



THE CITY OF KEY WEST
3140 Flagler St,
Key West, FL 33040

ADDENDUM #2
Electrical Enclosures & Fuel Station
Invitation to Bid: 13-011
6 March 2013

This Addendum is issued as supplemental information to the bid package for clarification of certain matters of both a general and a technical nature. The referenced bid package is amended in accordance with the following items:

- Attached to this coversheet is Addendum #2, dated 6 March 2013 which makes specific minor corrections to information presented in the bid documents, replaces “Fuel Station” drawings, “Switchgear Enclosures” drawings, and specific pages of the “NAVFAC Specifications” with the modified versions included in the Addendum and also includes the sign-in sheet for the mandatory pre-bid site visit.

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 2 by acknowledging Addendum No. 2 in their proposal or by submitting the signed Addendum No. 1 with the bid package. Bids submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

Name Of Business

ADDENDUM #2
Electrical Enclosures & Fuel Station
Invitation to Bid: 13-011
6 March 2013

This Addendum is issued as supplemental information to the bid package for clarification, correction, and additional information that will be of use to bidders.

The referenced bid package is amended as follows:

1. Replace Section F of Part 3 – Plans & Specifications with the attached (19 pages).
 - a. All work depicted on Sheets S403, S503, S504, S505, S506, S507, is to be excluded from this project in its entirety.
 - b. Portions of Sheets S101 and E101 indicated are not a part of this project.
 - c. Any reference to “Floating Dock” and work associated with “Floating Dock” is not a part of this project.
2. Replace Drawings A301, A302 and A501 of Part 3 – Plans & Specification Section E “Switchgear Enclosures” with the attached (3 pages).
 - a. These revised drawings reflect an updated waterproofing at the stem wall/CMU wall joint.
3. Replace Part 3 – Plans & Specifications Section E “NAVFAC Specifications” Section 09 90 00, pages 17 and 18 with the attached (2 pages).
4. Replace Part 3 Plans & Specifications Section H “Additional Requirements” 00 85 00-1 with the attached (1 page).
5. Note the following clarifications on Contractor insurance requirements:
 - a. Longshoremen’s policy ---
 - b. Wind (Citizens) policy ---
6. Note the attached sign-in sheet listing confirmed attendees of the mandatory pre-bid site visit.

NOTES

G-1 THE SITE DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE GENERAL AND ELECTRICAL DRAWINGS AND COORDINATE THE INFORMATION CONTAINED IN THESE DRAWINGS WITH THE SITE DRAWINGS TO PROPERLY CONSTRUCT THE PROJECT.
G-2 DIMENSIONS: ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE SITE DRAWINGS MUST BE VERIFIED AND COORDINATED WITH THE OTHER DISCIPLINE DRAWINGS BY THE CONTRACTOR BEFORE PROCEEDING WITH THE CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

STRUCTURAL DESIGN CRITERIA & CODES

D-1 THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE
D-2 CONCRETE SLAB IS DESIGNED FOR THE WEIGHT OF A FULL 1000 GALLON FUEL TANK AT 14,000 LBS AND SURROUNDING IS DESIGNED TO A 250 PSF UNIFORM SURFACE LOAD
SEE SHEET S-401 FOR ADDITIONAL EQUIPMENT LOADS
D-3 WIND LOADS FOR OVERTURNING ON TANK ARE AND SHALL BE BASED ON ASCE 7-10, MINIMUM DESIGN LOAD FOR BUILDING AND OTHER STRUCTURES.
D-4 WIND DESIGN CRITERIA:
ULTIMATE DESIGN WIND SPEED: 200 MPH (3 SEC GUST)
EXPOSURE CATEGORY : C
RISK CATEGORY: III

SOILS AND FOUNDATIONS

F-1 FOOTINGS AND SLAB HAVE BEEN DESIGNED AND PROPORTIONED FOR A MAX. ALLOWABLE SOIL BEARING PRESSURE OF 1,500 POUNDS PER SQUARE FOOT.
F-2 SOILS SHALL BE PREPARED FOR FOUNDATIONS AND SLABS AS DESCRIBED IN THE SPECIFICATIONS.
F-3 FOUNDATIONS AND FOOTINGS SHALL BE LOCATED AT THE CENTERLINE OF THE WALL OR COLUMN ABOVE, UNLESS NOTED OTHERWISE.
F-4 SITE PREPARATION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS.

STRUCTURAL STEEL

S-1 FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE A.I.S.C. "MANUAL OF STEEL CONSTRUCTION", THIRTEENTH EDITION AND THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", 2005.
S-2 STRUCTURAL STEEL W-SHAPE SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-992, GRADE 50, CHANNELS, ANGLES, PLATES AND BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-36, WITH A MINIMUM YIELD STRESS OF 36 KSI.
S-3 SQUARE AND RECTANGULAR HSS SHAPES SHALL CONFORM TO ASTM A-500, GRADE B WITH A MINIMUM YIELD STRESS OF 46 KSI.
S-4 UNLESS OTHERWISE NOTED BOLTS SHALL BE 3/4" A-325-X AND SHALL BE USED IN BEARING-TYPE CONNECTIONS. ALL HIGH STRENGTH BOLTS SHALL MEET THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A-325 OR A-490 BOLTS
S-5 SHOP AND FIELD WELDING SHALL BE PERFORMED BY CURRENTLY CERTIFIED WELDERS IN ACCORDANCE WITH THE AWS "STRUCTURAL WELDING CODE", LATEST EDITION. ALL CONNECTIONS SHALL USE E70XX ELECTRODES.
S-6 SUBMIT STRUCTURAL STEEL AND MISC. FABRICATIONS SHOP AND ERECTION DRAWINGS FOR REVIEW BY THE ENGINEER. ANY SPLICES OR CONNECTIONS NOT FULLY PROVIDED IN THESE PLANS SHALL BE DESIGNED BY AN ENGINEER WHO OVERSEES THE DETAILING OF THE STEEL SHOP AND ERECTION DRAWINGS, AND BEAR THE SEAL OF THAT INDIVIDUAL, BEING A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA. PROVIDE SIGNED AND SEALED ENGINEERING CALCULATIONS FOR ANY SPECIAL MOMENT SPLICE DESIGNS.
S-7 ALL MISCELLANEOUS BOLTS, NUTS AND WASHERS, AND SHAPES SHALL BE HOT-DIPPED GALVANIZED (AS INDICATED) IN CONFORMANCE WITH ASTM A-153 (U.N.O.).

REINFORCED CONCRETE

RC-1 CONCRETE DESIGN AND PLACEMENT SHALL BE IN STRICT ACCORDANCE WITH ACI 318-05, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
RC-2 STRUCTURAL CONCRETE SHALL CONFORM TO ACI 301 SPECIFICATIONS, AND SHALL DEVELOP THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS, AS WELL AS OTHER PROPERTIES SPECIFIED IN THESE DOCUMENTS. SEE SPECIFICATIONS FOR DESIGN MIX REQUIREMENTS.
RC-3 CONCRETE SHALL BE READY-MIX, REGULAR WEIGHT FOR ALL STRUCTURAL USES, WITH MINIMUM DRY DENSITY OF 140 LBS. PER CUBIC FOOT.
RC-4 3/4" CHAMFER ALL EXPOSED CONCRETE EDGES UNLESS NOTED OTHERWISE.
RC-5 REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI 318-05 AND ACI DETAILING MANUAL, ACI 315.
RC-6 REINFORCING STEEL SHALL BE NEW, DEFORMED BARS, FREE OF RUST, SCALE AND OIL, CONFORMING TO ASTM A-615, GRADE 60 WITH A MINIMUM YIELD STRENGTH = 60,000 PSI.
RC-7 PROVIDE CONTINUOUS REINFORCEMENT WITH ACI CLASS "B" LAP SPLICES, OR AS NOTED OTHERWISE. IN BEAMS, LAP CONTINUOUS BOTTOM STEEL OVER SUPPORTS AND CONTINUOUS TOP STEEL AT MIDSPAN, UNLESS NOTED OTHERWISE.
RC-8 WELDED WIRE FABRIC REINFORCING SHALL CONFORM TO ASTM A-185. PROVIDE MINIMUM 6 INCH LAPS, TYPICAL. PROVIDE ADEQUATE SUPPORTS AND BOLSTERING TO PRESERVE THE SPECIFIED POSITION OF THE MESH DURING CONCRETE PLACEMENT AND FINISHING. FLAT SHEETS ONLY. ROLLS WILL NOT BE PERMITTED.
RC-9 TERMINATE ALL DISCONTINUOUS ENDS OF TOP BARS WITH STANDARD ACI HOOKS. TURN HOOKS UP OR DOWN INTO SUPPORTING STRUCTURE. CORNER BARS SHALL BE SUPPLIED AND PLACED IN ADDITION TO HOOKED ENDS, PER THE DETAILS IN THESE DOCUMENTS.
RC-10 PROVIDE THE FOLLOWING MINIMUM CONCRETE COVERAGE OVER REINFORCING UNLESS NOTED OTHERWISE:
FOOTINGS, BOTTOM AND SIDES: 3"
FOOTINGS, TOP: 2"
SLABS ON GRADE, BOTTOM: 3"
SLABS ON GRADE, TOP: 1-1/2"
RC-11 PENETRATIONS THROUGH SLABS, BEAMS OR FOOTINGS SHALL BE SLEEVED INDIVIDUALLY. CORE DRILLING OF EXISTING CONCRETE MEMBERS WILL NOT BE PERMITTED, UNLESS NOTED ON PLANS. SUBMIT LOCATIONS AND SIZES OF ALL SLEEVES FOR ENGINEER OF RECORD APPROVAL PRIOR TO CASTING.
RC-12 NO REINFORCING BARS SHALL BE CUT OR OTHERWISE MODIFIED IN THE FIELD. REINFORCING BARS SHALL NOT BE DISPLACED PRIOR TO OR DURING CASTING TO ACCOMMODATE ANCHORS, EMBEDS OR OTHER ITEMS.
RC-13 WHERE FOOTINGS CHANGE DIRECTION, PROVIDE CORNER BARS OF SAME SIZE AND QUANTITY AS THE SPECIFIED LONGITUDINAL STEEL.
RC-14 EMBEDDED ITEMS SHALL BE SECURELY FIXED AND MAINTAINED IN POSITION PRIOR TO AND DURING CONCRETE PLACEMENT.
RC-15 PROVIDE REINFORCING SPLICES AS INDICATED BELOW IN CONFORMANCE WITH AN ACI CLASS B TENSION SPLICE. (2005 ACI 318 CODE). NO REDUCTION SHALL BE PERMITTED DUE TO BAR SPACING
CLASS B SPLICES FOR REINFORCEMENT, OTHER THAN TOP BARS
BAR SIZE 3,000 PSI 4,000 PSI 5,000 PSI
#3 16" 16" 16"
#4 22" 19" 19"
#5 27" 23" 23"
#6 35" 31" 31"
#7 48" 42" 42"
#8 63" 55" 55"
#9 80" 69" 69"
#10 102" 88" 88"
#11 125" 108" 108"
CLASS B SPLICES FOR "PLAIN REINFORCEMENT AS TOP BARS
BAR SIZE 3,000 PSI 4,000 PSI 5,000 PSI
#3 21" 18" 18"
#4 28" 24" 24"
#5 35" 30" 30"
#6 46" 40" 40"
#7 63" 54" 54"
#8 82" 71" 71"
#9 104" 90" 90"
#10 132" 114" 114"
#11 162" 140" 140"



STRUCTURAL
GENERAL STRUCTURAL NOTES

3001 PGA BLVD. SUITE 300
PALM BEACH GARDENS, FL 33410
EB0000072 AAC001992

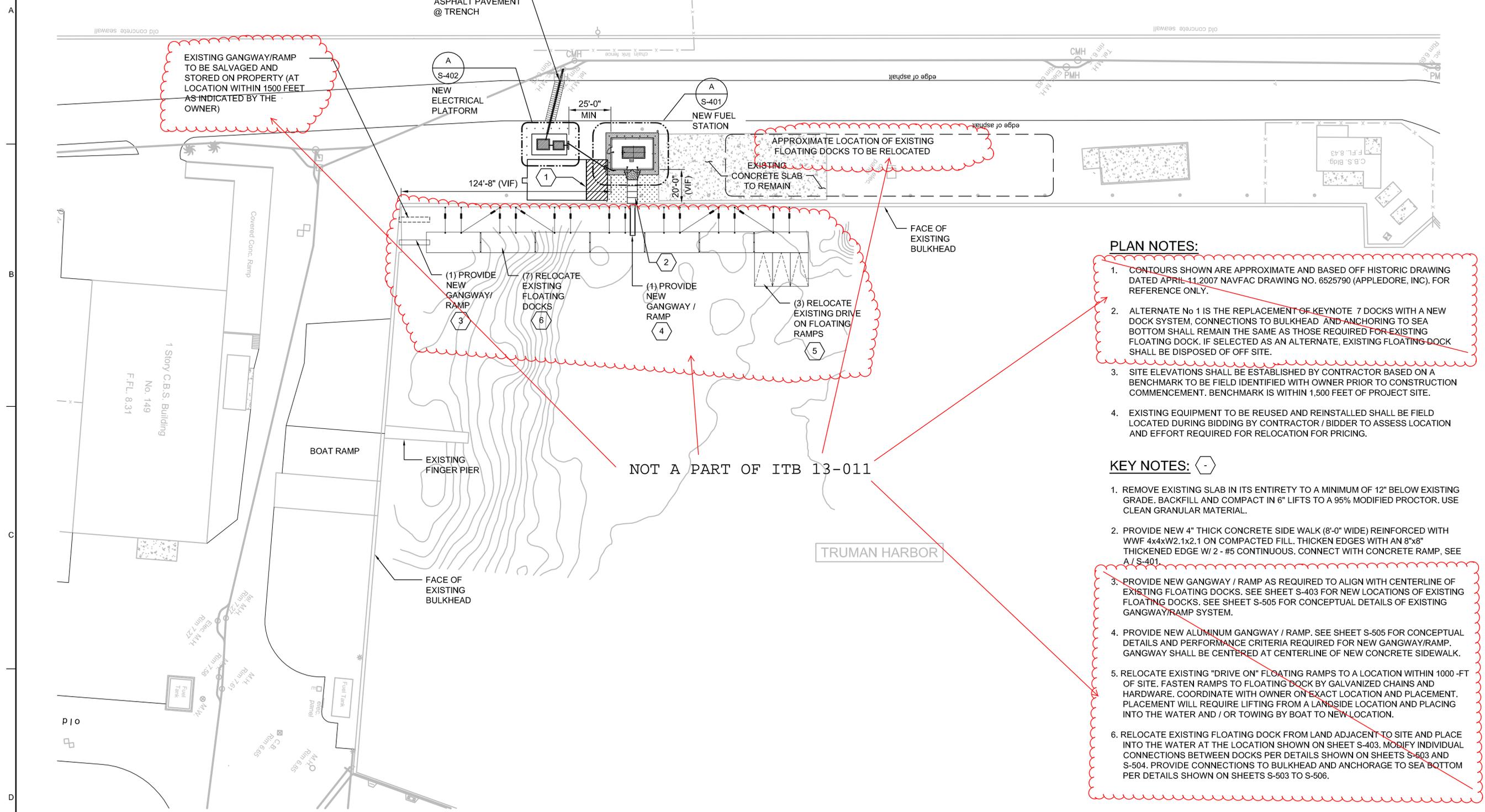
NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR.
KEY WEST, FLORIDA
NAVAL FACILITIES ENGINEERING COMMAND
SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE JANUARY 25, 2012
PROJ 460764
DWG S-001
SHEET 3 OF 19

JON CASEY LONG
FL PE No. 56083
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FINAL DRAWINGS

FORT ZACHARY TAYLOR

GULF OF MEXICO



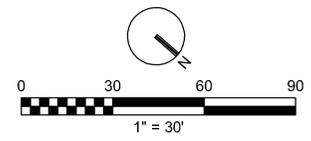
PLAN NOTES:

1. CONTOURS SHOWN ARE APPROXIMATE AND BASED OFF HISTORIC DRAWING DATED APRIL 11, 2007 NAVFAC DRAWING NO. 6525790 (APPLEDORE, INC), FOR REFERENCE ONLY.
2. ALTERNATE No 1 IS THE REPLACEMENT OF KEYNOTE 7 DOCKS WITH A NEW DOCK SYSTEM, CONNECTIONS TO BULKHEAD AND ANCHORING TO SEA BOTTOM SHALL REMAIN THE SAME AS THOSE REQUIRED FOR EXISTING FLOATING DOCK. IF SELECTED AS AN ALTERNATE, EXISTING FLOATING DOCK SHALL BE DISPOSED OF OFF SITE.
3. SITE ELEVATIONS SHALL BE ESTABLISHED BY CONTRACTOR BASED ON A BENCHMARK TO BE FIELD IDENTIFIED WITH OWNER PRIOR TO CONSTRUCTION COMMENCEMENT. BENCHMARK IS WITHIN 1,500 FEET OF PROJECT SITE.
4. EXISTING EQUIPMENT TO BE REUSED AND REINSTALLED SHALL BE FIELD LOCATED DURING BIDDING BY CONTRACTOR / BIDDER TO ASSESS LOCATION AND EFFORT REQUIRED FOR RELOCATION FOR PRICING.

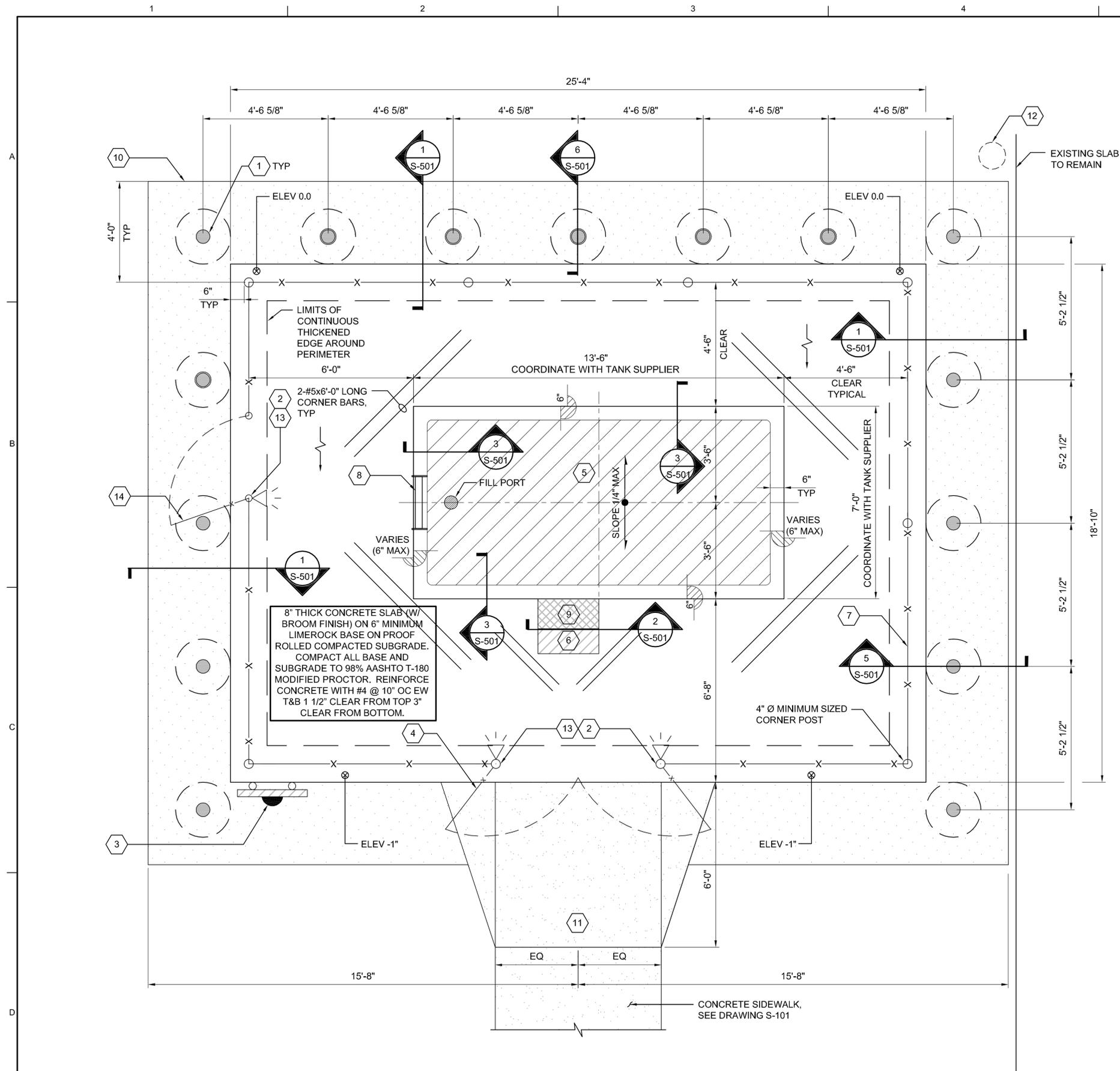
KEY NOTES:

1. REMOVE EXISTING SLAB IN ITS ENTIRETY TO A MINIMUM OF 12" BELOW EXISTING GRADE. BACKFILL AND COMPACT IN 6" LIFTS TO A 95% MODIFIED PROCTOR. USE CLEAN GRANULAR MATERIAL.
2. PROVIDE NEW 4" THICK CONCRETE SIDE WALK (8'-0" WIDE) REINFORCED WITH WWF 4x4xW2.1x2.1 ON COMPACTED FILL. THICKEN EDGES WITH AN 8"x8" THICKENED EDGE W/ 2 - #5 CONTINUOUS. CONNECT WITH CONCRETE RAMP, SEE A / S-401.
3. PROVIDE NEW GANGWAY / RAMP AS REQUIRED TO ALIGN WITH CENTERLINE OF EXISTING FLOATING DOCKS. SEE SHEET S-403 FOR NEW LOCATIONS OF EXISTING GANGWAY/RAMP SYSTEM.
4. PROVIDE NEW ALUMINUM GANGWAY / RAMP. SEE SHEET S-505 FOR CONCEPTUAL DETAILS AND PERFORMANCE CRITERIA REQUIRED FOR NEW GANGWAY/RAMP. GANGWAY SHALL BE CENTERED AT CENTERLINE OF NEW CONCRETE SIDEWALK.
5. RELOCATE EXISTING "DRIVE ON" FLOATING RAMPS TO A LOCATION WITHIN 1000- FT OF SITE. FASTEN RAMPS TO FLOATING DOCK BY GALVANIZED CHAINS AND HARDWARE. COORDINATE WITH OWNER ON EXACT LOCATION AND PLACEMENT. PLACEMENT WILL REQUIRE LIFTING FROM A LANDSIDE LOCATION AND PLACING INTO THE WATER AND / OR TOWING BY BOAT TO NEW LOCATION.
6. RELOCATE EXISTING FLOATING DOCK FROM LAND ADJACENT TO SITE AND PLACE INTO THE WATER AT THE LOCATION SHOWN ON SHEET S-403. MODIFY INDIVIDUAL CONNECTIONS BETWEEN DOCKS PER DETAILS SHOWN ON SHEETS S-503 AND S-504. PROVIDE CONNECTIONS TO BULKHEAD AND ANCHORAGE TO SEA BOTTOM PER DETAILS SHOWN ON SHEETS S-503 TO S-506.

1 LOCATION SITE PLAN
1" = 30'



CH2MHILL 3001 PGA BLVD., SUITE 300 PALM BEACH GARDENS, FL 33410 EB0000072 AAC001992		DSGN L VAN DYK / DR A ARTHAY		REVISION JC LONG		BY APVD JC LONG	
		NO. DATE		CHK JC LONG		JC LONG	
3001 PGA BLVD., SUITE 300 PALM BEACH GARDENS, FL 33410 EB0000072 AAC001992		NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR. KEY WEST, FLORIDA		AP GIRAITS JC LONG		JON CASEY LONG FL PE No. 56083	
SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA		NAVY FACILITIES ENGINEERING COMMAND SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA		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. © CH2M HILL 2012. ALL RIGHTS RESERVED.		FINAL DRAWINGS	
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.		DATE JANUARY 25, 2012		PROJ 460764		DWG S-101	
SHEET 4 OF 19		FILENAME: S-101_460764.dwg		PLOT DATE: Jan31, 2013		PLOT TIME: 7:23pm	



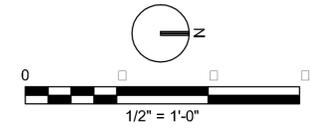
KEY NOTES:

- 6" Ø x 4'-0" HIGH HOT-DIPPED GALVANIZED STEEL BOLLARD FILLED WITH CONCRETE AND PAINTED YELLOW. SEE DETAIL 5/S501.
- EXTEND FENCE POST AT GATE WHERE SHOWN TO TOP OF POST ELEVATION OF 9'-0" A.F.G.
- EMERGENCY CONTROL BOX FOR FUEL STATION. SEE E-SHEETS.
- 8'-0" WIDE DOUBLE SWING GATE WITH CANE RODS AND 180° SWINGING HINGES. PROVIDE HITCH LATCH WITH LOCK.
- 1000 GALLON FUEL STORAGE TANK ON AN ELEVATED CONCRETE SLAB (6" MIN.). SEE DETAIL 3/S501.
- FUEL DISPENSING HOSE REEL (SPRING RETRIEVAL) WITH 100 FEET OF HOSE AND DISPENSING NOZZLE. MOUNT HOSE REEL ON ELEVATED CONCRETE SLAB (6"). PLACE REEL BELOW METER ENCLOSURE. SEE 2 / S501.
- 7'-0" HIGH CHAIN LINK FENCE WITH 1 FOOT HIGH OUTRIGGERS @ 45° WITH 3 STRANDS OF BARBED WIRE MOUNTED THROUGH CONCRETE SLAB. FENCE SYSTEM SHALL HAVE A BLACK VINYL COATING AND BLACK VINYL PRIVACY SLATS. SEE 1 / S501 AND 1/S502.
- ACCESS LADDER SYSTEM WITH STAINLESS STEEL ELEVATED DECK STEP AT BASE.
- SIDE MOUNTED STAINLESS STEEL METER ENCLOSURE. CONNECT TO SIDE OF TANK. PROVIDE ROLL DOWN DOOR (LOCKABLE) AND ENCLOSE MAIN PUMP ON/OFF SWITCH AND METER ASSEMBLY.
- BACKFILL A MINIMUM 3'-0" WIDE AREA WITH 6" MIN LIMEROCK BASE (LBR=100) COMPACT TO 98% MODIFIED PROCTOR.
- CONSTRUCT A 8'-0" CONCRETE ACCESS RAMP FROM EXISTING GRADE TO FINISH SLAB ELEVATION. REINFORCE WITH WWF 4x4 x W2.1xW2.1, 1 1/2" CLEAR FROM TOP. PROVIDE 8"x8" THICKENED EDGE REINFORCED WITH (2) #5 CONTINUOUS. SAWCUT JOINTS AT 5'-0" OC.
- AREA LIGHTING ATTACHED TO EXISTING POLE @ 30'-0" A.F.G. SEE E-SHEETS FOR MORE DETAIL.
- NEW FLOOD LIGHTS MOUNTED TO GATE/FENCE POST @ ELEVATION 9'-0" A.F.G.
- 3'-0" WIDE SINGLE SWING GATE WITH CANE ROD AND 180 DEGREE SWINGING HINGES. PROVIDE HITCH LATCH WITH LOCK.

PLAN NOTE:

- ELEVATION SHALL BE EQUIVALENT TO 4 INCHES ABOVE EXISTING ADJACENT ROAD EDGE ELEVATION.
- ALL SLABS ON GRADE SHALL RECEIVE A BROOM FINISH (U.N.O.).

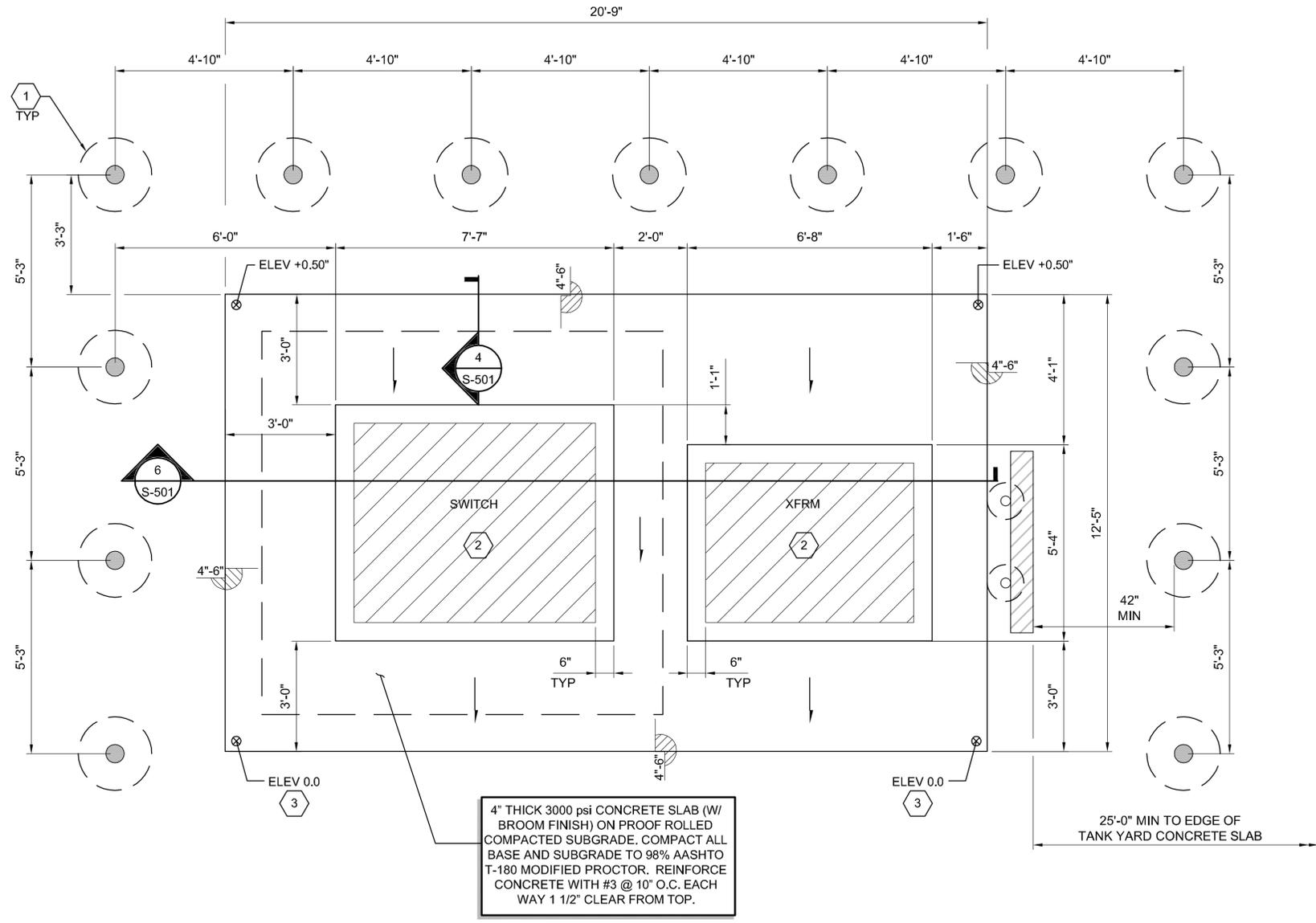
A ENLARGED FUEL STATION PLAN
1/2" = 1'-0"



CH2MHILL® 3001 PGA BLVD. SUITE 300 PALM BEACH GARDENS, FL 33410 EB0000072 AAC001992		NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR. KEY WEST, FLORIDA NAVAL FACILITIES ENGINEERING COMMAND SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA		JON CASEY LONG FL PE No. 56083	
		DATE: JANUARY 25, 2012 PROJ: 460764 DWG: S-401 SHEET: 5 OF 19	VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.	DSGN: L VAN DYK DR: AP GIRAITIS REVISION: JC LONG BY: APVD DATE:	NO. DATE 1 1/25/12 2 1/25/12 3 1/25/12 4 1/25/12 5 1/25/12 6 1/25/12 7 1/25/12 8 1/25/12 9 1/25/12 10 1/25/12 11 1/25/12 12 1/25/12 13 1/25/12 14 1/25/12

1 2 3 4 5 6

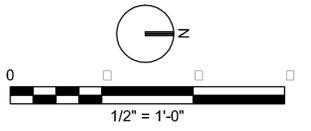
A
B
C
D



A ENLARGED ELECTRICAL PLATFORM PLAN
1/2" = 1'-0"

KEY NOTES:

- 6" Ø x 4'-0" HIGH HOT DIPPED GALVANIZED STEEL BOLLARD FILLED WITH CONCRETE AND PAINTED YELLOW. SEE DETAIL 5/S501.
- ELECTRICAL EQUIPMENT-SEE E-SHEETS.
- REFERENCE ELEVATION 0.0 SHALL BE 4 INCHES ABOVE NEAREST EDGE OF ASPHALT ROAD.



JON CASEY LONG FL PE No. 56083	
BY	APVD
JC LONG	JC LONG
REVISION	CHK
APVD	JC LONG
DR	AP GIRAITIS
NO.	DATE
DSGN	L VAN DYK

3001 PGA BLVD, SUITE 300
PALM BEACH GARDENS, FL 33410
EB0000072 AAC001992

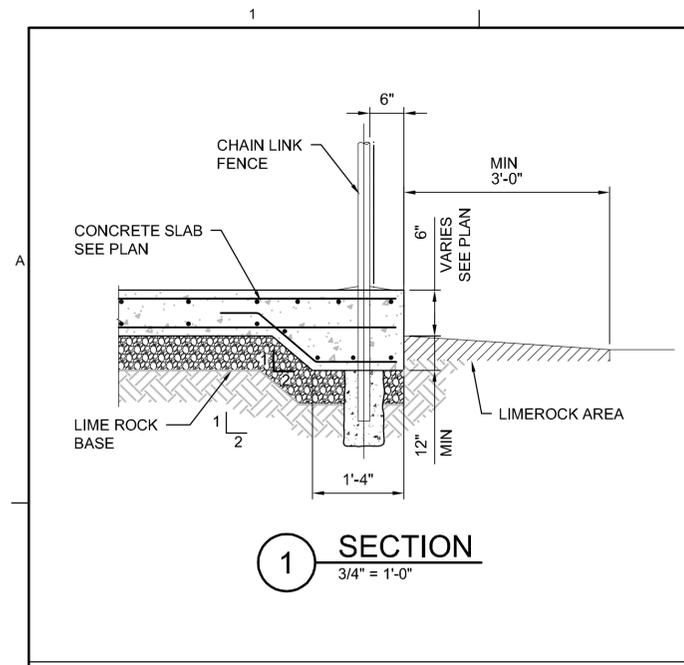
NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR.
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NAVAL FACILITIES ENGINEERING COMMAND
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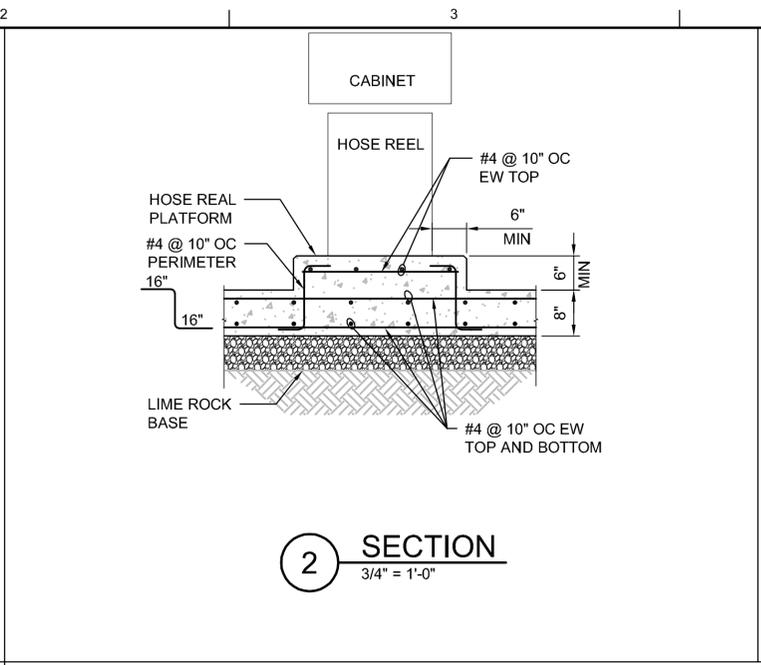
SITE
ENLARGED ELECTRICAL PLATFORM PLAN

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	JANUARY 25, 2012
PROJ	460764
DWG	S-402
SHEET	6 OF 19

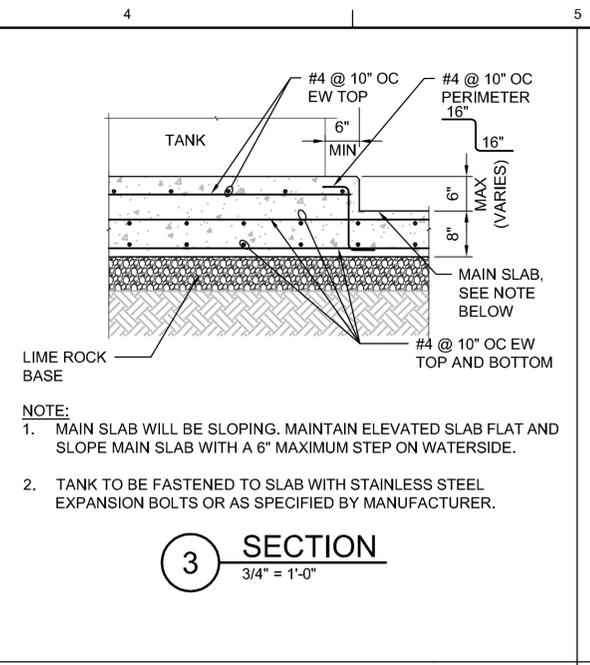
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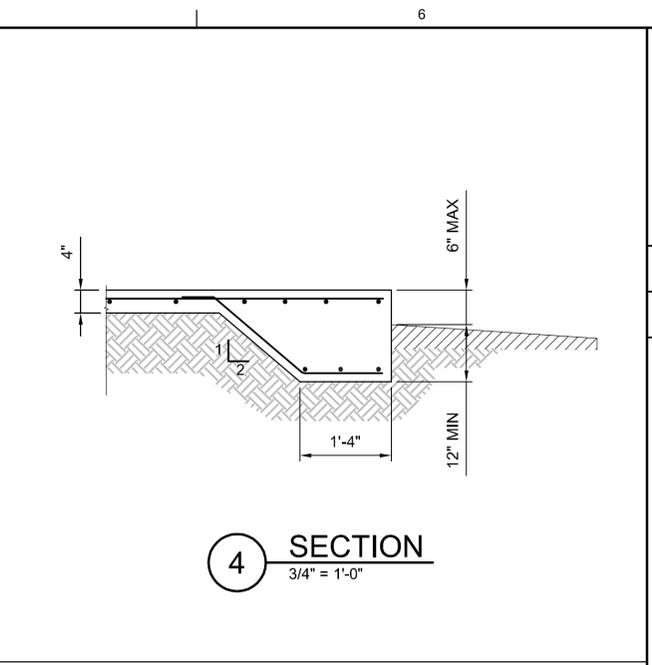
1 SECTION
3/4" = 1'-0"



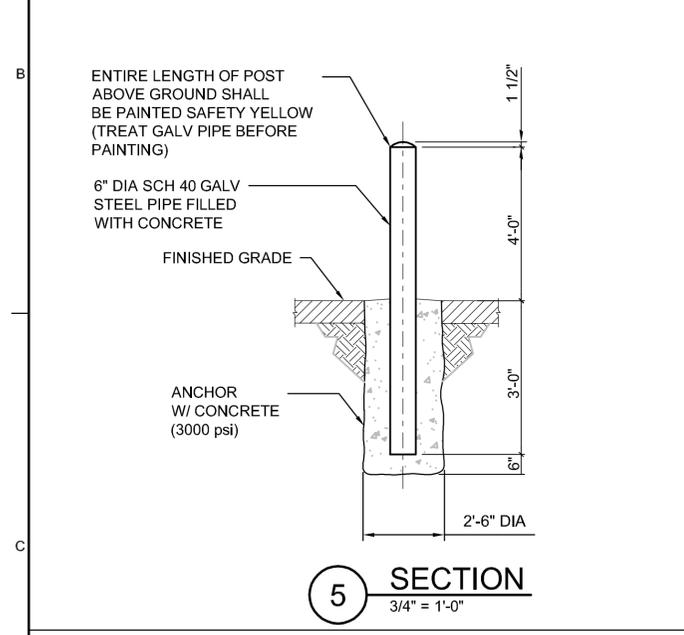
2 SECTION
3/4" = 1'-0"



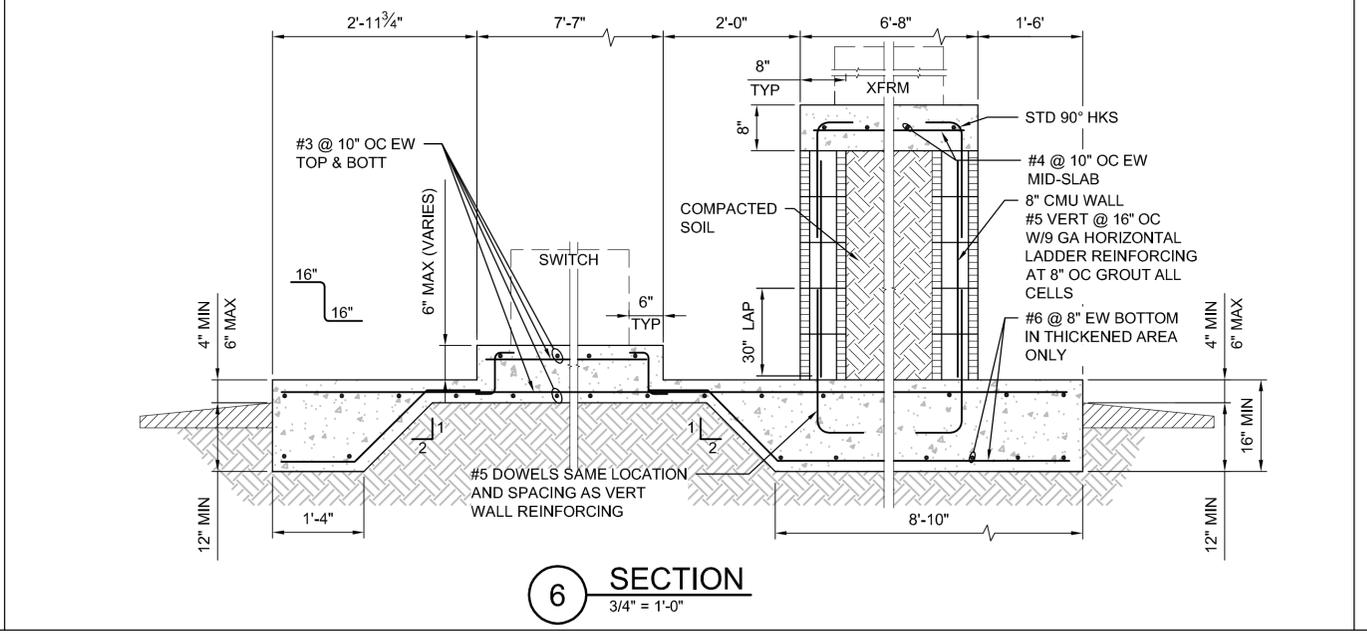
3 SECTION
3/4" = 1'-0"



4 SECTION
3/4" = 1'-0"



5 SECTION
3/4" = 1'-0"



6 SECTION
3/4" = 1'-0"

JON CASEY LONG
FL PE No. 56083

NO.	DATE	DR	AP	CHK	REVISION	BY	APVD
		L. VAN DYK	AP	JC LONG	JC LONG	JC LONG	JC LONG

3001 PGA BLVD. SUITE 300
PALM BEACH GARDENS, FL 33410
EB0000072 AAC001992

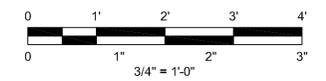
NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR.
KEY WEST, FLORIDA
NAVAL FACILITIES ENGINEERING COMMAND
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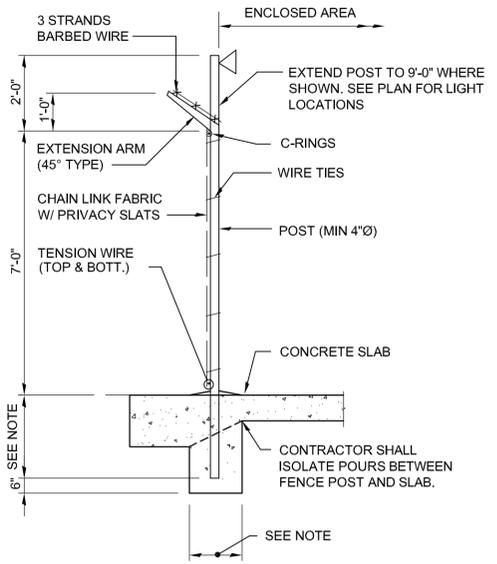
SITE
**TANK AND ELECTRICAL
YARD DETAILS**

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE	JANUARY 25, 2012
PROJ	460764
DWG	S-501
SHEET	8 OF 19



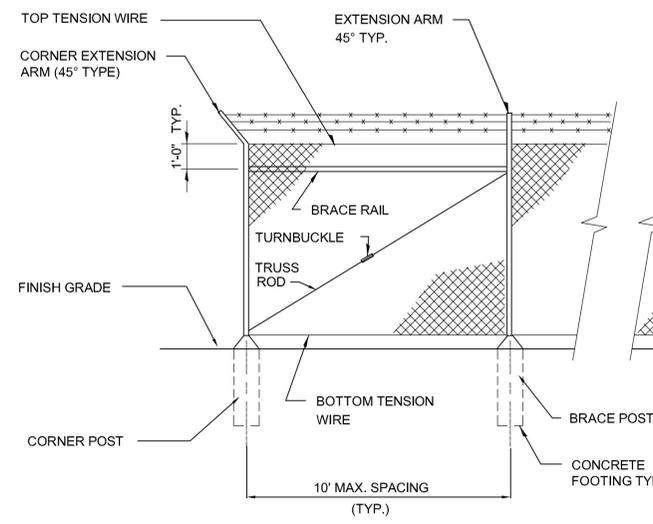
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1 TYPICAL FENCE DETAIL
NTS

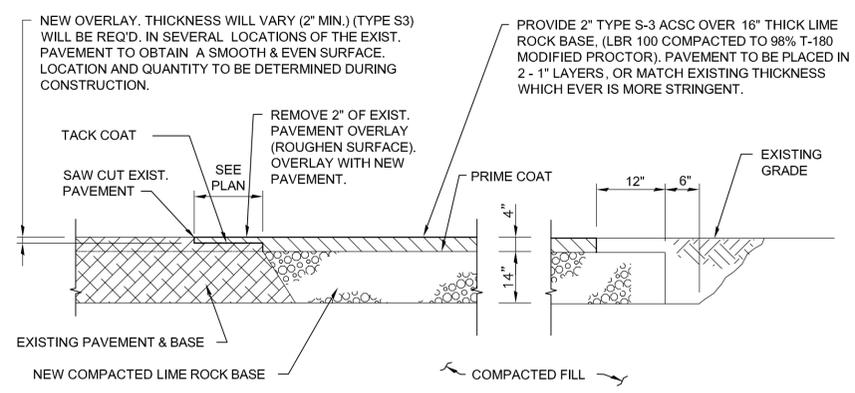
SET POSTS IN CONC. FOOTINGS OF DIAMETER 6 TIMES THE LARGEST CROSS-SECTION OF THE POST AND THE DEPTH SHALL BE A MINIMUM OF 30" PLUS AN ADDITIONAL 3" FOR EACH 1 FOOT INCREASE IN FENCE HEIGHT OVER 48" (INCLUDING BARB WIRE).

ALL FENCING SHALL RECEIVE APPROVAL OF LAYOUT IN FIELD PRIOR TO INSTALLATION.



2 TYPICAL FENCE AND DOUBLE SWING GATE ELEVATION
NTS

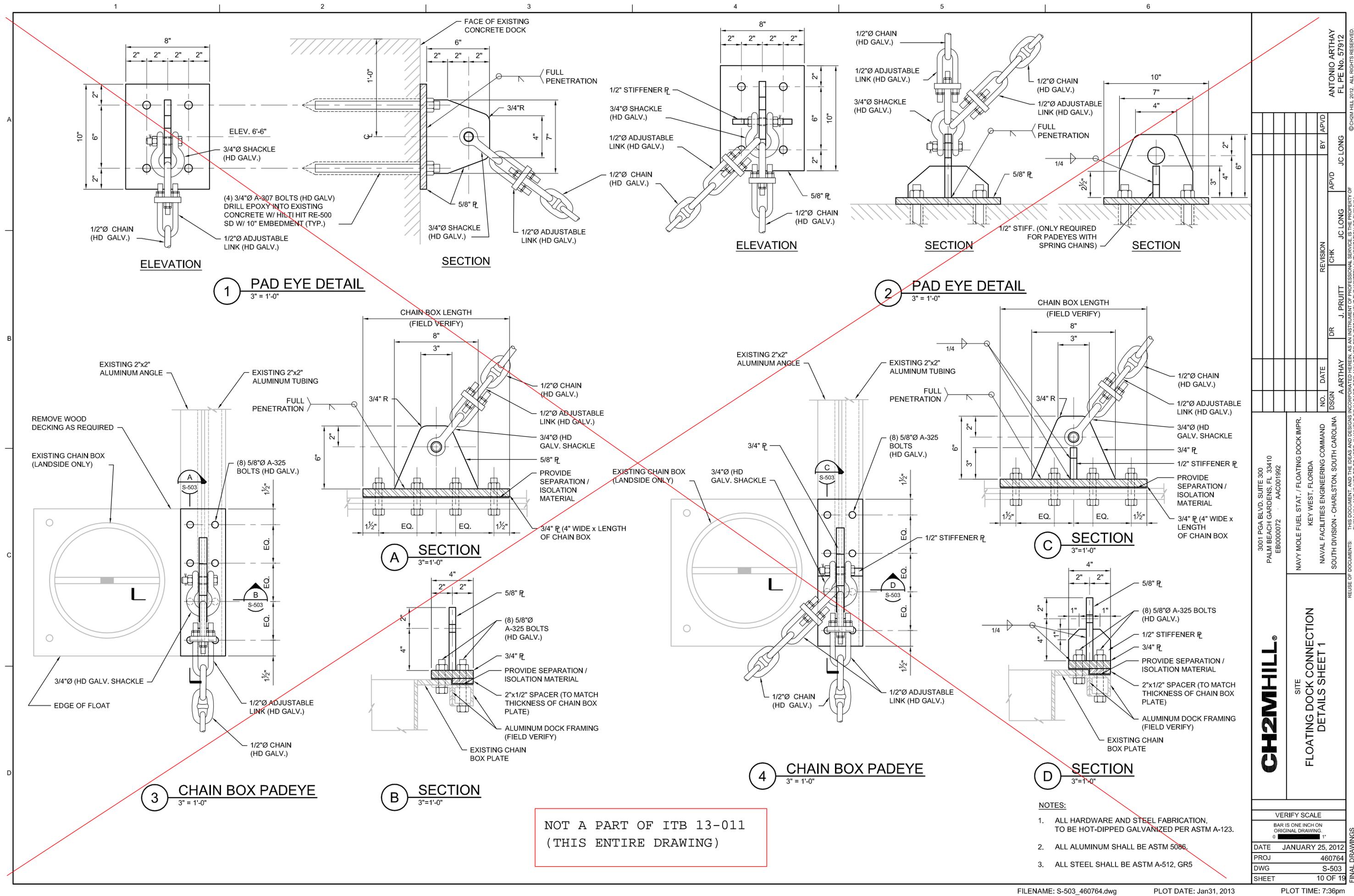
GATE LEAVES SHALL HAVE INTERMEDIATE BRACING AS REQUIRED, SPACED SO THAT NO MEMBERS ARE MORE THAN 7'-0" APART. GATE LEAVES 10'-0" OR OVER SHALL HAVE A HORIZONTAL BRACE OR ONE 5/16" MIN. DIAGONAL TRUSS ROD.



3 NEW PATCHING AND REPAIR DETAIL
NTS



CH2MHILL® 3001 PGA BLVD., SUITE 300 PALM BEACH GARDENS, FL 33410 EB0000072 AAC001992		NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR. KEY WEST, FLORIDA		NAVY FACILITIES ENGINEERING COMMAND SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA	
		SITE MISCELLANEOUS DETAILS		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. © CH2M HILL 2012. ALL RIGHTS RESERVED.	
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.		DATE JANUARY 25, 2012	PROJ 460764	DWG S-502	SHEET 9 OF 19
DR AP GIRAITIS		CHK JC LONG	APVD JC LONG	BY JC LONG	FL PE No. 56083 JON CASEY LONG



1 PAD EYE DETAIL
3" = 1'-0"

2 PAD EYE DETAIL
3" = 1'-0"

3 CHAIN BOX PADEYE
3" = 1'-0"

4 CHAIN BOX PADEYE
3" = 1'-0"

NOT A PART OF ITB 13-011
(THIS ENTIRE DRAWING)

- NOTES:
1. ALL HARDWARE AND STEEL FABRICATION, TO BE HOT-DIPPED GALVANIZED PER ASTM A-123.
 2. ALL ALUMINUM SHALL BE ASTM 5086.
 3. ALL STEEL SHALL BE ASTM A-512, GR5

CH2MHILL

SITE
**FLOATING DOCK CONNECTION
DETAILS SHEET 1**

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KEY WEST, FLORIDA
NAVAL FACILITIES ENGINEERING COMMAND
SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA

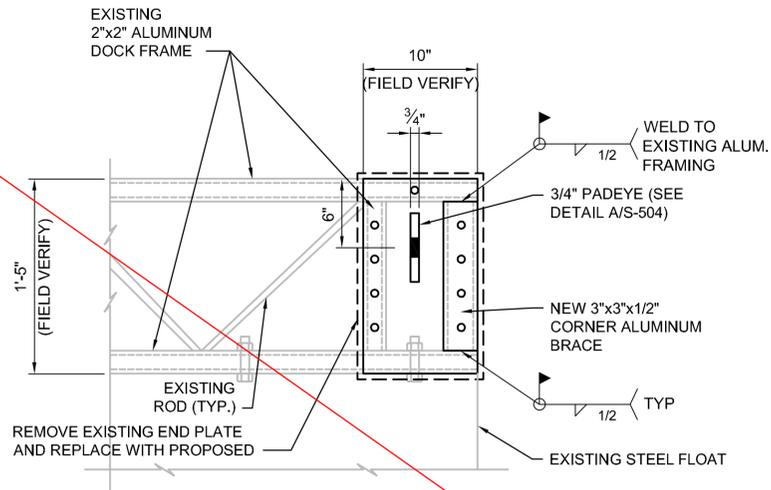
NO.	DATE	DR	CHK	APVD	BY	APVD
		J. PRUITT	J. LONG	J. LONG	J. LONG	J. LONG

ANTONIO ARTHAY
FL PE No. 57912

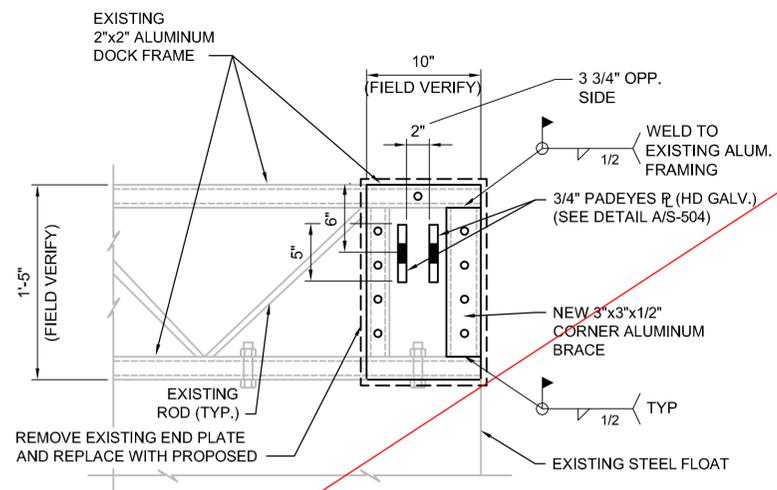
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DATE JANUARY 25, 2012
PROJ 460764
DWG S-503
SHEET 10 OF 19

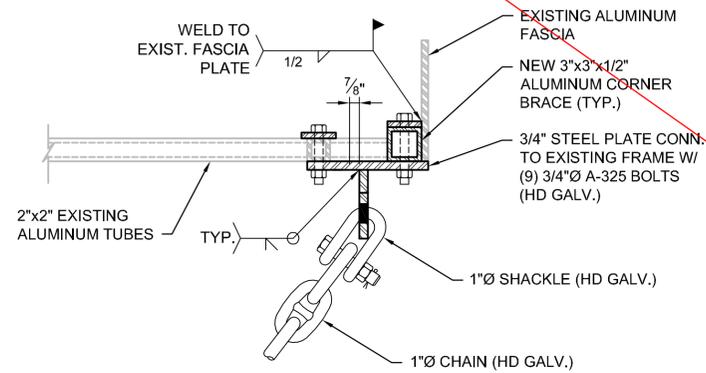
FINAL DRAWINGS



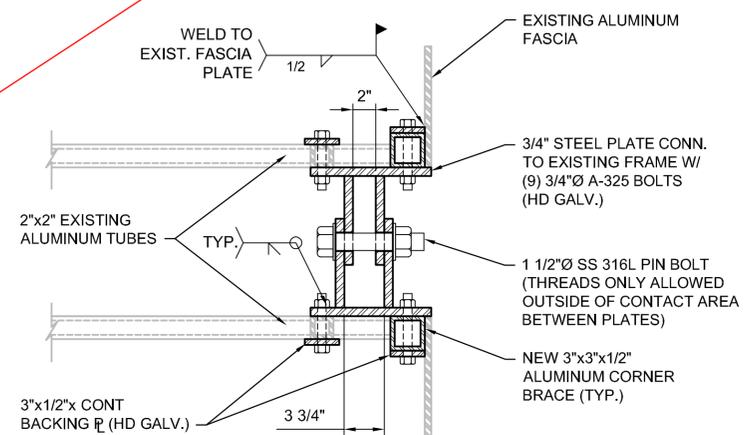
SECTION



SECTION



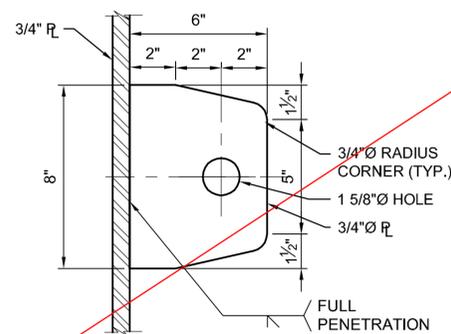
PLAN



PLAN

1 DETAIL
1 1/2"=1'-0"

2 DETAIL
1 1/2"=1'-0"



A PADEYE DETAIL
3" = 1'-0"

NOT A PART OF ITB 13-011
(THIS ENTIRE DRAWING)

NOTES:

1. ALL HARDWARE AND STEEL FABRICATION TO BE HOT-DIPPED GALVANIZED PER ASTM A-123.
2. ALL ALUMINUM SHALL BE ASTM 5086.
3. ALL STEEL SHALL BE ASTM A-572, GR 50.
4. PROVIDE ISOLATION / SEPARATION MATERIALS WHERE DIFFERENT MATERIALS TOUCH, TYPICAL.

CH2MHILL®

SITE
**FLOATING DOCK CONNECTION
DETAILS SHEET 2**

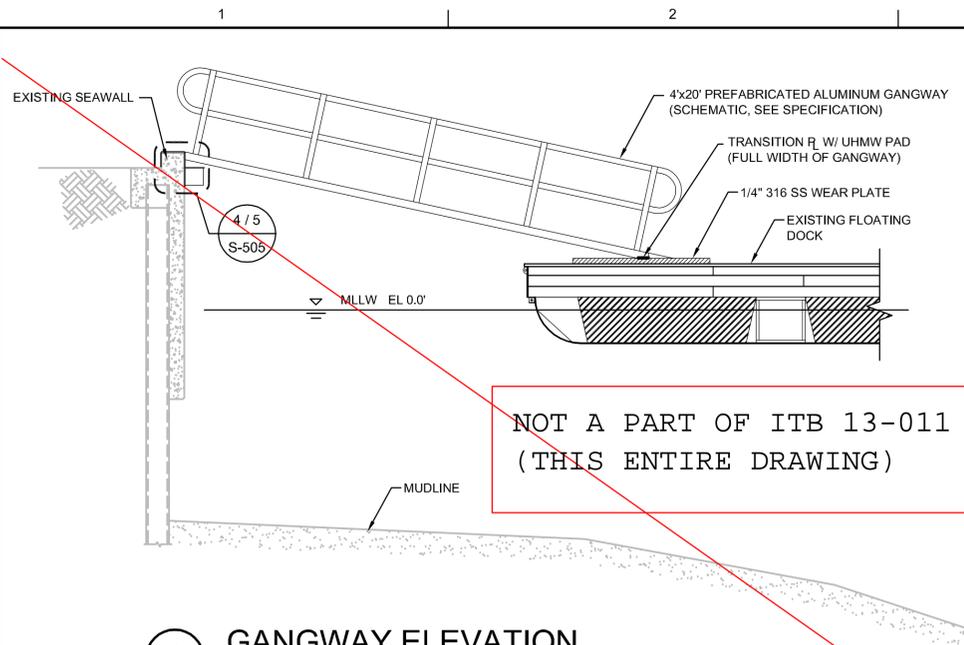
3001 PGA BLVD., SUITE 300
PALM BEACH GARDENS, FL 33410
EB0000072 AAC001992

NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR.
KEY WEST, FLORIDA
NAVAL FACILITIES ENGINEERING COMMAND
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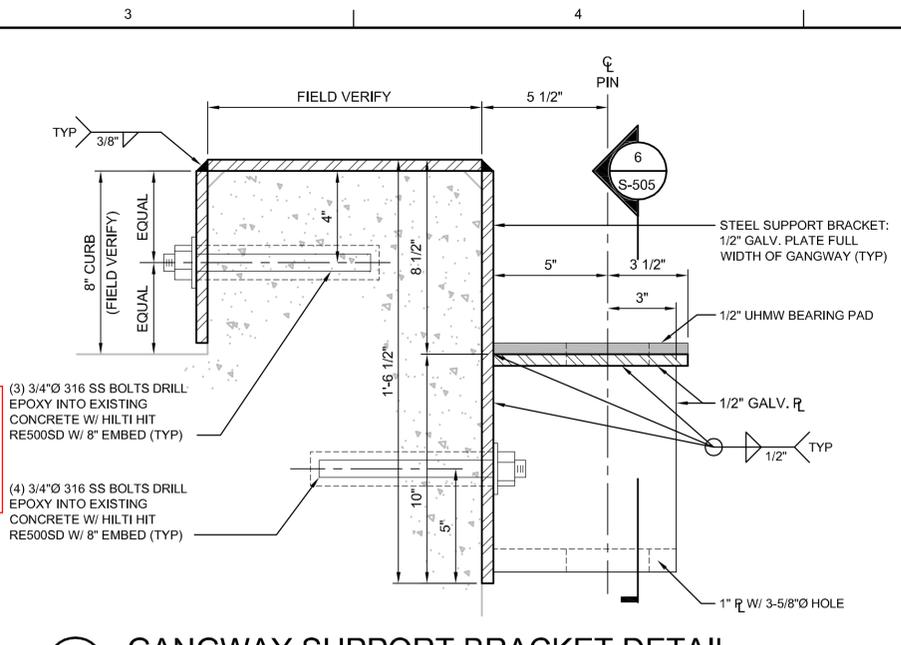
NO.	DATE	DR	CHK	REVISION	APVD	BY	APVD
		A. ARTHAY	J. PRUITT		JC LONG	JC LONG	JC LONG

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	JANUARY 25, 2012
PROJ	460764
DWG	S-504
SHEET	11 OF 19

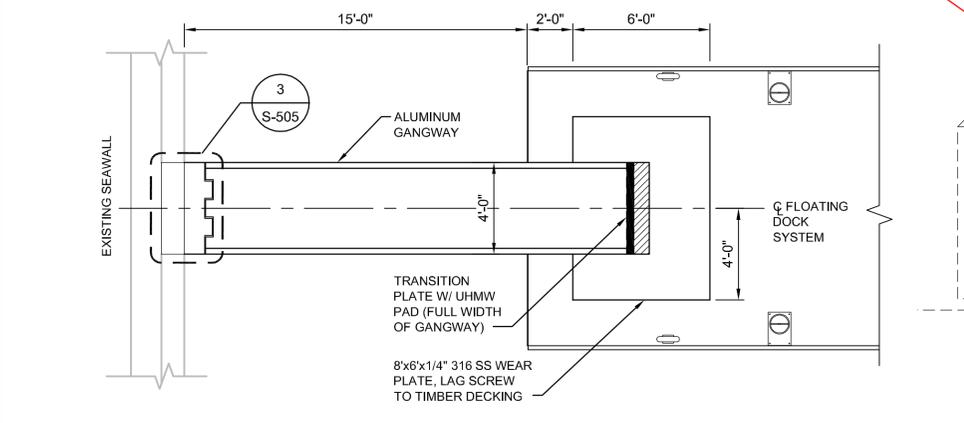
ANTONIO ARTHAY
FL PE No. 57912
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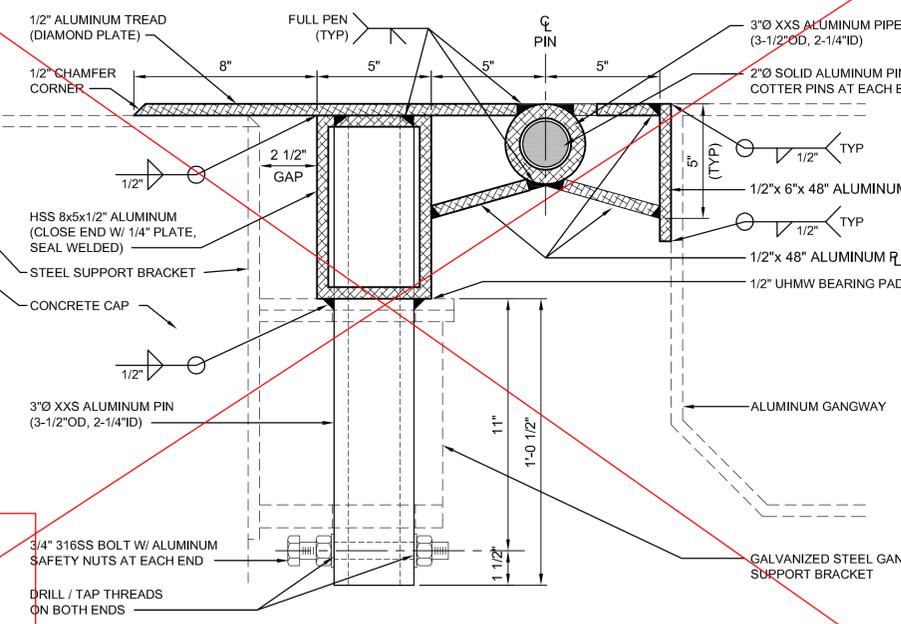
1 GANGWAY ELEVATION
1/4" = 1'-0"



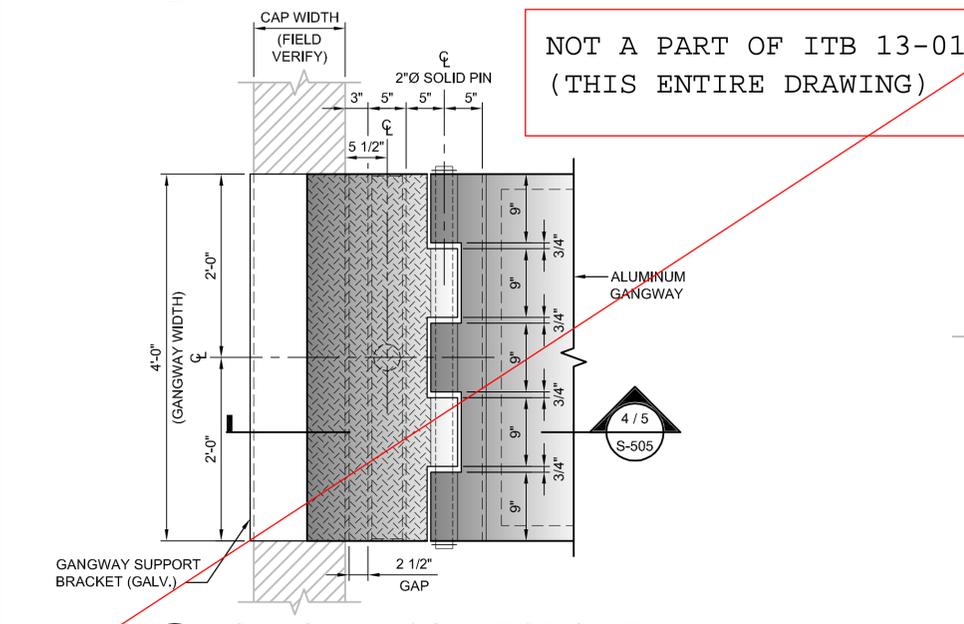
4 GANGWAY SUPPORT BRACKET DETAIL
3" = 1'-0"



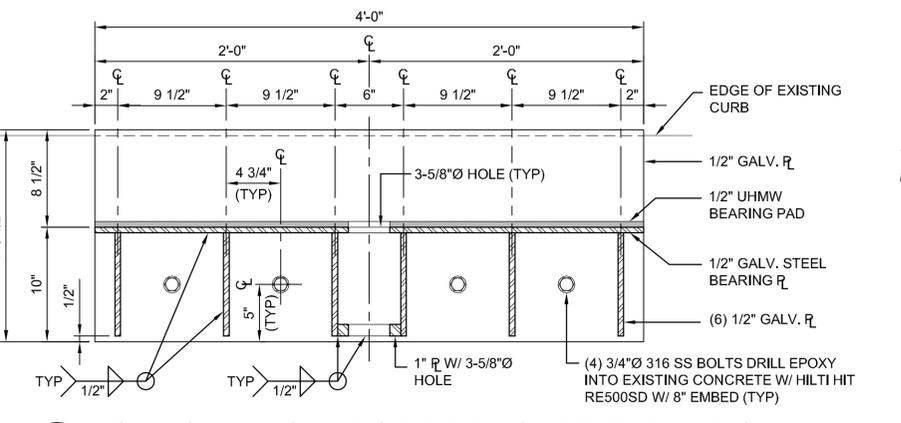
2 GANGWAY PLAN (100 PSF)
1/4" = 1'-0"



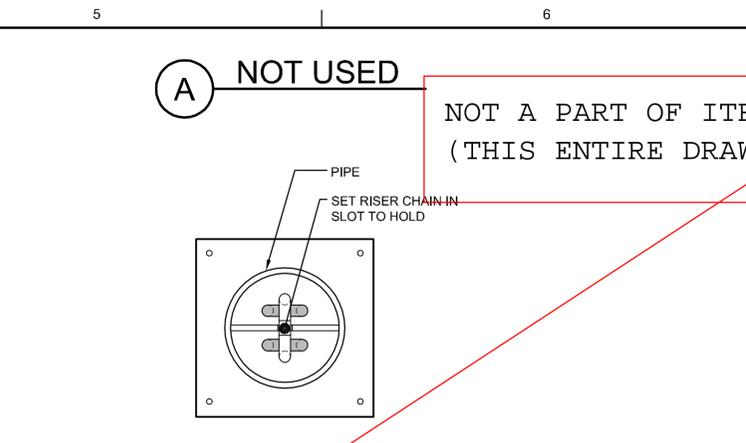
5 GANGWAY CONNECTION DETAIL
3" = 1'-0"



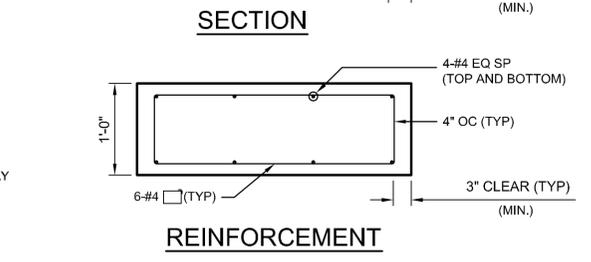
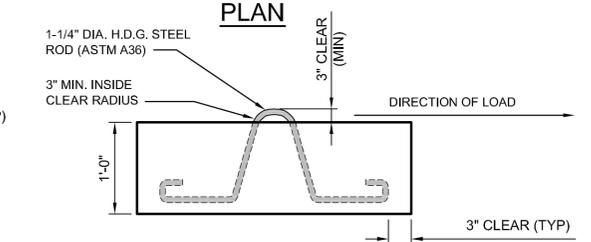
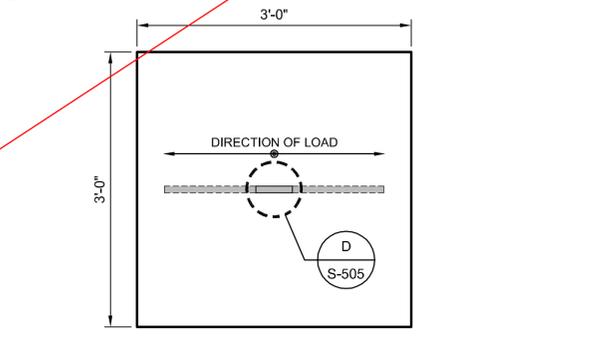
3 GANGWAY CONNECTION PLAN
1' = 1'-0"



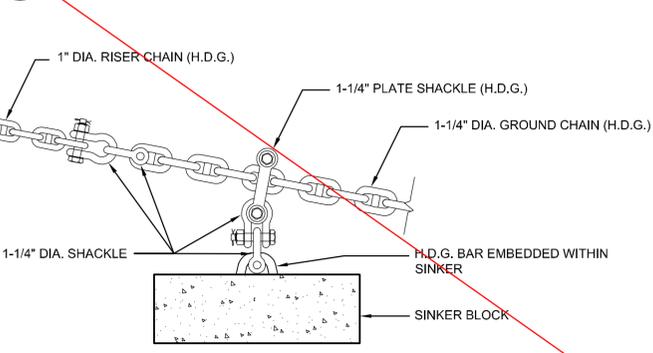
6 GANGWAY SUPPORT BRACKET ELEVATION
1-1/2" = 1'-0"



B EXISTING FLOAT CHAIN BOX DETAIL
NTS



C CONCRETE SINKER BLOCKS
1" = 1'-0"



D SINKER CONNECTION DETAIL
3/4" = 1'-0"

NOT A PART OF ITB 13-011
(THIS ENTIRE DRAWING)

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NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR.
KEY WEST, FLORIDA
NAVAL FACILITIES ENGINEERING COMMAND
SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA

DATE: JANUARY 25, 2012
PROJ: 460764
DWG: S-505
SHEET: 12 OF 19

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

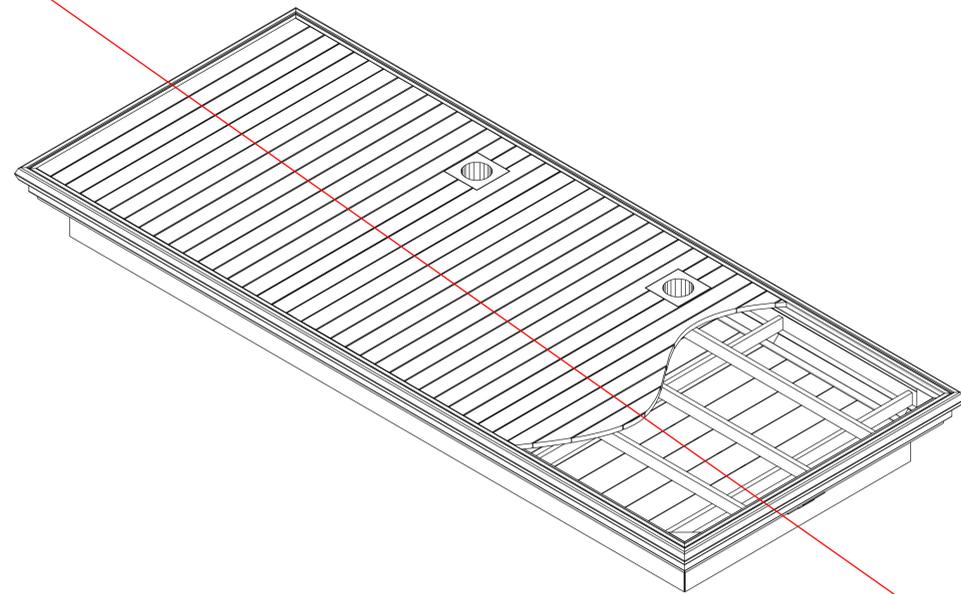
ANTONIO ARTHAY
FL PE No. 57912

DR: A ARTHAY
JC LONG
APVD: JC LONG
BY: APVD

REVISION: CHK JC LONG
DGN: A ARTHAY

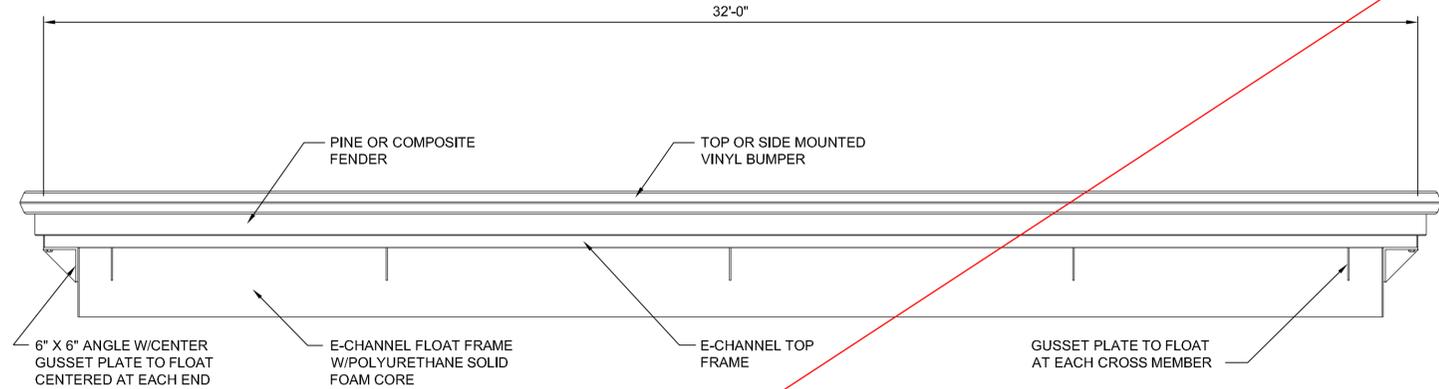
NO. DATE

FINAL DRAWINGS



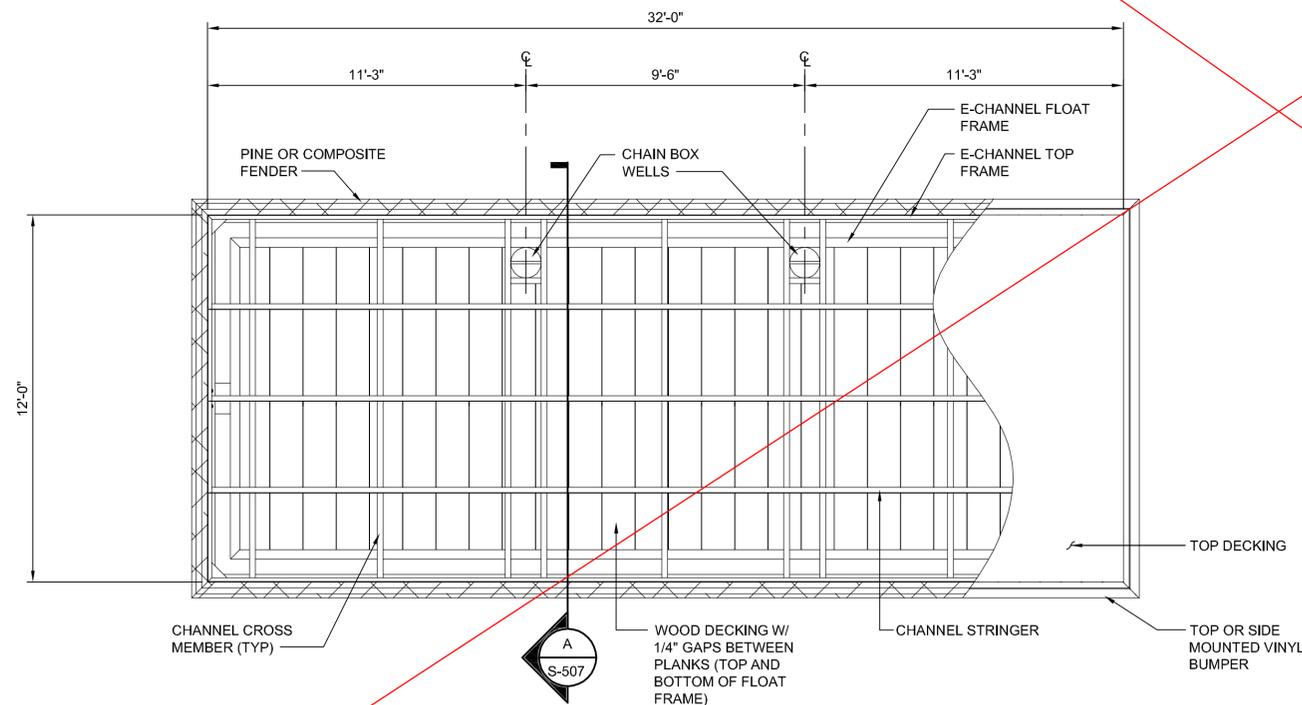
ISOMETRIC VIEW OF ALUMINUM-FRAMED FLOATING DOCK

NTS



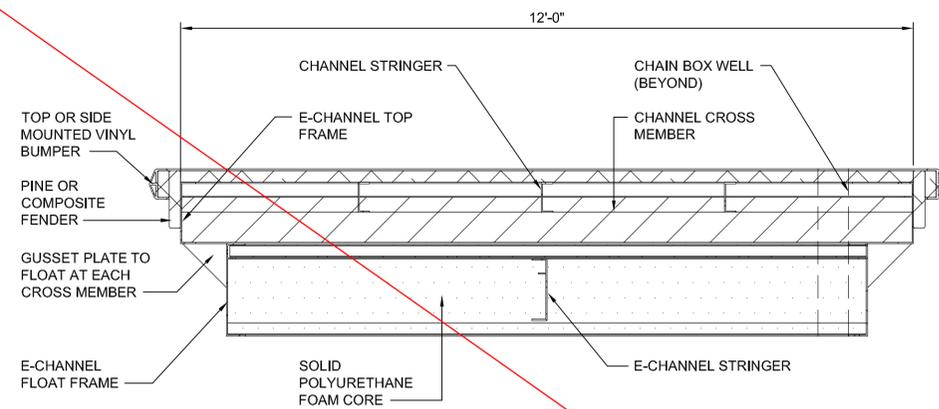
ELEVATION VIEW FOR ALUMINUM-FRAMED FLOATING DOCK

NTS



PLAN VIEW OF ALUMINUM-FRAMED FLOATING DOCK

NTS



A SECTION

NTS

NOTES:

- SEVEN (7) UNITS REQUIRED (TOTAL).
- CONNECTIONS BETWEEN UNITS AND ANCHORING CONNECTIONS SHALL BE SIMILAR TO THOSE PROVIDED FOR THE EXISTING DOCK SYSTEM AS SHOWN ELSEWHERE IN THESE PLANS (SEE SHEETS S-503 AND S-504).
- LIFTING LUGS SHALL BE PROVIDED SO THAT A SINGLE CRANE WITH SPREADER BAR CAN LIFT FLOAT OUT OF THE WATER.

NOT A PART OF ITB 13-011
(THIS ENTIRE DRAWING)

3001 PGA BLVD. SUITE 300
PALM BEACH GARDENS, FL 33410
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CH2MHILL®

SITE
ALTERNATE NO. 1
NEW FLOATING DOCK CONCEPT

NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR.
KEY WEST, FLORIDA
NAVAL FACILITIES ENGINEERING COMMAND
SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING	
DATE	JANUARY 25, 2012
PROJ	460764
DWG	S-507
SHEET	14 OF 19

ANTONIO ARTHAY
FL PE No. 57912

NO.	DATE	DR	REVISION	BY
1		AJ VANHOOSER		JC LONG
2		A ARTHAY		JC LONG

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FINAL DRAWINGS

ABBREVIATIONS:

A	AMPS, AMPERE	GA	GAUGE	P	POLE
AC	ALTERNATING CURRENT	GALV	GALVANIZED	PB	PULL BOX, PUSH BUTTON
AF	AMP FRAME	GEN	GENERATOR	PE	PHOTOELECTRIC DEVICE
AFF	ABOVE FINISHED FLOOR	GFI	GROUND FAULT INTERRUPTER	PF	POWER FACTOR
AL	ALUMINUM	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	PH, Ø	PHASE
ALT	ALTERNATE	GND	GROUND	PLC	PROGRAMMABLE LOGIC CONTROLLER
AM	AMMETER	GRS	GALVANIZED RIGID STEEL CONDUIT	PM	POWER METER
AMPS	AMPERES	H	HEIGHT	PMH	PRIMARY MANHOLE
APPROX	APPROXIMATE	HD	HEAVY DUTY	PNL	PANEL
ASPH	ASPHALT	HDPE	HIGH DENSITY POLYETHYLENE	PNLBD	PANELBOARD
AST	ABOVE-GROUND STORAGE TANK	HH	HANDHOLE	PR	PAIR
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	HID	HIGH INTENSITY DISCHARGE	PRI	PRIMARY
AT	AMP TRIP	HOA	HAND-OFF-AUTOMATIC	PROJ	PROJECT
ATS	AUTOMATIC TRANSFER SWITCH	HORIZ	HORIZONTAL	PS	PRESSURE SENSOR, POWER SUPPLY
AUX	AUXILIARY	HP	HORSEPOWER	PSI	POUNDS PER SQUARE INCH
AUTO	AUTOMATIC	HPS	HIGH PRESSURE SODIUM	PT	POTENTIAL TRANSFORMER, PRESSURE TRANSMITTER
AVG	AVERAGE	HR	HOUR	PVC	POLYVINYL CHLORIDE
AWG	AMERICAN WIRE GAUGE	HZ	HERTZ	PWR	POWER
BATT	BATTERY	ID	INSIDE DIMENSION	QTY	QUANTITY
BIL	BASIC IMPULSE LEVEL	IE	INVERT ELEVATION	RECP	RECEPTACLE
BLDG	BUILDING	IEEE	INSTITUTE OF ELECTRICAL & ELECTRONIC ENGINEERS	REF	REFERENCE
BKR	BREAKER	IES	ILLUMINATING ENGINEERING SOCIETY (OF NORTH AMERICA)	REINF	REINFORCEMENT
BNC	BAYONET-NIELL-CONCELMAN	IN	INCH(ES)	REQD	REQUIRED
BOT	BOTTOM	INCL	INCLUDING	REV	REVISION, REVISED
BPS	BITS PER SECOND	INST	INSTANTANEOUS	RF	RATING FACTOR
C	CONDUIT, CONDUCTOR	INSTR	INSTRUMENT, INSTRUMENTATION	RGS	RIGID GALVANIZED STEEL
CAB	CABINET	IMH	INSTRUMENTATION MANHOLE	RMS	ROOT-MEAN-SQUARE
CAT	CATALOG	INV	INVERT	RVAT	REDUCED VOLTAGE AUTO TRANSFORMER
CATV	CABLE TELEVISION	J, JB	JUNCTION BOX J	RVNR	REDUCED VOLTAGE NON-REVERSING RIGHT-OF-WAY
CB	CIRCUIT BREAKER, CATCH BASIN	JCT	UNCTION	R/W	
CEM	CEMENT	JT	JOINT	SA	SURGE ARRESTER
CF	CUBIC FOOT	K	KIRK KEY INTERLOCK	SCH	SCHEDULE
CIP	CAST-IN-PLACE	KA	KILO AMPERES	SEC	SECONDARY, SECOND(S)
CKT	CIRCUIT	KAIC	KILO AMPS INTERRUPTING CAPACITY	SECT	SECTION
CLR	CLEAR	KCMIL	ONE THOUSAND CIRCULAR MILS	SF	SQUARE FOOT, SQUARE FEET
CL	CLASS, CENTERLINE, CURRENT LIMITING	KV	KILOVOLTS	SHLD	SHIELDED
CDT	CONDUIT	KVA	KILOVOLT AMPERES	SHT	SHEET
CLG	CEILING	KVAR	KILOVOLT AMPERES REACTIVE	SI	SQUARE INCH, SQUARE INCHES
CMH	COMMUNICATIONS MANHOLE	KW	KILOWATTS	SIM	SIMILAR
COMM	COMMUNICATION(S)	KWH	KILOWATT HOURS	SMH	SECONDARY MANHOLE
CONC	CONCRETE	KWHD	KILOWATT HOURS DEMAND	SPDT	SINGLE POLE DOUBLE THROW
CONN	CONNECTION	L	LENGTH	SPEC	SPECIFICATION(S)
CONC	CONCRETE	LB(S)	POUND(S)	SQ	SQUARE
CONN	CONNECTION	LC	LOAD CENTER	SS	STAINLESS STEEL
CONST	CONSTRUCTION	LED	LIGHT EMITTING DIODE	ST	STREET
CONT	CONTINUED	LF	LINEAR FEET	STA	STATION
CONTR	CONTRACTOR	LOC	LOCATIONS	STD	STANDARD
COORD	COORDINATE	LS	LIMIT SWITCH	STR	STRANDED
CPT	CONTROL POWER TRANSFORMER	LS	LIMIT SWITCH	SW	SWITCH
CR	CONTROL RELAY	LT(S)	LIGHT(S)	SWBD	SWITCHBOARD
CRS	PVC COATED RIGID STEEL CONDUIT	LTG	LIGHTING	SYM	SYMMETRICAL
CS	CONTROL STATION	LV	LOW VOLTAGE	SYNC	SYNCHRONOUS
CT	CURRENT TRANSFORMER	LVMH	LOW VOLTAGE MANHOLE	SY	SQUARE YARD, SQUARE YARDS
CTR	CENTER	L-G	LINE-TO-GROUND	SYS	SYSTEM
CTRL	CONTROL	L-L	LINE-TO-LINE	TB	TERMINAL BLOCK
CU	COPPER	M	MOTOR	TBD	TO BE DETERMINED
DB	DIRECT BURIED	MAX	MAXIMUM	TD	TIME DELAY
dB	DECIBELS	MCM	ONE THOUSAND CIRCULAR MILS	TELE	TELEPHONE
DC	DIRECT CURRENT	MCOV	MAXIMUM CIRCUIT OPERATING VOLTAGE	TEMP	TEMPORARY, TEMPERATURE
DED	DEDICATED	MECH	MECHANICAL	TERM	TERMINAL
DEG	DEGREES	MFR	MANUFACTURER	THHN	HEAT RESISTANT THERMOPLASTIC INSULATION
DET	DETAIL	MH	MANHOLE	THK	THICK
DIA	DIAMETER	MIN	MINIMUM	THWN	HEAT AND MOISTURE RESISTANT THERMOPLASTIC INSULATION
DIV	DIVISION	MISC	MISCELLANEOUS	THRU	THROUGH
DIFF	DIFFERENTIAL	MOV	METAL OXIDE VARISTOR	TOS	TOP OF STEEL, TOP OF SLAB
DIM	DIMENSIONS	MLO	MAIN LUGS ONLY	TYP	TYPICAL
DWG	DRAWING	MTD	MOUNTED	TWSH	TWISTED SHEILED
EA	EACH	MTR	MOTOR	UBC	UNIFORM BUILDING CODE
ELEC	ELECTRIC, ELECTRICAL	MV	MEDIUM VOLTAGE	UG	UNDERGROUND
EL	ELEVATION	MVA	MEGAVOLT AMPERES	UL	UNDERWRITERS LABORATORY
EMBT	EMBEDMENT	N	NEUTRAL	UNO	UNLESS NOTED OTHERWISE
EMT	ELECTRICAL METALLIC TUBING	NC	NORMALLY CLOSED	UPS	UNINTERRUPTABLE POWER SUPPLY
ENCL	ENCLOSURE, ENCLOSED	NE	NORTH EAST	UTP	UNSHIELDED TWISTED PAIR
ENGR	ENGINEER	NEC	NATIONAL ELECTRICAL CODE	UVIR	ULTRAVIOLET INFRARED
EPA	EFFECTIVE PROJECTED AREA	NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION	V	VOLTS, VOLTAGE
EPR	ETHYLENE PROPYLENE RUBBER	NEUT	NEUTRAL	VAR	VOLT AMPERES REACTIVE
EQ	EQUAL	NIC	NOT IN CONTRACT	VERT	VERTICAL
EQUIP	EQUIPMENT	NO	NORMALLY OPEN, NUMBER	VM	VOLT METER
EXIST	EXISTING	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	VOL	VOLUME
EXP	EXPOSED	NTS	NOT TO SCALE	VT	VOLTAGE TRANSFORMER
EXT	EXTERIOR	OC	ON CENTER(S)	W	WATT, WIDE, WIDTH, WIRE
F	FUSE	OD	OUTSIDE DIAMETER	WF	WASTE FUEL
FA	FIRE ALARM	OH	OVERHEAD	WH	WATTHOUR
FAA	FORCED AIR	OL	OVERLOADS	WM	WATTHOUR METER
FACP	FIRE ALARM CONTROL PANEL	OPP	OPPOSITE	W/O	WITHOUT
FACS	FIRE ALARM CONTROL SYSTEM	OPER	OPERATOR	WP	WEATHERPROOF
FC	FOOTCANDLE	OWS	OIL WATER SEPERATOR	WT	WEIGHT
FND	FOUNDATION			WWF	WELDED WIRE FABRIC
FDR	FEEDER			W/	WITH
FHP	FRACTIONAL HORSEPOWER			X	REACTANCE
FF	FINISHED FLOOR			XFMR	TRANSFORMER
FIXT	FIXTURE			XHHW	HEAT AND MOISTURE RESISTANT CROSS LINKED SYNTHETIC POLYMER
FLEX	FLEXIBLE			XP	EXPLOSIONPROOF
FLR	FLOOR			Z	IMPEDANCE
FLUOR	FLUORESCENT				
FO	FIBER OPTIC				
FT	FOOT, FEET				
FTG	FOOTING				
FUT	FUTURE				
FV	FULL VOLTAGE				
FVR	FULL VOLTAGE REVERSING				
FVNR	FULL VOLTAGE NON-REVERSING				

LEGEND:

	REFERENCE NOTE TAG.		FEEDER LEGEND TAG.
	CONDUIT CONTENTS TAG.		KIRK KEY INTERLOCK.
	UG ELECTRICAL CONDUIT OR DUCT BANK AS INDICATED.		ELECTRICAL DUCT BANK.
	MANHOLE.		CONNECTION POINT.
	DRIVEN GROUNDING ROD ELECTRODE.		TRANSFORMER.
	CIRCUIT BREAKER.		FUSE.
	NO CONTACT.		NC CONTACT.
	CONTROL RELAY.		COIL.
	POWER METER.		PROTECTIVE TRIP DEVICE.
	ELBOW TERMINATORS.		INSTANTANEOUS TIME-OVERCURRENT PROTECTIVE RELAY
	TIME-OVERCURRENT PROTECTIVE RELAY		MULTI-FUNCTION PROTECTIVE RELAY WITH POWER METER
	POSITIVE DC VOLTAGE TERMINAL.		NEGATIVE DC VOLTAGE TERMINAL.
	MOMENTARY PUSHBUTTON WITH NC CONTACTS.		MOMENTARY PUSHBUTTON WITH NO CONTACTS.
	MOMENTARY PUSHBUTTON WITH BOTH NC AND NO CONTACTS.		2-POSITION SELECTOR SWITCH.
	KEY OPERATED 2-POSITION, SPRING RETURN FROM RIGHT TO LEFT, SELECTOR SWITCH WITH KEY RETAINED IN RIGHT POSITION.		TIMING RELAY WITH TIMING SETTING ADJUSTABLE FROM 0 TO 3600 SECONDS (SET FOR 3600 SECONDS). TIMER STARTS ON REMOVAL OF VOLTAGE, CONTACTS CHANGE STATE ON APPLICATION OF VOLTAGE AND AGAIN AT END OF TIMING SEQUENCE. REAPPLICATION OF VOLTAGE RESETS TIMER.
	CIRCUIT BREAKER ELECTRIC OPERATOR (e.g. SPRING CHARGING MECHANISM MOTOR)		CIRCUIT BREAKER ELECTRIC OPERATOR AUXILIARY CONTACT IN NO STATE WHEN ELECTRIC OPERATOR IS NOT AVAILABLE FOR OPERATION.
	CONTROL (OR PILOT) RELAY CONTACTS SHOWN IN NO STATE WHEN RELAY COIL IS DE-ENERGIZED.		CONTROL (OR PILOT) RELAY CONTACTS SHOWN IN NC STATE WHEN RELAY COIL IS DE-ENERGIZED.
	RECEPTACLE INTERLOCK CONTACTS SHOWN IN NO STATE WHEN RECEPTACLE DOOR IS IN FULLY CLOSED AND LOCKED POSITION OR PLUG IS IN FULLY ENGAGED AND LOCKED POSITION, AND CLOSED OTHERWISE.		PILOT LIGHT; COLOR IS INDICATED BY LETTER INSIDE SYMBOL (e.g. W = WHITE, R = RED, G = GREEN).
	MOTORIZED EQUIPMENT. "#" IDENTIFIES MOTOR HORSEPOWER.		NEMA RATED ENCLOSED COMBINATION DISCONNECTING MEANS AND MAGNETIC MOTOR STARTER UNIT.
	NEMA RATED MOTOR STARTER UNIT.		FUSED DISCONNECT SWITCH.
	NON-FUSED DISCONNECT SWITCH.		ENCLOSED CIRCUIT BREAKER.
	CIRCUIT #		FLOOD LIGHT

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NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR.
KEY WEST, FLORIDA
NAVAL FACILITIES ENGINEERING COMMAND
SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA

ELECTRICAL
**LEGEND, ABBREVIATIONS
GENERAL NOTES**

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE: JANUARY 25, 2012
PROJ: 460764
DWG: E-001
SHEET: 15 OF 19

JACK BARTON
FL PE No. 42467

JC LONG
BY APVD

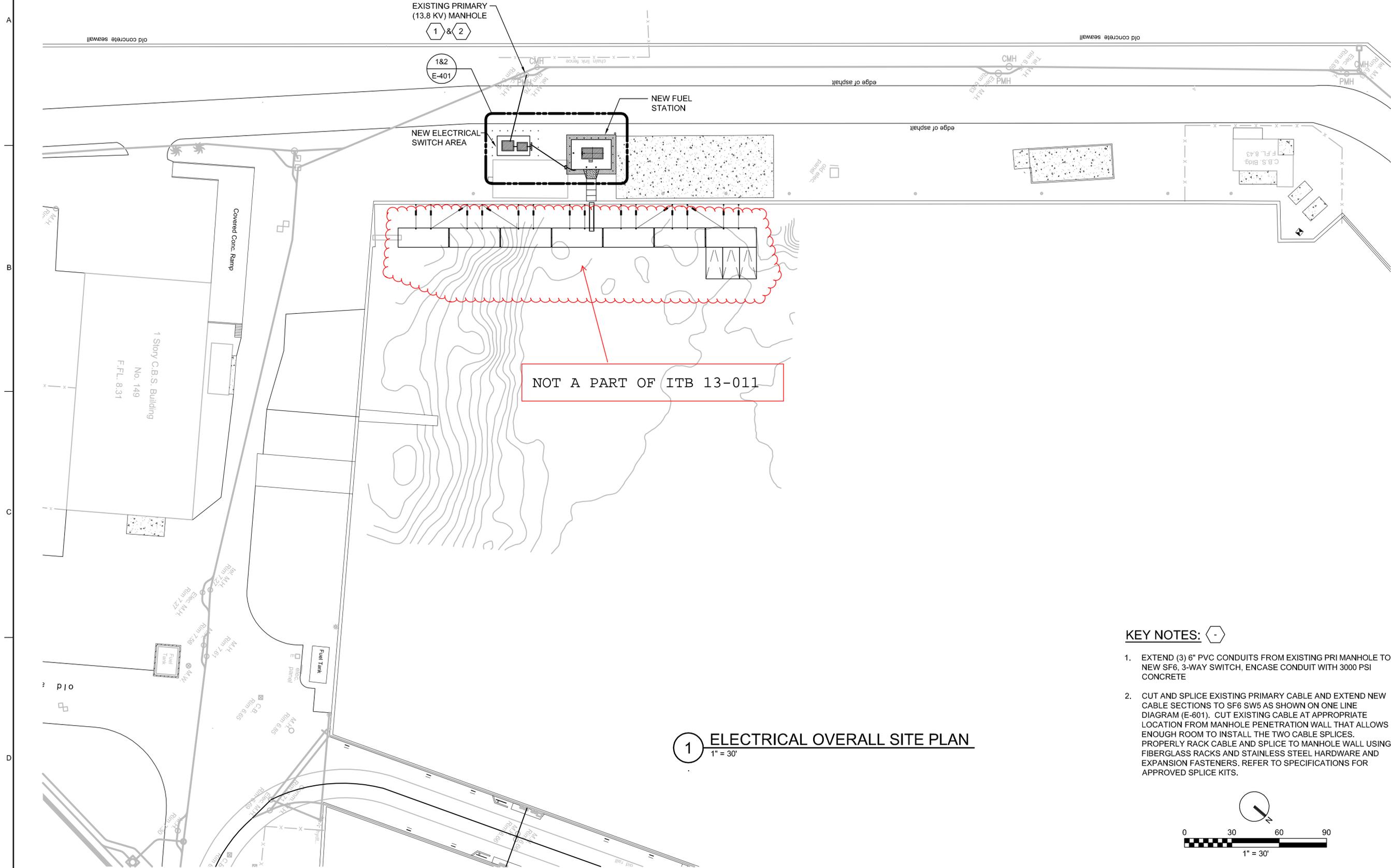
JC LONG
CHK

JC LONG
DR AP GIRAITS

JC LONG
DATE

JC LONG
DGSN

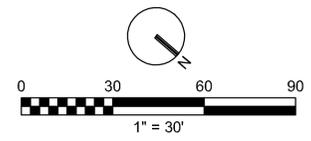
FORT ZACHARY TAYLOR



1 ELECTRICAL OVERALL SITE PLAN
1" = 30'

KEY NOTES:

- EXTEND (3) 6" PVC CONDUITS FROM EXISTING PRI MANHOLE TO NEW SF6, 3-WAY SWITCH, ENCASE CONDUIT WITH 3000 PSI CONCRETE
- CUT AND SPLICE EXISTING PRIMARY CABLE AND EXTEND NEW CABLE SECTIONS TO SF6 SW5 AS SHOWN ON ONE LINE DIAGRAM (E-601). CUT EXISTING CABLE AT APPROPRIATE LOCATION FROM MANHOLE PENETRATION WALL THAT ALLOWS ENOUGH ROOM TO INSTALL THE TWO CABLE SPLICES. PROPERLY RACK CABLE AND SPLICE TO MANHOLE WALL USING FIBERGLASS RACKS AND STAINLESS STEEL HARDWARE AND EXPANSION FASTENERS. REFER TO SPECIFICATIONS FOR APPROVED SPLICE KITS.



CH2MHILL® 3001 PGA BLVD., SUITE 300 PALM BEACH GARDENS, FL 33410 EB0000072 AAC001992		NO. DATE DSGN JC LONG		DR AP GIRAITIS JC LONG		REVISION JC LONG		BY APVD JC LONG		JACK BARTON FL PE No. 42467	
		NAVY MOLE FUEL STAT. / FLOATING DOCK IMPR. KEY WEST, FLORIDA NAVAL FACILITIES ENGINEERING COMMAND SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA		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. © CH2M HILL 2012. ALL RIGHTS RESERVED.		FINAL DRAWINGS SHEET 16 OF 19					

PANELBOARD SCHEDULE												
BUS VOLTAMPS				CIRCUIT BREAKERS				BUS VOLTAMPS				
LIGHTS	RECEPT	EQUIP	MOTORS	LOAD	AMPS/POLES	BUS	AMPS/POLES	LOAD	LIGHTS	RECEPT	EQUIP	MOTRS
		300	1500	Fuel Pump	20/1	1 A	2	TVSS				
1000				Shunt Trip	20/1	3 B	4					
	1500			Site Lighting	20/1	5 C	6					
				Convenience Rcpt	20/1	7 A	8	Phase Monitor Relay			25	
				Spare	20/1	9 B	10				25	
				Spare	20/1	11 C	12				25	
				Spare	20/1	13 A	14	PM Beacon Light	75			
				Spare	20/1	15 B	16	Space				
				Spare	20/1	17 C	18					
				Space	20/1	19 A	20					
				Space	20/1	19 A	20					

TOTAL VOLTAMPS:	LIGHTING	1075	CONNECTED KVA:	4.45
	RECEPTACLES	1500		
	EQUIPMENT	375	LARGEST MOTOR	1500
	MOTORS	1500	25% OF LARGEST MOTO	375
RATED VOLTAGE 208/120V, 3PH		PANEL CAPACITY: 42 POLES		
FULL NEUTRAL BUS; GROUND BUS; COPPER BUS BARS; BOLT IN BREAKERS				
HINGED DOOR WITH LOCKING HANDLE; NEMA 4X SURFACE MOUNTED ENCLOSURE				
MAIN CKT BKR: 100 AMPS CIRCUIT BREAKERS SHALL BE SHORT CIRCUIT RATED				
MAIN RATED FOR 100 AMPS FOR 10000 AMPS SYMMETRICAL				

DEMAND LOAD LIGHTING	1075	X	1.25	1343.75	VOLTAMPS
DEMAND LOAD RECEPTACLES	1500	X	PER NEC	1500	VOLTAMPS
DEMAND LOAD EQUIPMENT	375	X	PER NEC	375	VOLTAMPS
DEMAND LOAD MOTORS	1500	X	PER NEC	1875	VOLTAMPS
TOTAL DEMAND LOAD				5093.75	VOLTAMPS

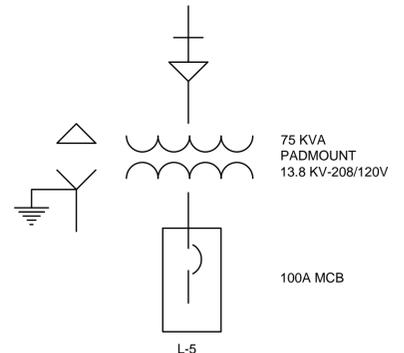
1/22/2013

L5

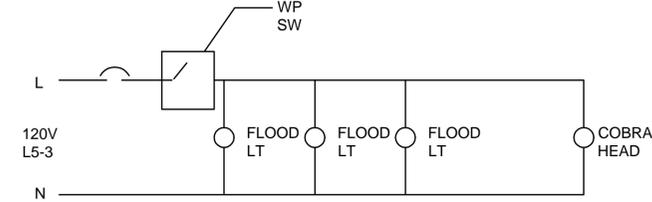
CKT SCHEDULE:

- [H1], [H2] 6°C, 3#350
- [H3] 4°C, 3#1
- [P1] 1°C, 2#10 #10G
- [P2] 1°C, 2#10 #10G
- [P3] 3°C, 4#1
- [P4] 1°C, EMPTY

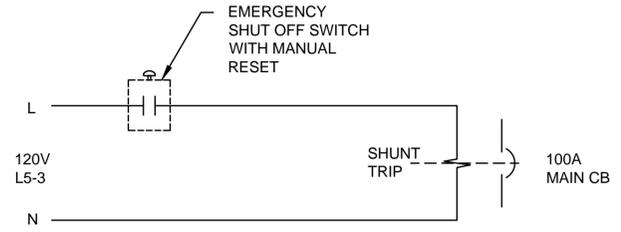
NOTE:
 1. H CKTS ARE RATED FOR 15KV, EPR, 133% INSULATION.
 2. P CKTS ARE RATED FOR 600V, CU, THWN/THHN



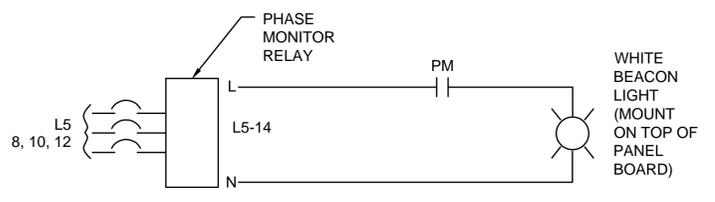
ONE LINE DIAGRAM SUBSTATION #5



LIGHTING CONTROL DIAGRAM
NTS



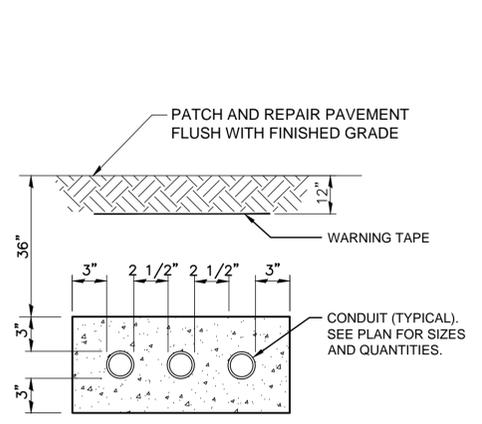
EMERGENCY SHUT OFF DIAGRAM
NTS



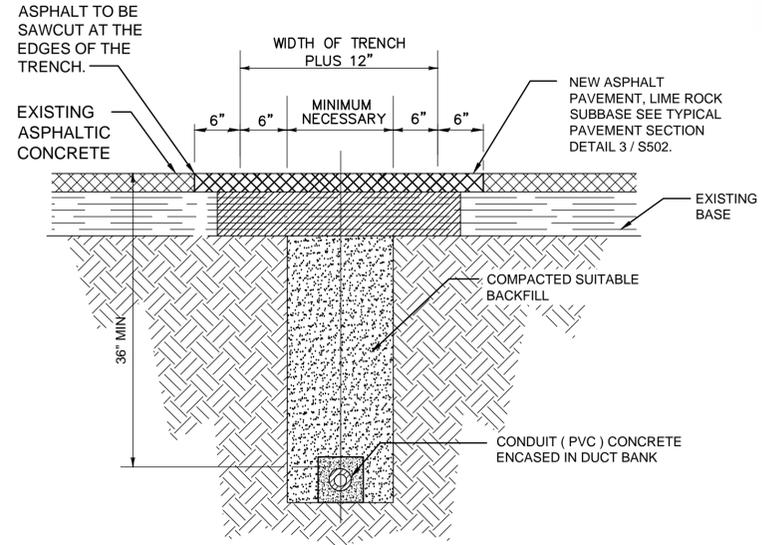
PHASE MONITOR DIAGRAM
NTS



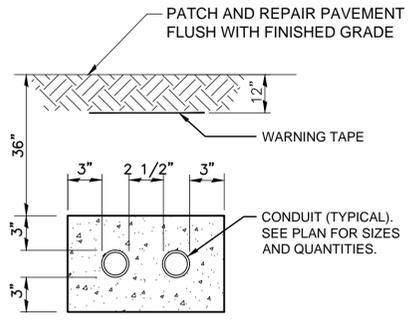
Know what's below. Call before you dig.



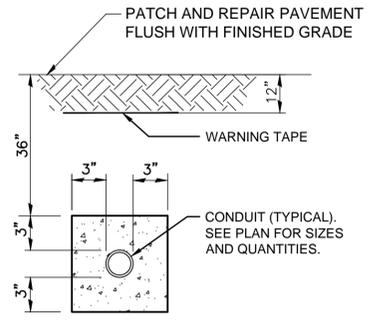
1 TYPICAL THREE DUCT BANK
NTS



2 FOR USE IN INSTALLING CONDUIT UNDER EXISTING PAVEMENT
NTS



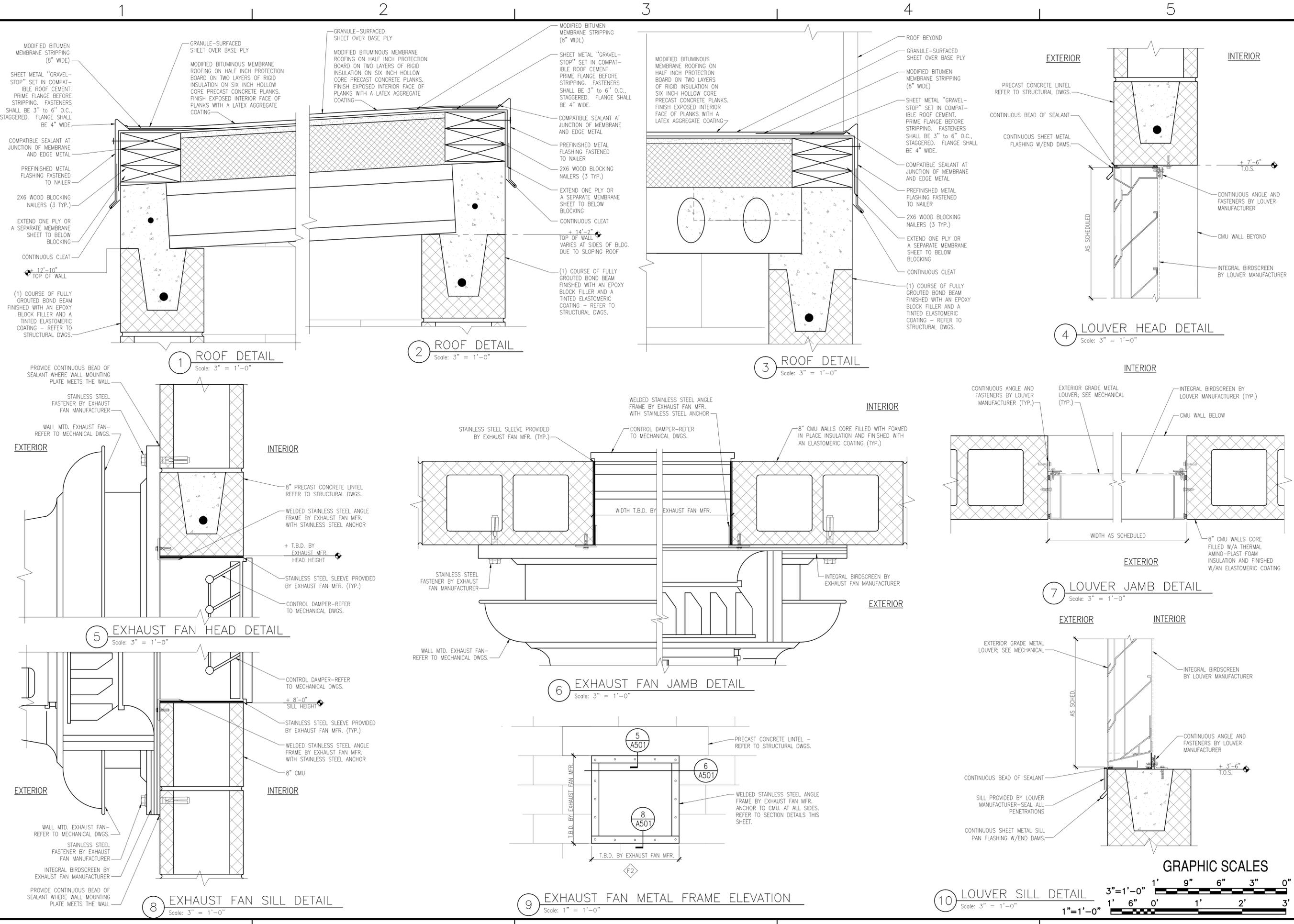
3 TYPICAL TWO DUCT BANK
NTS



4 TYPICAL SINGLE DUCT BANK
NTS

3001 PGA BLVD. SUITE 300 PALM BEACH GARDENS, FL 33410 EB0000072 AAC001992		NAVAL MOLE FUEL STAT. / FLOATING DOCK IMPR. KEY WEST, FLORIDA NAVAL FACILITIES ENGINEERING COMMAND SOUTH DIVISION - CHARLSTON, SOUTH CAROLINA	
CH2MHILL		ELECTRICAL ONE LINE DIAGRAM SUBSTATION #4	
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.			
DATE	JANUARY 25, 2012	PROJ	460764
DWG	E-602	SHEET	19 OF 19

FILE NAME: P:\CIBL\project_files\FLORIDA\key west (0)\0213\mole pier electrical enclosures-1140628\working technical files\Drawings\SheetA501 - DETAILS.dwg LAYOUT NAME: DETAILS PLOTTED: Thursday, February 21, 2013 - 2:44pm USER: troy.doyton



DATE	2/21/13
APPR	
DES	
CHK	
DRW	
TD	
TD	
CHK	
HK	
PROJECT MANAGER	D. COVINGTON
SPT TECH. BRANCH HEAD	J. WARD
CHEF ENG/ARCH (CORE)	R. RODRIGUEZ
XX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
KEY WEST, FLORIDA
NAVAL AIR STATION KEY WEST
MOLE PIER ELECTRICAL ENCLOSURES
DETAILS

SCALE: AS NOTED
PROJECT NO.: 1140628
CONSTR. CONTR. NO.: N69450-XX-C-XXXX
NAVFAC DRAWING NO.: 15071117
SHEET 31 OF 51
A501

GRAPHIC SCALES
3"=1'-0" 1' 9" 6" 3"
1"=1'-0" 1' 6" 0' 1' 2' 3'

DATE: 5 APRIL 2012

NOTE TO BIDDER: Use preferably BLACK ink for completing this Bid form.

BID FORM

To: The City of Key West

Address: 3140 Flagler Ave, Key West, Florida 33040

Project Title: Electrical Enclosures & Fuel Station

City of Key West Project No.: ITB 13-011

Bidder's contact for additional information on this Bid:

Company Name: _____

Contact Name: _____

Telephone: _____

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the Work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Bid is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Bid.

The Bidder further agrees, as evidenced by signing the Bid, that if awarded a Contract, the Florida Trench Safety Act and applicable trench safety standards will be complied with.

CONTRACT EXECUTION AND BONDS

The Bidder agrees that if this Bid is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner examples of the Performance Bond and Payment Bond required herein, and evidence of holding required licenses and certificates, and will, to the extent of his Bid, furnish all machinery, tools, apparatus, and other means of construction and do the Work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the Work under this Contract, the certificates of insurance as specified in these Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIMES

The Bidder agrees to begin work within 10 calendar days after the date of the Notice to Proceed and to achieve Substantial Completion within 160 calendar days from the date when the Contract Times commence to run as provided in paragraph 2.03.A of the General Conditions, and Work will be completed and ready for final payment and acceptance in accordance with paragraph 14.07 of the General Conditions within 180 calendar days from the date when the Contract Times commence to run.

LIQUIDATED DAMAGES

In the event the Bidder is awarded the Contract, Owner and Bidder recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in paragraph Start of Construction and Contract Completion Times above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. Owner and Bidder also recognize the delays, expense, and difficulties involved in proving in a legal or other dispute resolution proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Bidder agree that as liquidated damages for delay (but not as a penalty) Bidder shall pay Owner **\$500** per day for each day that expires after the time specified for substantial completion.

After Substantial Completion, if Bidder neglects, refuses, or fails to complete the remaining Work within the Contract Times or any Owner-granted extension thereof, Bidder shall pay Owner **\$200** for each day that expires after the time specified in paragraph Start of Construction and Contract Completion Times, above for completion and readiness for final payment. Liquidated damages shall run concurrent.

Owner will recover such liquidated damages by deducting the amount owed from the final payment or any retainage held by Owner.

ADDENDA

The Bidder hereby acknowledges that he has received Addenda Nos. _____, _____, _____, _____, _____, (Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Bid(s) includes all impacts resulting from said addenda.

SALES AND USE TAXES

The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated Bid Prices for the Work. Cash allowances DO NOT include any sales and use tax. Equipment allowance includes taxes as shown in Equipment Suppliers' Bid.

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, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.”

COMBINED UNIT PRICE AND LUMP SUM WORK

The Bidder further proposes to accept as full payment for the Work proposed herein the amounts computed under the provisions of the Contract Documents. For unit price bid items, the estimate of quantities of work to be done is tabulated in the Proposal and, although stated with as much accuracy as possible, is approximate only and is assumed solely for the basis of calculation upon which the award of Contract shall be made. For lump sum bid items, it is expressly understood that the amounts are independent of the exact quantities involved. The Bidder agrees that the amounts for both unit price and lump sum work represent a true measure of labor and materials required to perform the Work, including all allowances for inspection, testing, overhead and profit for each type of work called for in these Contract Documents. The amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern.

Bid Form ITB 13-011

City of Key West Project: OM1301

Base Bid :

SW#1 through SW#3 Enclosures (inclusive)	(Lump Sum)	_____	(1)
Accident Prevention Plan (APP) Management	(Lump Sum)	_____	(2)
Quality Control (QC) Program Management	(Lump Sum)	_____	(3)
Construction Administration (CA) Program Management	(Lump Sum)	_____	(4)

Total Bid: _____
 (1)+(2)+(3)+(4)

_____ Dollars and _____ Cents

Total Bid Written in Words has precedence (Basis of Award)

All Bid Items Below are "Alternate Bid Items" :

Alternate: SW#4 Enclosure (includes all site work within 100 feet of SW#4 Location) (Lump Sum) _____ (5)

Alternate Bid Items for SW#1 - SW#4

(Option # corresponds to Notes on Sheet A601 of Drawing Set)

	Quan.	Meas.	Unit Cost	Ext.	
Alternate: Option 1. Stainless Steel Watertight Man-door 3 ⁰	12	ea.	_____	_____	(6)
Alternate: Option 2. Stainless Steel OH Coil Roll-up Door 12'0"	4	ea.	_____	_____	(7)
Alternate: Option 3. Aluminum Flood Panel for 3 ⁰ Man-door	12	ea.	_____	_____	(8)
Alternate: Option 4. Aluminum Flood Panel for 12'0" Roll-up Door	4	ea.	_____	_____	(9)
Alternate: Option 5. Stainless Steel OH Coil Roll-up Door 10'0"	1	ea.	_____	_____	(10)
Alternate: Option 6. Aluminum Flood Panel for 10'0" Roll-up Door	1	ea.	_____	_____	(11)

Alternate Bid Items: Fueling Station

Alternate: Fueling Station: Site Work, Electrical, Fence, Concrete, Std. Tank (Lump Sum) _____ (12)

Alternate: Stainless Steel Option for 1000 Gal. Fuel Tank (Lump Sum) _____ (13)

SUBCONTRACTORS

The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the Work in the event that the Bidder is awarded the Contract:

Name

Street City State Zip

Surety

whose address is

Street City State Zip

Bidder

The name of the Bidder submitting this Bid is _____

_____ doing business at

Street

City

State

Zip

which is the address to which all communications concerned with this Bid and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Bid, or of the partnership, or of all persons interested in this Bid as principals are as follows:

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this ___ day of _____ 20__.

Signature of Bidder

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this ____ day of 20.

(SEAL)

Name of Corporation

By: _____

Title: _____

Attest: _____

Secretary

END OF SECTION

3.9 INSPECTION AND ACCEPTANCE

In addition to meeting previously specified requirements, demonstrate mobility of moving components, including roll-up doors by the Contracting Officer. Perform this demonstration after appropriate curing and drying times of coatings have elapsed and prior to invoicing for final payment.

3.10 WASTE MANAGEMENT

As specified in the Waste Management Plan and as follows. Do not use kerosene or any such organic solvents to clean up water based paints. Properly dispose of paints or solvents in designated containers. Close and seal partially used containers of paint to maintain quality as necessary for reuse. Store in protected, well-ventilated, fire-safe area at moderate temperature. Place materials defined as hazardous or toxic waste in designated containers. Set aside extra paint for future color matches or reuse by the Government.

3.11 PAINT TABLES

3.11.1 EXTERIOR PAINT TABLES

DIVISION 3: EXTERIOR CONCRETE PAINT TABLE		
A. New concrete, elastomeric System; vertical surfaces		
1. Elastomeric Coating		
New; MPI EXT 3.1F		
Primer: As recommended by the manufacturer	Intermediate: MPI 113, Elastomeric coating (tinted)	Topcoat: MPI 113, Elastomeric coating (tinted)
System DFT: As recommended by manufacturer.		

DIVISION 4: EXTERIOR CONCRETE MASONRY UNITS PAINT TABLE		
A. New concrete masonry, elastomeric System; on uncoated surface:		
1. Elastomeric Coating		
New; MPI EXT 4.2D		
Primer: MPI 116, Epoxy Block Filler	Intermediate: MPI 113, Elastomeric coating (tinted)	Topcoat: MPI 113, Elastomeric coating (tinted)
System DFT: As recommended by manufacturer.		

DIVISION 5: EXTERIOR METAL, FERROUS AND NON-FERROUS PAINT TABLE		
<u>EXTERIOR GALVANIZED SURFACES</u>		
A. New Galvanized surfaces: Base Bid: Walk through and rollup doors and miscellaneous surfaces		
1. Cementitious primer / Latex		
MPI EXT 5.3A-G1 (Flat)		
2. Epoxy Primer / Waterborne Light Industrial Coating		
MPI EXT 5.3K-G5 (Semigloss)		
Primer: MPI 101	Intermediate: MPI 163	Topcoat: MPI 163
System DFT: 5 mils		
MPI EXT 5.3K-G6 (Gloss)		
Primer: MPI 101	Intermediate: MPI 164	Topcoat: MPI 164
System DFT: 5 mils		
<u>EXTERIOR SURFACES, OTHER METALS (NON-FERROUS)</u>		
A. Aluminum, aluminum alloy and other miscellaneous non-ferrous metal items not otherwise specified except hot metal surfaces, roof surfaces, and new prefinished equipment. Match surrounding finish:		
MPI EXT 5.4F-G6 (Gloss)		

PART 3 SECTION H

ADDITIONAL REQUIREMENTS

There are some specific minor requirements for each of the Switchgear Enclosures that are not presented in the included plans and specifications but shall be included in the scope of this project and also in the submitted bid costs for each distinct enclosure. The sections below describe these requirements in detail:

1. SW#4 - Replace the existing Low Pressure Relief Device with a Qualitrol XPRD as described in the included catalog cut for “Qualitrol XPRD.” This replacement shall include appropriate testing of the transformer, transformer oil, and the reestablishment of the transformer’s nitrogen “blanket.” (Note that similar replacements have already been completed for SW#1 through SW#3.)
2. SW#1 through SW#4 – Plumb each of the XPRD pressure-relief devices to a containment tank using piping configuration per the included catalog cuts:
 - a. One such installation at each switchgear enclosure location.
 - b. Containment tank shall be new, clean, labeled, and restrained 55-gallon steel drum.
 - c. The tank shall be vented with a 1½” ID pipe topped by a 180° vent hood.
 - d. Piping shall be configured with disconnects such that the tank may be replaced.
 - e. Approved shop drawings required prior to procurement.
3. SW#4 – Sheets C141 and C142 of the Switchgear Enclosures drawing package depict removal and reconfiguration of existing fencing at SW#4. The fencing product to be used is specified as “Ameristar Impasse Gauntlet 3-rail 8-foot” for which catalog cuts are included in this section. Note the following:

- a. The profile of the new fence section should match that of the existing fence, including the concrete curb at ground level.
- b. No new concrete pilasters are required.
- c. This rearrangement will require demolition of four (4) existing concrete pilasters and approximately 30 lineal feet of concrete curb down to six inches below grade. Removal and proper disposal of demolished material and complete surface restoration to existing or better condition is also required.
- d. Approval of submitted shop drawings depicting this installation is required prior to material procurement.



Date: 08 March 2013

Mole Pier Electrical Enclosure Enclosure NAS Key West, FL

Request for Information – Questions and Answers

- 1) Under the NAVFAC “Design Bid Build Project Specifications” in many of the specification section it refers to the “Contracting Officer”. Since this is a City project and the Navy is not involved in this contract, who will be the acting Contracting Officer?
 - a. **The designated Owner’s representative, currently Terrence Justice, City/Navy Construction Coordinator. The Navy will have an active role in reviewing the performance of both the City’s Contracting Officer and the CA.**
- 2) Specification 01 33 00 paragraph 1.5.1 calls for to submit six copies of submittals of shop drawings. Since we have email capabilities, can this requirement be modified to electronic submittal in lieu of paper copies?
 - a. **Electronic submittals will be accepted.**
- 3) According to the NAVFAC specifications, the submittal reviewer can be the Government or the QC depending of what it has been listed in the specifications and the submittal register.
 - A) Since this project has the requirement of a Construction Administrator, and a QC and also the City of Key West, how will the submittals be reviewed and which party will be responsible for the approvals and disapprovals?
 - a. **The CA will review and make recommendations to the Owner. The City (Owner) will be responsible for approval/disapproval.**
 - B) For this Contract which party is considered to be “G” for the submittal review?
 - a. **The Navy will participate in the review process but the City will be the reviewer/approver of record.**
- 4) The “Key West Contract“ has different requirements and conflicting requirements then the NAVFAC specifications, which will be the Governing criteria for this project? For example spec section 01 20 00.00 25 Invoice requirement and content; the use of WAWF; Insurance requirements and minimums, etc. are different.
 - a. **The City Contract shall govern with respect to insurance requirements. Davis-Bacon does not apply to this contract.**
- 5) Since this Contract is a contract from the City of Key West which is not a Federal branch of Government, how does the FAR Regulation apply to this Contract? Again, many items conflict with the City of Key West Contract and the specifications.
 - a. **FAR does not apply to this City contract.**
- 6) Specification 01 57 19.00 25 paragraph 1.5.4 appears to be for a hazardous type project with hazardous waste. Does this requirement apply to this project?
 - a. **Existing hazardous materials are not anticipated in any of the work areas, but the possibility cannot be ruled out.**

- 7) Specification 01 57 19.01 25 Supplemental Temporary Environmental Controls paragraph 1.3.1.1.a.1.b states “Test soil and groundwater that will be disposed under this contract in accordance with the paragraph entitled “Laboratory Analysis” in Section 01 57 19.00 25.” This can be accomplished; however, if the test results are higher than the permissible threshold, will the Contractor negotiate a Modification to remove the contaminated soil and or ground water with the Government?
- a. If existing hazardous materials are encountered, a modification will be negotiated. If a spill of hazardous material is caused by the contractor, reporting and mitigation will be performed per the specifications.**
- 8) If the answer to questions #7 is “No” then should the Contractor consider all soil and ground water to be contaminated and will need specialty Subcontractor which has the expertise in handling and disposal of hazardous waste material?
- a. Existing hazardous materials are not anticipated in any of the work areas. Refer also to the answers to Questions #6 and #7.**
- 9) It appears that this Specification 01 57 19.01 25 *Supplemental Temporary Environmental Controls* has many items that refer to NAS Jacksonville and that do not pertain to the Key West Base and or area. Does this specification apply to this project?
- a. Coordinate any and all environmental issues with NASKW Environmental Director. Contact information will be provided to the successful bidder. The contractor will not be required to transport materials to Jacksonville or coordinate environmental issues with Jacksonville personnel or departments.**
- 10) The footing details shown on the structural drawings state to match existing footing; however, the existing footing depth/elevation is not shown. Please provide the existing footing depth? This is really important to know because we might have to dewater during the excavation of the footings depending of the depth of the footings.
- a. Bidders are directed to the Geotech report provided in which high and low tide groundwater depths are provided. The new footers will be no greater than 48” deep at the bottom of the footer.**
- 11) If the footings are located below, at or immediately above the water table then the compaction requirements specified will not be achievable. Please provide direction if this condition is encountered on how to proceed.
- a. Refer to 31 23 00.00 20 paragraph 1.5.**
- 12) If dewatering is required, who will be responsible for applying for a dewatering permit?
- a. The Contractor will apply for dewatering permit if needed.**
- 13) The structural drawings do not show any gravel and or sub base to be installed under the footings. Is gravel and or any other type of material required to be install, compacted tested below the footings? If yes, please provide the thickness that will be required to be installed, compacted and tested.
- a. Refer to 31 00 00 1.2.8-1.2.9**

- 14) Drawings S001 under the Foundations note #6 it states: "All excavations within 5 feet of existing structures to remain shall be removed by hand." Is the existing switchgear and slabs to remain considered to be "existing structures"? If they are considered to be "existing structures" all of the excavations for all the footings will be performed by hand since they are all within five feet from the existing switchgear etc.? Please clarify this requirement.
- a. Contractor may use other means of excavation at Contractor's own liability.**
- 15) Is the ceiling mounted crane manual or electric?
- a. Manual.**
- 16) E101 Floating Dock – Are the fiberglass racks in key note 2 existing or to be installed under this contract?
- a. They are to be installed under this contract. This is a corrosion-proof cable management racking system to be installed in the existing manhole.**
- 17) The spec for the Floating dock specifies GE and Sq D gear. Please confirm equal by Eaton Cutler Hammer is acceptable.
- a. Eaton Cutler Hammer is not an acceptable alternate for this project.**
- 18) For the Floating Dock project will the shutdown required to tie in the 15KV cabling be able to be done during normal working hours?
- a. Shut-downs may take place during normal working hours and must be coordinated with Port operations and Public Works Shops. Points of contact will be provided to successful bidder.**
- 19) E602 Floating Dock – The cable schedule for H1 & H2 calls for 3-#350 15KV cable. From previous experience we believe the existing 15KV cable is #2. Can the actual size of the existing 15KV cables be verified?
- a. #350 cable is confirmed.**
- 20) Will the 15KV cable be required to have fire taping?
- a. Yes.**
- 21) Are any other duct banks/underground conduit besides primary 13.8 KV required to be covered in concrete? The details on E602 indicate they do but are not specifically noted as the primary is.
- a. All direct-buried conduit shall be concrete encased as indicated on the drawings.**
- 22) Can the contractor provide electrical commissioning tests in lieu of an independent testing firm?
- a. No. Independent, certified testing and commissioning is a requirement.**
- 23) ES001 Mole Pier Enclosures – The 3/32" = 1' & 1" = 10' scale does not seem correct. Please verify.
- a. The scale on Sheet ES001 is incorrect. Please refer to Sheet C002 for the correct scale.**
- 24) Can as-builts of the existing duct banks and manholes on the Mole Pier be provided?
- a. As-builts are not available at this time.**
- 25) ED101 Mole Pier Enclosures – Demolition Note 1 states remove front enclosure only from SWGR. At the site meeting, it was stated to also remove roof. Please clarify.
- a. The roof must be removed. This is a modular structure and the roof is a separate piece (or pieces) that may be unbolted and removed without modification of any components that will remain in place.**

- 26) ED102 Mole Pier Enclosure - Can a picture or as built drawing be provided of the 10KVA transformer to be removed per Demolition note 3?
- a. **A picture or as-built is not available. The dry-type transformer is similar to the unit pictured below:**



- 27) Will a shutdown be required to remove the 10Kva transformer in previous question?
- a. **Removal of equipment requires that it be deenergized. This can be accomplished by use of existing SF6 switchgear coordinated with Navy Public Works Shops.**
- 28) Will a shut down be required to remove the 10Kva transformer feeder cables?
- a. **Removal of equipment requires that it be deenergized. This can be accomplished by use of existing SF6 switchgear coordinated with Navy Public Works Shops.**
- 29) What size are the cables feeding the 10Kva transformers that are to be removed?
- a. **Unknown. For bidding purposes, bidders should assume cables are nominal size for 15kVA load at 480V.**
- 30) EL101 Mole Pier Enclosures – Note 1 for the Luminaire schedule calls for cord and plug attachment for general purpose industrial fluorescent fixtures. Please confirm if a cord and plug attachment is required for each fixture?
- a. **Luminaires shall be hardwired via conduit. Cord and plug will not be utilized for any permanent lighting.**
- 31) EP101 & EP102 Mole pier Enclosures show the 200 amp disconnects as Nema 4x Stainless Steel. Are the HVAC disconnects shown on the electrical drwgs to be NEMA 4x Stainless Steel also?
- a. **Yes. All exterior electrical enclosures shall be NEMA 4X.**
- 32) The Mechanical split system equipment schedule is calling for variable speed drives and electrical disconnects for the AHU's & two speed compressors with manufacturers starters and disconnect for CU. The electrical drwgs are also showing disconnects. Who will furnish the disconnects?
- a. **This question is for the GC to answer, not for the Owner.**
- 33) Confirm mechanical control conduit is by mechanical contractor.
- a. **This question is for the GC to answer, not for the Owner.**
- 34) EP101 & EP102 Mole Pier Enclosures – Is the #6 ground wire on the Grounding Plan for Enclosures diagram in addition to the #6 ground wires that will be in the feeder conduits?
- a. **Yes.**
- 35) Since the Mole Pier is considered part of a navigable waterway, please confirm that USL&H (Longshoreman, as regulated by the U.S. Department of Labor) is required rather than State Worker's Compensation Act.
- a. **See insurance requirements as stated in Part 1, Section 00 43 18A. USL&H coverage is required.**

- 36) Jones Act: Please confirm that the Jones Act will not apply since this coverage is for a Captain and Crew, whether at sea or in port. We do not plan on have a ship's crew for this project.
- a. Jones Act will not apply to this project.**
- 37) Time: Page 00 41 13-2 states Substantial Completion is 150 days; Page 00 52 13-1 of the contract states Substantial Completion is 180 days; Notice to Proceed, page 00 62 04-1 also states 180 days...which is correct 150 days or 180 days?
- a. Final Completion is 180 days from Notice to Proceed. Please see revised Bid Form included in this Addendum#2.**
- 38) Is wind and flood insurance required? Cost is going to astronomical.
- a. Wind and Flood coverage, as part of Builder's Risk protection, are required.**
- 39) Does the City of Key West have a sealed survey showing the flood elevation? To obtain a flood quote, the flood elevation must be shown on a sealed survey. Can this be provided?
- a. The elevations depicted in the drawings provided have been certified by multiple Architects and Professional Engineers who make up the NAVFAC organization. This should be adequate for obtaining a quote for flood coverage.**
- 40) Since the contractor does not own the existing equipment on the Mole Pier, the contractor does not have an insurable interest and therefore cannot insure this equipment: Who will be providing wind, flood, and other insurance for the existing equipment? Will proof of coverage be provided?
- a. The contractor is to obtain Builder's Risk coverage on behalf of Owner and additional insured US Navy for risk to existing equipment and facilities as a result of Contractor's construction activities.**
- 41) At the pre-bid meeting, it was mentioned by the Government representative that the work on the Navy Mole Fueling Station and Floating Dock Improvement was only the work associated with the 1000 gallon tank. Please delineate and describe exactly what is intended to be part of this Contract.
- a. Please refer to the (19) modified drawings included in this addendum. Put simply: All electrical, concrete, site work, fencing, and fueling storage and delivery components are included in this project. All work associated with Floating Dock, anchoring and mooring, seawall attachments and gangways is excluded from this project.**
- 42) The 04200 does not specify the mortar color. Can you please provide the color?
- a. Mortar color will not be specified as all mortar, both interior and exterior, will be coated with a paint product.**
- 43) 04200 specification calls for Split-Faced Block. It also states "the color shall match existing adjacent dumpster enclosure." Please provide this color since we have not see a dumpster enclosure at the site visit. The color might be a custom color which will affect the price.
- a. Standard CMU will be used on this project. "Split-faced"block will not be used in any portion of this project. Paint coatings will be chosen by Owner from a sample color card submittal and a standard color will be selected.**
- 44) If a split face block is used, the door jambs will have to be modified so the flood panels can be installed according to the manufacturer's specifications. Please clarify this condition.
- a. "Split-faced"block will not be used in any portion of this project.**
- 45) If a split face block is not required, please specify if a "sand finish" type block is required or a "regular finish" block is acceptable.

- a. **“Split-faced”block will not be used in any portion of this project.**
- 46) Specification 03300 call for galvanized rebar, can MMFX rebar be used in lieu of galvanized?
- a. **Bidders are instructed to bid per specification. Contractor may propose an alternate via RFI submittal.**
- 47) At the site visit, the Government mentioned that the materials for this project had to be made in the USA. Our preliminary review of the documents did not see any reference to this requirement. Does this project fall under the “Buy American Act” per the FAR regulations? If yes, is NAFTA and or the European Treaty part of this project as defined by the FAR regulation? If the FAR regulation does not apply to this contract, please define “made in the USA”?
- a. **Bidders are directed to Supplementary Conditions, paragraph 6.03D.**
- 48) Part of the Project Description and the bid checklist under item “e.” it states: “A professional archaeologist will be on-site to monitor all ground-disturbing activities associated with the undertaking as required by the State Historic Preservation Office. The cost associated with this requirement shall be part of this bid.” Is the Government furnishing this individual and the contractor has to pay for his/her services? Or is the responsibility of the contractor to directly hire the services of an archaeologist and pay for his /her services?
- a. **Contractor shall provide a certified archaeologist who will observe and report on any excavation at SW#4 and Fuel Station locations. The report will be confidential, submitted directly to a Navy representative to be named. An archaeologist will not be required for SW#1, SW#2, or SW#3.**
- 49) Is there a letter from the State Historic Preservation Office requesting the archaeological monitoring as noted in bullet E of the notes page in section 00 80 01-2 Plans and Specifications? This letter would contain details concerning the scope of monitoring work and the requirements for the final report as required by the State Historic Preservation Office. Please provide this letter. If no letter is available please provide direction and details of the required report that the archaeologist will have to provide.
- a. **Contractor shall provide a certified archaeologist who will observe and report on any excavation at SW#4 and Fuel Station locations. The report will be confidential, submitted directly to a Navy representative to be named. An archaeologist will not be required for SW#1, SW#2, or SW#3.**
- 50) At the pre-bid meeting, the Government representative mentioned that no permits will be needed for this project. Please confirm this is correct and no permit will be required.
- a. **No building, electrical, mechanical, or right-of-way permits will be required. The Contractor will be required to apply for and obtain an excavation permit, burn permit for any welding and/or torch work, and a dewatering permit should dewatering be required.**
- 51) Bid Option 1 calls for “Stainless Steel Watertight insulated doors. If this option is taken, the hardware specified has not been tested and will not work since they are not watertight. Will the hardware furnished by the Stainless Steel Watertight door manufacturer which has been tested for this specific door be acceptable? If not, please provide hardware requirements that has been tested for watertightness.
- a. **Hardware furnished by specified watertight door manufacturer that meets provided specifications will be accepted.**

- 52) 3- 6" conduits 2 with 3 -350 mcm 15 kva cables to existing FPL manhole (Q,s one line diagram drawing shows feeders to be tied into the same existing feed from SF6 primary switch B, I believe one should tie into SF6 primary switch A feeders first switch, so they get the redundant power feeders like the other 4 existing substations. (Need to confirm both sets of feeders are in same manhole if this is needed)
- a. **Bidders are instructed to bid per the drawings and specifications. If redundant feeder configuration is recommended by contractor, it should be submitted as an RFI for issuance of a negotiated modification.**
- 53) Will FPL be installing the 15 kva 350 mcm cabling and splicing into the manhole feeds? also will FPL the final cutting into the manhole and connection of the conduits.
- a. **Power facilities are US Navy-owned at this site and are fed by commercial power owned by Keys Energy Services. The Contractor will supply all materials and perform the installation of all cabling, conduits, and other equipment depicted on the drawings.**
- 54) Is FPL supplying the substation and 30 kw 15 kva transformer ? also the 15 kva wiring within the 2-4" conduits between the substation and the 30 KW transformer and connection
- a. **The Contractor will be supplying and installing transformer and switchgear and will be supplying and installing the proposed conduits.**
- 55) When will the new addendum be issued ? Is the the bid date going to be extended ?
- a. **This Addendum#2 will be published 8 Mach 2013. The bid date cannot be extended without jeopardizing the award date based on City Commission schedule which could cause a 5-week delay in award of this contract.**
- 56) The specifications do not state whether or not that this project is under the Davis Bacon Act or if it is "Buy American". Please resolve.
- a. **Bidders are directed to Supplementary Conditions, paragraph 6.03D.**
- 57) Please provide NEMA rating of all disconnects, transformers and panels.
- a. **All exterior housings shall be NEMA 4X. All interior housings shall be NEMA 3R unless otherwise specified.**
- 58) Drawing EL101 shows hard piping the light fixtures, but the note #1 on the fixtures schedule shows that they want us to provide a cord and plug connection. Which method of connection do they want?
- a. **Luminaires shall be hardwired via conduit. Cord and plug will not be utilized for any permanent lighting.**