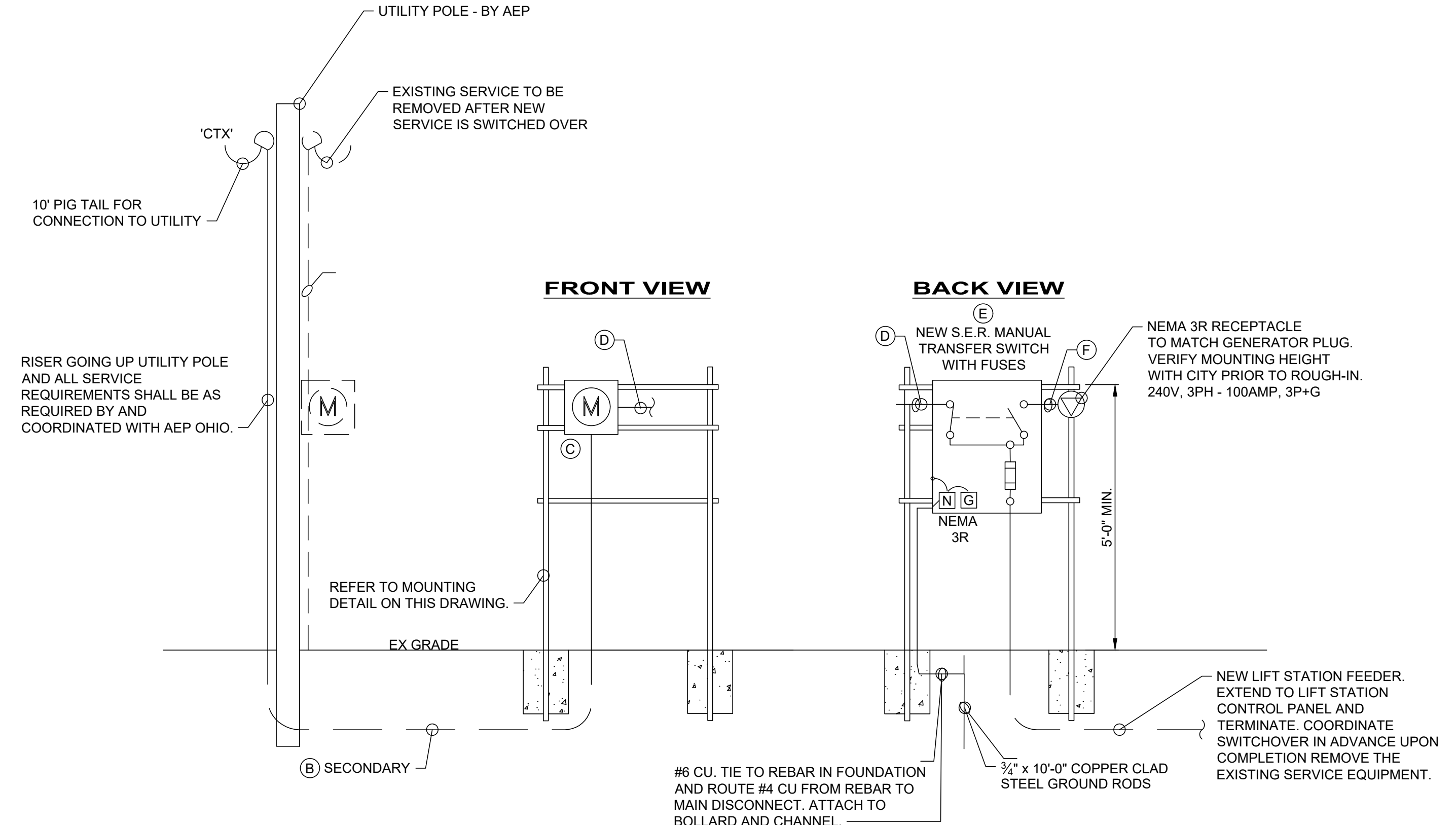


CRACKEL AND ESSMAN LIFT STATIONS
240V, 3PH ONE LINE DIAGRAM
 NOT TO SCALE



ST. RT. 125 LIFT STATION
480V, 3PH ONE LINE DIAGRAM
 NOT TO SCALE

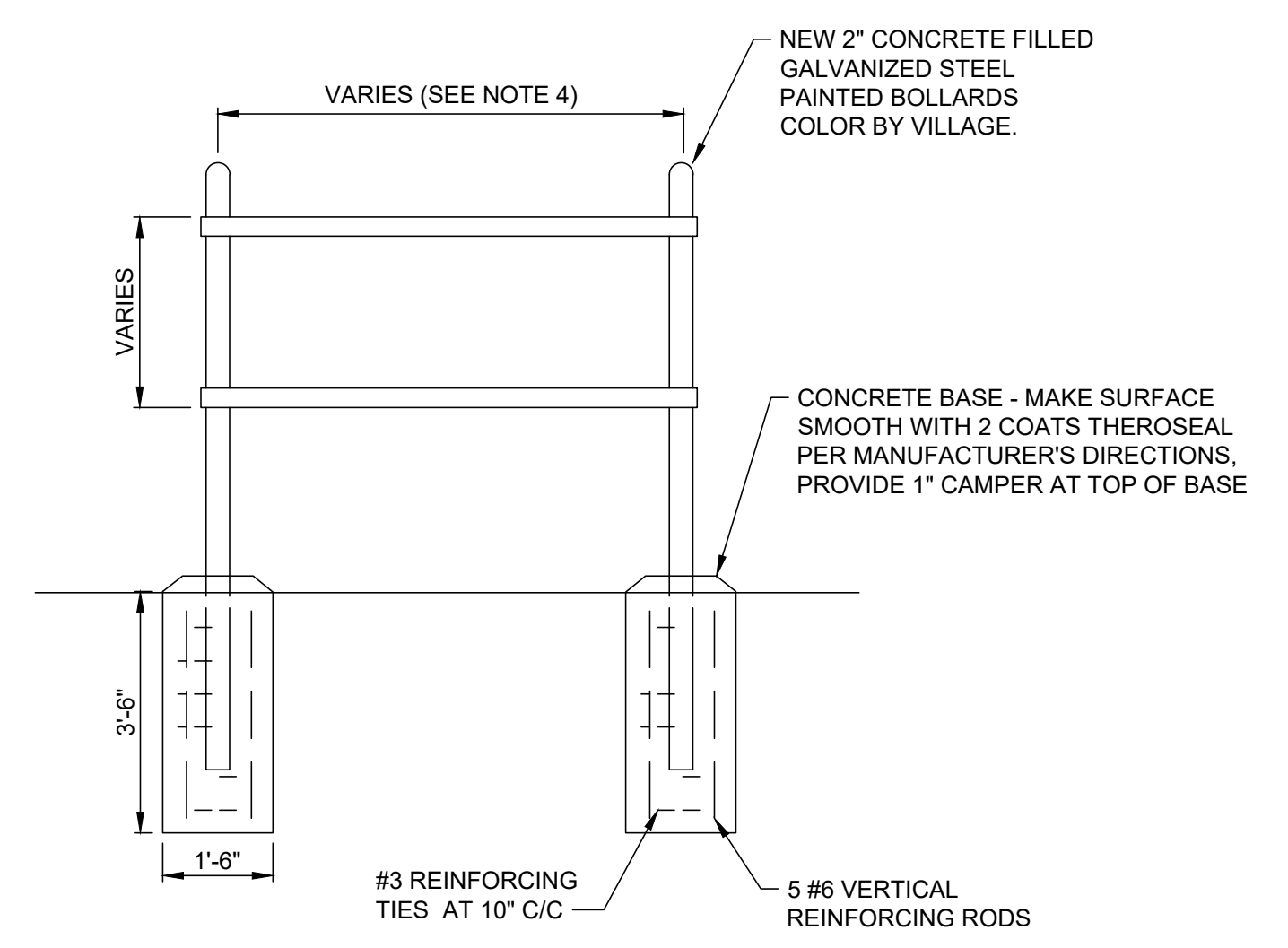
| ONE-LINE SCHEDULE | | | | | | | | |
|-------------------|-------------------------|---|-------------------------|---------------------------|---|---------------------------|---------------------------|-------------------|
| LS NAME | (A) VOLTS / PH / HP | (B) WIRE AND CONDUIT SIZE | (C) METER SOCKET RATING | (D) WIRE AND CONDUIT SIZE | (E) SERVICE ENTRANCE RATED MANUAL TRANSFER SWITCH SWITCHES/FUSE | (F) WIRE AND CONDUIT SIZE | (G) WIRE AND CONDUIT SIZE | MIN. CIRCUIT AMPS |
| CRACKLE LS | 240V / 3 PH / 2 @ 15 HP | 4#3/0, 2"C | PER AEP | 4#3/0, 2"C | 200 AMP / 125 AMP | 3#2 + #8 GND, 1 1/4" C | 3#1 + #6 GND, 1 1/2" C | 94.5 |
| ESSMAN LS | 240V / 3 PH / 2 @ 15 HP | 4#3/0, 2"C | PER AEP | 4#3/0, 2"C | 200 AMP / 125 AMP | 3#2 + #8 GND, 1 1/4" C | 3#1 + #6 GND, 1 1/2" C | 94.5 |
| ST. RT. 125 LS | 480V / 3 PH / 2 @ 50 HP | THE ST. RT. 125 ELECTRICAL SERVICE IS TO REMAIN. THE EXISTING CONTROL PANEL IS BEING REPLACED, DISCONNECT THE EXISTING PANEL AND RECONNECT NEW PUMP CONTROL PANEL USING LIKE WIRE | | | | | | |

GENERAL NOTES:

- CONFORM TO THE NEC, OSHA, FIRE MARSHAL, BUILDING DEPARTMENT AND OTHER APPLICABLE CODES AND REGULATIONS. OBTAIN PERMITS, PAY ALL FEES, AND ARRANGE FOR REQUIRED INSPECTIONS.
- COMPLY WITH ALL CITY STANDARDS, UTILITY CO. REQUIREMENTS, SPECIFICATIONS, AND THE REQUIREMENTS OF THE CONTRACT AS SPECIFIED BY ENGINEER, PROJECT MANAGER OR OWNER.
- CONTACT OUPS, VISIT SITE, AND VERIFY EXISTING CONDITIONS AND TAKE INTO CONSIDERATION IN BID.
- SYSTEMS ARE TO BE COMPLETE AND WORKABLE IN ALL RESPECTS. INSTALL PER MANUFACTURERS AND PROPERLY ADJUST AND START UP.
- DRAWINGS ARE DIAGRAMMATIC. FIELD VERIFY EXISTING CONDITIONS AND CONNECTION POINTS PRIOR TO STARTING WORK. FULLY COORDINATE WORK WITH OTHER TRADES. APPROVED SHOP DRAWINGS ARE TO BE CONSIDERED AS THE MEANS AND METHODS OF INSTALLATION.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, CONSTRUCTION SEQUENCES, AND WORKERS SAFETY.
- PERFORM ALL DEMOLITION WORK REQUIRED FOR PROJECT AND DISPOSE OF DEMOLITION MATERIALS IN CODE APPROVED MANNER.
- ALL CUTTING, TRENCHING, BACKFILLING AND PATCHING OF EXISTING SURFACES INCIDENTAL TO THIS WORK SHALL BE PERFORMED BY THIS CONTRACTOR. CUTTING AND PATCHING SHALL BE PERFORMED IN COMPLIANCE WITH THE PROJECT REQUIREMENTS. ALL BELOW GRADE CONDUITS SHALL BE 24" BELOW GRADE.
- ALL ELECTRICAL EQUIPMENT AND WIRING AND OTHER ELECTRICALLY CONDUCTIVE MATERIAL. LIKELY TO BECOME ENERGIZED SHALL BE BONDED AND GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- WIRES SHALL BE:
 - #12 AWG AND #10 SOLID OR STRANDED CONDUCTOR COPPER, 600V, TYPE THWN/THHN, WHHM OR THW (75/90 DEG. C)
 - #8 AWG TO AND INCLUDING #600 Kcmil AWG. STRANDED CONDUCTOR, 600V, TYPE THWN/THHN, WHHM OR THW (75/90 DEG. C)
 - COLOR CODE ALL WIRES PER N.E.C. GROUND CONDUCTORS SHALL BE GREEN. ALL WIRING SHALL BE IN CONDUIT, RIGID GALVANIZED STEEL ABOVE GRADE AND SCHEDULE 40 PVC BELOW GRADE.
- ALL ELECTRICAL EQUIPMENT SHALL BE UL LISTED FOR THE PURPOSE AND ENVIRONMENT AND SHALL BE NOTED AS SUCH.
- 75 DEGREE C CONDUCTOR RATINGS HAVE BEEN APPLIED UP TO 100 AMPS. ALL EQUIPMENT TERMINATION PROVISIONS SHALL BE LISTED AND IDENTIFIED FOR USE WITH 75 DEGREE C CONNECTIONS PER N.E.C. 110-14C
- ALL EXISTING CIRCUITS REQUIRED TO REMAIN ACTIVE SHALL BE REWORKED OR MAINTAINED AS REQUIRED.
- ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUIT AND WIRING SHOWN ON THE ELECTRICAL DRAWINGS IS NEW UNLESS CLEARLY CALLED OUT AS EXISTING. ALL EXISTING ELECTRICAL EQUIPMENT THAT IS CALLED OUT TO BE REUSED SHALL BE INSPECTED IN THE FIELD BY THE ELECTRICAL CONTRACTOR AND THE CONSTRUCTION MANAGER TO DETERMINE ITS CONDITION PRIOR TO STARTING ANY WORK. PROVIDE DOCUMENTATION TO OWNER INDICATING CONDITION OF THE EXISTING EQUIPMENT, AND REUSE EXISTING EQUIPMENT TO ALL PARTIES AGREE THE CONDITION IS ACCEPTABLE. ALL EXISTING EQUIPMENT DETERMINED TO BE UNUSABLE SHALL BE REPLACED WITH LIKE KIND AS DIRECTED BY THE OWNER. ANY OF THE OWNERS EQUIPMENT DETERMINED TO BE REUSED THAT IS DAMAGED BY ANY CONTRACTOR DURING SWITCHOVER SHALL BE REPLACED BY THAT CONTRACTOR. ALL EXISTING EQUIPMENT IS THE PROPERTY OF THE OWNER (NOT THE CONTRACTOR) AND SHALL BE TREATED ACCORDINGLY.
- ALL CABLES ARE TO BE CLEARLY MARKED WITH BRADY TYPE LABELS AND RECORD DRAWINGS SHALL INDICATED THE INDIVIDUAL MARKINGS.
- THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THEIR BIDS A TOWABLE GENERATOR. THE GENERATOR SHALL BE SIZED TO OPERATE THE PUMPS (15HP, 240V, 3 PH). THE GENERATOR SHALL PROVIDE 240V, 3PH AND SHALL BE DIESEL FUELED, LIQUID COOLED, TIER 4 COMPLIANT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

GENERAL DEMOLITION NOTES:

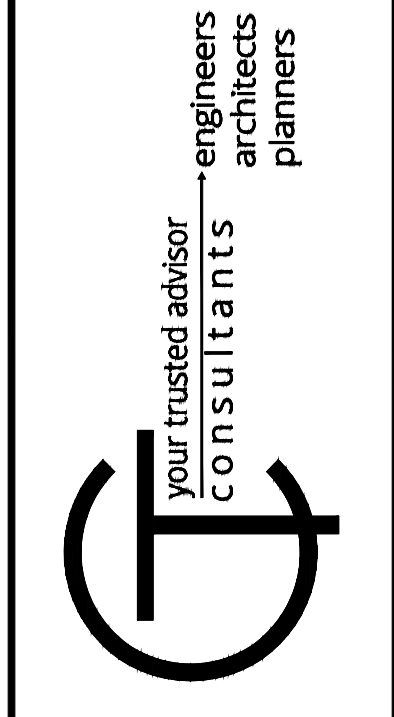
- THE ELECTRICAL CONTRACTOR SHALL PERFORM ALL DEMOLITION OF EXISTING ELECTRICAL SYSTEMS AS DIRECTED BY THE CONTRACT DOCUMENTS FOR THE PROJECT REMOVE FROM SITE AND PROPERLY DISPOSE OF ALL MATERIAL AND DEBRIS FROM THIS WORK.
- IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO FIELD VERIFY EXISTING ELECTRICAL CONDITIONS, ONCE THE EXISTING ELECTRICAL CONDITIONS ARE FIELD VERIFIED, THE ELECTRICAL CONTRACTOR SHALL REVIEW ALL CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, ETC., CONTRACT DOCUMENTS FOR CONFLICTS THAT WILL REQUIRE REMOVAL, MODIFICATION OR RELOCATION OF EXISTING EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BIDS THE COST ASSOCIATED WITH THIS WORK.
- DISCONNECT EXISTING EQUIPMENT THAT IS TO BE REMOVED UNDER OTHER SECTIONS. REMOVE DATA AND PHONE CABLING SYSTEM AS DIRECTED BY THE PROJECT MANAGER. NO CABLES SHALL BE REMOVED OR CUT WITHOUT APPROVAL FROM PROJECT MANAGER. ANY EXISTING CABLES TO REWORKED AS NEEDED.
- THE OWNER RESERVES THE RIGHT TO SALVAGE FOR ALL EXISTING ELECTRICAL EQUIPMENT PRIOR TO DEMOLITION. THE CONTRACTOR SHALL REVIEW ALL MATERIALS AND DELIVER TO THE OWNER THOSE REQUIRED IN THEIR EXISTING CONDITION. ALL OTHER MATERIAL SHALL BE REMOVED BY THIS CONTRACTOR.
- ALL CIRCUITS WHICH ARE REQUIRED TO REMAIN ACTIVE SHALL BE MAINTAINED. ALL CIRCUITS SHALL BE VERIFIED WITH EXISTING DRAWINGS AND ACTUAL FIELD CONDITIONS PRIOR TO BEGINNING DEMOLITION.



GENERAL DETAIL NOTES:

- THE ELECTRICAL CONTRACTOR SHALL PROVIDE A HOT DIPPED GALVANIZED STEEL CHANNEL SYSTEM TO MOUNT SERVICE EQUIPMENT.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE THIS SYSTEM SIZED BASED ON THE APPROVED SHOP DRAWINGS AND AS NEEDED TO INSTALL ACTUAL EQUIPMENT PROVIDED.
- BASE DETAIL IS TYPICAL FOR STANDARD SOIL BEARING. WHERE NON-STANDARD SOIL OCCURS, CONSULT CIVIL ENGINEER FOR BASE DESIGN PRIOR TO INSTALLATION.
- THE WIDTH OF THE RACK WILL VARY BASED ON SERVICE SIZES. THE VILLAGE OF WEST UNION WOULD LIKE THIS TO BE AS SHORT AS POSSIBLE. PROVIDE CHANNEL ON BOTH SIDES SO THAT THE EQUIPMENT CAN BE MOUNTED ON THE FRONT AND ON THE BACK. ALL PANELS AND DEVICES SHALL BE A MINIMUM OF 18 INCHES ABOVE GRADE.

OUTDOOR SERVICE MOUNTING DETAIL
 NOT TO SCALE



| | | | | | |
|--------------|------------|---------|----------|-----|-----|
| DATE | | | | | |
| REVISION | | | | | |
| NO | | | | | |
| ISSUED FOR: | EPA REVIEW | 1/17/20 | AS SHOWN | ### | ### |
| ISSUE DATE: | | | | | |
| SCALE: | | | | | |
| DESIGNED BY: | | | | | |
| DRAWN BY: | | | | | |
| CHECKED BY: | | | | | |

CRACKEL SUBDIVISION
SANITARY SEWER - PHASE 3
 - WEST UNION, OHIO -

ELECTRICAL DETAILS

| | |
|-------------|----------|
| PROJECT NO. | 190123 |
| DISCIPLINE | ELEC |
| SHEET NAME | ELEC-DET |
| SHEET | 24B |
| OF | 25 |