−∨ cv CHECK VALVE \$ FV FIRE VALVE (FUSIBLE LINK) -II-UN STR

FUEL PUMP $- \bigcirc -$ **PLE** pLV

PIPE FLOW - IN DIRECTION OF ARROW LEAK DETECTION ELEMENT LEVEL DETECTION ELEMENT

PRESSURE RELEASE VALVE

(AS)-X ANTI-SIPHON VALVE SOLENOID ACTIVATED VALVE SV-X

FIXTURE TAG

KEYNOTE

-0

LIMIT OF DEMOLITION CONNECT TO EXISTING

(#) о— 3/4"ø HW

PIPE SIZE AND SYSTEM TAG

AREA OUT OF SCOPE

AREA OF DEMOLITION

FUEL ABBREVIATIONS

ABOVEGROUND ANTI-SIPHON VALVE (MECHANICAL) BALL VALVE CARBON STEEL CHECK VALVE DIESEL DAY TANK **EFOS** ENGINE FUEL OIL SUPPLY FLEXIBLE CONNECTOR FFS FUEL FILL STATION FOR FUEL OIL RETURN FOS FUEL OIL SUPPLY FOV FUEL OIL VENT NEEDEL VALVE (FLOW REGULATING VALVE) GLV GLOBE VALVE GATE VALVE HPV HIGH POINT VENT INSULATING FLANGE ISSUEE PUMP LEAK DETECTION ELEMENT LE

LOW POINT DRAIN IV LEVEL DETECTION ELEMENT MANUAL AIR VENT MINIMUM NTS NOT TO SCALE OFFLOAD PUMP PUMP DISCHARGE CONTROL VALVE PDCV

POSITIVE DISPLACEMENT METER OFFLOAD PDML PDMO POSITIVE DISPLACEMENT METER LOADING PRODUCT RECOVERY TANK PRESSURE-VACUUM RTB RETURN TO BULK SEL SIGHT FLOW INDICATOR SOLENOIT ACTIVATED VALVE TICV TRUCK LOADING CONTROL VALVE TYPICAL

UNDERGROUND WC WATER COLUMN

FUEL GENERAL NOTES

GENERAL NOTES

- 1. THESE GENERAL NOTES APPLY TO ALL SHEETS, REFER TO INDIVIDUAL SHEETS FOR SHEET SPECIFIC NOTES.
- 2. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS, IT IS INTENDED THAT A COMPLETE SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROLS COMPLETELY COORDINATED WITH ALL DISCIPLINES.
- 3. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS, AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT OCCURRING ANY ADDITIONAL COST TO THE OWNER. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND
- 4. CONTRACTOR SHALL VISIT SITE AND VERIFY ALL EXISTING CONDITIONS AND CONNECTIONS TO EXISTING WORK PRIOR TO BIDDING
- 5. ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN THE DETAILS FOR PIPING AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
- 6. AT COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE COPIES OF BOUND OPERATIONS AND MAINTENANCE MANUALS,

EQUIPMENT NOTES

- INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- 2. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE
- 3. IDENTIFY ALL NEW MECHANICAL EQUIPMENT WITH NAMEPLATES PERMANENTLY ENGRAVED WITH 1/2 INCH HIGH WHITE LETTERS ON A BLACK BACKGROUND, IDENTIFY EQUIPMENT WITH SYMBOLS SHOWN ON THE PLANS AND AREA SERVED DESCRIPTION
- 4. FOUIPMENT AND APPLIANCES SHALL BE ACCESSIBLE FOR SERVICE. INSPECTION, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION, SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF FILTERS, BLOWERS, MOTORS, CONTROLS AND LUBRICATION OF MOVING PARTS.

- 1. ALL EQUIPMENT AND PIPING SHALL BE INSTALLED IN COMPLIANCE WITH THE APPLICABLE CODE LISTED IN THE CODE TABLE.
- 2. ALL NEW FUEL OIL PIPING SHALL BE STAINLESS STEEL 316.
- 3. ALL FUEL SYSTEM SUPPORTS SHALL BE STAINLESS STEEL 316.
- 4 THE CONTRACTOR SHALL PERFORM ALL REQUIRED CLOSURE REQUIREMENTS BEFORE THE REMOVAL AND REPLACEMENTOF THE THE CONTING TO STALL FAVE TOWN ALL KENDINES CLISIANE REGULEMENTS BEFORE THE REJUVEL AND REPUBLICATION THE EXISTING FUEL SYSTEM (TANK, PIPING, LEAVILEVEL DETECTION, ETC. IN ACCORDANCE WITH FLORIDA ADMINISTRATIVE CODE 62-762, SPECIFICALLY SECTION 801 "OUT-OF-SERVICE AND CLOSURE REQUIREMENTS FOR SHOP FRARICATED STORAGE TANK SYSTEMS." THE CONTRACTOR SHALL SUBMIT ALL REQUIRED PAPERWORK AS REQUIRED PER FLORIDA STATUTES CHAPTER 376, FLORIDA ADMINISTRATIVE CODE CHAPTER 62-71, AND FDEP TANK REGISTRATION REQUIREMENTS FOR REMOVAL OF EXISTING FUEL
- 5. CONTRACTOR TO TRANSFER DIESEL FUEL FROM EXISTING DAY TANK TO EXISTING STORAGE TANK BEFORE DEMO.

DEMOLITION NOTES

- 1. THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. INFORMATION CONTAINED ON THIS DRAWING WAS TAINED FROM THE BEST AVAILABLE INFORMATION AND IS NOT INTENDED TO LIMIT THE SCOPE OF THE WORK
- 2. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE EXECUTION OF THE WORK AFTER VISITING THE SITE, REQUEST SUCH FURTHER INFORMATION AND J OR CLARIFICATION AS NECESSARY TO UNDERSTAND THE WORK REQUIRED AND TO PROPERLY ESTIMATE THE COST. CONTRACTORS, BY SUBMITTING A BID, ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITION OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED,
- 3. REMOVE AND LEGALLY DISPOSE OF ITEMS WITHIN THE PROJECT AREA, UNLESS OTHERWISE NOTED, ALL ITEMS SHALL REMAIN THE PROPERTY OF THE OWNER PRIOR TO DISPOSAL. ITEMS TO BE SALVAGED MAY BE REMOVED, FROM THE SITE AS WORK PROGRESSES, SALVAGED ITEMS MUST BE TRANSPORTED FROM THE SITE AS THEY ARE REMOVED.
- 4. MAINTAIN ALL UTILITIES EXCEPT THOSE REQUIRING REMOVAL OR RELOCATION. DO NOT INTERRUPT UTILITIES WITHOUT FIRST ORTAINING PERMISSION FROM THE UTILITY COMPANY AND THE OWNER BE SURE LOCATIONS OF UTILITIES IN VICINITY OF PROJECT AREA ARE KNOWN AND IDENTIFIED AS 'IN SERVICE' OR 'SHUT DOWN'. PROVIDE TEMPORARY SERVICES AS REQUIRED
- 5. DISCONNECT, DEMOLISH, AND REMOVE MECHANICAL SYSTEMS, EQUIPMENT, AND COMPONENTS INDICATED TO BE REMOVED.
- 6. REMOVE AND REPLACE, WITH PRODUCTS OF EQUAL SIZE, CAPACITY, AND QUALITY, ANY DUCTWORK, PIPING, INSULATION, OR EQUIPMENT TO REMAIN THAT IS DAMAGED IN APPEARANCE OR UNSERVICEABLE.

APPLICABLE CODES AND ST	ANDARDS
FLORIDA BUILDING CODE, 8TH EDITION	FBC 2023
FLORIDA BUILDING CODE, EXISTING BLDG, 8TH EDITION	FEBC 2023
FLORIDA BUILDING CODE, MECHANICAL, 8TH EDITION	FMC 2023
FLORIDA BUILDING CODE, PLUMBING, 8TH EDITION	FPC 2023
FLORIDA BUILDING CODE, FUEL GAS CODE, 8TH EDITION	FFGC 2023
FLORIDA BUILDING CODE, HURRICANE TESTING, 8TH EDITION	FL TEST PROT. 2023
CHAPTER 62-762 ABOVEGROUND STORAGE TANK SYSTEM	FAC 62-762
NATIONAL ELECTRIC CODE	NEC 2020
OCCUPATIONAL SAFETY AND HEALTH ACT	OSHA

*ALL APPLICABLE BUILDING CODES AND STANDARD NOT SPECIFIED HEREIN

TECH

END υZ PLUMBING VIATIONS, GENERAL I A C

COLLIER COUNTY PUBLIC UTILITIES ABBI PROJ: 200-08486-2200 DESN: N. HIL

L. RAMIRE

CHKD:

GENERAL NOTES

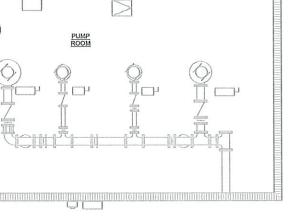
- EXISTING MECHANICAL EQUIPMENT, ACCESSORIES, SUPPORTS, CONTROLS, AND OTHER COMPONENTS SHALL BE DEMOLISHED AND REMOVED FROM SITE, THEN DISPOSED OF OR TURNED OVER TO OWNER.
- 2. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, DIMENSIONS, AND CONFIGURATION OF ALL EXISTING EQUIPMENT, HANGERS, SUPPORTS, ANCHORS, CONTROLS, ETC. COORDINATE DEMOLITION AND DISPOSAL WITH THE REQUIREMENTS OF SECTION 024119 AND THE OWNER.
- EXISTING ROOF OPENINGS SHALL BE FILLED, PATCHED AND SEALED STRUCTURAL DRAWINGS.

KEYED NOTES

- REMOVE EXISTING SUPPLY AND RETURN FUEL PIPE WITH ALL ASSOCIATED SUPPORTS AND HANGERS. CONTRACTOR TO PATCH AND SEAL REMAINING WALL OPENINGS.
- REMOVE EXISTING DIESEL FUEL DAY TANK WITH ALL ASSOCIATED SUPPORTS, CONDUITS, WIRING, CONTROLS, AND LEAK CONTAINMENT BASIN.
- 3. REMOVE EXISTING GENERATOR ENGINE SUPPLY AND RETURN FUEL PIPE WITH ALL ASSOCIATED SUPPORTS AND HANGERS.
- 4. EXISTING ANTI-SIPHON SOLENOID VALVE TO REMAIN. ELECTRICAL CONTRACTOR TO REWIRE OPERATION TO GENERATOR RUN SIGNAL, REFER TO ELECTRICAL DRAWINGS.
- 5. EXISTING FUEL TANK TO REMAIN.
- 6. EXISTING HIGH LEVEL WARNING PANEL TO REMAIN.
- 7. RELOCATED EXISITING LEAK DETECTION PANEL INCLUDING ALL ASSOCIATED WIRING, CONDUITS, SUPPORTS, ETC. CONTRACTOR SHALL MAINTAIN EXISTING LEAK DETECTION PANEL FOR REUSE AND IF DAMAGED, CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER.



7 DEMO PHOTO
P-101 SCALE: NTS



AMMONIA ROOM

OPERATOR'S ROOM

1 DEMOLITION PLAN

CHLORINE ROOM

DEMO & NEW WORK LEGEND



AREA OF DEMOLITION

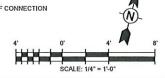
AREA OUT OF SCOPE



POINT OF DISCONNECTION



POINT OF CONNECTION



DRWN:

CHKD:

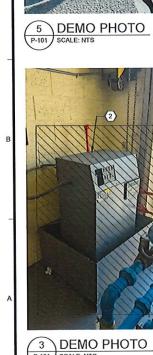
PLUMBING DEMOLTION PLAN

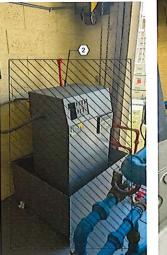
PROJ: 200-08486-2200

N. HILL

L. RAMIRE

TETRA









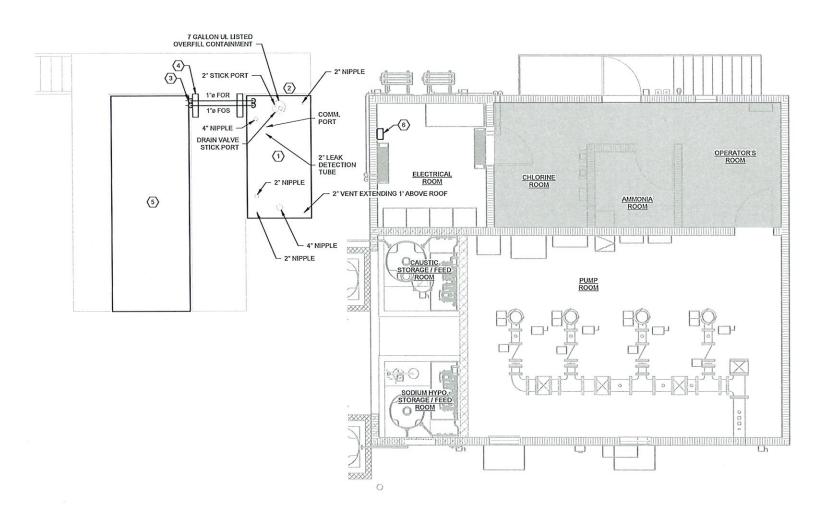
5 P101

4

P101







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

KEYED NOTES

- 3. COORDINATE LOCATION OF FUEL OIL SUPPLY AND FUEL OIL RETURN CONNECTIONS WITH ELECTRICAL CONTRACTOR.
- 4. PIPE SUPPORT.
- 6. RELOCATED EXISITING LEAK DETECTION PANEL INCLUDING ALL ASSOCIATED WIRING, CONDUITS, SUPPORTS, ETC.

1. EXISTING FUEL TANK SHALL BE ROTATED 90 DEG.

2. EXISTING HIGH LEVEL WARNING PANEL.

5. NEW GENERATOR, SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

DEMO & NEW WORK LEGEND



AREA OF DEMOLITION

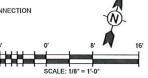
AREA OUT OF SCOPE



POINT OF DISCONNECTION



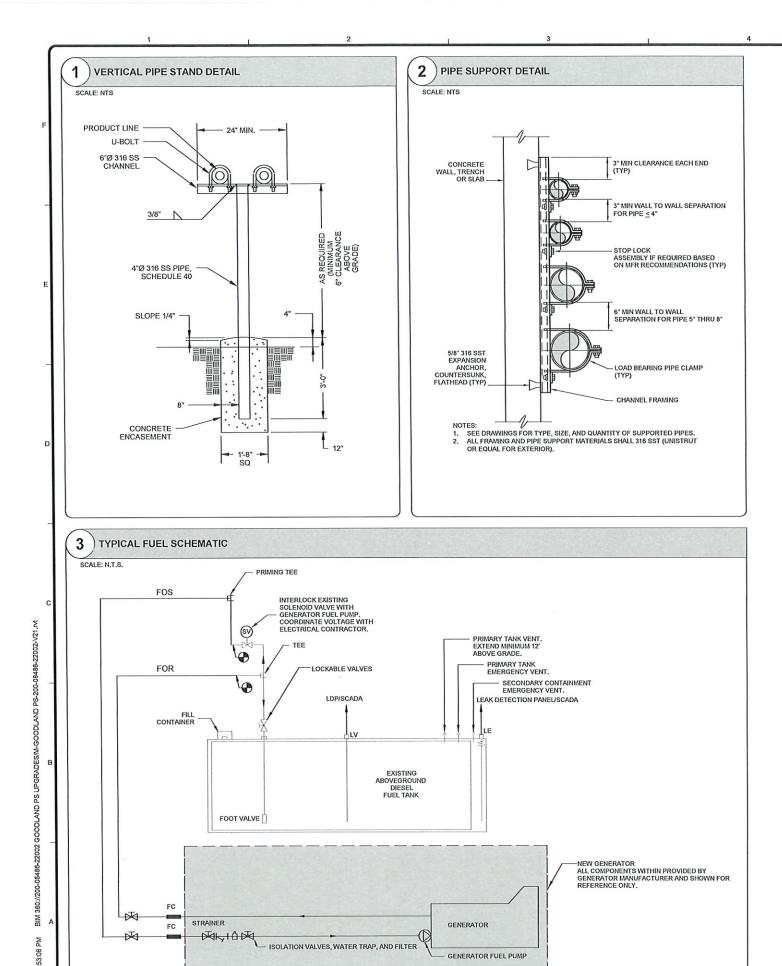
POINT OF CONNECTION

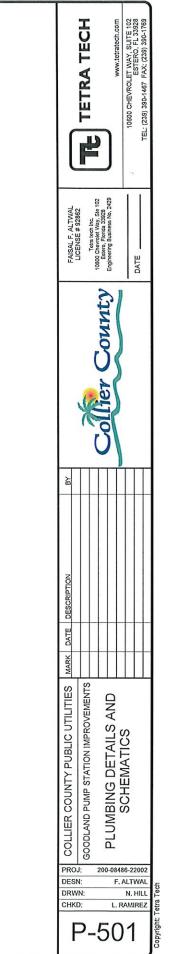


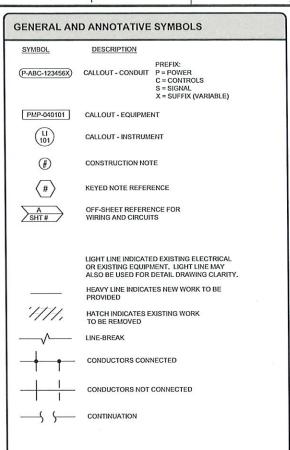
COLLIER COUNTY PUBLIC UTILITIES MAGE GOODLAND PUMP STATION IMPROVEMENTS PLUMBING MODIFICATION PLAN PROJ: 200-08486-22002 DESN: F. ALTWAL DRWN: N. HILL CHKD: L. RAMIRE

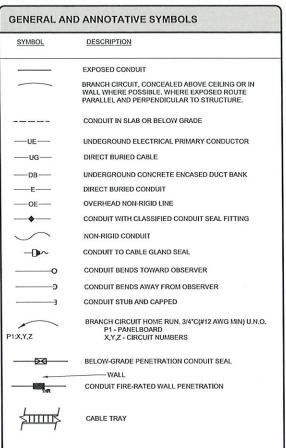
TETRA TECH

County

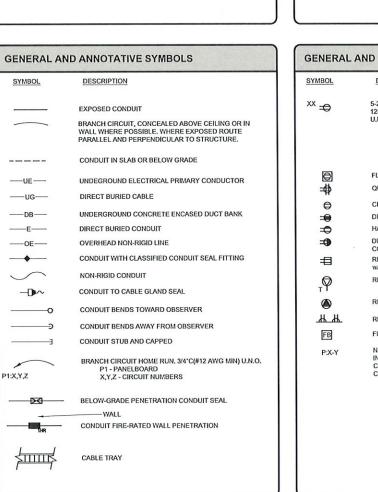


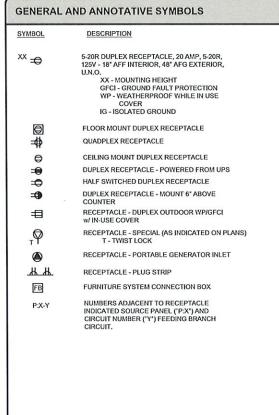




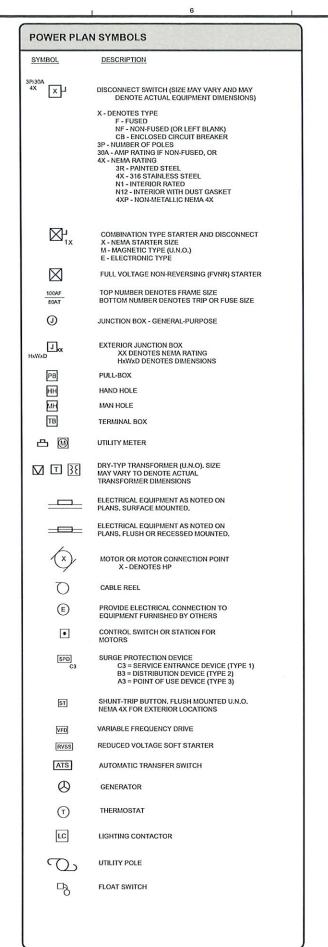


SYMBOL	DESCRIPTION
_{xx}	CEILING MOUNTED EXIT SIGN, ARROW IF INDICATED DENOTES ARROWS ON EXIT FACE PLACE. HATCH INDICATES NUMBER OF EXIT FACES. XX - DENOTES TYPE, SEE FIXTURE SCHEDULE
$\vdash \bigcirc\!$	WALL MOUNTED EXIT SIGN.
	EMERGENCY UNIT LIGHT FIXTURE WITH 2 HEADS
XX a	CEILING LIGHT FIXTURE. SIZED PER PHYSICAL DIMENSIONS OF FIXTURE XX - DENOTES TYPE. SEE FIXTURE SCHEDULE a - DENOTES CONTROLLED BY SWITCH IF INDICATED P1:10 - DENOTES SOURCE PANEL AND BRANCH CIRCUIT NUMBER
	CEILING LIGHT FIXTURE HATCH DENOTES EQUIPPED WITH EMERGENCY BATTERY BACKUP UNIT
	WALL MOUNTED LIGHT FIXTURE
\oslash	RECESSED DOWN LIGHT FIXTURE
*	HIGH MAST LIGHT FIXTURE
	POLE MOUNTED LIGHT FIXTURE
	POLE MOUNTED LIGHT FIXTURE WITH NUMBER OF ARMS OR HEADS AS SHOWN
	HANDRAIL MOUNTED LIGHT FIXTURE



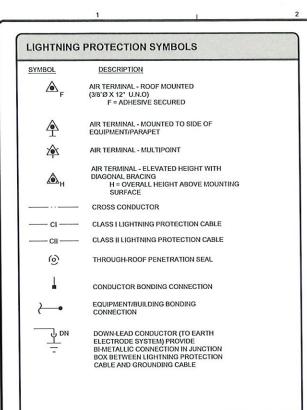


SYMBOL	DESCRIPTION
ş, x	120/277V, SINGLE TOGGLE, LIGHT SWITCH. 48° AFF U.N.O. X - DENOTES TYPE 3 - 3 WAY 4 - 4 WAY D - DIMMING (1500 WATT U.N.O.) OS - OCCUPANCY SENSOR WITH MANUAL OVERRIDE OSD - OCCUPANCY SENSOR WITH DIMMING AND MANUAL OVERRIDE M - MOTOR RATED LOCKABLE TOGGLE SWITCH LV - LOW VOLTAGE DIGITAL LV2 - LOW VOLTAGE DIGITAL WITH DIMMING WP - WEATHERPROOF COVER HOA - HAND-OFF-AUTO
	a - DENOTES FIXTURES CONTROLLED
(M)	VACANCY/OCCUPANCY SENSOR, CEILING MOUNTED
(PC)	PHOTOCELL (MOUNT EXTERIOR OF BUILDING FACING NORTH U.N.O)
rc	LIGHTING CONTACTOR.



TECH TETRA COUNTY PUBLIC UTILITIES PUMP STATION IMPROVEMENTS LEGEND ELECTRICAL PROJ: 200-08486-22002 DESN: RWN: JAS JDM CHKD:

6/30/2025 9;59:33 AM - O:PPROJECTSIORLANDONERI08486/200-08486-22002ICADISHEETFILESIPS IMPROVEMENTSIE-001 ELECTRICAL LEGENI



GROUNDING SYMBOLS

SYMBOL

 \boxtimes

X

DESCRIPTION

— G — — GROUND CONDUCTOR BURIED 30" BELOW

CONNECTION.

GROUND CONDUCTOR. BARE COPPER GROUND COUNTERPOISE. (4/0 TINNED COPPER U.O.N.)

GROUND CONDUCTOR WITH EXOTHERMIC CONNECTION, PIGTAIL 18" ABOVE FINISHED FLOOR. GROUND CONDUCTOR WITH MECHANICAL

GROUND BAR - SEE PLANS AND SPECS FOR

GROUND ROD WITH INSPECTION WELL

GROUND ROD (3/4'Ø X 10' COPPER-CLAD U.N.O) CONCRETE ENCASED ELECTRODE OR INDICATES BONDING TO CONCRETE REBAR

(FD) _{XX}	FLAME DETECTOR XX-DENOTES TYPE UV/IR - COMBINATION UV - ULTRAVIOLET IR - INFRARED VR - VISIBLE RADIATION
(HD) _{XX}	HEAT DETECTOR XX-DENOTES TYPE F - FIXED R - RATE OF RISE
GD _{XX}	GAS DETECTOR XX- GAS TYPE
⟨SD⟩ _{XX}	SMOKE DETECTOR XX-DENOTES TYPE ID - IN DUCT I - IONIZATION P - PHOTO ELECTRIC IP - DUAL RATED R - RETURN S - SUPPLY
— ғ —	FIRE ALARM SYSTEM CONDUIT AND WIRING
∇ F	FIRE ALARM STROBE LIGHT WALL MOUNTED
H	FIRE ALARM HORN ONLY
F _{CD}	FIRE ALARM HORN/STROBE LIGHT COMBINATION WALL MOUNTED CD = CANDELA RATING
SP	MASS NOTIFICATION SPEAKER/STROBE LIGHT COMBINATION WALL MOUNTED
₹	FIRE ALARM SPEAKER/STROBE LIGHT COMBINATION CEILING MOUNT
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
GAP	GRAPHIC ANNUNCIATOR
ANN	REMOTE ANNUCIATOR PANEL
RL	OUTPUT RELAY
vs	VALVE SUPERVISOR SWITCH
PS	PRESSURE SWITCH
DH	DOOR HOLDER
F	FIRE ALARM MANUAL PULL STATION
R	FIRE ALARM RELAY
FS	FIRE ALARM FLOW SWITCH
FE	FIRE EXTINGUISHER
TS	FIRE ALARM TAMPER SWITCH

FIRE PROTECTION SYMBOLS

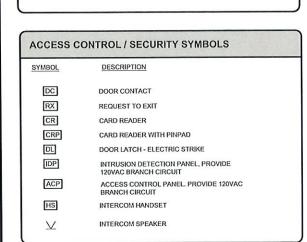
DESCRIPTION

SYMBOL



SINGLE-LINE	DIAGRAM SYMBOLS				
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	TRANSFORMER		HIGH VOLTAGE FUSE (ABOVE 600 V)	<u></u> 2	M-MAGNETIC MOTOR STARTER, C-GENERAL USE CONTACTOR (NUMBER INDICATED NEMA SIZE)
	XX - DENOTES SIZE IN KVA YY - DENOTES VOLTAGE AND PHASE R - DENOTE IMPEDANCE (PROVIDE	XX:A	LOW VOLTAGE FUSE XX DENOTES AMP RATING	000	MOTOR OVERLOAD DEVICE
\triangle	STANDARD IF BLANK) DELTA CONFIGURED WINDING		CIDCUIT PREAVER	市	CAPACITOR, 3 PHASE, SIZE AS INDICATED MAGNETIC STARTER
V	WYE CONFIGURED WINDING	0 0	CIRCUIT BREAKER	\boxtimes	(BACKGROUND DRAWINGS ONLY)
宁		< € 0 0→>	DRAW OUT BREAKER	\boxtimes	COMBINATION STARTER FUSED UNLESS NOTED (CIRCUIT BREAKER)
<u></u>	GROUND ELECTRODE (3/4*Ø X 10*) COPPER-CLAD U.N.O.	6	MOTOR WITH ASSUMED HORSEPOWER. ACTUAL	(1)	UTILITY METER
SPD	SURGE PROTECTION DEVICE	(x)	HORSEPOWER MAY DIFFER - INCREASE AS REQUIRED	\Diamond	INTERLOCK FUNCTION
	DISCONNECT SWITCH	(ST) —	SHUNT TRIP	K	MECHANICAL KEYED INTERLOCK
ww	HEATER w/ SIZE INDICATED	Y	UTILITY CONNECTION		INTERLOCK ASSOCIATION
TR 75KW		□H0	CT ENCLOSURE WITH SEPARATE METER	VFD SPD	VARIABLE FREQUENCY DRIVE
\otimes	SOLENOID VALVE	G XX:KW	GENERATOR		SURGE PROTECTION DEVICE
0 0	TRANSFER SWITCH	YY:V	XX: DENOTES SIZE IN KW YY: DENOTES VOLTAGE AND PHASE	SSRV	POWER QUALITY MONITOR SOLID STATE REDUCED VOLTAGE STARTER
8		O LĪ		SST	SOLID STATE TRIP
		₽	FLOAT SWITCH	RVSS	REDUCED VOLTAGE SOFT STARTER
00	LOW VOLTAGE DISCONNECT SWITCH	3(3)	CURRENT TRANSFORMER, (3) INDICATES QUANTITY	• N •	BUS CONNECTION
ONTROL CI	IRCUIT & PILOT DEVICE LEGEND				
SYMBOL D	ESCRIPTION SYMBOL	DESCRIPTION	SYMBOL DESCRIPTION		SYMBOL DESCRIPTION
0. 0					

CONTROL	CONTROL CIRCUIT & PILOT DEVICE LEGEND										
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION				
Z°	PRESS. ACTUATED SWITCH	-(CR)-	CONTROL RELAY COIL	√ °	TIMED CLOSED CONTACT ON DE-ENERGIZATION	0 0	MAINTAINED STOP MOMENTARY				
8	FLOAT ACTUATED SWITCH	П	CONTROL RELAY CONTACT-NORMALLY OPEN		MOMENTARY PUSHBUTTON OPERATOR-NORMALLY OPEN		START PUSHBUTTON (JOG)				
20	FLOW ACTUATED SWITCH	H	CONTROL RELAY CONTACT-NORMALLY CLOSED	مله	MOMENTARY PUSHBUTTON OPERATOR-NORMALLY CLOSED		ZERO SPEED OR ANTI- PLUGGING SWITCH				
مک	TEMP. ACTUATED SWITCH	-CR-	TWO COIL LATCHING RELAY	оТо	PUSHBUTTON OPERATOR WITH MUSHROOM HEAD	0	LOCAL TERMINALS WITH				
%	LIMIT SWITCH - NORMALLY OPEN	-(CR)-		<u>α Ι α</u>	FIELD LOCATED STOP BUTTON		EXTERNAL WIRING				
040	LIMIT SWITCH - NORMALLY CLOSED	-(T)-	TIMING RELAY COIL	- 0 + 0 -	MAINTAINED PUSH-PULL OPERATOR	—(n)—	ELAPSED TIME INDICATOR				
00	LIGHT SWITCH - NORMALLY CLOSED HELD OPEN	20	TIMED CLOSED CONTACT ON ENERGIZATION	-0 (0-	MAINTAINED PUSHFOLL OF ENATOR	INST.	TIMING RELAY INSTANTANEOUS CONTACTS				
070	LIGHT SWITCH - NORMALLY OPEN HELD CLOSED	T	TIMED OPEN CONTACT ON ENERGIZATION	0 0 0	MAINTAINED STOP-START PUSHBUTTON OPERATOR	NST.	TIMING RELAY INSTANTANEOUS CONTACTS				
070	LATCHING CABLE SWITCH	~°	TIMED OPEN CONTACT ON DE-ENERGIZATION	-0-40-	SOLENOID OR CLUTCH	%T X2	120 VAC TRANSFORMER				
	TIME-DELAY FUSE				PUSH-TO-TEST INDICATING LIGHT	* <u>olo</u> *	SELECTOR SWITCH OPERATOR WITH FUNCTION SHOWN				



SYMBOL	DESCRIPTION
△	TELECOMMUNICATIONS JACK, PROVIDE CAT-6 IN 1° CONDUIT TO SOURCE AS INDICATED ON PLANS, IN AREAS WITH DROP CEILING PROVIDE 1° CONDUIT TO ABOVE CEILING AND THEN UTILIZE CABLE TRAY OR "J" HOOKS TO ROUTE CAT-6 TO SOURCE
4	COMBINATION TELECOMMUNICATIONS JACK. PROVIDE TWO CAT-6
0	CEILING MOUNTED
√ WAP	WIRELESS ACCESS POINT
	FLOOR MOUTED
TV	TELEVISION OUTLET, HEIGHT AS NOTED ON PLANS. PROVIDE 1" CONDUIT TO SOURCE SHOWN
AV	AV BOX, PROVIDE 2* CONDUIT TO SOURCE SHOWN
	BASKET TYPE CABLE TRAY
ш	LADDER TYPE CABLE TRAY

SINGLE LIN	NE DIAGRAM ≥1000V					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
27)	UNDER-VOLTAGE	64)	GROUND DETECTOR	AFD	ARC-FLASH DETECTOR (OPTICAL)	
(32)	DIRECTIONAL POWER OR REVERSE-POWER	67)	A/C DIRECTIONAL OVERCURRENT	HIZ	HIGH-IMPEDANCE FAULT DETECTOR	
49)	MACHINE OR TRANSFORMER THERMAL RELAY	71)	LIQUID LEVEL SWITCH	(H)	SURGE ARRESTOR	
(50)	INSTANTANEOUS OVERCURRENT	(74)	ALARM RELAY	ARMS	ARC-FLASH REDUCTIONS MAINTENANCE SWITCH	
(51)	A/C INVERSE TIME-OVERCURRENT	(81) _{O/U}	OVER/UNDER FREQUENCY	ZSI	ZONE-SELECTIVE INTERLOCKING	
52	A/C CIRCUIT BREAKER	83	AUTOMATIC TRANSFER CONTROL	▼ =	DC BLOCKING DIODE BATTERY STRING	
59	OVERVOLTAGE	86	LOCKOUT RELAY		NON LOAD-BREAK ISOLATION SWITCH	
63	PRESSURE SWITCH	87)	DIFFERENTIAL PROTECTIVE RELAY		CHOKE/AIR INDUCTOR	

TETRA COLLIER COUNTY PUBLIC UTILITIES GOODLAND PUMP STATION IMPROVEMENTS ELECTRICAL LEGEND

PROJ: 200-08486-22002

JAS

JDM

DESN:

DRWN:

TECH

- PERFORM WORK IN COMPLIANCE WITH CODES AND ORDINANCES APPLICABLE TO AUTHORITIES NG JURISDICTION INCLUDING BUT NOT LIMITED TO: NATIONAL ELECTRICAL CODE NATIONAL FIRE PROTECTION CODES, BUILDING CODES, ENERGY CODES, HEALTH AND SAFETY CODES, LOCAL LAWS AND REGULATIONS, AND ACCESSIBILITY REQUIREMENTS, ADJUST WORK REQUIRED BY THIS CONTRACT WHERE NECESSARY FOR COMPLIANCE.
- ADHERE TO THE LATEST VERSION OF APPLICABLE INDUSTRY STANDARDS, INCLUDING BUT NO LIMITED TO: ISA - INSTRUMENT SOCIETY OF AUTOMATION, IES HANDBOOK AND RECOMMENDED ELMIED TO, 15A - INSTRUMENT SOCIETY OF AN OLOMATION, DESPONDENCE AND RECONSTRUCTED PRACTICES FOR LIGHTING, NETA ACCEPTANCE TESTING STANDARDS (ATS), INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE), ANSI, ELECTRONIC INDUSTRY ALLIANCE / TELECOMMUNICATIONS INDUSTRY ASSOCIATION (EIA / TIA), AND BUILDING INDUSTRY CONSULTING SERVICES INTERNATIONAL (BICSL)
- PROVIDE FOUIPMENT AND MATERIALS LISTED AND LABELED BY A NATIONALLY RECOGNIZED ESTING LABORATORY ACCEPTABLE TO THE AUTHORITIES HAVING JURISDICTION, CONTROL PANELS SHALL BE UL 508A LISTED AND LABELED. ANY PLO PANEL, UL 508A CONTROL PANEL, MCC, SWITCHGEAR, STANDALONE MOTOR CONTROLLERS, OR OTHER LISTED ELECTRICAL EQUIPMENT MODIFIED IN THE FIELD AFTER IT HAS LEFT THE FACTORY SHALL BE EVALUATED BY AN NRTI. TO PROVIDE A FIELD LISTING.
- ADHERE TO OWNER'S SITE-SPECIFIC PROTOCOLS INCLUDING, BUT NOT LIMITED TO: SYSTEM OPERATIONS, HEALTH AND SAFETY, SITE ACCESS RESTRICTIONS, AND LOCK-OUT / TAG-OUT PROCEDURES.
- PERFORM ELECTRICAL WORK IN ADHERENCE TO NECA 1 STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION.
- COORDINATE WORK WITH OTHER TRADES, AND WITH OWNER'S THIRD-PARTY CONTRACTORS AS
- THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO; TEMPORARY PROVISIONS TO MAINTAIN FACILITY USE, TEMPORARY CONSTRUCTION POWER AND COMMUNICATIONS, TOOLS / EQUIPMENT / AND MATERIALS REQUIRED FOR EXECUTION OF THEIR WORK, WORKFORCE SUPERVISION AND STAFFING, SITE HEALTH AND SAFETY, CONSTRUCTION SCHEDULING, SEQUENCE OF CONSTRUCTION, AND PLANNING AND COORDINATION OF WORK.
- PREPARE AND SUBMIT COORDINATION DRAWINGS FOR ELECTRICAL EQUIPMENT PLACEMENT, UNDERGROUND DUCT BANKS, AND OVERHEAD CONDUIT RACKS AND CABLE TRAYS. ILLUSTRATE CONDUIT STUB-UPS AND ENTRY LOCATIONS INTO EQUIPMENT ENCLOSURES, COORDINATE WITH AD JACENT ITEMS FOR CODE-REQUIRED CLEARANCES, AND ACCESS AS REQUIRED FOR OPERATIONS AND MAINTENANCE. (COORDINATION DRAWINGS ARE REQUIRED PRIOR TO EQUIPMENT SHOP DRAWING APPROVAL.)
- PLAN, PERMIT AND EXECUTE TRAFFIC CONTROL MEASURES AS REQUIRED TO PERFORM WORK IN STREETS AND PUBLIC RIGHT-OF-WAY.
- 0. PROTECT NEW AND EXISTING EQUIPMENT AND MATERIALS FROM DAMAGE AND DETERIORATION DURING CONSTRUCTION. REPAIR OR REPLACE ITEMS DAMAGED DURING CONSTRUCTION TO THE EXTENT THEIR DAMAGE IS UNNOTICEABLE AND IN A MANNER THAT DOES NOT AFFECT FUNCTION, USE, OR LONGEVITY (AT NO COST TO THE OWNER), WARRANTIES SHALL NOT BE AFFECTED BY ANY REPAIRS MADE IN THE FIELD.
- . THE OWNER HAS THE RIGHT TO RETAIN OR REFUSE ANY AND REMOVED MATERIALS. COORDINATE WITH THE OWNER ON RETAINED ITEMS AND EXERCISE CARE IN REMOVAL ANDLING AND STORAGE. ITEMS NOT RETAINED BY THE OWNER SHALL BE RECYCLED WHERE SUCH PROGRAMS EXIST, NON-RECYCLABLE ITEMS SHALL BE LAWFULLY DISPOSED OF BY THE CONTRACTOR.
- 12. FACILITY OPERATIONS AND USE SHALL BE MAINTAINED, EXCEPT AS EXPLICITLY IDENTIFIED FOR DECOMMISSIONING PROVIDE TEMPORARY FACILITIES AND SERVICES NECESSARY TO MAINTAIN FACILITY OPERATIONS DURING CONSTRUCTION, COORDINATE SCHEDULING AND TEMPORARY PROVISIONS FOR SYSTEM OUTAGES WITH THE OWNER A MINIAUM OF TWO WEEKS IN ADVANCE OF WORK WHICH MAY AFFECT FACILITY OPERATIONS. THIS MAY INCLUDE TEMPORARY LIFE SAFETY SYSTEMS, TEMPORARY POWER, TEMPORARY COMMUNICATION NETWORKS, EMPORARY CONTROLS SOFTWARE AND HARDWARE, THESE ITEMS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR
- 3. WHERE NEW UTILITIES ARE INCLUDED IN THE SCOPE OF WORK, COORDINATE EXACT DIVISION OF UTILITY WORK WITH LOCAL UTILITY COMPANIES PROVIDING SERVICES, WHERE CONTRACT REQUIREMENTS EXCEED THIS COORDINATED RESPONSIBILITY, PROVIDE SUITABLE CREDIT FOR WORK BEING PERFORMED BY OTHERS.
- THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND REPRESENT SYSTEMS THAT ARE COMPLETE AND FUNCTIONAL FOR THEIR INTENDED USE, PROVIDE SUPPLEMENTAL
 MATERIALS, LABOR AND OTHER ANCILLARY ITEMS REQUIRED FOR COMPLETE INSTALLATION THESE ITEMS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME
- THE CONTRACTOR SHALL COORDINATE WITH THE HVAC AND PROCESS EQUIPMENT SUPPLIERS. THE INTENT OF THE ELECTRICAL DRAWINGS IS TO PROVIDE A FULLY FUNCTIONAL HYAC AND PROCESS TREATMENT SYSTEM. AS SUCH, THE CONTRACTOR MAY BE REQUIRED TO MODIFY ELECTRICAL INSTALLATION INDICATED ON PLANS OR PROVIDE SUPPLEMENTAL MATERIALS, ABOR AND OTHER ANCILLARY ITEMS REQUIRED FOR COMPLETE INSTALLATION, THESE ITEMS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME
- PROVIDE ADDITIONAL JUNCTION BOXES, PULL BOXES AND HANDHOLES NECESSARY TO LIMIT INSTALLED CONDUIT BENDS TO NO MORE THAN 360-DEGREES FOR OVERHEAD WORK, AND 270-DEGREES FOR UNDERGROUND WORK, LOCATE BOXES BASED OF CABLE PULLING TENSION AND ACCESSIBILITY. SIZE BOXES PER CABLE MANUFACTURES BENDING RADIUS
 REQUIREMENTS AND THE NEC. THESE ITEMS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME. INSTALLATION OF NETWORK CABLING AND EQUIPMENT SHALL COMPLY WITH APPLICABLE EIA/TIA AND BICSI
- CONVENIENCE OUTLETS SHOWN WITHOUT DESIGNATED CIRCUITRY SHALL INCLUDE CONDUIT AND WIRE BACK TO THE NEAREST 120Y BRANCH CIRCUIT PANELBOARD USING WIRING METHODS CONSISTENT WITH SIMILAR CIRCUITS WITHIN THAT AREA. THIS WORK SHALL BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL

- 18. PROVIDE BRANCH CIRCUIT WIRING AND CONTROLS FOR INSTALLED LIGHTING SYSTEMS. THIS WORK IS TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME.
- 19. ADJUST BRANCH CIRCUIT CONDUCTOR SIZES TO COMPENSATE FOR VOLTAGE DROP AND DERATING OF AMPACITY BASED ON THE NUMBER OF CONDUCTORS CONTAINED WITHIN A SUBJECT RACEWAY, FOR 20-AMPERE BRANCH CIRCUITS EXCEEDING 75-FEET IN OVERALL LENGTH, INCREASE CONDUCTORS TO #10AWG SIZE (OR GREATER) AS REQUIRED TO REDUCE VOLTAGE DROP TO NO MORE THAN THREE PERCENT LINE-TO-NEUTRAL. THESE ADJUSTMENTS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME.
- 20. DIMENSIONAL TOLERANCES ARE NOT SPECIFICALLY INDICATED IN PLANS, DETAILS AND SPECIFICATIONS, ALIGN ABUTTING HORIZONTAL ITEMS WITHIN +/- 1/64*, AND WALL-MOUNTED OR SUSPENDED ITEMS SEPARATED BY 12" OR MORE TO A TOLERANCE OF 1/16". PLUMB ITEMS SHALL NOT DEVIATE FROM TRUE VERTICAL BY MORE THAN 1/8" IN 10"-0". LEVEL EQUIPMENT TO WITHIN 1/32" ACROSS ITS HORIZONTAL SURFACE IN EACH DIRECTION.
- 21. ALL CONDUITS SHALL BE MINIMUM 1/2 INCH RGS (ABOVE GRADE) AND 1° PVC (BELOW GRADE) UNLESS OTHERWISE NOTED AND INCLUDE AN INSULATED GREEN GROUNDING CONDUCTOR SIZED PER THE NEC. MINIMUM WIRE SIZE SHALL BE #12 AWG UNLESS OTHERWISE NOTED, THIS GROUND WIRE SHALL BE CONNECTED AT EACH END TO THE EQUIPMENT GROUND. THIS ALSO INCLUDES INSTRUMENTATION DEVICES SUCH AS LEVEL, PRESSURE, FLOW TRANSMITTERS, LIMIT SWITCHES, CONDUITS, NETWORK AND VO CABLES.
- 22. COMPLETELY CONCEAL POLY-VINYL CHLORIDE (PVC) CONDUITS WITHIN CONCRETE OR BELOW GRADE (UNLESS SPECIFICALLY INDICATED OTHERWISE,) PROVIDE RIGID GALVANIZED STEEL RISERS AND ELBOWS (WITH OR WITHOUT PVC COATING AS SPECIFIED) FOR EMBEDDED / DERGROUND PVC CONDUIT RUNS.
- 23. SECURELY FASTEN EQUIPMENT AND MATERIALS INTO PLACE TO PROVIDE RESTRAINT AGAINST MOVEMENT AND SEPARATION DURING CONDITIONS OF REGULAR USE AND DURING SEISMIC EVENTS, PROVIDE AND SUBMIT FOR APPROVAL STRUCTURAL DESIGN AND CALCULATIONS BY A REGISTERED PROFESSIONAL ENGINEER FOR SEISMIC RESTRAINT.
- 24. UNDERGROUND POWER AND CONTROL CONDUIT SYSTEMS SHALL BE SEPARATED BY 12' MINIMUM AND SHALL BE RUN THROUGH SEPARATE JUNCTION BOXES AND MANHOLES
- ALL EXTERIOR AREAS SHALL BE CONSIDERED WET AND CORROSIVE. EXTERIOR ELECTRICAL ENCLOSURES SHALL BE NEMA 4X STAINLESS STEEL UNLESS SPECIFICALLY NOTED OTHERWISE
- 26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COORDINATED ELECTRICAL POWER DISTRIBUTION SYSTEM IN ACCORDANCE WITH NEC ARTICLE 240,12 AND ARTICLE 700.27 COORDINATION STUDIES SHALL BE APPROVED PRIOR TO ORDERING ELECTRICAL DISTRIBUTION
- 27. ELECTRICAL SYSTEM INSTALLED IN HAZARDOUS LOCATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 5, ARTICLE 500 OF THE NEC. EQUIPMENT SHALL BE RATED FOR THE HAZARDOUS AREA IN WHICH IT IS PLACED. CONDUITS LEAVING HAZARDOUS AREAS SHALL BE SEALED PER THE NEC. STANDARDS SUCH AS NFPA 820 AND API 500 SHALL BE USED IN ACCORDANCE WITH CHAPTER 5 OF THE NEC.
- 28. THE CONTRACTOR SHALL SIZE WIRING NOT EXPLICITLY SHOWN ON THE DRAWINGS ACCORDING TO THE REQUIREMENT OF THE NEC FOR THE SPECIFIC APPLICATION AND CONDITIONS. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS,
- 29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES AND PROTECTING SAID UTILITIES DURING THE INSTALLATION OF THE ELECTRICAL SYSTEM.
- WHERE SELECTIVE DEMOLITION TO EXISTING PAVEMENTS AND SIDEWALKS ARE REQUIRED TO PERFORM CONSTRUCTION ACTIVITIES, NEATLY SAW-CUT SURFACES ALONG EDGES OF WORLD
- 31. CORE-DRILLING SHALL BE UTILIZED FOR CONCRETE WALLS AND FLOORS WHERE PENETRATIONS ARE REQUIRED. LOCATE REINFORCING STEEL PRIOR TO CORE DRILLING AND AVOID CUTTING STEEL WHERE POSSIBLE. WHERE CUTTING OF REINFORCING STEEL IS ABLE, SUBMIT AN RFI AND OBTAIN STRUCTURAL APPROVAL FOR THE NECESSARY REPAIRS ASSOCIATED WITH CUTTING REINFORCING STEEL.
- 32. VERIFY VOLTAGE AND PHASE PRIOR TO ORDERING AND AGAIN PRIOR TO TERMINATION OF CONDUCTORS ON EQUIPMENT AND DEVICES. DAMAGES RESULTING FROM LACK OF VERIFICATION SHALL BE BORNE BY THE CONTRACTOR.
- 33 SECURE SURFACE-MOUNTED ELECTRICAL FOUIDMENT AND RACEWAYS WITH CHANNEL STRUT MINIMUM STRUT LENGTH TO BE 12 INCHES, WHERE POSSIBLE
- APPLY DUCT SEAL TO CONDUITS ENTERING CONTROL PANELS AND ELECTRICAL EQUIPMENT ENCLOSURES.
- 35. ADJUST EQUIPMENT RATINGS AND CAPACITIES TO COMPENSATE FOR SITE-SPECIFIC AMBIENT TEMPERATURE CONDITIONS AND ELEVATIONS, SIZE EQUIPMENT AS HEAVY DUTY WHERE CONDITIONS OF USE WARRANT.
- PERFORM FINAL POWER STUDIES AND ARC-FLASH EVALUATION AFTER EQUIPMENT HAS BEEN SELECTED, BUT PRIOR TO ORDERING, ALLOWING FOR ADJUSTMENTS TO OVERCURRENT DEVICE SELECTION AND EQUIPMENT RATINGS AS DETERMINED BY THE STUDY, UNSUITABLE EQUIPMENT ORDERED PRIOR TO PERFORMING THESE STUDIES SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- WIRE STARTERS IN ACCORDANCE WITH NEMA STANDARD ICS 18-2001 (CURRENT VERSION CLASS IIB WIRING, SUBMIT ENGINEERED SHOP DRAWINGS FOR STARTERS SHOWN TO BE WIRED,
- 38. MAINTAIN A COMPREHENSIVE SET OF UP TO DATE AS-CONSTRUCTED RECORD DOCUMENTS, WHICH SHALL BE KEPT AND AVAILABLE FOR ON-SITE REVIEW AT ALL TIMES. USING CONFORMED DOCUMENTS AS A BASE, UTILIZE COLOR-CODED MARKUPS TO INDICATE FIELD MODIFICATIONS: RED TO INDICATE ADDED WORK OR REVISED LOCATIONS OF NEW WORK, GREEN FOR DELETED CONTENT, PURPLE FOR EXISTING CONDITIONS, AND BLUE FOR NON-TECHNICAL EXPLANATORY NOTES. YELLOW HIGHLIGHTING MAY BE USED TO INDICATE WORK COMPLETED AND IN FULL COMPLIANCE WITH THE CONFORMED SET.

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	PERCENTAGE	FBC	FLORIDA BUILDING CODE	LSIG	LONG, SHORT, INSTANTANEOUS, GROUND	R	RED, RELAY, OR RUN
	TWO POLE	FCV FDR	FLOW CONTROL VALVE FEEDER	LSL	LOW LEVEL SWITCH LEVEL TRANSMITTER	RCP RE	REFLECTED CEILING PLAN RELOCATE DEVICE INDICATED
	AMPERES OR AMBER, OR AERATOR ABOVE COUNTER	FE	FLOW ELEMENT	LT	LEVEL TRANSMITTER LEVEL TRANSMITTER OR LIGHT	REC	RECEPTACLE
	ACCESS CONTROL STATION	FI	FLOW INDICATOR		LIQUID TIGHT FLEXIBLE METAL CONDUIT	RECEPT	RECEPTACLE
	AMPERE FUSE	FIT	FLOW INDICATING TRANSMITTER	LTG	LIGHTING	REF	REFERENCE
AFF .	ABOVE FINISHED FLOOR TO CENTERLINE	FMCP	FIRE ALARM & MASS NOTIFICATION CONTROL	LTS & LTS	LIGHTING AND LIGHTS	RGA	RIGID GALVANIZED ALUMINUM
AFG .	ABOVE FINISHED GRADE TO CENTERLINE	PANEL	FORMARIO O MONTH OF	LV	LOW VOLTAGE	RGS	RIGID GALVANIZED STEEL
THI I	AUTHORITY HAVING JURISDICTION	FO	FIBER OPTIC	LY	LEVEL RELAY	RIL	RED INIDCATING LIGHT
	AIR HANDLING UNIT	FQI FT	FLOW TOTALIZER	M	MOTOR STARTER COIL OR CYCLE TIMER	RIO	REMOTE I/O PANEL
	ANALOG INPUT	FV	FLOW TRANSMITTER FLOW VALVE	mA	MILLIAMPERES	RM	ROOM
	ANALYSIS INDICATOR	FVR	FULL VOLTAGE REVERSING	MADC	DIRECT CURRENT MILLIAMPERES	RP	REPLACE
	AMPER INDICATING LIGHT	G	GROUND	MAN	MANUAL	RTD	RESISTANCE TEMPERATURE DETECTOR
	AMBER INDICATING LIGHT ANALYSIS INDICATING RECORDER	GB	GROUND BUS	MAX MCB	MAXIMUM MAIN CIRCUIT BREAKER	RTM RTU	RUNNING TIME METER REMOTE TELEMETRY UNIT
	ANALYSIS INDICATING TRANSMITTER	GC	GENERAL CONTRACTOR	MCC	MOTOR CONTROL CENTER	RVNR	REDUCED VOLTAGE, NON REVERSING
	ALUMINUM	GEN	GENERATOR	MCM	THOUSAND CIRCULAR MILS	RVS	REDUCED VOLTAGE STARTER
	ALTERNATE OR ALTERNATOR	GFCI	GROUND-FAULT CIRCUIT INTERRUPTER	MCP	MAIN CONTROL PANEL	RVSS	REDUCED VOLTAGE SOFT STARTER
M	AMMETER .	GFI	GROUND-FAULT INTERRUPTING	MCP	MOTOR CIRCUIT PROTECTOR	S	START CONTACTOR OR VALVE
AMP	AMPERE	GFP	GROUND-FAULT PROTECTION OF EQUIPMENT	MDP	MAIN DISTRIBUTION PANEL	S, SEC	SECOND
ANN	ANNUNCIATOR	GIL	GREEN INDICATING LIGHT	МН	MANHOLE	52	NEMA SIZE 2 STARTER
	ANALOG OUTPUT	GND GRP	GROUP	MIN	MINUTE, MINIMUM	SC	SPEED CONTROL;
	AMMETER SWITCH	GRS	GALVANIZED RIGID STEEL	MIN	MINUTES OR MINIMUM	SEC	SECONDARY OR SECONDS
	AMPERE SWITCH	Н	HORN OR HIGH	MLO	MAIN LUGS ONLY	SEL	SELECTOR
	AUTOMATIC TRANSFER SWITCH AUTOMATIC	нс	HAND CONTROL	MM MPZ	MULTIMODE MINI POWER ZONE	SER	SERVICE ENTRANCE RATED
	AUXILIARY	нн	HANDHOLE	MS	MAGNETIC STARTER	SH	SHEET OR SHIELDED SINGLE MODE
	AMERICAN WIRE GAUAGE	н	HIGH	MS	MANUAL MOTOR STARTER	SPD	SURGE PROTECTION DEVICE
	BUILDING AUTOMATION SYSTEM	HOA	HAND-OFF-AUTO		MOTOR	SPEC	SPECIFICATION
	BARE COPPER	HP	HORSEPOWER	MTS	MANUAL TRANSFER SWITCH	SS	SELECTOR SWITCH OR STAINLESS STEEL
BKR	CIRCUIT BREAKER	HPS	HIGH PRESSURE SODIUM	mV	MILLIVOLTS	SSSS	SOLID STATE SOFT START
BLDG	BUILDING	HR	HAND RESET OR HOUR	N	NEUTRAL	STP	SHIELDED TWISTED PAIR
С	CONDUIT	HS	HAND SWITCH	N/A	NOT APPLICABLE	SV	SOLENOID VALVE
	CATEGORY	HTR	HEATER	N1	NEMA 1 ENCLOSURE	SWBD	SWITCHBOARD
	CIRCUIT BREAKER	HZ	HERTZ INTERLOCK	N12	NEMA 1 ENCLOSURE	Т	THERMOSTAT
	COUNTER HEIGHT	ı/o	INPUT/OUTPUT	N3R	NEMA 3R ENCLOSURE	ТВ	TERMINAL BOX, TERMINAL BLOCK
	CHARGER-BATTERY	IC	ISOLATION CONTACTOR	NA	NON-AUTO	TD	TIME DELAY RELAY
	CIRCUIT OR CIRCUIT BREAKER CONTROL	IDS	INTRUSION DETECTION SYSTEM	NC NEC	NORMALLY CLOSED NATIONAL ELECTRICAL CODE	TEL	TELELPHONE TEMPERATURE INDICATOR
	CONTROL PANEL	IG	ISOLATED GROUND	NEMA	NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL MANUFACTURERS	TO	TIME DELAY OPENING CONTACT OR THERMAI
	CONTROL RELAY OR CORROSION RESISTANT	INST	INSTANTANEOUS	ASSOCIA		OVERLO	
CSI	CONTROL SYSTEM INTEGRATOR	INT	INTERVAL TIMER	NEUT	NEUTRAL	TOA	TEST-OFF-AUTO
СТ	CURRENT TRANSFORMER	INTLK	INTERLOCK	NF	NON-FUSED	TSP	TWISTED SHIELDED PAIR
cu	COPPER OR CONDENSING UNIT	Ю	INPUT/OUTPUT	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	TVSS	TRANSIENT VOLTAGE SURGE SUPRESSION
DB	DUCT BANK	ISP	INSTRUMENT AND SAMPLE PANEL	NO	NORMALLY OPEN	TYP	TYPICAL
	DISCRETE INPUT	1	JUNCTION BOX	NO. NP	NUMBER NAMEPLATE	UA UE	COMMON ALARM
	DIAGRAM	JB K	JUNCTION BOX KEY	NTS	NOT TO SCALE	UG	UNDERGROUND ELECTRIC UNDERGROUND
	DISCONNECT	KCMIL	THOUSAND CIRCULAR MILS	OC	OPEN/CLOSE	UL	UNDERWRITERS LABORATORIES
	DOWN DISCRETE OUTPUT	KV	KILOVOLTS	OL	OVERLOAD	UNO	UNLESS NOTED OTHERWISE
	DISTRIBUTION PANEL	KVA	KILOVOLT-AMPERES	OL	OVERLOAD RELAY	UON	UNLESS OTHERWISE NOTED
	DISCONNECT SWITCH	KVAR	KILOVARS (REACTIVE KILOVOLT-AMPERES)	00	ON-OFF	UP	UTILITY POWER
	DRAWING(S)	KW	KILOWATTS	OOR	ON-OFF RESET	UPS	UNINTERRUPTIBLE POWER SUPPLY
	ELECTRICAL CONTRACTOR	KWH	KILOWATT HOUR	OUT	ОUТРUТ	UT	UNDERGROUND TELECOMMUNICATIONS
ECU	ENERGY CONTROL UNIT	KY	TIME RELAY	P&ID	PROCESS & INSTRUMENTATION DIAGRAM	V	VOLTS
EF	EXHAUST FAN	LAH	HIGH LEVEL ALARM	PC	PHOTOELECTTRIC CELL	VA	VOLT AMPS
EH	ELECTRIC HEATER	LAL	LOW LEVEL ALARM	PCV	PRESSURE CONTROL VALVE	VAC	VOLTS ALTERNATING CURRENT
	ELEVATION	rc/c	LIGHTING CONTROL / CONTACTOR	PDT	DIFFERENTIAL PRESSURE TRANSMITTER	VDC	VOLTS DIRECT CURRENT
	EMERGENCY	LCP	LOCAL CONTROL PANEL	PE	PHOTOELECTTRIC CELL	VFD VM	VARIABLE FREQUENCY DRIVE VOLTMETER
	ELECTRICAL METALLIC TUBING	LCV	LEVEL CONTROL VALVE	PE	PRESSURE ELEMENT PHASE	W	WIRE, WATTS
	ENCLOSURE	LET	LEVEL ELEMENT TRANSMITTER LINEAR FEET	PH PI	PRESSURE INDICATOR	w/	WITH
ENET	ETHERNET	LF	LEVEL INDICATOR	PIT	PRESSURE INDICATING TRANSMITTER	w/o	WITHOUT
	EXPLOSION PROOF EQUIPMENT	LIC	LEVEL INDICATOR LEVEL INDICATING CONTROLLER	PLC	PROGRAMMABLE LOGIC CONTROLLER	WAP	WIRELESS ACCESS PORT
ETM	ELAPSED TIME METER	LIR	LEVEL INDICATING RECORDER	PM	PHASE MONITOR	WI	WEIGHT INDICATOR
ETR	EXISTING TO REMAIN	LLH	HIGH LEVEL LAMP	PMP	PUMP	WP	WEATHERPROOF
	ELECTRIC UNIT HEATER	LM	LUMEN	PNL	PANEL	XFMR	TRANSFORMER
EWH	ELECTRIC WATER HEATER	LOR	LOCAL-OFF-REMOTE	POE	POWER OVER ETHERNET	XLP	CROSS-LINKED POLYETHYLENE
EX	EXISTING DEVICE TO REMAIN	LOS	LOCK-OUT STOP	PP	POWER PANEL	XP	EXPLOSION-PROOF
EXST	EXISTING	LP	LIGHTING PANEL	PR	SHIELDED PAIR	YC	STATUS CONTROL
EXT	EXTERIOR	LR & L	LATCHING RELAY	PRI	PRIMARY	YL	STATUS INDICATION
EXTN	EXTENSION	LS	LEVEL SWITCH	PSH	PRESSURE SWITCH HIGH	ZS	POSITION SWITCH
FA	FIRE ALARM	LSH	HIGH LEVEL SWITCH	PSI	POUNDS PER SQUARE INCH	ZSC	POSITION SWITCH CLOSED
	FIRE ALABA CONTOOL DANIEL	LSH	LEVEL SWITCH HIGH	PSL	PRESSURE SWITCH LOW	ZSO P	OSITION SWITCH
FACP FAH	FIRE ALARM CONTROL PANEL FLOW ALARM HIGH	LSHL	HIGH/LOW LEVEL SWITCH	PVC	POLYVINYL CHLORIDE CONDUIT		

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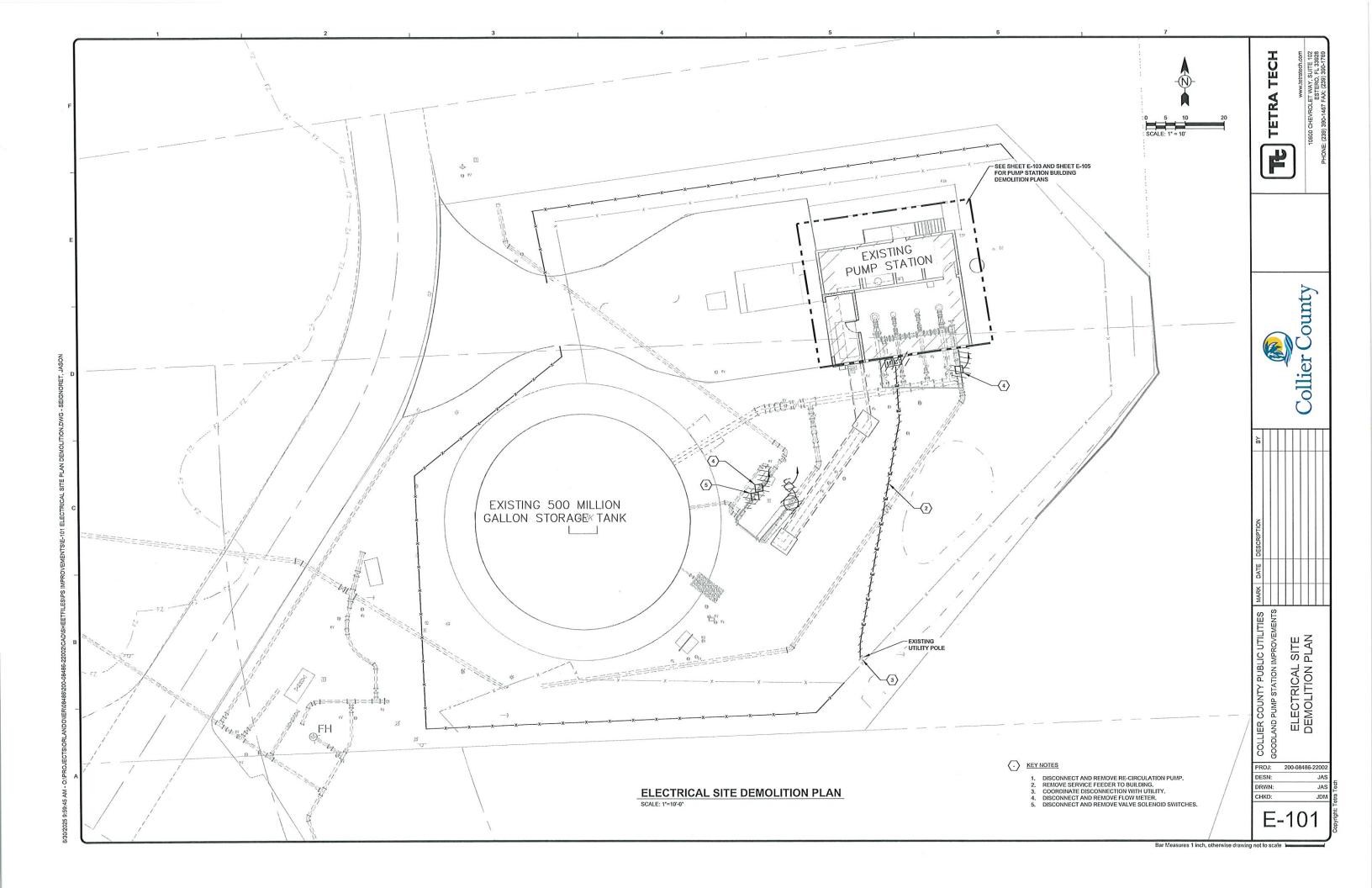


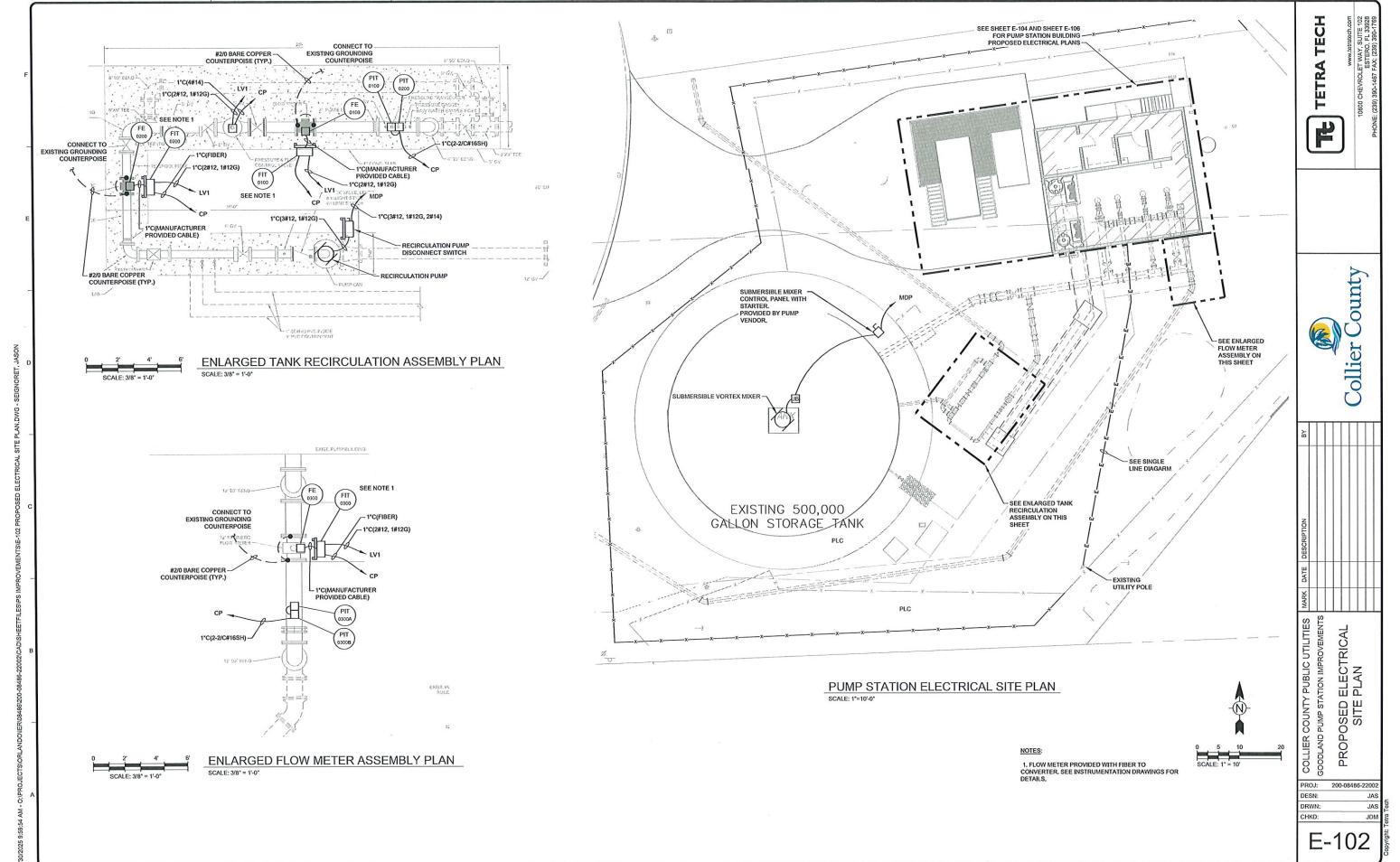


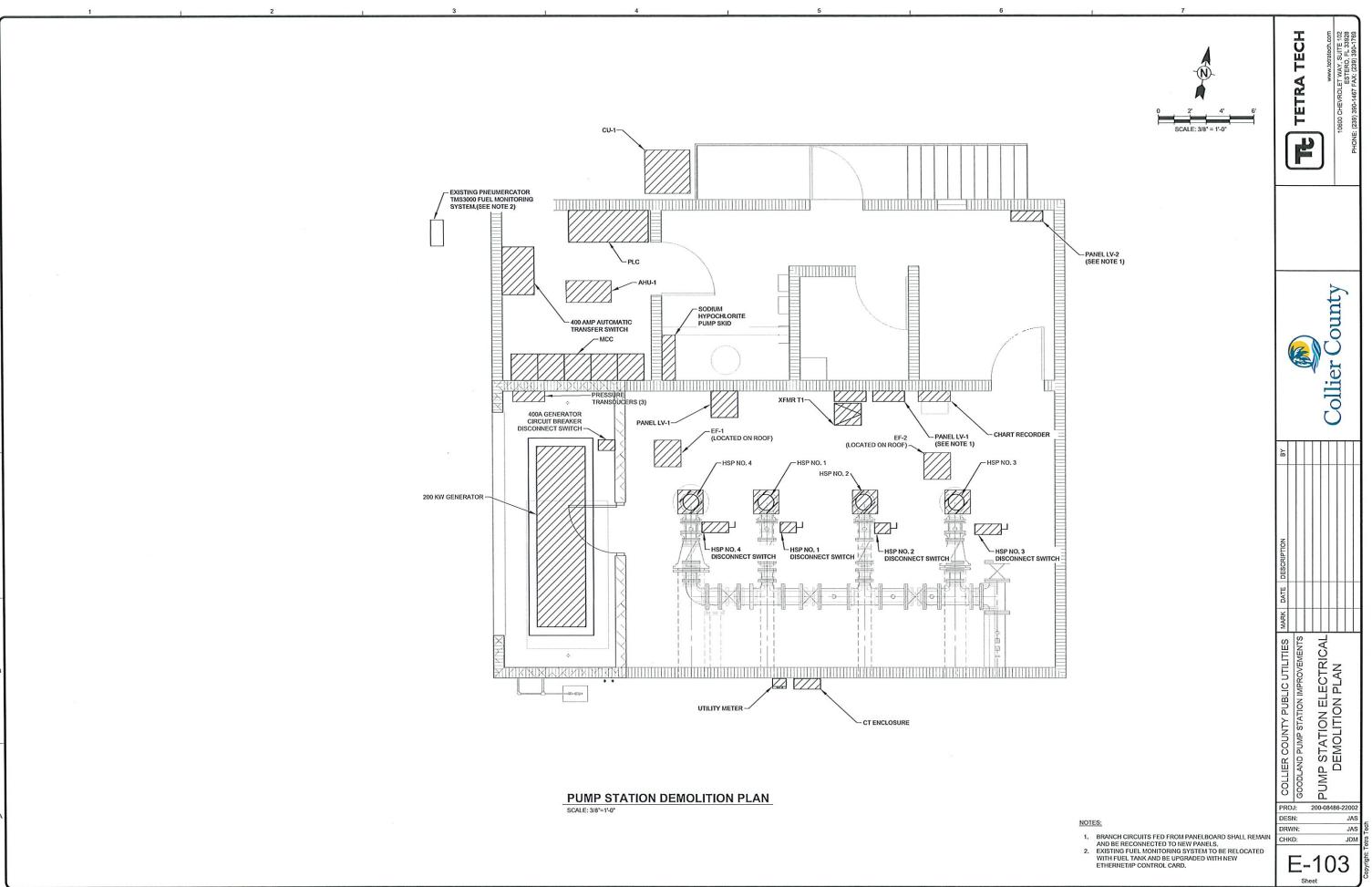
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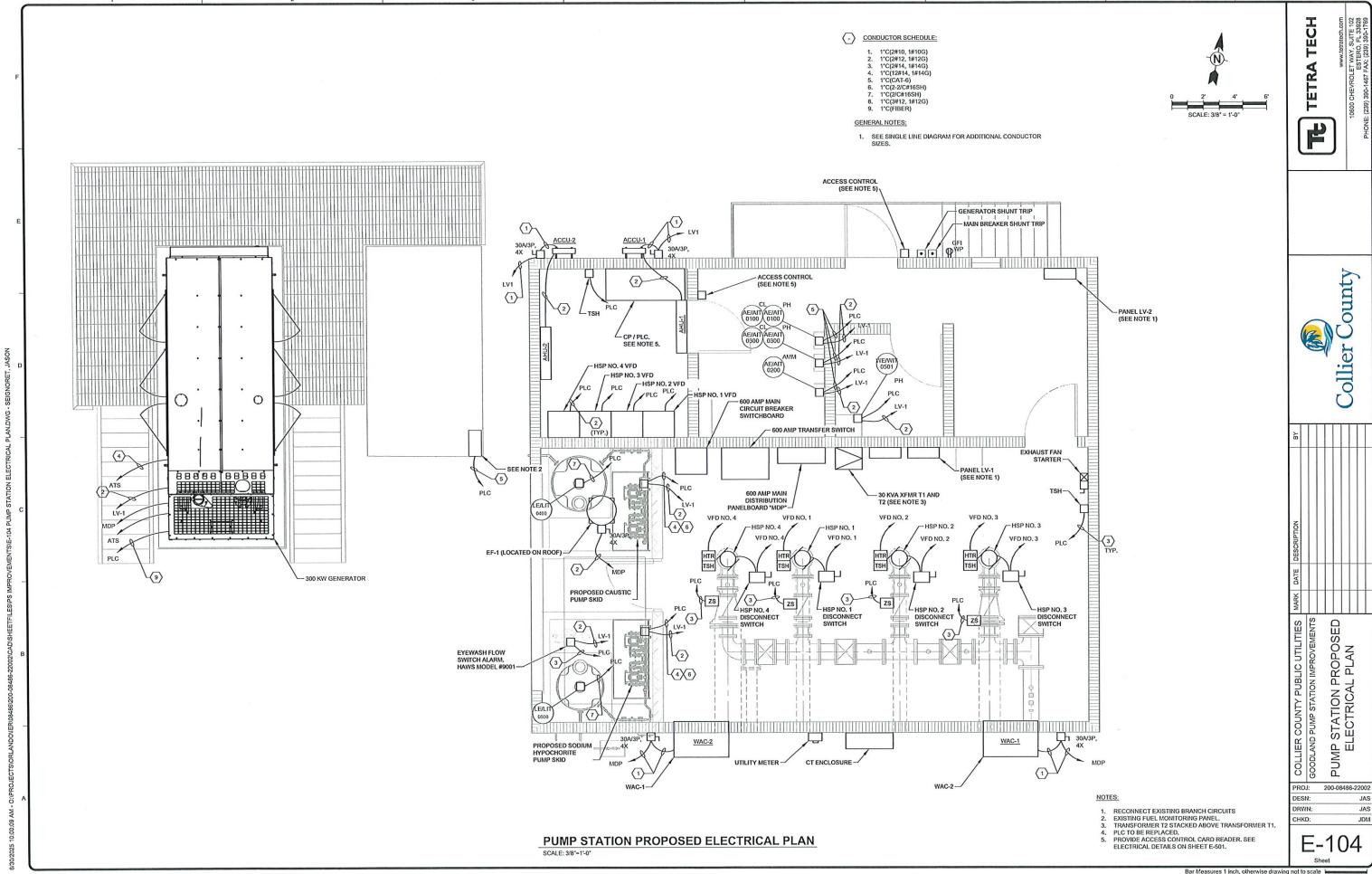
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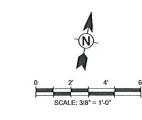
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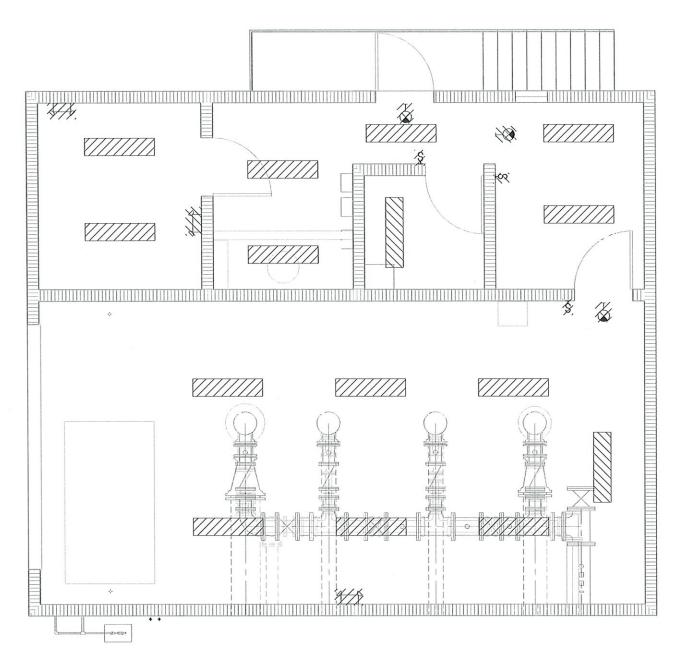








TETRA TECH



PUMP STATION LIGHTING DEMOLITION PLAN SCALE: 3/8"=1'-0"

GENERAL NOTES:

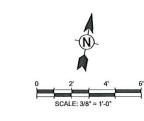
- DISCONNECT AND REMOVE ALL INTERIOR LIGHTS AND SWITCHES.
 REMOVE CONDUCTORS AND CONDUIT BACK TO SOURCE PANEL.

COLLIER COUNTY PUBLIC UTILITIES COODLAND PUMP STATION IMPROVEMENTS

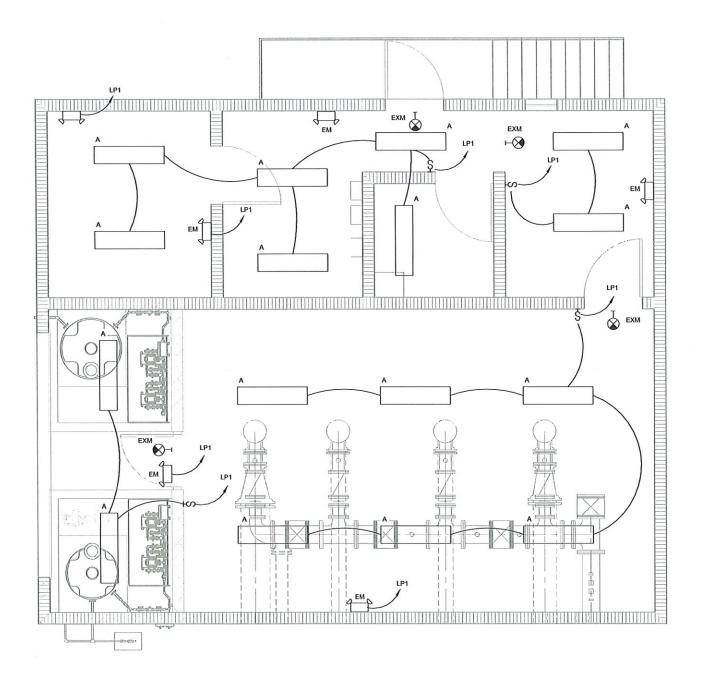
SOODLAND PUMP STATION ELECTRICAL

SWEET COORDINATION ELE CHKD:

E-105



TETRA TECH



PUMP STATION PROPOSED LIGHTING PLAN
SCALE: 3/8"=1"-0"

GENERAL NOTES:

- PROVIDE UN-SWITCHED HOT LEG TO EXIT SIGNS, TYP.
 PROVIDE 1°C(2#12, 1#12G) FOR LIGHTING BRANCH CIRCUITS.
 SEE DETAIL NO. 1 ON SHEET E-501 FOR LIGHT FIXTURE SCHEDULE.

COLLIER COUNTY PUBLIC UTILITIES

GOODLAND PUMP STATION IMPROVEMENTS

FOUMP STATION ELECTRICAL

SOOTION ELECTRICAL

PROPOSED LIGHTING PLAN

PROPOSED LIGHTING PLAN DESN: DRWN: CHKD:

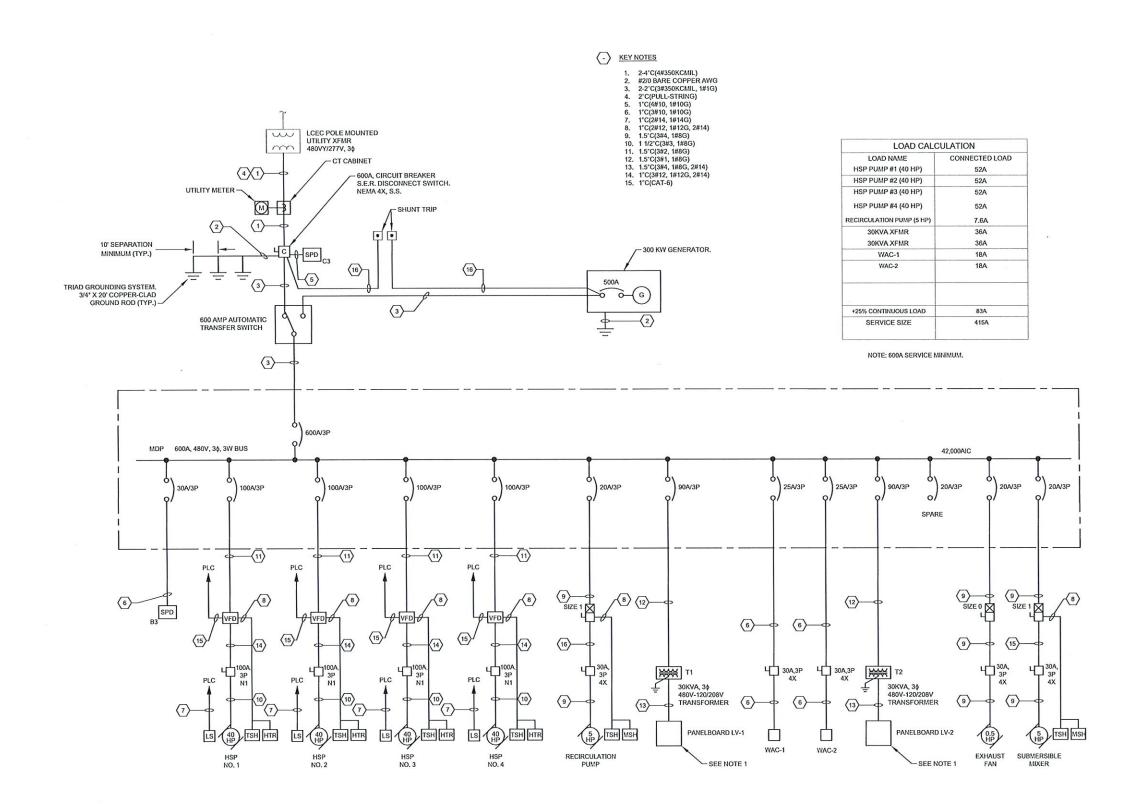
LCEC POLE MOUNTED
UTILITY XFMR
480VY/277V, 3\$ SEE NOTE 2 200 KW / 250 KVA, 480V/277V, 3¢ DIESEL GENERATOR UTILITY METER NO. 15282540 - CT ENCLOSURE G00A, CIRCUIT BREAKER S.E.R. DISCONNECT SWITCH - 400A, CIRCUIT BREAKER DISCONNECT SWITCH 400 AMP AUTOMATIC TRANSFER SWITCH T1 15KVA, 3¢ 180V-120/208V TRANSFORMER RECIRCULATION PUMP PANELBOARD LV-1 SEE NOTE 1 PANELBOARD LV-2 SEE NOTE 1 **ELECTRICAL SINGLE LINE DIAGRAM - DEMOLITION** SCALE: N.T.S.

NOTES:

- BRANCH CIRCUITS FED FROM PANELBOARDS SHALL BE DISCONNECTED AND REMAIN, EXISTING BRANCH CIRCUITS WILL BE RECONNECTED TO NEW PANELBOARD.
 GENERATOR FUEL SYSTEM TO REMAIN.

Collier COLLIER COUNTY PUBLIC UTILITIES GOODLAND PUMP STATION IMPROVEMENTS SINGLE LINE DIAGRAM DEMOLITION PROJ: 200-08486-2200 DESN: DRWN:

TETRA TECH



SINGLE LINE DIAGRAM - PROPOSED

SCALE: N.T.S.

NOTES:

RECONNECT EXISTING BRANCH CIRCUIT TO NEW PANELBOARDS. PROVIDE 120/208V, 3¢, 42 POLE, 100A MCB, 18,000 AIC RATED PANEL BOARDS.

COLLIER COUNTY PUBLIC UTILITIES SOODLAND PUMP STATION IMPROVEMENTS

DESN:

DRWN:

SINGLE LINE DIAGRAM PROPOSED

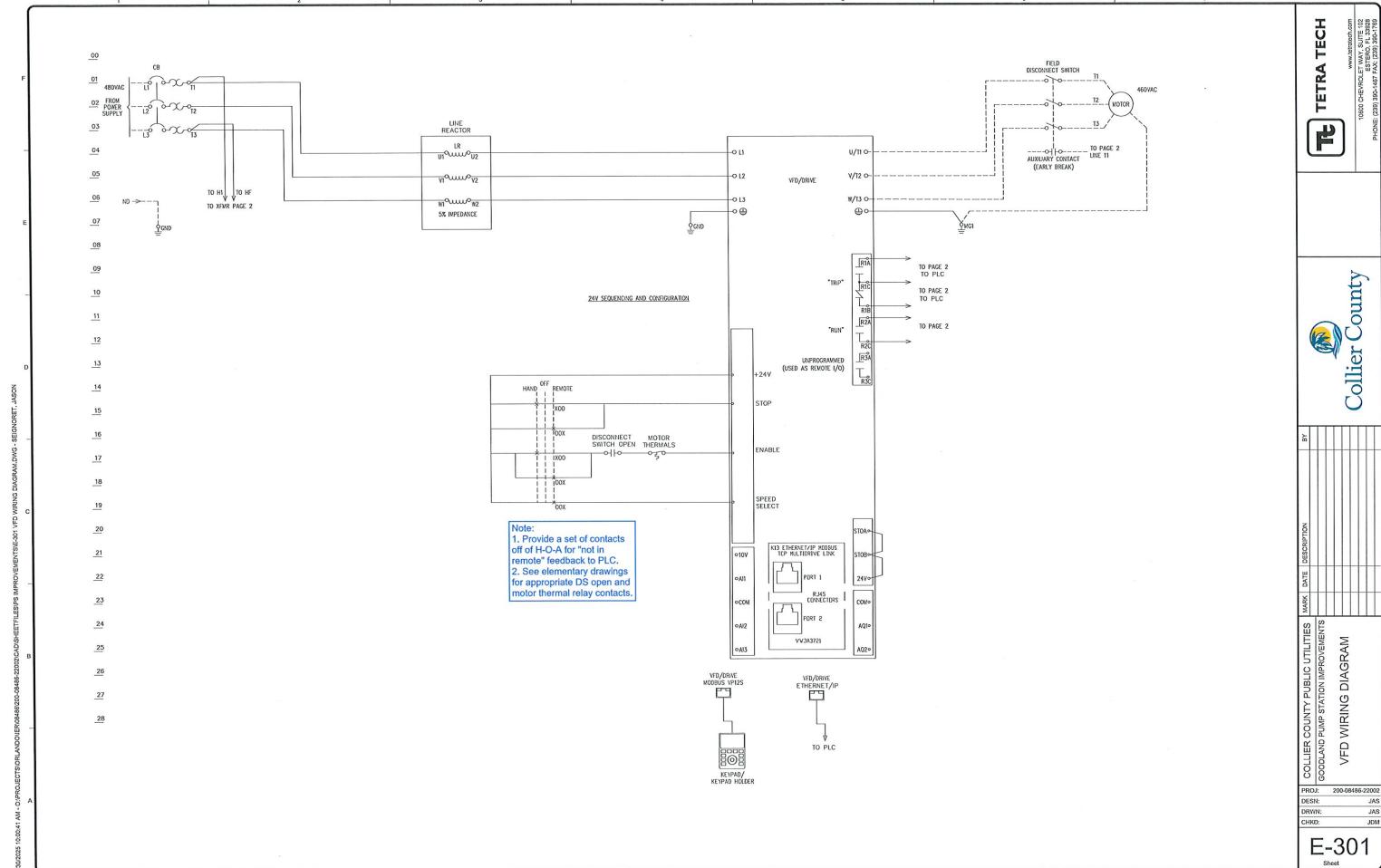
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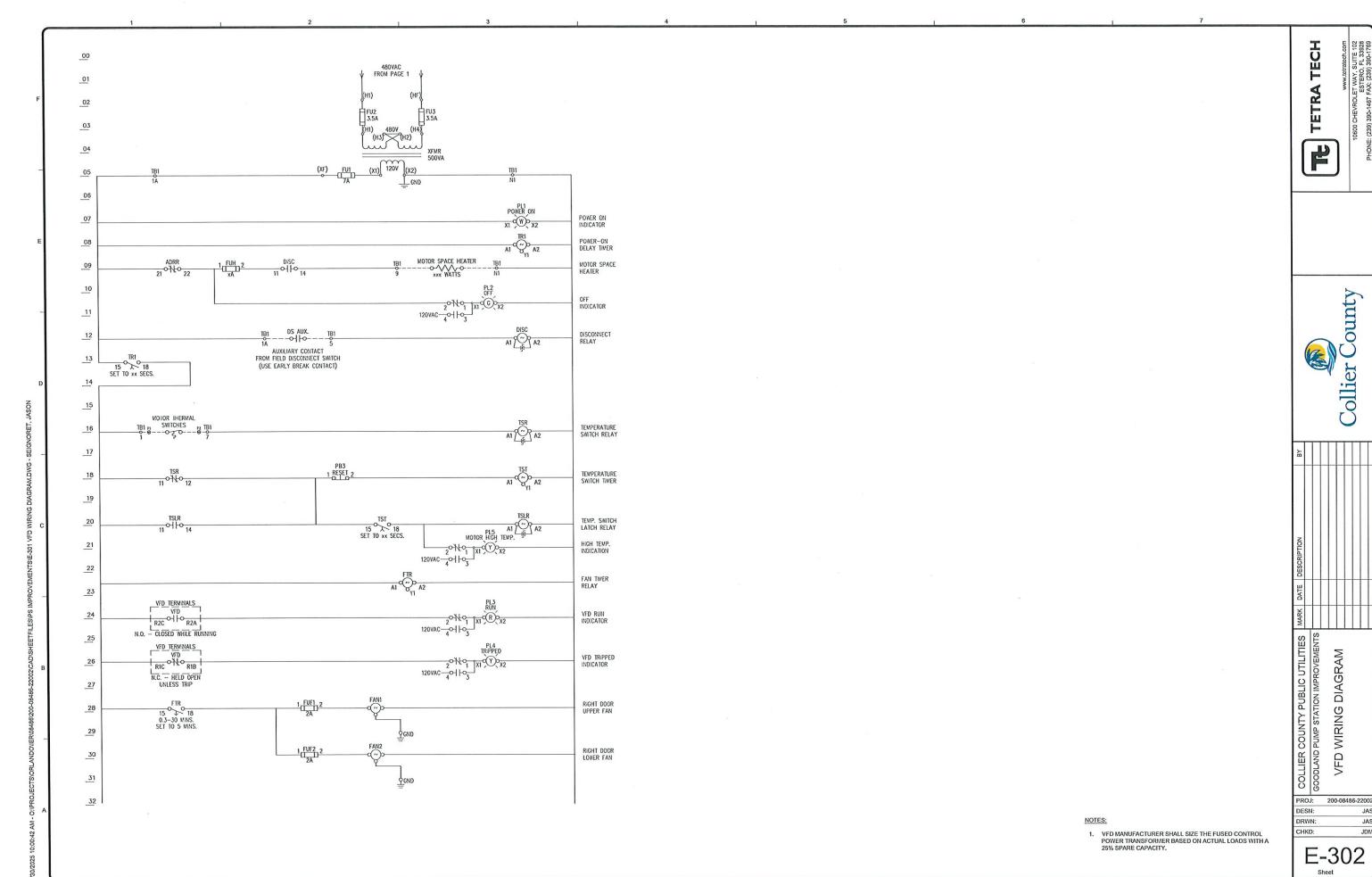
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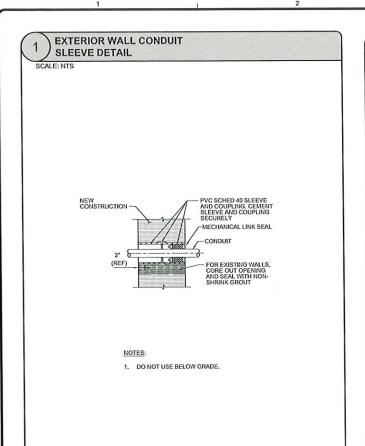
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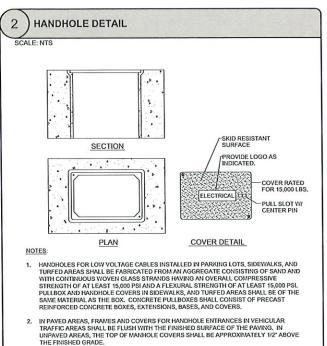
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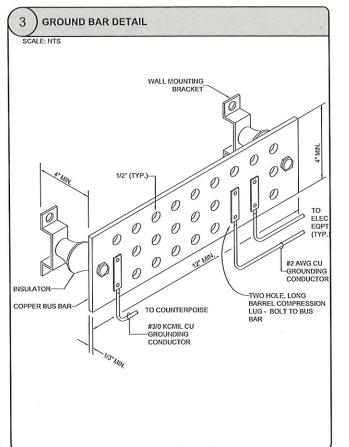


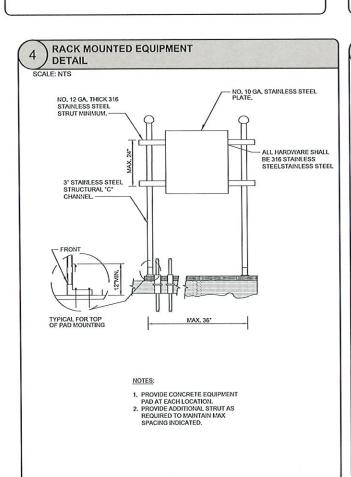
JAS JDM

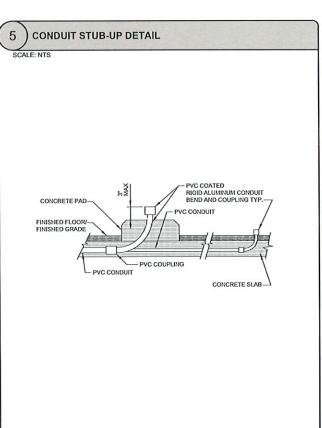


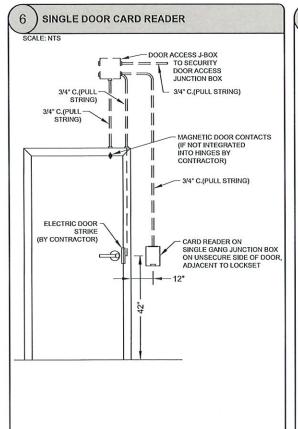


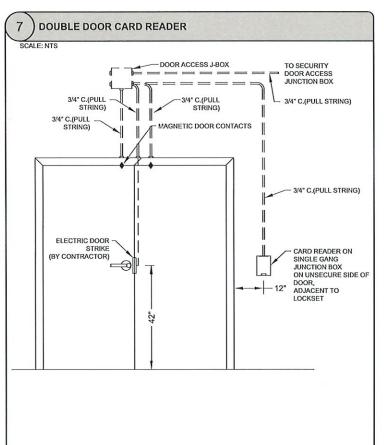
QUAZITE COMPOSOLITE OR EQUAL.
 SIZE PULL BOXES PER NEC REQUIREMENTS.

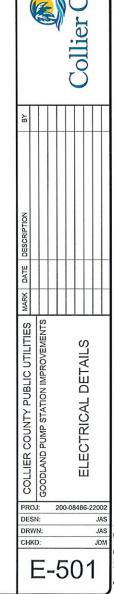






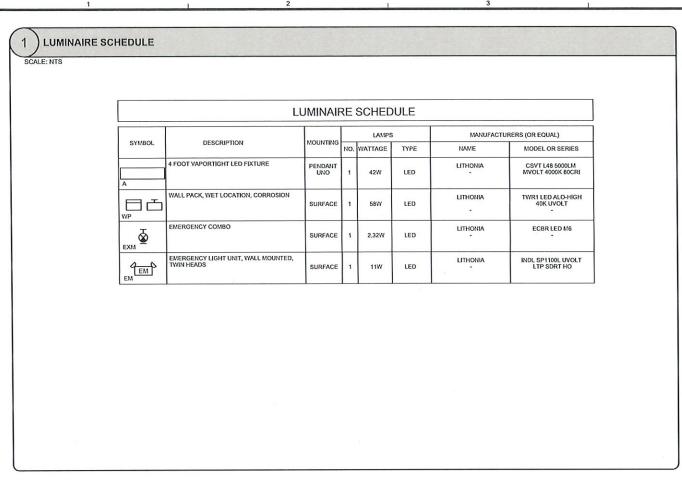


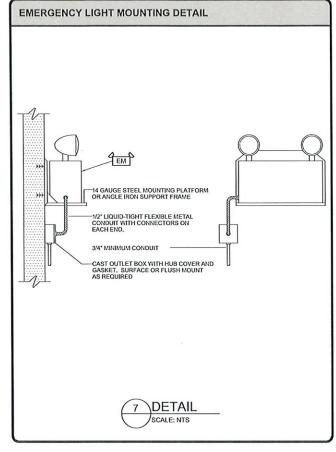


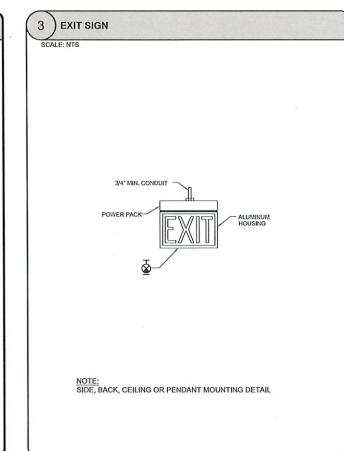


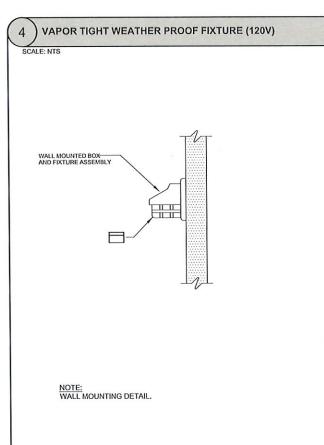
TECH

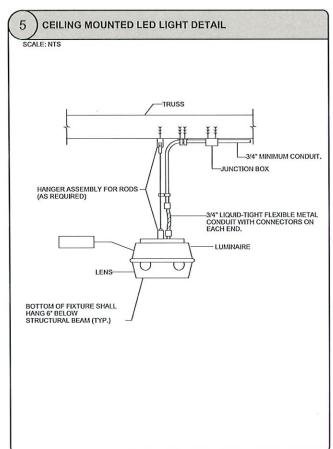
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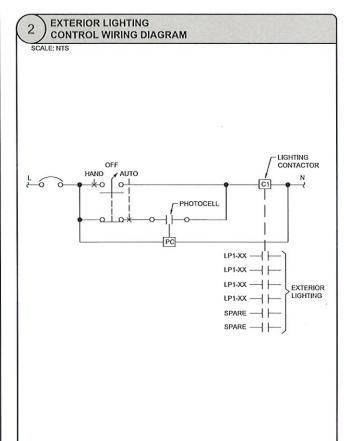


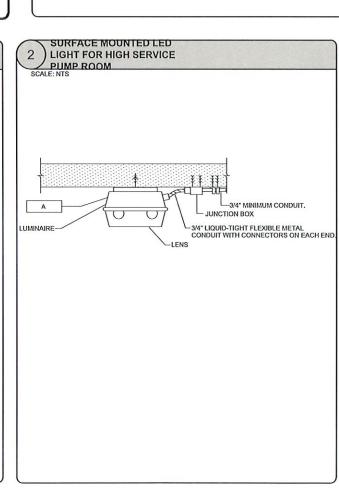


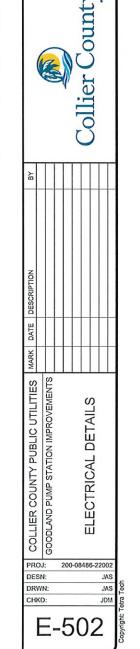












TETRA TECH