

ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
ATS	AUTOMATIC TRANSFER SWITCH
BOCT	BOTTOM OF CABLE TRAY ABOVE A.F.F
BOF	BOTTOM OF FLOAT
DTT	DRY TYPE TRANSFORMER
E	EMERGENCY POWER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND CONDUCTOR
IG	ISOLATED GROUND
MCC	MOTOR CONTROL CENTRE
MCS	MOULDED CASE SWITCH
MIO	MODULAR PLC I/O
N	NORMAL POWER
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O/C	OVER COUNTER
PLC	PROGRAMMABLE LOGIC CONTROLLER
PNL	PANEL
TL	TWIST LOCK
UPS	UNINTERRUPTIBLE POWER SUPPLY
WP	WEATHER PROOF
AFG	ABOVE FINISHED GRADE

RECEPTACLE SYMBOLS	
	20A, 125V, NEMA 5-20R T-SLOT DUPLEX RECEPTACLE
	20A, 125V, NEMA 5-20R T-SLOT GFCI DUPLEX RECEPTACLE
	20A, 125V, NEMA 5-20R T-SLOT GFCI WP 'IN USE' DUPLEX RECEPTACLE

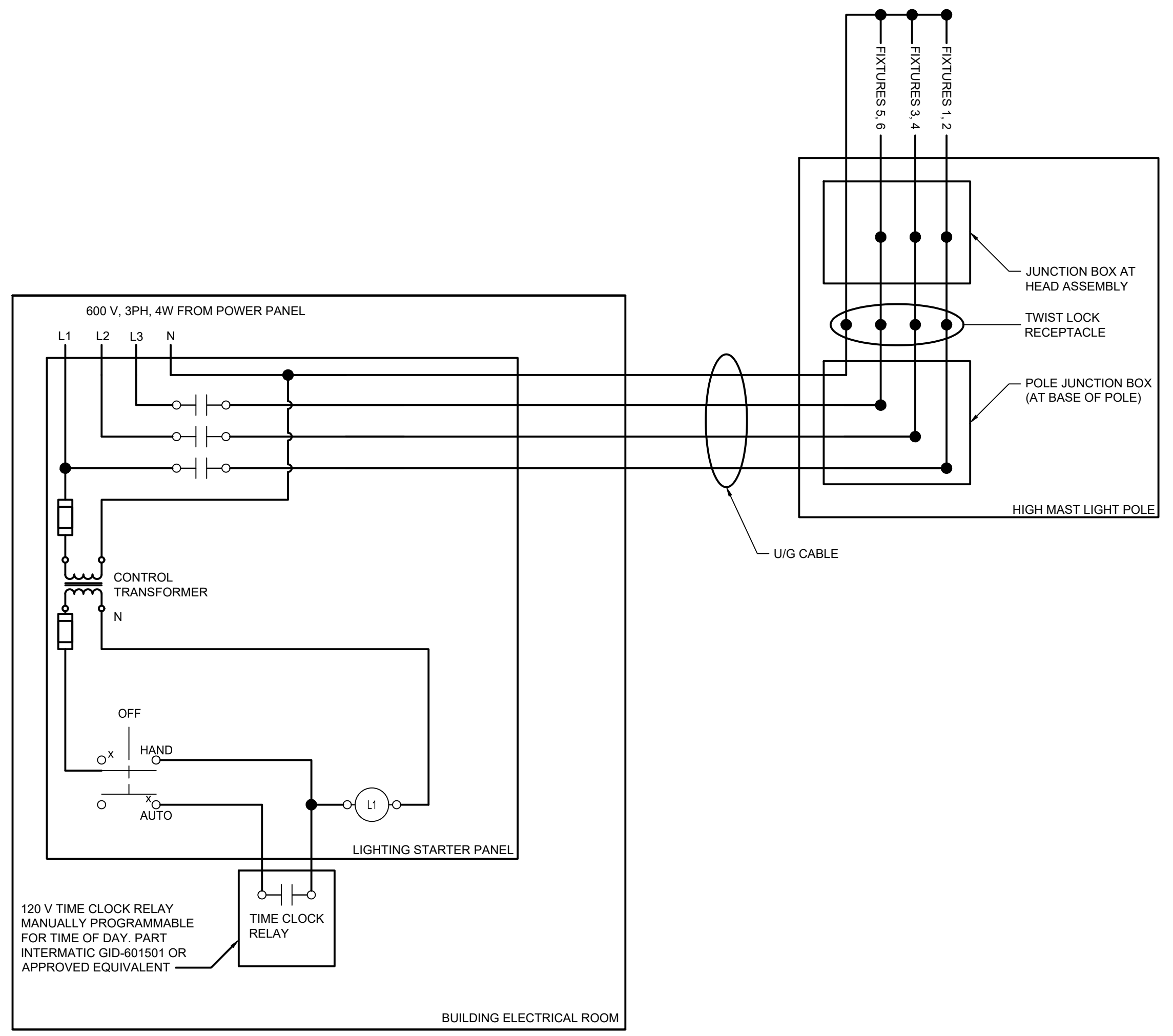
LINETYPE LEGEND	
	NEW AND / OR RELOCATED
	EXISTING TO REMAIN
	UNDERGROUND CONDUIT

LUMINAIRE SCHEDULE			
TYPE	LAMP	DESCRIPTION	MANUFACTURER (OR PRE-APPROVED EQUAL)
A1	LED 347 V	HIGH MAST DOWNLIGHT 70 CRI, 55 000 LUMENS, 4000K LEDS AND AREA NARROW OPTICS. ADJUSTABLE LUMEN SELECTOR SWITCH.	COOPER CTN-CA8-330-740-E1 SIGNIFY HFL-138L-1050NW-G2-5M-HVU-DMG-GY3 HOLOPHANE HMLEd4-P2-40K-HVOLT-HGR-AN
A2	LED 347 V	HIGH MAST DOWNLIGHT 980 70 CRI, 55 000 LUMENS, 4000K LEDS AND AREA NARROW OPTICS WITH 180 DEGREE HOUSE SIDE SHIELD. ADJUSTABLE LUMEN SELECTOR SWITCH	COOPER CTN-CA8-330-740-E1-HSS SIGNIFY HFL-138L-1050NW-G2-4-HVU-DMG-HS-GY3 HOLOPHANE HMLEd4-P2-40K-HVOLT-HGR-AN
A3	LED 347 V	HIGH MAST DOWNLIGHT 70 CRI, 55 000 LUMENS, 4000K LEDS AND AREA WIDE OPTICS. ADJUSTABLE LUMEN SELECTOR SWITCH	COOPER CTN-CA8-480-740-E1 SIGNIFY HFL-138L-1050NW-G2-5M-HVU-DMG-GY3 HOLOPHANE HMLEd4-P2-40K-HVOLT-HGR-AW
B1	LED 347 V	HIGH MAST FLOOD LIGHT 70 CRI, 65 000 LUMENS, 4000K LEDS AND NARROW FLOOD OPTICS. ADJUSTABLE LUMEN SELECTOR SWITCH	LITHONIA RSXF4 LED-P6-40K-NFL SIGNIFY PFF-138L-1.2A-NW-G2

POWER SYMBOLS	
	JUNCTION BOX
	MANUAL DISCONNECT SWITCH
	CIRCUIT BREAKER
	120/240V PANEL
	FUSE
	HOA SWITCH
	CONTACT
	SOLENOID

LIGHTING SYMBOLS	
	LED HIGH MAST LIGHT ASSEMBLY
	LED HIGH MAST DOWN LIGHT
	LED HIGH MAST FLOOD LIGHT

CIRCUIT NUMBERING:  
AA-X.1  
SWITCHED CIRCUIT  
CIRCUIT NUMBER  
PANEL NAME



1 LIGHTING CONTROL AND PHASING SCHEMATIC  
E01 SCALE: NOT TO SCALE

Contractor to verify all dimensions & conditions on site and immediately notify the departmental representative of all discrepancies.

REVISIONS	DESCRIPTION	DATE
REV0	ISSUED FOR TENDER	2022/04/22

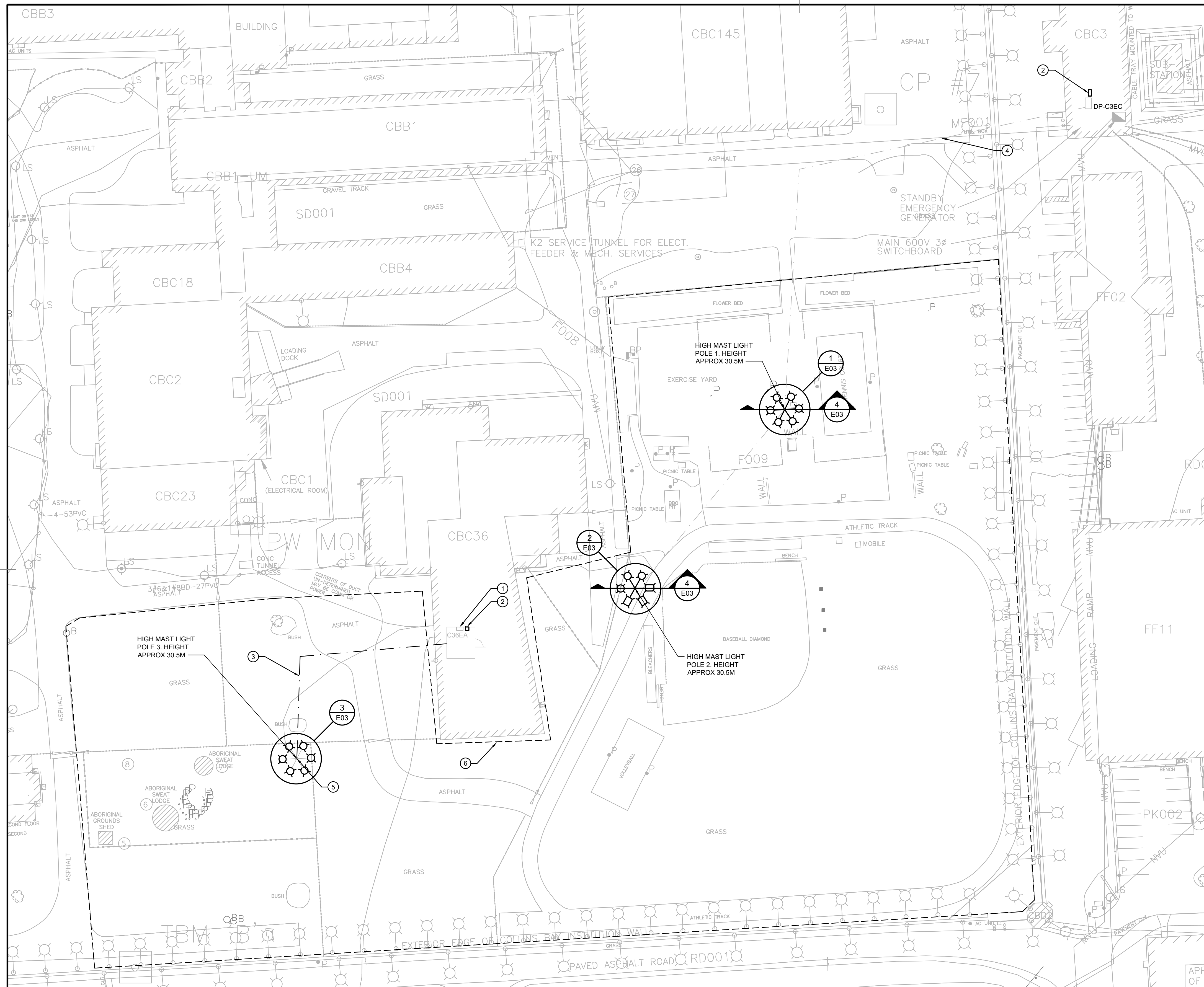
	A detail no. du detail	
	B location drawing no. sur dessin no.	
	C drawing no. dessin no.	

project HIGH MAST LIGHT REPLACEMENT, COLLINS BAY INSTITUTION  
1455 BATH ROAD, KINGSTON, ON, K7L 4V9

drawing LEGEND AND SCHEDULES  
dessin

Designed By	AY	Conçu par
Date	2022/02/07	(yyyy/mm/dd)
Drawn By	AY	Dessiné par
Date	2022/02/07	(yyyy/mm/dd)
Reviewed By	JG	Examiné par
Date	2022/02/14	(yyyy/mm/dd)
Approved By	-	Approuvé par
Date	-	(yyyy/mm/dd)
Tender	-	Soumission
Project Manager	-	Administrateur de projets
Project no.	31473-000	No. du projet
Drawing no.	E01	No. du dessin





1 SITE PLAN  
SCALE: 1:500

**GENERAL NOTES:**

A. INSTALLATION OF NEW HIGH MAST LUMINAIRES, HEAD ASSEMBLIES AND WIRING TO BE CARRIED OUT WITHOUT THE REMOVAL OF THE POLE. WORK SHALL BE CARRIED OUT WITH A CRANE AND MAN-BASKET AND A SECOND CRANE TO LIFT THE EQUIPMENT AS REQUIRED. ALL WORK TO BE CARRIED OUT UNDER STRICT ONTARIO MOL HEALTH AND SAFETY GUIDELINES AS WELL AS CSC SITE REQUIREMENTS.

**DRAWING NOTES:**

- ① PROVIDE NEW 600 V 3P 15 A BREAKER FOR NEW HIGH MAST LIGHTING CIRCUIT.
- ② DEMOLISH EXISTING STARTER AND TIME CLOCK RELAY AND PROVIDE NEW STARTER AND TIME CLOCK RELAY IN THE SAME LOCATION AS EXISTING. REFER TO ELECTRICAL SCHEMATIC E01/1 FOR DETAILS.
- ③ DISCONNECT EXISTING CABLE AT THE LIGHT POLE AND PULL BACK TO SOURCE PANEL C36EA. PROVIDE NEW 4C #10 FROM EXISTING PANEL C36EA IN EXISTING UNDERGROUND CONDUIT TO THE LIGHT POLE. CONDUIT ROUTING IS APPROXIMATE, TO BE VERIFIED DURING CONSTRUCTION. PROVIDE NEMA 3R JUNCTION BOX C/W 600 V TERMINAL STRIP INSIDE EXISTING JUNCTION BOX AT THE BASE OF THE POLE MOUNTED TO EXISTING PLATE.
- ④ VERIFY THAT EXISTING CABLE IS MINIMUM 4C #8. COMPLETE VISUAL INSPECTION ON EXPOSED CABLE, PROVIDE INSULATION RESISTANCE TEST, POLARITY AND POINT TO POINT TEST ON EXISTING CABLES. IF ALL TESTS/INSPECTION PASS, RE-TERMINATE TO NEW JUNCTION BOX AT THE BASE OF THE POLES.
- ⑤ PROVIDE NON-SHRINK GROUT BETWEEN THE EXISTING POLE BASE AND THE CONCRETE BASE.
- ⑥ CONTRACTOR TO PROVIDE PHOTOMETRIC DATA ALONG WITH SHOP DRAWINGS FOR THE AREA SHOWN. FIXTURES AND LIGHT LEVELS TO BE IN ACCORDANCE WITH CSC STANDARD SP-4 SECURITY LIGHTING SECTION 5.1 AND ACHIEVE AVERAGE ILLUMINATION OF 10 LUX AND AVERAGE TO MINIMUM UNIFORMITY RATIO OF 3:1 AT GRADE LEVEL. VERIFY LIGHT LEVELS UPON PROJECT COMPLETION, REFER TO SPECIFICATION 26 50 00 - LIGHTING FOR ADDITIONAL INFORMATION.

Contractor to verify all dimensions & conditions on site and immediately notify the departmental representative of all discrepancies.

REV0	ISSUED FOR TENDER	2022/04/22
revisions	description	date

A	A detail no.	A
C	no. du detail	C
B	location drawing no.	B
C	sur dessin no.	C
	C drawing no.	
	dessin no.	

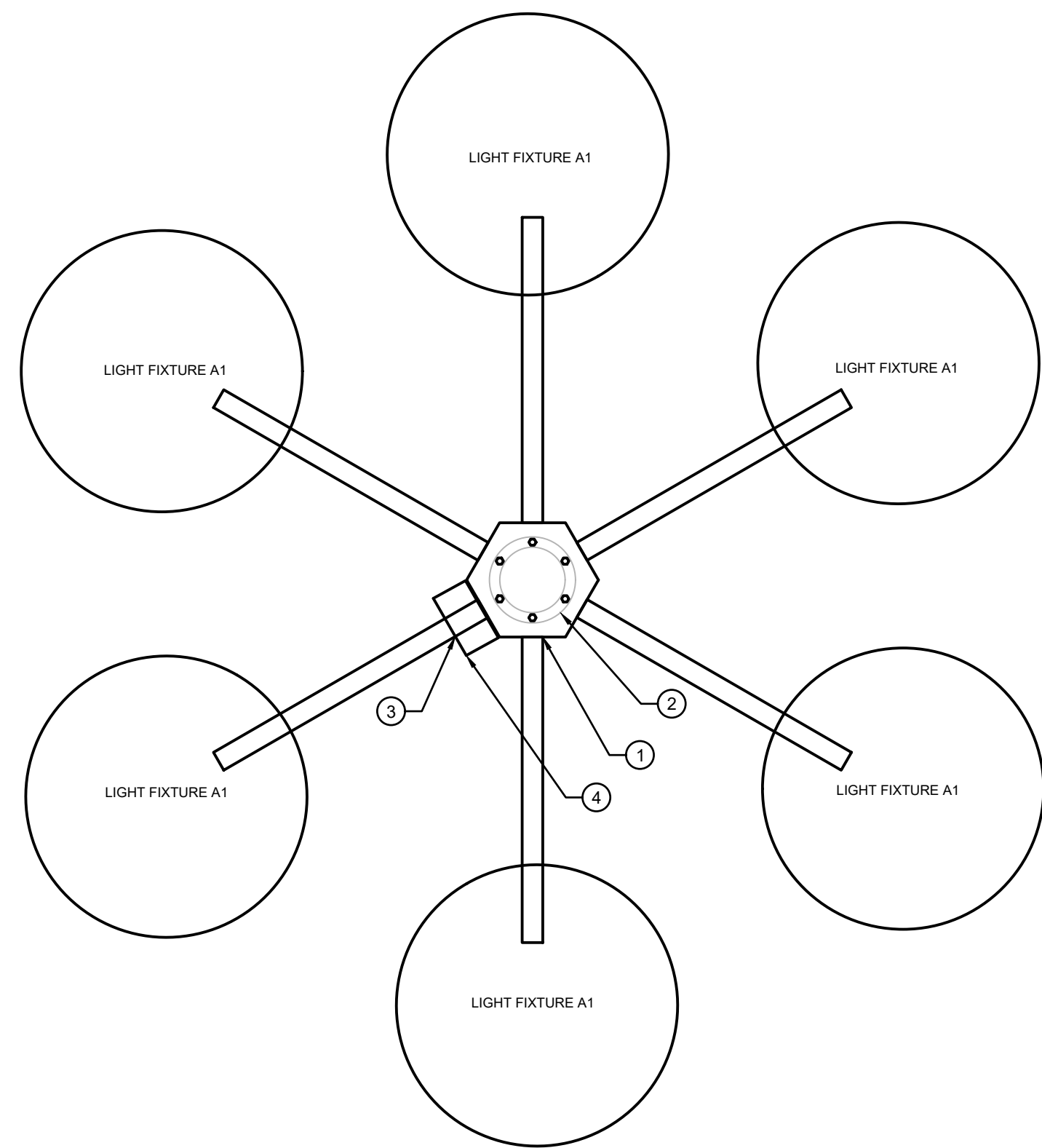
project HIGH MAST LIGHT REPLACEMENT, COLLINS BAY INSTITUTION project  
1455 BATH ROAD, KINGSTON, ON, K7L 4V9

drawing SITE PLAN dessin

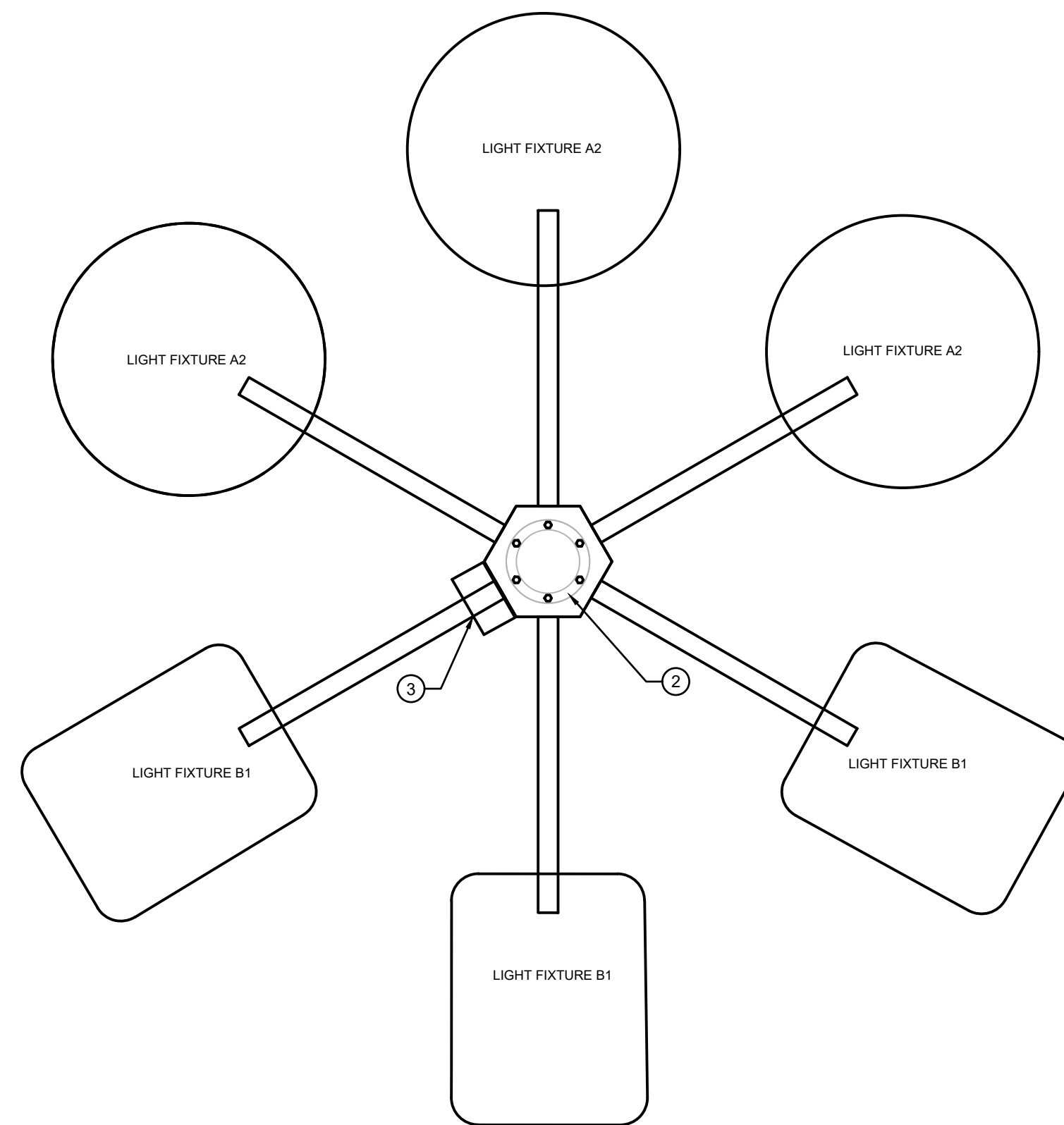
Designed By	AY	Conçu par
Date	2022/02/07	(yyyy/mm/dd)
Drawn By	GN	Dessiné par
Date	2022/02/07	(yyyy/mm/dd)
Reviewed By	JG	Examiné par
Date	-	(yyyy/mm/dd)
Approved By	-	Approuvé par
Date	-	(yyyy/mm/dd)
Tender	-	Soumission

Project Manager	Administrateur de projets
Project no.	No. du projet
	31473-000
Drawing no.	No. du dessin
	E02

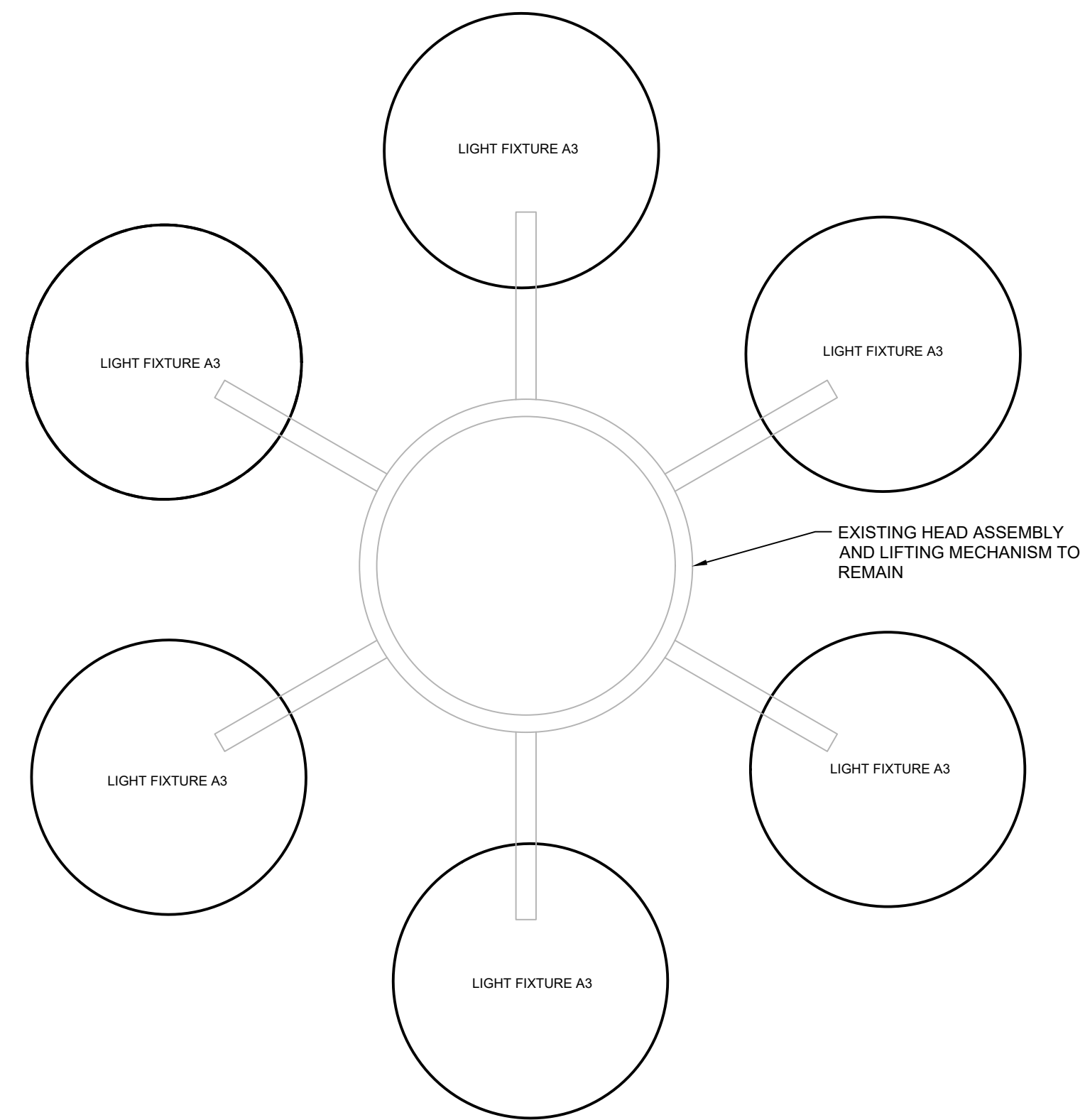




1 POLE 1 HEAD ASSEMBLY ENLARGED VIEW  
E03 SCALE: NOT TO SCALE



2 POLE 2 HEAD ASSEMBLY ENLARGED VIEW  
E03 SCALE: NOT TO SCALE



3 POLE 3 HEAD ASSEMBLY EXISTING TO REMAIN ENLARGED VIEW  
E03 SCALE: NOT TO SCALE

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revisions	description	date

A	A detail no. / no. du détail	A
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C	C drawing no. / dessin no.	C

project project

**HIGH MAST LIGHT REPLACEMENT, COLLINS BAY INSTITUTION**  
1455 BATH ROAD, KINGSTON, ON, K7L 4V9

drawing dessin

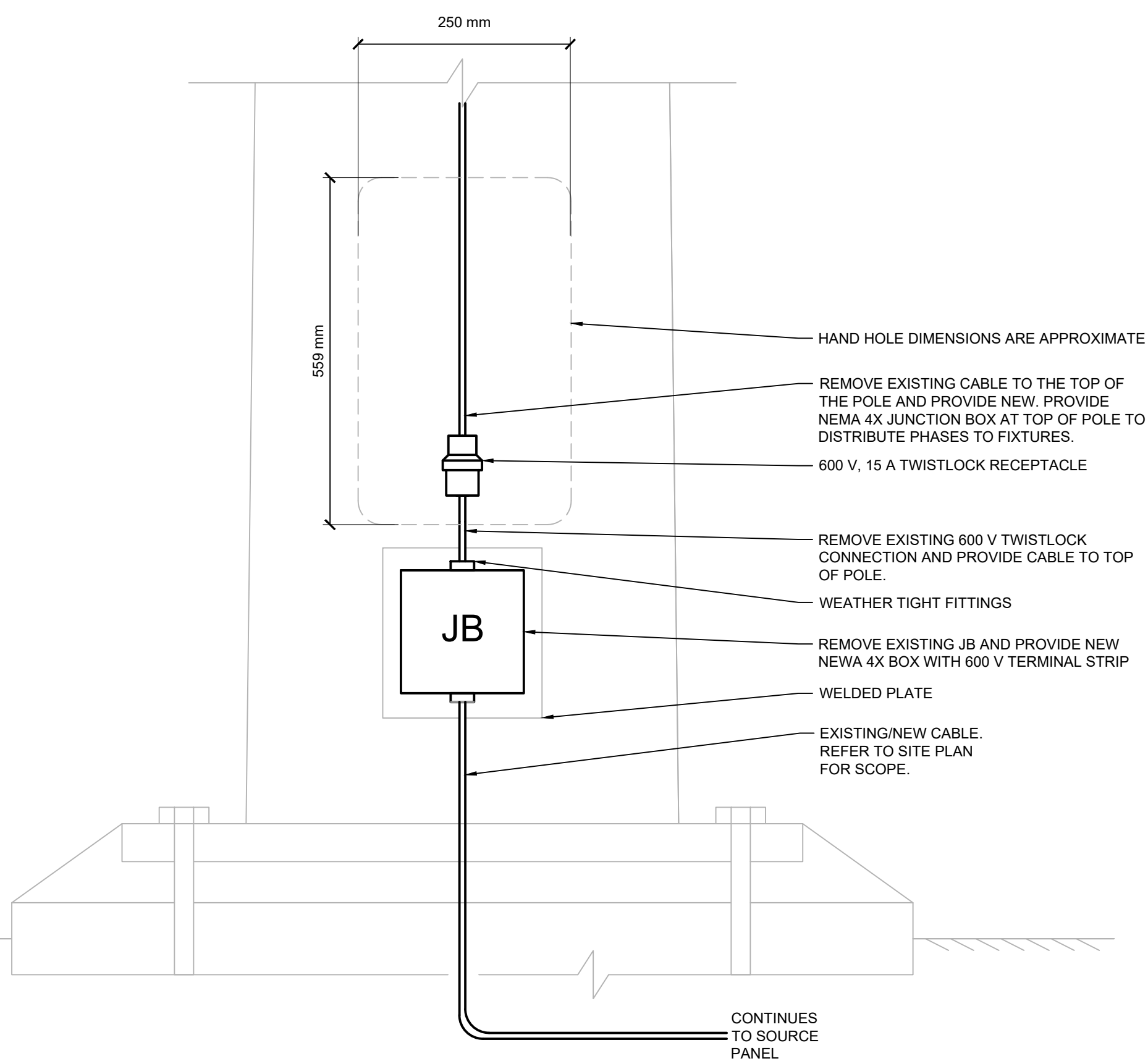
**DETAILS**

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Tender	-	Soumission
Project Manager	-	Administrateur de projets
Project no.	-	No. du projet

31473-000

Drawing no. No. du dessin

E03



4 POLE 1, 2 AND 3 SECTION VIEW  
E03 SCALE: NOT TO SCALE

**DRAWING NOTES:**

- 1 PROVIDE DETAILED SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER WITH A VALID LICENCE IN THE PROVINCE OF ONTARIO FOR THE NEW HEAD ASSEMBLY, MOUNTING DETAILS, COORDINATION OF ARM LENGTH, FIXTURE SIZE, HEAD COVER, ELECTRICAL SCHEMATICS AND CABLE DETAILS.
- 2 DISCONNECT EXISTING HEAD ASSEMBLY AND ALL ASSOCIATED EQUIPMENT WITH THE LIGHT FIXTURE LIFTING MECHANISM FROM THE POLE. PROVIDE NEW FIXED RING ASSEMBLY AND ALL COMPONENTS FOR AN OPERATIONAL FIXED SYSTEM. VERIFY BOLT PATTERN PRIOR TO SUBMITTING SHOP DRAWINGS, CONTRACTOR TO AVOID CUTTING AND DRILLING OF EXISTING FLANGE IF POSSIBLE. REFER 5/E03 FOR PHOTO OF EXISTING HEAD ASSEMBLY. TYPICAL FOR POLE 1 AND 2.
- 3 PROVIDE MOUNTING BRACKET AND NEMA 4X JUNCTION BOX COMPLETE WITH 600 V TERMINAL STRIPS TO JUNCTION INCOMING CABLE TO THE 6 FIXTURES. 2 FIXTURES PER PHASE.
- 4 PROVIDE NEW CABLING TO INDUSTRY STANDARDS FROM THE JUNCTION BOX AT THE POLE BASE TO THE TOP OF POLE JUNCTION BOX AND TO THE LIGHT FIXTURES.
- 5 PROVIDE NEW CABLING TO INDUSTRY STANDARDS INSTALLED IN EXISTING HIGH MAST ASSEMBLY. TERMINATE TO EXISTING DISCONNECT AT THE BASE OF THE POLE.

DISCONNECT ALL EXISTING HEAD ASSEMBLY AND ALL ASSOCIATED EQUIPMENT FROM THE EXISTING POLE FLANGE. PROVIDE NEW FIXED RING ASSEMBLY MOUNTED TO EXISTING FLANGE. VERIFY BOLT PATTERN PRIOR TO SHOP DRAWING SUBMISSION



5 EXISTING HIGH MASS HEAD ASSEMBLY, TYPICAL OF POLES 1 AND 2.  
E03 SCALE: NOT TO SCALE