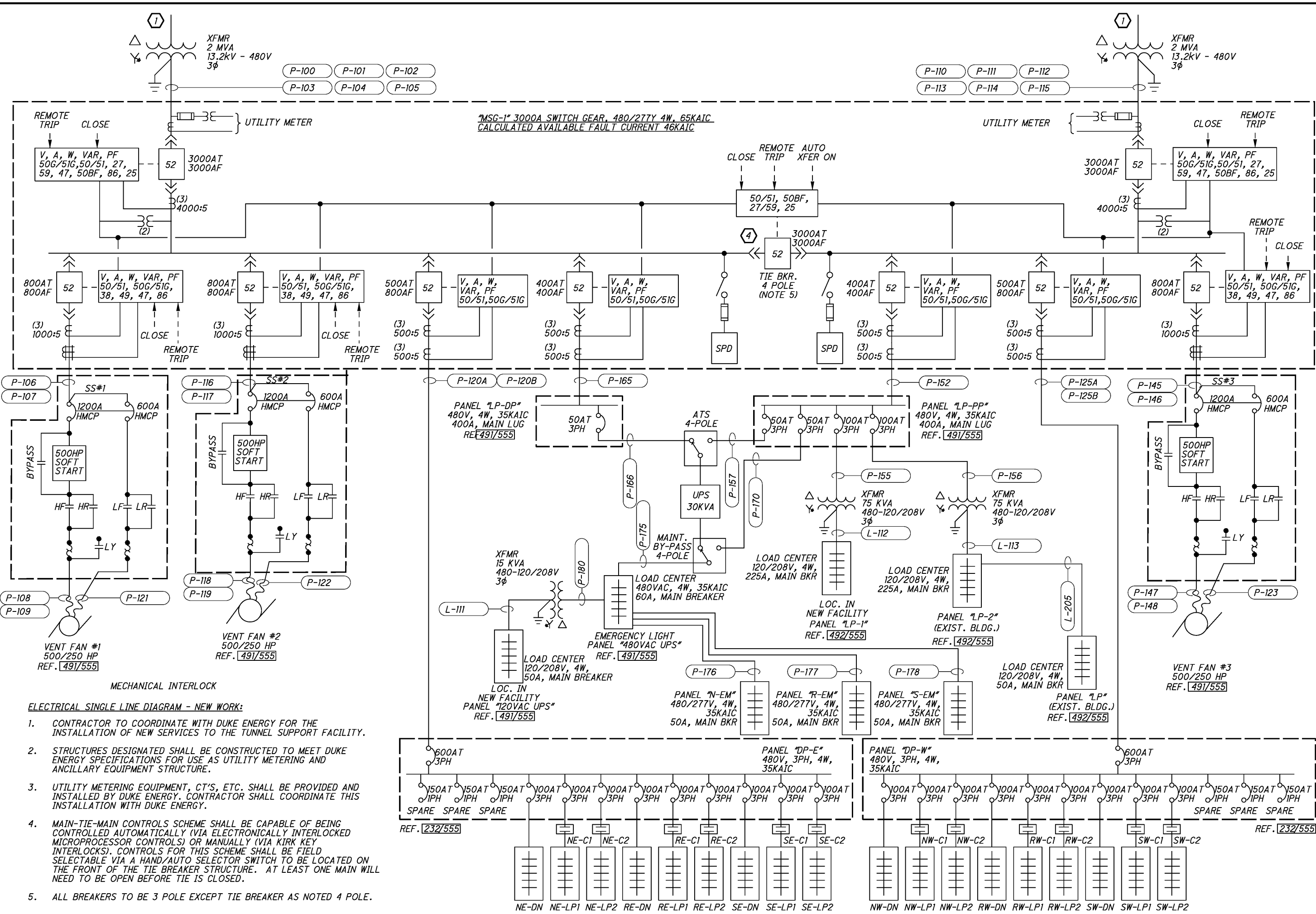


# APPENDIX

# E

ELECTRICAL  
ONE-LINE  
DIAGRAM

c:\pwworking\hmm\external\pre47802\dms72703\071\_0134CES009.dgn 2/20/2015 2:51:03 PM PRE47802



- ELECTRICAL SINGLE LINE DIAGRAM - NEW WORK:**
- CONTRACTOR TO COORDINATE WITH DUKE ENERGY FOR THE INSTALLATION OF NEW SERVICES TO THE TUNNEL SUPPORT FACILITY.
  - STRUCTURES DESIGNATED SHALL BE CONSTRUCTED TO MEET DUKE ENERGY SPECIFICATIONS FOR USE AS UTILITY METERING AND ANCILLARY EQUIPMENT STRUCTURE.
  - UTILITY METERING EQUIPMENT, CT'S, ETC. SHALL BE PROVIDED AND INSTALLED BY DUKE ENERGY. CONTRACTOR SHALL COORDINATE THIS INSTALLATION WITH DUKE ENERGY.
  - MAIN-TIE-MAIN CONTROLS SCHEME SHALL BE CAPABLE OF BEING CONTROLLED AUTOMATICALLY (VIA ELECTRONICALLY INTERLOCKED MICROPROCESSOR CONTROLS) OR MANUALLY (VIA KIRK KEY INTERLOCKS). CONTROLS FOR THIS SCHEME SHALL BE FIELD SELECTABLE VIA A HAND/AUTO SELECTOR SWITCH TO BE LOCATED ON THE FRONT OF THE TIE BREAKER STRUCTURE. AT LEAST ONE MAIN WILL NEED TO BE OPEN BEFORE TIE IS CLOSED.
  - ALL BREAKERS TO BE 3 POLE EXCEPT TIE BREAKER AS NOTED 4 POLE.

DESIGN AGENCY: HATCH MOTT MACDONALD  
 1803 CLEVELAND PKWY.  
 SUITE 200  
 CLEVELAND, OH 44135

DATE: 08/11/14  
 REVIEWED BY: RF  
 STRUCTURE FILE NUMBER: 3106578

DESIGNED BY: PAP  
 CHECKED BY: LL

**ELECTRICAL DETAILS - ONE LINE DIAGRAM**  
 BRIDGE NO. HAM-71-0134  
 I-71 LYTLE TUNNEL UNDER LYTLE PARK

**HAM-71-01.34**  
 PID No. 87268

211/296  
 469  
 555