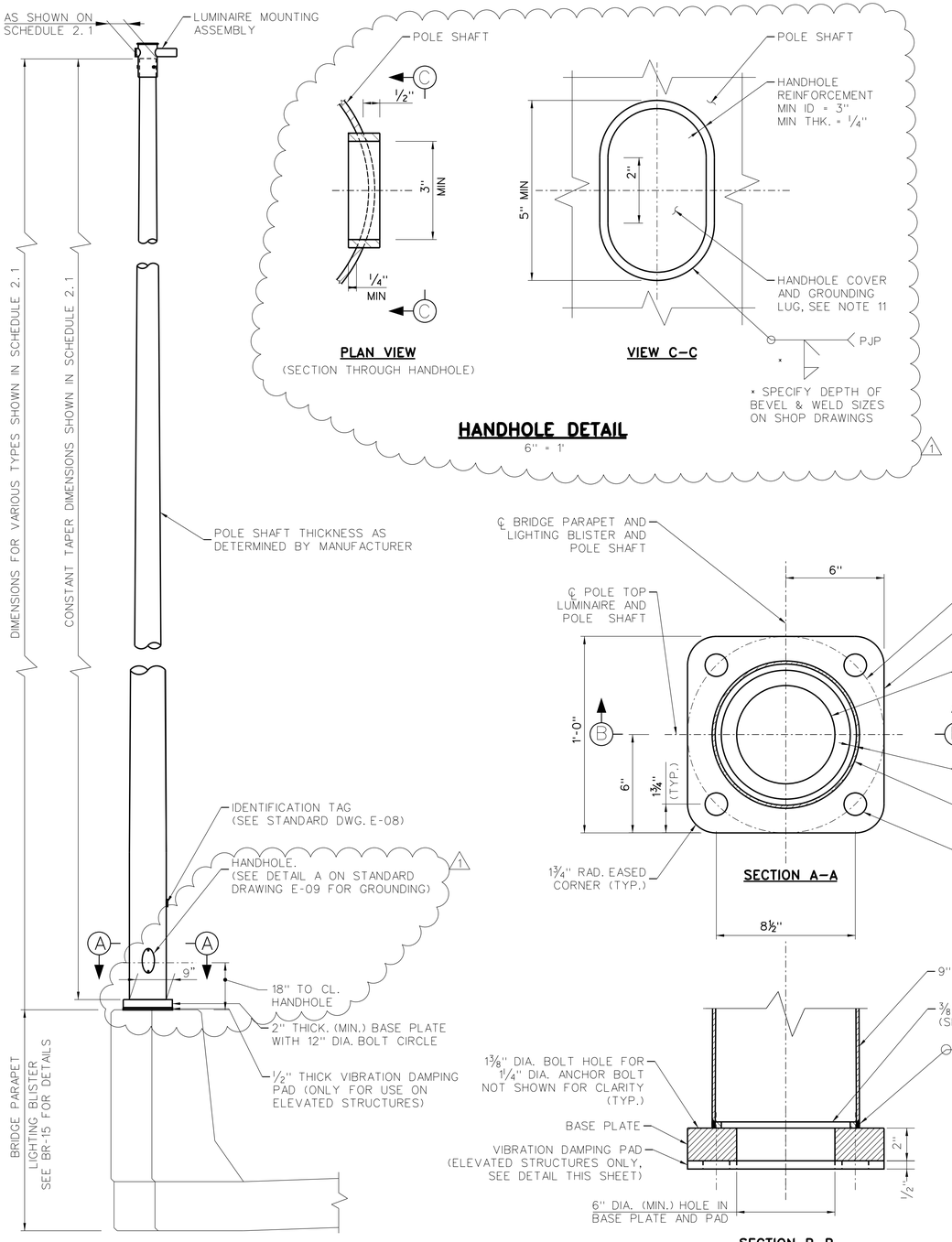
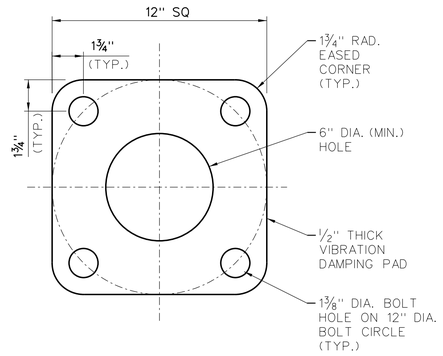


STEEL LIGHTING STANDARD
3/4" = 1'

PLAN VIEW
(SECTION THROUGH HANDHOLE)

VIEW C–C

HANDHOLE DETAIL
6" = 1'



VIBRATION DAMPENING PAD
3" = 1'
(ONLY FOR USE ON ELEVATED STRUCTURES)

SECTION A–A

SECTION B–B

BASE PLATE DETAIL
3" = 1'

NOTES:

1. THE DETAILS AND PROVISIONS SHOWN ON THIS SHEET SHALL BE APPLICABLE TO ALL LIGHTING STANDARDS WITHOUT TRANSFORMER BASE.
2. THESE DETAILS AND PROVISIONS ARE EXPLICITLY PRESENTED AS MINIMUM ACCEPTABLE CRITERIA. THEY SHALL NOT BE USED FOR DESIGN WITHOUT SUPPORTING DESIGN CALCULATIONS PREPARED BY THE LIGHTING STANDARD MANUFACTURER. THE LIGHTING STANDARD MANUFACTURER SHALL BE RESPONSIBLE FOR ALL ASPECTS OF DESIGN AND FABRICATION OF LIGHTING STANDARDS.
3. SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE AUTHORITY FOR REVIEW IN ACCORDANCE WITH SECTION 104.08 OF THE SPECIFICATIONS AND SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY. ALL DESIGNS SHALL CONSIDER THE BRIDGE MOUNTED LIGHTING STANDARD HEIGHT ABOVE LOCAL GRADE BELOW THE BRIDGE, BUT SHALL NOT BE CONSIDERED AT LESS THAN 135' ABOVE GRADE AND AT BASIC WIND SPEEDS LESS THAN 110MPH, SHOP DRAWINGS SHALL INCLUDE ALL DETAILS AND DIMENSIONS REQUIRED TO FABRICATE THE LIGHTING STANDARD(S) AND FURNISH ALL APPURTENANT HARDWARE. DESIGN CALCULATIONS SUBMITTED AS SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, CURRENT EDITION. BRIDGE MOUNTED LIGHTING STANDARDS SHALL NOT BE CONSIDERED AS 'COMMON POLES' AND THEREFORE SHALL INCLUDE STRENGTH AND FATIGUE DESIGN LOAD CASES. FOR THE PURPOSES OF FATIGUE DESIGN THE FOLLOWING SHALL BE CONSIDERED:
   - VORTEX SHEDDING LOAD CASE
   - NATURAL WIND GUST LOAD CASE
   - FATIGUE IMPORTANCE CATEGORY (IF) = 1.0
4. POLES AS SHOWN ON THIS SHEET SHALL BE DESIGNED TO SUPPORT A LUMINAIRE FIXTURE WEIGHING 60 LBS WITH AN EPA OF 1.5 SF.
5. LIGHTING STANDARDS TO BE PLACED ON BRIDGES SHALL BE CONSTRUCTED FROM STEEL ALLOY, AS PERMITTED BELOW.
6. STEEL ALLOY SHALL CONFORM TO ASTM A572, GR. 55 OR 65 OR ASTM A595 GR. A WITH A MINIMUM YIELD STRENGTH OF 55 KSI. ALL STEEL POLE SHAFTS SHALL BE ROUND. CIRCUMFERENTIAL WELDS AND BUTT WELDS, AND TELESCOPIC SLIP FIT SPLICES WILL NOT BE PERMITTED. ONLY ONE LONGITUDINAL SEAM WELD WILL BE PERMITTED. LONGITUDINAL SEAM WELDS WITHIN 6 INCHES OF THE POLE TO BASE PLATE WELD SHALL BE FULL PENETRATION WELDS. PLATES SHALL CONFORM TO A572 GR. 55 OR 65.
7. LIGHTING STANDARDS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123.
8. LIGHTING STANDARDS SHALL BE POWDER COATED USING A SYSTEM WHICH SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER. FINAL COAT SHALL MATCH COLOR 26440 FROM THE FEDERAL COLOR STANDARD 595C.
9. POLES SHALL HAVE A CONSTANT LINEAR TAPER WITHIN THE LIMITS SHOWN ON THIS SHEET.
10. BASE PLATE SHALL BE PREFERABLY CUT VIA MECHANICAL OR WATER JET METHODS. THERMAL CUTTING WILL BE PERMITTED.
11. HANDHOLE COVERS SHALL BE FABRICATED FROM THE SAME MATERIAL AS THE POLE. A NEOPRENE GASKET, COVER RETENTION TETHER CHAIN, AND ATTACHMENT HARDWARE SHALL BE PROVIDED. A GROUND STUD SHALL BE INSTALLED OPPOSITE THE HANDHOLE COVER.
12. ANCHOR BOLTS SHALL BE ASTM F-1554, GR. 105. WASHERS SHALL BE CLIPPED WHERE REQUIRED TO CLEAR THE POLE SHAFT OR POLE SHAFT WELDMENT.
13. SEE STANDARD DRAWING E-10 FOR POLE ATTACHMENT HARDWARE AND FOR ANCHOR BOLTS. APPROVED ISOLATING MATERIALS SHALL BE USED WHERE POWDER COATED SURFACES COME IN CONTACT WITH HARDENED WASHERS SO AS TO PREVENT DAMAGE TO THE FINISH. FOR ANCHOR BOLTS WITH GREATER THAN 55 KSI TENSILE STRENGTH, PROVIDE ANCHOR PLATE, DOUBLE NUTS, AND DO NOT BEND J-HOOK.
14. FULL PENETRATION WELDED POLE SHAFT TO BASE PLATE CONNECTION WITH THE BACKER RING ATTACHED TO THE BASE PLATE WITH A CONTINUOUS FILLET WELD AROUND THE INTERIOR FACE OF THE RING. THE THICKNESS OF THE BACKING RING SHALL NOT EXCEED ⅜".
15. PROVIDE LUMINAIRE MOUNTING ASSEMBLY AS REQUIRED TO SUPPORT LUMINAIRES AS SPECIFIED ON THE CONTRACT PLANS. SEE STANDARD DRAWINGS E-04 AND E-05 FOR LUMINAIRE MOUNTING ASSEMBLY DETAILS.
16. ALL COMPONENTS SUBMITTED FOR USE ON NJTA PROJECTS MUST BE FULLY INTERCHANGEABLE AND SIMILAR IN QUALITY, IN ALL RESPECTS WITH ARMS AND BASES SHOWN HEREIN. A COMPREHENSIVE REVIEW AND FINAL DETERMINATION FOR APPROVAL OF ALL LIGHTING STANDARD EQUIPMENT WILL BE MADE BY THE AUTHORITY'S ENGINEERING DEPARTMENT PRIOR TO MANUFACTURE OR USE.
17. 1 A HANDHOLE IS REQUIRED ON ALL BRIDGE-MOUNTED LIGHTING STANDARDS AND SHALL BE LOCATED SUCH THAT THE VERTICAL CENTERLINE OF THE HANDHOLE IS 18" FROM TOP OF PARAPET. WHEN LOCATED BEHIND CHAIN LINK FENCE, THE BOTTOM OF THE HANDHOLE SHALL BE LOCATED ONE FOOT ABOVE THE FENCE. ATTACHMENT SCREWS SHALL BE COATED WITH AN APPROVED ANTI-SEIZE COMPOUND.
18. A ½" THICK VIBRATION DAMPING PAD SHALL BE INSTALLED ON ALL POLES ON BRIDGES OR OTHER ELEVATED STRUCTURES. SEE SPECIFICATIONS.

0 1/2 1 2 3 4
ORIGINAL SIZE IN INCHES

SCHEDULE 2.1					
LIGHTING STANDARD TYPE				MAX. LUMINAIRE SIZE (INDIVIDUAL LUMINAIRE)	
TYPES	• OF LUMINAIRES	SHAFT DIMENSIONS		WEIGHT	PROJ. AREA SQ. FT
		TAPER	LENGTH		
L-MG-26-SB	1	9" x 5.92"	22'	60•	1.5
L-MG-40-SB	1	9" x 3.82"	37'	60•	1.5

REV.	DESCRIPTION	DATE
1	UPDATED HANDHOLE & NOTE	01/24
0	REISSUED DRAWING	09/21

NEW JERSEY TURNPIKE AUTHORITY
NEW JERSEY TURNPIKE
GARDEN STATE PARKWAY
STANDARD DRAWINGS

STEEL LIGHTING STANDARD

OFFICE OF THE CHIEF ENGINEER
NEW JERSEY TURNPIKE AUTHORITY
WOODBRIDGE, NEW JERSEY

STANDARD DRAWING
E-02

CONTRACT NO.

SHEET NO. OF