CITY OF LAKE WORTH
7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA
CITY OF LAKE WORTH
CITY COMMISSION MEETING
CITY HALL COMMISSION CHAMBER
TUESDAY, APRIL 15, 2014 - 6:00 PM

1. **ROLL CALL:**

2. **INVOCATION:** Offered by Pastor Petri Kosenen of All Nations Church

3. **PLEDGE OF ALLEGIANCE:** Led by Commissioner Christopher McVoy

4. **AGENDA - Additions/Deletions/Reordering:**

5. **PRESENTATIONS:** (there is no public comment on Presentation items)

   A. Proclamation recognizing April 2014 as National Autism Month

   B. Update provided by the Royal Poinciana Neighborhood Association

   C. Breaking the Cycle of Gang Recruitment video

   D. Recommendation by the Tree Board to replace a tree in the Cultural Plaza

6. **COMMISSION LIAISON REPORTS AND COMMENTS:**

7. **PUBLIC PARTICIPATION OF NON-AGENDAED ITEMS AND CONSENT AGENDA:**

8. **APPROVAL OF MINUTES:**

   A. City Commission Special Meeting - March 25, 2014
   B. City Commission Meeting - April 1, 2014

9. **CONSENT AGENDA:** (public comment allowed during Public Participation of Non-Agendaed items)

   A. Resolution No. 15-2014 - support the regulation of recovery residents or sober houses

   B. Resolution No. 16-2014 - support the County Metropolitan Planning Organization's effort to secure Transportation Investments Generating Economic Recovery (TIGER) grant funds

C. Resolution No. 17-2014 - amendment number 1 to the Fiscal Year 2013-2014 State Aid to Libraries Grant agreement

D. Resolution No. 18-2014 - submit grant application to the County Metropolitan Planning Organization for the 2014 Cycle Transportation Alternatives grant program

E. Authorize use of $1,375 in Law Enforcement Trust Fund for the County PAL to use for the Lake Worth Safety Patrol picnic

10. PUBLIC HEARINGS:

A. Ordinance No. 2014-10 - Second Reading and Public Hearing - amend beach parking regulations

B. Ordinance No. 2014-11 - Second Reading and Public Hearing - amend Bryant Park boat ramp parking

11. UNFINISHED BUSINESS:

12. NEW BUSINESS:

A. Resolution No. 19-2014 - amend the Fiscal Year 2014 Comprehensive Fee Schedule to include several beach and boat ramp parking, pool, and ballroom fees

B. Ordinance No. 2014-12 - First Reading - amend Chronic Nuisance Property Code related to exemptions from chronic nuisance activities and schedule the public hearing date for May 6, 2014

C. Ordinance No. 2014-13 - First Reading - amend Chronic Nuisance Property Code related to special assessments and schedule the public hearing date for May 6, 2014

D. Ordinance No. 2014-14 - First Reading - amend Buildings and Structural Regulations and schedule the public hearing date for May 6, 2014

E. Ordinance No. 2014-15 - First Reading - amend definition of appraised value and clarify methods of sale and schedule the public hearing date for May 6, 2014

F. Ordinance No. 2014-16 - First Reading - amend the foreclosure registry program and schedule the public hearing date for May 6, 2014

G. Contract and agreement with two companies to construct Potable Well 16 located at 1900 2nd Avenue North

H. Contract and agreement with two companies to construct the Raw Watermain for Potable Well 16

I. Agreement with Alcalde & Fay, LTD for federal government relations and comprehensive grant services

13. LAKE WORTH ELECTRIC UTILITY:

A. CONSENT AGENDA: (public comment allowed during Public Participation of Non-Agendaed items)

B. PUBLIC HEARING:

C. NEW BUSINESS:

14. CITY ATTORNEY'S REPORT:

15. CITY MANAGER'S REPORT:

A. May 6, 2014 draft City Commission agenda

16. ADJOURNMENT:

If a person decides to appeal any decision made by the board, agency or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. (F.S. 286.0105)

NOTE:ONE OR MORE MEMBERS OF ANY BOARD, AUTHORITY OR COMMISSION MAY ATTEND AND SPEAK AT ANY MEETING OF ANOTHER CITY BOARD, AUTHORITY OR COMMISSION.

PROCLAMATION

WHEREAS, autism is a complex neurobiological disorder that typically lasts throughout a person's lifetime, and it is part of a group of disorders known as Autism Spectrum Disorders (ASD); and

WHEREAS, autism affects all persons regardless of race, religion, socio-economic status or geography; and

WHEREAS, ASD are the fastest growing serious developmental disability, making these disorders more common than pediatric cancer, diabetes, and AIDS combined; and

WHEREAS, individuals with ASD and their families face tremendous and overwhelming challenges in accessing and navigating the complex programs and services for these disorders; and

WHEREAS, individuals with ASD are valuable and talented citizens.

NOW, THEREFORE, I, Pam Triolo, Mayor of the City of Lake Worth, Florida, by virtue of the authority vested in me, do hereby proclaim

April 2014

as

AUTISM AWARENESS MONTH

and recognize and commend the talents, abilities and contributions of the individuals in our community diagnosed with ASD and their parents, relatives, and professionals that provide valued services.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City of Lake Worth, Florida to be affixed this 15th day of April, 2014.

_____

Pam Triolo, Mayor

ATTEST:

_____

Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** City Clerk

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EXECUTIVE BRIEF

TITLE:
Royal Poinciana Neighborhood Association update

SUMMARY:
Ms. AnnaMaria Windisch-Hunt, Royal Poinciana President, will update the Commission on activities in the neighborhoods.

BACKGROUND AND JUSTIFICATION:
At the City Commission meeting on July 20, 2010, the City Commission requested that all neighborhood associations provide an update. This last update provided by the Royal Poinciana Neighborhood Association was on August 21, 2012.

MOTION:
Not applicable

ATTACHMENT(S):
Fiscal Impact Analysis – not applicable

South Grade Elementary
716 South K Street
Lake Worth, Florida 33460
561-267-5756

March 27, 2014

Mr. Michael Bornstein
Lake Worth City Manager
7 North Dixie Highway
Lake Worth, FL 33460

Dear Mr. Bornstein:

The topic of the April 15 presentation at the city commission meeting that we discussed is as follows.

Breaking the Cycle of Gang Recruitment is a PBSO At-Risk program for a select group of South Grade Elementary fifth graders which was directed by PBSO Deputy Devin Zuchowski in 2013/2014. Funding was received from Aileen Josephs, P.A., the Florida Sheriff's Association, Palm Beach County Sheriff's Office, and Harry's Banana Farm.

Please let me know if you need any other documentation from me.

Thank you.

Sincerely,

Rebecca Hinson
Art Teacher

Cc: Pam Lopez, Andy Amoroso, Mike Riley, Aileen Josephs P.A., Deputy Devin Zuchowski, Sgt. Oscar Cardenas, Captain Rolando Silva, Sheriff Ric Bradshaw, Pam Triolo, Scott Maxwell, Christopher McVoy, John Szerdi, Diana Borges

Lake Worth City Tree Board

7 North Dixie Hwy · Lake Worth, Florida 33460 · Phone: 561-586-1677·

13 February 2014

Dear Mayor Triolo and Members of the City Commission:

On behalf of the City Tree Board, I am writing to you about replacing the ficus tree, which was removed from the south side of the City Cultural Plaza on Thursday December 27, 2012.

At our regularly scheduled meeting on Thursday November 14, 2013, the City Tree Board listened to input from staff members, David McGrew, City Horticulturist; Jamie Brown, Public Services Director and Chris Kibben, Grounds and Cemetery Supervisor about why a decision was made to remove the ficus and replacement proposals. Board members shared their thoughts and then listened to public comment on tree replacement. There were a variety of proposals, but a consensus emerged from the public, many whom formerly served on the Tree Board, that a native tree should replace the ficus. More specifically, Green Buttonwood was mentioned a number of times as an excellent replacement that would serve the Cultural Plaza well.

The City Tree Board held a special meeting on Wednesday November 20, 2013. After extensive discussion on the matter of tree replacement, the Board voted unanimously to recommend to the City Commission planting a Green Buttonwood (with a 6-10 inch DBH and Florida #1 grade) in the planter formerly home to the Ficus.

The Green Buttonwood (Conocarpus erectus) has several advantages. It grows to be a relatively tall tree (40-66 feet.) With a normal spread of 35-40 feet, this Buttonwood provides abundant shade with its canopy. It has attractive healthy light green, feather-shaped leaves three to four inches long alternately arranged on the stem with an earthy smell and button-like reddish-brown fruit. It is easy to grow, tolerant of poor, dry, sandy soil and is extremely drought tolerant (irrigation not required.) Green Buttonwoods readily withstand salt and wind; they are more hurricane tolerant than most native trees. Green Buttonwoods are also more cold-tolerant and less susceptible to insects than its relative Silver Buttonwood. Green Buttonwood is an excellent specimen tree.

We hope the Commissioners concur with our opinion and the City plants a Green Buttonwood in the Cultural Plaza.

Sincerely,

Richard Stowe
Chair, City Tree Board

MINUTES
CITY OF LAKE WORTH
SPECIAL MEETING OF THE CITY COMMISSION
MARCH 25, 2014 – 6:00 PM

The meeting was called to order by Mayor Triolo on the above date at 6:00 PM in the City Commission Chamber located at City Hall, 7 North Dixie Highway, Lake Worth, Florida.

1. ROLL CALL:

Present were Mayor Pam Triolo; Vice Mayor Scott Maxwell; and Commissioners Christopher McVoy, Andy Amoroso, and John Szerdi. Also present were City Manager Michael Bornstein and City Clerk Pamela Lopez.

2. PLEDGE OF ALLEGIANCE:

The pledge of allegiance was led by Commissioner Andy Amoroso.

3. NEW BUSINESS:

A. Fiscal Year 2013 Comprehensive Annual Financial Report and Management Letter

Douglas Wood, Finance Director, recognized the Controller and former Finance Director for their work on the report.

Ronald Thompson, TCBA Watson Rice LLP, commented that the Comprehensive Annual Financial Report (CAFR) included an independent auditors' report, management's discussion and analysis, basic financials, notes to financials, budgetary comparison schedules, and combining non-major governmental funds. He explained the City's financial highlights between Fiscal Years 2011 through 2013, single audit report, status of compliance and internal control findings, management letter, new accounting pronouncements, and communication to the governing board as overseers of the audit. He announced the audit showed that the Finance Department addressed all but one legacy comment from Fiscal Years 2009 through 2012. He said for Fiscal Years 2012 and 2013, there was no management finding recommendations.

Action: Motion made by Commissioner McVoy and seconded by Commissioner Szerdi to accept the September 30, 2013, Audit Reports and authorize the Mayor to sign the necessary documents.

Mayor Triolo announced that it was time for public comment.

Peter Timm said the report showed that the City spent more money than it took in; commented that money received from the sub-regional sewer

settlement should have gone back to the taxpayers; and the City lost money in its parks, golf course, and recreation. He asked the Commission to be more cautious next year.

Loretta Sharpe said she disagreed with Mr. Timm's comments and asked someone to research whether or not the golf course had deed restrictions on the property's use.

Steven Carr, former Finance Director, explained that the money received from the sub-regional sewer settlement went towards reducing the City's water debt, which in turn reduced customer's rates. Therefore, the money indirectly went back to the taxpayers in the form of water rate reductions.

Request/comment summary:

1. Vice Mayor Maxwell requested staff research whether or not there were deed restrictions on the golf course property.

Vote: Voice vote showed: AYES: Mayor Triolo; Vice Mayor Maxwell; and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

B. Lake Worth 2020 summary presentation and discussion on potential funding sources

City Manager Bornstein explained that the Lake Worth 2020 Plan (Plan) was initiated in Fiscal Year 2013 to combine and prioritize critical roadway, water, sewer, and stormwater projects within the City. The Plan was expanded to consider a broad range of infrastructure improvements within the City. He said a series of detailed workshops were conducted in Fiscal Year 2013 to discuss the potential projects.

He advised that staff would present information on a 7-Year Base Plan financing, which included the Park of Commerce Phases 1, 2, and 3; an alternate 7-Year Base Plan financing; an alternate 5-Year Base Plan financing, which included the Park of Commerce Phases 1 and 2; an alternate 5-Year Base Plan financing; a two inch watermain replacement plan; and alternate financing scenarios.

Vice Mayor Maxwell left the meeting at 6:50 PM.

Jamie Brown, Public Services Director, explained in detail roadways, sidewalks, fire protection and need for fire hydrants, and drainage base plans. He said the 7-Year Base Plan for roadway improvements included drainage, water and hydrant plans, and full depth roadway reconstruction up to a Pavement Condition Index (PCI) 55 rating.

William Waters, Community Sustainability Director, provided an overview of the Park of Commerce improvements, which included roadway redevelopment, drainage improvements, potable water service upgrades, fire protection improvements, sanitary sewer service upgrades, electric service upgrades, telecommunications, landscaping upgrades, and street lighting. He explained where the roadway improvements were located in Phases 1, 2, and 3.

Douglas Wood, Finance Director, explained in detail the 7-Year Base Plan financing for roadway, storm, water, sewer, project management, and Park of Commerce Phases 1, 2, and 3. He said in 2015 (Year 1) the total cost for improvements was $16,119,996. The proposed 7-Year Base Plan totaled $82,206,131; however, a General Obligation (GO) Bond issued in an amount equal to the total amount less the City's current reserves would be $60,178,053.

He commented that a GO Bond 1 for Years 1-4 had a cumulative millage requirement of 1.80 mil; Bond 2 for Year 5 had a cumulative millage requirement of 2.31 mil; and Bond 3 for Years 6-7 had a cumulative millage requirement of 3.07 mil. He explained the number of residential and commercial properties sorted by taxable property value and the monthly taxable impact for GO Bonds 1, 2, and 3.

He explained in detail the 5-Year Base Plan financing for roadway, storm, water, sewer, project management, Park of Commerce Phases 1 and 2, and resurfacing roads with a PCI 56-83 rating. He said this Plan would make $6,800,000 available and the millage rate would remain at 3.07.

Vice Mayor Maxwell returned to the meeting at 7:07 PM.

City Manager Bornstein explained which improvements could not be done if the 5-Year Base Plan financing was preferred.

Larry Johnson, Water Utilities Director, explained in detail the condition of the City's two inch water pipes in alleys and easements.

Vice Mayor Maxwell left the meeting at 7:14 PM.

Mr. Johnson explained the locations of where water pipes had failed. He said staff proposed to replace all two inch water lines in alleys, easements, and roads in seven years for a total estimated cost of $14,000,000.

He said there were several payment options to replace the water lines, which included increasing water rates, issuing special assessments, increasing the amount of a GO Bond, or a combination of the options. He explained in detail the financial impact to customers for each of the payment

options. He said the cumulative millage rate increase required for the 7-Year Base Plan including the Park of Commerce Phases 1, 2, and 3 was 3.07 mil; however, adding a $14,000,000 two inch water pipe replacement plan would increase the millage rate to 3.78 mil.

Lengthy discussion ensued regarding the various funding options including grant funds.

Vice Mayor Maxwell returned to the meeting at 7:51 PM.

Mayor Triolo recessed the meeting at 7:57 PM and reconvened at 8:11 PM.

Lengthy discussion ensued regarding revenue the City would receive if a one-half cent county tax was approved.

Request/comment summary:

1. Commissioners Amoroso and Szerdi supported the 5-Year Base Plan financing.

2. Commissioner McVoy suggested seeking community input on what they wanted before the bond went on the ballot.

3. Mayor Triolo supported the 5-Year Base Plan financing.

4. Vice Mayor Maxwell suggested the Commission speak as one voice and articulate clearly to the voters what improvements they would be receiving.

Commissioner Amoroso left the meeting at 8:52 PM and returned at 8:55 PM.

Consensus: To support the 5-Year Base Plan financing including the Park of Commerce Phases 1 and 2 and resurfacing roads at a 56-83 PCI rating.

Request/comment summary:

5. City Manager Bornstein commented that he would meet individually with the Commission to discuss further the four funding source options and the two inch water pipe replacement plan.

6. Vice Mayor Maxwell requested a special meeting be scheduled to discuss only Lake Worth 2020.

4. ADJOURNMENT:

Action: Motion made by Vice Mayor Maxwell and seconded by Commissioner Amoroso to adjourn the meeting at 9:14 PM.

Vote: Voice vote showed: AYES: Mayor Triolo; Vice Mayor Maxwell; and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

_____
PAM TRIOLO, MAYOR

ATTEST:

_____
PAMELA J. LOPEZ, CITY CLERK

Minutes Approved: April 15, 2014

A digital audio recording of this meeting will be available in the Office of the City Clerk.

MINUTES
CITY OF LAKE WORTH
REGULAR MEETING OF THE CITY COMMISSION
APRIL 1, 2014 – 6:00 PM

The meeting was called to order by Mayor Triolo on the above date at 6:02 PM in the City Commission Chamber located at City Hall, 7 North Dixie Highway, Lake Worth, Florida.

1. ROLL CALL:

Present were Mayor Pam Triolo and Commissioners Christopher McVoy, Andy Amoroso, and John Szerdi. Vice Mayor Maxwell was absent. Also present were City Manager Michael Bornstein, City Attorney Glen Torcivia, and City Clerk Pamela Lopez.

2. INVOCATION:

The invocation was offered by Dr. Tommy Wood of First Baptist Church of Lake Worth.

3. PLEDGE OF ALLEGIANCE:

The pledge of allegiance was led by Commissioner John Szerdi.

4. AGENDA - Additions/Deletions/Reordering:

Action: Motion made by Commissioner McVoy and seconded by Commissioner Szerdi to waive the rules to:

- Delete New Business, Item C; and
- Approve the agenda as amended.

Vote: Voice vote showed: AYES: Mayor Triolo and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

5. PRESENTATIONS:

A. Proclamation declaring April 1, 2014 as Lake Worth High School Ethics Team Recognition Day

Mayor Triolo read a proclamation declaring April 1, 2014, as Lake Worth High School Ethics Team Recognition Day.

B. Proclamation declaring April 6-12, 2014 as National Volunteer Week

Mayor Triolo read a proclamation declaring April 6-12, 2014 as National Volunteer Week.

C. Proclamation declaring May 2014 as Foster Care Month

Mayor Triolo read a proclamation declaring May 2014 as Foster Care Month.

D. Update provided by Eden Place Neighborhood Association

Mark Pickering, President, provided information about the Eden Place Neighborhood Association's establishment, their boundaries, and acknowledged the President of the Neighborhood Association Presidents' Council for helping them get reestablished. He announced that the association received grant money for banners and invited the Commission to attend their April 21, 2014, meeting.

6. COMMISSION LIAISON REPORTS AND COMMENTS:

Commissioner McVoy: said he was inspired to be a part of the March 30, 2014, PrideFest parade and event and was grateful to the organizers for all of their work. He announced that 12 dioceses organized a Stations of the Cross event in support of immigration reform on March 29, 2014.

Commissioner Szerdi: thanked all of the City's volunteers for the time they donate; announced his attendance at a Treasure Coast Regional Planning Council meeting, said the members discussed All-Aboard Florida, and advised that he asked them to make an All-Aboard Florida presentation to the Commission. He announced an Easter Egg Hunt at South Palm Park on April 19, 2014, and Reggae Festival on April 11, 2014, at Bryant Park. He said the Neighborhood Association Presidents' Council was gearing up and working on the July 4th Raft Race event.

Commissioner Amoroso: announced his attendance at the Downtown Jewel Neighborhood Association's Flolfing Tournament, Marriage of Equality event in support of legalizing gay marriages in Florida, and PrideFest. He announced an Easter Egg Hunt at South Palm Park on April 19, 2014, and Easter Egg Hunt at Bryant Park hosted by the City Recreation Board.

Mayor Triolo: said PrideFest was amazing and thanked the Mayor of West Palm Beach for attending; thanked the volunteers who worked on the event; announced her attendance at the Police/Employees Pension Board and said the Finance Director was appointed vice chairperson; said she would provide an update to the Commission on pension board activities; announced her attendance at a Joint Sister City meeting with elected officials and staff from the Town of Mangonia Park and Cities of Riviera Beach, West Palm Beach, and Lake Worth to discuss regional issues to pool information; and announced her attendance at a Stakeholder's meeting with owners from the Park of Commerce on March 27, 2014, and said staff's information was well received. She announced a Peeps Show would be coming soon.

7. PUBLIC PARTICIPATION OF NON-AGENDAED ITEMS AND CONSENT AGENDA:

The following individuals spoke on various issues; however, they did not write anything on their comment cards: Peter Timm, Loretta Sharpe, Nadine Burns, and Greg Rice.

Mayor Triolo read the comment written by Suzanne Squire. Ms. Squire wrote that [the Commission] did not know what she wanted [and] if [they] did not [then the Commission should] ask. [She wrote to] please ask her. Do not tell her what she [would] "get." It assumed [that] she was stupid and it assumed [the Commission] was impolite.

Mayor Trolo read the comment written by AnnaMaria Windich-Hunt. Ms. Windich-Hunt wrote that Lake Worth Recreation Committee was having a fundraiser at the E.R. Bradley Restaurant on April 10, 2014, from 7:00 – 9:00 PM. Mel and Vinney, Kat Mahoney, and Alan Anapu would be performing. The tickets cost $10.00 and the restaurant and bar [were] opened and available. Raffle prizes [included a] cruise for two valued at $450 and a Lake Worth experience valued at $500.

The following individual spoke on issues written on his comment card:

Frank Campo said he received a parking ticket while attending the Green Market at the beach. He said he was shocked to receive the ticket and never was ticketed in Lake Worth. He commented that he received the City's form to dispute the ticket; however, the form stated that he could be responsible for court cost if the ticket was challenged. He said he paid the ticket rather than incur the court costs and asked the City to look into the court cost issue.

Request/comment summary;

1. Commissioner McVoy suggested information on the proposed Lake Worth 2020 projects be added to the website so that the public could provide their input and ideas.

8. APPROVAL OF MINUTES:

Action: Motion made by Commissioner Szerdi and seconded by Commissioner McVoy to approve the following minutes as submitted:

A. City Commission Meeting – March 18, 2014

Vote: Voice vote showed: AYES: Mayor Triolo and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

9. CONSENT AGENDA:

There were no Consent Agenda items on the agenda.

10. PUBLIC HEARINGS:

There were no Public Hearings items on the agenda.

11. UNFINISHED BUSINESS:

There were no Unfinished Business items on the agenda.

12. NEW BUSINESS:

A. Ordinance No. 2014-10 – First Reading – amend beach parking regulations and schedule the public hearing date for April 15, 2014

City Attorney Torcivia read the following ordinance by title only:

ORDINANCE NO. 2014-10 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 7, BEACHES, PARKS AND RECREATION; ARTICLE II, BEACH PARKING; SECTIONS 7-17 AND 7-21, TO REVISE SAID SECTIONS TO ALLOW FOR THE ISSUANCE OF SEASONAL RESIDENT PARKING DECALS; PROVIDING FOR SEVERABILITY; PROVIDING FOR THE REPEAL OF LAWS IN CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE

Action: Motion made by Commissioner Szerdi and seconded by Commissioner Amoroso to approve Ordinance No. 2014-10 on first reading and schedule the public hearing date for April 15, 2014.

Juan Ruiz, Leisure Services Director, explained that the ordinance would allow seasonal residents to purchase beach parking decals as directed by the City Commission on March 18, 2014. The fee for seasonal residents, as directed by the City Commission, would be scheduled on April 15, 2014.

Request/comment summary:

1. Commissioner McVoy requested amending the ordinance to allow for a one-year trial period and to track statistics on residents versus seasonal parking usage to determine if the ordinance needed to be amended.

2. Mr. Ruiz suggested not amending the ordinance and allow staff time to track usage and bring the information back to the Commission. He said the ordinance could be amended at any time.

3. Commissioner McVoy suggested a different looking parking decal for resident and seasonal so that staff would know, at a glance, who was

using the parking lot.

4. Commissioner Amoroso commented that the City would allow two motorcycles or scooters to park in one decal parking space.

Mayor Triolo announced that it was time for public comment.

Loretta Sharpe suggested the City track tenants who did not pay taxes, supported increasing the decal parking fee to $100 for residents, tenants, and seasonal.

Peter Timm said the County dictated the number of parking decal spaces and did not understand why County residents would be allowed to purchase a parking decal for $100.

Laurie Witkin commented that the beach was the best reason to live in Lake Worth. She said she understood the need for the beach to make money; however, she did not support allowing seasonal residents to purchase decals. She said she had a concern with having enough parking spaces for full-time residents, she suggested year round residents should be given a priority to find a parking space. She said she supported having different decals to differentiate between year round residents versus seasonal residents.

Greg Rice commented that the community said they wanted to be inclusive of all of its residents during PrideFest, but now the public's comments were separating residents from seasonal residents. He said a property owner had a vested right in the City, but Canada did not allow its residents to stay in the United States year round. He supported being an inclusive community.

Vote: Voice vote showed: AYES: Mayor Triolo and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

B. Ordinance No. 2014-11 – First Reading – amend Bryant Park boat ramp parking and schedule the public hearing date for April 15, 2014

City Attorney Torcivia read the following ordinance by title only:

ORDINANCE NO. 2014-11 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 7, BEACHES, PARKS AND RECREATION; ARTICLE V, "BOAT RAMP PARKING"; SECTION 7-54, "BOAT RAMP PARKING" TO ALLOW FOR THE LEISURE SERVICES DIRECTOR TO PROMULGATE RULES AND PROCEDURES REGARDING BOAT RAMP PARKING PERMITS; PROVIDING FOR SEVERABILITY, THE REPEAL OF LAWS IN CONFLICT, CODIFICATION, AND AN EFFECTIVE DATE

Action Motion made by Commissioner Szerdi and seconded by Commissioner McVoy to approve Ordinance No. 2014-11 on first reading and schedule the public hearing date for April 15, 2014.

Juan Ruiz, Leisure Services Director, explained that the ordinance would allow Palm Beach County residents to purchase an annual Bryant Park boat ramp parking decal. He said a resolution establishing the fee would be scheduled on April 15, 2014.

Request/comment summary:

1. Commissioner Amoroso suggested allowing event vendors to park their trailers at the boat ramp.

2. Commissioner Szerdi suggested information on regularly scheduled boat ramp parking closure be added to the website.

Mayor Triolo announced that it was time for public comment.

Peter Timm said he remembered when there was not enough parking for boat trailers and asked if the County was telling the City how much to charge. He said he did not support allowing nonresidents to purchase an annual boat ramp parking decal.

Vote: Voice vote showed: AYES: Mayor Triolo and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

C. (deleted) Agreement with Alcalde & Fay, LTD for federal government relations and comprehensive grant services

D. Agreement with Siemens Industry, Inc. for audit and energy performance contracting services

City Manager Bornstein explained that the agreement would allow for the development of energy conservation measures to provide guaranteed savings to fund the energy savings improvements. He said Siemens Industry would audit the City's facilities in order to determine what energy conservation measures (ECM) could be installed to provide energy savings to the City. The audit would include reviewing current and future energy consumption, projected savings, maintenance costs, simple payback, life cycle costs, analysis methods, and calculations. Once the audit was completed, Siemens Industry would submit the audit to the City for review. If the audit was accepted by the City, the City would be obligated to enter into an energy performance contract with Siemens Industry and/or pay the $148,500 audit fee.

Action: Motion made by Commissioner Szerdi and seconded by Commissioner Amoroso to approve an agreement with Siemens Industry, Inc.

Request/comment summary:

1. Commissioner McVoy suggested the agreement be amended to change the Scope of Energy Audit Section A *Collect General Facilities(s) Information* from 24-36 months to 48 months and Section C *Establish Base Year Consumption and Reconcile with End Use Consumption Estimates* from 24-month to 48 months.

2. Hector Samario, Siemens representative, agreed to the changes. He said the report and presentation to the City would be available in 120 days.

3. Mayor Triolo and the Commission agreed to the suggested changes to the Siemens agreement as proposed by Commissioner McVoy.

Mayor Triolo announced that it was time for public comment.

Peter Timm said the City did the same thing a few years ago for City facilities only. He commented that the City could not afford to pay for the audit.

Mayor Triolo read the comment written by Suzanne Squire. Ms. Squire wrote asking if Siemens Industry would hire Lake Worth or Palm Beach County residents and if not, then she wrote asking if the City would pay for their out of area travel to audit the City. She wrote asking if Energize Lake Worth was the same thing being requested and the City paid $199,000 for the same service. She wrote asking the Commission not to waste taxpayer money.

Loretta Sharpe said she used 540,000 gallons of water last month, after having the problem checked by a private company, she said she was told that she had a leak under her house.

Vote: Voice vote on the amended agreement showed: AYES: Mayor Triolo and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

Mayor recessed the meeting at 7:43 PM and reconvened at 7:58 PM.

13. LAKE WORTH ELECTRIC UTILITY:

A. PRESENTATION:

1) Update on the electric utility system

No update was provided.

B. CONSENT AGENDA:

There were no Lake Worth Electric Utility Consent Agenda items on the agenda.

C. PUBLIC HEARING:

There were no Lake Worth Electric Utility Public Hearing items on the agenda.

D. NEW BUSINESS:

1) Agreement with Level One, LLC for Utility billing processing, printing and mailing services

Donna Ryan-Ruiz, Customer Service Manager, explained that the agreement would authorize Level One, LLC to process, print and mail the City's utility bills and associated documents. The annual projected cost was $200,000. She advised that Level One could provide the service, including postage costs for $0.46 per bill. She said the City currently processed and printed utility bills and other mailing documents in-house. She commented the City's equipment was antiquated and inefficient, the process was labor intensive, and the cost was not effective. She said the contract with Level One would reduce the City's costs and provide better communication to the citizens of Lake Worth. She commented that the utility bill would be redesigned to make it easier for the customer to understand.

Request/comment summary:

1. Commissioner Amoroso suggested charging for advertisement inserts in the utility bills.

2. Commissioner McVoy suggested having a 24 month usage comparison instead of 12 month and to include kilowatt hour and gallon usages information.

Action: Motion made by Commissioner Szerdi and seconded by Commissioner Amoroso to approve the agreement with Level One, LLC.

Mayor Triolo announced that it was time for public comment.

Peter Timm commented that the City currently sent its bills to Tampa and now would be sending them to Pennsylvania. He said no company worked at a loss and they would want to make a profit. He commented that he was not sure if this agreement was a good or bad deal.

Loretta Sharpe said she disagreed with Mr. Timm's comments, the agreement would be a cost savings, Level One could print the City's newsletter, and urged the Commission to vote "yes."

Request/comment summary:

3. Mayor Triolo requested information on how much it currently cost the City per bill.

Vote: Voice vote showed: AYES: Mayor Triolo and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

2) Contractor Agreement with Industrial Maintenance Group, Inc. for replacement of protective coatings

Dave Mulvey, Power Plant Manager, explained that the agreement provided for water blasting and spray coatings on containment areas at the Power Plant. He advised that the Electric Utilities Advisory Board reviewed and recommended approval of the agreement with Industrial Maintenance Group, Inc. on March 19, 2014.

Action: Motion made by Commissioner McVoy and seconded by Commissioner Szerdi to approve an agreement with Industrial Maintenance Group, Inc. for $199,250; and approve the transfer of funds from the Electric Utilities Machinery & Equipment account to Capital Improvement Program Containment Area Coatings account.

Mayor Triolo announced that it was time for public comment.

Peter Timm said he was concerned that the company was guaranteeing the work for seven or eight years while other companies were only offering a two year guarantee.

Peggy Fisher advised that the Electric Utilities Advisory Board members saw the coating; however, she said she was concerned that the Board was being used because the members did not review the bids and did not recommend approval of the agreement as stated in the staff report.

Loretta Sharpe commented that the company was guaranteeing its product for ten years, the amount was $200,000 compared to over $400,000 spent for a contract six years ago.

Vote: Voice vote showed: AYES: Mayor Triolo and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

14. CITY ATTORNEY'S REPORT:

City Attorney Torcivia announced that he just received a Notice of Voluntary

Dismissal in the case of Laurel Decker versus City of Lake Worth regarding building height restrictions. He said Ms. Decker voluntarily dismissed the lawsuit.

15. CITY MANAGER'S REPORT

A. April 15, 2014 – draft Commission agenda

City Manager Bornstein did not provide a report.

16. ADJOURNMENT:

Action: Motion made by Commissioner McVoy and seconded by Commissioner Amoroso to adjourn the meeting at 8:32 PM.

Vote: Voice vote showed: AYES: Mayor Triolo and Commissioners McVoy, Amoroso, and Szerdi. NAYS: None.

_____
PAM TRIOLO, MAYOR

ATTEST:

_____
PAMELA J. LOPEZ, CITY CLERK

Minutes Approved: April 15, 2014

A digital audio recording of this meeting will be available in the Office of the City Clerk.

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** City Manager

---

EXECUTIVE BRIEF

TITLE:
Resolution No. 15-2014 - support the regulation of recovery residents or sober houses

SUMMARY:

The Resolution urges the Florida Legislature and Governor Scott to support regulations of recovery residents or "sober houses" in the form of statewide licensing and registration.

BACKGROUND AND JUSTIFICATION:
Currently, recovery residences, also known as sober houses, are not required to be licensed under state law. These houses can impact residential neighborhoods and when unlicensed and unregulated, can create safety and welfare hazards for both their residents and surrounding neighbors.

Currently the State Legislators are considering House Bill 479 requiring sober house transitional living homes to annually register with the Department of Children and Families. The House Bill also authorizes them to deny, suspend, or revoke the Certificate of Registration of a sober house transitional home.

As of April 4, 2014, House Bill 479 passed the House Health Care Appropriations Subcommittee and the House Health and Human Services Committee. It is currently awaiting action by the full House. A companion Senate Bill 582 is with the Senate Appropriations Committee.

It is the City's desire to protect both neighborhoods and individuals in sober houses by supporting the statewide regulations on sober houses.

MOTION:
I move to approve/not approve Resolution No. 15-2014.

ATTACHMENT(S):
Fiscal Impact Analysis
Resolution

RESOLUTION NO. 15-2014 OF THE CITY OF LAKE WORTH, FLORIDA, URGING THE FLORIDA LEGISLATURE TO ADOPT AND GOVERNOR RICK SCOTT TO SUPPORT LEGISLATIVE CHANGES PROVIDING FOR THE REGULATION OF RECOVERY RESIDENCES OR "SOBER HOUSES" IN THE FORM OF STATEWIDE LICENSING AND REGISTRATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, recovery residences, also known as "sober houses," are not required to be licensed under state law; and

WHEREAS, sober houses impact residential neighborhoods and when unlicensed and unregulated, create safety and welfare hazards for both their residents and surrounding neighbors; and

WHEREAS, the City Commission of the City of Lake Worth urges the Florida Legislature to adopt and Governor Rick Scott to support regulations and licensing requirements for sober houses in order to:

1. Create a consistent standard of operation to provide uniform and safe operation throughout the state;
2. Provide for accountability for the owners/operators of these homes;
3. Help end abuses that are occurring in some homes;
4. Require background checks for owners/operators of these homes similar to those required for owners/operators of substance abuse treatment providers, assisted living facilities, adult family-care homes and adult day care centers, and community residential homes; and
5. Ensure that certain life safety standards similar to those already in place for the homes and facilities referenced above are followed in order to keep residents safe; and

WHEREAS, the community housing component of licensed day or night treatment facilities is already licensed pursuant to Chapter 397, Florida Statutes, and such housing performs the same function as a sober house; and

WHEREAS, uniform regulation of sober houses will provide safety to a disadvantaged group and protect both the residents and their surrounding communities; and

WHEREAS, the City Commission determines that the regulation of sober houses would be in the best interests of and protect the health, safety and welfare of its residents, both temporary and permanent.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

<u>Section 1</u>: The foregoing recitals are hereby ratified and incorporated herein.

Section 2: The City Commission of the City of Lake Worth urges the Florida Legislature and the Governor to support the regulation and licensing of recovery residences (sober houses) located throughout the State of Florida.

Section 3: The City Commission directs that a copy of this Resolution shall be provided to the Governor, the Speaker of the House, the President of the Senate, the Palm Beach County legislative Delegation, the Florida League of Cities, and the Palm Beach County League of Cities.

Section 4: This Resolution shall become effective immediately upon adoption.

The passage of this Resolution was moved by Commissioner _____, seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Resolution duly passed and adopted on this 15th day of April, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** City Manager

---

EXECUTIVE BRIEF

TITLE:
Resolution No. 16-2014 - support the County Metropolitan Planning Organization's effort to secure Transportation Investments Generating Economic Recovery (TIGER) grant funds

SUMMARY:

The Resolution urges the support of federal dollars for quiet zone railroad crossing improvements to provide a safe area where train horns are not routinely sounded.

BACKGROUND AND JUSTIFICATION:
Design of the All-Aboard Florida (AAF) project to transport pedestrians from Miami to Orlando is developing rapidly. The improvements, funded by AAF, will include railroad crossing improvements and safety devices such as gates and flashing lights. However, AAF will not fund improvements required to garner a quiet zone through southeast Florida. A quiet zone will provide for the elimination of train horns by substituting various supplemental safety measures (SSM). These measures can include four quadrant gates, one way streets, barrier medians on the intersecting roadway or complete crossing closure. Traditionally, the SSM costs are borne by the affected municipalities because a quiet zone is deemed to be a quality of life issue for local residents.

Because the AAF project is proceeding at a rapid pace, local agencies have not been able to plan or budget funds for quiet zone implementation. Both Palm Beach and Broward Counties Metropolitan Planning Organizations (MPO) have assumed a valuable leadership role related to project development for quiet zones. The Palm Beach County MPO finds that the preliminary quiet zone cost estimate for the work in the County is around $17.9M. The County MPO has dedicated $6.6M in funding; however, there is an $11.3M deficit that must be borne by local municipalities or another agenda. The MPO is hoping that the other agency can be the US Department of Transportation via its Transportation Investment Generating Economic Recovery (TIGER) program.

The Palm Beach County and Broward County MPO's are preparing a joint application for TIGER funding to supplement local funds designated by the MPO's for quiet zone implementation. The application window is very short and requires accelerated work. The MPO has asked affected municipalities to approve a resolution of support for the TIGER funding and sending a letter to the US Department of Transportation supporting the installation of additional safety equipment for quiet zones .

MOTION:
I move to approve/not approve Resolution No. 16-2014.

ATTACHMENT(S):
Fiscal Impact Analysis – not applicable
US DOT letter of Support
Resolution

Office of the Commission
7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1730 · Fax: 561-586-1750

April 16, 2014

Secretary of Transportation
US Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Foxx:

The City of Lake Worth enthusiastically supports the installation of additional safety equipment to allow for quiet zones to be established along the Florida East Coast (FEC) railroad corridor.

Railroads are vital for commerce, but they can also create high noise levels from passing train horns. The expansion of intermodal facilities such as *Port Miami, Port Everglades* and the *Port of Palm Beach* will enhance economic activity in South Florida. It will also increase the number of trains traversing the FEC corridor.

A quiet zone will provide a safe area where train horns are not routinely sounded. The decreasing noise level for nearby residents, schools and businesses will improve quality of life while accommodating greater trade with domestic and international partners. We are in strong support of the application from Southeast Florida regarding the use of Federal dollars through the Transportation Investments Generating Economic Recovery (TIGER) program for this purpose.

Thank you for your consideration of this project.

Sincerely,

Mayor Pam Triolo

Vice Mayor Maxwell

Commissioner Christopher McVoy

Commissioner Andy Amoroso

Commissioner John Szerdi

RESOLUTION NO. 16-2014 OF THE CITY OF LAKE WORTH, FLORIDA, SUPPORTING EFFORTS OF THE PALM BEACH AND BROWARD COUNTIES METROPOLITAN PLANNING ORGANIZATIONS TO SECURE A TRANSPORTATION INVESTMENTS GENERATING ECONOMIC RECOVERY (TIGER) GRANT FOR QUIET ZONE AND OTHER SAFETY IMPROVEMENT IN THE CITY OF LAKE WORTH; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Florida East Coast (FEC) rail corridor is a linear rail corridor connecting historic mixed-use downtowns along Florida's east coast; and

WHEREAS, rail/roadway grade crossings occur throughout the historic downtowns along Florida's east coast; and

WHEREAS, these historic downtowns are realizing higher density populations; and

WHEREAS, the City of Lake Worth supports the efforts of All Aboard Florida to construct high speed passenger facilities in order to provide alternative passenger transportation between Miami and Orlando thereby serving these population centers; and

WHEREAS, enhanced passenger rail services provided by All Aboard Florida will further enhance the City of Lake Worth's efforts to construct transit oriented development along the FEC rail corridor; and

WHEREAS, southeast Florida is now presented with a unique opportunity to create a public-private partnership that can provide improved safety and quality of life along the FEC rail corridor; and

WHEREAS, railroads are vital for transportation and commerce, but they can also create high noise levels from passing train horns; and

WHEREAS, quiet zones can be installed as part of the All Aboard Florida project thus leading to incremental cost savings to the taxpayer resulting from the large scope of the overall project; and

WHEREAS, quiet zones will enhance the quality of life for individuals residing near railroad grade crossings, further encouraging migration of people to more dense transit oriented lifestyles; and

WHEREAS, the expansion of intermodal facilities such as *Port Miami, Port Everglades* and the *Port of Palm Beach* will enhance the ability to increase and process freight, expanding economic activities in South Florida; and

WHEREAS, these freight improvements are projected to increase the intensity of freight trains traversing the FEC corridor, both in number and size; and

WHEREAS, the installation of additional safety infrastructure and multi-modal connectivity at grade crossings will reduce neighborhood impacts from freight and improve the economic vitality of historic mixed-use downtowns.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1: The foregoing recitals are hereby fully incorporated herein by reference as legislative findings of the City Commission of the City of Lake Worth.

Section 2: The City Commission supports the Palm Beach and Broward Counties Metropolitan Planning Council's efforts to secure Federal funding in the form of a Transportation Investments Generating Economic Recovery (TIGER) grant for quiet zone improvements to provide a safe area where train horns are not routinely sounded.

Section 3: This Resolution shall become effective immediately upon adoption.

The passage of this Resolution was moved by Commissioner _____, seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Resolution duly passed and adopted on this 15th day of April, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Leisure Services

---

EXECUTIVE BRIEF

TITLE:
Resolution No. 17-2014 - amendment number 1 to the Fiscal Year 2013-2014 State Aid to Libraries Grant agreement

SUMMARY:
The Resolution authorizes an amendment to implement new State Statute requirements and stipulates distribution of the funds in one payment.

BACKGROUND AND JUSTIFICATION:
On February 4, 2013, the State executed State Aid to Libraries Grant Agreement 14-ST-60, thereby approving an award of $15,753 in FY 2013-2014 State Aid to Libraries Program grant funds to supplement the operating budget of the Lake Worth Public Library. At its meeting of March 15, 2014, the City Commission approved Resolution No. 11-2014 authorizing the acceptance of this award.

On March 31, 2014, the Florida Department of State, Division of Library and Information Services ("Division") notified the City that an amendment was needed to add Florida Statutes language for grants and contracts. This amendment further stipulates that upon execution of the amendment, the Division will fully distribute the grant funds in one payment to the City rather than the two installments previously proposed. No cash match is required of the City for receipt of these grant funds.

MOTION:
I move to approve/not approve Resolution No. 16-2014.

ATTACHMENT(S):
Fiscal Impact Analysis
Amendment Number 1
Resolution

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2014	2015	2016	2017	2018
Capital Expenditures	0	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	15,753	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
Net Fiscal Impact	15,753	0	0	0	0
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

B. Recommended Sources of Funds/Summary of Fiscal Impact:

C. Department Fiscal Review: _____

PROJECT NUMBER: 14-ST-60

Florida Department of State, Division of Library and Information Services
STATE AID TO LIBRARIES GRANT AGREEMENT

AMENDMENT NUMBER 1 TO THE GRANT AGREEMENT

AMENDMENT TO THE GRANT AGREEMENT BETWEEN the State of Florida, Department of State, Division of Library and Information Services, hereinafter referred to as the DIVISION, and the

GRANTEE: City of Lake Worth for and on behalf of Lake Worth Public Library

the PROJECT: State Aid to Libraries Grant

The parties entered into a grant agreement dated 2/11/2014, for implementation of a State Aid to Libraries Grant. The parties now mutually desire to amend certain terms and conditions of the grant agreement.

In consideration of the covenants contained herein, it is agreed as follows:

1. All sections of the original grant agreement not specifically amended by this or a prior written amendment and all prior written amendments are hereby reaffirmed.

2. The grant agreement is hereby revised as follows:

   I. The GRANTEE agrees to:

      a. Provide the following as grant deliverables:

         Have at least one library, branch library or member library open 40 hours or more each week.

   II. The DIVISION agrees to:

      c. To distribute grant funds in one payment. The payment will be requested by the DIVISION from the Chief Financial Officer upon execution of the amendment.

3. This amendment shall be effective upon execution.

This amendment is executed and entered into _____.

WITNESSETH:

THE GRANTEE	THE DIVISION
_____	_____
Signature of Authorized Official	Judith A. Ring, Director Division of Library and Information Services Department of State, State of Florida
_____	
Typed Name and Title of Authorized Official	
_____	_____
Witness	Witness
_____	_____
Witness	Witness

3/14

RESOLUTION NO. 17-2014 OF THE CITY OF LAKE WORTH, FLORIDA, APPROVING AND AUTHORIZING AMENDMENT NUMBER 1 TO THE FISCAL YEAR 2013-2014 STATE AID TO LIBRARIES GRANT PROGRAM AGREEMENT 14-ST-60 BETWEEN THE FLORIDA DEPARTMENT OF STATE, DIVISION OF LIBRARY AND INFORMATION SERVICES AND THE CITY; PROVIDING FOR AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

WHEREAS, the State Aid to Libraries Program ("Program") is administered by the Florida Department of State, Division of Library and Information Services ("Division") for the purpose of supplementing the operating budgets of eligible public libraries to encourage the development and provision of free public library service; and

WHEREAS, at its meeting of September 3, 2013, the City Commission approved Resolution No. 37-2013 to authorize the submission of an application to the Division for the receipt of these grant funds; and

WHEREAS, on February 10, 2014, the Division executed State Aid to Libraries Grant Agreement 14-ST-60 to approve a final grant award of $15,753 for the City; and

WHEREAS, at its meeting of March 18, 2014, the City Commission approved Resolution No. 11-2014 to accept these FY 2013-2014 State Aid to Libraries Program grant funds in the amount of $15,753; and

WHEREAS, the Division has informed the City that revisions to the Grant Agreement for this funding have been made to implement new requirements that have been added to the Florida Statutes for grants and contracts; and

WHEREAS, the City desires to approve Amendment Number 1 to the FY 2013-2014 State Aid to Libraries Program Grant Agreement 14-ST-60 in order to receive this funding.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF LAKE WORTH, FLORIDA, that:

SECTION 1: The City Commission of the City of Lake Worth, Florida, hereby approves and authorizes the Mayor to execute Amendment Number 1 to the FY 2013-2014 State Aid to Libraries Grant Agreement 14-ST-60 and all related documents required for the receipt of funding in the amount of $15,753 from the Florida Department of State, Division of Library and Information Services to assist with the operation of the Lake Worth Public Library.

SECTION 2: Upon execution of the Resolution, one copy shall be delivered to the Leisure Services Department Director and one copy shall be delivered to

the Library Services Supervisor. The fully executed original shall be maintained by the City Clerk as a public record of the City.

SECTION 3: This Resolution shall become effective upon adoption.

The passage of this Resolution was moved by Commissioner _____, seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

Mayor Pam Triolo thereupon declared this Resolution duly passed and adopted on the 15th day of April, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Public Services

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EXECUTIVE BRIEF

TITLE:
Resolution No. 18-2014 - submit grant application to the County Metropolitan Planning Organization for the 2014 Cycle Transportation Alternatives grant program

SUMMARY:

The Resolution authorizes a grant application up to $750,000 for improvements to the traffic circle at A Street and Lake/Lucerne Avenues.

BACKGROUND AND JUSTIFICATION:
The Palm Beach Metropolitan Planning Organization is accepting applications from eligible applicants for funding under the 2014 Cycle of the Transportation Grant Program for eligible projects, including the construction of infrastructure projects that will provide safe routes for non-motorized travelers, including children, older adults and individuals with disabilities, to access daily needs. As an eligible applicant, the City, in partnership with the Lake Worth Community Redevelopment Agency, intends to submit a proposal for funds that will become available in July of fiscal year 2017 for improvements that include lighting, wider bicycle lanes, additional signage, sight lines for vehicular traffic, and strategic placement of crosswalks and signals. The actual amount of funding to be requested has not yet been determined.

The Administration Highway Trust Fund is for programs and projects defined as transportation alternatives within the State of Florida under the Transportation Alternatives Grant Program. Accordingly, the Florida Department of Transportation has made available an allocation of Transportation Alternatives Grant Program funds for Palm Beach County and has authorized the Palm Beach Metropolitan Planning Organization to solicit eligible projects in Palm Beach County under the 2014 Cycle of the Transportation Alternatives Grant Program.

Funding under the Transportation Alternatives Grant Program must be utilized for any of the following eligible projects:

- Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990.
- Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs.
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users.
- Construction of turnouts, overlooks, and viewing areas.

- Community improvement activities, including inventory, control, or removal of outdoor advertising; historic preservation and rehabilitation of historic transportation facilities; vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control; and archaeological activities relating to impacts from implementation of an eligible transportation project.
- Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation to: address storm water management, control, and water pollution prevention or abatement related to highway construction or due to highway runoff; or reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats.
- The Recreational Trails Program.
- The Safe Routes to School Program.

Applications must be submitted to the Palm Beach Metropolitan Organization by April 23, 2014. No cash or in/kind services match is required of the City for this funding.

MOTION:
I move to approve/not approve Resolution No. 17-2014.

ATTACHMENT(S):
Fiscal Impact Analysis – not applicable
Resolution

RESOLUTION NO. 18-2014 OF THE CITY OF LAKE WORTH, FLORIDA, AUTHORIZING THE SUBMISSION OF AN APPLICATION TO THE PALM BEACH METROPOLITAN PLANNING ORGANIZATION FOR GRANT FUNDS IN THE AMOUNT OF UP TO $750,000 UNDER THE 2014 CYCLE OF THE TRANSPORTATION ALTERNATIVES GRANT PROGRAM FOR IMPROVEMENTS TO THE TRAFFIC CIRCLE AT “A” STREET AND LAKE AND LUCERNE AVENUES FOR IMPROVED SAFETY AND ACCESSIBILITY; PROVIDING FOR AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

WHEREAS, the Florida Department of Transportation is authorized to provide funding from the Federal Highway Administration Highway Trust Fund for programs and projects defined as transportation alternatives within the state of Florida under the Transportation Alternatives Grant Program; and

WHEREAS, the Florida Department of Transportation has made available an allocation of Transportation Alternatives Grant Program funds for Palm Beach County; and

WHEREAS, the Palm Beach Metropolitan Planning Organization has been authorized to solicit eligible projects in Palm Beach County under the Transportation Alternatives Grant Program; and

WHEREAS, the construction of infrastructure improvements that will provide safe use by pedestrians, bicyclists and other non-motorized forms of transportation in compliance with Americans with Disabilities requirements is an eligible project; and

WHEREAS, the City of Lake Worth is eligible to submit an application for funding under the 2014 Cycle of the Transportation Alternatives Grant Program for funds that will become available in Fiscal Year 2017-2018; and

WHEREAS, the City, in partnership with the Lake Worth Community Redevelopment Agency, desires to submit an application to the Palm Beach Metropolitan Planning Organization for funding under the 2014 Cycle of the Transportation Alternatives Grant Program in the amount of up to $750,000 that will become available in Fiscal Year 2017-2018 for improvements to the traffic circle at “A” Street and Lake and Lucerne Avenues to provide safer and more accessible pedestrian and bicycle traffic.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF LAKE WORTH, FLORIDA, that:

SECTION 1: The City Commission of the City of Lake Worth, Florida, hereby authorizes the submission of an application to the Palm Beach Metropolitan Planning Organization for funding under the 2014 Cycle of the Transportation Alternatives Grant Program in the amount of $750,000 that will become

available in Fiscal Year 2017-2018 for improvements to the traffic circle at "A" Street and Lake and Lucerne Avenues to provide safer and more accessible pedestrian and bicycle traffic.

SECTION 2: The City Commission of the City of Lake Worth, Florida, hereby authorizes the Mayor to execute all related documents necessary for submission of the City's proposal.

SECTION 3: Upon execution of the Resolution, one copy shall be provided to the Public Services Department Director and one copy shall be provided to the Lake Worth Community Redevelopment Agency Executive Director. The fully executed original shall be maintained by the City Clerk as a public record of the City.

SECTION 4: This Resolution shall become effective upon adoption.

The passage of this Resolution was moved by Commissioner _____, seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

Mayor Pam Triolo thereupon declared this Resolution duly passed and adopted on the 15th day of April, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** PBSO

EXECUTIVE BRIEF

TITLE:
Authorize use of $1,375 in Law Enforcement Trust Fund for the County PAL to use for the Lake Worth Safety Patrol picnic

SUMMARY:
PBSO is requesting approval to use Law Enforcement Trust Funds for the Lake Worth Safety Patrol Picnic.

BACKGROUND AND JUSTIFICATION:
Law Enforcement Trust Fund donations are intended to assist agencies and organizations for various purposes including Drug Treatment Programs, Drug Abuse Education, Drug Prevention, Crime Prevention, Safe Neighborhoods and School Resource Officer Programs. PBSO has determined that the purpose of the Lake Worth Safety Patrol Picnic will provide crime prevention and safe neighborhoods.

MOTION:
I move to approve/disapprove the above use of contraband funds in the amount of $1,375.00.

ATTACHMENT(S):
Fiscal Impact Analysis
State Law Enforcement Trust Fund Donation Application

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2014	2015	2016	2017	2018
Capital Expenditures	0	0	0	0	0
Operating Expenditures	1,375	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
Net Fiscal Impact	1,375	0	0	0	0
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

B. Recommended Sources of Funds/Summary of Fiscal Impact:

	State Confiscated / Forfeiture Fund					
Account Number (s)	**Account Description**	**FY 2014 Budget**	**Budget Amendment**	**Available Balance**	**Agenda Expenses**	**Remaining Balance**
647-3010-521-52-90	Operating Supplies	47,172	N/A	47,172	(1,375)	45,797

C. Department Fiscal Review: _____

PALM BEACH COUNTY
SHERIFF'S OFFICE
RIC L. BRADSHAW, SHERIFF

INTER-OFFICE MEMORANDUM
Department of Legal Affairs

TO: Captain Rolando Silva **DATE:** April 1, 2014

FROM: Lisa Rubin, Agency Attorney LR

SUBJECT: State LETF Application- City of Lake Worth

I have reviewed the State LETF Donation Application for Palm Beach County PAL to use LETF funds for the Lake Worth Safety Patrol Picnic. This memo shall serve as certification from the Palm Beach County Sheriff's Office that this request complies with the provisions of FSS 932.7055(5) and meets the requirements for the use of State LETF funds.

CITY OF LAKE WORTH
STATE LAW ENFORCEMENT TRUST FUND DONATION

GENERAL INFORMATION

❖ PURPOSE/GUIDELINES OF DONATION

1. Law Enforcement Trust Fund (LETF) donations are intended to assist agencies and organizations with the following purposes:

   Drug Treatment Program
   Drug Abuse Education
   Drug Prevention
   Crime Prevention
   Safe Neighborhood
   School Resource Officer Program(s)

   An agency or organization that wishes to receive such funds shall complete an application accompanied by a written certification, signed by the Executive Director or Fiscal Agent, that the funds will be used for one or more of the authorized purposes as listed above.

2. Pursuant to FSS 932.7055(5)(c),any agency or organization that receives money from a law enforcement trust fund shall provide an accounting for such monies. An "Accounting of Funds" form must be completed and is due 60 days after the earlier of termination of any funding Agreement or upon completion of the activities funded by any LETF donation.

3. Failure to comply with any of the provisions set forth in this application will result in denial of future funding.

4. Inclusion of printed program/organization brochure is optional.

5. In order to establish a clear understanding of the proposed program, applicants shall respond to all questions and complete the current year budget.

6. Each agency is asked to provide a contact person who will be available for further information, follow up and/or interviews.

❖ FUNDING DECISIONS/APPROVAL

The Palm Beach County Sheriff's Office will review this LETF donation request in order to provide written certification to the City of Lake Worth whether or not this request complies with the provisions of the Florida Contraband Forfeiture Act. The City of Lake Worth, City Commissioners must then approve the request prior to appropriation of this donation award to the agency or organization.

❖ AUTHORITY

The use of LETF as donations is authorized under section 932.7055, Florida State Statutes.

CITY OF LAKE WORTH
STATE LAW ENFORCEMENT TRUST FUND DONATION

APPLICATION

1. **Legal name of Organization**: Palm Beach County PAL

Palm Beach County PAL
NAME

2. **Address**: 3228 Gun Club Road
STREET ADDRESS

West Palm Beach, Fl. 33406
CITY, STATE, ZIP

3. **Executive Director**: Scott Scrivner
NAME

SIGNATURE

(561) 688-3821 Scrivners@pbso.org
TELEPHONE NUMBER E-MAIL ADDRESS

FEID #: 650461384

4. **Fiscal Agent**: Christopher Johnson
NAME

SIGNATURE

(561) 723-6038 johnsonc1207@bellsouth.net

TELEPHONE NUMBER E-MAIL ADDRESS

5. **Date**: 4/4/14
DATE

CITY OF LAKE WORTH
STATE LAW ENFORCEMENT TRUST FUND DONATION

Organization Name: Palm Beach County PAL

LETF Funding Request **(MUST match total on Financial Application)**: **$1375.00**

1. What service will your organization provide through the use of Law Enforcement Trust Funds?

   - ☐ School Resource Officers
   - ☐ Drug Treatment Program
   - ☑ Crime Prevention
   - ☑ Safe Neighborhood
   - ☐ Drug Abuse Education
   - ☐ Drug Prevention Programs

2. Organization Purpose: _____

The Palm Beach County Police Athletic League is a 501c3 non-profit corporation which builds partnerships between youth, law enforcement, and the community through recreational, athletic, and educational programs designed to encourage and develop good citizenship and improve the quality of life in Palm Beach County

3. Provide a brief summary of program's activities/services to be funded:

The PBSO District 14 Community Policing Unit hosts the Lake Worth Safety Patrol Picnic every year to reward the 5th grade safety patrols for their service throughout the school year. The picnic is attended by safety patrols & chaperones from 6 Lake Worth Elementary Schools including; North Grade, South Grade, Highland, Barton, Sacred Heart and the Academy for Positive Learning Charter School. In recent years the picnic has taken place at the Lake Lytal Pool off of Gun Club Road. The average amount of safety patrols attending the picnic the last few years is 185. The students enjoy swimming and playing on the diving boards & slides. They are divided up into groups for relay raft races and other competitions & games both inside and outside the pool. Prizes are awarded and every student is given a goodie bag. The PBSO Grill Team cooks lunch including hot dogs, hamburgers, baked beans and potato chips. Lunch is served at the Lake Lytal pavilion behind the pool. After lunch the students return to the pool for the remainder of the day.

4. What results are you committed to achieving? _____

   The positive interaction throughout the day in this environment between the safety patrols and Law Enforcement has a positive lasting impact on the students. The picnic also strengthens the belief that policing is a partnership between Law Enforcement and the Community. The Teachers often comment how the students look forward to the picnic and what a great motivating tool for an event that happens on one of the last days of the school year.

CITY OF LAKE WORTH
STATE LAW ENFORCEMENT TRUST FUND DONATION

FINANCIAL APPLICATION

Period Covered (one year) From: 05/23/13 To: 05/30/14

No.	Expense	Program Total	LETF Request	LETF
1.	Salaries	$	$	%
2.	Employee Benefits/Payroll Taxes	$	$	%
3.	Professional Fees	$	$	%
4.	Occupancy/Utilities	$225.00	$225.00	100%
5.	Telephone	$	$	%
6.	Postage/Shipping	$	$	%
7.	Printing & Publications	$	$	%
8.	Supplies	$475.00	$475.00	100%
9.	Travel	$535.00	$535.00	100%
10.	Meetings	$	$	%
11.	Miscellaneous Expenses	$140.00	$140.00	100%
	Total Expenses	$1375.00	$1375.00	100%

CITY OF LAKE WORTH
STATE LAW ENFORCEMENT TRUST FUND DONATION

Budget Narrative

Provide detailed description for each expense listed on the Financial Application. You may attach additional sheets if necessary.

Salaries (list employees and individual compensation): None

Professional Fees (list vendor and type of service provided): None

Occupancy/Utilities (list utilities): Use of Lake Lytal Pool & facilities.

Telephone (provide telephone numbers): None

Printing & Publications (list type of material): None

CITY OF LAKE WORTH
STATE LAW ENFORCEMENT TRUST FUND DONATION

Supplies (list supplies/equipment): Hot dogs, hamburgers, baked beans, potato chips, condiments, cookies, paper plates, utensils and napkins.

Travel (individuals traveling, destination and purpose): The students & chaperones will be transported from Elementary schools to Lake Lytal Pool and back. Some schools are able to provide their own transportation.

Meetings (attendees, purpose, items needed for meeting):

Miscellaneous Expense (specify items): Goodie bags: PBSO rubber bracelets, PBSO Pencils, PBSO flash lights and PBSO notebooks.

CITY OF LAKE WORTH
STATE LAW ENFORCEMENT TRUST FUND DONATION

APPLICATION CERTIFICATION

I hereby certify that any LETF funds received will be used for the authorized purpose as indicated on Page 3 of this application. Additionally, I certify that the agency requesting the funds is a not-for-profit agency or organization, which has been held to be tax exempt under the provisions of s. 501 of the Internal Revenue Code, and is registered as a Non Profit organization with the State of Florida, Department of State, Division of Corporations.

SCOTT SCRIVNER
Name (please print)

DIRECTOR
Title (please print)

Signature

4/4/14
Date

NOTARY SECTION:

State of Florida

County of Palm Beach

The foregoing Agreement was acknowledged and subscribed before me this 04 day of APRIL, 2014 by SCOTT SCRIVNER (name of individual) as DIRECTOR (title) of PBC PAL (name of organization/ agency), who is personally known to me or who produced _____ as identification.

Donna M Horgan
Notary Public

My Commission Expires:

DONNA M. HORGAN
Notary Public - State of Florida
My Comm. Expires Apr 24, 2016
Commission # EE 192210

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Leisure Services

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EXECUTIVE BRIEF

TITLE:
Ordinance No. 2014-10 – Second Reading and Public Hearing – amend beach parking regulations

SUMMARY:
The Ordinance will allow seasonal residents to purchase beach parking decals.

BACKGROUND AND JUSTIFICATION:
On March 18, 2014, the City Commission directed staff to amend the City's beach parking regulations to allow seasonal residents to purchase beach parking decals with the appropriate documentation.

On January 8, 2013, the City Commission adopted Ordinance No. 2013-12 which amended the designation and use of resident and employee parking areas. Additionally, this ordinance deleted a provision, which allowed seasonal residents to purchase a parking decal. This provision had been in the City Code since 1984.

On April 1, 2014, the City Commission approved Ordinance No. 2014-10 on first reading. The accompanying resolution amending the City's Comprehensive Fee Schedule to establish a seasonal resident fee, pool fees, and casino ballroom fees, as directed by the City Commission on March 18, 2014, is on the April 15, 2014, agenda. The effective date of the resolution will be 10 days after approval of Ordinance No. 2014-10.

MOTION:
I move to approve/not approve Ordinance No. 2014-10 on second reading.

ATTACHMENT(S):
Fiscal Impact Analysis – not applicable
Ordinance

ORDINANCE NO. 2014-10 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 7, BEACHES, PARKS AND RECREATION; ARTICLE II, BEACH PARKING; SECTIONS 7-17 AND 7-21, TO REVISE SAID SECTIONS TO ALLOW FOR THE ISSUANCE OF SEASONAL RESIDENT PARKING DECALS; PROVIDING FOR SEVERABILITY; PROVIDING FOR THE REPEAL OF LAWS IN CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City of Lake Worth, Florida (the "City") is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the City's Code of Ordinances, at Chapter 7, Article II, sections 7-17 to 7-22, set forth the City's beach parking regulations; and

WHEREAS, the sections 7-17 and 7-21 of the aforementioned beach parking regulations need to be updated to allow for the issuance of seasonal resident parking decals; and

WHEREAS, the City Commission has reviewed the recommended revisions to sections 7-17 and 7-21 and has determined that it is in the best interest of the public health, safety and general welfare of the City to adopt this ordinance.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1. The foregoing "WHEREAS" clauses are true and correct and are hereby ratified and confirmed by the City Commission.

Section 2. Chapter 7, Article II, sections 7-17 and 7-21 are hereby amended as follows:

Sec. 7-17. Definitions.

(a) *Municipal beach area* means that area lying within the municipal boundaries of the City of Lake Worth lying east of the ~~intercoastal~~ intracoastal waterway and west of the Atlantic Ocean.

(b) *Beach area parking lots* means the upper parking lot or upper lot, the lower parking lot or lower lot and the Old Bridge lot.

(c) *Bus* shall mean and include buses, shuttles, motor coaches or other similar vehicles used for the transportation of over 10 persons.

(d) *Lower parking lot* or *lower lot* means those parking areas at the municipal beach area, located immediately east of the S.R. A1A and west of the upper lot and Lake Worth Municipal Swimming Pool.

(e) *Old Bridge lot* means the parking area located west of S.R. A1A, east of the Lake and Lucerne Bridge on the north side of Lake Avenue used primarily for overflow parking of the city's casino, beach, and pier complex.

(f) *Resident or beach tenant employee parking areas* means those beach area parking lots and/or spaces designated and reserved for the exclusive use of individuals who satisfy the requirements provided herein for year-round residents, seasonal residents or beach tenant employees that possess and display the required decal.

(g) *Upper parking lot* or *upper lot* means the easternmost parking lot at the municipal beach area, located on the crest of the dune line to the east and south of the Lake Worth Municipal Swimming Pool.

Sec. 7-21. Designation and use of resident and beach tenant employee parking areas.

(a) Vehicles, excluding ~~motor homes and other~~ those vehicles ~~restricted~~ as set forth in section 7-19, displaying a resident or beach tenant employee parking decal issued by the city shall be permitted to park in the resident, which includes the year-round and seasonal residents, or beach tenant employee parking areas as hereinafter provided. If an area is designated for resident parking only, a resident parking decal shall be displayed. If an area is designated for beach tenant employee parking only, a beach tenant employee parking decal shall be displayed. If an area is designated for both resident and beach tenant employee parking, either a resident parking decal or beach tenant employee parking decal must be displayed.

(b) A parking decal as required by this section shall be issued to year-round and seasonal residents who meet the following criteria:

(1) A year-round resident of the city shall furnish proof of such residency by producing one (1) of the following items of current, documentary evidence:

a. Declaration of domicile;

b. Homestead exemption qualification card;

c. Ad valorem property tax payment receipt;

d. Voter registration card;

e. ~~One-year~~ A lease agreement ~~(minimum)~~ with notarized signatures or a notarized letter from a property owner or management company that provides that the person is renting the property and it is within the municipal limits of the City of Lake Worth;

f. City of Lake Worth utilities bill, in the name of the applicant, containing waste removal charges.

(2) A seasonal resident of the city shall furnish proof of such residency by producing one (1) of the following items of current, documentary evidence:

a. Ad valorem real property tax payment receipt reflecting an address within the city limits;

b. Mobile home registration reflecting an address within the city limits.

c. A lease agreement with notarized signatures or a notarized letter from the property owner or management company that provides that the person is renting the property and it is within the municipal limits of the City of Lake Worth.

(~~2~~3) ~~A~~ Both year-round and seasonal residents shall additionally furnish a current, valid motor vehicle registration for each vehicle for which a parking decal is sought, ~~and~~ a valid driver's license ~~or~~ and one other item of personal identification which reflects a Lake Worth city address. If the vehicle is registered in a company name, the person seeking the decal shall be referred to the city attorney or his/her designee for a determination of eligibility. With respect to year-round residents ~~T~~the documents required by subsection (1) and the first sentence of this subsection shall reflect the same Lake Worth address. A year-round resident who leases a vehicle for which a parking decal is sought shall additionally furnish a notarized copy of the lease in his or her name.

~~(3) Reserved.~~

(4) All persons applying for a resident parking decal shall execute an affidavit, under oath, setting forth any of the foregoing facts or any other facts requested by the city. Said resident executing this affidavit will be

advised that if any statement in the affidavit is false, the affiant will be prosecuted for perjury.

(5) All year-round residents shall pay to the city a fee set forth by resolution for the parking decal which shall be valid for a period of one (1) year commencing on May 1 and expiring the following April 30. ~~The fee set by resolution shall be pro-rated to a monthly amount if a resident parking decal is applied for after May 1. A partial month shall be counted as a full month in determining the pro-rated amount of the fee.~~

(6) All seasonal residents shall pay to the city a fee set forth by resolution for the parking decal which shall be valid for a period of one (1) year commencing on May 1 and expiring the following April 30.

(~~6~~7) The resident parking decal shall be permanently affixed by the resident to the vehicle in the lower left corner of the windshield on the driver's side ~~a conspicuous place~~ as directed by the city. The vehicle upon which the decal is permanently displayed shall be the same vehicle for which registration is exhibited to the city as required herein. Decals are not allowed to be transferred to other vehicles.

(~~7~~8) In case of replacement of a vehicle for which a parking decal has been issued, a replacement parking decal shall be issued upon the payment of ~~without charge (unless~~ a replacement fee ~~is~~ as established by city resolution~~)~~ and upon production of a vehicle registration certificate for a replacement vehicle and either the old parking decal or an affidavit, executed under oath, stating that the old parking decal has been lost, stolen or destroyed.

(~~8~~9) In addition to all other requirements contained herein, all unmarried minor persons applying for a resident parking decal shall furnish the affidavit provided for in subsection (4), which shall be co-signed by a parent or natural or court-appointed guardian. Proof of guardianship or marriage may be required by the issuing authority.

~~(9) Reserved.~~

(10) In case of a dispute, the city attorney or his/her designee shall have the authority to make a determination of issuance or non-issuance of the resident parking decal.

(c) Upon payment of the fee set by city resolution, any beach tenant employee who is employed by an authorized tenant of the Casino Building or the municipal beach area shall be issued a beach tenant employee parking decal. The decal shall be permanently affixed in the lower left corner of the

windshield on the driver's side as directed by the city. A replacement decal shall be issued upon the payment of ~~without charge (unless~~ a replacement fee ~~is~~ as set by city resolution~~)~~ and upon production of either the old parking decal or an affidavit, executed under oath, stating that the old decal has been lost, stolen or destroyed. The decal shall be valid for the period specified by city resolution. Tenant employee decals are city property and must be returned upon termination of employment or non-payment as set by city resolution.

(d) It shall be a municipal parking violation for any person to park a motor vehicle which does not display a resident or beach tenant employee parking decal as herein provided or pay the metered fee in the resident and beach tenant employee parking areas. A violation of this section shall be punished by a civil penalty set forth by city resolution.

(e) It shall be a misdemeanor of the second degree for any person to temporarily affix in any manner, such as though the use of adhesive tape, a resident beach parking decal or beach tenant employee parking decal to any motor vehicle. Furthermore, it shall be a misdemeanor of the second degree for any person to be in the possession of a motor vehicle on which is temporarily displayed in any manner a resident beach parking decal or beach tenant employee parking decal.

(f) It shall be a misdemeanor of the second degree for any person to forge, duplicate or reproduce in any manner a resident beach parking decal or beach tenant employee parking decal.

(1) It shall be a misdemeanor of the second degree for any person to display in any manner a forged, duplicated or otherwise reproduced resident beach parking decal or beach tenant employee parking decal on any motor vehicle.

(2) Furthermore, it shall be a misdemeanor of the second degree for any person to be in the possession of a motor vehicle on which is displayed a forged, duplicated or otherwise reproduced resident beach parking decal or beach tenant employee parking decal.

(g) Except to the extent that decal parking is allowed pursuant to this article, the rates for metered municipal beach parking shall be set by city resolution.

Section 3. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

Section 4. Repeal of Laws in Conflict. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 5. Codification. The sections of the ordinance may be made a part of the City Code of Laws and ordinances and may be re-numbered or re-lettered to accomplish such, and the word "ordinance" may be changed to "section", "division", or any other appropriate word.

Section 6. Effective Date. This Ordinance shall become effective on ten (10) days after passage.

The passage of this Ordinance on first reading was moved by Commissioner Szerdi, seconded by Commissioner Amoroso, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo	AYE
Vice Mayor Scott Maxwell	ABSENT
Commissioner Christopher McVoy	AYE
Commissioner Andy Amoroso	AYE
Commissioner John Szerdi	AYE

The Mayor thereupon declared this Ordinance duly passed on first reading on the 1st day of April, 2014.

The passage of this Ordinance on second reading was moved by Commissioner _____, seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed and enacted on the 15th day of April, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Leisure Services

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EXECUTIVE BRIEF

TITLE:
Ordinance No. 2014-11 - Second Reading and Public Hearing - amend Bryant Park boat ramp parking

SUMMARY:
The Ordinance will allow Palm Beach County residents to purchase an annual Bryant Park Boat ramp parking decal.

BACKGROUND AND JUSTIFICATION:
On September 12, 2013, the City Commission adopted Resolution No. 41-2013 establishing the fees for City services and other charges for Fiscal Year 2013-2014. The effective date of the resolution was October 1, 2013.

Since then, several changes have been made to the fee schedule as staff continues to address issues or resident concerns. This inclusion, supported by staff, was requested by Bryant Park Boat Ramp users. The annual trailer parking permits are valid January 1 through December 31 of the calendar year they are purchased for.

On April 1st, the City Commission approved on first reading the amendment to Bryant Park boat ramp parking decals that establishes a Palm Beach County resident yearly fee. The effective date of the resolution will be 10 days after approval of Ordinance No. 2014-11.

MOTION:
I move to approve/not approve Ordinance No. 2014-11 on second reading.

ATTACHMENT(S):
Fiscal Impact Analysis
Rules and Regulations
Application
Ordinance

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2014	2015	2016	2017	2018
Capital Expenditures	0	0	0	0	
Operating Expenditures	0	0	0	0	0
External Revenues	$13,500	$27,000	$27,000	$27,000	$27,000
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
Net Fiscal Impact	0	0	0	0	0
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

B. Recommended Sources of Funds/Summary of Fiscal Impact:

Five hundred permits will be printed for 68 boat trailer parking spaces. This includes the 18 spaces at the extended parking lot located at Snook Island.

Leisure Services - Parking

*Note: 500 permit stickers available for sale	Estimated # of Permits to be sold	Estimated Revenue 2014 (5 Months)	Estimated # of Permits to be sold	Estimated Revenue 2015 (12 months)
Residential	240 X $50 =	$12, 00.00	480 X $50 =	$24,000.00
Commercial-or Non PBC residents	10X $150 =	$1,500.00	20X $150 =	$ 3,000.00

C. Department Fiscal Review: _____

Bryant Park Boat Ramp Permit Application

Information as it appears on the current Boat Registration:

Name_____

Address_____
Street City State Zip

Home Phone_____ Business or cell Phone_____

Email Address _____ Trailer tag# _____

Payment of Annual fee: Check the one that applies

____**$50.00 - Palm Beach County Residents:** Must have FL boat and trailer registration with a Palm Beach County address AND a driver's license, voter's registration or property tax bill to qualify for the Palm Beach County Resident fee.

____**$159.00 – Out of County Residents:** Must have a current boat and trailer registration and a form of I.D.

____**$159.00 – Commercial:** Must have a current boat and trailer registration and a form of I.D.

____**$ 5.00 – Replacement Boat Permit**

Please make check/money order (in U.S. Funds) payable to: **"City of Lake Worth"** or complete the Credit Card Authorization below.

Credit card payments: Walk-in, Mail-in at (561) 533-7300 (Visa/MasterCard) **Credit**

Card: Visa/MasterCard

Card #_____Expiration Date_____/_____3 Digit CVV #_____

The 3 digit CVV number is located on the back of your card near your signature.

Please read and sign acknowledgment of the following statements:
I hereby certify that I have read and understand the rules and regulations for the Bryant Park Boat Ramp use. I understand that failure to comply with these rules may result in a fine or civil penalty or the inability to obtain a boat ramp parking permit.

_____ _____
Signature Date

I hereby assume the risk associated with the use of the facility and agree to hold City of Lake Worth, its agents, designees, employees, and elected officials free and harmless at all times from and against all claims, liability, expenses, losses, costs, fines, damages or causes of action of every kind and character, including attorney's fee and costs, whether at trial or appellate levels or otherwise, due to my acts, errors or omissions resulting in bodily injury, including death, or damage to my property or the property of others incident to or in connection with my use of the facility.

I have read and understand the rules and regulations designed for boat trailer parking at Bryant Park Boat Ramp, Lake Worth, Florida.

Signature _____ Date _____

OFFICE USE ONLY

PERMIT# _____ DATE RECEIVED _____ RECEIPT# _____ EMPLOYEE ID# _____

OFFICIAL'S SIGNATURE _____

BRYANT PARK BOAT RAMP PARKING PERMIT RULES & PROCEDURES
2014

Trailer launched boats utilizing the designated trailer parking spaces are required to display a valid City permit on the trailer bow stand. Vehicles with trailers must park in the designated boat trailer parking area at the boat ramp.

Permit Year: January 1 through December 31

Permit Fees: Fees are fixed and cannot be pro-rated.

Palm Beach County Resident: $53.00 (includes tax) **-** Palm Beach County Residents must produce a current Florida boat registration showing a Palm Beach County address AND an ID such as FL driver's license, voter registration, or property tax bill with a Palm Beach County address.

Out of County: $159.00 (includes tax) **–** Out of County Users must produce a current state boat registration and provide a copy of identification (ID) such as a driver's license.

Commercial: $159.00 (includes tax) **–** Commercial Users must produce a current state boat registration and provide a copy of identification (ID) such as a driver's license.

Replacement Permit: $5.00 (includes tax) for lost, stolen, defaced and if boat trailer is sold, original sticker needs to be peeled off and brought back with new registration in order to get a replacement for $5.

Boat Ramp Parking Permits are non-transferable: If a boat/trailer is changed during the permit year, remove the sticker from the existing boat/trailer and bring it, along with a copy of the new boat and trailer registration to the City of Lake Worth Customer Service Office, 414 Lake Avenue, Lake Worth, FL 33460. Upon receipt of the old permit decal, a new numbered replacement permit will be issued at a cost of $5.

How to purchase a permit: Complete the attached application and mail or bring in person to the City of Lake Worth Customer Service Office, located at 414 Lake Avenue, Lake Worth, FL 33460. Permits can be obtained Monday through Friday, between 8:00 a.m. and 4:30p.m. Applications with credit card payments must include the completed Credit Card Authorization.

To apply, the boat owner must provide:
a. The completed signed application
b. A copy of current boat registration (a Bill of Sale cannot be accepted in place of a registration)
c. A copy of the current trailer registration
d. A copy of personal identification (driver's license, voter's registration, property tax bill)
e. Applicable fee.

Make check or money order (in U.S. funds) payable to: "City of Lake Worth"
Or complete the attached Credit Card Authorization section of the application.

The Customer Service staff will verify the above requirements and issue the Boat Ramp Parking permit decal.

Permit Location: Place permit decal on the bow stand of the trailer, or the trailer tongue if there is no bow stand.

ORDINANCE NO. 2014-11 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 7, BEACHES, PARKS AND RECREATION; ARTICLE V, “BOAT RAMP PARKING”; SECTION 7-54, “BOAT RAMP PARKING” TO ALLOW FOR THE LEISURE SERVICES DIRECTOR TO PROMULGATE RULES AND PROCEDURES REGARDING BOAT RAMP PARKING PERMITS; PROVIDING FOR SEVERABILITY, THE REPEAL OF LAWS IN CONFLICT, CODIFICATION, AND AN EFFECTIVE DATE

WHEREAS, the City of Lake Worth, Florida (the “City”) is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the City’s Code of Ordinances, at Chapter 7, Article V, Section 7-54, sets forth the City’s boat ramp parking regulations; and

WHEREAS, the City Commission wishes to allow the Leisure Services Director the ability to promulgate rules and procedures regarding boat ramp parking permits; and

WHEREAS, the City Commission has reviewed the recommended revisions to section 7-54 and has determined that it is in the best interest of the public health, safety and general welfare of the City to adopt this ordinance.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1. The foregoing “WHEREAS” clauses are true and correct and are hereby ratified and confirmed by the City Commission.

Section 2. Chapter 7, Article V, “Boat Ramp Parking, Section 7-54, “Boat Ramp Parking”, is hereby amended as follows:

Sec. 7-54. Boat ramp parking.

(a) All boat trailers and vehicles with attached boat trailers using the Bryant Park boat ramp must park in city designated boat ramp parking spaces.

(b) The rate for parking at all city boat ramp parking spaces shall be set by resolution.

(c) The Leisure Services Director shall have the authority to develop and institute rules and procedures governing the city boat ramp parking spaces.

(~~c~~d) It shall be a municipal parking violation for any person to park in violation of this section. Any violation of this section shall be punishable by a civil penalty of fifty dollars ($50.00).

Section 3. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

Section 4. Repeal of Laws in Conflict. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 5. Codification. The sections of the ordinance may be made a part of the City Code of Laws and ordinances and may be re-numbered or re-lettered to accomplish such, and the word “ordinance” may be changed to “section”, “division”, or any other appropriate word.

Section 6. Effective Date. This Ordinance shall become effective on ten (10) days after passage.

The passage of this Ordinance on first reading was moved by Commissioner Szerdi, seconded by Commissioner McVoy, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo	AYE
Vice Mayor Scott Maxwell	ABSENT
Commissioner Christopher McVoy	AYE
Commissioner Andy Amoroso	AYE
Commissioner John Szerdi	AYE

The Mayor thereupon declared this Ordinance duly passed on first reading on the 1st day of April, 2014.

The passage of this Ordinance on second reading was moved by Commissioner _____, seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed and enacted on the 15th day of April, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Leisure Services

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EXECUTIVE BRIEF

TITLE:
Resolution No. 19-2014 - amend the Fiscal Year 2014 Comprehensive Fee Schedule to include several beach and boat ramp parking, pool, and ballroom fees

SUMMARY:
The Resolution provides for the establishment of the below fees:

- Provides for an annual boat trailer parking permit for all Palm Beach County residents and commercial parking at Bryant Park Boat Ramp;
- Updates the Lake Worth Pool fee schedule due to new programs and safety services;
- Provides for year round and seasonal resident beach parking decals; and
- Updates the Casino Ballroom fees.

BACKGROUND AND JUSTIFICATION:
On September 12, 2013, the City Commission adopted Resolution No. 41-2013 establishing the fees for City services and other charges for Fiscal year 2013-2014. The effective date of the charges was October 1, 2013. Since then amendments to the Fee Schedule have been made as staff continues to review and modify the fees as requested by both the City Commission and public or to better serve the City.

Additionally, on April 15, 2014, the City Commission will take action on Ordinance Nos. 2014-10 and 2014-11 to regulate the beach decal parking and Bryant Park Boat Ramp parking. The proposed Boat Ramp fee is comparable with the County's annual trailer parking permit, will be valid from January 1 through December 31 of the calendar year, sold for the remainder of the 2014 calendar year at the requested $50, and will not be prorated. If the ordinances are approved, this resolution will establish those fees. The effective date of this resolution will be the same as Ordinance Nos. 2014-10 and 2014-11.

MOTION:
I move to approve/not approve Resolution No. 19-2014.

ATTACHMENT(S):
A. Fiscal Impact Analysis – not applicable
B. Resolution

RESOLUTION NO. 19-2014 OF THE CITY OF LAKE WORTH, FLORIDA, ESTABLISHING FEES FOR THE ANNUAL BOAT TRAILER PARKING PERMITS AND BEACH PARKING DECALS AND UPDATING THE FEES FOR THE LAKE WORTH POOL AND CASINO BALLROOM; AMENDING RESOLUTION NOS. 41-2013, 61-2013, 68-2013, 05-2014 AND 09-2014; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Commission adopted Resolution 41-2013 on September 12, 2013 establishing the original schedule of fees and charges for the 2013-2014 fiscal year for City services which was later amended with Resolutions 61-2013, 68-2013, 05-2014 and 09-2014; and

WHEREAS, the City desires to amend the City-wide fee schedule to establish: (1) the annual boat trailer parking permit fees at Bryant Park Boat Ramp; (2) the annual beach parking decal fees for year-round and seasonal residents; and (3) update the fees for the Lake Worth Pool and Casino Ballroom; and

WHEREAS, the establishment of additional fees and charges to be added to the City-wide fee schedule serves a valid public purpose.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1. The foregoing recitals are incorporated into this Resolution as true and correct statements.

Section 2. The revised schedule of fees and charges is attached hereto as Exhibit “A” and incorporated herein is hereby adopted.

Section 3. Except as revised herein all other fees and charges adopted by the City remain unchanged.

Section 4. All Resolutions or parts of Resolutions in conflict herewith are hereby repealed.

Section 5. If any provision of this resolution or the application thereof to any person or circumstances is held invalid, the invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid provision or application and to this end the provisions of this Resolution are declared severable.

Section 6. That this Resolution shall take effect ten days after adoption.

The passage of this Resolution was moved by Commissioner _____ , seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Resolution duly passed and adopted on this 15th day of April, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

EXHIBIT A

CITY OF LAKE WORTH

SCHEDULE OF FEES AND CHARGES FOR SERVICES

EFFECTIVE – FY 2013-2014

- Original Adoption of Fee Reso # 41-2013 (9/12/13) Effective 10/1/2013
- Amendment 1 – Resolution # 61-2013 – November 5th 2013
- Amendment 2 – Resolution # 68-2013 – December 3rd 2013
- Amendment 3 - Resolution # 05-2014 – January 7th 2014
- Amendment 4 - Resolution # 14-2014 – March 18th 2014
- Amendment 5 - Reso # XX-2014 – Pending CC Approval 4/15/2014

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EXHIBIT A

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Lifeguards ……1
Lane Rental……1
Dive-In Movie Fees……1

DOWNTOWN PARKING FEES

Parking Fees - Downtown Area……2
Beach Parking, Old Bridge Parking, Employee/Tenant Pass……2
Beach Parking Decal (Annual Resident)……2
Beach Parking Decal (Seasonal Resident)……2
Boat Ramp & Boat Ramp Overflow……2
Boat Ramp Trailer Parking Decal (Annual Residential)……2
Boat Ramp Trailer Parking Decal *(Annual Non-PBC Resident)……2
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* PBC – Palm Beach County

CASINO BALLROOM

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Ocean View Terrace (Only) ……3
Intra-Coastal Terrace ……3
Beach & Courtyard Weddings……3

EXHIBIT A

SCHEDULE OF FEES AND CHARGES FOR SERVICES

Originating Department	Description of Services Provided	Fees ($)		
LEISURE SERVICES	**Beach and Pool**	**Resident**	**Non-Resident**	**Deposit**
Water Exercise Class	Summer Membership	$ 50	$ 50	$ -
	Non-Member	3	3	-
	Junior Life Guard Program	350	350	-
	Mom & Tot Program	25	35	-
	Master Swim Program	10	30	-
	Learn to Swim Program [1]	40	50	-
	Guppy Rescue Squad Program	50	-	-
	Youth Dive Program	20	25	-
	Synchronized Swim Program	20	25	-
	College Swim Rental	-	-	-
	Team [2]	84	84	-
	Swim Team/ Person	6	6	-
	Diving Shop Pool Rentals	50	50	-
	Diving Shop / Student	2	2	-
	Group Rates	2	2	-
	Beach Rentals	-	-	-
	Cabana Half Day	25	25	-
	Cabana Full Day	35	35	-
New Fees - FY 14	Pool Rental [3]	50	65	250
New Fees - FY 14	Lifeguards ($15: per hr - minimum of 2 hours)	15 per/hr	15 per/hr	-
New Fees - FY 14	Lane Rental	15 per/hr	15 per/hr	
New Fees - FY 14	Dive-In Movie Fees	7	7	
New Fees - FY 14	Dive-In Movie Family Fees 4+Guests	20	20	

	Footnote / Explanation
	Yellow highlighted fees are the new fees being presented to City Commission
1	Learn to swim per ten classes
2	Team rental per week / person per day
3	Pool rental per hour

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EXHIBIT A

SCHEDULE OF FEES AND CHARGES FOR SERVICES

Originating Department	Description of Services Provided	Fees ($)		
LEISURE SERVICES	Downtown Parking Fees	Resident	Non-Resident	Explantion
Parking Fees	**Downtown Area** [6]			
	(Free parking-for-limited-time-basis)			
	Free four (4) hour street parking at same parking space	$ -	$ -	
	Beach Parking (per hr)	2.00	2.00	
	Old Bridge Parking (Per hr)	2.00	2.00	
	Old Bridge Parking (Tenant/Employee Pass - per month)	40.00	40.00	
	Beach Parking Decal (Annual Resident) $40.00 plus tax	40.00	N/A	Incr. from $30:
	Beach Parking Decal (Seasonal Resident) $60.00 plus tax	60.00	N/A	New
	Boat Ramp and Boat Ramp over flow (per day)	10.00	10.00	
	Boat Ramp Trailer Parking Decal (Annual Residential $50.00 plus tax)	50.00	50.00	New
	Boat Ramp Trailer Parking Decal (Annual Non-PBC[1] Resident ($150.00 plus tax)	-	150.00	New
	Boat Ramp Trailer Parking Decal (Annual Commercial $150.00 plus tax)	150.00	150.00	New
	Fee for lost, stolen or destroyed replacement decals	5.00	5.00	New

Footnote / Explanation	
1	PBC - Palm Beach County
	Yellow highlighted fees are the new or revised fees being presented to City Commission
3 - 5	
6	The Downtown area is bounded by the Northern boundary of the Right-of-Way, known as 2nd Avenue North; on the West, by the Western boundary of the Right-of-Way known as "A" Street; on the South, by the Southern boundary of the Right-of-Way known as 1st Avenue South; and on the East, by the Eastern boundary of the Right-of-Way known as Golf View Lane.

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EXHIBIT A

SCHEDULE OF FEES AND CHARGES FOR SERVICES

Originating Department	Description of Services Provided	Fees ($)
LEISURE SERVICES	Casino Ballroom & Beach Complex	50% required to hold rental space

Casino Ballroom Beach Complex

Casino Ballroom (includes both Oceanview and Intracoastal Terraces)

	Hourly Rate (min 2 hours)	Nonprofit Resident Hr. Rate	Day Rate (12 hours)	Nonprofit Resident Day Rate	Additional Hour
Weekday SU-TH	$168	$147	$1680	$1470	$158
*Weekend Fri & Sat & holidays *6 hour min. Fri & Sat after 4pm	$231	$210	$2310	$2100	$210

Oceanview Terrace Only (8 hour rental)

	Nonprofit/Resident Rate	Regular Rate
Weekday SU-TH	$315	$473
Weekend Fri & Sat & holidays	$525	$683

Intracoastal Terrace (8 hour rental)

	Nonprofit/Resident Rate	Regular Rate
Weekday SU-TH	$206	$360
Weekend Fri & Sat & holidays	$412	$567

Beach & Courtyard Weddings (2 hour maximum – 10am-dusk) includes chairs & ceremony table

	Resident Rate	Regular Rate	With Ballroom Rental
Weekday M-TH	$105	$210	$53
Fri – Sat (b/f 1 pm) & Sunday	$210	$315	$105
Fri-Sat (after 2 pm)	$420	$525	$210

Kitchen Rental Fee	$530: kitchen rental fee

All rentals include up to 24 – 60" round tables, 12 – 6' banquet tables, 10- 72" round tables and 16 -36" round high boy or cocktail tables, 200 silver Chiavari chairs and 100 white padded folding chairs.
Pricing is subject to change. Prices do not include 6% sales tax
(proper non-profit paperwork is required with contract to receive non-profit rates and tax-exemption)

Footnote / Explanation	
Down payment policy	50% rental deposit required to reserve rental space
Parking Fees	For city coordinated events taking place at the lake worth beach complex, the City will have the ability to charge a $10-$20 valet parking fee when deemed financially beneficial to the event. The valet parking fee will be only be for a restricted number of parking spots during events hours only. Lake Worth decal parking area is exempted from the valet parking area.
Damage Policy	The City retains the right to charge all applicable fees to repair or replace damages arising from lessee rental of the ballroom without limit. A refundable damage deposit of $1,000: will be collected at the time of rental. If damages exceed the refundable deposit, the renter shall be responsible for the total charge.

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Community Sustainability

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EXECUTIVE BRIEF

TITLE:

Ordinance No. 2014-12 - First Reading - amend Chronic Nuisance Property Code related to exemptions from chronic nuisance activities and schedule the public hearing date for May 6, 2014

SUMMARY:

The Ordinance includes changes identified by staff, City Attorney's Office, and Palm Beach Sheriff Office to improve the effectiveness of the chronic nuisance program regarding exemptions from chronic nuisance activities.

BACKGROUND AND JUSTIFICATION:

Chronic Nuisance Services Ordinance: In May of 2013 the City's Code Compliance Division, a representative of the City Attorney's Office, and the Palm Beach County Sheriff's Office (PBSO), District 14, began monthly meetings to more effectively troubleshoot and coordinate solutions to the most pressing code enforcement and crime issues within the City. Several updates to the City's Chronic Nuisance Services Ordinance were later adopted in September 2013. Now, several months later, additional changes are needed to clarify what constitutes a nuisance activity triggering the ordinance.

Chronic Nuisance Services are a relatively new tool in the State of Florida. It allows the City to declare a property a "chronic nuisance property" based upon a mandatory minimum number of law enforcement calls for service made to the property. The types of calls for service that trigger the ordinance include such offenses as discharging a firearm in public, criminal mischief, trespass in a structure, loitering and prowling, disorderly intoxication, breach of the peace, etc. Once the minimum number of calls for service has been made at the property, the City issues the owner a "Declaration of Chronic Nuisance Property" and the owner is required to submit an action plan to the City that outlines how the owner plans to abate these unlawful activities at the property. If the owner fails to provide or carry out the action plan, the City will prosecute the case before the special magistrate and seek a "Chronic Nuisance Service Order" which allows the City to abate the nuisance and charge the owner for any abatement costs. The costs may be assessed as special assessments against the property and may be collected pursuant to the uniform method.

The amendments to the ordinance include the following: provide for additional "triggering" calls for service; provide for shared responsibilities between the City Attorney's Office and the Code Compliance Division; clarification of the 12 month jurisdiction of the special magistrate over a property; changes to the types of abatement activity to be considered in the action plan; providing for the automatic scheduling of a hearing as part of a notice of violation; clarification of how costs are determined and assessed; and removal of the delinquent payment process.

MOTION:

I move to approve/not approve Ordinance No. 2014-12 on firs reading and schedule the public hearing date for May 6, 2014.

ATTACHMENT(S):

Fiscal Impact Analysis – not applicable
Ordinance

ORDINANCE NO. 12 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 2 "ADMINISTRATION", ARTICLE XIX "CHRONIC NUISANCE PROPERTY CODE", DIVISION 1 "CHRONIC NUISANCE SERVICES", SECTION 2-201 "PATTERN OF NUISANCE ACTIVITY", TO MODIFY THE EXEMPTIONS OF NUISANCE ACTIVITY; AMENDING SECTION 2-208, "METHOD OF NOTICE; CONSTRUCTION", TO MODIFY THE NOTICE REQUIREMENTS; PROVIDING FOR SEVERABILITY, THE REPEAL OF LAWS IN CONFLICT, CODIFICATION AND AN EFFECTIVE DATE

WHEREAS, the City of Lake Worth, Florida (the "City") is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the City's Code of Ordinances provides, at Chapter 2, Article XIX "Chronic Nuisance Property Code", Division 1 "Chronic Nuisance Services", for the declaration of chronic nuisance properties and the assessment of the costs of chronic nuisance services against such properties; and

WHEREAS, the City Attorney's Office and the Code Compliance Division have conducted meetings with the Palm Beach County Sheriff's Office regarding the enforcement of the ordinance and the need for amendments to the ordinance related to the modification of the exemptions from chronic nuisance activity and notice requirements; and

WHEREAS, these amendments continue to ensure adequate due process is provided to respondents; and

WHEREAS, the City Commission has reviewed the recommended amendments and has determined that it is in the best interest of the public health, safety and general welfare of the City to adopt the same.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1. The foregoing "WHEREAS" clauses are true and correct and are hereby ratified and confirmed by the City Commission.

Section 2. Chapter 2 "Administration", Article XIX, "Chronic Nuisance Property Code", Division 1 "Chronic Nuisance Services", Section 2-201 "Pattern of nuisance activity" is hereby amended to read as follows:

Sec. 2-201. Pattern of nuisance activity.

(a) *Nuisance activity.* Nuisance activity means any activities relating to the following violations, whenever engaged in by property owner, agent, tenant, or invitee of the property owner or tenant:

(1) Chapter 5—Alcoholic beverages.

(2) Chapter 15, article I, sections 15-24 through 15-24.10—Noise control regulations.

(3) Chapter 15, article V—Sexual offenders & sexual predators residence.
(4) F.S. § 767.12—Dangerous dogs.
(5) F.S. § 784.03—Battery; felony battery.
(6) F.S. § 784.041—Felony battery.
(7) F.S. § 784.045—Aggravated battery.
(8) F.S. § 790.01—Carrying concealed weapons.
(9) F.S. § 790.10—Improper exhibition of dangerous weapons or firearms.
(10) F.S. § 790.15(1)—Discharging firearm in public.
(11) F.S. § 796.06—Renting space to be used for prostitution.
(12) F.S. § 796.07—Prostitution.
(13) F.S. § 800.03—Exposure of sexual organs.
(14) F.S. § 806.13—Criminal mischief.
(15) F.S. § 810.08—Trespass in structure or conveyance.
(16) F.S. § 810.09—Trespass on property other than structure or conveyance.
(17) F.S. § 812.014—Theft.
(18) F.S. § 812.019—Dealing in stolen property.
(19) F.S. § 812.173—Conveyance business security.
(20) F.S. § 824.01—Nuisance.
(21) F.S. § 828.12—Cruelty to animals.
(22) F.S. § 843.01—Resisting officer with violence.
(23) F.S. § 843.02—Resisting officer without violence.
(24) F.S. § 856.011—Disorderly intoxication.
(25) F.S. § 856.015—Open house parties.
(26) F.S. § 856.021—Loitering or prowling.
(27) F.S. § 856.022—Loitering or prowling in close proximity to children.
(28) F.S. § 870.01—Affrays and riots.
(29) F.S. ch. 874—Criminal gang enforcement and prevention.
(30) F.S. § 877.03—Breach of the peace; disorderly conduct.
(31) F.S. ch. 893—Any offense under the Florida Comprehensive Drug Abuse Prevention and Control Act.
(32) Any other offense under state or federal law that is punishable by a term of imprisonment exceeding one (1) year.

(b) *Pattern of nuisance activity.* Real property shall be deemed to exhibit a pattern of nuisance activity if:

(1) The city's law enforcement has responded to three (3) or more nuisance activities at the property within thirty (30) days;
(2) The city's law enforcement has responded to seven (7) or more nuisance activities at the property within six (6) months;
(3) An alcoholic beverage establishment that employs private security is located on the property and the city's law

enforcement has responded to five (5) or more nuisance activities at the property within thirty (30) days or twenty (20) or more nuisance activities at the property within six (6) months; or

(4) As otherwise provided by this code.

(c) *Construction and application.* Pattern of nuisance activity shall not be construed to include:

(1) ~~A nuisance activity where the property owner, agent, tenant, or invitee of the property owner, agent or tenant is a victim of a crime;~~

(~~2~~1) A nuisance activity that does not arise from the conduct of the property owner, agent, tenant, or invitee of the property owner, agent or tenant; or

(~~3~~2) A complaint or call for service to which the city responded and the city determined that no violation was committed.

(d) *Separate occurrences.* For purposes of this article, each day that law enforcement responds to a nuisance activity at the property shall be a separate occurrence.

Section 3. Chapter 2 "Administration", Article XIX, "Chronic Nuisance Property Code", Division 1 "Chronic Nuisance Services", Section 2-208 "Method of notice; construction" is hereby amended to read as follows:

Sec. 2-208. Method of notice; construction.

(a) *Notice.* ~~Unless otherwise provided, notice required by this article shall be certified mail, return receipt required and by first class mail to the address listed on the ad valorem tax roll. Notice shall be posted at the property where the nuisance activities occurred.~~ All notices required by this article shall be provided to the owner(s) consistent with the requirements for notice provided in section 162.12, Florida Statutes, regarding notices for code enforcement cases, except that if any notice sent by certified mail is not signed as received within fifteen (15) days after the date of mailing, notice may be provided by posting as described in section 162.12(2)(b), Florida Statutes. Notice by posting may run concurrently with, or may follow, an attempt or attempts to provide notice by hand delivery or by mail as set forth above. Evidence that an attempt has been made to hand deliver or mail notice as provided above, together with proof of posting, shall be sufficient to show that the notice requirements of this part have been met, without regard to whether or not the owner actually received such notice.

(b) *Construction of notice.* A property owner shall be deemed to have notice of a nuisance activity if that property owner: (1) has actual knowledge of the nuisance activity; (2) has received notice of the

nuisance activity; (3) has reason to know about the nuisance activity; (4) knows about a fact related to the nuisance activity; or (5) is able to ascertain the existence of a nuisance by checking an official filing or recording. The lack of knowledge of, acquiescence, or participation in, or responsibility for a nuisance activity on the part of property owner shall not be a defense to any enforcement of this article.

Section 4. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

Section 5. Repeal of Laws in Conflict. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 6. Codification. The sections of the ordinance may be made a part of the City Code of Laws and ordinances and may be re-numbered or re-lettered to accomplish such, and the word “ordinance” may be changed to “section”, “division”, or any other appropriate word.

Section 7. Effective Date. This ordinance shall take effect ten (10) days after adoption.

The passage of this Ordinance on first reading was moved by _____, seconded by _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed on first reading on the 15th day of April, 2014.

The passage of this Ordinance on second reading was moved by _____, seconded by _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed and enacted on the 6th day of May, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Community Sustainability

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EXECUTIVE BRIEF

TITLE:
Ordinance No. 2014-13 - First Reading - amend Chronic Nuisance Property Code related to special assessments and schedule the public hearing date for May 6, 2014

SUMMARY:
The Ordinance expands the definition of chronic nuisance services costs to include the Unsafe Building Abatement Code and board, secure, and lot clearing ordinances.

BACKGROUND AND JUSTIFICATION:
As Code Compliance and the City Attorney's Office work in tandem with the Palm Beach Sheriff's Office (PBSO) to address blight conditions in the City, several additional required changes to the Chronic Nuisance Services Ordinance have been identified. The City adopted a Chronic Nuisance Services Ordinance in September of 2011 and over the course of its implementation several changes have been needed to ensure that the ordinance is not in conflict with Florida Statutes with regard to special assessments. In addition, changes, amendments and additions have had to be made to ensure that the ordinance can be implemented effectively and efficiently.

This Ordinance changes the Citys assurance that its special assessment process for demolitions, board and securing properties and lot clearings as well as activities under the Chronic Nuisance Property Code and other related abatement services provided by the city are all addressed. The basis for the assessments and the legal provisions for them are all updated and comply with Florida Statutes.

MOTION:
I move to approve/not approve Ordinance No. 2014-13 on first reading and schedule the public hearing date for May 6, 2014.

ATTACHMENT(S):
Fiscal Impact Analysis – not applicable
Ordinance

ORDINANCE NO. 2014-13 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 2 “ADMINISTRATION”, ARTICLE XIX “CHRONIC NUISANCE PROPERTY CODE”, DIVISION 2 “LEVY AND COLLECTION OF NON-AD VALOREM ASSESSMENTS”, SECTION 2-221 “UNPAID CHRONIC NUISANCE SERVICE COSTS; NON-AD VALOREM ASSESSMENT” TO DEFINE THE TERM “CHRONIC NUISANCE SERVICES COSTS”; PROVIDING LEGAL AUTHORITY FOR THE LEVY AND COLLECTION OF ABATEMENT SERVICES AS SPECIAL ASSESSMENTS; AND FOR OTHER PURPOSES; PROVIDING FOR SEVERABILITY, THE REPEAL OF LAWS IN CONFLICT, CODIFICATION AND AN EFFECTIVE DATE.

WHEREAS, the City of Lake Worth, Florida (the “City”) is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the City has adopted various ordinances to address and abate nuisances on properties within the City, including, but not limited to, the “Lot Clearing Ordinance” (secs. 12-38 through 12-42); the “Board and Secure Ordinance” (secs. 2-75.2 through 2-75.2.7); the “Unsafe Building Abatement Code” (sec. 9-2.2); the “Chronic Nuisance Property Code” (secs. 2-200 through 2-211); and any other ordinance (existing or adopted hereinafter) authorizing the City to abate a nuisance or otherwise comply a violation of the Code of Ordinances and assess the unpaid costs as a special assessment (collectively, the “Nuisance Ordinances”); and

WHEREAS, the City Commission finds that the provision of these various abatement services by the City under the Nuisance Ordinances provides a direct, special benefit to assessed real property; and

WHEREAS, the City Commission finds that there is a logical relationship between the provision of abatement services by the City pursuant to the Nuisance Ordinances and an enhancement in the value and desirability of assessed real property; and

WHEREAS, due to the various Nuisance Ordinances, the City Commission wishes to define the term “chronic nuisance services costs” as that term is used in Chapter 2, Article XIX, Division 2 regarding the “Levy and Collection of Non-Ad Valorem Assessments”; and

WHEREAS, the City Commission has reviewed the recommended amendments and has determined that it is in the best interest of the public health, safety and general welfare of the City, its residents and visitors to adopt these amendments.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1. The foregoing "WHEREAS" clauses are true and correct and are hereby ratified and confirmed by the City Commission.

Section 2. The City Commission of the City of Lake Worth, Florida, hereby ascertains, finds, determines and declares that:

(a) Pursuant to Fla. Const. art. VIII, section 2(b), F.S. §§ 166.021 and 166.041, and City Charter art. I, section 3, the city commission has all powers of local self-government to perform municipal functions and to render municipal services in a manner not inconsistent with law. Such powers may be exercised by the enactment of city ordinances.

(b) The city commission may exercise any governmental, corporate, or proprietary power for a municipal purpose except when expressly prohibited by law. The city commission may legislate on any subject matter on which the Florida Legislature may act, except those subjects described in F.S. §§ 166.021(3). The subject matter described in F.S. §§ 166.021(3) is not relevant to the imposition of special assessments related to the provision of abatement services by the City.

(c) The provision of abatement services by the city pursuant to the Nuisance Ordinances possesses a logical relationship to the use and enjoyment of the benefited real property and provides a direct, special benefit to real property by:

(1) reducing or deferring property maintenance costs;
(2) reducing or deferring property management costs;
(3) eliminating unsanitary and unsightly conditions;
(4) eliminating the invitation of on-site criminal activities;
(5) protecting the health and safety of the occupants, if any;
(6) protecting the value of the real property;
(7) staying possible daily accruing code enforcement fines and liens; and
(8) enhancing the market perceptions.

(d) The cost of abating nuisances is entirely apportioned to the assessed real property receiving the service; such cost and apportionment is fair and reasonable; and the benefits to the property exceed the amount of the assessment.

(e) The cost of abating nuisances may be levied against benefited real property as a special assessment superior to all other private rights, interest, liens, mortgages, encumbrances, titles and claims upon the property and equal in rank and dignity with a lien for ad valorem taxes.

(f) The special assessments to be levied using the procedures of the Nuisance Ordinances shall constitute non-ad valorem assessments within the meaning and intent of F.S. § 197.3632.

(g) The special assessments to be levied using the procedures provided in the Nuisance Ordinances are imposed by the city commission. The duties of the property appraiser and tax collector under the provisions of this Chapter 2, Article XIX, Division 2 and F.S. § 197.3632 are ministerial.

Section 3. Section 2-221 "Unpaid chronic nuisance services costs; non-ad valorem assessment" is hereby amended to read as follows: and

Sec. 2-221. Definition; ~~U~~unpaid chronic nuisance service costs; non-ad valorem assessment.

(a) Definition. "Chronic nuisance services costs", when used in this division, shall include the costs incurred by the city to abate nuisances pursuant to any of the following ordinances:

(1) "Lot Clearing Ordinance" (secs. 12-38 through 12-42);
(2) "Board and Secure Ordinance" (secs. 2-75.2 through 2-75.2.7);
(3) "Unsafe Building Abatement Code" (sec. 9-2.2);
(4) "Chronic Nuisance Property Code" (secs. 2-200 through 2-211); and
(5) Any other existing ordinance, or ordinance adopted hereinafter, that authorizes the city to abate a nuisance or otherwise comply a violation of the Code of Ordinances and assess the costs thereof as a special assessment.

(b) Any chronic nuisance service costs that remain delinquent and unpaid as of June 1st of each year shall be a special assessment levied against the benefited real property as a non-ad valorem assessment superior to all other private rights, interests, liens, encumbrances, title and claims upon the benefited real property and equal in rank and dignity with alien for ad valorem taxes.

Section 4. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

Section 5. Repeal of Laws in Conflict. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 6. Codification. Section 2 of this ordinance shall be made a part of the City Code of Laws and ordinances and may be re-numbered or re-lettered to accomplish such, and the word "ordinance" may be changed to "section", "division", or any other appropriate word.

Section 7. Effective Date. This ordinance shall take effect ten days after its adoption.

The passage of this Ordinance on first reading was moved by _____, seconded by _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed on first reading on the 15th day of April, 2014.

The passage of this Ordinance on second reading was moved by _____, seconded by _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed and enacted on the 6th day of May, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Community Sustainability

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EXECUTIVE BRIEF

TITLE:
Ordinance No. 2014-14 - First Reading - amend Buildings and Structural Regulations and schedule the public hearing date for May 6, 2014

SUMMARY:
The Ordinance clarifies notice and hearing request requirements including limiting the time required for return receipt mail, mailing invoices, and special assessment language.

BACKGROUND AND JUSTIFICATION:
As Code Compliance and the City Attorney's Office work in tandem with the Palm Beach Sheriff's Office (PBSO) to address blight conditions in the City, several additional required changes to the Chronic Nuisance Services Ordinance have been identified. The City adopted a Chronic Nuisance Services Ordinance in September of 2011 and over the course of its implementation several changes have been needed to ensure that the ordinance is not in conflict with Florida Statutes. In addition, changes, amendments and additions have had to be made to ensure that the ordinance can be implemented effectively and efficiently.

Changes requested in this Ordinance involve proper noticing requirements, requests for hearings, mailings, invoices and the special assessment provisions. The changes also should speed up the process for demolition and boarding activities, ensure that due process requirements are met and reduce expenditures for these components.

MOTION:
I move to approve/not approve Ordinance No. 2014-14 on first reading and schedule the public hearing date for May 6, 2014.

ATTACHMENT(S):
Fiscal Impact Analysis – not applicable
Ordinance

ORDINANCE NO. 2014-14 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 9 “BUILDINGS AND STRUCTURAL REGULATIONS”, ARTICLE I “IN GENERAL”, SUBSECTION 9-2.2(G) TO CLARIFY THE TIMELINE FOR A REQUEST FOR HEARING; AMENDING SUBSECTION 9-2.2(H) TO CLARIFY THE REQUIRED INFORMATION IN A NOTICE OF VIOLATION; AMENDING SUBSECTION 9-2.2(I) TO ALLOW FOR DIFFERENT FORMS OF NOTICE TO RUN CONCURRENTLY AND TO INCLUDE A TIME LIMITATION ON THE RECEIPT OF CERTIFIED MAIL; AMENDING SUBSECTION 9-2.2(P) TO PROVIDE FOR THE MAILING OF THE INVOICE OF COSTS BY REGULAR MAIL; AMENDING SUBSECTION 9-2.2(Q) TO CLARIFY THE SPECIAL ASSESSMENT PROCESS; AND FOR OTHER PURPOSES; PROVIDING FOR SEVERABILITY, REPEAL OF LAWS IN CONFLICT, CODIFICATION AND AN EFFECTIVE DATE.

WHEREAS, the City of Lake Worth, Florida (the “City”) is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the City adopted its “Unsafe Building Abatement Code” to address unsafe, dangerous, dilapidated and substandard buildings within the City; and

WHEREAS, the City Commission wishes to improve upon the notice and hearing request requirements to ensure due process has been met and to ensure that such requirements are not overly burdensome; and

WHEREAS, the City Commission has reviewed the recommended amendments and has determined that it is in the best interest of the public health, safety and general welfare of the City, its residents and visitors to adopt these amendments.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1. The foregoing “WHEREAS” clauses are true and correct and are hereby ratified and confirmed by the City Commission.

Section 2. 9-2.2 “Abatement of unsafe buildings”, subsection (g) is hereby amended to read as follows:

(g) Emergency action. If the building official or designee finds that a building is likely to fully or partially collapse, posing an immediate hazard to life or to the safety of the general public, the building shall be deemed an emergency and ordered demolished immediately by the building official by affidavit attesting to the unsafe condition and by letter of authorization by the city manager. Prior to such demolition, notice shall be given to the owner of record and to any other interested party by hand delivery or, if

hand-delivery is not reasonably possible, by posting the property and by mailing the notice by regular mail and certified mail, return receipt requested. Proof of posting and mailing shall be by affidavit of the person posting and mailing the notice, which affidavit shall include a copy of the notice posted and mailed and the date of mailing and the date and places of its posting. Notice so posted may run concurrently with, or may follow, an attempt or attempts to provide notice by hand delivery or by mail. In any event, such notice shall include the affidavit of the building official and shall give the owner of the property five (5) business days to deliver a written request for a hearing~~, in writing~~ to the building official~~, a hearing before the special magistrate~~. Notice shall be deemed received upon hand delivery or, if not hand delivered, upon the date the return receipt was signed. If the notice could not be hand delivered and the signed return receipt is not received within ten (10) days of mailing, the notice shall be deemed received ten (10) days after it is first posted.

Section 3. 9-2.2 "Abatement of unsafe buildings", subsection (h) is hereby amended to read as follows:

(h) Written notice of violation. Whenever the building official has determined that such building is unsafe, the building official shall prepare a written notice of violation to the owner of record and all interested parties as follows:

(1) The notice of violation shall contain, but not be limited to, the following or substantially similar information:

a. The street address and legal description or property control number of the property on which the unsafe building is located.

b. A statement indicating the building has been declared unsafe by the building official~~,~~ and a summary of the conditions that led to the building official's determination.

c. A statement advising that if the following required action as determined by the building official is not commenced within or completed by the time specified, the building will be ordered vacated and posted to prevent further occupancy until the work is completed.

1. If the building is to be repaired, the notice shall require that all necessary permits be secured and the work commenced within thirty (30) days and continued to completion within such time as the building official determines.

2. If the building is to be vacated, the notice shall indicate the time within which vacation is to be completed.

3. If the building is to be demolished, the notice shall require that all required permits for demolition be secured and that the demolition be completed within such time as determined reasonable by the building official. ~~If the building is occupied, the notice shall require that the premises be vacated within sixty (60) days.~~

* * *

Section 4. 9-2.2 “Abatement of unsafe buildings”, subsection (i) is hereby amended to read as follows:

(i) *Service of notice of violation and notice of pending administrative action*. The notice shall be served either personally or by certified mail, postage pre-paid, return receipt requested, to each owner at the address as it appears in the official public records and to all other known interested parties. If addresses are not available on any person required to be served the notice, the notice addressed to such person shall be mailed to the address of the building or structure involved in the proceedings. The failure of any person to receive proper notice as described herein, other than the owner of record, shall not invalidate any proceedings under this section. Service by certified or registered mail as herein described shall be effective on the date the notice was received as indicated on the return receipt. In the event the certified mail is unclaimed or refused or the return receipt is not otherwise returned within twenty-one (21) days of mailing or there is no mailing address for an interested party, the notice shall be posted at the property and city hall for ten (10) days; the notice shall be re-sent by first class mail documented by a properly executed proof of mailing and posting or affidavit confirming the first class mailing and posting; and a notice of condemnation shall be published once a week for four (4) consecutive weeks in a newspaper of general circulation within the city. For properties that are published and posted, the notice shall be deemed received the day the notice was last published or ten (10) days after the notice was first posted, whichever is later. Notice by publication and posting may run concurrently with, or may follow, an attempt or attempts to provide notice by hand delivery or by mail as set forth above. Evidence that an attempt has been made to hand deliver or mail notice as provided above, together with proof of publication and posting as provided above, shall be sufficient to show that the notice requirements of this part have been met, without regard to whether or not the owner or interested party actually received such notice.

Section 5. 9-2.2 “Abatement of unsafe buildings”, subsection (p) is hereby amended to read as follows:

(p) *Recovery of costs.*

(1) Whenever a building or structure is boarded and secured, repaired or demolished in accordance with the provisions of

this code and the cost of such boarding and securing, repair or demolition is borne by the city, all costs incurred by the city, including but not limited to, the cost incurred in the compliance of the unsafe building, searching of the public records or title work to determine the record owners and interested parties in serving the notice as specified above, costs of publication and the costs of service and postage, and any other cost or fee attributable to the unsafe building, shall be assessed to the owner of the affected land or premises and shall become a lien against such land or premises as provided in this section.

(2) The building official shall certify the costs borne by the city, as described above, and shall serve such invoice~~cost certification~~ upon the property owner by regular mail~~certified mail return receipt requested~~. This invoice~~cost certification~~ is a demand for payment from the property owner.

Section 6. 9-2.2 “Abatement of unsafe buildings”, subsection (q) is hereby amended to read as follows:

(q) *Lien created.*

(1) If the owner fails to make payment within thirty (30) days from the date of the demand for payment, the amount of the certified costs shall be reported to the city commission in the form of a resolution assessing the costs against the real property upon which such costs were incurred, as a special assessment equal in rank and dignity with taxes and other non-ad valorem assessments and superior in dignity to all other liens, mortgages, judgments, encumbrances, titles, and claims, until paid. Such assessment shall be recorded in the public records.

(2) Said assessment shall bear interest at the current legal rate of interest per annum as provided by law and shall constitute a lien upon the land from the date of the assessment and shall be collectible in the same manner as liens for taxes and special assessments and with the same attorney's fee, penalties for default in payment, and under the same provisions as to sale and forfeiture~~, provided, however, that no lien created pursuant to the provisions of this section may be foreclosed on property that is homestead under Section 4, Article X of the State Constitution~~.

(3) Collection of such assessments, with such interest and with a reasonable attorney's fee, may also be made by the city commission by proceedings in a court of competent jurisdiction to foreclose the lien of the assessment in the

manner in which a lien for mortgages is foreclosed under the laws of the state and it shall be lawful to join in any complaint for foreclosure any one or more lots or parcels of land, by whomever owned, if assessed under the provisions of this section.

(4) Property subject to lien may be redeemed at any time prior to sale by its owner by paying the total amount due under the corresponding assessment lien including interest, court costs, advertising costs and reasonable attorney's fees.

(5) The city may choose to use the uniform method to collect such non-ad valorem assessments as authorized under F.S. § 197.3632, as amended from time to time, or in the same manner as assessments for chronic nuisance service assessments.

Section 7. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

Section 8. Repeal of Laws in Conflict. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 9. Codification. The sections of the ordinance may be made a part of the City Code of Laws and ordinances and may be re-numbered or re-lettered to accomplish such, and the word “ordinance” may be changed to “section”, “division”, or any other appropriate word.

Section 10. Effective Date. This ordinance shall take effect ten days after its adoption.

The passage of this Ordinance on first reading was moved by _____, seconded by _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed on first reading on the 15th day of April, 2014.

The passage of this Ordinance on second reading was moved by _____, seconded by _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed and enacted on the 6th day of May, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Community Sustainability

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EXECUTIVE BRIEF

TITLE:
Ordinance No. 2014-15 - First Reading - amend definition of appraised value and clarify methods of sale and schedule the public hearing date for May 6, 2014

SUMMARY:
The Ordinance amends the definition of appraised value and provides clarification regarding the methods of sale of City surplus real property.

BACKGROUND AND JUSTIFICATION:
The City Commission has deemed twenty-five (25) parcels as property worthy of being deemed surplus. As staff has been preparing the documentation for the proposed disposition of the properties, the required minimum sales bid for sealed bid offers as stipulated by City Code was defined as one hundred and fifty percent (150%) of the appraised value of the property as determined by the Palm Beach County Property Appraiser's office. In staff's opinion, the minimum sales bid should be more realistic to attract offers and be set at a value commensurate with its actual market value.

Successful disposition of the parcels will accomplish returning the properties to productive use and back onto the City's tax roll, eliminate potential blight, reduce on-going maintenance costs, reduce exposure to liability and help offset the City's current fiscal situation. Accordingly, Staff recommends amending the definition of the appraised value to mean one hundred percent (100%) of the total market value of the real property as reported by the County's Property Appraiser.

MOTION:
I move to approve/not approve Ordinance No. 2014-15 on first reading and schedule the public hearing date for May 6, 2014.

ATTACHMENT(S):
Fiscal Impact Analysis
Ordinance

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2014	2015	2016	2017	2017
Capital Expenditures	0	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	$524,557*	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
Net Fiscal Impact	0	$524,557	0	0	0
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

B. Recommended Sources of Funds/Summary of Fiscal Impact:
*Based on 2013 preliminary market value of all twenty-five (25) parcels recommended for disposition. Actual sales prices for properties are expected to be higher but may be lower with some properties.

C. Department Fiscal Review: _____

ORDINANCE NO. 2014-15 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 1 GENERAL, SECTION 2-1 “SALE OF CITY OWNED PROPERTY” TO AMEND THE DEFINITION OF APPRAISED VALUE AND CLARIFY THE METHODS OF SALE; PROVIDING FOR SEVERABILITY, THE REPEAL OF LAWS IN CONFLICT, CODIFICATION, AND AN EFFECTIVE DATE

WHEREAS, the City of Lake Worth, Florida (the “City”) is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the City’s Code of Ordinances, at Chapter 1, Section 2-1, sets forth the process for the sale of city owned property; and

WHEREAS, the City Commission wishes to allow the sale of city owned property for 100% of the total market value as reported by the county’s property appraiser’s current year; and

WHEREAS, the City Commission has reviewed the recommended revisions to section 2-1 and has determined that it is in the best interest of the public health, safety and general welfare of the City to adopt this ordinance.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1. The foregoing “WHEREAS” clauses are true and correct and are hereby ratified and confirmed by the City Commission.

Section 2. Chapter 1 General Sec. 2-1. Sale of city-owned property. is hereby amended as follows:

(a) *Definitions.* As used in this section:

(1) *Real property* or *property* shall mean any real property owned by the city, the sale of which is not otherwise prohibited by the charter of the city, an ordinance of the city, or the laws of the state.
(2) *Surplus property* shall mean city property the city commission has declared is not needed for city purposes.
(3) *Good standing* shall mean that the person or entity submitting a bid or offer must have no code enforcement fines, special assessments, taxes, judgments or liens of any kind outstanding to the city and have not withdrawn an offer previously approved by the city.
(4) *Appraised value* shall mean one hundred ~~fifty (150)~~ (100) percent of the ~~fair~~ total market value of the real property as reported by the county's property appraiser's current year of certified appraisal market value, or shall mean the opinion of an independent property appraisal employed pursuant to this section.

a. If an independent property appraisal is requested by the city and prepared for the property, then the appraised value shall be established from this report and not be based upon one hundred ~~fifty (150)~~(100) percent of the county appraiser's total market value.

b. If two (2) or more independent property appraisers are employed to appraise the same property, the appraised value will be the average of the appraisals unless the city commission, in its sole discretion, determines otherwise.

(5) *Proven track record* shall mean three (3) completed affordable housing projects.

(b) *Declaration of surplus property.*

(1) An inventory list of all real property within the city limits to which the city holds fee simple title shall be prepared at least every three (3) years. Properties found to be appropriate for use as affordable housing by the planning and zoning board shall be delineated on said inventory list and provided to the city commission for public hearing. All properties listed must include the address and legal description of each such property and specify whether the property is vacant or improved. The city commission must review the list at a public hearing and make a determination of the properties appropriate for affordable housing. Following the public hearing, the city commission shall adopt a resolution that includes an inventory list of property to be used as affordable housing.

(2) The properties identified as appropriate for use as affordable housing on the inventory list adopted by the city commission may be offered for sale and the proceeds may be used to purchase land for the development of affordable housing, or to increase the city fund earmarked for affordable housing, or may be sold with a restriction that requires the development of the property as permanent affordable housing, or may be donated to a nonprofit housing organization for the construction or rehabilitation of a property for permanent affordable housing.

(3) The city commission may also determine if there are properties that are unusable or not needed for city purposes that are not appropriate for affordable housing and that are to be sold by competitive sealed bids or by a request for proposal. These properties will then be identified on the inventory list.

(4) The city may sell the property by any of the following means listed below.

(c) *Method of sale.*

(1) *Competitive sealed bids.*

a. An invitation for bids shall be issued which shall include the specifications for the purchases sought including any special terms or conditions of sale.

b. Public notice. Prior to bid opening, public notice of the invitation for bid shall be published in a newspaper of general circulation once a week for two (2) consecutive weeks and by any other such means as deemed appropriate by the purchasing manager.

c. Bid submission. Bids shall be accepted only from persons or entities that are in good standing with the city. Bids must be received no later than the time and date and at the location specified for bid opening in the invitation for bid. No bids shall be accepted after such time and date or at any other location than specified. Bids received later, or at any other location specified, or from a vendor not in good standing with the city, shall be returned unopened to the bidder.

d. Bid opening. Bids shall be opened publicly at the time and place specified in the invitation for bids. The name of each bidder, the amount of each bid, and such other relevant information shall be recorded and such information shall be posted.

e. Bid cancellation or postponement. The city may at any time, elect to cancel a bid or postpone the date and/or time of bid submission or opening. After a bid opening, the purchasing manager may cancel a bid if fewer than two (2) responsive, and responsible bids are received.

(2) *Request for proposal.*

a. At any time, the city can issue a request for proposal for a property which may include any special terms or conditions of sale.

b. All responses to the request for proposal must be received no later than the time and date and at the location specified in the request for proposal. No response shall be accepted after such time and date or at any other location than specified. A response received later, or at any other location than specified, or from a person or entity not in good standing, shall be returned unopened.

c. *Cancellation or postponement*. The city may at any time, elect to cancel a request for proposal, or postpone the date and/or time of submission or opening. After a request for proposal opening, the purchasing manager may cancel a request for proposal if fewer than two (2) responsive, and responsible responses to the request for proposal are received.

(d) *Appraisals for sale of property by sealed bids.*

(1) *Generally*

a. The city, at its option, may determine the appraised value of a surplus property by using one hundred ~~fifty (150)~~(100) percent of the county property appraiser's total market value for the property. This appraisal shall be available for public view.

If this method is selected, then no sale by sealed bids shall be authorized unless the bid on the property is equal to at least one hundred (100) percent of ~~this appraised value, i.e. one hundred fifty (150) percent of~~ current county property appraiser's total market value.

b. *Independent property appraisal.* The city, at its option, may determine the value of the property based upon an independent property appraisal (IPA), prepared by an individual who is both a member of the appraisal institute (MAI) and a state certified general appraiser acceptable to the city commissioners. This appraisal shall be available for public view.

Sales price shall not be less than one hundred (100) percent of the property appraisal report. If the city elects to have the appraisal value determined by an independent property appraisal, then this report shall be the value used in considering the sale of the property.

(e) *Sale provisions for sale of property by sealed bids.*

(1) The commission at a public meeting shall approve the sale to the highest bidder, subject to the conditions set forth in this section, within forty-five (45) days from the deadline date set for receiving bids.
(2) All bids must include a deposit check for five (5) percent of offering price or five hundred dollars ($500.00), whichever is greater.
(3) In the event of a default on the part of any purchaser of city-owned real property in making full payment or otherwise failing in the performance of the purchaser's obligations under the contract of purchase, the amount of the deposit shall be forfeited unless the contract shall otherwise provide.
(4) Notwithstanding any rules of general practice for apportioning costs of the sale of property, purchasers of city-owned property shall pay all closing costs, including but not limited to costs of the survey, abstracting, title insurance, brokers fees, real estate commissions, purchaser's attorney's fees and all documentary stamps, as well as the appraisal costs.
(5) The city shall be responsible for all advertisements and or publication expenses which it elects to undertake for the property.
(6) The city shall have the right at any time to reject any and all bids or proposals and to cancel any scheduled sales.

(f) *Exceptions.*

(1) Notwithstanding the foregoing sections, the city commission at a scheduled public meeting by a simple majority vote, may waive the requirements regarding minimum bid amount, method of sale and sale of surplus property and convey the property to the Lake Worth Community Redevelopment Agency or for property located in a residentially zoned area, convey said real property to a 501(c)3

organization with a proven track record in the affordable housing industry.

(2) The Lake Worth Community Redevelopment Agency and the 501(c)3 organization awarded city surplused real property must apply for a building permit within one hundred twenty (120) days of obtaining clear marketable title or the property reverts back to the city. The city commission in its discretion may extend this time period.

Section 3. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

Section 4. Repeal of Laws in Conflict. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 5. Codification. The sections of the ordinance may be made a part of the City Code of Laws and ordinances and may be re-numbered or re-lettered to accomplish such, and the word “ordinance” may be changed to “section”, “division”, or any other appropriate word.

Section 6. Effective Date. This Ordinance shall become effective on ten (10) days after passage.

The passage of this Ordinance on first reading was moved by Commissioner _____, seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed on first reading on the 15th day of April, 2014.

The passage of this Ordinance on second reading was moved by Commissioner _____, seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed and enacted on the 6th day of May, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Community Sustainability

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EXECUTIVE BRIEF

TITLE:
Ordinance No. 2014-16 – First Reading – amend the foreclosure registry program and schedule the public hearing date for May 6, 2014

SUMMARY:
The Ordinance will require vacant and unimproved properties, not in foreclosure, to be registered; amends and adds definitions; and allows for the boarding up of properties as a means of security.

BACKGROUND AND JUSTIFICATION:
As the Code Compliance Division continues its endeavor to address blighted conditions in the City, additional changes to the Foreclosure Registry Program Ordinance have been identified as beneficial. Originally, the City adopted a Foreclosure Registry Ordinance to deal with the many vacant properties in the City that were in some stage of the foreclosure process. Since its inception, it has become evident that there are many neglected properties not in foreclosure requiring maintenance as well. One category of properties, especially in need of attention, is the ones that are both vacant and unimproved. It has been determined that properties in this condition create an equal number of calls for service and need to be addressed. The proposed changes should assist the Code Compliance Division with identifying responsible parties, enforcing code compliance and improving the established community standards.

MOTION:
I move to approve/not approve Ordinance No. 2014-16 on first reading and schedule the second reading and public hearing date for May 6, 2014.

ATTACHMENT(S):
Fiscal Impact Analysis – not applicable
Ordinance

ORDINANCE NO. 2014-16 OF THE CITY OF LAKE WORTH, FLORIDA, AMENDING CHAPTER 2 “ADMINISTRATION”, ARTICLE VII “ABATEMENT OF NUISANCE, SECTION 2-75.11 “FORECLOSURE REGISTRATION PROGRAM” TO REQUIRE THE REGISTRATION OF VACANT AND UNIMPROVED PROPERTIES NOT IN FORECLOSURE; TO AMEND AND ADD DEFINITIONS; TO PROVIDE THAT THE FEE FOR REGISTRATION SHALL BE ADOPTED BY RESOLUTION; TO ALLOW BOARDING UP OF VACANT PROPERTIES AS A MEANS OF SECURITY;AND FOR OTHER PURPOSES; PROVIDING FOR SEVERABILITY; PROVIDING FOR THE REPEAL OF LAWS IN CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City of Lake Worth, Florida (the “City”) is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the City’s Code of Ordinances provides, at Chapter 2, Article VII “Abatement of Nuisance”, for the registration of Foreclosed Properties; and

WHEREAS, the existing ordinance calls for the registration of properties in or being foreclosed upon; and

WHEREAS, many vacant properties are neglected that are not in foreclosure and therefore are not required to be registered under the existing ordinance; and

WHEREAS, it has been determined that vacant and abandoned properties not in foreclosure create as many code enforcement calls as those in foreclosure; and

WHEREAS, requiring non foreclosure properties to register and provide contact information can assist code enforcement to better enforce the codes and achieve compliance; and

WHEREAS, the City Commission has reviewed the recommended amendments and has determined that it is in the best interest of the public health, safety and general welfare of the City to adopt the same.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF LAKE WORTH, FLORIDA, that:

Section 1. The foregoing “WHEREAS” clauses are true and correct and are hereby ratified and confirmed by the City Commission.

Section 2. Chapter 2 “Administration”, Article VII “Abatement of Nuisance”, Foreclosure Registration Program Section 2-75.11” is hereby amended to read as follows:

Sec. 2-75.11. Foreclos~~ur~~ed, Vacant and Unimproved property registration program.

(a) *Purpose and intent*. It is the purpose and intent of this section to establish a process to monitor and address the conditions of vacant, abandoned and distressed real property located within the city. This Section is further intended to monitor, and reduce the amount of deteriorating property located within the city, ~~property~~ on which a public notice of default has been filed or which is in foreclosure or where ownership has been transferred to a lender or mortgagee by any legal method. It is further intended to establish ~~such~~ a registration program as a mechanism to protect neighborhoods from becoming blighted through the lack of ~~in~~adequate maintenance of abandoned or vacated properties which may or may not be subject to a mortgage or properties subject to mortgages that are in default.

(b) *Definitions*. The following words, terms and phrases, when used in this Section 2-75.11, shall have the meanings ascribed to them, except where the context clearly indicates a different meaning. Where the context will permit and no definitions are provided herein, the definitions provided in the Florida Building Code shall indicate the meaning.

(1) *Abandoned ~~real~~ property* means any real property that is vacant or distressed. ~~And/or, is under a public notice of default, notice of mortgagee's sale or pending tax assessor's lien sale, properties that have been the subject of a foreclosure sale and/or where title is retained by the mortgagee and any properties transferred under a deed-in-lieu of foreclosure sale, a short sale or any other legal means.~~

(2) *Default* means that the mortgagee has filed a foreclosure action or public notice of default on the mortgage. A mortgage shall be considered in default at such time as the mortgagee declares said mortgage to be in default in writing, by recording a lis pendens, by its actions or by commencing foreclosure proceedings or by any other actions demonstrating a breach of a security covenant on a property..

(3) *Disposition* means the foreclosure status and/or the mortgagee/servicer's intent if the mortgage remains in default. If the mortgagee enters into a permanent modification agreement with the owner/mortgagor, the mortgage is considered to be no longer in default unless there is further notification by the mortgagee/servicer.

(4) Distressed means any condition that on its own or combined with other conditions present would lead a reasonable person to believe that a property is neglected, abandoned or otherwise not being regularly maintained. Such conditions include, but are not limited to; a repeat violation of any provision of this Code, as defined in F.S. §162,04(5) or violations which have not been complied; overgrown and/or dead vegetation; the accumulation of trash, junk and/or debris; unsecured doors, windows or other openings; the presence of an unsanitary, stagnant swimming pool, the presence of boards over doors, windows or other openings in violation of the city code; deterioration of the structure or structures on the property.

(5) *Evidence of vacancy* means any condition that on its own, or combined with other conditions present, would lead a reasonable person to believe that the property is vacant. Such conditions may include, but are not limited to, overgrown and/or dead vegetation, ~~electricity, water or other utilities turned off~~, past due utility notices and/or disconnected utilities; ~~stagnant swimming~~ ~~pool~~, accumulation of trash, junk or debris; the absence of furnishings and/or personal items consistent with habitation or occupancy; an unsanitary or stagnant swimming pool; or statements by neighbors, passers-by, delivery agents or government agents, among other evidence of such conditions.

(6) *Foreclosure* means the judicial process by which a property, placed as security for a mortgage loan is to be sold at an auction to satisfy a debt upon which the borrower has defaulted.

(7) *Enforcement officer* means any fulltime law ~~enforcement~~ compliance officer, building official, fire inspector or code enforcement officer employed by the City of Lake Worth.

(8) *Owner means* any person, firm, corporation or other legal entity who, individually or jointly or severally with others, holds the legal or beneficial title to any building, facilities, equipment or property subject to the provisions of this chapter. The term shall include the owner's duly authorized agent, a purchaser, devisee, fiduciary, or any other person, firm, corporation or legal entity having a vested or contingent interest or, in the case of a leased premises, the legal holder of the lease or his legal representative. It is intended that this term shall be construed as applicable to the person, firm, corporation or legal entity responsible for the construction, maintenance and operation of the building, facilities or property involved whether vacant or occupied.

(9) *Property management company* means a local property manager, property maintenance company or similar entity responsible for the maintenance of the abandoned real property.

(10) *Vacant commercial* - means any building or structure which has been, but is not currently being utilized for a commercial purpose and which contains windows on the ground floor which front upon a public street, sidewalk or right-of-way.

(11) *Secure manner shall* include, but not be limited to, the closure and locking of windows, doors, gates and other openings of such size that may allow a child to access the interior of the property and/or structure.In the case of broken windows, such windows shall be secured by re-glazing or if the structure is vacant it may be boarded up in accorandance with code requirements.

(12) *Unimproved property* means any parcel within the city that does not contain a principal or accessory building~~s~~ or structure.

(13) *Vacant* property_means parcel of land that contains any building or structure that is not lawfully occupied or inhabited by human beings as evidenced by the conditions set forth in the definition of "evidence of vacancy". Vacant property does not mean property that is unoccupied while the occupants are temporarily away or is not intended by the owner to be left vacant so long as the period does not exceed six months.

~~(13) *Vacant lot* means any parcel within the city that does not contain a principal or accessory buildings.~~

(c) *Applicability.* This section relates to abandoned and vacant properties, unimproved property and to property subject to a mortgage that has been determined by the mortgagee to be in default, is in foreclosure, or to properties that have been the subject of a foreclosure sale where title is transferred to the mortgagee or lender as well as any properties transferred to the mortgagee or lender under a deed in lieu of foreclosure by any legal method. All such properties shall comply the with registration, security and maintenance requirements of this Section.

(d) *Penalties*. Violations of this section shall be subject to enforcement by a Special Magistrate of the City of Lake Worth.

(e) *Registration of unimproved property or vacant property*

(1) *Registration by owner.* Every owner of a vacant and/or unimproved property or property containing a vacant building or structure that is located within the city shall register with the city by filing a registration application prescribed by the city within ten (10) days of vacancy.

(2) A registration application shall contain at least the following information:

(A) The address and parcel control number of the vacant property;

(B) For purposes of notice, the name, telephone number, mailing address, and e-mail address of the owner;

(C) For purposes of notice, the name, telephone number, mailing address, and e-mail address of an individual or entity designated by the owner who has the authority to make decisions concerning the conditions at the vacant property, as well as any expenditure in connection therewith;

(D) The city reserves the right to require such other information as needed to carry out the public purpose and intent of this article.

(3) An annual registration fee, per property, for the vacant property registration, shall be established by resolution of the city commission Such fee shall accompany the registration form and shall be for the costs of registration and enforcement of this Section. Said fees shall be deposited to a special revenue account dedicated to the cost of the community sustainability department's implementation and enforcement of this article and any registries so required.

(4) Registration pursuant to this section shall be required annually for as long as the property is unimproved,or vacant A case initiated pursuant to this section may be presented to the special magistrate even if, prior to a hearing, the property is no longer unimproved, vacant or no longer distressed.

(5) Properties subject to this section shall remain under the registration requirement, and the inspection, security, and maintenance standards set forth in this section as long as they remain vacant.

(6) Any person or other legal entity that has registered a property under this section must report any change of information contained in the registration within ten (10) days of the change. There shall be no fee to update the current owner's information.

(7) Failure of the property owner of record to properly register or to modify the registration from time to time to reflect a change of circumstances as required by this Section is a violation and shall be subject to enforcement by any of the enforcement means available to the city.

(8) Pursuant to a finding by the special magistrate that any property is in violation of this Section, the city may take the necessary action to ensure compliance with and place a lien on the property for the cost of the work performed to benefit the property and to bring it into compliance.

(f) Registration of real property: mortgagee holding mortgage in default. ,foreclosure, or where ownership of property has been transferred to a lender or mortgagee

(1) All property, located within the city, which property is in or has been declared to be in default, mortgage foreclosure, or to properties that have been the subject of a foreclosure sale where title is transferred to the mortgagee as well as any properties transferred to the mortgagee or lender under a deed in lieu of foreclosure by any legal method shall be registered under this section

(2) Any mortgagee who holds a mortgage on vacant or abandoned real property located within the city shall perform an inspection of the property upon default by the mortgagor or prior to the issuance of a notice of default.

If the property is found to be vacant or shows evidence of vacancy, it shall be deemed vacant or abandoned, and the mortgagee shall, within two (2) days of the inspection, register the property with the City's Code Compliance Division on forms provided by the Code Compliance Division, even though the real property may not be vacant.

~~If the mortgage on the property is in default, no later than ten (10) days after the date that a default is declared, the mortgagee shall register the property with the Code Compliance Division electronically via the internet and further located at http://www.lakeworth.org/vacant_registry.~~

(3) If the property is occupied ~~but remains in default~~, it should be inspected monthly by the mortgagee or mortgagee's designee.

(4) Within ten (10) days of the date the mortgagee declares its mortgage to be in default, the mortgagee shall register the real property with the city's designee and, at the time of registration, and, if vacant, shall also designate in writing a local property manager to inspect, maintain and secure the real property subject to the mortgage in default.

(5) Registration: Registration pursuant to this section shall contain at a minimum: the name, the mailing address, the e-mail address, and the telephone number for the mortgagee, trustee and/or servicer along with the disposition and occupancy status of the real property.

If the property is vacant or deemed vacant by the Code Compliance Division of the city, then the name of the local property manager and said person's address, e-mail address, and telephone number shall also be provided for all new registrations. If the occupancy status of a registered property changes to vacant then the registration must be modified.

The local property manager shall be responsible to inspect, secure and maintain the property. The local property manager shall be available to be contacted by the city twenty-four (24) hours a day. The city shall charge a fee ~~of one hundred and fifty dollars ($150.00~~ as established in the city fee resolution for any registration or modification of registration, and it may assign and delegate the collection of such fee to an independent contractor. The registration fee must be paid by the mortgagee, trustee or mortgage servicer and cannot be assigned for payment or remitted by a third party for payment.

(6) This section 2-75.11 shall also apply to properties that have been the subject of a foreclosure sale where title is transferred to the mortgagee, as well as any properties transferred to the mortgagee under a deed in lieu of foreclosure.

(7) Properties subject to this section 2-75.11shall remain under the annual registration requirement, inspection, security, and maintenance standards of this section as long as they remain abandoned, vacant or subject to having been declared by a mortgagee to be in default.

(8) Any person or other legal entity that has registered a property under this section 2-75.11must report any change of information contained in the registration within ten (10) days of the change.

(9) Failure of the mortgagee and/or property owner of record to properly register or to revise the registration to reflect a change of circumstances as required by this section 2-75.11is a violation of the ordinances of the city. ~~Pursuant to a finding and determination by a Special Magistrate of the City of Lake Worth that any property is in violation of city's ordinances, the city may take the necessary action to ensure compliance with its ordinance, and/or place a lien or liens on the property for the cost of the work performed to benefit the property and to bring it into compliance.~~

(g) *Maintenance requirements.*

(1) Properties subject to this section shall be kept free of weeds, overgrown brush, dead vegetation, trash, junk, debris, building materials, any accumulation of newspapers, circulars, flyers, notices, except those required by federal, state, or local law, discarded personal items including, but not limited to, furniture, clothing, large and small

appliances, or any other items that give the appearance that the property is abandoned or not being properly maintained. ~~Weeds, overgrown brush or dead vegetation~~ Grass over twelve (12) inches tall ~~are~~ is prohibited.

(2) The property shall be maintained free of graffiti or similar markings by removal or painting over such graffiti or markings with an exterior grade paint that matches the color of the exterior structure.

(3) Yards shall be landscaped and maintained pursuant to the standards set forth in the ordinances of the City of Lake Worth. Landscaping shall include, but shall not be limited to, grass, ground cover, bushes, shrubs, hedges or similar plantings, decorative rock or bark, artificial turf or sod designed specifically for residential, commercial or industrial installation, as applicable. Landscaping shall not include weeds, gravel, broken concrete, asphalt or similar material. Maintenance shall include, but shall not be limited to, watering, irrigation, cutting and mowing of required landscape and removal of all trimmings and weeds.

(4) Pools and spas shall be kept in a safe and sanitary order so that pool and spa water remains free and clear of pollutants and debris. Pools and spas shall comply with the enclosure requirements of the city's ordinances and the Florida Building Code.

(5) In the event that the National Weather Service, National Hurricane Center, or other appropriate weather agency declares a hurricane warning for any portion of the city, all materials, furnishings, and equipment at the property shall be secured, stored, or removed so as to not create a safety hazard due to hurricane force winds.

(6) Failure of the mortgagee and/or property owner of record to properly maintain the property is a violation of the Code of Ordinances of the City of Lake Worth. Pursuant to a finding and determination by a special magistrate, the city may take the necessary action to ensure compliance with its ordinances and place a lien or liens and a special assessment on the property ~~and assign it as provided herein.~~

(h) *Security requirements.*

(1) Properties subject to this section shall be maintained in a secure manner so as not to be accessible to unauthorized persons.

(2) A "secure manner" shall include, but shall not be limited to, the closure and locking of windows, doors, gates and other openings of such size that may allow a child or adult to access the interior of the property and/or structure. Broken windows shall be secured by re-glazing or boarding. All means of access shall be secured by replacing, reglazing or boarding of the openings so as to meet all applicable laws, codes and regulations including the issuance of a boarding certificate..

(i) Property Management

(1) If a mortgage on the property is in default and the property has become vacant or abandoned, a local property manager shall be designated by the mortgagee to perform the work necessary to bring the property into compliance with the Code of Ordinances and the local property manager must perform weekly inspections to verify compliance with the requirements of this section 2-75.11 and any other applicable laws or ordinances of the City of Lake Worth.

(2) Upon request of the city or its authorized representative, the local property manager shall provide a copy of the inspection reports to the code compliance department.

(3) When a property becomes vacant ~~or abandoned~~, it shall be posted with the name and twenty-four-hour contact telephone number of the local property manager. The posting shall be no less than 18 inches × 24 inches, and no larger than 36 inches times 48 inches in size, and shall be of a font that is legible from a distance of forty-five (45) feet. The posting shall contain the following language: THIS PROPERTY IS MANAGED BY [*name of local property manager*], who may be contacted at any time by calling () [*the 24-hour contact telephone number*].

(4) All written information thereupon shall be clear, legible and updated as required. The posting shall be placed on the interior of a window facing the street to the front of the property so that it is visible from the street, or secured to the exterior of the building/structure facing the street to the front of the property so that it is visible from the street or if no such area exists, on a stake of sufficient size to support the posing in a location that is at all times visual from the street to the front of the property but not readily accessible to vandals. Exterior posting shall be constructed of and printed with weather-resistant materials.

(5) Failure of the mortgagee or property owner of record to properly inspect and secure the property and post and maintain the signage required by this section 2-75.11is a violation of this section. Pursuant to a finding and determination by a Special Magistrate of the City of Lake Worth, the city may take the necessary action to ensure compliance with this section 2-75.11, and place a lien or liens on the property to recover costs and expenses in support thereof..

(j) *Opposing, obstructing enforcement officer; penalty.* Whoever opposes, obstructs or resists any enforcement officer or any person authorized by the city in the discharge of duties as provided in this section, upon conviction, may be sanctioned as provided in the Code of Ordinances of the City of Lake Worth or Chapter 162, Florida Statutes.

(k) *Immunity of enforcement officer.* Any enforcement officer or any person authorized by the city to enforce this section shall be immune from prosecution, civil or criminal, for reasonable, good faith entry or trespass upon real property while in the discharge of duties imposed by this section.

(l) *Additional authority.* The code compliance administrator shall have authority to require the mortgagee and/or owner of record of any property affected by

this section to implement additional maintenance and/or security measures, including but not limited to having an on-site security guard. Failure to comply with the terms of this Section 2-75.11 shall constitute a continuing public nuisance. The city shall have the authority to promptly abate the public nuisance, in whole or in part, at the expense of the mortgagee or other responsible party.

(m) *Supplemental provisions.* Nothing contained in this Section 2-75.11 shall prohibit the city from enforcing its codes by any other means, including, but not limited to, injunction, abatement or as otherwise provided by code.

Section 3. Effective Date. This ordinance shall take effect ten (10) days after adoption.

The passage of this Ordinance on first reading was moved by _____, seconded by _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed on first reading on the 15th day of April, 2014.

The passage of this Ordinance on second reading was moved by _____, seconded by _____, and upon being put to a vote, the vote was as follows:

Mayor Pam Triolo
Vice Mayor Scott Maxwell
Commissioner Christopher McVoy
Commissioner Andy Amoroso
Commissioner John Szerdi

The Mayor thereupon declared this Ordinance duly passed and enacted on the 6th day of May, 2014.

LAKE WORTH CITY COMMISSION

By:_____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Water/Sewer Utilities

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EXECUTIVE BRIEF

TITLE:
Contract with two companies to construct Potable Well 16 located at 1900 2nd Avenue North

SUMMARY:
The Contract with Florida Design Drilling Corp. provides for construction of Potable Well 16 at a cost not to exceed $494,949.

The Contract with Mock Roos and Associates (MRA) provides for construction phase services associated with the construction of Potable Well 16 at a price not to exceed $57,550.

This is a companion to item H, which is the contract award to construct the Raw Watermain that will service Potable Well 16.

BACKGROUND AND JUSTIFICATION:
The City of Lake Worth has observed increasing levels of chlorides in the Surficial Aquifer monitoring well network since 2000. As part of the requirements of a new South Florida Water Management District (SFWMD) Water Use permit, the City must construct three new surficial wells to the west and north of the existing wellfield and abandon six existing facilities in the eastern portion of the Surficial Wellfield in a phased program extending through 2015. This will shift the footprint of the Surficial Aquifer withdrawals further west to lessen the potential for saline water intrusion.

The first proposed well is to be constructed in phase 1, with an expected completion date by the end of 2014. All three wells are to be constructed onsite at the City's 1900 2nd Avenue North complex.

The City of Lake Worth Utilities Department has solicited bids from contractors for the construction of Potable Well 16, under Bid IFB-UT-WT-12-13-128. The lowest bid for the sum of $494,949 was from Florida Design Drilling Corp. Mock Roos & Associates are recommending award of the bid to Florida Design Drilling Corp.

Mock Roos & Associates was the Engineering Consulting firm selected by the City of Lake Worth as the number one ranked firm for a continuing services contract, **WS-08-09,** through the Consultant's Competitive Negotiation Act (Florida State Statutes 287.055) procurement process.

Under this agreement, MRA have been selected to perform construction phase services for the construction of the proposed Surficial Well #16 by the Lake Worth Utilities Department. They have also been selected to perform construction phase services for the construction of a new Raw Watermain to transfer the water from the proposed Well #16 to the Lake Worth Water Treatment Plant. These two projects must be constructed this fiscal year in order to satisfy the conditions of the recently issued

SFWMD Consumptive Water Use Permit. Mock Roos & Associates acted as the City's consultant in obtaining the permit, and therefore have the base information needed to complete the project and satisfy the agency's requirements. They have also designed the majority of the surficial wells in the City and have conducted multiple groundwater model updates with the City's raw water production system. It is recommended that Mock Roos & Associates be retained to perform these services, as they have the data used to obtain the SFWMD permit, and the institutional knowledge of our wellfields, groundwater conditions, and similar designs throughout the City of Lake Worth.

MOTION:

I move to approve/not approve a contract with Florida Design Drilling Corp. at a cost not to exceed $494,949; and, the construction services/ engineering contract with Mock Roos and Associates at a price not to exceed $57,550.

Attachments

1) Fiscal Analysis
2) Mock Roos and Associates Proposal
3) Bid Tabulation
4) Florida Design Drilling Corp Contract
5) Bid Recommendation

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact

Fiscal Years	2014	2015	2016	2017	2018
Capital Expenditures	554,499	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-Kind Match	0	0	0	0	0
Net Fiscal Impact	554,499	0	$0	$0	$0

No. of Additional Full-Time Employees	0	0	0	0	0

B. Recommended Source of Funds/Summary of Fiscal Impact

The funds have been identified in the FY2014 Water Treatment Capital budget from account 402-7022-533.63-00.

Utilities/Water Production							
Account Number	Account Description	Project #	FY 2014 Proposed Budget	Amended Budget	Current Balance	Agenda Item Expenditures	Remaining Balance
402-7022-533.63-00	WTP Capital	WT1405	$662,000	N/A	$621,000	-$554,499	$66,501

C. Fiscal Review:

Larry Johnson – Director
Monica Morandi –Engineer
Clyde Johnson - Finance

MOCK•ROOS
ENGINEERS • SURVEYORS • PLANNERS

February 17, 2014
Revised February 19, 2014
Revised March 3, 2014

Ms. Monica Morandi
Lake Worth Utilities
1900 2nd Avenue N.
Lake Worth, FL 33461

Ref. No. B2067.03
Subject: Potable Well No. 16

Dear Monica:

We are submitting the attached Proposal To Provide *Construction Phase Engineering Services for Potable Well No. 16*. Please review the attached proposal and return one signed copy to our office as our authorization to proceed with the Scope of Services outlined in the proposal.

We will provide the Scope of Services on an hourly basis, plus reimbursable expenses. We anticipate the total fee to provide the Scope of Services will be $57,550.

If you have any questions please contact me at 683-3113, extension 258. Thank you for using Mock•Roos on this project. We look forward to working with you.

Sincerely,

MOCK, ROOS & ASSOCIATES, INC.

John R. Leemon, P.E.
Senior Project Manager

JRL:jeh
Enclosure
Copies: Bookkeeping

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Mock, Roos & Associates, Inc.
5720 Corporate Way, West Palm Beach, Florida 33407-2066, (561) 683-3113, fax 478-7248

Proposal To Provide Construction Phase Services for Potable Well No. 16

Services to be provided by: Mock•Roos

Services provided to (City): Lake Worth Utilities

Proposal Date: February 17, 2014
Revised February 19, 2014
Revised March 5, 2014

Proposal Terms

A. Project Description:

The project includes the construction of proposed Potable Well No. 16 and the relocation of a portion of the 6-inch forcemain currently located within Wellfield Zone 1. Mock•Roos will provide construction phase services as more specifically described under **B. Scope of Services** below.

B. Scope of Services:

The construction phase services budget contained herein includes providing services that run concurrent with the initial construction contract time (seven months) including one month for Project wrap-up coordination.

1. Provide Construction Phase Engineering Services for the Project, act as the City's engineering representative during construction, and advise the City on construction aspects of the project when necessary.

2. Coordinate, schedule and attend a preconstruction meeting with the Contractor, City and Subconsultants, prepare a detailed agenda for the preconstruction meeting, and prepare and distribute meeting minutes.

3. Review and process Contractor submittals and shop drawings for general conformance with the Contract Documents. Review and processing of "or equal" or "substitution" packages, as may be requested by the Contractor or City, can be performed as Additional Services. These services when requested are usually reimbursed by the Contractor.

4. Provide part time Project Field Representative services in accordance with the description of duties contained in the Project Manual. Project Field Representative services are budgeted at 1

hour per day for the active construction period. (These services are limited considering that the Project Field Representative will be providing services for the raw watermain in the same time frame). Our hydrogeologic subconsultant will provide Field Representative services for the well drilling phase.

5. Provide periodic site visits by the Engineer to observe the progress of the Work.

6. Review and process Contractor submitted applications for progress payment. Recommendations to the City regarding payment will be based on estimated quantities and work to date amounts observed for the requested progress payment period.

7. Assist in resolving Contractor's technical questions, if any, during the construction period. Provide interpretations of the Drawings, Technical Specifications, and Contract Documents and issue clarifications as needed.

8. Assist in implementing City requested minor changes to the construction project, generally in the form of Work Directive Changes. These minor changes should not require re-design of project elements. Associated construction cost, if any, will be deducted from a general allowance balance on the Project. Preparing major Change Orders for City requested changes or additions may require Additional Services.

9. Attend periodic construction meetings with the Contractor, City, and Subconsultants, to discuss the progress of the Work, review the Contractor's proposed construction schedules, and discuss other items as may be appropriate.

10. Perform one "Substantial Completion Walkthrough" with the Contractor, City and Subconsultants.

11. Prepare and distribute a punch-list of remaining work items to be completed following the "Substantial Completion Walkthrough".

12. Prepare and assist the City in the execution of a Substantial Completion Certificate as appropriate.

13. Perform one "Final Project Walkthrough" with the Contractor, City and Subconsultants once the punch-list is completed. Prepare a list, if necessary, of any punch-list items found to be inadequately addressed and advise the Contractor of the items that remain to be completed before the Project can be accepted by the City.

14. Review Contractor submitted record drawings for conformance with the requirements of the Contract Documents and incorporate the Contractor's record drawing information into to the electronic drawing files for City use. Provide an electronic copy of the drawing files in

AutoCAD "DWG" format and in PDF format.

15. Prepare and submit two completion statements to the Health Department. Coordinate with the Health Department as necessary.

16. Prepare and assist the City in processing final paperwork for the Project including: a final change order to adjust any quantities or other items in the Project, if necessary; the Contractor's final payment application; and a recommendation for final payment and final acceptance of the Project when appropriate.

17. Provide the services of a hydro-geologic subconsultant to review the drilling and completion aspects of the well construction.

18. Provide the services of an electrical subconsultant to review the electrical aspects of the project.

C. Additional Services:

1. Any services not included in the Scope of Services will be considered Additional Services.

2. Any design changes, schedule changes, drawing changes, or other project changes requested by Client will be considered Additional Services.

3. Additional Services can be provided upon Mock•Roos receiving signed authorization from Client.

D. Fees and Rates:

1. Mock•Roos will complete these services on an hourly basis at Mock•Roos' hourly rates, plus reimbursable expenses.

2. The total fee to provide the Scope of Services is anticipated to be $57,550.

3. Mock•Roos will not provide services in excess of the anticipated fee without signed authorization from City.

4. Mock•Roos can provide Additional Services at the Mock•Roos rates in effect at that time, plus reimbursable expenses or for an agreed upon lump sum fee.

E. Conditions:

1. All terms become valid upon Mock•Roos receiving one complete copy of this proposal within 60 days of its date.

2. This Proposal is based on the Scope of Services being completed on or before March 15, 2015. If not completed by this date for reasons other than those within the control of Mock•Roos, Mock•Roos may request a change order as provided for in Mock•Roos' contract with the Client (City Contract No. WS-08-09).

3. This proposal serves as a supplement to the general agreement between Mock•Roos and Client dated January 16, 2009, Contract WS-08-09-MR.

4. In case of discrepancies, the terms of this proposal supersede those of previous agreements.

F. Acceptance and Authorization to Proceed:

1. This proposal is acceptable and Mock•Roos has authorization to proceed with the Scope of Services. This authorization becomes valid upon Mock•Roos receiving one **complete** copy of this form with an original signature below.

IN WITNESS WHEREOF the parties hereto have made and executed this Agreement on the _____ day of _____, 2014.

CITY OF LAKE WORTH, FLORIDA

By: _____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

_____
Date

Approved as to form and legal sufficiency:

By: _____
Christy Goddeau
City Attorney

MOCK, ROOS & ASSOCIATES, INC.

By: _____
Thomas A. Biggs, P.E.
Executive Vice President

3/4/14
Date

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

The foregoing instrument was acknowledged before me this 4th day of March, 2014, by Thomas A. Biggs, P.E., Executive Vice President of Mock, Roos & Associates, Inc., a Florida corporation, on behalf of the corporation, and who is personally known to me or who as produced the following _____ as identification.

Notary Public: Jane E. Hayes

JANE E. HAYES
Commission # FF 040421
Expires August 15, 2017
Bonded Thru Troy Fain Insurance 800-385-7019

Print Name: Jane E. Hayes
My commission expires: 8/15/17

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Potable Well No. 16
for
City of Lake Worth

Estimate of Construction Phase Engineering Fees

TASK	Project Manager	Project Engr.	Field Rep	CADD Tech	Admin. Assist.	TOTAL
I. Pre-Construction Activities						
Initial Project Coord.	2	2			1	579
Pre-construction Meeting & Minutes	3	4	2		2	1,178
Processing Shop Drawings	4	16			2	2,478
Coord. w/Contractor & Client	2	2			2	638
Subtotal	11	24	2	0	7	4,873
II. Construction Activities						
Construction Services Admin.	4	8			2	1,598
Field Observation & Supervision	6	12	60		4	7,556
Review Payment Applications	4	8			4	1,716
Resolve Field & Technical Quest.	4	8			2	1,598
Assistance with Minor Changes	2	8			2	1,298
Construction Progress Meetings	4	8				1,480
Substantial Completion Walk-Through & Follow-up Coord.	2	4	2		2	1,028
Final Completion Observation	2	4	2		1	969
Health Department Release (2)	2	6			2	1,078
Coord. w/Contractor & Client	2	2			4	756
Subtotal	32	68	64	0	23	19,077
III. Post-Construction Activities						
Resolve Punch List Items	2	4	4		1	1,139
Process Final Paperwork	4	8			2	1,598
Update AutoCAD Record Drawings	1	4		12	1	1,669
Coordination w/Contractor & Client	2	2			2	638
Subtotal	9	18	4	12	6	5,044
Total Hours	52	110	70	12	36	28,994
Hourly Rate	150	110	85	85	59	
Total By Category	7,800	12,100	5,950	1,020	2,124	
Total Hourly Cost						28,994
Hydrogeologic Subconsultant						23,280
Electrical Subconsultant						4,500
Reimbursable Expenses						776
TOTAL BUDGET						**$57,550**

Bid Tabulation: Potable Well No. 16
for the City of Lake Worth

Bid Date: February 6, 2014

Item	Description	Est. Quantity	Unit	Florida Design Unit Price	Florida Design Amount	Southeast Drilling Unit Price	Southeast Drilling Amount	TLC Diversified Unit Price	TLC Diversified Amount
	Schedule A - General Requirements								
A-1.	Bonds and Insurance	1	LS		$20,000.00		$15,000.00		$5,200.00
A-2.	Mobilization/Demobilization/General Conditions	1	LS		40,000.00		55,000.00		37,883.00
A-3.	Permit Fees	1	LS		15,000.00		3,000.00		17,640.00
A-4.	Video Taping	1	LS		495.00		1,000.00		500.00
A-5.	Prepare & Furnish Record Drawings	1	LS		3,000.00		4,500.00		3,600.00
A-6.	General Allowance	1	LS		30,000.00		30,000.00		30,000.00
	Total Schedule A				$108,495.00		$108,500.00		$94,823.00
	Schedule B - 2-inch Diameter Test Well								
B-1.	Drill 8-inch diameter pilot hole	310	FT	$25.00	$7,750.00	$40.00	$12,400.00	$19.40	$6,014.00
B-2.	Perform geophysical logging (complete set)	1	LS	1,500.00	1,500.00	5,000.00	5,000.00	4,818.00	4,818.00
B-3.	Furnish & install 4-inch diameter Test Well Casing & Scree	310	FT	25.00	7,750.00	25.00	7,750.00	21.60	6,696.00
B-4.	Development and Perform Test Well Interval Sampling	6	EA	25.00	150.00	1,000.00	6,000.00	862.00	5,172.00
	Total Schedule B				$17,150.00		$31,150.00		$22,700.00
	Schedule C Well Construction								
C-1.	Drill 36-inch Nominal Borehole to 60 Feet	60	FT	$300.00	$18,000.00	$120.00	$7,200.00	$151.00	$9,060.00
C-2.	Furnish and Install 30-inch steel surface casing	60	FT	300.00	18,000.00	120.00	7,200.00	172.00	10,320.00
C-3.	Cement Grout 30-inch Steel Surface Casing in place	300	SKS	4.00	1,200.00	15.00	4,500.00	38.00	11,400.00
C-4.	Drill nominal 29-inch borehole	200	FT	175.00	35,000.00	25.00	5,000.00	86.00	17,200.00
C-5.	Furnish and Install 24-inch steel casing	200	FT	175.00	35,000.00	70.00	14,000.00	119.00	23,800.00
C-6.	Cement grout 24-inch casing	310	SKS	4.00	1,240.00	35.00	10,850.00	38.00	11,780.00
C-7.	Drill nominal 22-inch borehole with reverse air	60	FT	100.00	6,000.00	100.00	6,000.00	135.00	8,100.00
C-8.	Furnish and Install 16-inch screen	60	FT	150.00	9,000.00	120.00	7,200.00	297.00	17,820.00
C-9.	Furnish and Install 17.4-inch PVC riser	200	FT	88.00	17,600.00	70.00	14,000.00	114.00	22,800.00
C-10.	Furnish and Install gravel pack	260	CF	25.00	6,500.00	18.00	4,680.00	49.00	12,740.00
C-11.	Airlift Development	10	HR	175.00	1,750.00	250.00	2,500.00	307.00	3,070.00
C-12.	Jetting with Simultaneous Airlift Development	100	HR	175.00	17,500.00	250.00	25,000.00	350.00	35,000.00
C-13.	Well Pump Development	40	HR	175.00	7,000.00	250.00	10,000.00	162.00	6,480.00
C-14.	Conduct Step Rate Pump Test	12	HR	175.00	2,100.00	200.00	2,400.00	173.00	2,076.00
C-15.	Conduct Video Logging	1	EA	3,000.00	3,000.00	2,500.00	2,500.00	1,830.00	1,830.00
C-16.	Well Disinfection and Water Qualilty Samples	1	LS		4,000.00		3,500.00		8,620.00
C-17.	Extra Work by Drilling & Crew Drilling Equpment	16	HR	1.00	16.00	200.00	3,200.00	22.00	352.00
C-18.	Extra Work by Drilling Crew	16	HR	1.00	16.00	200.00	3,200.00	17.00	272.00
C-19.	Standby Time with Rig and Crew On-Site	16	HR	1.00	16.00	200.00	3,200.00	11.00	176.00
C-20.	Standby Time with Rig On-Site and Crew Off-Site	16	HR	1.00	16.00	200.00	3,200.00	6.00	96.00
C-21	Formation Water Disposal System	1	LS		9,000.00		5,000.00		30,000.00
	Total Schedule C				$191,954.00		$144,330.00		$232,992.00

Bid Tabulation: Potable Well No. 16
for the City of Lake Worth

Bid Date: February 6, 2014

Item	Description	Est. Quantity	Unit	Florida Design Unit Price	Florida Design Amount	Southeast Drilling Unit Price	Southeast Drilling Amount	TLC Diversified Unit Price	TLC Diversified Amount
	Schedule D - Finished Well and Site Work								
D-1.	Well pump	1	LS		$17,000.00		$25,000.00		$31,870.00
D-2.	Wellhead and Column Pipe	1	LS		10,000.00		9,000.00		13,260.00
D-3	Concrete	1	LS		3,000.00		5,000.00		8,635.00
D-4.	Wellhead Piping, valves,etc	1	LS		6,000.00		25,000.00		15,600.00
D-5.	Fencing	1	LS		6,000.00		6,000.00		5,900.00
D-6.	Site Restoration - include Landscaping and Sodding	1	LS		3,000.00		3,000.00		10,300.00
D-7.	Asphalt Pavement incl. Base at Well Site	1	LS		3,000.00		5,500.00		4,575.00
D-8.	Asphalt Trench Patch incl. Base	230	SY	30.00	6,900.00	25.00	5,750.00	47.00	10,810.00
D-9.	1" Mill and Asphalt Overlay	400	SY	25.00	10,000.00	12.00	4,800.00	22.00	8,800.00
D-10.	6" C900 PVC Forcemain	310	FT	35.00	10,850.00	64.00	19,840.00	62.00	19,220.00
D-11.	6" Gate Valves	2	EA	550.00	1,100.00	1,200.00	2,400.00	1,000.00	2,000.00
D-12.	16" C905 PVC Raw Watermain	60	FT	100.00	6,000.00	175.00	10,500.00	164.00	9,840.00
D-13.	16" MJ Butterfly Valve	1	EA	2,500.00	2,500.00	4,500.00	4,500.00	2,900.00	2,900.00
D-14.	Connect to Existing Forcemain	2	EA	500.00	1,000.00	1,000.00	2,000.00	1,265.00	2,530.00
D-15.	Abandon Existing Forcemain	1	LS		3,000.00		1,000.00		1,170.00
D-16.	Sod and Landscape Restoration along Forcemain Route	1	LS		1,000.00		1,000.00		6,000.00
D-17.	Pavement Markings	1	LS		1,000.00		800.00		1,250.00
D-18.	Misc.	1	LS		1,000.00		2,000.00		8,400.00
	Total Schedule D				$92,350.00		$133,090.00		$163,060.00
	Schedule E - Electrical and Instrumentation								
E-1.	Electrical wire, conduit, disconnects,etc.	1	LS		$30,000.00		$27,000.00		$28,260.00
E-2.	Control Panel	1	LS		45,000.00		18,000.00		18,300.00
E-3.	Instrumentation incl. Flow Meter	1	LS		5,000.00		15,000.00		16,300.00
E-4.	SCADA System	1	LS		5,000.00		33,000.00		29,250.00
	Total Schedule E				$85,000.00		$93,000.00		$92,110.00
	Total Schedules A through E				$494,949.00		$510,070.00		$605,685.00

Bid Tabulation: Potable Well No. 16
for the City of Lake Worth

Bid Date: February 6, 2014

Item	Description	Est. Quantity	Unit	All Webbs Unit Price	All Webbs Amount	A.C. Schultes Unit Price	A.C. Schultes Amount
	Schedule A - General Requirements						
A-1.	Bonds and Insurance	1	LS		$18,000.00		$9,900.00
A-2.	Mobilization/Demobilization/General Conditions	1	LS		56,000.00		65,500.00
A-3.	Permit Fees	1	LS		5,000.00		500.00
A-4.	Video Taping	1	LS		1,500.00		2,500.00
A-5.	Prepare & Furnish Record Drawings	1	LS		3,500.00		5,000.00
A-6.	General Allowance	1	LS		30,000.00		30,000.00
	Total Schedule A				$114,000.00		$113,400.00
	Schedule B - 2-inch Diameter Test Well						
B-1.	Drill 8-inch diameter pilot hole	310	FT	$40.00	$12,400.00	$125.00	$38,750.00
B-2.	Perform geophysical logging (complete set)	1	LS	1,000.00	1,000.00	5,000.00	5,000.00
B-3.	Furnish & install 4-inch diameter Test Well Casing & Scree	310	FT	15.00	4,650.00	75.00	23,250.00
B-4.	Development and Perform Test Well Interval Sampling	6	EA	400.00	2,400.00	1,200.00	7,200.00
	Total Schedule B				$20,450.00		$74,200.00
	Schedule C Well Construction						
C-1.	Drill 36-inch Nominal Borehole to 60 Feet	60	FT	$150.00	$9,000.00	$250.00	$15,000.00
C-2.	Furnish and Install 30-inch steel surface casing	60	FT	150.00	9,000.00	200.00	12,000.00
C-3.	Cement Grout 30-inch Steel Surface Casing in place	300	SKS	20.00	6,000.00	9.00	2,700.00
C-4.	Drill nominal 29-inch borehole	200	FT	200.00	40,000.00	130.00	26,000.00
C-5.	Furnish and Install 24-inch steel casing	200	FT	100.00	20,000.00	95.00	19,000.00
C-6.	Cement grout 24-inch casing	310	SKS	20.00	6,200.00	9.00	2,790.00
C-7.	Drill nominal 22-inch borehole with reverse air	60	FT	150.00	9,000.00	110.00	6,600.00
C-8.	Furnish and Install 16-inch screen	60	FT	250.00	15,000.00	105.00	6,300.00
C-9.	Furnish and Install 17.4-inch PVC riser	200	FT	80.00	16,000.00	120.00	24,000.00
C-10.	Furnish and Install gravel pack	260	CF	12.00	3,120.00	20.00	5,200.00
C-11.	Airlift Development	10	HR	300.00	3,000.00	150.00	1,500.00
C-12.	Jetting with Simultaneous Airlift Development	100	HR	300.00	30,000.00	100.00	10,000.00
C-13.	Well Pump Development	40	HR	300.00	12,000.00	100.00	4,000.00
C-14.	Conduct Step Rate Pump Test	12	HR	300.00	3,600.00	200.00	2,400.00
C-15.	Conduct Video Logging	1	EA	1,500.00	1,500.00	3,000.00	3,000.00
C-16.	Well Disinfection and Water Qualilty Samples	1	LS		6,000.00		15,000.00
C-17.	Extra Work by Drilling & Crew Drilling Equpment	16	HR	250.00	4,000.00	75.00	1,200.00
C-18.	Extra Work by Drilling Crew	16	HR	175.00	2,800.00	75.00	1,200.00
C-19.	Standby Time with Rig and Crew On-Site	16	HR	150.00	2,400.00	75.00	1,200.00
C-20.	Standby Time with Rig On-Site and Crew Off-Site	16	HR	150.00	2,400.00	75.00	1,200.00
C-21	Formation Water Disposal System	1	LS		15,000.00		20,000.00
	Total Schedule C				$216,020.00		$180,290.00

Bid Tabulation: Potable Well No. 16
for the City of Lake Worth

Bid Date: February 6, 2014

Item	Description	Est. Quantity	Unit	All Webbs Unit Price	All Webbs Amount	A.C. Schultes Unit Price	A.C. Schultes Amount
	Schedule D - Finished Well and Site Work						
D-1.	Well pump	1	LS		$25,000.00		$20,000.00
D-2.	Wellhead and Column Pipe	1	LS		15,000.00		10,000.00
D-3	Concrete	1	LS		8,500.00		5,000.00
D-4.	Wellhead Piping, valves,etc	1	LS		22,000.00		15,000.00
D-5.	Fencing	1	LS		6,500.00		10,000.00
D-6.	Site Restoration - include Landscaping and Sodding	1	LS		7,500.00		10,000.00
D-7.	Asphalt Pavement incl. Base at Well Site	1	LS		30,000.00		10,000.00
D-8.	Asphalt Trench Patch incl. Base	230	SY	48.00	11,040.00	53.00	12,190.00
D-9.	1" Mill and Asphalt Overlay	400	SY	18.00	7,200.00	23.50	9,400.00
D-10.	6" C900 PVC Forcemain	310	FT	74.00	22,940.00	25.00	7,750.00
D-11.	6" Gate Valves	2	EA	1,200.00	2,400.00	3,000.00	6,000.00
D-12.	16" C905 PVC Raw Watermain	60	FT	150.00	9,000.00	65.00	3,900.00
D-13.	16" MJ Butterfly Valve	1	EA	3,100.00	3,100.00	5,000.00	5,000.00
D-14.	Connect to Existing Forcemain	2	EA	2,800.00	5,600.00	5,000.00	10,000.00
D-15.	Abandon Existing Forcemain	1	LS		3,000.00		5,000.00
D-16.	Sod and Landscape Restoration along Forcemain Route	1	LS		7,000.00		5,000.00
D-17.	Pavement Markings	1	LS		1,200.00		3,500.00
D-18.	Misc.	1	LS		700.00		28,500.00
	Total Schedule D				$187,680.00		$176,240.00
	Schedule E - Electrical and Instrumentation						
E-1.	Electrical wire, conduit, disconnects,etc.	1	LS		$32,000.00		$36,000.00
E-2.	Control Panel	1	LS		23,000.00		25,000.00
E-3.	Instrumentation incl. Flow Meter	1	LS		18,000.00		20,000.00
E-4.	SCADA System	1	LS		28,000.00		30,000.00
	Total Schedule E				$101,000.00		$111,000.00
	Total Schedules A through E				$639,150.00		$655,130.00

PROJECT MANUAL

Potable Well No. 16
at 2nd Avenue North for City of Lake Worth
Lake Worth Solicitation No. IFB-UT-WT-12-13-128

August 2013

Prepared by:

Mock, Roos & Associates, Inc.
Engineers-Surveyors-Planners
5720 Corporate Way
West Palm Beach, Florida

Engineer's Project
No. B2067.00

PROJECT: Potable Well No. 16 at 2nd Avenue North for
City of Lake Worth

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PROJECT: Potable Well No. 16 at 2nd Avenue North for
City of Lake Worth
Solicitation No. IFB-UT-WT-12-13-128

Date: January 5, 2014

00020
INVITATION TO BID

Sealed bids, in duplicate, will be received by City of Lake Worth Procurement Office, City Hall, 2nd Floor, 7 North Dixie Highway, Lake Worth, Florida 33460 for the subject Project until 2:00 p.m. local time, February 6, 2014, then opened publicly at that time.

The OWNER for the Project is City of Lake Worth, Florida.

The Contract Documents will be open to inspection at Mock, Roos & Associates, Inc., 5720 Corporate Way, West Palm Beach, Florida 33407.

Contract Documents may be purchased from Mock, Roos & Associates, Inc. at the following prices, which are non-refundable:

Drawings:	$23.58 plus $1.42 sales tax	=	$25.00
Project Manual:	$33.02 plus $1.98 sales tax	=	$35.00
Complete Set (Drawings and Project Manual):			$60.00

Packaging & Mailing Charges/Set: $ 15.00 (when delivered by UPS)

This Contract is a Unit Price contract.

Bids must be accompanied by a Bid Security in the form of a certified or bank check made payable to the Owner, or a Bid Bond. The amount of the security shall not be less than five (5) percent of the Bidder's total price indicated in Bid Form.

No Bid may be withdrawn for a period of 120 days after the scheduled closing date for the receipt of bids except as otherwise provided in Article 13 of the Instructions to Bidders.

The successful Bidder, who is awarded the Contract, shall be required to furnish a 100% Construction Performance Bond and a 100% Construction Payment Bond.

The OWNER reserves the right to reject any or all Bids, to waive informalities, and to re-advertise.

/s/ Larry Johnson, Water/Sewer Utilities Director

Publish: Palm Beach Post – January 5, 2014

00100
INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS.

Terms used in these Instructions to Bidders which are defined in the Standard General Conditions of the Construction Contract (EDCJC No. 1910-8, 1983 Edition) have the meanings assigned to them in the General Conditions. The term "Bidder" means one who submits a Bid directly to Owner, as distinct from a sub-bidder, who submits a bid to a Bidder. The term "Successful Bidder" means the lowest, qualified, responsible and responsive Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award. The term "Bidding Documents" includes the Advertisement or Invitation to Bid, Instructions to Bidders, the Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

2. COPIES OF BIDDING DOCUMENTS.

2.1. Complete sets of the Bidding Documents in the number and for the cost, if any, stated in the Advertisement or Invitation to Bid may be obtained from Engineer (unless another issuing office is designated in the Advertisement or Invitation to Bid).

2.2. Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.3. Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

3. QUALIFICATIONS OF BIDDERS.

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five days of Owner's request, written evidence such as financial data, previous experience, present commitments and other such data as may be reasonably specifically requested by Owner or otherwise required in Contract Documents. Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.

4. EXAMINATION OF CONTRACT DOCUMENTS AND SITE.

4.1. It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the Work, (c) consider federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work, (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify Engineer of all conflicts, errors or discrepancies in the Contract Documents.

4.2. Reference is made to Division 1: General Requirements of the Specifications for the identification of:

4.2.1. those reports of explorations and tests of subsurface conditions at the site which have been utilized by Engineer in preparation of the Contract Documents.

4.2.2. those drawings of physical conditions in or relating to existing surface and subsurface conditions (except Underground Facilities) which are at or contiguous to the site which have been utilized by Engineer in preparation of the Contract Documents.

4.2.3. Copies of such reports and drawings (referred to above), if not attached to the Specifications or added on the Drawings, will be made available by Owner to any Bidder on request. Those reports and drawings are not a part of the Contract Documents. Bidder may not rely upon the accuracy of the non-technical data, interpretations or opinions contained in those reports and drawings. Bidder may

not rely on the completeness of those reports and drawings for the purposes of bidding or construction. Bidder may rely on any technical data contained in those reports and drawings specifically referenced in Division 1: General Requirements as technical data that can be relied on.

4.3. Information and data reflected in the Contract Documents with respect to Underground Facilities at or contiguous to the site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities or others, and Owner does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.

4.4. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders on subsurface conditions, Underground Facilities and other physical conditions, and possible changes in Contract Documents due to differing conditions appear in Paragraphs 4.2 and 4.3 of the General Conditions.

4.5. Before submitting a Bid, each Bidder will, at Bidder's own expense, be responsible to make or obtain such examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

4.6. On request in advance, Owner will provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations.

4.7. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by Owner unless otherwise provided in the Contract Documents.

4.8. The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

5. INTERPRETATIONS AND ADDENDA.

5.1. All questions about the meaning or intent of the Contract Documents are to be directed to Engineer (unless another issuing office is designated in the Advertisement or Invitation to Bid). Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by issuing office as having received the Bidding Documents. Questions received less than five days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

5.2. Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner or Engineer.

6. BID SECURITY.

6.1. Each Bid must be accompanied by Bid security made payable to Owner in an amount of five percent of the Bidder's maximum Bid price and in the form of a certified or bank check or a Bid Bond issued by a surety meeting the requirements of Paragraph 5.1 of the General Conditions.

6.2. The Bid security of the Successful Bidder will be retained until such Bidder has executed the Agreement and furnished the required contract security, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Agreement and furnish the required contract security within fifteen days after the Notice of Award, Owner may annul the Notice of Award and the Bid security of the Bidder will be forfeited. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the seventh day after the Effective Date of the Agreement or the ___120th___ day after the Bid opening, whereupon Bid security furnished by such Bidders will be returned. Bid security with Bids which are not competitive will be returned within seven days after the Bid opening.

7. CONTRACT TIME.

The numbers of days within which, or the dates by which, the Work is to be substantially completed and also completed and ready for final payment (the Contract Time) are set forth in the Bid Form and the Agreement. If Contract Times are left blank in the Bid Form, the time for Substantial Completion and final completion are to be set forth by Bidder in the Bid and will be included in the Agreement. The times will be taken into consideration by Owner during the evaluation of Bids, and it will be necessary for the Successful Bidder to satisfy Owner of Bidder's ability to achieve Substantial Completion and final completion within the times designated in the Bid.

8. LIQUIDATED DAMAGES.

Provisions for liquidated damages, if any, are set forth in the Agreement.

9. SUBSTITUTE OR "OR-EQUAL" ITEMS.

The contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement. The procedure for submission of any such application by Contractor and consideration by Engineer is set forth in Paragraphs 6.7.1, 6.7.2 and 6.7.3 of the General Conditions and may be supplemented in Division 1: General Requirements.

10. SUBCONTRACTORS, SUPPLIERS AND OTHERS.

10.1. If the Bid Form or Specifications require (or if Owner requests after Bids are received) the identity of certain Subcontractors, Suppliers and other persons and organizations (including those who are to furnish the principal items of material and equipment) to be submitted to Owner in advance of the specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within seven days after the Bid opening (or seven days after request by Owner) submit to Owner a list of all such Subcontractors, Suppliers and other persons and organizations proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, person or organization if requested by Owner. Subcontractors shall be required to meet Contractor's liability insurance requirements as established by the General and Supplementary Conditions or be listed as an additional insured on the apparent successful Bidder's policy. If Owner or Engineer after due investigation has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, either may before the Notice of Award is given request the apparent Successful Bidder to submit an acceptable substitute without an increase in Bid price. If apparent Successful Bidder declines to make any such substitution, Owner may award the contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers and other persons and

organizations. The declining to make requested substitutions will not constitute grounds for sacrificing the Bid security of any Bidder. Any Subcontractor, Supplier, other person or organization listed and to whom Owner or Engineer does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.8.2 of the General Conditions.

10.2. No Contractor shall be required to employ any Subcontractor, Supplier, other person or organization against whom Contractor has reasonable objection.

11. BID FORM.

11.1. The Bid Form is included with the Bidding Documents; additional copies may be obtained from Engineer (or the issuing office).

11.2. All blanks on the Bid Form must be completed in ink or by typewriter.

11.3. Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.

11.4. Bids by partnerships must be executed in the partnership name and signed by a general partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

11.5. All names must be typed or printed below the signature.

11.6. The Bid shall contain an acknowledgement of receipt of all Addenda (the numbers of which must be filled in on the Bid Form).

11.7. The address and telephone number for communications regarding the Bid must be shown.

12. SUBMISSION OF BIDS.

Bids shall be submitted at the time and place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope, marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted) and name and address of the Bidder and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED FOR __(insert project name)__ TO BE OPENED __(insert date and time as indicated in the Invitation to Bid or subsequent addenda)_____ " on the face of it.

13. MODIFICATION AND WITHDRAWAL OF BIDS.

13.1. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

13.2. If, within twenty-four hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the Work to be provided under the Contract Documents.

14. OPENING OF BIDS.

Bids will be opened (publicly or privately) as indicated in the Invitation to Bid.

14.1. When Bids are opened publicly they will be read aloud, and the amounts of the base Bids and major alternates (if any) will be made available after the opening of Bids.

14.2. When Bids are opened privately, an abstract of the same information (will or will not) be made available to Bidders within seven days after the date of Bid opening.

15. BIDS TO REMAIN SUBJECT TO ACCEPTANCE.

All bids will remain subject to acceptance for _____120_ days after the day of the Bid opening, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to that date.

16. AWARD OF CONTRACT.

16.1. Owner reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder, and the right to disregard all nonconforming, nonresponsive, unbalanced or conditional Bids. Also, Owner reserves the right to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make and award to the Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. Discrepancies in the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

16.2. In evaluating Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

16.3. Owner may consider the qualifications and experience of Subcontractors, Suppliers and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions (or as requested by Owner after the Bids are received). Owner also may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.

16.4. Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed Subcontractors, Suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.

16.5. If the contract is to be awarded, it will be awarded to the lowest Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of the Project.

16.6. If the contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within ___120_ days after the day of the Bid opening.

16.7. When Bidder is permitted to designate the Contract Time, Bid prices will be compared after adjusting for differences in the time designated in the Bid for Substantial Completion.

17. CONTRACT SECURITY.

Paragraph 5.1 of the General Conditions and the Supplementary Conditions set forth Owner's requirements as to performance and payment Bonds. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by the required performance and payment Bonds.

18. SIGNING OF AGREEMENT.

When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within ____15_ days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner with the required Bonds.

END OF SECTION

BID FORM MUST BE SUBMITTED IN DUPLICATE

BIDDER: Florida Design Drilling Corp.

PROJECT: Potable Well No. 16 at 2nd Avenue North for City of Lake Worth

DATE: 2/6/14
(Bid Submitted on)

00300
BID FORM

COPY

THIS BID IS SUBMITTED TO:

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. BIDDER accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 120 days after the day of Bid opening. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within 15 days after the date of OWNER's Notice of Award.

3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

(a) BIDDER has examined copies of all the Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

Date	Number
1/29/14	1

(b) BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

(c) BIDDER has studied carefully all reports and drawings of subsurface conditions and drawings of physical conditions which are identified in the Division 1: General Requirements as provided in paragraph 4.2 of the General Conditions, and accepts the determination set forth in Division 1: General Conditions of the extent of the technical data contained in such reports and drawings upon which BIDDER is entitled to rely.

(d) BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests and studies (in addition to or to supplement those referred to in (c) above) which pertain to the subsurface or physical conditions at the site or otherwise may affect the cost, progress, performance or furnishing of the Work as BIDDER considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.2 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports or similar information or data are or will be required by BIDDER for such purposes.

(e) BIDDER has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports or similar information or data in respect of said Underground Facilities are or will be required by BIDDER in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.3 of the General Conditions.

(f) BIDDER has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

(g) BIDDER has given ENGINEER written notice of all conflicts, errors or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to BIDDER.

(h) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

4. BIDDER agrees to perform all the Work described in Contract Documents, subject to adjustments as provided therein, for the Prices BIDDER provides on the Unit Price Schedule (Page 00300– thru 00300–):

5. BIDDER declares it understands that the unit quantities shown on the Bid Form Unit Price Schedule are approximate only and not guaranteed and are subject to either increase or decrease; and that should the quantities of any of the items of Work be increased, the BIDDER agrees to do the additional Work at the unit prices set out herein, and should the quantities be decreased, BIDDER also understands that final payment shall be made on actual quantities completed at the unit prices, and shall make no claims for anticipated profits for any decrease in the quantities.

6. The BIDDER further declares it understands the OWNER may elect to construct only a portion of the Work covered by these Documents and BIDDER agrees to perform that portion of the Work for which BIDDER is awarded a Contract at the unit prices quoted herein.

7. BIDDER agrees that the Work:

will be substantially complete within 180 calendar days after the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions, and completed and ready for final payment within 210 calendar days after the date when the Contract Time commences to run.

BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.

8. The following documents are attached to and made a condition of this Bid:

(a) Required Bid Security in the form of 5% Bid Bond.

(b) Unit Price Schedule on Page(s) 00300-5 and 00300-6.

(c) Trench Safety Affidavit on Page(s) 00300-9.

(d) Schedule of Subcontractors (Page(s) 00300-10)

(e) Schedule of Suppliers, Equipment and Materials (Page(s) 00300-11)

(f) Sworn Statements Under Section 287.133(3)(a), Florida Statutes, on Public Entity Crimes on Page(s) 00300-12 and 00300-13.

(g) (List other documents as pertinent): Certification of Drug Free Workplace Program (Page 00300-14).

9. Communications concerning this Bid shall be telephoned or addressed to:

The phone number and address of BIDDER indicated below.

10. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as part of the Contract Documents have the meanings assigned to them in the General Conditions.

11. BIDDER's Florida Contractor's License No. 11148.

12. BIDDER covenants that it is qualified to do business in the State of Florida and has attached evidence of BIDDER's qualification to do business in the State of Florida, or if not attached, BIDDER covenants to obtain such evidence within five days of request by OWNER to provide evidence.

If BIDDER is:

An Individual

By _____ (SEAL)
(Individual's Name)

_____
(Signature)

doing business as _____

Business address: _____

_____

Phone No. : _____

A Partnership

By _____ (SEAL)
(Firm Name)

_____
(General Partner) (Signature)

Business address: _____

_____

Phone No. : _____

A Corporation

By Florida Design Drilling Corporation (SEAL)
(Corporation Name)

Florida
(State of Incorporation)

By Daniel Ringdahl
(Name of Person Authorized to Sign)

President
(Title)

_____
(Signature)

(Corporate Seal)

Attest NOAH RINGDAHL
(Secretary)

_____
(Signature)

Business address: 1405 N Killian Dr

Lake Park, FL 33403

Phone No. : 561-844-2966

Unit Price Schedule
Potable Well No. 16
for the City of Lake Worth

Item	Description	Est. Quantity	Unit	Unit Price	Total Amount
	Schedule A - General Requirements				
A-1.	Bonds and Insurance	1	LS		$ 20,000
A-2.	Mobilization/Demobilization/General Conditions	1	LS		$ 40,000
A-3.	Permit Fees	1	LS		$ 15,000
A-4.	Video Taping	1	LS		$ ~~500~~ 495 DR
A-5.	Prepare & Furnish Record Drawings	1	LS		$ ~~3,500~~ 3,000 DR
A-6.	General Allowance	1	LS		$30,000.00
	Total Schedule A				$ 108,495
	Schedule B - 2-inch Diameter Test Well				
B-1.	Drill 8-inch diameter pilot hole	310	FT	$ 25	$ 7,750
B-2.	Perform geophysical logging (complete set)	1	LS	$ 1,500	$ 1,500
B-3.	Furnish & install 4-inch diameter Test Well Casing & Screen	310	FT	$ 25	$ 7,750
B-4.	Development and Perform Test Well Interval Sampling	6	EA	$ 25	$ 150
	Total Schedule B				$ 17,150
	Schedule C Well Construction				
C-1.	Drill 36-inch Nominal Borehole to 60 Feet	60	FT	$ 300	$ 18,000
C-2.	Furnish and Install 30-inch steel surface casing	60	FT	$ 300	$ 18,000
C-3.	Cement Grout 30-inch Steel Surface Casing in place	300	SKS	$ 4	$ 1,200
C-4.	Drill nominal 29-inch borehole	200	FT	$ 175	$ 35,000
C-5.	Furnish and Install 24-inch steel casing	200	FT	$ 175	$ 35,000
C-6.	Cement grout 24-inch casing	310	SKS	$ 4	$ 1,240
C-7.	Drill nominal 22-inch borehole with reverse air	60	FT	$ 100	$ 6,000
C-8.	Furnish and Install 16-inch screen	60	FT	$ 150	$ 9,000
C-9.	Furnish and Install 17.4-inch PVC riser	200	FT	$ 88	$ 17,600
C-10.	Furnish and Install gravel pack	260	CF	$ 25	$ 6,500
C-11.	Airlift Development	10	HR	$ 175	$ 1,750
C-12.	Jetting with Simultaneous Airlift Development	100	HR	$ 175	$ 17,500
C-13.	Well Pump Development	40	HR	$ 175	$ 7,000
C-14.	Conduct Step Rate Pump Test	12	HR	$ 175	$ 2,100
C-15.	Conduct Video Logging	1	EA	$ 3,000	$ 3,000
C-16.	Well Disinfection and Water Qualilty Samples	1	LS		$ 4,000
C-17.	Extra Work by Drilling & Crew Drilling Equpment	16	HR	$ 1	$ 16
C-18.	Extra Work by Drilling Crew	16	HR	$ 1	$ 16
C-19.	Standby Time with Rig and Crew On-Site	16	HR	$ 1	$ 16
C-20.	Standby Time with Rig On-Site and Crew Off-Site	16	HR	$ 1	$ 16
C-21	Formation Water Disposal System	1	LS		$ 9,000
	Total Schedule C				$ 191,954

Unit Price Schedule
Potable Well No. 16
for the City of Lake Worth

Item	Description	Est. Quantity	Unit	Unit Price	Total Amount
	Schedule D - Finished Well and Site Work				
D-1.	Well pump	1	LS		$ 17,000
D-2.	Wellhead and Column Pipe	1	LS		$ 10,000
D-3	Concrete	1	LS		$ 3,000
D-4.	Wellhead Piping, valves,etc	1	LS		$ 6,000
D-5.	Fencing	1	LS		$ 6,000
D-6.	Site Restoration - include Landscaping and Sodding	1	LS		$ 3,000
D-7.	Asphalt Pavement incl. Base at Well Site	1	LS		$ 3,000
D-8.	Asphalt Trench Patch incl. Base	230	SY	$ 30	$ 6,900
D-9.	1" Mill and Asphalt Overlay	400	SY	$ 25	$ 10,000
D-10.	6" C900 PVC Forcemain	310	FT	$ 35	$ 10,850
D-11.	6" Gate Valves	2	EA	$ 550	$ 1,100
D-12.	16" C905 PVC Raw Watermain	60	FT	$ 100	$ 6,000
D-13.	16" MJ Butterfly Valve	1	EA	$ 2,500	$ 2,500
D-14.	Connect to Existing Forcemain	2	EA	$ 500	$ 1,000
D-15.	Abandon Existing Forcemain	1	LS		$ 3,000
D-16.	Sod and Landscape Restoration along Forcemain Route	1	LS		$ 1,000
D-17.	Pavement Markings	1	LS		$ 1,000
D-18.	Misc.	1	LS		$ 1,000
	Total Schedule D				$ 92,350
	Schedule E - Electrical and Instrumentation				
E-1.	Electrical wire, conduit, disconnects,etc.	1	LS		$ 30,000
E-2.	Control Panel	1	LS		$ 45,000
E-3.	Instrumentation incl. Flow Meter	1	LS		$ 5,000
E-4.	SCADA System	1	LS		$ 5,000
	Total Schedule E				$ 85,000
	Total Schedules A through E				$ 494,949

Total in Words: FOUR HUNDRED ~~THOUSAND~~ DR NINETY FOUR THOUSAND NINE HUNDRED FORTY NINE DOLLARS.

City of Lake Worth – Potable Well No. 16

Qualification Requirements

(Only those Bidders and Subcontractor(s) who are qualified and can demonstrate through previous experience will be considered as bona fide bidders. Bidders must provide a minimum of four (4) projects of similar scope and value. Failure to provide this information is grounds for disqualification.

Name of Project: Water Supply Wells 28W, 31W, & 33W

Year of Project: 2013

Owner of Project: City of Boca Raton

Location of Project: Boca Raton, FL

Designing Engineer: CDM Smith

Address: 6365 NW 6th Way, #200, Ft Lauderdale, FL 33309

Telephone No.: 954-776-1731

Scope of Work: 3 new production wells, paving, wellheads, well pads, I&C, electrical.

Approximate Value: $671,500

Name of Project: Water Treatment Improvements Program Exploratory Test Wells

Year of Project: 2011-2012

Owner of Project: City of Everglades City

Location of Project: Everglades City

Designing Engineer: Tetra Tech

Address: 201 East Pine Street, Suite 1000, Orlando, FL 32801

Telephone No.: (407) 839-3955

Scope of Work: Two production test wells, testing, logging, sampling and analysis.

Approximate Value: $103,495

City of Lake Worth – Replacement of Potable Well No. 16

Qualification Requirements

Name of Project: Floridan Aquifer Well #7

Year of Project: 2013

Owner of Project: Ocean Reef Community Association

Location of Project: North Key Largo, FL

Designing Engineer: Mathews Consulting, Inc.

Address: 477 South Rosemary Ave, Suite 330, WPB, FL 33401

Telephone No.: 561-655-6175

Scope of Work: New Floridan production well, wellhead.

Approximate Value: $779,810

Name of Project: Sawgrass Floridan Well Construction and APT

Year of Project: 2013

Owner of Project: City of Sunrise

Location of Project: Sunrise, FL

Designing Engineer: MWH

Address: 490 Sawgrass Corporate Pkwy

Telephone No.: 954-846-0401

Scope of Work: Two Floridan test wells and aquifer performance testing, MOT.

Approximate Value: $2,242,600

PROJECT NO: B2067.00

TRENCH SAFETY AFFIDAVIT

(FAILURE TO COMPLETE THIS FORM MAY RESULT IN THE BID BEING DECLARED NON-RESPONSIVE)

Florida Design Drilling Corp. (NAME OF CONTRACTOR) hereby provides written assurance that compliance with applicable Trench Safety Standards identified in the Occupational Safety & Health Administration's Excavation Safety Standards, (OSHA) 29 C.F.R.S. 1926.650 Subpart P will be adhered to during trench excavation in accordance with Florida Statutes 553.60 through 553.64 inclusive (1990), "Trench Safety Act".

The undersigned acknowledges that included in the various items of the proposal and in the Total Bid Price are costs for complying with the Florida "Trench Safety Act" as summarized below: (Attach additional sheets as necessary)

Schedule Item	Trench Safety Measure (Slope, Trench Shield, etc.	Cost
	Sloping	$ 5,000.00
		$
		$
		$
		$
		$
	Total	$ 5,000.00

(Signature) 2/6/14 (date)

STATE OF Florida

COUNTY OF Palm Beach

Subscribed and Sworn to (or affirmed) before me on 2/6/14 (date) by Daniel Ringdahl (name). He/she is personally known to me or has presented _____ (type of identification) as identification.

Notary Public Signature and Seal

Print Notary Name and Commission No.

JO-ANN ESCOTT
Notary Public - State of Florida
My Comm. Expires Nov 28, 2015
Commission # EE 124236

SCHEDULE OF SUBCONTRACTORS

List Proposed Subcontractors	Category of Work
GILMORE	Electrician
CC CONTROL CORP.	Instrumentation

SCHEDULE OF EQUIPMENT AND MATERIALS

Description	Manufacturer	Model
Well pump	AMERICAN MARSH	9LC

SWORN STATEMENT UNDER SECTION 287.133(3)(a),
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to City of Lake Worth
[print name of the public entity]
by Daniel Ringdahl, President
[print individual's name and title]
for Florida Design Drilling Corp.
[print name of entity submitting sworn statement]

whose business address is 1405 N Killian Drive, Lake Park, FL 33403

and (if applicable) its Federal Employer Identification Number (FEIN) is 20-2779570

(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____.)

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

   1. A predecessor or successor of a person convicted of a public entity crime; or
   2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(c), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity
submitting this sworn statement. [Please indicate which statement applies.]

✓ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. [attach a copy of the final order]

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

_____
[signature]

2/6/14
[date]

STATE OF Florida

COUNTY OF Palm Beach

Subscribed and Sworn to (or affirmed) before me on 2/6/14 [date] by Daniel Ringdahl [name]. He/she is personally known to me or has presented _____ as identification.
[type of identification]

Joann Escott
[Notary's Signature and Seal]

JO-ANN ESCOTT
Notary Public - State of Florida
My Comm. Expires Nov 28, 2015
Commission # EE 124236

Print Notary Name and Commission No.

Form PUR 7068 (Rev. 04/10/91)
M/R 03/06/92

CERTIFICATION OF DRUG FREE WORKPLACE PROGRAM

I certify the firm of Florida Design Drilling Corp. maintains a drug-free workplace program, and that the following conditions are met:

1. We publish a statement notifying employees that the unlawful manufacturer, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying that actions will be taken against employees for violations of such prohibitions.

2. We inform employees about the dangers of drug abuse in the workplace, the company's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. We give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection one (1).

4. In the statement specified subsection one (1) we notify the employee that; a condition of working in the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty nolo contendere to any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. We impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.

6. We make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Contractor's Signature

AIA Document A310 – 2010

Bid Bond

CONTRACTOR:
Florida Design Drilling Corp.
1405 N. Kilian Drive
Lake Park, FL 33403

SURETY:
Aegis Security Insurance Company
P.O. Box 3153, Harrisburg, PA 17105

OWNER:
City of Lake Worth
7 North Dixie Highway
Lake Worth, FL 33460

BOND AMOUNT:
Five Percent of Amount Bid ; 5% of Amount Bid

PROJECT:
Potable Well No. 16 at 2nd Avenue North for City of Lake Worth; Solicitation No. IFB-UT-WT-12-13-128

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specificed in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof: or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specifified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60)days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60)days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requreiment shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 6th day of February, 2014.

Witness/Attest:

By: _____

Florida Design Drilling Corp.

By: _____ (Principal)

By: _____

Aegis Security Insurance Company

By: _____ (Surety)
Warren M. Alter, Attorney-in-fact

This document conforms to AIA Document A310 - 2010 BID BOND. THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NY AVE NW, WASHINGTON, DC 20006.

Power Certificate No. FL 133

AEGIS SECURITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT AEGIS SECURITY INSURANCE COMPANY does hereby make, constitute and appoint: **WARREN M. ALTER, DAVID T. SATINE**

its true and lawful Attorney-in-Fact, to make, execute and deliver on its behalf surety bonds, undertaking and other instruments of similar nature as follows: **$2.5 MILLION**

This Power of Attorney is granted and sealed under and by the authority of the following Resolution adopted by the Board of Directors of the Company on the 4th day of February 1993.

"**Resolved,** That the President, any Vice President, the Secretary and any Assistant Secretary appointed for that purpose by the officer in charge of surety operations shall each have authority to appoint individuals as Attorney-in-Fact or under other appropriate titles with authority to execute on behalf of the Company, fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such an appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal or facsimile thereof may by imposed or fixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

"**Resolved,** That the signature of each of the following officers; President, Vice President, any Assistant Vice President, any Secretary or Assistant Secretary and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any Certificate relating thereto, appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for the purpose only of executing and attesting bonds and undertaking and other writings upon the Company and any such power required and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, AEGIS SECURITY INSURANCE COMPANY has caused its official seal to be hereunto affixed, and these presents to be signed by its President this 20th day of September, 2013.

AEGIS SECURITY INSURANCE COMPANY

BY:

DARLEEN J. FRITZ
President

AEGIS SECURITY INSURANCE COMPANY CORPORATE SEAL 1977 PENNSYLVANIA

Commonwealth of Pennsylvania }
} s.s.: Harrisburg
County of Dauphin }

On this 20th day of September, 2013, before me personally came Darleen J. Fritz to me known, who being by me duly sworn, did depose and say that she is President of **AEGIS SECURITY INSURANCE COMPANY,** the corporation described herein and which executed the above instrument; that she knows the seal of the said corporation, that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that she signed her name thereto by like order.

REBECCA LIDDICK
Notary Public
My Commission Expires July 25, 2017

REBECCA LIDDICK COMMONWEALTH OF PENNSYLVANIA NOTARY PUBLIC

I, the undersigned, Secretary of **AEGIS SECURITY INSURANCE COMPANY,** a Pennsylvania corporation, **DO HEREBY CERTIFY** that the foregoing and attached Power of Attorney remains in full force and has not been revoked: and furthermore that the Resolution of the Board of Directors, set forth in the said Power of Attorney, is now in force.

Signed and sealed at the City of Harrisburg, in the Commonwealth of Pennsylvania, dated this 6th day of February, 2014

DEBORAH A. GOOD
Secretary

AEGIS SECURITY INSURANCE COMPANY CORPORATE SEAL 1977 PENNSYLVANIA

THIS POWER NULL AND VOID IF NUMBER IS NOT IN RED

00500
AGREEMENT

THIS AGREEMENT is dated and will be effective on the _____ day of _____ in the year 20_____, by and between the City of Lake Worth (hereinafter called OWNER) and Florida Design Drilling Corp.__ (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Potable Well No. 16 at 2nd Avenue North for City of Lake Worth

ARTICLE 2. ENGINEER

The Project has been designed by Mock, Roos & Associates, Inc., 5720 Corporate Way, West Palm Beach, FL 33407,who is hereinafter called ENGINEER and who is to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3. CONTRACT TIME.

3.1. The Work will be substantially completed within 180 days from the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions and shall be finally complete and ready for final payment in accordance with paragraph 14.13 of the General Conditions within 210 days from the date when the Contract Time commences to run.

3.2 All time limits for Milestones, if any, Substantial Completion and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

3.3. **LIQUIDATED DAMAGES. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER Five Hundred and 00/100 dollars ($ 500.00) for each day that expires after the time specified in paragraph 3.1 for Substantial Completion until the Work is substantially complete. After Substantial Completion if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER Five Hundred and 00/100 dollars ($500.00) for each day that expires after the time specified in paragraph 3.1 for completion and readiness for final payment.**

ARTICLE 4. CONTRACT PRICE.

OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents, subject to adjustment as provided therein, in current funds as follows:

4.1 An amount equal to the sum of the established unit price for each separately identified item on the Unit Price Schedule times the estimated quantity of that item:

TOTAL OF ALL UNIT PRICES Four Hundred Ninety Four Thousand Nine Hundred Forty Nine Dollars and 00/100 ($494,949.00)
(use words) (figures)

which is based on the unit price(s) in the Bid Form Unit Price Schedule for Unit Bid Items numbered A-1 to E-4.

ARTICLE 5. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1. PROGRESS PAYMENTS. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, on or about the 10th day of each month during construction as provided below. All progress payments will be on the basis of the progress of the Work measured by the schedule of values established in paragraph 2.9 of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in Division 1: General Requirements.

5.1.1 Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.7 of the General Conditions, less liquidated damages, if any.

90% of Work completed.
90% of materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to OWNER as provided in paragraph 14.2 of the General Conditions).
95% of the work complete after the Contractor has completed over 50% of the Work.

5.1.2 Upon Substantial Completion, in an amount sufficient to increase total payments to CONTRACTOR to 98% of the Contract Price, less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.7 of the General Conditions, less liquidated damages, if any.

5.2. FINAL PAYMENT. Upon final completion and acceptance of the Work in accordance with paragraph 14.13 of the General Conditions, and settlement of all claims, including liquidated damages, if any, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.13.

ARTICLE 6. (This Article left blank intentionally)

ARTICLE 7. CONTRACTOR'S REPRESENTATIONS.

In order to include OWNER to enter into this Agreement CONTRACTOR makes the following representations:

7.1. CONTRACTOR has familiarized itself with the nature and extent of the Contract Documents, Work, site locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

7.2. CONTRACTOR has studied carefully all reports of explorations and tests of subsurface conditions and drawings of physical conditions which are identified in the Division 1: General Requirements as provided in paragraph 4.2 of the General Conditions, and accepts the determination set forth in Division 1: General Requirements of the extent of the technical data contained in such reports and drawings upon which CONTRACTOR is entitled to rely, if any.

7.3. CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies, if any, (in addition to or to supplement those referred to in paragraph 7.2 above) which pertain to the subsurface of physical conditions at or contiguous to the site or otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.2 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by CONTRACTOR for such purposes.

7.4. CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents, if any, with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.3 of the General Conditions.

7.5. CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

7.6. CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

7.7 CONTRACTOR acknowledges that the Contract Documents are generally sufficient to indicate and convey an adequate understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 8. CONTRACT DOCUMENTS.

The Contract Documents which comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

8.1. This Agreement consisting of 7 pages.

8.2. Exhibits to this Agreement identified as: Contractor's Corporate Resolution; Contractor's Certificate of Insurance; _____ inclusive.

8.3. Performance Bond and Payment Bond consisting of 4 pages (plus Power of Attorney Forms as applicable).

8.4. Notice of Award and Notice to Proceed.

8.5. General Conditions consisting of 33 pages.

8.6. Supplementary Conditions consisting of 7 pages.

8.7. Bid documents as listed in the table of contents of the Project Manual.

8.8. Specifications consisting of _142_ pages.

8.9. Drawings not attached hereto but are listed in Section 00860 List of Drawings.

8.10. Addenda numbers 1 to 1__, inclusive.

8.11. CONTRACTOR's Bid consisting of 16___ pages.

8.12. Documentation submitted by CONTRACTOR prior to Notice of Award.

8.13. The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to paragraphs 3.4 and 3.5 of the General Conditions.

8.14. The documents listed under Article 8 above are attached to this Agreement (except as expressly noted otherwise above).

8.15. Notice of Compliance with Chapter 556, Florida Statutes, consisting of 1 page.

8.16. Any other document attached hereto or incorporated herein.

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be amended, modified or supplemented as provided in paragraphs 3.4 and 3.5 of the General Conditions.

ARTICLE 9. MISCELLANEOUS.

9.1. Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.

9.2. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation moneys that may become due and moneys that are due may not be assigned without such consent (except to the extend that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.3. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

9.4. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replaced such stricken provision or part thereof with a valid and enforceable provisions that comes as close as possible to expressing the intention of the stricken provision.

9.5 A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Bid on a Contract to provide any goods or services to a public entity, may not submit a Bid on a Contract with a public entity for the construction or repair of a public building or public work, may not be awarded or perform Work as a Contractor, Supplier, Subcontractor, or Consultant under a Contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

9.6 In accordance with Palm Beach County ordinance number 2011-009, the Contract Documents may be subject to investigation and/or audit by the Palm Beach County Inspector General. Contractor should review such ordinance in order to be aware of its rights and/or obligations under such ordinance and as applicable.

9.7 Failure of either party to enforce or exercise any right(s) under the Contract Documents shall not be deemed a waiver of either party's right to enforce said right(s) at any time thereafter.

9.8 TO ENCOURAGE PROMPT AND EQUITABLE RESOLUTION OF ANY LITIGATION, EACH PARTY HEREBY WAIVES ITS RIGHTS TO A TRIAL BY JURY IN ANY LITIGATION RELATED TO THE CONTRACT DOCUMENTS.

9.9 The Contractor is, and shall be, in the performance of all Work under the Contract Documents, an Independent Contractor, and not an employee, agent, or servant of the Owner. All persons engaged in any of the Work performed pursuant to the Contract Documents shall at all times and in all places be subject to the Contractor's sole direction, supervision and control.

9.10 The Contractor shall maintain adequate records to justify all charges, expenses, and costs incurred in estimating and performing the Work for at least five (5) years after final payment is

made. The Owner shall have access to such books, records, and documents as required for the purpose of inspection or audit during normal business hours at the Contractor's place of business. Under no circumstances will Contractor be required to disclose any confidential or proprietary information regarding its products and service costs.

9.11 The Contract Documents shall not be construed more strongly against either party regardless of who was more responsible for its preparation.

9.12 Contractor shall comply with Florida's Public Records Laws, and specifically agrees to:

a) Keep and maintain public records that ordinarily and necessarily would be required by the Owner in order to perform the service.

b) Provide the public with access to public records on the same terms and conditions that the Owner would provide the records and at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law.

d) Meet all requirements for retaining public records and transfer, at no cost, to the Owner all public records in possession of the Contractor upon termination of the Contract Documents and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the Owner in a format that is compatible with the information technology systems of the Owner.

ARTICLE 10. INDEMNIFICATION.

10.1. Contractor shall indemnify and hold harmless Owner and Engineer and their respective officers, and employees for liabilities, damages, losses, and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract.

10.2. It is the specific intent of the parties hereto that the foregoing indemnification complies with section 725.06, Florida Statutes. It is further the specific intent and agreement of the parties that all of the Contract Documents on this Project are hereby amended to include the foregoing indemnification and the "Specific Consideration" therefore.

10.3 Nothing in the Contract Documents shall be construed or interpreted as consent by the OWNER to be sued, nor as a waiver of sovereign immunity beyond the waiver or limits provided in section 768.28, Florida Statutes.

REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK
SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, OWNER AND CONTRACTOR have signed this Agreement in four parts. Two counterparts have been delivered to OWNER, and one counterpart each to CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

CITY OF LAKE WORTH, FLORIDA

By: _____
Pam Triolo, Mayor

ATTEST

_____
Pamela J. Lopez, City Clerk

Approved as to form and legal sufficiency:

CDM FOR
_____
Glen J. Torcivia, City Attorney

CONTRACTOR: Florida Design Drilling Corp

By: _____

Print Name: DANIEL RINGDAHL

Title: PRESIDENT

[Corporate Seal]

STATE OF Florida)
COUNTY OF Palm Bch)

The foregoing instrument was acknowledged before me this _____ day of _____, 2014 by Daniel Ringdahl as President of Florida Design Drilling Inc., a Florida corporation, and who is personally known to me or who has produced the following _____ as identification.

Notary Public:
Jo-ann Escott

JO-ANN ESCOTT
Notary Public - State of Florida
My Comm. Expires Nov 28, 2015
Commission # EE 124236

PROJECT: Potable Well No. 16 at 2nd Avenue North for
City of Lake Worth

00501
OPINION OF ATTORNEY

This is to certify that I have examined the attached Contract Documents, that after such examination I am of the opinion that the execution of the Agreement, the Performance Bond and Payment Bond are in due and proper form.

_____ FOR
Attorney for Owner

This the _____ day of _____, 20_____.

ALTER SURETY GROUP, INC.
SURETY BOND PROFESSIONALS

March 7, 2014

CITY OF LAKE WORTH
7 North Dixie Highway
Lake Worth, FL 33460

RE: FLORIDA DESIGN DRILLING CORP.
Project: Lake Worth – Potable Well No. 16
Bond No. B10013923

To Whom It May Concern:

We have executed the enclosed bonds on behalf of the above captioned contractor in favor of the City of Lake Worth. Please note that we have not dated the bonds or the Power of Attorney. The copy of the contract we received was not dated and as the bonds follow the contract they should not be dated prior to the contract.

Please accept this letter as authorization to date the enclosed Performance bond(s), Payment bond(s), and the attached Power of Attorney for the captioned project. Please date these items concurrently with the contract date and fax a copy to our office at 305-328-4838 or email to dawn@altersurety.com **so that we can activate the bond coverage.**

Please do not hesitate to contact our office should you have any questions in this regard. Thank you.

Yours truly,
Aegis Security Insurance Company

Warren M. Alter,
Attorney-in-Fact

5979 N.W. 151ST STREET • SUITE 104 • MIAMI LAKES, FLORIDA 33014
PHONE: 305-517-3803 • FAX: 305-328-4838
www.altersurety.com

ALTER SURETY GROUP, INC.

Bond Department

Public Works Bond
in compliance with Florida Statute Chapter 255.05

Bond Number	B10013923
Contractor Address & Phone No.	Florida Design Drilling Corp. 7733 Hooper Road West Palm Beach, FL 33411 561-818-3228
Surety Address & Phone No.	Aegis Security Insurance Company PO Box 3153 Harrisburg, PA 17105 717-657-9671
Owner Name Address & Phone No.	City of Lake Worth 7 North Dixie Highway Lake Worth, FL 33460 561-586-1658
Contract/Project Number	Ref No. B2067.00
Project Name	Potable Well No. 16
Project Location	2nd Avenue North for City of lake Worth
Legal Description And Street Address	Same as above
Description of Work	Potable Well No. 16

This bond is given to comply with section 255.05 Florida Statutes and any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes. Any provision of this bond which conflict with or purports to grant broader or more expanded coverage in excess of the minimum requirements of the application statute shall be deemed deleted herefrom. This bond is a statutory bond, not a common law bond.

This is the *front page* of the bond.
All other page(s) are deemed subsequent to this page regardless of any page number(s) that may be pre-printed thereon.

Construction Performance Bond

Bond Number B10013923

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

Florida Design Drilling Corp.
7733 Hooper Road
West Palm Beach, FL 33411

SURETY (Name and Principal Place of Business):

Aegis Security Insurance Company
P.O. Box 3153, Harrisburg, PA 17105

OWNER (Name and Address):

City of Lake Worth
7 North Dixie Highway
Lake Worth, FL 33460

CONSTRUCTION CONTRACT
Date:
Amount: $494,949.00
Description (Name and Location): Lake Worth - Potable Well No. 16, Ref No. B2067.00 at 2nd Avenue North for City of Lake Worth

BOND
Date (Not earlier than Construction Contract Date):
Amount: $494,949.00
Modifications to this Bond Form: None

CONTRACTOR AS PRINCIPAL
Company: Florida Design Drilling Corp. (Corp. Seal)
Signature: _____
Name and Title: DANIEL RINGDAHL, PRESIDENT

SURETY
Company: Aegis Security Insurance Company (Corp. Seal)
Signature: _____
Name and Title: Warren M. Alter, Attorney-in-fact

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)
Signature: _____
Name and Title:

SURETY
Company: (Corp. Seal)
Signature: _____
Name and Title:

EJCDC No. 1910-28A (1984 Edition)
Prepared through the joint efforts of The Surety Association of America, Engineers' Joint Contract Documents Committee, The Associated General Contractors of America, and the American Institute of Architects.

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3. If there is no Owner Default, the Surety's obligation under this Bond shall arise after:

3.1. The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below, that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

3.2. The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and

3.3. The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

4. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1. Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or

4.2. Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

1. After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or
2. Deny liability in whole or in part and notify the Owner citing reasons therefor.

5. If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6. After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:

6.1. The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

6.2. Additional legal including appellate proceedings, design professional and delay costs and expenses resulting from the Contractor's default, and *

6.3. Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

7. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, or successors.

8. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1. Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

12.2. Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

12.3. Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

12.4. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

* resulting from the actions or failure to act of the Surety under Paragraph 4; and

This Bond is executed pursuant to Florida Statutes Section 255.05 or Section 713.23, whichever is applicable, and is subject to the notice and time limitation provisions.

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENT or BROKER:
After Surety Group, Inc.
5979 NW 151st Street, #104, Miami Lakes, FL 33014
305-517-3803

OWNER'S REPRESENTATIVE (~~Architect or~~ Engineer ~~or other party~~):
Mock, Roos & Associates, Inc.
5720 Corporate Way
West Palm Beach, FL 33407

00620

Construction Payment Bond

Bond Number B10013923

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

Florida Design Drilling Corp.
7733 Hooper Road
West Palm Beach, FL 33411

SURETY (Name and Principal Place of Business):

Aegis Security Insurance Company
P.O. Box 3153, Harrisburg, PA 17105

OWNER (Name and Address):

City of Lake Worth
7 North Dixie Highway
Lake Worth, FL 33460

CONSTRUCTION CONTRACT
Date:
Amount: $494,949.00
Description (Name and Location): Lake Worth - Potable Well No. 16, Ref No. B2067.00 at 2nd Avenue North for City of Lake Worth

BOND
Date (Not earlier than Construction Contract Date):
Amount: $494,949.00
Modifications to this Bond Form:

THIS BOND IS GIVEN TO COMPLY WITH SECTION 255.05 FLORIDA STATUTES, AND ANY ACTION INSTITUTED BY A CLAIMANT UNDER THIS BOND FOR PAYMENT MUST BE IN ACCORDANCE WITH THE NOTICE AND TIME LIMITATION PROVISIONS IN SECTION 255.05(2), FLORIDA STATUTES.

CONTRACTOR AS PRINCIPAL
Company: Florida Design Drilling Corp. (Corp. Seal)
Signature: _____
Name and Title: DANIEL RINGDAHL, PRESIDENT

SURETY
Company: Aegis Security Insurance Company (Corp. Seal)
Signature: _____
Name and Title: Warren M. Alter, Attorney-in-fact

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)
Signature: _____
Name and Title:

SURETY
Company: (Corp. Seal)
Signature: _____
Name and Title:

ICDC No. 1910-28B (1984 Edition)
Prepared through the joint efforts of the Surety Association of America, Engineers' Joint Contract Documents Committee, The Associated General Contractors of America, American Institute of Architects, American Subcontractors Association, and the Associated Specialty Contractors.

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

2. With respect to the Owner, this obligation shall be null and void if the Contractor:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies and holds harmless the Owner from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.

4. The Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim. (see Note 1)

4.2. Claimants who do not have a direct contract with the Contractor:

1. Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.

5. If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

6. When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1. Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

9. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of 2 years from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2 (iii), or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

15.2. Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

Note 1: As an additional requirement any claimant, except a laborer, who is not in privity with the Contractor ~~and who has a contract for labor, materials or supplies~~ shall, within forty-five days after beginning to furnish labor, materials or supplies, furnish the Contractor with a Notice that he intends to look to the Bond for protection.

This Bond is executed pursuant to Florida Statutes Section 255.05 or Section 713.23, whichever is applicable, and is subject to the notice and time limitation provisions.

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENT or BROKER:	OWNER'S REPRESENTATIVE (~~Architect~~, Engineer ~~or other party~~):
Alter Surety Group, Inc.	Mock, Roos & Associates, Inc.
5979 NW 151st Street, #104, Miami Lakes, FL 33014	5720 Corporate Way
305-517-3803	West Palm Beach, FL 33407

Power Certificate No. FL 133

AEGIS SECURITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT AEGIS SECURITY INSURANCE COMPANY does hereby make, constitute and appoint: **WARREN M. ALTER, DAVID T. SATINE**

its true and lawful Attorney-in-Fact, to make, execute and deliver on its behalf surety bonds, undertaking and other instruments of similar nature as follows: **$2.5 MILLION**

This Power of Attorney is granted and sealed under and by the authority of the following Resolution adopted by the Board of Directors of the Company on the 4th day of February 1993.

"**Resolved,** That the President, any Vice President, the Secretary and any Assistant Secretary appointed for that purpose by the officer in charge of surety operations shall each have authority to appoint individuals as Attorney-in-Fact or under other appropriate titles with authority to execute on behalf of the Company, fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such an appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal or facsimile thereof may by imposed or fixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

"**Resolved,** That the signature of each of the following officers; President, Vice President, any Assistant Vice President, any Secretary or Assistant Secretary and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any Certificate relating thereto, appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for the purpose only of executing and attesting bonds and undertaking and other writings upon the Company and any such power required and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, AEGIS SECURITY INSURANCE COMPANY has caused its official seal to be hereunto affixed, and these presents to be signed by its President this 2nd day of March, 2012.

AEGIS SECURITY INSURANCE COMPANY

BY

DARLEEN J. FRITZ
President

AEGIS SECURITY INSURANCE COMPANY CORPORATE SEAL 1977 PENNSYLVANIA

Commonwealth of Pennsylvania }
} s.s.: Harrisburg
County of Dauphin }

On this 2nd day of March, 2012, before me personally came Darleen J. Fritz to me known, who being by me duly sworn, did depose and say that she is President of **AEGIS SECURITY INSURANCE COMPANY,** the corporation described herein and which executed the above instrument; that she knows the seal of the said corporation, that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that she signed her name thereto by like order.

REBECCA LIDDICK
Notary Public
My Commission Expires July 25, 2013

REBECCA LIDDICK COMMONWEALTH OF PENNSYLVANIA NOTARY PUBLIC

I, the undersigned, Assistant Secretary of **AEGIS SECURITY INSURANCE COMPANY,** a Pennsylvania corporation, **DO HEREBY CERTIFY** that the foregoing and attached Power of Attorney remains in full force and has not been revoked: and furthermore that the Resolution of the Board of Directors, set forth in the said Power of Attorney, is now in force.

Signed and sealed at the City of Harrisburg, in the Commonwealth of Pennsylvania, dated this day of

DEBORAH A. GOOD
Secretary

AEGIS SECURITY INSURANCE COMPANY CORPORATE SEAL 1977 PENNSYLVANIA

THIS POWER NULL AND VOID IF NUMBER IS NOT IN RED

SECTION 00630
NOTICE OF COMPLIANCE WITH CHAPTER 556, FLORIDA STATUTES

The undersigned Contractor does hereby confirm to the Owner and Engineer that the Contractor has reviewed the provisions of Chapter 556, Florida Statutes, and has provided to "Sunshine State One-Call of Florida, Inc." the information required under F.S. 556.105 before the commencement of any excavation or demolition required for the Work.

Executed this _____ day of _____, 20____.

_____
(name of Contractor)

_____
(signature)

_____
(print name)

_____
(title)

END OF SECTION

00670
CONTRACTOR'S AFFIDAVIT TO OWNER

STATE OF FLORIDA
COUNTY OF _____

Before me, the undersigned authority, authorized to administer oaths and take acknowledgements, personally appeared _____, who, being by me first duly sworn, on oath depose(s) and say(s):

(1) He/she is/They are a (Corporation, Partnership or Individual) of _____(State), doing business as _____(Company Name), hereinafter called "Contractor".

(2) Contractor heretofore entered into a Contract with _____ hereinafter called "Owner" to do Work (furnish material, labor and services) for the construction of _____, located at _____County, Florida. ".

(3) Contractor has fully completed construction in accordance with the terms of the Contract, and all lienors have been paid in full, except:

NAME OF LIENOR	AMOUNT DUE AND UNPAID
	$

(4) All Workmen's Compensation claims have been settled and no liability claims are pending, in connection with, arising out of or resulting from the Contract.

(5) Receipt by the Contractor of the final payment, under the aforementioned Contract, shall constitute a full release and discharge by the Contractor to the Owner of any and all claims of the Contractor against the Owner, arising out of, connected with, or resulting from performance of the obligations of the Contractor pursuant to the Contract Documents.

(6) The term "lienor" as used in this affidavit means any person having a lien or a prospective lien, under the Mechanics Lien Law of Florida, on the land and property of the Owner referred to in paragraph (2) of this affidavit..

(7) This affidavit is given pursuant to the provisions of Florida Statutes Section 713.06 or Section 255.05, whichever is applicable.
Signed and sealed in the presence of:

_____ _____
(ENTITY)
_____ By:_____
(SEAL)

Subscribed and Sworn to (or affirmed) before me on _____(date) by _____ _____(name). He/she is personally known to me or has presented _____(type of identification) as identification.

_____ _____
Notary Public Signature and Seal Print Notary Name and Commission No.

00680
APPLICATION FOR PAYMENT NO. _____

Project ____Potable Well No. 16 at 2nd Avenue North for City of Lake Worth

Application is made for payment, as hereinafter shown, in connection with this Agreement:

Total Work to Date - see attached schedule	$ _____
Total Material Suitably Stored - see attached schedule	$ _____
Gross Amount Due	$ _____
Less _____ % Retainage	$ _____
Amount Due to Date	$ _____
Less Previous Applications	$ _____
Amount Due This Application	$ _____
Original Contract Price	$ _____
Net Change Orders	$ _____
Current Contract Price	$ _____
Value of Work Remaining to be Done	$ _____

Contractor's Certification:
The undersigned Contractor certifies that (1) all previous progress payments received from Owner on account of Work done under the Agreement referred to above have been applied to discharge in full all obligations of Contractor incurred in connection with Work covered by prior Applications for Payment numbered 1 through _____, inclusive; and (2) title to all materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all liens, claims, security interests and encumbrances (except such as covered by Bond acceptable to Owner).

Dated _____, 20____

_____
Contractor and Mailing Address

By _____
(Name and Title)

State of)
County of)ss

Subscribed and Sworn to (or affirmed) before me on _____ *(date)*
personally appeared _____ *(name)*.
He/she is personally known to me or has presented _____
_____ *(type of identification)* as identification. Who being so duly sworn, did depose and say that he/she is _____ of the Contractor above mentioned; that he/she executed the above Application for Payment and statement on behalf of said Contractor; and that all of the statements contained therein are true, correct and complete.

_____ _____
Notary Public Signature and Seal Print Notary Name and Commission No.

Payment of the above AMOUNT DUE THIS APPLICATION is recommended.

MOCK, ROOS & ASSOCIATES, INC.

Date: _____ By: _____
(Name) (Title)

CITY OF LAKE WORTH

Date: _____ By_____
(Name) (Title)

00681
SCHEDULE OF VALUES AND WORK COMPLETED

PROJECT TITLE_____

_____

CONTRACTOR _____

FOR PERIOD ENDING _____

TO ACCOMPANY APPLICATION NO. _____

ITEM	CONTRACTOR'S Schedule of Values			Work Completed	
	Unit Price	Quantity	Amount	Quantity	Amount
	$		$		$
NOTE: CONTRACTOR SHALL PREPARE APPROPRIATE SCHEDULE WITH ALL CONTRACT ITEMS					
SHOWN FOR ATTACHMENT TO EACH APPLICATION FOR PAYMENT.					
			Total (Original Contract)		$ _____
C.O. No. 1					
C.O. No. 1 NOTE: CHANGE ORDER(S) SHALL BE ITEMIZED AS APPLICABLE.					

TOTAL WORK TO DATE $_____

MATERIALS SUITABLY STORED

NOTE: CONTRACTOR TO ITEMIZE AND ATTACH APPROPRIATE INVOICES

TOTAL MATERIAL SUITABLY STORED $_____

Accompanying Documentation (Contractor to itemize):

This document has important legal consequences: consultation with an attorney is encouraged with respect to its completion or modification.

05/02/86
GC-1

00700

STANDARD

GENERAL CONDITIONS

OF THE

CONSTRUCTION CONTRACT

Prepared by

Engineers' Joint Contract Documents Committee

and

Issued and Published Jointly By

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
A practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN CONSULTING ENGINEERS COUNCIL

AMERICAN SOCIETY OF CIVIL ENGINEERS

CONSTRUCTION SPECIFICATIONS INSTITUTE

This document has been approved and endorsed by

The Associated General Contractors of America

These General Conditions have been prepared for use with the Owner-Contractor Agreements (No. 1910-8-A-1 or 1910-8-A-2, 1983 editions). Their provisions are interrelated and a change in one may necessitate a change in the others. Comments concerning their usage are contained in the Commentary on Agreements for Engineering Services and Contract Documents, No. 1910-9, 1981 edition. For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. 1910-17, 1983 edition). When bidding is involved, the Standard Form of Instructions to Bidders (No. 1910-12, 1983 edition) may be used.

No. 1910-8 (1983 Edition)
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2029 K Street, N.W., Washington, D.C. 20006

American Consulting Engineers Council
1015 15th Street, N.W., Washington, D.C. 20005

American Society of Civil Engineers
345 East 47th Street, New York, NY 10017

Construction Specifications Institute
601 Madison St., Alexandria, VA 22314

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GENERAL CONDITIONS

ARTICLE 1—DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

Addenda—Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the bidding documents or the Contract Documents.

Agreement—The written agreement between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

Application for Payment—The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Bid—The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

* BIDDER-(see ¶SC-1 of Supplementary Conditions)

Bonds—Bid, performance and payment bonds and other instruments of security.

Change Order—A document recommended by ENGINEER, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.

Contract Documents—The Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all amendments, modifications and supplements issued pursuant to paragraphs 3.4 and 3.5 on or after the Effective Date of the Agreement.

Contract Price—The moneys payable by OWNER to CONTRACTOR under the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.9.1 in the case of Unit Price Work).

Contract Time—The number of days (computed as provided in paragraph 17.2) or the date stated in the Agreement for the completion of the Work.

CONTRACTOR—The person, firm or corporation with whom OWNER has entered into the Agreement.

defective—An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.8 or 14.10).

Drawings—The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.

Effective Date of the Agreement—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

ENGINEER—The person, firm or corporation named as such in the Agreement.

Field Order—A written order issued by ENGINEER which orders minor changes in the Work in accordance with paragraph 9.5 but which does not involve a change in the Contract Price or the Contract Time.

General Requirements—Sections of Division 1 of the Specifications.

Laws and Regulations; Laws or Regulations—Laws, rules, regulations, ordinances, codes and/or orders.

Notice of Award—The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

Notice to Proceed—A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR'S obligations under the Contract Documents.

OWNER—The public body or authority, corporation, association, firm or person with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be provided.

Partial Utilization—Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.

Project—The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

Resident Project Representative—The authorized representative of ENGINEER who is assigned to the site or any part thereof. (see ¶SC-1 of Supplementary Conditions) *

Shop Drawings—All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.

Specifications—Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor—An individual, firm or corporation having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

Substantial Completion—The Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER as evidenced by ENGINEER's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if there be no such certificate issued, when final payment is due in accordance with paragraph 14.13. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.

Supplementary Conditions—The part of the Contract Documents which amends or supplements these General Conditions.

Supplier—A manufacturer, fabricator, supplier, distributor, materialman or vendor.

Underground Facilities—All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Unit Price Work—Work to be paid for on the basis of unit prices.

Work—The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

Work Directive Change—A written directive to CONTRACTOR, issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 4.2 or 4.3 or to emergencies under paragraph 6.22. A Work Directive Change may not change the Contract Price or the Contract Time, but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Time as provided in paragraph 10.2.

Written Amendment—A written amendment of the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly Work-related aspects of the Contract Documents.

ARTICLE 2—PRELIMINARY MATTERS

Delivery of Bonds:

2.1. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish in accordance with paragraph 5.1.

Copies of Documents:

2.2. OWNER shall furnish to CONTRACTOR up to ten copies (unless otherwise specified in the Supplementary Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Time; Notice to Proceed:

2.3. The Contract Time will commence to run on the thirtieth day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty days after the Effective Date of the Agreement. ~~In no event will the Contract Time commence to run later than the seventy fifth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.~~ (See ¶SC-2.3 of Supplementary Conditions) *

Starting the Project:

2.4. CONTRACTOR shall start to perform the Work on the date when the Contract Time commences to run, but no Work shall be done at the site prior to the date on which the Contract Time commences to run.

Before Starting Construction:

2.5. Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown

thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

2.6. Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for review:

2.6.1. an estimated progress schedule indicating the starting and completion dates of the various stages of the Work;

2.6.2. a preliminary schedule of Shop Drawing submissions; and

2.6.3. a preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by CONTRACTOR at the time of submission.

2.7. ~~Before any Work at the site is started, CONTRACTOR shall deliver to OWNER, with a copy to ENGINEER, certificates (and other evidence of insurance requested by OWNER) which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 5.2 and 5.4, and OWNER shall deliver to CONTRACTOR certificates (and other evidence of insurance requested by CONTRACTOR) which OWNER is required to purchase and maintain in accordance with paragraphs 5.6 and 5.7.~~ (See ¶Sc-2.7 of
* the Supplementary Conditions)

Preconstruction Conference:

2.8. Within twenty days after the Effective Date of the Agreement, but before CONTRACTOR starts the Work at the site, a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to discuss the schedules referred to in paragraph 2.6, to discuss procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work.

Finalizing Schedules:

2.9. At least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to finalize the schedules submitted in accordance with paragraph 2.6. The finalized progress schedule will be acceptable to ENGINEER as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance will neither impose on ENGINEER responsibility for the progress or scheduling of the Work nor relieve CONTRACTOR from full responsibility therefor. The finalized schedule of Shop Drawing submissions will be acceptable to ENGINEER as providing a workable arrangement for processing the submissions. The finalized schedule of values will be acceptable to ENGINEER as to form and substance.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

Intent:

3.1. The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

3.2. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials or equipment such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or Laws or Regulations in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or ENGINEER, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in paragraph 9.4.

3.3. If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so report to ENGINEER in writing at once and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification

from ENGINEER; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

Amending and Supplementing Contract Documents:

3.4. The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

3.4.1. a formal Written Amendment,

3.4.2. a Change Order (pursuant to paragraph 10.4), or

3.4.3. a Work Directive Change (pursuant to paragraph 10.1).

As indicated in paragraphs 11.2 and 12.1, Contract Price and Contract Time may only be changed by a Change Order or a Written Amendment.

3.5. In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, in one or more of the following ways:

3.5.1. a Field Order (pursuant to paragraph 9.5),

3.5.2. ENGINEER's approval of a Shop Drawing or sample (pursuant to paragraphs 6.26 and 6.27), or

3.5.3. ENGINEER's written interpretation or clarification (pursuant to paragraph 9.4).

Reuse of Documents:

3.6. Neither CONTRACTOR nor any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER; and they shall not reuse any of them on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER.

ARTICLE 4—AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

Availability of Lands:

4.1. OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and pai for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER's furnishing these lands, rights-of-way or easements entitles CONTRACTOR to an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Article 12. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

Physical Conditions: (see ¶SC 4.2.1 of the Supplementary Conditions) *

4.2.1. *Explorations and Reports:* ~~Reference is made to the Supplementary Conditions for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such reports, but not upon nontechnical data, interpretations or opinions contained therein or for the completeness thereof for CONTRACTOR's purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to subsurface conditions at the site.~~

4.2.2. *Existing Structures:* ~~Reference is made to the Supplementary Conditions for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities referred to in paragraph 4.3) which are at or contiguous to the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, but not for the completeness thereof for CONTRACTOR's purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to physical conditions in or relating to such structures.~~

4.2.3. *Report of Differing Conditions:* If CONTRACTOR believes that:

4.2.3.1. any technical data on which CONTRACTOR is entitled to rely as provided in paragraphs 4.2.1 and 4.2.2 is inaccurate, or

4.2.3.2. any physical condition uncovered or revealed at the site differs materially from that indicated, reflected or referred to in the Contract Documents,

CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work in connection therewith (except in an emergency as permitted by paragraph 6.22), notify OWNER and ENGINEER in writing about the inaccuracy or difference.

4.2.4. *ENGINEER's Review:* ENGINEER will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

4.2.5. *Possible Document Change:* If ENGINEER concludes that there is a material error in the Contract Documents or that because of newly discovered conditions a change in the Contract Documents is required, a Work Directive Change or a Change Order will be issued as provided in Article 10 to reflect and document the consequences of the inaccuracy or difference.

4.2.6. *Possible Price and Time Adjustments:* In each such case, an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, or any combination thereof, will be allowable to the extent that they are attributable to any such inaccuracy or difference. If OWNER and CONTRACTOR are unable to agree as to the amount or length thereof, a claim may be made therefor as provided in Articles 11 and 12.

Physical Conditions—Underground Facilities:

4.3.1. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

4.3.1.1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

4.3.1.2. CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such Underground Facilities during construction, for the safety and protection thereof as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

4.3.2. *Not Shown or Indicated.* If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 6.22), identify the owner of such Underground Facility and give written notice thereof to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents will be amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.20. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility that was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of. If the parties are unable to agree as to the amount or length thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

Reference Points:

4.4. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified in the General Requirements), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.

ARTICLE 5—BONDS AND INSURANCE

Performance and Other Bonds:

5.1. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the forms prescribed by Law or Regulation or by the Contract Documents and be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

5.2. If the surety on any Bond furnished by CONTRACTOR is declared a bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of

the Project is located or it ceases to meet the requirements of paragraph 5.1, CONTRACTOR shall within five days thereafter substitute another Bond and Surety, both of which must be acceptable to OWNER.

* *Contractor's Liability Insurance:* (See ¶SC-5.3 of the Supplementary Conditions)

5.3. CONTRACTOR shall purchase and maintain such comprehensive general liability and other insurance as is appropriate for the Work being performed and furnished and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance and furnishing of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed or furnished by CONTRACTOR, by any Subcontractor, by anyone directly or indirectly employed by any of them to perform or furnish any of the Work, or by anyone for whose acts any of them may be liable:

5.3.1. Claims under workers' or workmen's compensation, disability benefits and other similar employee benefit acts;

5.3.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

5.3.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;

5.3.4. Claims for damages insured by personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (b) by any other person for any other reason;

5.3.5. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom;

5.3.6. Claims arising out of operation of Laws or Regulations for damages because of bodily injury or death of any person or for damage to property; and

5.3.7. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

The insurance required by this paragraph 5.3 shall include the specific coverages and be written for not less than the limits of liability and coverages provided in the Supplementary Conditions, or required by law, whichever is greater. The comprehensive general liability insurance shall include completed operations insurance. All of the policies of insurance so required to be purchased and maintained (or the certificates or other evidence thereof) shall contain a provision or endorsement that the coverage afforded will not be cancelled, materially changed or renewal refused until at least thirty days' prior written notice has been given to OWNER and ENGINEER by certified mail. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing *defective* Work in accordance with paragraph 13.12. In addition, CONTRACTOR shall maintain such completed operations insurance for at least two years after final payment and furnish OWNER with evidence of continuation of such insurance at final payment and one year thereafter.

Contractual Liability Insurance: (See ¶SC-5.4 of the Supplementary Conditions) *

5.4. The comprehensive general liability insurance required by paragraph 5.3 will include contractual liability insurance applicable to CONTRACTOR's obligations under paragraphs 6.30 and 6.31.

Owner's Liability Insurance: (See ¶SC-5.5 of the Supplementary Conditions) *

~~5.5. OWNER shall be responsible for purchasing and maintaining OWNER's own liability insurance and, at OWNER's option, may purchase and maintain such insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.~~

Property Insurance: (See ¶SC-5.6 thru 5.10 of the Supplementary Conditions) *

5.6. ~~Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER and ENGINEER's consultants in the Work, all of whom shall be listed as insureds or additional insured parties, shall insure against the perils of fire and extended coverage and shall include "all-risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in the Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance or otherwise provided in the Supplementary Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment.~~

5.7. ~~OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER AND ENGINEER's consultants in the Work, all of whom shall be listed as insured or additional insured parties.~~

5.8. ~~All the policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 will contain a provision or endorsement that the coverage afforded will not be cancelled or materially changed or renewal refused until at least thirty days' prior written notice has been given to CONTRACTOR by certified mail and will contain waiver provisions in accordance with paragraph 5.11.2.~~

5.9. ~~OWNER shall not be responsible for purchasing and maintaining any property insurance to protect the interests of CONTRACTOR, Subcontractors or others in the Work to the extent of any deductible amounts that are provided in the Supplementary Conditions. The risk of loss within the deductible amount, will be borne by CONTRACTOR, Subcontractor or others suffering any such loss and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.~~

5.10. ~~If CONTRACTOR requests in writing that other special insurance be included in the property insurance policy, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.~~

Waiver of Rights:

5.11.1. OWNER and CONTRACTOR waive all rights against each other for all losses and damages caused by any of the perils covered by the policies of insurance provided in response to paragraphs 5.6 and 5.7 and any other property insurance applicable to the Work, and also waive all such rights against the Subcontractors, ENGINEER, ENGINEER's consultants and all other parties named as insureds in such policies for losses and damages so caused. As required by paragraph 6.11, each subcontract between CONTRACTOR and a Subcontractor will contain similar waiver provisions by the Subcontractor in favor of OWNER, CONTRACTOR, ENGINEER, ENGINEER's consultants and all other parties named as insureds. None of the above waivers shall extend to the rights that any of the insured parties may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

5.11.2. OWNER and CONTRACTOR intend that any policies provided in response to paragraphs 5.6 and 5.7 shall protect all of the parties insured and provide primary coverage for all losses and damages caused by the perils covered thereby. Accordingly, all such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any of the parties named as insureds or additional insureds, and if the insurers require separate waiver forms to be signed by ENGINEER or ENGINEER's consultant OWNER will obtain the same, and if such waiver forms are required of any Subcontractor, CONTRACTOR will obtain the same.

Receipt and Application of Proceeds:

5.12. Any insured loss under the policies of insurance required by paragraphs 5.6 and 5.7 will be adjusted with OWNER and made payable to OWNER as trustee for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.13. OWNER shall deposit in a separate account any money so received, and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

5.13. OWNER as trustee shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within fifteen days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as trustee shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If required in writing by any party in interest, OWNER as trustee shall, upon the occurrence of an insured loss, give bond for the proper performance of such duties.

Acceptance of Insurance: (See ¶SC-5.14 of the Supplementary Conditions) *

5.14. ~~If OWNER has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.3 and 5.4 on the basis of its not complying with the Contract Documents, OWNER shall notify CONTRACTOR in writing thereof within ten days of the date of delivery of such certificates to OWNER in accordance with paragraph 2.7. If CONTRACTOR has any objection to the coverage afforded by or other provisions of the policies of insurance required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 on the basis of their not complying with the Contract Documents, CONTRACTOR shall notify OWNER in writing thereof within ten days of the date of delivery of such certificates to CONTRACTOR in accordance with paragraph 2.7. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided by each as the other may reasonably request. Failure by OWNER or CONTRACTOR to give any such notice of objection within the time provided shall constitute acceptance of such insurance purchased by the other as complying with the Contract Documents.~~

Partial Utilization—Property Insurance:

5.15. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.10; provided that no

such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected the changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be cancelled or lapse on account of any such partial use or occupancy.

ARTICLE 6—CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence:

6.1. CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

6.2. CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.

Labor, Materials and Equipment:

6.3. CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without OWNER's written consent given after prior written notice to ENGINEER.

6.4. Unless otherwise specified in the General Requirements, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

6.5. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16.

Adjusting Progress Schedule:

6.6. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.9) adjustments in the progress schedule to reflect the impact thereon of new developments; these will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

Substitutes or "Or-Equal" Items:

6.7.1. Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other Suppliers may be accepted by ENGINEER if sufficient information is submitted by CONTRACTOR to allow ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by ENGINEER will include the following as supplemented in the General Requirements. Requests for review of substitute items of material and equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or

royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by ENGINEER in evaluating the proposed substitute. ENGINEER may require CONTRACTOR to furnish at CONTRACTOR's expense additional data about the proposed substitute.

6.7.2. If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to ENGINEER, if CONTRACTOR submits sufficient information to allow ENGINEER to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in paragraph 6.7.1 as applied by ENGINEER and as may be supplemented in the General Requirements.

6.7.3. ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without ENGINEER's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute. ENGINEER will record time required by ENGINEER and ENGINEER's consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not ENGINEER accepts a proposed substitute, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's consultants for evaluating each proposed substitute.

Concerning Subcontractors, Suppliers and Others:

6.8.1. CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to OWNER and ENGINEER as indicated in paragraph 6.8.2), whether initially or as a substitute, against whom OWNER or ENGINEER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

6.8.2. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials and equipment) to be submitted to OWNER in advance of the specified date prior to the Effective Date of the Agreement for acceptance by OWNER and ENGINEER and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's or ENGINEER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the bidding documents or the Contract Documents) of any such Subcontractor, Supplier or other person or organization so identified may be revoked on the basis of reasonable objection after due investigation, in which case CONTRACTOR shall submit an acceptable substitute, the Contract Price will be increased by the difference in the cost occasioned by such substitution and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER or ENGINEER of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of OWNER or ENGINEER to reject *defective* Work.

6.8.3. (See ¶SC-6.8.3 of the Supplementary Conditions) *

6.9. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations. (See ¶SC-6.9 of the Supplementary Conditions) *

6.10. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

6.11. All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER and contains waiver provisions as required by paragraph 5.11. CONTRACTOR shall pay each Subcontractor a just share of any insurance moneys received by CONTRACTOR on account of losses under policies issued pursuant to paragraphs 5.6 and 5.7.

Patent Fees and Royalties:

6.12. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER

or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorneys' fees and court and arbitration costs) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights.

Permits:

6.13. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or if there are no Bids on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto such as
* plant investment fees. (See ¶6.13 of the Supplementary Conditions)

Laws and Regulations:

6.14.1. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

6.14.2. If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 3.4. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Laws or Regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

Taxes:

6.15. CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

Use of Premises:

6.16. CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or ENGINEER by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER and ENGINEER harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER or ENGINEER to the extent based on a claim arising out of CONTRACTOR's performance of the Work.

6.17. During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by OWNER. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

6.18. CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

Record Documents:

6.19. CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Directive Changes, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all changes made during construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon com-

pletion of the Work, these record documents, samples and Shop Drawings will be delivered to ENGINEER for OWNER.

Safety and Protection:

6.20. CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.20.1. all employees on the Work and other persons and organizations who may be affected thereby;

6.20.2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and

6.20.3. other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and Underground Facilities not designated for removal, relocation or replacement in the course of construction.

CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 6.20.2 or 6.20.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR). CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.13 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.21. CONTRACTOR shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's superintendent unless otherwise designated in writing by CONTRACTOR to OWNER.

Emergencies:

6.22. In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER or OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If ENGINEER determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

Shop Drawings and Samples:

6.23. After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, CONTRACTOR shall submit to ENGINEER for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.9), or for other appropriate action if so indicated in the Supplementary Conditions, five copies (unless otherwise specified in the General Requirements) of all Shop Drawings, which will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as ENGINEER may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable ENGINEER to review the information as required.

6.24. CONTRACTOR shall also submit to ENGINEER for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.

6.25.1. Before submission of each Shop Drawing or sample CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.

6.25.2. At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on

each Shop Drawing submitted to ENGINEER for review and approval of each such variation.

6.26. ENGINEER will review and approve with reasonable promptness Shop Drawings and samples, but ENGINEER's review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER, and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.27. ENGINEER's review and approval of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission as required by paragraph 6.25.2 and ENGINEER has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 6.25.1.

6.28. Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to ENGINEER's review and approval of the pertinent submission will be the sole expense and responsibility of CONTRACTOR.

Continuing the Work:

6.29. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.5 or as CONTRACTOR and OWNER may otherwise agree in writing.

Indemnification: **See Paragraph SC-6.30 of the Supplementary Conditions**

6.30. ~~To the fullest extent permitted by Laws and Regulations CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and their consultants, agents and employees from and against all claims, damages, losses and expenses, direct, indirect or consequential (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom and (b) is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder or arises by or is imposed by Law and Regulations regardless of the negligence of any such party.~~

See Paragraph SC-6.31 of the Supplementary Conditions

6.31. ~~In any and all claims against OWNER or ENGINEER or any of their consultants, agents or employees by any employee of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.30 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any such Subcontractor or other person or organization under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts:~~

6.32. The obligations of CONTRACTOR under paragraph 6.30 shall not extend to the liability of ENGINEER, ENGINEER's consultants, agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications.

ARTICLE 7—OTHER WORK

Related Work at Site:

7.1. OWNER may perform other work related to the Project at the site by OWNER's own forces, have other work performed by utility owners or let other direct contracts therefor which shall contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to CONTRACTOR prior to starting any such other work; and, if CONTRACTOR believes that such performance will involve additional expense to CONTRACTOR or requires additional time and the parties are unable to agree as to the extent thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

7.2. CONTRACTOR shall afford each utility owner and other contractor who is a party to such a direct contract (or OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with theirs. CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. CON-

TRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

7.3. If any part of CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor or utility owner (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. CONTRACTOR's failure so to report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's Work except for latent or non-apparent defects and deficiencies in the other work.

Coordination:

7.4. If OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Supplementary Conditions, and the specific matters to be covered by such authority and responsibility will be itemized, and the extent of such authority and responsibilities will be provided, in the Supplementary Conditions. Unless otherwise provided in the Supplementary Conditions, neither OWNER nor ENGINEER shall have any authority or responsibility in respect of such coordination.

ARTICLE 8—OWNER'S RESPONSIBILITIES

8.1. OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.2. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer against whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to arbitration.

8.3. OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly after they are due as provided in paragraphs 14.4 and 14.13.

8.4. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions at the site and in existing structures which have been utilized by ENGINEER in preparing the Drawings and Specifications.

8.5. OWNER's responsibilities in respect of purchasing and maintaining liability and property insurance are set forth in paragraphs 5.5 through 5.8.

8.6. OWNER is obligated to execute Change Orders as indicated in paragraph 10.4.

8.7. OWNER's responsibility in respect of certain inspections, tests and approvals is set forth in paragraph 13.4.

8.8. In connection with OWNER's right to stop Work or suspend Work, see paragraphs 13.10 and 15.1. Paragraph 15.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.

ARTICLE 9—ENGINEER'S STATUS DURING CONSTRUCTION

Owner's Representative:

9.1. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and ENGINEER.

Visits to Site:

9.2. ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design professional, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

Project Representation:

9.3. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in observing the performance of the Work. The duties, responsibilities and limitations of authority of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions. If OWNER designates another agent to represent OWNER at the site who is not ENGINEER's agent or employee, the duties, responsibilities and limitations of authority of such other person will be as provided in the Supplementary Conditions.

9.3.1. (See ¶SC-9.3.1 of the Supplementary Conditions) *

Clarifications and Interpretations:

9.4. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If CONTRACTOR believes that a written clarification or interpretation justifies an increase in the Contract Price or an extension of the Contract Time and the parties are unable to agree to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Article 11 or Article 12.

Authorized Variations in Work:

9.5. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER, and also on CONTRACTOR who shall perform the Work involved promptly. If CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or an extension of the Contract Time and the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Article 11 or 12.

Rejecting Defective Work:

9.6. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be *defective*, and will also have authority to require special inspection or testing of the Work as provided in paragraph 13.9, whether or not the Work is fabricated, installed or completed.

Shop Drawings, Change Orders and Payments:

9.7. In connection with ENGINEER's responsibility for Shop Drawings and samples, see paragraphs 6.23 through 6.29 inclusive.

9.8. In connection with ENGINEER's responsibilities as to Change Orders, see Articles 10, 11 and 12.

9.9. In connection with ENGINEER's responsibilities in respect of Applications for Payment, etc., see Article 14.

Determinations for Unit Prices:

9.10. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decisions thereon will be final and binding upon OWNER and CONTRACTOR, unless, within ten days after the date of any such decision, either OWNER or CONTRACTOR delivers to the other party to the Agreement and to ENGINEER written notice of intention to appeal from such a decision.

Decisions on Disputes:

9.11. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 11 and 12 in respect of changes in the Contract Price or Contract Time will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered by the claimant to ENGINEER and the other party to the Agreement promptly (but in no event later than thirty days) after the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER and the other party within sixty days after such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

9.12. When functioning as interpreter and judge under paragraphs 9.10 and 9.11, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to paragraphs 9.10 and 9.11 with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.16) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such claim, dispute or other matter.

Limitations on ENGINEER's Responsibilities:

9.13. Neither ENGINEER's authority to act under this Article 9 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

9.14. Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved" or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be

effective to assign to ENGINEER any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16.

9.15. ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

9.16. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 10—CHANGES IN THE WORK

10.1. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by a Written Amendment, a Change Order, or a Work Directive Change. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

10.2. If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Work Directive Change, a claim may be made therefor as provided in Article 11 or Article 12.

10.3. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.4 and 3.5, except in the case of an emergency as provided in paragraph 6.22 and except in the case of uncovering Work as provided in paragraph 13.9.

10.4. OWNER and CONTRACTOR shall execute appropriate Change Orders (or Written Amendments) covering:

10.4.1. changes in the Work which are ordered by OWNER pursuant to paragraph 10.1, are required because of acceptance of *defective* Work under paragraph 13.13 or correcting *defective* Work under paragraph 13.14, or are agreed to by the parties;

10.4.2. changes in the Contract Price or Contract Time which are agreed to by the parties; and

10.4.3. changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 9.11;

provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.29.

10.5. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Time) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

ARTICLE 11—CHANGE OF CONTRACT PRICE

11.1. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the Contract Price.

11.2. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Price shall be determined by ENGINEER in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this paragraph 11.2.

11.3. The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

11.3.1. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraphs 11.9.1. through 11.9.3, inclusive).

11.3.2. By mutual acceptance of a lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 11.6.2.1).

11.3.3. On the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a CONTRACTOR's Fee for overhead and profit (determined as provided in paragraphs 11.6 and 11.7).

Cost of the Work:

11.4. The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by OWNER.

11.4.2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

11.4.3. Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER who will then determine, with the advice of ENGINEER, which bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR's Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the Work.

11.4.5. Supplemental costs including the following:

11.4.5.1. The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

11.4.5.2. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.

11.4.5.3. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof—all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

11.4.5.4. Sales, consumer, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

11.4.5.5. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

11.4.5.6. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the performance and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by OWNER in accordance with paragraph 5.9), provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's Fee. If, however, any such loss or damage

requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.7. The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amounts established by OWNER in accordance with paragraph 5.9.

11.5. The term Cost of the Work shall not include any of the following:

11.5.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.4.1 or specifically covered by paragraph 11.4.4—all of which are to be considered administrative costs covered by the CONTRACTOR's Fee.

11.5.2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

11.5.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR'S capital employed for the Work and charges against CONTRACTOR for delinquent payments.

11.5.4. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 11.4.5.9 above).

11.5.5. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of *defective* Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

11.5.6. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

CONTRACTOR's Fee:

11.6. The CONTRACTOR's Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

11.6.1. a mutually acceptable fixed fee; or if none can be agreed upon,

11.6.2. a fee based on the following percentages of the various portions of the Cost of the Work:

11.6.2.1. for costs incurred under paragraphs 11.4.1 and 11.4.2, the CONTRACTOR's Fee shall be fifteen percent;

11.6.2.2. for costs incurred under paragraph 11.4.3, the CONTRACTOR's Fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors shall be fifteen percent;

11.6.2.3. no fee shall be payable on the basis of costs itemized under paragraphs 11.4.4, 11.4.5 and 11.5;

11.6.2.4. the amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's Fee by an amount equal to ten percent of the net decrease; and

11.6.2.5. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's Fee shall be computed on the basis of the net change in accordance with paragraphs 11.6.2.1 through 11.6.2.4, inclusive.

11.7. Whenever the cost of any Work is to be determined pursuant to paragraph 11.4 or 11.5, CONTRACTOR will submit in form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

Cash Allowances:

11.8. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to ENGINEER. CONTRACTOR agrees that:

11.8.1. The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and

11.8.2. CONTRACTOR's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the

allowances. No demand for additional payment on account of any thereof will be valid.

Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

Unit Price Work:

11.9.1. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER in accordance with Paragraph 9.10.

11.9.2. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

11.9.3. ~~Where the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement and there is no corresponding adjustment with respect to any other item of Work and if CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an increase in the Contract Price in accordance with Article 11 if the parties are unable to agree as to the amount of any such increase.~~
* (See ¶SC-11.9.3 of the Supplementary Conditions

ARTICLE 12—CHANGE OF CONTRACT TIME

12.1. The Contract Time may only be changed by a Change Order or a Written Amendment. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by ENGINEER in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this paragraph 12.1.

12.2. The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if a claim is made therefor as provided in paragraph 12.1. Such delays shall include, but not be limited to, acts or neglect by OWNER or others performing additional work as contemplated by Article 7, or to fires, floods, labor disputes, epidemics, abnormal weather conditions or acts of God.

12.3. All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of this Article 12 shall not exclude recovery for damages (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) for delay by either party.

ARTICLE 13—WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

Warranty and Guarantee:

13.1. CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents and will not be *defective*. ~~Prompt notice of all defects shall be given to CONTRACTOR.~~ All *defective* Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 13.
*See ¶SC-13.1 of the Supplementary Conditions. *

Access to Work:

13.2. ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.

Tests and Inspections:

13.3. ~~CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.~~ See ¶SC-13.3 of the Supplementary Conditions. *

13.4. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefor, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval. CONTRACTOR shall also

be responsible for and shall pay all costs in connection with any inspection or testing required in connection with OWNER's or ENGINEER's acceptance of a Supplier of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all inspections, tests and approvals in addition to the above which are required by the Contract Documents shall be paid by OWNER (unless otherwise specified).

13.5. All inspections, tests or approvals other than those required by Laws or Regulations of any public body having jurisdiction shall be performed by organizations acceptable to OWNER and CONTRACTOR (or by ENGINEER if so specified).

13.6. If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.7. Neither observations by ENGINEER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.

Uncovering Work:

13.8. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

13.9. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose or otherwise make available for observation, inspection or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is *defective,* CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including but not limited to fees and charges of engineers, architects, attorneys and other professionals), and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, may make a claim therefor as provided in Article 11. If, however, such Work is not found to be *defective,* CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

Owner May Stop the Work:

13.10. If the Work is *defective,* or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party.

Correction or Removal of Defective Work:

13.11. If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all *defective* Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with *nondefective* Work. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

One Year Correction Period:

13.12. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be *defective,* CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions, either correct such *defective* Work, or, if it has been rejected by OWNER, remove it from the site and replace it with *nondefective* Work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the *defective* Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by CONTRACTOR. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of *defective* Work, OWNER (and, prior to ENGINEER's recommendation of final payment, also ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential

costs attributable to OWNER's evaluation of and determination to accept such *defective* Work (such costs to be approved by ENGINEER as to reasonableness and to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals). If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

OWNER May Correct Defective Work:

13.14. If CONTRACTOR fails within a reasonable time after written notice of ENGINEER to proceed to correct and to correct *defective* Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.11, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by ENGINEER, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's *defective* Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

ARTICLE 14—PAYMENTS TO CONTRACTOR AND COMPLETION

Schedule of Values:

14.1. The schedule of values established as provided in paragraph 2.9 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

Application for Progress Payment:

14.2. At least twenty days before each progress payment is scheduled (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that OWNER has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER's interest therein, all of which will be satisfactory to OWNER. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

CONTRACTOR's Warranty of Title:

14.3. CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

Review of Applications for Progress Payment:

14.4. ENGINEER will, within ten days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER, or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. Ten days after presentation of the Application for Payment with ENGINEER's recommendation, the amount recommended will (subject to the provisions of the last sentence of paragraph 14.7) become due and when due will be paid by OWNER to CONTRACTOR.

14.5. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a

representation by ENGINEER to OWNER, based on ENGINEER's on-site observations of the Work in progress as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules that the Work has progressed to the point indicated; that, to the best of ENGINEER's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.10, and to any other qualifications stated in the recommendation); and that CONTRACTOR is entitled to payment of the amount recommended. However, by recommending any such payment ENGINEER will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents or that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or OWNER to withhold payment to CONTRACTOR.

14.6. ENGINEER's recommendation of final payment will constitute an additional representation by ENGINEER to OWNER that the conditions precedent to CONTRACTOR's being entitled to final payment as set forth in paragraph 14.13 have been fulfilled.

14.7. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

14.7.1. the Work is *defective,* or completed Work has been damaged requiring correction or replacement,

14.7.2. the Contract Price has been reduced by Written Amendment or Change Order,

14.7.3. OWNER has been required to correct *defective* Work or complete Work in accordance with paragraph 13.14, or

14.7.4. of ENGINEER's actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1 through 15.2.9 inclusive.

OWNER may refuse to make payment of the full amount recommended by ENGINEER because claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work or Liens have been filed in connection with the Work or there are other items entitling OWNER to a set-off against the amount recommended, but OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action.

Substantial Completion:

14.8. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within fourteen days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said fourteen days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

14.9. OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

Partial Utilization:

14.10. Use by OWNER of any finished part of the Work, which has specifically been identified in the Contract Docu-

ments, or which OWNER, ENGINEER and CONTRACTOR agree constitutes a separately functioning and useable part of the Work that can be used by OWNER without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

14.10.1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and 14.9 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

14.10.2. OWNER may at any time request CONTRACTOR in writing to permit OWNER to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to ENGINEER and within a reasonable time thereafter OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to OWNER and ENGINEER that such part of the Work is not ready for separate operation by OWNER, ENGINEER will finalize the list of items to be completed or corrected and will deliver such list to OWNER and CONTRACTOR together with a written recommendation as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing and so informed ENGINEER). During such operation and prior to Substantial Completion of such part of the Work, OWNER shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related Work.

14.10.3. No occupancy or separate operation of part of the Work will be accomplished prior to compliance with the requirements of paragraph 5.15 in respect of property insurance.

Final Inspection:

14.11. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or *defective*. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

Final Application for Payment:

14.12. After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 6.19) and other documents—all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable (subject to the provisions of paragraph 14.16), CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

Final Payment and Acceptance:

14.13. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation—all as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application to OWNER for payment. Thereupon ENGINEER will give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.16.

Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. Thirty days after presentation to OWNER of the Application and accompanying documentation, in appropriate form and substance, and with ENGINEER's recommendation and notice of acceptability, the amount recommended by ENGINEER will become due and will be paid by OWNER to CONTRACTOR.

14.14. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Contractor's Continuing Obligation:

14.15. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.13, nor any correction of *defective* Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 14.16).

Waiver of Claims:

14.16. The making and acceptance of final payment will constitute:

14.16.1. a waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from *defective* Work appearing after final inspection pursuant to paragraph 14.11 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents; and

14.16.2. a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 15—SUSPENSION OF WORK AND TERMINATION

Owner May Suspend Work:

15.1. OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if CONTRACTOR makes an approved claim therefor as provided in Articles 11 and 12.

Owner May Terminate:

15.2. Upon the occurrence of any one or more of the following events:

15.2.1. if CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

15.2.2. if a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

15.2.3. if CONTRACTOR makes a general assignment for the benefit of creditors;

15.2.4. if a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR's creditors;

15.2.5. if CONTRACTOR admits in writing an inability to pay its debts generally as they become due;

15.2.6. if CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents

(including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.9 as revised from time to time);

15.2.7. if CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

15.2.8. if CONTRACTOR disregards the authority of ENGINEER; or

15.2.9. if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety, if there be one) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) such excess will be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by ENGINEER and incorporated in a Change Order, but when exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

15.3. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.4. Upon seven days' written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed and any expense sustained plus reasonable termination expenses, which will include, but not be limited to, direct, indirect and consequential costs (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs).

Contractor May Stop Work or Terminate:

15.5. If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within thirty days after it is submitted, or OWNER fails for thirty days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days' written notice to OWNER and ENGINEER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven days' written notice to OWNER and ENGINEER stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 6.29 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

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ARTICLE 16—ARBITRATION

16.1. All claims, disputes and other matters in question between OWNER and CONTRACTOR arising out of, or relating to the Contract Documents or the breach thereof (except for claims which have been waived by the making or acceptance of final payment as provided by paragraph 14.16) will be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining subject to the limitations of this Article 16. This agreement so to arbitrate and any other agreement or consent to arbitrate entered into in accordance herewith as provided in this Article 16 will be specifically enforceable under the prevailing law of any court having jurisdiction.

16.2. No demand for arbitration of any claim, dispute or other matter that is required to be referred to ENGINEER initially for decision in accordance with paragraph 9.11 will be made until the earlier of (a) the date on which ENGINEER has rendered a decision or (b) the tenth day after the parties have presented their evidence to ENGINEER if a written decision has not been rendered by ENGINEER before that date. No demand for arbitration of any such claim, dispute or other matter will be made later than thirty days after the date on which ENGINEER has rendered a written decision in respect thereof in accordance with paragraph 9.11; and the failure to demand arbitration within said thirty days' period shall result in ENGINEER's decision being final and binding upon OWNER and CONTRACTOR. If ENGINEER renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence but will not supersede the arbitration proceedings, except where the decision is acceptable to the parties concerned. No demand for arbitration of any written decision of ENGINEER rendered in accordance with paragraph 9.10 will be made later than ten days after the party making such demand has delivered written notice of intention to appeal as provided in paragraph 9.10.

16.3. Notice of the demand for arbitration will be filed in writing with the other party to the Agreement and with the American Arbitration Association, and a copy will be sent to ENGINEER for information. The demand for arbitration will be made within the thirty-day or ten-day period specified in paragraph 16.2 as applicable, and in all other cases within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.

16.4. No arbitration arising out of or relating to the Contract Documents shall include by consolidation, joinder or in any other manner any other person or entity (including ENGINEER, ENGINEER's agents, employees or consultants) who is not a party to this contract unless:

16.4.1. the inclusion of such other person or entity is necessary if complete relief is to be afforded among those who are already parties to the arbitration,

16.4.2. such other person or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration and which will arise in such proceedings, and

16.4.3. the written consent of the other person or entity sought to be included and of OWNER and CONTRACTOR has been obtained for such inclusion, which consent shall make specific reference to this paragraph; but no such consent shall constitute consent to arbitration of any dispute not specifically described in such consent or to arbitration with any party not specifically identified in such consent.

16.5. The award rendered by the arbitrators will be final, judgment may be entered upon it in any court having jurisdiction thereof, and will not be subject to modification or appeal except to the extent permitted by Sections 10 and 11 of the Federal Arbitration Act (9 U.S.C. §§10,11).

*(See ¶SC-16 of the Supplementary Conditions)

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ARTICLE 17—MISCELLANEOUS

Giving Notice:

17.1. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Time:

17.2.1. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.2.2. A calendar day of twenty-four hours measured from midnight to the next midnight shall constitute a day.

General:

17.3. Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 17.3 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

17.4. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.30, 13.1, 13.12, 13.14, 14.3 and 15.2 and all of the rights and remedies available to OWNER and ENGINEER thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of the Agreement.

00800
SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (EJCDC No. 1910-8, 1983 edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect. The General Conditions may also be supplemented elsewhere in the Contract Documents.

The terms used in these Supplementary Conditions which are defined in the Standard General Conditions of the Construction Contract (EJCDC No. 1910-8, 1983, edition) have the meanings assigned to them in the General Conditions.

PART 1 - MODIFICATIONS AND SUPPLEMENTS TO GENERAL CONDITIONS

SC-1

Add the following to Article 1 - Definitions of the General Conditions:

Bidder -Any individual, partnership, corporation or joint venture submitting a Bid for the Work to be performed.

Resident Project Representative - The Resident Project Representative (RPR) may be assigned to the site or any part thereof on a full time basis or only on a part-time basis. This will be determined by Engineer's Agreement with Owner.

COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED:

SC-2.3

Delete the last sentence of paragraph 2.3. of the General Conditions and insert the following in its place:

In no event will the Contract Time commence to run later than the __120th__ day after the date of the Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier, (unless agreed otherwise by Owner and Contractor in writing).

BEFORE STARTING CONSTRUCTION:

SC-2.7

Delete paragraph 2.7. of the General Conditions in its entirety and insert the following in its place:

Before any Work at the site is started, Contractor shall deliver to Owner and Engineer certificates (and other evidence of insurance requested by Owner) which Contractor is required to purchase and maintain in accordance with the Contract Documents.

PHYSICAL CONDITIONS:

SC-4.2.1.

Delete paragraphs 4.2.1 and 4.2.2 of the General Conditions in their entirety and insert the following in their place:

4.2.1. Explorations and Reports: Reference is made to Division 1: General Requirements of the Specifications for the identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by Engineer in preparation of the Contract Documents. Contractor may rely upon the accuracy of any technical data contained in such reports that is specifically

referenced in Division 1: General Requirements as technical data that can be relied on by Contractor. Contractor may not rely upon nontechnical data, interpretations or opinions contained therein or upon the completeness thereof for Contractor's purposes. Except as indicated above and in paragraph 4.2.6, Contractor shall have full responsibility with respect to subsurface conditions at the site.

4.2.2. Existing Structures: Reference is made to Division 1: General Requirements of the Specifications for the identification of those drawings and physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities referred to in paragraph 4.3) which are at or contiguous to the site that have been utilized by Engineer in preparation of the Contract Documents. Contractor may rely upon the accuracy of the technical data contained in such drawings that is specifically referenced in Division 1: General Requirements as technical data that can be relied on by Contractor. Contractor may not rely upon non-technical data contained in such drawings or upon the completeness thereof for Contractor's purposes. Except as indicated above in this paragraph and in paragraph 4.2.6, Contractor shall have full responsibility with respect to physical conditions in or relating to such structures.

CONTRACTOR'S LIABILITY INSURANCE:

SC-5.3.

The limits of liability for the insurance required by paragraph 5.3 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

5.3.1. and 5.3.2. Worker's Compensation, etc. under paragraphs 5.3.1 and 5.3.2 of the General Conditions:

(1) State:	Statutory
(2) Applicable Federal (e.g. Longshoreman's and Harbour Workers' Compensation, Maritime, Jones Act, etc.):	Statutory
(3) Employer's Liability:	$ 1,000,000

5.3.3, 5.3.4, 5.3.5, 5.3.6. Comprehensive General Liability (under paragraphs 5.3.3 through 5.3.6 of the General Conditions):

(1) Bodily Injury (including completed operations and products liability):

$ 1,000,000	Each Occurrence
$ 3,000,000	Annual Aggregate

Property Damage:

$ 1,000,000	Each Occurrence
$ 1,000,000	Annual Aggregate
or a combined single limit of	$ 1,000,000

(2) Property Damage liability insurance will provide Explosion, Collapse and Underground coverage where applicable.

(3) Personal Injury, with employee exclusion deleted

$ 1,000,000	Annual Aggregate

5.3.7. Comprehensive Automobile Liability:

Bodily Injury:

$ 500,000	Each Person
$ 1,000,000	Each Occurrence

Property Damage:

$ 500,000	Each Occurrence
or a combined single limit of	$ 1,000,000

Add new paragraphs immediately after paragraph 5.3.7 of the General Conditions which are to read as follows:

5.3.8. Umbrella Excess Liability Insurance:

(1) $ 1,000,000 Each Occurrence
$ 1,000,000 Annual Aggregate

(2) The umbrella coverage shall be Following-Form being no more restrictive than coverage required for the underlying policies.

5.3.9. The comprehensive general liability insurance and umbrella insurance required under paragraph 5.3 and SC-5.3, and the contractual liability insurance required under SC-5.4, of the General Conditions shall include Owner and Engineer as additional insureds.

5.3.10 Prior to beginning work, Contractor shall provide Owner and Engineer with its Certificates of Insurance and endorsements naming Owner and Engineer as additional insureds in accordance with the requirements of the Contract Documents.

CONTRACTUAL LIABILITY INSURANCE:

SC-5.4.

The Contractual Liability Insurance required by paragraphs 5.4 of the General Conditions shall provide coverage for not less than the following amounts:

5.4.1. Bodily Injury:
$ 1,000,000 Each Occurrence
5.4.2. Property Damage:
$ 1,000,000 Each Occurrence
$ 3,000,000 Annual Aggregate

OWNER'S LIABILITY INSURANCE:

SC-5.5.

Delete paragraph 5.5 of the General Conditions in its entirety.

PROPERTY INSURANCE:

SC-5.6.

Delete paragraph 5.6 of the General Conditions in its entirety and insert the following in its place:

Contractor shall purchase and maintain on Projects with above ground structures, property insurance upon the Work at the site to the full insurable value thereof (subject to deductible amounts as may be provided in these Supplementary Conditions or required by Laws and Regulations). This insurance shall include the interests of Owner, Contractor, Subcontractors and Engineer in the Work (all of whom shall be listed as insured or additional insured parties), shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in these Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance or otherwise provided in these Supplementary Conditions, Contractor shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment. The policies of insurance required to be purchased and

maintained by Contractor in accordance with this paragraph 5.6 shall comply with the requirements of SC-5.8 and SC-5.9.

5.6.1. For all other Projects and portions of Projects not classified as above ground structures, Contractor shall add to the property insurance and/or maintain an Installation Floater with aggregate coverage of the total value of the Work.

5.6.2. When the Work includes the handling and installation of Owner furnished equipment, Contractor shall add to Property insurance or Installation Floater the amount of $ N/A which is the total value of the Owner furnished items.

SC-5.7.

Delete paragraph 5.7 of the General Conditions in its entirety and insert the following in its place:

5.7. Contractor shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by these Supplementary Conditions or Laws and Regulations which shall include the interests of Owner, Contractor, Subcontractors and Engineer in the Work, all of whom shall be listed as insured or additional insured parties.

5.7.1. Boiler and Machinery Policy Required. (None required by Owner this Project)

5.7.2. Additional Property Insurance Required. (None required by Owner this Project)

SC-5.8.

Delete paragraph 5.8 of the General Conditions in its entirety and insert the following in its place:

5.8. All policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by Contractor in accordance with paragraphs 5.3 through 5.10 shall contain the following provision or endorsements:

5.8.1. The Owner shall be the trustee of all monies received as an insured loss and shall be so named.

5.8.2. That the coverage afforded will not be cancelled or materially changed or renewal refused until at least ten days' prior written notice of cancellation for nonpayment of premium, and thirty days prior written notice for other cancellations or material changes have been given to Owner and Engineer by certified mail and shall contain waiver provisions in accordance with paragraph 5.11.2.

SC-5.9.

Delete paragraph 5.9 of the General Conditions in its entirety and insert the following in its place:

5.9. The maximum deductible amount for the insurance provided in response to paragraphs SC-5.6 and SC-5.7 shall be $ 5,000.00 . The risk of loss within the deductible amount shall be borne by Contractor, Subcontractor or others suffering any such loss and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

SC-5.10.

Delete paragraph 5.10 of the General Conditions in its entirety.

ACCEPTANCE OF INSURANCE:

SC-5.14.

Delete paragraph 5.14 of the General Conditions in its entirety and insert the following in its place:

5.14. Owner shall review the coverage afforded by or other provisions of the insurance required to be purchased and maintained by Contractor after delivery of insurance certificates to Owner in accordance with paragraph 2.7 of the General Conditions. Contractor shall furnish to the Owner such additional information in respect of insurance provided by Contractor as the Owner may reasonably request.

5.14.1. Review of Insurance Policies or Insurance Certificates by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

5.14.2. In case of the breach by Contractor of any insurance provision stated in the Contract Documents, the Owner, at his option, may take out and maintain, at the expense of the Contractor, such insurance as the Owner may deem proper and Owner may deduct the cost of such insurance from any monies which may be due or become due the Contractor under this Contract.

5.14.3. All the policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by Contractor shall contain the name of the Project.

CONCERNING SUBCONTRACTORS, SUPPLIERS AND OTHERS:

SC-6.8.3.

Add the following paragraph to the General Conditions:

6.8.3. If the Bid Form or Specifications require (or if requested by Owner prior to the Notice of Award) the apparent Successful Bidder and any other Bidder so requested, shall submit a list of all Subcontractors, Suppliers and other persons or organizations (including those who are to furnish the principal items of material and equipment) in accordance with requirements of paragraph 10. of the Instructions to Bidders and Article 6.8.2. of the General Conditions.

SC-6.9.

Add the following language at the end of paragraph 6.9 of the General Conditions:

Owner or Engineer may furnish to any such Subcontractor, Supplier or other person or organization, to the extent practicable, evidence of amounts paid to Contractor in accordance with Contractor's Applications for Payment.

SC-6.13

When the Owner is a public agency, add the following at the end of paragraph 6.13 of the General Conditions:

Contractor shall obtain and pay for the following permits:

1. City of Lake Worth Building Permit. Include in the bid amount a 3-percent permit fee based on the bid cost of the work. The actual amount paid for the permit fee will be paid under this bid line item and any balance credited back to the Owner.

INDEMNIFICATION

SC-6.30

Delete paragraph 6.30 of the General Conditions in its entirety and insert the following in its place:

Contractor shall indemnify and hold harmless Owner and Engineer and their respective officers, and employees for liabilities, damages, losses, and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract.

SC-6.31

Delete paragraph 6.31 of the General Conditions in its entirety.

PROJECT REPRESENTATION:

SC-9.3.1.

Add the following paragraph to the General Conditions:

9.3.1. If the Engineer furnishes a Resident Project Representative as per Article 9.3. of the General Conditions, the duties, etc. of the representative shall be as provided in the LISTING OF THE DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF THE RESIDENT PROJECT REPRESENTATIVE as included in the Project Manual. If Owner designates another agent to represent Owner at the site who is not Engineer's agent or employee, the duties, responsibilities and limitations of authority of such other agent will be as presented at the Preconstruction Conference.

UNIT PRICE WORK

SC-11.9.3.

Delete paragraph 11.9.3 of the General Conditions in its entirety and substitute the following in its place:

11.9.3. Contractor may not make a claim for additional expenses incurred as a result of a difference between final quantity of any item(s) of Unit Price Work and the estimated quantity of such items(s) in the Contract Documents, unless specifically allowed in the Bid Form. Any adjustments specifically allowed shall be made in accordance with directions in the Bid Form.

WARRANTY AND GUARANTEE:

SC-13.1.

Change the second sentence of paragraph 13.1 of the General Conditions to read as follows:

Prompt notice of all observed defects shall be given to the Contractor.

TESTS AND INSPECTIONS:

SC-13.3.

Delete paragraph 13.3 of the General Conditions in its entirety and insert the following in its place:

Contractor shall give twenty-four hour notice to Engineer for all required inspections, tests or approvals, except as otherwise provided.

SC-16.

Delete Article 16-ARBITRATION of the General Conditions in its entirety.

PART 2 - ADDITIONAL SUPPLEMENTARY CONDITIONS

1. ATTACHMENTS:

The following forms included in the Project Manual shall be used by Contractor for submittals required by the Contract Documents (unless Owner accepts other form):

a. Construction Performance Bond (00610).

b. Construction Payment Bond (00620).
c. Notice of Compliance with Chapter 556, Florida Statutes (00630).

d. Contractor's Affidavit to Owner (00670).

e. Form of Application for Payment (00680).

f. This space left blank intentionally.

2. DESIGN PROFESSIONALS REPRESENTING OWNER AND/OR ENGINEER AND DIVISION OF RESPONSIBILITIES

a. Various Design Professionals (i.e. Civil, Structural, Mechanical, Electrical, Groundwater Hydrology, Environmental, Landscape Architect, Architect, etc.) as consultants to Owner and/or Engineer, prepared or assisted in the preparation of Drawings and Specifications for the Project. The Owner and/or Engineer may have the various Design Professionals provide services during construction phase of the Project. The Design Professionals will be representatives of the Owner and/or Engineer. Visits to the site by the Design Professionals will be on the basis of General Conditions Paragraph 9.2, VISITS TO SITE. Also General Conditions Paragraphs 9.13 through 9.16, LIMITATIONS ON ENGINEER'S RESPONSIBILITIES includes the various Design Professionals for this Project.

b. Communication to and from the various Design Professionals will be coordinated through the Engineer.

END OF SECTION

00820
SPECIAL CONDITIONS

CITY OF LAKE WORTH PURCHASING DEPARTMENT REQUIREMENTS

SPC-1 APPROVAL OF ACCOUNTING SYSTEM

Except with respect to firm fixed-price contracts, no contract type shall be used unless the Purchasing Manager has determined in writing that:

1) The proposed contractor's accounting system will permit timely development of all necessary cost data in the form required by the specific contract type contemplated; and

2) The proposed contractor's accounting system is adequate to allocate costs in accordance with generally accepted cost accounting principles.

SPC-2 RIGHT TO INSPECT PLANT

The City may, at reasonable times, inspect any part of the plant, place of business, or work site of a contractor or subcontractor which is pertinent to the performance of any contact awarded or to be awarded by the City.

SPC-3 RIGHT TO AUDIT RECORDS

1) Audit of Cost or Pricing Data: The City may, at reasonable times and places audit the books, documents, papers and records of any contractor who has submitted cost or pricing data to the extent that such books, documents, papers and records are pertinent to such cost or pricing data. Any person who receives a contract, change order or contract modifications for which cost or pricing data is required, shall maintain such books, documents, papers and records that pertinent to such costs or pricing data for three (3) years from the data of the final payment under the contract.

2) Contract Audit: The City shall be entitled to audit the books, documents, papers and records of a contractor or a subcontractor at any tier under any negotiated contract or subcontract other than a firm fixed-price contract to the extent that such books, documents, papers and records are pertinent to the performance of such contract or subcontract. Such books, documents, papers and records shall be maintained by the contractor for a period of three (3) years from the date of final payment under the prime contract

and by the subcontractor for a period of three (3) years from the date of final payment under the subcontract.

3) Contractor Records: If a contract is being funded in whole or in part by assistance from a federal agency, then the contract shall include provisions:

   A) Requiring the contractor and subcontractor at any tier to maintain for three (3) years from the date of final payment under the contract all books, documents, papers and records pertinent to the contract; and

   B) Requiring the contractor and subcontractor at any tier to provide to the City, the federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives access to such books, documents, papers and records for the purposes of examining. Auditing and copying them.

SPC-4 LOCAL VENDOR PREFERENCE

In the event the lowest responsive, responsible bidder or the highest ranked responsive, responsible proposer in the procurement of goods, services or construction is a non-LOCAL business, then all bids and or proposals from responsive, responsible LOCAL businesses to the same solicitation shall be adjusted by five (5) percent, solely for the purpose of determining bid/contract award. The bid price of LOCAL bidders will be adjusted downward by five (5) percent for purposes of ranking of bidders.

In no event, shall the application of this adjustment to a responsive quote or bid change the actual bid amount. Further, it will not cause the City to pay more than $15,000 above the amount bid by that non-local vendor, which would have been recommended for award if the local vendor preference had not been applied.

If the application of the five-percent local vendor preference causes the *evaluated local vendor price* to be less than the actual low-bid price, but the actual bid price of the local vendor is more than $15,000 higher than the actual low-bid price of a non-local vendor, then the non-local vendor submitting the actual low-bid, shall be viewed as the low-bidder, and be recommended for award, unless for reasons other than price, the bid is not found to be responsive and/or responsible.

The determination as to whether a bidder or proposer is a local or non-local business shall be made by the Purchasing Division, after confirming

the vendor has a valid business tax receipt and certificate of occupancy, as reflected within the Business Master File of the city's ERP system. The bidder or proposer does not have to be a current vendor to the City (City as a customer) at the time of bidding/proposing, but must have been issued a business tax receipt applicable to the goods/services/ construction being requested, PRIOR to the due date/time for bids/proposals. Prior to making an award through the application of the local vendor preference, city staff may require a bidder or proposer to provide additional information at any time prior to the award.

A *LOCAL business*, for the purposes of the application of a local vendor preference, means a bidder or proposer which has a permanent, physical place of business within the city limits, and a valid business tax receipt applicable to the required goods, services, or construction items being procured. Post office boxes or locations at a postal service center are not verifiable and shall not be used for the purpose of establishing said physical address. If the business is a joint venture/partnership, it is sufficient for qualification as a LOCAL business if at least one party of the joint venture/partnership meets the test set forth in this Section.

Non-LOCAL business means a bidder or proposer which is not a LOCAL business as defined herein.

Permanent place of business means headquarters which are located within the city limits or a permanent office or other site located within the city limits from which a bidder or proposer will produce a substantial portion of the goods or perform a substantial portion of the services to be purchased. A post office box or location at a postal service center shall not constitute a permanent place of business.

SPC-5 CONTRACTOR'S START OF WORK & CHANGE OF SCOPE

1) The Contractor shall not perform work without a Purchase Order.

2) The Contractor shall not work out of scope without a signed, issued change order to the purchase order, authorizing the additional work and any change to the period of performance (Construction Contract Time).

SPC-6 APPROPRIATION OF FUNDS

This project is subject to approval and appropriation of funds by the City of Lake Worth Commission.

SPC-7 BUILDING PERMIT FEE

A building permit fee equal to 3-percent of the accepted bid shall be included in the project costs. See Supplemental Conditions paragraph SC-6.13 for further details.

00840
LISTING OF THE DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF THE RESIDENT PROJECT REPRESENTATIVE

ENGINEER may furnish a Resident Project Representative (RPR), assistants and other field staff to assist ENGINEER in observing performance of the Work of the Contractor. RPR may only be part time on site, and CONTRACTOR shall coordinate with RPR as required in the Contract Documents.

Through on-site observations of the Work in progress and field checks of materials and equipment by the RPR and assistants, ENGINEER shall endeavor to provide further protection for OWNER against defects and deficiencies in the Work; but, the furnishing of such services will not make ENGINEER responsible for or give ENGINEER control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs, or responsibility for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

The duties and responsibilities of the RPR are limited to those of ENGINEER in ENGINEER's agreement with the OWNER and in the construction Contract Documents, and are further limited and described as follows:

A. GENERAL

RPR is ENGINEER's agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work shall in general be with ENGINEER and CONTRACTOR keeping OWNER advised as necessary. RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of CONTRACTOR. RPR shall generally communicate with OWNER with the knowledge of and under the direction of ENGINEER.

B. DUTIES AND RESPONSIBILITIES OF RPR

1. SCHEDULES: Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by CONTRACTOR and consult with ENGINEER concerning acceptability.

2. CONFERENCES AND MEETINGS: Attend meetings with CONTRACTOR, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.

3. LIAISON:

   a. Serve as ENGINEER's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent and assist in understanding the intent of the Contract Documents; and assist ENGINEER in serving as OWNER's liaison with CONTRACTOR when CONTRACTOR's operations affect OWNER's on-site operations.

   b. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.

4. SHOP DRAWINGS AND SAMPLES:

   a. Record date of receipt of Shop Drawings and samples.

   b. Receive samples which are furnished at the site by CONTRACTOR, and notify ENGINEER of availability of samples for examination.

c. Advise ENGINEER and CONTRACTOR of the commencement of any Work requiring a Shop Drawing or sample if the submittal has not been approved by ENGINEER.

5. REVIEW OF WORK, REJECTION OF DEFECTIVE WORK, INSPECTIONS AND TESTS:

a. Conduct on-site observations of the Work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.

b. Report to ENGINEER whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

c. Verify that tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that CONTRACTOR maintains adequate records thereof; and observe, record and report to ENGINEER appropriate details relative to the test procedures and startups.

d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to ENGINEER.

6. INTERPRETATION OF CONTRACT DOCUMENTS: Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to CONTRACTOR clarifications and interpretations as issued by ENGINEER.

7. MODIFICATIONS: Consider and evaluate CONTRACTOR's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER. Transmit to CONTRACTOR decisions as issued by ENGINEER.

8. RECORDS:

a. Maintain at the job site or ENGINEER's office files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.

b. Record names, addresses and telephone numbers of all CONTRACTORS, subcontractors and major suppliers of materials and equipment.

9. REPORTS:

a. Furnish ENGINEER periodic reports as required of progress of the Work and of CONTRACTOR's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.

b. Consult with ENGINEER in advance of scheduled major tests, inspections or start of important phases of the Work.

c. Draft proposed Change Orders and Work Directive Changes, obtaining backup material from CONTRACTOR and recommend to ENGINEER Change Orders, Work Directive Changes, and Field Orders.

d. Report immediately to ENGINEER and OWNER upon the occurrence of any accident witnessed by RPR or that was otherwise made known to RPR.

10. PAYMENT REQUESTS: Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward with recommendations to

ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.

11. CERTIFICATES, MAINTENANCE AND OPERATION MANUALS: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to ENGINEER for review and forwarding to OWNER prior to final payment for the Work.

12. COMPLETION:

a. Before ENGINEER issues a Certificate of Substantial Completion, submit to CONTRACTOR a list of observed items requiring completion or correction.

b. Conduct final inspection in the company of ENGINEER, OWNER and CONTRACTOR and prepare a final list of items to be completed or corrected.

c. Observe that all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance.

C. LIMITATIONS OF AUTHORITY

Resident Project Representative:

1. Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by ENGINEER.

2. Shall not exceed limitations of ENGINEER's authority as set forth in the Contract Documents.

3. Shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR's superintendent.

4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.

5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.

6. Shall not accept Shop Drawing or sample submittals from anyone other than Contractor.

7. Shall not authorize OWNER to occupy the Project in whole or in part.

8. Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by ENGINEER.

END OF SECTION

00860
LIST OF DRAWINGS

The Drawings which form a part of the Contract Documents and show the Work to be performed are as follows:

Drawing Title	Drawing Number	No. of Sheets	Dated
Potable Well No. 16 at 2nd Avenue North	44-43-21-205	8	July 2013

ENGINEER'S PROJECT NO. B2067.00 PROJECT: Potable Well No. 16 at 2nd Avenue North for City of Lake Worth

DATE: January 29, 2014

ADDENDUM NO. 1

TO: ALL PROSPECTIVE BIDDERS

Pursuant to the Invitation to Bid on this Project, you are instructed to make the following modifications to the Project Contract Documents, which modifications shall constitute a portion of the Contract Documents and be an integral part of the Project:

PROJECT MANUAL

(1) Section 02626, paragraph 1.05.B: Alternate pipe color for raw watermain shall be white with two 2" olive green stripes.

(2) Section 11213, Revise paragraph 1.05.E to read "Total pump head at design capacity – 106 feet".

(3) Section 11213, paragraph 2.02 Materials, revise Impellers and bowl assembly to be nickel – aluminum – bronze.

(4) Section 11213, add paragraph 1.06.D. Provide certified pump curves of the factory pump test.

CONSTRUCTION DRAWINGS

(1) Sheet CO-2, add general note 23; All formation water produced shall be piped to the storm water dry detention basin located north of the well site (less than 100 yards).

(2) Sheet C1-2, Detail 1 Well No. 16 ENLARGED PLAN – The (2) 8' double hung gates are to be 8-feet in height (to match remainder of fence) with three (3) strands of barbed wire per detail on Sheet C5-2.

(3) Sheet C5-1, Detail2: The 8" long radius 90° bend shall be 316 stainless steel. The joint between the 90° bend and the 8" stainless steel column pipe extension may be welded.

/s/ MOCK, ROOS ASSOCIATES, INC.

END OF ADDENDUM NO. 1

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SECTION 01000

GENERAL REQUIREMENTS

1.0 PROJECT LOCATION

A. The project is located at 1900 2nd Avenue North.

2.0 SCOPE OF WORK

A. The Work to be performed by the Contractor includes permitting, inspecting, furnishing all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to modify, construct, complete, deliver and place in operation the subject Project as shown on the Drawings and/or as herein described as specified. All Work to be in accordance with the Contract Documents.

3.0 REFERENCE POINTS

A. Horizontal and vertical control have been provided in the Drawings. All construction staking to be provided by the Contractor.

4.0 GRADES, DIMENSIONS, AND ELEVATIONS

A. Written dimensions have preference over scaled dimensions. All elevations are based on the 1929 National Geodetic Vertical Datum (N.G.V.D.).

5.0 EXISTING STRUCTURES AND UTILITIES

A. All known utilities have been shown on the Drawings according to the best information available. It is the Contractor's responsibility to contact all owners of structures or utilities above ground, on the surface, or below the ground, within the Project area so that said owners may stake or otherwise mark or protect their facilities. The Contractor must provide facilities and be responsible for the protection of all structures, buildings and utilities, underground, on the surface, or above ground against trenching, dewatering, or any other activity connected with the Work throughout the entire Contract Time.

B. When structures and utilities have been properly shown or marked and are disturbed or damaged in the execution of the Work, they must be repaired immediately in conformance with best standard practice and the approval of the owner of the damaged utility or structure. In the case of structures and utilities which have not been properly shown or located as outlined above and are disturbed or damaged in the prosecution of the Work, take whatever steps are necessary for safety and notify the affected utility owner and avoid any actions which might cause further damage to the structure or utility.

C. Should the Work require repairs, changes or modifications of the Owner's utilities as well as other utilities, it is the responsibility of the Contractor to provide for the maintenance of continuous water, sewage, electric, telephone and other utility services to all present customers of such utilities, unless approval in writing is secured from the applicable utility company or Owner for interruption of such service.

D. Contractor is responsible for verifying all vertical and horizontal locations of all existing utilities and structures, whether shown on the drawings or not, to verify any potential conflicts prior to ordering any materials.

6.0 QUALITY CONTROL

A. Testing Laboratory Services:

All density and concrete tests and analyses, which are called for in the Specifications and/or Drawings to be performed by an Independent Testing Laboratory, will be at the Owner's expense unless otherwise specified, provided the tests and analyses determine that the material(s) and/or Work meets the requirements as specified. All such tests that fail to meet the Project requirements are to be paid by the Contractor. Contractor shall be responsible for scheduling test lab visits in a manner to limit costs of stand-by time and non-tests assessed because of minimum per visit charges. Such excessive costs will be paid by Contractor.

B. Field Observations:

Provide twenty-four (24) hour notification to the Engineer for all specified field observations, unless otherwise noted.

7.0 MOBILIZATION

A. Consists of the preparatory Work and operations in mobilizing for beginning Work on the Project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the Project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by these Specifications, and State and local laws and regulations.

The costs of bonds, insurance and any other pre-construction expenses necessary for the start of the Work, excluding the cost of construction materials, is to be included in Mobilization.

B. When the Bid Form includes a separate pay item for Mobilization, partial payments will be made in accordance with the following:

Percent of Contract Price Less Mobilization Earned	Allowable Percent of the Lump Sum Price of Mobilization
5	25
10	50
25	75
50	100

The standard retainage will be applied to these payments. Previous payments for Mobilization and unpaid amounts on Allowances will not be considered in calculating the percent of the Contract Price earned. Payments will be made in stepped increments as shown and will not be interpolated between steps.

C. When the Bid Form does not include a separate item for Mobilization, all Work and incidental costs specified as being covered under Mobilization is to be included for payment under the several scheduled items on the Bid Form, and no separate payment will be made therefor.

8.0 MAINTENANCE OF TRAFFIC

A. In the Contractor's use of streets and highways for the Work to be done under these Specifications, conform to all Municipal, County, State and Federal laws and regulations as applicable. Provide, erect and maintain effective barricades, warning lights, and signs on all intercepted streets or highways for protection of the Work and safety of the public. All barricades or obstructions which encroach on or are adjacent to the public rights of way should be provided with lights which are illuminated at all times between sunset and sunrise.

B. Contractor shall schedule Work to cause minimum disturbance of normal pedestrian and vehicular traffic and be responsible for providing suitable means of access to all public and private properties during all stages of the construction. Other than for an emergency safety condition, the Contractor must contact the Owner and Engineer for approval prior to completely blocking off any street to vehicular traffic during construction. Contractor shall provide written notification to emergency, police, fire and other appropriate agencies at least 24 hours in advance of new work or changed work.

C. Maintain traffic in accordance with Section 102 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, 2007 Edition, except as follows:

1. Contractor is responsible for preparing a Maintenance of Traffic plan. Submit plan for Owner or roadway authority (City, County, D.O.T.) review.

   The Maintenance of Traffic plan must be prepared by a person who is certified by an FDOT certified school or an engineer licensed in the State of Florida.

2. When the Bid Form does not include a separate item for Maintenance of Traffic, the costs are to be included for payment under the several scheduled items on the Bid Form, and no separate payment will be made.

9.0 PLACING EQUIPMENT INTO SERVICE

A. Do not operate or place into service or energize, electrical and mechanical equipment until approved by the Owner and Engineer. Such approval may be granted only after all interested parties have been duly notified, have given approval for placing the equipment into service, and all interested parties are present or waived their right to be present. Contractor shall provide, in writing, seventy-two (72) hour notification for all item and equipment start-ups.

10.0 SALVAGEABLE MATERIAL

A. All salvageable material and/or equipment removed as a part of the Work for which specific use, relocation or other disposal is not specifically noted on the Drawings or otherwise specified, must be disposed of by the Contractor. All material and/or equipment not in salvageable condition as determined by the Engineer, must be disposed of by the Contractor. The actual storage site for salvageable material will be designated by the Owner.

11.0 BORING LOGS, OTHER REPORTS AND DRAWINGS UTILIZED BY ENGINEER

A. Boring Logs, other reports and Drawings utilized by Engineer, if attached at the end of these Specifications, are provided for Contractor's information in accordance with paragraph 4. of the Instructions to Bidders and are not a part of the Contract Documents. There is no technical data in the Boring Logs, other reports or Drawings that should be relied on by the Contractor. There also were no other reports or drawings utilized by Engineer in preparation of the Contract Documents that contained data that could be relied on by the Contractor.

12.0 DISPOSAL OF EXCAVATED MATERIALS AND DEBRIS

A. All excess excavated material and debris not required for backfill (unless otherwise noted), broken pipe, sidewalks, curbs and other concrete items, together with all roots, boards and other debris are to be disposed of by the Contractor at an appropriate legal site.

13.0 TEMPORARY CONTROLS AND FACILITIES

A. The Contractor is responsible for compliance with all NPDES regulations including submitting a Pollution Prevention Plan, submitting a Notice of Intent, conducting maintenance and inspection of controls, erosion and sediment controls and submitting a Notice of Termination.

B. As part of the Work, the Contractor shall be responsible for applying for, obtaining and complying with all required dewatering permits. Contractor shall notify South Florida Water Management District (SFWMD) prior to all dewatering activities. All dewatering shall meet SFWMD requirements.

C. Contractor shall install all turbidity control devices required by SFWMD, if necessary. Contractor shall notify SFWMD for inspection of turbidity control devices prior to any construction activities.

14.0 CONSTRUCTION SCHEDULE MEETINGS

A. Contractor shall submit a construction schedule in accordance with the General Conditions. Contractor's Project Manager and a representative of subcontractors performing work at the time of the meeting shall attend a coordination/progress meeting a minimum of once a month, as designated by the Owner, at the Owner's office during the progress of the Work. Contractor shall submit an updated construction schedule to the Engineer at each coordination/progress meeting.

15.0 MISCELLANEOUS

A. All bolts, nuts, washers, etc. and miscellaneous hardware shall be 316 stainless steel, unless otherwise indicated.

16.0 CONTRACTOR'S SUBMITTALS

A. Contractor shall be required to submit, with a letter of transmittal to the Engineer, a minimum of eight (8) copies of each checked and approved shop drawing, mix report, laboratory results, etc., where required in the specifications, Drawings or as appropriate, in lieu of the five (5) copies specified in Article 6 of the General Conditions or as specified elsewhere in these Specifications. Of the ten copies submitted, two copies will be returned to the Contractor for the Contractor's use. If the Contractor requires any additional approved copies, the Contractor shall submit additional copies at the time of initial submission. Allow a minimum of two weeks from date of receipt for review by the Engineer. Review of shop drawings will be general and will not relieve the Contractor from any responsibility.

B. Contractor shall be required to submit, with a letter of transmittal to the Engineer, for review and approval, five (5) hard copies and five (5) copies in CD format of each Operation and Maintenance Manual for all equipment, regardless of the number of submittals specified elsewhere in these Specifications.

17.0 CONSTRUCTION SEQUENCE

A. In addition to requirements of the Specifications and Drawings, the Contractor shall submit Construction Schedule and Project Phasing and Temporary Facilities Plan to Engineer which will include coordination of the various elements of the Work.

18.0 PROTECTION AND RESTORATION OF SURVEY MONUMENTS

A. The Contractor shall be responsible for protecting and restoring all land and property corners, such as section corners, ¼ section corners, property corners or block control points, and for maintaining all horizontal and vertical control points. All surveying work shall be the responsibility of the Contractor and shall be performed under the supervision of a Florida Professional Surveyor and Mapper. Survey points that will be destroyed during construction shall be properly referenced and replaced at the Contractor's expense with permanent monuments approved by the ENGINEER.

19.0 GENERAL ALLOWANCE

A. General Allowance: The work to be paid under this item may cover unforeseen and unanticipated costs associated with the work. Use of the General Allowance requires written authorization by the Owner prior to performing any work under this item. Any unused portion of the General Allowance will be credited to the Owner at the time of final payment.

B. Other Allowances: Bid items C-14, C-15, C-16, and C-17 (Extra Work and Standby Time) are allowance items for additional work as may be ordered by the Owner. No work under these items shall be furnished by the Contractor until authorized by the Owner in writing.

C. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances or any credit due for unused allowance balances, and the Contract Price shall be correspondingly adjusted.

20. ORDER OF PRECEDENCE

A. The Order of Precedence shall follow the order as set forth in Article B Contract Documents, page 00500-3 and 00500-4 of the Agreement.

B. In the case of a discrepancy between any of the Contract Documents, the most restrictive requirement shall govern unless otherwise determined by the Engineer.

C. In the event that a conflict cannot be resolved by the methods listed in paragraph A or B above, the Engineer shall review the dispute and issue a clarification to resolve the issue. The Engineer's decision shall be binding on all parties. In general the Engineer will consider the overall intent of the project as presented in the contract documents, and render a decision consistent with the overall project objectives.

END OF SECTION

SECTION 01010

SUMMARY OF WORK

PART I GENERAL

1.01 WORK COVERED IN CONTRACT DOCUMENTS

A. Furnish all labor, equipment, and materials necessary to construct one (1) Surficial aquifer production well (LW-16) for the City of Lake Worth (OWNER) for the City of Lake Worth Water Treatment Plant in Lake Worth, Florida. The well site location is shown on the attached project drawings. Well construction will include well construction permitting, drill site preparation, drilling, setting of casings and screen, grouting, water quality testing, well logging, well pad preparation, wellhead piping assemblies, electrical service and controls, restoration of well sites, and all incidental work as described herein and as shown on the attached project drawings.

B. The anticipated maximum depth of LW-16 well is approximately 250 feet below land surface (bls). Actual depth will be determined in the field based on site specific conditions encountered during drilling and testing. Proposed construction details of the production well are provided in the project drawings.

C. The CONTRACTOR shall be responsible for all labor, materials, transportation, tools, supplies, equipment, and appurtenances necessary to construct, develop, and test the well as specified herein. In general, all methods and material used under this construction shall be in accordance with the latest revisions of the American Water Works Association Standard for Wells (AWWA A100-06) and the National Water Well Association Standards as they apply to the particular needs or conditions encountered in the proposed work.

2.01 WORK BY OTHERS

A. The CONTRACTOR will diligently perform the scope of work independently of all others who may perform concurrent tasks during execution of the scope of work.

B. The OWNER reserves the right to add to the work in accordance with the Contract Documents.

C. Access to the well site and work areas shall be limited to the areas shown on the project drawings and as discussed in the pre construction meeting(s).

D. The ENGINEER will record and document activities, processes and events that occur at the well site. Record by the ENGINEER may include digital photography and video recording of the CONTRACTOR'S work.

3.01 WORK SEQUENCE

A. CONTRACTOR must contact the Palm Beach County Health Department and submit applicable portions of the "Well Construction Permit Application", and any others required for construction as filed by the OWNER and Engineer prior to commencement of well drilling activities.

B. Sequence of work will be discussed at the Pre-Construction meeting. The CONTRACTOR shall be prepared to perform the sequence as outlined in the Specifications. An alternative sequence of work may be considered if the proposed sequence is of benefit to the OWNER.

C. Normal working hours shall be compliant with the City Code. Should the CONTRACTOR desire to carry on his work at night or outside regular working hours, they shall submit written notice to the OWNER/ENGINEER and allow a minimum of 48 hours for satisfactory arrangements to be made and for inspecting the work in progress.

D. Start of construction and contract completion times will be in accordance with project specifications.

END OF SECTION

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Measurement and payment criteria applicable to the Work performed under a Unit Price payment method.

1.02 AUTHORITY

A. Measurement methods delineated in the individual Specification sections are intended to complement the criteria of this Section. In the event of conflict, the requirements of the individual Specification section will govern.

B. The Engineer will take all measurements and compute quantities unless noted otherwise herein.

C. Contractor to assist Engineer by providing necessary equipment, workers, and survey personnel as required.

1.03 UNIT QUANTITIES SPECIFIED

A. Quantities and measurements indicated in the Bid Form are for bidding and Contract purposes only. Quantities and measurements supplied or placed in the Work and verified by the Engineer will determine payment. Waste will not be included in the measurements or quantities.

B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the Contract Unit Price.

1.04 VOLUME MEASUREMENT

A. Measured by cubic dimension using mean length, width, and height or thickness.

B. For excavation of lakes, canals, ditches, etc., material will be measured in its original position by a Professional Land Surveyor who is licensed in the State of Florida. The Surveyor will be retained by the Contractor. Quantities will be based on before and after cross sections determined by the Surveyor. Payment will not be made for excavation beyond the lines shown on the Drawings.

1.05 AREA MEASUREMENT

A. Measured by square dimension using mean length and width or radius.

1.06 LINEAR MEASUREMENT

A. Measured by linear dimension, at the item centerline or mean chord.

B. For pipelines, the length will be measured from center of structure or fitting to center of structure or fitting.

1.07 PAYMENT

A. Payment Includes: Full compensation for all required labor, products, tools, equipment, plant, transportation, services anals; erection, application or installation of an item of the Work; overhead and profit.

B. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Engineer multiplied by the unit price for Work which is incorporated in or made necessary by the Work.

C. Payment for lump sum items will be made on the basis of percentage complete as approved by the Engineer.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

1. PAY ITEM NO. A1 - BONDS AND INSURANCE

The costs of bonds, and any required insurance for the start of work shall be paid for at the Contract Lump Sum Price as listed on the Bid Form.

2. PAY ITEM NO. A2 – MOBILIZATION/DEMOBILIZATION/GENERAL CONDITIONS

The work specified in this item consists of the work and operations necessary in mobilizing and demobilizing for the work as described by the contract documents, including but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to and from the project site, as required by these specifications, including but not limited to, staging and storage areas, security facilities and services, establishment/de-establishment of temporary environmental controls, sanitary facilities, and the special provisions made by State and local laws and regulations, including sanitary facilities, safety, noise abatement, and any other pre- or post- construction expense necessary for starting and completing the work. This item also includes any costs incurred to comply with the General Conditions of the contract. Payment for this item shall be made at 50% of the Contract Lump Sum Price following completion of mobilization and 50% following completion of demobilization to and from the well site and acceptance by the OWNER. The Contract Lump Sum Price for mobilization/demobilization shall not exceed 10% of the total contract price.

3. PAY ITEM NO. A3 – PERMITS

The work included in this item consists of preparing, submitting and obtaining all permits required for construction. This item shall include all permit fees. Payment will be made based on the actual cost for permits obtained for construction with any balance credited back to the Owner.

4. PAY ITEM NO. A4 – VIDEO TAPING

The work included in this Item consists of videotaping the pre-construction conditions of the project area and any areas that may be impacted by construction activities and providing the recording in standard DVD format. Payment will be made at the Contract Unit Price lump sum amount for the item once completed and accepted by Owner.

5. PAY ITEM NO. A5 – PREPARE AND FURNISH RECORD DRAWINGS

The work included in this Item consists of the costs of preparing, submitting, and obtaining Owner approval of electronic as-built drawings, including GPS coordinates for all valves, fittings, meter boxes, fire hydrants, etc., and other data as may be required in the Contract Documents. Payment will be made on a lump sum basis based on the percentage of the item completed and accepted by Owner. Payment for this item will not be made until final record drawings (signed and sealed by a Florida registered surveyor) have been received and accepted by Owner. Substantial completion on the Contract will not be granted or achieved until record drawings are submitted and accepted by the Owner.

6. PAY ITEM NO. A6 – GENERAL ALLOWANCE

This item shall apply to items agreed to by the ENGINEER and OWNER that are not otherwise covered in the Contract Bid Items, or where additional monies are necessary due to unforeseen circumstances, strictly out of the control of the Contractor. Application for payment of any monies in this allowance fund must be approved in writing by the ENGINEER and OWNER before any monies can be expended from this pay item. Any monies not used from this allowance shall not be paid to the Contractor, and shall remain with the OWNER at the conclusion of the project.

7. PAY ITEM NO. B1 - DRILL 8-INCH PILOT HOLE

This pay item includes the actual length of mud rotary drilled hole and shall be measured vertically from land surface to the total drilled depth as approved by the ENGINEER. The borehole shall be paid for at the contract unit price per foot, actual drilled borehole drilled and accepted by the ENGINEER, as listed on the BID FORM. The said Contract Unit Price shall include but not be limited to the furnishing of all material, labor and equipment necessary to complete the work as described in SECTION 02740.

8. PAY ITEM NO. B2 - GEOPHYSICAL LOGGING

Geophysical logging shall be paid as a lump sum for all logs specified for the well and include but not be limited to furnishing all material, labor and equipment necessary to complete the work as described in SECTION 02765. Payment of this item will be made at the Contract Lump Sum Price as listed on the BID FORM.

9. PAY ITEM NO. B3 – FURNISH, INSTALL AND GRAVEL PACK 4-INCH DIAMETER CASING AND WELL SCREEN

The furnished and installed 4-inch diameter casing and well screen shall be installed to the depth specified by the ENGINEER as listed on the BID FORM. Payment of this item shall be paid for by the linear foot, from land surface to the total depth installed and accepted, and shall include but not be limited to all labor, equipment and other materials necessary to properly install the casing, screen and gravel pack as described in Section 02770.

10. PAY ITEM NO. B4 – DEVELOPMENT AND TEST WELL INTERVAL SAMPLING

Development and water quality sampling at each depth interval shall be paid for at the Contract Unit Price per interval as approved by the ENGINEER as described in SECTION 02770. The said Contract Unit Price shall include but not be limited to the furnishing of all material, labor and equipment necessary to complete development and sampling as specified. Payment will be determined by the completion of successful sampling as approved by the ENGINEER.

11. PAY ITEM NO. C1 – DRILL NOMINAL 36-INCH DIAMETER BOREHOLE

This pay item includes the actual length of mud rotary drilled hole and shall be measured vertically from land surface to the total drilled depth as approved by the ENGINEER. The borehole shall be paid for at the contract unit price per foot, actual drilled borehole drilled and accepted by the ENGINEER, as listed on the BID FORM. The said Contract Unit Price shall include but not be limited to the furnishing of all material, labor and equipment necessary to complete the work as described in SECTION 02740.

12. PAY ITEM NO. C2 – FURNISH AND INSTALL 30-INCH DIAMETER CASING

The actual length of 30-inch diameter steel casing installed and accepted will be the actual measured quantities, below land surface, specified by the ENGINEER as listed in the BID FORM. It will be paid for at the unit price per foot as listed in the BID FORM and will be based on the actual units installed, including time, all labor, equipment, centralizers, and materials necessary for proper casing installation as described in SECTION 02745.

13. PAY ITEM NO. C3 – GROUT 30-INCH DIAMETER CASING

Cement for the 30-inch diameter casing installation shall be paid for at the Contract Unit Price per 94 pound sack of cement furnished, in place and accepted by the ENGINEER, as listed on the BID FORM and described in SECTION 02755. Contract Unit Price includes but is not limited to materials, labor, equipment, delivery charges, additives, operations, setup and removal of equipment for grout emplacement.

14. PAY ITEM NO. C4 – DRILL NOMINAL 29-INCH BOREHOLE

This pay item includes the actual length of drilled hole measured from the base of the 30-inch diameter casing to the total drilled depth, as determined by the ENGINEER. The borehole shall be paid for at the contract unit price per foot, actual drilled borehole drilled and accepted by the ENGINEER, as listed on the BID FORM. The said Contract Unit Price shall include but not be limited to the furnishing of all material, labor and equipment necessary to complete the work as described in SECTION 02740.

15. PAY ITEM NO. C5 - FURNISH AND INSTALL 24-INCH STEEL CASING

The actual length of 24-inch diameter steel casing installed and accepted will be the actual measured quantities, below land surface, specified by the ENGINEER as listed in the BID FORM. It will be paid for at the unit price per foot as listed in the BID FORM and will be based on the actual units installed, including time, all labor, equipment, centralizers, and materials necessary for proper casing installation as described in SECTION 02745.

16. PAY ITEM NO. C6 – CEMENT GROUT 24-INCH DIAMETER CASING

Cement for the 24-inch diameter casing installation shall be paid for at the Contract Unit Price per 94 pound sack of cement furnished, in place and accepted by the ENGINEER, as listed on the BID FORM and described in SECTION 02755. Contract Unit Price includes but is not limited to materials, labor, equipment, delivery charges, additives, operations, setup and removal of equipment for grout emplacement.

17. PAY ITEM NO. C7 – DRILL NOMINAL 22-INCH BOREHOLE

This pay item includes the actual length of drilled hole measured from the base of the 24-inch diameter casing to the total drilled depth, as determined by the ENGINEER. The borehole shall be paid for at the contract unit price per foot, actual drilled borehole drilled and accepted by the ENGINEER, as listed on the BID FORM. The said Contract Unit Price shall include but not be limited to the furnishing of all material, labor and equipment necessary to complete the work as described in SECTION 02740.

18. PAY ITEM NO. C8 – INSTALL 16-INCH STAINLESS STEEL SCREEN

The actual length of 16-inch diameter stainless steel well screen installed and accepted will be the actual measured quantities, below land surface, specified by the ENGINEER as listed in the BID FORM. It will be paid for at the Contract Unit Price per foot as listed in the BID FORM and will be based on the actual units installed, including time, all labor, equipment, centralizers, and materials to properly install the screen as described in SECTION 02750.

19. PAY ITEM NO. C9 – INSTALL 17.4-INCH DIAMETER PVC RISER CASING

The actual length of 17.4-inch diameter SDR17 Certainteed Certalok riser casing installed and accepted will be the actual measured quantities, below land surface, specified by the ENGINEER as listed in the BID FORM. It will be paid for at the Contract Unit Price per foot as listed in the BID FORM and will be based on the actual units installed, including time, all labor, equipment, centralizers, and materials to properly install the riser casing as described in SECTION 02745 and 02750.

20. PAY ITEM NO. C10 – FURNISH AND INSTALL GRAVEL PACK

Gravel pack installation will be paid for at the Contract Unit Price per cubic foot as listed in the BID FORM, including time, all labor, equipment and materials necessary for proper installation throughout well construction. Payment will be based on the actual units installed as described in SECTION 02750.

21. PAY ITEM NO. C11 – AIRLIFT DEVELOPMENT

Airlift Development shall be paid for at the Contract Unit Price per hour as listed on the BID FORM of actual airlift performed as approved by the ENGINEER and described in SECTION 02760. The said Contract Unit Price shall include but not be limited to the furnishing of all material, labor and equipment necessary to complete development as specified. Only time approved by the ENGINEER will be paid for under this pay item.

22. PAY ITEM NO. C12 – JETTING WITH SIMULTANEOUS AIRLIFT DEVELOPMENT

Jetting with simultaneous airlift development shall be paid for at the Contract Unit Price per hour as listed on the BID FORM actual jetting and simultaneous airlift performed as approved by the ENGINEER and described in SECTION 02760. The said Contract Unit Price shall include but not be limited to the furnishing of all material, labor and equipment necessary to complete development as specified. Only time approved by the ENGINEER will be paid for under this pay item.

23. PAY ITEM NO. C13 – WELL PUMP DEVELOPMENT

Well pump development shall be paid for at the Contract Unit Price per hour as listed on the BID FORM of actual pump development time and, and approved by the ENGINEER. The said Contract Unit Price shall include but not be limited to the furnishing of all material, labor and equipment necessary to complete development as described in SECTION 02760.

24. PAY ITEM NO. C14 – STEP RATE PUMP TEST

The pumping test will be paid for at the Contract Unit Price per hour of actual pumping time, as listed in the BID FORM. The said unit price shall include the furnishing of all material, labor and equipment necessary to complete the test as described in SECTION 02775. Payment begins upon initiation of pumping and ends at completion of pumping. Payment will be based on the actual hours of pump testing as approved by the ENGINEER.

25. PAY ITEM NO. C15 - VIDEO LOG

Acceptable video logs will be paid for at the unit price as listed in the Bid Form, including time, equipment and materials necessary to complete the work as described in SECTION 02765. Payment of this item will be made at the Contract Lump Sum Price as listed on the BID FORM.

26. PAY ITEM NO. C16 – WELL DISINFECTION AND WATER QUALITY SAMPLING

This pay item shall include, but not be limited to, all equipment, materials and labor to satisfactorily disinfect the wells, construct and remove easily accessible sampling points, bacteriological sampling and testing, and water quality analytical testing as required by SECTION 02780, State and Local laws and regulations as related to this pay item. The CONTRACTOR is solely responsible for all costs associated with the re-chlorination, re-sampling, and re-testing as needed to satisfactorily disinfect the well and obtain passing and acceptable water quality test results as described in SECTION 02780, State and Local laws and regulations. Payment of this item will be made at the Contract Lump Sum Price for satisfactory disinfection and water quality sampling as listed on the BID FORM.

27. PAY ITEM NO. C17 - EXTRA WORK BY DRILLING CREW WITH DRILLING EQUIPMENT

This pay item shall include all labor, equipment, and materials associated with extra work performed by the drilling crew with drilling equipment. Extra work shall be approved in writing by the ENGINEER and OWNER, before work is started and shall be paid for at the Contract Unit Price as listed on the BID FORM. Measurement will be the actual number of house during which the extra work was performed as verified and approved by the ENGINEER. Work included under other pay items will not be considered under this pay item. All extra work must be approved in writing by the OWNER before the work begins and at the end of each work day. No payment for extra will be allowed unless written approval is granted.

28. PAY ITEM NO. C18 - EXTRA WORK BY DRILLING CREW WITHOUT DRILLING EQUIPMENT

This pay item shall include all labor, equipment, and materials associated with extra work performed by the drilling crew without drilling equipment. Extra work shall be approved in writing by the ENGINEER and OWNER, before work is started and shall be paid for at the Contract Unit Price as listed on the BID FORM. Measurement will be the actual number of house during which the extra work was performed as verified and approved by the ENGINEER. Work included under other pay items will not be considered under this pay item. All extra work must be approved in writing by the OWNER before the work begins and at the end of each work day. No payment for extra will be allowed unless written approval is granted.

29. PAY ITEM NO. C19 - STANDBY TIME WITH RIG AND DRILLING CREW ON SITE

If standby time is required with the drilling crew and drilling rig on site, payment shall be made at the specified Contract Unit Price. Measurement shall be based on the actual number of hours of standby time that occurred during normal working hours as described in project specifications and approved by the ENGINEER. All standby time must be approved in writing by the OWNER before the work begins and at the end of each work day. No payment for extra will be allowed unless written approval is granted.

30. PAY ITEM NO. C20 - STANDBY TIME WITH RIG ON SITE AND CREW OFF SITE

If standby time is required with the drilling crew and drilling rig off site, payment shall be made at the specified Contract Unit Price. Measurement shall be based on the actual number of hours of standby time that occurred during normal working hours as described in project specifications and approved by the ENGINEER. All standby time must be approved in writing by the OWNER before the work begins and at the end of each work day. No payment for extra will be allowed unless written approval is granted.

31. PAY ITEM NO. C21 – FORMATION WATER DISPOSAL SYSTEM

This pay item includes providing all labor, materials, and equipment required to properly perform fluids disposal during well development, as indicated on the project drawings. The Contract Lump Sum Price includes setting up the system, creating and maintaining the temporary settling system, including grading, installing a perimeter fence, maintaining the system throughout construction, and removing the system, including restoration of all affected areas to their original conditions.

32. PAY ITEM NO. D1 – WELL PUMP

This item includes all the materials and labor associated with complete installation of the well pump and motor, and other appurtenances for a properly working pump assembly as specified in the Contract Documents. Payment for this item shall be made at the Contract Lump Sum amount for the work completed and accepted by the Owner.

33. PAY ITEM NO. D2 – WELLHEAD AND COLUMN PIPE

This item includes all the materials and labor associated with complete installation of the wellhead components, column pipe extension, and other appurtenances for a properly working pump assembly as specified in the Contract Documents. Payment for this item shall be made at the Contract Lump Sum amount for the work completed and accepted by the Owner.

34. PAY ITEM NO. D3 – CONCRETE

This item includes the placement of concrete pads at the well site to the lines and grades specified in the Contract Documents. It shall include all materials, labor, equipment, subsurface preparation, and testing required to result in a complete installation. Reinforcing steel, as indicated in the plans, is included in this item of work. This item shall be paid at the Contract Lump Sum amount for reinforced concrete installed and accepted by the Owner.

35. PAY ITEM NO. D4 – WELL HEAD PIPING, VALVES, ETC.

This item includes all the materials and labor associated with complete installation of the well piping at each location including ductile iron pipe, valves, flow meter, air release valve, spool pieces, blow-off, sample point, bends, fittings, pipe supports, and all necessary appurtenances for a complete assembly. Payment for this item shall be made at the Contract Lump Sum amount for the work completed and accepted by the Owner.

36. PAY ITEM NO. D5 – FENCING

This item includes the installation of black vinyl coated chain link fencing with slats including swing gates, hinges, latches, and all appurtenances necessary as specified in the Contract Documents. Payment for this item will be at the unit price per linear foot of fencing, including the length of gates. No separate payment will be made for the swing gates

37. PAY ITEM NO. D6 – SITE RESTORATION

This pay item shall include all labor, materials and equipment necessary to restore the well sites and all other areas affected by construction activities to the grades and conditions that existed prior to construction or better. Payment shall be made at the Contract Lump Sum Price as listed on the BID FORM.

38. PAY ITEM NO. D7 –ASPHALT PAVEMENT INCLUDING BASE AT WELL SITE

This item includes the complete preparation and construction of those areas designated to be paved for access to each well site, to the lines, grades and materials indicated in the Contract Documents. This includes the subgrade preparation, base construction and pavement application per the specifications, including all materials, labor, testing and equipment necessary for a complete installation. Payment for this item shall be made at the Contract Lump Sum amount for the work completed and accepted by the Owner.

39. PAY ITEM NO. D8 – ASPHALT TRENCH PATCH INCLUDING BASE

The work included in this Item consists of repairing existing asphalt pavement cut as a result of installing the forcemain and shall include, but not be limited to, saw cutting, removal, and disposal of the existing asphalt roadway material, excavation, preparation of subgrade, base rock, grading, compaction and testing (Owner pays for all passing density and asphalt tests, Contractor pays for failing tests) prime coat, asphalt, restoration and all other work and materials necessary for a complete asphalt repair. Payment will be made at the Contract Unit Price per square yard of asphalt installed, completed, and accepted by the Owner.

40. PAY ITEM NO. D9 – 1" MILL AND ASPHALT OVERLAY

The work included in this Item consists of milling a minimum of 1" of asphalt from the existing roadway and placing tack coat and asphaltic concrete to provide a flush road surface and shall include, but not be limited to removal and disposal of the existing asphalt roadway material.

Payment will be made at the Contract Unit price per square yard of asphalt installed, completed, and accepted by the Owner.

41. PAY ITEM NO. D10 – 6" C900 PVC FORCEMAIN

The work included in this Item consists of installation of 6" C900 PVC sanitary forcemain including, but not limited to furnishing, unloading, stringing, survey, layout, trench excavation, temporary excavation, sheeting, shoring, dewatering, pipe bedding material, ductile iron fittings, temporary/permanent plugs, deflecting as necessary, laying, restraining devices, thrust blocks, anchoring, backfilling, compacting, complying with the State of Florida Trench Safety Act. Payment will be made per linear foot of pipe installed measured horizontally and accepted by Owner.

42. PAY ITEM NO. D11 – 6" GATE VALVE

The work included in this Item consists of furnishing and installing a 6" mechanical joint (MJ) gate valve including, but not limited to the valve, restraining devices, valve box, concrete pad for valve box with identification disc, painting the valve box cover and all appurtenances necessary to complete the Work. Payment will be made at the Contract Unit price for the number of valves installed, completed and accepted by the Owner.

43. PAY ITEM NO. D12 -16" C905 PVC RAW WATERMAIN

The work included in this Item consists of installation of 16" C905 PVC raw watermain including, but not limited to furnishing, unloading, stringing, survey, layout, trench excavation, temporary excavation, sheeting, shoring, dewatering, pipe bedding material, ductile iron fittings, temporary/permanent plugs, deflecting as necessary, laying, restraining devices, thrust blocks, anchoring, backfilling, compacting, complying with the State of Florida Trench Safety Act, flushing, pressure testing, and disinfecting. Payment will be made per linear foot of pipe installed measured horizontally, including fittings, and accepted by Owner.

44. PAY ITEM NO. D13 – 16" BUTTERFLY VALVE

The work included in this Item consists of furnishing and installing a 16" mechanical joint (MJ) butterfly valve including, but not limited to the valve, restraining devices, valve box, concrete pad for valve box with identification disc, painting the valve box cover and all appurtenances necessary to complete the Work. Payment will be made at the Contract Unit price for the number of valves installed, complete and accepted by the Owner.

45. PAY ITEM NO. D14 – CONNECT TO EXISTING FORCEMAIN

The work included in this Item consists of, but is not limited to all labor, equipment and material for trench excavation, temporary excavation, sheeting, shoring, dewatering, pipe bedding material, fittings, temporary/permanent plugs, restraining devices, concrete thrust blocks, fittings, cutting existing pipe, draining existing main, coordination with utility staff for tying into existing main, backfill; compaction, and compliance with the State of Florida Trench Safety Act, and all appurtenant and miscellaneous items of work required to tie-in the newly installed forcemain to the existing PVC forcemain. Payment will be made for each tie-in installed, completed, witnessed, and accepted by Owner.

46. PAY ITEM NO. D15- ABANDON EXISTING FORCEMAIN

The work included in this Item consists of abandoning the existing forcemain in place after connection and clearance of proposed forcemain including, but not limited to excavation, backfill, compaction, isolation of piping to be abandoned, thrust restraint, evacuation and disposal of liquid from piping to be abandoned, grouting abandoned forcemain with light weight concrete, capping ends of abandoned forcemain, cleanup, restoration, coordination and all other work and materials required for complete abandonment of the forcemain. Payment will be made at the Contract Unit Price amount for the work completed and accepted by Owner.

47. PAY ITEM NO. D16 – SOD AND LANDSCAPE RESTORATION ALONG FORCEMAIN ROUTE

The work included in this Item consists of all restoration work along the forcemain route, including but not limited to providing additional fill, removal and disposal of excess fill, grading, fine grading, sodding (Bahia) and watering, repair of irrigation systems, landscaping replacement, and all other restoration as necessary to restore project areas to condition as existed prior to construction or better. Payment will be made at the Contract Unit Price lump sum amount for restoration based on the percentage completed, and accepted by the Owner. Final payment will not be made on this item until all newly installed sod is established and accepted by Owner.

48.PAY ITEM NO. D17 – PAVEMENT MARKINGS

The work included in this Item consists of applying thermoplastic stripes and markings including, but not limited to preparing surface, furnishing materials and equipment, curing and protection of markings and all other work and materials necessary to complete the work. Pavement markings shall match the layout of the existing markings. Payment will be made on a lump sum basis based on the percentage of the item completed and accepted by the Owner.

49. PAY ITEM NO. D18 – MISC.

The work included in this Item consists of all incidental work not otherwise specified, but obviously necessary for the proper completion of the project. Payment will be made at the Contract Unit Price lump sum amount for the item once the entire project is completed and accepted by Owner.

50. PAY ITEM NO. E1 – ELECTRICAL WIRE, CONDUIT, DISCONNECTS, ETC.

The work included in this Item includes furnishing and installing electrical conduit and wires including, but not limited to coordination with Owner and Power Company, electrical meter, junction boxes, grounding, hardware, and all other work and materials required for a complete installation. Payment will be made at the Contract Unit Price lump sum amount for a complete operable system accepted by the Owner.

51. PAY ITEM NO. E2 – CONTROL PANEL

The work included in this Item includes furnishing and installing an electrical control panel including, but not limited to electrical equipment rack, main disconnect switch, mounting of all equipment, excavation, backfilling, compaction, cleanup, and all other work and materials required for a complete installation. Payment will be made at the Contract Unit Price lump sum amount for the control panel installation, completed and accepted by the Owner.

52. PAY ITEM NO. E3 – INSTRUMENTATION INCLUDING FLOW METER

The work included in this Item consists of placing into service all instrumentation and control equipment including but not limited to, making all electrical connections, field testing and calibration, and all miscellaneous accessories and appurtenances to provide a completely operational system. Payment will be made at the Contract Unit Price lump sum amount for a complete operable system accepted by the Owner.

53. PAY ITEM NO. E4 – SCADA SYSTEM

The work included in this Item consists of installation of the SCADA system including but not limited to, controllers, RTUs and all other equipment and appurtenances, software, programming, field testing and calibration, all miscellaneous accessories and appurtenances, and coordination with Owner to provide a complete operational system. Payment will be made at the Contract Unit price lump sum amount for a complete operable system accepted by the Owner.

END OF SECTION

SECTION 01720

RECORD DOCUMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. On site maintenance of Record Documents.

B. Required record information.

1.02 MAINTENANCE

H. Maintain on site, one set of the following Record Documents; record actual revisions to the Work:

1. Drawings.
2. Specifications.
3. Addenda.
4. Change Orders and other modifications to the Contract.
5. Shop Drawings, product data, and samples.

B. Store Record Documents separate from documents used for construction.

C. Record information concurrent with construction progress.

D. In the interest of timely detection of non-conforming Work, all Record Drawing information for underground utilities such as drainage, wastewater and water pipelines, must be furnished to the Engineer prior to submitting for payment of that particular item.

E. Under no circumstances will roadway paving Work be allowed to start until the Engineer has reviewed the Record Drawing information for Work constructed within the roadway area that will be paved.

F. All Record Drawing information such as elevations, distances, location of underground utilities, lake cross-sections, and road cross-sections must be obtained by a Professional Surveyor and Mapper, who is licensed in the State of Florida. The Surveyor will be retained by the Contractor. Information must be signed and sealed.

G. Record Documents must be available to Engineer for examination at any time during the progress of the Work.

H. Submit completed Record Documents upon completion of the Work and prior to application for final payment.

I. Show record information in bold or boxed out to stand out from rest of Drawing.

1.03 REQUIRED RECORD DRAWING INFORMATION

A. This space left intentionally blank.

B. Water.

1. Top of pipe elevations at 100 foot intervals.
2. Distance from the reference points shown on the Drawings.
3. Horizontal location at 100 foot intervals.

4. Location of water services, valves, fittings, hydrants, blowoff points, etc. by stationing and offsetting from wastewater manholes. If wastewater manholes are not located nearby, use reference points shown on the Drawings.
5. Details of any design changes.
6. Location of utilities and miscellaneous structures encountered which are different from or not shown on the Drawings.
7. Elevations and clearances when water mains cross either wastewater or drainage pipe.
8. Changes in pipe material.
9. Finished well head elevation.
10. Depth of all drilled holes of each diameter.
11. Depth of each size casing pipe and screen section.
12. Any changes to well construction, well head, surface piping, or site layout.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CONTRACTOR'S SURVEYOR RESPONSIBILITIES

A. Engineer will provide the Contractor with electronic files of the construction drawings at the pre-construction conference. One copy of the electronic files will be provided on CD/DVD media in AutoDesk Civil 3D 2014 format. No warranty of the usability of the electronic files provided is expressed or implied. The cost of any required conversion or duplication of the electronic files from the format specified herein shall be the responsibility of the Contractor.

B. The Owner and Engineer will advise the Contractor at the pre-construction conference of the acceptable method and file format by which the interim and final Record Drawing information will be provided to the Owner and/or Engineer.

C. Record Drawing information shall be prepared electronically. The Record Drawing information shall be placed on a separate layer so that it is isolated from all other layers in the drawing file. This layer must be prepared in such a manner that it can be exported as a separate AutoCad file and subsequently inserted into an AutoCad drawing containing the approved design information. The AutoCad files shall be accompanied by an Adobe Acrobat portable document format (.pdf) file of the Record Drawings.

D. Place information in the Drawings in a manner that indicates which elevations and dimensions have been checked. This is to be done by crossing through the design elevation or dimension and placing the Record information next to it. If an elevation or dimension has not changed, the same procedures should be followed to confirm that it has been checked. Add new information in a manner to indicate that it is Record information and not design information.

E. Each Record Drawing sheet must include the surveyor's name, company, address, license number, and date of field survey.

F. Signed and sealed Record Drawings shall be submitted with all pay applications and at the conclusion of the Project.

3.02 CONTRACTOR RESPONSIBILITIES

A. Record document information not required to be obtained by a Professional Surveyor and Mapper must be obtained by the Contractor.

B. Mark Record information on one clean set of prints of the Contract Documents.

C. Each Drawing must be stamped indicating that the information has been reviewed by the Contractor.

D. Contractor's Surveyor will transfer Contractor supplied information to the record drawing.

END OF SECTION

SECTION 02108

VIDEO-TAPING OF EXISTING CONDITIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Video-taping the pre-construction conditions of the surface features within the construction area.

1.02 SUBMITTALS

A. Submit two completed video-tapes to Engineer at least seven calendar days prior to commencing construction and delivery of any materials and/or equipment.

B. Convert completed video-tapes to DVD media that is playabale on standard DVD players, and submit two copies.

1.03 QUALITY ASSURANCE

A. Video-taping must be done by a responsible commercial firm known to be skilled and regularly engaged in the business of pre-construction video documentation.

PART 2 PRODUCTS

2.01 MATERIALS

A. Video-Tapes: Standard VHS cassette tapes in color. New, not previously used.

B. DVD Media: Standard name-brand high quality write-once media. New, not previously used.

PART 3 EXECUTION

3.01 VIDEO-TAPING

A. Video-taping shall be performed and submitted at least seven calendar days prior to the commencement of construction and delivery of any materials and/or equipment. Upon review by the Engineer, and prior to commencement of construction and delivery of any materials and/or equipment, additional video-taping of any portions of the construction areas that are not adequately documented on the initial video-tapes may be required.

B. Video-tape the pre-construction conditions of the surface features within the construction area.

C. The video-tape will serve as a record of the pre-construction conditions for disputes arising from restoration, and should, therefore, be taken within the construction area in sufficient detail as necessary to clearly depict pre-construction conditions.

D. Indicate the date and time (hour, minutes and seconds) on which the video-tapes were recorded.

E. Video-tapes shall record video with simultaneous audio to assist viewer orientation with any needed identification, differentiation, clarification, or objective description of the features being shown with audio recording of commentary by the camera operator. The audio recording shall be free of any conversations between the camera operator and other production technicians.

F. Camera Height and Stability: Do not exceed 10 feet vertical distance between camera lens and the ground when conventional wheeled vehicles are used as conveyances for the recording system.

G. Camera Control: Control camera pan, tilt, zoom-in and zoom-out rates such that recorded objects will be clearly viewed during video tape playback. Control or adjust camera and recording system controls such as lens focus, aperture, light, and white balance to maximize picture quality.

H. Viewer Orientation Techniques: Use existing landmarks including but not limited to, all visible house and business addresses, to maintain viewer orientation.

I. Video Tape Log: Provide a written log of each video tape's contents including but not limited to, the names of the streets or easements, coverage beginning and ending, directions of coverage, and the date upon which the recording was made.

J. All video-tapes and DVD's become the property of the Owner.

END OF SECTION

SECTION 02110

SITE CLEARING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Clearing and grubbing.

B. Removal of pavement and structures.

1.02 REGULATORY REQUIREMENTS

A. Comply with all applicable federal, state, and local laws and regulations for the prevention, control, and abatement of all forms of pollution and the protection of soil, vegetation, wildlife, fish, and water courses.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 PREPARATION

A. Verify that existing plant life designated to remain is tagged or identified.

B. Protect utilities that remain, from damage.

C. Protect trees, plant growth, and features to remain as final landscaping.

D. Protect benchmarks, survey control points, and existing structures from damage or displacement.

3.02 CLEARING AND GRUBBING

A. Remove and dispose of timber, brush, stumps, roots, rubbish and debris, and all other obstructions resting on or protruding through the surface of the existing ground and the surface of areas to be excavated.

B. Unless otherwise shown on the Drawings, clearing and grubbing is to be done in the following areas:

1. All areas where excavation is to be done.
2. All areas where structures will be constructed, including pipe culverts and other pipelines.
3. In pavement areas and within roadway right of way.
4. Any other areas specifically called for on the Drawings to be cleared and grubbed.

C. In pavement areas, remove roots and other debris to a depth of at least one foot below the ground surface. The surface must then be plowed to a depth of at least six inches and all roots thereby exposed are to be removed to a depth of at least one foot.

D. All stumps within pavement areas and road right of way are to be completely removed and disposed of.

E. Where excavation is done, all roots protruding through or appearing on the surface of the completed excavation must be removed to a depth of at least one foot below the excavation surface.

3.03 REMOVAL OF PAVEMENT

A. Remove and dispose of existing concrete pavement, concrete sidewalk, slope pavement, ditch pavement, asphalt pavement, rock pavement base, curb, and curb and gutter, where designated on the Drawings or where required to be removed because of the construction operations.

3.04 REMOVAL OF STRUCTURES

A. Remove and dispose of those structures, or portions of structures specified on the Drawings or those structures or portions of structures which need to be removed in order to construct new structures, and other appurtenances or obstructions which are designated on the Drawings.

3.05 DISPOSAL

A. Timber, stumps, brush, roots, rubbish, concrete, pipe, asphalt, and other objectionable material is to be disposed of at an appropriate legal site.

END OF SECTION

SECTION 02210

GRADING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Cutting, filling, grading, and rough contouring site.

B. Compaction requirements.

C. Finish grading.

1.02 REFERENCES

A. AASHTO T-180/ASTM D1557-78 - Moisture Density Relations of Soils and Soil Aggregate Mixtures, Using 10 lb. Rammer and an 18 inch Drop.

B. ASTM D422-63 - Particle-Size Analysis of Soils.

C. ASTM D2922-81 - Density of Soil-Aggregate in Place by Nuclear Methods.

PART 2 PRODUCTS

2.01 MATERIAL

A. Fill: Free from large clods, muck, rocks larger than 6 inches, organics or other extraneous material. The maximum size rock allowed in the top 12 inches of the rough and finished grade to be 1 inch, suitable for pavement subgrade.

2.02 SOURCE QUALITY CONTROL

A. Engineer to review and approve fill material at the source prior to hauling material onsite.

PART 3 EXECUTION

3.01 PREPARATION

A. Identify required lines, levels, contours, and datum.

B. Identify known below and above grade utilities. Stake and flag locations.

3.02 GRADING

A. Fill/cut and grade Project site in a neat and uniform manner to conform to the grades detailed on the Drawings. If grades are not specified, grade in a neat and uniform manner to the grades which were existing prior to construction.

3.03 COMPACTION

A. Spread fill material and level in layers not to exceed 18 inches in thickness, measured loose. Compact each layer using a vibratory roller.

B. In fill sections that are to be paved, compact to a density not less than 95 percent of the maximum density determined by AASHTO T-180.

C. In cut sections and existing sections, the upper one (1) foot of the undisturbed subgrade or foundation grade must be compacted to a density not less than 95 percent of the maximum density determined by AASHTO T-180.

D. All subgrade or foundation grades disturbed during construction must be compacted to a density not less than 95 percent of the maximum density determined by AASHTO T-180.

E. In non-paved areas, compact to 90 percent of the maximum density determined by AASHTO T-180.

3.04 PROTECTION

A. Protect trees, shrubs, lawns, and other features remaining as a part of the final landscaping.

B. Protect benchmarks.

C. Protect existing structures, fences, roads, sidewalks, paving and curbs.

D. Protect above and below grade utilities which pass through Work area.

3.05 TESTING

A. Density tests for verifying compaction will be performed by an independent testing laboratory. Contractor is responsible for scheduling density tests and for the coordination of the testing with the testing laboratory and Engineer. Tests are to be paid for as specified in the Division 1: General Requirements.

3.06 FIELD OBSERVATIONS

A. Engineer to review finished grades prior to seeding or placement of sod.

END OF SECTION

SECTION 02220

EXCAVATING, BACKFILLING, AND COMPACTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Excavation for structures, pipelines, lakes, canals, ditches, etc.

B. Backfilling of structures and pipelines.

C. Dewatering.

D. Compacting.

1.02 REFERENCES

A. ASTM C136-84 - Sieve Analysis of Fine and Coarse Aggregates.

B. ASTM D2922-81 - Density of Soil-Aggregate in Place by Nuclear Methods.

C. AASHTO T-180/ASTM D1557-78 - Moisture Density Relations of Soils and Soil Aggregate Mixtures, Using 10 lb. Rammer and an 18 inch Drop.

1.03 REGULATORY REQUIREMENTS

A. Contractor is responsible for the provisions of the Occupational Safety and Health Administration's excavation safety standards, 29 C.F.R.s. 1926.650 Subpart P, which requires excavations exceeding five (5) feet in depth to be shored or sloped to the angle of repose.

1.04 PREVENTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION

A. Provide for and be responsible for the prevention, control, and abatement of erosion and water pollution until completion of the Project.

B. Provide all temporary erosion control features necessary to prevent, control, and abate erosion and water pollution.

C. Comply with the water quality standards of the State of Florida. The Contractor is cautioned that during the execution of the Work, creation of turbidity in excess of 29 Nephelometric Turbidity Units (NTU's) above the natural background level and/or directly or indirectly affecting the water quality in the waters of the State in such a manner as to exceed the limitations on the concentration of various constituents for such water as prescribed in Chapter 62-302 of the Florida Administrative Code, is a violation of the water quality standards of the State of Florida.

PART 2 PRODUCTS

2.01 BACKFILL MATERIAL

A. Backfill with an approved material, free from large clods, rocks larger than 1 inch, organic material or other extraneous material.

PART 3 EXECUTION

3.01 PREPARATION

A. Identify known underground utilities. Stake and flag locations.

B. Maintain and protect existing utilities remaining which pass through Work area.

C. Verify stockpiled fill is approved.

3.02 EXCAVATION

A. Perform the excavation of all substance(s) encountered to dimensions and depths shown on the Drawings and/or as specified herein, or as approved by the Engineer. Stockpile all material suitable for backfill near the site. Rock, debris or other material undesirable for backfill (as determined by the Engineer) is to be disposed of by the Contractor.

B. When a masonry or concrete structure rests on an excavated surface other than rock, special care must be taken to avoid disturbing the bottom of the excavation. Final removal of the existing material to foundation grade is not to be started until just before the masonry or concrete foundation is to be placed.

C. Excavate pipe trenches to a depth as shown on the Drawings. If over-excavation occurs, place a layer of fine crushed rock or compacted course sand to secure a firm foundation for the lower one-third of the pipe.

D. The maximum width of the trench at the top of the pipe must not be greater than 2 feet more than the nominal diameter of the pipe, unless otherwise specified. If this maximum is exceeded, it will be the Contractor's responsibility to provide adequate support (concrete cradle or crushed rock and compacted course sand) at the location of the trench width over excavated.

E. Keep pipe laying operations as close to the excavation as practical during the execution of the Work.

F. If rock is encountered at the foundation grade of a masonry or concrete structure, excavate the rock in such a manner as to allow the solid rock to be exposed. Prepare in horizontal beds for receiving the masonry or concrete. Remove all loose and disintegrated rock or thin strata. Cut back roots to 12 inches below the foundation grade.

G. If rock is encountered at the grade line of a pipe line, remove the rock so that at no place will it be closer than 6 inches to the finished pipe line. After the excavation is completed, place and tamp a bed of selected backfill (coarse sand and fine crushed rock) to at least 6 inches deep. Cut back roots to 12 inches below pipe grade.

H. Remove any water accumulated in the pipe trench and/or structure excavation and keep the excavation de-watered until the bedding is complete. Accomplish in a manner so as to not create any nuisance to adjacent property or public thoroughfare. Do not use the pipeline being installed as a drain for such water. Meet all laws, codes, ordinances, and government regulations when de-watering.

I. Provide all bracing, sheeting, and shoring necessary to perform and protect all excavations, as required for safety, or in accordance with governing laws. Remove all sheeting during backfilling operations except as otherwise noted herein or approved by the Engineer. Remove bracing, sheeting, and shoring in such a manner as not to disturb the completed Work.

Whenever bracing or shoring is driven to a depth below the top of pipe elevation, that portion of the sheeting below the top of the pipe must not be disturbed or removed. Whenever bracing or sheeting is driven for protection of trench walls in a water-bearing soil, no portion of such

sheeting is to be removed below existing ground water table level unless otherwise approved by the Engineer.

J. Unsuitable Foundation - In case the soil conditions encountered at the grade line of the pipe trench or structure excavation are found to be unsuitable, the Engineer must be notified to review the character of the foundations prior to continuing the Work.

3.03 BACKFILLING

A. Backfilling of structure (manholes, pump stations, sidewalks, etc.) excavations and required fill under structure slabs are to be done in horizontal lifts not exceeding eight inches in depth (compacted thickness), and compacted to a density of not less than 95 percent of the maximum density determined by AASHTO T-180.

B. Place backfill material for pipe excavation evenly and carefully around and over pipe and under lower sections of pipe in 6-inch maximum lifts. Hand-tamp backfill around the pipe. Each lift is to be thoroughly and carefully rammed until one foot of cover exists over the pipe. The remainder of the backfill is to be placed in eight inch lifts (compacted thickness), moistened, and mechanically compacted to a density of not less than 90 percent of the maximum density as determined by AASHTO T-180, unless otherwise noted. Water settling may be utilized at the option of the Contractor, however, the dewatering system must remain in service until all required density determinations are performed.

C. For structures and rigid pipelines where the backfill lies within a pavement subgrade, the backfill must be compacted to a density not less than 95 percent of the maximum density determined by AASHTO T-180.

D. For flexible pipe lines (i.e. PVC pipe or corrugated metal pipe) where the backfill lies within a pavement subgrade, the subgrade backfill to 6 inches above the top of the pipe must be compacted to a density not less than 90 percent of the maximum density determined by AASHTO T-180. The remaining backfill to grade is to be compacted to a density not less than 95 percent of the maximum density determined by AASHTO T-180.

E. Compact all subgrade or foundation grade disturbed during construction to a density not less than 95 percent of the maximum density as determined by AASHTO T-180.

3.04 TOLERANCES

A. Top Surface: Plus or minus 0.1 foot.

3.05 TESTING

A. Density tests for subgrade and backfill will be performed by an independent testing laboratory. The Contractor is responsible for scheduling density tests and for the coordination of the testing with the testing laboratory and Engineer.

3.06 FIELD OBSERVATIONS

A. All structures, pipelines, pipeline joints, and other construction are subject to field observation by the Engineer prior to backfilling.

END OF SECTION

SECTION 02230

ROCK BASE COURSE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Compacted subgrade.

B. Stabilized subgrade.

C. Coquina, limerock, and shellrock base courses.

1.02 REFERENCES

A. Florida Department of Transportation - Standard Specifications for Road and Bridge Construction, 2000, herein after referred to as the FDOT Specifications. This document must be onsite during the Work.

B. ASTM C136-01 - Sieve Analysis of Fine and Coarse Aggregates.

C. ASTM D2922-96 - Density of Soil-Aggregate in Place by Nuclear Methods.

D. AASHTO T 180/ASTM D1557-00 – Laboratory Compaction Characteristics of Soil Using Modified Effort.

1.03 TESTS

A. Testing of the rock for compliance with this specification will be preformed when it is delivered to the project site by an independent testing laboratory. Contractor is responsible for scheduling tests and for the coordination of the testing with the testing laboratory and Engineer. Tests are to be paid for as specified in the Division 1: General Requirements.

PART 2 PRODUCTS

2.01 MATERIALS

A. Compacted Subgrade: Local sands approved in advance by the Engineer. Free from large clods, rocks larger than one inch, organic material or other extraneous material.

B. Stabilized Subgrade: In accordance with Section 914 of the FDOT Specifications.

C. Coquina Rock Base: In accordance with Section 915 of the FDOT Specifications.

D. Limerock Base: In accordance with Section 911 of the FDOT Specifications.

E. Shellrock Base: In accordance with Section 913A of the FDOT Specifications.

F. Prime Coat: Meets Sections 300-2.1 and 916 of the FDOT Specifications.

PART 3 EXECUTION

3.01 PREPARATION

A. Prepare, compact, and grade compacted subgrade in accordance with Section 120-9 and 120-11 of the FDOT Specifications.

B. Prepare, compact, and grade stabilized subgrade in accordance with Section 160-5, 160-7, and 160–8 of the FDOT Specifications.

C. Clean subgrade surface of all foreign matter.

D. Verify gradients and elevations of subgrade are correct.

3.02 PLACING BASE MATERIAL

A. Spread base material over prepared subgrade to a total compacted thickness as shown on the Drawings.

B. Place in 6 inch maximum lifts. Compact to 98 percent of maximum density per AASHTO T 180, Method D.

C. Check finished surface with a template cut to the required crown and with a 15 foot straight edge laid parallel to the centerline of the pavement. Correct all irregularities greater than 1/4 inch by scarifying, and removing or adding base material as may be required. Re-compact area to meet specified density requirements.

3.03 PRIME COAT APPLICATION

A. Apply prime coat in accordance with Section 300-6 of the FDOT Specifications except Contractor to apply prime coat at a rate of 0.15 gallons per square yard over a base course free of all loose and foreign materials which may prevent proper bond. The moisture content of the base must not exceed 90 percent of the optimum moisture content of the material.

3.04 FIELD OBSERVATIONS

A. Engineer to review the subgrade prior to placing base course.

B. Engineer to review the finished base prior to application of the prime coat and paving.

3.05 PROTECTION

A. Any roadway base damaged, disturbed, or destroyed in excess of maximum pipe trench widths detailed on the Drawings must be replaced in accordance with the Drawings and Specifications at no additional expense to the Owner.

END OF SECTION

SECTION 02513

TYPE S ASPHALTIC CONCRETE PAVING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Materials, surface preparation, and placement of Type S asphaltic concrete pavement.

1.02 REFERENCES

A. Florida Department of Transportation - Standard Specifications for Road and Bridge Construction, 2000, herein after referred to as the FDOT Specifications. This document must be onsite during the Work.

1.03 SUBMITTALS

A. Submit a job mix formula for each asphaltic paving mixture in accordance with Section 331-4.3 of the FDOT Specifications.

PART 2 PRODUCTS

2.01 MATERIALS

A. Tack Coat: Meets Section 300-2.3 of the FDOT Specifications.

B. Type S Asphaltic Concrete: Meets Section 331 of the FDOT Specifications.

Requirements for mixing temperature must conform to those specified in Section 330-7.3 of the FDOT Specifications.

PART 3 EXECUTION

3.01 PREPARATION

A. Adjust manhole rims and valve boxes to finished grade. Cost of Work to be at the unit prices on the Bid Form. If there is no separate bid item for these adjustments, the cost is to be included in the cost of the asphalt.

B. Apply an asphaltic tack coat to existing asphaltic concrete surfaces to be repaved and to new asphalt base courses. Remove all loose and foreign material from the paved surface. Apply in accordance with Section 300-7 of the FDOT Specifications.

C. Clean surface of all sand and debris prior to placing surface course.

3.02 PLACING ASPHALT PAVEMENT

A. Place in accordance with Section 330-10 of the FDOT Specifications.

B. Compact asphalt in accordance with Section 330-11.1 of the FDOT Specifications. Compact to an average density of at least 98 percent of the valid control strip density. The control strip density is determined by the method defined in Section 330-11.3.2 of the FDOT Specifications.

C. Prepare joints in accordance with Section 330-12 of the FDOT Specifications. Maintain a smooth transition between existing pavement and new pavement.

D. Maintain all pavement cuts to the approval of the Engineer until the Project is complete.

E. Surface course cut during construction must have all edges saw cut prior to replacement.

3.03 SURFACE REQUIREMENTS

A. The finished surface must be of uniform texture and compaction. Any pulled, torn, or loosened asphalt, or any areas with open pores, segregation, sand streaks, sand spots, or ripples must be corrected.

B. Check finished surface with a 15-foot straightedge. Correct deficiencies in excess of 3/16-inch.

C. Correct deficiencies in accordance with Section 330-13.4 of the FDOT Specifications.

3.04 THICKNESS ALLOWANCES

A. The maximum allowable deficiency from the layer thickness specified on the Drawings is as follows:

1. For pavement of a specified thickness of 2-1/2 inches or more: 1/2 inch.

2. For pavement of a specified thickness of less than 2-1/2 inches: 1/4 inch.

B. Correct deficiencies either by replacing the full thickness for a length extending at least 50 feet beyond each end of the deficient area for the full width of the paving lane or (when permitted by the Engineer) by overlaying.

3.05. LEVELING COURSE REQUIREMENTS

A. Prepare in accordance with Section 330-9 of the FDOT Specifications.

B. Place mixture in accordance with Sections 330-10.1 and 330-10.3 of the FDOT Specifications.

C. Compact per Section 330-11.1 of the FDOT Specifications.

D. Method of Measurement will be per Section 331-6 of the FDOT Specifications. Engineer and Contractor will agree and physically mark in the field all locations to have a level course applied. Engineer will collect tonnage tickets at the time of placement and note that the material placed was a leveling course.

3.06 FIELD OBSERVATIONS

A. Engineer to observe paving activities and finished surface.

3.07 PROTECTION

A. Any roadway surface damaged, disturbed, or destroyed in excess of maximum trench widths detailed on the Drawings must be replaced in accordance with the Drawings and Specifications at no additional expense to the Owner.

END OF SECTION

SECTION 02523

SIDEWALKS, DRIVEWAYS, AND CURBS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete sidewalks, driveways, curbs, and gutters.

1.02 RELATED SECTIONS

A. Section 02210 - Grading.

1.03 REFERENCES

A. AASHTO T 180/ASTM D1557-00 - Laboratory Compaction Characteristics of Soil Using Modified Effort.

B. ACI 347R-94 – Guide to Formwork for Concrete.

C. ASTM A185-97 - Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.

D. ASTM A615-01 - Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.

E. ASTM C33-01 - Concrete Aggregates.

F. ASTM C39-01 - Compressive Strength of Cylindrical Concrete Specimens.

G. ASTM C42-99 - Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.

H. ASTM C94-00 - Ready-Mixed Concrete.

I. ASTM C143-00 - Slump of Hydraulic Cement Concrete.

J. ASTM C150-00 - Portland Cement.

K. ASTM C260-01 - Air-Entraining Admixtures for Concrete.

L. ASTM C309-98 - Liquid Membrane - Forming Compounds for Curing Concrete.

M. ASTM D1751-99 - Preformed Expansion Joint Filler for Concrete Paving and Structural Construction.

N. ASTM D2922-01 - Density of Soil and Soil-Aggregate in Place by Nuclear Methods.

1.04 SUBMITTALS

A. Concrete mix design indicating the proportions of cement, coarse aggregate, fine aggregate, water, and admixtures. Mix design sheet must also indicate slump, design strength, and water-cement ratio.

PART 2 PRODUCTS

2.01 MATERIALS

A. Forms: Conform to ACI 347.

B. Reinforcing Steel: ASTM A615, Grade 60, new deformed billet steel.

C. Welded Steel Wire Fabric: Plain type, ASTM A185.

D. Expansion Joints: 1/2 inch thick preformed non-extruding joint filler meeting ASTM D1751.

E. Concrete: Cement (ASTM C150, Type I), aggregates (ASTM C33), and potable water mixed in accordance with ASTM C94. Minimum of 470 lbs. of cement per cubic yard of concrete. Water-cement ratio less than or equal to 0.55. Slump of 0-5 inches. 3000 psi minimum compressive strength at 28 days.

F. Air-Entraining admixture to be from two to six percent.

G. Curing Compound: ASTM C309, Type 1 or 1-D, Class A.

PART 3 EXECUTION

3.01 SUBGRADE PREPARATION

A. Prepare subgrade in accordance with Section 02210.

B. Compacted density to be at least 95 percent of the maximum density determined by AASHTO T180.

C. Verify gradients and elevations of subgrade are correct.

D. Just prior to placing concrete, moisten subgrade and forms to provide a uniform dampened surface at the time concrete is placed.

3.02 CONCRETE PLACEMENT

A. Maintain concrete temperature at time of placement below 90 degrees Fahrenheit.

B. Deposit concrete on the subgrade in a manner which will minimize rehandling.

C. Do not disturb expansion joints.

D. Consolidate concrete against and along the faces of all forms, and along the full length on both sides of all joint assemblies.

3.03 JOINT CONSTRUCTION

A. Contraction Joints for Sidewalks and Driveways: Sidewalk joints are to be spaced 5 feet on center unless noted otherwise on Drawings. Driveway joints are to be spaced 15 to 18 feet on center unless noted otherwise on Drawings. Joints are to be installed with the use of a mason's hand groover utilized while the concrete is in the plastic state. The hand groover must be of sufficient depth to leave a finished joint greater than 'D'/5 and less than 'D'/4. Hand formed joints must have a finished radius along the joint edge equal to 1/4 inch.

B. Contraction Joints for Curbs: Space joints at 10 feet on center. Use saws equipped with shatterproof abrasive or diamond rimmed blades. Cut joints into concrete as soon as the surface will not be ravelled or otherwise damaged by the cutting action. Cut slot, 3/16 inch wide and not less than 1 1/2 inches deep. Joints must be completed between four (4) and twelve (12) hours after placing concrete.

C. Construction Joints: Place full depth construction joints at the end of concrete pours and at locations where placement operations are stopped for a period of thirty (30) minutes or more except where such pours terminate at expansion joints.

D. Expansion Joints for Sidewalks and Driveways: Construct at 100 foot intervals (unless noted otherwise on Drawings), between sidewalk and driveways, at sidewalk intersections, and around all other fixed objects within the sidewalk or driveway. Joints must contain preformed joint filler for the full depth. Edges must be finished with a 1/4 inch radius.

E. Expansion Joints for Curbs: Construct at all inlets and radius points, where new curb abuts an existing fixed object, and at intervals of 500 feet. Joints must contain 1/2 inch preformed joint filler for the full depth of the curb.

3.04 FINISHING

A. Adding water to the surface of the concrete to assist in finishing operations is not permitted.

B. A uniform gritty non-slip finish must be provided by brushing the surface with a stiff-bristled broom or by dragging a 'burlap bag' over the surface just before the water sheen disappears.

C. After the final finish has been applied, but before the concrete has become nonplastic, the edges on each side of expansion joints, construction joints, contraction joints (for sidewalks and driveways) and along any structure extending into the concrete are to be carefully rounded to a 1/4 inch radius. Finish sidewalk and driveway edges with a 1/4 inch radius edging tool. Produce a well-defined and continuous radius and a smooth, dense mortar finish. Remove all concrete from the top of the joint filler.

3.05 CURING

A. After the finishing operations have been completed and as soon as the concrete has hardened sufficiently such that marring of the surface will not occur, the entire surface and the edges of the newly placed concrete are to be cured using a liquid curing compound. Rate of application to be 200 square feet per gallon or as recommended by the manufacturer.

B. Do not leave the concrete exposed for a period in excess of 30 minutes between stages of curing or during the curing period.

3.06 BACKFILLING

A. After the concrete has set sufficiently, but not later than three days after pouring, refill the spaces in front and back of curb/sidewalk to the required elevation with suitable material.

3.07 FIELD OBSERVATIONS

A. The subgrade and formwork prior to placing concrete.

B. Concrete placement activities.

C. Furnish a delivery ticket for each batch of concrete unloaded if so requested by the Engineer.

END OF SECTION

SECTION 02613

DUCTILE-IRON PIPE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Ductile iron pipe and fittings for Potable Water, Wastewater, and Reclaimed Water Systems, sizes 3 inch diameter through 64 inches in diameter.

1.02 RELATED SECTIONS

A. Section 02220 - Excavating, Backfilling and Compacting.

B. Section 02675 - Disinfecting Water Mains.

1.03 REFERENCES

A. ASTM A153-01 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

B. ASTM A 197-00 - Cupola Malleable Iron.

C. ASTM A 307-00 - Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.

D. ASTM A 506-00 – Alloy and Structural Alloy Steel, Sheet and Strip, Hot-Rolled and Cold-Rolled.

E. ASTM A 536-99 - Ductile-Iron Castings.

F. ASTM A 575-96 - Steel Bars, Carbon, Merchant Quality, M-Grades.

G. ASTM D 1248-00 - Polyethylene Plastics Extrusion Materials for Wire and Cable.

H. ASTM D 2794-93 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).

I. AWWA C104-95 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.

J. AWWA C105-99 - Polyethylene Encasement for Ductile-Iron Pipe Systems.

K. AWWA C110-98 – Ductile-Iron and Gray-Iron Fittings, 3 inch through 48 inch for Water.

L. AWWA C111-00 - Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.

M. AWWA C115-99 - Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.

N. AWWA C150-96 - Thickness Design of Ductile-Iron Pipe.

O. AWWA C151-96 - Ductile-Iron Pipe, Centrifugally Cast, for Water or Other Liquids.

P. AWWA C153-00 - Ductile-Iron Compact Fittings, 3 inch Through 64 inch, for Water Service.

Q. AWWA C 600-99 - Installation of Ductile-Iron Water Mains and Their Appurtenances.

1.04 SUBMITTALS

A. Manufacturer's technical product data for pipe and fittings.

1.05 QUALITY ASSURANCE

A. Each pipe and fitting must be marked with the following information: weight, pressure or thickness class (as applicable), manufacturer's mark, and the letters "DI" or "DUCTILE".

PART 2 PRODUCTS

2.01 PIPE

A. Manufactured in accordance with AWWA C151.

Size (inches)	Pressure Class	Special Thickness Class
3-20	--	51
24	350	--
30-42	300	--
48-64	250	--

B. Push-on type joints conforming to AWWA C111.

C. Flanged Joints (where specified on the Drawings): Conform to AWWA C115. Ductile iron conforming to the chemical and physical properties specified in AWWA C110. Pipe to be Special Thickness Class 53. Do not thread or flange pipe in the field.

D. On raw watermain pipe provide one olive green identification stripe for the entire length of the pipe section for mains less than 12 inches in diameter. Provide 2 stripes for mains 12 inches in diameter and greater.

2.02 FITTINGS

A. Mechanical: AWWA C153 with joints conforming to AWWA C111. All buried fittings to be mechanical type.

B. Flanged: AWWA C110 for 3 inch through 48 inch and AWWA C153 for 54 inch through 64 inch. Joints to conform to AWWA C111. All above ground fittings to be flanged.

2.03 COATINGS AND LININGS

A. Cement-mortar lined in pipe used for Potable Water and Reclaimed Water Systems conforming to AWWA C104.

B. Polyethylene Encasement (where specified on the Drawings):

1. Conforms to AWWA C105.

2. 8 mil thick tube or sheet of plastic meeting ASTM D1248.

3. Exposure of wrapped pipe should be kept to a minimum.

C. Epoxy lining for pipes used in wastewater systems.

1. The lining material for pipe and fittings to be Protecto 401. Apply in strict conformance with the manufacturer's recommendations. Provide minimum 40 mils dry film thickness.

2.04 ACCESSORIES

A. Clamps, straps and washers : ASTM A 506.

B. Rods: ASTM A 575.

C. Rod Couplings: ASTM A 197.

D. Bolts and Nuts: ASTM A 307, Grade B.

E. All bolts, nuts, washers, couplings, rods, clamps, and straps are to be hot-dipped galvanized per ASTM A153.

F. Thrust Blocks: Concrete with a minimum compressive strength of 2500 psi at 28 days. Allowed only where specifically called for on the drawings.

G. Restrain pipe joints using either 'Field Lok' gaskets as manufactured by U.S. Pipe or 'Fast Grip' gaskets as manufactured by American Ductile Iron Pipe.

H. Restrain fittings, valves, and appurtenances using 'Megalugs' as manufactured by Ebaa Iron Sales, Inc.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install ductile iron pipe in accordance with AWWA C600.

B. Clean gaskets, sockets, and spigots of all foreign matter.

C. When ductile iron pipe is cut in the field, smooth the rough cut edge with a grinder or coarse file and bevel the end so that the cut end does not damage the gasket.

D. Lubricate the exposed face of the gasket and the spigot with the pipe and/or fitting manufacturers' recommended joint lubricant.

E. The interior of the pipe must be thoroughly cleaned of all foreign matter before being lowered into the dry trench and kept clean during laying operations by means of plugs or other approved methods.

F. Provide bell holes in the subgrade to accommodate the bells and to insure that the barrels are in contact with the foundation throughout it's full length exclusive of the bell.

G. Restrain from movement all reaction forces at bends (11-1/4 degrees or greater), tees, valves, and plugs by mechanical restraints as specified on the Drawings.

H. Provide minimum 30 inch depth of cover except where otherwise shown on the Drawings.

I. Coat all bolts, nuts, studs, and other uncoated parts with a coal-tar epoxy coating prior to backfilling.

3.02 CLEANING

A. Upon completion of the pipe installation, the mains are to be either canon flushed or swabbed by forcing under water pressure a soft sided swab through the mains to remove dirt and any other foreign matter.

B. When canon flushing, achieve a minimum velocity of 2.5 feet per second in the pipe. The duration of the flushing to be sufficient to provide a minimum flush volume equal to three times the internal volume of the pipeline being flushed.

C. The size of the swab is to be the same size as the main. Install launching and exit points as required for each pipe size. The swab is to be Style V, Type B as manufactured by Knapp, Inc. Supply sufficient water pressure to move the swab through the system. Should a single pass reveal, in the Engineer's opinion, an excessive amount of dirt and debris, a second pass may be required at no additional cost to the Owner. The Contractor is responsible for ensuring that all valves are properly opened or closed as appropriate to facilitate the swabbing process. Neither the Owner or the Engineer will be responsible for the swab getting hung up or stuck in a main and any resulting costs for removal.

D. The cost of canon flushing/swab cleaning, as applicable, is to be included in the cost of the pipe.

3.03 HYDROSTATIC TESTING

A. All pressure mains must be subjected to a pressure and leakage test of at least 2 hours in duration.

B. Test mains after the pipe and fittings are properly restrained but before backfilling the fittings.

C. Contractor must furnish own source of potable water.

D. The length of pipe to be tested at one time must not exceed the length allowed by the controlling utilities company, or 1500 feet, whichever is less.

E. Before applying the specified test pressure, expel air completely from the pipe, valves, and hydrants.

F. Subject pipelines to a gauge pressure of 150 psi. Subject fire service lines to a gauge pressure of 200 psi. The pressure must not vary by more than 5 psi for the duration of the test.

G. Inspect the line being tested. Stop all visible leaks by an approved method regardless of the leakage test results.

H. Maximum leakage allowed will be as set in Section 5.2 of AWWA Standard C600.

I. If leakage is at a rate in excess of that allowed, the Contractor must tighten the joints or replace the defective Work until the leakage is reduced to within the allowable amount.

3.04 DISINFECTION

A. Disinfect potable water mains in accordance with Section 02675.

3.05 FIELD OBSERVATION

A. Fittings, valves, thrust blocks, mechanical restraints, canon flushing and swab cleaning are to be observed at the option of the Engineer.

B. Engineer must be present during pressure tests.

C. All pipe and fittings are subject to visual or other inspection by the Engineer at any time. Such sections that do not conform to these Specifications will be rejected when, in the opinion of the

Engineer, the methods of manufacture fail to guarantee uniform results, where the materials used are such as to produce inferior pipe, or the pipe and/or fittings are otherwise damaged or defective.

END OF SECTION

SECTION 02626

PVC PRESSURE PIPE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. PVC pipe for potable watermains, 4 inch through 48 inch diameter.

1.02 RELATED SECTIONS

A. Section 02220 - Excavating, Backfilling and Compacting.

B. Section 02675 - Disinfecting Water Mains.

1.03 REFERENCES9

A. ASTM D1784-99 - Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.

B. ASTM D2241-00 - Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series).

C. ASTM D2672-96 - Joints for IPS PVC Pipe Using Solvent Cement.

D. ASTM F477-99 - Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

E. AWWA C153-00 - Ductile-Iron Compact Fittings, 3 inch Through 64 inch, for Water Service.

F. AWWA C605-94 - Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water.

G. AWWA C900-97 - Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 inch through 12 inch, for Water Distribution.

H. AWWA C905-97 – Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14-inch through 48-inch, for Water Distribution.

1.04 SUBMITTALS

A. Manufacturer's technical product data for pipe and fittings.

1.05 QUALITY ASSURANCE

A. Pipe for watermains and forcemains must be marked with the following information: nominal size and OD base, material code designation, dimension ratio number, AWWA pressure class, AWWA designation number, manufacturer's name or trademark, production code, and the seal of the testing agency that verified the suitability of the pipe material for potable water service.

B. Pipe for raw watermains shall be olive green in color. Pipe for forcemains shall be dark gray.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver pipe to the site in such a manner as to provide adequate protection for the pipe ends and pipe.

B. Do not store PVC pipe in a place where it can be exposed to ultraviolet sunlight.

PART 2 PRODUCTS

2.01 MATERIALS

A. Pipe for Watermains and Forcemains: 4-inch through 12-inch diameter shall be AWWA C900, Class 150, DR 18, 14-inch through 48" nominal diameter shall be AWWA C905, Class 165, DR25.

B. This space left intentionally blank.

C. Fittings: AWWA C153. For Wastewater Systems provide an epoxy lining using Protecto 401. Apply in strict conformance with the manufacturer's recommendations.

D. Thrust Blocks: Concrete with a minimum compressive strength of 2500 psi at 28 days. Allowed only where called for on the Drawings or where approved by the Engineer.

E. Restrained Fittings: 'Megalugs' as manufactured by Ebaa Iron Sales, Inc.

F. Restrained Pipe Joints: Series 1600 or 2800 Restraint Harness by Ebaa Iron Sales, Inc.

G. Flanged Connections: Flanges, as indicated on the Drawings or as required by connecting pipe, shall be AWWA C207 Class D and shall have back-up rings constructed of 316 stainless steel. All flanged connections shall have a full face neoprene flange gasket (non-asbestos) with minimum thickness of 1/16-inch. Bolts and all hardware shall be 316 stainless steel.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install PVC pipe, fittings and joints in accordance with the manufacturer's instructions and AWWA C605.

B. Install pipe with the spigots pointing in the direction of flow except in a looped water distribution system where the flow in the pipe line may be either way. In a looped system, lay pipe lines with the bell ends facing in the direction of laying pipe.

C. The interior of the pipe and fittings are to be thoroughly cleaned of all foreign matter before being lowered into the dry trench and kept clean during laying operations by means of plugs or other approved methods.

D. No trench water is allowed to enter the pipe or fittings. During suspension of Work for any reason at any time, a suitable stopper must be placed in the end of the pipe last laid to prevent mud or other foreign material from entering the pipe.

E. Lay pipe lines to grade and alignment as shown on the Drawings.

F. Provide minimum 30 inch depth of cover except where otherwise shown on the Drawings.

G. Any pipe and/or fitting found defective must be removed immediately and replaced with sound pipe.

H. Dig bell holes in the pipe subgrade to accommodate the bells. Bell holes must be deep enough to insure that the bell does not bear on the bottom of the hole and the holes are not to be excessively wide in the longitudinal direction of the pipe line. When the pipe and fittings are laid, the barrels must be in contact with the foundation throughout its full length exclusive of the bell.

I. All reaction forces at bends (11-1/4 degrees or greater), tees, valves, and plugs are to be restrained from movement by mechanical restraints as specified on the Drawings.

J. Coat all bolts, nuts, studs, and other uncoated parts with a coal-tar epoxy coating prior to backfilling.

3.02 PIPE LOCATION AND DETECTION PROVISIONS

A. Metallic Tape

1. All non-metallic pipe shall be marked in place by laying a metalized tape in the ditch 24-inches above the top of the pipe to allow for pipe location by a metal detecting device. The tape shall be color coded and labeled to identify the type of material being carried by the pipe.
2. The locator tape shall be 6-inches wide and continuous along the entire length of the pipe. The tape shall be white background with blue lettering that says "Potable Water Below". Tape shall comply with testing per ASTM B-1.

B. Tracer Wire

1. Contractor shall install a #10 THHN multi-strand copper conductor, with green insulation on to the side of the pipe along its entire length with nylon cable-ties placed at least every 10 feet.
2. Tracer wire shall be wound around each valve and extended to ground surface as show on the construction drawing details. Alternatively the wire can be terminated inside the valve box, leaving 2-feet of extra wire inside the valve box.
3. Where necessary, the wire may be spliced using a splicing lug suitable for direct bury. Such as that manufactured by King Innovations, Dry Con Direct Bury Lug or approved equal.
4. The Contractor is responsible to install the required tracer system with complete continuity of the system. Final acceptance will include the successful testing of the tracer system.

3.03 CLEANING

A. Upon completion of the pipe installation, the mains are to be canon flushed and swabbed by forcing under water pressure a soft sided swab through the mains to remove dirt and any other foreign matter.

17.4-inch diameter SDR 17 CertainTeed Certalok PVC riser casing which shall be continuous from approximately 190 feet below land surface to the wellhead as shown on the project drawings. Screen and riser casing construction, assembly and installation will be in accordance with SECTION 02745, WELL CASING and SECTION 02750, WELL SCREEN AND GRAVEL.

P. Install gravel pack in the annular space between the screen and the borehole. Gravel shall be placed using the tremmie method and continually flushed with water to a depth above the top of the screen as indicated in SECTION 02750, WELL SCREEN AND GRAVEL.

Q. Develop the well using a combination of compressed airlift development, and high velocity water jetting with simultaneous airlift development, and pump development. Initial development shall be done using air lift alone to stabilize the gravel pack. Following initial airlift shall be high velocity water jetting with simultaneous airlift. After gravel pack has stabilized, perform pump development until well meets development criteria for sand and silt content. All well development shall be performed in accordance with Section 02760, DEVELOPMENT.

R. Conduct a five step, variable rate pumping test to measure drawdown, well efficiency and water quality. A submersible test pump shall be installed according to the ENGINEER recommended pump setting depth. Pump testing shall be in accordance with Section 02775, PUMPING TESTS.

S. Perform water quality sampling of the well. Water quality sampling shall be in accordance with SECTION 02780, WELL DISINFECTION.

T. Perform a down hole camera video log of the casing and screen or open interval. Video log shall be in accordance with SECTION 02765, BOREHOLE GEOPHYSICAL LOGGING AND VIDEO LOG.

U. Clean out development solids from well screen if necessary, as determined by ENGINEER.

V. Complete the wellhead per the drawings as specified.

W. The CONTRACTOR shall disinfect the well as soon as construction of the well, wellhead and cleaning procedures are completed or at another time if instructed to do so by the ENGINEER. Disinfection shall be in accordance with SECTION 02780, WELL DISINFECTION.

X. Perform complete site restoration as described in project specifications.

END OF SECTION

SECTION 02725

SUBMITTALS

PART I GENERAL

1.01 WORK INCLUDED

Submit to the ENGINEER shop drawings, project data and samples required by specification sections.

1.02 SCHEDULE

CONTRACTOR shall prepare and submit, with Construction Schedule, a separate schedule listing dates for submission of shop drawings and projected return dates.

PART II PRODUCTS

2.01 PROJECT DATA

A. Manufacturer's standard schematic drawings:

1. Modify drawings to delete information that is not applicable to project.
2. Supplement standard information to provide additional information applicable to project.
3. All proposed products for well construction.
4. Proposed construction of transition coupling from screen to riser casing.

B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.

1. Clearly mark each copy to identify pertinent materials, products or models.
2. Show dimensions and clearances required.
3. Show performance characteristics and capacities.

C. A list of materials and equipment for the disposal of formation water.

D. A list of drilling equipment, settling tanks, and pumping equipment to be used for the construction of the well.

E. Documentation of welder's certification.

F. Flow meter calibration certificates.

2.02 SAMPLES

Physical examples to illustrate materials, equipment or workmanship and to establish standards by which completed work is judged, including but not limited to gravel pack material.

PART III EXECUTION

3.01 CONTRACTOR RESPONSIBILITIES

A. Review Shop Drawings, Project Data and Samples prior to submission.

B. Verify:

1. Field measurements.

2. Field construction criteria.

3. Catalog numbers and similar data.

C. Coordinate each submittal with requirements of Work and of Contract Documents.

D. Notify ENGINEER, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.

E. Begin no work that requires submittals until return of submittals with ENGINEER's stamp and initials or signature indicating review.

F. After ENGINEER review, distribute copies as required.

3.02 SUBMISSION REQUIREMENTS

A. Schedule submissions at least 14 days before dates reviewed submittals will be needed.

B. Submit 8 copies of Shop Drawings, Project Datum and Samples which CONTRACTOR requires for distribution plus 4 copies that will be retained by the ENGINEER.

C. Accompany submittals with transmittal letter, in duplicate, containing:

1. Date.

2. Project title and number.

3. CONTRACTOR's name and address.

4. Notification of deviations from Contract Documents.

5. Other pertinent data.

D. Submittals must include:

1. Date of submittal and revision dates.

2. Project title and number

3. The names of:
   a. Engineer
   b. Contractor
   c. Subcontractor
   d. Supplier
   e. Manufacturer
   f. Separate detailer when pertinent

4. Identification of product or material.

5. Relation to adjacent structure or materials.

6. Field dimensions, clearly identified as such.

7. Identification of deviations from Contract Documents.

8. CONTRACTOR's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract Documents.

3.03 RESUBMISSION REQUIREMENTS

A. Shop Drawings:

1. Revise initial drawings as required and resubmit as specified for initial submittal.

2. Indicate on drawings any changes which have been made other than those requested by ENGINEER.

B. Project Data and Samples:

Submit new datum and samples as required for initial submittal.

END OF SECTION

SECTION 02740

WELL DRILLING

PART I GENERAL

1.01 SCOPE OF WORK

This section covers the work, materials, and equipment necessary for drilling the boreholes for the production well.

1.02 SUBMITTALS

A. A list of any drilling additives intended for use on this project shall be submitted to the ENGINEER prior to drilling activities.

B. A list of drilling equipment to be used on this project shall be submitted to the ENGINEER prior to mobilization, including drill bit diameters and dimensions of staged bit assemblies proposed for drilling.

C. Location for disposal of waste solids.

D. Drilling fluid solids management system specifications, mud pump type and pump curve, and anticipated up-hole mud velocities during drilling shall be submitted to the ENGINEER.

PART II PRODUCTS

2.01 DRILLING EQUIPMENT

A. All equipment shall be in good working condition and suitable for the proposed work. The CONTRACTOR will provide assurances that he has the proper equipment to adequately complete the project and overcome possible complications. The CONTRACTOR shall provide all materials, equipment and labor reasonably inferable and required for proper completion of the work whether specifically outlined in the Contract Documents or not.

B. The OWNER will reserve the right to inspect the equipment of each CONTRACTOR submitting a bid as a part of the evaluation of bids.

C. The CONTRACTOR will provide all tools, bits, and all other necessary equipment for drilling.

D. Drilling equipment shall be capable of performing applicable drilling methods within the established time of construction.

E. The CONTRACTOR will take special precautions to reduce to a minimum the nuisances and damage to property which could result from working adjacent to a road. Any damage to public or private property will be immediately repaired or paid for by the CONTRACTOR at no expense to the OWNER. Equipment, tools and materials will be located in places where they will produce a minimum of nuisance. CONTRACTOR will take appropriate action to minimize noise, light and other nuisances caused by the drilling operation. The appropriate warning signs will be posted on the streets and the appropriate police will be informed of the location of the construction site.

2.02 DRILLING FLUID

The CONTRACTOR will provide all drilling fluids, water, and additives as required. ENGINEER approved non-potable water added to the well will have a minimum chlorine residual of 50 ppm.

2.03 TEST AND SAMPLING EQUIPMENT

A. Provide equipment for measuring drilling fluid properties including a marsh funnel, viscosimeter, filter press and a fluid density balance.

B. Provide sampling bags or containers for collection and storage of formation samples.

PART III EXECUTION

3.01 GENERAL REQUIREMENTS

A. Notify the ENGINEER 7 days prior to drilling. Normal working hours shall be compliant with the City Code. Should the CONTRACTOR desire to carry on his work at night or outside regular working hours, they shall submit written notice to the OWNER/ENGINEER and allow a minimum of 48 hours for satisfactory arrangements to be made and for inspecting the work in progress.

B. Provide at all times a thoroughly experienced, competent, and Florida licensed driller during all operations at the drill site. Provide sufficient competent driller's helpers during all operations at the drill site.

3.02 DRILLING

A. Anticipated borehole depths and diameters for the test well and the Surficial Aquifer production well is depicted on the project drawings. Borehole diameters are considered nominal dimensions. The CONTRACTOR shall recommend the appropriate bit size for drilling the correct borehole diameter. Borehole depths provided in the specifications are estimates, only; actual depths may vary and will be determined by the ENGINEER.

B. Boreholes shall be advanced in such a manner that the drilled hole will proceed straight and plumb. The drilling rate shall be optimized for cuttings removal with minimal mixing and accurate formation sample collection. Pilot boreholes shall be advanced in 5-feet increments for more accurate sample collection. Cuttings shall be predominantly cleared from the borehole at the end of each increment (5-feet increments for pilot holes and reverse air drilled holes, 20 feet increments for reamed holes).

C. Boreholes shall be drilled and conditioned to permit geophysical logging and casing installation as per SECTION 02740, DRILLING and SECTION 02745, WELL CASING. The borehole shall be cleared of cuttings and stable to permit subsequent tasks to be completed without impairment.

D. The reaming assembly shall consist of a lead bit with the same outer diameter as the pilot hole and progressively larger diameter bits up to the reamed hole diameter. The reaming assembly should not exceed 8 feet in length.

3.03 DRILLING FLUIDS

A. All drilling fluid storage tanks shall be above ground. Dug mud pits will not be permitted. Tanks shall be of sufficient length and construction to allow settling or removal of cuttings and prevent their reintroduction to the borehole. A mud system shall be used that includes a vibratory shale shaker and centrifugal desanders. Mud tanks shall be of sufficient length and construction to allow settling or removal of cuttings and prevent their reintroduction to the borehole.

B. The CONTRACTOR shall routinely monitor and record drilling fluid properties including mud weight, viscosity, gel strength, pH, liquid and solids content. Monitoring shall be in accordance with manufacturer's recommendations, AWWA and International Association of Drilling Contractors (IADC). The mud and solids management systems used by the CONTRACTOR for this project shall meet the CONTRACTOR's proposed drilling fluid manufacturer specifications for the intended application.

3.04 ALIGNMENT REQUIREMENTS

A. Pilot holes and reamed holes shall be drilled round and straight throughout.

B. The completed well will be sufficiently plumb and straight so that there will be no interference with installation, alignment, operation or future removal of the permanent well pump.

3.05 COMPLIANCE WITH GOVERNMENTAL REGULATIONS

Construct the well in strict conformance with all laws, rules, regulations, and standards related to the construction of wells in the State of Florida and local regulatory agencies.

3.06 FORMATION SAMPLES

A. One (1) set of representative formation samples shall be collected by the CONTRACTOR for the well. Samples shall be taken at each 5-foot level and each change in formation or material type. The method must yield samples that are representative of the actual depth to which drilling has progressed.

B. Each sample shall be approximately 8 ounces and be placed in a cotton, soil sample bag, Hubco or equivalent, or as approved by ENGINEER. Each sample shall be labeled with the date, well identification, and depth from which the sample was taken clearly marked on the container in indelible ink. The CONTRACTOR will store and protect the samples from damage or disturbance until they have been released to and accepted by the ENGINEER.

3.07 DRILLING LOGS

A. Prepare a daily drilling log for inspection and submittal to the ENGINEER. Include in the log the depths and type of geologic formation encountered; drilling penetration rate, in minutes, for each five feet interval; general formation hardness based on drilling; type of drilling, chemical, water and mud additives; loss of circulation zones; additives to the well to control flow; water added to supplement reverse air drilling; problems during drilling; date, time, and depth for each entry. The log shall be kept current with a copy located at the drill site. The CONTRACTOR shall maintain an up to date drill string tallies and will be available for inspection by the ENGINEER.

B. A final well log shall be prepared that includes copies of the above. An as-built drawing of the well shall be submitted showing casing dimensions and details; screen and riser dimensions; gravel pack type, size, placements depths; and borehole dimensions.

C. Submittals will be made as required to the appropriate regulatory agencies per the applicable local, state and federal regulations. The CONTRACTOR will provide copies of all submittals to the ENGINEER.

3.09 WASTE DISPOSAL

A. All solid and liquid waste, including but not limited to drilled solids, cuttings, drilling mud, drilling additives, spent or unused chemicals and unused products shall be disposed of or recycled by the CONTRACTOR in an environmentally responsible manner and in accordance with applicable regulations. The disposal or recycling location must be identified in a submittal to the ENGINEER. Prior to disposal, the location must be accepted by the ENGINEER. The CONTRACTOR will prevent wastes from migrating from the designated construction area and cuttings storage area. The CONTRACTOR will promptly clean up drilling by-products that migrate outside of the designated construction area. Further, the CONTRACTOR will minimize the spillage of formation water at all times and promptly repair leaks where formation water may be released to the ground surface.

B. Remove from the drilling site all cuttings and other material removed by the drilling operations that are not required to complete the work. Solid material shall be disposed of in accordance with local and state regulations at an approved disposal site, approved by the ENGINEER. Removal of cuttings, mud and formation water from the site is considered incidental to the Work and does not constitute additional payment to the CONTRACTOR.

C. Depressions left in the land surface from the cleanup of residues, or for any other reason resulting from the CONTRACTOR's activities, shall be filled with clean fill material and graded smoothly.

END OF SECTION

SECTION 02676

WELL CASING

PART I GENERAL

1.01 SCOPE OF WORK

This section covers the work, equipment and materials necessary for furnishing and installing the well casing.

1.02 SUBMITTALS

Provide manufactures specifications and technical data on all casings to be provided for well construction.

PART II PRODUCTS

2.01 GENERAL REQUIREMENTS

A. All casings will be approved for use in municipal public supply wells, and to the specifications as outlined. Casing material and dimensions are provided in SECTION 02720, WELL CONSTRUCTION SEQUENCE and contract drawings. The CONTRACTOR will furnish and satisfactorily install each string of casing. All casings will be new, unused and in good physical condition. Warped or damaged casing will be rejected.

B. The Contract will indicate an estimate for the amount of casing. The OWNER or the ENGINEER will determine actual lengths. The CONTRACTOR shall be responsible for ensuring that the selected casing will withstand all stresses of construction without impairment.

C. The CONTRACTOR will provide the ENGINEER with an inventory of all casing delivered to the site and maintain a tally during installation.

D. All casing sections shall each be clearly marked with type, grade and manufacturer. If required by the ENGINEER, the CONTRACTOR shall provide additional backup supporting documentation from the manufacturer. Casing connections shall meet manufacture specifications for water tightness. Connections shall have equal strength as the casing itself.

2.02 STEEL CASING

A. All steel casing shall be new and unused carbon steel pipe that conforms to API 5L grade B. Wall thickness shall be a minimum 0.375 for the 30-inch,

and 24-inch diameter casings.

B. Steel casing mill certificates for each and every delivered pipe section planned for use in the well construction shall be submitted to the ENGINEER by the CONTRACTOR prior to delivery of the casing to the site.

2.03 POLY VINYL CHLORIDE (PVC) CASING

A. PVC casing and couplings shall be SDR17 Certa-lok by CertainTeed or equivalent. Any equivalent casing selected must be shown to have sufficient joint and tensile strength, internal pressure rating, resistance to collapse and ability to withstand all stresses of construction. Any alternates must be approved in advance by the ENGINEER.

B. All casings shall be clearly marked with type, grade and manufacturer. If required by the ENGINEER, the CONTRACTOR will provide additional backup supporting documentation from the Manufacturer.

C. Only the PVC manufacturer approved joint compound will be used for pipe assembly. The joint compound will be approved for water well construction.

D. Only Certainteed Certa-lok splines will be used with Certa-lok couplings. The CONTRACTOR shall provide a copy of the installation and connection procedure on site for review prior to casing assembly. The fabricated reducer bushing shall have strength equal to or greater than the couplings.

E. Final PVC well casing shall be completed as shown on the drawings.

F. Bills of lading shall be provided for casings delivered for well construction.

2.04 CENTERING GUIDES

A. Casing centering guides (centralizers) will be placed on all casing strings, prior to installation, at 30-foot intervals with the first set of centralizers placed within 5 feet from the bottom of the casing. Centralizers will be fixed to the casing at coupling locations.

B. Centralizer material will be steel when attached to carbon steel and stainless steel when attached to PVC casing. Guides will be welded when attached to steel; and steel strapped to PVC.

C. Fixed centering guides shall extend outward from the casing to within 1/2 inch of the maximum drill bit dimension.

PART III EXECUTION

3.01 GENERAL

A. Casings will be installed and completed as described in the specifications and drawings. Actual casing depths will be determined by the ENGINEER.

B. The casing installation method shall be approved in advance by the ENGINEER and be consistent with manufacturer specifications.

C. Casing failure by any means, including but not limited to: any collapse, breakage, separation, dents, tears or rips during construction that in any way impairs the use of the well in the opinion of the ENGINEER, shall be repaired or replaced at the CONTRACTOR's sole expense.

D. Casing connections shall meet manufacture specifications for water tightness. Connections shall have equal strength to the casing itself.

E. Steel casings shall have machine cut beveled ends and will be arc welded together by the standards of the American Welding Society. Welded casings shall be straight and true of alignment to the satisfaction of the ENGINEER. Only certified welders may perform the outlined work; proof of certification must be presented to the OWNER if requested

F. Casing elevators must be approved by the ENGINEER before use.

END OF SECTION

SECTION 02750

WELL SCREEN AND GRAVEL PACK

PART I GENERAL

1.01 SCOPE OF WORK

This section covers the work, equipment and materials necessary for furnishing and installing the well screen and gravel pack.

1.02 SUBMITTALS

A. Provide data on all proposed additives and manufacturer's specifications.

B. Provide manufactures specifications and technical data on all screens and gravel to be provided for well construction.

C. Provide grain size distribution data on gravel pack and a 16 ounce sample prior to use.

D. Provide shop drawings showing screen/PVC casing transition coupling.

PART II PRODUCTS

2.01 GENERAL REQUIREMENTS

A. All screens shall be approved for use in municipal public supply wells, and to the specifications as outlined. The CONTRACTOR shall furnish, satisfactorily install and gravel pack the string of well screen and riser casing. All screens, riser casings couplings and adapters shall be new, unused, in good physical condition and delivered to the site in the original protective wood crates as provided by the manufacturer. Warped or damaged materials will be rejected.

B. The well screen to be used in the construction of the 4-inch test well shall be 10 foot length, continuous slot, 0.020 inch slot size, or as directed by the ENGINEER. Gravel for the 4-inch test well will be Standard Sand and Silica Company, "Sand", 6 by 14, gravel, or equivalent.

C. The well screen to be used for the construction of the production well shall be continuous slot, type 316 stainless steel well screens, of V-slot design, manufactured by Johnson Well Screens, Inc., or approved equal. Screen section shall be joined by welding connections. The weld will not decrease the corrosion resistance of the screen.

D. The ENGINEER will determine the screen slot size within 5 working days of borehole drilling completion. Blank sections within the screened interval shall be "tight wound" type 316 stainless steel screen having less than 0.001" slot openings.

E. The Bidding Documents indicate an estimate of the screen length. Actual lengths shall be determined by the ENGINEER.

2.02 RISER CASING

A. Riser casing shall consist of 17-inch diameter (O.D.) SDR17 Certainteed Certa-lok PVC casing and be in accordance with the casing requirements provided in Section 02745, WELL CASING. For estimation purposes, the riser interval is shown on the project drawings; however, the amount of riser required may change based on the amount required. The riser will be continuous from the top of the screen to land surface or as determined by the ENGINEER.

B. The riser casing will be securely connected with a coupling adapter to the stainless steel screen by a manufacturer and ENGINEER approved method. The CONTRACTOR is responsible for the intact placement of the screen and riser pipe to the depth specified by the ENGINEER.

2.03 CENTERING GUIDES

A. Casing centering guides (centralizers) shall be placed on the screen and casing, prior to installation, at 30 feet intervals with the first set of centralizers placed within 5 feet from the bottom of the screen. Centralizers shall be fixed to the casing at weld ring or coupling locations. Centralizers shall be aligned so that they do not interfere with installation of gravel and cement installation tubing.

B. Centralizer material shall be stainless steel when attached to stainless steel, and carbon steel when attached to PVC. Guides shall be welded when attached to steel; and screw attached using a 1/4 inch screws or lags that penetrate not more than 80 percent of the coupling and casing when attached to PVC. Any casing penetrated will be rejected and shall be replaced at the CONTRACTOR'S expense.

C. Centralizer material shall be non ferrous and will not attached by drilled into the casing. No ferrous materials will be used for attachment.

2.04 GRAVEL PACK MATERIAL

A. Gravel pack material shall be a minimum of 95% silica, approved by the ENGINEER, sorted and graded so that there is 90% retention on the well screens installed. The CONTRACTOR shall provide a grain size analysis of gravel to be used during well construction. Based on the CONTRACTOR provided sample and grain size analysis, the ENGINEER shall provide to the CONTRACTOR well screen slot size.

B. The type of gravel pack selected will be from a supplier located within the State of Florida.

PART III EXECUTION

3.01 GENERAL

A. Screens and casing risers shall be installed as described in the specifications and drawings. Actual casing depths will be determined by the ENGINEER.

B. The screen assembly and installation method shall be approved in advance by the ENGINEER and be consistent with manufacturer specifications.

C. Gravel pack will be installed in a water slurry by the tremmie method. The base of the tremmie pipe shall be placed at the gravel placement depth and be moved upward consistent with the gravel fill depth.

D. Water required for the construction of the well shall be potable and meet primary and drinking water standards pursuant to Chapters 62-3 and 62-550 Florida Administrative Code.

E. Screen or casing failure by any means, including but not limited to: collapse, breakage, separation, dents, tears or rips during construction, that in any way impair the use of the well in the opinion of the ENGINEER, shall be repaired or replaced at the CONTRACTOR's sole expense.

F. Casing connections shall meet manufacture specifications for water tightness. Connections shall have equal strength as the casing itself.

END OF SECTION

SECTION 02755

ANNULAR GROUT

PART I GENERAL

1.01 SCOPE OF WORK

This section covers the labor, equipment and materials required to furnish and install the annular grout for casing installations.

1.02 SUBMITTALS

A. Provide data on all proposed additives and manufacturer's specifications.

B. Provide bulk cement units weight tickets for verification of cement quantities pumped.

C. After cementing, provide cement slurry weight data for each grouting stage.

PART II PRODUCTS

2.01 GENERAL REQUIREMENTS

D. The CONTRACTOR shall furnish and install all grout and additives as specified.

E. Provide a method of measurement to determine the weight in pounds per gallon of cement slurry to confirm proper mix ratios. Samples of the cement slurry shall be collected, weighed and recorded. The correct mix ratios shall be maintained. If performed in batches, provide slurry weight and collect sample for each batch mixed. If performed in continuous mixing, provide slurry weights and collect samples at the beginning, middle, and end of pumping for each grouting stage.

2.02 PORTLAND CEMENT

Cement grout shall be API class B Portland cement and conform to ASTM C150, Type II standards.

2.03 BENTONITE

Bentonite furnished for cementing shall be raw bentonite and be added at the bulk facility and thoroughly mixed at the ratio specified. Small batches (less than 50, 94 lb. bags of cement) of grout may be mixed on site.

PART III EXECUTION

3.01 GROUTING

A. The CONTRACTOR is solely responsible for the successful execution of grouting. Annular grout shall be in conformance with all applicable local and state regulations.

B. The CONTRACTOR is solely responsible for defects in the grout or grouted interval. The CONTRACTOR shall take all precautions to protect the casing from collapse or damage during grouting. Any defects in the grout job or casing damage resulting from grouting shall be corrected by the CONTRACTOR at his own expense.

C. The CONTRACTOR shall provide adequate notice prior to cementing to enable the ENGINEER to observe all cementing operations.

D. Provide a method of measurement to determine the weight in pounds per gallon of cement slurry to confirm proper mix ratios. A sample of the cement slurry shall be collected at the beginning and end of each cementing phase, weighed and recorded. The correct mix ratios shall be maintained.

E. If grouting is to be conducted in stages, the top of the hardened grout from the previous grouting stage will be measured in the presence of the ENGINEER prior to each cementing stage. Each cementing stage shall be given 12 hours of curing time prior to resuming cementing. It is the responsibility of the CONTRACTOR to determine the collapse strength of the casing and the appropriate amount of grout for each grouting stage. Cementing calculations shall be reviewed with the ENGINEER in advance of each grouting stage.

F. The grout mixture for the initial grouting stage after each casing installation shall be API Class B neat Portland cement mixed with no more than 6 gallons of water per sack of cement. At a minimum, the neat cement mixture shall be used to grout the lower 40 linear feet of casing. Additional grouting stages after casing installation above the initial grouting stage will be API Class B Portland cement mixed with up to 6% bentonite and no more than 9 gallons of water per sack of cement. Only potable water shall be used for the grout mix.

3.02 SETTING TIME

A. Each cement stage should be allowed to set for at least 12 hours and its level measured before proceeding with the next stage. Cement will be allowed to cure 48 hours before continuation of drilling operations.

END OF SECTION

SECTION 02760

WELL DEVELOPMENT

PART I GENERAL

1.01 SCOPE OF WORK

A. This section covers the labor, equipment and materials required to perform development of the well.

B. The CONTRACTOR shall develop the well using a combination of compressed air, jetting with simultaneous airlift, and pumped water, until, to the satisfaction of the ENGINEER, the discharge water is free of sediments and the gravel pack has stabilized.

C. The CONTRACTOR is solely responsible, by any and all methods necessary, to meet the requirements for discharge of water. If the CONTRACTOR fails to fulfill proper requirements of discharge water, the CONTRACTOR is responsible for complete restoration of the discharge location to the original condition at no cost to the OWNER.

PART II PRODUCTS

2.01 DEVELOPMENT EQUIPMENT

A. Provide all pumps, motors, air compressors and other ancillary equipment needed to develop the well to the extent that, as practical, suspended solids are removed from the well bore. Provide all pipe, fittings, and valves required to transmit discharge water from the pump to the settling tanks as required in SECTION 02785, FORMATION WATER DISPOSAL SYSTEM.

B. The test pumping equipment shall have access ports, water level measurement setup and discharge piping as required in SECTION 02775, PUMPING TESTS.

C. The CONTRACTOR shall provide a calibrated flow meter near the pump. The flow meter shall be accurate and precise within the range of 300 gpm to 2,000 gpm. The placement of the flow meter shall be in accordance with manufacturer recommendations for flow meter placement. The CONTRACTOR shall also consult the ENGINEER for optimal flow meter placement. Air release valves shall be provided and installed by the CONTRACTOR. The CONTRACTOR shall supply an orifice weir or other ENGINEER approved method to verify pumping rates.

PART III EXECUTION

3.02 WELL DEVELOPMENT

A. Develop the well using compressed air lift at a minimum air flow rate of 750 cubic feet per minute. The base of the air discharge will be set at the base of the screen during initial the development period. The initial airlift phase shall be not less than 8 hours. This step shall be considered initial development to remove the majority of drilling fluid from the borehole and to confirm the stability of the gravel pack. Air development shall include varying the depth of air discharge and periodically surging the well with the use of a surge tank. The top of the gravel pack shall be continuously monitored during air lift. If the top of the gravel pack is below the top of the desired level, then gravel must be added.

B. Following initial development, high velocity jetting shall be done using chlorinated water for a period of time to be determined by the ENGINEER. A high velocity jetting tool having 4 nozzles shall be rotated and moved vertically throughout the entire screened portion of the well while chlorinated water is forced through the screen and into the gravel pack. The jetting tool and pumping equipment shall deliver a minimum flow rate of 500 gpm per nozzle. Each shall have an internal diameter of 1.0 inch. Alternate nozzle sizes and flow rates may be proposed. However, a minimum jetting velocity of 50 feet per second shall be maintained. The initial phase of jetting shall be done using a solution of BMR and chlorinated water having a minimum chlorine concentration of 50 milligrams per liter (mg/l). Thereafter, fresh water may be used for jetting development. Occasionally, at the direction of the ENGINEER, accumulating sand in the screen shall be removed by lowering the air lift set up to the bottom of the well.

C. After thoroughly jetting and surging the well with the jetting tool, well development shall be completed using air lift at the base of the screen to clean out development solids from borehole or directed by the ENGINEER.

D. Throughout development, at intervals specified by the ENGINEER, the CONTRACTOR shall conduct sand testing. Sand testing shall be conducted using a Rossum Sand Tester, or approved equal method.

E. On a daily basis prior to start-up of airlift and jetting development and at other times as directed by the ENGINEER, the CONTRACTOR shall pump the well and accurately measure the static water level, drawdown, specific capacity and depth to the gravel pack. The pump shall be capable of a discharge rate of 100 gpm with a minimum drawdown of 25 feet below the pump level.

F. After air lift and jetting with simultaneous airlift developments, the CONTRACTOR will continue development using the test pump setup (as described in SECTION 02775, PUMPING TESTS). The CONTRACTOR

shall pump surge the well until, to the satisfaction of the ENGINEER, the pump discharge water is free of suspended material. The test pump will be capable of maintaining a steady pumping rate of 2,000 gallons per minute (gpm) and on/off surging.

G. Upon completion of development or at other times as directed by the ENGINEER, the CONTRACTOR will check the total depth of the well in the presence of the ENGINEER.

3.03 DISCHARGE WATER

A. The CONTRACTOR shall construct temporary settling tanks for settlement of solids from the discharge water in accordance with SECTION 02785, FORMATION WATER DISPOSAL SYSTEM. A transfer pump shall be used to pump discharge water to the designated outfall location if required by the ENGINEER. The CONTRACTOR shall provide sufficient temporary piping to transmit formation water from the well site to a discharge point as shown on the Contract Drawings. The CONTRACTOR shall set up and maintain discharge water transmission hose as determined necessary.

B. Discharge water shall always be contained and under control by the CONTRACTOR. Any erosion that results from the discharge water shall be immediately repaired by the CONTRACTOR to its previous non-eroded condition.

C. If required by the ENGINEER, silt booms will be provided, installed and maintained by the CONTRACTOR in any surface water body receiving the discharge water.

D. The CONTRACTOR shall ensure that the discharge water does not impact adjoining property unless it is specifically approved by the ENGINEER, does not flood streets or impede any traffic flow in any way, and does not cause a nuisance in general.

END OF SECTION

SECTION 02674

BOREHOLE GEOPHYSICAL LOGGING AND VIDEO LOG

PART I GENERAL

1.01 SCOPE OF WORK

A. This section covers the equipment, work and materials necessary to perform geophysical logging of the well.

B. Provide the following geophysical logging and well survey equipment:

1. Dual Induction and single point resistivity logs.
2. Natural gamma log.
3. Spontaneous potential log.
4. Caliper log.
5. Video log.

PART II PRODUCTS (NOT USED)

PART III EXECUTION

3.01 GENERAL

A. All logging shall be supervised by the ENGINEER with 24 hours advanced notice. The CONTRACTOR is responsible to ensure that logs are complete and include the entire borehole and cased intervals as directed by the ENGINEER. Logging should be done as soon as possible after the drilling tools have been removed from the logged interval.

B. When the hole has been drilled to a depth determined by the ENGINEER, it must be prepared for geophysical logging. Borehole preparation will include but not be limited to: i) continuation of drilling fluid circulation until drill cuttings have been removed from the borehole, and the fluid is uniform in the borehole; or ii) reverse air pumping until the discharge water is free of cuttings and suspended sediment. The CONTRACTOR must make all reasonable efforts to

leave the borehole free from obstructions in preparation for geophysical logging. Logging must be done immediately following the completion of borehole preparation unless otherwise stated in the Contract or as stipulated by the ENGINEER.

C. Each log must be run and recorded in a continuous fashion to qualify as an acceptable log.

D. The CONTRACTOR is responsible to ensure that the logs are complete. Any obstructions or fill material or borehole of reduced diameter more than 1/2-inch in the borehole or cased intervals will be removed or reamed by the CONTRACTOR at his own expense.

E. All logs will include a repeat section of not less than 50 feet of the portion of the hole. The ENGINEER will determine the repeat section.

F. All logs shall be appropriately labeled with all appropriate information. Two (2) field copies shall be made available to the ENGINEER upon completion. Five (5) copies of finished logs are to be provided within two weeks of logging. The CONTRACTOR will furnish three (3) copies of the video to the OWNER.

G. A down hole video log in DVD format will be conducted to inspect the casing and screened interval of the well prior to demobilizing the drilling rig. The video will be conducted in the presence of the ENGINEER. The video camera lens will be color and capable of 360 degree movement; be controlled by the logging technician; be independent of the camera body; and have focus capability. The video camera will be centralized in the borehole. The centralizers will self-adjust to different casing and hole sizes as necessary. If the ENGINEER determines that the video is unacceptable due to poor quality, the CONTRACTOR at his expense will obtain the necessary equipment to perform additional logging to the satisfaction of the ENGINEER.

H. Video logging will be conducted under both static and pumping conditions at the direction of the ENGINEER. CONTRACTOR shall ensure that the well is pumped sufficiently to ensure adequate visibility for the video survey as determined by the ENGINEER. CONTRACTOR shall use a submersible pump capable of a minimum of 500 gpm discharge rate.

I. Following completion of the well video, the CONTRACTOR shall clean out development solids from borehole if necessary, as determined by ENGINEER at no additional cost to the OWNER.

SCHEDULE OF GEOPHYSICAL AND VIDEO LOGS

Construction Phase	Log Type
8-inch pilot borehole (0 feet to 300 feet)	Dual Induction, single point res., SP caliper, gamma ray
Well Completion	Video with rotating lens

END OF SECTION

SECTION 02770

TEST WELL INTERVAL SAMPLING

PART I GENERAL

1.01 SCOPE OF WORK

A. This section covers the work, equipment and materials necessary for furnishing and installing the test well and performing interval sampling.

B. The purpose of the interval sampling is to determine aquifer quality. Representative groundwater samples will be collected from approximately six (6) intervals between the depths of approximately 50 feet and 300 feet below land surface. Sampling depth will be based on pilot hole results.

C. The test well shall be located at the well location as shown on project drawings. Following interval sampling, the test well will be converted into the final production well. Details for the final production well are outlined in the project drawings and in the well construction sequence.

D. An alternate interval testing and sampling program may be proposed by the CONTRACTOR however; at a minimum the CONTRACTOR must have the capability to perform the work as specified.

1.02 SUBMITTALS

Provide manufacturer specifications and technical data on well casing and screen used for installation in the test well.

PART II PRODUCTS

2.01 GENERAL REQUIREMENTS

A. At a minimum, casings shall conform to the requirements specified in SECTION 02745, WELL CASING.

2.02 TEST WELL CASING

A. The test well casing shall have a minimum diameter of four (4)-inches. The CONTRACTOR will recommend the appropriate schedule of casing for use in the test well for ENGINEER approval based on the CONTRACTOR'S experience. Test well casing material shall be recommended by the CONTRACTOR; material must be of sufficient strength to withstand the process of test well interval sampling.

2.03 TEST WELL SCREEN

A. The CONTRACTOR shall recommend a screen that will withstand the stresses of installation, development, and sampling without collapse or impairment of the water sampling program. Test well casing and screen material will be determined by the CONTRACTOR. Material shall be new and unused and conform to ASTM standards.

B. The selected screen shall have sufficient tensile and collapse strength to withstand the proposed testing program.

2.04 GRAVEL PACK

Gravel pack material shall be as standard for 0.020 inch slot screen as specified in SECTION 02750, WELL SCREEN AND GRAVEL PACK.

PART III EXECUTION

3.01 GENERAL

A. The test well will consist of approximately 290 feet of 4-inch diameter casing and 10 feet of 0.020 inch slot screen. The test well will be installed in the 8-inch diameter pilot hole at a depth of approximately 300 feet and gravel packed to surface.

B. Following test well and gravel pack placement, the test interval will be developed as outlined in SECTION 02760, WELL DEVELOPMENT using air lift, surge block, surge pumping or another ENGINEER approved method. After development of the interval, a test/sampling submersible pump will be installed in the test well so that a representative water sample can be retrieved from the test interval. A sample shall be collected when each interval has been developed to the satisfaction of the ENGINEER. Each interval zone testing is anticipated to take approximately 2 to 3 hours for completion, however, may vary from interval to interval.

C. Following successful water sampling, the 4-inch diameter test well and screen will be pulled up to the next higher interval to be sampled. The test well will then be gravel packed again and the process of development and water sampling repeated for up to five (5) samples.

D. The process of sampling and pulling back the test well will be repeated at various depths until the uppermost sample has been collected.

E. Following interval sampling, the test well materials will be removed and the borehole will be converted to production well LW-16.

F. An alternate interval testing and sampling program may be proposed by the CONTRACTOR. However, at a minimum the CONTRACTOR must have the capability to perform the work as specified.

G. The CONTRACTOR will re-drill, replace and re test any test well component, tool, pump or any associated component that fails for any reason before representative samples are obtained.

H. An alternate interval testing and sampling program may be proposed by the CONTRACTOR however; at a minimum the CONTRACTOR must have the capability to perform the work as specified. Any alternate plan shall be paid for in the same manner as specified in the bid form.

END OF SECTION

SECTION 02775

PUMPING TESTS

PART I GENERAL

1.01 SCOPE OF WORK

This section covers the labor, equipment and material required to perform a step rate pumping test on the production well. The scope of work specified in this section also may be applicable to other sections by reference in those sections.

1.02 SUBMITTALS

Provide certificates of calibration for flow meters to be used for flow measurement by the ENGINEER.

PART II PRODUCTS

2.01 TEST PUMP

A. Furnish the necessary instruments and pumping equipment capable of pumping at a steady rate ranging from 300 gpm to 2,000 gpm with a throttling device and gate valve so that the flow rate can be adjusted as directed by the ENGINEER.

B. Furnish a gate valve, orifice plate and manometer to control and measure discharge. The CONTRACTOR shall supply an orifice weir or other ENGINEER approved method to verify pumping rates.

C. Provide and install a 1 1/4-inch ID drop tube between the pump column and casing, from the water level access fitting at the wellhead to 5 feet above the pump intake. The drop tube will enable the ENGINEER to measure water levels without interference of the pump or pump column.

2.02 FLOW METER

Provide a calibrated flow meter with direct measurement and a totalizer to measure flow. Anticipated metered flows shall range from 300 to 2,000 gpm. Certification shall be no older than 60 days prior to notice to proceed and attest to an accuracy of 95 percent or greater for the range of the meter. The CONTRACTOR will supply an orifice weir to verify pumping rates.

2.03 DISCHARGE PIPING

Discharge water will be conveyed via pipe, hoses, fittings, and valves required to transmit discharge water from the pump to discharge point.

PART III EXECUTION

3.01 PUMPING TEST

A. Install and operate the pumping test equipment. Pumping test shall consist of five steps to be performed at rates of between approximately 300 and 2,000 gpm or at other rates determined by the ENGINEER. Step duration shall continue until drawdown in the production well stabilizes or a maximum of approximately two hours per step. The CONTRACTOR shall determine the appropriate engine and gate valve settings for the desired pumping rate prior to the start of the test in order to achieve a constant rate as soon as possible after the start of the test.

B. Sufficient time shall be permitted for the ENGINEER to collect a static water level in the well prior to step rate and constant rate pumping tests. The static water level shall be measured by the CONTRACTOR prior to the start of pumping.

C. At the option of the ENGINEER, a longer steady rate pumping test shall be conducted by the same method as described above. Payment for pump tests shall be at the hourly pumping test rate regardless of duration.

D. The CONTRACTOR shall furnish a gate valve, orifice plate and manometer to control and measure discharge.

E. Discharged water shall be conducted from the pumped well to a location shown on the Contract Drawings or as otherwise directed by the ENGINEER. Discharged fluid shall be piped so as to prevent the recirculation of the discharged water into monitored aquifers.

F. All equipment necessary to conduct these tests shall be supplied, operated, manned, and maintained by the CONTRACTOR. The CONTRACTOR shall be responsible for failure of equipment and materials associated with the pumping tests, and for negligence on the part of the CONTRACTOR. In the event of such failure or negligence that results in re-running the pumping test, the CONTRACTOR shall repeat the test at the CONTRACTOR'S own expense.

G. Under no circumstances shall the test pumping equipment create a vacuum within the well casing.

3.02 DISCHARGE WATER

Discharge water shall be in accordance with the requirements in SECTION 02785, FORMATION WATER DISPOSAL SYSTEM.

END OF SECTION

SECTION 02780

WELL FACILITY DISINFECTION AND WATER QUALITY SAMPLING

PART I GENERAL

1.01 SCOPE OF WORK

A. Provide labor, equipment and materials to disinfect the production well pursuant to the requirements of AWWA C654-97; including pump facilities, wellhead, and piping according to the requirements of AWWA C-601.

B. Provide labor, equipment and materials to perform analytical tests including (1 complete set) Chapter 62-550 Florida Administrative Code (FAC) drinking water analysis on the production well. The CONTRACTOR shall subcontract an analytical laboratory to perform analytical services in accordance with regulations. All water samples required shall be taken by an employee of a laboratory certified to perform drinking water analysis by the Department in accordance with F.S.§ 403.863 and Chapter 64E-1, F.A.C. The laboratory shall be certified to perform the scope of work by the Florida Department of Environmental Protection and Palm Beach County Health Department regulations.

1.02 SUBMITTALS

A. State and County certifications for proposed laboratory.

B. Provide sampling reports, completed chain of custody forms and analytical results for all consecutive sampling events.

PART II PRODUCTS

2.01 MATERIALS

A. Free chlorine liquid or gas.

B. Sodium Hypochlorite.

PART III EXECUTION

3.01 WELL FACILITY DISINFECTION

A. Provide notice to ENGINEER 48 hours in advance of treatment. Provide injection and measurement methods for approval.

B. Post warning notices and secure the well facility from unauthorized access or use. Secure the area.

C. The CONTRACTOR shall disinfect the well as soon as constructions of the well and cleaning procedures have been completed. The CONTRACTOR shall carry out adequate cleaning procedures immediately preceding disinfection where evidence indicates that normal well construction and development work have not adequately cleaned the well. All oil, grease, soil, and other materials, which could protect bacteria from disinfectants shall not be allowed in the hole. If evidence indicates that this material has entered the hole, it shall be thoroughly removed. The cleaning operation is to be carried out by pumping and swabbing only. Where test pumping equipment is to be used, such equipment shall be thoroughly scrubbed, or otherwise cleaned of foreign material.

D. Mix a sufficient concentration of chlorinated water solution to maintain a 200 parts per million chlorine residual throughout the well, pump and added piping facilities. Any well components sensitive to free chlorine or disinfecting agents will be disinfected and installed separately to prevent damage.

E. Disinfection procedures shall ensure that the disinfecting agent is uniformly applied throughout the entire water depth of the well, without relying on subsequent mechanical or surging action for dispersing the disinfectant. For this purpose, the disinfecting agent shall be furnished or prepared in liquid form and placed in the well through a hose or liquid form and placed in the well through a hose or tremmie of sufficient length to extend to the bottom of the well. The disinfecting agent shall be applied through the hose, which is to be raised and lowered, to achieve uniform distribution of the solution throughout the well.

F. All portions of the well above the water shall be maintained in a damp condition with water containing the required concentration of disinfecting agent for a period of not less than 20 minutes. The disinfecting agent shall be left in the well for a period of at least 24 hours.

G. After a 24 hour or longer contact period, the well are to be pumped to clear it of the disinfecting agent. The disposal point for the purged water shall be selected so as to minimize potential damage to aquatic life or vegetation.

H. All water used for treatment shall be potable and from a ENGINEER approved source.

I. The complete disinfection program and methods followed, especially if materially different from those specified, shall be in accordance with directives of the Florida Department of Environmental Protection, Division of Health and all methods employed shall have their approval. Final approval of the bacterial samples shall be received from the Florida Department of Environmental Protection prior to the time that the system is placed into operation.

3.02 BACTERIOLOGICAL ANALYSIS

A. Purge detectable chlorine solution from the well facility.

B. Following well and wellhead construction completion, collect twenty (20) water samples at an approved location 48 hours after disinfection procedure. Sample collection and handling procedures shall be in accordance with state approved laboratory quality assurance plan by an experienced sampling technician. Samples shall be analyzed by an approved independent certified laboratory in accordance with state and local regulations, and in accordance with the methods published by AWWA.

C. Water samples shall be analyzed by an approved independent certified laboratory in accordance with state and local regulations, and in accordance with the methods published by AWWA.

D. The CONTRACTOR shall continue to treat and conduct sample collection and analysis until an acceptable result is obtained. Any system disinfection (or any component thereof), sample collection or analysis required after an unsuccessful first attempt, shall be conducted at the CONTRACTOR'S expense.

3.03 WATER QUALITY ANALYSIS

A. Purge a minimum of five (5) well volumes of formation water from the production well. The CONTRACTOR shall coordinate with the ENGINEER and OWNER for water quality analysis.

B. Collect one (1) set of water samples from the well for drinking water analysis. The CONTRACTOR shall subcontract an analytical laboratory to perform field sampling and analytical services in accordance with regulations. Sample analyses shall include all drinking water parameters required in Florida Department of Environmental Protection, Chapter 62-550 FAC. Sample collection and handling procedures shall be in accordance with state approved laboratory quality assurance plan by an experienced sampling technician.

C. Water samples shall be analyzed by an approved independent certified laboratory in accordance with state and local regulations.

SECTION 02785

FORMATION WATER DISPOSAL SYSTEM

PART I GENERAL

1.01 SCOPE OF WORK

A. Provide labor, equipment and materials to furnish, assemble and maintain pumps, transmission piping, settling tanks and other methods as required to transmit formation water from the CONTRACTOR's construction wellhead, to the discharge location as shown on the attached Project Drawings. CONTRACTOR shall be prepared to provide a minimum of 500 feet of discharge piping.

B. All formation water discharged from the well must be contained at all times and be directed to the outfall via the formation water disposal system.

C. The CONTRACTOR shall provide the ENGINEER access to collect water samples as needed to monitor discharge water quality.

D. The CONTRACTOR is solely responsible, by any and all methods necessary, to meet the requirements for discharge of water. If the CONTRACTOR fails to fulfill proper requirements of discharge water, the CONTRACTOR is responsible for complete restoration of the discharge location to the original condition at no cost to the OWNER.

PART II PRODUCTS

2.01 EQUIPMENT

A. The CONTRACTOR will provide and maintain a transfer pump capable of pumping the total volumes and anticipated maximum rates of discharge from the well as defined in SECTION 02775, PUMPING TESTS. The pump will be used for transfer of water from the settling tanks to the discharge location as shown on the Project Drawings.

B. The CONTRACTOR shall provide temporary transmission piping, couplings, valves, reusable fittings and other items needed to assemble, operate and maintain the formation water disposal system. The CONTRACTOR shall maintain the transmission piping and ensure that it is free of leaks at all times. Any leaks found will be repaired immediately. Transmission piping will be required from the well to the settling tanks and from the settling tanks to the discharge location. Multiple vessels will be connected and sequential to provide sufficient retention time for solids separation prior to fluid discharge.

C. The CONTRACTOR shall provide, operate and maintain as many pumps as required to transmit water from the well to the discharge location. The pumps shall be capable of pumping at the maximum rates for the elements of work contemplated herein.

D. The CONTRACTOR shall employ all means necessary to minimize to the greatest extent possible erosion and turbidity at the discharge location.

PART III EXECUTION

3.01 PREPARATION

Review pipeline location with ENGINEER to confirm proper location and to minimize impact to site operations. The pipeline will be buried when crossing site access roads, or pedestrian paths.

3.02 CONSTRUCTION

Assemble the transmission piping in accordance with the project drawings. All formation water transmission piping will be maintained and inspected regularly by the CONTRACTOR so that it is free from leaks and defects. Any leaks encountered will be repaired immediately.

3.03 OPERATION

A. The formation water disposal piping will be monitored continuously for leaks and possible problem areas. A thorough inspection of the complete pipeline shall be conducted daily prior to startup. Repairs will be made prior to use.

B. The CONTRACTOR shall coordinate discharge formation water activities with the ENGINEER.

C. Pumps shall be capable of pumping water at the anticipated maximum rates of flow. Throttling devices shall be provided on the pumps to adjust the pumping rates accordingly. Valves shall be provided as needed to shut off flow and stop gravity drainage if necessary.

D. Provide safety measures and controls as needed.

END OF SECTION

SECTION 02831

CHAIN LINK FENCES AND GATES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fence framework, fabric, and accessories.

B. Excavation for post bases.

C. Manual gates and related hardware.

1.02 REFERENCES

A. ASTM A53-01-Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.

B. ASTM A121-99 - Zinc-Coated (Galvanized) Steel Barbed Wire.

C. ASTM A123-01 - Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Products.

D. ASTM A307-00 - Carbon Steel Bolts and Studs, 60000 PSI Tensile Strength.

E. ASTM A392-96 - Zinc-Coated Steel Chain-Link Fence Fabric.

F. ASTM A563-00 - Carbon and Alloy Steel Nuts.

G. ASTM B6-00 - Zinc.

H. ASTM C94-00 - Ready-Mixed Concrete.

I. ASTM F552-01 - Terminology Relating to Chain Link Fencing.

J. ASTM F567-00 - Practice for Installation of Chain-Link Fence.

K. ASTM F626-96 - Fence Fittings.

L. ASTM F668-99 - Poly (Vinyl Chloride) (PVC) and other Organic Polymer - Coated Steel Chain-Link Fence Fabric.

M. ASTM F900-94 - Industrial and Commercial Swing Gates.

1.03 SUBMITTALS

A. Manufacturer's catalog cuts with printed specifications.

B. Shop Drawings with complete details of fence and gate construction, fence height, post spacing, dimensions and unit weights of framework, and concrete footing details.

PART 2 PRODUCTS

2.01 MATERIALS

A. Framing (Steel): ASTM A53, Schedule 40 steel pipe.

B. Fabric Wire (Steel): ASTM A392.

C. Barbed Wire: ASTM A121.

D. Bolts: ASTM A307, Grade A.

E. Nuts: ASTM A563, Grade A.

F. Concrete: ASTM C94; Normal Portland Cement, 2000 psi minimum compressive strength at 28 days, 3 inch slump, 1 inch nominal sized coarse aggregate.

2.02 COMPONENTS

A. Line Posts: 1.50 inch nominal diameter.

B. Corner and End Posts: 2.00 inch nominal diameter.

C. Gate Support Post: 3.50 inch nominal diameter. Gate Latch Post: 2.50 inch nominal diameter.

D. Top and Brace Rails: 1.25 inch nominal diameter, plain end, sleeve coupled.

E. Gate Frame: 2.00 inch nominal diameter.

F. Fabric: 2 inch diamond mesh interwoven wire, 9 gage steel core, top selvage twisted tight, bottom selvage knuckle end closed.

G. Brace and Tension Bands: 1/8 inch thick steel.

H. Tension Bar: 1/4 inch thick steel.

I. Tension Wire: 7 gage steel, zinc galvanized at the rate of 1.2 oz/SF.

J. Tie Wire: 9 gage steel, zinc galvanized at the rate of 1.2 oz/SF.

K. Caps: Malleable iron, galvanized; sized to post diameter, stainless steel set screw retainer.

2.03 ACCESSORIES

A. Barbed Wire: 12-$^1/_2$ gage, 4 point, 5 inch spacing, 14 gage round barbs.

B. Extension Arms: Cast steel to accommodate 3 strands of barbed wire, double arm, sloped to 45 degrees each side. Withstand a weight of 200 pounds.

C. Gate Hardware: Fork latch for single swing gate, center gate stop and drop rod for double swing gates, keeper for double swing gates, hardware for padlock, and two 180 degree hinges per leaf.

2.04 FINISHES

A. Zinc Coating

1. Components and Framing: ASTM A123.
2. Fabric: ASTM A392, 1.2 oz./sq. ft.
3. Hardware: ASTM A153.
4. Extension Arms: ASTM A153.
5. Barbed Wire: ASTM A121, 0.80 oz./sq. ft.

B. Vinyl Coating (when specified on the Drawings)

1. General: Factory coated (unless noted otherwise), fusion bonded PVC.
2. Components and Framing: 10-14 mils vinyl coating over galvanizing per ASTM A123.
3. Fabric: 7-12 mils vinyl coating per ASTM F668, Class 2B over 0.3 oz./sq. ft. of galvanizing per ASTM A641.
4. Hardware: Spray paint hardware in the field to match vinyl coating.
5. Extension Arms: 10-14 mils vinyl coating over galvanizing per ASTM A153.
6. Barbed Wire: 7-12 mils vinyl coating over 0.80 oz./sq. ft. of galvanizing per ASTM A121.
7. Color: Black

PART 3 EXECUTION

3.01 SITE PREPARATION

A. Before installing chain-link fence, all necessary site clearing and grading is to be completed.

B. Where the clearing and grubbing for the Project does not include the area occupied by the fence, clearing is to be done to a width of at least two feet on each side of the fence line, except that the Engineer may direct that valuable trees be left in place. Do not extend clearing beyond the right of way.

3.02 INSTALLATION

A. General

1. Install framework, fabric, accessories, and gates in accordance with ASTM F567.

2. Install all fasteners with the nuts on the inside face of the fence.

B. Posts

1. Space at intervals not exceeding 10 feet on center. Measure the interval parallel to the grade of the fence and in the line of fence from center to center of the post.

2. Set line posts in concrete foundations of not less than 10 inches in diameter and 2.5 feet deep below grade.

3. Set corner and end posts in concrete foundations not less than 12 inches in diameter and 3.5 feet deep below grade.

4. Set gate posts in concrete foundations not less than 18 inches in diameter and 4 feet deep below grade.

5. Slope concrete away from the posts to provide for proper water drainage.

6. Install corner posts whenever the fence alignment changes 10 degrees or more.

7. Provide fence height as indicated on the Drawings.

C. Terminal Post Bracing

1. Brace each gate and terminal post to adjacent line post with horizontal center rail.

2. Braces are not required on fences 6 feet high or less.

D. Top Rail

1. Provide a top rail so that a continuous brace from end to end of each stretch of fence is formed.

2. Support at each line post.

3. Securely fasten to terminal posts and join with sleeves or coupling to allow for expansion and contraction.

E. Fabric

1. Place chain-link fabric on the outside of the area to be enclosed or as directed by the Engineer.

2. Stretch fabric between terminal posts or at intervals of 100 feet maximum, whichever is less.

3. Position bottom of fabric two inches above finished grade. Over irregular ground, a minimum clearance of one inch and a maximum of six inches will be permitted for a length not to exceed eight feet.

4. Fasten fabric to line posts at intervals not exceeding 15 inches and to top rail at intervals not exceeding 24 inches with wire ties.

5. Provide bands or clips of adequate strength to attach fabric to tension bars at all corner, end, and gate posts at intervals not exceeding 12 inches.

6. Do not place fabric until posts have been permanently positioned and concrete foundations have attained adequate strength.

F. Gates

1. Provide concrete center drop to foundation depth and drop rod retainers at center of double gate openings.

2. Install gates with fabric and barbed wire overhang to match fence. Install three hinges per leaf, latch catches, drop bolt, foot bolts and sockets, torsion spring retainer, retainer and locking clamp.

G. Barbed Wire and Support Arms

1. Pull taut to remove all sags.

2. Firmly install in the slots of the extension arms and secure to a post or terminal arm.

3. Stagger barbs.

H. Electrical Grounds

1. A ground must be installed directly below the closest point of overhead power lines. The ground rod is to consist of an aluminum or galvanized rod, with connection of similar metal if required, or of other appropriate material, eight feet in length and at least 5/8 inch in diameter. Drive the rod vertically until the tip of the rod is approximately six inches below the ground surface. Use a No. 6 conductor to connect the rod and all fence elements. Connect the conductor to each fence element and the ground rod by means of electrical type clamps which will prevent corrosion.

END OF SECTION

SECTION 02936

SEEDING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Preparation of subsoil.

B. Placing topsoil.

C. Fertilizing.

D. Seeding and hydro-seeding.

E. Mulching.

F. Maintenance.

1.02 QUALITY ASSURANCE

A. Provide seed mixture in containers showing percentage of seed mix, year of production, net weight, date of packaging, and location where packaged.

1.03 REGULATORY REQUIREMENTS

A. Comply with regulatory agencies for fertilizer and herbicide composition.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver seed mixture in sealed containers. Seed in damaged packaging is not acceptable.

B. Deliver fertilizer in waterproof bags showing weight, chemical analysis and name of manufacturer.

1.05 EXISTING CONDITIONS

A. All existing grass areas which are damaged or destroyed during construction are to be repaired with new grass. Contractor is responsible for the restoration of the grass to the conditions that existed prior to construction.

1.06 FIELD MEASUREMENTS

A. On pipeline projects, seeded areas will be measured based on maximum trench widths shown on the Drawings. Seed required to be placed in excess of the maximum trench widths or limits detailed on the Drawings will be at no additional cost to the Owner.

PART 2 PRODUCT

2.01 MATERIALS

A. Topsoil: Muck; free of plants, weeds and roots. PH level between 5.0 and 7.0. Organic content of at least 1.5 percent.

B. Fertilizer: 12 percent nitrogen - 8 percent phosphoric acid - 8 percent potash.

C. Seed: Argentine Bahia Grass. Minimum pure seed content of 95 percent with a minimum germination rate of 80 percent.

D. Dry Mulch: Straw or hay, consisting of oat, rye, or wheat straw, or of pangola, peanut, coastal bermuda or bahia grass hay. Use only un-deteriorated mulch which can be readily cut into the soil.

E. Mulch for Hydro-Seeding: Applegate brand fiber mulch, paper base with green dye.

E. Water: Free of excess and harmful chemicals, acids, alkalies, or any substance which might be harmful to plant growth. Salt water not permitted.

PART 3 EXECUTION

3.01 PREPARATION OF SUBSOIL

A. Prepare sub-soil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.

B. Remove foreign materials, weeds and undesirable plants and their roots.

3.02 PLACING TOPSOIL

A. Spread topsoil to a minimum thickness of 2 inches over the entire area to be seeded.

B. Place topsoil during dry weather.

C. Roto-till to a depth of 6 inches.

D. Fine grade the area to be seeded to eliminate ridges, depressions and other irregularities, and to ensure positive drainage.

3.03 FERTILIZING

A. Fertilizing operations will not be permitted when wind velocities exceed 15 miles per hour.

B. Apply fertilizer uniformly at a rate of 400-500 pounds per acre.

C. Apply after smooth raking of topsoil and prior to seeding.

D. Apply fertilizer no more than 48 hours before seeding. When hydro-seeding, mix fertilizer with seed and mulch.

E. Lightly water to aid the dissipation of fertilizer.

3.04 SEEDING AND MULCHING

A. Seeding operations will not be permitted when the wind velocities exceed 15 miles per hour.

B. Seed only when the soil is moist and in proper condition to induce growth.

C. Seed Application Rate: 8-10 pounds of Argentine Bahia per 1,000 square feet. During late fall, winter, and early spring applications, add 4-5 pounds of rye seed to the Bahia per 1,000 square feet. During late spring, summer, and early fall, add 1-1/2 - 2 pounds of red top millet seed to the Bahia per 1,000 square feet.

D. Immediately after completion of the seeding, roll entire seeded area. At least two trips over the entire area are required.

E. Immediately following seeding and rolling, apply mulch to a loose thickness of 1 inch over the entire seeded area.

F. Apply water with a fine spray immediately after each area has been mulched.

G. Newly seeded areas are not to be watered to force seed germination but only to sustain grass growth.

3.05 HYDRO-SEEDING

A. Seed Application Rate: 8-10 pounds of Argentine Bahia per 1,000 square feet. During late fall, winter, and early spring applications, add 4-5 pounds of rye seed to the Bahia per 1,000 square feet. During late spring, summer, and early fall, add 1-1/2 - 2 pounds of red top millet seed to the Bahia per 1,000 square.

B. Mulch Application Rate: 1,100 pounds per acre.

C. Add to the mixture a dispersing agent to insure proper dispersion and a uniform application.

D. Spray hydro mulch, seed, tackifier, and fertilizer in a one step operation. Keep mixture in a homogeneous slurry at all times.

E. Hydraulically spray on the ground to form a ground cover impregnated uniformly with grass seed. Allow absorption of moisture from rainfall or mechanical watering to percolate to the underlying soil.

F. Water so as to provide optimum growth conditions for the establishment of grass 24 hours after hydro-seeding. Irrigate for brief intervals, 3 to 4 times a day, until established. Keep top layer of soil moist until seeds germinate.

3.06 MAINTENANCE

A. Begin maintenance immediately after each area is planted.

B. Water to keep surface soil moist.

C. Repair washed out areas by filling with topsoil, fertilizing, seeding, and mulching.

D. Mow grass at regular intervals to maintain a maximum height of 4 inches. Do not cut more than $^1/_3$ of grass blade at any one mowing.

E. Immediately remove clippings after mowing.

F. Roll surface to remove minor depressions or irregularities.

G. Control growth of weeds. Apply herbicides in accordance with manufacturer's instructions. Remedy damage resulting from improper use of herbicides.

H. Continue maintenance for the duration of the Contract Time but in no case less than two weeks.

3.07 ACCEPTANCE

A. If, at the end of the maintenance period, a satisfactory stand of grass has not been produced, renovate and reseed the unsatisfactory portions thereof immediately.

B. A satisfactory stand is defined as grass or section of grass that has:

1. No bare spots larger than 3 square feet.
2. Not more than 10 percent of total area with bare spots larger than 1 square foot..
3. No more than 15 percent of total area with bare spots larger than 6 inches square.

END OF SECTION

SECTION 02938

SODDING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Preparation of subsoil.

B. Placing topsoil.

C. Fertilizing.

D. Sod installation.

E. Maintenance.

1.02 REGULATORY REQUIREMENTS

A. Comply with regulatory agencies for fertilizer and herbicide composition.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Deliver sod on pallets. Protect exposed roots from dehydration.

B. Do not deliver more sod than can be laid within 24 hours.

1.04 EXISTING CONDITIONS

A. All existing grass areas which are damaged or destroyed during construction are to be replaced with new sod of the same variety, unless otherwise noted, which existed prior to construction.

B. In all cases, Contractor is responsible for the restoration of the grass to the conditions that existed prior to construction.

1.05 FIELD MEASUREMENTS

A. On pipeline projects, sodded areas will be measured based on maximum trench widths shown on the Drawings. Sod placed in excess of the maximum trench widths or limits detailed on the Drawings will be at the full expense of the Contractor.

PART 2 PRODUCTS

2.01 MATERIALS

A. Topsoil: Muck; free of plants, weeds, and roots.

B. Sod: Bahia. Live, fresh, and uninjured at time of planting, free of objectionable weeds, and
B. Sod: Bahia. Live, fresh, and uninjured at time of planting, free of objectionable weeds,
and have a soil mat of sufficient thickness adhering firmly to the roots to withstand all necessary handling. Transport within 24 hours after being stripped and plant as soon as possible.

C. Fertilizer: 6 percent nitrogen - 6 percent phosphoric acid - 6 percent potash, 40 percent organics.

D. Water: Free of excess and harmful chemicals, acids, alkalies, or any substance which might be harmful to plant growth. Salt water not allowed.

E. Wood Pegs: Softwood; sufficient size and length to ensure anchorage of sod on a slope.

PART 3 EXECUTION

3.01 PREPARATION OF SUBSOIL

A. Prepare subsoil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.

B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated soil.

3.02 PLACING TOPSOIL

A. Spread topsoil to a minimum depth of 2 inches over area to be sodded.

B. Place topsoil during dry weather.

C. Roto-till to a depth of 6 inches.

D. Fine grade the area to be sodded to eliminate ridges, depressions and other irregularities, and to ensure positive drainage.

3.03 FERTILIZING

A. Apply fertilizer uniformly at a rate of 16 pounds per 1000 square feet.

B. Apply after smooth raking of topsoil and prior to installation of sod.

C. Apply fertilizer no more than 48 hours before laying sod.

D. Lightly water to aid the dissipation of fertilizer.

3.04 SOD INSTALLATION

A. Moisten prepared surface immediately prior to laying sod.

B. Place sod on the prepared surface with edges in close contact and embed firmly and smoothly by light tamping with appropriate tools.

C. Do not stretch or overlap sod pieces.

D. Where sodding is used in drainage ditches, the setting of the pieces must be staggered to avoid a continuous seam along the line of flow.

E. In order to prevent erosion caused by vertical edges at the outer limits, tamp the outer pieces of sod so as to produce a feather edge effect.

F. On slopes 6 inches per foot and steeper, lay sod perpendicular to slope and secure every row with wooden pegs at maximum 2 feet on center. Drive pegs flush with soil portion of sod.

G. After installation, saturate sod with water to a depth of 4 inches into the soil.

H. After sod and soil have dried, roll sodded areas to ensure good bond between sod and soil and to remove minor depressions and irregularities.

I. After rolling, keep sod moist for the duration of the contract period and in no case less than 2 weeks. The moistened condition should extend at least to the full depth of the rooting zone.

END OF SECTION

SECTION 03001

CONCRETE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Formwork.

B. Concrete reinforcement and accessories.

C. Cast-in-place concrete.

D. Pre-cast concrete.

1.02 REFERENCES

A. ACI 301-96 - Specifications for Structural Concrete.

B. ACI 318-99 - Building Code Requirements for Structural Concrete.

C. ACI SP-4 (95) – Formwork for Concrete.

D. ASTM A185-97 – Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.

E. ASTM A615-01 - Deformed and Plain Billet Steel for Concrete Reinforcement.

F. ASTM A775-01 – Epoxy - Coated Reinforcing Steel Bars.

G. ASTM C31-00 - Making and Curing Concrete Test Specimens in the Field.

H. ASTM C33-01 - Concrete Aggregates.

I. ASTM C39-01 - Compressive Strength of Cylindrical Concrete Specimens.

J. ASTM C42-99 - Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.

K. ASTM C94-00 - Ready-Mixed Concrete.

L. ASTM C143-00 - Slump of Hydraulic Cement Concrete.

M. ASTM C150-00 - Portland Cement.

N. ASTM C192-90 - Making and Curing Concrete Test Specimens in the Laboratory.

O. ASTM C260-01 - Air-Entraining Admixtures for Concrete.

P. ASTM C309-98 - Liquid Membrane - Forming Compounds for Curing Concrete.

Q. ASTM D1751-99 - Preformed Expansion Joint Filler for Concrete Paving and Structural Construction.

1.03 SUBMITTALS

A. Four copies of the test mix report showing the proportions of cement, aggregate, fine aggregate, water and admixtures.

B. Shop Drawings of pre-cast structures for review prior to fabrication.

PART 2 PRODUCTS

2.01 FORM MATERIALS

A. Conform to ACI 347.

2.02 REINFORCING STEEL

A. Reinforcing Bars: ASTM A615, Grade 60, new deformed billet steel.

B. Welded Wire Fabric: Plain type, ASTM A185.

C. Stirrups and Ties: ASTM A615, Grade 40 or Grade 60.

D. Bar Supports and Spacers: Steel wire with upturned legs. Mortar cubes.

E. Epoxy - Coated Reinforcing Bars: ASTM A775, Grade 60, new deformed billet steel.

2.03 CONCRETE MATERIALS

A. Cement: ASTM C150, Type I. Type II cement for wastewater structures.

B. Fine and Coarse Aggregates: ASTM C33.

Nominal maximum size of coarse aggregate not larger than:

1 The narrowest dimension between sides of forms, nor
2. 1/3 the depth of slabs, nor
3. 3/4 the minimum clear spacing between individual reinforcing bars or wires, bundles of bars, or ducts.
4. 4 inches.

C. Water: Clean, fresh, and free from injurious amounts of oils, acids, alkalis, salts, organic materials, or other substances that may be deleterious to concrete or reinforcement.

D. Air Entrainment Admixtures: ASTM C260. 'Darex' by the W. R. Grace Company or approved equal.

E. Curing Compound: ASTM C309, Type 1 or Type 1-D, Class A.

2.04 CONCRETE MIX

A. Mix concrete in accordance with ASTM C94.

B. Compressive Strength: 3000 psi minimum at 28 days for cast-in-place concrete and 4000 psi minimum at 28 days for pre-cast concrete (unless otherwise noted on Drawings).

C. Slump: 5 inches maximum (Vertical Pours)
3 inches maximum (Horizontal Pours)
2 inches minimum (Unless noted otherwise i.e. tremie, curb machine)

D. Mixing water not to exceed 6 gallons per sack of Portland Cement. This includes water entering the batches as surface moisture on the aggregates, which must be deducted from the specified 6 gallons to determine the amount of mixing water for each batch.

E. Contain not less than 5 sacks of cement per cubic yard of concrete for 3000 psi concrete and not less than 6 sacks of cement per cubic yard of concrete for 4000 psi concrete.

F. Air-Entraining admixture to produce 5 percent (+/- 1.5%) entrained air.

PART 3 EXECUTION

3.01 FORMWORK ERECTION

A. Conforms to the shapes, lines, and dimensions of the members as called for on the Drawings.

B. Provide bracing to ensure stability of formwork.

C. Design and construct forms, bracing, and supports to withstand the pressure of freshly placed concrete without bow or deflection.

D. Hand trim sides and bottom of earth forms; remove loose dirt.

E. Coordinate Work on Drawings in forming and setting openings, recesses, chases, sleeves, bolts, anchors, and other inserts.

F. Substantial and sufficiently tight to prevent leakage of mortar. Check forms prior to placing concrete and tighten as required to produce flush surfaces.

G. Tie metal remaining in the concrete to be at least 3 inches back of the concrete face. Plug holes left by the tie ends with grout.

H. Chamfer corners of beams, columns, walls and exposed edges or corners of concrete with 3/4 inch by 3/4 inch wood chamfer strips unless otherwise shown on Drawings.

I. Clean forms and apply form release agents or wet forms prior to concrete placement.

J. Remove forms in such a manner as to insure the complete safety of the structure. Where the structure as a whole is supported on shores, the removable floor forms, beams and girder sides, column and similar vertical forms may be removed only after concrete has reached 2/3 of its design strength by test and is sufficiently hard not to be injured during form removal. In no case should supporting forms or shoring be removed until the members have acquired sufficient strength to support their weight and the load safely thereon.

3.02 REINFORCEMENT

A. Before placing concrete, clean reinforcement of foreign particles or coatings.

B. Place, support, and secure reinforcement against displacement.

C. Lap welded wire mesh at least one full mesh and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.

D. Avoid splices at points of maximum stress. Provide sufficient lap to transfer the stress between bars by bond and shear.

E. Make bends for stirrups and ties on bars 5/8 inches in diameter and less, around a pin having a diameter not less than four times the thickness of the bar. Make bends for other bars around a pin having a diameter not less than six times the minimum thickness of the bar, except that for bars larger than one inch but less than 1-3/4 inches, the pin can not be less than eight times the minimum thickness of the bar. Bend all bars cold.

F. Splices and Offsets in Reinforcement: In slabs, beams, and girders, avoid splices of reinforcement at points of maximum stress. Provide sufficient lap to transfer the stress between bars by bond and shear and meet the requirements of ACI 318.

Where changes in the cross section of a column occur, offset the longitudinal bars in a region where lateral support is afforded. Where offset, the slope of the inclined portion should not be more than one in six, and in the case of tied columns, space the ties not more than 3 inches on center for a distance of one foot below the actual point of offset.

G. Protection of Reinforcement: Protect the metal reinforcement by the thickness of concrete indicated on the Drawings. Where not otherwise shown, the thickness of concrete over the reinforcement should be as follows:

Where concrete is deposited against ground without the use of forms, not less than 3 inches for beams and slabs.

Where concrete is exposed to the weather or exposed to the ground but placed in forms, not less than 2 inches for bars more than 5/8 inch in diameter and 1-1/2 inches for bars 5/8 inch or less in diameter.

In slabs and walls not exposed to the ground or to the weather, not less than 1-1/2 inches.
In beams, girders and columns not exposed to the ground or to the weather, not less than 1-1/2 inches.

In all cases, the thickness of concrete over the reinforcement must be at least 1-1/2 inches.

H. Protect reinforcement bars, intended for bonding with future extensions, with concrete or other approved adequate covering.

3.03 JOINTS

A. Expansion and Contraction Joints: Provide expansion joints when slabs on grade join other construction and elsewhere as indicated. Expansion joints are to be one-half (1/2) inch thick when not otherwise noted. Tool edges of slabs at expansion and contraction joints to a one-fourth (1/4) inch radius.

B. Construction Joints: In jointing fresh concrete to that which has already set, the surface of the concrete in place must be thoroughly cleaned and have all laitance removed by cutting with a suitable tool. In addition, wet and slush with a coat of grout, no leaner than one (1) part cement to two (2) parts sand.

3.04 CONCRETE MIXING

A. Mix until there is a uniform distribution of the materials and discharge completely before the mixer is recharged.

B. For job-mixed concrete, rotate the mixer at a speed recommended by the manufacturer and mix continuously for at least one minute after all materials are in the mixer.

C. Mix and deliver ready-mixed concrete in accordance with ASTM C-94.

D. Wet batches of concrete may be transported in either agitating or nonagitating trucks. When non-agitator trucks are used, the elapsed time between the addition of water to the mix and depositing the concrete in place must not exceed 45 minutes except that when a retardant admixture is used such elapsed time must not exceed 75 minutes. When the handling is done in truck agitators, such elapsed time must not exceed 60 minutes, except that when a retardant admixture is used a maximum elapsed time of 90 minutes will be permitted.

E. When concrete arrives on site with slump below that suitable for placing, as indicated by the Specifications, water may be added only if neither the maximum permissible water-cement ratio nor the maximum slump is exceeded.

3.05 PLACING CONCRETE

A. Notify Engineer a minimum of 24 hours prior to commencement of concreting operations.

B. Equipment for chuting, pumping and pneumatically conveying concrete must be sized and designed as to insure a practically continuous flow of concrete at the delivery end without separation of the materials.

C. Prevent separation or loss of materials when conveying concrete from mixer to place of final deposit.

D. No concrete that has partially hardened or been contaminated by foreign material may be deposited on the Work nor retempered concrete.

E. Deposit as nearly as practicable to its final position to avoid segregation due to rehandling or flowing.

F. During placement, thoroughly work concrete around reinforcement and embedded fixtures and into the corners of the forms.

G. At all times, concrete is to be plastic and flow readily into the space between the bars.

When concreting is once started, carry on as a continuous operation until the placing of the panel or section is completed. The top surface to be generally level.

H. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding or tamping. Use vibrators designed to operate with vibratory element submerged in concrete.

3.06 UNDER-WATER PLACING (Done only on approval of Engineer)

A. When conditions require placing through water, a tremie or drop-bottom bucket should be used and the Work must be well supervised. Every precaution must be taken to prevent the cement from washing out of concrete. The tremie is to be water-tight and large enough to allow a free flow of concrete. It must be kept filled with concrete at all times while depositing. Discharge concrete and spread by moving the tremie as to maintain as nearly as practicable a uniform flow and avoid dropping the concrete through water. If the charge is lost while depositing, the tremie must be withdrawn and refilled. Maintain concrete slump between 6 and 7 inches. Tremie concrete must be pumped into place instead of gravity placed.

3.07 COLD WEATHER PLACEMENT

A. Provide adequate equipment for heating the concrete materials and protecting the concrete during freezing or near-freezing weather. No frozen materials or materials containing ice can be used.

B. All concrete materials and all reinforcement, forms, fillers and ground with which the concrete is to come in contact must be free from frost. Whenever the temperature of the surrounding air is below 40 degrees F, all concrete placed in the forms must have a temperature of between 70 degrees F and 80 degrees F, and adequate means to provide for maintaining a temperature of not less than 70 degrees F for 3 days or 50 degrees F for 5 days. The housing covering or other protection used in connection with curing must remain in place and intact at least 24 hours after the artificial heating is discontinued. No dependence can be placed on salt or other chemicals for the prevention of freezing.

3.08 HOT WEATHER PLACEMENT

A. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 degrees F. Mixing water may be chilled, or chopped ice may be used to control the concrete temperature, provided the water equivalent of the ice is calculated to the total amount of mixing water.

B. A shorter mixing time than specified in ASTM C94 may be required. When the air temperature is between 85 and 90 degrees F, reduce the mixing and delivery time from 90 minutes to 75 minutes, and when the air temperature is above 90 degrees F, reduce the mixing and delivery time to 60 minutes.

   Cover reinforcing steel with water-soaked burlap if it becomes to hot, so that the steel temperature will not exceed the ambient air temperatures immediately before embedment in concrete. Wet forms thoroughly before placing concrete.

   Do not use retarding admixtures without the written approval of the Engineer.

3.09 FINISHING CONCRETE

A. Rough finish for concrete surfaces not exposed to view in the finish Work or covered by other construction.

B. Strike - off smooth and finish with a texture matching adjacent formed surfaces at tops of walls, horizontal offsets and similar unformed surfaces occurring adjacent to formed surfaces.

C. Provide a uniform smooth rubbed finish on exposed formed concrete walls, columns, and beams.

D. Float finish monolithic slab surfaces that are to receive trowel finish or other finish.

   1. Trowel Finish: After floating, begin first trowel finish operation using a power-driven trowel. Begin final troweling when surface produces a ringing sound as trowel is moved over surface. Consolidate concrete surface by final hand-troweling operation, free of trowel marks, uniform in texture and appearance, and with a surface plane tolerance not exceeding 1/4" in 10 feet when tested with a 10 foot straight-edge. Grind smooth surface defects which would show through applied floor covering system.

   2. Non-slip Broom Finish: Apply non-slip fine-hair broom finish to sidewalks, driveways, handicap ramps, curbs, or other items as noted on the Drawings.

3.10 CURING

A. Protect freshly placed concrete from premature drying or heat, and maintain without drying at a relatively constant temperature for a period of time necessary for hydration of cement and proper hardening.

B. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 72 hours.

C. Continue curing for a least 7 days and in accordance with ACI 301 procedures. Avoid rapid drying at end of final curing period.

D. In lieu of moist curing, spray a clear liquid membrane curing compound on all new concrete immediately after initial set. Rate of application to be 200 square feet per gallon or as recommended by the manufacturer.

3.11 TESTS

A. Testing and analysis of concrete will be performed by an independent testing laboratory.

B. Test firm will take cylinders and perform compression tests in accordance with ASTM C31, ASTM C39, and ASTM C192.

C. Number of cylinders and frequency of tests will be designated by the Engineer.

D. One slump test will be performed per ASTM C143 for each set of test cylinders taken.

E. Cure specimens under laboratory conditions except that when in the opinion of the Engineer, there is a possibility of the surrounding air temperature falling below 40 degrees F., additional specimens may be required and cured under job conditions.

F. If the average strength of the laboratory control cylinders for any portion of the structure falls below the compressive strengths called for on the Drawings, the Engineer has the right to order a change in the proportions or the water content for the remaining portion of the structure. If the average strength of the job-cured cylinders falls below the required strength the Engineer has the right to require conditions of temperature and moisture necessary to secure the required strength and may require tests in accordance with ASTM C42, or order load tests to be made on the portions of the structure so affected. Remove or replace failing concrete if directed by the Engineer.

3.12 PROTECTION

A. Protect concrete from damage until final acceptance of Work.

END OF SECTION

SECTION 09900

PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation and application of protective coatings.

B. Interior and exterior coating systems.

1.02 REFERENCES

A. ASTM B117-90 - Salt Spray (Fog) Testing.

B. ASTM D2247-87 - Testing Water Resistance of Coatings in 100% Relative Humidity.

C. ASTM D3359-87 - Measuring Adhesion by Tape Test.

D. ASTM D3363-74 - Film Hardness by Pencil Test.

E. ASTM D4060-84 - Abrasion Resistance of Organic Coatings by the Taber Abraser.

F. ASTM D4541-85 - Pull-Off Strength of Coatings Using Portable Adhesion-Testers.

G. ASTM D4585-87 - Testing the Water Resistance of Coatings Using Controlled Condensation.

H. AWWA C210-84 - Liquid Epoxy Coating System for the Interior and Exterior of Steel Water Pipelines.

I. AWWA D102-78 - Painting Steel Water-Storage Tanks.

J. Steel Structures Painting Council (SSPC) Specifications.

1. SP-1 Solvent Cleaning: Remove all grease,oil, salt, acid, alkali, dirt, dust, wax, fat, foreign matter and contaminates, etc. by one of the following methods: steam cleaning, alkaline cleaning, or volatile solvent cleaning.

2. SP-2 Hand Tool Cleaning: Removal of loose rust, loose mill scale and loose paint to a clean sound substrate by hand chipping, scraping, sanding and wire brushing.

3. SP-3 Power Tool Cleaning: Removal of loose mill scale and loose paint to a clean sound substrate by power tool chipping, descaling, sanding, wire brushing and grinding.

4. SP-5 White Metal Blast Cleaning: Complete removal of all mill scale, rust, rust scale, previous coating, etc., leaving the surface a uniform gray-white color.

5. SP-6 Commercial Blast Cleaning: Complete removal of all dirt, rust scale, mill scale, foreign matter and previous coating, etc., leaving only shadows and/or streaks caused by rust stain and mill scale oxides. At least 66% of each square inch of surface area is to be free of all visible residues, except slight discoloration.

6. SP-7 Brush-Off Blast Cleaning: Removal of rust scale, loose mill scale, loose rust and loose coatings, leaving tightly-bonded mill scale, rust and previous coatings. On concrete surfaces, brush-off blast clean to remove all laitance, form oils and solid contaminates. Blasting should be performed sufficiently close to the surface so as to open up surface voids, bugholes, air pockets and other subsurface irregularities, but so as not to expose underlying aggregate.

7. SP-8 Shop Pickled: Complete removal of rust and mill scale by acid pickling, duplex pickling or electrolytic pickling (may reduce the resistance of the surface to corrosion, if not to be primed immediately).

8. SP-10 Near-White Metal Blast Cleaning: Removal of all rust scale, mill scale, previous coating, etc., leaving only light stains from rust, mill scale and small specks of previous coating. At least 95% of each square inch of surface area is to be free of all visible residues and the remainder limited to slight discoloration.

9. VIS-1 Pictorial Surface Preparation Standards for Painting Steel Surfaces

1.03 ABBREVIATIONS

A. ASTM - American Society of Testing Materials

B. AWWA - American Water Works Association

C. DFT - Dry film thickness.

D. Exterior - Outside, exposed to weather.

E. Interior Dry - Inside, concealed or protected from weather.

F. Interior Wet - Inside, subject to immersion service.

G. NACE - National Association of Corrosion Engineers

H. SSPC - Steel Structures Painting Council

1.04 SUBMITTALS

A. Product data sheets and application instructions.

B. Color samples for selection by the Owner.

C. For each coating application, submit an affidavit from the manufacturer stating that the paint selected is recommended for its intended use.

D. When removal of lead containing paint is part of the Work, submit qualifications such as a copy of a Certification of Training, demonstrating that the person supervising the Work has been trained in removing lead containing paint. In addition, submit a plan for the methods to be employed for surface preparation, containment and ventilation, and collection of debris.

1.05 QUALITY ASSURANCE

A. All Work to be done by skilled and experienced craftsmen.

B. When removal of lead containing paint is part of the Work, the person supervising the Work must be trained in lead paint removal by a nationally recognized training organization. A minimum of 16 hours classroom training is required.

C. The following instruments must be available on the job site for Engineer's use, during all painting activities:

1. Moisture meter.
2. 'Tape' type mill profile micrometer.
3. 'Nordson-Mikrotest' dry film gauge.
4. Tooke - gauge.
5. Sponge type holiday detector.

D. Primers and other undercoat paint must be produced by same manufacturer as finish coats.

E. Use only thinners approved by the paint manufacturer, and use only within recommended limits.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers.

B. Container labeling to include manufacturer's name, type of paint, brand name, brand code, batch number, date of manufacturer, shelf life, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing.

C. Store painting materials in a clean, dry, well ventilated place, protected from sparks, flame, direct rays of the sun or from excessive heat.

1.07 REGULATORY REQUIREMENTS

A. All coatings used for potable water service must be approved and certified for use by the National Sanitation Foundation (NSF) Standard 61 and conform to AWWA D-102 and AWWA C-210.

B. All coatings must meet the requirements for volatile organic compounds (VOC) of not more than 3.5 lbs/gallon after thinning.

C. Contain, handle, and dispose of all hazardous materials, including but not limited to lead containing paint, resulting from surface preparation and painting, in accordance with all applicable local, state and federal requirements.

1.08 ENVIRONMENTAL REQUIREMENTS

A. Apply paint only on thoroughly dry surfaces and during periods of favorable weather, unless otherwise allowed by the paint manufacturer. Except as provided below, painting is not permitted when the atmospheric temperature is below 50° F, or when freshly painted surfaces may be damaged by rain, fog, dust, or condensation, and/or when it can be anticipated that these conditions will prevail during the drying period.

B. Do not apply coatings unless the surface temperature is a minimum of 5° above the dew point; temperature must be maintained during curing.

C. Dew Point Calculation Chart

Ambient Air Temperature - Fahrenheit

Relative Humidity	20	30	40	50	60	70	80	90	100	110	120
90%	18	28	37	47	57	67	77	87	97	107	117
85%	17	26	36	45	55	65	76	84	95	104	113
80%	16	25	34	44	54	63	73	82	93	102	110
75%	15	24	33	42	52	62	71	80	91	100	108
70%	13	22	31	40	50	60	68	78	88	96	105
65%	12	20	29	38	47	57	66	76	85	93	103
60%	11	29	27	36	45	55	64	73	83	92	101
55%	9	17	25	34	43	53	61	70	80	89	98
50%	6	15	23	31	40	50	59	67	77	86	94

45%	4	13	21	29	37	47	56	64	73	82	91
40%	1	11	18	26	35	43	52	61	69	78	87
35%	-2	8	16	23	31	40	48	57	65	74	83
30%	-6	4	13	20	28	36	44	52	61	69	77

SURFACE TEMPERATURE AT WHICH CONDENSATION OCCURS

D. Suitable enclosures to permit painting during inclement weather may be used if provisions are made to control atmospheric conditions artificially inside the enclosure, within limits suitable for painting throughout the painting operations.

1.09 EXISTING CONDITIONS

A. When unable to inspect the interior surfaces of existing tanks during bidding, assume 25 percent of the area is pitted as defined by the Steel Structures Painting Council.

1.10 EXTRA MATERIALS

A. Provide a one gallon container of each color and surface texture to Owner.

B. Label each container with color, texture, location used, in addition to the manufacturer's label.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. All materials specified herein are manufactured by the Tnemec Company, Inc., North Kansas City, Missouri, unless noted otherwise. These products are specified to establish standards of quality and are approved for use on this Project.

B. Equivalent materials of other manufacturers may be substituted on approval of the Engineer. Requests for substitution must include manufacturer's literature for each product giving the name, generic type, descriptive information and evidence of satisfactory past performance and an independent laboratory certification that their product meets the performance criteria of the specified materials.

C. Performance Criteria

1. Abrasion - ASTM D4060, CS-17 Wheel, 1,000 grams load.

2. Adhesion - ASTM D3359, Method B or ASTM D4541.

3. Exterior Exposure - Exposed at 45 degrees facing the ocean (South Florida Marine Exposure).

4. Hardness - ASTM D3363.

5. Humidity - ASTM D2247 or ASTM D4585.

6. Salt Spray (Fog) - ASTM B117.

D. Substitutions which decrease the film thickness, the number of coats applied, change the generic type of coating, or fail to meet the performance criteria of the specified materials will not be approved. Primer and finish coats on all surfaces must be furnished by the same manufacturer.

2.02 MATERIALS

A. Coatings: Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating. Good flow and brushing properties; capable of drying or curing free of streaks or sags.

B. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified. Of commercial quality.

C. Cement - Base Patching: Thorite by Thoro System Products of Miami, Florida.

D. Colors: When not specified, as selected by the Owner.

2.03 EQUIPMENT

A. Use effective oil/water separators on all compressed air lines serving spray painting and sandblasting operations to remove oil or moisture from the air before it is used. Place separators as far as practicable from the compressor.

B. All equipment for application of the paint and the completion of the Work must be in first-class condition and comply with recommendations of the paint manufacturer.

PART 3 EXECUTION

3.01 INSPECTION

A. Applicator must examine areas and conditions under which painting Work is to be completed and notify Engineer in writing of conditions detrimental to proper and timely completion of Work.

B. Inspect the substrate and report any unsatisfactory conditions. Contractor is not responsible for latent defects in the substrate which can not be detected during a reasonable visual inspection. Starting the Work indicates acceptance of the substrate as constructed.

C. All surfaces to be painted are subject to review by the Engineer before application of the prime coat and each succeeding coat. Any defects or deficiencies are to be corrected by the Contractor before application of any subsequent coat.

D. When any appreciable time has elapsed between coats, previously coated areas are to be reviewed by the Engineer. Where surfaces are damaged or contaminated, they are to be cleaned and recoated. Adhere to recoating times of manufacturer's printed instructions.

3.02 SURFACE PREPARATION

A. General: Clean surfaces as specified and in accordance with the manufacturer's recommendation for the coating being used. If surfaces are subject to contamination other than mill scale or normal atmospheric rusting, the surfaces are to be pressure washed, and acid or caustic pH residues neutralized, in addition to the specified surface preparation.

B. Concrete and Masonry: Remove all oil, grease, dirt, laitance and other foreign materials. Blast remove all existing coatings using equipment rated at 3500 psi. Acid etch with a solution of muriatic acid and then rinse with clean water. Verify required acid-alkali balance is achieved. Surface must be dry and free of dust prior to painting. New concrete and masonry must be cured a minimum of 28 days before treating and coating.

   Repair damaged concrete using a cement base patching system. Use in strict accordance with the manufacturer's recommendations.

C. Plaster: Remove dirt, loose mortar, scale, chalk, salt or alkali powder, and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry.

Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry. Fill hairline cracks, small holes, and imperfections with a latex patching plaster.

D. Gypsum Drywall: Latex fill minor defects. Spot prime after repair. Remove dust from surface by wiping with clean rags or other means.

E. Carbon Steel: Remove all oily and greasy residues in accordance with SSPC-SP1. Blast clean using Dupont's 'Starblast' as the blasting media in accordance with SSPC-SP10. 'Starblast' is the only blasting media allowed to be used. Apply primer coat before any rust bloom forms.

F. Galvanized Steel and Other Non-Ferrous Metals: Surface to be clean and dry. Remove oil, grease, and protective mill coatings by solvent cleaning per SSPC-SP1. Remove white rust from galvanized steel by hand or power brushing. Take care not to damage or remove the galvanizing. Remove rust from old galvanized steel by hand or power tool cleaning in accordance with SSPC-SP2 or SSPC-SP3.

G. PVC Pipe: Remove surface contaminants. Roughen surface by sanding to provide adhesion for primer coat.

H. Wood: Remove dust, grit and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes and cracks. Wood must be clean and dry before application of coating.

I. Fiberglass Reinforced Plastic: Roughen by brush blasting to provide adhesion for primer coat.

3.03 PROTECTION

A. Protect elements surrounding the Work of this Section from damage or disfiguration.

B. Repair damage to other surfaces caused by Work of this Section.

C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

D. Erect, maintain, and dismantle scaffolding without damage to structures, machinery, equipment or pipe. Use drop cloths to protect buildings and equipment.

E. Construct a temporary shroud or cover to contain and collect all spent abrasives and old paint. Dispose of spent abrasives and old paint in accordance with all local, state and federal requirements.

3.04 APPLICATION

A. Apply products in strict accordance with the coating manufacturer's instructions.

B. Apply coating uniformly at the prescribed thickness. Prevent film defects that would adversely affect the appearance or performance.

C. Apply prime coat immediately following surface preparation and in no case later than the same working day. Apply by brushing, paint mitt and roller, conventional spraying, or airless spraying, using equipment approved by the coatings manufacturer.

D. Recoat as per the manufacturer's instructions. Coating is considered recoatable when an additional coat can be applied without any detrimental film irregularities such as lifting or loss of adhesion.

E. Surfaces that will be inaccessible after assembly are to receive either the full specified paint system or three shop coats of the specified primer before assembly.

F. Brushing or rolling is to be done so that a smooth coat as nearly uniform in thickness as possible is obtained. Smooth the film so as not to leave detrimental marks.

G. When using an air, airless or hot spray, apply paint in a uniform layer, with a 50 percent overlap pattern. Brush out all runs and sags immediately or the paint will have to be removed and the surface resprayed.

H. High build coatings should be applied by a cross-hatch method of spray application to ensure proper film thickness of the coating.

I. Surfaces not accessible to brushes, rollers or sprays may be painted by a dauber, sheepskin, or paint mitt.

J. Sand lightly between each succeeding alkyd enamel or varnish coat.

3.05 FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT

A. Approval from the Owner is required prior to field painting in the vicinity of, or on, energized electrical and rotating equipment, and equipment and/or pipes in service.

B. Exercise extreme care in the painting of operable equipment, such as valves, electric motors, etc., so that the proper functioning of the equipment will not be affected.

C. Degloss factory finish.

D. Do not paint identification markings or code required labels.

E. Match associated piping color with finished paint color. See piping color code.

3.06 CLEANING

A. Contain paint overspray and debris by suitable means, including but not limited to, full shrouding of the area.

B. As Work proceeds, promptly remove paint where spilled, splashed or splattered.

C. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.

3.07 COATING SYSTEMS - INTERIOR SURFACES

A. Concrete Floors

1. One coat of Tnemec Series 287 Enviro-Tread (Waterborne Epoxy) applied at 3.0 mils DFT (273 SF/Gal).
2. A second coat of Tnemec Series 287 Enviro-Tread applied at 3.0 mils (273 SF/Gal).
3. Where requested by Owner add or broadcast Series S287-300C (sand) to the 1st coat for a non-slip finish.

B. Masonry Block Walls

1. One coat Tnemec 54-WB surface coat masonry filler. Apply at a minimum rate of 80-100 square feet per gallon to concrete block surfaces only.
2. One coat Series 113 H.B. Tnemec-Tufcoat water-base acrylic epoxy. Apply at a minimum rate of 120-170 square feet per gallon. Two coats will be required if applied by roller.

C. Concrete (including exposed ceilings)

1. Two coats Series 113 H.B. Tnemec-Tufcoat water base acrylic epoxy. Apply at a minimum rate of 120-170 square feet per gallon.

D. Gypsum Drywall

1. One coat Tnemec-cryl Sealer (thinned 10%). Apply at a minimum rate of 400 square feet per gallon.
2. One coat Series 113 H.B. Tneme-Tufcoat water-base acrylic-epoxy. Apply at a minimum rate of 120-170 square feet per gallon. Two coats will be required if applied by roller.

E. Carbon Steel, Ductile Iron, or Cast Iron

1. Prime coat Tnemec Series N69-1211 Epoxoline Primer epoxy-polyamide, 3-5 mils DFT.
2. Finish coat Tnemec Series N69 Hi-Build Epoxoline II epoxy-polyamide, 4-6 mils DFT.

F. Fuel Oil Tanks

1. Prime coat Series 61-5002 Tneme-Liner high solids catalyzed epoxy, 8-12 mils DFT.
2. Finish coat Series 61-5001 Tneme-Liner high solids catalyzed epoxy, 8-12 mils DFT.

G. Galvanized Steel and Other Non-Ferrous Metals

1. One coat Tnemec Series N69 Hi-Build Epoxoline epoxy-polyamide, 4-6 mils DFT.

H. PVC Piping

1. Two coats Tnemec Series N69 Hi-Build Epoxoline epoxy-polyamide. Apply at a minimum rate of 300 square feet per gallon per coat.

I. Shop Finished Electrical and Mechanical Equipment

1. One coat Tnemec Series 27 F/C/ Tu[ppxu (Fast Cire E[pxu), 2-6 mils DFT.
2. One coat Tnemec Series N69 Hi-Build Epoxoline epoxy-polyamide, 4-6 mils DFT.

J. Wood Trim and Doors - Painted

1. Prime coat of Tenemec Series 10-99 W Tnemec primer applied at 2.5 mils DFT (350± SF/Gal)..
2. Two coats of Tnemec Series 23 Enduratone (Semi-Gloss Alkyd Ename) applied at 2.0 mils DFT per coat.

3.08 COATING SYSTEMS - EXTERIOR SURFACES

A. Carbon Steel, Ductile, or Cast Iron

1. Prime coat Tnemec Series 135 (Chembuild Surface Tolerant Epxy), 3-5 mils DFT.
2. Finish coat Tnemec Series 73 Endura-Shield III high build acrylic polyurethane, 2-5 mils DFT.

B. Galvanized Steel and Other Non-Ferrous Metals

1. Prime coat Tnemec Series N69 Hi-Build Epoxoline epoxy-polyamide, 2-3 mils DFT.
2. Finish coat Tnemec Series 73 Endura-Shield III high build acrylic poly- urethane, 2-5 mils DFT.

C. Above Ground Fuel Storage Tanks

1. Shop Primer: One coat Series 90-97 Tneme-Zinc zinc-rich urethane, 2.5-3.5 mils DFT.
2. Field Touch-Up: Series 90-97 Tneme-Zinc, 2.5-3.5 mils DFT.

3. Full first coat Tnemec Series N69 Hi-Build Epoxoline epoxy polyamide, 2-3 mils DFT.
4. Finish coat Tnemec Series 73 Endura-Shield III high-build acrylic polyurethane, 2-5 mils DFT.

D. PVC Piping

1. One coat Tnemec Series N69 Hi-Build Epoxoline epoxy polyamide. Apply at a minimum rate of 300 square feet per gallon.
2. One coat Tnemec Series 73 Endura-Shield III high-build acrylic polyurethane. Apply at a minimum rate of 300 square feet per gallon.

E. Fiberglass Reinforced Plastic

1. One coat Tnemec Series N69 Hi-Build Epoxoline epoxy polyamide. Apply at a minimum rate of 300 square feet per gallon.
2. One coat Tnemec Series 73 Endura-Shield III high-build acrylic polyurethane. Apply at a minimum rate of 300 square feet per gallon.

F. Shop Finished Electrical and Mechanical Equipment

1. Prime coat Tnemec Series 27 F.C. Typoxy (fast cure epoxy), 2-3 mils DFT.
2. Finish coat Tnemec Series 73 Endura-Shield III high-build acrylic polyurethane, 2-5 mils DFT.

G. Masonry Block Walls
1. Block Filler – Tnemec Series 54WB surface coat Masonry Filler applied at 80± SF/Gal.
2. Finish per requirements below.

H. Precast and Cast In Place Concrete
1. Above Grade Coating – Finish per requirements below.
2. Below Grade Coating – Apply one coat Series 46H-413 Hi-Build Theme-Tar (Coal Tar Epoxy), 14.0 to 20.0 mils DFT.

I. Plaster, Above Grade Concrete, and Stucco
1. Prime Coat: Thoro Primer 2K by Thoro System Products of Miami, Florida. Apply at the minimum rate of 200 square feet per gallon.
2. Finish Coats: Two coast Thorosheen by Thoro System Products of Miami, Florida. Apply at the minimum rate of 200 square feet per gallon.
3. See Section 07145 for additional requirements for new or repaired concrete and masonary surfaces.

3.09 PIPING COLOR CODE

Water Lines

Raw	Olive Green
Settled or Clarified	Aqua
Finished or Potable	Dark Blue

Chemical Lines

Alum or Primary Coagulant	Orange
Ammonia	White
Carbon Slurry	Black
Caustic	Yellow with Green Band
Chlorine (Gas and Solution)	Yellow
Fluoride	Light Blue and Red Band
Lime Slurry	Light Green
Ozone	Yellow with Orange Band
Phosphate Compounds	Light Green with Red Band

Polymers or Coagulant Aids	Orange with Green Band
Potassium Permanganate	Violet
Soda Ash	Light Green with Orange Band
Sulfuric Acid	Yellow with Red Band
Sulfur Dioxide	Light Green with Yellow Band

Fuel Oil Lines

Black Oil	Yellow
Diesel	Yellow

Waste Lines

Backwash Waste	Light Brown
Sludge	Dark Brown
Sewer (Sanitary and Other)	Dark Gray

Other

Compressed Air	Dark Green
Gas	Red
Other Lines	Light Gray

3.10 PAINTING SCHEDULE

A. All newly installed piping, equipment, and appurtenances.

B. Exceptions: Stainless steel items, aluminum items, fence and fence fabric, and factory painted electrical boxes or similar factory finished items.

END OF SECTION

SECTION 11213

DEEPWELL TURBINE PUMPS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Turbine pumping units for submersible deepwell applications.

B. Pump column pipe (drop pipe).

1.02 PAYMENT

A. Payment for materials and installation of the Pumping Unit(s) and the services of a Manufacturer's Field Representative shall be included in the Contract Lump Sum Price for turbine well pump, column pipe, etc., as detailed on the Bid Form.

1.03 RELATED SECTIONS

A. Section 02700 Series - Water Supply Well Construction

1.04 REFERENCES

A. ANSI/AWWA E101-77: Vertical Turbine Pumps

1.05 DESIGN REQUIREMENTS

A. Minimum Capacity at design head (gpm) - 800 gpm

B. Datum Elevation to be determined in the field.

C. Pumping level below Datum at design capacity – 80 feet (Assumed)

D. Total head above Datum (static plus system friction) at design capacity - 40 feet

E. Total pump head at design capacity - 120 feet

F. Operating Range: Minimum Total Pump Head – 60 feet
Maximum Total Pump Head – 140 feet

G. Maximum Size of Electric Motor shall be 30 hp

H. Pump Setting - 103 feet below Datum.

I. Nominal diameter Pump Column – 8 inches

J. Nominal diameter of Well Casing – 17.4 inches.

K. Static water level below Datum – To be determined during construction

L. Maximum shaft nominal speed to be 3600 rpm

1.06 SUBMITTALS

A. Six (6) copies of the manufacturer's information for the pumping unit including but not limited to certified copies of the pump performance curve indicating pumping head, capacity, efficiency and horsepower.

B. Six (6)) copies of the equipment manufacturer's installation, operating and maintenance manuals for the pumping unit.

C. Pumping unit manufacturer's notarized statement that all equipment furnished complies with these Specifications and the applicable requirements of ANSI/AWWA E101-77.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Pumping unit and motor to be furnished shall be manufactured by a company which maintains an established warehouse within the State of Florida for replacement parts.

B. Manufacturers of pumping units approved to date of this printing are: Goulds Pumps and J-Line Pump Company

C. Manufacturers of pump motors approved to date, as of this printing are: Franklin Electric

2.02 MATERIALS

A. Materials to be utilized in the various components of the pump shall be as listed in Table 4 of AWWA E101-77 with the following exceptions:

1. Impellers, suction interconnector bearings, and cable seal glands shall be bronze.
2. The impeller Collet, strainer, and cable clamps shall be 316 stainless steel.
3. Surface plate (sealed) shall be steel.
4. Surface plate gasket shall be neoprene.
5. Terminal box shall be stainless steel.
6. Bowl assembly shall be bronze.

2.03 EQUIPMENT

A. The pump furnished shall be a submersible vertical pumping unit consisting of a pump bowl assembly with enclosed type impellers, column assembly, 316 stainless steel strainer, surface plate, discharge elbow, terminal box, submersible motor and cable.

B. The submersible electric motor shall be 3-phase, 480 volts, 60 cycle and shall be as specified in Section B4 of AWWA E101-77. The motor shall be of proper size to drive the pump continuously over the specified operating range without the load exceeding the motor rating. Provide Subtrol-Plus monitoring unit from Franklin Electric.

C. Motor case shall be 316 stainless steel.

2.04 PUMP COLUMN PIPE

A. Materials: pipe and couplings shall be made from unplasticized PVC compounds having a minimum cell classification of 12454-B, as defined in ASTM D1784. The compound shall qualify for a Hydrostatic Design Basis (HDB) of 4000 psi for water at 73.4°, in accordance with the requirements of ASTM D2837. White pipe shall be supplied, unless otherwise approved by the Engineer.

B. Approvals: Products shall be evaluated, tested, and certified for conformance with NSF61, or the health effects portion of NSF14, by an acceptable certifying organization.

C. Physical Requirements: Standard pipe laying length shall be 20'. Nominal drop pipe diameter shall be as specified on the Drawings.

D. All pipe supplied as part of this specification shall meet the performance requirements of ASTM D1785 for Schedule 80 pipe.

E. Pipe shall be joined using a spline lock joint. High-strength, acid-resistant, flexible thermoplastic splines shall be inserted into mating precision-machined grooves to provide full 360° restraint with evenly distributed loading. No external pipe-to-pipe restraining devices that clamp onto or otherwise damage the pipe surface as a result of point-loading shall be permitted. The joining system shall incorporate elastomeric sealing gaskets that are designed to provide a watertight seal. Pipe with threaded joints shall not be accepted.

F. The Drop Pipe shall be joined to pumps or other components using a 316 Stainless Steel Drop Pipe Adapter provided by the Drop Pipe manufacturer. Adaptors shall use the same spline lock joint as used on the drop pipe.

G. The Drop Pipe shall be legibly and permanently marked with the following information:

- Manufacturer and Trade Name
- Nominal Size & SCH Rating
- Manufacturing Data Code
- (NSF-61) or (NSF14)

H. All Drop Pipe and couplings shall be homogeneous throughout and free from visible cracks, holes, foreign inclusions, blisters and dents, interior roughness, and other injurious defects that may affect wall integrity. The pipe and couplings shall be uniform in color, opacity, density and other physical characteristics.

I. The Drop Pipe Manufacturer shall be Certa-Lok PVC Drop Pipe by CertainTeed Corporation, Valley Forge, PA 19482 or approved equal.

PART 3 EXECUTION

3.01 INSTALLATION

A. Installation shall comply with the Contract Drawings and Specifications.

B. Assembly of pumping unit shall conform to the pump manufacturer's recommendations.

3.02 MANUFACTURER'S FIELD REPRESENTATIVE

A. Contractor shall provide the services of the pumping unit manufacturer's authorized field representative to verify proper installation of each unit prior to start-up, and to check the operation of each unit during initial operation.

END OF SECTION

SECTION 13100

INSTRUMENTATION, CONTROLS, AND TELEMETRY

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The work covered by this section of the specifications consists of furnishing all labor, materials, and equipment, and performing all operations necessary for the installation of the complete instrumentation, control, and telemetry system ready for use as specified and shown on the drawings. Omission of a specific item obviously necessary for the proper function of the equipment shall not relieve the Contractor of the responsibility of furnishing and installing the item as a part of the Contract.

B. The major components of the instrumentation, controls, and telemetry system are as follows:

1. One (1) remote terminal unit (RTU) including antenna.

2. One (1) flow transmitter.

3. One (1) level transmitter.

4. One (1) pressure transmitter.

5. Programming of the central station computer to include all control/status logic, screens, and report generation as required for the new systems.

6. Other hardware as shown or as described in the specifications, or as is necessary for proper operation of the system.

C. The telemetry system Supplier shall take the necessary steps to assure that the strength and quality of the telemetry signals are consistent and noise free. This may require a radio survey to determine additional equipment requirements. All additional equipment necessary to meet the signal requirements shall be included in the bid and provided at no additional cost to the Owner. This may include a taller antenna tower and/or a higher gain antenna.

1.02 QUALITY ASSURANCE

A. Codes and Standards: All work shall be performed in accordance with the following:

1. Institute of Electrical and Electronic Engineers (IEEE)

2. Instrument Society of America (ISA)

3. National Electrical Manufacturers Association (NEMA)

4. America National Standards Institute (ANSI)

5. National Electric Code (NFPA70)

6. Underwriter Laboratories (U.L.). The RTU shall meet UL 508 requirements and bear the U.L. label.

B. The instrumentation, controls, and telemetry system is an integrated system which shall be furnished by one (1) Supplier who shall provide all of the equipment, regardless of Manufacturer, and shall be responsible to the Contractor for satisfactory operation of the entire system. The Supplier shall also coordinate the interconnecting control functions of all of the system equipment and shall be responsible for producing the complete instrumentation/control/telemetry system interconnection diagrams, wiring tables, and schematics.

C. The Contractor shall coordinate work of the system Supplier, service personnel during construction, testing, calibration and acceptance of this system. The system Supplier shall provide service personnel as required to assist the Contractor in the location of sleeves, methods of installing conduit and special cable, mounting, piping, and wiring of the system equipment prior to placing it in service. The system Supplier shall also provide personnel as required for calibration, start-up and testing of the system equipment.

D. All instruments, and telemetry system components, regardless of Manufacturer, shall be supplied by C.C. Control Corp. of West Palm Beach, Florida, or approved equal. Alternate Suppliers must meet the following conditions:

1. At least two (2) full-time employees of the Supplier, with five (5) years of acceptable experience in the installation and programming of similar systems permanently located within twenty-five miles of the project site.

2. U.L. certified instrumentation, controls, and telemetry assembly shop.

1.03 SUBMITTALS

A. The following shall be provided for approval:

1. A complete schematic of instrumentation/control/telemetry system wiring and equipment interconnection wiring with a full description of the operation and with each component identified. Final copies of the schematic shall be provided as AutoCAD files on disk.

2. Component data sheets indicating pertinent data identifying each component by item number and nomenclature as indicated in the plans and specifications and on the above mentioned schematic drawings.

3. Control loops as separate drawings shall be provided where needed to clarify the operation and connections of the equipment.

4. A hard copy printout of the programs and ladder logic diagrams if applicable.

5. Proposed computer screens for the central station computer shall be provided for review and comment prior to completion of the programming. Changes shall be made as requested at no additional cost.

B. All literature and drawings being forwarded for approval shall be neatly bound in one volume labeled "Instrumentation/Controls/Telemetry". Sales bulletins and other general publications are not acceptable as material for approval. The intent is to provide the Owner and Engineer with a reusable reference.

C. After the work is complete, the Supplier shall provide six (6) copies of complete operating and maintenance instructions and parts lists. These sets of instructions shall include copies of the original

drawing submitted for approval reflecting all "as-built" modifications. The manual shall also include functional description of the entire system. Special requirements particular to the system shall be clearly defined along with special calibration test procedures. Include all password keys. These manuals shall be in a hard cover 3-ring binder in single volume labeled "Instrumentation/Controls/Telemetry Operating and Maintenance Instructions".

D. The Supplier shall provide a minimum of eight (8) hours of instruction to maintenance personnel in the proper operation, calibration, and training on the use and maintenance of all equipment supplied.

1.04 WARRANTY

A. All equipment furnished, and all work performed under Division 13, shall be guaranteed by the Supplier against defects in workmanship, materials, and proper operation for a minimum period of one (1) year from date of acceptance.

PART 2 - PRODUCTS

2.01 REMOTE TERMINAL UNIT

A. As a minimum, the RTU shall comply with the following specifications:

1. The RTU assembly shall be from a single manufacturer. The assembly of third party components to form the RTU is not acceptable.

2. The RTU shall be microprocessor based with large enough memory capacity to make control decisions on-site based on status conditions and values from local and remote sources. A minimum of 256 KB of RAM is required.

3. The RTU shall possess adequate Input/Output (I/O) points to satisfy the needs of the user with a minimum of 10% spares available for future site expansion.

4. The RTU shall be programmable using industry accepted ladder logic and/or the 'C' programming language.

5. The application residing in the RTU shall be accessible and modifiable via both radio communications and by directly plugging into the RTU.

6. Remote configuration and programming of the RTU shall be possible from the central computer.

7. The RTU shall permit communications to occur RTU-to-central and RTU-to-RTU (peer-to-peer). RTU-to-RTU communications shall allow the RTU to access and utilize information from another RTU directly.

8. It shall be possible for communications to occur between individual RTUs or to be broadcast to several RTUs simultaneously.

9. The RTU shall be capable of Store & Forward operation to pass messages RTU-to-RTU throughout the system.

10. The RTU shall allow advanced communications features by using an advanced networking protocol suited for wide area communications links, having routing capabilities, back-up link configuration, alternate routing, etc.

11. Data transmission shall be accomplished using a communication protocol that is based on the International Standards Organization's (ISO7498) 7-layer protocol recommendation. (This type of protocol is similar to the TCP/IP protocol that is used as the basis for the World Wide Web.) This shall permit the RTU to packetize and transfer data with no maximum size limit, and to operate within communication system designs that require intermediate RTUs to Store & Forward data among different communications media having different access requirements, operating at different data speeds.

12. The RTU shall support time-tagged messages to provide a minimum timing accuracy of +/- 5 milliseconds. The timing accuracy being defined as the difference in time from the time an event actually occurs to the time actually logged in the system files.

13. The RTU shall be designed to operate over a variety of various communications media including radio, line, dial-up, fiber optic, etc.

14. The RTU shall support equipment that operates with different de-facto SCADA protocols. These shall include, but are not limited to, the following protocols: Modbus, TCP/IP, AB DF1, and DNP 3.0.

15. The RTU shall support RTU-initiated messaging which virtually eliminates any need for continuous polling to transfer information. The RTU sends data only when user-defined conditions occur on-site. This RTU-initiated messaging is also referred to as Change-of-State (COS) messaging.

16. The RTU shall support automatic (time-based) or manual interrogations from the central.

17. The entire RTU database shall be accessible from the central computer using the system software.

18. The RTU shall support voice communications, in addition to data, over the same frequency.

19. The RTU shall consist of a NEMA 4X enclosure that contains the power supply, CPU, I/O modules, module rack, battery, power transformer, and radio.

20. The RTU shall be Manufactured by Motorola, MOSCAD ACE.

B. Power Supply

The power supply module shall be capable of operating on 120 Vac or 12/24 Vac/dc. A secondary power source, namely a rechargeable battery, shall also be present to power the modules, radio, and certain other elements of the RTU should the primary power source fail. The battery shall be connected to these elements through the power supply module; the power supply module shall also serve as the battery charger. The battery shall power the RTU for a minimum of 4 hours without AC power. With regard to surge protection, the power supply shall meet or exceed ANSI/IEEE Standard C37.90.1- 1989 for an oscillatory wave equal to 2.5 kV.

C. CPU

The CPU module shall contain the RTU's microprocessor with large enough memory capacity to make control decisions on-site based on status conditions and values from local and remote sources. A minimum of 256 KB of RAM is required. The CPU shall be programmed in industry standard ladder logic and/or the 'C' programming language. The CPU shall include diagnostic lights that provide

information regarding the operation of the CPU and the I/O modules. With regard to surge protection, the CPU module shall meet or exceed the following standards:

1. Per IEC 801-2: air discharge of 8 kV and contact discharge of 4 kV.
2. Per IEC 801-3: radiation immunity equal to 10 V/m
3. Per IEC 801-4: fast transient equal to 0.5 kV.

D. Digital Input Module

The digital input (DI) module shall contain a minimum of 16 digital inputs that allows wet or dry closures from switches or relays in other on-site equipment to be connected to the RTU. Under the control of the application program, the CPU module will read the current status of one or more of the 16 inputs. Each of the digital inputs shall also be capable of serving as low-speed counter inputs if necessary. The totalization shall be done with the CPU module under application control. Any of the 16 digital inputs shall be capable of being defined to time-tag the input event with +/- millisecond accuracy. Each digital input shall accept signals from external 10-28 Vac/dc or 110 Vac sensors. The module shall also provide a floating 24 Vdc output to wet the contacts on dry-contact sensors. The module shall utilize plug-in screw terminal wiring connectors for ease of removal. All inputs shall be protected by optical isolators on the module. The input isolation shall meet or exceed IEC 255-5 with a breakdown voltage between user connects and logic equal to 2.5 kV, an insulation resistance of 100 Mohm @ 500V, and an insulation impulse of 5 kV. With regard to surge protection, the DI module shall meet or exceed the following standards:

1. Per ANSI/IEEE C37.90.1- 1989: oscillatory wave equal to 2.5 kV and a fast transient of 4 kV.
2. Per IEC 801-2: air discharge of 8 kV and contact discharge of 4 kV.
3. Per IEC 801-3: radiation immunity equal to 10 V/m
4. Per IEC 801-4: fast transient equal to 0.5 kV.

E. Digital Output Module

The digital output (DO) module shall contain a minimum of 8 relay outputs that may be connected, and used, to control other on-site electrical devices. All 8 relays shall be either Magnetically-Latched (ML) or Electrically-Energized (EE). All relays shall be rated for 60 watt (dc) or 125 VA, not to exceed either 2 amps or 30Vdc/250Vac. Under the control of the application program, the CPU module shall move the current status of the data variables in the CPU module that are associated with the relays to the DO module. The digital output modules shall have secondary contacts on the relays that provide positive feedback that the relay has closed. The module shall utilize plug-in screw terminal wiring connectors for ease of removal. With regard to surge protection, the DO module shall meet or exceed the following standards:

1. Per ANSI/IEEE C37.90.1- 1989: oscillatory wave equal to 2.5 kV and a fast transient of 4 kV.
2. Per IEC 801-3: radiation immunity equal to 10 V/m
3. Per IEC 801-4: fast transient equal to 0.5 kV.

F. Analog Input Module

The analog input (AI) module shall contain a minimum of 6 analog inputs to allow DC analog signals (+/- 4-20 ma or +/- 0-5 V), from other on-site equipment, to be connected to the RTU. Each of the inputs, plus ground, shall be multiplexed to an on-module precision analog-to-digital converter (ADC); ground

shall be measured to eliminate any ADC drift. All inputs shall be protected by optical isolators that also function as the multiplex switches. An on-module power supply shall provide a calibration voltage to the multiplexer to cause the AI module to be self-calibrating. Under control of the application program, the AI module shall read the value of one or more of the inputs and move that data from the AI module to the CPU. The module shall utilize plug-in screw terminal wiring connectors for ease of removal. The input isolation shall meet or exceed IEC 255-5 with a breakdown voltage between user connects and logic equal to 2.5 kV and an insulation resistance of 300 Mohm @ 500V. With regard to surge protection, the AI module shall meet or exceed the following standards:

1. Per ANSI/IEEE C37.90.1- 1989: oscillatory wave equal to 2.5 kV and a fast transient of 4 kV.
2. Per IEC 801-2: air discharge of 8 kV and contact discharge of 4 kV.
3. Per IEC 801-3: radiation immunity equal to 3 V/m
4. Per IEC 801-4: fast transient equal to 0.5 kV.

G. Analog Output Module

The analog output (AO) module shall contain a minimum of 4 analog outputs to allow other on-site pieces of equipment to be connected to, and controlled by, the RTU. The outputs shall be able to be calibrated as either 4-20 ma or 0-5 Vdc. Under control of the application program, the CPU module shall move the current data value of one or more logic variables from the CPU module into the AO module. The AO module shall pass that data through on-module digital-to-analog converters (DAC), one converter for each output channel, to the controlled device. The module shall utilize plug-in screw terminal wiring connectors for ease of removal. The outputs shall be optically isolated to a minimum of 2.5 kV between outputs.

H. Mixed I/O Module

In addition to the module types described above, the supplier must also be capable of supplying modules that have a combination of discrete and analog inputs and outputs to include a minimum of 2 analog inputs, 8 digital inputs, and 2 digital outputs.

I. Batteries

The RTU shall possess a built-in uninterruptible power source function. The power supply will keep the batteries at a float charge. The batteries shall not be damaged by deep discharges. The batteries shall power the system for a minimum of 4 hours without AC power. The RTU shall provide zero-transfer-transient performance when switching from AC power to the battery source. A transient-less switch back to AC power shall also occur.

J. Radio

The radio shall be a microprocessor-controlled unit that functions as the interface between the RTU and the central site equipment. The unit shall house the radio transceiver and associated electronics to allow the RTU to communicate with the central site. The radio shall be programmable to allow upgrading of the radio with new software packages or features based on the user's current and/or future needs. As a minimum the radio shall possess the following features:

1. Surge protected radio power.

2. On-board communications and functional firmware.

3. Watchdog Timer.

4. Voltage regulation and radio power supply control.

5. RS-232 service port.

6. LED indicators on power, transmit data, receive data, and CPU failure.

7. Voice communications capabilities over same frequency as data communications.

8. Unit removable without disturbing field wiring or configuration jumpers.

With regard to environmental requirements (low pressure, high temperature, low temperature, temperature shock, solar radiation, rain, humidity, salt fog, dust, vibration, and shock), the radios shall meet or exceed the applicable methods (procedures) of the following U.S. Military Specifications:

1. U.S. Military Specification 810C
2. U.S. Military Specification 810D
3. U.S. Military Specification 810E

K. RTU Enclosure

The RTU shall be provided in a stainless steel, NEMA 4x enclosure, painted white. A padlock ring shall be an integral part of the enclosure. All hardware used to mount the enclosure shall be stainless steel. The enclosure and module rack shall be integrated into a single entity; the module rack shall contain the power supply/charger module, the CPU module, and up to three I/O modules. The enclosure shall be oversized, and additional I/O modules provided, where required to meet the I/O requirements of the project as described in paragraph 3.02 herein.

2.02 ANTENNA SUBSYSTEM

A. A high gain directional antenna shall be used to transmit and receive data at the RTU. When an antenna mast/pole is utilized, it shall be hot dipped galvanized for corrosion protection. All mounting hardware shall be made of stainless steel. The mast shall be rated for a minimum wind loading that meets the requirements of the current Florida Building Code. The mast shall possess an integrated grounding system that is protected from vandalism. The coaxial cable shall be of the type that utilizes an inert semi-liquid compound to flood the copper braid. The coaxial cable shall be of the LMR 400 construction type and have the RF loss characteristic of foam flex. The cable shall be installed in such a fashion as to protect it from both vandalism and the elements. Tie-wrapping the cable to the mast is not acceptable. Type N connectors or equal shall be utilized at both ends of the coaxial cable. The Type N connectors shall be sealed to provide a moisture barrier. The RTU shall be protected from electrical surge or transients entering through the coaxial cable by use of a coaxial cable surge protector. The unit

shall meet or exceed the quality, reliability, and performance of the IS-50NX-C1-ME manufactured by Polyphaser Corporation. The directional antennas shall have all welded aluminum elements and shall be gold anodized for corrosion resistance. The antennas shall have a single radiator element connected to a type N female connector. Element connections utilizing nuts and bolts are not acceptable.

2.03 RTU RECOVERY

A. In the event of a reset of the RAM in the RTU, or a replacement of the CPU module, critical information that was contained in the RTU database prior to the reset (or CPU replacement) shall be automatically replenished by the FIU. As a minimum, automatically recovered data shall include the following:

1. RTU configuration data
2. Set points
3. Pump starts
4. Pump runtimes

The recovery of the RTU shall occur with no user intervention.

2.04 PRESSURE INDICATING TRANSMITTERS

A. Type:

1. Microprocessor based intelligent type, diaphragm actuated.
2. The instrument shall measure gauge pressure.

B. Functional/Performance:

1. Accuracy-Plus or minus 0.1 percent of calibrated span.
2. Overrange Protection-Provide positive overrange protection to maximum process pressure.
3. RFI Protection-0.1 percent error between 27 and 500 MHz at 20 v/m field intensity.
4. Output-4-20 mA.
5. Power Requirements-Loop powered, two wire type.
6. Stability-Combined temperature effects shall be less than plus or minus 0.25 percent of maximum span per 50 degrees F temperature change.

C. Physical:

1. Electrical Classification-Intrinsically safe or explosion proof for class I and II, Division 1 locations.
2. Enclosure-Rated NEMA 4X.
3. Diaphragm Sensor Material-Cobalt-Nickel-Chrome alloy, 316 stainless steel or Hastelloy C.

4. Sensor Fill Fluid-Shall be suitable for process fluid being measured.

D. Options/Accessories Required:

1. Provide a shutoff valve and mounting bracket for each transmitter.

2. Provide an integral indicator scaled in engineering units.

E. Manufacturers:

1. Rosemount Model 3051TG2A2B21AM5, no substitute.

2.05 ELECTROMAGNETIC FLOW METER

A. Flow Element

1. Type:
   a. Pulsed DC electromagnetic induction type and shall provide a signal, which is linear to the liquid flow rate.
2. Functional/Performance:
   a. Power requirements - Match to converter/transmitter
   b. Accuracy - Plus or minus 0.2 percent of reading, or +/- 1 millimeter per second, whichever is greater, irrespective of flow direction (including converter/ transmitter).
   c. Temperature rating - Suitable for process liquid temperature up to 70 degrees C and an ambient of 65 degrees C.
   d. RFI protection - Provide RFI protection.
   e. Pressure rating - 240 psi if 150 lb flanges are used, 700 psi if 300 lb flanges are used.
   f. Additional - Meter shall be capable of running empty indefinitely without damage to any component.
   g. Additional - Meter shall be able to measure flowrate and flow total in both the forward and reverse directions.
3. Physical:
   a. Metering Tube: 304 stainless steel.
   b. Flanges: ANSI 150 lb, 316 Stainless Steel.
   c. Liner - Polyurethane for raw water.
   d. Electrodes - Type 316 stainless steel, bullet nosed or elliptical self cleaning type.
   e. Housing - Meters shall be designed for continuous submergence in 30-ft of water.
   f. Painting - All external surfaces shall be painted with a chemical and corrosion resistant epoxy finish.
4. Accessories/Options Required:
   a. Factory calibration - All meters shall be factory calibrated. A copy of the report shall be provided.
   b. Grounding - Meter shall be grounded per the manufacturers recommendation. Provide 316 Stainless Steel ground rings, ground wires, gaskets, etc, as required or as otherwise noted. All materials shall be suitable for liquid being measured.
   c. Provide Smart Meter Verification Diagnostic option (DA2) to verify meter calibration.

5. Manufacturers:
   a. Rosemont 8750WA Series, no substitute.

B. Flow Converter/Transmitter
1. Type:
   a. Match to flow element.
2. Functional/Performance:
   a. Power requirements - 120 VAC plus or minus 10 percent.
   b. Accuracy - As defined for flow element.
   c. Temperature - minus 25 to plus 65 degrees C
   d. Output - Isolated 4-20 mA into 0 to 1000 ohms, HART protocol.
3. Physical:
   a. Housing - NEMA 4X wall mount.
4. Accessories/Options Required:
   a. Cable - Provide signal cable between element and signal converter.
   b. Indicator - provide local digital indicator with scale in engineering units which indicates actual flow rate.
   c. Totalizer - Provide a seven digit, resettable or non-resettable totalizer on the face of the enclosure and a scalable pulse output to drive the totalizer. The totalizer multiplier shall be a power of 10.
   d. Zero Return Unit - Provide a zero return unit. The unit shall be powered from the converter/transmitter and may be mounted in a separate NEMA 4X enclosure; the device shall drive the element output to 4 mADC on no flow conditions.
   e. Password Protection - Meter software shall incorporate dual password features to prevent inadvertent program or unit changes.
5. Manufacturer:
   a. Rosemont 8712 Series, no substitute.

2.06 LEVEL TRANSMITTER

A. Type:

1. Submersible

2. Pressure

3. 316SS Housing

B. Functional:

1. Range: 0-100 ft. w.c.

2. Power Supply: 24VDC (from receiver over signal leads)

3. Output: 4-20mA DC

4. Mounting Depth: 100 ft. below wellhead

C. Performance:

1. Accuracy: 0.25 percent of span

2. Stability: 0.1 percent of span per year

D. Installation:

1. Level transmitter shall be Pressure Systems, Inc. Series 700, KPSI, or approved equal.

2. Install the level transmitter in accordance with Manufacturer's instructions.

3. Coordinate with the mechanical contractor for proper mounting of equipment and required fittings.

2.07 INSTRUMENT POWER SUPPLIES

A. Provide separate 0-24VDC power supplies, within the telemetry enclosure, where required to power the 4-20mA instrument loops. These shall be isolated with lighting/surge protection as specified herein.

2.08 LIGHTING/SURGE PROTECTION

A. General-Lighting/Surge protection shall be provided to protect the electronic instrumentation system from induced surges propagating along the signal and power supply lines. The protection systems shall be such that the protective level shall not interfere with normal operation, but shall be lower than the instrument surge withstand level, and be maintenance free and self-restoring. Instruments shall be housed in a suitable metallic case, properly grounded. Ground wires for all surge protectors shall be connected to a good earth ground and where practical each ground wire run individually and insulated from each other. These protectors shall be mounted within the instrument enclosure or a separate NEMA 4 junction box coupled to the enclosure.

B. Power-Supply-Protection of all 120 VAC instrument power supply lines shall be provided. Cabinet(s)/panel(s) and groups of field instruments shall be protected by UL-listed isolation transformers and two-stage LTSS gas tube and zener diodes devices. Individual field instruments shall be protected by individual 120VAC two-stage LTSS gas tube and zener diodes devices. Maximum withstand ratings shall be coordinated with the electrical service entrance surge arrestors. Transformers shall be GE, SOLA, or equal. LTSS devices shall be Phoenix Contact, Joslyn, MCG Electronics, or equal.

C. Signal Line-All signal lines when they enter a panel shall be protected through the use of UL-listed two-stage LTSS devices containing gas tube surge arrestors, inductor filters, and transorb diode protectors. Panel protectors shall be track-mounted. Field protectors shall be conduit-

mounted. Devices shall be Phoenix Contact, Joslyn, Rosemount, EDCO, Weidmueller, or equal.

PART 3 - EXECUTION

3.01 GENERAL

A. All mounting hardware shall be stainless steel.

B. The antenna assembly, including the antenna and its mast/pole, shall be grounded to a 5/8" diameter x 20ft. Copper-clad steel ground rod using a #6 bare copper ground wire and an approved pressure type bronze connector clamp.

C. Seal all conduit entrances into RTU enclosures using silicone gel.

D. All piping to and from pressure transmitters shall be provided with necessary unions, test tees, couplings, adaptors, and shut-off valves (see Detail 'B', attached).

E. Instrumentation and accessory equipment shall be installed in accordance with the Manufacturer's instructions. The locations of equipment, transmitters, and devices shown on the Drawings are approximate only. Exact locations shall be as approved by the Engineer during construction. Obtain in the field all information relevant to the placing of instruments and in case of any interference with other work, proceed as directed by the Engineer and furnish all labor and materials necessary to complete the work in an approved manner.

F. Unless specifically shown in the contract Drawings, direct reading or electrical transmitting instrumentation shall not be mounted on process piping. Instrumentation shall be mounted on stainless steel unistrut supports. All instrumentation connections shall be provided with shutoff and drain valves. Diaphragm seals with flushing connections shall be provided.

G. The shield on each process instrumentation cable shall be continuous from source to destination and be grounded as directed by the Manufacturer of the instrumentation equipment but in no case shall more than one ground point be employed for each shield.

H. The system supplier shall complete the installation, the placing and location of system components, their connections to the process equipment panels, cabinets, and devices, subject to the Engineer's approval. He shall be responsible to insure that all field wiring for power and signal circuits are correctly done in accordance with best industry practice and provide for all necessary system grounding to insure a satisfactory functioning installation.

I. Instrumentation shall be energized and started only by the instrumentation supplier's field representative.

J. All instrumentation shall be carefully checked by the supplier's field service personnel for damage and shall be fully calibrated and put into operation. Field service personnel shall check calibration under actual conditions as equipment is put into service, and shall work closely with the Contractor and

Owner/Engineer in obtaining desired control.

K. After all adjustments are made, one (1) day shall be set aside to allow the system Supplier to demonstrate proper operation as specified, and to instruct maintenance and operations personnel in the operation, maintenance, and troubleshooting of all equipment supplied under this section.

3.02 CENTRAL STATION COMPUTER PROGRAMMING

A. The following control strategies and parameters described herein are written descriptions of the programming required to implement the operation of the entire system. The programming shall be implemented within the central station computer as required to provide the following control and status/alarm reporting functions:

1. Well No.16:

   a. Pump Start/Stop (DO)

   b. Pump Run (DI)

   c. Pump Fail (DI)

   d. Intrusion Alarm (DI)

   e. Pressure (AI)

   f. Level (AI)

   g. Flow (AI)

   h. Power Failure or RTU on Battery Backup (DI)

B. The Supplier shall test all individual control parameters to prove its integrity and the process control language in which it is implemented. Within the testing process the Supplier shall test all Loop-Specific and Non-Loop-Specific functions including but not limited to the following:

1. Failure Mode and Backup Procedures: power failure, program backup and reload, retentive outputs.

2. Communication with the remote terminal units via telemetry.

3. All remote I/O module functions.

Tests shall be performed locally and at the central station computer.

END OF SECTION

SECTION 16050

ELECTRICAL GENERAL PROVISIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. The Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Division.

1.02 SCOPE OF WORK

A. Furnish all labor, materials, equipment and incidentals required for a complete electrical system as hereinafter specified and shown on the Drawings. Electrical work to be performed under this Contract includes, but is not limited to, the following:

1. Provide and install all equipment, conduit, and wiring for the electrical work indicated on the civil site plans and the electrical drawings in accordance with Division 16 of the specifications.

B. The work, apparatus and materials which shall be furnished under these Specifications and accompanying Drawings shall include all items listed hereinafter and/or shown on the Drawings. Certain equipment will be furnished as specified in other Sections of these Specifications which will require wiring thereto and/or complete installation as indicated. All materials necessary for the complete installation shall be furnished and installed by the Contractor to provide complete power, communication systems, instrumentation, wiring and control systems as indicated on the Drawings and /or as specified herein.

C. The work shall include complete testing of all equipment and wiring at the completion of the work and making any minor connection changes or adjustments necessary for the proper functioning of the system and equipment. All workmanship shall be of the highest quality; sub-standard work will be rejected.

D. Make all field connections to RTU panels.

1.03 GENERAL INFORMATION

A. Each bidder or his authorized representatives shall, before preparing his proposal, visit all areas of the sites in which work under this Section is to be performed and inspect carefully the existing conditions. The submission of the proposal by the bidder shall be considered evidence that he or his representative has visited the sites and noted the locations and conditions under which the work will be performed and that he takes full responsibility for a complete knowledge of all factors governing his work.

B. It is the intent of these Specifications that the electrical system shall be suitable in every way for the service required. All material and all work which may be reasonably implied as being incidental to the work of this Section shall be furnished at no extra cost.

1.04 CODES, INSPECTION AND FEES

A. All material and installation shall be in accordance with the latest edition of the National Electrical Code and all applicable national, local and state codes.

B. All equipment and material shall be U.L. listed.

C. Pay all fees required for permits and inspections.

1.05 UTILITY COORDINATION

A. The Contractor shall coordinate with local representatives of the power utility to ensure the proper installation of these utilities at the project sites. Utility installation(s) shall be in accordance with the requirements of the Contract Documents and meet all requirements of the respective utility.

1.06 TEMPORARY ELECTRICAL FACILITIES

B. The Contractor shall furnish, install, and maintain all materials and equipment required to provide temporary light and power to perform the work of all trades during construction until work is competed. Adequate lighting and receptacle outlets for operation of hand tools shall be provided throughout the project, including trailers, field offices, etc. and shall be extended as construction progresses.

C. All reasonable safety requirements shall be observed to protect workers and the public from shock and fire hazards.

1. Ground fault circuit interrupters shall be employed in accordance with codes.

2. Ground wires are required in all circuits. Ground poles are required on all outlets. All metallic cases shall be grounded.

3. Raintight cabinets shall be used for all equipment in wet locations.

1.07 INTERPRETATION OF DRAWINGS

A. The Drawings are not intended to show exact locations of conduit runs.

B. Unless otherwise approved by the Engineer conduit shown exposed shall be installed exposed; conduit shown concealed shall be installed concealed.

C. Where circuits are shown as "home-runs" all necessary fittings and boxes shall be provided for a complete raceway installation.

D. All wire, conduit, circuit breaker, and motor starter sizes shown on the drawings are indicative of the sizes required based upon the equipment shown. These may vary depending upon the actual equipment furnished. The Contractor shall make adjustments as required to meet the installation requirements of equipment.

E. The locations of equipment and devices shown on the Drawings are approximate only. Exact locations shall be as approved by the Engineer during construction. Obtain in the field all

information relevant to the placing of electrical work and in case of any interference with other work, proceed as directed by the Engineer and furnish all labor and materials necessary to complete the work in an approved manner.

F. Circuit layouts shown are not intended to show the number of fittings, or other installation details. Furnish all labor and materials necessary to install and place in satisfactory operation all power, lighting, and other electrical systems shown. Additional circuits shall be installed whenever needed to conform to the specific requirements of the equipment.

G All connections to equipment shall be made as shown, specified, and directed and in accordance with the approved shop drawings.

H. All cutting and patching necessary throughout the existing site shall be done in a thoroughly workmanlike manner.

1.08 COMPONENT INTERCONNECTIONS

A. Component equipment furnished under this Specification will not be furnished as integrated systems.

B. Analyze all systems components and their shop drawings; identify all terminals and prepare drawings or wiring tables necessary for component interconnection.

1.09 MATERIALS

A. The materials used in all systems shall be new, unused, of the manufacturer's latest design, and as hereinafter specified. All materials where not specified shall be of the very best of their respective kinds. Samples of materials or Manufacturer's Specifications shall be submitted for approval as required by the Engineer.

B. Materials and equipment used shall be Underwriters Laboratories, Inc. listed.

C. Electrical equipment shall at all times during construction be adequately protected against mechanical injury or damage by water. Electrical equipment shall not be stored out-of-doors. Electrical equipment shall be stored in dry permanent shelters. If any apparatus has been damaged, such damage shall be repaired by the Contractor at his own cost and expense. If any apparatus has been subject to possible injury by water, it shall be thoroughly dried-out and put through such special tests as directed by the Engineer, at the cost and expense of the Contractor, or shall be replaced by the Contractor at his own expense.

D. All electrical panels, enclosures, raceways, conduits, wireways, boxes, cabinets, etc., shall be fabricated of metal, Non-metallic substitutes are not acceptable. This does not apply to buried work.

1.10 SHOP DRAWINGS

A. Shop drawings shall be submitted for approval of all materials, equipment, apparatus, and other items as required by the Engineer.

B. Shop drawings shall be submitted for all equipment supplied under Division 16 of the specifications.

C. Prior to submittal by the Contractor, all shop drawings shall be checked for conformance with the Contract requirements. Shop drawings shall bear the date checked, checker's name and indication of approval. Provide an itemized list noting all discrepancies with the Specifications and Drawings. Shop drawings not so checked and noted shall be returned.

D. The Engineer's check shall be only for conformance with the design concept of the project and compliance with the Specifications and Drawings.

E. No material shall be ordered or shop work started until the Engineer's approval of shop drawings has been given.

1.11 WARRANTY

A. All equipment furnished and installed, and all work performed under Division 16 shall be guaranteed by the Contractor against defects of workmanship, materials, and proper installation for a minimum period of one (1) year from date of acceptance. This time shall be increased to the periods stated within individual specification sections as required.

1.12 RECORD DRAWINGS

A. As the work progresses, legibly record all field changes on a set of project Contract Drawings. When the project is complete, furnish a complete set of "as-built" drawings for the Project Record Documents.

1.13 TESTS

A. Test all systems in the presence of the Engineer and repair or replace all defective work. Make all necessary adjustments to the systems and instruct the Owner's personnel in the proper operation of the systems.

END OF SECTION

SECTION 16110

RACEWAYS

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. Furnish and install complete raceway systems as shown on the Drawings and as specified herein.

1.02 APPLICATIONS

A. Schedule 40 PVC conduit shall be used underground, unless otherwise noted. Transitions to exposed, outdoor locations shall be made using Schedule 80 PVC conduit starting with the last 90 degree elbow.

B. Schedule 80 PVC conduit shall be used in exposed, outdoor locations except where specified otherwise.

C. PVC coated RGS conduit shall be used as raceways for shielded wiring.

D. All conduit of a given type shall be the product of one manufacturer.

PART 2 - PRODUCTS

2.01 RIGID CONDUIT

A. PVC conduit shall be rigid polyvinyl chloride type as manufactured by Carlon, an Indian Head Company, Phillips Petroleum Company, Triangle Pipe and Tube Company, Inc., or approved equal.

B. PVC coated rigid steel conduit shall be hot-dipped galvanized inside and out including threads. The PVC coating shall be UL listed for corrosion protection and be at least 40 mil thick. A 2 mil green urethane interior coating shall be provided. PVC coated rigid steel conduit shall be as manufactured by the Perma-Cote Company, Gilmer, Texas, or approved equal.

2.02 BOXES AND FITTINGS

A. Terminal boxes, junction boxes, pull boxes, etc., shall be schedule 80 PVC unless otherwise shown on the Drawings. Covers shall be gasketed and fastened with stainless steel screws. Boxes shall be as manufactured by Hoffman Engineering Company or approved equal.

B. Conduit hubs shall be as manufactured by Meyers Electric Products, Inc., Raco Division, Appleton Electric Company, or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

A. No conduit smaller than 3/4 inch electrical trade size shall be used, nor shall any have more than four (4) 90 degree bends in any one run. Pull boxes shall be provided as required or directed.

B. An equipment grounding conductor sized per article 250-95 of the N.E.C. shall be installed in every raceway whether or not shown on the Drawings.

C. All underground conduit shall be buried at least 24 inches below grade.

D. A three (3) inch wide warning tape, red with black stenciled letters **"CAUTION - CAUTION - CAUTION ELECTRICAL LINE BURIED BELOW"** shall be installed at least 12 inches above, and along the entire length of all underground conduit.

E. No wire shall be pulled until the conduit system is complete in all details.

F. The ends of all conduits shall be tightly plugged to exclude dust and moisture while under construction.

G. Conduit supports shall be spaced at intervals of eight (8) feet or less, as required to obtain rigid construction.

H. Single conduits shall be supported by means of one-hole pipe clamps in combination with one-screw back plates, to raise conduits from the surface.

I. All conduits on exposed work shall be run at right angles to and parallel with the surrounding wall or slab. No diagonal runs will be allowed. Bends in parallel conduit runs shall be concentric. All conduit shall be run perfectly straight and true.

J. All earth, sod, etc., moved during the installation of underground conduit shall be replaced by the contractor to its original state.

K. Conduits terminating in gasketed enclosures shall be terminated with conduit hubs.

L. The ends of all conduits terminating in panels and cabinets shall be filled with silicone gel. Filling shall be done after the cable has been pulled in order to prevent moisture in the terminating enclosure.

END OF SECTION

SECTION 16120

WIRES AND CABLES

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. Furnish, install and test all wire, cable, and appurtenances as shown on the Drawings and as hereinafter specified.

1.02 APPLICATIONS

A. Wire for all low voltage power and motor circuits shall be type XHHW, stranded.

B. Single conductor wire for control, indication and metering shall be type THHN/THWN No. 14 AWG, stranded.

C. Wire for process instrumentation shall be shielded pairs No. 16 AWG, stranded with individual drain wires.

1.03 SUBMITTALS

A. Samples of proposed wire and cable shall be submitted for approval. Each sample shall have the size, type of insulation and voltage stencilled on the jacket.

B. Approved samples will be sent to the project location for comparison by the Resident Engineer with the wire actually installed.

C. Installed, unapproved wire shall be removed and replaced at no additional cost to the Owner.

PART 2 - PRODUCTS

2.01 MATERIALS

A. All wires and cables shall be of annealed, 98 percent conductivity, soft drawn copper conductors.

B. All conductors No. 8 AWG and larger shall be stranded.

C. Type XHHW shall be 600 volt cross-linked polyethylene (XLP) and type THHN/THWN shall be 600 volt as manufactured by the Hi-Tech Company, Rome Cable Corporation, The Okonite Company or approved equal.

D. Process instrumentation wire shall be 600 volt, PVC or polyethylene insulated, aluminum/polyester tape shielded, polyvinyl chloride jacketed, type "TC" as manufactured by the American Insulated Wire Company, Belden Corporation, "Beldfoil" 9342, or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

A. All conductors shall be carefully handled to avoid kinks or damage to insulation.

B. Lubrications shall be used to facilitate wire pulling. Lubricants shall be U.L. listed for use with the insulation specified.

C. Shielded instrumentation wire shall be installed from terminal to terminal with no splicing at any intermediate point.

D. Instrumentation cables shall be separated from power and control cables in pullboxes.

E. Shielding on instrumentation wire shall be grounded at the transmitter end only, or as directed by the supplier of the instrumentation equipment.

F. Wire and cable connections to terminals, splices, and taps shall be made with compression connectors. Connections of insulated conductors shall be insulated and covered. All connections shall be made using materials and installation methods in accordance with instructions and recommendations of the manufacturer of the particular item of wire and cable. The conductivity of all completed connections shall be not less than that of the uncut conductor. The insulation resistance of all completed connections of insulated conductors shall be not less than that of the uncut conductor.

G. All wire and cable shall be continuous and without splices between points of connection to equipment terminals, except a splice will be permitted by the Engineer if the length required between the points of connection exceeds the greatest standard shipping length available from the manufacturer specified or approved by the Engineer as the manufacturer of the particular item of wire and cable.

H. Steel fish tapes and/or steel pulling cables shall not be used in PVC conduit runs.

3.02 TESTS

A. All 600 volt wire insulation shall be tested with a megohm meter after installation. Tests shall be made at not less than 1,000 VDC.

END OF SECTION

SECTION 16452

GROUNDING

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. Furnish and install a complete grounding system in strict accordance with Article 250 of the National Electric Code and as hereinafter specified and shown on the Drawings.

PART 2 - PRODUCTS

2.01 GROUND RODS

A. Ground rods shall be copper clad steel 5/8 inch diameter x 20 foot minimum length. Ground rods shall be Copperweld or be an approved equal product.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Contractor shall not allow any grounding connections to be painted. If the connections are painted, they shall be disassembled and remade with new fittings.

B. Grounding electrodes shall be driven as required. Where rock is encountered, grounding plates may be used in lieu of grounding rods.

C. All equipment enclosures, motor frames, conduits systems, exposed structural steel, and similar items shall be grounded.

D. Exposed connections shall be made by means of approved grounding clamps. Exposed connections between different metals shall be sealed with No-Oxide Paint Grade A or approved equal. All buried connections shall be made by welding process equal to Cadweld.

E. All grounding conductors shall be laid slack and where exposed to mechanical injury, shall be protected by pipes or other substantial guards. If guards are iron pipe or other magnetic material, conductors shall be electrically connected to both ends of the guard.

F. The Contractor shall exercise care to insure good ground continuity, in particular between the conduit system and equipment frames and enclosures. Where necessary, jumper wires shall be installed.

3.02 TESTS

A. The Contractor shall test the ground resistance of the system. Testing shall not be performed within 48 hours of rainfall. All test equipment shall be provided by the Contractor and approved by the Engineer. Dry season resistance of the system shall not exceed 5 ohms. Submit test results to the Engineer for approval. In the event that the specified resistance cannot be achieved through the grounding as shown, provide additional grounding as directed by the Engineer.

B. All grounding system continuity shall be checked with a low range ohmmeter.

END OF SECTION

SECTION 16810

CONTROL PANEL

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. Provide, install, and test the control panel and appurtenances as shown on the Drawings and as hereinafter specified.

1.02 STANDARDS

A. The control panel shall be in accordance with the National Electric Code and NEMA as applicable.

1.03 QUALITY ASSURANCE

A. The control panel manufacturer shall have total system control responsibility. The manufacturer shall have acceptable local experience in providing control panels of the types and functions as specified herein.

B. All control panels shall be UL 508 listed and constructed by a UL approved shop.

C. The control panel shall be manufactured by C.C. Controls or approved equal.

1.04 CONTROL PANEL FUNCTIONS

A. The panel builder shall provide functions as described using his own standard schematics and arrangements. All wires shall be numbered and brought to numbered terminals. Complete schematics and outline Drawings shall be provided for approval.

1.05 SUBMITTALS

A. Shop Drawings shall include the following:

1. Enclosure manufacturer's catalog data and descriptive literature.

2. Outline Drawings of complete control panel showing dimensions and weight. These Drawings shall include conduit entrance locations and requirements, nameplate legends, and device layout.

3. Complete master wiring diagrams and elementary/control schematics, indicating coordination with other control devices operating in conjunction with the control panel. This shall include complete terminal point diagrams for internal and external equipment connections. Due to the complexity of the control functions, it is imperative that these Drawings be clear and carefully prepared to facilitate interconnections with the other equipment. Standard preprinted sheets or Drawings marked to indicate applicability to this contract will not be accepted.

4. Complete component data including, control power transformers, relays, fuses, breakers, starters, overload devices, indicating meters and any other panel mounted devices such as pushbuttons, selector switches, indicating lamps, etc.

5. Exceptions to these Specifications clearly noted with the reason for each exception.

6. Manufacturer's statement accepting one (1) year warranty responsibility.

7. Recommended spare parts list.

B. Final Drawings:

1. The following final Drawings shall be submitted on AutoCAD diskette, along with two (2) sets of 11" x 17" paper prints:

a. Outline Drawings

b. Section elevations showing devices and nameplates

c. Complete wiring diagrams

C. O&M Manuals:

1. Operation and maintenance manuals shall be furnished for all equipment and components.

PART 2 - PRODUCTS

2.01 CONSTRUCTION

A. All panels furnished shall be of the arrangement and design as shown on the Drawings and specified herein.

B. Panel construction shall be NEMA 3R, 316 stainless steel, painted white, with a 3 point latch and means of using a padlock. Internal components shall be mounted on an aluminum back panel and selector switches, lights, etc., mounted on an interior aluminum dead-front panel. Provide a NEMA 4X, stainless steel, closed loop heat exchanger for the enclosure, sized to maintain less than a 110 degrees, F temperature inside the enclosure with a 95 degrees F ambient condition, Noren, Hoffman, or approved equal.

C. Nameplates shall be provided for all panel mounted equipment. The nameplates shall be constructed of black and white laminated, phenolic material having engraved letters approximately 3/16 inch high, extending through the black face into the white layer. Nameplates shall be attached to panels by self-tapping stainless steel screws.

D. Print storage pockets shall be provided on the inside of each panel. Its size shall be sufficient to hold all of the prints required to service the equipment. Reduced drawings shall be provided to be stored in these pockets.

E. All panel equipment shall be mounted and wired on or within the cabinet. All wiring within the panel shall be grouped together with harnesses or ducts and secured to the structure. All wiring shall be numbered in accordance with the numbering system used on the wiring/connection diagrams. Power and low voltage DC signal wiring shall be routed in separate wire ways. Crossing of the two system wires shall be at right angles. Parallel troughs of different systems shall be separated by a minimum of 12 inches. Wiring through for supporting internal wiring shall be plastic type with snap-on covers. The side walls shall be open-top type to permit wire changing without disconnecting. Wiring troughs shall not be filled to more than 60 percent visible fill. Wiring through covers shall be match marked to identify placement. If component identification is shown on covers for visibility, the ID shall also appear on the mounting sub-panel.

F. Power wire shall be 12 AWG minimum, type THWN stranded, insulated for not less than 600 volts unless specified otherwise. Control wire shall be 14 AWG type THWN stranded. Wire color shall be, Line Power - Black; Neutral or common - White; AC Control - Red; DC Control - Blue; Equipment or Chassis Ground - Green; specified externally powered circuits - Orange.

G. All wiring shall terminate in a master terminal board, rigid type and numbered. The master terminal board shall have a minimum of 25 percent spares. Terminal blocks shall be arranged in horizontal rows and separated into groups. (Power, AC control, DC signal, and alarm). Terminal blocks shall be barrier type with the appropriate voltage rating (600 volts minimum). They shall be the raised channel mounted type. Wire connectors shall be the hook fork type with non-insulated barrel for crimp type compression connection to the wire. Wire and tube markers shall be the sleeve type with heat impressed letters and members. Direct interlock wiring between equipment will not be allowed. Only one side of a terminal block row shall be used for internal wiring. The field wiring side of the terminal shall not be within six (6) inches of the side panel or adjacent terminal.

H. All components shall be mounted in a manner that shall permit servicing, adjustment, testing and removal without disconnecting, moving or removing any other component. Components mounted on the inside panels shall be mounted on removable plates and not directly to the enclosure. Mounting shall be rigid and stable unless shock mounting is required by the manufacturer to protect equipment from vibration. Component mounting shall be oriented in accordance with the component manufacturer's and industries' standard practices. All internal components shall be identified with suitable plastic or metal engraved tags attached with drive pins adjacent to (not on) each component identifying the component in accordance with the drawing, specifications, and supplier's data.

2.02 COMPONENTS

A. Combination Motor Starters:

1. All motor starters shall be a combination motor circuit protector and contactor, 3-pole, 60 hertz, 600 volt, magnetically operated, of the types shown on the Drawings. NEMA sizes shall be as required for the horsepowers shown on the Drawings, but shall be not less than NEMA size 0. The contactors shall have a 120 volt operating coil and shall have three (3) N.O. and one (1) N.C. reversible auxiliary contacts.

2. Motor circuit protectors shall be molded case with adjustable magnetic trip only. They shall have an RMS current interrupting capacity of at least 10,000 A. They shall be specifically designed for use with magnetic motor starters. Motor circuit protector handles through deadfront panels shall be padlockable in the "OFF" position.

3. Replaceable individual overload relay heaters shall be installed in each phase and sized based on the full load amps of the actual motor supplied. Overload relays shall be adjustable and manually reset by pushbutton on the dead-front door. These shall be ambient compensated and have one (1) N.O. and one (1) N.C. auxiliary contacts common to all three phases.

4. Combination motor starters shall be Square-D class 8539, or approved equal.

B. Circuit Breakers:

1. Circuit breakers shall be thermal-magnetic, molded case, permanent trip. Voltage, current, interrupting ratings, and number of poles required shall be as shown on the Drawings. Circuit breakers rated 120/240 volt shall be UL listed and have an interrupting capacity of not less than 10,000 amperes, RMS, symmetrical. Circuit breakers shall be as manufactured by Square-D, Class 650, Type FAL, or approved equal.

C. Push Buttons:

1. Push buttons shall be heavy-duty, oil tight, with momentary contacts. Switches shall be supplied with the number of poles required for the application, an escutcheon plate, and contacts rated for 10 amperes at 120 volts AC. Push buttons shall be as manufactured by Square-D, Class 9001, Type KR1, or approved equal.

D. Rotary Hand Switches:

1. Rotary selector switches shall be heavy duty oil tight, with the number of poles and number of positions as required. Switches shall have a pistol grip handle and be of the maintained contact type rated for 10 amps at 120 volts AC. The switches required for "electronic duty" shall have low, stable, contact resistance and gold contacts. Provide make-before-break bridging contacts where required. Rotary hand switches shall be as manufactured by Square-D, Class 9001, Type KS, standard knob, or approved equal.

E. Pilot Lights:

1. Indicating lights shall be heavy duty, oil tight, lens color as shown on the Drawings. Units shall be approximately 1 inch diameter. Bulbs shall be of the push-to-test type, allow relamping from the front, and powered through a 120 volt AC; 6 volt transformer. Pilot lights shall be as manufactured by Square-D, Class 9001, Type KT, or approved equal.

F. Duplex Receptacle:

1. A 20A duplex receptacle shall be installed within the control panel. Receptacle shall be GFCI Type and shall be as manufactured by Leviton Company Type 6599-I.

G. Terminal Blocks:

1. Terminal blocks shall be as manufactured by Square D Class 9080.

H. Intrusion Alarms:

1. Intrusion alarm devices shall be of the limit switch type with one N.O. contact closing upon entry (door opening). Limit switches shall be heavy duty as manufactured by Square D, Type C, Class 9007 or approved equal. Mounting shall be as required.

I. Elapsed Time Meters:

1. Run time meters shall be 3 1/2" inch square case; non-reset, 99,999.9 hour range; Type 236 as manufactured by the General Electric Company, or approved equal.

J. Control Relays:

1. General purpose relays shall be double pole, double throw, octal plug-in type with a transparent dust cover. The relay shall be equipped with an indicating light to indicate when its coil is energized. The relays shall have 10 ampere 120 volt AC contacts. Relays shall be as manufactured by Square-D, Class 8501, Type KP, or approved equal.

2. Time delay relays shall be plug-in type with a dust and moisture resistant case. The timers shall be of the multi-range/analog or digital type with selectable ranges. The output contacts shall be rated at 10 amperes 120 volt AC minimum. The timer shall have a "timing in progress" indication. Timers shall be as manufactured by Square-D, Class 9050, Type JCK, or approved equal.

K. Phase Monitors:

1. Phase monitors shall be three phase solid state devices with voltage sensing capabilities. Phase monitors shall have undervoltage capabilities with a UL listed relay. The monitors shall protect the equipment against phase loss, phase unbalance, phase reversal, and undervoltage. Phase monitors shall be Diversified Electronics Type SLA-440-ALE automatic reset type, or approved equal.

L. Flow Meter Indicator:

1. Provide a digital display, 3 ½ - digit, 7-segment LCD for indication of flow proportional to a loop powered 4-20mA signal. The flow meter indicator shall be as manufactured by Newport Electronics, Inc. Model 558, or approved equal.

M. Pump Motor Monitor:

1. The pump motor protective device shall monitor overload, underload, overheating, and rapid cycling , and shut down the motor upon detection of any of these conditions. The pump monitor shall be Franklin Electric Subtrol Plus, no substitute.

N. Transient Protection:

1. A surge arrester shall be installed for the incoming power conductors. Provide protection for each ungrounded conductor as required. These shall be connected to the line side of the protected equipment. Install a current limiting fuse in series with each pole of the arrester connection as recommended by the Manufacturer. All transient protection devices, including fuses, shall be installed within the protected equipment enclosures wherever possible. Surge arresters shall be as manufactured by the General Electric Company, Tranquell Series, Model 9L15 or approved equal.

2.03 SPARE PARTS

A. Furnish one (1) complete set of Manufacturer recommended spare parts. As a minimum, furnish the following for each control panel:

1. One (1) box of control power fuses of each size utilized.

2. One (1) box of pilot light lamps.

B. Spare parts shall be plainly tagged and marked for identification and re-ordering.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Seal all conduit entrances into control panels using silicone gel after wires are pulled.

3.02 TESTS

A. The supplier shall test all equipment at the factory prior to shipment.

3.03 ACCEPTANCE

A. Upon successful completion of a 30 day operation test and subsequent review and approval of the complete system's final documentation, the control panel shall be considered as acceptable.

-END OF SECTION-

16950

MISCELLANEOUS EQUIPMENT

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. Furnish and install all miscellaneous equipment as hereinafter specified and as shown on the Drawings.

PART 2 - PRODUCTS

2.01 DISCONNECT SWITCHES (DOUBLE-THROW)

A. Fusible and non-fusible double-throw disconnect switches shall be heavy-duty, quick-make, quick-break, visible blades, 600 volt, 3-pole with full cover interlock. All current carrying parts shall be copper. Enclosure Type shall be NEMA-4X, stainless steel, with stainless steel mounting hardware except as shown on the drawings. Disconnect switches shall be horsepower rated as manufactured by the Square-D Company, Class 3140, Type DT/DTU, or approved equal.

2.02 TRANSIENT PROTECTION

A. Surge arresters shall be installed where required on the Drawings. Provide protection for each ungrounded conductor as required. These shall be connected to the line side of the protected equipment. Install a current limiting fuse in series with each pole of the arrester connection as recommended by the Manufacturer. All transient protection devices, including fuses, shall be installed within the protected equipment enclosures wherever possible. Surge arresters shall be as manufactured by the General Electric Company, Tranquell Series, Model 9L15 or approved equal.

END OF SECTION

APPENDIX A

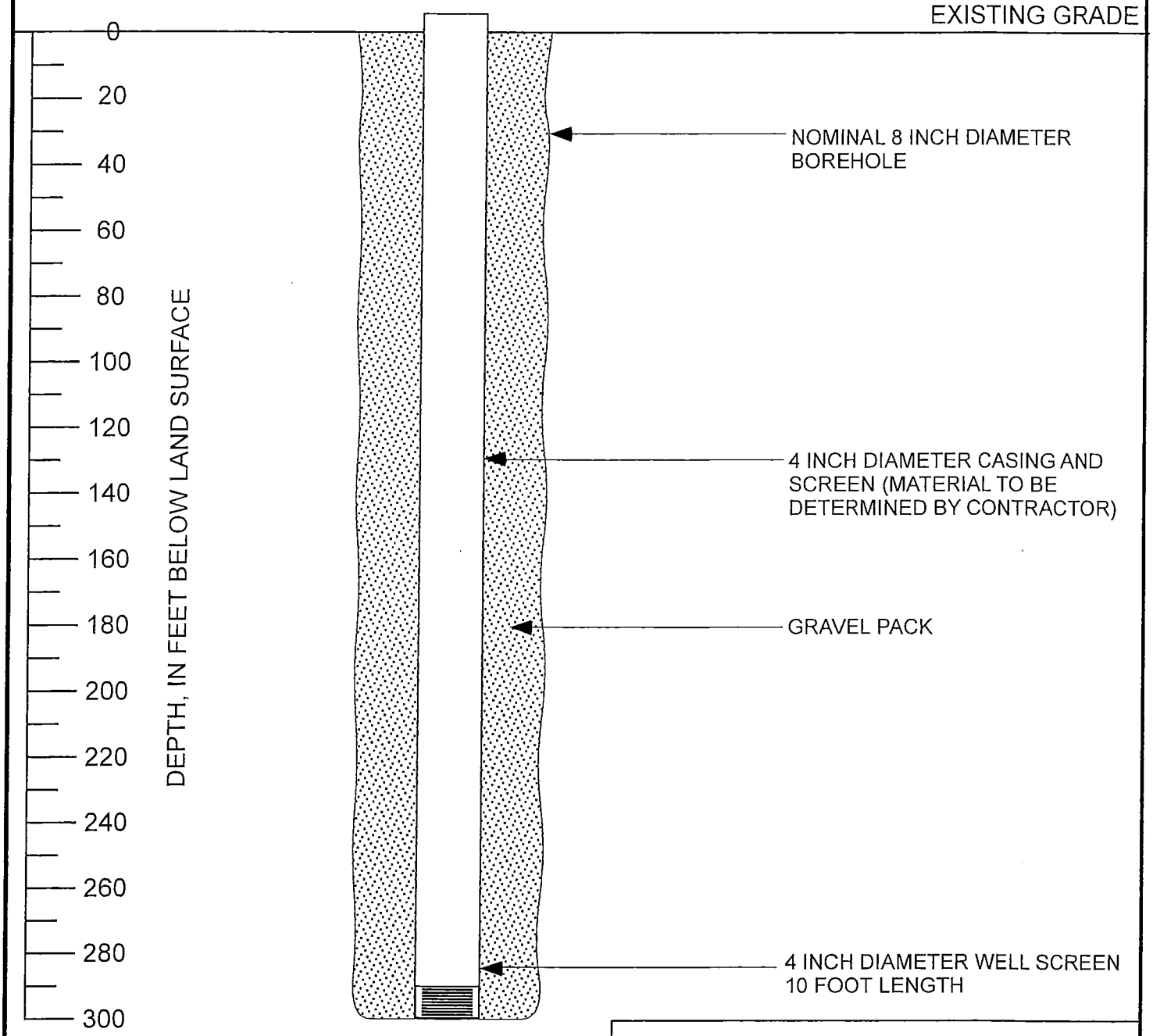
FIGURES 1, 2, and 3

FIGURE TITLE:

CITY OF LAKE WORTH
SURFICIAL AQUIFER PRODUCTION WELL LW-16R
PROJECT LOCATION MAP

JLA Geosciences, Inc.

DATE: 4/3/2013	FIGURE NO:
DRAWN BY: ASG	1
PROJECT NO:13-004	



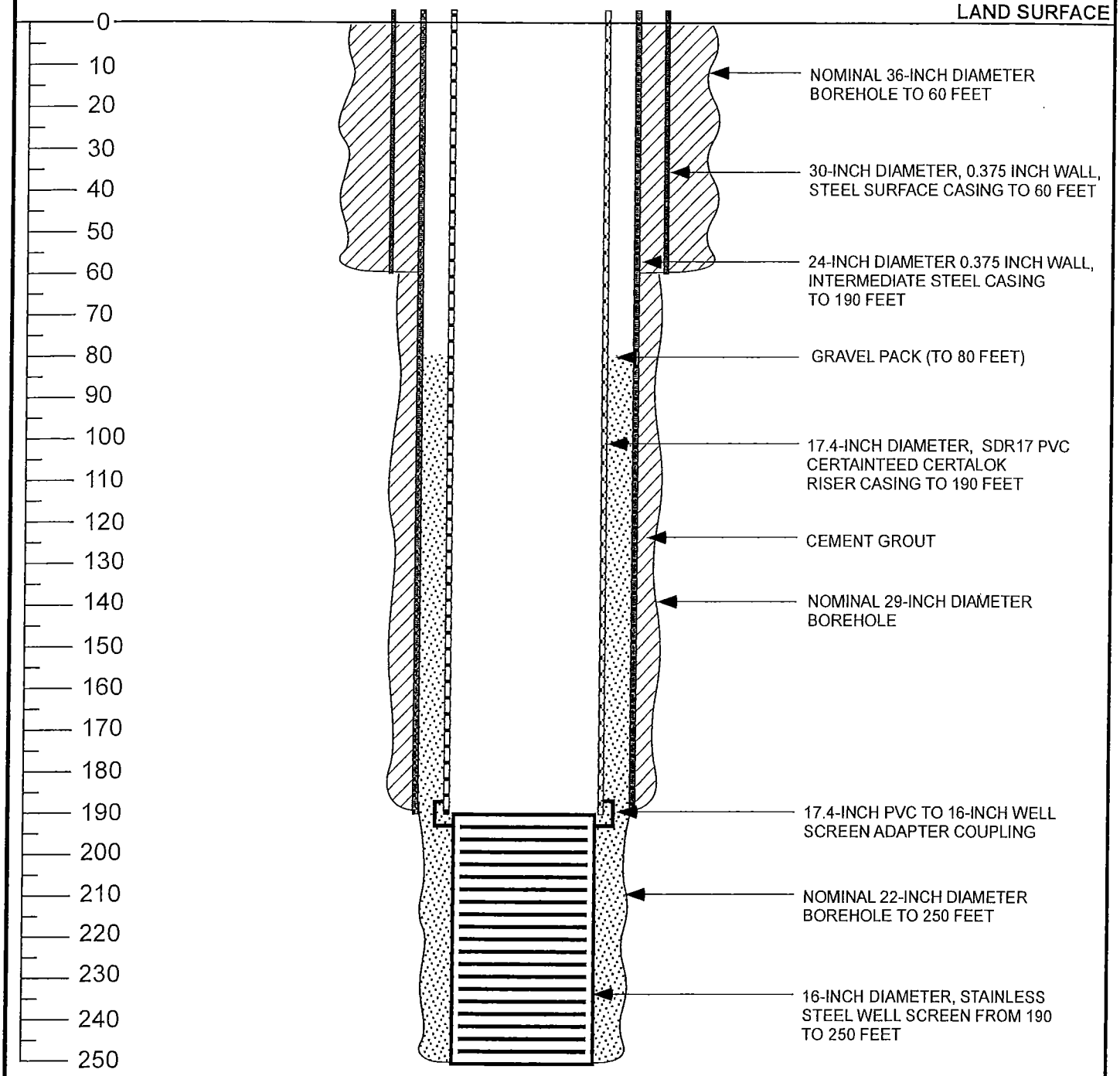
JLA Geosciences, Inc.

LEGEND:
GRAVEL PACK
WELL CASING
WELL SCREEN

DEPTHS HAVE BEEN ESTIMATED FOR BIDDING PURPOSES. ACTUAL DEPTHS WILL BE DETERMINED BY THE HYDROGEOLOGIST DURING CONSTRUCTION

SCALE:	DATE:
AS SHOWN	04/3/13
DRAWN BY: ASG	DWG #: 1

PROJECT SITE:	PROJECT NO:
CITY OF LAKE WORTH SURFICIAL AQUIFER PRODUCTION WELL LW-16R	13-004
FIGURE TITLE: 2-INCH EXPLORATORY TEST WELL WELL CONSTRUCTION DETAILS	FIGURE NO: 2



DEPTHS HAVE BEEN ESTIMATED FOR BIDDING PURPOSES. ACTUAL DEPTHS WILL BE DETERMINED BY THE HYDROGEOLOGIST DURING CONSTRUCTION

LEGEND:

- CEMENT GROUT
- STEEL WELL CASING
- WELL SCREEN
- GRAVEL PACK
- PVC WELL CASING

PROJECT SITE: CITY OF LAKE WORTH SURFICIAL AQUIFER PRODUCTION WELL LW-16R	JLA Geosciences, Inc.
	DATE: 06/11/13 DRAWN BY: RKS
FIGURE TITLE: WELL CONSTRUCTION DETAILS	PROJECT NO: 13-004
	FIGURE NO: 3

APPENDIX B

FLORIDA DEPARTMENT OF HEALTH LETTERS

December 5, 2013

ELECTRONIC CORRESPONDENCE

In the matter of an
Application for Permit by:

Monica Morandi, P.E.
Utilities Engineer, City of Lake Worth
1900 2nd Avenue North
Lake Worth, FL 33461
mmorandi@lakeworth.org

DEP File No.: 138272-168-WC
Palm Beach County
Project: Potable Well #16

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number **138272-168-WC** to construct a community water wellhead issued under Section(s) 403.087 of the Florida Statutes (F.S.). The project consists of a submersible pump rated for 800 gpm at 120 feet TDH, flow meter, valves, electrical equipment, controls and approximately 60 linear feet of sixteen (16) inch DIP raw water main.

This permit is final and effective on the date filed with the clerk of the Florida Department of Health, Palm Beach County (the Department), unless a petition is filed in accordance with the paragraphs below or unless a request for extension of time in which to file a petition is filed within the required timeframe and conforms to Rule 62-110.106(4), F.A.C. Upon timely filing of a petition or a request for an extension, this permit will not be effective until further Order of the Department.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) with the Agency Clerk, Division of Environmental Public Health, Florida Department of Health, Palm Beach County, 800 Clematis Street, West Palm Beach, Florida 33401, within 14 days of receipt of this Notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-106.205, F.A.C.

A petition must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address

for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of how and when the petitioner received notice of the agency decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, including the specific facts which petitioner contends warrant reversal or modification of the Department's action;

(f) A statement of the specific rules or statutes the petitioner contends requires reversal or modification of the Department's action, including an explanation of how the alleged facts relate to the specific rules or statutes; and

(g) A statement of the relief sought by petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the materials facts on which the Department's action is based shall state that no such facts are in dispute and otherwise contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any such final decision of the Department on the petition have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to section 120.68 of the Florida Statutes, by filing a Notice of Appeal pursuant to Rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department, Division of Environmental Public Health, Florida Department of Health, Palm Beach County, 800 Clematis Street, West Palm Beach, Florida 33401; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

Executed in the City of West Palm Beach, Florida.

STATE OF FLORIDA
DEPARTMENT OF HEALTH - PALM BEACH COUNTY

Darrel J. Graziani, P.E., R.S.,
Environmental Administrator
Division of Environmental Public Health
800 Clematis Street, West Palm Beach, FL 33401
(561) 837-5900

Enclosures: Permit File No. 138272-168-WC

CERTIFICATION OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Permit Issuance and all copies were mailed/electronically transmitted before the close of business on December 5, 2013 to those persons listed.

Clerk Stamp

Florida Department of Health - PBC
Environmental Public Health
800 Clematis Street, 4th Floor
P.O. Box 29
West Palm Beach, Florida 33402

FILING AND ACKNOWLEDGEMENT

Filed, on this date, under section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

J Lefferman
Clerk

12/05/2013
Date

Engineer-of-Record: John R. Leemon, P.E.
Florida DEP: Linda Brien, P.G.

ELECTRONIC CORRESPONDENCE

PERMITTEE:
Monica Morandi, P.E., Utilities Engineer
City of Lake Worth
1900 2nd Avenue North
Lake Worth, FL 33461
mmorandi@lakeworth.org

PWS ID NUMBER: 4500773
PERMIT NUMBER: 138272-168-WC
DATE OF ISSUE: 12/05/2013
EXPIRATION DATE: 12/04/2018
COUNTY: Palm Beach
LAT/LONG: 27°37'09"N/80°04'21" W
SECT/TWP/RGE: 20/44/43
PROJECT: Potable Well #16

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-550, 62-555 & 62-560. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Construct: One new wellhead for a community water treatment facility, equipped with a submersible pump rated for 800 gpm at 120 feet TDH, flow meter, valves, electrical equipment, controls and instrumentation, and approximately 60 linear feet of sixteen (16) inch DIP raw water main.

In Accordance With:

Application Form DEP 62-555.900(1), engineering drawing sheets C01-C02, C1-1-C1-2, C5-1- C5-2, and E1 received July 24, 2013, revised sheet E2 received August 13, 2013, and utility agreement letter received November 20, 2013.

Located: At the Lake Worth Utilities Administration Building adjacent to 2nd Avenue North in the City of Lake Worth, Florida.

To Serve: Existing and future connections.

Subject To: General Conditions 1 - 15 and Specific Conditions 1 – 8.

GENERAL CONDITIONS:

The following General Conditions are referenced in Florida Administrative Code Rule 62-4.160.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State.Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
   a. Have access to and copy any records that must be kept under conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
   c. Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

GENERAL CONDITIONS:

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   a. A description of and cause of noncompliance; and
   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300 F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:
    a. Determination of Best Available Control Technology (BACT)
    b. Determination of Prevention of Significant Deterioration (PSD)
    c. Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)
    d. Compliance with New Source Performance Standards

14. The permittee shall comply with the following:
    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

GENERAL CONDITIONS: 14 (cont'd.)

c. Records of monitoring information shall include:
   1. the date, exact place, and time of sampling or measurements;
   2. the person responsible for performing the sampling or measurements;
   3. the dates analyses were performed;
   4. the person responsible for performing the analyses;
   5. the analytical techniques or methods used;
   6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. All products, including paints, which shall come into contact with potable water, either directly or indirectly, shall conform with National Sanitation Foundation (NSF) International, Water Chemicals Codex, Food Chemicals Codex, American Water Works Association (AWWA) Standards and the Food and Drug Administration, as provided in Rule 62-555.320(3), F.A.C.

2. Water supply facilities, including mains, pipe, fittings, valves, fire hydrants and other materials shall be installed in accordance with the latest applicable AWWA Standards and Department rules and regulations. The system shall be pressure and leak tested in accordance with AWWA Standard C600 C603, or C605, as applicable, and disinfected in accordance with AWWA Standard C651-653, as well as in accordance with Rule 62-555.340, F.A.C.

3. Setback distances between potable water wells and sanitary hazards shall be in accordance with 62-555.312, F.A.C.

4. Permittee shall maintain vertical clearance and horizontal separation between water mains and sanitary sewers, storm sewers, etc. unless approved otherwise by the Department, as provided in Rule 62-555.314, F.A.C., and Section 8.6 of *Recommended Standards for Water Works*, a manual adopted by reference in Rule 62-555.330(3), F.A.C.

5. The permittee must instruct the engineer of record to request system clearance from the Department within sixty (60) days of completion of construction, testing and disinfecting the system. Bacteriological test results shall be considered unacceptable if the test were completed more than 60 days before the Department received the results. [F.A.C. Rule 62-555.340(2)(c)]

SPECIFIC CONDITIONS:

6. Prior to placing this project into service, Permittee shall submit, at a minimum, all of the following to the Department for evaluation and approval for operation, as provided in Rules 62-555.340 and 62-555.345, F.A.C.:

   a. the engineer's *Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components Into Operation* {DEP Form 62-555.900(9)};

   b. certified record drawings, if there are any changes noted for the permitted project.

   c. copy of a satisfactory pressure test of the process piping performed in accordance with AWWA Standards. [F.A.C. Rule 62-555.320(21)(a)(1)]

   d. two consecutive days of satisfactory raw water main bacteriological analytical results

   e. ten(10) satisfactory bacteriological analysis results performed on the raw water to be taken ten(10) consecutive weekdays, or taken twice a day, 6 hours apart for 5 consecutive weekdays;

   NOTE: All samples must be performed by an employee of a State certified laboratory or a certified operator per PBC ECR-II).

   f. satisfactory chemical clearance, to include Primary Inorganic Contaminants, Secondary Contaminants, Volatile Organic Contaminants (VOCs), Synthetic Organic Contaminants (SOCs, aka Pesticides and PCBs), Radionuclides (Gross Alpha, Radium-226, Radium-228, Uranium), Alkalinity, Dissolved Iron, Dissolved Oxygen, pH, Total Sulfide, and Turbidity results from a certified laboratory.

   g. provide a copy of the well driller's completion report including actual well yield in gallons per minute

   In order to facilitate the issuance of a letter of clearance, the Department requests that all of the above information be submitted as one package.

7. Prior to construction, all required permits or approvals must be obtained for all aspects of the project from the appropriate agencies

8. The applicant shall install liners in existing sanitary sewers located in Wellfield Protection Zones One and Two as defined by Palm Beach County Resources Management in lieu of the pressure testing required under the Palm Beach County Wellfield Protection Ordinance. Installation of liners shall be completed prior to release of the well for service.

Issued This 5 Day of December, 2013.

STATE OF FLORIDA DEPARTMENT OF HEALTH
PALM BEACH COUNTY

Alina M. Alonso, MD, Director

c: Engineer-of-Record: John R. Leemon, P.E.
Florida DEP: Linda Brien, P.G.

FLORDES-01 DTRAYNOR

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/11/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Collinsworth, Alter, Lambert, LLC
23 Eganfuskee Street
Suite 102
Jupiter, FL 33477

CONTACT NAME: Diane Traynor
PHONE (A/C, No, Ext): (561) 776-9001 FAX (A/C, No): (561) 427-6730
E-MAIL ADDRESS: Dtraynor@calllc.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Amerisure Mutual Ins Co	23396
INSURER B : Amerisure Insurance Co	19488
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Florida Design Drilling Corporation
7733 Hooper Rd.
West Palm Beach, FL 33411

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC			GL20522770601	3/1/2014	3/1/2015	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			CA20522790601	3/1/2014	3/1/2015	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $			CU20522760601	3/1/2014	3/1/2015	EACH OCCURRENCE AGGREGATE	$ 4,000,000 $ 4,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WC205227506	3/1/2014	3/1/2015	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Ref #B2067.00, Lake Worth -Portable Well No. 16
Certificate holder is named as additional insured including products and completed operations for general liability per CG7048, auto liability, and umbrella liability when required by written contract. General Liability, Automobile, and Umbrella coverages are primary and non contributory when required by written contract. Waiver of subrogation applies to General Liability, Auto, Umbrella, and Workers' Compensation coverages for the additional insureds when required by written contract. Should any of the above described policies be cancelled, notice will be delivered in accordance with the policy provisions. The Umbrella policy follows form over the General Liability, Auto, and Workers' Compensation coverages.

The certificate holder is expanded to read: The City of Lake Worth

CERTIFICATE HOLDER
City of Lake Worth
7 N. Dixie Hwy.
Lake Worth, FL 33460

CANCELLATION
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

FLORIDA CHANGES – CANCELLATION AND NONRENEWAL

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
ELECTRONIC DATA LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCT WITHDRAWAL COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

A. Paragraph **2.** of the **Cancellation** Common Policy Condition is replaced by the following:

2. Cancellation Of Policies In Effect

a. For 90 Days Or Less

If this policy has been in effect for 90 days or less, we may cancel this policy by mailing or delivering to the first Named Insured written notice of cancellation, accompanied by the reasons for cancellation, at least:

(1) 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or

(2) 20 days before the effective date of cancellation if we cancel for any other reason, except we may cancel immediately if there has been:

(a) A material misstatement or misrepresentation; or

(b) A failure to comply with the underwriting requirements established by the insurer.

b. For More Than 90 Days

If this policy has been in effect for more than 90 days, we may cancel this policy only for one or more of the following reasons:

(1) Nonpayment of premium;

(2) The policy was obtained by a material misstatement;

(3) Failure to comply with underwriting requirements established by the insurer within 90 days of the effective date of coverage;

(4) A substantial change in the risk covered by the policy; or

(5) The cancellation is for all insureds under such policies for a given class of insureds.

If we cancel this policy for any of these reasons, we will mail or deliver to the first Named Insured written notice of cancellation, accompanied by the reasons for cancellation, at least:

(a) 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or

(b) 45 days before the effective date of cancellation if we cancel for any of the other reasons stated in Paragraph **2.b.**

B. Paragraph **3.** of the **Cancellation** Common Policy Condition is replaced by the following:

3. We will mail or deliver our notice to the first Named Insured at the last mailing address known to us.

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FLORDES-01 DTRAYNOR

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/11/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Collinsworth, Alter, Lambert, LLC
23 Eganfuskee Street
Suite 102
Jupiter, FL 33477

CONTACT NAME: Diane Traynor
PHONE (A/C, No, Ext): (561) 776-9001 FAX (A/C, No): (561) 427-6730
E-MAIL ADDRESS: Dtraynor@calllc.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Amerisure Mutual Ins Co	23396
INSURER B : Amerisure Insurance Co	19488
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Florida Design Drilling Corporation
7733 Hooper Rd.
West Palm Beach, FL 33411

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC			GL20522770601	3/1/2014	3/1/2015	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			CA20522790601	3/1/2014	3/1/2015	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $			CU20522760601	3/1/2014	3/1/2015	EACH OCCURRENCE	$ 4,000,000
							AGGREGATE	$ 4,000,000
								$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WC205227506	3/1/2014	3/1/2015	X WC STATU-TORY LIMITS OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Ref No #B2067.00, Subject : Lake Worth- Portable Well No. 16

Certificate holder is named as additional insured including products and completed operations for general liability per CG7048, auto liability, and umbrella liability when required by written contract. General Liability, Automobile, and Umbrella coverages are primary and non contributory when required by written contract. Waiver of subrogation applies to General Liability, Auto, Umbrella, and Workers' Compensation coverages for the additional insureds when required by written contract. Should any of the above described policies be cancelled, notice will be delivered in accordance with the policy provisions. The Umbrella policy follows form over the General Liability, Auto, and Workers' Compensation coverages.

The certificate holder is expanded to read: City of Lake Worth

CERTIFICATE HOLDER

Mock Roos & Associates Inc.
5720 Corporate Way
West Palm Beach, FL 33407-2066

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

FLORIDA CHANGES – CANCELLATION AND NONRENEWAL

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
ELECTRONIC DATA LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCT WITHDRAWAL COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

A. Paragraph **2.** of the **Cancellation** Common Policy Condition is replaced by the following:

2. Cancellation Of Policies In Effect

a. For 90 Days Or Less

If this policy has been in effect for 90 days or less, we may cancel this policy by mailing or delivering to the first Named Insured written notice of cancellation, accompanied by the reasons for cancellation, at least:

(1) 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or

(2) 20 days before the effective date of cancellation if we cancel for any other reason, except we may cancel immediately if there has been:

(a) A material misstatement or misrepresentation; or

(b) A failure to comply with the underwriting requirements established by the insurer.

b. For More Than 90 Days

If this policy has been in effect for more than 90 days, we may cancel this policy only for one or more of the following reasons:

(1) Nonpayment of premium;

(2) The policy was obtained by a material misstatement;

(3) Failure to comply with underwriting requirements established by the insurer within 90 days of the effective date of coverage;

(4) A substantial change in the risk covered by the policy; or

(5) The cancellation is for all insureds under such policies for a given class of insureds.

If we cancel this policy for any of these reasons, we will mail or deliver to the first Named Insured written notice of cancellation, accompanied by the reasons for cancellation, at least:

(a) 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or

(b) 45 days before the effective date of cancellation if we cancel for any of the other reasons stated in Paragraph **2.b.**

B. Paragraph **3.** of the **Cancellation** Common Policy Condition is replaced by the following:

3. We will mail or deliver our notice to the first Named Insured at the last mailing address known to us.

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MOCK • ROOS
ENGINEERS • SURVEYORS • PLANNERS

February 19, 2014

Monica Morandi, P.E.
Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, FL 33461

Ref. No.: B2067.00
Subject: Lake Worth Proposed Potable Well No. 16

Dear Monica:

On February 6, 2014 bids were received for the construction work on this project. The bids ranged from $494,949 to $655,130. Enclosed is a bid tabulation summary for your use in reviewing and comparing the bids. The low bid was received from Florida Design Drilling Corporation in the amount of $494,949. The bid was below the Engineer's Opinion of Probable Construction Cost. This is the result of the current favorable bidding climate and we believe this represents a good value for the City.

Florida Design Drilling Corp. has completed past projects with our Hydrogeologic subconsultant, JLA Geosciences, Inc. They report that these projects were completed in a satisfactory manner and that the Contractor was a reasonable organization to work with. Based on this past project performance, we did not check additional references. We have discussed the bid with the Contractor and the Contractor has indicated that his bid is complete and that he can complete the project for the bid amount. Based on the above discussions, we recommend award of this Contract to Florida Design Drilling Corp.

Our recommendation of award is based on review of the project and the Contractor from an engineering perspective and based on past project performance. We recommend that you seek advice of legal counsel relative to other issues regarding legalities of award of this contract.

We recommend that you establish the following budgets for anticipated expenses under this contract. Our recommendation includes a materials testing allowance which will be needed for compaction tests for the well site and pipelines and concrete cylinder tests for the wellhead area.

Construction Contract	$494,949.00
Materials Testing Allowance	$2,000.00
Construction Phase Engineering and Hydrogeological fees	$57,550.00
Total	$554,499.00

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Mock, Roos & Associates, Inc.
5720 Corporate Way, West Palm Beach, Florida 33407-2066, (561) 683-3113, fax 478-7248

In addition to the bid tabulation, enclosed is a copy of the low bidders bid submittal. If you have any questions or comments regarding this recommendation or the project, please contact me at 683-3113 extension 258. I would be happy to meet with you to discuss this bid and project further.

Sincerely,

MOCK, ROOS & ASSOCIATES, INC.

John R. Leemon, P.E.
Senior Project Manager

JRL:cbm
Copies: Kari Hansen
Tim Sloan

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** Water Utilities

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EXECUTIVE BRIEF

TITLE:
Contracts with two companies to construct the Raw Watermain for Potable Well 16.

SUMMARY:
The contract with B&B Underground, Inc. provides for construction of the Raw Watermain for Potable Well 16 at a cost not to exceed $569,445.

The contract with Mock Roos and Associates (MRA) provides for construction phase services associated with the construction of the Raw Watermain for Potable Well 16 at a price not to exceed $54,900.

This is a companion to item G, which is the contract award to construct Potable Well #16.

BACKGROUND AND JUSTIFICATION:
The City of Lake Worth has observed increasing levels of chlorides in the Surficial Aquifer monitoring well network since 2000. As part of the requirements of our new SFWMD Water Use permit the City must construct three new surficial wells to the west and north of the existing wellfield and abandon 6 existing facilities in the eastern portion of the Surficial Wellfield in a phased program extending through 2015. This will shift the footprint of the Surficial Aquifer withdrawals further west to lessen the potential for saline water intrusion.

The City of Lake Worth Utilities department has solicited bids from contractors for the construction of the Raw Watermain to serve Potable Well 16, under Bid IFB-UT-WT-12-13-129. The lowest bid for the sum of $569,445 was from B&B Underground, Inc. Mock Roos and Associates are recommending award of the Bid to B&B Underground, Inc.

Mock Roos and Associates was the Engineering Consulting firm selected by the City of Lake Worth as the number one ranked firm for a continuing services contract, **WS-08-09,** through the Consultant's Competitive Negotiation Act (Florida State Statutes 287.055) procurement process.

Under this agreement, they have been selected to perform construction phase services for the construction of the proposed Raw Watermain to transfer the water from the proposed Well #16 to the Lake Worth Water Treatment Plant by the Lake Worth Utilities Department. The new well #16 and raw watermain projects must be constructed this fiscal year in order to satisfy the conditions of the recently issued South Florida Water Management District Consumptive Water Use Permit. Mock Roos and Associates acted as the City of Lake Worth's consultant in obtaining the permit, and therefore have the base information needed to complete the project and satisfy the agency's requirements. They have also designed the majority of the surficial wells in the City, and have conducted multiple groundwater model updates with the City's raw water production system. It is recommended that Mock Roos & Associates be retained to perform these services, as they have the data used to

obtain the SFWMD permit, and the institutional knowledge of our wellfields, groundwater conditions, and similar designs throughout the City of Lake Worth.

MOTION:

I move to approve/not approve a contract with B&B Underground, Inc. at a cost not to exceed $569,445; and, the construction services/engineering agreement with Mock Roos and Associates at a price not to exceed $54,900.

Attachments

1) Fiscal Analysis
2) B&B Underground, Inc Contract
3) Mock Roos Proposal
4) Bid Tabulation
5) Bid Recommendation

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact

Fiscal Years	2014	2015	2016	2017	2018
Capital Expenditures	629,345	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-Kind Match	0	0	0	0	0
Net Fiscal Impact	$629,345	0	$0	$0	$0

No. of Additional Full-Time Employees	0	0	0	0	0

B. Recommended Source of Funds/Summary of Fiscal Impact

The funds have been identified in the FY2014 Water Treatment Capital budget from account 402-7022-533.63-00.

Utilities/Water Production							
Account Number	Account Description	Project #	FY 2014 Proposed Budget	Amended Budget	Current Balance	Agenda Item Expenditures	Remaining Balance
402-7022-533.63-00	WTP Capital	WT1403	$860,000	N/A	$860,000	-$629,345	$230,655

C. Fiscal Review:

Larry Johnson – Director
Monica Morandi –Engineer
Clyde Johnson - Finance

PROJECT MANUAL

Raw Watermain Improvements
For Potable Well No. 16
for
City of Lake Worth

Solicitation No. IFB-UT-WT-12-13-129

September 2013

Prepared by:

Mock, Roos & Associates, Inc.
Engineers-Surveyors-Planners
5720 Corporate Way
West Palm Beach, Florida

Engineer's Project
No. B2066.00

PROJECT: Raw Watermain Improvements for Potable Well No. 16
For City of Lake Worth

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PROJECT: Raw Watermain Improvements for Potable
Well No. 16
For City of Lake Worth
Solicitation No. IFB-UT-WT-12-13-129

Date: January 5, 2014

00020
INVITATION TO BID

Sealed bids, in duplicate, will be received by City of Lake Worth Procurement Office, City Hall, 2nd Floor, 7 North Dixie Highway, Lake Worth, Florida 33460 for the subject Project until 2:00 p.m.local time, February 6, 2014, then opened publicly at that time.

The OWNER for the Project is City of Lake Worth, Florida.

The Contract Documents will be open to inspection at Mock, Roos & Associates, Inc., 5720 Corporate Way, West Palm Beach, Florida 33407.

Contract Documents may be purchased from Mock, Roos & Associates, Inc. at the following prices, which are non-refundable:

Drawings:	$23.58 plus $1.42 sales tax	=	$25.00
Project Manual:	$23.58 plus $1.42 sales tax	=	$25.00
Complete Set (Drawings and Project Manual):			$50.00

Packaging & Mailing Charges/Set: $ 15.00 (when delivered by UPS)

This Contract is a Unit Price contract.

Bids must be accompanied by a Bid Security in the form of a certified or bank check made payable to the Owner, or a Bid Bond. The amount of the security shall not be less than five (5) percent of the Bidder's total price indicated in Bid Form.

No Bid may be withdrawn for a period of 120 days after the scheduled closing date for the receipt of bids except as otherwise provided in Article 13 of the Instructions to Bidders.

The successful Bidder, who is awarded the Contract, shall be required to furnish a 100% Construction Performance Bond and a 100% Construction Payment Bond.

The OWNER reserves the right to reject any or all Bids, to waive informalities, and to re-advertise.

/s/ Larry Johnson, Water/Sewer Utilities Director

Publish: Palm Beach Post – January 5, 2014

00100
INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS.

Terms used in these Instructions to Bidders which are defined in the Standard General Conditions of the Construction Contract (EDCJC No. 1910-8, 1983 Edition) have the meanings assigned to them in the General Conditions. The term "Bidder" means one who submits a Bid directly to Owner, as distinct from a sub-bidder, who submits a bid to a Bidder. The term "Successful Bidder" means the lowest, qualified, responsible and responsive Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award. The term "Bidding Documents" includes the Advertisement or Invitation to Bid, Instructions to Bidders, the Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

2. COPIES OF BIDDING DOCUMENTS.

2.1. Complete sets of the Bidding Documents in the number and for the cost, if any, stated in the Advertisement or Invitation to Bid may be obtained from Engineer (unless another issuing office is designated in the Advertisement or Invitation to Bid).

2.2. Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.3. Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

3. QUALIFICATIONS OF BIDDERS.

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five days of Owner's request, written evidence such as financial data, previous experience, present commitments and other such data as may be reasonably specifically requested by Owner or otherwise required in Contract Documents. Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.

4. EXAMINATION OF CONTRACT DOCUMENTS AND SITE.

4.1. It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the Work, (c) consider federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work, (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify Engineer of all conflicts, errors or discrepancies in the Contract Documents.

4.2. Reference is made to Division 1: General Requirements of the Specifications for the identification of:

4.2.1. those reports of explorations and tests of subsurface conditions at the site which have been utilized by Engineer in preparation of the Contract Documents.

4.2.2. those drawings of physical conditions in or relating to existing surface and subsurface conditions (except Underground Facilities) which are at or contiguous to the site which have been utilized by Engineer in preparation of the Contract Documents.

4.2.3. Copies of such reports and drawings (referred to above), if not attached to the Specifications or added on the Drawings, will be made available by Owner to any Bidder on request. Those reports and drawings are not a part of the Contract Documents. Bidder may not rely upon the accuracy of the non-technical data, interpretations or opinions contained in those reports and drawings. Bidder may

not rely on the completeness of those reports and drawings for the purposes of bidding or construction. Bidder may rely on any technical data contained in those reports and drawings specifically referenced in Division 1: General Requirements as technical data that can be relied on.

4.3. Information and data reflected in the Contract Documents with respect to Underground Facilities at or contiguous to the site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities or others, and Owner does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.

4.4. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders on subsurface conditions, Underground Facilities and other physical conditions, and possible changes in Contract Documents due to differing conditions appear in Paragraphs 4.2 and 4.3 of the General Conditions.

4.5. Before submitting a Bid, each Bidder will, at Bidder's own expense, be responsible to make or obtain such examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

4.6. On request in advance, Owner will provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations.

4.7. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by Owner unless otherwise provided in the Contract Documents.

4.8. The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

5. INTERPRETATIONS AND ADDENDA.

5.1. All questions about the meaning or intent of the Contract Documents are to be directed to Engineer (unless another issuing office is designated in the Advertisement or Invitation to Bid). Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by issuing office as having received the Bidding Documents. Questions received less than five days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

5.2. Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner or Engineer.

6. BID SECURITY.

6.1. Each Bid must be accompanied by Bid security made payable to Owner in an amount of five percent of the Bidder's maximum Bid price and in the form of a certified or bank check or a Bid Bond issued by a surety meeting the requirements of Paragraph 5.1 of the General Conditions.

6.2. The Bid security of the Successful Bidder will be retained until such Bidder has executed the Agreement and furnished the required contract security, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Agreement and furnish the required contract security within fifteen days after the Notice of Award, Owner may annul the Notice of Award and the Bid security of the Bidder will be forfeited. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the seventh day after the Effective Date of the Agreement or the ___120___ day after the Bid opening, whereupon Bid security furnished by such Bidders will be returned. Bid security with Bids which are not competitive will be returned within seven days after the Bid opening.

7. CONTRACT TIME.

The numbers of days within which, or the dates by which, the Work is to be substantially completed and also completed and ready for final payment (the Contract Time) are set forth in the Bid Form and the Agreement. If Contract Times are left blank in the Bid Form, the time for Substantial Completion and final completion are to be set forth by Bidder in the Bid and will be included in the Agreement. The times will be taken into consideration by Owner during the evaluation of Bids, and it will be necessary for the Successful Bidder to satisfy Owner of Bidder's ability to achieve Substantial Completion and final completion within the times designated in the Bid.

8. LIQUIDATED DAMAGES.

Provisions for liquidated damages, if any, are set forth in the Agreement.

9. SUBSTITUTE OR "OR-EQUAL" ITEMS.

The contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement. The procedure for submission of any such application by Contractor and consideration by Engineer is set forth in Paragraphs 6.7.1, 6.7.2 and 6.7.3 of the General Conditions and may be supplemented in Division 1: General Requirements.

10. SUBCONTRACTORS, SUPPLIERS AND OTHERS.

10.1. If the Bid Form or Specifications require (or if Owner requests after Bids are received) the identity of certain Subcontractors, Suppliers and other persons and organizations (including those who are to furnish the principal items of material and equipment) to be submitted to Owner in advance of the specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within seven days after the Bid opening (or seven days after request by Owner) submit to Owner a list of all such Subcontractors, Suppliers and other persons and organizations proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, person or organization if requested by Owner. Subcontractors shall be required to meet Contractor's liability insurance requirements as established by the General and Supplementary Conditions or be listed as an additional insured on the apparent successful Bidder's policy. If Owner or Engineer after due investigation has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, either may before the Notice of Award is given request the apparent Successful Bidder to submit an acceptable substitute without an increase in Bid price. If apparent Successful Bidder declines to make any such substitution, Owner may award the contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers and other persons and

organizations. The declining to make requested substitutions will not constitute grounds for sacrificing the Bid security of any Bidder. Any Subcontractor, Supplier, other person or organization listed and to whom Owner or Engineer does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.8.2 of the General Conditions.

10.2. No Contractor shall be required to employ any Subcontractor, Supplier, other person or organization against whom Contractor has reasonable objection.

11. BID FORM.

11.1. The Bid Form is included with the Bidding Documents; additional copies may be obtained from Engineer (or the issuing office).

11.2. All blanks on the Bid Form must be completed in ink or by typewriter.

11.3. Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.

11.4. Bids by partnerships must be executed in the partnership name and signed by a general partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

11.5. All names must be typed or printed below the signature.

11.6. The Bid shall contain an acknowledgement of receipt of all Addenda (the numbers of which must be filled in on the Bid Form).

11.7. The address and telephone number for communications regarding the Bid must be shown.

12. SUBMISSION OF BIDS.

Bids shall be submitted at the time and place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope, marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted) and name and address of the Bidder and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED FOR __(insert project name)__ TO BE OPENED __(insert date and time as indicated in the Invitation to Bid or subsequent addenda)_____ " on the face of it.

13. MODIFICATION AND WITHDRAWAL OF BIDS.

13.1. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

13.2. If, within twenty-four hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the Work to be provided under the Contract Documents.

14. OPENING OF BIDS.

Bids will be opened (publicly or privately) as indicated in the Invitation to Bid.

14.1. When Bids are opened publicly they will be read aloud, and the amounts of the base Bids and major alternates (if any) will be made available after the opening of Bids.

14.2. When Bids are opened privately, an abstract of the same information (will or will not) be made available to Bidders within seven days after the date of Bid opening.

15. BIDS TO REMAIN SUBJECT TO ACCEPTANCE.

All bids will remain subject to acceptance for 120 days after the day of the Bid opening, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to that date.

16. AWARD OF CONTRACT.

16.1. Owner reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder, and the right to disregard all nonconforming, nonresponsive, unbalanced or conditional Bids. Also, Owner reserves the right to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make and award to the Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. Discrepancies in the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

16.2. In evaluating Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

16.3. Owner may consider the qualifications and experience of Subcontractors, Suppliers and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions (or as requested by Owner after the Bids are received). Owner also may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.

16.4. Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed Subcontractors, Suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.

16.5. If the contract is to be awarded, it will be awarded to the lowest Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of the Project.

16.6. If the contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within 120 days after the day of the Bid opening.

16.7. When Bidder is permitted to designate the Contract Time, Bid prices will be compared after adjusting for differences in the time designated in the Bid for Substantial Completion.

17. CONTRACT SECURITY.

Paragraph 5.1 of the General Conditions and the Supplementary Conditions set forth Owner's requirements as to performance and payment Bonds. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by the required performance and payment Bonds.

18. SIGNING OF AGREEMENT.

When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within 15 days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner with the required Bonds.

END OF SECTION

BID FORM MUST BE SUBMITTED IN DUPLICATE

BIDDER: B&B Underground Contractors, Inc.

PROJECT: Raw Watermain Improvements for Potable Well No. 16
For City of Lake Worth

DATE: Feb. 6, 2014
(Bid Submitted on)

00300
BID FORM

THIS BID IS SUBMITTED TO:

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. BIDDER accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 120 days after the day of Bid opening. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within 15 days after the date of OWNER's Notice of Award.

3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

(a) BIDDER has examined copies of all the Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

Date Number ∅

(b) BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

(c) BIDDER has studied carefully all reports and drawings of subsurface conditions and drawings of physical conditions which are identified in the Division 1: General Requirements as provided in paragraph 4.2 of the General Conditions, and accepts the determination set forth in Division 1: General Conditions of the extent of the technical data contained in such reports and drawings upon which BIDDER is entitled to rely.

(d) BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests and studies (in addition to or to supplement those referred to in (c) above) which pertain to the subsurface or physical conditions at the site or otherwise may affect the cost, progress, performance or furnishing of the Work as BIDDER considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.2 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports or similar information or data are or will be required by BIDDER for such purposes.

(e) BIDDER has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports or similar information or data in respect of said Underground Facilities are or will be required by BIDDER in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.3 of the General Conditions.

(f) BIDDER has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

(g) BIDDER has given ENGINEER written notice of all conflicts, errors or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to BIDDER.

(h) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

4. BIDDER agrees to perform all the Work described in Contract Documents, subject to adjustments as provided therein, for the Prices BIDDER provides on the Unit Price Schedule (Page 00300– thru 00300–):

5. BIDDER declares it understands that the unit quantities shown on the Bid Form Unit Price Schedule are approximate only and not guaranteed and are subject to either increase or decrease; and that should the quantities of any of the items of Work be increased, the BIDDER agrees to do the additional Work at the unit prices set out herein, and should the quantities be decreased, BIDDER also understands that final payment shall be made on actual quantities completed at the unit prices, and shall make no claims for anticipated profits for any decrease in the quantities.

6. The BIDDER further declares it understands the OWNER may elect to construct only a portion of the Work covered by these Documents and BIDDER agrees to perform that portion of the Work for which BIDDER is awarded a Contract at the unit prices quoted herein.

7. BIDDER agrees that the Work:

will be substantially complete within 150 calendar days after the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions, and completed and ready for final payment within 180 calendar days after the date when the Contract Time commences to run.

BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.

8. The following documents are attached to and made a condition of this Bid:

(a) Required Bid Security in the form of 5% Bid Bond.

(b) Unit Price Schedule on Page(s) 00300-5.

(c) Trench Safety Affidavit on Page(s) 00300-6.

(d) Schedule of Subcontractors (Page(s) 00300-7.)

(e) Schedule of Suppliers, Equipment and Materials (Page(s) 00300-8)

(f) Sworn Statements Under Section 287.133(3)(a), Florida Statutes, on Public Entity Crimes on Page(s) 00300-9 and 00300-10.

(g) (List other documents as pertinent): Certification of Drug Free Workplace Program (Page 00300-11).

9. Communications concerning this Bid shall be telephoned or addressed to:

The phone number and address of BIDDER indicated below.

10. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as part of the Contract Documents have the meanings assigned to them in the General Conditions.

11. BIDDER's Florida Contractor's License No. CGC 1516940 / CUC 1223998

12. BIDDER covenants that it is qualified to do business in the State of Florida and has attached evidence of BIDDER's qualification to do business in the State of Florida, or if not attached, BIDDER covenants to obtain such evidence within five days of request by OWNER to provide evidence.

If BIDDER is:

An Individual

By _____ (SEAL)
(Individual's Name)

_____
(Signature)

doing business as _____

Business address: NA

_____

Phone No. : _____

A Partnership

By _____ (SEAL)
(Firm Name)

_____
(General Partner) (Signature)

Business address: NA

_____

Phone No. : _____

A Corporation

By B & B UNDERGROUND CONTRACTORS, INC. (SEAL)
(Corporation Name)

Florida
(State of Incorporation)

By OVEAL BATES
(Name of Person Authorized to Sign)

PRESIDENT
(Title)

_____
(Signature)

(Corporate Seal)

Attest _____
(Secretary)

_____
(Signature)

Business address: 585 105TH AVE. NORTH UNIT 16

Royal Palm Beach, FL 33411

Phone No. : 561-204-9335

Unit Price Schedule
for City of Lake Worth
Raw Watermain for Potable Well No. 16

Item	Description	Quantity	Unit	Unit Price	Amount
Schedule A - General Requirements					
A-1.	Mobilization/Demobilization/General Conditions	1	LS		$ 20,000.00
A-2.	Bonds and Insurance	1	LS		10,000.00
A-3.	Permit Fees	1	LS		200.00
A-4.	Maintenance of Traffic	1	LS		9,000.00
A-5.	Video Taping of Existing Conditions	1	LS		2,500.00
A-6.	Prepare & Furnish Record Drawings	1	LS		15,000.00
A-7.	Turbidity Control/Lake Protection (John Prince Park)	1	LS		7,500.00
A-8.	General Allowance	1	LS		$40,000
	Total Schedule A				$ 104,200.00
Schedule B - Site Work and Utilities					
B-1.	16" HDPE Pipe (Directional Drill)	625	LF	$ 127.00	$ 79,375.00
B-2.	16" PVC Pipe	2150	LF	75.00	161,250.00
B-3.	16" DI Pipe	160	LF	106.50	17,040.00
B-4.	16" Butterfly Valves	2	EA	3,850.00	7,700.00
B-5.	Air Release Valve & Manhole	6	EA	7,825.00	46,950.00
B-6.	Offset Air Release Valve & Manhole	3	EA	5,750.00	17,250.00
B-7.	Air Release Valve Service	1	EA	600.00	600.00
B-8.	Connect to Existing	2	EA	6,200.00	12,400.00
B-9.	Sample Points	4	EA	250.00	1,000.00
B-10.	Asphalt Pavement Replacement	1450	SY	35.00	50,750.00
B-11.	Asphalt Sidewalk Restoration	450	SY	35.00	15,750.00
B-12.	Mill and Overlay	1700	SY	15.00	25,500.00
B-13.	Type F Curb	560	LF	3.00	1,680.00
B-14.	Thermoplastic Pavement Marking and RPMs	1	LS		2,500.00
B-15.	Seeding and Sodding	1	LS		6,000.00
B-16.	Landscape Restoration	1	LS		1,500.00
B-17	Funish Utility Crew and Equipment for Add'l Work as Ordered	16	HR	500.00	8,000.00
B-18	Furnish Add'l Ductile Iron Fitting	1000	LBS	10.00	10,000.00
	Total Schedule B				$465,245.00
	Total (A & B)				$ 569,445.00

PROJECT NO: B2066.00

TRENCH SAFETY AFFIDAVIT

(FAILURE TO COMPLETE THIS FORM MAY RESULT IN THE BID BEING DECLARED NON-RESPONSIVE)

B&B Underground Contractors, Inc. (NAME OF CONTRACTOR) hereby provides written assurance that compliance with applicable Trench Safety Standards identified in the Occupational Safety & Health Administration's Excavation Safety Standards, (OSHA) 29 C.F.R.S. 1926.650 Subpart P will be adhered to during trench excavation in accordance with Florida Statutes 553.60 through 553.64 inclusive (1990), "Trench Safety Act".

The undersigned acknowledges that included in the various items of the proposal and in the Total Bid Price are costs for complying with the Florida "Trench Safety Act" as summarized below: (Attach additional sheets as necessary)

Schedule Item	Trench Safety Measure (Slope, Trench Shield, etc.	Cost
B-2	Sloping	$ 1000-
B-3	Sloping	$ 1000-
		$
		$
		$
		$
	Total	$ 2000-

(Signature) Feb. 6, 2014 (date)

STATE OF Florida

COUNTY OF Palm Beach

Subscribed and Sworn to (or affirmed) before me on 2/6/14 (date) by

Oneal Bates (name) He/she is personally known to me or has

presented _____ (type of identification) as identification.

Laura De
Notary Public Signature and Seal

Laura DeMillo #FF 002294
Print Notary Name and Commission No.

LAURA DEMILLO
Notary Public - State of Florida
My Comm. Expires May 19, 2017
Commission # FF 002294
Bonded Through National Notary Assn.

SCHEDULE OF SUBCONTRACTORS

List Proposed Subcontractors	Category of Work
None	

SCHEDULE OF EQUIPMENT AND MATERIALS

Description	Manufacturer	Model
PVC PIPE	JM, NATIONAL	VARIOUS.
BUTTERFLY VALVE	PRATT, KENNEDY.	

SWORN STATEMENT UNDER SECTION 287.133(3)(a),
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to The City of Lake Worth
[print name of the public entity]
by Owen Bates President
[print individual's name and title]
for B&B underground contractors, inc.
[print name of entity submitting sworn statement]

whose business address is 585 10th Ave. North unit 1L

Royal Palm Beach, FL 33411

and (if applicable) its Federal Employer Identification Number (FEIN) is 65-1043589

(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____.)

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

   1. A predecessor or successor of a person convicted of a public entity crime; or
   2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(c), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity
submitting this sworn statement. [Please indicate which statement applies.]

__X__ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. [attach a copy of the final order]

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

_____
[signature]

Feb. 6 2014
[date]

STATE OF Florida

COUNTY OF Palm Beach

Subscribed and Sworn to (or affirmed) before me on 2/6/14 by
[date]
ONEAL Bates (He/she is personally known to me or has presented
[name]
_____ as identification.
[type of identification]

Laura DeMillo
[Notary's Signature and Seal]

Laura DeMillo # FF 002294
Print Notary Name and Commission No.

LAURA DEMILLO
Notary Public - State of Florida
My Comm. Expires May 19, 2017
Commission # FF 002294
Bonded Through National Notary Assn.

Form PUR 7068 (Rev. 04/10/91)
M/R 03/06/92

CERTIFICATION OF DRUG FREE WORKPLACE PROGRAM

I certify the firm of B&B underground Contractors, inc. maintains a drug-free workplace program, and that the following conditions are met:

1. We publish a statement notifying employees that the unlawful manufacturer, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying that actions will be taken against employees for violations of such prohibitions.

2. We inform employees about the dangers of drug abuse in the workplace, the company's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. We give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection one (1).

4. In the statement specified subsection one (1) we notify the employee that; a condition of working in the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty nolo contendere to any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. We impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.

6. We make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Contractor's Signature

00500
AGREEMENT

THIS AGREEMENT is dated and will be effective on the _____ day of _____ in the year 20_____, by and between the City of Lake Worth (hereinafter called OWNER) and B&B Underground Contractors, Inc (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Watermain Improvements for Potable Well No. 16.

ARTICLE 2. ENGINEER

The Project has been designed by Mock, Roos & Associates, Inc., 5720 Corporate Way, West Palm Beach, FL 33407,who is hereinafter called ENGINEER and who is to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3. CONTRACT TIME.

3.1. The Work will be substantially completed within 150 days from the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions and shall be finally complete and ready for final payment in accordance with paragraph 14.13 of the General Conditions within 180 days from the date when the Contract Time commences to run.

3.2 All time limits for Milestones, if any, Substantial Completion and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

3.3. **LIQUIDATED DAMAGES. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER Five Hundred and 00/100 dollars ($ 500.00) for each day that expires after the time specified in paragraph 3.1 for Substantial Completion until the Work is substantially complete. After Substantial Completion if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER Five Hundred and 00/100 dollars ($500.00) for each day that expires after the time specified in paragraph 3.1 for completion and readiness for final payment.**

ARTICLE 4. CONTRACT PRICE.

OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents, subject to adjustment as provided therein, in current funds as follows:

4.1 An amount equal to the sum of the established unit price for each separately identified item on the Unit Price Schedule times the estimated quantity of that item:

TOTAL OF ALL UNIT PRICES Five Hundrede Sixty Nine Thousand, Four Hundred Forty-Five Dollars and 00/100 ($569,445.00)
(use words) (figures)

which is based on the unit price(s) in the Bid Form Unit Price Schedule for Unit Bid Items numbered A-1 to B-18 .

ARTICLE 5. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1. PROGRESS PAYMENTS. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, on or about the 10th day of each month during construction as provided below. All progress payments will be on the basis of the progress of the Work measured by the schedule of values established in paragraph 2.9 of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in Division 1: General Requirements.

5.1.1 Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.7 of the General Conditions, less liquidated damages, if any.

90% of Work completed.
90% of materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to OWNER as provided in paragraph 14.2 of the General Conditions).
95% of the work complete after the Contractor has completed over 50% of the Work.

5.1.2 Upon Substantial Completion, in an amount sufficient to increase total payments to CONTRACTOR to 98% of the Contract Price, less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.7 of the General Conditions, less liquidated damages, if any.

5.2. FINAL PAYMENT. Upon final completion and acceptance of the Work in accordance with paragraph 14.13 of the General Conditions, and settlement of all claims, including liquidated damages, if any, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.13.

ARTICLE 6. (This Article left blank intentionally)

ARTICLE 7. CONTRACTOR'S REPRESENTATIONS.

In order to include OWNER to enter into this Agreement CONTRACTOR makes the following representations:

7.1. CONTRACTOR has familiarized itself with the nature and extent of the Contract Documents, Work, site locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

7.2. CONTRACTOR has studied carefully all reports of explorations and tests of subsurface conditions and drawings of physical conditions which are identified in the Division 1: General Requirements as provided in paragraph 4.2 of the General Conditions, and accepts the determination set forth in Division 1: General Requirements of the extent of the technical data contained in such reports and drawings upon which CONTRACTOR is entitled to rely, if any.

7.3. CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies, if any, (in addition to or to supplement those referred to in paragraph 7.2 above) which pertain to the subsurface of physical conditions at or contiguous to the site or otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.2 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by CONTRACTOR for such purposes.

7.4. CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents, if any, with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.3 of the General Conditions.

7.5. CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

7.6. CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

7.7 CONTRACTOR acknowledges that the Contract Documents are generally sufficient to indicate and convey an adequate understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 8. CONTRACT DOCUMENTS.

The Contract Documents which comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

8.1. This Agreement consisting of 7 pages.

8.2. Exhibits to this Agreement identified as: Contractor's Corporate Resolution; Contractor's Certificate of Insurance; _____ inclusive.

8.3. Performance Bond and Payment Bond consisting of 4 pages (plus Power of Attorney Forms as applicable).

8.4. Notice of Award and Notice to Proceed.

8.5. General Conditions consisting of 33 pages.

8.6. Supplementary Conditions consisting of 7 pages.

8.7. Bid documents as listed in the table of contents of the Project Manual.

8.8. Specifications consisting of _66_ pages.

8.9. Drawings not attached hereto but are listed in Section 00860 List of Drawings.

8.10. Addenda numbers 1 to 1__, inclusive.

8.11. CONTRACTOR's Bid consisting of 11___ pages.

8.12. Documentation submitted by CONTRACTOR prior to Notice of Award.

8.13. The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to paragraphs 3.4 and 3.5 of the General Conditions.

8.14. The documents listed under Article 8 above are attached to this Agreement (except as expressly noted otherwise above).

8.15. Notice of Compliance with Chapter 556, Florida Statutes, consisting of 1 page.

8.16. Any other document attached hereto or incorporated herein.

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be amended, modified or supplemented as provided in paragraphs 3.4 and 3.5 of the General Conditions.

ARTICLE 9. MISCELLANEOUS.

9.1. Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.

9.2. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation moneys that may become due and moneys that are due may not be assigned without such consent (except to the extend that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.3. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

9.4. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replaced such stricken provision or part thereof with a valid and enforceable provisions that comes as close as possible to expressing the intention of the stricken provision.

9.5 A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Bid on a Contract to provide any goods or services to a public entity, may not submit a Bid on a Contract with a public entity for the construction or repair of a public building or public work, may not be awarded or perform Work as a Contractor, Supplier, Subcontractor, or Consultant under a Contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

9.6 In accordance with Palm Beach County ordinance number 2011-009, the Contract Documents may be subject to investigation and/or audit by the Palm Beach County Inspector General. Contractor should review such ordinance in order to be aware of its rights and/or obligations under such ordinance and as applicable.

9.7 Failure of either party to enforce or exercise any right(s) under the Contract Documents shall not be deemed a waiver of either party's right to enforce said right(s) at any time thereafter.

9.8 TO ENCOURAGE PROMPT AND EQUITABLE RESOLUTION OF ANY LITIGATION, EACH PARTY HEREBY WAIVES ITS RIGHTS TO A TRIAL BY JURY IN ANY LITIGATION RELATED TO THE CONTRACT DOCUMENTS.

9.9 The Contractor is, and shall be, in the performance of all Work under the Contract Documents, an Independent Contractor, and not an employee, agent, or servant of the Owner. All persons engaged in any of the Work performed pursuant to the Contract Documents shall at all times and in all places be subject to the Contractor's sole direction, supervision and control.

9.10 The Contractor shall maintain adequate records to justify all charges, expenses, and costs incurred in estimating and performing the Work for at least five (5) years after final payment is

made. The Owner shall have access to such books, records, and documents as required for the purpose of inspection or audit during normal business hours at the Contractor's place of business. Under no circumstances will Contractor be required to disclose any confidential or proprietary information regarding its products and service costs.

9.11 The Contract Documents shall not be construed more strongly against either party regardless of who was more responsible for its preparation.

9.12 Contractor shall comply with Florida's Public Records Laws, and specifically agrees to:

a) Keep and maintain public records that ordinarily and necessarily would be required by the Owner in order to perform the service.

b) Provide the public with access to public records on the same terms and conditions that the Owner would provide the records and at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law.

d) Meet all requirements for retaining public records and transfer, at no cost, to the Owner all public records in possession of the Contractor upon termination of the Contract Documents and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the Owner in a format that is compatible with the information technology systems of the Owner.

ARTICLE 10. INDEMNIFICATION.

10.1. Contractor shall indemnify and hold harmless Owner and Engineer and their respective officers, and employees for liabilities, damages, losses, and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract.

10.2. It is the specific intent of the parties hereto that the foregoing indemnification complies with section 725.06, Florida Statutes. It is further the specific intent and agreement of the parties that all of the Contract Documents on this Project are hereby amended to include the foregoing indemnification and the "Specific Consideration" therefore.

10.3 Nothing in the Contract Documents shall be construed or interpreted as consent by the OWNER to be sued, nor as a waiver of sovereign immunity beyond the waiver or limits provided in section 768.28, Florida Statutes.

REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK
SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, OWNER AND CONTRACTOR have signed this Agreement in four parts. Two counterparts have been delivered to OWNER, and one counterpart each to CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

CITY OF LAKE WORTH, FLORIDA

By: _____
Pam Triolo, Mayor

ATTEST

_____
Pamela J. Lopez, City Clerk

Approved as to form and legal sufficiency:

_____ FOR
Glen J. Torcivia, City Attorney

CONTRACTOR: B&B Underground Contractors, Inc

By: _____

Print Name: ONeal Bates

Title: President

[Corporate Seal]

STATE OF Florida)
COUNTY OF Palm Beach)

The foregoing instrument was acknowledged before me this 21rst day of March, 2014 by ONeal Bates, as President of B*B Underground Contractor, Inc., a Florida corporation, and who is personally known to me or who has produced the following _____ as identification.

Notary Public:

Laura DeMello

LAURA DEMELLO
Notary Public - State of Florida
My Comm. Expires May 19, 2017
Commission # FF 082294
Bonded Through National Notary Assn.

PROJECT: Well No. 16 Raw Watermain Improvements
For City of Lake Worth

00501
OPINION OF ATTORNEY

This is to certify that I have examined the attached Contract Documents, that after such examination I am of the opinion that the execution of the Agreement, the Performance Bond and Payment Bond are in due and proper form.

_____ FOR
Attorney for Owner

This the _____ day of _____, 20_____.

Westfield Insurance Company
One Park Circle
Westfield Center, OH 44251
800-243-0210

This is the front page of the performance/payment bond issued in compliance with Florida Statute Chapter 255.05

Bond Number	0988337
Contractor Name Address	B&B Underground Contractors, Inc. 585 10th Ave. N., Unit 16 Royal Palm Beach, FL 33411 561-204-9335
Owner Name Address	City of Lake Worth 7 North Dixie Highway Lake Worth, FL 33460 561-586-1600 or 561-586-1710
Contract Name	Raw Watermain Improvements for Potable Well No. 16 for City of Lake Worth
Agent Name Address	Broder & Company 6191 Orange Drive, #6159E Davie, FL 33314 954-584-3002

Front Page
All other bond page(s) are deemed subsequent to this page regardless of any page number(s) that may be preprinted thereon.

Construction Performance Bond

Bond #- 0988337

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):
B&B Underground Contractors, Inc.
585 10th Avenue N., Unit 16
Royal Palm Beach, FL 33411

SURETY (Name and Principal Place of Business):
Westfield Insurance Company
One Park Circle
Westfield Center, OH 44251

OWNER (Name and Address):
City of Lake Worth, FL
7 North Dixie Highway
Lake Worth, FL 33460

CONSTRUCTION CONTRACT
Date:
Amount: **Five Hundred Sixty Nine Thousand Four Hundred Forty Five & 00/100 DOLLARS ($569,445.00)**

Description (Name and Location): **Raw Watermain Improvements for Potable Well No. 16**

BOND
Date (Not earlier than Contract Date):
Amount: **Five Hundred Sixty Nine Thousand Four Hundred Forty Five & 00/100 DOLLARS ($569,445.00)**
Modifications to this Bond Form:
None

CONTRACTOR AS PRINCIPAL
Company: **B&B Underground Contractors, Inc.** (Corp. Seal)
Signature: _____
Name and Title: **A. O'Neal Bates, President**

SURETY
Company: **Westfield Insurance Company** (Corp. Seal)
Signature: _____
Name and Title: **Arthur K. Broder, Agent & Attorney In Fact**

(Space is provided below for signatures of additional parties, if required.)

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)
Signature: _____
Name and Title:

SURETY
Company: (Corp. Seal)
Signature: _____
Name and Title:

EJCDC
Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3. If there is no Owner Default, the Surety's obligation under this Bond shall arise after:

3.1. The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below, that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

3.2. The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and

3.3. The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

4. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1. Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or

4.2. Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

1. After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or
2. Deny liability in whole or in part and notify the Owner citing reasons therefor.

5. If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6. After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:

6.1. The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

6.2. Additional legal including appellate proceedings, design professional and delay costs and expenses resulting from the Contractor's default, and *

6.3. Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

7. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, or successors.

8. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1. Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

12.2. Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

12.3. Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

12.4. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

* resulting from the actions or failure to act of the Surety under Paragraph 4; and

This Bond is executed pursuant to Florida Statutes Section 255.05 or Section 713.23, whichever is applicable, and is subject to the notice and time limitation provisions.

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENT or BROKER:	OWNER'S REPRESENTATIVE (Architect, Engineer or other party):
BRODER & COMPANY	Mock, Roos & Associates, Inc.
6191 ORANGE DR., STE. 6159E	5720 Corporate Way
DAVIE, FL. 33314	West Palm Beach, FL 33407
954-584-3002	

Construction Payment Bond

Bond #- 0988337

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):
B&B Underground, Inc.
585 10th Avenue N., Unit 16
Royal Palm Beach, FL 33411

SURETY (Name and Principal Place of Business):
Westfield Insurance Company
One Park Circle
Westfield Center, OH 44251

OWNER (Name and Address):
City of Lake Worth, FL
7 North Dixie Highway
Lake Worth, FL 33460

CONTRACT
Date:
Amount: **Five Hundred Sixty Nine Thousand Four Hundred Forty Five & 00/100 DOLLARS ($569,445.00)**

Description (Name and Location): **Raw Watermain Improvements for Potable Well No. 16**

BOND
Date (Not earlier than Contract Date):
Amount: **Five Hundred Sixty Nine Thousand Four Hundred Forty Five & 00/100 DOLLARS ($569,445.00)**
Modifications to this Bond Form:
The provisions and limitations of Section 255.05, Florida Statutes, are herby made a part of this bond be reference.

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL
Company: **B&B Underground Contractors, Inc.** (Corp. Seal)

Signature: _____
Name and Title: **A. O'Neal Bates, President**

SURETY
Company: **Westfield Insurance Company** (Corp. Seal)

Signature: _____
Name and Title: **Arthur K. Broder, Agent & Attorney-in-Fact**

(Space is provided below for signatures of additional parties, if required.)

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)

Signature: _____
Name and Title:

SURETY
Company: (Corp. Seal)

Signature: _____
Name and Title:

EJCDC
Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

2. With respect to the Owner, this obligation shall be null and void if the Contractor:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies and holds harmless the Owner from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.

4. The Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim. (see Note 1)

4.2. Claimants who do not have a direct contract with the Contractor:

1. Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.

5. If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

6. When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1. Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

9. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of 2 years from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2 (iii), or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy this Bond or shall permit a copy to be made.

15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

15.2. Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

Note 1: As an additional requirement any claimant, except a laborer, who is not in privity with the Contractor ~~and who has not received payment for his labor, materials or supplies~~ shall, within forty-five days after beginning to furnish labor, materials or supplies, furnish the Contractor with a Notice that he intends to look to the Bond for protection.

This Bond is executed pursuant to Florida Statutes Section 255.05 or Section 713.23, whichever is applicable, and is subject to the notice and time limitation provisions.

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENT or BROKER:
BRODER & COMPANY
6191 ORANGE DR.,6159E
DAVIE, FL. 33314
954-584-3002

OWNER'S REPRESENTATIVE (Architect, Engineer ~~or other party~~):
Mock, Roos & Associates, Inc.
5720 Corporate Way
West Palm Beach, FL 33407

General
Power
of Attorney

CERTIFIED COPY

POWER NO. 0992212 00

Westfield Insurance Co.
Westfield National Insurance Co.
Ohio Farmers Insurance Co.

Westfield Center, Ohio

Know All Men by These Presents, That WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, corporations, hereinafter referred to individually as a "Company" and collectively as "Companies," duly organized and existing under the laws of the State of Ohio, and having its principal office in Westfield Center, Medina County, Ohio, do by these presents make, constitute and appoint
ARTHUR K. BRODER, MICHAEL P. BRODER, JOINTLY OR SEVERALLY

of **DAVIE** and State of **FL** its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver **any and all bonds, recognizances, undertakings, or other instruments or contracts of suretyship**- -

LIMITATION: THIS POWER OF ATTORNEY CANNOT BE USED TO EXECUTE NOTE GUARANTEE, MORTGAGE DEFICIENCY, MORTGAGE GUARANTEE, OR BANK DEPOSITORY BONDS.

and to bind any of the Companies thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the applicable Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolution adopted by the Board of Directors of each of the WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY:

"*Be It Resolved,* that the President, any Senior Executive, any Secretary or any Fidelity & Surety Operations Executive or other Executive shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

The Attorney-in-Fact, may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed by the President and sealed and attested by the Corporate Secretary."

"*Be It Further Resolved,* that the signature of any such designated person and the seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signatures or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached." (Each adopted at a meeting held on February 8, 2000).

In Witness Whereof, WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY have caused these presents to be signed by their **Senior Executive** and their corporate seals to be hereto affixed this 25th day of **APRIL** A.D., **2005** .

Corporate
Seals
Affixed

WESTFIELD INSURANCE COMPANY
WESTFIELD NATIONAL INSURANCE COMPANY
OHIO FARMERS INSURANCE COMPANY

By: *[signature]*
Richard L. Kinnaird, Jr., *Senior Executive*

State of Ohio
County of Medina ss.:

On this **25th** day of **APRIL** A.D., **2005** , before me personally came **Richard L. Kinnaird, Jr.** to me known, who, being by me duly sworn, did depose and say, that he resides in **Medina, Ohio**; that he is **Senior Executive** of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, the companies described in and which executed the above instrument; that he knows the seals of said Companies; that the seals affixed to said instrument are such corporate seals; that they were so affixed by order of the Boards of Directors of said Companies; and that he signed his name thereto by like order.

Notarial
Seal
Affixed

State of Ohio
County of Medina ss.:

[signature]
William J. Kahelin, Attorney at Law, *Notary Public*
My Commission Does Not Expire (Sec. 147.03 Ohio Revised Code)

I, **Frank A. Carrino,** Secretary of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; and furthermore, the resolutions of the Boards of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Westfield Center, Ohio, this day of A.D., .

[signature]
Frank A. Carrino, *Secretary*

BPOAC2 (combined) (06-02)

SECTION 00630
NOTICE OF COMPLIANCE WITH CHAPTER 556, FLORIDA STATUTES

The undersigned Contractor does hereby confirm to the Owner and Engineer that the Contractor has reviewed the provisions of Chapter 556, Florida Statutes, and has provided to "Sunshine State One-Call of Florida, Inc." the information required under F.S. 556.105 before the commencement of any excavation or demolition required for the Work.

Executed this _____ day of _____, 20____.

_____
(name of Contractor)

_____
(signature)

_____
(print name)

_____
(title)

END OF SECTION

00670
CONTRACTOR'S AFFIDAVIT TO OWNER

STATE OF FLORIDA
COUNTY OF _____

Before me, the undersigned authority, authorized to administer oaths and take acknowledgements, personally appeared _____, who, being by me first duly sworn, on oath depose(s) and say(s):

(1) He/she is/They are a (Corporation, Partnership or Individual) of _____ (State), doing business as _____ (Company Name), hereinafter called "Contractor".

(2) Contractor heretofore entered into a Contract with _____ hereinafter called "Owner" to do Work (furnish material, labor and services) for the construction of _____, located at _____County, Florida. ".

(3) Contractor has fully completed construction in accordance with the terms of the Contract, and all lienors have been paid in full, except:

NAME OF LIENOR	AMOUNT DUE AND UNPAID
	$

(4) All Workmen's Compensation claims have been settled and no liability claims are pending, in connection with, arising out of or resulting from the Contract..

(5) Receipt by the Contractor of the final payment, under the aforementioned Contract, shall constitute a full release and discharge by the Contractor to the Owner of any and all claims of the Contractor against the Owner, arising out of, connected with, or resulting from performance of the obligations of the Contractor pursuant to the Contract Documents.

(6) The term "lienor" as used in this affidavit means any person having a lien or a prospective lien, under the Mechanics Lien Law of Florida, on the land and property of the Owner referred to in paragraph (2) of this affidavit..

(7) This affidavit is given pursuant to the provisions of Florida Statutes Section 713.06 or Section 255.05, whichever is applicable.
Signed and sealed in the presence of:

_____ _____
(ENTITY)
_____ By:_____
(SEAL)

Subscribed and Sworn to (or affirmed) before me on _____(date) by _____ _____(name). He/she is personally known to me or has presented _____(type of identification) as identification.

_____ _____
Notary Public Signature and Seal Print Notary Name and Commission No.

00680
APPLICATION FOR PAYMENT NO. _____

Project Raw Watermain Improvements for Potable Well No. 16 for City of Lake Worth

Application is made for payment, as hereinafter shown, in connection with this Agreement:

Total Work to Date - see attached schedule	$ _____
Total Material Suitably Stored - see attached schedule	$ _____
Gross Amount Due	$ _____
Less _____ % Retainage	$ _____
Amount Due to Date	$ _____
Less Previous Applications	$ _____
Amount Due This Application	$ _____
Original Contract Price	$ _____
Net Change Orders	$ _____
Current Contract Price	$ _____
Value of Work Remaining to be Done	$ _____

Contractor's Certification:
The undersigned Contractor certifies that (1) all previous progress payments received from Owner on account of Work done under the Agreement referred to above have been applied to discharge in full all obligations of Contractor incurred in connection with Work covered by prior Applications for Payment numbered 1 through _____, inclusive; and (2) title to all materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all liens, claims, security interests and encumbrances (except such as covered by Bond acceptable to Owner).

Dated _____, 20___

_____
Contractor and Mailing Address

By _____
(Name and Title)

State of)
County of)ss

Subscribed and Sworn to (or affirmed) before me on _____ *(date)*
personally appeared _____ *(name)*.
He/she is personally known to me or has presented _____
_____ *(type of identification)* as identification. Who being so duly sworn, did depose and say that he/she is _____ of the Contractor above mentioned; that he/she executed the above Application for Payment and statement on behalf of said Contractor; and that all of the statements contained therein are true, correct and complete.

_____ _____
Notary Public Signature and Seal Print Notary Name and Commission No.

Payment of the above AMOUNT DUE THIS APPLICATION is recommended.

MOCK, ROOS & ASSOCIATES, INC.

Date: _____ By: _____
(Name) (Title)

CITY OF LAKE WORTH

Date: _____ By_____
(Name) (Title)

00681
SCHEDULE OF VALUES AND WORK COMPLETED

PROJECT TITLE_____

_____

CONTRACTOR _____

FOR PERIOD ENDING _____

TO ACCOMPANY APPLICATION NO. _____

ITEM	CONTRACTOR'S Schedule of Values			Work Completed	
	Unit Price	Quantity	Amount	Quantity	Amount
	$		$		$
NOTE: CONTRACTOR SHALL PREPARE APPROPRIATE SCHEDULE WITH ALL CONTRACT ITEMS					
SHOWN FOR ATTACHMENT TO EACH APPLICATION FOR PAYMENT.					
			Total (Original Contract)		$ _____
C.O. No. 1					
C.O. No. 1 NOTE: CHANGE ORDER(S) SHALL BE ITEMIZED AS APPLICABLE.					

TOTAL WORK TO DATE $_____

MATERIALS SUITABLY STORED

NOTE: CONTRACTOR TO ITEMIZE AND ATTACH APPROPRIATE INVOICES

TOTAL MATERIAL SUITABLY STORED $_____

Accompanying Documentation (Contractor to itemize):

This document has important legal consequences: consultation with an attorney is encouraged with respect to its completion or modification.

05/02/86
GC-1

00700

STANDARD

GENERAL CONDITIONS

OF THE

CONSTRUCTION CONTRACT

Prepared by

Engineers' Joint Contract Documents Committee

and

Issued and Published Jointly By

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
A practice division of the
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AMERICAN SOCIETY OF CIVIL ENGINEERS

CONSTRUCTION SPECIFICATIONS INSTITUTE

This document has been approved and endorsed by

The Associated General Contractors of America

These General Conditions have been prepared for use with the Owner-Contractor Agreements (No. 1910-8-A-1 or 1910-8-A-2, 1983 editions). Their provisions are interrelated and a change in one may necessitate a change in the others. Comments concerning their usage are contained in the Commentary on Agreements for Engineering Services and Contract Documents, No. 1910-9, 1981 edition. For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. 1910-17, 1983 edition). When bidding is involved, the Standard Form of Instructions to Bidders (No. 1910-12, 1983 edition) may be used.

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GENERAL CONDITIONS

ARTICLE 1—DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

Addenda—Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the bidding documents or the Contract Documents.

Agreement—The written agreement between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

Application for Payment—The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Bid—The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

* BIDDER-(see ¶SC-1 of Supplementary Conditions)

Bonds—Bid, performance and payment bonds and other instruments of security.

Change Order—A document recommended by ENGINEER, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.

Contract Documents—The Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all amendments, modifications and supplements issued pursuant to paragraphs 3.4 and 3.5 on or after the Effective Date of the Agreement.

Contract Price—The moneys payable by OWNER to CONTRACTOR under the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.9.1 in the case of Unit Price Work).

Contract Time—The number of days (computed as provided in paragraph 17.2) or the date stated in the Agreement for the completion of the Work.

CONTRACTOR—The person, firm or corporation with whom OWNER has entered into the Agreement.

defective—An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.8 or 14.10).

Drawings—The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.

Effective Date of the Agreement—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

ENGINEER—The person, firm or corporation named as such in the Agreement.

Field Order—A written order issued by ENGINEER which orders minor changes in the Work in accordance with paragraph 9.5 but which does not involve a change in the Contract Price or the Contract Time.

General Requirements—Sections of Division 1 of the Specifications.

Laws and Regulations; Laws or Regulations—Laws, rules, regulations, ordinances, codes and/or orders.

Notice of Award—The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

Notice to Proceed—A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR'S obligations under the Contract Documents.

OWNER—The public body or authority, corporation, association, firm or person with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be provided.

Partial Utilization—Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.

Project—The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

Resident Project Representative—The authorized representative of ENGINEER who is assigned to the site or any part thereof. (see ¶SC-1 of Supplementary Conditions) *

Shop Drawings—All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.

Specifications—Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor—An individual, firm or corporation having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

Substantial Completion—The Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER as evidenced by ENGINEER's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if there be no such certificate issued, when final payment is due in accordance with paragraph 14.13. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.

Supplementary Conditions—The part of the Contract Documents which amends or supplements these General Conditions.

Supplier—A manufacturer, fabricator, supplier, distributor, materialman or vendor.

Underground Facilities—All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Unit Price Work—Work to be paid for on the basis of unit prices.

Work—The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

Work Directive Change—A written directive to CONTRACTOR, issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 4.2 or 4.3 or to emergencies under paragraph 6.22. A Work Directive Change may not change the Contract Price or the Contract Time, but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Time as provided in paragraph 10.2.

Written Amendment—A written amendment of the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly Work-related aspects of the Contract Documents.

ARTICLE 2—PRELIMINARY MATTERS

Delivery of Bonds:

2.1. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish in accordance with paragraph 5.1.

Copies of Documents:

2.2. OWNER shall furnish to CONTRACTOR up to ten copies (unless otherwise specified in the Supplementary Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Time; Notice to Proceed:

2.3. The Contract Time will commence to run on the thirtieth day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty days after the Effective Date of the Agreement. ~~In no event will the Contract Time commence to run later than the seventy-fifth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.~~ (See ¶SC-2.3 of Supplementary Conditions) *

Starting the Project:

2.4. CONTRACTOR shall start to perform the Work on the date when the Contract Time commences to run, but no Work shall be done at the site prior to the date on which the Contract Time commences to run.

Before Starting Construction:

2.5. Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown

thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

2.6. Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for review:

2.6.1. an estimated progress schedule indicating the starting and completion dates of the various stages of the Work;

2.6.2. a preliminary schedule of Shop Drawing submissions; and

2.6.3. a preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by CONTRACTOR at the time of submission.

2.7. ~~Before any Work at the site is started, CONTRACTOR shall deliver to OWNER, with a copy to ENGINEER, certificates (and other evidence of insurance requested by OWNER) which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 5.3 and 5.4, and OWNER shall deliver to CONTRACTOR certificates (and other evidence of insurance requested by CONTRACTOR) which OWNER is required to purchase and maintain in accordance with paragraphs 5.6 and 5.7.~~ (See ¶Sc-2.7 of
* the Supplementary Conditions)

Preconstruction Conference:

2.8. Within twenty days after the Effective Date of the Agreement, but before CONTRACTOR starts the Work at the site, a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to discuss the schedules referred to in paragraph 2.6, to discuss procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work.

Finalizing Schedules:

2.9. At least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to finalize the schedules submitted in accordance with paragraph 2.6. The finalized progress schedule will be acceptable to ENGINEER as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance will neither impose on ENGINEER responsibility for the progress or scheduling of the Work nor relieve CONTRACTOR from full responsibility therefor. The finalized schedule of Shop Drawing submissions will be acceptable to ENGINEER as providing a workable arrangement for processing the submissions. The finalized schedule of values will be acceptable to ENGINEER as to form and substance.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

Intent:

3.1. The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

3.2. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials or equipment such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or Laws or Regulations in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or ENGINEER, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in paragraph 9.4.

3.3. If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so report to ENGINEER in writing at once and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification

from ENGINEER; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

Amending and Supplementing Contract Documents:

3.4. The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

3.4.1. a formal Written Amendment,

3.4.2. a Change Order (pursuant to paragraph 10.4), or

3.4.3. a Work Directive Change (pursuant to paragraph 10.1).

As indicated in paragraphs 11.2 and 12.1, Contract Price and Contract Time may only be changed by a Change Order or a Written Amendment.

3.5. In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, in one or more of the following ways:

3.5.1. a Field Order (pursuant to paragraph 9.5),

3.5.2. ENGINEER's approval of a Shop Drawing or sample (pursuant to paragraphs 6.26 and 6.27), or

3.5.3. ENGINEER's written interpretation or clarification (pursuant to paragraph 9.4).

Reuse of Documents:

3.6. Neither CONTRACTOR nor any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER; and they shall not reuse any of them on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER.

ARTICLE 4—AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

Availability of Lands:

4.1. OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and pai for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER's furnishing these lands, rights-of-way or easements entitles CONTRACTOR to an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Article 12. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

Physical Conditions: (see ¶SC 4.2.1 of the Supplementary Conditions) *

4.2.1. *Explorations and Reports:* ~~Reference is made to the Supplementary Conditions for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such reports, but not upon nontechnical data, interpretations or opinions contained therein or for the completeness thereof for CONTRACTOR's purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to subsurface conditions at the site.~~

4.2.2. *Existing Structures:* ~~Reference is made to the Supplementary Conditions for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities referred to in paragraph 4.3) which are at or contiguous to the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, but not for the completeness thereof for CONTRACTOR's purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to physical conditions in or relating to such structures.~~

4.2.3. *Report of Differing Conditions:* If CONTRACTOR believes that:

4.2.3.1. any technical data on which CONTRACTOR is entitled to rely as provided in paragraphs 4.2.1 and 4.2.2 is inaccurate, or

4.2.3.2. any physical condition uncovered or revealed at the site differs materially from that indicated, reflected or referred to in the Contract Documents,

CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work in connection therewith (except in an emergency as permitted by paragraph 6.22), notify OWNER and ENGINEER in writing about the inaccuracy or difference.

4.2.4. *ENGINEER's Review:* ENGINEER will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

4.2.5. *Possible Document Change:* If ENGINEER concludes that there is a material error in the Contract Documents or that because of newly discovered conditions a change in the Contract Documents is required, a Work Directive Change or a Change Order will be issued as provided in Article 10 to reflect and document the consequences of the inaccuracy or difference.

4.2.6. *Possible Price and Time Adjustments:* In each such case, an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, or any combination thereof, will be allowable to the extent that they are attributable to any such inaccuracy or difference. If OWNER and CONTRACTOR are unable to agree as to the amount or length thereof, a claim may be made therefor as provided in Articles 11 and 12.

Physical Conditions—Underground Facilities:

4.3.1. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

4.3.1.1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

4.3.1.2. CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such Underground Facilities during construction, for the safety and protection thereof as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

4.3.2. *Not Shown or Indicated.* If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 6.22), identify the owner of such Underground Facility and give written notice thereof to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents will be amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.20. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility that was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of. If the parties are unable to agree as to the amount or length thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

Reference Points:

4.4. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified in the General Requirements), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.

ARTICLE 5—BONDS AND INSURANCE

Performance and Other Bonds:

5.1. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the forms prescribed by Law or Regulation or by the Contract Documents and be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

5.2. If the surety on any Bond furnished by CONTRACTOR is declared a bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of

the Project is located or it ceases to meet the requirements of paragraph 5.1, CONTRACTOR shall within five days thereafter substitute another Bond and Surety, both of which must be acceptable to OWNER.

* ***Contractor's Liability Insurance:*** (See ¶SC-5.3 of the Supplementary Conditions)

5.3. CONTRACTOR shall purchase and maintain such comprehensive general liability and other insurance as is appropriate for the Work being performed and furnished and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance and furnishing of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed or furnished by CONTRACTOR, by any Subcontractor, by anyone directly or indirectly employed by any of them to perform or furnish any of the Work, or by anyone for whose acts any of them may be liable:

5.3.1. Claims under workers' or workmen's compensation, disability benefits and other similar employee benefit acts;

5.3.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

5.3.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;

5.3.4. Claims for damages insured by personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (b) by any other person for any other reason;

5.3.5. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom;

5.3.6. Claims arising out of operation of Laws or Regulations for damages because of bodily injury or death of any person or for damage to property; and

5.3.7. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

The insurance required by this paragraph 5.3 shall include the specific coverages and be written for not less than the limits of liability and coverages provided in the Supplementary Conditions, or required by law, whichever is greater. The comprehensive general liability insurance shall include completed operations insurance. All of the policies of insurance so required to be purchased and maintained (or the certificates or other evidence thereof) shall contain a provision or endorsement that the coverage afforded will not be cancelled, materially changed or renewal refused until at least thirty days' prior written notice has been given to OWNER and ENGINEER by certified mail. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing *defective* Work in accordance with paragraph 13.12. In addition, CONTRACTOR shall maintain such completed operations insurance for at least two years after final payment and furnish OWNER with evidence of continuation of such insurance at final payment and one year thereafter.

Contractual Liability Insurance: (See ¶SC-5.4 of the Supplementary Conditions) *

5.4. The comprehensive general liability insurance required by paragraph 5.3 will include contractual liability insurance applicable to CONTRACTOR's obligations under paragraphs 6.30 and 6.31.

Owner's Liability Insurance: (See ¶SC-5.5 of the Supplementary Conditions) *

~~5.5. OWNER shall be responsible for purchasing and maintaining OWNER's own liability insurance and, at OWNER's option, may purchase and maintain such insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.~~

Property Insurance: (See ¶SC-5.6 thru 5.10 of the Supplementary Conditions) *

5.6. ~~Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER and ENGINEER's consultants in the Work, all of whom shall be listed as insureds or additional insured parties, shall insure against the perils of fire and extended coverage and shall include "all-risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in the Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all-risk" insurance or otherwise provided in the Supplementary Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment.~~

5.7. ~~OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER AND ENGINEER's consultants in the Work, all of whom shall be listed as insured or additional insured parties.~~

5.8. ~~All the policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 will contain a provision or endorsement that the coverage afforded will not be cancelled or materially changed or renewal refused until at least thirty days' prior written notice has been given to CONTRACTOR by certified mail and will contain waiver provisions in accordance with paragraph 5.11.2.~~

5.9. ~~OWNER shall not be responsible for purchasing and maintaining any property insurance to protect the interests of CONTRACTOR, Subcontractors or others in the Work to the extent of any deductible amounts that are provided in the Supplementary Conditions. The risk of loss within the deductible amount, will be borne by CONTRACTOR, Subcontractor or others suffering any such loss and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.~~

5.10. ~~If CONTRACTOR requests in writing that other special insurance be included in the property insurance policy, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.~~

Waiver of Rights:

5.11.1. OWNER and CONTRACTOR waive all rights against each other for all losses and damages caused by any of the perils covered by the policies of insurance provided in response to paragraphs 5.6 and 5.7 and any other property insurance applicable to the Work, and also waive all such rights against the Subcontractors, ENGINEER, ENGINEER's consultants and all other parties named as insureds in such policies for losses and damages so caused. As required by paragraph 6.11, each subcontract between CONTRACTOR and a Subcontractor will contain similar waiver provisions by the Subcontractor in favor of OWNER, CONTRACTOR, ENGINEER, ENGINEER's consultants and all other parties named as insureds. None of the above waivers shall extend to the rights that any of the insured parties may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

5.11.2. OWNER and CONTRACTOR intend that any policies provided in response to paragraphs 5.6 and 5.7 shall protect all of the parties insured and provide primary coverage for all losses and damages caused by the perils covered thereby. Accordingly, all such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any of the parties named as insureds or additional insureds, and if the insurers require separate waiver forms to be signed by ENGINEER or ENGINEER's consultant OWNER will obtain the same, and if such waiver forms are required of any Subcontractor, CONTRACTOR will obtain the same.

Receipt and Application of Proceeds:

5.12. Any insured loss under the policies of insurance required by paragraphs 5.6 and 5.7 will be adjusted with OWNER and made payable to OWNER as trustee for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.13. OWNER shall deposit in a separate account any money so received, and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

5.13. OWNER as trustee shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within fifteen days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as trustee shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If required in writing by any party in interest, OWNER as trustee shall, upon the occurrence of an insured loss, give bond for the proper performance of such duties.

Acceptance of Insurance: (See ¶SC-5.14 of the Supplementary Conditions) *

5.14. ~~If OWNER has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.3 and 5.4 on the basis of its not complying with the Contract Documents, OWNER shall notify CONTRACTOR in writing thereof within ten days of the date of delivery of such certificates to OWNER in accordance with paragraph 2.7. If CONTRACTOR has any objection to the coverage afforded by or other provisions of the policies of insurance required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 on the basis of their not complying with the Contract Documents, CONTRACTOR shall notify OWNER in writing thereof within ten days of the date of delivery of such certificates to CONTRACTOR in accordance with paragraph 2.7. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided by each as the other may reasonably request. Failure by OWNER or CONTRACTOR to give any such notice of objection within the time provided shall constitute acceptance of such insurance purchased by the other as complying with the Contract Documents.~~

Partial Utilization—Property Insurance:

5.15. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.10; provided that no

such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected the changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be cancelled or lapse on account of any such partial use or occupancy.

ARTICLE 6—CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence:

6.1. CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

6.2. CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.

Labor, Materials and Equipment:

6.3. CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without OWNER's written consent given after prior written notice to ENGINEER.

6.4. Unless otherwise specified in the General Requirements, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

6.5. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16.

Adjusting Progress Schedule:

6.6. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.9) adjustments in the progress schedule to reflect the impact thereon of new developments; these will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

Substitutes or "Or-Equal" Items:

6.7.1. Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other Suppliers may be accepted by ENGINEER if sufficient information is submitted by CONTRACTOR to allow ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by ENGINEER will include the following as supplemented in the General Requirements. Requests for review of substitute items of material and equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or

royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by ENGINEER in evaluating the proposed substitute. ENGINEER may require CONTRACTOR to furnish at CONTRACTOR's expense additional data about the proposed substitute.

6.7.2. If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to ENGINEER, if CONTRACTOR submits sufficient information to allow ENGINEER to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in paragraph 6.7.1 as applied by ENGINEER and as may be supplemented in the General Requirements.

6.7.3. ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without ENGINEER's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute. ENGINEER will record time required by ENGINEER and ENGINEER's consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not ENGINEER accepts a proposed substitute, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's consultants for evaluating each proposed substitute.

Concerning Subcontractors, Suppliers and Others:

6.8.1. CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to OWNER and ENGINEER as indicated in paragraph 6.8.2), whether initially or as a substitute, against whom OWNER or ENGINEER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

6.8.2. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials and equipment) to be submitted to OWNER in advance of the specified date prior to the Effective Date of the Agreement for acceptance by OWNER and ENGINEER and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's or ENGINEER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the bidding documents or the Contract Documents) of any such Subcontractor, Supplier or other person or organization so identified may be revoked on the basis of reasonable objection after due investigation, in which case CONTRACTOR shall submit an acceptable substitute, the Contract Price will be increased by the difference in the cost occasioned by such substitution and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER or ENGINEER of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of OWNER or ENGINEER to reject *defective* Work.

6.8.3. (See ¶SC-6.8.3 of the Supplementary Conditions) *

6.9. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations. (See ¶SC-6.9 of the Supplementary Conditions) *

6.10. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

6.11. All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER and contains waiver provisions as required by paragraph 5.11. CONTRACTOR shall pay each Subcontractor a just share of any insurance moneys received by CONTRACTOR on account of losses under policies issued pursuant to paragraphs 5.6 and 5.7.

Patent Fees and Royalties:

6.12. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER

or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorneys' fees and court and arbitration costs) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights.

Permits:

6.13. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or if there are no Bids on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto such as
* plant investment fees. (See ¶6.13 of the Supplementary Conditions)

Laws and Regulations:

6.14.1. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

6.14.2. If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 3.4. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Laws or Regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

Taxes:

6.15. CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

Use of Premises:

6.16. CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or ENGINEER by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER and ENGINEER harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER or ENGINEER to the extent based on a claim arising out of CONTRACTOR's performance of the Work.

6.17. During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by OWNER. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

6.18. CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

Record Documents:

6.19. CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Directive Changes, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all changes made during construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon com-

pletion of the Work, these record documents, samples and Shop Drawings will be delivered to ENGINEER for OWNER.

Safety and Protection:

6.20. CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.20.1. all employees on the Work and other persons and organizations who may be affected thereby;

6.20.2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and

6.20.3. other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and Underground Facilities not designated for removal, relocation or replacement in the course of construction.

CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 6.20.2 or 6.20.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR). CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.13 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.21. CONTRACTOR shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's superintendent unless otherwise designated in writing by CONTRACTOR to OWNER.

Emergencies:

6.22. In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER or OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If ENGINEER determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

Shop Drawings and Samples:

6.23. After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, CONTRACTOR shall submit to ENGINEER for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.9), or for other appropriate action if so indicated in the Supplementary Conditions, five copies (unless otherwise specified in the General Requirements) of all Shop Drawings, which will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as ENGINEER may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable ENGINEER to review the information as required.

6.24. CONTRACTOR shall also submit to ENGINEER for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.

6.25.1. Before submission of each Shop Drawing or sample CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.

6.25.2. At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on

each Shop Drawing submitted to ENGINEER for review and approval of each such variation.

6.26. ENGINEER will review and approve with reasonable promptness Shop Drawings and samples, but ENGINEER's review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER, and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.27. ENGINEER's review and approval of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission as required by paragraph 6.25.2 and ENGINEER has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 6.25.1.

6.28. Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to ENGINEER's review and approval of the pertinent submission will be the sole expense and responsibility of CONTRACTOR.

Continuing the Work:

6.29. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.5 or as CONTRACTOR and OWNER may otherwise agree in writing.

Indemnification: **See Paragraph SC-6.30 of the Supplementary Conditions**

6.30. ~~To the fullest extent permitted by Laws and Regulations CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and their consultants, agents and employees from and against all claims, damages, losses and expenses, direct, indirect or consequential (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom and (b) is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder or arises by or is imposed by Law and Regulations regardless of the negligence of any such party.~~

See Paragraph SC-6.31 of the Supplementary Conditions

6.31. ~~In any and all claims against OWNER or ENGINEER or any of their consultants, agents or employees by any employee of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.30 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any such Subcontractor or other person or organization under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.~~

6.32. The obligations of CONTRACTOR under paragraph 6.30 shall not extend to the liability of ENGINEER, ENGINEER's consultants, agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications.

ARTICLE 7—OTHER WORK

Related Work at Site:

7.1. OWNER may perform other work related to the Project at the site by OWNER's own forces, have other work performed by utility owners or let other direct contracts therefor which shall contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to CONTRACTOR prior to starting any such other work; and, if CONTRACTOR believes that such performance will involve additional expense to CONTRACTOR or requires additional time and the parties are unable to agree as to the extent thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

7.2. CONTRACTOR shall afford each utility owner and other contractor who is a party to such a direct contract (or OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with theirs. CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. CON-

TRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

7.3. If any part of CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor or utility owner (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. CONTRACTOR's failure so to report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's Work except for latent or non-apparent defects and deficiencies in the other work.

Coordination:

7.4. If OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Supplementary Conditions, and the specific matters to be covered by such authority and responsibility will be itemized, and the extent of such authority and responsibilities will be provided, in the Supplementary Conditions. Unless otherwise provided in the Supplementary Conditions, neither OWNER nor ENGINEER shall have any authority or responsibility in respect of such coordination.

ARTICLE 8—OWNER'S RESPONSIBILITIES

8.1. OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.2. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer against whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to arbitration.

8.3. OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly after they are due as provided in paragraphs 14.4 and 14.13.

8.4. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions at the site and in existing structures which have been utilized by ENGINEER in preparing the Drawings and Specifications.

8.5. OWNER's responsibilities in respect of purchasing and maintaining liability and property insurance are set forth in paragraphs 5.5 through 5.8.

8.6. OWNER is obligated to execute Change Orders as indicated in paragraph 10.4.

8.7. OWNER's responsibility in respect of certain inspections, tests and approvals is set forth in paragraph 13.4.

8.8. In connection with OWNER's right to stop Work or suspend Work, see paragraphs 13.10 and 15.1. Paragraph 15.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.

ARTICLE 9—ENGINEER'S STATUS DURING CONSTRUCTION

Owner's Representative:

9.1. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and ENGINEER.

Visits to Site:

9.2. ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design professional, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

Project Representation:

9.3. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in observing the performance of the Work. The duties, responsibilities and limitations of authority of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions. If OWNER designates another agent to represent OWNER at the site who is not ENGINEER's agent or employee, the duties, responsibilities and limitations of authority of such other person will be as provided in the Supplementary Conditions.

9.3.1. (See ¶SC-9.3.1 of the Supplementary Conditions) *

Clarifications and Interpretations:

9.4. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If CONTRACTOR believes that a written clarification or interpretation justifies an increase in the Contract Price or an extension of the Contract Time and the parties are unable to agree to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Article 11 or Article 12.

Authorized Variations in Work:

9.5. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER, and also on CONTRACTOR who shall perform the Work involved promptly. If CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or an extension of the Contract Time and the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Article 11 or 12.

Rejecting Defective Work:

9.6. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be *defective*, and will also have authority to require special inspection or testing of the Work as provided in paragraph 13.9, whether or not the Work is fabricated, installed or completed.

Shop Drawings, Change Orders and Payments:

9.7. In connection with ENGINEER's responsibility for Shop Drawings and samples, see paragraphs 6.23 through 6.29 inclusive.

9.8. In connection with ENGINEER's responsibilities as to Change Orders, see Articles 10, 11 and 12.

9.9. In connection with ENGINEER's responsibilities in respect of Applications for Payment, etc., see Article 14.

Determinations for Unit Prices:

9.10. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decisions thereon will be final and binding upon OWNER and CONTRACTOR, unless, within ten days after the date of any such decision, either OWNER or CONTRACTOR delivers to the other party to the Agreement and to ENGINEER written notice of intention to appeal from such a decision.

Decisions on Disputes:

9.11. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 11 and 12 in respect of changes in the Contract Price or Contract Time will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered by the claimant to ENGINEER and the other party to the Agreement promptly (but in no event later than thirty days) after the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER and the other party within sixty days after such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

9.12. When functioning as interpreter and judge under paragraphs 9.10 and 9.11, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to paragraphs 9.10 and 9.11 with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.16) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such claim, dispute or other matter.

Limitations on ENGINEER's Responsibilities:

9.13. Neither ENGINEER's authority to act under this Article 9 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

9.14. Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved" or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be

effective to assign to ENGINEER any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16.

9.15. ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

9.16. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 10—CHANGES IN THE WORK

10.1. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by a Written Amendment, a Change Order, or a Work Directive Change. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

10.2. If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Work Directive Change, a claim may be made therefor as provided in Article 11 or Article 12.

10.3. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.4 and 3.5, except in the case of an emergency as provided in paragraph 6.22 and except in the case of uncovering Work as provided in paragraph 13.9.

10.4. OWNER and CONTRACTOR shall execute appropriate Change Orders (or Written Amendments) covering:

10.4.1. changes in the Work which are ordered by OWNER pursuant to paragraph 10.1, are required because of acceptance of *defective* Work under paragraph 13.13 or correcting *defective* Work under paragraph 13.14, or are agreed to by the parties;

10.4.2. changes in the Contract Price or Contract Time which are agreed to by the parties; and

10.4.3. changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 9.11;

provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.29.

10.5. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Time) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

ARTICLE 11—CHANGE OF CONTRACT PRICE

11.1. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the Contract Price.

11.2. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Price shall be determined by ENGINEER in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this paragraph 11.2.

11.3. The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

11.3.1. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraphs 11.9.1. through 11.9.3, inclusive).

11.3.2. By mutual acceptance of a lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 11.6.2.1).

11.3.3. On the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a CONTRACTOR's Fee for overhead and profit (determined as provided in paragraphs 11.6 and 11.7).

Cost of the Work:

11.4. The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by OWNER.

11.4.2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

11.4.3. Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER who will then determine, with the advice of ENGINEER, which bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR's Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the Work.

11.4.5. Supplemental costs including the following:

11.4.5.1. The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

11.4.5.2. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.

11.4.5.3. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof—all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

11.4.5.4. Sales, consumer, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

11.4.5.5. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

11.4.5.6. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the performance and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by OWNER in accordance with paragraph 5.9), provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's Fee. If, however, any such loss or damage

requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.7. The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amounts established by OWNER in accordance with paragraph 5.9.

11.5. The term Cost of the Work shall not include any of the following:

11.5.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.4.1 or specifically covered by paragraph 11.4.4—all of which are to be considered administrative costs covered by the CONTRACTOR's Fee.

11.5.2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

11.5.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR'S capital employed for the Work and charges against CONTRACTOR for delinquent payments.

11.5.4. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 11.4.5.9 above).

11.5.5. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of *defective* Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

11.5.6. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

CONTRACTOR's Fee:

11.6. The CONTRACTOR's Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

11.6.1. a mutually acceptable fixed fee; or if none can be agreed upon,

11.6.2. a fee based on the following percentages of the various portions of the Cost of the Work:

11.6.2.1. for costs incurred under paragraphs 11.4.1 and 11.4.2, the CONTRACTOR's Fee shall be fifteen percent;

11.6.2.2. for costs incurred under paragraph 11.4.3, the CONTRACTOR's Fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors shall be fifteen percent;

11.6.2.3. no fee shall be payable on the basis of costs itemized under paragraphs 11.4.4, 11.4.5 and 11.5;

11.6.2.4. the amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's Fee by an amount equal to ten percent of the net decrease; and

11.6.2.5. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's Fee shall be computed on the basis of the net change in accordance with paragraphs 11.6.2.1 through 11.6.2.4, inclusive.

11.7. Whenever the cost of any Work is to be determined pursuant to paragraph 11.4 or 11.5, CONTRACTOR will submit in form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

Cash Allowances:

11.8. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to ENGINEER. CONTRACTOR agrees that:

11.8.1. The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and

11.8.2. CONTRACTOR's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the

allowances. No demand for additional payment on account of any thereof will be valid.

Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

Unit Price Work:

11.9.1. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER in accordance with Paragraph 9.10.

11.9.2. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

11.9.3. ~~Where the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement and there is no corresponding adjustment with respect to any other item of Work and if CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an increase in the Contract Price in accordance with Article 11 if the parties are unable to agree as to the amount of any such increase.~~
* (See ¶SC-11.9.3 of the Supplementary Conditions

ARTICLE 12—CHANGE OF CONTRACT TIME

12.1. The Contract Time may only be changed by a Change Order or a Written Amendment. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by ENGINEER in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this paragraph 12.1.

12.2. The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if a claim is made therefor as provided in paragraph 12.1. Such delays shall include, but not be limited to, acts or neglect by OWNER or others performing additional work as contemplated by Article 7, or to fires, floods, labor disputes, epidemics, abnormal weather conditions or acts of God.

12.3. All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of this Article 12 shall not exclude recovery for damages (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) for delay by either party.

ARTICLE 13—WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

Warranty and Guarantee:

13.1. CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents and will not be *defective*. ~~Prompt notice of all defects shall be given to CONTRACTOR.~~ All *defective* Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 13.
*See ¶SC-13.1 of the Supplementary Conditions. *

Access to Work:

13.2. ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.

Tests and Inspections:

13.3. ~~CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.~~ See ¶SC-13.3 of the Supplementary Conditions. *

13.4. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefor, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval. CONTRACTOR shall also

be responsible for and shall pay all costs in connection with any inspection or testing required in connection with OWNER's or ENGINEER's acceptance of a Supplier of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all inspections, tests and approvals in addition to the above which are required by the Contract Documents shall be paid by OWNER (unless otherwise specified).

13.5. All inspections, tests or approvals other than those required by Laws or Regulations of any public body having jurisdiction shall be performed by organizations acceptable to OWNER and CONTRACTOR (or by ENGINEER if so specified).

13.6. If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.7. Neither observations by ENGINEER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.

Uncovering Work:

13.8. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

13.9. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose or otherwise make available for observation, inspection or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is *defective*, CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including but not limited to fees and charges of engineers, architects, attorneys and other professionals), and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, may make a claim therefor as provided in Article 11. If, however, such Work is not found to be *defective*, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

Owner May Stop the Work:

13.10. If the Work is *defective*, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party.

Correction or Removal of Defective Work:

13.11. If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all *defective* Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with *nondefective* Work. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

One Year Correction Period:

13.12. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be *defective*, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions, either correct such *defective* Work, or, if it has been rejected by OWNER, remove it from the site and replace it with *nondefective* Work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the *defective* Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by CONTRACTOR. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of *defective* Work, OWNER (and, prior to ENGINEER's recommendation of final payment, also ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential

costs attributable to OWNER's evaluation of and determination to accept such *defective* Work (such costs to be approved by ENGINEER as to reasonableness and to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals). If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

OWNER May Correct Defective Work:

13.14. If CONTRACTOR fails within a reasonable time after written notice of ENGINEER to proceed to correct and to correct *defective* Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.11, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by ENGINEER, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's *defective* Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

ARTICLE 14—PAYMENTS TO CONTRACTOR AND COMPLETION

Schedule of Values:

14.1. The schedule of values established as provided in paragraph 2.9 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

Application for Progress Payment:

14.2. At least twenty days before each progress payment is scheduled (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that OWNER has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER's interest therein, all of which will be satisfactory to OWNER. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

CONTRACTOR's Warranty of Title:

14.3. CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

Review of Applications for Progress Payment:

14.4. ENGINEER will, within ten days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER, or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. Ten days after presentation of the Application for Payment with ENGINEER's recommendation, the amount recommended will (subject to the provisions of the last sentence of paragraph 14.7) become due and when due will be paid by OWNER to CONTRACTOR.

14.5. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a

representation by ENGINEER to OWNER, based on ENGINEER's on-site observations of the Work in progress as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules that the Work has progressed to the point indicated; that, to the best of ENGINEER's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.10, and to any other qualifications stated in the recommendation); and that CONTRACTOR is entitled to payment of the amount recommended. However, by recommending any such payment ENGINEER will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents or that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or OWNER to withhold payment to CONTRACTOR.

14.6. ENGINEER's recommendation of final payment will constitute an additional representation by ENGINEER to OWNER that the conditions precedent to CONTRACTOR's being entitled to final payment as set forth in paragraph 14.13 have been fulfilled.

14.7. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

14.7.1. the Work is *defective,* or completed Work has been damaged requiring correction or replacement,

14.7.2. the Contract Price has been reduced by Written Amendment or Change Order,

14.7.3. OWNER has been required to correct *defective* Work or complete Work in accordance with paragraph 13.14, or

14.7.4. of ENGINEER's actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1 through 15.2.9 inclusive.

OWNER may refuse to make payment of the full amount recommended by ENGINEER because claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work or Liens have been filed in connection with the Work or there are other items entitling OWNER to a set-off against the amount recommended, but OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action.

Substantial Completion:

14.8. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within fourteen days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said fourteen days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

14.9. OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

Partial Utilization:

14.10. Use by OWNER of any finished part of the Work, which has specifically been identified in the Contract Docu-

ments, or which OWNER, ENGINEER and CONTRACTOR agree constitutes a separately functioning and useable part of the Work that can be used by OWNER without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

14.10.1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and 14.9 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

14.10.2. OWNER may at any time request CONTRACTOR in writing to permit OWNER to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to ENGINEER and within a reasonable time thereafter OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to OWNER and ENGINEER that such part of the Work is not ready for separate operation by OWNER, ENGINEER will finalize the list of items to be completed or corrected and will deliver such list to OWNER and CONTRACTOR together with a written recommendation as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing and so informed ENGINEER). During such operation and prior to Substantial Completion of such part of the Work, OWNER shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related Work.

14.10.3. No occupancy or separate operation of part of the Work will be accomplished prior to compliance with the requirements of paragraph 5.15 in respect of property insurance.

Final Inspection:

14.11. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or *defective*. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

Final Application for Payment:

14.12. After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 6.19) and other documents—all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable (subject to the provisions of paragraph 14.16), CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

Final Payment and Acceptance:

14.13. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation—all as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application to OWNER for payment. Thereupon ENGINEER will give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.16.

Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. Thirty days after presentation to OWNER of the Application and accompanying documentation, in appropriate form and substance, and with ENGINEER's recommendation and notice of acceptability, the amount recommended by ENGINEER will become due and will be paid by OWNER to CONTRACTOR.

14.14. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Contractor's Continuing Obligation:

14.15. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.13, nor any correction of *defective* Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 14.16).

Waiver of Claims:

14.16. The making and acceptance of final payment will constitute:

14.16.1. a waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from *defective* Work appearing after final inspection pursuant to paragraph 14.11 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents; and

14.16.2. a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 15—SUSPENSION OF WORK AND TERMINATION

Owner May Suspend Work:

15.1. OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if CONTRACTOR makes an approved claim therefor as provided in Articles 11 and 12.

Owner May Terminate:

15.2. Upon the occurrence of any one or more of the following events:

15.2.1. if CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

15.2.2. if a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

15.2.3. if CONTRACTOR makes a general assignment for the benefit of creditors;

15.2.4. if a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR's creditors;

15.2.5. if CONTRACTOR admits in writing an inability to pay its debts generally as they become due;

15.2.6. if CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents

(including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.9 as revised from time to time);

15.2.7. if CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

15.2.8. if CONTRACTOR disregards the authority of ENGINEER; or

15.2.9. if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety, if there be one) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) such excess will be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by ENGINEER and incorporated in a Change Order, but when exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

15.3. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.4. Upon seven days' written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed and any expense sustained plus reasonable termination expenses, which will include, but not be limited to, direct, indirect and consequential costs (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs).

Contractor May Stop Work or Terminate:

15.5. If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within thirty days after it is submitted, or OWNER fails for thirty days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days' written notice to OWNER and ENGINEER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven days' written notice to OWNER and ENGINEER stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 6.29 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

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ARTICLE 16—ARBITRATION

16.1. All claims, disputes and other matters in question between OWNER and CONTRACTOR arising out of, or relating to the Contract Documents or the breach thereof (except for claims which have been waived by the making or acceptance of final payment as provided by paragraph 14.16) will be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining subject to the limitations of this Article 16. This agreement so to arbitrate and any other agreement or consent to arbitrate entered into in accordance herewith as provided in this Article 16 will be specifically enforceable under the prevailing law of any court having jurisdiction.

16.2. No demand for arbitration of any claim, dispute or other matter that is required to be referred to ENGINEER initially for decision in accordance with paragraph 9.11 will be made until the earlier of (a) the date on which ENGINEER has rendered a decision or (b) the tenth day after the parties have presented their evidence to ENGINEER if a written decision has not been rendered by ENGINEER before that date. No demand for arbitration of any such claim, dispute or other matter will be made later than thirty days after the date on which ENGINEER has rendered a written decision in respect thereof in accordance with paragraph 9.11; and the failure to demand arbitration within said thirty days' period shall result in ENGINEER's decision being final and binding upon OWNER and CONTRACTOR. If ENGINEER renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence but will not supersede the arbitration proceedings, except where the decision is acceptable to the parties concerned. No demand for arbitration of any written decision of ENGINEER rendered in accordance with paragraph 9.10 will be made later than ten days after the party making such demand has delivered written notice of intention to appeal as provided in paragraph 9.10.

16.3. Notice of the demand for arbitration will be filed in writing with the other party to the Agreement and with the American Arbitration Association, and a copy will be sent to ENGINEER for information. The demand for arbitration will be made within the thirty-day or ten-day period specified in paragraph 16.2 as applicable, and in all other cases within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.

16.4. No arbitration arising out of or relating to the Contract Documents shall include by consolidation, joinder or in any other manner any other person or entity (including ENGINEER, ENGINEER's agents, employees or consultants) who is not a party to this contract unless:

16.4.1. the inclusion of such other person or entity is necessary if complete relief is to be afforded among those who are already parties to the arbitration,

16.4.2. such other person or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration and which will arise in such proceedings, and

16.4.3. the written consent of the other person or entity sought to be included and of OWNER and CONTRACTOR has been obtained for such inclusion, which consent shall make specific reference to this paragraph; but no such consent shall constitute consent to arbitration of any dispute not specifically described in such consent or to arbitration with any party not specifically identified in such consent.

16.5. The award rendered by the arbitrators will be final, judgment may be entered upon it in any court having jurisdiction thereof, and will not be subject to modification or appeal except to the extent permitted by Sections 10 and 11 of the Federal Arbitration Act (9 U.S.C. §§10,11).

*(See ¶SC-16 of the Supplementary Conditions)

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ARTICLE 17—MISCELLANEOUS

Giving Notice:

17.1. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Time:

17.2.1. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.2.2. A calendar day of twenty-four hours measured from midnight to the next midnight shall constitute a day.

General:

17.3. Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 17.3 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

17.4. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.30, 13.1, 13.12, 13.14, 14.3 and 15.2 and all of the rights and remedies available to OWNER and ENGINEER thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of the Agreement.

00800
SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (EJCDC No. 1910-8, 1983 edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect. The General Conditions may also be supplemented elsewhere in the Contract Documents.

The terms used in these Supplementary Conditions which are defined in the Standard General Conditions of the Construction Contract (EJCDC No. 1910-8, 1983, edition) have the meanings assigned to them in the General Conditions.

PART 1 - MODIFICATIONS AND SUPPLEMENTS TO GENERAL CONDITIONS

SC-1

Add the following to Article 1 - Definitions of the General Conditions:

Bidder -Any individual, partnership, corporation or joint venture submitting a Bid for the Work to be performed.

Resident Project Representative - The Resident Project Representative (RPR) may be assigned to the site or any part thereof on a full time basis or only on a part-time basis. This will be determined by Engineer's Agreement with Owner.

COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED:

SC-2.3

Delete the last sentence of paragraph 2.3. of the General Conditions and insert the following in its place:

In no event will the Contract Time commence to run later than the __120th__ day after the date of the Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier, (unless agreed otherwise by Owner and Contractor in writing).

BEFORE STARTING CONSTRUCTION:

SC-2.7

Delete paragraph 2.7. of the General Conditions in its entirety and insert the following in its place:

Before any Work at the site is started, Contractor shall deliver to Owner and Engineer certificates (and other evidence of insurance requested by Owner) which Contractor is required to purchase and maintain in accordance with the Contract Documents.

PHYSICAL CONDITIONS:

SC-4.2.1.

4.2.1. Existing Structures: Reference is made to Division 1: General Requirements of the Specifications for the identification of those drawings and physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities referred to in paragraph 4.3) which are at or contiguous to the site that have been utilized by Engineer in preparation of the Contract Documents. Contractor may rely upon the accuracy of the technical data contained in such drawings that is specifically referenced in Division 1: General Requirements as technical data that can be relied on by Contractor. Contractor may not rely upon non-technical data contained in such

drawings or upon the completeness thereof for Contractor's purposes. Except as indicated above in this paragraph and in paragraph 4.2.6, Contractor shall have full responsibility with respect to physical conditions in or relating to such structures.

CONTRACTOR'S LIABILITY INSURANCE:

SC-5.3.

The limits of liability for the insurance required by paragraph 5.3 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

5.3.1. and 5.3.2. Worker's Compensation, etc. under paragraphs 5.3.1 and 5.3.2 of the General Conditions:

(1) State:	Statutory
(2) Applicable Federal (e.g. Longshoreman's and Harbour Workers' Compensation, Maritime, Jones Act, etc.):	Statutory
(3) Employer's Liability:	$ 1,000,000

5.3.3, 5.3.4, 5.3.5, 5.3.6. Comprehensive General Liability (under paragraphs 5.3.3 through 5.3.6 of the General Conditions):

(1) Bodily Injury (including completed operations and products liability):

$ 1,000,000	Each Occurrence
$ 3,000,000	Annual Aggregate

Property Damage:

$ 1,000,000	Each Occurrence
$ 1,000,000	Annual Aggregate
or a combined single limit of	$ 1,000,000

(2) Property Damage liability insurance will provide Explosion, Collapse and Underground coverage where applicable.

(3) Personal Injury, with employee exclusion deleted

$ 1,000,000	Annual Aggregate

5.3.7. Comprehensive Automobile Liability:

Bodily Injury:

$ 500,000	Each Person
$ 1,000,000	Each Occurrence

Property Damage:

$ 500,000	Each Occurrence
or a combined single limit of	$ 1,000,000

Add new paragraphs immediately after paragraph 5.3.7 of the General Conditions which are to read as follows:

5.3.8. Umbrella Excess Liability Insurance:

(1) $ 1,000,000	Each Occurrence
$ 1,000,000	Annual Aggregate

(2) The umbrella coverage shall be Following-Form being no more restrictive than coverage required for the underlying policies.

5.3.9. The comprehensive general liability insurance and umbrella insurance required under paragraph 5.3 and SC-5.3, and the contractual liability insurance required under SC-5.4, of the General Conditions shall include Owner, Engineer, and Palm Beach County as additional insureds.

5.3.10 Prior to beginning work, Contractor shall provide Owner, Engineer and Palm Beach County with its Certificates of Insurance and endorsements naming Owner, Engineer, and Palm Beach County as additional insureds in accordance with the requirements of the Contract Documents.

CONTRACTUAL LIABILITY INSURANCE:

SC-5.4.

The Contractual Liability Insurance required by paragraphs 5.4 of the General Conditions shall provide coverage for not less than the following amounts:

5.4.1.	Bodily Injury:	
	$ 1,000,000	Each Occurrence
5.4.2.	Property Damage:	
	$ 1,000,000	Each Occurrence
	$ 3,000,000	Annual Aggregate

OWNER'S LIABILITY INSURANCE:

SC-5.5.

Delete paragraph 5.5 of the General Conditions in its entirety.

PROPERTY INSURANCE:

SC-5.6.

Delete paragraph 5.6 of the General Conditions in its entirety and insert the following in its place:

Contractor shall purchase and maintain on Projects with above ground structures, property insurance upon the Work at the site to the full insurable value thereof (subject to deductible amounts as may be provided in these Supplementary Conditions or required by Laws and Regulations). This insurance shall include the interests of Owner, Contractor, Subcontractors and Engineer in the Work (all of whom shall be listed as insured or additional insured parties), shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in these Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance or otherwise provided in these Supplementary Conditions, Contractor shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment. The policies of insurance required to be purchased and maintained by Contractor in accordance with this paragraph 5.6 shall comply with the requirements of SC-5.8 and SC-5.9.

5.6.1. For all other Projects and portions of Projects not classified as above ground structures, Contractor shall add to the property insurance and/or maintain an Installation Floater with aggregate coverage of the total value of the Work.

5.6.2. When the Work includes the handling and installation of Owner furnished equipment, Contractor shall add to Property insurance or Installation Floater the amount of $ N/A which is the total value of the Owner furnished items.

SC-5.7.

Delete paragraph 5.7 of the General Conditions in its entirety and insert the following in its place:

5.7. Contractor shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by these Supplementary Conditions or Laws and Regulations which shall include the interests of Owner, Contractor, Subcontractors and Engineer in the Work, all of whom shall be listed as insured or additional insured parties.

5.7.1. Boiler and Machinery Policy Required. (None required by Owner this Project)

5.7.2. Additional Property Insurance Required. (None required by Owner this Project)

SC-5.8.

Delete paragraph 5.8 of the General Conditions in its entirety and insert the following in its place:

5.8. All policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by Contractor in accordance with paragraphs 5.3 through 5.10 shall contain the following provision or endorsements:

5.8.1. The Owner shall be the trustee of all monies received as an insured loss and shall be so named.

5.8.2. That the coverage afforded will not be cancelled or materially changed or renewal refused until at least ten days' prior written notice of cancellation for nonpayment of premium, and thirty days prior written notice for other cancellations or material changes have been given to Owner and Engineer by certified mail and shall contain waiver provisions in accordance with paragraph 5.11.2.

SC-5.9.

Delete paragraph 5.9 of the General Conditions in its entirety and insert the following in its place:

5.9. The maximum deductible amount for the insurance provided in response to paragraphs SC-5.6 and SC-5.7 shall be $ 5,000.00 . The risk of loss within the deductible amount shall be borne by Contractor, Subcontractor or others suffering any such loss and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

SC-5.10.

Delete paragraph 5.10 of the General Conditions in its entirety.

ACCEPTANCE OF INSURANCE:

SC-5.14.

Delete paragraph 5.14 of the General Conditions in its entirety and insert the following in its place:

5.14. Owner shall review the coverage afforded by or other provisions of the insurance required to be purchased and maintained by Contractor after delivery of insurance certificates to Owner in accordance with paragraph 2.7 of the General Conditions. Contractor shall furnish to the Owner such additional information in respect of insurance provided by Contractor as the Owner may reasonably request.

5.14.1. Review of Insurance Policies or Insurance Certificates by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

5.14.2. In case of the breach by Contractor of any insurance provision stated in the Contract Documents, the Owner, at his option, may take out and maintain, at the expense of the Contractor, such insurance as the Owner may deem proper and Owner may deduct the cost of such insurance from any monies which may be due or become due the Contractor under this Contract.

5.14.3. All the policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by Contractor shall contain the name of the Project.

CONCERNING SUBCONTRACTORS, SUPPLIERS AND OTHERS:

SC-6.8.3.

Add the following paragraph to the General Conditions:

6.8.3. If the Bid Form or Specifications require (or if requested by Owner prior to the Notice of Award) the apparent Successful Bidder and any other Bidder so requested, shall submit a list of all Subcontractors, Suppliers and other persons or organizations (including those who are to furnish the principal items of material and equipment) in accordance with requirements of paragraph 10. of the Instructions to Bidders and Article 6.8.2. of the General Conditions.

SC-6.9.

Add the following language at the end of paragraph 6.9 of the General Conditions:

Owner or Engineer may furnish to any such Subcontractor, Supplier or other person or organization, to the extent practicable, evidence of amounts paid to Contractor in accordance with Contractor's Applications for Payment.

SC-6.13

When the Owner is a public agency, add the following at the end of paragraph 6.13 of the General Conditions:

Contractor shall obtain and pay for the following permits:

1. As needed.

INDEMNIFICATION

SC-6.30

Delete paragraph 6.30 of the General Conditions in its entirety and insert the following in its place:

Contractor shall indemnify and hold harmless Owner and Engineer and their respective officers, and employees for liabilities, damages, losses, and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract.

SC-6.31

Delete paragraph 6.31 of the General Conditions in its entirety.

PROJECT REPRESENTATION:

SC-9.3.1.

Add the following paragraph to the General Conditions:

9.3.1. If the Engineer furnishes a Resident Project Representative as per Article 9.3. of the General Conditions, the duties, etc. of the representative shall be as provided in the LISTING OF THE DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF THE RESIDENT PROJECT REPRESENTATIVE as included in the Project Manual. If Owner designates another agent to represent Owner at the site who is not Engineer's agent or employee, the duties, responsibilities and limitations of authority of such other agent will be as presented at the Preconstruction Conference.

UNIT PRICE WORK

SC-11.9.3.

Delete paragraph 11.9.3 of the General Conditions in its entirety and substitute the following in its place:

11.9.3. Contractor may not make a claim for additional expenses incurred as a result of a difference between final quantity of any item(s) of Unit Price Work and the estimated quantity of such items(s) in the Contract Documents, unless specifically allowed in the Bid Form. Any adjustments specifically allowed shall be made in accordance with directions in the Bid Form.

WARRANTY AND GUARANTEE:

SC-13.1.

Change the second sentence of paragraph 13.1 of the General Conditions to read as follows:

Prompt notice of all observed defects shall be given to the Contractor.

TESTS AND INSPECTIONS:

SC-13.3.

Delete paragraph 13.3 of the General Conditions in its entirety and insert the following in its place:

Contractor shall give twenty-four hour notice to Engineer for all required inspections, tests or approvals, except as otherwise provided.

SC-16.

Delete Article 16-ARBITRATION of the General Conditions in its entirety.

PART 2 - ADDITIONAL SUPPLEMENTARY CONDITIONS

1. ATTACHMENTS:

The following forms included in the Project Manual shall be used by Contractor for submittals required by the Contract Documents (unless Owner accepts other form):

a. Construction Performance Bond (00610).

b. Construction Payment Bond (00620).

c. Notice of Compliance with Chapter 556, Florida Statutes (00630).

d. Contractor's Affidavit to Owner (00670).

e. Form of Application for Payment (00680).

END OF SECTION

00820
SPECIAL CONDITIONS

CITY OF LAKE WORTH PURCHASING DEPARTMENT REQUIREMENTS

SPC-1 APPROVAL OF ACCOUNTING SYSTEM

Except with respect to firm fixed-price contracts, no contract type shall be used unless the Purchasing Manager has determined in writing that:

1) The proposed contractor's accounting system will permit timely development of all necessary cost data in the form required by the specific contract type contemplated; and

2) The proposed contractor's accounting system is adequate to allocate costs in accordance with generally accepted cost accounting principles.

SPC-2 RIGHT TO INSPECT PLANT

The City may, at reasonable times, inspect any part of the plant, place of business, or work site of a contractor or subcontractor which is pertinent to the performance of any contact awarded or to be awarded by the City.

SPC-3 RIGHT TO AUDIT RECORDS

1) Audit of Cost or Pricing Data: The City may, at reasonable times and places audit the books, documents, papers and records of any contractor who has submitted cost or pricing data to the extent that such books, documents, papers and records are pertinent to such cost or pricing data. Any person who receives a contract, change order or contract modifications for which cost or pricing data is required, shall maintain such books, documents, papers and records that pertinent to such costs or pricing data for three (3) years from the data of the final payment under the contract.

2) Contract Audit: The City shall be entitled to audit the books, documents, papers and records of a contractor or a subcontractor at any tier under any negotiated contract or subcontract other than a firm fixed-price contract to the extent that such books, documents, papers and records are pertinent to the performance of such contract or subcontract. Such books, documents, papers and records shall be maintained by the contractor for a period of three (3) years from the date of final payment under the prime contract and by the subcontractor for a period of three (3) years from the date of final payment under the subcontract.

3) Contractor Records: If a contract is being funded in whole or in part by assistance from a federal agency, then the contract shall include provisions:

   A) Requiring the contractor and subcontractor at any tier to maintain for three (3) years from the date of final payment under the contract all books, documents, papers and records pertinent to the contract; and

B) Requiring the contractor and subcontractor at any tier to provide to the City, the federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives access to such books, documents, papers and records for the purposes of examining. Auditing and copying them.

SPC-4 LOCAL VENDOR PREFERENCE

In the event the lowest responsive, responsible bidder or the highest ranked responsive, responsible proposer in the procurement of goods, services or construction is a non-LOCAL business, then all bids and or proposals from responsive, responsible LOCAL businesses to the same solicitation shall be adjusted by five (5) percent, solely for the purpose of determining bid/contract award. The bid price of LOCAL bidders will be adjusted downward by five (5) percent for purposes of ranking of bidders.

In no event, shall the application of this adjustment to a responsive quote or bid change the actual bid amount. Further, it will not cause the City to pay more than $15,000 above the amount bid by that non-local vendor, which would have been recommended for award if the local vendor preference had not been applied.

If the application of the five-percent local vendor preference causes the *evaluated local vendor price* to be less than the actual low-bid price, but the actual bid price of the local vendor is more than $15,000 higher than the actual low-bid price of a non-local vendor, then the non-local vendor submitting the actual low-bid, shall be viewed as the low-bidder, and be recommended for award, unless for reasons other than price, the bid is not found to be responsive and/or responsible.

The determination as to whether a bidder or proposer is a local or non-local business shall be made by the Purchasing Division, after confirming the vendor has a valid business tax receipt and certificate of occupancy, as reflected within the Business Master File of the city's ERP system. The bidder or proposer does not have to be a current vendor to the City (City as a customer) at the time of bidding/proposing, but must have been issued a business tax receipt applicable to the goods/services/ construction being requested, PRIOR to the due date/time for bids/proposals. Prior to making an award through the application of the local vendor preference, city staff may require a bidder or proposer to provide additional information at any time prior to the award.

A *LOCAL business*, for the purposes of the application of a local vendor preference, means a bidder or proposer which has a permanent, physical place of business within the city limits, and a valid business tax receipt applicable to the required goods, services, or construction items being procured. Post office boxes or locations at a postal service center are not verifiable and shall not be used for the purpose of establishing said physical address. If the business is a joint venture/partnership, it is sufficient for qualification as a LOCAL business if at least one party of the joint venture/partnership meets the test set forth in this Section.

Non-LOCAL business means a bidder or proposer which is not a LOCAL business as defined herein.

Permanent place of business means headquarters which are located within the city limits or a permanent office or other site located within the city limits from which a bidder or proposer will produce a substantial portion of the goods or perform a substantial portion of the services to be purchased. A post office box or location at a postal service center shall not constitute a permanent place of business.

SPC-5 CONTRACTOR'S START OF WORK & CHANGE OF SCOPE

1) The Contractor shall not perform work without a Purchase Order.

2) The Contractor shall not work out of scope without a signed, issued change order to the purchase order, authorizing the additional work and any change to the period of performance (Construction Contract Time).

SPC-6 APPROPRIATION OF FUNDS

This project is subject to approval and appropriation of funds by the City of Lake Worth Commission.

00840
LISTING OF THE DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF THE RESIDENT PROJECT REPRESENTATIVE

ENGINEER may furnish a Resident Project Representative (RPR), assistants and other field staff to assist ENGINEER in observing performance of the Work of the Contractor. RPR may only be part time on site, and CONTRACTOR shall coordinate with RPR as required in the Contract Documents.

Through on-site observations of the Work in progress and field checks of materials and equipment by the RPR and assistants, ENGINEER shall endeavor to provide further protection for OWNER against defects and deficiencies in the Work; but, the furnishing of such services will not make ENGINEER responsible for or give ENGINEER control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs, or responsibility for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

The duties and responsibilities of the RPR are limited to those of ENGINEER in ENGINEER's agreement with the OWNER and in the construction Contract Documents, and are further limited and described as follows:

A. GENERAL

RPR is ENGINEER's agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work shall in general be with ENGINEER and CONTRACTOR keeping OWNER advised as necessary. RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of CONTRACTOR. RPR shall generally communicate with OWNER with the knowledge of and under the direction of ENGINEER.

B. DUTIES AND RESPONSIBILITIES OF RPR

1. SCHEDULES: Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by CONTRACTOR and consult with ENGINEER concerning acceptability.

2. CONFERENCES AND MEETINGS: Attend meetings with CONTRACTOR, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.

3. LIAISON:

   a. Serve as ENGINEER's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent and assist in understanding the intent of the Contract Documents; and assist ENGINEER in serving as OWNER's liaison with CONTRACTOR when CONTRACTOR's operations affect OWNER's on-site operations.

   b. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.

4. SHOP DRAWINGS AND SAMPLES:

   a. Record date of receipt of Shop Drawings and samples.

   b. Receive samples which are furnished at the site by CONTRACTOR, and notify ENGINEER of availability of samples for examination.

c. Advise ENGINEER and CONTRACTOR of the commencement of any Work requiring a Shop Drawing or sample if the submittal has not been approved by ENGINEER.

5. REVIEW OF WORK, REJECTION OF DEFECTIVE WORK, INSPECTIONS AND TESTS:

a. Conduct on-site observations of the Work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.

b. Report to ENGINEER whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

c. Verify that tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that CONTRACTOR maintains adequate records thereof; and observe, record and report to ENGINEER appropriate details relative to the test procedures and startups.

d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to ENGINEER.

6. INTERPRETATION OF CONTRACT DOCUMENTS: Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to CONTRACTOR clarifications and interpretations as issued by ENGINEER.

7. MODIFICATIONS: Consider and evaluate CONTRACTOR's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER. Transmit to CONTRACTOR decisions as issued by ENGINEER.

8. RECORDS:

a. Maintain at the job site or ENGINEER's office files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.

b. Record names, addresses and telephone numbers of all CONTRACTORS, subcontractors and major suppliers of materials and equipment.

9. REPORTS:

a. Furnish ENGINEER periodic reports as required of progress of the Work and of CONTRACTOR's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.

b. Consult with ENGINEER in advance of scheduled major tests, inspections or start of important phases of the Work.

c. Draft proposed Change Orders and Work Directive Changes, obtaining backup material from CONTRACTOR and recommend to ENGINEER Change Orders, Work Directive Changes, and Field Orders.

d. Report immediately to ENGINEER and OWNER upon the occurrence of any accident witnessed by RPR or that was otherwise made known to RPR.

10. PAYMENT REQUESTS: Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward with recommendations to

ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.

11. CERTIFICATES, MAINTENANCE AND OPERATION MANUALS: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to ENGINEER for review and forwarding to OWNER prior to final payment for the Work.

12. COMPLETION:

a. Before ENGINEER issues a Certificate of Substantial Completion, submit to CONTRACTOR a list of observed items requiring completion or correction.

b. Conduct final inspection in the company of ENGINEER, OWNER and CONTRACTOR and prepare a final list of items to be completed or corrected.

c. Observe that all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance.

C. LIMITATIONS OF AUTHORITY

Resident Project Representative:

1. Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by ENGINEER.

2. Shall not exceed limitations of ENGINEER's authority as set forth in the Contract Documents.

3. Shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR's superintendent.

4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.

5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.

6. Shall not accept Shop Drawing or sample submittals from anyone other than Contractor.

7. Shall not authorize OWNER to occupy the Project in whole or in part.

8. Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by ENGINEER.

END OF SECTION

00860
LIST OF DRAWINGS

The Drawings which form a part of the Contract Documents and show the Work to be performed are as follows:

Drawing Title	Drawing Number	No. of Sheets	Dated
Raw Watermain Improvements For Potable Well No. 16	44-43-21-206	11	September 2013

ENGINEER'S PROJECT NO. B2066.00 PROJECT: Raw Watermain Improvements for Potable Well No. 16
City of Lake Worth

DATE: January 29, 2014

ADDENDUM NO. 1

TO: ALL PROSPECTIVE BIDDERS

Pursuant to the Invitation to Bid on this Project, you are instructed to make the following modifications to the Project Contract Documents, which modifications shall constitute a portion of the Contract Documents and be an integral part of the Project:

PROJECT MANUAL

(1) Section 02626, paragraph 2.01.B: Alternate pipe color for raw watermain shall be white with two 2" olive green stripes.

/s/ MOCK, ROOS ASSOCIATES, INC.

END OF ADDENDUM NO. 1

SPECIFICATIONS
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SECTION 01000

GENERAL REQUIREMENTS

1.0 PROJECT LOCATION

A. The project is located along Lake Osborne Drive and Detroit Street.

2.0 SCOPE OF WORK

A. The Work to be performed by the Contractor includes permitting, inspecting, furnishing all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to modify, construct, complete, deliver and place in operation the subject Project as shown on the Drawings and/or as herein described as specified. All Work to be in accordance with the Contract Documents.

3.0 REFERENCE POINTS

A. Horizontal and vertical control have been provided in the Drawings. All construction staking to be provided by the Contractor.

4.0 GRADES, DIMENSIONS, AND ELEVATIONS

A. Written dimensions have preference over scaled dimensions. All elevations are based on the 1929 National Geodetic Vertical Datum (N.G.V.D.).

5.0 EXISTING STRUCTURES AND UTILITIES

A. All known utilities have been shown on the Drawings according to the best information available. It is the Contractor's responsibility to contact all owners of structures or utilities above ground, on the surface, or below the ground, within the Project area so that said owners may stake or otherwise mark or protect their facilities. The Contractor must provide facilities and be responsible for the protection of all structures, buildings and utilities, underground, on the surface, or above ground against trenching, dewatering, or any other activity connected with the Work throughout the entire Contract Time.

B. When structures and utilities have been properly shown or marked and are disturbed or damaged in the execution of the Work, they must be repaired immediately in conformance with best standard practice and the approval of the owner of the damaged utility or structure. In the case of structures and utilities which have not been properly shown or located as outlined above and are disturbed or damaged in the prosecution of the Work, take whatever steps are necessary for safety and notify the affected utility owner and avoid any actions which might cause further damage to the structure or utility.

C. Should the Work require repairs, changes or modifications of the Owner's utilities as well as other utilities, it is the responsibility of the Contractor to provide for the maintenance of continuous water, sewage, electric, telephone and other utility services to all present customers of such utilities, unless approval in writing is secured from the applicable utility company or Owner for interruption of such service.

D. Contractor is responsible for verifying all vertical and horizontal locations of all existing utilities and structures, whether shown on the drawings or not, to verify any potential conflicts prior to ordering any materials.

6.0 QUALITY CONTROL

A. Testing Laboratory Services:

All density and concrete tests and analyses, which are called for in the Specifications and/or Drawings to be performed by an Independent Testing Laboratory, will be at the Owner's expense unless otherwise specified, provided the tests and analyses determine that the material(s) and/or Work meets the requirements as specified. All such tests that fail to meet the Project requirements are to be paid by the Contractor. Contractor shall be responsible for scheduling test lab visits in a manner to limit costs of stand-by time and non-tests assessed because of minimum per visit charges. Such excessive costs will be paid by Contractor.

B. Field Observations:

Provide twenty-four (24) hour notification to the Engineer for all specified field observations, unless otherwise noted.

7.0 MOBILIZATION

A. Consists of the preparatory Work and operations in mobilizing for beginning Work on the Project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the Project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by these Specifications, and State and local laws and regulations.

The costs of bonds, insurance and any other pre-construction expenses necessary for the start of the Work, excluding the cost of construction materials, is to be included in Mobilization.

B. When the Bid Form includes a separate pay item for Mobilization, partial payments will be made in accordance with the following:

Percent of Contract Price Less Mobilization Earned	Allowable Percent of the Lump Sum Price of Mobilization
5	25
10	50
25	75
50	100

The standard retainage will be applied to these payments. Previous payments for Mobilization and unpaid amounts on Allowances will not be considered in calculating the percent of the Contract Price earned. Payments will be made in stepped increments as shown and will not be interpolated between steps.

C. When the Bid Form does not include a separate item for Mobilization, all Work and incidental costs specified as being covered under Mobilization is to be included for payment under the several scheduled items on the Bid Form, and no separate payment will be made therefor.

8.0 MAINTENANCE OF TRAFFIC

A. In the Contractor's use of streets and highways for the Work to be done under these Specifications, conform to all Municipal, County, State and Federal laws and regulations as applicable. Provide, erect and maintain effective barricades, warning lights, and signs on all intercepted streets or highways for protection of the Work and safety of the public. All barricades or obstructions which encroach on or are adjacent to the public rights of way should be provided with lights which are illuminated at all times between sunset and sunrise.

B. Contractor shall schedule Work to cause minimum disturbance of normal pedestrian and vehicular traffic and be responsible for providing suitable means of access to all public and private properties during all stages of the construction. Other than for an emergency safety condition, the Contractor must contact the Owner and Engineer for approval prior to completely blocking off any street to vehicular traffic during construction. Contractor shall provide written

notification to emergency, police, fire and other appropriate agencies at least 24 hours in advance of new work or changed work.

C. Maintain traffic in accordance with Section 102 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, 2007 Edition, except as follows:

1. Contractor is responsible for preparing a Maintenance of Traffic plan. Submit plan for Owner or roadway authority (City, County, D.O.T.) review.

   The Maintenance of Traffic plan must be prepared by a person who is certified by an FDOT certified school or an engineer licensed in the State of Florida.

2. When the Bid Form does not include a separate item for Maintenance of Traffic, the costs are to be included for payment under the several scheduled items on the Bid Form, and no separate payment will be made.

9.0 PLACING EQUIPMENT INTO SERVICE

A. Do not operate or place into service or energize, electrical and mechanical equipment until approved by the Owner and Engineer. Such approval may be granted only after all interested parties have been duly notified, have given approval for placing the equipment into service, and all interested parties are present or waived their right to be present. Contractor shall provide, in writing, seventy-two (72) hour notification for all item and equipment start-ups.

10.0 SALVAGEABLE MATERIAL

A. All salvageable material and/or equipment removed as a part of the Work for which specific use, relocation or other disposal is not specifically noted on the Drawings or otherwise specified, must be disposed of by the Contractor. All material and/or equipment not in salvageable condition as determined by the Engineer, must be disposed of by the Contractor. The actual storage site for salvageable material will be designated by the Owner.

11.0 BORING LOGS, OTHER REPORTS AND DRAWINGS UTILIZED BY ENGINEER

A. Boring Logs, other reports and Drawings utilized by Engineer, if attached at the end of these Specifications, are provided for Contractor's information in accordance with paragraph 4. of the Instructions to Bidders and are not a part of the Contract Documents. There is no technical data in the Boring Logs, other reports or Drawings that should be relied on by the Contractor. There also were no other reports or drawings utilized by Engineer in preparation of the Contract Documents that contained data that could be relied on by the Contractor.

12.0 DISPOSAL OF EXCAVATED MATERIALS AND DEBRIS

A. All excess excavated material and debris not required for backfill (unless otherwise noted), broken pipe, sidewalks, curbs and other concrete items, together with all roots, boards and other debris are to be disposed of by the Contractor at an appropriate legal site.

13.0 TEMPORARY CONTROLS AND FACILITIES

A. The Contractor is responsible for compliance with all NPDES regulations including submitting a Pollution Prevention Plan, submitting a Notice of Intent, conducting maintenance and inspection of controls, erosion and sediment controls and submitting a Notice of Termination.

B. As part of the Work, the Contractor shall be responsible for applying for, obtaining and complying with all required dewatering permits. Contractor shall notify South Florida Water Management District (SFWMD) prior to all dewatering activities. All dewatering shall meet SFWMD requirements.

C. Contractor shall install all turbidity control devices required by SFWMD, if necessary. Contractor shall notify SFWMD for inspection of turbidity control devices prior to any construction activities.

14.0 CONSTRUCTION SCHEDULE MEETINGS

A. Contractor shall submit a construction schedule in accordance with the General Conditions. Contractor's Project Manager and a representative of subcontractors performing work at the time of the meeting shall attend a coordination/progress meeting a minimum of once a month, as designated by the Owner, at the Owner's office during the progress of the Work. Contractor shall submit an updated construction schedule to the Engineer at each coordination/progress meeting.

15.0 MISCELLANEOUS

A. All bolts, nuts, washers, etc. and miscellaneous hardware shall be 316 stainless steel, unless otherwise indicated.

16.0 CONTRACTOR'S SUBMITTALS

A. Contractor shall be required to submit, with a letter of transmittal to the Engineer, a minimum of six (6) copies of each checked and approved shop drawing, mix report, laboratory results, etc., where required in the specifications, Drawings or as appropriate, in lieu of the five (5) copies specified in Article 6 of the General Conditions or as specified elsewhere in these Specifications. Of the ten copies submitted, two copies will be returned to the Contractor for the Contractor's use. If the Contractor requires any additional approved copies, the Contractor shall submit additional copies at the time of initial submission. Allow a minimum of two weeks from date of receipt for review by the Engineer. Review of shop drawings will be general and will not relieve the Contractor from any responsibility.

A. Contractor shall be required to submit, with a letter of transmittal to the Engineer, for review and approval, four (4) hard copies and four (4) copies in CD format of each Operation and Maintenance Manual for all equipment, regardless of the number of submittals specified elsewhere in these Specifications.

17.0 CONSTRUCTION SEQUENCE

A. In addition to requirements of the Specifications and Drawings, the Contractor shall submit Construction Schedule and Project Phasing and Temporary Facilities Plan to Engineer which will include coordination of the various elements of the Work.

18.0 PROTECTION AND RESTORATION OF SURVEY MONUMENTS

A. The Contractor shall be responsible for protecting and restoring all land and property corners, such as section corners, ¼ section corners, property corners or block control points, and for maintaining all horizontal and vertical control points. All surveying work shall be the responsibility of the Contractor and shall be performed under the supervision of a Florida Registered Land Surveyor. Survey points that will be destroyed during construction shall be properly referenced and replaced at the Contractor's expense with permanent monuments approved by the ENGINEER.

19.0 ALLOWANCES

A. General Allowance: The work to be paid under this item may cover unforeseen and unanticipated costs associated with the work. Use of the General Allowance requires written authorization by the Owner prior to performing any work under this item. Any unused portion of the General Allowance will be credited to the Owner at the time of final payment.

B. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances or any credit due for unused allowance balances, and the Contract Price shall be correspondingly adjusted.

20. ORDER OF PRECEDENCE

A. The Order of Precedence shall follow the order as set forth in Article B Contract Documents, page 00500-3 and 00500-4 of the Agreement.

B. In the case of a discrepancy between any of the Contract Documents, the most restrictive requirement shall govern unless otherwise determined by the Engineer.

C. In the event that a conflict cannot be resolved by the methods listed in paragraph A or B above, the Engineer shall review the dispute and issue a clarification to resolve the issue. The Engineer's decision shall be binding on all parties. In general the Engineer will consider the overall intent of the project as presented in the contract documents, and render a decision consistent with the overall project objectives.

END OF SECTION

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Measurement and payment criteria applicable to the Work performed under a Unit Price payment method.

1.02 AUTHORITY

A. Measurement methods delineated in the individual Specification sections are intended to complement the criteria of this Section. In the event of conflict, the requirements of the individual Specification section will govern.

B. The Engineer will take all measurements and compute quantities unless noted otherwise herein.

C. Contractor to assist Engineer by providing necessary equipment, workers, and survey personnel as required.

1.03 UNIT QUANTITIES SPECIFIED

A. Quantities and measurements indicated in the Bid Form are for bidding and Contract purposes only. Quantities and measurements supplied or placed in the Work and verified by the Engineer will determine payment. Waste will not be included in the measurements or quantities.

B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the Contract Unit Price.

1.04 VOLUME MEASUREMENT

A. Measured by cubic dimension using mean length, width, and height or thickness.

B. For excavation of lakes, canals, ditches, etc., material will be measured in its original position by a Professional Land Surveyor who is licensed in the State of Florida. The Surveyor will be retained by the Contractor. Quantities will be based on before and after cross sections determined by the Surveyor. Payment will not be made for excavation beyond the lines shown on the Drawings.

1.05 AREA MEASUREMENT

A. Measured by square dimension using mean length and width or radius.

1.06 LINEAR MEASUREMENT

A. Measured by linear dimension, at the item centerline or mean chord.

B. For pipelines, the length will be measured from center of structure or fitting to center of structure or fitting.

1.07 PAYMENT

A. Payment Includes: Full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

B. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Engineer multiplied by the unit price for Work which is incorporated in or made necessary by the Work.

C. Payment for lump sum items will be made on the basis of percentage complete as approved by the Engineer.

D. For all pipeline bid items include in the unit price per lineal foot of pipe the cost of any fittings shown or otherwise needed to complete all work as shown on the drawings.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01720

RECORD DOCUMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. On site maintenance of Record Documents.

B. Required record information.

1.02 MAINTENANCE

A. Maintain on site, one set of the following Record Documents; record actual revisions to the Work:

1. Drawings.
2. Specifications.
3. Addenda.
4. Change Orders and other modifications to the Contract.
5. Shop Drawings, product data, and samples.

B. Store Record Documents separate from documents used for construction.

C. Record information concurrent with construction progress.

D. In the interest of timely detection of non-conforming Work, all Record Drawing information must be furnished to the Engineer prior to submitting for payment of that particular item. No progress payment application requests will be approved by the Engineer without satisfactory record drawings for that particular items(s).

E. Under no circumstances will roadway paving Work be allowed to start until the Engineer has reviewed the Record Drawing information for Work constructed within the roadway area that will be paved.

F. All Record Drawing information such as elevations, distances, location of underground utilities, lake cross-sections, and road cross-sections must be obtained by a Professional Surveyor and Mapper, who is licensed in the State of Florida. The Surveyor will be retained by the Contractor. Information must be signed and sealed.

G. Record Documents must be available to Engineer for examination at any time during the progress of the Work.

H. Submit completed Record Documents upon completion of the Work and prior to application for final payment.

I. Show record information in bold or boxed out to stand out from rest of Drawing.

J. Record actual revision dates of the Work.

1.03 REQUIRED RECORD DRAWING INFORMATION

A. All elevations and horizontal locations shown on the Drawings must be verified. Verification or deviation must be clearly indicated on the Drawings.

B. Drainage

1. Flow line elevation of pipe at headwalls, outfalls and structures.

2. Top elevation of headwalls, structures, and concrete caps.
3. Drainage Control Structures, Baffles, and Weirs. Obtain horizontal dimensions and vertical elevations.
4. Horizontal locations of headwalls, structures, and concrete caps.
5. Location of utilities and miscellaneous structures encountered which are different from or not shown on the Drawings.

C. Lakes, Canals, and Pump Station Intake Channels

1. Cross section at each design cross section shown on the Drawings and at a minimum 100 foot intervals. Obtain elevations at all grade breaks and across bottom from 20 foot beyond top of bank (each side).
2. Determine side slopes.
3. Locate top of bank and the edge of water at the control elevation and plot location on a drawing at the same scale as the construction drawings.

D. Roadways

1. Cross-section elevations at the profile grade line (centerline or edge of median) and at the edge of pavement at the following frequencies:
   a. Major Roads (collector or higher): At high and low points of the profile grade and at even 100 foot stations in-between.
   b. Local Roads: At high and low points of the profile grade.
2. Location of utilities and miscellaneous structures encountered which are different from or not shown on the Drawings.
3. Spot elevations in parking lots and access roads.

E. Wastewater

1. Invert elevations in manholes and at end of stubouts.
2. Distance between manholes.
3. Top of manhole elevations.
4. Location of manholes, based on stationing system on Drawings.
5. Calculate slope of gravity mains.
6. Locate end of stubouts and services by stationing and offsetting from the gravity main and downstream manholes.
7. Length of stubouts.
8. Elevations of the top slab, wet well invert, influent pipe inverts, and driveway for lift stations.
9. Details of any design changes.
10. Location of utilities and miscellaneous structures encountered which are different from or not shown on the Drawings.
11. Top of force main elevations and finished grade at 100 foot intervals and at high and low points.
12. Locate force main fittings, valves, air release structures, etc. by stationing and offsetting from gravity wastewater manholes. If manholes are not located nearby, use reference points shown on the Drawings.
13. Elevation and clearances when wastewater mains cross either water mains or drainage pipe.
14. Changes in pipe material.
15. Bottom of wastewater service pipe elevation and top of drainage pipe elevation at all crossings.
16. Top of wastewater service pipe elevation and bottom of watermain elevation at all crossings.
17. Lift station electrical controls and FPL service to control panel.

F. Water

1. Top of pipe elevations at 100 foot intervals.
2. Distance from the reference points shown on the Drawings.
3. Horizontal location at 100 foot intervals.

4. Location of water services, valves, fittings, hydrants, blowoff points, etc. by stationing and offsetting from wastewater manholes. If wastewater manholes are not located nearby, use reference points shown on the Drawings.
5. Details of any design changes.
6. Location of utilities and miscellaneous structures encountered which are different from or not shown on the Drawings.
7. Elevations and clearances when water mains cross either wastewater or drainage pipe.
8. Changes in pipe material.

G. Conduit Sleeves

1. Horizontal location and size of conduit.

H. Structural

1. Obtain horizontal and vertical locations and elevations for all structural components, including but not limited to, intake structure including piles and cap, slabs, building and building features, grating, trash rack, etc.

I. General Site

1. Spot elevations shall be taken at a reasonable grid interval for finished grade verification. Obtain spot elevations at all grade or contours (as shown on the Drawings), grade breaks, property lines, and limits of construction.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CONTRACTOR'S SURVEYOR RESPONSIBILITIES

A. Engineer will provide the Contractor with electronic files of the construction drawings at the pre-construction conference. One copy of the electronic files will be provided on CD/DVD media in AutoDesk Civil 3D 2014 format. No warranty of the usability of the electronic files provided is expressed or implied. The cost of any required conversion or duplication of the electronic files from the format specified herein shall be the responsibility of the Contractor.

B. The Owner and Engineer will advise the Contractor at the pre-construction conference of the acceptable method and file format by which the interim and final Record Drawing information will be provided to the Owner and/or Engineer.

C. Record Drawing information shall be prepared electronically. The Record Drawing information shall be placed on a separate layer so that it is isolated from all other layers in the drawing file. This layer must be prepared in such a manner that it can be exported as a separate AutoCad file and subsequently inserted into an AutoCad drawing containing the approved design information. The AutoCad files shall be accompanied by an Adobe Acrobat portable document format (.pdf) file of the Record Drawings.

D. Place information in the Drawings in a manner that indicates which elevations and dimensions have been checked. This is to be done by crossing through the design elevation or dimension and placing the Record information next to it. If an elevation or dimension has not changed, the same procedures should be followed to confirm that it has been checked. Add new information in a manner to indicate that it is Record information and not design information.

E. Each Record Drawing sheet must include the surveyor's name, company, address, license number, and date of field survey.

F. Signed and sealed Record Drawings shall be submitted with all pay applications and at the conclusion of the Project.

3.02 CONTRACTOR RESPONSIBILITIES

A. Record document information not required to be obtained by a Professional Surveyor and Mapper must be obtained by the Contractor.

B. Mark Record information on one clean set of prints of the Contract Documents.

C. Each Drawing must be stamped indicating that the information has been reviewed by the Contractor.

D. Contractor's Surveyor will transfer Contractor supplied information to the record drawing.

END OF SECTION

SECTION 02108

VIDEO-TAPING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Video-taping the pre-construction conditions of the surface features within the construction area and post construction (clean-out) dive inspection video of wetwells.

1.02 SUBMITTALS

A. Pre Construction: Submit two completed DVD media that is playable on standard DVD players to Engineer at least seven calendar days prior to commencing construction and delivery of any materials and/or equipment.

B. Post Construction: Submit two completed DVD media that is playable on standard DVD players to Engineer for review prior to substantial completion.

1.03 QUALITY ASSURANCE

A. Video-taping must be done by a responsible commercial firm known to be skilled and regularly engaged in the business of pre-construction video documentation.

PART 2 PRODUCTS

2.01 MATERIALS

A. DVD Media: Standard name-brand high quality write-once media. New, not previously used.

PART 3 EXECUTION

3.01 PRE CONSTRUCTION VIDEO-TAPING

A. Video-taping shall be performed and submitted at least seven calendar days prior to the commencement of construction and delivery of any materials and/or equipment. Upon review by the Engineer, and prior to commencement of construction and delivery of any materials and/or equipment, additional video-taping of any portions of the construction areas that are not adequately documented on the initial video-tapes may be required.

B. Video-tape the pre-construction conditions of the surface features within the construction area.

C. The video-tape will serve as a record of the pre-construction conditions for disputes arising from restoration, and should, therefore, be taken within the construction area in sufficient detail as necessary to clearly depict pre-construction conditions.

D. Indicate the date and time (hour, minutes and seconds) on which the video-tapes were recorded.

E. Video-tapes shall record video with simultaneous audio to assist viewer orientation with any needed identification, differentiation, clarification, or objective description of the features being shown with audio recording of commentary by the camera operator. The audio recording shall be free of any conversations between the camera operator and other production technicians.

F. Camera Height and Stability: Do not exceed 10 feet vertical distance between camera lens and the ground when conventional wheeled vehicles are used as conveyances for the recording system.

G. Camera Control: Control camera pan, tilt, zoom-in and zoom-out rates such that recorded objects will be clearly viewed during video tape playback. Control or adjust camera and recording system controls such as lens focus, aperture, light, and white balance to maximize picture quality.

H. Viewer Orientation Techniques: Use existing landmarks including but not limited to, all visible house and business addresses, to maintain viewer orientation.

I. Video Tape Log: Provide a written log of each video tape's contents including but not limited to, the names of the streets or easements, coverage beginning and ending, directions of coverage, and the date upon which the recording was made.

J. All video-tapes and DVD's become the property of the Owner.

3.02 POST CONSTRUCTIN VIDEO TAPING

A. Video-tape the post-construction conditions of the surface of the wetwells to verify miscellaneous materials have adequately been removed.

END OF SECTION

SECTION 02110

SITE CLEARING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Clearing and grubbing.

B. Removal of pavement and structures.

1.02 REGULATORY REQUIREMENTS

A. Comply with all applicable federal, state, and local laws and regulations for the prevention, control, and abatement of all forms of pollution and the protection of soil, vegetation, wildlife, fish, and water courses.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 PREPARATION

A. Verify that existing plant life designated to remain is tagged or identified.

B. Protect utilities that are to remain, from damage.

C. Protect trees, plant growth, and features to remain as final landscaping.

D. Protect benchmarks, survey control points, and existing structures from damage or displacement.

3.02 CLEARING AND GRUBBING

A. Remove and dispose of timber, brush, stumps, roots, rubbish and debris, and all other obstructions resting on or protruding through the surface of the existing ground and the surface of areas to be excavated.

B. Unless otherwise shown on the Drawings, clearing and grubbing is to be done in the following areas:

1. All areas where excavation and/or grading is to be done.
2. All areas where structures will be constructed, including pipe culverts and other pipelines.
3. In pavement areas and within roadway right of way.
4. Any other areas requiring clearing and grubbing to complete the Work.

C. In pavement areas, remove roots and other debris to a depth of at least one foot below the ground surface. The surface must then be plowed to a depth of at least six inches and all roots thereby exposed are to be removed to a depth of at least one foot.

D. All stumps within pavement areas and road right of way are to be completely removed and disposed of.

E. Where excavation is done, all roots protruding through or appearing on the surface of the completed excavation must be removed to a depth of at least one foot below the excavation surface.

3.03 REMOVAL OF PAVEMENT

A. Remove and dispose of existing concrete pavement, concrete sidewalk, slope pavement, ditch pavement, asphalt pavement, rock pavement base, curb, and curb and gutter, where designated on the Drawings or where required to be removed because of the construction operations.

3.04 REMOVAL OF STRUCTURES

A. Remove and dispose of those structures, or portions of structures specified on the Drawings or those structures or portions of structures which need to be removed in order to construct new structures, and other appurtenances or obstructions which are designated on the Drawings.

3.05 DISPOSAL

A. All removed items, including but not limited to, those indicated in Sections 3.02, 3.03, and 3.04 of this Specification are to be disposed of at an appropriate legal site.

END OF SECTION

SECTION 02156

HORIZONTAL DIRECTIONAL DRILLING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. The work specified in this section consists of furnishing and installing underground utilities using the horizontal directional drilling (HDD) method of installation. This work shall include all services, equipment, materials, and labor for the complete and proper installation, testing, restoration of underground utilities and environmental protection and restoration.

1.02 RELATED SECTIONS

A. Section 02619 –Polyethylene (HDPE) Pipe for Watermains.

1.03 SUBMITTALS

A. Prior to beginning work, the Contractor must submit to the Engineer a general work plan outlining the procedure and schedule to be used to execute the project.

B. Contractor will submit specifications on directional drilling equipment.

C. Contractor will submit shop drawings on material to be used including, but not limited to, the pipe, fittings and any other item which is to be an installed component of the project.

1.04 QUALITY ASSURANCE

A. Contractor performing the work under this section must be regularly engaged in HDD with similar experience within the last three years.

B. All personnel shall be fully trained in their respective duties as part of the directional drilling crew and in safety.

C. Contractor must supply reference of previous work.

PART 2 PRODUCTS

2.01 MATERIALS

A. Pipe: HDPE See Section 02619.

B. Drilling Fluid: Drilling fluid shall be composed of clean water and an appropriate additive. Water shall be from a clean source with a pH of 8.5 – 10 and/or as per mixing requirements of the Manufacturer. Water of a lower pH or with excessive calcium shall be treated with the appropriate amount of sodium carbonate or equal. The water and additives shall be mixed thoroughly and be absent of any clumps or clods. No hazardous additives may be used. Drilling fluid shall be maintained at a viscosity sufficient to suspend cuttings and maintain the integrity of bore wall.

C. Detection Wire: TW, THW, THWN, or HMWPE insulated copper, 10 gauge or thicker wire by Copperhead Industries Reinforced #1245 Extra-High Strength Tracer Wire or equal.

2.02 EQUIPMENT

A. The directional drilling equipment shall consist of a directional drilling rig of sufficient capacity to perform the bore and pullback of the pipe, a drilling fluid mixing and delivery system of

sufficient capacity to successfully complete the installation, a guidance system to accurately guide boring operations and trained and competent personnel to operate the system. All equipment shall be in good, safe operating condition with sufficient supplies, materials and spare parts on hand to maintain the system in good working order for the duration of the project.

B. A self-contained, closed, drilling fluid mixing system shall be of sufficient size to mix and deliver drilling fluid composed of bentonite clay, potable water and appropriate additives. Mixing system shall be able to molecularly shear individual bentonite particles from the dry powder to avoid clumping and ensure thorough mixing. The drilling fluid reservoir tank shall be sized for adequate storage of the mud. The mixing system shall continually agitate the drilling fluid during drilling operations.

C. Pipe rollers, if required, shall be of sufficient size and number to fully support the weight of the pipe during pull-back operations.

D. Hydraulic or pneumatic pipe rammers may only be used if necessary and with the authorization of Engineer.

PART 3 EXECUTION

3.01 GENERAL

A. The Owner/Engineer must be notified 48 hours in advance of starting work. The Directional Bore shall not begin until the Engineer is present at the job site and agrees that proper preparations for the operations have been made. The Engineer's approval for beginning the installation shall in no way relieve the Contractor of the ultimate responsibility for the satisfactory completion of the work as authorized under the Contract. The Engineer shall provide his observation at such times as appropriate without causing undue hardship by reason of delay to the Contractor.

3.02 PREPARATION

A. Site Preparation

1. Prior to any alterations being started at the work site, contractor shall photograph or video tape entire work area, including entry and exit points. Two copies shall be given to Engineer and one copy to remain with contractor for a period of one year following the completion of the project.

2. The work site as shown on the located drawings, within the public right-of-way, shall be graded or filled to provide a level working area. No alterations beyond what is required for operations are to be made. Contractor shall confine all activities to within limits of construction. Contractor shall restore working area to preconstruction or better conditions.

B. Drill Path Survey: Entire drill path shall be accurately surveyed with entry and exit stakes placed in the appropriate locations within the areas indicated on drawings. If contractor is using a magnetic guidance system, drill path shall be surveyed by Contractor for any surface geo-magnetic variations or anomalies.

C. Environmental Protection: Contractor shall place a silt fence or other barriers between all drilling operations and any drainage, wetland or waterway or other area designated for such protection by contract documents or state, federal or local regulations. Additional environmental protection necessary to contain any hydraulic or drilling fluid spills shall be put in place, including berms, liners, turbidity curtains, and other measures. Contractor shall adhere to all applicable environmental regulations. Fuel or oil may not be stored in bulk containers within 200 feet of any water-body or wetland.

D. Safety: Contractor shall adhere to all applicable state, federal and local safety regulations and all operations shall be conducted in a safe manner.

3.03 OPERATION

A. General

1. Determine drilling length and equipment pull strength for type of soil encountered.
2. Entry angle shall be between 10° and 14°. Exit angle shall be between 5° and 12°.
3. Provide method to control line and grade.
   a. Provide and maintain instrumentation that accurately locates pilot hole.
   b. Drill pilot hole along path following drawings to these tolerances:
      1) Vertical alignment plus or minus 0.5 foot. Vertical path of the pilot hole must not establish new high points not shown on drawings.
      2) Horizontal alignment plus or minus 1.0 foot.
   c. Include electronic monitoring of the horizontal and vertical drilling head location. Obtain an accuracy range within 1 inch of actual position of the pipeline. Record position readings at a maximum of 10 foot intervals.
   d. At completion of pilot hole drilling, furnish Engineer tabulations of horizontal and vertical alignment.
4. When water is encountered.
   a. Provide and maintain a dewatering system of sufficient capacity to remove water.
   b. Keep excavation free of water until backfill operation is in progress.
   c. Perform dewatering in such a manner that removal of soils particles are held to a minimum.
5. Maintain close observation to detect settlement or displacement of surface and adjacent facilities.
   a. Notify Engineer and applicable agency immediately if settlement or displacement is detected.
   b. Act to maintain safe conditions and prevent damage.

B. Drilling Operation

1. Drilling fluids.
   a. Maintain drilling fluid in bore hole to increase stability of the surrounding soil and reduce drag on pulled pipe.
   b. Dispose of drilling fluid and other spoils at locations following laws, ordinances, rules, and regulations of local jurisdiction.
   c. Transport excess fluids and other spoils to the disposal site.
   d. Minimize drilling fluid at locations other than entry and exit points. Immediately clean up any drilling fluids that inadvertently surface.
   e. Provide clean water for drilling.
2. Pilot Hole Drilling
   a. Angle entry hole so that curvature of pilot hole does not exceed allowable bending radius of HDPE pipe
   b. Be able to make a turn of up to 90 degrees and maintain a curvature not to exceed allowable bending radius of HDPE pipe.
   c. Alignment Adjustment and Restarts.
      1) Follow pipeline alignment on Drawings within tolerances specified herein. Before adjustments, notify Engineer for approval.
      2) Notify Engineer when forward motion of operation is stopped by an obstruction.
         a) Abandon in place with drilling fluid
         b) Attempt a second installation at approved location.
      3) Exercise caution including, but not limited to, locating utilities, drilling downholes (test pits) to observe drill stems or reamer assembly to clear other existing utilities at locations following drawings.
      4) Keep the number of boring pits to a minimum, no closer than following distances.
         a) Equipment must be capable of the proposed lengths as shown on the drawings in a single bore.

3.04 INSTALLATION

A. Installing HDPE Pipe.

1. Provide a swivel to reaming assembly and pull section of pipe to minimize torsional stress on pull section after drilling pilot hole.
2. Hold reaming diameter to 1.5 times the outside diameter of HDPE pipe being installed.
3. Protect pull section as it proceeds during pull back so that it moves freely and is not damaged.
4. Pull detection wire along with HDPE pipe. Extend wire into location station at each end of HDPE pipe.
5. When connecting to adjacent pulled or non-pulled section of HDPE pipe, allow pull section of pipe to extend past termination point. Make tie-ins the next day after pullback of HDPE pipe.
6. Test pit pipe installation to verify horizontal and vertical alignment.
   a. One test pit for every 500 feet along length of pipeline.
   b. Engineer may order additional test pits for each test pit that reveals pipeline installation is not in compliance with the Contract Documents.
7. Replace portions of the pipeline not in compliance with the Contract Documents, at no additional cost to the Owner.

B. Installing Locator Station.

1. Locator Stations.
   a. Provide locator stations at each end of the HDPE pipe.
   b. Flush mount underground locator. Valvco or equal locator box (H-20 rated box required in paved areas).
   c. When HDPE pipe is connected to another type of pipe material, continue detector wire over the connecting pipe, so locator station is installed out of paved area (where possible).
   d. In areas schedule to be improved identify and protect station locations immediately after installation.
      1) Space 3 stakes equally around the station.
      2) Extend at least 4 feet above existing grade.
      3) Flag with orange fluorescent wrap within 6 inches from top of stakes.
2. Detection Wire.
   a. Install detection wire without splices.
   b. Terminate detection wire inside locator box using proper sized crimp type connectors on wire ends.
   c. Connect each wire to a terminal maintaining at least 18 inches slack in each wire for underground flush mounted locator station.
   d. Neatly coil slack wire in test station below terminal board.
   e. Locate wires on top and along HDPE pipe.
   f. Allow adequate slack and support to protect wires from damage during backfilling operations
   g. Test each detection wire for continuity after backfill is completed.
      1) If test for continuity is negative, repair or replace.
      2) After continuity is verified, connect each detection wire to terminal block in locator station.

3.05 BORING PATH REPORT

A. Furnish a Bore Path Report to the Engineer within seven days of the completion of each bore path. Include the following in the report.

1. Location of project and permit number
2. Name of person collecting data, including title, position and company name
3. Investigate site location (Contract plans station number or reference to a permanent structure within the project right-of-way)

4. Identification of the detection method used
5. Provide position readings that include the location (Northing, Easting coordinates or offset from a permanent structure) and elevation at a maximum of ten-foot intervals
6. Elevations and offset dimensions shall meet minimum requirements of FDOT Specification Section 555-4.2

B. Submit record drawings for the bore as required by FDOT Specification Section 555-6.2.

3.06 FIELD OBSERVATIONS

A. All directional drillings are to be observed at the option of the Engineer.

END OF SECTION

SECTION 02210

GRADING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Cutting, filling, grading, and rough contouring site.

B. Compaction requirements.

C. Finish grading.

1.02 REFERENCES

A. AASHTO T-180/ASTM D1557-78 - Moisture Density Relations of Soils and Soil Aggregate Mixtures, Using 10 lb. Rammer and an 18 inch Drop.

B. ASTM D422-63 - Particle-Size Analysis of Soils.

C. ASTM D2922-81 - Density of Soil-Aggregate in Place by Nuclear Methods.

PART 2 PRODUCTS

2.01 MATERIAL

A. Fill: Free from large clods, muck, rocks larger than 6 inches, organics or other extraneous material. The maximum size rock allowed in the top 12 inches of the rough and finished grade to be 1 inch, suitable for pavement subgrade.

2.02 SOURCE QUALITY CONTROL

A. Engineer to review and approve fill material at the source prior to hauling material onsite.

PART 3 EXECUTION

3.01 PREPARATION

A. Identify required lines, levels, contours, and datum.

B. Identify known below and above grade utilities. Stake and flag locations.

3.02 GRADING

A. Fill/cut and grade Project site in a neat and uniform manner to conform to the grades detailed on the Drawings. If grades are not specified, grade in a neat and uniform manner to the grades which were existing prior to construction.

3.03 COMPACTION

A. Spread fill material and level in layers not to exceed 18 inches in thickness, measured loose. Compact each layer using a vibratory roller.

B. In fill sections that are to be paved, compact to a density not less than 100 percent of the maximum density determined by AASHTO T-99 Method C.

C. In cut sections and existing sections, the upper one (1) foot of the undisturbed subgrade or foundation grade must be compacted to a density not less than 100 percent of the maximum density determined by AASHTO T-99 Method C.

D. All subgrade or foundation grades disturbed during construction must be compacted to a density not less than 95 percent of the maximum density determined by AASHTO T-180.

E. In non-paved areas, compact to 95 percent of the maximum density determined by AASHTO T-180.

3.04 PROTECTION

A. Protect trees, shrubs, lawns, and other features remaining as a part of the final landscaping.

B. Protect benchmarks.

C. Protect existing structures, fences, roads, sidewalks, paving and curbs.

D. Protect above and below grade utilities which pass through Work area.

3.05 TESTING

A. Density tests for verifying compaction will be performed by an independent testing laboratory in accordance with Division 1: General Requirements. Contractor is responsible for scheduling density tests and for the coordination of the testing with the testing laboratory and Engineer. Tests are to be paid for as specified in the Division 1: General Requirements.

3.06 FIELD OBSERVATIONS

A. Engineer Owner's representative to review finished grades prior to seeding or placement of sod.

END OF SECTION

SECTION 02220

EXCAVATING, BACKFILLING, AND COMPACTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Excavation for structures, pipelines, lakes, canals, ditches, etc.

B. Backfilling of structures and pipelines.

C. Dewatering.

D. Compacting.

1.02 REFERENCES

A. ASTM C136-84 - Sieve Analysis of Fine and Coarse Aggregates.

B. ASTM D2922-81 - Density of Soil-Aggregate in Place by Nuclear Methods.

C. AASHTO T-180/ASTM D1557-78 - Moisture Density Relations of Soils and Soil Aggregate Mixtures, Using 10 lb. Rammer and an 18 inch Drop.

1.03 REGULATORY REQUIREMENTS

A. Contractor is responsible for the provisions of the Occupational Safety and Health Administration's excavation safety standards, 29 C.F.R.s. 1926.650 Subpart P, which requires excavations exceeding five (5) feet in depth to be shored or sloped to the angle of repose.

1.04 PREVENTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION

A. Contractor shall provide for and be responsible for the prevention, control, and abatement of erosion and water pollution until completion of the Project.

B. Contractor shall provide all temporary erosion control features necessary to prevent, control, and abate erosion and water pollution.

C. Contractor shall comply with the water quality standards of the State of Florida. The Contractor is cautioned that during the execution of the Work, creation of turbidity in excess of 29 Nephelometric Turbidity Units (NTU's) above the natural background level and/or directly or indirectly affecting the water quality in the waters of the State in such a manner as to exceed the limitations on the concentration of various constituents for such water as prescribed in Chapter 62-302 of the Florida Administrative Code, is a violation of the water quality standards of the State of Florida.

PART 2 PRODUCTS

2.01 BACKFILL MATERIAL

A. Backfill with an approved material, free from large clods, rocks larger than 1 inch, organic material or other extraneous material.

PART 3 EXECUTION

3.01 PREPARATION

A. Identify required lines, levels, contours and datum.

B. Identify known below and above grade utilities. Stake and flag locations.

C. Maintain and protect existing utilities remaining which pass through Work area.

D. Verify stockpiled fill is approved.

3.02 EXCAVATION

A. Perform the excavation of all substance(s) encountered for construction of the intake channel to dimensions and depths shown on the Drawings and/or as specified herein, or as approved by the Engineer by hand dredge methods only. Contractor shall dispose of all at an appropriate legal site.

B. When a masonry or concrete structure rests on an excavated surface other than rock, special care must be taken to avoid disturbing the bottom of the excavation. Final removal of the existing material to foundation grade is not to be started until just before the masonry or concrete foundation is to be placed.

C. Excavate pipe trenches to a depth as shown on the Drawings. If over-excavation occurs, place a layer of fine crushed rock or compacted coarse sand to secure a firm foundation for the lower one-third of the pipe.

D. The maximum width of the trench at the top of the pipe must not be greater than 2 feet more than the nominal diameter of the pipe, unless otherwise specified. If this maximum is exceeded, it will be the Contractor's responsibility to provide adequate support (concrete cradle or crushed rock and compacted coarse sand) at the location of the trench width over excavated.

E. Keep pipe laying operations as close to the excavation as practical during the execution of the Work.

F. If rock is encountered at the foundation grade of a masonry or concrete structure, excavate the rock in such a manner as to allow the solid rock to be exposed. Prepare in horizontal beds for receiving the masonry or concrete. Remove all loose and disintegrated rock or thin strata. Cut back roots to 12 inches below the foundation grade.

G. If rock is encountered at the grade line of a pipe line, remove the rock so that at no place will it be closer than 6 inches to the finished pipe line. After the excavation is completed, place and tamp a bed of selected backfill (coarse sand and fine crushed rock) to at least 6 inches deep. Cut back roots to 12 inches below pipe grade.

H. Remove any water accumulated in the pipe trench and/or structure excavation and keep the excavation de-watered until the bedding is complete. Accomplish in a manner so as to not create any nuisance to adjacent property or public thoroughfare. Do not use the pipeline being installed as a drain for such water. Meet all laws, codes, ordinances, and government regulations when de-watering.

I. Provide all bracing, sheeting, and shoring necessary to perform and protect all excavations, as required for safety, or in accordance with governing laws. Remove all sheeting during backfilling operations except as otherwise noted herein or approved by the Engineer. Remove bracing, sheeting, and shoring in such a manner as not to disturb the completed Work.

Whenever bracing or shoring is driven to a depth below the top of pipe elevation, that portion of the sheeting below the top of the pipe must not be disturbed or removed. Whenever bracing or

sheeting is driven for protection of trench walls in a water-bearing soil, no portion of such sheeting is to be removed below existing ground water table level unless otherwise approved by the Engineer.

J. Unsuitable Foundation - In case the soil conditions encountered at the grade line of the pipe trench or structure excavation are found to be unsuitable, the Engineer must be notified to review the character of the foundations prior to continuing the Work.

3.03 BACKFILLING

A. Backfilling of structure (manholes, pump stations, sidewalks, etc.) excavations and required fill under structure slabs are to be done in horizontal lifts not exceeding eight inches in depth (compacted thickness), and compacted to a density of not less than 95 percent of the maximum density determined by AASHTO T-180.

B. Place backfill material for pipe excavation evenly and carefully around and over pipe and under lower sections of pipe in 6-inch maximum lifts. Hand-tamp backfill around the pipe. Each lift is to be thoroughly and carefully rammed until one foot of cover exists over the pipe. The remainder of the backfill is to be placed in eight inch lifts (compacted thickness), moistened, and mechanically compacted to a density of not less than 100 percent of the maximum density as determined by AASHTO T-99 Method C180, unless otherwise noted. Water settling may be utilized at the option of the Contractor, however, the dewatering system must remain in service until all required density determinations are performed.

C. For structures and rigid pipelines where the backfill lies within a pavement subgrade, the backfill must be compacted to a density not less than 100 percent of the maximum density determined by AASHTO T-99 Method C180.

D. For flexible pipe lines (i.e. PVC pipe or corrugated metal pipe) where the backfill lies within a pavement subgrade, the subgrade backfill to 6 inches above the top of the pipe must be compacted to a density not less than 100 percent of the maximum density determined by AASHTO T-99 Method C180. The remaining backfill to grade is to be compacted to a density not less than 985 percent of the maximum density determined by AASHTO T-180.

E. Compact the upper one (1) foot of undisturbed subgrade or foundation grade disturbed during construction to a density not less than 98 percent of the maximum density as determined by AASHTO T-180.

3.04 TOLERANCES

A. Top Surface: Plus or minus 0.1 foot.

3.05 TESTING

A. Density tests for subgrade and backfill shall will be performed by an independent testing laboratory in accordance with Division 1: General Requirements.. The Contractor is responsible for scheduling density tests and for the coordination of the testing with the testing laboratory and Engineer.

3.06 FIELD OBSERVATIONS

A. All structures, pipelines, pipeline joints, and other construction are subject to field observation by the Engineer and Owner prior to backfilling.

END OF SECTION

SECTION 02230

ROCK BASE COURSE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Compacted subgrade.

B. Stabilized subgrade.

C. Coquina, limerock, and shellrock base courses.

1.02 REFERENCES

A. Florida Department of Transportation - Standard Specifications for Road and Bridge Construction, 2007 Edition, herein after referred to as the FDOT Specifications. This document must be onsite during the Work.

B. ASTM C136-01 - Sieve Analysis of Fine and Coarse Aggregates.

C. ASTM D2922-96 - Density of Soil-Aggregate in Place by Nuclear Methods.

D. AASHTO T 180/ASTM D1557-00 – Laboratory Compaction Characteristics of Soil Using Modified Effort.

1.03 TESTS

A. Testing of the rock for compliance with this specification will be performed when it is delivered to the project site by an independent testing laboratory. Contractor is responsible for scheduling tests and for the coordination of the testing with the testing laboratory and Engineer. Tests are to be paid for as specified in the Division 1: General Requirements.

PART 2 PRODUCTS

2.01 MATERIALS

A. Compacted Subgrade: Local sands approved in advance by the Engineer. Free from large clods, rocks larger than one inch, organic material or other extraneous material.

B. Stabilized Subgrade: In accordance with Section 914 of the FDOT Specifications.

C. Coquina Rock Base: In accordance with Section 915 of the FDOT Specifications.

D. Limerock Base: In accordance with Section 911 of the FDOT Specifications.

E. Shellrock Base: In accordance with Section 913A of the FDOT Specifications.

F. Prime Coat: Meets Sections 300-2.1 and 916 of the FDOT Specifications.

PART 3 EXECUTION

3.01 PREPARATION

A. Prepare, compact, and grade compacted subgrade in accordance with Section 120-9 of the FDOT Specifications.

B. Prepare, compact, and grade stabilized subgrade in accordance with Section 160-5 of the FDOT Specifications, 2007 Edition.

C. Clean subgrade surface of all foreign matter.

D. Verify gradients and elevations of subgrade are correct.

3.02 PLACING BASE MATERIAL

A. Spread base material over prepared subgrade to a total compacted thickness as shown on the Drawings.

B. Place in 6 inch maximum lifts. Compact to 98 percent of maximum density per AASHTO T 180, Method D.

C. Check finished surface with a template cut to the required crown and with a 15 foot straight edge laid parallel to the centerline of the pavement. Correct all irregularities greater than 1/4 inch by scarifying, and removing or adding base material as may be required. Re-compact area to meet specified density requirements.

3.03 PRIME COAT APPLICATION

A. Apply prime coat in accordance with Section 300-7 of the FDOT Specifications except Contractor to apply prime coat at a rate of 0.15 gallons per square yard over a base course free of all loose and foreign materials which may prevent proper bond. The moisture content of the base must not exceed 90 percent of the optimum moisture content of the material.

3.04 FIELD OBSERVATIONS

A. Engineer to review the subgrade prior to placing base course.

B. Engineer to review the finished base prior to application of the prime coat and paving.

3.05 PROTECTION

A. Any roadway base damaged, disturbed, or destroyed in excess of maximum pipe trench widths detailed on the Drawings must be replaced in accordance with the Drawings and Specifications at no additional expense to the Owner.

END OF SECTION

SECTION 02513

TYPE S ASPHALTIC CONCRETE PAVING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Materials, surface preparation, and placement of Type S asphaltic concrete pavement.

1.02 REFERENCES

A. Florida Department of Transportation - Standard Specifications for Road and Bridge Construction, 2000 and 2007, herein after referred to as the FDOT Specifications. These documents must be onsite during the Work.

1.03 SUBMITTALS

A. Submit a job mix formula for each asphaltic paving mixture in accordance with Section 331-4.3 of the 2000 Standard Specifications (2000 FDOT Specifications).

PART 2 PRODUCTS

2.01 MATERIALS

A. Tack Coat: Meets Section 300-2.3 of the FDOT Specifications, 2007 Edition.

B. Type S Asphaltic Concrete: Meets the requirements of Section 331 of the 2000 FDOT Specifications.

Requirements for mixing temperature must conform to those specified in Section 330-6.3 of the 2007 FDOT Specifications.

PART 3 EXECUTION

3.01 PREPARATION

A. Adjust manhole rims and valve boxes to finished grade. Cost of Work to be at the unit prices on the Bid Form. If there is no separate bid item for these adjustments, the cost is to be included in the cost of the asphalt.

B. Apply an asphaltic tack coat to existing asphaltic concrete surfaces to be repaved and to new asphalt base courses. Remove all loose and foreign material from the paved surface. Apply in accordance with Section 300-8 of the 2007 FDOT Specifications.

C. Clean surface of all sand and debris prior to placing surface course.

3.02 PLACING ASPHALT PAVEMENT

A. Place in accordance with Section 330-9 of the 2007 FDOT Specifications.

B. Compact asphalt in accordance with Section 330-10 of the 2007 FDOT Specifications. Compact to an average density of at least 98 percent of the valid control strip density. The control strip density is determined by the method defined in Section 330-11.3.2 of the 2000 FDOT Specifications.

C. Prepare joints in accordance with Section 330-11 of the 2007 FDOT Specifications. Maintain a smooth transition between existing pavement and new pavement.

D. Maintain all pavement cuts to the approval of the Engineer until the Project is complete.

E. Surface course cut during construction must have all edges saw cut prior to replacement.

3.03 SURFACE REQUIREMENTS

A. The finished surface must be of uniform texture and compaction. Any pulled, torn, or loosened asphalt, or any areas with open pores, segregation, sand streaks, sand spots, or ripples must be corrected.

B. Check finished surface with a 15-foot straightedge. Correct deficiencies in excess of 3/16-inch.

C. Correct deficiencies in accordance with Section 330-12.5 of the 2007 FDOT Specifications.

3.04 THICKNESS ALLOWANCES

A. The maximum allowable deficiency from the layer thickness specified on the Drawings is as follows:

1. For pavement of a specified thickness of 2-1/2 inches or more: 1/2 inch.

2. For pavement of a specified thickness of less than 2-1/2 inches: 1/4 inch.

B. Correct deficiencies either by replacing the full thickness for a length extending at least 50 feet beyond each end of the deficient area for the full width of the paving lane or (when permitted by the Engineer) by overlaying.

3.05. LEVELING COURSE REQUIREMENTS

A. Prepare in accordance with Section 330-9 of the 2007 FDOT Specifications.

B. Place mixture in accordance with Sections 330-9 of the 2007 FDOT Specifications.

C. Compact per Section 330-10 of the 2007 FDOT Specifications.

D. Method of Measurement will be per Section 331-6 of the 2000 FDOT Specifications. Engineer and Contractor will agree and physically mark in the field all locations to have a level course applied. Engineer will collect tonnage tickets at the time of placement and note that the material placed was a leveling course.

3.06 FIELD OBSERVATIONS

A. Engineer to observe paving activities and finished surface.

3.07 PROTECTION

A. Any roadway surface damaged, disturbed, or destroyed in excess of maximum trench widths detailed on the Drawings must be replaced in accordance with the Drawings and Specifications at no additional expense to the Owner.

END OF SECTION

SECTION 02523

SIDEWALKS, DRIVEWAYS, AND CURBS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete sidewalks, driveways, curbs, and gutters.

1.02 RELATED SECTIONS

A. Section 02210 - Grading.

1.03 REFERENCES

A. AASHTO T 180/ASTM D1557-00 - Laboratory Compaction Characteristics of Soil Using Modified Effort.

B. ACI 347R-94 – Guide to Formwork for Concrete.

C. ASTM A185-97 - Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.

D. ASTM A615-01 - Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.

E. ASTM C33-01 - Concrete Aggregates.

F. ASTM C39-01 - Compressive Strength of Cylindrical Concrete Specimens.

G. ASTM C42-99 - Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.

H. ASTM C94-00 - Ready-Mixed Concrete.

I. ASTM C143-00 - Slump of Hydraulic Cement Concrete.

J. ASTM C150-00 - Portland Cement.

K. ASTM C260-01 - Air-Entraining Admixtures for Concrete.

L. ASTM C309-98 - Liquid Membrane - Forming Compounds for Curing Concrete.

M. ASTM D1751-99 - Preformed Expansion Joint Filler for Concrete Paving and Structural Construction.

N. ASTM D2922-01 - Density of Soil and Soil-Aggregate in Place by Nuclear Methods.

1.04 SUBMITTALS

A. Concrete mix design indicating the proportions of cement, coarse aggregate, fine aggregate, water, and admixtures. Mix design sheet must also indicate slump, design strength, and water-cement ratio.

PART 2 PRODUCTS

2.01 MATERIALS

A. Forms: Conform to ACI 347.

B. Reinforcing Steel: ASTM A615, Grade 60, new deformed billet steel.

C. Welded Steel Wire Fabric: Plain type, ASTM A185.

D. Expansion Joints: 1/2 inch thick preformed non-extruding joint filler meeting ASTM D1751.

E. Concrete: Cement (ASTM C150, Type I), aggregates (ASTM C33), and potable water mixed in accordance with ASTM C94. Minimum of 470 lbs. of cement per cubic yard of concrete. Water-cement ratio less than or equal to 0.55. Slump of 0-5 inches. 3000 psi minimum compressive strength at 28 days.

F. Air-Entraining admixture to be from two to six percent.

G. Curing Compound: ASTM C309, Type 1 or 1-D, Class A.

PART 3 EXECUTION

3.01 SUBGRADE PREPARATION

A. Prepare subgrade in accordance with Section 02210.

B. Compacted density to be at least 98 percent of the maximum density determined by AASHTO T180.

C. Verify gradients and elevations of subgrade are correct.

D. Just prior to placing concrete, moisten subgrade and forms to provide a uniform dampened surface at the time concrete is placed.

3.02 CONCRETE PLACEMENT

A. Maintain concrete temperature at time of placement below 90 degrees Fahrenheit.

B. Deposit concrete on the subgrade in a manner which will minimize rehandling.

C. Do not disturb expansion joints.

D. Consolidate concrete against and along the faces of all forms, and along the full length on both sides of all joint assemblies.

3.03 JOINT CONSTRUCTION

A. Contraction Joints for Sidewalks and Driveways: Sidewalk joints are to be spaced 5 feet on center unless noted otherwise on Drawings. Driveway joints are to be spaced 15 to 18 feet on center unless noted otherwise on Drawings. Use saws equipped with shatterproof abrasive or diamond rimmed blades. Cut joints into concrete as soon as the surface will not be ravelled or otherwise damaged by the cutting action. Cut slot, 3/16 inch wide and not less than 1 1/2 inches deep. Joints must be completed between four (4) and twelve (12) hours after placing concrete.

B. Contraction Joints for Curbs: Space joints at 10 feet on center. Use saws equipped with shatterproof abrasive or diamond rimmed blades. Cut joints into concrete as soon as the surface will not be ravelled or otherwise damaged by the cutting action. Cut slot, 3/16 inch wide and not less than 1 1/2 inches deep. Joints must be completed between four (4) and twelve (12) hours after placing concrete.

C. Construction Joints: Place full depth construction joints at the end of concrete pours and at locations where placement operations are stopped for a period of thirty (30) minutes or more except where such pours terminate at expansion joints.

D. Expansion Joints for Sidewalks and Driveways: Construct at 100 foot intervals (unless noted otherwise on Drawings), between sidewalk and driveways, at sidewalk intersections, and around all other fixed objects within the sidewalk or driveway. Joints must contain preformed joint filler for the full depth. Edges must be finished with a 1/4 inch radius.

E. Expansion Joints for Curbs: Construct at all inlets and radius points, where new curb abuts an existing fixed object, and at intervals of 500 feet. Joints must contain 1/2 inch preformed joint filler for the full depth of the curb.

3.04 FINISHING

A. Adding water to the surface of the concrete to assist in finishing operations is not permitted.

B. A uniform gritty non-slip finish must be provided by brushing the surface with a stiff-bristled broom or by dragging a 'burlap bag' over the surface just before the water sheen disappears.

C. After the final finish has been applied, but before the concrete has become nonplastic, the edges on each side of expansion joints, construction joints, and along any structure extending into the concrete are to be carefully rounded to a 1/4 inch radius. Finish sidewalk and driveway edges with a 1/4 inch radius edging tool. Produce a well-defined and continuous radius and a smooth, dense mortar finish. Remove all concrete from the top of the joint filler.

3.05 CURING

A. After the finishing operations have been completed and as soon as the concrete has hardened sufficiently such that marring of the surface will not occur, the entire surface and the edges of the newly placed concrete are to be cured using a liquid curing compound. Rate of application to be 200 square feet per gallon or as recommended by the manufacturer.

B. Do not leave the concrete exposed for a period in excess of 30 minutes between stages of curing or during the curing period.

3.06 BACKFILLING

A. After the concrete has set sufficiently, but not later than three days after pouring, refill the spaces in front and back of curb/sidewalk to the required elevation with suitable material.

3.07 FIELD OBSERVATIONS

A. The subgrade and formwork prior to placing concrete.

B. Concrete placement activities.

C. Furnish a delivery ticket for each batch of concrete unloaded if so requested by the Engineer.

END OF SECTION

SECTION 02580

PAVEMENT MARKING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Traffic stripes and markings using reflective paint.

B. Traffic stripes and markings using a thermoplastic compound.

C. Reflective pavement markers.

1.02 REFERENCES

A. Florida Department of Transportation - Standard Specifications for Road and Bridge Construction, 2007, herein after referred to as the FDOT Specification. This document must be onsite during the Work.

PART 2 PRODUCTS

2.01 MATERIALS

A. Reflective Traffic Stripes and Markings: In accordance with Sections 710, 971-1, 971-2, and 971-3 of the FDOT Specifications.

B. Thermoplastic Traffic Stripes and Markings: In accordance with Section 711 of the FDOT Specifications.

C. Reflective Pavement Markers: In accordance with Section 706 of the FDOT Specifications, Class B.

2.02 EQUIPMENT

A. In accordance with the following FDOT Specifications: Section 710-3 for reflective paint and Section 711-3 for thermoplastic compounds.

PART 3 EXECUTION

3.01 PREPARATION

A. Establish the necessary tack points and other controls for alignment of the stripes.

B. Tolerances in dimensions and alignment to be in accordance with FDOT Specification 710-5.

3.02 APPLICATION

A. Apply reflective paint in accordance with FDOT Specification 710-4 as temporary striping.

B. Apply thermoplastic compounds in accordance with FDOT Specification 711-4 for all permanent striping. Thermoplastics shall not be installed on roadway until 30 calendar days after final lift of asphalt has been placed with the exception of Friction Course which shall be 90 days.

C. Apply reflective pavement markers in accordance with Section 706-4 of the FDOT Specifications. Use bituminous adhesives only when installing. Do not apply markers to new pavement striping or markings.

3.03 FIELD QUALITY CONTROL

A. All Work under this Section which fails to meet the Specifications, including the permissible tolerances and the appearance requirements, or are marred or damaged by traffic or from other cause, must be corrected by the Contractor to the approval of the Engineer.

3.04 PROTECTION

A. Protection of newly painted and applied stripes and markings to be in accordance with Sections 710-7 and 711-6 of the FDOT Specifications.

END OF SECTION

SECTION 02606

MANHOLES AND INLETS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete manholes and inlets for Drainage Systems.

B. Concrete manholes for Wastewater Systems.

1.02 REFERENCES

A. ASTM A48-94 - Gray Iron Castings.

B. ASTM A185-97 - Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.

C. ASTM C32-93 - Sewer and Manhole Brick.

D. ASTM C55-99 - Concrete Brick.

E. ASTM C139-99 - Concrete Masonry Units for Construction of Catch Basins and Manholes.

F. ASTM C150-99 - Portland Cement.

G. ASTM C478-96 - Precast Reinforced Concrete Manhole Sections.

1.03 SUBMITTALS

A. Fabrication drawings for manholes and inlets.

B. Manufacturer's product data for cast iron frames, grates, and covers.

PART 2 PRODUCTS

2.01 MATERIALS

A. Brick: Hardburned clay conforming to ASTM C32, Grade MM or concrete brick conforming to ASTM C55, Grade N.

B. Concrete Masonry Units: ASTM C 139.

C. Mortar: 1 part Portland Cement (ASTM C150, Type II) mixed with 2 parts sand and potable water as required.

D. Manholes and Inlets: ASTM C478. Minimum 8 inch wall thickness. Base and first riser section to be a monolithic pour. Use Type II Portland Cement. Openings must be pre-cast.

E. Cast Iron Frames, Grates, and Covers: ASTM A48, Class 30 gray iron. Castings to be smooth, true to pattern and free from projections, sand holes, warps and other defects of any kind and well cleaned. Provide concealed type pick holes in all covers. Machine at touching surfaces so as to seat firmly and not rock. Cast on covers the words 'Sanitary Sewer' or 'Storm', as applicable, the manufacturer's name and catalog number.

F. Protective Coating: Interior and exterior coatings for wastewater manholes are specified on the Drawings.

PART 3 EXECUTION

3.01 INSTALLATION

A. Manholes and inlets are to be constructed at the locations and elevations shown on the Drawings.

B. Masonry work to be built true with all courses level. Shove masonry into place (not laid) in full beds of mortar so as to bond masonry thoroughly into the mortar. Strike joints to a smooth finish. Joints should not be less than 1/4 inch nor more than 1/2 inch in thickness.

C. Plaster manholes and inlets as shown on the Drawings to leave a smooth, dense finish, completely watertight.

D. Use Ramneck at all keyed riser joints (1/2 inch thick with width at least 1/2 the wall thickness) with a non-shrink grout on inside and outside.

E. Seal all openings with a water proof, non-shrink grout.

3.02 FIELD OBSERVATIONS

A. All manholes and inlets will be observed at the option of the Engineer prior to backfilling.

B. Engineer to review the invert flow channels in wastewater manholes before field application of the interior protective coating.

END OF SECTION

SECTION 02613

DUCTILE-IRON PIPE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Ductile iron pipe and fittings for Potable Water, Wastewater, and Reclaimed Water Systems, sizes 3 inch diameter through 64 inches in diameter.

1.02 RELATED SECTIONS

A. Section 02220 - Excavating, Backfilling and Compacting.

B. Section 02675 - Disinfecting Water Mains.

1.03 REFERENCES

A. ASTM A153-01 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

B. ASTM A 197-00 - Cupola Malleable Iron.

C. ASTM A 307-00 - Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.

D. ASTM A 506-00 – Alloy and Structural Alloy Steel, Sheet and Strip, Hot-Rolled and Cold-Rolled.

E. ASTM A 536-99 - Ductile-Iron Castings.

F. ASTM A 575-96 - Steel Bars, Carbon, Merchant Quality, M-Grades.

G. ASTM D 1248-00 - Polyethylene Plastics Extrusion Materials for Wire and Cable.

H. ASTM D 2794-93 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).

I. AWWA C104-08 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.

J. AWWA C105-05 - Polyethylene Encasement for Ductile-Iron Pipe Systems.

K. AWWA C110-08 – Ductile-Iron and Gray-Iron Fittings, 3 inch through 48 inch for Water.

L. AWWA C111-07 - Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.

M. AWWA C115-06 - Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.

N. AWWA C150-08 - Thickness Design of Ductile-Iron Pipe.

O. AWWA C151-09 - Ductile-Iron Pipe, Centrifugally Cast, for Water or Other Liquids.

P. AWWA C153-06 - Ductile-Iron Compact Fittings, 3 inch Through 64 inch, for Water Service.

Q. AWWA C 600-05 - Installation of Ductile-Iron Water Mains and Their Appurtenances.

1.04 SUBMITTALS

A. Manufacturer's technical product data for pipe and fittings.

1.05 QUALITY ASSURANCE

A. Each pipe and fitting must be marked with the following information: weight, pressure or thickness class (as applicable), manufacturer's mark, and the letters "DI" or "DUCTILE".

PART 2 PRODUCTS

2.01 PIPE

A. Manufactured in accordance with AWWA C151.

Size (inches)	Pressure Class	Special Thickness Class
3-20	--	51
24	350	--
30-42	300	--
48-64	250	--

B. Push-on type joints conforming to AWWA C111.

C. Flanged Joints (where specified on the Drawings): Conform to AWWA C115. Ductile iron conforming to the chemical and physical properties specified in AWWA C110. Pipe to be Special Thickness Class 53. Do not thread or flange pipe in the field.

D. On raw watermain pipe provide one olive green identification stripe for the entire length of the pipe section for mains less than 12 inches in diameter. Provide 2 stripes for mains 12 inches in diameter and greater.

2.02 FITTINGS

A. Mechanical: AWWA C153 with joints conforming to AWWA C111. All buried fittings to be mechanical type.

B. Flanged: AWWA C110 for 3 inch through 48 inch and AWWA C153 for 54 inch through 64 inch. Joints to conform to AWWA C111. All above ground fittings to be flanged.

2.03 COATINGS AND LININGS

A. Cement-mortar lined in pipe used for Raw Water, Potable Water, and Reclaimed Water Systems conforming to AWWA C104.

B. Polyethylene Encasement (where specified on the Drawings):

1. Conforms to AWWA C105.

2. 8 mil thick tube or sheet of plastic meeting ASTM D1248.

3. Exposure of wrapped pipe should be kept to a minimum.

C. Epoxy lining for pipes used in wastewater systems.

1. The lining material for pipe and fittings to be Protecto 401. Apply in strict conformance with the manufacturer's recommendations. Provide minimum 40 mils dry film thickness.

D. Buried Pipe shall have 1 mil asphalt coating.

2.04 ACCESSORIES

A. Clamps, straps and washers : ASTM A 506.

B. Rods: ASTM A 575.

C. Rod Couplings: ASTM A 197.

D. Bolts and Nuts: ASTM A 307, Grade B.

E. All bolts, nuts, washers, couplings, rods, clamps, and straps are to be hot-dipped galvanized per ASTM A153.

F. Thrust Blocks: Concrete with a minimum compressive strength of 2500 psi at 28 days. Allowed only where called for on the drawings or where approved by the Engineer.

G. Restrain pipe joints using either 'Field Lok' gaskets as manufactured by U.S. Pipe or 'Fast Grip' gaskets as manufactured by American Ductile Iron Pipe.

H. Restrain fittings using 'Megalugs' as manufactured by Ebaa Iron Sales, Inc.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install ductile iron pipe in accordance with AWWA C600.

B. Clean gaskets, sockets, and spigots of all foreign matter.

C. When ductile iron pipe is cut in the field, smooth the rough cut edge with a grinder or coarse file and bevel the end so that the cut end does not damage the gasket.

D. Lubricate the exposed face of the gasket and the spigot with the pipe and/or fitting manufacturers' recommended joint lubricant.

E. The interior of the pipe must be thoroughly cleaned of all foreign matter before being lowered into the dry trench and kept clean during laying operations by means of plugs or other approved methods.

F. Provide bell holes in the subgrade to accommodate the bells and to insure that the barrels are in contact with the foundation throughout it's full length exclusive of the bell.

G. Restrain from movement all reaction forces at bends (11-1/4 degrees or greater), tees, valves, and plugs by mechanical restraints as specified on the Drawings.

H. Provide minimum 30 inch depth of cover except where otherwise shown on the Drawings.

I. Coat all bolts, nuts, studs, and other uncoated parts with a coal-tar epoxy coating prior to backfilling.

3.02 CLEANING

A. Upon completion of the pipe installation, the mains are to be canon flushed and swabbed by forcing under water pressure a soft sided swab through the mains to remove dirt and any other foreign matter.

B. A spool piece shall be installed at each butterfly valve location. After the swabbing is complete the butterfly valves shall be installed using extra care to prevent debris from entering the pipe.

C. When canon flushing, achieve a minimum velocity of 2.5 feet per second in the pipe. The duration of the flushing to be sufficient to provide a minimum flush volume equal to three times the internal volume of the pipeline being flushed.

D. The size of the swab is to be the same size as the main. Install launching and exit points as required for each pipe size. The swab is to be Style V, Type B as manufactured by Knapp, Inc. Supply sufficient water pressure to move the swab through the system. Should a single pass reveal, in the Engineer's opinion, an excessive amount of dirt and debris, a second pass may be required at no additional cost to the Owner. The Contractor is responsible for ensuring that all valves are properly opened or closed as appropriate to facilitate the swabbing process. Neither the Owner or the Engineer will be responsible for the swab getting hung up or stuck in a main and any resulting costs for removal.

E. The cost of canon flushing and swab cleaning, as applicable, is to be included in the cost of the pipe.

3.03 HYDROSTATIC TESTING

A. All pressure mains must be subjected to a pressure and leakage test of at least 2 hours in duration.

B. Test mains after the pipe and fittings are properly restrained but before backfilling the fittings.

C. Contractor must furnish own source of potable water.

D. The length of pipe to be tested at one time must not exceed the length allowed by the controlling utilities company, or 1500 feet, whichever is less.

E. Before applying the specified test pressure, expel air completely from the pipe, valves, and hydrants.

F. Subject pipelines to a gauge pressure of 150 psi. Subject fire service lines to a gauge pressure of 200 psi. The pressure must not vary by more than 5 psi for the duration of the test.

G. Inspect the line being tested. Stop all visible leaks by an approved method regardless of the leakage test results.

H. Maximum leakage allowed will be as set in Section 5.2 of AWWA Standard C600.

I. If leakage is at a rate in excess of that allowed, the Contractor must tighten the joints or replace the defective Work until the leakage is reduced to within the allowable amount.

3.04 DISINFECTION

A. Disinfect potable water mains in accordance with Section 02675.

3.05 FIELD OBSERVATION

A. Fittings, valves, thrust blocks, mechanical restraints, canon flushing and swab cleaning are to be observed at the option of the Engineer.

B. Engineer must be present during pressure tests.

C. All pipe and fittings are subject to visual or other inspection by the Engineer at any time. Such sections that do not conform to these Specifications will be rejected when, in the opinion of the Engineer, the methods of manufacture fail to guarantee uniform results, where the materials used are such as to produce inferior pipe, or the pipe and/or fittings are otherwise damaged or defective.

END OF SECTION

SECTION 02619

POLYETHYLENE (HDPE) PIPE FOR WATERMAINS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Polyethylene pipe for watermains.

1.02 RELATED SECTIONS

A. Section 02220 – Excavating, Backfill, and Compacting.

B. Section 02156 – Horizontal Directional Drilling

1.03 REFERENCES

A. ASTM D3350 – HDPE Pipe and Fittings Materials.

B. ASTM D3035 – Polyethylene (PE) Pipe.

C. ASTM D3261 –Butt Heat Fusion Welded Polyethylene (PE) Fittings.

D. ASTM D2837

E. AWWA C906 – Polyethylene Pressure Pipe and Fittings, 4 inch through 63 inch for water distribution and transmission.

1.04 SUBMITTALS

A. Submit manufacturer's technical product data.

B. The manufacturer shall certify that samples of the manufacturers production pipe have been factory tested, in accordance with ASTM D-2837, and validated in accordance with the latest revisions of PPI ASTM D-2837 and PPI TR-3.

1.05 QUALITY ASSURANCE

A. Continually and permanently mark pipe with the following information: Manufacturer's name and trademark, nominal pipe size, dimension ratio, production code, schedule and type of pipe and working pressure at 73 degrees F.

PART 2 PRODUCTS

2.01 MATERIALS

A. Polyethylene Pipe and Fittings: AWWA C906 and ASTM D3350, PE 3408, DR 11 rated at 160 psi water working pressure. All HDPE pipe and fittings shall have a ductile iron OD (DIPS) unless otherwise specified. All pipe and fittings shall be NSF approved. Color to be either striped or solid olive green.

B. Flanged connections: Shall be installed with PLEXCO Back-up Rings and shall be AWWA C207 Class D. Back-up rings shall be constructed of 316 stainless steel. All flanged connections shall have a full face neoprene flange gasket (non-asbestos) with minimum thickness 1/16-inch. Bolts and all hardware shall be 316 stainless steel.

C. Manufacturer: Drisco Plex HDPE 3408 by Performance Pipe, a division of Chevron Phillips Chemical Company or equal.

D. Thrust Blocks: Concrete with a minimum compressive strength of 2500 psi at 28 days allowed only where called for on the drawings or allowed by the Engineer.

E. Tracer Wire: Directional Drilled HDPE shall have wire conforming to Copperhead Industries Reinforced #1245 Extra-High Strength Tracer Wire and affixed to the drilling head/reamer.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install pipe in strict conformance with the latest published recommendations and instructions of the manufacturer. HDPE shall be installed by Directional Drilling as outlined in Section 02156.

B. Polyethylene pipe and fittings shall be joined by the heat butt fusion process at 440° or 550° F to produce a homogenous, sealed, leak tight joint unless otherwise noted as a flanged connection on the Drawings. Fusion process shall meet the requirements of ASTM D-3261. At the point of fusion, the outside diameter and minimum wall thickness shall meet the outside diameter and minimum wall thickness specifications of ASTM F-714. Polyethylene fittings shall be made from the material meeting the same requirements as the pipe. Polyethylene fittings shall be fabricated by the manufacturer of the pipe.

C. Pipe shall be handled with a nylon sling only. No chain or steel sling shall be used.

D. The interior of the pipe and fittings are to be thoroughly cleaned of all foreign matter before being lowered into the dry trench and kept clean during laying operations by means of plugs or other approved methods.

E. No trench water is allowed to enter the pipe or fittings. During suspension of Work for any reason at any time, a suitable stopper must be placed in the end of the pipe last laid to prevent mud or other foreign material from entering the pipe.

F. Lay pipe lines to grade and alignment as shown on the Drawings.

G. Provide minimum 30 inch depth of cover or as shown on the Drawings.

H. Any pipe and/or fitting found defective must be removed immediately and replaced with sound pipe.

I. Dig bell holes or flange holes in the pipe subgrade to accommodate the bells or flanges. Holes must be deep enough to insure that the bell or flange does not bear on the bottom of the hole and the holes are not to be excessively wide in the longitudinal direction of the pipe line. When the pipe and fittings are laid, the barrels must be in contact with the foundation throughout its full length exclusive of the bell.

J. Thrust blocks are not required where polyethylene pipe and fittings are joined together by heat butt fusion process per ASTM D-3261. Thrust blocks shall only be installed in locations shown on the Drawings and where polyethylene pipe or fittings are joined to pipe and fittings of dissimilar materials via a process other than heat butt fusion.

K. Coat all bolts, nuts, studs, and other uncoated parts with a coal-tar epoxy coating prior to backfilling.

3.02 At the conclusion of the work, thoroughly clean the entire length of the new pipe to remove all dirt, stones, pieces of wood or other material which may have entered during the construction period by forcing a cleaning swab through all mains 4" or greater. Flushing velocities shall be a minimum of 2.5 feet per second. All flushing shall be coordinated with Owner.

3.03 HYDROSTATIC TESTING

A. All pressure mains are to be subjected to a pressure and leakage test of at least 2 hours in duration.

B. Test mains after the pipe and fittings are properly restrained but before backfilling the fittings.

C. Contractor must provide his own source of potable water.

D. The length of pipe to be tested at one time must not exceed the length allowed by the controlling utilities company, or 1500 feet, whichever is less.

E. Before applying the specified test pressure, air must be expelled completely from the pipe, valves, and hydrants.

F. Subject pipelines to a gauge pressure of 150 psi. Fire service lines are to be subjected to a gauge pressure of 200 psi.

G. Inspect the line being tested. Stop all visible leaks by an approved method regardless of the leakage test results.

H. Maximum leakage allowed will be a maximum of 50% of that set in Section 7.3 of AWWA Standard C605.

I. If leakage is at a rate in excess of that allowed, the Contractor must tighten the joints or replace the defective Work until the leakage is reduced to within the allowable amount.

J. Polyethylene pipe shall be pressure tested as specified by the pipe manufacturer.

3.04 FIELD OBSERVATIONS

A. The polyethylene pipe, fittings, valves, thrust blocks and butt fusion welding are to be observed at the option of the Engineer.

B. The pressure test must be conducted in the presence of the Engineer.

END OF SECTION

SECTION 02626

PVC PRESSURE PIPE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. PVC pipe for potable watermains, 4 inch through 48 inch diameter.

1.02 RELATED SECTIONS

A. Section 02220 - Excavating, Backfilling and Compacting.

B. Section 02675 - Disinfecting Water Mains.

1.03 REFERENCES

A. ASTM D1784-99 - Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.

B. ASTM D2241-00 - Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series).

C. ASTM D2672-96 - Joints for IPS PVC Pipe Using Solvent Cement.

D. ASTM F477-99 - Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

E. AWWA C153-00 - Ductile-Iron Compact Fittings, 3 inch Through 64 inch, for Water Service.

F. AWWA C605-94 - Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water.

G. AWWA C900-07 - Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 inch through 12 inch, for Water Distribution.

H. AWWA C905-97 – Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14-inch through 48-inch, for Water Distribution.

1.04 SUBMITTALS

A. Manufacturer's technical product data for pipe and fittings.

1.05 QUALITY ASSURANCE

A. Pipe for watermains must be marked with the following information: nominal size and OD base, material code designation, dimension ratio number, AWWA pressure class, AWWA designation number, manufacturer's name or trademark, production code, and the seal of the testing agency that verified the suitability of the pipe material for potable water service.

B. This space left intentionally blank.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver pipe to the site in such a manner as to provide adequate protection for the pipe ends and pipe.

B. Do not store PVC pipe in a place where it can be exposed to ultraviolet sunlight.

PART 2 PRODUCTS

2.01 MATERIALS

A. Pipe for Watermains: 4-inch through 12-inch diameter shall be AWWA C900, Class 150, DR 18, 14-inch through 48" nominal diameter shall be AWWA C905, Class 165, DR25.

B. Raw watermain pipe shall be olive green in color or have one olive green stripe for the length of the pipe for mains less than 12" in diameter. Provide 2 stripes for mains 12" in diameter or greater.

C. Fittings: AWWA C153 with cement mortar lining. For Wastewater Systems provide an epoxy lining using Protecto 401. Apply in strict conformance with the manufacturer's recommendations.

D. Thrust Blocks: Concrete with a minimum compressive strength of 2500 psi at 28 days. Allowed only where called for on the Drawings or where approved by the Engineer.

E. Restrained Fittings: 'Megalugs' as manufactured by Ebaa Iron Sales, Inc.

F. Restrained Pipe Joints: Series 1600 or 2800 Restraint Harness by Ebaa Iron Sales, Inc.

G. Flanged Connections: Flanges, as indicated on the Drawings or as required by connecting pipe, shall be AWWA C207 Class D and shall have back-up rings constructed of 316 stainless steel. All flanged connections shall have a full face neoprene flange gasket (non-asbestos) with minimum thickness of 1/16-inch. Bolts and all hardware shall be 316 stainless steel.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install PVC pipe, fittings and joints in accordance with the manufacturer's instructions and AWWA C605.

B. Install pipe with the spigots pointing in the direction of flow except in a looped water distribution system where the flow in the pipe line may be either way. In a looped system, lay pipe lines with the bell ends facing in the direction of laying pipe.

C. The interior of the pipe and fittings are to be thoroughly cleaned of all foreign matter before being lowered into the dry trench and kept clean during laying operations by means of plugs or other approved methods.

D. No trench water is allowed to enter the pipe or fittings. During suspension of Work for any reason at any time, a suitable stopper must be placed in the end of the pipe last laid to prevent mud or other foreign material from entering the pipe.

E. Lay pipe lines to grade and alignment as shown on the Drawings.

F. Provide minimum 30 inch depth of cover except where otherwise shown on the Drawings.

G. Any pipe and/or fitting found defective must be removed immediately and replaced with sound pipe.

H. Dig bell holes in the pipe subgrade to accommodate the bells. Bell holes must be deep enough to insure that the bell does not bear on the bottom of the hole and the holes are not to be excessively wide in the longitudinal direction of the pipe line. When the pipe and fittings are laid, the barrels must be in contact with the foundation throughout its full length exclusive of the bell.

I. All reaction forces at bends (11-1/4 degrees or greater), tees, valves, and plugs are to be restrained from movement by mechanical restraints as specified on the Drawings.

J. Coat all bolts, nuts, studs, and other uncoated parts with a coal-tar epoxy coating prior to backfilling.

3.02 PIPE LOCATION AND DETECTION PROVISIONS

A. Metallic Tape

1. All non-metallic pipe shall be marked in place by laying a metalized tape in the ditch 24-inches above the top of the pipe to allow for pipe location by a metal detecting device. The tape shall be color coded and labeled to identify the type of material being carried by the pipe.
2. The locator tape shall be 6-inches wide and continuous along the entire length of the pipe. The tape shall be white background with blue lettering that says "a Non-Potable Water Below". Tape shall comply with testing per ASTM B-1.

B. Tracer Wire

1. Contractor shall install a #10 THHN multi-strand copper conductor, with green insulation on to the side of the pipe along its entire length with nylon cable-ties placed at least every 10 feet.
2. Tracer wire shall be terminated at tracer wire termination box and extended to ground surface as show on the construction drawing details.
3. Where necessary, the wire may be spliced using a splicing lug suitable for direct bury. Such as that manufactured by King Innovations, Dry Con Direct Bury Lug or approved equal.
4. The Contractor is responsible to install the required tracer system with complete continuity of the system. Final acceptance will include the successful testing of the tracer system.

3.03 CLEANING

A. Upon completion of the pipe installation, the mains are to be canon flushed and swabbed by forcing under water pressure a soft sided swab through the mains to remove dirt and any other foreign matter.

B. A spool piece shall be installed at each butterfly valve location. After the swabbing is complete the butterfly valves shall be installed using extra care to prevent debris from entering the pipe. Flush pipe when complete.

C. The size of the swab is to be the same size as the main. Install launching and exit points as required for each pipe size. The swab to be Style V, Type B as manufactured by Knapp, Inc. Supply sufficient water pressure to move the swab through the system. Should a single pass reveal, in the Engineer's opinion, an excessive amount of dirt and debris, a second pass may be required at no additional cost to the Owner. The Contractor is responsible for ensuring that all valves are properly opened or closed as appropriate to facilitate the swabbing process. Neither the Owner or the Engineer will be responsible for the swab getting hung up or stuck in a main and any resulting costs for removal.

D. When canon flushing, achieve a minimum velocity of 2.5 feet per second in the pipe. The duration of the flushing to be sufficient to provide a minimum flush volume equal to three times the internal volume of the pipeline being flushed.

E. The cost of canon flushing and swab cleaning, as applicable, is to be included in the cost of the pipe.

3.04 HYDROSTATIC TESTING

A. All pressure mains are to be subjected to a pressure and leakage test of at least 2 hours in duration.

B. Test mains after the pipe and fittings are properly restrained but before backfilling the fittings.

C. Contractor must provide his own source of potable water.

D. The length of pipe to be tested at one time must not exceed the length allowed by the controlling utilities company, or 1500 feet, whichever is less.

E. Before applying the specified test pressure, air must be expelled completely from the pipe, valves, and hydrants.

F. Subject pipelines to a gauge pressure of 150 psi. Fire service lines are to be subjected to a gauge pressure of 200 psi.

G. Inspect the line being tested. Stop all visible leaks by an approved method regardless of the leakage test results.

H. Maximum leakage allowed will be as set in Section 7.3 of AWWA Standard C605.

I. If leakage is at a rate in excess of that allowed, the Contractor must tighten the joints or replace the defective Work until the leakage is reduced to within the allowable amount.

3.05 DISINFECTION

A. Disinfect potable watermains in accordance with Section 02675.

3.06 FIELD OBSERVATIONS

A. Fittings, valves, thrust blocks, mechanical restraints, canon flushing, and swab cleaning are to be observed at the option of the Engineer.

B. Engineer must be present during pressure tests.

C. All pipe and fittings are subject to observation by the Engineer at any time. Such sections that do not conform to these Specifications will be rejected when, in the opinion of the Engineer, the methods of manufacture fail to guarantee uniform results, where the materials used are such as to produce inferior pipe, or the pipe and/or fittings are otherwise damaged or defective.

END OF SECTION

SECTION 02641

GATE VALVES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Gate valves with a nominal pipe size of 3, 4, 6, 8, 10, and 12 inch.

B. Valve boxes.

1.02 REFERENCES

A. AWWA C509-09 - Resilient-Seated Gate Valves, for Water and Sewerage Systems.

B. AWWA C515-09 – Reduced Wall, Resilient – Seated Gate Valves for Water Supply Service.

1.03 SUBMITTALS

A. Manufacturer's information for valves and valve boxes.

B. Four sets of operation, maintenance and parts manuals.

1.04 QUALITY ASSURANCE

A. Provide valves with manufacturer's name, year of manufacture, valve size, and pressure rating clearly cast on the body of each valve.

B. Provide valves of same manufacturer throughout.

PART 2 PRODUCTS

2.01 VALVES

A. Conform to the requirements of AWWA C509 or AWWA C515, design water working pressure of 200 psi.

B. Suitable for water and sewer service.

C. A water passage equal to the nominal diameter of the pipe when fully open.

D. Valve opens when turning counter clockwise. Operating nut or handwheel has an arrow cast in the metal indicating the direction of opening.

E. For valves located above ground or inside a structure, furnish a hand wheel operator.

F. Valves to have either flanged ends or mechanical joint ends suitable for connecting to the ends of adjoining piping.

G. Prior to shipment from the factory, test each valve by applying it to a hydraulic pressure equal to twice the specified working pressure.

H. Manufacturers: American Flow Control, Mueller Company, LTD, or equal.

2.04 VALVE BOXES

A. Cast iron construction, adjustable type.

B. Cast in the cover the word 'WATER' or 'SEWER' as applicable.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install valves with stems upright or horizontal, not inverted.

B. All buried valves must have valve boxes. Depth of box to be suitable for the depth of the valve below grade.

C. Mount valve boxes centered over the operating nut to facilitate ease of operation.

3.02 FIELD OBSERVATIONS

A. All valves constructed underground may be observed at the option of the Engineer prior to backfilling.

END OF SECTION

SECTION 02643

BUTTERFLY VALVES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Butterfly valves, 8 inch through 72 inch in diameter for use in water or reclaimed water systems.

B. Valve boxes.

1.02 REFERENCES

A. ASTM A48-00-Gray Iron Castings.

B. ASTM A126-95-Gray Iron Castings for Valves, Flanges, and Pipe Fittings.

C. ASTM A536-84-Ductile Iron Castings.

D. ANSI/AWWA C504-10 - Rubber-Seated Butterfly Valves, 3 inches through 72 inches.

E. National Sanitation Foundation (NSF) 61-2002-Drinking Water System Components-Health Effects.

1.03 SUBMITTALS

A. Manufacturer's information for valves and valve boxes.

B. Four sets of operation, maintenance and parts manuals.

1.04 QUALITY ASSURANCE

A. Provide valves with manufacturer's name, year of manufacture, class, and valve size either cast on the body or etched on corrosion resistant plates attached to the body.

B. Valves of the same manufacturer throughout.

PART 2 PRODUCTS

2.01 VALVES

A. Conform to the requirements of AWWA C504, Class 150 B and NSF Standard 61.

B. Flanged or mechanical joint ends suitable for connecting to adjoining pipe.

C. Operating nut for buried service. Handwheel for above ground service, actuators where specified.

D. Shaft: Type 304 stainless steel.

E. Body: Gray iron, ductile iron or alloy gray iron, per ASTM A126, Class B or ASTM A536, latest editions.

F. Disc: Made from cast iron per ASTM A126, Class B or ASTM A48, Class 40 for sizes 24-inch in diameter and smaller. Ductile iron per ASTM A536 for sizes 30-inch in diameter and larger. Furnish disc with Type 316 stainless steel seating edge to mate with the rubber seat on the body.

G. Valve seals shall be provided per AWWA C504, 4.2.5 and shall be compatible to the liquid flowing through the valve. EPDM rubber shall be used where chlorine and ammonia are in the waters.

H. Manufacturer to be Henry Pratt Company or equal.

2.02 VALVE BOXES

A. Cast iron, adjustable type.

B. Cast in the cover the word 'Water' or 'Reclaimed Water'.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install valves with stems upright, not inverted.

B. All buried valves must have valve boxes. Depth of box to be suitable for the depth of the valve below grade. Extensions are to be furnished where required.

C. Mount valve boxes centered over the operating nut to facilitate ease of operation.

D. Install valves in accordance with the manufacturer's instructions.

E. Be sure valve interiors and adjacent piping are cleaned of foreign material prior to mating valve to pipe joint connection.

F. Do not deflect pipe at valve joints.

G. For buried valves, install valve boxes so that they do not transmit shock or stress to the valve actuator as a result of shifting soil or traffic load.

3.02 TESTING

A. Valves are to be tested in line with the pipe and shall hold the test pressure for a minimum of two (2) hours with zero leakage. Test pressures should not exceed the pressure rating of the valve.

3.03 FIELD OBSERVATIONS

A. Engineer to review underground valve installations before backfilling.

END OF SECTION

SECTION 02648

STAINLESS STEEL AIR RELEASE VALVES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Stainless steel air release valves suitable for Floridan aquifer water service.

1.02 SUBMITTALS

A. Submit product literature that includes information on the performance and operation of the valve, materials of construction, dimensions and weights, parts list drawings, operation and maintenance manuals, and warranty information.

B. 'Affidavit of Compliance' from the manufacturer indicating that the valves and other products or materials furnished meet the requirements of this Specification.

1.03 QUALILTY ASSURANCE

A. Supplier shall have at least five (5) years experience in the manufacture of air valves.

B. Provide air release valves with corrosion resistant nameplate with manufacturer's name, year of manufacture, valve size, class, etc. attached to the body or cover.

C. Valves of the same manufacturer throughout.

PART 2 PRODUCTS

2.01 GENERAL

A. All materials that come in contact with the water being treated or the finished water shall be on either the EPA or NSF lists of approved products for use in contact with potable water. Manufacturers shall submit an affidavit with the shop drawings indicating approval by the EPA or NSF for the materials used in products that come in contact with the water in accordance with Rule 62-555.320(3), Florida Administrative Code.

2.02 MANUFACTURER

A. Stainless steel air release valves shall be:

1. Series 200C as manufactured by Val-Matic Valve and Mfg. Corp. of Elmhurst, IL.

2. Series C as manufactured by Crispin-Multiplex Manufacturing Co. of Berwick, PA.

3. Series 140C as manufactures by APCO Willamette Valve and Primer Corp. of Schaumburg, IL.

B. Alternate air release valves shall be ARI Flow Control Accessories Model D-021 combination air valve for raw water with reinforced nylon body.

2.03 AIR RELEASE VALVES

A. Air release valves shall be automatic float operated valves designed to release air from a piping system while the system is in operation and under pressure.

B. The valve body shall be threaded with NPT inlets and outlets.

C. The cover shall be bolted to the valve body and sealed with a flat gasket.

D. Seal shall be accomplished via a replaceable orifice button or needle, and shall provide drop tight shutoff to the full valve pressure rating.

E. A vacuum check shall be supplied on the outlet to eliminate the possibility of air entering the system where the pressure decreases, or if a vacuum is drawn.

F. Air release valves shall be capable of passing 30 SCFM at 50 psi working pressure and able to withstand 150 psi test pressure.

2.04 MATERIALS OF CONSTRUCTION

A. Body, cover, float, seat, internal linkage and trim, and hardware shall be type 316 stainless steel.

B. Seal shall be Buna-N or Viton.

PART 3 EXECUTION

3.01 INSTALLATION

A. Air release valve shall be installed in accordance with manufacturer's written Installation and Operation Manual and approved submittals.

END OF SECTION

SECTION 02675

DISINFECTING WATER MAINS AND STORAGE TANKS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Cleaning, disinfecting, and bacteriological testing of water mains.

B. Cleaning, disinfecting and bacteriological testing of water storage tanks (clearwells).

1.02 REFERENCES

A. AWWA C651-99 - Disinfecting Water Mains.

B. AWWA C652-02 - Disinfecting Water Storage Facilities.

C. AWWA C653-03 - Disinfecting Water Treatment Plants.

1.03 SUBMITTALS

A. Bacteriological test results from a State certified laboratory.

1.04 SEQUENCING AND SCHEDULING

A. The interior wet coating shall be properly cured.

B. The interior wet coating shall be washed with potable water.

C. Contractor shall flush and disinfect the tank and connecting piping.

D. The Contractor shall take and send in the samples to the laboratory for testing. The Contractor shall pay for the testing of the initial set of samples. The Contractor shall pay for all subsequent samples and testing, if required.

PART 2 PRODUCTS

2.01 MATERIALS

A. Materials for disinfection of the tank shall be as listed in Section 3: Forms of Chlorine for Disinfection of AWWA C652-02.

B. Materials for disinfection of the distribution system shall be as listed in Section 2: Forms of Chlorine for Disinfection of AWWA C651-99.

PART 3 EXECUTION

3.01 CLEANING AND DISINFECTION

A. All potable water mains, fittings, and appurtenances must be cleaned and disinfected in accordance with AWWA C651.

3.02 DISINFECTION OF THE CONNECTING PIPING

A. It is the Contractor's responsibility to flush and disinfect the connecting piping until satisfactory water samples are reported from the Florida state certified laboratory. Method 1 (Section 5.1) of

AWWA C651-99 shall be used for the disinfection procedure. The taking and testing of the samples are the responsibility of the Contractor.

3.03 WASHING TANK INTERIOR WET SURFACES

A. After proper curing of the coating on the interior wet surfaces and prior to disinfecting, the Contractor shall wash the tank interior wet surfaces with potable water. The Contractor shall supply an adequate flow of water (20 gpm minimum) with sufficient pressure (60 psi minimum at the nozzle) to wash thoroughly all the interior surfaces, including those surfaces above the high water level. All residue shall be removed from the tank and inlet/outlet pipe.

3.04 DISINFECTION OF THE TANK

A. Disinfection: It is the Contractor's responsibility to flush and disinfect the tank and connecting piping until two or more successive samples taken on two consecutive days show that the samples are satisfactory as reported from the Florida state certified laboratory. Method 2 (Section 4.3.2) of AWWA C652-02 shall be used for the disinfection procedure. Samples shall be taken and tested by the Contractor.

3.05 BACTERIOLOGICAL TESTING FOR STORAGE TANK

A. The Contractor shall take and send in the samples to a Florida state certified laboratory. The stored tank water shall comply with current State and USEPA standards for organic, inorganic, and biological contaminants as influenced by the operations of the Contractor. One tank of water for the disinfection shall be furnished by the Owner at no charge to the Contractor. Additional water shall be furnished at current municipal water rates charged by the Owner and shall be paid for by the Contractor.

3.06 BACTERIOLOGICAL TESTING FOR WATERMAINS

A. Install sampling taps at the locations shown on the Drawings.

B. Fire hydrants are not to be used in the collection of samples.

C. Leave sampling taps running so that samples may be collected by an independent testing laboratory.

D. Two consecutive daily water samples are to be analyzed.

E. Satisfactory samples show the absence of coliform organisms and the presence of a chlorine residual.

F. Should samples be unsatisfactory, Contractor must reflush, rechlorinate the pipelines, and set up additional sampling with the independent testing laboratory until satisfactory results are obtained.

END OF SECTION

SECTION 02936

SEEDING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Preparation of subsoil.

B. Placing topsoil.

C. Fertilizing.

D. Seeding and hydro-seeding.

E. Mulching.

F. Maintenance.

1.02 QUALITY ASSURANCE

A. Provide seed mixture in containers showing percentage of seed mix, year of production, net weight, date of packaging, and location where packaged.

1.03 REGULATORY REQUIREMENTS

A. Comply with regulatory agencies for fertilizer and herbicide composition.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver seed mixture in sealed containers. Seed in damaged packaging is not acceptable.

B. Deliver fertilizer in waterproof bags showing weight, chemical analysis and name of manufacturer.

1.05 EXISTING CONDITIONS

A. All existing grass areas which are damaged or destroyed during construction are to be repaired with new grass. Contractor is responsible for the restoration of the grass to the conditions that existed prior to construction.

1.06 FIELD MEASUREMENTS

A. On pipeline projects, seeded areas will be measured based on maximum trench widths shown on the Drawings. Seed required to be placed in excess of the maximum trench widths or limits detailed on the Drawings will be at no additional cost to the Owner.

PART 2 PRODUCT

2.01 MATERIALS

A. Topsoil: Muck; free of plants, weeds and roots. PH level between 5.0 and 7.0. Organic content of at least 1.5 percent.
B. Fertilizer: 12 percent nitrogen - 8 percent phosphoric acid - 8 percent potash.

C. Seed: Argentine Bahia Grass. Minimum pure seed content of 95 percent with a minimum germination rate of 80 percent.

D. Dry Mulch: Straw or hay, consisting of oat, rye, or wheat straw, or of pangola, peanut, coastal bermuda or bahia grass hay. Use only un-deteriorated mulch which can be readily cut into the soil.

E. Mulch for Hydro-Seeding: Applegate brand fiber mulch, paper base with green dye.

E. Water: Free of excess and harmful chemicals, acids, alkalies, or any substance which might be harmful to plant growth. Salt water not permitted.

PART 3 EXECUTION

3.01 PREPARATION OF SUBSOIL

A. Prepare sub-soil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.

B. Remove foreign materials, weeds and undesirable plants and their roots.

3.02 PLACING TOPSOIL

A. Spread topsoil to a minimum thickness of 2 inches over the entire area to be seeded.

B. Place topsoil during dry weather.

C. Roto-till to a depth of 6 inches.

D. Fine grade the area to be seeded to eliminate ridges, depressions and other irregularities, and to ensure positive drainage.

3.03 FERTILIZING

A. Fertilizing operations will not be permitted when wind velocities exceed 15 miles per hour.

B. Apply fertilizer uniformly at a rate of 400-500 pounds per acre.

C. Apply after smooth raking of topsoil and prior to seeding.

D. Apply fertilizer no more than 48 hours before seeding. When hydro-seeding, mix fertilizer with seed and mulch.

E. Lightly water to aid the dissipation of fertilizer.

3.04 SEEDING AND MULCHING

A. Seeding operations will not be permitted when the wind velocities exceed 15 miles per hour.

B. Seed only when the soil is moist and in proper condition to induce growth.

C. Seed Application Rate: 8-10 pounds of Argentine Bahia per 1,000 square feet. During late fall, winter, and early spring applications, add 4-5 pounds of rye seed to the Bahia per 1,000 square feet. During late spring, summer, and early fall, add 1-1/2 - 2 pounds of red top millet seed to the Bahia per 1,000 square feet.

D. Immediately after completion of the seeding, roll entire seeded area. At least two trips over the entire area are required.

E. Immediately following seeding and rolling, apply mulch to a loose thickness of 1 inch over the entire seeded area.

F. Apply water with a fine spray immediately after each area has been mulched.

G. Newly seeded areas are not to be watered to force seed germination but only to sustain grass growth.

3.05 HYDRO-SEEDING

A. Seed Application Rate: 8-10 pounds of Argentine Bahia per 1,000 square feet. During late fall, winter, and early spring applications, add 4-5 pounds of rye seed to the Bahia per 1,000 square feet. During late spring, summer, and early fall, add 1-1/2 - 2 pounds of red top millet seed to the Bahia per 1,000 square.

B. Mulch Application Rate: 1,100 pounds per acre.

C. Add to the mixture a dispersing agent to insure proper dispersion and a uniform application.

D. Spray hydro mulch, seed, tackifier, and fertilizer in a one step operation. Keep mixture in a homogeneous slurry at all times.

E. Hydraulically spray on the ground to form a ground cover impregnated uniformly with grass seed. Allow absorption of moisture from rainfall or mechanical watering to percolate to the underlying soil.

F. Water so as to provide optimum growth conditions for the establishment of grass 24 hours after hydro-seeding. Irrigate for brief intervals, 3 to 4 times a day, until established. Keep top layer of soil moist until seeds germinate.

3.06 MAINTENANCE

A. Begin maintenance immediately after each area is planted.

B. Water to keep surface soil moist.

C. Repair washed out areas by filling with topsoil, fertilizing, seeding, and mulching.

D. Mow grass at regular intervals to maintain a maximum height of 4 inches. Do not cut more than $^1/_3$ of grass blade at any one mowing.

E. Immediately remove clippings after mowing.

F. Roll surface to remove minor depressions or irregularities.

G. Control growth of weeds. Apply herbicides in accordance with manufacturer's instructions. Remedy damage resulting from improper use of herbicides.

H. Continue maintenance for the duration of the Contract Time but in no case less than two weeks.

3.07 ACCEPTANCE

A. If, at the end of the maintenance period, a satisfactory stand of grass has not been produced, renovate and reseed the unsatisfactory portions thereof immediately.

B. A satisfactory stand is defined as grass or section of grass that has:

1. No bare spots larger than 3 square feet.

2. Not more than 10 percent of total area with bare spots larger than 1 square foot..
3. No more than 15 percent of total area with bare spots larger than 6 inches square.

END OF SECTION

SECTION 02938

SODDING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Preparation of subsoil.

B. Placing topsoil.

C. Fertilizing.

D. Sod installation.

E. Maintenance.

1.02 REGULATORY REQUIREMENTS

A. Comply with regulatory agencies for fertilizer and herbicide composition.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Deliver sod on pallets. Protect exposed roots from dehydration.

B. Do not deliver more sod than can be laid within 24 hours.

1.04 EXISTING CONDITIONS

A. All existing grass areas which are damaged or destroyed during construction are to be replaced with new sod of the same variety, unless otherwise noted, which existed prior to construction.

B. In all cases, Contractor is responsible for the restoration of the grass to the conditions that existed prior to construction.

1.05 FIELD MEASUREMENTS

A. On pipeline projects, sodded areas will be measured based on maximum trench widths shown on the Drawings. Sod placed in excess of the maximum trench widths or limits detailed on the Drawings will be at the full expense of the Contractor.

PART 2 PRODUCTS

2.01 MATERIALS

A. Topsoil: Muck; free of plants, weeds, and roots.

B. B. Sod: Bahia. Live, fresh, and uninjured at time of planting, free of objectionable weeds, and have a soil mat of sufficient thickness adhering firmly to the roots to withstand all necessary handling. Transport within 24 hours after being stripped and plant as soon as possible.

C. Fertilizer: 6 percent nitrogen - 6 percent phosphoric acid - 6 percent potash, 40 percent organics.

D. Water: Free of excess and harmful chemicals, acids, alkalies, or any substance which might be harmful to plant growth. Salt water not allowed.

E. Wood Pegs: Softwood; sufficient size and length to ensure anchorage of sod on a slope.

PART 3 EXECUTION

3.01 PREPARATION OF SUBSOIL

A. Prepare subsoil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.

B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated soil.

3.02 PLACING TOPSOIL

A. Spread topsoil to a minimum depth of 2 inches over area to be sodded.

B. Place topsoil during dry weather.

C. Roto-till to a depth of 6 inches.

D. Fine grade the area to be sodded to eliminate ridges, depressions and other irregularities, and to ensure positive drainage.

3.03 FERTILIZING

A. Apply fertilizer uniformly at a rate of 16 pounds per 1000 square feet.

B. Apply after smooth raking of topsoil and prior to installation of sod.

C. Apply fertilizer no more than 48 hours before laying sod.

D. Lightly water to aid the dissipation of fertilizer.

3.04 SOD INSTALLATION

A. Moisten prepared surface immediately prior to laying sod.

B. Place sod on the prepared surface with edges in close contact and embed firmly and smoothly by light tamping with appropriate tools.

C. Do not stretch or overlap sod pieces.

D. Where sodding is used in drainage ditches, the setting of the pieces must be staggered to avoid a continuous seam along the line of flow.

E. In order to prevent erosion caused by vertical edges at the outer limits, tamp the outer pieces of sod so as to produce a feather edge effect.

F. On slopes 6 inches per foot and steeper, lay sod perpendicular to slope and secure every row with wooden pegs at maximum 2 feet on center. Drive pegs flush with soil portion of sod.

G. After installation, saturate sod with water to a depth of 4 inches into the soil.

H. After sod and soil have dried, roll sodded areas to ensure good bond between sod and soil and to remove minor depressions and irregularities.

I. After rolling, keep sod moist for the duration of the contract period and in no case less than 2 weeks. The moistened condition should extend at least to the full depth of the rooting zone.

END OF SECTION

SECTION 03001

CONCRETE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Formwork.

B. Concrete reinforcement and accessories.

C. Cast-in-place concrete.

D. Pre-cast concrete.

1.02 REFERENCES

A. ACI 301-96 - Specifications for Structural Concrete.

B. ACI 318-99 - Building Code Requirements for Structural Concrete.

C. ACI SP-4 (95) – Formwork for Concrete.

D. ASTM A185-97 – Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.

E. ASTM A615-01 - Deformed and Plain Billet Steel for Concrete Reinforcement.

F. ASTM A775-01 – Epoxy - Coated Reinforcing Steel Bars.

G. ASTM C31-00 - Making and Curing Concrete Test Specimens in the Field.

H. ASTM C33-01 - Concrete Aggregates.

I. ASTM C39-01 - Compressive Strength of Cylindrical Concrete Specimens.

J. ASTM C42-99 - Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.

K. ASTM C94-00 - Ready-Mixed Concrete.

L. ASTM C143-00 - Slump of Hydraulic Cement Concrete.

M. ASTM C150-00 - Portland Cement.

N. ASTM C192-90 - Making and Curing Concrete Test Specimens in the Laboratory.

O. ASTM C260-01 - Air-Entraining Admixtures for Concrete.

P. ASTM C309-98 - Liquid Membrane - Forming Compounds for Curing Concrete.

Q. ASTM D1751-99 - Preformed Expansion Joint Filler for Concrete Paving and Structural Construction.

1.03 SUBMITTALS

A. Four copies of the test mix report showing the proportions of cement, aggregate, fine aggregate, water and admixtures.

B. Shop Drawings of pre-cast structures for review prior to fabrication.

PART 2 PRODUCTS

2.01 FORM MATERIALS

A. Conform to ACI 347.

2.02 REINFORCING STEEL

A. Reinforcing Bars: ASTM A615, Grade 60, new deformed billet steel.

B. Welded Wire Fabric: Plain type, ASTM A185.

C. Stirrups and Ties: ASTM A615, Grade 40 or Grade 60.

D. Bar Supports and Spacers: Steel wire with upturned legs. Mortar cubes.

E. Epoxy - Coated Reinforcing Bars: ASTM A775, Grade 60, new deformed billet steel.

2.03 CONCRETE MATERIALS

A. Cement: ASTM C150, Type I. Type II cement for wastewater structures.

B. Fine and Coarse Aggregates: ASTM C33.

Nominal maximum size of coarse aggregate not larger than:

1 The narrowest dimension between sides of forms, nor
2. 1/3 the depth of slabs, nor
3. 3/4 the minimum clear spacing between individual reinforcing bars or wires, bundles of bars, or ducts.
4. 4 inches.

C. Water: Clean, fresh, and free from injurious amounts of oils, acids, alkalis, salts, organic materials, or other substances that may be deleterious to concrete or reinforcement.

D. Air Entrainment Admixtures: ASTM C260. 'Darex' by the W. R. Grace Company or approved equal.

E. Curing Compound: ASTM C309, Type 1 or Type 1-D, Class A.

2.04 CONCRETE MIX

A. Mix concrete in accordance with ASTM C94.

B. Compressive Strength: 3000 psi minimum at 28 days for cast-in-place concrete and 4000 psi minimum at 28 days for pre-cast concrete (unless otherwise noted on Drawings).

C. Slump: 5 inches maximum (Vertical Pours)
3 inches maximum (Horizontal Pours)
2 inches minimum (Unless noted otherwise i.e. tremie, curb machine)

D. Mixing water not to exceed 6 gallons per sack of Portland Cement. This includes water entering the batches as surface moisture on the aggregates, which must be deducted from the specified 6 gallons to determine the amount of mixing water for each batch.

E. Contain not less than 5 sacks of cement per cubic yard of concrete for 3000 psi concrete and not less than 6 sacks of cement per cubic yard of concrete for 4000 psi concrete.

F. Air-Entraining admixture to produce 5 percent (+/- 1.5%) entrained air.

PART 3 EXECUTION

3.01 FORMWORK ERECTION

A. Conforms to the shapes, lines, and dimensions of the members as called for on the Drawings.

B. Provide bracing to ensure stability of formwork.

C. Design and construct forms, bracing, and supports to withstand the pressure of freshly placed concrete without bow or deflection.

D. Hand trim sides and bottom of earth forms; remove loose dirt.

E. Coordinate Work on Drawings in forming and setting openings, recesses, chases, sleeves, bolts, anchors, and other inserts.

F. Substantial and sufficiently tight to prevent leakage of mortar. Check forms prior to placing concrete and tighten as required to produce flush surfaces.

G. Tie metal remaining in the concrete to be at least 3 inches back of the concrete face. Plug holes left by the tie ends with grout.

H. Chamfer corners of beams, columns, walls and exposed edges or corners of concrete with 3/4 inch by 3/4 inch wood chamfer strips unless otherwise shown on Drawings.

I. Clean forms and apply form release agents or wet forms prior to concrete placement.

J. Remove forms in such a manner as to insure the complete safety of the structure. Where the structure as a whole is supported on shores, the removable floor forms, beams and girder sides, columns and similar vertical forms may be removed only after concrete has reached 2/3 of its design strength by test and is sufficiently hard not to be injured during form removal. In no case should supporting forms or shoring be removed until the members have acquired sufficient strength to support their weight and the load safely thereon.

3.02 REINFORCEMENT

A. Before placing concrete, clean reinforcement of foreign particles or coatings.

B. Place, support, and secure reinforcement against displacement.

C. Lap welded wire mesh at least one full mesh and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.

D. Avoid splices at points of maximum stress. Provide sufficient lap to transfer the stress between bars by bond and shear.

E. Make bends for stirrups and ties on bars 5/8 inches in diameter and less, around a pin having a diameter not less than four times the thickness of the bar. Make bends for other bars around a pin having a diameter not less than six times the minimum thickness of the bar, except that for bars larger than one inch but less than 1-3/4 inches, the pin can not be less than eight times the minimum thickness of the bar. Bend all bars cold.

F. Splices and Offsets in Reinforcement: In slabs, beams, and girders, avoid splices of reinforcement at points of maximum stress. Provide sufficient lap to transfer the stress between bars by bond and shear and meet the requirements of ACI 318.

Where changes in the cross section of a column occur, offset the longitudinal bars in a region where lateral support is afforded. Where offset, the slope of the inclined portion should not be more than one in six, and in the case of tied columns, space the ties not more than 3 inches on center for a distance of one foot below the actual point of offset.

G. Protection of Reinforcement: Protect the metal reinforcement by the thickness of concrete indicated on the Drawings. Where not otherwise shown, the thickness of concrete over the reinforcement should be as follows:

Where concrete is deposited against ground without the use of forms, not less than 3 inches for beams and slabs.

Where concrete is exposed to the weather or exposed to the ground but placed in forms, not less than 2 inches for bars more than 5/8 inch in diameter and 1-1/2 inches for bars 5/8 inch or less in diameter.

In slabs and walls not exposed to the ground or to the weather, not less than 1-1/2 inches.
In beams, girders and columns not exposed to the ground or to the weather, not less than 1-1/2 inches.

In all cases, the thickness of concrete over the reinforcement must be at least 1-1/2 inches.

H. Protect reinforcement bars, intended for bonding with future extensions, with approved adequate covering.

3.03 JOINTS

A. Expansion and Contraction Joints: Provide expansion joints when slabs on grade join other construction and elsewhere as indicated. Expansion joints are to be one-half (1/2) inch thick when not otherwise noted. Tool edges of slabs at expansion and contraction joints to a one-fourth (1/4) inch radius.

B. Construction Joints: In jointing fresh concrete to that which has already set, the surface of the concrete in place must be thoroughly cleaned and have all laitance removed by cutting with a suitable tool. In addition, wet and slush with a coat of grout, no leaner than one (1) part cement to two (2) parts sand.

3.04 CONCRETE MIXING

A. Mix until there is a uniform distribution of the materials and discharge completely before the mixer is recharged.

B. For job-mixed concrete, rotate the mixer at a speed recommended by the manufacturer and mix continuously for at least one minute after all materials are in the mixer.

C. Mix and deliver ready-mixed concrete in accordance with ASTM C-94.

D. Wet batches of concrete may be transported in either agitating or nonagitating trucks. When non-agitator trucks are used, the elapsed time between the addition of water to the mix and depositing the concrete in place must not exceed 45 minutes except that when a retardant admixture is used such elapsed time must not exceed 75 minutes. When the handling is done in truck agitators, such elapsed time must not exceed 60 minutes, except that when a retardant admixture is used a maximum elapsed time of 90 minutes will be permitted.

E. When concrete arrives on site with slump below that suitable for placing, as indicated by the Specifications, water may be added only if neither the maximum permissible water-cement ratio nor the maximum slump is exceeded.

3.05 PLACING CONCRETE

A. Notify Engineer a minimum of 24 hours prior to commencement of concreting operations.

B. Equipment for chuting, pumping and pneumatically conveying concrete must be sized and designed as to insure a practically continuous flow of concrete at the delivery end without separation of the materials.

C. Prevent separation or loss of materials when conveying concrete from mixer to place of final deposit.

D. No concrete that has partially hardened or been contaminated by foreign material may be deposited on the Work nor retempered.

E. Deposit as nearly as practicable to its final position to avoid segregation due to rehandling or flowing.

F. During placement, thoroughly work concrete around reinforcement and embedded fixtures and into the corners of the forms.

G. At all times, concrete is to be plastic and flow readily into the space between the bars.

When concreting is once started, carry on as a continuous operation until the placing of the panel or section is completed. The top surface to be generally level.

H. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding or tamping. Use vibrators designed to operate with vibratory element submerged in concrete.

3.06 UNDER-WATER PLACING (Done only on approval of Engineer)

A. When conditions require placing through water, a tremie or drop-bottom bucket should be used and the Work must be well supervised. Every precaution must be taken to prevent the cement from washing out of the concrete. The tremie is to be water-tight and large enough to allow a free flow of concrete. It must be kept filled with concrete at all times while depositing. Discharge concrete and spread by moving the tremie as to maintain as nearly as practicable a uniform flow and avoid dropping the concrete through water. If the charge is lost while depositing, the tremie must be withdrawn and refilled. Maintain concrete slump between 6 and 7 inches. Tremie concrete must be pumped into place instead of gravity placed.

3.07 COLD WEATHER PLACEMENT

A. Provide adequate equipment for heating the concrete materials and protecting the concrete during freezing or near-freezing weather. No frozen materials or materials containing ice can be used.

B. All concrete materials and all reinforcement, forms, fillers and ground with which the concrete is to come in contact must be free from frost. Whenever the temperature of the surrounding air is below 40 degrees F, all concrete placed in the forms must have a temperature of between 70 degrees F and 80 degrees F, and adequate means to provide for maintaining a temperature of not less than 70 degrees F for 3 days or 50 degrees F for 5 days. The housing covering or other protection used in connection with curing must remain in place and intact at least 24 hours after the artificial heating is discontinued. No dependence can be placed on salt or other chemicals for the prevention of freezing.

3.08 HOT WEATHER PLACEMENT

A. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 degrees F. Mixing water may be chilled, or chopped ice may be used to control the concrete

temperature, provided the water equivalent of the ice is calculated to the total amount of mixing water.

B. A shorter mixing time than specified in ASTM C94 may be required. When the air temperature is between 85 and 90 degrees F, reduce the mixing and delivery time from 90 minutes to 75 minutes, and when the air temperature is above 90 degrees F, reduce the mixing and delivery time to 60 minutes.

Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that the steel temperature will not exceed the ambient air temperatures immediately before embedment in concrete. Wet forms thoroughly before placing concrete.

Do not use retarding admixtures without the written approval of the Engineer.

3.09 FINISHING CONCRETE

A. Rough finish for concrete surfaces not exposed to view in the finish Work or covered by other construction.

B. Strike - off smooth and finish with a texture matching adjacent formed surfaces at tops of walls, horizontal offsets and similar unformed surfaces occurring adjacent to formed surfaces.

C. Provide a uniform smooth rubbed finish on exposed formed concrete walls, columns, and beams.

D. Float finish monolithic slab surfaces that are to receive trowel finish or other finish.

1. Trowel Finish: After floating, begin first trowel finish operation using a power-driven trowel. Begin final troweling when surface produces a ringing sound as trowel is moved over surface. Consolidate concrete surface by final hand-troweling operation, free of trowel marks, uniform in texture and appearance, and with a surface plane tolerance not exceeding 1/4" in 10 feet when tested with a 10 foot straight-edge. Grind smooth surface defects which would show through applied floor covering system.

2. Non-slip Broom Finish: Apply non-slip fine-hair broom finish to sidewalks, driveways, handicap ramps, curbs, or other items as noted on the Drawings.

3.10 CURING

A. Protect freshly placed concrete from premature drying or heat, and maintain without drying at a relatively constant temperature for a period of time necessary for hydration of cement and proper hardening.

B. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 72 hours.

C. Continue curing for a least 7 days and in accordance with ACI 301 procedures. Avoid rapid drying at end of final curing period.

D. In lieu of moist curing, spray a clear liquid membrane curing compound on all new concrete immediately after initial set. Rate of application to be 200 square feet per gallon or as recommended by the manufacturer.

3.11 TESTS

A. Testing and analysis of concrete will be performed by an independent testing laboratory.

B. Test firm will take cylinders and perform compression tests in accordance with ASTM C31, ASTM C39, and ASTM C192.

C. Number of cylinders and frequency of tests will be designated by the Engineer.

D. One slump test will be performed per ASTM C143 for each set of test cylinders taken.

E. Cure specimens under laboratory conditions except that when in the opinion of the Engineer, there is a possibility of the surrounding air temperature falling below 40 degrees F., additional specimens may be required and cured under job conditions.

F. If the average strength of the laboratory control cylinders for any portion of the structure falls below the compressive strengths called for on the Drawings, the Engineer has the right to order a change in the proportions or the water content for the remaining portion of the structure. If the average strength of the job-cured cylinders falls below the required strength the Engineer has the right to require conditions of temperature and moisture necessary to secure the required strength and may require tests in accordance with ASTM C42, or order load tests to be made on the portions of the structure so affected. Remove or replace failing concrete if directed by the Engineer.

3.12 PROTECTION

A. Protect concrete from damage until final acceptance of Work.

END OF SECTION

APPENDIX A

FLORIDA DEPARTMENT OF HEALTH LETTERS

October 14, 2013

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In the matter of an
Application for Permit by:

Monica Morandi, P.E.
Utilities Engineer
City of Lake Worth
1900 2nd Avenue North
Lake Worth, FL 33461
MMorandi@LakeWorth.org

DEP File No.: 138272-173-DS
Palm Beach County
PWS ID: 450 0773
PROJECT: Raw Water Main for
Potable Well #16

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number **138272-173-DS** to construct a raw water main for a proposed community water well, issued pursuant to Section(s) 403.087, Florida Statutes.

This permit is final and effective on the date filed with the clerk of the Florida Department of Health, Palm Beach County (the Department), unless a petition is filed in accordance with the paragraphs below or unless a request for extension of time in which to file a petition is filed within the required timeframe and conforms to Rule 62-110.106(4), F.A.C. Upon timely filing of a petition or a request for an extension, this permit will not be effective until further Order of the Department.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) with the Agency Clerk, Division of Environmental Public Health, Florida Department of Health, Palm Beach County, 800 Clematis Street, West Palm Beach, Florida 33401, within 14 days of receipt of this Notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-106.205, F.A.C.

A petition must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of how and when the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts which petitioner contends warrant reversal or modification of the Department's action;
(f) A statement of the specific rules or statutes the petitioner contends requires reversal or modification of the Department's action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the materials facts on which the Department's action is based shall state that no such facts are in dispute and otherwise contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any such final decision of the Department on the petition have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to section 120.68 of the Florida Statutes, by filing a Notice of Appeal pursuant to Rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department, Division of Environmental Public Health, Florida Department of Health, Palm Beach County, 800 Clematis Street, West Palm Beach, Florida 33401; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

Executed in the City of West Palm Beach, Florida.

STATE OF FLORIDA
DEPARTMENT OF HEALTH - PALM BEACH COUNTY

Darrel J. Graziani, P.E., R.S.,
Environmental Administrator
Division of Environmental Public Health
800 Clematis Street, West Palm Beach, FL 33401
(561) 837-5900

Enclosures: Permit File No.138272-173-DS

CERTIFICATION OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Permit Issuance and all copies were mailed/electronically transmitted before the close of business on October 14, 2013 to those persons listed.

Clerk Stamp

Florida Department of Health - PBC
Environmental Public Health
800 Clematis Street, 4th Floor
P.O. Box 29
West Palm Beach, Florida 33402

FILING AND ACKNOWLEDGEMENT

Filed, on this date, under section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

10/14/2013
Date

Copies Furnished to:

Engineer-of-Record: John Leemon, P.E.
Florida DEP: Jose Calas, P.E.

October 14, 2013

PERMITTEE:
Monica Morandi, P.E., Utilities Engineer
City of Lake Worth
1900 2nd Avenue North
Lake Worth, FL 33461
MMorandi@LakeWorth.org

PWS ID NUMBER: 4500773
PERMIT NUMBER: 138272-173-DS
DATE OF ISSUE: 10/14/2013
EXPIRATION DATE: 10/13/2018
COUNTY: Palm Beach
PROJECT: Lake Worth Well No. 16 Raw Water Main

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-550, 62-555 and 62-560. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

TO CONSTRUCT:

Approximately 2,200 LF of 16" PVC raw water main, 600 LF of 16" HDPE raw water main, 140 LF of 16" ductile iron raw water main and eight (8) air relief vales and manholes.

IN ACCORDANCE WITH:

Application Form DEP 62-555.900(1), specification sheets and engineering drawings received October 1, 2013.

LOCATION:

From Lake Worth Utilities Administration Site adjacent to 2nd Avenue North, south along Detroit Street to Lake Osborne Drive and east along Lake Osborne Drive in the City of Lake Worth, Florida.

TO SERVE:

City of Lake Worth Proposed Well No. 16.

SUBJECT TO:

General Conditions 1-15 and Specific Conditions 1-6.

GENERAL CONDITIONS:

The permittee shall be aware of and operate under the Permit Conditions below. These applicable conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes. [F.A.C. Rule 62-555.533(1)]

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

   a. Have access to and copy any records that must be kept under conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
   c. Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

GENERAL CONDITIONS: (14 cont'd.)

of the sample, measurement, report, or application unless otherwise specified by Department rule.

a. Records of monitoring information shall include:
   i. the date, exact place, and time of sampling or measurements;
   ii. the person responsible for performing the sampling or measurements;
   iii. the dates analyses were performed;
   iv. the person responsible for performing the analyses;
   v. the analytical techniques or methods used;
   vi. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. All construction must be in accordance with this permit. Before commencing work on project changes for which a construction permit modification is required per 62-555.536(1), the permittee shall submit to the Department a written request for a permit modification. Each such request shall be accompanied by one copy of a revised construction permit application, the proper processing fee and one copy of either a revised preliminary design report or revised drawings, specifications and design data. [F.A.C. Rule 62-555.536].

2. Permitted construction or alteration of public water supply systems must be supervised during construction by a professional engineer registered in the State of Florida if the project was designed under the responsible charge of a professional engineer licensed in the State of Florida. The permittee must retain the service of a professional engineer registered in the State of Florida to observe that construction of the project is in accordance with the engineering plans and specifications as submitted in support of the application for this permit. [F.A.C. Rule 62-555.520(3)].

3. This permit satisfies Drinking Water permitting requirements only and does not authorize construction or operation of this facility prior to obtaining all other necessary permits from other program areas within the Department, or required permits from other state, federal, or local agencies.

4. All products, including paints, which shall come into contact with potable water, either directly or indirectly, shall conform with National Sanitation Foundation (NSF) International, Water Chemicals Codex, Food Chemicals Codex, American Water Works Association (AWWA) Standards and the Food and Drug Administration, as provided in Rule 62-555.320(3), F.A.C.

5. Prior to placing this project into service, Permittee shall submit, at a minimum, all of the following to the Department for evaluation and approval for operation, as provided in Rules 62-555.340 and 62-555.345, F.A.C.:

GENERAL CONDITIONS:

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of noncompliance; and
   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300 F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (BACT)
    b. Determination of Prevention of Significant Deterioration (PSD)
    c. Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)
    d. Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date

SPECIFIC CONDITIONS: (5 cont'd.)

a. the engineer's *Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components Into Operation* {DEP Form 62-555.900(9)};

b. certified record drawings, if there are any changes noted for the permitted project.

c. copy of a satisfactory pressure test of the process piping performed in accordance with AWWA Standards. [F.A.C. Rule 62-555.320(21)(a)(1)]

d. two consecutive days of satisfactory distribution bacteriological analytical results. Bacteriological test results shall be considered unacceptable if the test were completed more than 60 days before the Department received the results. [F.A.C. Rule 62-555.340(2)(c)] **All samples shall be collected by an employee of a state certified laboratory or a certified operator.**

6. When any existing asbestos cement (AC) pipes are replaced under this permit, the permittee shall do so in accordance with the applicable rules of the Federal Asbestos Regulation and Florida DEP requirements. For specific requirements applicable to AC pipes, the permittee should contact the Air and Waste Management section managers prior to commencing any such activities at (561) 837-5900 #3. Please be aware that a notification is required to be submitted to the Department for a regulated project

Issued this 14th day of October, 2013.

STATE OF FLORIDA DEPARTMENT OF HEALTH
PALM BEACH COUNTY

Alina M. Alonso, MD, Director

c: Engineer-of-Record: John R. Leemon, P.E.
Florida DEP: Jose Calas, P.E.

APPENDIX B

FLORIDA DEPARTMENT OF TRANSPORTATION

UTILITY PERMIT

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

UTILITY PERMIT

2013H-496-0314

PERMIT NO.:	SECTION NO.: 93180	STATE ROAD 802	COUNTY Palm Beach
FDOT construction is proposed or underway.	☐ Yes	■ No	Financial Project ID:
Is this work related to an approved Utility Work Schedule?	☐ Yes	■ No	If yes, Document Number:

PERMITTEE:	City of Lake Worth Monica Morandi, P.E.		
ADDRESS:	1900 2nd Avenue North	TELEPHONE NUMBER: ( )561 586-1798	
CITY/STATE/ZIP:	Lake Worth, FL 33461		

The above PERMITTEE requests permission from the State of Florida Department of Transportation, hereinafter called the FDOT, to construct, operate and maintain the following:
16" HDPE Watermain Under Lake Worth Road (SR 802) Dir bore Potable well #16

FROM: 8.061	TO: 8.216

Submitted for the PERMITTEE by: Name and Company (Typed or Printed Legibly)	Contact Information Address/Telephone/E-Mail (if applicable)	Signature	Date
John R. Leemon, Mock•Roos	5720 Corporate Way WPB, FL 33407	[signature]	10/7/13

Bet Lake Osborne Dr + Detroit St

1. The Permittee declares that prior to filing this application, the location of all existing utilities that it owns or has an interest in, both aerial and underground, are accurately shown on the plans and a letter of notification was mailed on 06/25/13 to the following utilities known to be involved or potentially impacted in the area of the proposed installation:
ATT, Florida Public Utilities, Comcast, FPL.
2. The local Maintenance or Resident Engineer, hereafter referred to as the FDOT Engineer, shall be notified a minimum of forty eight (48) hours in advance prior to starting work and again immediately upon completion of work. The FDOT's Engineer is Brett Drouin, located at _____, Telephone Number (561) 432-4966.
The Permittee's employee responsible for MOT is Karla White, Telephone Number (561) 533-7345 (This name may be provided at the time of the forty eight (48) hour advance-notice prior to starting work).
3. All work, materials, and equipment shall be subject to inspection and approval by the FDOT Engineer.
4. All plans and installations shall conform to the requirements of the FDOT's UAM in effect as of the date this permit is approved by FDOT, and shall be made a part of this permit. This provision shall not limit the authority of the FDOT under Paragraph 8 of this Permit.
5. This Permittee shall commence actual construction in good faith within 1 days after issuance of permit, and shall be completed within 180 days after the permitted work has begun. If the beginning date is more than sixty (60) days from the date of permit approval, the Permittee must review the permit with the FDOT Engineer to make sure no changes have occurred to the Transportation Facility that would affect the permitted construction.
6. The construction and maintenance of such utility shall not interfere with the property and rights of a prior Permittee.
7. It is expressly stipulated that this permit is a license for permissive use only and that the placing of utilities upon public property pursuant to this permit shall not operate to create or vest any property right in said holder, except as provided in executed subordination and Railroad Utility Agreements.
8. Pursuant to Section 337.403, Florida Statutes, any utility placed upon, under, over, or along any public road or publicly owned rail corridor that is found by FDOT to be unreasonably interfering in any way with the convenient, safe, or continuous use, or maintenance, improvement, extension, or expansion, of such public road or publicly owned rail corridor shall, upon thirty (30) days written notice to the utility or its agent by FDOT, be removed or relocated by such utility at its own expense except as provided in Section 337.403(1), Florida Statutes, and except for reimbursement rights set forth in previously executed subordination and Railroad Utility Agreements, and shall apply to all successors and assigns for the permitted facility.
9. It is agreed that in the event the relocation of said utilities are scheduled to be done simultaneously with the FDOT's construction work, the Permittee will coordinate with the FDOT before proceeding and shall cooperate with the FDOT's contractor to arrange the sequence of work so as not to delay the work of the FDOT's contractor, defend any legal claims of the FDOT's contractor due to delays caused by the Permittee's failure to comply with the approved schedule, and shall comply with all provisions of the law and the FDOT's current UAM. The Permittee shall not be responsible for delay beyond its control.
10. In the case of non-compliance with the FDOT's requirements in effect as of the date this permit is approved, this permit is void and the facility will have to be brought into compliance or removed from the R/W at no cost to the FDOT, except for reimbursement rights set forth in previously executed subordination and Railroad Utility Agreements. This provision shall not limit the authority of the FDOT under Paragraph 8 of this Permit.
11. It is understood and agreed that the rights and privileges herein set out are granted only to the extent of the State's right, title and interest in the land to be entered upon and used by the Permittee, and the Permittee will, at all times, and to the extent permitted by law, assume all risk of and indemnify, defend, and save harmless the State of Florida and the FDOT from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by said Permittee of the aforesaid rights and privileges.
12. During construction, all safety regulations of the FDOT shall be observed and the Permittee must take measures, including placing and the display of safety devices that may be necessary in order to safely conduct the public through the project area in accordance with the Federal MUTCD, as amended by the UAM.
13. Should the Permittee be desirous of keeping its utilities in place and out of service, the Permittee, by execution of this permit acknowledges its present and continuing ownership of its utilities located between Lake Osborne Drive and 2nd Avenue North within the FDOT's R/W as set forth above. Whenever the Permittee removes its facilities, it shall be at the Permittee's sole cost and expense. The Permittee, at its sole expense, shall promptly remove said out of service utilities whenever the FDOT determines said removal is in the public interest.
14. In the event contaminated soil is encountered by the Permittee or anyone within the permitted construction limits, the Permittee shall immediately cease work and notify the FDOT. The FDOT shall notify the Permitee of any suspension or revocation of the permit to allow contamination assessment and remediation. Said suspension or revocation shall remain in effect until otherwise notified by FDOT
15. For any excavation, construction, maintenance, or support activities performed by or on behalf of the FDOT, within its R/W, the Permittee may be required by the FDOT or its agents to perform the following activities with respect to a Permittee's facilities: physically expose or direct exposure of underground facilities, provide any necessary support to facilities and/or cover, de-energize or alter aerial facilities as deemed necessary for protection and safety.

UTILITY PERMIT

16. Pursuant to Section 337.401(2), Florida Statutes, the permit shall require the permit holder to be responsible for damage resulting from the issuance of the permit. The FDOT may initiate injunctive proceedings as provided in s.120.69 to enforce provisions of this subsection or any rule or order issued or entered into pursuant thereto.
17. Pursuant to Section 337.402, Florida Statutes, when any public road or publicly owned rail corridor is damaged or impaired in any way because of the installation, inspection, or repair of a utility located on such road or publicly owned rail corridor, the owner of the utility shall, at his or her own expense, restore the road or publicly owned rail corridor to its original condition before such damage. If the owner fails to make such restoration, the authority is authorized to do so and charge the cost thereof against the owner under the provisions of s.337.404.
18. The Permittee shall comply with all provisions of Chapter 556, Florida Statutes, Underground Facilities Damage Prevention and Safety Act.
19. Special FDOT instructions: SEE ATTACHMENT "A"

It is understood and agreed that commencement by the Permittee is acknowledgment and acceptance of the binding nature of all the above listed permit conditions and special instructions.

20. By receipt of this permit, the Permittee acknowledges responsibility to comply with Section 119.07, Florida Statutes.
21. By the below signature, the Permittee hereby represents that no change to the FDOT's standard Utility Permit form, as incorporated by reference into Rule 14-46.001, for this Utility Permit has been made which has not been previously called to the attention of the FDOT (and signified to by checking the appropriate box below) by a separate attached written document showing all changes and the written and dated approval of the FDOT Engineer. Are there attachments reflecting change/s to the standard form? ☒ NO ☐ YES If Yes, _____ pages are attached.

PERMITTEE	City of Lake Worth Monica Morandi, P.E.	SIGNATURE	Monica Morandi	DATE:	10-3-13
	Name & Title of Authorized Permittee or Agent (Typed or Printed Legibly)				
APPROVED BY:				ISSUE DATE:	10/28/13
	District Maintenance Engineer or Designee				

UTILITY PERMIT FINAL INSPECTION CERTIFICATION

DATE:	
DATE WORK STARTED:	
DATE WORK COMPLETED:	
INSPECTED BY:	
(Permittee or Agent)	
CHANGE APPROVED BY:	DATE:
District Maintenance Engineer or Designee	

I the undersigned Permittee do hereby CERTIFY that the utility construction approved by the above numbered permit was inspected and installed in accordance with the approved plans made a part of this permit and in accordance with the FDOT's current UAM. All plan changes have been approved by the FDOT's Engineer and are attached to this permit. I also certify that the work area has been left in as good or better condition than when the work was begun.

PERMITTEE:	SIGNATURE:	DATE:
Name & Title of Authorized Permittee or Agent (Typed or Printed Legibly)		

CC: District Permit Office
Permittee

lwu_16wm/B2066.00/ap03shjh.pdf

SPECIAL PROVISIONS/CONDITIONS
UTILITY PERMITS
DIRECTIONAL & JACK & BORES
ATTACHMENT "A"

All new or replaced underground facilities within the Right of Way shall be made electronically detectable using techniques available in the industry.

It is the Permittee's responsibility to obtain final acceptance of permitted work (completed) and the restoration of the Right of Way from the Department prior to usuage.

Permittee will restore the Right of Way as a minimum, to its original condition or better in accordance w/FDOT's Standard Specifications for Road & Bridge Construction or as directed by the Resident Operations Engineer.

Permittee will ensure that all locates have been performed prior to scheduling of any boring activities. This shall include soft digs to verify vertical & horizontal alignment.

Permittee's representative & an FDOT Inspector must be on site during all boring activities. Upon completion of the boring activities, Permittee shall provide all documentation to be in accordance with FDOT Standard Specifications, Section 555 or 556, whichever is applicable.

All maintenance of traffic (MOT) will be in accordance with the Department's current edition of the Design Standards, (600 series). The Operations Engineer or his designee reserves the right to direct the removal/relocation/modification of any traffic device(s) at the Permittee's sole expense.

Restricted hours of operation will be from 9:00 am to 3:30 pm, (Monday thru Friday), unless otherwise approved by the Operations Engineer, or designee.

Permit is valid for six (6) months from the date of issue.

Permittee shall use the current editions of the Department's Design Standards, Standard Specifications for Road and Bridge Construction and applicable manuals, policies and procedures.

PERMITTEE: PLEASE NOTE:
Permittee's contractors that are performing directional drilling and/or jack and bore activities shall provide the Department (Permits Office) proof of a proper state contractor's license and certificate of liability insurance prior to any commencement of permitted work.

Permittee to coordinate all work with the Palm Beach Operations Permits Dept. @ via fax 561-370-1236. Coordination will include a pre-construction meeting.

All HDPE conduit used for traffic signals or other electrically powered or operated traffic control devices, shall use a Standard Dimension Ratio of 11 (SDR 11).

Permittee will maintain ten (10) times the bore diameter for minimum depth of coverage. Multiple pullbacks will be the aggregrate of the diameters times ten (10) to obtain the minimum depth of cover in inches.

Permittee will provide the Department with certified "As-Built" plans prior to final acceptance of the permitted work.

SECTION 555
DIRECTIONAL BORE

555-1 Description.

555-1.1 Scope of Work: The work specified in this Section documents the approved construction methods, procedures and materials for Directional Boring, also commonly called Horizontal Directional Drilling (HDD).

555-1.2 General: HDD is a trenchless method for installing a product that serves as a conduit for liquids, gasses, or as a duct for pipe, cable, or wire line products. It is a multi-stage process consisting of site preparation and restoration, equipment setup, and drilling a pilot bore along a predetermined path and then pulling the product back through the drilled space. When necessary, enlargement of the pilot bore hole may be necessary to accommodate a product larger than the pilot bore hole size. This process is referred to as back reaming and is done at the same time the product is being pulled back through the pilot bore hole.

Accomplish alignment of the bore by proper orientation of the drill bit head as it is being pushed into the ground by a hydraulic jack. Determine orientation and tracking of the drill bit by an above ground radio detection device which picks up a radio signal generated from a transmitter located within the drill bit head. Then electronically translate the radio signal into depth and alignment. In order to minimize friction and prevent collapse of the bore hole, introduce a soil stabilizing agent (drilling fluid) into the annular bore space from the trailing end of the drill bit. The rotation of the bit in the soil wetted by the drilling fluid creates a slurry. The slurry acts to stabilize the surrounding soil and prevent collapse of the bore hole as well as provides lubrication.

Select or design drilling fluids for the site specific soil and ground water conditions. Confine free flowing (escaping) slurry or drilling fluids at the ground surface during pull back or drilling. Accomplish this by creating sump areas or vacuum operations to prevent damage or hazardous conditions in surrounding areas. Remove all residual slurry from the surface and restore the site to preconstruction conditions.....

555-6 Documentation Requirements.

555-6.1 Boring Path Report: Furnish a Bore Path Report to the Engineer within seven days of the completion of each bore path. Include the following in the report:

(a) Location of project and financial project number including the Permit Number when assigned

(b) Name of person collecting data, including title, position and company name

(c) Investigation site location (Contract plans station number or reference to a permanent structure within the project right-of-way)

(d) Identification of the detection method used

(e) Elevations and offset dimensions as required in 555-4.2

555-6.2 As-Built Plans: Provide the Engineer a complete set of As-Built Plans showing all bores (successful and failed) within 30 calendar days of completing the work. Ensure that the plans are dimensionally correct copies of the Contract plans and include roadway plan and profile, cross-section, boring location and subsurface conditions as

PLEASE NOTE:

Prior to any construction activities in the FDOT Right of way (i.e. 48 hours notice, minimum)

The Permittee/Contractor shall provide the Department with a copy of the Contractor's license, Local Business Tax Receipt and Certificate of Liability Insurance.

The Certificate of Liability Insurance shall name the FDOT as the certificate holder with our address (7900 Forest Hill Boulevard, West Palm Beach, Florida 33413), including the Additionally Insured Rider. Please include the FDOT Permit number on all correspondence.

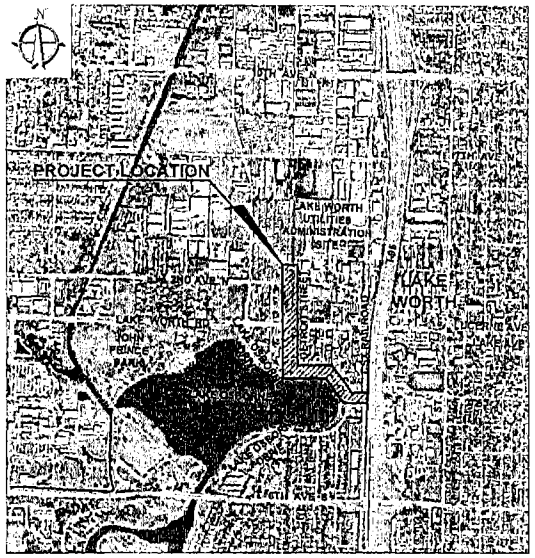
RAW WATERMAIN IMPROVEMENTS FOR POTABLE WELL NO. 16 CONSTRUCTION DRAWINGS

PREPARED FOR

CITY OF LAKE WORTH

PALM BEACH COUNTY, FLORIDA

SEPTEMBER 2013



VICINITY MAP
N.T.S.

SECTION 21, TOWNSHIP 44 SOUTH, RANGE 43 EAST

CITY COMMISSION

PAM TRIOLO, MAYOR
SCOTT MAXWELL, VICE MAYOR
CHRISTOPHER MCVOY
ANDY AMOROSO
JOHN SZERDI

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
C0-1	COVER
C0-2	LOCATION MAP, KEY SHEET, NOTES AND LEGEND
C0-3	HORIZONTAL CONTROL SHEET
C1-1	PLAN AND PROFILE STA. 1+00 TO STA. 6+00
C1-2	PLAN AND PROFILE STA. 6+00 TO STA. 12+00
C1-3	PLAN AND PROFILE STA. 12+00 TO STA. 17+00
C1-4	PLAN AND PROFILE STA. 20+00 TO STA. 25+25
C1-5	PLAN AND PROFILE STA. 25+25 TO STA. 30+50
C1-6	PLAN AND PROFILE STA. 30+50 TO STA. 31+00
C5-1	DETAILS
C5-2	DETAILS

TOTAL NO. OF SHEETS - 11

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
IT'S THE LAW IN FLORIDA

A copy of this permit and plans will be on the job site at all times during the construction of this facility

2013H-496-0314

NO.	DATE	BY	REVISION

JOHN R. LEEMAN
FLORIDA P.E. NO. 38615
9/30/13

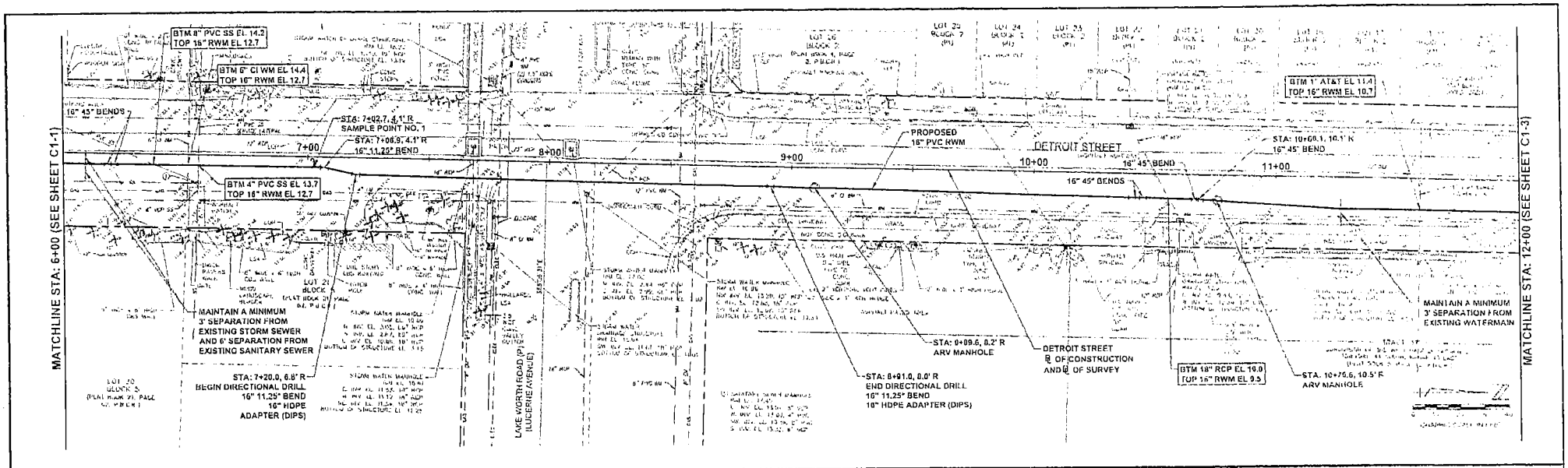
FLORIDA C.A. NO. 48 — MOCK ROOS ENGINEERS & SURVEYORS & PLANNERS — FLORIDA LB NO. 48
5720 Corporate Way, West Palm Beach, Florida 33407 (561) 683-3113 Fax (561) 683-7244

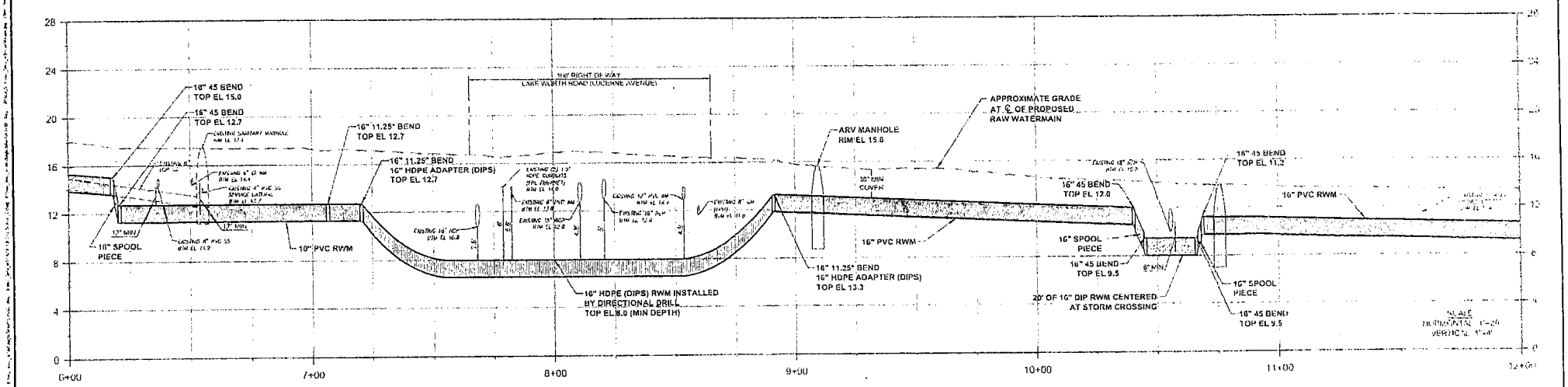
FIELD: —
DRAWN: YM
DESIGN: JRL
APPR: JGG
SCALE AS SHOWN

RAW WATERMAIN IMPROVEMENTS
FOR POTABLE WELL NO. 16
CONSTRUCTION DRAWINGS
CITY OF LAKE WORTH
PALM BEACH COUNTY, FLORIDA

DATE: 9/30/2013
DWG. NO. 44-21-25
SHEET 1 of 11

13-H-1001 - R14-931RD





PLAN AND PROFILE STA. 6+00 TO STA. 12+00

CADD FILE	NO	DATE	BY	REVISION	JOHN R. LEE JR. FLORIDA P.E. NO. 44649 9/30/13 DATE	FLORIDA E.B. NO. 43 MOCK ROOS ENGINEERS SURVEYORS PLANNERS 5729 Corporate Way, West Palm Beach, Florida 33407 (561) 863-3111 Fax 478-7248	FLORIDA L.B. NO. 43 FIELD O. LEAVY DRAWN YM DESIGN JRL APPR. CCG SCALE AS SHOWN	RAW WATERMAIN IMPROVEMENTS FOR POTABLE WELL NO. 16 CONSTRUCTION DRAWINGS CITY OF LAKE WORTH PALM BEACH COUNTY, FLORIDA	DATE P.A. NO. DWG. NO. SHEET

APPENDIX C

PALM BEACH COUNTY

UTILITY PERMIT

PALM BEACH COUNTY LAND DEVELOPMENT DIVISION
RIGHT-OF-WAY CONSTRUCTION - UTILITY PERMIT -

Permit not valid unless pink copy is signed and returned within 15 days after pick up to:

Palm Beach County
Land Development Division
2300 N. Jog Road
West Palm Beach, FL 33411-2745

PERMIT NUMBER UT31896-1213
ISSUANCE DATE 12/18/2013
EXPIRATION DATE 06/18/2014

S 29 T 44 R 43

PERMITTEE City Of Lake Worth
1900 2nd Avenue North
Lake Worth, FL 33461

FEE WAIVED

CONTACT Shampale Holland
(561) 683 - 3113

PROJECT DESCRIPTION City of Lake Worth - Raw Watermain Improvements for Potable Well # 16, located along Lake Osborne Drive, from Detroit St to approx 1,155 ft southeast of Detroit St.

LOCATION **LAKE OSBORNE DR - (C1-1,C1-4, C1-5) Install 100 ft of 16 inch Raw WM via Directional Drilling at the intersection of Detroit St and an additional 100 ft at a location approx 1,155 ft southeast of Detroit St. (C1-5) Install 180 ft of 16 inch Raw WM, outside of the road pavement, including a manhole, an utility box and six bends, from approx 720 ft southeast of Detroit St to 900 ft southeast of Detroit St.**

REFERENCED PLANS C1-1,C1-4,C1-5,C1-6,C5-1.C5-2

Permit is hereby granted for the work within the right-of-way as shown on the referenced plans, subject to provisions of Chapters 125.42.337.401 through 337.404, current Florida Statutes, the Conditions on the back of this permit, and the following conditions:

1. **Contact the Construction Coordination Division at (561) 684-4180, 48 hours before commencement of work. (See Condition Number 1 on the back of this permit.)**
2. **The Permittee is responsible to contact Palm Beach County Department of Environmental Resources Management (561) 233-2400 to obtain any approvals that office may require due to the work proposed by this permit.**
3. **The Permittee shall be responsible for submission of a traffic control plan to Ed McClane with the Palm Beach County Traffic Division. He can be contacted at (561) 684-4030. The plan shall be submitted a minimum of 2 weeks before start of construction. The Permittee shall coordinate with Mr. McClane to ensure the plan is approved prior to start of construction.**
4. **Prior to scheduling a final field review with Construction Coordination, the permittee shall submit to the Land Development Division a signed and sealed certification of completion from the Engineer-of-Record for the above work, referencing the permit number and indicating the work was completed in substantial accordance with the approved plans.**

This permit shall become void if the pink copy of the permit is not signed and returned to this office within 15 days after pickup; or, if returned, Condition Number 1 on the back of this permit is not complied with. Certification of Occupancy (if applicable) will be withheld until the Certification of Completion from the engineer of record (if applicable) and a satisfactory field review by the Palm Beach County Construction Coordination Division have been received by the Land Development Division.

Joanne M. Keller

PERMITTEE SIGNATURE (AUTHORIZED SIGNATURE OR DULY AUTHORIZED AGENT)

COUNTY APPROVAL
Joanne M. Keller, P. E., Director
Land Development Division

SIGNATURE

Shampale Holland
PLEASE PRINT OR TYPE

Control Number	N/A
PR No.	N/A
Related Permit	N/A

JMK ROBERT LAZO

cc: Construction Coordination Division w/plans
John Leemon - Mock Roos and Associates, Incorporated
Permittee w/plans

CONDITIONS FOR RIGHT-OF-WAY CONSTRUCTION (UTILITIES)

1. The Construction Coordination Division shall be contacted 48 hours before commencement of work to establish the start date and establish a timeline when field review(s) of the work are required. Construction shall be done Monday through Friday. Weekend work shall be approved by Construction Coordination 48 hours before Saturday. Plans bearing the approval stamp of the County Engineer and the approved permit shall be at the work site. Work may proceed beyond the permit expiration date if a start date was established and work started prior to the permit expiration date. When work is complete and the engineer's certification of completion has been submitted to the Land Development Division, the permittee/representative/engineer (as applicable) shall schedule a final review with Construction Coordination Division. If a permitted project has been completed but does not require an engineer's certification, the permittee/representative (as applicable) shall submit a letter to the Land Development Division indicating the work is complete and ready for final field review. Land Development will notify the permittee/representative to schedule final field reviews with Construction Coordination.

2. The permittee understands and agrees that the rights and privileges herein set out are granted only to the extent of the County's right, title and interest in the land to be entered upon and used by the permittee. THE PERMITTEE WILL AT ALL TIMES ASSUME ALL RISK AND FURTHER WILL INDEMNIFY, DEFEND, AND SAVE HARMLESS PALM BEACH COUNTY FROM AND AGAINST ALL LOSS, DAMAGE, COST OR EXPENSE ARISING IN ANY MANNER (INCLUDING ALL LITIGATION COSTS AND ATTORNEY FEES), ON ACCOUNT OF THE EXERCISE OR ATTEMPTED EXERCISE BY SAID PERMITTEE OF THE AFORESAID RIGHTS AND PRIVILEGES REGARDLESS OF THE APPORTIONMENT OF NEGLIGENCE OF THE PARTIES INVOLVED. THE PERMIT HOLDER, THEREFORE, AGREES TO INDEMNIFY THE COUNTY FOR THE COUNTY'S OWN NEGLIGENCE. It is specifically understood that the limits of this indemnification are the COUNTY'S statutory liability limits under Section 768.28, Florida Statute, or any successor legislation in effect at the issuance of said permit. The existing statutory limits under 768.28, Florida Statute are hereby recognized as the Statue ("Construction Contracts") should that statute be deemed to apply.

2a. The following condition is applicable when the permittee is a governmental agency: That Agency shall indemnify, defend and hold County harmless against any actions, claims or damages arising out of Agency's negligence and Agency's exercise of the rights granted by this Agreement to the extent permitted by law. The foregoing indemnification shall not constitute a waiver of sovereign immunity beyond the limits set forth in Section 768.28, Florida Statutes, nor shall the same be construed to constitute an agreement by Agency to indemnify County of County's negligence.

3. Permittee assumes full responsibility to maintain all areas under construction safe for the public and to properly route and direct traffic through the construction area. All traffic control operations shall be done in accordance with the current *Manual on Uniform Traffic Control Devices* (Part VI). Supplements to this manual are the Florida Department of Transportation's Roadway and Traffic Design Standards (Index 600) and Standard Specifications for Road and Bridge Construction (latest edition). No obstruction of the travel lanes between 7 a.m. to 9 a.m. and 3 p.m. to 6 p.m. Monday thru Friday, unless approved by the Palm Beach County Traffic Engineering Division. No time restrictions for local and subdivision roads, or for construction done Saturday or Sunday.

4. Florida Statute 336.048 – Temporary closing traveling lane of road: Whenever any road on the county road or city street system is repaired, reconstructed, or otherwise altered in a manner that necessitates the closing of one or more traveling lanes of the road for a period of time exceeding 2 hours, the party performing such work shall give notice to the appropriate local law enforcement agency within whose jurisdiction such road is located prior to commencing work on the project. However, when the closing of one or more lanes is required because of emergency conditions, such notice shall be waived.

5. Permittee hereby acknowledges the COUNTY'S right to inspect the area governed by this permit at any time prior to final acceptance by the COUNTY to assure compliance with all plans and specifications. All reviews, however, shall be performed at the COUNTY'S discretion and are strictly to assure compliance with project plans and specifications. PERMITTEE HEREBY ACKNOWLEDGES THAT THE COUNTY VIA SAID REVIEWS IS NOT THE EMPLOYER, SUPERVISOR, PRINCIPAL OR AGENT OF PERMITTEE. Permittee is at all times an independent contractor with full responsibility for all obligations and responsibilities imposed under this permit and imposed by law.

6. If a County maintained Thoroughfare Plan Road is open cut, the procedures in Land Development Division PPM EL-O-3605, including Form 3605.1 (Open Cut Restoration for Thoroughfare Plan Roads) shall be adhered to. If a Non-Thoroughfare Plan Road is open cut, Land Development Division PPM EL-O-3606, including Form 3606.1 (Open Cut Restoration for Non-Thoroughfare Plan Roads) shall be adhered to.

6a. If an asphalt driveway is cut and patched, the entire driveway shall be overlaid with a minimum one inch of asphalt, or entirely replaced. If a concrete driveway is cut, it shall be entirely replaced. Replacement area is from the intersecting road to the property line.

7. All areas in the right-of-way shall be left in a condition equal to or better than existed prior to construction. Shoulders disturbed within 8 feet of the edge of pavement shall be stabilized a minimum 50 PSI Florida Bearing Value, 6 inches in depth. Existing drainage shall not be impeded. Sidewalk areas disturbed during construction shall be maintained until repaved. Prior to or concurrent with final review, the permittee shall submit to the Construction Coordination Division copies of density reports done by an independent testing laboratory. If the construction should fail within one year from the date of final review by the Construction Coordination Division, the permittee is responsible for restoration.

8. The permittee certifies notification has or will be given at least 48 hours (excluding Saturday, Sundays and legal holidays) prior to starting excavation, to anyone having the right to bury gas pipe line within the public or private street, alley, right-of-way or gas utility easement for purposes of obtaining information concerning the possible location of gas pipe lines in the area of proposed excavation.

9. The permitted work shall be coordinated with any Utility or Cable TV facilities in the area of construction.

10. The permittee/developer shall provide and install pavement markings (thermoplastic, unless approved otherwise by the Palm Beach County Traffic Engineer), and reflective pavement markers in accordance with Palm Beach County Traffic Division's latest Typicals for Pavement Markings, Signing and Geometrics.

11. If traffic signalization equipment is in the area of construction, notify Palm Beach County Traffic Operations at (561) 233-3900. Do not disturb any material within six feet of a traffic signal pole or a guy wire and anchor. If damage to the equipment occurs during construction, it shall be repaired by Traffic Operations at the permittee's expense.

12. Provide a minimum cover of 36 inches in the right-of-way of Thoroughfare Plan Roads and a minimum of 30 inches for all others. Maintain a minimum clearance of 12 inches over or under drainage facilities.

13. When plastic pipe is permitted for boring, it shall meet the standards as set forth in the latest Florida Department of Transportation Design Standards.

14. If previously approved construction is underway in the same location as indicated on this permit, the permittee shall obtain permission to work from the contractor doing the underway construction. If not granted, the construction under this permit shall not be done until the underway construction is finaled by the Palm Beach County Construction Coordination Division.

15. In the event of widening, repair, or reconstruction of the subject road(s), the Permittee, any successors, legal heirs or assigns, shall upon request and within 30 days after notice by the Office of the County Engineer, remove or relocate the item(s) permitted within the right-of-way of the subject road(s) at no expense to Palm Beach County.

17. Issuance of this permit does not in any way create any rights on the part of the applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the County for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

18. All applicable state or federal permits must be obtained before any development is commenced.

Revised 8/6/2013

Fees pursuant to Section 42-62 Fees, of Article IV, Public Rights-of-Way Permit Requirement and Fee Schedule, Chapter 42, Code of Laws and Ordinances of Palm Beach County, Florida (Ordinance 2008-006).

The minimum fee for any application shall not be less than one hundred fifty dollars ($150). The minimum fee shall be paid at time of application, and any balance due shall be paid prior to issuance of the permit.

PERMIT NO.: UT31896-1213 **ROAD NAME:** LAKE OSBORNE DR **JOB NO.:** B2066

TYPE OF PERMIT	FEE	QUANTITY	AMOUNT DUE

pc: Permittee

Total Permit Fee	$0.00
Less Fee Paid	$0.00
Balance	**WAIVED**

BBUND-1 OP ID: R3

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 03/10/14

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Brown & Brown of Florida, Inc.
1201 W Cypress Creek Rd # 130
P.O. Box 5727
Ft. Lauderdale, FL 33310-5727
Daniel A. Touchet

954-776-2222
954-776-4446

CONTACT NAME:
PHONE (A/C, No, Ext):
FAX (A/C, No):
E-MAIL ADDRESS:

INSURED
B&B Underground Contractors, Inc
585 105th Ave N Unit 16
Royal Palm Beach, FL 33411

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : National Trust Insurance Co	20141
INSURER B : FCCI Commercial Ins Co	33472
INSURER C : FCCI Insurance Company	10178
INSURER D :	
INSURER E :	
INSURER F :	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC	X		GL00132622	04/01/13	04/01/14	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			CA00206692	04/01/13	04/01/14	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) PIP	$ 1,000,000 $ $ $ $ 10,000
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10,000			UMB00141512	04/01/13	04/01/14	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000 $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		001WC13A68265	04/01/13	04/01/14	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
RE: B2066.00, Lake Worth - Raw Watermain Improvements for Potable Well No. 16
City of Lake Worth is additional insured with respect to General Liability if required by written contract. 30 days notice of cancellation applies except 10 days for non-payment.

CERTIFICATE HOLDER

LAKEWOR

City of Lake Worth
7 North Dixie Highway
Lake Worth, FL 33460

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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BBUND-1 OP ID: R3

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 03/10/14

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Brown & Brown of Florida, Inc.
1201 W Cypress Creek Rd # 130
P.O. Box 5727
Ft. Lauderdale, FL 33310-5727
Daniel A. Touchet

954-776-2222
954-776-4446

CONTACT NAME:
PHONE (A/C, No, Ext):
FAX (A/C, No):
E-MAIL ADDRESS:

INSURED
B&B Underground Contractors, Inc
585 105th Ave N Unit 16
Royal Palm Beach, FL 33411

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : National Trust Insurance Co	20141
INSURER B : FCCI Commercial Ins Co	33472
INSURER C : FCCI Insurance Company	10178
INSURER D :	
INSURER E :	
INSURER F :	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC	X		GL00132622	04/01/13	04/01/14	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS / SCHEDULED AUTOS X HIRED AUTOS / X NON-OWNED AUTOS			CA00206692	04/01/13	04/01/14	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
							PIP	$ 10,000
A	X UMBRELLA LIAB / X OCCUR EXCESS LIAB / CLAIMS-MADE DED X RETENTION $ 10,000			UMB00141512	04/01/13	04/01/14	EACH OCCURRENCE	$ 5,000,000
							AGGREGATE	$ 5,000,000
								$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		001WC13A68265	04/01/13	04/01/14	X WC STATU-TORY LIMITS / OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
RE: B2066.00, Lake Worth - Raw Watermain Improvements for Potable Well No. 16
Mock Roos & Associates, Inc is additional insured with respect to General Liability if required by written contract. 30 days notice of cancellation applies except 10 days for non-payment.

CERTIFICATE HOLDER

MOCKROO

Mock Roos & Associates, Inc
5720 Corporate Way
West Palm Beach, FL 33407-2066

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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MOCK•ROOS
ENGINEERS SURVEYORS PLANNERS

February 17, 2014
Revised March 3, 2014

Ms. Monica Morandi
Lake Worth Utilities
1900 2nd Avenue N.
Lake Worth, FL 33461

Ref. No. B2066.02
Subject: Well No. 16 Raw Watermain Improvements

Dear Monica:

We are submitting the attached Proposal To Provide *Construction Phase Engineering Services for Well No. 16 Raw Watermain Improvements*. Please review the attached proposal and return one signed copy to our office as our authorization to proceed with the Scope of Services outlined in the proposal.

We will provide the Scope of Services on an hourly basis, plus reimbursable expenses. We anticipate the total fee to provide the Scope of Services will be $54,900.

If you have any questions please contact me at 683-3113, extension 258. Thank you for using Mock•Roos on this project. We look forward to working with you.

Sincerely,

MOCK, ROOS & ASSOCIATES, INC.

John R. Leemon, P.E.
Senior Project Manager

JRL:jeh
Enclosure
Copies: Bookkeeping

I:\mk\b2066.02\hr01jljh.doc

Mock, Roos & Associates, Inc.
5720 Corporate Way, West Palm Beach, Florida 33407-2066, (561) 683-3113, fax 478-7248

Proposal To Provide Construction Phase Services for Well No. 16 Raw Watermain Improvements

Services to be provided by: Mock•Roos

Services provided to (City): Lake Worth Utilities

Proposal Date: February 17, 2014
Revised March 3, 2014

Proposal Terms

A. Project Description:

The project includes the construction of a 16-inch raw watermain extension to serve proposed Potable Well Nos. 16, 17, and 18. Mock•Roos will provide construction phase services as more specifically described under **B. Scope of Services** below.

B. Scope of Services:

The construction phase services budget contained herein includes providing services that run concurrent with the initial construction contract time (six months) including one month for Project wrap-up coordination.

1. Provide Construction Phase Engineering Services for the Project, act as the City's engineering representative during construction, and advise the City on construction aspects of the project when necessary.

2. Coordinate, schedule and attend a preconstruction meeting with the Contractor, City and Subconsultants, prepare a detailed agenda for the preconstruction meeting, and prepare and distribute meeting minutes.

3. Review and process Contractor submittals and shop drawings for general conformance with the Contract Documents. Review and processing of "or equal" or "substitution" packages, as may be requested by the Contractor or City, can be performed as Additional Services. These services when requested are usually reimbursed by the Contractor.

4. Provide part time Project Field Representative services in accordance with the description of duties contained in the Project Manual. Project Field Representative services are budgeted not to exceed 3 hours per day for the active construction period estimated to be approximately 4 months.

5. Provide periodic site visits by the Engineer to observe the progress of the Work.

6. Review and process Contractor submitted applications for progress payment. Recommendations to the City regarding payment will be based on estimated quantities and work to date amounts observed for the requested progress payment period.

7. Assist in resolving Contractor's technical questions, if any, during the construction period. Provide interpretations of the Drawings, Technical Specifications, and Contract Documents and issue clarifications as needed.

8. Assist in implementing City requested minor changes to the construction project, generally in the form of Work Directive Changes. These minor changes should not require re-design of project elements. Associated construction cost, if any, will be deducted from a general allowance balance on the Project. Preparing major Change Orders for City requested changes or additions may require Additional Services.

9. Attend periodic construction meetings with the Contractor, City, and Subconsultants, to discuss the progress of the Work, review the Contractor's proposed construction schedules, and discuss other items as may be appropriate.

10. Perform one "Substantial Completion Walkthrough" with the Contractor, City and Subconsultants.

11. Prepare and distribute a punch-list of remaining work items to be completed following the "Substantial Completion Walkthrough".

12. Prepare and assist the City in the execution of a Substantial Completion Certificate as appropriate.

13. Perform one "Final Project Walkthrough" with the Contractor, City and Subconsultants once the punch-list is completed. Prepare a list, if necessary, of any punch-list items found to be inadequately addressed and advise the Contractor of the items that remain to be completed before the Project can be accepted by the City.

14. Review Contractor submitted record drawings for conformance with the requirements of the Contract Documents and incorporate the Contractor's record drawing information into to the electronic drawing files for City use. Provide an electronic copy of the drawing files in AutoCAD "DWG" format and in PDF format.

15. Prepare and submit a completion statement to the Health Department. Coordinate with the Health Department as necessary.

16. Prepare and submit a certification of completion to Palm Beach County and assist in closing out utility permit.

17. Prepare and submit a completion statement to FDOT and assist in closing out permit.

18. Prepare and assist the City in processing final paperwork for the Project including: a final change order to adjust any quantities or other items in the Project, if necessary; the Contractor's final payment application; and a recommendation for final payment and final acceptance of the Project when appropriate.

C. Additional Services:

1. Any services not included in the Scope of Services will be considered Additional Services.

2. Any design changes, schedule changes, drawing changes, or other project changes requested by Client will be considered Additional Services.

3. Additional Services can be provided upon Mock•Roos receiving signed authorization from Client.

D. Fees and Rates:

1. Mock•Roos will complete these services on an hourly basis at Mock•Roos' hourly rates, plus reimbursable expenses.

2. The total fee to provide the Scope of Services is anticipated to be $54.900.

3. Mock•Roos will not provide services in excess of the anticipated fee without signed authorization from City.

4. Mock•Roos can provide Additional Services at the Mock•Roos rates in effect at that time, plus reimbursable expenses or for an agreed upon lump sum fee.

E. Conditions:

1. All terms become valid upon Mock•Roos receiving one complete copy of this proposal within 60 days of its date.

2. This Proposal is based on the Scope of Services being completed on or before March 31, 2015. If not completed by this date for reasons other than those within the control of Mock•Roos, Mock•Roos may request a change order as provided for in Mock•Roos' contract with the Client (City Contract No. WS-08-09).

3. This proposal serves as a supplement to the general agreement between Mock•Roos and Client dated January 16, 2009, Contract WS-08-09-MR.

4. In case of discrepancies, the terms of this proposal supersede those of previous agreements.

F. Acceptance and Authorization to Proceed:

1. This proposal is acceptable and Mock•Roos has authorization to proceed with the Scope of Services. This authorization becomes valid upon Mock•Roos receiving one **complete** copy of this form with an original signature below.

IN WITNESS WHEREOF the parties hereto have made and executed this Agreement on the _____ day of _____, 2014.

CITY OF LAKE WORTH, FLORIDA

By: _____
Pam Triolo, Mayor

ATTEST:

_____
Pamela J. Lopez, City Clerk

_____
Date

Approved as to form and legal sufficiency:

By: _____
Christy Goddeau
City Attorney

MOCK, ROOS & ASSOCIATES, INC.

By: _____
Thomas A. Biggs, P.E.
Executive Vice President

3/4/14
Date

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

The foregoing instrument was acknowledged before me this 4th day of March, 2014, by Thomas A. Biggs, P.E., Executive Vice President of Mock, Roos & Associates, Inc., a Florida corporation, on behalf of the corporation, and who is personally known to me or who as produced the following _____ as identification.

JANE E. HAYES
Commission # FF 040421
Expires August 15, 2017
Bonded Thru Troy Fain Insurance 800-385-7019

Notary Public: Jane E. Hayes

Print Name: Jane E. Hayes
My commission expires: 8/15/17

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Well No. 16 Raw Watermain
for
City of Lake Worth

Estimate of Construction Phase Engineering Fees

TASK	Project Manager	Project Engr.	Field Rep	CADD Tech	Admin. Assist.	TOTAL
I. Pre-Construction Activities						
Initial Project Coord.	2	2			2	638
Pre-construction Meeting & Minutes	3	6	2		2	1,398
Processing Shop Drawings	4	16			2	2,478
Coord. w/Contractor & Client	4	4			2	1,158
Subtotal	13	28	2	0	8	5,672
II. Construction Activities						
Construction Services Admin.	4	12			2	2,038
Field Observation & Supervision	8	16	240		4	23,596
Review Payment Applications	4	10			4	1,936
Resolve Field & Technical Quest.	4	8			2	1,598
Assistance with Minor Changes	2	8			4	1,416
Construction Progress Meetings	8	12				2,520
Substantial Completion Walk-Through & Follow-up Coord.	2	6	2		2	1,248
Final Completion Observation	2	4	2		1	969
Health Department Release	2	4			2	858
County Permit Completion	1	3			1	539
FDOT Permit Completion	1	3			1	539
Coord. w/Contractor & Client	8	8			4	2,316
Subtotal	46	94	244	0	27	39,573
III. Post-Construction Activities						
Resolve Punch List Items	2	4	8		1	1,479
Process Final Paperwork	6	8			3	1,957
Update AutoCAD Record Drawings	2	4	4	24	1	3,179
Coordination w/Contractor & Client	8	8			2	2,198
Subtotal	18	24	12	24	7	8,813
Total Hours	77	146	258	24	42	54,058
Hourly Rate	150	110	85	85	59	
Total By Category	11,550	16,060	21,930	2,040	2,478	
Total Hourly Cost						54,058
Reimbursable Expenses						842
TOTAL BUDGET						**$54,900**

Bid Tabulation: Raw Watermain For Potable Well No. 16
for City of Lake Worth

Bid Date : February 6, 2014

Item	Description	Quantity	Unit	B&B Underground Unit Price	B&B Underground Amount	Johnson Davis Unit Price	Johnson Davis Amount	Southern Undergd Unit Price	Southern Undergd Amount		D.S. Eakins Unit Price	D.S. Eakins Amount
Schedule A - General Requirements												
A-1.	Mobilization/Demobilization/General Conditions	1	LS		$20,000.00		$5,600.00		$22,500.00			$20,000.00
A-2.	Bonds and Insurance	1	LS		10,000.00		8,000.00		17,500.00			7,000.00
A-3.	Permit Fees	1	LS		200.00		2,000.00		10,000.00			7,000.00
A-4.	Maintenance of Traffic	1	LS		9,000.00		6,000.00		4,000.00			13,100.00
A-5.	Video Taping of Existing Conditions	1	LS		2,500.00		2,000.00		1,500.00			2,471.00
A-6.	Prepare & Furnish Record Drawings	1	LS		15,000.00		8,000.00		6,500.00			10,370.00
A-7.	Turbidity Control/Lake Protection (John Prince Park)	1	LS		7,500.00		4,000.00		8,000.00			3,000.00
A-8.	General Allowance	1	LS		40,000.00		40,000.00		40,000.00			40,000.00
	Total Schedule A				$104,200.00		$75,600.00		$110,000.00			$102,941.00
Schedule B - Site Work and Utilities												
B-1.	16" HDPE Pipe (Directional Drill)	625	LF	$127.00	$79,375.00	$140.00	$87,500.00	$158.00	$98,750.00		$176.36	$110,225.00
B-2.	16" PVC Pipe	2150	LF	75.00	161,250.00	95.00	204,250.00	67.50	145,125.00	*	77.30	166,195.00
B-3.	16" DI Pipe	160	LF	106.50	17,040.00	120.00	19,200.00	110.00	17,600.00		167.00	26,720.00
B-4.	16" Butterfly Valves	2	EA	3,850.00	7,700.00	4,000.00	8,000.00	3,850.00	7,700.00		4,379.00	8,758.00
B-5.	Air Release Valve & Manhole	6	EA	7,825.00	46,950.00	5,000.00	30,000.00	8,600.00	51,600.00		5,024.00	30,144.00
B-6.	Offset Air Release Valve & Manhole	3	EA	5,750.00	17,250.00	4,500.00	13,500.00	6,500.00	19,500.00		5,240.00	15,720.00
B-7.	Air Release Valve Service	1	EA	600.00	600.00	3,000.00	3,000.00	3,250.00	3,250.00		1,378.00	1,378.00
B-8.	Connect to Existing	2	EA	6,200.00	12,400.00	4,500.00	9,000.00	12,000.00	24,000.00		5,598.00	11,196.00
B-9.	Sample Points	4	EA	250.00	1,000.00	800.00	3,200.00	650.00	2,600.00		575.00	2,300.00
B-10.	Asphalt Pavement Replacement	1450	SY	35.00	50,750.00	30.00	43,500.00	28.00	40,600.00		46.00	66,700.00
B-11.	Asphalt Sidewalk Restoration	450	SY	35.00	15,750.00	40.00	18,000.00	26.00	11,700.00		39.50	17,775.00
B-12.	Mill and Overlay	1700	SY	15.00	25,500.00	16.00	27,200.00	12.75	21,675.00		14.50	24,650.00
B-13.	Type F Curb	560	LF	3.00	1,680.00	25.00	14,000.00	16.00	8,960.00		20.00	11,200.00
B-14.	Thermoplastic Pavement Marking and RPMs	1	LS		2,500.00		3,000.00		4,500.00			9,600.00
B-15.	Seeding and Sodding	1	LS		6,000.00		13,000.00		5,520.00			18,400.00
B-16.	Landscape Restoration	1	LS		1,500.00		3,000.00		3,500.00			2,000.00
B-17	Funish Utility Crew & Equipment for Add'l Work as Ordere	16	HR	500.00	8,000.00	475.00	7,600.00	650.00	10,400.00		315.00	5,040.00
B-18	Furnish Add'l Ductile Iron Fitting	1000	LBS	10.00	10,000.00	5.00	5,000.00	10.00	10,000.00		3.69	3,690.00
	Total Schedule B				$465,245.00		$511,950.00		$486,980.00			$531,691.00
	Total (A & B)				$569,445.00		$587,550.00		$596,980.00			$634,632.00

* Denotes error in multiplying

Bid Tabulation: Raw Watermain For Potable Well No. 16
for City of Lake Worth

Bid Date : February 6, 2014

Item	Description	Quantity	Unit	Westwind Contracting Unit Price	Westwind Contracting Amount	TB Landmark Unit Price	TB Landmark Amount	David Mancini Unit Price	David Mancini Amount	Metro Equipment Unit Price	Metro Equipment Amount
Schedule A - General Requirements											
A-1.	Mobilization/Demobilization/General Conditions	1	LS		$46,330.00		$14,532.00		$65,000.00		$132,000.00
A-2.	Bonds and Insurance	1	LS		11,400.00		7,700.00		35,600.00		75,000.00
A-3.	Permit Fees	1	LS		4,000.00		978.00		2,400.00		5,000.00
A-4.	Maintenance of Traffic	1	LS		26,000.00		17,043.00		14,000.00		15,000.00
A-5.	Video Taping of Existing Conditions	1	LS		5,515.00		980.00		1,200.00		2,000.00
A-6.	Prepare & Furnish Record Drawings	1	LS		5,475.00		10,612.00		2,700.00		25,000.00
A-7.	Turbidity Control/Lake Protection (John Prince Park)	1	LS		14,550.00		9,895.00		7,000.00		5,000.00
A-8.	General Allowance	1	LS		40,000.00		40,000.00		40,000.00		40,000.00
	Total Schedule A				$153,270.00		$101,740.00		$167,900.00		$299,000.00
Schedule B - Site Work and Utilities											
B-1.	16" HDPE Pipe (Directional Drill)	625	LF	$313.00	$195,625.00	$161.33	$100,831.25	$170.00	$106,250.00	$200.00	$125,000.00
B-2.	16" PVC Pipe	2150	LF	63.50	136,525.00	106.98	230,007.00	105.00	225,750.00	124.00	266,600.00
B-3.	16" DI Pipe	160	LF	73.00	11,680.00	172.15	27,544.00	110.00	17,600.00	150.00	24,000.00
B-4.	16" Butterfly Valves	2	EA	3,890.00	7,780.00	4,671.50	9,343.00	3,500.00	7,000.00	6,000.00	12,000.00
B-5.	Air Release Valve & Manhole	6	EA	4,920.00	29,520.00	5,856.00	35,136.00	6,700.00	40,200.00	5,000.00	30,000.00
B-6.	Offset Air Release Valve & Manhole	3	EA	5,180.00	15,540.00	5,937.00	17,811.00	4,100.00	12,300.00	2,000.00	6,000.00
B-7.	Air Release Valve Service	1	EA	2,290.00	2,290.00	4,037.00	4,037.00	2,300.00	2,300.00	2,000.00	2,000.00
B-8.	Connect to Existing	2	EA	2,720.00	5,440.00	4,282.00	8,564.00	2,700.00	5,400.00	1,000.00	2,000.00
B-9.	Sample Points	4	EA	710.00	2,840.00	1,189.50	4,758.00	1,000.00	4,000.00	250.00	1,000.00
B-10.	Asphalt Pavement Replacement	1450	SY	33.00	47,850.00	40.25	58,362.50	37.00	53,650.00	30.00	43,500.00
B-11.	Asphalt Sidewalk Restoration	450	SY	27.00	12,150.00	30.28	13,626.00	33.00	14,850.00	15.00	6,750.00
B-12.	Mill and Overlay	1700	SY	13.00	22,100.00	22.47	38,199.00	15.00	25,500.00	15.00	25,500.00
B-13.	Type F Curb	560	LF	14.50	8,120.00	28.35	15,876.00	18.00	10,080.00	7.50	4,200.00
B-14.	Thermoplastic Pavement Marking and RPMs	1	LS		2,120.00		4,800.00		1,200.00		5,500.00
B-15.	Seeding and Sodding	1	LS		5,515.00		7,820.00		4,100.00		20,000.00
B-16.	Landscape Restoration	1	LS		8,485.00		4,370.25		3,800.00		5,000.00
B-17	Funish Utility Crew & Equipment for Add'l Work as Ordere	16	HR	211.00	3,376.00	497.50	7,960.00	460.00	7,360.00	500.00	8,000.00
B-18	Furnish Add'l Ductile Iron Fitting	1000	LBS	5.50	5,500.00	7.64	7,640.00	5.10	5,100.00	1.50	1,500.00
	Total Schedule B				$522,456.00		$596,685.00		$546,440.00		$588,550.00
	Total (A & B)				$675,726.00		$698,425.00		$714,340.00		$887,550.00

* Denotes error in multiplying

MOCK • ROOS
ENGINEERS • SURVEYORS • PLANNERS

February 19, 2014

Monica Morandi, P.E.
Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, FL 33461

Ref. No.: B2066.00
Subject: Lake Worth Raw Watermain for Potable Well No. 16

Dear Monica:

On February 6, 2014 bids were received for the construction work on this project. Bids ranged from $569,445 to $887,550. The low bid was from B&B Underground, Inc. in the amount of $569,445. This bid was below the Engineer's Opinion of Probable Construction Cost. This is the result of the current favorable bidding climate and we believe that this represents a good value for the City.

We have completed a number of past projects with B&B Underground, Inc. The Contractor has the capability to complete the current project based on this past performance. We have discussed the bid with the Contractor and the Contractor has indicated that his bid is complete and that he can complete the project for the bid amount. Based on the above discussions, we recommend award of the contract to B&B Underground, Inc.

Our recommendation of award is based on review of the project and the Contractor from an engineering perspective and based on past project performance. We recommend that you seek advice of legal counsel relative to other issues regarding legalities of award of this contract.

We recommend that you establish the following budgets for anticipated expenses under the construction phase of this contract. Our recommendation includes a materials testing allowance which will be needed for the compaction tests along the pipeline route.

Construction Contract	$569,445.00
Materials Testing Allowance	$5,000.00
Construction Phase Engineering Fees	$54,900.00
Total	$629,345.00

In addition to the bid tabulation, enclosed is a copy of B&B Underground, Inc.bid submittal.

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Mock, Roos & Associates, Inc.
5720 Corporate Way, West Palm Beach, Florida 33407-2066, (561) 683-3113, fax 478-7248

If you have any questions or comments regarding this recommendation or the project, please contact me at 683-3113 extension 258. I would be happy to meet with you to discuss this bid and project further.

Sincerely,

MOCK, ROOS & ASSOCIATES, INC.

John R. Leemon, P.E.
Senior Project Manager

JRL:cbm
Copies: Kari Hansen

Bid Tabulation: Raw Watermain For Potable Well No. 16
for City of Lake Worth

Bid Date : February 6, 2014

Item	Description	Quantity	Unit	B&B Underground Unit Price	B&B Underground Amount	Johnson Davis Unit Price	Johnson Davis Amount	Southern Undergd Unit Price	Southern Undergd Amount		D.S. Eakins Unit Price	D.S. Eakins Amount
Schedule A - General Requirements												
A-1.	Mobilization/Demobilization/General Conditions	1	LS		$20,000.00		$5,600.00		$22,500.00			$20,000.00
A-2.	Bonds and Insurance	1	LS		10,000.00		8,000.00		17,500.00			7,000.00
A-3.	Permit Fees	1	LS		200.00		2,000.00		10,000.00			7,000.00
A-4.	Maintenance of Traffic	1	LS		9,000.00		6,000.00		4,000.00			13,100.00
A-5.	Video Taping of Existing Conditions	1	LS		2,500.00		2,000.00		1,500.00			2,471.00
A-6.	Prepare & Furnish Record Drawings	1	LS		15,000.00		8,000.00		6,500.00			10,370.00
A-7.	Turbidity Control/Lake Protection (John Prince Park)	1	LS		7,500.00		4,000.00		8,000.00			3,000.00
A-8.	General Allowance	1	LS		40,000.00		40,000.00		40,000.00			40,000.00
	Total Schedule A				$104,200.00		$75,600.00		$110,000.00			$102,941.00
Schedule B - Site Work and Utilities												
B-1.	16" HDPE Pipe (Directional Drill)	625	LF	$127.00	$79,375.00	$140.00	$87,500.00	$158.00	$98,750.00		$176.36	$110,225.00
B-2.	16" PVC Pipe	2150	LF	75.00	161,250.00	95.00	204,250.00	67.50	145,125.00	*	77.30	166,195.00
B-3.	16" DI Pipe	160	LF	106.50	17,040.00	120.00	19,200.00	110.00	17,600.00		167.00	26,720.00
B-4.	16" Butterfly Valves	2	EA	3,850.00	7,700.00	4,000.00	8,000.00	3,850.00	7,700.00		4,379.00	8,758.00
B-5.	Air Release Valve & Manhole	6	EA	7,825.00	46,950.00	5,000.00	30,000.00	8,600.00	51,600.00		5,024.00	30,144.00
B-6.	Offset Air Release Valve & Manhole	3	EA	5,750.00	17,250.00	4,500.00	13,500.00	6,500.00	19,500.00		5,240.00	15,720.00
B-7.	Air Release Valve Service	1	EA	600.00	600.00	3,000.00	3,000.00	3,250.00	3,250.00		1,378.00	1,378.00
B-8.	Connect to Existing	2	EA	6,200.00	12,400.00	4,500.00	9,000.00	12,000.00	24,000.00		5,598.00	11,196.00
B-9.	Sample Points	4	EA	250.00	1,000.00	800.00	3,200.00	650.00	2,600.00		575.00	2,300.00
B-10.	Asphalt Pavement Replacement	1450	SY	35.00	50,750.00	30.00	43,500.00	28.00	40,600.00		46.00	66,700.00
B-11.	Asphalt Sidewalk Restoration	450	SY	35.00	15,750.00	40.00	18,000.00	26.00	11,700.00		39.50	17,775.00
B-12.	Mill and Overlay	1700	SY	15.00	25,500.00	16.00	27,200.00	12.75	21,675.00		14.50	24,650.00
B-13.	Type F Curb	560	LF	3.00	1,680.00	25.00	14,000.00	16.00	8,960.00		20.00	11,200.00
B-14.	Thermoplastic Pavement Marking and RPMs	1	LS		2,500.00		3,000.00		4,500.00			9,600.00
B-15.	Seeding and Sodding	1	LS		6,000.00		13,000.00		5,520.00			18,400.00
B-16.	Landscape Restoration	1	LS		1,500.00		3,000.00		3,500.00			2,000.00
B-17	Funish Utility Crew & Equipment for Add'l Work as Ordere	16	HR	500.00	8,000.00	475.00	7,600.00	650.00	10,400.00		315.00	5,040.00
B-18	Furnish Add'l Ductile Iron Fitting	1000	LBS	10.00	10,000.00	5.00	5,000.00	10.00	10,000.00		3.69	3,690.00
	Total Schedule B				$465,245.00		$511,950.00		$486,980.00			$531,691.00
	Total (A & B)				$569,445.00		$587,550.00		$596,980.00			$634,632.00

* Denotes error in multiplying

Bid Tabulation: Raw Watermain For Potable Well No. 16
for City of Lake Worth

Bid Date : February 6, 2014

Item	Description	Quantity	Unit	Westwind Contracting Unit Price	Westwind Contracting Amount	TB Landmark Unit Price	TB Landmark Amount	David Mancini Unit Price	David Mancini Amount	Metro Equipment Unit Price	Metro Equipment Amount
Schedule A - General Requirements											
A-1.	Mobilization/Demobilization/General Conditions	1	LS		$46,330.00		$14,532.00		$65,000.00		$132,000.00
A-2.	Bonds and Insurance	1	LS		11,400.00		7,700.00		35,600.00		75,000.00
A-3.	Permit Fees	1	LS		4,000.00		978.00		2,400.00		5,000.00
A-4.	Maintenance of Traffic	1	LS		26,000.00		17,043.00		14,000.00		15,000.00
A-5.	Video Taping of Existing Conditions	1	LS		5,515.00		980.00		1,200.00		2,000.00
A-6.	Prepare & Furnish Record Drawings	1	LS		5,475.00		10,612.00		2,700.00		25,000.00
A-7.	Turbidity Control/Lake Protection (John Prince Park)	1	LS		14,550.00		9,895.00		7,000.00		5,000.00
A-8.	General Allowance	1	LS		40,000.00		40,000.00		40,000.00		40,000.00
	Total Schedule A				$153,270.00		$101,740.00		$167,900.00		$299,000.00
Schedule B - Site Work and Utilities											
B-1.	16" HDPE Pipe (Directional Drill)	625	LF	$313.00	$195,625.00	$161.33	$100,831.25	$170.00	$106,250.00	$200.00	$125,000.00
B-2.	16" PVC Pipe	2150	LF	63.50	136,525.00	106.98	230,007.00	105.00	225,750.00	124.00	266,600.00
B-3.	16" DI Pipe	160	LF	73.00	11,680.00	172.15	27,544.00	110.00	17,600.00	150.00	24,000.00
B-4.	16" Butterfly Valves	2	EA	3,890.00	7,780.00	4,671.50	9,343.00	3,500.00	7,000.00	6,000.00	12,000.00
B-5.	Air Release Valve & Manhole	6	EA	4,920.00	29,520.00	5,856.00	35,136.00	6,700.00	40,200.00	5,000.00	30,000.00
B-6.	Offset Air Release Valve & Manhole	3	EA	5,180.00	15,540.00	5,937.00	17,811.00	4,100.00	12,300.00	2,000.00	6,000.00
B-7.	Air Release Valve Service	1	EA	2,290.00	2,290.00	4,037.00	4,037.00	2,300.00	2,300.00	2,000.00	2,000.00
B-8.	Connect to Existing	2	EA	2,720.00	5,440.00	4,282.00	8,564.00	2,700.00	5,400.00	1,000.00	2,000.00
B-9.	Sample Points	4	EA	710.00	2,840.00	1,189.50	4,758.00	1,000.00	4,000.00	250.00	1,000.00
B-10.	Asphalt Pavement Replacement	1450	SY	33.00	47,850.00	40.25	58,362.50	37.00	53,650.00	30.00	43,500.00
B-11.	Asphalt Sidewalk Restoration	450	SY	27.00	12,150.00	30.28	13,626.00	33.00	14,850.00	15.00	6,750.00
B-12.	Mill and Overlay	1700	SY	13.00	22,100.00	22.47	38,199.00	15.00	25,500.00	15.00	25,500.00
B-13.	Type F Curb	560	LF	14.50	8,120.00	28.35	15,876.00	18.00	10,080.00	7.50	4,200.00
B-14.	Thermoplastic Pavement Marking and RPMs	1	LS		2,120.00		4,800.00		1,200.00		5,500.00
B-15.	Seeding and Sodding	1	LS		5,515.00		7,820.00		4,100.00		20,000.00
B-16.	Landscape Restoration	1	LS		8,485.00		4,370.25		3,800.00		5,000.00
B-17	Funish Utility Crew & Equipment for Add'l Work as Ordere	16	HR	211.00	3,376.00	497.50	7,960.00	460.00	7,360.00	500.00	8,000.00
B-18	Furnish Add'l Ductile Iron Fitting	1000	LBS	5.50	5,500.00	7.64	7,640.00	5.10	5,100.00	1.50	1,500.00
	Total Schedule B				$522,456.00		$596,685.00		$546,440.00		$588,550.00
	Total (A & B)				$675,726.00		$698,425.00		$714,340.00		$887,550.00

* Denotes error in multiplying

CITY OF LAKE WORTH

7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

AGENDA DATE: April 15, 2014, Regular Meeting **DEPARTMENT:** City Manager

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EXECUTIVE BRIEF

TITLE:
Agreement with Alcalde & Fay, LTD for federal government relations and comprehensive grant services

SUMMARY:
The Agreement provides for professional services in the field of government relations and advocacy, including legislative procedure, regulatory processes, public policy, and appropriations and grant programs administered by the Federal government.

BACKGROUND AND JUSTIFICATION:
In order to maximize participation in Federal programs and funding opportunities the services of a well connected and established lobbying firm is required. Alcalde & Fay, LTD is a bipartisan firm that represents Palm Beach County, West Palm Beach and Riviera Beach as well as other local governments ranging in population size from 2,676 to 2.6 million. They have successfully assisted in obtaining essential support and direct Federal assistance for transportation, economic development, criminal justice and law enforcement programs/projects, health services, a range of education and community programs, and water/wastewater infrastructure project. It is the city's intent to become more effective in applying for and obtaining Federal money for projects and programs including road infrastructure and utilities. Compensation for services include a monthly retainer of $5,000 plus out-of-pocket expenses incurred in connection with their work for items such as copying, postage, telephone, delivery, and telecopy charges.

Staff recommends approval of this agreement as Administration moves forward to find funding sources for roadway, utilities, and Park of Commerce infrastructure improvements. If approved, a budget amendment would be required.

MOTION:
I move to approve/not approve an agreement with Alcalde & Fay, LTD for federal government relations and comprehensive grant services.

ATTACHMENT(S):
Fiscal Impact Analysis
Proposal
Agreement

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2014	2015	2016	2017	2018
Capital Expenditures	35,000	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
Net Fiscal Impact	35,000	0	0	0	0
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

B. Recommended Sources of Funds/Summary of Fiscal Impact:

Upon approval by City Commission, a budget amendment will be required and submitted on May 6, 2014, to add sufficient funds to the Contractual Services Account.

	Alcade & Fay, LTD					
Account Number (s)	**Account Description**	**FY 2014 Budget**	**Budget Amendment Pending**	**Available Balance Pending**	**Agenda Expenses**	**Remaining Balance**
001-XXXX-XXX-34-50	Contractual Services	-	35,000	35,000	(35,000)	-

C. Department Fiscal Review: __CJ__

ALCALDE & FAY

GOVERNMENT & PUBLIC AFFAIRS CONSULTANTS

Received

February 12, 2014

FEB 13 2014

Mr. Michael Bornstein
City Manager
7 North Dixie Highway
Lake Worth, Florida 33460

City of Lake Worth
Office of the City Manager

Dear Mr. Bornstein:

Alcalde & Fay is pleased to submit the following proposal for Federal Government Relations and Comprehensive Grant Services to the City of Lake Worth, Florida.

Founded in 1973, Alcalde & Fay is one of the largest and oldest government and public affairs firms in the Washington, DC metropolitan area. Recognized as a bipartisan firm, we have built a distinguished reputation for effective public policy representation on behalf of numerous local governments, ranging in size from Miami-Dade County (population of 2.6 million) to the City of Bunnell (population of 2,676), as well as many corporations, coalitions, and trade associations. Regardless of size, we work diligently on behalf of all of our clients to help secure Federal grants, appropriations, and beneficial legislation, as well as impact policy issues that are critical to them.

There has been no time more important than the present for local governments to have a voice in Washington so that they might maximize their participation in Federal programs and funding opportunities as Congress and the Administration seek ways to stimulate the economy. Our track record and history of successes on behalf of our clients speaks for itself. We have successfully assisted our clients in obtaining essential support and direct Federal assistance for transportation, economic development, criminal justice and law enforcement programs/projects, health services, a range of education and community programs, and water and wastewater infrastructure projects.

Through our long-term representation of several local governments and firm members' individual professional backgrounds, we have developed an expertise in Federal issues impacting municipal governments. We believe our knowledge, experience, approach, and strong working relationships with key Washington decision makers will enable Lake Worth to realize great success in Washington.

As a courtesy, we are enclosing our standard contract for your review. Please feel free to make any changes deemed necessary. We are honored to represent the City of Lake Worth and look forward to assisting the City in obtaining Federal funding and impacting policy in Washington.

Sincerely,

L.A. "Skip" Bafalis

ALCALDE & FAY

PROPOSAL TO PROVIDE FEDERAL GOVERNMENT RELATIONS AND COMPREHENSIVE GRANT SERVICES FOR THE CITY OF LAKE WORTH, FLORIDA

L.A. "SKIP" BAFALIS
ALCALDE & FAY GOVERNMENT AND PUBLIC RELATIONS
2111 WILSON BOULEVARD, 8TH FLOOR ~ ARLINGTON, VIRGINIA 22201
(703) 841-0626 ~ BAFALIS@ALCALDE-FAY.COM

ABOUT THE FIRM

FIRM HISTORY

Alcalde & Fay is a Federal government and public affairs firm located in Arlington, Virginia, a short distance from the nation's Capitol. The firm was founded in 1973 by Hector Alcalde, after serving as the chief of staff to a Florida congressman for more than 11 years.

For 40 years Alcalde & Fay has successfully managed issues and represented a broad range of clients before the United States Congress and the Executive branch. The firm has built a distinguished reputation for effective public policy representation on behalf of numerous public bodies and a variety of corporations including those in the transportation, maritime, environmental, energy and defense industries.

The firm counts 45 partners and professionals on its staff including a former Member of Congress, senior staff from Capitol Hill and the Executive Branch, and presidential appointees who reflect a rich diversity in both background and expertise. Other partners and associates have backgrounds in public relations, journalism, marketing and law. Drawing on the expertise of our staff, we are able to provide effective advocacy on behalf of clients with Congress, regulatory agencies, the White House and numerous Federal agencies.

Over the years, we have worked closely with many members of Congress, congressional staff and political appointees, several of whom are in positions of seniority and leadership. These relationships, combined with our understanding and experience in the public policy decision-making process in Washington, enable us to be effective advocates for our clients' goals.

LOCAL GOVERNMENT EXPERTISE

Alcalde & Fay was one of the first government affairs firms to specialize in Federal advocacy for public bodies across the country. Since our inception we have represented a broad spectrum cities, counties, seaports, airports, transportation authorities and public entities. Currently, our firm provides services to approximately 80 public body clients nationwide, including more than 40 Florida city, county, and local government districts.

On their behalf, we assist in navigating the legislative, appropriations, and authorizing processes on Capitol Hill and the competitive grant, regulatory and policy processes within Federal departments. Our range of expertise is broad and substantial: from transportation and infrastructure projects to those related to environment and water resources; law enforcement

and emergency services; community and economic development; health and social services; among others.

This breadth of expertise is a great benefit to our local government clients, particularly in developing creative solutions to the most complex problems.

BIPARTISAN CONGRESSIONAL RELATIONSHIPS

Recognized as a bipartisan firm, the partners and personnel of Alcalde & Fay are drawn from both political parties and have among them close working relations with key legislators and staff on both sides of the aisle.

Alcalde & Fay will make it a priority to maintain good working relationships with the entire Florida Congressional Delegation, including the City's members of Congress, which includes Representative Lois Frankel (D), and Senators Bill Nelson (D) and Marco Rubio (R), as they will provide a strong base of support for implementing your Federal Legislative Agenda.

In addition to a rapport with your Congressional Delegation, it is critical that your lobbyist has solid working relationships with key committee chairmen, ranking members, and senior staff. At Alcalde & Fay that *is* our strength. For four decades, we have worked with leadership and senior staff of many of the congressional committees that would be important to Lake Worth, including the House and Senate Appropriations Committees, House Transportation and Infrastructure Committee, and the Senate Committee on Environment and Public Works.

Each of these Committees play a critical role in legislation affecting Lake Worth and our professional work with Congressional Committee members and their staff will be beneficial in advocating on behalf of the City's priorities. Our long-standing relationships based on professionalism and mutual respect enable us to "stay ahead" of developments that might be a priority to our clients and allow us an opportunity to provide input while legislative initiatives are in their earliest evolutionary stages.

EXECUTIVE BRANCH RELATIONSHIPS

In addition to Capitol Hill, Alcalde & Fay's long-term relationships extend well into the ranks of political appointees and senior career staff in many of the Federal agencies.

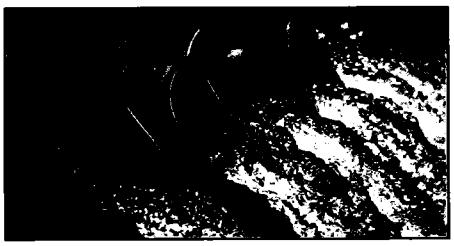
We have extensive contacts and significant experience working with several Federal departments that provide Federal assistance to cities, including the Departments of Commerce, Energy, Homeland Security, Housing and Urban Development, Interior, Justice,

Labor, and Transportation, and the Environmental Protection Agency and Army Corps of Engineers.

These relationships will prove to be a great asset to the City as these agencies administer several programs that provide for competitive grant funding that would benefit the City. We work closely with departmental officials to monitor trends and priorities amongst Federal programs, and will work to refine your grant proposals to ensure they reflect Administration funding objectives.

Additionally, we regularly facilitate meetings with senior program officers within the agencies, engaging in an extensive, coordinated program of visitations with key developmental offices. Visits of this nature provide high visibility for the City's projects at executive agencies and can be critical to a successful grant strategy. Likewise, these visits are an important component of an educational campaign that draws attention to the issues the City faces.

WATER AND WASTEWATER INFRASTRUCTURE



Alcalde & Fay has a long history of successfully representing the water and wastewater needs of cities, counties and public authorities around the country. We are completely familiar with the host of Federal departments and programs that support water and wastewater infrastructure. The more prominent programs include: (1) Environmental Protection Agency (EPA) State Revolving Fund; (2) U.S. Department of Agriculture (USDA) Rural Utilities Program; and (3) Economic Development Administration (EDA) Public Works programs.

In addition to water and wastewater infrastructure funding, Alcalde & Fay is available to support and enhance Lake Worth's policy goals at the EPA. We have excellent working relationships with key decision makers in the agency. As previously stated, Kevin Fay, firm President, is internationally recognized as a specialist on environmental and energy issues and has twice been recognized by the EPA for leadership in global environmental protection. He heads up the firms environmental policy efforts and spearheads both the Alliance for Responsible Atmospheric Policy and the International Climate Change Partnership.

We have worked diligently with both state and Federal offices for EPA, USDA, and EDA, and collaborated with our public body clients and members of Congress, to secure Federal water and wastewater funding for several clients. Below is a sample of several of our clients' funding successes.

- ✓ $600,000 for a stormwater management plan, City of Riviera Beach, Florida
- ✓ $500,000 for a water utility upgrade project, City of Homestead, Florida
- ✓ $485,000 for water and wastewater infrastructure improvements, Hillsborough County, Florida
- ✓ $200,000 for an alternative water project, Hillsborough County, Florida

ENERGY, ENVIRONMENT AND NATURAL RESOURCE ISSUES

Alcalde & Fay has a long history of leadership in environmental, energy and natural resource issues. As an example of our experience in this arena, we have been involved with Miami-Dade County's sustainability, climate change, water conservation, bay restoration, artificial reef program, and energy efficiency initiatives, to name several. We have worked closely with County staff to support these efforts at the Federal level, seeking congressional support and funding for these endeavors.

Moreover, we continue to monitor developments regarding pertinent legislation of interest to our public clientele, including any actions on the Clean Air Act, the Endangered Species Act, the Clean Water Act, energy and climate change legislation, and EPA rulemakings.

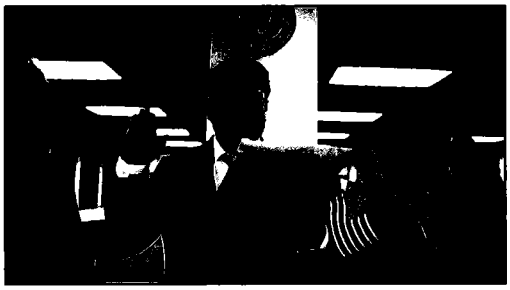
We have worked to identify funding for green initiatives through agency grants, as well as analyze and assess environmental and policy compliance, enabling our clients to stay out in front of environmental issues, be proactive, and identify funding for environmental mitigation earlier.

- ✓ Increased the federal cap on environmental restoration project from $5 million to $9.75 million, which subsequently led to the Corps reimbursing $1.6 million, Florida Inland Navigation District, Florida
- ✓ $3.5 million to treat invasive aquatic plants that are a nuisance to the County's water system, Osceola County, Florida
- ✓ Assisted in changing the Environmental Protection Agency's impaired water status relating to total maximum daily load (TMDL), Osceola County, Florida
- ✓ $3.9 million for specific environmental mitigation work which has already been accomplished at the County's expense, Miami-Dade County, Florida

IMMIGRATION AND WORKFORCE DEVELOPMENT

For public clients needing direction on immigration services issues, Alcalde & Fay has acted as a liaison with the U.S. Citizenship and Immigration Services (USCIS), which oversees lawful immigration to the United States. With the current administration's policy calling for an enhanced border control and an immigration system, we continue to assist local government clients with obtaining helpful information pertaining to the USCIS E-Verify program, the DHS United States Visitor and Immigrant Status Indicator Technology (US-VISIT) and the DOJ State Criminal Alien Assistance Programs (SCAAP).

Alcalde & Fay has worked extensively on behalf of our public clients to obtain funding for workforce and economic development projects, and have supported client efforts to receive HUD Section 108 loans for economic development, housing rehabilitation, public facilities, and large-scale development projects.

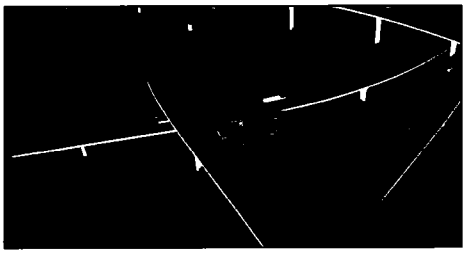


Also, we have supported maintaining Community Development Block Grants (CDBG) along with U.S. Department of Commerce, Economic Development Administration (EDA) grants for revitalization and reuse of idle and abandoned industrial land and facilities. A sample of

several of our clients' successes includes:

- ✓ Restored $19 million in targeted assistance funding for immigration support programs in welfare reform legislation, Miami-Dade County, Florida
- ✓ Stripped adverse provision which would have reduced assistance for legal aliens from immigration reform bill, Miami-Dade County, Florida
- ✓ $196,514 for Business Resource Center and Business Development Training, Lauderdale Lakes, Florida
- ✓ $975,000 to expand essential advanced manufacturing training to help address the growing critical skilled workforce shortage in Palm Beach County, Palm Beach State College, Florida

TRANSPORTATION



Alcalde & Fay has long been considered an expert in the highway/transportation field, and has established a solid track-record in assisting our clients in obtaining funding for major projects. We have excellent and long–term working relationships with the senior members and staff of the House Transportation and Infrastructure Committee and the Senate Environment and Public Works Committee, as well as strong contacts at various agencies within the Department of Transportation.

Below are examples of clients' projects that were funded in transportation appropriations and authorization legislation:

- ✓ $750,000 for the East-West Bus Connector, City of Homestead, Florida
- ✓ $750,000 for U.S. 441/SR7 Interchange at 11th Street, City of Lauderhill, Florida
- ✓ $500,000 for city traffic calming, City of Boca Raton, Florida
- ✓ $500,000 for US 27/SR 80, Hendry County, Florida

HEALTH AND COMMUNITY SERVICES

Alcalde & Fay has developed a unique expertise in assisting communities in their Health and Human Services efforts. In particular, our firm has tremendous experience in helping communities obtain essential funding for critical community services, including: health care, affordable housing, workforce training, homelessness prevention, and veterans' affairs.

A few examples of where our clients have been successful in expanding community programs with Federal funds include:

- ✓ $690,000 for facilities and equipment at the William F. "Bill" Dickinson Senior Center, City of Homestead, Florida
- ✓ $475,000 for Senior Center bus program, City of Pembroke Pines, Florida
- ✓ $240,000 for a Senior Citizens Center, City of Maitland, Florida
- ✓ $28,860 to implement a "fall prevention" education program for their elderly population, City of Deerfield Beach, Florida

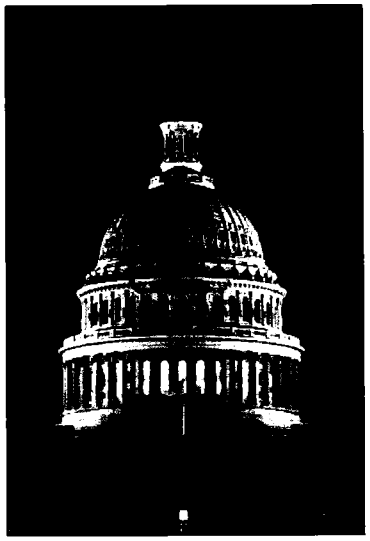
LAW ENFORCEMENT/PUBLIC SAFETY

Alcalde & Fay has a strong record of helping clients obtain Federal funding with regard to law enforcement, public safety, and homeland security. Public safety and law enforcement issues are bipartisan issues that have broad support, particularly in regards to funding for first-responders, communication interoperability, and crime prevention.

We continuously monitor and advocate that resources be directed toward crime-fighting technology, juvenile delinquency programs, emergency responders, and a wide array of other homeland security related enhancements for our public clients, as they are on the front lines of law enforcement and crime prevention. A sample of our clients' successes in obtaining support for crime prevention programs is included below:

- ✓ $499,500 to upgrade the police department's radio system Jupiter, Florida
- ✓ $158,000 for Emergency Operations Center, City of Maitland, Florida
- ✓ $140,778 for a Firefighters Assistance Grant, City of Oviedo, Florida
- ✓ $133,950 for a VHF radio system, City of Melbourne, Florida
- ✓ $100,000 for law enforcement initiatives, City of North Miami Beach, Florida

DEVELOPMENT OF FEDERAL AGENDA



Alcalde & Fay's efforts on behalf of each client are tailor-made to meet that client's needs. We pride ourselves in our commitment to service and attribute our high client retention rate to that service. The firm's approach with both new and current clients includes:

- Continuous communication with the client and key decision makers in Congress;
- Understanding the agendas of those from whom we are requesting assistance so we can fit our client's objectives into that agenda;
- In-depth knowledge of the programs and issues of importance to our clients;
- Access to decision-makers; and
- Creative and persistent pursuit of our client's goals.

Upon commencement of our contract, we would immediately begin working with City officials to establish a Federal legislative agenda based on your objectives. This agenda would result from discussions with you in which we would gather specific information about your projects. In consultation with City staff, we would then perform a candid appraisal of each specific objective and design and implement a strategy that raises the consciousness and awareness of issues relating to the City of Lake Worth with your Congressional Delegation and Executive branch agencies.

As a firm that has been representing public entities in Washington for 40 years, we are well equipped to assist the City of Lake Worth by:

- Identifying, pursuing and protecting essential Federal program funding critical to the City in annual appropriations legislation;

- Providing comprehensive grant services – including working with the City to submit successful Federal grant applications;

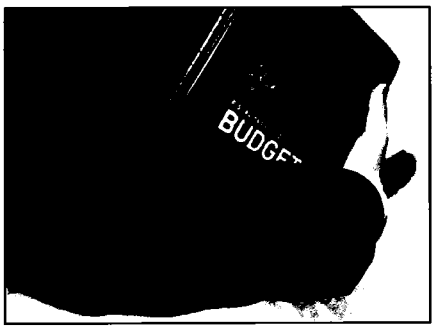
- Expanding the City of Lake Worth's role in Federal policy, working to develop new opportunities for economic development and grant programs;

- Working to support or oppose legislation, regulations and policy that would either benefit or harm the City of Lake Worth or its residents;

- Fostering and enhancing relationships with Members of Congress and Executive Agency officials; and

- Organizing Washington "Fly-In" to meet with Florida Congressional Delegation and Federal Agencies to advocate for Lake Worth's priorities.

CONGRESSIONAL BUDGET APPROPRIATIONS



Congress employs numerous ways to fund portions of projects so local governments can develop plans, implement change, and enhance their communities. A core part of our practice is assisting cities and counties secure funding through the appropriations and grant process.

Congress annually considers several appropriations measures that provide funding through grants for numerous activities, such as transportation, housing and community development, energy and environment, education, as well as homeland security and public safety. We are experts in helping our clients navigate this process and our efforts have aided our clients in achieving hundreds of millions of dollars of funding over our long history.

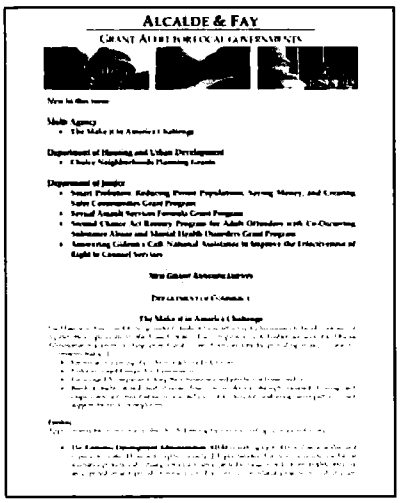
Alcalde & Fay is well equipped to do this for the City of Lake Worth and will work with your congressional delegation, key members of congress, as well as the House and Senate Appropriations Committees to create and/or preserve Federal programs that are important to the City. We also stand ready to draft and develop committee report language and bill language, which has enabled many of our clients to apply for Federal grants and low-interest loans that match an entity's needs.

IN-HOUSE FEDERAL GRANTS DEPARTMENT

Alcalde & Fay utilizes a multi-dimensional approach to assisting clients in the pursuit of grant funding. First and foremost, your Alcalde & Fay team will outline the standard funding opportunities that exist and are frequently used by other counties. If there are any projects that fit these or other common grant opportunities, your team will instruct you on what strings are attached in receiving the money, assist in drafting and submitting the necessary paperwork, and follow up with the respective Federal agency.

Secondly, Alcalde & Fay monitors grant opportunities on a daily basis and regularly sends out our *Grant Alert for Local Governments* identifying Federal grant opportunities. An example of our most recent Grant Alert is included in the Appendix.

The purpose of this alert is to continue the dialogue between our team and City staff in case you recognize a grant that would support a City project or program. As we identify pertinent grant solicitations, Alcalde & Fay's grant writing staff is available to offer a broad range of Federal grant services including:


ALCALDE & FAY

GRANT ALERT FOR LOCAL GOVERNMENTS

- ✓ Customized prospecting services,
- ✓ Grant writing and Application Development
- ✓ Peer Evaluation and Critique Services, as well as
- ✓ Work to develop congressional support for the projects and to coordinate the inclusion of Congressional letters of support in the application package.

We closely monitor trends and priorities among Federal programs, and we will work to refine your grant proposals and ensure they reflect Administration funding objectives.

In addition, we will coordinate any meetings required with program officers at Federal agencies. Engaging in an extensive, coordinated program of visitations with key developmental offices can be critical to a successful grant strategy. Visits of this nature provide high visibility for the City of Lake Worth and its projects at executive agencies, and can be an important component of an educational campaign that details the issues the City faces.

Recent Grant Successes

Alcalde & Fay most recently assisted a number of its local government clients with their successful grant submissions. Examples of funding awarded include:

EDA

City of Melbourne- Melbourne International Airport, Florida
$1.5 million under the Economic Development Administration for construction of an airport apron to attract new airlines to the Airport

FEMA

City of Miramar, Florida
$1,985,160 under the FEMA SAFER Program to hire 12 new firefighters to staff a new engine company in the City

COPS

City of Sanford, Florida
$1,133,670 in competitive gran funding under the COPS Hiring Grant Program to hire an additional 6 sworn police officers

USDA

City of Bunnell, Florida
$1.3 million under the USDA Rural Development Program for city water plant improvements and upgrades.

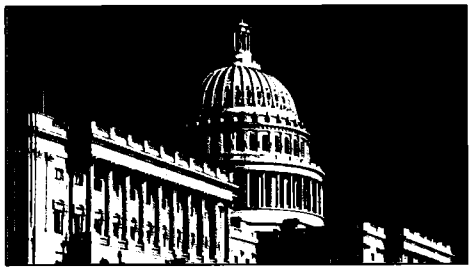
Hillsborough County, Florida
$602,354 grant under the Transportation, Community Preservation program for infrastructure improvements.

FEMA

Flagler County, Florida
$486,288 for the County's efforts to replace 15 cardiac monitor/defibrillators which have become outdated and obsolete

ORGANIZING WASHINGTON "FLY-IN"

Alcalde & Fay regularly arranges Washington, D.C. visits for our clients and will arrange meetings with: the Florida Congressional Delegation and pertinent committees; professional staff and/grant program managers at Federal Agencies to advocate on behalf of the City of Lake Worth's agenda.



The firm is accustomed to handling all the arrangements of our clients' visits, including scheduling and oftentimes transportation between meetings. Prior to any visit by Lake Worth City officials, we would prepare necessary documents that articulate your objectives and provide thorough briefings on current and emerging policy issues and priorities and objectives for each meeting and the overall trip.

To facilitate our clients' travel to Washington, Alcalde & Fay maintains fully functional guest offices at our headquarters in Arlington, Virginia for the use of visiting Lake Worth officials. The Lake Worth client team will also be available to any visiting City representatives to address their legal and legislative research, and administrative requirements while in Washington. Following the completion of the trip, we will also prepare and submit follow up memoranda for any action items agreed to as part of their respective meetings.

CLIENT TEAM

As with any good organization, our greatest strength and your best assurance of our successful service on behalf of Lake Worth resides in the team that we would assemble to represent your interests in Washington. Although different members of the client team may take the lead on various projects, each of the team members would be knowledgeable about Lake Worth's objectives. The client team leader would be the City's main point of contact.

The proposed client team for Lake Worth is **L.A. 'Skip' Bafalis, Jim Davenport, Joshua Gaboton, Trace Roller, and Bill Smith**. Each of these individuals has substantial experience in representing public bodies in Washington and brings a wealth of knowledge of municipal government issues to the Lake Worth Client Team.

L.A. 'SKIP' BAFALIS

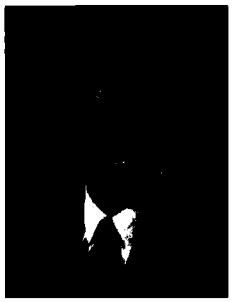
A former five-term Congressman from Florida, L.A. "Skip" Bafalis, Partner, has a background that includes business and government representation. He began his political career in Palm Beach County with election to the Florida House of Representatives and then served in the Florida Senate for two terms. He then served ten years in the U.S. Congress and subsequently was the Republican nominee for Governor of Florida in 1982.

In Congress, Mr. Bafalis served on the Public Works Committee, now the Committee on Transportation and Infrastructure. He then moved to the Ways and Means Committee. An active member of the Trade Subcommittee and the Ranking Member of the Public Assistance and Unemployment Compensation Subcommittee, he became known for his expertise in trade and tax matters and authored and managed passage of wide-ranging estate and gift tax legislation.

Mr. Bafalis has been lobbying in Washington for more than 25 years, and has extensive experience working on behalf of public clients. He maintains close working relationships with members of the House and Senate, many of whom are former colleagues.

He holds a B.A. degree from St. Anselm's College in Manchester, New Hampshire. His alma mater has honored him with its "Alumni Award of Merit" for his contributions to the school and to the nation.

JIM DAVENPORT, ESQ.



Jim Davenport, Partner, joined the firm in 1999. He manages many of the firm's public clients on a wide array of issues including economic development, transportation, education, environmental issues, and criminal justice. In this role, he works closely with numerous members of Congress and their staff, the Corps of Engineers, the Department of Justice, the Department of Housing and Urban Development, the Department of Transportation, and many other Federal agencies.

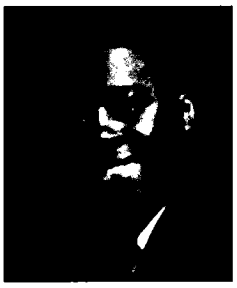
Mr. Davenport has been effective in helping public clients secure millions of dollars in Federal funding for projects ranging from bridges, roads, beaches and waterways to school programs, health initiatives, water and sewer systems and technology for law enforcement personnel. He is an experienced tactician in navigating the congressional legislative process and the Federal agencies to obtain funding and legislative language on behalf of his public body clients.

In addition to his work in helping secure Federal funding for his clients, Mr. Davenport consults and advises clients on the Federal budget and congressional appropriations process, agency rulemakings, legislation, and Administration policy. He has positioned his public clients to benefit from Federal laws and policy affecting municipalities and local government districts.

Mr. Davenport has been active in government and public affairs for eighteen years. Prior to joining Alcalde & Fay, he served as Legislative Assistant in the office of the late Congressman Gerald B. Solomon of New York where he worked on a broad range of issues including economic development and health care. He also served as an associate for Wehner & York, LLP, handling election law.

Mr. Davenport holds a B.A. degree from St. Lawrence University in New York. He obtained a J.D. degree from The Catholic University of America in Washington, DC.

JOSHUA J. GABOTON



Josh Gaboton, Partner, spent more than eight years on Capitol Hill under the leadership of then-Chairman of the House Committee on Transportation and Infrastructure, John Mica (R-FL). Mr. Gaboton served as Legislative Director and Senior Legislative Assistant for Chairman Mica; and advised the Chairman on issues involving Appropriations, Transportation, Housing, Homeland Security, Telecommunications and Army Corps of Engineers.

Prior to joining Alcalde & Fay, Mr. Gaboton, served as a Principal for a Government and Public Affairs Firm in Washington, DC, where he accrued an impressive record of securing Federal funds and legislative victories for municipalities and private sector entities nationwide.

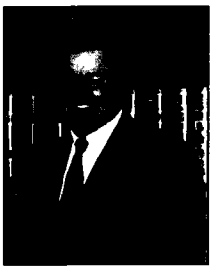
Mr. Gaboton has in-depth knowledge in the areas of Transportation, Appropriations, Housing, Homeland Security, and Army Corps of Engineers. He worked extensively with the House Transportation and Infrastructure Committee and the Senate Commerce, Science, and Transportation Committee. As a result, he has developed excellent working relationships with the Chairman and Ranking Members of these important Committees, as well as other Members of Congress and staff on key House and Senate Committees. These ongoing working relationships have been a significant advantage to firm clients interested in the development of transportation policy and funding initiatives at the Federal, State, and local level.

In addition, Mr. Gaboton has experience working with the Department of Housing and Urban Development (HUD) and its Public and Affordable Housing Programs on behalf of numerous public and private sector clients. On behalf of firm clients, Mr. Gaboton has worked with HUD on a broad range of policy and affordable housing initiatives, and has particular expertise in working with the Office of Public and Indian Housing.

Other Administrative agency experience includes work with the Department of Homeland Security, Department of Defense, Department of Commerce, United States Fish and Wildlife, Army Corps of Engineers, and the Environmental Protection Agency.

Mr. Gaboton holds a B.A. degree in History and Political Science from the University of Central Florida.

BILL SMITH, JR.



Bill T. Smith, Jr., Florida Affiliate of Alcalde & Fay, is former Mayor and Councilman for the City of Boca Raton, Florida has a distinguished career in south Florida serving the community in various official capacities since 1987.

Following his elected service, Mr. Smith was appointed by then-Governor Jeb Bush as Commissioner of the Florida Commission for the Transportation Disadvantaged, and later as Commissioner of the South Florida Regional Transportation Authority.

A 62 year resident of South Florida, Mr. Smith has a vast knowledge of the critical issues facing the region. Mr. Smith has been practicing law for over 35 year, and is a Member of Board of Directors of several local non-profit and family foundations. He graduated with a Bachelor of Arts in Finance from the University of South Florida in 1973. Mr. Smith earned his Juris Doctorate from Sheppard Broad School of Law, Nova University in 1978.

TRACE ROLLER

Trace Roller, Associate, works on behalf of several Alcalde & Fay municipal clients on a broad range of issues, including workforce and economic development and public safety.

Prior to joining the firm, Mr. Roller served on the legislative staff at the Texas Department of Agriculture, and later as Legislative Assistant in the Texas House of Representatives. Mr. Roller began his public affairs career serving on staff with Senior Rules Committee member Congressman Pete Sessions of Texas.

Active in government and public affairs for more than a decade, Mr. Roller has extensive experience advocating on behalf of varied clientele of public and private entities at both the Federal and State government level. At Alcalde & Fay, Mr. Roller assists several public clients with shepherding their appropriations and authorizing requests through the legislative process, as well as serves on the Firm's Grant Writing Team, specializing in economic development and infrastructure grants.

A native of Texas, Mr. Roller holds a Master's Degree in Political Management from the George Washington University, and a B.S. Degree from Texas A&M University.

COST PROPOSAL

Currently, all Alcalde & Fay clients are billed based upon a monthly retainer. Along with our clients, we believe that a fixed monthly retainer provides them with their most cost-effective approach, allowing the client to operate with a firm fixed budget, and us to perform all the work required to be successful on a client's behalf without concern of whether each hour might ultimately contribute to that success.

For the services described in our proposal, Alcalde & Fay proposes a monthly retainer of $5,000. This monthly retainer fee is exclusive of all out-of-pocket expenses for local services such as telephone tolls, copying, messenger service, parking, transportation, and postage. Any expenses for travel outside of the Washington metropolitan area would be additional and undertaken only at the Lake Worth's request and direction. Reimbursement is based on actual expenses with no administrative overhead applied.

In addition, other partners and associates of Alcalde & Fay may be utilized on an as-needed basis, to complement the efforts of the Lake Worth Client Team when such efforts would benefit the client. There will be no additional charge for such work.

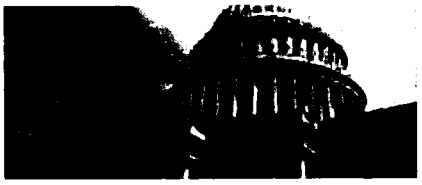
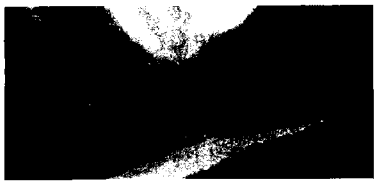
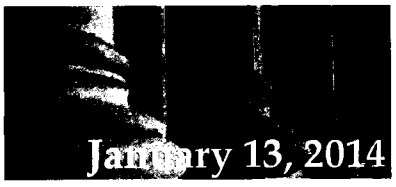
Furthermore, it should be noted that all Alcalde & Fay contracts include a 30-day cancellation clause allowing any client to terminate their service agreement if unhappy with the performance of service.

APPENDIX

- *Alcalde & Fay Grant Alert for Local Governments*

ALCALDE & FAY

GRANT ALERT FOR LOCAL GOVERNMENTS

New in this issue:

Department of Commerce

- **EDA Public Works and Economic Adjustment Assistance Programs**
- **NOAA Broad Agency Announcement**

Department of Health and Human Services

- **Nursing Workforce Diversity Program**
- **Health Resources & Services Administration Advanced Education Nursing Traineeship (AENT) Program**

Department of Justice

- **Demonstration Projects to Establish "Zero Tolerance" Cultures for Sexual Assault in Correctional Facilities**
- **Enhanced Training and Services to End Violence Against and Abuse of Women Later in Life Program**
- **Grants to Encourage Arrest Policies and Enforcement of Protection Orders Program**
- **Grants to Enhance Culturally Specific Services for Victims of Sexual Assault, Domestic Violence, Dating Violence and Stalking Program**
- **Justice for Families Grant Program**
- **Legal Assistance for Victims Grant Program**
- **Rural Sexual Assault, Domestic Violence, Dating Violence and**
- **Stalking Assistance Grant Program**
- **Sexual Assault Services Culturally Specific Grant Program**
- **Training Assistance Grant Program**
- **Training and Services to End Violence Against Women with Disabilities Grant Program**

Department of Labor

- **Employment and Training Administration Youth CareerConnect Grant Program**

NEW GRANT ANNOUNCEMENTS

DEPARTMENT OF COMMERCE

EDA Public Works and Economic Adjustment Assistance Programs

The Economic Development Administration 's (EDA) Public Works and Economic Adjustment Assistance Programs provides funding for construction, non-construction, and revolving loan fund investments that will leverage regional assets to support the implementation of regional economic development strategies designed to create jobs, leverage private capital, and encourage economic development. EDA solicits applications from rural and urban communities to develop initiatives that advance new ideas and creative approaches to address rapidly evolving economic conditions.

Eligible Applicants
State and local governments; higher education institutions; and nonprofit organizations.

Funding
TBD - The average size of a Public Works investment is approximately $1.7 million, though awards range from $500,000 to $2,000,000.

Application Deadline
EDA will accept and review applications in funding cycles. The next funding cycle deadlines are:

- March 14, 2014 for funding cycle 3 of FY 2014;
- June 13, 2014 for funding cycle 4 of FY 2014 ; and
- October 17, 2015 for funding cycle 1 of FY 2014.

Program and application information can be found here.
For more information on these programs, please contact the appropriate regional office contact or Economic Development Representative at the following ***here.***

NOAA Broad Agency Announcement

The purpose of this notice is to request applications for special projects and programs associated with NOAA's strategic plan and mission goals, as well as to provide the general public with information and guidelines on how NOAA will select proposals and administer discretionary Federal assistance under this Broad Agency Announcement (BAA). This BAA is a mechanism to encourage research, education and outreach, innovative projects, or sponsorships that are not addressed through our competitive discretionary programs.

Eligible Applicants
State and local governments; higher education institutions; and nonprofit and commercial organizations.

Funding
TBD - contingent upon the availability of Fiscal Year 2014 and Fiscal Year 2015 appropriations

Application Deadline
September 30, 2014

Program and application information can be found here.
For more information on this solicitation please contact Michele Pollard by telephone at (301) 628-1334, or via email, Michele.Pollard@noaa.gov.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Nursing Workforce Diversity (NWD) Program

The Nursing Workforce Diversity (NWD) Grant Program provides funding for projects that increase nursing education opportunities for individuals who are from disadvantaged backgrounds by providing (1) student scholarships or stipends for diploma or associate degree nurses to enter a bridge or degree completion program, and (2) student scholarships or stipends for accelerated nursing degree programs, pre-entry preparation, advanced education preparation, and retention activities.

Eligible Applicants
State and local governments; private or public entities determined appropriate by the Secretary, including eligible faith-based and community-based entities; and accredited schools of nursing, nursing centers, and academic health centers.

Funding
$4 million is available for approximately 12 awards.

Application Deadline
January 24, 2014

Application and program information may be found here.
For further information, please contact Kristen Hansen, RN, MSHA, NE-BC, by telephone at (301) 443-2796 or via email, khansen@hrsa.gov.

Health Resources & Services Administration Advanced Education Nursing Traineeship (AENT) Program

The purpose of the AENT program funding opportunity announcement for FY 2014 is to increase the number of primary care providers by providing traineeships to nurses who are pursuing advanced degrees as primary care nurse practitioners (NP) or nurse-midwives.

Eligible Applicants
State, county, city, township, or special district governments; public and state controlled institutions of higher education; and private institutions of higher education.

Funding
$22 million is available for approximately 65 awards.

Application Deadline
March 18, 2014

Application and program information may be found here.
For further information, please contact Janice Young, PhD, MPH, RHN, by telephone at (301) 443-6739, or via email, jyoung@hrsa.gov.

DEPARTMENT OF JUSTICE

Demonstration Projects to Establish "Zero Tolerance" Cultures for Sexual Assault in Correctional Facilities

The goal of this program is to assist facilities in implementing prevention, identification, and response mechanisms that will reduce the incidence of sexual abuse in confinement facilities. This program will provide federal assistance to implement comprehensive demonstration projects in local adult and juvenile correctional facilities to meet the PREA requirements of the standards.

Funding under the program may be used for the following purposes:

- Increase awareness of the problem of sexual assault in adult prisons and jails; juvenile facilities; community corrections facilities; law enforcement lockups and other temporary holding facilities; and tribal detention facilities. Use local data to identify causes and contributing factors leading to sexual victimization;
- Track performance indicators to ensure the effective application of policy and implementation of program strategies which achieve compliance with the PREA standards and create a "zero tolerance" within confinement environments; and
- Provide resources to develop comprehensive programs, strategies, and policies that will enhance state, local, or tribal government's abilities to achieve compliance with the PREA standards and eliminate sexual abuse.

Eligible Applicants
State and local governments.

Funding
Funding is expected to be made available for multiple grants up to $250,000 per award.

Application Deadline
February 19, 2014

Program and Application information can be found here.
For further program information, please contact the BJA Justice Information Center by telephone at (877) 927–5657 or via email, JIC@telesishq.com.

Enhanced Training and Services to End Violence Against and Abuse of Women Later in Life Program

The Enhanced Training and Services to End Violence Against and Abuse of Women Later in Life Program provides or enhances training and services to address elder abuse, neglect, and exploitation, including sexual assault, domestic violence, dating violence, or stalking, involving victims who are 50 years of age or older.

Funding under this year's program may be used for the following purposes:

- Providing training programs to assist in recognizing and addressing instances of elder abuse;
- Providing or enhancing services for victims of abuse in later life, including domestic violence, dating violence, sexual assault, stalking, exploitation, and neglect;
- Establishing or supporting multidisciplinary collaborative community responses; and
- Conducting cross-training to better serve victims of abuse in later life, including domestic violence, dating violence, sexual assault, stalking, exploitation, and neglect.

Eligible Applicants
State and local governments, and nonprofits.

Funding
Approximately $3 million has been available for up to 8 awards of up to $400,000 per grant.

Application Deadline
February 5, 2014

Program and Application information can be found here.
For further program information, please contact Janice Green by telephone at (202) 616-6728, or via email. Janice.A.Green@usdoj.gov.

Grants to Encourage Arrest Policies and Enforcement of Protection Orders Program

The Grants to Encourage Arrest Policies and Enforcement of Protection Orders Program provides funding to encourage state and local governments/courts to treat sexual assault, domestic violence, dating violence, and stalking as serious violations of criminal law requiring the coordinated involvement of the entire criminal justice system and community-based victim service organizations. See ***"Program Scope"*** in solicitation for specific information on eligible activities funded under this year's program.

Eligible Applicants
State and local governments

Funding
Approximately $5 million has been made available for up to 71 awards up to $900,000 per award.

Application Deadline
February 19, 2014

Program and Application information can be found here.
For further program information, please contact Sue Pugliese by telephone at (202) 305-1660, or via email, Suzanne.Pugliese@usdoj.gov.

Grants to Enhance Culturally Specific Services for Victims of Sexual Assault, Domestic Violence, Dating Violence and Stalking Program

The Grants to Enhance Culturally Specific Services for Victims of Sexual Assault, Domestic Violence, Dating Violence and Stalking Program supports community-based non-profit organizations in providing culturally relevant services to victims of sexual assault, domestic violence, dating violence, and stalking.

Funding under this year's program may be used for the following purposes:

- Increasing communities' capacity to provide culturally specific resources and support;
- Enhancing traditional services to victims;
- Working in cooperation with the community to develop education and prevention strategies highlighting culturally specific issues and resources;
- Providing culturally specific resources and services to victims, including children;
- Working with State and local governments and social service agencies to develop and enhance effective strategies;
- Strengthening criminal justice interventions, by providing training for specific responses to sexual assault, domestic violence, dating violence, and stalking; and
- Examining the dynamics of culture and its impact on victimization and healing.

Eligible Applicants
Nonprofit organizations.

Funding
Funding is expected to be made available for up to 20 awards of up to $300,000 per grant.

Application Deadline
February 5, 2014

Program and Application information can be found here.
For further program information, please contact Kimberly Cortez by telephone at (202) 353-3923, or via email, Kimberly.A.Cortez@usdoj.gov.

Justice for Families Grant Program

The Justice for Families program provides funding to improve the response of all aspects of the civil and criminal justice system to families with a history of domestic violence, dating violence, sexual assault, and stalking, or in cases involving allegations of child sexual abuse. The program includes purpose areas previously authorized under the Safe Havens: Supervised Visitation and Safe Exchange Grant Program (Supervised Visitation) and the Court Training and Improvements Program (Courts), along with new purpose areas and applicant requirements. See *"Program Scope"* in solicitation for specific information on eligible activities funded under this year's program.

Eligible Applicants
State and local governments and nonprofit organizations

Funding
Approximately $15.5 million has been made available for up to 50 awards ranging from $50,000-$400,000 per grant.

Application Deadline
January 23, 2014

Program and Application information can be found here.
For further program information, please contact Ginger Baran by telephone at (202) 305-2093, or via email, virginia.baran@usdoj.gov.

Legal Assistance for Victims Grant Program

The Legal Assistance for Victims (LAV) Grant Program provides funding to develop innovative, collaborative projects that provide quality representation to victims of sexual assault, domestic violence, dating violence, and stalking. Funding under the program may be used to provide direct legal services to victims of sexual assault, domestic violence, dating violence, and stalking in matters relating to or arising out of that abuse or violence. Grant funds may not be used to provide criminal defense services.

Eligible Applicants
The LAV Grant Program makes awards to law school clinics, domestic violence victims' programs and shelters, bar associations, rape crisis centers and other sexual assault services programs, private nonprofit entities, Indian tribal governments and tribal organizations, territorial organizations, and legal aid or statewide legal services.

Funding
Approximately $38 million has been available for up to 75 awards of up to $500,000 per grant.

Application Deadline
January 30, 2014

Program and Application information can be found here.
For further program information, please contact Regina Madison by telephone at (202) 514-9568, or via email, regina.madison@usdoj.gov.

Rural Sexual Assault, Domestic Violence, Dating Violence and Stalking Assistance Grant Program

The primary purpose of the Rural Program is to enhance the safety of rural victims of sexual assault, domestic violence, dating violence and stalking and support projects uniquely designed to address and prevent these crimes in rural areas. The Rural Program welcomes applications that propose innovative solutions to achieving this goal and encourages collaboration among criminal justice agencies, victim services providers, social services agencies, health professionals, and other community organizations to overcome the problem of sexual assault, domestic violence, dating violence, and stalking and ensure that victim safety is paramount while providing services to victims.

Funding under this year's program may be used for the following purposes:

- To identify, assess, and appropriately respond to child, youth, and adult victims of sexual assault, domestic violence, dating violence, and stalking in rural areas or rural communities;
- To establish and expand nonprofit, nongovernmental, state, tribal, territorial, and local government victim services in rural areas or rural communities to child, youth, and adult victims; and/or
- To increase the safety and well-being of women and children in rural areas or rural communities by creating and implementing strategies to increase awareness and prevent sexual assault, domestic violence, dating violence and/or stalking.

Eligible Applicants
State and local governments; nonprofits; and higher education institutions.

Funding
TBD - Funding is expected to be made available for up to 40 awards.

Application Deadline
January 23, 2014

Program and Application information can be found here.
For further program information, please contact Kara Moller, Grant Program Specialist, by telephone at (202) 616-3464 or via email, kara.moller@usdoj.gov.

Sexual Assault Services Culturally Specific Grant Program

The Sexual Assault Services Culturally Specific Grant Program provides funding to create, maintain, and expand sustainable sexual assault services provided by culturally specific organizations, which are uniquely situated to respond to the needs of sexual assault victims within culturally specific populations.

Funding under this year's program may be used for the following purposes:

- To establish, maintain, and expand culturally specific intervention and related assistance for victims of sexual assault;
- Crisis intervention, short-term individual and group support, information, and referral services;
- Accompaniment and advocacy services;
- Culturally specific approaches to healing;
- Comprehensive service coordination and supervision;
- Outreach activities to culturally specific communities; and
- Development and distribution of informational materials on issues related to sexual assault services provided by the agency.

Eligible Applicants
Nonprofit organizations for which the primary purpose of the organization as a whole is to provide culturally specific services to American Indians, Asian Americans, Native Hawaiians and other Pacific Islanders, Blacks, or Hispanics.

Funding
Approximately $2.3 million has been available for up to eight awards of up to $325,000 per grant.

Application Deadline
January 29, 2014

Program and Application information can be found here.
For further program information, please contact Melissa Schmisek by telephone at (202) 305-1271, or via email, Melissa.Schmisek@usdoj.gov.

Training Assistance Grant Program

The primary purpose of the Technical Assistance Program is to provide direct technical assistance to existing and potential grantees and sub grantees to enhance and support their efforts to successfully implement projects supported by the Office of Violence Against Women (OVW) grant funds. In addition, OVW is focused on building the capacity of criminal justice and victim services organizations to respond effectively to sexual assault, domestic violence, dating violence and stalking and fostering partnerships among organizations that have not traditionally worked together to address violence against women. See ***"Project Scope - Competitive Targeted Technical Assistance Project Purpose Areas"*** in solicitation for specific information on eligible activities funded under this year's program.

Eligible Applicants
Nonprofit organizations and higher education institutions

Funding
Approximately $31 million has been made available for up to 70 awards up to $600,000 per award.

Application Deadline
March 6, 2014

Program and Application information can be found here.
For further program information, please contact Tosha Preston by telephone at (202) 353-7446, or via email, tosha.preston@usdoj.gov.

Training and Services to End Violence Against Women with Disabilities Grant Program

The Disability Grant Program funds will be used to establish and strengthen multidisciplinary collaborative relationships; increase organizational capacity to provide accessible, safe, and effective services to individuals with disabilities and Deaf individuals who are victims of violence and abuse; and identify needs within the grantee's organization and/or service area, and develop a plan to address those identified needs that builds a strong foundation for future work.

Funding under this year's program may be used for the following purposes:

- To provide personnel, training, technical assistance, advocacy, intervention, risk reduction and prevention;
- To conduct outreach activities to ensure that individuals with disabilities who are victims receive appropriate assistance;
- To conduct cross-training about risk reduction, intervention, prevention and the nature of sexual assault, domestic violence, dating violence, and stalking for individuals with disabilities;

- To provide technical assistance to assist with modifications to existing policies, protocols, and procedures to ensure equal access to the services, programs, and activities of victim service providers;
- To provide training and technical assistance on the requirements of shelters and victim service providers;
- To modify facilities, purchase equipment, and provide personnel so that shelters and victim service organizations can accommodate the needs of individuals with disabilities;
- To provide advocacy and victim intervention services; or
- To develop model programs providing advocacy and intervention services within organizations serving individuals with disabilities.

Eligible Applicants
State and local governments; nonprofits; and higher education institutions.

Funding
TBD - Funding is expected to be made available for up to ten awards ranging from $350,000-$550,000 per grant.

Application Deadline
February 5, 2014

Program and Application information can be found here.
For further program information, please contact Amy Loder by telephone at (202) 305-2971, or via email, Amy.Loder@usdoj.gov.

DEPARTMENT OF LABOR

Employment and Training Administration Youth CareerConnect Grant Program

The Youth CareerConnect is designed to provide high school students with education and training that combines rigorous academic and technical curricula focused on specific in-demand occupations and industries for which employers are using H-1B visas to hire foreign workers.

The ultimate goal for the program is to ensure that participants: (1) gain academic and occupational skills by completing the program and graduating from high school; (2) move into a positive placement following high school that includes unsubsidized employment, post-secondary education, long-term occupational skills training, or Registered Apprenticeship; (3) obtain an industry-recognized credential in an H-1B industry or occupation for those industries where credential attainment is feasible by program completion, in addition to a high school diploma; and (4) earn post-secondary credit towards a degree or credit-bearing certificate issued by an institution of higher education.

Eligible Applicants
Nonprofits – See "III. Eligibility Information" section of solicitation for clarification

Funding
Approximately $100 million has been available for awards ranging from $2 million to $7 million per grant.

Application Deadline
January 27, 2014

Program and Application information can be found here.
For further program information, please contact Ariam Ferro by telephone at (202) 693-3968, or via email, Ferro.Ariam@dol.gov.

PREVIOUS GRANT ANNOUNCEMENTS

DEPARTMENT OF AGRICULTURE

Technical Assistance and Training (TAT) Grant Program

The Technical Assistance and Training (TAT) Grant Program provides funding to non-profit organizations for technical assistance and/or training to associations on a wide range of issues relating to delivery of water and waste disposal service. These associations are located in rural areas or cities and towns with a population of 10,000 or less. Qualified private non-profit organizations will receive TAT grant funds to identify and evaluate solutions to water and waste disposal problems in rural areas, assist applicants in preparing applications for water and waste grants made at the State level offices, and improve operation and maintenance of existing water and waste disposal facilities in rural areas.

Eligible Applicants
Nonprofits – See "Additional Information on Eligibility" section of solicitation for clarification

Funding
Approximately $17 million has been available for up to 17 awards.

Application Deadline
January 31, 2014

Program and Application information can be found here.
For further program information, please contact Anita O'Brien by telephone at (202) 690-3789, or via email, Anita.Obrien@wdc.usda.gov.

Solid Waste Management Grant Program

The Solid Waste Management (SWM) Grant Program provides communities funding to: evaluate current landfill conditions to determine threats to water resources; provide technical assistance and/or training to enhance operator skills in the operation and maintenance of active landfills; provide technical assistance and/or training to help communities reduce the solid waste stream; and provide technical assistance and/or training for operators of landfills which are closed or will be closed in the near future with the development and implementation of closure plans, future land use plans, safety and maintenance planning, and closure scheduling within permit requirements.

Eligible Applicants
State and local governments and nonprofits.

Funding
Approximately $3.4 million has been available for up to 34 awards.

Application Deadline
January 31, 2014

Program and Application information can be found here.
For further program information, please contact LaVonda Pernell, Community Program Specialist, by telephone at (202) 720-9635, or via email, lavonda.pernell@wdc.usda.gov.

Fiscal Year (FY) 2013 Community Forest and Open Space Program

The Community Forest Program (CFP) protects forests that are important for people and the places they call home. Community forests provide many benefits such as places to recreate and enjoy nature; they protect habitat, water quality and other environmental benefits, and they can provide economic benefits through timber resources.

Eligible Applicants
Municipal, county, or other local governments with jurisdiction over local land use decisions.

Funding
TBD – award ceiling is $4 million

Application Deadline
Jan 15, 2014 - Applications must be submitted to the State Foresters in which the property will be acquired by January 15, 2014. State Foresters and Tribal officials must forward applications to the Forest Service by February 17, 2014.

Program and Application information can be found here.
For further program information, please contact Maya Solomon, Program Coordinator, by telephone at (202) 205-1376.

DEPARTMENT OF COMMERCE

Planning and Local Technical Assistance Programs

Under the Planning and Local Technical Assistance programs grants, the Economic Development Administration (EDA) assists recipients in creating regional economic development plans designed to stimulate and guide the economic development efforts of a community or region. As part of this program, EDA supports Partnership Planning investments to facilitate the development, implementation, revision, or replacement of Comprehensive Economic Development Strategies (CEDS), which articulate and prioritize the strategic economic goals of recipients' respective regions.

Eligible Applicants
States, cities, or other political subdivisions of a state, including a special purpose unit of a state or local government engaged in economic or infrastructure development activities, or a consortium of political subdivisions; district organizations; institutions of higher education or a consortium of institutions of higher education; or public or private non-profit organizations or associations acting in cooperation with officials of a political subdivision of a state.

Funding
Annual grant amounts per recipient for EDA's Partnership Planning, Short-Term, and State Planning programs are typically between $60,000 and $70,000.

Application Deadline
Applications are accepted on a continuing basis and processed as received.

Application and program information may be found here.
For further information, please contact the appropriate regional office or Economic Development Representative listed in the announcement. EDA's website at www.eda.gov contains additional information on EDA and its programs.

DEPARTMENT OF HOMELAND SECURITY: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Fiscal Year (FY) 2013 DHS - FEMA Preparedness Grant Programs

The Department of Homeland Security (DHS) has announced its final allocations for the FY 2013 preparedness grant programs, which total more than $1 billion for federal grants to assist state and local governments with preparedness program funding in the form of Non-Disaster Grants to enhance the capacity of state and local emergency responders to prevent, respond to, and recover from a weapons of mass destruction terrorism incident involving chemical, biological, radiological, nuclear, and explosive devices and cyberattacks. The following preparedness grant programs may be of interest to municipalities as they fund a variety of activities including planning, organization, equipment purchases, training and exercises. The overview to the following grants can be viewed here.

Homeland Security Grant Program (HSGP)—$968 million targeted for states or urban areas to build capabilities critical to security. HSGP consists of the following programs:

- **State Homeland Security Program (SHSP)—$354.6 million** is allocated by formula to states to build capabilities at the state and local levels to implement the state homeland security goals and objectives identified in the State Preparedness Report. The 9/11 Act requires states to dedicate 25 percent of SHSP funds to law enforcement terrorism prevention-oriented planning, organization, training, exercise and equipment activities. Additional information can be found here.

- **Urban Areas Security Initiative (UASI)—$558.7 million** to enhance regional preparedness by strengthening capabilities in 25 designated high-threat, high-density urban areas across the country. The 9/11 Act requires states to dedicate 25 percent of UASI funds to law enforcement terrorism prevention-oriented activities. A complete list of all eligible UASI entities can be found here.

Emergency Management Performance Grants (EMPG) Program—$332.4 million to assist state and local governments in enhancing and sustaining all-hazards emergency management capabilities. FY 2011 EMPG funds will be allocated by formula with each state receiving a base amount of 0.75 percent of the total available grant funding. Additional information can be found here.

Port Security Grant Program (PSGP)—$93.2 million to help protect critical port infrastructure from terrorism, enhance maritime domain awareness and strengthen risk management capabilities in order to protect against improvised explosive devices and other non-conventional weapons; conduct training and exercises; and implement the Transportation Worker Identification Credential (TWIC). By law, DHS must direct these funds to the Nation's highest risk ports. To comply with this requirement, the PSGP covers a total of 145 ports identified as critical. Based upon USCG recommendations, these ports are aggregated into 90 discrete port funding areas. Additional information can be found here.

Transit Security Grant Program - $83.7 million to owners and operators of transit systems (including intracity bus, commuter bus, ferries, and all forms of passenger rail) to protect critical surface transportation and increase the resilience of transit infrastructure. Eligible transit agencies are determined based on daily unlinked passenger trips (ridership) and transit systems that serve historically eligible Urban Areas Security Initiative (UASI) jurisdictions. Certain ferry systems are eligible to participate in the FY 2013 TSGP and receive funds. Additional information can be found here.

Eligible Applicants

Please note that the majority of funding under these programs is allocated by formula to States. We encourage you to contact your respective State Administering Agency (SAA) for program and eligibility requirements specific to your state. A list of SAA's can be found here.

Application Deadline
The application deadlines vary by each program. Most states will have an earlier submission deadline than that of the federal program. If you are interested in the submitting an application, please contact your State Administering Agency as referenced above.

Application and Program Information
As you may be aware, states and designated urban areas are the only eligible applicants under several of these preparedness programs. Please contact your respective DHS-FEMA office for program and application materials specific to your community. Additional information on all DHS preparedness grant programs and an overview of all preparedness funding announced can be found ***here***. Additional program information can be found ***here***.

DEPARTMENT OF THE INTERIOR

U.S. Fish & Wildlife Service (USFWS) Partners for Fish & Wildlife Program

The U.S. Fish & Wildlife Service (USFWS) Partners for Fish & Wildlife Program is a voluntary, incentive-based program that provides technical and financial assistance to private landowners to restore and conserve fish and wildlife habitat. The Partners for Fish and Wildlife Program is not a traditional grants program, it is a direct federal assistance program. The Program does not solicit projects through a request for proposals. Instead, projects are developed in collaboration and with substantial involvement from Partners for Fish and Wildlife field biologists.

National priority ranking factors for the Partners Program are used to assign funding priority status to proposed projects that meet these conditions:

- Improve habitat for Federal Trust Species, including migratory birds; threatened and endangered species; inter-jurisdictional fish; marine mammals; and, other declining species.
- Complement activities on National Wildlife Refuge System lands, or contribute to the resolution of problems on refuges that are caused by off-refuge practices.
- Address species and habitat priorities that have been identified through Service planning teams (with our partners), or in collaboration with state fish and wildlife agencies.
- Reduce habitat fragmentation or serve as buffers for other important Federal or state conservation lands.
- Result in self-sustaining systems that are not dependent on artificial structures.

Eligible Applicants
Individuals; nonprofits, other than institutions of higher education; private institutions of higher education; and for-profit organizations and small businesses.

Funding
$22 million is available for approximately 5000 awards.

Application Deadline
TBD - contact the local Partners for Fish and Wildlife Program office.

Application and program information may be found here.
For further information, please contact Michael Murray via email at Michael_Murray@fws.gov, or contact the local Partners for Fish and Wildlife Program office.

U.S. Fish & Wildlife Service (USFWS) Coastal Program

Similar to the Partners for Fish & Wildlife Program, the USFWS Coastal Program is a voluntary, incentive-based program that provides technical and financial assistance to coastal communities and landowners to restore and protect fish and wildlife habitat on public and private lands. The Coastal Program is not a conventional grants program, in that it does not solicit projects through a request for proposals. Instead, projects are developed strategically, in coordination with partners, and with substantial involvement from Service field biologists.

The Coastal Program integrates all USFWS activities in high priority coastal ecosystems to:

- Identify the most important natural resource problems and solutions;
- Influence the planning and decision-making processes of other agencies and organizations with USFWS living resource capabilities;
- Implement solutions on-the-ground in partnership with others; and
- Instill a stewardship ethic, and catalyze the public to help solve problems, change behaviors, and promote ecologically sound decisions.

Eligible Applicants
State and local governments; public and private institutions of higher education; special district governments; independent school districts; individuals; nonprofits; and for-profit organizations and small businesses.

Funding
$6 million is available for approximately 500 awards.

Application Deadline
TBD - contact the local Partners for Fish and Wildlife Program office.

Application and program information may be found here.
For further information, please contact Michael Murray via email at Michael_Murray@fws.gov, or contact the local USFWS office.

INSTITUTE OF MUSEUM AND LIBRARY SERVICES

National Leadership Grants for Libraries

National Leadership Grants (NLG) for Libraries support projects that address challenges faced by the library and/or archive fields and that have the potential to advance practice in those fields. Successful proposals will generate results such as new tools, research findings, models, services, practices, or alliances that can be widely used, adapted, scaled, or replicated to extend the benefits of federal investment. Proposals addressing learners from ages 0-8 and their parents and caregivers are encouraged. NLG-Libraries applicants are encouraged to partner with community organizations to address at least one of the challenges identified by the Campaign for Grade Level Reading including school readiness, summer reading loss, and chronic school absence.

Grants are awarded in the following categories:

- **Advancing Digital Resources:** Support the creation, use, presentation, and preservation of significant digital resources as well as the development of tools to enhance access, use, and management of digital assets.
- **Research:** Support research that investigates key questions that are important to library and/or archival practice.
- **Demonstration:** Support the development and evaluation of replicable models or practices that are usable, adaptable, or scalable by other institutions for improving services and performance.

Eligible Applicants
State and local governments or private not-for-profit organizations that qualify as a library or a parent organization, such as a school district, a municipality, a state agency, or an academic institution, that is responsible for the administration of a library.

Funding
Approximately 40 grants ranging from $50,000 to $500,000 will be awarded. For applicants requesting less than $250,000, at least a one-third match is encouraged. Applicants requesting $250,000 or more must provide funds from non-federal sources in an amount that is equal to or greater than the amount of the grant.

Application Deadline
February 3, 2014

Application and program information can be found here.
For further information, please contact Sandra Toro, Senior Program Officer, by telephone at (202) 653-4662 or via email, storo@imls.gov, or Kathy Mitchell, Library Program Specialist, by telephone at (202) 653-4687 or via email, kmitchell@imls.gov.

Sparks! Ignition Grants for Libraries and Museums

Sparks! Ignition Grants for Libraries (Sparks Grants) are a special funding opportunity within the IMLS National Leadership Grants for Libraries program. These grants encourage libraries and archives to prototype and evaluate specific innovations in the ways they operate and the services they provide, resulting in new tools, products, services, or organizational practices.

Successful Sparks Grants projects:

- **Broad Impact:** Projects should show potential for far-reaching impact beyond primary institution and influence practice across one or more disciplines or specific fields within the library or archival profession.

- **In-depth Knowledge:** Projects should reflect a thorough understanding of current practice and knowledge about the subject matter and an awareness and support of current strategic initiatives and agendas in the field.

- **Innovative Approach:** Projects should employ new approaches to strengthen and improve services to benefit the audiences and communities being served.

- **Shared Results:** Proposals should generate results that can be widely used, adapted, scaled, or replicated to extend the benefits of federal investment

Eligible Applicants
State and local governments; and private nonprofit organizations. Additional information regarding eligibility is available via the program information link provided below.

Funding
Approximately 12 grants ranging from $10,000 to $25,000 will be awarded.

Application Deadline
February 3, 2014

Application and program information may be found here.
For further information, please contact Robert Horton, Associate Deputy Director for Library Services, by telephone at (202) 653-4660 or via email, rhorton@imls.gov, or contact Kathy, Library Program Specialist, by telephone at (202) 653-4687 or via email, kmitchell@imls.gov.

AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE CITY OF LAKE WORTH, FLORIDA AND ALCALDE & FAY, LTD.

The following is an agreement (this "Agreement") between the City of Lake Worth, Florida, hereinafter referred to as "CITY" and the firm of Alcalde & Fay, Ltd., a Virginia corporation, hereinafter referred to as "A&F".

WHEREAS, A&F provides professional services in the field of government relations and advocacy, including legislative procedure, regulatory processes, public policy, and appropriations and grant programs administered by the Federal government; and

WHEREAS, the City deems it in their best interest to employ A&F to provide CITY with services in the field of government relations and advocacy, including legislative procedure, regulatory processes, public policy, and appropriations and grant programs administered by the Federal government.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

PART I - SPECIFIC PROVISIONS

A. PROFESSIONAL SERVICES TO BE PROVIDED: A&F will provide government relations and advocacy, including legislative procedure, regulatory processes, public policy, and appropriations and grant programs administered by the Federal government, including but not limited to:

1. Developing and implementing strategies to obtain and maximize Federal funding for CITY projects and programs;
2. Coordinating CITY's Federal appropriations, authorizations, grant applications, legislation, regulatory filings and policy related activities with the United States Congress and Federal departments;
3. Providing CITY with a Federal grant alert on a routine basis and assisting CITY with submitting Federal grant applications;
4. Maintaining contact on CITY's behalf and advocating CITY's interests with United States Senators and Representative and Federal Departments; and
5. Providing written reports detailing A&F's government relations services for CITY and status of relevant legislation and Federal department policy.

B. PAYMENT: The parties have determined the most efficient and economical method to compensate for A&F's services to be provided is by a monthly retainer. The monthly retainer shall be deemed earned by A&F upon CITY being invoiced by A&F.

(i) MONTHLY RETAINER: A&F's compensation for the services provided hereunder shall be $5,000.00 per month. A&F shall submit the monthly $5,000.00 fee invoice at the first of each month, beginning on April 1, 2014.

(ii) OUT-OF-POCKET EXPENSES: The CITY shall reimburse A&F for reasonable out-of-pocket expenses incurred in connection with the A&F'S work at actual cost. Expenses that are to be reimbursed include, but are not limited to photocopying, postage, telephone, delivery, and telecopy charges. Expenses will be reimbursed to A&F on a monthly basis. All travel expenses will be incurred only following approval by CITY.

PART II. GENERAL PROVISIONS

A. COOPERATION: CITY will cooperate, participate in meetings, and provide any information and documentation as may be reasonably requested by A&F to enable A&F to provide professional services.

B. STATUS OF A&F: The parties intend that A&F, in performing its services, shall act as an independent contractor and shall have control of the work and the manner in which it is performed. A&F is not to be considered an agent or employee of CITY and is not entitled to participate in any pension plan, insurance, bonus or similar benefits CITY provides its employees.

C. KEY PERSONNEL: A&F has represented to CITY that L.A. "Skip" Bafalis and Jim Davenport will act as the primary contacts for A&F's services in the performance of A&F's duties hereunder, and has relied on that representation as an inducement to entering into this Agreement.

D. METHOD AND PLACE OF GIVING NOTICE, SUBMITTING BILLS AND MAKING PAYMENTS: All notices, bill, and payments shall be made in writing and may be given by electronic mail, U.S. mail or personal delivery. Notices, bills and payments sent by mail should be addressed as follows:

CITY: Michael Bornstein
City Manager
7 North Dixie Highway
Lake Worth, Florida
(561) 586-1689

A&F: Alcalde & Fay
2111 Wilson Boulevard
8th Floor
Arlington, VA 22201
(703) 841-0626

E. NON-DISCRIMINATION: A&F shall comply with all applicable federal, state and local laws, rules and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, age, marital status, medical condition, or physical or mental disability.

F. COMPLIANCE: A&F and CITY shall comply with the Lobbying Disclosure Act and all amendments and the Honest Leadership and Open Government Act of 2007.

G. TERM OF AGREEMENT: This Agreement shall become effective April 1, 2014 and shall terminate upon 30 day's written notice by either party with or without cause.

H. JURISDICTION: This Agreement and performance hereunder and all suits and special proceedings hereunder shall be construed in accordance with the laws of the State of Florida. In addition, special proceeding or other proceeding that may be brought arising out of, in connection with, or by reason of this Agreement, the laws of the State of Florida shall be applicable and shall govern to the exclusion of the law of any other forum.

I. ATTORNEY'S FEES; COSTS; VENUE: In the event that any party hereto shall bring an action or proceeding for an alleged breach of any provision of this Agreement, the prevailing party shall be entitled to recover, as part of such action or proceeding, reasonable attorney's fees, paralegal fees, and court costs at both trial and appellate levels. For the purpose of any suit, action or proceeding arising out of or relating to this Agreement, the parties hereby consent to the jurisdiction and venue of any of the courts of record of the State of Florida, Palm Beach County.

J. PALM BEACH COUNTY IG: In accordance with Palm Beach County ordinance number 2011-009, Alcalde & Fay acknowledges that this Agreement may be subject to investigation and/or audit by the Palm Beach County Inspector General. Alcalde & Fay has reviewed Palm Beach County ordinance number 2011-009 and is aware of its rights and/or obligations under such ordinance.

K. PUBLIC RECORDS: Alcalde & Fay shall comply with all public records laws in accordance with Chapter 119, Fla. Stat. In accordance with state law, Alcalde & Fay agrees to:

a) Keep and maintain all records that ordinarily and necessarily would be required by the City.

b) Provide the public with access to public records on the same terms and conditions that the City would provide for the records and at a cost that does not exceed the costs provided in Chapter 119, Fla. Stat. or as otherwise provided by law.

c) Ensure that public records that are exempt or confidential and exempt from public records disclosure are not disclosed except as authorized by law.

d) Meet all requirements for retaining public records and transfer, at no cost, to the City all records in possession of Alcalde & Fay at the termination of the contract and destroy any public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the City in a format that is compatible with the information technology systems of the City. All records shall be transferred to the City prior to final payment being made to Alcalde & Fay.

e) If Alcalde & Fay does not comply with this section, the City shall enforce the contract provisions in accordance with the contract and may unilaterally cancel this contract in accordance with state law.

L. ENTIRE AGREEMENT: This Agreement constitutes the entire agreement between the parties and supersedes all prior oral or written agreements. No waiver, modifications, additions or addendum to this Agreement shall be valid unless in writing and signed by both the A&F and CITY. This Agreement may be extended by mutual agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed this _____ day of _____, 2014.

ATTEST:

_____

_____

WITNESSES:

_____

_____

CITY OF LAKE WORTH, FLORIDA

By _____

Approved for Legal Sufficiency
For City Attorney, Glen J. Torcivia, Esq.

ALCALDE & FAY, LTD.

By _____

CITY OF LAKE WORTH
7 North Dixie Highway · Lake Worth, Florida 33460 · Phone: 561-586-1600· Fax: 561-586-1750

DRAFT
AGENDA
CITY OF LAKE WORTH
CITY COMMISSION MEETING
CITY HALL COMMISSION CHAMBER
TUESDAY, MAY 06, 2014 - 6:00 PM

1. **ROLL CALL:**

2. **INVOCATION:**

3. **PLEDGE OF ALLEGIANCE:** Led by Commissioner Andy Amoroso

4. **AGENDA - Additions/Deletions/Reordering:**

5. **PRESENTATIONS:** (there is no public comment on Presentation items)

6. **COMMISSION LIAISON REPORTS AND COMMENTS:**

7. **PUBLIC PARTICIPATION OF NON-AGENDAED ITEMS AND CONSENT AGENDA:**

8. **APPROVAL OF MINUTES:**

9. **CONSENT AGENDA:** (public comment allowed during Public Participation of Non-Agendaed items)

   A. Additional Contract Work

   B. Approve Resolution for Assistance 2014 under the Florida Inland Navigation District Waterways Assistance Program for Old Bridge Park Natural Area Improvements

10. **PUBLIC HEARINGS:**

11. **UNFINISHED BUSINESS:**

12. **NEW BUSINESS:**

    A. TCRPC presentation re All Aboard Florida

B. Resolution No. xx-2014 - Second Fiscal Year 2014 Budget Amendment

13. LAKE WORTH ELECTRIC UTILITY:

A. PRESENTATION: (There is no public comment on Presentation items)

1) Update on the electric utility system

B. CONSENT AGENDA: (public comment allowed during Public Participation of Non-Agendaed items)

C. PUBLIC HEARING:

D. NEW BUSINESS:

14. CITY ATTORNEY'S REPORT:

15. CITY MANAGER'S REPORT:

16. ADJOURNMENT:

If a person decides to appeal any decision made by the board, agency or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. (F.S. 286.0105)

NOTE:ONE OR MORE MEMBERS OF ANY BOARD, AUTHORITY OR COMMISSION MAY ATTEND AND SPEAK AT ANY MEETING OF ANOTHER CITY BOARD, AUTHORITY OR COMMISSION.