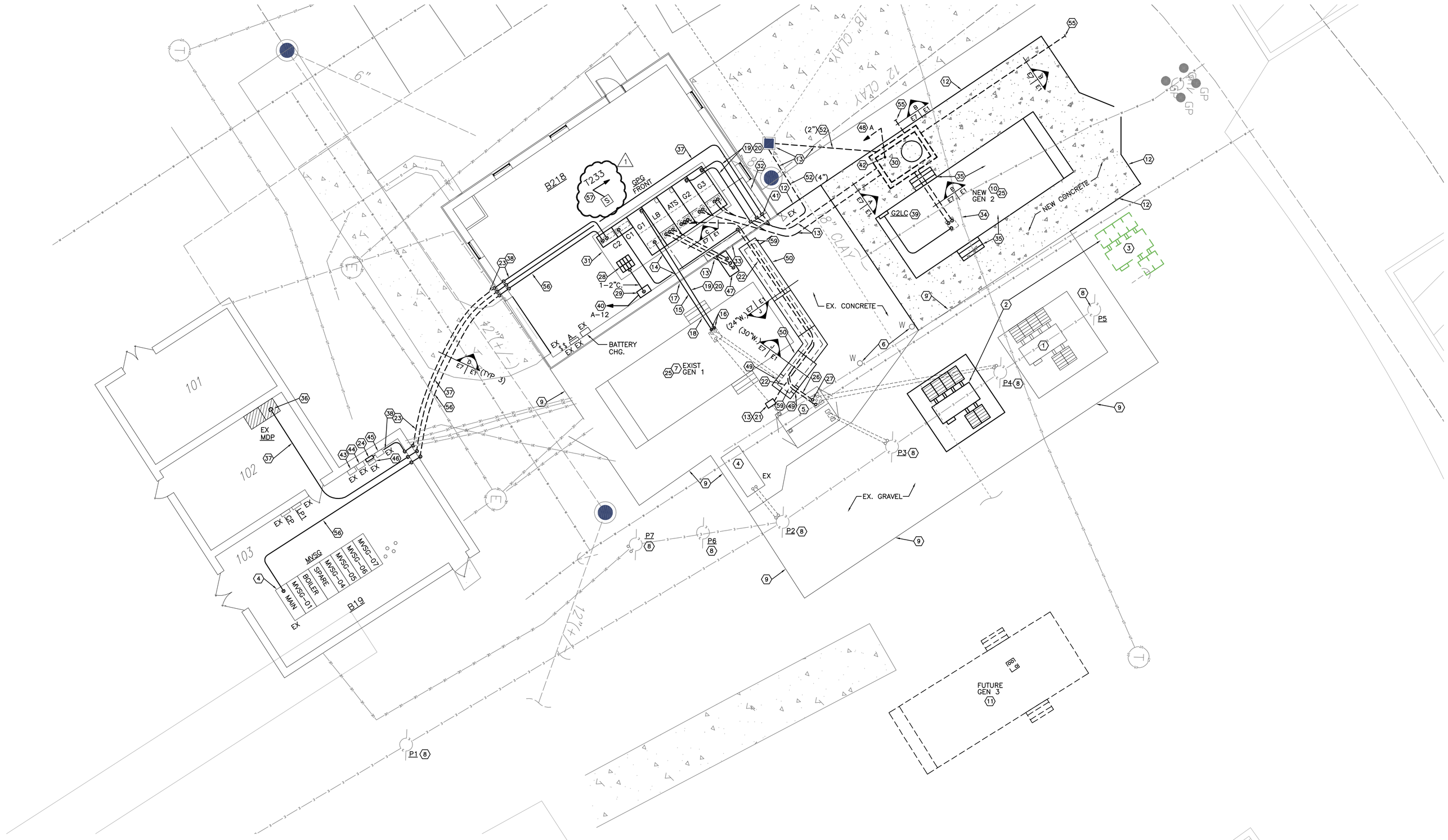

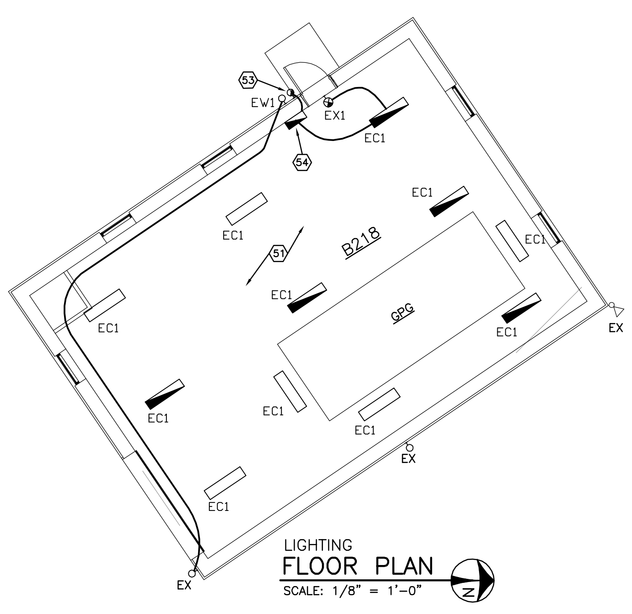

LIGHTING
FLOOR PLAN
SCALE: 1/8" = 1'-0"

SITE PLAN
SCALE: 1/8" = 1'-0"

NOTES

1. EXISTING 7.5MVA, 12,470V TO 4,160Y/2400V DISTRIBUTION CLASS SUBSTATION TRANSFORMER.
2. RELOCATE SPARE 7.5MVA, 12,470V TO 4,160Y/2400V DISTRIBUTION CLASS SUBSTATION TRANSFORMER. PROVIDE CONCRETE BASE PER ARCHITECTURAL DETAILS.
3. SPARE 7.5MVA, 12,470V TO 4,160Y/2400V DISTRIBUTION CLASS SUBSTATION TRANSFORMER.
4. EXISTING MV CIRCUIT BREAKER. ADJUST SETTINGS AS RECOMMENDED BY PROTECTIVE DEVICE STUDY.
5. EXISTING 4,160V ATS.
6. EXISTING WATER VALVE.
7. EXISTING 1.5 MW, 4,160V STAND-BY GENERATOR, WEATHER PROOF HOUSING AND SUB-BASE FUEL TANK.
8. EXISTING WOOD POLE AND CONDUIT RISERS. EXCAVATE AND EXPOSE 18" OF BASE OF POLE. INSPECT FOR ROT/DECAY AND PROVIDE TREATMENT.
9. EXISTING CHAIN LINK FENCE.
10. NEW 1.5 MW, 4,160V STAND-BY GENERATOR, WEATHER PROOF HOUSING AND SUB-BASE FUEL TANK. PROVIDE CONCRETE BASE PER ARCHITECTURAL DETAILS.
11. FUTURE 1.5MW, 4,160V STAND-BY GENERATOR, WEATHER PROOF HOUSING AND SUB-BASE FUEL TANK.
12. NEW GALVANIZED CHAIN LINK FENCE, GATE AND POSTS (8'-0"H) TO MATCH EXISTING. REFER TO SPECIFICATIONS.
13. SAW CUT, EXCAVATE AND PATCH CONCRETE TO ACCOMMODATE NEW FEEDER/PULLBOX/PIPE.
14. NEW 5KV CONDUCTORS IN 5"RMC RUN OVERHEAD WITHIN BUILDING.
15. NEW 5KV CONDUCTORS IN 5"RMC RUN EXPOSED OVERHEAD.
16. PROVIDE NEW PLASTIC COATED FLEXIBLE METAL CONDUIT FOR FINAL CONNECTION TO EXISTING GENERATOR.
17. PENETRATE BUILDING WALL AT SAME LEVEL AS GENERATOR PENETRATION. SEAL PENETRATION WATER-TIGHT.
18. PENETRATE GENERATOR WEATHERPROOF HOUSING AS HIGH AS POSSIBLE OVER DOOR. SEAL PENETRATION WATER-TIGHT.
19. 2-#8, #10 GRD. AND 14-#14 ALL IN 1-2"C. (VDC AND CONTROL) FROM GPG TO EACH GENERATOR. MANUFACTURER TO VERIFY EXACT QUANTITY/TERMINATION LOCATION.
20. TWO 3C-STP (RS-485) CABLES AND THREE 2C-STP CABLES IN 1.5"C. (VOLTAGE/SPEED REGULATION) FROM GPG TO EACH GENERATOR. MANUFACTURER TO VERIFY EXACT QUANTITY/TERMINATION LOCATION.
21. PROVIDE 11"X18" OPEN BOTTOM POLYMER CONCRETE PULLBOX WITH BOLT DOWN COVER, ANSI TIER 15, COVER TO READ "ELECTRIC". INTERCEPT EXISTING CONDUITS FROM GENERATOR 1 TO ATS AND UTILIZE FOR NEW CONTROL CABLING. REFER TO DETAIL D/E6.
22. 10-#14 IN 1"C. (ATS CONTROL) AND 2-#10, #10 GRD. IN SEPARATE 1"C. FROM GPG TO ATS.
23. 2-#14, #14 GRD. AND RS-485 CABLE IN 1"C. (REMOTE ANNUNCIATOR).
24. NEW GENERATOR SURFACE MOUNTED REMOTE ANNUNCIATOR.
25. PROVIDE LEXAN COVER WITH PAD LOCK HASP OVER TOP OF EPO SWITCH TO PERMIT LOCKOUT/TAGOUT OF GENERATOR.
26. INTERCEPT EXISTING 2-5"C. INTO ATS AND UTILIZE FOR NEW 5KV CONDUCTORS.
27. INCLUDE ALL MODIFICATIONS TO EXISTING 5KV TERMINATION PADS REQUIRED, INCLUDING EXTENSIONS, OFFSETS, ETC. TO ACCOMMODATE NEW TERMINATIONS.
28. TWO TIER BATTERY RACK SIZED PER MANUFACTURER'S REQUIREMENTS.
29. NEW 12V WALL MOUNTED BATTERY CHARGER. TIE TROUBLE ALARM INTO SCHNIEDER ELECTRIC GENERATOR/ATS MONITOR/CONTROL SYSTEM.
30. NEW POWER MANHOLE, SUMP PUMP, LADDER, CABLE STANCHIONS, ETC. REFER TO DETAILS ON SHEET E6.
31. PROVIDE 4"H. CONCRETE HOUSEKEEPING PAD.
32. REMOVE AND REPLACE PORTION OF FLOOR SLAB TO ACCOMMODATE NEW UNDERGROUND FEEDERS.
33. EXCAVATE AND EXPOSE BUILDING FOUNDATION. CORE DRILL FOR ALL NEW CONDUIT PENETRATIONS. SEAL ALL PENETRATIONS WATER-TIGHT. COORDINATE ALL PENETRATION SIZES AND LOCATIONS WITH STRUCTURAL ENGINEER.
34. PROTECT EXISTING DUCTBANK.
35. PROVIDE NON-SLIP STEPS AND NON-SLIP FLOORING IN HOUSING.
36. REMOVE TWO SPARE 100A/3P FUSIBLE SWITCHES AND PROVIDE NEW 200A/3P FUSIBLE SWITCH (FUSED AT 125A LPN-RK (QTY. 2)).
37. RUN 3-#1/0, 1-#6 GRD. IN 1.5"C.
38. PROVIDE MODBUS (RS-485) CABLE FROM GPG BREAKER COMMUNICATIONS MODULES TO EXISTING SCHNEIDER ELECTRIC GENERATOR/ATS MONITOR/CONTROL SYSTEM. COORDINATE ALL REQUIREMENTS WITH SCHNEIDER ELECTRIC.
39. 125A, 208/120V-1PH-3W MAIN BREAKER LOAD CENTER SERVING BLOCK HEATER, BATTERY CHARGER, LIGHTS, RECEPTACLES, ETC. FURNISHED WITH GENERATOR.
40. UTILIZE SPARE 120V-20A/1P CIRCUIT BREAKER.
41. STUB SPARE 2-1.5" RMC SPARE UP AND CAP 24" ABOVE FLOOR.
42. PROVIDE 120V SIMPLEX RECEPTACLE (WP/GFCI) FOR SUMP PUMP.
43. EXISTING SCHNEIDER ELECTRIC POWER MONITOR.
44. EXISTING SCHNEIDER ELECTRIC ATS MONITOR/CONTROL PLC CABINET.
45. EXISTING SCHNEIDER ELECTRIC ATS MONITOR/CONTROL PLC ANNUNCIATOR SCREEN.
46. EXISTING GENERATOR REMOTE ANNUNCIATOR.
47. NEW 5KV LOAD BANK TERMINATION CABINET. REFER TO DETAIL G/E1. LABEL COVER "5KV LOAD BANK".
48. PROVIDE NEW 120V-20A/1P CIRCUIT BREAKER IN EXISTING PANEL.
49. PROVIDE NOTCH IN PRECAST TRENCH AND SET OVER TOP OF EXISTING 5" CONDUITS. INTERCEPT AND UTILIZE ONCE READY FOR CUTOVER. FIELD VERIFY EXACT DIMENSIONS PRIOR TO ORDERING. SEAL SPACE BETWEEN CONDUIT AND CONDUCTORS WATER-TIGHT.
50. PROVIDE PRECAST CONCRETE UNDERGROUND UTILITY TRENCH. INCLUDE ALL SAW CUTTING, EXCAVATION, BACKFILL, CONCRETE FLATWORK, ETC. FOR A COMPLETE INSTALLATION. REFER TO DETAIL J/E1.
51. CONNECT TO EXISTING LIGHTING CIRCUIT. PROVIDE UNSWITCHED HOT FOR BATTERY BACKUP.
52. EXTEND PVC STORM DISCHARGE PIPE CONNECT TO CATCH BASIN. SEAL STORM LINE WATER TIGHT AROUND NEW PENETRATION. SIZE AS INDICATED ON PLANS.
53. PROVIDE WEATHERPROOF METAL CHROME SEALED BEAM 6V PAR 36 LAMP HEAD, 8W MOUNTED ON WEATHERPROOF BACKBOX (8'-0" AFF).
54. PROVIDE EMERGENCY BATTERY PACK (LESS HEADS) 6V-12W FOR EXTERIOR LAMP HEAD ILLUMINATION (6'-6" AFF).
55. REFER TO SPECIFICATIONS FOR CONSTRUCTION DETAILS ON PARTIALLY COMPLETED DUCT BANKS. PROVIDE LOCATING PIN AT GRADE.
56. 36-#14 IN 1.25"C. FOR GPG/MVSG SIGNAL CABLING.
57. PROVIDE SIMPLEX SMOKE DETECTOR TIED INTO BLDG. T233 LOCATED APPROXIMATELY 150' NORTH OF B21B. PROVIDE 1-1"C. DIRECT BURIED BETWEEN BUILDINGS-UPDATE CAMPUS SYSTEM GRAPHICS.

GENERAL NOTES

A. CONTRACTOR TO VERIFY ALL FIELD CONDITIONS AT THE JOB SITE.

B. PROVIDE RMC ELBOWS WHERE ALL UNDERGROUND PVC CONDUIT EMERGES FROM GRADE.

C. COMPLETELY ENCLOSE THE EXCAVATION AND WORK AREA WITH SAFETY FENCING. FENCING SHALL BE METAL CHAIN LINK TYPE.

D. OSHA APPROVED TRENCH SAFETY PROTECTION MEASURES MUST BE PROVIDED AT ALL TIMES WHEN EXCAVATED DEPTHS WARRANT.

E. NOT ALL EXISTING UTILITIES ARE NECESSARILY SHOWN. CONTRACTOR SHALL PROVIDE A UTILITY LOCATING SERVICE TO HAVE ALL EXISTING UTILITIES LOCATED WITHIN THE AREA OF PROPOSED WORK. CONTRACTOR SHALL NOTIFY THE COTR ONCE ALL UTILITIES ARE MARKED. THE COTR AND ENGINEERING STAFF SHALL REVIEW THE MARKINGS.

F. THE CONTRACTOR SHALL WEAR PROTECTIVE SUIT AND BREATHING PROTECTION IN ALL CRAWL SPACES.

100% SUBMITTAL FULLY SPRINKLERED

Revisions	Date

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Drawing Title: SITE PLAN - NEW WORK
Approved: Project Director

Project Title: FCA - REPLACE / ADD GENERATORS
Location: CHILLICOTHE, OHIO
Date: 12/20/2011 | Checked: RAR | Drawn: MSG

Project Number: 538-12-100
Building Number: CAMPUS
Drawing Number: E8
Dwg. -- of --

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231

PLOTTED BY: sethun
PLOT/PLN DATE: April 24, 2012