**STEAM VAULT ELECTRICAL DETAIL**

**GENERAL NOTES**

1. APPLY SEALING COMPOUND AT ALL CONDUIT COUPLINGS AND TERMINATE SEALING SLEEVES. PROVIDE PLASTI-BOND #PRTOUCHUP-GRAY-P1 OR EQUAL.

2. ALL CONDUIT SHALL BE THREADED PVC COATED RIGID METAL CONDUIT (RMC). FIELD SPRAY ALL CUT METAL WITH GALVANIZING PAINT TO PREVENT CORROSION.

3. ALL CONDUIT & EQUIPMENT SIZES, LENGTHS, QUANTITIES SHOWN HERE ARE TYPICAL. SPECIFIC PROJECTS SHALL VERIFY SIZES, LENGTHS, QUANTITIES AS REQUIRED.

4. PROVIDE 316 STAINLESS STEEL CONCRETE WEDGE ANCHORS WITH THREADED 5/8" DIA. ROD FOR MOUNTING ALL EQUIPMENT AND ENCLOSURES AS REQUIRED. FIELD SPRAY ALL CUT METAL WITH GALVANIZING PAINT TO PREVENT CORROSION.

5. PHYSICAL MOUNTING LOCATIONS AND ELEVATIONS ABOVE BOTTOM OF VAULT SHALL BE EVALUATED ON A VAULT BY VAULT BASIS AND COORDINATED WITH UNL. PRIOR TO WORK. SEE OTHER VAULT DETAILS FOR OTHER VAULT REQUIREMENTS.

6. PROVIDING CONDUIT SENDS & OFFSETS AS REQUIRED. TAKE CARE IN BENDING PVC COATED CONDUIT SO AS NOT TO DAMAGED THE PVC COATING. UTILIZE CONDUIT BENDERS AND OTHER TOOLS APPROVED FOR PVC COATED CONDUIT APPLICATIONS.

7. EXACT POSITION OF THE SAFETY SWITCHES WILL VARY ON A CASE-BY-CASE BASIS. REVIEW WITH PROJECT MANAGER AND MAKE NECESSARY ADJUSTMENTS TO LAYOUT.

**KEY NOTES**

1. NON-METALLIC TERMINAL JUNCTION BOX. HIGH-IMPACT STRENGTH, FIBERGLASS ENCLOSURE & COVER WITH STAINLESS STEEL (S.S.) COVER SCREWS. INCLUDES HIGH-TEMPERATURE SILICON GASKET. PROVIDE WITH PLATED STEEL BACK PANEL. HOFFMAN EXE SERIES ENCLOSURE OR EQUAL. 16"X16"X6" ENCLOSURE (MODEL #EX-00405165). BACK PANEL (MODEL #A0040509) IS DETECTED IN THE DETAIL. SPECIFIC ENCLOSURE SIZE WILL BE DETERMINED ON A VAULT-BY-VAULT BASIS. MOUNT TO UNLESS (SEE NOTE 12).

2. TYPE XHHW COPPER CONDUCTORS. MINIMUM 2#6, #12G123 BETWEEN VAULTS. MINIMUM 2#12, #12G123 FROM TERMINAL BLOCKS TO VAULT LOADS. 600V, HIGH-HEAT & MOISTURE RESISTANT STRANDED CONDUCTORS WITH XLP INSULATION. SOUTHWIRE XHHW-2 SIMPLEX CONDUCTORS OR EQUAL.

3. POWER DISTRIBUTION BLOCKS. MOUNT TO BACK PANEL OF ENCLOSURE WITH STAINLESS STEEL HARDWARE. LINE SIDE TERMINALS SUITABLE FOR TWO EACH 1#4-20 CONDUCTORS. LOAD SIDE TERMINALS SUITABLE FOR SIX EACH #6-4 CONDUCTORS. SO P00604B302006 OR EQUAL. PROVIDE TERMINAL BLOCKS WITH FINGER SAFE COVERS. SO P00606B30807 OR EQUAL. MOUNT TERMINAL BLOCKS IN CENTER OF BOX AS MUCH AS PRACTICAL TO ALLOW FOR CONDUCTOR BENDS AND TERMINATIONS.

4. PVC COATED 1-1/2" MYERS HUB. NEMA 4X HUB WITH HIGH TEMPERATURE MOLDED PVC GASKET, O-RING GASKET, AND SEALING SLEEVE. INCLUDES 40 MIL PVC EXTERIOR COATING AND 2ML URETHANE INTERIOR COATING. PLASTI-BOND #PRNS505 OR EQUAL. QUANTITY & SIZES OF HUBS AS REQUIRED TO MATCH SPECIFIC VAULT CONDITIONS. APPLY SEALING COMPOUND AROUND EACH SLEEVE AFTER INSTALLATION. PLASTI-BOND #PRTOUCHUP-GRAY-P7 OR EQUAL.

5. SPARE 3/4" CONDUIT PENETRATION AT BOTTOM OF ENCLOSURE FOR FUTURE LOAD CONNECTION. PROVIDE WITH ALUMINUM "CAP-OFF" DEVICE WITH GASKET. COOPER CROSSEY HINDS MODEL #60CA2 OR EQUAL.

6. PVC COATED 1-1/2" FEMALE-MALE UNIV UNY. NEMA 4X UNION WITH HIGH TEMPERATURE MOLDED PVC GASKET AND SEALING SLEEVE. INCLUDES 40 MIL PVC EXTERIOR COATING AND 2ML URETHANE INTERIOR COATING. PLASTI-BOND #PRNF505 OR EQUAL. QUANTITY & SIZES OF UNIONS AS REQUIRED TO MATCH SPECIFIC VAULT CONDITIONS.

7. PVC COATED 3/4" RMC CONDUIT. INCLUDES 40 MIL PVC EXTERIOR COATING AND 2ML URETHANE INTERIOR COATING. PLASTI-BOND #PRHC0NDUIT-3/4 OR EQUAL. QUANTITY AS REQUIRED TO MATCH SPECIFIC VAULT CONDITIONS.

8. MECHANICALLY-INTERLOCKED, WATERTIGHT, NON-FUSED, SHRINKED SAFETY SWITCH. NEMA 4X, NON-METALLIC ENCLOSURE SWITCH RATED FOR 600V, 60 AMP RATED. PROVIDE HUBBELL #HBL363 OR EQUAL. MOUNT TO UNLESS (SEE NOTE 12).

9. NON-METALLIC TERMINAL JUNCTION BOX. HIGH-IMPACT STRENGTH, FIBERGLASS ENCLOSURE & COVER WITH STAINLESS STEEL (S.S.) COVER SCREWS. INCLUDES HIGH-TEMPERATURE SILICON GASKET. PROVIDE WITH PLATED STEEL BACK PANEL. HOFFMAN EXE SERIES ENCLOSURE OR EQUAL. 6X3X3/4" ENCLOSURE (MODEL #EX-001601600). BACK PANEL (MODEL #A0160180) IS DETECTED IN THE DETAIL. SPECIFIC ENCLOSURE SIZE WILL BE DETERMINED ON A VAULT-BY-VAULT BASIS.

10. CONNECT PUMP CABLE INDIVIDUAL CONDUCTORS TO DIST. BLOCKS IN 4 X 4 J-BOX.

11. PVC COATED 1-1/2" RMC CONDUIT. INCLUDES 40 MIL PVC EXTERIOR COATING AND 2ML URETHANE INTERIOR COATING. PLASTI-BOND #PRHC0NDUIT-1-1/2 OR EQUAL. CONDUIT SIZE & QUANTITY AS REQUIRED TO MATCH SPECIFIC VAULT CONDITIONS.

12. GALVANIZED UNISTRUT STANDOFFS. PROVIDE STACKED UNISTRUT STANDOFFS VERTICALLY POSITIONED ON EACH SIDE OF THE ENCLOSURE (QUANTITY AND LENGTHS AS REQUIRED). SECURE TO THE VAULT WALL, LOCATE WALL ANCHORS ABOVE AND BELOW THE ENCLOSURE. PROVIDE ALL STAINLESS STEEL MOUNTING HARDWARE. FIELD SPRAY ALL CUT METAL WITH GALVANIZING PAINT TO PREVENT CORROSION.

13. PVC COATED 3/4" MYERS HUB. NEMA 4X HUB WITH HIGH TEMPERATURE MOLDED PVC GASKET, O-RING GASKET, AND SEALING SLEEVE. INCLUDES 40 MIL PVC EXTERIOR COATING AND 2ML URETHANE INTERIOR COATING. PLASTI-BOND #PRST2 OR EQUAL. QUANTITY & SIZES OF HUBS AS REQUIRED TO MATCH SPECIFIC VAULT CONDITIONS. APPLY SEALING COMPOUND AROUND EACH SLEEVE AFTER INSTALLATION. PLASTI-BOND #PRTOUCHUP-GRAY-P7 OR EQUAL.

14. AT EACH HUB CONNECTED TO THE JUNCTION BOX PROVIDE FOAM DUCT SEALANT WITHIN THE CONDUIT. SEALANT SHALL BE TWO-HOUR RATED EXPANSION FOAM WITH HIGH TEMPERATURE RATED AFT CURING, MINIMUM 200 DEG. F. POLYETHYLENE #1ST FOAM SEALANT OR EQUAL. PROVIDE WITH NECESSARY APPLICATOR AND MIXING CONTAINERS. CLEAN ALL EXCESS SEALANT FROM AREA PRIOR TO SEALANT FULLY CURING.

15. PROVIDE A 1/2" NEMA 4X DRAIN WITH BREATHER IN EACH ENCLOSURE. CROUSE-HINDS #CD140 GAR DRAIN WITH #CD140A BREATHER OR EQUAL.

16. PROVIDE CONDUIT SHEL F OFF FITTING WITH DRAIN IN EACH RECEPTACLE CONDUIT 3/4" HUB RATED FOR CLASSIFIED LOCATIONS. CROUSE-HINDS #EY021 OR EQUAL, FILL WITH CHICO, WATER PROOFING COMPOUND.