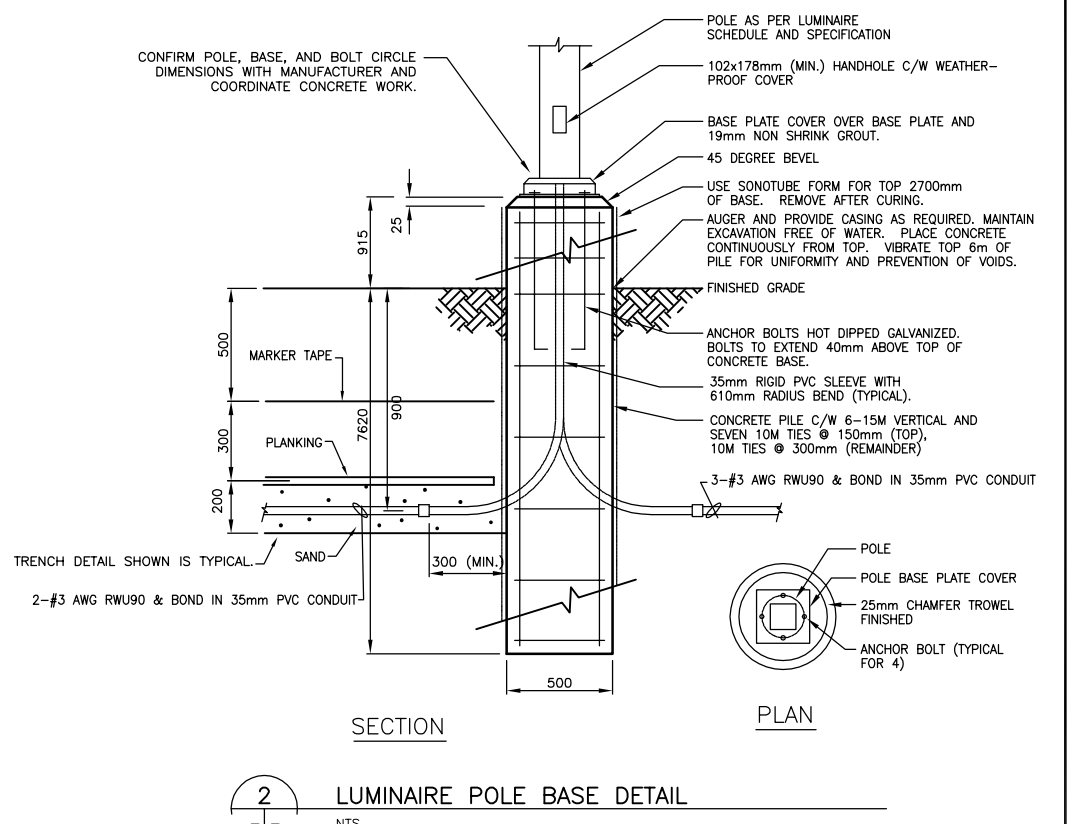


1  
PARKING LOT ELECTRICAL PLAN  
SCALE 1:300

FIXTURE SCHEDULE

TYPE	DESCRIPTION	LAMP	VOLTAGE	LENS	SYMBOL	MANUFACTURER
A	DOUBLE HEAD POLE MOUNTED LUMINAIRE C/W MOUNTING HARDWARE, POLE WITH ANCHOR BOLTS AND TEMPLATE, DRILLED FOR TWO FIXTURES 180°. MOUNTING HEIGHT 35'.	2-400W MH P.S.	120V	GLASS	(Symbol A)	AMERICAN ELECTRIC LIGHTING AVL 40M SCWA 120 R4 FG / WEST COAST ENGINEERING MTS 35 BZP OR ACCEPTED EQUIVALENT
B	PARAPET MOUNTED FLOODLIGHT LUMINAIRE C/W HARDWARE FOR PARAPET MOUNTING. ALLOW FOR FINISH TO MATCH BUILDING FACADE.	1-250W MH P.S.	120V	GLASS	(Symbol B)	LITHONIA TFR 250M 120 SCWA FRWB TFRV OR ACCEPTED EQUIVALENT



2  
LUMINAIRE POLE BASE DETAIL  
NTS

NOTES

- 1 PROVIDE LUMINAIRES, POLES, FOUNDATIONS, MOUNTING HARDWARE, CONDUIT, WIRE, CABLE, BOXES, CIRCUIT BREAKERS, CONTACTORS, TRENCHING, SAND, BACKFILL, PLANKING, MARKING TAPE, SURFACE RESTORATION, AND ALL OTHER WORKS REQUIRED TO PROVIDE COMPLETE AND FUNCTIONAL PARKING LOT AND BUILDING MOUNTED LIGHTING. LIGHTING SHALL BE CONTROLLED IN UNISON WITH EXISTING BUILDING MOUNTED EXTERIOR LIGHTING.
- 2 PROVIDE ONE 15A/1P CIRCUIT BREAKER IN EXISTING AMALGAMATED ELECTRIC PANEL X IN MAIN FLOOR LOST AND FOUND ROOM. PANEL IS RECESSED IN BLOCK WALL. WIRE TO CEILING SPACE IN AC90 IF EMT CONDUIT IS NOT PRACTICABLE. RUN EMT CONDUIT IN CEILING SPACE TO BUILDING ENTRYWAY. RUN EXPOSED EMT CONDUIT THROUGH ENTRYWAY AND PENETRATE ALUMINUM GLAZING FRAME TO CONTINUE TO NEW CONTACTOR IN VESTIBULE. CONTINUE EMT CONDUIT RUNS TO BUILDING EXTERIOR, UP TO ROOFTOP LEVEL, AND ON TO INDICATED LUMINAIRE LOCATIONS. PROVIDE ONE 15A/1P CONTACTOR AT VESTIBULE CEILING. CONNECT VIA EMT TO EXISTING EXTERIOR LIGHTING CIRCUIT FOR CONTROL OF CONTACTOR. WIRE AND CONNECT LUMINAIRES AND CONTACTOR, USE #12AWG RW90 CU WIRING, LABEL BOXES AND UPDATE PANEL X DIRECTORY. LUMINAIRES SHALL BE MOUNTED APPROXIMATELY TWELVE FEET FROM BUILDING CORNER, FACING DOWNWARD APPROXIMATELY 30 DEGREES OFF OF VERTICAL, AND AWAY FROM THE BUILDING. LUMINAIRE SHALL NOT CAUSE GLARE TO APPROACHING FOOT TRAFFIC OR VEHICLE TRAFFIC PASSING BY. REVIEW MOUNTING OPTIONS, MOUNT WITHOUT PIERCING PREFINISHED METAL WALL IF PRACTICABLE, PROVIDE ALTERNATE MOUNTING BRACKET AND LEVELLING HARDWARE AS REQUIRED. LUMINAIRE AND MOUNTING HARDWARE SHALL BE FINISHED TO REASONABLY MATCH THE BUILDING. AFTER AWARD OF CONTRACT REVIEW EXISTING ENTRANCE FLOODLIGHTING CIRCUITS. EXISTING CONDUIT AND/OR CIRCUIT SHALL BE USED IF SUITABLE, COORDINATE WITH CONTRACT ADMINISTRATOR. ADVISE ON LAMPING OF EXISTING ENTRANCE FLOODLIGHTS PRIOR TO FLOODLIGHT SHOP DRAWING APPROVAL.
- 3 PROVIDE TWO 20A/1P CIRCUIT BREAKERS ON DIFFERENT PHASES IN EXISTING AMALGAMATED ELECTRIC PANEL K IN BASEMENT MECHANICAL ROOM. PANEL IS SURFACE MOUNTED ON CONCRETE WALL. RUN EMT CONDUIT TO ADJACENT LIGHTING CONTROL EQUIPMENT AND PROVIDE ONE 20A/2P 120/240V CONTACTOR ON WALL. CONTINUE EMT CONDUIT RUN TO CEILING HEIGHT, AND SOUTH THROUGH MECHANICAL ROOM WALL, THROUGH CORRIDOR, THROUGH SERVICE ROOM, AND INTO CRAWLSPACE AREA. WIRE WITH #3AWG RW90 CU. TRANSITION TO 3-#3AWG RW90 CU & BOND IN 35mm PVC CONDUIT IN CRAWLSPACE CEILING NEAR SERVICE ROOM WALL. PENETRATE SOUTH CRAWLSPACE WALL AT BURIED CABLE ELEVATION, WIRE THROUGH TO EXTERIOR, AND SEAL PENETRATION WITH SEAL KIT. CONTINUE WIRING TO INDICATED LUMINAIRE AND FROM THERE TO REMAINING FIXTURES AS SHOWN. PROVIDE DIRECTIONAL DRILLING AS REQUIRED. WIRING SHALL BE CONTINUOUS FROM CRAWLSPACE CEILING TO LUMINAIRE AND BETWEEN LUMINAIRES. CONNECT CONTACTORS VIA EMT AND #12AWG RW90 CU TO EXISTING EXTERIOR LIGHTING CIRCUIT FOR CONTROL OF CONTACTOR. LABEL BOXES AND UPDATE PANEL K DIRECTORY. IF TRENCHING UNDER ENTRANCE PAVEMENT AREA IS REQUIRED FOR ACCESS TO CRAWLSPACE, COORDINATE WITH THE RESURFACING WORK OCCURRING IN THIS LOCATION. PROVIDE DIRECTIONAL DRILLING AS REQUIRED UNDER VESTIBULE APRON AND VESTIBULE.
- 4 LOCATIONS IN CRAWLSPACE, UNDERGROUND, IN ENTRYWAY AND IN VESTIBULE SHALL BE CONSIDERED CATEGORY 1. PROVIDE CSA 4 ENCLOSURES AND BOXES AND RAIN TIGHT FITTINGS AND OTHER SUITABLE MATERIALS AND METHODS.
- 5 THE ENTRYWAY AND VESTIBULE AND BUILDING EXTERIOR ARE FINISHED LOCATIONS WHERE PORTIONS OF THE WORK SHALL REMAIN EXPOSED AND VISIBLE. PAINT CONDUIT AND HARDWARE PRIOR TO INSTALLATION TO MATCH SURFACES. INSTALL CONDUIT IN A FASHION MIMICKING THE EXISTING CONDUIT RUNS FOR A CONSISTENT, CLEAN, AND NEAT APPEARANCE.
- 6 FIRESTOP ALL PENETRATIONS THROUGH INTERIOR BASEMENT WALLS AND OTHER SURFACES AS SPECIFIED. SEAL PENETRATIONS THROUGH VESTIBULE GLAZING FRAME.
- 7 THE BUILDING SHALL MAINTAIN NORMAL OPERATING HOURS DURING THE COURSE OF THE WORK. WORK MAY GENERALLY BE CARRIED OUT DURING REGULAR HOURS. CARRY OUT WORK SUCH THAT NO FACILITY USERS OR PERSONNEL WILL BE SUBJECT TO UNREASONABLE OR PROLONGED MESS, NOISE, OR LOSS OF USE OF SYSTEMS. DO NOT LEAVE ANY WORK IN AN UNSAFE STATE.
- 8 THE CONTRACTOR SHALL ALLOW FOR ONE VISIT TO THE SITE AFTER DARK OR BEFORE LIGHT, AT THE CONTRACT ADMINISTRATORS CONVIENCE, FOR ADJUSTMENT OF BUILDING MOUNTED FLOODLIGHT AIMING. THE CONTRACTOR SHALL ADJUST AIMING SUCH THAT THE LIGHTING CAN BE LEFT PERMANENTLY OR ADJUSTED IN THE FUTURE. APPROPRIATE HARDWARE SHALL BE PROVIDED FOR THE VISIBLE OUTDOOR APPLICATION.
- 9 SEAL PENETRATIONS ON BOTH SIDES OF WALLS AND GLAZING.
- 10 PROVIDE TWO SPARE 400W AND ONE 250W LAMP.

150 mm WM	150 mm WM	150 mm WM	150 mm WM	150 mm WM	150 mm WM
WATERMAIN	HYDRANT	HYDRO	CONCRETE	WATERMAIN	HYDRANT
VALVE	CONCRETE	MTS	LIMIT OF ASPHALT	HYDRANT	VALVE
300 mm LDS	LAND DRAINAGE SEWER	300 mm LDS	CURB RENEWAL	300 mm LDS	SEWER
250 mm CS	COMBINED SEWER	250 mm CS	ASPHALT	300 mm LDS	300 mm LDS
MANHOLE	CATCH BASIN (CB)	231.000	ELEVATIONS		
CURB INLET (CP)	CURB INLET (CP)		PROPERTY LINE		
SIGN	LAMP STANDARD		SURVEY BAR		
GAS	GAS		CURB STOP		
			RAMP CURB		
EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW
			EXISTING	LEGEND - PROFILE	NEW

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPR. U/G STRUCTURES COMMITTEE DATE

NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. ELEV.	
ISSUED FOR TENDER	06/03/31 D.R.
NO. REVISIONS	DATE BY

COCHRANE ENGINEERING LTD.

#600 - 5 DONALD STREET WINNIPEG, MANITOBA, R3L 2T4 TEL: (204) 477-6680 FAX: (204) 474-2884

ENGINEERS • PLANNERS • SCIENTISTS • PROJECT MANAGERS

WINDSOR, CALGARY, EDMONTON, REGINA, SASKATOON, WINNIPEG, BURLINGTON, TORONTO

DESIGNED BY DR

CHECKED BY DTB

DRAWN BY SR

APPROVED BY DR

HOR. SCALE: AS NOTED

DATE MARCH 21, 2006

ROBINSON Member 22543

CONSULTANT DRAWING NO. 05047E01-R0

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT

PARKING LOT ELECTRICAL PLAN

CITY DRAWING NUMBER 218-2006-E01-R0

SHEET 6 OF 6

REV. 6 0

METRIC WHOLE NUMBERS INDICATE MILLIMETRES DECIMALIZED NUMBERS INDICATE METRES

APECM Certificate of Authorization Cochrane Engineering Ltd. No. 227 Expiry April 30, 2008