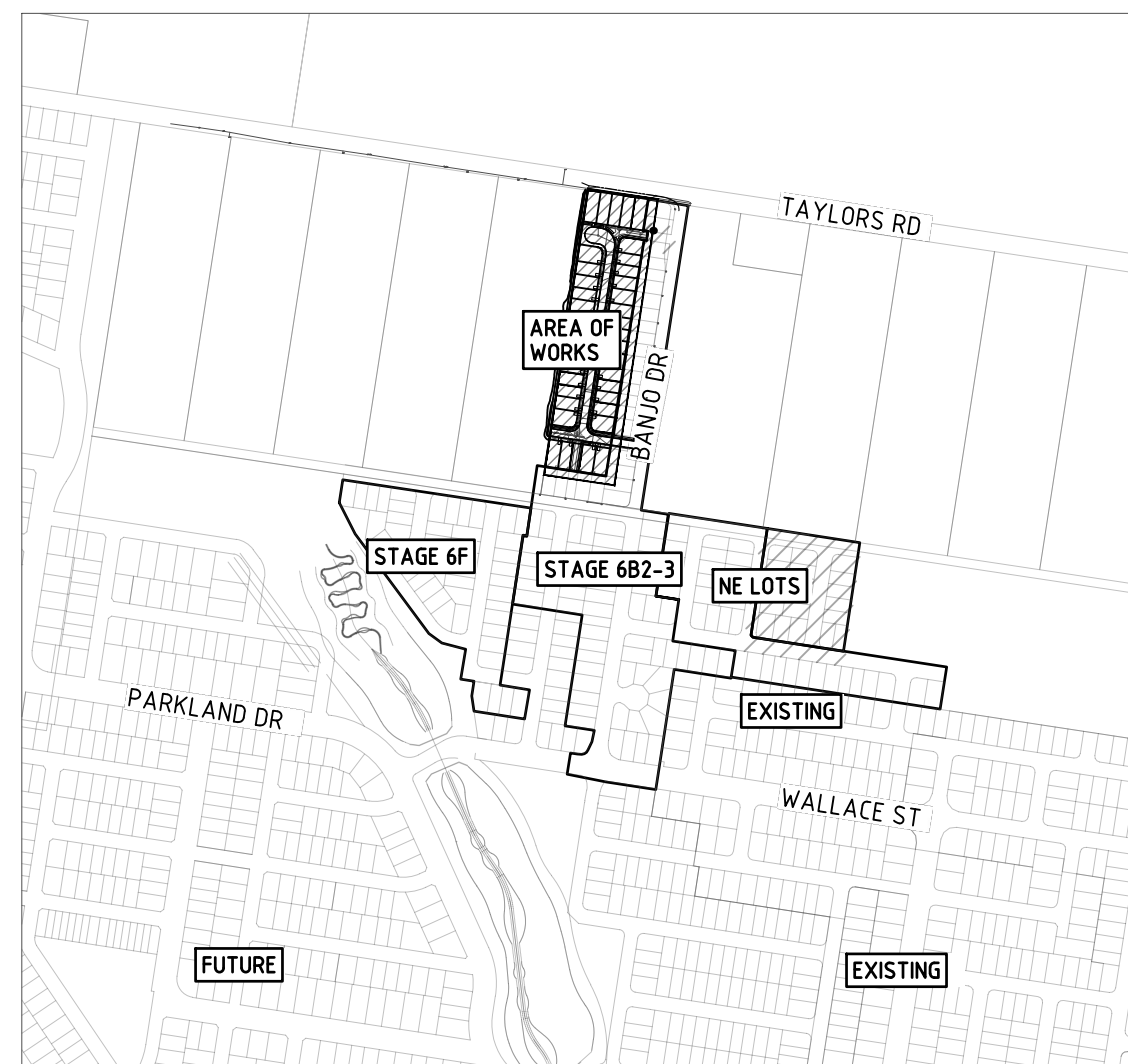
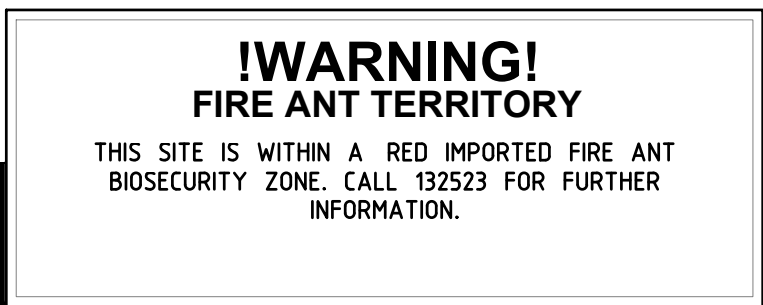




ROAD LIGHTING CERTIFIED TO COMPLY WITH IPSWICH CITY COUNCIL PLANNING SCHEME POLICY 3 AND REQUIREMENTS FOR AS/NZS 1158.1.1:2022 FOR 'V' CATEGORY & AS/NZS 1158.3.1:2020 FOR 'P' CATEGORY FOR LUMINAIRES AND LAMPS SUPPLIED UNDER AEMO APPROVED UNMETERED SUPPLY TABLE. INSTALLATION TO COMPLY WITH THE REQUIREMENTS OF AS/NZS 3000:2018. THE LIGHTING DESIGN IS BASED UPON THE FOLLOWING MAINTENANCE SCHEDULE: * LAMP REPLACEMENT AT 88000 HOURS INTERVALS INC. CLEANING & INSPECTION OF LUMINAIRE EVERY 48 MONTHS. * VEGETATION TO BE KEPT CLEAR OF LUMINAIRES. * INSPECTION PATROLS & SPOT LAMP REPLACEMENT TO MAINTAIN SERVICE AVAILABILITY AT MIN. 95%. * LUMINAIRES & LAMPS TO BE REPLACED WITH EXACT EQUIVALENTS. EQUIVALENTS.	
STREET NAME	LIGHTING CATEGORY
BANJO ST	PR3
WICKHAM WAY & BINGHAM ST	PR5
PATHWAY & PATHWAY SOUTH	PP5
PATHWAY	PR6
KRIS BOVEINIS (RPEQ 22272)	
DATE	11/04/2025

REFER TO PROJECT S1302337 WORKS PLANS FOR ENERGEX WORKS PLANS.

SYMBOL LEGEND	
	PROPOSED 50mm S/L
	PROPOSED 50mm S/L (RATE 3)
	PROPOSED ENERXEG 100mm COMMS
	PROPOSED 100mm
	PROPOSED 125mm
	EXISTING 40mm S/L
	EXISTING ENERXEG 100mm COMMS
	EXISTING 100mm
	EXISTING 125mm
	PROPOSED CABLE (AS MARKED)
	EXISTING CABLE (AS MARKED)
	PROPOSED UNDERGROUND HV/LV ROUTE
	EXISTING UNDERGROUND HV/LV ROUTE
	PROPOSED OVERHEAD HV/LV ROUTE
	EXISTING OVERHEAD HV/LV ROUTE
	PROPOSED S/L CABLE
	EXISTING S/L CABLE
	CONTINUES
	PADMOUNT TRANSFORMER
	PMT LV GEOGRAPHIC
	PMT HV GEOGRAPHIC
	RING MAIN UNIT
	RMU HV SCHEMATIC
	PROPOSED SUPPLY PILLAR
	EXISTING SUPPLY PILLAR
	PROPOSED LINK PILLAR
	EXISTING LINK PILLAR
	COMMERCIAL PILLAR
	EARTH
	PROPOSED TYPE 4 PIT
	EXISTING TYPE 4 PIT
	RECOVER EQUIPMENT
	1kV STRAIGHT JOINT
	OVERHEAD POLE TRANSFORMER
	OVERHEAD POLE (HV ONLY)
	OVERHEAD POLE (LV ONLY)
	OVERHEAD POLE (HV & LV)
	OVERHEAD HV TERMINATION
	OVERHEAD LV TERMINATION
	AIR BREAK SWITCH (OPEN)
	AIR BREAK SWITCH (CLOSED)
	DISCONNECT LINKS (OPEN)
	DISCONNECT LINKS (CLOSED)
	WATER METER
	SURVEY PEG
	STATION NUMBER
STREET LIGHT SYMBOL LEGEND	
	PROPOSED NOSTALGIA GEN2 14W 4K (RATE 3)
	PROPOSED STREETLED L14A LOUVERED (RATE 3)
	EXISTING AVENUE GEN2 L18 4K
	EXISTING S/L (RATE 2)

Maintenance Factor Assumed: The maintenance factor assumed in the calculations is as follows:

- * Luminaire Maintenance Factor (refer AS 1158 1.1:2022 APPENDIX E).
- * Lamp Lumen Depreciation Factor (Refer Lamp Manufacturer's "Lamp Lumen Depreciation Curves").

Maintenance Factor Calculated 0.75 (LED)

Schedule of Maintenance: This road lighting design is based on the following maintenance schedule:

Cleaning regime every 48 months including:

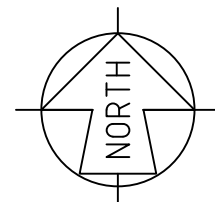
- * All optical surfaces, both internal and external, of the luminaire shall be cleaned.
- * All gaskets shall be checked for deterioration and replaced where necessary.
- * Damaged/weathered visors shall be replaced.
- * All accessible screws, nuts etc. shall be checked for tightness.
- * A visual check shall be made of the electrical components and wiring for signs of overheating.
- * If required, the luminaire shall be realigned/adjusted to the design specification.

DESIGN DOCUMENTATION IN ACCORDANCE WITH THE REQUIREMENTS OF COMPLIANCE OF AS/NZS 1158

* Refer AS1158.1.1:2022 Appendix D for information regarding V category
* Refer AS1158.3.1:2020 Appendix C for information regarding P category
* PerfectLite 5.06 computer software used
* AGI32 computer software used

ITEM		PROJECT SPECIFICATION					
LIGHTING CATEGORY							
Road Name	BANJO DR	WICKHAM WAY & BINGHAM ST	WICKHAM WAY & BINGHAM ST	PATHWAY	PATHWAY	PATHWAY SOUTH	
Nominated Lighting Category	PR3	PR5	PR5	PR6	PP5	PP5	
Road Surface Reflection Characteristic	R3	R3	R3	R3	R3	R3	
INSTALLATION GEOMETRY							
Road Reserve / Pathway Lighting Design Width	17m	16m	16m	10m	1.5m	1.5m	
Mounting Height	5.1m	5.1m	5.1m	5m	5m	5m	
Overhang	-1.14m	-1.14m	-1.14m	-0.5m	-0.5m	-1.5m	
Lighting Arrangement	ARR1	ARR1	ARR3	-	-	-	
Pole Setback	1.141OK	1.141OK	1.141OK	0.5 PATH	0.5 PATH	1.5 PATH	
Upcast Angle	0°	0°	0°	0°	0°	0°	
LUMINAIRE/LAMP DETAILS							
Lamp Type / Wattage	L18 (Nostalgia Type 1)	L14 (Nostalgia Type 1)	L14 (Nostalgia Type 1)	L14AL	L14AL	L14AL	
Luminaire Identification	Sylvania Schröder AVENUE GEN2 15W 4K	Sylvania Schröder AVENUE GEN2 14W 4K	Sylvania Schröder AVENUE GEN2 14W 4K	Sylvania Schröder StreetLED MKIII 14W Aeroscreen Louvre	Sylvania Schröder StreetLED MKIII 14W Aeroscreen Louvre	Sylvania Schröder StreetLED MKIII 14W Aeroscreen Louvre	
Lamp Flux (Lumens)	2523	1969	1969	1290	1290	1290	
I-Table Number (cie)	AVENUE II 4K 18W V2 210730PH	AVENUE II 4K 14W V2 210729PH	AVENUE II 4K 14W V2 210729PH	StreetLED3 14W 4K Aero LVR 220828PH2	StreetLED3 14W 4K Aero LVR 220828PH2	StreetLED3 14W 4K Aero LVR 220828PH2	
Lighting Tariff	3	3	3	3	3	3	
Power Factor	HPF (≥ 0.9)	HPF (≥ 0.9)	HPF (≥ 0.9)	HPF (≥ 0.9)	HPF (≥ 0.9)	HPF (≥ 0.9)	
Start/Run Currents (Amps)	0.08	0.06	0.06	40.4/0.06	40.4/0.06	40.4/0.06	
IP Rating	IP66	IP66	IP66	IP66	IP66	IP66	
CATEGORY PR5 LUMINAIRE/LAMP MAXIMUM SPACING CALCUS							
Average Horizontal Illuminance (E_h)	≥1.75 lx	≥0.85 lx	≥0.85 lx	≥0.7 lx	≥0.85 lx	≥0.85 lx	
Minimum Point Horizontal Illuminance (E_{-1})	≥0.14 lx	≥0.14 lx	≥0.14 lx	≥0.14 lx	≥0.14 lx	≥0.14 lx	
Illuminance Uniformity (U_{min})	≤0.8	≤10	≤10	≤10	≤5	≤5	
Upward wasted light ratio (UWL/R) %	50%	50%	50%	50%	≤0%	50%	
Road Reserve Lighting Design Width (m)	Maximum Spacing (m)	Maximum Spacing (m)	Maximum Spacing (m)	Maximum Spacing (m)	Maximum Spacing (m)	Maximum Spacing (m)	
1.5	-	-	-	-	57	57	
10	-	-	-	62.4	-	-	
16	-	55.3	57.5	-	-	-	
17	44	-	-	-	-	-	
25	-	-	28.7	-	-	-	

DATE	DESCRIPTION
16.10.24	ISSUED FOR CONVEYANCE ONLY NOT FOR CONSTRUCTION
11.04.25	ISSUED FOR CONSTRUCTION



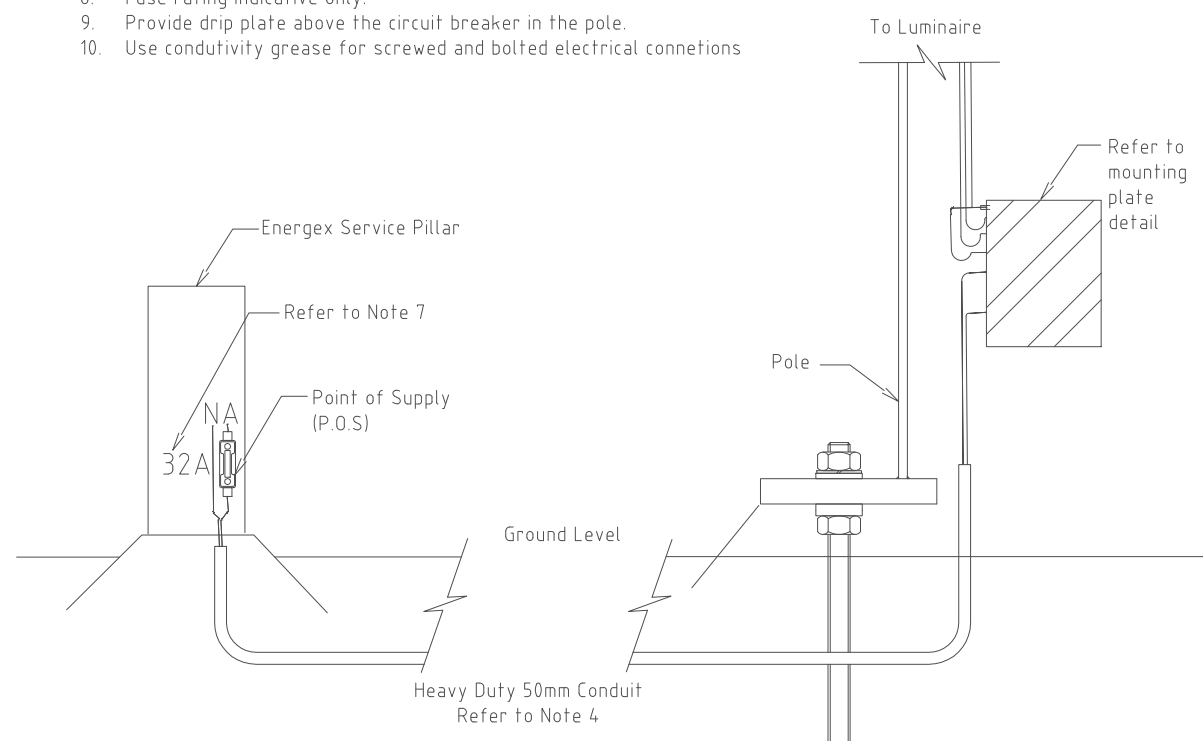
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SITE CONTACT DETAILS		COUNCIL STANDARD ALIGNMENTS		WORKS COORDINATOR	PECE	APPROVED	KRIS BOVEINIS	PECE		WORKSPLAN VERSION 5.5
NAME		2.95m RP		PARENT PROJECT NO.				SCALE: 1:500@A1		
TBC		0-0.3m RP		WORK REQUEST NO.	782-784 & 802-836	CHECKED	BOYD WILCOCKS	INSTALL CABLES & STREETLIGHTS		PROJECT / SUB PROJECT NO.
COMPANY		NBN	REFER NBN	LOTS		DESIGNER	FILIPPE PABIS			
		GAS	REFER GAS			PHONE	(07) 5596 1425			
PHONE	-	HP GAS	REFER GAS	CANCELLING LOTS	LOT 6 ON SP341606	PLANNER	ANTHONY JOWETT	38 LOT SUBDIVISION GIBBS - STAGE 2 - RATE 3 WALLOON QLD 4306		S1330006
MOBILE	-	WATER	REFER CIVIL		IPSWICH CITY COUNCIL	PHONE	(07) 5596 1425			
FAX	-	STORMWATER SEWERAGE	REFER CIVIL	LOCAL AUTHORITY		ISSUE DATE	11 APRIL 2025			
		OTHER	REFER CIVIL	UDB REF						
			REFER CIVIL	DEGPED?						

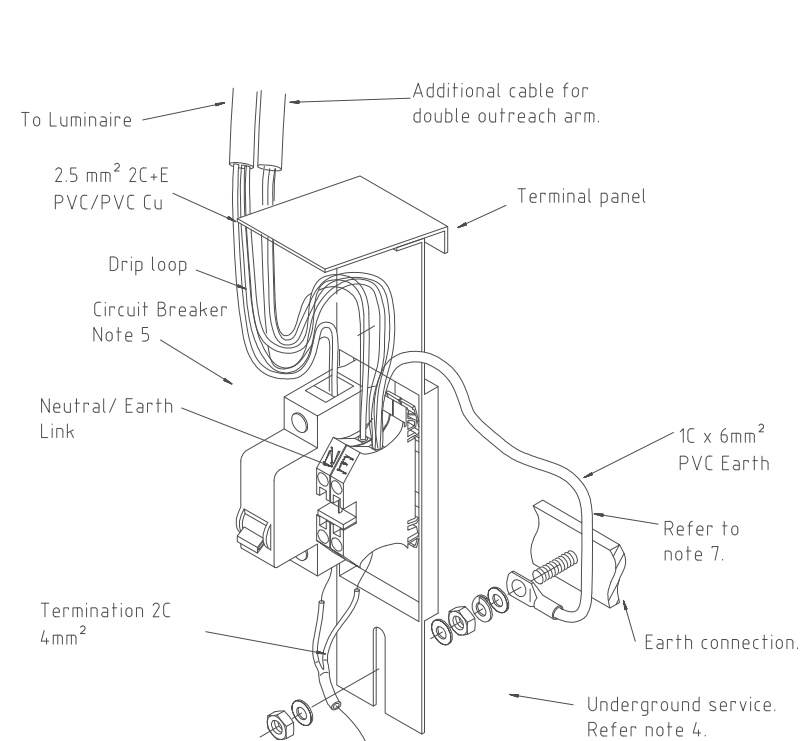
Sheet
 ISSUE NO: B

1 of 2

- 1 All dimensions shown are in mm.
 - 2 Dimensions shown are minimum only.
 - 3 BCD protection on lighting fixture subcircuit not required as per Ipswich City Council risk assessment and AS3000 2.6.3.21 Exception 5.
 - 4 Cable shall be a minimum of 4mm² XLPE/PPE Cu and suitable for underground installation.
 - 5 Circuit breaker type and rating shall be determined by the designer. Circuit breaker breaking depicted on the drawings are indicative only.
 - 6 To be labelled as "MAIN SWITCH".
 - 7 Include drop loops of nominal 100mm radius.
 - 8 Provide tag "MAIN EARTH - DO NOT DISCONNECT".
 - 9 Fuse rating indicative only.
 - 10 Provide drop plate above the circuit breaker in the pole.
- Use conductivity gauge for screwed and bolted electrical connections
- To Luminaire



CROSS SECTION
(N.T.S)



MOUNTING PLATE DETAIL
(N.T.S)

CIRCUIT NOTES

1. ALL CALCULATIONS BASED ON 240V SUPPLY.
2. FAULT LOOP IMPEDANCE CALCULATED USING 0.4s DISCONNECT TIME.
3. ONLY TYPE B OR C CIRCUIT BREAKERS TO BE USED UNLESS NOTED OTHERWISE.
CIRCUIT BREAKER SIZE:
 (i) MINOR ROAD 10A
 (ii) MAJOR ROAD 16A
4. Ia OF 4.5 TIMES RATED C/B CURRENT.
5. INSTALLATION TO COMPLY WITH THE REQUIREMENTS OF AS/NZS 3000:2018.
6. NO RCD HAS BEEN INCLUDED IN CIRCUIT DESIGN DUE TO RISK OF UNUSUAL TRIPPING CAUSING DANGER GREATER THAN EARTH LEAKAGE CURRENT.

RATE 3 LED LIGHTING INFORMATION

DESCRIPTION: SYLVANIA SCHREDER NOSTALGIA GEN2 14W NOSTALGIA TYPE 2, NEMA 7 PIN
DIMMABLE LUMINAIRE
ORDER CODE: 210729PH
SCHEDULE CODE: L14

DESCRIPTION: SYLVANIA SCHREDER STREETLED MKIII 14W 4K AEROSCREEN LOUVRE, NEMA 7 PIN
DIMMABLE LUMINAIRE.
ORDER CODE: 220828PH
SCHEDULE CODE: L14AL

DESCRIPTION: SYLVANIA SCHRÉDER AVENUE GEN2 18W 4K
ORDER CODE: AVENUE II 4K 18W V2 210730PH
SCHEDULE CODE: L18

RATE 3 LED LIGHTING NOTES

1. DESIGNED IN ACCORDANCE WITH IPSWICH CITY COUNCIL PLANNING SCHEME POLICY 3.
2. ALL POLES & OUTREACHES TO BE GALVANISED UNLESS NOTED OTHERWISE.
3. CONTRACTOR TO ENSURE LUMINAIRES ARE MOUNTED WITH ZERO DEGREE TILT.

RATE 3 UNDERGROUND CABLE SCHEDULE													
LOCATION	STATIONS FROM-TO	VOLTS	EXIST	TRF	REC	INSTALL	CABLE SIZE/TYPE	MODEL ID	ROUTE LENGTH (m)	CABLE LENGTH (m)		LCC	REMARKS
										NEW	REC		
WICKHAM WAY	3 - 3L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	22	25			
	6 - 6L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	17	20			
	10 - 10L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	17	20			
	11 - 11L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	32	35			
	15 - 15L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	22	25			
	17 - 17L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	7	10			
	24 - 24L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	2	5			
	26 - 26L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	22	25			
BINGHAM ST	29 - 29L	SL				*	4 16mm² 2C Cu PVC/PVC	LVC216PVPV	47	50			
	30 - 30L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	7	10			
PATHWAY SOUTH	31 - 31L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	22	25			
TOTALS		SL					4mm² 2C Cu PVC/PVC	LVC24PVPV		200			
							16mm² 2C Cu PVC/PVC	LVC216PVPV		50			

RATE 3 STREETLIGHT SCHEDULE																							
LOCATION	STN NO	SITE ID (POLE No)	POLE or COMPONENTS					COM P-ID	EX	LANTERN				OUTREACH BRACKET				MOUNT HEIGHT (m)	REMARKS				
			COM P-ID	EXIST (m)	REC (m)	ERECT (m)	SLM or IIN			ALIGN (m)	RECOVER LUMIN		CUST	DATE DE- ENERG	L ERECT LUMIN	CUST	DATE ENERG			SLM or IIN	EXIST (m)	REC (m)	
PATHWAY	3L	W12738206	PO 1			5BPM	SB50H0I05CI	0.5 PATH	SL 1					L14AL	IPSW		220828PH				0°	5	MID HINGED POLE W/ LOUVRE REPLACE SHORTING CAP W/ NEMA CELL / POWERED COATED BLACK
WICKHAM WAY	6L	W12738207	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
	10L	W12738366	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
	11L	W12738208	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
	15L	W12738209	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
	17L	W12738210	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
	24L	W12738211	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
BINGHAM ST	26L	W12738212	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
	29L	W12738213	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
	30L	W12738214	PO 1			4.5BPM	SLN0S3CI	1.14IOK	SL 1					L14	IPSW		210729PH				0°	5.1	
PATHWAY SOUTH	31L	W12738215	PO 1			5BPM	SB50H0I05CI	1.5 PATH	SL 1					L14AL	IPSW		220828PH				0°	5	MID HINGED POLE W/ LOUVRE REPLACE SHORTING CAP W/ NEMA CELL / POWERED COATED BLACK

*** All poles will require Rate 3 Ipswich City Council streetlight pole site label "ICC3", requirements:**

- Durable and clearly visible permanently fixed weatherproof label
- Green back with white writing
- Writing to be vertically aligned
- Text font size to be 25mm high
- Rate 3 label to be affixed to pole above Energex site ID label.

*EOP - Edge of Pathway
*IOK - Invert of Kerb

East Coast Electrical Queensland Pty Ltd
QLD Elec. Lic. #49263

AS CONSTRUCTED

Date: 11/11/2025

Signed: 

James Cornford
Ph:0432 343 085

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