STREET LIGHT LOCATIONS

POLE NO.	LOCATION	OFFSET	LENGTH OF POLE/ARM	WALL THICKNESS	BREAK AWAY BASE	LUMINAIRE			MOUNT HEIGHT (OF ARM)
						LAMP	WATTS	TYPE	
1	108+16 RT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
2	108+22 LT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
3	107+26 RT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
4	107+32 LT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
5	106+36 RT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
6	106+42 LT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
7	106+18 RT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
8	106+24 LT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
9	105+28 RT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
10	105+34 LT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
11	104+38 RT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'
12	104+44 LT.	16.67'	25.0'/2.8'	0.25"	NO	MH	100	III	22.0'

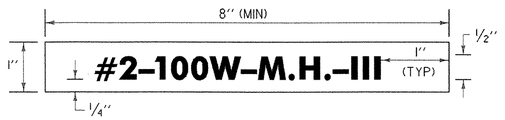
STREET LIGHTING DESIGN PARAMETERS

	RECOMMENDED	ACTUAL
ROADWAY (COLLECTOR-INTERMEDIATE)	0.8 FC 4 : 1 UR	1.43 FC 2.75 : 1 UR
SIDEWALK	0.8 FC 4 : 1 UR	0.84 FC 1.75 : 1 UR
LUMINAIRE DIRT DEPRECIATION:	0.95 - ENCLOSED AND FILTERED	
LAMP LUMEN DEPRECIATION:	0.65 @ 7,500 HOURS (END OF LIFE)	
COMBINED LAMP (MAINT.) FACTOR:	0.62	

EXISTING	NEW	LEGEND
○	●	STREET LIGHT POLE
—○≡	—●≡	LUMINAIRE
▨	■	JUNCTION BOX
— EX —	— — —	CONDUIT
- - - -	———	SLEEVE
ơơ	ơơ	STANCHION
⊏□	◤	UTILITY POLE
L-3 = CIRCUIT NUMBER		
(34) = LIGHT POLE NUMBER		
4 = JUNCTION BOX NUMBER		

ABBREVIATIONS		
FC	=	FOOTCANDLE
UR	=	UNIFORMITY RATIO
AVE	=	AVERAGE
MH	=	METAL HALIDE
HPS	=	HIGH PRESSURE SODIUM
AWG	=	AMERICAN WIRE GAUGE
GND	=	GROUND
CU	=	COPPER
PVC	=	POLYVINYL CHLORIDE
MIN	=	MINIMUM
MAX	=	MAXIMUM
LT	=	LEFT
RT	=	RIGHT
'	=	FEET
"	=	INCHES

DETAILS FOR TAGS ATTACHED TO STREET LIGHT POLES



LEGEND: WHITE (NON-REFL.) - STAMPED PRIOR TO PRINTING/PAINTING. BACKGROUND: FLAT BLACK SURFACE, SAME AS POLE FINISH.

NOTES:
1. THE TAG SHALL BE MOUNTED ON ALL STREET LIGHT POLES IN SUCH A MANNER AS NOT TO BE EASILY REMOVED. SUCH AS WELDED, RIVETED, OR BOLTED WITH VANDAL PROOF BOLTS.
2. THE LETTERS SHALL BE PUNCHED, STAMPED, ENGRAVED, OR PHOTO-ETCHED. PUNCHING, STAMPING OR ENGRAVING SHALL PENETRATE ONE HALF THE BASE MATERIAL THICKNESS.
3. THE BASE MATERIAL FOR THE TAG SHALL BE ALUMINUM WITH A MINIMUM THICKNESS OF 0.100 INCHES.
4. THE TAG SHALL BE ATTACHED TO THE POLE ABOVE THE HANDHOLE, 6" MAXIMUM. IF THE POLE HAS A TRANSFORMER BASE, ATTACH TAG TO COVER.

GENERAL STREET LIGHTING NOTES

ANCHOR BOLTS

1.) ANCHOR BOLTS SHALL BE PLACED IN THE BRIDGE DECK SUCH THAT THE LIGHT POLES CAN BE ERECTED WITHOUT CONFLICTING WITH BRIDGE RAILING PLACEMENT. IF A SPECIFIED POLE LOCATION INTERFERES WITH A RAILING POST, THE CONTRACTOR SHALL MOVE THE LIGHT POLE UP TO 5' LONGITUDINALLY FROM THE SPECIFIED LOCATION TO AVOID THE CONFLICT. IN ALL CASES, THE CONTRACTOR SHALL MAINTAIN SYMMETRY IN THE POLE LOCATIONS.

2.) ANCHOR BOLTS SHALL BE 1" DIA. PLACED TO FORM A 11 1/2" BOLT CIRCLE PER MANUFACTURER'S SPECIFICATIONS.

POLES AND ARMS

1.) LIGHT POLES SHALL BE 5" DIAMETER ROUND STEEL POLES WITH AN ELECTROSTATICALLY APPLIED BLACK POWDER COAT FINISH (ZED P105SV-25 OR EQUIVALENT).

2.) POLES SHALL BE MOUNTED IN THE 6 3/8" SPACE BETWEEN BRIDGE RAILINGS ON THE SIDEWALK SIDE OR IMMEDIATELY BEHIND THE RAILING ON THE NON-SIDEWALK SIDE OF THE BRIDGE AS SHOWN ON THE PLAN. HANDHOLES SHALL BE MOUNTED 90 DEGREES FROM THE ROADWAY SO THAT THEY CAN BE ACCESSED WHILE THE RAILING IS IN PLACE.

3.) THE CONTRACTOR SHALL INSTALL METAL TAGS ON EACH LIGHT POLE WITH THE INFORMATION AS NOTED ON THE DETAIL SHOWN ON THIS SHEET.

4.) ALL LUMINAIRE SUPPORT ARMS INSTALLED SHALL BE LUMEC MODEL M20M AND SHALL HAVE AN ELECTROSTATICALLY APPLIED BLACK POWDER COAT FINISH.

LUMINAIRES

1.) LUMINAIRES SHALL BE HARMONIA SERIES TYPE Z-60A WITH TYPE III LIGHT DISTRIBUTION MANUFACTURED BY LUMEC/ZED.

2.) LUMINAIRES SHALL HAVE AN ELECTROSTATICALLY APPLIED BLACK POWDER COAT FINISH AND SHALL BE FITTED WITH A BUTTON-TYPE PHOTOELECTRIC CELL.

CONDUIT

1.) A 2" MINIMUM DIAMETER CONDUIT SHALL BE USED AT ALL LOCATIONS UNLESS OTHERWISE NOTED ON THE PLANS, ALL CONDUIT SHALL BE AT LEAST (SCHEDULE 40 P.V.C.) OR RIGID GALVANIZED STEEL ELECTRICAL CONDUIT (AND CONFORM TO THE REQUIREMENTS OF UL-6). TYPE OF CONDUIT (P.V.C. OR STEEL) SHALL BE NOTED ON THE PLANS.

2.) A CONDUIT EXPANSION JOINT COUPLING (AS DETAILED ON STANDARD SHEET E-181) SHALL BE USED WHERE EVER CONDUIT CROSSES A BRIDGE EXPANSION JOINT. COUPLINGS SHALL BE DESIGNED TO ACCOMMODATE A 2 1/4" MOVEMENT IN THE BRIDGE.

CONDUIT SLEEVE

1.) MINIMUM WALL THICKNESS FOR RIGID PLASTIC PIPE SLEEVES SHALL BE 1/35TH THE DIAMETER. ALL CONDUIT RUNS UNDER ROADWAY SHALL BE INSTALLED IN RIGID PLASTIC OR STEEL PIPE SLEEVES. THE SLEEVE SHALL EXTEND TO WITHIN 2'-0" OF THE SIDE OF A CONCRETE BASE OR PULLBOX. WHERE NO CONCRETE BASE OR PULLBOX IS PRESENT, THE SLEEVE SHALL EXTEND 4'-0" BEYOND THE OUTSIDE EDGE OF SHOULDER OR FACE OF CURB. BACKFILLING AROUND A SLEEVE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

2.) WHEN JACKING A SLEEVE UNDER ROADWAY IT SHALL BE STEEL WITH A MINIMUM DIAMETER OF 8" AND MINIMUM WALL THICKNESS OF 3/8". ACTUAL LENGTH TO BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.

WIRE

1.) ALL WIRING BETWEEN THE METER AND/OR POWER SOURCE AND THE FIRST POLE AND/OR PULLBOX AND BETWEEN POLES AND/OR PULLBOXES SHALL BE COPPER AND SIZED AS SPECIFIED ON THE PLANS. ALL WIRE SHALL HAVE TYPE XHHW INSULATION OR EQUIVALENT.

GROUNDING

1.) ALL CONDUIT MUST INCLUDE A GROUNDING CONDUCTOR. RIGID STEEL CONDUIT SHALL BE PROPERLY CONNECTED AT THE JOINTS SO AS TO BE WATERTIGHT AND MAINTAIN ELECTRICAL CONTINUITY AND HAVE GROUNDING BUSHINGS SO AS TO ACT AS A GROUND CONDUCTOR.

2.) ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.

PULLBOXES AND JUNCTION BOXES

1.) FOR DETAILS SEE STANDARD SHEET E-173.

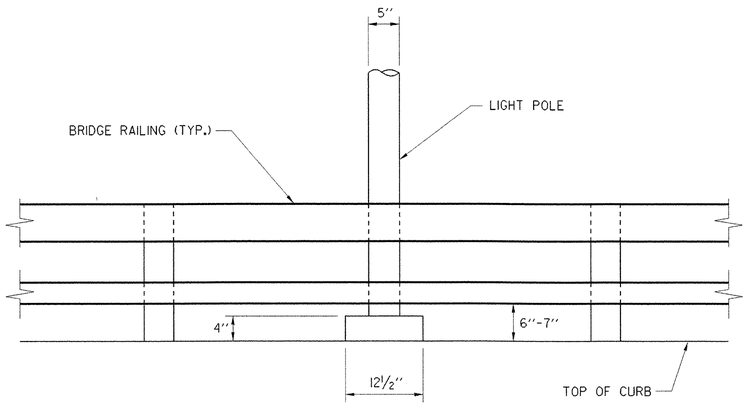
GENERAL

1.) THE LOAD ON EACH BRANCH OF THE THREE WIRE CIRCUIT SHALL BE BALANCED AS POSSIBLE. LOAD TO NEUTRAL.

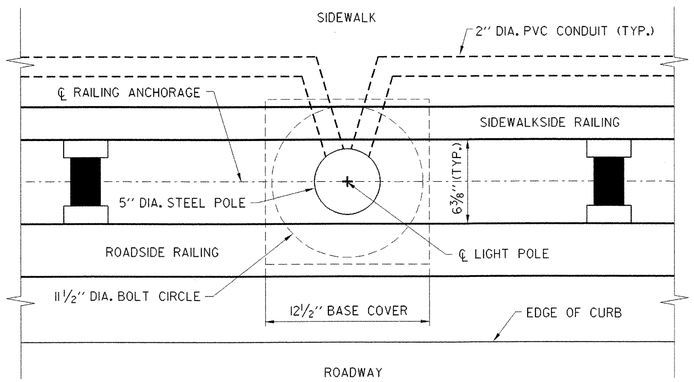
2.) FOR STANCHION DETAIL SEE STANDARD SHEET E-175.

3.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY ELECTRICAL PERMITS.

4.) SEE STANDARD SHEET E-181 FOR ADDITIONAL BRIDGE MOUNTING DETAILS FOR STREET LIGHT POLES.



ELEVATION VIEW



PLAN VIEW

LIGHT POLE PLACEMENT DETAILS

N.T.S.

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PROJECT NAME:
PROJECT NUMBER: ROYALTON BRZ 1444(22)

FILE NAME: U:\9425\MSTN\SLP-2.DGN
IPARM NAME:
PROJECT LEADER: P. FAITH
DESIGNED BY: M. WIESZCHOWSKI

PLOT DATE: 08/01/00
DRAWN BY: M. WIESZCHOWSKI
CHECKED BY: T. JOHNSON