

LIGHT POLE SPECIFICATION:

GENERAL:
 LIGHT STANDARDS SHALL HAVE MOUNTING HEIGHTS AND LUMINAIRE SUPPORT ARMS AS SHOWN ON THE DETAIL. POLES SHALL BE FABRICATED FROM STEEL AND SHALL BE DESIGNED FOR 90 MPH WIND ZONES. THE TOWN WILL CONDUCT FIELD INSPECTION OF THE STANDARDS, AND WILL REJECT SUBSTANDARD OR DEFECTIVE MATERIAL OR COMPONENTS. THE CONTRACTOR SHALL FURNISH THE REQUIRED NUMBER OF SHOP DRAWINGS FOR APPROVAL BEFORE FABRICATION.

MATERIAL:
 POLES SHALL CONFORM TO THE MINIMUM DESIGN REQUIREMENTS OF THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) PUBLICATION "STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS". LUMINAIRE SUPPORT ARMS, POLE SHAFTS, BASES, AND RELATED COMPONENTS, SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF ARTBA TECHNICAL BULLETIN NO. 270 PUBLISHED BY AASHTO. POLES SHALL HAVE AASHTO AND FEDERAL HIGHWAY ADMINISTRATION APPROVED BREAKAWAY ASSEMBLIES AS SHOWN IN THE DETAILS.

HANDHOLES:
 HANDHOLE COVERS SHALL BE TETHERED TO THE POLE SHAFT WITH STAINLESS STEEL CHAIN OR CABLE. AN ALUMINUM SHROUD SHALL BE INSTALLED AROUND THE BASE OF STANDARDS EQUIPPED WITH BREAKAWAY COUPLINGS. TRANSFORMER BASE SHALL HAVE AN ACCESS DOOR WITH STAINLESS STEEL HINGES.

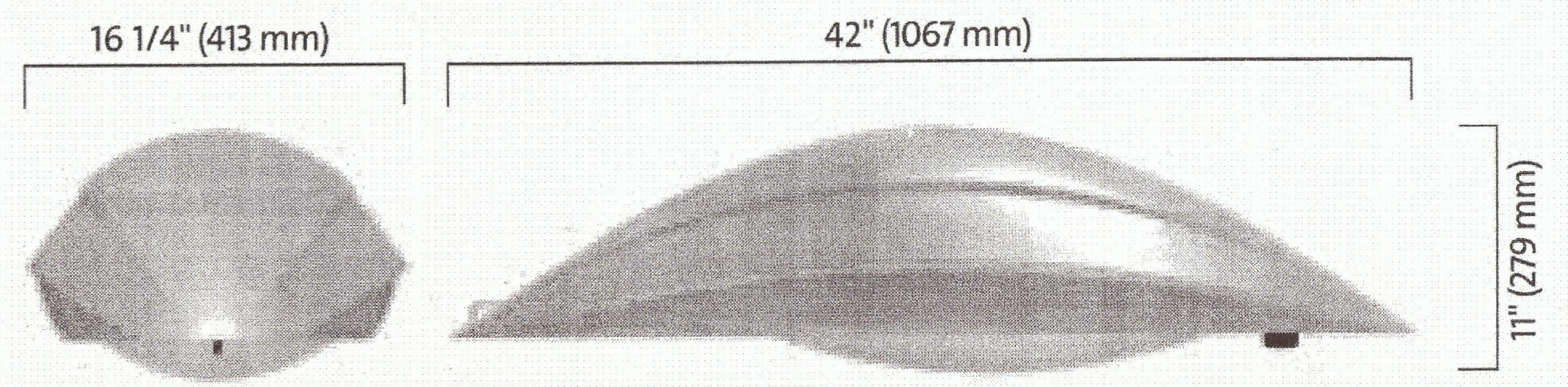
LIGHTING POLE FOUNDATIONS:
 THE CONTRACTOR SHALL PROVIDE CAST-IN-PLACE, CONCRETE, DRILLED SHAFT FOUNDATIONS. THE FOUNDATIONS SHALL BE COMPLETE WITH ANCHOR BOLTS, ANCHOR NUTS, SHIM PACK, REINFORCING, GROUND RODS, GROUND LEADS, AND 2" DIAMETER PVC ENTRANCE CONDUITS.

ANCHORS:
 FOUR STEEL ANCHOR BOLTS, WITH TWO (2) NUTS EACH SHALL PROJECT 3-1/2 INCHES FOR EACH LIGHTING POLE TRANSFORMER BASE. BOLT CIRCLE SHALL BE AS REQUIRED BY MANUFACTURER OF TRANSFORMER BASE OR BREAKAWAY COUPLINGS. THE CONTRACTOR SHALL PROVIDE THE REMAINDER OF THE LIGHTING POLE ANCHORAGE SYSTEM CONSISTING OF GALVANIZED SHIM PACK, BEARING PLATES, AND POLE SETTING TEMPLATES.

FINISH:
 FACTORY POWDER COAT FINISH WITH COLOR MATCHING SHERWIN WILLIAMS B65W00651 ACROLON 218HS, SEMI-GLOSS EXTRA WHITE BASE WITH THE FOLLOWING 844 FORMULA PER 32 OUNCES (OR APPROVED EQUAL):

- LB LAMP BLACK - 17
- YO YELLOW OX - 22
- QR QUIN RED - 2
- PB PHTH BLUE - 4

POLES SHALL BE MANUFACTURED BY VALMONT INC. OR APPROVED EQUAL.



LUMINAIRE DESCRIPTION:

LUMINAIRE HOUSING SHALL BE CONSTRUCTED OF DIE-CAST ALUMINUM WITH A TOOL-FREE COMPRESSION TWIST-LOCK LATCH. HOUSING SHALL BE HINGED AT THE BACK OF THE FIXTURE FOR EASY DROP DOWN SERVICING.

LENS FRAME SHALL BE DIE-CAST ALUMINUM. HOUSING SHALL BE PROVIDE A SEALED OPTICAL CHAMBER CONSISTING OF A HYDROFORMED REFLECTOR PERMANENTLY SEALED ON A SAGGED TEMPERED-GLASS LENS. FIXTURE OPTICS SHALL BE OF THE CUT-OFF STYLE.

LUMINAIRE SHALL RECEIVE WIRES ON UP TO #8 WIRE WITH A GROUND LUG.

ALL EXPOSED SCREWS SHALL BE STAINLESS STEEL.

FIXTURE SHALL BE WET LOCATION LISTED PER UL 1598 AND CSA C22.2, AND IP RATED AT IP65.

A LAMP SHALL BE PROVIDED WITH THE FIXTURE. LAMP SHALL INCORPORATE A QUICK DISCONNECT CONNECTOR BETWEEN THE BALLAST AND LAMP SOCKET.

BRACKET ARMS SHALL BE ROUND, 3-FEET LONG FROM THE BACK OF THE FIXTURE TO THE POLE. LUMINAIRE TENON AND POLE TENON SHALL REQUIRE ADDITIONAL BRACKET ARM LENGTH.

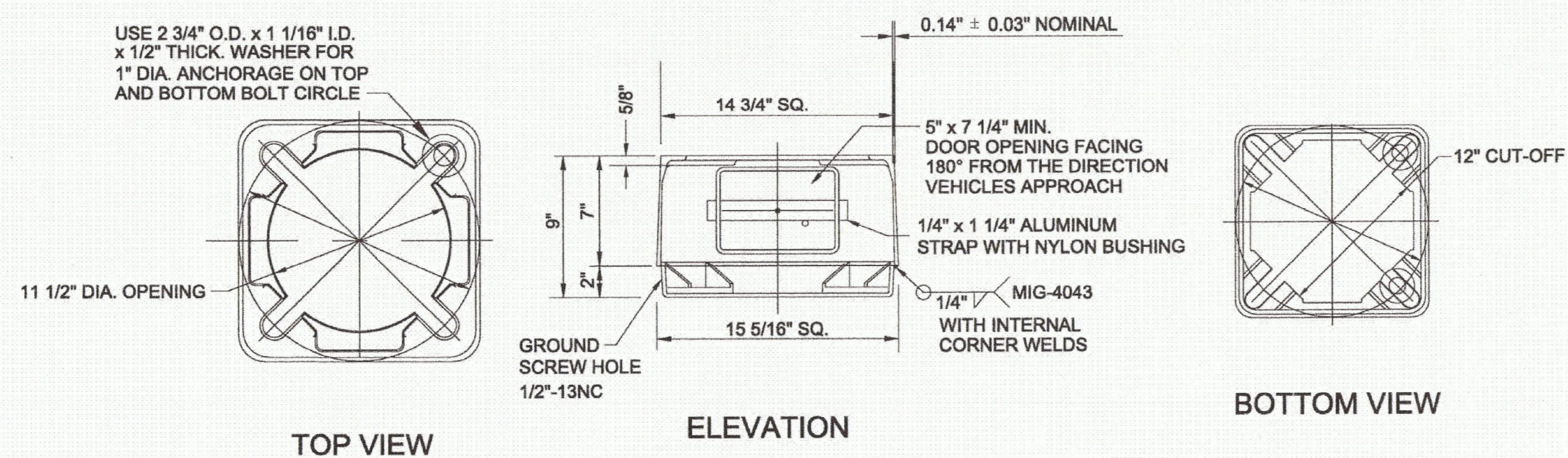
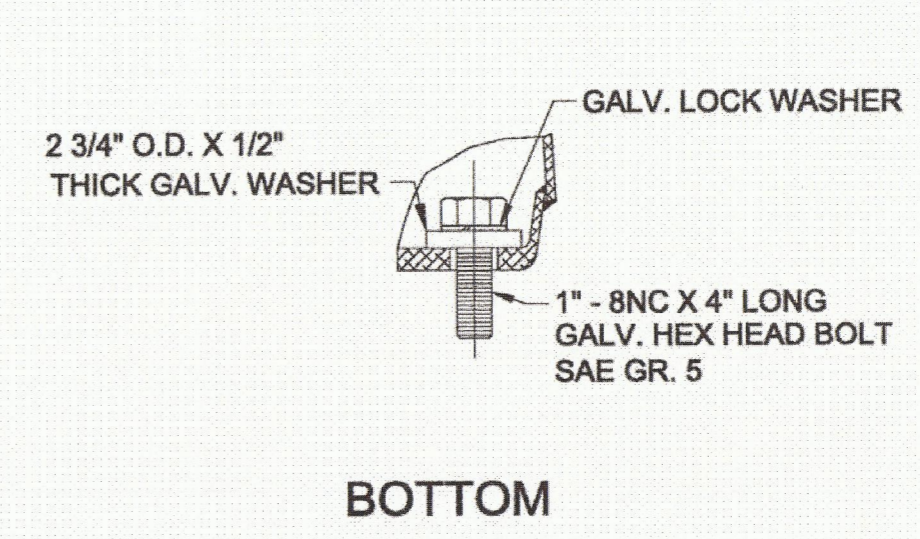
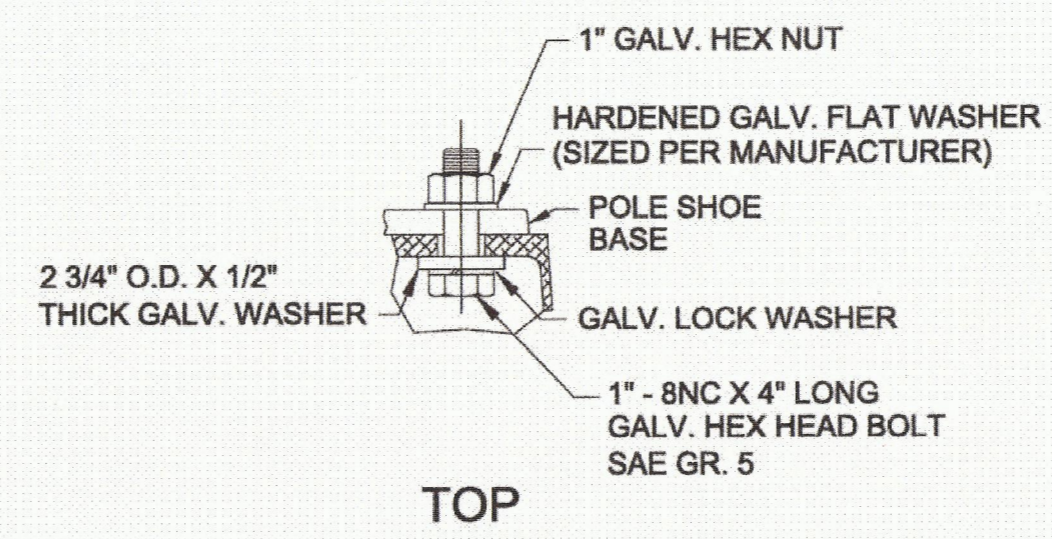
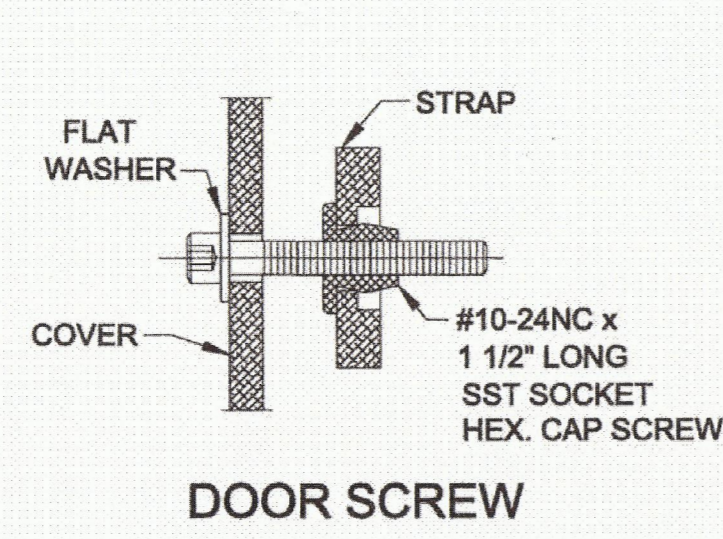
BALLAST SHALL SUPPORT 350 WATT PULSE START LAMP.

THE FINISH SHALL MATCH THE SAME SPECIFICATIONS AS THE POLE.

THE PERFORMANCE OF THE LIGHTING SYSTEM SHALL BE DEMONSTRATED WITH POINT-BY-POINT LIGHTING CALCULATIONS. THE CALCULATIONS SHALL BE APPROVED PRIOR TO ORDERING MATERIALS.

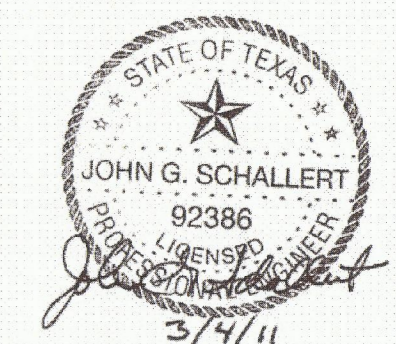
THE COMPUTER PROGRAM OUTPUT SHALL DEMONSTRATE THE FOLLOWING:
 - NON-PRORATED (NON-SCALED) IES FORMAT PHOTOMETRIC DATA FILES OF THE FIXTURE TYPE PROPOSED.
 - POINT-BY-POINT COMPUTER LIGHTING CALCULATIONS WITH 0.6 LIGHT LOSS FACTOR.
 - DESCRIPTIVE LITERATURE OF ALL INPUT AND OUTPUT PARAMETERS USED IN THE CALCULATIONS
 - ROADWAY AND INTERSECTION LIGHTING LEVELS THAT MEET THE IESNA RP-8-00 DESIGN CRITERIA.

LUMINAIRE SHALL BE LUMEC "CAPELLA SERIES", OR APPROVED EQUAL.



LOW PROFILE FRANGIBLE BASE DETAIL

NOTES
 MATERIAL SHALL CONFORM TO ASTM DESIGNATION B108 ALLOY 356-T6.
 BASE CONFORMS TO BREAKAWAY CRITERIA OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (1985).



ISSUED FOR CONSTRUCTION - 6/1/11

NO.	DATE	REVISION	APPROV.
HNTB ARCHITECTS ENGINEERS PLANNERS <small>The HNTB Companies - TBE Firm No. 420 2001 BRYAN STREET, SUITE 100 DALLAS, TEXAS 75201 (214) 748-8400</small>			
BELT LINE ROAD MEDIAN MARSH LANE TO DALLAS N. TOLLWAY			
ELECTRICAL DETAILS POLES, LUMINAIRES			
SHEET 19 OF 19			
TOWN OF ADDISON, TEXAS			
DESIGN	RS	DRAWN	FH
CHECK	JS	CHECK	TK
DATE	30-Dec-10	SCALE	
HNTB NO.	48564	SHEET NO.	20