



CITY OF TAMPA

Bob Buckhorn, Mayor

CONTRACT ADMINISTRATION DEPARTMENT

Michael W. Chucran, Director

ADDENDUM NO. 6

DATE: January 25, 2016

Contract 15-C-00022; Hanna Pumping Station Replacement

Bidders on the above referenced project are hereby notified that the following addendum is made to the Contract Documents. BIDS TO BE SUBMITTED SHALL CONFORM TO THIS NOTICE.

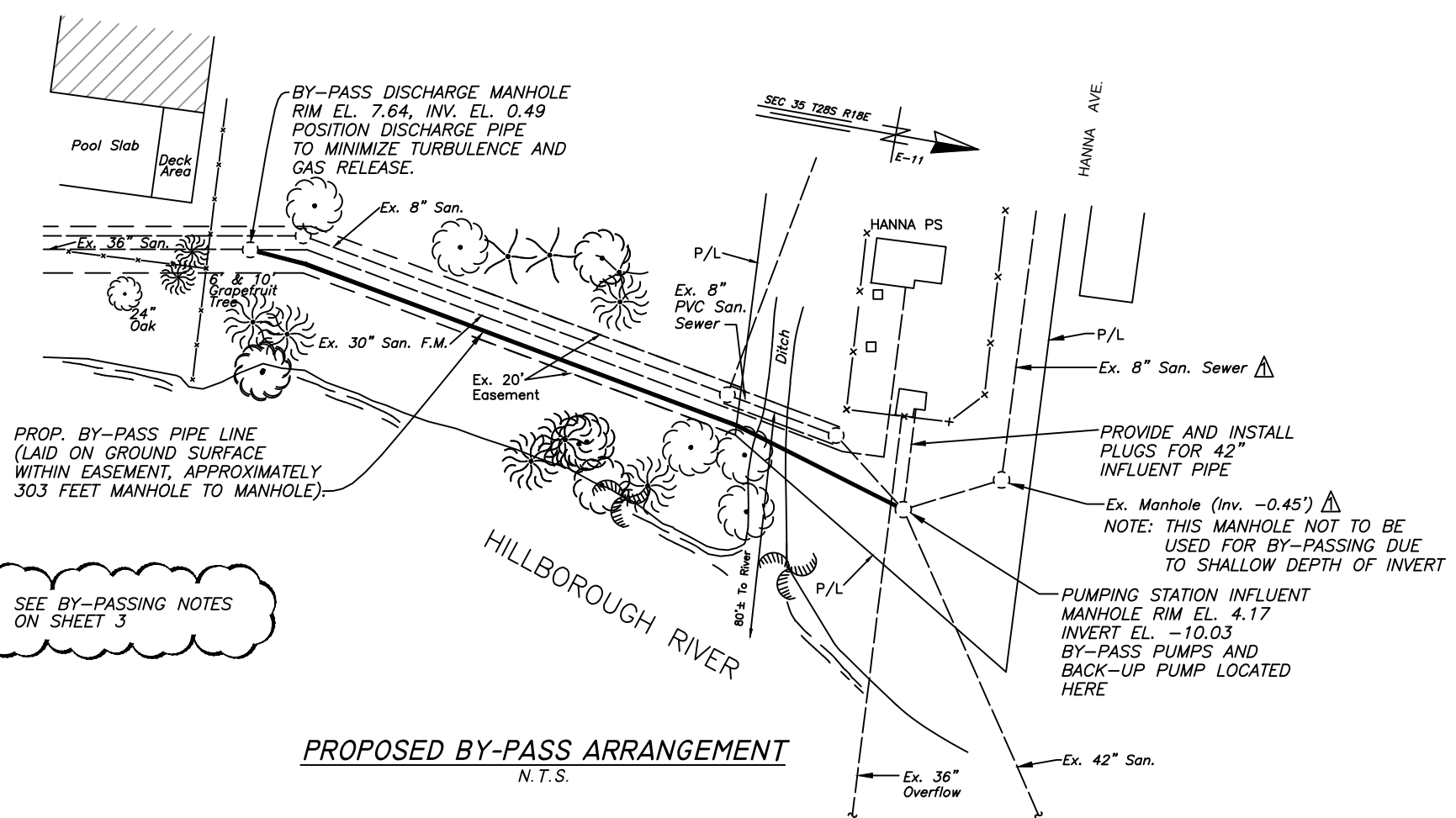
Item 1: Replace plan sheet nos. 2, 3, E3, E4, E5, E7, E8 and E9 with the attached plan sheet nos. 2, 3, E3, E4, E5, E7, E8 and E9.

Item 2: Insert the attached plan sheet no. E5A

All other provisions of the Contract Documents and Specifications not in conflict with this Addendum shall remain in full force and effect. Questions are to be e-mailed to ContractAdministration@tampagov.net.

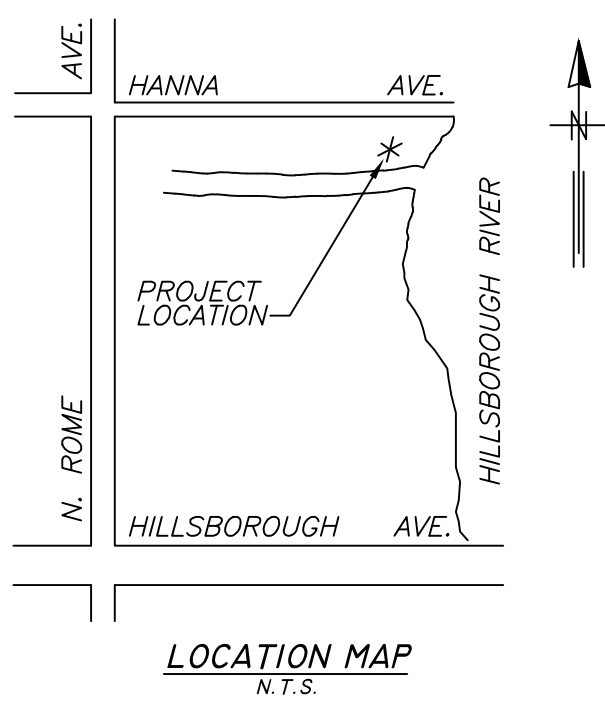
Jim Greiner

Jim Greiner, P.E., Contract Management Supervisor



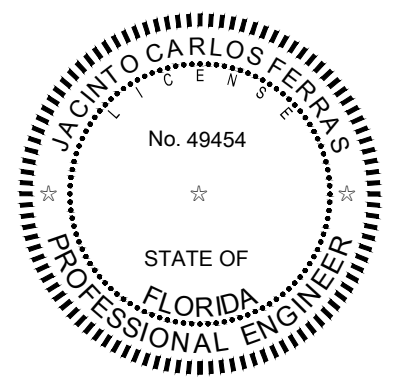
SEE BY-PASSING NOTES
ON SHEET 3

PROPOSED BY-PASS ARRANGEMENT
N.T.S.



LOCATION MAP
N.T.S.

INDEX	
SHT NO.	DESCRIPTION
1	COVER SHEET
2	INDEX, LOCATION MAP AND BY-PASSING DETAIL
3	GENERAL NOTES & BY-PASSING NOTES
4	PUMP ROOM DEMOLITION PLAN (EL. -8.00')
5	DEMOLITION SECTION (COMBINED SECTIONS A-A, B-B)
6	PROPOSED PUMP ROOM PLAN (EL.-8.00')
7	PROPOSED SECTION A-A
8	PROPOSED SECTION B-B
E-1	SYMBOL LEGEND (1 OF 2)
E-2	SYMBOL LEGEND 2 OF 2)
E-3	ELECTRICAL NOTES & SCOPE OF WORK
E-4	ONE LINE DIAGRAM (SHT. 1 OF 2)
E-5	ONE LINE DIAGRAM (SHT. 2 OF 2)
E-5A	EXISTING KEYED NOTES AND LOAD SUMMARY
E-6	MOTOR ROOM FLOOR PLAN
E-7	PUMP ROOM FLOOR PLAN
E-8	SECTIONS A-A AND B-B
E-9	ELECTRICAL DETAILS
E-10	ACTUATOR CONTROLS



No.	DATE	REVISIONS
3		
2		
1	10/30/15	8" SEWER IN HANNA AVE.

DES: J.H.
DRN: W.A.
CKD:
DATE:

CITY of TAMPA
WASTEWATER DEPARTMENT

**HANNA P.S. VALVE REPLACEMENT
BY-PASS, LOCATION MAP AND INDEX**

W.O. 1000426
SHEET
2
OF 18

User: sse8 Drawing Name: K:\WW_Projects\2014\2014-WO-HANNA AVE. PS\DWG\4677-2.dwg
Layout - LOCATION-INDEX, Jan 21, 2016 - 9:50am

GENERAL NOTES

- 1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO PURCHASING EQUIPMENT OR COMMENCING IN CONSTRUCTION.
- 2. ALL CONDUCTORS SHALL BE STRANDED COPPER, #12 AWG MIN. W/THWN INSULATION, UNLESS OTHERWISE NOTED.
- 3. ALL WIRING SHALL BE IDENTIFIED W/NUMBERS AT ALL TERMINALS AND ON WIRING DIAGRAMS.
- 4. VERIFY ALL MECHANICAL EQUIPMENT SIZES AND RATING PRIOR TO CONNECTING.
- 5. FIELD VERIFY ALL EQUIPMENT LOCATIONS AND CONNECTIONS PRIOR TO COMMENCING CONSTRUCTION.
- 6. PLANS ARE DESIGNED IN ACCORDANCE WITH THE 5TH EDITION OF THE FLORIDA BUILDING CODE AND THE 2014 EDITION OF THE NATIONAL ELECTRIC CODE. CONTRACTOR SHALL ENSURE THAT ALL ELECTRICAL WORK PERFORMED SHALL ADHERE TO THE SAME ACCORDANCE AND ALL APPLICABLE LOCAL ORDINANCES.
- 7. ALL THREADED CONNECTIONS SHALL BE COATED W/ COPPER SHIELD ANTI-SEIZE COMPOUND MANUFACTURED BY THOMAS & BETTS (T & B) OR EQUAL.
- 8. ALL PANELS, DISCONNECTS, SWITCHES, AND EQUIPMENT COVERPLATES SHALL BE LABELED W/ NAMEPLATES. NAMEPLATES SHALL BE THREE-PLY PHENOLIC BLACK-WHITE-BLACK ENGRAVED THROUGH THE FIRST BLACK LAYER. LETTERING SHALL BE 0.5 CM (3/16") MIN. EDGE OF NAMEPLATE SHALL BE BEVELED 45 DEG.
- 9. ALL CONDUIT SHALL BE SUPPORTED AT MAXIMUM 5'-0" INTERVALS.
- 10. ALL CIRCUITS SHALL HAVE A PROPERLY SIZED GROUNDING CONDUCTOR ROUTED INSIDE EACH CONDUIT W/ POWER CONDUCTORS.
- 11. ALL CONDUCTOR LENGTHS SHALL BE CONTINUOUS, NO SPLICES OR CONDUCTOR TERMINATIONS SHALL BE PERMITTED UNLESS SPECIFICALLY DESIGNATED IN THE DRAWINGS.
- 12. NEATLY COIL ALL SPARE CONDUCTORS & TAPE W/ VINYL ELECTRICAL TAPE (SCOTCH 33+).
- 13. PROVIDE A MINIMUM OF 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL EQUIPMENT IN ACCORDANCE W/ ARTICLE 110 OF THE NEC.
- 14. ALL FASTENING HARDWARE (SCREW, BOLTS, NUTS, ETC.) SHALL BE 316-STAINLESS STEEL. FASTENING HARDWARE CONSTRUCTED OF FERROUS MATERIAL ARE NOT ACCEPTABLE.

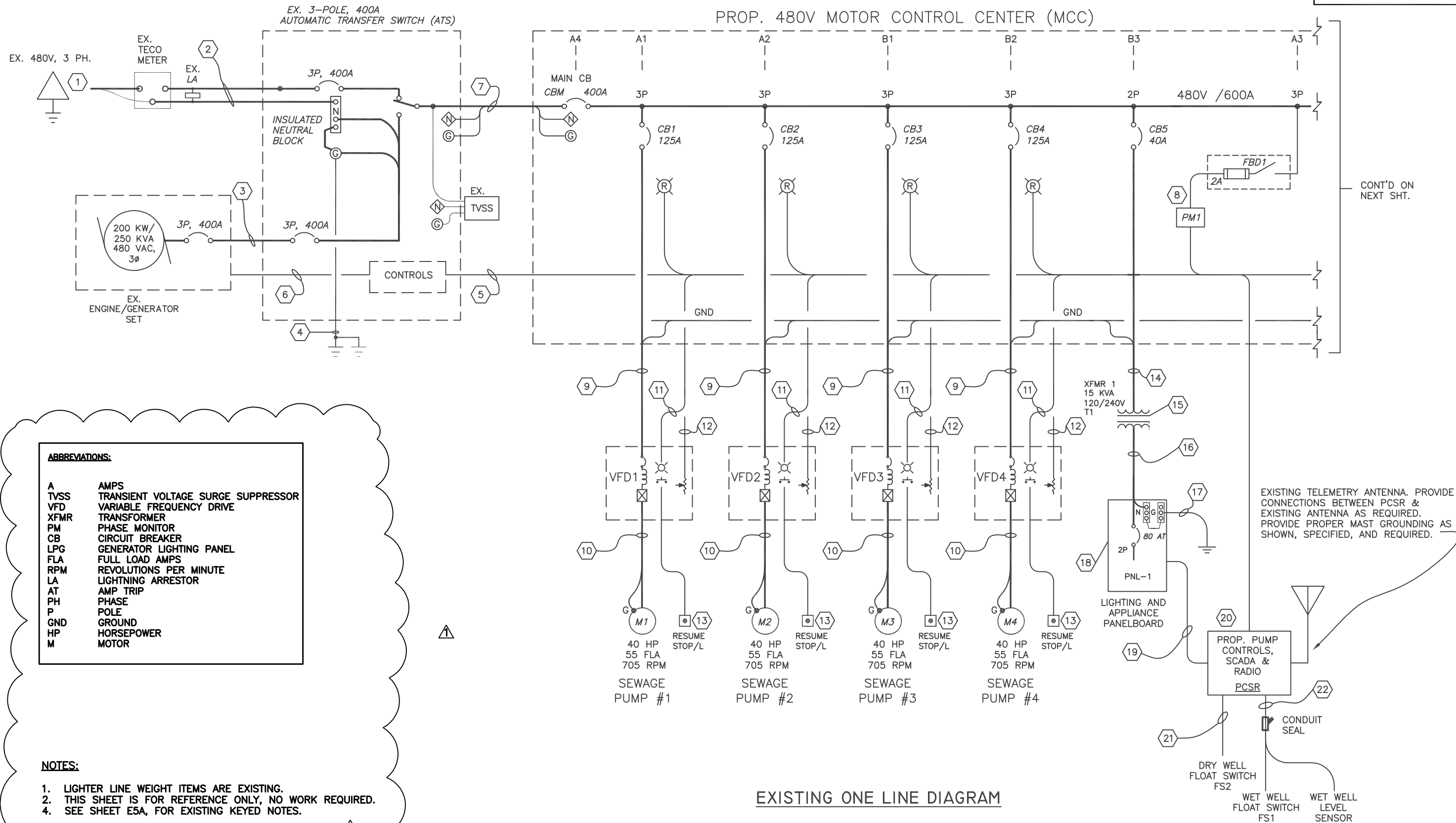
- 15. EXPOSED CONDUITS SHALL BE NON-COATED RIGID ALUMINUM CONDUIT, UNLESS OTHERWISE NOTED (UON). INSTALL PVC COATED RIGID ALUMINUM CONDUIT IN THE WET WELL.
- 14. DIRECT BURIED AND CONCRETE ENCASED CONDUIT SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE NOTED. TRANSITIONS FROM ABOVE-GRADE RIGID ALUMINUM CONDUIT TO NONMETALLIC CONDUIT SHALL BE ACCOMPLISHED WITH A THREADED ADAPTER. RIGID ALUMINUM CONDUIT INSTALLED ABOVE GRADE AND EXTENDING BELOW GRADE SHALL INCLUDE THE FIRST 90 DEGREE ELBOW. ALL RIGID ALUMINUM CONDUITS EXTENDING BELOW GRADE SHALL BE COATED WITH TWO COATS OF AN ASPHALTUM-TYPE PAINT ALONG ITS ENTIRE LENGTH BELOW GRADE AND EXTENDING 6" ABOVE GRADE OR ABOVE THE TOP OF THE FINISHED SLAB.
- 15. CONDUIT CONNECTIONS SHALL BE MADE WITH RIGID CONDUIT IF THE EQUIPMENT IS FIXED AND NOT SUBJECT TO ADJUSTMENT, MECHANICAL MOVEMENT, OR VIBRATION. MYERS WATER-TIGHT /DUST-TIGHT HUBS SHALL BE USED FOR OUTDOOR, BELOW GRADE, OR WASH DOWN AREAS. RIGID CONDUIT CONNECTIONS SHALL HAVE UNION FITTINGS TO PERMIT REMOVAL OF EQUIPMENT WITHOUT CUTTING OR BREAKING THE CONDUIT.
- 16. CONDUIT CONNECTIONS SHALL BE MADE WITH APPROVED FLEXIBLE NONMETALLIC CONDUIT IF EQUIPMENT IS SUBJECT TO ADJUSTMENT, MECHANICAL MOVEMENT, OR VIBRATION. FLEXIBLE CONDUIT CONNECTIONS SHALL BE WATERTIGHT.
- 17. A 316-STAINLESS STEEL CHANNEL ERECTOR SYSTEM SHALL BE USED TO SUPPORT ALL CONDUITS, BOXES, ETC. USE 316-STAINLESS STEEL MOUNTING HARDWARE.
- 18. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND MAKE ADJUSTMENTS AS NECESSARY TO EXECUTE THE PROPOSED INSTALLATIONS.
- 19. ALL EXISTING INSTALLATIONS DENOTED ON THE DRAWINGS ARE FOR THE CONTRACTOR'S REFERENCE ONLY. ALL EXISTING INSTALLATIONS SHALL BE FIELD VERIFIED PRIOR TO SUBMITTING A BID AND PRIOR TO COMMENCING CONSTRUCTION.
- 20. PULL BOXES SHALL BE INSTALLED AS NECESSARY TO FACILITATE WIRE PULLS AND AVOID EXCESSIVE PULLING TENSION ON WIRING. IN NO CASE SHALL CONDUIT LENGTHS EXCEED 150' OR THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) WITHOUT A PULL BOX. PULL BOXES SHALL BE SIZED IN ACCORDANCE WITH ARTICLE 314 OF THE NEC AND BE AS SPECIFIED,

SCOPE OF WORK

- 1. REMOVE THE EXISTING SPARE, SECTION B5 MCC CUBICLE AND INSTALL TWO (2) NEW MCC CUBICLE BUCKETS, AS SHOWN, SPECIFIED AND REQUIRED. PROVIDE PROPER LEGEND PLATES AS SHOWN ON PLANS. PROPOSED LEGEND PLATE ENGRAVING, LETTERING SIZE, AND MATERIAL SHALL MATCH EXISTING LEGEND PLATES.
- 2. THE CONTRACTOR SHALL PROVIDE AND INSTALL PROPOSED ELECTRIC ACTUATORS FOR KNIFE GATE VALVES, KG1, KG2, KG3, AND KG4 AND PLUG VALVES PV1, PV2, PV3, AND PV4 AND ALL ASSOCIATED CONDUITS AND CONDUCTORS, AS SHOWN, SPECIFIED AND REQUIRED.
- 3. PROVIDE AND INSTALL TERMINAL BOXES, DISCONNECTS, AND JUNCTION BOXES AS SHOWN ON PLANS.
- 4. IF POSSIBLE, UTILIZE EXISTING CONCRETE OPENINGS TO INSTALL CONDUIT; OTHERWISE, CORE DRILL CONCRETE AS NEEDED. FILL ANNULAR SPACES USING APPROVED PRODUCTS AND FINISH TO MATCH EXISTING SURFACE.
- 5. ALL ELECTRIC WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 5TH EDITION 2014, THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) SERIES 70/NATIONAL ELECTRICAL CODE (NEC) 2014 EDITION AND CHAPTER 5 OF THE CITY OF TAMPA CODE.



ROMAN D. KORCHAK, P.E. #42626 ELECTRICAL SECTION HEAD WASTEWATER DEPARTMENT	No.	DATE	REVISIONS	DES: LRG	CITY of TAMPA WASTEWATER DEPARTMENT	HANNA PUMPING STATION VALVE REPLACEMENT ELECTRICAL NOTES & SCOPE OF WORK	W.O. 0426
	3			DRN: LRG			SHEET
	2			CKD:			E3
	⚠	1/19/16	REVISION 1	DATE: 11/24/15			



ROMAN D. KORCHAK, P.E. #42626
ELECTRICAL SECTION HEAD
WASTEWATER DEPARTMENT

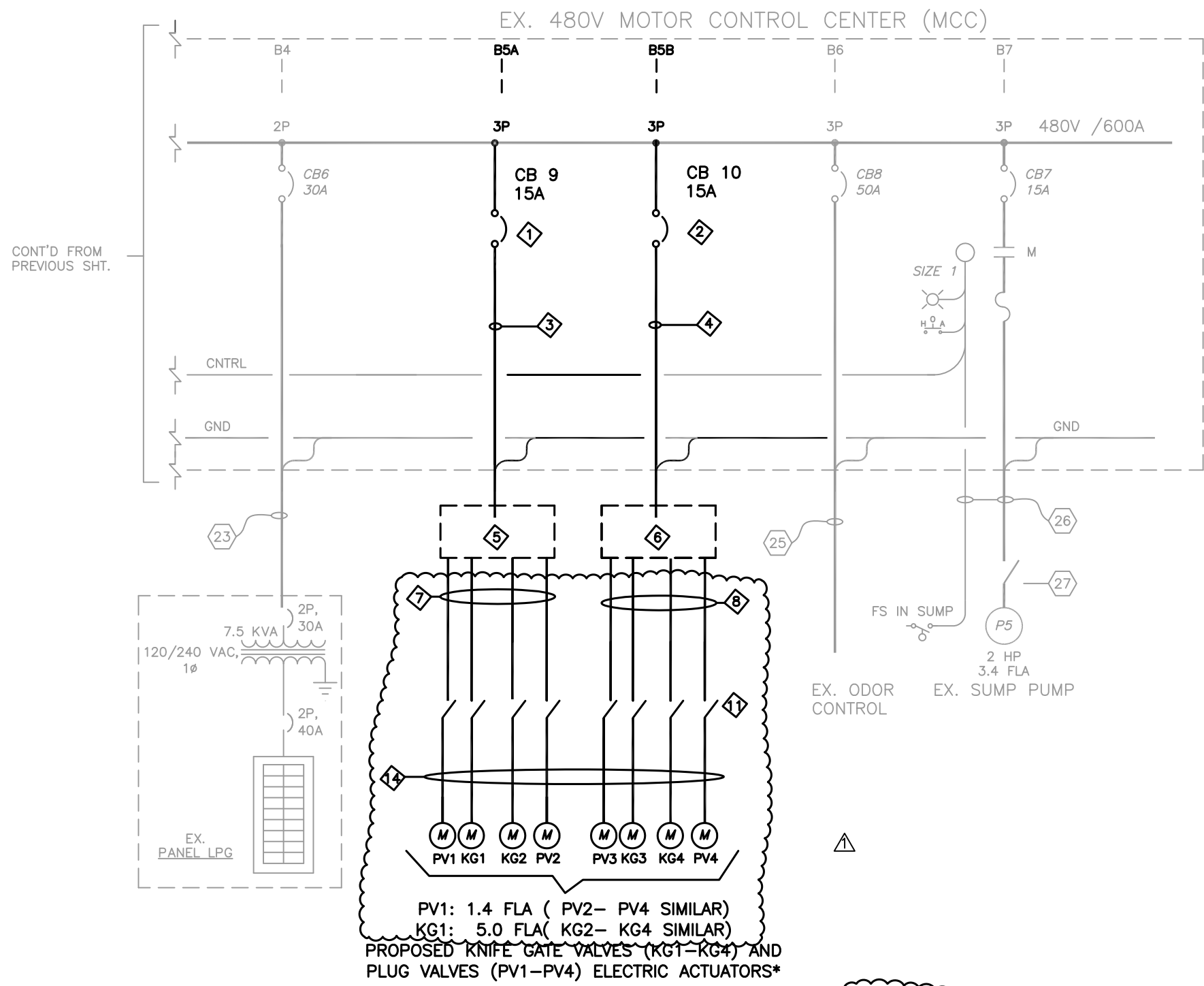
No.	DATE	REVISIONS
3		
2		
1	1/19/16	REVISION 1

DES: LRG
DRN: LRG
CKD:
DATE: 11/23/15

CITY of TAMPA
WASTEWATER DEPARTMENT

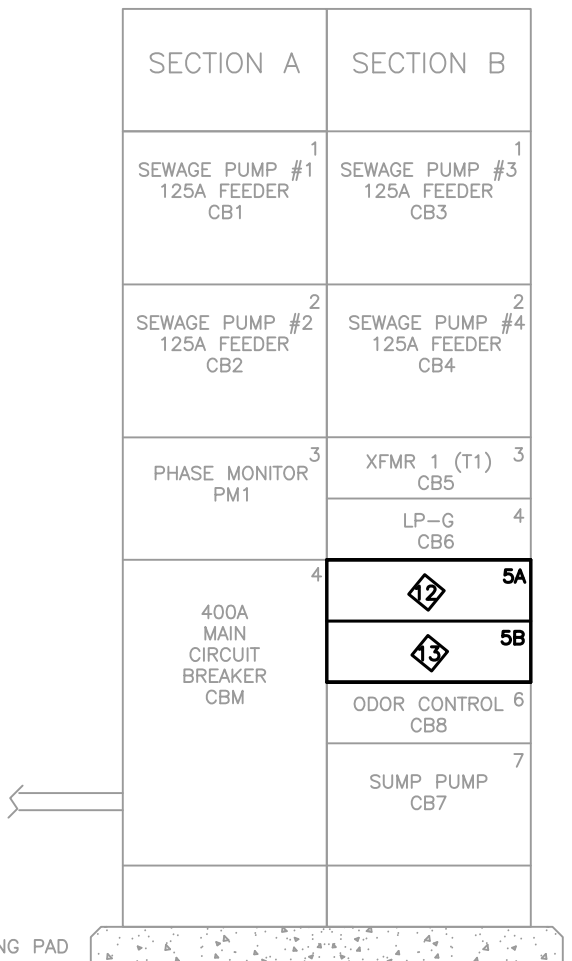
HANNA PUMPING STATION
VALVE REPLACEMENT
ONE LINE DIAGRAM (SHT. 1 OF 2)

W.O. 0426
SHEET
E4



PROP. ONE LINE DIAGRAM

*ALL MOTOR OPERATED VALVE LOADS ARE INTERMITTENT (NON-CONTINUOUS). ONLY ONE MOTOR KNIFE GATE AND PLUG VALVE ACTUATOR PER CIRCUIT WILL BE UTILIZED AT ANY GIVEN TIME. PROPOSED 15 AMPERE CIRCUIT BREAKERS WILL ACCOMMODATE ALL ASSOCIATED MOTOR OPERATED VALVE LOADS.



EX. SIEMENS TIASTAR
MOTOR CONTROL CENTER (MCC)
(MODIFY B5A AND B5B AS SHOWN)

- NOTES:
1. LIGHTER LINE WEIGHT ITEMS ARE EXISTING.
 2. MAKE MODIFICATIONS TO MCC AS SHOWN.
 3. SEE SHEET E9, FOR PROPOSED KEYED NOTES.
 4. SEE SHEET E5A, FOR EXISTING KEYED NOTES.

EXISTING KEYED NOTES:

- 1

EXISTING (EX.) 480V/240V, 3-PHASE, 4W, DELTA UTILITY POWER-- HIGH LEG IS 416V TO GND AND SHALL BE MARKED WITH ORANGE TAPE.
- 2

EX. (3)-500 KCMIL, & (1)-#1/0 NEU. IN 3" C.
- 3

EX. (3)-500 KCMIL, (1)-#1/0 NEU. & (1)-#2 GND IN 3" C.
- 4

1/0 AWG TO (2) S.S. 5/8"x10' GROUNDING RODS (6 FT. MINIMUM SPACING)
- 5

PROVIDE AND INSTALL NEW 1" CONDUIT AND (8)-#14 AWG & (1)-#12 GND. TO EXTEND EX. ATS & GENERATOR STATUS SIGNALS TO PROP. PCSR.
- 6

EX. (2)-#12 AWG (GENERATOR ON/OFF CONTROL), (4)-#12 AWG (STATUS) & (1)-#12 GND. IN 1" C.
- 7

(3)-500 KCMIL, (1)-#1/0 NEU. & (1)-#2 GND IN 3" C.
- 8

3-PHASE POWER MONITOR RELAY W/ 480VAC LINE INPUT-- ALARM ON PHASE LOSS, UNDERVOLTAGE, OR WRONG ROTATION. EIGHT PIN PLUG-IN W/ DIN RAIL SOCKET. MOTOR CONTROLS CORP. MODEL PM-440-118A. FUSE BLOCK DISCONNECT (FBD)-- ALLEN BRADLEY 1492-FB3C30-L W/ BUSSMANN KTK-R-2 FUSES.
- 9

(3)-#1 AWG, & (1)-#6 GND IN 1-1/4" C.
- 10

(3)-#3 AWG, & (1)-#6 GND IN 1-1/4" C.
- 11

(12)-#14 AWG, & (1)-#12 GND IN 3/4" C.
- 12

(4)-2/C #16 SHLD, & (1)-#12 GND IN 3/4" C.

- 13

(2)-#14 AWG & (1) #12 GND IN 3/4" C. TO TWO POSITION--MAINTAINED PULL / MAINTAINED PUSH, NEMA 4X OPERATOR STATION--SQUARE D 9001SKR9R W/ LEGEND PLATE: "PULL TO RESUME-- PUSH TO STOP" AND PADLOCK ATTACHMENT K62.
- 14

(1)-#6 AWG, (1)-#6 NEU. & (1)-#8 GND IN 1"C.
- 15

NEW SINGLE PHASE, 480-120/240 V, 60HZ, 15KVA EPOXY ENCAPSULATED TRANSFORMER W/ WALL MOUNTING BRACKETS-- REX MANUFACTURING MODEL #SC15HK/EP OR EQUAL. ENCLOSURE RATED NEMA 3R/ 4.
- 16

(2)-#4 AWG, (1)-#4 NEU., (1)-#8 B.C. IN 1"C.
- 17

(1)-#6 AWG, TO APPROVED GROUNDING ELECTRODE.
- 18

NEW SINGLE PHASE, 3-WIRE, 240VAC, 20 CIRCUIT PANELBOARD W/ 80A MAIN CIRCUIT BREAKER-- SQUARE D MODEL NQOD20M100CU IN NQB526 ENCLOSURE. PROVIDE CIRCUIT BREAKERS PER PANELBOARD SCHEDULE.
- 19

(1)-#12 AWG, (1)-#12 NEU. & (1)-#12 GND IN 3/4"C.
- 20

"PCSR" IS THE PROPOSED PUMP CONTROL / SCADA / RADIO PANEL (SEE SHTS. E10-E15).
- 21

(3) #14 AWG, (1) #12 GND 3/4"C.
- 22

(4)-3/C #16 SHLD (ULTRASONIC TRANSDUCER CABLE), (3)-#14 AWG & (1)-#12 GND GND IN 3/4" C.

- 23

(2)-#10 AWG & 1-#10 GND IN 3/4" C.
- 24

RESERVED.
- 25

(3)-#8 AWG & (1)-#8 GND. IN 1"C.
- 26

(5)-#12 AWG & (1)-#12 GND. IN 3/4"C.
- 27

NEW NEMA 4X, 30 AMP., NON-FUSED DISCONNECT

NOTES:

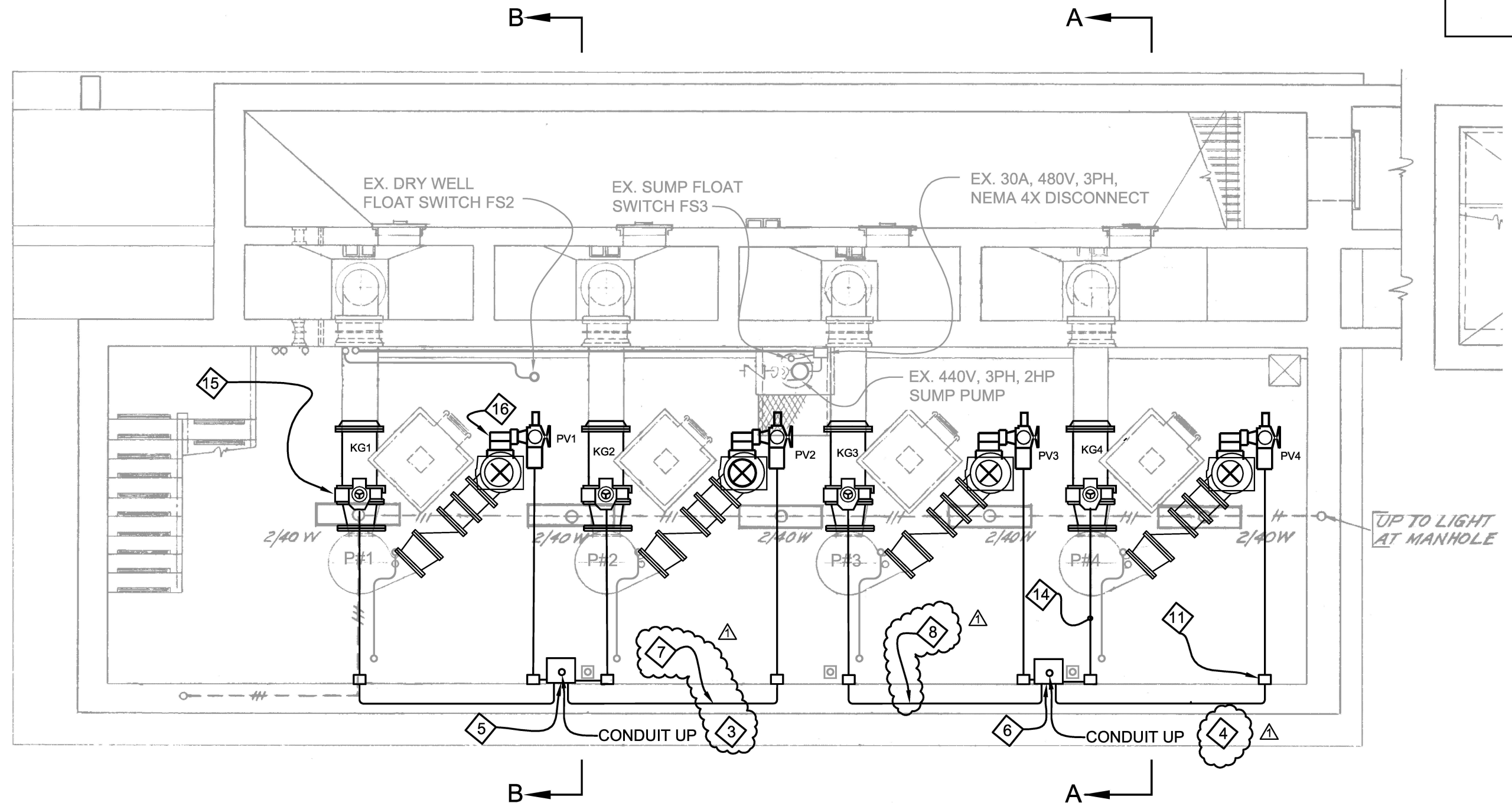
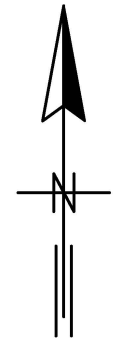
1. ALL EXISTING ITEMS ARE SHOWN WITH A LIGHTER LINE WEIGHT.
2. EXISTING KEYED NOTES ARE TO BE USED WITH THE EXISTING PORTIONS OF THE ONE-LINE ON SHEETS E4 AND E5.

SHEET E5A IS AN ADDED SHEET TO THE PLANS.



LOAD SUMMARY		
480 VAC, 3ø, 4W		
LOAD	CONNECTED	DEMAND
PUMP #1	45.7 KVA	45.7 KVA
PUMP #2	45.7 KVA	45.7 KVA
PUMP #3	45.7 KVA	45.7 KVA
PUMP #4	45.7 KVA	—
ELEC. ACTUATORS	21.3 KVA	10.6 KVA
ODOR CONTROL	8.3 KVA	8.3 KVA
LP1	15.0 KVA	15.0 KVA
LPG	7.5 KVA	7.5 KVA
TOTAL	234.9 KVA	178.5 KVA

ROMAN D. KORCHAK, P.E. #42626 ELECTRICAL SECTION HEAD WASTEWATER DEPARTMENT	No.	DATE	REVISIONS	DES: LRG DRN: LRG CKD: DATE: 11/24/2015	CITY of TAMPA WASTEWATER DEPARTMENT	HANNA PUMPING STATION VALVE REPLACEMENT EX. KEYED NOTES & LOAD SUMMARY	W.O. 0426
	3						SHEET
	2						E5A
	1/19/16		REVISION 1				



PUMP ROOM FLOOR PLAN, FL. EL -16.33

SCALE: 3/16"=1'-0"

NOTES:

1. MODIFICATIONS ARE SHOWN DARKENED, UNLESS OTHERWISE NOTED.
2. SEE SHEET E9, FOR KEYED NOTES.

ROMAN D. KORCHAK, P.E. #42626
ELECTRICAL SECTION HEAD
WASTEWATER DEPARTMENT

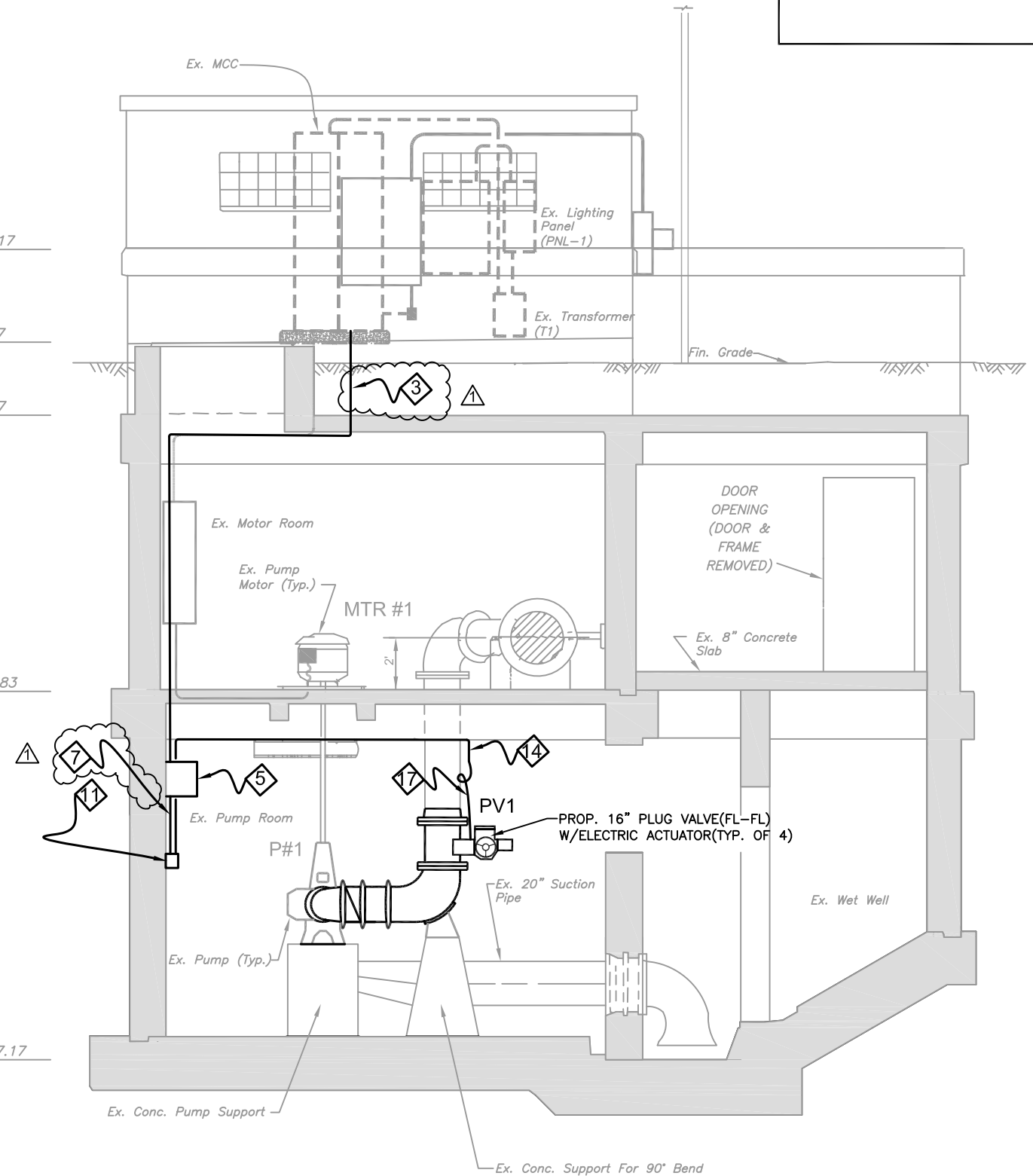
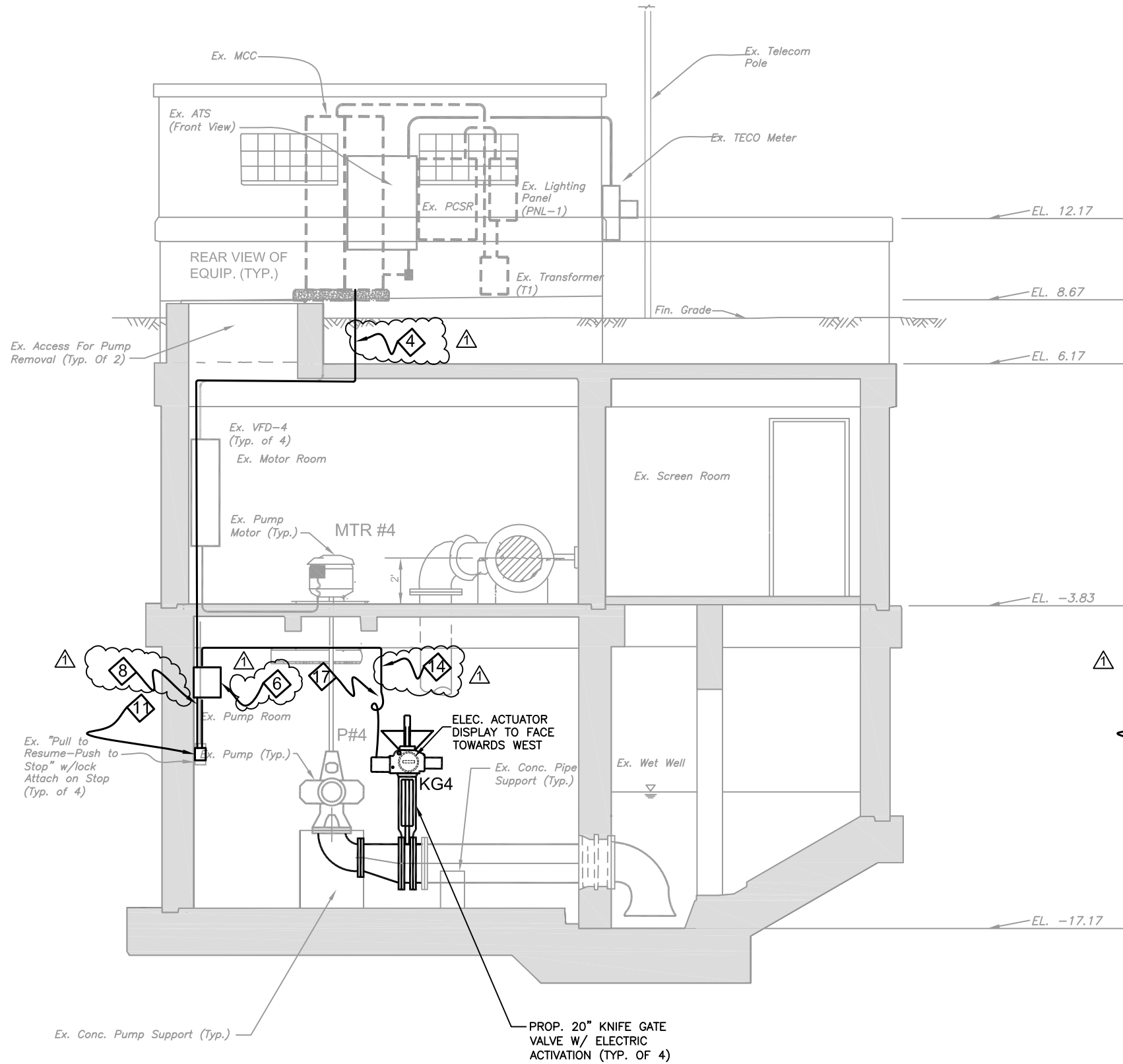
No.	DATE	REVISIONS
3		
2		
	1/19/16	REVISION 1

DES: LRG
DRN: LRG/WA
CKD:
DATE: 10/29/15

CITY of TAMPA
WASTEWATER DEPARTMENT

**HANNA PUMPING STATION
VALVE REPLACEMENT
PUMP ROOM FLOOR PLAN**

W.O. 0426
SHEET
E7



NOTES:
 1. ELECTRICAL MODIFICATIONS ARE SHOWN DARKENED, UNLESS OTHERWISE NOTED.
 2. SEE KEYED NOTES ON SHEET E9.

PROPOSED SECTION A-A
 SCALE: 3/16" = 1'-0"

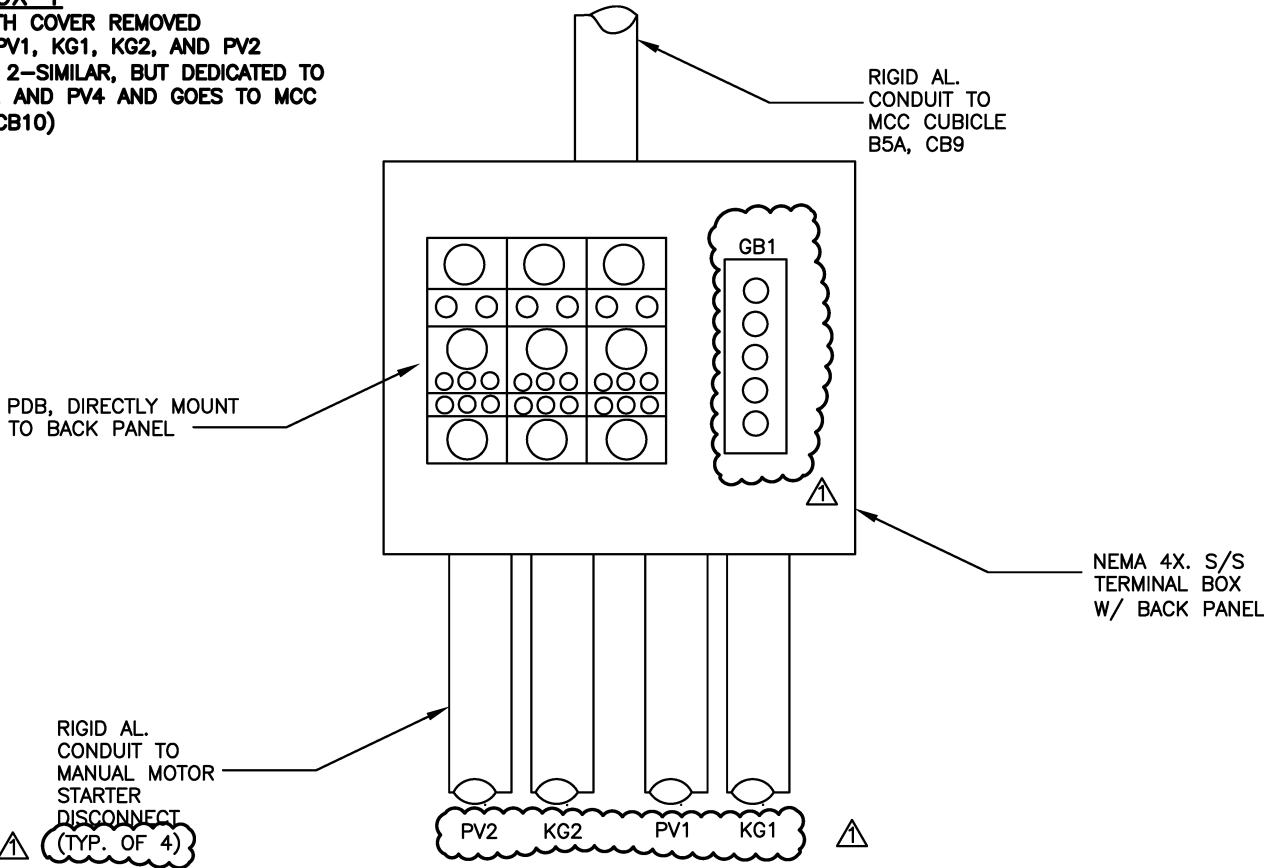
PROPOSED SECTION B-B
 SCALE: 3/16" = 1'-0"

ROMAN D. KORCHAK, P.E. #42626 ELECTRICAL SECTION HEAD WASTEWATER DEPARTMENT	No.	DATE	REVISIONS	DES: LRG	CITY of TAMPA WASTEWATER DEPARTMENT	HANNA PUMPING STATION VALVE REPLACEMENTS SECTIONS A-A & B-B	W.O. 0426 SHEET E8
	3			DRN: LRG/WA			
	2			CKD:			
				DATE: 11/23/15			
	1/19/16		REVISION 1				

PARTS SCHEDULE			
SYMBOL	NAME	MAKE/TYPE/RATING	MODEL OR CAT#
CB 9, 10	CIRCUIT BREAKER	SIEMENS/3-POLE 15 AMP TRIP	HEG 125A FRAME, 65 KAIC
PDB	POWER DISTRIBUTION BLOCK	ILSCO/3-POLE/600 VAC	PDB-26-2/0-3
	NEMA 4 MANUAL MOTOR STARTER DISCONNECT	SQUARE D/3-POLE	2510 KW2H
	NEMA 4X ALUMINUM TERMINAL BOX	HOFFMAN/16" X 14 X 6"	A-1614NFAL
		W/ALUMINUM BACK PANEL	A-16P14AL
GB1	GROUNDING BLOCK	PANDUIT/UGB2/0-4 14-12	

PARTS SCHEDULE
FOR USE WITH SHT. E5 &
NEMA 4X TERMINAL BOX DETAIL,
THIS SHEET.

TERMINAL BOX 1
FRONT VIEW WITH COVER REMOVED
DEDICATED TO PV1, KG1, KG2, AND PV2
(TERMINAL BOX 2—SIMILAR, BUT DEDICATED TO
PV3, KG3, KG4, AND PV4 AND GOES TO MCC
CUBICLE B5B, CB10)



KEYED NOTES:

- 1 PROPOSED CB-9. 3-POLE, 15 AMP CIRCUIT BREAKER
- 2 PROPOSED CB-10, 3-POLE, 15 AMP CIRCUIT BREAKER
- 3 PROPOSED 3/4" CONDUIT, (3)#12 AWG. & (1)#12 GND. (FROM PROPOSED TERMINAL BOX 1 TO MCC CUBICLE B5A, CIRCUIT BREAKER CB-9)
- 4 PROPOSED 3/4" CONDUIT, (3)#12 AWG. & (1)#12 GND. (FROM PROPOSED TERMINAL BOX 2 TO MCC CUBICLE B5B, CIRCUIT BREAKER CB-10)
- 5 PROPOSED NEMA 4X TERMINAL BOX 1, FOR USE WITH PV1, PV2, KG1, AND KG2
- 6 PROPOSED NEMA 4X TERMINAL BOX 2, FOR USE WITH PV3, PV4, KG3, AND KG4.
- 7 PROPOSED 3/4" CONDUIT, (3)#12 AWG. & (1)#12 GND. FROM PROPOSED TERMINAL BOX 1 TO PROPOSED MOTOR STARTER DISCONNECT (TYP. OF 4)
- 8 PROPOSED 3/4" CONDUIT, (3)#12 AWG. & (1)#12 GND. FROM PROPOSED TERMINAL BOX 2 TO PROPOSED MOTOR STARTER DISCONNECT (TYP. OF 4)
- ~~9 PROPOSED 3/4" CONDUIT, (3)#12 AWG. & (1)#12 GND. (FROM PROPOSED MOTOR STARTER DISCONNECTS PV3 TO PROPOSED TERMINAL BOX 2)~~
- ~~10 PROPOSED 3/4" CONDUIT, (3)#12 AWG. & (1)#12 GND. (FROM PROPOSED MOTOR STARTER DISCONNECTS PV4 TO PROPOSED TERMINAL BOX 2)~~
- 11 PROPOSED NEMA 4 MANUAL MOTOR STARTER DISCONNECTS, TYPICAL OF 8
- 12 REMOVE EXISTING 12" SPACE COMBINATION STARTER AND PROVIDE AND INSTALL A 6" HIGH DENSITY CIRCUIT BREAKER, UNIT CUBICLE 5A LABEL SHALL READ:
PLUG VALVE 1
KNIFE GATE VALVE 1
PLUG VALVE 2
KNIFE GATE VALVE 2
- 13 SEE KEYED NOTE 12 AND PROVIDE AND INSTALL A 6" HIGH DENSITY CIRCUIT BREAKER, UNIT CUBICLE 5B LABEL SHALL READ:
PLUG VALVE 3
KNIFE GATE VALVE 3
PLUG VALVE 4
KNIFE GATE VALVE 4
- 14 PROPOSED 3/4" CONDUIT, (3)#12 AWG. & (1)#12 GND. (FROM PROPOSED ACTUATOR TO PROPOSED MANUAL MOTOR STARTER DISCONNECT (TYP. OF 8))
- 15 PROPOSED KNIFE GATE VALVE ACTUATOR (TYP. OF 4)
- 16 PROPOSED PLUG GATE VALVE ACTUATOR (TYP. OF 4)
- 17 PROPOSED 3/4" NON-METALLIC FLEXIBLE CONDUIT, TRANSITION TO 3/4" RIGID ALUMINUM

KEYED NOTES
FOR USE WITH SHEETS E5 THRU E8

ROMAN D. KORCHAK, P.E. #42626
ELECTRICAL SECTION HEAD
WASTEWATER DEPARTMENT

No.	DATE	REVISIONS
3		
2		
1	1/19/16	REVISION 1

DES: LRG
DRN: LRG
CKD:
DATE: 10/29/15

CITY of TAMPA
WASTEWATER DEPARTMENT

HANNA PUMPING STATION
VALVE REPLACEMENT
ELECTRICAL DETAILS

W.O. 0426
SHEET
E9