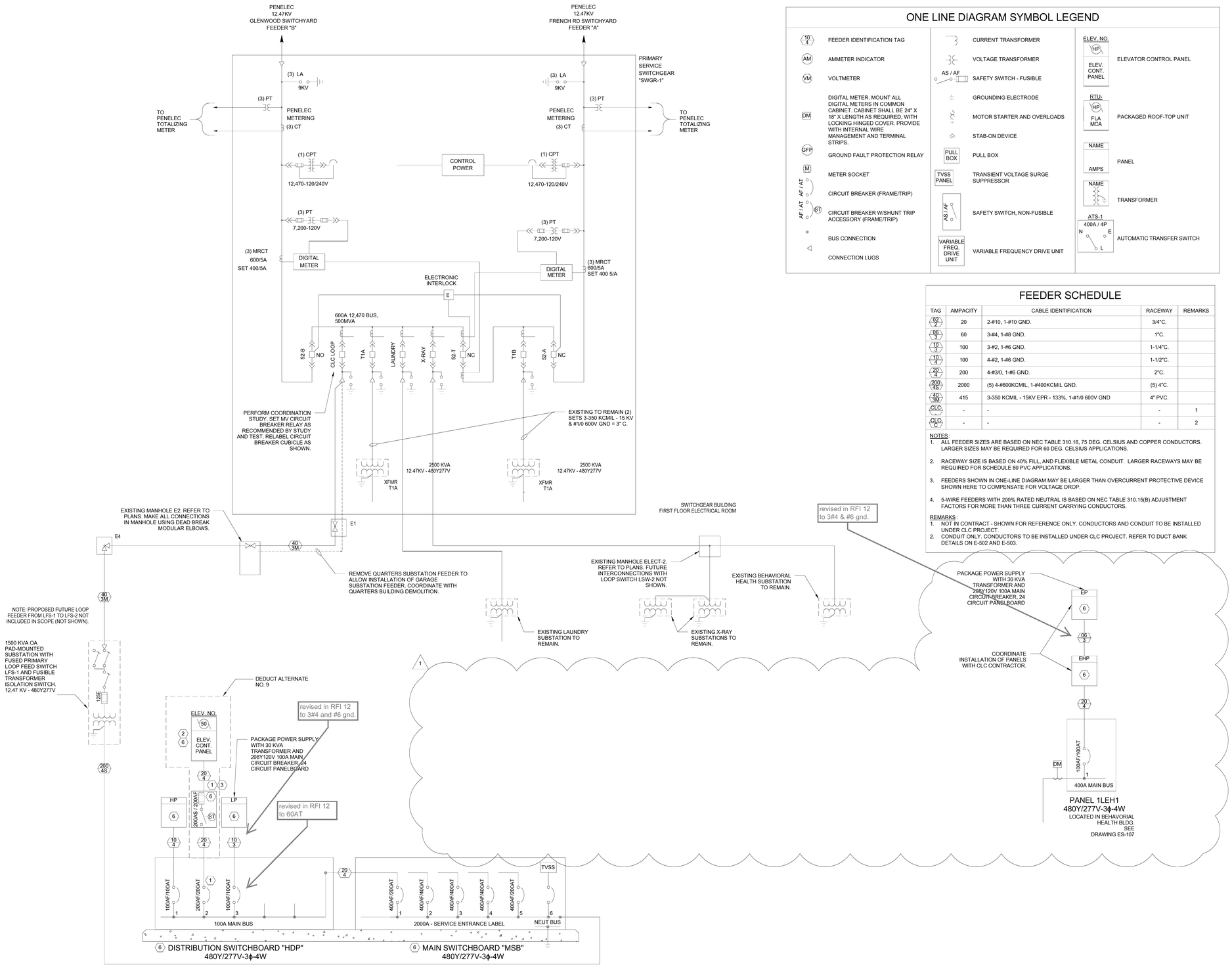

1 ELECTRICAL ONE-LINE DIAGRAM

ONE LINE DIAGRAM SYMBOL LEGEND

10/4	FEEDER IDENTIFICATION TAG
AM	AMMETER INDICATOR
VM	VOLTMETER
DM	DIGITAL METER. MOUNT ALL DIGITAL METERS IN COMMON CABINET. CABINET SHALL BE 24" X 18" X LENGTH AS REQUIRED, WITH LOCKING HINGED COVER. PROVIDE WITH INTERNAL WIRE MANAGEMENT AND TERMINAL STRIPS.
GFP	GROUND FAULT PROTECTION RELAY
M	METER SOCKET
AF / AT	CIRCUIT BREAKER (FRAME/TRIP)
AF / AT ST	CIRCUIT BREAKER W/SHUNT TRIP ACCESSORY (FRAME/TRIP)
	BUS CONNECTION
	CONNECTION LUGS
	CURRENT TRANSFORMER
	VOLTAGE TRANSFORMER
AS / AF	SAFETY SWITCH - FUSIBLE
	GROUNDING ELECTRODE
	MOTOR STARTER AND OVERLOADS
	STAB-ON DEVICE
PULL BOX	PULL BOX
TVSS PANEL	TRANSIENT VOLTAGE SURGE SUPPRESSOR
AS / AF	SAFETY SWITCH, NON-FUSIBLE
VARIABLE FREQ. DRIVE UNIT	VARIABLE FREQUENCY DRIVE UNIT
ELEV. NO. / HP / ELEV. CONT. PANEL	ELEVATOR CONTROL PANEL
RTU- / HP / FLA / MCA	PACKAGED ROOF-TOP UNIT
NAME / AMPS	PANEL
NAME	TRANSFORMER
ATS-1 / 400A / 4P / N / E / L	AUTOMATIC TRANSFER SWITCH

FEEDER SCHEDULE

TAG	AMPACITY	CABLE IDENTIFICATION	RACEWAY	REMARKS
02/2	20	2-#10, 1-#10 GND.	3/4"C.	
06/3	60	3-#4, 1-#8 GND.	1"C.	
10/3	100	3-#2, 1-#6 GND.	1-1/4"C.	
10/4	100	4-#2, 1-#6 GND.	1-1/2"C.	
20/4	200	4-#3/0, 1-#6 GND.	2"C.	
200/4S	2000	(5) 4-#600KCMIL, 1-#400KCMIL GND.	(5) 4"C.	
40/3M	415	3-350 KCMIL - 15KV EPR - 133%, 1-#1/0 600V GND	4" PVC.	
CLC	-	-	-	1
CLC	-	-	-	2

NOTES:
1. ALL FEEDER SIZES ARE BASED ON NEC TABLE 310.16, 75 DEG. CELSIUS AND COPPER CONDUCTORS. LARGER SIZES MAY BE REQUIRED FOR 60 DEG. CELSIUS APPLICATIONS.
2. RACEWAY SIZE IS BASED ON 40% FILL, AND FLEXIBLE METAL CONDUIT. LARGER RACEWAYS MAY BE REQUIRED FOR SCHEDULE 80 PVC APPLICATIONS.
3. FEEDERS SHOWN IN ONE-LINE DIAGRAM MAY BE LARGER THAN OVERCURRENT PROTECTIVE DEVICE SHOWN HERE TO COMPENSATE FOR VOLTAGE DROP.
4. 5-WIRE FEEDERS WITH 200% RATED NEUTRAL IS BASED ON NEC TABLE 310.15(B) ADJUSTMENT FACTORS FOR MORE THAN THREE CURRENT CARRYING CONDUCTORS.

REMARKS:
1. NOT IN CONTRACT - SHOWN FOR REFERENCE ONLY. CONDUCTORS AND CONDUIT TO BE INSTALLED UNDER CLC PROJECT.
2. CONDUIT ONLY. CONDUCTORS TO BE INSTALLED UNDER CLC PROJECT. REFER TO DUCT BANK DETAILS ON E-502 AND E-503.

Key Notes

1. CIRCUIT BREAKER OR FUSE RATING SHOWN FOR BIDDING PURPOSES ONLY. COORDINATE RATING WITH EQUIPMENT NAMEPLATE OR INSTALLATION REQUIREMENTS PRIOR TO ORDERING OR SUBMITTING SHOP DRAWINGS.
2. PROVIDE WIRING FROM ELEVATOR CONTROLLER TO DRIVE MOTOR AND MAKE FINAL CONNECTIONS. COORDINATE INSTALLATION AND WIRING REQUIREMENTS WITH ELEVATOR EQUIPMENT SUPPLIER.
3. PROVIDE WITH AUXILIARY CONTACTS FOR INTEGRATION WITH ELEVATOR BATTERY LOWERING SYSTEM. ROUTE (2) #12, #12 GND - 3/4" C TO ELEVATOR CONTROLLER (NOT SHOWN).
4. NOT USED.
5. NOT USED.
6. ELECTRICAL EQUIPMENT TO BE PROVIDED IN PARKING GARAGE PROJECT.
7. ELECTRICAL EQUIPMENT LOCATED IN PARKING GARAGE. PROVIDED IN CLC PROJECT.

FINAL SUBMITTAL

No.	Description	Date
	FINAL SUBMITTAL	05/07/2013
1	AMENDMENT #1	02/28/2014

Revisions: Date

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Approved: Project Director
Project Title: VA Erie Parking Structure
Location: Erie, PA
Date: 9/24/2013 | Checked: MSB | Drawn: SRH
Project Number: 11159.00
Building Number
Drawing Number: E-601

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