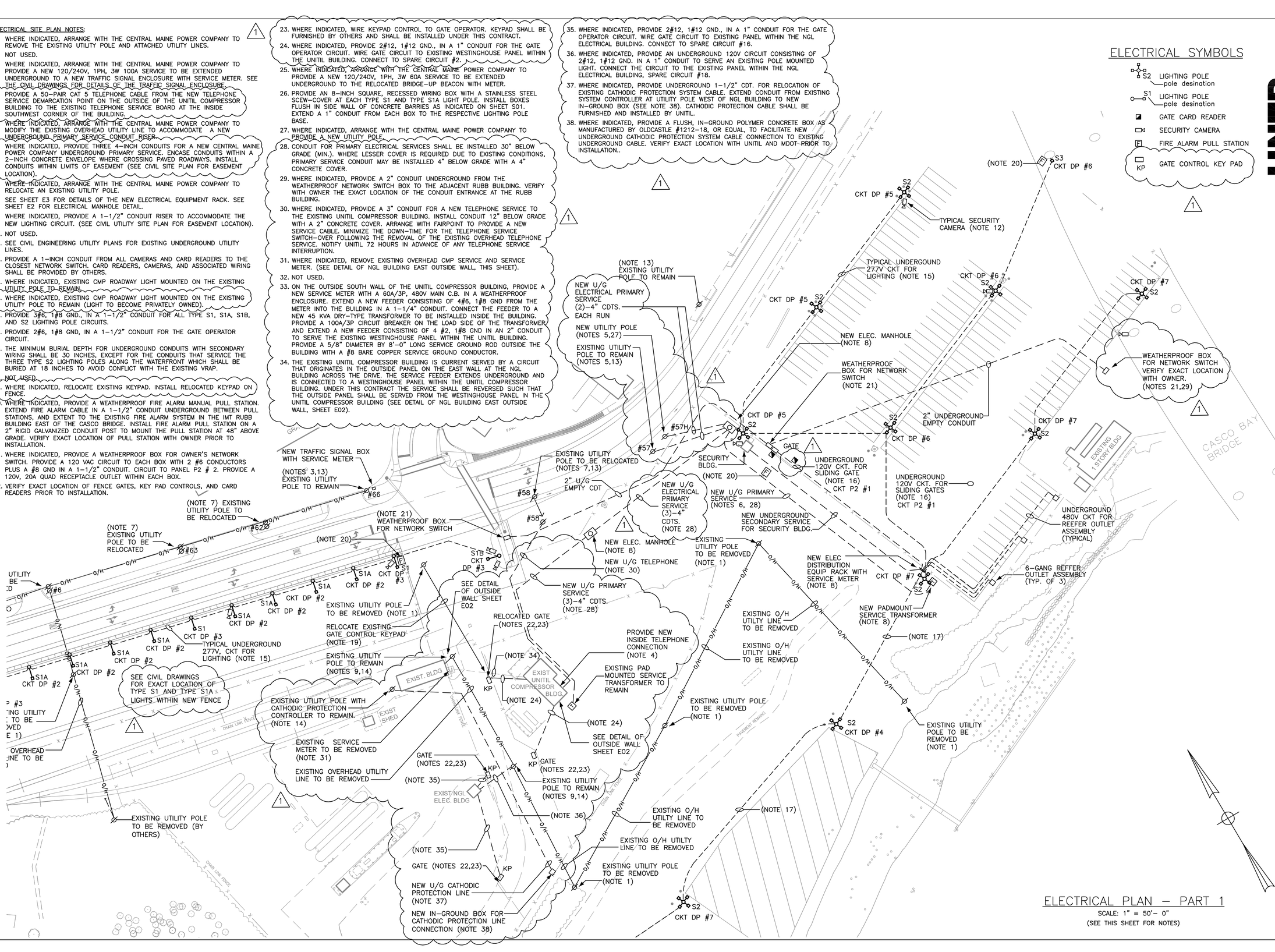
ELECTRICAL SITE PLAN NOTES:

1. WHERE INDICATED, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO REMOVE THE EXISTING UTILITY POLE AND ATTACHED UTILITY LINES.
2. NOT USED.
3. WHERE INDICATED, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO PROVIDE A NEW 120/240V, 1PH, 3W 100A SERVICE TO BE EXTENDED UNDERGROUND TO A NEW TRAFFIC SIGNAL ENCLOSURE WITH SERVICE METER. SEE THE CIVIL DRAWINGS FOR DETAILS OF THE TRAFFIC SIGNAL ENCLOSURE.
4. PROVIDE A 50–PAIR CAT 5 TELEPHONE CABLE FROM THE NEW TELEPHONE SERVICE DEMARCATION POINT ON THE OUTSIDE OF THE UNITIL COMPRESSOR BUILDING TO THE EXISTING TELEPHONE SERVICE BOARD AT THE INSIDE SOUTHWEST CORNER OF THE BUILDING.
5. WHERE INDICATED, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO MODIFY THE EXISTING OVERHEAD UTILITY LINE TO ACCOMMODATE A NEW UNDERGROUND PRIMARY SERVICE CONDUIT RISER.
6. WHERE INDICATED, PROVIDE THREE 4–INCH CONDUITS FOR A NEW CENTRAL MAINE POWER COMPANY UNDERGROUND PRIMARY SERVICE. ENCASE CONDUITS WITHIN A 2–INCH CONCRETE ENVELOPE WHERE CROSSING PAVED ROADWAYS. INSTALL CONDUITS WITHIN LIMITS OF EASEMENT (SEE CIVIL SITE PLAN FOR EASEMENT LOCATION).
7. WHERE INDICATED, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO RELOCATE AN EXISTING UTILITY POLE.
8. SEE SHEET E3 FOR DETAILS OF THE NEW ELECTRICAL EQUIPMENT RACK. SEE SHEET E2 FOR ELECTRICAL MANHOLE DETAIL.
9. WHERE INDICATED, PROVIDE A 1–1/2" CONDUIT RISER TO ACCOMMODATE THE NEW LIGHTING CIRCUIT. (SEE CIVIL UTILITY SITE PLAN FOR EASEMENT LOCATION).
10. NOT USED.
11. SEE CIVIL ENGINEERING UTILITY PLANS FOR EXISTING UNDERGROUND UTILITY LINES.
12. PROVIDE A 1–INCH CONDUIT FROM ALL CAMERAS AND CARD READERS TO THE CLOSEST NETWORK SWITCH. CARD READERS, CAMERAS, AND ASSOCIATED WIRING SHALL BE PROVIDED BY OTHERS.
13. WHERE INDICATED, EXISTING CMP ROADWAY LIGHT MOUNTED ON THE EXISTING UTILITY POLE TO REMAIN.
14. WHERE INDICATED, EXISTING CMP ROADWAY LIGHT MOUNTED ON THE EXISTING UTILITY POLE TO REMAIN (LIGHT TO BECOME PRIVATELY OWNED).
15. PROVIDE 3#6, 1#8 GND., IN A 1–1/2" CONDUIT FOR ALL TYPE S1, S1A, S1B, AND S2 LIGHTING POLE CIRCUITS.
16. PROVIDE 2#6, 1#8 GND, IN A 1–1/2" CONDUIT FOR THE GATE OPERATOR CIRCUIT.
17. THE MINIMUM BURIAL DEPTH FOR UNDERGROUND CONDUITS WITH SECONDARY WIRING SHALL BE 30 INCHES, EXCEPT FOR THE CONDUITS THAT SERVICE THE THREE TYPE S2 LIGHTING POLES ALONG THE WATERFRONT WHICH SHALL BE BURIED AT 18 INCHES TO AVOID CONFLICT WITH THE EXISTING VRAP.
18. NOT USED.
19. WHERE INDICATED, RELOCATE EXISTING KEYPAD. INSTALL RELOCATED KEYPAD ON FENCE.
20. WHERE INDICATED, PROVIDE A WEATHERPROOF FIRE ALARM MANUAL PULL STATION. EXTEND FIRE ALARM CABLE IN A 1–1/2" CONDUIT UNDERGROUND BETWEEN PULL STATIONS, AND EXTENT TO THE EXISTING FIRE ALARM SYSTEM IN THE IMT RUBB BUILDING EAST OF THE CASCO BRIDGE. INSTALL FIRE ALARM PULL STATION ON A 2" RIGID GALVANIZED CONDUIT POST TO MOUNT THE PULL STATION AT 48" ABOVE GRADE. VERIFY EXACT LOCATION OF PULL STATION WITH OWNER PRIOR TO INSTALLATION.
21. WHERE INDICATED, PROVIDE A WEATHERPROOF BOX FOR OWNER'S NETWORK SWITCH. PROVIDE A 120 VAC CIRCUIT TO EACH BOX WITH 2 #6 CONDUCTORS PLUS A #8 GND IN A 1–1/2" CONDUIT. CIRCUIT TO PANEL P2 # 2. PROVIDE A 120V, 20A QUAD RECEPTACLE OUTLET WITHIN EACH BOX.
22. VERIFY EXACT LOCATION OF FENCE GATES, KEY PAD CONTROLS, AND CARD READERS PRIOR TO INSTALLATION.
23. WHERE INDICATED, WIRE KEYPAD CONTROL TO GATE OPERATOR. KEYPAD SHALL BE FURNISHED BY OTHERS AND SHALL BE INSTALLED UNDER THIS CONTRACT.
24. WHERE INDICATED, PROVIDE 2#12, 1#12 GND., IN A 1" CONDUIT FOR THE GATE OPERATOR CIRCUIT. WIRE GATE CIRCUIT TO EXISTING WESTINGHOUSE PANEL WITHIN THE UNITIL BUILDING. CONNECT TO SPARE CIRCUIT #2.
25. WHERE INDICATED, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO PROVIDE A NEW 120/240V, 1PH, 3W 60A SERVICE TO BE EXTENDED UNDERGROUND TO THE RELOCATED BRIDGE–UP BEACON WITH METER.
26. PROVIDE AN 8–INCH SQUARE, RECESSED WIRING BOX WITH A STAINLESS STEEL SCEW–COVER AT EACH TYPE S1 AND TYPE S1A LIGHT POLE. INSTALL BOXES FLUSH IN SIDE WALL OF CONCRETE BARRIES AS INDICATED ON SHEET S01. EXTEND A 1" CONDUIT FROM EACH BOX TO THE RESPECTIVE LIGHTING POLE BASE.
27. WHERE INDICATED, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO PROVIDE A NEW UTILITY POLE.
28. CONDUIT FOR PRIMARY ELECTRICAL SERVICES SHALL BE INSTALLED 30" BELOW GRADE (MIN.). WHERE LESSER COVER IS REQUIRED DUE TO EXISTING CONDITIONS, PRIMARY SERVICE CONDUIT MAY BE INSTALLED 4" BELOW GRADE WITH A 4" CONCRETE COVER.
29. WHERE INDICATED, PROVIDE A 2" CONDUIT UNDERGROUND FROM THE WEATHERPROOF NETWORK SWITCH BOX TO THE ADJACENT RUBB BUILDING. VERIFY WITH OWNER THE EXACT LOCATION OF THE CONDUIT ENTRANCE AT THE RUBB BUILDING.
30. WHERE INDICATED, PROVIDE A 3" CONDUIT FOR A NEW TELEPHONE SERVICE TO THE EXISTING UNITIL COMPRESSOR BUILDING. INSTALL CONDUIT 12" BELOW GRADE WITH A 2" CONCRETE COVER. ARRANGE WITH FAIRPOINT TO PROVIDE A NEW SERVICE CABLE. MINIMIZE THE DOWN–TIME FOR THE TELEPHONE SERVICE SWITCH–OVER FOLLOWING THE REMOVAL OF THE EXISTING OVERHEAD TELEPHONE SERVICE. NOTIFY UNITIL 72 HOURS IN ADVANCE OF ANY TELEPHONE SERVICE INTERRUPTION.
31. WHERE INDICATED, REMOVE EXISTING OVERHEAD CMP SERVICE AND SERVICE METER. (SEE DETAIL OF NGL BUILDING EAST OUTSIDE WALL, THIS SHEET).
32. NOT USED.
33. ON THE OUTSIDE SOUTH WALL OF THE UNITIL COMPRESSOR BUILDING, PROVIDE A NEW SERVICE METER WITH A 60A/3P, 480V MAIN C.B. IN A WEATHERPROOF ENCLOSURE. EXTEND A NEW FEEDER CONSISTING OF 4#6, 1#8 GND FROM THE METER INTO THE BUILDING IN A 1–1/4" CONDUIT. CONNECT THE FEEDER TO A NEW 45 KVA DRY–TYPE TRANSFORMER TO BE INSTALLED INSIDE THE BUILDING. PROVIDE A 100A/3P CIRCUIT BREAKER ON THE LOAD SIDE OF THE TRANSFORMER AND EXTEND A NEW FEEDER CONSISTING OF 4 #2, 1#8 GND IN AN 2" CONDUIT TO SERVE THE EXISTING WESTINGHOUSE PANEL WITHIN THE UNITIL BUILDING. PROVIDE A 5/8" DIAMETER BY 8'–0" LONG SERVICE GROUND ROD OUTSIDE THE BUILDING WITH A #8 BARE COPPER SERVICE GROUND CONDUCTOR.
34. THE EXISTING UNITIL COMPRESSOR BUILDING IS CURRENT SERVED BY A CIRCUIT THAT ORIGINATES IN THE OUTSIDE PANEL ON THE EAST WALL AT THE NGL BUILDING ACROSS THE DRIVE. THE SERVICE FEEDER EXTENDS UNDERGROUND AND IS CONNECTED TO A WESTINGHOUSE PANEL WITHIN THE UNITIL COMPRESSOR BUILDING. UNDER THIS CONTRACT THE SERVICE SHALL BE REVERSED SUCH THAT THE OUTSIDE PANEL SHALL BE SERVED FROM THE WESTINGHOUSE PANEL IN THE UNITIL COMPRESSOR BUILDING (SEE DETAIL OF NGL BUILDING EAST OUTSIDE WALL, SHEET E02).
35. WHERE INDICATED, PROVIDE 2#12, 1#12 GND., IN A 1" CONDUIT FOR THE GATE OPERATOR CIRCUIT. WIRE GATE CIRCUIT TO EXISTING PANEL WITHIN THE NGL ELECTRICAL BUILDING. CONNECT TO SPARE CIRCUIT #16.
36. WHERE INDICATED, PROVIDE AN UNDERGROUND 120V CIRCUIT CONSISTING OF 2#12, 1#12 GND. IN A 1" CONDUIT TO SERVE AN EXISTING POLE MOUNTED LIGHT. CONNECT THE CIRCUIT TO THE EXISTING PANEL WITHIN THE NGL ELECTRICAL BUILDING, SPARE CIRCUIT #18.
37. WHERE INDICATED, PROVIDE UNDERGROUND 1–1/2" CDT. FOR RELOCATION OF EXISTING CATHODIC PROTECTION SYSTEM CABLE. EXTEND CONDUIT FROM EXISTING SYSTEM CONTROLLER AT UTILITY POLE WEST OF NGL BUILDING TO NEW IN–GROUND BOX (SEE NOTE 38). CATHODIC PROTECTION CABLE SHALL BE FURNISHED AND INSTALLED BY UNITIL.
38. WHERE INDICATED, PROVIDE A FLUSH, IN–GROUND POLYMER CONCRETE BOX AS MANUFACTURED BY OLDCASTLE #1212–18, OR EQUAL, TO FACILITATE NEW UNDERGROUND CATHODIC PROTECTION SYSTEM CABLE CONNECTION TO EXISTING UNDERGROUND CABLE. VERIFY EXACT LOCATION WITH UNITIL AND MDOT PRIOR TO INSTALLATION..

ELECTRICAL SYMBOLS

- S2 — LIGHTING POLE pole desination
- S1 — LIGHTING POLE pole desination
- GATE CARD READER
- SECURITY CAMERA
- F — FIRE ALARM PULL STATION
- KP — GATE CONTROL KEY PAD



ELECTRICAL PLAN – PART 1

SCALE: 1" = 50'– 0"

(SEE THIS SHEET FOR NOTES)

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

62506-DS-001

WIN
-

STATE OF MAINE — LAWRENCE E. BARTLETT — No. 7928 — REGISTERED PROFESSIONAL ENGINEER

Lawrence E. Bartlett
10/1/14

	BY	DATE
PROJ. MANAGER CRAIG R. MORIN		
DESIGN–DETAILED	LEB	07/11/14
CHECKED–REVIEWED	-	-
DESIGN2–DETAILED2	-	-
DESIGN3–DETAILED3	-	-
REVISIONS 1	QMP/NGL/UNITIL REV.	10/01/14
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

Lawrence E. Bartlett
SIGNATURE
7928
P.E. NUMBER
02/26/14
DATE
06/26/14

PORTLAND INTERNATIONAL MARINE TERMINAL
EXISTING LAYDOWN AND CONNECTING CORRIDOR CONNECTION
PORTLAND CUMBERLAND COUNTY

ELECTRICAL PLAN – PART 1

SHEET NUMBER

E01

027 OF 116