DUCTBANK SCHEDULE

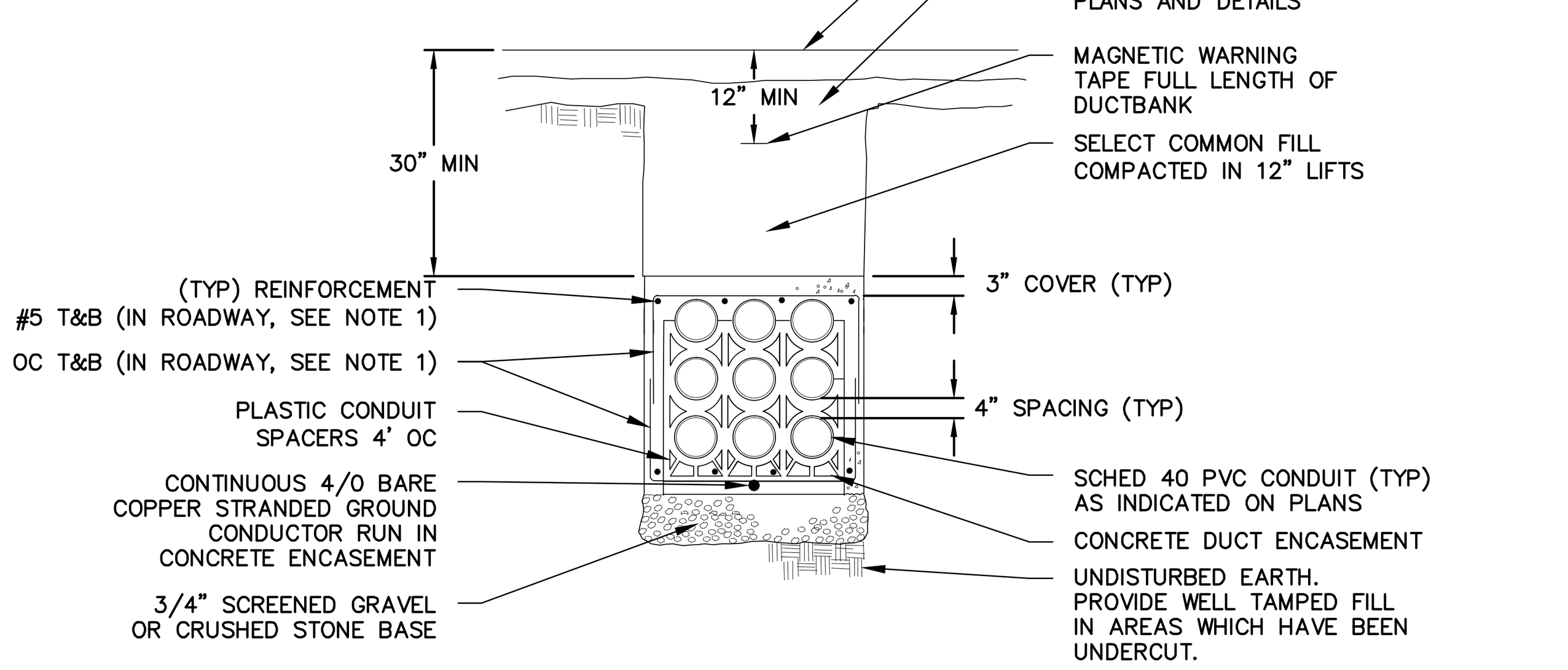
DUCTBANK	TYPE	SIZE	FROM	TO	DESCRIPTION	NOTES
A	POWER	5"	UTILITY POLE	MANHOLE	PRIMARY ELECTRIC SERVICE	DUCT BANK TYPICAL FOR BOTH POLE RISERS
	POWER	5"	UTILITY POLE	MANHOLE	PRIMARY ELECTRIC SERVICE	
B	POWER	5"	MANHOLE	MANHOLE	PRIMARY ELECTRIC SERVICE	
	POWER	5"	MANHOLE	MANHOLE	PRIMARY ELECTRIC SERVICE	
	POWER	5"	MANHOLE	MANHOLE	SPARE POWER	
C	TELE/DATA	4"	UTILITY POLE	MANHOLE	TELEPHONE	
	TELE/DATA	4"	UTILITY POLE	MANHOLE	FIBER COMMUNICATIONS	
	TELE/DATA	4"	UTILITY POLE	MANHOLE	SPARE	
D	POWER	5"	MANHOLE	MANHOLE	PRIMARY ELECTRIC SERVICE	PROVIDE A MINIMUM 1'-0" SPACING BETWEEN ALL POWER AND TELE/DATA CONDUITS
	POWER	5"	MANHOLE	MANHOLE	PRIMARY ELECTRIC SERVICE	
	POWER	5"	MANHOLE	MANHOLE	SPARE POWER	
	TELE/DATA	4"	MANHOLE	MANHOLE	TELEPHONE	
	TELE/DATA	4"	MANHOLE	MANHOLE	FIBER COMMUNICATIONS	
	TELE/DATA	4"	MANHOLE	MANHOLE	SPARE	
E	POWER	1"	LIGHTING CONTROL PANEL	LIGHT POLE BASES	SITE LIGHTING POWER	

2

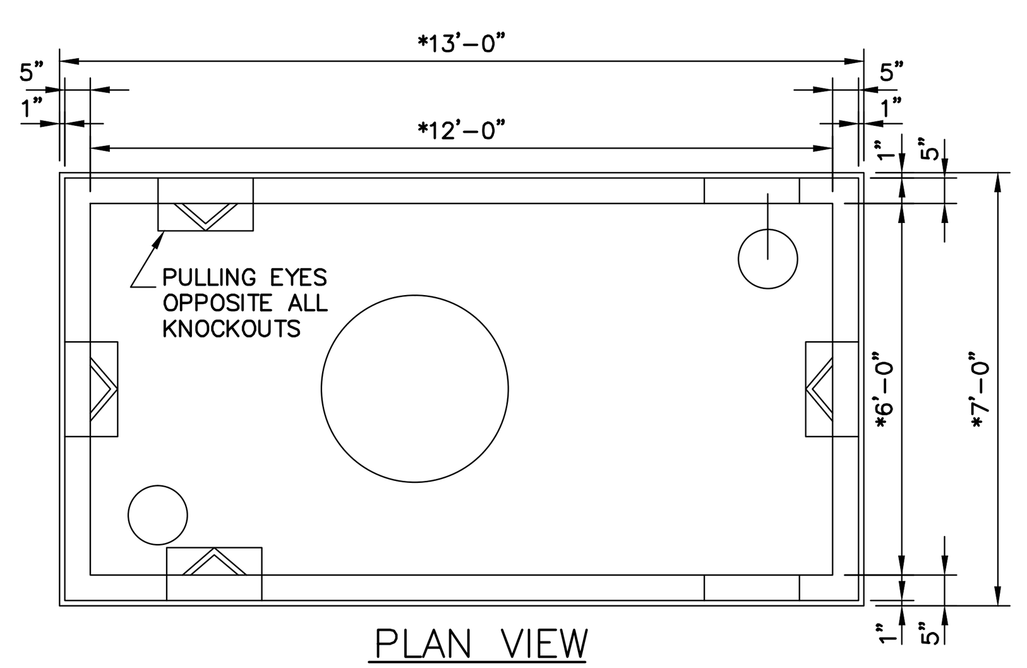
DUCTBANK SCHEDULE

SITE DUCTBANK NOTES:

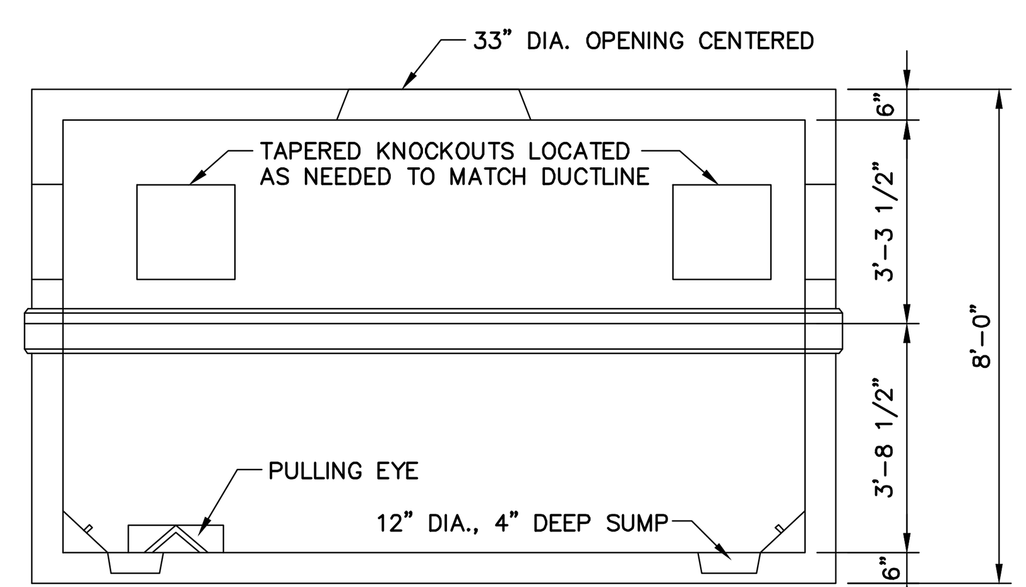
1. REBAR REINFORCEMENT IS REQUIRED BENEATH ROAD CROSSINGS ONLY, TO 3'–0" OF EITHER SIDE.
2. ALL CONDUITS, INCLUDING RISER CONDUITS, NEED TO BE SLOPED TO DRAIN INTO MANHOLES OR TRANSFORMER FOUNDATIONS, 3" PER 100'.
3. INSTALL A PULLING LINE WITHIN EACH CONDUIT.
4. CONDUIT SHALL BE SCHEDULE 40 PVC, CONDUIT SWEEPS SHALL BE MIN. 48" RADIUS RIGID GALV. STEEL.



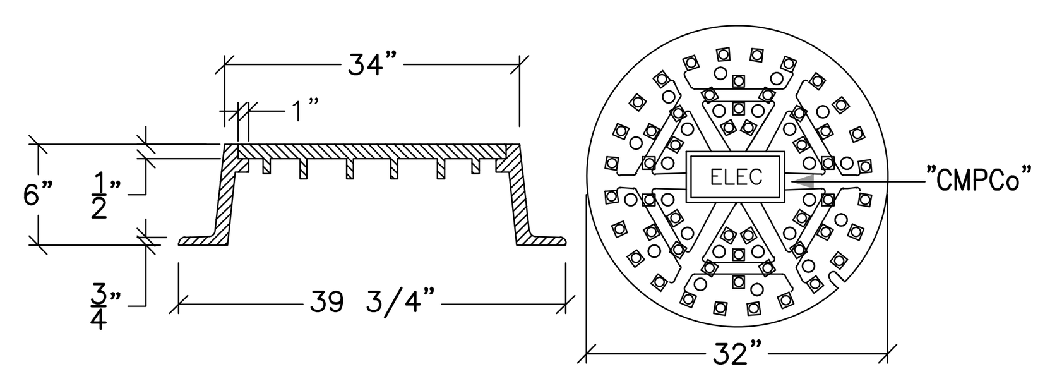
TYPICAL CONCRETE ENCASED UNDERGROUND DUCT BANK DETAIL
SCALE: NTS



PLAN VIEW
*SEE NOTE 2



SIDE VIEW

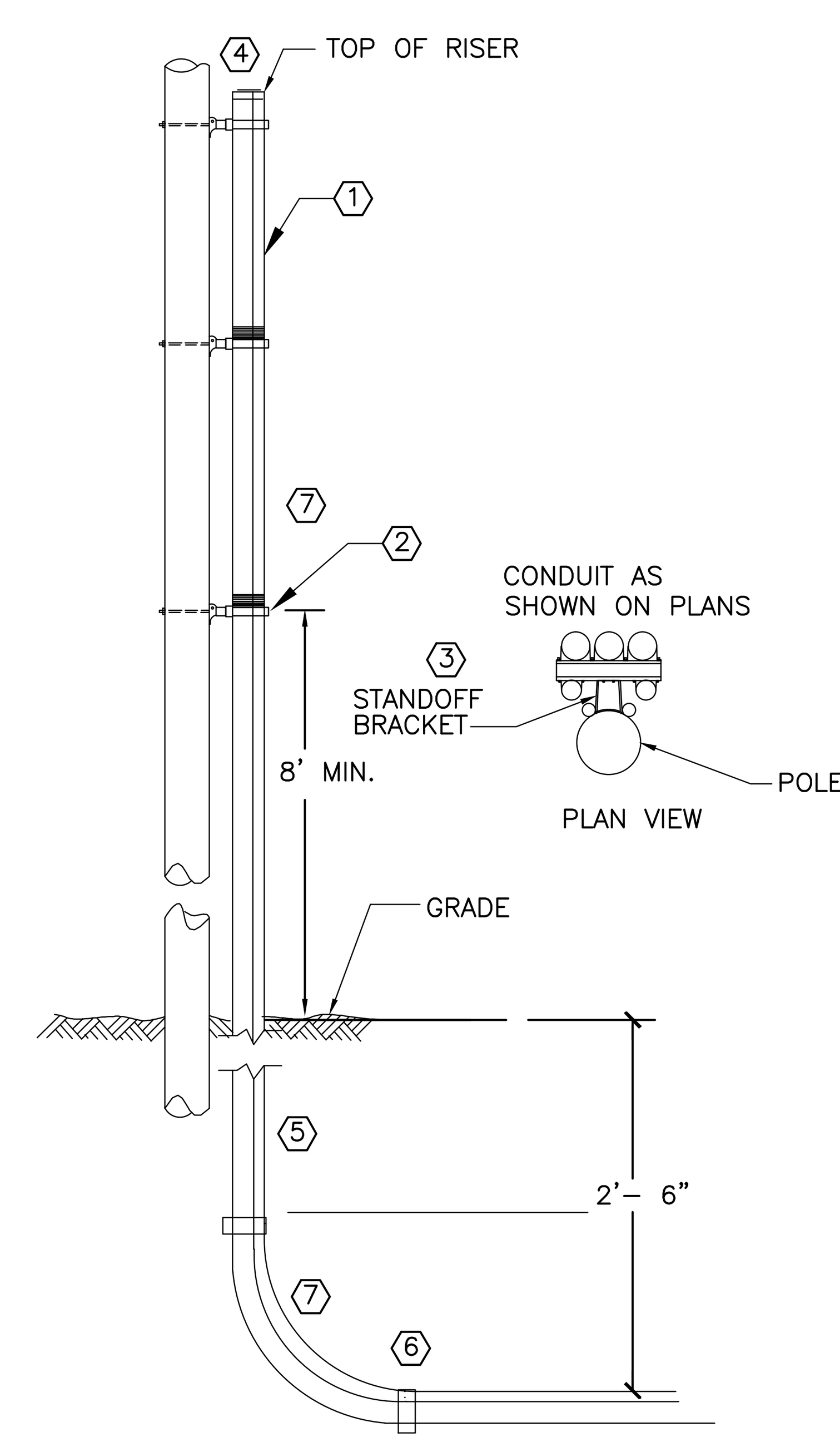


COVER DETAIL

NOTES (TYPICAL FOR ELEC MANHOLES):

1. PROVIDE 38Y STYLE ELECTRIC MANHOLE PER CENTRAL MAINE POWER (CMP) REQUIREMENTS. COORDINATE ALL WORK WITH CMP.
2. DETAIL DEPICTS ELECTRICAL POWER MANHOLE CONFIGURATION; COMMUNICATIONS MANHOLES SHALL BE 4'X6' AS REQUIRED BY THE COMMUNICATIONS COMPANY. ADJUST MANHOLE COVER LABEL ACCORDINGLY.
3. CONCRETE: 4,000 PSI @ 28 DAYS.
4. USE 32" COVER AND FRAME MARKED CMPCo. BRICK AS REQUIRED TO REACH FINISHED GRADE (MINIMUM ONE COURSE).
5. MANHOLE SHALL BE SET ON A MIN. 12" OF 3/4" CRUSHED STONE.
6. VAULT SHALL BE DESIGNED TO WITHSTAND H20 WHEEL LOADING WITH 6 INCHES OF OVERBURDEN. THE DESIGN SHALL ALSO COMPLY WITH THE STRENGTH REQUIREMENTS OF NATIONAL ELECTRICAL SAFETY CODE SECTION 323A. PROVIDE SHOP DRAWINGS STAMPED BY A STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER.
7. MANHOLE FRAMES AND COVERS ARE TO BE MACHINED TO A SMOOTH FIT AND SHALL BE OF GRAY CAST IRON.
8. COVER SHALL HAVE DIAMOND TOP SURFACE IN ACCORDANCE WITH CMP REQUIREMENTS.
9. JOINTS SHALL BE SEALED WITH ASPHALT.
10. CABLES SHALL BE RACKED ALONG ONE WALL ONLY.
11. CONDUITS ENTERING CONCRETE STRUCTURES SHALL BE SET BACK FROM THE INSIDE WALL 1 TO 2 INCHES AND THE SPACE WITHIN THE KNOCKOUT SURROUNDING THE CONDUITS COMPLETELY FILLED WITH MORTAR TO PREVENT SOIL OR GROUNDWATER FROM ENTERING STRUCTURE. INSIDE THE STRUCTURE THE MORTAR SHALL BE FINISHED AND BEVELED FROM THE CONDUIT ENDS TO THE INSIDE WALL FACE TO COVER AND SMOOTH THE EDGES OF THE KNOCKOUT.

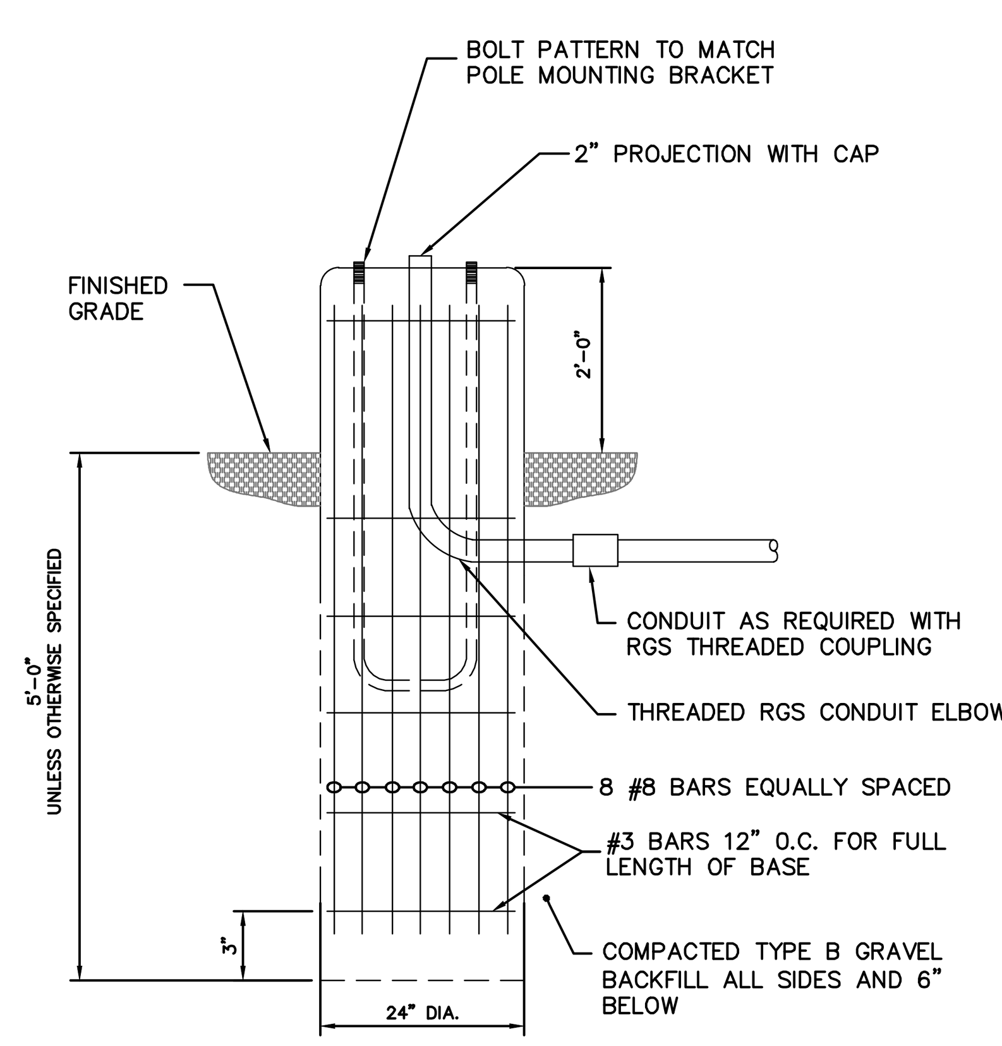
ELECTRICAL & TEL/COMM MANHOLE DETAIL
SCALE: NTS

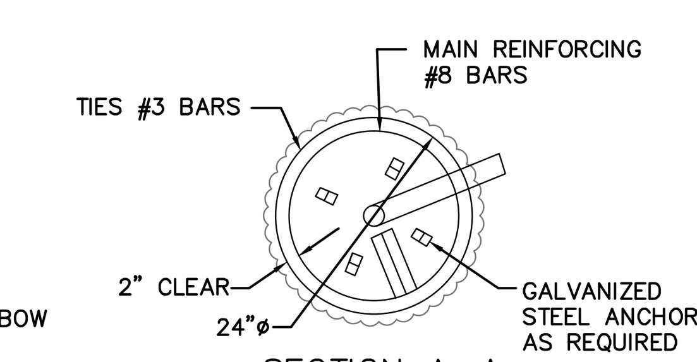


NOTES (TYPICAL FOR POLE RISERS):

1. TOP CONDUIT SECTIONS LONGER THAN 24" MUST BE SUPPORTED.
2. LOWEST BRACKET SHALL BE MINIMUM OF 8 FEET ABOVE FINISHED GRADE.
3. ONE BRACKET SHALL BE USED TO SUPPORT EACH 10–FOOT SECTION OF CONDUIT WITH THE BRACKET
4. SEAL TOP OF CONDUIT WITH POLYURETHANE SEALER. TOP OF CONDUIT SHALL HAVE A DOUBLE NON–THREADED PLASTIC COUPLING. TOP OF CONDUIT SHALL EXTEND 4" ABOVE PRIMARY NEUTRAL.
5. RIGID GALVANIZED STEEL (RGS) CONDUIT.
6. PVC TO STEEL RGS CONDUIT COUPLING.
7. LONG RADIUS SWEEP RGS CONDUIT ELBOW.

TYPICAL RISER POLE DETAIL
SCALE: NTS





SECTION A–A

NOTE:

POLE AND FIXTURE SHALL BE HOLOPHANE LEDgend ROADWAY LED WITH ROUND TAPERED ALUMINUM POLE 25FT, 8.0 x 4.5 x .156 WALL: 1209–1 MOUNTING ARM, BLACK

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LIGHT POLE AND BASE DETAIL
SCALE: NTS

REVIEW SET
NOT FOR CONSTRUCTION

WOODARD & CURRAN
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Portland, Maine 04102
800.426.4262 | www.woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

STATE OF MAINE TEDD M. GIFFORD NO. 10271 LICENSED PROFESSIONAL ENGINEER

REV	DESCRIPTION	DATE
2	LIGHTING CHANGE ORDER	1/11/13
1	ISSUED FOR BID	8/12/12

DESIGNED BY: SEH CHECKED BY: TMG
DRAWN BY: SEH 20384863–E03.dwg

ELECTRICAL DETAILS

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE

PORTLAND TECHNOLOGY PARK

JOB NO.: 203848.63
DATE: AUGUST 12, 2012
SCALE: AS NOTED
SHEET: 22 OF 22

E-03