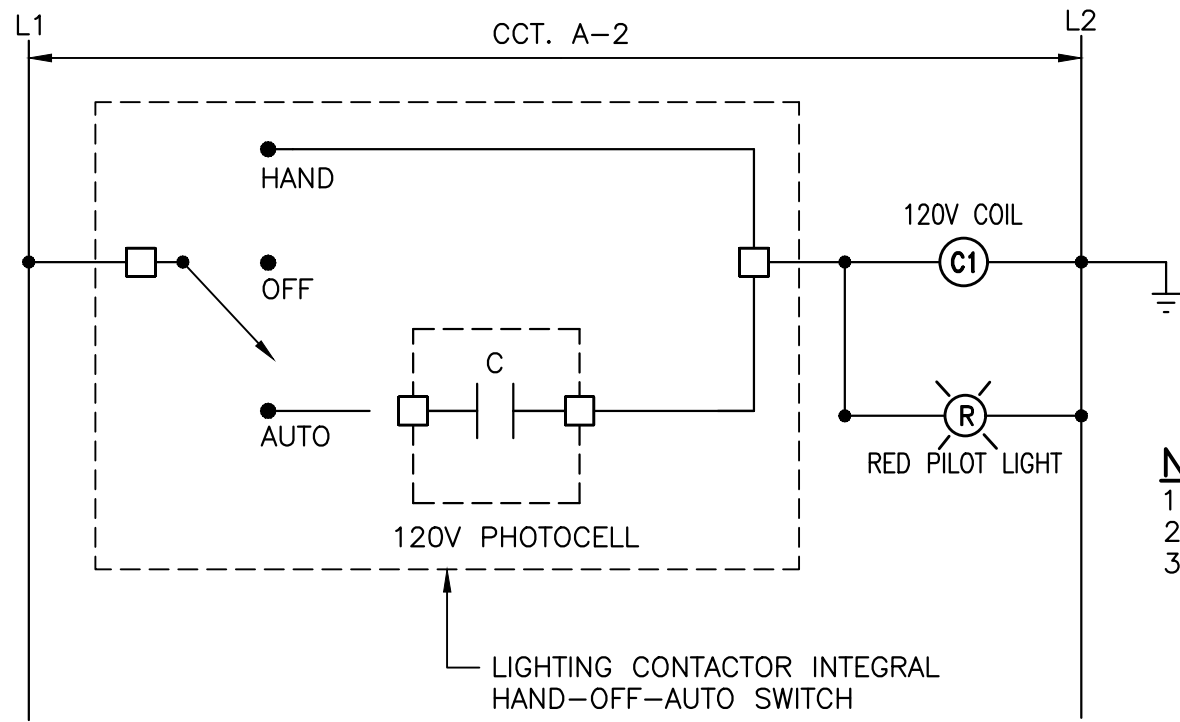


NOTE:  
INSTALL A WARNING SIGN ADJACENT TO THE LIGHTING CONTACTOR STATING THE FOLLOWING: "THIS EQUIPMENT IS FED FROM A SEPARATE CIRCUIT" THE WARNING SIGN SHALL BE IN CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 9.5mm, IN WHITE ON A RED BACKGROUND



- NOTES:
1. 3-POLE CONTACTOR.
  2. CONTACTS RATED FOR 20 AMP, 120V.
  3. 20 AMP COIL

MARGINAL WHARF LIGHTING WIRING DIAGRAM & CONTROL SCHEMATIC 2 E5



NOTE: FINGER WHARF LIGHTING CONTROL IS EXISTING TO REMAIN

### LUMINAIRE SCHEDULE

- AREA LIGHTING
1. MARINE RATED, LED LUMINAIRES.
  2. INPUT: 120V, 400 WATT HID EQUIVALENT
  3. LIGHT INPUT 125 - 170 WATTS.
  4. OUTPUT: MINIMUM 20,000 LUMENS - MAXIMUM 24,000 LUMENS
  5. EFFICACY (LPW) 135 LPW - 165 LPW
  6. R3 ROADWAY TYPE III DISTRIBUTION
  7. 1000 MA DRIVER.
  8. 4000K COLOUR TEMPERATURE.
  9. OPTICAL ENCLOSURE TO BE SEALED AND GASKETTED TO IP66 RATING.
  10. DIE-CAST ALUMINUM; POLYESTER POWDER COAT FINISH. GRAY IN COLOUR.
  11. ENHANCED CORROSION RESISTANT FINISH RATED AT 5000 HOUR EXPOSURE TO SALT SPRAY.
  12. UL STANDARD 1598A (SALT WATER) MARINE OUTSIDE TESTED.
  13. GALVANIZED STEEL MOUNTING BRACKETS AND HARDWARE SUITABLE FOR MOUNTING ON TIMBER POLES.

- FLOOD LIGHTING
1. MARINE RATED, LED LUMINAIRES.
  2. INPUT: 120V, 400 WATT HID EQUIVALENT
  3. OUTPUT: MINIMUM 20,000 LUMENS
  4. VERTICAL DISTRIBUTION. NEMA 4X4 BEAM PATTERN.
  5. CAST ALUMINUM WITH COPPER ALLOY HOUSING. EPOXY PRIMER, GREY FINISHED COAT.
  6. 4000K COLOUR TEMPERATURE WITH A 70 CRI (MINIMUM).
  7. 1000 MA DRIVER.
  8. ENHANCED CORROSION RESISTANT FINISH RATED AT 5000 HOUR EXPOSURE TO SALT SPRAY.
  9. UL STANDARD 1598A (SALT WATER) MARINE OUTSIDE TESTED.
  10. OPTICAL ENCLOSURE TO BE SEALED AND GASKETTED TO IP66 RATING.
  11. GALVANIZED STEEL MOUNTING BRACKETS AND HARDWARE SUITABLE FOR MOUNTING ON TIMBER POLES.

- TREATED TIMBER POLES
1. TIMBER POLES TO BE JACK PINE, TO CSA 015-15 'WOOD UTILITY POLES AND REINFORCING STUBS'.
  2. TIMBER TREATMENT TO CSA 080-15 'WOOD PRESERVATION'.
  3. POLES TO BE CLASS 3, 10.7 M IN TOTAL LENGTH.
  4. HANDLE TREATED MATERIAL TO AVOID DAMAGE CAUSING ALTERATION IN ORIGINAL TREATMENT.

LUMINAIRE SCHEDULE		LUMINAIRE SCHEDULE							DESCRIPTION (SEE SPECIFICATION FOR FULL DESCRIPTION)
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	MOUNTING HEIGHT	AIMING ANGLE (TILT °)		
	9	A	SINGLE	21,000 +	0.810	7.620 METERS	0°	POLE MOUNTED MARINE GRADE LED AREA LIGHT	
	3	B	SINGLE	20,000 +	0.810	7.620 METERS	45°	POLE MOUNTED MARINE GRADE LED FLOOD LIGHT	

CALCULATION SUMMARY							
LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
FINGER WHARF	ILLUMINANCE	LUX	36.06	84.8	15.6	2.31	5.44
MARGINAL WHARF	ILLUMINANCE	LUX	48.16	80.9	23.8	2.02	3.40

SITE LIGHTING LAYOUT & LIGHTING LEVELS 1 E5