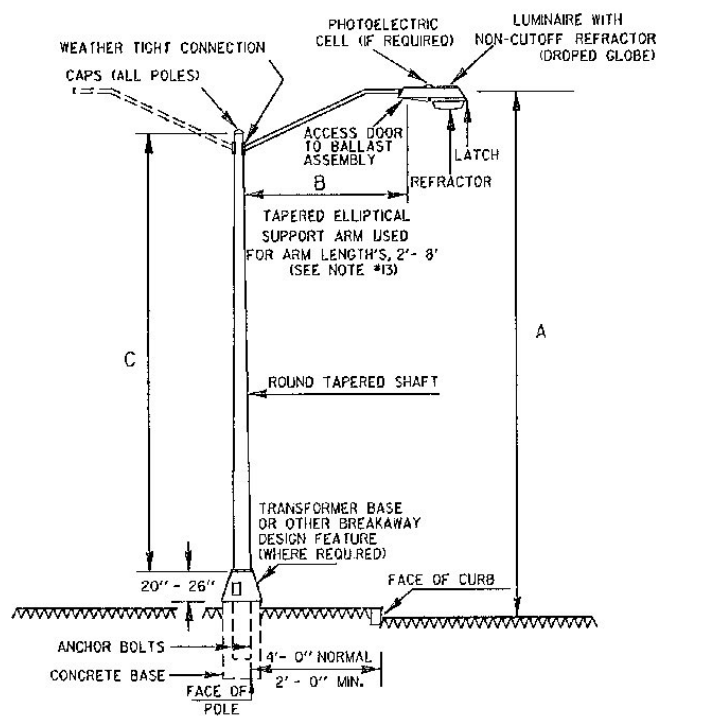
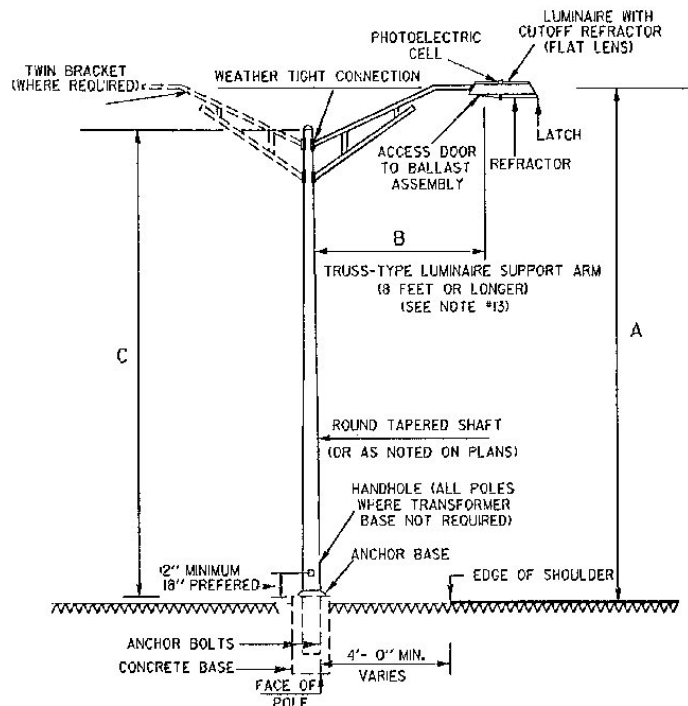


ROUND ALUMINUM AND STEEL POLES



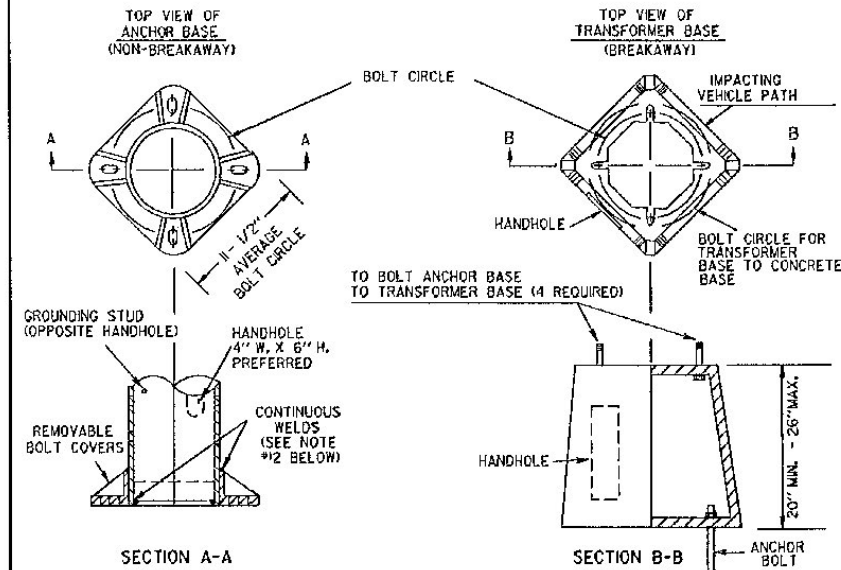
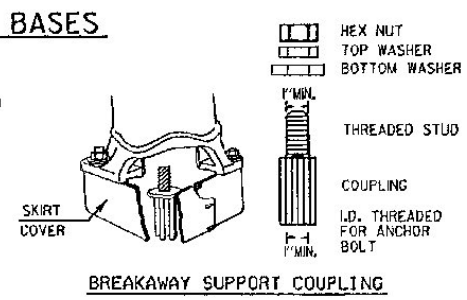
ALL SUPPORT ARMS TO BE EQUIPPED WITH 2" SLIPFITTER FOR MOUNTING LUMINAIRE UNLESS OTHERWISE INDICATED.

DIMENSIONS:
A=MOUNTING HEIGHT
B=LUMINAIRE SUPPORT ARM LENGTH
C=POLE HEIGHT

BASES

NOTES:

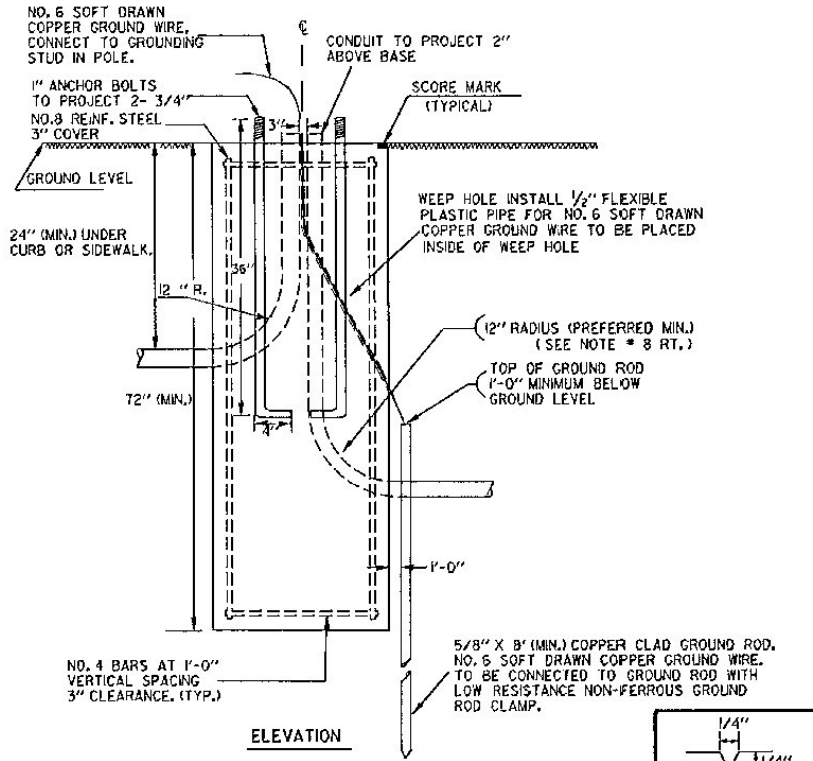
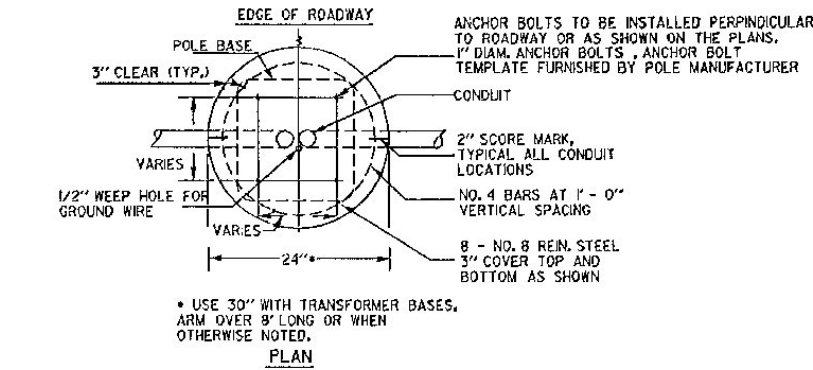
- DIMENSIONS SHOWN FOR ANCHOR BASES AND TRANSFORMER BASES MAY VARY SLIGHTLY WITH DIFFERENT MANUFACTURERS.
- FOR BREAKAWAY DESIGN A TRANSFORMER BASE, BREAKAWAY COUPLINGS, OR OTHER APPROVED METHOD SHALL BE PLACED BETWEEN THE ANCHOR BASE AND THE CONCRETE BASE.
- ANCHOR BOLT TEMPLATE FURNISHED BY POLE MANUFACTURER.



POLES, ANCHOR BASES, ARMS, AND LUMINAIRES. GENERAL NOTES

- NO POLE SHALL BE INSTALLED WITHOUT A LUMINAIRE ALREADY ATTACHED.
- ANCHOR BASE AND ANCHOR BOLT DIMENSIONS SHOWN ARE FOR A SINGLE ARM POLE OF HEIGHT 35 FEET OR LESS. SEE PLANS FOR OTHER CONDITIONS.
- ALL POLES OF THE BREAKAWAY DESIGN SHALL YIELD OR BREAKAWAY WITH A CHANGE IN VEHICLE MOMENTUM OF LESS THAN 100 POUNDS-SECONDS WHEN STRUCK BY 2250 POUNDS AT 20 M.P.H. TO 60 M.P.H.
- A 12 FOOT OR LONGER ARM REQUIRES A 6 INCH OUTSIDE DIAMETER POLE TOP.
- LUMINAIRES SHALL MEET SPECIFICATIONS AS SHOWN ON THE PLANS.
- ALL ELECTRICAL MATERIAL AND ELECTRICAL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE AREA ELECTRICAL INSPECTOR AND/OR THE POWER COMPANY WITH JURISDICTION IN THE PROJECT AREA.
- ALL WORK MUST MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, AS WELL AS LOCAL AND STATE CODES.
- ALL STREET LIGHT POLES SHALL HAVE A METAL TAG ATTACHED TO THE HANDHOLE WITH THE POLE NUMBER, WATTAGE AND TYPE OF LAMP, EXAMPLE, #2-150W.-H.P.S.- MCB, MINIMUM LETTER SIZE 1/2" INCH HIGH. PAYMENT FOR TAGS WILL BE SUBSIDIARY TO ITEM 679.15, STREET LIGHTING.
- POLES, BASE PLATES, AND ARMS SHALL MEET THE SPECIFICATION OF THE LATEST EDITION OF AASHTO-AGC-ARTBA'S GUIDE TO STANDARDIZED HIGHWAY LIGHTING POLE HARDWARE.
- ANCHOR BOLTS WILL BE ACCEPTABLE WITH EITHER ROLLED OR CUT-IN THREADS WITH MINOR VARIATIONS FROM THE 1" DIAMETER.
- ALL LIGHT POLES SHALL HAVE A BREAKAWAY DESIGN FEATURE UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL WELDS SHALL BE AT LEAST AS STRONG AS THE MATERIAL BEING WELDED.
- LUMINAIRE SUPPORT ARMS IN A LENGTH OF 8 FEET ARE AVAILABLE IN EITHER SINGLE MEMBER OR TRUSS TYPE. PLAN SHEET SHALL SPECIFY WHICH IS TO BE USED.

CONCRETE BASE

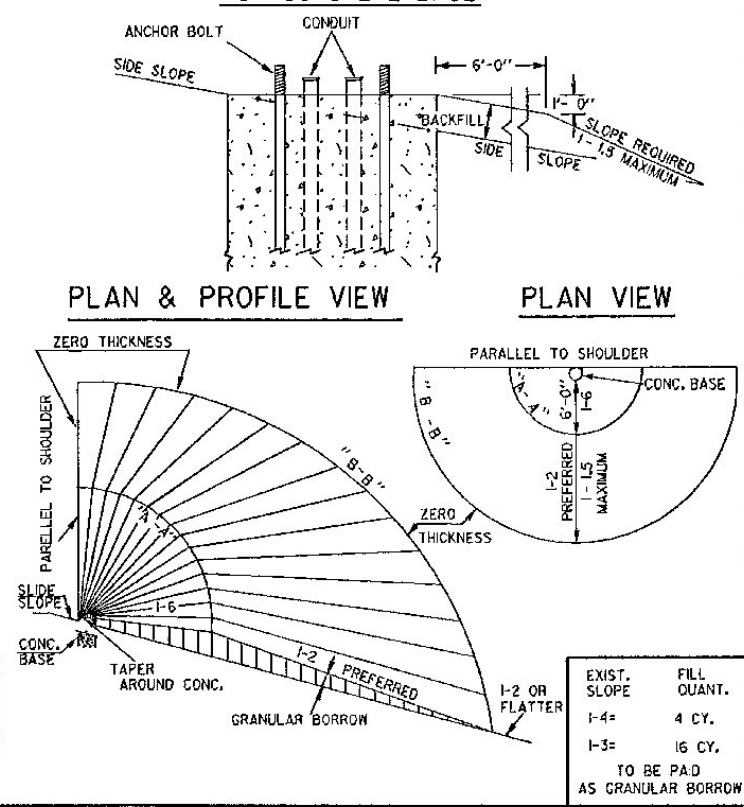


ANCHOR BOLTS AND WASHERS SHALL BE AN AUSTENITIC GRADE OF STAINLESS STEEL CONFORMING TO THE CHEMISTRY OF ASTM A276 TYPE 304 WITH THE FOLLOWING PHYSICAL PROPERTIES:

(a)	TENSILE STRENGTH, MINIMUM	80,000 psi
(b)	YIELD STRENGTH, MINIMUM	55,000 psi
(c)	ELONGATION IN 2 INCHES, MINIMUM	25 %
(d)	ROCKWELL B HARDNESS, MINIMUM	86
	OR CHARPY V-NOTCH (AASHTO T243 USING H FREQUENCY OF TESTING), MINIMUM	15 ft.-lbs. at 40°F

NUTS FOR THE ANCHOR BOLTS SHALL BE THE HEAVY HEX TYPE CONFORMING TO THE REQUIREMENTS OF ASTM A-194 GRADE 8.

SIDE SLOPE TREATMENT FOR CONCRETE BASE



- ### CONCRETE BASE NOTES
- ALL CONCRETE BASES TO BE CONCRETE, CLASS B.
 - ALL REINFORCING STEEL TO CONFORM TO THE REQUIREMENTS FOR 'REINFORCING STEEL'.
 - TEMPLATE FOR ANCHOR BOLTS, STAINLESS STEEL ANCHOR BOLTS, NUTS, AND WASHERS TO BE OBTAINED BY CONTRACTOR FROM POLE MANUFACTURER PRIOR TO CONSTRUCTION OF BASES.
 - SCORE TOP OF CONCRETE BASE TO SHOW LOCATION OF CONDUIT (S).
 - CONDUIT SIZE - AS SHOWN ON THE PLANS.
 - ALL EXPOSED METAL HARDWARE SHALL BE GALVANIZED OR STAINLESS STEEL.
 - IF THE ELECTRICAL CONDUIT IN THE CONCRETE BASE IS GALVANIZED STEEL, GROUNDING BUSHINGS SHALL BE USED.
 - THE MINIMUM RADIUS FOR RIGID GALVANIZED ELECTRICAL CONDUIT SHALL BE SIX TIMES THE INSIDE DIAMETER OF THE CONDUIT.
 - SEE STANDARD SHEET E-173 FOR PULL BOX DETAIL.

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

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Ed. B. MacArthur
TRAFFIC AND SAFETY ENGINEER

STREET LIGHTING DETAILS



STANDARD E-180