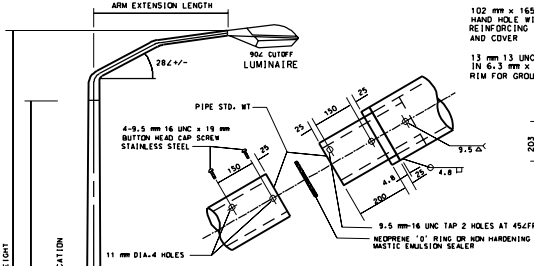
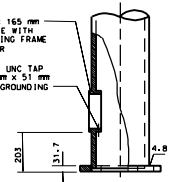


LUMINAIRE ARM CONNECTION



HAND HOLE DETAIL

SHAFT HEIGHT	POLE HEIGHT	ARM EXTENSION DIMENTIONS LENGHT	ARM EXTENSION DIMENTIONS END DIA (mm)	MIN. SHAFT BOTTOM O.D. (mm)	MIN. SHAFT TOP O.D. (mm)	MIN. WALL THICKNESS (mm)	MAX. SHAFT TOP DEFLECTION (mm)
8.5 m	9.4 m	1.8 m	60.3	200	101.6	3.04	114.3
	9.7 m	3.0 m	60.3	200	101.6	3.04	114.3
11.6 m	12.5 m	1.8 m	60.3	238.1	101.6	3.04	152.4
	12.8 m	3.0 m	60.3	238.1	101.6	3.04	152.4

NOTES:

1 - LIGHT POLE ASSEMBLY

A-THE ASSEMBLY SHALL CONSIST OF POLE, ARM, BASE, INTERNAL CONDUCTORS, IDENTIFICATION, SPLICES, MOLDED CONNECTORS, FUSES, ANCHOR BOLTS, HARDWARE AND BREAK-AWAY BASE OR ANCHOR BASE.

2 - POLE

A-THE LIGHT POLE DESIGN UTILITES TAPERED STEEL POLES AND SHALL MEET ASTM A 570 GRADE 33 GALVANIZED IN ACCORDANCE WITH ASTM A 123. OTHER LIGHT POLE MATERIALS MAY BE ACCEPTABLE SUBJECT TO THE APPROVAL OF DESIGN AND DRAWINGS PRIOR TO THE OPENING OF BIDS BY THE DEPUTY DIRECTOR. SHOP DRAWINGS REQUIRED.

B-POLE AND ARM DESIGN SHALL BE THE SAME THROUGHOUT THE PROJECT AND SHALL MEET THE REQUIREMENTS OF AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS, LUMINARES AND TRAFFIC SIGNALS, 1994 EDITION.
FOR AN 130 km/h WIND WITH 170 km/h GUSTS.
ALLOWABLE STRESSES: ASTM A 570 GRADE 33-Fb=150.17 MPa
Fv=75.08 MPa

(INCREASE 40% FOR GROUP II AND III LOADING)

C-ARM EXTENSION CONNECTIONS, COMPONENTS AND DETAILS SHALL BE COMPATIBLE WITH THE TYPE OF POLE UTILIZED.

D-LIGHT POLE BASE PLATE SHALL BE FURNISHED TO MATCH EXISTING BOLT CIRCLE WHEN POLE IS LOCATED ON STRUCTURE.

E-LIGHT POLE DESIGN SHALL BE FOR A LUMINARE WEIGHT OF 35 kg AND A PROJECTED AREA OF 0.3 m^2

F-ALL ARM EXTENSIONS SHALL BE ORIENTED AT RIGHT ANGLES TO THE SURVEY LINE OF ROADWAY.

G-OFFSET IS DEFINED AS THE DISTANCE FROM THE EDGE OF TRAVELED WAY TO THE SHAFT CENTER OF THE LIGHT POLE.

H-CENTER SHAFT TOP OVER CENTER OF FUNDATION AFTER ARM EXTENSION, LUMINARE AND ALL ELECTRICAL ACCESSORIES ARE IN PLACE.

J-MAXIMUM ALLOWABLE DEFLECTION AT SHAFT TOP IS BASED ON 445 N HORIZONTAL LOAD APPLIED AT 150 mm BELOW TOP DEFLECTION CRITERIA SHALL BE MET REGARDLESS OF LIGHT POLE MATERIAL USED.

K-LOCATE LIGHT POLE BEHIND SIGNS WHEN THERE IS CONFLICT.

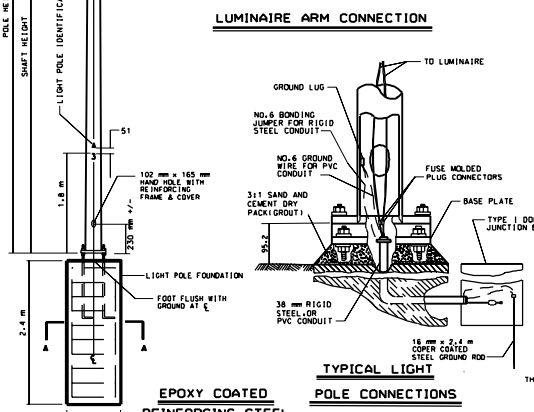
3 - FOUNDATION

A-ALL FOUNDATIONS SHALL BE CAST-IN-PLACE IN AUGERED HOLES WITH CLASS A(AE) CONCRETE

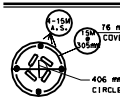
4 - ANCHOR BOLTS

A-ASTM A 307, ANCHOR BOLTS SHALL BE HOOKED 27 mm x 914 mm x 101.6 mm WITH HEAVY HEXAGON NUTS. ALL NUTS, WASHERS AND TOP 254 mm OF THE ANCHOR BOLTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-123. ANCHOR BOLT THREADS SHALL BE OPEN AND DEFECT FREE. NUTS SHALL BE FREE RUNNING BY HAND FOR TOTAL THREAD LENGTH.

B-ANCHOR BOLTS SHALL BE PLACED BY TEMPLATE AND SHALL NOT BE WELDED TO REINFORCING STEEL.

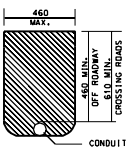


EPOXY COATED
REINFORCING STEEL

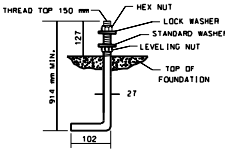


SECTION A-A

TYPICAL LIGHT
POLE CONNECTIONS



TRENCHING DETAIL



ANCHOR BOLT

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

REVISIONS

NO.	DATE	APPR.	REMARKS
1	3-20-96		CORRECT ROUNDING ERROR IN ANCHOR CONNECTOR DETAIL.
0			

UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL: APR 27 1995
CHAIRMAN STANDARDS COMMITTEE
APPROVED: APR 27 1995
DEPUTY DIRECTOR

(METRIC)
LIGHT POLE
ANCHOR BASE
STANDARD DRAWING TITLE

STD. DWG. NO.
755-6