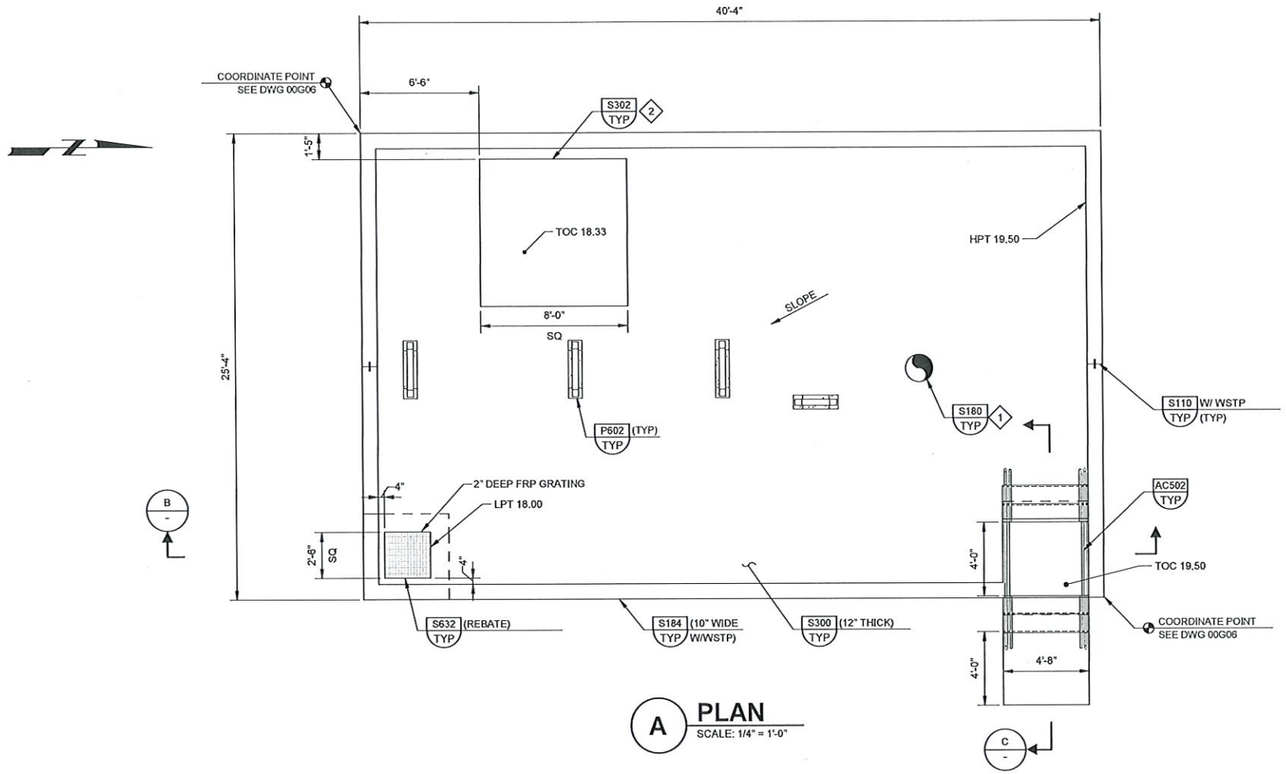
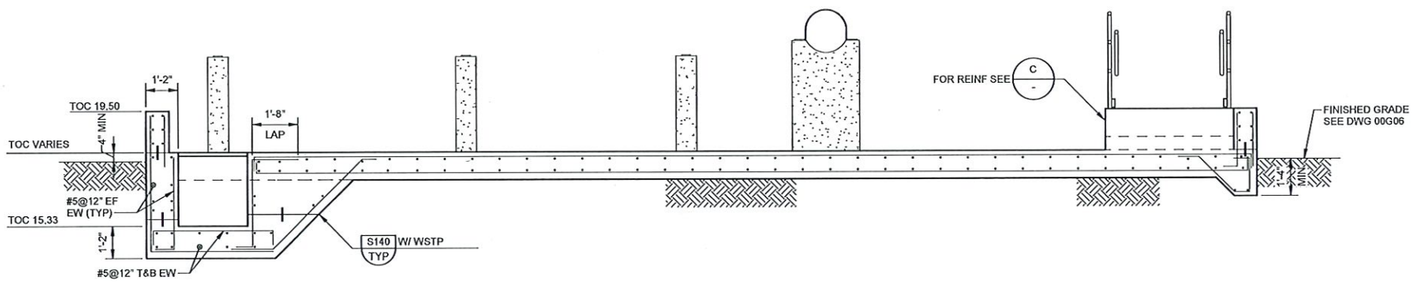
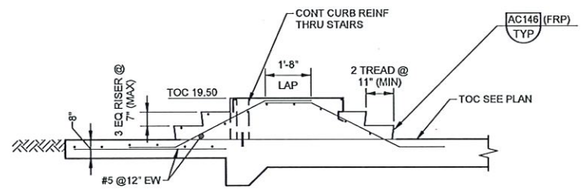


A PLAN
SCALE: 1/4" = 1'-0"



B SECTION
SCALE: 3/8" = 1'-0"



C SECTION
SCALE: 3/8" = 1'-0"

GENERAL NOTES:

1. THIS DRAWING IS REPRESENTATIVE OF INJECTION WELL #1 AND INJECTION WELL #2.
2. OVER EXCAVATE TO THE LOWEST FOUNDATION BEARING LEVEL. EXCAVATION BOTTOM SHALL BE COMPACTED UNTIL 98% OF ASTM D1557 IS ACHIEVED WITHIN 1'-0" OF THE EXCAVATED BOTTOM. REFER TO THE SPECIFICATION FOR BACKFILL REQUIREMENTS AND MINIMUM COMPACTION EFFORT.
3. ELEVATIONS NOTED THUS (X.XX) ARE REFERENCED FROM THE SLAB ON GRADE ELEVATION (UNO).
4. PROJECT DATUM ELEVATION = 18.00

(#) KEY NOTES:

1. PROVIDE DIAGONAL BAR ONLY AND WRAP PIPE WITH STRIP WATERSTOP.
2. CONTRACTOR TO COORDINATE FINAL EQUIPMENT PAD DIMENSIONS WITH SUPPLIED EQUIPMENT.

REV	DATE	BY	DESCRIPTION
1	10/25	MSL	BID SET

DESIGNED DAM
DRAWN JLH
CHECKED MSL
DATE NOVEMBER 2025

JOEL D. SMASON LICENSE No 58434 STATE OF FLORIDA PROFESSIONAL ENGINEER

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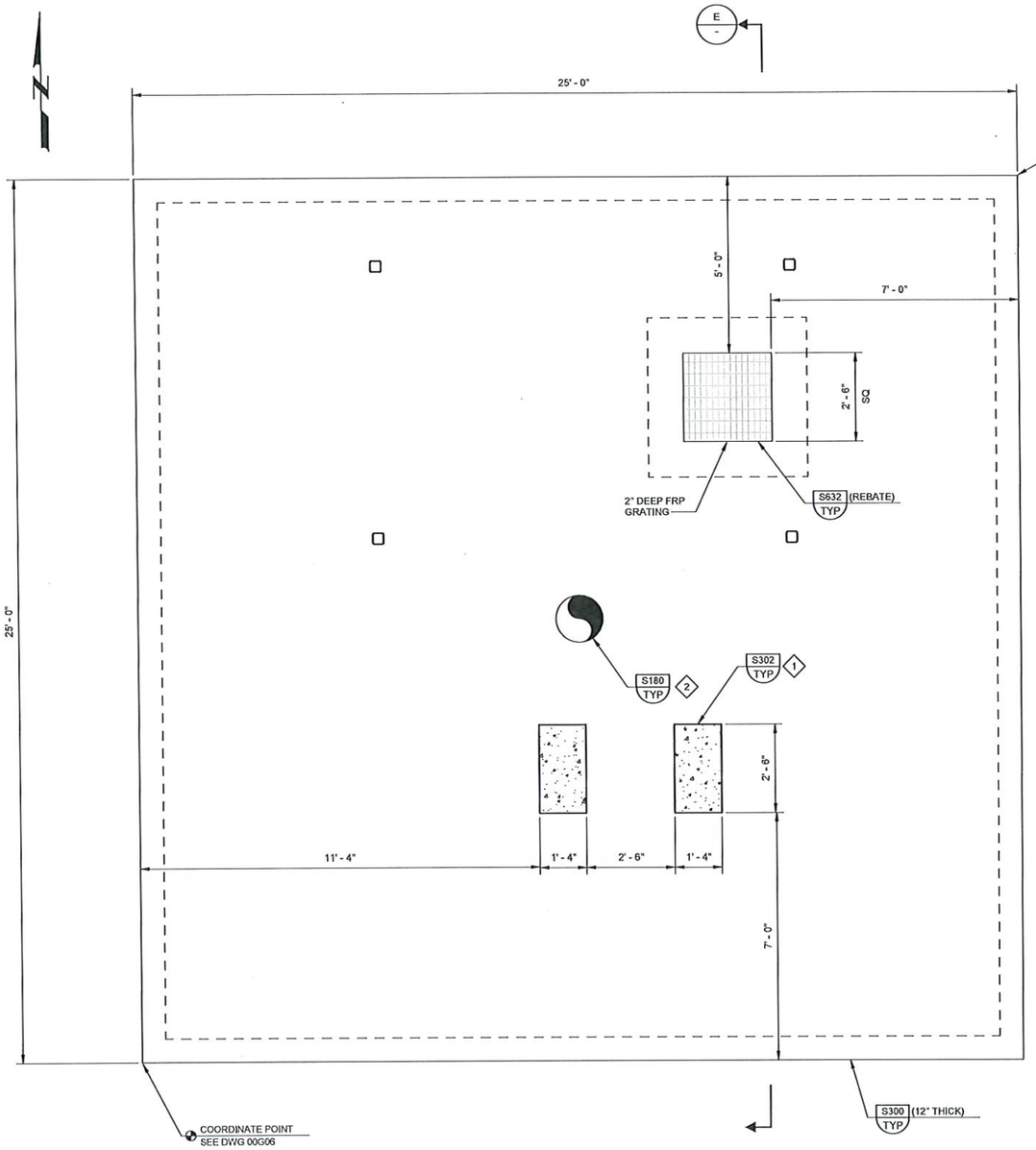
Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP - DIW CONVEYANCE
STRUCTURAL
DEEP INJECTION WELL
PLAN AND SECTION

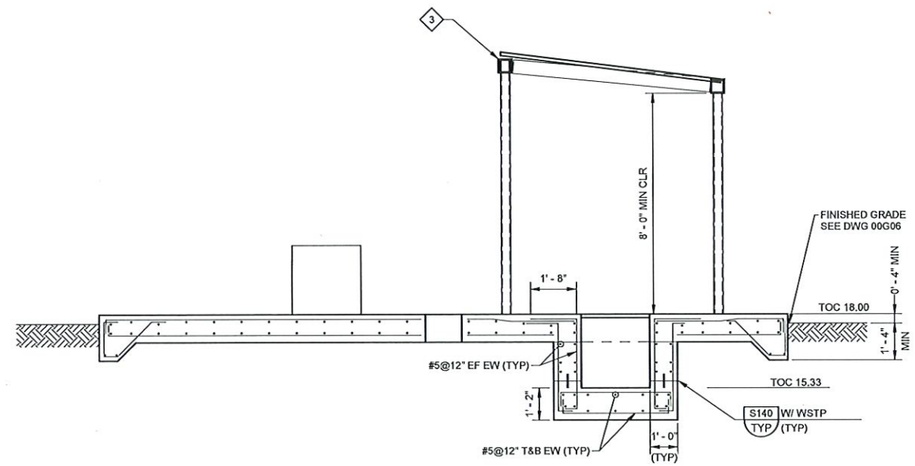
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 71261.10
DRAWING NO. S02
SHEET NO. 21 OF 62

PLOT DATE: 11/6/2025 4:57:59 PM
FILE NAME: R:\d1321535\7126l1000S0801.rvt



D **PLAN**
SCALE: 1/2" = 1'-0"



E **SECTION**
SCALE: 3/8" = 1'-0"

GENERAL NOTES:

1. OVER EXCAVATE TO THE LOWEST FOUNDATION BEARING LEVEL. EXCAVATION BOTTOM SHALL BE COMPACTED UNTIL 95% OF ASTM D1557 IS ACHIEVED WITHIN 1'-0" OF THE EXCAVATED BOTTOM. REFER TO THE SPECIFICATION FOR BACKFILL REQUIREMENTS AND MINIMUM COMPACTION EFFORT.
2. ELEVATIONS NOTED THUS (X.XX) ARE REFERENCED FROM THE SLAB ON GRADE ELEVATION (UNO).
3. PROJECT DATUM ELEVATION = 18.00.

(#) KEY NOTES:

1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT PAD DIMENSIONS WITH SUPPLIED EQUIPMENT.
2. PROVIDE DIAGONAL BAR ONLY. WRAP PIPE IN 1/2" FOAM EXPANSION JOINT MATERIAL.
3. PROVIDE 12'-0" x 8'-0" SHADE STRUCTURE PER SPECIFICATION SECTION 10_71_18. CENTER SHADE STRUCTURE OVER THE SAMPLE PANEL.

REV	DATE	BY	DESCRIPTION
1	10/25	MSL	BID SET

DESIGNED DAM
DRAWN JLH
CHECKED MSL
DATE NOVEMBER 2025

JOEL D. SMASON LICENSE No 58434 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP - DIW CONVEYANCE
STRUCTURAL
MONITORING WELL
PLAN AND SECTION

VERIFY SCALES
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0 1"
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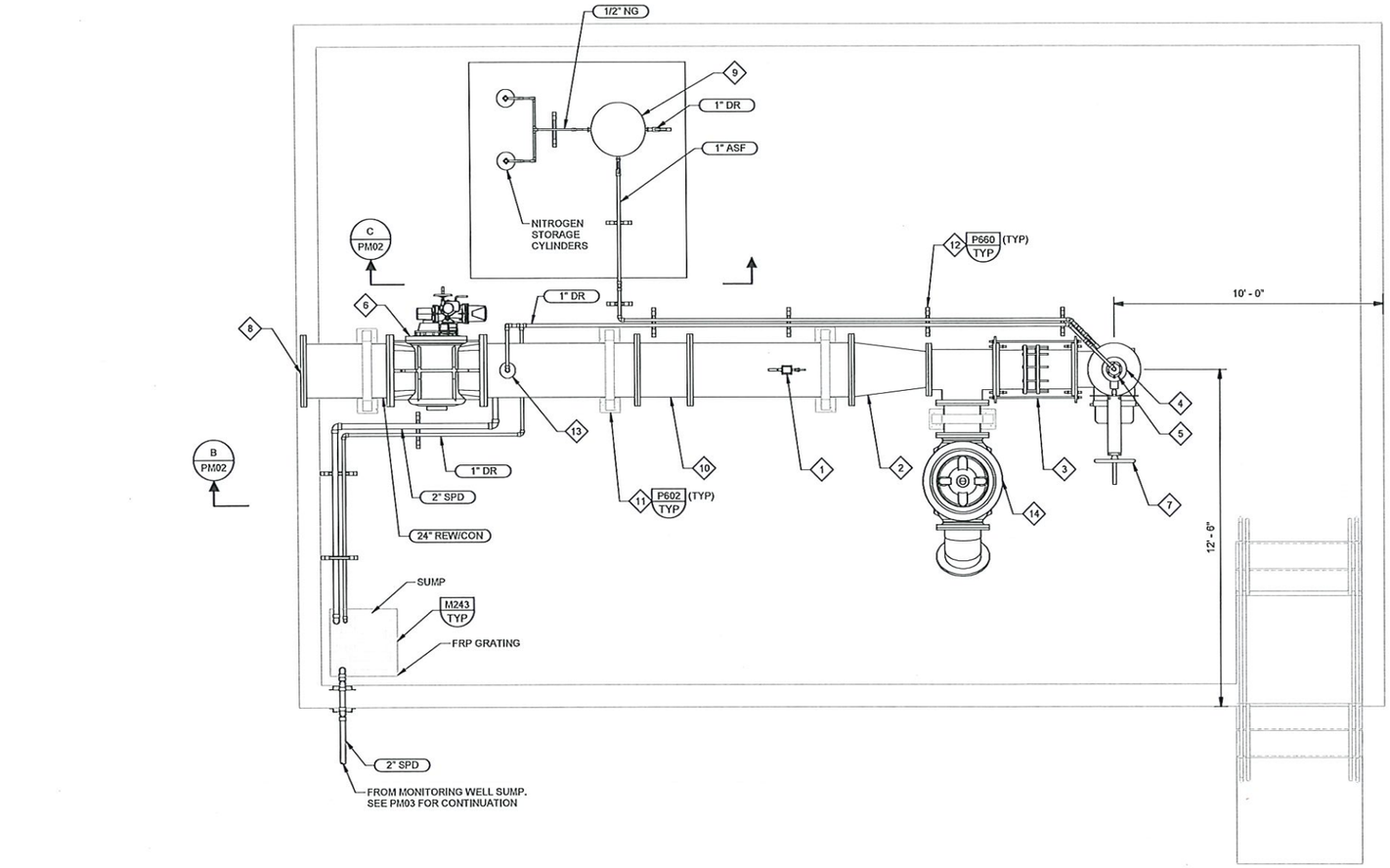
JOB NO. 71261.10
DRAWING NO. S03
SHEET NO. 22 OF 62

PLOT DATE: 11/6/2025 4:59:51 PM
FILE NAME: R:\j1321535\71261100S0802.rvt



A PLAN
SCALE: 3/8" = 1'-0"

GENERAL NOTES:

1. THIS DRAWING IS REPRESENTATIVE OF INJECTION WELL # 1 AND INJECTION WELL #2.
2. SEE DRAWING G02 FOR PIPE SCHEDULE
3. MINOR INSTRUMENTATION DETAILS ARE LEFT OFF OF THIS DRAWING FOR CLARITY. REFERENCE DRAWING NO. 00N01 FOR FURTHER DETAILS

KEY NOTES:

1. PRESSURE GAUGE AND TRANSMITTER
2. 24"x16" ECCENTRIC REDUCER
3. RESTRAINED FLEXIBLE COUPLING
4. 6" BALL VALVE
5. 2" AIR RELEASE VALVE
6. 24" PLUG VALVE WITH MOTOR ACTUATOR
7. 16" KNIFE GATE VALVE
8. 24" PVC BLIND FLANGE
9. 100 GALLON, 24" DIA WELL ANNULUS PRESSURE TANK
10. LOCATION FOR FLOW METER. CONTRACTOR TO VERIFY DIMENSION OF SPOOL PIECE PRIOR TO PIPE FABRICATION
11. CONCRETE PIPE SUPPORT
12. PREFORMED CHANNEL PIPE SUPPORT
13. 1" AIR RELEASE VALVE
14. 16" SURGE ANTICIPATOR VALVE

REV	DATE	BY	DESCRIPTION
1	10/25	MSL	BID SET

DESIGNED MAB
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CHECKED MSL
DATE NOVEMBER 2025

MATTHEW S. LOVE LICENSE No 66118 STATE OF FLORIDA PROFESSIONAL ENGINEER

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COLLIER COUNTY
NORTHEAST WRF/WTP - DIW CONVEYANCE
MECHANICAL
DEEP INJECTION WELL - PLAN

VERIFY SCALES
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0 1"
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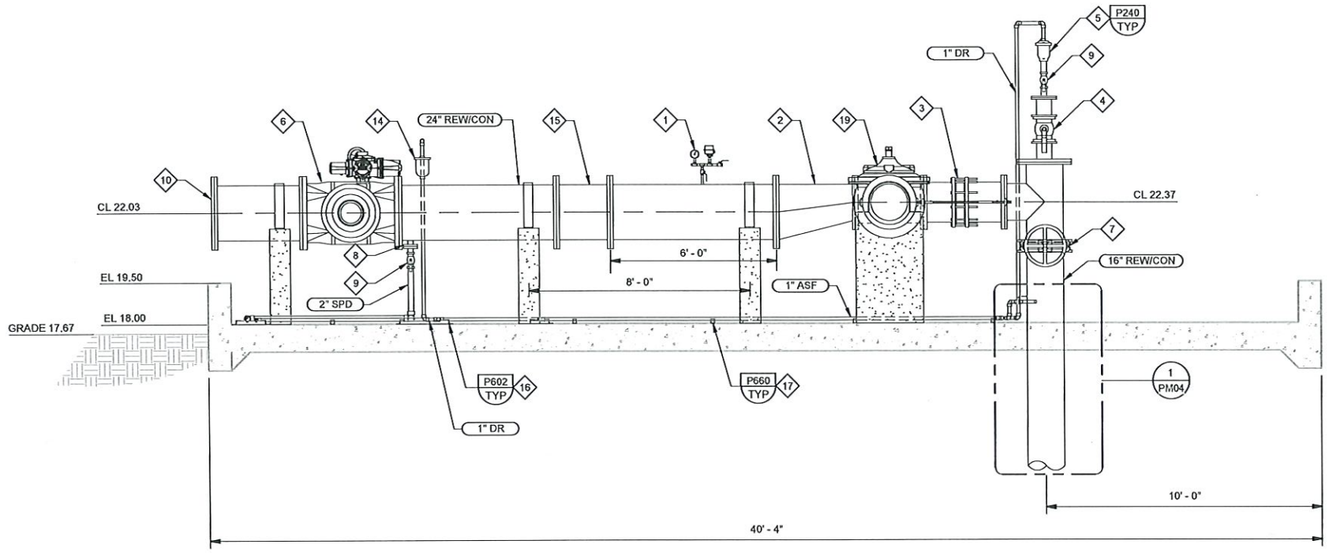
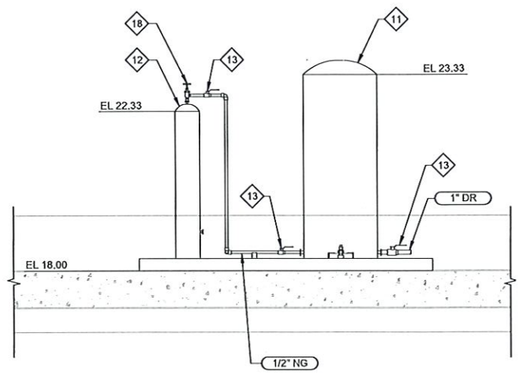
JOB NO. 7126I.10
DRAWING NO. PM01
SHEET NO. 23 OF 62

PLOT DATE: 11/19/2025 7:59:20 PM
FILE NAME: R:\d1321534\7126I1000M0801.rvt



B PM01 SECTION
SCALE: 3/8" = 1'-0"



C PM01 SECTION
SCALE: 1/2" = 1'-0"

GENERAL NOTES:

1. THIS DRAWING IS REPRESENTATIVE OF INJECTION WELL # 1 AND INJECTION WELL #2.
2. SEE DRAWING G02 FOR PIPE SCHEDULE
3. FLOOD ELEVATION 14.5 FT ABOVE MSL, NAVD88

KEY NOTES:

1. PRESSURE GAUGE AND TRANSMITTER
2. 24"x16" ECCENTRIC REDUCER
3. RESTRAINED FLEXIBLE COUPLING
4. 6" BALL VALVE
5. 2" AIR RELEASE VALVE
6. 24" PLUG VALVE WITH MOTOR ACTUATOR
7. 16" KNIFE GATE VALVE
8. 2" FLANGED OUTLET
9. 2" BALL VALVE
10. 24" PVC BLIND FLANGE
11. 250 GALLON, 36" DIA WELL ANNULUS PRESSURE TANK
12. NITROGEN STORAGE CYLINDERS
13. BALL VALVE
14. 1" AIR RELEASE VALVE
15. LOCATION FOR FLOW METER. CONTRACTOR TO VERIFY DIMENSION OF SPOOL PIECE PRIOR TO PIPE FABRICATION
16. CONCRETE PIPE SUPPORT
17. PREFORMED CHANNEL PIPE SUPPORT
18. ANGLE VALVE
19. 16" SURGE ANTICIPATOR VALVE

REV	DATE	BY	DESCRIPTION
1	10/25	MSL	BID SET

DESIGNED MAB
DRAWN AMR
CHECKED MSL
DATE NOVEMBER 2025

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MECHANICAL
DEEP INJECTION WELL - SECTIONS

VERIFY SCALES
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0 1"
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JOB NO. 71261.10
DRAWING NO. PM02
SHEET NO. 24 OF 62

PLOT DATE: 11/19/2025 7:59:27 PM
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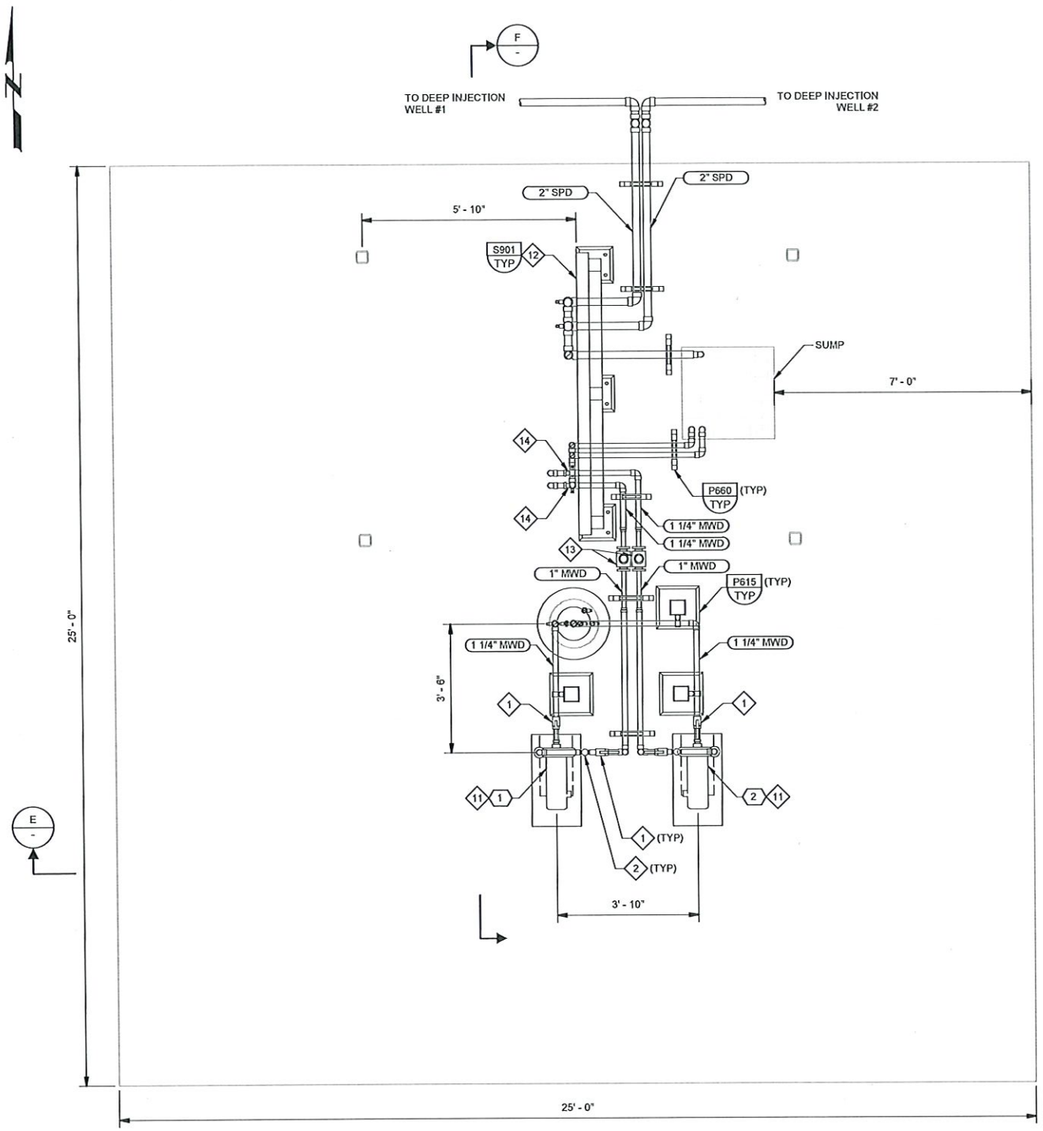
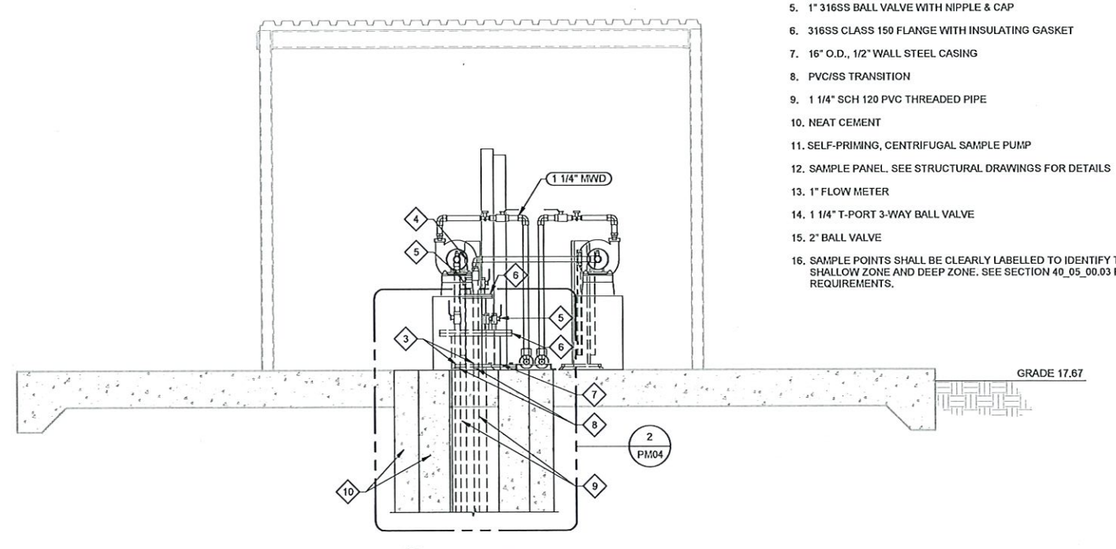
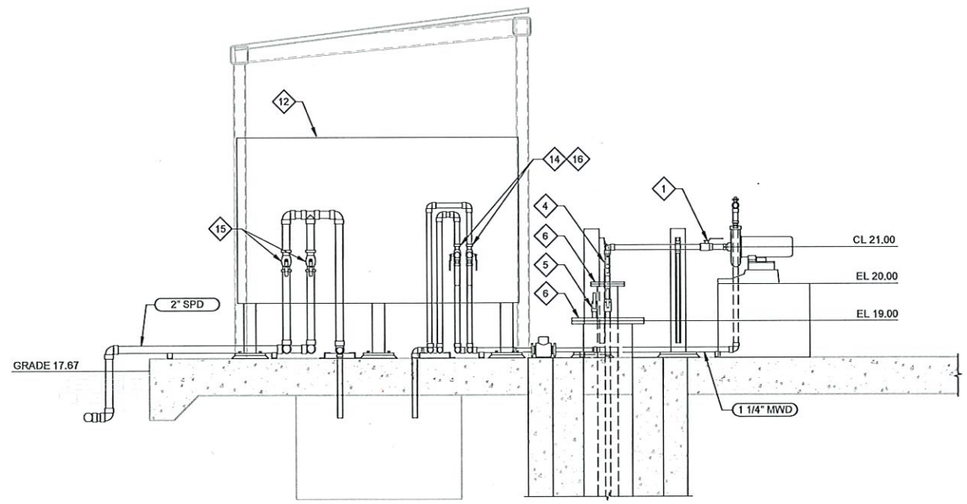


D **PLAN**
SCALE: 1/2" = 1'-0"



E **SECTION**
SCALE: 1/2" = 1'-0"



F **SECTION**
SCALE: 1/2" = 1'-0"

KEY TAGS:

#		
1	SAM-4	SHALLOW ZONE SAMPLE PUMP
2	SAM-3	DEEP ZONE SAMPLE PUMP

GENERAL NOTES:

1. SEE DRAWING G02 FOR PIPE SCHEDULE
2. FLOOD ELEVATION 14.5 FT ABOVE MSL, NAVD88

KEY NOTES:

1. 1 1/4" BALL BALL
2. 1 1/4" CHECK VALVE
3. 1 1/4" 316SS PIPE
4. 1 1/4" 316SS BALL VALVE
5. 1" 316SS BALL VALVE WITH NIPPLE & CAP
6. 316SS CLASS 150 FLANGE WITH INSULATING GASKET
7. 16" O.D., 1/2" WALL STEEL CASING
8. PVC/SS TRANSITION
9. 1 1/4" SCH 120 PVC THREADED PIPE
10. NEAT CEMENT
11. SELF-PRIMING, CENTRIFUGAL SAMPLE PUMP
12. SAMPLE PANEL, SEE STRUCTURAL DRAWINGS FOR DETAILS
13. 1" FLOW METER
14. 1 1/4" T-PORT 3-WAY BALL VALVE
15. 2" BALL VALVE
16. SAMPLE POINTS SHALL BE CLEARLY LABELLED TO IDENTIFY THE SHALLOW ZONE AND DEEP ZONE. SEE SECTION 40_05_00.03 FOR REQUIREMENTS.

REV	DATE	BY	DESCRIPTION
1	10/25	MSL	BID SET

DESIGNED MAB
DRAWN AMR
CHECKED MSL
DATE NOVEMBER 2025

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COLLIER COUNTY
NORTHEAST WRF/WTP - DIW CONVEYANCE
MECHANICAL
MONITORING WELL SURFACE FEATURES PLAN AND SECTIONS

VERIFY SCALES
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0 1"
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JOB NO. 71261.10
DRAWING NO. PM03
SHEET NO. 25 OF 62

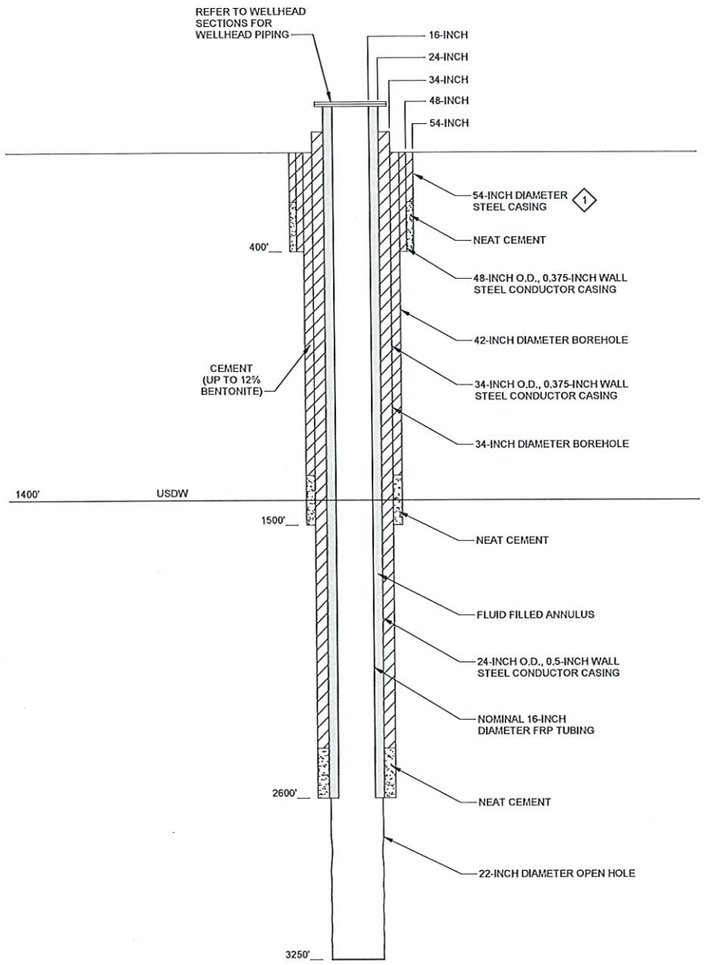
PLOT DATE: 11/10/2025 10:18:12 AM
FILE NAME: R:\d13215347126I1000M0802.rvt

GENERAL NOTES:

1. ELEVATIONS SHOWN ON THIS DRAWING REPRESENT FEET BELOW GRADE

(#) KEY NOTES:

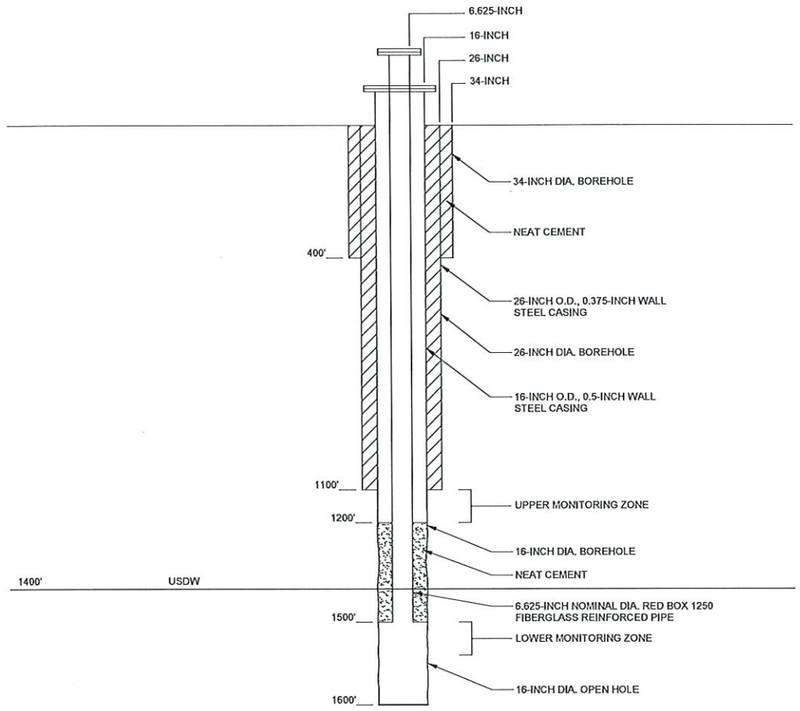
1. INSTALL 54-INCH DIAMETER STEEL CASING TO A MINIMUM DEPTH OF 50 FEET BELOW LAND SURFACE



INJECTION WELL

1 PM02 **DETAIL**

SCALE: NOT TO SCALE



MONITORING WELL

2 PM03 **DETAIL**

SCALE: NOT TO SCALE

REV	DATE	BY	DESCRIPTION
1	10/25	MSL	BID SET

DESIGNED MAB
DRAWN AMR
CHECKED MSL
DATE NOVEMBER 2025

MATTHEW S. LOVE LICENSE No 66118 STATE OF FLORIDA PROFESSIONAL ENGINEER

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COLLIER COUNTY
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MECHANICAL
INJECTION AND MONITORING WELLS DETAILS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
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JOB NO. 7126I.10
DRAWING NO. PM04
SHEET NO. 26 OF 62

PLOT DATE: 11/6/2025 4:54:31 PM

FILE NAME: R:\d1321534\7126I1000M0802.rvt

ELECTRICAL PLAN/LAYOUT

SYMBOL	DESCRIPTION
TTC	TELEPHONE TERMINAL CABINET
	TERMINAL JUNCTION BOX
	ELECTRICAL EQUIPMENT
X	CEILING MOUNTED DOWNLIGHT LUMINAIRE - SEE SCHEDULE FOR TYPE
X	FLOURESCENT LUMINAIRE, SURFACE OR LAY IN TYPE SEE SCHEDULE FOR TYPE
X	LUMINAIRE AND POLE - SEE SCHEDULE FOR TYPE
X	WALL MOUNTED LUMINAIRE - SEE SCHEDULE FOR TYPE
X	FLOOD LIGHTS - AIM IN THE DIRECTION SHOWN SEE SCHEDULE FOR TYPE
X	EXIT LIGHTS - SOLID SECTION IS DIRECTION OF FACE SEE SCHEDULE FOR TYPE
X	EMERGENCY LIGHT WITH BATTERY PACK SEE SCHEDULE FOR TYPE
	LIGHTING FIXTURE POWER AND SWITCHING LEGEND
X Y Z (TYP)	X=FIXTURE TYPE Y=PANEL-CIRCUIT BRKR Z=SWITCH IF NO Z INDICATED, CONNECT DIRECTLY TO CIRCUIT BREAKER.
[B2]	CONDUIT/CONDUCTOR - REFER TO CIRCUIT SCHEDULE
LPA-2	HOME RUN - PANEL AND CIRCUIT NUMBER SHOWN
	EXPOSED CONDUIT AND CONDUCTORS*
	UNDERGROUND CONDUIT AND CONDUCTORS* NOTE: * ALL UNMARKED CONDUIT RUNS CONSIST OF 2#12, 1#12G IN 3/4"C.
YCX	YARD CONDUIT. REFER TO YARD CONDUIT SCHEDULE
	DIRECT BURIED CONDUIT
	CONDUIT, STUBBED AND CAPPED AS SHOWN
G	GROUND WIRE, 4/0 UNLESS OTHERWISE NOTED
	6 FOOT GROUND WIRE PIGTAIL, 4/0 UNLESS OTHERWISE NOTED
	GROUND ROD - 5/8" x 20' COPPER CLAD UNLESS OTHERWISE NOTED. COUPLING TWO 10' RODS IS ACCEPTABLE.
	GROUND TEST WELL, SEE DETAIL
S	WALL SWITCH: 2- DOUBLE POLE, 3- THREE WAY, 4- FOUR WAY, WP- WEATHERPROOF, P- PILOT LIGHT, K- KEY OPERATED, D- DIMMER, CRE- CORROSION RESISTANT
	CONVENIENCE RECEPTACLE - 20A DUPLEX UNLESS SPECIFIED OTHERWISE WP- WEATHERPROOF, TL- TWIST LOCK, C- CLOCK HANGER, CRE- CORROSION RESISTANT, GFI-GROUND FAULT INTERRUPTER
	CONVENIENCE RECEPTACLE - 20A QUADROPLEX UNLESS SPECIFIED OTHERWISE
	CONVENIENCE RECEPTACLE - 20A DUPLEX UNLESS SPECIFIED OTHERWISE. LOCATED ABOVE COUNTER TOP GFI-GROUND FAULT INTERRUPTER
	CONVENIENCE RECEPTACLE - 20A DUPLEX UNLESS SPECIFIED OTHERWISE. MOUNTED FLUSH IN FLOOR.
30	RECEPTACLE, SPECIAL PURPOSE - AMPERAGE AS INDICATED.
	TELEPHONE/DATA RECEPTACLE (OUTLET BOX, 18" AFF) W - WALL MOUNTED, 54" AFF
	TELEPHONE/DATA RECEPTACLE MOUNTED FLUSH IN FLOOR
J	JUNCTION BOX NEMA 12 ENCLOSURE UNLESS INDICATED OTHERWISE. 4X = NEMA 4X SS
F	FIRE ALARM PULL STATION
F	FIRE ALARM HORN/STROBE LIGHT
F	FIRE ALARM STROBE LIGHT
FACP	FIRE ALARM CONTROL PANEL
FAAP	FIRE ALARM ANNUNCIATOR PANEL
CAM X	SURVEILLANCE CAMERA X - 90, 180 OR 360 CAMERA
DS	SECURITY SYSTEM DOOR SWITCH

SYMBOL	DESCRIPTION
SD	FIRE ALARM SMOKE DETECTOR EC- MOUNTED TO EXPOSED CEILING H- HARSH ENVIROMENT RATED
HD	FIRE ALARM HEAT DETECTOR EC- MOUNTED TO EXPOSED CEILING
BD R	BEAM DETECTOR, T=TRANSMITTER, R=RECEIVER
SD D	DUCT SMOKE DETECTOR
RTU	REMOTE TELEMETRY UNIT
CR	SECURITY CARD READER

ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
A	AMMETER, AMPERE
AC	ALTERNATING CURRENT
AF	AMPERE FRAME
AFD	ADJUSTABLE FREQUENCY DRIVE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AS	AMMETER SWITCH, AMPERE SENSOR
ASU	AIR SUPPLY UNIT
ATS	AUTOMATIC TRANSFER SWITCH
BC	BYPASS CONTACTOR
BRKR	BREAKER
C	CONDUIT, CONTACTOR
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CMS	COMBINATION MOTOR STARTER
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CRE	CORROSION RESISTANT
CT	CURRENT TRANSFORMER
DC	DIRECT CURRENT
DIV	DIVISION
DP	DISTRIBUTION PANEL (480V)
EF	EXHAUST FAN
EG	ELECTRICAL GROUND
ETM	ELAPSED TIME METER
EXST	EXISTING
FDR	FEEDER
F, FU	FUSE
FI	FLOW INDICATOR
FLR	FLOOR
FLUOR	FLUORESCENT
FM	FLOW METER
FO	FIBER OPTIC
FS	FLOAT SWITCH, FLOW SWITCH
FT	FLOW TRANSMITTER
FUT	FUTURE
FVNR	FULL VOLTAGE NON-REVERSING STARTER
G	GREEN, GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GFR	GROUND FAULT RELAY
GND	GROUND
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND/OFF/AUTO
HOR	HAND/OFF/REMOTE
HPS	HIGH PRESSURE SODIUM
HVAC	HEATING, VENTILATING & AIR CONDITIONING
IC	INTERRUPTING CAPACITY
I & C	INSTRUMENTATION AND CONTROL
IMH	INSTRUMENTATION MANHOLE
INST	INSTANTANEOUS
IP	INSTRUMENT PANEL (PANELBOARD)
J, J-BOX	JUNCTION BOX
K	KEY INTERLOCK
KK	KIRK KEY INTERLOCK
LA	LIGHTNING ARRESTER
LC	LIGHTING CONTACTOR
LP	LIGHTING PANEL (PANELBOARD)
LR	LOCAL/REMOTE, LATCHING RELAY
LS	LIMIT SWITCH
LT FLEX	LIQUID TIGHT FLEX CONDUIT
LTG	LIGHTING
M	MAGNETIC CONTACTOR COIL OR MOTOR
MA	MILLIAMPS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MERC	MERCURY VAPOR
MH	MOTOR HEATER, MANHOLE
MLO	MAIN LUGS ONLY
MPZ	MINI POWER ZONE
MPR	MOTOR PROTECTION RELAY
MS	MOTOR STARTER
MSC	MANUFACTURER SUPPLIED CABLE
MT	MOUNT
MTD	MOTOR TEMPERATURE DETECTOR
N	NEUTRAL
NC	NORMALLY CLOSED
NEMA	NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
NO	NORMALLY OPEN
NP	NAMEPLATE
NTS	NOT TO SCALE
OL	OVERLOAD RELAY
OLM	OPTICAL LINK MODULE
P	POLE
PB	PULL BOX
PC	PHOTOCELL
PH	PHASE
PM	PHASE MONITOR,POWER METER
PNL	PANEL
PP	POWER PANEL (480VAC)
PR	PAIR
PS	PRESSURE SWITCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE CONDUIT
RCPT	RECEPTACLE
RMS	ROOT MEAN SQUARE
RS	RIGID STEEL CONDUIT
RGS	RIGID GALVANIZED STEEL CONDUIT
RTU	REMOTE TELEMETRY UNIT
SC	SURGE CAPACITOR
SF	SUPPLY FAN
SH	SPACE HEATER
S/N	SOLID NEUTRAL
SPD	SURGE PROTECTION DEVICE
SSRVS	SOLID STATE REDUCED VOLTAGE STARTER
SS	STAINLESS STEEL
SV	SOLENOID VALVE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
T	THERMOSTAT
TB	TERMINAL BOARD
TDR	TIME DELAY RELAY
TJB	TERMINAL JUNCTION BOX
TS	THERMAL SWITCH
TSP	TWISTED SHIELDED PAIR
TYP	TYPICAL
UPS	UNINTERRUPTIBLE POWER SUPPLY
UVR	UNDER VOLTAGE RELAY
V	VOLTMETER, VOLT
VFD	VARIABLE FREQUENCY DRIVE
VS	VOLTMETER SWITCH
W	WATT
WHD	WATTHOUR DEMAND METER
WP	WEATHERPROOF
XFMR	TRANSFORMER

ONE LINE DIAGRAMS, RISER DIAGRAMS AND SCHEMATICS

SYMBOL	DESCRIPTION
5	MOTOR, SQUIRREL CAGE INDUCTION UNLESS OTHERWISE NOTED - HORSEPOWER INDICATED
	OVERLOAD RELAY HEATER
1	MAGNETIC STARTER WITH NEMA SIZE INDICATED
M	MOTOR CIRCUIT PROTECTOR, MAGNETIC, 3 POLE UNLESS INDICATED OTHERWISE.
400	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE UNLESS INDICATED OTHERWISE.
400 225	FUSED SWITCH, SWITCH AND FUSE CURRENT RATING INDICATED, 3 POLE UNLESS INDICATED OTHERWISE.
100	SWITCH - CURRENT RATING INDICATED, 3 POLE UNLESS INDICATED OTHERWISE.
400 600	DRAWOUT CIRCUIT BREAKER, LOW VOLTAGE 600= FRAME RATING, 400=TRIP SETTING
1200 1200	DRAWOUT CIRCUIT BREAKER, MEDIUM VOLTAGE 1200= FRAME RATING, 1200=TRIP SETTING
600 400	DRAWOUT FUSED SWITCH, LOW OR MEDIUM VOLTAGE 600= FRAME RATING, 400=FUSE RATING
(3)	CURRENT TRANSFORMER, NUMBER OF WINDINGS INDICATED
480-120 /208V 15 KVA, 3Ø K-4 RATED	TRANSFORMER, VOLTAGES, PHASE AND RATING INDICATED AS APPLICABLE
	LIGHTNING ARRESTER
	CAPACITOR OR SURGE CAPACITOR
M	UTILITY METER
G	GENERATOR
X 0-600V	METER SCALE RANGE SHOWN IF REQUIRED A - AMPS, V - VOLTS, PM - PHASE MONITOR, P - POWER METER
	FUSE
SPD	SURGE PROTECTION DEVICE
	GROUND
CPT 120V	CONTROL TRANSFORMER
GFR	GROUND FAULT RELAY WITH C.T.
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY OPEN
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY CLOSED
	PUSH BUTTON SWITCH, MAINTAINED CONTACTS WITH MECHANICAL INTERLOCK
	REMOTE DEVICE
A	INDICATING LIGHT - LETTER INDICATES COLOR A - AMBER, B - BLUE, C - CLEAR, G - GREEN, R - RED, W - WHITE
A	PUSH TO TEST AND CONNECT INDICATING LIGHT SCHEMATIC DIAGRAMS ONLY A - AMBER, B - BLUE, C - CLEAR, G - GREEN, R - RED, W - WHITE

SYMBOL	DESCRIPTION
S M	MANUAL MOTOR STARTER SWITCH, NEMA 4X SS UNLESS OTHERWISE NOTED. NUMBER OF POLES AS REQUIRED
PB 4X	PUSH-BUTTON STATION, NEMA 12 ENCLOSURE UNLESS INDICATED OTHERWISE. 4X = NEMA 4X 316 STAINLESS STEEL ENCLOSURE. SEE CONTROL DIAGRAMS FOR TYPE PUSH BUTTON REQUIRED
30 4X	NONFUSED DISCONNECT SWITCH, SIZE INDICATED, 3 POLE UNLESS INDICATED OTHERWISE, NEMA 12 ENCLOSURE, 4X = NEMA 4X 316 STAINLESS STEEL
F 60 40 4X	FUSED DISCONNECT SWITCH, SIZE INDICATED (60 = SWITCH RATING: 40 = FUSE RATING) 3 POLE UNLESS INDICATED OTHERWISE, NEMA 12 ENCLOSURE, 4X = NEMA 4X 316 STAINLESS STEEL
LC 30 4X	LIGHTING CONTACTOR, CURRENT RATING INDICATED, NEMA 12 ENCLOSURE UNLESS INDICATED OTHERWISE. SEE CONTROL DIAGRAM FOR NUMBER OF POLES. 4X = NEMA 4X 316 STAINLESS STEEL
2 4X	MAGNETIC STARTER, NEMA SIZE INDICATED, NEMA 12 ENCLOSURE, UNLESS INDICATED OTHERWISE. SEE CONTROL DIAGRAM. 4X = NEMA 4X 316 STAINLESS STEEL
2 4X	COMBINATION (FUSE OR CIRCUIT BREAKER AS INDICATED). MAGNETIC STARTER, NEMA SIZE INDICATED, NEMA 12 ENCLOSURE UNLESS INDICATED OTHERWISE. SEE CONTROL SCHEMATIC DIAGRAM. 4X = NEMA 4X 316 STAINLESS STEEL
	ELECTRIC RESISTANCE HEATER
ETM	ELAPSED TIME METER
CRX	CONTACT - NORMALLY OPEN WITH COIL INDICATED
CRX	CONTACT - NORMALLY CLOSED WITH COIL INDICATED
CRX	CONTROL RELAY, X=SEQUENTIAL NUMBER
LRX (L)	LATCHING RELAY, X=SEQUENTIAL NUMBER L - LATCH, U - UNLATCH
TDX NOTC	TIME DELAY RELAY, X=SEQUENTIAL NUMBER NOTC=NORMALLY OPEN TIMED CLOSED NOTO=NORMALLY OPEN TIMED OPEN AFTER CLOSE NCTO=NORMALLY CLOSED TIMED OPEN NCTC=NORMALLY CLOSED TIMED CLOSED AFTER OPEN
	TEMPERATURE
	OPENS ON RISING TEMPERATURE, CLOSES ON FALLING TEMPERATURE
	CLOSES ON RISING TEMPERATURE, OPENS ON FALLING TEMPERATURE
H O A XOO OOX	SELECTOR SWITCH: MAINTAINED CONTACT WITH CONTACT POSITION INDICATED, CHART IDENTIFIES OPERATION

POSITION			
CKT.	HAND	OFF	AUTO
1	X	O	O
2	O	O	X

X - CLOSED CONTACT
O - OPEN CONTACT

GENERAL

SYMBOL	DESCRIPTION
	CONNECTION POINT TO EQUIPMENT SPECIFIED, FURNISHED AND INSTALLED UNDER OTHER SECTIONS. RACEWAY, CONDUCTOR AND CONNECTION IN THIS SECTION.
1"C,2#12,1#12G 1"C,1-25/C TYPE 1	INDICATES RACEWAY AND CIRCUIT CONDUCTORS. FIRST NUMBER IS RACEWAY SIZE. THE FOLLOWING NUMBERS ARE THE CONDUCTOR QUANTITIES, SIZES, AND TYPES.
	DEMOLITION TO BE REMOVED OR DELETED

LINE WEIGHT

NEW

EXISTING

NOTE:
THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT BE UTILIZED ON PROJECT.

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED ADS
DRAWN MDG
CHECKED ADS
DATE OCTOBER 2025

ALEXANDAR D. STOJANOVIC LICENSE No 80308 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY ALEKSANDAR D. STOJANOVIC ON THE DATE ADJACENT TO THE SEAL ON THE COVER SHEET

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Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
ELECTRICAL
LEGEND

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7126I.10
DRAWING NO. 00GE01
SHEET NO. 27 OF 62

LAST SAVED BY: ADS

PROJECT NO. 7126I.10 FILE NAME: 00GE01 - Legend.dwg

GENERAL NOTES AND SPECIFICATIONS:

1. NOT USED.
2. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR TO INSTALL THE ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN BUT OBVIOUSLY NECESSARY FOR COMPLETION OF THE WORK SHALL BE INCLUDED.
3. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE 2017 (NFPA 70), ELECTRICAL SAFETY IN THE WORKPLACE (NFPA 70E), ALL MONROE COUNTY CODES AND LATEST FLORIDA BUILDING CODE.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO INCLUDE, BUT ARE NOT LIMITED TO, INSPECTIONS AND APPROVALS AND TO INCLUDE ALL FEES AS PART OF HIS BID IF NOT OTHERWISE NOTED. THE FOLLOWING PERMITS ARE REQUIRED: POWER, LIGHTING, INSTRUMENTATION, LIGHTNING PROTECTION, FIBER OPTIC, LOW VOLTAGE AND ELECTRICAL DEMOLITION.
5. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE ENGINEER AND THE OWNER.
6. THE CONTRACTOR SHALL, BEFORE SUBMITTING HIS BID, VISIT THE SITE OF THE PROJECT AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS. NO ALLOWANCE WILL BE MADE FOR EXISTING CONDITIONS OR FAILURE OF THE CONTRACTOR TO OBSERVE THEM.
7. ALL EQUIPMENT AND MATERIAL SHALL BE NEW AND U.L. LISTED WHERE APPLICABLE.
8. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL SYSTEMS INSTALLED OR MODIFIED UNDER THIS PROJECT AND REPAIR OR REPLACE ALL DEFECTIVE WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER.
9. ALL EQUIPMENT FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE.
10. ALL CONDUCTORS SHALL BE COPPER. NO ALUMINUM ALLOWED UNLESS SPECIFICALLY INDICATED ON DRAWINGS.
11. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL ELECTRICAL & CONTROL EQUIPMENT AND MATERIAL.
12. ALL CONTROL PANELS SHALL BE CONSTRUCTED BY A UL 508A APPROVED PANEL VENDOR AND SHALL BEAR A UL 508A LABEL ON THE PANEL.
13. THE DRAWINGS ARE NOT INTENDED TO SHOW THE EXACT LOCATION OF CONDUIT RUNS. THESE ARE TO BE COORDINATED WITH THE OTHER TRADES SO THAT CONFLICTS ARE AVOIDED PRIOR TO INSTALLATIONS.
14. ALL LOCATIONS OF EQUIPMENT, PANELS ETC. ARE SHOWN FOR ILLUSTRATION PURPOSES. CONTRACTOR SHALL VERIFY AND COORDINATE EXACT LOCATION AND SIZE WITH ALL SUBCONTRACTORS AND EQUIPMENT SUPPLIERS PRIOR TO ANY INSTALLATION AND THEN INSTALL AS SUCH WITH CORRESPONDING CONDUIT STUB-UPS.
15. SEE OTHER DISCIPLINE DRAWINGS FOR COORDINATION OF ALL DRAWINGS. ANY CONFLICTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION AND MOVEMENT OF CONDUITS OR OTHER ELECTRICAL EQUIPMENT SHALL BE ACCOMPLISHED WITHOUT ANY ADDITIONAL COST FOR THE OWNER.
16. LOCATIONS OF MANHOLES, HANDHOLES AND PULL BOXES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH EXISTING AND NEW PIPING OR CONDUIT AND ADJUST ACCORDINGLY.
17. NOT ALL CONDUITS SHOWN ON RISER AND ONE-LINE DIAGRAMS ARE SHOWN ON BUILDING LAYOUTS. CONTRACTOR SHALL SUPPLY ALL CONDUITS AND CABLES AS SHOWN ON RISER AND ONE-LINE DIAGRAMS.
18. ALL CIRCUITS SHALL BE IDENTIFIED IN JUNCTION BOXES, PULL BOXES, CONTROL PANELS, PANELBOARDS, LIGHTING POLES, CONTROLLERS AND SERVICE POINTS. IDENTIFICATION SHALL MATCH PANELBOARD SCHEDULES.
19. EXPOSED RUNS OF CONDUITS SHALL BE INSTALLED WITH RUNS PARALLEL OR PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS OR INTERSECTIONS OF VERTICAL PLANES AND CEILINGS, WITH RIGHT ANGLE TURNS CONSISTING OF SYMMETRICAL BENDS OR PULL BOXES AS INDICATED ON THE DRAWINGS. BENDS AND OFFSETS SHALL BE AVOIDED WHERE POSSIBLE.
20. INSTRUMENTATION IS LOW VOLTAGE SIGNALS SUCH AS 4-20MA, TELEPHONE COMMUNICATION, FIRE ALARM COMMUNICATION. POWER CONDUIT SHALL ONLY CROSS INSTRUMENTATION CONDUIT PERPENDICULARLY AT RIGHT ANGLES WITH 6" SEPARATION.
21. CONDUCTOR PULLING TENSIONS SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATION. CONTRACTOR SHALL INSTALL PULL BOXES TO MEET MANUFACTURER'S REQUIREMENTS.
22. MINIMUM DISTANCE ALLOWED BETWEEN POWER CONDUITS AND INSTRUMENTATION CONDUITS SHALL BE:

VOLTAGE	DISTANCE
4160V - 15KV TO INST. CONDUIT	3 FT
480V - 600V TO INST CONDUIT	2 FT
120V TO INST. CONDUIT	1 FT

23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUIT AND WIRING INSTALLATION FOR ALL VENDOR PROVIDED EQUIPMENT (PACKAGE SYSTEMS). IF THE SHOP DRAWINGS DIFFER FROM THE DESIGNED FACILITIES, THE CONTRACTOR SHALL REDESIGN THE FACILITIES AND SUBMIT THE REVISED DESIGN FOR THE ENGINEER'S APPROVAL ALONG WITH THE SHOP DRAWINGS. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER FOR THE REDESIGN NOR FOR ANY ADDITIONAL CONDUITS AND WIRING. DURING SUBMITTAL THE CONTRACTOR SHALL VERIFY ALL SUPPLIED BREAKER SIZES FOR ALL PACKAGED SYSTEMS SUCH AS HVAC, EXHAUST FANS, MIXERS, CHEMICAL PUMPS ETC. AND MODIFY ALL BREAKERS IN MCC'S AND PANELBOARDS ACCORDINGLY WITHOUT ANY ADDITIONAL COST TO THE OWNER.
24. ALL EXCAVATIONS FOR CONDUITS, HANDHOLES, MANHOLES AND PULLBOXES NEAR EXISTING PIPING, CONDUIT AND EQUIPMENT SHALL BE HAND EXCAVATED AND COORDINATED WITH THE OWNER.
25. MINIMUM DEPTH FROM TOP OF DUCT BANKS OR CONDUITS TO FINISHED GRADE SHALL BE 24" UNLESS OTHERWISE NOTED.
26. COLORED WARNING TAPE 6" WIDE SHALL BE INSTALLED 8" BELOW FINISHED GRADE DIRECTLY ABOVE ALL UNDERGROUND YARD CONDUITS ACCORDING TO THE FOLLOWING SCHEDULE:
    POWER: RED
    ALL OTHER CONDUITS: GREEN
27. CONTRACTOR SHALL RESTORE SIDEWALKS, ROADWAYS, SOD AND SPRINKLER SYSTEM PIPING TO MATCH EXISTING, AFTER THE COMPLETION OF THE CONDUIT AND PULLBOX INSTALLATION.
28. GROUNDING SHALL BE INSTALLED IN ACCORDANCE WITH NEC 2017, ARTICLE 250. THE GROUNDING SYSTEM TEST SHALL NOT EXCEED A 48 HOUR SPAN DRY RESISTANCE OF 10 OHMS. ADDITIONAL GROUNDING TO MEET THIS REQUIREMENT SHALL BE INSTALLED AT NO EXTRA COST. GROUNDING AND BONDING CONNECTIONS SHALL NOT BE PAINTED. ALL GROUNDING CONNECTIONS SHALL BE EXOTHERMIC UNLESS SPECIFICALLY INDICATED OTHERWISE.
29. AN EQUIPMENT GROUND WIRE SIZED PER NEC SHALL BE PULLED IN ALL ELECTRICAL CONDUITS, POWER AND CONTROL, AS SHOWN ON PLANS.
30. ALL ENCLOSURES, TJB, WIREWAY, PULL BOXES (EXCEPT IN-GROUND PULL BOXES AND MANHOLES) ETC. SHALL CONTAIN A GROUNDING BUS. CONNECT ALL RACEWAY BONDS TO THIS BUS VIA GROUNDING BUSHING AND EXTEND BONDING JUMPER FROM THIS BUS TO THE ENCLOSURE.
31. PRIMARY BUILDING GROUNDING SHALL BE AN EMBEDDED GRID OF MINIMUM #4/0 AWG WIRE INSTALLED IN THE FOUNDATION AND AROUND THE BUILDING PERIMETER TO FORM A COMPLETE LOOP. SECONDARY GROUND CONNECTIONS TO ALL METAL EQUIPMENT, HAND RAILS, STRUCTURAL STEEL, CONCRETE PADS, REBAR ETC. SHALL HAVE A MINIMUM #4 STRANDED COPPER CONDUCTOR BONDED USING APPROVED LUGS OR EXOTHERMIC CONNECTIONS. ALL EQUIPMENT GROUNDING CONDUCTORS PENETRATING CONCRETE SLABS OR FINISHED GRADE SHALL HAVE A 72" CONDUCTOR PIGTAIL AT EACH LOCATION FOR CONNECTION TO EQUIPMENT.
32. ALL CONCRETE ENCASED DUCTBANKS SHALL CARRY A MINIMUM #4/0 AWG BARE COPPER GROUND WIRE, OVER THE ENTIRE LENGTH, WHICH SHALL BE CONNECTED TO THE SITE GROUNDING GRID AND GROUND RODS LOCATED CONNECTING MANHOLES, HANDHOLES OR PULL BOXES.
33. CONTRACTOR SHALL CORE DRILL EXISTING CONCRETE WALLS, FLOORS, MANHOLES, HANDHOLES AND PULL BOXES FOR CONDUIT PENETRATIONS. SEAL PENETRATIONS WITH NON-SHRINK GROUT OR APPROPRIATE FIRE RATED DEVICES WHERE APPLICABLE.
34. ALL CONDUITS PENETRATING RATED FIRE WALLS OR RATED FIRE FLOORS SHALL BE INSTALLED WITH U.L. APPROVED DEVICES TO MAINTAIN THE FIRE RATING OF THE WALL OR FLOOR PENETRATED.
35. PROVIDE CONDUIT DUCT SEAL AT ALL CONDUIT ENDS.
36. ALL SPARE CONDUITS SHALL BE SEALED WITH A CAP AT BOTH ENDS AND A PULL STRING INSTALLED WITH IDENTIFICATION ON BOTH ENDS.
37. ALL RECEPTACLES SHALL BE INSTALLED 18" AFF UNLESS OTHERWISE NOTED. LIGHT SWITCHES SHALL BE MOUNTED 48" AFF UNLESS OTHERWISE NOTED.
38. ALL RECEPTACLES WITHIN 6' OF A SINK SHALL BE GFI.
39. FLEXIBLE CONDUITS SHALL BE USED TO TERMINATE ALL MOTORS AND OTHER VIBRATING EQUIPMENT AND SHALL BE BETWEEN 18" AND 3' IN LENGTH.
40. TYPEWRITTEN PANEL SCHEDULES SHALL BE INSTALLED IN EACH PANELBOARD, AND TYPEWRITTEN TERMINAL BLOCK SCHEDULES IN EACH CONTROL CABINET.
41. ALL SPD'S SHALL BE INTEGRAL TO THE NEW EQUIPMENT SHOWN AND SUPPLIED AS ONE UNIT AND ONE U.L. ENTITY.
42. ALL MATERIAL IN DESIGNATED CORROSIVE AREAS SHALL BE NEMA 4X STAINLESS STEEL OR NON-METALLIC.
43. ALL OUTDOOR LIGHTING FIXTURES SHALL BE OF COPPER FREE CONSTRUCTION.
44. ALL REFERENCES TO SS OR STAINLESS STEEL SHALL BE 316 STAINLESS STEEL.
45. CONTRACTOR SHALL BALANCE PANELBOARD LOADS AT THE END OF THE PROJECT.
46. ALL YARD CONDUITS SHALL BE DIRECT BURIAL UNLESS NOTED OTHERWISE. REFER TO DRAWING 00E11 FOR INSTALLATION DETAILS.
47. ALL CONDUIT CONNECTIONS TO NEMA 4X PANELS/ENCLOSURES SHALL USE MYERS HUBS (OR EQUAL) TO MAINTAIN 4X RATING.
48. NOT USED.
49. CONTRACTOR SHALL PROVIDE FOR A SATISFACTORY NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) INSPECTION FOR ALTERATIONS TO CONTROL PANELS, ELECTRICAL EQUIPMENT, OR ASSEMBLIES TO MAINTAIN THE ORIGINAL UL RATING.
50. PROVIDE AS-BUILT DRAWINGS AND MANUALS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 13-413.ABC.2.1 & 13-413.ABC.2.2
51. CONDUCTORS SHALL BE STRANDED COPPER, NO ALUMINUM ALLOWED UNLESS SPECIFICALLY INDICATED ON DRAWINGS. POWER CONDUCTORS SHALL BE XHHW IN WET LOCATIONS OR IN UNDERGROUND RACEWAYS AND SHALL BE THWN/THHN IN DRY LOCATIONS.
52. INSTRUMENTATION AND CONTROL CIRCUITS ORIGINATING FROM CONTROL PANELS CONTAINING A PLC ARE CLASSIFIED AS CLASS 1 POWER-LIMITED CIRCUITS PER NEC ARTICLE 725. CONTROL AND INSTRUMENTATION AND CONTROL CIRCUITS ORIGINATING FROM CONTROL PANELS WITHOUT A PLC OR FROM A MOTOR CONTROL CENTER ARE CLASSIFIED AS CLASS 1 REMOTE CONTROL AND SIGNALING CIRCUITS PER NEC ARTICLE 725.
53. ALL VERTICAL CONDUIT PENETRATIONS FROM CONCRETE SLAB SHALL HAVE A MAINTENANCE PAD TO PREVENT CORROSION.
54. AFFIX NAMEPLATES TO ALL DISCONNECT SWITCHES WITH THE NAME OF THE EQUIPMENT SERVED BY THE DISCONNECT SWITCH IN ACCORDANCE WITH NEC ARTICLE 110.22. NAMEPLATES SHALL BE AS DESCRIBED IN SPECIFICATION 26_05_04.
55. THERE ARE NO CLASSIFIED AREAS PERTAINING TO NEC ARTICLE 500 IN THIS FACILITY.

NOTE:

THE EXISTING ELECTRICAL INFORMATION IS OBTAINED FROM "RECORD DRAWINGS" AND OTHER "AS-BUILT DRAWINGS". CONTRACTOR SHALL VERIFY THE INFORMATION PROVIDED IN THESE DRAWINGS AND ADJUST ACCORDINGLY. ANY CONFLICTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BEFORE SUBMITTING HIS BID.

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED ADS | DRAWN MDG | CHECKED ADS | DATE OCTOBER 2025

ALEKSANDAR D. STOJANOVIC, LICENSE No 82068, STATE OF FLORIDA, PROFESSIONAL ENGINEER

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Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
ELECTRICAL
NOTES

VERIFY SCALES
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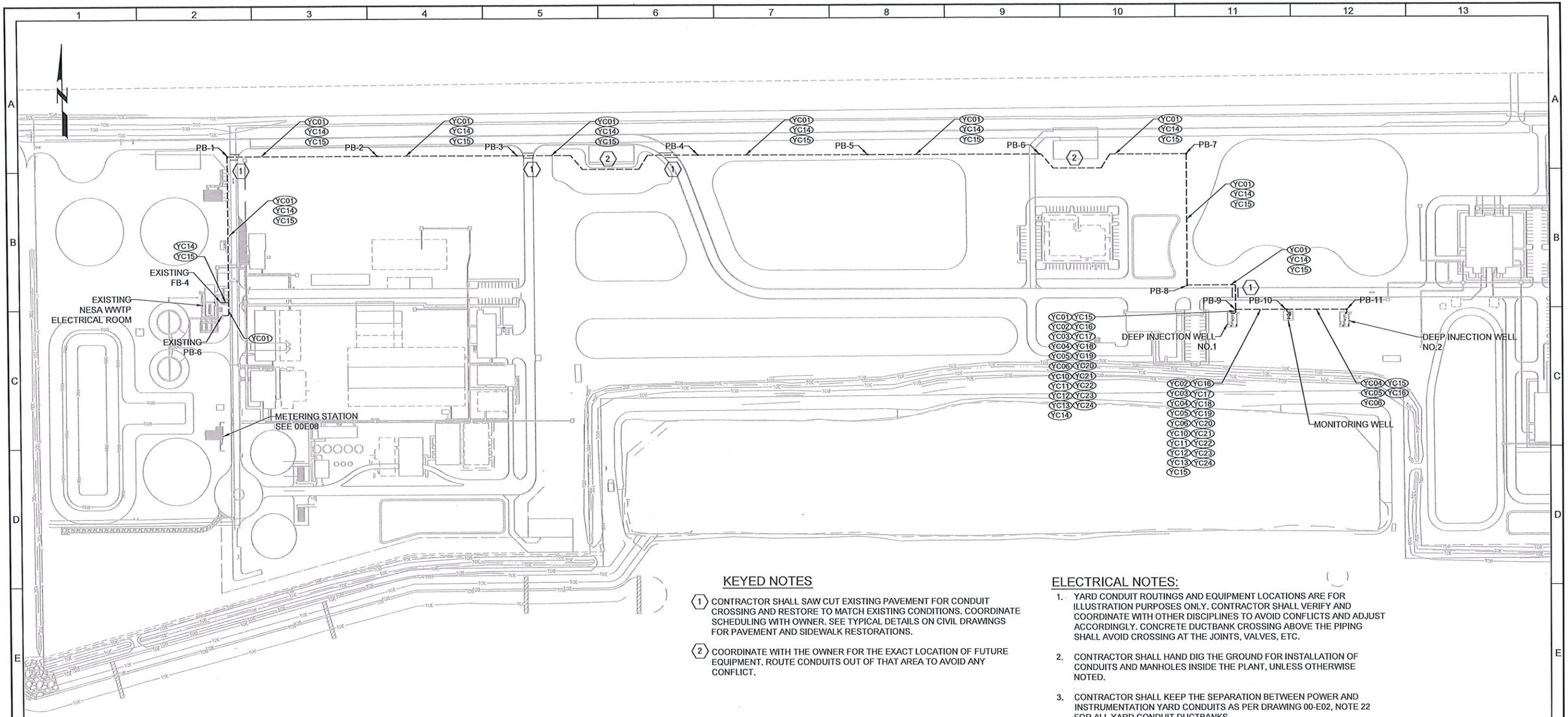
JOB NO. 7126I.10
DRAWING NO. 00GE02
SHEET NO. 28 OF 62

LAST SAVED BY: ADS

PROJECT NO. 7126I.10 FILE NAME: 00GE02 - Notes.dwg



KEYED NOTES

1. CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT FOR CONDUIT CROSSING AND RESTORE TO MATCH EXISTING CONDITIONS. COORDINATE SCHEDULING WITH OWNER. SEE TYPICAL DETAILS ON CIVIL DRAWINGS FOR PAVEMENT AND SIDEWALK RESTORATIONS.
2. COORDINATE WITH THE OWNER FOR THE EXACT LOCATION OF FUTURE EQUIPMENT. ROUTE CONDUITS OUT OF THAT AREA TO AVOID ANY CONFLICT.

ELECTRICAL NOTES:

1. YARD CONDUIT ROUTINGS AND EQUIPMENT LOCATIONS ARE FOR ILLUSTRATION PURPOSES ONLY. CONTRACTOR SHALL VERIFY AND COORDINATE WITH OTHER DISCIPLINES TO AVOID CONFLICTS AND ADJUST ACCORDINGLY. CONCRETE DUCTBANK CROSSING ABOVE THE PIPING SHALL AVOID CROSSING AT THE JOINTS, VALVES, ETC.
2. CONTRACTOR SHALL HAND DIG THE GROUND FOR INSTALLATION OF CONDUITS AND MANHOLES INSIDE THE PLANT, UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL KEEP THE SEPARATION BETWEEN POWER AND INSTRUMENTATION YARD CONDUITS AS PER DRAWING 00-E02, NOTE 22 FOR ALL YARD CONDUIT DUCTBANKS.
4. CONTRACTOR SHALL RESTORE SIDEWALK, WALKWAY, ETC. AFTER THE COMPLETION OF THE PROJECT.
5. ALL CONDUITS NOT DEFINED AS YARD CONDUITS ARE ASSUMED TO BE RUN UNDER A CONCRETE SLAB. IF A CONDUIT IS INSTALLED OUTSIDE OF CONCRETE SLAB, FOR WHATEVER REASON, IT NEEDS TO BE CONCRETE ENCASED AND MARKED AS YARD CONDUIT.

0 64' 128' 256'
1/128"=1'-0"

REV	DATE	BY	DESCRIPTION
1	03/25	RC	BID SET

DESIGNED ADS
DRAWN MDG
CHECKED ADS
DATE MARCH 2025

ALEKSANDAR D. STOJANOVIC LICENSE No 80369 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
ELECTRICAL
SITE PLAN

VERIFY SCALES
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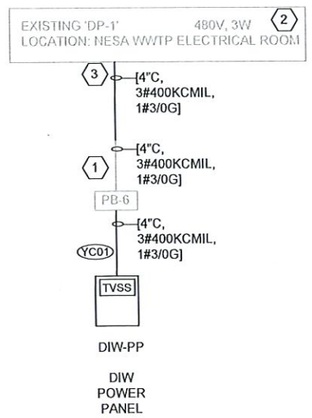
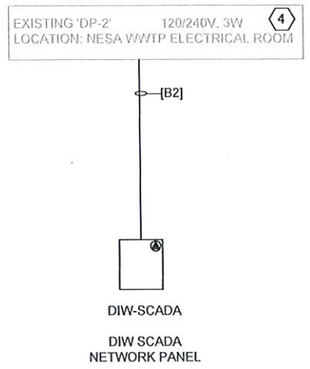
JOB NO. 7126I.10
DRAWING NO. 00E01
SHEET NO. 29 OF 61

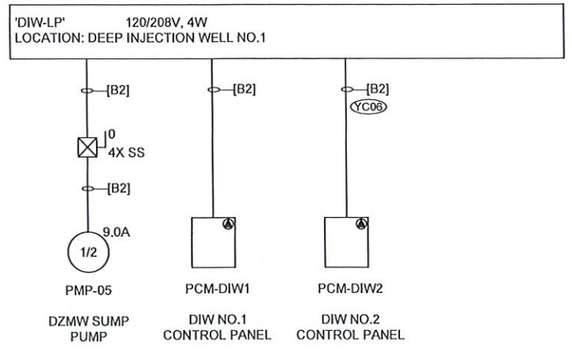
LAST SAVED BY: ADS

PROJECT NO. 10523A.43 FILE NAME: 00E01 - Site Plan.dwg

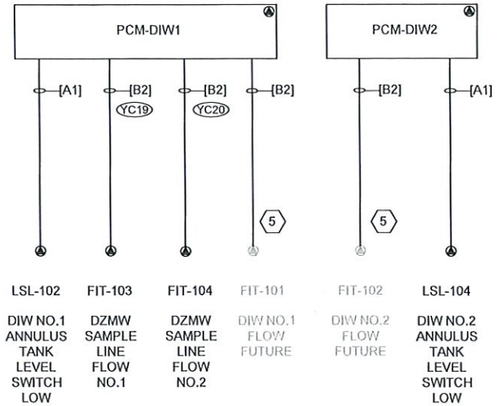




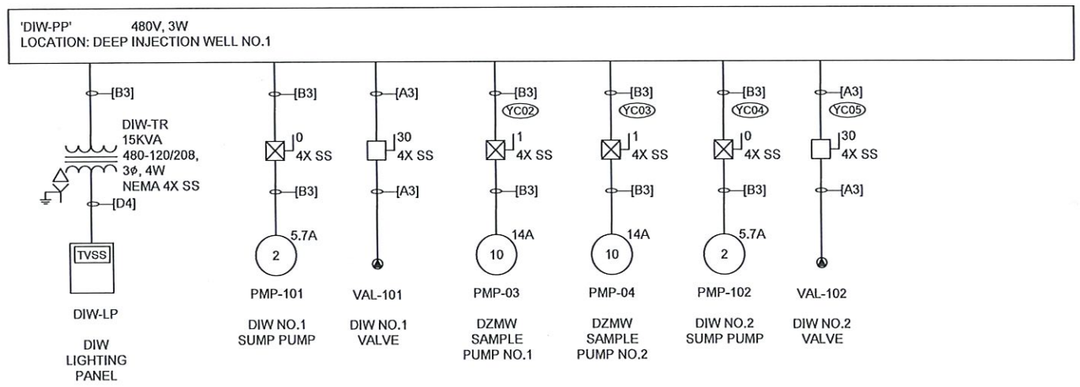
EXISTING DISTRIBUTION PANEL DP-2



LIGHTING PANEL DIW-LP



EXISTING DISTRIBUTION PANEL DP-1



POWER PANEL DIW-PP

KEYED NOTES:

1. CONTRACTOR SHALL FIELD INVESTIGATE AND UTILIZE EXISTING SPARE CONDUIT RUN FROM EXISTING PB-6 TO STUB-UP LOCATION IN NESA WWTP ELECTRICAL ROOM FOR PORTION BETWEEN THE EXISTING PB-6 AND ELECTRICAL ROOM IF FEASIBLE. OTHERWISE PROVIDE A NEW CONDUIT AS PER DESIGN.
2. CONTRACTOR SHALL MODIFY THE EXISTING DP-1 PANEL AS NECESSARY IN ORDER TO INSTALL 100A BREAKER. PROVIDED 100A BREAKER SHALL HAVE LUGS WHICH ACCEPTS MINIMUM 350KCMIL CONDUCTOR. IF CONTRACTOR IS NOT ABLE TO PROVIDE 100A BREAKER WITH LUGS WHICH ACCEPTS 350KCMIL CONDUCTOR, CONTRACTOR SHALL UPSIZE THE BREAKER ACCORDINGLY TO PROVIDE BREAKER WITH LUGS THAT ACCEPTS 350KCMIL. CONTRACTOR IS RESPONSIBLE TO DO ALL NECESSARY MODIFICATION TO THE PANEL INCLUDING BUT NOT LIMITED TO REPLACING EXISTING SPARE BREAKERS WITH NEW 100A CIRCUIT BREAKER, UTILIZING EMPTY SPACE FOR NEW BREAKER, ETC. FOR COMPLETE WORKING SYSTEM IN PLACE.
3. BEFORE CONDUCTOR TERMINATION TO THE CIRCUIT BREAKER CONTRACTOR SHALL REDUCE WIRE SIZE AS NECESSARY USING APPROVED WATERPROOF SPLICING KIT OR REDUCTION LUGS. THE SPLICING POINT IS REQUIRED TO BE ACCESSIBLE FOR MAINTENANCE.
4. CONTRACTOR SHALL FIELD INVESTIGATE AND UTILIZE SPARE 20A CIRCUIT BREAKER IN THE DP-2 IF FEASIBLE. OTHERWISE CONTRACTOR SHALL MODIFY THE EXISTING DP-2 PANEL AS NECESSARY IN ORDER TO INSTALL NEW 20A CIRCUIT BREAKER IN EMPTY SPACE.
5. CONTRACTOR SHALL RUN EMPTY CONDUIT FOR FUTURE FLOWMETER AND PROVIDE STUBUPS AT LOCATION OF FUTURE FLOW METER

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JOB NO. 7126I.10
DRAWING NO. 00E02
SHEET NO. 30 OF 62

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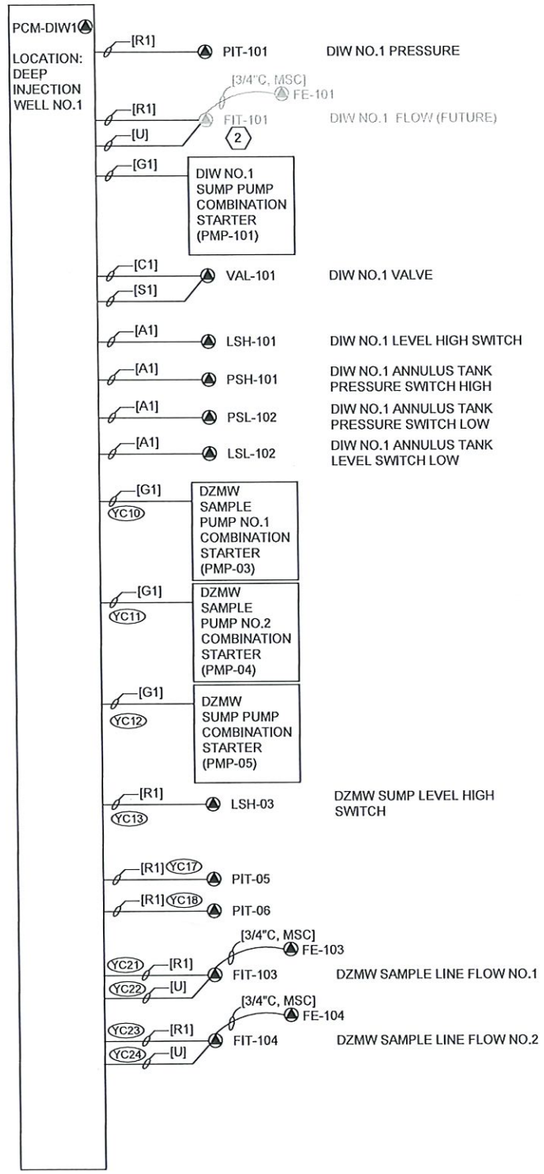
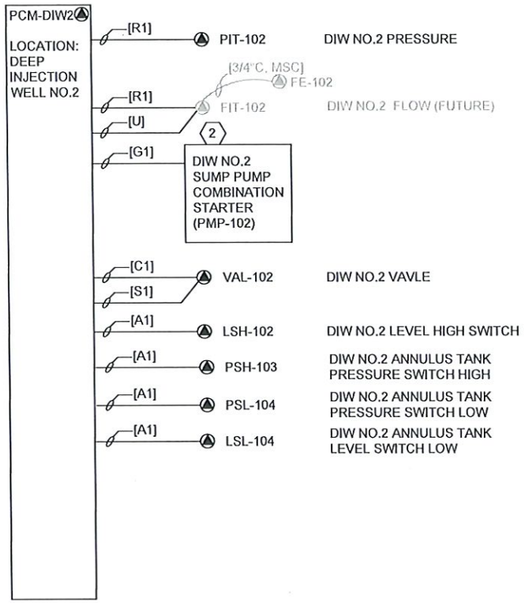
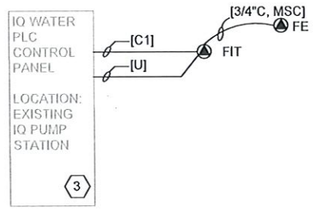
PROJECT NO. 7126I.10 FILE NAME: 00E02 - Riser Diagrams 1.dwg



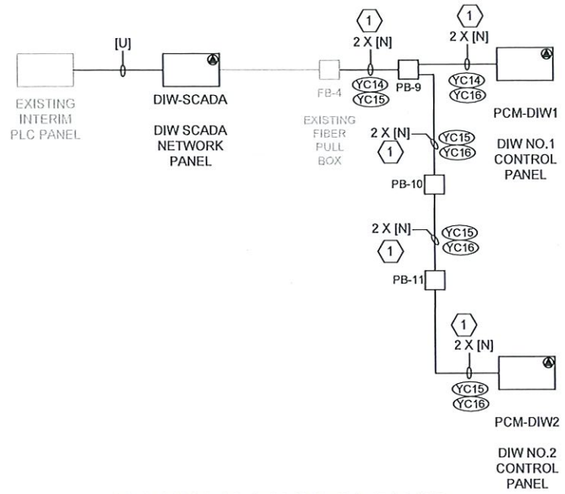
PCM-DIW1 CONTROL RISER



PCM-DIW2 CONTROL RISER



IQ WATER PLC CONTROL PANEL CONTROL RISER



NETWORK CONTROL RISER

KEYED NOTES:

1. CONTRACTOR SHALL RUN FIRST FIBER OPTIC CABLE FROM PCM-DIW1 TO DIW-SCADA NETWORK CONTROL PANEL, SECOND FIBER OPTIC CABLE FROM PCM-DIW2 TO DIW-SCADA NETWORK CONTROL PANEL AND THIRD FIBER OPTIC CABLE FROM PCM-DIW1 TO PCM-DIW2 UTILIZING CONDUITS AS SHOWN ON THE NETWORK CONTROL RISER. FIBER OPTIC CABLE SHALL BE IN ITS OWN SEPARATE CONDUIT. RUNNING MULTIPLE FIBER OPTIC CABLES THROUGH THE SAME CONDUIT IS NOT ALLOWED. FOR THE EXACT FIBER OPTIC CABLE TYPE, QUANTITY AND REQUIREMENTS REFER TO THE NETWORK BLOCK DIAGRAM ON DRAWING 03N01.
2. CONTRACTOR SHALL RUN EMPTY CONDUIT FOR FUTURE FLOWMETER AND PROVIDE STUBUPS AT LOCATION OF FUTURE FLOW METER.
3. CONTRACTOR SHALL FIELD INVESTIGATE AND MODIFY THE EXISTING IQ WATER PLC CONTROL PANEL TO PROVIDE 120VAC POWER FOR THE NEW FIT. PERFORM ALL NECESSARY PANEL MODIFICATIONS, INCLUDING INSTALLING A DEDICATED CIRCUIT BREAKER OR A FUSED TERMINAL BLOCK, TO PROVIDE POWER SUPPLY FOR THE FIT AND TERMINATING THE NETWORK CAT6 CABLE FROM FLOWMETER AT THE EXISTING NETWORK SWITCH IN THE PANEL.

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DRAWING NO. 00E03
SHEET NO. 31 OF 62

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PROJECT NO. 7126I.10 FILE NAME: 00E03 - Riser Diagrams 2.dwg

	CIRCUIT SCHEDULE 3PH, 3W OR 1PH, 3W	
CKT I.D.	CONDUIT AND CONDUCTOR SIZE	AMPS
[A3]	[3/4 "C, 3#12, 1#12G]	20
[B3]	[3/4 "C, 3#10, 1#10G]	30
[C3]	[1"C, 3#8, 1#10G]	40
[D3]	[1"C, 3#6, 1#10G]	50
[E3]	[1 1/4 "C, 3#4, 1#10G]	60
[F3]	[1 1/4 "C, 3#4, 1#8G]	70
[G3]	[1 1/4 "C, 3#3, 1#8G]	80
[H3]	[1 1/2 "C, 3#2, 1#8G]	90
[J3]	[1 1/2 "C, 3#1, 1#8G]	100
[K3]	[2 "C, 3#1/O, 1#6G]	150
[L3]	[2"C, 3#2/O, 1#6G]	175
[M3]	[2"C, 3#3/O, 1#6G]	200
[N3]	[2 1/2 "C, 3#4/O, 1#4G]	225
[P3]	[2 1/2 "C, 3-250KCMIL, 1#4G]	250
[Q3]	[3 1/2"C, 3-500KCMIL, 1#3G]	350
[R3]	2 EA.[2 "C, 3-3/O, 1#3G]	400
[S3]	2 EA.[2 1/2 "C, 3-250KCMIL, 1#2G]	500
[T3]	2 EA.[3"C, 3-350KCMIL, 1#1G]	600
[U3]	2 EA.[4"C, 3-500KCMIL, 1#1/OG]	700
[V3]	2 EA.[5"C, 3-600KCMIL, 1#1/OG]	800
[W3]	3 EA.[3 1/2"C, 3-500KCMIL, 1#2/OG]	1000
[X3]	4 EA.[3"C, 3-350KCMIL, 1#3/OG]	1200
[Y3]	5 EA.[4"C, 3-500KCMIL, 1#4/OG]	1600
[Z3]	6 EA.[4"C,3-500KCMIL, 1 -250KCMIL G]	2000
[ZA3]	6 EA.[4"C,3-600KCMIL,1 -250KCMIL G]	2500
[ZB3]	8 EA.[4"C,3-600KCMIL, 1 -600KCMIL G]	3000
[ZC3]	8 EA.[4"C,3-600KCMIL, 1 -600KCMIL G/N]	3000
[ZD3]	10 EA.[4"C,3-600KCMIL, 1 -600KCMILG]	4000

	CIRCUIT SCHEDULE - CONTROL, INSTRUMENTATION
CKT I.D.	CONDUIT AND CONDUCTOR SIZE
[A1]	[3/4 "C, 2#14, 1#14G]
[B1]	[3/4 "C, 3#14, 1#14G]
[C1]	[3/4 "C, 4#14, 1#14G]
[D1]	[3/4 "C, 5#14, 1#14G]
[E1]	[3/4 "C, 6#14, 1#14G]
[F1]	[3/4 "C, 7#14, 1#14G]
[G1]	[1 "C, 9#14, 1#14G]
[H1]	[1"C, 11#14, 1#14G]
[J1]	[1 1/2"C, 30#14, 1#14G]
[K1]	[1 1/4"C, 7/C TYPE A]
[LI]	[1 1/4"C, 12/C TYPE A]
[M1]	[1 1/2 "C, 19/C TYPE A]
[N1]	[2"C, 25/C TYPE A]
[P1]	[2"C, 37/C TYPE A]
[Q1]	[3/4 "C, 1#16, TW PR]
[R1]	[3/4 "C, 1-TYPE B, TW SHLD PR]
[S1]	[1 "C, 2-TYPE B, TW SHLD PR]
[T1]	[1 1/4 "C, 3-TYPE B, TW SHLD PR]
[U1]	[1 1/4 "C, 4-TYPE B, TW SHLD PR]
[V1]	[2 "C, 8-TYPE B, TW SHLD PR]
[W1]	[T"C. 1-BELDEN 3092A CONTROLNET]
[X1]	[3 "C, 100#14, 1#12G]
[Y1]	[2"C, 20#14, 1#14G]
[Z1]	[2"C, 14-TYPE B, TW SHILD PR]

	CIRCUIT SCHEDULE 3PH, 4W	
CKT I.D.	CONDUIT AND CONDUCTOR SIZE	AMPS
[A4]	[3/4 "C, 4#12, 1#12G]	20
[B4]	[3/4 "C, 4#10, 1#10G]	30
[C4]	[1"C, 4#8, 1#10G]	40
[D4]	[1 1/4"C, 4#6, 1#10G]	50
[E4]	[1 1/4 "C, 4#4, 1#10G]	60
[F4]	[1 1/4 "C, 4#4, 1#8G]	70
[G4]	[1 1/2 "C, 4#3, 1#8G]	80
[H4]	[1 1/2"C, 4#2, 1#8G]	90
[J4]	[2"C, 4#1, 1#8G]	100
[K4]	[2"C, 4#1/O, 1#6G]	150
[L4]	[2 1/2"C, 4#2/O, 1#6G]	175
[M4]	[2 1/2 "C, 4#3/O, 1#6G]	200
[N4]	[3 "C, 4#4/O, 1#4G]	225
[P4]	[3"C, 4-250KCMIL, 1#4G]	250
[Q4]	[3 1/2"C, 4-350KCMIL, 1#3G]	300
[R4]	2 EA.[2 1/2 "C, 4#3/O, 1#3G]	400
[S4]	2 EA.[3"C, 4-250KCMIL, 1#2G]	500
[T4]	2 EA.[4"C, 4-350KCMIL, 1#1G]	600
[U4]	2 EA.[4"C, 4-500KCMIL, 1#1/O G]	700
[V4]	3 EA.[4"C, 4-350KCMIL, 1#1/O G]	800
[W4]	3 EA.[4"C, 4-500KCMIL, 1#2/O G]	1000
[X4]	4 EA.[4"C, 4-350KCMIL, 1#3/O G]	1200
[Y4]	5 EA.[4"C, 4-500KCMIL, 1#4/O G]	1600
[Z4]	6 EA.[4"C, 4-500KCMIL, 1-250KCMIL G]	2000

	CIRCUIT SCHEDULE 1PH, 2W	
CKT I.D.	CONDUIT AND CONDUCTOR SIZE	AMPS
[A2]	[3/4 "C, 2#12, 1#12G]	15
[B2]	[3/4 "C, 2#12, 1#12G]	20
[C2]	[3/4 "C, 2#10, 1#10G]	30
[D2]	[3/4 "C, 2#8, 1#10G]	40
[E2]	[1 "C, 2#6, 1#10G]	50
[F2]	[1"C, 2#4, 1#10G]	60
[G2]	[1"C, 2#4, 1#8G]	70
[H2]	[1 1/4 "C, 2#3, 1#8G]	80
[J2]	[1 1/4 "C, 2#2, 1#8G]	90
[K2]	[1 1/4 "C, 2#1, 1#8G]	100
[L2]	[1 1/2 "C, 2#1/O, 1#6G]	150
[M2]	[1 1/2 "C, 2#2/O, 1#6G]	175
[N2]	[2"C, 2#3/O, 1#6G]	200
[P2]	[2"C, 2#4/O, 1#4G]	225
[Q2]	[2 1/2 "C, 2-250KCMIL, 1#4G]	250
[R2]	[2 1/2 "C, 2-350KCMIL, 1#4G]	300
[S2]		
[T2]		
[U2]		
[V2]		
[W2]		
[X2]		
[Y2]		
[Z2]		

[A]	[3/4"C, EMPTY]
[B]	[2"C, EMPTY]
[C]	[2 1/2"C, EMPTY]
[D]	[1 1/4"C, 4#12, 1 #12G]
[E]	[1 1/2"C, 3#10, 3#14G ARMORED CABLE]
[F]	[1 1/4"C, 3#8, 1 #10G]
[G]	[1 1/4"C, 5-TYPE B, TW SHLD PR]
[H]	[2 1/2"C, 15-TYPE B, TW SHLD PR]
[I]	[1"C, 14#14, 1 #14G]
[J]	[2 1/2"C, 3-2/0, 3#6G VFD CABLE]
[K]	[1"C, EMPTY]
[L]	[4"C, WITH INNERDUCT FOR FO]
[M]	[1"C, 4-CAT 6e]
[N]	[2"C, FOR FIBER OPTIC CABLES]
[O]	[3"C, 3-350KCMIL, 1#3G]
[P]	[3"C, 4#300KCMIL, 1#3G]
[Q]	8EA.[4"C, 3-500KCM, 1-350KCMG]
[R]	[11/2"C, 40#14, 1#14G]
[S]	[11/4"C, 20#14, 2#12, 1#12G]
[T]	[4"C-3#600KCM, 1#2G]
[U]	[1"C, CAT 6]
[V]	[1"C, I&C SUPPLIED CABLE, 1#14G]
[W]	[2"C, 60#14, 1#14G]
[Y]	[3"C, 18-TYPE B, TW SHILD PR]
[Z]	[1"C, 1-CAT 6e]
[B6]	[1 1/4"C, 3#10, 3#14G ARMORED CABLE]
[C6]	[1 1/4"C, 3#8, 3#14G ARMORED CABLE]
[D6]	[2"C, 3#2, 3#10G VFD CABLE]
[E6]	[1 1/2"C, 3#4, 3#12G VFD CABLE]
[G6]	[2"C, 3#2, 3#10G VFD CABLE]
[K6]	[2 1/2"C, 3#1/O, 3#10G VFD CABLE]
[L6]	[3"C, 3#2/O, 3#8G VFD CABLE]
[M6]	[2 1/2"C, 3#3/O, 1#4G VFD CABLE]
[N6]	[3 1/2"C, 3#4/O, 3#4G VFD CABLE]
[R6]	2 EA.[3"C, 3#3/O, 3#4G]
[S6]	2 EA.[3"C, 3-250KCMIL, 3#4G]
[Q6]	[4"C, 3#500KCM, 3#1G VFD CABLE]

YARD CONDUIT SCHEDULE

YC #	CONDUIT AND WIRES	FROM	TO	REMARKS
YC01	SEE DWG. 00E02	EXISTING PB-6 @ NESA WWTP ELECTRICAL ROOM	DIW-PP @ DEEP INJECTION WELL NO.1	00E01
YC02	SEE DWG. 00E02	DIW-PP @ DEEP INJECTION WELL NO.1	PMP-03 @ MONITORING WELL	00E01
YC03	SEE DWG. 00E02	DIW-PP @ DEEP INJECTION WELL NO.1	PMP-04 @ MONITORING WELL	00E01
YC04	SEE DWG. 00E02	DIW-PP @ DEEP INJECTION WELL NO.1	PMP-02 @ DEEP INJECTION WELL NO.2	00E01
YC05	SEE DWG. 00E02	DIW-PP @ DEEP INJECTION WELL NO.1	VAL-02 @ DEEP INJECTION WELL NO.2	00E01
YC06	SEE DWG. 00E02	DIW-LP @ DEEP INJECTION WELL NO.1	PCM-DIW2 @ DEEP INJECTION WELL NO.2	00E01
YC07	NOT USED			
YC08	NOT USED			
YC09	NOT USED			
YC10	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	PMP-03 @ MONITORING WELL	00E01
YC11	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	PMP-04 @ MONITORING WELL	00E01
YC12	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	PMP-05 @ MONITORING WELL	00E01
YC13	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	LSH-03 @ MONITORING WELL	00E01
YC14	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	DIW-SCADA @ NESA WWTP ELECTRICAL ROOM	00E01
YC15	SEE DWG. 00E03	PCM-DIW2 @ DEEP INJECTION WELL NO.1	DIW-SCADA @ NESA WWTP ELECTRICAL ROOM	00E01
YC16	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	PCM-DIW2 @ DEEP INJECTION WELL NO.1	00E01
YC17	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	PIT-05 @ MONITORING WELL	00E01
YC18	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	PIT-06 @ MONITORING WELL	00E01
YC19	SEE DWG. 00E02	PCM-DIW1 @ DEEP INJECTION WELL NO.1	FIT-103 @ MONITORING WELL	00E01
YC20	SEE DWG. 00E02	PCM-DIW1 @ DEEP INJECTION WELL NO.1	FIT-104 @ MONITORING WELL	00E01
YC21	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	FIT-103 @ MONITORING WELL	00E01
YC22	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	FIT-103 @ MONITORING WELL	00E01
YC23	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	FIT-104 @ MONITORING WELL	00E01
YC24	SEE DWG. 00E03	PCM-DIW1 @ DEEP INJECTION WELL NO.1	FIT-104 @ MONITORING WELL	00E01

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DRAWING NO. 00E04
SHEET NO. 32 OF 62

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EXISTING PANELBOARD DP-1 SCHEDULE

BUS AMPS A	BUS AMPS B	BUS AMPS C	LOAD	POLES	AMPS	BUS	AMPS	POLES	LOAD	BUS AMPS A	BUS AMPS B	BUS AMPS C
100.0			TRANSFORMER T1 75KVA, 12/240	2	200	1 A	2	30	3 SPD DEVICE	0.0		
	100.0		‖	‖	‖	3 B	4	‖	‖ ‖		0.0	
		40.0	TRANSFORMER T2 25KVA, 12/240	2	70	5 C	6	‖	‖ ‖			0.0
40.0			‖	‖	‖	7 A	8	20	3 CLARIFIER #1	2.1		
	1.2		MOV-A POT. WTR TANK BYPASS MODE	3	20	9 B	10	‖	‖ ‖		2.1	
		1.2	‖	‖	‖	11 C	12	‖	‖ ‖			2.1
1.2			‖	‖	‖	13 A	14	20	3 CLARIFIER #2	2.1		
	1.2		MOV-B DIVERT TO WTR TANK	3	20	15 B	16	‖	‖ ‖		2.1	
		1.2	‖	‖	‖	17 C	18	‖	‖ ‖			2.1
1.2			‖	‖	‖	19 A	20	30	3 ELECTRICAL ROOM A/C #1	21.3		
	1.2		MOV-C POT. WTR TANK BOOSTER MODE	3	20	21 B	22	‖	‖ ‖		21.3	
		1.2	‖	‖	‖	23 C	24	‖	‖ ‖			21.3
1.2			‖	‖	‖	25 A	26	30	3 ELECTRICAL ROOM A/C #2	21.3		
	1.2		MOV-D POT. WTR TANK REPUMP MODE	3	20	27 B	28	‖	‖ ‖		21.3	
		1.2	‖	‖	‖	29 C	30	‖	‖ ‖			21.3
1.2			‖	‖	‖	31 A	32	20	3 MIXER CONTROL PANEL	14.0		
	40.0		DP-5 CL TANKS DIST. PANEL	3	100	33 B	34	‖	‖ ‖		14.0	
		40.0	‖	‖	‖	35 C	36	‖	‖ ‖			14.0
40.0			‖	‖	‖	37 A	38	20	3 ODOR CONTROL SYSTEM	14.0		
	44.3		**DIW-PP DEEP INJECTION WELL PANEL**	**3**	**100**	39 B	40	‖	‖ ‖		14.0	
		43.4	‖	‖	‖	41 C	42	‖	‖ ‖			14.0
43.4			‖	‖	‖	43 A	44	20	3 SECURITY GATE	0.0		
			SPACE	‖	‖	45 B	46	‖	‖ ‖		0.0	
			‖	‖	‖	47 C	48	‖	‖ ‖			0.0
			‖	‖	‖	49 A	50	20	3 SPARE			
			SPACE	‖	‖	51 B	52	‖	‖ ‖			
			‖	‖	‖	53 C	54	‖	‖ ‖			
			‖	‖	‖	55 A	56	20	3 SPARE			
			SPACE	‖	‖	57 B	58	‖	‖ ‖			
			‖	‖	‖	59 C	60	‖	‖ ‖			
			‖	‖	‖	61 A	62	20	3 SPARE			
			SPACE	‖	‖	63 B	64	‖	‖ ‖			
			‖	‖	‖	65 C	66	‖	‖ ‖			

TOTAL AMPS:	BUS A: 303.0A	BUS B: 263.9A	BUS C: 203.0A	CONNECTED KVA: 213.4KVA	RUNNING KVA:

RATED VOLTAGE: ☐ 120/208 ■ 480 3 PHASE, 3 WIRE	BRANCH POLES ☐ 12 ☐ 24 ☐ 30 ☐ 42 ☐ 54 ☐ 60 ■ 72
RATED AMPS: ☐ 100 ☐ 225 ☐ 400 ■ 600	CABINET: ■ SURFACE ☐ FLUSH
NEUTRAL BUS ☐ 100% ■ 150% ☐ 200%	■ GROUND BUS ☐ HINGED DOOR ■ KEYED DOOR LATCH LOCATION: NESA WWTP ELECTRICAL ROOM
■ CIRCUIT BREAKER (BOLT-IN) BRANCH DEVICES	■ TVSS ENCLOSURE TYPE: ■ NEMA 1 ☐ NEMA 3R NEMA 4X SS ☐ _____
☐ MAIN LUGS ONLY	MAIN 600 AMPS ■ BREAKER ☐ _____ TO BE GFI BREAKERS
PANELBOARD MUST BE RATED TO INTERRUPT A SHORT CIRCUIT ISC OF 65,000 AMPS SYMMETRICAL.	
APPROVED MF'RS. SEE SPECIFICATION.	COPPER BUSSES MAIN LUGS _____ SETS SIZE: _____

PANELBOARD DIW-LP SCHEDULE

BUS AMPS A	BUS AMPS B	BUS AMPS C	LOAD	POLES	AMPS	BUS	AMPS	POLES	LOAD	BUS AMPS A	BUS AMPS B	BUS AMPS C
9.0			PMP-05 DZMW SUMP PUMP	1	20	1 A	2	20	1 SPARE			
	7.0		PCM-DIW1 DIW NO.1 CONTROL PANEL	1	20	3 B	4	20	1 SPARE			
		7.0	PCM-DIW1 DIW NO.1 CONTROL PANEL	1	20	5 C	6	20	1 SPARE			
			SPARE	1	20	7 A	8	20	1 SPARE			
			SPARE	1	20	9 B	10	20	1 SPARE			
			SPARE	1	20	11 C	12	20	1 SPARE			

TOTAL AMPS:	BUS A: 9.0A	BUS B: 7.0A	BUS C: 7.0A	CONNECTED KVA: 2.8KVA	RUNNING KVA:

RATED VOLTAGE: ■ 120/208 ☐ 480 3 PHASE, 4 WIRE	BRANCH POLES ■ 12 ☐ 24 ☐ 30 ☐ 42 ☐ 54 ☐ 60 ☐ 72
RATED AMPS: ■ 100 ☐ 225 ☐ 400 ☐ _____	CABINET: ■ SURFACE ☐ FLUSH
NEUTRAL BUS ☐ 100% ■ 150% ☐ 200%	■ GROUND BUS ☐ HINGED DOOR ■ KEYED DOOR LATCH LOCATION: DEEP INJECTION WELL
■ CIRCUIT BREAKER (BOLT-IN) BRANCH DEVICES	■ TVSS ENCLOSURE TYPE: ☐ NEMA 1 ☐ NEMA 3R ■ NEMA 4X SS ☐ _____
☐ MAIN LUGS ONLY	MAIN 100 AMPS ■ BREAKER ☐ _____ TO BE GFI BREAKERS
PANELBOARD MUST BE RATED TO INTERRUPT A SHORT CIRCUIT ISC OF 22,000 AMPS SYMMETRICAL.	
APPROVED MF'RS. SEE SPECIFICATION.	COPPER BUSSES MAIN LUGS _____ SETS SIZE: _____

EXISTING PANELBOARD DP-2 SCHEDULE

BUS AMPS A	BUS AMPS B	LOAD	POLES	AMPS	BUS	AMPS	POLES	LOAD	BUS AMPS A	BUS AMPS B
0.0		SPD DEVICE	2	20	1 A	2	15	1 WHEATHER STATION CP	5.0	
	0.0	‖	‖	‖	3 B	4	60	1 CHLORAMINE SYSTEM CP		10.0
5.0		IO WATER PLC CP	1	20	5 A	6	‖	‖ ‖	10.0	
	5.0	PLANT PUMP STA. PLC CP	1	20	7 B	8	150	4 OPERATIONS BUILDING DIST PANEL "O"		112.4
20.0		PLANT PLC CP	2	30	9 A	10	‖	‖ ‖	112.4	
	20.0	‖	‖	‖	11 B	12	‖	‖ ‖		0.0
5.0		POTABLE WATER PLC CP	1	20	13 A	14	‖	‖ ‖	0.0	
	6.0	ELEC. ROOM RECEPTS EXTERIOR	1	20	15 B	16	30	1 GENERATOR #1		10.0
6.0		ELEC. ROOM RECEPTS INTERIOR	1	20	17 A	18	‖	‖ ‖	10.0	
	6.0	ELEC. ROOM EXIT & EMER. LIGHTS	1	20	19 B	20	30	1 GENERATOR #2		10.0
30.0		WATE WATER AREA DP-3	2	60	21 A	22	‖	‖ ‖	10.0	
	30.0	‖	‖	‖	23 B	24	30	1 GENERATOR #3		10.0
5.0		IT CABINET	1	20	25 A	26	‖	‖ ‖	10.0	
	5.0	**DIW-SCADA NETWORK PANEL**	1	20	27 B	28	20	1 SPARE		
		SPARE	1	20	29 A	30	20	1 SPARE		
		SPARE	1	20	31 B	32	20	1 SPARE		
		SPARE	1	20	33 A	34	20	1 SPARE		
		SPARE	1	20	35 B	36	20	1 SPARE		
		SPARE	1	20	37 A	38	20	1 SPARE		
		SPARE	1	20	39 B	40	20	1 SPARE		
		SPARE	1	20	41 A	42	20	1 SPARE		

TOTAL AMPS:	BUS A: 228.4A	BUS B: 224.4A	CONNECTED KVA: 54.3KVA	RUNNING KVA:

RATED VOLTAGE: ■ 120/240 ☐ 480 1 PHASE, 3 WIRE	BRANCH POLES ☐ 12 ☐ 24 ☐ 30 ■ 42 ☐ 54 ☐ 60 ☐ 72
RATED AMPS: ☐ 100 ☐ 225 ■ 400 ☐ _____	CABINET: ■ SURFACE ☐ FLUSH
NEUTRAL BUS ☐ 100% ■ 150% ☐ 200%	■ GROUND BUS ☐ HINGED DOOR ■ KEYED DOOR LATCH LOCATION: NESA WWTP ELECTRICAL ROOM
■ CIRCUIT BREAKER (BOLT-IN) BRANCH DEVICES	■ TVSS ENCLOSURE TYPE: ■ NEMA 1 ☐ NEMA 3R NEMA 4X SS ☐ _____
☐ MAIN LUGS ONLY	MAIN 400 AMPS ■ BREAKER ☐ _____ TO BE GFI BREAKERS
PANELBOARD MUST BE RATED TO INTERRUPT A SHORT CIRCUIT ISC OF 22,000 AMPS SYMMETRICAL.	
APPROVED MF'RS. SEE SPECIFICATION.	COPPER BUSSES MAIN LUGS _____ SETS SIZE: _____

PANELBOARD DIW-PP SCHEDULE

BUS AMPS A	BUS AMPS B	BUS AMPS C	LOAD	POLES	AMPS	BUS	AMPS	POLES	LOAD	BUS AMPS A	BUS AMPS B	BUS AMPS C
3.9			DIW-LP DIW LIGHITNG PANEL	3	30	1 A	2	20	3 VAL-102 DIW NO.2 VALVE	0.5		
	3.0		‖	‖	‖	3 B	4	‖	‖ ‖		0.5	
		3.0	‖	‖	‖	5 C	6	‖	‖ ‖			0.5
5.7			PMP-101 DIW NO.1 SUMP PUMP	3	20	7 A	8	20	3 PMP-03 DZMW SAMPLE PUMP NO.1	14.0		
	5.7		‖	‖	‖	9 B	10	‖	‖ ‖		14.0	
		5.7	‖	‖	‖	11 C	12	‖	‖ ‖			14.0
0.5			VAL-101 DIW NO.1 VALVE	3	20	13 A	14	20	3 PMP-04 DZMW SAMPLE PUMP NO.2	14.0		
	0.5		‖	‖	‖	15 B	16	‖	‖ ‖		14.0	
		0.5	‖	‖	‖	17 C	18	‖	‖ ‖			14.0
5.7			PMP-102 DIW NO.2 SUMP PUMP	3	20	19 A	20	20	3 SPARE			
	5.7		‖	‖	‖	21 B	22	‖	‖ ‖			
		5.7	‖	‖	‖	23 C	24	‖	‖ ‖			

TOTAL AMPS:	BUS A: 44.3A	BUS B: 43.4A	BUS C: 43.4A	CONNECTED KVA: 36.3KVA	RUNNING KVA:

RATED VOLTAGE: ☐ 120/208 ■ 480 3 PHASE, 3 WIRE	BRANCH POLES ☐ 12 ■ 24 ☐ 30 ☐ 42 ☐ 54 ☐ 60 ☐ 72
RATED AMPS: ■ 100 ☐ 225 ☐ 400 ☐ _____	CABINET: ■ SURFACE ☐ FLUSH
NEUTRAL BUS ☐ 100% ■ 150% ☐ 200%	■ GROUND BUS ☐ HINGED DOOR ■ KEYED DOOR LATCH LOCATION: DEEP INJECTION WELL
■ CIRCUIT BREAKER (BOLT-IN) BRANCH DEVICES	■ TVSS ENCLOSURE TYPE: ☐ NEMA 1 ☐ NEMA 3R ■ NEMA 4X SS ☐ _____
☐ MAIN LUGS ONLY	MAIN 100 AMPS ■ BREAKER ☐ _____ TO BE GFI BREAKERS
PANELBOARD MUST BE RATED TO INTERRUPT A SHORT CIRCUIT ISC OF 42,000 AMPS SYMMETRICAL.	
APPROVED MF'RS. SEE SPECIFICATION.	COPPER BUSSES MAIN LUGS _____ SETS SIZE: _____

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED ADS
DRAWN MDG
CHECKED ADS
DATE OCTOBER 2025

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Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
ELECTRICAL
SCHEDULES SHEET NO.2

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
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JOB NO. 71261.10
DRAWING NO. 00E05
SHEET NO. 33 OF 62

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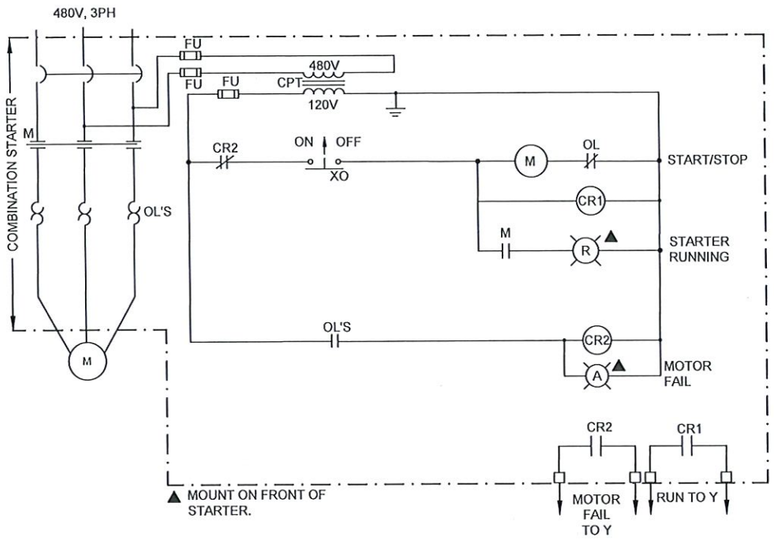
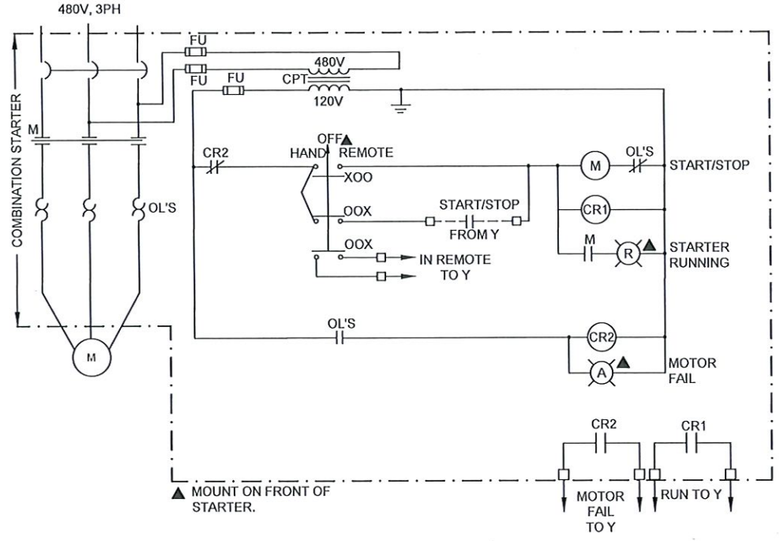
PROJECT NO. 71261.10 FILE NAME: 00E05 - Schedules 2.dwg



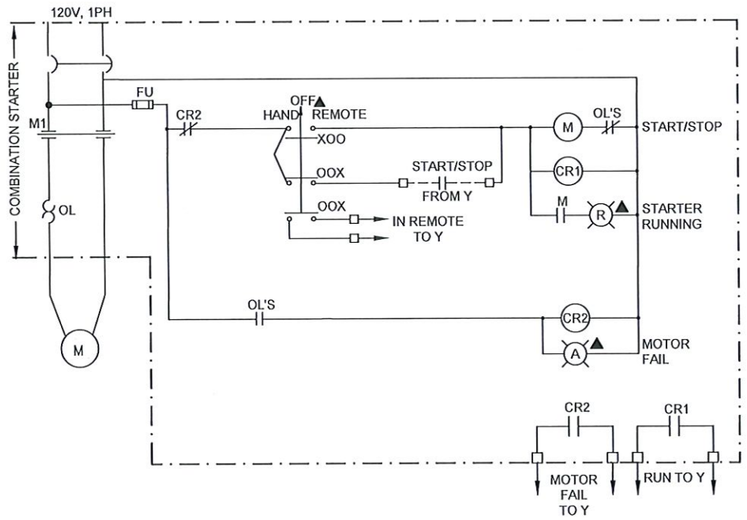
DZMW SAMPLE PUMP - PMP-0X

SCALE: NTS
X=3,4
Y=PCM-DIW1, PCM-DIW2



DIW NO.X SUMP PUMP - PMP-0X

SCALE: NTS
X=1,2
Y=PCM-DIW1, PCM-DIW2



DZMW SUMP PUMP PMP-05

SCALE: NTS
Y=PCM-DIW1

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED ADS
DRAWN MDG
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DATE OCTOBER 2025

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Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
ELECTRICAL
SCHEMATICS SHEET NO. 1

VERIFY SCALES
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0 1"
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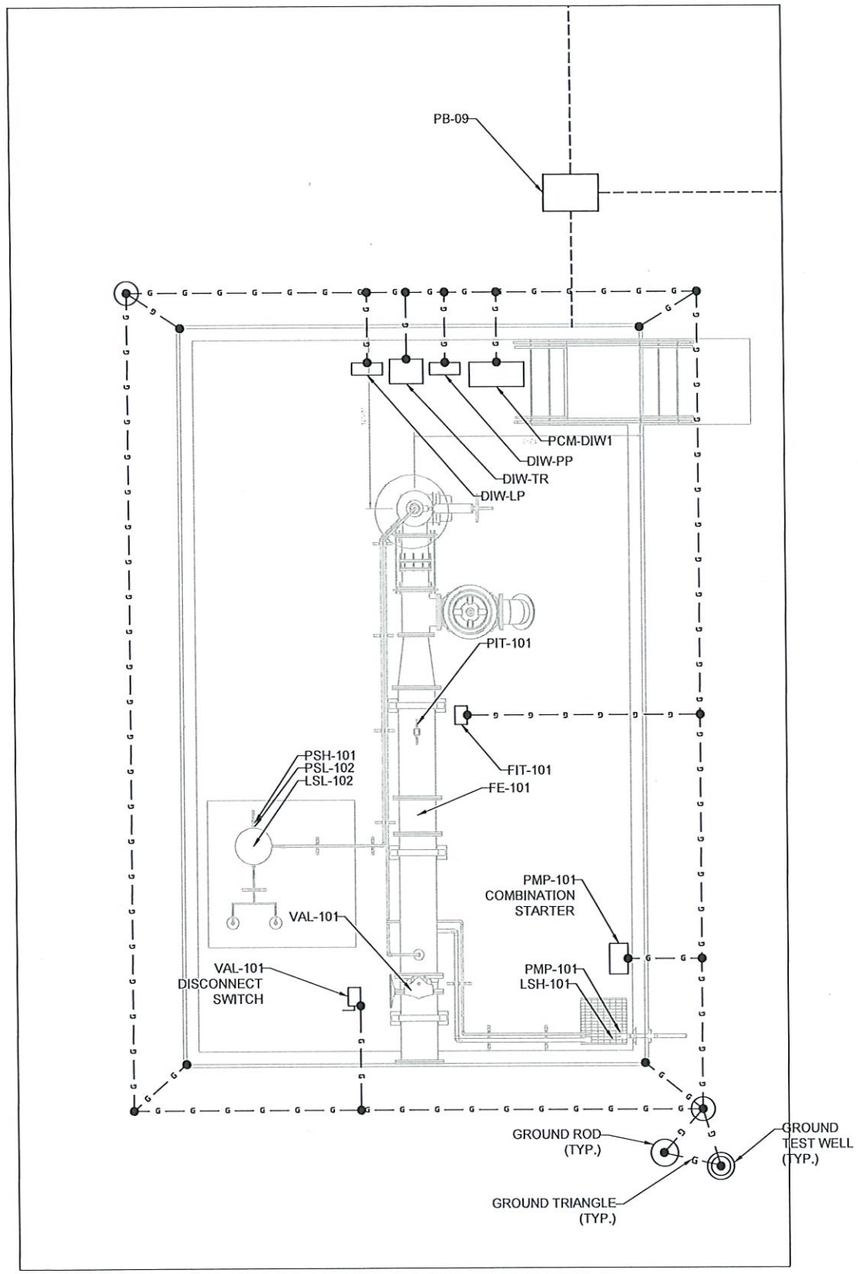
JOB NO. 7126I.10
DRAWING NO. 00E06
SHEET NO. 34 OF 62

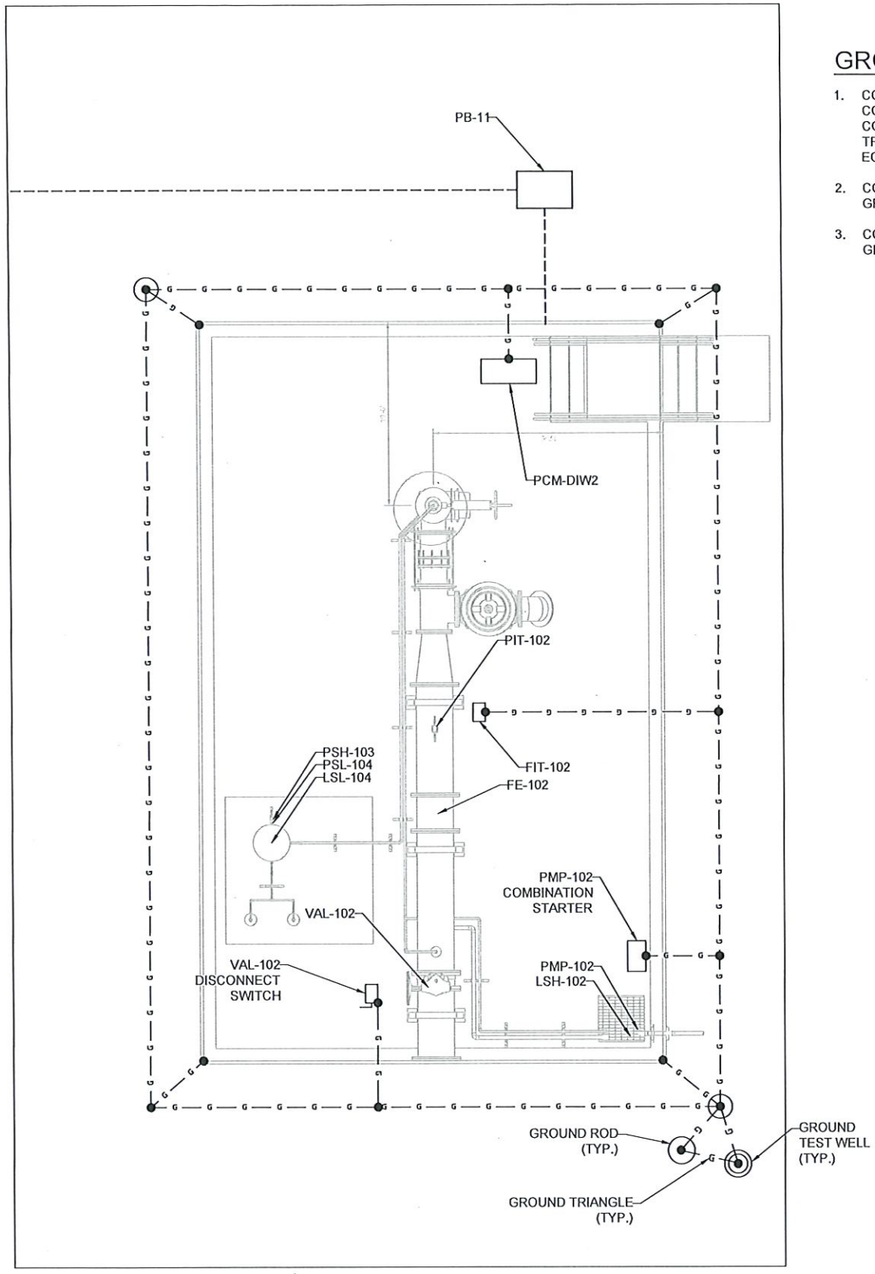
LAST SAVED BY: ADS

PROJECT NO. 7126I.10
FILE NAME: 00E06 - Schematics.dwg



DEEP INJECTION WELL NO.1

0 2' 4' 8'
1/4"=1'-0"



DEEP INJECTION WELL NO.2

0 2' 4' 8'
1/4"=1'-0"

GROUNDING NOTES

1. CONTRACTOR SHALL INSTALL GROUNDING CONDUCTOR FROM THE GROUNDING GRID TO ALL CONTROL PANELS, PUMPS, DISCONNECTS, TRANSMITTERS, TANKS, ETC. INCLUDING ALL FUTURE EQUIPMENT.
2. CONTRACTOR SHALL BOND STEEL COLUMNS TO GROUND GRID USING EXOTHERMIC CONNECTIONS.
3. CONTRACTOR SHALL BOND REBAR IN FLOOR TO GROUND GRID USING EXOTHERMIC CONNECTIONS.

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED ADS
DRAWN MDG
CHECKED ADS
DATE OCTOBER 2025

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COLLIER COUNTY
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ELECTRICAL
DEEP INJECTION WELLS LAYOUT

VERIFY SCALES
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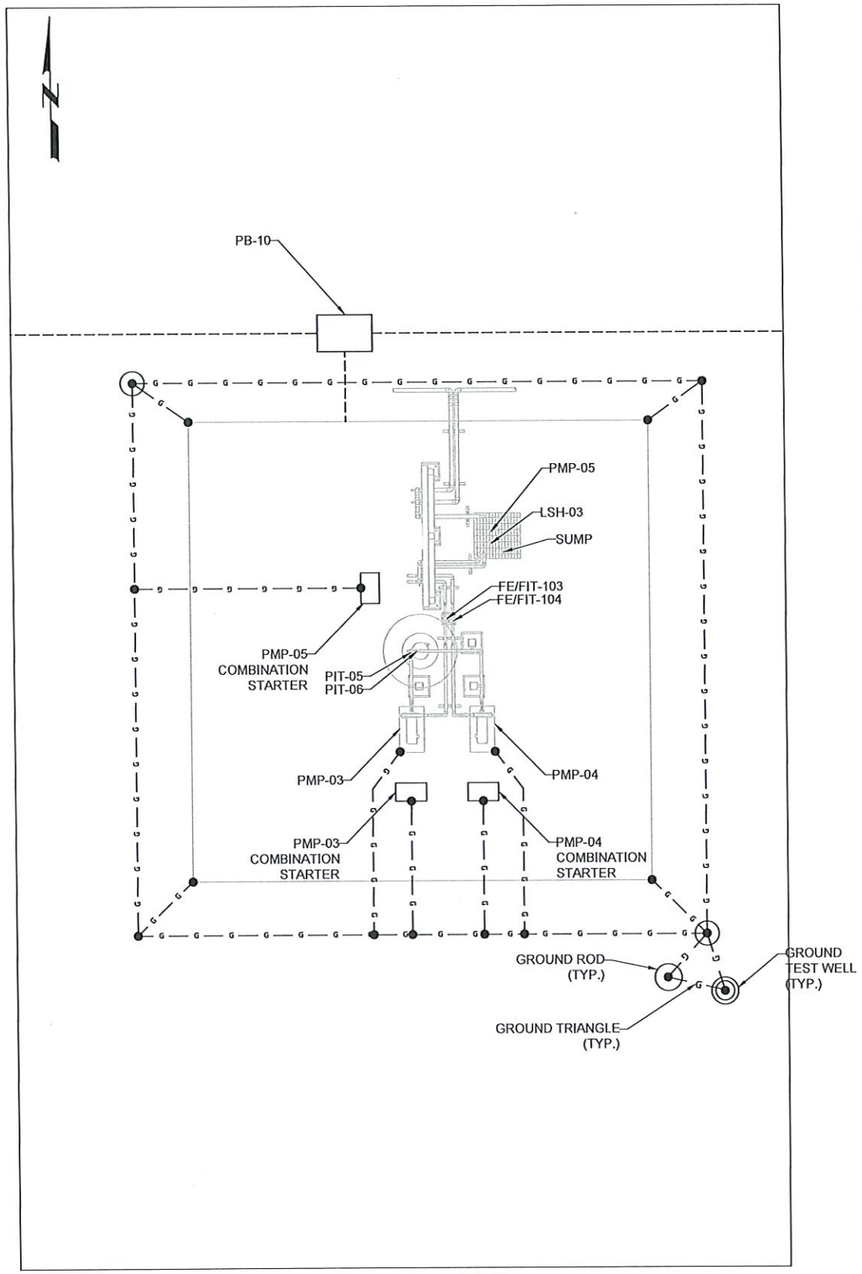
JOB NO. 7126I.10
DRAWING NO. 00E07
SHEET NO. 35 OF 62

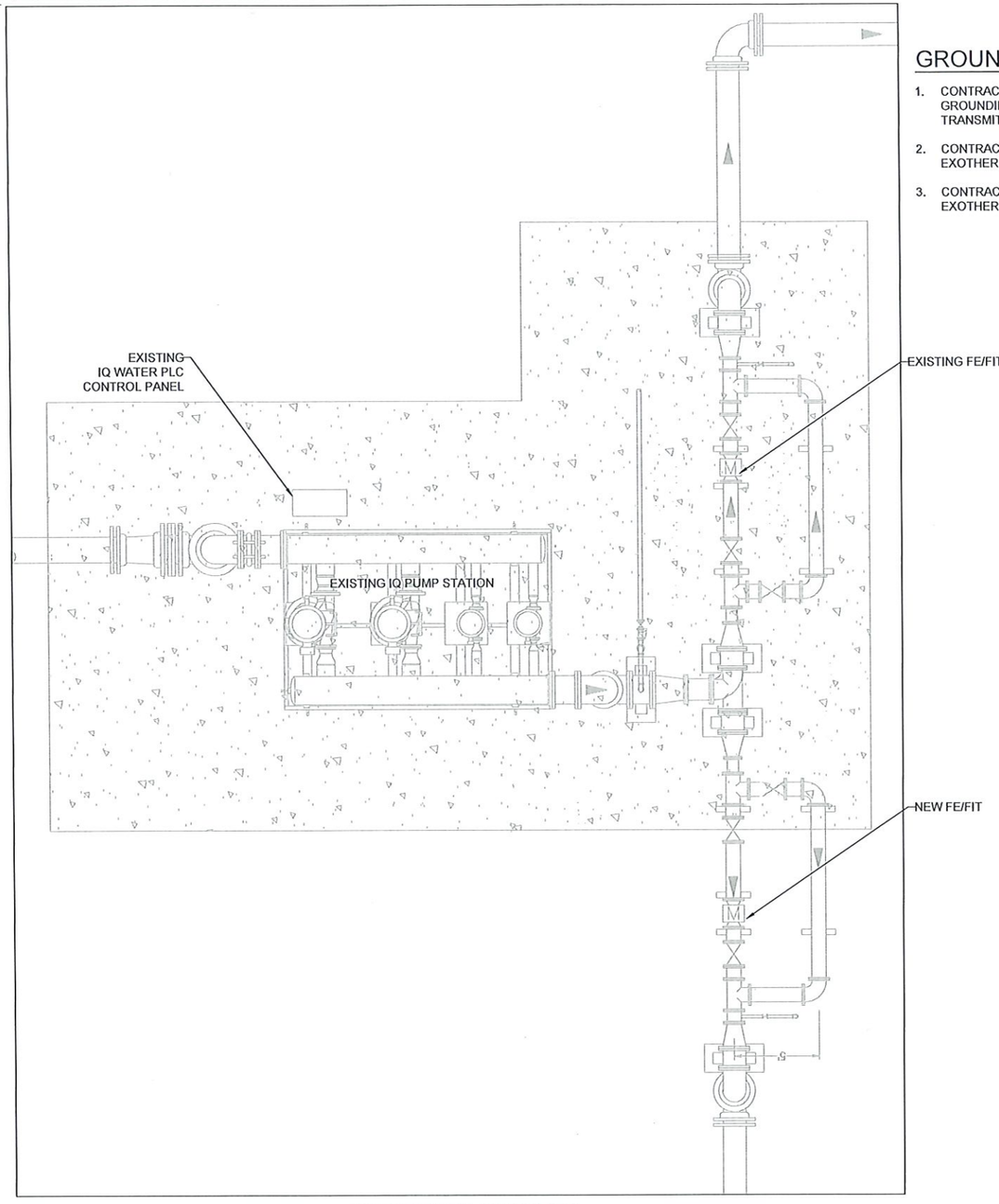
LAST SAVED BY: ADS

PROJECT NO. 7126I.10 FILE NAME: 00E07 - Injection Well.dwg



MONITORING WELL

0 2' 4' 8'
1/4"=1'-0"



METERING STATION

0 2' 4' 8'
1/4"=1'-0"

GROUNDING NOTES

1. CONTRACTOR SHALL INSTALL GROUNDING CONDUCTOR FROM THE GROUNDING GRID TO ALL CONTROL PANELS, PUMPS, DISCONNECTS, TRANSMITTERS, TANKS, ETC. INCLUDING ALL FUTURE EQUIPMENT.
2. CONTRACTOR SHALL BOND STEEL COLUMNS TO GROUND GRID USING EXOTHERMIC CONNECTIONS.
3. CONTRACTOR SHALL BOND REBAR IN FLOOR TO GROUND GRID USING EXOTHERMIC CONNECTIONS.

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED ADS
DRAWN MDG
CHECKED ADS
DATE OCTOBER 2025

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Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
ELECTRICAL
MONITORING WELL AND METERING STATION LAYOUT

VERIFY SCALES
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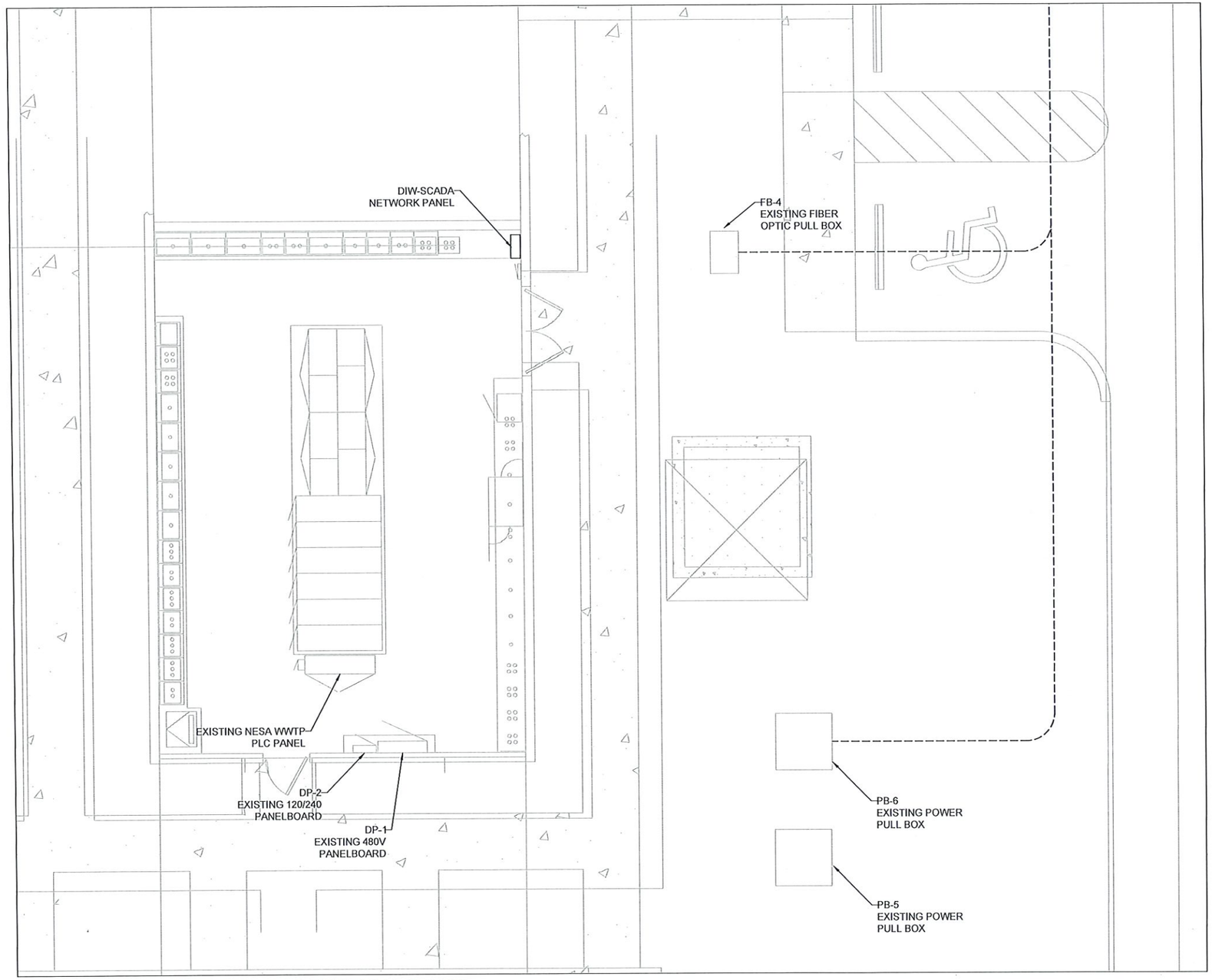
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7126I.10
DRAWING NO. 00E08
SHEET NO. 36 OF 62

LAST SAVED BY: ADS

PROJECT NO. 7126I.10 FILE NAME: 00E08 - Monitoring Well.dwg



NESA WWTP ELECTRICAL ROOM

0 2' 4' 8'
1/4"=1'-0"

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED ADS
DRAWN MDG
CHECKED ADS
DATE OCTOBER 2025

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COLLIER COUNTY
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ELECTRICAL
NESA WWTP ELECTRICAL ROOM

VERIFY SCALES
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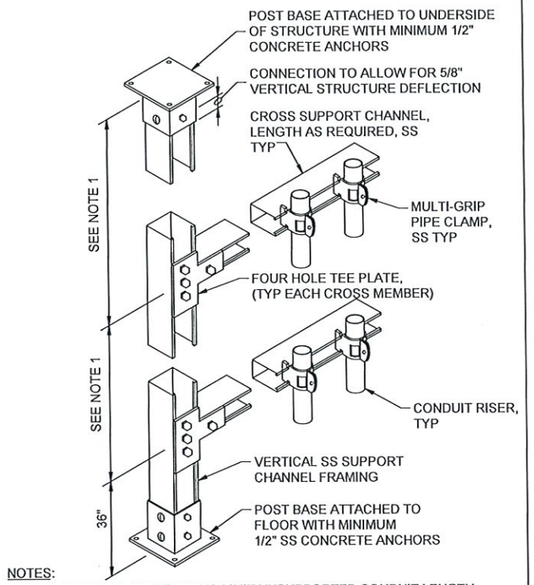
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7126I.10
DRAWING NO. 00E09
SHEET NO. 37 OF 62

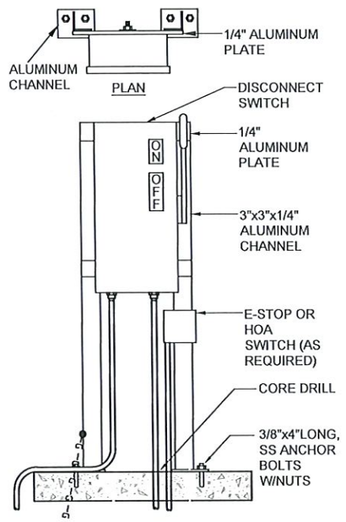
LAST SAVED BY: ADS

PROJECT NO. 7126I.10 FILE NAME: 00E09 - Electrical Room.dwg



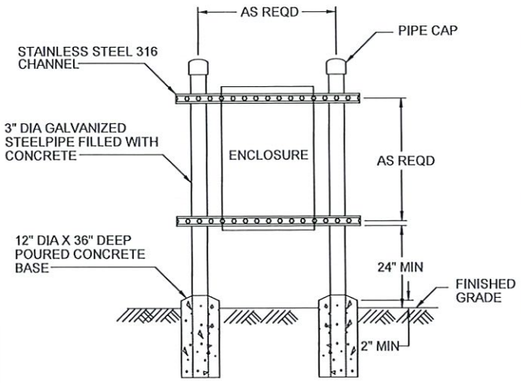
NOTES:
1. LENGTH AS REQUIRED TO LIMIT UNSUPPORTED CONDUIT LENGTH TO MAXIMUM VALUES ALLOWED BY NEC.
2. ALL MATERIALS AND FASTENING HARDWARE SHALL BE TYPE 316 STAINLESS STEEL (SS).

E001 TYP — VERTICAL CONDUIT SUPPORT
SCALE: NTS



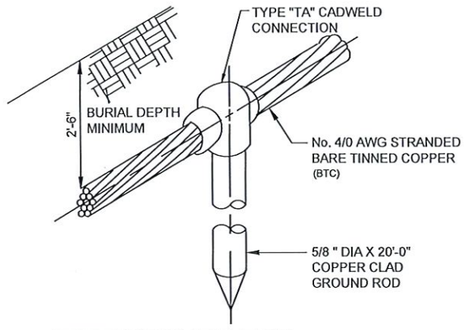
NOTE:
FOR DISCONNECT RATED 200A AND ABOVE, PROVIDE 5"x5"x1/2" ALUMINUM CHANNEL.

E002 TYP — DISCONNECT MOUNTING
SCALE: NTS

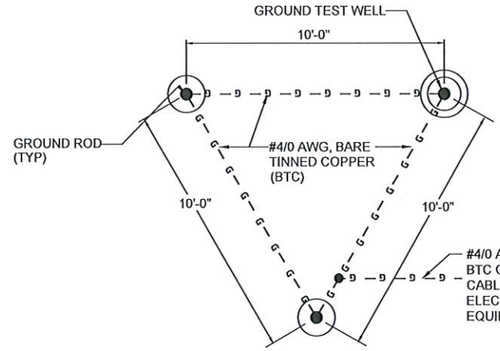


NOTE:
1. PROVIDE CLASS A CONCRETE PER SPECIFICATION SECTION 03300.

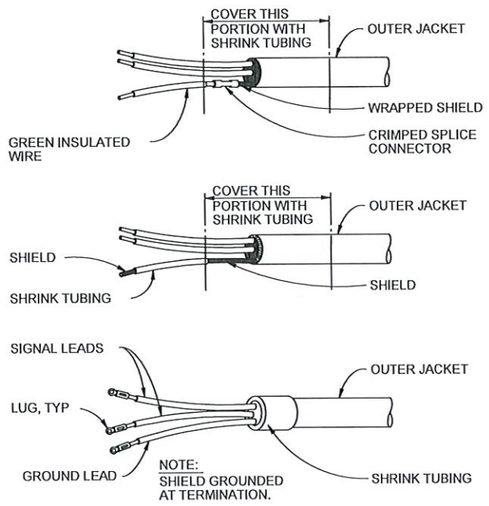
E003 TYP — ENCLOSURE MOUNTING STAND
SCALE: NTS



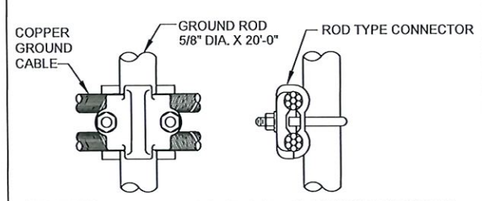
E007 TYP — GROUND ROD
SCALE: NTS



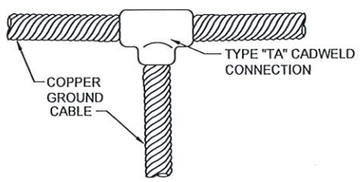
E008 TYP — GROUND TRIANGLE
SCALE: NTS



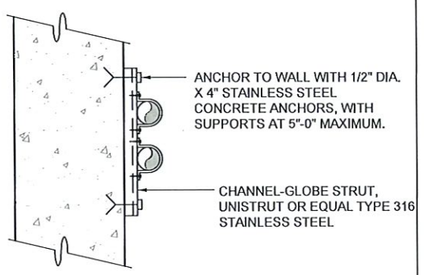
E004 TYP — TERMINATION OF SHIELDED CONTROL CABLE
SCALE: NTS



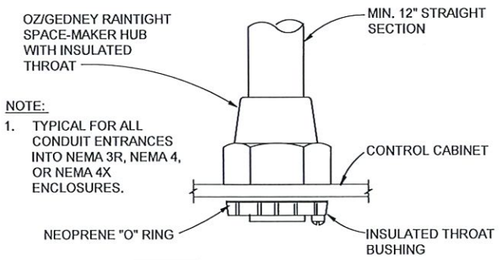
E005 TYP — CABLE TO ROD CONNECTION
SCALE: NTS



E006 TYP — GROUND CABLE CONNECTION
SCALE: NTS



E010 TYP — CONDUIT SUPPORT
SCALE: NTS



NOTE:
1. TYPICAL FOR ALL CONDUIT ENTRANCES INTO NEMA 3R, NEMA 4, OR NEMA 4X ENCLOSURES.

E011 TYP — CONDUIT HUB
SCALE: NTS

COPPER CONDUCTOR TAP TO HORIZONTAL REINFORCING BAR (REBAR) LOCATED NEAR THE BOTTOM OR VERTICALLY, WITHIN THAT PORTION OF CONCRETE FOUNDATION OR FOOTING. MAXIMUM CONDUCTOR SIZE IS 4/0 AWG. MINIMUM DIAMETER OF REBAR IS 1/2". MINIMUM LENGTH OF REBAR IS 20'.

E009 TYP — GROUND CABLE CADWELDED TO REBAR
SCALE: NTS

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED ADS
DRAWN MDG
CHECKED ADS
DATE OCTOBER 2025

ALEKSANDAR D. STOJANOVIC LICENSE No 82068 STATE OF FLORIDA PROFESSIONAL ENGINEER

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CA No. 00008571

Collier County

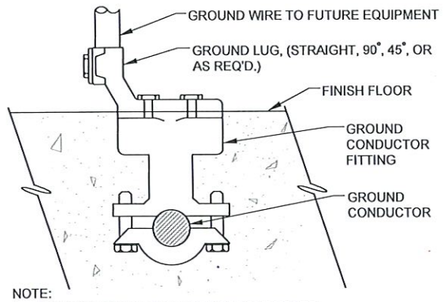
COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
ELECTRICAL
DETAILS SHEET NO.1

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7126I.10
DRAWING NO. 00E10
SHEET NO. 38 OF 62

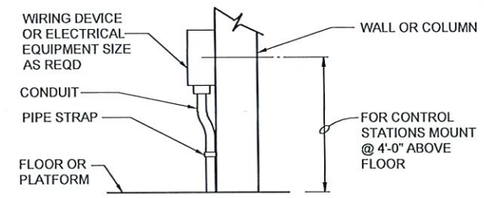
LAST SAVED BY: ADS

PROJECT NO. 7126I.10 FILE NAME: 00E10 - Details 1.dwg



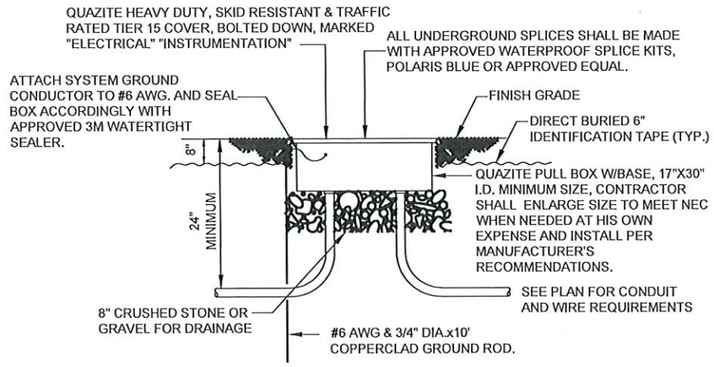
NOTE:
1. BOLTS SHALL BE INSERTED IN BOLT HOLES BEFORE CONNECTOR IS EMBEDDED.

E014 TYP — GROUNDING INSERT
SCALE: NTS

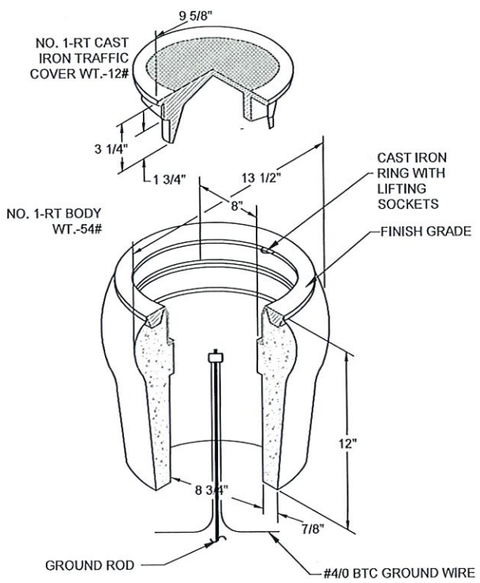


NOTE:
1. ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL 316. ON CONCRETE WALLS, USE MALLEABLE IRON INSERTS, MOUNT ENCLOSURE ON 1/4" SPACERS OF 1/2" RIGID CONDUIT.

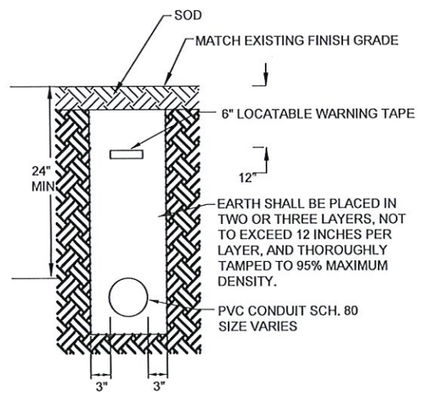
E013 TYP — WALL OR COLUMN MOUNTED DEVICE
SCALE: NTS



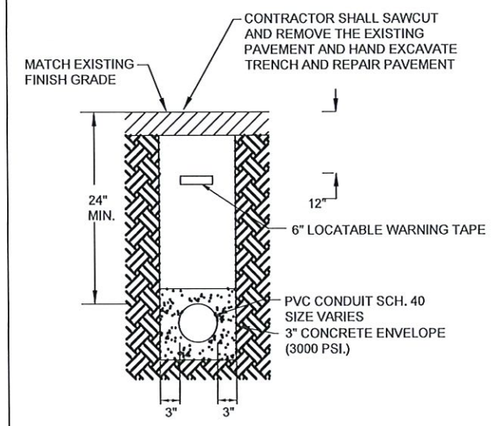
E014 TYP — QUAZITE PULL BOX DETAIL
SCALE: NTS



E015 TYP — GROUND TEST WELL
SCALE: NTS



E016 TYP — TYPICAL DIRECT BURIED CONDUIT
SCALE: NTS



E017 TYP — TYPICAL CONDUIT INSTALLED UNDER NEW/EXISTING PAVEMENT
SCALE: NTS

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

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DRAWN MDG
CHECKED ADS
DATE OCTOBER 2025

ALEKSANDAR D. STOJANOVIC — No 80309 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

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Collier County

COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
ELECTRICAL
DETAILS SHEET NO.2

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 71261.10
DRAWING NO. 00E11
SHEET NO. 39 OF 62

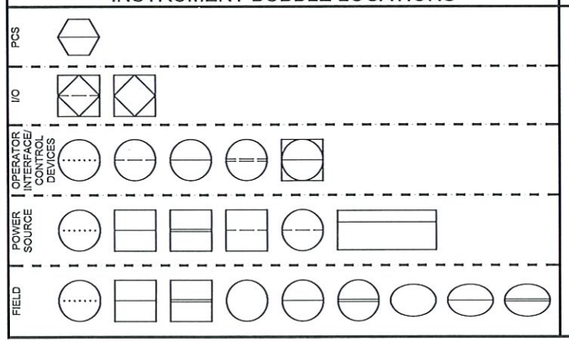
LAST SAVED BY: ADS

PROJECT NO. 71261.10 FILE NAME: 00E11 - Details 2.dwg

SYMBOL	DRAWING VISIBLE FIELDS	FIELD - 1	FIELD - 2	FIELD - 3	FIELD - 4	FIELD - 5	FIELD - 6	FIELD - 7	FIELD - 8
HMI/SCADA SYSTEM OPERATOR INTERFACE TERMINAL	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - DESCRIPTION 5 - DESCRIPTION 6 - EXISTING/FUTURE	REFER ◇1 ◇2	REFER ◇3	ACTION ALARM SP - NUMERIC STATUS - SET POINT TREND	DESCRIPTION ◇2 ◇5	DESCRIPTION	E - EXISTING F - FUTURE		
HARDWIRED I/O POINT	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - DESCRIPTION 5 - LOCATION 6 - EXISTING/FUTURE 7 - IO TABLE	REFER ◇1 ◇2 ◇4	REFER ◇3	AI - ANALOG INPUT AO - ANALOG OUTPUT DI - DISCRETE INPUT DO - DISCRETE OUTPUT RTD - RTD INPUT	DESCRIPTION	PAC - PROGRAMMABLE AUTOMATION CONTROLLER NO. PLC - PROGRAMMABLE LOGIC CONTROLLER NO. RIO - REMOTE I/O VCP - VENDOR CONTROL PANEL NO.	E - EXISTING F - FUTURE		
NETWORK / SOFT I/O	1 - TAG 2 - LOOP NUMBER 3 - PROTOCOL 4 - PANEL 5 - PLC 6 - EXISTING/FUTURE 7 - IO TABLE 8 - SWITCH/SEGMENT	REFER ◇1 ◇2	REFER ◇3	COMMUNICATION PROTOCOL CNET - CONTROLNET DNET - DEVICENET EIP - ETHERNET/IP FF - FOUNDATION FIELDBUS HART-I - HART OVER ETHERNET MANF - MFR. PROPRIETARY MBRTU - MODBUS RTU MB+ - MODBUS PLUS MBTCP - MODBUS TCP DP - PROFIBUS DP PA - PROFIBUS PA PNET - PROFINET SNMP - SNMPv3 HTTP - WEB SERVER (TCP/IP)	DESCRIPTION	PAC - PROGRAMMABLE AUTOMATION CONTROLLER NO. PLC - PROGRAMMABLE LOGIC CONTROLLER NO. RIO - REMOTE I/O VCP - VENDOR CONTROL PANEL NO.	E - EXISTING F - FUTURE		
LOCAL OPERATOR INTERFACE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - DESCRIPTION 5 - LOCATION 6 - EXISTING/FUTURE	REFER ◇1 ◇2	REFER ◇3	ACTION ALARM SP - NUMERIC STATUS - SET POINT TREND	DESCRIPTION	LOI - LOCAL OPERATOR INTERFACE NO. LCP - LOCAL CONTROL PANEL NO. PCM - PROCESS CONTROL MODULE NO. VCP - VENDOR CONTROL PANEL NO.	E - EXISTING F - FUTURE		
PILOT DEVICE OPERATOR INTERFACE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - DESCRIPTION 5 - LOCATION 6 - EXISTING/FUTURE	REFER ◇1 ◇2	REFER ◇3	AM - AUTO/MANUAL BYPASS - BY PASS E-STOP - EMERGENCY STOP FRLR - FIXED RATE/LEVEL RATE HOA - HAND/OFF/AUTO LOR - LOCAL/OFF/REMOTE LOS - LOCK OUT STOP LS - LEAD/STANDBY LSR - LOCAL/STOP/REMOTE NOOT - NO OFFLINE/OFFLINE TRANSITION OC - OPEN/CLOSE OLOL - ON LINE/OFFLINE OO - OFF/ON OSC - OPEN/STOP/CLOSE RST - RESET SAAM - SEMI AUTO/AUTO/MANUAL SEL - SELECT SPD - SPEED SS - START/STOP ST - STOP	DESCRIPTION ◇2 ◇5	LCP - LOCAL CONTROL PANEL NO. MCC - MOTOR CONTROL CENTER NO. PCM - PROCESS CONTROL MODULE NO. RVS - REDUCED VOLTAGE SOLID STARTER NO. VCP - VENDOR CONTROL PANEL NO. VFD - VARIABLE FREQUENCY DRIVE NO.	E - EXISTING F - FUTURE		
POWER DEVICE PRIMARY FUNCTION OPERATOR ACCESSIBLE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - VOLTAGE-POLE 5 - LOCATION 6 - EXISTING/FUTURE	CB - CIRCUIT BREAKER DISC - DISCONNECT FU - FUSE	REFER ◇3	TM - THERMAL MAGNETIC CIRCUIT BREAKER	24VDC - 1P 24VDC - 2P 24VAC - 1P 48VDC - 2P 120VAC - 1P 208VAC - 2P 208VAC - 3P 240VAC - 2P 240VAC - 3P 480VAC - 3P 2400VAC - 3P 4160VAC - 3P	DP - DISTRIBUTION PANEL NO. LCP - LOCAL CONTROL PANEL NO. LP - LIGHTING PANEL NO. MCC - MOTOR CONTROL CENTER NO. PCM - PROCESS CONTROL MODULE NO. PP - POWER PANEL NO. VCP - VENDOR CONTROL PANEL NO.	E - EXISTING F - FUTURE		
POWER DEVICE AUXILIARY FUNCTION OPERATOR ACCESSIBLE	1 - TAG 2 - LOOP NUMBER 3 - DESCRIPTION 4 - DESCRIPTION 5 - DESCRIPTION 6 - EXISTING/FUTURE	DISC - DISCONNECT	REFER ◇3	DESCRIPTION	DESCRIPTION	DESCRIPTION	E - EXISTING F - FUTURE		
POWER DEVICE PRIMARY FUNCTION OPERATOR INACCESSIBLE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - VOLTAGE-POLE 5 - LOCATION 6 - EXISTING/FUTURE	CB - CIRCUIT BREAKER FU - FUSE	REFER ◇3	MCP - MOTOR CIRCUIT PROTECTOR SS - SOLID STATE CIRCUIT BREAKER TM - THERMAL MAGNETIC CIRCUIT BREAKER	24VDC - 1P 24VDC - 2P 24VAC - 1P 48VDC - 2P 120VAC - 1P 208VAC - 2P 208VAC - 3P 240VAC - 2P 240VAC - 3P 480VAC - 3P 2400VAC - 3P 4160VAC - 3P	DP - DISTRIBUTION PANEL NO. LCP - LOCAL CONTROL PANEL NO. LP - LIGHTING PANEL NO. MCC - MOTOR CONTROL CENTER NO. PCM - PROCESS CONTROL MODULE NO. PP - POWER PANEL NO. VCP - VENDOR CONTROL PANEL NO.	E - EXISTING F - FUTURE		

SYMBOL	DRAWING VISIBLE FIELDS	FIELD - 1	FIELD - 2	FIELD - 3	FIELD - 4	FIELD - 5	FIELD - 6	FIELD - 7	FIELD - 8
INSTRUMENT PRIMARY ELEMENT	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE	REFER ◇1	REFER ◇3	DESCRIPTION ◇5	DESCRIPTION ◇6 ◇7	AREA NO. BUILDING NO. ROOM NO.	E - EXISTING F - FUTURE		
INSTRUMENT/ CONTROL ELEMENT PRIMARY FUNCTION OPERATOR ACCESSIBLE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - FURNISHED BY 5 - DESCRIPTION 6 - EXISTING/FUTURE	REFER ◇1	REFER ◇3	DESCRIPTION ◇5	DESCRIPTION ◇6 ◇7	DESCRIPTION INT - INTEGRAL REM - REMOTE	E - EXISTING F - FUTURE		OUT - OUTDOOR
INSTRUMENT/ CONTROL ELEMENT AUXILIARY FUNCTION OPERATOR ACCESSIBLE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE	REFER ◇1	REFER ◇3	DESCRIPTION	DESCRIPTION ◇6 ◇7	DESCRIPTION	E - EXISTING F - FUTURE		
INSTRUMENT/ CONTROL ELEMENT PRIMARY FUNCTION OPERATOR INACCESSIBLE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE	REFER ◇1 ◇3 XR - PROTECTION RELAY CR - CONTROL RELAY XR - INTERPOSING RELAY	REFER ◇3	DESCRIPTION	DESCRIPTION ◇6 ◇7	DESCRIPTION	E - EXISTING F - FUTURE		
INSTRUMENT/ CONTROL ELEMENT AUXILIARY FUNCTION OPERATOR INACCESSIBLE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE	REFER ◇1 ◇3 XR - PROTECTION RELAY CR - CONTROL RELAY XR - INTERPOSING RELAY	REFER ◇3	DESCRIPTION	DESCRIPTION ◇6 ◇7	DESCRIPTION	E - EXISTING F - FUTURE		
FIELD EQUIPMENT NON-POWERED	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION/SIZE 4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE	REFER ◇3	REFER ◇3	DESCRIPTION	DESCRIPTION ◇6 ◇7	AREA NO. BUILDING NO. ROOM NO.	E - EXISTING F - FUTURE		
FIELD EQUIPMENT PRIMARY FUNCTION POWERED	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE	REFER ◇3	REFER ◇3	DESCRIPTION	DESCRIPTION ◇6 ◇7	AREA NO. BUILDING NO. ROOM NO.	E - EXISTING F - FUTURE		
FIELD EQUIPMENT AUXILIARY FUNCTION POWERED	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION 4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE	MWH - MOTOR WINDING HEATER TSH - TEMPERATURE SWITCH XSH - TORQUE SWITCH	REFER ◇3	DESCRIPTION	DESCRIPTION ◇6 ◇7	DESCRIPTION	E - EXISTING F - FUTURE		
FIELD EQUIPMENT STARTER/DRIVE CUBICLE/CABINET	1 - TAG 2 - LOOP NUMBER 3 - TYPE 4 - VOLTAGE-POLE 5 - POWER SOURCE 6 - EXISTING/FUTURE	MS - MOTOR STARTER RVAT - REDUCED VOLTAGE AUTO TRANSFORMER STARTER RVSS - REDUCED VOLTAGE SOLID STATE STARTER VFD - VARIABLE FREQUENCY DRIVE	REFER ◇3	FVNR - FULL VOLTAGE NON-REVERSING STARTER FVR - FULL VOLTAGE REVERSING STARTER PWS - PART-WINDING STARTER RVAT - REDUCED VOLTAGE AUTO RVSS - REDUCED VOLTAGE SOLID STATE STARTER TS1W - TWO SPEED SINGLE WINDING TS2W - TWO SPEED TWO WINDINGS VFD - VARIABLE FREQUENCY DRIVE	120VAC - 1P 208VAC - 2P 208VAC - 3P 240VAC - 2P 240VAC - 3P 480VAC - 3P 2400VAC - 3P 4160VAC - 3P	LCP - LOCAL CONTROL PANEL NO. MCC - MOTOR CONTROL CENTER NO. PCM - PROCESS CONTROL MODULE NO. VCP - VENDOR CONTROL PANEL NO.	E - EXISTING F - FUTURE		

INSTRUMENT BUBBLE LOCATIONS



NOTES

1. INSTRUMENT TAG IDENTIFICATION LETTERS TABLE
2. OPERATOR PILOT DEVICE LEGEND
3. EQUIPMENT TAGGING TABLE
4. I/O TYPE DESIGNATIONS
5. INSTRUMENT TYPE DESIGNATIONS TABLE
6. FURNISHED BY: FBO FURNISHED BY OWNER; FBV FURNISHED BY VENDOR
7. PROVIDED BY: PBO PROVIDED BY OWNER; PBV PROVIDED BY VENDOR

REV	DATE	BY	DESCRIPTION
1	10/25	RC	BID SET

DESIGNED JJH
DRAWN TCD
CHECKED AMA
DATE NOVEMBER 2025

JOSEPH J. HANLON LICENSE No 53548 STATE OF FLORIDA PROFESSIONAL ENGINEER

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COLLIER COUNTY
NORTHEAST WRF/WTP -DIW CONVEYANCE
INSTRUMENTATION
SYMBOLS AND ABBREVIATIONS 1

VERIFY SCALES
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0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7126I.10
DRAWING NO. 00GN01
SHEET NO. 40 OF 62

PROJECT NO. 7126I10 FILE NAME: 7126I1000GN01.dwg

Plot Date: 07-NOV-2025 8:26:13 AM
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