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**D5 Commissioner**

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**City Manager**

Emilio T. Gonzalez, Ph. D

CITY OF MIAMI  
OFFICE OF CAPITAL IMPROVEMENTS PROGRAM  
STEVEN C. WILLIAMSON, DIRECTOR

RIVERVIEW STORM SEWER PUMP STATION  
EMERGENCY GENERATOR, CO<sub>2</sub> FIRE SUPPRESSANT SYSTEM  
AND MAIN SWITCH DISCONNECT PROJECT



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LOCATION MAP  
N.T.S.

RIVERVIEW  
PUMP STATION  
N.W. 6TH STREET  
N.W. 13TH AVENUE

PLANS PREPARED BY:  
R. J. BEHAR & COMPANY, INC.  
6861 S.W. 196 AVENUE, SUITE 302  
PEMBROKE PINES, FL 33332

BACH DESIGN ENGINEERS  
321 SE 10th ST  
POMPAHO BEACH, FL 33060

ISSUED FOR BIDS 09/17/2018

CIVIL PLANS  
ENGINEER OF RECORD: JUAN H. VAZQUEZ

P.E. LICENSE NO.: 51143



CITY OF MIAMI PROJECT MANAGER: ELYROSA ESTEVEZ, PE, CSI  
CITY OF MIAMI CONSTRUCTION MANAGER: HUMBERTO GOMEZ, PE, CPM

<table border="1"> <thead> <tr> <th>DATE</th> <th>REVISIONS DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		DATE	REVISIONS DESCRIPTION			<b>R.J. Behar &amp; Company, Inc.</b> Engineers • Planners 6861 S.W. 196 AVENUE, SUITE 302 PEMBROKE PINES, FL 33332 JUAN H. VAZQUEZ, P.E. LICENSE NO. 51143 CERTIFICATE OF AUTHORIZATION NO. 00008365	<p>CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRAM 444 S.W. 2ND AVENUE, 8TH FLOOR MIAMI, FLORIDA 33130 (305) 416-1213 FAX (305) 416-1253</p>	<table border="1"> <thead> <tr> <th colspan="2">CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRAM</th> </tr> <tr> <th>PROJECT NAME</th> <th>PROJECT No.</th> </tr> </thead> <tbody> <tr> <td>MIAMI RIVERVIEW PS</td> <td>17096</td> </tr> </tbody> </table>	CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRAM		PROJECT NAME	PROJECT No.	MIAMI RIVERVIEW PS	17096	<p><b>KEY SHEET</b></p>	<p>SHEET NO. <b>C-0</b></p>
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GENERAL NOTES:

1. GENERAL NOTES ON THE PROJECT PLANS AND DRAWINGS ARE SOLELY TO AID AND ASSIST THE CONTRACTOR WITH THE FIELD OPERATIONS FOR THE PROJECT. SAID GENERAL NOTES MAY NOT FULLY DESCRIBE ALL OF THE REQUIREMENTS FOR AN ITEM. THEREFORE, THE CONTRACTOR SHALL READ AND VERIFY THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO THE PLANS, SPECIFICATIONS, GENERAL TERMS AND CONDITIONS, AND THE SUPPLEMENTAL TERMS AND CONDITIONS, TO FULLY UNDERSTAND AND COMPLY WITH ALL THE REQUIREMENTS THEREIN.
2. THE INFORMATION PROVIDED ON THE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION AND SHOULD BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH CURRENT SITE CONDITIONS, AND SHALL REPORT DISCREPANCIES TO THE ENGINEER PRIOR TO STARTING WORK.
3. CONTRACTOR WILL SECURE WORK SITE TO PROTECT THE PUBLIC HEALTH AND WELFARE.
4. ALL WORK WILL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF MIAMI ENGINEERING STANDARDS FOR DESIGN AND CONSTRUCTION.
5. CONTRACTOR TO REPAIR ALL DAMAGES INCURRED AS A RESULT OF CONSTRUCTION ACTIVITIES SUCH AS BUT NOT LIMITED TO SIDEWALK, PAVEMENT, LANDSCAPING, FENCING, ETC. NO ADDITIONAL COMPENSATION WILL BE GIVEN.
6. CONTRACTOR SHALL CONTROL/REMOVE DUST USING WATER OR OTHER EQUIPMENT CAPABLE OF CONTROLLING DUST. WATER, IF USED, SHALL BE OF SUCH FLOW RATE TO CONTROL DUST WITHOUT CAUSING SEDIMENTATION-CONTAMINATED RUNOFF.
7. THE CONTRACTOR SHALL NOTIFY THE CITY IN WRITING AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A PROPER STAGING AREA.
9. THE CONTRACTOR SHALL BE RESPONSIBLE TO SATISFY ALL REQUIREMENTS OF ANY REGULATORY AGENCY PERMITS IN REGARDS TO CONSTRUCTION ACTIVITIES AND RELATED CONDITIONS PRIOR TO THE START OF CONSTRUCTION.
10. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN AND VEHICULAR ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE CITY.
11. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT.
12. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS EXCAVATED MATERIAL AND DEBRIS TO AN APPROVED SITE IN A LEGAL MANNER AT NO ADDITIONAL COST TO THE PROJECT.
13. STOCKPILING OF MATERIAL IN ROADWAYS IS NOT ALLOWED.
14. THE CONTRACTOR SHALL VERIFY, PHOTOGRAPH AND INVENTORY THE EXACT LOCATION OF ALL EXISTING TREES, STRUCTURES, PAVEMENT OR OTHER FEATURES. ANY EXISTING STRUCTURE, PAVEMENT, TREE OR OTHER EXISTING FEATURE, WHICH IS IN CONFLICT OR DAMAGED, EXPOSED OR IN ANY WAY DISTURBED BY CONSTRUCTION PERFORMED UNDER THE CONTRACT, SHALL BE RESTORED PROMPTLY TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE PROJECT BEFORE AND AFTER.
15. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY OF ANY CONFLICT ARISING DURING CONSTRUCTION FOR ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS.
16. ALL CONSTRUCTION LAYOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
17. CONTRACTOR TO RESTORE ALL SODDED AREAS OF THE PROJECT WHICH ARE DISTURBED DUE TO CONSTRUCTION ACTIVITIES.
18. ALL PROPOSED WORK SHALL BE PERFORMED WITHIN THE LIMITS OF THE EXISTING LOCAL RIGHT-OF-WAY, AND ALL IMPROVEMENTS SHALL BE CONSTRUCTED AND INSTALLED WITHIN SAID LIMITS.
19. THE CONTRACTOR SHALL ASSIST THE CITY WITH THE HANDLING OF PUBLIC INFORMATION MATERIALS, INCLUDING CITIZEN NOTIFICATION LETTERS AND PROJECT CONSTRUCTION SIGNS, PRIOR TO THE START OF EACH SIGNIFICANT PHASE OF CONSTRUCTION. COST OF THIS WORK SHALL BE INCLUDED IN THE MOBILIZATION COSTS.
20. EXISTING DRAINAGE SYSTEM TO REMAIN SHALL BE PROTECTED FROM DAMAGE AND SEDIMENT AND MAINTAINED FUNCTIONAL DURING THE PROJECT.

TREE REQUIREMENTS:

1. ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS.

ENVIRONMENTAL NOTES:

1. DUE TO THE LIMITED SCOPE OF WORK, NO IMPACTS TO EXISTING HISTORICAL AND CULTURAL RESOURCES ARE EXPECTED AS A RESULT OF THE PROPOSED ACTION.
2. ANY MATERIAL TO BE STOCKPILED FOR PERIODS GREATER THAN 24 HOURS SHALL BE PROTECTED BY APPROPRIATE EROSION CONTROL DEVICES.
3. NO STAGING OR OTHER ACTIVITIES FOR THIS PROJECT SHALL OCCUR WITHIN THE DRIPLINE OF EXISTING TREES.
4. PREVENT DAMAGING TREES AND PLANTERS WITHIN OR IMMEDIATELY ADJACENT TO THE PROJECT'S RIGHT-OF-WAY.
5. A CERTIFIED ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE SHALL BE PRESENT ON SITE TO DIRECT ALL ROOT PRUNING AND/OR CANOPY TRIMMING ACTIVITIES. IF REQUIRED.
6. TREE PROTECTION SHALL BE PROPERLY INSTALLED AND MAINTAINED AROUND TREES TO REMAIN LOCATED ADJACENT TO CONSTRUCTION ACTIVITIES.
7. THE CONTRACTOR SHALL NOT REMOVE, RELOCATE OR PRUNE ANY TREES WITHOUT PRIOR APPROVAL FROM THE CITY. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM THE CITY OF MIAMI PRIOR TO ANY TREE REMOVAL/RELOCATION.
8. CONTRACTOR SHALL KEEP EXISTING INLETS CLEAN OF MILLING MATERIALS AND DEBRIS. INLETS LOCATED NEAR CONSTRUCTION ACTIVITIES SHALL BE PROTECTED BY APPROPRIATE EROSION AND SEDIMENT CONTROL DEVICES.

APPLICABLE CODES:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE CITY OF MIAMI, AND ALL OTHER APPLICABLE LOCAL, STATE AND NATIONAL CODES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT 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 AS AMENDED, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS AND FIRE CODE.

PRE-CONSTRUCTION RESPONSIBILITIES:

1. PRIOR TO THE COMMENCEMENT OF THE CONSTRUCTION AND THE RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE CITY CONSTRUCTION MANAGER AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE THE ENGINEER OF RECORD. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE AND BE PREPARED TO DISCUSS ANY CONCERNS OR COORDINATION EFFORTS AND REQUIREMENTS WITH THE PARTIES INVOLVED.
2. CONTRACTOR SHALL PREPARE AND SUBMIT TO THE CITY ENGINEER A STORM WATER POLLUTION PREVENTION PLAN ACCORDING TO THE LATEST CITY OF MIAMI DEPARTMENT OF PUBLIC WORKS BULLETIN NO. 25 AND CITY OF MIAMI ENGINEERING STANDARDS MISC. 35-89-6, THE FLORIDA STORMWATER, EROSION, AND SEDIMENTATION CONTROL INSPECTOR MANUAL AND THE FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITIONS.

PROJECT RECORD DOCUMENTS:

1. DURING THE DAILY PROGRESS OF THE JOB THE CONTRACTOR SHALL RECORD THE EXACT LOCATION, LENGTH, AND ELEVATION OF ALL PROPOSED IMPROVEMENTS ON HIS SET OF CONSTRUCTION DRAWINGS.
2. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER ONE COMPLETE SET OF ALL "AS BUILT" CONSTRUCTION CHANGES AND DIMENSIONS, LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND IN ACCORDANCE WITH THE "SURVEY WORK" SECTION OF THE "SPECIFICATIONS AND CONTRACT DOCUMENTS" FOR THIS PROJECT.
3. ALL "AS-BUILT" INFORMATION AND ELEVATIONS SHALL BE CERTIFIED BY A FLORIDA REGISTERED LAND SURVEYOR AND ALL FINAL MEASUREMENTS ARE TO BE IN THE FORM OF FIELD NOTES.
4. AS-BUILTS SHALL UTILIZE THE CITY OF MIAMI DATUM.
5. AS-BUILTS SHALL UTILIZE FLORIDA STATE PLANE EAST FOR HORIZONTAL CONTROL.

<p style="text-align: center;">REVISIONS</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 15%;">DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		DATE	DESCRIPTION			<p><b>R.J. Behar &amp; Company, Inc.</b>                  Engineers • Planners                  6861 S.W. 196 AVENUE, SUITE 302                  PEMBROKE PINES, FL 33332                  JUAN H. VAZQUEZ, P.E. LICENSE NO. 51143                  CERTIFICATE OF AUTHORIZATION NO. 00008365</p>	 <p style="text-align: center;">CITY OF MIAMI                  CAPITAL IMPROVEMENTS PROGRAM                  444 S.W. 2ND AVENUE, 8TH FLOOR                  MIAMI, FLORIDA 33130                  (305) 416-1213 FAX (305) 416-1253</p>	<p><b>CITY OF MIAMI</b>                  CAPITAL IMPROVEMENTS PROGRAM</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 50%;">PROJECT NAME</th> <th style="width: 50%;">PROJECT No.</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><b>MIAMI RIVERVIEW PS</b></td> <td style="text-align: center;"><b>17096</b></td> </tr> </tbody> </table>		PROJECT NAME	PROJECT No.	<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>	<p><b>GENERAL NOTES</b></p>	<p>SHEET NO.</p>
DATE	DESCRIPTION														
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<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>														
		<p><b>C-1</b></p>													

**SURVEY NOTES:**

1. ALL AVAILABLE ELEVATIONS REFER TO THE CITY OF MIAMI DATUM AND ARE EXPRESSED IN FEET.
2. ALL PUBLIC LAND CORNERS AND MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED BY CONTRACTOR AS FOLLOWS: CORNERS AND MONUMENTS IN CONFLICT WITH THE WORK AND IN DANGER OF BEING DAMAGED, DESTROYED OR COVERED SHALL BE PROPERLY REFERENCED BY A REGISTERED-LAND SURVEYOR IN ACCORDANCE WITH THE MINIMUM TECHNICAL STANDARDS OF THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYOR PRIOR TO BEGINNING WORK AT THAT SITE. THE CONTRACTOR SHALL RETAIN THE LAND SURVEYOR TO REFERENCE, AND RESTORE UPON COMPLETION OF THE WORK, ALL SUCH CORNERS AND MONUMENTS AND SHALL FURNISH TO THE CITY ENGINEER A SIGNED AND SEALED COPY OF THE LAND SURVEYOR'S REFERENCE DRAWING. INCLUDE ALL COST OF REFERENCING, RESTORING AND PRESERVING IN THE MOBILIZATION COSTS.
3. ALL N.G.V.D. BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS EXCEPT THAT THE LAND SURVEYORS SHALL NOT BE REQUIRED TO RESTORE THE N.G.V.D. BENCH MARK UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL PROMPTLY TRANSMIT ALL DISPLACED OR DAMAGED N.G.V.D. DISCS TO THE CITY ENGINEER, WHO SHALL NOTIFY THE GEODETIC INFORMATION CENTER. INCLUDE ALL COST OF REFERENCING AND PROTECTING IN THE BID PRICE FOR ITEM 101-1 MOBILIZATION.

**UTILITIES:**

1. AT LEAST TWO FULL BUSINESS DAYS PRIOR TO DIGGING, THE CONTRACTOR SHALL CALL "SUNSHINE STATE ONE" AT 811 TO REQUEST UTILITY LOCATIONS BEFORE BEGINNING ANY CONSTRUCTION ACTIVITIES.
2. EXISTING UTILITIES, INCLUDING STORM SEWERS, SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER. ALL EXISTING UTILITIES ARE TO REMAIN UNLESS OTHERWISE NOTED.
3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERTICALLY AND HORIZONTALLY PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT. ANY DAMAGE TO SUCH UTILITIES SHOWN OR NOT SHOWN ON THE PLANS SHALL BE IMMEDIATELY REPORTED TO THE UTILITY OWNER. THE OWNER RESERVES THE RIGHT TO REMEDY SUCH DAMAGE BY ORDERING OUTSIDE PARTIES TO MAKE SUCH REPAIRS AT THE EXPENSE TO THE CONTRACTOR.
4. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL UTILITY MARKINGS ONCE THE WORK IS COMPLETED. CONTRACTOR SHALL USE SPECIAL CARE WHEN REMOVING THE UTILITY MARKINGS. THE REMOVAL METHOD NEEDS TO BE SUCH THAT IT DOES NOT DAMAGE THE SURFACES OF THE EXISTING WORK ALREADY IN PLACE.

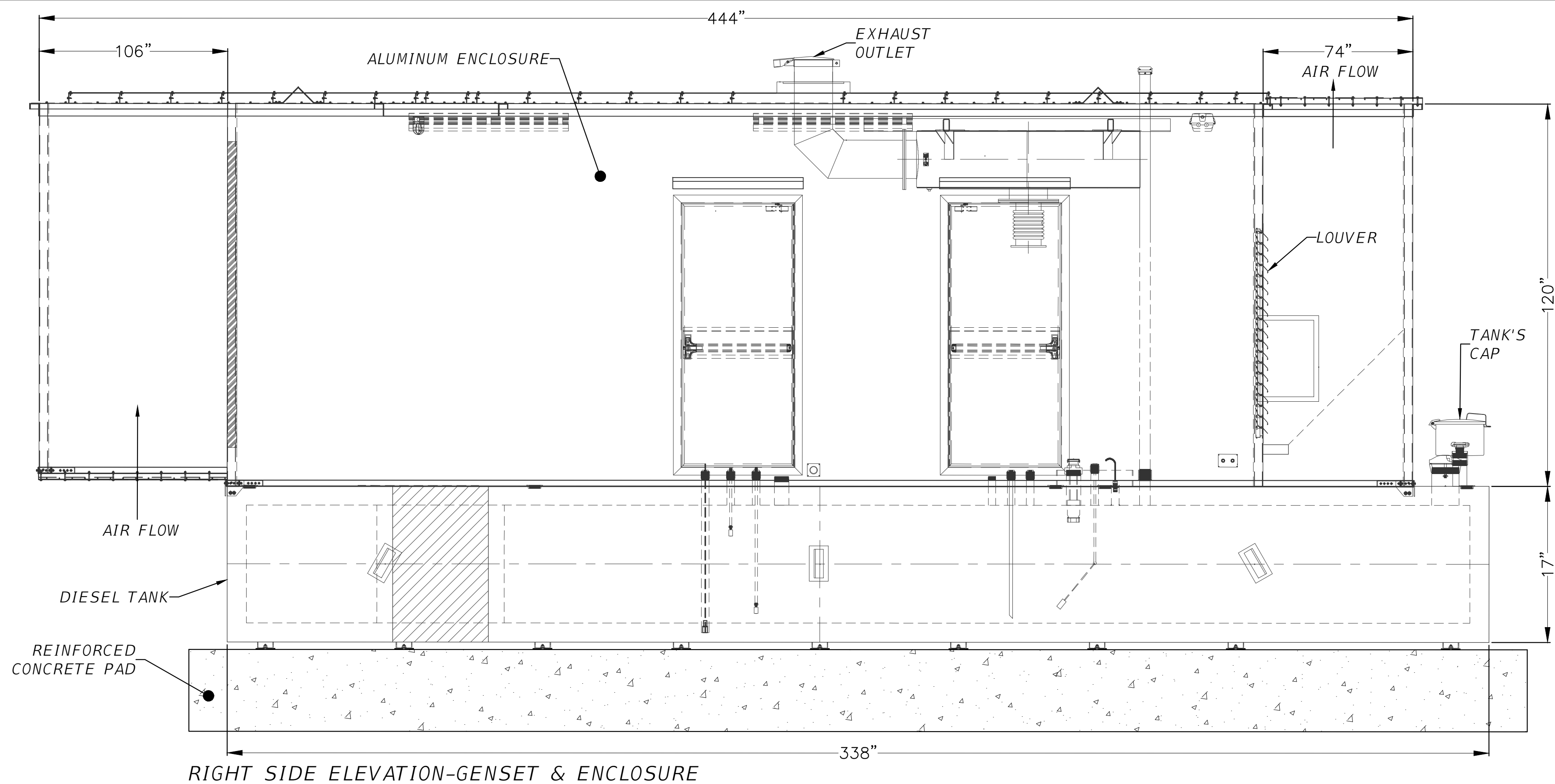
**UTILITY OWNERS:**

COMCAST CABLE	954-447-8405
DADE COUNTY PUBLIC WORKS AND TRAFFIC	305-412-0891 Ext: 201
FLORIDA POWER & LIGHT	386-586-6403
CROWN CASTLE FIBER	786-610-7073
FLORIDA POWER & LIGHT	305-228-5290
MIAMI DADE WATER SEWER	786-268-5273
TECO PEOPLES GAS-SOUTH FLORIDA	954-453-0824
AT&T DISTRIBUTION	561-997-0240

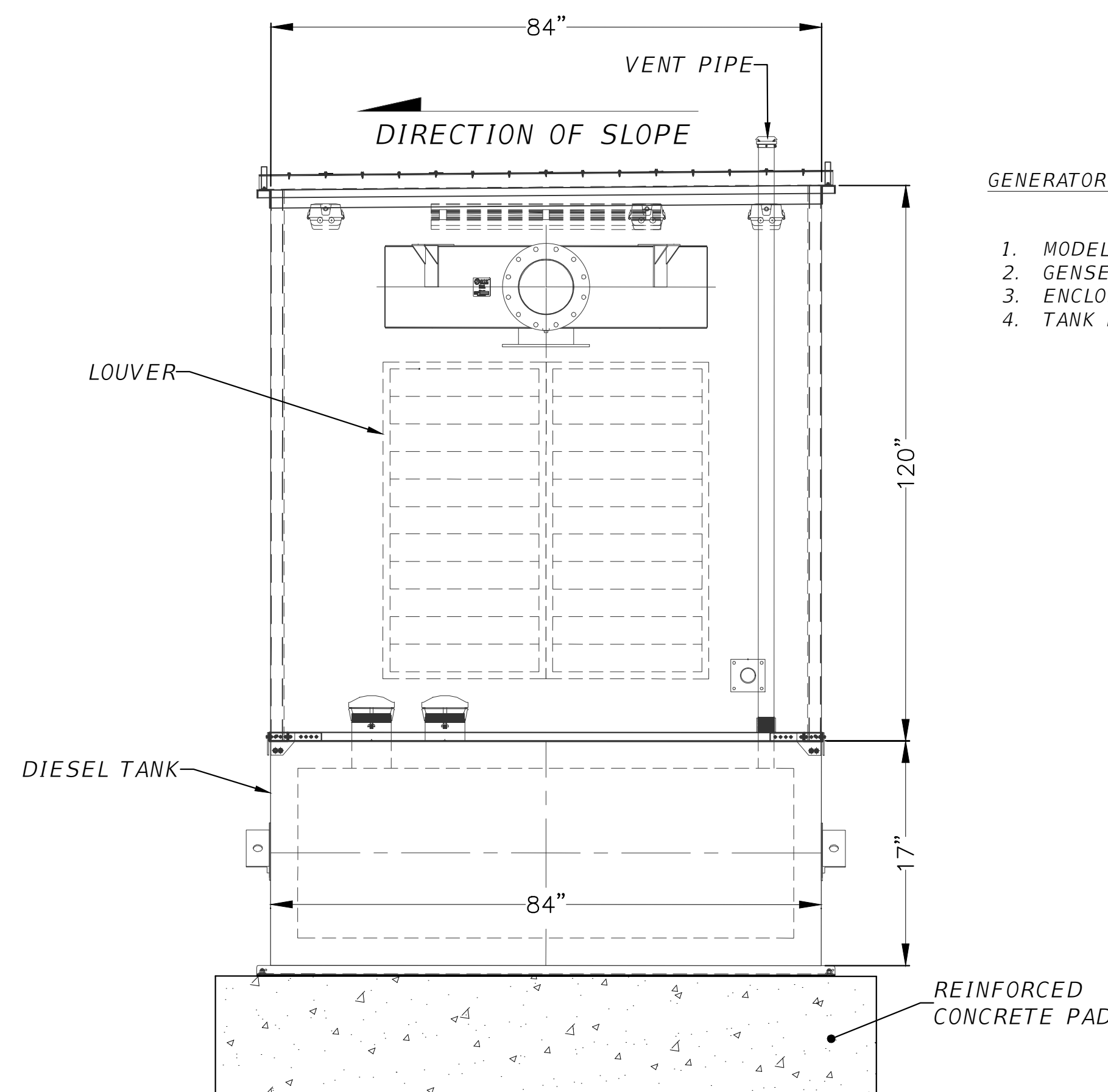
CONTRACTOR SHALL COORDINATE WITH FP&L THE WORK AT THE POWER UTILITY TRANSFORMER AND ADHERE TO FP&L REQUIREMENTS  
 CONTACT: CHRISTIAN PALOMO  
 ASSOCIATE ENGINEER  
 305-377-6064  
 122 SW 3rd ST  
 MIAMI, FL 33130

**GENERATOR NOTES:**

1. REFER TO SHEET E-1 FOR DESIGN PARAMETERS.
2. THE DIMENSIONS SHOWN ARE BASED ON CATERPILLAR MANUFACTURER. THESE COULD VARY BASED ON THE FINAL DESIGN, MANUFACTURER PROVIDED BY CONTRACTOR AND APPROVED BY THE CITY.



RIGHT SIDE ELEVATION-GENSET & ENCLOSURE



RADIATOR ELEVATION-GENSET & ENCLOSURE

**GENERATOR NOTES:**

1. MODEL C27 800KW
2. GENSET WEIGHT 14,600 LBS
3. ENCLOSURE WEIGHT 10,758 LBS
4. TANK DRY WEIGHT 10,990 LBS



SUNSHINE DESIGN TICKET NO. 086804437

DATE	REVISIONS DESCRIPTION

**R.J. Behar & Company, Inc.**  
 Engineers • Planners  
 6861 S.W. 196 AVENUE, SUITE 302  
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 JUAN H. VAZQUEZ, P.E. LICENSE NO. 51143  
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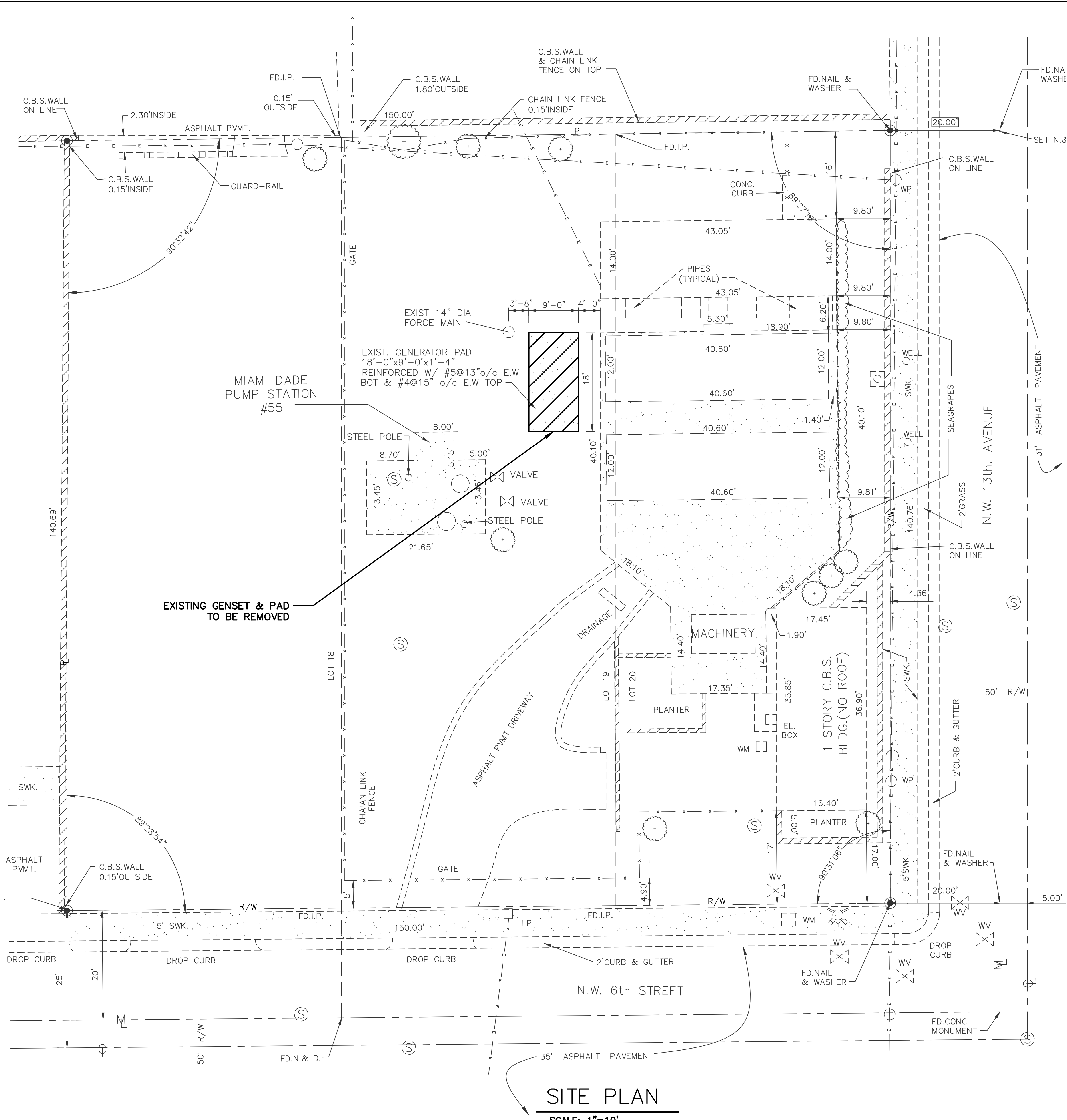


**CITY OF MIAMI**  
 CAPITAL IMPROVEMENTS PROGRAM  
 444 S.W. 2ND AVENUE, 8TH FLOOR  
 MIAMI, FLORIDA 33130  
 (305) 416-1213 FAX (305) 416-1253

CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRAM	
PROJECT NAME	PROJECT No.
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**GENERAL NOTES &  
 GENERATOR ELEVATIONS**

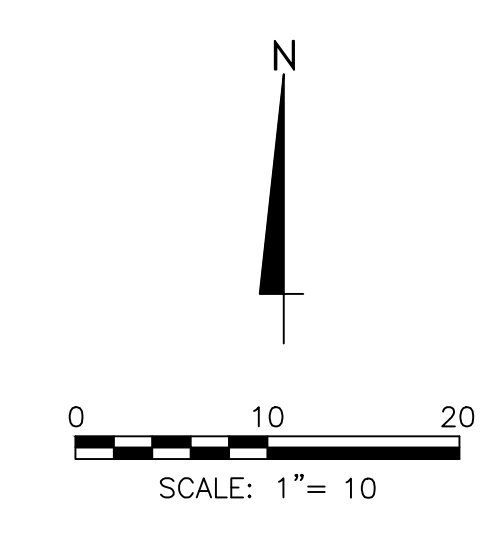
SHEET NO.  
**C-2**



**LEGEND**

WM	WATER METER	PL	PROPERTY LINE
WV	WATER VALVE	ML	MONUMENT LINE
SS	STORM SEWER	CL	CENTER LINE
WP	WOOD POLE	R/W	RIGHT OF WAY
[ ]	EXISTING STRUCTURE	-x-x-x-x-	FENCE
( )	EXISTING TREE	-E-E-E-	ELECTRIC LINE

[Hatched Box] GENERATOR PAD TO BE REMOVED



- GENERAL NOTES:**
1. CONTRACTOR SHALL PERFORM ALL WORK WITHIN THE LIMITS OF THE LEGAL PROPERTY AND EASEMENTS, AND SHALL NOT DISTURB ADJACENT PROPERTIES.
  2. A FIELD SURVEY OF THE PUMP STATION WAS NOT PERFORMED AS PART OF THIS PROJECT AT THE CITY'S DIRECTIVE. ALL BUILDING ELEVATIONS AND DIMENSIONS INCLUDING, BUT NOT LIMITED TO, INTERIOR WALL DIMENSIONS, WET WELL DIMENSIONS, FLOOR OPENING DIMENSIONS, INTERIOR FLOOR SLAB ELEVATIONS, ETC. ARE AS PROVIDED BY THE CITY THROUGH EXISTING PLANS FROM PREVIOUS PROJECTS FOR THIS PUMP STATION. NO BUILDING, STRUCTURAL, OR PIPING/MECHANICAL EVALUATIONS WERE MADE OF THE WET WELL OR THE EQUIPMENT HOUSING STRUCTURE AT THE CITY'S DIRECTIVE; THEREFORE, THE CONTRACTOR MUST EXAMINE, BECOME FAMILIAR WITH, AND VERIFY THE AFOREMENTIONED COMPONENT'S INTEGRITY BEFORE COMMENCING WORK. CONTRACTOR IS TO FIELD VERIFY ALL NECESSARY DIMENSIONS TO GUARANTEE THAT ALL MANUFACTURER CLEARANCES AND MINIMUM/MAXIMUM DIMENSIONS ARE MET SO THAT A COMPLETE PROPER AND FULLY FUNCTIONAL INSTALLATION IS ACCOMPLISHED.
  3. NEW PICKET FENCE HAS BEEN INSTALLED AROUND THE SITE. CONTRACTOR SHALL MAKE SURE THE NEW FENCE IS NOT DAMAGED BY HIS OPERATIONS. ANY DAMAGE SHALL BE REPAIRED AT NO COST TO THE CITY.

**SITE PLAN**  
SCALE: 1"=10'

DATE	REVISIONS DESCRIPTION

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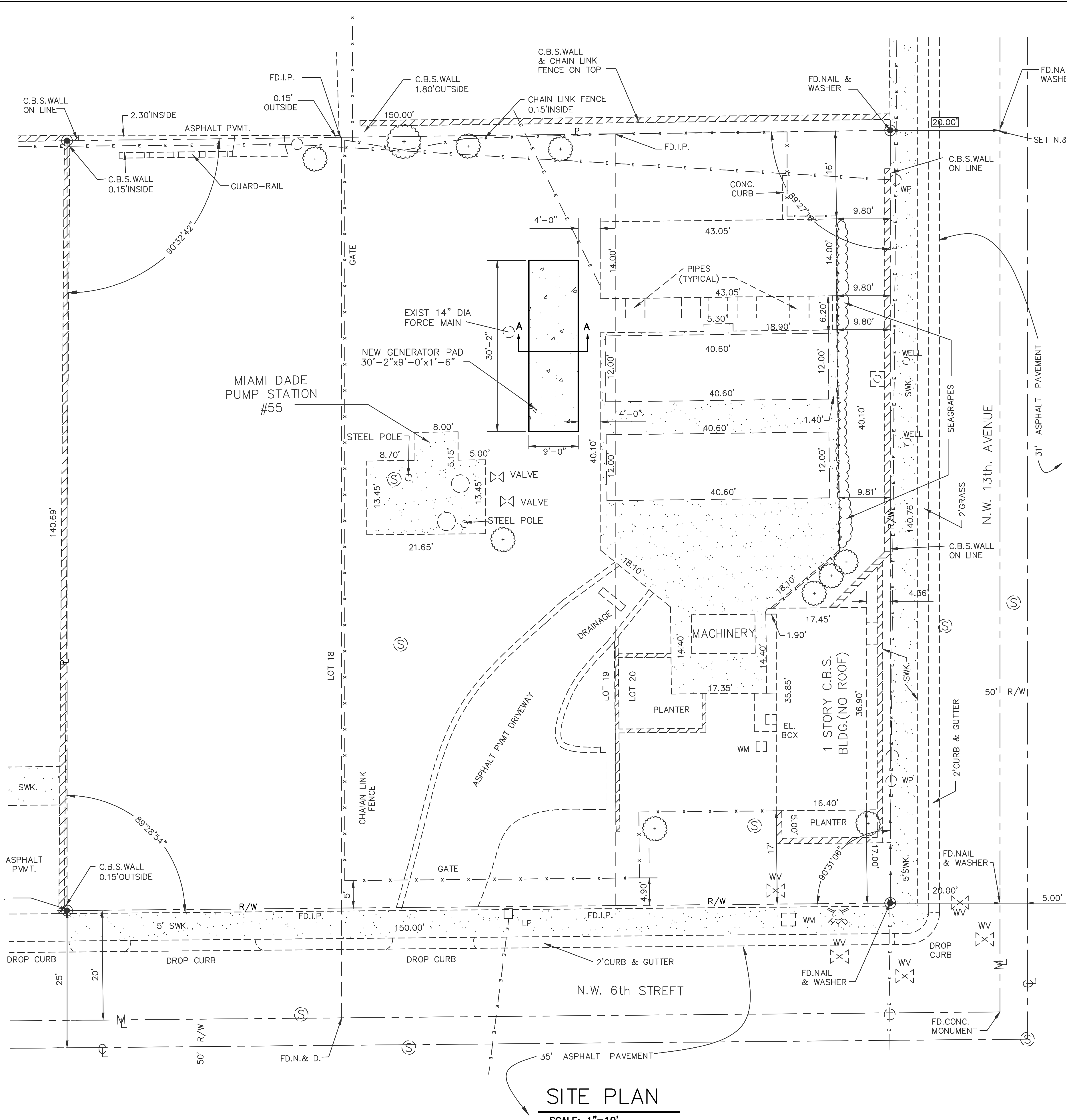


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CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRAM	
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<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>

**DEMOLITION SITE PLAN**

SHEET NO.  
**C-3**

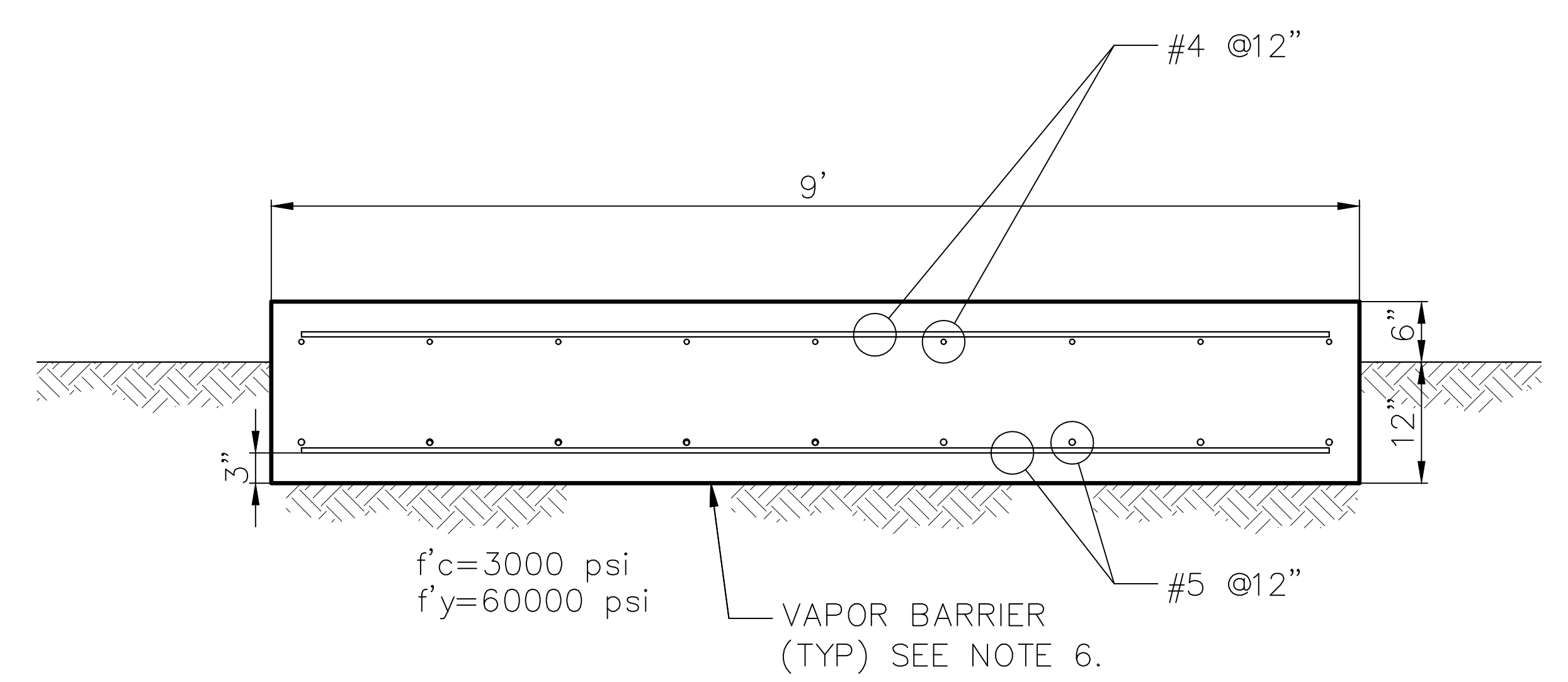


**LEGEND**

WM	WATER METER	PL	PROPERTY LINE
WV	WATER VALVE	ML	MONUMENT LINE
SS	STORM SEWER	CL	CENTER LINE
WP	WOOD POLE	R/W	RIGHT OF WAY
[ ]	EXISTING STRUCTURE	-x-x-x-	FENCE
(o)	EXISTING TREE	-E-E-E-	ELECTRIC LINE


SCALE: 1"=10'

- GENERAL NOTES:**
- CONTRACTOR SHALL PERFORM ALL WORK WITHIN THE LIMITS OF THE LEGAL PROPERTY AND EASEMENTS, AND SHALL NOT DISTURB ADJACENT PROPERTIES.
  - A FIELD SURVEY OF THE PUMP STATION WAS NOT PERFORMED AS PART OF THIS PROJECT AT THE CITY'S DIRECTIVE. ALL BUILDING ELEVATIONS AND DIMENSIONS INCLUDING, BUT NOT LIMITED TO, INTERIOR WALL DIMENSIONS, WET WELL DIMENSIONS, FLOOR OPENING DIMENSIONS, INTERIOR FLOOR SLAB ELEVATIONS, ETC. ARE AS PROVIDED BY THE CITY THROUGH EXISTING PLANS FROM PREVIOUS PROJECTS FOR THIS PUMP STATION. NO BUILDING, STRUCTURAL, OR PIPING/MECHANICAL EVALUATIONS WERE MADE OF THE WET WELL OR THE EQUIPMENT HOUSING STRUCTURE AT THE CITY'S DIRECTIVE; THEREFORE, THE CONTRACTOR MUST EXAMINE, BECOME FAMILIAR WITH, AND VERIFY THE AFOREMENTIONED COMPONENT'S INTEGRITY BEFORE COMMENCING WORK. CONTRACTOR IS TO FIELD VERIFY ALL NECESSARY DIMENSIONS TO GUARANTEE THAT ALL MANUFACTURER CLEARANCES AND MINIMUM/MAXIMUM DIMENSIONS ARE MET SO THAT A COMPLETE PROPER AND FULLY FUNCTIONAL INSTALLATION IS ACCOMPLISHED.
  - CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING CONSTRUCTION.
  - CONTRACTOR SHALL CONTACT THE CITY STAFF AT LEAST 48 HOURS PRIOR TO PERFORMING ANY WORK TO COORDINATE THE EXACT SEQUENCE OF INSTALLATION.
  - THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ONSITE FACILITIES AT ALL TIMES.
  - PROVIDE 10-MIL POLYETHYLENE VAPOR BARRIER WITH MINIMUM 6" WIDE Z-LOCK TYPE LAPPING. "VISQUEEN" OR APPROVED EQUAL.
  - EXHAUST OUTLET MUST BE LOCATED MINIMUM 3' FROM EXTERIOR WALLS AND ROOFS; 10' FROM OPERABLE OPENING (WINDOW, DOORS, VENTS).
  - SITE IS LOCATED WITHIN ZONE X OF FEMA FLOOD MAP (ZONE X ARE AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1.0% ANNUAL FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE)



**SECTION A-A**  
SCALE: 1"=1'

**SITE PLAN**  
SCALE: 1"=10'

REVISIONS		R.J. Behar & Company, Inc. Engineers • Planners 6861 S.W. 196 AVENUE, SUITE 302 PEMBROKE PINES, FL 33332 JUAN H. VAZQUEZ, P.E. LICENSE NO. 51143 CERTIFICATE OF AUTHORIZATION NO. 00008365	 <b>CITY OF MIAMI</b> CAPITAL IMPROVEMENTS PROGRAM 444 S.W. 2ND AVENUE, 8TH FLOOR MIAMI, FLORIDA 33130 (305) 416-1213 FAX (305) 416-1253	CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRAM		SHEET NO. <b>C-4</b>
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			<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>	<b>SITE PLAN</b>	

**NOTES:**

- IT IS THE OBLIGATION OF THE BIDDER OR THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION AND SATISFY HIMSELF FULLY OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS BID. FAILURE TO DO SO WILL NOT RELIEVE HIM OF HIS OBLIGATION TO COMPLETE THE WORK FULLY AND ACCEPTABLE TO THE ENGINEER AND THE OWNER FOR THE CONSIDERATION SET FORTH IN HIS BID.
- THE WORK CONSISTS OF ALL SUPERVISION, PERMITS, FEES, INSPECTIONS, TESTS, LABOR, MATERIALS, EQUIPMENT AND INSTALLATION REQUIRED FOR THE COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS OR CALLED FOR IN THESE REQUIREMENTS.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL CONTACT SUNSHINE AT 1 (800) 432-4770 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY DIGGING TO VERIFY THE EXACT LOCATION OF EXISTING UTILITIES.
- CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM PRINTS FOR CONSTRUCTION PURPOSES
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ONSITE FACILITIES AT ALL TIMES.
- CONTRACTOR SHALL FOLLOW THE CURRENT OSHA RULES WHEN WORKING CLOSE TO OVERHEAD ELECTRICAL LINES.
- WHEN DRAWINGS, NOTES AND THESE REQUIREMENTS ARE IN CONFLICT, THE MOST STRINGENT CONDITION SHALL APPLY UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS MANNER AND SHALL BE COMPLETED AND FULLY OPERATIVE TO THE ACCEPTANCE OF THE OWNER, GENERAL CONTRACTOR AND ENGINEER.
- A FIELD SURVEY OF THE PUMP STATION WAS NOT PERFORMED AS A PART OF THIS PROJECT AT THE CITY'S DIRECTIVE. ALL BUILDING ELEVATIONS AND DIMENSIONS INCLUDING, BUT NOT LIMITED TO, INTERIOR WALL DIMENSIONS, WET WELL DIMENSIONS, FLOOR OPENING DIMENSIONS, INTERIOR FLOOR SLAB ELEVATIONS, ETC. ARE AS PROVIDED BY THE CITY THROUGH EXISTING PLANS FROM PREVIOUS PROJECTS FOR THIS PUMP STATION. NO BUILDING, STRUCTURAL, OR MECHANICAL EVALUATIONS WERE MADE AT THE CITY'S DIRECTIVE; THEREFORE, THE CONTRACTOR MUST EXAMINE, BECOME FAMILIAR WITH, AND VERIFY THE AFOREMENTIONED COMPONENT'S INTEGRITY BEFORE COMMENCING WORK. CONTRACTOR IS TO FIELD VERIFY ALL NECESSARY DIMENSION TO GUARANTEE THAT ALL MANUFACTURER CLEARANCES AND MINIMUM/MAXIMUM DIMENSIONS ARE MET SO THAT A PROPER INSTALLATION IS ACCOMPLISHED.

**CODES AND STANDARDS:**

- PERFORM WORK AND FURNISH EQUIPMENT COMPLYING WITH THE CURRENT EDITION OF THE FOLLOWING CODES:
- NATIONAL ELECTRICAL CODE (NEC 2014)
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
- FLORIDA BUILDING CODE (FBC)

**MATERIALS:**

- ALL MATERIALS SHALL BEAR THE LABEL OF UNDERWRITER'S LABORATORY FOR THE INTENDED USE.
- ENCLOSURES SHALL BE NEMA 3R.
- CONDUITS FOR EXTERIOR USE SHALL BE GALVANIZED, THREADED RIGID STEEL. USE THREADED GALVANIZED STEEL FITTINGS.
- CONDUITS FOR UNDERGROUND USE SHALL BE RIGID, SCHEDULE 40, 90 DEGREES C., UL RATED.
- CONDUCTORS SHALL BE COOPER, STRANDED, TYPE THWN-2 COLOR CODED.

**OPERATION AND MAINTENANCE MANUALS:**

- OPERATING AND MAINTENANCE MANUALS MUST CONTAIN BUT NOT LIMITED TO THE FOLLOWING:
- SYSTEM DESCRIPTION, AND OPERATING AND MAINTENANCE INSTRUCTIONS.
- MANUFACTURER'S NAME AND MODEL NUMBER OF ALL COMPONENTS.
- CONTROL AND WIRING DIAGRAMS WITH SEQUENCE OF OPERATION.
- LIST OF RECOMMENDED SPARE PARTS.

**SHOP DRAWINGS:**

- WITHIN 30 DAYS AFTER THE DATE OF THE AWARD OF THE CONTRACT, AND BEFORE ANY MATERIAL OR EQUIPMENT IS PURCHASED, SUBMIT TO THE ENGINEER FOR APPROVAL, A COMPLETE LIST IN QUINTUPPLICATE OF ELECTRICAL MATERIALS, AND EQUIPMENT TO BE INCORPORATED IN THE WORK. INCLUDE CATALOG NUMBER, DIMENSIONS, INTERCONNECTION DIAGRAMS AND INSTALLATION INSTRUCTIONS.

**GROUNDING:**

- INSTALL GROUNDING IN COMPLIANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.
- INACCESSIBLE CONNECTIONS SHALL BE MADE WITH THE EXOTHERMIC WELDING PROCESS
- FURNISH AND INSTALL GROUND RODS OF COPPER CLAD STEEL, 3/4 INCH IN DIAMETER, 10 FEET LONG, DRIVEN FULL LENGTH INTO THE EARTH.

**INSTALLATION:**

- INSTALL EQUIPMENT AT THE LOCATIONS SHOWN ON THE DRAWINGS FOLLOWING THE MANUFACTURER'S RECOMMENDATIONS.
- IDENTIFY FEEDERS, BRANCH CIRCUITS AND INSTRUMENTATION AND CONTROL WIRES AT TERMINATIONS, JUNCTION AND PULL BOXES.
- PROVIDE IDENTIFICATION LABELS FOR PANELS AND DISCONNECTS, AND FOR CIRCUITS ON PANELS.

**TESTING:**

UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PERFORM THE FOLLOWING TESTS:

- INSULATION RESISTANCE TESTS ON EACH FEEDER WITH A 500 VOLT DC MEGGER. DEFECTS FOUND SHALL BE CORRECTED. FEEDERS SHALL BE DISCONNECTED FROM EQUIPMENT AND PANELS BEFORE THE INSULATION TEST TO AVOID DAMAGE TO ELECTRONIC DEVICES.
- ENERGIZE, START-UP AND TEST OPERATE ALL THE SYSTEMS AND EQUIPMENT IN THE PRESENCE OF THE ENGINEER.

**AS BUILT DRAWINGS:**

- AFTER FINAL INSPECTION, FURNISH A SET OF REPRODUCIBLE "AS BUILT DRAWINGS" SHOWING DEPTHS AND ROUTING OF CONCEALED ELECTRICAL BELOW GRADE INSTALLATIONS AND ALL VARIATIONS BETWEEN THE ACTUAL LOCATION AND THAT SHOWN ON THE CONTRACT DRAWINGS.

**NOTES:**

- ONE OF THE EXISTING PUMPS SHALL BE READY TO START FROM THE UTILITY AND/OR THE GENERATOR DURING THE CONSTRUCTION WORK.
- ONLY ONE OF THE TWO 500HP PUMPS CONNECTED TO THE TRANSFER SWITCHES SHALL BE ALLOW TO START FROM THE EMERGENCY GENERATOR AT ONE TIME (SOFT-START ONLY). CONTRACTOR SHALL PROVIDE THE REQUIRED ELECTRICAL INTERLOCKS AMONG THE TRANSFER SWITCHES, CP-1, SOFT-START, AND THE GENERATOR SET FOR EACH PUMP AS PER MANUFACTURER RECOMMENDATIONS. THE PUMP SHALL BE COMPLETELY AT REST BEFORE THE CONTROL SYSTEM ALLOWS THE PUMP TO START UNDER THE EMERGENCY MODE.
- ATS-3. PROVIDE A 3P, 1600A, 480V, 85KAIC, NEMA 3R ASCO AUTOMATIC TRANSFER SWITCH IN NEMA 3R ENCLOSURE, WITH A MINIMUM OF TWO AUXILIARY N.C. CONTACTS THAT SHALL BE CLOSED WHEN THE TRANSFER SWITCH IS CONNECTED TO THE UTILITY.
- ALL CABLES/WIRES SHALL BE TYPE THHN-2 UNLESS OTHERWISE REQUIRED.
- CONTRACTOR TO COORDINATE CABLE/WIRE WITH EQUIPMENT LUGS CONNECTIONS. PROVIDE LUG KIT AS REQUIRED.
- ALL EQUIPMENT SHALL BE UL (UNDERWRITER LABORATORY) APPROVED FOR EMERGENCY SYSTEMS.
- ALL CONDUITS SHALL BE PAINTED TO MATCH EXISTING CONDUITS.
- CONDUITS AND EQUIPMENTS SHALL BE LABELED AND IDENTIFIED AS EMERGENCY SYSTEM AS PER NEC.
- ALL CONDUITS/EQUIPMENT OPENINGS SHALL BE CAP.
- ALL GROUND BONDING SHALL BE PROVIDED AS PER NEC.


**BASIS OF DESIGN PARAMETERS**

GENERATOR PARAMETERS	
Manufacturer	Caterpillar
Make/Model	C27
Feature Code	C27DRA1
Engine Performance Number	DM7696
Alternator Arrangement Number	4923854
Alternator Temperature Rise Degs.	80 C
Alternator Insulation Type	H
Voltage	480 V
Phase	3
Wires	4
Maximum Ambient Temperature	105 F
Altitude	500 FT
Humidity	95%
% of Intermittent Motors	100%
Generator Duty	Standby
Fuel	Diesel
Permitted Frequency Dip %	15%
Permitted Voltage Dip %	20%
Fuel Tank	Yes
Min. Fuel tank Capacity	24Hrs
HVHZ Enclosure	Yes
Enclosure Max. dBA at Neighbor Property line	70 dBA

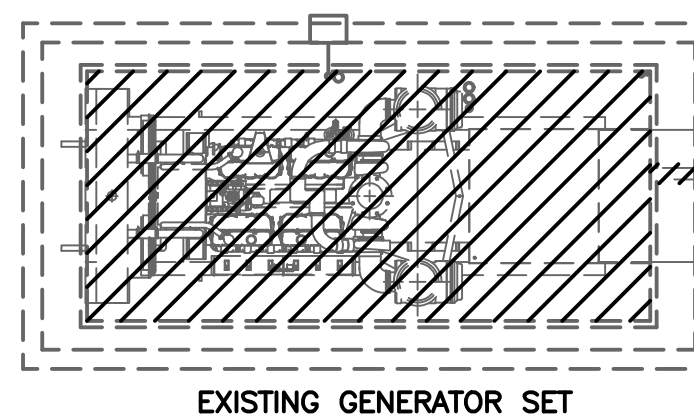
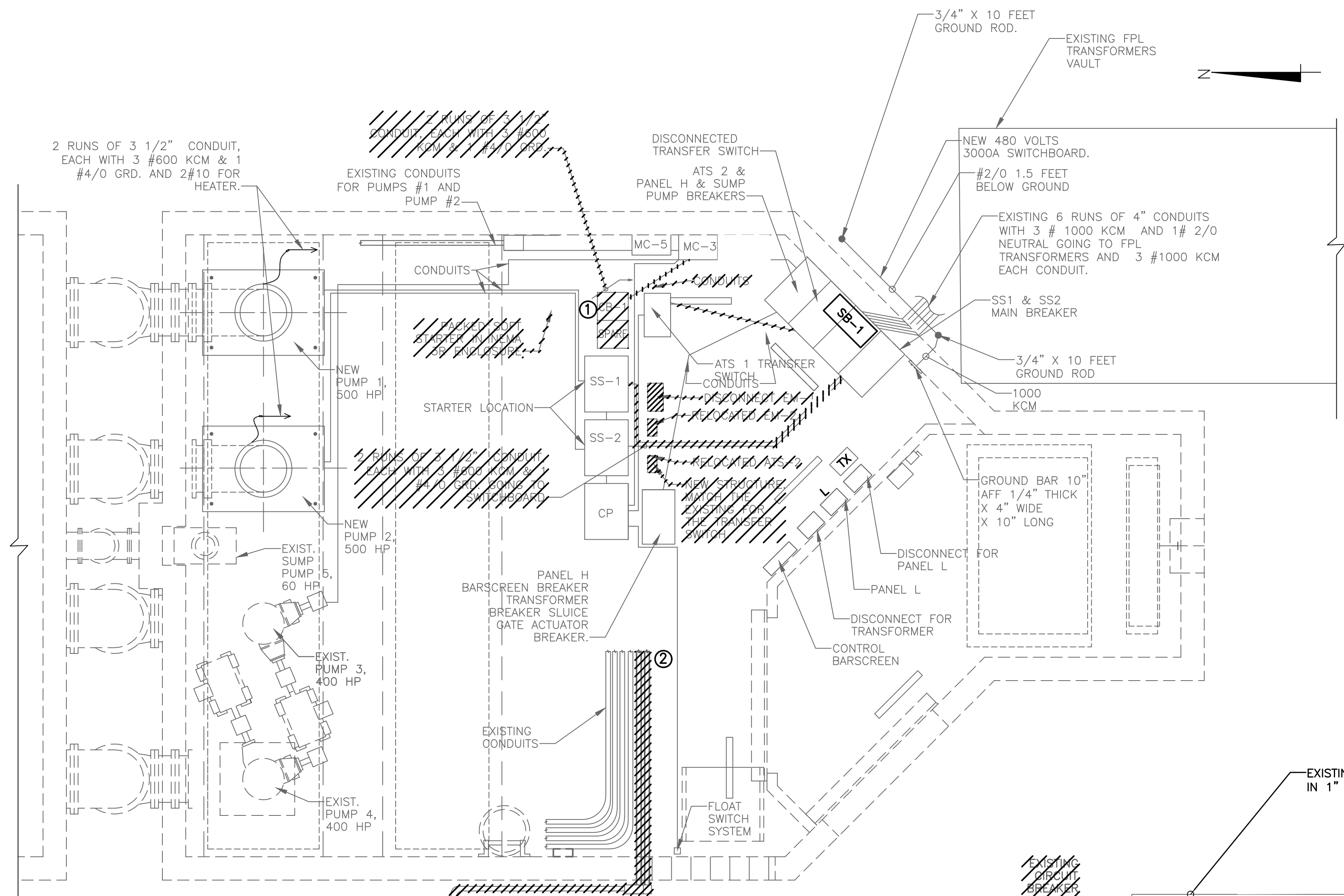
SOFT-START STARTING PARAMETERS	
Voltage Dip Permitted % of Nominal	50-100%
Frequency Dip Permitted % of Nominal	+/- 20%
Soft-Start	Yes

ATS STARTING PARAMETERS	
Voltage Dip Allow %	25%
Frequency Dip Allow %	15%

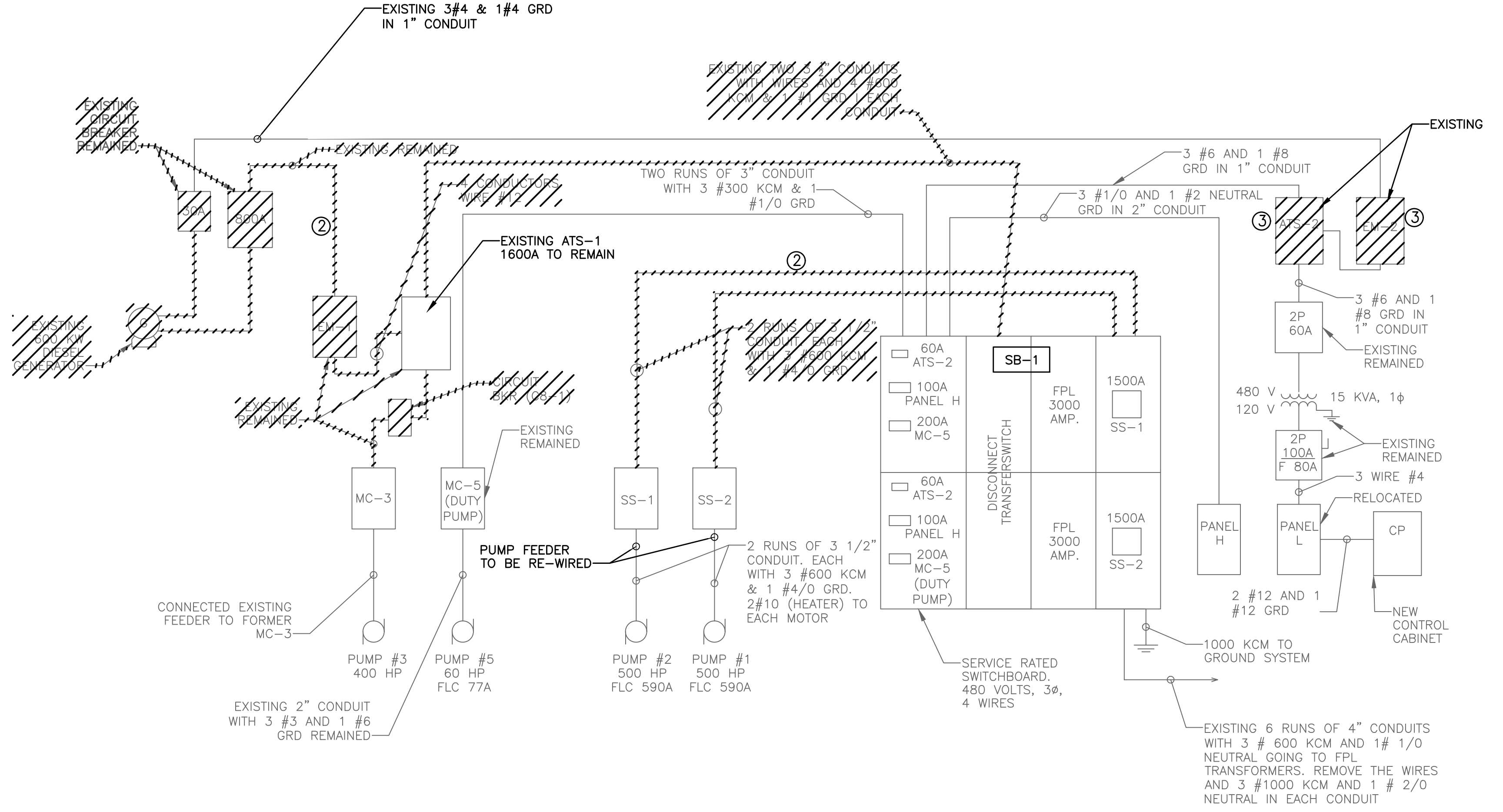
MOTOR PARAMETERS	
US Motors Model	Titan II
Voltage	460 V
Full Load Amps	611 A
HP	500 HP
Code	G
Running Efficiency	93.0%
Guaranteed Efficiency	91.7%
Running PF	0.824
RPM	588
Type	RU
Enclosure	WP1
Frame	5813P
Soft-Started	Yes
Soft-Start Current Limit %	300
Intermittent Starting	Yes

	<b>REVISIONS</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:10%;">DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> </tr> </table>	DATE	DESCRIPTION			<b>R.J. Behar &amp; Company, Inc.</b> Engineers • Planners 6861 S.W. 196 AVENUE, SUITE 302 PEMBROKE PINES, FL 33332 REINALDO OROZCO, P.E. LICENSE NO. 42258 CERTIFICATE OF AUTHORIZATION NO. 00008365		<b>CITY OF MIAMI</b> CAPITAL IMPROVEMENTS PROGRAM 444 S.W. 2ND AVENUE, 8TH FLOOR MIAMI, FLORIDA 33130 (305) 416-1213 FAX (305) 416-1253	<b>CITY OF MIAMI</b> <b>CAPITAL IMPROVEMENTS PROGRAM</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">PROJECT NAME</th> <th style="width:50%;">PROJECT No.</th> </tr> <tr> <td style="text-align: center;"><b>MIAMI RIVERVIEW PS</b></td> <td style="text-align: center;"><b>17096</b></td> </tr> </table>	PROJECT NAME	PROJECT No.	<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>	<b>ELECTRICAL GENERAL NOTES</b> <b>AND DESIGN PARAMETERS</b>	SHEET NO. <b>E-1</b>
DATE	DESCRIPTION														
PROJECT NAME	PROJECT No.														
<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>														

- NOTES:
- ① RELOCATE 3P, 480V, 100KAIC BREAKER TO SWITCHBOARD. SECTION 1 AS SHOWN ON PROPOSED ONE-LINE DIAGRAM.
  - ② EXISTING CONDUITS COULD BE REUSED IF THEY ARE IN EXCELLENT CONDITIONS. NO WIRE SHALL BE REUSED.
  - ③ ATS-2 AND EM-2 TO BE RELOCATED. RELOCATE AND/OR EXTEND EXISTING CONNECTIONS AS REQUIRED.



DEMOLITION PLAN  
SCALE: 1"= 5'



RISER  
N.T.S.

DATE	REVISIONS DESCRIPTION

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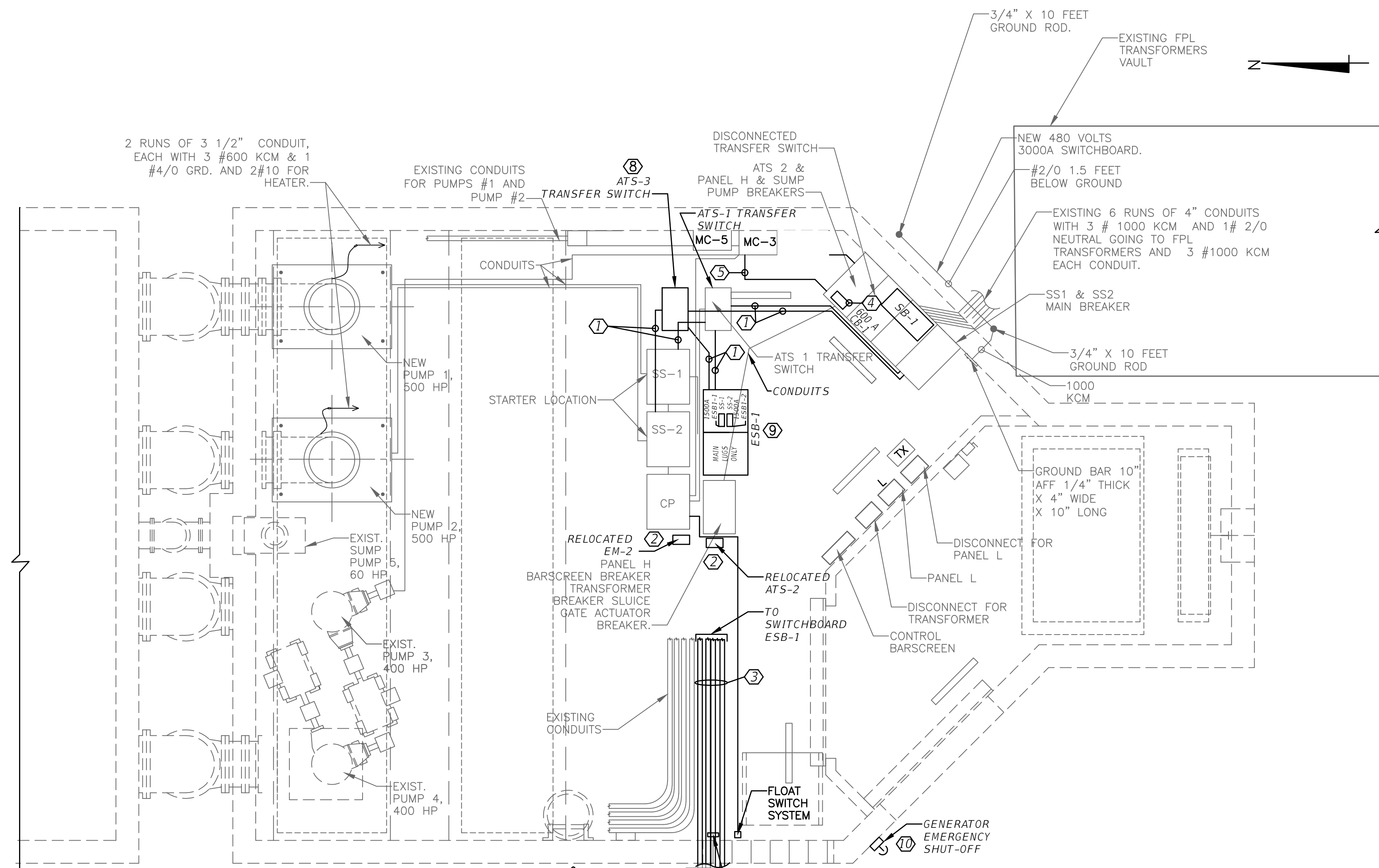


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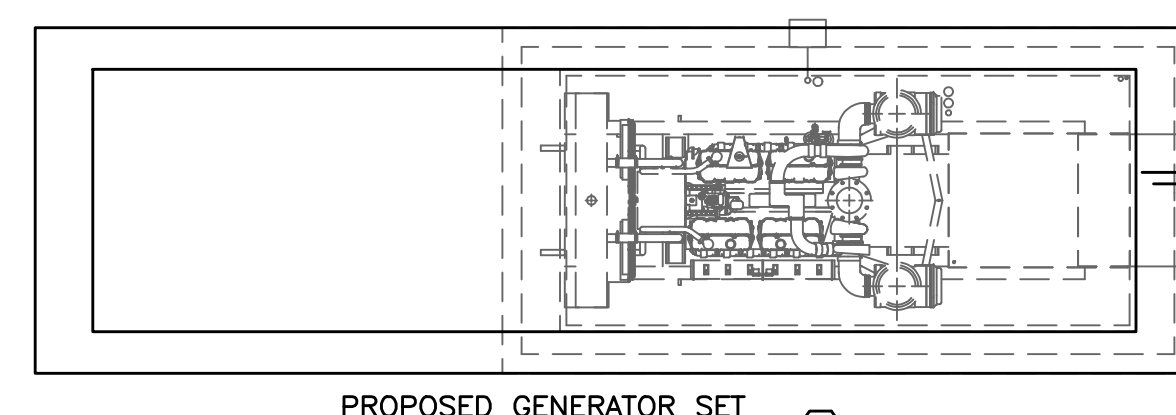
CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRAM	
PROJECT NAME	PROJECT No.
<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>

**ELECTRICAL DEMOLITION PLAN**

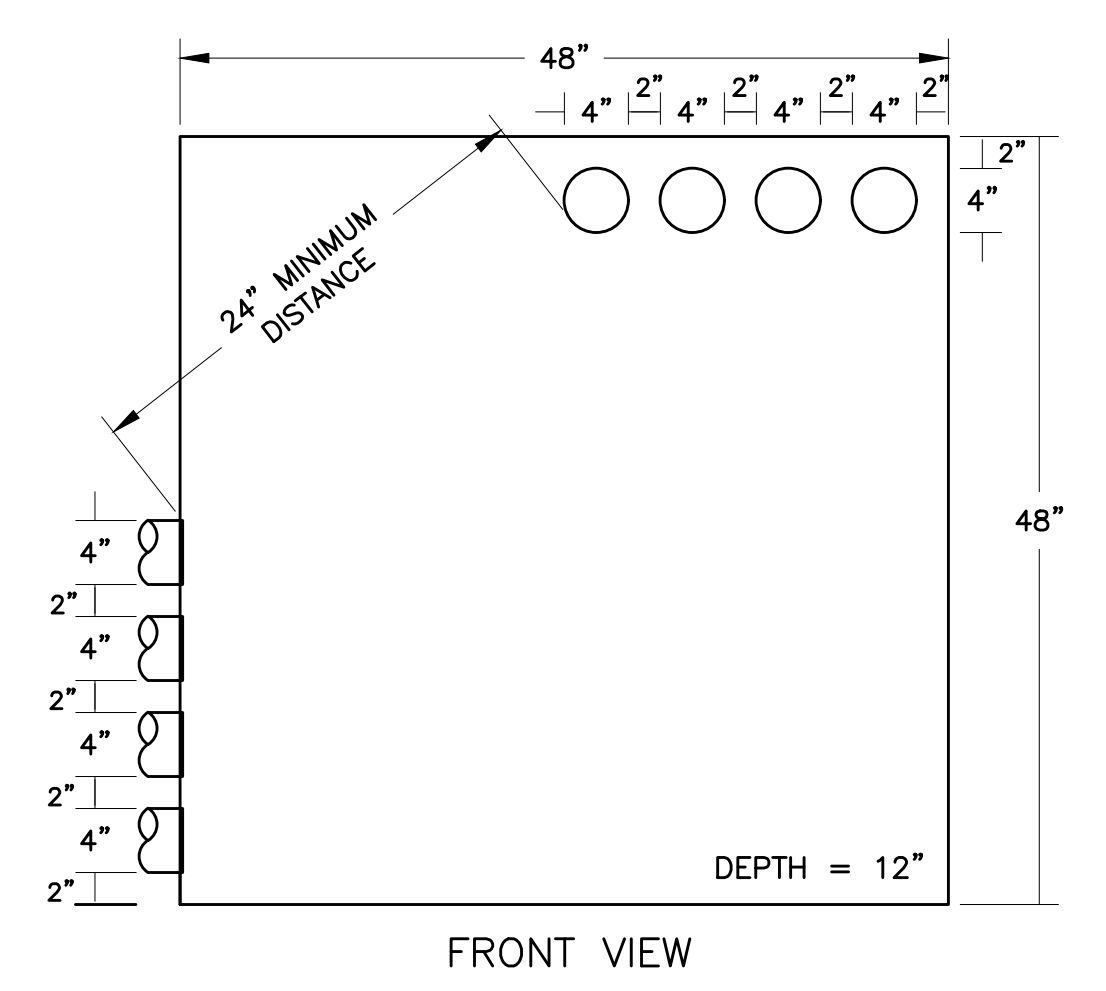
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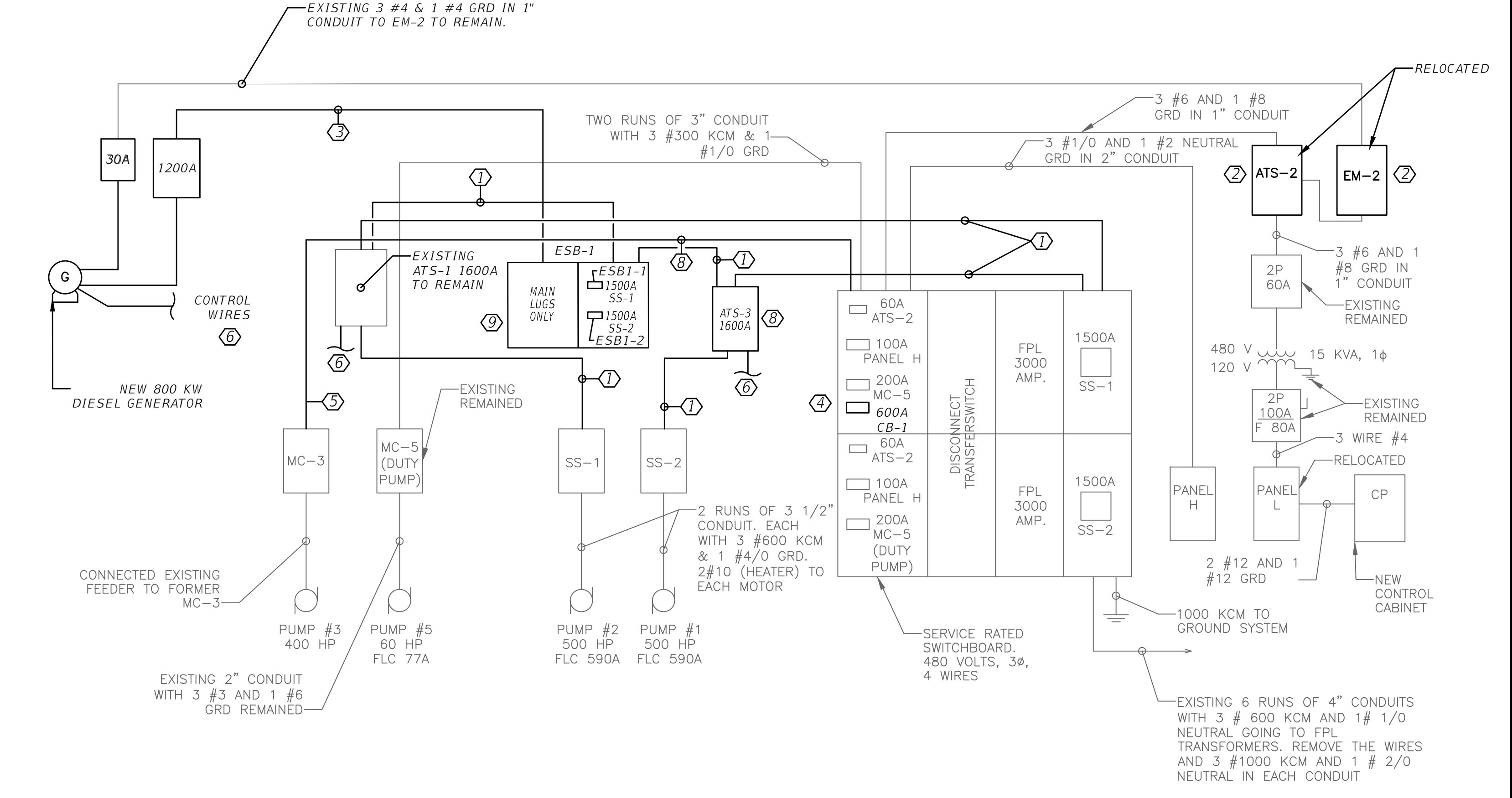
- NOTES:**
- ① NEW (2) RUNS OF 3-1/2" CONDUIT EACH WITH 3# 600KCM AND 1# 4/0 GND.
  - ② RELOCATED ATS-2 AND EM-2. PROVIDE MATCHING SUPPORT AS PROVIDED AT THE ORIGINAL LOCATION.
  - ③ NEW (4) RUNS OF 4" RIGID CONDUIT EACH WITH 4# 600KCM AND 1# 250KCM GND.
  - ④ RELOCATED 600A, 3P, 480V, 100KAIC BREAKER.
  - ⑤ NEW (2) RUNS OF 3-1/2" CONDUIT EACH WITH 3# 350KCM AND 1# 1 GND.
  - ⑥ CONTROL WIRING AS PER MANUFACTURER RECOMMENDATION.
  - ⑦ NEW NOT SEPARATELY DERIVED STANDBY GENERATOR SET, CATERPILLAR 800KW, 1000KVA AT 0.80 POWER FACTOR, 277/480V, 3PH, 4W, 60HZ, C27 DRA1, 80C TEMPERATURE RISE, DM-7696 ENGINE, 4923854 ALTERNATOR ARRANGEMENT WITH DOUBLE WALL FUEL TANK AND ALL ALUMINUM HVHZ HURRICANE ENCLOSURE (BASIS OF DESIGN) APPROVED EQUAL ALTERNATE MANUFACTURER WILL BE ALLOWED. EITHER WAY, CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE COMPLETE DESIGN AND GUARANTEE FUNCTIONALITY. THE STANDBY GENERATOR SET SHALL COMPLY WITH NFPA 110, LEVEL 1, TYPE 10 REQUIREMENTS.
  - ⑧ ATS-3. PROVIDE A 3P, 1600A, 480V, 85KAIC, NEMA 3R ASCO AUTOMATIC TRANSFER SWITCH IN NEMA 3R ENCLOSURE, WITH A MINIMUM OF TWO AUXILIARY N.C. CONTACTS THAT SHALL BE CLOSED WHEN THE TRANSFER SWITCH IS CONNECTED TO THE UTILITY.
  - ⑨ ESB-1. PROVIDE SQUARE D QED-2 SERIES 2, 480V, 3PH, 3W, 2000A, 100KAIC, NEMA 3R EMERGENCY SWITCHBOARD WITH TIN PLATED COPPER MAIN BUS. SWITCHBOARD SHALL INCLUDE (2) 480V, 1600A, 3P, 100KAIC LSI BREAKER WITH TRIPPING UNIT SET AT 1500A. ONE FOR EACH 500HP PUMP.
  - ⑩ PROVIDE GENERATOR EMERGENCY SHUT-OFF SWITCH. PROPOSED LOCATION SHOWN, COORDINATE FINAL LOCATION WITH THE FIRE DEPARTMENT. FINAL LOCATION MUST BE A MINIMUM OF 20' AWAY FROM THE GENERATOR.
  - ⑪ PROVIDE GENERATOR SET REMOTE ANNUNCIATOR, WALL MOUNTED.
  - ⑫ 48"x48"x12" NEMA 3R JUNCTION BOX. CONDUIT ENTRY POINT COULD BE MODIFIED TO ADAPT TO FIELD CONDITIONS, BUT JUNCTION BOX SHALL COMPLY WITH NEC-314.



**PROPOSED PLAN**  
SCALE: 1" = 5'



**JUNCTION BOX DETAIL**  
N.T.S.



**RISER**  
N.T.S.

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**CITY OF MIAMI**  
**CAPITAL IMPROVEMENTS PROGRAM**  
PROJECT NAME: **MIAMI RIVERVIEW PS**  
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**ELECTRICAL PLAN**

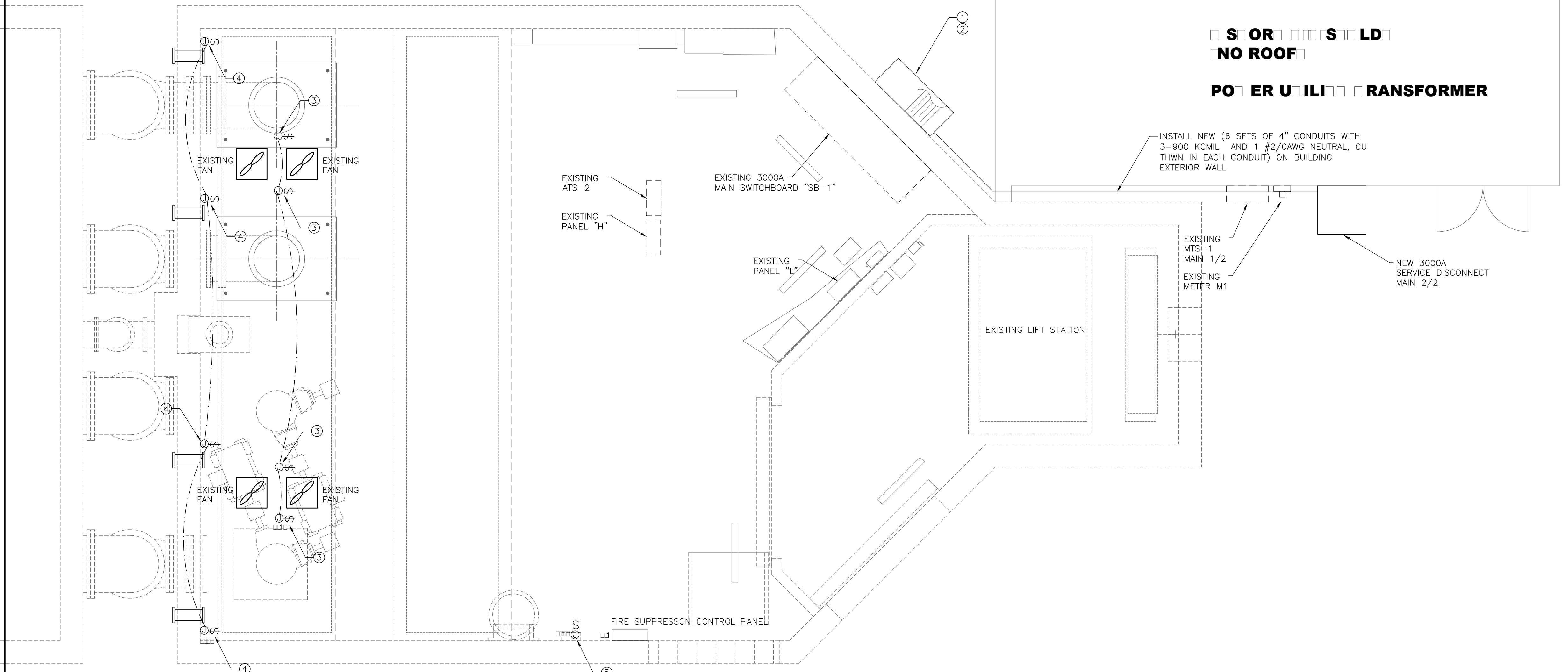
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**ELECTRICAL SPECIFICATIONS**

- MATERIALS AND INSTALLATION, AS A MINIMUM, ARE TO CONFORM WITH THE CODES IN EFFECT: THE NATIONAL ELECTRIC CODE NEC 2014, NEC 2017 (6TH EDITION), NFPA 70, NFPA 72 2010, LOCAL CODES, ORDINANCES, INCLUDING ALL AMENDMENTS TO THE N.E.C. EQUIPMENT, WHERE APPLICABLE, WILL BE LISTED WITH THE UNDERWRITERS LABORATORIES, INC. QUALITY AND WORKMANSHIP ESTABLISHED BY DRAWINGS AND SPECIFICATIONS ARE NOT TO BE REDUCED BY THE ABOVE MENTIONED CODES.
- TO THE BEST OF OUR KNOWLEDGE AND ABILITY THESE DRAWINGS REPRESENT AN ACCURATE PRESENTATION OF EXISTING CONDITIONS BASED UPON CAREFUL EVALUATION OF OBSERVED CONDITIONS TO THE EXTENT REASONABLY POSSIBLE. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND IMMEDIATELY NOTIFY ENGINEER WITH ANY DISCREPANCY.
- BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF WORK. THE SUBMISSION OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD AN EXAMINATION BEEN MADE, WILL NOT BE ALLOWED.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM IS TO BE FULLY OPERABLE AND ACCEPTANCE OF THIS SYSTEM BY THE ENGINEER MUST BE A CONDITION OF THE SUB CONTRACT.
- ALL WORK TO BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- CONTRACTOR TO GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE.
- CORRECTION OF ANY DEFECTS TO BE COMPLETED WITHOUT ADDITIONAL CHARGE AND TO INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
- ALL REQUIRED INSURANCE TO BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OF PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- CONTRACTOR TO PAY FOR ALL PERMITS, FEES INSPECTIONS AND TESTINGS.
- ELECTRICAL INSTALLATION TO MEET ALL STANDARD REQUIREMENTS OF LOCAL POWER AND TELEPHONE COMPANIES. ELECTRICAL CONTRACTOR SHALL CONTACT LOCAL POWER AND TELEPHONE COMPANIES PRIOR TO START OF CONSTRUCTION.
- ALL WIRING SHALL BE IN CONDUIT UNLESS OTHERWISE NOTED. MINIMUM WIRE SIZE SHALL BE #12 AWG. EXCLUDING CONTROL WIRING. ALL CONDUCTORS SHALL BE COPPER WITH THWN/THHN INSULATION. CONDUCTORS #10 AND SMALLER MAY BE SOLID; ALL THOSE #8 AND LARGER TO BE STRANDED.
- ALL UNDERGROUND RACEWAYS SHALL BE MINIMUM 3/4", GALVANIZED RIGID STEEL CONDUIT OR SCHEDULE 40 PVC. ALL OTHER RACEWAYS TO COMPLY WITH GOVERNING CODES. WHERE RIGID STEEL IS USED, IT SHALL BE COMPLETELY COATED WITH AN ALKALI AND RUST RESISTANT BITUMASTIC PAINT. COPPER NO. 50, AND THREADS SHALL BE COATED WITH ZINC CHROMATE. RIGID STEEL SHALL ALSO BE USED WHEN CONDUIT IS EXPOSED TO EXTERIOR ENVIRONMENT SUCH AS EXTERIOR OF BUILDING OR WHERE IT IS EXPOSED AND SUBJECT TO DAMAGE, INSIDE OF BUILDING.
- OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS, AND BE OF SPECIAL CONSTRUCTION FOR OTHER CLASSIFIED AREAS. ALL BOXES SHALL BE RECESSED (FLUSH) IN WALLS OR CEILING WHENEVER POSSIBLE.
- DISCONNECT SWITCHES SHALL BE H.P. RATED, GENERAL DUTY, QUICK-MAKE, QUICK-BREAK TYPE. ENCLOSURES SHALL BE AS REQUIRED BY N.E.C. AND LOCATION (WEATHERPROOF, EXPLOSION PROOF, ETC.). ENGRAVED LAMINATED PLASTIC IDENTIFICATION PLATES SHALL BE FURNISHED AND INSTALLED ON ALL DISCONNECT SWITCHES, CONTACTORS AND STARTERS.
- ALL FUSES FOR SAFETY SWITCHES SHALL BE DUAL ELEMENT, CARTRIDGE TYPE. FUSES SHALL BE THOSE MANUFACTURED BY EITHER BUSSMAN OR LITTLEFUSE. THE CONTRACTOR SHALL FURNISH TO THE OWNER ONE SPARE FUSE FOR EACH SIZE AND TYPE OF FUSE INSTALLED. FUSES 600 AMPS OR LESS SHALL BE CLASS RK1, TYPICAL UNLESS OTHERWISE NOTED. FUSES OVER 600 AMPS SHALL BE CLASS L.
- ALL GENERAL PURPOSE SWITCHES AND RECEPTACLES SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER. CATALOG NUMBERS LISTED ARE LEVITON; HOWEVER, COMPARABLE DEVICES BY PASS & SEYMOUR, BRYANT, OR ARROW HART WILL BE ACCEPTED. COLOR OF DEVICES AND PLATES SHALL BE WHITE UNLESS DICTATED OTHERWISE BY ARCHITECT/OWNER.
- IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM, AND PROVIDE ALL NECESSARY DEVICES AND COMPONENTS FOR EQUIPMENT BE PLACED IN PROPER WORKING ORDER.
- A SEPARATE, GREEN TYPE THWN COPPER GROUND CONDUCTOR SHALL BE RUN FROM GROUND LUG OF EACH GROUNDED RECEPTACLE TO AN APPROVED CONNECTION INSIDE THE ENCLOSING STEEL OUTLET BOX. DEVICE MOUNTING SCREWS SHALL NOT BE CONSIDERED AN APPROVED GROUND. A SEPARATE GROUND CONDUCTOR SHALL BE INSTALLED IN EVERY CONDUIT AND RACEWAY AND SECURELY BONDED IN AN APPROVED GROUNDING TERMINAL AT BOTH ENDS OF THE RUN. THE GROUNDING CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH TABLE 250-122 OF THE N.E.C. CONTRACTOR SHALL SIZE CONDUIT TO ACCOMMODATE ADDITIONAL CONDUCTOR.
- LOAD DATA IS BASED ON INFORMATION GIVEN TO THE ENGINEER AT THE TIME OF DESIGN. VERIFY ALL EQUIPMENT NAMEPLATE RATINGS BEFORE ORDERING.
- CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZES. THE CONTRACTOR IS TO PROVIDE CIRCUITS AND ROUTING OF CONDUITS TO SUIT JOB CONDITIONS.
- FURNISH AND INSTALL DISCONNECT SWITCHES, WIRING, AND CONNECTIONS ON AIR CONDITIONING SYSTEM AS SHOWN ON PLANS. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND WIRING FROM C.U. TO A.H.U. TERMINATION SHALL BE PERFORMED BY MECHANICAL CONTRACTOR.
- ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE IN LINE FUSING AND ENERGY SAVING BALLASTS. (ONLY REQUIRED IN MIAMI DADE COUNTY)
- ALL SWITCHGEAR, PANELS, STARTERS, CONTACTORS ETC., SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER, THE SYSTEM DESIGN IS BASED ON SQUARE "D"; HOWEVER, COMPARABLE EQUIPMENT BY GE & SIEMENS ONLY WILL BE ACCEPTABLE. TANDEM AND HALF-SPACE CIRCUIT BREAKERS SHALL NOT BE USED.
- PROVIDE IDENTIFICATION FOR ALL PANELS, CABINETS, ENCLOSURES, DISCONNECTS & TRANSFORMERS USING ENGRAVED NAMEPLATES, WHITE LETTERING ON A BLACK BACKGROUND. NAMEPLATES SHALL IDENTIFY PANEL DESIGNATION (NAME), VOLTAGE, PHASE & WIRE CONFIGURATION. PROVIDE TYPEWRITTEN IDENTIFICATION UNDER PLASTIC COVER FOR ALL PANEL BRANCH CIRCUITS, CLEARLY INDICATING AREA AND TYPE OF LOAD SERVED BY EACH BRANCH CKT PROTECTIVE DEVICE, INCLUDING SPARES. HAND PRINTED WILL NOT BE ACCEPTED.
- ENGRAVED, LAMINATED PLASTIC IDENTIFICATION PLATES SHALL BE FURNISHED AND INSTALLED ON ALL PANELS AND SWITCHGEAR. PLATES SHALL BE AFFIXED TO FRONT OF PANELS, INDICATING PANEL NAME, VOLTAGE AND AMPERAGE.
- ALL UNDERGROUND PVC CONDUIT RUNS SHALL HAVE RIGID STEEL ELBOWS AND RIGID STEEL SECTIONS AT SLAB PENETRATIONS WHERE SUBJECT TO POSSIBLE DAMAGE. WHERE RIGID STEEL IS USED, IT SHALL BE COMPLETELY COATED WITH AN ALKALI AND RUST-RESISTANT BITUMASTIC PAINT. COPPER NO. 50, AND THREADS SHALL BE COATED WITH ZINC CHROMATE.
- THE ELECTRICAL CONTRACTOR SHALL MEET AND COORDINATE WITH THE LOCAL POWER COMPANY AT THE SITE PRIOR TO CONSTRUCTION. AT THAT TIME, THE CONTRACTOR SHALL COORDINATE ALL RELATED WORK WITH THE UTILITY COMPANY'S RESPONSIBILITIES TO MEET THE OWNER'S SCHED.
- ALL ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN AN APPROVED RACEWAY, EMT, IMC, RIGID GALVANIZED CONDUIT OR SCHEDULE 40 P.V.C. THERE SHALL BE NO TYPE "NM" AND ELECTRICAL NON-METALLIC TUBING USED FOR BRANCH CIRCUITING. MAXIMUM NUMBER OF 120V CIRCUITS ALLOWED IN A COMMON CONDUIT SHALL BE SIX (6). "MC" TYPE CABLE SHALL NOT BE USED AS HOME RUNS. THE CONTRACTOR SHALL STRICTLY CONFORM TO THE N.E.C. REQUIREMENTS OF DERATING FOR CONDUCTOR AMPACITY AND CONDUIT FILL.
- CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:  

200V SYSTEM	240V (HIGH LEG) SYSTEM	480V SYSTEM	PHASE SEQUENCE
NEUTRAL - WHITE	NEUTRAL - WHITE	NEUTRAL - WHITE	ASC. TOP TO BOTTOM
PHASE A - BLACK	PHASE A - BLACK	PHASE A - BROWN	LEFT TO RIGHT,
PHASE B - RED	PHASE B - ORANGE	PHASE B - PURPLE	FRONT TO BACK
PHASE C - BLUE	PHASE C - BLUE	PHASE C - YELLOW	
GRD.CON - GREEN	GRD.CON - GREEN	GRD.CON - GREEN	
- CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL CONDUIT PENETRATIONS MADE THROUGH FIRE RATED WALLS, CEILINGS, SLABS, ETC. PENETRATION SEALS SHALL BE PER U.L. ASSEMBLY.
- CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF CONTRACT DRAWINGS AT JOB SITE WITH COLORED MARKINGS INDICATING PROGRESS OF WORK. THIS SET OF CONTRACT DRAWINGS IS TO BE SEPARATE FROM AND IN ADDITION TO CONTRACTOR CONSTRUCTION SET. EVERY UNIT OF EQUIPMENT, DEVICE, CONDUIT AND WIRE IS TO BE MARKED WHEN INSTALLED. USE GREEN TO INDICATE INSTALLATION AS SHOWN ON DRAWINGS AND USE RED TO INDICATE FIELD CHANGES. UPON COMPLETION OF WORK, THIS SET OF CONTRACT DRAWINGS IS TO BE TURNED OVER TO, AND BECOME PROPERTY OF THE ELECTRICAL ENGINEER.
- IF ELECTRICAL CONTRACTOR HAS QUESTIONS, OR IN THEIR OPINION FINDS OMISSIONS OR ERRORS ON ELECTRICAL DOCUMENTS, IT IS THEIR RESPONSIBILITY TO BRING THIS TO THE ATTENTION OF THE ELECTRICAL ENGINEER IMMEDIATELY. IF ELECTRICAL CONTRACTOR PROCEEDS WITH ANY CHANGES TO THE CONTRACT DOCUMENTS, WITHOUT WRITTEN PRIOR APPROVAL FROM THE ELECTRICAL ENGINEER, CONTRACTOR WILL NOT BE COMPENSATED.



**NO ROOF**  
**POWER UTILITIES TRANSFORMER**

- KEY NOTES:**
- DISCONNECT AND REMOVE EXISTING SERVICE CONDUCTORS TO EXISTING PUMP ROOM SWITCHBOARD.  
 REMOVE EARTH FILLING TO UNCOVER THE EXISTING 6 SETS OF 4" EMPTY CONDUITS FROM WHICH THE SERVICE CONDUCTORS WERE REMOVED.  
 REBUILD THE SERVICE CONDUITS PATH THROUGH THE NEW PULL BOX TO REACH THE NEW MAIN DISCONNECT ENCLOSURE FOR TOP FEED.  
 IF EXISTING CONDUITS CANNOT BE REUSED, THE EXISTING CONDUITS WILL BE REMOVED AND NEW CONDUITS SHALL BE INSTALLED TO ACHIEVE THE OBJECTIVE OF REBUILDING THE SERVICE AS SHOWN.
  - FIELD IDENTIFY THE EXACT SPECIFICATIONS OF THE REMOVED SERVICE CONDUCTORS AND IMMEDIATELY NOTIFY THE ENGINEER OF RECORD AND THE PROJECT MANAGER IF FOUND TO BE DIFFERENT FROM THE NEW SPECIFIED CONDUCTORS.
  - FOR MOTORIZED DAMPER CONNECTION, MOTORIZED DAMPER SHALL CLOSE THE EXHAUST FAN OPENING UPON INITIATION OF THE NEW FIRE SUPPRESSION SYSTEM. PROVIDE FA RELAY AND INTERCONNECT WITH NEW FP SYSTEM CONTROL PANEL.
  - FOR MOTORIZED DAMPER CONNECTION, MOTORIZED DAMPER SHALL CLOSE THE BUILDING OPENING UPON INITIATION OF THE EXISTING FIRE SUPPRESSION SYSTEM. PROVIDE FA RELAY AND INTERCONNECT WITH NEW FP SYSTEM CONTROL PANEL.
  - FOR FIRE PROTECTION REFRIGERATION UNIT CONNECTION, FIELD COORDINATE EXACT LOCATION PRIOR TO ROUGH IN AND PROVIDE CLEARANCE AS PER NEC 110.26

**ELECTRICAL PLAN**  
 scale: 1/4" = 1'-0"

DATE	REVISIONS DESCRIPTION

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**CITY OF MIAMI**  
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**CITY OF MIAMI**  
**CAPITAL IMPROVEMENTS PROGRAM**  
 PROJECT NAME: **MIAMI RIVERVIEW PS**  
 PROJECT No.: **17096**

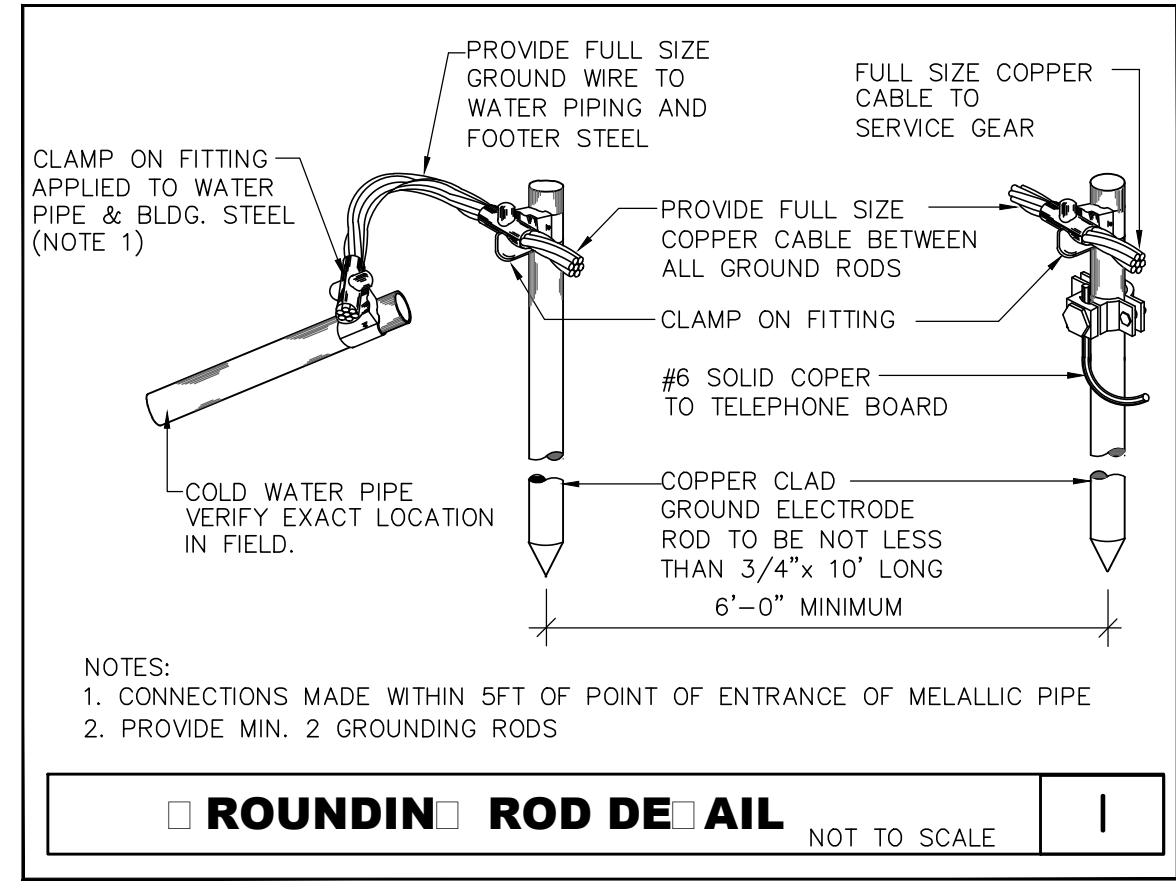
**ELECTRICAL PLAN**

SHEET NO.  
**EE-1**

\$USERS\$ \$DATES\$ \$TIMES\$ \$FILES\$

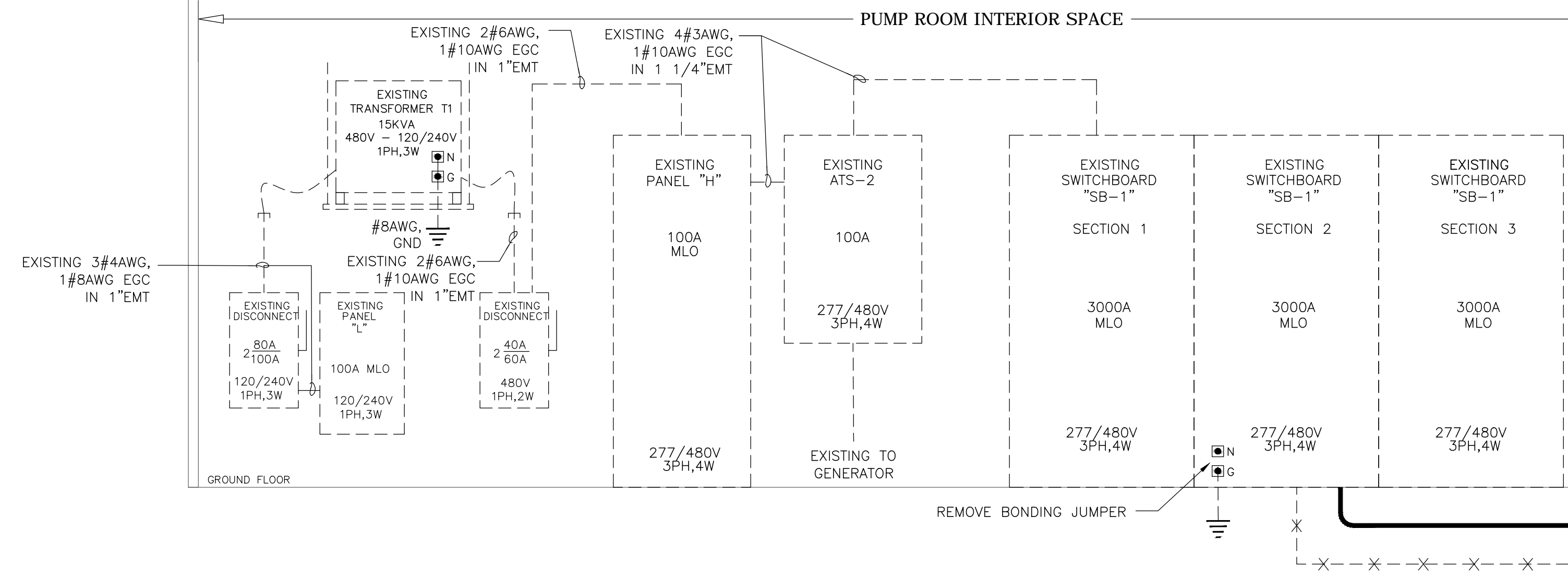
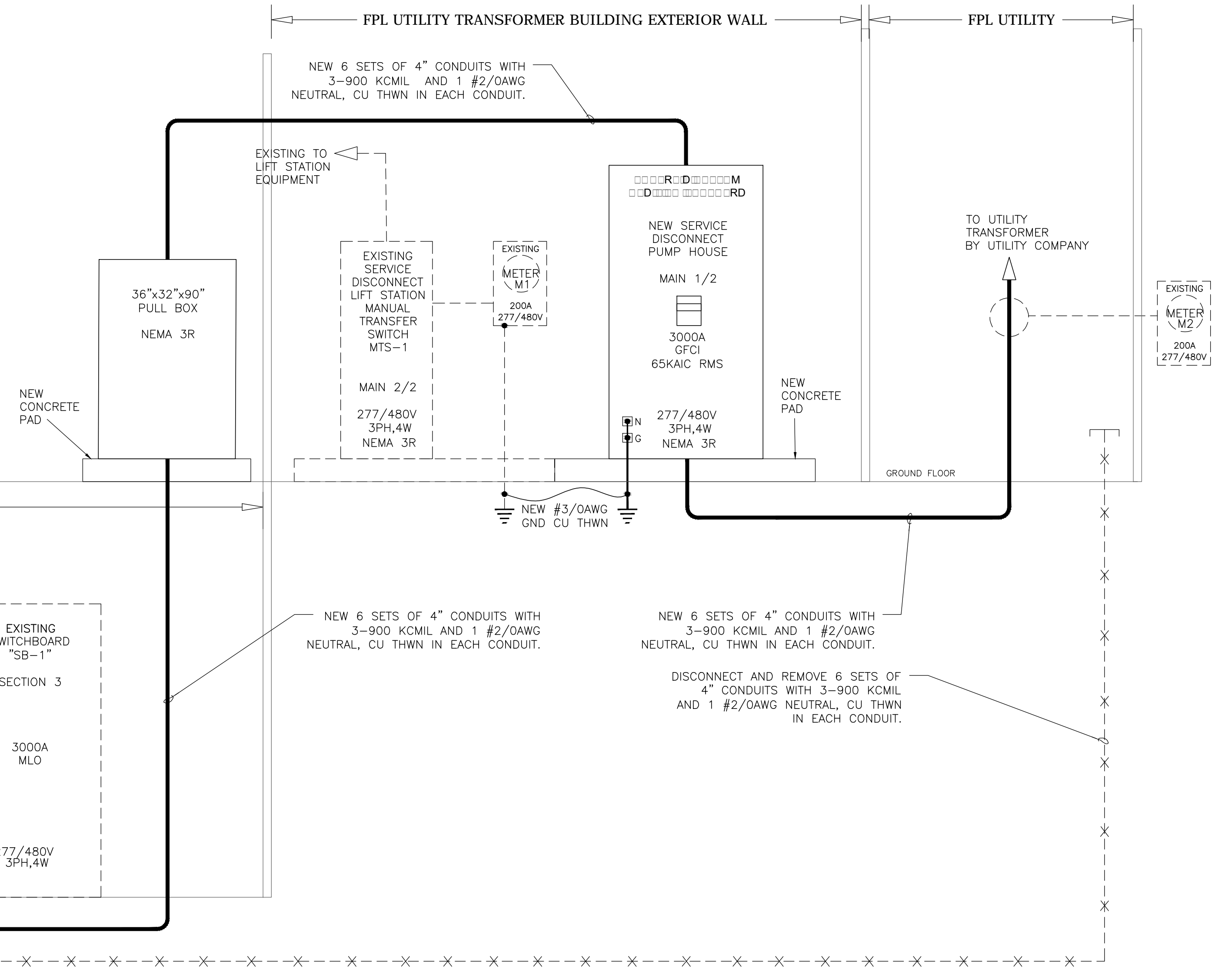
PANEL SCHEDULE L		EXISTING		FED FROM:		TRANSF. T1		MOUNTING:												
Rated Voltage: 120/240V		1PH, 3W		Manufacturer:		SQUARE D NODD		SURFACE												
Rated Amps: (Cu bus) 100A		SPACES: 30		Location:		SEE FLOOR PLAN		NEMA 1												
Main: MLO				Project No:		0.00		EXISTING												
NOTE	CIRCUIT DESIGNATION	O.C.P.	AVG	MAX. DIST. (ft)	VOLT DROP	REPT	LTGC/CONT	KITCHEN	MOTORAPP.	PH	RCPT	LTGC/CONT	KITCHEN	MOTORAPP.	MAX. DIST. (ft)	VOLT DROP	AVG	O.C.P.	CIRCUIT DESIGNATION	NOTE
1	MOTOR CONTROL	20/1	12	219	3%				0.60	C				0.60	219	3%	12	20/1	NEW FP CONTROL PANEL	2 3
3	NOT USABLE SPACE																		NOT USABLE SPACE	4
5	MOTOR CONTROL	20/1	12	219	3%				0.60	C				0.60	219	3%	12	20/1	CLIMBER	6
7	MOTOR CONTROL	20/1	12	219	3%				0.60	A		0.90		1.46	3%	12	20/1	EXISTING LIGHTS	8	
9	NOT USABLE SPACE																		NOT USABLE SPACE	10
11	MOTOR CONTROL	20/1	12	219	3%				0.60	C				0.60	219	3%	12	20/1	MOTOR CONTROL	12
13	MOTOR CONTROL	20/1	12	219	3%				0.60	A				1.20	110	3%	12	20/1	FAN #4	14
15	NOT USABLE SPACE																		NOT USABLE SPACE	16
17	MOTOR CONTROL	20/1	12	219	3%				0.60	C				0.60	219	3%	12	20/1	MOTORIZED DAMPERS	18 3
19	MOTOR CONTROL	20/1	12	219	3%				0.60	A				1.20	110	3%	12	20/1	FP REFRIGERATION UNIT	20 3
21	NOT USABLE SPACE																		NOT USABLE SPACE	22
23	MOTOR CONTROL	20/1	12	219	3%				0.60	C	0.36			366	3%	12	20/1	GFCI RECEPTACLE	24	
25	FAN #1	20/1	12	110	3%				1.20	A				0.60	219	3%	12	20/1	BATTERY CHARGER	26
27	NOT USABLE SPACE																		NOT USABLE SPACE	28
29	FAN #3	20/1	12	110	3%				1.20	C	0.36			366	3%	12	20/1	GFCI RECEPTACLE	30	
SUBTOTAL CONNECTED LOAD:										SUBTOTAL CONNECTED LOAD:										
CONNECTED LOAD PHASE A: 7.7										CONNECTED LOAD PHASE A: 7.7										
CONNECTED LOAD PHASE C: 6.1										CONNECTED LOAD PHASE C: 6.1										
TOTAL CONNECTED LOAD: 13.8										TOTAL CONNECTED LOAD: 13.8										
RECEPT. CONNECTED LOAD PH A: 0.0										RECEPT. CONNECTED LOAD PH A: 0.0										
RECEPT. CONNECTED LOAD PH C: 0.7										RECEPT. CONNECTED LOAD PH C: 0.7										

SHORT CIRCUIT CALCULATION	
FAULT CURRENT AT UTILITY TRANSFORMER SECONDARY	31158 A.I.C.
CURRENT SOURCE (INFINITE)	PROVIDED BY FPL ON 6.6.2018
FAULT CURRENT AT MAIN 2/2	41002 A.I.C.
NO MOTOR CONTRIBUTION	31002 A.I.C.
WITH MOTOR CONTRIBUTION	40202 A.I.C.
MOTOR CONTRIBUTION	9200 AMP
WIRE SIZE	900 KCMIL CU
LENGTH OF RUNS	10 FEET
NUMBER OF RUNS	6
FAULT CURRENT AT SB-1	30393 A.I.C.
NO MOTOR CONTRIBUTION	30393 A.I.C.
WITH MOTOR CONTRIBUTION	39593 A.I.C.
MOTOR CONTRIBUTION	9200 AMP
WIRE SIZE	900 KCMIL CU
LENGTH OF RUNS	50 FEET
NUMBER OF RUNS	6



PANEL SCHEDULE H		EXISTING		FED FROM:		ATS-2		MOUNTING:													
Rated Voltage: 277/480V		3PH, 4W		Manufacturer:		EXISTING		SURFACE													
Rated Amps: (Cu bus) 100A		SPACES: 24		Location:		SEE FLOOR PLAN		NEMA 1													
Main: MLO				Project No:		0.00		EXISTING													
NOTE	CIRCUIT DESIGNATION	O.C.P.	AVG	MAX. DIST. (ft)	VOLT DROP	REPT	LTGC/CONT	KITCHEN	MOTORAPP.	PH	RCPT	LTGC/CONT	KITCHEN	MOTORAPP.	MAX. DIST. (ft)	VOLT DROP	AVG	O.C.P.	CIRCUIT DESIGNATION	NOTE	
1	SPACE									A									SPACE	2	
3	SPACE									B									SPACE	4	
6	SPACE									C									SPACE	6	
7	SPACE																		SPACE	8	
9	BARSCREEN MOTOR	60/3	6	382	3%				7.00	A	0.00	0.90	0.00	6.80		3%	6	60/3	PANELL	10	
11	SPACE								7.00	B				7.00					TRANSFORMER T1	12	
13	SPACE								7.00	C	0.72	0.00	0.00	5.40					SPACE	14	
16	SPARE	60/3												7.00		382	3%	6	60/3	SLUICE GATE ACTUATOR	16
17	SPACE													7.00					SPACE	18	
19	SPACE																		SPACE	20	
21	SPACE																		SPACE	22	
23	SPACE																		SPACE	24	
SUBTOTAL CONNECTED LOAD:										SUBTOTAL CONNECTED LOAD:											
CONNECTED LOAD PHASE A: 21.7										CONNECTED LOAD PHASE A: 21.7											
CONNECTED LOAD PHASE B: 14.0										CONNECTED LOAD PHASE B: 14.0											
CONNECTED LOAD PHASE C: 20.1										CONNECTED LOAD PHASE C: 20.1											
TOTAL CONNECTED LOAD: 55.8										TOTAL CONNECTED LOAD: 55.8											
RECEPT. CONNECTED LOAD PH A: 0.0										RECEPT. CONNECTED LOAD PH A: 0.0											
RECEPT. CONNECTED LOAD PH B: 0.0										RECEPT. CONNECTED LOAD PH B: 0.0											
RECEPT. CONNECTED LOAD PH C: 0.7										RECEPT. CONNECTED LOAD PH C: 0.7											

PROVIDE PROPER SIGNAGE AS PER NEC 2014 110.16, SIGNAGE TO STATE: "WARNING ARC FLASH HAZARD. APPROPRIATE PPE REQUIRED. FAILURE TO COMPLY CAN RESULT IN DEATH OR INJURY. (REFER TO NFPA 70 E.)"



**ELECTRICAL RISER**

— NEW  
 - - - EXISTING  
 X-X-X DEMOLISHED

DATE	REVISIONS DESCRIPTION

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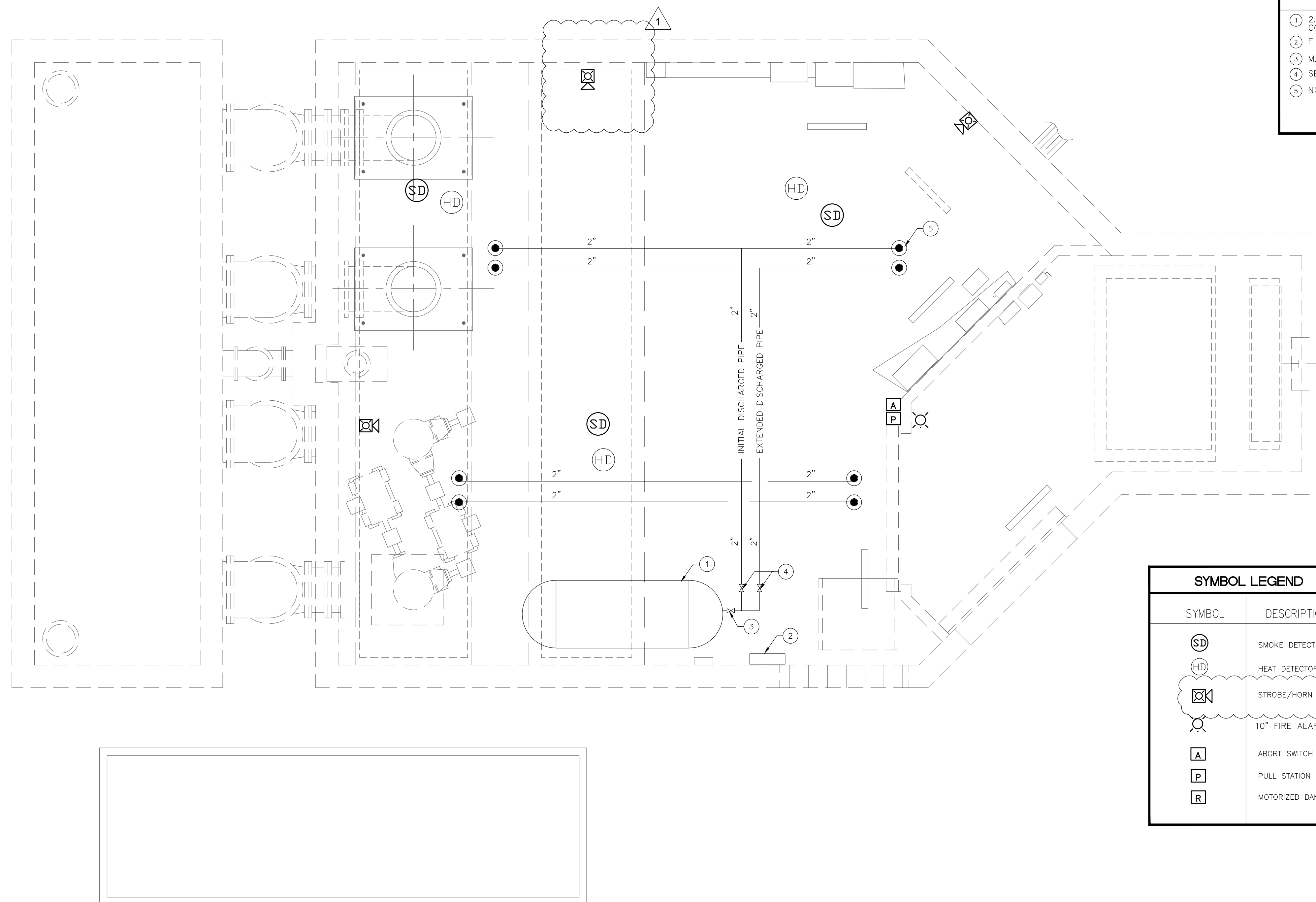
**CITY OF MIAMI**  
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**CITY OF MIAMI**  
 CAPITAL IMPROVEMENTS PROGRAM  
 PROJECT NAME: **MIAMI RIVERVIEW PS**  
 PROJECT No.: **17096**

**ELECTRICAL RISER AND SPECIFICATIONS**

SHEET NO.  
**EE-2**

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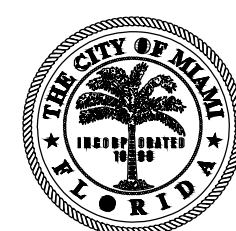
DRAWING KEYNOTES	
①	2.75 TON LOW PRESSURE CARBON DIOXIDE TANK WITH CONDENSING UNIT BY JANUS OR EQUAL
②	FIRE SUPPRESSION CONTROL PANEL
③	MAINTANCE LOCK OUT VALVE
④	SELECTOR VALVE
⑤	NOZZLE (TYPICAL)

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
(SD)	SMOKE DETECTOR
(HD)	HEAT DETECTOR
☒	STROBE/HORN
⊙	10" FIRE ALARM BELL
A	ABORT SWITCH
P	PULL STATION
R	MOTORIZED DAMPER RELAY

**FIRE SUPPRESSION FLOOR PLAN**  
 scale: 1/4" = 1'-0"

DATE	REVISIONS DESCRIPTION
08-02-18	1. BUILDING DEPARTMENT COMMENTS

**bd** bach design  
 engineers  
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 info@bachengineers.com  
 CA#92852  
 Viet Bach Nguyen, P.E.  
 Florida License #69753 Date: \_\_\_\_\_

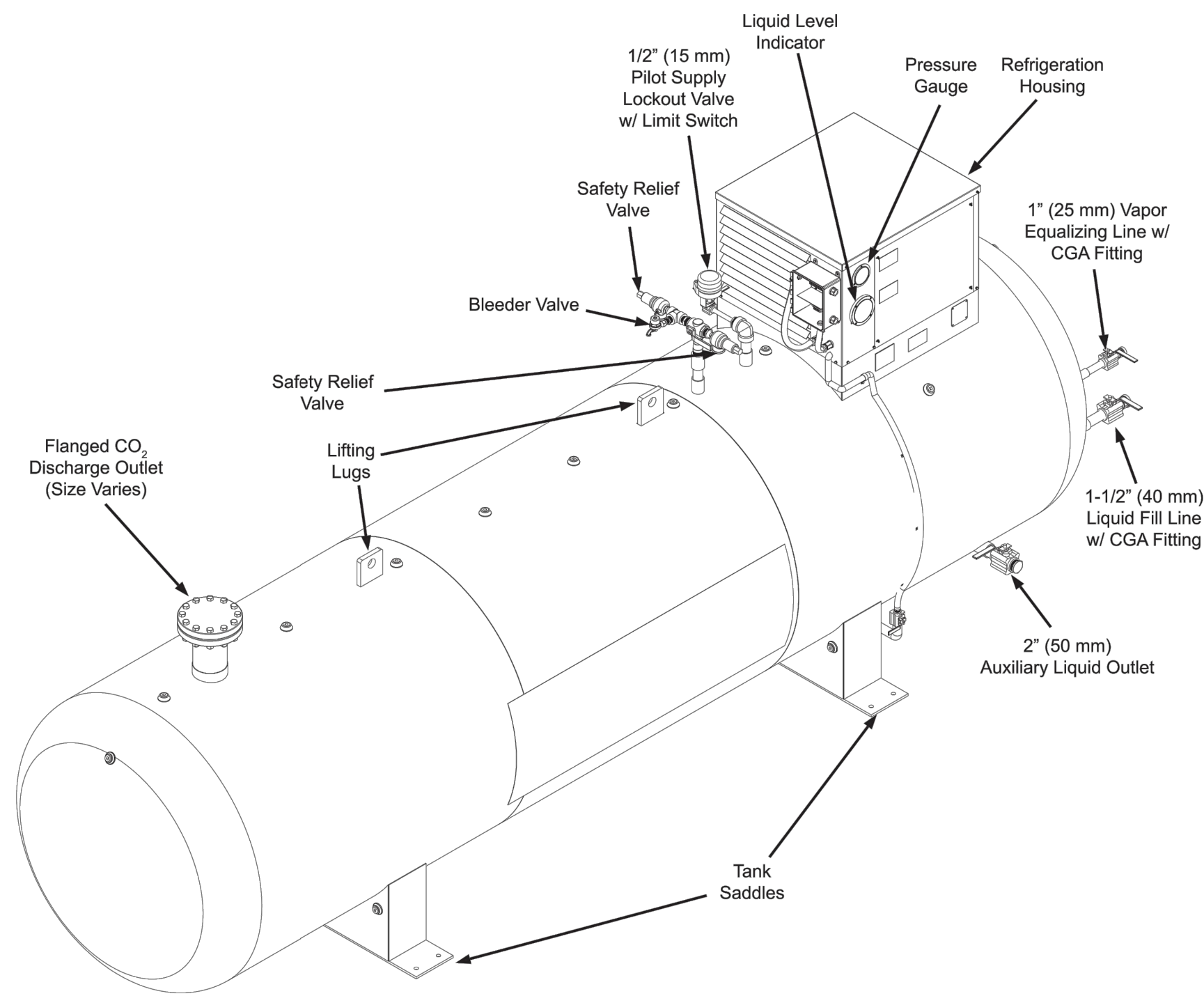


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CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRAM	
PROJECT NAME	PROJECT No.
MIAMI RIVERVIEW PS	17096

FIRE SUPPRESSION PLAN	
\$USERS\$	\$DATE\$ \$TIME\$ \$FILE\$

SHEET NO.	FS-1
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## LOW PRESSURE CO<sub>2</sub>TANK DETAIL

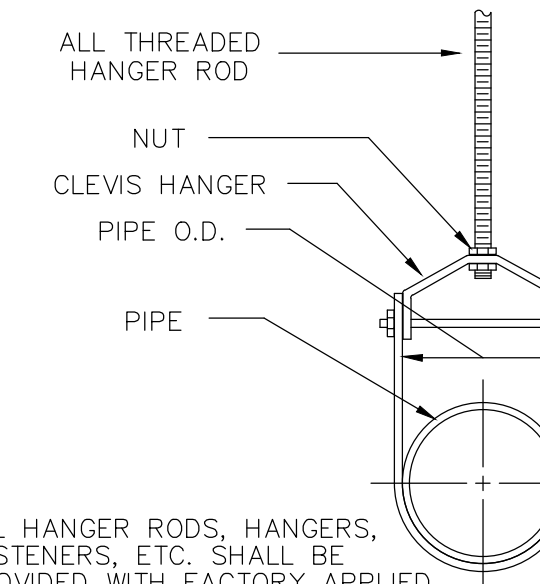
N.T.S.

### FIRE SUPPRESSION SYSTEM

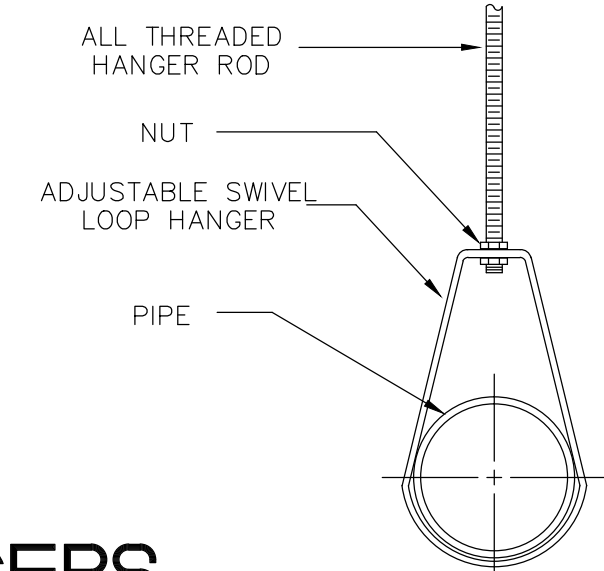
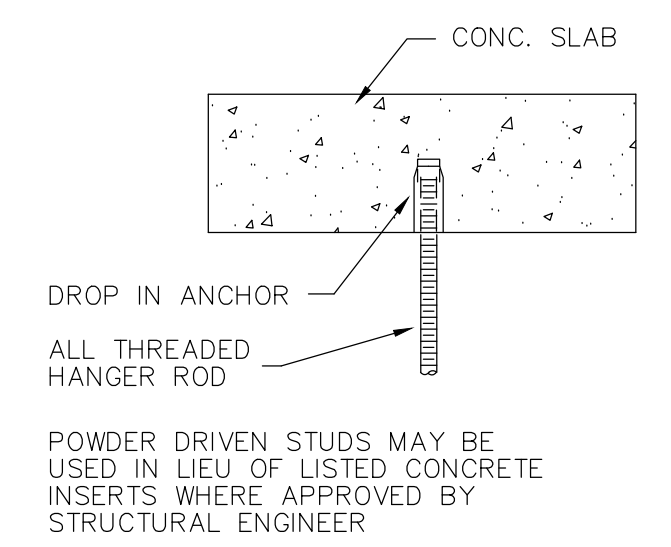
1. CO<sub>2</sub> FIRE SPRINKLER SUPPRESSION SYSTEM SHALL providing 100% coverage of all areas.  
System shall be designed and installed as per latest NFPA 12 manual. Contractor shall submit complete shop drawings with hydraulic calculations signed and sealed by a registered engineer in the state of Florida.
2. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY to obtain approval of CO<sub>2</sub> fire suppression shop drawings from building's insurance carrier, the fire marshal, and all local authorities having jurisdiction. It shall be the contractor's responsibility to verify sufficient water flow and pressure available to the system.
3. CONTRACTOR SHALL VISIT job site prior to bidding.

### FASTENERS

N.T.S.  
ALL FASTENERS SHALL BE LISTED FOR THEIR INTENDED SERVICE



ALL HANGER RODS, HANGERS, FASTENERS, ETC. SHALL BE PROVIDED WITH FACTORY APPLIED ZINC PLATING

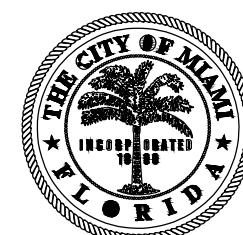


### PIPE HANGERS

N.T.S.  
ALL HANGERS SHALL BE LISTED FOR THEIR INTENDED SERVICE

DATE	REVISIONS DESCRIPTION

**bd** bach design engineers  
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**CITY OF MIAMI**  
**CAPITAL IMPROVEMENTS PROGRAM**

PROJECT NAME	PROJECT No.
<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>

FIRE SUPPRESSION NOTES  
AND DETAILS

SHEET NO.

FS-2

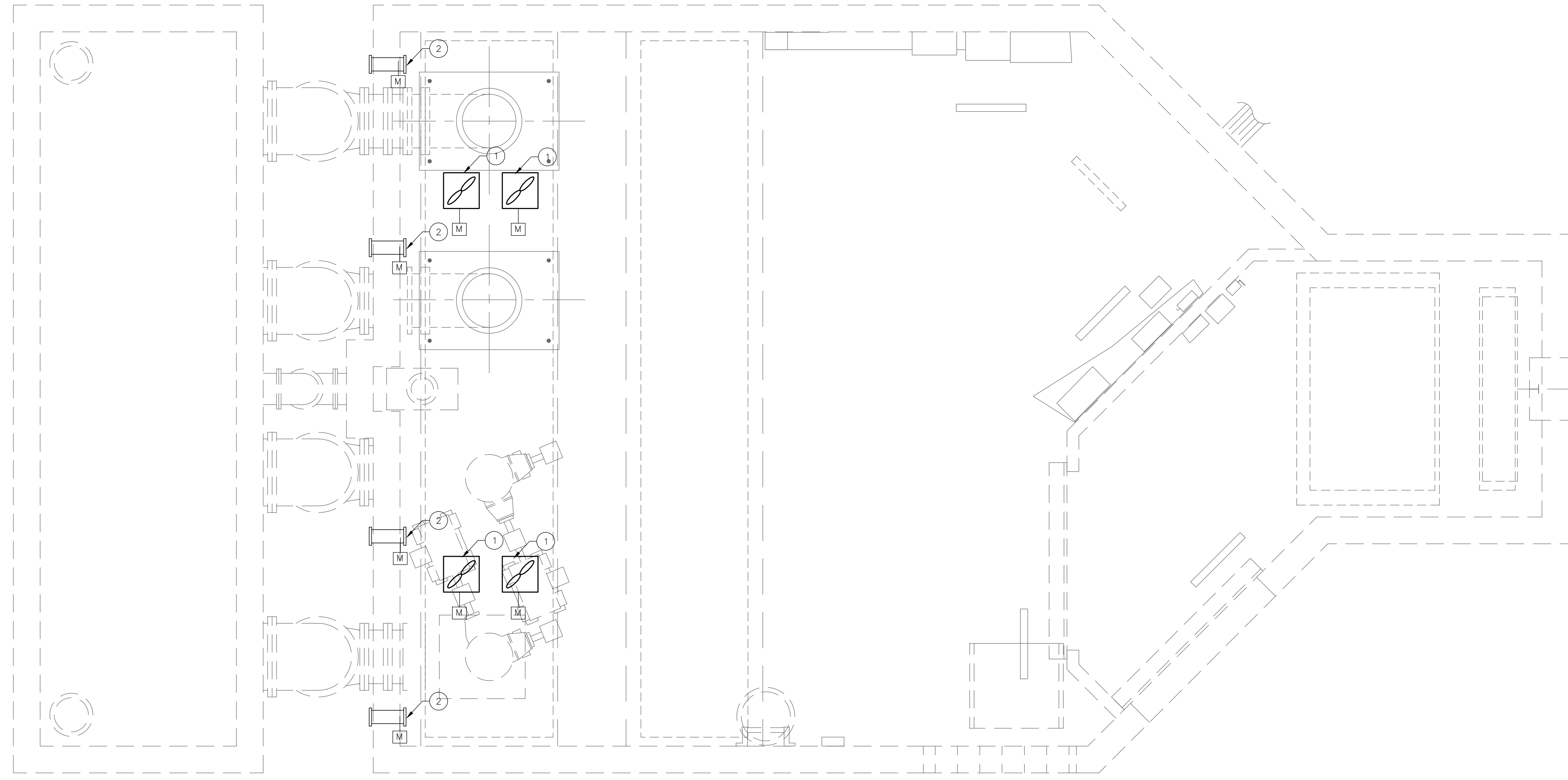
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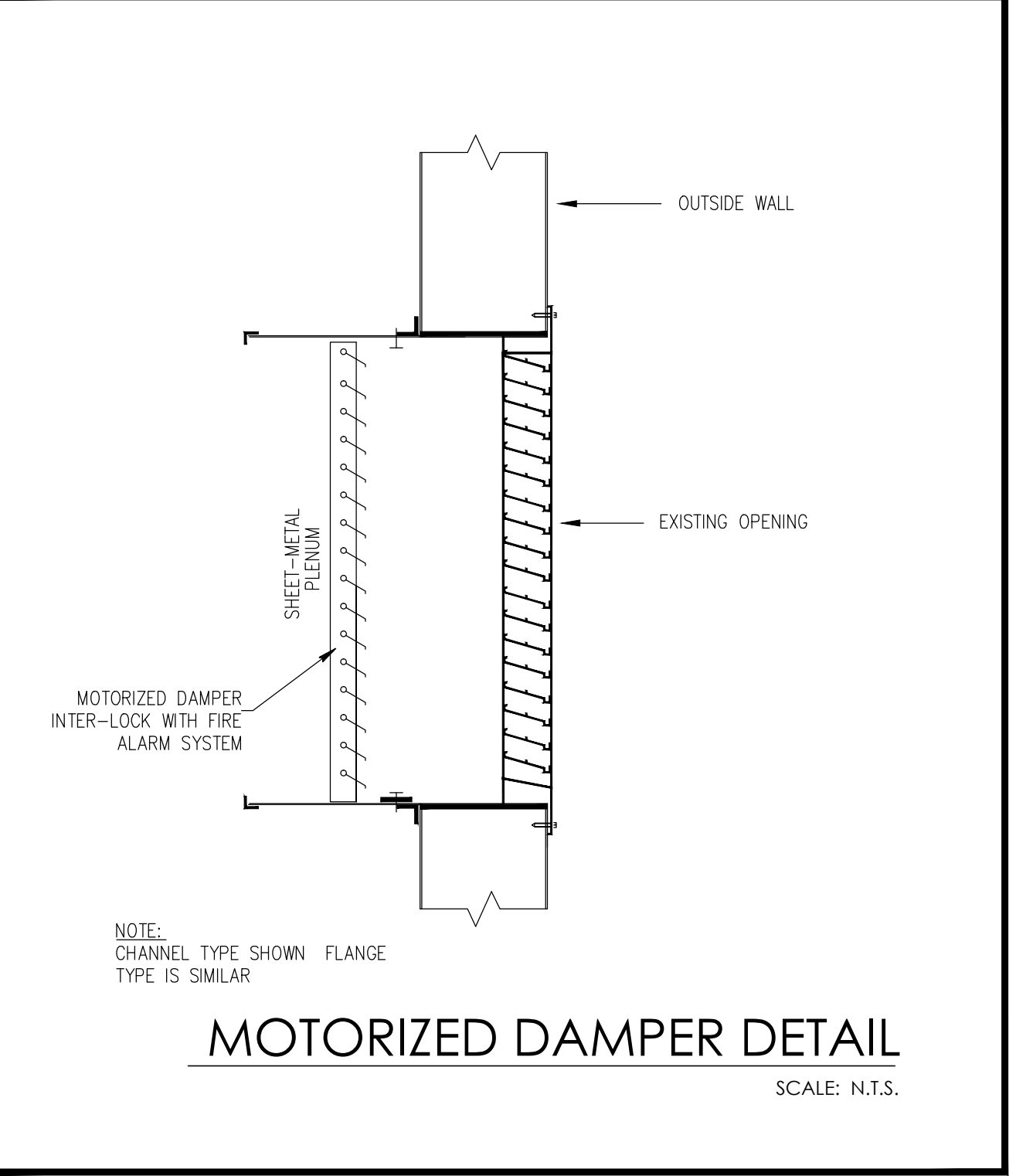
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- DRAWING KEYNOTES**
- ① PROVIDE MOTORIZED DAMPER TO CLOSED EXHAUST FAN OPENING WHEN SMOKE/HEAT DETECTOR IS ACTIVATED.
  - ② PROVIDE MOTORIZED DAMPER TO CLOSED EXISTING 12"Ø BUILDING OPENING WHEN SMOKE/HEAT DETECTOR IS ACTIVATED.



- HVAC GENERAL NOTES**
1. GENERAL
    - A. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND WITH ALL APPLICABLE REGULATIONS.
    - B. DRAWINGS: REFER TO ALL DRAWINGS FOR COORDINATION OF THE HVAC WORK.
    - C. ARRANGE AND PAY FOR ALL PERMITS, LICENSES, INSPECTIONS AND TESTS. OBTAIN THE REQUIRED CERTIFICATES AND PRESENT TO OWNER.
    - D. GUARANTEE: THE COMPLETED INSTALLATION SHALL BE FULLY GUARANTEED AGAINST DEFECTIVE MATERIALS AND/OR IMPROPER WORKMANSHIP FOR A MINIMUM OF ONE YEAR FOR MATERIAL AND LABOR. ALL COMPRESSORS SHALL BE GUARANTEED FOR 5 YEARS MINIMUM.
  2. SHOP DRAWINGS: CONTRACTORS SHALL SUBMIT FOR APPROVAL, WITHIN 30 DAYS AFTER SIGNING CONTRACT, A MINIMUM OF FIVE COPIES OF FULLY DESCRIPTIVE LITERATURE, INCLUDING BUT NOT LIMITED TO: AIR CONDITIONING UNITS, FANS AND AIR OUTLETS. NO WORK SHALL PROCEED WITHOUT APPROVAL OF THESE SUBMITTALS.
  3. ELECTRICAL CONTROLS AND POWER WIRING: UNDER ELECTRICAL CONTRACT.
  4. EQUIPMENT SPECIFIED BY MANUFACTURER'S NUMBER SHALL INCLUDE ALL ACCESSORIES, CONTROLS, ETC., LISTED IN THE CATALOG AS STANDARD WITH THE EQUIPMENT. OPTIONAL OR ADDITIONAL ACCESSORIES SHALL BE FURNISHED AS SPECIFIED.
  5. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID ANY INTERFERENCES THAT MAY DELAY PROGRESS OF CONSTRUCTION. CONTRACTOR SHALL INSTALL ALL NECESSARY OFFSETS, BENDS, AND TRANSITIONS REQUIRED TO PROVIDE A COMPLETE SYSTEM AT NO ADDITIONAL COST TO OWNER.



**MECHANICAL PLAN**  
scale: 1/4" = 1'-0"

DATE	REVISIONS DESCRIPTION

**bach design engineers**  
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**CITY OF MIAMI**  
**CAPITAL IMPROVEMENTS PROGRAM**

PROJECT NAME	PROJECT No.
<b>MIAMI RIVERVIEW PS</b>	<b>17096</b>

MECHANICAL FLOOR PLAN

\$USERS\$    \$DATES\$    \$TIMES\$    \$FILES\$

SHEET NO.  
M-1