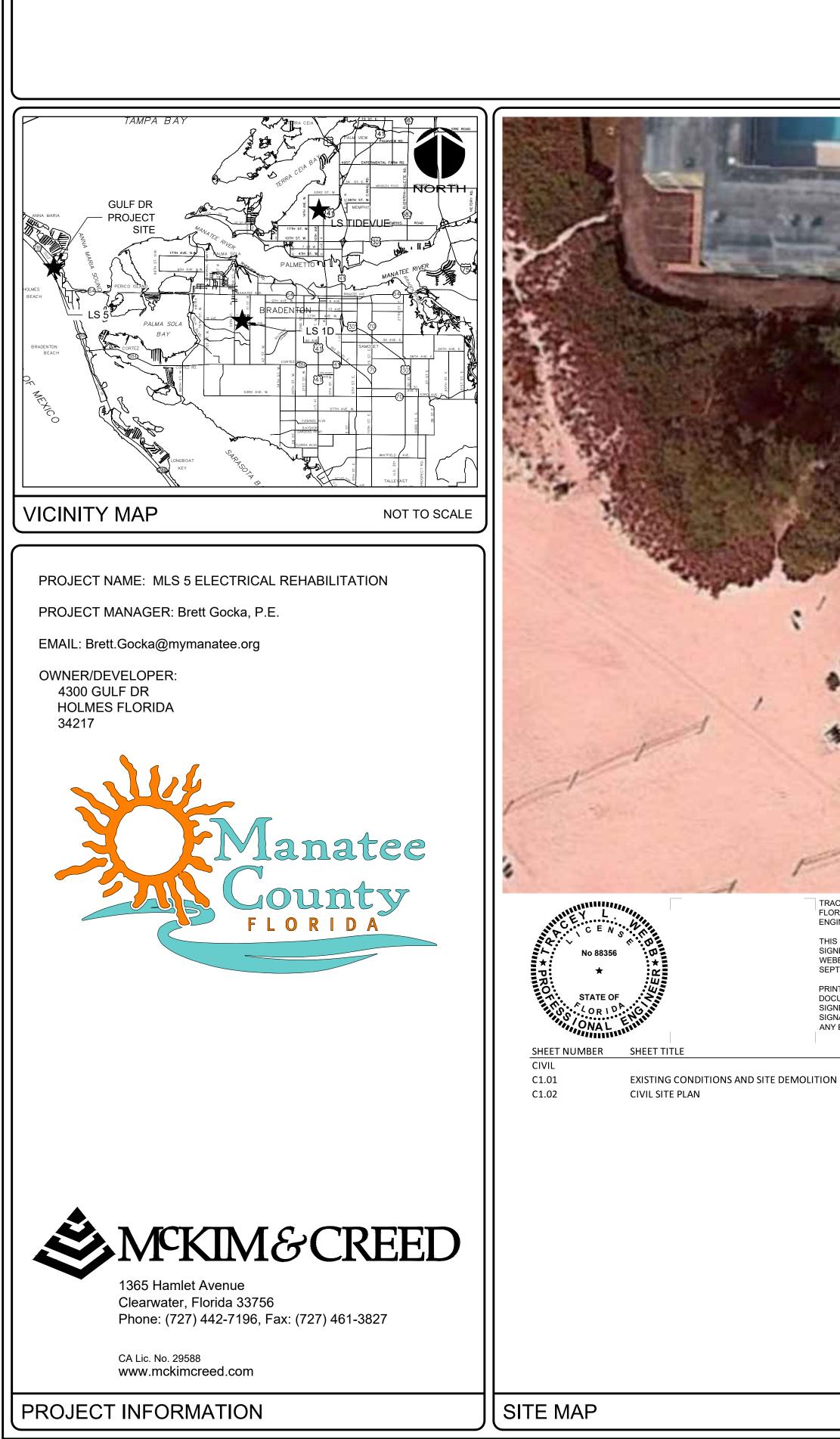
# MLS 5 ELECTRICAL REHABILITATION MANATEE COUNTY, PROJECT NO. 6097482



# PROJ. NO. 01024-0190 SEPTEMBER 16, 2022 **ISSUED FOR BID**

4300 GULF DR. HOLMES. FL. 3421

TRACEY L. WEBB, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 88356

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY TRACEY L. WEBB THE DATE INDICATED HERE. SEPTEMBER 16, 2022

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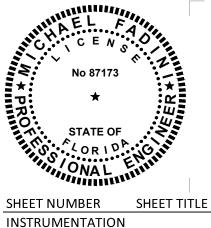
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GENERAL NOTES, DESIGN LOADS, DESIGN CRITERIA & LEGEND EXIST. L.S. & ELECTR. BLDG. FDN. LAYOUT, SECTIONS & DETAILS ELECTR. BLDG. FRMG. PLAN, SECTIONS & DETAILS



**INSTRUMENTATION SYMBOL SHEET 1 INSTRUMENTATION SYMBOL SHEET 2** PROCESS AND INSTRUMENT DIAGRAM CONTROL PANEL

SHEET TITLE

WILLIAM F. BAND, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67838

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WILLIAM F. BAND THE DATE INDICATED HERE. SEPTEMBER 16, 2022

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MICHAEL FADINI, STATE OF FLORIDA, PROFESSIONAL

ENGINEER, LICENSE NO. 87173 THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL FADINI THE DATE INDICATED

HERE. SEPTEMBER 16, 2022

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SHEET N	NUMBER	SHEET TITLE

GENERAL

G0.00

CIVIL

C1.00 ELECTRICAL

E0.01

E0.02

E0.03

E1.00 E1.01

E1.02

E1.03

E1.04

E1.05

E1.06

E1.07

COVER SHEET
HYATT SURVEY MLS5
SYMBOLS, ABBREVIATIONS ANI
SYMBOLS ELECTRICAL 1
SYMBOLS ELECTRICAL 2
ELECTRICAL SITE PLAN
DEMOLITION PLAN
SINGLE LINE DIAGRAM
PUMP BUILDING POWER PLAN
ELECTRICAL BUILDING POWER
ELECTRICAL BUILDING LAYOUT
GROUNDING AND LIGHTNING
MCB, ATS AND MCC ELEVATION
LIGHTING PLAN
ELECTRICAL INTERCONNECT D
PANELBOARD SCHEDULES
ELECTRICAL CONTROLS SCHEM
ELECTRICAL DETAILS 1 OF 2

ND NOTES R PLAN **PROTECTION** N DIAGRAM MATICS ELECTRICAL DETAILS 2 OF 2



AUBREY A. HAUDRICOURT, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 66861

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY AUBREY A. HAUDRICOURT THE DATE INDICATED HERE. SEPTEMBER 16, 2022

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	Sheet List Table
Sheet Number	Sheet Title
GENERAL	
G0.00	COVER SHEET
CIVIL	
C1.00	HYATT SURVEY MLS5
C1.01	EXISTING CONDITIONS AND SITE DEMOLITION
C1.02	CIVIL SITE PLAN
STRUCTURAL	
S0.00	GENERAL NOTES, DESIGN LOADS, DESIGN CRITERIA & LEGEND
S1.00	EXIST. L.S. & ELECTR. BLDG. FDN. LAYOUT, SECTIONS & DETAILS
S1.01	ELECTR. BLDG. FRMG. PLAN, SECTIONS & DETAILS
ELECTRICAL	
E0.01	SYMBOLS, ABBREVIATIONS AND NOTES
E0.02	SYMBOLS ELECTRICAL 1
E0.03	SYMBOLS ELECTRICAL 2
E1.00	ELECTRICAL SITE PLAN
E1.01	DEMOLITION PLAN
E1.02	SINGLE LINE DIAGRAM
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E1.04	ELECTRICAL BUILDING POWER PLAN
E1.05	ELECTRICAL BUILDING LAYOUT
E1.06	GROUNDING AND LIGHTNING PROTECTION
E1.07	MCB, ATS AND MCC ELEVATION
E1.08	LIGHTING PLAN
E1.09	ELECTRICAL INTERCONNECT DIAGRAM
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E1.11	ELECTRICAL CONTROLS SCHEMATICS
E1.12	ELECTRICAL DETAILS 1 OF 2
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INSTRUMENTATION	
10.00	INSTRUMENTATION SYMBOL SHEET 1
10.01	INSTRUMENTATION SYMBOL SHEET 2
11.00	PROCESS AND INSTRUMENT DIAGRAM
11.01	CONTROL PANEL



SHEET INDEX

SCALE: NTS



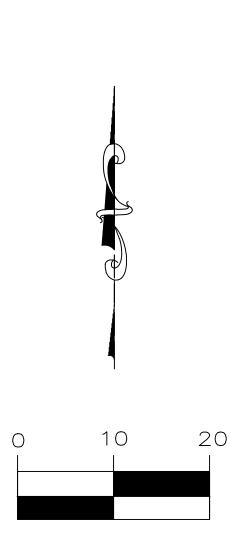
1. THE FOLLOWING NGS VERTICAL CONTROL MONUMENTS WERE RECOVERED AND UTILIZED FOR THE ELEVATIONS INDICATED HEREON: "J 254" PID AG1981 NAVD 1988 ELEVATION 13.48' AND "GIS 103" PID AG9208 NAVD 1988 ELEVATION 4.27"

2. THIS SURVEY IS REFERENCED TO A PROJECTION OF THE FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE NAD 1983/2011 ADJUSTMENT).

3. TITLE WORK WAS NOT PROVIDED FOR THIS SURVEY. PARCEL LINES SHOWN HEREIN ARE BASED ON FOUND BOUNDARY MONUMENTATION TOGETHER WITH PUBLIC INFORMATION AVAILABLE ON THE MANATEE COUNTY CLERK WEBSITE.

4. THIS SURVEY IS SUBJECT TO PERTINENT EASEMENTS, RIGHTS-OF-WAY AND RESTRICTIONS OF RECORD, IF ANY.

5. THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN HYATT SURVEY SERVICES, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM HYATT SURVEY SERVICES, INC. IS STRICTLY PROHIBITED AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO HYATT SURVEY SERVICES, INC.



Geographic Data Specialists LB No.: 7203 2012 LENA ROAD, BRADENTON, FLORIDA 34211 PH. (941) 748-4693

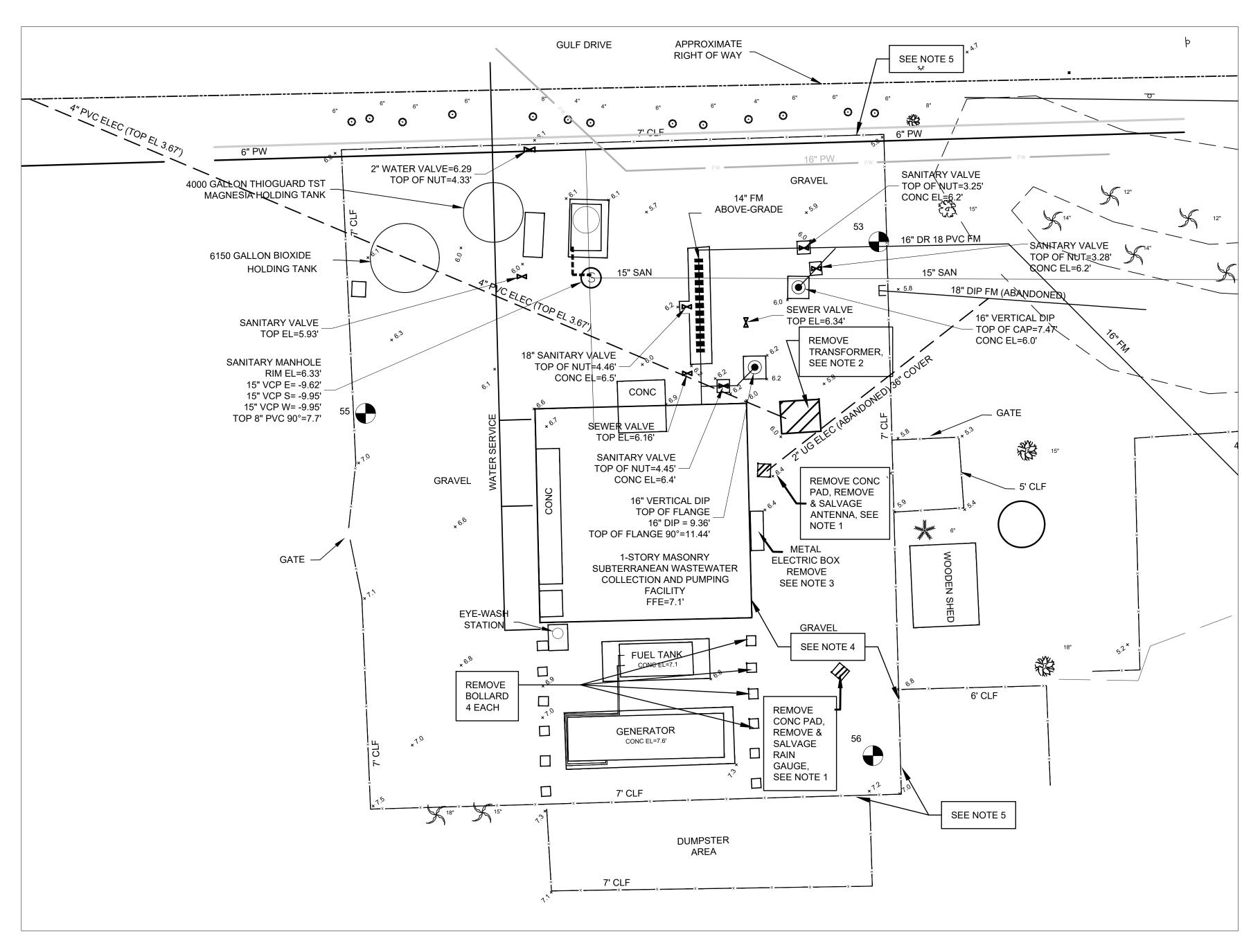
# GENERAL NOTES

# LEGEND

R/W RIGHT-OF WAY	$\leftarrow$ GUY WIRE
PID PARCEL IDENTIFICATION	□ WATER METER
PB PLAT BOOK	S SANITARY MANHOLE
OR OFFICIAL RECORD	D STORM MANHOLE
PG PAGE	⊖' MAILBOX
BM BENCHMARK	
FFE FINISHED FLOOR ELEVATION	- FIRE HYDRANT
EL ELEVATION	2" BACKFLOW PREVENTER
CLF CHAIN LINK FENCE	• BOLLARD
○ IRON PIPE	
<ul> <li>IRON ROD W/ CAP</li> </ul>	
O PK NAIL W/ DISC	▷ VALVE
<ul> <li>CONCRETE MONUMENT</li> </ul>	O CLEANOUT
-	
_o_ SIGN	
Ø UTILITY POLE	

# Hyatt Survey Services, Inc.

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Image: Note of the second se	THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED SEAL OR DIGITAL SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER.		RUSSELL P. HYATT, PSM FLORIDA SURVEYORS REGISTRATION NO. 5303
QPROJECT #15-1967-1SURVEY #LIFT STATION 5SECTION28TWN RNG34-16SCALE1" = 30'SURVEYEDHYATT4/2021DESIGNEDDRAWNDR4/2021			
PROJECT #15-1967-1SURVEY #LIFT STATION 5SECTION28TWN RNG34-16SCALE1" = 30'SURVEYEDHYATT4/2021DESIGNEDDRAWNDR4/2021	REVISION DESCRIPTION		
	PROJECT SURVEY SECTION TWN RNG SCALE SURVEYED DESIGNED DRAWN	# LIFT S 28 34- 1" 0 HYATT 0 DR	TATION 5 3 16 = 30' 4/2021 4/2021



## GENERAL NOTES

- 1. IN CASE OF A DISCREPANCY ON THESE DRAWINGS OR BETWEEN THESE DRAWINGS AND THE DRAWINGS OF OTHER DISCIPLINES OR CONDITIONS IN THE FIELD, THE MORE STRINGENT REQUIREMENT WILL BE MET. REPORT ANY DISCREPANCY TO ENGINEER PRIOR TO ACTION.
- 2. LOCATIONS AND ELEVATIONS OF UTILITIES SHOWN ON PLANS ARE BASED ON AVAILABLE RECORD DRAWING INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR MUST EMPLOY THE USE OF GROUND PENETRATING RADAR (GPR) EQUIPMENT BY A QUALIFIED COMPANY AND PERSONNEL TO LOCATE, IDENTIFY AND PROTECT EXISTING UNDERGROUND UTILITIES IN THE AREA OF WORK. ANY UTILITIES SPOTTED MUST BE DRAWN ON THE SITE PLAN PROVIDED BY THE ARCHITECT/ENGINEER AND SUBMITTED AS PART OF THE AS BUILT DRAWINGS. NOTIFY UTILITY AND ARCHITECT/ENGINEER OF CONFLICTS BETWEEN EXISTING AND PROPOSED FACILITIES.
- 3. DAMAGE TO EXISTING SIDEWALKS, ASPHALT OR OTHER OFF-SITE IMPROVEMENTS DURING CONSTRUCTION MUST BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.
- 4. THE CONTRACTOR MUST COMPLY WITH ALL FEDERAL AND STATE REGULATIONS CONCERNING NOTIFICATION TO THE REGULATORY AUTHORITIES OF ANY AND ALL BUILDING RENOVATIONS AND/OR DEMOLITION.

# PLAN NOTES

- SIDES.

# REMOVAL LEGEND



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REV.NO.	DESCRIPTION DATE	NILEY L. MAS
		CENS
		No 88356
		STATE OF
		CORID S
		- ONAL MIN
-		TRACEY L. WEBB
	REVISIONS	No. 88356

## EXISTING SITE PLAN SC ALE: 1"=10'-0"

1. RELOCATE AND SALVAGE EQUIPMENT FOR REUSE ON SITE. SEE SHEET C1.02. REMOVE CONCRETE PAD AND CONDUIT TO A MINIMUM OF 18-INCHES BELOW GRADE. PLUG OR CAP OPEN CONDUIT. SEE ELECTRICAL SHEETS FOR WIRING AND NEW EQUIPMENT LOCATIONS. 2. REMOVE EXISTING TRANSFORMER AND CONC PAD, SEE ELECTRIC REMOVAL PLAN REGARDING

CONDUIT AND SERVICE IMPACTS.

3. REMOVE ELECTRICAL EQUIPMENT, SEE ELECTRIC DEMOLITION PLAN.

4. REMOVE COMPACTED GRAVEL AS NEEDED FOR EXCAVATION.

5. INSTALL TEMPORARY PERIMETER BARRIER ALONG SITE FENCING ON NORTH, WEST AND SOUTH

REMOVE CONCRETE

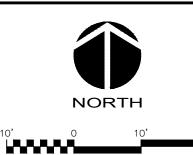




	Solver Legend		
R/W	RIGHT-OF WAY	$\leftarrow$	GUY WIRE
PID	PARCEL IDENTIFICATION		WATER METER
PB	PLAT BOOK	S	SANITARY MANHOLE
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FFE	FINISHED FLOOR ELEVATION	- C	FIRE HYDRANT
EL	ELEVATION	-0-	2" BACKFLOW PREVENTER
CLF	CHAIN LINK FENCE	$\odot$	BOLLARD
0	IRON PIPE	U	UTILITY BOX
•	IRON ROD W/ CAP		6" RECLAIMED WATER VALVE
$\odot$	PK NAIL W/ DISC	Ô	ANTENNA
	CONCRETE MONUMENT	$\boxtimes$	POTABLE WATER VALVE
_		0	CLEANOUT
igodol	SITE BENCHMARK		GRATE INLET
_0_	SIGN		
Ø	WOOD POWER POLE	K	PALM TREE

- BE TAKEN.
- 2. NO DEVIATIONS FROM THE PROJECT PLANS OR SPECIFICATIONS ARE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OF RECORD AND THE ARCHITEC T.
- 3. AT THE TIME OF SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT PERMANENT COVER MUST BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR PERMANENT COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL BE EMPLOYED (I.E. EROSION CONTROL FABRIC, RIP-RAP, ETC.).
- 4. THE CONTRACTOR MUST MAKE REGULAR INSPECTIONS OF ALL CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PROCESS TO ENSURE THE OVERALL EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL PLAN. AT A MINIMUM, INSPECTIONS WILL OCCUR AT LEAST ONCE A WEEK AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A STORM EVENT THAT IS ONE-HALF (0.50) INCH OR GREATER. ALL INSPECTIONS WILL BE DOCUMENTED IN ACCORDANCE WITH FDEP NPDES REQUIREMENTS.
- 5. IN THE EVENT THAT AN ON-SITE INSPECTION BY ANY PARTY REVEALS A DEFICIENCY IN THE INSTALLATION AND/OR MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE IMMEDIATE REMEDIATION OF THE PROBLEM AT NO ADDITIONAL COST TO THE OWNER.
- 6. FAILURE TO COMPLY WITH THE REQUIRED EROSION AND SEDIMENT CONTROL GUIDELINES MAY RESULT IN FINES LEVIED BY GOVERNMENTAL AGENCIES. ANY FINES SUFFERED DUE TO NON-COMPLIANCE WILL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
- SEQUENCE OF EROSION AND SEDIMENT CONTROL MEASURES IMPLEMENTATION SITE PREPARATION
- 1. PRIOR TO ANY SOIL DISTURBANCE, SILT FENCE MUST BE INSTALLED ALONG ENTIRE DOWN-GRADE PERIMETER OF PLANNED DISTURBANCE AS SHOWN IN PLANS AND DETAILS, OR BY EQUIVALENT MEASURES. SILT FENCE MUST BE MAINTAINED IN PLACE UNTIL ALL UP-GRADE AREAS OF DISTURBANCE HAVE BEEN PERMANENTLY STABILIZED.
- 2. A PROPER CONSTRUCTION ENTRANCE MUST BE ESTABLISHED AT ALL POINTS OF INGRESS/EGRESS FROM CONSTRUCTION SITE PER DETAIL PROVIDED IN THE PLANS, OR BY EQUIVALENT MEASURES. ALL CONSTRUCTION ENTRANCES MUST REMAIN IN PLACE UNTIL INGRESS/EGRESS FROM THE SITE AT THAT POINT HAS STOPPED.

# SURVEY LEGEND



SC ALE: 1"=10' (Horiz.)

# SURVEYOR'S NOTES

- 1. SURVEY COMPLETED BY HYATT SURVEY SERVICES, INC. LOCATED AT 2012 LENA ROAD, BRADENTON FLORIDA 34211. FIELD WORK COMPLETED APRIL 2021.
- 2. THE FOLLOWING NGS VERTICAL CONTROL MONUMENTS WERE RECOVERED AND UTILIZED FOR THE ELEVATIONS INDICATED HEREON: "J 254" PID AG1981 NAVD 1988 ELEVATION 13.48' AND "GIS 103" PID AG9208 NAVD 1988 ELEVATION 4.27"
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SITE BENCH MARKS				
BM # NORTHING EASTING ELEVATION DESCRIPTION				
53	1150970.079	425345.328	5.80	TP SIRC LB7203
55	1150944.257	425268.148	6.54	TP SIRC LB7203
56	1150892.755	425344.442	6.95	TP SIRC LB7203

# GENERAL NOTES EROSION AND SEDIMENT CONTROL

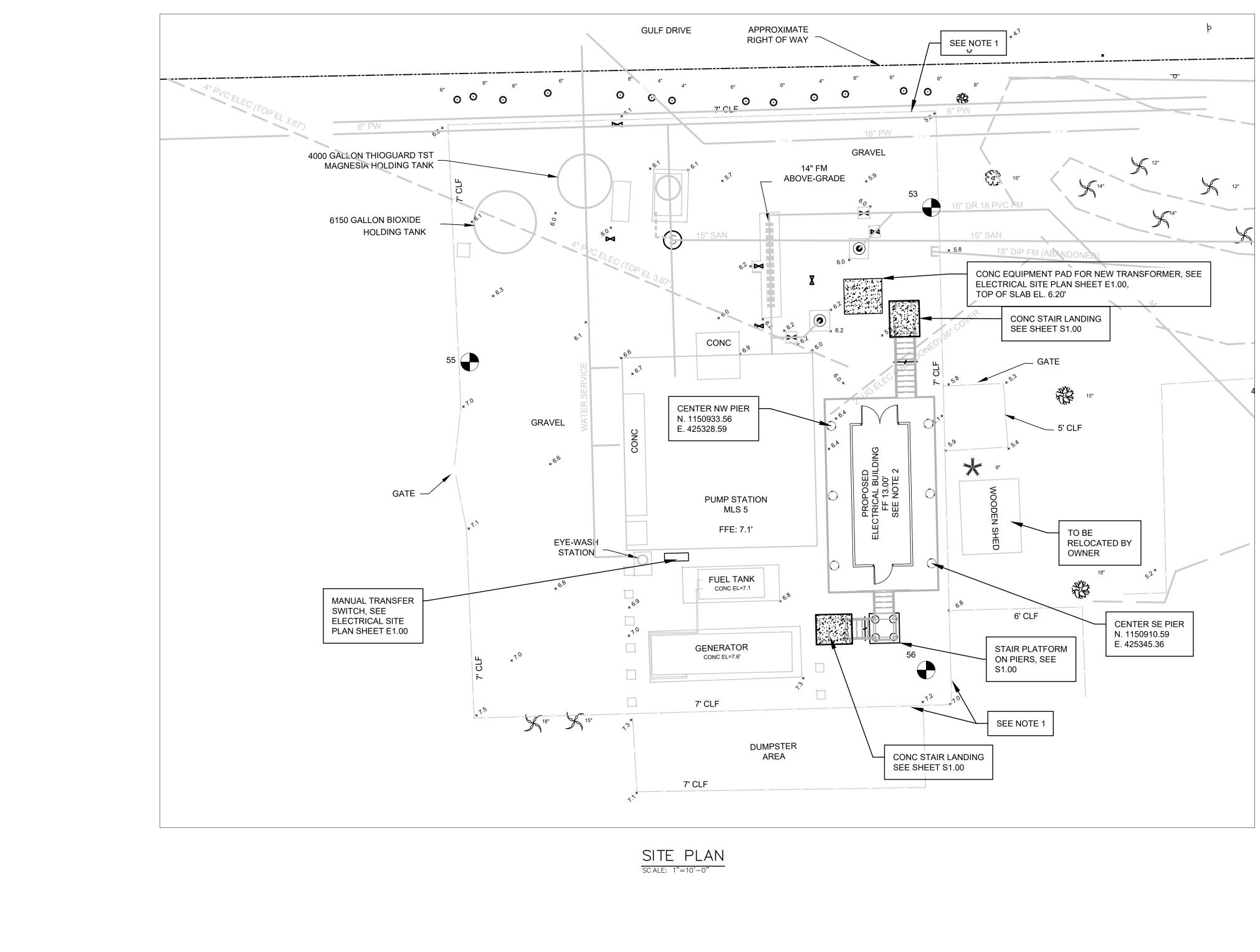
CLEARING AND GRUBBING

- 1. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION (PRIOR TO CONSTRUCTION) AND MAINTENANCE/REPAIRS OF (DURING CONSTRUCTION) EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO RETAIN ALL SEDIMENT AND EROSION ON THE SITE OF DEVELOPMENT. THE PROVISIONS SHOWN HEREIN REPRESENT THE MINIMUM EROSION CONTROL MEASURES TO
- 1. ALL DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) DAYS, AND ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC, MUST RECEIVE A TEMPORARY SEEDING IMMEDIATELY UPON DISTURBANCE. IF THE SEASON PREVENTS ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREA WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER AC RE.
- 2. ALL DISTURBED AREAS THAT ARE SUBJECT TO HIGH AMOUNTS OF EROSION (I.E. STEEP SLOPES, EMBANKMENTS GREATER THAN 3:1, OR OTHER AS DICTATED BY SITE CONDITIONS) MUST IMMEDIATELY RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH MULCHING WITH STRAW, OR EQUIVALENT MATERIAL, AT A THICKNESS OF TWO (2) TO FOUR (4) INCHES MIXED WITH THE TOP TWO (2) INCHES OF SOIL.
- 3. ALL DISTURBED AREAS MUST, AS A MINIMUM, BE MAINTAINED BY WATER TO MINIMIZE THE GENERATION OF DUST. SITE GRADING
- 1. THE SITE MUST, AT ALL TIMES, BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS CONTROLLED BY EROSION AND SEDIMENT CONTROL MEASURES.
- 2. ALL AREAS USED FOR MATERIAL STOCKPILE, BE IT FILL/EXCAVATED MATERIALS, STONE, OR OTHERWISE, MUST STABILIZED, AND MUST HAVE SILT FENCE INSTALLED PER THE DETAILS PROVIDED IN THE PLANS, OR BY EQUIVALENT MEASURES, AROUND THEIR ENTIRE DOWNGRADE PERIMETER.
- INSTALLATION OF STORM SEWER AND UTILITIES
- 1. TEMPORARY OUTLET PROTECTION MUST INSTALLED AT ALL PROPOSED STORM WATER OUTFALLS PRIOR TO THE INSTALLATION OF THE DRAINAGE SYSTEM.
- 2. ALL SITE DRAINAGE, INCLUDING ROOF DRAINS, DOWN SPOUTS, GUTTERS, OR OTHERWISE MUST BE ROUTED TO CARRY ALL STORM WATER TO THE PROPOSED STORM WATER MANAGEMENT SYSTEM(S).
- 3. ANY SLOPES GREATER THAN 3:1 (H:V) RECEIVING PIPELINE OR UTILITY INSTALLATION MUST BE BACKFILLED AND STABILIZED DAILY AS THE INSTALLATION PROCEEDS.
- FINAL SITEWORK
- 1. PERMANENT SOD MUST BE INSTALLED ON ALL EXPOSED AREAS WITHIN THREE (3) DAYS AFTER FINAL GRADING.
- 2. UPON COMPLETION OF CONSTRUCTION, BUT PRIOR TO FINAL ACCEPTANCE, ALL CONSTRUCTION WASTE AND DEBRIS MUST BE REMOVED FROM THE SITE AND ALL PAVED ROADWAYS AND/OR PARKING AREAS WILL BE SWEPT CLEAN OF ALL SEDIMENT.
- 3. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST REMAIN IN PLACE AND BE MAINTAINED UNTIL SUCH TIME WHEN ALL UP-GRADE AREAS HAVE BEEN PERMANENTLY STABILIZED, AT WHICH POINT THEY MUST BE REMOVED.

MLS 5 ELECTRICAL REHABILITATION		
CIVIL		
EXISTING CONDITIONS AND SITE		
DEMOLITION		

PROJ. START DA	-	SCALE			
MCE PROJ. # DRAWN	01024-0190 TLW	HORIZONTAL:	C1.01		
DESIGNED	SS	1"=10'	DRAWING NUMBER		
CHECKED	MAC	VERTICAL:			
PROJ. MGR.	ААН	l J	REVISION		
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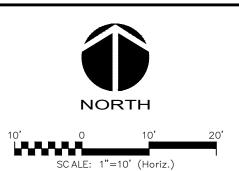


REV.NO.	DESCRIPTION	DATE	SEAL
			C E N S
			No 88356
			STATE OF
			LORIDA CIN
			MAN ONAL ENTIT
-			TRACEY L. WEBB
	REVISIONS		No. 88356



www.mckimcreed.com





# GENERAL NOTES

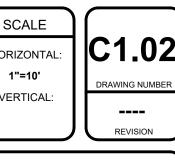
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- 3. DAMAGE TO EXISTING SIDEWALKS, ASPHALT OR OTHER OFF-SITE IMPROVEMENTS DURING CONSTRUCTION MUST BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.
- 4. THE CONTRACTOR MUST COMPLY WITH ALL FEDERAL AND STATE REGULATIONS CONCERNING NOTIFICATION TO THE REGULATORY AUTHORITIES OF ANY AND ALL BUILDING RENOVATIONS AND/OR DEMOLITION.
- 5. RESTORE ALL DISTURBED AREAS TO MATCH EXISTING CONDITIONS. MATCH EXISTING SURFACE ELEVATIONS AND MATERIALS.

# PLAN NOTES

- 1. MAINTAIN TEMPORARY PERIMETER BARRIER ALONG SITE FENCING ON NORTH, WEST AND SOUTH SIDES.
- 2. NEW BUILDING FLOOR TO BE ABOVE GRADE, RAISED CONCRETE SLAB ON PIERS, SEE STRUCTURAL PLAN S1.00.
- 3. AREA BELOW BUILDING SHALL BE GRADED TO DRAIN AWAY FROM EXISTING STRUCTURE. MATCH CURRENT DRAINAGE PATTERNS AND RESTORE WITH MINIMUM OF 8-INCHES OF COMPAC TED AGGREGATE.

	MLS 5	ELECT	RICAL	REHA	BILIT	ATION
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PROJ. START DATE:	2021.MAR	
MCE PROJ. #	01024-0190	<u> </u>
DRAWN	TLW	НО
DESIGNED	SS	
CHECKED	MAC	V
PROJ. MGR.	AAH	l
STATUS:		



**ISSUED FOR BID** 

CIVIL **CIVIL SITE PLAN** 

1	GENERAL NOTES	3	FOUNDATIONS CTD.
	/ORK IS TO BE PERFORMED IN A GOOD, WORKMANLIKE AND SIONAL MANNER.		OR BOLTS SHALL BE SET BY MEANS OF TEMPLATE. "FLOATING" BOLTS INTO PLACE IS PROHIBITED.
REQUIRE EDITION, STRINGE		EXISTING "KNOWN" CONTRAC ENCOUN	TRACTOR IS TO VERIFY THE ELEVATION AND LOCATION OF ALL AND PROPOSED UTILITIES PRIOR TO CONSTRUCTION. ANY UTILITY LINES DAMAGED WILL BE REPLACED AT THE CTOR'S EXPENSE. IF ANY "UNKNOWN" UTILITY LINES ARE TERED WHEN EXCAVATING THE CONTRACTOR IS TO CEASE ALL
CONSTR CONTRA	E DRAWINGS DO NOT SHOW PROVISIONS FOR SAFETY DURING UCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CTOR TO PROVIDE THE REQUIRED BRACING, SHORING, AND DEVICES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.	EXCAVAT AND INST 3.11 THE BEFORE	TION ACTIVITY UNTIL THE ENGINEER AND OWNER ARE NOTIFIED TRUCTIONS ARE PROVIDED ABOUT HOW TO PROCEED. CONTRACTOR SHALL OBTAIN THE OWNER'S PERMISSION ENCASING OR BACK FILLING AROUND ANY EXISTING
2	COORDINATION		ROUND STRUCTURE, PIPING, ELECTRICAL, OR OTHER ROUND WORK.
COORDIN	L CTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH & NATED W/ CIVIL, ELECTRICAL AND MECHANICAL DRAWINGS, NG VENDOR SUBMITTAL DRAWINGS AND OTHER CONTRACT NTS.	4.1 BARS	REINFORCING STEEL SHALL BE ROLLED FROM NEW BILLET-STEEL OF DOMESTIC
OPENING ELECTRI	RDINATE THE EXACT SIZE AND LOCATION OF ALL SLEEVES AND GS THROUGH WALLS OR CONCRETE SLABS w/ CIVIL, CAL AND MECHANICAL DRAWINGS, INCLUDING VENDOR AL DRAWINGS AND OTHER CONTRACT DOCUMENTS.	DEFORMI REINFOR REQUIRE	CTURE CONFORMING TO "STANDARD SPECIFICATION FOR ED AND PLAIN BILLET STEEL BARS FOR CONCRETE CEMENT," ASTM A615, GRADE 60 AND SUPPLEMENTARY MENT S-1.
SHOWN OF THE S	DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE ON THESE DRAWINGS ARE TO BE BROUGHT TO THE ATTENTION STRUCTURAL ENGINEER BEFORE WORK PROCEEDS, INCLUDING IG AND FABRICATING MATERIALS.	THE AME PUBLICA	IL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH RICAN CONCRETE INSTITUTE "ACI DETAILING MANUAL," LATEST FION.
PROVIDE GENERA	PENDENT TESTING / REVIEW OF MATERIALS SHALL BE D AS DEFINED IN PROJECT SPECIFICATIONS IF APPLICABLE. IN L PROJECT INVOLVES THE FOLLOWING:	CONCRE 4.4 WELD	ED WIRE FABRIC SHALL CONFORM TO "STANDARD
B. C.I.P 2.5 IF CO	/ FILL COMPACTION & BEARING. . CONCRETE. ORDINATION OF INFORMATION PRESENTED CONFLICTS w/ THE F SPECIFICATIONS, THE DRAWINGS WILL TAKE PRECEDENCE.	REINFOR 4.5 PLAC	ATION FOR WELDED STEEL WIRE FABRIC FOR CONCRETE CEMENT," ASTM A1064. E WELDED WIRE FABRIC AT CENTER OF SLABS-ON-GRADE AND D SLAB TOPPINGS OVER METAL DECK, UNLESS NOTED
2.6 IN GE EXISTING	NERAL CALL-OUTS ARE FOR NEW CONSTRUCTION U.N.O CONSTRUCTION CALL-OUTS, ELEVATIONS AND DIMENSIONS	OTHERW 4.6 PROV	,
DRAWING INDIVIDU CONSTR	STRUCTORES ARE BASED ON EXISTING RECORD SS PROVIDED TO McKIM & CREED. THE (*) SYMBOL ON AL FACILITY "STRUCTURAL" DRAWINGS INDICATES EXISTING UCTION CALL-OUTS, CONDITIONS, ELEVATIONS AND ONS TO BE FIELD VERIFIED BY THE GENERAL CONTRACTOR	U.N.O. ON 4.7 FABR	ICATE CONTINUOUS BARS IN SLABS, WALLS AND FOOTINGS TO GEST PRACTICABLE LENGTHS.
U.N.O. PF FABRICA COUNTY	RIOR TO CONSTRUCTION, INCLUDING ORDERING AND TING MATERIALS. RECORD DRAWINGS PROVIDED BY MANATEE UTILIZED INCLUDES:	4.8 REINF	ORCING STEEL SHALL NOT BE BENT AFTER BEING PARTIALLY ED IN HARDENED CONCRETE.
SEC	NATEE COUNTY, FLA. SANITARY SEWERAGE PART A CTION III - SEWAGE LIFT STATIONS" BY RUSSELL & AXON, NSULTING ENGINEERS, INC. (DTD. DECEMBER 1971).	4.9 BARS REASON.	SHALL BE COLD BENT AND SHALL NOT BE HEATED FOR ANY
REINF. S STEEL &	IAL INSPECTIONS (IF APPLICABLE): ALL FOUNDATION SOILS, TEEL, C.I.P. CONCRETE, CONCRETE MASONRY, STRUCTURAL PRE-CAST CONCRETE BUILDINGS / STRUCTURES WORK SHALL EWED AS STATED IN CONJUNCTION w/ THEIR RESPECTIVE ELOW.	4.11 REFI REINFOR CLASS B	FORCING BARS SHALL NOT BE WELDED. ERENCE DRAWINGS FOR REQUIREMENTS FOR LAP SPLICING CING STEEL IN CONCRETE. ALL "LCS" SHALL CONFORM TO SPLICE CRITERIA. IT IS ACCEPTABLE TO TO LAP SPLICE NON
EXISTING	RACTOR SHALL COORDINATE ALL DEMOLITION ACTIVITIES OF CONSTRUCTION IN PLACE w/ THE OWNER. CONTRACTOR TO E OWNER HAS THE RIGHT OF FIRST REFUSAL FOR ALL		IINIMUM OF 50 BAR DIAMETERS UNLESS NOTED OTHERWISE. SPLICED BARS IN CONCRETE ARE TO BE WIRE TIED.
REMOVE	D AND / OR SCRAPPED MATERIALS AND EQUIPMENT.	4.13 LAP THAN 8".	SPLICED BARS IN MASONRY ARE TO BE NO FARTHER APART
3	FOUNDATIONS	5	CONCRETE
DESIGN / ACCORD BY DRIGO DTD. MA' THIS VAL THE SOIL IN THE FO	LOW FOUNDATION CRITERIA: ALLOWABLE SOIL BEARING PRESSURE - 3,000 PSF IN ANCE w/ THE PROJECT GEOTECHNICAL REPORT AS PREPARED GERS ENGINEERING SERVICES, INC. (PROJECT NO. DES 218737, Y 7, 2021). THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING .UE PRIOR TO FOUNDATION CONSTRUCTION. IN AREAS WHERE . DOES NOT YIELD THIS BEARING STRESS VALUE, ADJUSTMENT DOTING DEPTHS AND FOUNDATION DIMENSION MAY BE MADE ENGINEER BEFORE WORK PROCEEDS. CONTRACTOR IS	COMPRE "DESIGN APPLICA" 5.2 CONC REQUIRE & TO "CO	NERAL CONCRETE SHALL DEVELOP 4,000 PSI MINIMUM SSIVE STRENGTH AT 28 DAYS. IN ADDITION REFERENCE CRITERIA" THIS DWG. & PROJECT SPECIFICATIONS FOR TION & SPECIFIC CONCRETE MIX DESIGN REQUIREMENTS. RETE WORK SHALL CONFORM T0 "BUILDING CODE MENTS FOR STRUCTURAL CONCRETE", ACI 318 (2014 EDITION) DE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING
DEEP FO	SIBLE FOR PERFORMING ANY SUCH ADJUSTMENTS. UNDATION CRITERIA: NALIZED FOR BID DOCUMENTS - IN PROGRESS.	5.3 PLAC	TE STRUCTURES", ACI 350 (2006 EDITION). E 1/2 INCH EXPANSION JOINT MATERIAL BETWEEN EDGES OF TE AND VERTICAL SURFACES UNLESS NOTED OTHERWISE.
3.2 PREP PROJECT	ARE THE EXISTING SUBGRADE IN ACCORDANCE w/ THE GEOTECHNICAL REPORT AS PREPARED BY DRIGGERS	5.4 PROV	IDE CONSTRUCTION OR CONTROL JOINTS IN SLABS & WALLS TIONS SHOWN ON DRAWINGS.
2021). IN NOTIFY T	RING SERVICES, INC. (PROJECT NO. DES 218737, DTD. MAY 7, THE EVENT UNUSUAL SOIL CONDITIONS ARE UNCOVERED, THE OWNER AND ENGINEER PRIOR TO FOUNDATION UCTION FOR INSTRUCTIONS HOW TO PROCEED. ADJUSTMENT	5.5 CHAN OTHERW	FER EXPOSED EDGES OF CONCRETE 3/4 INCH, UNLESS NOTED ISE.
IN THE FO	DOTING DEPTHS AND GENERAL FOUNDATION CONSTRUCTION MADE BY THE ENGINEER BEFORE WORK PROCEEDS. CTOR IS RESPONSIBLE FOR PERFORMING ANY SUCH	CONCRE REQUIRE REQUIRE	RACTOR SHALL BE RESPONSIBLE FOR PROPER CURING OF ALL TE. CURING METHODS SHALL CONFORM TO "BUILDING CODE MENTS FOR STRUCTURAL CONCRETE" ACI 318, "CODE MENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE JRES" ACI 350 AND "GUIDE TO EXTERNAL CURING OF
REVIEWE	ING, PIER & SLAB EXCAVATIONS AND FORMS SHALL BE ED BY AN OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR EMENT OF CONCRETE.	CONCRE	TE", ACI 308 (2016 EDITION). SS NOTED OTHERWISE DOWELS SHALL BE THE SAME NUMBER AS THE LARGEST VERTICAL BAR TO WHICH THEY ARE
LOWERE	ING, PIER & SLAB ELEVATIONS SHALL NOT BE RAISED OR D WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.	SPLICED.	
PLACEMI BE PLAC SHALL BI	XCAVATIONS SHALL BE ADEQUATELY DEWATERED BEFORE ENT OF CONCRETE. NO CONCRETE OR CONCRETE FILL SHALL ED IN STANDING WATER. ACCUMULATION EXCEEDING 1 INCH E PUMPED OUT.	APPROV/ REINFOR	RACTOR SHALL SUBMIT REBAR SHOP DRAWINGS FOR AL TO OWNER PRIOR TO FABRICATION. DO NOT FABRICATE CING PRIOR TO RECEIPT OF APPROVED SHOP DRAWINGS.
BUILDING SHALL BI SCRAPS, NOT EXC GEOTEC	ILL MATERIAL, IF REQUIRED, INSIDE THE G'S / STRUCTURE'S FOOTPRINT AND BELOW FOUNDATION'S E SELECT MATERIAL FREE FROM ROOTS, TRASH WOOD AND OTHER EXTRANEOUS MATERIALS. PLACE FILL IN LIFTS EEDING THE RECOMMENDATIONS OF THE PROJECT HNICAL REPORT AS PREPARED BY DRIGGERS ENGINEERING S, INC. (PROJECT NO. DES 218737, DTD. MAY 7, 2021).	CONSTRU CONCRE REVIEWE	CRETE MIXES TO BE REVIEWED BY THE OWNER'S JCTION REPRESENTATIVE PRIOR TO PLACEMENT OF TE. COMPRESSIVE STRENGTH TEST CYLINDERS TO BE D BY THE OWNER'S CONSTRUCTION REPRESENTATIVE HOUT CONCRETE CONSTRUCTION OF THE PROJECT.
	OOTINGS & PIERS SHALL BE CENTERED UNDER THE TED WALL / COLUMN MEMBER UNLESS NOTED OTHERWISE.		
	STRUCTION JOINTS IN FOUNDATION SLABS, WALLS & FOOTINGS E MADE AT LOCATIONS SHOWN ON DRAWINGS.		
REV.NO.	DESCRIPTION		
			No 67838

REVISIONS

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GROUT 6

6.1 GROUT WHERE REQUIRED SHALL BE NON-SHRINK GROUT IN CONFORMANCE TO ASTM C1107.

6.2 GROUT SHALL BE NON-METALLIC AND NON-STAINING AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI.

# MASONRY

NOT APPLICABLE.

### STRUCTURAL STEEL 8

8.1 STEEL SHALL CONFORM TO "STANDARD SPECIFICATION FOR STRUCTURAL STEEL," ASTM A36 (Fy=36 ksi) FOR ANGLES, PLATES & CHANNELS. WIDE FLANGE SECTIONS SHALL CONFORM TO ASTM A992 (Fy=50 ksi). HOLLOW STEEL SECTIONS (HSS) SHALL CONFORM TO ASTM A500, GRADE B (Fy=46 ksi). STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B, (Fy=35 ksi).

8.2 STEEL WORK SHALL CONFORM TO "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS", OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC., (2016 EDITION), INCLUDING ALL SUPPLEMENTS AND THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", (LATEST EDITION).

8.3 CONNECTION BOLTS SHALL BE 3/4 INCH DIAMETER CONFORMING TO "STANDARD SPECIFICATION FOR HIGH-STRENGTH BOLTS FOR STRUCTURAL STEEL JOINTS", ASTM A325, UNLESS NOTED OTHERWISE CONNECTIONS ARE BEARING TYPE WITH THREADS EXCLUDED FROM SHEAR PLANES (A325x).

8.4 WELDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY AWS D1.1 "STRUCTURAL WELDING CODE". WELDING SHALL BE PERFORMED BY CERTIFIED PERSONNEL WHO HAVE BEEN PREVIOUSLY QUALIFIED BY TEST PRESCRIBED IN THE AWS "STRUCTURAL WELDING CODE". ELECTRODES SHALL CONFORM TO AWS 5.5, E70XX.

8.5 LINTELS SHALL BEAR EIGHT (8) INCHES MINIMUM ON MASONRY UNLESS NOTED OTHERWISE.

8.6 THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING, SHORING, AND GUYING OF STEEL FRAMING AGAINST WIND, CONSTRUCTION LOADS, AND OTHER TEMPORARY FORCES UNTIL SUCH PROTECTION IS NO LONGER REQUIRED FOR THE SAFE SUPPORT OF THE FRAMING.

8.7 ALL COPES, BLOCKS, CUTS, CUT-OFFS AND OTHER CUTTING OF STRUCTURAL MEMBERS SHALL HAVE ALL RE-ENTRANT CORNERS SHAPED, AND NOTCH-FREE TO A RADIUS OF AT LEAST 1/2 INCH. THE FILLET AND ITS CONTIGUOUS CUTS SHALL MEET WITHOUT OFFSET OR CUTTING PAST THE POINT OF TANGENCY.

8.8 ANCHOR BOLTS SHALL BE ASTM F1554 OR ASTM A36 & SHALL BE EITHER HEADED w/ NUTS TACK WELDED TO BOLTS OR NON-HEADED w/ HOOKS AS REQUIRED BY THE DRAWINGS. PROVIDE (2) NUTS AND WASHERS WITH EACH ANCHOR BOLT AT COLUMNS UNLESS NOTED OTHERWISE. ANCHOR BOLTS FOR EQUIPMENT & OTHER ASSEMBLIES MAY BE POST APPLIED ANCHOR ASSEMBLIES AS INDICATED ON THE DRAWINGS.

8.9 OVERSIZED AND SLOTTED HOLES SHALL NOT BE USED FOR BOLTED CONNECTIONS ON THIS PROJECT EXCEPT AT LOCATIONS NOTED ON DRAWINGS.

8.10 SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER, AS TO LOCATION AND TYPE OF SPLICE. ANY MEMBER HAVING A SPLICE NOT SHOWN AND DETAILED ON THE SHOP DRAWINGS WILL BE REPLACED.

8.11 PRE-GROUTING BASE PLATES IS NOT PERMITTED.

8.12 ALL HOLES IN STRUCTURAL STEEL ARE TO BE PUNCHED OR DRILLED. FLAME CUTTING OF STEEL IS STRICTLY PROHIBITED.

8.13 ALL DESIGN, DETAILING, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION.

8.14 IN GENERAL SHOP CONNECTIONS SHALL BE EITHER WELDED OR BOLTED AND FIELD CONNECTIONS SHALL BE BOLTED UNLESS NOTED OTHERWISE.

8.15 FABRICATOR/CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR OWNER/ENGINEER APPROVAL PRIOR TO FABRICATION. ALL SHOP DRAWINGS MAY BE EXPEDITED IF THE FABRICATOR ADHERES CLOSELY TO THE DETAILS, NOTES, AND INSTRUCTIONS, SHOWN ON THE DRAWINGS.

8.16 ALL GALVANIZED MATERIALS THAT ARE FIELD CUT, FIELD WELDED OR DAMAGED IN SURFACE FINISH SHALL BE CLEANED AND RE-COATED w/ A 98% ZINC RICH OXIDE AND IN CONFORMANCE w/ THE PROJECT SPECIFICATIONS.

8.17 STRUCTURAL STEEL FRAMING & DECKING ERECTION TO BE REVIEWED BY THE THE OWNER'S CONSTRUCTION REPRESENTATIVE THROUGHOUT CONCRETE & STEEL CONSTRUCTION OF THE PROJECT.

### ALUMINUM 9

9.1 ALUMINUM FABRICATION SHALL BE IN CONFORMANCE WITH THE ALUMINUM ASSOCIATION, INC. "SPECIFICATIONS FOR ALUMINUM STRUCTURES".

- 9.2 UNLESS NOTED OTHERWISE, MATERIALS SHALL BE: a.) PLATE & SHEET - ASTM B209; 6061-T6, 6061-T651 ALLOY.
- b.) EXTRUDED SHAPES ASTM B221; 6061-T6 ALLOY.
- c.) PIPE SECTIONS FOR POST & GUARDRAILS ASTM B241; 6063-T6 ALLOY. POSTS ARE SCHEDULE 80 & RAILS SCHEDULE 40 U.N.O. d.) BOLTS - ASTM A193; GRADE B8 OR ASTM 276; TYPE 316
- STAINLESS STEEL. e.) NUTS - ASTM A194; GRADE M OR ASTM 276; TYPE 316 STAINLESS STEEL.

9.3 ALUMINUM SHALL BE SEPARATED FROM DIRECT CONTACT WITH OTHER MATERIALS (STEEL, CONCRETE, ETC.) BY PRESSURE SENSITIVE TAPE, BITUMASTIC COATING, OR OTHER PROTECTIVE METHOD SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE.

9.4 CONNECTIONS SHALL HAVE A MINIMUM OF TWO 3/4" DIAMETER STAINLESS STEEL BOLTS.

9.5 WELDING ALUMINUM SHALL CONFORM TO AWS D1.2 & AWS A5.10 AND THE REQUIREMENTS OF THE ALUMINUM ASSOCIATIONS "ALUMINUM DESIGN MANUAL" (LATEST EDITION)

TABLE 7.1-1 FOR WELD FILLERS FOR WROUGHT ALLOYS.

9.6 REFERENCE PROJECT SPECIFICATIONS FOR ADDITIONAL HANDRAIL & GUARDRAIL REQUIREMENTS.

### PRECAST CONCRETE 10

10.1 PRE-CAST CONCRETE FIELD ASSEMBLED STRUCTURES TO BE DESIGNED BY THE PRE-CAST MANUFACTURER UTILIZING "DESIGN LOADS" PROVIDED THIS DRAWING AND / OR THE RESPECTIVE FACILITY STRUCTURAL DRAWINGS AND IN ACCORDANCE w/ THE PROJECT SPECIFICATIONS. COORDINATE w/ THE CIVIL, ELECTRICAL, MECHANICAL AND VENDOR EQUIPMENT DRAWINGS FOR ADDITIONAL MATERIALS REQUIRED FOR CALCULATION OF THE DEAD LOADS, LIVE LOADS AND EQUIPMENT LOADS, THAT MAY BE SUSPENDED FROM THE SIDES OF WALL PANELS AND UNDERSIDE OF THE ROOF SLAB PANELS AS APPLICABLE.

10.2. PRE-CAST CONCRETE FIELD ASSEMBLED STRUCTURES MANUFACTURER IS REQUIRED TO SUBMIT DRAWINGS AND CALCULATION PACKAGES SEALED, SIGNED AND DATED BY AN ENGINEER CURRENTLY LICENSED BY THE STATE OF FLORIDA. FABRICATION OF THE PRE-CAST FIELD ASSEMBLED STRUCTURES COMPONENTS SHOULD NOT OCCUR UNTIL "FINAL" ACCEPTANCE OF THE MANUFACTURER'S DRAWINGS AND CALCULATIONS SUBMITTALS.

10.3 REFERENCE MECHANICAL AND STRUCTURAL DRAWINGS FOR PRE-CAST CONCRETE FIELD ASSEMBLED STRUCTURES FOUNDATION SYSTEMS AND BEARING ELEVATIONS, DIMENSIONS, WALL AND ROOF SLAB OPENINGS & ROOF SLAB SLOPE REQUIREMENTS.

10.4 REFERENCE DRAWINGS & PROJECT SPECIFICATIONS FOR ALL INTERIOR AND EXTERIOR WALL AND SLAB SECTIONS FINISH REQUIREMENTS.

10.5 PRE-CAST FIELD ASSEMBLED STRUCTURES WALL AND SLAB SECTIONS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI.

10.6 REFERENCE ALL PROJECT SPECIFICATIONS RELATED TO THE PRE-CAST CONCRETE FIELD ASSEMBLED STRUCTURES FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

10.7 CONSTRUCTION ACTIVITIES RELATED TO THE PRE-CAST FIELD ASSEMBLED STRUCTURES TO BE REVIEWED BY THE THE OWNER'S CONSTRUCTION REPRESENTATIVE THROUGHOUT CONCRETE CONSTRUCTION OF THE PROJECT.

PRE-ENGR. TIMBER TRUSS 11

NOT APPLICABLE.

PRE-ENGR. METAL BLDGS. 12

NOT APPLICABLE.

### MISC. BUILDING MATERIALS 13

13.1 ALL MISCELLANEOUS MATERIALS ARE TO BE DELIVERED TO SITE & STAGED ON SITE PRIOR TO INSTALLATION. STORE ON SITE AS REQUIRED BY THE MATERIAL MANUFACTURER TO AVOID DAMAGE PRIOR TO INSTALLATION.

13.2 CAULK & SEALANT MATERIAL SHALL BE MASTERSEAL "NP 1" ONE COMPONENT, MOISTURE CURING HIGH PERFORMANCE POLY-URETHANE SEALANT, OR AN APPROVED EQUAL.

14	ABBREVI
TO REPRE	FOLLOWING LIST OF A
SUPPLEM ADD'L =	ENT THE MORE COMM ADDITIONAL
AL =	ALUMINUM
ALT. = BLDG. =	, <u> </u>
BLBG. =	BLOCK
BM. = B.O. =	BEAM BOTTOM OF
BRG. =	BEARING
C.I.P. = CLR. =	CAST-IN-PLACE
CLR. = CMU =	CLEAR CONC. MAS. UNIT
C.O. =	
COL. = CONC. =	COLUMN CONCRETE
CONN. =	CONNECTION
CONST. = CONT. =	CONSTRUCTION CONTINUOUS
COORD.=	COORDINATE
CTR. = CTR'D. =	CENTER CENTERED
DBL. =	DOUBLE
DIR. = DWG. =	DIRECTION DRAWING
DWG.'s. =	DRAWINGS
EA. =	EACH
EL = E.O. =	ELEVATION EDGE OF
EQ. =	EQUAL
EQUIP. = EXIST. =	EQUIPMENT EXISTING
EXP. =	EXPANSION
FLG. =	FLANGE
FDN. = F.S. =	FOUNDATION FAR SIDE
FT. =	FEET
FTG. = GA. =	FOOTING GAGE
GALV. =	GALVANIZED
GALV'D =	GALVANIZED
HORZ. = H.P. =	HORIZONTAL HIGH POINT
HRS. =	
I/F = INFO. =	INSIDE FACE
INTR. =	INTERIOR
JST. = JT. =	JOIST JOINT
KB =	KNEE BRACE
LCS =	
LLH =	STRUCTURES LONG LEG HORIZO
LLV =	LONG LEG VERTIC/
L.P. = LSL =	LOW POINT LONG SLOTTED
MAS. =	MASONRY
MAT'L. = MFG. =	MATERIAL MANUFACTURER
MFG. = MIN. =	
MTL. =	METAL
N/A = NA =	NOT APPLICABLE
NOM. =	NOMINAL
N.S. = N.T.S. =	NEAR SIDE NOT TO SCALE
0.C. =	ON CENTER
O/F = O/H =	OUTSIDE FACE OVERHANG
0/0 =	OUT TO OUT
OPNG. =	OPENING
OPP. = ORIENT.=	OPPOSITE ORIENTATION
PLCS. =	PLACES
P.P. = RAD. =	PUMP PAD RADIUS
REF. =	REFERENCE
REINF. = REQ'D. =	REINFORCING REQUIRED
REG D. =	RETAINING
ROT. =	
SIM. = SPA. =	SIMILAR SPACED
SPECS. =	SPECIFICATIONS
S.S. = SSL =	STAINLESS STEEL SHORT SLOTTED
STD. =	STANDARD
STL. = T&B =	STEEL TOP & BOTTOM
T&B =	TURN DOWN
THK. =	THICK
THK'D = T.O. =	THICKENED TOP OF
T.O.S =	TOP OF STEEL
TYP. = U.N.O. =	TYPICAL UNLESS NOTED
	OTHERWISE
XB = VERT. =	CROSS OR "X"-BRA VERTICAL
W.P. =	WORK POINT

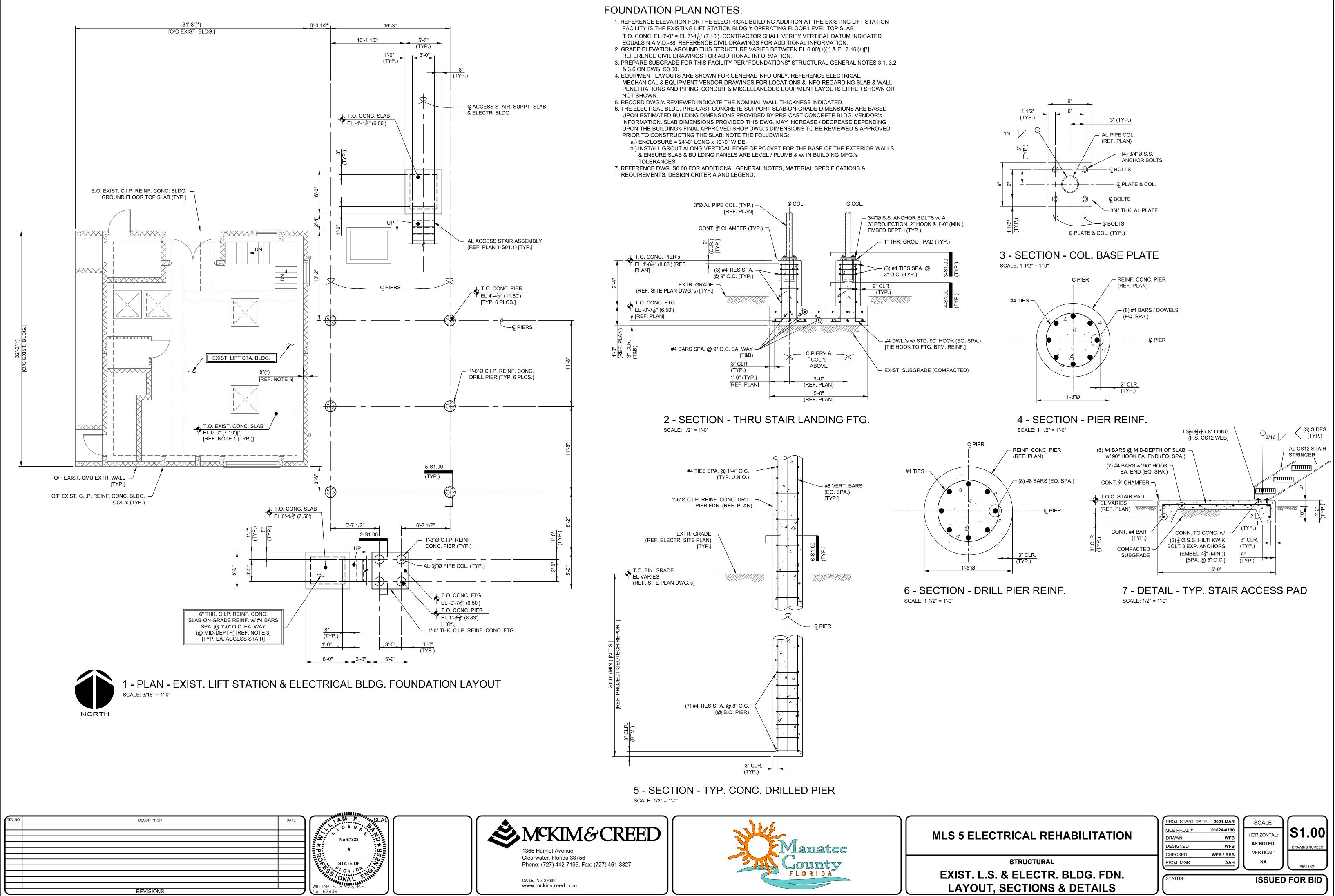


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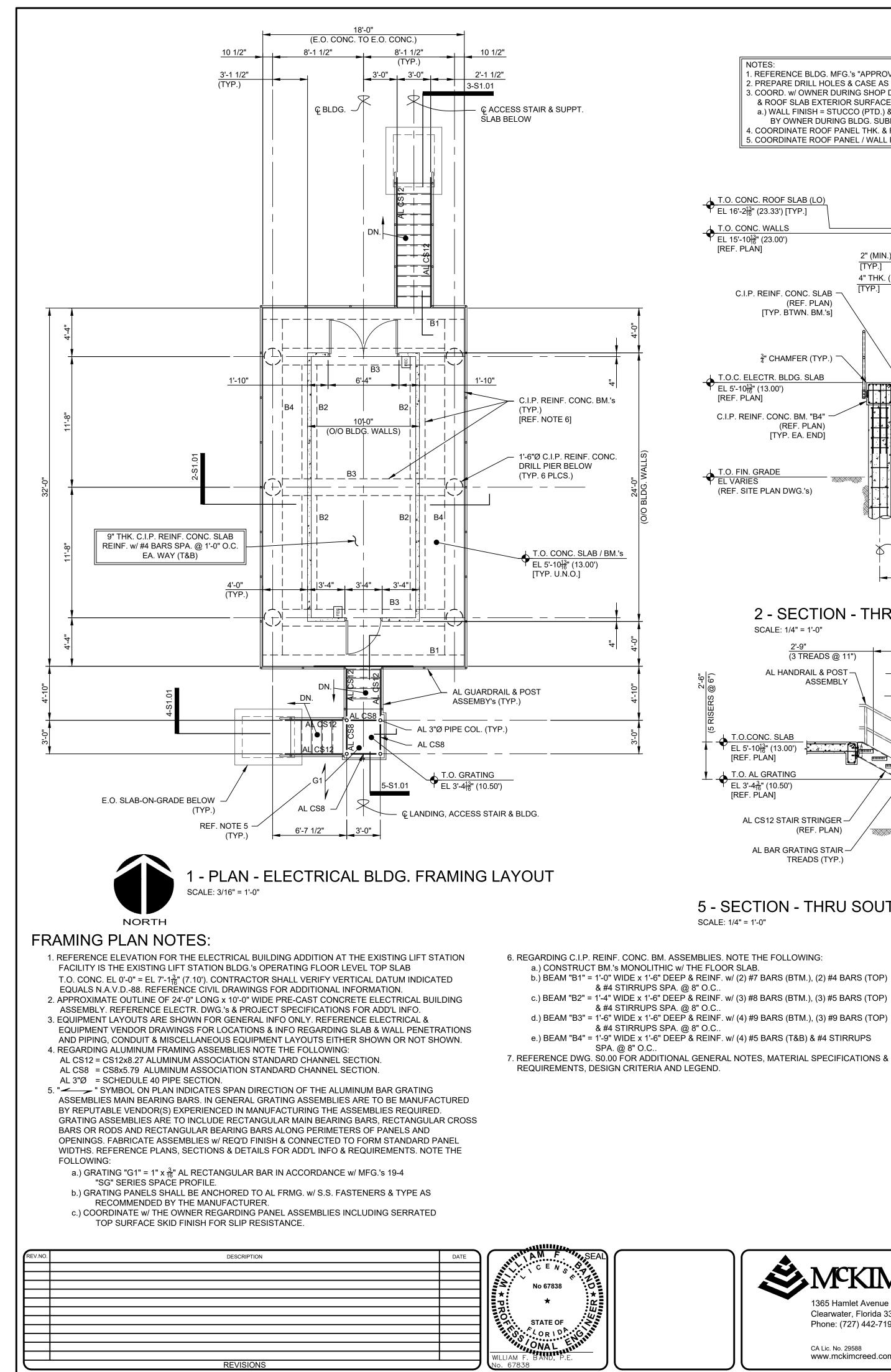
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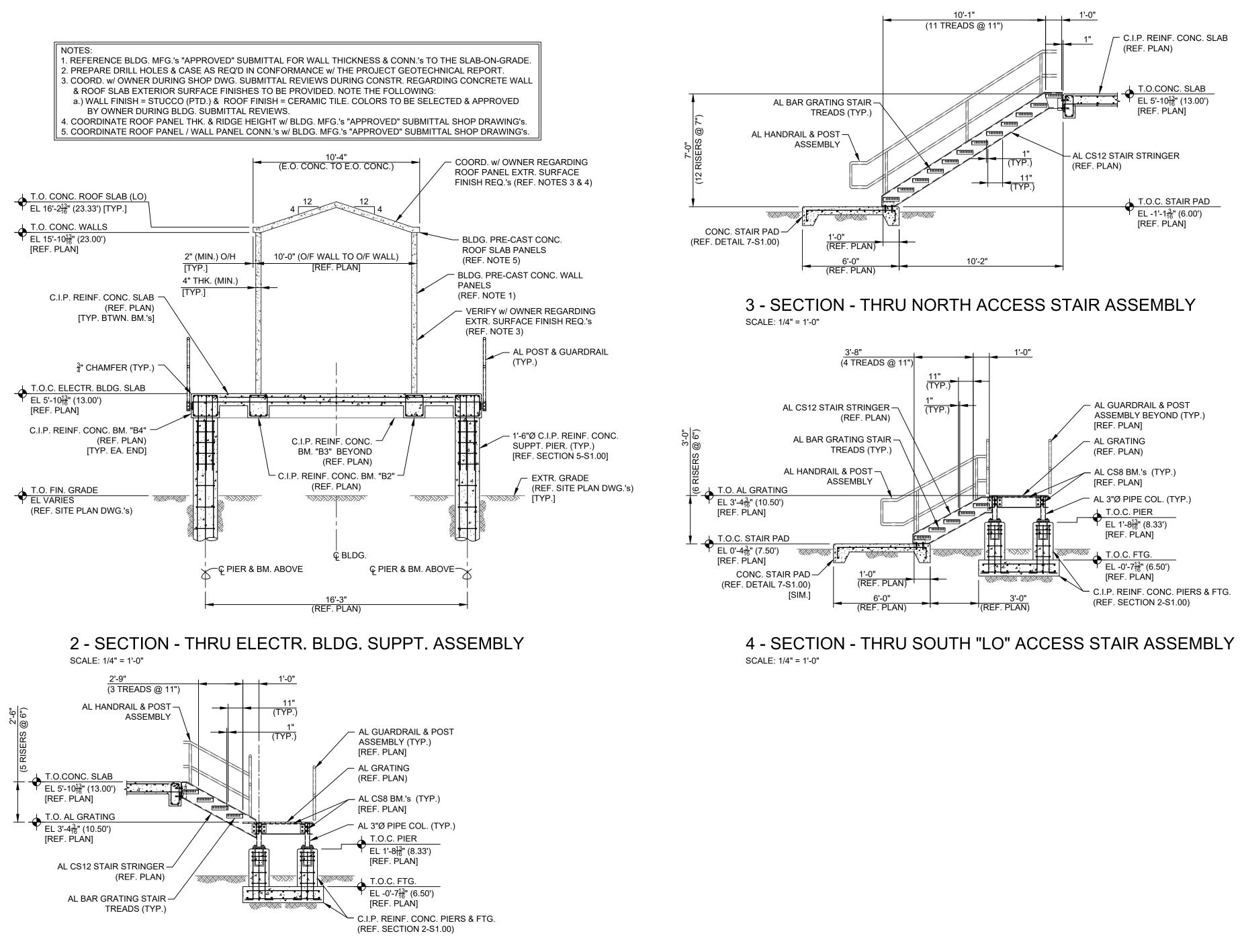
	15	DESIGN LC	DAD	S			
BREVIATIONS IS NOT INTENDED O ON THE DRAWINGS, BUT TO ON ABBREVIATIONS USED.	FLORID	LOADS BASIS OF DESIG A BUILDING CODE (FBC) M DESIGN LOADS FOR B					
	EQUIP. LOAD:N/ALIVE LOAD:125 PSF (ELECTRICAL BLDG. FLOOR), 100 PSF (ACCESS STAIRS & LANDING)ROOF LOAD:65 PSF (ELECTRICAL BLDG.) & 20 PSF (COLLATERAL)SNOW LOAD:N/AWIND LOAD:160 mi/hr, EXPOSURE C, OCCUPANCY / RISK CATEGORY III						
		CALCULATED V Vx = 12.9 k & Vy	/ = 4.5 k				
	SEISMIC	ZONE 1, ZONE ZONE 4 & ZONI	2 & ZON	DING WIND PRESSURE E 3 ROOF PRESSURES _ PRESSURES = BY ELE	= BY ELECTRICAL BLDG. MF	G.	
	FLOOD:		TATIC) 8	0.3 k (NET WAVE FOR	CE)		
	SOIL BE	ARING: FIELD TEST PER REF. "FOUNDATI		CT GEOTECH REPORT = DTE 3.1 DWG. S0.00	= 3,000 PSF		
	16	DESIGN C	RITE	RIA			
	SLABS- PIPE EN SLABS & BEAMS NON-LC BELOW SIDEWA REINFO WELDEI STRUCT ALUMIN BOLTS S TYPE 37 ANCHO ASTM A STEEL E	SHALL BE 3/4"Ø ASTM A3 16 S.S.: R BOLTS SHALL BE 3/4"Ø 36 (STEEL); TYPE 316 S.S ELECTRODES SHALL COM	LUMNS & LLLS: GUTTER 25 OR ASTM F 3. (ALUM NFORM T	BEAMS: : -1554 OR INUM): TO:	fc = 4,000 PSI fc = 3,000 PSI N/A fc = 4,500 PSI N/A fc = 4,500 PSI N/A fc = 4,000 PSI fc = 4,000 PSI N/A fc = 3,000 PSI N/A ASTM A615, GRADE 60 ASTM A1064 REF. STRUCTURAL NOTE 8. REF. STRUCTURAL NOTE 9. REF. STRUCTURAL NOTE 8. REF. STRUCTURAL NOTE 8.	2 3.3 & 9.2.d 8 CTURAL NOTE 8.4)	
		UM WELD FILLERS ALLO ARING CAPACITY:	YS SHAL	L CONFORM TO:	AWS A5.10 (REF. STRUCTU REF. "DESIGN LOADS" TABL		
	17	LEGEND					
-	ENLARG	GED PLAN AREA, DETAIL	=				
	CONC. N	ASONRY BLOCK	=			(EXISTING)	
	BRICK V	'ENEER	=			(EXISTING)	
	CONC. V	VALL, SLAB, ETC.	=	4	4	(EXISTING)	
	GROUT		=			(EXISTING)	
	GRATIN	G	=			(EXISTING)	
		OR SECTION ET NO. REFERENCE	=	Y.Y.Y	X-SY.YY		
	PROJEC	T NORTH	=	NORTH			
	ELEVAT	ION DATUM	=				
	ELEVAT REFERE	ION NO./SHEET NO. NCE	=	X-SY.YY			
	ELEVAT	IONS X'-X" (Y.YY')	=	_	O / FROM FACILITY REFEREN SITE EL VERTICAL DATUM	CE EL 0'-0"	
	STEP IN	FOOTING ELEVATION	=	\$			
J	STL. FR.	AMING COL./BM.		•			

MLS 5 ELECTRICAL REHABILITATION	PROJ. START DATE:       2021.MAR         MCE PROJ. #       01024-0190         DRAWN       WFB         DESIGNED       WFB         OUFOU/FD       WEB / AFA
STRUCTURAL GENERAL NOTES, DESIGN LOADS,	CHECKED     WFB / AEA       PROJ. MGR.     AAH       NA     REVISION
DESIGN CRITERIA & LEGEND	STATUS: ISSUED FOR BID
\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\STRU	JCTURAL\S000-SG001-10240190.DWG 09/15/2022 20:57:50 SUVATH SENG



\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\STRUCTURAL\S100-SC101-10240190.DWG 09/15/2022 20:58:00 SUVATH SENG







- b.) BEAM "B1" = 1'-0" WIDE x 1'-6" DEEP & REINF. w/ (2) #7 BARS (BTM.), (2) #4 BARS (TOP)
- c.) BEAM "B2" = 1'-4" WIDE x 1'-6" DEEP & REINF. w/ (3) #8 BARS (BTM.), (3) #5 BARS (TOP)
- 7. REFERENCE DWG. S0.00 FOR ADDITIONAL GENERAL NOTES, MATERIAL SPECIFICATIONS &





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$\square$	PROJ. START DATE:	-	SCALE	
	MCE PROJ. # DRAWN	01024-0190 WFB	HORIZONTAL:	S1.01
	DESIGNED	WFB	AS NOTED	DRAWING NUMBER
	CHECKED	WFB / AEA	VERTICAL:	
	PROJ. MGR.	AAH	NA	REVISION
				AL VIOLON
J	STATUS:		ISSUEE	FOR BID

\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\STRUCTURAL\S101-SC102-10240190.DWG 09/15/2022 20:58:12 SUVATH SENG

**SECTIONS & DETAILS** 

**MLS 5 ELECTRICAL REHABILITATION** 

STRUCTURAL

ELECTR. BLDG. FRMG. PLAN,

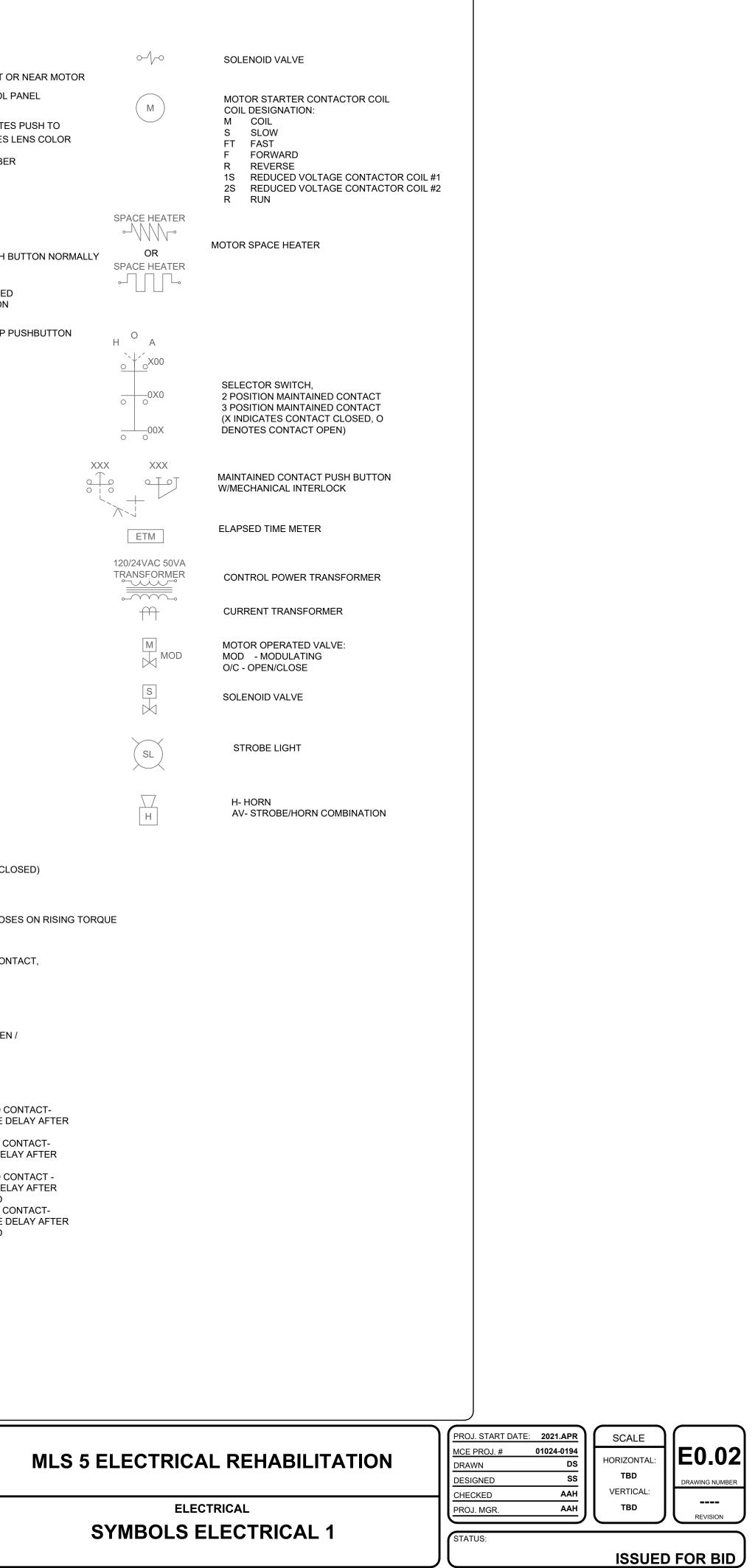
1 ABBREVIATIONS	2 TYPICAL DEVICE SYMBOLS	4 GENERAL ELECTRICAL SYMBOLS		7 GENERAL ELECTRICAL NOTES
1         ABBREVIATIONS           NOTE: ALL ABSREVATIONS WAY NOT BE UTILIZED FOR THIS           PROJECT           A, MAP           APD           ADDUSTABLE FREDUENCY DRIVE           AFD         ADDUSTABLE FREDUENCY DRIVE           AC         ADDUSTABLE FREDUENCY DRIVE           AC         ADDUSTABLE FREDUENCY DRIVE           AC         ADDUST           AC         ADDUST           AC         ADDUST           ADDUST         ADDUST           ADDUST         ADDUST           CONTROL SWITCH         CONTROL SWITCH           CONTROL SWITCH	2         TYPICAL DEVICE SYMBOLS           *         LIGHTING CONTROL SWITCHES: UPPER LET CHARACTER OWERNALLES 'S' DEMORTS SWITCH CONTROL 3 - THREE WAY SWITCH CONTROL 5 - COLUMARY SUBSCIENCE           *         - COLUMARY SWITCH CONTROL 5 - COLUMARY SUBSCIENCE           *         - COLUMARY SWITCH CONTROL 5 - COLUMARY SUBSCIENCE           *         - COLUMARY SUBSCIENCE	4       GENERAL ELECTRICAL SYMBOLS         Image: Contact - Normally Closed Contact - Normally OPN         Image: Contact - Letter Indicates Color         Image: Contact Relay         Image: Contact Relay	CONDUCT FORMATION 100 DUMBENT SHOWN, LIVE THE DESIGNATE ADMITTION CONCERED IN PURSES SAME CREATE ADMITTION CONCERED IN PURSES SAME CREATE ADMITTION FLOOR CASE, LANDERSTOND, ETC. EXPLORE ADMITTION FLOOR CASE, LANDERSTOND, ETC. EXPLORE OF CONDUCT CONCERT TOWER OF CONCERED IN PURSES WALLS AND CONCERT TOWER OF CONCERED IN PURSES CONCERT TOWER OF CONCERTS CONCERT TOWER OF CONCERTS CONCERTS OF CONCERTS CONCERTS CONCERTS CONCERTS OF CONCERTS CONCERTS CONCERTS CONCERTS OF CONCERTS OF CONCERTS CONCERTS CONCERTS OF CONCERTS OF CONCERTS CONCERTS CONCERTS CONCERTS OF CONCERTS OF CONCERTS OF CONCERTS CONCERTS OF CONCERTS OF CONCERTS OF CONCERTS OF CONCERTS CONCERTS OF CONCERTS OF	<ul> <li>Control Report Number of All All All All All All All All All Al</li></ul>
REV.NO. DESCRIPTION	DATE	1365 Hamlet Avenue         Clearwater, Florida 33756         Phone: (727) 442-7196, Fax: (727) 461-3         CA Lic. No. 29588         www.mckimcreed.com	Manatee	MLS 5 ELECTRICAL REHABILITATION         ELECTRICAL         BUDY         BUDY

\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\WATER-ELECT-LEAD SHEET.DWG 09/15/2022 20:58:19 SUVATH SENG

1 GENERA	L ELECTRICAL SYMBOLS	2	POW	ER SYMBOLS
	LIGHTING, APPLIANCE OR INSTRUMENT PANELBOARD POWER PANELBOARD			CLASS 1/DIVISION I/II CONDUIT SEAL-OFF FITTING CONTROL STATION
CP	CP - CONTROL PANEL			STOP-START STATION
(T)	THERMOSTAT			LOCK-OUT-STOP SWITCH
MD	MOTORIZED DAMPER			<ul> <li>□ LOCATED AT FIELD DEVICE</li> <li>△ LOCATED AT MAIN CONTROL PAN</li> <li>● LOCATED AT LOCAL CONTROL PAN</li> </ul>
(LM) (M) X-X (UH)	LOUVER MOTOR MOTOR, UNIT HEATER-NUMERAL DENOTES LIGHTING PANEL AND BRANCH CIRCUIT NUMBER. MOTOR SYMBOL SHOWN DASHED DENOTES EQUIPMENT			MOUNTED ON DOOR INDUSTRIAL BATTERY SET W/MOUNTING RACK
CRAC	LOCATED ON ROOF. COMPUTER ROOM AIR CONDITIONER			ELECTRICAL DEVICE AND THE LETTER
EIS	EMERGENCY INVERTER SYSTEM		XX	ELECTRICAL DEVICE AND THE LETTER
ATS	AUTOMATIC TRANSFER SWITCH		xxx	ELECTRICAL BUBBLE AND THE LETTER
XX	ELECTRICAL MANHOLE / HANDHOLE AND THE LETTERS INDICATE THE TYPE OF THE HOLE			DELTA/WYE TRANSFORMER CONNECTION W/GROUND
CT110	RACEWAY SYSTEM CALL-OUTS: CT - CABLE TRAY BD - BUS DUCT DB - DUCTBANK EC - EXPOSED CONDUIT		-0 <sup>LA</sup> 0	
	WW - WIRE WAY/TROUGH	_		FUSE- VOLTAGE AS REQUIRED AND SIZ CL DENOTES CURRENT LIMITING TYPE WHEN LESS THAN 3.
042000	RACEWAY AND/OR CABLE ID NUMBER		PFD 	PFD DENOTES PULL FUSE DISCONNECT TYPE
CONDUIT DESIGNAT	HOMERUN TO EQUIPMENT SHOWN. LINE TYPE TES CONCEALED, EXPOSED, ETC. NUMBERS/TEXT TE HOMERUN EQUIPMENT (I.E. PANEL BOARD CIRCUIT		M M D	MICROPROCESSOR BASED METERING DEVICE
GENERAL	CONDUIT RUN CONCEALED IN FURRED WALLS AND EXPOSED ELSEWHERE UNLESS OTHERWISE NOTED		30	POWER RECPT. WITH DISCONNECT-600 NUMBER DENOTES AMPERE RATING
	ED CONDUIT IN FLOOR SLAB, UNDERGROUND, ETC. CABLE OR CONDUIT		<u>ه</u> 30	POWER RECPT. 600V, 3 PHASE, 4 WIRE
)	TURNED DOWN TURNED UP CAPPED	S	S S S	POWER ON-OFF SNAP SWITCH, 1PH, 12 S2-DENOTES, 2 POLE, 240 VOLTS, 20A
	ON		0	PUSH-BUTTON STATION
E	SITE ELECTRICAL     EXISTING SITE ELECTRICAL			PUSH-BUTTON STATION WITH LOCK-0
T	SITE TELEPHONE			SELECTOR SWITCH
T	EXISTING SITE TELEPHONE		X	INDICATING LIGHT
OHE	OVERHEAD ELECTRICAL UTILITY		CS	CONTROL STATION
OHT	OVERHEAD TELEPHONE UTILITY		L	LOCAL-OFF-REMOTE SELECTOR SWIT
UGE	UNDERGROUND ELECTRICAL UTILITY		R	
G	UNDERGROUND TELEPHONE UTILITY     SITE GROUND     EXISTING SITE GROUND	0	A	TS-BI AUTOMATIC TRANSFER SWITCH -ATS STATE CONTROLS AND ACCESSORIES INDICATED DENOTES WITH BYPASS-IS
	DEVICE MOUNTING HEIGHTS			SUBMERSIBLE CABLES BY VENDOR
RECEPTACLES (INTERIOR PRO RECEPTACLES (EXTERIOR PRO LIGHT SWITCHES		_		POTENTIAL TRANSFORMER
PHONE OUTLETS	——————————————————————————————————————			X TRANSFORMER- SIZE AS NOTED ON T X THE DRAWINGS
	16" AFF ———————————————————————————————————			SHIELDED ISOLATION TRANSFORMER
CONCRETE BLOCK OR BRICK	BOTTOM UNLESS NOTED OTHERWISE. IN WALL CONSTRUCTION, CONTRACTOR SHALL STALLATION WITH MORTAR AND			CABLE TRAY
:v.no.				MANU HAMADASEAN
	DESCRIPTION			
				No 66861
				CORIDA CONT
			AUE	REY A. HAUDRICOURT, P.E.
	REVISIONS		No.	66861

				3 IN:	STRUMENTATION S
	NF 30AF NF 3R	NON-FUSED OR FUSED DISCONNEC DENOTES FUSE SIZE (NF=NON-FUS DENOTES FRAME SIZE. RIGHT N ENCLOSURE RATING.	ED). BOTTOM NUMBER	PC	PHOTOCELL DEVICE LOCATED IN FIELD AT OF
	3R ) <u>30AT</u> 30AF 2P	ENCLOSED THERMAL MAGNETIC CIRC DENOTES TRIP. BOTTOM NUMBER DE RIGHT NUMBER DENOTES NUMBER OF LEFT NUMBER DENOTES NEMA ENCLOS	NOTES FRAME SIZE. CENTER POLES (2P OR 3P). THE UPPER		DEVICE LOCATED IN THEED AT ON DEVICE LOCATED IN CONTROL PA INDICATING LIGHT, PT-DENOTES TEST TYPE LETTER INDICATES LI W-WHITE G-GREEN A-AMBER
ANEL PANEL	$ \begin{array}{c}                                     $	DRAWOUT / FIXED MOUNTED POWER RMS TYPE SOLID STATE TRIP PROGRAM EO DENOTES ELECTRICALLY OPERATE	MMER.	PT XXX o``o	R-RED B-BLUE C-CLEAR SWITCH - TOGGLE OPEN
	EO ×	LOAD BREAK			MOMENTARY CONTACT PUSH BU OPEN / NORMALLY CLOSED
	100AF	CIRCUIT BREAKER			MUSHROOM HEAD MAINTAINED CONTACT PUSH/PULL BUTTON
RS INDICATE THE TYPE	° ∕ 80% <u>30AT</u> 600V			XXX o 4_o	MOMENTARY LOCKOUT STOP PL
RS INDICATE THE TYPE	RK1	FUSE		(INS ###	INSTRUMENTATION BUBBLE
		DISCONNECT SWITCH WITH FUSING WHERE NOTED		XXX Q	SWITCH - LIMIT HELD CLOSED / OPEN
SIZE NOTED ON THE DRAWINGS.	00 2 <u>1-70AT</u> 7AF	STAND-ALONE MOTOR CONTROL DISCONNECT: UPPER LEFT NUMBER DE UPPER RIGHT NUMBERS DENOTE A RATINGS. LOWER LEFT NUMBER DE	ENOTES NEMA FRAME SIZE. MPERE TRIP AND FRAME	XXX	LIMIT SWITCH CLOSE / OPEN
E. NUMBER INDICATES QUANTITY		RATING.THEMIDDLELETTERSDEFOLLOWING:FVNRFULLVOLTAGE NON-REVERFVRFULLVOLTAGE REVERSIBLETS1WTWO SPEED - SINGLE WINDTS2WTWO SPEED - DUAL WINDIN	RSE E ING G	XXX S	TEMPERATURE SWITCH CLOSE / OPEN
	00	RVSSREDUCED VOLTAGE SOFT SRVATREDUCED VOLTAGE AUTO 1VFDVARIABLE FREQUENCY DRI	IRANSFORMER VE	xxx°	FLOAT SWITCH CLOSE / OPEN
00V, 3 PHASE, 4 WIRE	FVNR	FULL-VOLTAGE NON-REVERSING MOTOUPPER LEFT NUMBER DENOTES NEMATHE MIDDLE LETTERS DENOTE TO ONEFVNRFULL VOLTAGE NON-REVERFVRFULL VOLTAGE REVERSIBLETS1WTWO SPEED - SINGLE WINDTS2WTWO SPEED - DUAL WINDINRVSSREDUCED VOLTAGE SOFT SRVATREDUCED VOLTAGE AUTO TVFDVARIABLE FREQUENCY DRI	FRAME SIZE. OF THE FOLLOWING: SE ING G STARTER FRANSFORMER	XXX	PRESSURE SWITCH CLOSE / OPEN
120V AC, 20A A	1 RVSS	REDUCED VOLTAGE SOLID-STATE MOT UPPER LEFT NUMBER DENOTES NEMA THE MIDDLE LETTERS DENOTE TO ONE FVNR FULL VOLTAGE NON-REVER	FRAME SIZE. E OF THE FOLLOWING: RSE	xxx	FLOW SWITCH CLOSE / OPEN
-OUT FEATURE		FVRFULL VOLTAGE REVERSIBLITS1WTWO SPEED - SINGLE WINDTS2WTWO SPEED - DUAL WINDINRVSSREDUCED VOLTAGE SOFT SRVATREDUCED VOLTAGE AUTO TVFDVARIABLE FREQUENCY DRI	DING IG STARTER TRANSFORMER	xxx ⊣¢⊢	VALVE LIMIT SWITCH (OPEN / CLO
		VARIABLE FREQUENCY DRIVE MOTO	R CONTROLLER, MCC UNIT.	XXX	TORQUE SWITCH, OPENS / CLOSE
1 VFD	100A 18-PULSE 5% LINE AND 5% LOAD REACTOR	UPPER LEFT NUMBER DENOTES NEMA THE MIDDLE LETTERS DENOTE TO ONE FVNR FULL VOLTAGE NON-REVER FVR FULL VOLTAGE REVERSIBLE TS1W TWO SPEED - SINGLE WIND TS2W TWO SPEED - DUAL WINDIN	OF THE FOLLOWING: SE E ING	xxx otto	NORMALLY OPEN / CLOSED CONT NUMBER INDICATES RELAY.
S, WITH SOLID ESBI WHEN -ISOLATION SWITCH		RVSSREDUCED VOLTAGE SOFT SRVATREDUCED VOLTAGE AUTO TVFDVARIABLE FREQUENCY DRIANSI/IEEE TYPE-52 AC POWER CIRCUIT	STARTER IRANSFORMER VE	xxx 어 卜아	THERMALLY ACTUATED MOTOR OVERLOAD RELAY, LATCHES OPEN / CLOSED ON OVERLOAD
	M 1~ 1~ 10 FLA XXX	AC MOTOR (SINGLE PHASE/THREE PHA	SE)	XXX ^ NOTC	TIMED CONTACT: NOTC NORMALLY OPENED CO TIMED CLOSED TIME DE COIL ENERGIZED NCTO NORMALLY CLOSED COI
	M 21.0 FLA 460V 15HP	DC MOTOR			TIMED OPEN TIME DELA COIL ENERGIZED NOTO NORMALLY OPENED CO TIMED OPEN TIME DELA
I THE	SPD				COIL DE-ENERGIZED NCTC NORMALLY CLOSED COI TIMED CLOSED TIME DE COIL DE-ENERGIZED
	# # #			XXX 0	CONTROL RELAY COIL DESIGNATION: CR CONTROL RELAY MX AUXILIARY RELAY
	ADDITIONAL SYMB	NOT BE UTILIZED FOR THIS PROJECT. OLS NOT SHOWN ON THIS DRAWING MA RAWINGS. IF REQUIRED, IEC RATINGS W		XXX YYY 0	TR TIMING RELAY AR ALARM RELAY RR READY RELAY
	MCKT	M&CREED			
	1365 Hamlet Aven Clearwater, Florida	ue 33756			atee
	CA Lic. No. 29588 www.mckimcreed.c	7196, Fax: (727) 461-3827 com		FLOR	

# SYMBOLS

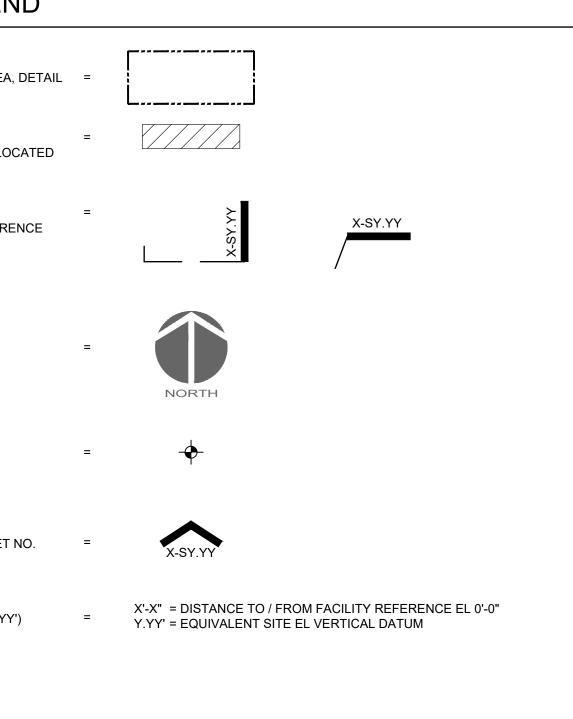


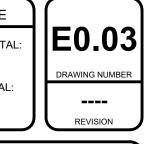
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4 LIGHTING SYMBOL	<b>S</b>	5 FIRE ALARM SYSTEM	8 AUXILIA	ARY SYSTEMS	7 LEG			)
FIRST NUMERAL DENOTE	FIXTURE - SURFACE OR PENDANT MOUNTED. S LIGHTING PANEL (LP1), SECOND NUMBER JIT NUMBER. LOWER CASE LETTER DENOTES	A/V 110 HORN A/V 110 A/V 110 A	GD	AUXILIARY DETECTOR DC DOOR CONTACT GD GLASS-BREAK DETECTOR MS MOTION SENSOR CR CARD READER	ENLARGED PLAN A EQUIPMENT TO BE DEMOLISHED OR R	=		
FLUORESCENT LIGHTING       OR       EM	FIXTURE WITH BATTERY PACK SURFACE	F MANUAL PULL STATION	FOPP	CONTROL PANEL, THE MIDDLE LETTERS DENOTE AS THE FOLLOWING: IACP INTRUSION ALARM CONTROL PANEL	DETAIL OR SECTIO		X-SY.YY	
PENDANT OR CEILING MC	DUNTED LIGHTING FIXTURE.	FACP FIRE ALARM CONTROL PANEL		ACP ALARM CONTROL PANEL FOPP FIBER OPTIC PATCH PANEL CAMERA	NO./SHEET NO. REF			
	G FIXTURE.	B BELL						
POLE OR STANCHION MO	UNTED LIGHTING FIXTURE.	FAAS FIRE ALARM ANNUNCIATOR STATION		ALARM BEACON LETTER INDICATES COLOR	PROJECT NORTH	= NORTH		
	HION MOUNTED LIGHTING FIXTURES	FS FLOW SWITCH	Н	SPEAKER\HORN H = HORN PS = PAGING SPEAKER				
	WITH GF RECEPTACLE	TS VALVE TAMPER SWITCH		AV = Audio/Visual Annunciator	ELEVATION DATUM	n = - <del>•</del>		
2 LAMP SELF CONTAINED EM LETTER DENOTES FIXTUR	DC EMERGENCY LIGHTING UNIT. RE TYPE.		C	CEILING MOUNTED SPEAKER	ELEVATION NO./SH	IEET NO. =		
	D (SINGLE FACE WITH INDICATING PACK ARROW INDICATES DIRECTION OF	FD FLAME DETECTOR		VOICE/DATA COMBINATION OUTLETS:	REFERENCE			
	INTED (DOUBLE FACE WITH INDICATING ARROWS) ROWS INDICATE DIRECTION OF EXIT DOOR	SD H SMOKE DETECTOR, MULTISENSOR		WIRING DEVICE NOTES: IF SHOWN, UPPER-LEFT CHARACTERS DENOTE PANEL BOARD CIRCUIT FOR POWER OUTLETS. IF SHOWN, LOWER-RIGHT CHARACTERS DENOTE	ELEVATIONS X'-X" (	(Y.YY') = X'-X" = DISTANCE TO Y.YY' = EQUIVALENT S	/ FROM FACILITY REFERENCE EL 0'-0" SITE EL VERTICAL DATUM	
	YMBOL. SEE LIGHTING FIXTURE SCHEDULE FOR ALL FIXTURES SHOWN IN A ROOM WITH THIS PE INDICATED BY LETTER; NUMBER IN SYMBOL	<ul> <li>SMOKE DETECTOR PHOTOELECTRIC</li> <li>DUCT MOUNTED SMOKE DETECTOR</li> </ul>		NEMA PLUG AND/OR RECEPTACLE CONFIGURATION.				
150 INDICATES LAMP WATTAG ONE (UNLESS OTHERWIS	GE AND NUMBER OF LAMPS WHERE MORE THAN E NOTED). NUMBER BELOW SYMBOL INDICATES TE FINISHED FLOOR OR AS NOTED.	H THERMAL DETECTOR (FIXED AND RATE OF RISE) H-HIGH TEMPERATURE		DATA OUTLET FLOOR MOUNTED DATA OUTLET				
		CT SIGNAL INPUT MODULE		SOUND POWERED TELEPHONE				
AMP RECEPTACLE DESIG	ECEPTACLE, 2 POLE, 3 WIRE, 120 VOLTS A.C. 20 NATIONS, FIRST NUMBER DENOTES PANEL, ES CIRCUIT NUMBER. GF-DENOTES GROUND FAULT GE SUPPRESSION TYPE WP-DENOTES	CC1 SIGNAL MODULE	TB	FLAT CABLE TRANSITION BOX				
	ECEPTACLE, 2 POLE, 3 WIRE; 120 VOLTS AC. 20		PBX	TELEPHONE PUNCH DOWN BLOCK PRIVATE BRANCH EXCHANGE				
	POLE, 3 WIRE 250 VOLTS A.C. 20 AMP UNLESS		EPN	EXTERNAL PORT NODE				
NOTED OTHERWISE ON D	RAWINGS.	6 GROUND SYMBOLS	F/C	FIBER CONVERTER				
	LE	GROUND TEST POINT	LE	LINE EXTENDER				
HEAT-TRACE OR SPECIAL P REFERENCE DRAWINGS FO		GROUND ROD	PCC	PAGING CONTROL CABINET				
PU PAGING UNIT		GROUND GRID CABLE CONNECTION	XCR	TRANSCEIVER				
LS PAGING UNIT SPEAKER		GROUND		MONITOR				
a S LIGHTING CONTROL SWIT	CHES	#4/0 GROUND CABLE BURIED 2'-6" BELOW GRADE UNLESS OTHERWISE NOTED		T1 DEMARCATION				
2 UPPER-LEFT CHARACTER DESIGNATION. LOWER-F ab DENOTES SWITCH CONTR SS 3D 2 - TWO POLE 3 - THREE-WAY SWITCH C	R "a" DENOTES SWITCH RIGHT CHARACTER "4" ROL ONTROL	CLASS I COPPER LIGHTNING CONDUCTOR UNLESS OTHERWISE NOTED	UPS	UNINTERRUPTIBLE POWER SUPPLY				
a b c SSS D - DIMMER CONTROL 2 3 4 OS - OCCUPANCY SENSOR M - MOTOR RATED SWITCH	R							
M - MOTOR RATED SWITC T - 24V DC MOMENTARY C V - VARIABLE SPEED FAN	CONTACT SWITCH	7 ANSI/IEEE DEVICE NUMBERS						
LP1-2 INDICATE PANEL AND CIR 3#12 AWG IN 3/4" CONDUI BETWEEN PANEL AND FIR	RUN TO PANELBOARD LETTERS AND NUMERALS CUIT NUMBER. AS A MINIMUM, ALL WIRING SHALL BE T. #10 AWG WIRE SHALL BE USED FOR RUNS RST LIGHTING FIXTURE OR RECEPTACLE EXCEEDING WISE NOTED ON DRAWING.	27UNDER VOLTAGE59OVER VOLTAGE38BEARING PROTECTION74ALARM RELAY46PHASE UNBALANCE81FREQUENCY						
LP1-2 J 10 CROSS LINES INDICATE NUM INDICATES NEUTRAL. NUM AWG. CONTINUE CONDUIT OR AREA AS NOTED BY BF BE USED FOR RUNS BETW	NDICATE PANEL AND CIRCUIT NUMBER (LP1-2). UMBER OF CONDUCTORS. HALF HASH MARKS MBER (10) DENOTES WIRE SIZE WHEN NOT #12 TAND WIRE RUN FROM BOX TO DEVICE IN ROOM RANCH CIRCUIT NUMBER. #10 AWG WIRING SHALL /EEN PANEL AND FIRST LIGHTING FIXTURE OR 50 FEET, UNLESS OTHERWISE NOTED ON	(48)INCOMPLETE SEQUENCE(86)LOCK OUT(49)OVER TEMPERATURE(87)DIFFERENTIAL(51)TIMED OVERCURRENT						
INDICATES GROUND CONE C12								
REV.NO. DESC		RMAND HAUDASEAL						PROJ. START DATE: 2021.APR MCE PROJ. # 01024-0194
	90 V * PR	* 1365 Hamlet A Clearwater, Flo		Manate				DRAWN DS DESIGNED SS CHECKED AAH
		STATE OF     Phone: (727) 4       State of     CA Lic. No. 29588	442-7196, Fax: (727) 461-3827	FLORIDA			CTRICAL ELECTRICAL 2	STATUS:









SUED FOR BID

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ELEC TRICAL SITE PLAN SC ALE: 1"=10'

REV.NO.	DESCRIPTION	DATE	ARMAND HAUDASEAL
			CENS C
		i	No 66861
			STATE OF
			UNAL MINI
· · · · · · · · · · · · · · · · · · ·	REVISIONS	A	AUBREY A. HAUDRICOURT, P.E.
	IL VISIONS		





NOTES:

1. PROVIDE AND COORDINATE RELOCATION REQUIREMENTS INCLUDING SCHEDULING WITH FLORIDA POWER AND LIGHT (FP&L) IN ORDER TO RELOCATE TRANSFORMER AND PRIMARY SERVICE THAT IS TO REMAIN IN RIGHT OF WAY. PROVIDE TEMPORARY SERVICE FOR CONSTRUCTION AND TEMPORARY BYPASS PUMPING FOR SANITARY FLOWS.

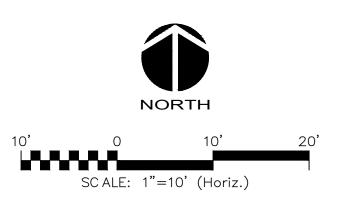
2. MAINTAIN 3' CLEARANCE AROUND TRANSFORMER AND 8' CLEARANCE IN FRONT OF TRANSFORMER DOOR.

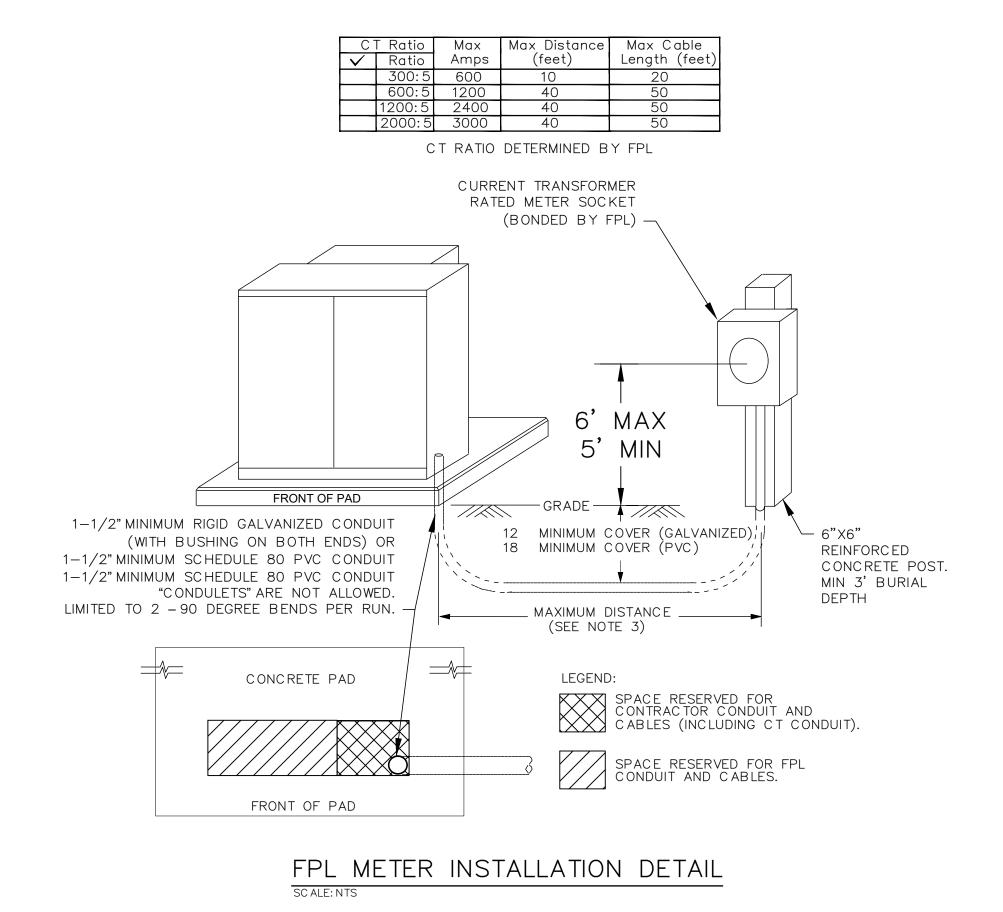
3. 1-1/2" MINIMUM RIGID GALVANIZED OR SCHEDULE 80 PVC CONDUIT WITH PULL STRING INSTALLED BETWEEN METER SOCKET AND PADMOUNTED TRANSFORMER PROVIDED AND INSTALLED BY CONTRACTOR. CONDULETS ARE NOT ALLOWED, AND LIMITED TO 2 90 DEGREE BENDS PER RUN. FOR MAXIMUM DISTANCE BETWEEN TRANSFORMER AND METER SOCKET, SEE TABLE BELOW.

4. TO BE RELOCATED TO AVOID NEW LOCATION OF ELECTRICAL BUILDING.

5. LANDSCAPING TO BE RESTORED TO MATCH EXISTING CONDITIONS.

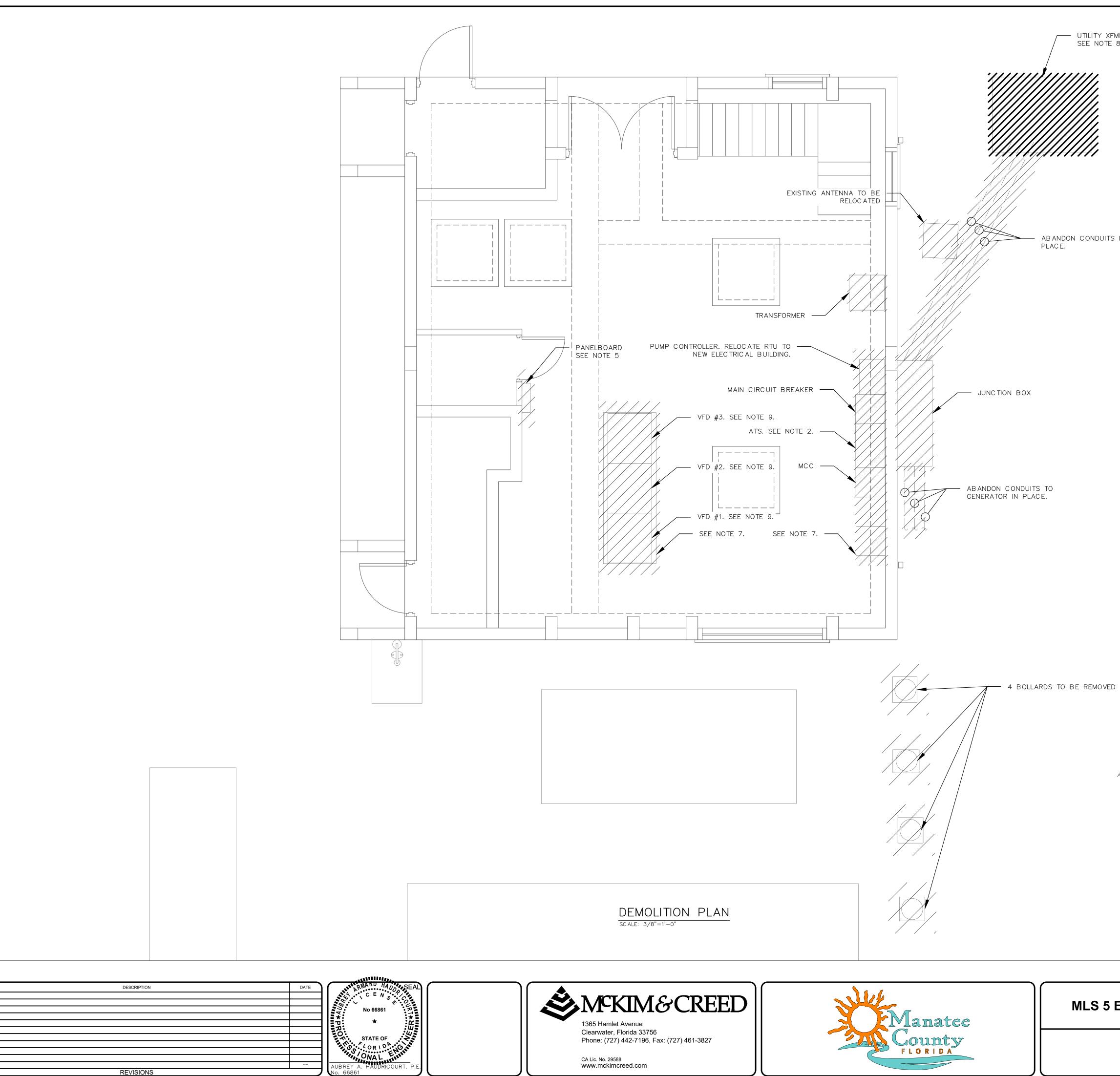
6. PUMP STATION ALARM LIGHT SHALL BE MOUNTED TO TOWER. SIGNAL CABLE IS CONDUIT TAG C112 AND COAXIAL CABLE IS CONDUIT C200.





MLS 5 ELECTRICAL REHABILITATION	PROJ. START DATE:2021.MARMCE PROJ. #01024-0190DRAWNJGDESIGNEDSSCHECKEDMAC
ELECTRICAL ELECTRICAL SITE PLAN	PROJ. MGR. AAH

\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\EB-100-01024-0190 SITE PLAN\_V2.DWG 09/15/2022 20:59:07 SUVATH SENG

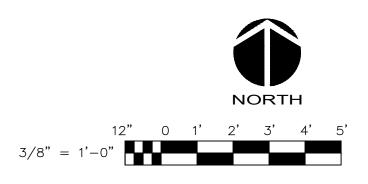


REV.NO.

UTILITY XFMR
SEE NOTE 8

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ABANDON CONDUITS IN

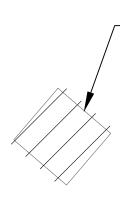


NOTES:

- 1. PROVIDE BYPASS PUMPING. REFER TO BYPASS PUMP SPECIFIC ATIONS.
- 2. EXISTING ATS W/ENCLOSURE SHALL BE REMOVED AND RETURNED TO THE COUNTY.
- 3. REMOVE ALL EXPOSED CONDUIT AND WIRE NOT USED PER EQUIPMENT DEMOLITION.
- 4. REMOVE ALL WIRING IN UNDERGROUND CONDUIT THAT IS TO BE ABANDONED. CAP ALL ABANDONED CONDUIT.
- 5. INTERCEPT EXISTING CONDUITS, AT EXISTING PANELBOARD LOCATION. INSTALL NEW PANELBOARD. REUSE EXISTING WIRE AND SPLICE AS NECESSARY INSIDE NEW PANEL.
- 6. REMOVE AND REPLACE ALL RECEPTACLE AND SWITCHES W/NEW CORROSION RESISTANT DEVICES.
- 7. REMOVE EQUIPMENT PADS UNDERNEATH EQUIPMENT BEING DEMOLISHED AND REFINISH FLOOR.
- 8. CONTRACTOR TO COORDINATE WITH FPL TO RELOCATE TRANSFORMER. SEE SHEET E1.00 FOR NEW LOCATION OF EXISTING TRANSFORMER.
- 9. MAS711 PUMP MONITORING UNITS TO BE RELOCATED TO NEW VFDs. COORDINATE INSTALLATION IN FIELD.



EQUIPMENT TO BE DEMOLISHED OR RELOCATED.



EXISTING RAIN GAUGE TO BE RELOCATED. SEE SHEET ##### FOR PROPOSED LOCATION.

MLS 5 ELECTRICAL REHABILITATION

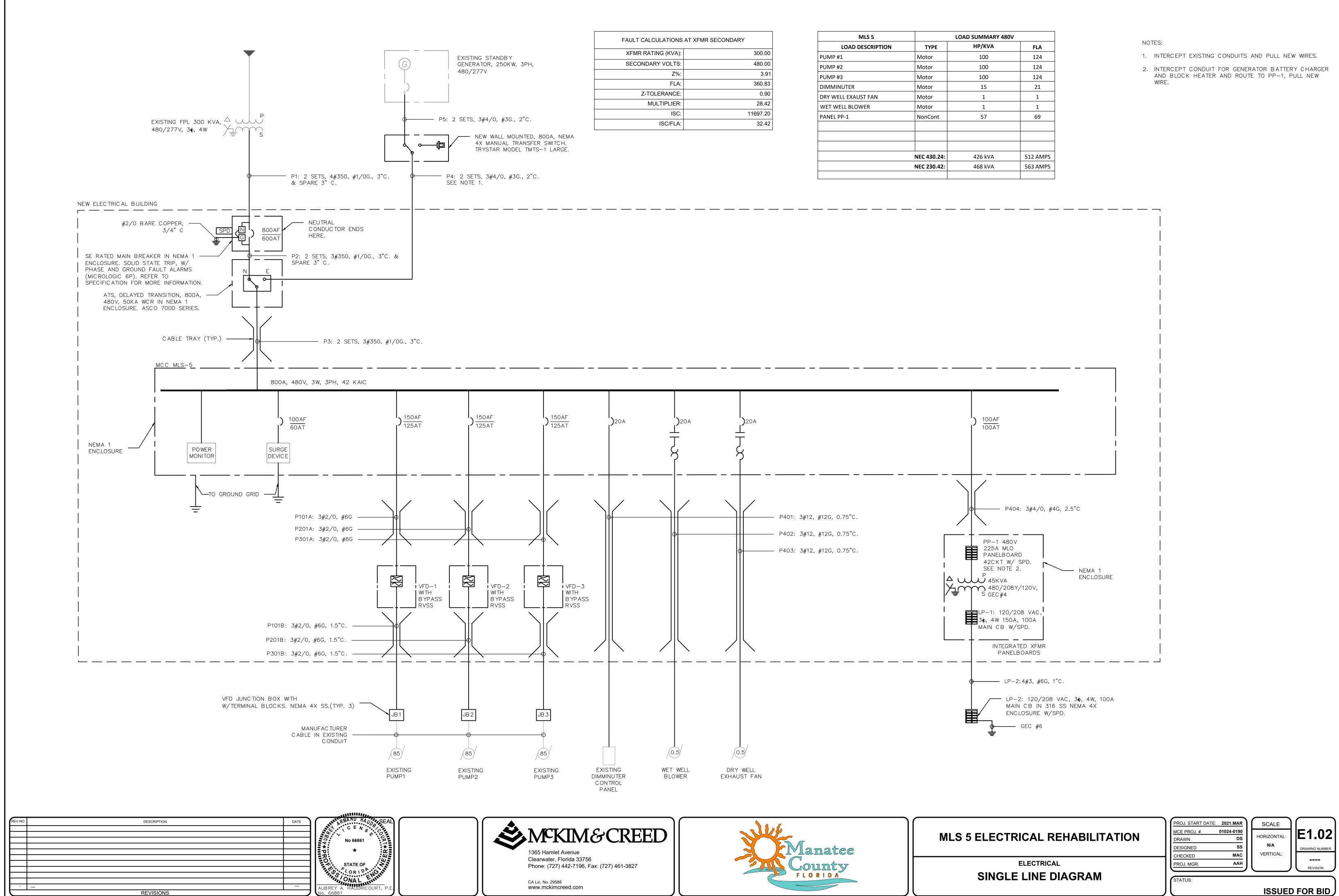
ELECTRICAL **DEMOLITION PLAN** 

PROJ. START DATE:	2021.MAR	SCALE
MCE PROJ. #	01024-0190	
DRAWN	DS	HORIZONTAL:
DESIGNED	SS	3/8"=1'
CHECKED	MAC	VERTICAL:
PROJ. MGR.	AAH	
STATUS:		

ALE	
ONTAL:	E1.01
"=1'	DRAWING NUMBER
FICAL:	
	REVISION

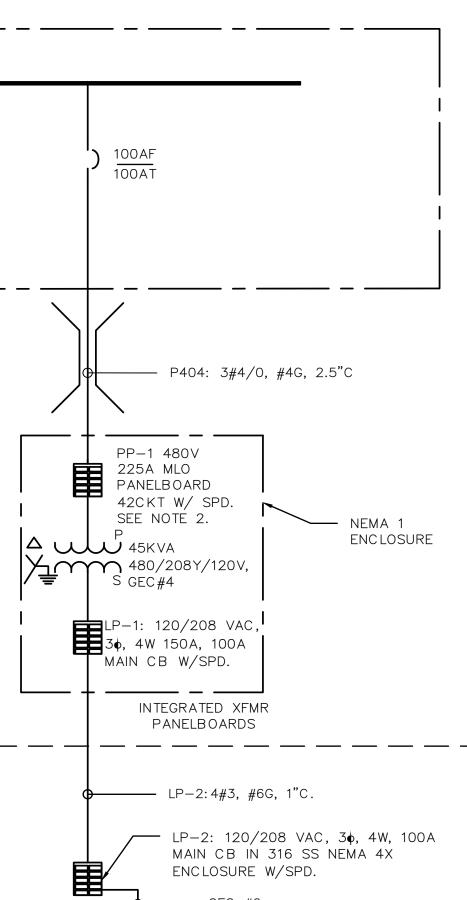
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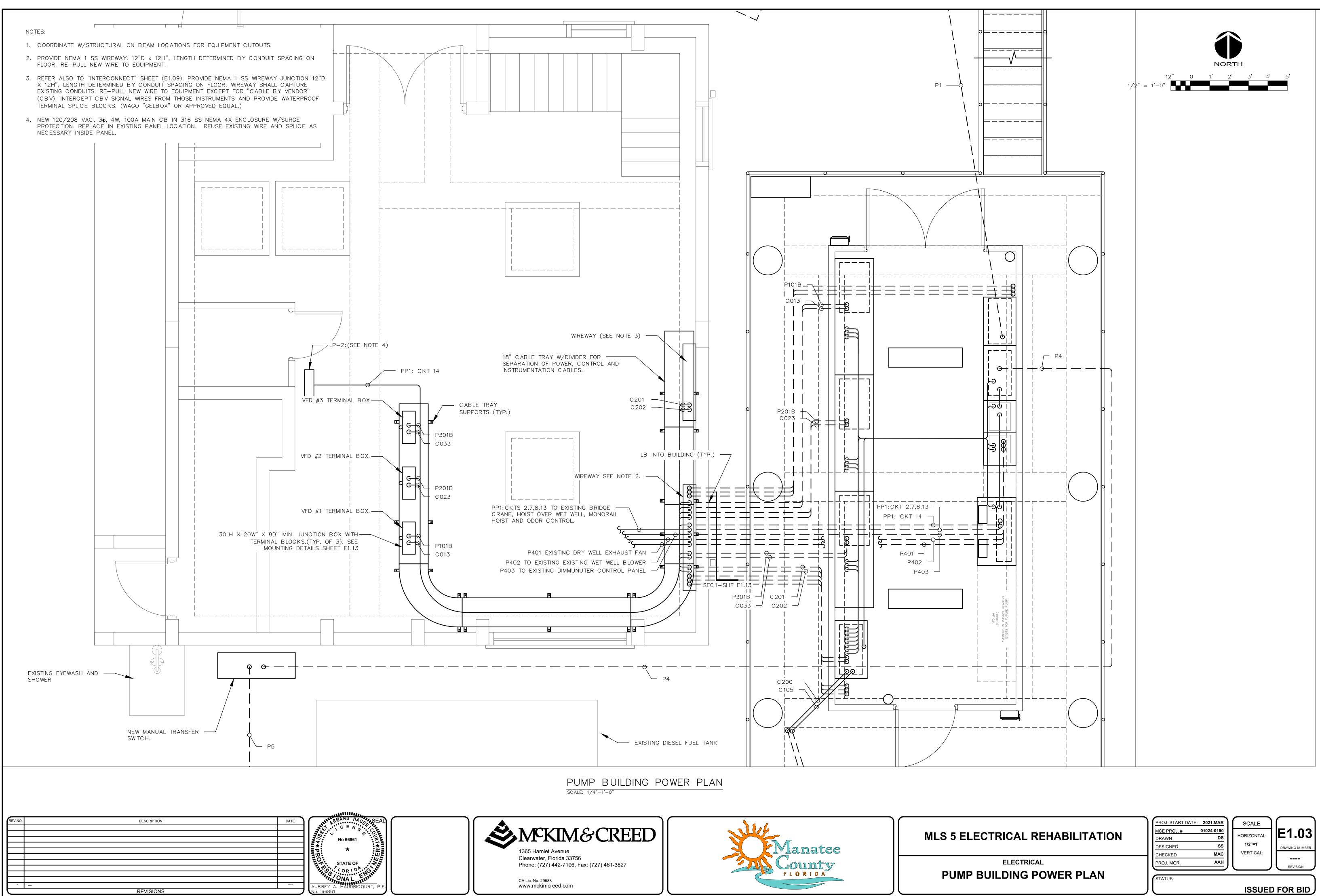
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	FAULT CALCULATIONS AT XFMR S		MLS 5	LOAD SUMMARY 480V		
			LOAD DESCRIPTION	ТҮРЕ	HP/KVA	FLA
EXISTING STANDBY	XFMR RATING (KVA):	300.00	PUMP #1	Motor	100	124
GENERATOR, 250KW, 3PH,	SECONDARY VOLTS:	480.00	PUMP #2	Motor	100	124
480/277V	Z%:	3.91	PUMP #3	Motor	100	124
	FLA:	360.83	DIMMINUTER	Motor	15	21
	Z-TOLERANCE:	0.90	DRY WELL EXAUST FAN	Motor	1	1
	MULTIPLIER:	28.42	WET WELL BLOWER	Motor	1	1
	ISC:	11697.20	PANEL PP-1	NonCont	57	69
5: 2 SETS, 3#4/0, #3G., 2"C.	ISC/FLA:	32.42				
NEW WALL MOUNTED, 800A, NEMA 4X MANUAL TRANSFER SWITCH. TRYSTAR MODEL TMTS-1 LARGE.				NEC 430.24:	426 kVA	512 AMPS
				NEC 230.42:	468 kVA	563 AMPS
P4: 2 SETS, 3#4/0, #3G., 2"C. SEE NOTE 1.						

\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\ELECTRICAL SINGLE LINE DIAGRAM\_MLS-5.DWG 09/15/2022 20:59:51 SUVATH SENG

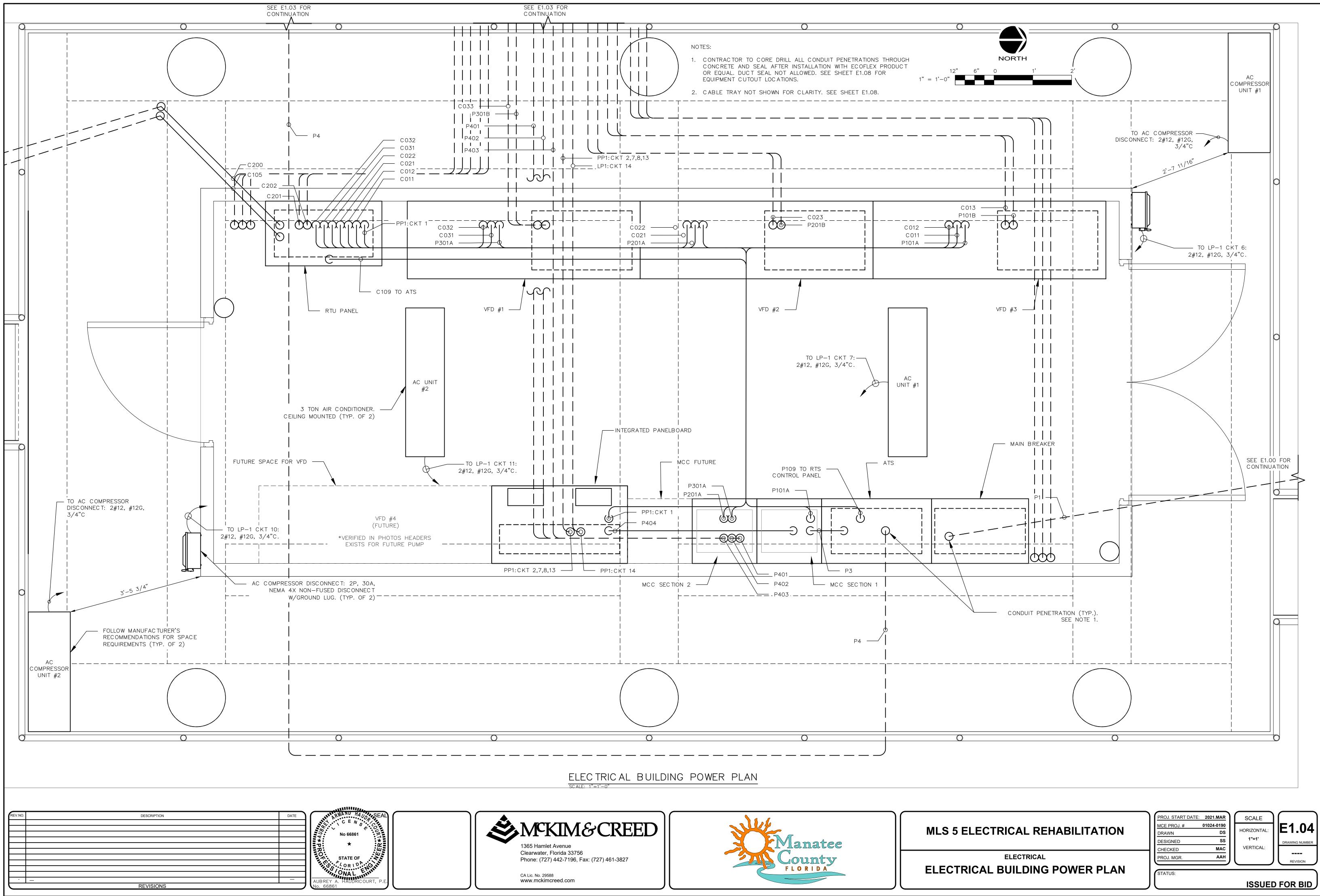




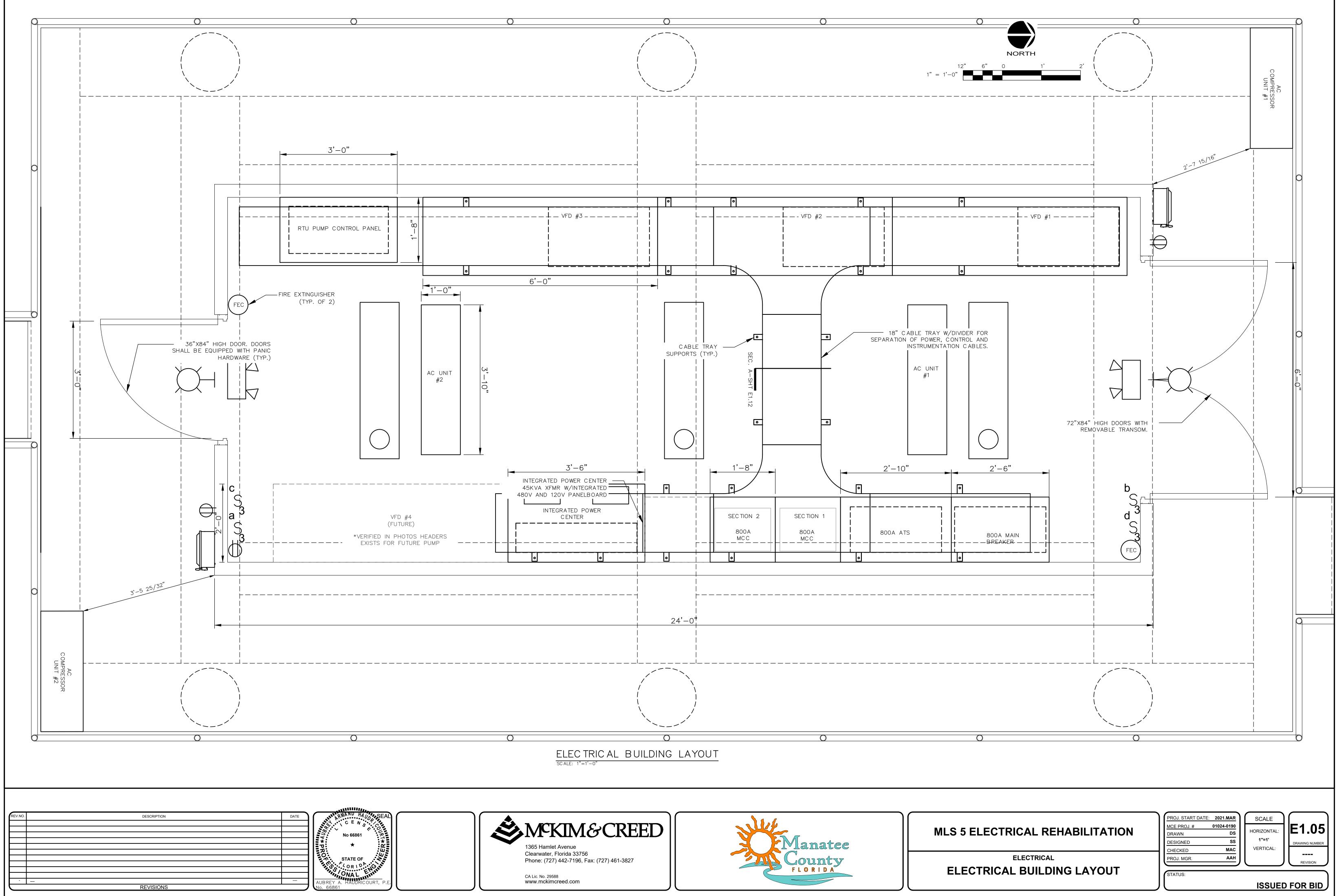
MLS	5 EL	ECTR	ICAL	REHA	<b>ABILI</b> .	TAT	ON

PROJ. START DATE:	2021.MAR	SCALE	
MCE PROJ. #	01024-0190		F
DRAWN	DS	HORIZONTAL:	┞┺
DESIGNED	SS	1/2"=1'	
CHECKED	MAC	VERTICAL:	
PROJ. MGR.	AAH		
		$\square$	
STATUS:			

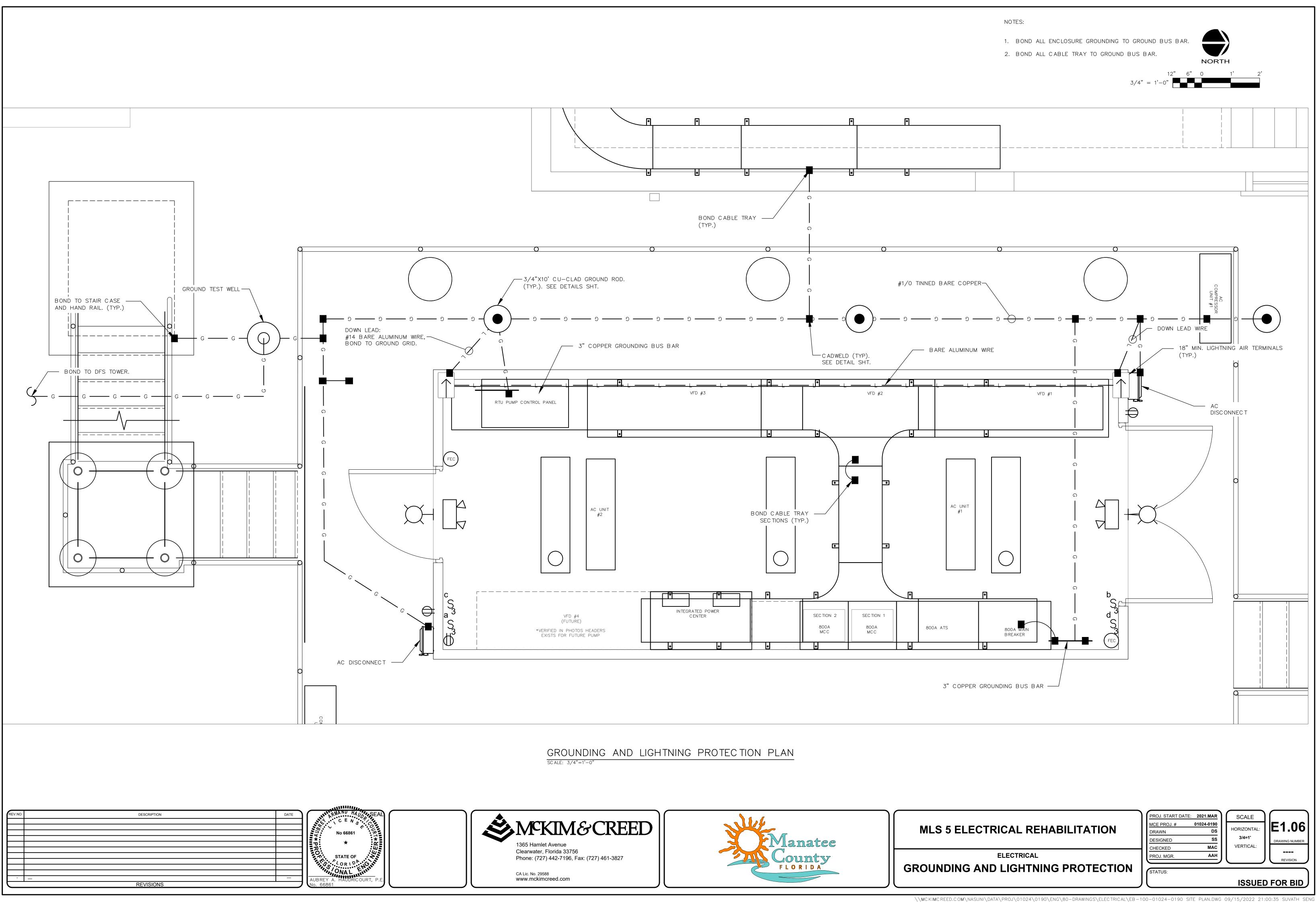
\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\EB-100-01024-0190 SITE PLAN.DWG 09/15/2022 21:00:19 SUVATH SENG

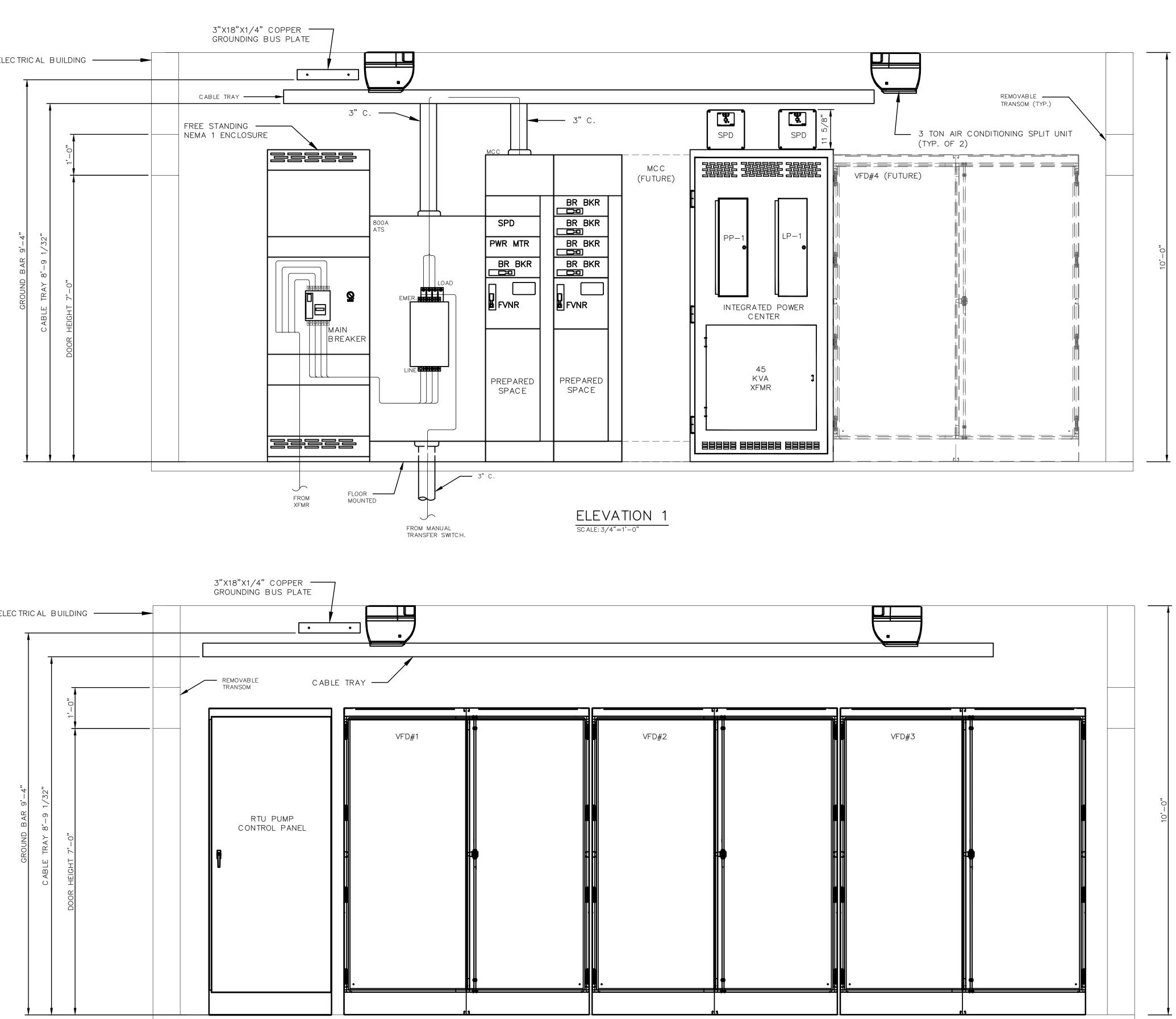


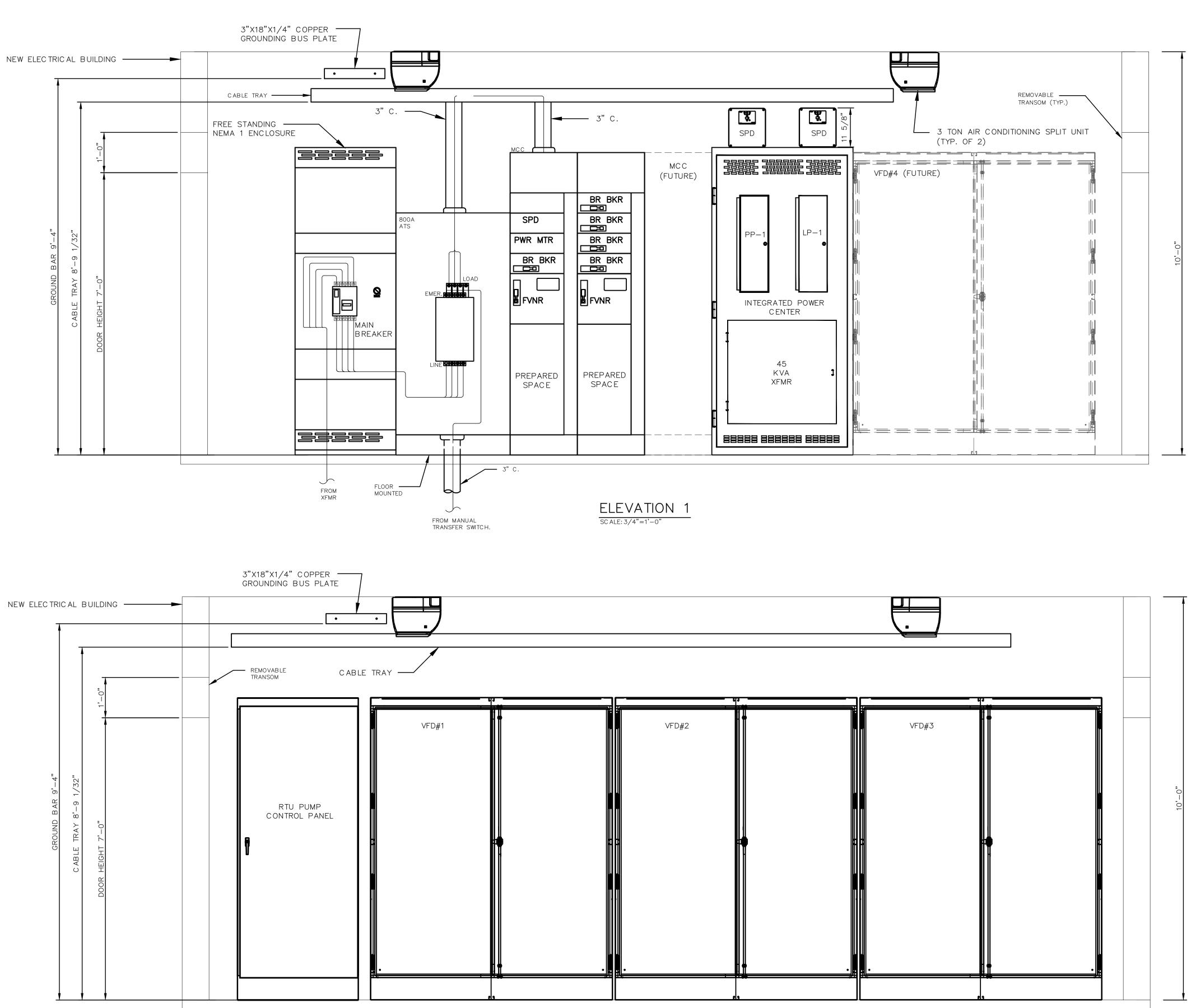
\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\EB-100-01024-0190 SITE PLAN.DWG 09/15/2022 21:00:25 SUVATH SENG



\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\EB-100-01024-0190 SITE PLAN.DWG 09/15/2022 21:00:30 SUVATH SENG







REV.NO.	DESCRIPTION	DATE	ARMANU HAUDASEAL
			C E N S C
			No 66861
			STATE OF
			JBREY A. HAUDRICOURT, P.E.
	REVISIONS		b. 66861

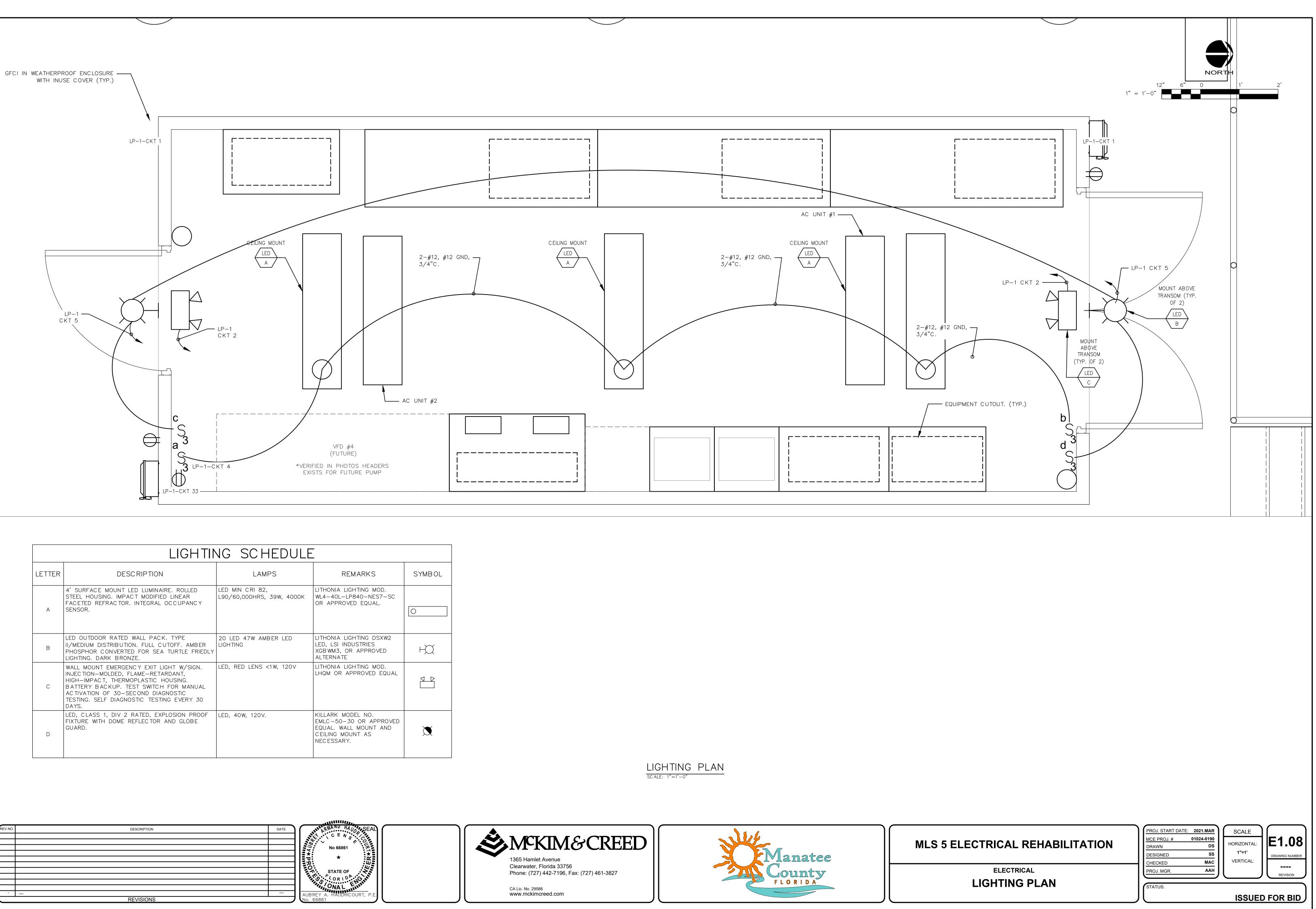
ELEVATION 2 SCALE: 3/4"=1'-0"





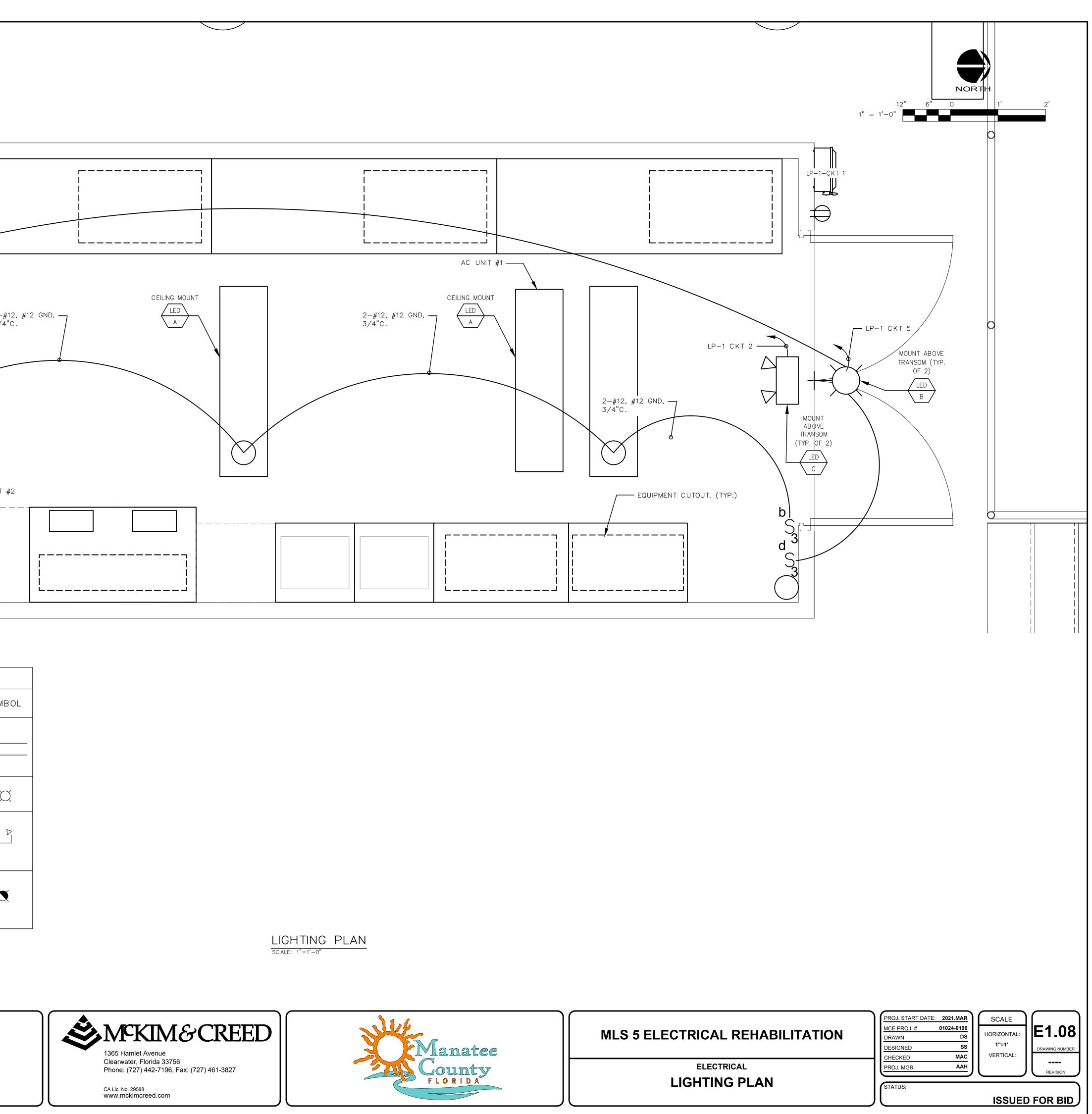
MLS 5 ELECTRICAL REHABILITATION	PROJ. START DATE:       2021.APR         MCE PROJ. #       01024-0194         DRAWN       DS         DESIGNED       SS         CHECKED       AAH    SCALE HORIZONTAL: TBD VERTICAL:
ELECTRICAL MCB, ATS AND MCC ELEVATION	CHECKED     JOHN       PROJ. MGR.     AAH       TBD     REVISION       STATUS:     ISSUED FOR BID

\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\MCB\_ATS\_MCC\_ELEVATION\_MLS5.DWG 09/15/2022 21:00:49 SUVATH SENG



	LIGHTIN	NG SCHEDULE	-	
LETTER	DESCRIPTION	LAMPS	REMARKS	SYN
A	4' SURFACE MOUNT LED LUMINAIRE. ROLLED STEEL HOUSING. IMPACT MODIFIED LINEAR FACETED REFRACTOR. INTEGRAL OCCUPANCY SENSOR.	LED MIN CRI 82, L90/60,000HRS, 39W, 4000K	LITHONIA LIGHTING MOD. WL4-40L-LP840-NES7-SC OR APPROVED EQUAL.	0
В	LED OUTDOOR RATED WALL PACK. TYPE II/MEDIUM DISTRIBUTION. FULL CUTOFF. AMBER PHOSPHOR CONVERTED FOR SEA TURTLE FRIEDLY LIGHTING. DARK BRONZE.	20 LED 47W AMBER LED LIGHTING	LITHONIA LIGHTING DSXW2 LED, LSI INDUSTRIES XGBWM3, OR APPROVED ALTERNATE	······································
С	WALL MOUNT EMERGENCY EXIT LIGHT W/SIGN. INJECTION-MOLDED, FLAME-RETARDANT, HIGH-IMPACT, THERMOPLASTIC HOUSING. BATTERY BACKUP. TEST SWITCH FOR MANUAL ACTIVATION OF 30-SECOND DIAGNOSTIC TESTING. SELF DIAGNOSTIC TESTING EVERY 30 DAYS.	LED, RED LENS <1W, 120V	LITHONIA LIGHTING MOD. LHQM OR APPROVED EQUAL	4
D	LED, CLASS 1, DIV 2 RATED, EXPLOSION PROOF FIXTURE WITH DOME REFLECTOR AND GLOBE GUARD.	LED, 40W, 120V.	KILLARK MODEL NO. EMLC – 50 – 30 OR APPROVED EQUAL. WALL MOUNT AND CEILING MOUNT AS NECESSARY.	ζ

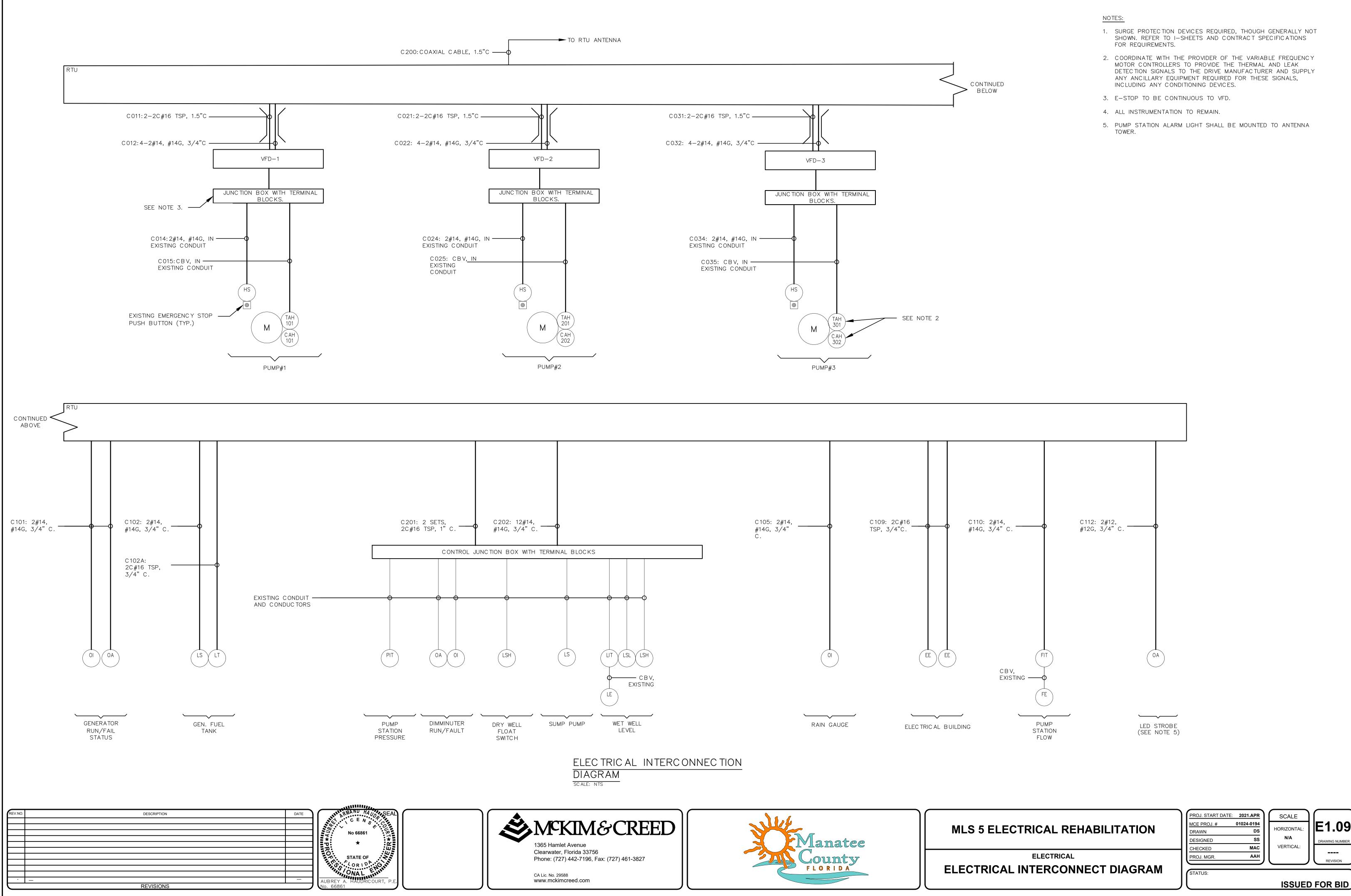
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	REVISIONS	AUBREY A. HAI	UDRICOURT, P.E.







\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\EB-100-01024-0190 SITE PLAN.DWG 09/15/2022 21:01:18 SUVATH SENG



\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\INTERCONNECT\_MLS5.DWG 09/15/2022 21:01:32 SUVATH SENG

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	load kva	AMPS	POLES	А	KVA PER PHASE B	с	POLES	AMPS	LOAD KVA	DESCRIPTION OF LOAD	TRIP AMPS	CKT NC
1	30	PHASE LOSS MONITOR PLC CONTROL PANEL	1	<mark>3.6</mark>	3	4.6			3	13.0	3.6	BRIDGE CRANE	30	2
			1				4.6				3.6			
			1					4.6			3.6			
7	20	HOIST OVER WET WELL	2.05	7.4	3	5.7			3	13.0	3.6	MONORAIL HOIST	30	8
			2.05				5.7				3.6			
			2.05					5.7			3.6			
13	20	SIEMEN CHEMICAL ODOR CONTROL	1.7	6.1	3	1.8			3	0.4	0.1	SURGE PROTECTION DEVICE	20	14
			1.7				1.8				0.1			
10	20	CDADE	1.7					1.8	-		0.1			
19	20	SPARE			3	0.0	0.0		3				30	20
							0.0	0.0						
25	30	SPARE			3	0.0		0.0	3				20	26
						0.0	0.0		-					
								0.0						
31	30	SPARE			3	0.0			2			SPARE	30	32
							0.0							
								0.0	2			SPARE	30	36
37		SPACE				0.0								
39							0.0		2			SPACE		40
41								0.0						
	PANEL	PP-1	то	)T <mark>AL KVA</mark>		12.1	12.1	12.1		VOLTS	480	SERVICE CHARACTERISTICS	225	A MLC
LOCATION MANATEE COUNTY BUILDING ELECTRICAL BUILDING		GRANI	D CONNECT	ED TC	otal KVA	36.	2		PHASE: WIRE:	-	- - -	0	_ A MCI	

PANEL SCHEDULE PP-1 SCALE: NTS

REV.NO.	DESCRIPTION DATE	ARMANU HAUOS SEAL
		No 66861
		* * * * * * * * * * * * * * * * * * *
		STATE OF
		- ONAL ENTIT
-	PEV/(PIONO	AUBREY A. HAUDRICOURT, P.E.
	REVISIONS	No. 66861

AMPS AMPS 1. 1.5 6.7 2. 15.4 3. 50.0	0.8 1.6 1.6 1.6 1.6 6	ELEC. BUILDING EMERG. EXIT LIGHT ELEC. BUILDING LIGHTING INSIDE ELEC. BUILDING AC OUTDOOR UNIT #1 ELEC. BUILDING AC OUTDOOR UNIT #2 PANEL LP-2	20 20 25 25	2 4 6 10
6.7           2         15.4           2         15.4	0.8 1.6 1.6 1.6 1.6 6	ELEC. BUILDING LIGHTING INSIDE ELEC. BUILDING AC OUTDOOR UNIT #1 ELEC. BUILDING AC OUTDOOR UNIT #2	20 25	4 6
2     15.4       2     15.4	1.6 1.6 1.6 1.6 6	ELEC. BUILDING AC OUTDOOR UNIT #1 ELEC. BUILDING AC OUTDOOR UNIT #2	25	6
2 15.4	1.6 1.6 1.6 6	ELEC. BUILDING AC OUTDOOR UNIT #2		
	1.6 1.6 6		25	10
	1.6 6		25	10
3 50.0	6	DANEL I D-2		
3 50.0		DANEL 10-2		
			100	14
	6			
	6			
12.5	1.5	RTU CONTROL PANEL	20	20
L				22
L				24
L				26
L				28
L				30
•		SERVICE CHARACTERISTICS		
VOLTS	TS: 208Y/120			A MLO
PHASE: 3 WIRE: 4		-	225	A MCB
	PHA	PHASE: 3		PHASE: 3 225

PANEL SCHEDULE LP-1 SC ALE: NTS

	TRIP AMPS				POLES		KVA PER PHAS	E	POLES		ES ANADO				
CKT NO.	AN AN	DESCRIPTION OF LOAD	LOAD KVA	AMP5	lod	А	В	С	IOd	AMPS	LOAD KVA	DESCRIPTION OF LOAD	AM	CKT NO.	
1	60	N.W. OUTLET (OFF)			2	0.6			1	5.0	0.6	SIEMENS CHEM./EMER. LIGHTING	30	2	
							0.0		1			UNKOWN	20	4	
5	20	NORTH WALL OUTLET	0.18	1.5	1			0.8	1	5.0	0.6	BATHROOM LIGHT	20	6	
7	20	DRY WELL LIGHTS	1	8.3	1	2.0			1	8.3	1	OUTSIDE FLOOD LIGHTS	20	8	
9	20	UNKOWN			1		1.0		1	8.3	1	FLOW METER	20	10	
11	20	SUMP PUMP DRYWELL OUTLET	0.18	1.5	1			0.4	1	1.5	0.18	GOLF CART OUTLET	20	12	
13	20	WETWELL LIGHTS	1	8.3	1	1.0			1			UNKOWN	20	14	
15	20	ENTRANCE LIGHTING	1	8.3	1		3.5		1	20.8	2.5	UPS OUTLET	30	16	
17	20	S.W. WALL OUTLET	0.18	1.5	1			0.4	1	1.5	0.18	WEST WALL OUTLET	20	18	
19	20	CONTROL ROOM LIGHTING	0.6	5.0	1	0.7		_	1	0.8	0.1	AIR PUMP	20	20	
21	20	CONTROL ROOM LIGHTING	0.6	5.0	1		0.6		1			UNKOWN	20	22	
23	20	UNKOWN			1			1.3	1	10.8	1.3	CONTROL ROOM EX. FAN	20	24	
25	30	OUTSIDE GENERATOR - PANEL FEED	1	8.3	3	1.0		_	1			UNKOWN	20	26	
			1				1.0		1			UNKOWN	20	28	
			1					2.0	1	8.3	1	VEEDER ROOT FUEL READER	20	30	
			т	OTAL KVA		5.3	6.1	4.8				SERVICE CHARACTERISTICS			
	PANEL	LP-2				5.5	0.1	4.0		VOLTS:	208Y/120			A MLO	
L	OCATION	MANATEE COUNTY	GRAN	D CONNEC			1.	5.2		PHASE:	3		225	A MCB	
(	BUILDING	ELECTRICAL BUILDING	GRAN	DCONNEC				J.Z		WIRE:	4				

NOTES: INTEGRATED PANELBOARD

PANEL SCHEDULE LP-2

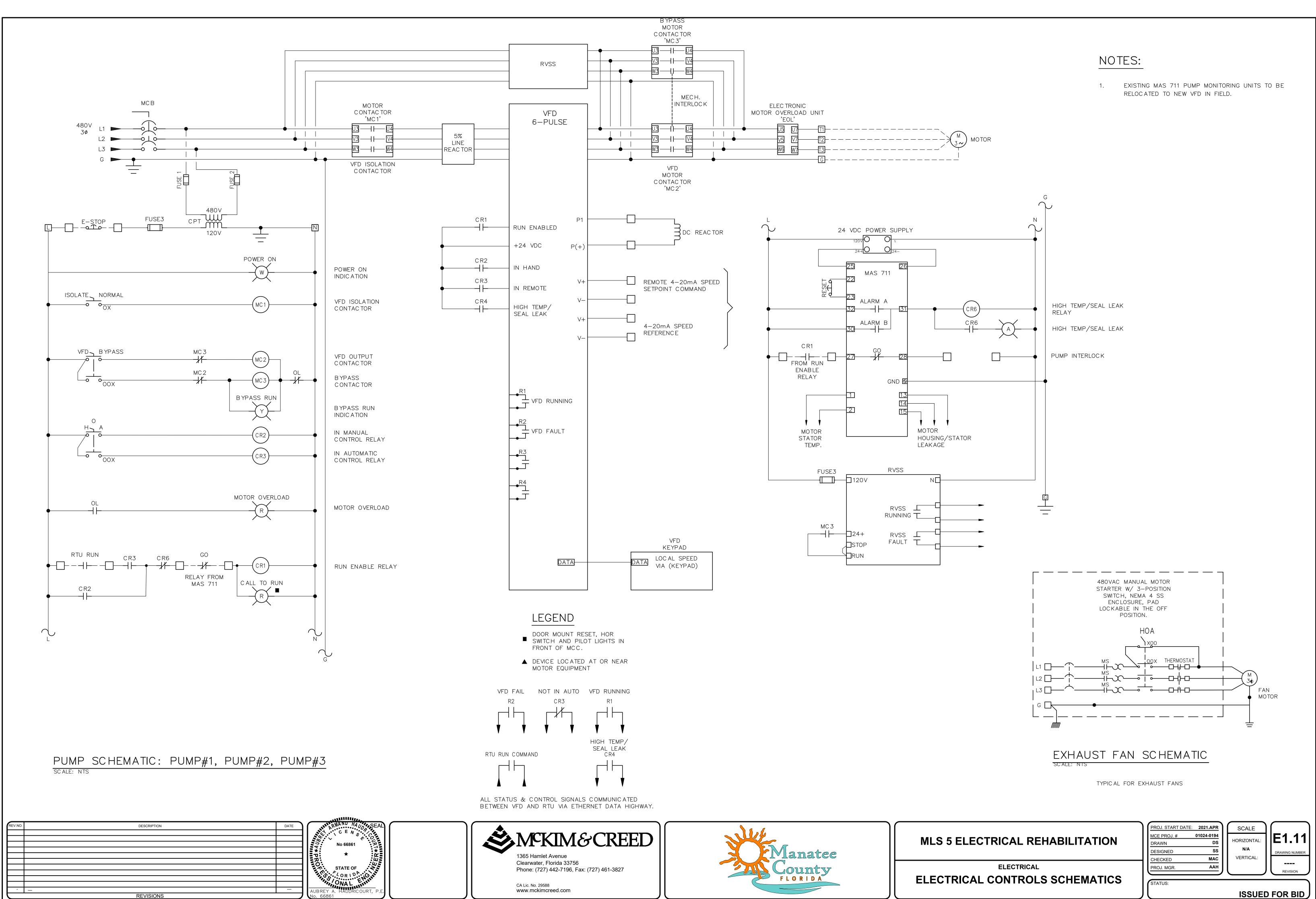


lanatee FLORIDA

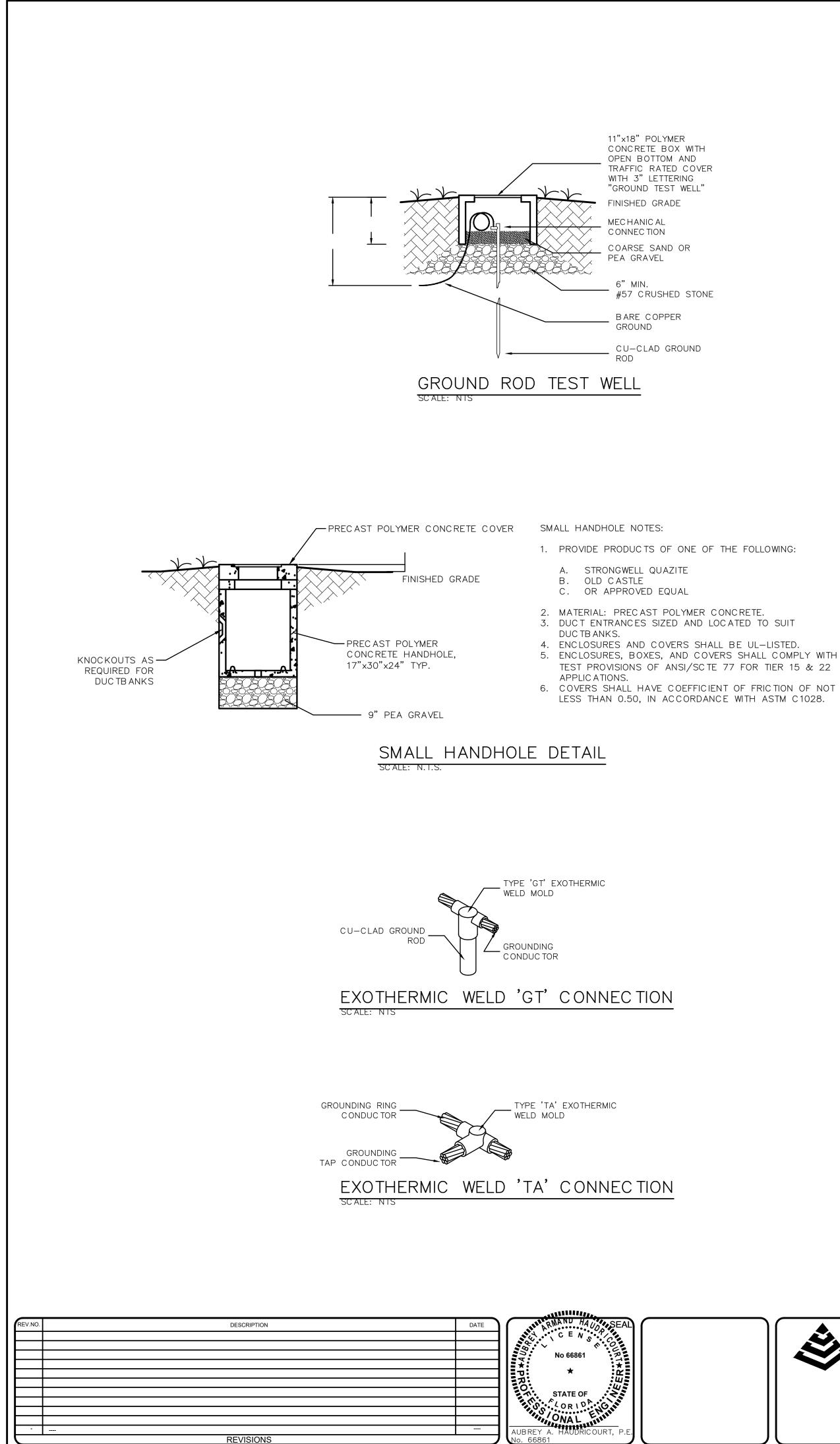
CA Lic. No. 29588 www.mckimcreed.com

PROJ. START DATE: 2021.APR SCALE MCE PROJ. # DRAWN 01024-0194 E1.10 MLS 5 ELECTRICAL REHABILITATION HORIZONTAL: DS SS MAC AAH N/A DESIGNED DRAWING NUMBER VERTICAL: CHECKED PROJ. MGR. ----ELECTRICAL REVISION PANELBOARD SCHEDULES STATUS: ISSUED FOR BID

\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\PANEL\_SCHEDULE\_MLS5.DWG\_09/15/2022\_21:01:39\_SUVATH\_SENG



\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\ELECTRICAL CONTROLS SCHEMATICS.DWG 09/15/2022 21:01:52 SUVATH SENG



# 2" MIN. 2" MIN

24" MIN.

SCALE: NTS

- COMPACTED FILL SCHEDULE 80 PVC CONDUIT, - SIZE AND QUANTITY AS REQUIRED SELECT COMPACTED BACKFILL - CONTAINING NO MATERIALS OR STONE LARGER THAN 3/4" DIRECT BURIED DUCTBANK SCALE: NT

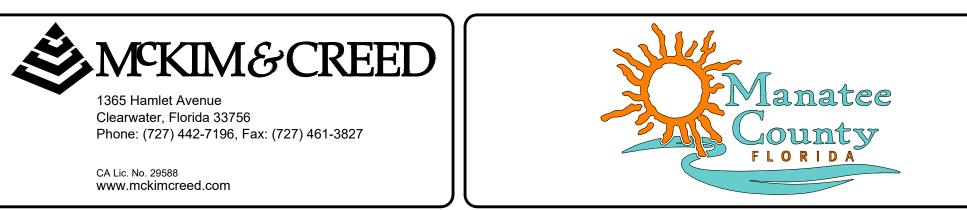
-FINISHED GRADE

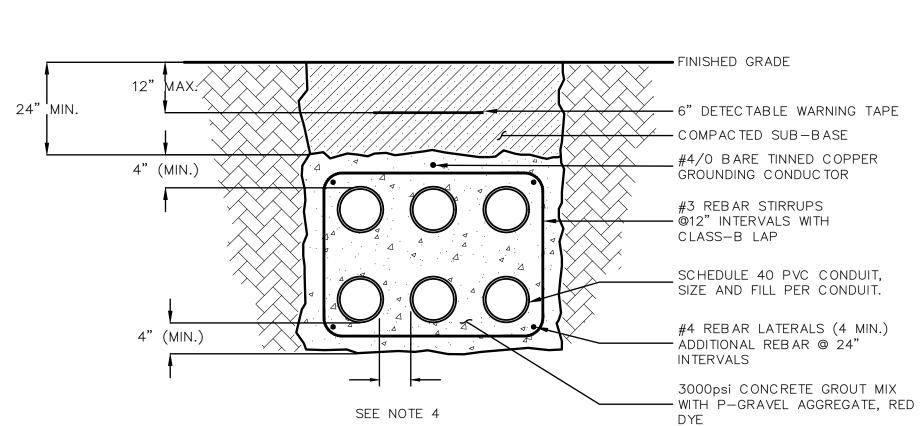
- 2" MIN. WARNING TAPE

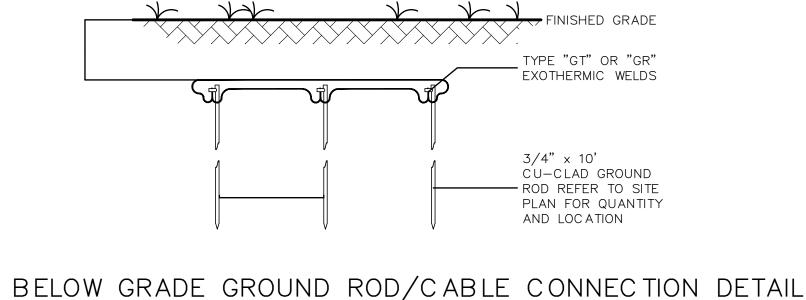
FILL 12" MAX

DO NOT TAMP DIRECTLY OVER CONDUITS WITH LESS THAN 12"

# REINFORCED CONCRETE DUCTBANK SCALE: NTS

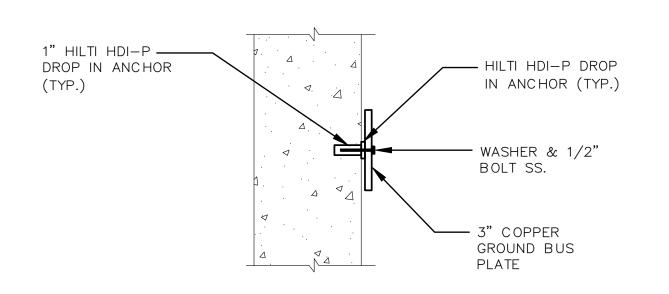




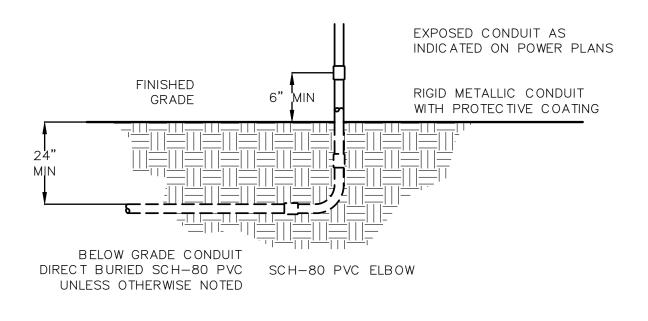


# NOTES:

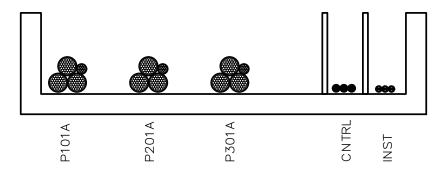
- 1. MINIMUM WIRE SIZE FOR ALL POWER CIRCUITS IS #12AWG CU UNLESS OTHERWISE NOTED.
- 2. MINIMUM CONDUIT SIZE IS 3/4" TRADE SIZE. 3. SWAB CLEAN EXISTING CONDUITS PRIOR TO PULLING NEW CIRCUITS.
- 4. FOR LOW VOLTAGE DUCTBANKS MINIMUM SEPARATION BETWEEN CONDUITS SHALL BE 2".



## COPPER GROUND BUS PLATE MOUNTING DETAIL SCALE: NTS

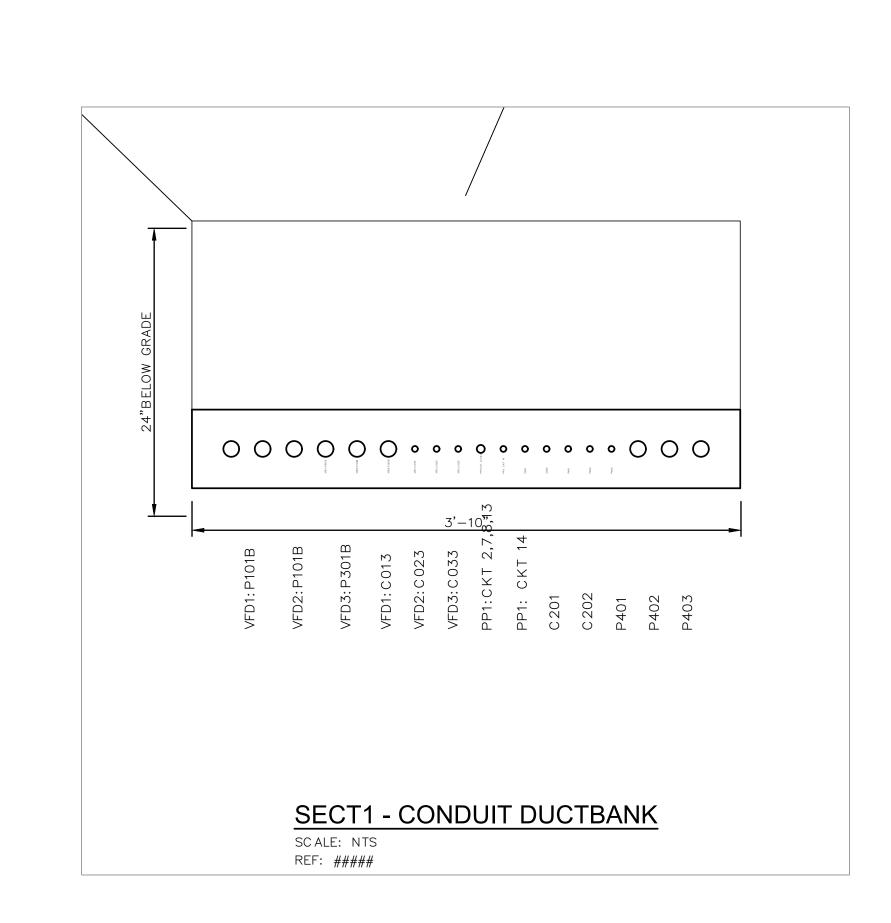


## CONDUIT TRANSITION DETAIL SCALE: NIS

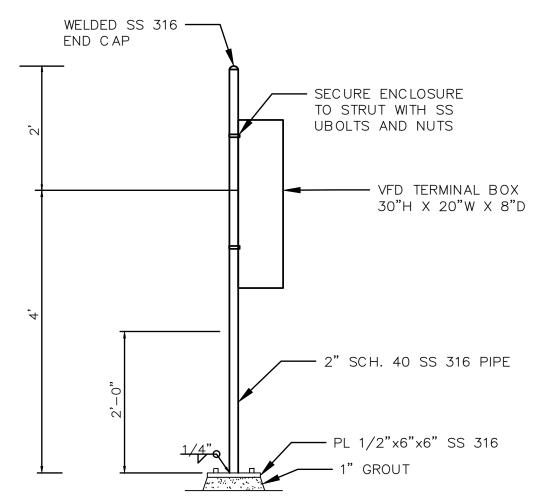


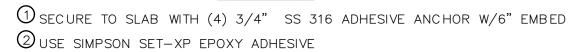
PROJ. START DATE: 2021.APR SCALE MCE PROJ. # 01024-0194 E1.12 MLS 5 ELECTRICAL REHABILITATION ORIZONTAL DS DRAWN SS N/A DESIGNED RAWING NUMB MAC VERTICAL: HECKED ----AAH ELECTRICAL PROJ. MGR. REVISION **ELECTRICAL DETAILS 1 OF 2** STATUS: ISSUED FOR BID

\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\ELECTRICAL\ELECTRICAL DETAILS 2 OF 2.DWG 09/15/2022 21:02:07 SUVATH SENG



REV.NO.	DESCRIPTION	DATE	ARMAND HAUDOSSEAL
			80 No 66861
			STATE OF
			LORIDA G
			ONAL ELININ
· · · ·	REVISIONS		AUBREY A. HAUDRICOURT, P.E. No. 66861



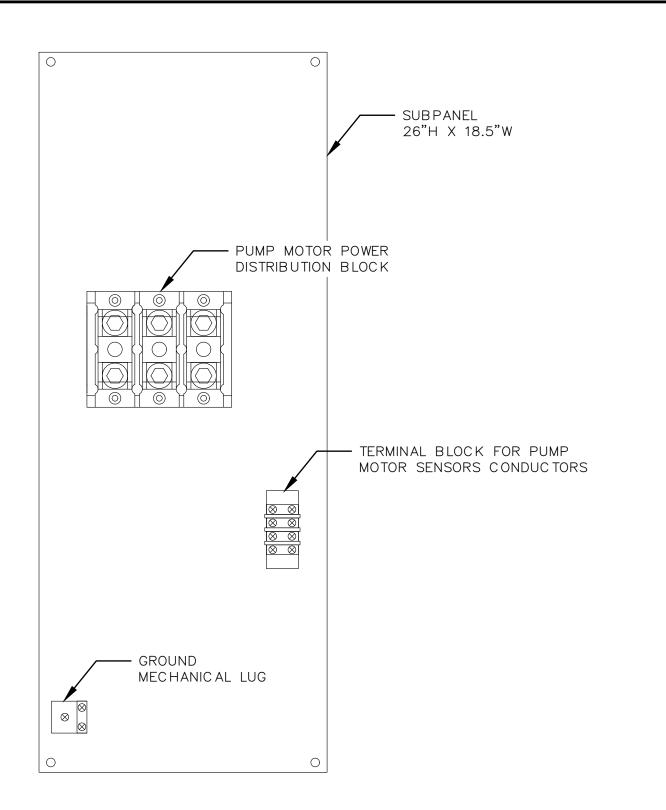


# VFD TERMINAL BOX MOUNTING DETAIL SCALE: NTS



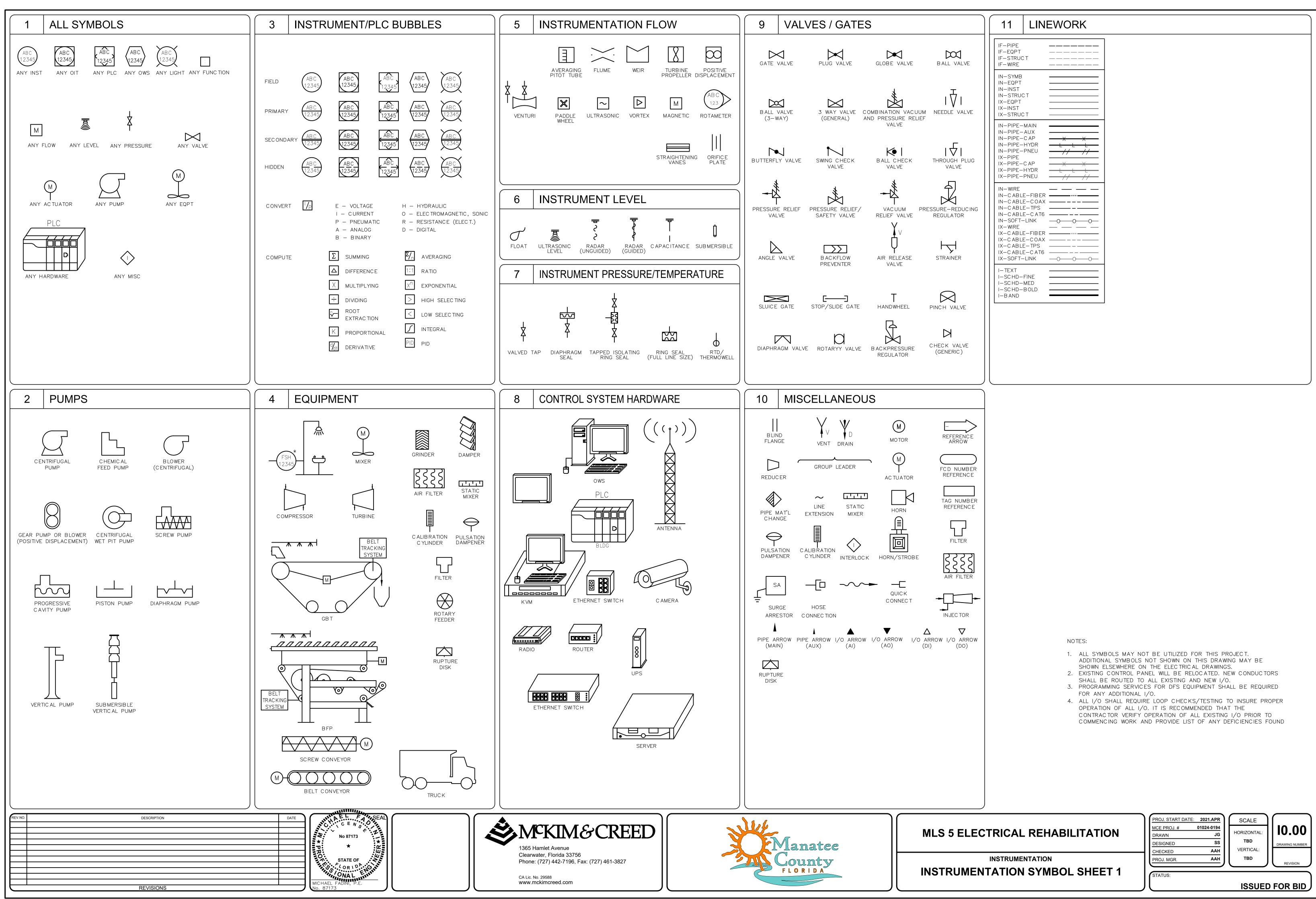
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VFD TERMINAL BOX SUBPANEL LAYOUT SCALE: NTS

MLS 5 ELECTRICAL REHABILITATION	PROJ. START DATE:       2021.APR         MCE PROJ. #       01024-0194         DRAWN       JG         DESIGNED       SS         CHECKED       MAC    SCALE HORIZONTAL: N/A VERTICAL:
ELECTRICAL ELECTRICAL DETAILS 2 OF 2	CHECKED     INAG       PROJ. MGR.     AAH       STATUS:     ISSUED FOR BID



# PID FUNCTION SYMBOLS

	FIRST LETT	ER	SUCCEEDING-LETTERS					
	MEASURED OR		READOUT OR	OUTPUT				
	INITIATING VARIABLE	MODIFIER	PASSIVE FUNCTION	FUNCTION	MODIFIER			
A	Analysis		Alarm					
В	Burner, Combustion		Programmer					
С	Conductivity			Control	Closed			
	(Electrical)							
D	Density or	Differential						
	Specific Gravity							
E	Voltage		Sensor (Primary	Eduction				
			Element)					
F	Flow Rate	Ratio (Fraction)						
G	Gaging		Glass,					
			Viewing Device					
Н	Hand				High			
	Current (Electrical)		Indicate					
J	Power	Scan						
K	Time, Time Schedule			Control Station				
	Time, Time Schedule			Control Station				
L	Level		Light (Pilot)		Low			
М	Motor				Middle,			
					Intermed			
Ν	Vibration							
0	Operation	Offset	Orifice, Restriction		Open			
Ρ	Pressure, Vacuum		Point (Test)					
			Connection					
Q	Quantity, Event	Integrate, Totalize	Integrate					
R	Radiation		Record, Print	Regulate				
S	Speed, Frequency	Safety		Switch				
Т	Temperature			Transmit				
U	Multivariable	Trend	Multifunction	Multifunction	Multifunc			
V	Viscosity	Vacuum		Valve, Damper,				
				Louver, Gate				
W	Weight, Force,		Well					
vv	Torque		Wen					
X	Unclassified		Unclassified	Unclassified	Unclassif			
	Unclassified		Unclassified		Unclassii			
Y				Relay, Compute,				
				Convert				
Ζ	Position			Final	Drive, Ac			
				Control	Unclassif			
				Element	Final Co			
					Element			

REV.NO.	DESCRIPTION	DATE
		No 87173
		STATE OF
		MICHAEL FADINI, P.E.
	REVISIONS	No. 87173



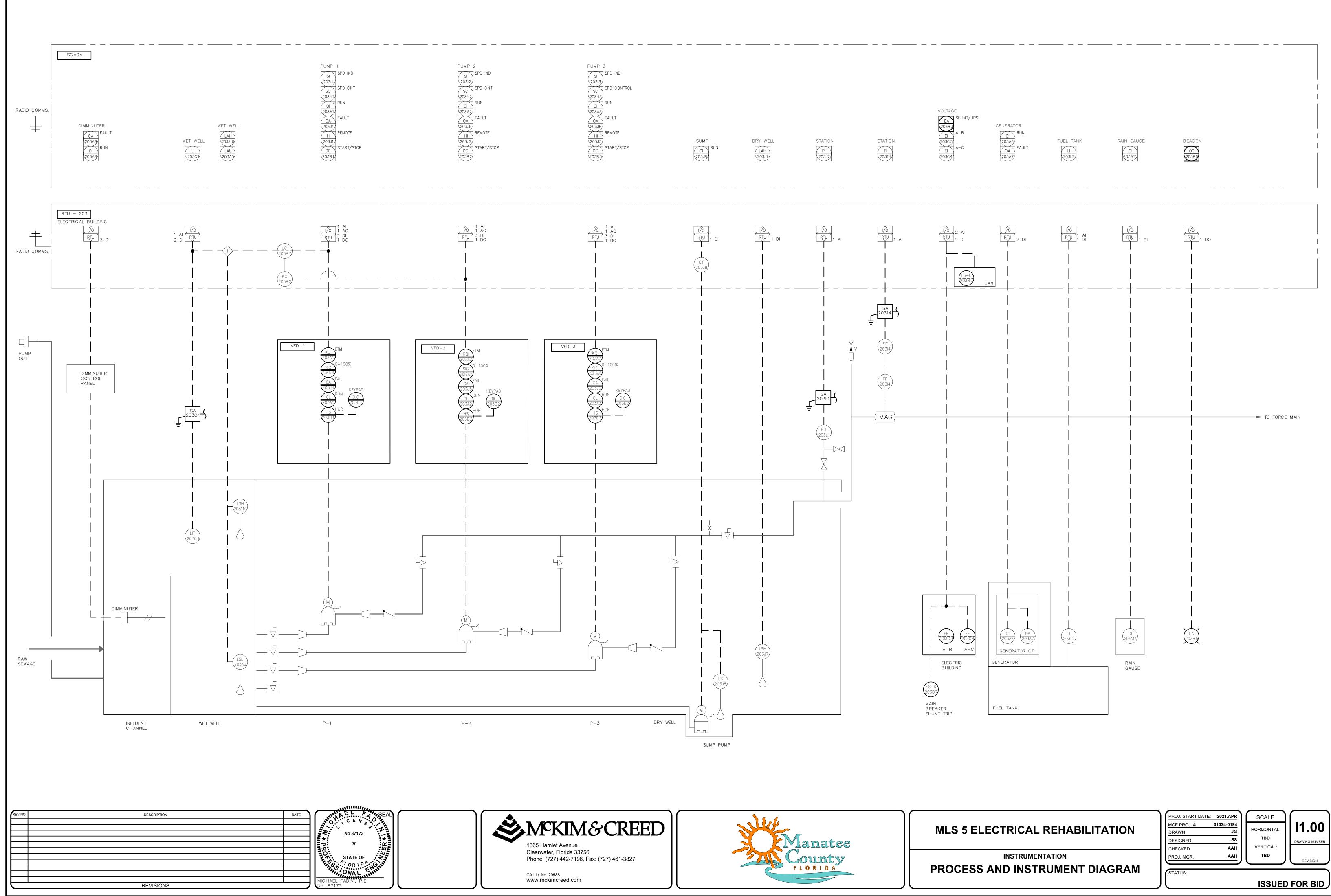


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	PROJ. START DATE: 2021.APR SCALE
MLS 5 ELECTRICAL REHABILITATION	MCE PROJ. #         01024-0194           DRAWN         JG
	DESIGNED         SS         TBD         DRAWING NUMBER           CHECKED         AAH         VERTICAL:         DRAWING NUMBER
INSTRUMENTATION	PROJ. MGR. AAH
<b>INSTRUMENTATION SYMBOL SHEET 2</b>	STATUS:
	ISSUED FOR BID

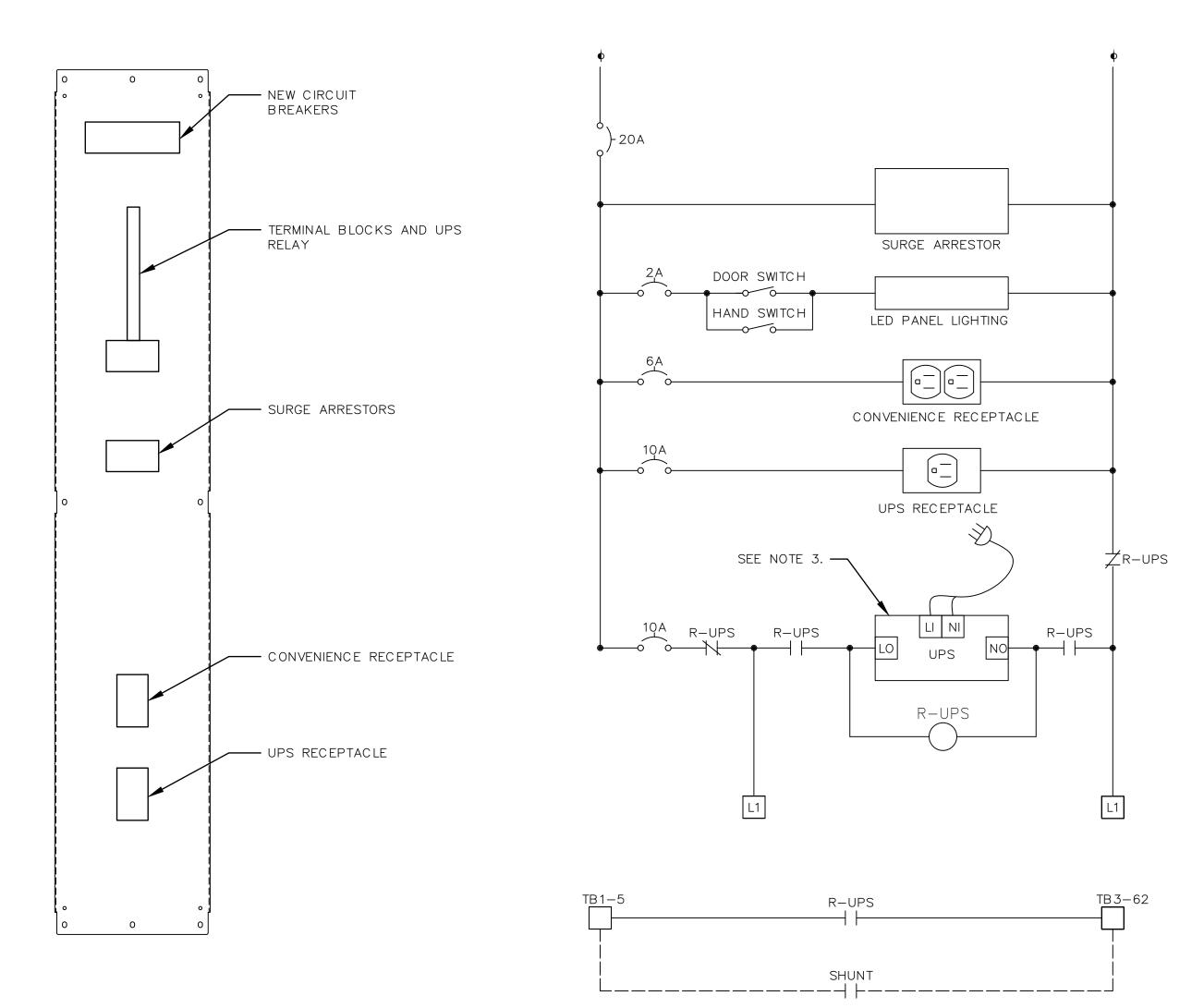
\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\INSTRUMENTATION\LEAD SHEET.DWG 09/15/2022 21:02:24 SUVATH SENG



\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\INSTRUMENTATION\I00.1 PID.DWG 09/15/2022 21:02:37 SUVATH SENG

SIDE	Ρ
SC ALE-NITS	C

REV.NO.	DESCRIPTION	DATE	HILA EL FAMSEAL
			C E N S
			No 87173
			* * * * * * * * * * * * * * * * * * *
			STATE OF
			CORID GIN
			ONAL UNIT
<b>├</b> ────	REVISIONS		MICHAEL FADINI, P.E. No. 87173



# SIDE PANEL ELEVATION A SCALE: NTS, SEE NOTE 1.

# CONTROL PANEL SCHEMATIC DIAGRAM





### NOTES:

- 1. SIDE PANEL LAYOUT AND SCHEMATIC IS DIAGRAMATTIC TO CONVEY MINIMUM REQUIREMENTS FOR FABRICATION AND INSTALLATION.
- 2. NEW SHUNT AND UPS COMMON ALARM SHALL BE WIRED TO SPARE INPUT B7. B7 IS NORMALLY CONFIGURED FOR ALARM IS SILENCED INDICATION AND SHALL BE CHANGED IN DFS SOFTWARE.
- 3. UPS SHALL BE MANUFACTURED BY NEWMAR PART NO. AC-UPS-48-2000

MLS 5 ELECTRICAL REHABILITATION	PROJ. START DATE:2021.APRMCE PROJ. #01024-0194DRAWNJGDESIGNEDSSCHECKEDAAH
INSTRUMENTATION	PROJ. MGR. AAH TBD REVISION
CONTROL PANEL	STATUS:
	ノ ISSUED FOR BID J

\\MCKIMCREED.COM\NASUNI\DATA\PROJ\01024\0190\ENG\80-DRAWINGS\INSTRUMENTATION\100.2 PANEL.DWG 09/15/2022 21:02:46 SUVATH SENG