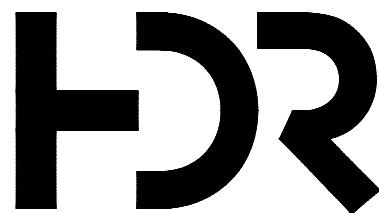
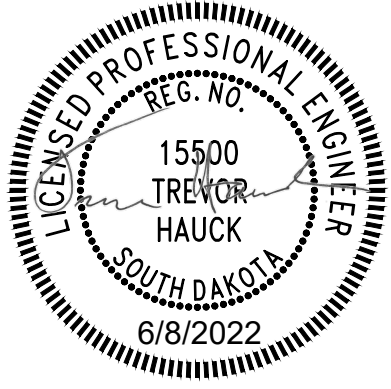


1	2	3	4	5	6	7	8
ELECTRICAL SPECIFICATIONS		RACEWAYS AND BOXES					
PROJECT SUMMARY:		1.1 GENERAL					
1.1.CONTRACTOR TO INSTALL ELECTRICAL EQUIPMENT, CONDUIT, MEDIUM VOLTAGE CONDUCTOR TO REPLACE OLD CABLE FROM OVERHEAD LINE TO THE EAST SUBSTATION.		A. SECTION INCLUDES:					
1.2.CONTRACTOR TO FOLLOW APPLICABLE 2017 NATIONAL ELECTRIC SAFETY CODE (NESC) REQUIREMENTS.		2. CONDUITS					
1.3.SEE ELECTRICAL SPECIFICATIONS ATTACHED WITH THIS DESIGN PACKAGE		3. CONDUIT FITTINGS					
MEDIUM VOLTAGE CABLE		4. PULL AND JUNCTION BOXES					
1.1 GENERAL		1.2 RIGID CONDUIT					
A. SECTION INCLUDES:		A. SCHEDULES 40(PVC-40) AND 80(PVC-80):					
1. MATERIAL AND INSTALLATION REQUIREMENTS FOR:		1. POLYVINYL-CHLORIDE (PVC) PLASTIC COMPOUND WHICH INCLUDES INERT MODIFIERS TO IMPROVE WEATHERABILITY AND HEAT DISTRIBUTION.					
A. MEDIUM VOLTAGE CABLE (601 V AND ABOVE).		2. RATED FOR DIRECT SUNLIGHT EXPOSURE.					
B. CABLE TERMINATIONS AND SPLICES.		3. FIRE RETARDANT AND LOW SMOKE EMISSION.					
A. QUALIFICATIONS:		4. SHALL BE SUITABLE FOR USE WITH 90 DEGC WIRE AND SHALL BE MARKED "MAXIMUM 90 DEGC".					
1. CABLE TECHNICIAN:		5. STANDARDS: NEMA TC 2, UL 651.					
A. THREE (3) YEARS EXPERIENCE IN HANDLING, TERMINATING AND SPLICING MEDIUM VOLTAGE CABLES.		B. CONDUIT BENDS					
B. SPECIFICALLY TRAINED BY A FACTORY REPRESENTATIVE ON THE TERMINATIONS AND SPLICES TO BE USED ON THE PROJECT.		1. BENDS AT RISERS SHALL BE 60" RADIUS					
1) IF NOT TRAINED ON THE PRODUCTS TO BE USED, ON-SITE TRAINING BY THE FACTORY REPRESENTATIVE SHALL BE PERFORMED BEFORE ANY TERMINATIONS OR SPLICES ARE MADE.		C. CONDUIT SPACERS					
1.2 ACCEPTABLE MANUFACTURERS		1. CONDUIT SPACERS TO ACCOMMODATE 2 EA. 6" CONDUITS WITH 3" DUCT-TO-DUCT (9" CENTER-TO-CENTER SEPARATION) SIMILAR TO CARLON SNAP-N-STAC SP6W30-2					
A. SUBJECT TO COMPLIANCE WITH THE CONTRACT DOCUMENTS, THE FOLLOWING MANUFACTURERS ARE ACCEPTABLE:		2. CONDUIT SPACERS TO PLACED AT INTERVALS WITH NO LESS THAN 5' OF SEPARATION AND NO MORE THAN 8' OF SEPARATION					
1. WIRE AND CABLE:		D. ALL CONDUIT SYSTEM TO BE NON-MAGNETIC, INCLUDING CLAMPS, SUPPORTS, BOLTS, ETC.					
A. THE OKONITE COMPANY.		1.3 VAULTS AND MANHOLES					
B. PRYSMIAN CABLE CORPORATION.		1. INTERIOR DIMENSIONS NO LESS THAN 7' HIGH BY 7' WIDE BY 7' DEEP					
C. SOUTHWIRE COMPANY.		2. SIMILAR TO OLDCASTLE INFRASTRUCTURE 7X7X7 MANHOLE 2					
2. LUGS, CONNECTORS AND TERMINATIONS:		B. STANDARDS: NEMA 250, UL 50.					
A. EATON COOPER POWER SYSTEMS.		C. CABLE PULLING					
B. 3M COMPANY.		1. REMOVE MOISTURE AND DEBRIS FROM CONDUIT BEFORE WIRE IS PULLED INTO PLACE.					
C. ELASTIMOLD, A THOMAS AND BETTS COMPANY.		2. PULL MANDREL AND DIAMETER NOMINALLY 1/4 IN SMALLER THAN THE INTERIOR OF THE CONDUIT, TO REMOVE OBSTRUCTIONS.					
1.3 MEDIUM VOLTAGE CABLES		3. SWAB CONDUIT BY PULLING A CLEAN, TIGHT-FITTING RAG THROUGH THE CONDUIT.					
A. RATINGS:		4. TIGHTLY PLUG ENDS OF CONDUIT WITH TAPERED WOOD PLUGS, PLASTIC CAPS OR PLASTIC INSERTS UNTIL WIRE IS PULLED					
1. 15KV CLASS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.		5. CABLE LUBRICANT SHALL BE APPLIED SO AS TO ACHIEVE A DYNAMIC COEFFICIENT OF FRICTION OF 0.2 OR LESS.					
B. CONDUCTOR TYPE:							
1. BETWEEN RISER AND SWITCHGEAR:							
A. 500KCMIL, ALUMINUM, COPPER TAPE SHIELD AND EPR CT RATED JACKET.							
C. INSULATION:							
1. TEMPERATURE RATING: MV-90 OR MV-105 PER NFPA 70.							
2. ETHYLENE PROPYLENE RUBBER (EPR).							
3. 133 PERCENT INSULATION LEVEL.							
4. CABLE TRAY RATED							
D. CONDUIT:							
1. NEW CONDUIT FOR MV CABLE TO BE 6-INCH, SCHEDULE 40 PVC CONDUIT, GRAY, WHEN BURIED.							
2. NEW CONDUIT FOR MV CABLE TO BE 6-INCH, SCHEDULE 80 PVC CONDUIT, GRAY, WHEN ABOVE GROUND.							
1.4 CABLE ACCESSORIES							
A. TERMINATIONS:							
1. LIVEFRONT TERMINATION CONNECTORS:							
A. STANDARD: IEEE 386.							
B. VOLTAGE RATING: SAME AS THE CABLE RATING.							
C. ONE-PIECE DESIGN, MOLDED 8-SKIRT SILICONE RUBBER COLD SHRINK TERMINATION							
D. LIVEFRONT, DEADBREAK TYPE WITH:							
1) ALUMINUM TWO HOLE COMPRESSION LUG.							
2) TEMPERATURE RATING: TYPE MV-90 OR MV-105.							
2.1 INSTALLATION							
A. INSTALL PER MANUFACTURER'S RECOMMENDATION							
B. PERFORM INSPECTIONS AND TESTS PER MANUFACTURER'S RECOMMENDATION IN PRESENCE OF ENGINEER.							

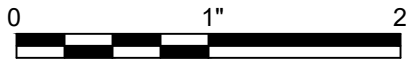


PROJECT MANAGER Trevor Hauck		
0	6/8/22	ISSUE_FOR_CONSTRUCTION
ISSUE	DATE	DESCRIPTION

PROJECT NUMBER		10333743
----------------	--	----------



EAST SUBSTATION CABLE REPLACEMENT
ELECTRICAL SPECIFICATIONS



FILENAME	SURF_E115
SCALE	SCALE