LAKE WORTH DRAINAGE DISTRICT
SOLICITATION ADDENDUM

Request for Proposal (RFP): 16-9381L-02
Project: SCADA Project
Addendum Number: 3
Date: 09-27-2016

<u>Responses to inquiries received prior to 09-22- 2016:</u>

Inquiry: *CH2M drawing E-212 handhole detail 2605-444 says length varies see schedule. Where is the schedule?*

Reply: Detail 2605-444 will be replaced. "Length Varies, See Schedule" will be replaced with "Length as required per NEC, minimum". "Width as Required, 48" Min" will be replaced with "Length as required per NEC, minimum."

Inquiry: *Specs call for conduit system to be schedule 40 PVC underground and rigid galvanize steel exposed while SEC drawing SE-1 general note 17 calls for schedule 40 PVC. Which one do we go with?*

Reply: PVC for underground and RGS for above ground.

Inquiry: *Are precast buildings to be purchased with lighting panel, lights and receptacles.*

Reply: As noted in specification section 13 34 23 paragraph 1.02D, the building design shall be coordinated with the electrical equipment to be enclosed. As noted in 13 34 23 paragraph 1.03, submittals for the electrical equipment specified in section 13 34 23 shall be included in the submittal for section 13 34 23. Purchasing method is not dictated in the construction contract documents.

Inquiry: *I have a clarification question of the FCC license, do we have to procure a new license or do we use the existing license? In section 40 90 00-1, part 1 paragraph 1.01(B)(3)(a), It's says Owner has obtained the required FCC license.*
The current frequency from the bid document is 219.976 MH TX and RX 25kHz channel.

Reply: The District has the required license. The frequency is 219.975 MH TX and RX, 25 kHz channel. (See radio configuration 40_90_00_1)

Inquiry: *What is the panel manufacturer and breaker model series that will be installed in the CS-03 MDP Panel, and CS-04 MDP?"*
The Smith Engineering drawing information provided is generic in this regard. The information could be found on the nameplates of the panels. I appreciate any help.
Please see drawing SE-7 and SE-9.

Reply: Control Station #3
Square D Cat NO 12331373900010001 400A 3P 4 Wire
Square D 400A Breaker LAP36400MB LA 400A
Square D 60A Breaker FH36060 FH 60A
Square D 20A Breaker FH36020 FH 20A
Square D 200A Breaker Power Pack JG 250 200A

Control Station #4
Siemens Panel Type P3 480Y/277V 3P 4W Cat No. P3E68JX400FTS
Siemens 20A Breaker NGB3B020
Siemens 60A Breaker NGB3B060

(See attached photos)

Inquiry: *Specifications 40 90 00 1.01 B 6 application software provided by engineer" and 2.11 A 2 "Engineer will provide the following during application software development" and list a thru g (hardware, software, and license)*

Then the conflict of 3.02 I 4 all software licenses and warranties are to be purchased by the contractor and all the licenses and warranties transferred to the owner at a suitable point in the project" and 3.07 Owner License A and B "Purchased by contractor transferred to owner"

Reply: The engineer will be developing application software in their offices prior to the factory demonstration testing. 40 90 00 2.11 A lists equipment to be provided by the contractor. 40 90 00 2.11 A2 clarifies that items that do NOT have to be provided to the engineer's office for development of application software (e.g. engineer has their own license software copies). However, the engineer is not giving their copies of licenses to the owner for use in the operating system. The contractor is responsible for these items as documented in the contract documents. Please note the definition of Application software in 40 90 00 1.03E.

NOTE: **40 91 00 2.04O. 1b. Replace the word "iFIX" with "Factory Talk View".**

Inquiry: *Please clarify*

Section 3.02J 1 G-3-1 and G-3-2 A "Existing actuators were manufactured by Rotork" 2 for all other Gates A "Each gate actuator has an analog card that is not currently installed"

Who will provide the analog card to the non Rotork actuators? What is the make and model of the non Rotork actuators? Who will supply the analog cards for the two Rotork actuators?

Reply: All the gates will be EIM actuators except for the 2 two gates at CS#3, which will remain Rotork. These gates have the 4-20 ma card installed.
CS#6 now have Rotork actuators but will be changed to EIM when the 3 phase power becomes available. All the 4-20 ma cards for the EIM actuators are located at Head Quarters. (See attached EIM spec sheet)

Inquiry: *Drawing N 202 Communications Building. Please clarify required PLC-MS-1 data concentrator hardware.*

Reply: Please refer to 40 90 00 3.02H, 40 90 00 Supplement 5, and 40 91 00 .04H for details.

Inquiry: *Plan sheet S-502 calls for all the platform's posts and rails to be constructed with 3" diameter galvanized pipe , with the exception of the hand rail at stairs which are 1 ½", the pipes are to connected using galvanized slip-on connectors with ss set screws. No one makes 3" slip connector. Please advise FYI - SFWMD utilizes 2" sch 80 and sch 40 piping for their platforms*

Reply: Alternative to slip-on connectors, use threaded galvanized elbows, tees and cross connectors; 3" pipe size, FNPT connection type.

Inquiry: *Plan sheet S-503 detail #3 Bracing Connection Detail: top view shows connection pipes to be 4.5" diameter, while the side view shows the connection pipes to be 3 ½" pipe. Please clarify.*

Reply: Replace 3.5 in pipe with 4.5 in pipe. Pipe to be 4.5" diameter to allow clearance for the 3" diameter brace members.

Inquiry: *The spec calls for two types of light poles for the control structure, but it does not specify which one to use. It does call for concrete or aluminum. Will it be up to the contractor to decide whether they use concrete or aluminum, as long as adhere to the appropriate height?*

Reply: The drawing, SE-1, shows the light fixture schedule. Fixture types 3, 4 & 5 call for a pole mounted light fixture. Drawing SE-20 shows the pole types to be used. The only pole mounted detail using an aluminum pole is the detail for mounting the pole on a finger pier (can't mount a concrete pole to the concrete finger pier). The specs cover concrete poles for all locations except CS-12 finger pier, using the finger pier mounting detail and an aluminum pole. The only difference is the detail calls for a 4 foot aluminum pole and the fixture schedule calls for a 10 foot pole (used everywhere else). Since there is a minor conflict in the two drawings, the District will leave it to the contractor discretion to install either of these two choices for CS-12 finger pier only.

Inquiry: *Temporary Generator – What size will we need? How long will we need this on site? What are we planning use the generator for? Pumps? Plant Lighting Controls? Everything? My understanding is the pumps have no temporary power now or nor will it have back power when the job is done. Just trying to get a grip on when we will need the generator, for what and for how long thanks.*

Reply: The control station gates must be operational at all times. If power is not available the contractor will need to supply auxiliary power for gate operation.
(See Volume 2, Division 1, Article 01_31_13B, Paragraph 1.06)

The gates are 3 phase, 480 volt and they pull 12 amps. Also contractor will need power for power tools while on site. The pumps will not require temporary power.

Inquiry: *Stop logs, not sure about the crane requirements and how far we need to reach from the banks. Do you have an average distance that can be used? When will the stop logs be used in the construction sequence? What is the work that needs to be completed while the stop logs are installed?*

Reply: The longest from the bank to the center of the furthest gate in a straight line is approximately sixty feet. The crane reach will vary from site to site.

The stop logs will have to be in place during the testing only.

Inquiry: *As per Addendum No 02 Contractors and Sub-Contractors are required to obtain and maintain the same insurance has per Article 7.06 O. Article 7.06 O states that the limits that must be maintained are in this article and "Supplementary Conditions". Neither Article 7.06 O nor Article 6.03 "Contractor's Insurance" contain the required limits and we are unable to locate "Supplementary Conditions".*

Reply: See Insurance Sheet Attachment.

Inquiry: *The Bid Form has 14 items in items CS-1 thru CS-17W the items are site specific" with the exception of items covered under the system wide control item". Which line item is the designated "system wide control item"? Should an additional line be added?*

Reply: As Stated in Basis for Payment:

The Contractor shall receive a Certificate of Substantial Completion and a final check list for the remaining Contract items upon successful completion of the Functional Test Part 2 as defined in specification 40 90 00 has been completed and the system, including the Headquarters and ALL remote sites, are fully operable from the Centralized Control Point (HMI) at Headquarters. Concurrent with the Certificate of Substantial Completion, the retainage shall be reduced from 10% to 2%.

Inquiry: *Please review CH2M drawings E-207 for the missing information. An example is from CP-1-1 to Motor Starter P-1-1 we're supposed to run (C10). There's usually a chart giving the conduit, number of conductors and size of conductors.*

Reply: Using CS-1 as the example, the contractor can see, on SE-2 & 3, the control wiring going to the CP-1-1 and the notes calling for the contractor to connect the control wiring for a complete working system and drawing G-142 showing a conduit and conductor schedule and E-207 showing a control diagram. Refer to the drawing for further detail.

LAKE WORTH DRAINAGE DISTRICT
ACKNOWLEDGEMENT OF SOLICITATION ADDENDUM

Request for Proposal (RFP): 16-9381L-02
Project: SCADA Project
Addendum Number: 3
Dated: 09-27-2016

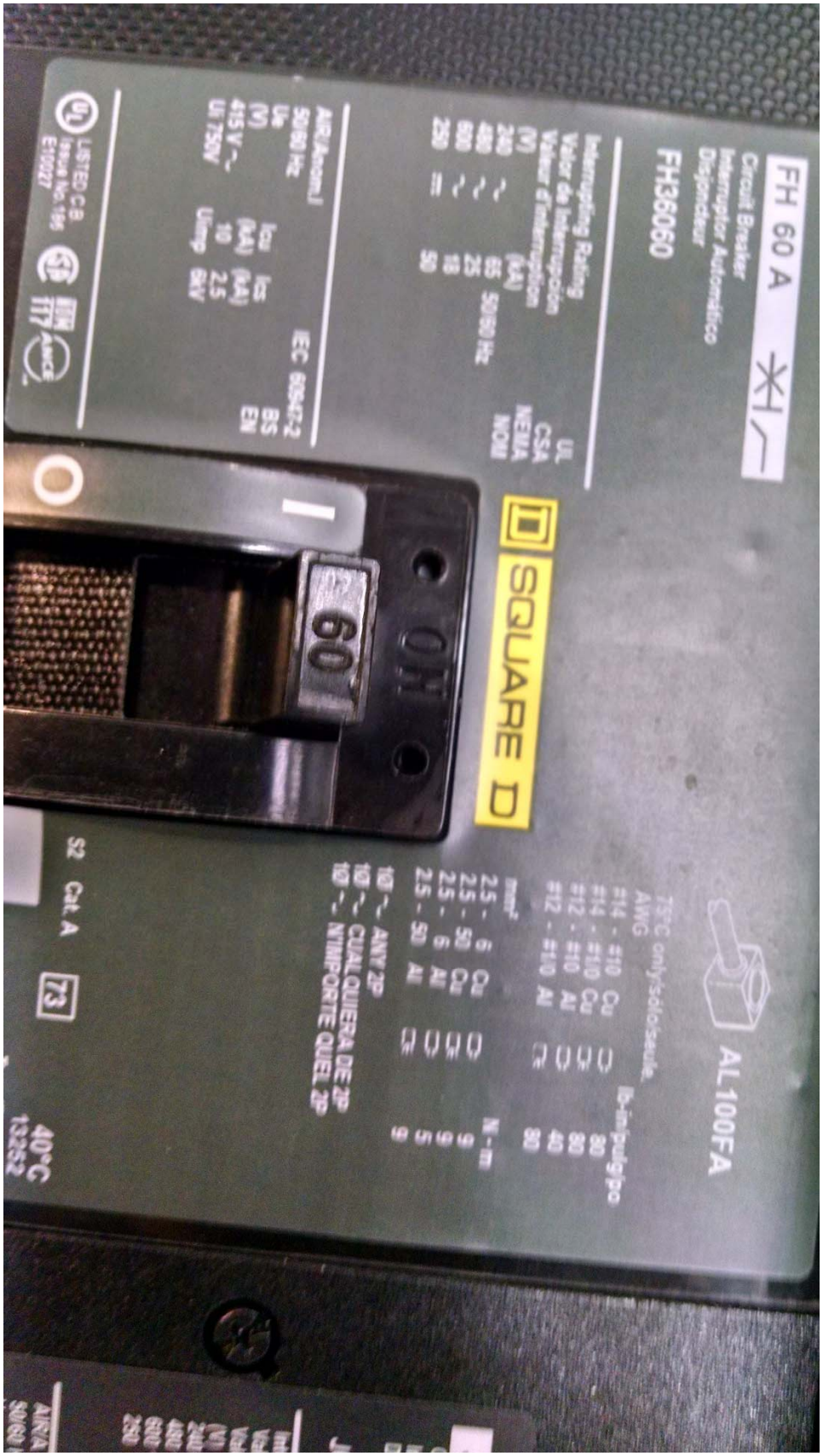
Receipt of Response is hereby acknowledged and included in the submittal due OCT 05, 2016.

_____
Respondent (Engineering Firm)

_____
Printed Name & Title of Authorized Representative

_____ _____
Signature of Authorized Representative Date

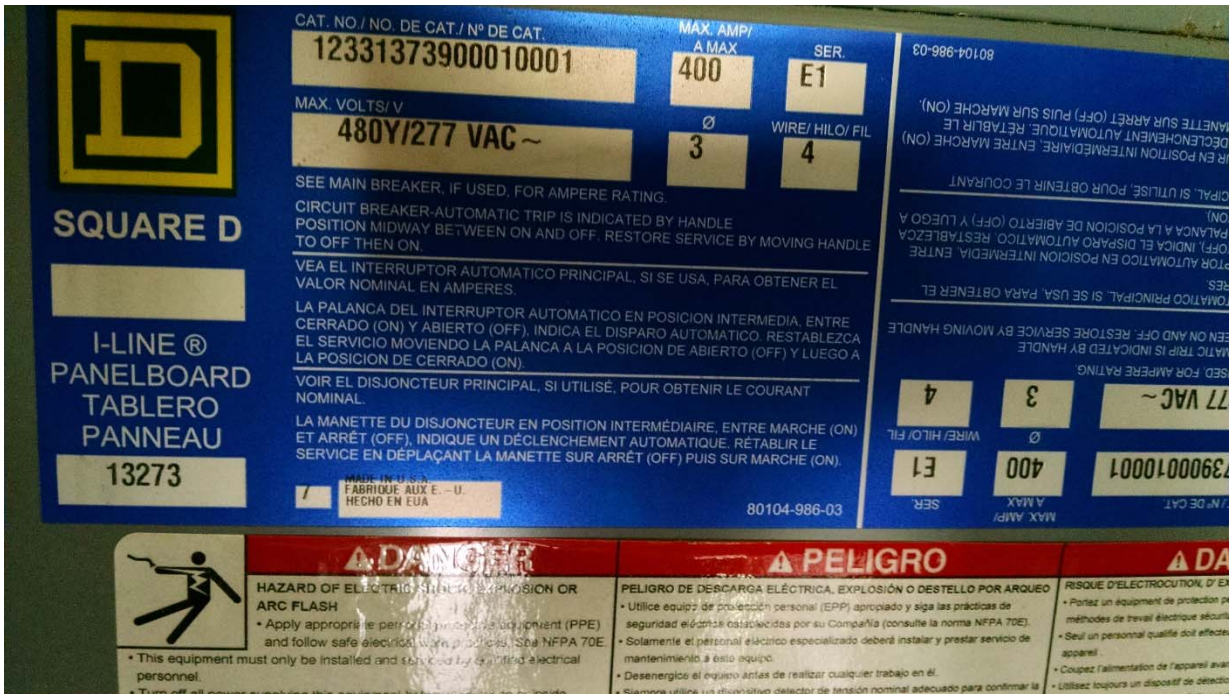
CS#3


FH 60 A
Circuit Breaker
Interruptor Automático
Disjoncteur
FH36060
Interrupting Rating
Valor de Interrupción
Valeur d'interruption
UL
CSA
NEMA
NOM
SQUARE D
ON
60
AL100FA
75°C only/solo/seule.
AWG
lb-in/pulg/po
mm²
Ni - m
ANY 2P
CUAL QUIERA DE 2P
N'IMPORTE QUEL 2P
S2 Cat. A
73
40°C
13252

CS#3

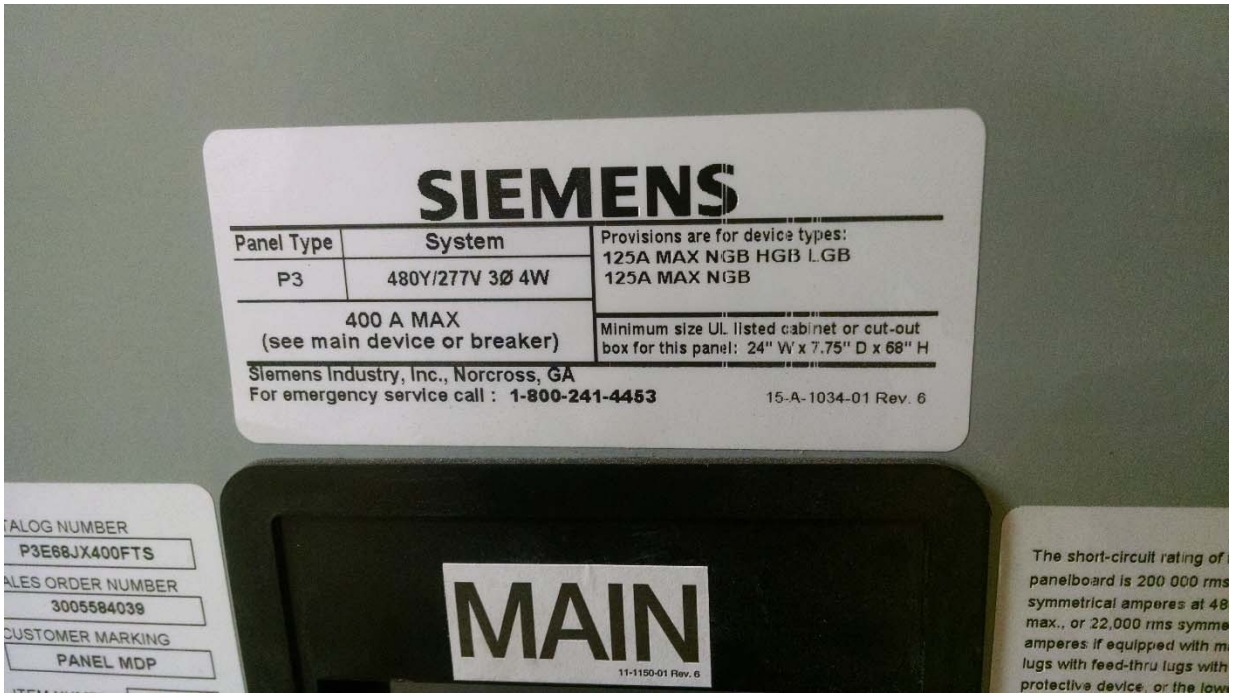
80030-270-04
LA 400 A
Circuit Breaker
Interruptor Automático
Disjoncteur
LAP36400MB
Interrupting Rating
Valor de Interrupción
Valeur d'interruption
UL
CSA
NEMA
(V) (kA)
240 ~ 42 50/60 Hz
480 ~ 30
600 ~ 22
250 ⎓ 10
AIR/A nom.
50/60 Hz
IEC 60947-2
BS
EN
Ue Icn Icu
(V) (kA) (kA)
415 ~ 5 20
Ui 750 V ~ Uimp 6 kV
LISTED C.B.
Issue No. 186
E10027
SQUARE D
ON
400 A
OFF

CS#3


CAT. NO./ NO. DE CAT./ Nº DE CAT.
12331373900010001
MAX. AMP/ A MAX
400
SER.
E1
MAX. VOLTS/ V
480Y/277 VAC ~
Ø
3
WIRE/ HILO/ FIL
4
SQUARE D
SEE MAIN BREAKER, IF USED, FOR AMPERE RATING.
CIRCUIT BREAKER-AUTOMATIC TRIP IS INDICATED BY HANDLE POSITION MIDWAY BETWEEN ON AND OFF. RESTORE SERVICE BY MOVING HANDLE TO OFF THEN ON.
VEA EL INTERRUPTOR AUTOMATICO PRINCIPAL, SI SE USA, PARA OBTENER EL VALOR NOMINAL EN AMPERES.
LA PALANCA DEL INTERRUPTOR AUTOMATICO EN POSICION INTERMEDIA, ENTRE CERRADO (ON) Y ABIERTO (OFF), INDICA EL DISPARO AUTOMATICO. RESTABLEZCA EL SERVICIO MOVIENDO LA PALANCA A LA POSICION DE ABIERTO (OFF) Y LUEGO A LA POSICION DE CERRADO (ON).
VOIR EL DISJONCTEUR PRINCIPAL, SI UTILISÉ, POUR OBTENIR LE COURANT NOMINAL.
LA MANETTE DU DISJONCTEUR EN POSITION INTERMÉDIAIRE, ENTRE MARCHE (ON) ET ARRÊT (OFF), INDIQUE UN DÉCLENCHEMENT AUTOMATIQUE. RÉTABLIR LE SERVICE EN DÉPLAÇANT LA MANETTE SUR ARRÊT (OFF) PUIS SUR MARCHE (ON).
I-LINE ®
PANELBOARD
TABLERO
PANNEAU
13273
MADE IN U.S.A.
FABRIQUÉ AUX É. - U.
HECHO EN EUA
80104-986-03
DANGER
HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH
• This equipment must only be installed and
personnel.
PELIGRO
PELIGRO DE DESCARGA ELÉCTRICA, EXPLOSIÓN O DESTELLO POR ARQUEO
• Utilice equipo de protección personal (EPP) apropiado y siga las prácticas de seguridad eléctrica establecidas por su Compañía (consulte la norma NFPA 70E).
• Solamente el personal eléctrico especializado deberá instalar y prestar servicio de mantenimiento a este equipo.
• Desenergice el equipo antes de realizar cualquier trabajo en él.

200 A

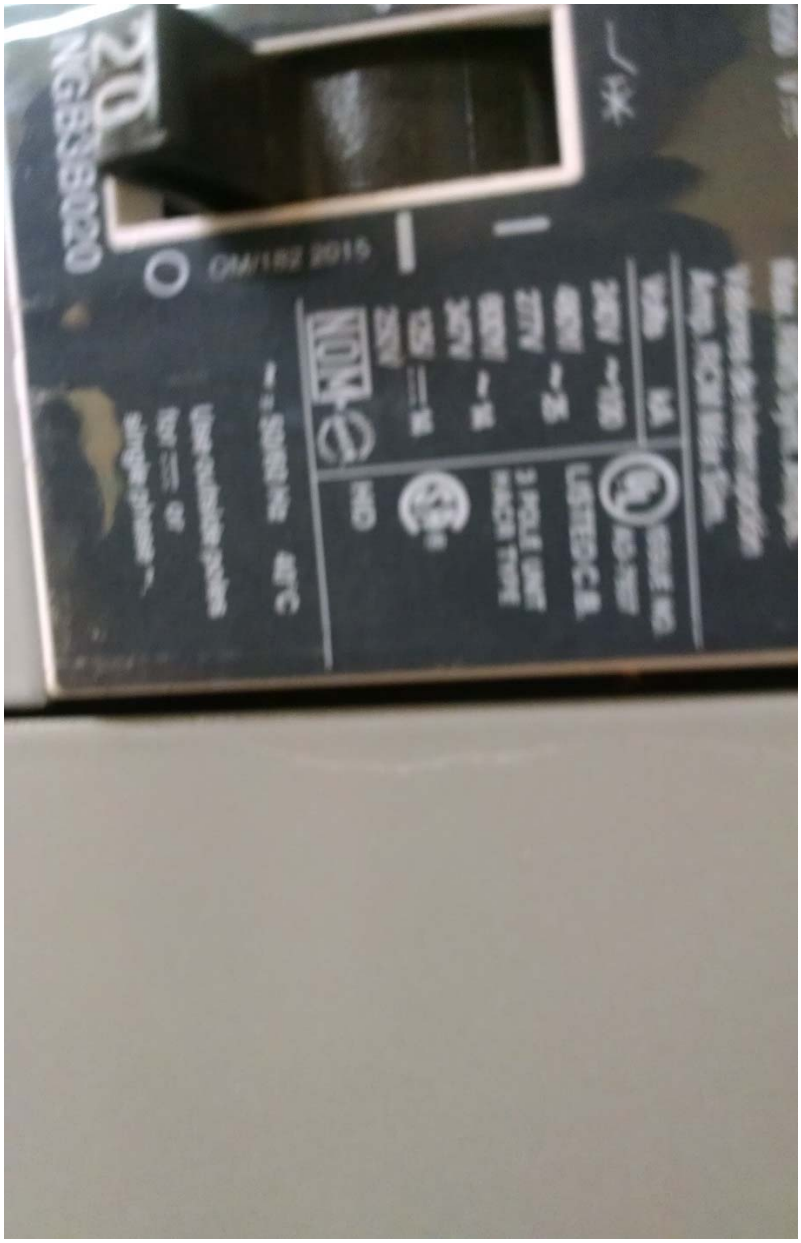
CS#4


SIEMENS
Panel Type
System
P3
480Y/277V 3Ø 4W
Provisions are for device types:
125A MAX NGB HGB LGB
125A MAX NGB
400 A MAX
(see main device or breaker)
Minimum size UL listed cabinet or cut-out box for this panel: 24" W x 7.75" D x 68" H
Siemens Industry, Inc., Norcross, GA
For emergency service call : 1-800-241-4453
15-A-1034-01 Rev. 6
ALOG NUMBER
P3E68JX400FTS
ALES ORDER NUMBER
3005584039
CUSTOMER MARKING
PANEL MDP
MAIN
11-1150-01 Rev. 6
The short-circuit rating of
panelboard is 200 000 rms
symmetrical amperes at 48
max., or 22,000 rms symme
amperes if equipped with m
lugs with feed-thru lugs with
protective device, or the low

CS#4

SIEMENS
Panel Type
System
P3
480Y/277V 3Ø 4W
400 A MAX
(see main device or breaker)
Siemens Industry, Inc., Norcross, GA
For emergency service call : 1-800-241-4453
CATALOG NUMBER
P3E68JX400FTS
SALES ORDER NUMBER
3005584039
CUSTOMER MARKING
PANEL MDP
ITEM NUMBER
020020
LOCATION
D
DATE
09/14/2015
MAIN
400

CS#4



CS#4

CATALOG NUMBER
P3E68JX400FTS
SALES ORDER NUMBER
3005584039
CUSTOMER MARKING
PANEL MDP
ITEM NUMBER
020020
LOCATION
D
DATE
09/14/2015
Field conductors may be sized for 60° or 75° CU or AL unless noted otherwise on the device.
Field installable kits to add mains and to customize the panel are listed on the rear of the deadfront.

CS#4

EIM JOB SPEC SHEET Job No: 144963A1 Entry Form: EN Entered: EN 04/23/15

Customer: SOUTHEAST INDUSTRIAL SALES CO. Rev: 001 Date: 05/11/15
P. O. No: PO-121178

P.O. Item No: 1 Project: LWDD MECHANICAL ACTUATORS

Valve Data

Manufacturer: WATERMAN
Type: ROLLER GATE
Torque(ft-lb): 3004

Valve Stem Data

Dimensions - Inches

Diameter (inches): Unknown
Key: (1) 0.001 X 0.001
Turns-Full Stroke: 3.000
Stroke Time (Sec): 690
Output Rotation: CW To Close

Actuator Data

Quantity: 23
EIM Model No: FFLE-3
Outline Dwg: F-3001/30G
Assembly Dwg: 83775D-1
83775D-2
84188
Instruction: Tech Manual
Enclosure: Watertight NEMA 4/IP66
RPM Out: 0.28
Torque Spring: 83464-5 White
Motor Gears: 34082/34933
Auxiliary Gear: MG03-85:1
Handwheel Gears: 33937/34544
Drive Sleeve/Worm: 35820-2L 48:2L
Lubrication: #229 Moly Ultra
Nameplate: 36685 Watertight 4X, IP66
Handwheel: 8"w/2" AWWA Nut

Motor Data

Horsepower: 1.0
RPM: 1725
Volts: 460/480 Vac
Hertz: 60
Phase: Three
Run Amps (15 min): 3.1
Stall Amps: 12.1
Motor Part No.: 9C4603FC-F

Electrical Data

Wiring Diagram: 144963
Power Voltage: 460/480 Vac, 3 phase, 60
M2CP Frame: 84108-4A 4T-4G (10T)
N Number: 0339
Transformer: 84378-3 (460/115,12&18V)
Contactor: 84045 Assy
Motor Protection: OL RLY 84138-B30(2.5-5.4)
LSM: 84112-08B
Position Switches: LSC,LSO,LSA,LSB(16Contact
Torque Switches: TSC & TSO
Space Heater: 1500 Ohm, 25W (115V)
Pushbuttons: Open-Stop-Close
Selector Switch: Local(hand)-Off-Rem(auto)
Position Lights: Close(green), Open(red)
Lamp No. 3: Power On (include lens)
TBM: 83943-02
Relay: Monitor
Lamp No. 4: Over Torque (include lens
FMC Futronic: II 84829-1, 3ph (600)
Potentiometer: 1000 Ohm, 84766
MDPI gear assy: 84055-0339
Pot input gear: 36462-24
Pot. Input Shaft: P4042-90
Cover Assembly: 84350-08AS
Control Functions: Position Seat (no G to H jumper on LSM), Momentary P.B. (jumper 5 to 6 on TB 36539 Thermostat
Thermostat: Space Heater
T/S Shaft Rotates: CW To Close
Loss Of Signal: Valve Does Not Move

Additional Accessories, Services & Notes:

Torque Switches:

Dial Setting	2	3	4	5	6	7	8	9
Ft-lb Output:	3127	4070	4691	5287	5882	6478	7099	7694

Approximate only. Actual torque requires test by dynamometer.

Max H/W Input TQ: 80 ft-lb Max
Notes: Futronic II card is installed but not powered
Customer Tag No(s)
Valve Adaption: Not Ordered From Factory
Bore & Key Bushing: By Others (Ship 35804 Blank - Not Returned)

Certificate of Insurance

PROVIDED TO: LAKE WORTH DRAINAGE DISTRICT

AGENT BROKER Name/Address/Telephone Number		
	COMPANIES AFFORDING COVERAGE & BEST RATING	
	COMPANY LETTER **A**	COMPANY LETTER **D**
INSUREDS Name/Address/Telephone Number	COMPANY LETTER **B**	COMPANY LETTER **E**
	COMPANY LETTER **C**	COMPANY LETTER **F**

CO LTR	TYPE OF COVERAGE	POLICY NUMBER	EFFECTIVE DATE (MM/DD/YY)	EXPIRATIONDATE (MM/DD/YY)	LIABILITY LIMITS IN THOUSANDS	
						PER OCCURRENCE
	GENERAL LIABILITY CONTRACTUAL LIABILITY				BI & PD Combined	$2,000,000.00 $2,000,000.00
	AUTOMOBILE LIABILITY _X_Any Auto _X_ Hired Autos _X_ Non-Owned Autos				BI & PD Combined	$1,000,000.00
	EXCESS LIABILITY ___UMBRELLA FORM				PER OCCURRENCE	$2,000,000.00
	WORKERS' COMPENSATION & EMPLOYERS LIABILITY				EACH ACCIDENT DISEASE-POL LIMIT DISEASE EACH EMPLOYEE	$500,000 $500,000 $500,000

NOTES: Project No._____ - LAKE WORTH DRAINAGE DISTRICT IS ADDITIONAL NAMED INSURED.

Named as Additional Insurer	***CANCELLATION***
LAKE WORTH DRAINAGE DISTRICT 13081 Military Trail Delray Beach, Florida 33484	Should any of the above coverages be cancelled or modified, the Agent/Broker shall notify the Certificate Holder named to the left prior to the effective date.

_____

Signature of Agent

Date:_____