



ADDENDUM NO. 1
TO THE CONTRACT DOCUMENTS

Date: June 13, 2018
Project No.: 682450

for the construction of

Pump Stations Rehabilitation Phase 1 H, B, And A Generator

City of Key West, Key West, Florida

To All Planholders and/or Prospective Bidders:

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the construction of **Pump Stations Rehabilitation Phase 1 H, B, And A Generator** dated May 2018 as fully and completely as if the same were fully set forth therein:

A. PRE-BID MEETING

1. Meeting minutes from pre-bid meeting, attached.
2. Copy of sign-in sheet from the pre-bid meeting, attached.

B. QUESTIONS AND ANSWERS

1. **Question:** Will we need to provide a backup generator at Pump Station A while the old generator is offline?

Answer: City has mobile generators capable of running the station should the need arise. However, Contractor will need to maintain an emergency generator coupling connection.

2. **Question:** Is the City's budget to Engineer's estimate available?

Answer: Not at this time, Engineer's Estimate of Probable Construction Cost will be provided via addendum.

3. **Question:** DFS equipment is installed in the pump control panel that was provided by a control panel manufacturer. Is it the intent for DFS to provide the services and materials to that control panel for the new I/O points?

Answer: Yes it is.

C. PART 3, SPECIFICATIONS

1. Section 33 12 00, Temporary Wastewater Bypass Pumping
ADD the attached section to the Contract Documents

D. DRAWINGS

1. DELETE the following Drawing and REPLACE with the attached.
030-C-101 Pump Station A Site Demolition Plan, attached.
2. DELETE the following Drawing and REPLACE with the attached.
030-C-201 Pump Station A Site Plan, attached.
3. DELETE the following Drawing and REPLACE with the attached.
020-E-601 Pump Station H One-Line Diagram, attached.
4. DELETE the following Drawing and REPLACE with the attached.
030-E-201 Pump Station A Site Plan, attached.
5. DELETE the following Drawing and REPLACE with the attached.
030-S-201 Pump Station A Platform A Plan and Section.

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 1 in the Bid Form or by submitting the Addendum with the bid package. Bid Forms submitted without acknowledgment or without this Addendum will be considered in nonconformance.

CH2M HILL

Sean Mc Coy, P.E.

Project Manager

Appended hereto and part of Addendum No. 1:
Pre-Bid Meeting Minutes, attached.
Sign-in Sheet from Pre-Bid Meeting, attached.
Section 33 12 00, Temporary Wastewater Bypass Pumping, attached.
030-C-101 Pump Station A Site Demolition Plan, attached.
030-C-201 Pump Station A Site Plan, attached.
020-E-601 Pump Station H One-Line Diagram, attached.
030-E-201 Pump Station A Site Plan, attached.
030-S-201 Pump Station A Platform A Plan and Section.

END OF ADDENDUM

MANDATORY PRE-BID MEETING MINUTES

CITY OF KEY WEST

Pump Station Rehab Phase I H, B, A Generator City Manager's Conference Room (113) Wednesday May 30, 2018 at 10:00 AM

1. Introductions (sign-in)

- a. **Sign in sheet attached**

2. Project Summary

The project proposes to rehabilitate City of Key West, Wastewater Pump Stations H, B, and A, by completing the below work:

PS H:

- Replace valves, bypass connection, hatches, pumps, piping, supports, guide rails, control panel, site lighting, and RTU w/TCU.
- Add bubbler system, and pump floor plates
- Concrete repair and minor site modifications

PS B:

- Replace hatch covers, valves, bypass connection, Pumps, piping, and guide rails
- Add De-ragger Unit, and Pump floor plates

PS A:

- Remove existing generator
- Provide new 250 kW generator with waterproof enclosure
- Modify existing pad, and walkway platform for access

3. Contract Time and Estimated Schedule

Substantial completion-150 calendar days after notice to proceed
Final Completion-within 30 calendar days after substantial completion

Estimated NTP: August 20, 2018

Bids due June 20, 2018 before 4:00 PM

Bidder's questions must be submitted in writing by close of business Monday, June 11, 2018. Submit questions to;

John Paul Castro
CoKW Utilities Director; jcastro@cityofkeywest-fl.gov

4. Liquidated Damages

\$3,000/day for failure to meet final completion

5. Allowance

An unforeseen conditions allowance of \$30,000 is included in the proposal for unforeseen conditions and conflicts. Payment of the allowance shall be based on actual costs and authorized by Work Change Directive.

6. Subcontracting

Three (3) approved process, integration, and control (PIC) contractors approved for this work:

- C&C Controls
- Newport Integration
- HTS Controls

All other subcontractors shall also be identified in proposal

7. Permits

City of Key West building permits shall be the responsibility of the contractor.

City of Key West license is required for certified or registered electrical and general contractors.

SFWMD (ERP) permit, USACE permit, and FDEP permit are not required for this project.

8. Construction Sequencing

Wastewater Systems shall remain operational always. However, temporary shutdowns will be required. **Bypass Pumping will be required. Specification to be added by addendum**

Shutdowns will need to be coordinated closely with Owner, begin coordination efforts 15 working days prior to any temporary shut downs.

9. Staging Area

Contractor shall confine his construction operations to within the easement limits or street right-of-way limits or make special arrangements with the property owners or appropriate public agency for the additional area required.

10. Working Hours

City of Key West has a noise ordinance that allows working hours between 8:00 AM to 7:00 PM, Monday through Friday and 9:00 AM to 5:00 PM Saturday. No work allowed on Sundays.

11. Job Site Security

Contractor shall be responsible for safety of public and the materials on site. See specification section 010100. Coordinate off-hour site security requirements with City.

12. Existing Utilities

Contractor is responsible for utility location.

Notify all utility offices which are affected by construction operations a minimum of 48 hrs in advance. Where utility relocation is required in documents, contractor shall coordinate with utility.

13. General Requirements Specification section 01 01 00

A few items to note:

- Temporary Construction Facilities; Water and Sanitary Facilities to be provided by contractor.
- Site Conditions; Contractor shall verify elevations and location of existing facilities shown on drawings prior to start of construction.
- Pre- and Post-Construction Videos Required
- Project Redlines to be maintained Daily by site superintendent
- Salvage of Materials: Pumps and Control Panel from PS H shall be removed, cleaned and delivered to OMI at RAH WWTP. (section to be modified via addendum)

14. Technical requirements

All stainless-steel components to be 316, all electrical enclosures to be NEMA 4X 316 SST.

The TCU will monitor signals from the generator, and pump station. The TCU will tie into the Owner's existing DFS SCADA network. Refer to Section 40 90 01 for TCU requirements.

15. City/OMI Comments

- a. Bidders were reminded that City Ordinance Section 2-773 Cone of Silence is in effect, and that ALL communications regarding ITB # 18-033 shall be in writing. Cone of Silence is in effect until City Commission considers the ITB at a future public Board Meeting.

16. Contractor Questions/Comments

Q: Will we need to provide a backup generator at Pump Station A while the old generator is offline.

A: City has mobile generators capable of running the station should the need arise. However, Contractor will need to maintain an emergency generator coupling connection.

Q: Is the City's Budget, or Engineer's Estimate Available.

A: Not at this time. Engineer's Estimate of Probable Construction Cost will be provided via addendum.

17. Meeting Adjourned

SIGN-IN
MANDATORY PRE-BID MEETING
 City of Key West
PS Rehab Phase 1
 H, B, and A Generator
 Wednesday June 30th, 2018

To insure all contact information is recorded correctly and meeting minutes are sent to the right email address: PLEASE PRINT CLEARLY

Name	Company	Phone No.	Cell Phone	E-mail
John Paul Castro	CoKW	305-809-3902	305-846-4244	icastro@cityofkeywest-fl.gov
John Bartelmo	OMI			john.bartelmo@jacobs.com
Sean McCoy	Jacobs		305.432.1397	sean.mccoy@jacobs.com
Sarah Schultz	Kiewit	813-399-3118	same	Sarah.Schultz@kiewit.com
Isaynit Novoa	Stonehenge Construction, LLC	780-800-7776	780 041 0193	inovoqa@shc-vs.com
JEFF KIRK	Near Shore Elect.	305-294-3991		Nearshore@Bellsouth.net
John Bartelmo	OMI	305-292-5102	same	John.Bartelmo@Jacobs.com
Jeanne Akersblom	Akersblom Contracting, Inc	954-224-1766	same	rakertblom@aol.com
CARL AKERBLOM	AKERBLOM CON, INC	954-224-4437	SAME	AKERBLOM@ADC-COM
ANDREW CHAPMAN	XYLEM PUMPS	954-829-7741	ANDREW	CHAPMAN@XYLEMINC.COM
STEVE CHAPNER	KEW	305-304-3930	SAME	SCHEPNER@CITYOFKEYWEST-FL.GOV
CHRIS HUG	KAMAN INDUSTRIES	305-570-5567	same	CHRIS.HUG@KAMAN.COM
Paul Waters	Douglas N. Higgins	305-797-1049	same	Paulw@duhiggins.com
Leo Murrell	CT & S	305 797 3688		leo@murrelltoppico.com
MICHAEL L. SMITH	FLORIDA KEYS ELECT, LLC	305-296-4028	305-797-3985	msmith@flkeysselectric.com

SECTION 33 12 00
TEMPORARY WASTEWATER BYPASS PUMPING SYSTEM

PART 1 GENERAL

1.01 SYSTEM DESCRIPTION

A. Performance Requirements:

1. It is essential to the operation of the City of Key West sewer collection system that no interruption in wastewater collection to the City's wastewater treatment plant occur during the site improvements project. The Contractor shall provide, maintain, and operate all temporary facilities such as dams, plugs, pumping equipment (both primary and backup units as required), pipe, fittings, and all necessary power to intercept the gravity sewers that flows to the Pump Station wet well before it would interfere with the required work and return it to the existing force main piping system downstream of the Pump Station.
2. Design, install, and operate the temporary pumping system and pay all costs associated with this system, including fuel.
3. Convey the sewage wastewater safely past this Work area. Do not stop or impede the gravity sewers flows under any circumstances.
4. Maintain wastewater flow around the area where Pump Station modifications are to be constructed in a manner that will not cause surcharging of sewers, damage to sewers, and that will protect public and private property from damage and flooding.
5. Protect water resources, wetlands, and other natural resources. Mitigation of any spills and associated fines and costs shall be the sole responsibility of the Contractor.

B. Design Requirements:

1. Provide all pipeline plugs, pumps of adequate size to handle peak flow, and temporary discharge piping, to ensure that the total flow in the influent gravity sewers to the Pump Station can be safely diverted around the Pump Station. Bypass pumping system will be required to be operated 24 hours per day 7 days per week, including holidays during periods when piping modifications are being made by the Contractor and the existing system is inoperable.
2. Pump Stations are equipped with cam-lock fitted bypass connections.

3. Install a minimum of two pumps to bypass the main flow of the influent gravity sewers to the Pump Station. All pumps shall be of equal size. Each pump (normal operating) shall have a minimum pumping capacity to convey flow shown in table. All pumps shall be online and isolated by individual valves and ready for immediate use in the event of an emergency or breakdown.
4. Install suction and discharge piping from the point of flow collection to the existing station bypass pump connection to the existing force main system. Each individual discharge pipeline shall be of adequate size to convey the required flow for the system's normal operating pumps. Contractor shall furnish and install tapping sleeves and valves, including upstream isolation, or existing process piping systems as required to tie-in the temporary pumping system.
5. Maintain onsite portable lights for routine maintenance and/or emergency use.

Pump Station	Design Flow/Head
B	1,600 GPM/78' TDH
H	375 GPM/18' TDH

1.02 SUBMITTALS

- A. Shop Drawings: Detailed plans and descriptions outlining all provisions and precautions regarding the handling of existing wastewater flows. This plan must be specific and complete including such items as schedules, locations, elevations, capacities of equipment, materials and all other incidental items necessary and/or required to ensure proper protection of the facilities, including protection of public and private property from damage and flooding by surcharging of sewers. The plan shall include but not be limited to details of the following:
 1. Sewer plugging method and types of plugs.
 2. Number, size, material, location and method of installation of suction piping.
 3. Number, size, material, method of installation and location of installation of discharge piping.
 4. Bypass pump sizes, capacity, number of each size to be onsite and power requirements.
 5. Calculations of static lift, friction losses, and flow velocity (pump curves showing pump operating range shall be submitted).
 6. Standby power generator size, location.
 7. Thrust restraint scheme for all pipe and fittings.
 8. Sections showing any suction and discharge pipe depth, embedment, select fill and special backfill where required.
 9. Method of noise control for each pump and/or generator.

10. Any temporary pipe supports and anchoring required.
11. Calculations for selection of bypass pumping pipe size.
12. Schedule for installation of and maintenance of bypass pumping lines.

B. Quality Control Submittals: Certification of vendor's compliance with qualifications included in Article Quality Assurance.

1.03 QUALITY ASSURANCE

A. Employ vendor specializing in design and operation of temporary bypass pumping system.

1. Provide five references from projects of similar size performed by vendor in the past 3 years.
2. Vendor shall be Godwin Pumps, Sunbelt Rentals Pump and Power Services, or approved equal.

B. System operators to be full-time employees of vendor with minimum 3 years experience in operating and maintaining bypass systems. An operator shall be present at all times, 24 hours per day, 7 days per week, that temporary pumps are in operation.

C. Contractor shall be responsible for any spillage of raw sewage that results in civil or criminal charges from any local, state, or federal agency. Costs for these charges and any required restoration shall be the Contractor's sole responsibility.

1.04 MAINTENANCE

A. Maintenance Service: Ensure that the temporary pumping system is properly maintained and a responsible operator shall be on hand at all times when pumps are operating.

B. Extra Materials: Spare parts for pumps and piping shall be kept onsite as necessary.

C. Adequate hoisting equipment for each pump and accessories shall be maintained on the site.

PART 2 PRODUCTS

2.01 BYPASS PIPING MATERIALS

- A. Header and Discharge Piping: Pipe, fittings, couplings, and related items shall be manufactured of materials suitable for conveyance of raw unscreened sewage under pressure. The pressure rating of pipe, fittings, and couplings shall be a minimum of 1.25 times the shutoff head of the bypass pumps employed in the pumping system. Piping shall be suitably thrust restrained for the pumping pressures encountered.
- B. Suction Piping: Suction piping shall be high density polyethylene pressure piping conforming to ASTM D3350 with a maximum SDR of 17. Joints shall be butt fusion welded. Suction piping shall be as manufactured by Phillips Driscopipe, Inc., or equal.

2.02 EQUIPMENT

- A. All pumps used shall be fully automatic self priming units that do not require the use of foot-valves or vacuum pumps in the priming system. The pumps shall be electrically operated with diesel engine backup power. Contractor shall provide temporary electric power from Keys Energy to operate the pumps. All pumps shall be trailer mounted and must be constructed to allow dry running for long periods of time to accommodate the cyclical nature of influent flows. Contractor shall provide an emergency generator connection for the existing pumps upon disconnection of the generator and for the bypass pumps to provide power to operate the pumps should Keys Energy power be interrupted. An emergency generator will be provided by the City for use by the Contractor.
- B. Contractor is responsible for operating and maintaining the temporary pumping equipment 24 hours a day for the duration of the project.
- C. Provide the necessary stop/start controls and the following alarm signals:
 - 1. High level alarm (beacon and horn).
 - 2. Pump malfunction (beacon and horn). Contractor shall provide auxiliary contacts for temporary motor failure and a float with auxiliary contacts (High Level) for use by Owner in remote indication. Connection to auxiliary contacts for remote indication will be by the Owner.
- D. Pump design shall be such that 3.0-inch minimum solid may be passed.

- E. All pumps shall be Godwin “Dri-Prime” automatic self-priming pumps (CD, DPC, or HL Series) meeting flow and head conditions specified as manufactured Godwin Pumps of America, Inc.; Gorman-Rupp (PA or Quiet Flow Series) or equal.
- F. Incorporate noise prevention measures for any and all equipment being used to ensure minimum noise impact on the surrounding areas.
 - 1. Include: Hospital grade silencers or mufflers, equipment modifications, and special equipment or sound barrier walls as necessary to limit noise levels below 55 decibels at a distance of 25 feet in the direction of any residential home.
- G. Repair clamps shall be full circle, stainless steel clamps, Style FS2 or FS3 as manufactured by the Ford Meter Box Company, Inc., or equal.

PART 3 EXECUTION

3.01 PREPARATION

- A. Precautions:
 - 1. Locate any existing utilities in the area selected to locate the bypass pipelines. Locate bypass pipelines to minimize any disturbance to existing utilities and obtain approval of all utilities, and the Engineer prior to installation.
 - 2. Bypass pump all wastewater flows during all phases of the Work and coordinate all bypass pumping operations with the Owner.

3.02 INSTALLATION

- A. Plugging or blocking of sewage flows shall incorporate a primary and secondary plugging device. When plugging or blocking is no longer needed for performance and acceptance of Work, it is to be removed in a manner that permits the sewage flow to slowly return to normal without surge, to prevent surcharging or causing other major disturbances downstream. Contractor shall provide continuous monitoring of the integrity of plugs and blocks.
- B. When working inside manholes, exercise caution and comply with OSHA requirements when working in the presence of sewer gases, combustible or oxygen-deficient atmospheres, and confined spaces.

3.03 FIELD QUALITY CONTROL

- A. Test: Perform a hydrostatic pressure test for each section of discharge piping with a maximum pressure equal to 1.5 times the maximum operating pressure of the system. The Owner shall witness the test to ensure that there are no leaks in the discharge piping prior to actual operation.
- B. Bypass pumping systems shall be operated continuously for a minimum period of 24 hours to demonstrate the performance and reliability of the system prior to initiating modification work, which would eliminate existing Pump Station from service.
- C. The Operator shall inspect the bypass pumping system every hour, or on a schedule approved by the Engineer.
 - 1. An inspection log shall be kept at each pumping location. Each inspection log shall be marked with a time clock stamp to ensure the required maintenance and inspection are being performed.

3.04 CLEANING

- A. Sewage remaining in the bypass discharge pipeline and/or pumping equipment shall be discharged to a working sewer before the bypass pumping system is broken down and demobilized.
- B. Disturbed Areas: Upon completion of the bypass pumping operation, clean up all areas disturbed by these operations, restoring same to a condition, at least equal to that which existed prior to the start of the Work.

3.05 DEMOBILIZATION

- A. Upon completion of the temporary bypass pumping, remove pumps, piping, and appurtenances from the site.

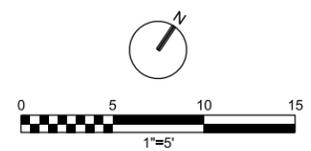
END OF SECTION

GENERAL SHEET NOTES

1. THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONE AE (ELEVATION 7).

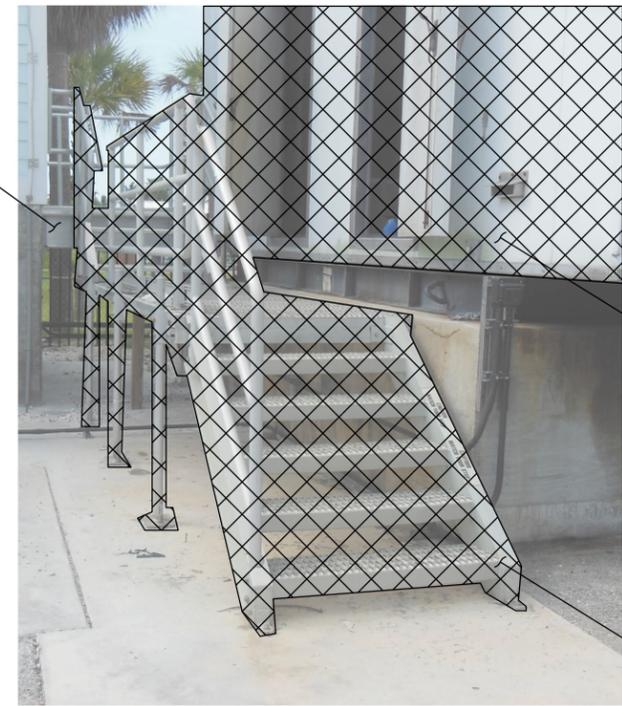
AMELIA STREET

30' RIGHT-OF-WAY PER PLAT



SHEET KEYNOTES

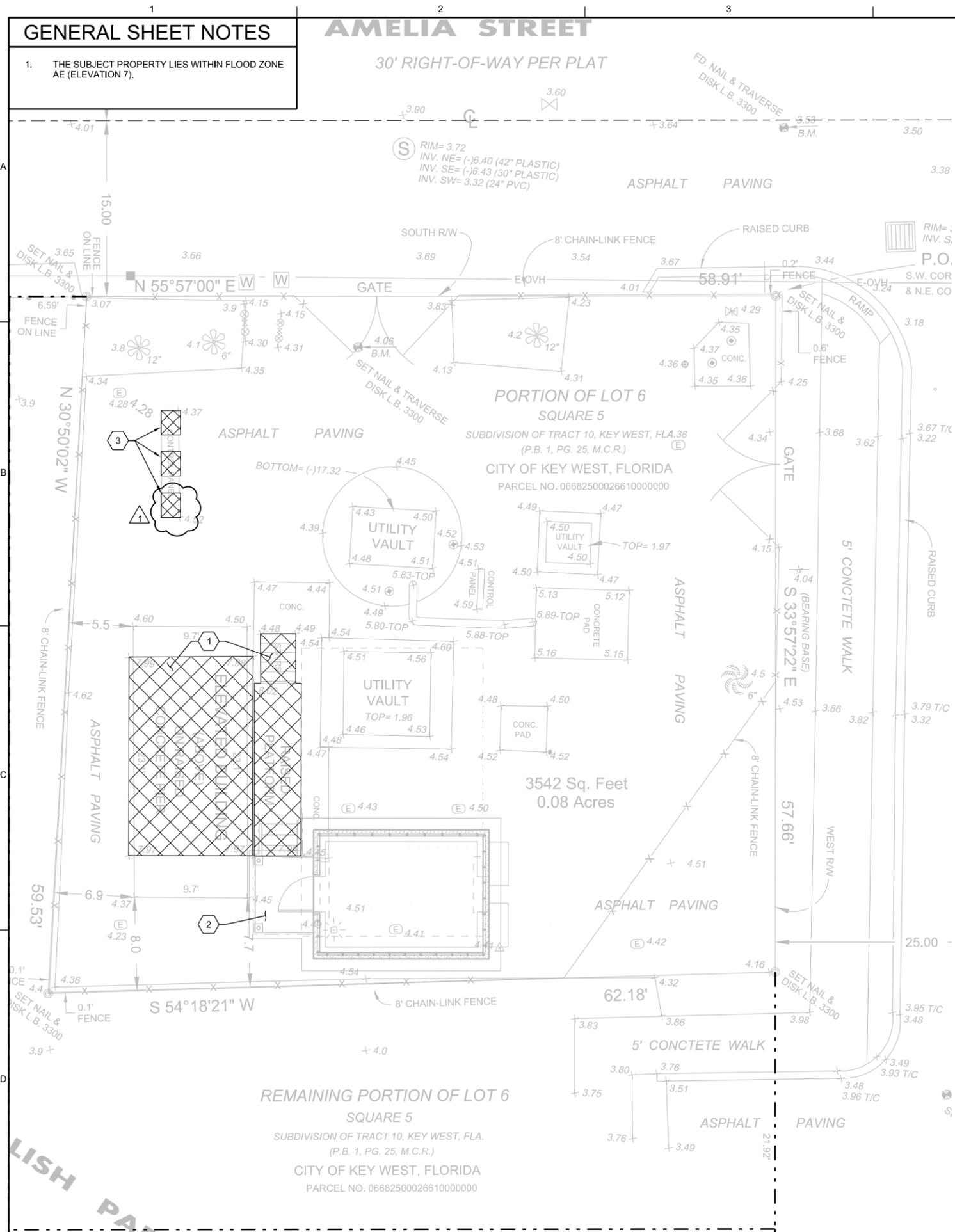
- TO BE REMOVED.
- EXISTING PLATFORM TO REMAIN.
- DEMO AT'S, MAIN DISCONNECT, CABINET, AND SUPPORT.



1 PHOTO
NTS



2 PHOTO
NTS



NO.	DATE	REVISION	CHK	APVD
1	06/09/18	ADDENDUM NO. 1	R. MORRISON	R. MORRISON
DR		R. MORRISON		T. MALONE
DGSN		R. MORRISON		R. MORRISON
3011 SW WILLISTON ROAD GAINESVILLE, FLORIDA 32608 EB0000072 AAC001982 RICHARD THOMAS MORRISON PE 67713				
PUMP STATIONS H & B REHABILITATION AND PUMP STATION GENERATOR REPLACEMENT CITY OF KEY WEST KEY WEST, FLORIDA				
CIVIL PUMP STATION A SITE DEMOLITION PLAN				
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"				
DATE	MAY 2018			
PROJ	683450			
DWG	030-C-101			
SHEET	18 of 30			

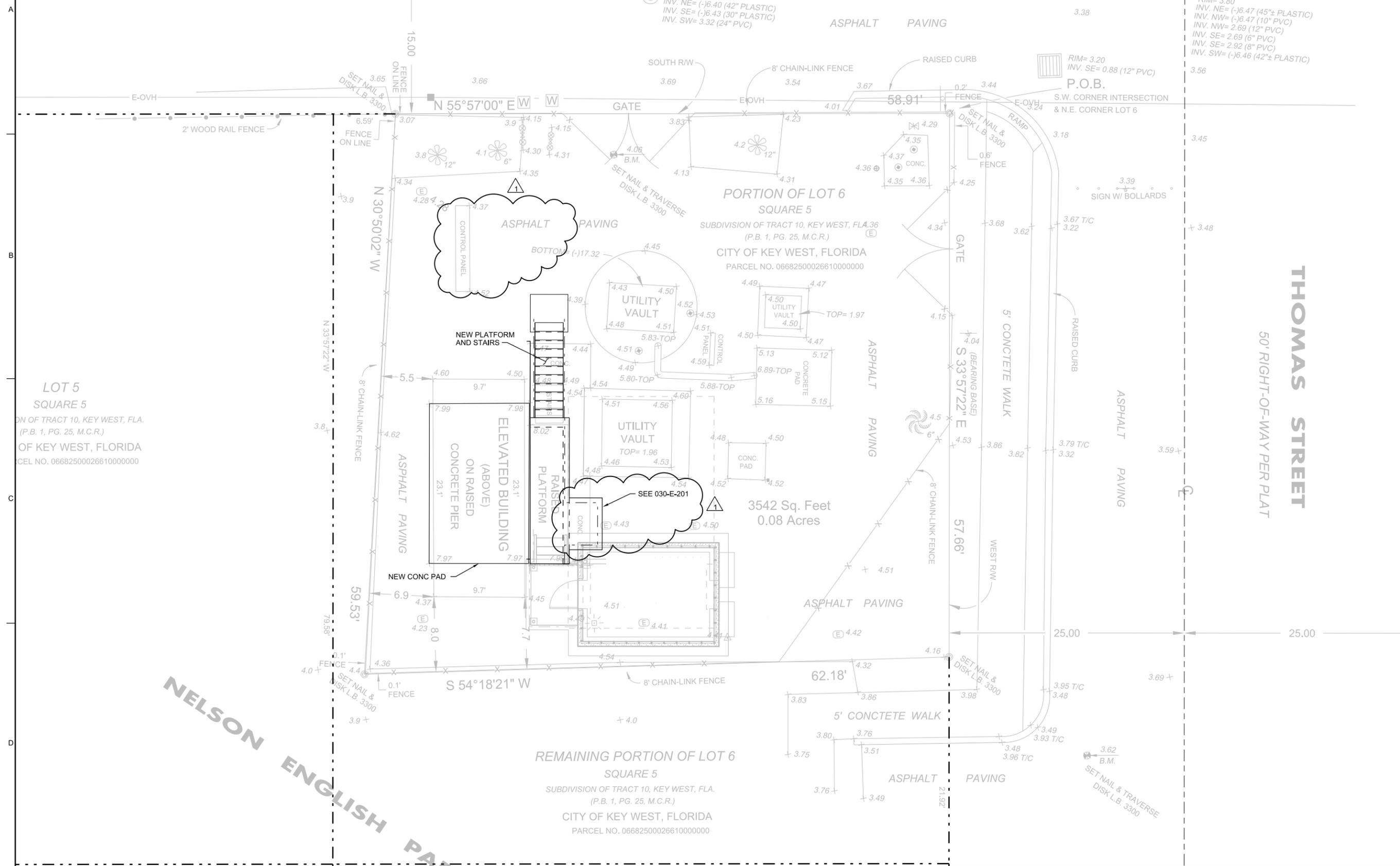
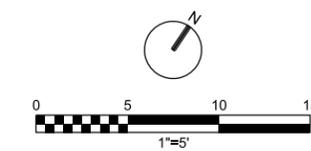
BID DOCUMENTS

GENERAL SHEET NOTES

1. THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONE AE (ELEVATION 7).

AMELIA STREET

30' RIGHT-OF-WAY PER PLAT



LOT 5
SQUARE 5
 PART OF TRACT 10, KEY WEST, FLA.
 (P.B. 1, PG. 25, M.C.R.)
 CITY OF KEY WEST, FLORIDA
 PARCEL NO. 06682500026610000000

PORTION OF LOT 6
SQUARE 5
 SUBDIVISION OF TRACT 10, KEY WEST, FLA.36
 (P.B. 1, PG. 25, M.C.R.)
 CITY OF KEY WEST, FLORIDA
 PARCEL NO. 06682500026610000000

3542 Sq. Feet
 0.08 Acres

REMAINING PORTION OF LOT 6
SQUARE 5
 SUBDIVISION OF TRACT 10, KEY WEST, FLA.
 (P.B. 1, PG. 25, M.C.R.)
 CITY OF KEY WEST, FLORIDA
 PARCEL NO. 06682500026610000000

3011 S.W. WILLISTON ROAD GAINESVILLE, FLORIDA 32608 EBO000072 AAC001982		RICHARD THOMAS MORRISON PE 67713	
PUMP STATIONS H & B REHABILITATION AND PUMP STATION GENERATOR REPLACEMENT		CITY OF KEY WEST KEY WEST, FLORIDA	
CIVIL		PUMP STATION A SITE PLAN	
DATE	MAY 2018	NO.	1
PROJ	683450	ADDENDUM NO.	1
DWG	030-C-201	REVISION	
SHEET	19 of 30	CHK	
		DR	R. MORRISON
		CHK	T. MALONE
		BY	R. MORRISON
		APVD	

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	MAY 2018
PROJ	683450
DWG	030-C-201
SHEET	19 of 30



EXISTING DISTRIBUTION PANEL, DP-A

EXISTING ATS-A

EXISTING MAIN BREAKER MCB-A

GENERAL NOTES

- LEGEND:**
 XXX TO BE REMOVED
- A. DO NOT SCALE ELECTRICAL DRAWING. REFER TO THE CIVIL, ARCHITECTURAL/MECHANICAL, STRUCTURAL DRAWINGS AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACTLY LOCATION OF ALL EQUIPMENT.
 - B. ALL WORK SHALL COMPLY WITH THE NEC AND LOCAL CODES.
 - C. CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITIES, PIPING, CONDUITS, ETC. AND REROUTE NEW ELECTRICAL CONDUITS AS REQUIRED.
 - D. CONDUCTORS SHALL NOT BE SPLICED EXCEPT AS NOTED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS.
 - E. CONNECT NEW CONTROL SIGNALS FROM SERVICE ENTRANCE ATS, AND GENERATOR TO EXISTING CONTROL PANEL CP-A LOCATED INSIDE THE ELECTRICAL ROOM.
 - F. FURNISH AND INSTALL ASCO 7000 SERIES, JTAUS-A-3-300-N-5-X-V, 18B/18G, 31Z, 72EE, 119BG, OR EQUAL

GENERAL NOTES

- HAZARDOUS LOCATION NOTES:**
- 1. PER NFPA 850, TABLE 4.2, ROW 15, LINE a, THE WET WELL IS CLASSIFIED AS A HAZARDOUS LOCATION AS FOLLOWS:
 - a. THE AREA INSIDE THE WETWELL AND WITHIN A 3'-0" RADIUS AROUND VENT OPENING AS CONSIDERED CLASS I, DIV 1, GROUP C AND D LOCATIONS.
 - b. THE AREA WITHIN A 5'-0" RADIUS AROUND VENT OPENING AND AN ENVELOPE 18" ABOVE HATCHES AND EXTENDING 3'-0" FROM THE EDGE OF THE HATCHES ARE CONSIDERED CLASS I, DIV 2, GROUP C AND D LOCATIONS.
 - 2. PER NFPA 820, TABLE 4.2, ROW 31, LINE a AND ROW 36, LINE a, THE VALVE AND METER VAULTS ARE CLASSIFIED AS HAZARDOUS LOCATIONS AS FOLLOWS:
 - a. THE AREA INSIDE THE VAULT IS CONSIDERED CLASS I, DIV 2, GROUP C AND D LOCATIONS.
 - 3. PER NFPA 820, TABLE 4.2, ROW 20, LINE b, THE ODOR-CONTROL SYSTEM IS CLASSIFIED AS A HAZARDOUS LOCATION AS FOLLOWS:
 - a. THE AREA WITHIN 3'-0" ENVELOPE AROUND THE ODOR-CONTROL SYSTEM IS CONSIDERED A CLASS I, DIV 2, GROUP C AND D LOCATION.
 - 4. PROVIDE SUITABLE WIRING METHODS AND MATERIALS FOR THE HAZARDOUS LOCATIONS PER NFPA 70 (NEC).

SHEET KEYNOTES

1. SAVE EXISTING CONDUIT TO USE WITH NEW SERVICE ENTRANCE DISCONNECT AND NEW AUTOMATIC TRANSFER SWITCH
2. [Keynote symbol]
3. [Keynote symbol]
5. RELOCATE WEATHER PROOF LIGHT SWITCHES (2605-011b)
6. REFERENCE STRUCTURAL DETAILS FOR ATS CONCRETE BASE ON DRAWING 030-S-2001

NO.	DATE	REVISION	CHK	APVD
1	06/09/08	ADDENDUM No. 1	N ADAMS	D NICHOLSON
			A PASTRANA	D NICHOLSON
			DR	APVD

3011 S.W. WILLISTON ROAD
 GAINESVILLE, FLORIDA 32608
 EB0000072 AAC001982

DAVID C. NICHOLSON PE 60201

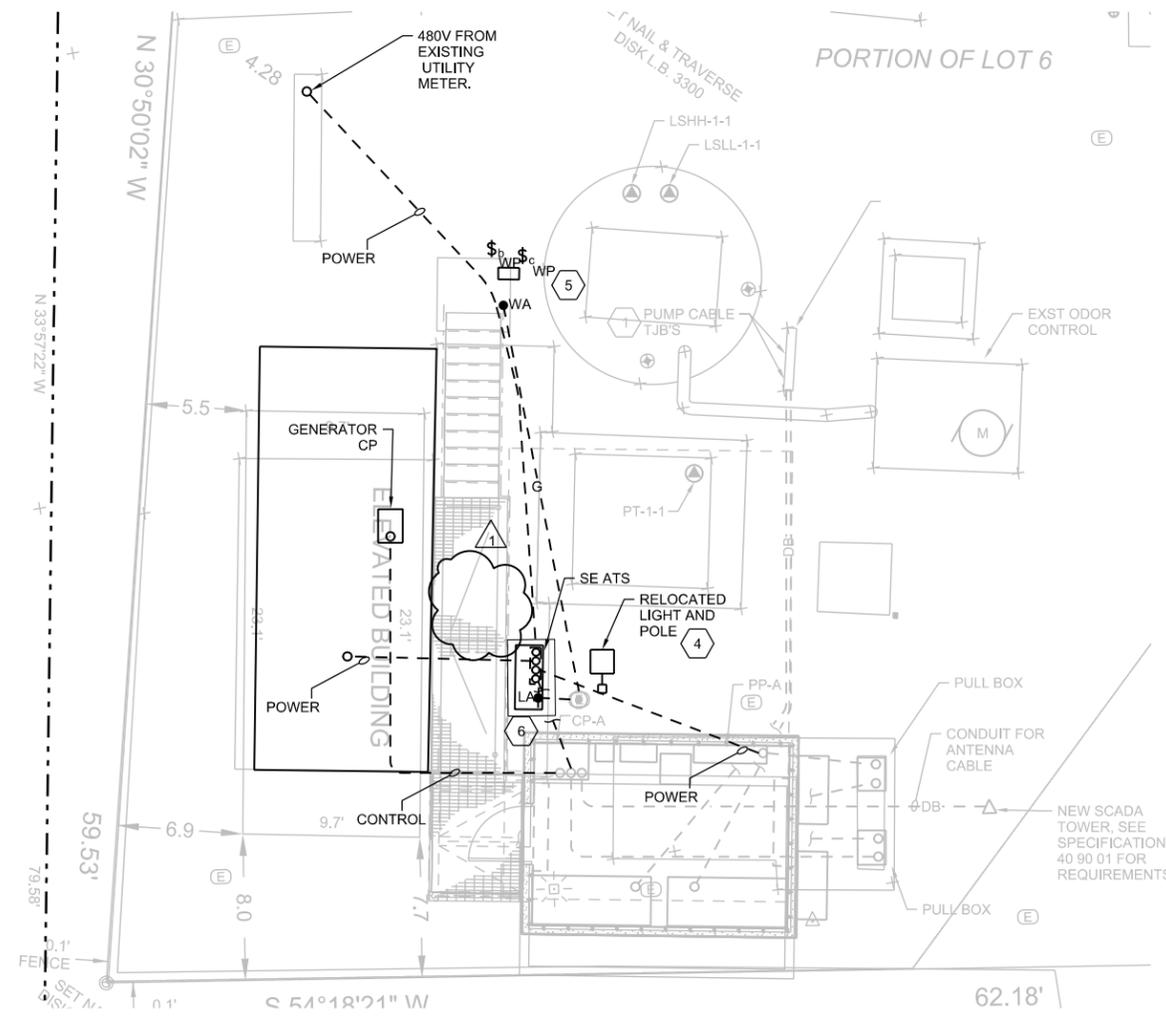
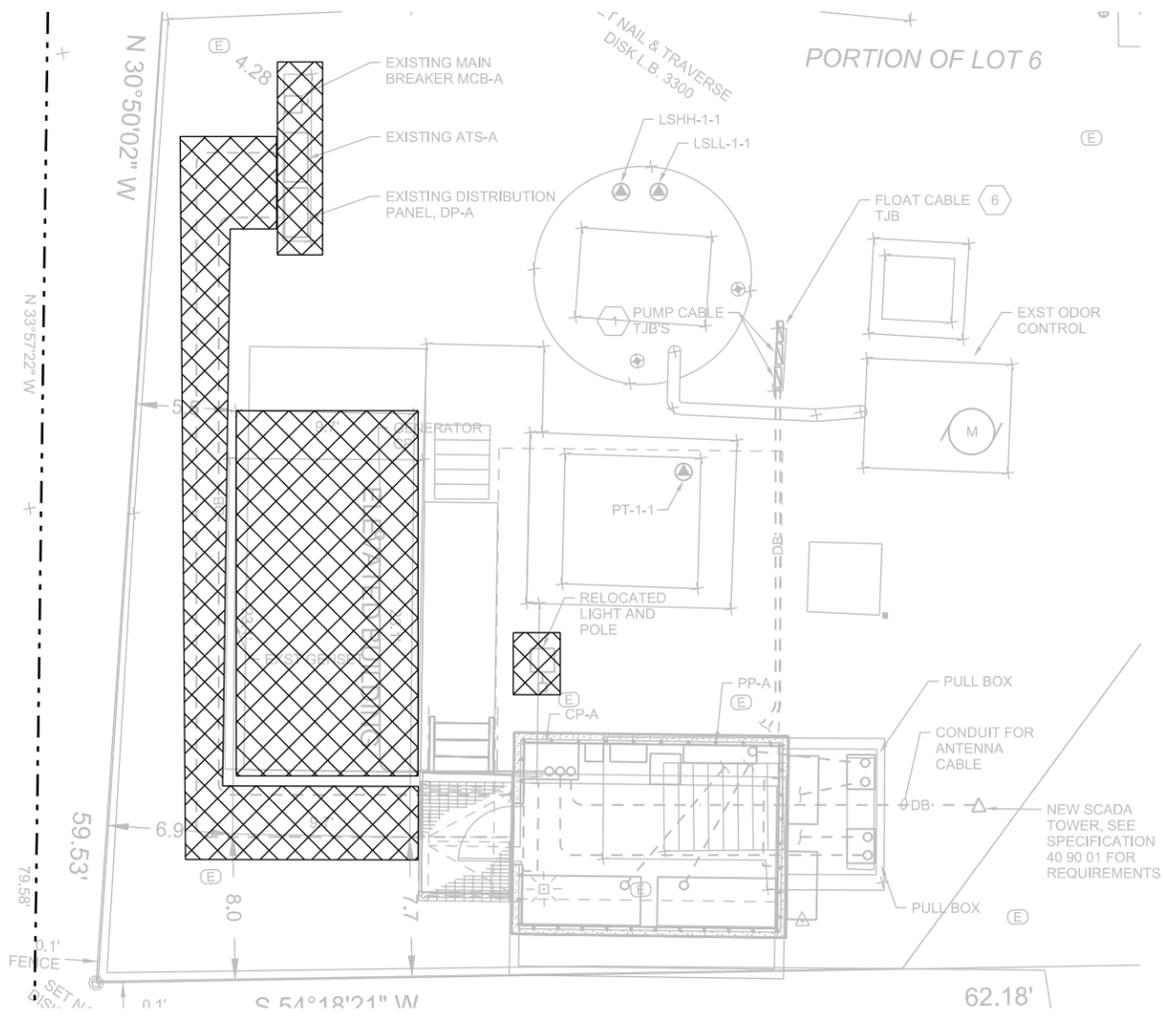
PUMP STATIONS H & B REHABILITATION
 AND PUMP STATION GENERATOR REPLACEMENT
 CITY OF KEY WEST
 KEY WEST, FLORIDA

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	MAY 2018
PROJ	683450
DWG	030-E-201
SHEET	21 of 30

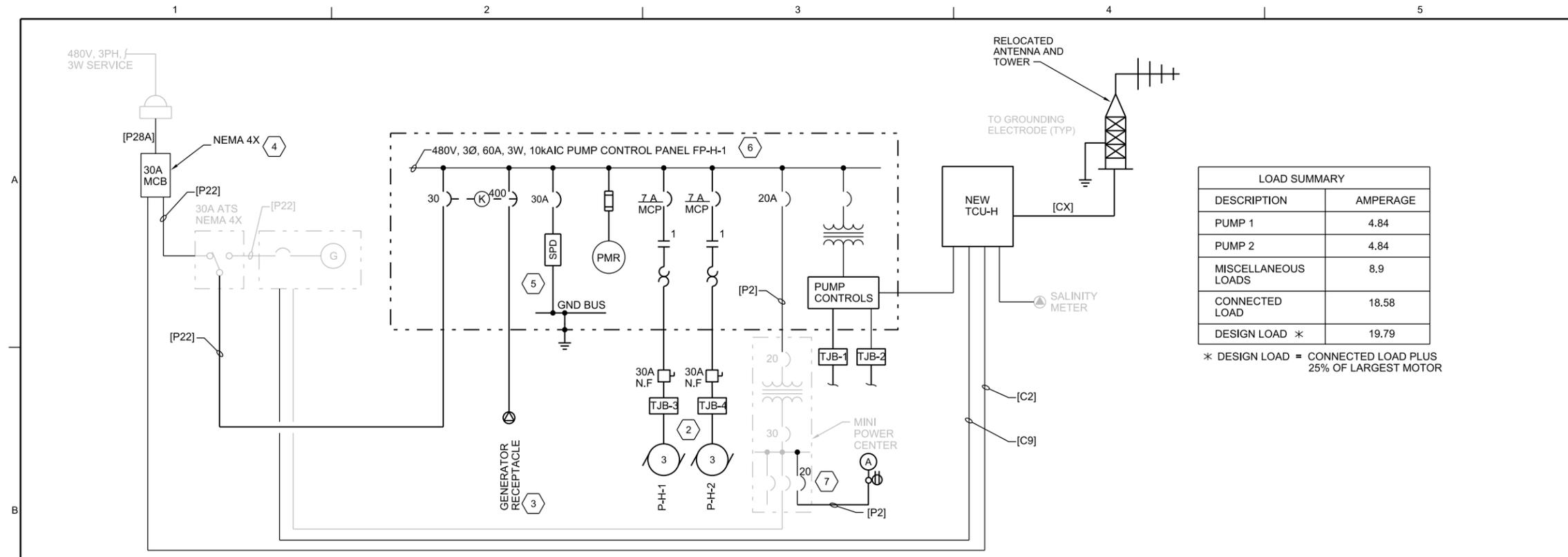
BID DOCUMENTS

© CH2M HILL 2018. ALL RIGHTS RESERVED.

REUSE OF DOCUMENTS: THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.



DEMO SITE PLAN PUMP STATION A



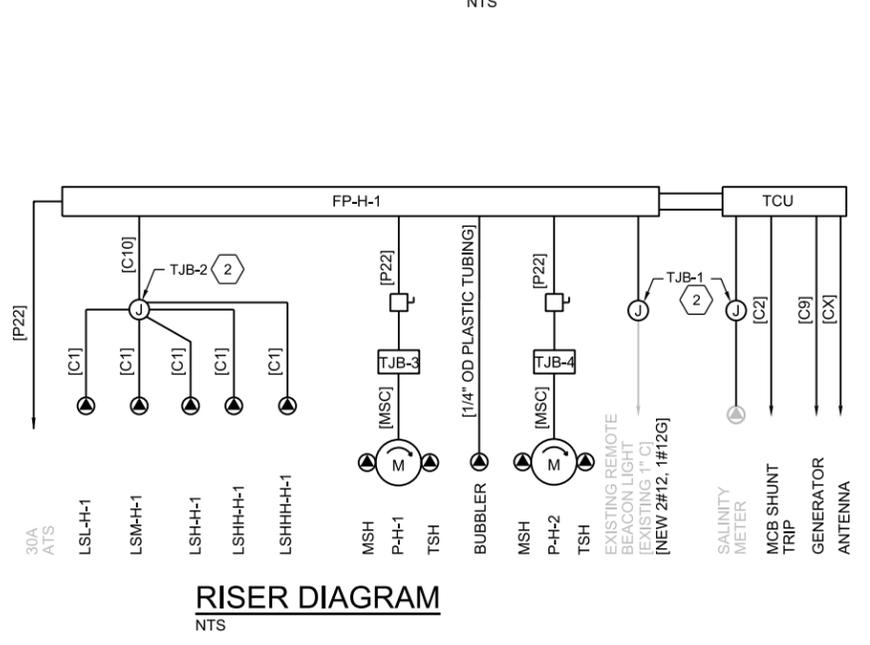
LOAD SUMMARY	
DESCRIPTION	AMPERAGE
PUMP 1	4.84
PUMP 2	4.84
MISCELLANEOUS LOADS	8.9
CONNECTED LOAD	18.58
DESIGN LOAD *	19.79

* DESIGN LOAD = CONNECTED LOAD PLUS 25% OF LARGEST MOTOR

- ### SHEET KEYNOTES
- ALL RACEWAYS TO BE PVC-COATED RGS. REFER TO SPECIFICATION SECTION 26 05 01
 - PROVIDE NEMA 4X 316 SST TERMINAL JUNCTION BOXES SIZE PER NEC REQUIREMENTS WITH NSI POLARIS BLUE SERIES SUBMERSIBLE POWER DISTRIBUTION BLOCKS.
 - FURNISH AND INSTALL 400A, 600V GENERATOR RECEPTACLE WITH JUNCTION BOX AND ANGLED ADAPTER TO BE REMOTELY LOCATED. RUSSELL STOLL: DS 4404MRA00, NO SUBSTITUTIONS.
 - NEW MAIN CIRCUIT BREAKER DISCONNECT WITH SHUNT TRIP OPTION. BREAKER SHALL OPEN UPON RECEIPT OF SHUNT TRIP COMMAND FROM TCU.
 - PROVIDE CATEGORY C, 6-MODE, 20KA NOMINAL DISCHARGE CURRENT, SPD WITH SINE WAVE TRACKING. INSTALL IN POWER PANEL AS SHOWN AND ON THE NORMAL / UTILITY SIDE OF THE AUTOMATIC TRANSFER SWITCH.
 - PUMP CONTROL PANEL SHALL BEAR A FROM A NATIONAL RECOGNIZED TESTING LABORATORY INDICATING ITS LISTING / LABELING IN ACCORDANCE WITH UL-698A, INDUSTRIAL CONTROL PANELS.
 - FURNISH AND INSTALL NEW 20A BREAKER IN THE EXISTING MINI POWER CENTER TO POWER A NEW POLE MOUNTED LIGHT FIXTURE AND A WEATHER PROOF RECEPTACLE.
 - THE GENERATOR CIRCUIT BREAKER TO BE INTERLOCKED WITH MAIN CIRCUIT BREAKER TO PREVENT BOTH CIRCUIT BREAKERS FROM BEING CLOSED AT THE SAME TIME. PROVIDE A 3" CONDUIT WITH A 4#350KCM AND #4 GROUND FROM THE GENERATOR CIRCUIT BREAKER TO THE NEW 400 A GENERATOR RECEPTACLE.
 - FURNISH AND INSTALL CONDUIT SEALS SUITABLE FOR CLASS 1, DIV 2, GROUP C AND D LOCATION.

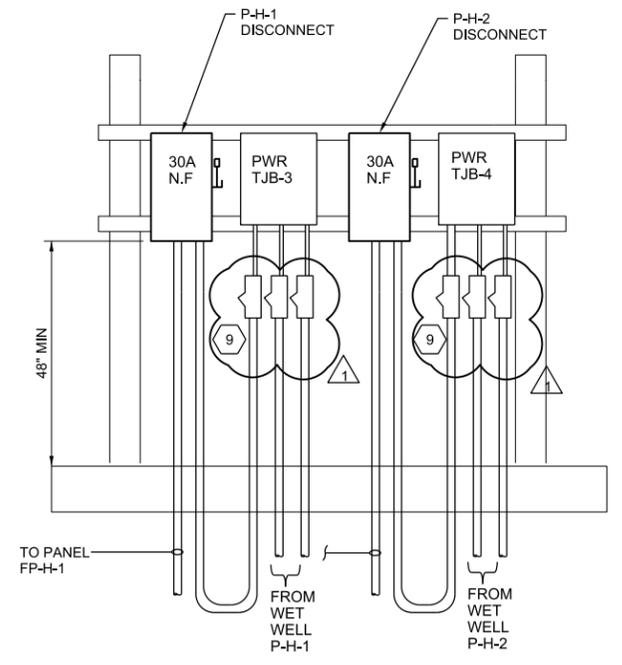
REVISED ONE LINE DIAGRAM

NTS



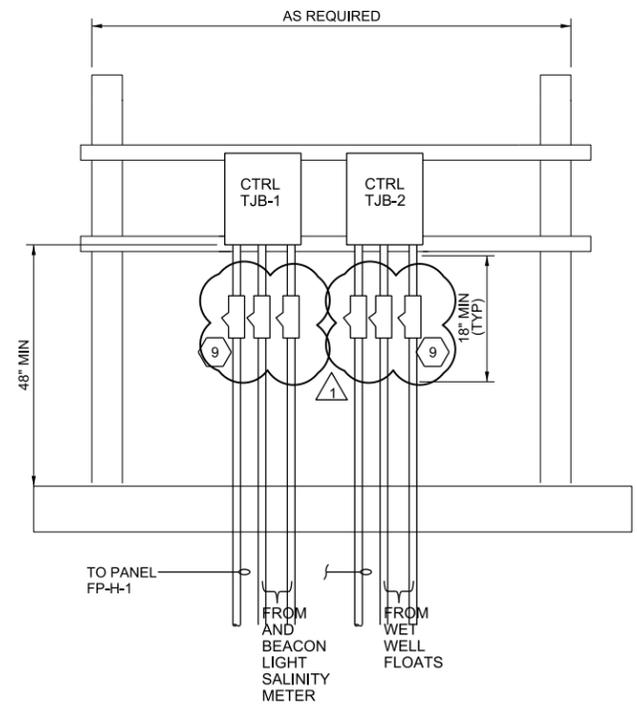
RISER DIAGRAM

NTS



A MOUNTING RACK FRONT LAYOUT

NTS



B MOUNTING RACK BACK LAYOUT

NTS

NO.	DATE	REVISION	BY	APVD
1	06/09/18	ADDENDUM NO. 1	EC	

DAVID C. NICHOLSON PE 60201
 PUMP STATIONS H & B REHABILITATION
 AND PUMP STATION GENERATOR REPLACEMENT
 CITY OF KEY WEST
 KEY WEST, FLORIDA

ch2m
 ELECTRICAL
**PUMP STATION H
 ONE-LINE DIAGRAM**

1" = X'	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	MAY 2018
PROJ	683450
DWG	020-E-601
SHEET	17 of 30

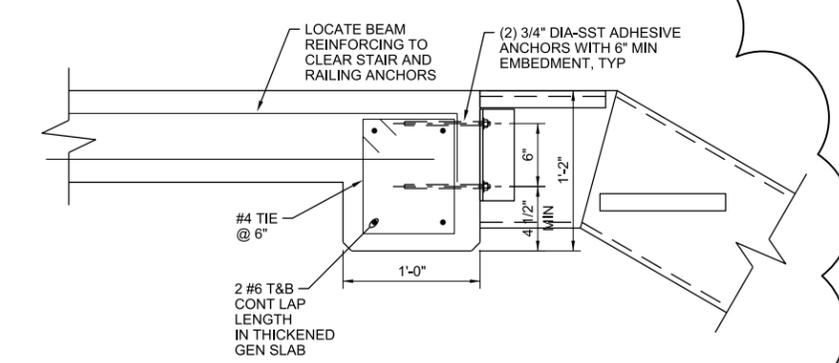
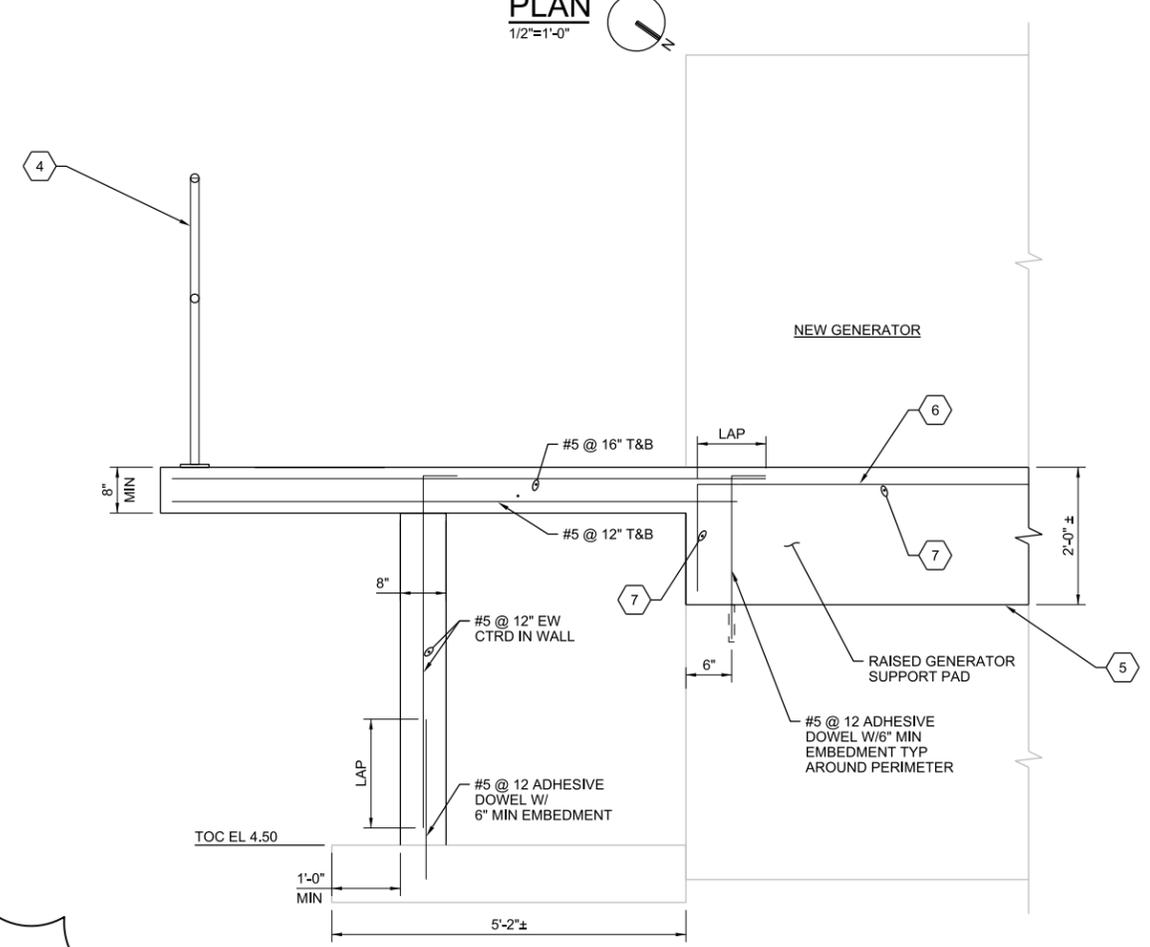
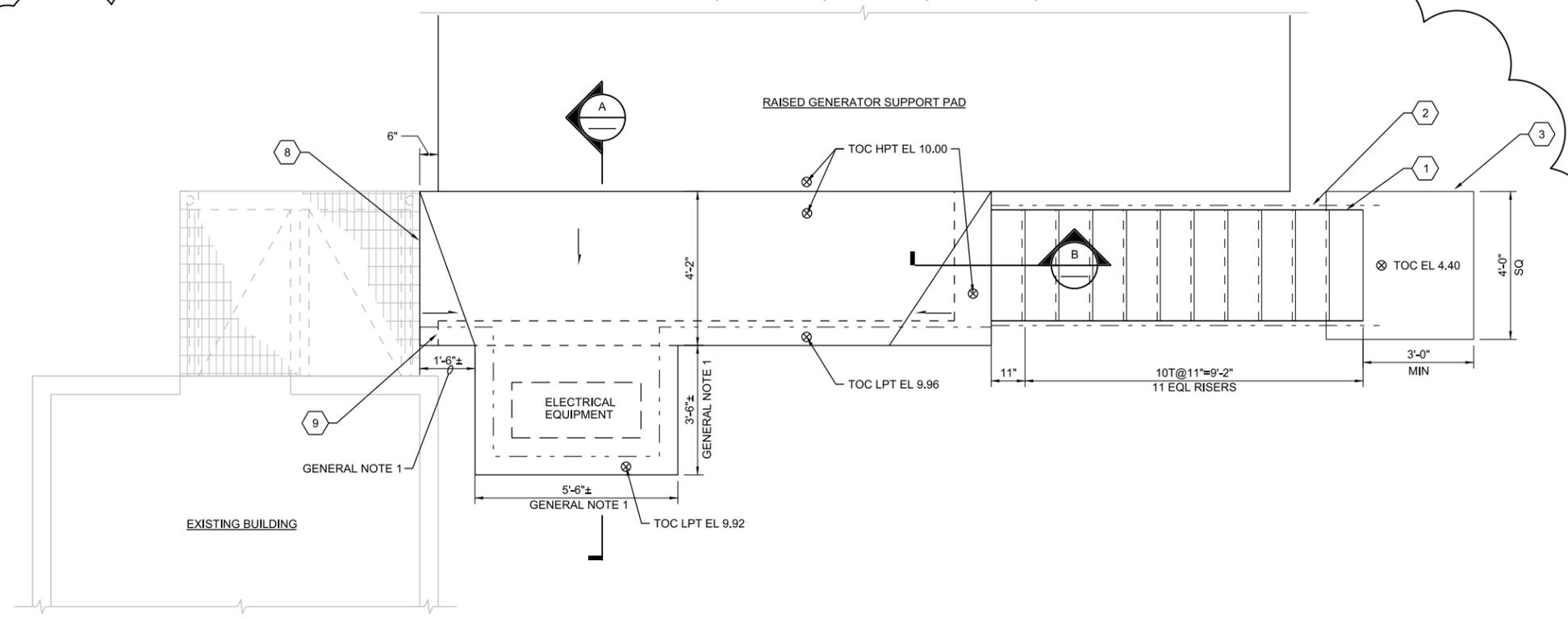
BID DOCUMENTS

GENERAL SHEET NOTES

- COORDINATE DIMENSIONS WITH APPROVED EQUIPMENT SUBMITTAL.

SHEET KEYNOTES

- AL STAIRS. SEE DETAIL 0551-001. 3'-0" CLEARANCE BETWEEN STRINGER.
- AL RAILING WITH BASE ANCHORAGE TYPE 'D'. SEE DETAIL 0552-001.
- CONC LANDING PAD. SEE DETAIL 0330-056 TYPE 'G' SIM.
- AL RAILING WITH BASE ANCHORAGE TYPE 'A'. SEE DETAIL 0552-001.
- PREPARE CONSTRUCTION JOINT WITH HIGH PRESSURE WATER BLASTING. REMOVE FOREIGN MATERIAL AND CONTAMINANTS. APPLY BONDING AGENT PRIOR.
- #5@12"
- #5@6" CONTINUOUS AROUND CORNERS.
- 5/8" MAX GAP BETWEEN EXISTING GRATING AND NEW CONCRETE SLAB. CONCRETE SHALL FINISH FLUSH WITH GRATING.
- EXTEND WALL AND FOUNDATION TO FACE OF EXISTING FOUNDATION.



NO.	DATE	REVISION	BY	APVD
1	06/11/18	UPDATED PLATFORM	DR	R KOEKEMOER

3011 SW WILLISTON ROAD
GAINESVILLE, FLORIDA 32608
EB0000072 AAC001982
ROCCO DEVILLIERS KOEKEMOER PE 76468

PUMP STATIONS H & B REHABILITATION
AND PUMP STATION GENERATOR REPLACEMENT
CITY OF KEY WEST
KEY WEST, FLORIDA

STRUCTURAL	AS NOTED
PUMP STATION A	VERIFY SCALE
PLATFORM A	BAR IS ONE INCH ON ORIGINAL DRAWING.
PLAN AND SECTION	DATE MAY 2018
	PROJ 683450
	DWG 030-S-201
	SHEET 20 of 30

BID DOCUMENTS