

## **Solicitation 12413-103**

# **POOL RESURFACING Riverland Park Pool, Carter Park Pool, Croissant Park**

**Bid Designation: Public**



**City of Fort Lauderdale**

## Bid 12413-103

### POOL RESURFACING Riverland Park Pool, Carter Park Pool, Croissant Park

Bid Number **12413-103**  
 Bid Title **POOL RESURFACING Riverland Park Pool, Carter Park Pool, Croissant Park**  
 Bid Start Date **Aug 7, 2020 1:43:29 PM EDT**  
 Bid End Date **Sep 28, 2020 2:00:00 PM EDT**  
 Question & Answer End Date **Sep 15, 2020 5:00:00 PM EDT**  
 Bid Contact **Fausto Vargas**  
**Procurement Specialist**  
**Finance - Procurement Division**  
**fvargas@fortlauderdale.gov**  
 Contract Duration **One Time Purchase**  
 Contract Renewal **Not Applicable**  
 Prices Good for **120 days**  
 Bid Comments **INVITATION TO BID**

Sealed bids will be received electronically until 2:00 P.M., local time, on Monday, September 14, 2020, Please be advised that effective immediately, and until further notice, all Invitation to Bids, by the City of Fort Lauderdale will be opened electronically via BIDSYNC.COM at the date and time indicated on the solicitation. This notice supersedes any indication on any current unopened solicitation that may give a specific location for the solicitation opening. All openings will be held on the BIDSYNC.COM platform. Once the Procurement Specialist opens the solicitation, the bid tabulations may be viewed immediately on a computer, laptop, cell phone, or any other device with WiFi access. The opening may also be viewed in real time through a "Webex meeting" or similar type platform, for BID NO., 12413-103, PROJECT NO., 12578 POOL RESURFACING – Riverland Park Pool, Carter Park Pool, Croissant Park Water Playground.

Anyone requesting assistance or having further inquiry in this matter must contact the Procurement Specialist indicated on the solicitation, via the question and Answer forum on Bidsync.com before the Last Day for Questions indicated in the Solicitation

#### Join ZoomGov Meeting

<https://fortlauderdale.zoomgov.com/j/1618676620?pwd=MHBDbHVpdzRKdVVSdUJ5bWp2cIRYz09>

Meeting ID: 161 867 6620

Password: 114889

Mobile Phone One-tap Dial:

+16692545252,,1618676620#,,1#,114889# US (San Jose)

+16468287666,,1618676620#,,1#,114889# US (New York)

Dial by your location

+1 669 254 5252 US (San Jose)

+1 646 828 7666 US (New York)

Meeting ID: 161 867 6620

Password: 114889

Find your local number: <https://fortlauderdale.zoomgov.com/u/ad983Y91nU>

This project consists of Drawing File No. 4-140-45 (65) sheets.

The projects are located at Riverland Park Public Pool, 950 SW 27<sup>th</sup> Avenue. Carter Park Public Pool, 1450 W. Sunrise Blvd. Croissant Park Water Playground, 245 West Park Drive, all 3 in Fort Lauderdale, Florida. The work to be accomplished includes, but is not limited to the demolition of the existing pools surfacing and resurfaced utilizing SGM's Commercial White Diamond Brite or City approved equivalent and the replacement of each pool / water playground's main drain cover. Contractor must be a currently approved/qualified applicator of material specified herein, and must furnish proof of such qualification to the City from the manufacturer. Bidder should be normally engaged in the work of competitive swimming pool resurfacing at the time of bid submission. All work is to be performed in accordance with the Florida Building Code by legally licensed and insured contractors capable of pulling all necessary permits to successfully complete the project. A list of all sub-contractors must be supplied with the bid response. The pool resurfacing shall be in compliance with all applicable State and local codes and regulations City of Fort Lauderdale permit is required.

**NOTE: Payment on this contract will be made by Visa or MasterCard.**

**Licensing Requirements:** Contractor certified by State of Florida to perform the work specified in the scope. Must possess State of Florida General Contractor's License or Certified Commercial Pool/Spa Contractor

There will not be a pre-bid meeting or site visit for this Invitation to Bid.

It will be the sole responsibility of the bidder to ensure that his bid is submitted prior to the bid opening date and time listed. **PAPER BID SUBMITTALS WILL NOT BE ACCEPTED. BIDS MUST BE SUBMITTED ELECTRONICALLY VIA BIDSYNC.COM**

**Bid Security:** A bid bond for FIVE percent (5%) of the bid amount, made payable to the City of Fort Lauderdale, Florida, shall accompany each proposal.

**Bid Bonds:**

Bidders can submit bid bonds for projects two different ways:

BidSync allows bidders to submit bid bonds electronically directly through their system using Surety 2000. For more information on this feature and to access it, contact BIDSYNC customer care department.

If bid bonds are not submitted via Surety 2000, Bidders may upload their original executed bid bond on Bidsync to accompany their bids with the electronic proposal. Bid bond shall be written by a surety insurer authorized to do business in the State of Florida as surety, in accordance with Section 255.05, Florida Statutes. Insufficient bid bond surety shall automatically constitute a failure on the part of the Contractor and shall be grounds for rejection of your bid.

The City of Fort Lauderdale reserves the right to waive any informality in any or all bids and to reject any or all bids.

For information concerning technical specifications, please utilize the question/answer feature provided by BIDSYNC at [www.bidsync.com](http://www.bidsync.com). Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures, will only be transmitted by written addendum. (See addendum section of BIDSYNC Site). **Contractors please note: No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized himself with the nature and extent of the work, equipment, materials, and labor required. The entire bid response must be submitted in accordance with all specifications contained in this solicitation.**

Information on bid results and projects currently out to bid can be obtained on the City's website – <http://www.fortlauderdale.gov/departments/finance/procurement-services>. For general inquiries, please call (954) 828-5933.

Added on Aug 25, 2020:  
Addendum 1)

**A) Site Visits will be allowed:**

Site visits are to be scheduled / arranged by appointment only. Contact Thomas White at (954) 828-5350 email [thwhite@fortlauderdale.gov](mailto:thwhite@fortlauderdale.gov) or James Sherbondy (954) 828-5655 email [jsherbondy@fortlauderdale.gov](mailto:jsherbondy@fortlauderdale.gov) any time during normal business hours, before the cut-off date and time, to schedule a specific date and time for your visit. The cut-off date for site visits is Tuesday, September 8, 2020 by 4:30 PM. **PLEASE NOTE: You are encouraged to set up your appointment asap to assure availability before the site visit cut-off date and time.**

Added on Sep 3, 2020:

**Addendum 2)**

a) Opening Bid, Questions and Answers will be extended:

**New Dates:****Questions and Answers: September 11, 2020****Opening Bid: September 21, 2020**

b) Florida Stucco Will be accepted:

**Gem Finish****Blue Gem Color****Added on Sep 21, 2020:****Addendum 3)**

a) Opening Bid, Questions and Answers will be extended:

**New Dates:****Questions and Answers: September 15, 2020****Opening Bid: September 28, 2020****Addendum # 1**

New Documents

**Addendum 1.pdf****Addendum # 2**

New Documents

**Addendum 2.pdf**Previous End Date **Sep 14, 2020 2:00:00 PM EDT**New End Date **Sep 21, 2020 2:00:00 PM EDT**Previous Q & A End Date **Aug 28, 2020 5:00:00 PM EDT**New Q & A End Date **Sep 11, 2020 5:00:00 PM EDT****Addendum # 3**

New Documents

**Addendum 3.pdf**Previous End Date **Sep 21, 2020 2:00:00 PM EDT**New End Date **Sep 28, 2020 2:00:00 PM EDT**Previous Q & A End Date **Sep 11, 2020 5:00:00 PM EDT**New Q & A End Date **Sep 15, 2020 5:00:00 PM EDT****Item Response Form**Item **12413-103--01-01 - BASE BID : Mobilization**Lot Description **BASE BID**Quantity **1 lump sum**

Unit Price

Delivery Location **City of Fort Lauderdale**[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

**Qty 1****Description**

Riverland Park Public Pool: Mobilization includes securing and cordoning off the work area and activation of contractor physical and manpower



resources for the transfer to each construction site median as well as ensuring all utilities are available for use during the actual construction. THIS ITEM CANNOT EXCEED 5% OF THE BASE BID ONLY. (DOES NOT INCLUDE BID ALLOWANCES.)

Item	<b>12413-103--01-02 - BASE BID : Demolition</b>
Lot Description	<b>BASE BID</b>
Quantity	<b>1 lump sum</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty 1</b>

**Description**

Riverland Park Public Pool: Furnish all materials, labor and equipment to remove and properly dispose of all existing pool surfacing and all related activities as shown on the plans and per specifications. The base bid shall include overhead, profit, and all other fixed costs.

Item	<b>12413-103--01-03 - BASE BID : New Construction</b>
Lot Description	<b>BASE BID</b>
Quantity	<b>1 lump sum</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty 1</b>

**Description**

Riverland Park Public Pool: Furnish all labor, material, and equipment to perform all work to be accomplished under this contract, which includes, but is not limited to, all new construction including but not limited to the resurfacing of the public park swimming pool. The base bid shall included overhead, profit, and all other fixed costs.

Item	<b>12413-103--01-04 - BASE BID : Mobilization</b>
Lot Description	<b>BASE BID</b>
Quantity	<b>1 lump sum</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty 1</b>

**Description**

Carter Park Public Pool: Mobilization includes securing and cordoning off the work area and activation of contractor physical and manpower resources for the transfer to each construction site median as well as ensuring all utilities are available for use during the actual construction. THIS ITEM CANNOT EXCEED 5% OF THE BASE BID ONLY. (DOES NOT INCLUDE BID ALLOWANCES.)

Item	<b>12413-103--01-05 - BASE BID : Demolition</b>
Lot Description	<b>BASE BID</b>
Quantity	<b>1 lump sum</b>

Unit Price

Delivery Location

**City of Fort Lauderdale**[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

**Qty 1****Description**

Carter Park Public Pool: Furnish all materials, labor and equipment to remove and properly dispose of all existing pool surfacing and all related activities as shown on the plans and per specifications. The base bid shall include overhead, profit, and all other fixed costs.

Item

**12413-103--01-06 - BASE BID : New Construction**

Lot Description

**BASE BID**

Quantity

**1 lump sum**

Unit Price

Delivery Location

**City of Fort Lauderdale**[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

**Qty 1****Description**

Carter Park Public Pool: Furnish all labor, material, and equipment to perform all work to be accomplished under this contract, which includes, but is not limited to, all new construction including but not limited to the resurfacing of the public park swimming pool. The base bid shall include overhead, profit, and all other fixed costs.

Item

**12413-103--01-07 - BASE BID : Mobilization**

Lot Description

**BASE BID**

Quantity

**1 lump sum**

Unit Price

Delivery Location

**City of Fort Lauderdale**[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

**Qty 1****Description**

Croissant Park Aquatic Playground: Mobilization includes securing and cordoning off the work area and activation of contractor physical and manpower resources for the transfer to each construction site median as well as ensuring all utilities are available for use during the actual construction. THIS ITEM CANNOT EXCEED 5% OF THE BASE BID ONLY. (DOES NOT INCLUDE BID ALLOWANCES.)

Item

**12413-103--01-08 - BASE BID : Demolition**

Lot Description

**BASE BID**

Quantity

**1 lump sum**

Unit Price

Delivery Location

**City of Fort Lauderdale**[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

**Qty 1****Description**

Croissant Park Aquatic Playground: Furnish all materials, labor and equipment to remove and properly dispose of all existing aquatic playground surfacing and all related activities as shown on the plans and per specifications. The base bid shall include overhead, profit, and all other fixed costs.

---

Item	<b>12413-103--01-09 - BASE BID : New Construction</b>
Lot Description	<b>BASE BID</b>
Quantity	<b>1 lump sum</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty 1</b>

**Description**

Croissant Park Aquatic Playground: Furnish all labor, material, and equipment to perform all work to be accomplished under this contract, which includes, but is not limited to, all new construction including but not limited to the resurfacing of the public park aquatic playground. The base bid shall include overhead, profit, and all other fixed costs.

---

Item	<b>12413-103--01-10 - BASE BID : New Construction</b>
Lot Description	<b>BASE BID</b>
Quantity	<b>1 sf</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty 1</b>

**Description**

Price per S.F. of SGM Commercial White Diamond Brite or City approved equivalent including and all labor and materials.

**CITY OF FORT LAUDERDALE  
CONTRACT AND SPECIFICATIONS PACKAGE**

---

**BID NO. 12413-103**

**PROJECT NO. 12578**

**Pool Resurfacing – Riverland Park  
Pool, Carter Park Pool and Croissant  
Park Water Playground**



**THOMAS WHITE, ASLA-ISA  
PROJECT MANAGER II**

**IRINA TOKAR, RA  
SENIOR PROJECT MANAGER**

**FAUSTO VARGAS  
PROCUREMENT SPECIALIST**  
Telephone: (954) 828-6167 E-mail: [fvargas@fortlauderdale.gov](mailto:fvargas@fortlauderdale.gov)

## **TABLE OF CONTENTS**

<b><u>Description</u></b>	<b><u>Pages</u></b>
<b>I. BID INFORMATION</b>	
Invitation to Bid.....	ITB-1 thru ITB-2
Instruction to Bidders.....	IB-1 thru IB-6
Special Conditions.....	SC-1 thru SC-8
<b>II. CONSTRUCTION AGREEMENT (SAMPLE).....</b>	<b>C-1 thru C-45</b>
<b>III. GENERAL CONDITIONS.....</b>	<b>GC-1 thru GC-11</b>
<b>IV. TECHNICAL SPECIFICATIONS</b>	
<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
011000 Summary.....	3
012200 Unit Prices.....	1
012500 Substitution Procedures .....	3
012600 Contract Modification Procedures .....	2
012900 Payment Procedures.....	3
013100 Project Management and Coordination .....	7
013200 Construction Project Documentation .....	4
013233 Photographic Documentation .....	2
013300 Submittal Procedures.....	3
014000 Quality Requirements.....	2
015900 Construction Sign Request Form .....	1
015900 Project Sign.....	1
017419 Construction waste Management .....	1
017700 Closeout Procedures.....	5
017839 Project Record Documents .....	4
<b>DIVISION 13 – SPECIAL FACILITY COMPONENTS COMPOSITES</b>	
131100 Swimming Pool Resurfacing.....	3
<b>EXHIBIT A DRAWINGS.....</b>	<b>65</b>

**Note:** The following documents are available electronically for completion and documents must be returned with your bid along with your bid security, proof of insurance, and proof of required licenses/certifications.

[CITB Prime Contractor ID Form](#)  
[CITB Local Business Preference](#)  
[CITB Trench Safety](#)  
[CITB Non-Collusion Statement](#)  
[CITB Contract Payment Method](#)  
[CITB Construction Bid Certification](#)  
[Non-Discrimination Certification Form](#)  
[E-Verify Affirmation Statement](#)

**INVITATION TO BID**

Sealed bids will be received electronically until 2:00 P.M., local time, on **Monday, September 14, 2020**. Please be advised that effective immediately, and until further notice, all Invitation to Bids, by the City of Fort Lauderdale will be opened electronically via BIDSYNC.COM at the date and time indicated on the solicitation. This notice supersedes any indication on any current unopened solicitation that may give a specific location for the solicitation opening. All openings will be held on the BIDSYNC.COM platform. Once the Procurement Specialist opens the solicitation, the bid tabulations may be viewed immediately on a computer, laptop, cell phone, or any other device with WiFi access. The opening may also be viewed in real time through a "Webex meeting" or similar type platform, for **BID NO., 12413-103, PROJECT NO.,12578 POOL RESURFACING – Riverland Park Pool, Carter Park Pool, Croissant Park Water Playground.**

Anyone requesting assistance or having further inquiry in this matter must contact the Procurement Specialist indicated on the solicitation, via the question and Answer forum on Bidsync.com before the Last Day for Questions indicated in the Solicitation

Join ZoomGov Meeting

<https://fortlauderdale.zoomgov.com/j/1618676620?pwd=MHBDdBHVpdzRKdVVScUJ5bWp2clRYZz09>

Meeting ID: 161 867 6620

Password: 114889

Mobile Phone One-tap Dial:

+16692545252,,1618676620#,,1#,114889# US (San Jose)

+16468287666,,1618676620#,,1#,114889# US (New York)

Dial by your location

+1 669 254 5252 US (San Jose)

+1 646 828 7666 US (New York)

Meeting ID: 161 867 6620

Password: 114889

Find your local number: <https://fortlauderdale.zoomgov.com/u/ad983Y91nU>

This project consists of Drawing File No. 4-140-45 **(65)** sheets.

The projects are located at Riverland Park Public Pool, 950 SW 27<sup>th</sup> Avenue. Carter Park Public Pool, 1450 W. Sunrise Blvd. Croissant Park Water Playground, 245 West Park Drive, all 3 in Fort Lauderdale, Florida. The work to be accomplished includes, but is not limited to the demolition of the existing pools surfacing and resurfaced utilizing SGM's Commercial White Diamond Brite or City approved equivalent and the replacement of each pool / water playground's main drain cover. Contractor must be a currently approved/qualified applicator of material specified herein, and must furnish proof of such qualification to the City from the manufacturer. Bidder should be normally engaged in the work of competitive swimming pool resurfacing at the time of bid submission. All work is to be performed in accordance with the Florida Building Code by legally licensed and insured contractors capable of pulling all necessary permits to successfully complete the project. A list of all sub-contractors must be

supplied with the bid response. The pool resurfacing shall be in compliance with all applicable State and local codes and regulations City of Fort Lauderdale permit is required.

**NOTE: Payment on this contract will be made by Visa or MasterCard.**

**Licensing Requirements:** Contractor certified by State of Florida to perform the work specified in the scope. Must possess State of Florida General Contractor's License or Certified Commercial Pool/Spa Contractor

**There will not be a pre-bid meeting or site visit for this Invitation to Bid.**

It will be the sole responsibility of the bidder to ensure that his bid is submitted prior to the bid opening date and time listed. **PAPER BID SUBMITTALS WILL NOT BE ACCEPTED. BIDS MUST BE SUBMITTED ELECTRONICALLY VIA BIDSYNC.COM**

**Bid Security:** A bid bond for **FIVE** percent (**5%**) of the bid amount, made payable to the City of Fort Lauderdale, Florida, shall accompany each proposal.

**Bid Bonds:**

Bidders can submit bid bonds for projects two different ways:

- 1) BidSync allows bidders to submit bid bonds electronically directly through their system using **Surety 2000**. For more information on this feature and to access it, contact BIDSYNC customer care department.
- 2) If bid bonds are not submitted via Surety 2000, Bidders may upload their original executed bid bond on Bidsync to accompany their bids with the electronic proposal. Bid bond shall be written by a surety insurer authorized to do business in the State of Florida as surety, in accordance with Section 255.05, Florida Statutes. Insufficient bid bond surety shall automatically constitute a failure on the part of the Contractor and shall be grounds for rejection of your bid.

The City of Fort Lauderdale reserves the right to waive any informality in any or all bids and to reject any or all bids.

For information concerning technical specifications, please utilize the question/answer feature provided by BIDSYNC at [www.bidsync.com](http://www.bidsync.com). Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures, will only be transmitted by written addendum. (See addendum section of BIDSYNC Site). **Contractors please note:** No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized himself with the nature and extent of the work, equipment, materials, and labor required. The entire bid response must be submitted in accordance with all specifications contained in this solicitation.

Information on bid results and projects currently out to bid can be obtained on the City's website – <http://www.fortlauderdale.gov/departments/finance/procurement-services>. For general inquiries, please call (954) 828-5933.



## **INSTRUCTIONS TO BIDDERS**

The following instructions are given for the purpose of guiding bidders in properly preparing their bids or proposals. These directions have equal force and weight with the specifications and strict compliance is required with all of these provisions.

**QUALIFICATIONS OF BIDDERS** – No proposal will be accepted from, nor will any contract be awarded to, any person who is in arrears to the CITY OF FORT LAUDERDALE, upon any debt or contract, or who has defaulted, as surety or otherwise, upon any obligation to the City, or who is deemed irresponsible or unreliable by the City Commission of Fort Lauderdale.

**PERSONAL INVESTIGATION** - Bidders shall satisfy themselves by personal investigation, and by such other means as they may think necessary or desirable, as to the conditions affecting the proposed work and the cost. No information derived from maps, plans, specifications, or from the Engineer, City Manager, or their assistants shall relieve the Contractor from any risk or from fulfilling all terms of the contract.

**INCONSISTENCIES** – Any seeming inconsistency between different provisions of the plans, specifications, proposal or contract, or any point requiring explanation must be inquired into by the bidder, in writing, at least ten (10) days prior to the time set for opening proposals. After proposals are opened, the bidders shall abide by the decision of the Engineer as to such interpretation.

**ADDENDA AND INTERPRETATIONS** - No interpretations of the meaning of the plans, specifications or other contract documents will be made orally to any bidder. Prospective bidders must request such interpretation in writing as instructed in the bid package. To be considered, such request must be received by the Questions and Answers deadline as indicated in BIDSYNC.COM. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. **It is the bidder's responsibility to verify if addendums have been issued in BIDSYNC.COM.** Failure of any bidder to receive any such addenda or interpretation shall not relieve any bidder from any obligation under his bid as submitted. All addenda so issued shall become a part of the contract document. **Bidder** shall verify **in BIDSYNC.COM** that he has all addenda before submitting a bid.

**LEGAL CONDITIONS** - Bidders are notified to familiarize themselves with the provisions of the laws of the State of Florida relating to hours of labor on municipal work, and with the provisions of the laws of the State of Florida and the Charter and the ordinances of the City of Fort Lauderdale.

**PUBLIC ENTITY CRIMES** - 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 submit bids on leases of real property to a public entity, 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 thirty-six (36) months from the date of being placed on the convicted vendor list.

**FORMS OF PROPOSALS** - Each proposal and its accompanying statements must be made on the blanks provided. **THE FORMS MUST BE SUBMITTED ELECTRONICALLY, IN GOOD ORDER WITH ALL BLANKS COMPLETED,** and must show the name of the bidder and a statement as to its contents.

**FORMS OF PROPOSALS (CONTINUED)** - The proposal must be signed by one duly authorized to do so, and in case signed by a deputy or subordinate, the principal's properly written authority to such deputy or subordinate must accompany the proposal. No proposal will be accepted, for any reason whatsoever, which is not submitted to the City as stated above, within the specified time.

**INSURANCE** - Contractor shall provide and shall require all of its sub-contractors to provide, pay for, and maintain in force at all times during the term of the Agreement, such insurance, including Property Insurance (Builder's Risk), Commercial General Liability Insurance, Business Automobile Liability Insurance, Workers' Compensation Insurance, Employer's Liability Insurance, and Umbrella/Excess Liability, as stated below. Such policy or policies shall be issued by companies authorized to do business in the State of Florida and having agents upon whom service of process may be made in the State of Florida.

**BID BOND** - A bid bond shall accompany each proposal as evidence of the good faith and responsibility of the bidder. The bond shall be retained by the City as liquidated damages should the bidder refuse to or fail to enter into a contract for the execution of the work embraced in this proposal, in the event the proposal of the bidder is accepted. Retention of such amount shall not be construed as a penalty or forfeiture.

The above bond shall be a guarantee that the bidder will, if necessary, promptly execute a satisfactory contract and furnish good and sufficient bonds. As soon as a satisfactory contract has been executed and the bonds furnished and accepted, the bond accompanying the proposal of the successful bidder will be returned to him. If the successful bidder shall not enter into, execute, and deliver such a contract and furnish the required bonds within ten (10) days after receiving notice to do so, the bid bond shall immediately become the property of the City of Fort Lauderdale as liquidated damages. Retention of such amount shall not be construed as a penalty or forfeiture.

**FILLING IN BIDS** - All prices must be electronically submitted in the proposal pages, and all proposals must fully cover all items for which proposals are asked and no other. Bidders are required to state the names and places of residence of all persons interested, and if no other person is interested, the bidder shall distinctly state such fact and shall state that the proposal is, in all respects, fair and without collusion or fraud. Where more than one person is interested, it is required that all persons interested or their legal representative make all verification and subscribe to the proposal.

**PRICES QUOTED:** Deduct any discount offered and quote firm net unit prices. In the case of a discrepancy in computing the amount of the bid, the unit price quoted will govern. All prices quoted shall be F.O.B. destination, freight prepaid (Bidder pays and bears freight charges, Bidder owns goods in transit and files any claims), unless otherwise stated in Special Conditions. Each item must be bid separately. No attempt shall be made to tie any item or items contained in the ITB with any other business with the City.

**BIDS FIRM FOR ACCEPTANCE:** Bidder warrants, by virtue of bidding, that his bid and the prices quoted in his bid will be firm for acceptance by the City for a period of one hundred and twenty (120) days from the date of bid opening unless otherwise stated in the ITB. The City shall award contract within this time period or shall request to the recommended awarded vendor an extension to hold pricing, until products/services have been awarded.

**ADDITIONAL ITEMS OR SERVICES:** The City may require additional items or services of a similar nature, but not specifically listed in the contract. The Contractor agrees to provide such items or

services, and shall provide the City prices on such additional items or services. If the price(s) offered are not acceptable to the City, and the situation cannot be resolved to the satisfaction of the City, the City reserves the right to procure those items or services from other vendors, or to cancel the contract upon giving the Contractor thirty (30) days written notice.

**DELETION OR MODIFICATION OF SERVICES:** The City reserves the right to delete any portion of the Contract at any time without cause, and if such right is exercised by the City, the total fee shall be reduced in the same ratio as the estimated cost of the work deleted bears to the estimated cost of the work originally planned. If work has already been accomplished on the portion of the Contract to be deleted, the Contractor shall be paid for the deleted portion on the basis of the estimated percentage of completion of such portion.

If the Contractor and the City agree on modifications or revisions to the task elements, after the City has approved work to begin on a particular task or project, and a budget has been established for that task or project, the Contractor will submit a revised budget to the City for approval prior to proceeding with the work.

**CAUSES FOR REJECTION** - No proposal will be canvassed, considered or accepted which, in the opinion of the City Commission, is informal or unbalanced, or contains inadequate or unreasonable prices for any items; each item must carry its own proportion of the cost as nearly as is practicable. Any alteration, erasure, interlineation, or failure to specify bids for all items called for in the schedule shall render the proposal informal.

**REJECTION OF BIDS** - The City reserves the right to reject any bid if the evidence submitted by the bidder, or if the investigation of such bidder, fails to satisfy the City that such bidder is properly qualified to carry out the obligations and to complete the work contemplated. Any or all proposals will be rejected, if there is reason to believe that collusion exists among bidders. A proposal will be considered irregular and may be rejected, if it shows serious omissions, alterations in form, additions not called for, conditions or unauthorized alternates, or irregularities of any kind. The City reserves the right to reject any or all proposals and to waive such technical errors as may be deemed best for the interests of the City.

**BID PROTEST PROCEDURE:** Any proposer or bidder who is not recommended for award of a contract and who alleges a failure by the City to follow the City's procurement ordinance or any applicable law may protest to the Procurement Division – Procurement Manager, by delivering a letter of protest within five (5) days after a Notice of Intent to award is posted on the City's website at the following link: [http://www.fortlauderdale.gov/purchasing/notices\\_of\\_intent.htm](http://www.fortlauderdale.gov/purchasing/notices_of_intent.htm). The complete protest ordinance may be found on the City's website at the following link: <http://www.fortlauderdale.gov/purchasing/protestordinance.pdf>

**WITHDRAWALS** - Any bidder may, without prejudice to himself, withdraw his proposal at any time prior to the expiration of the time during which proposals may be submitted. Such request for withdrawal must be in writing and signed in the same manner and by the same person who signed the proposal. After expiration of the period for receiving proposals, no proposal can be withdrawn, modified, or explained.

**CONTRACT** - The bidder to whom award is made shall execute a written contract to do the work and maintain the same in good repair until final acceptance by the proper authorities, and shall furnish

good and sufficient bonds as specified within ten (10) days after receiving such contract for execution. If the bidder to whom the first award is made fails to enter into a contract as provided, the award may be annulled and the contract let to the next lowest bidder who is reliable, responsible, and responsive in the opinion of the City Commission, and that bidder shall fulfill every stipulation and obligation as if such bidder were the original party to whom award was made.

The contract shall provide that the Contractor agrees to correct any defective or faulty work or material, which may appear within one (1) year after completion of the work and receipt of final payment.

**ENFORCEMENT OF SPECIFICATIONS** - Copies of the specifications will be placed in the hands of all the assistants to the Engineer and Inspectors employed on the work, who shall enforce each and every requirement of the contract. Such assistants shall have no authority to vary from such requirements.

**COPIES OF DRAWING PLANS** - Copies of the drawing plans are on file in the Public Works Department, City Hall, 4<sup>th</sup> Floor, 100 N. Andrews Avenue, Fort Lauderdale, Florida 33301.

**SURETY BOND** – The Contractor shall execute and record in the public records of Broward County, Florida, a payment and performance bond in an amount at least equal to the Contract Price with a surety insurer authorized to do business in the State of Florida as surety, ("Bond"), in accordance with Section 255.05, Florida Statutes (2014), as may be amended or revised, as security for the faithful performance and payment of all of the Contractor's obligations under the Contract Documents.

The successful bidder shall furnish a performance and payment bond in compliance with Section 255.05, Florida Statutes, written by a Corporate Surety company, holding a Certificate of Authority from the Secretary of the Treasury of the United States as acceptable sureties on federal bonds, in an amount equal to the total amount payable by the terms of the contract, executed and issued by a Resident Agent licensed by and having an office in the State of Florida, representing such Corporate Surety, conditioned for the due and faithful performance of the work, and providing in addition to all other conditions, that if the Contractor, or his or its subcontractors, fail to duly pay for any labor, materials, or other supplies used or consumed by such Contractor, or his or its subcontractor or subcontractors, in performance of the work contracted to be done, the Surety will pay the same in the amount not exceeding the sum provided in such bonds, together with interest at the rate of fifteen percent (15%) per annum, and that they shall indemnify and save harmless the City of Fort Lauderdale to the extent of any and all payments in connection with carrying out of the contract, which the City may be required to make under the law.

The Contractor is required at all times to have a valid surety bond in force covering the work being performed. A failure to have such bond in force at any time shall constitute a default on the part of the Contractor. A bond written by a surety, which becomes disqualified to do business in the State of Florida, shall automatically constitute a failure on the part of the Contractor to meet the above requirements.

Such bond shall continue in effect for one (1) year after completion and acceptance of the work with liability equal to at least twenty-five percent (25%) of contract price, or an additional bond shall be conditioned that the Contractor will correct any defective or faulty work or material which appear within one (1) year after completion of the contract, upon notification by the City, except in contracts which are concerned solely with demolition work, in which cases twenty-five percent (25%) liability will not be applicable.

AUDIT OF CONTRACTOR'S RECORDS - Upon execution of the Contract, the City reserves the right to conduct any necessary audit of the Contractor's records. Such an audit, or audits, may be conducted by the City or its representatives at any time prior to final payment, or thereafter, for a period up to three (3) years. The City may also require submittal of the records from either the Contractor, the Subcontractor, or both. For the purpose of this Section, records shall include all books of account, supporting documents and papers deemed necessary by the City to assure compliance with the contract provisions.

Failure of the Contractor or Subcontractor to comply with these requirements may result in disqualification or suspension from bidding for future contracts or disapproval as a Subcontractor at the option of the City.

The Contractor shall assure that each of its Subcontractors will provide access to its records pertaining to the project upon request by the City.

PERIODIC ESTIMATE FOR PARTIAL PAYMENT - After the Contractor has submitted a periodic estimate for partial payment, approved and certified by the Public Works Department, the City shall make payment in the manner provided in the Contract Documents and in accordance with Florida's Prompt Payment Act, Section 218, Florida Statutes.

RESERVATION FOR AWARD AND REJECTION OF BIDS - The City reserves the right to accept or reject any or all bids, part of bids, and to waive minor irregularities or variations to specifications contained in bids, and minor irregularities in the bidding process. The City also reserves the right to award the contract on a split order basis, lump sum basis, individual item basis, or such combination as shall best serve the interest of the City. The City reserves the right to make an award to the responsive and responsible bidder whose product or service meets the terms, conditions, and specifications of the ITB and whose bid is considered to best serve the City's interest. In determining the responsiveness of the offer and the responsibility of the Bidder, the following shall be considered when applicable: the ability, capacity and skill of the Bidder to perform as required; whether the Bidder can perform promptly, or within the time specified, without delay or interference; the character, integrity, reputation, judgment, experience and efficiency of the Bidder; the quality of past performance by the Bidder; the previous and existing compliance by the Bidder with related laws and ordinances; the sufficiency of the Bidder's financial resources; the availability, quality and adaptability of the Bidder's supplies or services to the required use; the ability of the Bidder to provide future maintenance, service or parts; the number and scope of conditions attached to the bid.

MINORITY AND WOMEN BUSINESS ENTERPRISE PARTICIPATION AND BUSINESS - It is the desire of the City of Fort Lauderdale to increase the participation of minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the City does not have any preference or set aside programs in place, it is committed **to a policy of equitable participation for these firms**. The City of Fort Lauderdale wants to increase the participation of Minority Business Enterprises (MBE), Women Business Enterprises (WBE), and Small Business Enterprises (SBE) in its procurement activities. If your firm qualifies in accordance with the below definitions please indicate in the space provided in this ITB.

Minority Business Enterprise (MBE) "A Minority Business" is a business enterprise that is owned or controlled by one or more socially or economically disadvantaged persons. Such disadvantage may arise from cultural, racial, chronic economic circumstances or background or other similar cause. Such persons include, but are not limited to: Blacks, Hispanics, Asian Americans, and Native Americans.

The term "Minority Business Enterprise" means a business at least fifty-one percent (51%) of which is owned by minority group members or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by minority group members. For the purpose of the preceding sentence, minority group members are citizens of the United States who include, but are not limited to: Blacks, Hispanics, Asian Americans, and Native Americans.

Women Business Enterprise (WBE) a "Women Owned or Controlled Business" is a business enterprise at least fifty-one percent (51%) of which is owned by females or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by females.

Small Business Enterprise (SBE) "Small Business" means a corporation, partnership, sole proprietorship, or other legal entity formed for the purpose of making a profit, which is independently owned and operated, has either fewer than 100 employees or less than \$1,000,000 in annual gross receipts.

BLACK includes persons having origins in any of the Black racial groups of Africa.

WHITE includes persons whose origins are Anglo-Saxon and Europeans and persons of Indo-European decent including Pakistani and East Indian.

HISPANIC includes persons of Mexican, Puerto Rican, Cuban, Central and South American, or other Spanish culture or origin, regardless of race.

NATIVE AMERICAN includes persons whose origins are American Indians, Eskimos, Aleuts, or Native Hawaiians.

ASIAN AMERICAN includes persons having origin in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

DEBARRED OR SUSPENDED BIDDERS OR PROPOSERS - The bidder or proposer certifies, by submission of a response to this solicitation, that neither it nor its principals and subcontractors are presently debarred or suspended by any Federal department or agency.

LOBBYING ACTIVITIES - ALL CONTRACTORS PLEASE NOTE: Any contractor submitting a response to this solicitation must comply, if applicable, with City of Fort Lauderdale Ordinance No. C-00-27 & Resolution No. 07-101, Lobbying Activities. Copies of Ordinance No., C-00-27, and Resolution No. 07-101, may be obtained from the City Clerk's Office on the 7th Floor of City Hall, 100 N. Andrews Avenue, Fort Lauderdale, Florida. The ordinance may also be viewed on the City's website at [http://www.fortlauderdale.gov/clerk/LobbyistDocs/lobbyist\\_ordinance.pdf](http://www.fortlauderdale.gov/clerk/LobbyistDocs/lobbyist_ordinance.pdf)

#### EARLY PROJECT COMPLETION INCENTIVE

The City reserves the right to or not to negotiate an incentive program with the awarded vendor for timely completion. The City is under no obligation to offer such an incentive.

## SPECIAL CONDITIONS

### 01. PURPOSE

The City of Fort Lauderdale, Florida (City) is seeking bids from qualified bidders, hereinafter referred to as the Contractor, to provide Construction Services, in accordance with the terms, conditions, and specifications contained in this Invitation To Bid (ITB).

### 02. TRANSACTION FEES

The City of Fort Lauderdale uses BidSync ([www.bidsync.com](http://www.bidsync.com)) to distribute and receive bids and proposals. There is no charge to vendors/contractors to register and participate in the solicitation process, nor will any fees be charged to the awarded contractor.

### 03. SUBMISSION OF BIDS

It is the sole responsibility of the Contractor to ensure that their bid is submitted electronically through BidSync at [www.bidsync.com](http://www.bidsync.com) and that any bid security not submitted via BidSync reaches the City of Fort Lauderdale City Hall, Procurement Services Division, 6<sup>th</sup> floor, Room 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301 in a sealed envelope marked on the outside with the ITB solicitation number and Contractor's name, no later than the time and date specified in this solicitation. **PAPER BID SUBMITALS WILL NOT BE ACCEPTED. PLEASE SUBMIT YOUR BID RESPONSE ELECTRONICALLY.**

### 04. INFORMATION OR CLARIFICATION

For information concerning procedures for responding to this solicitation, contact **Fausto Vargas Procurement Specialist**, at (954) 828-6167 or email at [fvargas@fortlauderdale.gov](mailto:fvargas@fortlauderdale.gov). Such contact shall be for clarification purposes only.

For information concerning technical specifications please utilize the question/answer feature provided by BidSync at [www.bidsync.com](http://www.bidsync.com). Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. (See addendum section of BidSync Site). **Contractors please note:** No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized himself with the nature and extent of the work, and the equipment, materials, and labor required. The entire bid response must be submitted in accordance with all specifications contained in this solicitation. The questions and answers submitted in BidSync shall become part of any contract that is created from this ITB.

## 05. CONTRACT PERIOD

- 5.1 The Contractor recognizes that TIME IS OF THE ESSENCE. The Work shall commence within **30** calendar days (**20** working days) of the date of the Notice to Proceed.
- 5.2 The Work shall be Substantially Completed within **90** calendar days (**60** working days) after the date when the Contract Time commences to run as provided in the Notice to Proceed.
- 5.3 The Work shall be finally completed on the Final Completion Date and ready for final payment in accordance with this Agreement within **120** calendar days (**80** working days) after the date when the Contract Time commences to run as provided in the Notice to Proceed.

The City of Fort Lauderdale reserves the right to waive any informality in any bid and to reject any or all bids. The City of Fort Lauderdale reserves the right to reduce or delete any of the bid items.

**At time of award of contract, the City reserves the right to set a maximum dollar limit that may be expended on this project. Contract quantities of any or all items may be increased, reduced, or eliminated to adjust the contract amount to coincide with the amount of work necessary or to bring the contract value to within the established limit. All quantities are estimated and the City reserves the right to increase, reduce, or eliminate the contract quantities in any amount.**

**The undersigned bidder affirms that he has or will obtain all equipment necessary to complete the work described, that he has or will obtain all required permits and licenses from the appropriate agencies, and that his firm is authorized to do business in the State of Florida.**

## 06. BID SECURITY

A certified check, cashier's check, bank officer's check or bid bond for **FIVE** percent (**5%**) of the bid amount, made payable to the City of Fort Lauderdale, Florida, shall accompany each proposal.

## 07. REQUIRED LICENSES/CERTIFICATIONS

Contractor certified by State of Florida to perform the work specified in the scope. Must possess State of Florida General Contractor's License or Certified Commercial Pool/Spa Contractor.

***Note: Contractor must have proper licensing and be able to provide evidence of same, if requested, at time of award.***



**08. SPECIFIC EXPERIENCE REQUIRED**

Contractor should be normally engaged in the work of competitive swimming pool resurfacing at the time of bid submission. Bidder shall submit proof of construction experience for a minimum of three (3) projects of similar scope and scale (or larger) and shall, for each project listed, identify location; dates of construction; project name and overall scope; scope of work that was self-performed by Contractor; and client's name, address, telephone number and e-mail address.

**REFERENCES SHOULD NOT INCLUDE CITY OF FORT LAUDERDALE EMPLOYEES OR WORK PERFORMED FOR THE CITY.**

*By signing this bid solicitation, contractor is affirming that this expertise will be provided for this contract at no additional charge.*

**09. BID ALLOWANCE**

**Allowance for permits:** Payments will be made to the contractor based on the actual cost of permits upon submission of paid permit receipts. The City shall not pay for other costs related to obtaining or securing permits.

The amount indicated is intended to be sufficient to cover the entire project. If the City Permit fees exceed the allowance indicated, the City will reimburse the contractor the actual amount of City Permit Fees required for project completion.

<b>Allowance</b>	<b>\$</b>
Permit Fee	5,000.00
Labor and Material	15,000.00
Total	20,000.00

**Note:** *The City will add this allowance to your bid.*

**10. INSURANCE REQUIREMENTS** *(See Article 10, Bonds and Insurance, of the Contract for details)*

Insurance

10.1 As a condition precedent to the effectiveness of this Agreement, during the term of this Agreement and during any renewal or extension term of this Agreement, the Contractor, at the Contractor's sole expense, shall provide insurance of such types and with such terms and limits as noted below. Providing proof of and maintaining adequate insurance coverage are material obligations of the Contractor. The Contractor shall provide the City a certificate of insurance

evidencing such coverage. The Contractor's insurance coverage shall be primary insurance for all applicable policies. The limits of coverage under each policy maintained by the Contractor shall not be interpreted as limiting the Contractor's liability and obligations under this Agreement. All insurance policies shall be from insurers authorized to write insurance policies in the State of Florida and that possess an A.M. Best rating of A-, VII or better. All insurance policies are subject to approval by the City's Risk Manager.

The coverages, limits, and endorsements required herein protect the interests of the City, and these coverages, limits, and endorsements may not be relied upon by the Contractor for assessing the extent or determining appropriate types and limits of coverage to protect the Contractor against any loss exposure, whether as a result of this Agreement or otherwise. The requirements contained herein, as well as the City's review or acknowledgement, are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Contractor under this Agreement.

The following insurance policies and coverages are required:

#### 10.1.1 Commercial General Liability

Coverage must be afforded under a Commercial General Liability policy with limits not less than:

- \$1,000,000 each occurrence and \$2,000,000 aggregate for Bodily Injury, Property Damage, and Personal and Advertising Injury
- \$1,000,000 each occurrence and \$2,000,000 aggregate for Products and Completed Operations

Policy must include coverage for Contractual Liability and Independent Contractors.

The City and the City's officers, employees, and volunteers are to be covered as additional insureds with a CG 20 26 04 13 Additional Insured – Designated Person or Organization Endorsement or similar endorsement providing equal or broader Additional Insured Coverage with respect to liability arising out of activities performed by or on behalf of the Contractor. The coverage shall contain no special limitation on the scope of protection afforded to the City or the City's officers, employees, and volunteers.

#### 10.1.2 Business Automobile Liability

Coverage must be afforded for all Owned, Hired, Scheduled, and Non-Owned vehicles for Bodily Injury and Property Damage in an amount not less than \$1,000,000 combined single limit each accident.

If the Contractor does not own vehicles, the Contractor shall maintain coverage for Hired and Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

### 10.1.3 Workers' Compensation and Employer's Liability

Coverage must be afforded per Chapter 440, Florida Statutes. Any person or entity performing work for or on behalf of the City must provide Workers' Compensation insurance. Exceptions and exemptions will be allowed by the City's Risk Manager, if they are in accordance with Florida Statute.

The Contractor waives, and the Contractor shall ensure that the Contractor's insurance carrier waives, all subrogation rights against the City and the City's officers, employees, and volunteers for all losses or damages. The City requires the policy to be endorsed with WC 00 03 13 Waiver of our Right to Recover from Others or equivalent.

The Contractor must be in compliance with all applicable State and federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act and the Jones Act, if applicable.

#### Insurance Certificate Requirements

- a. The Contractor shall provide the City with valid Certificates of Insurance (binders are unacceptable) no later than thirty (30) days prior to the start of work contemplated in this Agreement.
- b. The Contractor shall provide the City with valid Certificates of Insurance (binders are unacceptable) no later than thirty (30) days prior to the start of work contemplated in this Agreement.
- c. The Contractor shall provide to the City a Certificate of Insurance having a thirty (30) day notice of cancellation; ten (10) days' notice if cancellation is for nonpayment of premium.
- d. In the event that the insurer is unable to accommodate the cancellation notice requirement, it shall be the responsibility of the Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested, and addressed to the certificate holder.
- e. In the event the Agreement term goes beyond the expiration date of the insurance policy, the Contractor shall provide the City with an updated Certificate of Insurance no later than ten (10) days prior to the expiration of the insurance currently in effect. The City reserves the right to suspend the Agreement until this requirement is met.
- f. The Certificate of Insurance shall indicate whether coverage is provided under a claims-made or occurrence form. If any coverage is provided on a claims-made form, the Certificate of Insurance must show a retroactive date, which shall be the effective date of the initial contract or prior.
- g. The City shall be named as an Additional Insured on all liability policies, with the exception of Workers' Compensation.
- h. The City shall be granted a Waiver of Subrogation on the Contractor's Workers' Compensation insurance policy.

- i. The title of the Agreement, Bid/Contract number, event dates, or other identifying reference must be listed on the Certificate of Insurance.

The Certificate Holder should read as follows:

City of Fort Lauderdale

100 N. Andrews Avenue

Fort Lauderdale, FL 33301

The Contractor has the sole responsibility for the payment of all insurance premiums and shall be fully and solely responsible for any costs or expenses as a result of a coverage deductible, co-insurance penalty, or self-insured retention; including any loss not covered because of the operation of such deductible, co-insurance penalty, self-insured retention, or coverage exclusion or limitation. Any costs for adding the City as an Additional Insured shall be at the Contractor's expense.

If the Contractor's primary insurance policy/policies do not meet the minimum requirements, as set forth in this Agreement, the Contractor may provide evidence of an Umbrella/Excess insurance policy to comply with this requirement.

The Contractor's insurance coverage shall be primary insurance as applied to the City and the City's officers, employees, and volunteers. Any insurance or self-insurance maintained by the City covering the City, the City's officers, employees, or volunteers shall be non-contributory.

Any exclusion or provision in the insurance maintained by the Contractor that excludes coverage for work contemplated in this Agreement shall be unacceptable and shall be considered breach of contract.

All required insurance policies must be maintained until the contract work has been accepted by the City, or until this Agreement is terminated, whichever is later. Any lapse in coverage shall be considered breach of contract. In addition, Contractor must provide to the City confirmation of coverage renewal via an updated certificate should any policies expire prior to the expiration of this Agreement. The City reserves the right to review, at any time, coverage forms and limits of Contractor's insurance policies.

The Contractor shall provide notice of any and all claims, accidents, and any other occurrences associated with this Agreement shall be provided to the Contractor's insurance company or companies and the City's Risk Management office as soon as practical.

It is the Contractor's responsibility to ensure that any and all of the Contractor's independent contractors and subcontractors comply with these insurance requirements. All coverages for independent contractors and subcontractors shall be subject to all of the applicable requirements stated herein. Any and all deficiencies are the responsibility of the Contractor.

#### 10.1.4 ADDITIONAL REQUIRED COVERAGES

##### 10.1.4.1 Umbrella/Excess Liability:

The Contractor shall provide umbrella/excess coverage with limits of no less than \$2,000,000 excess of Commercial General Liability, Automobile Liability and Employer's Liability.

**NOTE: CITY PROJECT NUMBER AND NAME MUST APPEAR ON EACH CERTIFICATE, AND THE CITY OF FORT LAUDERDALE MUST BE NAMED ON THE CERTIFICATE AS AN "ADDITIONAL INSURED" ON ALL LIABILITY POLICIES, WITH THE EXCEPTION OF WORKERS' COMPENSATION.**

**A Sample Insurance Certificate shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.**

#### **11. PERFORMANCE AND PAYMENT BOND: 100%**

**Number of awards anticipated: One (1)**

#### **12. CITY PROJECT MANAGER**

The Project Manager is hereby designated by the City as Thomas White whose address is 100 North Andrews, 5<sup>th</sup> Floor, Fort Lauderdale, FL 33301, telephone number: (954) 828-5350, and email address is [thomaswh@fortlauderdale.gov](mailto:thomaswh@fortlauderdale.gov). The Project Manager will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the Contract Documents in connection with completion of the Work in accordance with this Agreement.

#### **13. LIQUIDATED DAMAGES** *(See Article 16, Liquidated Damages, of the Contract for details)*

Upon failure of the Contractor to complete the Work within the time specified for completion, the Contractor shall pay to the City the sum of **Two Hundred and Fifty Dollars (\$250.00)** for each and every calendar day that the completion of the Work is delayed beyond the time specified in this Agreement for completion, as fixed and agreed liquidated damages and not as a penalty, so long as the delay is caused by the Contractor. (See Article 16, Liquidated Damages Clause, of the Contract)

#### **14. PAYMENT** *(See Article 7, Payment, of the Contract for other details)*

The City has implemented a Purchasing Card (P-Card) Program utilizing both VISA and MASTERCARD networks. Purchases from this contract will be made utilizing the City's Purchasing Card. Contractor will receive payment from the purchasing card in the same manner as other credit card purchases. Accordingly, bidders must presently have the

ability to accept these credit cards or take whatever steps necessary to implement the ability before the start of the contract term, or contract award by the City. The City reserves the right to revise this program as necessary.

**15. WORK SCHEDULE (including overtime hours): Standard**

Regular work hours: **8:00 am to 4:30 pm, Monday through Friday.**

City Inspector Hours: **7:00 am to 4:30 pm, Monday through Friday.**

Any inspection requested by the contractor outside those hours will be considered overtime to be paid by the Contractor.

**16. INSPECTION OVERTIME COST: \$ 100.00 per Hour.**

CITY OF FORT LAUDERDALE  
CONSTRUCTION AGREEMENT

THIS AGREEMENT made and entered into this \_\_\_ day of \_\_\_, **2020**, by and between the City of Fort Lauderdale, a Florida municipal corporation (City) and \_\_\_\_\_, (Contractor), (parties);

WHEREAS, the City desires to retain a contractor for the Project as expressed in its Invitation to Bid No., **12413-103**, Project Number, **12578**, which was opened on \_\_\_\_\_, **2020**; and,

WHEREAS, the Contractor has expressed its willingness and capability to perform the necessary work to accomplish the Project;

NOW, THEREFORE, the City and the Contractor, in consideration of the mutual covenants and conditions contained herein and for other good and valuable consideration, the receipt and sufficiency is hereby acknowledged, agree as follows:

**ARTICLE 1 – DEFINITIONS**

Whenever used in this Agreement or in other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural forms:

- 1.1 Agreement – This written Agreement between the City and the Contractor covering the work to be performed including other Contract Documents that are attached to or incorporated in the Agreement.
- 1.2 Application for Payment – The form accepted by the City which is to be used by the Contractor in requesting progress or final payment and which is to include such supporting documentation as is required by the Contract Documents.
- 1.3 Approve – The word approve is defined to mean review of the material, equipment or methods for general compliance with design concepts and with the information given in the Contract Documents. It does not imply a responsibility on the part of the City to verify in every detail conformance with plans and specifications.
- 1.4 Bid – The offer or Bid of the Contractor submitted on the prescribed form setting forth the total prices for the Work to be performed.
- 1.5 Bid Documents – This Agreement, advertisement for Invitation to Bids, the Instructions to Bidders, the Bid Form (with supplemental affidavits and agreements), the Contract Forms, General Conditions, the Supplementary Conditions, the Specifications, and the Plans, which documents all become an integral part of the Contract Documents.

- 1.6 Certificate of Substantial Completion – Certificate provided by the City certifying that all Work, excluding the punch list items, has been completed, inspected, and accepted by the City.
- 1.7 Change Order – A change order is defined as a written order to a contractor approved by the City, authorizing a revision of an underlying agreement between the City and a contractor that is directly related to the original scope of work or an adjustment in the original contract price or the contract time directly related to the original scope of work, issued on or after the effective date of the contract.
- 1.8 City – The City of Fort Lauderdale, Florida, including but not limited to its employees, agents, officials, representatives, contractors, subcontractors, volunteers, successors and assigns, with whom the Contractor has entered into the Agreement and for whom the Work is to be provided.
- 1.9 Contract Documents – The Contract Documents shall consist of this Agreement, Exhibits to this Agreement, Public Construction Bond, Performance Bond, Payment Bond and Certificates of Insurance, Notice of Award and Notice to Proceed, General Conditions as amended by the Special Conditions, Technical Specifications, Plans/Drawings, Addenda, Bid Form and supplement Affidavits and Agreements, all applicable provisions of State and Federal Law and any modification, including Change Orders or written amendments duly delivered after execution of Agreement, Invitation to Bid, Instructions to Bidders and Bid Bond, Contractor's response to the City's Invitation to Bid, Schedule of Completion, Schedule of Values, all amendments, modifications and supplements, change orders and work directive changes issued on or after the Effective Date of the Agreement, as well as any additional documents that are required to be submitted under the Agreement.
- Permits on file with the City and or those permits to be obtained shall be considered directive in nature and will be considered a part of this Agreement. A copy of all permits shall be given to the City for inclusion in the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.
- 1.10 Contract Price – The monies payable to the Contractor by the City under the Contract Documents and in accordance with the line item unit prices listed in the Bid.
- 1.11 Contract Time – The number of calendar days stated in the Agreement for the completion of the Work. The dates on which the work shall be started and shall be completed as stated in the Notice to Proceed.
- 1.12 Contractor – The person, firm, company, or corporation with whom the City has entered into the Agreement, including but not limited to its employees, agents,



representatives, contractors, subcontractors, their subcontractors and their other successors and assigns.

- 1.13 Day – A calendar day of twenty-four (24) hours ending at midnight.
- 1.14 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, test or approval referred to in the Contract Documents, or has been damaged prior to the Project Manager’s recommendation of final payment.
- 1.15 Effective Date of the Agreement – The effective date of the Agreement shall be the date the City Commission approves the work. The Contractor shall provide all required payment and performance bonds and insurances to the City within ten (10) calendar days following the City Commission approval. Upon verification of all bonds and insurances, the City will issue a notice to proceed (“NTP”) to the Contractor. Contract Time will commence on the date when the Notice to Proceed is issued. The Contractor shall commence the work immediately upon receipt of the Notice to Proceed. Failure of the Contractor to proceed with the work will constitute non-performance of the Contractor and would be ground for termination of the Agreement per Article 17 of the Agreement.
- 1.16 Final Completion Date – The date the Work is completed, including completion of the final punch list, and delivered along with those items specified in the Contract Documents and is accepted by the City.
- 1.17 Hazardous Materials (HAZMAT) – Any solid, liquid, or gaseous material that is toxic, flammable, radioactive, corrosive, chemically reactive, or unstable upon prolonged storage in quantities that could pose a threat to life, property, or the environment defined in Section 101(14) of Comprehensive Environmental Response, Compensation and Liability Act of 1980 and in 40 CFR 300.6. Also defined by 49 CFR 171.8 as a substance or material designated by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated.
- 1.18 Hazardous Substance – As defined by Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act; any substance designated pursuant to Section 311(b)(2)(A) of the Clean Water Act; any element, compound, mixture, solution or substance designated pursuant to Section 102 identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act {but not including any waste listed under Section 307[a] of the Clean Water Act}; any hazardous air pollutant listed under Section 112 of the Clean Air Act; and any imminently hazardous chemical substance or mixture pursuant to Section 7 of the Toxic Substances Control Act. The term does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance in the first sentence of this paragraph, and

the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

- 1.19 Hazardous Waste – Those solid wastes designated by OSHA in accordance with 40 CFR 261 due to the properties of ignitability, corrosivity, reactivity, or toxicity. Any material that is subject to the Hazardous Waste Manifest requirements of the EPA specified in 40 CFR Part 262.
- 1.20 Holidays – Those designated non-workdays as established by the City Commission of the City of Fort Lauderdale.
- 1.21 Inspection – The term “inspection” and the act of inspecting as used in this Agreement is defined to mean the examination of construction to ensure that it conforms to the design concept expressed in the plans and specifications. This term shall not be construed to mean supervision, superintending and/or overseeing.
- 1.22 Notice of Award – The written notice by City to the Contractor stating that upon compliance by the Contractor with the conditions precedent enumerated therein, within the time specified that the City will sign and deliver this Agreement.
- 1.23 Notice to Proceed – A written notice given by the City to the Contractor fixing the date on which the Contract Time will commence to run and on which the Contract Time will end.
- 1.24 Plans – The drawings which show the character and scope of the work to be performed and which have been prepared or approved by the City and are referred to in the Contract Documents.
- 1.25 Premises (otherwise known as Site or Work Site) – means the land, buildings, facilities, etc. upon which the Work is to be performed.
- 1.26 Project – The total construction of the Work to be provided as defined in the Contract Documents.
- 1.27 Project Manager – The employee of the City, or other designated individual who is herein referred to as the Project Manager, will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the Contract Documents in connection with completion of the Work in accordance with this Agreement. The Project Manager, or designee, shall be the authorized agent for the City unless otherwise specified.
- 1.28 Punch List – The City’s list of Work yet to be done or be corrected by the Contractor, before the Final Completion date can be determined by the City.

- 1.29 Record Documents – A complete set of all specifications, drawings, addenda, modifications, shop drawings, submittals and samples annotated to show all changes made during the construction process.
- 1.30 Record Drawings or "As-Builts" – A set of drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the Contractor. These documents will be signed and sealed by the Engineer of Record or a Professional Land Surveyor licensed in the State of Florida.
- 1.31 Substantially Completed Date – A date when the Contractor has requested in writing, stating that the Work is substantially completed and is ready for an inspection and issuance of a final punch list for the Project.
- 1.32 Work – The entire completed delivered product 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 material and equipment into the product, all as required by the Contract Documents.

## ARTICLE 2 – SCOPE OF WORK

- 2.1 The Contractor shall complete all work as specified or indicated in the Contract Documents. The Project for which the Work under the Contract Documents may be the whole or only part is generally described as follows:

**Pool Resurfacing-Riverland Park Pool, Carter Park Pool and Croissant Park Water Playground**

**ITB #12413-103 PROJECT # 12578**

- 2.2 All Work for the Project shall be constructed in accordance with the Drawings and Specifications. The Work generally involves:

### PROJECT DESCRIPTION

The projects are located at Riverland Park Public Pool, 950 SW 27<sup>th</sup> Avenue. Carter Park Public Pool, 1450 W. Sunrise Blvd. Croissant Park Water Playground, 245 West Park Drive, all 3 in Fort Lauderdale, Florida. The work to be accomplished includes, but is not limited to the demolition of the existing pools surfacing and resurfaced utilizing SGM's Commercial White Diamond Brite or City approved equivalent and the replacement of each pool / water playground's main drain cover. Contractor must be a currently approved/qualified applicator of material specified herein, and must furnish proof of such qualification to the City from the manufacturer. Bidder should be normally engaged in the work of competitive swimming pool resurfacing at the time of bid submission. All work is to be performed in accordance with the Florida Building Code by legally licensed and insured contractors capable of pulling all necessary permits to successfully complete the

project. A list of all sub-contractors must be supplied with the bid response. The pool resurfacing shall be in compliance with all applicable State and local codes and regulations

### ARTICLE 3 – PROJECT MANAGER

- 3.1 The Project Manager is hereby designated by the City as Thomas White, whose address is 100 N. Andrews Avenue, 5<sup>th</sup> Floor, Fort Lauderdale, FL 33301, telephone number: (954) 828-4019, and email address is [thomaswh@fortlauderdale.gov](mailto:thomaswh@fortlauderdale.gov). The Project Manager will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the Contract Documents in connection with completion of the Work in accordance with this Agreement.

### ARTICLE 4 – CONTRACT DOCUMENTS

The Contract Documents may only be altered, amended, or repealed in accordance with the specific provisions of the terms of this Agreement. The Contract Documents which comprise the entire Agreement between the City and Contractor are attached to this Agreement, are made a part hereof and consist of the following:

- 4.1 This Agreement.
- 4.3 Exhibits to this Agreement: (Plans sheets No.32, sheets respectively, inclusive).
- 4.4 Public Construction Bond, Performance Bond, Payment Bond and Certificates of Insurance.
- 4.5 Notice of Award and Notice to Proceed.
- 4.6 General Conditions as amended by the Special Conditions.
- 4.7 Technical Specifications.
- 4.8 Plans/Drawings.
- 4.9 Addenda number \_\_ through \_\_ inclusive.
- 4.10 Bid Form and supplement Affidavits and Agreements.
- 4.11 All applicable provisions of State and Federal Law.
- 4.12 Invitation to Bid No. **12413-103**, Instructions to Bidders, and Bid Bond.
- 4.13 Contractor's response to the City's Invitation to Bid No. **12413-103**, dated                     ,2020
- 4.14 Schedule of Completion and Schedule of Values.

- 4.15 All amendments, modifications and supplements, change orders and work directive changes issued on or after the Effective Date of the Agreement.
- 4.16 Any additional documents that are required to be submitted under the Agreement.
- 4.17 Permits on file with the City and or those permits to be obtained shall be considered directive in nature and will be considered a part of this Agreement. A copy of all permits shall be given to the City for inclusion in the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.

In the event of any conflict between the documents or any ambiguity or missing specification or instruction, the following priority is established:

- a. Approved change orders, addenda or amendments.
- b. Specifications (quality) and Drawings (location and quantity).
- c. Supplemental conditions or special terms.
- d. General Terms and Conditions.
- e. This Agreement dated \_\_\_\_\_, and any attachments.
- f. Invitation to Bid No. **12413-103**, and the specifications prepared by the City.
- g. Contractor's response to the City's Invitation to Bid No. **12413-103**, dated \_\_\_\_\_, **2020**.
- h. Schedule of Values.
- i. Schedule of Completion.

If during the performance of the Work, Contractor finds a conflict, error or discrepancy in the Contract Documents, Contractor shall so report to the Project Manager, in writing, at once and before proceeding with the Work affected shall obtain a written interpretation or clarification from the City.

It is the intent of the specifications and plans to describe a complete Project to be constructed in accordance with the Contract Documents. Any Work that may reasonably be inferred from the specifications or plans as being required to produce the intended result shall be supplied whether or not it is specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials, or equipment, such works shall be interpreted in accordance with such meaning. Reference to standard specifications, manuals or codes of any technical society, organization or associations, or to the code of any governmental authority whether such reference be

specific or implied, shall mean the latest standard specification, manual or code in effect as of the Effective Date of this Agreement, 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 change the duties and responsibilities of the City, the Contractor, or any of their agents or employees from those set forth in the Contract Documents.

#### ARTICLE 5 – CONTRACT TIME

- 5.1 The Contractor recognizes that **TIME IS OF THE ESSENCE**. The Work shall commence within **30** calendar days (**20** working days) of the date of the Notice to Proceed.
- 5.2 The Work shall be Substantially Completed within **90** calendar days (**60** working days) after the date when the Contract Time commences to run as provided in the Notice to Proceed.
- 5.3 The Work shall be finally completed on the Final Completion Date and ready for final payment in accordance with this Agreement within **120** calendar days (**80** working days) after the date when the Contract Time commences to run as provided in the Notice to Proceed.

#### ARTICLE 6 – CONTRACT PRICE

- 6.1 City shall pay Contractor for performance of the Work in accordance with Article 7, subject to additions and deletions by Change Order, as provided for in this Agreement.
- 6.2 The parties expressly agree that the Contract Price, which shall not exceed the amount of \$\_\_\_\_\_, constitutes the total maximum compensation payable to Contractor for performing the Work, plus any Work done pursuant to a Change Order. The Contract Price is in accordance with the line item unit prices listed in the Bid. Line items are based on a unit price cost multiplied by a defined quantity. Pricing shall remain firm for the duration of the project.

Any additional duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at Contractor's expense without change to the Contract Price.

Commencement of any phases of the contract are contingent upon appropriation of funds.

- 6.3 The Contract Price constitutes the compensation payable to Contractor for performing the Work plus any Work done pursuant to a Change Order. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at Contractor's expense without change in the Contract Price.

## ARTICLE 7 – PAYMENT

- 7.1 Contractor shall submit Applications for Payment in accordance with the Contract Documents. Applications for Payment will be processed by City as provided in the General Conditions.
- 7.2 Progress Payments. City shall make progress payments on account of the Contract Price based on the Contractor's monthly Applications for Payment, which shall be submitted by the Contractor between the first (1<sup>st</sup>) and the tenth (10<sup>th</sup>) day after the end of each calendar month for which payment is requested. All progress payments will be made on the basis of the progress of the Work completed.
- 7.3 Prior to Final Completion, progress payments will be made in an amount equal to ninety percent (90%) of the value of Work completed less in each case the aggregate of payments previously made.
- 7.4 Final Payment. Upon final completion of the Work in accordance with the General Conditions, as may be supplemented, the City shall pay Contractor an amount sufficient to increase total payments to one-hundred percent (100%) of the Contract Price. However, not less than ten percent (10%) of the Contract Price shall be retained until Record Drawings (as-builts), specifications, addenda, modifications and shop drawings, including all manufacturers' instructional and parts manuals are delivered to and accepted by the City.
- 7.5 City may withhold, in whole or in part, payment to such extent as may be necessary to protect itself from loss on account of:
- 7.5.1 Defective work not remedied.
  - 7.5.2 Claims filed or reasonable evidence indicating probable filing of claims by other parties against Contractor or City because of Contractor's performance.
  - 7.5.3 Failure of Contractor to make payments properly to subcontractors or for material or labor.
  - 7.5.4 Damage to another contractor not remedied.
  - 7.5.5 Liquidated damages and costs incurred by Consultant for extended construction administration, if applicable.
  - 7.5.6 Failure of Contractor to provide any and all documents required by the Contract Documents.

When the above grounds are removed or resolved satisfactory to the Project Manager, payment shall be made in whole or in part.

- 7.6 The City shall make payment to the Contractor in accordance with the Florida Prompt Payment Act, Section 218.70, Florida Statutes.
- 7.7 Payment on this Agreement will be made by check.
- 7.8 Payment Card Industry (PCI) Compliance

Contractor agrees to comply with all applicable state, federal and international laws, as well as industry best practices, governing the collection, access, use, disclosure, safeguarding and destruction of Protected Information.

Contractor and/or any subcontractor that handles credit card data must be, and remain, PCI compliant under the current standards and will provide documentation confirming compliance upon request by the City of Fort Lauderdale, failure to produce documentation could result in termination of the Agreement.

## **ARTICLE 8 – CONTRACTOR’S REPRESENTATIONS**

In order to induce the City to enter into this Agreement, Contractor makes the following representations upon which the City has relied:

- 8.1 Contractor is qualified in the field of public construction and in particular to perform the Work and services set forth in this Agreement.
- 8.2 Contractor has visited the Work Site, has conducted extensive tests, examinations and investigations and represents and warrants a thorough familiarization with the nature and extent of the Contract Documents, the Work, locality, soil conditions, moisture conditions and all year-round local weather and climate conditions (past and present), and, in reliance on such tests, examination and investigations conducted by Contractor and the Contractor's experts, has determined that no conditions exist that would in any manner affect the Proposed Price and that the project can be completed for the proposed price submitted within the Contract Time as defined in this Agreement. Furthermore, Contractor warrants and confirms that it is totally familiar with, understands and obligates Contractor to comply with all federal, state and local laws, ordinances, rules, regulations and all market conditions that affect or may affect the cost and price of materials and labor needed to fulfill all provisions of this Agreement or that in any manner may affect cost, progress or performance of the Work.
- 8.3 The Contractor has satisfied itself as to the nature and location of the Work under the Contract Documents, the general and local conditions of the Project, particularly upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, and roads, the conformation and conditions at the ground based on City provided reports, the type of equipment



and facilities needed for the prosecution of the Work, as well as all other matters which could affect the Work its cost.

- 8.4 The Contractor has also studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Works, and finds and has further determined that no conditions exist that would in any manner affect the proposed price and that the project can be completed for the proposed price submitted.
- 8.5 Contractor has made or caused to be made examinations, investigations, tests and studies of such reports and related data in addition to those referred to in Paragraphs 8.2, 8.3 and 8.4 above as it deems necessary for the performance of the Work at the Contract Prices, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are, or will be, required by Contractor for such purposes.
- 8.6 Contractor has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.
- 8.7 Contractor has given City written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution by City is acceptable to the Contractor.
- 8.8 Labor:
- 8.8.1 The Contractor shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. The Contractor shall at all times maintain good discipline and order at the site.
- 8.8.2 The Contractor shall, at all times, have a competent superintendent, capable of reading and thoroughly understanding the drawings and specifications, as the Contractor's agent on the Work, who shall, as the Contractor's agent, supervise, direct and otherwise conduct the Work.
- 8.8.3 The Contractor shall designate the superintendent on the job to the City, in writing, immediately after receipt of the Notice to Proceed. The Contractor understands and agrees that the superintendent's physical presence on the job site is indispensable to the successful completion of the Work. If the superintendent is frequently absent from the job site, the Project Manager may deliver written notice to the Contractor to stop work or terminate the Contract in accordance with Article 17.
- 8.8.4 The Contractor shall assign personnel to the job site that have successfully completed training programs related to trench safety, confined space and

maintenance of traffic. A certified "competent person" shall be assigned to the job site. Personnel certified by the International Municipal Signal Associations with Florida Department of Transportation qualifications are required relative to maintenance of traffic. Failure to pursue the Work with the properly certified supervisory staff may result in notice to stop work or terminate the Agreement in accordance with Article 17.

8.9 Materials:

8.9.1 The Contractor shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of Work.

8.9.2 All material and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. Suppliers shall be selected and paid by the Contractor; the City reserves the right to approve all suppliers and materials.

8.10 Work Hours: 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 Supplementary Conditions, all work at the site shall be performed during regular working hours between 8 a.m. and 5:00 p.m., Monday through Friday. The Contractor will not permit overtime work or the performance of work on Saturday, Sunday or any legal holiday (designated by the City of Fort Lauderdale) without the Project Manager's written consent at least seventy-two (72) hours in advance of starting such work. If the Project Manager permits overtime work, the Contractor shall pay for the additional charges to the City with respect to such overtime work. Such additional charges shall be a subsidiary obligation of the Contractor and no extra payment shall be made to the Contractor for overtime work. **It shall be noted that the City's Inspector work hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday, and any work requiring inspection oversight outside this timeframe shall be paid by the Contractor at the overtime rate of \$100 per hour.** The cost to the Contractor to reimburse the City for overtime inspection is established at direct-labor and overtime costs for each person or inspector required. Incidental overtime costs for engineering, testing and other related services will also be charged to the Contractor at the actual rate accrued.

8.11 Patent Fee and Royalties: The 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, or any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. The Contractor hereby expressly binds himself or itself to indemnify and hold harmless the City

from all such claims and fees and from any and all suits and action of every name and description that may be brought against City on account of any such claims, fees, royalties, or costs for any such invention or patent, and from any and all suits or actions that may be brought against said City for the infringement of any and all patents or patent rights claimed by any person, firm corporation or other entity.

- 8.12 Permits: The Contractor shall obtain and pay for all permits and licenses. There shall be no allowance for Contractor markup, overhead or profit for permits and licenses.

The Contractor shall pay all government charges which are applicable at the time of opening of proposals. It shall be the responsibility of the Contractor to secure and pay for all necessary licenses and permits of a temporary nature necessary for the prosecution of Work.

- 8.13 Law and Regulations: The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the Work. If the Contractor observes that the specifications or plans are at variance therewith, the Contractor shall give the Project Manager prompt written notice thereof, and any necessary changes shall be adjusted by any appropriate modifications. If the Contractor performs any work knowing or having reason to know that it is contrary to such laws, ordinances, rules and regulations, and without such notice to the Project Manager, the Contractor shall bear all costs arising therefrom; however, it shall not be the Contractor's primary responsibility to make certain that the specifications and plans are in accordance with such laws, ordinances, rules and regulations.

- 8.14 Taxes: The Contractor shall pay all sales, consumer use, and other similar taxes required to be paid by it in accordance with the laws of the City of Fort Lauderdale, County of Broward, and State of Florida.

- 8.15 Contractor Use of Premises: The Contractor shall confine construction equipment, the storage of materials and equipment and the operations of workmen to areas permitted by law, ordinances, permits and/or the requirements of the Contract Documents, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment.

The Contractor shall not enter upon private property for any purpose without first securing the permission of the property owner in writing and furnishing the Project Manager with a copy of said permission. This requirement will be strictly enforced, particularly with regard to such vacant properties as may be utilized for storage or staging by the Contractor.

The Contractor shall conduct his work in such a manner as to avoid damage to adjacent private or public property. Any damage to existing structures of work of any kind, including permanent reference markers or property corner markers, or

the interruption of a utility service, shall be repaired or restored promptly at no expense to the City or property owner.

The Contractor will preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site which do not reasonably interfere with the construction, as determined by the Project Manager. The Contractor will be responsible for repairing or replacing any trees, shrubs, lawns and landscaping that may be damaged due to careless operation of equipment, stockpiling of materials, tracking of grass by equipment or other construction activity. The Contractor will be liable for, or will be required to replace or restore at no expense to the City all vegetation not protected or preserved as required herein that may be destroyed or damaged.

During the progress of the work, the Contractor shall keep the premises free from accumulations of waste materials, rubbish and debris resulting from the Work. At the completion of the Work, the 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 the City. The Contractor shall restore to their original condition those portions of the site not designated for alteration by the Contract Documents at no cost to the City.

- 8.16 Project Coordination: The Contractor shall provide for the complete coordination of the construction effort. This shall include, but not necessarily be limited to, coordination of the following:

8.16.1 Flow of material and equipment from suppliers.

8.16.2 The interrelated work with affected utility companies.

8.16.3 The interrelated work with the City where tie-ins to existing facilities are required.

8.16.4 The effort of independent testing agencies.

8.16.5 Notice to affected property owners as may be directed by the Project Manager.

- 8.17 Project Record Documents and Final As-Builts (Record Drawings): Contractor shall be responsible for maintaining up-to-date redline as-built drawings, on site, at all times during construction. All as-built information shall be surveyed and verified by a professional land surveyor registered in the State of Florida. Contractor shall provide the City with a minimum of three (3) sets of signed and sealed record drawings (Final As-Builts) and a CD of the electronic drawings files created in AutoCAD 2014 or later. All costs associated with survey work required for construction layout and as-built preparation shall be the responsibility of the Contractor.

- 8.18 Safety and Protection:

8.18.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- 8.18.1.1 All employees working on the project and other persons who may be affected thereby.
- 8.18.1.2 All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site.
- 8.18.1.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

8.18.2 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders 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. The Contractor shall notify owners of adjacent property and utilities when execution of the Work may affect them at least seventy-two (72) hours in advance (unless otherwise required). All damage, injury or loss to any property caused, directly or indirectly, in whole or in part by the Contractor, any subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by the Contractor. The Contractor's duties and responsibilities for safety and protection of the Work shall continue until such time as all the Work is completed and accepted by the City.

8.19 Emergencies: In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the City is obligated to act to prevent threatened damage, injury or loss. The Contractor shall give the Project Manager prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby.

8.20 Risk of Loss: The risk of loss, injury or destruction shall be on the Contractor until acceptance of the Work by the City. Title to the Work shall pass to the City upon acceptance of the Work by the City.

8.21 Environmental: The Contractor has fully inspected the Premises and agrees, except as to the presence of any asbestos, to accept the Premises in an "as is" physical condition, without representation or warranty by the City of any kind, including, without limitation, any and all existing environmental claims or obligations that may arise from the presence of any "contamination" on, in or about the Premises. Further, Contractor and all entities claiming by, through or under

the Contractor, releases and discharges the City, from any claim, demand, or cause of action arising out of or relating to the Contractor's use, handling, storage, release, discharge, treatment, removal, transport, decontamination, cleanup, disposal and/or presence of any hazardous substances including asbestos on, under, from or about the Premises. The Contractor shall have no liability for any pre-existing claims or "contamination" on the Premises.

The Contractor shall not use, handle, store, discharge, treat, remove, transport, or dispose of Hazardous Substances including asbestos at, in, upon, under, to or from the Premises until receipt of instructions from the City. At such time, a City approved Change Order, which shall not include any profit, shall authorize the Contractor to perform such services.

The Contractor shall immediately deliver to the Project Manager complete copies of all notices, demands, or other communications received by the Contractor from any governmental or quasi-governmental authority or any insurance company or board of fire underwriters or like or similar entities regarding in any way alleged violations or potential violations of any Environmental Law or otherwise asserting the existence or potential existence of any condition or activity on the Premises which is or could be dangerous to life, limb, property, or the environment.

For other and additional consideration, the Contractor hereby agrees, at its sole cost and expense, to indemnify and protect, defend, and hold harmless the City and its respective employees, agents, officials, officers, representatives, contractors and subcontractors, successors, and assigns from and against any and all claims, demands, losses, damages, costs, expenses, including but not limited to mitigation, restoration, and natural restoration expenses, liabilities, assessments, fines, penalties charges, administrative and judicial proceedings and orders, judgments, causes of action, in law or in equity, remedial action requirements and/or enforcement actions of any kind (including, without limitation, attorneys' fees and costs) directly or indirectly arising out of or attributable to, in whole or in part, the Contractor's use, handling, storage, release, threatened release, discharge, treatment, removal, transport, decontamination, cleanup, disposal and/or presence of a Hazardous Substance (excluding asbestos) on, under, from, to or about the Premises or any other activity carried on or undertaken on or off the Premises by the Contractor or its employees, agents or subcontractors, in connection with the use, handling, storage, release, threatened release, discharge, treatment, mitigation, natural resource restoration, removal, transport, decontamination, cleanup, disposal and/or presence or any Hazardous Substance including asbestos located, transported, or present on, under, from, to, or about the Premises. This indemnity is intended to be operable under 42 U.S.C. Section 9607, as amended, and any successor section.

The scope of the indemnity obligations includes, but is not limited to: (a) all consequential damages; (b) the cost of any required or necessary repair, cleanup, or detoxification of the applicable real estate and the preparation and

implementation of any closure, remedial or other required plan, including without limitation; (i) the costs of removal or remedial action incurred by the United States government or the State of Florida or response costs incurred by any other person, or damages from injury to destruction of, or loss of, natural resources, including the cost of assessing such injury, destruction, or loss, incurred pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended; (ii) the clean-up costs, fines, damages, or penalties incurred pursuant to any applicable provisions of Florida law; and (iii) the cost and expenses of abatement, correction or cleanup, fines, damages, response costs, or penalties which arise from the provisions of any other statute, law, regulation, code ordinance, or legal requirement state or federal; and (c) liability for personal injury or property damage arising under any statutory or common law tort theory, including damages assessed for the maintenance of a public private nuisance, response costs, or for the carrying on of an abnormally dangerous activity.

- 8.22 No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any other reason or allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.
- 8.23 No Liens: If any subcontractor, supplier, laborer, or materialmen of Contractor or any other person directly or indirectly acting for or through Contractor files or attempts to file a mechanic's or construction lien against the real property on which the work is performed or any part or against any personal property or improvements or claim against any monies due or to become due from the City to Contractor or from Contractor to a subcontractor, for or on account of any work, labor, services, material, equipment, or other items furnished in connection with the Work or any Change Order, Contractor agrees to satisfy, remove, or discharge such lien or claim at its own expense by bond, payment, or otherwise within twenty (20) days of the filing or from receipt of written notice from the City.

Additionally, until such time as such lien or claim is satisfied, removed or discharged by Contractor, all monies due to Contractor, or that become due to Contractor before the lien or claim is satisfied, removed or otherwise discharged, shall be held by City as security for the satisfaction, removal and discharge of such lien and any expense that may be incurred while obtaining such. If Contractor shall

fail to do so, City shall have the right, in addition to all other rights and remedies provided by this Agreement or by law, to satisfy, remove, or discharge such lien or claim by whatever means City chooses at the entire and sole cost and expense of Contractor which costs and expenses shall, without limitation, include attorney's fees, litigation costs, fees and expenses and all court costs and assessments.

- 8.24 Weather Emergencies: Upon issuance of a hurricane watch by the National Weather Service, the Contractor shall submit to the City a plan to secure the work area in the event a hurricane warning is issued. The plan shall detail how the Contractor will secure the Premises, equipment and materials in a manner as to prevent damage to the Work and prevent materials and equipment from becoming a hazard to persons and property on and around the Premises. The plan shall include a time schedule required to accomplish the hurricane preparations and a list of emergency contacts that will be available and in the City before, during and immediately after the storm.

Upon issuance of a Hurricane Warning by the National Weather Service, if the Contractor has not already done so, the Contractor shall implement its hurricane preparedness plan. Cost of development and implementation of the hurricane preparedness plan shall be considered as incidental to construction. Cost of any clean up and rework required after the storm will be considered normal construction risk within Florida and shall not entitle the Contractor to any additional compensation. Contractor shall be entitled to request an extension in time for completion of the Work, in accordance with the provisions of Article 15 of this Agreement, equal to the time it is shut down for implementation of the preparedness plan, the duration of the storm and a reasonable period to restore the Premises.

- 8.25 Force Majeure: No Party shall hold the other responsible for damages or for delays in performance caused by force majeure, acts of God, or other acts or circumstances beyond the control of the other Party, or that could not have been reasonably foreseen and prevented. For this purpose, such acts or circumstances shall include, but not be limited to weather conditions affecting performance, floods, epidemics, war, riots, strikes, lockouts, other industrial disturbances, or protest demonstrations. Should such acts or circumstances occur, the Parties shall use their best efforts to overcome the difficulties arising therefrom and to resume the Work as soon as reasonably possible with the normal pursuit of the Work.

Inclement weather, continuous rain for less than three (3) days or the acts or omissions of subcontractors, third-party contractors, materialmen, suppliers, or their subcontractors, shall not be considered acts of force majeure.

No Party shall be liable for its failure to carry out its obligations under the Agreement during a period when such Party is rendered unable by force majeure to carry out its obligation, but the obligation of the Party or Parties relying on such



force majeure shall be suspended only during the continuance of the inability and for no longer period than the unexpected or uncontrollable event.

The Contractor further agrees and stipulates, that its right to excuse its failure to perform by reason of force majeure shall be conditioned upon giving written notice of its assertion that a Force Majeure delay has commenced within 96 hours after such an occurrence. The Contractor shall use its reasonable efforts to minimize such delays. The Agreement shall promptly provide an estimate of the anticipated additional time required to complete the Project.

- 8.26 Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assisted Contracts: The recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this Agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 *et seq.*).

Additionally, the Contractor assures that they, the subrecipient or the subcontractor shall not discriminate based on race, color, national origin, or sex in the performance of this Agreement. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as the recipient deems appropriate. (This additional language must be included in each subcontract the prime Contractor signs with a subcontractor.)

## ARTICLE 9 – CITY'S RESPONSIBILITIES

- 9.1 The City shall furnish the data required of the City under the Contract Documents promptly and shall make payments to the Contractor promptly after they are due as provided in Article 7.
- 9.2 The City's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in the Contract Documents.
- 9.3 Technical Clarifications and Interpretations:

- 9.3.1 The City shall issue, with reasonable promptness, such written clarifications or interpretations of the Contract Documents as it may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. Should the Contractor fail to request interpretation of questionable items in the Contract Documents, the City shall not entertain any excuse for failure to execute the Work in a satisfactory manner.
- 9.3.2 The City shall interpret and decide matters concerning performance under the requirements of the Contract Documents, and shall make decisions on all claims, disputes or other matters in question. Written notice of each claim, dispute or other matter will be delivered by claimant to the other Party but in no event later than five (5) days after the occurrence of event, and written supporting data will be submitted to the other Party within five (5) days after such occurrence. All written decisions of the City on any claim or dispute will be final and binding.
- 9.4 The Contractor shall perform all Work to the reasonable satisfaction of the City in accordance with the Contract Documents. In cases of disagreement or ambiguity, the City shall decide all questions, difficulties, and disputes of whatever nature, which may arise under or by reason of this Agreement or the quality, amount and value of the Work, and the City's decisions on all claims, questions and determination are final.

## **ARTICLE 10 – BONDS AND INSURANCE**

- 10.1 Public Construction and Other Bonds: The Contractor shall furnish Public Construction or Performance and Payment Bonds ("Bond"), each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all the Contractor's obligations under the Contract Documents. These Bonds shall remain in effect until at least one (1) year after the date of final payment, except as otherwise provided by law. All Bonds shall be furnished and provided by the surety and shall be in substantially the same form as prescribed by the Contract Documents and be executed by such sureties as (i) are licensed to conduct business in the State of Florida, and (ii) 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 and (iii) otherwise meet the requirements set forth herein that apply to sureties. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.
- 10.1.1 Performance Bond: The Contractor shall execute and record in the public records of Broward County, Florida, a payment and performance bond in an amount at least equal to the Contract Price with a surety insurer authorized to do business in the State of Florida as surety, ("Bond"), in

accordance with Section 255.05, Florida Statutes (2014), as may be amended or revised, as security for the faithful performance and payment of all of the Contractor's obligations under the Contract Documents.

A Corporate Surety Bond legally issued, meeting the approval of, and running to the City in an amount not less than the Contract Price of such improvements, conditioned that the Contractor shall maintain and make all repairs to the improvements constructed by the Contractor at their own expense and free of charge to the City, for the period of one (1) year after the date of acceptance of the Work within such period by reason of any imperfection of the material used or by reason of any defective workmanship, or any improper, imperfect or defective preparation of the base upon which any such improvement shall be laid.

10.2 Disqualification of Surety: If the Surety on any Bond furnished by the Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in the State of Florida or it ceases to meet the requirements of clauses (i) and (ii) of Paragraph 10.1, the Contractor shall within five (5) days thereafter substitute another Bond and Surety, both of which shall be acceptable to the City.

10.3 Insurance: NOTE: STANDARD INSURANCE IS AS INDICATED BELOW, HOWEVER, BE SURE IT IS CONSISTANT WITH THE SOLICITATION

10.3.1 As a condition precedent to the effectiveness of this Agreement, during the term of this Agreement and during any renewal or extension term of this Agreement, the Contractor, at the Contractor's sole expense, shall provide insurance of such types and with such terms and limits as noted below. Providing proof of and maintaining adequate insurance coverage are material obligations of the Contractor. The Contractor shall provide the City a certificate of insurance evidencing such coverage. The Contractor's insurance coverage shall be primary insurance for all applicable policies. The limits of coverage under each policy maintained by the Contractor shall not be interpreted as limiting the Contractor's liability and obligations under this Agreement. All insurance policies shall be from insurers authorized to write insurance policies in the State of Florida and that possess an A.M. Best rating of A-, VII or better. All insurance policies are subject to approval by the City's Risk Manager.

The coverages, limits, and endorsements required herein protect the interests of the City, and these coverages, limits, and endorsements may not be relied upon by the Contractor for assessing the extent or determining appropriate types and limits of coverage to protect the Contractor against any loss exposure, whether as a result of this Agreement or otherwise. The requirements contained herein, as well as the City's review or acknowledgement, are not intended to and shall not in any manner limit or

qualify the liabilities and obligations assumed by the Contractor under this Agreement.

The following insurance policies and coverages are required:

**10.3.2 Commercial General Liability**

Coverage must be afforded under a Commercial General Liability policy with limits not less than:

- \$1,000,000 each occurrence and \$2,000,000 aggregate for Bodily Injury, Property Damage, and Personal and Advertising Injury
- \$1,000,000 each occurrence and \$2,000,000 aggregate for Products and Completed Operations

Policy must include coverage for Contractual Liability and Independent Contractors.

The City and the City's officers, employees, and volunteers are to be covered as additional insureds with a CG 20 26 04 13 Additional Insured – Designated Person or Organization Endorsement or similar endorsement providing equal or broader Additional Insured Coverage with respect to liability arising out of activities performed by or on behalf of the Contractor. The coverage shall contain no special limitation on the scope of protection afforded to the City or the City's officers, employees, and volunteers.

**10.3.3 Business Automobile Liability**

Coverage must be afforded for all Owned, Hired, Scheduled, and Non-Owned vehicles for Bodily Injury and Property Damage in an amount not less than \$1,000,000 combined single limit each accident.

If the Contractor does not own vehicles, the Contractor shall maintain coverage for Hired and Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

**10.3.4 Workers' Compensation and Employer's Liability**

Coverage must be afforded per Chapter 440, Florida Statutes. Any person or entity performing work for or on behalf of the City must provide Workers' Compensation insurance. Exceptions and exemptions will be allowed by the City's Risk Manager, if they are in accordance with Florida Statute.

The Contractor waives, and the Contractor shall ensure that the Contractor's insurance carrier waives, all subrogation rights against the City and the City's officers, employees, and volunteers for all losses or damages. The City requires the policy to be endorsed with WC 00 03 13 Waiver of our Right to Recover from Others or equivalent.

The Contractor must be in compliance with all applicable State and federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act and the Jones Act, if applicable.

#### 10.1.5 Umbrella/Excess Liability:

The Contractor shall provide umbrella/excess coverage with limits of no less than \$2,000,000 excess of Commercial General Liability, Automobile Liability and Employer's Liability.

#### Insurance Certificate Requirements

- a. The Contractor shall provide the City with valid Certificates of Insurance (binders are unacceptable) no later than thirty (30) days prior to the start of work contemplated in this Agreement.
- b. The Contractor shall provide to the City a Certificate of Insurance having a thirty (30) day notice of cancellation; ten (10) days' notice if cancellation is for nonpayment of premium.
- c. In the event that the insurer is unable to accommodate the cancellation notice requirement, it shall be the responsibility of the Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested, and addressed to the certificate holder.
- d. In the event the Agreement term goes beyond the expiration date of the insurance policy, the Contractor shall provide the City with an updated Certificate of Insurance no later than ten (10) days prior to the expiration of the insurance currently in effect. The City reserves the right to suspend the Agreement until this requirement is met.
- e. The Certificate of Insurance shall indicate whether coverage is provided under a claims-made or occurrence form. If any coverage is provided on a claims-made form, the Certificate of Insurance must show a retroactive date, which shall be the effective date of the initial Agreement or prior.
- f. The City shall be named as an Additional Insured on General liability policies, with the exception of Workers' Compensation.
- g. The City shall be granted a Waiver of Subrogation on the Contractor's Workers' Compensation insurance policy.
- h. The title of the Agreement, Bid/Contract number, event dates, or other identifying reference must be listed on the Certificate of Insurance.

#### The Certificate Holder should read as follows:

City of Fort Lauderdale  
100 North Andrews Avenue  
Fort Lauderdale, Florida 33301

The Contractor has the sole responsibility for the payment of all insurance premiums and shall be fully and solely responsible for any costs or expenses as a result of a coverage deductible, co-insurance penalty, or self-insured retention; including any loss not covered because of the operation of such deductible, co-insurance penalty, self-insured retention, or coverage exclusion or limitation. Any costs for adding the City as an Additional Insured shall be at the Contractor's expense.

If the Contractor's primary insurance policy/policies do not meet the minimum requirements, as set forth in this Agreement, the Contractor may provide evidence of an Umbrella/Excess insurance policy to comply with this requirement.

The Contractor's insurance coverage shall be primary insurance as applied to the City and the City's officers, employees, and volunteers. Any insurance or self-insurance maintained by the City covering the City, the City's officers, employees, or volunteers shall be non-contributory.

Any exclusion or provision in the insurance maintained by the Contractor that excludes coverage for work contemplated in this Agreement shall be unacceptable and shall be considered breach of contract.

All required insurance policies must be maintained until the contract work has been accepted by the City, or until this Agreement is terminated, whichever is later. Any lapse in coverage shall be considered breach of contract. In addition, Contractor must provide to the City confirmation of coverage renewal via an updated certificate should any policies expire prior to the expiration of this Agreement. The City reserves the right to review, at any time, coverage forms and limits of Contractor's insurance policies.

The Contractor shall provide notice of any and all claims, accidents, and any other occurrences associated with this Agreement shall be provided to the Contractor's insurance company or companies and the City's Risk Management office as soon as practical.

It is the Contractor's responsibility to ensure that any and all of the Contractor's independent contractors and subcontractors comply with these insurance requirements. All coverages for independent contractors and subcontractors shall be subject to all of the applicable requirements stated herein. Any and all deficiencies are the responsibility of the Contractor.

**NOTE: CITY PROJECT NUMBER, NAME AND BID NUMBER MUST APPEAR ON EACH CERTIFICATE, AND THE CITY OF FORT LAUDERDALE MUST BE NAMED ON THE CERTIFICATE AS AN "ADDITIONAL INSURED" ON GENERAL LIABILITY POLICIES.**

#### **ARTICLE 11- WARRANTY AND GUARANTEE, TESTS AND INSPECTIONS, CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

11.1 Warranty: The Contractor warrants and guarantees to the City 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 the Contractor. All defective work, whether or not in place, may be rejected, corrected or accepted as provided in this Article.

11.1.1 Warranty of Title: The Contractor warrants to the City that it possesses good, clear and marketable title to all equipment and materials provided and

that there are no pending liens, claims or encumbrances against the equipment and materials.

11.1.2 Warranty of Specifications: The Contractor warrants that all equipment, materials and workmanship furnished, whether furnished by the Contractor, its subcontractors or suppliers, will comply with the specifications, drawings and other descriptions supplied or adopted and that all services will be performed in a workmanlike manner.

11.1.3 Warranty of Merchantability: The Contractor warrants that any and all equipment to be supplied pursuant to this Agreement is merchantable, free from defects, whether patent or latent in material or workmanship, and fit for the ordinary purposes for which it is intended.

11.2 Tests and Inspections: Contractor shall retain the services of an independent, certified, testing lab to perform all testing as required by the specifications, Contract drawings, and any applicable permitting agency. Contractor shall provide evidence of certification to the City before the work and testing is done. Testing results shall be submitted to the Engineer for review and approval at the time the results are provided to the Contractor. The Contractor shall give the Project Manager and City Inspector a minimum of twenty-four (24) hours' advanced notice of readiness of the Work for all required inspections, tests, or approvals and shall notify all applicable permitting agencies in a timely manner based on requirements set forth in the permit documents.

11.2.1 Neither observations by the Project Manager nor inspections, tests or approvals by others shall relieve the Contractor from its obligations to perform the Work in accordance with the Contract Documents.

11.3 Uncovering Work: If any work that is to be inspected, tested or approved is covered without approval or consent of the Project Manager, it must, if requested by the Project Manager, be uncovered for observation and/or testing. Such uncovering and replacement shall be at the Contractor's sole expense unless the Contractor has given the Project Manager timely notice of the Contractor's intention to cover such Work and the Project Manager has not acted with reasonable promptness in response to such notice.

11.3.1 If the Project Manager considers it necessary or advisable that Work covered in accordance with Paragraph 11.2.1, 11.2.2 and 11.2.3 be observed by the City or inspected or tested by others, the Contractor at the City's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Project Manager 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, the Contractor shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including

compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such work is not found to be defective, the 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 if he makes a claim therefore as provided in Articles 14 and 15.

- 11.4 City May Stop the Work: If the Work is defective, or the Contractor fails to supply sufficient skilled supervisory personnel or workmen or suitable materials or equipment or the work area is deemed unsafe, the City may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the City to stop the Work shall not give rise to any duty on the part of the City to exercise this right for the benefit of the Contractor or any other party. The City will not award any increase in Contract Price or Contract Time if the Work is stopped due to the circumstances described herein.
- 11.5 Correction or Removal of Defective Work Before Final Payment: If required by the Project Manager, the Contractor shall promptly, without cost to the City and as Specified by the Project Manager, either correct any defective Work, whether or not fabricated, installed or completed, or if the Work has been rejected by the City remove it from the site and replace it with non-defective Work.
- 11.6 One Year Correction Period After Final Payment: If within one (1) year after the date of final acceptance, or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, the Contractor shall promptly, without cost to the City and in accordance with the City's written instructions, either correct such defective Work, or, if it has been rejected by the City, remove it from the site and replace it with non-defective Work.
- If The 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, the City may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs for such removal and replacement, including compensation for additional professional services, shall be paid by the Contractor.
- 11.7 Acceptance of Defective Work, Deductions: If, instead of requiring correction or removal and replacement of defective Work, the City, at the City's sole option, prefers to accept it, the City may do so. In such a case, if acceptance occurs prior to the Project Manager's recommendation of final payments, a Change Order shall be issued incorporating the necessary revisions in the Contract's Documents, including appropriate reduction in the Contract Price; or if the acceptance occurs after such recommendation, an appropriate amount shall be paid by the Contractor to the City.



- 11.8 City May Correct Defective Work: If the Contractor fails within a reasonable time after written notice of the Project Manager to proceed to correct defective Work or to remove and replace rejected Work as required by the Project Manager in accordance with Paragraph 11.5, or if the Contractor fails to perform the Work in accordance with the Contract Documents, the City may, after seven (7) days written notice to the Contractor, correct and remedy any such deficiency. In exercising its rights under this paragraph, the City shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, the City may exclude the Contractor from all or part of the site, take possession of all or part of the Work, suspend the Contractor's services related thereto and take possession of the Contractor's tools, construction equipment and materials stored at the site or elsewhere. The Contractor shall allow the City's representative agents and employees such access to the site as may be necessary to enable the City to exercise its rights under this paragraph. All direct and indirect costs of the City in exercising such rights shall be charged against the Contractor in an amount verified by the Project Manager, and a Change Order shall be issued incorporating the necessary revisions in the Contract Documents and a reduction in the Contract Price. Such direct and indirect costs shall include, but without limitation, compensation for additional professional services required and costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of the Contractor's defective Work. The 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 the City of the City's right hereunder.

## **ARTICLE 12 – INDEMNIFICATION**

- 12.1 Disclaimer of Liability: The City shall not at any time, be liable for injury or damage occurring to any person or property from any cause, whatsoever, arising out of Contractor's construction and fulfillment of this Agreement.
- 12.2 Indemnification: For other, additional good valuable consideration, the receipt and sufficiency of which is hereby acknowledged:
- 12.2.1 Contractor shall, at its sole cost and expense, indemnify and hold harmless the City, its representatives, employees and elected and appointed officials from or on account of all claims, damages, losses, liabilities and expenses, direct, indirect or consequential including but not limited to fees and charges of engineers, architects, attorneys, consultants and other professionals and court costs arising out of or in consequence of the performance of this Agreement at all trial and appellate levels. Indemnification shall specifically include but not be limited to claims, damages, losses, liabilities and expenses arising out of or from (a) the negligent or defective design of the project and Work of this Agreement; (b) any act, omission or default of the Contractor, its subcontractors, agents, servants or employees; (c) any and all bodily injuries, sickness, disease or death; (d) injury to or destruction of tangible property, including any resulting loss of use; (e) other such

damages, liabilities, or losses received or sustained by any person or persons during or on account of any operations connected with the construction of this Project including the warranty period; (f) the use of any improper materials; (g) any construction defect including both patent and latent defects; (h) failure to timely complete the work; (i) the violation of any federal, state, county or city laws, ordinances or regulations by Contractor, its subcontractors, agents, servants, independent contractors or employees; (j) the breach or alleged breach by Contractor of any term of the Agreement, including the breach or alleged breach of any warranty or guarantee.

12.2.2 Contractor agrees to indemnify, defend, and hold harmless the City, its officers, agents and employees, from all damages, liabilities, losses, claims, fines and fees, and from any and all suits and actions of every name and description that may be brought against City, its officers, agents and employees, on account of any claims, fees, royalties, or costs for any invention or patent and/or for the infringement of any and all copyrights or patent rights claimed by any person, firm, or corporation.

12.2.3 Contractor shall pay all claims, losses, liens, settlements or judgments of any nature in connection with the foregoing indemnifications including, but not limited to, reasonable attorney's fees and costs for trials and appeals.

12.2.4 If any subcontractor, supplier, laborer, or materialmen of Contractor or any other person directly or indirectly acting for or through Contractor files or attempts to file a mechanic's or construction lien against the real property on which the work is performed or any part or against any personal property or improvements thereon or make a claim against any monies due or to become due from the City to Contractor or from Contractor to a subcontractor, for or on account of any work, labor, services, material, equipment, or other items furnished in connection with the Work or any change order, Contractor agrees to satisfy, remove, or discharge such lien or claim at its own expense by bond, payment, or otherwise within five (5) days of the filing or from receipt of written notice from the City.

Additionally, until such time as such lien or claim is satisfied, removed or discharged by Contractor, all monies due to Contractor, or that become due to Contractor before the lien or claim is satisfied, removed or otherwise discharged, shall be held by City as security for the satisfaction, removal and discharge of such lien and any expense that may be incurred while obtaining the discharge. If Contractor shall fail to do so, City shall have the right, in addition to all other rights and remedies provided by this Agreement or by law, to satisfy, remove, or discharge such lien or claim by whatever means City chooses at the entire and sole cost and expense of Contractor which costs and expenses shall, without limitation, include attorney's fees, litigation costs, fees and expenses and all court costs and assessments,

and which shall be deducted from any amount owing to Contractor. In the event the amount due Contractor is less than the amount required to satisfy Contractor's obligation under this, or any other article, paragraph or section of this Agreement, the Contractor shall be liable for the deficiency due the City.

12.2.5 The Contractor and the City agree that Section 725.06(2), Florida Statutes controls the extent and limits of the indemnification and hold harmless provisions of this Agreement, if any, and that the parties waive any defects in the wording of this Article that runs afoul of said statutory section.

### **ARTICLE 13 – CHANGES IN THE WORK**

- 13.1 Without invalidating this Agreement, the City may, at any time or from time to time order additions, deletions or revisions in the Work through the issuance of Change Orders. Upon receipt of a Change Order, the Contractor shall proceed with the Work involved. All Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in Article 14 or Article 15 on the basis of a claim made by either Party.
- 13.2 The Project Manager may authorize minor changes in the work not involving an adjustment in the Contract Price or the Contract Time, which are consistent with the overall intent of the Contract Documents. Such changes must be in writing and signed by the City and the Contractor.
- 13.3 If notice of any change affecting the general scope of the Work or change in the Contract Price is required by the provisions of any Bond to be given to the Surety, it will be the Contractor's responsibility to so notify the Surety, and the amount of each applicable Bond shall be adjusted accordingly. The Contractor shall furnish proof of such adjustment to the City.

### **ARTICLE 14 – CHANGE OF CONTRACT PRICE**

Change of Contract Price, approved by City, shall be computed as follows:

- 14.1 Cost of the Work: The term "Cost of the Work" means the sum of all direct costs necessarily incurred and paid by Contractor in the proper performance of the Work. Except as otherwise may be agreed to in writing by the City, these costs shall be in amounts no higher than those prevailing in the City and shall include only the following items and shall not include any of the costs itemized in Paragraph 14.3:
- 14.1.1 Payroll costs for employees in the direct employ of the Contractor in the performance of the Work under schedules of job classifications agreed upon by the City and the 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 and cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, worker's compensation, health and retirement benefits, bonuses, sick leave, vacation and applicable holiday pay.

14.1.2 Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage, and required suppliers and field services. All cash discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to the City, and the Contractor shall make provisions so that they may be obtained.

14.1.3 Supplemental costs including the following:

- 14.1.3.1 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.
- 14.1.3.2 Rentals of all construction equipment and machinery and the parts whether rented from the Contractor or others in accordance with rental agreements approved by the City, and the costs of transporting, loading, unloading, installation, dismantling and removal. The rental of any such equipment, machinery or parts shall cease when the use is no longer necessary for the Work.
- 14.1.3.3 Sales, consumer, use or similar taxes related to the Work and for which the Contractor is liable, imposed by laws and regulations.
- 14.1.3.4 Royalty payments and fees for permits and licenses.
- 14.1.3.5 The cost of utilities, fuel and sanitary facilities at the Work site.
- 14.1.3.6 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.
- 14.1.3.7 Cost of premiums for additional bonds and insurance required because of changes in the Work.

14.2 The Contract Price may only be increased by a Change Order when Work is modified in accordance with Article 13 and approved by the City in writing. Any

claim for an increase in the Contract Price resulting from a Change Order shall be based on written notice delivered to the Project Manager within ten (10) days of the occurrence of the Change Order giving rise to the claim. Notice of the amount of the claim with supporting data shall be included in the Change Order and delivered within twenty (20) days of such occurrence unless Project Manager allows an additional period of time to ascertain accurate cost data. Any change in the Contract Price resulting from any such claim shall be incorporated in the Change Order. **IT IS EXPRESSLY AND SPECIFICALLY AGREED THAT ANY AND ALL CLAIMS FOR CHANGES TO THE CONTRACT PRICE SHALL BE WAIVED IF NOT SUBMITTED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.**

14.3 Not Included in the Cost of the Work: The term “cost of the Work” shall not include any of the following:

14.3.1 Payroll costs and other compensation of the Contractor’s officers executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditor, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by the Contractor whether at the site or in the Contractor’s principal or branch office for general administration of the work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 14.1.1, all of which are to be considered administrative costs covered by the Contractor’s fee.

14.3.2 Expenses of the Contractor’s principal and branch offices other than the Contractor’s office at the site.

14.3.3 Any part of the Contractor’s capital expenses, including interest on the Contractor’s capital employed for the Work and charges against the Contractor for delinquent payments.

14.3.4 Cost of premiums for all bonds and for all insurance whether or not the Contractor is required by the Contract Documents to purchase and maintain the same.

14.3.5 Costs due to the negligence of the 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.

14.3.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 14.1

- 14.4 Basis of Compensation: The Contractor's compensation, allowed to the Contractor for overhead and profit, shall be determined as follows:

14.4.1 A mutually acceptable negotiated fee:

14.4.1.1 For costs incurred under Paragraphs 14.1.1 and 14.1.2, the Contractor's fee shall not exceed five percent (5%).

14.4.1.2 No fee shall be payable on the basis of costs itemized under Paragraphs 14.1.3.1, 14.1.3.2, 14.1.3.3, 14.1.3.4, 14.1.3.5, 14.1.3.6, 14.1.3.7, 14.3.1, 14.3.2, 14.3.3, 14.3.4, 14.3.5 and 14.3.6.

14.4.1.3 The amount of credit to be allowed by the Contractor to the City for any such change which results in a net decrease plus a deduction in the Contractor's fee by an amount equal to five percent (5%) for the net decrease.

14.4.1.4 When both additions and credits are involved in any one change the combined overhead and profit shall be figured on the basis of net increase if any, however, not to exceed five percent (5%) of the agreed compensation. Profit will not be paid on any Work not performed.

- 14.5 Cost Breakdown Required: Whenever the cost of any Work is to be determined pursuant to this Article, the Contractor will submit in form acceptable to the City an itemized cost breakdown together with supporting documentation. Whenever a change in the Work is to be based upon mutual acceptance of a lump sum, whether the amount is an addition, credit, or no-charge-in-cost, the Contractor shall submit an estimate substantiated by a complete itemized breakdown:

14.5.1 The breakdown shall list quantities and unit prices for materials, labor, equipment and other items of cost.

14.5.2 Whenever a change involves the Contractor and one (1) or more subcontractors and the change is an increase in the agreed compensation, the overhead and profit percentage for the Contractor and each subcontractor shall be itemized separately.

- 14.6 Time for the City to Approve Extra Work: Any Extra Work in an amount up to and not exceeding a cumulative amount of \$25,000 for a specific project can be approved by the City Manager and shall require a written Change Order proposal to be submitted to the Public Works Director for submittal and approval by the City Manager. Extra Work exceeding the cumulative amount of \$25,000 for a specific project must be approved by the City Commission and a written Change Order proposal must be submitted to the Public Works Director for submittal and approval by the City Manager and City Commission. No financial or time claim for delay to

the project resulting from the Change Order approval process outlined above under Section 14.6 will be allowed.

## ARTICLE 15 – CHANGE OF THE CONTRACT TIME

- 15.1 The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to the Project Manager within five (5) days of the occurrence of the event giving rise to the claim. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.
- 15.2 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the Contractor if a claim is made there for as provided in Paragraph 15.1. Such delays shall include but not be limited to, acts or neglect by the City, or to fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.
- 15.3 All time limits stated in the Contract Documents are of the essence. The provisions of this Article 15 shall not exclude recovery for damages for delay by the Contractor.
- 15.4 Delays caused by or resulting from entities, contractors or subcontractors who are not affiliated with the Contractor (non-affiliated Contractors) shall not give rise to a claim by the Contractor for damages for increases in material and/or labor costs. Such entities, contractors and subcontractors include, but are not limited to, the City's contractors and subcontractors, Florida Power and Light Company, AT&T and Florida East Coast Railway, LLC.
- 15.5 Rights of Various Interests: Whenever work being done by City's forces or by other contractors is contiguous to or within the limits of work covered by this Agreement, the respective rights of the various interests involved shall be established by the Project Manager to secure the completion of the various portions of the work in general harmony.

## ARTICLE 16 – LIQUIDATED DAMAGES

- 16.1 Upon failure of the Contractor to complete the Work within the time specified for completion, the Contractor shall pay to the City the sum of **Two Hundred and Fifty Dollars (\$250.00)** for each and every calendar day that the completion of the Work is delayed beyond the time specified in this Agreement for completion, as fixed and agreed liquidated damages and not as a penalty, so long as the delay is caused by the Contractor. Should an act of God or the acts or omissions of the

City, its agents or representatives, in derogation to the terms of this Agreement cause the delay, the Contractor shall not be responsible for the delay nor liquidated damages. Liquidated damages are fixed and agreed upon between the Parties, recognizing the impossibility of precisely ascertaining the amount of damages that will be sustained by the City as a consequence of such delay and both parties desiring to obviate any question of dispute concerning the amount of damages and the cost and effect of the failure of the Contractor to complete the Work on time. Liquidated damages shall apply separately to each portion of the Work for which a time of completion is given. The City shall have the right to deduct from or retain any compensation which may be due or which may become due and payable to the Contractor the amount of liquidated damages, and if the amount retained by the City is insufficient to pay in full such liquidated damages, the Contractor shall pay all liquidated damages in full. The Contractor shall be responsible for reimbursing the City, in addition to liquidated damages or other damages for delay, for all costs of engineering, architectural fees, and inspection and other costs incurred in administering the construction of the Project beyond the completion date specified or beyond an approved extension of time granted to the Contractor whichever is later. Delays caused by or resulting from entities, contractors or subcontractors who are not affiliated with the Contractor shall not give rise to a claim by Contractor for damages for increase in material and/or labor costs. Such entities, contractors and subcontractors include, but are not limited to, the City's contractors and subcontractors, Florida Power and Light Company, AT&T, and Florida East Coast Railway, LLC.

- 16.2 No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any reason, allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.

## **ARTICLE 17 – SUSPENSION OF WORK AND TERMINATION**

- 17.1 City May Suspend Work: The City may, at any time and without cause, suspend the Work or any portion of the Work for a period of not more than ninety (90) days by notice in writing to the Contractor which shall fix the date on which Work shall be resumed. The Contractor shall resume the Work on the date fixed. The Contractor will be allowed an increase in the Contract Price or an extension of the



Contract Time, or both, directly attributable to any suspension, if the Contractor makes a claim as provided in Articles 14 and 15.

**17.2 City's Right to Terminate Agreement:** The City may terminate this Agreement upon fifteen (15) calendar days' written notice upon the occurrence of any one or more of the following events:

17.2.1 If the Contractor commences a voluntary case or a petition is filed against the Contractor, under any chapter of the Bankruptcy Code, or if the 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.

17.2.2 If the Contractor makes a general assignment for the benefit of creditors.

17.2.3 If a trustee, receiver, custodian or agent of the Contractor is appointed under applicable law or under contract, whose appointment or authority to take charge of property of the 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 the Contractor's creditors.

17.2.4 If Contractor fails to begin the Work within fifteen (15) calendar days after the Project Initiation Date, or fails to perform the Work with sufficient workers and equipment or with sufficient materials to ensure the prompt completion of the Work, or shall perform the Work unsuitably, or cause it to be rejected as defective and unsuitable, or shall discontinue the prosecution of the Work pursuant to the accepted schedule or if Contractor shall fail to perform any material term set forth in the Contract Documents, or from any other cause whatsoever shall not carry on the Work in an acceptable manner, Project Manager may give notice in writing to Contractor and its Surety of such delay, neglect or default, specifying the same.

17.2.5 If the Contractor repeatedly fails to make prompt payments to subcontractors or for labor, material or equipment.

17.2.6 If the Contractor repeatedly disregards proper safety procedures.

17.2.7 If the Contractor disregards any local, state or federal laws or regulations.

17.2.8 If the Contractor otherwise violates any provisions of this Agreement.

**17.3** If Contractor, within a period of ten (10) calendar days after such notice, shall not proceed in accordance therewith, the City may exclude the Contractor from the Work site and take the prosecution of the Work out of the hands of the Contractor, and take possession of the Work and all of the Contractor's tools, appliances, construction equipment and machinery at the site and use them without liability to

the City for trespass or conversion, incorporate in the Work all materials and equipment stored at the site or for which the City has paid the Contractor but which are stored elsewhere, and finish the Work as the City may deem expedient. In this instance, the Contractor shall not be entitled to receive any further compensation until the Work is finished.

17.3.1 If after notice of termination of Contractor's right to proceed, it is determined for any reason that Contractor was not in default, the rights and obligations of City and Contractor shall be the same as if the notice of termination had been issued pursuant to the Termination for Convenience clause as set forth in Section 17.5 below.

17.3.2 Upon receipt of Notice of Termination pursuant to Sections 17.2 or 17.5, Contractor shall promptly discontinue all affected work unless the Notice of Termination directs otherwise and deliver or otherwise make available to City all data, drawings, specifications, reports, estimates, summaries and such other information as may have been required by the Contract Documents whether completed or in process.

17.4 If the Contractor commits a default due to its insolvency or bankruptcy, the following shall apply:

17.4.1 Should this Agreement be entered into and fully executed by the parties, funds released and the Contractor (Debtor) files for bankruptcy, the following shall occur:

17.4.1.1 In the event the Contractor files a voluntary petition under 11 U.S.C. 301 or 302, or an order for relief is entered under 11 U.S.C. 303, the Contractor shall acknowledge the extent, validity, and priority of the lien recorded in favor of the City. The Contractor further agrees that in the event of this default, the City shall, at its option, be entitled to seek relief from the automatic stay pursuant to 11 U.S.C. 362. The City shall be entitled to relief from the automatic stay pursuant to 11 U.S.C. 362(d) (1) or (d) (2), and the Contractor agrees to waive the notice provisions in effect pursuant to 11 U.S.C. 362 and any applicable Local Rules of the United States Bankruptcy Court. The Contractor acknowledges that such waiver is done knowingly and voluntarily.

17.4.1.2 Alternatively, in the event the City does not seek stay relief, or if stay relief is denied, the City shall be entitled to monthly adequate protection payments within the meaning of 11 U.S.C. 361. The monthly adequate protection payments shall each be in an amount determined in accordance with the Note and Mortgage executed by the Contractor in favor of the City.

17.4.1.3 In the event the Contractor files for bankruptcy under Chapter 13 of Title 11, United States Code in addition to the foregoing provisions, the Contractor agrees to cure any amounts in arrears over a period not to exceed twenty-four (24) months from the date of the confirmation order, and such payments shall be made in addition to the regular monthly payments required by the Note and mortgage. Additionally, the Contractor shall agree that the City is over secured and, therefore, entitled to interest and attorney's fees pursuant to 11 U.S.C. 506(b). Such fees shall be allowed and payable as an administrative expense. Further, in the event the Contractor has less than five (5) years of payments remaining on the Note, the Contractor agrees that the treatment afforded to the claim of the City under any confirmed plan of reorganization shall provide that the remaining payments shall be satisfied in accordance with the Note, and that the remaining payments or claim shall not be extended or amortized over a longer period than the time remaining under the Note.

17.4.2 Should this Agreement be entered into and fully executed by the Parties, and the funds have not been forwarded to Contractor, the following shall occur:

17.4.2.1 In the event the Contractor files a voluntary petition pursuant to 11 U.S.C. 301 or 302, or an order for relief is entered under 11 U.S.C. 303., the Contractor acknowledges that the commencement of a bankruptcy proceeding constitutes an event of default under the terms of this Agreement. Further, the Contractor acknowledges that this Agreement constitutes an executory agreement within the meaning of 11 U.S.C. 365. The Contractor acknowledges that this Agreement is not capable of being assumed pursuant to 11 U.S.C. 365(c)(2), unless the City expressly consents in writing to the assumption. In the event the City consents to the assumption, the Contractor agrees to file a motion to assume this Agreement within ten (10) days after receipt of written consent from the City, regardless of whether the bankruptcy proceeding is pending under Chapter 7, 11, or 13 of Title 11 of the United States Code. The Contractor further acknowledges that this Agreement is not capable of being assigned pursuant to 11 U.S.C. 365(b)(1).

17.5 Termination for Convenience: This Agreement may be terminated for convenience in writing by City upon thirty (30) days written notice to Contractor (delivered by certified mail, return receipt requested) of intent to terminate and the date on which such termination becomes effective. In such case, Contractor shall be paid for all work executed and expenses incurred prior to termination in addition to termination settlement costs reasonably incurred by Contractor relating to commitments which had become firm prior to the termination. Payment shall include reasonable profit

for work/services satisfactorily performed. No payment shall be made for profit for work/services which have not been performed.

- 17.6 Where the Contractor's service have been so terminated by the City, the termination shall not affect any rights of the City against the Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due the Contractor by the City will not release the Contractor from liability.
- 17.7 The Contractor has no right, authority or ability to terminate the Work except for the wrongful withholding of any payments due the Contractor from the City.

## **ARTICLE 18 – DISPUTE RESOLUTION**

- 18.1 Resolution of Disputes: Questions, claims, difficulties and disputes of whatever nature which may arise relative to the technical interpretation of the Contract Documents and fulfillment of this Agreement as to the character, quality, amount and value of any work done and materials furnished, or proposed to be done or furnished under or, by reason of, the Contract Documents which cannot be resolved by mutual agreement of contract administrator and Contractor shall be submitted to the consultant for resolution. When either Party has determined that a disputed question, claim, difficulty or dispute is at an impasse, that Party shall notify the other Party in writing and submit the question, claim, difficulty or dispute to the consultant for resolution. The parties may agree to a proposed resolution at any time without the involvement and determination of the Consultant.
- 18.1.1 Consultant shall notify contract administrator and Contractor in writing of Consultant's decision within twenty-one (21) calendar days from the date of the submission of the question, claim, difficulty or dispute, unless Consultant requires time to gather information or allow the parties to provide additional information.
- 18.1.2 In the event the determination of a dispute by the Consultant under this Article is unacceptable to any of the parties hereto, the party objecting to the determination must notify the other party and the City Manager, in writing within ten (10) days after receipt of the determination. The notice must state the basis of the objection and the proposed resolution. Final resolution of such dispute shall be made by the City Manager. The City Manager's decision shall be final and binding on the parties.
- 18.1.3 All non-technical administrative disputes (such as billing and payment) shall be determined by contract administrator.
- 18.1.4 During the pendency of any dispute and after a determination thereof, Contractor, consultant, and contract administrator shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction. During the

pendency of any dispute arising under this Agreement, other than termination herein, Contractor shall carry on the Work and adhere to the progress schedule. The Work shall not be delayed or postponed pending resolution of any disputes or disagreements.

- 18.1.5 For any disputes which remain unsolved, within sixty (60) calendar days after Final Completion of the Work, the parties shall participate in mediation to address all unresolved disputes. A mediator shall be mutually agreed upon by the parties. Should any objection not be resolved in mediation, the parties retain all their legal rights and remedies under applicable law. If a party objecting to a determination, fails to comply in strict accordance with the requirements of this Article, said party specifically waives all of its rights provided hereunder, including its rights and remedies under applicable law.

### ARTICLE 19 – NOTICES

- 19.1 All notices required by any of the Contract Documents shall be in writing and shall be deemed delivered upon mailing by certified mail, return receipt requested to the following:

To the City:

City Manager  
City of Fort Lauderdale  
100 North Andrews Avenue  
Fort Lauderdale, Florida 33301

with copy to the:

Project Manager and City Attorney  
City of Fort Lauderdale  
100 North Andrews Avenue  
Fort Lauderdale, Florida 33301

To the Contractor:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## ARTICLE 20 – LIMITATION OF LIABILITY

- 20.1 The City desires to enter into this Agreement only if in so doing the City can place a limit on the City's liability for any cause of action arising out of this Agreement, so that the City's liability for any breach never exceeds the sum of \$1,000. For other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Contractor expresses its willingness to enter into this Agreement with the knowledge that the Contractor's recovery from the City to any action or claim arising from the Agreement is limited to a maximum amount of \$1,000, which amount shall be reduced by the amount actually paid by the City to the Contractor pursuant to this Agreement, for any action or claim arising out of this Agreement. Nothing contained in this paragraph or elsewhere in this Agreement is in any way intended either to be a waiver of the limitation placed upon the City's liability as set forth in Section 768.28, Florida Statutes, or to extend the City's liability beyond the limits established in said Section 768.28; and no claim or award against the City shall include attorney's fees, investigative costs, expert fees, suit costs or pre-judgment interest.
- 20.2 No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any reason, allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.

## ARTICLE 21 – GOVERNING LAW

- 21.1 This Agreement shall be governed by the laws of the State of Florida. Both Parties agree that the courts of the State of Florida shall have jurisdiction of any claim arising in connection with this Agreement. Venue for any claim, objection or dispute arising out of this Agreement shall be in Broward County, Florida. **By entering into this Agreement, Contractor and City hereby expressly waive any rights either party may have to a trial by jury or any civil litigation related to or arising out of the Project. Contractor shall specifically bind all subcontractors to the provisions of this Agreement.**

## ARTICLE 22 – MISCELLANEOUS

- 22.1 The duties and obligations imposed by this Agreement and the rights and remedies available to the parties and, in particular but without limitation, the warranties, guaranties and obligations imposed upon the Contractor and all of the rights and remedies available to the City, 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, and the provisions of this Paragraph will survive final payment and termination or completion of this Agreement.
- 22.2 The Contractor shall not assign or transfer this Agreement or its rights, title or interests. The obligations undertaken by the Contractor pursuant to this Agreement shall not be delegated or assigned to any other person or firm. Violation of the terms of this Paragraph shall constitute a material breach of Agreement by the Contractor and the City any, at its discretion, cancel this Agreement and all rights, title and interest of the Contractor which shall immediately cease and terminate.
- 22.3 The Contractor and its employees, volunteers and agents shall be and remain an independent contractors and not agents or employees of the City with respect to all of the acts and services performed by and under the terms of this Agreement. This Agreement shall not in any way be constructed to create a partnership, association or any other kind of joint undertaking or venture between the Parties.
- 22.4 The City reserves the right to audit the records of the Contractor relating in any way to the Work to be performed pursuant to this Agreement at any time during the performance and term of this Agreement and for a period of three (3) years after completion and acceptance by the City. If required by the City, the Contractor agrees to submit to an audit by an independent certified public accountant selected by the City. The Contractor shall allow the City to inspect, examine and review the records of the Contractor at any and all times during normal business hours during the term of this Agreement.
- 22.5 The remedies expressly provided in this Agreement to the City shall not be deemed to be exclusive but shall be cumulative and in addition to all other remedies in favor of the City now or later existing at law or in equity.
- 22.6 Should any part, term or provisions of this Agreement be decided by the courts to be invalid, illegal or in conflict with any state or federal law, the validity of the remaining portion or provision shall not be affected.
- 22.7 Prohibition Against Contracting With Scrutinized Companies: Subject to *Odebrecht Construction, Inc., v. Prasad*, 876 F.Supp.2d 1305 (S.D. Fla. 2012), *affirmed*, *Odebrecht Construction, Inc., v. Secretary, Florida Department of Transportation*, 715 F.3d 1268 (11th Cir. 2013), with regard to the "Cuba Amendment," the Contractor certifies that it is not on the Scrutinized Companies with Activities in

Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2019), that it is not engaged in a boycott of Israel, and that it does not have business operations in Cuba or Syria, as provided in section 287.135, Florida Statutes (2019), as may be amended or revised. The City may terminate this Agreement at the City's option if the Contractor is found to have submitted a false certification as provided under subsection (5) of Section 287.135, Florida Statutes (2019), as may be amended or revised, or been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2019), or is engaged in a boycott of Israel or has been engaged in business operations in Cuba or Syria, as defined in Section 287.135, Florida Statutes (2019), as may be amended or revised.

22.8 Public Entity Crimes: In accordance with the Public Crimes Act, Section 287.133, Florida Statutes, a person or affiliate who is a contractor, consultant or other provider, 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 the City, may not submit a bid on a contract with the City for the construction or repair of a public building or public work, may not submit bids on leases of real property to the City, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with the City, and may not transact any business with the City in excess of the threshold amount provided in Section 287.017, Florida Statutes, for category two purchases for a period of thirty-six (36) months from the date of being placed on the convicted vendor list. Violation of this section by Contractor shall result in cancellation of the City purchase and may result in Contractor debarment.

22.9 Attorney Fees: If City or Consultant incurs any expense in enforcing the terms of this Agreement through litigation, the prevailing party in that litigation shall be reimbursed for all such costs and expenses, including but not limited to court costs, and reasonable attorney fees incurred during litigation.

22.10 Public Records

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT [PRRCONTRACT@FORTLAUDERDALE.GOV](mailto:PRRCONTRACT@FORTLAUDERDALE.GOV), 954-828-5002, CITY CLERK'S OFFICE, 100 NORTH ANDREWS AVENUE, FORT LAUDERDALE, FLORIDA 33301.**

Contractor shall:

1. Keep and maintain public records required by the City in order to perform the service.



2. Upon request from the City's custodian of public records, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes (2019), as may be amended or revised, or as otherwise provided by law.
3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of this Agreement if the Contractor does not transfer the records to the City.
4. Upon completion of the Agreement, transfer, at no cost, to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of this Agreement, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of this Agreement, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

**[THIS REMAINDER OF THE PAGE INTENTIONALLY LEFT BLANK]**

POOL RESURFACING – Riverland Park Pool, Carter Park Pool, Croissant Park Water Playground

Project # 12578

**CITY**

IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first written above.

CITY OF FORT LAUDERDALE, a municipal  
corporation of the State of Florida

By: \_\_\_\_\_  
JODI S. HART,  
Chief Procurement Officer

(CORPORATE SEAL)

ATTEST:

By: \_\_\_\_\_  
JEFFREY A. MODARELLI  
City Clerk

Approved as to Legal Form:  
Alain E. Boileau, City Attorney

By: \_\_\_\_\_  
RHONDA MONTROYA HASAN  
Assistant City Attorney

**CONTRACTOR**

WITNESSES:

\_\_\_\_\_

Print Name

\_\_\_\_\_

Print Name

(CORPORATE SEAL)

STATE OF FLORIDA:  
COUNTY OF BROWARD:

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this \_\_\_\_ day of \_\_\_\_\_, 2020, by (Name and title of authorized officer) for (Name of corporation), a (whatever type of corporation).

SEAL

By: \_\_\_\_\_

Print name: \_\_\_\_\_

Title: \_\_\_\_\_

ATTEST:

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

 \_\_\_\_\_  
 Notary Public, State of Florida  
 (Signature of Notary Public)

 \_\_\_\_\_  
 (Print, Type, or Stamp Commissioned  
 Name  
 of Notary Public)

 Personally Known \_\_\_\_ OR Produced Identification \_\_\_\_  
 Type of Identification Produced \_\_\_\_\_

## **GENERAL CONDITIONS**

**Unless otherwise modified in the Projects Special Conditions, the following General Conditions shall be part of the Contract:**

**GC - 01 - DEFINITIONS** - The following words and expressions, or pronouns used in their stead, shall wherever they appear in the Contract and the Contract Documents, be construed as follows:

"Addendum" or "Addenda" - shall mean the additional Contract provisions issued in writing, by the Engineer, prior to the receipt of bids.

"Bid" – shall mean the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

"Bidder" – shall mean any person, firm, company, corporation or entity submitting a Bid for the Work.

"Bonds" –shall mean bid, performance and payment bonds and other instruments of security, furnished by Contractor and his surety in accordance with the Contract Documents.

"City" – shall mean the City of Fort Lauderdale, Florida, a Florida municipal corporation. In the event the City exercises its regulatory authority as a government body, the exercise of such regulatory authority and the enforcement of any rules, regulations, codes, laws and ordinances shall be deemed to have occurred pursuant to City's authority as a governmental body and shall not be attributable in any manner to the City as a party to this Contract. For the purpose of this Contract, "City" without modification shall mean the City Commission, and/or City Manager or his/her designee(s) as applicable.

"Construction Manager" - shall mean the Public Works Director or his/her designee.

"Construction Project Manager" - shall mean the Public Works Director or his/her designee.

"Consultant" – shall mean a person, firm, company, corporation or other entity employed by the City to perform the professional services for the project.

"Contract Work" - shall mean everything expressed or implied to be required to be furnished and furnished by the Contractor by any one or more of the parts of the Contract Documents referred to in the Contract hereof except Extra Work as hereinafter defined, it being understood that, in case of any inconsistency in or between any part or parts of this Contract, the Public Works Director shall determine which shall prevail.

"Design Documents" – shall mean the construction plans and specifications included as part of a Bid/Proposal Solicitation prepared either by the City or by the Consultant under a separate Agreement with the City.

"Engineer" - shall mean the Public Works Director or his/her designee.

"Extra Work" - shall mean work other than that required by the Contract.

"Inspector" – shall mean an authorized representative of the City assigned to make necessary inspections of materials furnished by Contractor and of the Work performed by Contractor.

"Notice" - shall mean written notice sent by certified United States mail, return receipt requested, or sent by commercial express carrier with acknowledgement of delivery, or via fax or email, or by hand delivery with a request for a written receipt of acknowledgment of delivery and shall be served upon the Contractor either personally or to its place of business listed in the Bid.

"Owner" - shall mean the City of Fort Lauderdale.

"Project Manager" - shall mean the Public Works Director or his/her designee.

"Public Works Director" – shall mean the Public Works Director of the City of Fort Lauderdale, Florida or his/her designee(s).

"Site" - shall mean the area upon or in which the Contractor's operations are carried out and such other areas adjacent thereto as may be designated as such by the Public Works Director.

"Sub-contractor" - shall mean any person, firm, company, corporation or other entity, other than employees of the Contractor, who or which contracts with the contractor, to furnish, or actually furnishes labor and materials, or labor and equipment, or labor, materials and equipment at the site.

"Surety" - shall mean any corporation or entity that executes, as Surety, the Contractor's performance and payment bond securing the performance of this Contract.

**GC - 02 - SITE INVESTIGATION AND REPRESENTATION** - The Contractor acknowledges that it has satisfied itself as to the nature and location of the Work under the Contract Documents, the general and local conditions of the Site, particularly those bearing upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, and roads, the conformation and conditions at the ground based on City provided reports, the type of equipment and facilities needed preliminary to and during the prosecution of the Work and all other matters which can in any way affect the Work or the cost thereof under the Contract Documents.

The Contractor acknowledges that it has conducted extensive tests, examinations and investigations and represents and warrants a thorough familiarization with the nature and extent of the Contract Documents, the Work, locality, soil conditions, moisture conditions and all year-round local weather and climate conditions (past and present), and, in reliance on such tests, examination and investigations conducted by Contractor and the Contractor's experts, has determined that no conditions exist that would in any manner affect the Bid Price and that the project can be completed for the Bid Price submitted.

The Contractor, on its own, has made or caused to be made examinations, investigations, tests and studies of reports and related data in addition to those referred above, as Contractor deemed necessary to perform the Work at the Bid price set by the Contractor, within the contract time and in accordance with the other terms and conditions of the Contract Documents and the bid made by the Contractor; and no additional examinations, investigations, tests, reports or similar data are, or will be, required by Contractor to assure that the Work can be done at the Bid price set by the Contractor.

The Contractor further acknowledges that it has satisfied itself based on any geotechnical reports the City may provide and inspection of the project Site as to the character, quality, and quantity of surface and subsurface materials to be encountered from inspecting the site and from evaluating information derived from exploratory work that may have been done by the City or included in the Contract Documents and finds and has further determined that no conditions exist that would in any manner affect the Bid price and that the project can be completed for the Bid price submitted.

Any failure by the Contractor to acquaint itself with all the provided information and information obtained by visiting the project Site will not relieve Contractor from responsibility for properly estimating the difficulty or cost thereof under the Contract Documents. In the event that the actual subsurface conditions vary from the actual City provided reports, the Contractor shall notify the City and the Contract amount may be adjusted depending on the conditions, at the approval of the City.

**GC - 03 - SUBSTITUTIONS** - If the Contractor desires to use materials and/or products of manufacturer's names different from those specified in the Contract Documents, the Bidder requesting the substitution shall make written application as described herein. The burden of proving the equality of the proposed substitution rests on the Bidder making the request. To be acceptable, the proposed substitution shall meet or exceed all expressed requirements of the Contract Documents and shall be submitted upon the Contractor's letterhead, in addition to the "Contractor's Request for Substitution" form provided by the Public Works Director. The following requirements shall be met in order for the substitution to be considered:

1. Requests for substitution shall reach the Public Works Director no less than ten (10) Working Days prior to the date set for opening of Bids; and
2. Requests for substitution shall be accompanied by such technical data, as the party making the request desires to submit. The Public Works Director will consider reports from reputable independent testing laboratories, verified experience records from previous users and other written information valid in the circumstances; and
3. Requests for substitution shall completely and clearly indicate in what respects the materials and/or products differ from those indicated in the Contract Documents; and
4. Requests for substitution shall be accompanied by the manufacturer's printed recommendations clearly describing the installation, use and care, as applicable, of the proposed substitutions; and
5. Requests for substitution shall be accompanied by a complete schedule of changes in the Contract Documents, if any, which must be made to permit the use of the proposed substitution; and

If a proposed substitution is approved by the Public Works Director, an addendum will be issued to prospective bidders not less than three (3) working days prior to the date set for opening of bids. Unless substitutions are received and approved as described above, the successful Bidder shall be responsible for furnishing materials and products in strict accordance with the Contract Documents.

**GC - 04 - CONTROL OF THE WORK** - The Public Works Director shall have full control and direction of the Work in all respects. The Public Works Director and/or his authorized designee(s) shall, at all times, have the right to inspect the Work and materials. The Contractor shall furnish all reasonable facilities for obtaining such information, as the Public Works Director may desire respecting the quality of the Work and materials and the manner of conducting the Work. Should the Contractor be directed or permitted to perform night Work, or to vary the period which work is ordinarily carried on in the daytime, he shall give ample notice to the Public Works Director so that proper and adequate inspection may be provided. Such Work shall be done only under such regulations as are furnished in writing by the Public Works Director, and no extra compensation shall be allowed to the Contractor therefore. In the event of night work, the Contractor shall furnish such light, satisfactory to the Public Works Director, as will ensure proper inspection. Nothing herein contained shall relieve the Contractor from compliance with any and all City ordinances relating to noise or Work during prohibited hours.

The Contractor shall keep the Public Works Director informed, a reasonable time in advance, as to his need for grades and lines in order that the same may be furnished and all necessary measurements made for records and for payment with the minimum of inconvenience to the Public Works Director or of delay to the Contractor. The Contractor shall submit to the Public Works Director or Inspector on the job a written request outlining the streets, etc., for which the Contractor desires lines and grades. It is the intention not to delay the Work for the giving of lines and grades, but when necessary, work operations shall be suspended for such reasonable time as the Public Works Director may require for this purpose. However, such cost increases shall be authorized either by the City Manager and/or designee, or the City Commission based upon the purchasing threshold amounts provided for in Chapter 2 of the City of Fort Lauderdale's Code of Ordinances.

**GC - 05 - SUB-CONTRACTOR** - The Contractor shall not sublet, in whole or any part of the Work without the written consent and approval of the Public Works Director. Within ten (10) days after official notification of starting date, the Contractor must submit in writing, to the Public Works Director, a list of all Sub-contractors. No Work shall be done by any Sub-contractor until such Subcontractor has been officially approved by the Public Works Director. A sub-contractor not appearing on the original list will not be approved without written request submitted to the Public Works Director and approved by the Public Works Director. In all cases, the Contractor shall give his personal attention to the Work of the Sub-contractors and the Sub-contractor is liable to be discharged by the Contractor, at the direction of the Public Works Director, for neglect of duty, incompetence or misconduct.

Acceptance of any sub-contractor, other person, or organization by the Public Works Director shall not constitute a waiver of any right of Public Works Director to reject defective Work or Work not in conformance with the Contract Documents.

Contractor shall be fully responsible for all acts and omissions of his Sub-contractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between City and any sub-contractor or other person or organization having a direct contract with Contractor, nor shall it create any obligation on the part of City to pay or to see to the payment of any moneys due to any sub-contractor or other person, or organization, except as may otherwise be required by law.

**GC - 06 - QUANTITIES** - It is mutually agreed that the proposal shows the approximate amounts only along with the Plans and the general location. It is also mutually agreed that no change will be made involving any departure from the general scheme of the Work and that no such change involving a material change in cost, either to the City or Contractor, shall be made, except upon written permission of the City. However, the Public Works Director shall have the right to make minor alternations in the line, grade, plan, form or materials of the Work herein contemplated any time before the completion of the same. That if such alterations shall diminish the quantity of the Work to be done, such alterations shall not constitute a claim for damages or anticipated profits. That if such alterations increase the amount of the Work to be done, such increase shall be paid for according to the quantity actually performed and at the unit price or prices stipulated therefore in the Contract.

The City shall, in all cases of dispute, determine the amount or quantity of the several kinds of Work which are to be paid for under this Contract, and shall decide all questions relative to the execution of the same, and such estimates and decisions shall be final and binding.

Any Work not herein specified, which might be fairly implied as included in the Contract, of which the City shall judge, shall be done by the Contractor without extra charge. However, such cost increases shall be authorized either by the City Manager and/or designee, or the City Commission based upon the purchasing threshold amounts provided for in Chapter 2 of the City of Fort Lauderdale's Code of Ordinances.

**GC - 07 - NO ORAL CHANGES** - Except to the extent expressly set forth in the Contract, no change in, or modification, termination or discharge of the Contract in any form whatsoever, shall be valid or enforceable unless it is in writing and signed by the parties charged, therewith or their duly authorized representative.

**GC - 08 - PERMITS AND PROTECTION OF PUBLIC** – Permits on file with the City and or those permits to be obtained, shall be considered directive in nature, and will be considered a part of this Contract. A copy of all permits shall be given to the City and become part of the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.

The Contractor shall be required to observe all the ordinances in relation to obtaining permits for occupying, excavating, or in any way obstructing the streets and alleys. He shall erect and maintain barricades and sufficient safeguards around all excavations, embankments or obstructions; he shall place sufficient warning lights at or near the Work; keep the same burning from sunset to sunrise, employ watchmen, and strictly obey all laws and ordinances controlling or limiting those engaged in similar work.

Where there are telephones, light or power poles, water mains, conduits, pipes or drains or other construction, either public or private, in or on the streets or alleys, the Work shall be so conducted that no interruption or delay will be caused in the operation or use of the same. Proper written notice shall be given, and all the facilities, afforded the owners of such construction encountered or likely to be encountered, as will enable them to preserve the same from injury.

The Contractor shall not be permitted to interfere with public travel and convenience by grading or tearing up streets indiscriminately, but the Work of constructing the various items in this contract shall proceed in an orderly, systematic and progressive manner.

Contractor shall not load nor permit any part of any structure to be loaded with weights that will endanger the structure, nor shall he subject any part of the Work to stresses or pressures that will endanger it.

Where lifting operations involving the use of specialized cranes are required as part of construction, Contractor must undertake the following investigation and submit the results and documentation to the Engineer prior to commencing any lifting operations: marking a very specific area in the field for the placement of the crane; a drawing showing the limitations of the job operation (i.e. not over adjacent properties or pedestrian and high vehicular traffic areas); underground utility exploration in the vicinity of the crane location, which may include ground penetrating radar to identify voids or old pipe or other subsurface features that could lead to sudden failure; assessment of the underlying soil and roadway materials and a worst case analysis based on entire load being distributed on just one or two outriggers; provision of properly sized pads under the outriggers; loading charts from manufacturer showing allowable configurations/loads; and inspection to make sure crane operation is in accordance with the permit conditions.

**GC - 09 - DISEASE REGULATIONS** - The Contractor shall enforce all sanitary regulations and take all precautions against infectious diseases as the Public Works Director may deem necessary. Should any infectious or contagious diseases occur among his employees, he shall arrange for the immediate removal of the employee from the Site and isolation of all persons connected with the Work.

**GC - 10 - CONTRACTOR TO CHECK PLANS, SPECIFICATIONS, AND DATA** - The Contractor shall verify all dimensions, quantities, and details shown on the plans, supplementary drawings, schedules, or other data received from the Public Works Director, and shall notify the Public Works Director of all errors, omissions, conflicts and discrepancies found therein within three (3) working days of discovery. Failure to discover or correct errors, conflictions, or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory Work, faulty construction, or improper operation resulting therefrom nor from rectifying such condition at its own expense.

**GC - 11 - SUPPLEMENTARY DRAWINGS** - When, in the opinion of the Public Works Director, it becomes necessary to explain more fully the Work to be done, or to illustrate the work further, or to show any changes which may be required, drawings, known as supplementary drawings, with specifications pertaining thereto, will be prepared by the Public Works Director and copies will be given to the Contractor.

The supplementary drawings shall be binding upon the Contractor with the same force as the original Plans. Where such supplementary drawings require either less or more than the estimated quantities of work, credit to the City or compensations therefore to the Contractor shall be subject to the terms of the Contract.

**GC - 12 - MATERIALS AND WORKMANSHIP** - All material and workmanship shall, in every respect, be in conformity with approved modern practice and with prevailing standards of performance and quality. In the event of a dispute, the Public Works Director's decision shall be final. Wherever the Plans, Specifications, Contract Documents, or the directions of the Public Works Director are unclear as to what is permissible and/or fail to note the quality of any Work, that interpretation will be made by the Public Works Director, which is in accordance with approved modern practice, to meet the particular requirements of the Contract.

In all cases, new materials shall be used, unless this provision is waived by notice from the City in writing.

**GC - 13 - SAFEGUARDING MARKS** - The Contractor shall safeguard all points, stakes, grade marks, monuments, and bench marks made or established on the Work, bear the cost of re-establishing same if disturbed, or bear the entire expense of rectifying Work improperly installed due to not maintaining or protecting or for removing without authorization, such established points, stakes and marks. The Contractor shall safeguard all existing and known property corners, monuments and marks not related to the Work and, if required, shall bear the cost of having them re-established by a licensed surveyor if disturbed or destroyed during the course of construction.



**GC - 14 - EXISTING UTILITY SERVICE** - All existing utility service shall be maintained with a minimum of interruption at the expense of the Contractor.

**GC - 15 - JOB DESCRIPTION SIGNS** – Contractor, at Contractor's expense, shall furnish, erect, and maintain suitable weatherproof signs on jobs over \$100,000 containing the following information:

1. City Seal (in colors)
2. Project or Improvement Number
3. Job Description
4. Estimated Cost
5. Completion Date

Minimum size of sign shall be four feet high, eight feet wide and shall be suitably anchored. The entire sign shall be painted and present a pleasing appearance. Exact location of signs will be determined in the field. Two (2) signs will be required, one at each end of the job. All costs of this work shall be included in other parts of the work.

**GC - 16 - FLORIDA EAST COAST RIGHT-OF-WAY** - Whenever a City contractor is constructing within the Florida East Coast Railway Company's Right-of-Way, it will be mandatory that the contractor carry bodily injury and property damage insurance in amounts satisfactory to the Florida East Coast Company. This insurance requirement shall be verified by the contractor with the Florida East Coast Company prior to commencing work, and maintained during the life of the Contract.

**GC - 17 - ACCIDENTS** - The Contractor shall provide such equipment and facilities as are necessary and/or required, in the case of accidents, for first aide services to be provided to a person who may be injured during the project duration. The Contractor shall also comply with the OSHA requirements as defined in the United States Labor Code 29 CFR 1926.50.

In addition, the Contractor must report immediately to the Public Works Director every accident to persons or damage to property, and shall furnish in writing full information, including testimony of witnesses regarding any and all accidents.

**GC - 18 - SAFETY PRECAUTIONS** - Contractor must adhere to the applicable environmental protection guidelines for the duration of a project. If hazardous waste materials are used, detected or generated at any time, the Project Manager must be immediately notified of each and every occurrence. The Contractor shall comply with all codes, ordinances, rules, orders and other legal requirements of public authorities (including OSHA, EPA, DERM, the City, Broward County, State of Florida, and Florida Building Code), which bear on the performance of the Work.

The Contractor shall take the responsibility to ensure that all Work is performed using adequate safeguards, including but not limited to: proper safe rigging, safety nets, fencing, scaffolding, barricades, chain link fencing, railings, barricades, steel plates, safety lights, and ladders that are necessary for the protection of its employees, as well as the public and City employees. All riggings and scaffolding shall be constructed with good sound materials, of adequate dimensions for their intended use, and substantially braced, tied or secured to ensure absolute safety for those required to use it, as well as those in the vicinity. All riggings, scaffolding, platforms, equipment guards, trenching, shoring, ladders and similar actions or equipment shall be OSHA approved, as applicable, and in accordance with all Federal, State and local regulations.

**GC - 19 - DUST PREVENTION** - The Contractor shall, by means of a water spray, or temporary asphalt pavement, take all necessary precautions to prevent or abate a dust nuisance arising from dry weather or Work in an incomplete stage. All costs of this Work shall be included in cost of other parts of the Work.

Should the Contractor fail to abate a dust nuisance by the above methods, he will be required to immediately construct temporary patches per City standards.

**GC - 20 - PLACING BARRICADES AND WARNING LIGHTS** - The Contractor shall furnish and place, at his own expense, all barricades, warning lights, automatic blinker lights and such devices necessary to properly protect the work and vehicular and pedestrian traffic. Should the Contractor fail to erect or

maintain such barricades, warning lights, etc., the Public Works Director may, after 24 hours' notice to the Contractor, proceed to have such barricades and warning lights placed and maintained by City or other forces and all costs incurred thereof charged to the Contractor and may be retained by the City from any monies due, or to become due, to the Contractor.

**GC - 21 - TRAFFIC CONTROL** - The Contractor shall coordinate all Work and obtain, through the City's Transportation and Mobility Department, Broward County, Florida Department of Transportation, as applicable, any permits required to detour traffic or close any street before starting to work in the road. The following section: Part VI Traffic Controls for Street and Highway Construction and Maintenance Operations, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, U.S. Department of Transportation Federal Highway Administration, 2009, or current edition, shall be used as a guide for requirement and placement of traffic control devices, signs and barricades. The Public Works Director shall determine requirements for the above. The above publication is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. In the event that a Maintenance of Traffic (MOT) Plan is required, the Plan shall be prepared by an A.A.S.T.A. certified technician.

All traffic control devices, flashing lights, signs and barricades shall be maintained in working condition at all times.

**GC - 22 - COORDINATION** - The Contractor shall notify all utilities, transportation department, etc., in writing, with a copy to the Public Works Director before construction is started and shall coordinate its Work with them. The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal, construction and rearrangement operations in order that services rendered by these parties will not be unnecessarily interrupted.

The Contractor shall arrange its Work and dispose of his materials so as to not interfere with the operation of other contractors engaged upon adjacent work and to join its Work to that of others in a proper manner and to perform its Work in the proper sequence in relation to that of other contractors all as may be directed by the Public Works Director.

Each Contractor shall be responsible for any damage done by it or its agents to the work performed by another contractor.

The Contractor shall contact the Broward County Transportation Department and the Florida Department of Transportation, as applicable, to verify and obtain location of any and all traffic conduits, loops, and street light underground services.

**GC - 23 - WATER** - Bulk water used for construction, flushing pipelines, and testing shall be obtained from fire hydrants. Contractor shall make payment for hydrant meter at Treasury Billing Office, 1st Floor, City Hall, 100 N. Andrews Avenue. With the paid receipt, contractor can pick up hydrant meter at the utility location office. No connection shall be made to a fire hydrant without a meter connected.

**GC - 24 - PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES** - As to any contract for goods or services of \$1 million or more and as to the renewal of any contract for goods or services of \$1 million or more, subject to *Odebrecht Construction, Inc., v. Prasad*, 876 F.Supp.2d 1305 (S.D. Fla. 2012), *affirmed*, *Odebrecht Construction, Inc., v. Secretary, Florida Department of Transportation*, 715 F.3d 1268 (11th Cir. 2013), with regard to the "Cuba Amendment," the Contractor certifies that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, and that it does not have business operations in Cuba or Syria, as provided in section 287.135, Florida Statutes (2019), as may be amended or revised. As to any contract for goods or services of any amount and as to the renewal of any contract for goods or services of any amount, the Contractor certifies that it is not on the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2019), and that it is not engaged in a boycott of Israel. The City may terminate this Agreement at the City's option if the Contractor is found to have submitted a false certification as provided under subsection (5) of section 287.135, Florida Statutes (2019), as may be amended or revised, or been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2019), or is engaged in a boycott of Israel or has been

engaged in business operations in Cuba or Syria, as defined in Section 287.135, Florida Statutes (2019), as may be amended or revised.

**GC - 25 - LOCATION OF UNDERGROUND FACILITIES** - If the Proposer, for the purpose of responding to this solicitation, requests the location of underground facilities through the Sunshine State One-Call of Florida, Inc. notification system or through any person or entity providing a facility locating service, and underground facilities are marked with paint, stakes or other markings within the City pursuant to such a request, then the Proposer shall be deemed non-responsive to this solicitation in accordance with Section 2-184(5) of the City of Fort Lauderdale Code of Ordinances.

**GC - 26 - USE OF FLORIDA LUMBER TIMBER AND OTHER FOREST PRODUCTS** - In accordance with Florida Statute 255.20 (3), the City specifies that lumber, timber, and other forest products used for this Project shall be produced and manufactured in the State of Florida if such products are available and their price, fitness, and quality are equal. This requirement does not apply to plywood specified for monolithic concrete forms, if the structural or service requirements for timber for a particular job cannot be supplied by native species, or if the construction is financed in whole or in part from federal funds with the requirement that there be no restrictions as to species or place of manufacture. The Bidder affirms by submitting a bid response to this solicitation that they will comply with section 255.20 (3) Florida Statutes.

**GC - 27 - PUBLIC RECORDS/TRADE SECRETS/COPYRIGHT:** The Proposer's response to the Solicitation is a public record pursuant to Florida law, which is subject to disclosure by the City under the State of Florida Public Records Law, Florida Statutes Chapter 119.07 ("Public Records Law"). The City shall permit public access to all documents, papers, letters or other material submitted in connection with this Solicitation and the Contract to be executed for this Solicitation, subject to the provisions of Chapter 119.07 of the Florida Statutes.

Any language contained in the Proposer's response to the Solicitation purporting to require confidentiality of any portion of the Proposer's response to the Solicitation, except to the extent that certain information is in the City's opinion a Trade Secret pursuant to Florida law, shall be void. If a Proposer submits any documents or other information to the City which the Proposer claims is Trade Secret information and exempt from Florida Statutes Chapter 119.07 ("Public Records Laws"), the Proposer shall clearly designate that it is a Trade Secret and that it is asserting that the document or information is exempt. The Proposer must specifically identify the exemption being claimed under Florida Statutes 119.07. The City shall be the final arbiter of whether any information contained in the Proposer's response to the Solicitation constitutes a Trade Secret. The City's determination of whether an exemption applies shall be final, and the proposer agrees to defend, indemnify, and hold harmless the City and the City's officers, employees, and agents, against any loss or damages incurred by any person or entity as a result of the City's treatment of records as public records. In addition, the proposer agrees to defend, indemnify, and hold harmless the City and the City's officers, employees, and agents, against any loss or damages incurred by any person or entity as a result of the City's treatment of records as exempt from disclosure or confidential. Proposals purporting to be subject to copyright protection in full or in part will be rejected. The proposer authorizes the City to publish, copy, and reproduce any and all documents submitted to the City bearing copyright symbols or otherwise purporting to be subject to copyright protection.

EXCEPT FOR CLEARLY MARKED PORTIONS THAT ARE BONA FIDE TRADE SECRETS PURSUANT TO FLORIDA LAW, DO NOT MARK YOUR RESPONSE TO THE SOLICITATION AS PROPRIETARY OR CONFIDENTIAL. DO NOT MARK YOUR RESPONSE TO THE SOLICITATION OR ANY PART THEREOF AS COPYRIGHTED.

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:**

**Telephone Number:** (954) 828-5002

**Mailing Address:**                   **City Clerk's Office**  
  **100 N. Andrews Avenue**  
  **Fort Lauderdale, Florida 33301-1016**

**E-mail:**                               **prcontract@fortlauderdale.gov**

Contractor shall:

1. Keep and maintain public records required by the City in order to perform the service.
2. Upon request from the City's custodian of public records, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes (2019), as may be amended or revised, or as otherwise provided by law.
3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of this contract if the Contractor does not transfer the records to the City.
4. Upon completion of the Contract, transfer, at no cost, to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of this Contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of this Contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

Rev. 5/8/2020

## **SECTION 011000 SUMMARY**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section. The written specifications package entitled 12578 POOL RESURFACING; RIVERLAND, CARTER AND CROISSANT PARKS

#### **1.2 INTENT OF DRAWINGS AND SPECIFICATIONS**

- A. Intent of the drawings and specifications is to cover an installation complete in every respect. It is not necessarily intended to provide every detail on drawings or in the specifications. The City will not be responsible for absence of any detail which the Contractor may require nor for any special construction which may be found necessary as work progresses. If an item is either indicated or specified, it shall be considered sufficient for inclusion of said item in the contract. Contractor shall furnish and install materials and equipment normally furnished with such systems and as needed to complete a fully operational installation, whether mentioned or not, which are customary to the trade.
- B. Incidental accessories not usually shown or specified, but which are necessary for the proper installation and operation shall be included in the work without additional cost to the City, as if herein depicted or specified.
- C. Any apparatus, appliance, material or work not shown on drawings, but mentioned in specifications, or vice versa, shall be furnished, delivered and installed by the Contractor without additional cost to the City.
- D. Drawings are diagrammatic and indicate the general arrangement of systems and work indicated (do not scale drawings). Consult the Engineer for exact locations of fixtures, equipment, etc. where these items are not definitively located on the drawings.
- E. City Staff has researched various signs on the market and selected features that staff feels are beneficial for the City's needs. These features have been compiled into the specifications that make up this bid. We have referenced materials that we desire, but they are not intended to be of a proprietary nature. Staff has made attempts to be careful not to include items that were of a proprietary nature in this document; however, a few specifications may inadvertently remain. If, upon your review of this document, you see a requirement that you feel is proprietary to only one vendor, please bring that to our attention for our review. It is our hope that we have prepared a competitive specification that is as impartial as possible, without compromising necessary and desired features.

#### **1.3 SUMMARY**

- A. This Section includes the following:
1. Work covered by the Contract Documents.
  2. Use of premises
  3. Work restrictions.
  4. Specification and drawing conventions.

#### **1.4 WORK COVERED BY CONTRACT DOCUMENTS**

- A. The Work is defined by the Contract Documents and consists of the following:
  - 1. The Work includes the removal of existing pool surfacing and new pool surfacing with new main drain covers per specifications.
- B. TYPE OF CONTRACT
  - 1. Project will be constructed under a single prime contract.
    - a. Division of work: The division of work among it's separate Subcontractors is the responsibility of the General Contractor, and the City assumes no responsibility to act as arbitrator to establish subcontract limits between any sections of the work.

#### **1.5 USE OF PREMISES**

- A. General: Contractor shall have full use of project site for construction operations during construction period. Contractor's use of project site is limited only by City's right to perform work or to retain other contractors on portions of Project.

#### **1.6 WORK RESTRICTIONS**

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Work shall be generally performed at the designated locations during normal business working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, except otherwise indicated.
- C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to nearby property owners.
  - 1. Notify Construction Manager not less than two days in advance of proposed disruptive operations.
  - 2. Obtain Construction Manager's written permission before proceeding with disruptive operations.

#### **1.7 SPECIFICATION FORMATS AND CONVENTIONS**

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 49-division format and CSI/CSC's "MasterFormat" numbering system.
  - 1. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.
  - 2. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in

the Specifications.

- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
  2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
    - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION (Not Used)**

**END OF SECTION 011000**

**SECTION 012200  
UNIT PRICES****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for unit prices.
- B. Related Sections include the following:
  - 1. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
  - 2. Division 01 Section "Quality Requirements" for general testing and inspecting requirements.

**1.3 DEFINITIONS**

- A. Unit price is stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

**1.4 PROCEDURES**

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. City reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at City's expense, by City Surveyor or City Construction Inspector.

**PART 2 - PRODUCTS (Not Used)****PART 3 - EXECUTION (Not Used)****END OF SECTION 012200**



## **SECTION 012500 SUBSTITUTION PROCEDURES**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for substitutions.

#### **1.3 DEFINITIONS**

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or City that are not required in order to meet other Project requirements but may offer advantage to Contractor or City.

#### **1.4 ACTION SUBMITTALS**

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use facsimile of form provided by Construction Manager.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
    - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
    - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. Certificates and qualification data, where applicable or requested.
  - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects, engineers, and owners.
  - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - i. Research reports evidencing compliance with Florida Building Code in effect for Project.
  - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
  - k. Cost information, including a proposal of change, if any, in the Contract Sum.
  - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
  - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within 10 days of receipt of a request for substitution. Engineer will notify Contractor through Construction Manager of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Engineer's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Engineer does not issue a decision on use of a proposed substitution within time allocated.

## **1.5 QUALITY ASSURANCE**

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

## **1.6 PROCEDURES**

- A. Coordination: Modify or adjust affected work as necessary to integrate work of the approved substitutions.

## PART 2 - PRODUCTS

### 2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
1. Conditions: Engineer will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Engineer will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - b. Substitution request is fully documented and properly submitted.
    - c. Requested substitution will not adversely affect Contractor's construction schedule.
    - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
    - e. Requested substitution is compatible with other portions of the Work.
    - f. Requested substitution has been coordinated with other portions of the Work.
    - g. Requested substitution provides specified warranty.
    - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Engineer will consider requests for substitution if received within 30 days after the Notice of Award. Requests received after that time will not be considered.
1. Conditions: Engineer will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Engineer will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect or Engineer for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
    - b. Requested substitution does not require extensive revisions to the Contract Documents.
    - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - d. Substitution request is fully documented and properly submitted.
    - e. Requested substitution will not adversely affect Contractor's construction schedule.
    - f. Requested substitution has received necessary approvals of authorities having jurisdiction.

- g. Requested substitution is compatible with other portions of the Work.
- h. Requested substitution has been coordinated with other portions of the Work.
- i. Requested substitution provides specified warranty.
- j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

**PART 3 - EXECUTION (Not Used)**

**END OF SECTION 012500**

**SECTION 012600  
CONTRACT MODIFICATION PROCEDURES**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
  - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

**1.3 MINOR CHANGES IN THE WORK**

- A. Engineer may issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

**1.4 REQUESTS FOR INFORMATION**

- A. If latent or unforeseen conditions arise that may require changes in the Work, the Contractor may submit a Request for Information to the Construction Manager.

**1.5 PROPOSAL REQUESTS**

- A. City-Initiated Proposal Requests: Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Proposal Requests issued by Engineer are not instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.
    - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

- e. Quotation Form: Use forms acceptable to Engineer.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Engineer.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Include costs of labor and supervision directly attributable to the change.
  - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  - 6. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
  - 7. Proposal Request Form: Use forms acceptable to Engineer.

## **1.6 CHANGE ORDER PROCEDURES**

- A. On City's approval of a Proposal Request, Engineer will issue a Change Order for signature of the Contractor on City's standard form. The Change Order will not be official until approved by the appropriate City Officials and signed by the City Engineer, City Manager and/or Mayor.

## **1.7 CONSTRUCTION CHANGE DIRECTIVE**

- A. Work Change Directive: Engineer may issue a Work Change Directive. Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. Work Change Directive contains a complete description of change in Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.
  - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

## **PART 2 - PRODUCTS (Not Used)**

## **PART 3 - EXECUTION (Not Used)**

**END OF SECTION 012600**

## **SECTION 012900 PAYMENT PROCEDURES**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Sections include the following:
  - 1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  - 2. Division 01 Section "Unit Prices" for administrative requirements governing use of unit prices.
  - 3. Division 01 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.
- C. **BASIS OF PAYMENT** - The price for each items shall include the furnishing of all labor, materials, equipment and incidentals required to complete the construction and to repair in a manner satisfactory to the Engineer any and all damage, as a result of work under this contract, done to existing structures, pavement, driveways paved areas, curbs and gutters, sidewalks, shrubbery, grass, trees, utility poles, utility pipe lines, conduits, drains, catch basins, flagstones, rocked, graveled or stabilized areas or driveways and including all above and underground obstructions not specifically named here-in: replacing in a manner satisfactory to the Engineer and or all of the above items which may be damaged beyond repair as a result of work under this contract: performing the work necessary to complete any and all special connections, hangers, supports, bracing, blocking, shoring and patching necessary to complete the contract in a finished workmanlike manner ready for operation.
- D. **Retainage:** The City shall retain a portion of each partial payment according to the following schedule:
  - 1. The City will retain ten percent (10%) of all monies earned by Contractor until the work is completed.

#### **1.3 DEFINITIONS**

- A. **Schedule of Values:** A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

#### **1.4 SCHEDULE OF VALUES**

- A. **Coordination:** Coordinate preparation of the Schedule of Values with preparation of

### Contractor's Construction Schedule.

1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
    - a. City's Form - Periodic Estimate for Partial Payment.
    - b. Submittals Schedule.
    - c. Contractor's Construction Schedule.
  2. Submit the Schedule of Values to City Representative at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.
1. Identification: Include the following Project identification on the Schedule of Values:
    - a. Project name and location.
    - b. Project Number
    - c. Contractor's name and address.
    - d. Date of submittal.
  2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
    - a. Related Specification Section or Division.
    - b. Description of the Work.
    - c. Name of subcontractor.
    - d. Name of manufacturer or fabricator.
    - e. Name of supplier.
    - f. Change Orders (numbers) that affect value.
    - g. Dollar value.
      - 1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
  3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
  4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
  5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
    - a. Differentiate between items stored on-site and items stored off-site. If specified, include evidence of insurance or bonded warehousing.
  6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the



Work.

7. Allowances: Provide a separate line item in the Schedule of Values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
8. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
  - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as General Conditions expense, at Contractor's option.
9. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

## **1.5 APPLICATIONS FOR PAYMENT**

- A. The General Contractor must meet with the City Representative on or about the 25th of each month. The City Representative will go over the pay items and agree on the quantities and the dollar amounts of the work completed during the month. A copy of the agreed amounts will be signed by the parties and a copy will be left with each representative.
- B. The General Contractor will make up a partial pay request using the City-supplied forms and submit the request to the City Representative before the first of the upcoming month.
- C. Each pay request must be accompanied by a partial release of lien by the General Contractor and by all Subcontractors, suppliers, and for all labor, as outlined below.
  1. Starting with the second (2nd) pay request and for each and every pay request thereafter, the General Contractor shall submit partial release of liens from all Subcontractors, suppliers, and laborers covering the preceding month's request (SEE FOLLOWING EXAMPLE).
  2. EXAMPLE: In the first (1st) pay request, payment is requested by General Contractor for the asbestos contractor and the electrician. The General Contractor must attach his partial release of lien.
  3. For the second (2nd) pay request, the General Contractor must attach his partial release of lien from the asbestos contractor and the electrician for the amounts billed in the 1st pay request; i.e., the General Contractor will be running one (1) month behind with the releases from the Subcontractors, suppliers, etc., until the final pay request.
- D. For the final pay request, the General Contractor will be required to submit FINAL release of liens for ALL Subcontractors, suppliers, etc., and for ALL labor BEFORE FINAL PAYMENT WILL BE MADE.
- E. No partial payments, after the first payment, will be made until all partial release of liens are submitted for the preceding month's billing, as described
- F. Each Application for Payment shall be consistent with previous applications and payments as certified by and paid for by City.
- G. Payment Application Forms: Use City Form "PERIODIC ESTIMATE FOR PARTIAL PAYMENT" as form for Applications for Payment.

1. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. City will return incomplete applications without action.
  2. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
  3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- H. Release of Lien: With each Application for Payment, submit release of lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
1. Submit partial release of lien on each item for amount requested in previous application, after deduction for retainage, on each item.
  2. When an application shows completion of an item, submit final release of lien.
  3. City reserves the right to designate which entities involved in the Work must submit release of lien forms.
- I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
  2. Schedule of Values.
  3. Contractor's Construction Schedule.
  4. Submittals Schedule
  5. List of Contractor's staff assignments.
  6. Copies of building permits.
  7. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  8. Report of preconstruction conference.
  9. Certificates of insurance and insurance policies..
  10. Performance and payment bonds.
- J. City may withhold, in whole or in part, payment to such extent as may be necessary to protect itself from loss on account of:
1. Defective Work not remedied.
  2. Claims filed or reasonable evidence indicating probable filing of claims by other parties against Contractor or City because of Contractor's performance.
  3. Failure of Contractor to make payments properly to Subcontractors or for material or labor.
  4. Damage to another contractor not remedied.
  5. Liquidated damages and costs incurred by City and/or Consultant for extended construction administration.
  6. Failure of Contractor to provide any and all documents required by the Contract Documents.
- K. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
  2. Insurance certificates for products and completed operations where required and proof

- that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
  4. Evidence that claims have been settled.
  5. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when City took possession of and assumed responsibility for corresponding elements of the Work.
  6. Final, liquidated damages settlement statement.

- L. The acceptance of final payment shall constitute a waiver of all claims by contractor, except those previously made in strict accordance with the provisions of the Contract and identified by Contractor as unsettled at the time of the application for final payment.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION (Not Used)**

**END OF SECTION 012900**

**SECTION 013100  
PROJECT MANAGEMENT AND COORDINATION**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
1. Coordination Drawings.
  2. Special Project Procedures
  3. Administrative and supervisory personnel.
  4. Project meetings.
  5. Requests for Interpretation (RFIs).
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.
- C. Related Sections include the following:
1. Division 01 Section "Construction Progress Documentation" for preparing and submitting Contractor's Construction Schedule.
  2. Division 01 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
  3. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

**1.3 DEFINITIONS**

- A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

**1.4 COORDINATION**

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.

**1.5 SUBMITTALS**

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
1. Name, address, and telephone number of entity performing subcontract or supplying products.

2. Number and title of related Specification Section(s) covered by subcontract.

- B. Key Personnel Names: Within 15 days of notice to proceed, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

## 1.6 SPECIAL PROJECT PROCEDURES

- A. Discrepancies, Errors: Should discrepancies or errors appear in the drawings or specifications concerning materials, workmanship, or quantity of work to be performed, the Contractor will be required to immediately notify the City before proceeding with the work. If the Contractor fails to notify the City and proceeds with the work, Contractor will be required to correct the errors at his/her own expense. In the event of a conflict between the drawings and specifications, the City will decide on the way to perform the work or supply the materials. See also General Conditions, "Contractor to Check Plans and Data," Section 5-76.
- B. Dimensions and Measurements: The figured dimensions on the drawings or notes including dimensions shall be used for construction instead of measurements of the drawings by scale. No scale measurements shall be used as a dimension for construction. Dimensions on all drawings as well as the detail drawings themselves are subject in every case to measurements of adjacent or previously completed work. All such measurements necessary shall be taken before undertaking any work dependent upon such data. Field verification of dimensions on plans is mandatory since actual locations, distances, and levels will be governed by actual field conditions.
- C. Discrepancies or Inconsistencies: Should any discrepancy or inconsistency appear between larger and smaller scale drawings in any of the divisions of the specifications or in any of the contract documents, such discrepancy shall be immediately submitted to the City for correction before proceeding with the work in question. In no case shall the Contractor make any alterations, erasures, changes or modifications in the drawings or specifications.
1. Should it appear that any of the work as specified or shown by the drawings is not sufficiently detailed or explained, the Contractor shall apply to the City for such further details or information as may be necessary for full understanding of the work in question.
  2. The data set forth in these specifications and indicated on the drawings are as accurate as can be obtained, but their extreme accuracy is not guaranteed. Final application thereto shall be determined on the job as conditions may demand and subject to the approval of the City.
- D. Plans and Specifications Acknowledgment by Subcontractors and Suppliers: All Subcontractors and suppliers must submit, through the General Contractor to the City Engineer, a statement on their individual letterhead stationery, signed and sealed with their corporate seal, or a notarized statement on their letterhead stationery in the absence of a corporate seal, that the individual Subcontractor or Supplier:
1. Has received or reviewed a FULL set of approved plans and specifications for the project,
  2. Is aware that items concerning their particular trade may be shown and/or detailed in

- other trades or sections of the plans and specifications, and
3. Will comply with said plans, specifications and all applicable codes and permit requirements.
- E. In the event a Subcontractor or Supplier notes a mistake or details appear incomplete, or if there are questions or concerns with the plans and specifications, the Subcontractor or Supplier will immediately notify the General Contractor. No work will proceed until such conflicts or questions are resolved in writing.
- F. The Subcontractor will not be permitted to start work, nor will any Shop drawings/submittals be accepted for review from a supplier until this letter of acknowledgment is received and approved by the General Contractor and City Engineer. Also, the City will not process any pay request for the work of any Subcontractor or Supplier whose acknowledgment letter is not on file with the City.

## **1.7 ADMINISTRATIVE AND SUPERVISORY PERSONNEL**

- A. The Contractor shall employ a competent superintendent who can communicate with spoken English, and who shall be in attendance at the site full-time when any work is in progress. The superintendent shall be satisfactory to the City's Engineer and shall not be changed except with the consent of the City's Engineer.
- B. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

## **1.8 PROJECT MEETINGS**

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify City Representative of scheduled meeting dates and times.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including City Representative and Engineer, within 48 hours of the completion of the meeting.
    - a. Minutes from all meetings shall be prepared by the Contractor, reflecting all items discussed as well as agreed upon or suggested solutions. These minutes shall be a true reflection of what actually happened at the meeting.
    - b. Items discussed and not resolved or being handled by any one of the parties present shall be reflected along with the name of the person responsible in all ongoing minutes until it is resolved.
    - c. Minutes shall be typewritten within 24 hours from the completion of the meeting. They shall immediately be FAXED to all parties present and followed by a copy through the mail.
    - d. All items requiring information and not resolved shall be reflected in each and every set of minutes thereafter until it is totally resolved
- B. Preconstruction Meeting: After the contract(s) has been awarded, executed, and a tentative work schedule has been composed, and prior to the start of the work, the Contractor(s), the Engineer, the City's Representative, and other persons and/or governmental agencies that

are involved shall meet. The minimum agenda is to include but is not limited to the following:

1. Distribute and discuss list of major Subcontractors
2. Tentative construction schedule
3. Critical work sequencing and long-lead items
4. Designation of key personnel and their duties
5. Procedures for processing field decisions and Change Orders
6. Procedures for RFIs
7. Procedures for testing and inspecting
8. Adequacy of distribution of contract documents
9. Submittal of Shop drawings, project data, and samples
10. Procedures for maintaining Record documents
11. Use of premises
12. Protection of existing construction including landscape materials
13. Work restrictions
14. Construction waste management and recycling
15. Parking availability
16. Working hours
17. Safety and first-aid procedures
18. Security procedures
19. Housekeeping procedures including progress cleaning.
20. Schedule of values.
21. Processing of payments or contract.

C. Progress Meetings: Conduct progress meetings at biweekly intervals. Coordinate dates of meetings with preparation of payment requests.

1. Attendees: In addition to representatives of City and Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
  - a. Review and approve minutes of previous Progress Meeting.
  - b. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - 1) Review schedule for next period.
  - c. Review present and future needs of each entity present, including the following:
    - 1) Sequence of operations.
    - 2) Status of submittals.
    - 3) Deliveries.
    - 4) Off-site fabrication.
    - 5) Access.
    - 6) Work hours.

- 7) Hazards and risks.
  - 8) Progress cleaning.
  - 9) Quality and work standards.
  - 10) Status of correction of deficient items.
  - 11) Field observations.
  - 12) RFIs.
  - 13) Status of proposal requests.
  - 14) Pending changes.
  - 15) Status of Change Orders.
  - 16) Pending claims and disputes.
  - 17) Documentation of information for payment requests.
3. Minutes: General Contractor shall record the meeting minutes. These minutes shall indicate all items discussed as well as agreed upon or suggested solutions. They shall be a true reflection of what occurred at the meeting.
  4. Reporting: Within 24 hours, distribute minutes of the meeting by fax transmittal to each party present and to parties who should have been present.
    - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

#### **1.9 REQUESTS FOR INTERPRETATION (RFIs)**

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
  1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
  2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
  1. City Project Number
  2. City Project Name.
  3. Date.
  4. Name of Contractor.
  5. RFI number, numbered sequentially.
  6. Specification Section number and title and related paragraphs, as appropriate.
  7. Drawing number and detail references, as appropriate.
  8. Field dimensions and conditions, as appropriate.
  9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  10. Contractor's signature.
  11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
    - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials,



assemblies, and attachments.

- C. Hard-Copy RFIs: Form as provided and instructed by the Construction Management Department.
  - 1. Identify each page of attachments with the RFI number and sequential page number.
- D. Software-Generated RFIs: Software-generated form with substantially the same content as indicated above. Word Template is available upon request from the City Engineer's Office.
  - 1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- E. Engineer's Action: Engineer will review each RFI, determine action required, and return it. Allow seven working days for Engineer's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
  - 1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Requests for interpretation of Engineer's actions on submittals.
    - f. Incomplete RFIs or RFIs with numerous errors.
  - 2. Engineer's action may include a request for additional information, in which case Engineer's time for response will start again.
  - 3. Engineer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Engineer in writing within 10 days of receipt of the RFI response.
- F. On receipt of Engineer's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Engineer within seven days if Contractor disagrees with response.
- G. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log bi-weekly. Include the following:
  - 1. Project name.
  - 2. Name and address of Contractor.
  - 3. RFI number including RFIs that were dropped and not submitted.
  - 4. RFI description.
  - 5. Date the RFI was submitted.
  - 6. Date Engineer's response was received.
  - 7. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
  - 8. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION (Not Used)**

**END OF SECTION 013100**

**SECTION 013200  
CONSTRUCTION PROGRESS DOCUMENTATION**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
1. Contractor's Construction Schedule.
  2. Submittals Schedule.
  3. Daily construction reports.
  4. Material location reports.
  5. Site condition reports.
  6. Special reports.
- B. Related Sections include the following:
1. Division 01 Section "Payment Procedures" for submitting the Schedule of Values.
  2. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes.
  3. Division 01 Section "Submittal Procedures" for submitting schedules and reports.
  4. Division 01 Section "Photographic Documentation" for submitting construction photographs.
  5. Division 01 Section "Quality Requirements" for submitting a schedule of tests and inspections.

**1.3 SUBMITTALS**

- A. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:
1. Scheduled date for first submittal
  2. Name of subcontractor.
  3. Description of the Work covered.
  4. Scheduled date for Engineer's final release or approval.
- B. Contractor's Construction Schedule: Submit three copies of initial schedule, large enough to show entire schedule for entire construction period.
- C. Daily construction Reports: Submit two copies at weekly intervals.
- D. Field Condition Reports: Submit two copies at time of discovery of differing conditions.
- E. Special Reports: Submit two copies at time of unusual event.

## **PART 2 - PRODUCTS**

### **2.1 SUBMITTALS SCHEDULE**

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
  - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
  - 2. Initial Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

### **2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL**

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
  - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each separate area as a separate numbered activity for each principal element of the Work. Comply with the following: The schedule shall clearly indicate the critical path and all activities associated with it. The dependencies shall be clearly delineated.
  - 2. All activities with a time duration exceeding five (5) days shall be shown as separate items.
  - 3. Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
  - 4. Where materials require more than one (1) week fabrication or order time, this order/fabrication time shall be shown.
- C. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, Final Completion, and Certificate of Occupancy.
- D. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis to demonstrate the effect of the proposed change on the overall project schedule.

### **2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)**

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for the Notice to Proceed. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

## **2.4 REPORTS**

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
1. List of subcontractors at Project site.
  2. Approximate count of personnel at Project site.
  3. Equipment at Project site.
  4. Material deliveries.
  5. High and low temperatures and general weather conditions.
  6. Accidents.
  7. Meetings and significant decisions.
  8. Unusual events (refer to special reports).
  9. Stoppages, delays, shortages, and losses.
  10. Emergency procedures.
  11. Orders and requests of authorities having jurisdiction.
  12. Change Orders received and implemented.
  13. Construction Change Directives received and implemented.
  14. Services connected and disconnected.
  15. Equipment or system tests and startups.
  16. Substantial Completions authorized.
- B. Site Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

## **2.5 SPECIAL REPORTS**

- A. General: Submit special reports directly to City within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise City in advance when these events are known or predictable.

## **PART 3 - EXECUTION**

### **3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE**

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  3. As the Work progresses, indicate Actual Completion percentage for each activity.

- B. Distribution: Distribute copies of approved schedule to City Representative, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
  2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

**END OF SECTION 013200**

**SECTION 013233  
PHOTOGRAPHIC DOCUMENTATION**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for the following:
1. Preconstruction photographs.
  2. Periodic construction photographs.
  3. Final Completion construction photographs.
- B. Related Sections include the following:
1. Division 01 Section "Submittal Procedures" for submitting photographic documentation.
  2. Division 01 Section "Closeout Procedures" for submitting digital media as Project Record Documents at Project closeout.

**1.3 INFORMATIONAL SUBMITTALS**

- A. Construction Photographs: Submit digital media files of each photographic view within seven days of taking photographs.
1. Format: Minimum 3200 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph. File names shall be in the following format: City project number – date taken (YYMMDD) – picture number (example: 10350-090408-011 would indicate project number 10350 taken on April 8, 2009 photograph number 11). Submit on CD with folders for separate dates.
  2. Identification: On jewel case and CD, provide an applied label with the following information:
    - a. Name of Project.
    - b. Name of Contractor.
    - c. Dates photographs were taken.

**1.4 USAGE RIGHTS**

- A. Obtain and transfer copyright usage rights from photographer to Owner for unlimited reproduction of photographic documentation.

**PART 2 - PRODUCTS**

**2.1 PHOTOGRAPHIC MEDIA**

- A. Digital Images: Provide images in JPG format, produced by a digital camera with minimum

sensor size of 8 mega pixels, and at an image resolution of not less than 3200 by 2400 pixels.

### **PART 3 - EXECUTION**

#### **3.1 CONSTRUCTION PHOTOGRAPHS**

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
  - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- B. Daily Progress Photographs: Take daily photographs to document progress. Take photographs of all work that will be concealed by subsequent construction activity (such as rough electrical, rough plumbing and rough ductwork). Such photographs shall fully document actual installed conditions.
- C. Preconstruction Photographs: Before starting construction, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, or, as directed by Engineer.
- D. Periodic Construction Photographs: Take minimum 20 photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points, including aerial photographs to show status of construction and progress since last photographs were taken.
  - a. Interior Work, through date of Substantial Completion.
- E. Final Completion Construction Photographs: Take 20 color photographs after date of Substantial Completion for submission as Project Record Documents. Construction Manager will direct photographer for desired vantage points.
  - 1. Do not include date stamp.

**END OF SECTION 013233**



## **SECTION 013300 SUBMITTAL PROCEDURES**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections include the following:
  - 1. Division 01 Section "Payment Procedures" for submitting Applications for Payment and the Schedule of Values.
  - 2. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes and for submitting Coordination Drawings.
  - 3. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule.
  - 4. Division 01 Section "Photographic Documentation" for submitting construction photographs.
  - 5. Division 01 Section "Quality Requirements" for submitting test and inspection reports.
  - 6. Division 01 Section "Closeout Procedures" for submitting warranties.
  - 7. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
  - 8. Divisions 02 through 33 Sections for specific requirements for submittals in those Sections.

#### **1.3 DEFINITIONS**

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

#### **1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS**

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
  4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- B. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 10 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow 10 days for review of each resubmittal.
- C. Paper Submittals: Place a permanent label or title block on each submittal item for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
  2. Provide a space approximately 3 by 6 inches (75 by 150 mm) on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
  3. Include the following information for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name of Engineer.
    - d. Name of Contractor.
    - e. Name of subcontractor.
    - f. Name of supplier.
    - g. Name of manufacturer.
    - h. Submittal number or other unique identifier, including revision identifier.
      - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
  - i. Number and title of appropriate Specification Section.
  - j. Drawing number and detail references, as appropriate.
  - k. Location(s) where product is to be installed, as appropriate.
  - l. Other necessary identification.

4. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Engineer observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
  5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Engineer will return without review submittals received from sources other than Contractor.
    - a. Transmittal Form for Paper Submittals: Provide locations on form for the following information:
      - 1) Project name.
      - 2) Date.
      - 3) Destination (To:).
      - 4) Source (From:).
      - 5) Name of Engineer.
      - 6) Name of Contractor.
      - 7) Name of firm or entity that prepared submittal.
      - 8) Names of subcontractor, manufacturer, and supplier.
      - 9) Category and type of submittal.
      - 10) Submittal purpose and description.
      - 11) Specification Section number and title.
      - 12) Specification paragraph number or drawing designation and generic name for each of multiple items.
      - 13) Drawing number and detail references, as appropriate.
      - 14) Indication of full or partial submittal.
      - 15) Transmittal number.
      - 16) Submittal and transmittal distribution record.
      - 17) Remarks.
      - 18) Signature of transmitter.
- D. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
  2. Name file with submittal number or other unique identifier, including revision identifier.
    - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., 10905-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 10905-061000.01.A).
  3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Engineer.
  4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
    - a. Project name.
    - b. Date.
    - c. Name of Engineer.
    - d. Name of Contractor.

- e. Name of firm or entity that prepared submittal.
  - f. Category and type of submittal.
  - g. Submittal purpose and description.
  - h. Specification Section number and title.
  - i. Specification paragraph number or drawing designation and generic name for each of multiple items.
  - j. Drawing number and detail references, as appropriate.
  - k. Location(s) where product is to be installed, as appropriate.
  - l. Related physical samples submitted directly.
  - m. Indication of full or partial submittal.
  - n. Transmittal number.
  - o. Submittal and transmittal distribution record.
  - p. Other necessary identification.
  - q. Remarks.
- E. Options: Identify options requiring selection by Engineer.
- F. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Engineer on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
- 1. Note date and content of previous submittal.
  - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  - 3. Resubmit submittals until they are marked with approval notation from Engineer's action stamp.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Engineer's action stamp.

## **PART 2 - PRODUCTS**

### **2.1 SUBMITTAL PROCEDURES**

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections and Contract Drawings. Types of submittals are indicated in individual Specification Sections.
- 1. Submit electronic submittals via email as PDF electronic files.
    - a. Engineer will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
  - 2. Action Submittals: Submit five paper copies of each submittal unless otherwise indicated. Engineer will return three copies.

3. Informational Submittals: Submit five paper copies of each submittal unless otherwise indicated. Engineer will return three copies.
  4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
    - a. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
  2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams showing factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  5. Submit Product Data before or concurrent with Samples.
  6. Submit Product Data in the following format:
    - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on Engineer's digital data drawing files is otherwise permitted.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.

- g. Seal and signature of professional engineer if specified.
  - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm), but no larger than 24 by 36 inches (610 by 915 mm).
  - 3. Submit Shop Drawings in the following format:
    - a. PDF electronic file.
    - b. Five opaque copies of each submittal. Engineer will retain two copies; remainder will be returned.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
- 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  - 2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of applicable Specification Section.
    - e. Specification paragraph number and generic name of each item.
  - 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
  - 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
  - 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
    - a. Number of Samples: Submit two full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Engineer will return one submittal with options selected.
  - 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
    - a. Number of Samples: Submit five sets of Samples. Engineer will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record sample.

- E. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation" for Construction Manager's action.
- F. Application for Payment and Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."
- G. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."
- H. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
- I. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of engineers and owners, and other information specified.
- J. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- K. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- L. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- M. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- N. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- O. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- P. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- Q. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - 1. Name of evaluation organization.
  - 2. Date of evaluation.
  - 3. Time period when report is in effect.
  - 4. Product and manufacturers' names.
  - 5. Description of product.

6. Test procedures and results.
  7. Limitations of use.
- R. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- S. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- T. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- U. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

## **2.2 DELEGATED-DESIGN SERVICES**

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

## **PART 3 - EXECUTION**

### **3.1 CONTRACTOR'S REVIEW**

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been



reviewed, checked, and approved for compliance with the Contract Documents.

### **3.2 ENGINEER'S ACTION**

- A. General: Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
  - 1. Approved as submitted
  - 2. Approved as noted
  - 3. Revise and resubmit
  - 4. Rejected.
- C. Informational Submittals: Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.
- D. Partial or incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

**END OF SECTION 013300**

## **SECTION 014000 QUALITY REQUIREMENTS**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and -control services required by Engineer, City, Construction Manager, or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Sections include the following:
  - 1. Division 01 Section "Construction Progress Documentation" for developing a schedule of required tests and inspections.
  - 2. Divisions 02 through 33 Sections for specific test and inspection requirements.

#### **1.3 DEFINITIONS**

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Engineer or Construction Manager.
- C. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.

- D. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- E. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- F. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
  - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- G. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

#### **1.4 CONFLICTING REQUIREMENTS**

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Construction Management for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Engineer or Construction Management for a decision before proceeding.

#### **1.5 SUBMITTALS**

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
  - 1. Specification Section number and title.
  - 2. Entity responsible for performing tests and inspections.
  - 3. Description of test and inspection.
  - 4. Identification of applicable standards.
  - 5. Identification of test and inspection methods.
  - 6. Number of tests and inspections required.
  - 7. Time schedule or time span for tests and inspections.
  - 8. Requirements for obtaining samples.
  - 9. Unique characteristics of each quality-control service.

- C. Reports: Prepare and submit certified written reports that include the following:
1. Date of issue.
  2. Project title and number.
  3. Name, address, and telephone number of testing agency.
  4. Dates and locations of samples and tests or inspections.
  5. Names of individuals making tests and inspections.
  6. Description of the Work and test and inspection method.
  7. Identification of product and Specification Section.
  8. Complete test or inspection data.
  9. Test and inspection results and an interpretation of test results.
  10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
  11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  12. Name and signature of laboratory inspector.
  13. Recommendations on retesting and reinspecting.
  14. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For City's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

## **1.6 QUALITY ASSURANCE**

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

## **1.7 QUALITY CONTROL**

- A. City Responsibilities: Where quality-control services are indicated as City's responsibility, City will engage a qualified testing agency to perform these services.
1. The City Engineer or his authorized agent will direct all field testing. Unless otherwise specifically stated in the plans or specifications, all laboratory expenses will be paid by the City of Fort Lauderdale. The contractor shall give to City timely notice of when and where tests are to be made so that the City may be present for such procedures.

2. City will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
  3. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Tests and inspections not explicitly assigned to City are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
    - a. Contractor shall not employ same entity engaged by City, unless agreed to in writing by Owner.
  2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
  3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- D. Testing Agency Responsibilities: Cooperate with City and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify City and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
  3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  6. Do not perform any duties of Contractor.
- E. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
  2. Incidental labor and facilities necessary to facilitate tests and inspections.

3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  4. Facilities for storage and field curing of test samples.
  5. Delivery of samples to testing agencies.
  6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  7. Security and protection for samples and for testing and inspecting equipment at Project site.
- F. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

## **PART 2 - PRODUCTS (Not Used)**

## **PART 3 - EXECUTION**

### **3.1 TEST AND INSPECTION LOG**

- A. Prepare a record of tests and inspections. Include the following:
1. Date test or inspection was conducted.
  2. Description of the Work tested or inspected.
  3. Date test or inspection results were transmitted to Construction Manager.
  4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Engineer's and Construction Manager's reference during normal working hours.

### **3.2 REPAIR AND PROTECTION**

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**END OF SECTION 014000**

# Construction Sign Request Form

Title (Bold):

Title (Not Bold):

What's Happening?

Benefits:

Number of Neighbors Benefitted:

Cost:

Month and Year of Expected Completion:

Contractor:

Phone: 954-828-8000

We're Working On:

Project Manager Signature

Date

Senior Project Manager Signature

Date

**SECTION 015900 – PROJECT SIGN****PART 1 GENERAL**

Contractor, at contractor's expense, shall furnish and install a **4x8' (Feet)** sign (with 2 white 2x4" (Inch) painted posts) prior to start of construction. A sample sign template is below but is not specific to the project. The exact style and design of the sign will be provided by the CITY to the Contractor during the preconstruction meeting in PDF format.

**City of Fort Lauderdale**

## Keeping the Ocean in the Ocean

### Bringing Drier Streets to Hendricks Isle

<b>What's Happening?</b> The City of Fort Lauderdale is combating poor roadway drainage resulting from seasonal high tides and major rain events.  <a href="http://www.fortlauderdale.gov">www.fortlauderdale.gov</a>	<b>Benefits 5,000 Neighbors</b> <ul style="list-style-type: none"> <li>• Improved vehicular access during high tide and rain events</li> <li>• Better drainage of roadway</li> <li>• Enhanced neighborhood</li> </ul> <b>Phone</b> (954) 828-8000	<b>Cost</b> \$20,000  <b>Completion</b> August 2013  <b>Contractor</b> ABC Company	<b>We're Working On:</b> <ul style="list-style-type: none"> <li>• Installing interconnected underground catch basins</li> <li>• Cleaning existing drainage pipes, including the outfall pipes</li> <li>• Removing and replacing the concrete valley gutters that transport water to the catch basins</li> <li>• Installing drainage valves to help alleviate flooding from high tides</li> </ul>
--	--	---	--

**Fort Lauderdale City Commission**

<b>John P. "Jack" Seiler</b> Mayor	<b>Bruce G. Roberts</b> Vice Mayor, District I	<b>Dean J. Trantalis</b> Commissioner, District II	<b>Bobby B. DuBose</b> Commissioner, District III	<b>Romney Rogers</b> Commissioner, District IV	<b>Lee R. Feldman, ICMA-CM</b> City Manager
---------------------------------------	---	---	--	---	--

See Page 2, "Construction Sign Request Form", for information on the sign for this Project.

**END OF SECTION**



## **SECTION 017300 EXECUTION**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1. Construction layout.
  - 2. Field engineering and surveying.
  - 3. Installation of the Work.
  - 4. Progress cleaning.
  - 5. Starting and adjusting.
  - 6. Protection of installed construction.
  - 7. Correction of the Work.
- B. Related Sections include the following:
  - 1. Division 01 Section "Project Management and Coordination" for procedures for coordinating field engineering with other construction activities.
  - 2. Division 01 Section "Submittal Procedures" for submitting surveys.
  - 3. Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of City-accepted deviations from indicated lines and levels, and final cleaning.

#### **1.3 SUBMITTALS**

- A. Qualification Data: For land surveyor.
- B. Certificates: Submit certificate signed by land surveyor certifying that location and elevation of improvements comply with requirements.
- C. Certified Surveys: Submit two copies signed by land surveyor.

#### **1.4 QUALITY ASSURANCE**

- A. Land Surveyor Qualifications: A professional land surveyor who is licensed by the State of Florida and who is experienced in providing land-surveying services of the kind indicated.

### **PART 2 - PRODUCTS (Not used)**

### **PART 3 - EXECUTION**

#### **3.1 EXAMINATION**

- A. Existing Conditions: The existence and location of underground and other utilities and

construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, and other construction affecting the Work.

1. Before construction verify the location of utility services.
- B. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
  1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### **3.2 PREPARATION**

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Construction Manager according to requirements in Division 01 Section "Project Management and Coordination."

### **3.3 CONSTRUCTION LAYOUT**

- A. Verification: Before proceeding to request for the City's surveyor to lay-out the Work, verify layout information shown on Drawings. If discrepancies are discovered, notify Construction Manager promptly.
- B. General: The City's Surveyor will provide the survey lay-out, benchmarks, control points, and one (1) set of stakes, which shall be protected and preserve by the Contractor. The Contractor shall safeguard all points, stakes, grade marks, monuments and bench marks made or established on the work, bear the cost of re-establishing same if disturbed, or bear the entire expense of rectifying work improperly installed due to not maintaining or protecting or for removing without authorization, such established points, stakes and marks. In the event that the Contractor requests that the City's Surveyor re-establishes this information, the Contractor shall be billed for this work at a billing rate of \$130/hour, if City survey crews are available. The Contractor shall be responsible for all surveying work necessary to complete this project, except for the initial information provided by the City's surveyor. The contractor shall safeguard all existing and known property corners, monuments and marks

not related to the work and, if required, shall bear the cost of having them re-established by a licensed surveyor if disturbed or destroyed during the course of construction.

- C. Schedule lay-out: The contractor shall submit his request for the City's surveyor, through the Construction Manager, at least 5 working days in advance in order to allow the Surveyor to schedule this work. The City's Surveyor will record the "as-built" information.
- D. Coordination: The Contractor shall be responsible to coordinate with subcontractors information received from City's surveyor.
  - 1. Establish limits on use of Project site.
  - 2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
  - 3. Inform installers of lines and levels to which they must comply.
  - 4. Check the location, level and plumb, of every major element as the Work progresses.
  - 5. Notify Construction Manager when deviations from required lines and levels exceed allowable tolerances.

### **3.4 FIELD ENGINEERING**

- A. Identification: City will identify existing benchmarks, control points, and property corners.
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
  - 1. Do not change or relocate existing benchmarks or control points without prior written approval of Engineer. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Construction Manager before proceeding.
  - 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

### **3.5 INSTALLATION**

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  - 1. Make vertical work plumb and make horizontal work level.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
  - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Engineer.
  - 2. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.
- K.

### **3.6 PROGRESS CLEANING**

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F (27 deg C).
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- D. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- E. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.

- F. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

### **3.7 PROTECTION OF INSTALLED CONSTRUCTION**

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

### **3.8 CORRECTION OF THE WORK**

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
  - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

**END OF SECTION 017300**

**SECTION 017419  
CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for the following:
  - 1. Disposing of nonhazardous construction waste.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION**

**3.1 DISPOSAL OF WASTE**

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Remove waste materials from City's property and legally dispose of them.

**END OF SECTION 017419**

## **SECTION 017700 CLOSEOUT PROCEDURES**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
1. Substantial Completion procedures.
  2. Final completion procedures.
  3. Warranties.
  4. Final cleaning.
  5. Repair of the Work.
- B. Related Sections include the following:
1. Division 01 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
  2. Division 01 Section "Photographic Documentation" for submitting Final Completion construction photographs and negatives.
  3. Division 01 Section "Execution Requirements" for progress cleaning of Project site.
  4. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
  5. Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

#### **1.3 SUBSTANTIAL COMPLETION PROCEDURES**

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, and similar final record information.
  2. Submit closeout submittals specified in individual Divisions 02 through 33 Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  3. Submit maintenance material submittals specified in individual Divisions 02 through 33

Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Construction Manager. Label with manufacturer's name and model number where applicable.

- C. Procedures Prior to Substantial Completion: Complete the following prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Terminate and remove temporary facilities from Project site, along with construction tools, and similar elements.
  - 2. Complete final cleaning requirements, including touchup painting.
  - 3. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Construction Manager will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Construction Manager that must be completed or corrected before certificate will be issued.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for final completion.

#### **1.4 FINAL COMPLETION PROCEDURES**

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
  - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
  - 2. Certified List of Incomplete Items: Submit certified copy of Construction Manager's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Construction Manager. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  - 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  - 4. Submit final releases of lien from all subcontractors and suppliers.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Final payment will only be made after ALL unconditional release of liens from all subcontractors and suppliers are received by the City.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

#### **1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)**

- A. Organization of List: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.



1. Include the following information at the top of each page:
  - a. Project number and name.
  - b. Date.
  - c. Name of Construction Manager.
  - d. Name of Contractor.
  - e. Page number.
2. Submit list of incomplete items in the following format:
  - a. MS Excel electronic file. Construction Manager will return annotated file.
  - b. PDF electronic file. Construction Manager will return annotated file.
  - c. Three paper copies. Construction Manager will return two copies.

## **1.6 SUBMITTAL OF PROJECT WARRANTIES**

- A. Time of Submittal: Submit written warranties for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## **PART 3 - EXECUTION**

### **3.1 FINAL CLEANING**

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
  1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.

- e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
- f. Sweep concrete floors broom clean in unoccupied spaces.
- g. Remove labels that are not permanent.

- B. Construction Waste Disposal: Comply with waste disposal requirements in Division 01 Section "Construction Waste Management and Disposal."

### **3.2 REPAIR OF THE WORK**

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
  - 1. Remove and replace chipped, scratched, or broken reflective surfaces, and other damaged materials.
  - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.

**END OF SECTION 017700**

**SECTION 017839  
PROJECT RECORD DOCUMENTS**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
1. Record Drawings.
  2. Record Product Data.
  3. Miscellaneous record submittals
- B. Related Sections include the following:
1. Division 01 Section "Closeout Procedures" for general closeout procedures.
  2. Divisions 02 through 33 Sections for specific requirements for project record documents of the Work in those Sections.

**1.3 CLOSEOUT SUBMITTALS**

- A. Record Drawings: Comply with the following:
1. Number of Copies: Submit 2 set(s) of marked-up record prints.

**PART 2 - PRODUCTS**

**2.1 RECORD DRAWINGS**

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an acceptable drawing technique.
    - c. Record data as soon as possible after obtaining it.
    - d. Record and check the markup before enclosing concealed installations.
    - e. Cross-reference record prints to corresponding archive photographic documentation.
  2. Content: Types of items requiring marking include, but are not limited to, the following:

- a. Dimensional changes to Drawings.
  - b. Revisions to details shown on Drawings.
  - c. Depths of foundations.
  - d. Locations and depths of underground utilities.
  - e. Revisions to routing of piping and conduits.
  - f. Changes made by Change Order or Construction Change Directive.
  - g. Changes made following Engineer's written orders.
  - h. Details not on the original Contract Drawings.
  - i. Field records for variable and concealed conditions.
  - j. Record information on the Work that is shown only schematically.
3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
  4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

## **2.2 RECORD PRODUCT DATA**

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  3. Note related Change Orders and record Drawings where applicable.
- B. Format: Submit record Product Data as annotated PDF electronic file.

## **PART 3 - EXECUTION**

### **3.1 RECORDING AND MAINTENANCE**

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Engineer's reference during normal working hours.
- C. Final pay request will not be processed until Record Documents have been completed and submitted to the City.

**END OF SECTION 017839**

## SPECIFICATIONS/SCOPE OF SERVICE SWIMMING POOL RESURFACING SPECIFICATIONS/SCOPE OF SERVICE

### SCOPE

The City of Fort Lauderdale (City), in accordance with the following technical specifications is seeking bids from qualified firms to furnish all labor, material, equipment, licenses, bonds, permits, and incidentals for the resurfacing and main drain cover replacement of Fort Lauderdale's Riverland Park Public Pool, Carter Park Public Pool and Croissant Park Water Playground.

All work must meet or exceed National Spa and Pool Institute (NSPI) and National Plasters Council (NPC) industry standards.

To make arrangements for on-site inspection of the Pools, please contact either:  
James Sherbondy, Aquatics Lead Facility Worker at 954-828-5655 or Cell 561-703-8982  
OR  
Thomas White, PMII at 954-828-5350 or Cell 954-253-2265.

### LOCATIONS

Riverland Park Public Pool, 950 SW 27<sup>th</sup> Avenue., Fort Lauderdale, Florida 33312-2908  
Carter Park Public Pool, 1450 W. Sunrise Blvd., Fort Lauderdale, Florida 33311-7041  
Croissant Park Water Playground, 245 West Park Drive, Fort Lauderdale, Florida 33315-2119

### MANUFACTURER (Or City Approved Equal)

SGM, Inc.  
1502 SW 2nd Place Pompano Beach, FL 33069-3220  
(800) 641-9247  
(954) 943-2288  
Fax: (954) 943-2402  
www.sgm.cc

### SPECIFICATIONS

The two pools and one water playground are to be resurfaced utilizing a color approved Portland cement based quartz aggregate, such as SGM's Commercial White Diamond Brite or City approved equivalent and the replacement of each pool / water playground's main drain cover. Contractor must be a currently approved/qualified applicator of material specified herein, and must furnish proof of such qualification to the City from the manufacturer.

#### **A. Contractor**

Bidder should be normally engaged in the work of competitive swimming pool resurfacing at the time of bid submission. All work is to be performed in accordance with the Florida Building Code by legally licensed and insured contractors capable of pulling all necessary permits to successfully complete the project. A list of all sub-contractors must be supplied with the bid response. The pool resurfacing shall be in compliance with all applicable State and local codes and regulations.

Bidder shall specify a firm, fixed time schedule for the successful completion of the pool-resurfacing project in the ITB response. **It is important to note however, that the actual pool resurfacing work commencement date shall be mandated by the event/programming schedule of each Park Pool, and shall be determined by City/Facility Management.**

#### **B. Pool Draining**

The pool is to be drained by the Contractor once a final project commencement date has been determined by the City/Facility Management for the pool resurfacing project, as mandated by the event/programming schedule of each pool. Contractor is responsible to verify if dewatering is necessary.

If needed a dewatering pump is needed, It is to be setup & supplied by the Contractor

### **C. Surface Preparation per SGM Specifications**

Contractor shall protect all existing pool fixtures from all pool resurfacing preparation procedures. Required pool surface preparation shall include, but not be limited to removing the entire existing pool surface to the original first pool surface, undercutting of all return fittings, lights, and gutters 2 inches away & at least 3/8 inches deep. Additionally, the required pool surface preparation shall include, where necessary, the inspection and removal of all loose, hollow, or delaminated pool surface material, including tiles. If the existing tiles are not to current code, all tiles will be replaced to code compliance.

Method for removing the material may include, but not be limited to sandblasting, grinding, chipping via electrical, or pneumatic tools, so long as complete removal of the existing surface, down to the previous pool surface is achieved on the floor and walls of the pool. Probing/sounding of the pool walls and floor shall be done to determine where or if hollow areas are present. Chipping out the hollow areas shall be done with electrical or pneumatic tools.

All exposed, and/or bleeding rebar must be exposed and coated with an epoxy-based material to prevent any future staining of the newly applied Portland cement based quartz aggregate, such as SGM Commercial White Diamond Brite or City approved equivalent surface.

It is required that all existing surfaces be mechanically chipped or gauged in order to allow for proper bonding between the cement surface, and the new Portland cement based quartz aggregate, such as SGM Commercial White Diamond Brite or City approved equivalent surface.

After removal of the existing pool finish, it is required that an acid wash of at least 50% acid solution be completed on the entire pool surface that is to be resurfaced. Neutralization of the acid solution should be completed with a solution of soda ash and water, ensuring to neutralize completely.

Areas where the existing marcite or finish was removed for hollow spots or delaminating, It must be built up using a SGM concrete patching compound so as to allow that after the final finish has been applied these areas will be in the same vertical plane or levelness.

Finally, any damaged lane tiles, wall targets, and tile breaks shall be removed, and retiled to match existing as originally accurate within one quarter inch in each direction, as dictated by the Florida State Department of Health or as dictated by owner.

### **D. Application per SGM Specifications**

Apply one coat of multi-coat scratch coat bonding agent such as SGM Southcrete 45 Bonding Agent, Bond Kote or City approved equivalent to entire surface of the pool.

Apply Portland cement based quartz aggregate, such as SGM Commercial White Diamond Brite or City approved equivalent as approved by City/Facility Management, 3/8 inch to 1/2 inch in thickness to the floor of the pool, and 3/8 inch to 1/2 inch in thickness to the pool walls.

Daily application of the Portland cement based quartz aggregate, such as SGM Commercial White Diamond Brite or City approved equivalent must be finished against new or existing ceramic tile. Cold joints in the Portland cement based quartz aggregate, such as SGM Commercial White Diamond Brite or City approved equivalent will be considered unacceptable.

After the Portland cement based quartz aggregate, such as SGM Commercial White Diamond Brite or City approved equivalent has had time to cure or harden, It must have the aggregate exposed using water & scrub brushes to make the color in the finish even or continuous. In some cases muriatic might be necessary to expose the aggregate.

Once the Portland cement based quartz aggregate, such as SGM Commercial White Diamond Brite or City approved equivalent has been exposed, the existing main drain grate and pool return assemblies will need to be reinstalled.

Successful application, and finishing of the Portland cement based quartz aggregate, such as SGM

Commercial White Diamond Brite or City approved equivalent will be affected by existing weather conditions, including, but not limited to fast drying time due to exposure to direct sunlight, rain, air, and temperature. The Contractor is expected to take these factors into consideration and choose the most favorable time of day to apply the Portland cement based quartz aggregate, such as AGM Commercial White Diamond Brite or City approved equivalent so as to minimize any harmful effects associated with the above-mentioned elements.

**ANY ADDITIONAL COST ASSOCIATED WITH THE REDUCTION OF DAMAGE, INCLUDING BUT NOT LIMITED TO FAST DRYING TIME DUE TO EXPOSURE TO DIRECT SUNLIGHT, RAIN, AIR, TEMPERATURE TO THE DIAMOND BRITE COATING SHALL BE INCLUDED IN THE PRICE OF THE CONTRACTOR'S BID.**

**E. Pool Refill**

The Contractor will be responsible for the refilling pool with a filter, and the re-balancing of the pool chemicals to Florida State Department of Health standards.

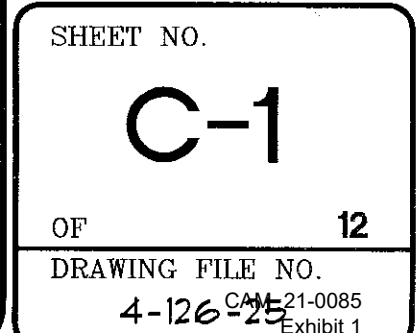
**F. Materials & Storage**

All materials shall be new and shall be delivered to the project site in unopened containers that plainly show the color, designated name, date of manufacture, and name of manufacturer. Materials will be stored in a suitable protected area that is heated or cooled, as well protected from moisture as required by the manufacturer. Contractor must maintain job site in a clean, and orderly manner on a daily basis throughout the course of the project until satisfactory completion of project.

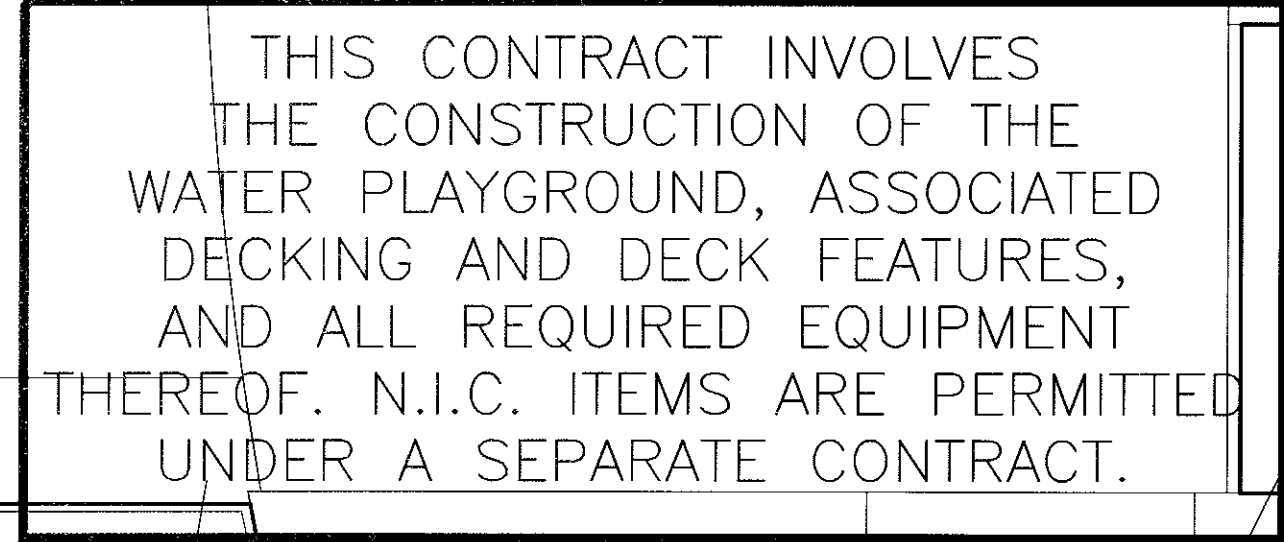
Contractor shall be responsible for the proper removal and disposal off –site of all materials removed, and utilized throughout the course of the project, until satisfactorily completing the project.

**G. Warranty**

The Contractor along with the Manufacture of the Portland cement based quartz aggregate, such as SGM Commercial White Diamond Brite or City approved equivalent for a period of 5 years for labor & materials. This warranty shall be for against material failure & delamination, which includes labor to make any repairs, needed.






SCALE  $1''=10'$ 

ALL GATES IN POOL AREA TO OPEN OUTWARD, AWAY FROM POOL WITH LATCH 54" MIN. ABOVE GATE BOTTOM OR 3" BELOW GATE TOP ON POOL SIDE

565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL. 33441

LAWRENCE DeROSE, P.E.  
LICENSED ENGINEER NO. 20189  
STATE OF FLORIDA



**Defosse & Slopey**  
CONSULTING ENGINEERS, INC.  
LAND PLANNING • CIVIL • STRUCTURAL  
ENVIRONMENT • ELECTRICAL • MECHANICAL  
470 S. ANDREWS AVENUE  
SUITE 200  
POMPANO BEACH, FLORIDA 33069  
(954) 942-7703

"AS-BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL INC.

PROJECT #P15245A  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
POOL PLANS-PHASE II

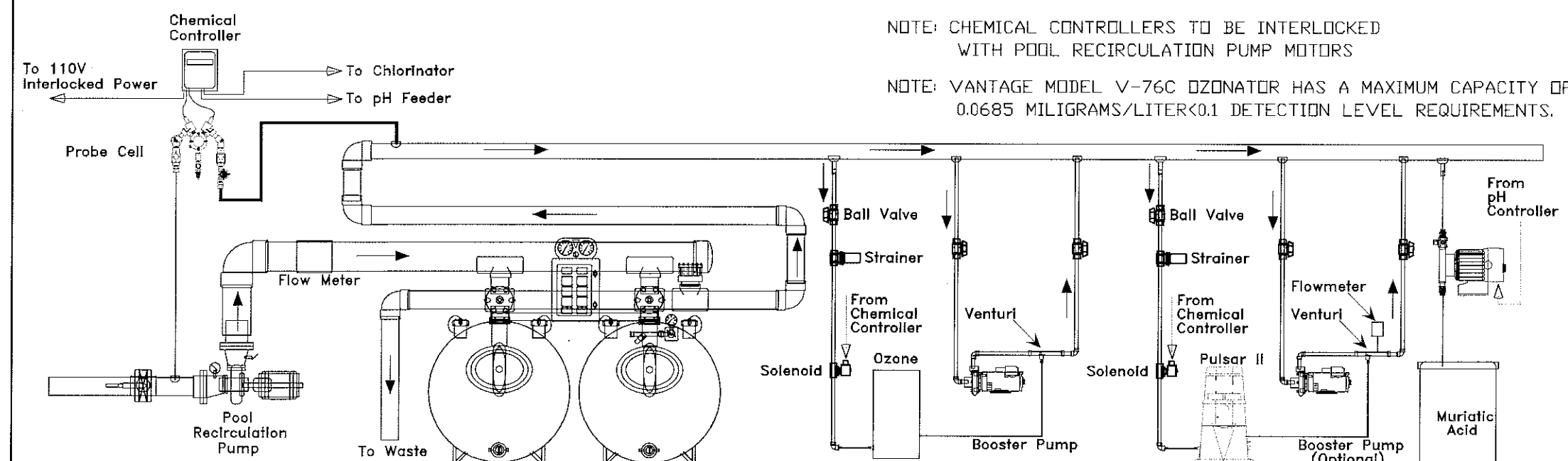
SHEET NO.

C-2

OF	1
DRAWING FILE NO.	008
Exhibit	

p. 141

9/24/2020 8:10 AM



THIS CONTRACT INVOLVES  
THE CONSTRUCTION OF THE  
WATER PLAYGROUND, ASSOCIATED  
DECKING AND DECK FEATURES,  
AND ALL REQUIRED EQUIPMENT  
THEREOF. N.I.C. ITEMS ARE PERMITTED  
UNDER A SEPARATE CONTRACT.

CHLORINE FEEDER NOTES:  
THE FEEDER IS CAPABLE OF FEEDING A DOSAGE OF 6 PPM TO THE  
MINIMUM REQUIRED TURNOVER RATE:  
ACTIVITY POOL: 17,568 GAL.  $\times 8 \times 6 \text{ PPM} = 8.33 \text{ LBS./GAL.}$   
DIVIDED BY 1,000,000 = 7.02 LBS./DAY  
PULSAR III CHLORINE OUTPUT = 120 LBS./DAY

1. THE CONTRACTOR SHALL SUPPLY A VACUUM SYSTEM COMPLETE WITH 105 S.F. STAINLESS STEEL CARTRIDGE FILTER, 36" VACUUM HEAD, 50 FEET OF FLEX HOSE, 1 HP ELECTRIC DRIVEN PUMP MOTOR.  
ALL SKID MOUNTED
2. THE CONTRACTOR SHALL PROVIDE TWO SHEPARD'S HOOKS WITH ONE PIECE POLE EQUAL TO QUALITY MODEL #RH1038.  
THE POLE SHALL BE A MINIMUM OF 16 FEET IN LENGTH.
3. THE CONTRACTOR SHALL PROVIDE TWO 20" DIAMETER LIFE SAVING RING EQUAL TO QUALITY MODEL Z3005.

1. OZONE GENERATOR SHALL BE AS MANUFACTURED BY VANTAGE MODEL W-76C (OR ENGINEER APPROVED EQUAL) AND AS SUPPLIED BY COMMERCIAL ENERGY SPECIALISTS, PHONE 1-800-940-1557 (OR ENGINEER APPROVED EQUAL).

2. OZONE GENERATOR SHALL BE PROVIDED WITH ALL NECESSARY DRAWINGS AND PARTS LISTS FOR EASY IDENTIFICATION.

3. OZONE GENERATOR EQUIPMENT ELECTRICAL COMPONENTS AND WIRING SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE AND THE MANUFACTURER SHALL PROVIDE A CERTIFICATE OF CONFORMANCE.

4. THE PROCESS ENGINEER SHALL CONTINUE EFFECTIVE MEANS TO ALERT THE USER WHEN ANY COMPONENT OF THE SYSTEM OR MAINTENANCE PERSONNEL DETECTS A NOISE, VIBRATION, OR MALFUNCTION STOPPING THE PRODUCTION OF OZONE, VENTING THE ROOM, AND SOUNDING THE ALARM ONCE OZONE IS DETECTED.

5. OZONE GENERATING EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE NSF STANDARD # 50-1992.

6. OZONE GENERATING EQUIPMENT SHALL BE PROVIDED WITH A REMOVAL OF OZONE EQUIPMENT. EQUIPMENT IS INCLUDED WITH THE GENERATOR THAN THE CONCENTRATION OF OZONE AFTER REMOVAL SHALL COMPLY WITH THE REQUIREMENTS ABOVE.

7. OZONE GENERATING EQUIPMENT SHALL COME EQUIPPED WITH A CHECK VALVE BETWEEN THE GENERATOR AND THE INJECTION POINT.

8. OZONE GENERATING EQUIPMENT SHALL BE FURNISHED WITH A FLOW METER AND A VALVE TO CONTROL THE FLOW.

9. OZONE GENERATING EQUIPMENT SHALL BE FURNISHED WITH DRAWINGS AND PARTS LISTS FOR EASY IDENTIFICATION.

10. REPLACEMENT PARTS SHALL INCLUDE THE MODEL NUMBER OF THE UNIT; INSTRUCTIONS FOR PROPER SIZE SELECTION AND INSTALLATION; OPERATING AND MAINTENANCE INSTRUCTIONS; COPY OF MANUFACTURERS WARRANTY; AND ANY AND ALL APPLICATIONS.

11. FORCED VENTILATION SHALL BE INSTALLED AT THE EQUIPMENT ROOM FLOOR IN FOUR LOCATIONS.

1. THE EQUIPMENT ROOM FLOOR SHALL BE CONSTRUCTED OF CONCRETE WITH A SMOOTH SLIP RESISTANT FINISH AND UNIFORMLY SLOPED TO PREVENT STANDING WATER.
2. THE EQUIPMENT ROOMS SHALL HAVE A FORCED DRAFT, OR ADEQUATE CROSS VENTILATION, AND POSITIVE FLOOR DRAINAGE (SEE MECHANICAL DRAWINGS).
3. THE EQUIPMENT ROOMS EQUIPPED WITH THREE (MIN.) HOSE BIBBS WITH VACUUM BREAKERS.
4. THE EQUIPMENT ROOM HAS A FIXED CEILING WITH A MINIMUM CLEAR HEIGHT OF 7'.
5. THE EQUIPMENT ROOM HAS LIGHTING THAT PROVIDES A MINIMUM 30' CANDLES OF ILLUMINATION AT FLOOR LEVEL (SEE ELECTRICAL DRAWINGS).
6. ALL CHEMICAL USED FOR POOL FILTRATION SHALL BE STORED UNDER ROOF IN AN AREA SEPARATE FROM THE EQUIPMENT ROOM. STORAGE IS PROTECTED BY AN ALARM SYSTEM (UNLESS OTHERWISE SPECIFIED).
7. EQUIPMENT ROOMS FOR OZONE GENERATORS SHALL HAVE FORCED DRAFT VENTILATION WITH FAN CONTROL SWITCH LOCATED OUTSIDE THE EQUIPMENT ROOM DOOR.
8. THE EXHAUST FAN INLET SHALL BE CONTROLLED BY AN EXHAUST FAN LEVEL.

1. CHLORINE FEED SYSTEM SHALL BE PULSAR III 100% COMPLETE OPERATING SYSTEM AS SUPPLIED BY OLIN CORPORATION (OR HRS APPROVED EQUAL). THE PULSAR UNIT SHALL BE CAPABLE OF PRODUCING 120 LBS. OF CHLORINE PER DAY.
2. THE FEEDER FOR THE CHLORINE SHALL HAVE AN ADJUSTABLE FEED RATE FROM ZERO TO FULL RANGE AND MEETS THE REQUIREMENTS OF NSF 50-1996.
3. THE FEEDER SHALL BE CAPABLE OF FEEDING A DOSAGE OF 6 PPM TO THE MINIMUM REQUIRED TURNOVER FLOW RATE.
4. THE FEEDER SHALL BE ELECTRICALLY OPERATED AND SHALL INTERLOCK WITH THE POOL REGULATOR PUMP.
5. THE FEEDER SHALL BE CONTROLLED BY THE STRANTROL SYSTEM 5 CSA CONTROLLER.
6. THE FEEDER SHALL BE APPROVED BY THE STATE OF CALIFORNIA UNDER THE CALIFORNIA POOL AND SPA ACT, CALIF. PUB. LAW 1557, OR APPROVED EQUAL.

1. CHEMICAL CONTROLLER SHALL BE STRANTRAIL SYSTEM 5 CUSA CONTROLLER AS SUPPLIED BY CES, OR APPROVED EQUIVALENT.
2. CHLORINE FEED SYSTEM SHALL BE STRA-SI 10000 COMPOSITE OPERATING SYSTEM AS SUPPLIED BY OWN CORPORATION (OR HRS APPROVED EQUIVALENT) THE PULSAR UNIT SHALL BE CAPABLE OF PRODUCING 1200 LBS. OF CHLORINE PER DAY.
3. PH FEEDER SHALL BE BC STENNER 85M, WITH AN 85 GPD CAPACITY. PH CONTROL CHEMICAL TO BE MURIATIC ACID CONTAINED IN A JF POLYCARBON CONTAINER WITH LID, CLEARLY MARKING THE CONTENTS OF THE CROCK.
4. REMOTE CONTROLLER STRANTRAIL WSE-RAK MODEL 5-6950001R (OR EQUAL) LOCATED IN THE EQUIPMENT ROOM.
5. REMOTE SYSTEM 5 LBS. PLASTIC 1/2" I.D. IN A REMOTE BUILDING 100' AWAY ADJACENT TO THE EQUIPMENT ROOM FOR EASE OF EMPLOYEE MONITORING OF CHEMICAL BATHS. SHOW JACOBI TO BE PROVIDED IN THIS SAME LOCATION FOR REMOTE CONNECTION TO THE OWNERS SELECTED MANAGEMENT COMPANY.

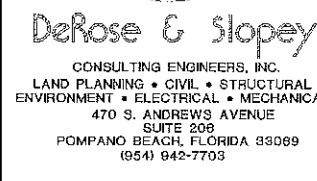
SCALE  $1/4"=1'$

1. POOL PIPING IS SCHEMATIC AND CAN BE ADJUSTED BY POOL CONTRACTOR, SUBMIT LAYOUT TO ENGINEER FOR REVIEW AND APPROVAL.
2. VALVES, FITTINGS, ETC. ARE NOT ALL SHOWN AND SHALL BE INSTALLED PER H.R.S. AND BUILDING CODE REQUIREMENTS.
3. ALL REQUIREMENTS FOR PHASE II POOL PIPING, ELECTRICS, ETC., THAT ARE LOCATED BETWEEN SLABS, FOOTING OR THROUGH WALLS SHALL BE INSTALLED, PLUGGED OR CAPPED IN PHASE I CONSTRUCTION.
4. CONNECT PHASE II PIPING REQUIREMENTS TO PREVIOUSLY INSTALLED PHASE I PIPING. PHYSICAL CONNECTIONS TO BE PERFORMED AFTER SUCCESSFUL PRESSURE TESTING OF PHASE II PIPING.

565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

INCORPORATED  
ARCHITECTS • PLANNERS  
3407 N.W. 9th Avenue  
Suite 200  
Ft. Lauderdale, Florida 33309  
954-566-2700  
AA-C001427  
PROJECT NO. 2210

BY:
DATE



POOL PEOPLE COMMERCIAL INC

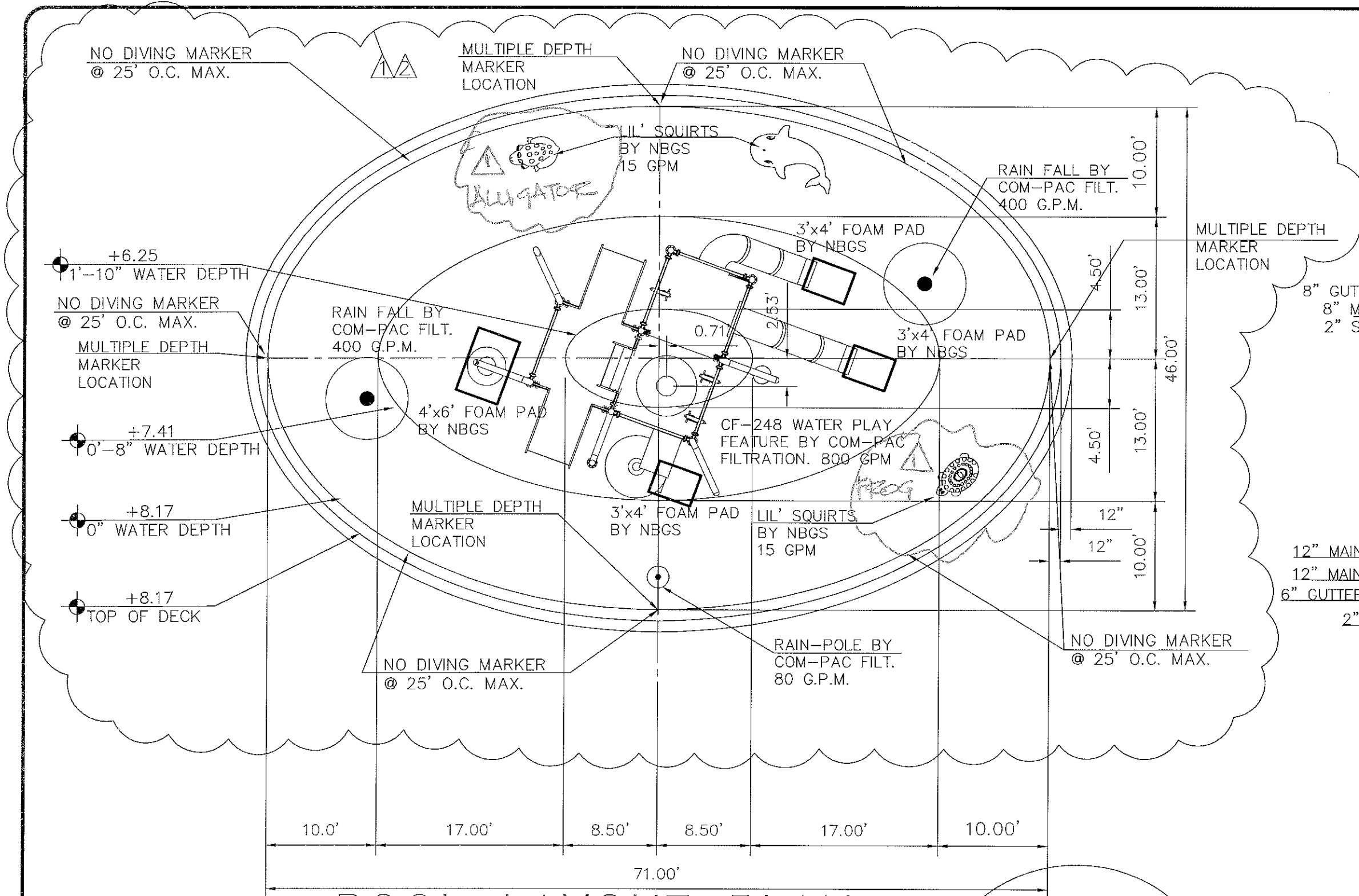
⚠ CHANGED ROUND COLL. TANK TO SQUARE  
RELOCATED HEATER TO FIT ROOM  
RELOCATED CHEM. STORAGE TANKS

DATE:	10/20/03	REVISIONS: A PER HRS 3724/05 A PER OWNER 5/1/05
DRAWN BY:		

SHEET NO

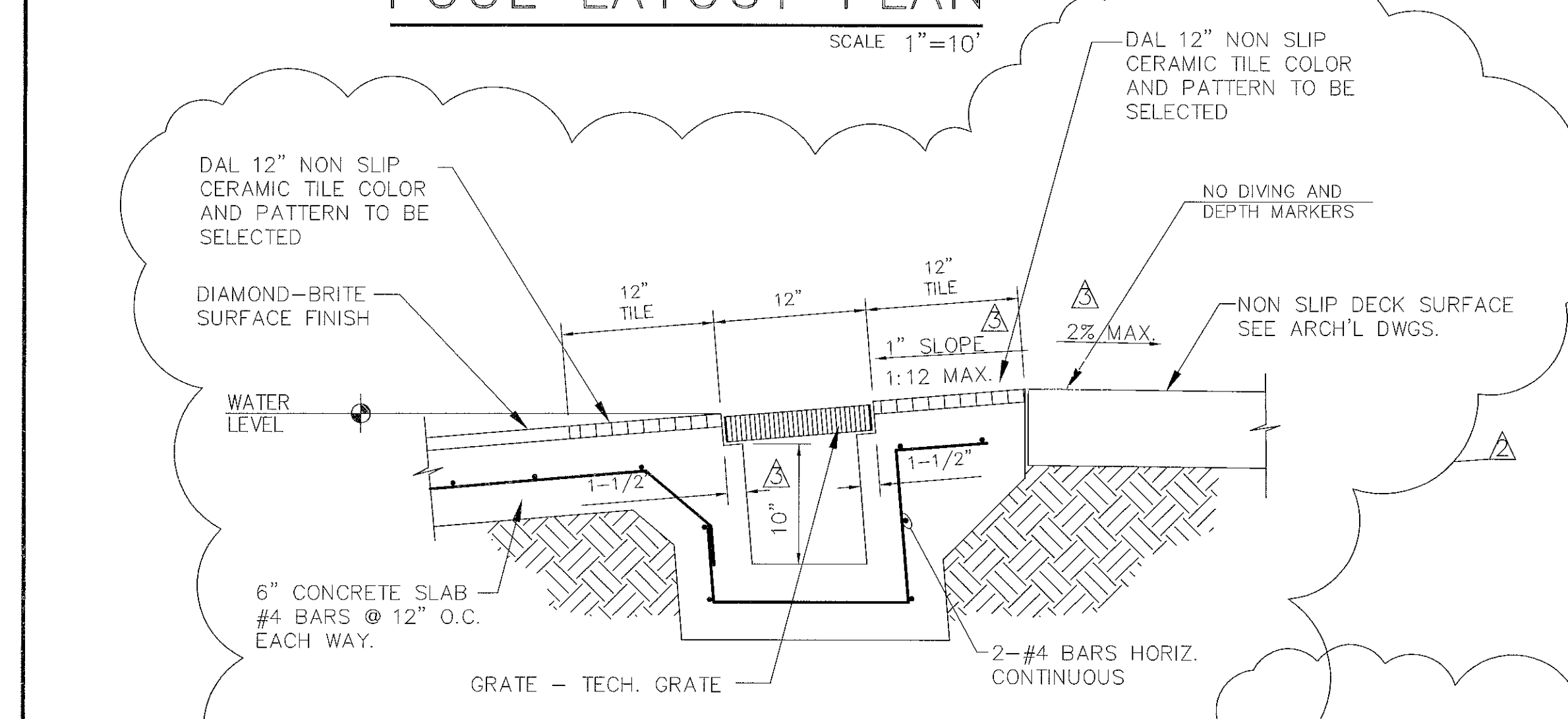
OF 12  
DRAWING FILE NO. 4-126-25  
EXHIBIT 1





POOL RESTROOM FACILITY-N.I.C.

RECREATION POOL- N.I.C.

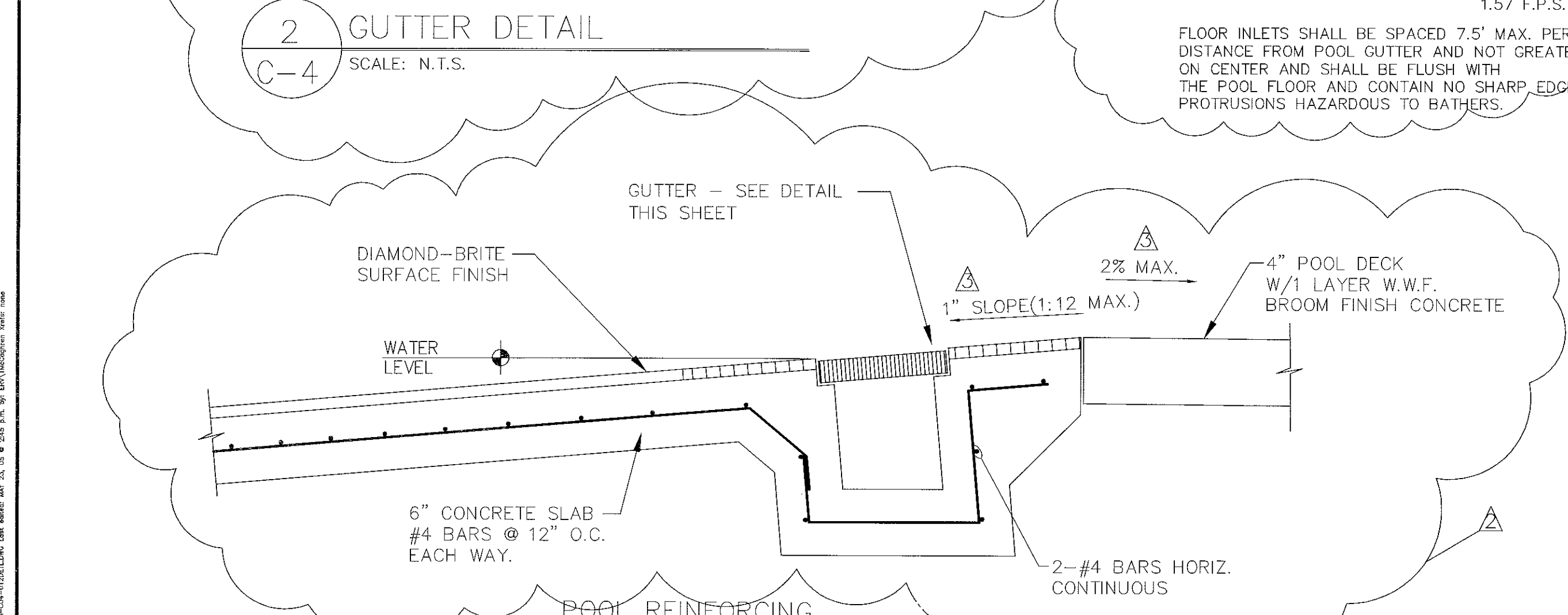


NOTE:  
THE GUTTER SHALL BE MADE LEVEL AROUND THE POOL WITH AN ALLOWABLE TOLERANCE OF PLUS OR MINUS 1/4". THE GUTTER PIPE SHALL ALSO BE INSTALLED LEVEL AROUND THE POOL PERIMETER BUT SHALL PITCH DOWNWARD TO THE COLLECTOR OR FILTER TANKS DEPENDING ON THE SYSTEM. DO NOT CREATE ANY UPWARD LOOPS IN THE PIPING BETWEEN THE POOL AND TANKS.

FILTRATION NOTES

1. POOL TURNOVER FLOW RATE 260 G.P.M.
2. 15 2- 1/2" SCUM-GUTTER DRAINS @ 15' MAX. SPACING 17.33 G.P.M. 3.0 F.P.S.
3. 27 1- 1/2" RETURN INLETS @ 20' MAX. SPACING 10.0 G.P.M. 1.57 F.P.S.

FLOOR INLETS SHALL BE SPACED 7.5' MAX. PERPENDICULAR DISTANCE FROM POOL GUTTER AND NOT GREATER THAN 20' ON CENTER AND SHALL BE FLUSH WITH THE POOL FLOOR AND CONTAIN NO SHARP EDGES OR OTHER PROTRUSIONS HAZARDOUS TO BATHERS.



POOL REINFORCING

POOL SHELL SHALL BE 3500 PSI CONCRETE, 6" THICK, POURED OVER VAPOR BARRIER OVER 96% WELL COMPACTED, CLEAN FILL. POOL SHALL BE SLIP RESISTANT, SMOOTH FINISH.

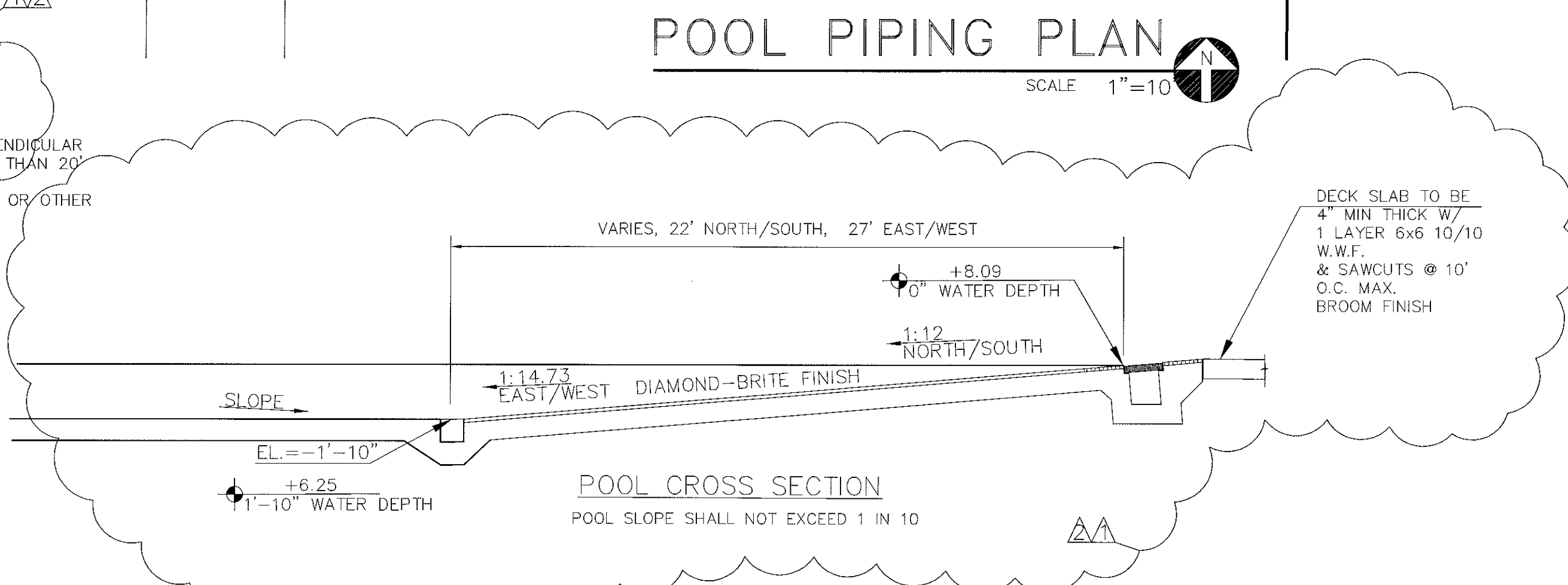
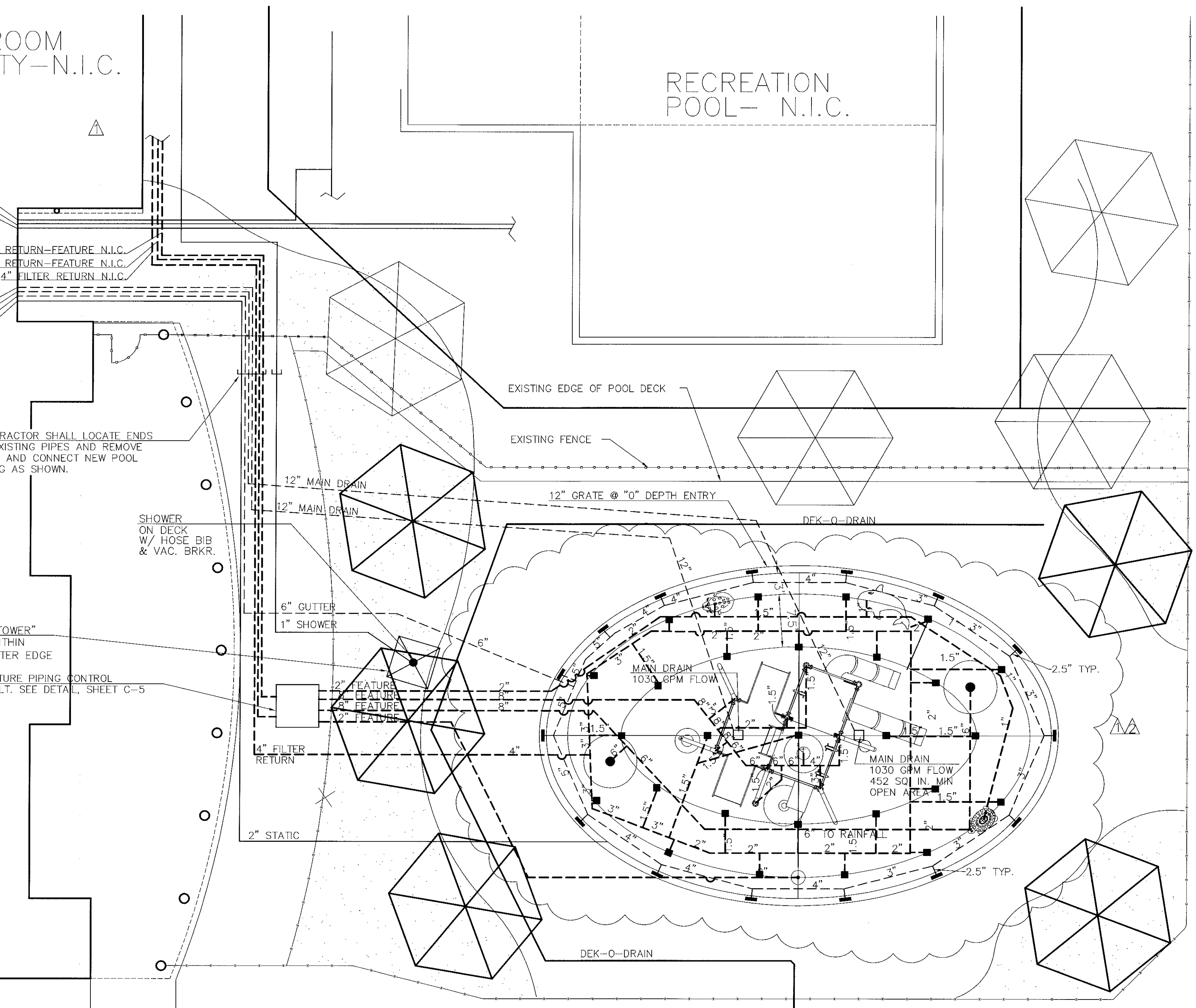
- 8" GUTTER DRAIN N.I.C.
- 8" MAIN DRAIN N.I.C.
- 2" STATIC LINE N.I.C.
- 8" RETURN-FEATURE N.I.C.
- 8" RETURN-FEATURE N.I.C.
- 4" FILTER RETURN N.I.C.
- 12" MAIN DRAIN N.I.C.
- 12" MAIN DRAIN N.I.C.
- 6" GUTTER DRAIN N.I.C.
- 2" STATIC N.I.C.

CONTRACTOR SHALL LOCATE ENDS OF EXISTING PIPES AND REMOVE CAPS AND CONNECT NEW POOL PIPING AS SHOWN.

"SHOWER TOWER" SHOWER WITHIN 20' OF WATER EDGE

FEATURE PIPING CONTROL VAULT. SEE DETAIL, SHEET C-5

SHOWER ON DECK W/ HOSE BIB & VAC. BRKR.



DECK SLAB TO BE 4" MIN THICK W/ 1 LAYER 6x6 10/10 W.W.F. & SAWCUTS @ 10' O.C. MAX. BROOM FINISH

SEAWOOD BUILDERS INC.

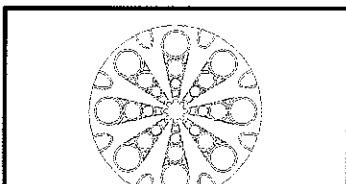
565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

SCHARF & ASSOCIATES INCORPORATED ARCHITECTS-PLANNERS

3407 N.W. 9th Avenue  
Suite 200  
Fort Lauderdale, Florida 33309  
954-566-2700  
AA-C001427  
PROJECT NO. 2210

LAWRENCE DeROSE, P.E.  
LICENSED ENGINEER NO. 20169  
STATE OF FLORIDA

BY: DATE:



DeRose & Slopey  
CONSULTING ENGINEERS, INC.  
LAND PLANNING • CIVIL • STRUCTURAL  
ENVIRONMENTAL • ELECTRICAL • MECHANICAL  
470 S. ANDERSON AVENUE  
SUITE 200  
FORT LAUDERDALE, FLORIDA 33309  
954-566-2700

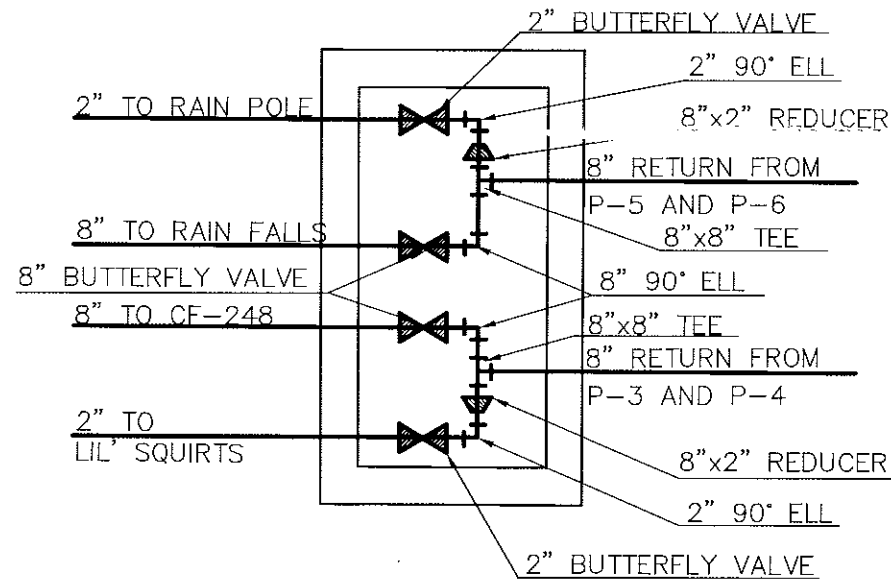
"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL INC.  
CHANGED ANIMAL PLAY FEATURES

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

DATE:	10/20/03
DRAWN BY:	JRL / LJM
CHECKED BY:	TKM
CAD FILE:	9218A-C04-001
REVISIONS:	
PER HRS	3/24/05
PER OWNER	5/11/05
PER HRS	5/23/05

PROJECT #P15245A  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
POOL DETAILS-PHASE II  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

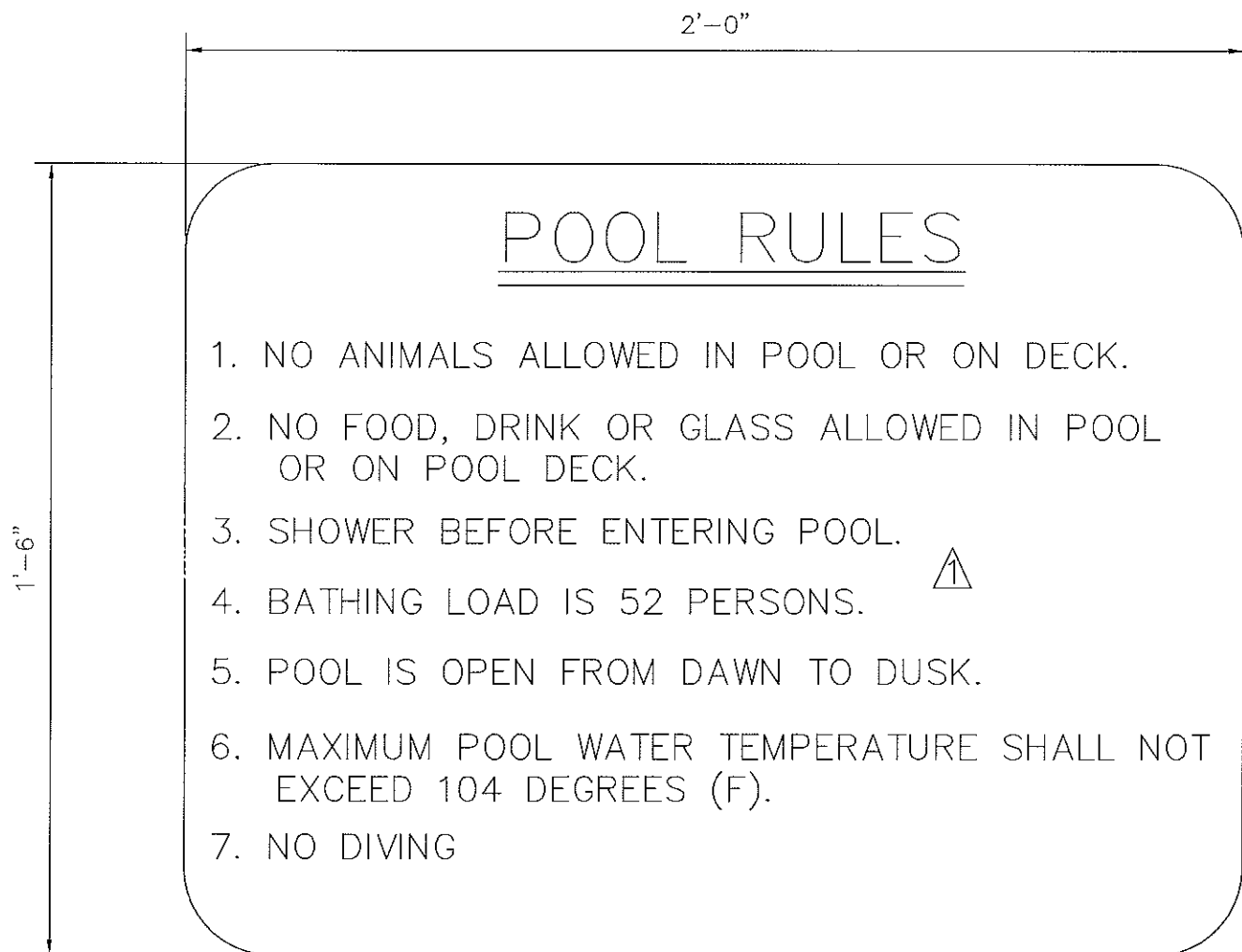
SHEET NO.  
C-4  
OF  
DRAWING FILE NO.  
4-126-25  
Page 143 of 215



8'-0" x 5'-0" PRECAST CONC. VAULT  
(INSIDE DIMENSIONS) W/ 8" WALLS  
REINFORCED W/ #4@12" O.C. & NO  
BOTTOM SLAB.  
PROVIDE 8" THICK TOP SLAB W/ #5@6"  
O.C. AND PEDESTRIAN LOADING, ALUMINUM,  
DOUBLE DOOR HATCH COVER, U.S.FOUNDRY  
ADP. 72x48 (OR ENGINEER APPROVED EQUAL).  
PROVIDE HASP AND LOCK.

VALVE VAULT DETAIL

SCALE 1"=5'

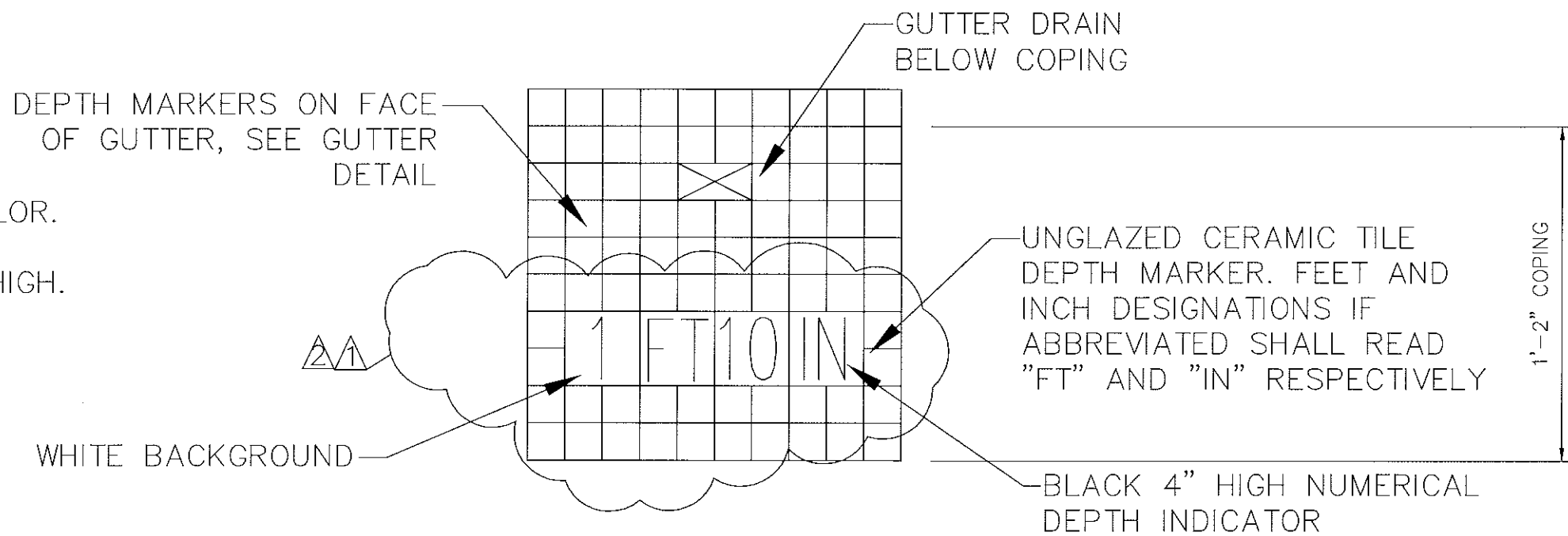


GENERAL SPECIFICATIONS

1. POST SIGN WITHIN CONFINES OF POOL AREA.
2. SIGN LETTERING SHALL CONTRAST WITH BACKGROUND COLOR.
3. SIGN LETTERS SHALL BE AT LEAST 1" HIGH.
4. LETTERS SPECIFYING NO DIVING SHALL BE AT LEAST 4" HIGH.

POOL RULES SIGN DETAIL

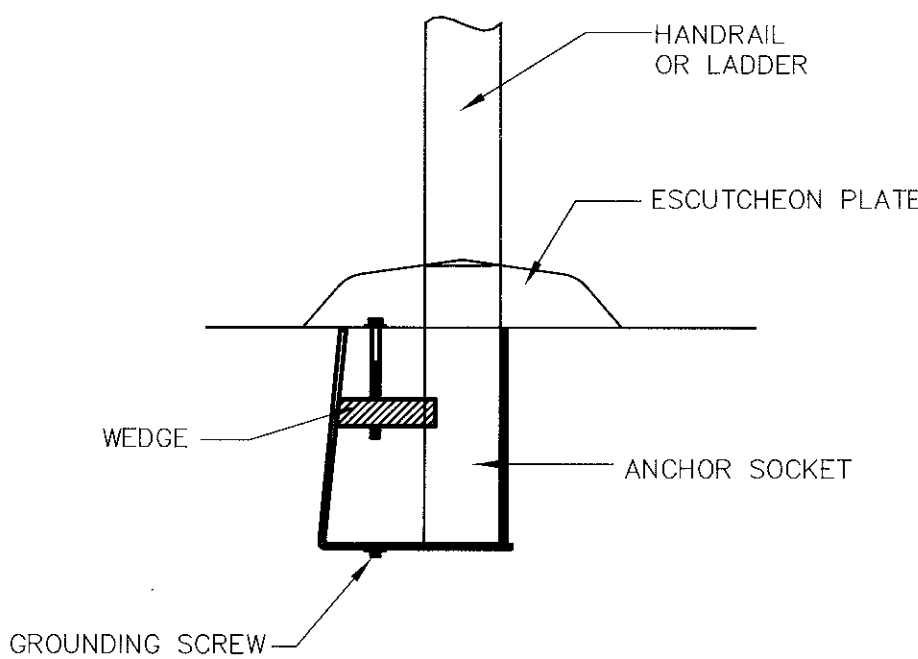
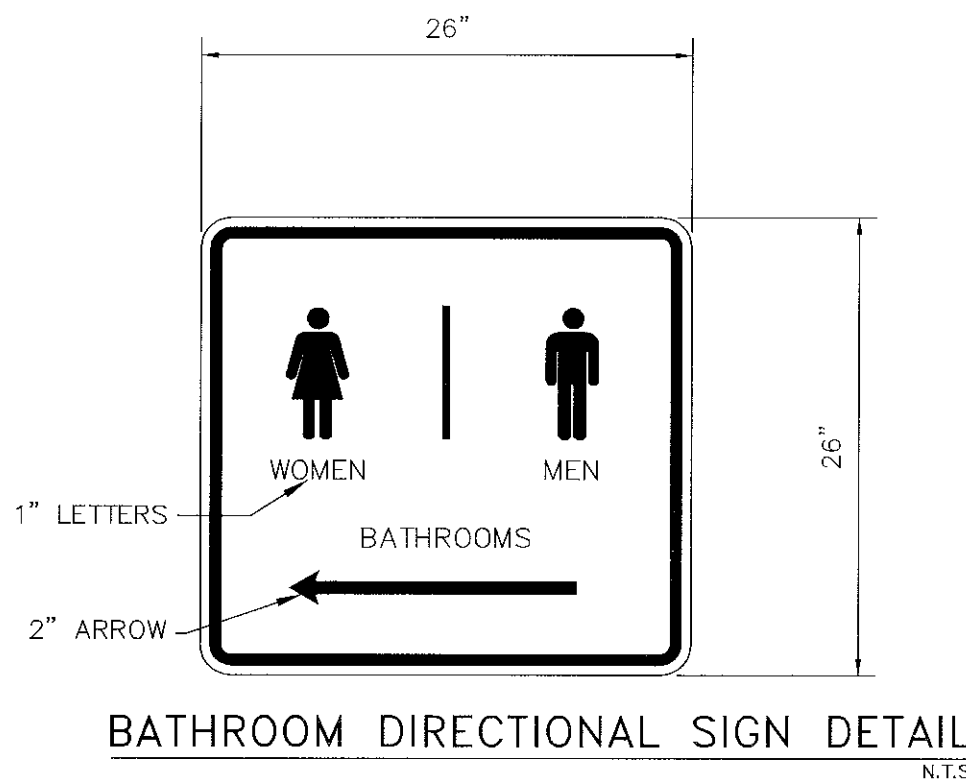
N.T.S.



NOTE:  
MAXIMUM SPACING BETWEEN ADJACENT DEPTH  
MARKERS SHALL NOT EXCEED 25'-0"  
ALL MARKERS SHALL BE ABOVE WATER LEVEL.

DEPTH MARKER DETAILS

N.T.S.



WEDGE ANCHOR

**SEAWOOD BUILDERS**  
INC.

565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

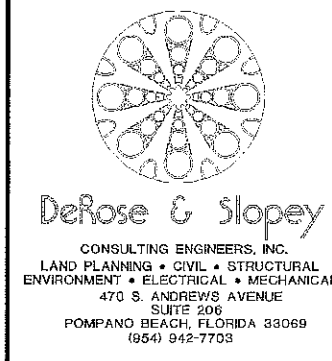
**SCHARF**  
**& ASSOCIATES**  
INCORPORATED  
ARCHITECTS-PLANNERS

3007 N.W. 9th Avenue  
Suite 200  
Ft. Lauderdale, Florida 33309  
954-566-2700  
AIA-000427  
PROJECT NO. 2210

LAWRENCE DeROSE, P.E.  
LICENSED ENGINEER NO. 20189  
STATE OF FLORIDA

BY:

DATE:



"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL INC

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

REVISIONS:  
DATE: 10/20/03  
DRAWN BY: JRL / LJM.C.  
CHECKED BY: TKM.C.  
CAD FILE: B245A-C25-01DETL

PROJECT #P15245A  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
POOL DETAILS-PHASE II  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

SHEET NO.  
C-5  
OF 12  
DRAWING FROM 120085  
Exhibit 1  
4-12-05 of 215

ENGINEERING NOTES

1. Operating weight 5,000 lbs. 2,268 (kg).
2. Maximum operating pressure 100 p.s.i. (6.89 Bar).
3. Media required: 24FT<sup>3</sup>(.57M<sup>3</sup>).
4. The filter system may be installed with the back and sides of the tank(s) against walls as operation and/or maintenance is performed at the front of the system.
5. Influent, effluent, and waste manifolds are reversible for right or left hand installations as desired.
6. Effluent rate of flow adjustment valve and backwash sight glass valves are not factory attached to the manifolds, allowing for installations options.
7. Provide a minimum clearance of 36" (.91m) in front of the filter system. Refer to local code requirements.
8. Always provide shut-off valves in all pipe lines to and from the filter system when it is installed below the source water level. Failure to do so may cause flooding and/or injury.
9. It is recommended that a floor drain be installed in the filter room.
10. Flow meter—install the flow meter, allowing 40" (1.02m) of straight pipe upstream from the flow meter and 20" (.51m) downstream.
11. Seismic zone 4 filter tank leg design and anchoring hardware is provided.
12. DO NOT store corrosive chemicals such as chlorine, acid, etc., which will corrode equipment.
13. Pressure Amplification System: A constant 50 P.S.I. (3.45 Bar) water pressure supply to the filter control solenoid valves is required to operate the filter backwash valves.  
Model 2-0020-076 115 vac, 1 phase, 60 Hz.  
Model 2-0020-115 230 vac, 1 phase, 50 Hz.
14. All EPD filter systems are designed to backwash when a 15 P.S.I.D. (1.03 BarD) differential is indicated on the influent and effluent pressure gauges.
15. Electrical power supply to Aquatic Intelligence Filter Control(automatic filter systems only)  
A - 115 vac, single phase, 60 Hz., 15 amp  
B - 230 vac, single phase, 50 Hz., 7.5 amp
16. PLC Filter controller with touchscreen operator interface, controlling features:  
A - Starts/stops flow - Controls pumps and/or automatic valves.  
B - Controls accessories during the filtering cycle such as booster pumps, chemical feeders, etc. Power 'On' during filter cycle and power 'Off' during backwash cycle.  
C - Controls accessories during the backwash cycle such as water pressure supply, pressure amplification system, etc. Power 'On' during backwash cycle and power 'Off' during filter cycle.  
D - Two filter systems installed at the same facility: Both filter microprocessors may be wired together to prevent both filter systems from backwashing at the same time into the waste drainage system.  
E - A heater or boiler, when wired to the filter control microprocessor, will shut down 20 minutes prior to circulating pump shutting down and/or backwash. This mode allows for the cool down of the heater tubes, etc., to prevent scaling and/or thermal damage. (Refer to owners manual for wiring diagram).
17. All connections are American standard I.P.S./P.V.C. sockets or spigets.

ENVIRONMENTAL PRODUCTS DIVISION

FILTER DATA:

MODELS: EPD-104C (FULLY AUTOMATIC)  
EPD-104CS(SEMI-AUTOMATIC)

1 TANK, COMMERCIAL SYSTEM WITH 4" PIPING  
TYPE: Hi-Rate Permanent Media Filter (Composite)  
FILTER AREA: 16.5 SQ.FT.(1.53M<sup>2</sup>)

TYPICAL FLOW RATES

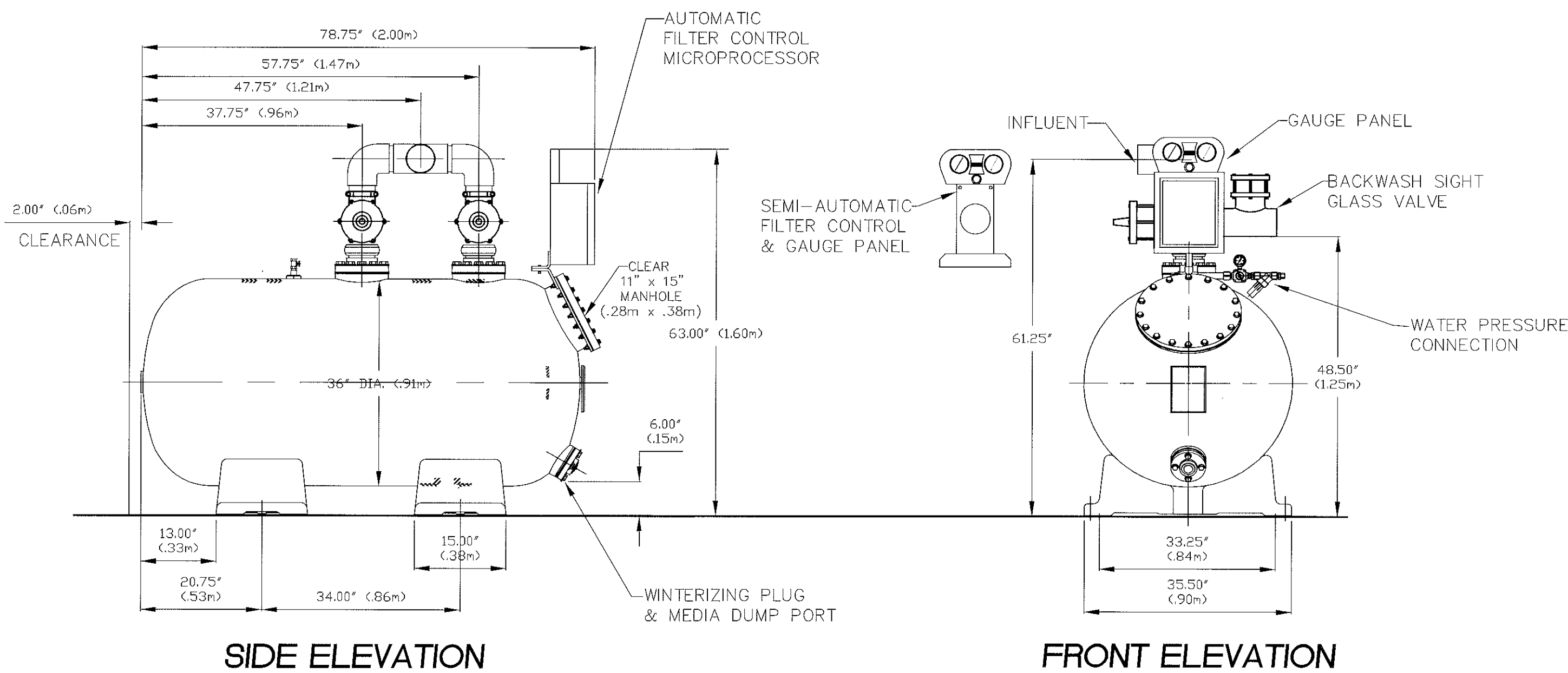
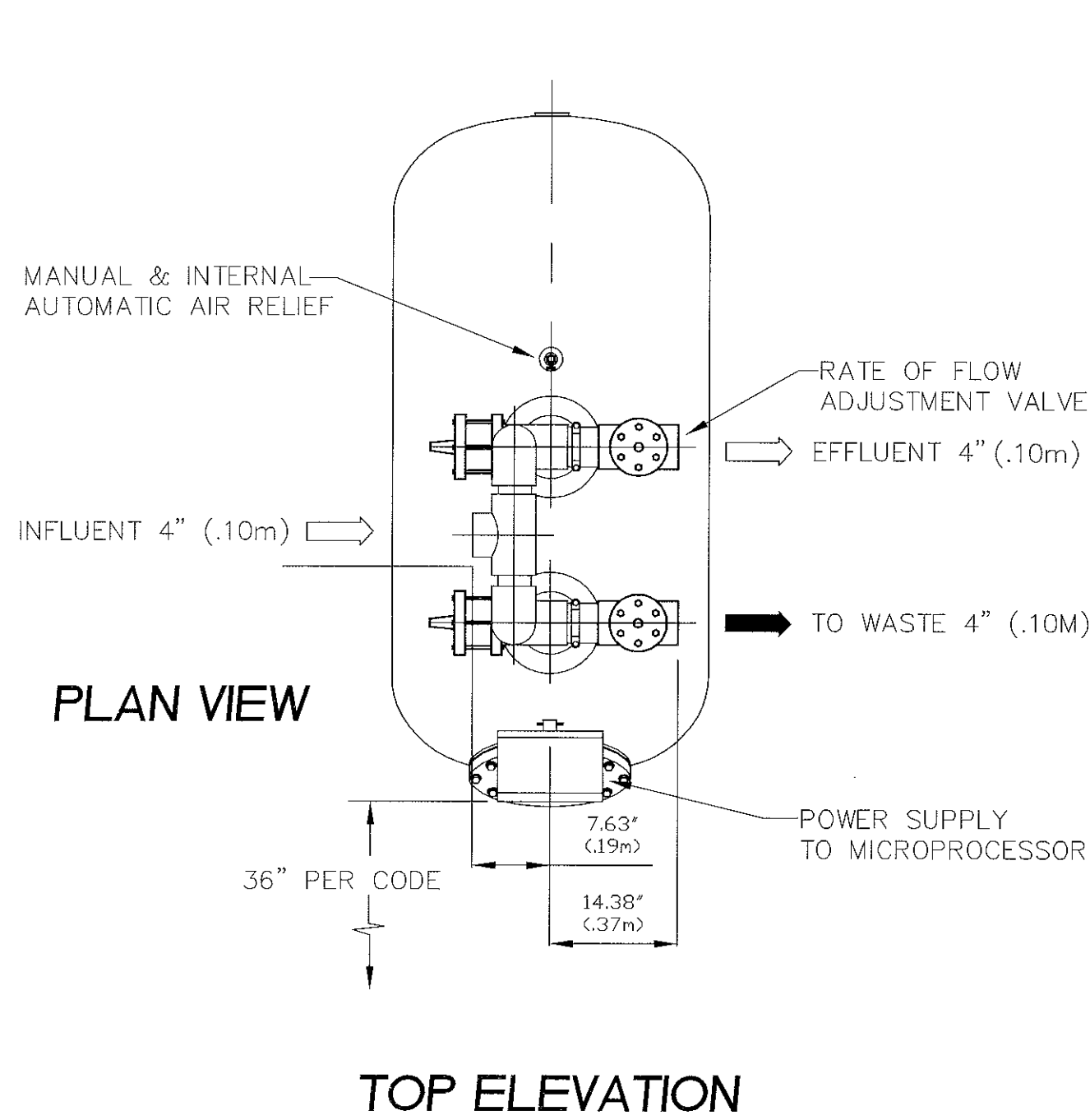
GPM/SQ. FT.= GPM	(M <sup>3</sup> /MIN/M) (G M/MIN)
10=165	(.4073)=(.63)
15=248	(.6109)=(.94)
20=330*	(.8146)=(1.25)*

\* Maximum recommended flow rate

BACK WASH FLOW RATES

MEDIA GRADE	MEDIA TYPE	GMP/(M3/M)	
		MIN	MAX
20	GARNET	275 (1.04)	400 (1.51)
30	GARNET	200 (.76)	250 (.95)

Units in ( ) are metric



CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

REVISIONS:  
DATE: 10/20/03  
DRAWN BY: JRL / LJC  
CHECKED BY: TKMC  
CAD FILE: B0404-004-00001

PROJECT #P15245A  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
FILTER DETAILS-PHASE II  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

SHEET NO.  
C-6  
OF  
DRAWING 4-126-75  
Page 15 of 215

**SEAWOOD BUILDERS INC.**  
565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

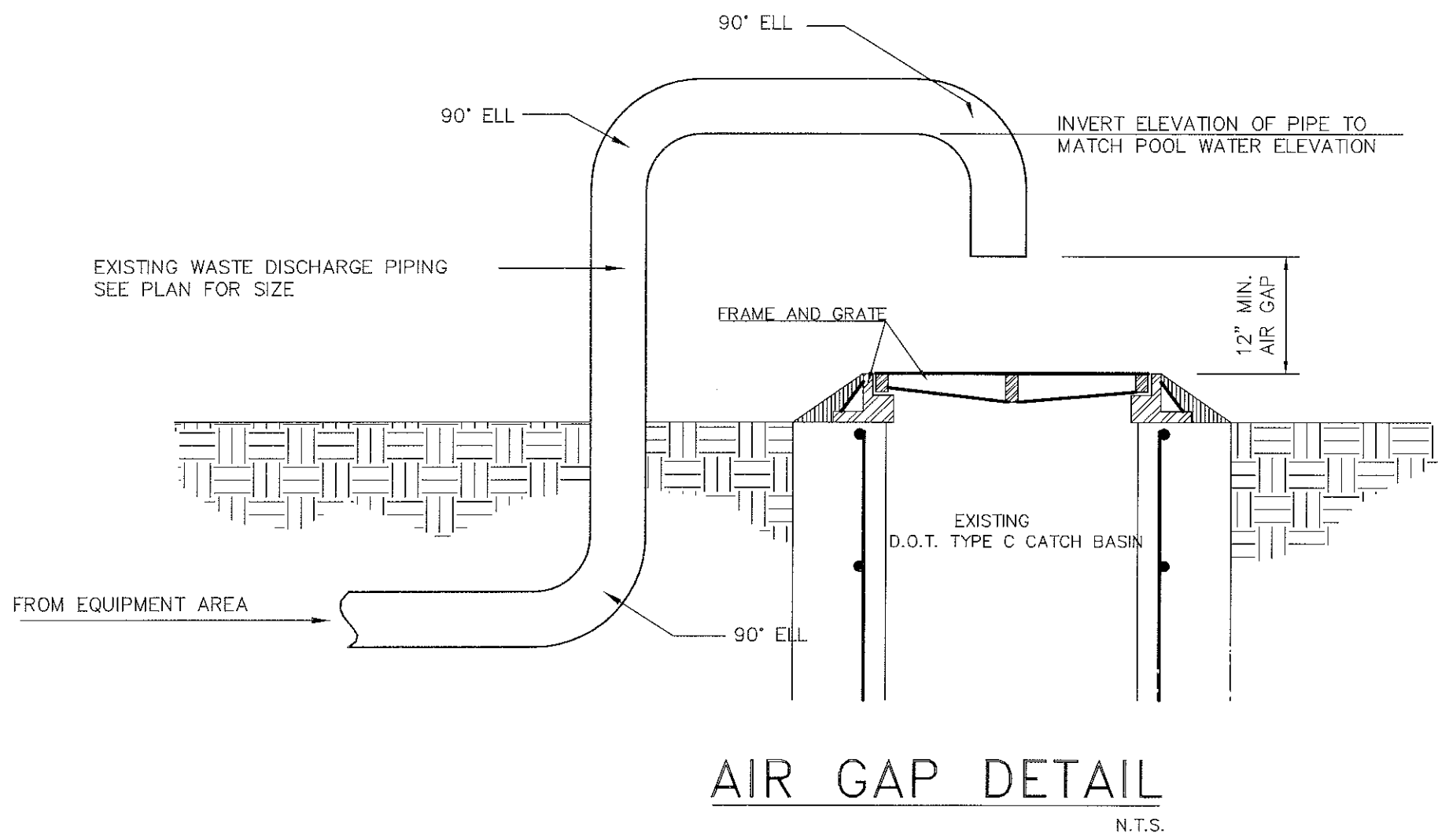
**SCHARF & ASSOCIATES INCORPORATED**  
ARCHITECTS-PLANNERS  
3407 N.W. 9th Avenue  
Suite 200  
P.O. Box 1000  
Fort Lauderdale, Florida 33309  
954-569-2700  
AIA-C001427  
PROJECT NO. 2210

**LAWRENCE DeROSE, P.E.**  
LICENSED ENGINEER NO. 20169  
STATE OF FLORIDA  
BY:  
DATE:

**DeRose & Slopey**  
CONSULTING ENGINEERS, INC.  
LAND PLANNING • CIVIL • STRUCTURAL  
ENVIRONMENT • ELECTRICAL • MECHANICAL  
470 S. ANDREWS AVENUE  
SUITE 200  
FORT LAUDERDALE, FLORIDA 33308  
954-545-7720

"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL INC.





### GENERAL NOTES:

- ALL POOL CONCRETE AND/OR SHOTCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 P.S.I.
- ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 P.S.I.
- NO OVERHEAD ELECTRICAL WIRING SHALL BE PERMITTED WITHIN 10' OF POOL WATER EDGE.
- ELECTRICAL TRANSFORMER BOXES OR JUNCTION BOXES BETWEEN POOL AND TRANSFORMERS SHALL BE LOCATED NOT LESS THAN 12" ABOVE TOP OF POOL COPING STONE.
- ELECTRICAL CONTRACTOR OR ELECTRICIAN SHALL PROVIDE WRITTEN CERTIFICATION TO OWNER AND HEALTH DEPARTMENT THAT ALL ELECTRICAL WORK WAS COMPLETED IN COMPLIANCE WITH NATIONAL ELECTRICAL CODE.
- ALL BONDING AND GROUNDING SHALL BE IN ACCORDANCE WITH SEC. 690 OF NATIONAL ELECTRIC CODE 1996 (OR LATEST) REVISION.
- INTERIOR OF POOLS SHALL BE LIGHT PASTEL IN COLOR.
- ALL POOL OPERATING VALVES SHALL BE ALPHABETICALLY OR NUMERICALLY TAGGED WITH THE APPROPRIATE OPERATING INSTRUCTIONS POSTED IN THE EQUIPMENT ROOM IN A PROTECTIVE COVER.
- THE PREPARATION OR DISPERSEMENT OF FOOD SHALL NOT BE PERMITTED WITHIN 12'-0" OF POOL'S WATER EDGE. IN ADDITION, ANY FOOD OR DRINK SERVICE SHALL PROVIDE A PHYSICAL BARRIER AT OR BEYOND THE 12'-0" MIN. LIMIT.
- POOL WASTE SHALL BE DISCHARGED THROUGH AN AIR GAP BEFORE FINAL DISPOSAL.

### DEPTH MARKER NOTES:

PERMANENT TILE DEPTH MARKERS, 4" TALL OF A CONTRASTING COLOR SHALL BE PROVIDED AS INDICATED ON THE POOL BEAM DETAILS. MARKERS SHALL BE LOCATED NO MORE THAN 25'-0" APART AS MEASURED AT THE POOL'S WATER EDGE. MARKERS SHALL BE PROVIDED AT THE POOL'S MINIMUM AND MAXIMUM DEPTHS AND AS PER THE PRECEDING REQUIREMENT. ALL DEPTH MARKERS SHALL INDICATE TRUE POOL DEPTH WHEN MEASURED THREE FEET INTO THE POOL MARKER AT DEEP END OF POOL MAY HAVE A TOLERANCE OF  $\pm 3$  INCHES. ALL MARKERS IN DECK TO BE NON-SKID TILE. MARKERS SHALL INCLUDE DESIGNATION OF "FEET" AND/OR "INCHES" OR "FT" AND/OR "IN".

"NO DIVING" MARKERS SHALL BE PROVIDED ON MAXIMUM 25 FOOT INTERVALS. AROUND THE POOL PERIMETER WITHIN 2 FEET OF THE POOL WATER EDGE. THE LETTERING SHALL BE 4" IN HEIGHT AND CONTRAST WITH THE BACKGROUND. THE UNIVERSAL NO DIVING MARKER IS A SATISFACTORY SUBSTITUTE. MARKERS SHALL BE CEREMIC, NON-GLAZED.

### POOL TOILET ROOM NOTES:

- FLOORS SHALL BE IMPERVIOUS AND SLIP RESISTANT AND SLOPE 2" IN 10'-0" TO FLOOR DRAINS.
- JUNCTION OF FLOOR AND WALLS SHALL BE COVERED TO FACILITATE CLEANING.

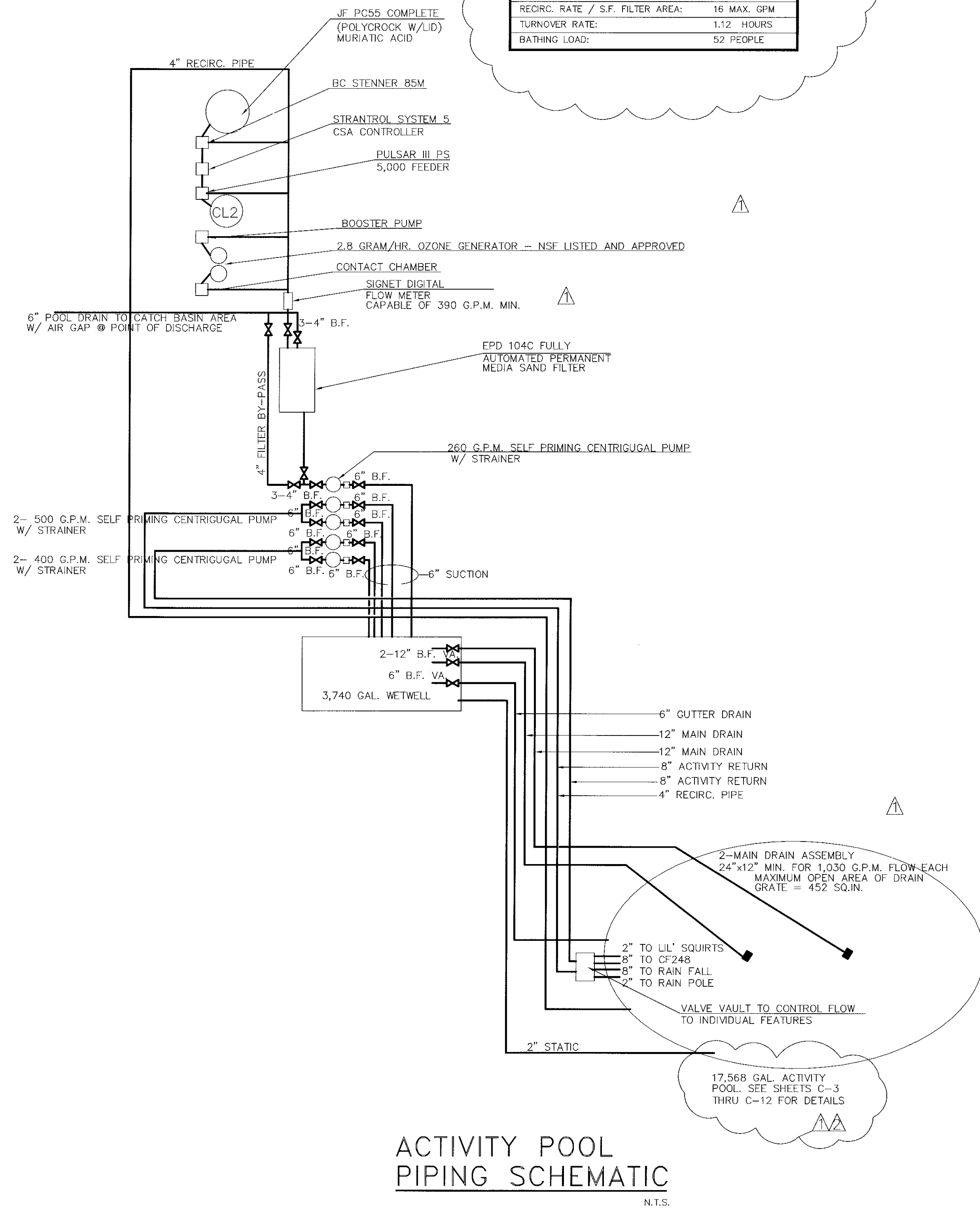
### GENERAL FILTRATION NOTES

- TOTAL POOL WATER SURFACE AREA = 2,562.22 S.F.
- TOTAL GALLONAGE = 17,568 GALLONS.
- POOL TURN OVER RATE SHALL BE 3 HOUR MAXIMUM.
- ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF CHAPTER 64E-9, FLORIDA DEPARTMENT OF HEALTH.
- RETURN INLETS SHALL BE DESIGNED FOR MANUAL DIRECTIONAL ADJUSTMENT. INLETS SHALL BE DESIGNED FOR 10 G.P.M. MAXIMUM FLOW, 10 F.P.S. MAXIMUM VELOCITY, AND SHALL BE AS MANUFACTURED BY HAYWARD MODEL #SP1425S, (OR ENGINEER APPROVED EQUAL). INLETS SHALL NOT BE LOCATED MORE THAN 20' APART AND NO MORE THAN 5' FROM EDGE OF POOL.
- POOL MAIN DRAINS SHALL BE CORROSION RESISTANT HIGH IMPACT PLASTIC GRATING AND FASTENED IN PLACE WITH CORROSION RESISTANT FLUSH MOUNTED LOCKING DEVICES. MAIN DRAINS ARE DESIGNED FOR 3 F.P.S. MAXIMUM VELOCITY AND 1,030 G.P.M. MINIMUM FLOW. DRAINS SHALL BE FIELD MANUFACTURED (OR ENGINEER APPROVED EQUAL). DRAINS SHALL BE A MINIMUM OF 24"x12" AND HAVE A MINIMUM OPEN AREA OF 452.0 SQ. INCHES (4 TIMES THE AREA OF THE RECEIVING DRAIN PIPE PER F.B.C. 5002.5 (A)(2)).
- GUTTER DRAIN LINE SPACING SHALL NOT EXCEED 15'-0" CENTER TO CENTER SPACING MAXIMUM. GUTTERS ARE DESIGNED FOR 17.33 G.P.M. MINIMUM FLOW AND 3 F.P.S. MAXIMUM VELOCITY.
- MAXIMUM BATHING LOAD SHALL BE BASED ON ONE BATHER PER 5 G.P.M. OF RECIRCULATION FLOW = 52 BATHERS

MARK	ITEM	QTY.	DESCRIPTION
1	MAIN DRAIN ASSEMBLY	2	FIELD FABRICATED 2'-0"x1'-0" HIGH IMPACT PLASTIC GRATE ASSEMBLY, 452 MINIMUM SQ. IN. OPEN AREA. SECURE W/ TAMPERPROOF SCREWS
2	WALL RETURN FITTINGS	0	
3	FLOOR RETURN FITTINGS	27	HAYWARD SP1425S 1/4"x2" FIP FLOW ADJUSTABLE FLOOR RETURN FITTINGS WHITE ABS PLASTIC FINISH AROUND FLUSH WITH FLOOR
4	GUTTER DRAINS	15	HAYWARD SQUM GUTTER DRAIN FTG AND GRATE, 2 1/2" SKT x 2 1/2" FIP, WHITE ABS PLASTIC MODEL SP-1019
5	EQUALIZER FITTING	1	HAYWARD GRATE END FTG FOR EQUALIZER/MAKE-UP WATER LINE. FTG TO BE INSTALLED 12" BELOW POOL WATER LEVEL, MODEL SP-1019, 2"
6	POOL LIGHTS	0	NO UNDERWATER LIGHTS DUE TO DEPTH MINIMUM 15 FOOT CANDLES AT WATER SURFACE SEE ELECTRICAL DRAWINGS.
7			
8	LIFE RING	2	LIFE RING, AQUATIC MODEL #23005, 20" DIAMETER PLASTIC RING WITH 1/4"x40" LONG SAFETY LINE
9	LIFE HOOK	2	SHEPHERD TYPE LIFE HOOK, END ANCHORED TO A 16" ALUMINUM TELESCOPING HANDLE, AQUATIC MODEL # RH1038
10	LIFE RING HOLDER	2	AQUATIC MODEL # AH250
11	VACUUM CLEANER	1	PORTABLE TYPE W/105 S.F. STAINLESS STEEL CARTRIDGE FILTER, 36" VACUUM HEAD, 35' OF 2" FLEX HOSE, 1 HP. ELECTRIC DRIVEN PUMP MOTOR ALL SKID MOUNTED.
12	TEST KIT	1	TAYLOR TEST KIT MODEL # 2000-5 DUPLEX CAPABLE OF MEETING ALL CHEMICAL TESTS SPECIFIED BY THE FLORIDA ADMINISTRATIVE CODE IN CHAPTER 10D-5.
13	PRESSURE GAUGES	2	INTEGRAL 4" DIAMETER FACE INCLUDED WITH EDP 0-125 PSI
14	FILTER PUMP	1	ITT MARLOW, 7.5 H.P., MODEL KH 3532EC-C2, 3450 RPM SELF-PRIMING PUMP, 260 GPM @ 70.0 T.D.H., TRIM TO MAX. H.P. PUMP TO INCLUDE ITT MARLOW CAST IRON IMPELLER, CAST IRON STRAINER (6" DIAMETER) WITH S/S BASKET
15	FILTER UNIT	1	EPD 104C (1) TANK, 4" PIPING, FILTERS ARE HORIZONTAL HI RATE PERMANANT WITH COMPUTER MICROPROCESSOR PANEL, WATER PRESSURE BOOST PUMP TO BE INCLUDED 16.5 SQUARE FEET EACH, 16.5 SQUARE FEET TOTAL @ 15.75 GPM FLOW
16	FLOWMETER	1	SIGNET ELECTRONIC FLOWMETER INTERFACE WITH 24 VOLT MICROPROCESSOR PANEL LOCATED ON EPD 1500 GPM DIGITAL NUMERICAL READOUT INCLUDED WITH EPD
17	CL2 FEEDER	1	PULSAR III PS 5000 FEEDER INCLUDING 1/4" BOOSTER PUMP BM 71528
18	PH FEEDER	1	BC STENNER 85M 85 GPD CHEMICAL FEEDER
19	CHEMICAL CONTROLLER	1	STRANTRONL SYSTEM 5 WITH DVT I/O PORT & REMOTE ANNUNCIATOR INSTALLED IN POOL MANAGERS OFFICE. PROVIDE AND INSTALL ALL CABLE, CONDUIT, FITTINGS, AND HARDWARE FOR INSTALLATION PER MFRS. DETAILS (C.E.S. INC. JUPITER, FLORIDA)
20			
21	CHEMICAL STORAGE CONTAINER	1	100 GALLON POLY-CROCK WITH LID MURIATIC ACID FOR PH
22	OZONE GENERATOR	1	CLEARWATER TECH, INC. MODEL M/1500 TPN CWT 028C, 2.8 GRAM/HOUR OZONE GENERATOR WITH BOOSTER PUMP AND VENTURI AND CONTACT COLUMN INJECTOR SYSTEM. - NFS APPROVED
23	COLLECTOR TANK	1	POURED CONC. W/ 3,740 GAL. CAPACITY TANK INCLUDES OVERFLOW PIPE, MAKE UP WATER FLOATS OVERFLOW PIPE AND SAFETY RAILS
24	HAIR AND LINT STRAINER	1	SSI ANSI 65 PSI 6" CAST IRON STRAINER WITH 5/32" PERFORATED STAINLESS STEEL BASKET INCLUDED WITH MARLOWE KH 3532EC-C2
25	FEATURE PUMP	2	ITT MARLOW, 15 H.P., MODEL KH 45PC1SEC, 1750 RPM SELF-PRIMING PUMP, 500 GPM @ 80 T.D.H., TRIM TO MAX. H.P. PUMP TO INCLUDE ITT MARLOW CAST IRON IMPELLER, FIBERGLASS STRAINER (12" DIAMETER) WITH S/S BASKET
26	FEATURE PUMP	2	ITT MARLOW, 10 H.P., MODEL KH 45PC1SEC, 1750 RPM SELF-PRIMING PUMP, 400 GPM @ 70.0 T.D.H., TRIM TO MAX. H.P. PUMP TO INCLUDE ITT MARLOW CAST IRON IMPELLER, FIBERGLASS STRAINER (10" DIAMETER) WITH S/S BASKET
27	OZONE DETECTION	1	ECO SENSOR MODEL C302 SENSITIVE TO 1 MG/L, CAPABLE OF ACTIVATING THE FAN EXHAUST AND ACTIVATING AN AUDIBLE AND VISUAL ALARM.

PIPING AND HYDRAULICS			
LINE TYPE	SIZE	FLOW (GPM)	VEL (FPS)
RETURN LINE	1-4"	260.0	6.64
MAIN DRAIN LINE	2-12"	1,030	2.95
GUTTER LINE	1-6"	260.0	2.95

POOL DATA	
VOLUME:	17,568 GALLONS
SURFACE AREA:	2,562.22 SQUARE FEET
PERIMETER:	177.74 LINEAL FEET
RECIRC. RATE / S.F. FILTER AREA:	16 MAX. GPM
TURNOVER RATE:	1.12 HOURS
BATHING LOAD:	52 PEOPLE



CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 6th Floor, Fort Lauderdale, Florida 33301

DATE:	10/20/05
DRAWN BY:	JRL / L.M.C.
CHECKED BY:	TKMC.
CAD FILE:	8248A-C01-002BTL

PROJECT #P15245A  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
POOL DETAILS AND NOTES-PHASE II  
960 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

SHEET NO.	C-7
OF	12
DRAWING FILE NO.	4-126-25
Exhibit 1	21-0085
Page 146 of 215	

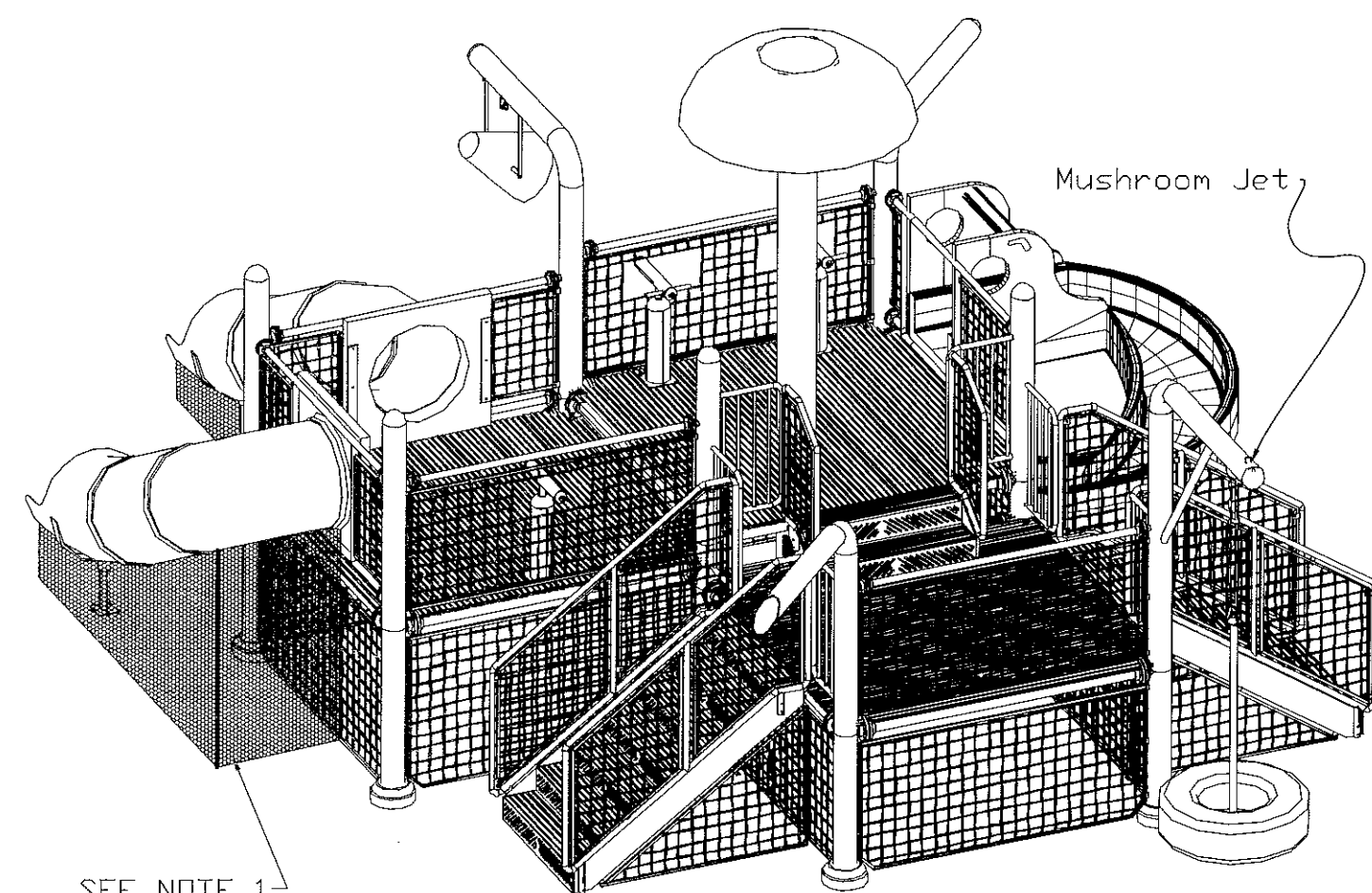
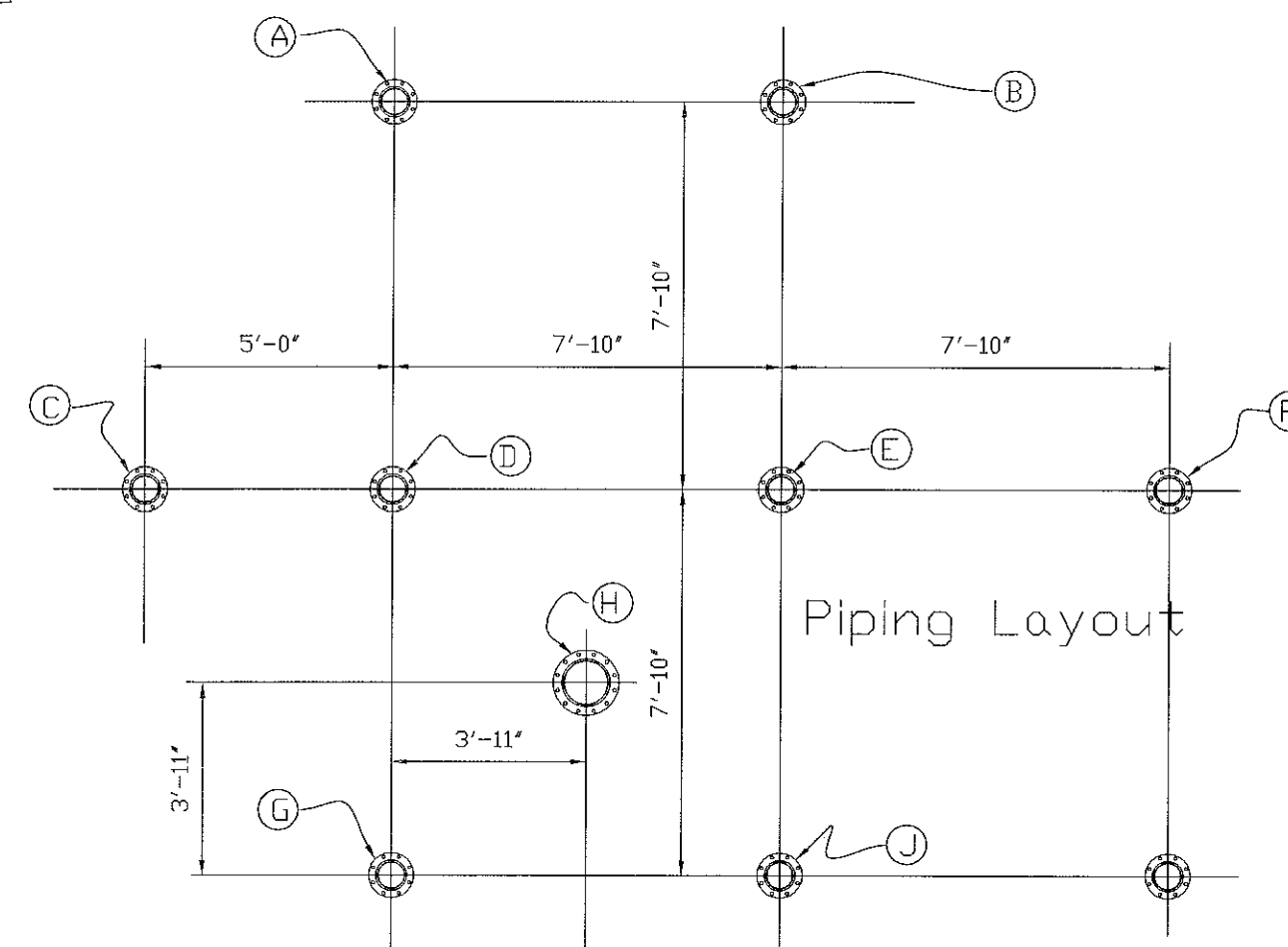
**SEAWOOD BUILDERS INC.**  
565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

**SCHARF & ASSOCIATES INCORPORATED**  
ARCHITECTS • PLANNERS  
3007 N.W. 9th Avenue  
Suite 200  
Fort Lauderdale, Florida 33309  
954 566 2700  
AA-C001427  
PROJECT NO. 2210

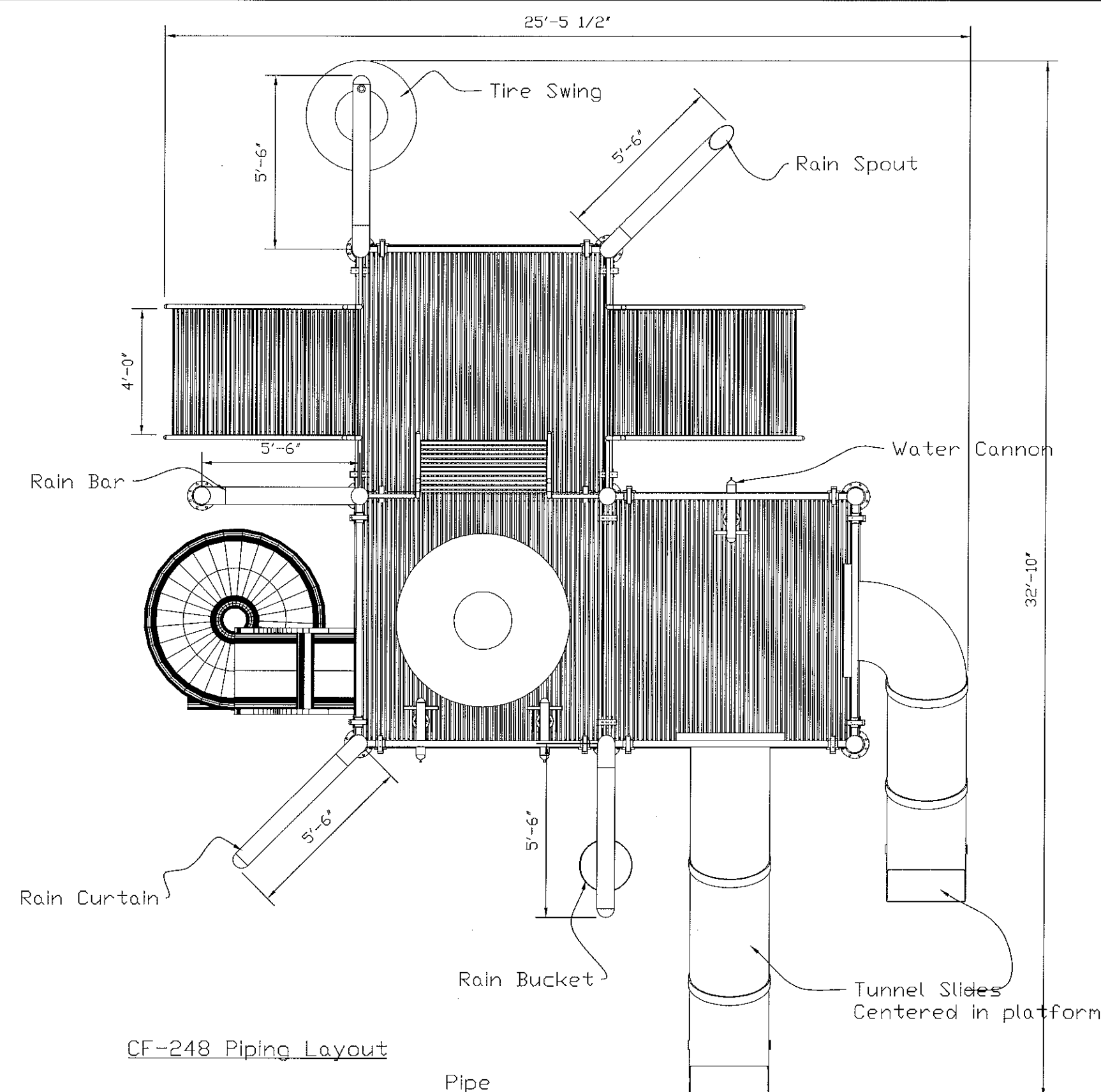
**LAWRENCE DeROSE, P.E.**  
LICENSED ENGINEER NO. 20169  
STATE OF FLORIDA  
BY:  
DATE:

**DeRose & Slopey**  
CONSULTING ENGINEERS, INC.  
LAND PLANNING • CIVIL • STRUCTURAL  
ENVIRONMENT • ELECTRICAL • MECHANICAL  
110 S. ANDREWS AVENUE  
PO BOX 8640 FORT LAUDERDALE  
FLORIDA 33308

"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL INC.

SEE NOTE 1.  
TYP.

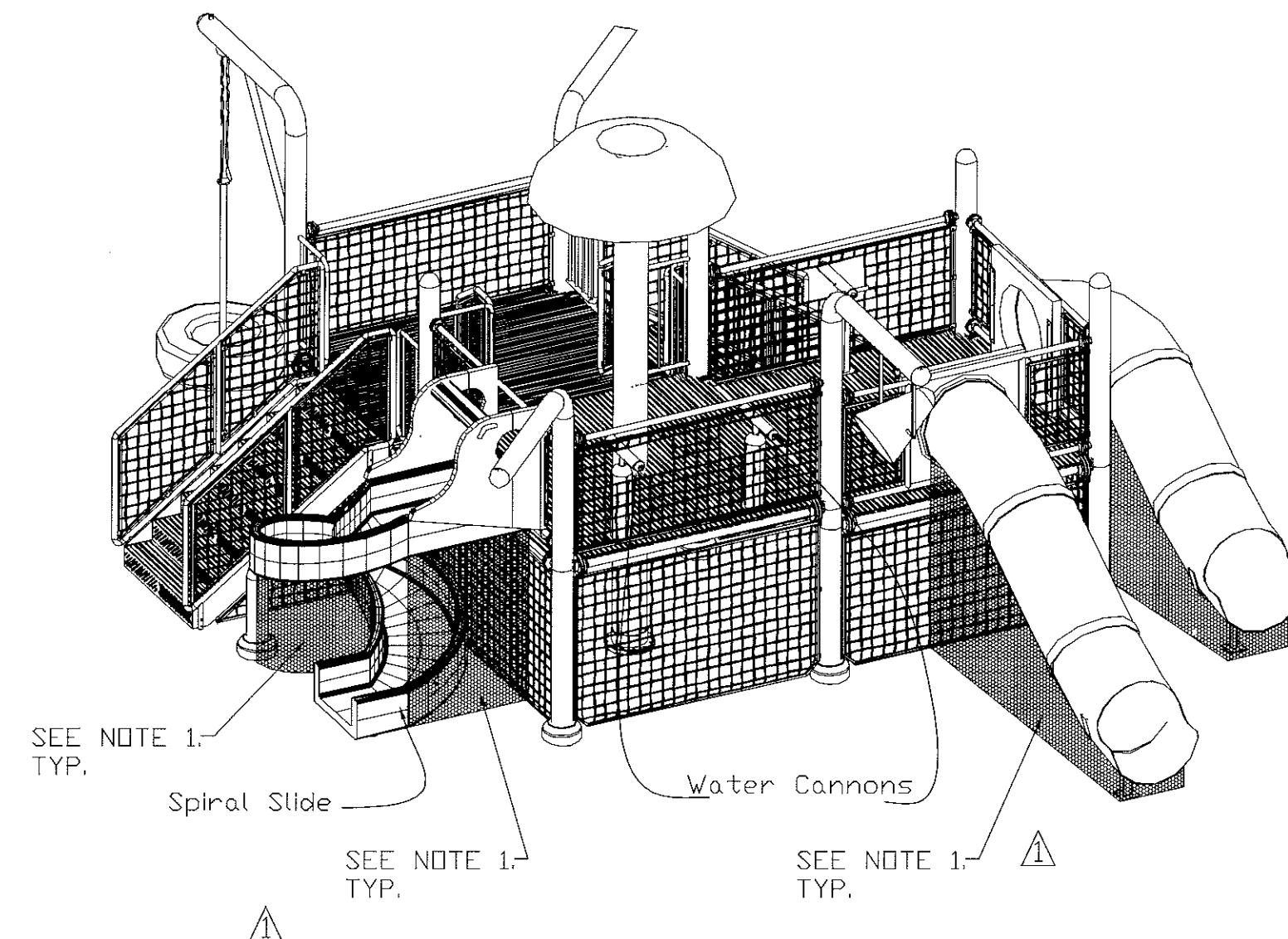
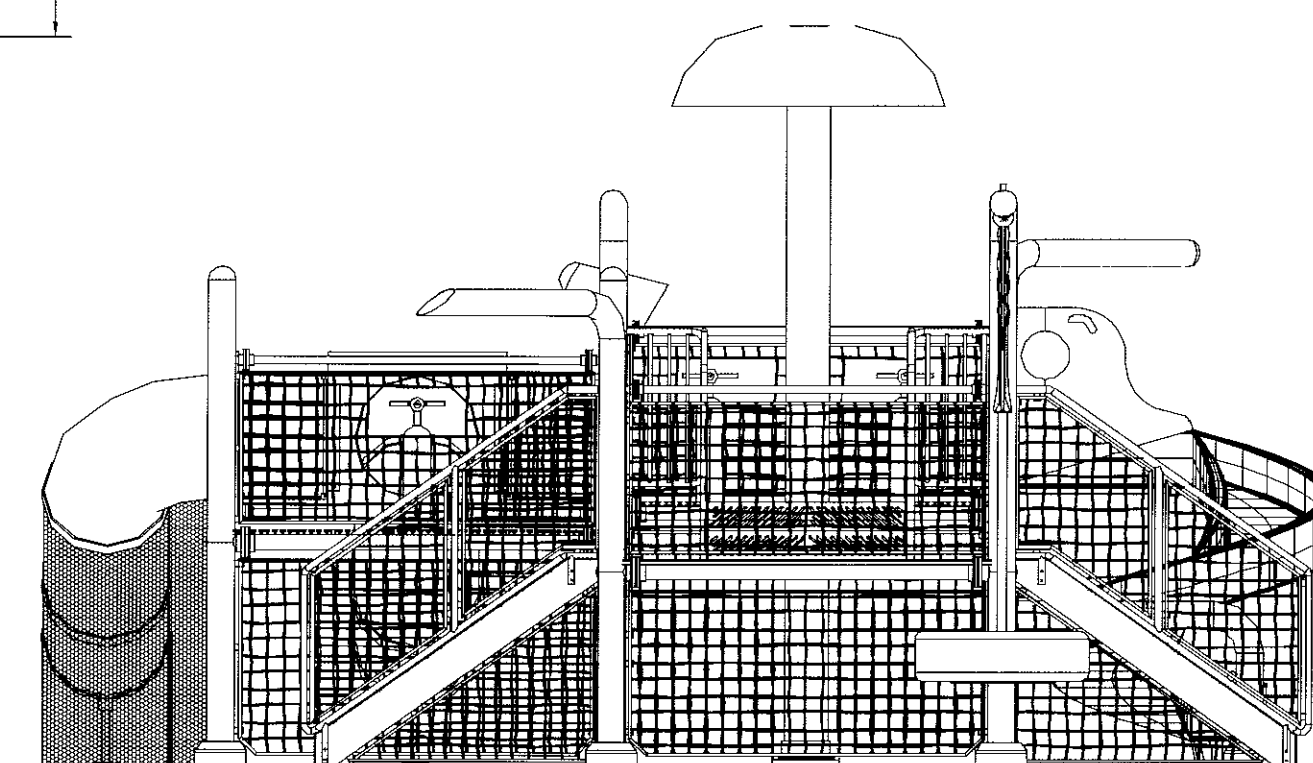
Piping Layout



CF-248 Piping Layout

Feature	Description	Pipe Size	GPM
1	Mushroom Jet	1-1/2"	6
2	Rain Spout	3"	150
3	Rain Bar	2"	80
4	Dancing Floor	1-1/2"	50
5	Dancing Floor	1-1/2"	50
6	Water Cannon	1-1/2"	6
7	Rain Curtain	3"	175
8	Ø5'-6" Rain Fall	4"	300
9	Rain Bucket / Water Cannons	1-1/2"	6/12
			835 Gpm @ 35' TDH

NOTE 1.  
ALL BOTTOMS OF STRUCTURES LESS THAN 8'-0" ABOVE POOL BOTTOM SHALL BE EQUIPPED WITH AN APPROVED BARRIER TO PREVENT POOL USERS FROM ENTERING UNDER THE STRUCTURE.  
SHOP DRAWINGS REQUIRED.  
SOME NETTING NOT SHOWN FOR CLARITY.

SEE NOTE 1.  
TYP.SEE NOTE 1.  
TYP.SEE NOTE 1.  
TYP.

Rear View

## General Notes

1. Main Frame constructed from Stainless Steel, and must meet Grounding requirements as per local / national electric codes.
2. Custom colors are picked from order form by customer prior to manufacturing.
3. 0 3/4" x 6-1/4" Wedge Anchors used to mount base flanges to slab floor.
4. Thickness of slab footprint to be calculated by project engineer.
5. Con-Pac CF series play systems are designed to be placed on level surface. Any deviation must be addressed by engineer/health dept. and approved in writing by Con-Pac.
6. These prints are for proposal purposes only. Final prints will be issued after point of sale.

No. Revision/Issue Date

Firm Name and Address

Project Name and Address

CF-248

Drawn By: A. J. B.

E-mail: tony@com-pac.net

Project Sheet

Date 12-11-03

Scale

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

REVISIONS:  
DATE: 10/20/03  
DRAWN BY: JRL / LJM/C  
CHECKED BY: TKM/C  
CAD FILE: 19248-CF248-01.DWG

PROJECT #P15245A  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
ACTIVITY FEATURE DETAILS-PHASE II  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

SHEET NO.

C-8

OF  
DRAWING FILE 1001bit 1  
4-1262257 of 215

NOTE:  
DRAWING PROVIDED FOR PRODUCT INFORMATION ONLY.

SEAWOOD BUILDERS  
INC.

565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

SCHARF  
& ASSOCIATES  
INCORPORATED  
ARCHITECTS-PLANNERS

3407 N.W. 9th Avenue  
Suite 200  
Ft. Lauderdale, Florida 33309  
954 566 2700  
FAX: 954 566 2700  
PROJECT NO. 2210

LAWRENCE DeROSE, P.E.  
LICENSED ENGINEER NO. 20169  
STATE OF FLORIDA

BY:  
DATE:

DeRose & Slopey  
CONSULTING ENGINEERS, INC.  
LAND SURVEYING • CIVIL • STRUCTURAL  
ENVIRONMENTAL • ELECTRICAL • MECHANICAL  
410 S. UNIVERSITY AVENUE  
SUITE 200  
POMEROY BEACH, FLORIDA 33069  
(954) 942-7722

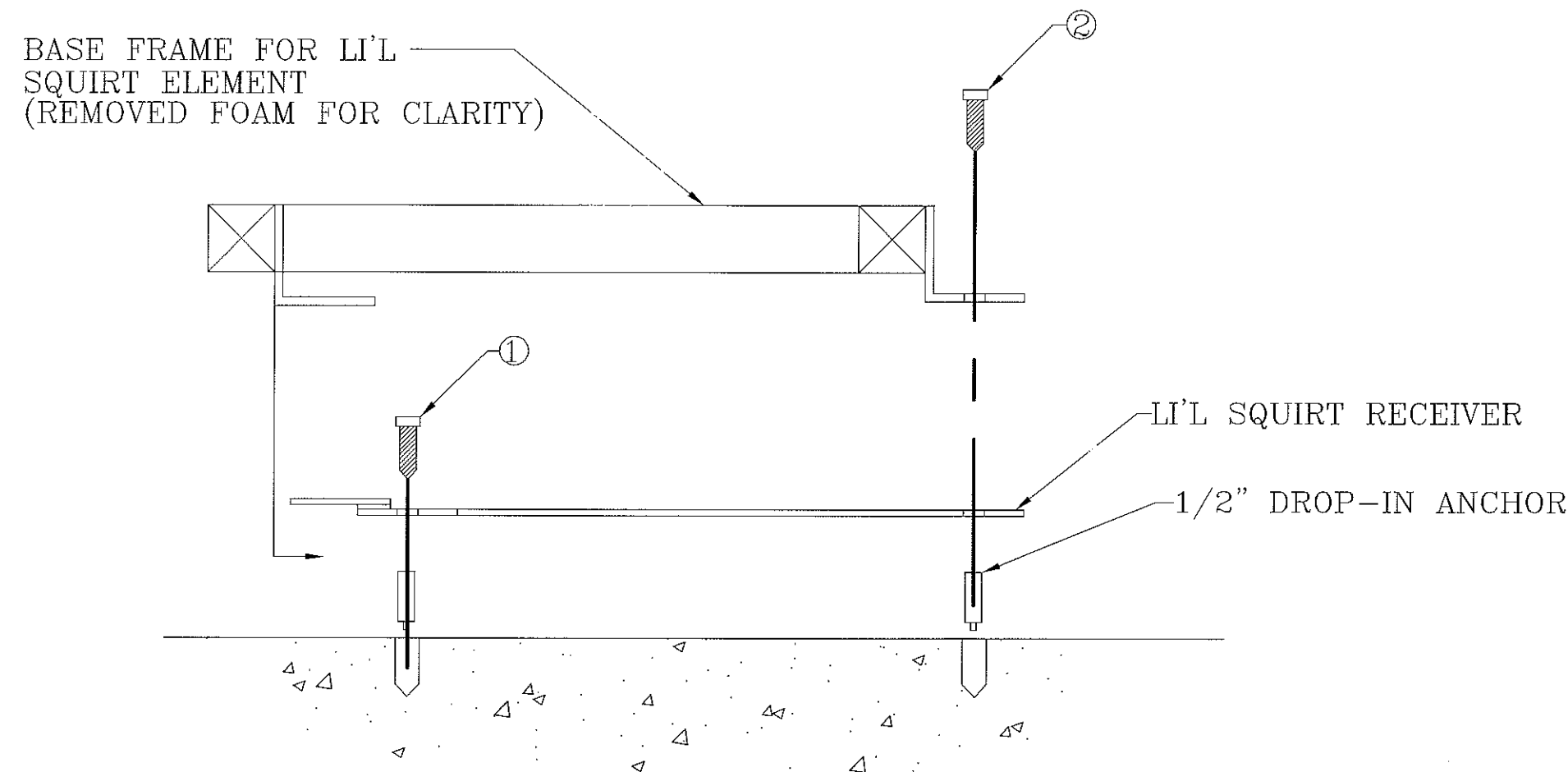
"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL INC.

NOTE:  
PRE-FABRICATED, PRE-ENGINEERED WATER ACTIVITY  
PLAY EQUIPMENT SHALL SATISFY ALL REQUIREMENTS  
OF THE STATE OF FLORIDA DEPARTMENT OF HEALTH,  
RELATED STATE CODES AND THE FLORIDA BUILDING CODE.

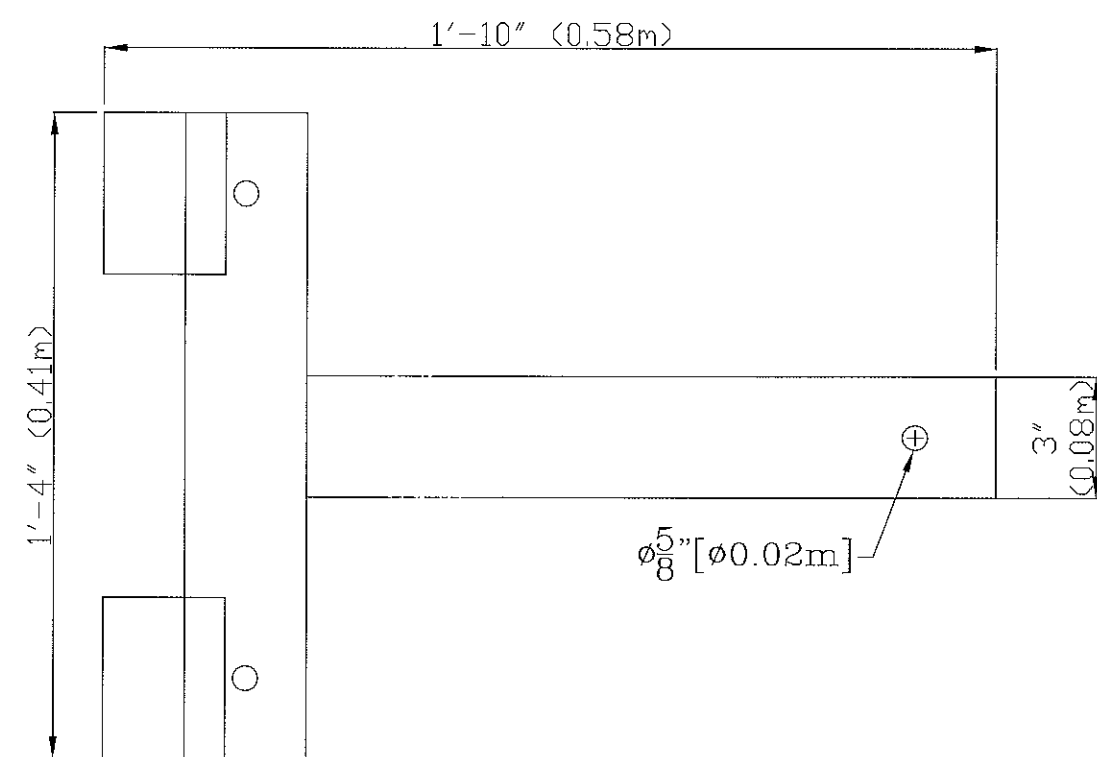


**NIBGS**  
INTERNATIONAL  
3150 IH 35 WEST NEW BRAUNFELS  
(210)620-4000 (FAX)629-2867 TEXAS 78130  
E-MAIL: NBGS1@AOL.COM

### INSTALLATION OF LI'L SQUIRT ELEMENTS P/N 601371



1. LI'L SQUIRT RECEIVER IS ANCHORED TO POOL BOTTOM WITH 1/2" SST DROP-IN ANCHORS.
2. ANCHOR DOWN WITH SST BOLTS MARKED ① (2 EA.)
3. SLIDE LI'L SQUIRT ELEMENT INTO PLACE SHOWN ABOVE AND FINISH IT BY ANCHORING IT IN PLACE WITH THE LAST BOLT MARKED ②



LI'L SQUIRT RECEIVER

This document is the property of NBGS of New Braunfels, Texas, which has exclusive rights to proprietary trade secrets and confidential information contained herein. Receipt of permission to use this document in whole or part does not convey any rights to use any of the information contained herein without prior written permission of NBGS.

REVISED  
4/98

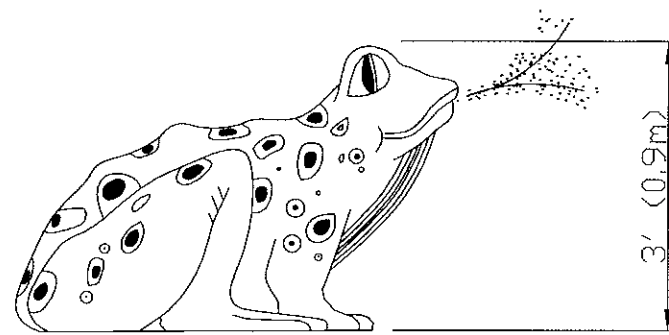
**NOTE:**  
PRE-FABRICATED, PRE-ENGINEERED WATER ACTIVITY PLAY EQUIPMENT SHALL SATISFY ALL REQUIREMENTS OF THE STATE OF FLORIDA DEPARTMENT OF HEALTH, RELATED STATE CODES AND THE FLORIDA BUILDING CODE.

**NIBGS**  
INTERNATIONAL  
3150 IH 35 SOUTH NEW BRAUNFELS  
(830)620-4000 (FAX)629-2867 TEXAS 78130  
E-MAIL: waterpro@nbgintl.com

### FOAM LITTLE SQUIRTS

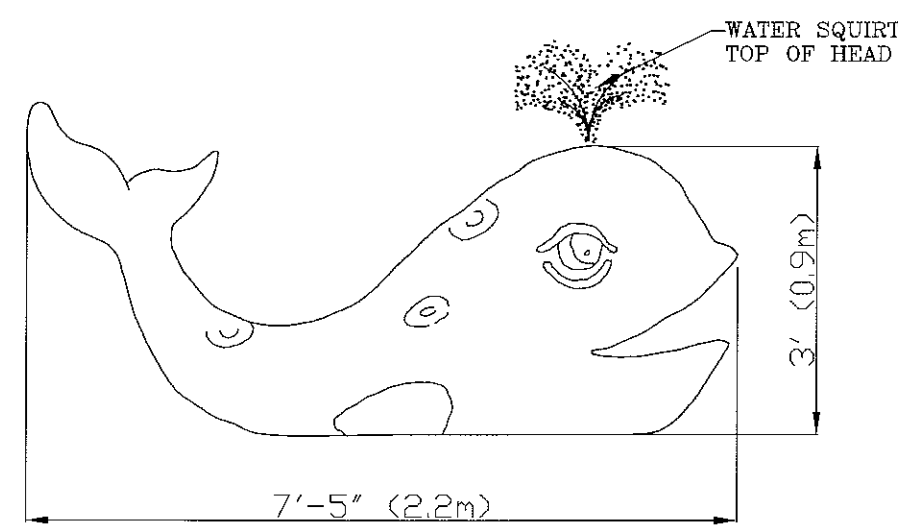
LI'L SQUIRTS ARE DESIGNED TO BE BOLTED DOWN IN A DRY OR WET AREA.  
RECOMMENDED DEPTH FOR WET AREAS IS 4" TO 6".

**FROG**  
610197  
SHIPPING WT.:  
135 LBS. / 61 KG.  
RAW WEIGHT:  
100 LBS. / 45 KG.



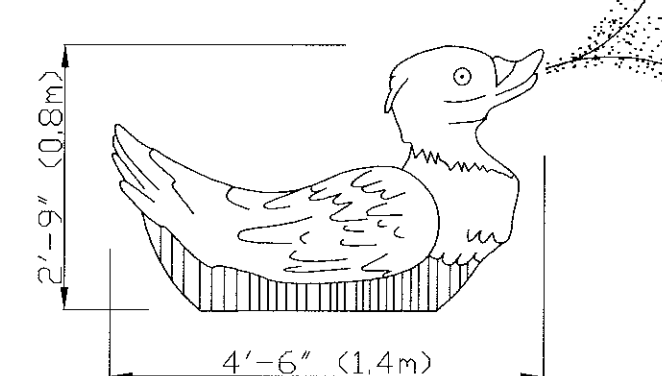
© 1990, NBGS INTL, INC.

**WHALE**  
610193  
SHIPPING WT.:  
120 LBS. / 54 KG.  
RAW WEIGHT:  
85 LBS. / 40 KG.



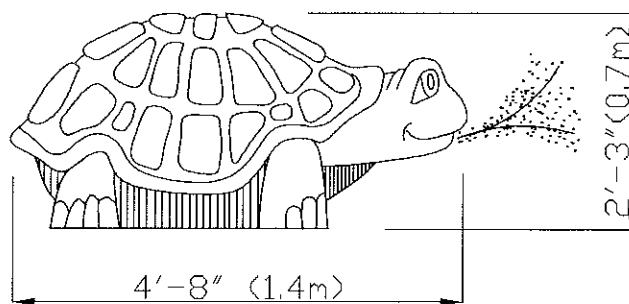
© 1989, NBGS INTL, INC.

**DUCK**  
610214  
SHIPPING WT.:  
105 LBS. / 48 KG.  
RAW WEIGHT:  
70 LBS. / 32 KG.



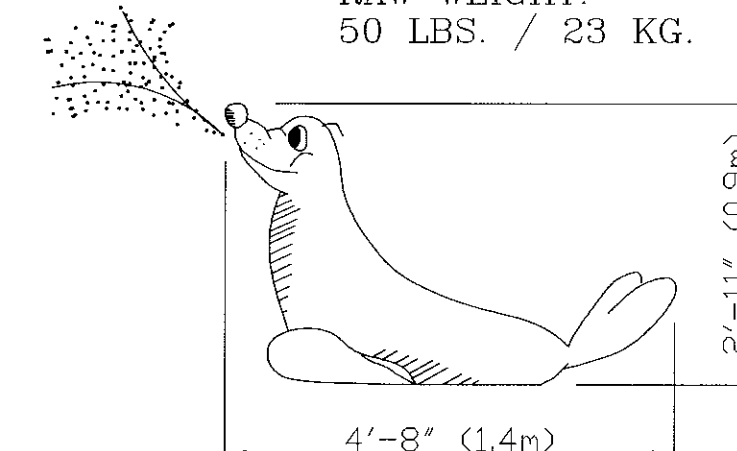
© 1990, NBGS INTL, INC.

**TORTOISE**  
610195  
SHIPPING WT.:  
120 LBS. / 54 KG.  
RAW WEIGHT:  
85 LBS. / 40 KG.



© 1990, NBGS INTL, INC.

**SEAL**  
610216  
SHIPPING WT.:  
85 LBS. / 40 KG.  
RAW WEIGHT:  
50 LBS. / 23 KG.



© 1990, NBGS INTL, INC.

THIS DRAWING SHALL NOT BE USED  
FOR CONSTRUCTION. ACTUAL  
DIMENSIONS MAY VARY.

© 1996,NBGS INTL,INC

This document is the property of NBGS of New Braunfels, Texas, which has exclusive rights to proprietary trade secrets and confidential information contained herein. Receipt of permission to use this document in whole or part does not convey any rights to use any of the information contained herein without prior written permission of NBGS.

SHEET 1 OF 1  
REVISED  
02/99

**NOTE:**  
DRAWING PROVIDED FOR PRODUCT INFORMATION ONLY.

**SEAWOOD BUILDERS**  
INC.

565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

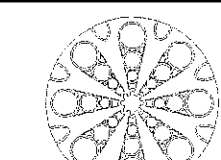
**SCHARF**  
ASSOCIATES  
INCORPORATED  
ARCHITECTS-PLANNERS

3007 N.W. 9th Avenue  
Suite 200  
Fort Lauderdale, Florida 33309  
954 568 2700  
AA-C001427  
PROJECT NO. 2210

**LAWRENCE DeROSE, P.E.**  
LICENSED ENGINEER NO. 20169  
STATE OF FLORIDA

BY:

DATE:



**DeRose & Slopey**  
CONSULTING ENGINEERS, INC.  
LAND PLANNING & CIVIL • STRUCTURAL  
ENVIRONMENT • ELECTRICAL & MECHANICAL  
470 S. HARRISON AVENUE  
FORT LAUDERDALE, FLORIDA 33609  
(954) 547-7700

"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL

**CITY OF FORT LAUDERDALE**  
PUBLIC SERVICES DEPARTMENT  
**ARCHITECTURAL DIVISION**  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

REVISIONS:  
DATE: 10/20/03  
DRAWN BY: JRL / LJM/C  
CHECKED BY: TKM/C  
CAD FILE: 10245A-009-010PCL

**PROJECT #P15245A**  
**RIVERLAND PARK COMMUNITY CENTER**  
**FORT LAUDERDALE, FLORIDA**  
**ACTIVITY FEATURE DETAILS-PHASE II**  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

SHEET NO.

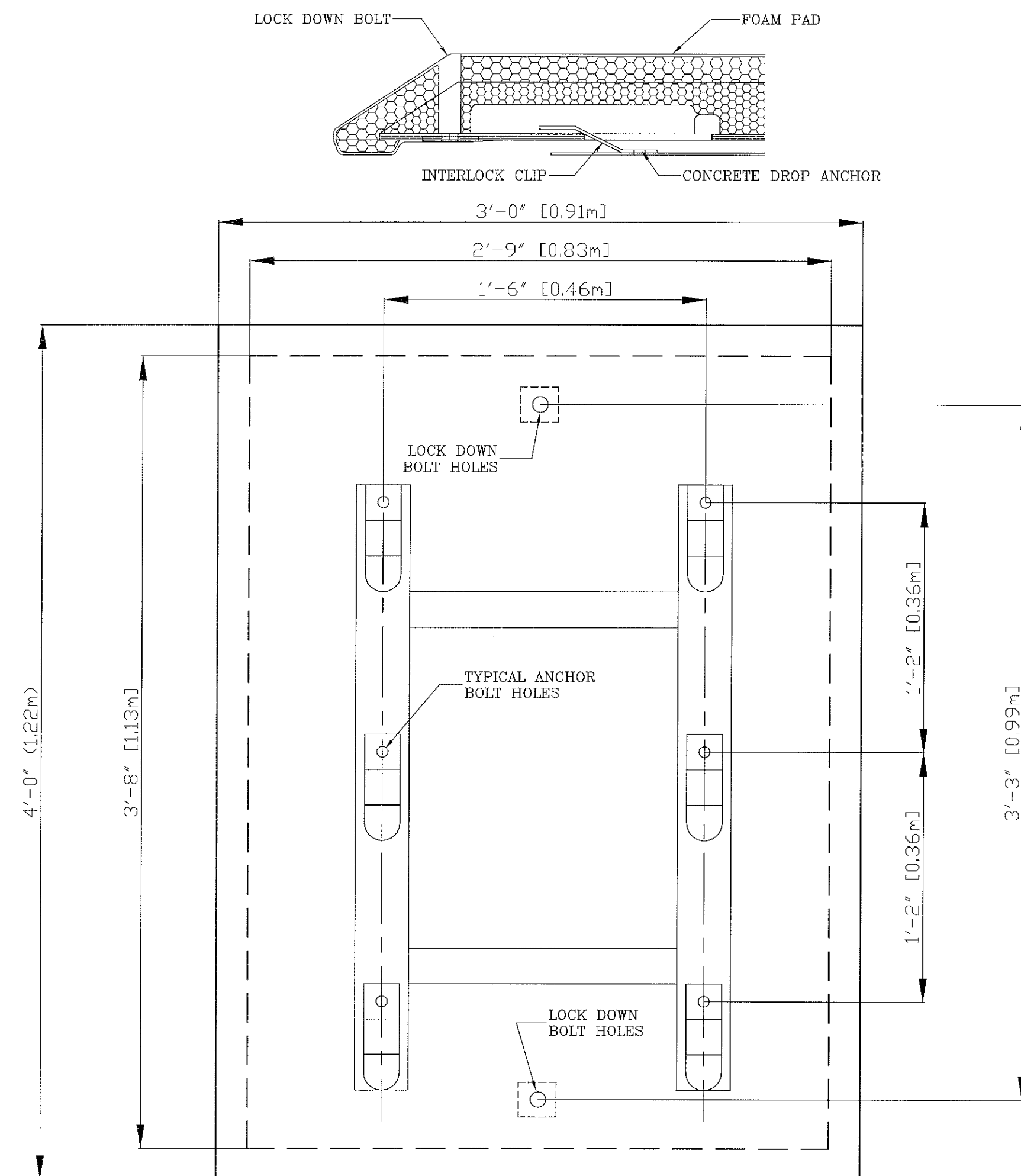
**C-9**

OF 12  
DRAWING TEAM  
4-120-258 of 215





### 3' x 4' BOTTOM PAD INTERLOCK SYSTEM P/N 611225



THIS DRAWING SHALL NOT BE USED  
FOR CONSTRUCTION. ACTUAL  
DIMENSIONS MAY VARY.

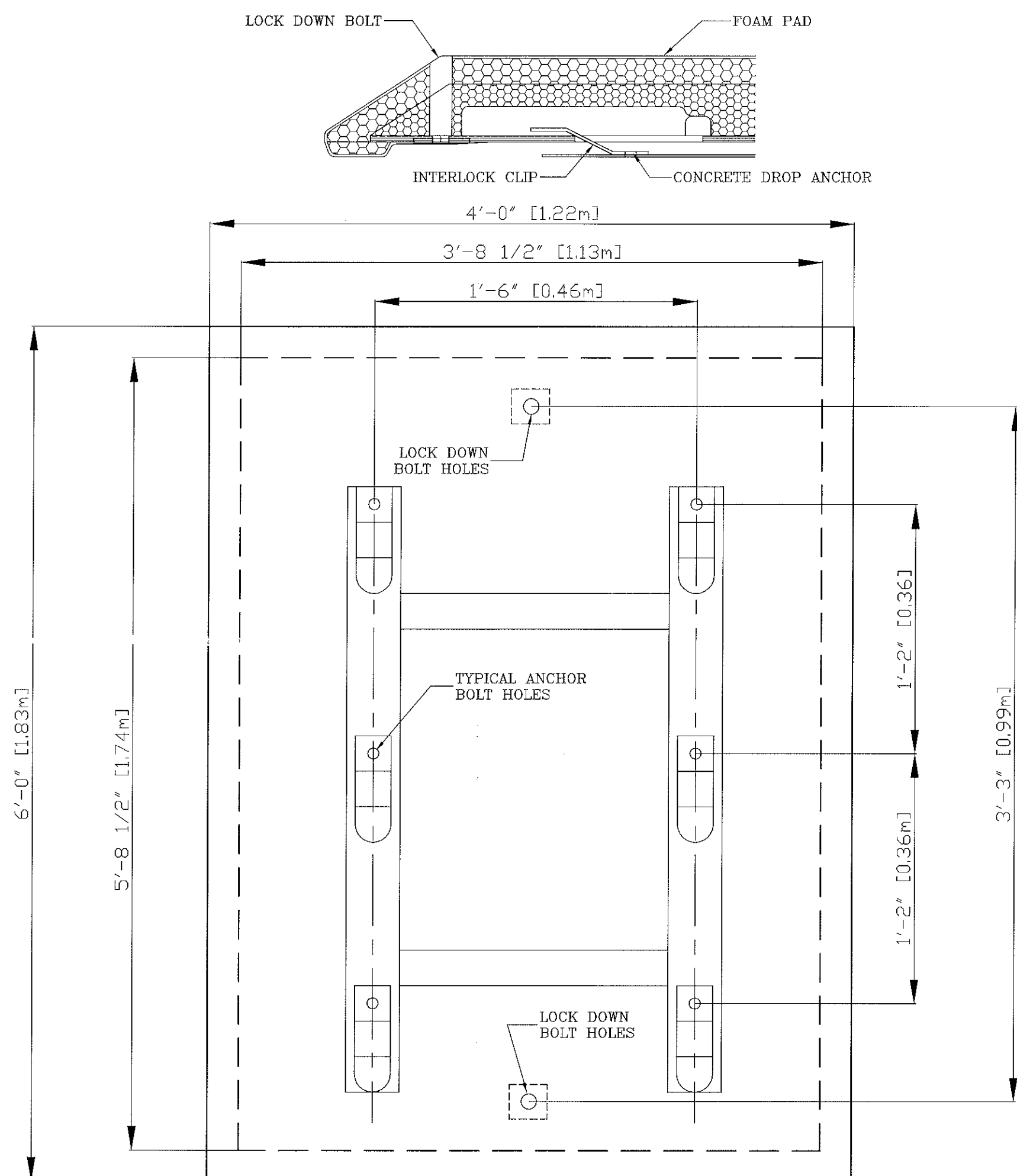
© XXXX,NBGS INTL,INC

This document is the property of NBGS of  
New Braunfels, Texas, which has exclusive  
rights to proprietary trade secrets and  
confidential information contained herein.  
Receipt of permission to use this document  
in whole or part does not convey any  
rights to use any of the information  
contained herein without prior written  
permission of NBGS.

SHEET 1 OF 1 REVISED  
03/99



### 4' x 6' BOTTOM PAD INTERLOCK SYSTEM P/N 601230



THIS DRAWING SHALL NOT BE USED  
FOR CONSTRUCTION. ACTUAL  
DIMENSIONS MAY VARY.

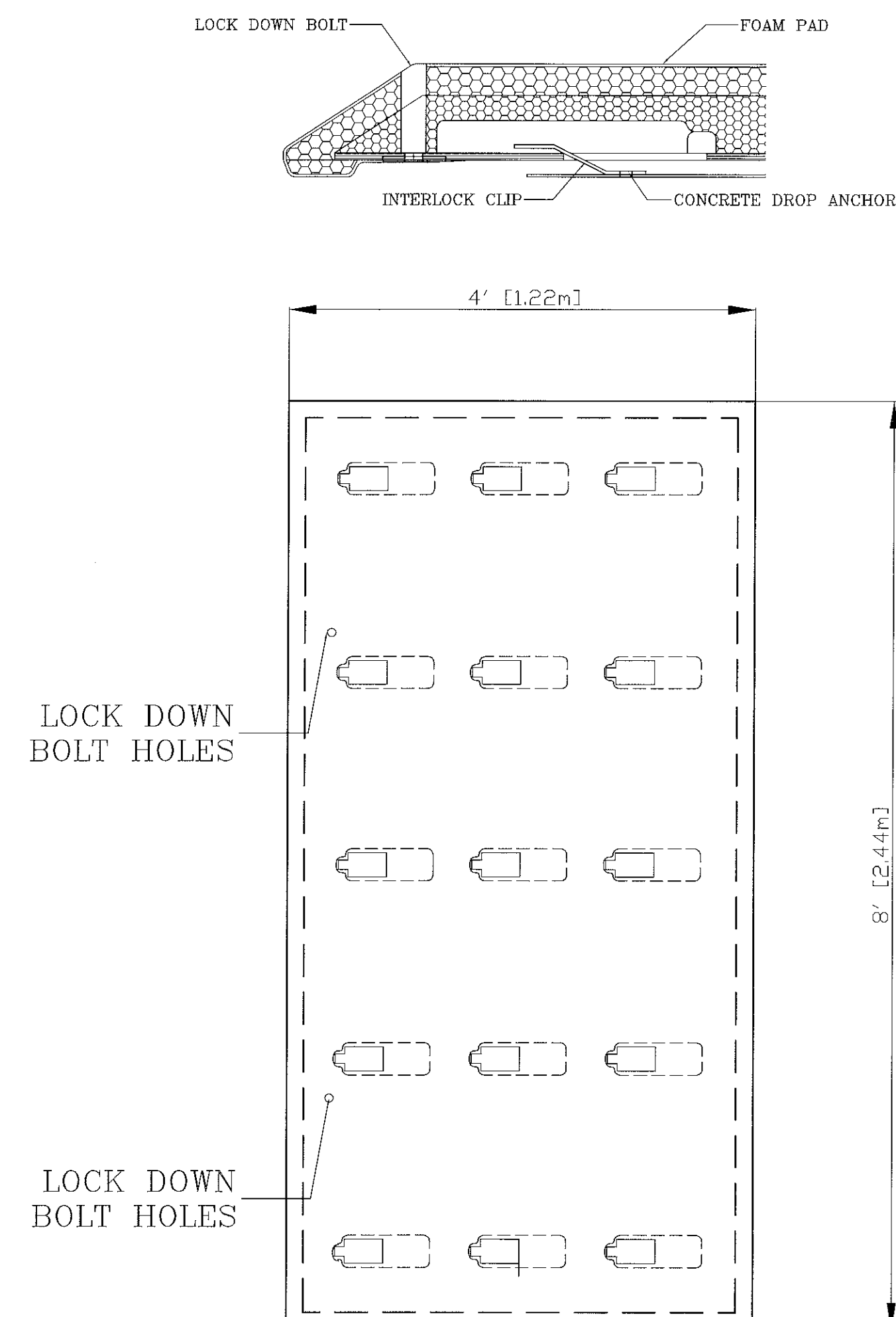
© XXXX,NBGS INTL,INC

This document is the property of NBGS of  
New Braunfels, Texas, which has exclusive  
rights to proprietary trade secrets and  
confidential information contained herein.  
Receipt of permission to use this document  
in whole or part does not convey any  
rights to use any of the information  
contained herein without prior written  
permission of NBGS.

SHEET 1 OF 1 REVISED  
03/99



### 4' x 8' BOTTOM PAD INTERLOCK SYSTEM P/N 601235



THIS DRAWING SHALL NOT BE USED  
FOR CONSTRUCTION. ACTUAL  
DIMENSIONS MAY VARY.

© XXXX,NBGS INTL,INC

This document is the property of NBGS of  
New Braunfels, Texas, which has exclusive  
rights to proprietary trade secrets and  
confidential information contained herein.  
Receipt of permission to use this document  
in whole or part does not convey any  
rights to use any of the information  
contained herein without prior written  
permission of NBGS.

SHEET 1 OF 1 REVISED  
3/99

NOTE:  
PRE-FABRICATED, PRE-ENGINEERED WATER ACTIVITY  
PLAY EQUIPMENT SHALL SATISFY ALL REQUIREMENTS  
OF THE STATE OF FLORIDA DEPARTMENT OF HEALTH,  
RELATED STATE CODES AND THE FLORIDA BUILDING CODE.

NOTE:  
DRAWING PROVIDED FOR PRODUCT INFORMATION ONLY.

**SEAWOOD BUILDERS**  
INC.

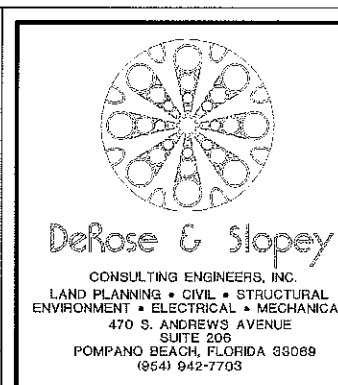
565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

**SCHARF & ASSOCIATES**  
INCORPORATED  
ARCHITECTS-PLANNERS

3007 N.W. 9th Avenue  
Suite 200  
Fort Lauderdale, Florida 33309  
954 568-2700  
AA-C001427  
PROJECT NO. 2210

LAWRENCE DeROSE, P.E.  
LICENSED ENGINEER NO. 20169  
STATE OF FLORIDA

BY:  
DATE:



"AS BUILT SET" 11/6/05  
POOL PEOPLE COMMERCIAL INC

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

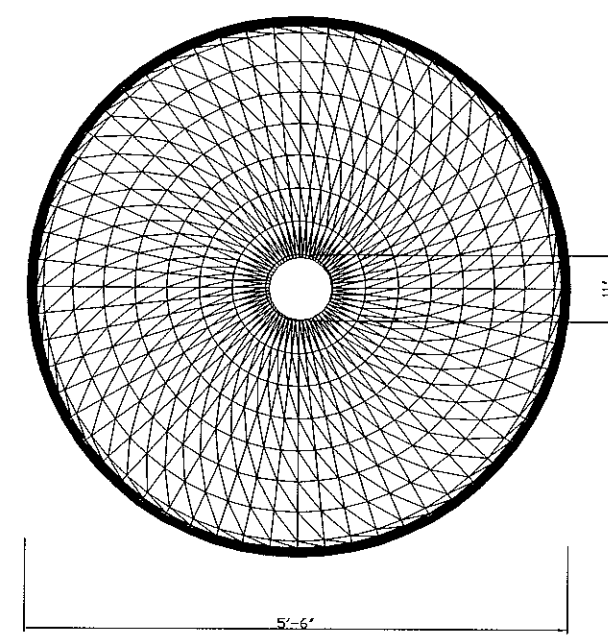
REVISIONS:  
DATE: 10/20/03  
DRAWN BY: JRL / L.J.M.C.  
CHECKED BY: TKM.C.  
CAD FILE: 10245A-CC-02251

PROJECT #P15245A  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
ACTIVITY FEATURE DETAILS-PHASE II  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

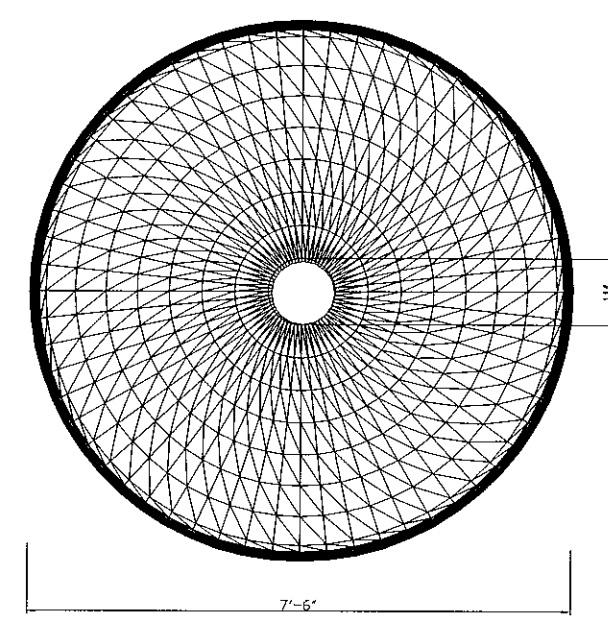
SHEET NO.

C-10

OF CAM 21-00042  
DRAWING 13 OF 215



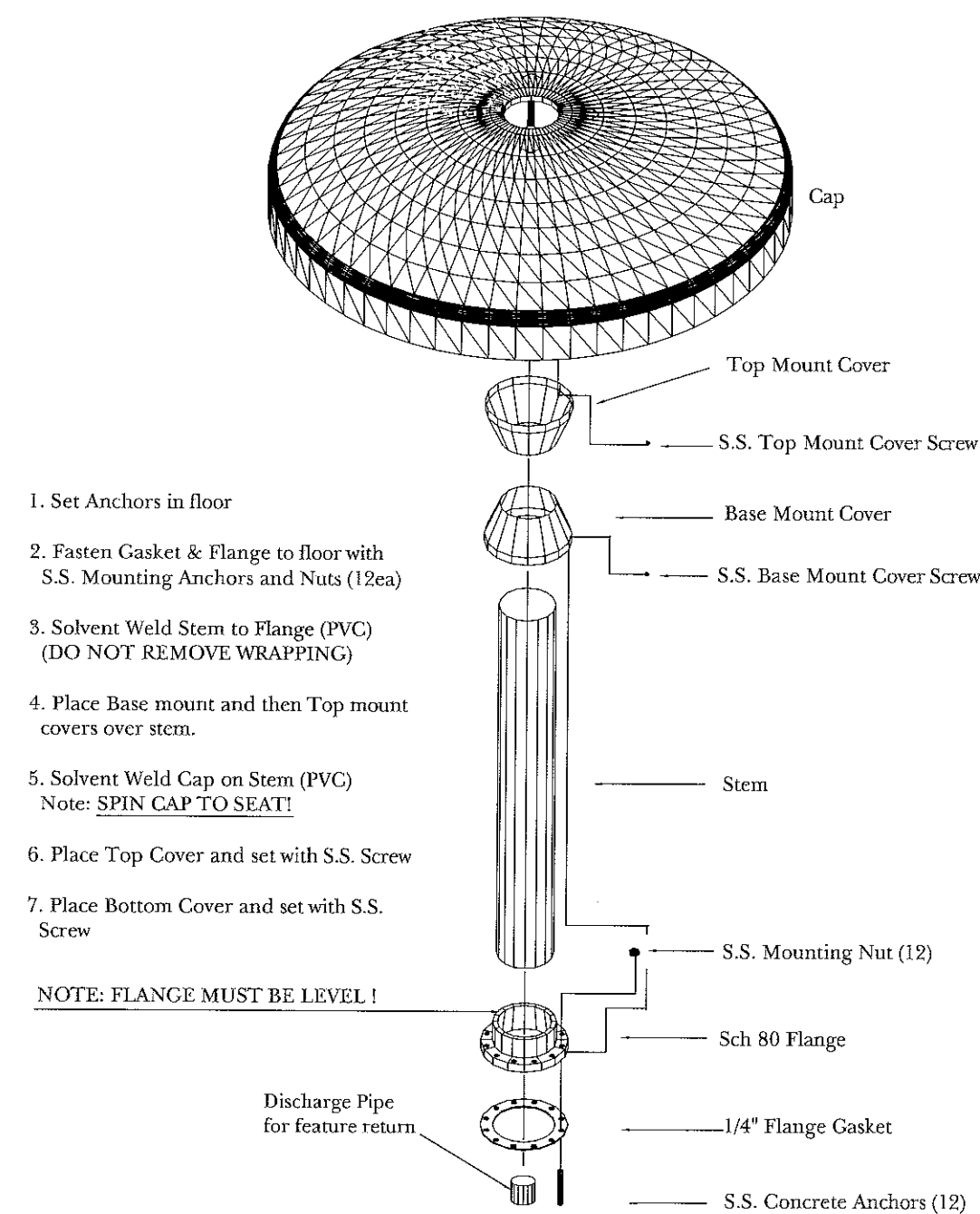
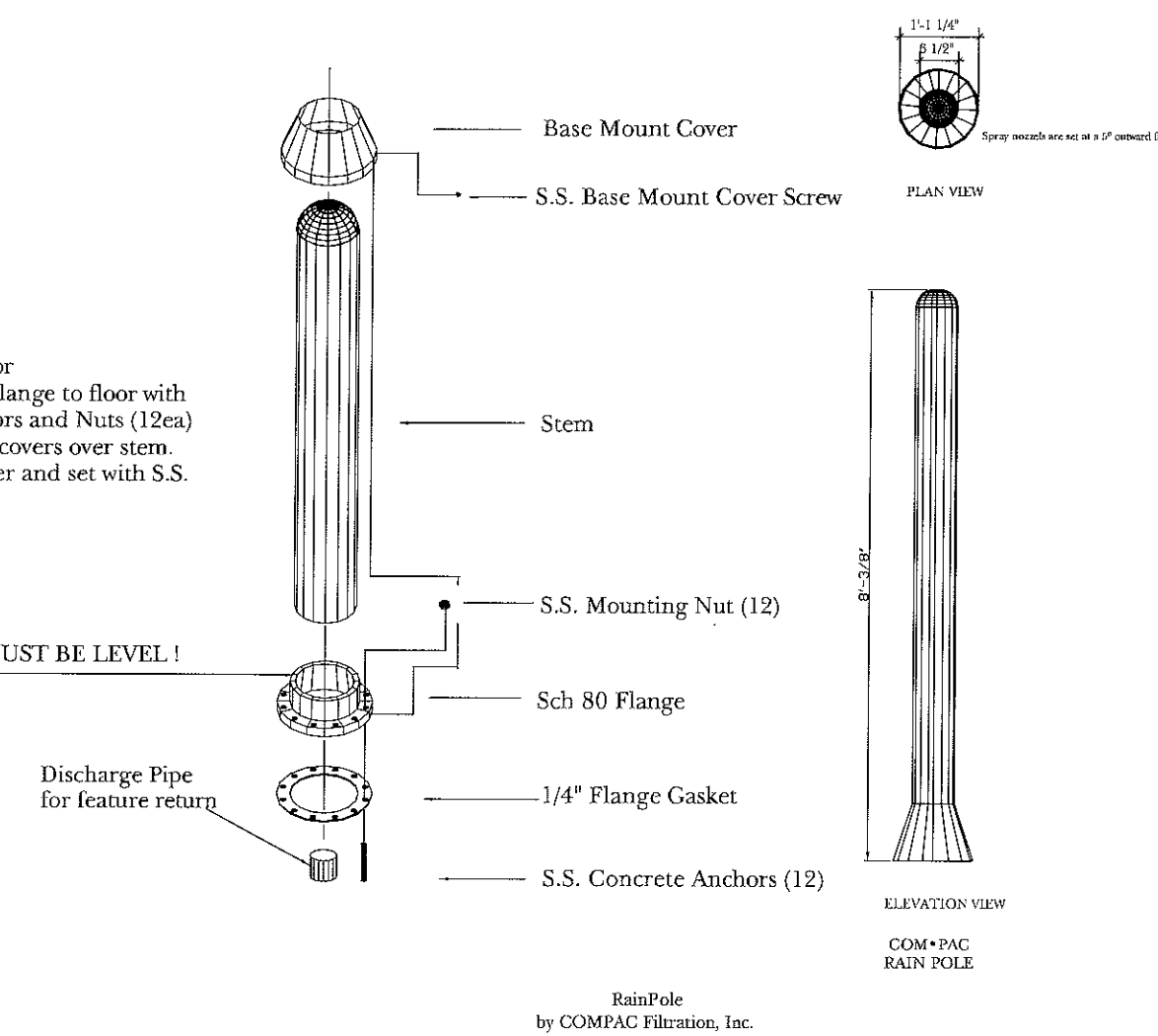
RAIN FALL  
by COM-PAC Filtration, Inc.



RAIN FALL  
by COM-PAC Filtration, Inc.

1. Set Anchors in floor
2. Fasten Gasket & Flange to floor with S.S. Mounting Anchors and Nuts (12ea)
3. Place Base mount covers over stem
4. Place Bottom Cover and set with S.S. Screw

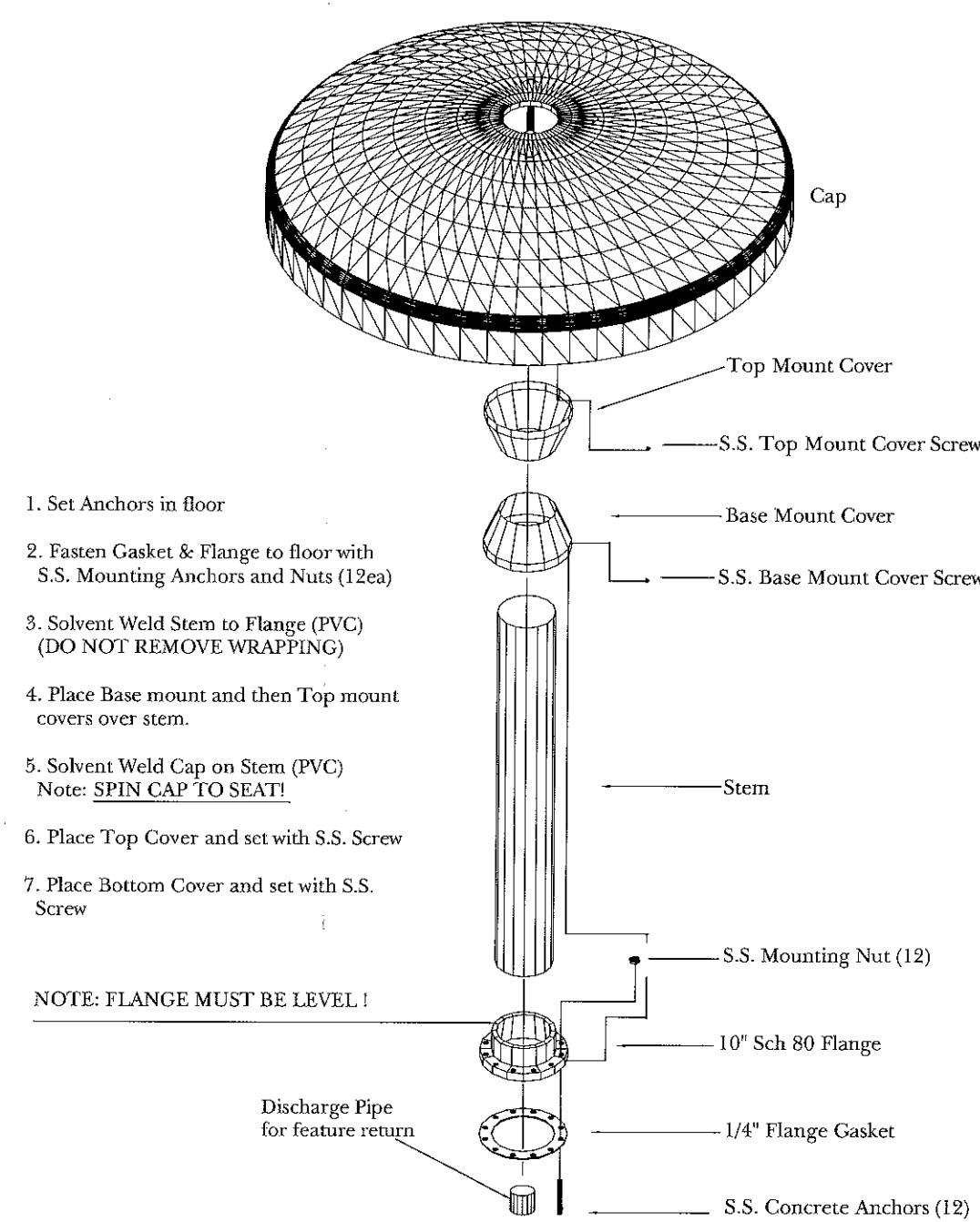
NOTE: FLANGE MUST BE LEVEL!



1. Set Anchors in floor
2. Fasten Gasket & Flange to floor with S.S. Mounting Anchors and Nuts (12ea)
3. Solvent Weld Stem to Flange (PVC) (DO NOT REMOVE WRAPPING)
4. Place Base mount and then Top mount covers over stem.
5. Solvent Weld Cap on Stem (PVC) Note: **SPIN CAP TO SEAT!**
6. Place Top Cover and set with S.S. Screw
7. Place Bottom Cover and set with S.S. Screw

NOTE: FLANGE MUST BE LEVEL!

RAIN FALL  
by COM-PAC Filtration, Inc.

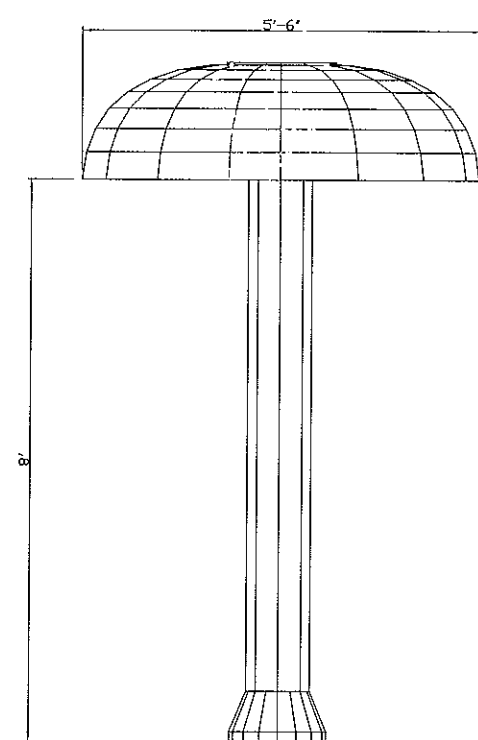


1. Set Anchors in floor
2. Fasten Gasket & Flange to floor with S.S. Mounting Anchors and Nuts (12ea)
3. Solvent Weld Stem to Flange (PVC) (DO NOT REMOVE WRAPPING)
4. Place Base mount and then Top mount covers over stem.
5. Solvent Weld Cap on Stem (PVC) Note: **SPIN CAP TO SEAT!**
6. Place Top Cover and set with S.S. Screw
7. Place Bottom Cover and set with S.S. Screw

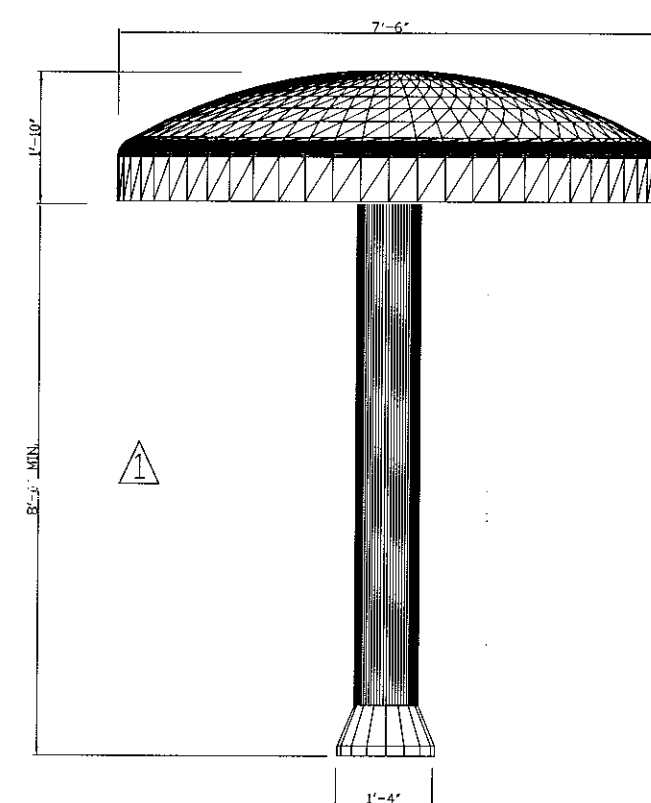
NOTE: FLANGE MUST BE LEVEL!

RAIN FALL  
by COM-PAC Filtration, Inc.

COM PAC FILTRATION, INC.  
p.o. box 40071  
Jacksonville, FL 32203-0071  
PH:(904)356-4003 FAX:(800)711-2301



Rain Fall 5.5  
by COM-PAC Filtration, Inc.



Rain Fall 7.5  
by COM-PAC Filtration, Inc.

NOTE:  
PRE-FABRICATED, PRE-ENGINEERED WATER ACTIVITY  
PLAY EQUIPMENT SHALL SATISFY ALL REQUIREMENTS  
OF THE STATE OF FLORIDA DEPARTMENT OF HEALTH,  
RELATED STATE CODES AND THE FLORIDA BUILDING CODE.

NOTE:  
DRAWING PROVIDED FOR PRODUCT INFORMATION ONLY.

**SEAWOOD BUILDERS**  
INC.

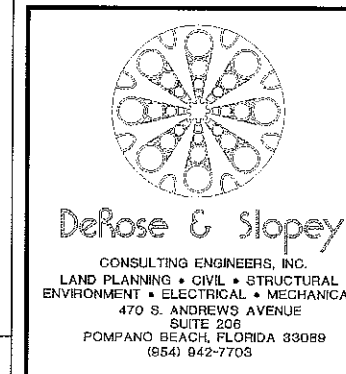
565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

**SCHARF & ASSOCIATES**  
INCORPORATED  
ARCHITECTS • PLANNERS

3407 S.W. 9th Avenue  
Suite 200  
Ft. Lauderdale, Florida 33309  
954-566-2700  
44-C001427  
PROJECT NO. 2210

LAWRENCE DeROSE, P.E.  
LICENSED ENGINEER NO. 20169  
STATE OF FLORIDA

BY:  
DATE:



"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL INC.

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

REVISIONS:  
A PER HES 3/24/05  
A PER OWNER 5/11/05

DATE: 10/20/03  
DRAWN BY: JEL / LJM  
CHECKED BY: TKM  
CAD FILE: B345A-CL-02DET

PROJECT #P15245A  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
ACTIVITY FEATURE DETAILS-PHASE II  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

SHEET NO.

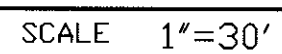
C-11

OF 12  
DRAWING FILE NO. 4-126-25  
21-0085  
Exhibit 1









"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL, INC.

SHEET NO.


**C-14**

CAM 21-0085  
Exhibit 1  
Page 152 of 221

OF

DATE:	09/30/03	REVISIONS:	D/B CONTRACT 9/10/03
DRAWN BY:	JRL / LJM.C.		DRC CONTRACTS 9/15/03
CHECKED BY:	TKM.C.		D/B 100% C.D. 9/30/03
CAD FILE:			10/24/03
			D/B 100% C.D. 12/03/03
			PER HUBB. PERMIT 12/03/03
			PER CONTRACTOR 9/16/04

SWIMMING POOL SILE PLAN



**DeRose & Slopey**  
CONSULTING ENGINEERS, INC.  
LAND PLANNING • CIVIL • STRUCTURAL  
ENVIRONMENT • ELECTRICAL • MECHANICAL  
470 S. ANDERSON AVENUE  
SUITE 200  
POMPANO BEACH, FLORIDA 33069  
(954) 942-7703

"AS BUILT SET" 11/10/05  
POOL PEOPLE COMMERCIAL INC.

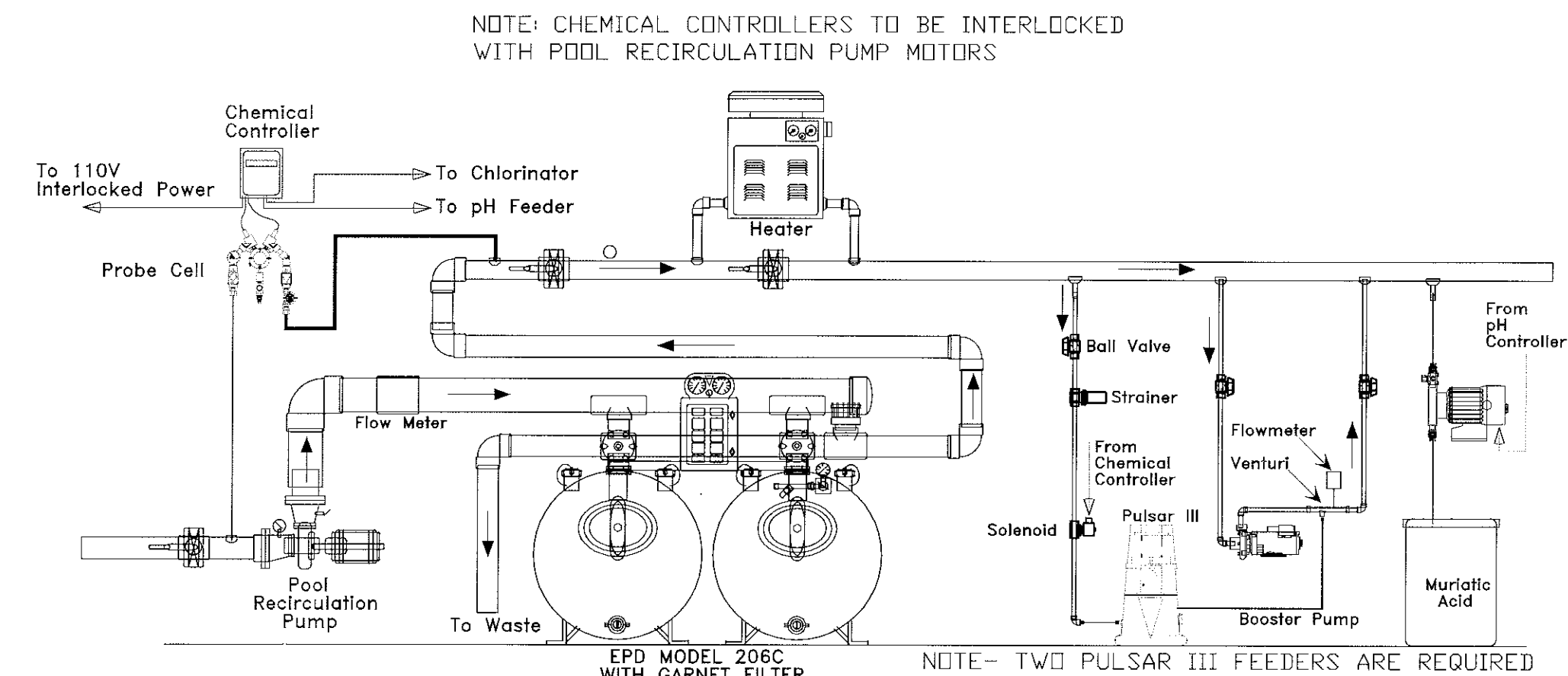
19300 SW 2/ AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

SHEET NO.

**C-15**

OF 21  
DRAWING FILE NO.





## SCALE: N.T.S.

THE FEEDER IS CAPABLE OF FEEDING A DOSAGE OF 6 PPM TO THE MINIMUM REQUIRED TURNOVER RATE:

COMPETITION POOL: 247,682.5 GAL. x 4 x 6 PPM x 8.33 LBS./GAL.  
DIVIDED BY 1,000,000 = 49.52 LBS./DAY

PULSAR III CHLORINE OUTPUT = 120 LBS./DAY

## ACCESSORIES

1. THE CONTRACTOR SHALL SUPPLY A VACUUM SYSTEM COMPLETE WITH 105 S.F. STAINLESS STEEL CARTRIDGE FILTER, 36" VACUUM HEAD, 50 FEET OF FLEX HOSE, 1 HP ELECTRIC DRIVEN PUMP MOTOR.  
ALL SKID MOUNTED
2. THE CONTRACTOR SHALL PROVIDE TWO SHEPARD'S HOOKS WITH ONE PIECE POLE EQUAL TO QUALITY MODEL #RH1038. THE POLE SHALL BE A MINIMUM OF 16 FEET IN LENGTH.
3. THE CONTRACTOR SHALL PROVIDE TWO 20" DIAMETER LIFE SAVING RING POLE TO QUALITY MODEL 2300S.

## PHASE II OZONE GENERATOR NOTES

1. OZONE GENERATOR SHALL BE AS MANUFACTURED BY VANTAGE MODEL V-75C (OR ENGINEER APPROVED EQUAL) AND AS SUPPLIED BY COMMERCIAL ENERGY SPECIALISTS, PHONE 1-800-940-1557 (OR ENGINEER APPROVED EQUAL)---PHASE II
2. OZONE GENERATOR TO HAVE A CAPACITY OF 2.8 GRAMS PER HOUR---PHASE II
3. OZONE GENERATOR SHALL BE MANUFACTURED BY VANTAGE MODEL V-75C (OR ENGINEER APPROVED EQUAL) AND SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE AND THE MANUFACTURER SHALL PROVIDE A CERTIFICATE OF CONFORMANCE---PHASE II
4. THE PROCESS EQUIPMENT SHALL CONTAIN AN EFFECTIVE MEANS TO ALERT THE USER WHEN ANY COMPONENT OF THE SYSTEM IS MALFUNCTIONING. THE MEANS SHALL BE A SILENT ALARM BELL OR BELL WITH A SILENT STOPPING OF THE PRODUCTION OF OZONE, VENTING THE ROOM, AND SOUNDING THE ALARM WHEN OZONE IS DETECTED.
5. OZONE GENERATING EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE NSF STANDARD # 50-1992-1993
6. THE MINIMUM OZONE CONTACT TIME SHALL BE 15 MINUTES AND THE MINIMUM OZONE CONCENTRATION SHALL BE 0.1 MILIGRAMS PER LITER. THE OZONE CONTACT TIME IS INCLUDED WITH THE GENERATOR THAN THE CONCENTRATION OF OZONE AFTER REMOVAL SHALL COMPLY WITH THE REQUIREMENTS ABOVE---PHASE II
7. OZONE GENERATING EQUIPMENT SHALL COME EQUIPPED WITH A CHECK VALVE BETWEEN THE GENERATOR AND THE INJECTION POINT---PHASE II
8. OZONE GENERATING EQUIPMENT SHALL COME EQUIPPED WITH AN AIR FLOW METER AND A VALVE TO CONTRIBUTE THE FLOW---PHASE II
9. OZONE GENERATING EQUIPMENT SHALL BE FURNISHED WITH DRAWINGS AND PARTS LISTS FOR EASY IDENTIFICATION OF REPLACEMENT PARTS AND SHALL INCLUDE THE MODEL NUMBER OF THE UNIT, INSTRUCTIONS FOR PROPER SIZE SELECTION AND INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS, COPY OF MANUFACTURERS WARRANTY, AND ANY OTHER APPLICABLE SAFETY INFORMATION---PHASE II
10. FORCED VENTILATION SHALL BE INSTALLED AT THE EQUIPMENT ROOM FLOOR IN FOUR LOCATIONS---PHASE I

## EQUIPMENT ROOM NOTES

1. THE EQUIPMENT ROOM FLOOR SHALL BE CONSTRUCTED OF CONCRETE WITH A SMOOTH SLIP RESISTANT FINISH AND UNIFORMLY SLOPED TO PREVENT STANDING WATER.
2. THE EQUIPMENT ROOM SHALL BE PROVIDED WITH A FORCED DRAFT, OR ADEQUATE CROSS VENTILATION, AND POSITIVE FLOOR DRAINAGE (SEE MECHANICAL DRAWINGS).
3. THE EQUIPMENT ROOM IS EQUIPPED WITH THREE (3) HOSE BIBS WITH VACUUM BREAKERS.
4. THE EQUIPMENT ROOM SHALL BE PROVIDED WITH A FORCED DRAFT, WITH A MINIMUM CLEAR HEIGHT OF 10 FEET.
5. THE EQUIPMENT ROOM HAS LIGHTING THAT PROVIDES A MINIMUM 30" CANDLES OF ILLUMINATION AT FLOOR LEVEL (SEE ELECTRICAL DRAWINGS).
6. ALL CHEMICAL USED FOR POOL FILTRATION SHALL BE STORED UNDER COVER IN AN AREA SEPARATE FROM THE EQUIPMENT ROOM. STORAGE IS PROVIDED FOR UNARMED AND ARMED POOL CHEMICALS.
7. EQUIPMENT ROOMS FOR OZONE GENERATORS SHALL HAVE FORCED DRAFT VENTILATION WITH FAN CONTROL SWITCH LOCATED OUTSIDE THE EQUIPMENT ROOM DOOR.
8. THE EXHAUST FAN INLET SHALL BE INSTALLED AT FLOOR LEVEL.

## CHLORINE NOTES

1. CHLORINE FEED SYSTEM SHALL BE PULSAR #1 100% COMPLETE OPERATING SYSTEM AS SUPPLIED BY OJIN CORPORATION (OR WHO APPROVED EQUIV). THE PULSAR UNIT SHALL BE CAPABLE OF PRODUCING 120 LBS. OF CHLORINE PER DAY.
2. THE FEEDER FOR THE CHLORINE SHALL HAVE AN ADJUSTABLE FEED RATE FROM ZERO TO FULL RANGE AND MEETS THE REQUIREMENTS OF NSF 50-1996.
3. THE FEEDER SHALL BE CAPABLE OF FEEDING A DOSAGE OF 6 PPM TO THE MINIMUM REQUIRED TURNOVER FLOW RATE.
4. THE FEEDER SHALL BE ELECTRICALLY OPERATED AND SHALL INTERLOCK WITH THE POOL RECIRCULATION PUMP.
5. THE FEEDER SHALL BE CONTROLLED BY THE STRATCOIL SYSTEM 6 CSA CONTROLLER.
6. ALL EQUIPMENT IS AVAILABLE FROM COMMERCIAL ENERGY SPECIALISTS (CES), 1-800-940-1557, OR APPROVED EQUAL.
7. TWO PULSAR UNITS ARE REQUIRED.

## CHEMICAL CONTROLLER NOTES

1. CHEMICAL CONTROLLER SHALL BE STRANTROL SYSTEM 5 CDS CONTROLLER AS SUPPLIED BY CES, OR APPROVED EQUAL.
2. CHLORINE FEED SYSTEM SHALL BE PULSAR III 100K COMPLETE OPERATING SYSTEM AS SUPPLIED BY DUIN CORPORATION (OR HIS APPROVED EQUIV.) TO PUMP UNIT SHALL BE CAPABLE OF OPERATING AT 100% CAPACITY PER DAY.
3. PH FEEDER SHALL BE SC STENNER 85M, WITH AN 85 GPD CAPACITY. PH CONTROL CHEMICAL TO BE MURIATIC ACID CONTAINED IN A JF POLYCYCLOP CONTAINER WITH LID, CLEARLY MARKING THE CONTENTS OF THE CROCK.
4. REMOTE CONTROLLER STRANTROL WSE-RANK W-6950001K (OR EQUAL) LOCATED IN THE EQUIPMENT ROOM.
5. WATER FEED SYSTEM IS TO BE LEAK AND ADMINISTRATION BUILDING HALLWAY ADJACENT TO THE EQUIPMENT ROOM FOR EASY EMPLOYEE MONITORING OF CHEMICAL BALANCE. PHONE JACKS ARE PROVIDED IN THIS SAME LOCATION FOR MODEM CONNECTION TO THE OWNERS SELECTED MAINTENANCE COMPANY.

SCALE  $1/4"=1'$

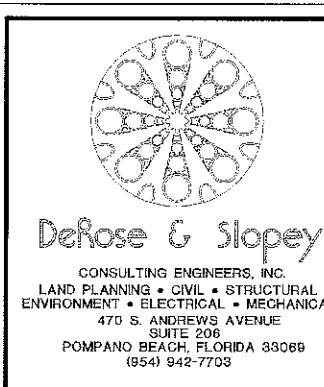
1. POOL PIPING IS SCHEMATIC AND CAN BE ADJUSTED BY POOL CONTRACTOR, SUBMIT LAYOUT TO ENGINEER FOR REVIEW AND APPROVAL.
2. VALVES, FITTINGS, ETC. ARE NOT ALL SHOWN AND SHALL BE INSTALLED PER H.R.S. AND BUILDING CODE REQUIREMENTS.
3. ALL REQUIREMENTS FOR PHASE II POOL PIPING, ELECTRIC, ETC., THAT ARE LOCATED BENEATH SLABS, FOOTINGS OR THROUGH WALLS SHALL BE INSTALLED, PLUGGED OR CAPPED IN PHASE I CONSTRUCTION.

565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

**SCHARF  
& ASSOCIATES**  
INCORPORATED  
ARCHITECTS • PLANNERS  
3407 N.W. 9th Avenue  
Suite 200  
Ft. Lauderdale, Florida 33309  
954-566-2700  
AA-C001427  
PROJECT NO. 2210


LAWRENCE DeROSE, P.E.  
LICENSED ENGINEER NO. 20169

BY: \_\_\_\_\_  
DATE: \_\_\_\_\_



"AS BUILT SET" 11/10/05

POOL PEOPLE COMMERCIAL INC  
 ▲ CHARGED ROUND COIL TANK TO SQUARE  
 RELOCATED HEATER TO FIT ROOM  
 RELOCATED CHEM. STORAGE TANKS



American Institute of Architects  
100 North And

DATE:	09/30/03	REVISIONS:	D/B CONTRACT 8/01/03
DRAWN BY:	JARUL, J L/MJC.		DRC COMMENTS 9/15/03
CHECKED BY:			D/B 100% CD. 9/30/03
THICKED BY:			D/B 100% CD. 10/24/03
CMC.			PER HRS. 12/23/03
			PER-MT 12/09/03
CAD FILE:			PER CONTRACTOR 9/16/04

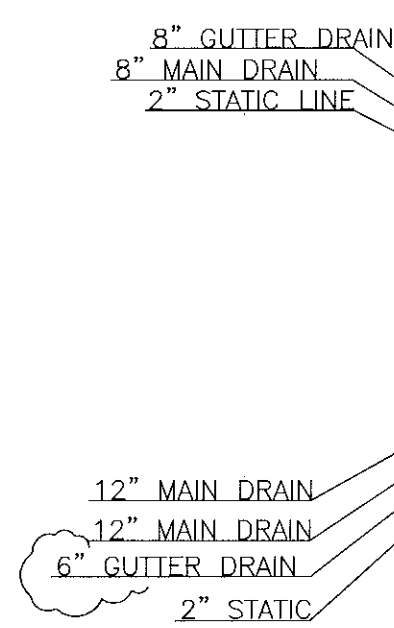
**PROJECT #P15245  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
POOL EQUIPMENT PLAN**  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

SHEET NO.

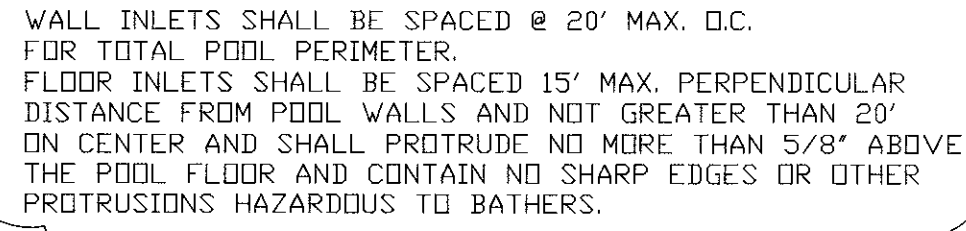
**C-16**

OF **21**

DRAWING FILE NO.



SCALE 1"=10'

SCALE  $1''=10'$ 

N.T.S.

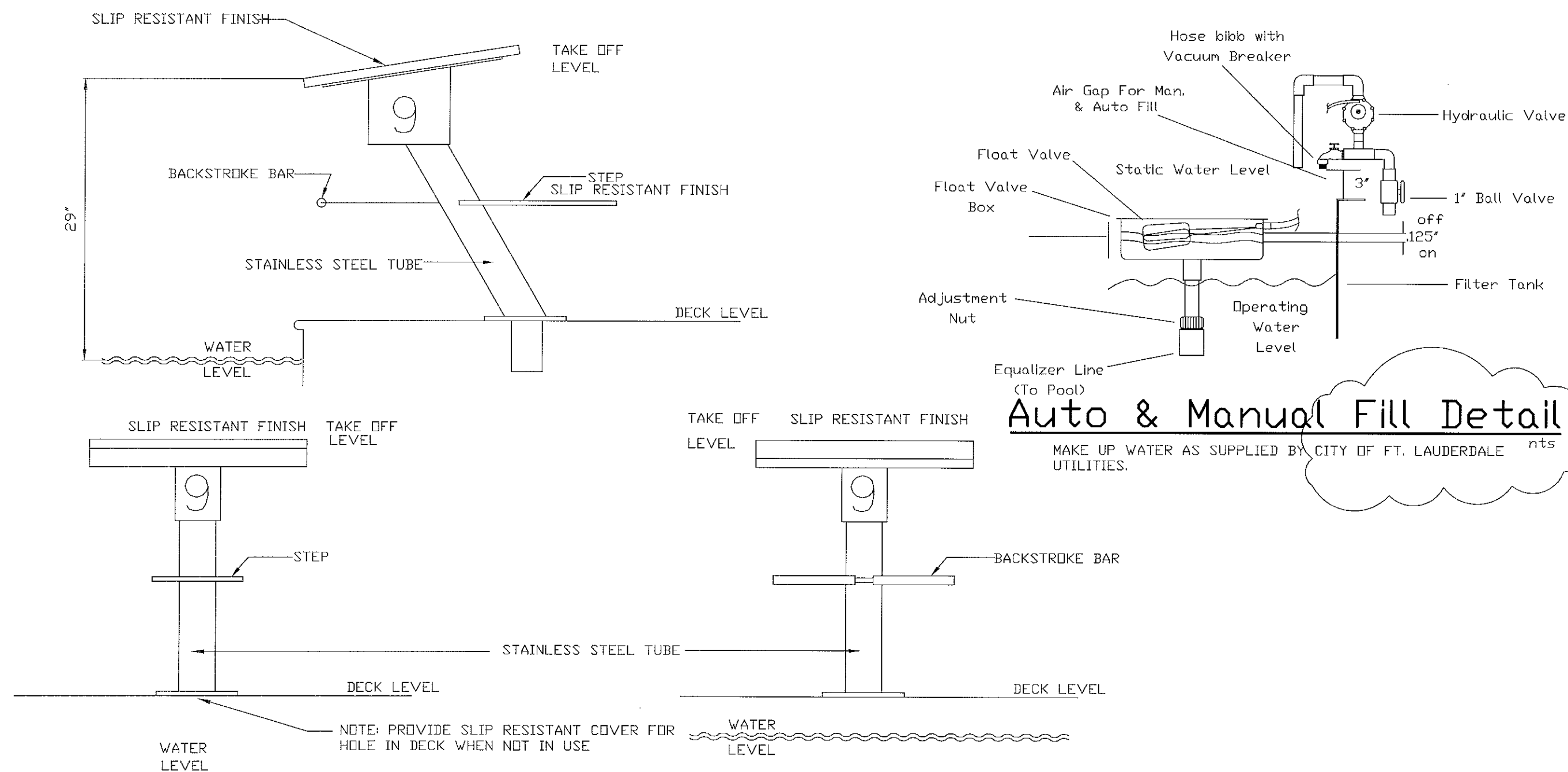
SHEET NO.

**C-17**

OF **21**

DRAWING FILE NO.





### TYPICAL STARTING PLATFORMS

PLATFORMS SHALL BE AS MANUFACTURED BY KDI PARAGON MODEL # 23214 (OR APPROVED EQUAL).

### POOL RULES

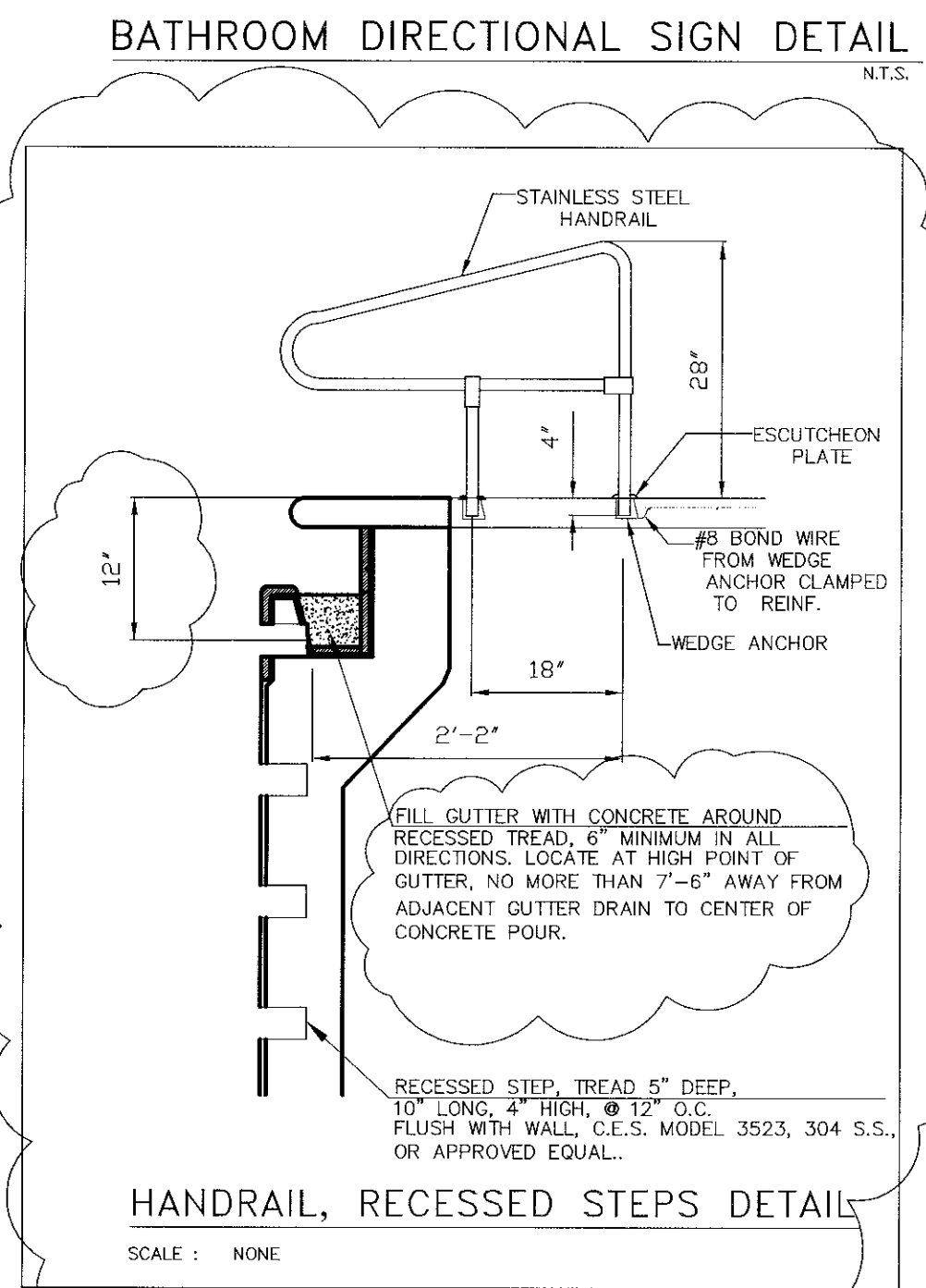
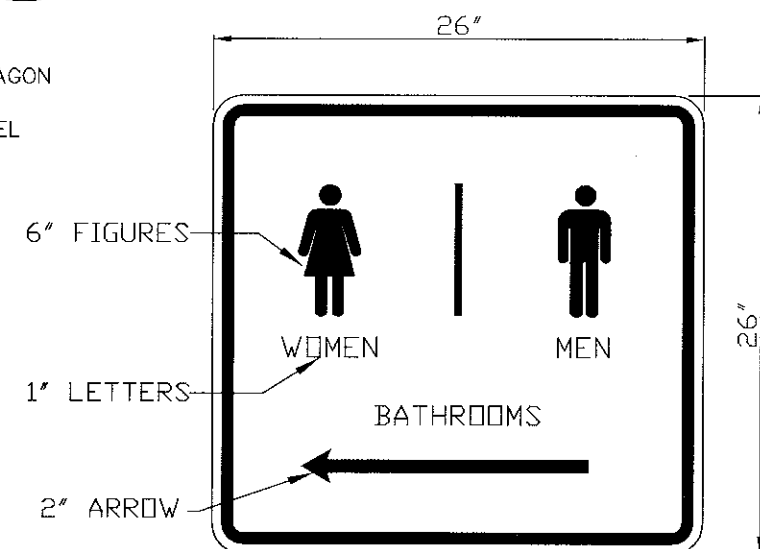
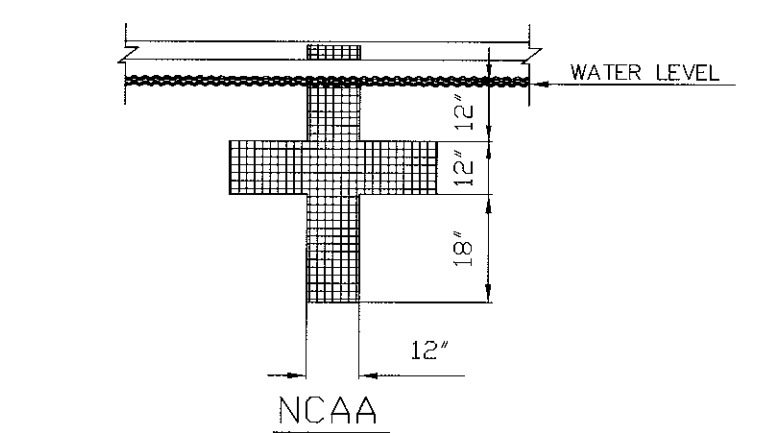
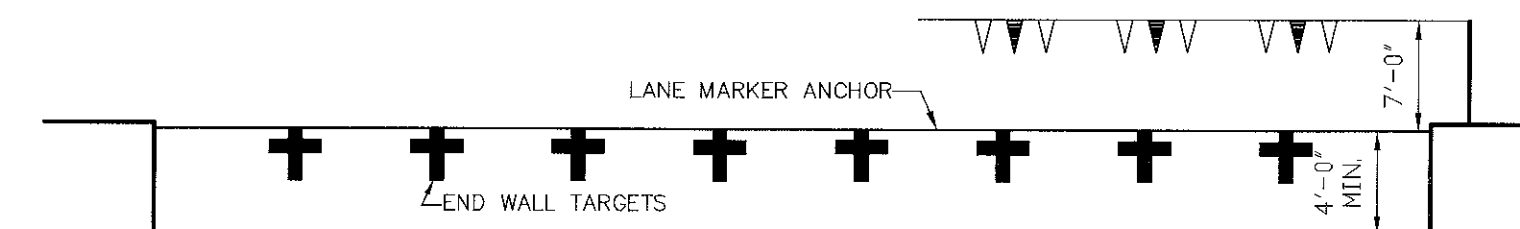
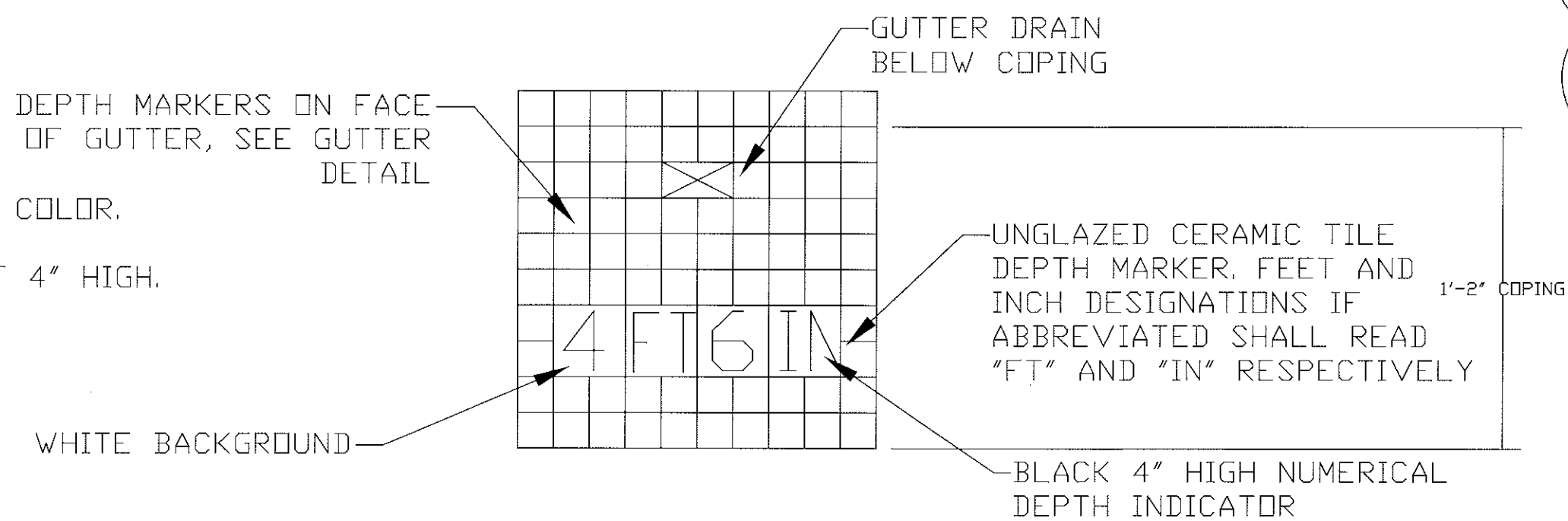
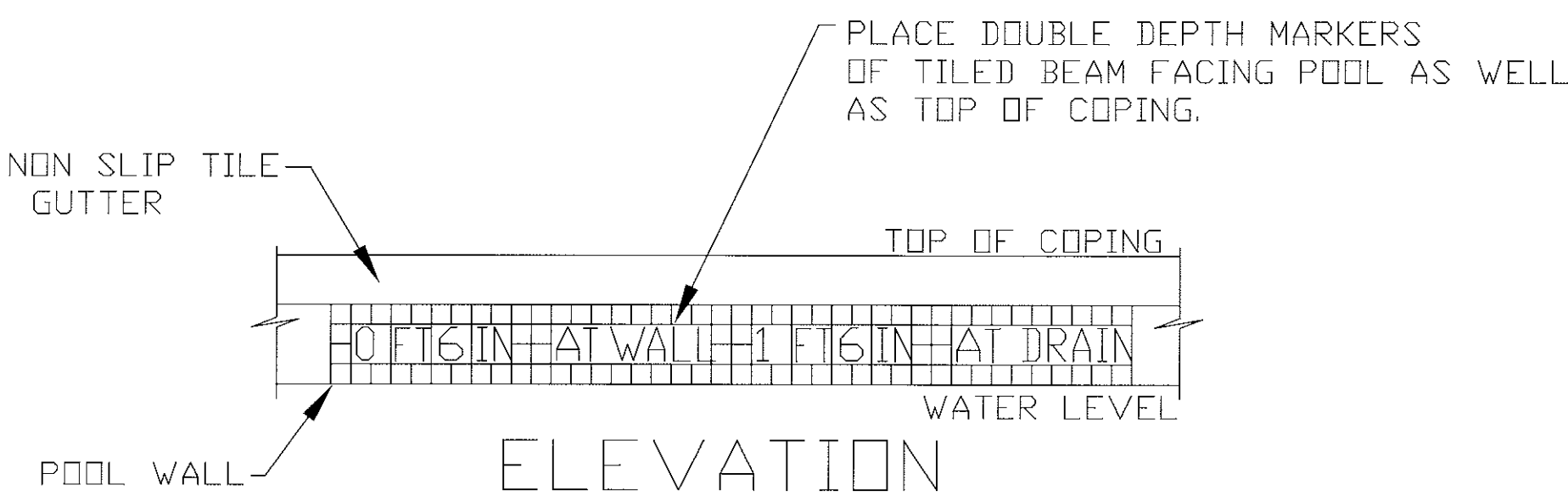
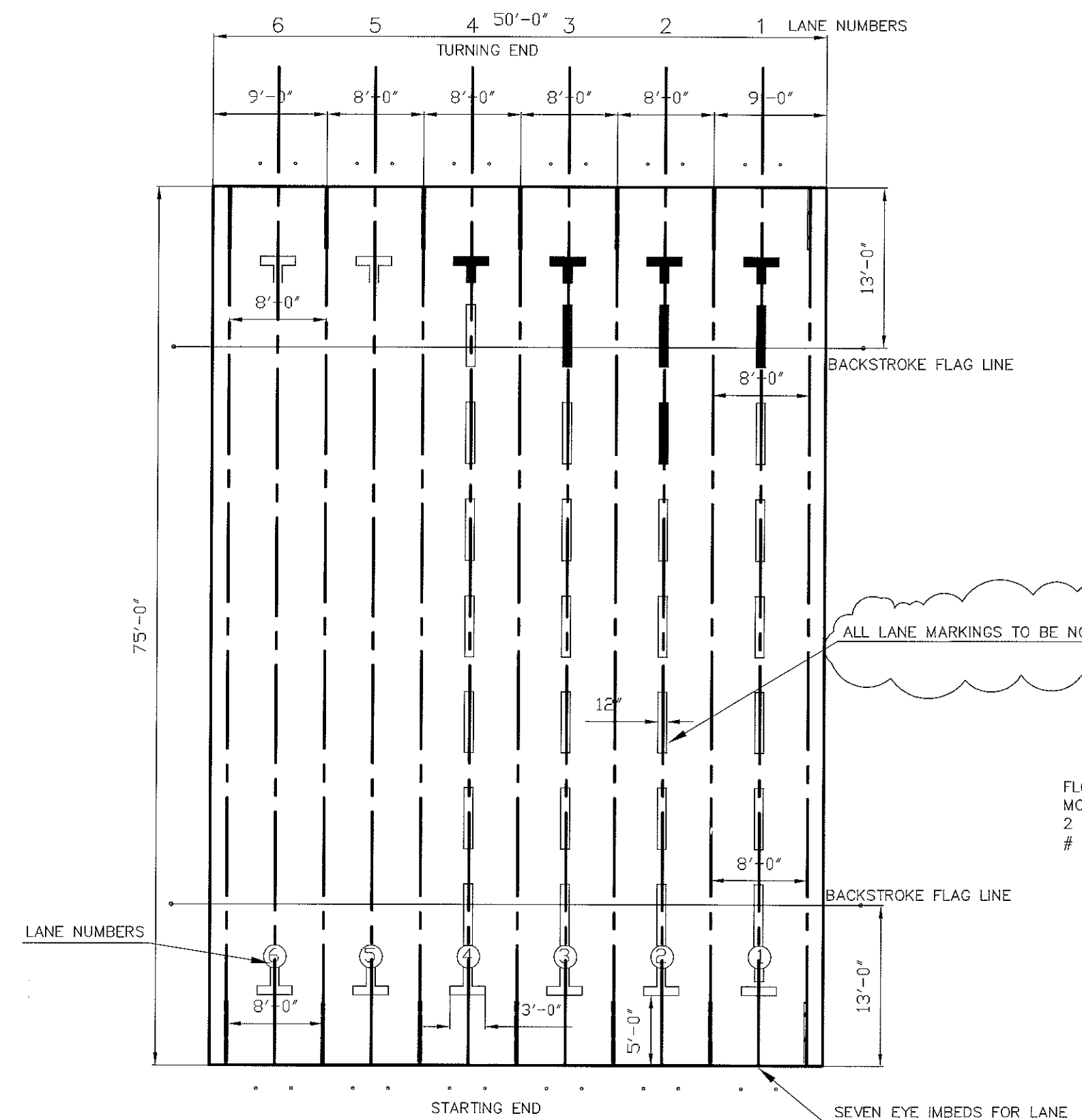
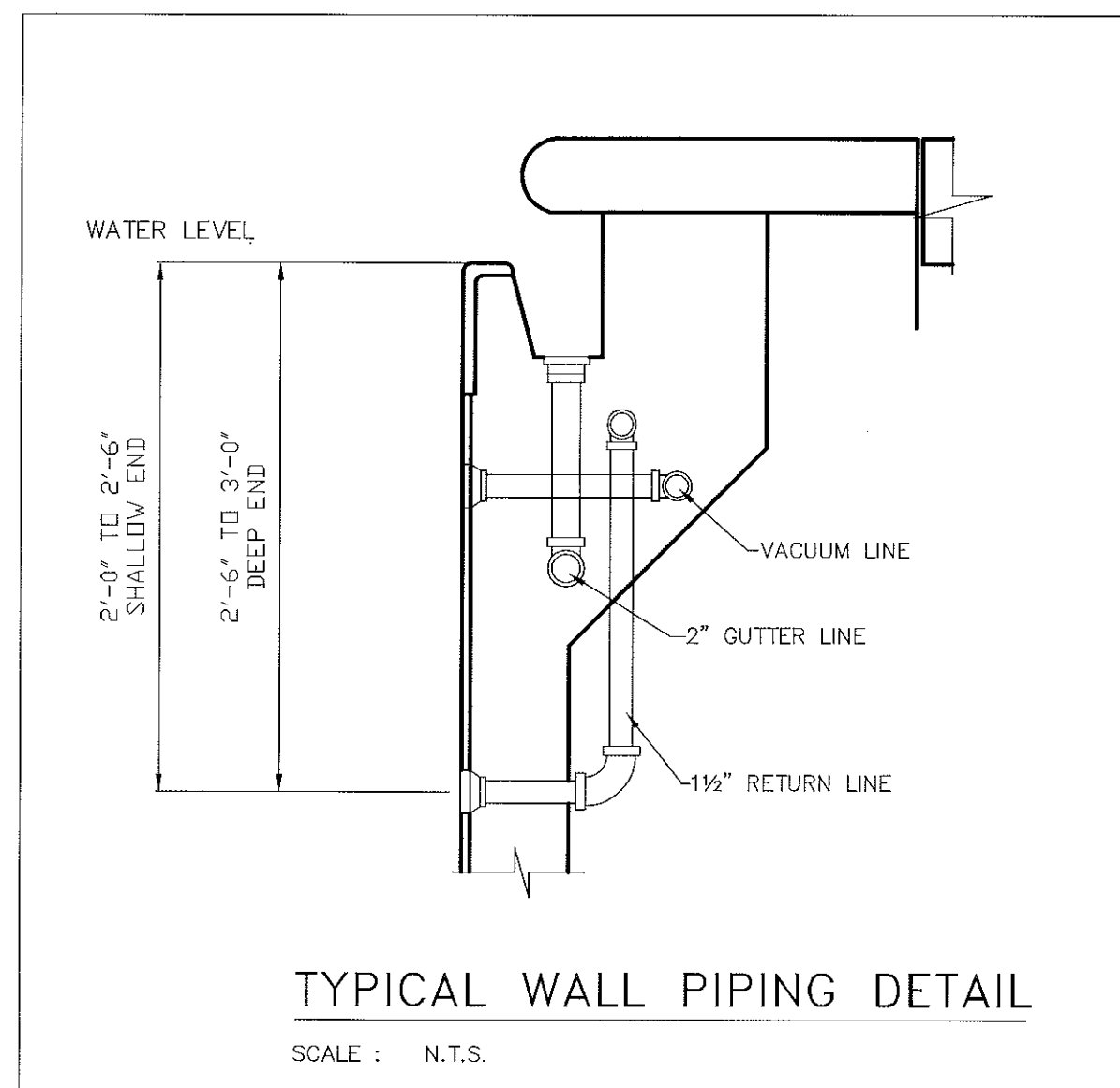
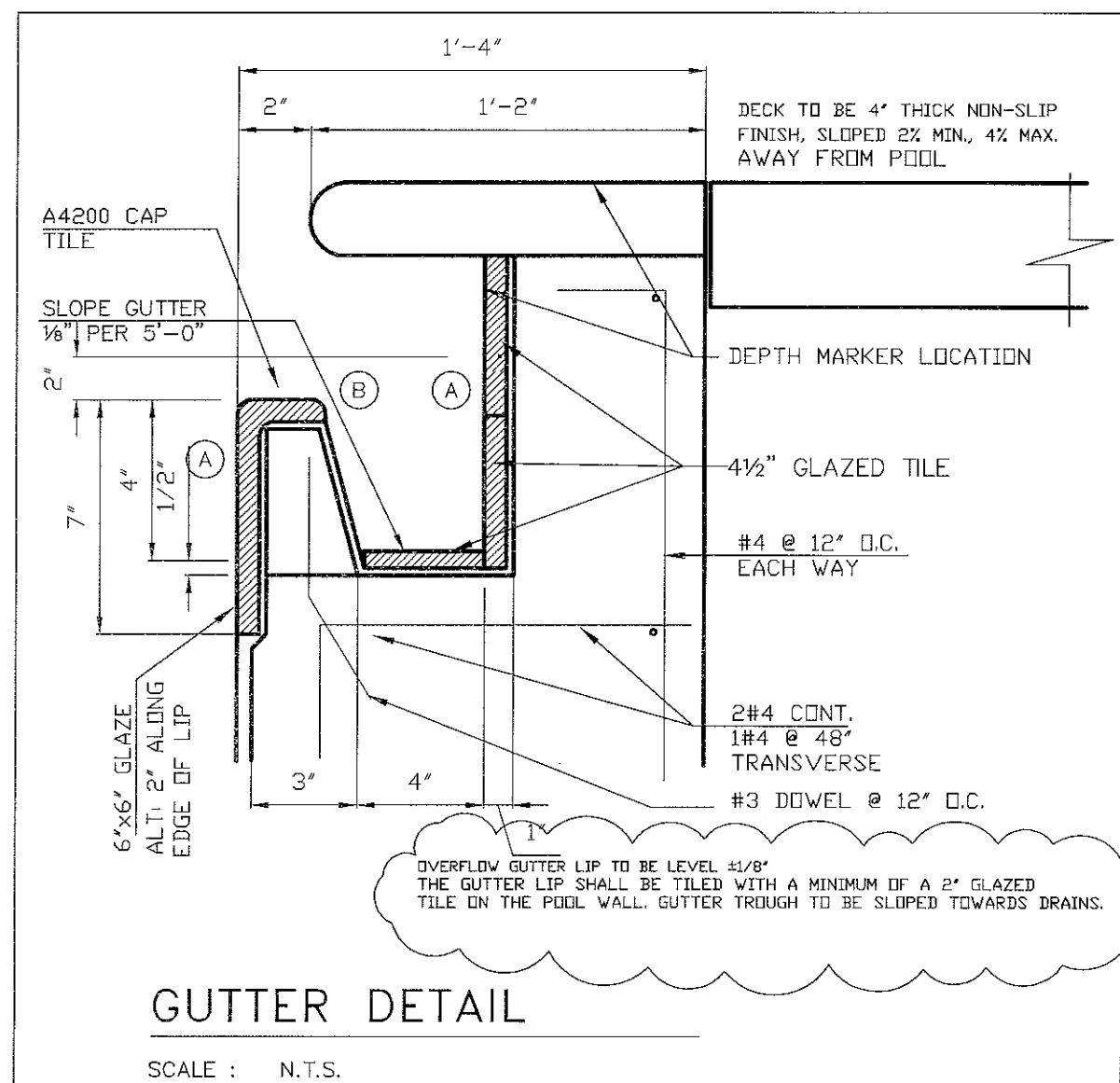
1. NO ANIMALS ALLOWED IN POOL OR ON DECK.
2. NO FOOD, DRINK OR GLASS ALLOWED IN POOL OR ON POOL DECK.
3. SHOWER BEFORE ENTERING POOL.
4. BATHING LOAD IS 85 PERSONS.
5. POOL IS OPEN FROM DAWN TO DUSK.
6. MAXIMUM POOL WATER TEMPERATURE SHALL NOT EXCEED 104 DEGREES (F).
7. NO DIVING

#### GENERAL SPECIFICATIONS

1. POST SIGN WITHIN CONFINES OF POOL AREA.
2. SIGN LETTERING SHALL CONTRAST WITH BACKGROUND COLOR.
3. SIGN LETTERS SHALL BE AT LEAST 1" HIGH.
4. LETTERS SPECIFYING NO DIVING SHALL BE AT LEAST 4" HIGH.

#### POOL RULES SIGN DETAIL

N.T.S.



**SEAWOOD BUILDERS INC.**  
565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL 33441

**SCHARF & ASSOCIATES**  
INCORPORATED  
ARCHITECTS-PLANNERS  
3107 N.W. 91st Avenue  
Suite 200  
Ft. Lauderdale, Florida 33309  
954-566-2700  
FA-001427  
PROJECT NO. 2210

**LAWRENCE DeROSE, P.E.**  
LICENSED ENGINEER NO. 20169  
STATE OF FLORIDA  
BY:  
DATE:

**DeRose & Slopey**  
CONSULTING ENGINEERS, INC.  
LAND PLANNING & CIVIL & STRUCTURAL  
ELECTRICAL & MECHANICAL  
470 S. ANDREWS AVENUE  
SUITE 200  
FORT LAUDERDALE, FLORIDA 33309  
(954) 545-7763

**"AS BUILT SET" 11/10/05**  
**POOL PEOPLE COMMERCIAL INC.**

**CITY OF FORT LAUDERDALE**  
PUBLIC SERVICES DEPARTMENT  
**ARCHITECTURAL DIVISION**  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

**REVISIONS:**

DATE:	D/B CONTRACT	8/10/03
09/30/03	D/B CONTRACT	8/10/03
	D/B 100% C.D.	9/30/03
	D/B 100% C.D.	10/24/03
	D/B 100% C.D.	12/03/03
	PER I.R.S.	12/03/03
	PER I.R.S.	1/06/04
	PER CONTRACTOR	9/16/04

**CAD FILE:** B248-CB-201POOL

**PROJECT #P15245**  
**RIVERLAND PARK COMMUNITY CENTER**  
**FORT LAUDERDALE, FLORIDA**  
**POOL DETAILS**  
950 SW 27 AVENUE, FORT LAUDERDALE, BROWARD COUNTY, FL 33312

**SHEET NO.**  
**C-18**  
**OF**  
**DRAWING FILE NO.** 4-126-25  
**Page 156 of 215**







1. ALL POOL CONCRETE AND/OR SHOTCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 P.S.I.
2. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 P.S.I.
3. NO OVERHEAD ELECTRICAL WIRING SHALL BE PERMITTED WITHIN 10' OF POOL WATER EDGE.
4. ELECTRICAL TRANSFORMER BOXES OR JUNCTION BOXES BETWEEN POOL AND TRANSFORMERS SHALL BE LOCATED NOT LESS THAN 12" ABOVE TOP OF POOL COPING STONE.
5. ELECTRICAL CONTRACTOR OR ELECTRICIAN SHALL PROVIDE WRITTEN CERTIFICATION TO OWNER AND HEALTH DEPARTMENT THAT ALL ELECTRICAL WORK WAS COMPLETED IN COMPLIANCE WITH NATIONAL ELECTRICAL CODE.
6. ALL BUNDING AND GROUNDING SHALL BE IN ACCORDANCE WITH SEC. 680 OF NATIONAL ELECTRIC CODE 1996 (OR LATEST) REVISION.
7. INTERIOR OF POOLS SHALL BE LIGHT PASTEL IN COLOR.
8. ALL POOL OPERATING VALVES SHALL BE ALPHABETICALLY OR NUMERICALLY TAGGED WITH THE APPROPRIATE OPERATING INSTRUCTIONS POSTED IN THE EQUIPMENT ROOM IN A PROTECTIVE COVER.
9. THE PREPARATION OR DISBURSEMENT OF FOOD SHALL NOT BE PERMITTED WITHIN 12'-0" OF POOL'S WATER EDGE. IN ADDITION, ANY FOOD OR DRINK SERVICE SHALL PROVIDE A PHYSICAL BARRIER AT OR BEYOND THE 12'-0" MIN. LIMIT.
10. POOL WASTE SHALL BE DISCHARGED THROUGH AN AIR GAP BEFORE FINAL DISPOSAL.

DEPTH MARKER NOTES:

PERMANENT TILE DEPTH MARKERS, 4" TALL OF A CONTRASTING COLOR SHALL BE PROVIDED AND INDICATED ON THE POOL DEAM DETAILS. MARKERS SHALL BE LOCATED MORE THAN 1/2" OF THE POOL DEAM MEASURED AT THE POOLS WATER EDGE. MARKERS SHALL BE PROVIDED AT THE POOL'S MINIMUM AND MAXIMUM DEPTHS AND AS PER THE PRECEDING REQUIREMENT. ALL DEPTH MARKERS SHALL INDICATE TRUE POOL DEPTH WHEN MEASURED THREE FEET INTO THE POOL MARKER AT DEEP END OF POOL MAY HAVE A TOLERANCE OF  $\pm 3$  INCHES. ALL MARKERS IN DECK TO BE NON-SKID TILE. MARKERS SHALL INCLUDE DESIGNATION OF "FEET" AND/OR "INCHES" OR "FT" AND/OR "IN".

"NO DIVING" MARKERS SHALL BE PROVIDED ON MAXIMUM 25 FOOT INTERVALS, AROUND THE POOL PERIMETER WITHIN 2 FEET OF THE POOL WATER EDGE. THE LETTERING SHALL BE 4" IN HEIGHT AND CONTRAST WITH THE BACKGROUND. THE UNIVERSAL NO DIVING MARKER IS A SATISFACTORY SUBSTITUTE. MARKERS SHALL BE CERAMIC, NON-GLAZED.

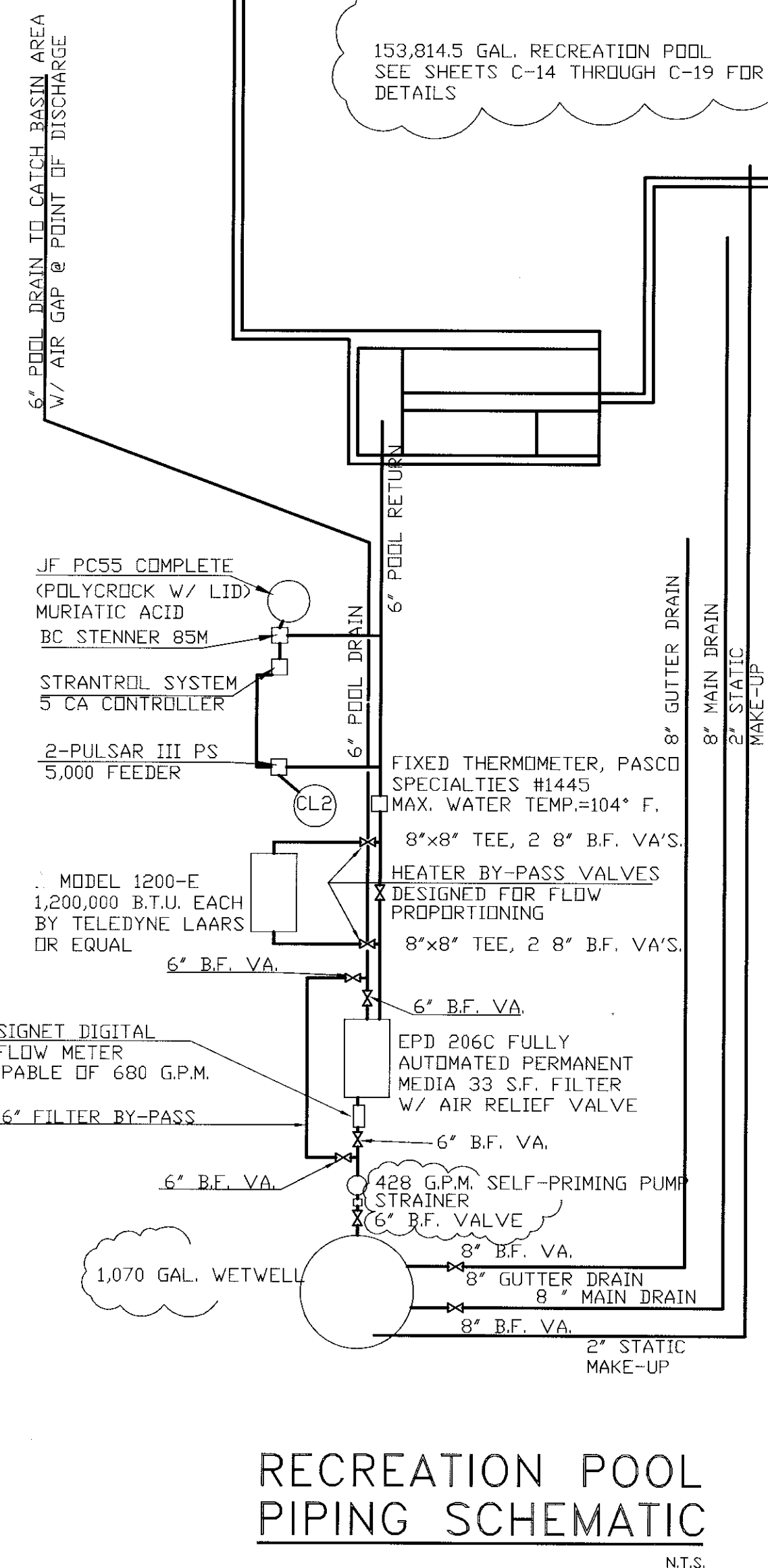
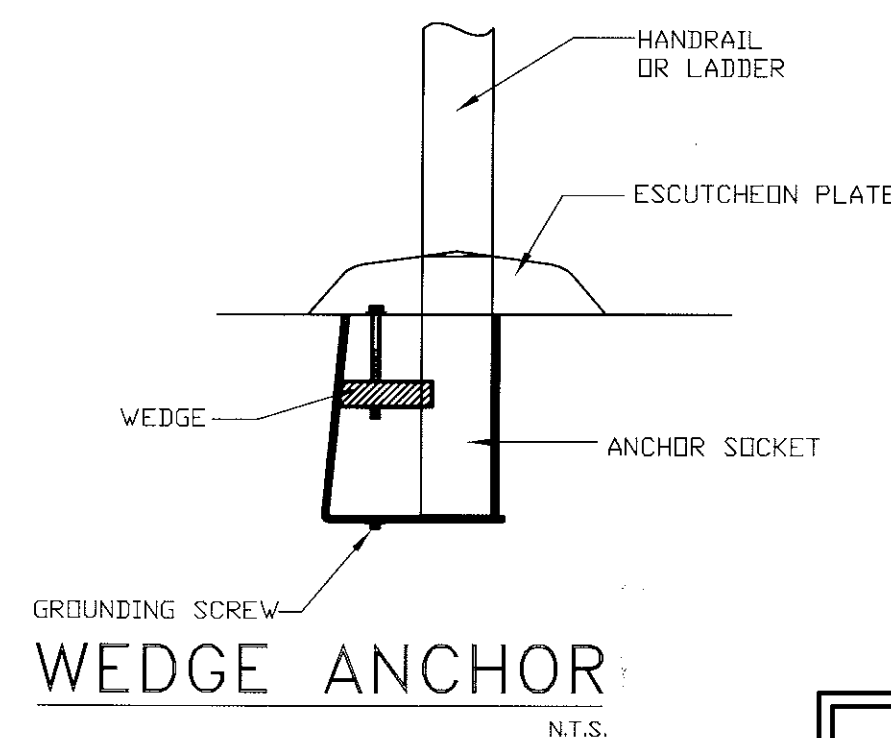
POOL TOILET ROOM NOTES:

1. FLOORS SHALL BE IMPERVIOUS AND SLIP RESISTANT AND SLOPE 2' IN 10'-0" TO FLOOR DRAINS.
2. JUNCTION OF FLOOR AND WALLS SHALL BE COVERED TO FACILITATE CLEANING.

## GENERAL FILTRATION NOTES

1. TOTAL POOL WATER SURFACE AREA = 4,863 S.F.
2. TOTAL GALLONAGE = 153,814.5 GALLONS.
3. POOL TURN OVER RATE SHALL BE 6 HOUR MAXIMUM.
4. ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF CHAPTER 64E-9, FLORIDA DEPARTMENT OF HEALTH.
5. RETURN INLETS SHALL BE DESIGNED FOR MANUAL DIRECTIONAL ADJUSTMENT. INLETS SHALL BE DESIGNED FOR 15 G.P.M. MAXIMUM FLOW, 8 F.P.S. MAXIMUM VELOCITY, AND SHALL BE AS MANUFACTURED BY HAYWARD MODEL #SP1425S, (OR ENGINEER APPROVED EQUAL). INLETS SHALL NOT BE LOCATED MORE THAN 20' APART AND NO MORE THAN 10' FROM EDGE OF POOL.
6. POOL MAIN DRAINS SHALL BE CORROSION RESISTANT HIGH IMPACT PLASTIC GRATING AND FASTENED IN PLACE WITH CORROSION RESISTANT FLUSH MOUNTED LOCKING DEVICES. MAIN DRAINS ARE DESIGNED FOR 15 F.P.S. MAXIMUM VELOCITY AND 428 G.P.M. MINIMUM FLOW. DRAINS SHALL BE FIELD MANUFACTURED (OR ENGINEER APPROVED EQUAL). DRAINS SHALL BE 15" MINIMUM OF 24"x12" AND HAVE A MINIMUM OPEN AREA OF 11.30 SQ. INCHES (4 TIMES THE AREA OF THE RECEIVING DRAIN PIPE, PER S.F. BC 900.25 (A)(2)).
7. GUTTER DRAIN LINE "C" SHALL NOT EXCEED 15'-0" CENTER TO CENTER SPACING MAXIMUM. GUTTERS ARE DESIGNED FOR 14.0 G.P.M. MINIMUM FLOW AND 3 F.P.S. MAXIMUM VELOCITY.
8. MAXIMUM BATHING LOAD SHALL BE BASED ON 420 G.P.M. FLOW  $\times$  1 BATHER PER 5 G.P.M. = 84 BATHERS.

MARK	ITEM	QTY.	DESCRIPTION
1	MAIN DRAIN ASSEMBLY	3	FIELD FABRICATED 1x2" HIGH IMPACT PLASTIC GRATE ASSEMBLY, 1130 SQ. IN. OPEN AREA EACH SECURE W/ TAMPERPROOF SCREWS
2	WALL RETURN FITTINGS	20	HAYWARD SP142SS 1 1/2"x2" FIP FLOW ADJUSTABLE FLOOR RETURN FITTINGS WHITE ABS PLASTIC FINISH MOUNT FLUSH WITH FLOOR
3	FLOOR RETURN FITTINGS	10	HAYWARD SP1419A 1 1/2"x2" FIP FLOW ADJUSTABLE FLOOR RETURN FITTINGS WHITE ABS PLASTIC FINISH MOUNT FLUSH WITH FLOOR
4	GUTTER DRAINS	30	HAYWARD SCUM GUTTER DRAIN FTG AND GRATE, 2 1/2" SKT x 2 1/2" FIP, WHITE ABS PLASTIC MODEL SP-1019
5	EQUALIZER FITTING	1	HAYWARD GRATE END FTG FOR EQUALIZER/MAKE-UP WATER LINE. FTG TO BE INSTALLED 12" BELOW POOL WATER LEVEL, MODEL SP-1019, 2"
6	POOL LIGHTS	10	LOW VOLTAGE CIRCUITS 415 VOLTS MAXIMUM, INDIVIDUALLY GROUNDED 300 WATTS MAXIMUM, 18" BELOW WATER LEVEL
7	TRANSFORMER BOX	1	LOW VOLTAGE (12 V)
8	PROCESS TURBIDIMETER	1	PROCESS TURBIDIMETER WITH POLYMER FEED SYSTEM FOR DRINKING WATER QUALITY, ED 303-1566
9	LADDER	0	RECESSED STEPS PER KDI-PARAGON AQUATICS
10	HANDRAIL	4	CONTINUOUS ALONG ADA RAMP, BOTH WALLS KDI PARAGON CONTINUOUS
11	ANCHOR SOCKET	0	KDI PARAGON 28102
12	ESCUTCHEON PLATE	0	KDI PARAGON 28302
13	LIFE RING	2	LIFE RING, AQUATIC MODEL #23005, 20" DIAMETER PLASTIC RING WITH 440' LONG SAFETY LINE
14	LIFE HOOK	2	SHEPHERD TYPE LIFE HOOK, END ANCHORED TO A 16' ALUMINUM TELESCOPING HANDLE, AQUATIC MODEL # RH038
15	LIFE RING HOLDER	2	AQUATIC MODEL # AH250
16	VACUUM CLEANER	1	PORTABLE TYPE W/105 S.F. STAINLESS STEEL CARTRIDGE FILTER, 36" VACUUM HEAD, 35' OF 2" FLEX HOSE, 1 HP. ELECTRIC DRIVEN PUMP MOTOR ALL SKID MOUNTED.
17	TEST KIT	1	TAYLOR TEST KIT MODEL # 2000-5 DUPLEX CAPABLE OF MEETING ALL CHEMICAL TESTS SPECIFIED BY THE FLORIDA ADMINISTRATIVE CODE IN CHAPTER 100-5.
18	PRESSURE GAUGES	2	INTEGRAL 4" DIAMETER FACE INCLUDED WITH EDP 0-125 PSI
19	FILTER PUMP	1	ITT MARLBW, 15 HP, MODEL KA 45PCISEC, 1750 RPM SELF-PRIMING PUMP, 428 GPM @ 6.0 TDH, TRIM TO MAX. HP. PUMP TO INCLUDE ITT MARLBW CAST IRON IMPELLER, FIBREGLASS STRAINER (6" DIAMETER) WITH S/S BASKET
20	FILTER UNIT	1	EPD 206G (2) TANKS, 6" PIPING, FILTERS ARE HORIZONTAL HI RATE SAND W/ GARNET MEDIA WITH COMPUTER MICROPROCESSOR PANEL, WATER PRESSURE BOOST PUMP TO BE INCLUDED 16.5 SQUARE FEET EACH, 33 SQUARE FEET TOTAL
21	FLOWMETER	1	SIGMET ELECTRONIC FLOWMETER INTERFACE WITH 24 VOLT MICROPROCESSOR PANEL LOCATED ON EPD 1500 GPM DIGITAL NUMERICAL READOUT
22	GL2 FEEDER	2	PULSAR II PS 5600 FEEDER COMPLETE WITH 3/4 HP. BOOSTER PUMP BM 71528, W/ 120 PPD CHLORINE CAPACITY
23	PH FEEDER	1	BC STENNER 85M 85 GPD CHEMICAL FEEDER
24	CHEMICAL CONTROLLER	1	STRANTRONL SYSTEM S WITH 1/4" I/O PORT & REMOTE ANNUNCIATOR INSTALLED IN POOL MANAGERS OFFICE. PROVIDE AND INSTALL ALL CABLE, CONDUIT, FITTINGS, AND HARDWARE FOR INSTALLATION PER MFRS. DETAILS. FLOW SWITCH AND SAFETY FLOW SWITCH.
25	CHEMICAL STORAGE CONTAINER	1	100 GALLON POLY-CROCK WITH WITH LID (MURIATIC ACID)
26	COLLECTOR TANK	6	PRECAST CONC. 6' DIA. W/ 1070 GAL. CAPACITY TANK INCLUDES OVERFLOW PIPE, MAKE UP WATER FLOATS OVERFLOW PIPE AND SAFETY RAILS
27	HAIR AND LINT STRAINER	1	KENLOCK FIBREGLASS STRAINER W/ STAINLESS STEEL BASKET, MODEL 1108, 8' DIAMETER



## RECREATION POOL PIPING SCHEMATIC

N.T.S

**SEAWOOD BUILDERS**  
**INC.**


565 EAST HILLSBORO BOULEVARD  
DEERFIELD BEACH, FL. 33441

**SCHARF  
& ASSOCIATES**  
INCORPORATED  
ARCHITECTS • PLANNERS  
3407 N.W. 9th Avenue  
Suite 200  
Ft. Lauderdale, Florida 33309  
954-866-2700  
AA-C001427  
PROJECT NO. 2210

**LAWRENCE DeROSE, P.E.**  
**LICENSED ENGINEER NO. 20169**  
**STATE OF FLORIDA**

BY: \_\_\_\_\_

DATE: \_\_\_\_\_



**DeRose & Slopey**  
CONSULTING ENGINEERS, INC.  
LAND PLANNING • CIVIL • STRUCTURAL  
ENVIRONMENT • ELECTRICAL • MECHANICAL  
470 S. ANDREWS AVENUE  
SUITE 200  
POMPANO BEACH, FLORIDA 33069  
(954) 942-7703

AS BUILT SET 11/12/05  
POOL PEOPLE COMMERCIAL INC.

PROJECT #P15245  
RIVERLAND PARK COMMUNITY CENTER  
FORT LAUDERDALE, FLORIDA  
POOL DETAILS AND NOTES

SHEET NO.

C-20

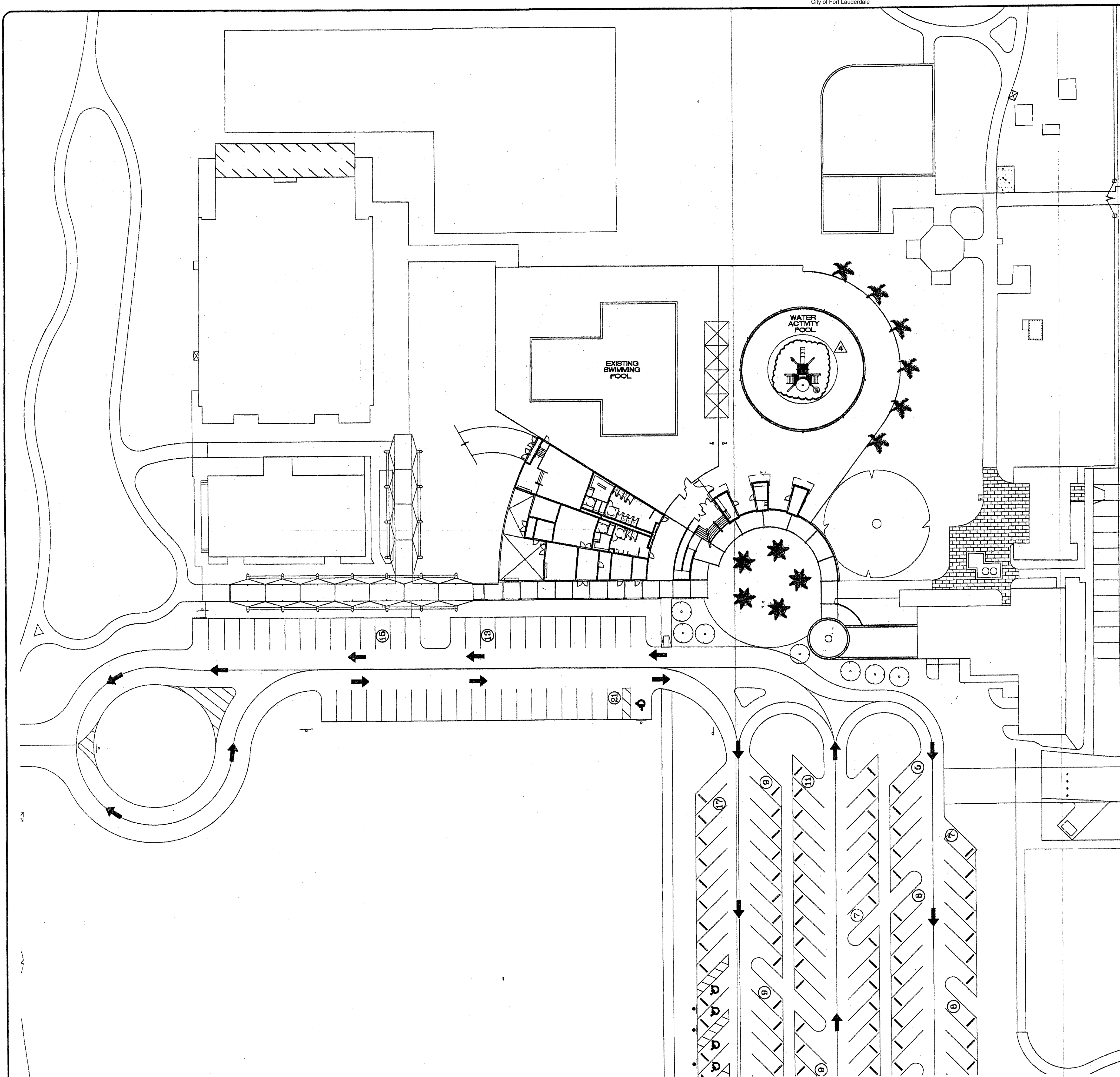
OF 21

DRAWING FILE NO.









WATER ACTIVITY POOL LOCATION PLAN  
SCALE: 1" = 30'-0"

### RESTROOM FACILITIES REQUIREMENTS

- 1- THE FLOORS SHALL BE CONSTRUCTED OF AN IMPERVIOUS MATERIAL AND SHALL HAVE A NON SLIP SURFACE FINISH.
- 2- THE FLOORS SHALL SLOPE TO A FLOOR DRAIN AT LEAST 3 INCHES IN DIAMETER.
- 3- FIXTURE SETS SHALL INCLUDE THE FOLLOWING:  
MEN: 3 WATER CLOSETS, 3 URINALS, 3 LAVATORIES, AND ONE 3/4 INCH HOSE BIBB WITH VACUUM BREAKER.  
WOMEN: 9 WATER CLOSETS, 3 LAVATORIES AND ONE 3/4 INCH HOSE BIBB WITH VACUUM BREAKER.
- 4- EACH SEX SHALL BE LABELED ON THEIR RESPECTIVE DOORS.
- 5- DIRECT ACCESS FROM THE POOL OR THE SPA DECK TO THE RESTROOM FACILITIES IS REQUIRED.
- 6- WALLS IN RESTROOM FACILITIES SHALL BE COVED.

### DEPARTMENT OF HEALTH NOTES

- 1- STORAGE OF CHEMICALS SHALL BE MADE IN AN ENCLOSED LOCKABLE AREA TO PREVENT UNAUTHORIZED ACCESS.
- 2- ALL POOL SURFACES SHALL HAVE A SMOOTHLIKE NON-SLIP FINISH.
- 3- ALL ELECTRICAL WORK SHALL BE DONE BY QUALIFIED LICENSED CONTRACTORS AND IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 680, 1999 EDITION.
- 4- ALL POOL PIPING SHALL BE PVC PW SCHEDULE 40 NON-THREADED NSF APPROVED. ALL PIPE SHALL DISPLAY THE NSF-PW LOGO.
- 5- POOL RESTROOM FACILITIES SHALL BE LOCATED WITHIN A 200 FOOT RADIUS OF THE POOL.

### LIST OF DRAWINGS

PL-	DESCRIPTION
1	POOL LOCATION PLAN
2	POOL AREA PLAN
3	WATER ACTIVITY POOL LAYOUT
4	WATER ACTIVITY POOL PIPING PLAN
5	WATER ACTIVITY POOL SECTIONS
6	SCHEDULE OF EQUIPMENT
7	COMPAC CF-247 PLAN VIEW
8	POOL EQUIPMENT PIPING PLAN
9	POOL EQUIPMENT ROOM DETAILS
10	EXISTING POOL FILTER DETAILS
11	EXISTING POOL DETAILS
12	EXISTING POOL PIPING DETAILS

Pool Asbuilts  
PL1 Thru PL15  
Prepared by Edwin Green

AQUADYNAMICS  
DESIGN GROUP, INC.  
AQUATIC ENGINEERING  
CONSULTANTS  
4600 E.W. 75th AVE  
SUITE 100  
MIAMI, FLORIDA 33149  
TEL: 305.887.4876  
FAX: 305.887.4876

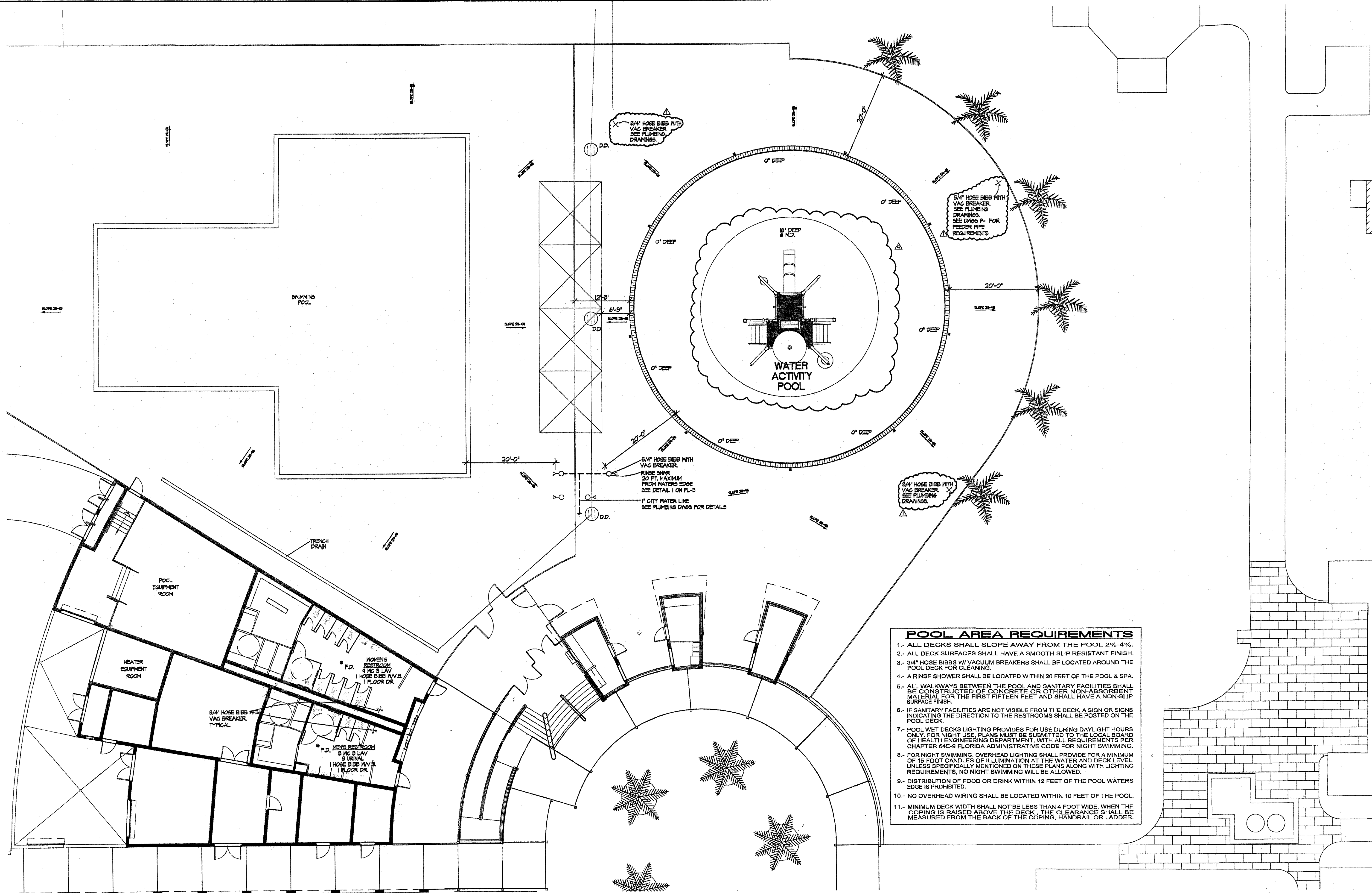
CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

DATE:	07-30-01	REVISIONS:	4/17/01 CITY REVIEW
DRAWN BY:	OT		10/24/01 100% SUBMITTAL
CHECKED BY:			COMMENTS
CAD FILE:			11/6/01 PER DOH REVIEW
			01/17/03 CHANGED TO CF-247

PROJECT #15160  
JOSEPH C. CARTER PARK  
POOL LOCATION PLAN

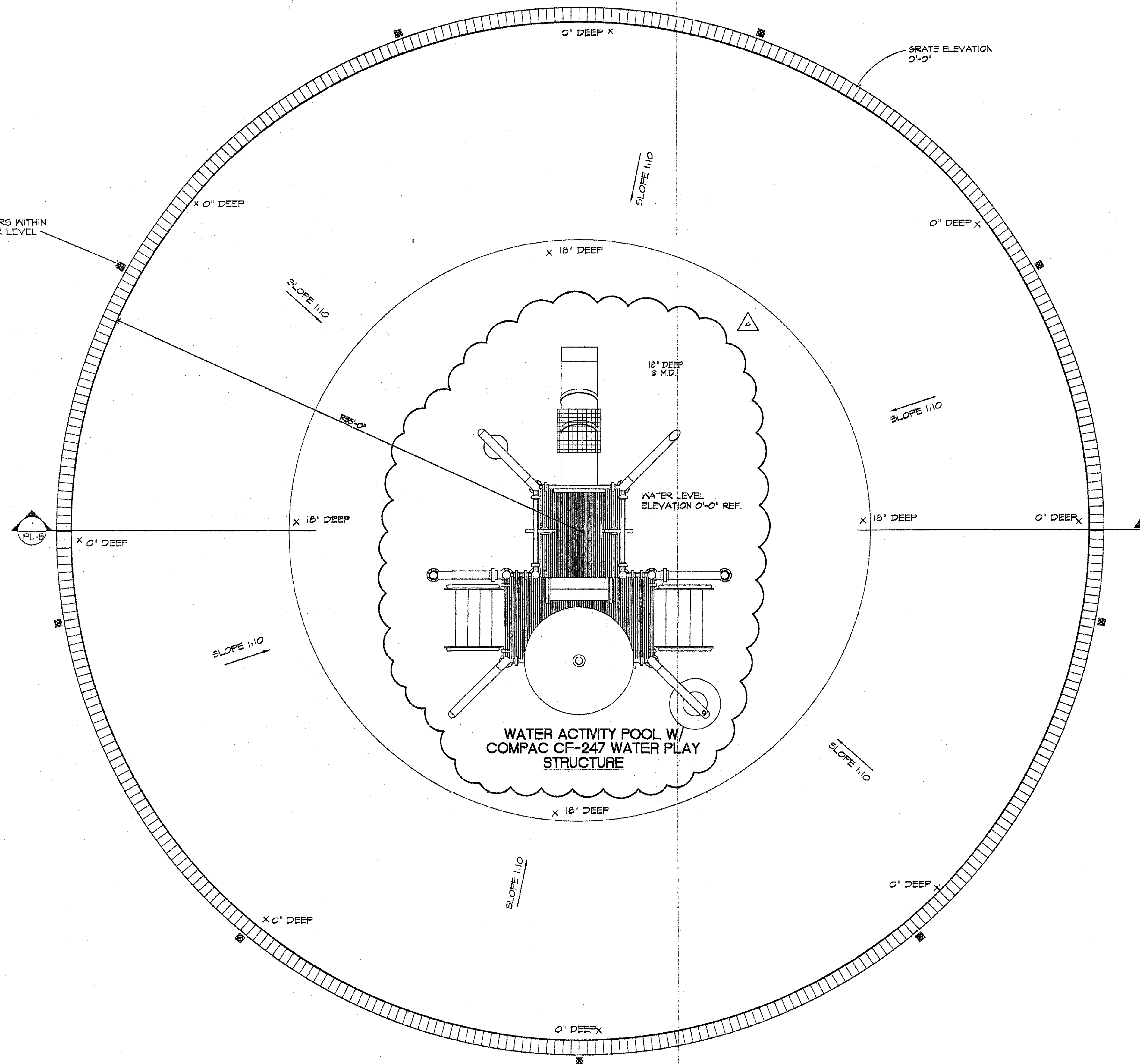
SHEET NO.  
PL-1  
OF 12  
DRAWING FILE NO.  
4-122-52



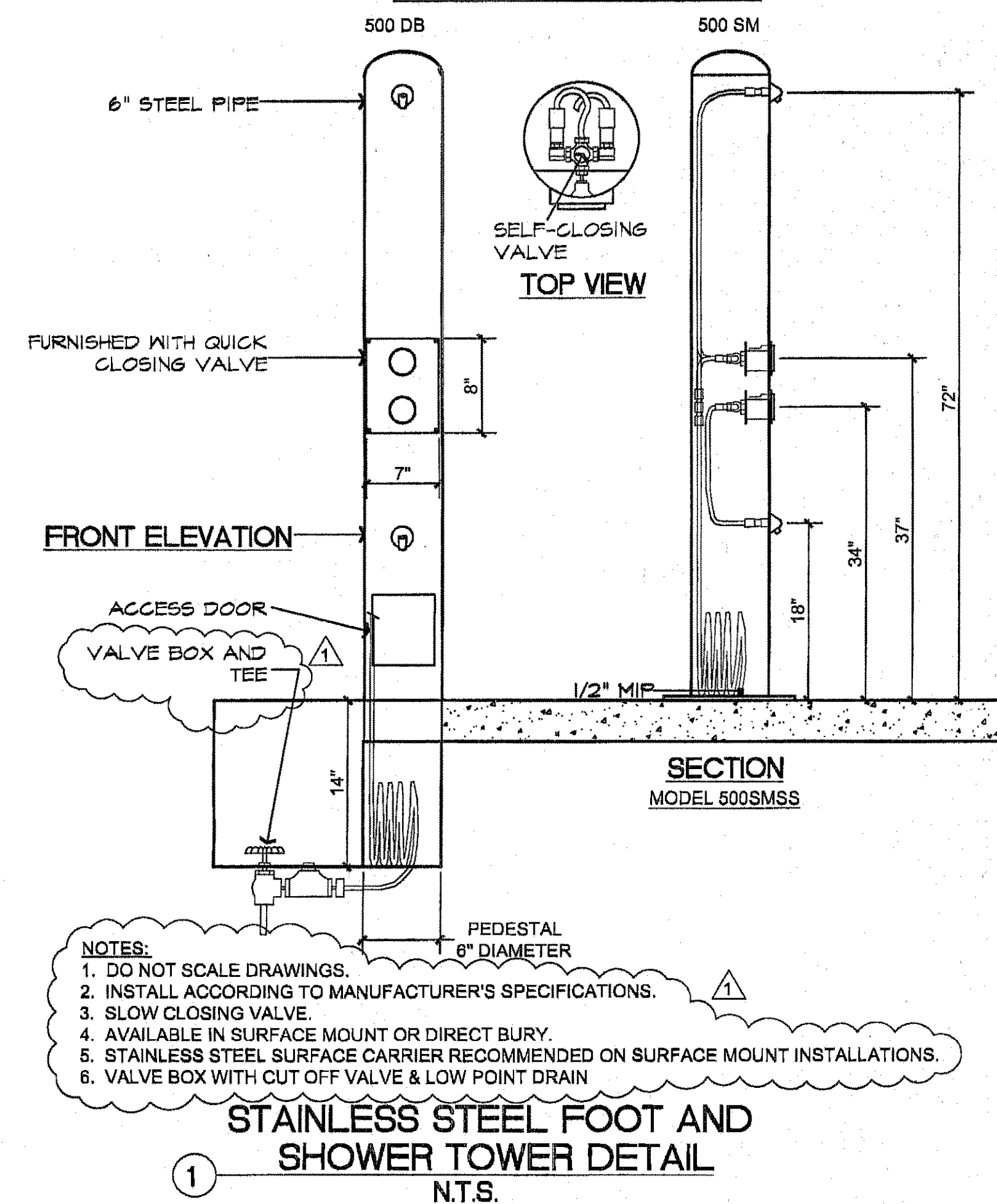


- POOL AREA REQUIREMENTS**
- 1.- ALL DECKS SHALL SLOPE AWAY FROM THE POOL 2%-4%.
  - 2.- ALL DECK SURFACES SHALL HAVE A SMOOTH SLIP RESISTANT FINISH.
  - 3.- 3/4" HOSE BIBBS W/ VACUUM BREAKERS SHALL BE LOCATED AROUND THE POOL DECK FOR CLEANING.
  - 4.- A RINSE SHOWER SHALL BE LOCATED WITHIN 20 FEET OF THE POOL & SPA.
  - 5.- ALL WALKWAYS BETWEEN THE POOL AND SANITARY FACILITIES SHALL BE CONSTRUCTED OF CONCRETE OR OTHER NON-ABSORBENT MATERIAL FOR THE FIRST FIFTEEN FEET AND SHALL HAVE A NON-SLIP SURFACE FINISH.
  - 6.- IF SANITARY FACILITIES ARE NOT VISIBLE FROM THE DECK, A SIGN OR SIGNS INDICATING THE DIRECTION TO THE RESTROOMS SHALL BE POSTED ON THE POOL DECK.
  - 7.- POOL WET DECKS LIGHTING PROVIDES FOR USE DURING DAYLIGHT HOURS ONLY. FOR NIGHT USE, PLANS MUST BE SUBMITTED TO THE LOCAL BOARD OF HEALTH ENGINEERING DEPARTMENT, WITH ALL REQUIREMENTS PER CHAPTER 64E-9 FLORIDA ADMINISTRATIVE CODE FOR NIGHT SWIMMING.
  - 8.- FOR NIGHT SWIMMING, OVERHEAD LIGHTING SHALL PROVIDE FOR A MINIMUM OF 15 FOOT CANDLES OF ILLUMINATION AT THE WATER AND DECK LEVEL, UNLESS SPECIFICALLY MENTIONED ON THESE PLANS ALONG WITH LIGHTING REQUIREMENTS, NO NIGHT SWIMMING WILL BE ALLOWED.
  - 9.- DISTRIBUTION OF FOOD OR DRINK WITHIN 12 FEET OF THE POOL WATERS EDGE IS PROHIBITED.
  - 10.- NO OVERHEAD WIRING SHALL BE LOCATED WITHIN 10 FEET OF THE POOL.
  - 11.- MINIMUM DECK WIDTH SHALL NOT BE LESS THAN 4 FOOT WIDE, WHEN THE COPING IS RAISED ABOVE THE DECK, THE CLEARANCE SHALL BE MEASURED FROM THE BACK OF THE COPING, HANDRAIL OR LADDER.

**WATER ACTIVITY POOL AREA PLAN**  
SCALE: 1" = 10'-0"



**MOST DEPENDABLE FOUNTAINS**  
5705 COMMANDER DR.  
P.O. BOX 587  
ARLINGTON, TN 38002-0587  
(901) 867-0039 PH.  
(901) 867-4008 FX.  
(800) 552-6331 PH.  
[www.mostdependable.com](http://www.mostdependable.com)




### WATER ACTIVITY POOL DATA CHART

POOL AREA= 3848 S.F.  
POOL PERIMETER= 219 L.F.  
POOL VOLUME= 21,600 GALS.  
FILTER RATE= 330 GPM IN 1 HOUR  
BATHING LOAD= 225 PERSONS  
SCS 245 FLOW RATE= 1750 GPM

## WATER ACTIVITY POOL LAYOUT PLAN

SCALE: 1/4" = 1'-0"



**CITY OF FORT LAUDERDALE**  
**PUBLIC SERVICES DEPARTMENT**  
**ARCHITECTURAL DIVISION**

Architecture • Landscape Architecture • Project Management  
 100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

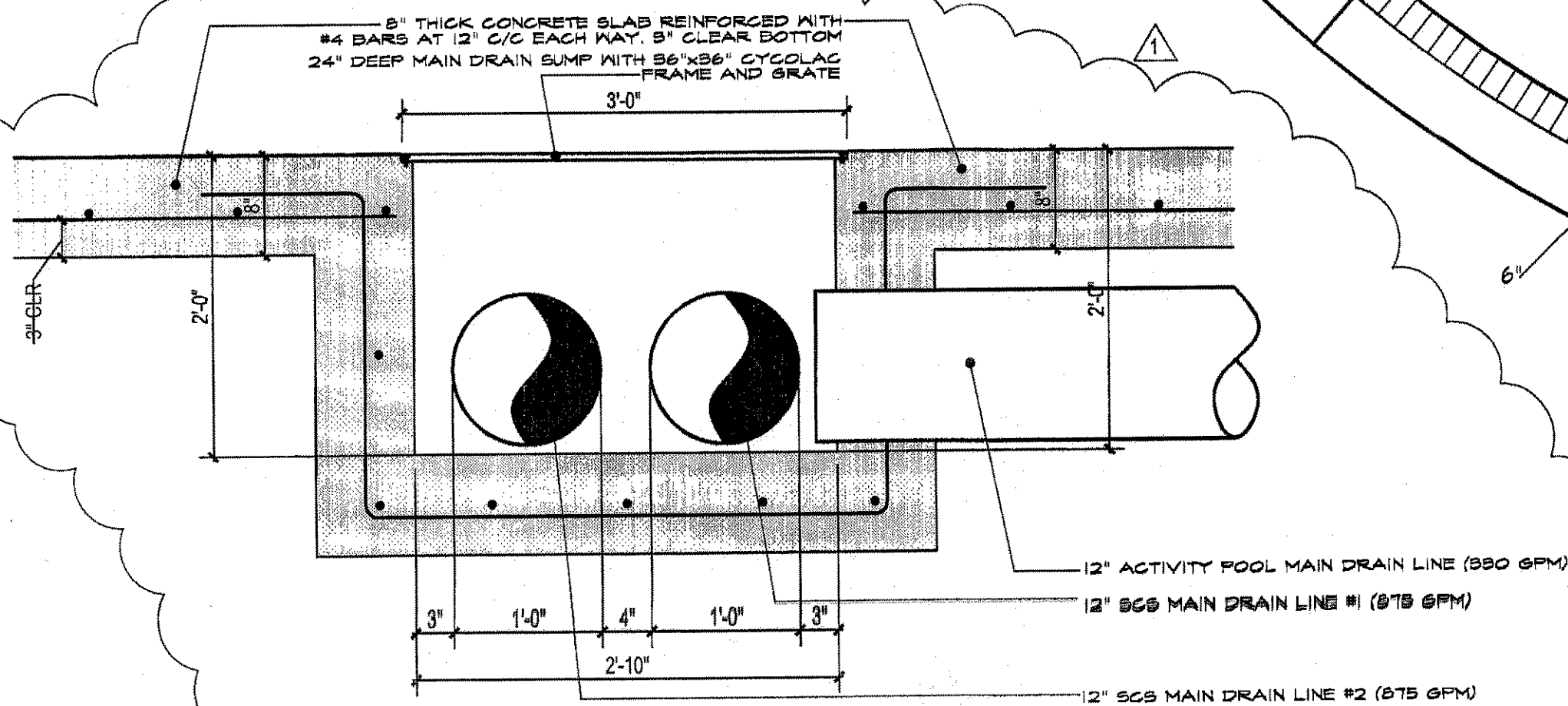
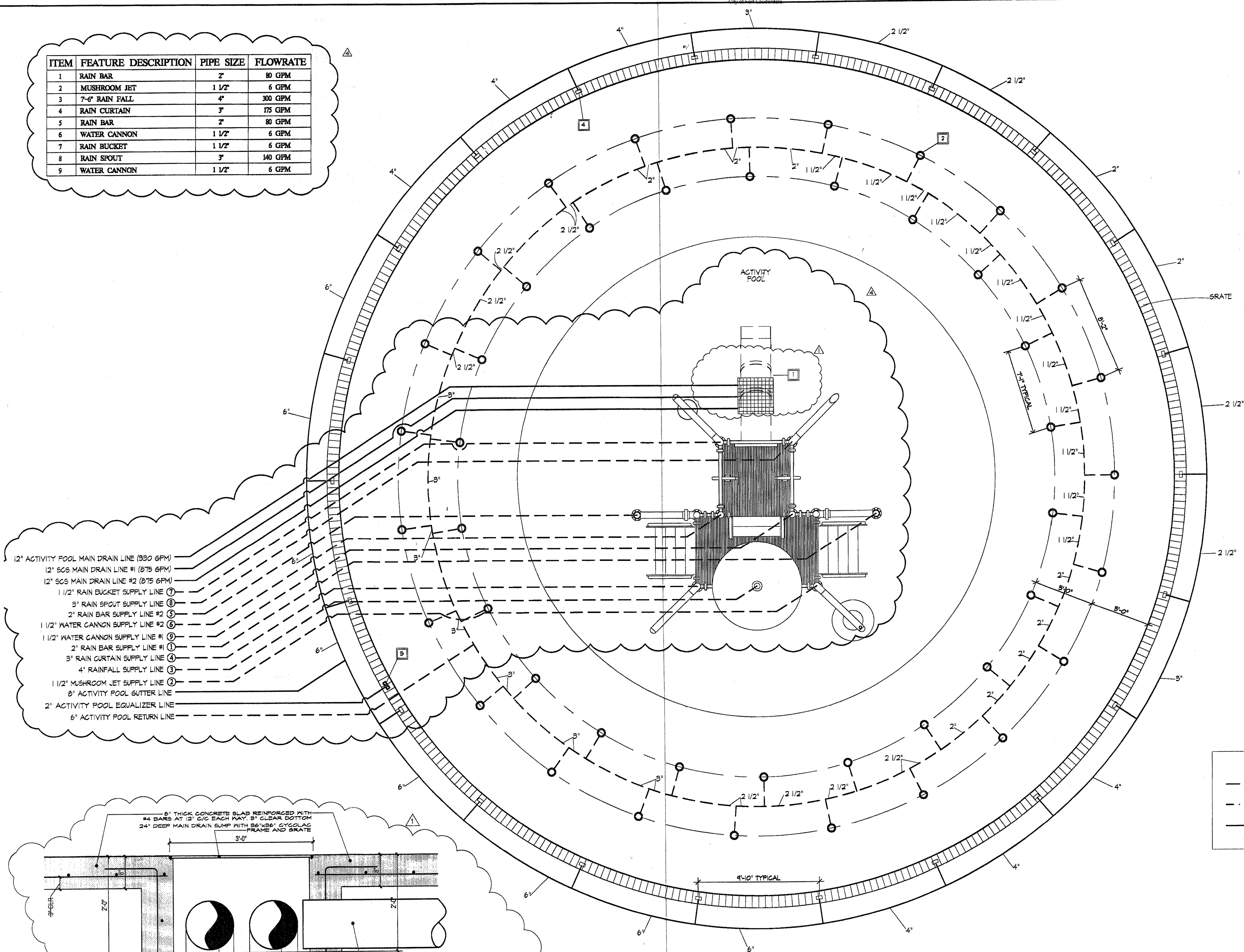
DATE: 01-30-01	REVISIONS:
DRAWN BY: C.T.	1 4/17/01 CITY REVIEW
CHECKED BY:	2 10/24/01 100% SUBMITTAL COMMENTS
CAD FILE:	3 11/6/01 PER DOH REVIEW
1560-140-669-POL	4 01/7/03 CHANGED TO CF-24T

PROJECT #15160  
JOSEPH C. CARTER PARK  
WATER ACTIVITY POOL  
LAYOUT PLAN

SHEET NO.  
PL-3  
OF 12  
DRAWING FILE NO.  
4-122-52



ITEM	FEATURE DESCRIPTION	PIPE SIZE	FLOWRATE
1	RAIN BAR	2"	80 GPM
2	MUSHROOM JET	1 1/2"	6 GPM
3	7'-6" RAIN FALL	4"	300 GPM
4	RAIN CURTAIN	3"	175 GPM
5	RAIN BAR	2"	80 GPM
6	WATER CANNON	1 1/2"	6 GPM
7	RAIN BUCKET	1 1/2"	6 GPM
8	RAIN SPOUT	3"	140 GPM
9	WATER CANNON	1 1/2"	6 GPM



1 MAIN DRAIN DETAIL  
SCALE: 1" = 1'-0"

NOTE: THE PIPING SHOWN IS A GRAPHIC REPRESENTATION OF PIPE ROUTE. ACTUAL ROUTING OF PIPING AROUND POOL MAY DIFFER FROM THIS PLAN.

WATER ACTIVITY POOL PIPING PLAN  
SCALE 1/4"=1'-0"

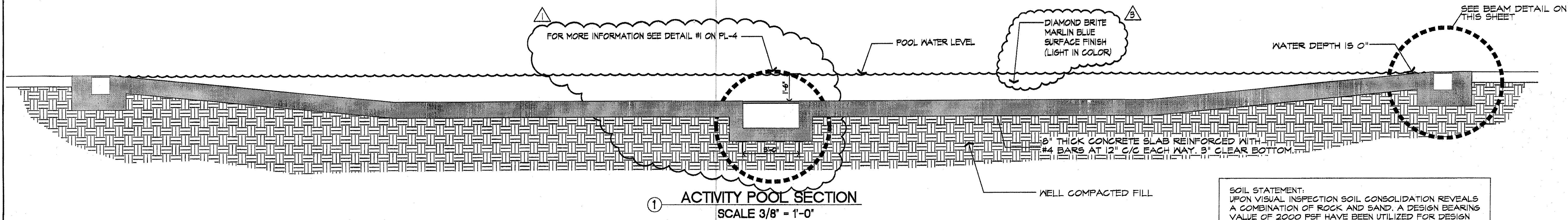
#### DESIGN VELOCITIES

GRAVITY LINES = 3 FPS  
SUCTION LINES = 6 FPS  
PRESSURE LINES = 8 FPS

#### PLAN LEGEND

- PVC SCHEDULE 40 NSF APPVD. PIPE (PRESSURE LINE)
- - - PVC SCHEDULE 40 NSF APPVD. PIPE (SUCTION LINE)
- PVC SCHEDULE 40 NSF APPVD. PIPE (GRAVITY FLOW LINE)

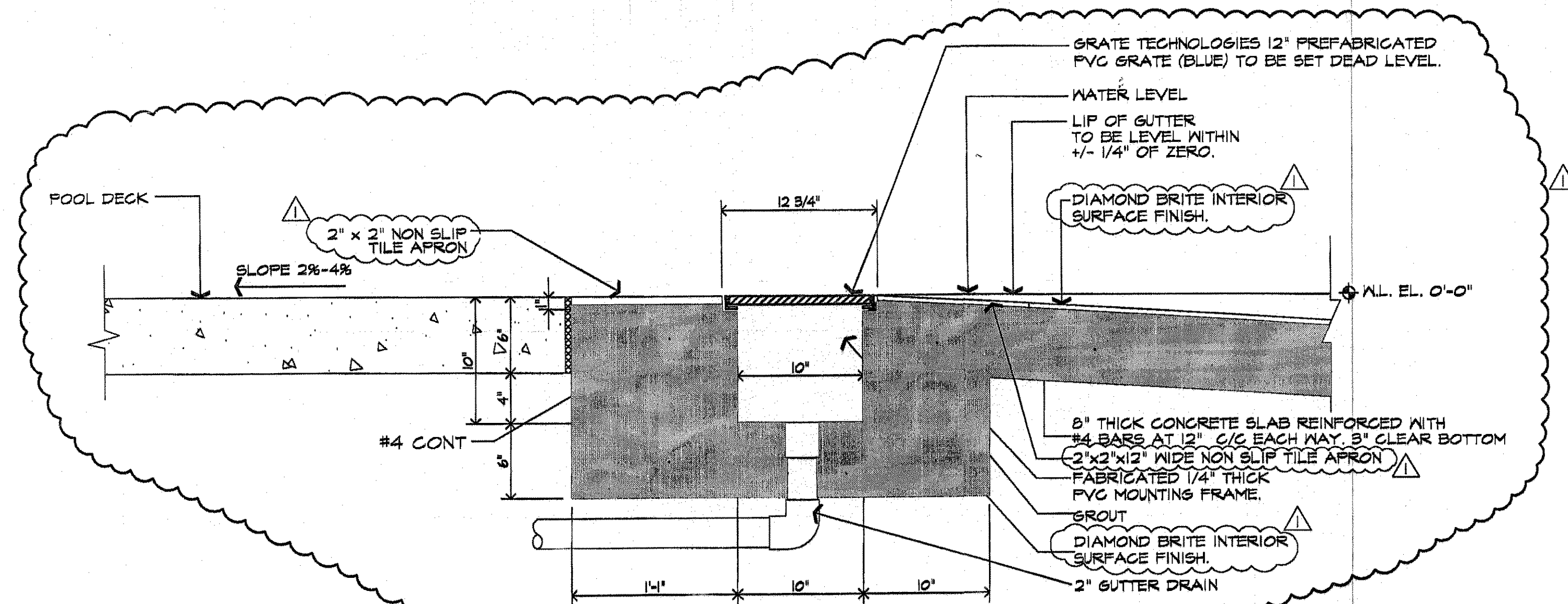




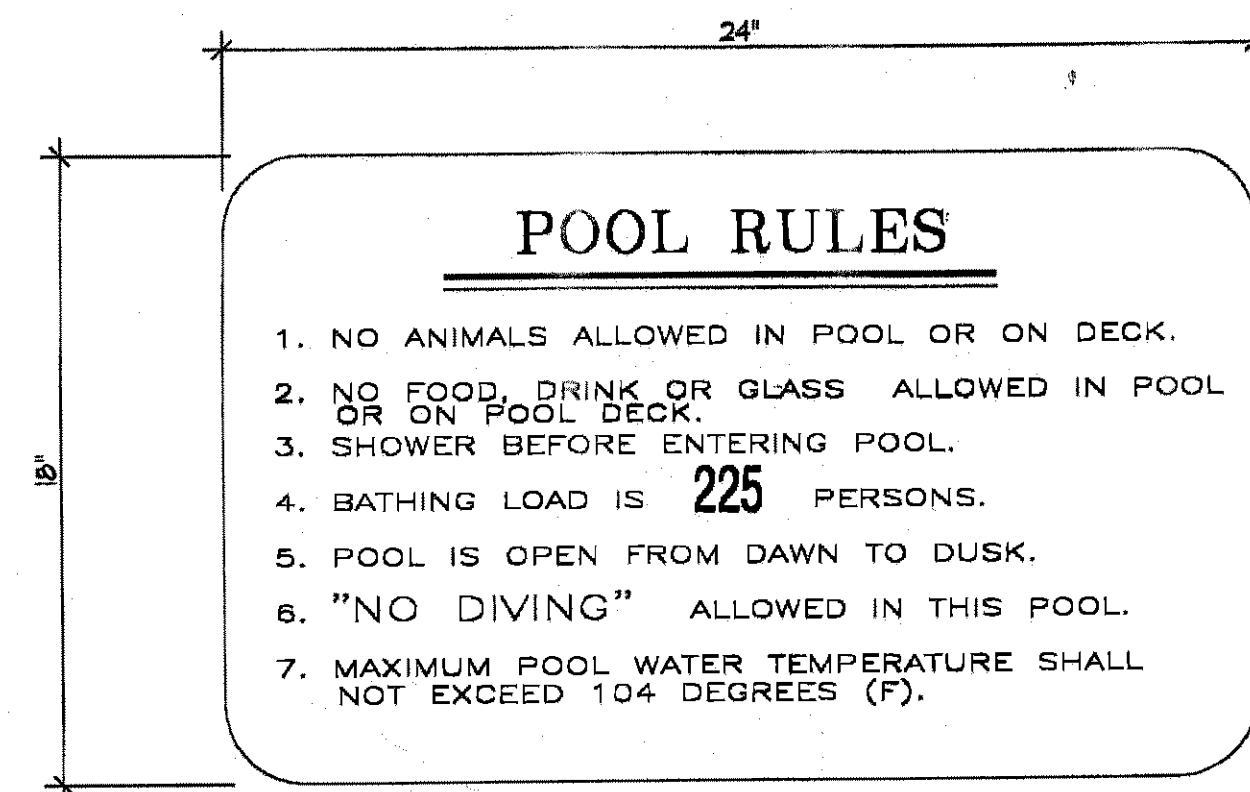
① **ACTIVITY POOL SECTION**  
SCALE 3/8" = 1'-0"

WELL COMPACTED FILL

SOIL STATEMENT:  
UPON VISUAL INSPECTION SOIL CONSOLIDATION REVEALS  
A COMBINATION OF ROCK AND SAND. A DESIGN BEARING  
VALUE OF 2000 PSF HAVE BEEN UTILIZED FOR DESIGN  
PURPOSES.  
NOTE: IF UPON EXCAVATION CONTRACTOR UNCOVERS  
MATERIAL OTHER THAN THAT SPECIFIED ABOVE THE  
ENGINEER SHALL BE NOTIFIED PRIOR TO CONTINUING WITH  
ANY OTHER WORK.



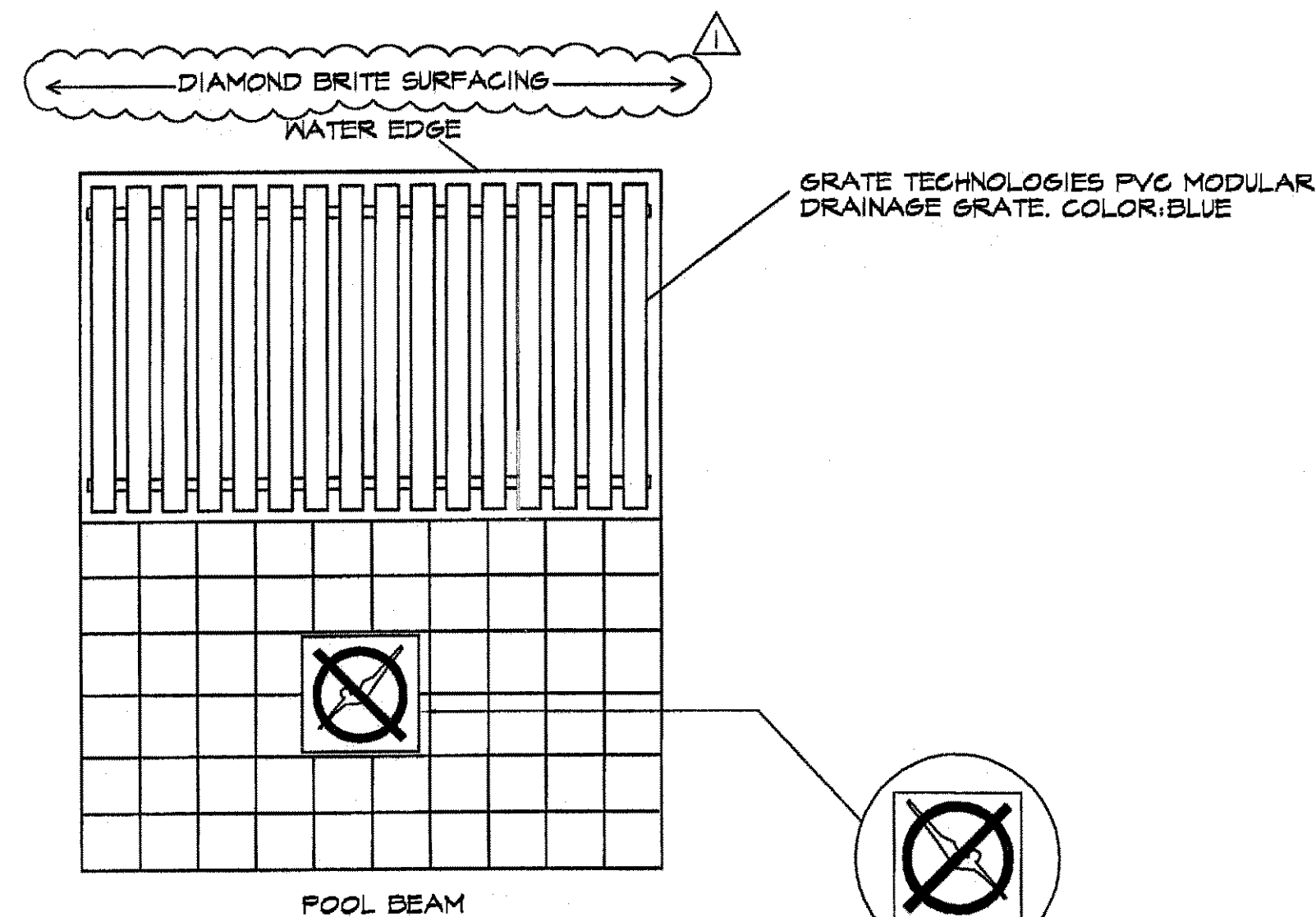
**DETAIL AT BEACH ENTRY** 1-1/2"=1'-0"



**GENERAL SPECIFICATIONS**

1. POST SIGN WITHIN CONFINES OF POOL AREA.
2. SIGN LETTERING SHALL CONTRAST WITH BACKGROUND COLOR.
3. SIGN LETTERS SHALL BE AT LEAST 1" HIGH.
4. LETTERS SPECIFYING NO DIVING SHALL BE AT LEAST 4" HIGH.

**RULES SIGN DETAIL** NTS



NOTE: MAXIMUM SPACING BETWEEN ADJACENT NO DIVING  
MARKERS SHALL NOT EXCEED 25'-0".

6" INTL NO DIVING MARKER TILE  
NON SLIP SURFACE FINISH.  
WHITE BACKGROUND WITH 4" HIGH  
RED LOGO. MAXIMUM SPACING  
NOT TO EXCEED 25'-0" C/C

**NO DIVING MARKER DETAIL** NTS

**AQUADYNAMICS  
DESIGN GROUP, INC.**  
AQUATIC ENGINEERING  
CONSULTANTS  
4600 N.W. 72ND AVENUE  
SUITE 100  
FORT LAUDERDALE, FL 33309  
TEL: (954) 887-8876  
FAX: (954) 887-8876

**CITY OF FORT LAUDERDALE**  
**PUBLIC SERVICES DEPARTMENT**  
**ARCHITECTURAL DIVISION**  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

DATE:	REVISIONS:
07-30-01	1/17/01 CITY REVIEW
DRAWN BY: C.T.	10/24/01 100% SUBMITTAL
CHECKED BY:	COMMENTS
CAD FILE:	11/6/01 PER DOH REVIEW
	01/17/03 CHANGED TO CF-247

**PROJECT #15160**  
**JOSEPH C. CARTER PARK**  
**WATER ACTIVITY POOL**  
SECTION AND DETAILS

SHEET NO.  
**PL-5**  
OF 12  
DRAWING FILE NO.  
4-122-52



# WATER ACTIVITY POOL SCHEDULE OF EQUIPMENT

MARK	QTY.	ITEM	MFR	CAT. No.	DESCRIPTION
1	1	MAIN DRAIN ASSEMBLY			STAINLESS STEEL W 1 1/4" DIA. PERFORATIONS. 3' x 3' GRATE ASSEMBLY. 150 GPM/SQ. FT. 40% OPEN AREA (3.6 SQ. FT. OPEN AREA). SECURE W/ TAMPERPROOF SCREWS. MAXIMUM VELOCITY THRU MAIN DRAIN GRATE HAS BEEN CALCULATED @ 1.0 FPS.
2	45	FLOOR RETURN FITTINGS	HAYWARD	SP1425S	FLOW ADJUSTABLE, FLUSH MOUNTED
3	0	VACUUM FITTINGS			SEE ITEM 28
4	22	GUTTER DRAINS	HAYWARD	SP-1019	SCUM GUTTER DRAIN FTG AND GRATE, 2" SKT X 2" FIP, WHITE ABS PLASTIC.
5	1	EQUALIZER FITTING	HAYWARD	SP-1019	GRATE END FITTING FOR EQUALIZER/MAKE-UP WATER LINE. FTG TO BE INSTALLED 12" BELOW POOL WATER LEVEL.
6	0	POOL LIGHTS			
7	0	TRANSFORMER BOX			
8	0	JUNCTION BOX			
9	0	LADDER			
10	0	HANDRAIL			
11	0	ANCHOR SOCKET			
12	0	ESCUTCHEON PLATE			
13	2	LIFE RING	AQUALITY	#23005	20 INCH DIAMETER PLASTIC RING WITH 1/4" DIAMETER X 40 FT LONG SAFETY LINE.
14	2	LIFE HOOK	AQUALITY	#RH1038	SHEPHERD TYPE LIFE HOOK, END ANCHORED TO A 16 FT ALUMINUM HANDLE.
15	2	LIFE RING HOLDER	AQUALITY	#AH250	
16	1	VACUUM CLEANER	AQUALITY	#215-24	18 INCH WIDE VACUUM HEAD WITH FOUR WHEEL BASE. 16 FT TELESCOPING HANDLE, AND 1-1/2" X 35 FT FLEX HOSE.
17	1	TEST KIT	TAYLOR	#2000-5	DUPLEX CAPABLE OF MEETING ALL CHEMICAL TESTS SPECIFIED BY THE FLORIDA ADMINISTRATIVE CODE IN CHAPTER 10D-5.
18	1	PRESSURE GAUGES			4" FACE 0-60 PSI LOCATED ON FACE OF MICROPROCESSOR PANEL.
19	1	FILTER PUMP	WEINMAN	3"K	10 HP, WITH 8" STRAINER 330 GPM AT 70 TDH. THREE PHASE 480 VOLT
20	1	FILTER UNIT	EPD	206C	COMPOSITE HORIZONTAL HI-RITE SAND FILTER. GARNET MEDIA. 33 SQUARE FEET FILTER AREA TOTAL PROVIDED. 22 SQUARE FEET FILTER AREA TOTAL REQUIRED.
21	1	FLOWMETER	EPD		6" SIGNET FLOWMETER, MAX. RANGE 900 GPM.
22	1	CL2 FEEDER	PULSAR	PULSAR III	CALCIUM HYPOCHLORITE FEEDER WITH FLOW REGULATING VALVE AND FLOWMETER. 90 PPD CAP.
23	1	PH FEEDER	STENNER	85M5	PERISTALTIC MURIATIC ACID FEEDER 85 GPD CAPACITY. INTERLOCK ELECTRICALLY WITH FILTER PUMP.
24	1	CHEMICAL STORAGE CONTAINER			50 GALLON POLYPROPYLENE STORAGE TANK WITH LID. CONTENTS OF TANK TO BE CLEARLY LABELED ON FRONT OF TANK.
25		CHEMICAL CONTROLLER	STRANTRON	SYSTEM 5	STRANTRON SYSTEM 5 WITH DVT I/O PORT & REMOTE ANNUNCIATOR INSTALLED IN POOL MANAGERS OFFICE. PROVIDE AND INSTALL ALL CABLE, CONDUIT, FITTINGS AND HARDWARE FOR INSTALLATION PER MFRS. DETAILS (C.E.S. INC. JUPITER, FLORIDA)
26	1	WATER LEVEL CONTROLLER			TORO AUTOMATIC WATER LEVELING DEVICE, AND FLOAT VALVE ASSEMBLY. VALVE IS ALSO EQUIPPED WITH A 1 1/2" PVC FILL LINE AND MANUALLY OPERATED BALL VALVE
27	2	COLLECTOR TANK	COMPAC	F700	700 GALLON CAPACITY. ALL FIBERGLASS CONSTRUCTION AS MANUFACTURED BY COMPAC FILTRATION, INC. 1-904-356-4003
28	1	PORTABLE VACUUM SYSTEM			PORTABLE SKID MNTD. UNIT WITH BF 105 CARTRIDGE FILTER, 1 HP 110 VAC. SELF PRIMING PUMP WITH 100' CORD AND PLUG.
29	1	CF-247 PUMP	BERKELEY	BGZPLS	20 HP, 1750 RPM, WITH 12" STRAINER 1000 GPM AT 50 TDH.
30	N/A	OZONE	VANTAGE	V-056C	5.6 GR/HR CORONA DISCHARGE TYPE. 0.07 CONTACT CONCENTRATION. SINGLE PHASE 120 VAC POWER SUPPLY REQUIRED. INTERLOCK WITH POOL FILTER PUMP MOTOR CIRCUIT
31	1	PULSAR BOOSTER PUMP			1/2 HP BOOSTER PUMP FOR PULSAR III FEEDER / 200V / SINGLE PHASE.
32	1	PRESSURE AMP PUMP			1/2 HP PRESSURE AMP PUMP FOR EPD 200V / SINGLE PHASE.

## ENVIRONMENTAL PRODUCTS DIVISION

### FILTER DATA:

MODELS: EPD-206CP (FULLY AUTOMATIC)  
EPD-206CSP (SEMI-AUTOMATIC)

2 TANK, COMMERCIAL SYSTEM WITH 6" PIPING  
TYPE: Hi-Rate Permanent Media Filter (Composite)  
FILTER AREA: 33 SQ.FT.(3.07m<sup>2</sup>)

#### TYPICAL FLOW RATES

GPM/SQ. FT. = GPM ÷ (M <sup>2</sup> /MIN/M ÷ (M <sup>2</sup> /MIN)	
10=330	(.4073)=(1.25)
15=495	(.6109)=(1.87)
20=660*	(.8146)=(2.50)*

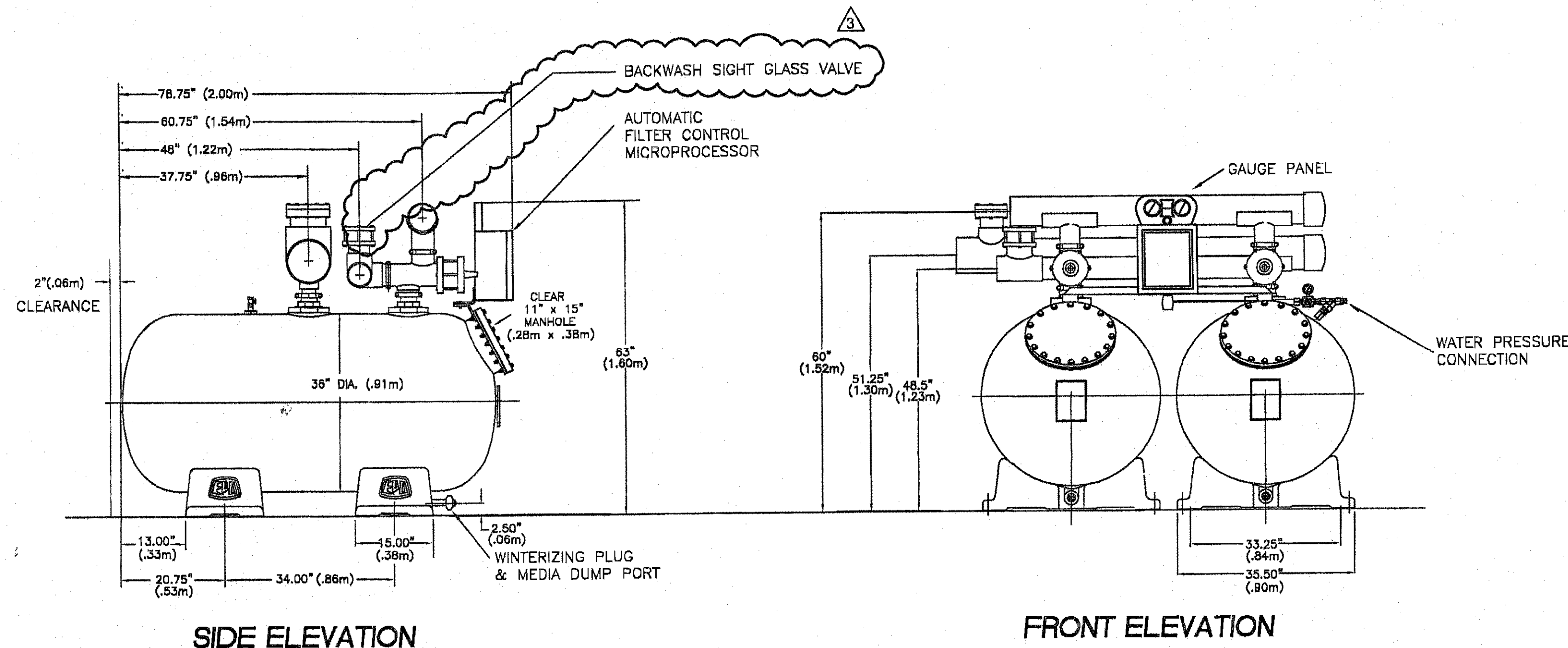
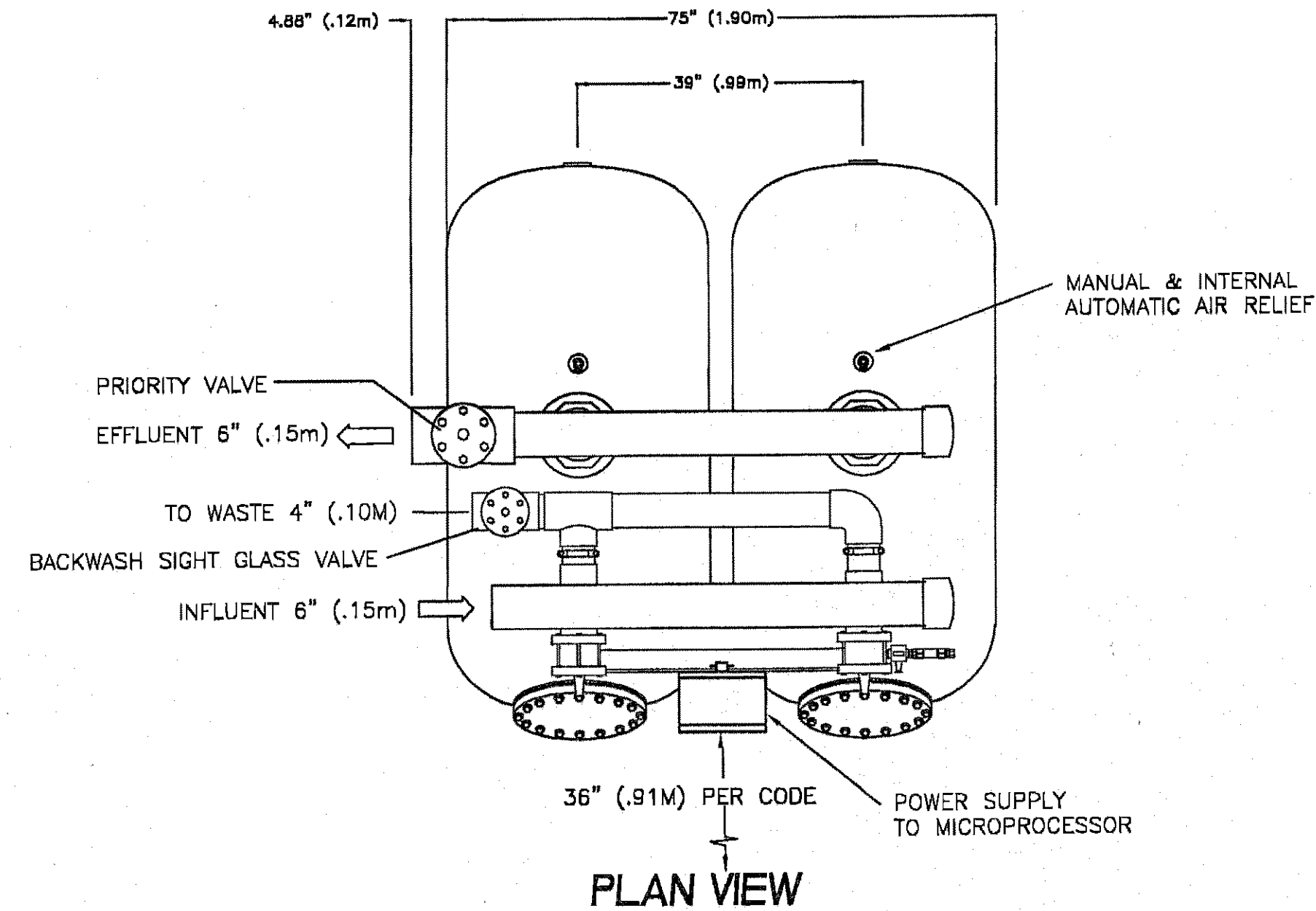
\* Maximum recommended flow rate

#### BACK WASH FLOW RATES

MEDIA GRADE	MEDIA TYPE	GMP/(M <sup>3</sup> /M)	MIN	MAX
20	GARNET	275 (1.04)	400 (1.51)	
30	GARNET	200 (.76)	250 (.95)	

Units in ( ) are metric

Engineering notes on reverse side.

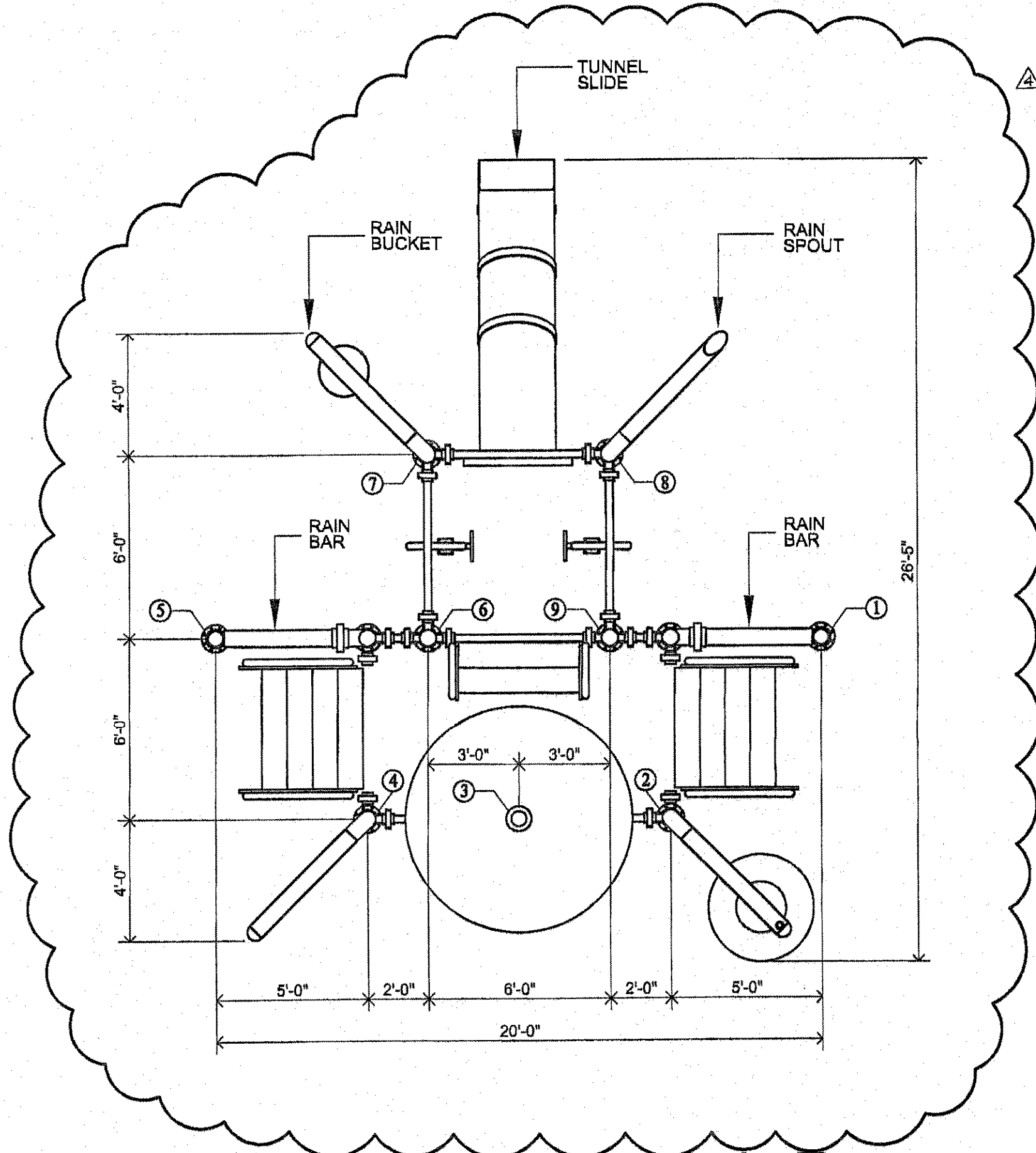


## EQUIPMENT ROOM REQUIREMENTS

- 1- THE FLOOR IN THE ROOM SHALL BE CONSTRUCTED OF CONCRETE HAVING A SMOOTHLIKE NON-SLIP SURFACE FINISH.
- 2- THE FLOOR SHALL BE POSITIVELY DRAINED TO A FLOOR DRAIN.
- 3- A 3/4 INCH HOSE BIBB WITH VACUUM BREAKER SHALL BE LOCATED INSIDE THE ROOM.
- 4- THE OVERHEAD LIGHT SHALL EMIT AT LEAST 30 FOOT CANDLES OF ILLUMINATION AT THE FLOOR LEVEL.
- 5- CLEARANCES TO PUMPS AND FILTERS FROM WALLS SHALL BE AS SPECIFIED BY THE MANUFACTURER.

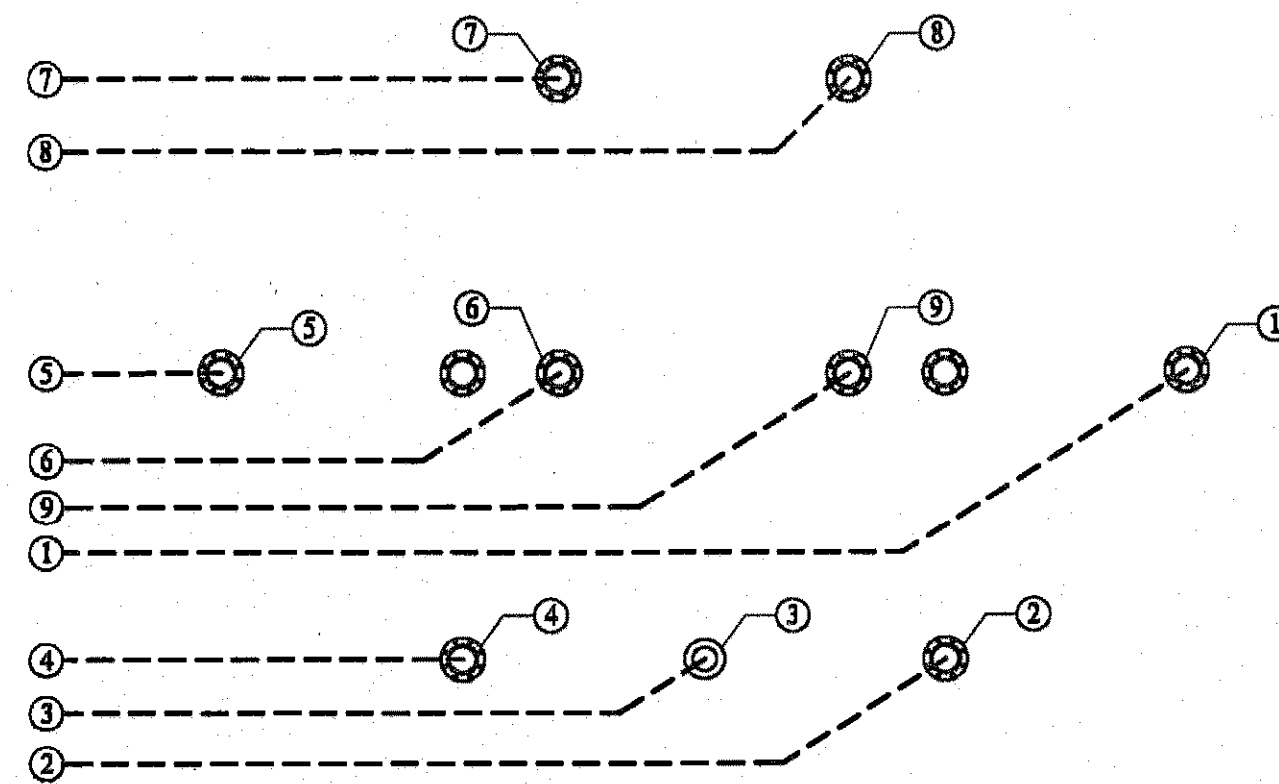
## FILTER PIPING REQUIREMENTS

- 1- TAG ALL VALVES AND POST OPERATING INSTRUCTION INSIDE THE ROOM.
- 2- ALL FACE PIPING SHALL BE PVC SCHEDULE 40 NSF-PW. ALL JOINT SHALL BE NON-THREADED SOLVENT WELD TYPE.
- 3- GATE VALVES SHALL NOT BE USED AS A MEANS FOR CONTROLLING THE FLOW OF WATER. ALL PROPORTIONAL FLOW TYPE VALVES ARE INDICATED ON THE DRAWING.
- 4- ELECTRICALLY OPERATED CHEMICAL FEEDERS SHALL BE INTERLOCKED WITH THE FILTER PUMP MOTOR.
- 5- THE CHEMICAL SOLUTION TANK SHALL BE LABELED ACCORDING TO THE SOLUTION OF WHICH IT CONTAINS.

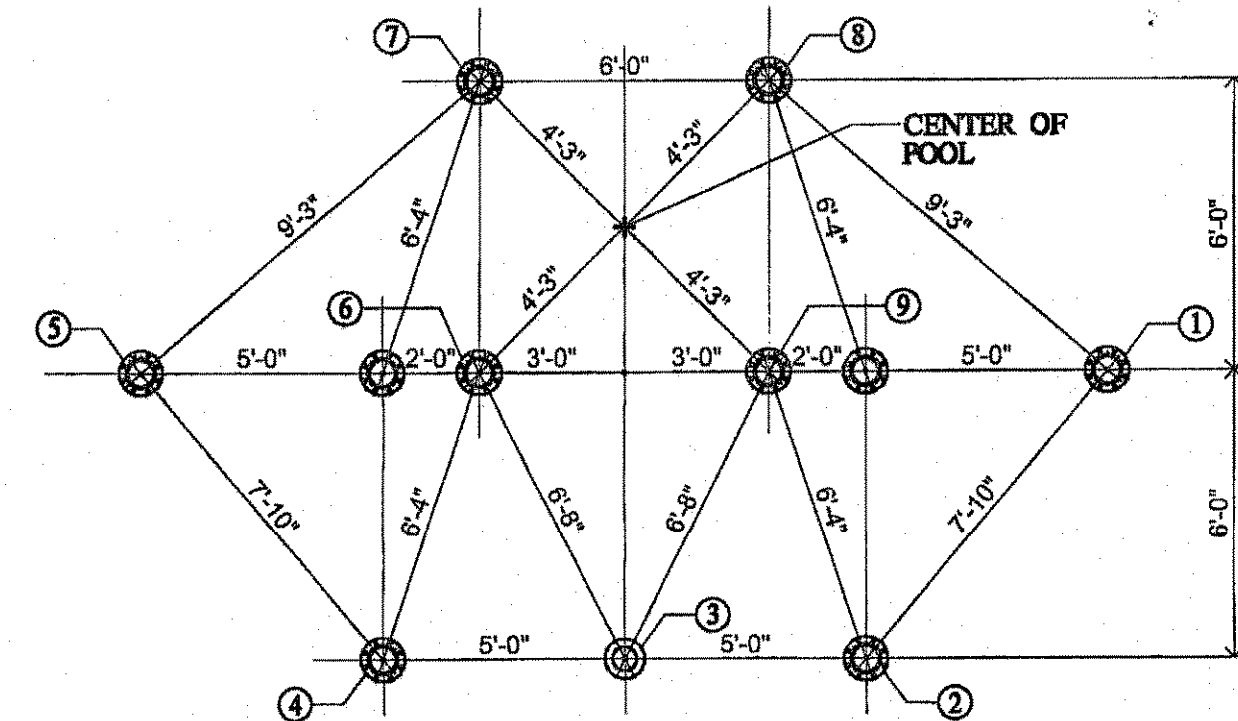


COMPAC MODEL CF-247  
SPRAY IN PLAY PLAN  
SCALE: 1/4" = 1'-0"

ITEM	FEATURE DESCRIPTION	PIPE SIZE	FLOWRATE
1	RAIN BAR	2"	80 GPM
2	MUSHROOM JET	1 1/2"	6 GPM
3	7'-6" RAIN FALL	4"	300 GPM
4	RAIN CURTAIN	3"	175 GPM
5	RAIN BAR	2"	80 GPM
6	WATER CANNON	1 1/2"	6 GPM
7	RAIN BUCKET	1 1/2"	6 GPM
8	RAIN SPOUT	3"	140 GPM
9	WATER CANNON	1 1/2"	6 GPM

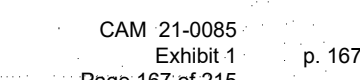


COMPAC MODEL CF-247  
FEEDER PIPE STUBOUT SCHEMATIC

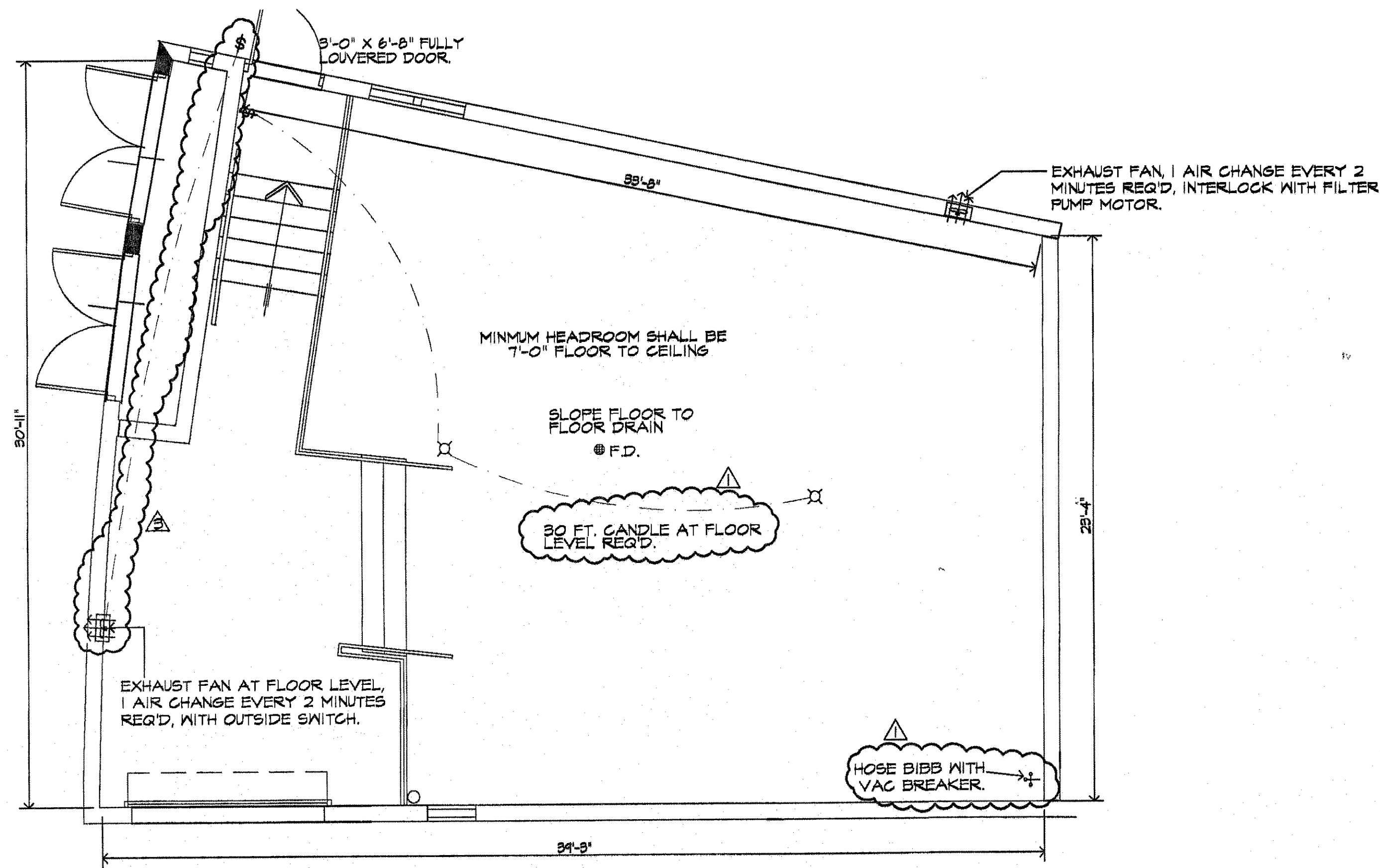


COMPAC MODEL CF-247  
PIPING LAYOUT  
SCALE: 1/4" = 1'-0"

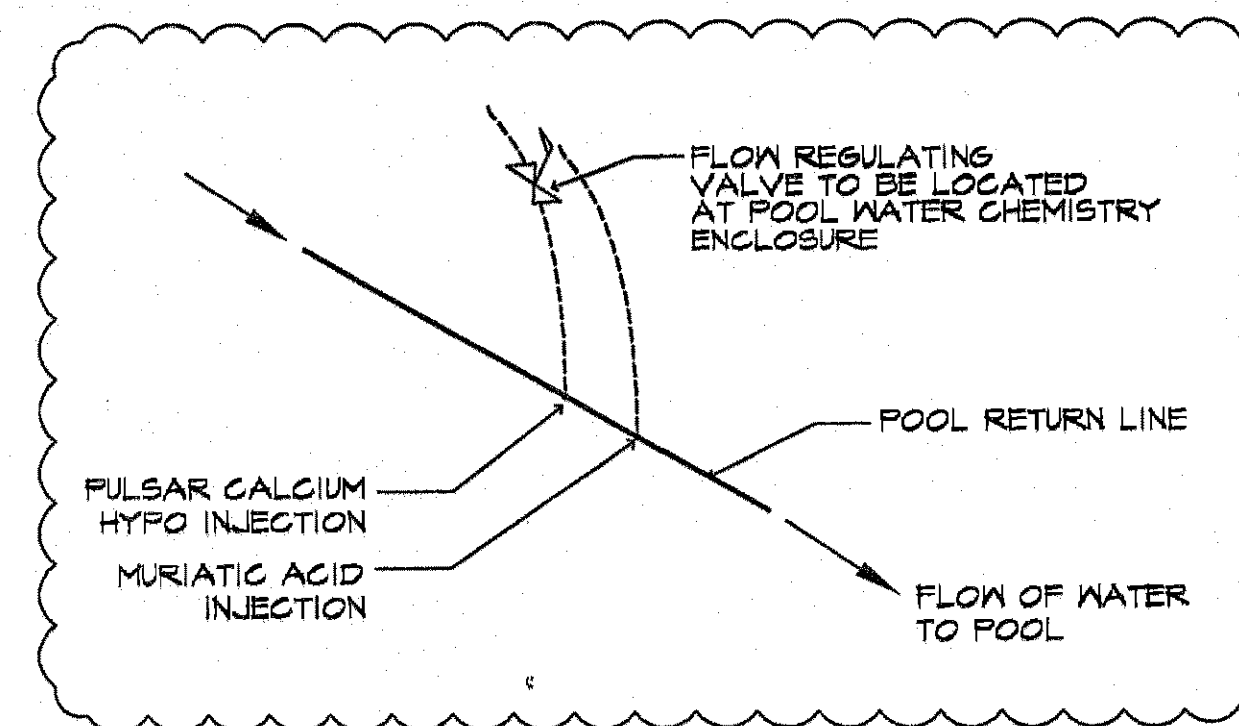




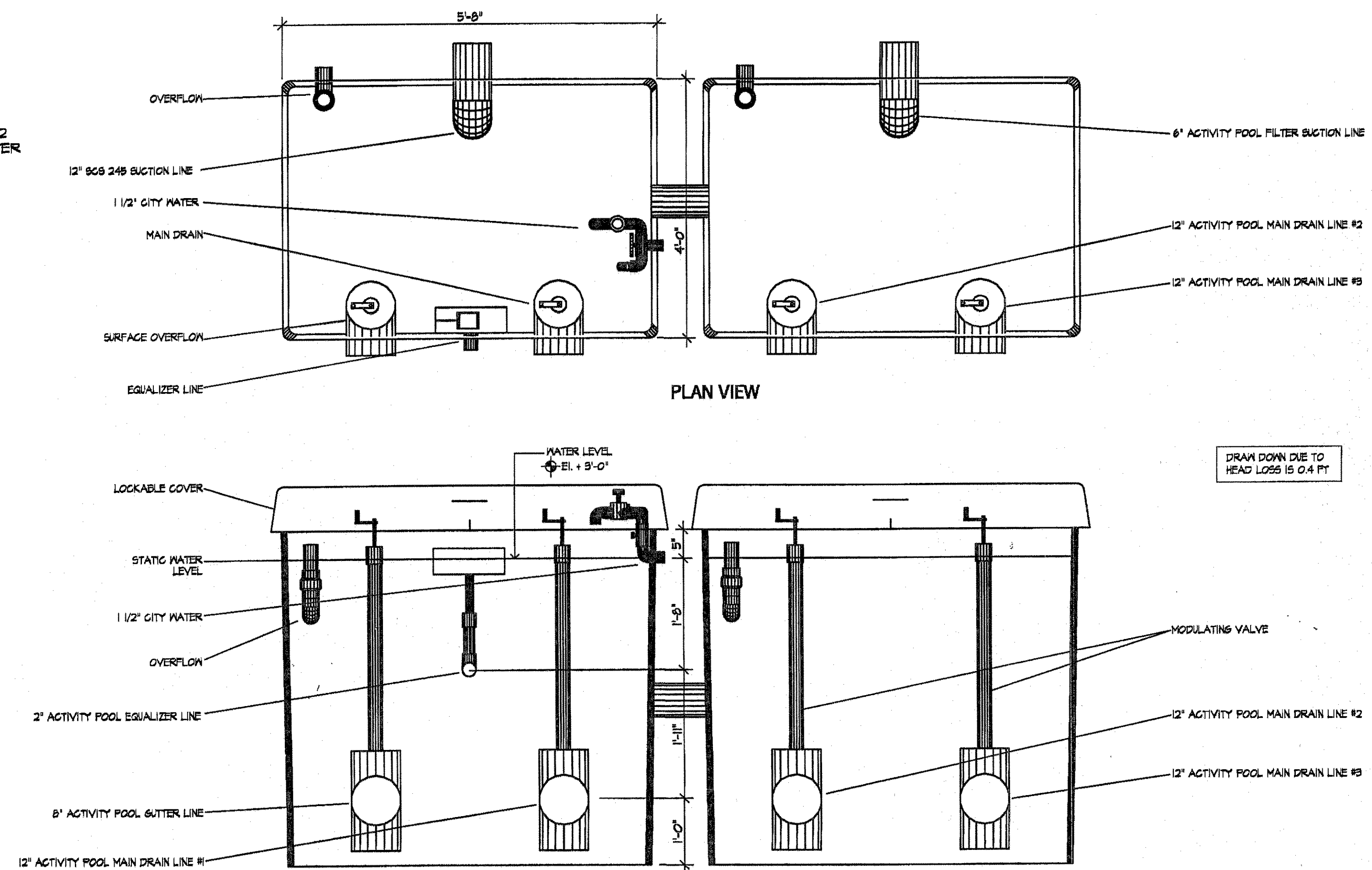




**POOL EQUIPMENT ROOM PLAN**  
SCALE: 1/4"=1'-0"

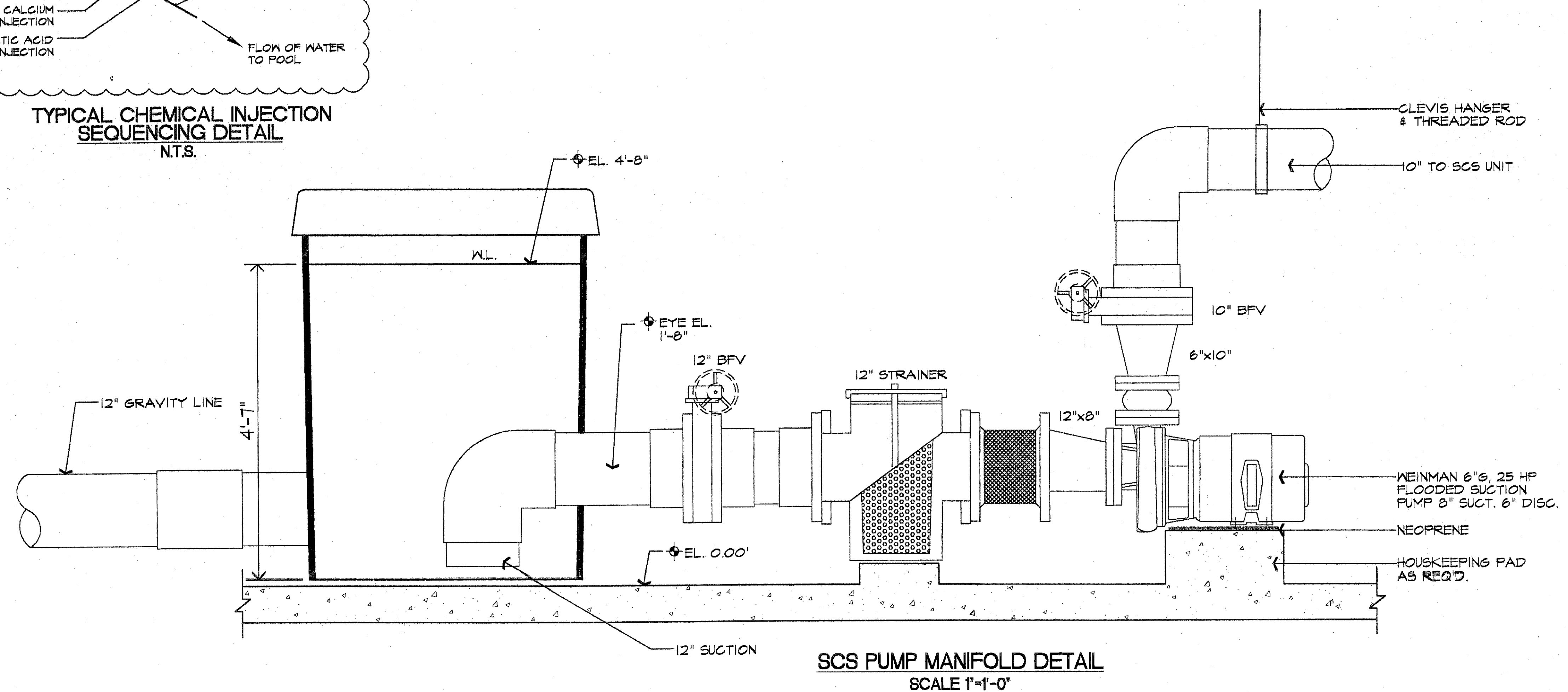


**TYPICAL CHEMICAL INJECTION SEQUENCING DETAIL**  
N.T.S.



COM PAC FILTRATION, INC.  
JACKSONVILLE, FLORIDA

**WATER ACTIVITY POOL COLLECTOR TANK DETAILS**  
SCALE 3/4"=1'-0"



**SCS PUMP MANIFOLD DETAIL**  
SCALE 1"=1'-0"

**AQUADYNAMICS DESIGN GROUP, INC.**  
AQUATIC ENGINEERING CONSULTANTS  
3400 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33156  
PH: 305.587.4876  
FAX: 305.587.4878

**CITY OF FORT LAUDERDALE**  
PUBLIC SERVICES DEPARTMENT  
**ARCHITECTURAL DIVISION**  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

DATE:	REVISIONS:
07-30-01	9/17/01 CITY REVIEW
DRAWN BY: CT	10/24/01 100% SUBMITTAL
CHECKED BY:	COMMENTS
CAD FILE:	11/6/01 PER DOH REVIEW
	01/10/03 CHANGED TO CF-247
	01/10/05 AS BUILT

**PROJECT #15160**  
**JOSEPH C. CARTER PARK**  
**POOL EQUIPMENT DETAIL**

SHEET NO.  
**PL-9**  
OF 12  
DRAWING FILE NO.  
4-122-52



## EXISTING SWIMMING POOL DATA

REGISTERED POOL VOLUME= 102,880 GALLONS  
 FILTER RATE= 508 GPM IN 6 HOURS  
 FILTER AREA REQUIRED= 25.5 S.F.  
 FILTER AREA PROVIDED= 33 S.F.

## GENERAL NOTES

1. ALL NEW PIPE SHALL BE SCHEDULE 40 PVC-PW NSF. PIPE SHALL BE STAMPED WITH NSF LOGO
2. CONNECT ALL NEW PIPE TO EXISTING FACE PIPE AS INDICATED ON THE DRAWING.
3. ALTERATION OR MODIFICATIONS TO EXISTING EQUIPMENT WITHOUT DOH APPROVAL IS PROHIBITED.
4. ALL VALVES SHOWN ARE DESIGNED FOR PROPORTIONING THE WATER FLOW.
5. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH NEC ART. 680 /1999 EDITION.
6. THE EPD-206CP SAND FILTER IS NSF LISTED.
7. ALL PRESSURE GAUGES SHALL BE 4" FACE 0-60PSI MINIMUM DIAL READOUT

## PROJECT DESCRIPTION:

- REMOVED EXISTING FILTER SYSTEM AND REPLACE WITH NEW GARNET MEDIA SAND FILTER SYSTEM.
- UTILIZE EXISTING MAIN AND GUTTER LINES.

## INSTALL:

- INSTALL NEW CHEMICAL AND DISINFECTING SYSTEMS.
- FILTER TANKS, GAUGES, FLOWMETER AND RELATED ITEMS.
- INSTALL NEW FILTER PUMP
- UTILIZE EXISTING MAIN AND GUTTER LINES WITH EXISTING COLLECTOR TANK.
- CONTRACTOR TO BE PROVIDE AND INSTALL ALL HARDWARE, FITTINGS, ETC. TO COMPLETE FILTER INSTALLATION IN ACCORDANCE WITH DOH REG.

## ENVIRONMENTAL PRODUCTS DIVISION

### FILTER DATA:

MODELS: EPD-206CP (FULLY AUTOMATIC)  
 EPD-206CSP (SEMI-AUTOMATIC)

2 TANK, COMMERCIAL SYSTEM WITH 6" PIPING  
 TYPE: HI-Rate Permanent Media Filter (Composite)  
 FILTER AREA: 33 SQ.FT.(3.07m<sup>2</sup>)

### TYPICAL FLOW RATES

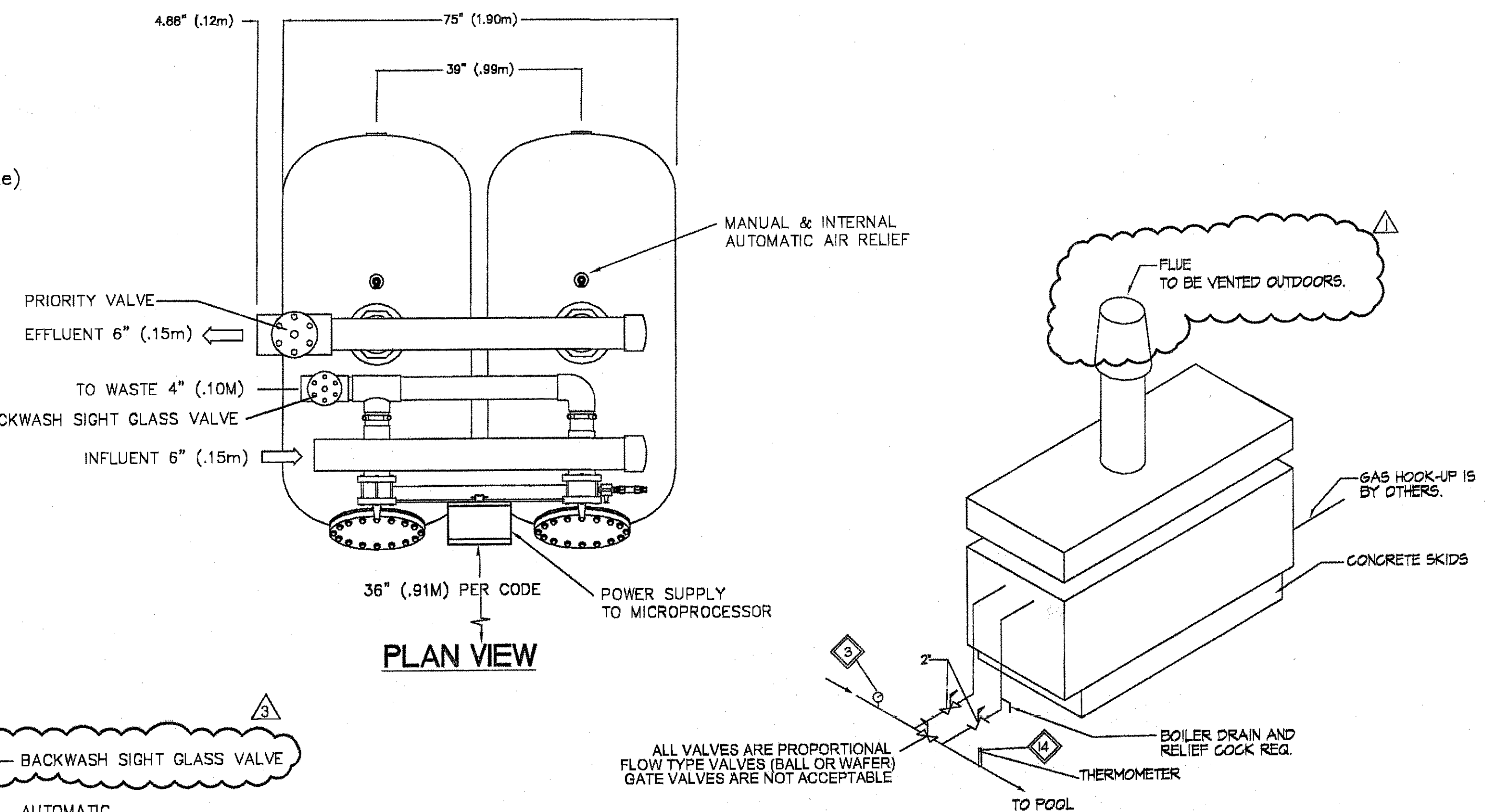
GPM/SQ. FT. = GPM	(M <sup>3</sup> /MIN/M <sup>2</sup> ) = (M <sup>3</sup> /MIN)
10=330	(.4073)=(1.25)
15=495	(.6109)=(1.87)
20=660*	(.8146)=(2.50)*

\* Maximum recommended flow rate

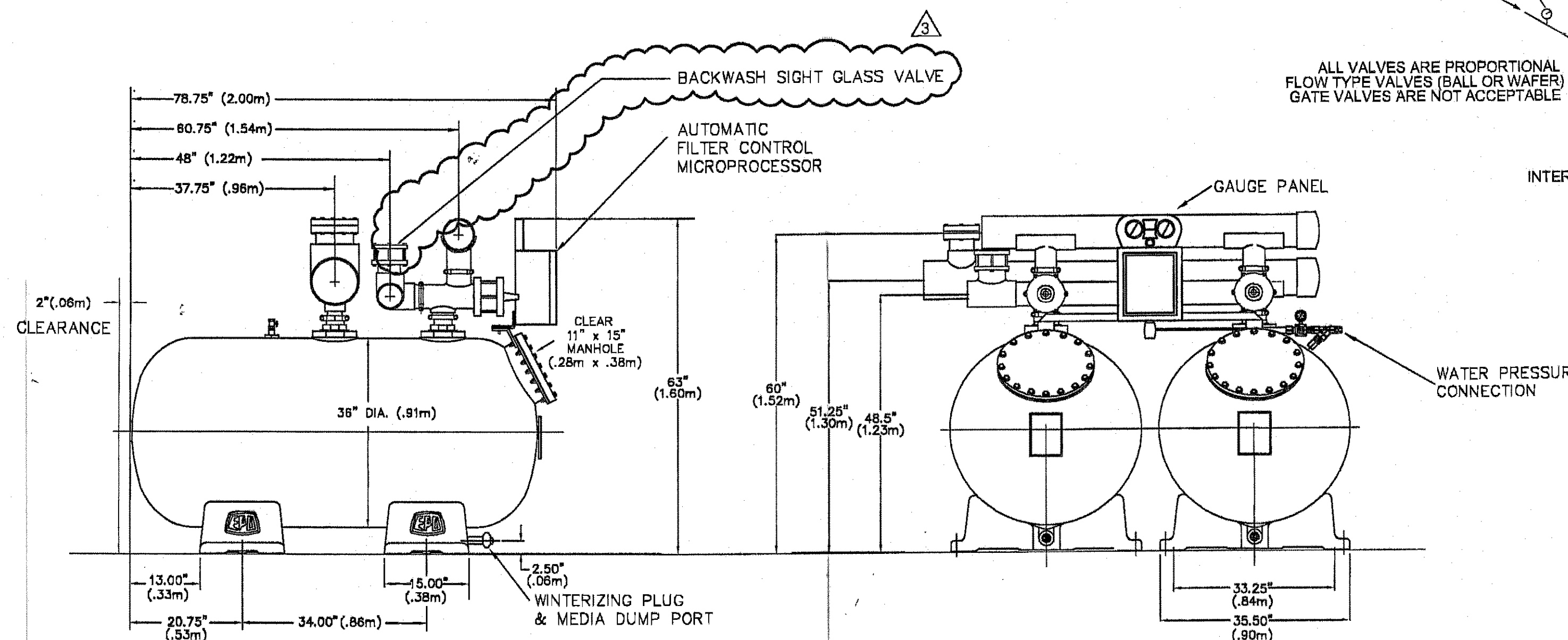
### BACK WASH FLOW RATES

MEDIA GRADE	MEDIA TYPE	GMP/(M <sup>3</sup> /M)	MIN	MAX
20	GARNET	275 (1.04)	400 (1.51)	
30	GARNET	200 (.76)	250 (.95)	

Units in ( ) are metric  
 Engineering notes on reverse side.



PLAN VIEW



SIDE ELEVATION

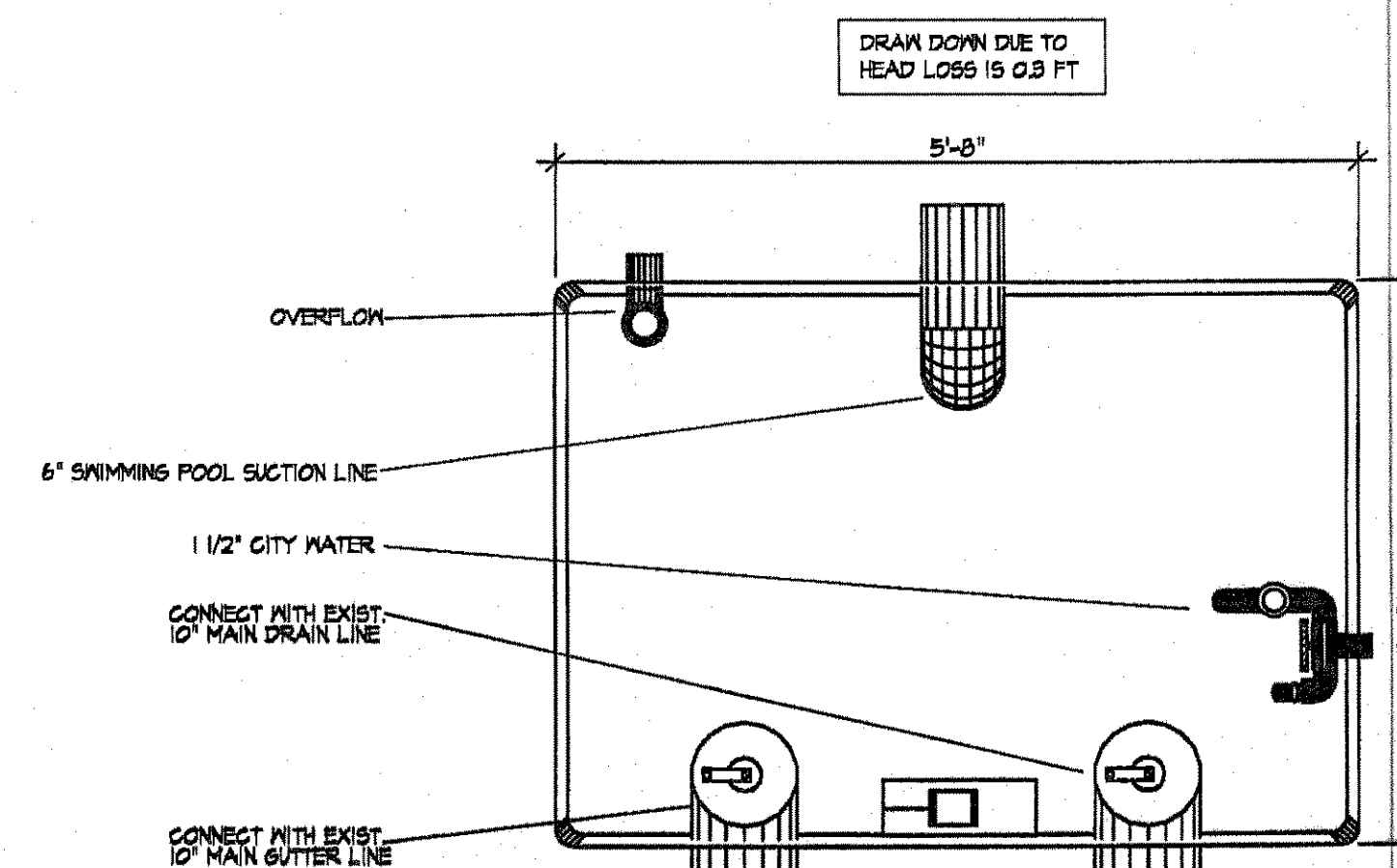
FRONT ELEVATION

INTERNAL HEATER PARTS ARE NON-TOXIC TO BATHERS WHEN USED IN CONJUNCTION WITH POTABLE WATER.

HEATER DETAIL  
 N.T.S.

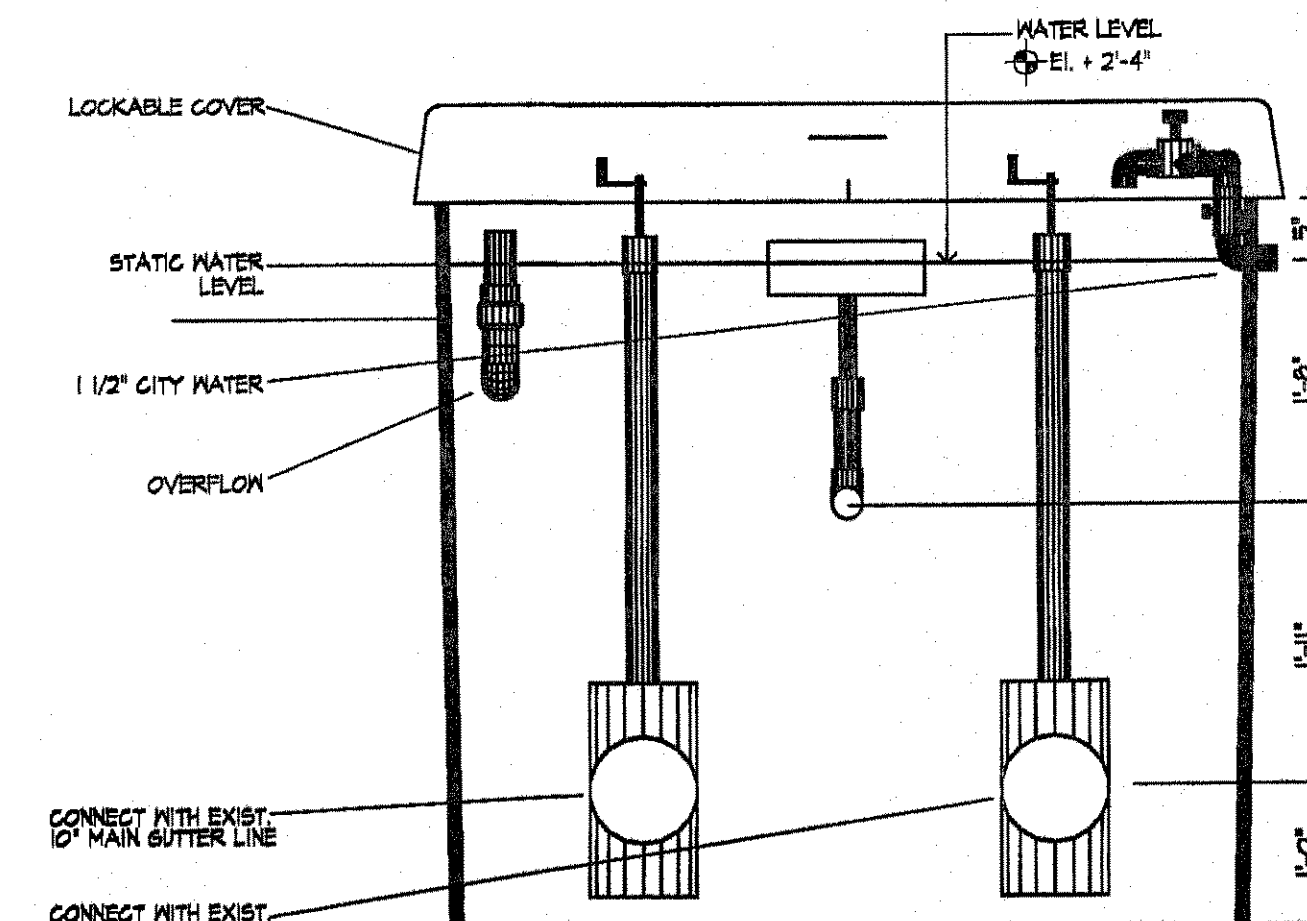
## EXISTING SWIMMING POOL LIST OF NEW EQUIPMENT

MARK	QTY.	ITEM	MFR	CAT. No.	DESCRIPTION
1	1	FILTER PUMP	WEINMAN	4"KL	15HP. WITH 6" STRAINER, 508 GPM AT 70 TDH. THREE PHASE, 480 VOLT. FLOODED SUCTION CENTRIFUGAL PUMP
2	1	FILTER UNIT	EPD	206CP	COMPOSITE HORIZONTAL HI-RITE SAND FILTER. GARNET MEDIA. 33 SQUARE FEET FILTER AREA TOTAL PROVIDED. 25.4 SQUARE FEET FILTER AREA TOTAL REQUIRED.
3	2	PRESSURE GAUGES			4" FACE 0-60 PSI LOCATED ON FACE OF MICROPROCESSOR PANEL.
4	1	FLOWMETER	EPD		6" SIGNET FLOWMETER, MAX. RANGE 900 GPM.
5	1	CL2 FEEDER	PULSAR	PULSAR III	CALCIUM HYPOCHLORITE FEEDER WITH FLOW REGULATING VALVE AND FLOWMETER. 90 PPD CAP.
6	1	PH FEEDER	STENNER	170MS	PERISTALTIC MURIATIC ACID FEEDER. 170 GPD CAPACITY. INTERLOCK ELECTRICALLY WITH FILTER PUMP.
7	1	CHEMICAL STORAGE CONTAINER			50 GALLON POLYPROPYLENE STORAGE TANK WITH LID CONTENTS OF TANK TO BE CLEARLY LABELED ON FRONT OF TANK.
8		CHEMICAL CONTROLLER	STRANTROL	SYSTEM 5	STRANTROL SYSTEM 5 WITH DVT I/O PORT & REMOTE ANNUNCIATOR INSTALLED IN POOL MANAGERS OFFICE. PROVIDE AND INSTALL ALL CABLE, CONDUIT, FITTINGS AND HARDWARE FOR INSTALLATION PER MFRS. DETAILS (C.E.S. INC. JUPITER, FLORIDA)
9	1	WATER LEVEL CONTROLLER			TORO AUTOMATIC WATER LEVELING DEVICE, AND FLOAT VALVE ASSEMBLY. VALVE IS ALSO EQUIPPED WITH A 1 1/2" PVC FILL LINE AND MANUALLY OPERATED BALL VALVE
10	1	COLLECTOR TANK	COMPAC	F700	700 GALLON CAPACITY. ALL FIBERGLASS CONSTRUCTION AS MANUFACTURED BY COMPAC FILTRATION, INC. 1-804-356-4003
11	1	BOOSTER PUMP			1/2 HP BOOSTER PUMP FOR PULSAR III FEEDER / 200V / SINGLE PHASE.
12	1	PRESSURE AMP PUMP			1/2 HP PRESSURE AMP PUMP FOR DEP 200V / SINGLE PHASE.
13	1	POOL HEATER	EXISTING		2,400 000 BTU EXISTING POOL HEATER
14	1	THERMOMETER			ASHCROFT OR EQUAL



PLAN VIEW  
 COM PAC FILTRATION, INC.  
 JACKSONVILLE, FLORIDA

SWIMMING POOL  
 COLLECTOR TANK DETAIL  
 SCALE 3/4"=1'-0"



ELEVATION

AQUADYNAMICS  
 DESIGN GROUP, INC.  
 AQUATIC ENGINEERING  
 CONSULTANTS  
 4500 NW 70TH AVENUE  
 MIAMI, FLORIDA 33166  
 PH (305) 897-8878  
 FAX (305) 898-4008

CITY OF FORT LAUDERDALE  
 PUBLIC SERVICES DEPARTMENT  
 ARCHITECTURAL DIVISION  
 Architecture • Landscape Architecture • Project Management  
 100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

DATE:	07-30-01
DRAWN BY:	O.T.
CHECKED BY:	
CAD FILE:	316-0-148-144-P-001
REVISIONS:	1/1/01 CITY REVIEW 10/24/01 100% SUBMITTAL COMMENTS 1/6/01 PER DOH REVIEW 01/103 CHANGED TO CF-247

PROJECT #15160  
 JOSEPH C. CARTER PARK  
 EXISTING SWIMMING POOL  
 SCHEDULE OF EQUIPMENT AND FILTER DETAILS

SHEET NO.  
 PL-10  
 OF 12  
 DRAWING FILE NO.  
 12-12-02  
 Page 109 of 215



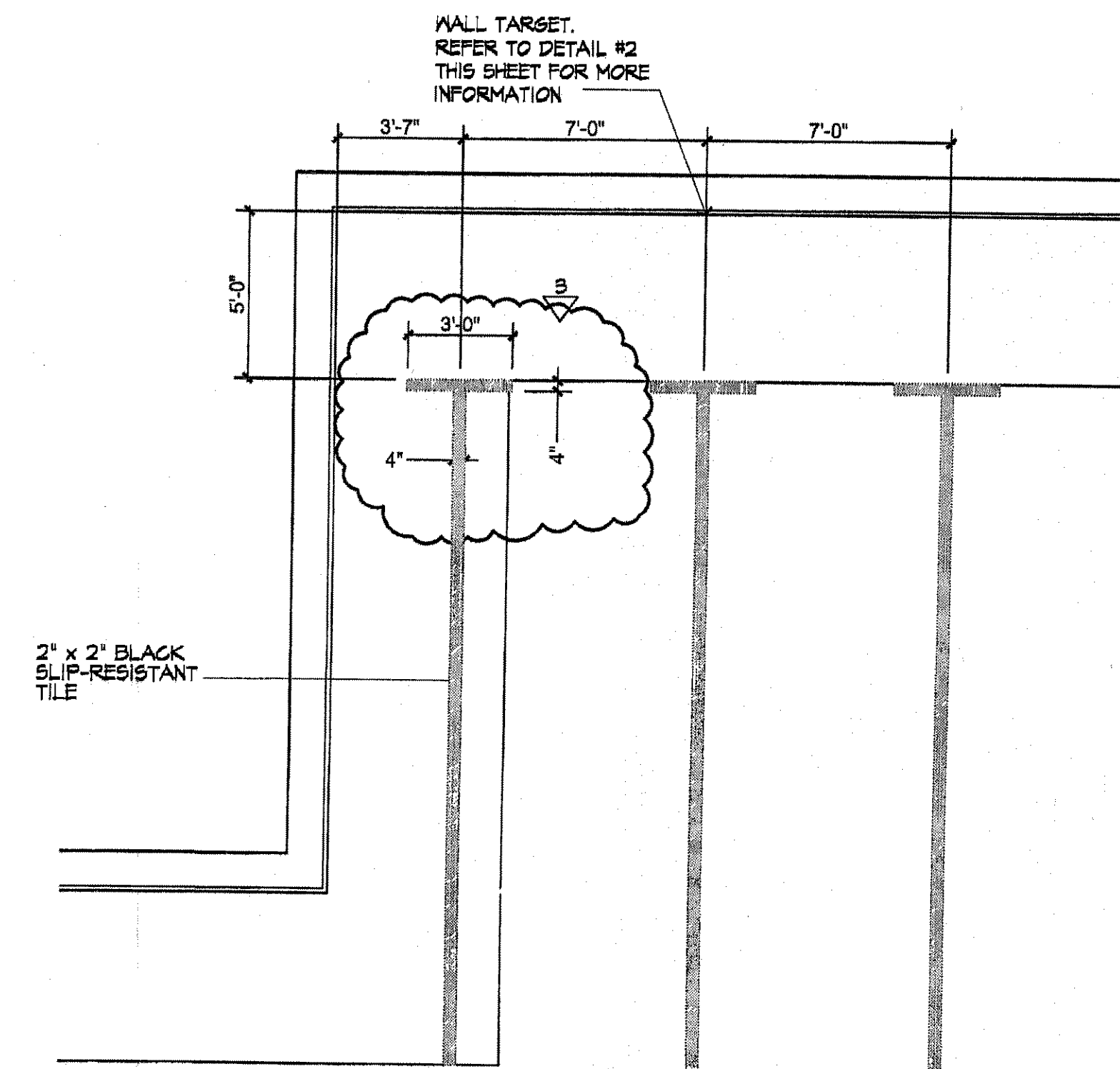



Diagram illustrating the dimensions of a 2 x 2 Slip Resistant Tile Wall Target. The target is a cross-shaped structure with a central square and four rectangular arms. Dimensions are given in meters (M) and feet/inches (Ft/In).

- Central square side length: 0.25M (10")
- Horizontal arm total width: 1.74M (5Ft 8 1/2 In)
- Horizontal arm central section width: 0.5M (1Ft 7 1/2 In)
- Vertical arm total height: 3.38M (11Ft 1 1/8 In)
- Vertical arm central section height: 0.25M (10")
- Target label: 2 x 2 SLIP RESISTANT TILE WALL TARGET
- Pool wall label: POOL WALL

WALL  
② TARGET DETAIL  
SCALE 1/2"=1'-0"



**CITY OF FORT LAUDERDALE**  
**PUBLIC SERVICES DEPARTMENT**  
**ARCHITECTURAL DIVISION**  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

DATE: 07-30-01	REVISIONS: A 9/17/01 CITY REVIEW A 10/24/01 100% SUBMITTAL COMMENTS A 11/6/01 PER DOH REVIEW A 01/10/03 CHANGED TO CF-247
DRAWN BY: M.F.	
CHECKED BY:	
CAD FILE: 156-00-Sig-146-Pool	

PROJECT #15160  
JOSEPH C. CARTER PARK  
SWIMMING POOL  
DETAILS

SHEET NO.  
PL-11  
OF 12  
DRAWING FILE NO.  
4-122-52

## NOTES:

1.- POOL CONTRACTOR TO PLUG AND PRESSURE TEST ALL EXISTING PIPING FOR LEAKS. PRESSURE TEST ALL PIPING AT 40 PSI FOR 24 HOURS.

2.- IF NECESSARY POOL CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED PIPE AND OR FITTINGS.

3.- POOL CONTRACTOR SHALL CHECK THE CONDITION OF ALL PIPE SUPPORTS FOR INTEGRITY. POOL CONTRACTOR SHALL REPAIR OR REPLACE AS NECESSARY ALL SUPPORT AS REQUIRED.

4.- THE POOL CONTRACTOR SHALL INCLUDE IN THE BID PACKAGE, AN ALLOWANCE FOR THE ABOVE SPECIFIED WORK IN THE WORST CASE. THE POOL CONTRACTOR SHALL CREDIT THE CITY FOR WORK NOT NECESSARY UNDER THIS PORTION OF THE PROJECT.

EXISTING  
CONVERTER BOX

EXISTING 10" SWIMMING POOL  
MAIN DRAIN LINE TO BE CONNECTED  
WITH NEW COLLECTOR TANK IN ROOM

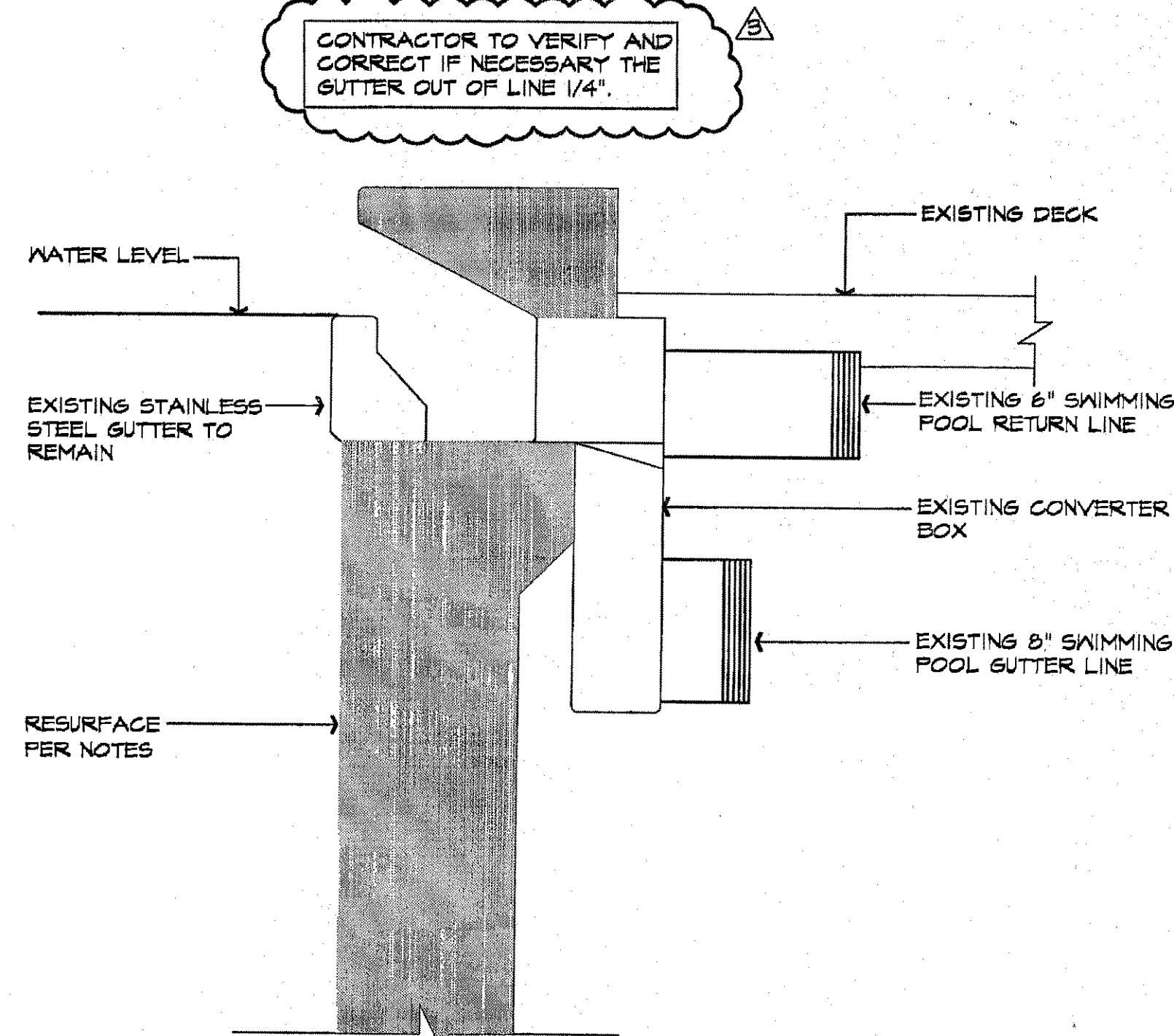
EXISTING 8" SWIMMING POOL  
GUTTER LINE TO BE CONNECTED  
WITH NEW COLLECTOR TANK IN ROOM

EXISTING 6" SWIMMING POOL  
RETURN LINE TO BE CONNECTED  
WITH NEW RETURN LINE IN EQUIP. ROOM

## EXISTING SWIMMING POOL PIPING PLAN

SCALE: 1/8" = 1'-0"

POOL  
EQUIPMENT  
ROOM



## EXISTING POOL GUTTER DETAIL

SCALE: 1 1/2" = 1'-0"

**AQUADYNAMICS  
DESIGN GROUP, INC.**  
AQUATIC ENGINEERING  
CONSULTANTS  
6850 S.W. 79th AVENUE  
MIAMI, FLORIDA 33155  
TEL: 305-487-8876  
FAX: 305-487-8888

**CITY OF FORT LAUDERDALE**  
PUBLIC SERVICES DEPARTMENT  
**ARCHITECTURAL DIVISION**  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

DATE:	REVISIONS:
10-09-01	4/17/01 CITY REVIEW
DRAWN BY: O.T.	10/24/01 100% SUBMITTAL COMMENTS
CHECKED BY:	11/6/01 PER DOH REVIEW
CAD FILE:	01/17/03 CHANGED TO CF-247
FILE: 31-100-POOL	

**PROJECT #15160**  
**JOSEPH C. CARTER PARK**  
**SWIMMING POOL**  
EXISTING PIPING PLAN

SHEET NO.

PL-12

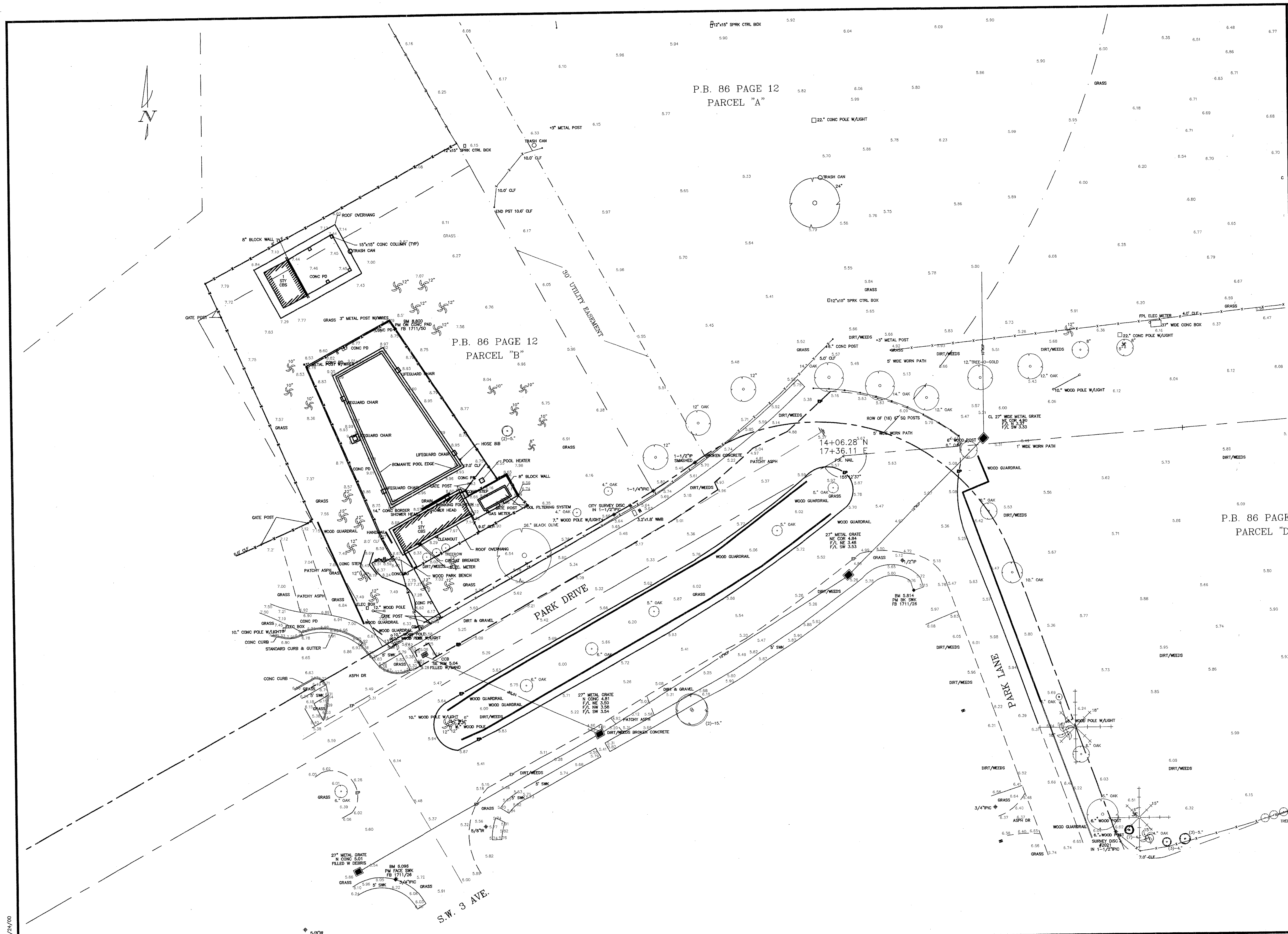
OF

12

DRAWING FILE NO.

4-122-52





FINAL APPROVAL

SCALE: 1" = 20'

DESIGNED BY: KSH

CHECKED BY: JSC

DATE: 08/24/00

FIELD BOOK:

CITY OF FORT LAUDERDALE

PUBLIC SERVICES DEPARTMENT

ENGINEERING DIVISION

FORT LAUDERDALE, FLORIDA

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT #15170

AQUATIC CENTER

CROISSANT PARK

NO. OF SHEETS: 00

SHEET NO.: S-1

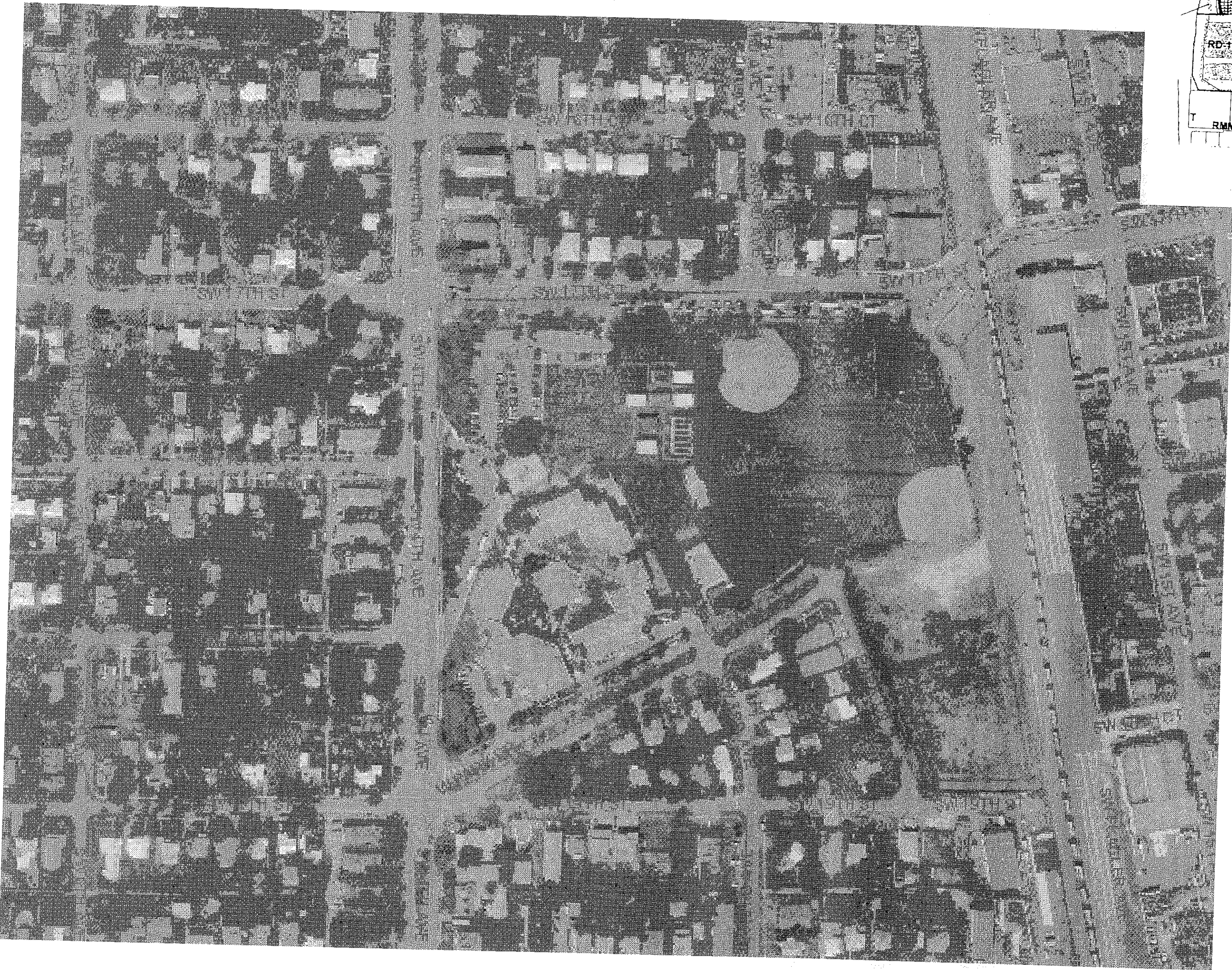
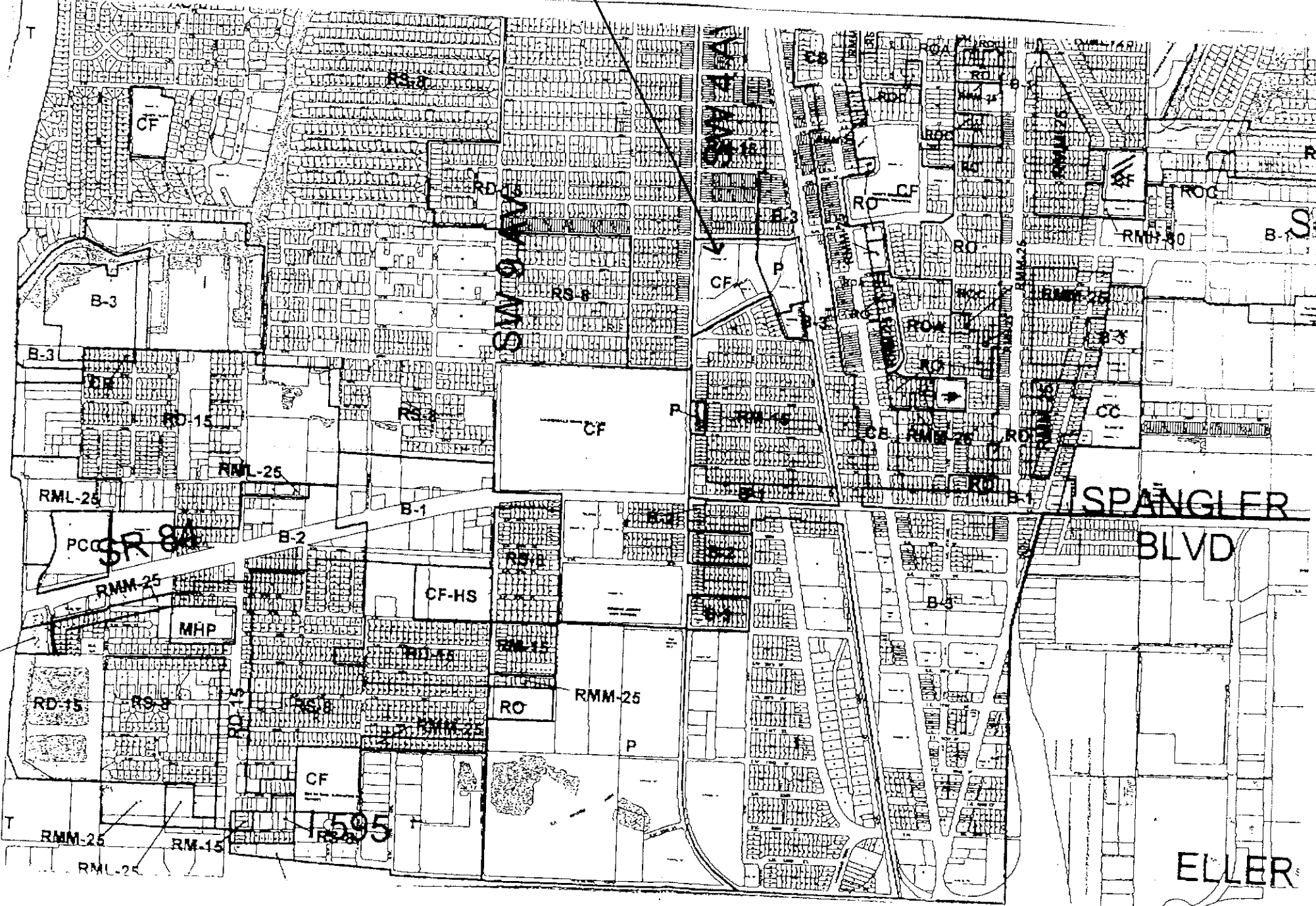
CAD FILE NO. 15170-S01-000SURV

FILE NO.

OWNER & DRC Initial Review Drawings



CRUISSANT PARK  
1800 SW 4th AVENUE  
SITE LOCATION



City of Fort Lauderdale GIS

Page 1 of 1

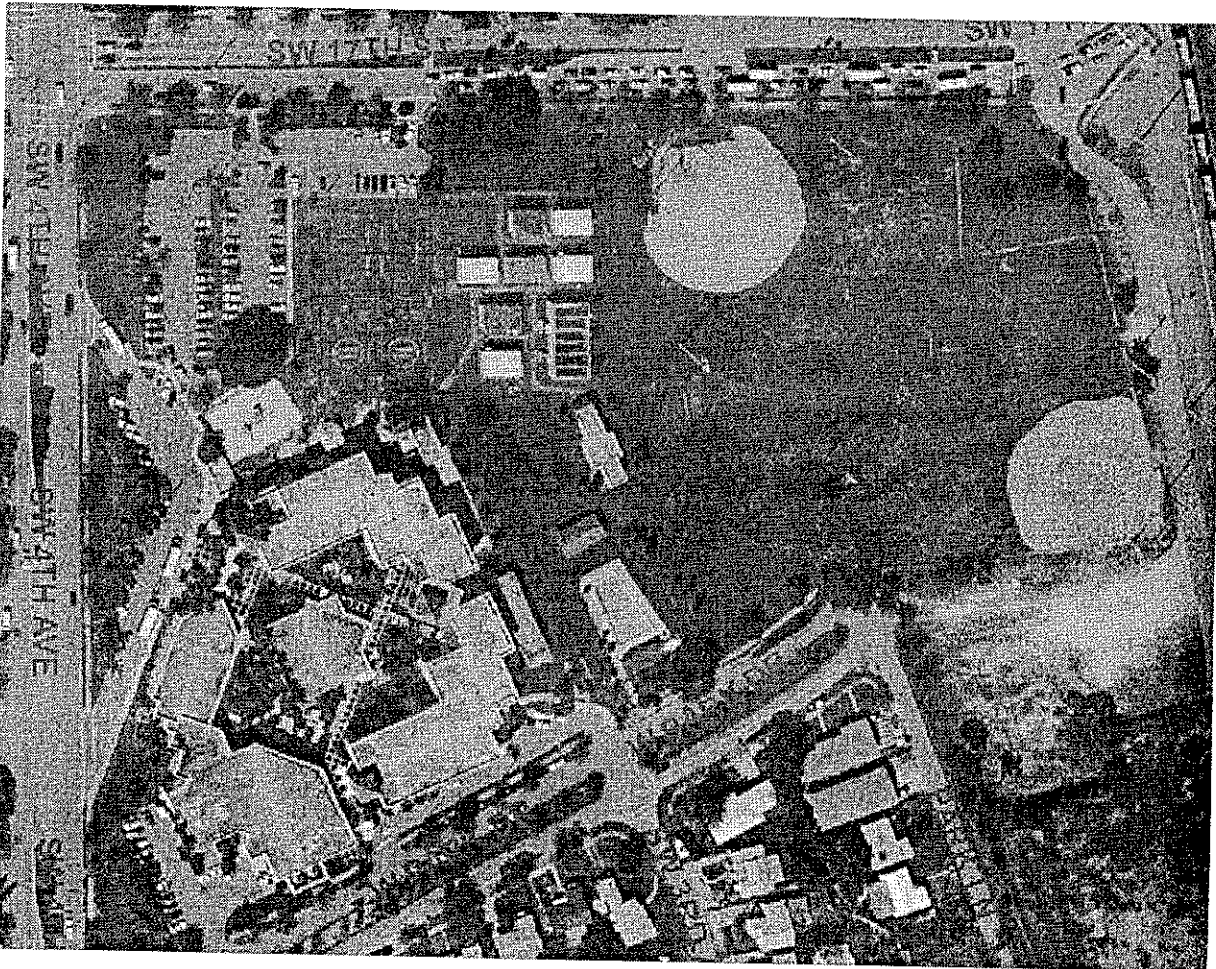
City of Fort Lauderdale GIS

[View Aerial Photo](#)

[Find New Address](#)

**Click Inside Map to:**

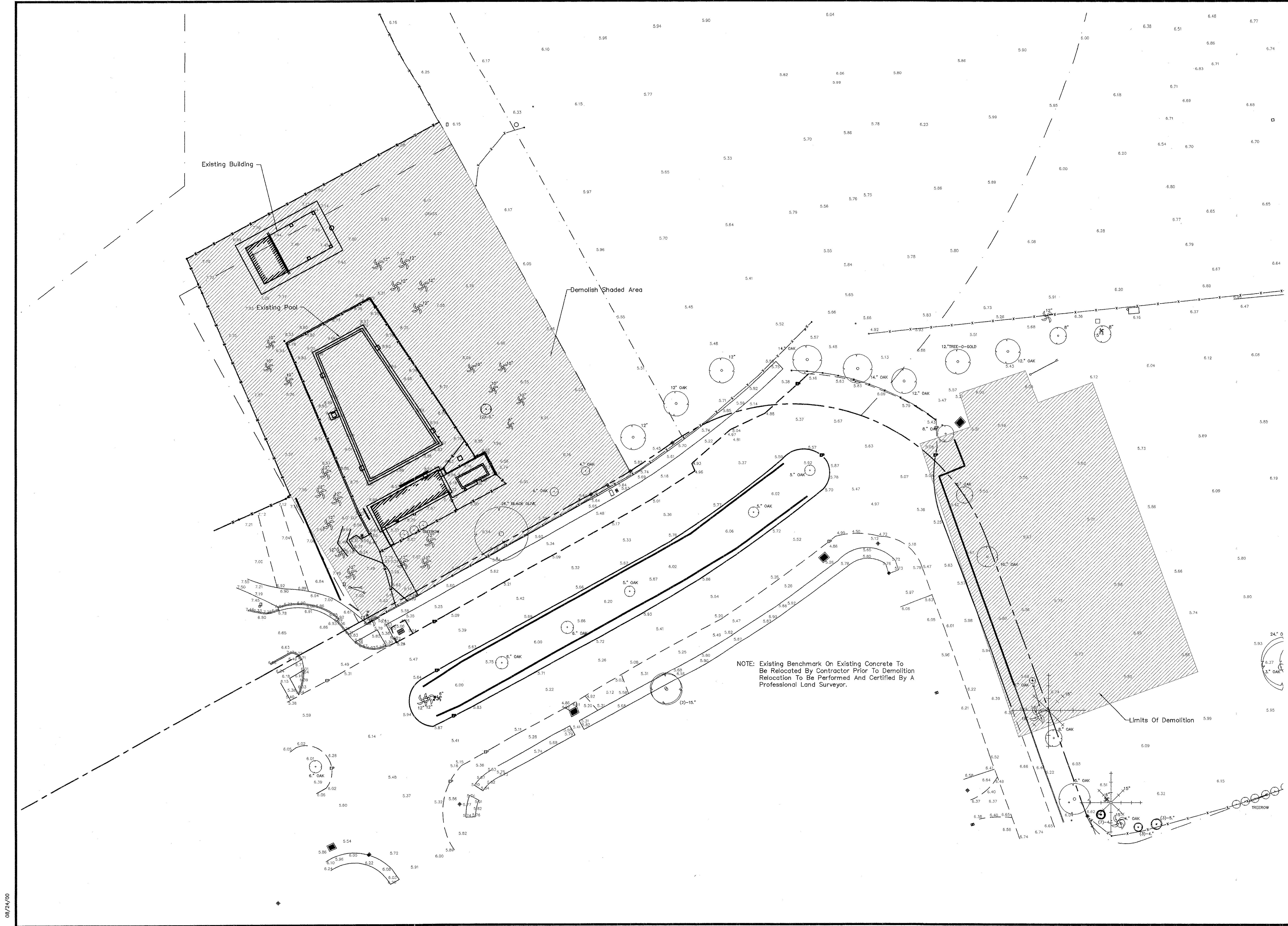
[Zoom In](#) [Zoom Out](#) [Recenter Map](#) [Show Parcel Detail](#)



This map contains parcel data governed by the following:  
Copyright 1993-1998 EPL. No express or implied warranties including, but not limited to the implied warranties of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE are made. The materials contained herein are provided as is and may contain inaccuracies and User is warned to utilize the materials herein at User's own risk and to verify the materials' accuracy independently and assumes the risk of any and all loss.

.../esrimap.dll?name=Project\_5066&Cmd=ZoomIn&Left=935920.183784243&Bottom=641348.0/14/00







1616-52

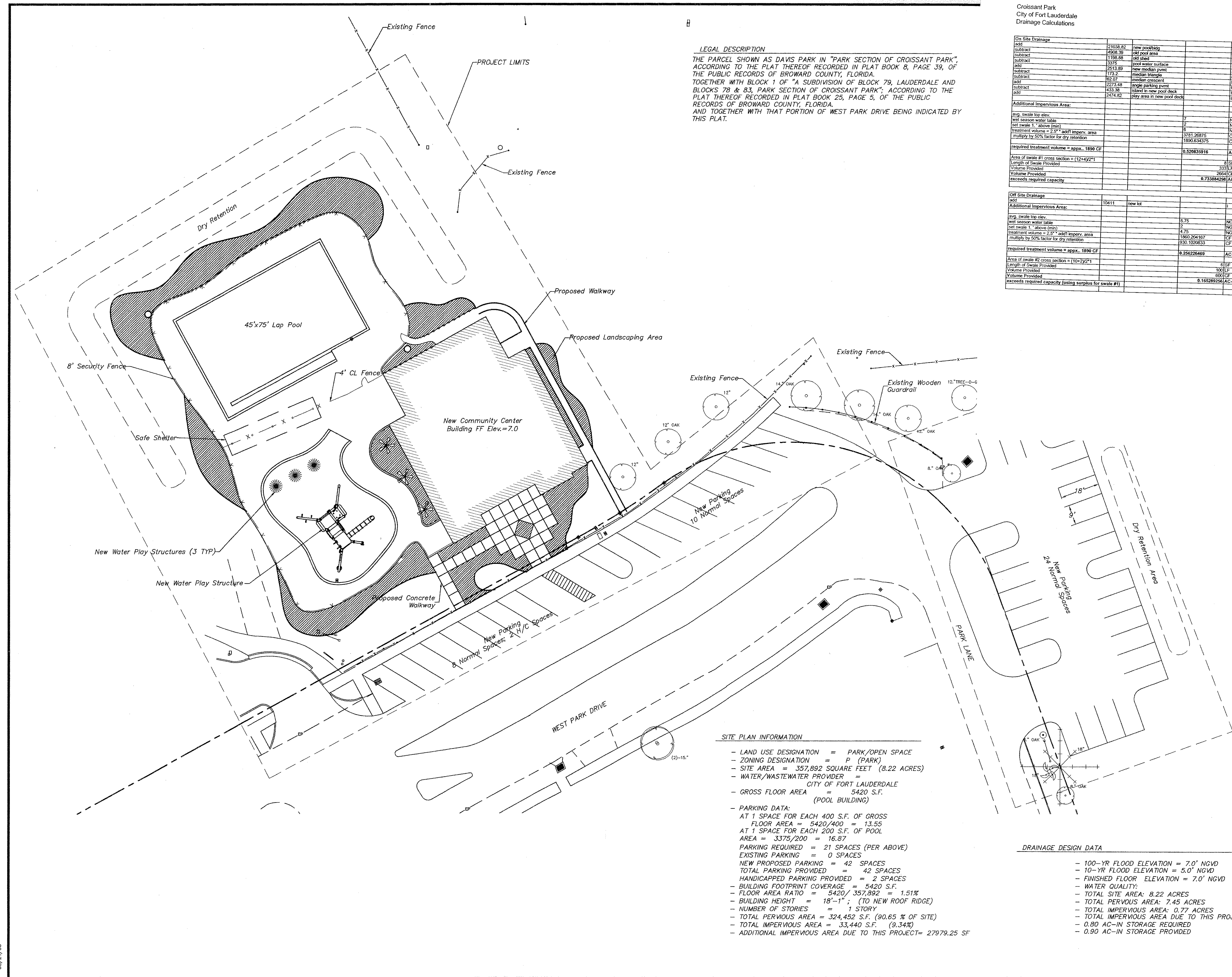
08/24/00

Croissant Park  
City of Fort Lauderdale  
Drainage Calculations

On Site Drainage	21038.82	new pool area	1	21038.82
add				
subtract	4906.38	old pool area	1	4906.38
subtract	1198.88	old shed	1	1198.88
add	3375	pool water surface	1	3375
subtract	2513.89	new median pvt.	1	2513.89
subtract	173.2	median triangle	1	173.2
add	62.07	median crescent	1	62.07
subtract	2273.48	angle parking pvt.	1	2273.48
add	433.38	island in new pool deck	1	433.38
subtract	2474.82	play area in new pool deck	1	2474.82
Additional Impervious Area:				18150.09
avg. swale top elev.				
wet season water table	7	NGVD		
soil swale 1" above (min)	2	NGVD		
treatment volume = 2.5" add'l imperv. area	3781.26875	CF		
multiply by 50% factor for dry retention	1890.634375	CF		
required treatment volume = approx. 1890 CF	0.520835916	AC-IN		
Area of swale #1 cross section = (12+4)2*1	6	SF		
Length of Swale Provided	3331LF			
Volume Provided	2664	CF		
Volume Provided	0.733884296	AC-IN		
exceeds required capacity				
Off Site Drainage	10411	new lot	1	8928.98
Additional Impervious Area:				8928.98
avg. swale top elev.				
wet season water table	5.75	NGVD		
soil swale 1" above (min)	2	NGVD		
treatment volume = 2.5" add'l imperv. area	4.75	NGVD		
multiply by 50% factor for dry retention	1860.204167	CF		
required treatment volume = approx. 1890 CF	830.1004533	CF		
Area of swale #2 cross section = (10+2)2*1	0.296226469	AC-IN		
Length of Swale Provided	6	SF		
Volume Provided	1001LF			
Volume Provided	0.165289256	AC-IN		
exceeds required capacity (using surplus for swale #1)				

## LEGAL DESCRIPTION

THE PARCEL SHOWN AS DAVIS PARK IN "PARK SECTION OF CROISSANT PARK", ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 8, PAGE 39, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. TOGETHER WITH BLOCK 1 OF "A SUBDIVISION OF BLOCK 79, LAUDERDALE AND BLOCKS 78 & 83, PARK SECTION OF CROISSANT PARK", ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 25, PAGE 5, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. AND TOGETHER WITH THAT PORTION OF WEST PARK DRIVE BEING INDICATED BY THIS PLAT.



## SITE PLAN INFORMATION

- LAND USE DESIGNATION = PARK/OPEN SPACE
- ZONING DESIGNATION = P (PARK)
- SITE AREA = 357,892 SQUARE FEET (8.22 ACRES)
- WATER/WASTEWATER PROVIDER = CITY OF FORT LAUDERDALE
- GROSS FLOOR AREA = 5420 S.F. (POOL BUILDING)
- PARKING DATA:
  - AT 1 SPACE FOR EACH 400 S.F. OF GROSS FLOOR AREA = 5420/400 = 13.55
  - AT 1 SPACE FOR EACH 200 S.F. OF POOL AREA = 3375/200 = 16.87
  - PARKING REQUIRED = 21 SPACES (PER ABOVE)
  - EXISTING PARKING = 0 SPACES
  - NEW PROPOSED PARKING = 42 SPACES
  - TOTAL PARKING PROVIDED = 42 SPACES
  - HANDICAPPED PARKING PROVIDED = 2 SPACES
  - BUILDING FOOTPRINT COVERAGE = 5420 S.F.
  - FLOOR AREA RATIO = 5420 / 357,892 = 1.51%
  - BUILDING HEIGHT = 18'-1" (TO NEW ROOF RIDGE)
  - NUMBER OF STORIES = 1 STORY
  - TOTAL PERVIOUS AREA = 324,452 S.F. (90.65 % OF SITE)
  - TOTAL IMPERVIOUS AREA = 33,440 S.F. (9.34%)
  - ADDITIONAL IMPERVIOUS AREA DUE TO THIS PROJECT= 27979.25 SF

## DRAINAGE DESIGN DATA

- 100-YR FLOOD ELEVATION = 7.0' NGVD
- 10-YR FLOOD ELEVATION = 5.0' NGVD
- FINISHED FLOOR ELEVATION = 7.0' NGVD
- WATER QUALITY:
  - TOTAL SITE AREA: 8.22 ACRES
  - TOTAL PERVIOUS AREA: 7.45 ACRES
  - TOTAL IMPERVIOUS AREA: 0.77 ACRES
  - TOTAL IMPERVIOUS AREA DUE TO THIS PROJECT= 0.60 AC
  - 0.80 AC-IN STORAGE REQUIRED
  - 0.90 AC-IN STORAGE PROVIDED

FINAL APPROVAL	FLA. REG. ENG. NO.

SCALE: 1" = 20'	DATE: 08/24/00
DRAWN BY: AFR	DESIGNED BY: KSH
	CHECKED BY: JSC

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ENGINEERING DIVISION  
FORT LAUDERDALE, FLORIDA

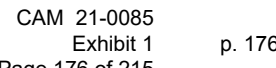
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT #15170  
AQUATIC CENTER  
CROISSANT PARK

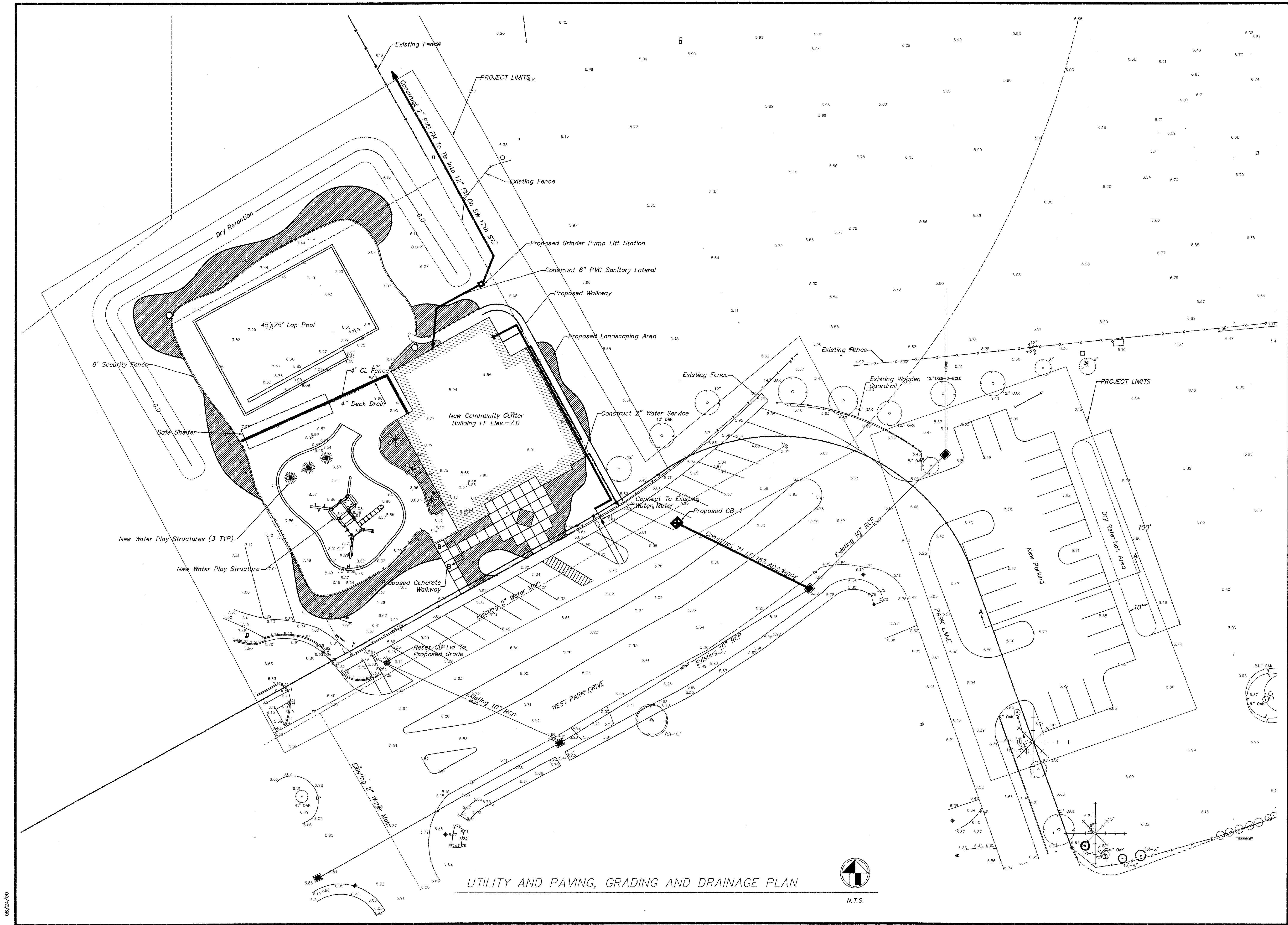
NO. OF SHEETS: 08

SHEET NO.: C-1

CAD FILE NO.  
15170-c01-008site  
FILE NO.







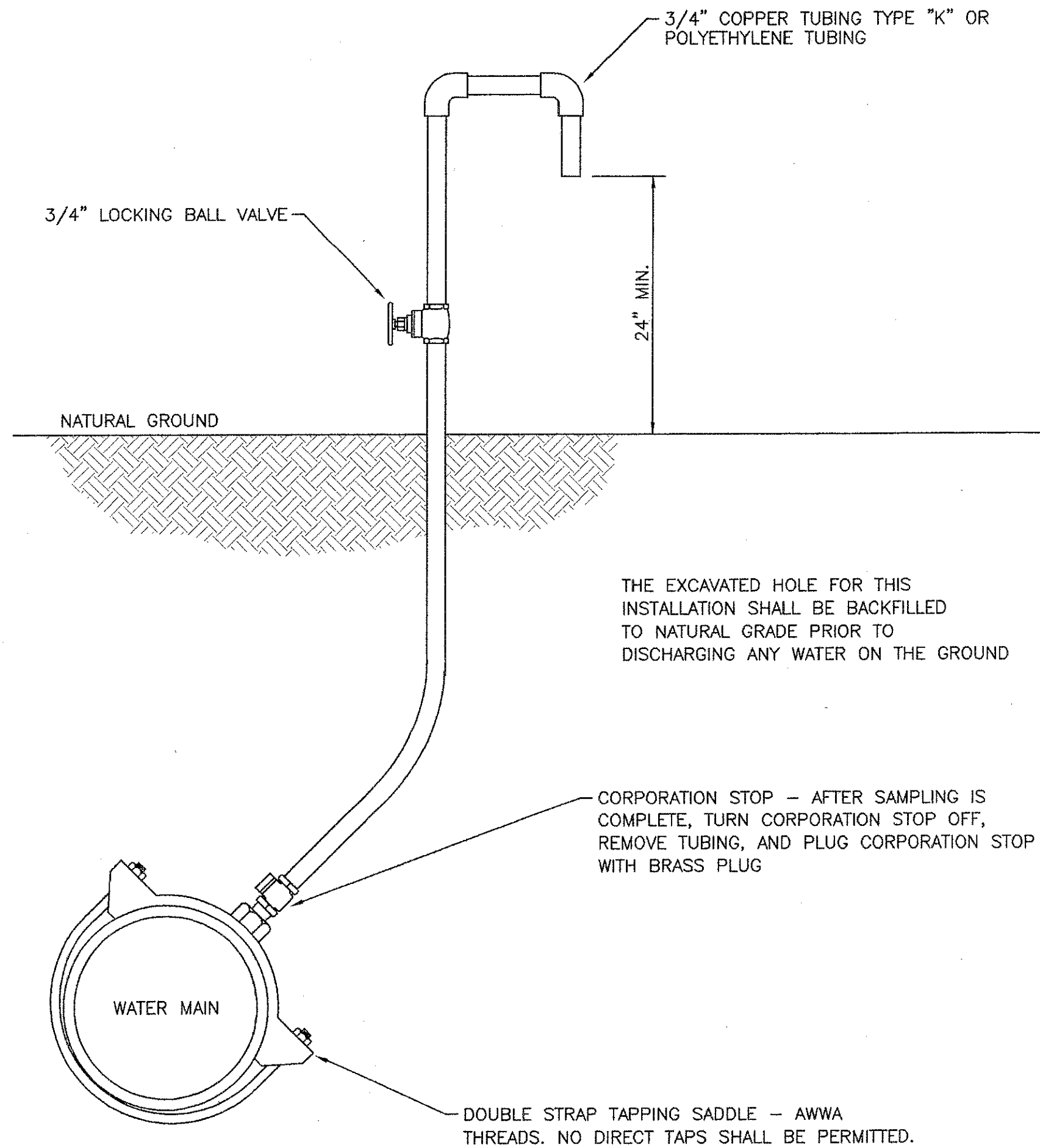
UTILITY AND PAVING, GRADING AND DRAINAGE PLAN



FINAL APPROVAL		SCALE: 1" = 20'		DRAWN BY: AFR		DESIGNED BY: KSH		CHECKED BY: JSC		DATE: 08/24/00		FLA. REG. ENG. NO.					
CITY OF FORT LAUDERDALE												PUBLIC SERVICES DEPARTMENT		ENGINEERING DIVISION		FORT LAUDERDALE, FLORIDA	
PROJECT #15170												AQUATIC CENTER		CROISSANT PARK		NO. OF SHEETS: 08	
SHEET NO.: C-3												CAD FILE NO. 15170-c03-008util		FILE NO.			

REVISIONS	
NO.	DATE
BY	CHK'D
DESCRIPTION	

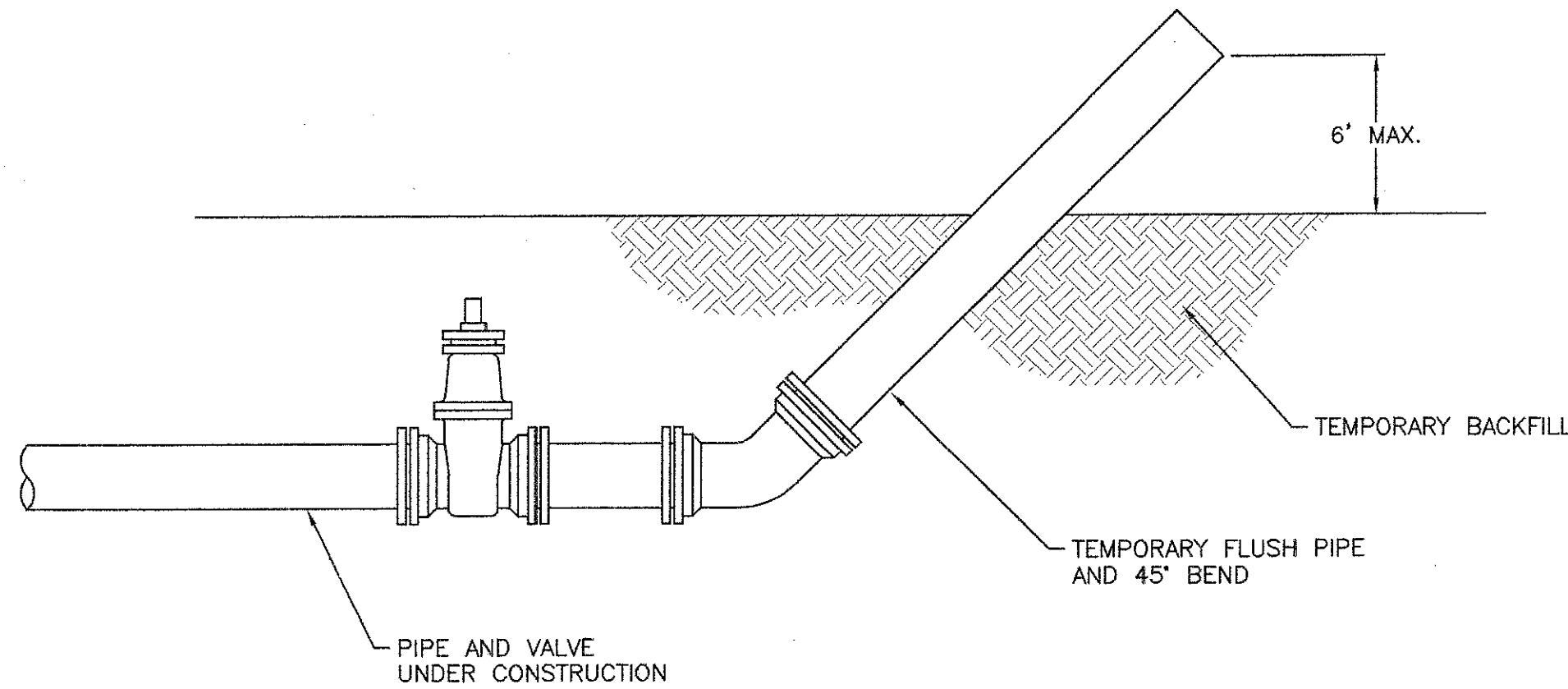
08/24/00



NOTES:

1. WHERE POSSIBLE, SERVICE TAPS OR FIRE HYDRANTS (SEE "SAMPLING POINT (FIRE HYDRANT)" DETAIL) SHALL BE USED AS SAMPLING POINTS.

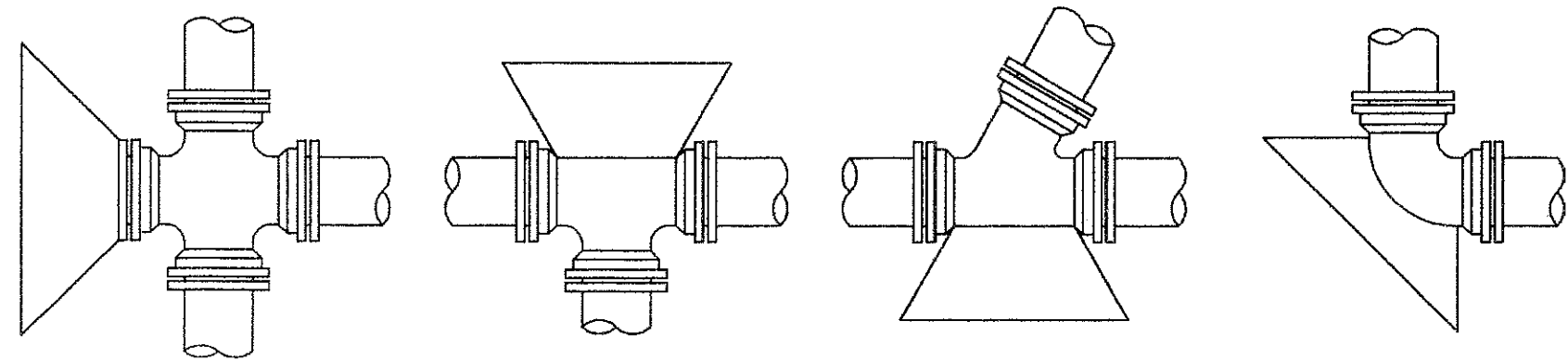
SAMPLING POINT (IN-LINE)  
N.T.S.



NOTES:

- UPON COMPLETION OF THE PIPE INSTALLATION FOR ANY SECTION, THE MAINS SHALL BE CANNON FLUSHED TO REMOVE DIRT AND ANY OTHER FOREIGN MATTER BY ACHIEVING A MINIMUM VELOCITY OF 2.5 FEET PER SECOND IN THE PIPE. TEMPORARY FITTINGS, PIPE, ETC. MAY BE NEEDED TO FACILITATE CANNON FLUSHING.
- INSTALL A 45° BEND AND ASSOCIATED PIPING AS SHOWN TO DIRECT THE FLUSHING WATER AWAY FROM THE IMMEDIATE WORK AREA AND EXERCISE DUE CARE SO AS TO ENSURE THAT THE WATER USED IN FLUSHING DOES NOT CAUSE A NUISANCE OR INFLECT PROPERTY DAMAGE.
- BENDS AND PIPING SHALL BE THE SAME SIZE AS THE LINE TO BE FLUSHED.
- PRIOR TO THE ACTUAL LINE FLUSHING OPERATION, THE CONTRACTOR SHALL PROPERLY NOTIFY THE INSPECTOR OF SUCH INTENDED WATER USE.
- NO EXISTING VALVES SHALL BE TURNED ON OR OFF, EXCEPT BY AUTHORIZED PERSONNEL.
- FLUSHING SHALL NOT BE ACCOMPLISHED WITHOUT THE ACTUAL PRESENCE OF THE INSPECTOR.
- AFTER THE LINE UNDER CONSTRUCTION HAS BEEN SUCCESSFULLY FLUSHED THE CONTRACTOR SHALL REMOVE THE TEMPORARY PIPING ARRANGEMENT AND PROCEED WITH THE REMAINING CONSTRUCTION AS SPECIFIED.
- THERE MAY BE SPECIAL REQUIREMENTS FOR FLUSHING PIPE LARGER THAN 12".

CANNON FLUSHING PROCEDURE  
N.T.S.

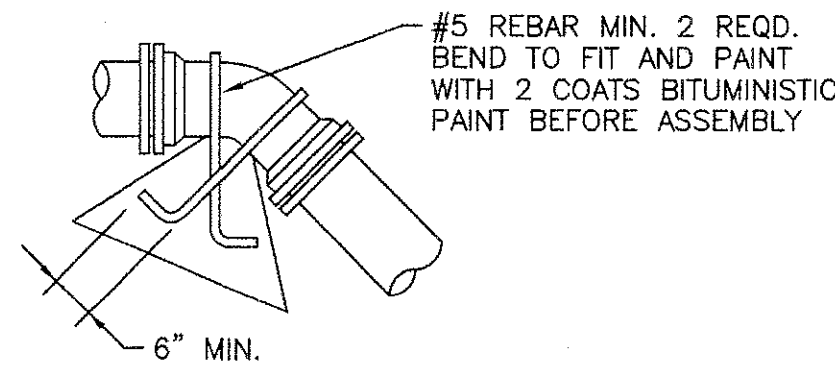


CROSS WITH PLUG

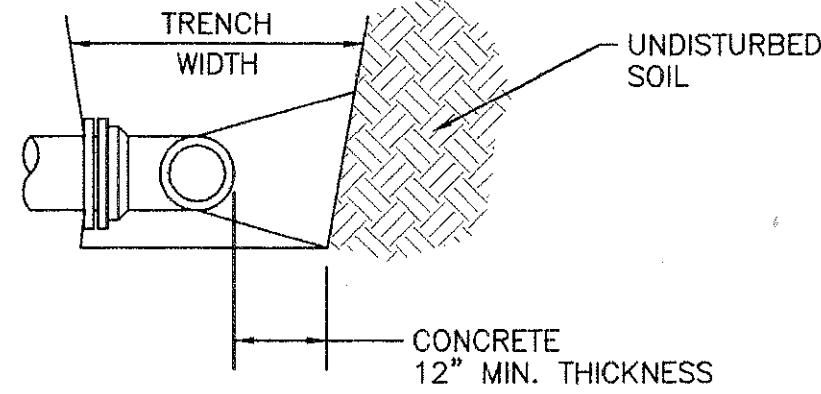
TEE

WYE

BEND



\* DEADMAN



TYPICAL SECTION

ALL THRUST BLOCKS SHALL BE FORMED. LAID FORMS SHALL BE INSPECTED BY SUA PRIOR TO THE POURING OF CONCRETE AND SHALL ALSO BE INSPECTED BY SUA PRIOR TO COVERING. TYPICAL LOCATIONS WHICH REQUIRE CONCRETE REACTIONS (THRUST) BLOCKS, FOR PRESSURE MAINS FOUR INCHES (4") AND GREATER CONCRETE SHALL HAVE 2500 P.S.I. MINIMUM STRENGTH AT TWENTY EIGHT (28) DAYS AND BEAR AGAINST UNDISTURBED STABLE SOILS, AREA OF CONTACT SHALL BE GOVERNED BY PIPE SIZE, MAXIMUM PRESSURE IN PIPE, AND BEARING CAPACITY OF SOIL. PROTECT FITTINGS, BOLTS, ETC. BY COVERING WITH VISQUEEN OR OTHER ACCEPTABLE MATERIAL. CONCRETE SHALL BE A MINIMUM OF TWELVE INCHES (12") THICK.

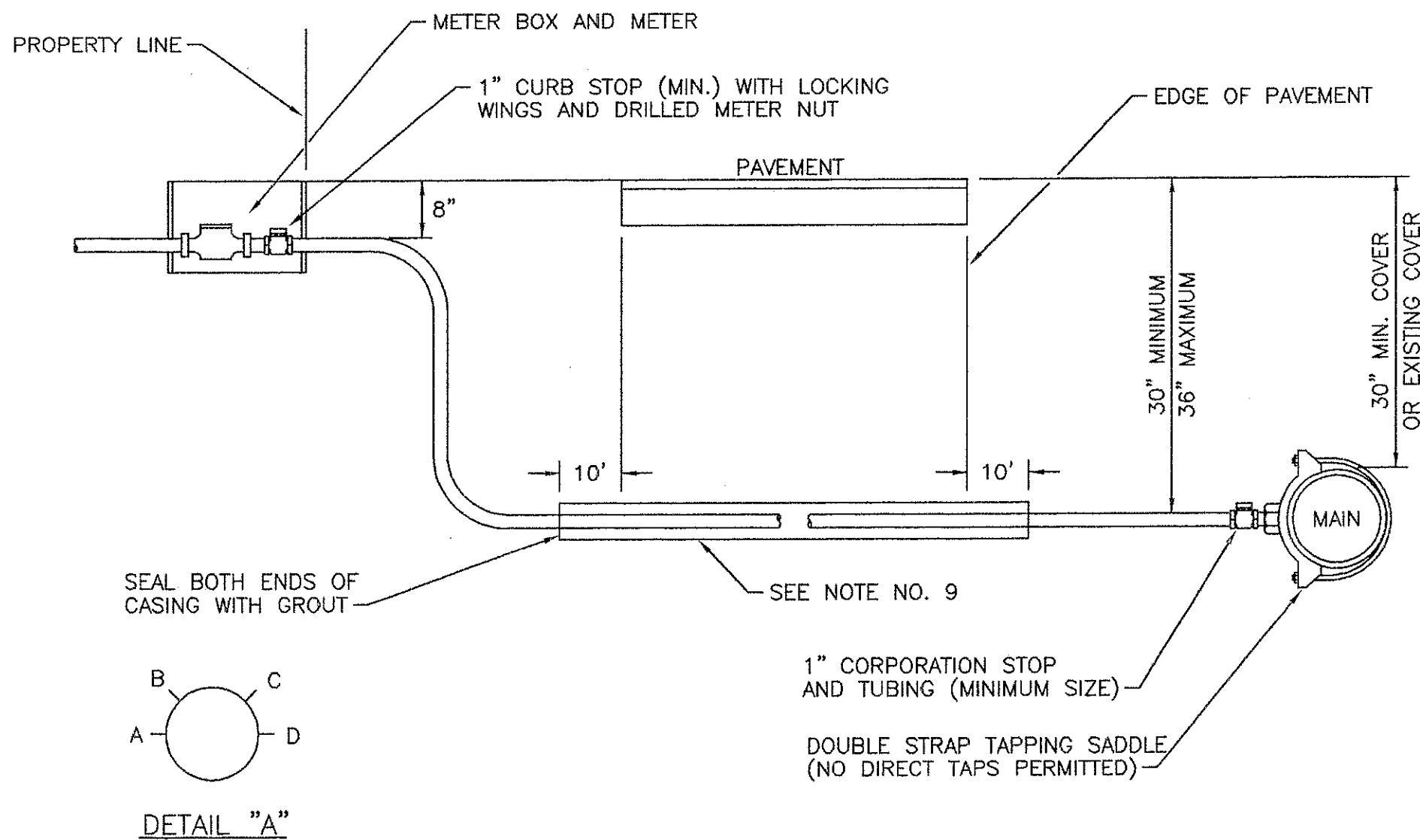
PIPE	THRUST BLOCK SOIL BEARING AREA REQUIRED	PIPE	THRUST BLOCK SOIL BEARING AREA REQUIRED	REMARKS
4"	2.0 SQ. FT.	18"	30.0 SQ. FT.	VALUES ARE FOR 90° BEND, BASED ON 2000 P.S.F. SAFE BEARING LOAD AND PIPE PRESSURE OF 150 P.S.I. PLUS 33% SAFETY FACTOR FOR OTHER SOILS AND PRESSURES, THE AREA REQUIRED IS IN DIRECT PROPORTION.
6"	4.0 SQ. FT.	20"	37.0 SQ. FT.	
8"	6.6 SQ. FT.	24"	53.0 SQ. FT.	
10"	10.0 SQ. FT.	27"	80.0 SQ. FT.	
12"	14.0 SQ. FT.	30"	98.0 SQ. FT.	
14"	18.0 SQ. FT.	36"	127.0 SQ. FT.	
16"	24.0 SQ. FT.			

\* THE ENGINEER OF RECORD SHALL CALCULATE THE SIZE OF THE DEADMAN REQUIRED AS WELL AS ANY INSTALLATION WHICH IS NOT COVERED BY THE ABOVE.

THRUST BLOCKS  
N.T.S.

FINAL APPROVAL	SCALE: N.T.S.	DRAWN BY: AFR	DESIGNED BY: KSH	CHECKED BY: JSC
FLA. REG. ENG. NO.	DATE: 08/24/00	FIELD BOOK:		
CITY OF FORT LAUDERDALE				
PUBLIC SERVICES DEPARTMENT				
ENGINEERING DIVISION				
FORT LAUDERDALE, FLORIDA				
REVISIONS	NO.	DATE	BY	CHK'D
PROJECT #15170				
AQUATIC CENTER				
CROISSANT PARK				
NO. OF SHEETS: 08				
SHEET NO.: C-4				
CAD FILE NO. 15170-0C4-008note				
FILE NO.				



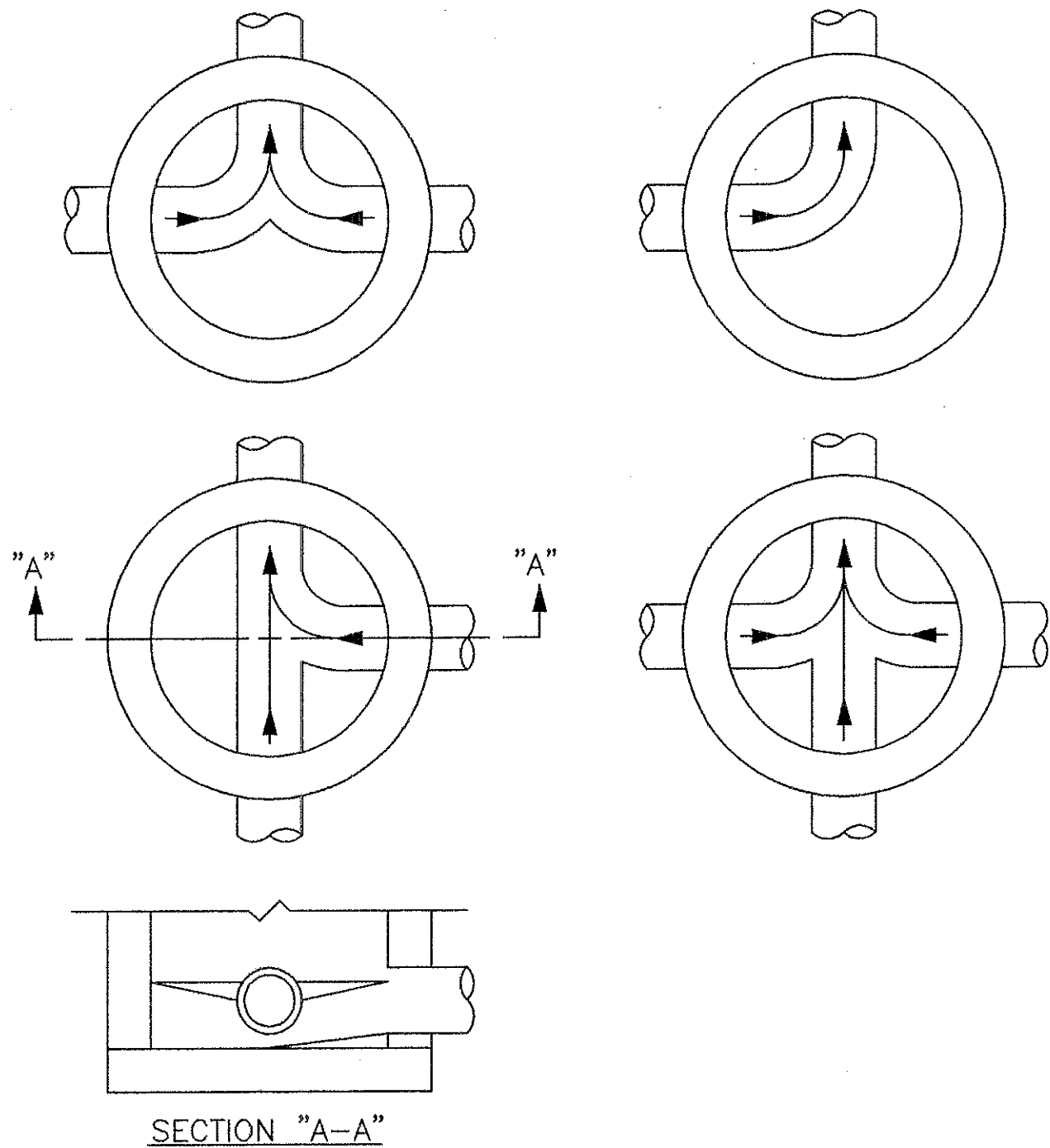


NOTES:

- CASINGS SHALL BE REQUIRED FOR ALL LONG SIDE SERVICES.
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET AND AT 45' FROM THE CENTERLINE MAINS WITH GREATER THAN 30" OF COVER. (SEE DETAIL "A")
- WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISH GRADE.
- COPPER TUBING SHALL BE TYPE "K" WITH COMPRESSION FITTINGS.
- POLYETHYLENE TUBING SHALL BE SDR 9, COPPER TUBE SIZE.
- ROTATE THE CORPORATION STOP SO THAT THE OPERATING NUT IS ACTUATED FROM THE VERTICAL POSITION RATHER THAN THE HORIZONTAL.
- BOTH COPPER AND POLYETHYLENE TUBING SERVICE LINES SHALL BE CONTINUOUS FROM CORPORATION STOP TO CURB STOP WITH NO FITTINGS IN BETWEEN.
- TAPPING SADDLES AND CORPORATION STOPS SHALL HAVE AWWA INLET THREADS.
- SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.
- GALVANIZED CASING REQUIRED FOR ANY INSTALLATION REQUIRING A JACK AND BORE, SCHEDULE 40 PVC MAY BE USED FOR AN OPEN CUT INSTALLATION WITH THE APPROVAL OF EOR, CASING SHOULD EXTEND TEN (10) FEET BEYOND EDGE OF PAVEMENT AND SIZED AS FOLLOWS:
  - 1" SERVICE USE 2" CASING
  - 1 1/2" SERVICE USE 3" CASING
  - 2" SERVICE USE 4" CASING

TYPICAL WATER SERVICE INSTALLATION

N.T.S.

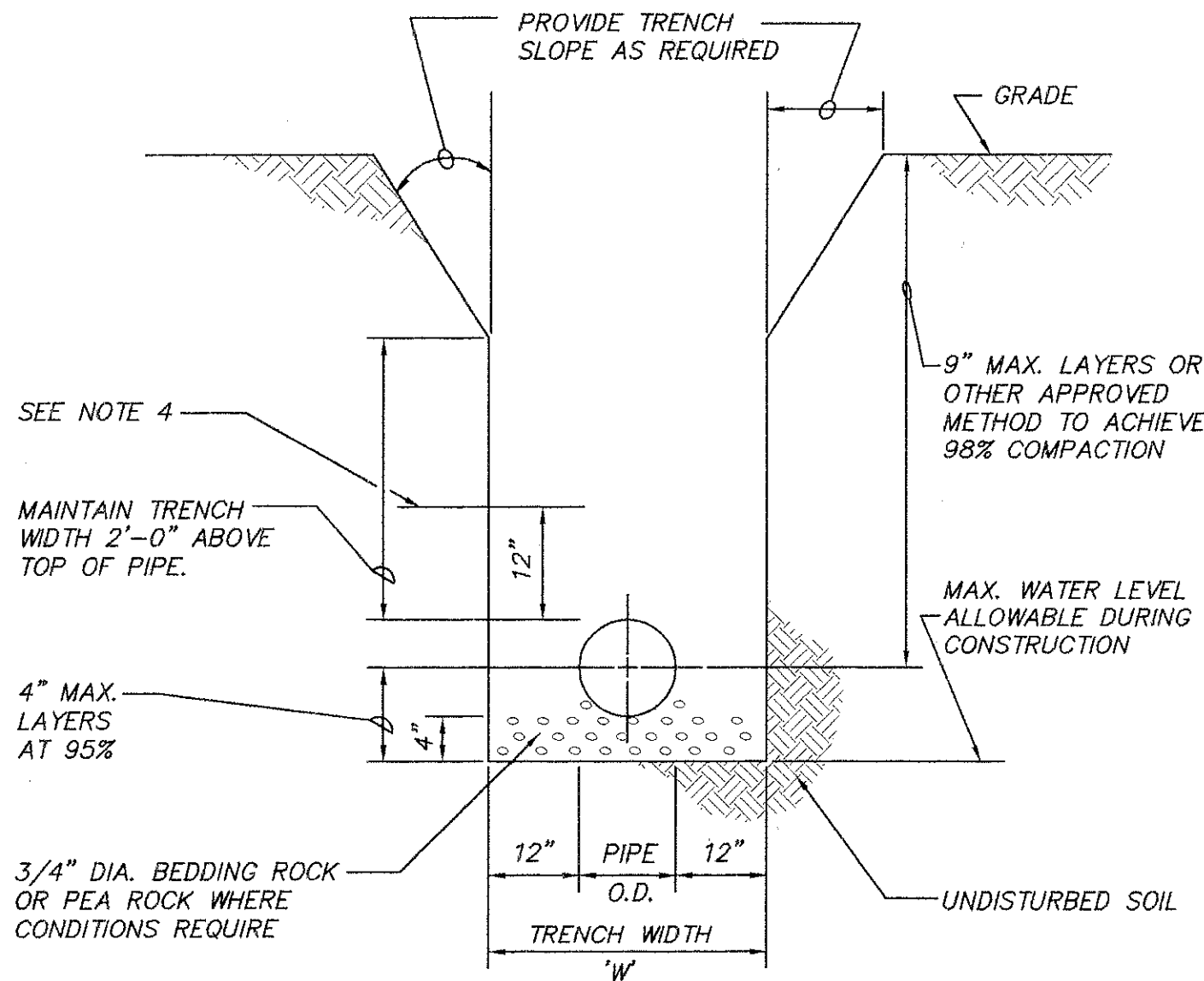


NOTES:

- INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
- SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.
- CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
- SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
- INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP.

FLOW PATTERNS FOR INVERT CHANNELS

N.T.S.

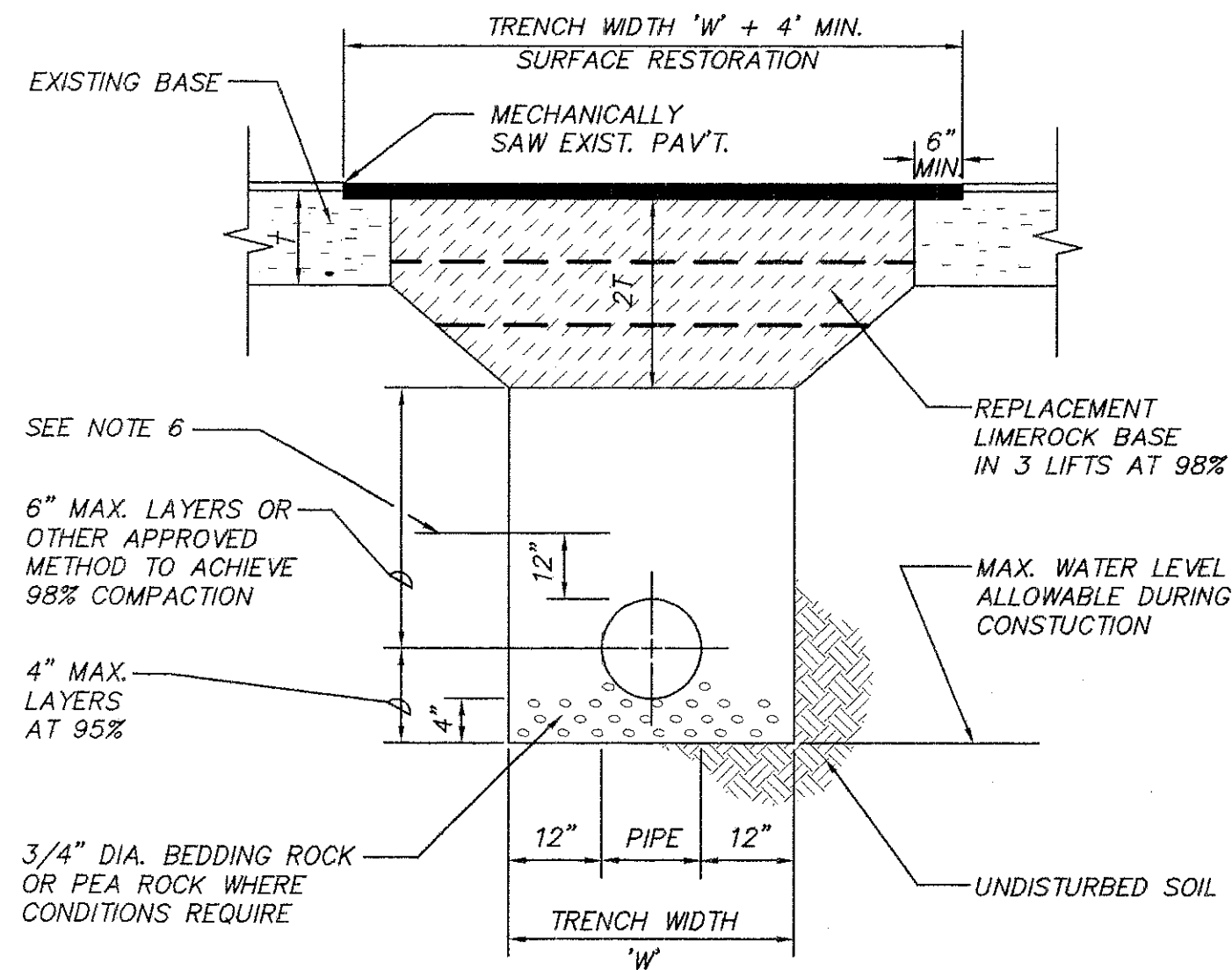


NOTES

- WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED METHOD OF CONSTRUCTION.
- SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
- COMPACTION PERCENTAGES SHOWN REFER TO A.A.S.H.O. T-180.
- MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL.

TRENCH (UNPAVED AREAS)

N.T.S.



NOTES

- WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED METHOD OF CONSTRUCTION.
- SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
- NEW SURFACING MATERIALS SHALL BE CONSISTENT WITH EXISTING AND SHALL HAVE LAPPED AND FEATHERED JOINTS. (2" MIN. THK.)
- COMPACTION PERCENTAGES SHOWN REFER TO A.A.S.H.O. T-180.
- ALL ROADWAY RESTORATION SHALL COMPLY WITH THE RESPECTIVE GOVERNING AUTHORITY.
- MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL.

PAVEMENT RESTORATION DETAIL

N.T.S.

CONFLICT NOTES:

1. EXISTING ELEVATIONS

ELEVATIONS OF EXISTING UNDERGROUND UTILITIES ARE TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CROSSING AT CONFLICT LOCATIONS SHALL BE MADE OVER OR UNDER DEPENDING ON ELEVATIONS OF UTILITY PIPES AS PER GENERAL NOTES ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER.

2. VERTICAL CROSSINGS

SANITARY SEWER SYSTEMS AND/OR REUSE WATER MAINS SHALL CROSS UNDER POTABLE WATER MAINS WHENEVER PHYSICALLY POSSIBLE. SANITARY SEWERS SYSTEMS AND/OR REUSE WATER MAINS CROSSING BELOW POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE POTABLE WATER MAIN AND THE CROWN OF THE LOWER PIPE.

3. HORIZONTAL SEPARATIONS

WHEREVER IT IS PHYSICALLY POSSIBLE: SANITARY SEWER SYSTEMS REQUIRE A MINIMUM OF A 10 FOOT HORIZONTAL SEPARATION DISTANCE BETWEEN ANY POTABLE WATER MAIN PARALLEL INSTALLATIONS.

REUSE WATER MAINS REQUIRE A MINIMUM OF A 5 FOOT CENTER TO CENTER (ABSOLUTE MINIMUM OF 3 FOOT OUTSIDE TO OUTSIDE OF PIPE) HORIZONTAL SEPARATION DISTANCE BETWEEN ANY POTABLE WATER MAIN AND/OR A SANITARY SEWER SYSTEM PARALLEL INSTALLATIONS.

WHEREVER EITHER ARE NOT PHYSICALLY POSSIBLE, THEN THE POTABLE WATER MAIN SHALL BE AT THE MAXIMUM PHYSICAL HORIZONTAL SEPARATION DISTANCE POSSIBLE, AND EITHER LAID:

- IN A SEPARATE TRENCH;
- ON AN UNDISTURBED SHELVE;

WITH A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES PROVIDED BETWEEN THE INVERT OF THE POTABLE WATER MAIN AND THE CROWN OF THE LOWER PIPE, THUS CONFORMING TO THE MINIMUM VERTICAL CROSSINGS IN NOTE 2.

4. CONFLICTS

WHEREVER IT IS NOT POSSIBLE TO MAINTAIN THE MINIMUM STANDARDS IN 1 AND 2, THEN ALL PIPING MATERIAL SHALL BE DUCTILE IRON PIPE (DIP). ALL DIP SHALL BE CLASS 50 OR HIGHER. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN AND SITE CONDITIONS. ADDITIONALLY, ALL JOINTS ON THE POTABLE WATER MAIN, WITHIN 20 FEET OF THE CONFLICT, SHALL BE MECHANICALLY RESTRAINED. AN ABSOLUTE MINIMUM VERTICAL SEPARATION DISTANCE OF 6 INCHES SHALL BE PROVIDED BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE.

FINAL APPROVAL

SCALE: NTS

DESIGNED BY: KSH

CHECKED BY: JSC

DATE: 08/24/00

FIELD BOOK:

CITY OF FORT LAUDERDALE

PUBLIC SERVICES DEPARTMENT

ENGINEERING DIVISION

FORT LAUDERDALE, FLORIDA

REVISIONS		DESCRIPTION	
NO.	DATE	CHK'D	DESCRIPTION

PROJECT #15170

AQUATIC CENTER

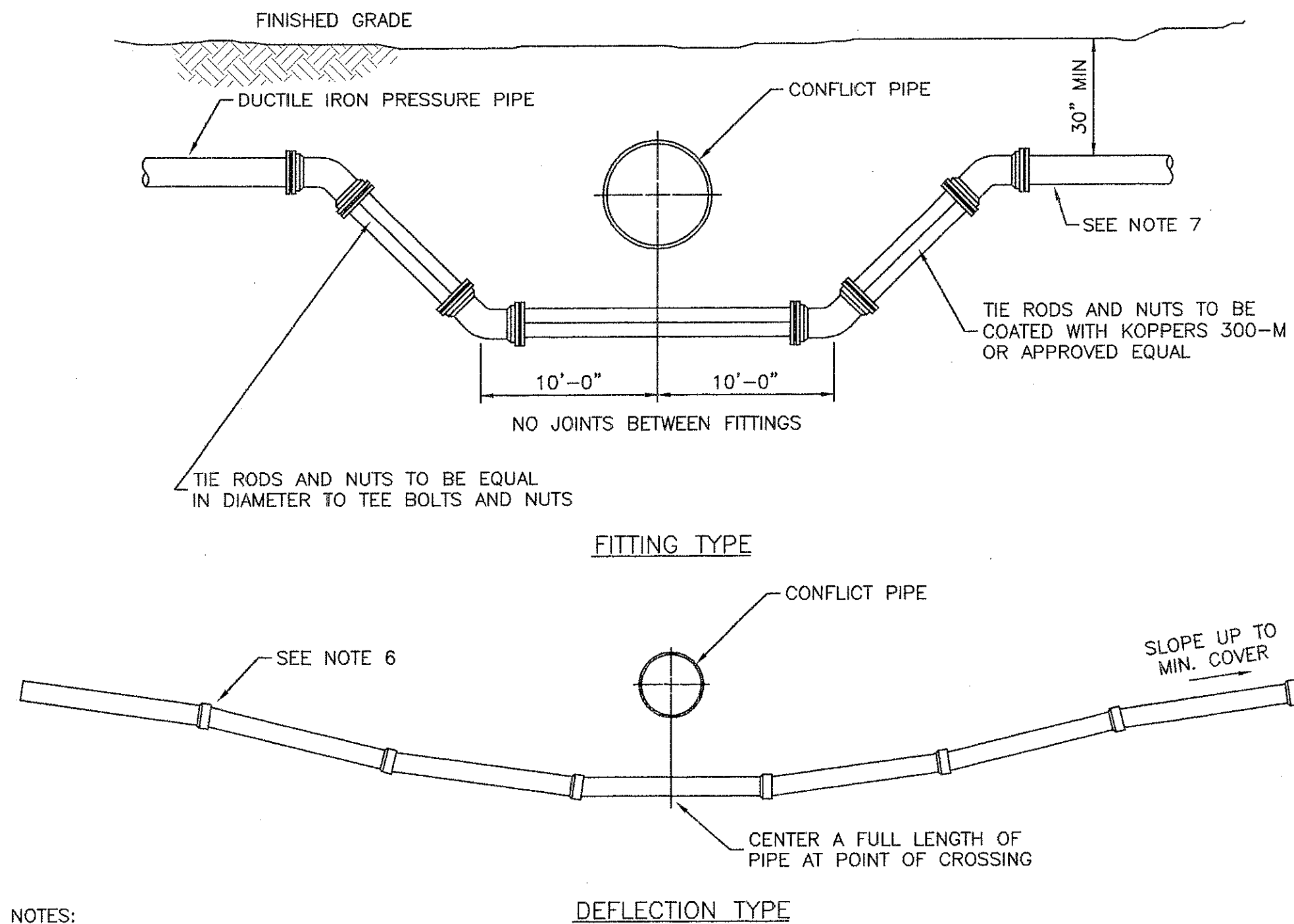
CROISSANT PARK

NO. OF SHEETS: 08

SHEET NO.: C-5

CAD FILE NO. 15170-0C5-008note

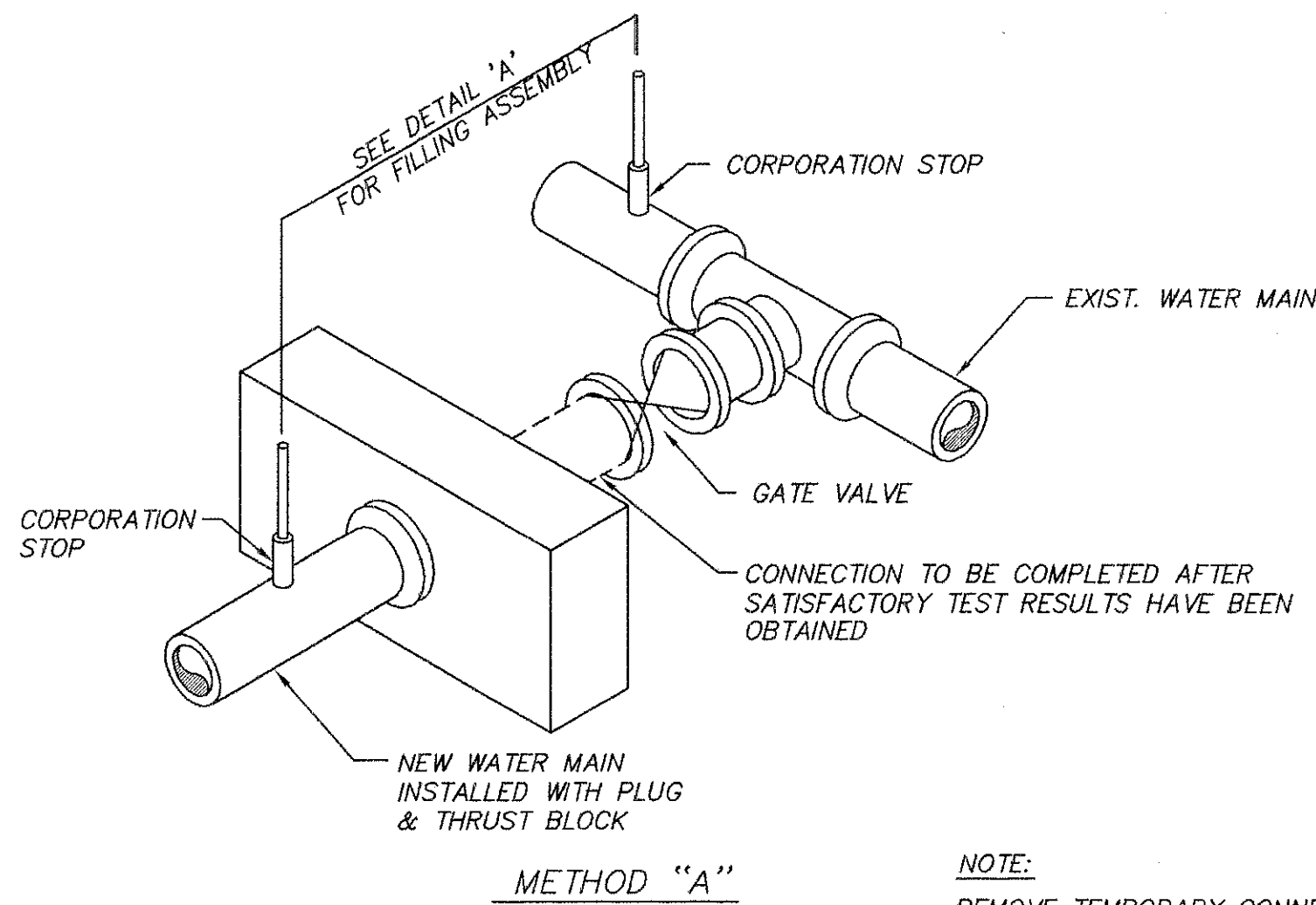
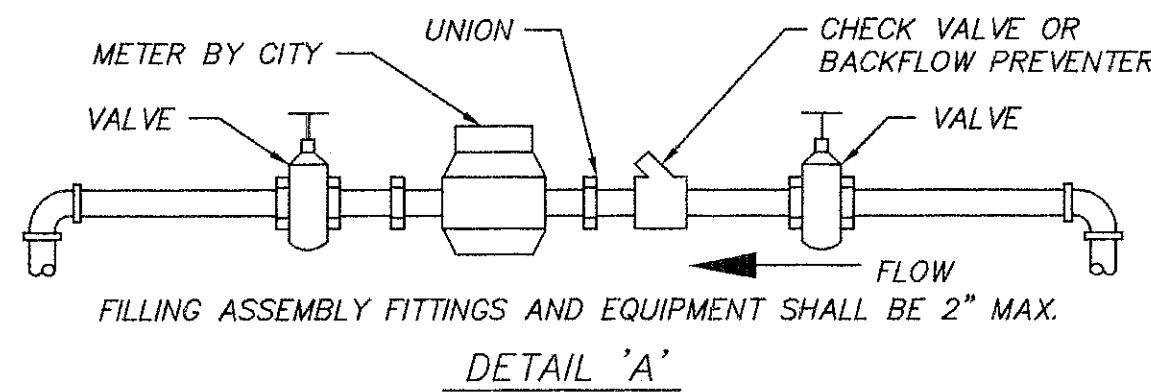
FILE NO.



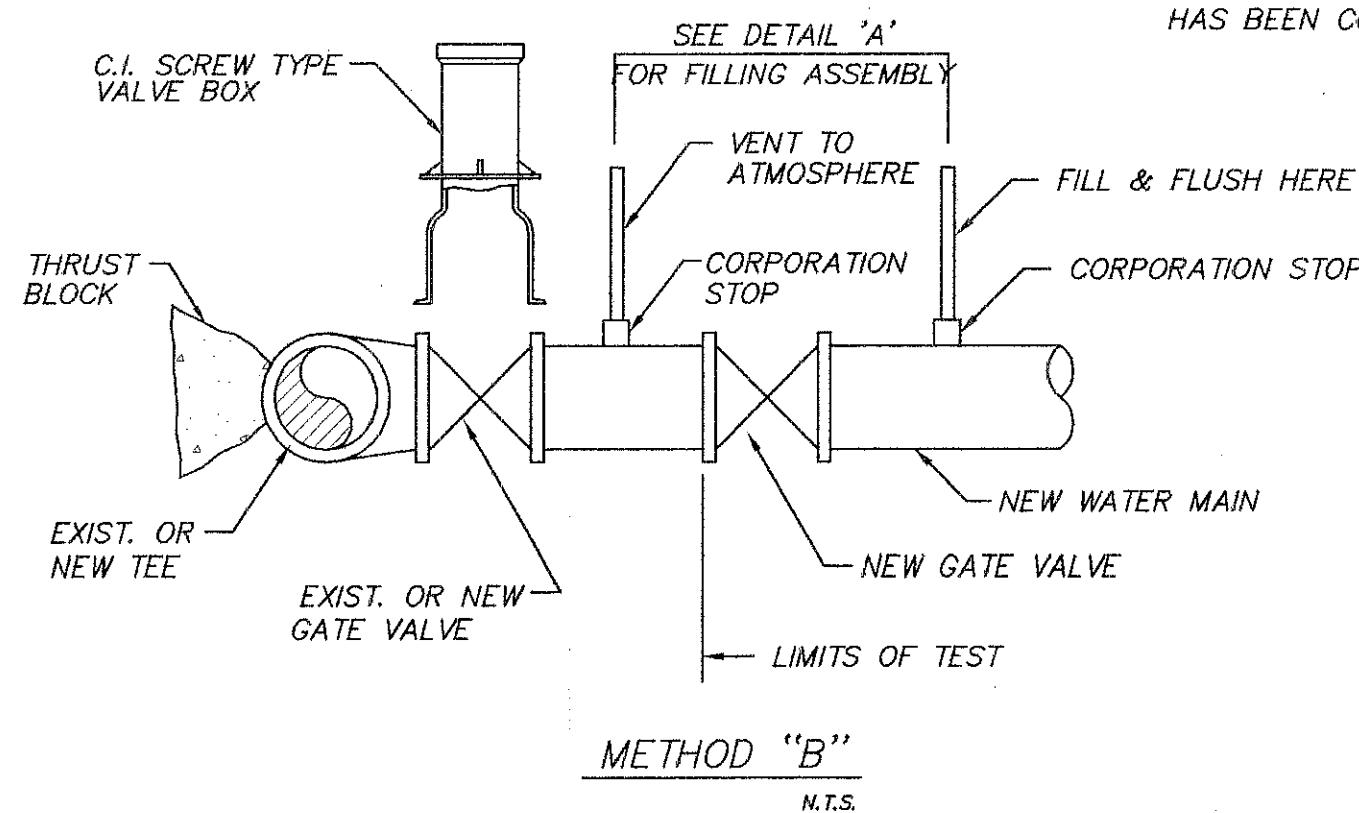
- NOTES:
- STORM AND SANITARY SEWER LINES CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS AND BOTH PIPES SHALL BE D.I.P. WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER A WATER MAIN, THE CRITERIA FOR MINIMUM SEPARATION BETWEEN LINES AND JOINTS IN THE ABOVE, SHALL BE REQUIRED AND BOTH PIPES SHALL BE D.I.P. IRRESPECTIVE OF SEPARATION. D.I.P. IS NOT REQUIRED FOR STORM SEWERS.
  - MAINTAIN A TEN (10) FEET HORIZONTAL DISTANCE BETWEEN WATER MAIN AND SEWER LINE AS A MINIMUM.
  - FORCE MAIN CROSSING WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BETWEEN THE OUTSIDE OF FORCE MAIN AND THE OUTSIDE OF THE WATER MAIN WITH WATER MAIN CROSSING OVER FORCE MAIN.
  - TWO OF THE FOLLOWING FORMS OF RESTRAINT SHALL BE USED FROM FITTING TO FITTING.
    - CONCRETE THRUST BLOCKS.
    - APPROVED MECHANICAL JOINT RESTRAINT. ( i.e. MEGA-LUG)
    - TIE RODS & NUTS EQUAL IN DIA. TO TEE BOLTS & NUTS.
  - THE DEFLECTION TYPE CROSSING IS PREFERRED, BUT IN INSTANCES WHERE THE FITTING TYPE DEFLECTION IS USED, 22 1/2" BENDS ARE PREFERRED.
  - DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.
  - PIPE SHALL BE RESTRAINED FOR A MINIMUM DISTANCE OF 60' (SIXTY) FROM EACH TOP DEFLECTION.

PRESSURE PIPE DEFLECTION

N.T.S.



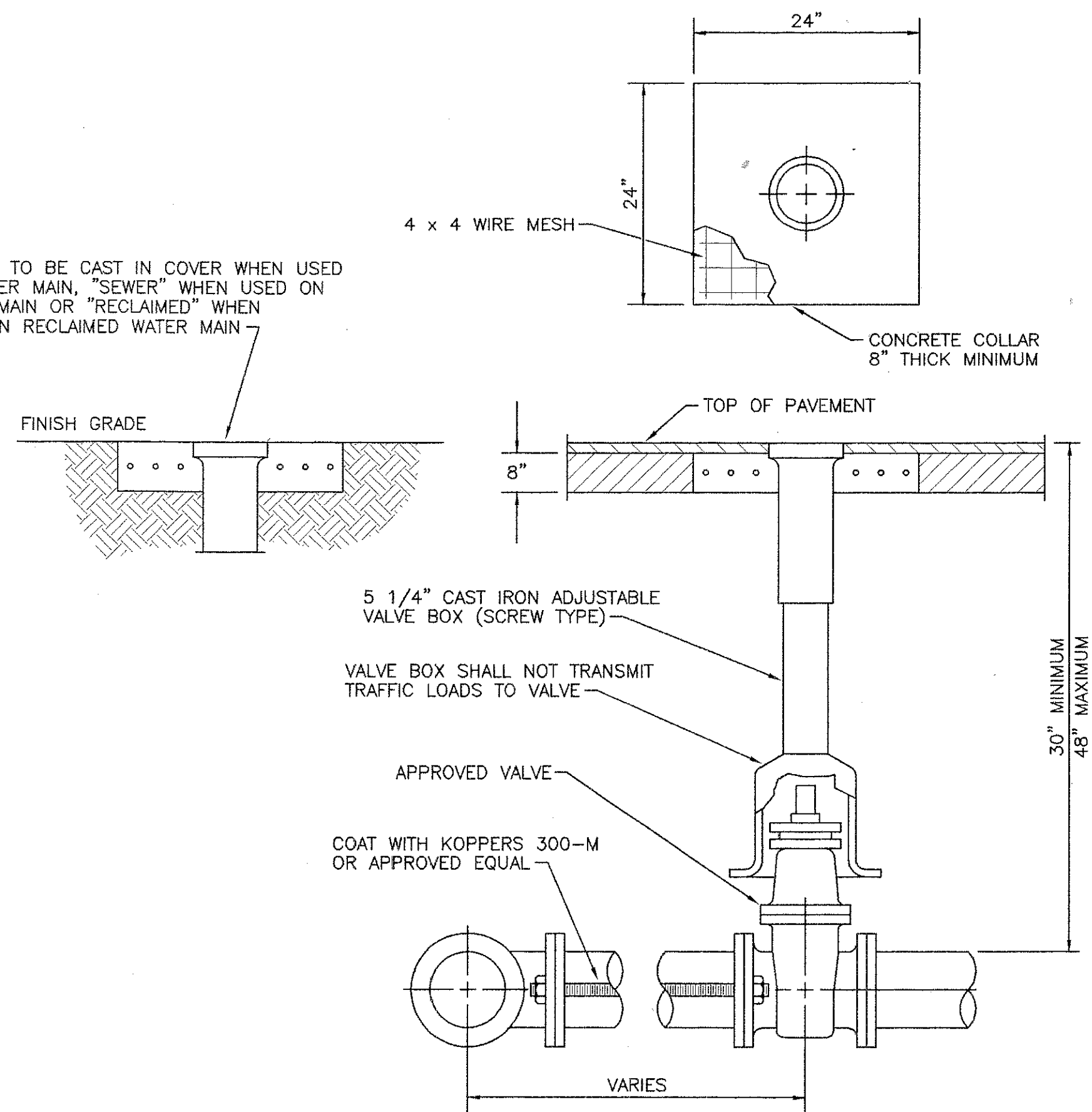
NOTE:  
REMOVE TEMPORARY CONNECTION AT CORPORATION STOP ON NEW MAIN AFTER FILLING & FLUSHING HAS BEEN COMPLETED.



FILL-FLUSH DETAILS

N.T.S.

"WATER" TO BE CAST IN COVER WHEN USED ON WATER MAIN, "SEWER" WHEN USED ON FORCE MAIN OR "RECLAIMED" WHEN USED ON RECLAIMED WATER MAIN



NOTES:

- CONCRETE COLLAR MAY NOT BE REQUIRED IN PAVED AREAS IF PAVEMENT SURFACE IS FINISHED PRIOR TO FINAL INSPECTION AND VALVE BOX LID IS AT FINISHED GRADE.
- WHEN VALVE IS DEEPER THAN 36" AN EXTENSION WILL BE REQUIRED TO BRING OPERATING NUT TO 24" OF FINISHED GRADE. EXTENSION MUST BE SET SCREW TYPE AND ATTACHED TO OPERATING NUT.

TYPICAL UNDERGROUND VALVE INSTALLATION

N.T.S.

FINAL APPROVAL  
FLA. REG. ENG. NO.

SCALE: NTS  
DRAWN BY: AFR  
DESIGNED BY: KSH  
CHECKED BY: JSC  
DATE: 08/24/00  
FIELD BOOK:

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ENGINEERING DIVISION  
FORT LAUDERDALE, FLORIDA

REVISIONS		DESCRIPTION	
NO.	DATE	CHK'D	BY

PROJECT #15170  
AQUATIC CENTER  
CROISSANT PARK

NO. OF SHEETS: 08  
SHEET NO.: C-6  
CAD FILE NO. 15170-0C6-008note  
FILE NO.



GENERAL NOTES AND SPECIFICATIONS

PROJECT NO. 1816-52

I. APPLICABLE CODES:

- A. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF CITY OF FT. LAUDERDALE AND ALL OTHER LOCAL, STATE AND NATIONAL CODES WHERE APPLICABLE.
- B. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.
- C. ALL ELEVATIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE BASED ON NATIONAL GEODETICAL VERTICAL DATUM OF 1929, (N.G.V.D.), UNLESS OTHERWISE NOTED.

II. PRECONSTRUCTION RESPONSIBILITIES:

- A. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATE CERTIFICATION NUMBER AT LEAST 48 HOURS PRIOR TO BEGINNING AN EXCAVATION, CALL 1-800-432-4770.
- B. ALL UTILITY EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION. (IF REQUIRED)
- C. LOCATION OF EXISTING FACILITIES AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN. VERIFY, IF POSSIBLE, THE ELEVATIONS AND LOCATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION. IF AN EXISTING CONSTRUCTION UPON EXCAVATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE PROBLEM.
- D. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE PERMIT(S) PRIOR TO START OF CONSTRUCTION.

III. INSPECTIONS:

- A. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AND ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 24 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO THE INSPECTION OF THE FOLLOWING ITEMS, WHERE APPLICABLE:

1. CLEARING AND DEMOLITION
2. SUBGRADE CONSTRUCTION
3. BUILDING PAD
4. POOL CONSTRUCTION
5. CONCRETE SIDEWALKS
6. FENCE INSTALLATION
7. ASPHALT
8. STRIPING
9. FINAL

IV. SHOP DRAWINGS:

- A. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS: CONCRETE MIX DESIGN, ASPHALT MIX DESIGN, WATER LINE, FENCING, POOL EQUIPMENT, SHADE CANOPY, GRINDER PUMP.

V. TEMPORARY FACILITIES:

- A. TEMPORARY FACILITIES - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY.
- B. TRAFFIC REGULATION -
1. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
  2. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
  3. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHT-TIME HOURS WITHOUT EXPRESS PERMISSION OF CITY OF FT. LAUDERDALE PARKS AND RECREATION.

VI. PROJECT CLOSEOUT:

- A. CLEANING UP -
1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEEPED BROOM CLEAN.
  2. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THAT END, THE CONTRACTORS SHALL DO AS REQUIRED, ALL NECESSARY HIGHWAY, DRIVEWAY, WALK AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATIONS.

3. WHERE MATERIALS OR DEBRIS HAS WASHED OR FLOWED INTO, OR HAVE BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.

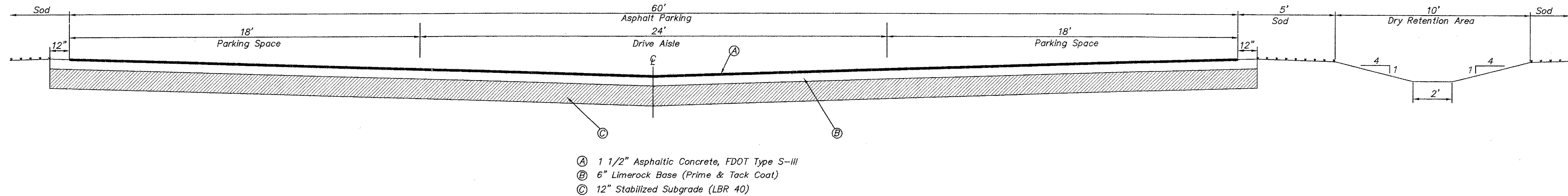
- B. ALL PROPERTY MONUMENTS OR PERMANENT REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTORS EXPENSE.
- C. ALL UNPAVED SURFACES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.
- D. PROJECT RECORD DOCUMENTS -
1. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS.
  2. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONS, LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS.

VII. EARTHWORK & COMPACTION:

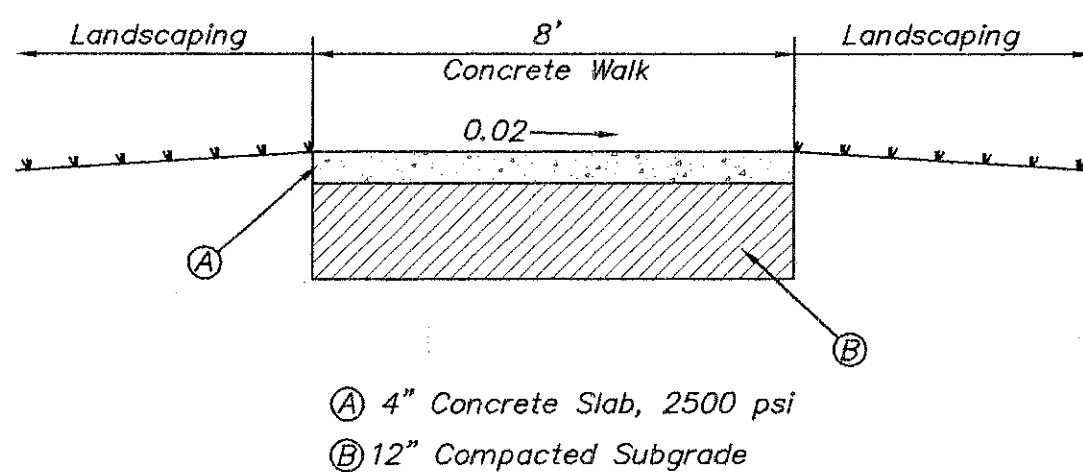
- A. ALL TOPSOIL, VEGETATION AND HEAVY ROOT MATS SHALL BE STRIPPED TO AT LEAST 5' BEYOND THE PERIMETER OF THE PROPOSED CONSTRUCTION.
- B. IMPORTED BACKFILL SHALL BE A SAND, OR SAND-ROCK MIXTURE HAVING LESS THAN 5% SILT, 2% ORGANICS AND ROCK SIZES LESS THAN 3" IN DIAMETER OR AS PERMITTED BY THE ENGINEER. THIS MATERIAL SHALL BE CLASSIFIED AS A-1, A-2-4 OR A-3.
- C. REMOVE ALL DELETERIOUS MATERIAL AND DEBRIS FROM BENEATH ALL BUILDING PADS, POOL DECK AREAS AND SIDEWALKS AND REPLACE WITH CLEAN FILL.

VIII. MATERIALS:

- A. GENERAL -
1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH SOUND CONSTRUCTION PRACTICES TYPICAL OF THE SOUTH FLORIDA AREA AND IN COMPLIANCE WITH THE SFBC.
- B. MATERIALS -
1. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI.
  2. DECORATIVE SECURITY FENCE TO BE 8" STEEL PICKET STYLE "SENTRY" MODEL AS MANUFACTURED BY NATIONAL FABRICATION AND COATING COMPANY. CHAIN LINK FENCE TO BE 4" BLACK LXX. MANGATES TO BE SELF LATCHING.
  3. ASPHALT SHALL BE FDOT TYPE S-III.
  4. LIMEROCK SHALL BE A MINIMUM LIMEROCK BEARING RATE OF (100) AND ORIGINATE FROM THE MIAMI FORMATION, HAVING MINIMUM PERCENTAGE OF CALCIUM AND MAGNESIUM OF 60. BASE MATERIAL SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 98% OF MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T-180.
  5. CANOPY TO BE PRE-ENGINEERED STRUCTURE AS MANUFACTURED BY SAFE SHADE, INC. COLOR TO BE DETERMINED BY CITY.
- C. INSTALLATION -
1. CONCRETE SHALL BE FORMED, TRANSPORTED, PLACED AND CURED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE ACI STANDARD SPECIFICATIONS.
  2. FINISHED CONCRETE SHALL HAVE A LIGHT BROOM FINISH.
  3. SAWCUTS OR SCORE LINES SHALL BE PLACED AT A MAXIMUM SPACING OF 5 FEET.
  4. SAWCUTS SHALL BE A MINIMUM OF 1/8" WIDE BY 1/2" DEEP TO CONTROL SHRINKAGE CRACKS.
  5. ALL CONCRETE EDGES SHALL BE TOOLED WITH A 1/4" QUARTER-ROUND TOOL.
  6. PRIME COAT SHALL BE APPLIED AT A RATE OF 0.25 GALLONS PER SQUARE YARD. PRIME AND TACK COAT FOR BASE SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF SECTIONS 300-1 THROUGH 300-7 OF FDOT STANDARD SPECIFICATIONS.
  7. BASE AND SUBGRADE DENSITY TESTS SHALL BE CONDUCTED FOR A MAXIMUM 7000 SQUARE FEET OF FINISHED PAVEMENT.
  8. PROCTORS SHALL BE PERFORMED ON ALL MATERIAL, SUBGRADE AND BASE ANY SUBSEQUENT CHANGES IN MATERIALS, LIMEROCK BEARING RATIOS, SIEVE ANALYSIS AND DENSITIES REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE SUBMITTED TO THE CITY.
  9. ALL REPAIRS TO EXISTING PAVEMENT SHALL RECEIVE SAW-CUT EDGES PRIOR TO RELAYING ASPHALT. UTILITY PIPING OR WIRING LESS THAN FOUR (4) INCHES IN DIAMETER REQUIRES A SCHEDULE 40 PVC CASING PIPE WITH SAND BACKFILL UNDER PAVED AREAS ONLY.



SECTION A-A  
N.T.S.



SECTION B-B  
N.T.S.

FINAL APPROVAL	SCALE:	DRAWN BY:	DESIGNED BY:	CHECKED BY:
	NTS	AFR	KSH	JSC

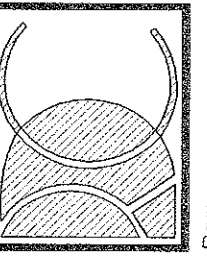
FLA. REG. ENG. NO.	DATE:	FIELD BOOK:
	8/24/00	

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ENGINEERING DIVISION  
FORT LAUDERDALE, FLORIDA

REVISIONS	NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT #15170  
AQUATIC CENTER  
CROISSANT PARK

NO. OF SHEETS: 08
SHEET NO.: C-7
CAD FILE NO. 15170-0C7-008NOTE
FILE NO.



RECREATIONAL  
CONSTRUCTION, INC.  
3330 West Broward Boulevard  
Suite A  
Fort Lauderdale, Florida 33317  
954.327.1171 Fax  
LAC Proj: #20-055

**CITY OF FORT LAUDERDALE**  
**PUBLIC SERVICES DEPARTMENT**  
**ARCHITECTURAL DIVISION**  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

REVISIONS:

DATE:

4/10/00

DRAWN BY:

K.V.Z.

CHECKED BY:

CAD FILE:

20-055.dwg

PROJECT #P15170  
CROISSANT PARK  
AQUATIC FACILITY  
FORT LAUDERDALE

SHEET NO.

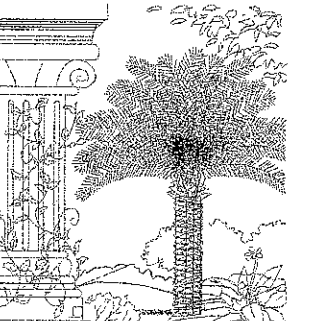
TRP-1

OF

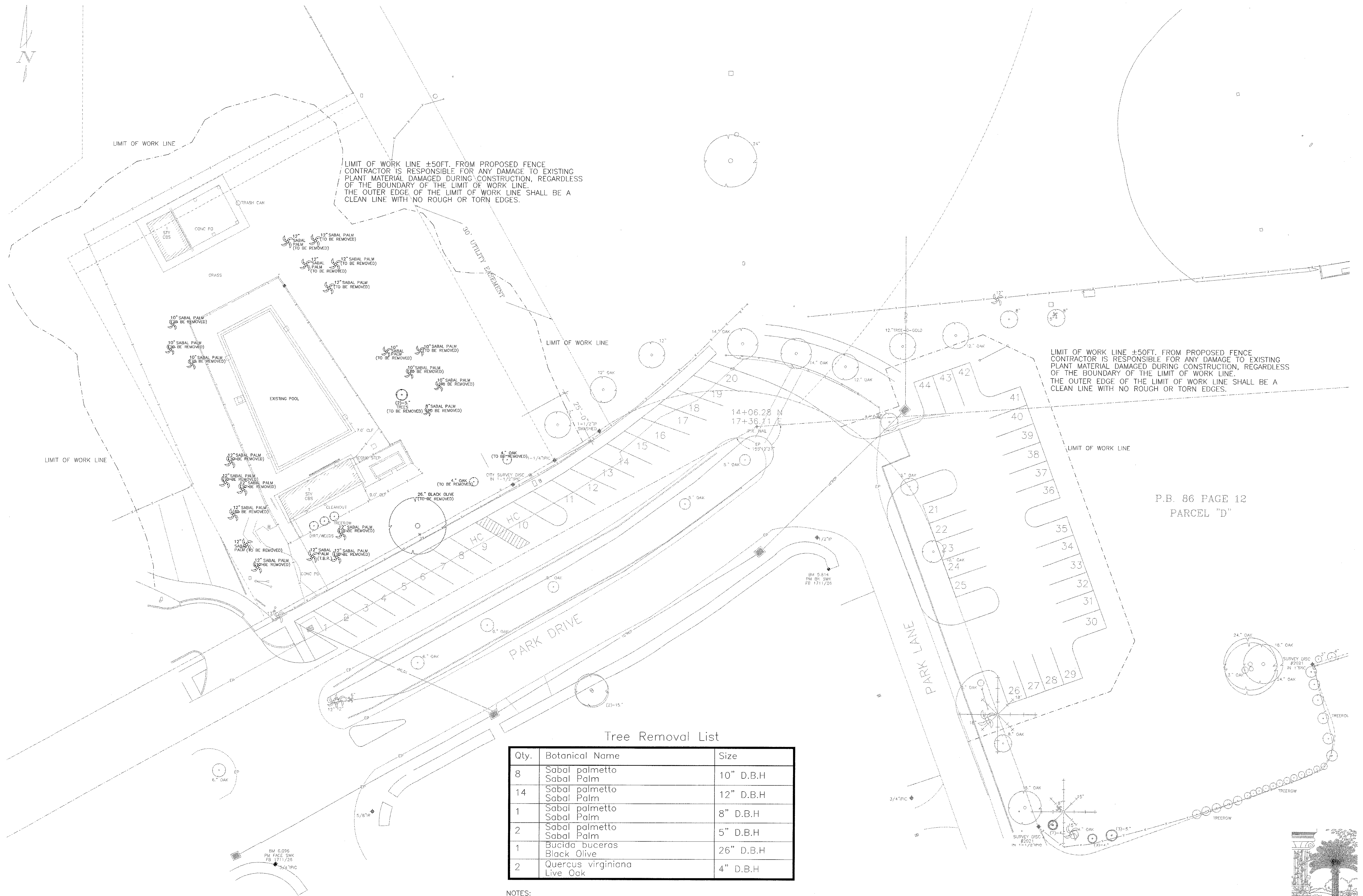
2

DRAWING FILE NO.

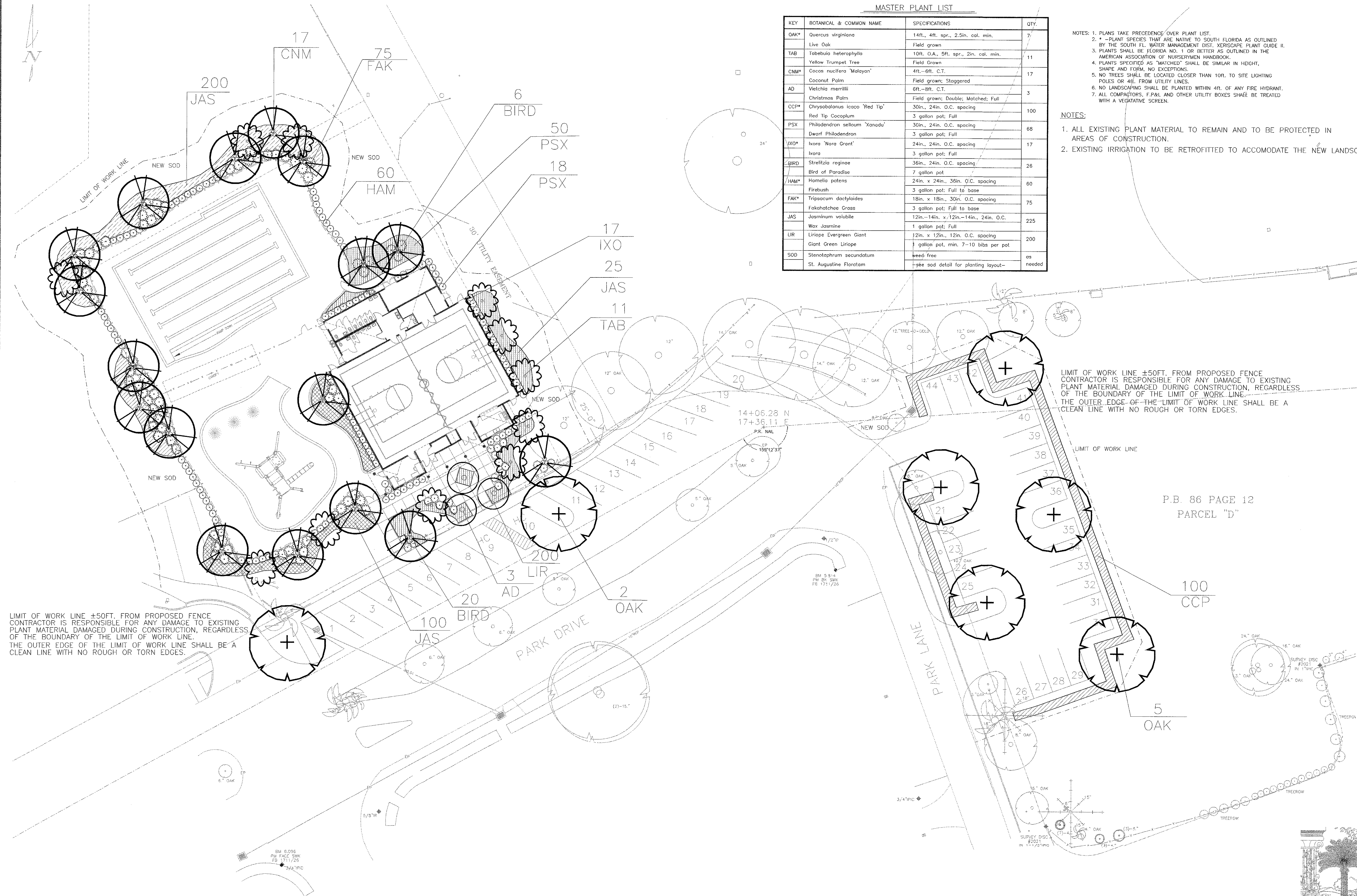
4-XXX-XX



LANDSCAPE ARCHITECTS  
COLLABORATIVE  
4310 West Broward Boulevard  
Suite A  
Fort Lauderdale, Florida 33317  
954.327.1171  
954.327.1171 Fax  
LAC Proj: #20-055







MASTER PLANT LIST

KEY	BOTANICAL & COMMON NAME	SPECIFICATIONS	QTY.
OAK*	Quercus virginiana	14ft., 4ft. spr., 2.5in. cal. min.	7
	Live Oak	Field grown	
TAB	Tabebuia heterophylla	10ft. O.A., 5ft. spr., 2in. cal. min.	11
	Yellow Trumpet Tree	Field Grown	
CNM*	Cocos nucifera 'Malayan'	4ft.-6ft. C.T.	17
	Coconut Palm	Field grown; Staggered	
AD	Vietchia merrillii	6ft.-8ft. C.T.	3
	Christmas Palm	Field grown; Double; Matched; Full	
CCP*	Chrysobalanus icaco 'Red Tip'	30in., 24in. O.C. spacing	100
	Red Tip Cocoplum	3 gallon pot; Full	
PSX	Philodendron sellowianum 'Xanadu'	30in., 24in. O.C. spacing	68
	Dwarf Philodendron	3 gallon pot; Full	
IXO*	Ixora 'Nora Grant'	24in., 24in. O.C. spacing	17
	Ixora	3 gallon pot; Full	
BIRD	Streptocarpus reginae	36in., 24in. O.C. spacing	26
	Bird of Paradise	7 gallon pot	
HAM*	Hamelia patens	24in. x 24in., 36in. O.C. spacing	60
	Firebush	3 gallon pot; Full to base	
FAK*	Tripsacum dactyloides	18in. x 18in., 30in. O.C. spacing	75
	Fakahatchee Grass	3 gallon pot; Full to base	
JAS	Jasminum volubile	12in.-14in. x 12in.-14in., 24in. O.C.	225
	Wax Jasmine	1 gallon pot; Full	
LIR	Liriope Evergreen Giant	12in. x 12in., 12in. O.C. spacing	200
	Giant Green Liriope	1 gallon pot, min. 7-10 bbs per pot	
SOD	Stenotaphrum secundatum	Weed free	as needed
	St. Augustine Floratam	See sod detail for planting layout-	

- NOTES:
1. PLANS TAKE PRECEDENCE OVER PLANT LIST.
  2. \* - PLANT SPECIES THAT ARE NATIVE TO SOUTH FLORIDA AS OUTLINED BY THE SOUTH FL. WATER MANAGEMENT DIST. XERISCAPE PLANT GUIDE II.
  3. PLANTS SHALL BE FLORIDA NO. 1 OR BETTER AS OUTLINED IN THE AMERICAN ASSOCIATION OF NURSERYMEN HANDBOOK.
  4. PLANTS SPECIFIED AS "MATCHED" SHALL BE SIMILAR IN HEIGHT, SHAPE AND FORM, NO EXCEPTIONS.
  5. NO TREES SHALL BE LOCATED CLOSER THAN 10ft. TO SITE LIGHTING POLES OR 4ft. FROM UTILITY LINES.
  6. NO LANDSCAPING SHALL BE PLANTED WITHIN 4ft. OF ANY FIRE HYDRANT.
  7. ALL COMPACTORS, F.PAL AND OTHER UTILITY BOXES SHALL BE TREATED WITH A VEGETATIVE SCREEN.

- NOTES:
1. ALL EXISTING PLANT MATERIAL TO REMAIN AND TO BE PROTECTED IN AREAS OF CONSTRUCTION.
  2. EXISTING IRRIGATION TO BE RETROFITTED TO ACCOMMODATE THE NEW LANDSCAPE.

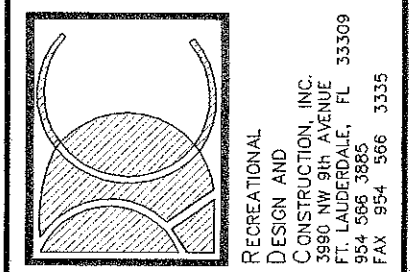
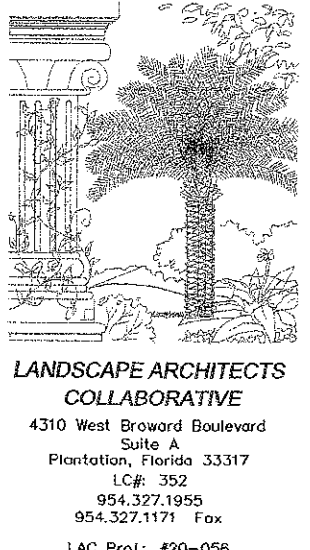
LIMIT OF WORK LINE ±50FT. FROM PROPOSED FENCE. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING PLANT MATERIAL DAMAGED DURING CONSTRUCTION, REGARDLESS OF THE BOUNDARY OF THE LIMIT OF WORK LINE. THE OUTER EDGE OF THE LIMIT OF WORK LINE SHALL BE A CLEAN LINE WITH NO ROUGH OR TORN EDGES.

P.B. 86 PAGE 12  
PARCEL "D"



LANDSCAPE PLAN

N.T.S.



CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

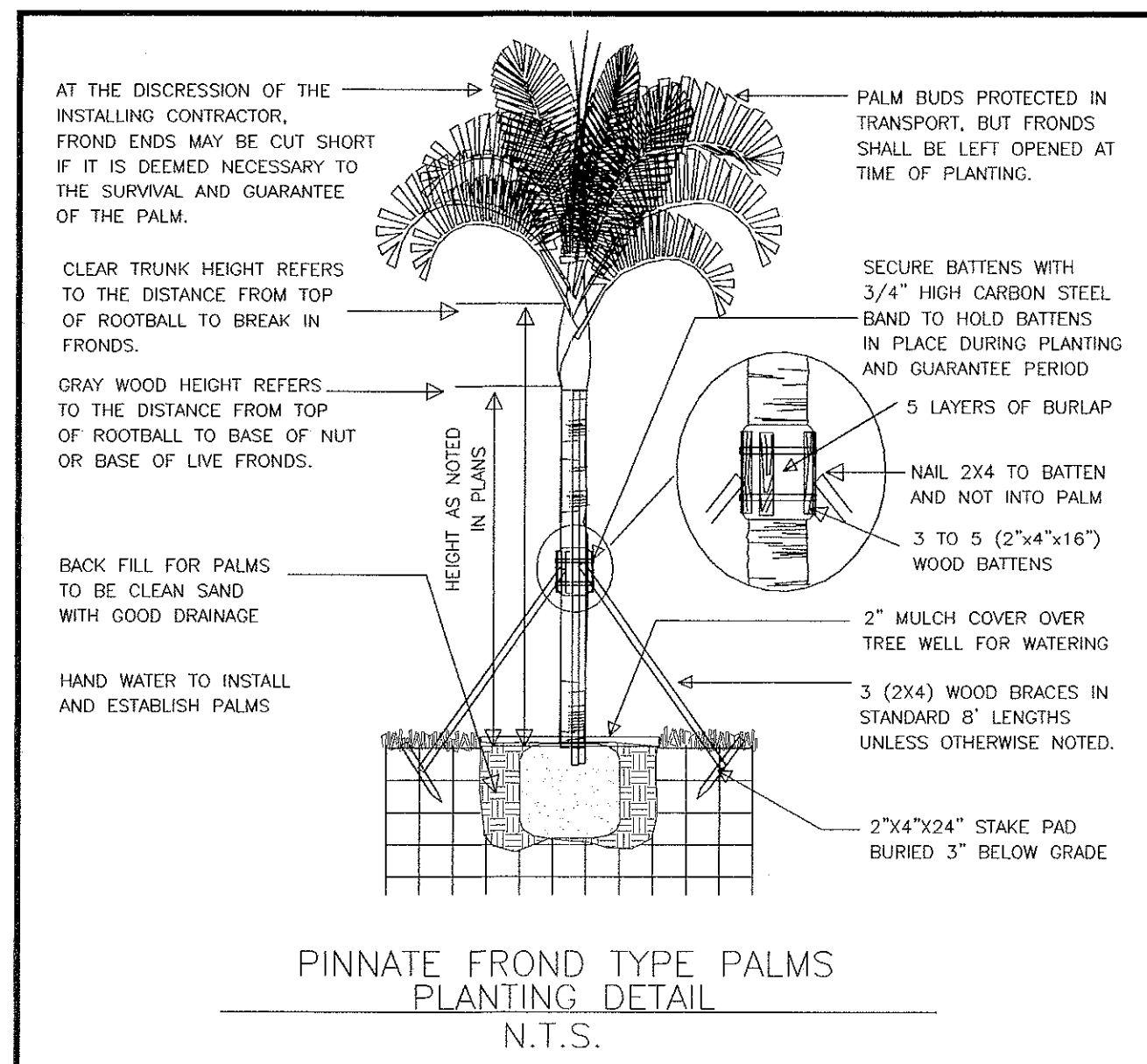
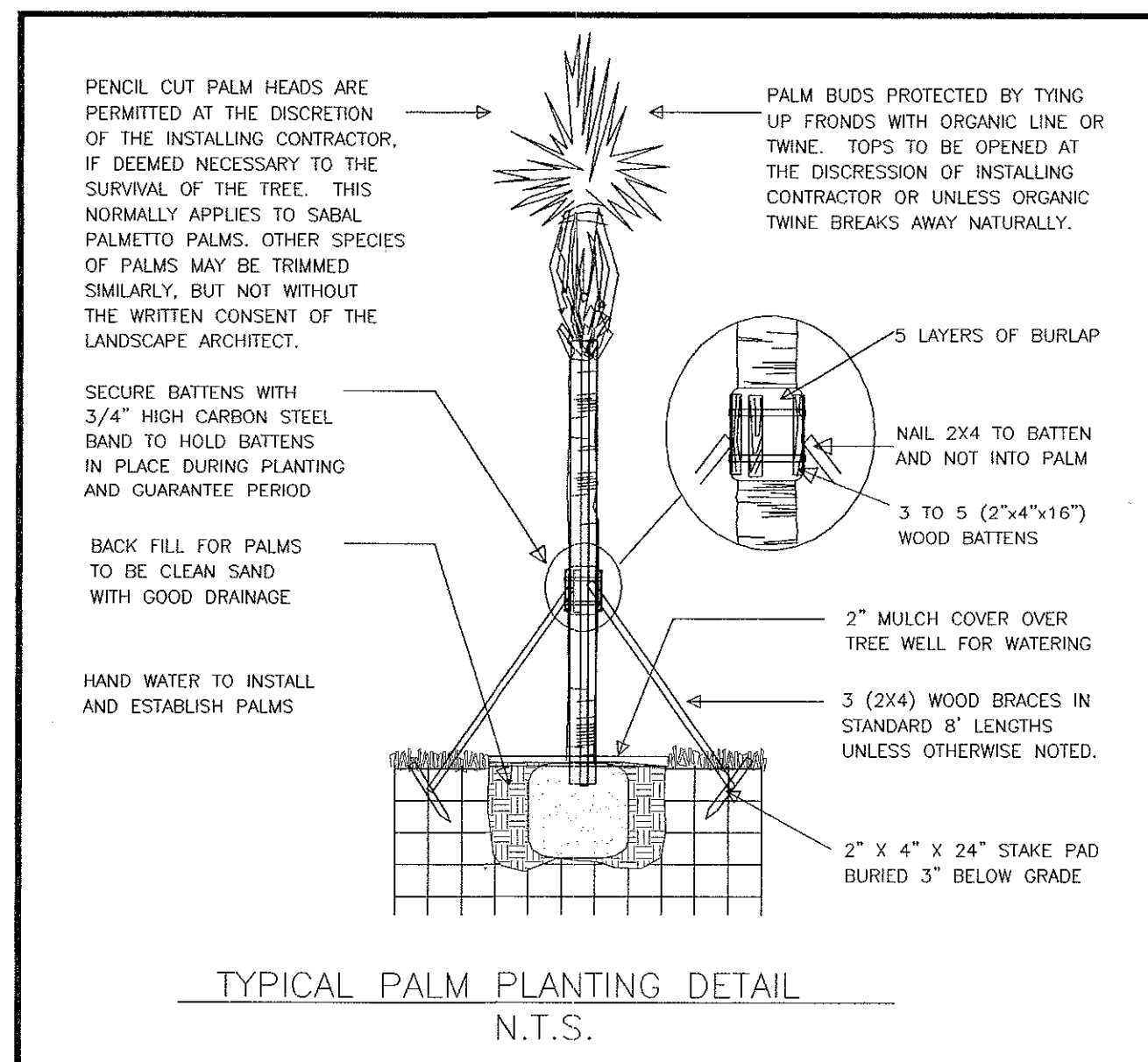
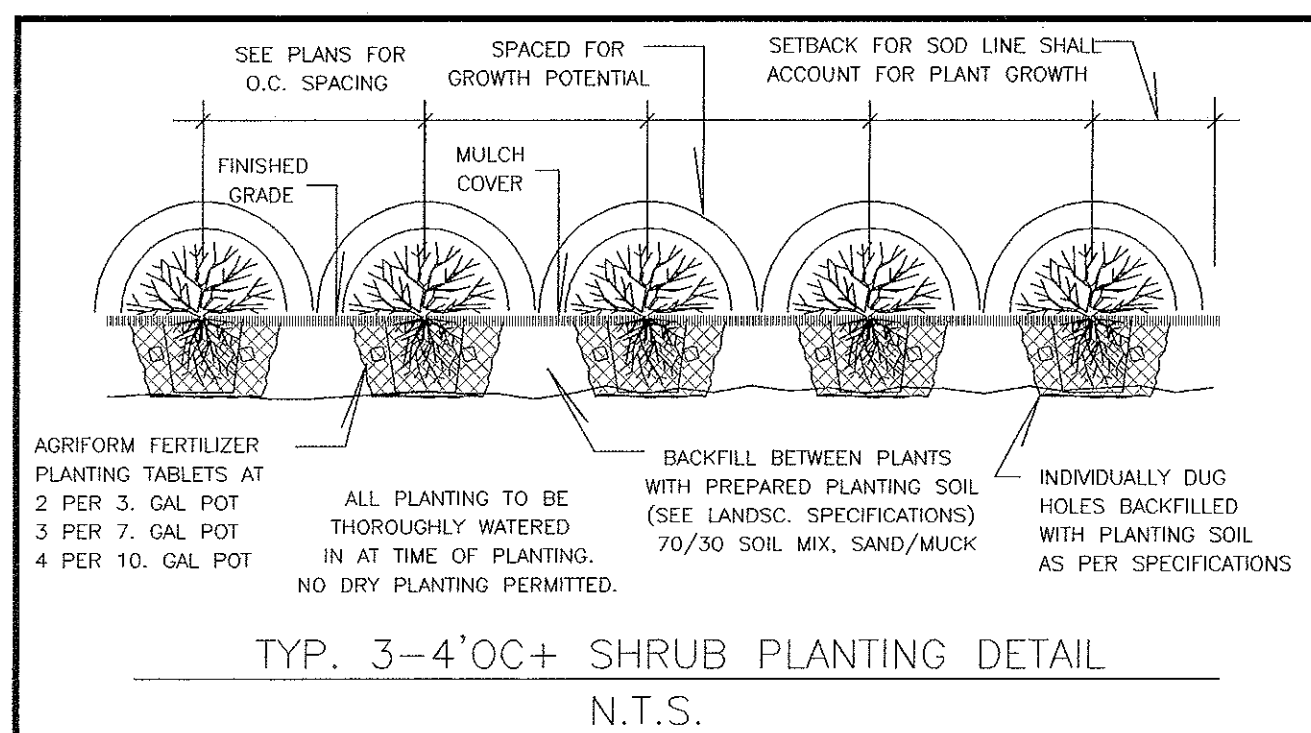
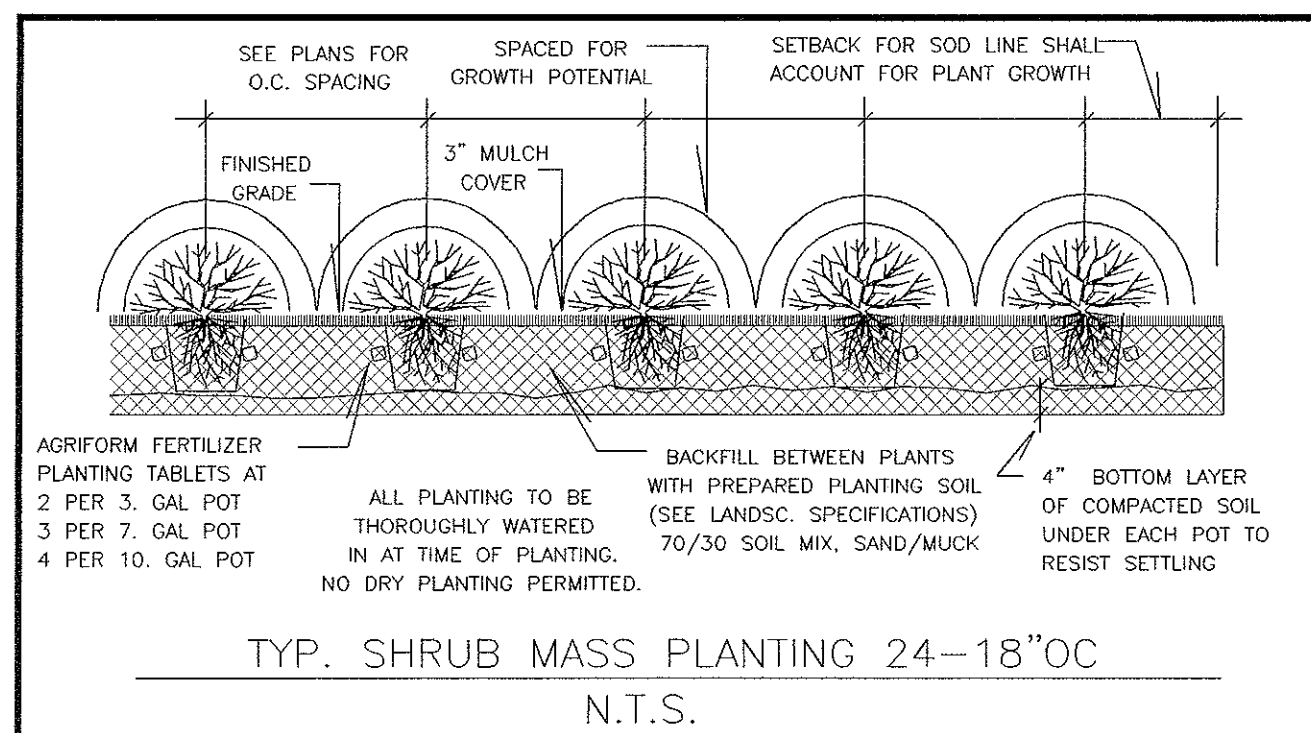
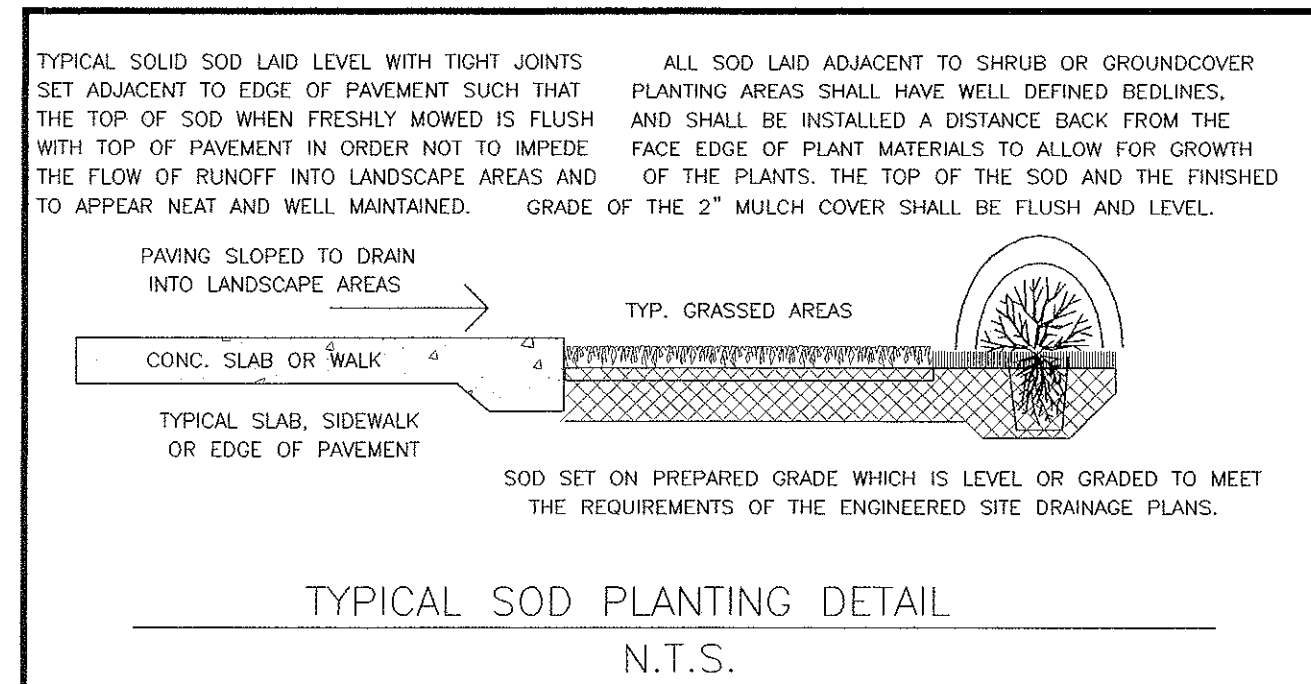
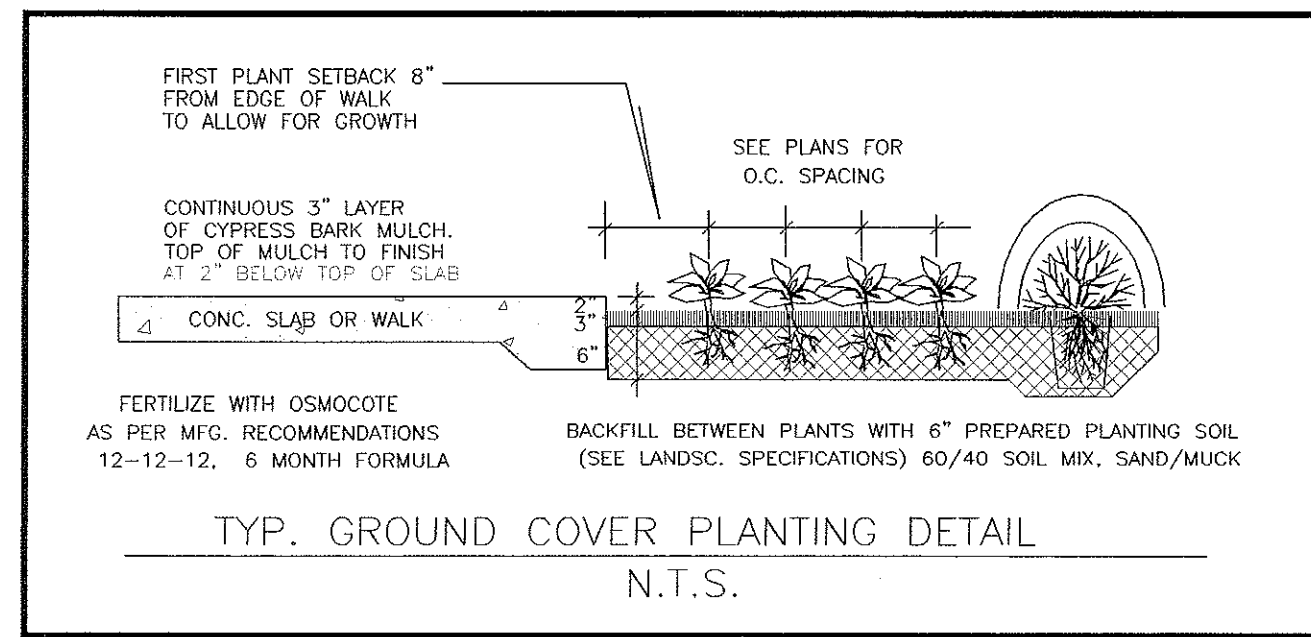
REVISIONS:

DATE:	4/10/00
DRAWN BY:	K.V.Z.
CHECKED BY:	
CAD FILE:	

PROJECT #P15170  
CROISSANT PARK  
AQUATIC FACILITY  
FORT LAUDERDALE

SHEET NO.  
L-1  
OF  
2  
DRAWING FILE NO.  
4-XXX-XX



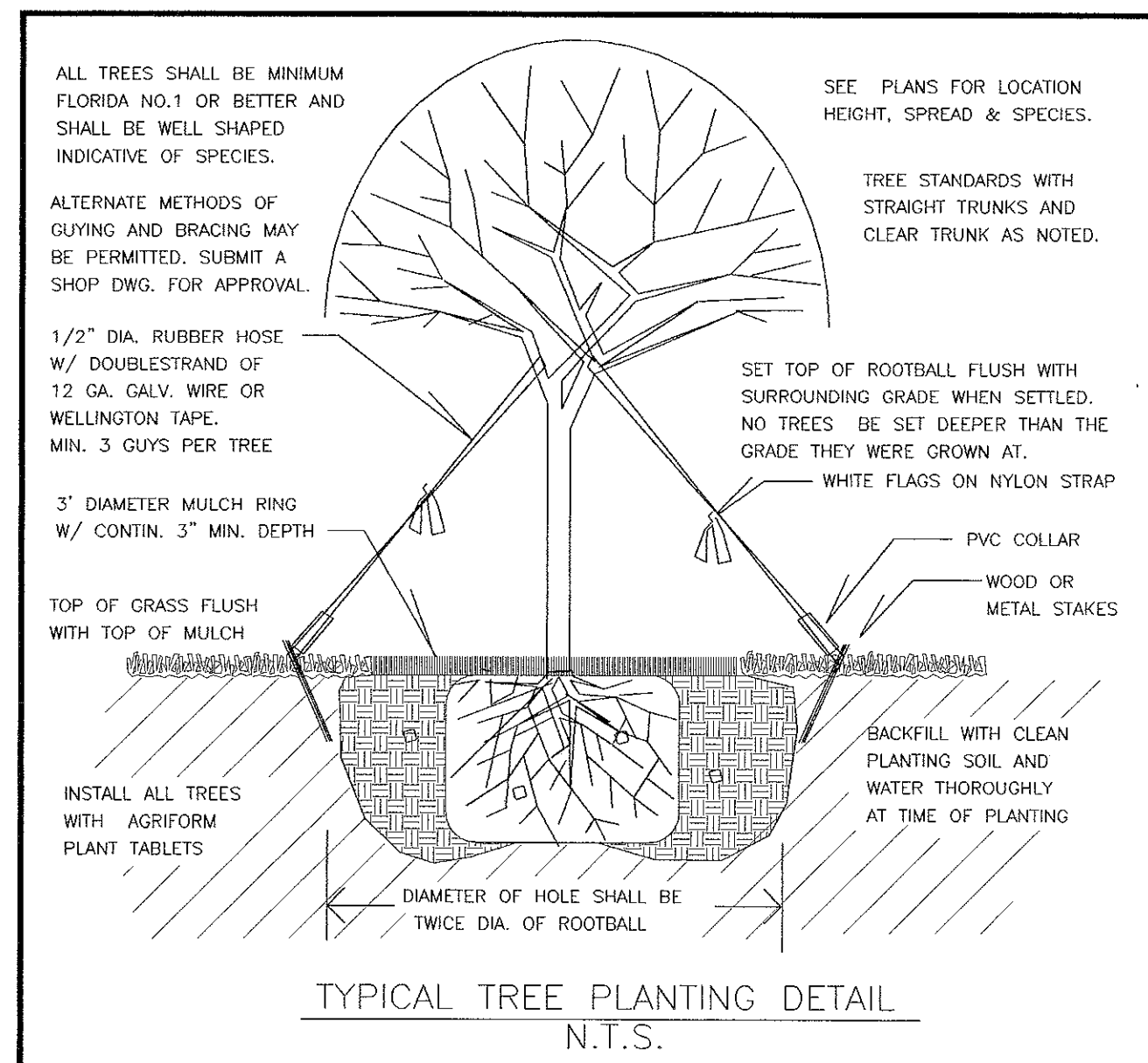
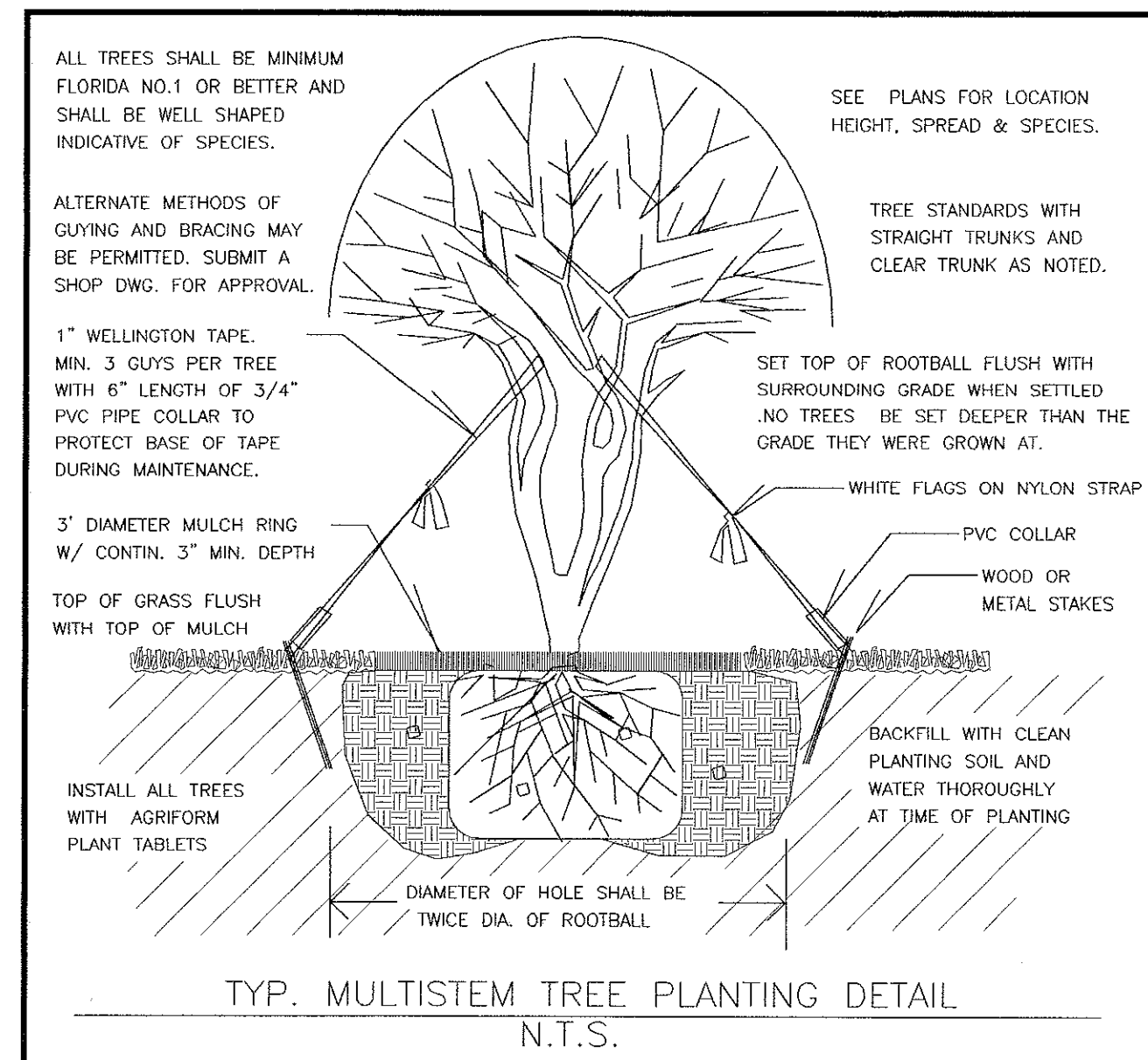


#### PLANTING SOIL TYPE 1 --

STANDARD TO THE INDUSTRY 70% SAND, 30% MUCK, FOR USE ONLY IN PLANTING AREAS THAT ARE ON NATURAL GRADE. DELIVERED LOOSE AND FRIABLE, FREE OF WEEDS, STICKS, ROCK AND OBJECTIONABLE DEBRIS. INSTALL AS PER DETAILS & PLANTING NOTES, OVER EXISTING SITE FILL.

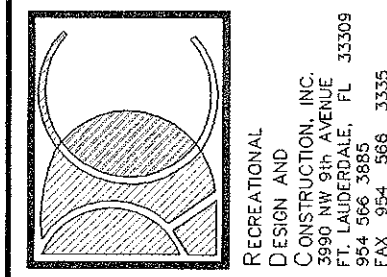
NOTE THAT THE APPLICATION OF PLANTING SOIL SHALL NOT ALTER THE BASE ELEVATION OF SLOPE OF EARTHWORK AS DESIGNED BY THE SITE ENGINEERS FOR DRAINAGE AND RETENTION. COORDINATE WITH CIVIL AND ARCHITECTURAL DRAWINGS FOR GRADE AND ELEVATION INFORMATION.

#### PLANTING SOIL N.T.S.



## LANDSCAPE INSTALLATION NOTES

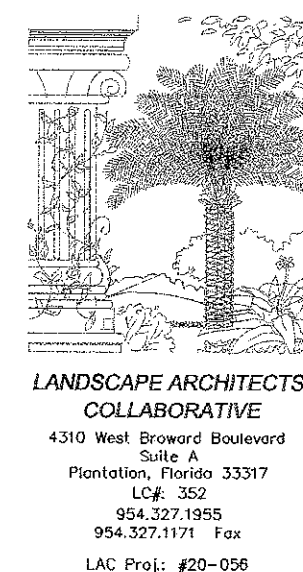
- ALL SIZES SHOWN FOR PLANT MATERIAL ON PLAN ARE TO BE CONSIDERED AS MINIMUMS. ALL PLANT MATERIAL MUST MEET OR EXCEED THESE MINIMUM REQUIREMENTS FOR BOTH HEIGHT AND SPREAD. ANY OTHER REQUIREMENTS FOR SPECIFIC SHAPE OR EFFECT AS NOTED ON THE PLAN WILL ALSO BE REQUIRED FOR FINAL ACCEPTANCE.
- ALL PLANT MATERIAL FURNISHED BY THE LANDSCAPE CONTRACTOR UNLESS OTHERWISE SPECIFIED SHALL BE FLORIDA NO.1 OR BETTER, AND SHALL BE INSTALLED AS SPECIFIED IN GRADES & STANDARDS FOR NURSERY PLANTS, PART 1+II, PUBLISHED BY THE STATE DEPT. OF AGRICULTURE.
- IN ADDITION TO THESE REQUIREMENTS ALL LOCAL LANDSCAPE CODES & REQUIREMENTS SHALL BE MET IN ORDER TO SATISFY THE REVIEW & APPROVAL OF THE GOVERNING MUNICIPALITY.
- ALL LANDSCAPING SCHEDULED TO OCCUR IN VEHICULAR USE AREAS SHALL BE PROTECTED FROM ENCROACHMENT BY PROPER SETBACKS OF PLANTS FROM PAVEMENT OR CURBING TO ALLOW FOR NORMAL GROWTH OF PLANT MATERIALS.
- ALL CODE REQUIRED TREES SHALL BE A MINIMUM 10'-12' HEIGHT AND HAVE A WELL SHAPED CANOPY WITH A MINIMUM SPREAD OF 4'-5'. TREE STANDARDS SHALL HAVE A MINIMUM OF 5" OF CLEAR TRUNK AND 2-3" CALIPER MEASURED AT A HEIGHT OF 4' ABOVE GRADE, DBH.
- ALL CODE REQUIRED SCREEN SHRUBS SHALL BE A MINIMUM OF 30" OF HEIGHT AT THE TIME OF PLANTING. ALL CODE REQUIRED SCREEN SHRUBS SHALL BE SPACED AT A MAXIMUM OF 2' O.C. IN ORDER TO DEVELOP A SOLID SCREEN PLANTING WITHIN 1 YEAR OF INSTALLATION. ALL SHRUBS SHALL HAVE A WELL BRANCHED STEM STRUCTURE AND A SPREAD INDICATIVE OF THE SPECIES. ALL SHRUBS NOT OCCURRING IN AREAS OTHER THAN THE CODE REQUIRED SCREEN PLANTING LOCATIONS, SHALL BE SIZED AS NOTED IN PLANS.
- SOD SHALL BE OF THE VARIETY ST. AUGUSTINE FLORITAM, AND SHALL BE LAID ON A SMOOTH PLANTING BASE WHICH HAS BEEN GRADED TO MEET THE DRAINAGE CHARACTERISTICS OF THE SITE. ALL SOD SHALL BE LAID WITH CLOSELY FITTED JOINTS, AND SHALL BE IN A GREEN AND HEALTHY GROWING CONDITION AT PLANTING. SOD INSTALLED ADJACENT TO CURBS, WALKS OR PAVING SHALL BE LAID SUCH THAT THE TOP OF SOD WHEN FRESHLY MOWED IS FLUSH WITH THE PAVEMENT AND DOES NOT IMPEDE THE FLOW OF DRAINAGE OFF THOSE PAVED SURFACES.
- ALL LANDSCAPE AREAS NOT COVERED BY SOD SHALL BE COVERED WITH SHREDDDED BARK MULCH, TO A MINIMUM DEPTH OF THREE (3) INCHES OF COVER WHEN SETTLED. TOP OF MULCH SHALL FINISH BELOW THE HEIGHTS OF WALKS & PAVING AREAS FOR DRAINAGE.
- ALL EXISTING TREES ON THE SITE, WHICH ARE SCHEDULED TO BE REMOVED TO PROVIDE FOR CONSTRUCTION AND SITE DEVELOPMENT, SHALL BE NOTED IN PLANS, AND PERMITS FOR REMOVAL SHALL BE SEPARATELY APPLIED FOR.
- ALL PLANTING AREAS SHALL BE PROPERLY PREPARED BY EXCAVATING TO REMOVE ALL OBJECTIONABLE MATERIALS, SUCH AS EXISTING ASPHALT, SUB-BASE, CONCRETE, ROCK, CAUSTIC MATERIALS WITH AN EXCESSIVE SOIL PH, OR SIMILAR MATERIALS NOT SUITED FOR LANDSCAPE PLANTING.
- ALL PLANT MATERIALS SHALL BE PLANTED IN PLANTING SOIL THAT IS DELIVERED TO THE SITE IN A CLEAN, LOOSE AND FRIABLE CONDITION. ALL SOIL SHALL HAVE A WELL DRAINED CHARACTERISTIC. SOIL MUST BE FREE OF ALL ROCKS, STICKS, OBJECTIONABLE DEBRIS INCLUDING WEEDS AND WEED SEED.
- ALL PLANT MATERIALS SHALL BE THOROUGHLY WATERED IN AT THE TIME OF PLANTING. NO DRY PLANTING SHALL BE PERMITTED. ALL PLANT MATERIALS SHALL BE PLANTED SUCH THAT THE TOP OF THE PLANT BALL IS FLUSH WITH THE SURROUNDING GRADE.
- CONTRACT FOR LANDSCAPE INSTALLATION INCLUDES THE PROVISION FOR ON GOING WATERING AS NEEDED TO ESTABLISH PLANT MATERIALS. NOTE THAT THE SPRINKLER SYSTEM CONSTRUCTION DOES NOT COVER THIS REQUIREMENT UNTIL BOTH CONTRACTS HAVE FINAL ACCEPTANCE.
- ALL PLANT MATERIALS SHALL BE INSTALLED WITH FERTILIZER WHICH SHALL BE STATE APPROVED AS A COMPLETE FERTILIZER CONTAINING THE REQUIRED MINIMUM OF TRACE MINOR ELEMENTS IN ADDITION TO N-P-K, OF WHICH 50% OF THE NITROGEN SHALL BE DERIVED FROM AN ORGANIC SOURCE.
- ALL LANDSCAPE AREAS SHALL BE FINISH GRADED SUCH THAT THEY FLUSH AND LEVEL WITH SURROUNDING PAVED SURFACES AS NOT TO IMPEDE THE FLOW OF DRAINAGE INTO LANDSCAPE AREAS AND TO PREVENT THE BACKWASH OF MULCH AND DEBRIS INTO PAVED AREAS. FINAL GRADING SHALL FOLLOW THE DESIGN OF ENGINEERED DRAWINGS.
- CONTRACTORS ARE RESPONSIBLE TO COORDINATE WITH ALL PLANS RELATED TO WORK BY OTHERS TO AVOID CONFLICTS WITH UNDERGROUND AND ABOVE GROUND UTILITIES, STRUCTURES AND EXISTING SITE FEATURES TO REMAIN UNDISTURBED. CALL FOR LOCATIONS.
- SEE ARCHITECTS DRAWINGS FOR SITE GRADING AND DRAINAGE. LANDSCAPE CONTRACTOR SHALL INSTALL PLANTINGS IN COORDINATION WITH THE GRADING PLANS. KEEP PERIMETER HEDGES LEVEL AND INSTALLED AT THE TOP OF THE DRY RETENTION AREAS. ONLY FLORITAM ST. AUGUSTINE SOD MAY BE PLANTED IN SWALE AREAS.
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR REPLACEMENT, INCLUDING ALL LABOR AND COST OF REPLACEMENT TREE, SHRUB OR GROUNDCOVER AT A SIZE EQUAL TO THE SIZE AND QUALITY INSTALLED INITIALLY TO MEET SPECIFICATIONS AND LOCAL CODES. GUARANTEE IS NULL AND VOID FOR ITEMS LOST OR DAMAGED BY LIGHTNING, HURRICANE FORCE WINDS, VANDALISM, THEFT OR NEGLIGENCE BY OWNER. WHEN GUARANTEE IS NULL AND VOID, IT IS THE OWNERS RESPONSIBILITY TO MAKE REPLACEMENTS AND MAINTAIN ALL PLANTINGS TO CONFORM TO LOCAL CODES AND ORDINANCES.
- ALL LANDSCAPE AREA SHALL BE IRRIGATED BY A FULLY AUTOMATIC SYSTEM ADJUSTED TO PROVIDE 100% COVERAGE OF ALL LANDSCAPE AREAS. ALL HEADS SHALL BE ADJUSTED TO MANUFACTURERE RECOMMENDED MIN. 50% OVERLAP.
- IRRIGATION CONTROLLER SHALL BE EQUIPPED WITH AN AUTOMATIC RAIN SENSOR SWITCH, EITHER RAIN CHECK OR MINI-CLICK, MOUNTED AS PER MANUFACTURERS RECOMMENDATIONS AND HARD WIRED TO THE CONTROLLER TO OVER RIDE THE SYSTEM. THIS IS REQUIRED AS PER LOCAL MUNICIPAL CODES, BROWARD COUNTY AND SFWM.



CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

REVISIONS:

DATE:	4/10/00
DRAWN BY:	K.V.Z.
CHECKED BY:	
CAD FILE:	



LANDSCAPE ARCHITECTS  
COLLABORATIVE  
4310 West Broward Boulevard  
Suite A  
Plantation, Florida 33317  
LGA 350  
954.327.1955  
954.327.1971 Fax  
LAC Proj: #20-056

PROJECT #P15170  
CROISSANT PARK  
AQUATIC FACILITY  
FORT LAUDERDALE

SHEET NO.

L-2

OF

DRAWING FILE NO.  
4-XXX-XX



EXISTING CONTROLLER TO BE REPLACED BY NEW CONTROLLER.

LIMIT OF WORK LINE ±50FT. FROM PROPOSED FENCE. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING PLANT MATERIAL DAMAGED DURING CONSTRUCTION, REGARDLESS OF THE BOUNDARY OF THE LIMIT OF WORK LINE. THE OUTER EDGE OF THE LIMIT OF WORK LINE SHALL BE A CLEAN LINE WITH NO ROUGH OR TORN EDGES.

EXISTING GALVANIZED MAINLINE IS TO BE REPLACED PRIOR TO ADDITION OF NEW MAINLINE SECTION. CONTRACTOR TO VERIFY THE ACTUAL LOCATION OF THE EXISTING MAINLINE AND VALVES TO COORDINATE TIE-IN OF NEW IRRIGATION.

TORO CC-M24 24 STATION CONTROLLER IN STAINLESS STEEL BOX. TORO RAINSWITCH AND BYPASS SWITCH TO BE MOUNTED ON EXTERIOR OF BUILDING, MOUNTED SO AS TO OPERATE AS THE MANUFACTURER SPECIFICS.

### IRRIGATION EQUIPMENT GRAPHIC KEY:

- TORO 5702-6P/12P-SI-COM-15-F-TQ.H.O-PC, 6" OR 12" COMMERCIAL POP-UP BODY, W/ SCREEN AND NOZZLES TO TYP. SPACING. UTILIZE FULL SPECTRUM OF NOZZLES AVAILABLE BY MANUFACTURER TO PROVIDE FULL COVERAGE WITHOUT OVERSPRAY ONTO PAVEMENT. NOZZLES SERIES 5702 SIDE-INLET W/ CHECK-O-MATIC INTERCHANGEABLE NOZZLES. OPERATING POUNDS PER SQUARE INCH (PSI) AT 40.
- TORO 5702-6P/12P-SI-COM-95ST-PC, 6" COMMERCIAL POP-UP BODY, W/ SCREENS AND NOZZLES TO TYP. SPACING. UTILIZE FULL SPECTRUM OF NOZZLES AVAILABLE BY MANUFACTURER TO PROVIDE FULL COVERAGE WITHOUT OVERSPRAY ONTO PAVEMENT. NOZZLES SERIES 9502 SIDE-INLET W/ CHECK-O-MATIC INTERCHANGEABLE NOZZLES. OPERATING POUNDS PER SQUARE INCH (PSI) AT 40.
- TORO 58-90/180-PC-2, 6" COMMERCIAL POP-UP BODY, W/ SCREENS AND NOZZLES TO TYP. SPACING. UTILIZE FULL SPECTRUM OF NOZZLES AVAILABLE BY MANUFACTURER TO PROVIDE FULL COVERAGE WITHOUT OVERSPRAY ONTO PAVEMENT. NOZZLES SERIES 9 SIDE STRIPS.
- 4" METER
- BACK FLOW PREVENTER
- TORO-CC-M24 SYSTEM COMPLETE WITH TRANSMITTER, CONTROL MODULE, POTTED LATCH SOLENOID. OPERATING SPECIFICATIONS, BATTERIES, AS REQUIRED FOR A FULLY OPERATIONAL SYSTEM TO CONTROL ALL VALVES INSTALLED IN THIS PHASE OF CONSTRUCTION. WALL MOUNTED INSIDE MECHANICAL EQUIPMENT/ POOL ROOM.
- TORO RAINSWITCH AND BYPASS SWITCH.
- TORO SERIES 250-061-04, 24V. ELECT., GLASS FILLED NYLON BODY VALVE W/ PRESSURE REGULATOR. INSTALLED IN A VALVE BOX ASSEMBLY AS PER DETAILS.
- VALVE BOXES SHALL BE AMETEK OR APPROVED EQUAL, STANDARD 10" ROUND FOR ALL LOCATIONS. ALL VALVES, FILTERS, AND SIMILAR ASSEMBLIES AS SHOWN IN DETAILS WILL REQUIRE A SEPARATE VALVE BOX WHETHER SHOWN ON PLANS OR NOT. IT IS IMPLIED THAT EACH ASSEMBLY REQUIRES ITS OWN SEPARATE VALVE BOX ASSEMBLY.
- IRRIGATION LATERAL LINE, SIZE AS NOTED ON PLANS. ALL CONTROL WIRES SHALL BE INSTALLED IN GRAY CONDUIT IN SAME TRENCH WITH LATERAL LINES.
- EXISTING MAINLINE SECTION.
- IRRIGATION 2" MAIN LINE. ALL CONTROL WIRES SHALL BE INSTALLED IN GRAY CONDUIT IN SAME TRENCH WITH MAIN LINES.
- SLEEVE FOR IRRIGATION MAIN LINE, SECTION LINES AND CONDUITS. SEE NOTES ON PLAN AND SLEEVE SIZING CHART.
- THE ALPHABETICAL KEY INDICATES THE CORRESPONDING METER & CONTROLLER. THE NUMERICAL FIGURE INDICATES THE PARTICULAR ZONE NUMBER OR STATION. SEE VALVE SIZING SCHEDULE FOR APPROPRIATE 1", 1.5" OR 2" VALVE SIZE.
- THE LOWER NUMERICAL FIGURE INDICATES THE TOTAL NUMBER OF GALLONS PER MINUTE (GPM) THAT THE ZONE IS DESIGNED FOR, CORRESPONDING TO THE APPROPRIATE SIZE VALVE. SEE VALVE SIZING CHART INFORMATION.

### CLOCK- ZONE A

ZONE	GPM/ZONE	RUN TIME	GPM/CYCLE
A1	30 GPM	15 MIN.	450 GAL.
A2	30 GPM	15 MIN.	450 GAL.
A3	30 GPM	15 MIN.	450 GAL.
A4	30 GPM	15 MIN.	450 GAL.
A5	30 GPM	15 MIN.	450 GAL.
A6	30 GPM	15 MIN.	450 GAL.
A7	30 GPM	15 MIN.	450 GAL.
A8	30 GPM	15 MIN.	450 GAL.
A9	30 GPM	15 MIN.	450 GAL.
TOTAL GPM	270 GPM	135 MIN.	4,050 GAL.

### IRRIGATION DETAIL- ZONE WATERING SCHEDULE

EACH SPRAY ZONE SHALL BE OPERATED FOR 15 MINUTES EACH, EVERY OTHER DAY.  
SCHEDULE MAY BE ALTERED DUE TO OBSERVED FIELD CONDITIONS.

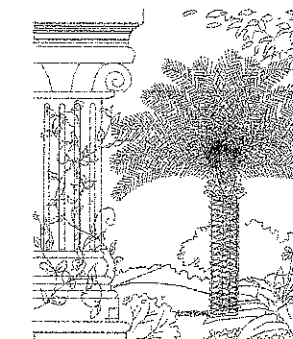
LIMIT OF WORK LINE ±50FT. FROM PROPOSED FENCE. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING PLANT MATERIAL DAMAGED DURING CONSTRUCTION, REGARDLESS OF THE BOUNDARY OF THE LIMIT OF WORK LINE. THE OUTER EDGE OF THE LIMIT OF WORK LINE SHALL BE A CLEAN LINE WITH NO ROUGH OR TORN EDGES.

P.B. 86 PAGE 12  
PARCEL "D"



IRRIGATION PLAN

N.T.S.



LANDSCAPE ARCHITECTS  
COLLABORATIVE  
4310 West Broward Boulevard  
Suite A  
Plantation, Florida 33317  
LIC. 302  
954.327.1865  
954.327.1171 Fax  
LAC Proj: #20-056

#### REVISIONS:

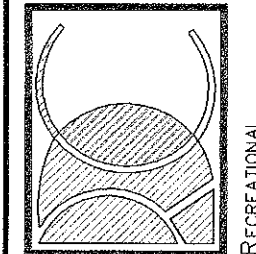
DATE:	DRAWN BY:	CHECKED BY:	CAD FILE:
4/10/00	K.V.Z.		

PROJECT #P15170  
CROISSANT PARK  
AQUATIC FACILITY  
FORT LAUDERDALE

#### SHEET NO.

1-1

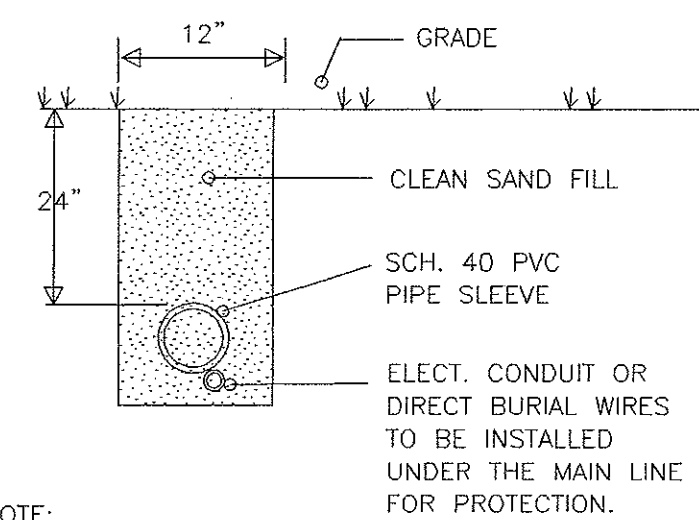
OF 2  
DRAWING FILE NO.  
4-XXX-XX



CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

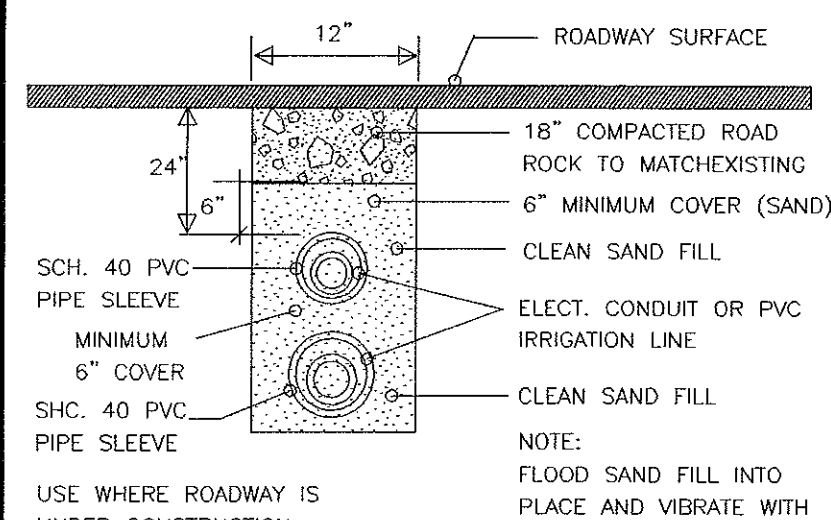


IRRIGATION DETAIL - MAIN LINE PIPE INSTALLATION



NOTE: FLOOD SAND FILL INTO PLACE AND VIBRATE WITH CONCRETE VIBRATOR.

IRRIGATION DETAIL - PIPE AND CONDUIT ACROSS ROADWAYS



NOTE: FLOOD SAND FILL INTO PLACE AND VIBRATE WITH CONCRETE VIBRATOR.

IRRIGATION DETAIL - PIPE SLEEVE SCHEDULE

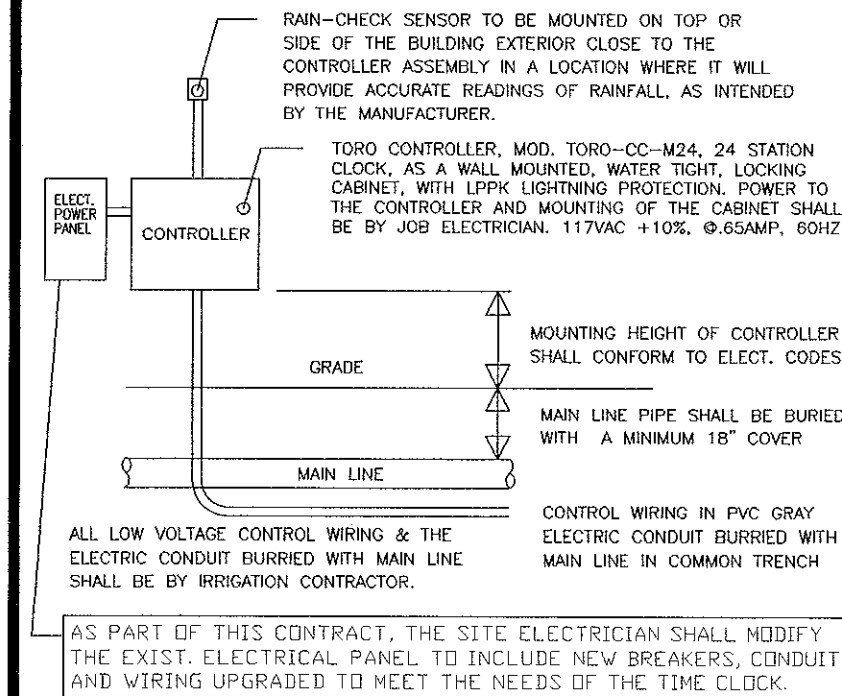
NOTE: SEE PIPE SLEEVING SCHEDULE FOR SLEEVE SIZES. FOR PIPES 2 1/2" AND OVER THERE SHOULD BE A 2" MINIMUM BETWEEN THE INSIDE WALL OF THE SLEEVE AND THE OUTSIDE WALL OF THE PIPE.

PIPE SLEEVING SCHEDULE

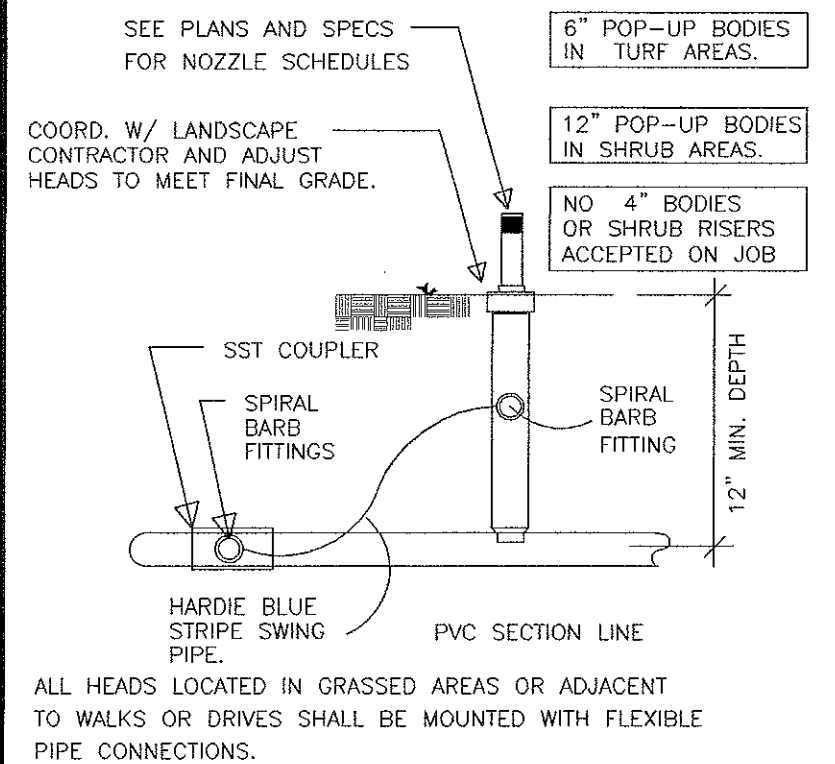
PIPE SIZE	SLEEVE SIZE
1"	2"
1 1/4"	2"
1 1/2"	3"
2"	4"
2 1/2"+	6"

SLEEVES THAT PROTECT TWO OR MORE LATERALS AND/OR MAINS IN THE SAME SLEEVE SHALL BE SIZED BY THE CONTRACTOR WITH THE SAME MINIMUM 2" CLEARANCE STANDARD FOR ALL PIPES.

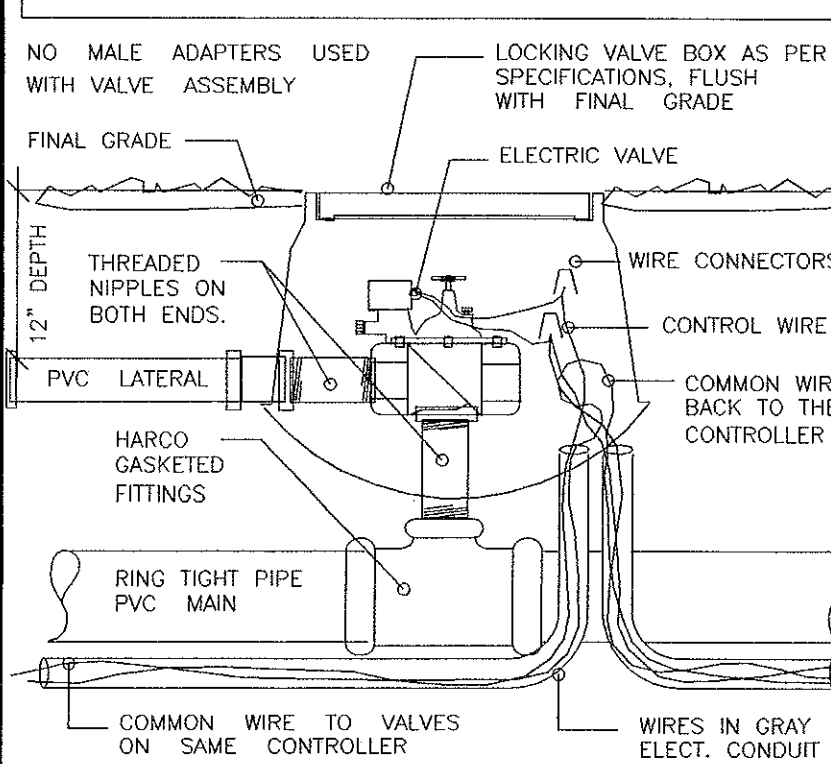
IRR. DETAIL - TIME CLOCK CONTROLLER



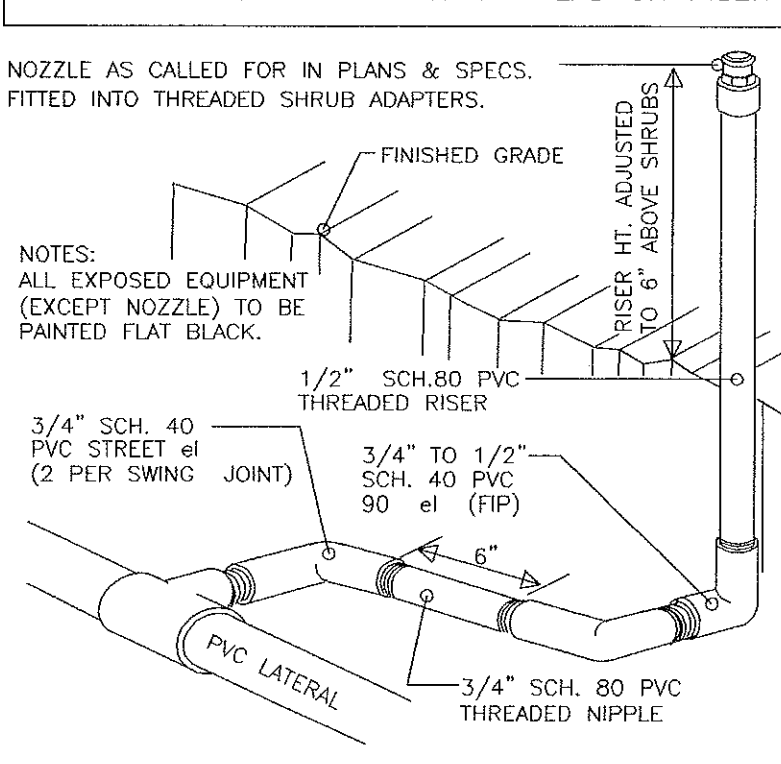
IRRIGATION DETAIL- SPRAY HEAD DETAIL



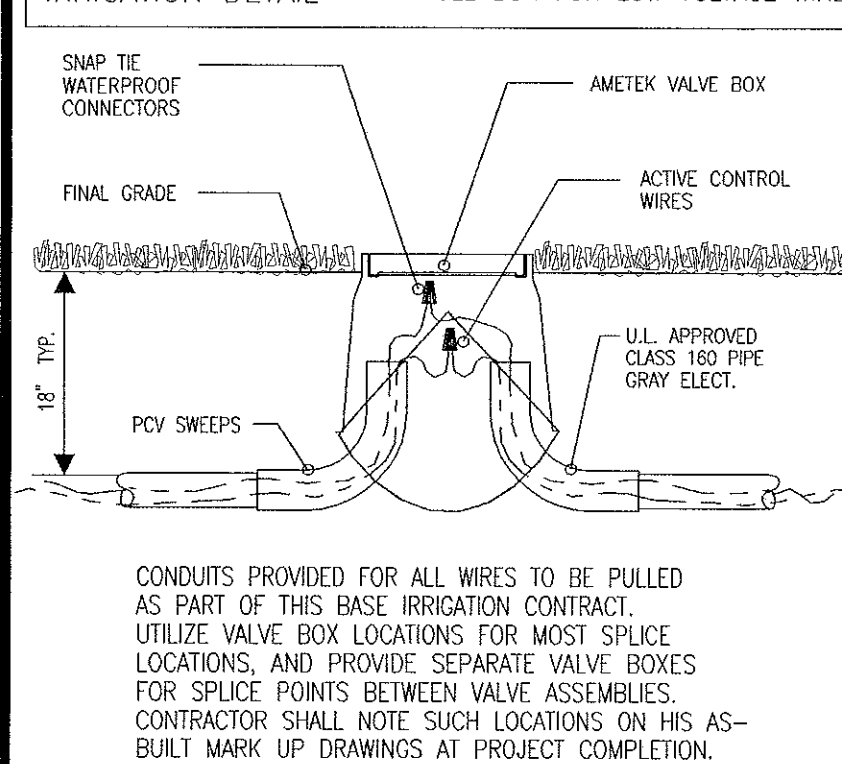
IRRIGATION DETAIL - VALVE AND DIRECT BURIAL WIRE



IRRIGATION DETAIL - SPRAY HEAD ON RISER



IRRIGATION DETAIL - PULL BOX FOR LOW VOLTAGE WIRE



IRRIGATION DETAIL - PIPE SIZING &amp; NOZZLE NOTES

CONTRACTORS SHALL EMPLOY THE FULL SPECTRUM OF NOZZLE PATTERS AVAILABLE FROM THE MANUFACTURER TO PROVIDE THE CORRECT NOZZLES TO COVER THE LANDSCAPE AREAS AND AVOID OVERSPRAY ONTO PAVED AREAS. THIS WOULD INCLUDE BUT NOT BE LIMITED TO, ADJUSTABLE ARC NOZZLES, CENTER STRIP, END STRIP & SIDE STRIP NOZZLES, AND OTHER BASIC NOZZLES DESIGNED TO CONTROL OVERSPRAY ONTO AREAS NOT INTENDED TO GET WET OR REQUIRED COVERAGE. THE USE OF THESE NOZZLE TYPES IS IMPLIED AS PART OF THE BASE BID PRICE AND REPRESENTS A SYSTEM INSTALLATION THAT IS STANDARD TO THE INDUSTRY AND REQUIRED BY LOCAL CODES FOR WATER CONSERVATION AND SAFETY PROTECTION AGAINST WET SURFACES, SLIP & FALL SITUATIONS OR SKID ACCIDENT.

PIPES ARE SIZED SPECIFICALLY TO THE ANTICIPATE THE USE OF THE APPROPRIATE NOZZLE REQUIRED FOR ADEQUATE COVERAGE WITHOUT OVERSPRAY. THE PIPE SIZE IS DESIGNED WITH A REASONABLE MINIMUM CUSHION IN THE LINE SIZE THAT WILL ALLOW THE OWNER THE LATITUDE TO EFFECT NORMAL REPAIRS AND CHANGES OVER COMING YEARS. DO NOT REDUCE THE LINE SIZES FROM THE SCHEDULE SHOWN.

IRRIGATION DETAIL - PIPE SIZING NOTES

PIPES ARE SIZED SPECIFICALLY TO THE ANTICIPATE THE USE OF THE APPROPRIATE NOZZLE REQUIRED FOR ADEQUATE COVERAGE WITHOUT OVERSPRAY. THE PIPE SIZE IS DESIGNED WITH A REASONABLE MINIMUM CUSHION IN THE LINE SIZE THAT WILL ALLOW THE OWNER THE LATITUDE TO EFFECT NORMAL REPAIRS AND CHANGES OVER COMING YEARS. DO NOT REDUCE THE LINE SIZES FROM THE SCHEDULE SHOWN.

NO PVC PIPE AND FITTINGS, SMALLER THAN 3/4" PIPE SHALL BE PERMITTED, EXCEPT FOR SWING JOINT ADAPTERS TO FLEX PIPE FITTINGS. ALL SECTION LINE PIPE SHALL BE STANDARD INDUSTRY PIPE SIZES 3/4", 1" 1 1/4", 1 1/2", 2" 2 1/2", 3", AND 4" PIPE, WITH APPROPRIATE NEW SCH. 40 PVC FITTINGS FOR SOLVENT WELDED ASSEMBLY USING CLEANERS/PRIMERS.

IT IS THE INTENT OF THE LANDSCAPE ARCHITECT / DESIGNER TO PROVIDE A SCHEMATIC DRAWING DEMONSTRATING THE RECOMMENDED PIPING LAYOUT. THE CONTRACTOR SHALL CONFORM TO THAT PLAN DIAGRAM WHEREVER POSSIBLE. WHEN A CHANGE IN THE LAYOUT IS DEEMED NECESSARY DUE TO A CONFLICT, ADJUST PIPE AS NEEDED AND PROVIDE AS-BUILT DATA.

IRRIGATION DETAIL- PRESSURE TESTING MAIN LINES

MAIN LINE PIPE SHALL BE INSTALLED WITH A MINIMUM OF 18" OF COVER. NO ROCK SHALL BE IN CONTACT WITH PIPE.

MAIN LINE PIPE SHALL BE SCHEDULE 40 PVC PIPE ONLY, WITH SOLVENT WELDED FITTINGS, INSTALLED AS PER THE MANUFACTURERS RECOMMENDATIONS INCLUDING PIPE CLEANER AND SOLVENT WELDING.

ALL NEW CONSTRUCTED MAIN LINES MUST BE PRESSURE CHECKED PRIOR TO BACK FILLING. PRESSURE CHECKS SHALL INCLUDE INSTALLED VALVE ASSEMBLIES, WITH TEMPORARY CAPS TO CLOSE THE SYSTEM. PRESSURE SHALL BE BROUGHT UP TO 100 PSI, WITH A PRESSURE GAUGE IN PLACE, AND LEFT AT THAT PRESSURE FOR 24 HOURS. ANY PRESSURE LOSS OF GREATER THAN 5 PSI IN 24 HOURS IS A FAILURE OF THE MAIN.

ANY LEAKS OR BREAKS IN THE MAIN SHALL BE LOCATED AND REPAIRED, THEN THE MAIN LINE SHALL BE RETESTED BY THE SAME PROCEDURE, FOR FINAL APPROVAL AND ACCEPTANCE.

IRRIGATION DETAIL- VALVE SIZING CHART

TEES OFF LOOP MAIN TO SUPPLY VALVE ASSEMBLIES SHALL BE SIZED TO THE FOLLOWING SCHEDULE:

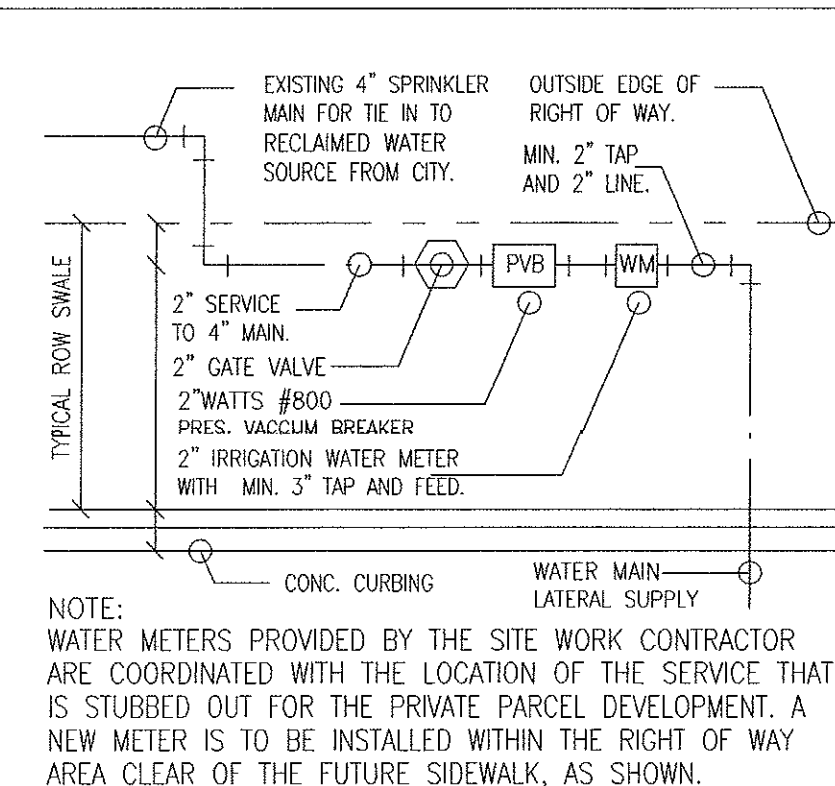
20-39 GPM REQUIRE 1.0" VALVE FROM 2.0" TEE

40-60 GPM REQUIRE 1.5" VALVE FROM 2.5" TEE

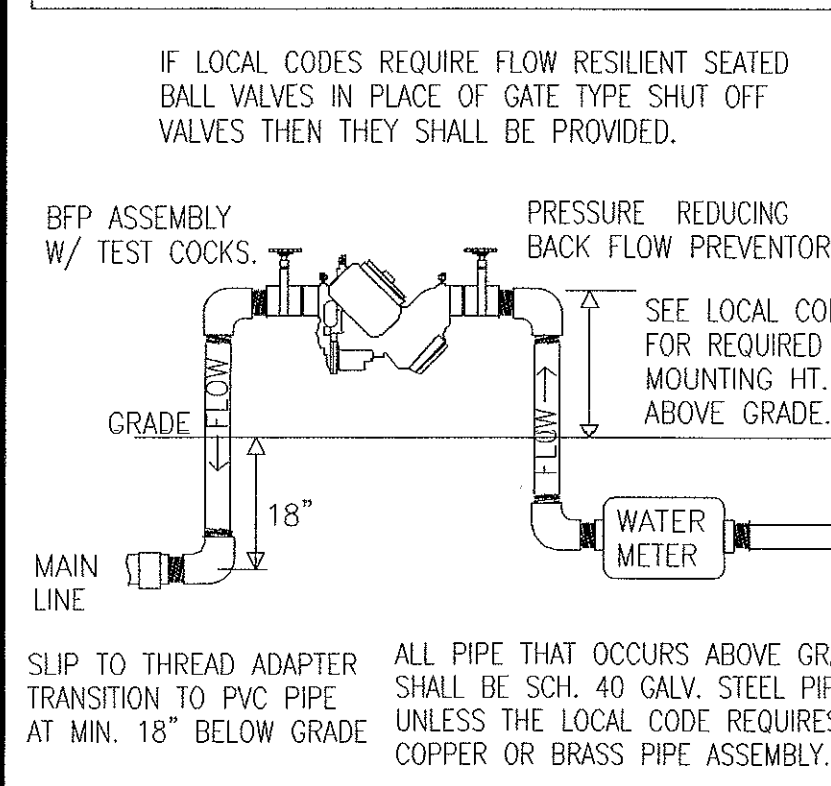
61-85 GPM REQUIRE 2.0" VALVE FROM 3.0" TEE

85-125 GPM REQUIRE 2.5" VALVE FROM 4.0" TEE

IRRIGATION DETAIL - WATER METER &amp; BACK FLOW PREVENTORS

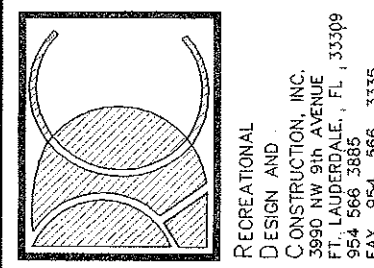


IRRIGATION DETAIL - BACK FLOW PREVENTOR



## GENERAL IRRIGATION NOTES:

- IRRIGATION CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL OTHER DRAWINGS OF THE PROJECT TO RESOLVE COORDINATION AND POTENTIAL CONFLICTS WITH EXISTING UNDERGROUND PIPES AND UTILITIES OR WORK BY OTHERS, PRIOR TO ANY WORK BEING DONE. MOST MAIN LINES SHARE ALIGNMENT WITH PERIMETER UTILITY EASEMENTS & SIGNIFICANT LANDSCAPE BUFFER PLANTINGS. AVOID CONFLICTS WITH ROOTBALL AREA OF TREES.
- THE IRRIGATION CONTRACTOR IS RESPONSIBLE TO CALL FOR LOCATIONS AND TO COORDINATE WITH LOCAL AGENCIES TO IDENTIFY LINES, PIPES, CABLES OF EASEMENTS WITHIN THE EFFECTED AREAS, PRIOR TO WORK.
- THE INSTALLING CONTRACTORS ARE RESPONSIBLE FOR THEIR OWN LICENSE, AND PERMITS WITHIN THE MUNICIPALITY AND BROWARD COUNTY AS WELL AS THE RELATED FEES WITHIN THE CONTRACT PRICE. PERMITS FOR SOUTH FLORIDA WATER MANAGEMENT DISTRICT ARE PULLED BY THE OWNER.
- THE HORIZONTAL CONTROL FOR THE PROJECT WILL BE ESTABLISHED BY THE GENERAL CONTRACTOR WHO WILL LOCATE AND STAKE PROPERTY LINES, ALL RECORDED EASEMENTS, LIMIT OF WORK LINE, LIGHT POLES, PAVED AREAS, PARKING ISLANDS, DRAINAGE STRUCTURES AND RELATED FEATURES.
- ALL MAINS AND SECTION LINES ARE SHOWN SCHEMATICALLY. LINES WHERE EVER POSSIBLE SHALL BE CONSOLIDATED INTO COMMON TRENCHES. THE CONTROL WIRES IN GRAY ELECTRICAL CONDUIT SHALL BE LOCATED UNDER THE MAIN FOR PROTECTION.
- ALL MAIN LINES SHALL BE BURIED A UNIFORM 24" BELOW GRADE. ALL SECTION LINES SHALL BE INSTALLED A MINIMUM OF 12" BELOW GRADE.
- SLEEVES UNDER ROADWAYS MAY BE DEEPER THAN 24" TO COORDINATE WITH ROADWAY CONSTRUCTION REQUIREMENTS OR TO COORDINATE WITH UTILITIES. SLEEVES UNDER PAVED PARKING AREAS WILL TYPICALLY MAINTAIN A 24" DEPTH TO ALIGN WITH MAIN LINE INSTALLATION DEPTHS.
- ALL SECTION LINE PIPE FROM 3/4" TO 2" I.D. SHALL BE SCHEDULE 40 PVC NEW PIPE ONLY, TYPE 1, PIPE, ASTM D-1785 AND D-2665 DUAL MARKER. ALL SECTION LINE PIPE FROM 2.5" TO 6" SHALL BE SDR-26 (160 PSI) PVC 1120 TYPE 1 PIPE.
- ALL MAIN LINE PIPE SHALL BE SCHEDULE 40 PVC NEW PIPE ONLY, TYPE 1, PIPE, ASTM D-1785 AND D-2665 DUAL MARKER.
- ALL PIPING IS SIZED TO MEET DESIGN CALCULATIONS FOR GPM FLOW AND FOR A PRE-DESIGNED CUSHION TO ALLOW FOR NOMINAL REPAIRS AND FOR MODIFICATIONS TO THE SYSTEM WHICH OCCUR OVER TIME IN NORMAL OPERATION OF SYSTEM. LINE SHALL BE INSTALLED TO THE SIZE AS SHOWN IN PLANS. DOWN SIZING LINES IS NOT PERMITTED WITHOUT A CHANGE ORDER AND A REVISION OF THE DRAWING. THE CONTRACTOR MAY SUGGEST REVISION OR VALUE ENGINEERING WITH THE LANDSCAPE ARCHITECT FOR REVIEW AND WRITTEN APPROVALS PRIOR TO IMPLEMENTATION.
- ALL PVC SOLVENT WELDED ASSEMBLY SHALL BE CLEANED AND PRIMED PRIOR TO THE SOLVENT WELD. USE EZ-WELD CLEAR PVC CEMENT 205, CLEAR PRIMER 212, PIPE CLEANER 214, FOR TYPE 1 PVC PIPE.
- ALL WORK SHALL BE DONE IN A GOOD WORKMAN-LIKE MANNER AND IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND STANDARDS OF THE FLORIDA IRRIGATION SOCIETY, BROWARD CHAPTER.
- ALL CONTROL WIRES SHALL BE U.L. APPROVED DIRECT BURIAL TYPE PLASTIC COATED WIRE, AWG SIZE MINIMUM 14 GAUGE SOLID OR 12 STRAND WIRE. ALL SPLICES SHALL BE MADE WITH RAINBIRD ST-03 SNAP TIGHT WATERPROOF CONNECTORS. ALL WIRES SHALL BE MARKED WITH DURABLE TAGS IDENTIFYING EACH AND ALL WIRES.
- ALL CONTROL WIRES SHALL BE INSTALLED IN U.L. APPROVED SIZE OF CLASS 160 GRAY ELECTRICAL CONDUIT WITH 3" SWEEPS UP INTO A PULL BOX OR VALVE BOX ASSEMBLY.
- THE IRRIGATION CONTRACTOR SHALL BRING THE CONTROL WIRES TO THE TIMECLOCK/CONTROLLER AND CONNECT ALL WIRING ON THE LOW VOLTAGE SIDE OF THE PANEL. ALL HIGH VOLTAGE WIRING AND POWER IS PROVIDED BY THE PUMP MANUFACTURER AND THE OWNER. LABEL ALL CONTROL WIRES AT THE PANEL TO CONFORM TO THOSE IN THE FIELD.
- ALL ON SITE HIGH VOLTAGE ELECTRICAL WORK SHALL BE PROVIDED BY THE JOB SITE ELECTRICIAN APART FROM LOW VOLTAGE WIRE BY THE IRRIGATION CONTRACTOR.
- ALL VALVE BOXES AND PULL BOXES FOR CONTROL WIRES SHALL BE AN AMETEX BOX, MINIMUM 10" DIAMETER ROUND BOX. ONE PER EACH VALVE.
- EACH LENGTH OF MAIN LINE BETWEEN THE METER AND EACH ISOLATION VALVE SHALL BE PRESSURE CHECKED AND INSPECTED BY THE DESIGN PROFESSIONAL. PRESSURE MUST MAINTAIN A MINIMUM OF 5 PSI LOSS IN 24 HOURS FROM A 100 PSI PRIMING FOR ANY GIVEN TEST LENGTH.
- THE SPRINKLER CONTRACTOR SHALL COORDINATE WITH THE WATER DEPARTMENT TO INSTALL THE BACK FLOW PREVENTOR ACCORDING TO LOCAL CODES & STANDARDS ADJUSTING TO SCHEDULES OF EQUIPMENT, PIPING, MATERIALS FOR SIGN OFF AND APPROVALS. CODE REQUIREMENTS TAKE PRESEDENT OVER DETAILS & SPECIFICATIONS.
- THE FULL SPECTRUM OF NOZZLES, NOZZLE ANGLES, FULL CIRCLE, PART CIRCLE & ADJUSTABLE PATTERN HEADS IS TO BE EMPLOYED IN THIS CONSTRUCTION. THE CONTRACTOR SHALL ADJUST THE SYSTEM FOR COMPLETE COVERAGE WITH THE MANUFACTURERS RECOMMENDED 50% OVERLAP AND UTILIZE THE ADJUSTABLE PATTERN HEADS TO AVOID OVERSPRAY TO PAVED SURFACES.
- ALL HEADS SHALL BE SET USING HARDIE BLUE STRIPE SWING JOINT ASSEMBLIES INCLUDING SPIRAL BARB FITTINGS AND THICK WALL PIPE OR SUBMIT SHOP DRAWINGS FOR APPROVAL.
- ALL MATERIALS ARE GUARANTEED FREE FROM DEFECTS AND ALL WORKMANSHIP AND INSTALLATION ARE GUARANTEED FOR THE COST OF FULL REPLACEMENT FOR A PERIOD OF ONE YEAR FROM THE TIME OF COMPLETION AND FINAL ACCEPTANCE OF EACH SEPARATE, COMPLETED, AND FULLY OPERATIONAL SYSTEM.



CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ARCHITECTURAL DIVISION  
Architecture • Landscape Architecture • Project Management  
100 North Andrews Avenue, 5th Floor, Fort Lauderdale, Florida 33301

REVISIONS:

DATE:

4/10/00

DRAWN BY:

K.V.Z.

CHECKED BY:

CAD FILE:

PROJECT #P15170  
CROISSANT PARK  
AQUATIC FACILITY  
FORT LAUDERDALE

SHEET NO.

1-2

OF

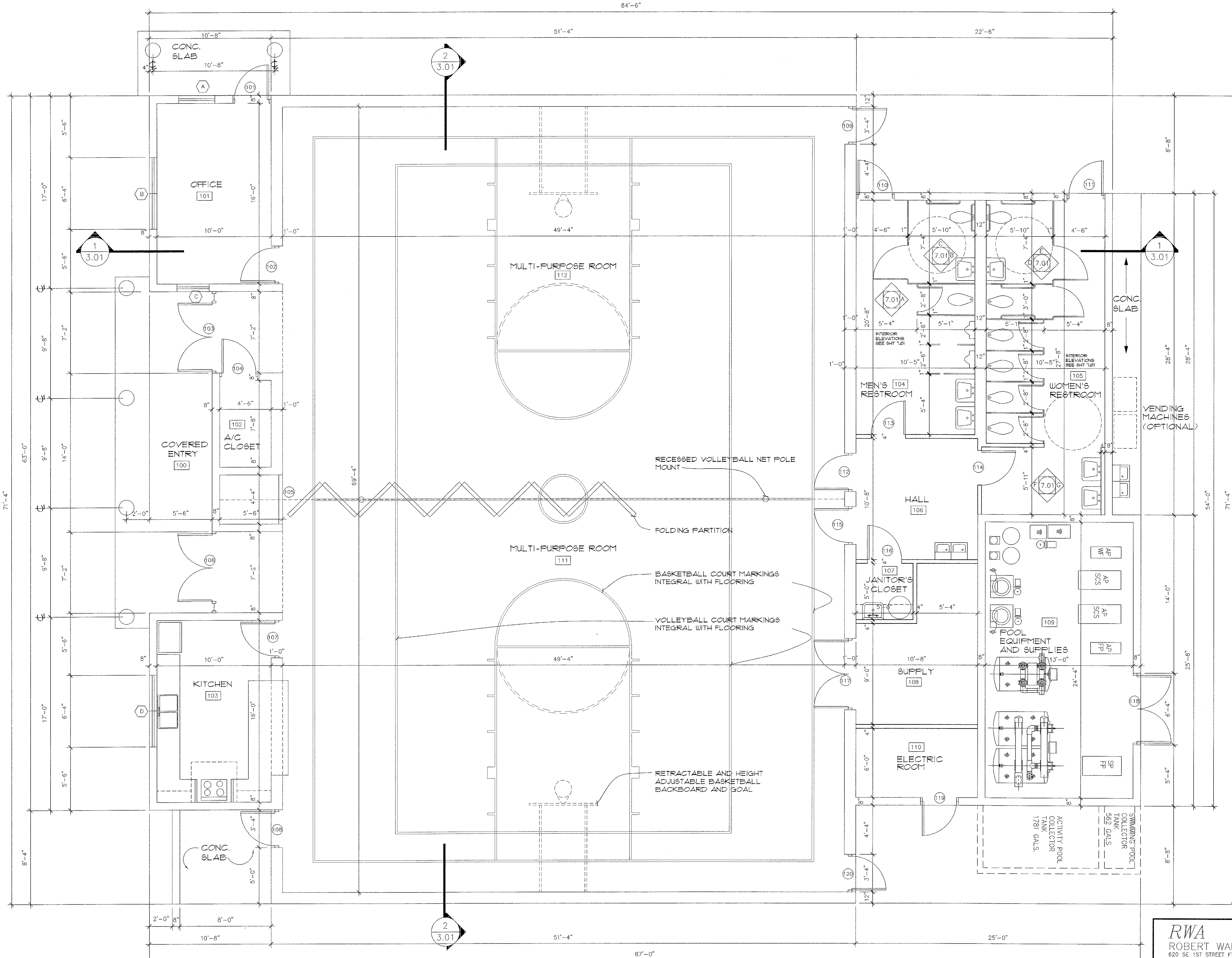
2

DRAWING FILE NO.

4-XXX-XX

LAC Proj: #20-056

09/01/00



# FLOOR PLAN

SCALE: 1/4" = 1'-0"

**RWA**  
ROBERT WALTERS ARCHITECTS  
620 SE 1ST STREET FT. LAUDERDALE FL 33301  
PHONE: (954) 522-4123 FAX: (954) 522-4128  
EMAIL: RSW@BELLSOUTH.NET

CORPORATE NAME: ROBERT S. WALTERS, AIA, P.A.

THIS DRAWING IS A FLORIDA CORPORATION REGISTERED UNDER THE NAME OF ROBERT S. WALTERS, AIA, P.A. THESE DRAWINGS ARE THE PROPERTY OF ROBERT S. WALTERS, AIA, P.A. AND SHALL NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION FROM A PERSONAL OF THE FIRM OR BE LOANED FOR THE FURTHER USE, REUSE, OR REPRODUCTION OF ANY KIND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF FORT LAUDERDALE PRIOR TO THE BEGINNING OF THE WORK. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

PROJECT #15170  
COMMUNITY CENTER AT  
CROISSANT PARK  
FORT LAUDERDALE, FLORIDA

NO. OF SHEETS: 1

SHEET NO.: 1.01

CAD FILE NO.: 00111101

FILE NO.: 00111101

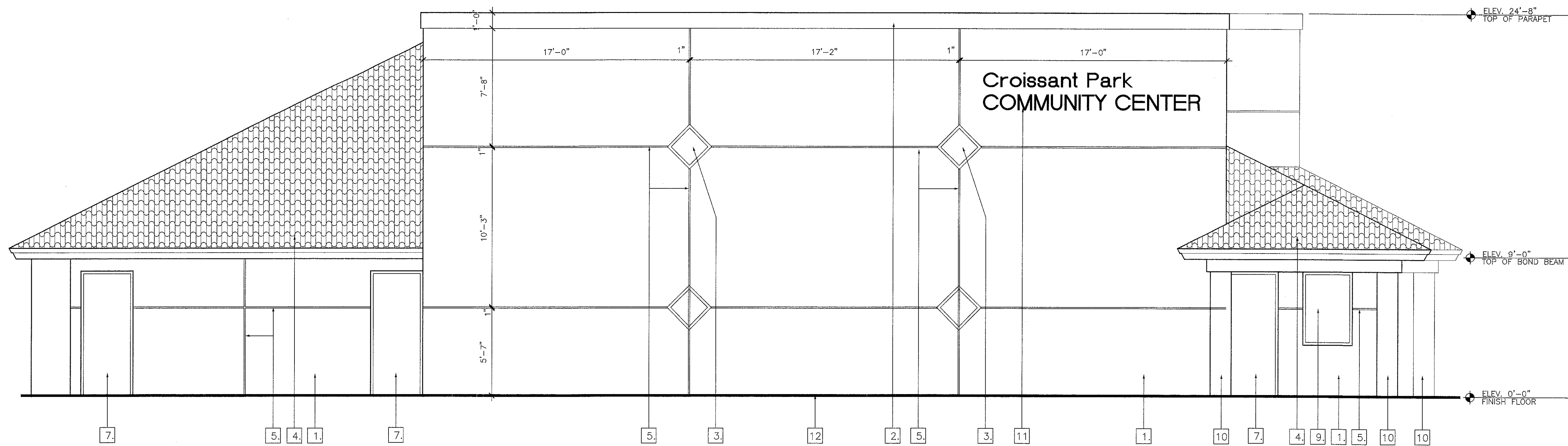
REVISIONS			
NO.	DATE	BY	DESCRIPTION

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ENGINEERING DIVISION  
FORT LAUDERDALE, FLORIDA

DRAWN BY: AHZ  
DESIGNED BY: AHZ  
CHECKED BY: RSW

ARCHITECT: ROBERT WALTERS ARCHITECTS  
620 SE 1ST STREET  
FORT LAUDERDALE, FLORIDA  
TEL: (954) 522-4123  
FAX: (954) 522-4128

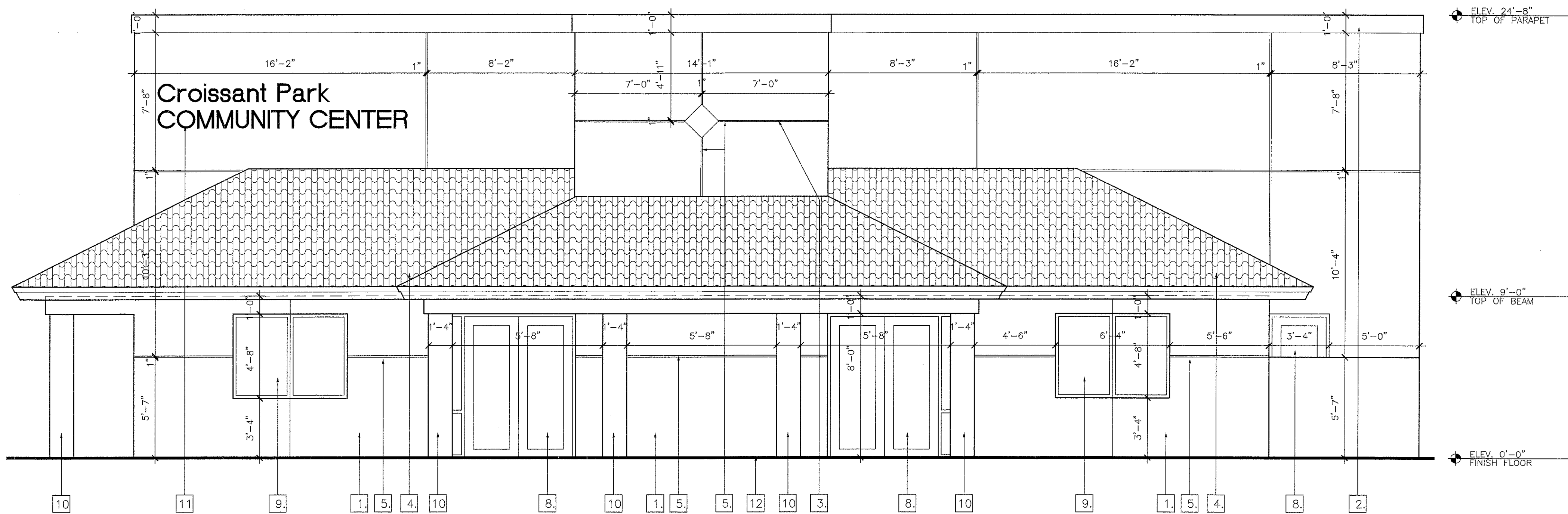




POOL SIDE ELEVATION

SCALE: 1/4" = 1'-0"

BUILDING MATERIALS	
1.	5/8" TEXTURED STUCCO FINISH
2.	RAISED SMOOTH STUCCO BAND
3.	TILE ACCENT MEDALLION
4.	CONCRETE BARREL TILE ROOF
5.	1" ALUMINUM REGLET <span>2/2.03</span>
6.	"V" STUCCO JOINT
7.	HOLLOW METAL DOOR WITH METAL FRAME
8.	DOOR WITH ALUMINUM FRAME AND IMPACT GLAZING
9.	ALUMINUM FRAME IMPACT WINDOW
10.	CONCRETE COLUMN WITH STUCCO FINISH
11.	12" HIGH ALUMINUM SIGNAGE
12.	EXPANSION JOINT AT ABUTTING CONC WALKS <span>4/2.03</span>



STREET SIDE ELEVATION

SCALE: 1/4" = 1'-0"

CITY OF FORT LAUDERDALE  
PUBLIC SERVICES DEPARTMENT  
ENGINEERING DIVISION  
FORT LAUDERDALE, FLORIDA

ARCHITECT:  
ROBERT WALTERS ARCHITECTS  
620 SE 1ST STREET  
FORT LAUDERDALE, FLORIDA  
TEL: (954) 522-4123  
FAX: (954) 522-4128

SCALE:	DATE:
DRAWN BY: AHZ	DESIGNED BY: AHZ
CHECKED BY: RSW	FIELD BOOK:

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHK'D

PROJECT #15170  
COMMUNITY CENTER AT  
CROISSANT PARK  
FORT LAUDERDALE, FLORIDA

NO. OF SHEETS: —
SHEET NO.: 2.01
CAD FILE NO. 00111201
FILE NO. 00111201

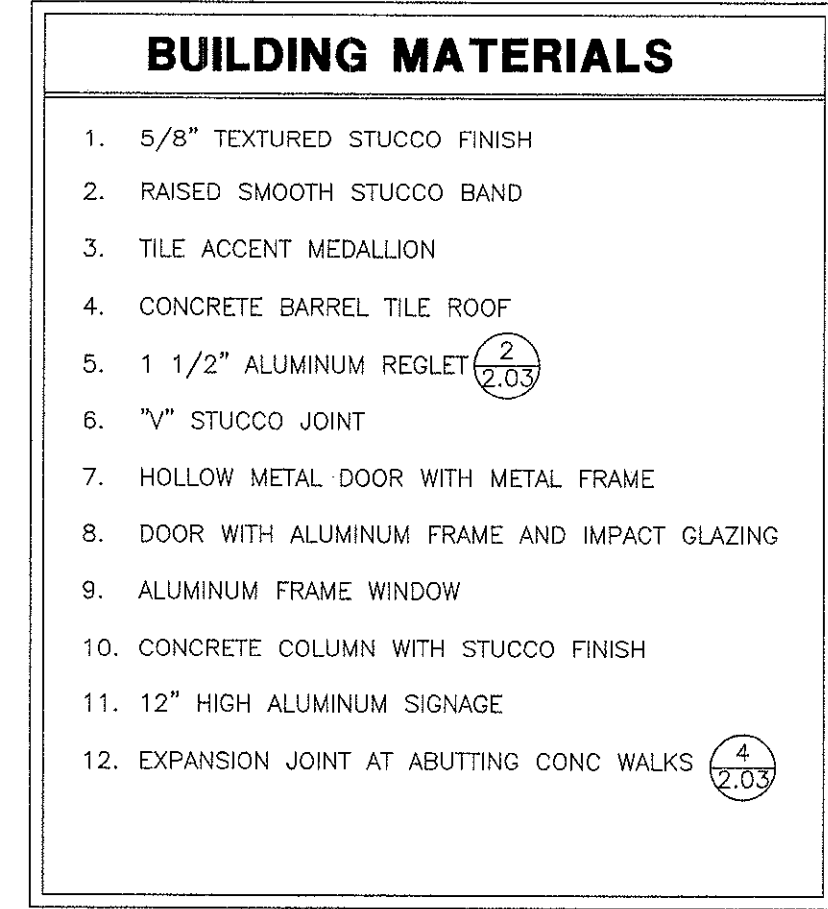
RWA

ROBERT WALTERS ARCHITECTS  
620 SE 1ST STREET FT. LAUDERDALE FL. 33301  
PHONE: (954) 522-4123 FAX: (954) 522-4128  
EMAIL: RSWAIA@BELLSOUTH.NET

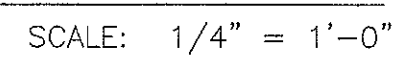
CORPORATE NAME: ROBERT S. WALTERS, AIA, P.A.

THIS FIRM IS A FLORIDA CORPORATION REGISTERED UNDER THE NAME OF ROBERT S. WALTERS, AIA, P.A.  
THESE DRAWINGS ARE THE PROPERTY OF ROBERT S. WALTERS, AIA, P.A. AND SHALL NOT BE REPRODUCED WITHOUT  
WRITTEN PERMISSION FROM A PERSONAL OF THE FIRM OR BE LABLE FOR THE FULLEST LEGAL RECOURSE. THE  
CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AND NOTIFY THIS OFFICE OF ANY  
DISCREPANCIES PRIOR TO EXECUTION OF THE WORK. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.





SCALE:  $1/4" = 1'-0"$



*RWA*

CORPORATE NAME: ROBERT S. WALTERS, AIA, P.A.

**ROBERT WALTERS ARCHITECTS**

620 SE 1ST STREET FT. LAUDERDALE FL 33301

PHONE: (954) 522-4123 FAX: (954) 522-4128

EMAIL: [RSWA@BELLSOUTH.NET](mailto:RSWA@BELLSOUTH.NET)

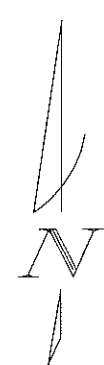
THIS FIRM IS A FLORIDA CORPORATION REGISTERED UNDER THE NAME OF ROBERT S. WALTERS, AIA, P.A. THESE DIMENSIONS ARE THE PROPERTY OF JOSEPH S. WALTERS, AIA, P.A. AND SHALL NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION FROM A PRINCIPAL OF THE FIRM OR BE LENT FOR THE PRESENTATION, LEND, RECORD, THE REPRODUCTION, REUSE, OR ANY OTHER COMMERCIAL OR INDUSTRIAL PURPOSES. ANY VIOLATION OF THIS STATEMENT OF ANY DISCREPANCIES FROM TO EXECUTION OF THE WORK, WITHOUT DIMENSIONS, THEY WILL BE CONSIDERED AS APPROVED DIMENSIONS.

DRAWN BY: AHZ	SCALE: —
DESIGNED BY: AHZ	DATE: 09/01/00
CHECKED BY: RSW	FIELD BOOK: —

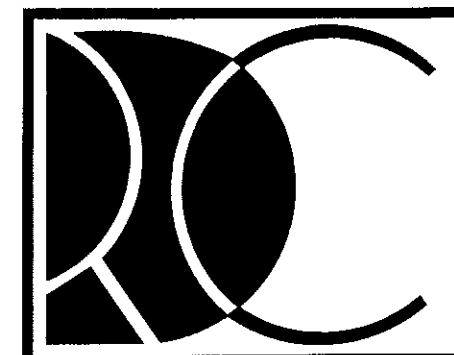
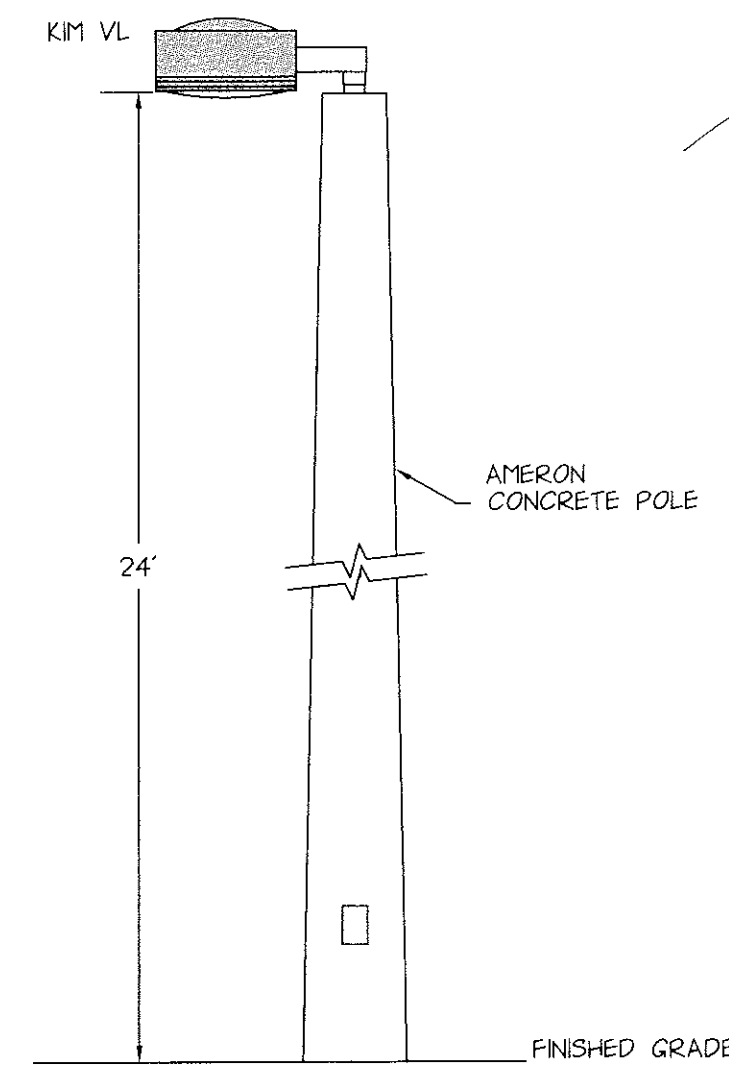
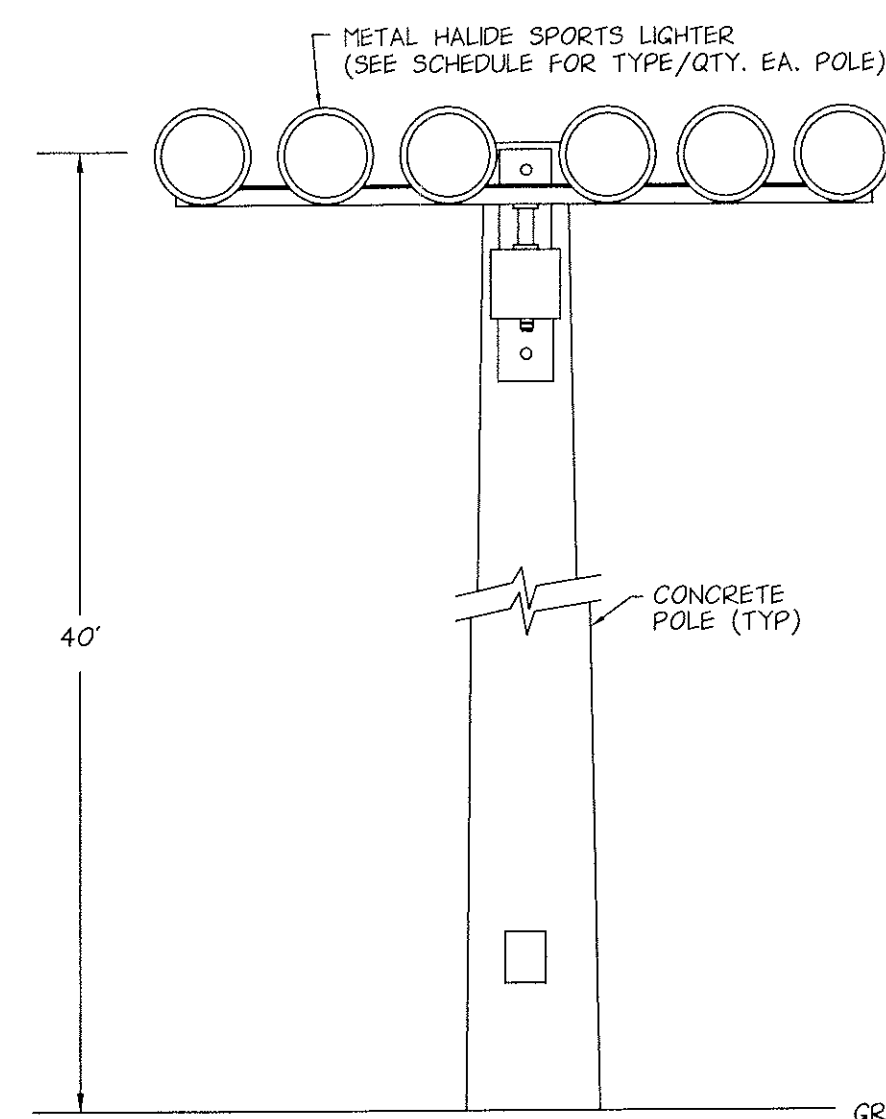
[illegible]

NO. OF SHEETS: —
SHEET NO.: 2.02
CAD FILE NO. 00111202
FILE NO. 00111202

SCALE: 1" = 20'

P.B. 86 PAGE 12  
PARCEL "A"

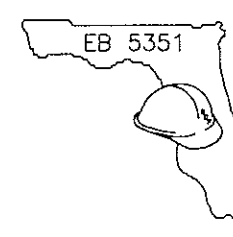
POOL LIGHTING:						
Fixture	Quantity	Curve #	Init Lum	LLF	Design Lum	
POWER SPOT III	8	99040607.tlt	110000	0.680	74800	
POWER SPOT III	8	99040106.tlt	110000	0.680	74800	
System Units: Feet/Footcandles						
Grid	Average	Max	Min	Avg/Min	Max/Min	CV
Pool	39.3	51.3	24.5	1.61	2.09	0.157
Wplay	37.5	53.8	21.2	1.77	2.54	0.194
Svert6	0.090	0.295	0.000	> 100	> 100	1.25
						#Points
						73
						54
						13



RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
3890 POWERLINE ROAD  
FT. LAUDERDALE, FL 33309  
954-566-3885  
FAX 954-566-3335

REVISIONS


CONSTRUCTION  
CONSULTANTS  
OF FLORIDA INC.



CONSULTING ENGINEERS  
1475 S.W. 21st Avenue  
Fort Lauderdale, Florida  
(954) 584-7904

THESE DESIGNS & DRAWINGS ARE THE INTELLECTUAL  
PROPERTY OF THE ABOVE AND MAY NOT BE REPRODUCED  
IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION.

DATE: 8/14/00

JOB NUMBER

RFP

P.B. 86 PAGE 1  
PARCEL "D"

CROISSANT PARK AQUATIC FACILITY

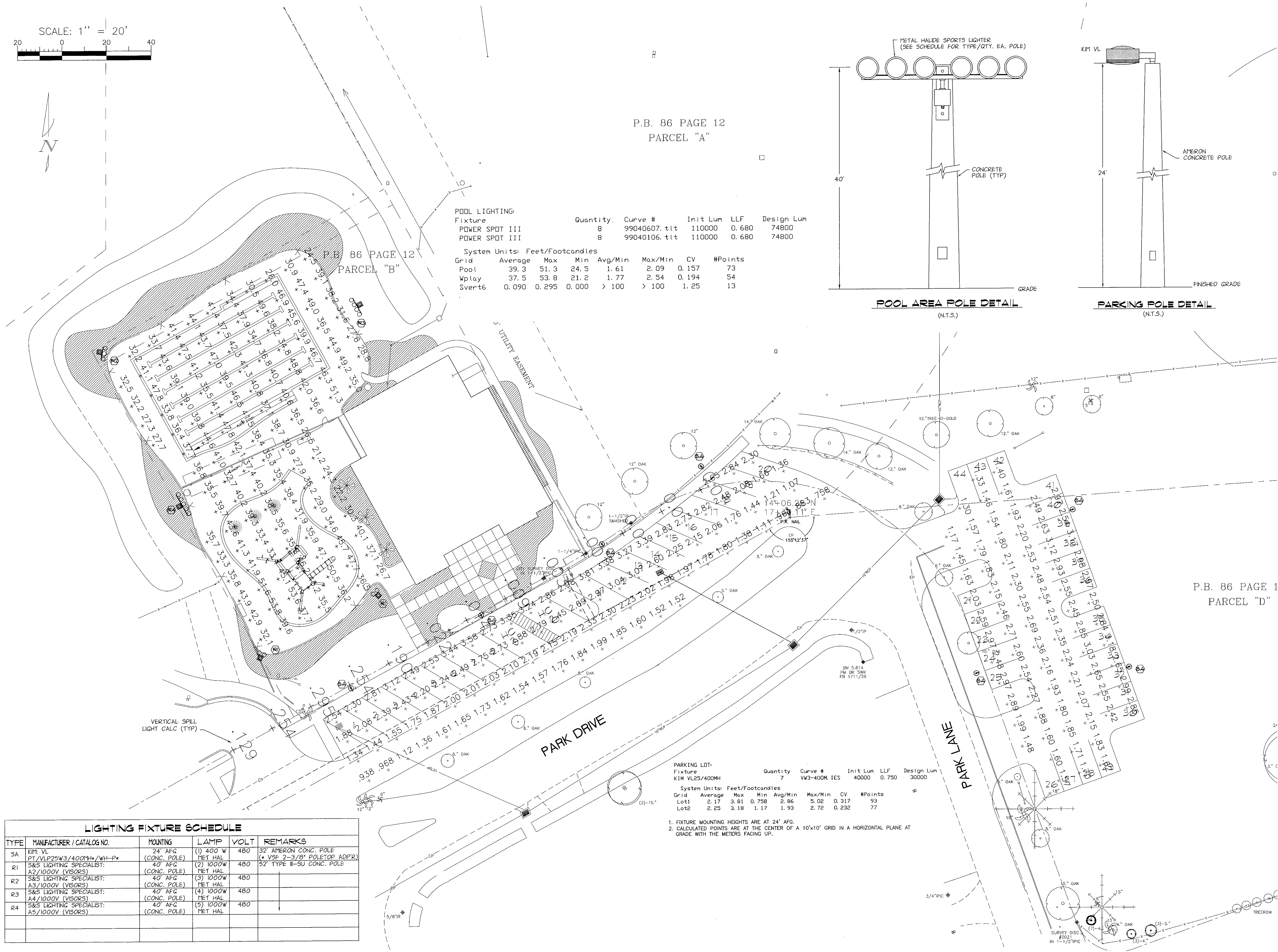
CITY OF FORT LAUDERDALE

SHEET INDEX  
SITE  
PHOTOMETRY  
SHEET NUMBER

PH-1  
CAM 21-0085  
p. 190

Page 190 of 215

THIS DRAWING IS THE INTELLECTUAL PROPERTY OF RECREATIONAL DESIGN &amp; CONSTRUCTION, INC. AND SHALL NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION FROM A PRINCIPAL OF THE FIRM OR BE LIABLE FOR THE FULLEST LEGAL RECOURSE.



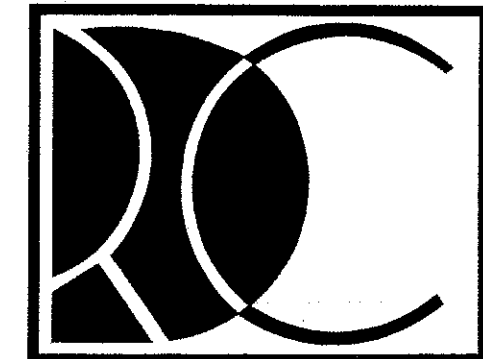
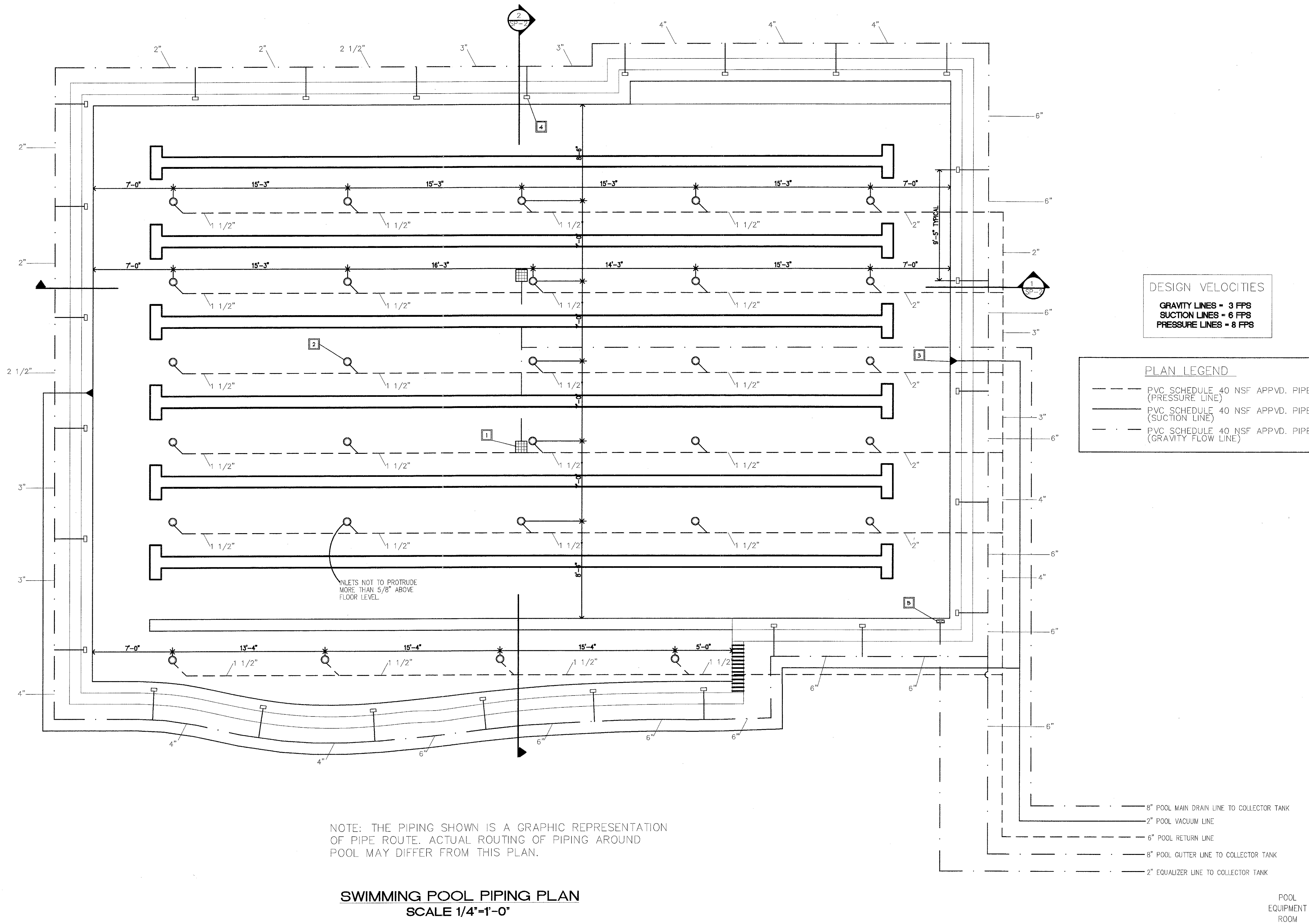
## LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER / CATALOG NO.	MOUNTING	LAMP	VOLT	REMARKS
SA	KIM VL PT VLP25W3/4007H*/WH-P*	24' AFG (CONC. POLE)	(1) 400 W MET HAL	480	(*) VSF 2-3/8" POLE TOP ADPTR
R1	S&S LIGHTING SPECIALIST: A2/1000V (VISORS)	40' AFG (CONC. POLE)	(2) 1000W MET HAL	480	52" TYPE II-SU CONC. POLE
R2	S&S LIGHTING SPECIALIST: A3/1000V (VISORS)	40' AFG (CONC. POLE)	(3) 1000W MET HAL	480	
R3	S&S LIGHTING SPECIALIST: A4/1000V (VISORS)	40' AFG (CONC. POLE)	(4) 1000W MET HAL	480	
R4	S&S LIGHTING SPECIALIST: A5/1000V (VISORS)	40' AFG (CONC. POLE)	(5) 1000W MET HAL	480	

Photometric data provided by the lighting manufacturers.  
Construction Consultants of Florida, Inc. makes no warranty, either expressed or implied, as to  
the accuracy of the photometric data, nor shall Construction Consultants be liable for the use  
of such data.

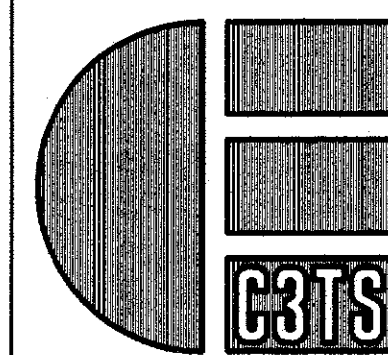
PARKING LOT:						
Fixture	Quantity	Curve #	Init Lum	LLF	Design Lum	
KIM VL25/400MH	7	VW3-400M IES	40000	0.750	30000	
System Units: Feet/Footcandles						
Grid	Average	Max	Min	Avg/Min	Max/Min	CV
Lot1	2.17	3.81	0.758	2.86	5.02	0.317
Lot2	2.25	3.18	1.17	1.93	2.72	0.232
						#Points
						93
						77

1. FIXTURE MOUNTING HEIGHTS ARE AT 24' AFG.
2. CALCULATED POINTS ARE AT THE CENTER OF A 10'x10' GRID IN A HORIZONTAL PLANE AT GRADE WITH THE METERS FACING UP.



RECREATIONAL  
 DESIGN AND  
 CONSTRUCTION, INC.  
 6555 NW 9th AVENUE SUITE 201  
 FT. LAUDERDALE, FL 33309  
 954-771-5567  
 FAX 954-771-6965

REVISIONS



**CORZO  
 CASTELLA  
 CARBALLO  
 THOMPSON  
 SALMAN**

**Engineers  
 Architects  
 Planners**

3990 NW 9th AVENUE  
 Ft. Lauderdale, Florida 33309  
 954-563-2713 954-563-2009  
 E90003022 AAC002142

JOB NUMBER


**POOL AND COMMUNITY CENTER  
 CROISSANT PARK  
 FT LAUDERDALE, FLORIDA**



**KEHLER ENGINEERING  
 ASSOCIATES, INC.**  
 ENGINEERS  
 SPECIALISTS IN AQUATIC ENGINEERING  
 4910 S.W. 72ND AVENUE  
 MIAMI, FLORIDA 33155  
 (305) 687-8975 TELEFAX (305) 682-1002

SHEET INDEX  
**SWIMMING POOL  
 PIPING PLAN**  
 SHEET NUMBER  
**SP-1**





**E  
n  
g  
i  
n  
e  
e  
r  
s  
  
A  
r  
c  
h  
i  
t  
e  
c  
t  
s  
  
P  
l  
a  
n  
n  
e  
r  
s**

J O B	N U M B E R
-------	-------------

SHEET INDEX

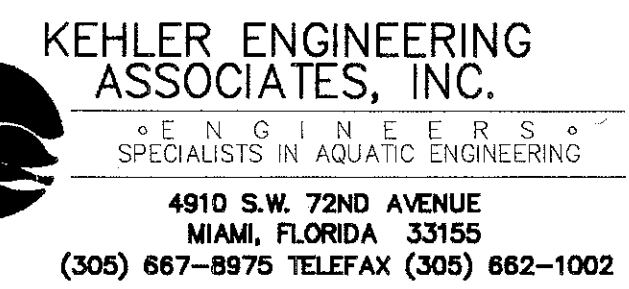
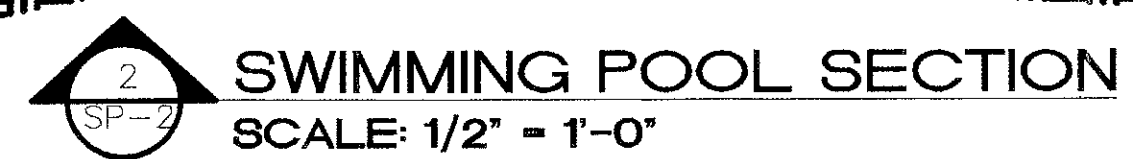
**SWIMMING POOL  
SECTIONS**

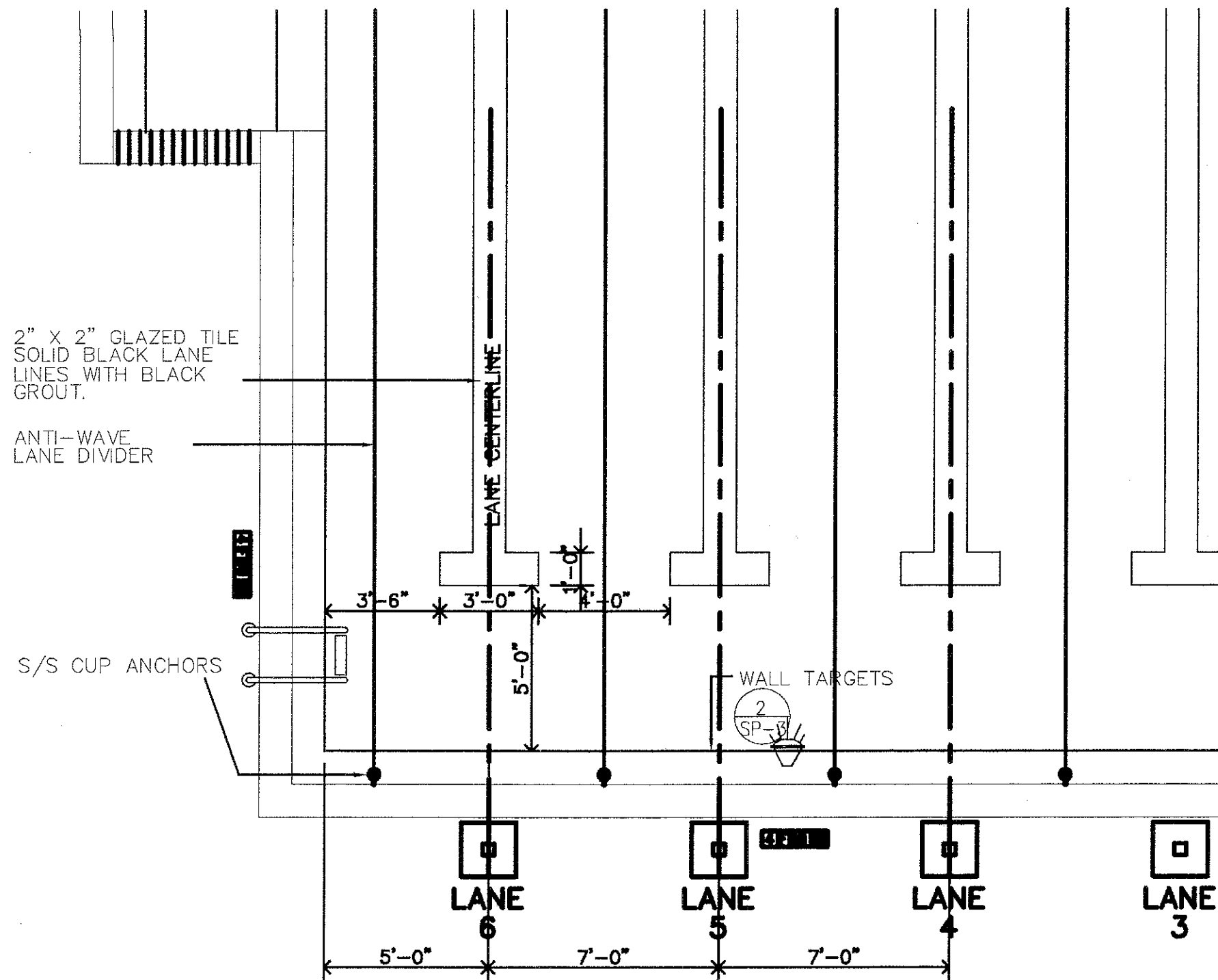
SHEET NUMBER

SP-2

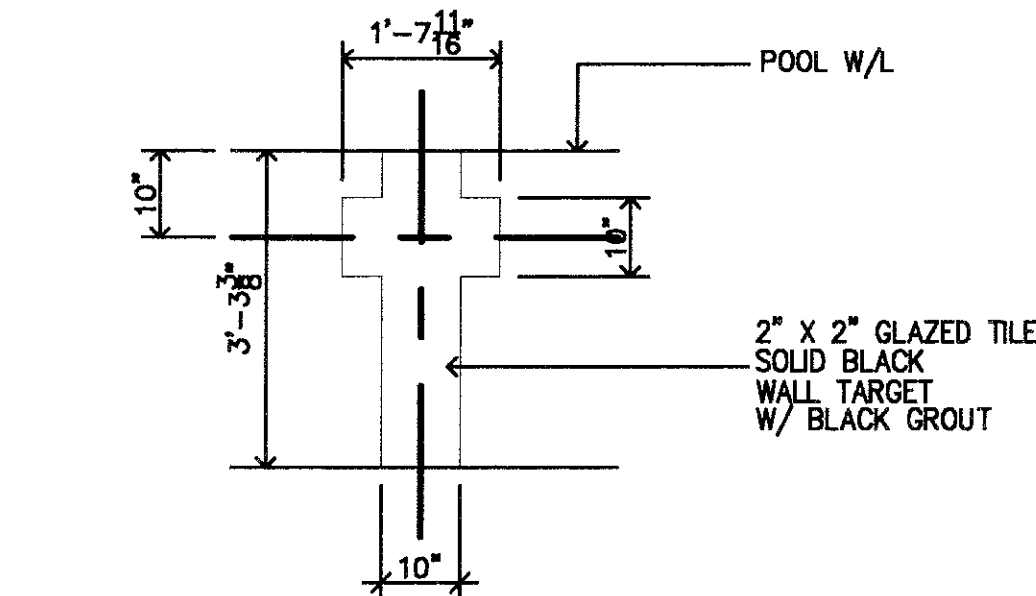


- 1) INTERIOR POOL FINISH SHALL BE DIAMOND BRITE "MARLIN BLUE" BY SOUTHERN GROUTS & MORTARS, INC / POMPANO BEACH, FLORIDA
- 2) INTERIOR POOL FINISH IS IMPERVIOUS AND NON-SLIP.
- 3) THE MAXIMUM VELOCITY THROUGH THE MAIN DRAIN GRATE DOES NOT EXCEED 1.5 F.P.S.
- 4) SECURE THE MAIN DRAIN GRATE WITH TAMPERPROOF SCREWS. (THE MAIN DRAIN GRATE IS NOT READILY REMOVABLE.)
- 5) THE ACTUAL DEPTH AT OPERATING WATER LEVEL SHALL NOT DEVIATE MORE THAN 3 INCHES FROM THE DEPTH SPECIFIED BY THE MARKER WHEN MEASURED 3 FEET FROM THE POOL WALL.
- 6) THE DEPTH AT THE SHALLOW END SHALL NOT BE LESS THAN 3'-0"

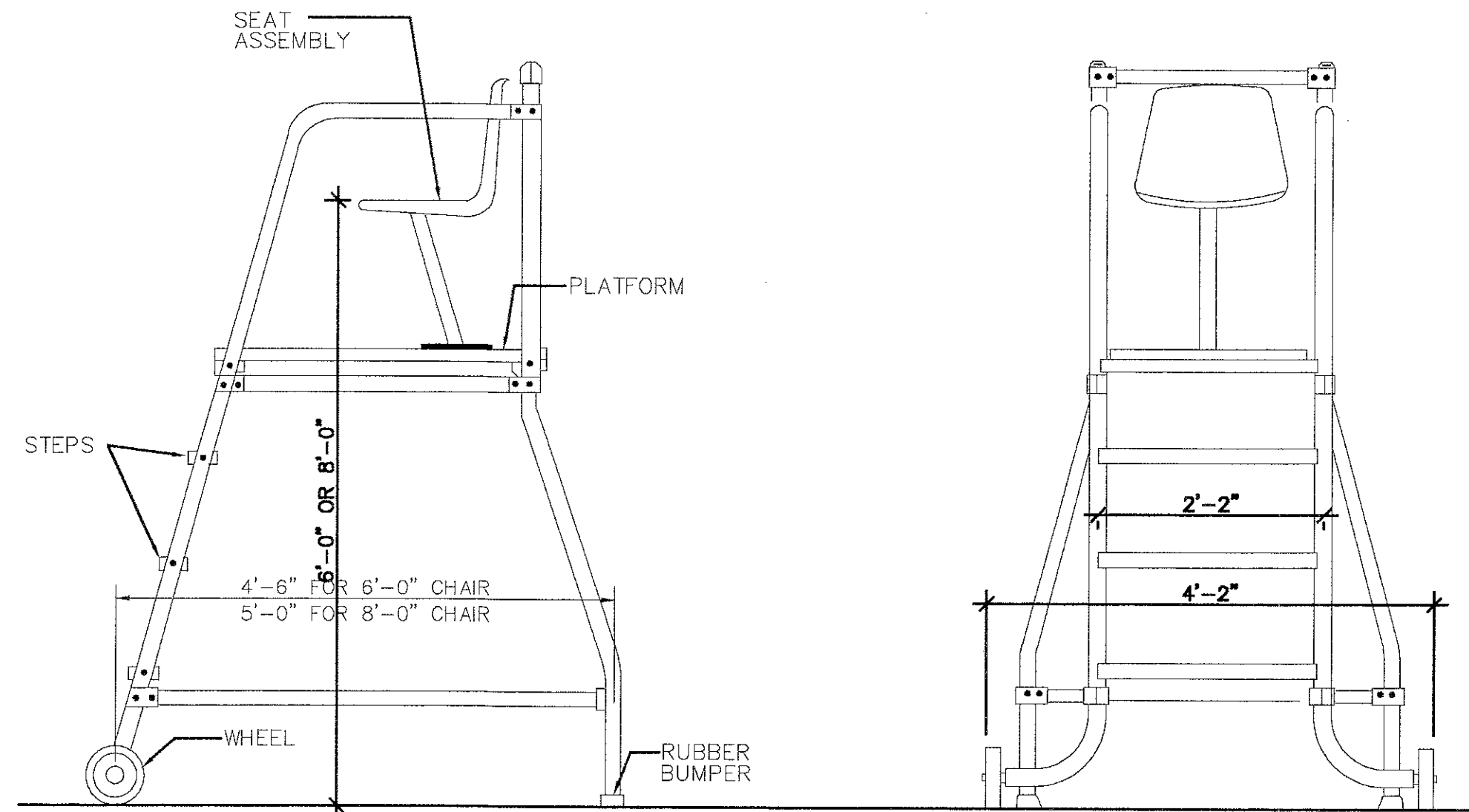




1 LANE MARKING AND  
TERMINATOR DETAILS  
SCALE 1/4" = 1'-0"



2 WALL TARGET  
DETAIL  
SCALE 1/2" = 1'-0"



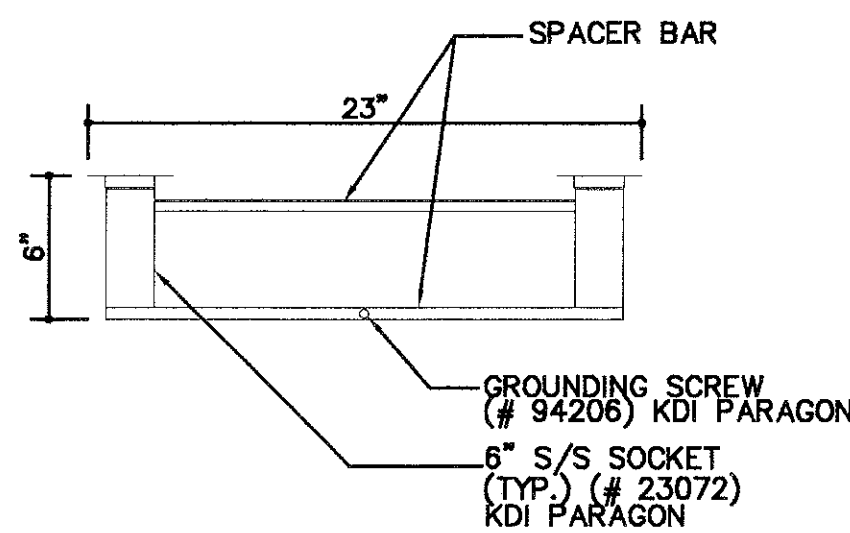
SIDE ELEVATION

FRONT ELEVATION

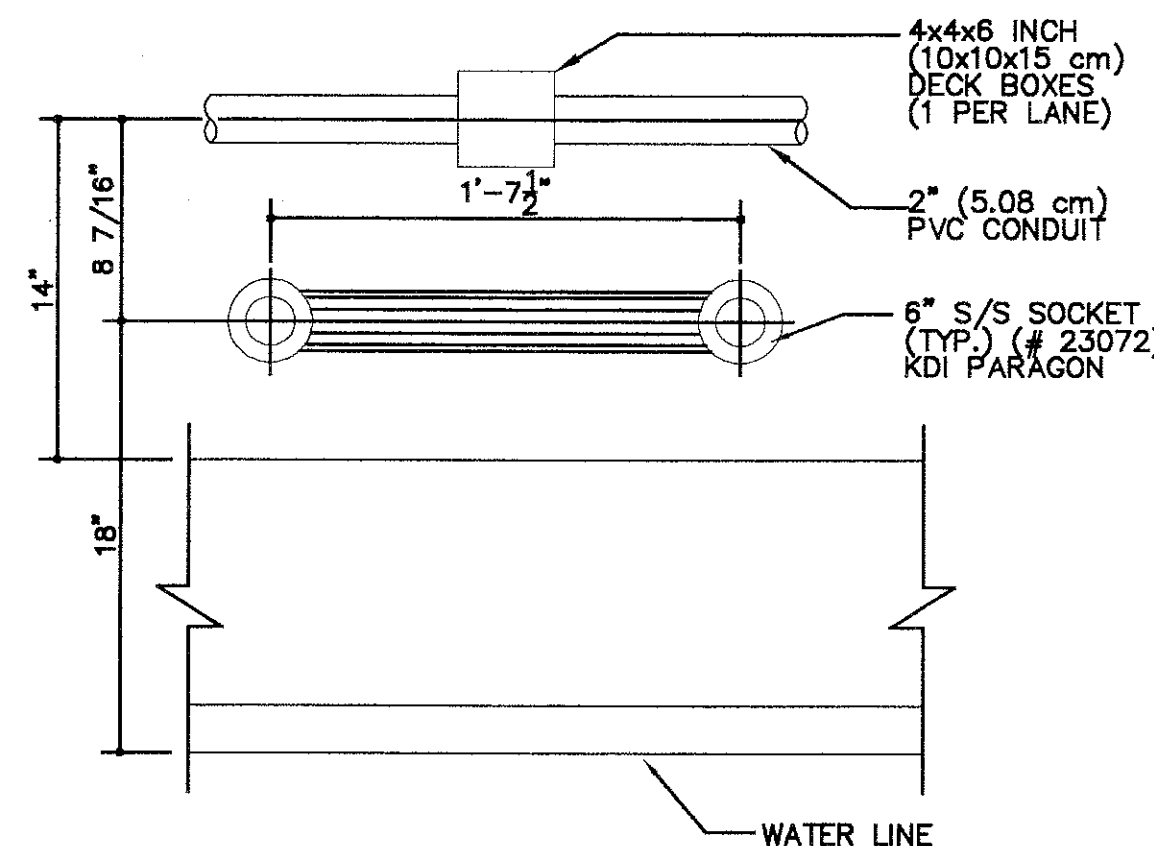
3 MOVABLE LIFEGUARD CHAIR  
SCALE 3/4" = 1'-0"

SPECIFICATIONS:

THE MOVABLE CHAIR SHALL PROVIDE A MOLDED  
PLASTIC SEAT (6 FT) (8 FT) ABOVE THE DECK.

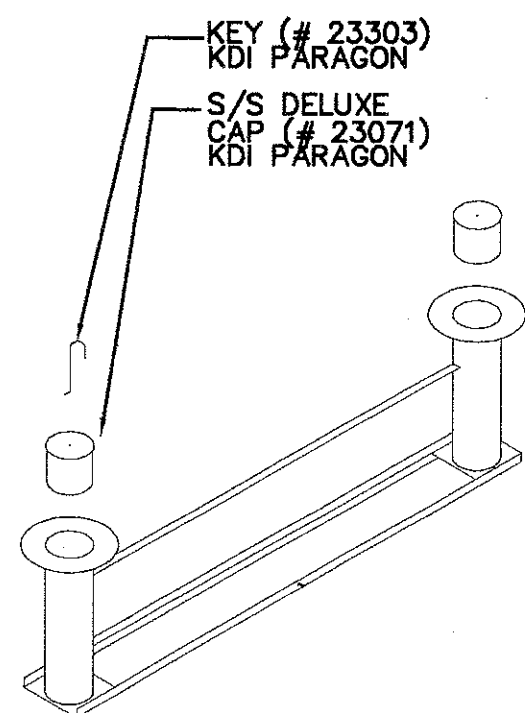


FROM VIEW

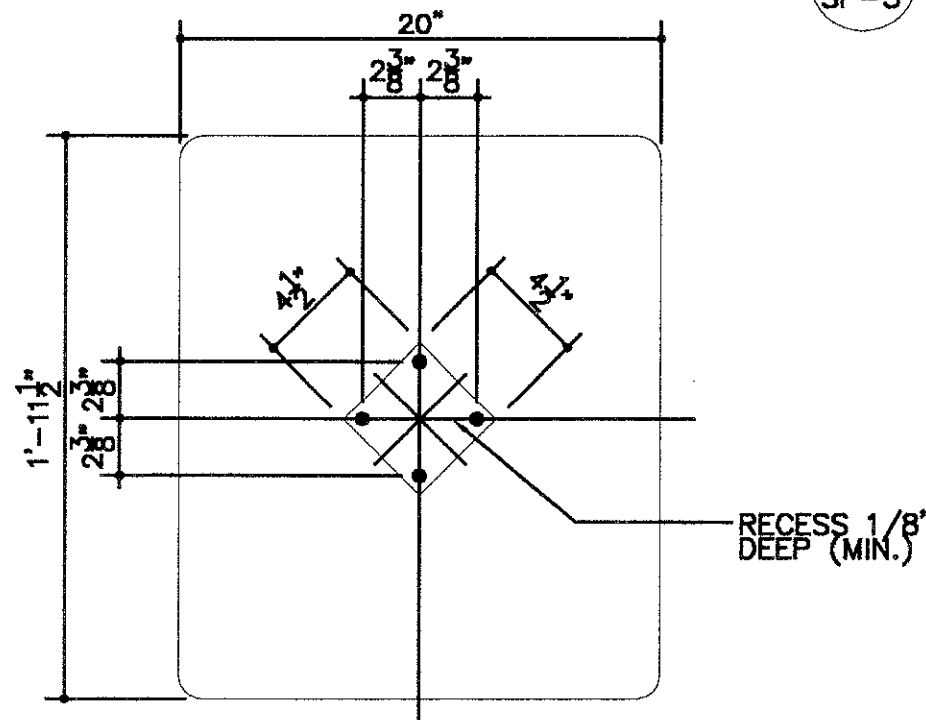


TOP VIEW

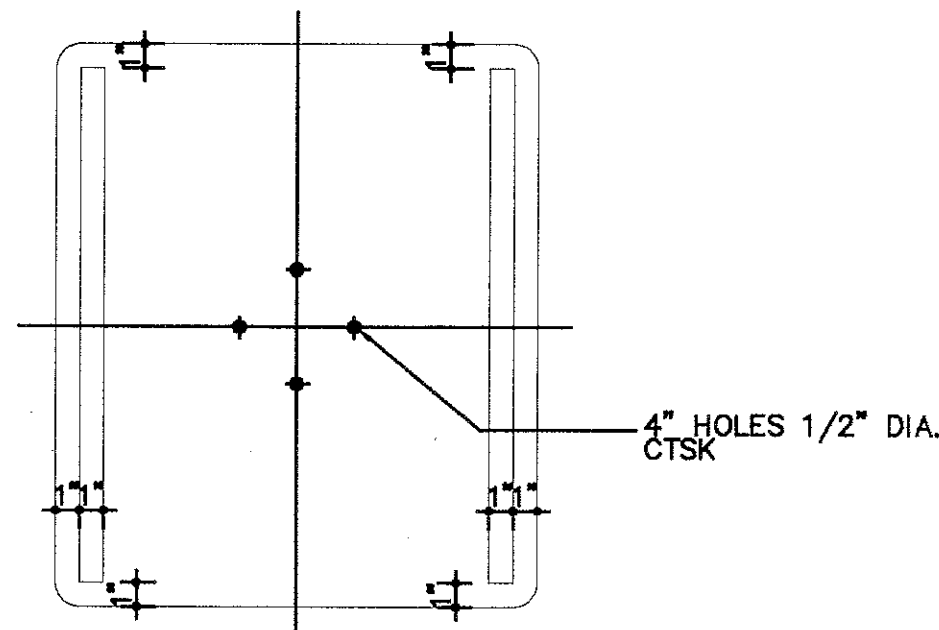
5 6" COMPETITOR ANCHOR SOCKET  
SCALE: 1 1/2" = 1'-0"



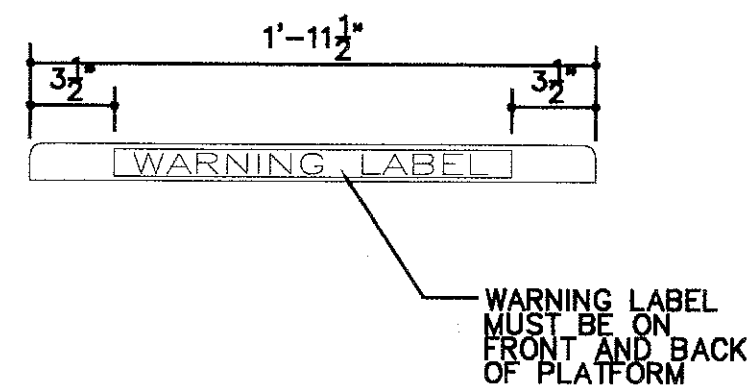
ISOMETRIC



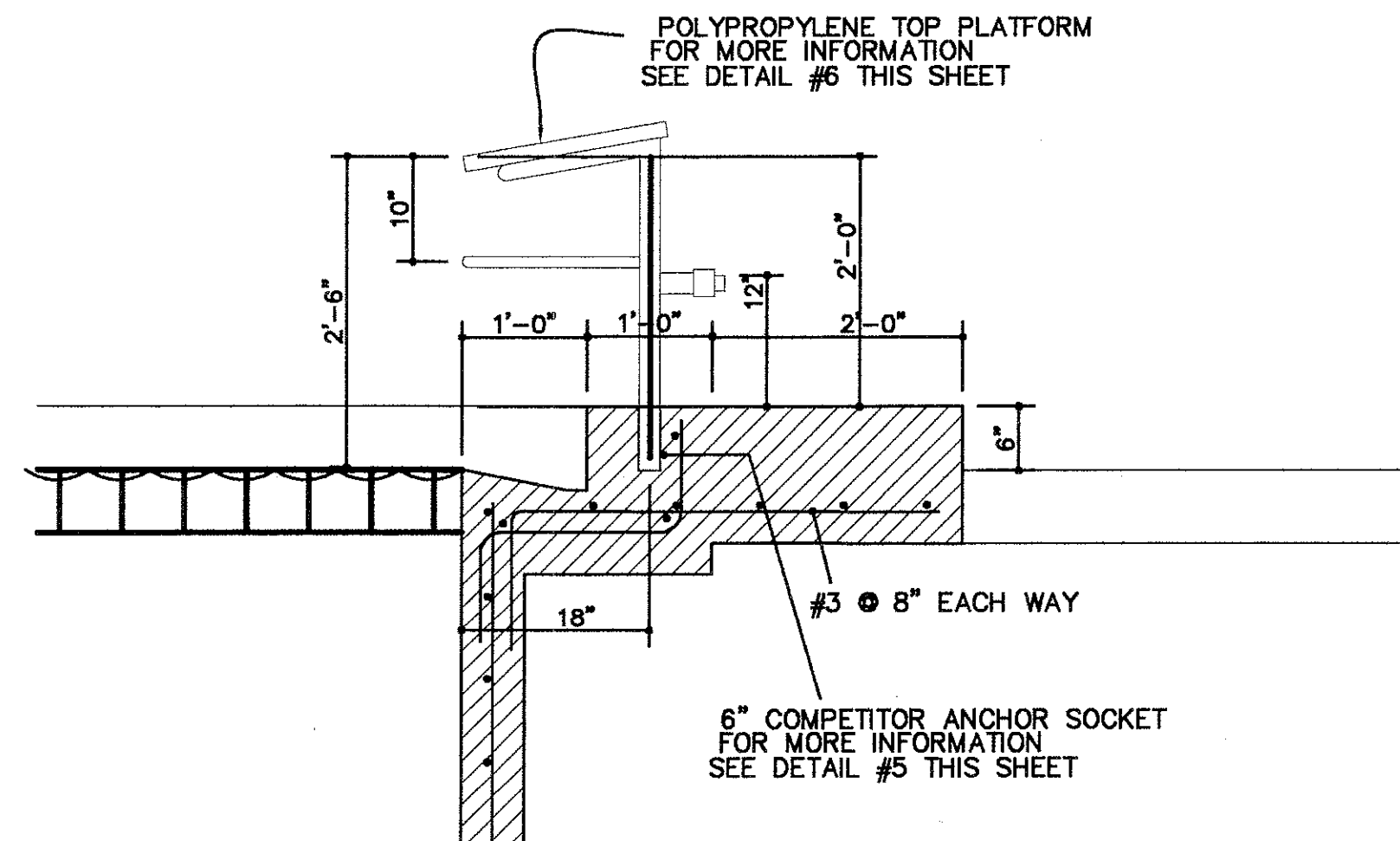
TOP VIEW



BOTTOM VIEW




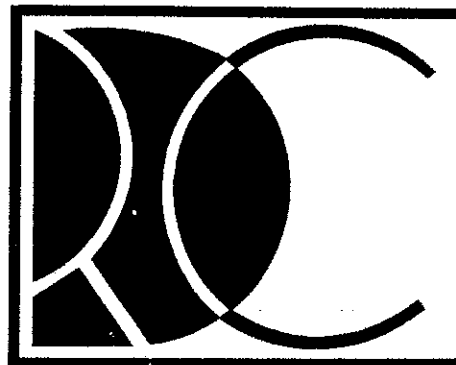
FRONT AND BACK VIEW



4 STARTING PLATFORM ELEVATION  
COMPETITOR MODEL  
KDI PARAGON INC.  
SCALE: 3/4" = 1'-0"

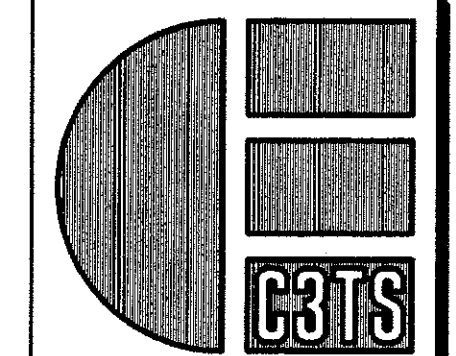
6 POLYPROPYLENE TOP PLATFORM  
SCALE: 1 1/2" = 1'-0"

 **KEHLER ENGINEERING  
ASSOCIATES, INC.**  
ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING  
4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 662-1002



RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
6555 NW 9th AVENUE SUITE 201  
FT. LAUDERDALE, FL 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



**CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN**

**Engineers  
Architects  
Planners**

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954.563.2113 954.563.2009  
130005022 AAC02142

JOB NUMBER

**POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA**

SHEET INDEX  
**SWIMMING POOL  
DETAILS 1**  
SHEET NUMBER  
**SP-3**  
CANT 21-0085  
p. 193



# SWIMMING POOL SCHEDULE OF EQUIPMENT

MARK	ITEM	QTY.	DESCRIPTION
1	MAIN DRAIN ASSEMBLY	2	HAYWARD 12" X 12" CYCLOC MAIN DRAIN GRATE ASSEMBLY, 68 SQ.IN. OPEN AREA, MODEL SP-1032
2	RETURN FITTINGS	29	HAYWARD SP14255 FLOW ADJ. FLR RET FTG.
3	VACUUM FITTINGS	2	HAYWARD VACUUM FTG MODEL SP-1022B, 1-1/2" X 2" SLIP SOCKET, WITH PLUG.
4	GUTTER DRAINS	27	HAYWARD SQUM GUTTER DRAIN FTG AND GRATE, 2" SKT X 2" FIP, WHITE ABS PLASTIC, MODEL SP-1019.
5	EQUALIZER FITTING	1	HAYWARD GRATE END FTG FOR EQUALIZER/MAKE-UP WATER LINE. FTG TO BE INSTALLED 12" BELOW POOL WATER LEVEL. MODEL SP-1019, 2".
6	POOL LIGHTS	6	AMERICAN PRODUCTS POOL UNDERWATER LIGHT WITH STAINLESS STEEL FACE RING. MODEL #784231, 300W, 12V, 25 FT CORD. INCLUDE AMERICAN PRODUCTS #782105 STAINLESS STEEL NICHE WITH 1" HUB. OR EQUAL.
7	TRANSFORMER BOX	6	TRANSFORMER BOX IN WEATHER PROOF ENCLOSURE, A.J. CIAMMANCO SAF-T-VOLT DUAL WINDING TYPE.
8	JUNCTION BOX	6	JUNCTION BOX IN WEATHER PROOF NON-CORROSIVE ENCLOSURE REQUIRED. REFER TO LIGHT DETAIL ON THESE DRAWINGS FOR MOUNTING REQUIREMENTS. INSTALL IN ACCORDANCE WITH ALL LOCAL BUILDING DEPARTMENT REQUIREMENTS IN ADDITION ARTICLE 680 OF THE NATIONAL ELECTRICAL CODE.
9	LADDER	2	3-TREAD LADDER, STAINLESS STEEL RAILS, 1.90" X 0.065" THICK WALL TREADS TO HAVE A NON SLIP SURFACE FINISH. REFER TO PLAN FOR LOCATION OF FOUR TREAD LADDERS.
10	HANDRAIL	0	3 BEND STAINLESS STEEL HANDRAIL HAVING AN OUTSIDE DIAMETER OF 1.90 INCHES AND A WALL THICKNESS OF 0.065 INCHES. THE RAIL SHALL BE ANCHORED IN THE DECK AND THE BOTTOM TREAD.
11	ANCHOR SOCKET	4	ANCHOR SOCKET, PARAGON MODEL #C1200B BRASS SOCKET WITH GROUNDING LUG. EACH SOCKET SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE STANDARDS.
12	ESCUTCHEON PLATE	4	ESCUTCHEON PLATE, PARAGON MODEL #C1210SS STAINLESS STEEL COVER PLATE.
13	LIFE RING	2	LIFE RING, AQUALITY MODEL #23005, 20 INCH DIAMETER PLASTIC RING WITH 1/4" DIAMETER X 40 FT LONG SAFETY LINE.
14	LIFE HOOK	2	SHEPHERD TYPE LIFE HOOK, END ANCHORED TO A 16 FT ALUMINUM TELESCOPING HANDLE. AQUALITY MODEL #RH1038
15	LIFE RING HOLDER	2	AQUALITY MODEL #AH250 LIFE RING HOLDER.
16	VACUUM CLEANER	1	VACUUM CLEANER, AQUALITY MODEL #215-24, 18 INCH WIDE VACUUM HEAD WITH FOUR WHEEL BASE, 16 FT TELESCOPING HANDLE, AND 1-1/2" X 50 FT FLEX HOSE.
17	TEST KIT	1	TAYLOR TEST KIT MODEL #2000-5 DUPLEX CAPABLE OF MEETING ALL CHEMICAL TESTS SPECIFIED BY THE FLORIDA ADMINISTRATIVE CODE IN CHAPTER 64E-9.
18	PRESSURE GAUGES	2	2 1/2PSI FACE 0-60PSI MINIMUM DIAL READOUT, CONTRACTOR TO SELECT SUPPLIER.
19	FILTER PUMP	1	ITT MARLOW 4SPC10EC, 10 HP, WITH INTEGRAL SUCTION STRAINER, 352 GPM AT 60 TDH, THREE PHASE 480VOLT 1750 RPM, SELF PRIMING PUMP.
20	FILTER UNIT	1	EPD FULLY AUTO. HORIZONTAL HI-RITE SAND FILTER. MODEL 201. 13.5 S.F. FILTER AREA EACH, 27.0 S.F. TOTAL.
21	FLOWMETER	1	4" SIGNET FLOWMETER, MAX. RANGE 600 GPM.
22	STORAGE CONTAINER	1	55 GALLON CAPACITY CHEMICAL CONTAINER WITH LID & LABEL ON FRONT INDICATING CONTENTS.
23	CL2 FEEDER	1	PULSAR PI CALHYPO EROSION FEEDER, 120 PPD
24	CHEMICAL CONTROLLER	1	STRANTRON SYSTEM 4 WITH DVT I/O PORT & REMOTE ANNUNCIATOR INSTALLED IN POOL MANAGERS OFFICE. PROVIDE AND INSTALL ALL CABLE, CONDUIT, FITTINGS AND HARDWARE FOR INSTALLATION PER MRS. DETAL/CL2/CL2-NO JUPITER, FLORIDA
25	WATER LEVEL CONTROLLER	1	TORO AUTOMATIC WATER LEVELING DEVICE, AND FLOAT VALVE ASSEMBLY. THE VALVE IS ALSO EQUIPPED WITH A 3/4" PVC FILL LINE AND MANUALLY OPERATED BALL VALVE.
26	COLLECTOR TANK	1	FIELD FABRICATED CONCRETE COLLECTOR TANK TANK INCLUDES WATER LEVEL TANK, OVERFLOW PIPE AND LOCKABLE LID. 562 GALLONS CAPACITY.
27	SIGHT GLASS	1	SWIMTIME OR EQUAL, 1 1/2" MIP WITH CLEAR LENS
28	ACID FEEDER	1	STENNER 45M5 ACID FEEDER, 50 GPD CAPACITY, INTERLOCK ELECTRICALLY WITH FILTER PUMP.
29	PORTABLE VACUUM SYSTEM	0	PORTABLE 6KID MTD. UNIT WITH BF 105 CARTRIDGE FILTER, 1HP 110 VAC. SELF PRIMING PUMP WITH 100' CORD AND PLUG.
30	LIFEGUARD CHAIR	1	S.R. SMITH MODEL PLS-203 PORTABLE LIFEGUARD STAND
31	STARTING PLATFORM	8	KOI PARAGON STARTING PLATFORM COMPETITOR, MODEL 23011.
32	TOP PLATFORM	8	KOI PARAGON POLYPROPYLENE TOP PLATFORM FOR STARTING PLATFORM COMPETITOR, 1 1/4" THICK, HIGH DENSITY POLYPROPYLENE ROUND ALL EDGES AND CORNERS (# 22644), WITH WARNING LABEL (2) REQ'D PER EACH PLATFORM (# 22621).
33	COMPETITOR ANCHOR SOCKET	8	KOI PARAGON 6" ANCHOR SOCKET (# 23072), WITH GROUNDING SCREW (# 94206), (2) S/S DELUXE CAP (# 23071) (2) S/S SOCKET (# 23072) AND KEY (# 23303).

## RESTROOM FACILITIES REQUIREMENTS

- THE FLOORS SHALL BE CONSTRUCTED OF AN IMPERVIOUS MATERIAL AND SHALL HAVE A NON SLIP SURFACE FINISH.
- THE FLOORS SHALL SLOPE TO A FLOOR DRAIN AT LEAST 3 INCHES IN DIAMETER.
- FIXTURE SETS SHALL INCLUDE THE FOLLOWING:  
MEN: 2 WATER CLOSETS, 2 URINALS, 3 LAVATORIES, AND ONE 3/4 INCH HOSE BIBB WITH VACUUM BREAKER.  
WOMEN: 6 WATER CLOSETS, 5 LAVATORIES, AND ONE 3/4 INCH HOSE BIBB WITH VACUUM BREAKER.
- EACH SEX SHALL BE LABELED ON THEIR RESPECTIVE DOORS.
- DIRECT ACCESS FROM THE POOL OR THE SPA DECK TO THE RESTROOM FACILITIES IS REQUIRED.
- WALLS IN RESTROOM FACILITIES SHALL BE COVERED.

## EQUIPMENT ROOM REQUIREMENTS

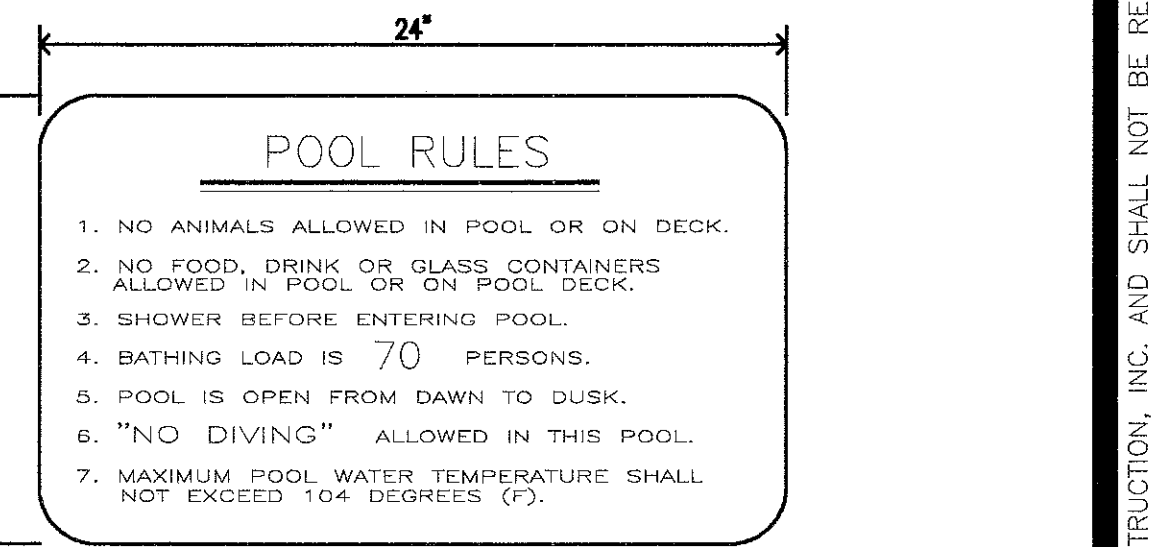
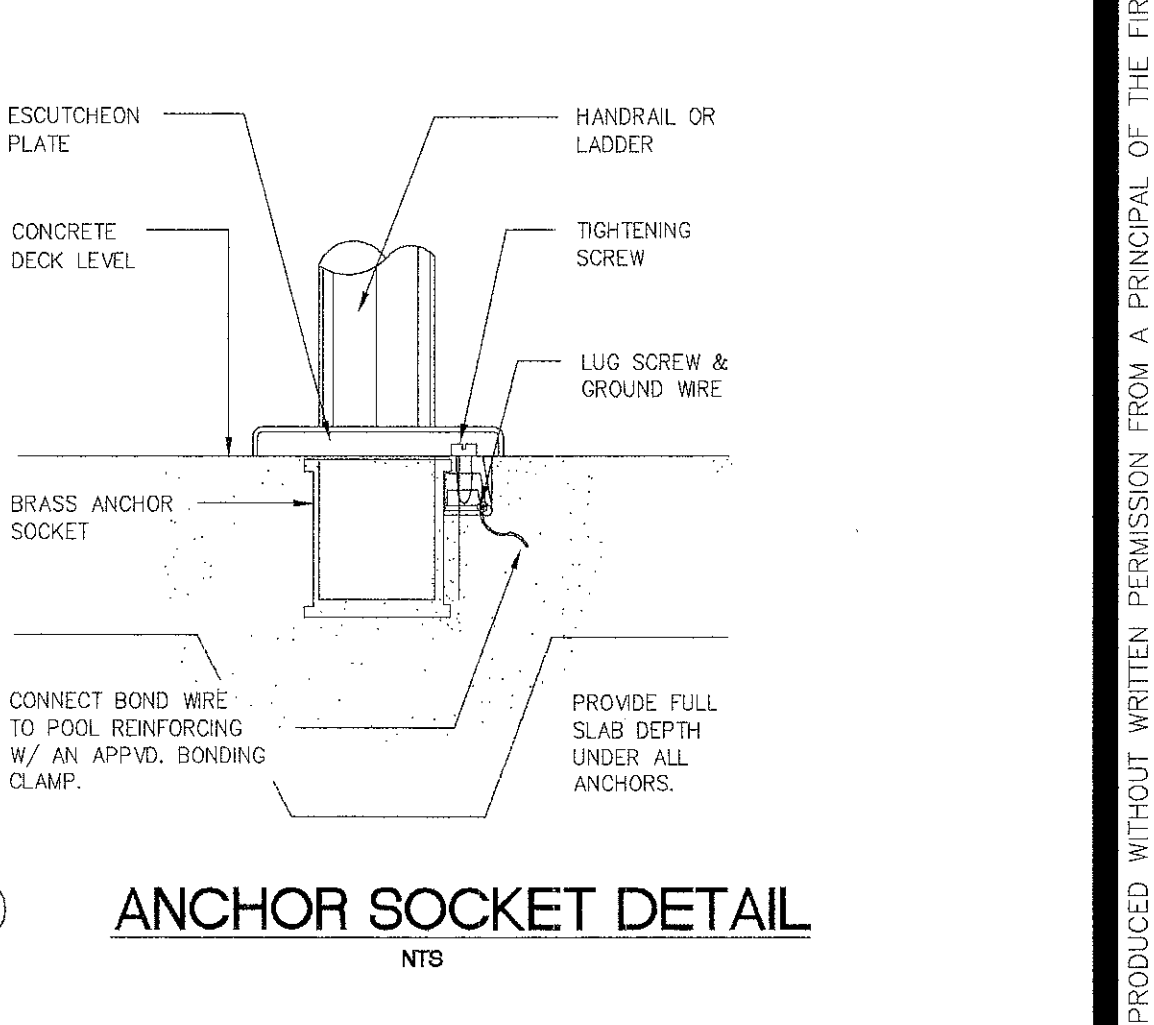
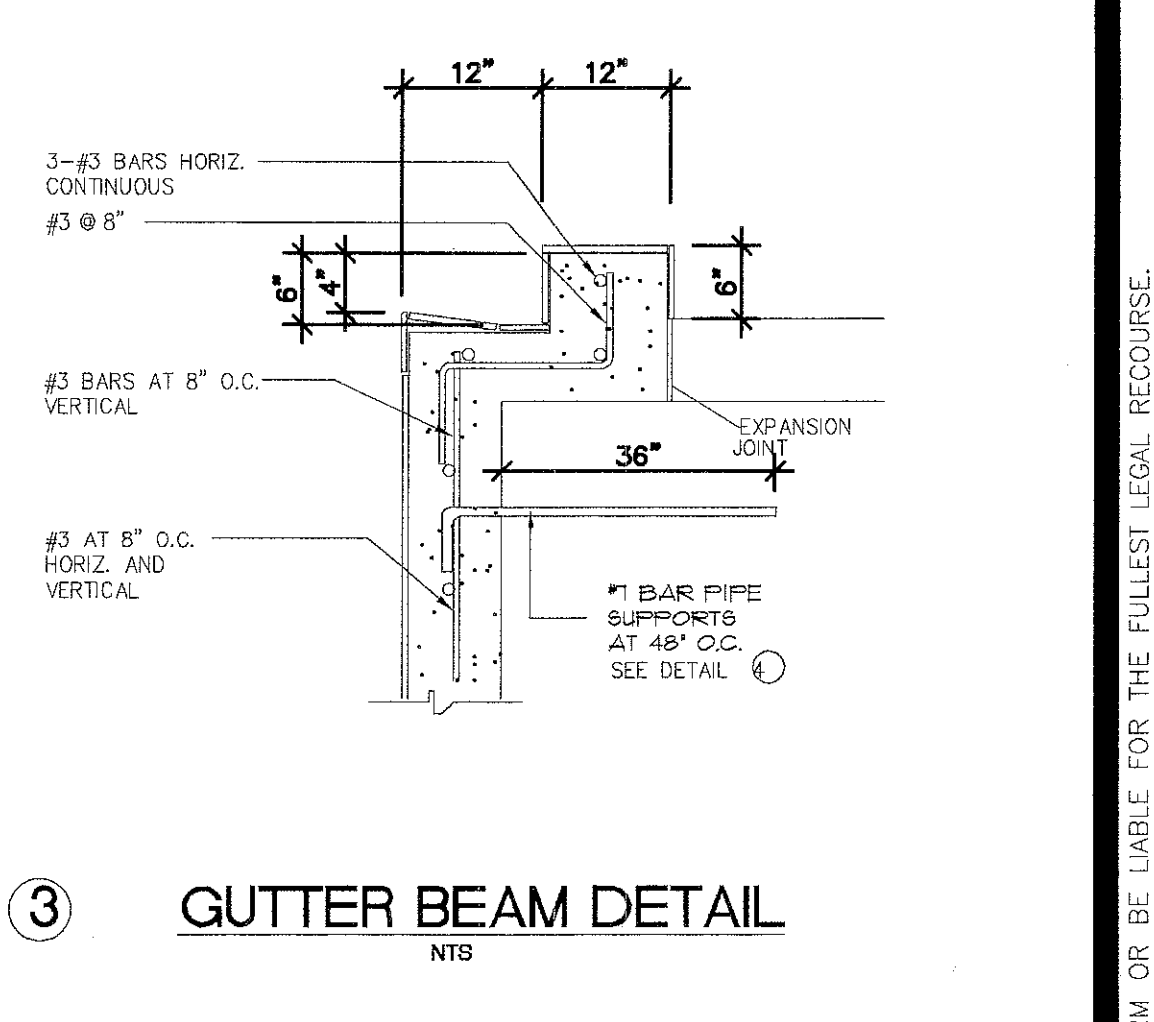
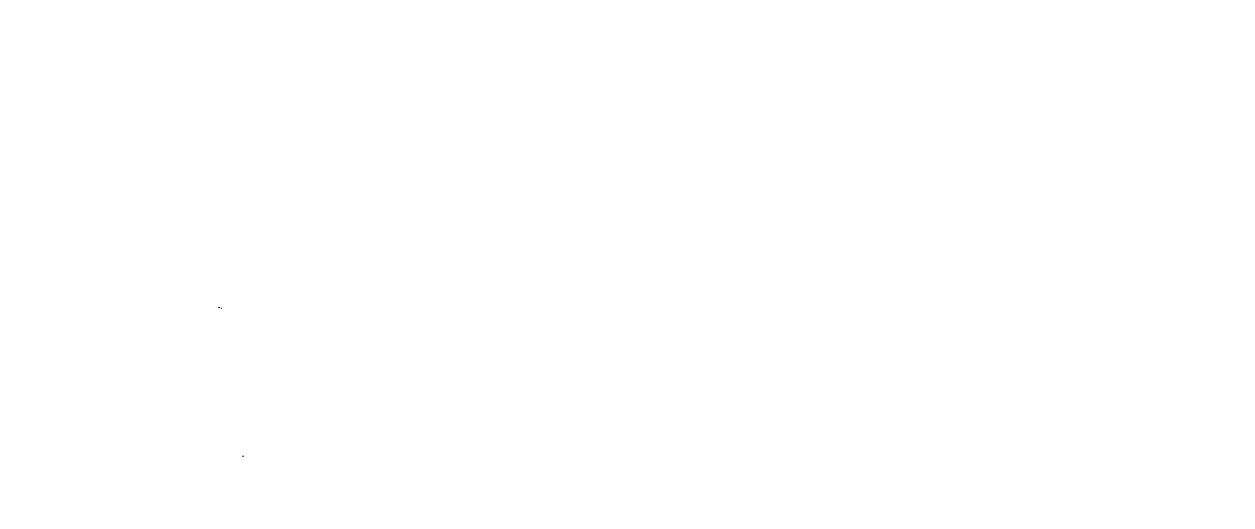
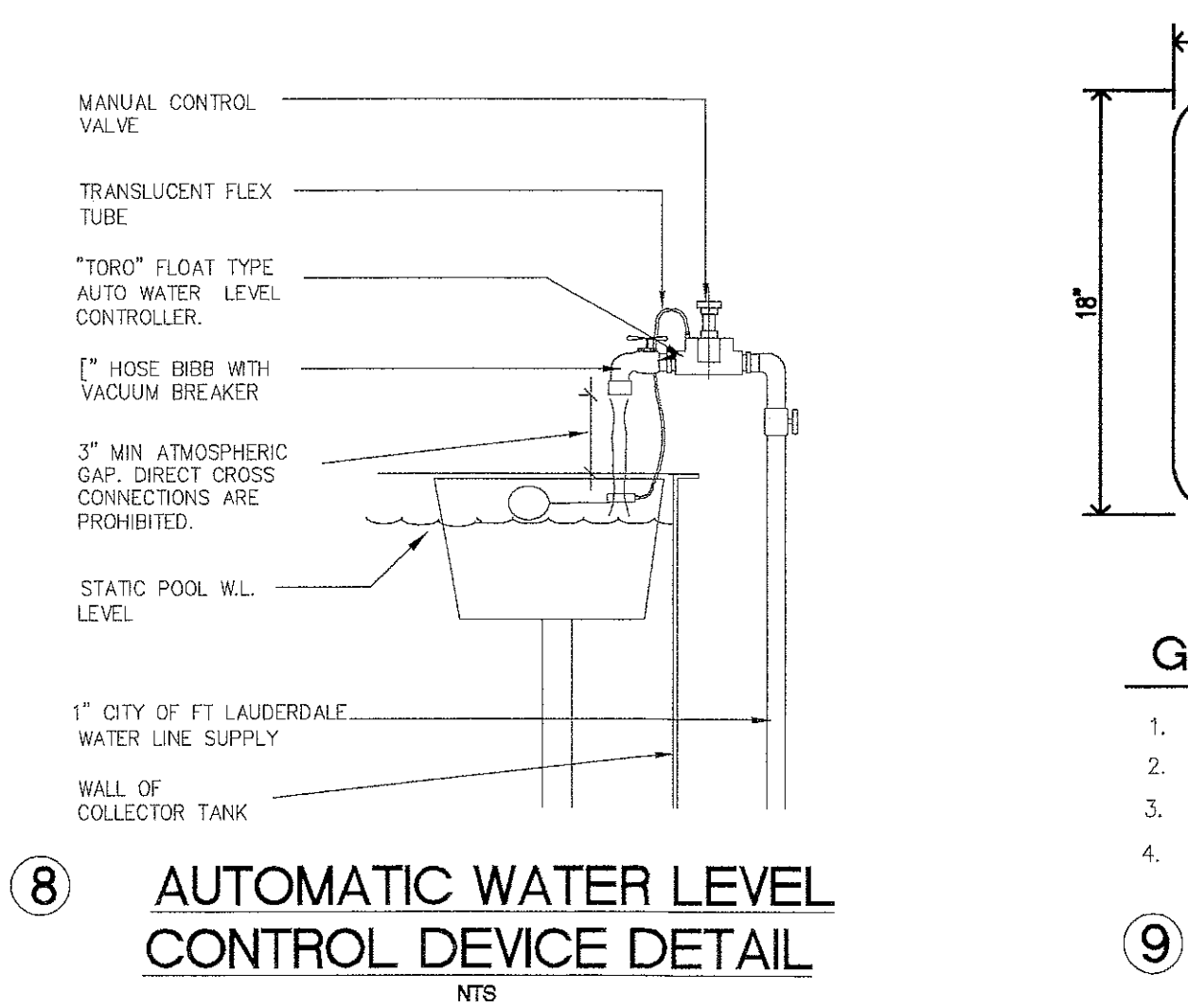
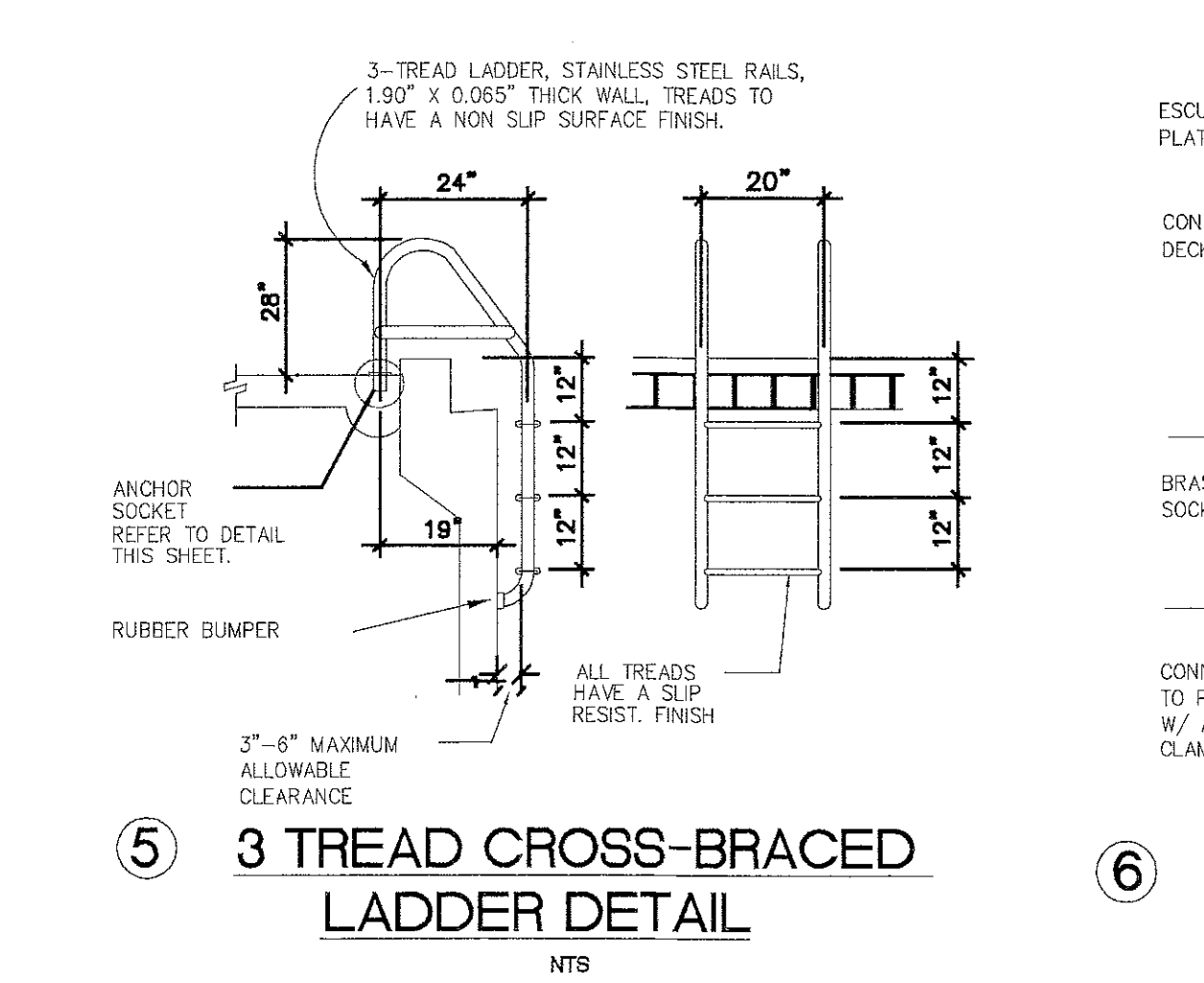
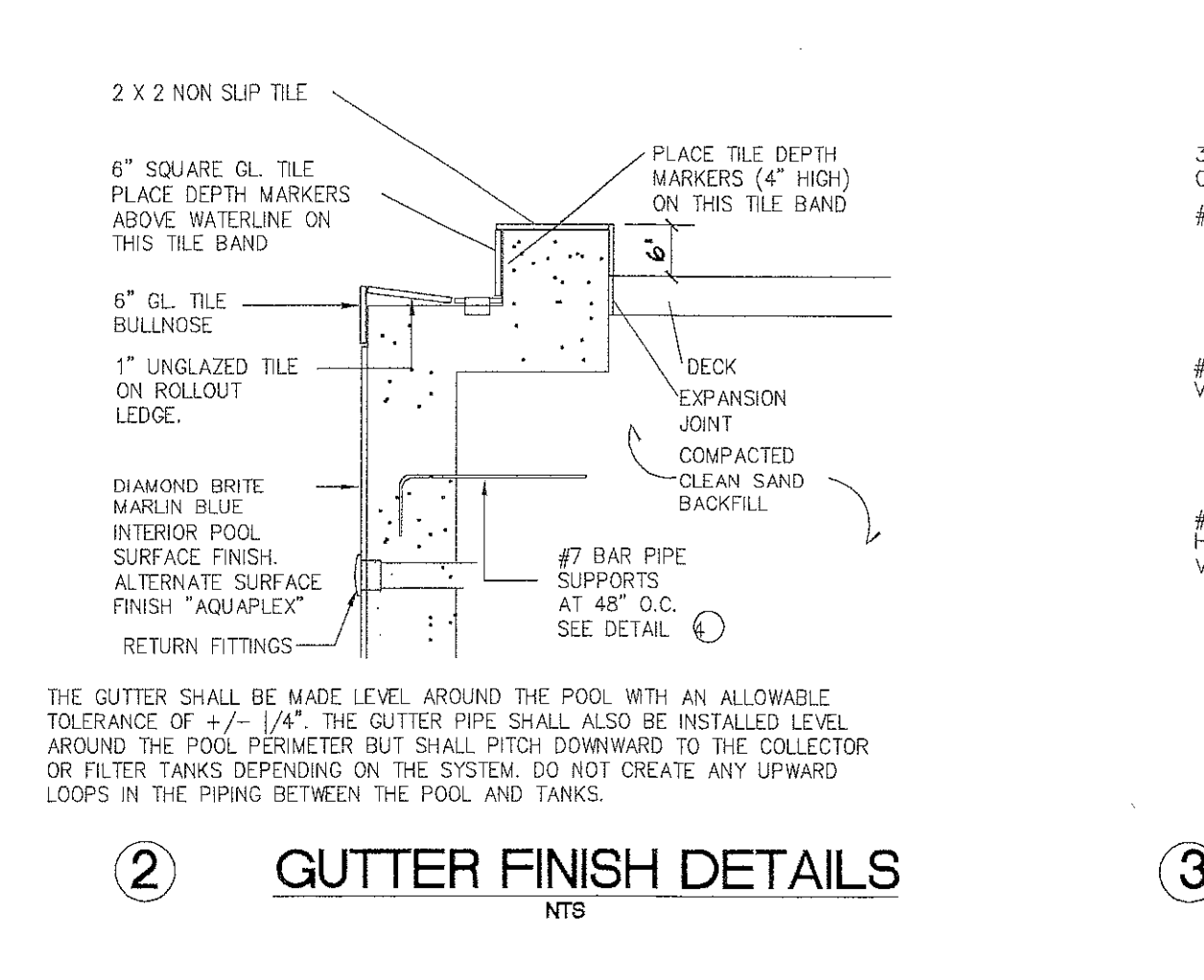
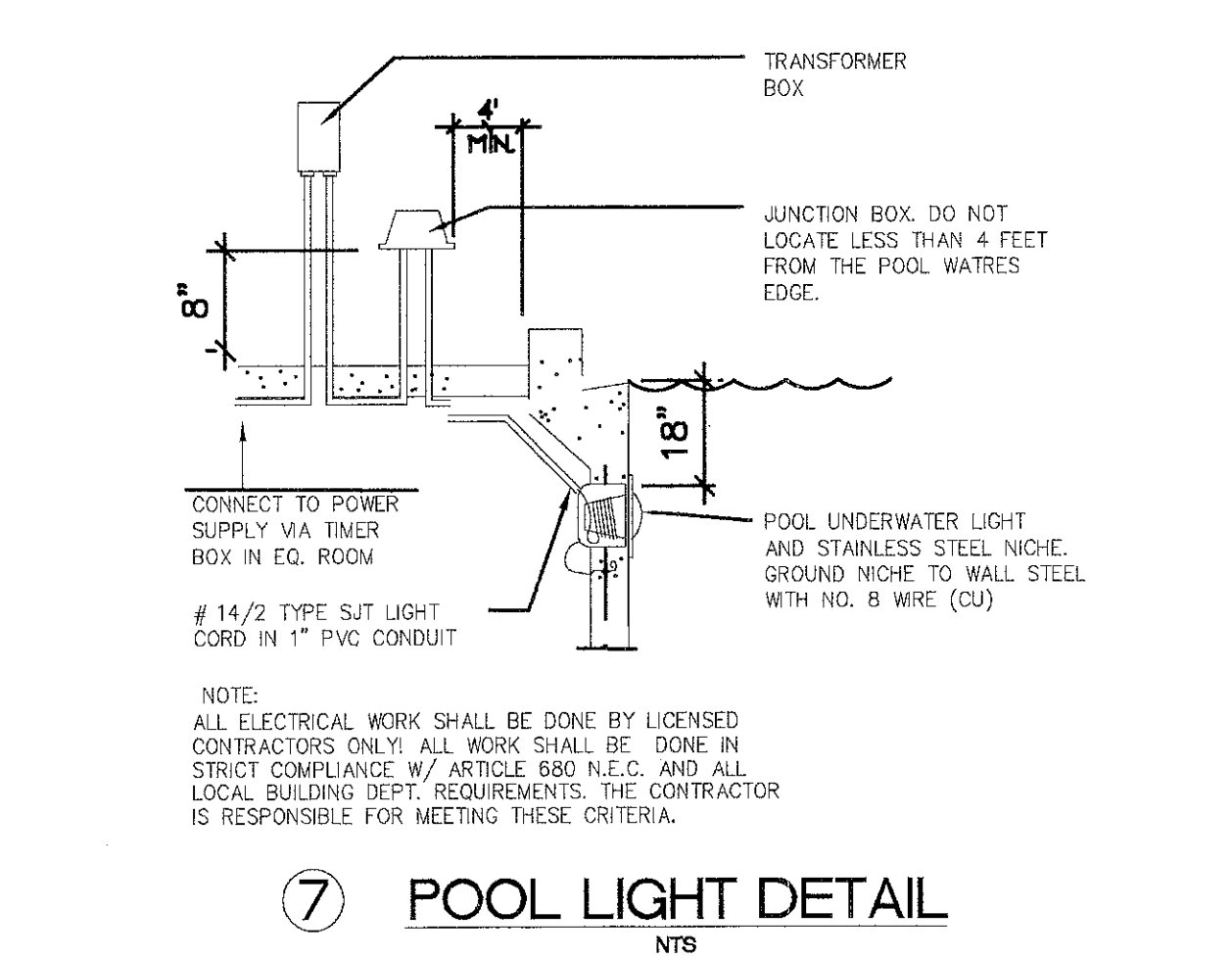
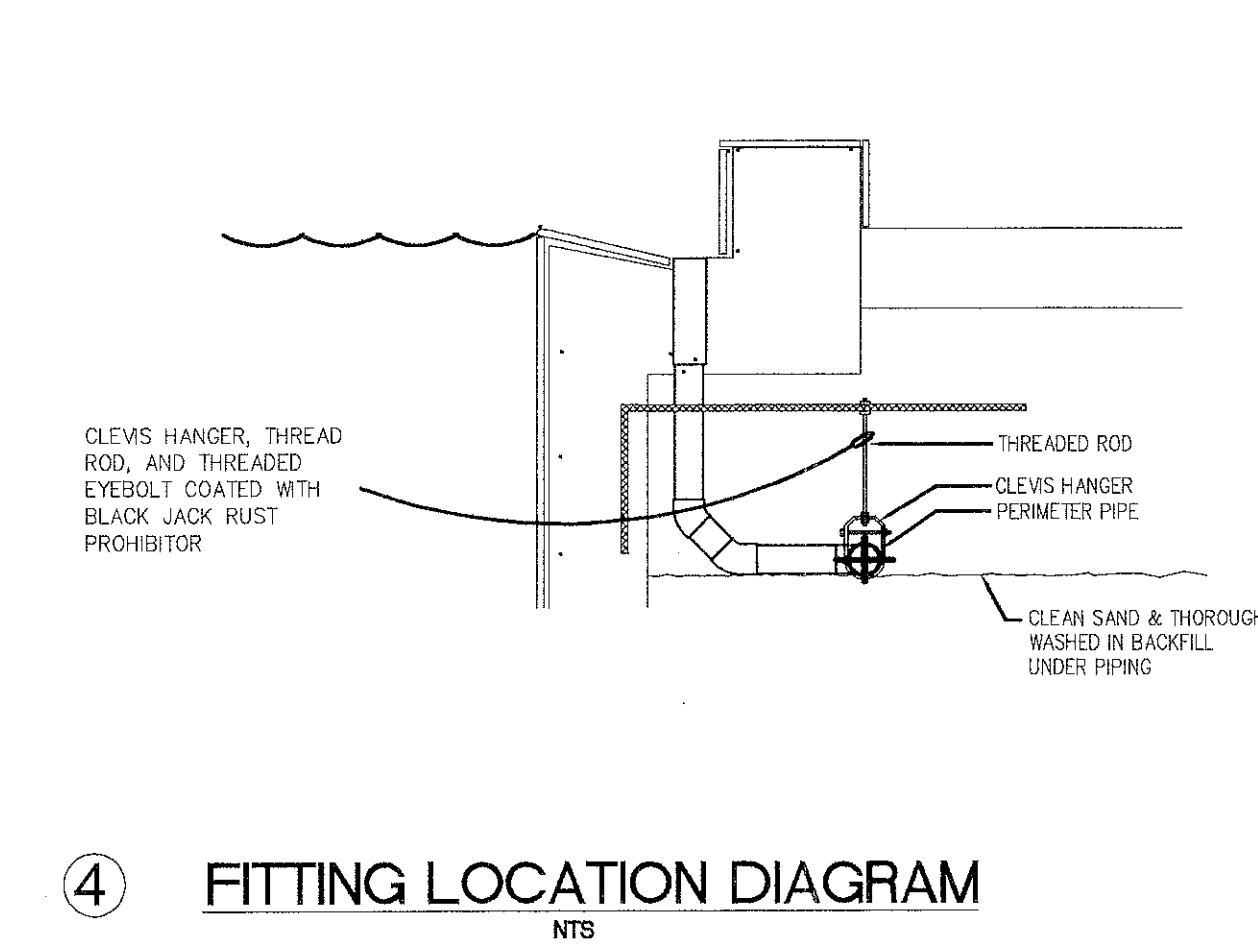
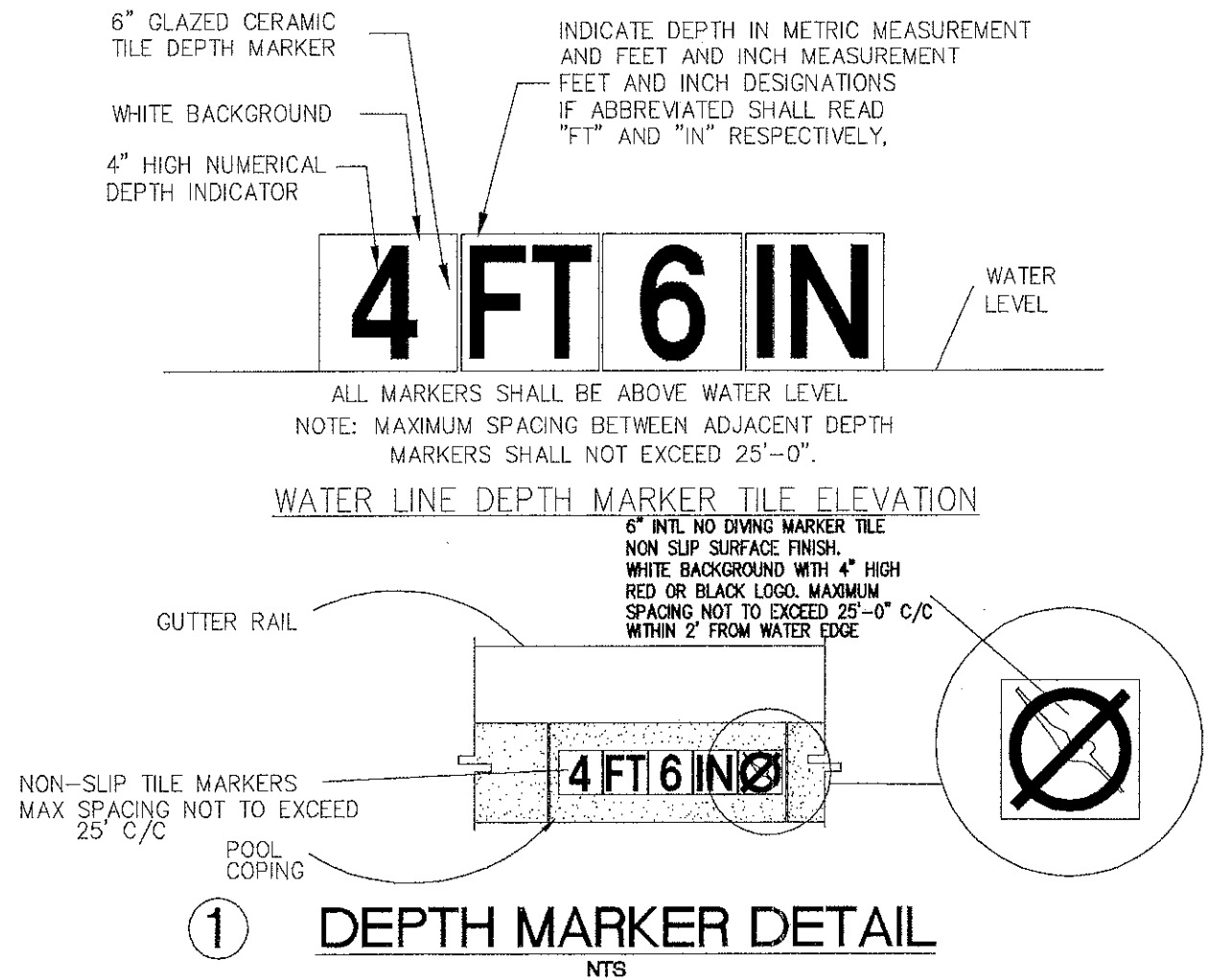
- THE FLOOR IN THE ROOM SHALL BE CONSTRUCTED OF CONCRETE HAVING A SMOOTHLIKE NON-SLIP SURFACE FINISH.
- THE FLOOR SHALL BE POSITIVELY DRAINED TO A FLOOR DRAIN.
- A 1 INCH HOSE BIBB WITH VACUUM BREAKER SHALL BE LOCATED INSIDE THE ROOM.
- THE OVERHEAD LIGHT SHALL EMIT AT LEAST 30 FOOT CANDLES OF ILLUMINATION AT THE FLOOR LEVEL.
- CLEARANCES TO PUMPS AND FILTERS FROM WALLS SHALL BE AS SPECIFIED BY THE MANUFACTURER

## FILTER PIPING REQUIREMENTS

- TAG ALL VALVES AND POST OPERATING INSTRUCTION INSIDE THE ROOM.
- ALL FACE PIPING SHALL BE PVC SCHEDULE 40 NSF-PW. ALL JOINT SHALL BE NON-THREADED SOLVENT WELD TYPE.
- GATE VALVES SHALL NOT BE USED AS A MEANS FOR CONTROLLING THE FLOW OF WATER. ALL PROPORTIONAL FLOW TYPE VALVES ARE INDICATED ON THE DRAWING.
- ELECTRICALLY OPERATED CHEMICAL FEEDERS SHALL BE INTERLOCKED WITH THE FILTER PUMP MOTOR.
- THE CHEMICAL SOLUTION TANK SHALL BE LABELED ACCORDING TO THE SOLUTION OF WHICH IT CONTAINS.

## DEPARTMENT OF HEALTH NOTES

- ALL DECKS SHALL SLOPE AWAY FROM THE POOL 2%-4%.
- ALL DECK SURFACES SHALL HAVE A SMOOTH SLIP RESISTANT FINISH.
- HOSE BIBBS SHALL BE LOCATED AROUND THE POOL DECK FOR CLEANING.
- A RINSE SHOWER SHALL BE LOCATED WITHIN 20 FEET OF THE POOL & SPA.
- A DRINKING FOUNTAIN SHALL BE LOCATED IN THE POOL AREA.
- ALL WALKWAYS BETWEEN THE POOL AND SANITARY FACILITIES SHALL BE CONSTRUCTED OF CONCRETE OR OTHER NON-ABSORBENT MATERIAL FOR THE FIRST FIFTEEN FEET AND SHALL HAVE A NON-SLIP SURFACE FINISH.
- IF SANITARY FACILITIES ARE NOT VISIBLE FROM THE DECK, A SIGN OR SIGNS INDICATING THE DIRECTION TO THE RESTROOMS SHALL BE POSTED ON THE POOL DECK.
- POOL WET DECKS LIGHTING PROVIDES FOR USE DURING DAYLIGHT HOURS ONLY. FOR NIGHT USE, PLANS MUST BE SUBMITTED TO THE LOCAL BOARD OF HEALTH ENGINEERING DEPARTMENT, WITH ALL REQUIREMENTS PER CHAPTER 64E-9 FLORIDA ADMINISTRATIVE CODE FOR NIGHT SWIMMING.
- FOR NIGHT SWIMMING, OVERHEAD LIGHTING SHALL PROVIDE FOR A MINIMUM OF 3 FOOT CANDLES OF ILLUMINATION AT THE WATER AND DECK LEVEL. UNLESS SPECIFICALLY MENTIONED ON THESE PLANS ALONG WITH LIGHTING REQUIREMENTS, NO NIGHT SWIMMING WILL BE ALLOWED.
- DISTRIBUTION OF FOOD OR DRINK WITHIN 12 FEET OF THE POOL WATERS EDGE IS PROHIBITED.
- STORAGE OF CHEMICALS SHALL BE MADE IN AN ENCLOSED LOCKABLE AREA TO PREVENT UNAUTHORIZED ACCESS.
- ALL POOL SURFACES SHALL HAVE A SMOOTHLIKE NON-SLIP FINISH.
- NO OVERHEAD WIRING SHALL BE LOCATED WITHIN 10 FEET OF THE POOL.
- ALL ELECTRICAL WORK SHALL BE DONE BY QUALIFIED LICENSED CONTRACTORS AND IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICAL 680, 1999 EDITION
- ALL POOL PIPING SHALL BE PVC PW SCHEDULE 40 NON-THREADED NSF APPROVED. ALL PIPE SHALL DISPLAY THE NSF-PW LOGO.
- THE DEPTH MARKERS SHALL INDICATE THE DEPTH AT NORMAL OPERATING WATER LEVEL, WITHIN 3 INCHES, WHEN MEASURED 3 FEET FROM THE WALL OF THE POOL. SYMMETRICAL POOL DESIGNS WITH THE DEEP POINT AT THE CENTER, MAY BE ALLOWED TO DISPLAY A DUAL MARKING SYSTEM WHICH INDICATES THE DEPTH AT THE WALL AND THE DEEP POINT. DEPTH MARKERS SHALL BE LOCATED ON BOTH SIDES OF THE POOL.
- THE MINIMUM DEPTH SHALL BE 3'-6" AT THE SHALLOW END.
- ALL POOL DEPTHS SHALL BE AS SPECIFIED ON THE PLANS.
- POOL RESTROOM FACILITIES SHALL BE LOCATED WITHIN A 200 FOOT RADIUS OF THE POOL.
- ALL STEEL SHALL BE ASTM A615 GRADE 60 HAVING A YIELD STRENGTH 60,000 PSI.
- ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS.
- ALL STEEL COMING IN CONTACT WITH SOIL SHALL HAVE 3 INCH COVER. STEEL CLOSE TO THE WATER SURFACE SHALL HAVE 1\1/2 INCH COVERAGE. VERTICAL STEEL IN THE POOL WALLS SHALL BE CENTERED IN THE WALL UNLESS OTHERWISE NOTED.
- ALL POOL WALLS SHALL BE SHOTCRETE OR GUNITE (PNEUMATICALLY PLACED).
- POOL FLOORS OF POURED CONCRETE SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES WITH MINIMUM REINFORCEMENT OF # 3 BARS SPACED 10 IN. CENTER TO CENTER IN EACH DIRECTION.
- REFER TO STRUCTURAL DRAWINGS FOR ALL CONCRETE AND REINFORCING DETAILS WHEN THE POOL IS PILING SUPPORTED.
- MINIMUM DECK WIDTH SHALL NOT BE LESS THAN 4 FEET WIDE. WHEN THE COPING IS RAISED ABOVE THE DECK, THE CLEARANCE SHALL BE MEASURED FROM THE BACK OF THE COPING, HANDRAIL, OR LADDER, TO THE NEAREST OBSTRUCTION.




## GENERAL SPECIFICATIONS

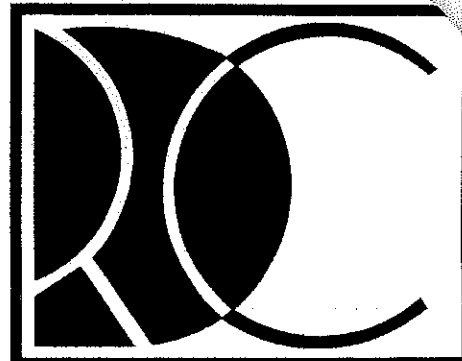
- POST SIGN WITHIN CONFINES OF POOL AREA.
- SIGN LETTERING SHALL CONTRAST WITH BACKGROUND COLOR.
- SIGN LETTERS SHALL BE AT LEAST 1" HIGH.
- LETTERS SPECIFYING NO DIVING SHALL BE AT LEAST 4" HIGH.

## RULES SIGN DETAIL



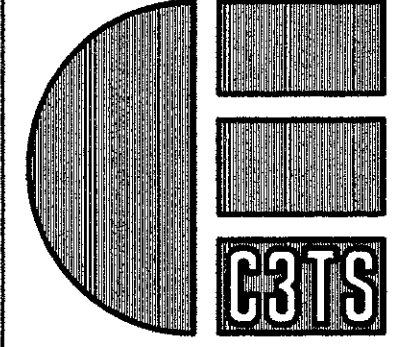


**KEHLER ENGINEERING ASSOCIATES, INC.**  
 ENGINEERS  
 SPECIALISTS IN AQUATIC ENGINEERING  
 4910 S.W. 72ND AVENUE  
 MIAMI, FLORIDA 33155  
 (305) 667-8975 TELEFAX (305) 662-1002



**RECREATIONAL DESIGN AND CONSTRUCTION, INC.**  
 6555 NW 9th AVENUE, SUITE 201  
 FT. LAUDERDALE, FL 33309  
 954-771-5567  
 FAX 954-771-6965

REVISIONS



**CORZO CASTELLA CARBALLO THOMPSON SALMAN**  
 Engineers Architects Planners  
 3990 NW 9th AVENUE  
 Ft. Lauderdale, Florida 33309  
 954.565.2713 954.563.2009  
 E80002022 AAC002142

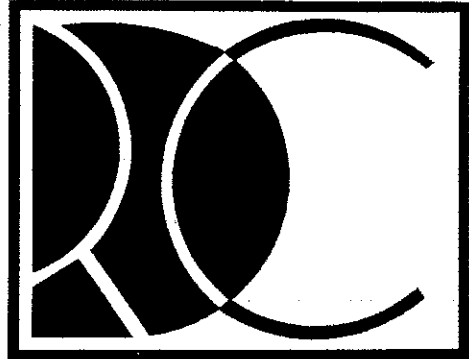
JOB NUMBER  
 -

POOL AND COMMUNITY CENTER  
 CROISSANT PARK  
 FT LAUDERDALE, FLORIDA

SHEET INDEX  
**SWIMMING POOL DETAILS 2**  
 SHEET NUMBER  
**SP-4**

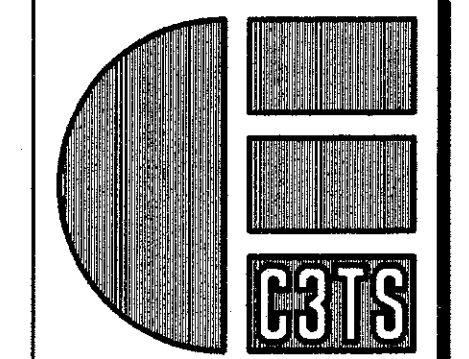
CAM 21-0085  
 Exhibit 1  
 Page 194 of 215

THIS DRAWING IS THE INTELLECTUAL PROPERTY OF RECREATIONAL DESIGN & CONSTRUCTION, INC. AND SHALL NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION FROM A PRINCIPAL OF THE FIRM OR BE LIABLE FOR THE FULLEST LEGAL RECOURSE.



RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
6555 NW 9th AVENUE, SUITE 201  
FT. LAUDERDALE, FL 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



**CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN**

**Engineers  
Architects  
Planners**

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954.565.2113 954.563.2009  
B00005022 AAC002142

JOB NUMBER

**POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA**

SHEET INDEX  
**SWIMMING POOL  
FILTER DETAILS**  
SHEET NUMBER  
**SP-5**  
CAM 21-0085  
Page 195 of 215

## EPD 201 2 TANK, 6" PIPING FILTRATION SYSTEM

MAKE: Environmental Products Division  
HOFFINGER INDUSTRIES, INC.

TYPE: Fully Automated Permanent Media Hi-Rate Sand Filter

MODEL: EPD 201

FILTER  
AREA: 27 SQ. FT. (2.51m<sup>2</sup>)

FILTER FLOW RATES	
GPM/SQ. FT.-GPM	(M <sup>3</sup> /PM/M <sup>3</sup> /M <sup>3</sup> PM)
10 = 270	(.0378) = (1.02)
15 = 405	(.0568) = (1.53)
20 = 540*	(.0757) = (2.04)

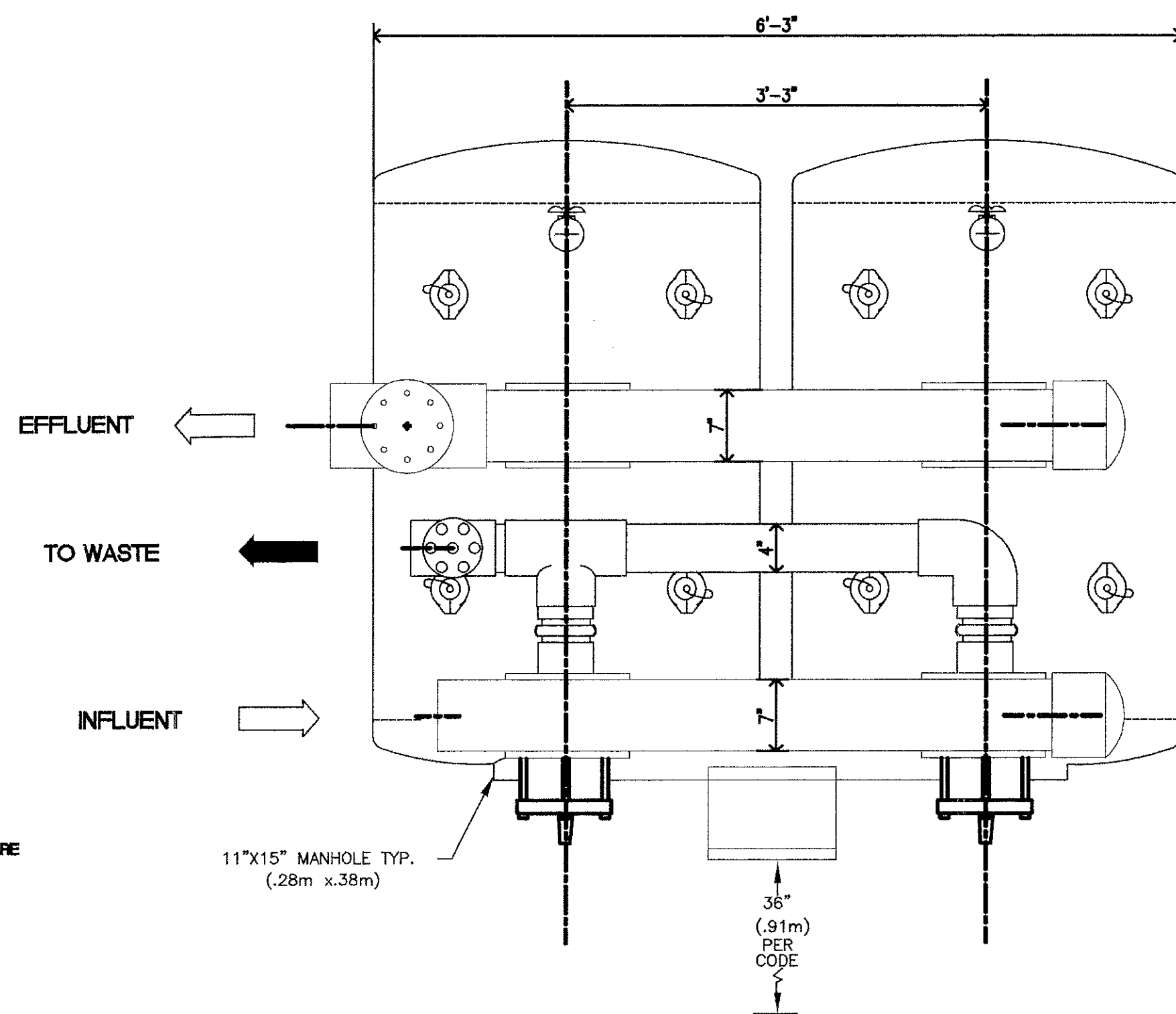
\*Maximum recommended flow rate

BACKWASH FLOW RANGE	
GPM	(M <sup>3</sup> /M)
200 to 270	(.76 to 1.02)

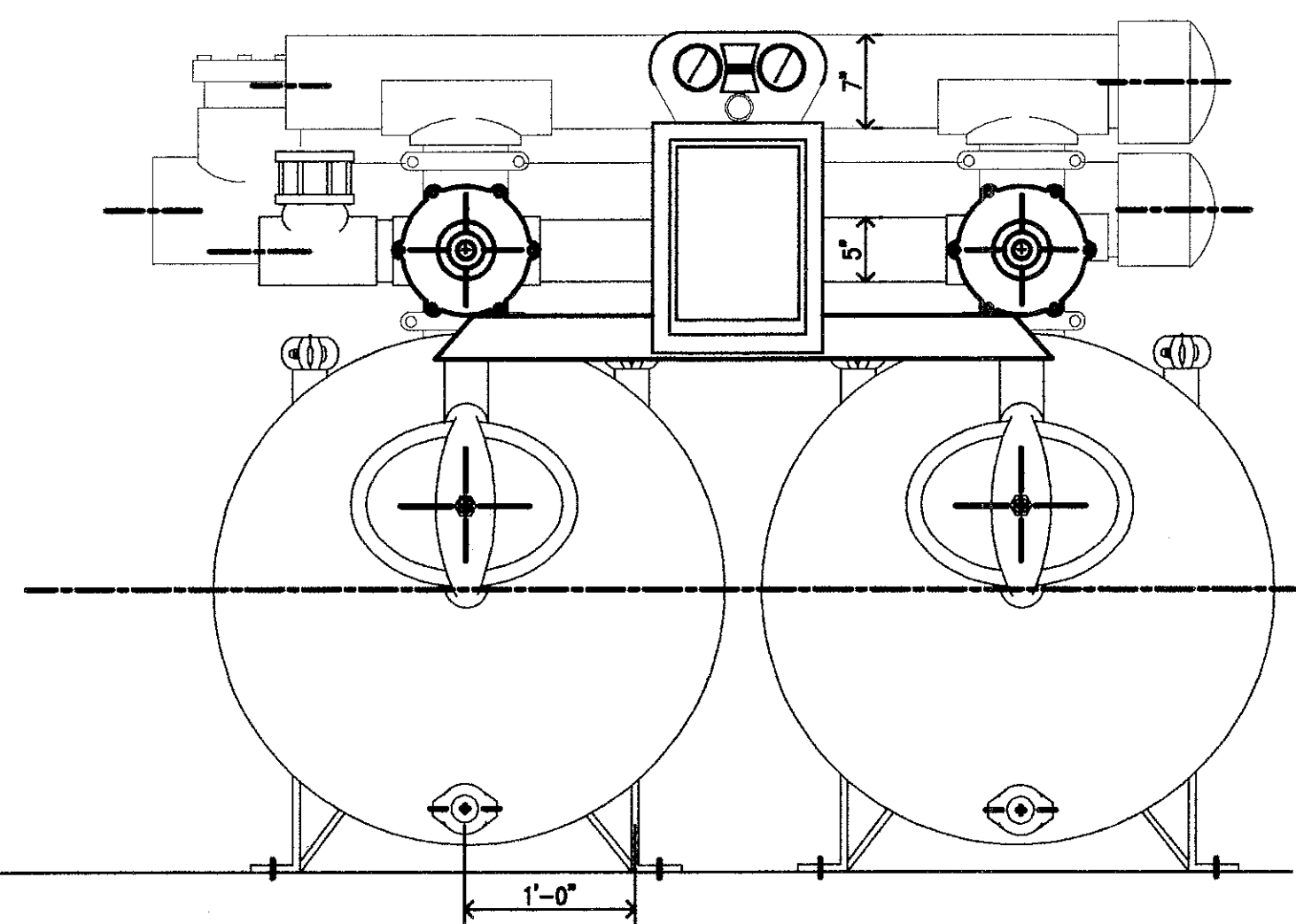
Units in ( ) are metric

INFLUENT AND EFFLUENT CONNECTIONS ARE  
6" (15m) PVC SOCKETS

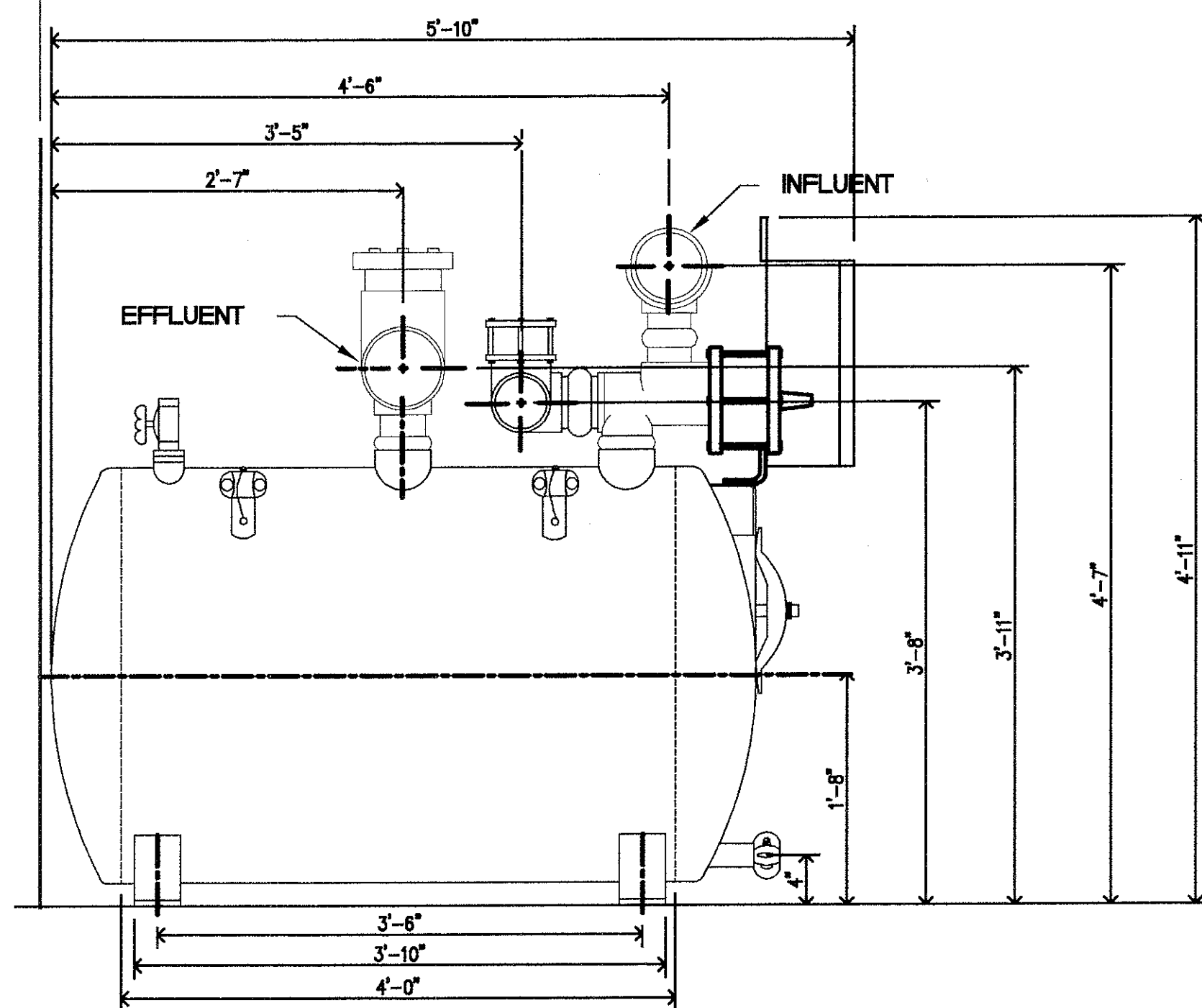
WASTE CONNECTION IS  
4" (10m) PVC SOCKET



PLAN VIEW

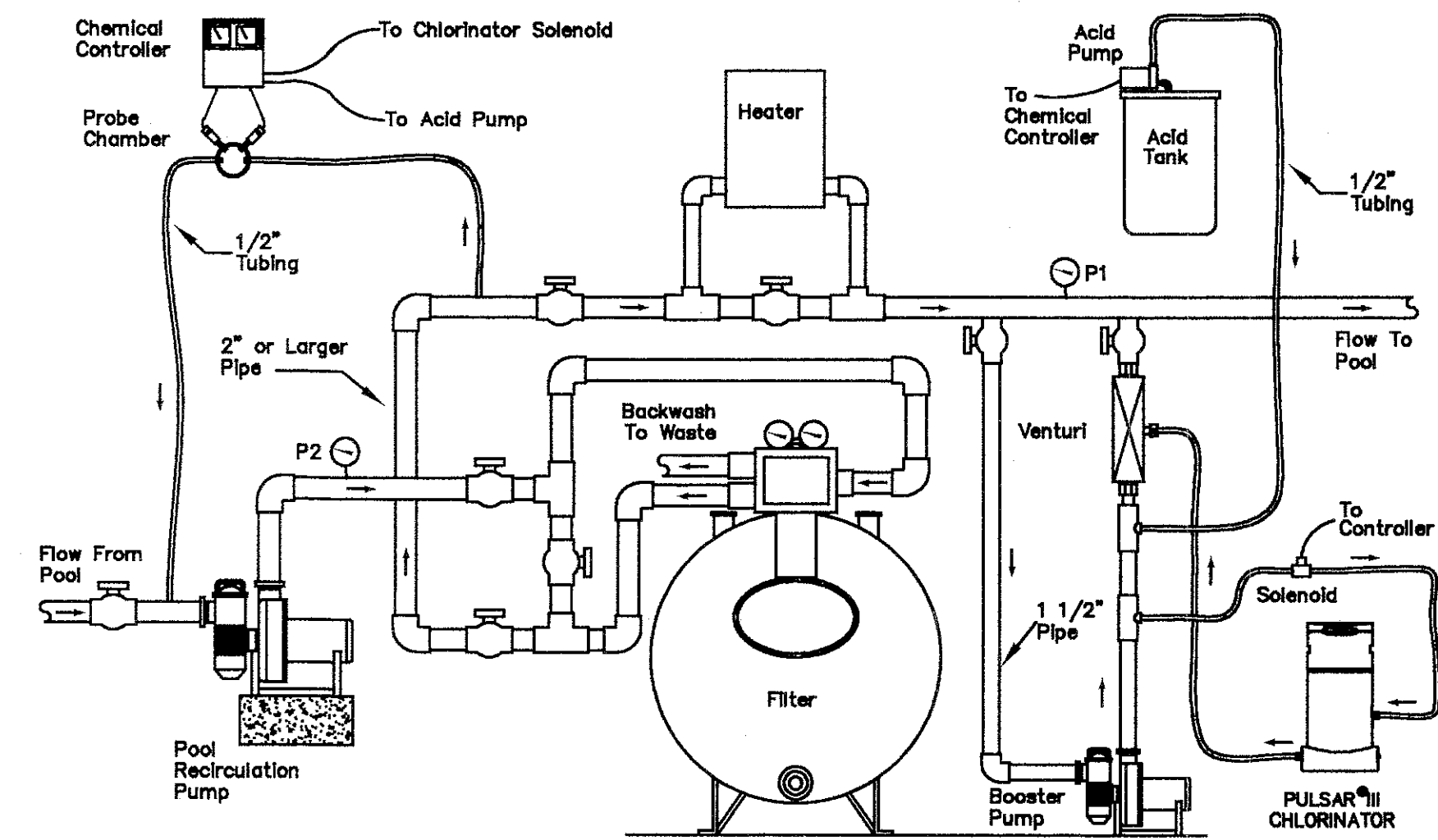


FRONT ELEVATION



SIDE ELEVATION

**FILTER DETAILS**  
SCALE 1"=1'-0"



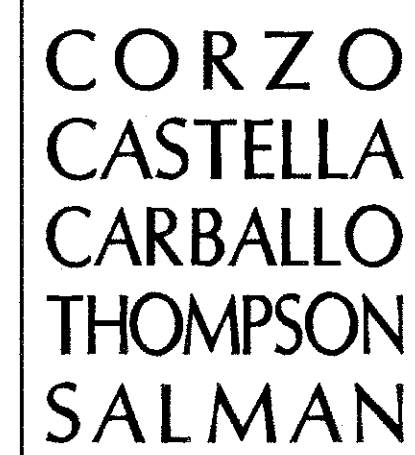
**PULSAR PII INSTALLATION SCHEMATIC LAYOUT**  
NTS

**KEHLER ENGINEERING  
ASSOCIATES, INC.**  
ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING  
4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 662-1002





THIS DRAWING IS THE INTELLECTUAL PROPERTY OF RECREATIONAL DESIGN & CONSTRUCTION, INC. AND SHALL NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION FROM A PRINCIPAL OF THE FIRM OR BE ABLE FOR THE FULLEST LEGAL RECOURSE.

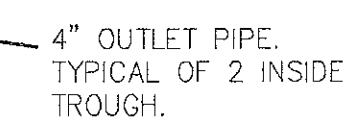


**3990 NW 9th AVENUE**  
**Ft. Lauderdale, Florida 33309**  
**954.563.2113      954.563.2009**  
**EB0005022      AAC002142**

J O B	N U M B E R
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA

SP-6



GRAVITY LINES - 3 FPS  
SUCTION LINES - 6 FPS  
PRESSURE LINES - 8 FPS

— — — PVC SCHEDULE 40 NSF APPVD. PIPE  
(PRESSURE LINE)

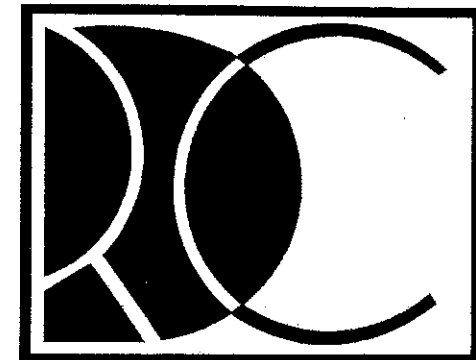
— — — PVC SCHEDULE 40 NSF APPVD. PIPE  
(SUCTION LINE)

— . — PVC SCHEDULE 40 NSF APPVD. PIPE  
(GRAVITY FLOW LINE)

WATER ACTIVITY POOL PIPING PLAN  
SCALE 1/4"=1'-0"

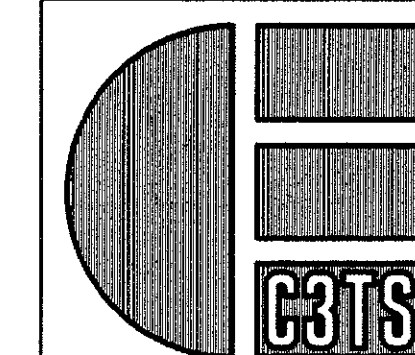


4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 662-1002



RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
6555 NW 9th AVENUE, SUITE 201  
FT. LAUDERDALE, FL. 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN

Engineers  
Architects  
Planners

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954-563-2713 954-563-2009  
B9005022 AAC002H2

JOB NUMBER

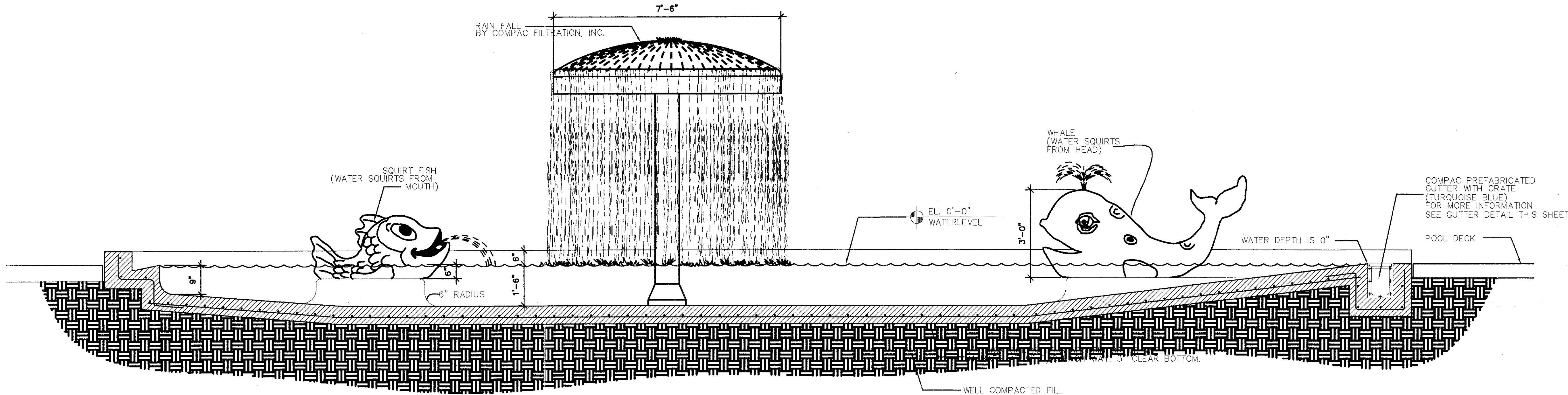
POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA

SHEET INDEX

ACTIVITY POOL  
SECTIONS

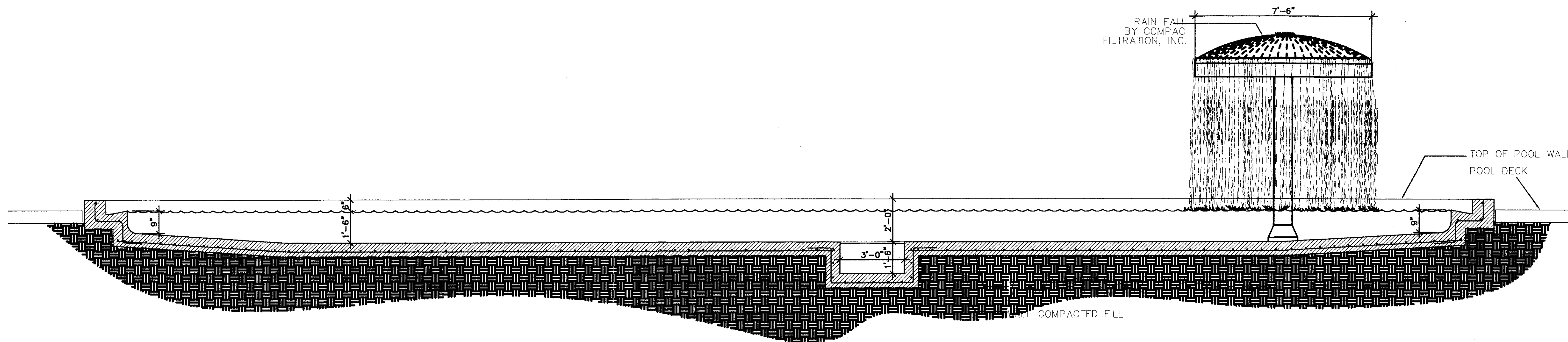
SHEET NUMBER

SP-7



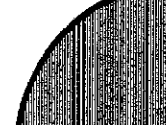
1  
SP-6  
ACTIVITY POOL SECTION THRU BEACH ENTRY  
SCALE 1/2" = 1'-0"

SOIL STATEMENT:  
UPON VISUAL INSPECTION SOIL CONSOLIDATION REVEALS  
A COMBINATION OF ROCK AND SAND. A DESIGN BEARING  
VALUE OF 2000 PSF HAVE BEEN UTILIZED FOR DESIGN  
PURPOSES.  
NOTE: IF UPON EXCAVATION CONTRACTOR UNCOVERS  
MATERIAL OTHER THAN THAT SPECIFIED ABOVE THE  
ENGINEER SHALL BE NOTIFIED PRIOR TO CONTINUING WITH  
ANY OTHER WORK.



4  
SP-6  
ACTIVITY POOL SECTION #2  
SCALE 3/8" = 1'-0"

KEHLER ENGINEERING  
ASSOCIATES, INC.  
ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING  
4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 662-1002



**Engineers  
Architects  
Planners**

J O B	N U M B E R
-------	-------------

POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA

CAM 21-0085  
Exhibit 1 · p. 198  
Page 198 of 215

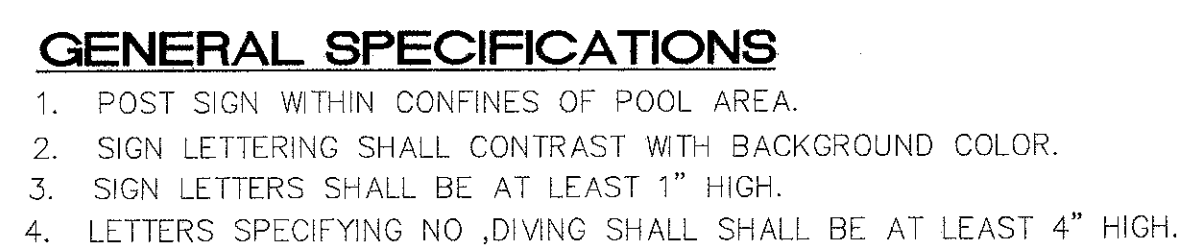
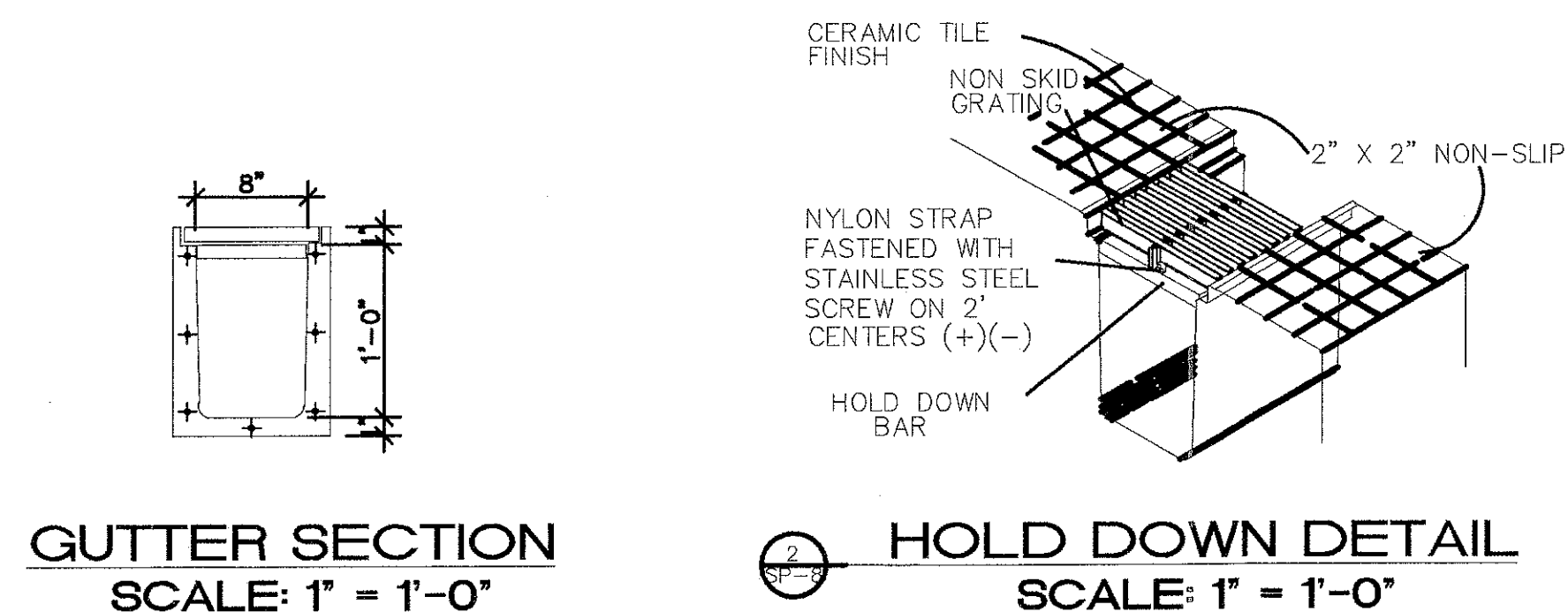


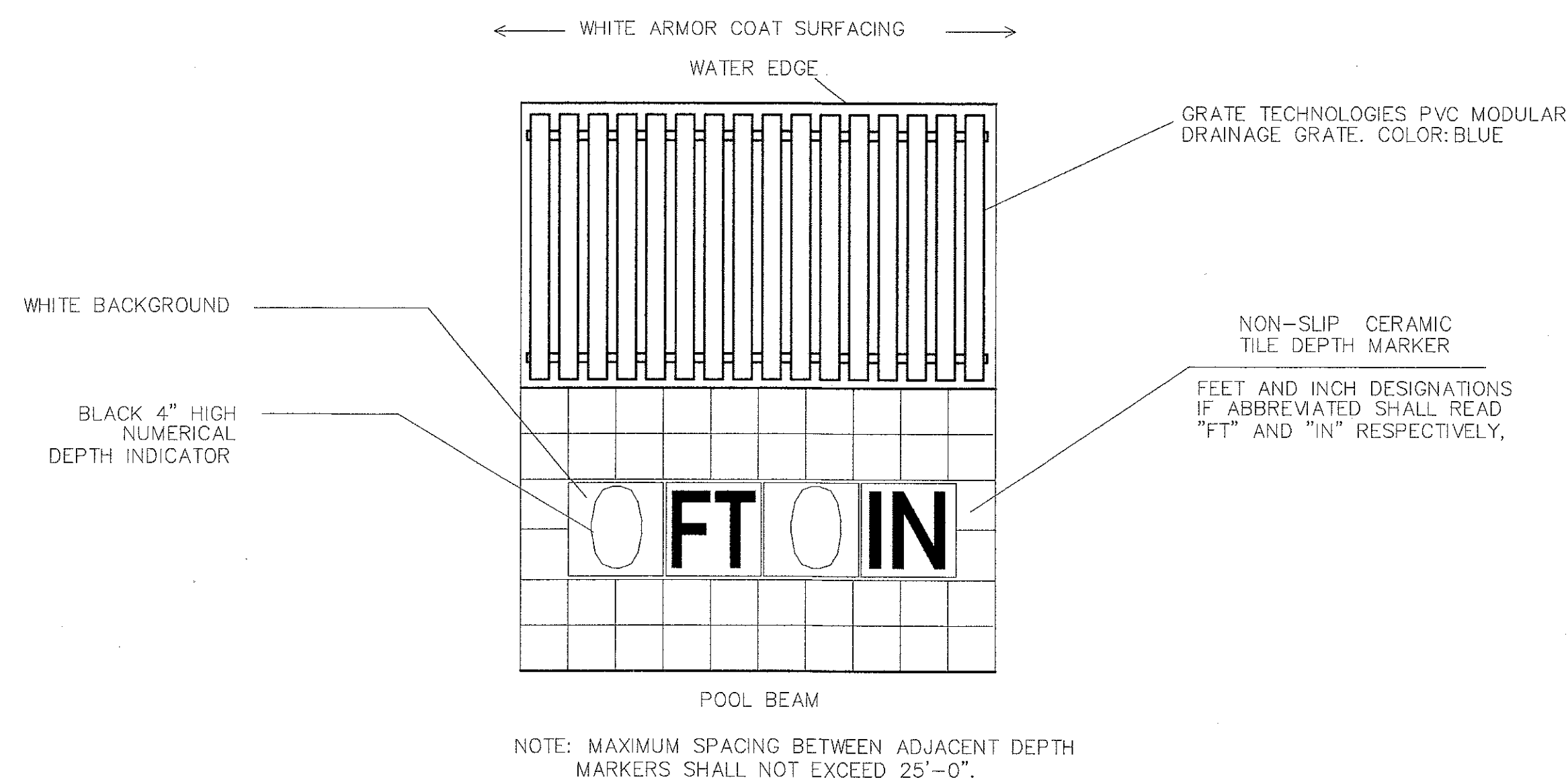
Diagram illustrating the Depth Marker Detail. The marker is a 4-inch high numerical depth indicator (4 FT 6 IN) on a white background, with a glazed ceramic tile depth marker on top. The marker is set into a 2-foot deep shallow water area. The diagram includes labels for the glazed ceramic tile depth marker, white background, 4-inch high numerical depth indicator, feet and inch designations, 2 x 2 unglazed non-slip ceramic tile, rollout gutter, 2-foot deep shallow water, top of coping, and pool coping.

Labels and Callouts:

- GLAZED CERAMIC TILE DEPTH MARKER
- WHITE BACKGROUND
- 4" HIGH NUMERICAL DEPTH INDICATOR
- FEET AND INCH DESIGNATIONS IF ABBREVIATED SHALL READ "FT" AND "IN" RESPECTIVELY.
- DAL DK-310 DAFODIL 2 x 2 UNGLAZED NON-SLIP CERAMIC TILE
- ROLLOUT GUTTER
- DAL DK-310 DAFODIL 2 x 2 UNGLAZED NON-SLIP TILE
- POOL COPING
- TOP OF COPING
- 2 FT DEEP SHALLOW WATER

NOTE: MAXIMUM SPACING BETWEEN ADJACENT DEPTH MARKERS SHALL NOT EXCEED 25'-0".

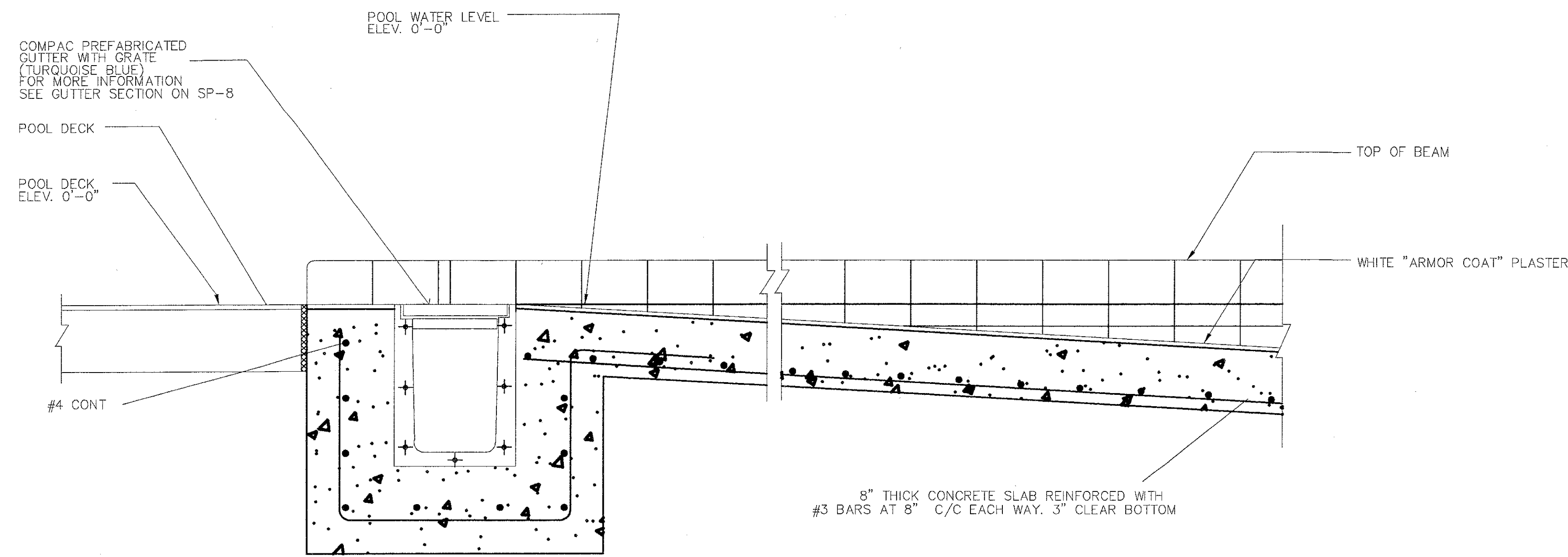
## DEPTH MARKER DETAIL



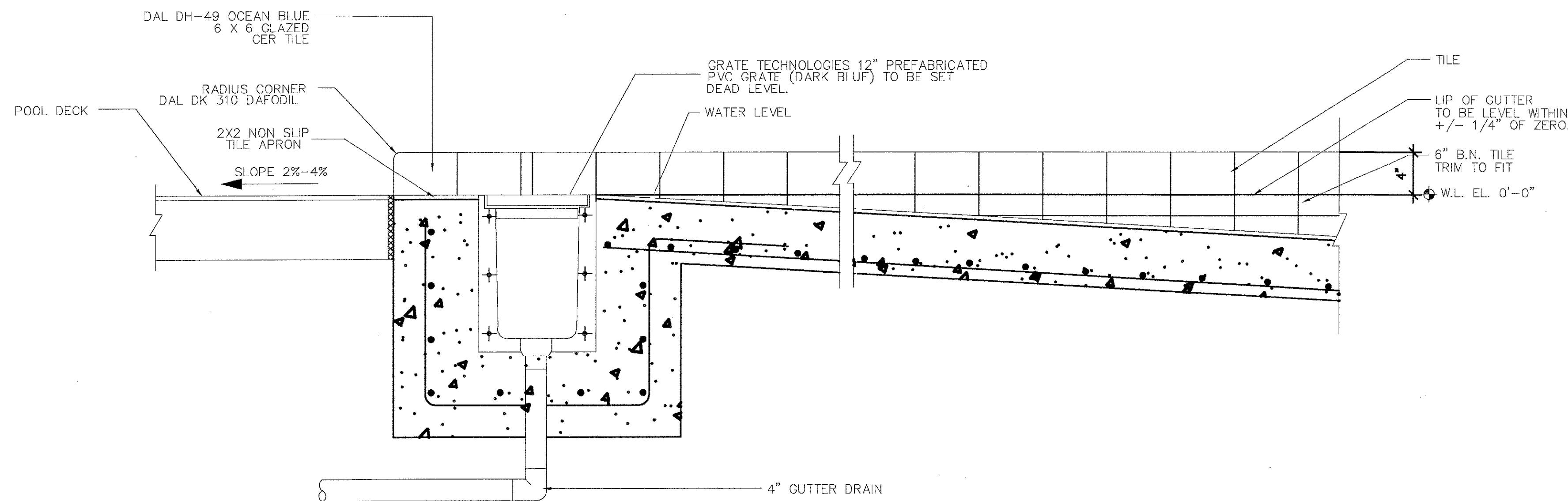
DEPTH MARKER DETAIL AT BEACH ENTRY      NTS



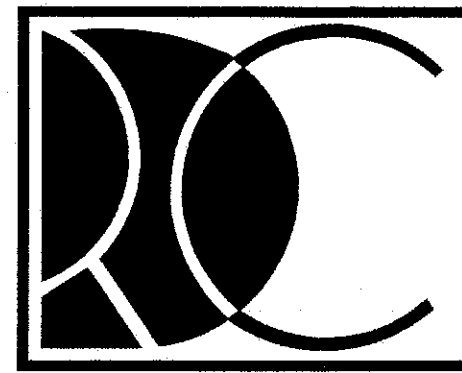




**DETAIL AT BEACH ENTRY**  
SCALE 1-1/2"=1'-0"

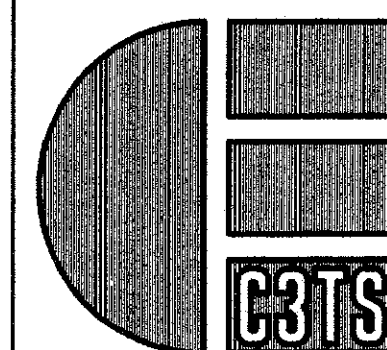


**DETAIL AT BEACH ENTRY**  
SCALE 1-1/2"=1'-0"



RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
6555 NW 9th AVENUE SUITE 201  
FT. LAUDERDALE, FL 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



**CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN**

**Engineers  
Architects  
Planners**

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954.565.2113 954.563.2009  
E9000922 A4000142

JOB NUMBER

**POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA**



**KEHLER ENGINEERING  
ASSOCIATES, INC.**

ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING

4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 662-1002

SHEET INDEX  
**BEACH ENTRY  
DETAILS**  
SHEET NUMBER  
**SP-9**

## SCHEDULE OF EQUIPMENT

MARK	ITEM	QTY.	DESCRIPTION
1	MAIN DRAIN ASSEMBLY	1	MMFG FIELD FABRICATED 3' x 3' HIGH IMPACT FRP GRATE ASSEMBLY, 150 GPM / SQ. FT. 40% OPEN AREA (3.6 SQ. FT. OPEN AREA). SECURE W/ TAMPERPROOF SCREWS. MAXIMUM VELOCITY THRU MAIN DRAIN GRATE HAS BEEN CALCULATED @ 1.2 FPS.
2	RETURN FITTINGS	20	HAYWARD SP142SS FLOW ADJ. FLR RET FTG.
3	VACUUM FITTINGS	0	USE PORTABLE VACUUM, SEE ITEM 29
4	GUTTER DRAINS	22	HAYWARD SCUM GUTTER DRAIN FTG AND GRATE, 2" SKT X 2" FIP, WHITE ABS PLASTIC, MODEL SP-1019.
5	EQUALIZER FITTING	1	HAYWARD GRATE END FTG. FOR EQUALIZER MAKE UP WATER LINE FTG. TO BE INSTALLED 12" BELOW POOL WATER LEVEL.
6	POOL LIGHTS	0	NONE
7	TRANSFORMER BOX	0	NONE
8	JUNCTION BOX	0	NONE
9	LADDER	0	NONE
10	HANDRAIL	0	NONE
11	ANCHOR SOCKET	0	NONE
12	ESCUTCHEON PLATE	0	NONE
13	LIFE RING	2	LIFE RING, AQUALITY MODEL #23005, 20 INCH DIAMETER PLASTIC RING WITH 1/4" DIAMETER X 40 FT LONG SAFETY LINE.
14	LIFE HOOK	2	SHEPHERD TYPE LIFE HOOK, END ANCHORED TO A 10 FT ALUMINUM TELESCOPING HANDLE, AQUALITY MODEL #RH1038
15	LIFE RING HOLDER	2	AQUALITY MODEL #AH250 LIFE RING HOLDER.
16	VACUUM CLEANER	1	VACUUM CLEANER, AQUALITY MODEL #215-24, 18 INCH WIDE VACUUM HEAD WITH FOUR WHEEL, BASE 16 FT TELESCOPING HANDLE, AND 1-1/2" X 35 FT FLEX HOSE.
17	TEST KIT	1	TAYLOR TEST KIT MODEL #2000-5 DUPLEX CAPABLE OF MEETING ALL CHEMICAL TESTS SPECIFIED BY THE FLORIDA ADMINISTRATIVE CODE IN CHAPTER 64E-9.
18	PRESSURE GAUGES	1	4" FACE 0-60 PSI LOCATED ON FACE OF MICROPROCESSOR PANEL.
19	FILTER PUMP	1	ITT MARLOW 3B32EC-C2, 7 1/2 HP, WITH INTEGRAL SUCTION STRAINER, 220 GPM AT 70 TDH, THREE PHASE 480VOLT 3450 RPM, SELF PRIMING PUMP
20	FILTER UNIT	1	EPD FULLY AUTO. GARNETT MEDIA; POLYMER FEED TURBIDIMETER, MODEL 150. 13.5 S.F. FILTER AREA.
21	FLOWMETER	1	4" SIGNET FLOWMETER, MAX. RANGE 600 GPM.
22	STORAGE CONTAINER	1	55 GALLON CAPACITY CHEMICAL CONTAINER WITH LID & LABEL ON FRONT INDICATING CONTENTS.
23	CL2 FEEDER	1	PULSAR PII CALHYPO EROSION FEEDER, 120 FPD
24	CHEMICAL CONTROLLER	1	STRANTRON SYSTEM 4 WITH DVT I/O PORT & REMOTE ANNUNCIATOR INSTALLED IN POOL MANAGERS OFFICE. PROVIDE AND INSTALL ALL CABLE, CONDUIT, FITTINGS AND HARDWARE FOR INSTALLATION PER MFRS. DETAILS/C.E.B., INC. JUPITER, FLORIDA
25	WATER LEVEL CONTROLLER	1	TORO AUTOMATIC WATER LEVELING DEVICE, AND FLOAT VALVE ASSEMBLY, THE VALVE IS ALSO EQUIPPED WITH A 3/4" PVC FILL LINE AND MANUALLY OPERATED BALL VALVE
26	COLLECTOR TANK	1	FIELD FABRICATED CONCRETE COLLECTOR TANK. TANK INCLUDES WATER LEVEL TANK, OVERFLOW PIPE AND LOCKABLE LID. 1781 GALLONS CAPACITY.
27	SIGHT GLASS	1	SWIMTIME OR EQUAL, 1 1/2" MIP WITH CLEAR LENS
28	ACID FEEDER	1	STENNER 45M5 ACID FEEDER 50 GPD CAPACITY. INTERLOCK ELECTRICALLY WITH FILTER PUMP.
29	PORTABLE VACUUM SYSTEM	1	PORTABLE 8KID MNTD. UNIT WITH BF 105 CARTRIDGE FILTER, 1 HP 110 VAC SELF PRIMING PUMP WITH 100' CORD AND PLUS.
30	CF-248 PUMP	2	ITT MARLOW 4SPC20EC, 20 HP, WITH INTEGRAL SUCTION STRAINER, 750 GPM AT 30 TDH, THREE PHASE 480VOLT 3450 RPM, SELF PRIMING PUMP
31	WATERFEATURE PUMP	1	ITT MARLOW 3B28EC-C2, 5 HP, WITH INTEGRAL SUCTION STRAINER, 320 GPM AT 30 TDH, THREE PHASE 480 VOLT 3450 RPM, SELF PRIMING PUMP
32	OZONE GENERATOR	1	VANTAGE V-028C 52.8 GR/HR CORONA DISCHARGE TYPE, 0.056 CONTACT CONCENTRATION, SINGLE PHASE 120 VAC POWER SUPPLY REQUIRED. INTERLOCK WITH POOL FILTER PUMP MOTOR CIRCUIT
33	LIFEGUARD CHAIR	1	S.R. SMITH MODEL PLS-203 PORTABLE LIFEGUARD STAND

## RESTROOM FACILITIES REQUIREMENTS

1. THE FLOORS SHALL BE CONSTRUCTED OF AN IMPERVIOUS MATERIAL AND SHALL HAVE A NON-SLIP SURFACE FINISH.
2. THE FLOORS SHALL SLOPE TO A FLOOR DRAIN AT LEAST 3 INCHES IN DIAMETER.
3. FIXTURE SETS SHALL INCLUDE THE FOLLOWING:  
MEN: 2 WATER CLOSETS, 2 URINALS, 3 LAVATORIES, AND ONE 3/4 INCH HOSE BIBB WITH VACUUM BREAKER.  
WOMEN: 6 WATER CLOSETS, 3 LAVATORIES, AND ONE 3/4 INCH HOSE BIBB WITH VACUUM BREAKER.
4. EACH SEX SHALL BE LABELED ON THEIR RESPECTIVE DOORS.
5. DIRECT ACCESS FROM THE POOL OR THE SPA DECK TO THE RESTROOM FACILITIES IS REQUIRED.
6. WALLS IN RESTROOM FACILITIES SHALL BE COVERED.

## EQUIPMENT ROOM REQUIREMENTS

1. THE FLOOR IN THE ROOM SHALL BE CONSTRUCTED OF CONCRETE HAVING A SMOOTHLIKE NON-SLIP SURFACE FINISH.
2. THE FLOOR SHALL BE POSITIVELY DRAINED TO A FLOOR DRAIN.
3. A 1 INCH HOSE BIBB WITH VACUUM BREAKER SHALL BE LOCATED INSIDE THE ROOM.
4. THE OVERHEAD LIGHT SHALL EMIT AT LEAST 30 FOOT CANDLES OF ILLUMINATION AT THE FLOOR LEVEL.
5. CLEARANCES TO PUMPS AND FILTERS FROM WALLS SHALL BE AS SPECIFIED BY THE MANUFACTURER

## FILTER PIPING REQUIREMENTS

1. TAG ALL VALVES AND POST OPERATING INSTRUCTION INSIDE THE ROOM.
2. ALL FACE PIPING SHALL BE PVC SCHEDULE 40 NSF-PW. ALL JOINT SHALL BE NON-THREADED SOLVENT WELD TYPE.
3. GATE VALVES SHALL NOT BE USED AS A MEANS FOR CONTROLLING THE FLOW OF WATER. ALL PROPORTIONAL FLOW TYPE VALVES ARE INDICATED ON THE DRAWING.
4. ELECTRICALLY OPERATED CHEMICAL FEEDERS SHALL BE INTERLOCKED WITH THE FILTER PUMP MOTOR.
5. THE CHEMICAL SOLUTION TANK SHALL BE LABELED ACCORDING TO THE SOLUTION OF WHICH IT CONTAINS.

## DEPARTMENT OF HEALTH NOTES

1. ALL DECKS SHALL SLOPE AWAY FROM THE POOL 2%-4%.
2. ALL DECK SURFACES SHALL HAVE A SMOOTH SLIP RESISTANT FINISH.
3. HOSE BIBBS SHALL BE LOCATED AROUND THE POOL DECK FOR CLEANING.
4. A RINSE SHOWER SHALL BE LOCATED WITHIN 20 FEET OF THE POOL & SPA.
5. A DRINKING FOUNTAIN SHALL BE LOCATED IN THE POOL AREA.
6. ALL WALKWAYS BETWEEN THE POOL AND SANITARY FACILITIES SHALL BE CONSTRUCTED OF CONCRETE OR OTHER NON-ABSORBENT MATERIAL FOR THE FIRST FIFTEEN FEET AND SHALL HAVE A NON-SLIP SURFACE FINISH.
7. IF SANITARY FACILITIES ARE NOT VISIBLE FROM THE DECK, A SIGN OR SIGNS INDICATING THE DIRECTION TO THE RESTROOMS SHALL BE POSTED ON THE POOL DECK.
8. POOL WET DECKS LIGHTING PROVIDES FOR USE DURING DAYLIGHT HOURS ONLY. FOR NIGHT USE, PLANS MUST BE SUBMITTED TO THE LOCAL BOARD OF HEALTH ENGINEERING DEPARTMENT, WITH ALL REQUIREMENTS PER CHAPTER 64E-9 FLORIDA ADMINISTRATIVE CODE FOR NIGHT SWIMMING.
9. FOR NIGHT SWIMMING, OVERHEAD LIGHTING SHALL PROVIDE FOR A MINIMUM OF 15 FOOT CANDLES OF ILLUMINATION AT THE WATER AND DECK LEVEL UNLESS SPECIFICALLY MENTIONED ON THESE PLANS ALONG WITH LIGHTING REQUIREMENTS, NO NIGHT SWIMMING WILL BE ALLOWED.
10. DISTRIBUTION OF FOOD OR DRINK WITHIN 12 FEET OF THE POOL WATERS EDGE IS PROHIBITED.
11. STORAGE OF CHEMICALS SHALL BE MADE IN AN ENCLOSED LOCKABLE AREA TO PREVENT UNAUTHORIZED ACCESS.
12. ALL POOL SURFACES SHALL HAVE A SMOOTHLIKE NON-SLIP FINISH.
13. NO OVERHEAD WIRING SHALL BE LOCATED WITHIN 10 FEET OF THE POOL
14. ALL ELECTRICAL WORK SHALL BE DONE BY QUALIFIED LICENSED CONTRACTORS AND IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICAL 680. 1999 EDITION
15. ALL POOL PIPING SHALL BE PVC PW SCHEDULE 40 NON-THREADED NSF APPROVED. ALL PIPE SHALL DISPLAY THE NSF-PW LOGO.
16. THE DEPTH MARKERS SHALL INDICATE THE DEPTH AT NORMAL OPERATING WATER LEVEL, WITHIN 3 INCHES, WHEN MEASURED 3 FEET FROM THE WALL OF THE POOL. SYMMETRICAL POOL DESIGNS WITH THE DEEP POINT AT THE CENTER, MAY BE ALLOWED TO DISPLAY A DUAL MARKING SYSTEM WHICH INDICATES THE DEPTH AT THE WALL AND THE DEEP POINT. DEPTH MARKERS SHALL BE LOCATED ON BOTH SIDES OF THE POOL.
18. ALL POOL DEPTHS SHALL BE AS SPECIFIED ON THE PLANS.
19. POOL RESTROOM FACILITIES SHALL BE LOCATED WITHIN A 200 FOOT RADIUS OF THE POOL.
20. ALL STEEL SHALL BE ASTM A615 GRADE 60 HAVING A YIELD STRENGTH 60,000 PSI.
21. ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS.
22. ALL STEEL COMING IN CONTACT WITH SOIL SHALL HAVE 3 INCH COVER. STEEL CLOSE TO THE WATER SURFACE SHALL HAVE 1 1/2 INCH COVERAGE. VERTICAL STEEL IN THE POOL WALLS SHALL BE CENTERED IN THE WALL UNLESS OTHERWISE NOTED. THESE REQUIREMENTS DO NOT APPLY WHEN POOL STRUCTURAL DESIGN IS BY OTHERS.
23. ALL POOL WALLS SHALL BE SHOTCRETE OR GUNITE (PNEUMATICALLY PLACED).
24. MINIMUM DECK WIDTH SHALL NOT BE LESS THAN 4 FEET WIDE. WHEN THE COPING IS RAISED ABOVE THE DECK, THE CLEARANCE SHALL BE MEASURED FROM THE BACK OF THE COPING, HANDRAIL, OR LADDER, TO THE NEAREST OBSTRUCTION.

## EPD 150

1 TANK, 4" PIPING  
FILTRATION SYSTEM

MAKE: Environmental Products Division  
HOFFINGER INDUSTRIES, INC.

TYPE: Fully Automated Permanent Media Hi-Rate Sand Filter

MODEL: EPD 150

FILTER  
AREA: 13.5 SQ. FT. (1.25m<sup>2</sup>)

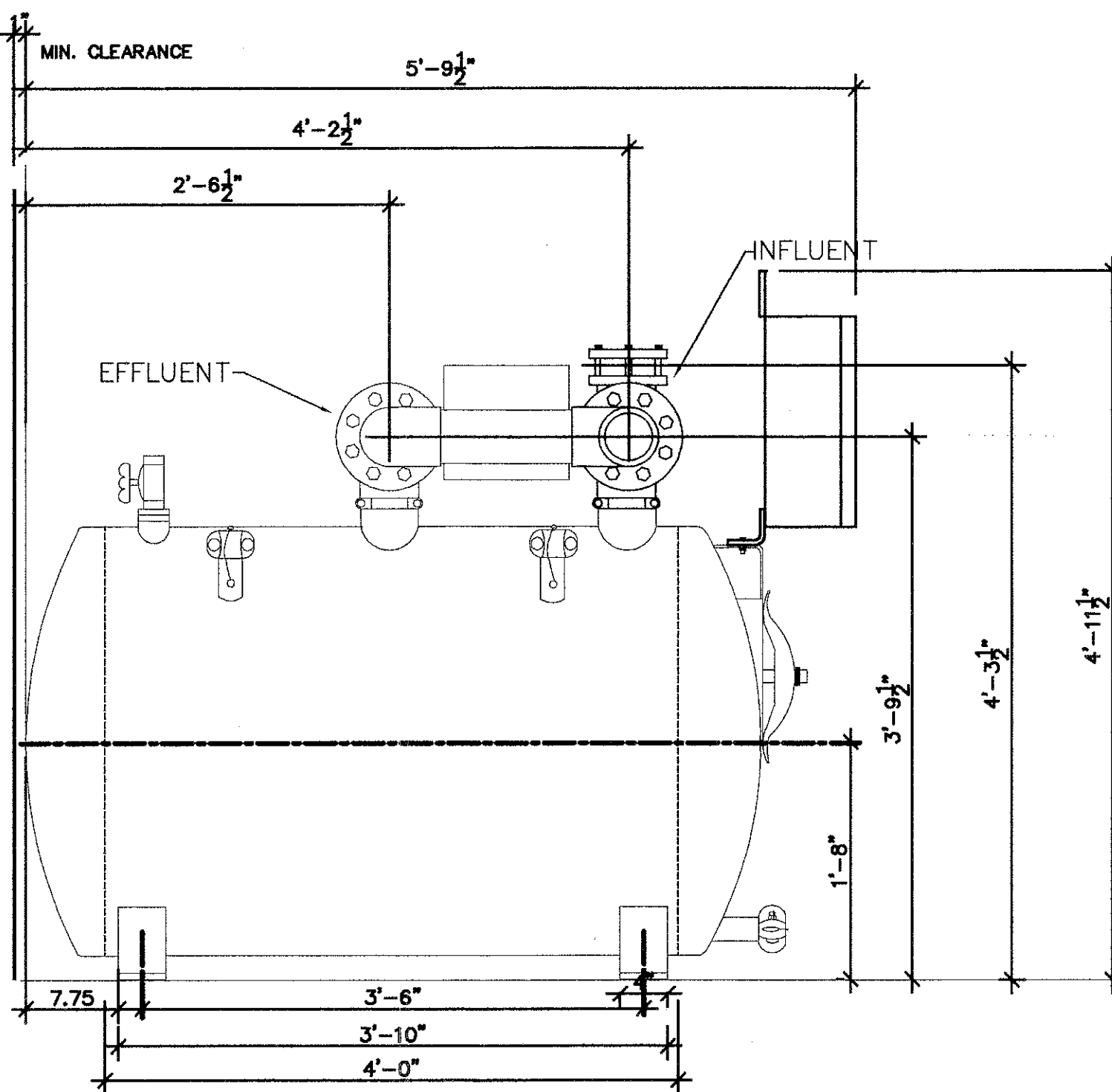
FILTER FLOW RATES	
GPM/SQ. FT.-GPM	(M <sup>3</sup> /MIN)/(M <sup>2</sup> /MIN)
10 = 135	(0.379)/(1.51)
15 = 202.5	(0.568)/(2.27)
20 = 270*	(0.757)/(3.02*)

\*Maximum recommended flow rate

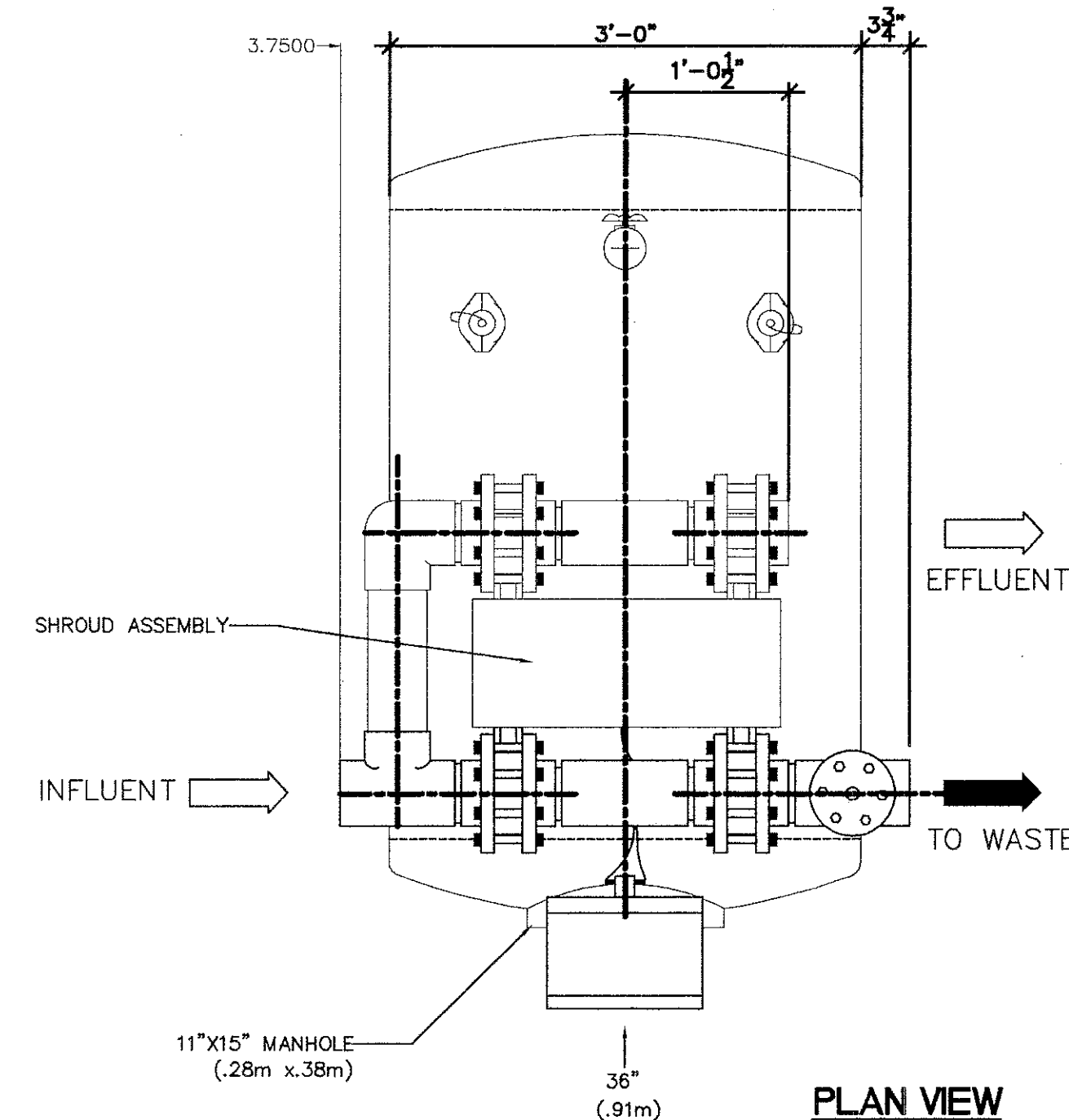
BACKWASH FLOW RANGE	
GPM	(M <sup>3</sup> /MIN)
200 to 270	(7.6 to 1.02)

Units in ( ) are metric

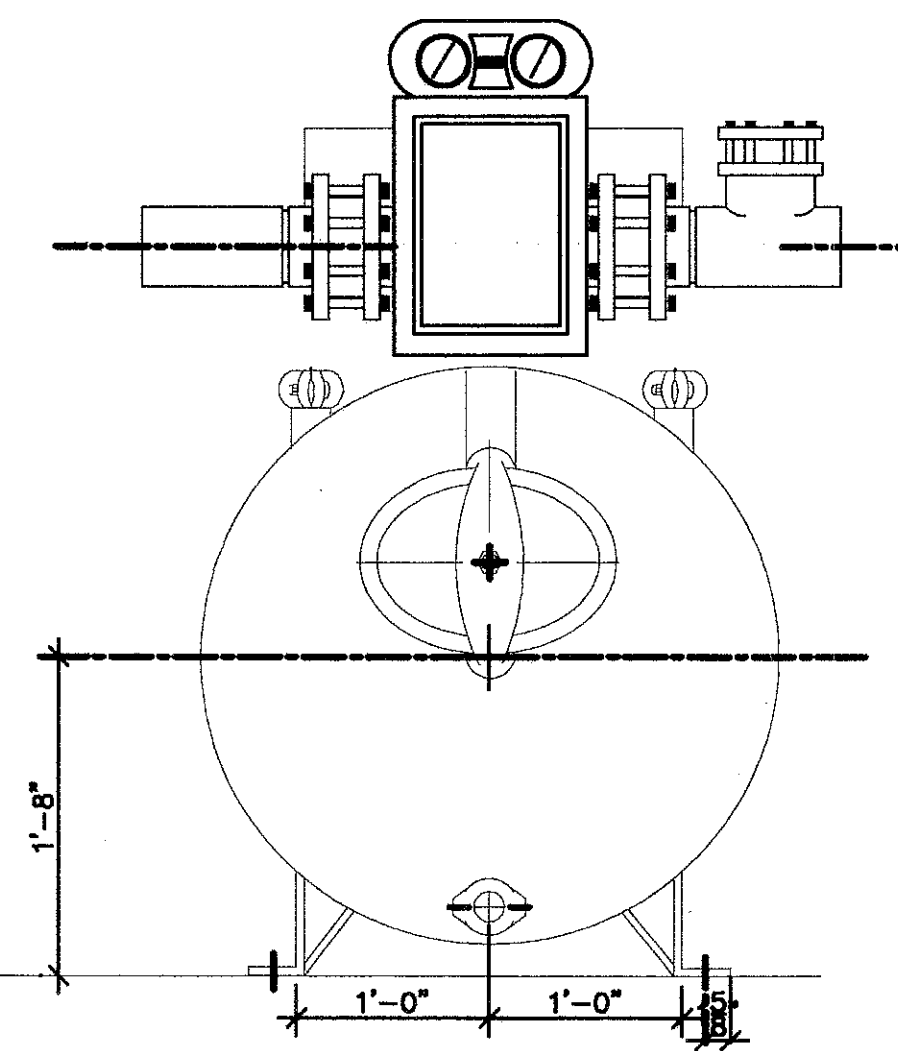
INFLUENT, EFFLUENT AND WASTE  
CONNECTIONS ARE 4" (10m) PVC SOCKETS



SIDE ELEVATION



PLAN VIEW



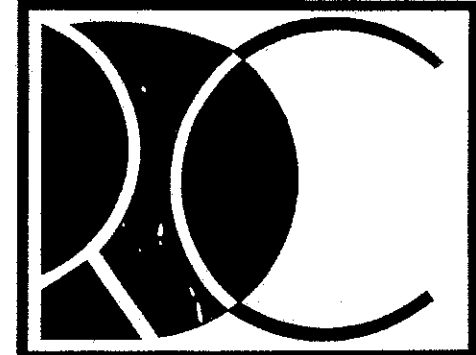
FRONT ELEVATION



KEHLER ENGINEERING  
ASSOCIATES, INC.

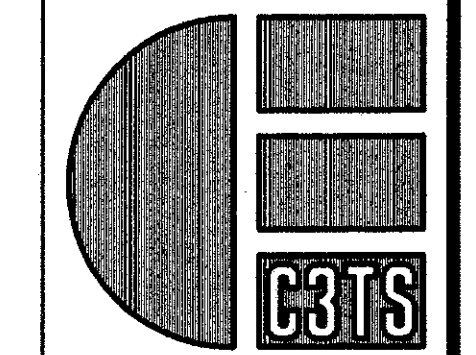
ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING

4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 662-1002



RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
6555 NW 9th AVENUE, SUITE 201  
FT. LAUDERDALE, FL 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN

Engineers  
Architects  
Planners

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954-5652713 954-5632009  
B0000502 AAC00214

JOB NUMBER

-

POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA

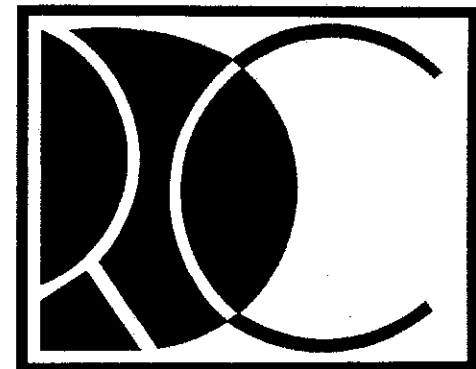
SHEET INDEX

ACTIVITY POOL  
FILTER DETAILS  
SHEET NUMBER

SP-10

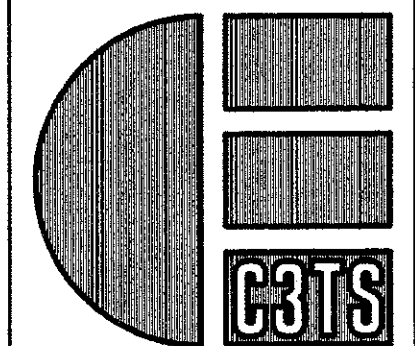
Page 200 of 215

p. 200



RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
6555 NW 9th AVENUE SUITE 201  
FT. LAUDERDALE, FL 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



**CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN**

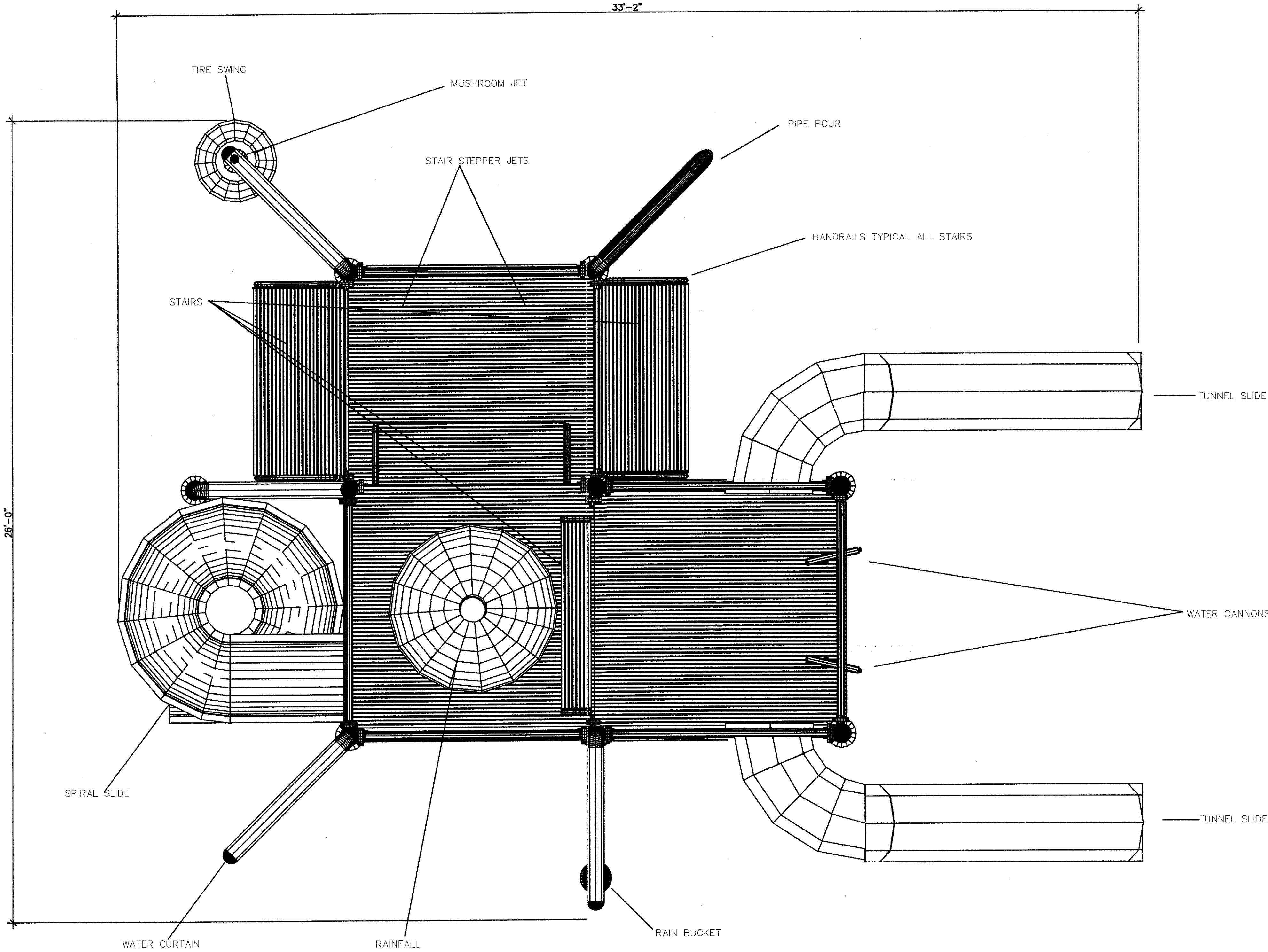
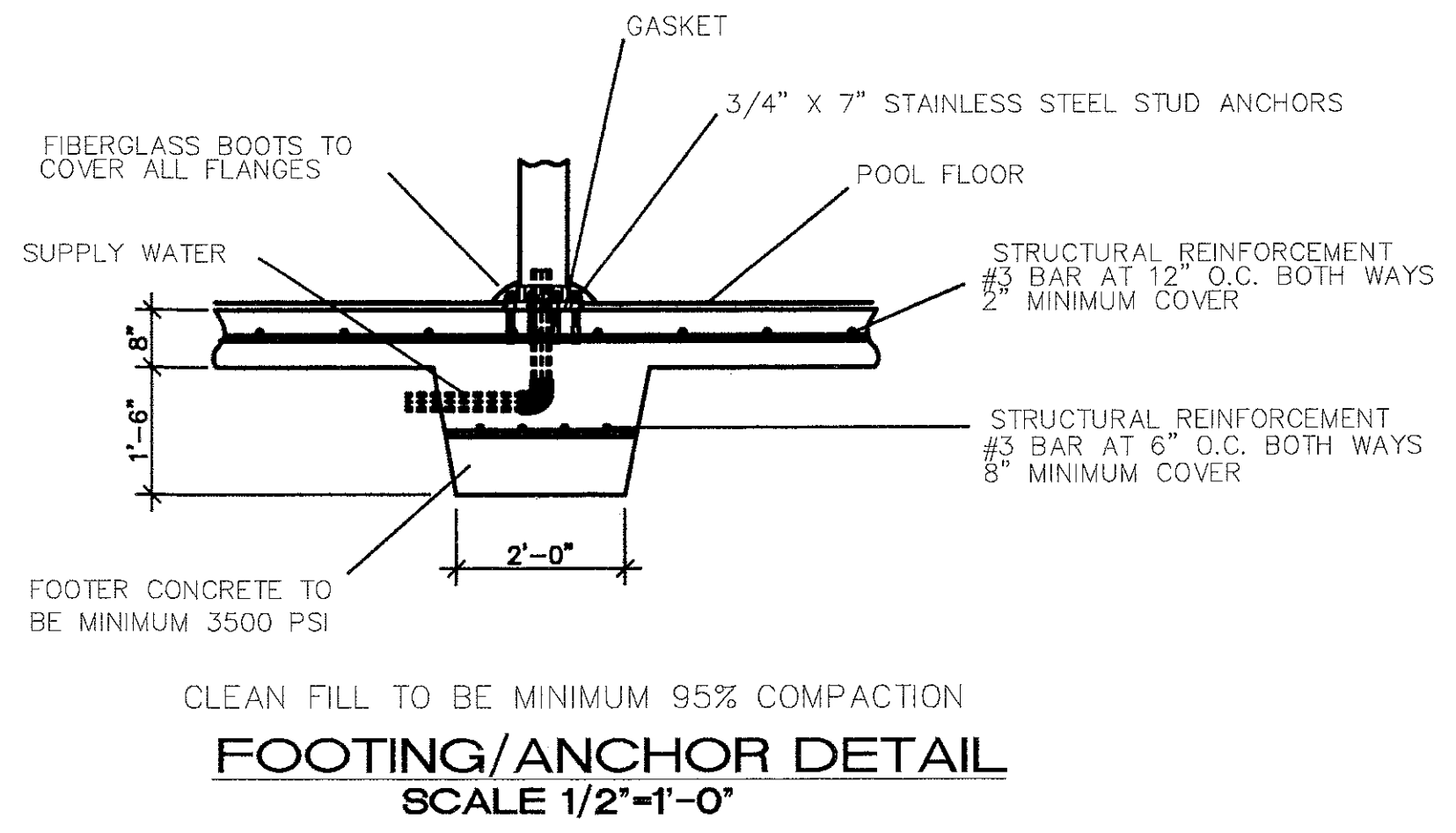
**Engineers  
Architects  
Planners**

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954.563.2113 954.563.2009  
F90005022 A0000142

JOB	NUMBER


**POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA**

SHEET INDEX
COMPAC CF-248 PLAN VIEW
SHEET NUMBER
SP-11



**COMPAC MODEL 248 WATER ACTIVITY STRUCTURE  
PLAN VIEW  
SCALE 1/2"-1'-0"**

- MATERIAL NOTES**
1. ALL FLANGES, PIPE, 90'S AND TEE'S TO BE 304 STAINLESS STEEL
  2. ALL MOUNTING HARDWARE, BOLTS, NUTS AND WASHERS TO BE 316 STAINLESS STEEL
  3. RAINFALL TO BE SEVEN LAYER FIBERGLASS LAMINATE
  4. ALL HAND RAIL OPENINGS PROTECTED WITH NYLON SAFETY NETTING
  5. ALL STEPS AND DECKING TO BE FIBERGLASS MOLDED GRATING UL CLASSIFIED
  6. SLIDES TO BE EXTREMELY DURABLE MEDIUM-DENSITY POLYETHYLENE WITH ULTRAVIOLET LIGHT STABILIZERS
  7. ALL FLANGES ON POOL SURFACE TO BE COVERED WITH FIBERGLASS BOOTS

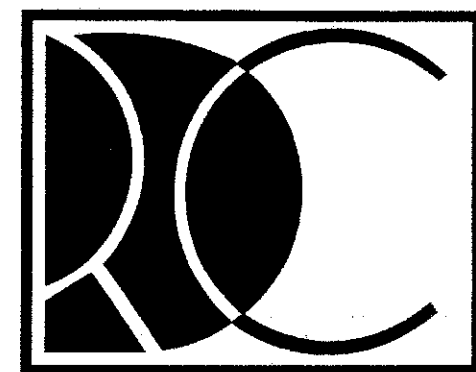


**KEHLER ENGINEERING  
ASSOCIATES, INC.**

ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING

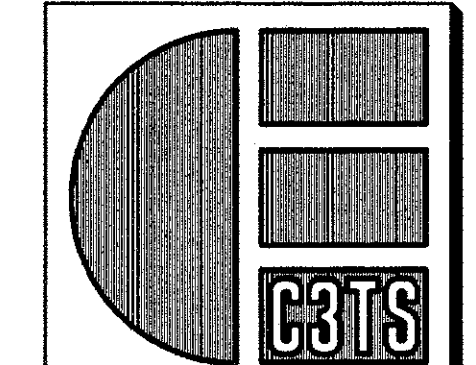
4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 662-1002





RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
6555 NW 9th AVENUE SUITE 201  
FT. LAUDERDALE, FL 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



**CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN**

**Engineers  
Architects  
Planners**

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954-565-2113 954-563-2009  
F90005022 AIC002142

JOB NUMBER

**POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA**

SHEET INDEX

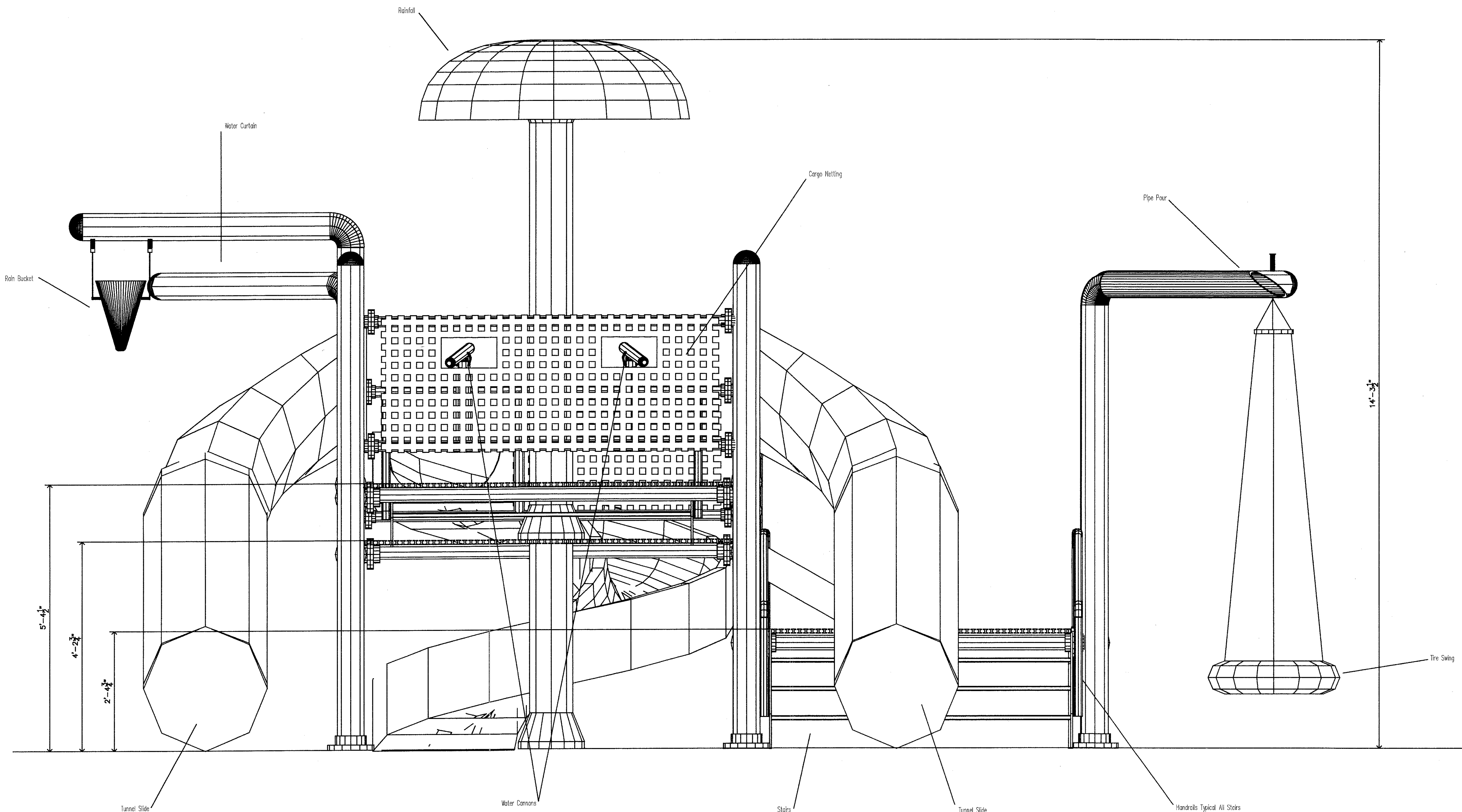
**COMPAC CF-248  
ELEVATION**

SHEET NUMBER

**SP-12**

CAM 21-0085  
Exhibit 1  
Page 202 of 215

p. 202



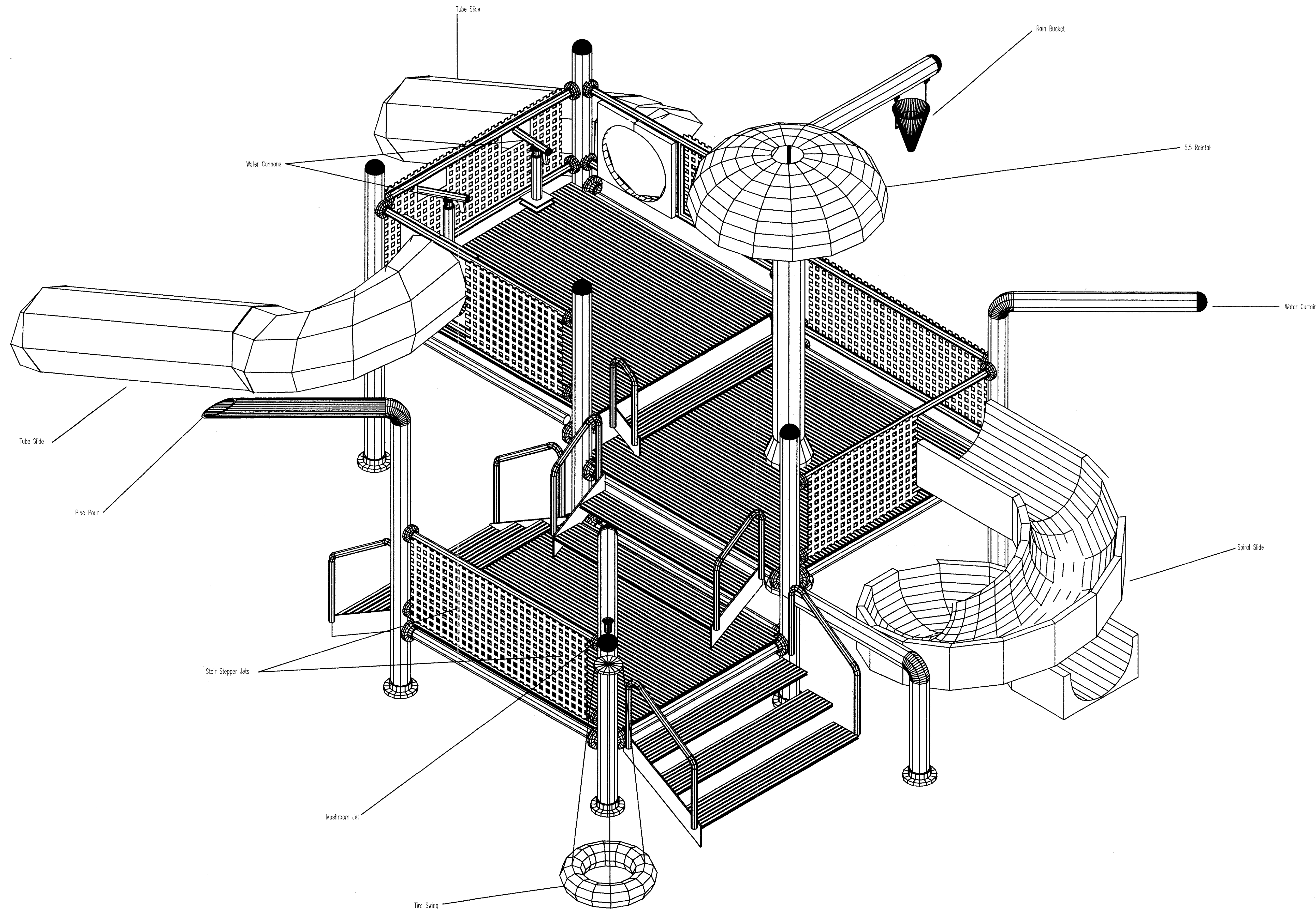
**COMPAC MODEL 248 WATERPLAY STRUCTURE  
FRONT ELEVATION  
SCALE 1"=1'-0"**



**KEHLER ENGINEERING  
ASSOCIATES, INC.**

ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING

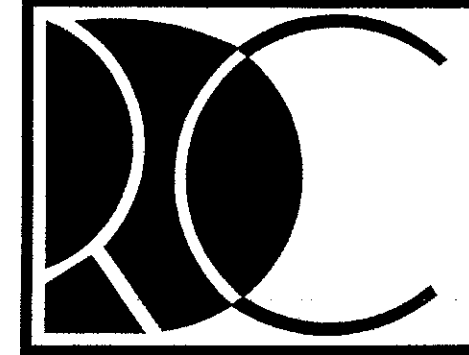
4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-6875 TELEFAX (305) 662-1002



COMPAC MODEL 248 WATERPLAY STRUCTURE  
ISOMETRIC  
NTS

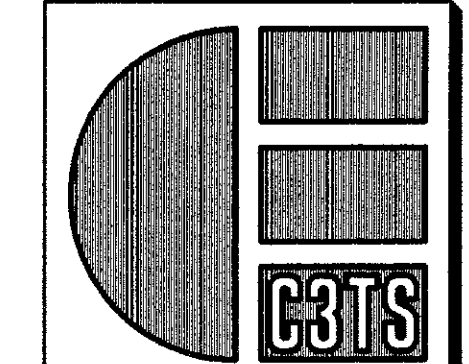


KEHLER ENGINEERING  
ASSOCIATES, INC.  
ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING  
4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 662-1002



RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.  
6555 NW 9th AVENUE SUITE 201  
FT. LAUDERDALE, FL 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN

Engineers  
Architects  
Planners

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954-565-2113 954-563-2009  
F80005022 A0000242

JOB NUMBER

POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA

SHEET INDEX

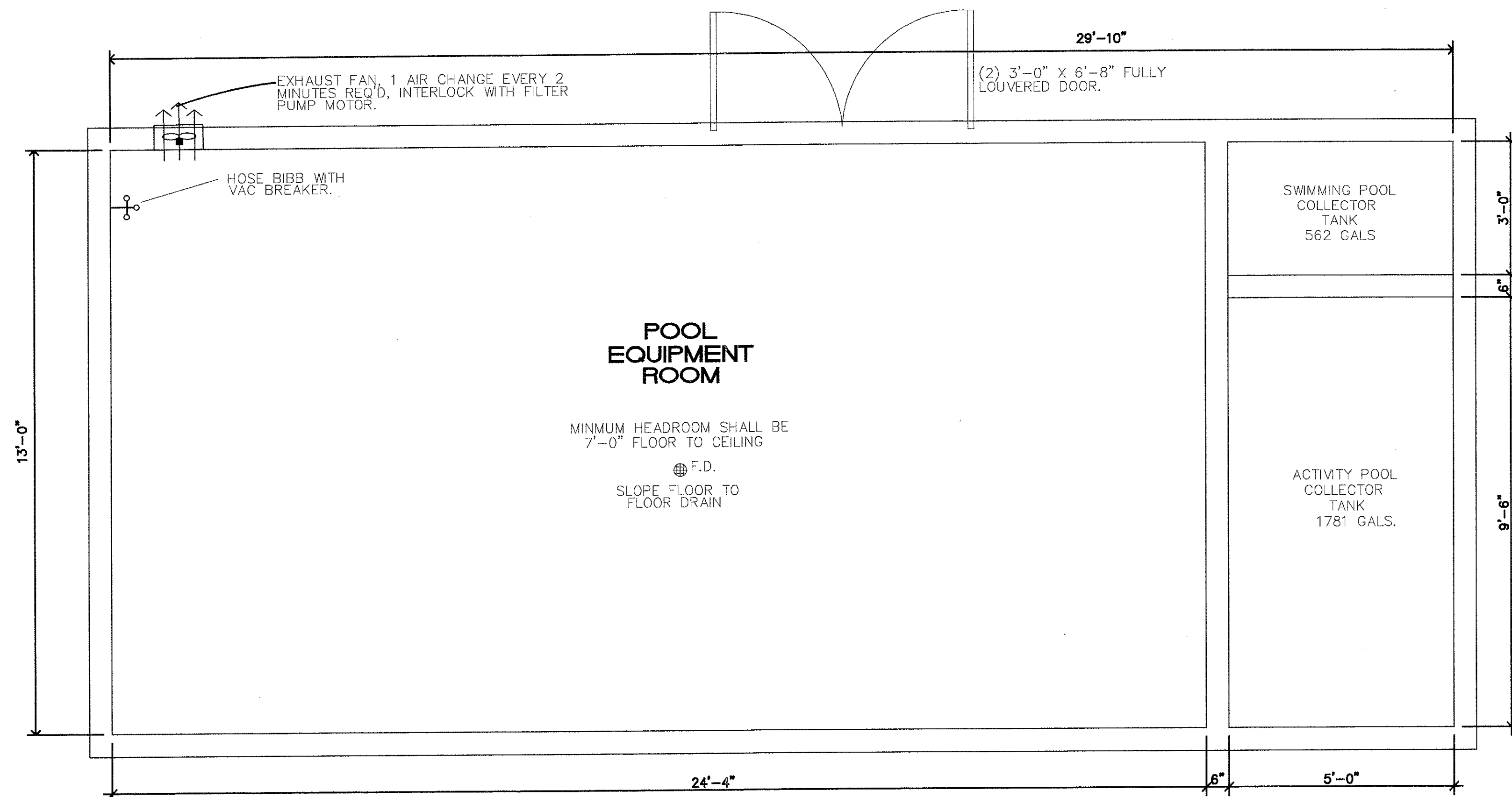
COMPAC CF-248  
ISOMETRIC

SHEET NUMBER

SP-13

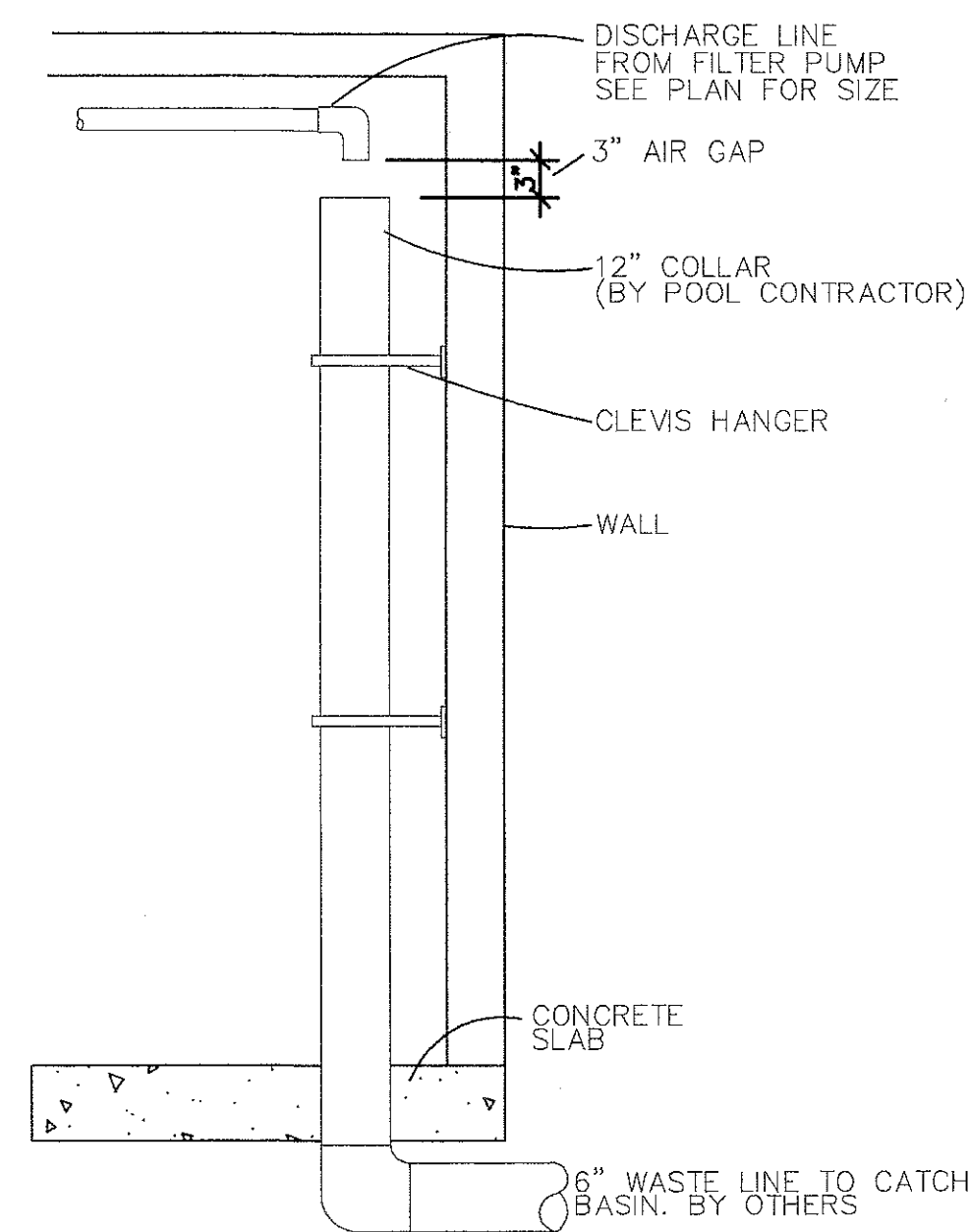
Exhibit 1  
Page 203 of 215





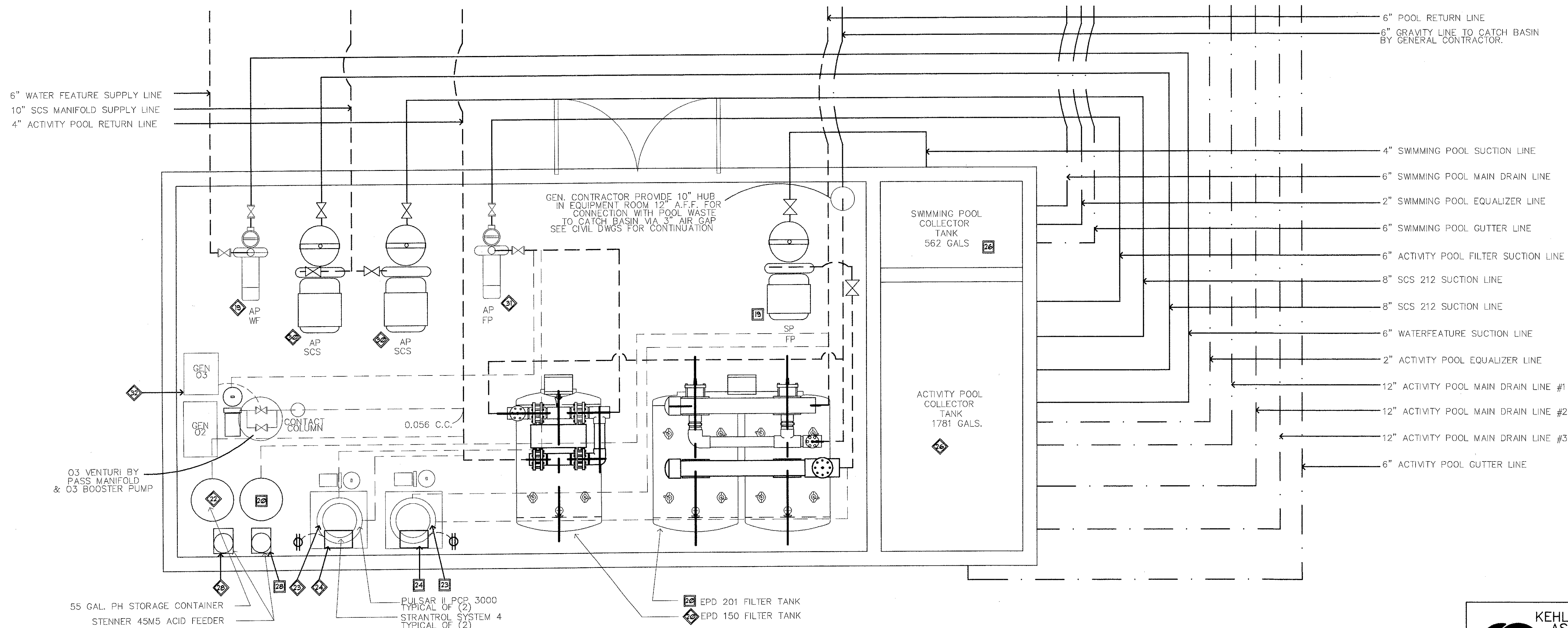
**POOL EQUIPMENT ROOM PLAN**  
SCALE 1/2"=1'-0"

(SEE ARCH. DWGS FOR STRUCTURAL DETAILS)



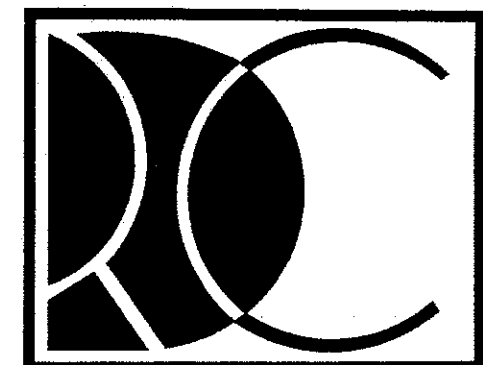
**POOL WASTE LINE  
AIR GAP DETAIL**  
NO SCALE

CONTRACTOR SHALL PROVIDE SHOP  
DRAWING OF ALL PIPE PENETRATIONS  
PRIOR TO INSTALLATION.



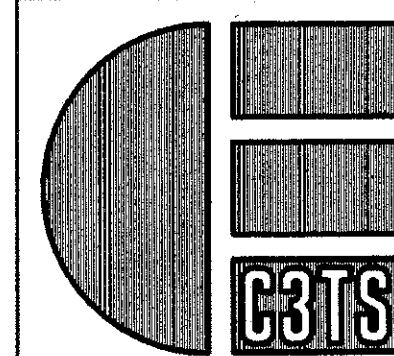
**POOL FILTER EQUIPMENT LAYOUT PLAN**  
SCALE 1/2"=1'-0"

**KEHLER ENGINEERING  
ASSOCIATES, INC.**  
ENGINEERS  
SPECIALISTS IN AQUATIC ENGINEERING  
4910 S.W. 72ND AVENUE  
MIAMI, FLORIDA 33155  
(305) 667-8975 TELEFAX (305) 862-1002



**RECREATIONAL  
DESIGN AND  
CONSTRUCTION, INC.**  
6555 NW 9th AVENUE SUITE 201  
FT. LAUDERDALE, FL 33309  
954-771-5567  
FAX 954-771-6965

REVISIONS



**CORZO  
CASTELLA  
CARBALLO  
THOMPSON  
SALMAN**

**Engineers  
Architects  
Planners**

3990 NW 9th AVENUE  
Ft. Lauderdale, Florida 33309  
954.563.2113 954.563.2009  
190005022 AAC00202

JOB NUMBER

**POOL AND COMMUNITY CENTER  
CROISSANT PARK  
FT LAUDERDALE, FLORIDA**

SHEET INDEX  
**POOL EQUIPMENT  
PLAN**  
SHEET NUMBER  
**SP-14**

**NON-COLLUSION STATEMENT:**

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

**Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.**

**NAME****RELATIONSHIPS**



**In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.**

Authorized Signature

Title

Name (Printed)

Date

## CONTRACT PAYMENT METHOD

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to credit card payments via MasterCard or Visa as part of this program.

This allows you as a vendor of the City of Fort Lauderdale to receive your payments fast and safely. No more waiting for checks to be printed and mailed.

In accordance with the contract, payments on this contract will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, bidders must presently have the ability to accept these credit cards or take whatever steps necessary to implement acceptance of a card before the start of the contract term, or contract award by the City.

All costs associated with the Contractor's participation in this purchasing program shall be borne by the Contractor. The City reserves the right to revise this program as necessary.

By signing below you agree with these terms.

Please indicate which credit card payment you prefer:

☐ MasterCard

☐ Visa

Company Name

Name (Printed)

Signature

Date

Title

**CONTRACTOR'S CERTIFICATE OF COMPLIANCE WITH  
NON-DISCRIMINATION PROVISIONS OF THE CONTRACT**

The completed and signed form should be returned with the Contractor's submittal. If not provided with submittal, the Contractor must submit within three business days of City's request. Contractor may be deemed non-responsive for failure to fully comply within stated timeframes.

Pursuant to City Ordinance Sec. 2-187(c), bidders must certify compliance with the Non-Discrimination provision of the ordinance.

The Contractor shall not, in any of his/her/its activities, including employment, discriminate against any individual on the basis of race, color, national origin, religion, creed, sex, disability, sexual orientation, gender, gender identity, gender expression, or marital status.

1. The Contractor certifies and represents that he/she/it will comply with Section 2-187, Code of Ordinances of the City of Fort Lauderdale, Florida, as amended by Ordinance C-18-33 (collectively, "Section 2-187").
2. The failure of the Contractor to comply with Section 2-187 shall be deemed to be a material breach of this Agreement, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.
3. The City may terminate this Agreement if the Contractor fails to comply with Section 2-187.
4. The City may retain all monies due or to become due until the Contractor complies with Section 2-187.
5. The Contractor may be subject to debarment or suspension proceedings. Such proceedings will be consistent with the procedures in section 2-183 of the Code of Ordinances of the City of Fort Lauderdale, Florida.

Authorized Signature

Print Name and Title

Date

**BID/PROPOSAL CERTIFICATION**

**Please Note:** It is the sole responsibility of the bidder to ensure that his bid is submitted electronically through [www.BidSync.com](http://www.BidSync.com) prior to the bid opening date and time listed. Paper bid submittals will not be accepted. All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit <http://www.dos.state.fl.us/>).

Company: (Legal Registration)  EIN (Optional):

Address:

City:  State:  Zip:

Telephone No.:  FAX No.:  Email:

Delivery: Calendar days after receipt of Purchase Order (**section 1.02 of General Conditions**):

Total Bid Discount (**section 1.05 of General Conditions**):

Check box if your firm qualifies for MBE / SBE / WBE (**section 1.09 of General Conditions**): ☐

**ADDENDUM ACKNOWLEDGEMENT** - Proposer acknowledges that the following addenda have been received and are included in the proposal:

<u>Addendum No.</u>	<u>Date Issued</u>	<u>Addendum No.</u>	<u>Date Issued</u>	<u>Addendum No.</u>	<u>Date Issued</u>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**VARIANCES:** If you take exception or have variances to any term, condition, specification, scope of service, or requirement in this competitive solicitation you must specify such exception or variance in the space provided below or reference in the space provided below all variances contained on other pages within your response. Additional pages may be attached if necessary. No exceptions or variances will be deemed to be part of the response submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A. **You must also click the "Take Exception" button.**

The below signatory hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid/proposal.

I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal, I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this bid/proposal. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a response, that in no event shall the City's liability for respondent's direct, indirect, incidental, consequential, special or exemplary damages,



expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars (\$500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

Name (printed)

Signature

Date

Title

Revised 4/28/2020

**E-VERIFY AFFIRMATION STATEMENT**

RFP/Bid /Contract No: \_\_\_\_\_

Project Description: \_\_\_\_\_

\_\_\_\_\_

Contractor/Proposer/Bidder acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of,

- (a) all persons employed by Contractor/Proposer/Bidder to perform employment duties within Florida during the term of the Contract, and,
- (b) all persons (including subcontractors/vendors) assigned by Contractor/Proposer/Bidder to perform work pursuant to the Contract.

The Contractor/Proposer/Bidder acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the Contract is a condition of the Contract.

Contractor/Proposer/ Bidder Company Name: \_\_\_\_\_

Authorized Company Person's Signature: \_\_\_\_\_

Authorized Company Person's Title: \_\_\_\_\_

Date: \_\_\_\_\_



City of Fort Lauderdale • Procurement Services Division  
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301  
954-828-5933 Fax 954-828-5576  
[purchase@fortlauderdale.gov](mailto:purchase@fortlauderdale.gov)

ITB NO. 12413-103

**POOL RESURFACING – Riverland Park Pool, Carter Park Pool,  
Croissant Park Water Playground**

---

**ADDENDUM NO. 1**

ISSUED: August 25, 2020

---

This Addendum is being issued to provide the following information. It is hereby made a part of the Plans and Specifications and shall be included with all contract documents.

Acknowledge receipt of this Addendum by inserting its number and date on the CITB Construction Bid Certification Page.

**A) Site Visits will be allowed:**

Site visits are to be scheduled / arranged by appointment only. Contact Thomas White at (954) 828-5350 email [thwhite@fortlauderdale.gov](mailto:thwhite@fortlauderdale.gov) or James Sherbondy (954) 828-5655 email [jsherbondy@fortlauderdale.gov](mailto:jsherbondy@fortlauderdale.gov) any time during normal business hours, before the cut-off date and time, to schedule a specific date and time for your visit. The cut-off date for site visits is **Tuesday, September 8, 2020** by **4:30 PM**. **PLEASE NOTE:** You are encouraged to set up your appointment asap to assure availability before the site visit cut-off date and time.

All other terms, conditions, and specifications remain unchanged.

*Fausto Vargas*  
Procurement Specialist

Company Name: \_\_\_\_\_  
(please print)

Bidder's Signature: \_\_\_\_\_

Date: \_\_\_\_\_



City of Fort Lauderdale • Procurement Services Division  
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301  
954-828-5933 Fax 954-828-5576  
[purchase@fortlauderdale.gov](mailto:purchase@fortlauderdale.gov)

ITB NO. 12413-103

**POOL RESURFACING – Riverland Park Pool, Carter Park Pool,  
Croissant Park Water Playground**

---

**ADDENDUM NO. 2**

ISSUED: September 3, 2020

---

This Addendum is being issued to provide the following information. It is hereby made a part of the Plans and Specifications and shall be included with all contract documents.

Acknowledge receipt of this Addendum by inserting its number and date on the CITB Construction Bid Certification Page.

**a) Opening Bid, Questions and Answers will be extended:**

**New Dates:**

**Questions and Answers: September 11, 2020**

**Opening Bid: September 21, 2020**

**b) Florida Stucco Will be accepted:**

**Gem Finish  
Blue Gem Color**

All other terms, conditions, and specifications remain unchanged.

*Fausto Vargas*  
Procurement Specialist

Company Name: \_\_\_\_\_  
(please print)

Bidder's Signature: \_\_\_\_\_

Date: \_\_\_\_\_



City of Fort Lauderdale • Procurement Services Division  
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301  
954-828-5933 Fax 954-828-5576  
[purchase@fortlauderdale.gov](mailto:purchase@fortlauderdale.gov)

ITB NO. 12413-103

**POOL RESURFACING – Riverland Park Pool, Carter Park Pool,  
Croissant Park Water Playground**

---

**ADDENDUM NO. 3**

ISSUED: September 21, 2020

---

This Addendum is being issued to provide the following information. It is hereby made a part of the Plans and Specifications and shall be included with all contract documents.

Acknowledge receipt of this Addendum by inserting its number and date on the CITB Construction Bid Certification Page.

**a) Opening Bid, Questions and Answers will be extended:**

**New Dates:**

**Questions and Answers: September 15, 2020**

**Opening Bid: September 28, 2020**

All other terms, conditions, and specifications remain unchanged.

*Fausto Vargas*  
Procurement Specialist

Company Name: \_\_\_\_\_  
(please print)

Bidder's Signature: \_\_\_\_\_

Date: \_\_\_\_\_



## Question and Answers for Bid #12413-103 - POOL RESURFACING Riverland Park Pool, Carter Park Pool, Croissant Park

### Overall Bid Questions

#### Question 1

- 1) is there an estimated budget for this bid?
- 2) Have these pools been re-plastered previously?
- 2a) if so what was the bid number and when was it awarded?
- 3) Will new aquatic playground equipment need to be included in the bid/ will new playground equipment be purchased or is the equipment going to be moved and put back after re-plastering?
- 4) Will this include a new pump/ Filtration system
- 5) The scope of work says only a removal and re-plastering of pool surfaces, but if i am understanding correctly, this also includes a demo and re-plastering of the associated splash pad playgrounds at each location? **(Submitted: Aug 10, 2020 5:19:43 PM EDT)**

#### Answer

- 1)The estimated budget for this project is \$180,000.00
- 3)Playground equipment to remain in place during the re-plastering.
- 4)No.
- 5)There is only one aquatic playground at Croissant Park, not the other two locations. **(Answered: Aug 18, 2020 1:19:17 PM EDT)**

#### Question 2

Is the Project site open/available for a walk-through? **(Submitted: Aug 19, 2020 8:50:33 PM EDT)**

#### Answer

- Please review Addendum 1 **(Answered: Aug 25, 2020 2:21:59 PM EDT)**

#### Question 3

At the Various pools should the Non-skid tiles be replaced as well? **(Submitted: Aug 28, 2020 4:53:30 PM EDT)**

#### Answer

- The tile would only be replaced in some cases: If the tile was previously damaged(chipped or cracked), If the tile was damaged in the pool surface preparation, and if the tile are out of code then they would need to be brought back up to the current standards. **(Answered: Aug 31, 2020 10:18:36 AM EDT)**

#### Question 4

At the Riverside Park must the contractor demo and replace the pool trough gutter system? **(Submitted: Aug 28, 2020 4:55:16 PM EDT)**

#### Answer

- The bottom of gutter system is diamond brighted so it would need a new coating applied over the old coating in the gutter bottom. **(Answered: Aug 31, 2020 10:18:36 AM EDT)**

#### Question 5

Would the Owner be acceptable to Florida Stucco Gem Color? **(Submitted: Aug 28, 2020 4:56:33 PM EDT)**

**Answer**

- GC - 03 - SUBSTITUTIONS - If the Contractor desires to use materials and/or products of manufacturer's names different from those specified in the Contract Documents, the Bidder requesting the substitution shall make written application as described herein. The burden of proving the equality of the proposed substitution rests on the Bidder making the request. To be acceptable, the proposed substitution shall meet or exceed all expressed requirements of the Contract Documents and shall be submitted upon the Contractor's letterhead, in addition to the "Contractor's Request for Substitution" form provided by the Public Works Director. The following requirements shall be met in order for the substitution to be considered:

1. Requests for substitution shall reach the Public Works Director no less than ten (10) Working Days prior to the date set for opening of Bids; and
2. Requests for substitution shall be accompanied by such technical data, as the party making the request desires to submit. The Public Works Director will consider reports from reputable independent testing laboratories, verified experience records from previous users and other written information valid in the circumstances.
3. Requests for substitution shall completely and clearly indicate in what respects the materials and/or products differ from those indicated in the Contract Documents; and
4. Requests for substitution shall be accompanied by the manufacturer's printed recommendations clearly describing the installation, use and care, as applicable, of the proposed substitutions; and
5. Requests for substitution shall be accompanied by a complete schedule of changes in the Contract Documents, if any, which must be made to permit the use of the proposed substitution; and If a proposed substitution is approved by the Public Works Director, an addendum will be issued to prospective bidders not less than three (3) working days prior to the date set for opening of bids. Unless substitutions are received and approved as described above, the successful Bidder shall be responsible for furnishing materials and products in strict accordance with the Contract Documents. **(Answered: Sep 2, 2020 11:50:09 AM EDT)**

**Question 6**

how long will the owner require the contractor chemically balance pool after resurfacing? **(Submitted: Aug 28, 2020 4:59:04 PM EDT)**

**Answer**

- When the pool water is chemically balanced means. When the Calcium level is at 250-300 ppm, Alkalinity level is at 100 -140 ppm and Stabilizer level is at 40 ppm, it would be considered balanced. Also when the pool is refilled with new water, it must filtered and a stain inhibitor is added. This whole process is also known as a pool fire up which usually takes 1 week. **(Answered: Aug 31, 2020 10:18:36 AM EDT)**