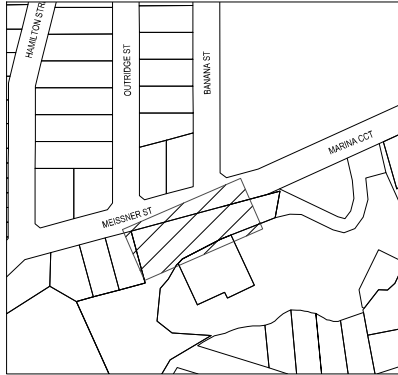
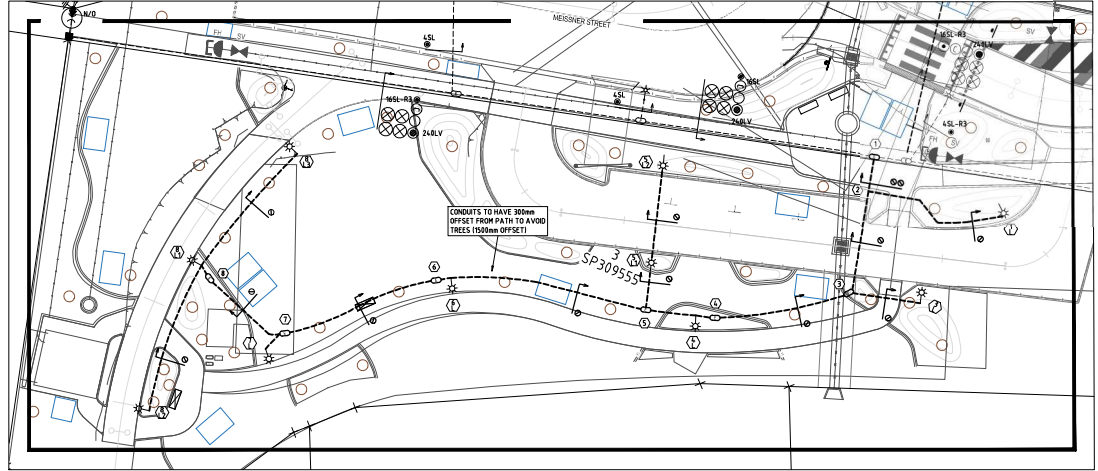




SITE LOCALITY (SCALE 1:2000 @ A1)



SYMBOL LEGEND	
○	PROPOSED 50mm S/L
⊕	PROPOSED ENERGEX 100mm COMMS
⊗	PROPOSED 150mm
⊗	PROPOSED 125mm
○	EXISTING 40mm S/L
⊕	EXISTING ENERGEX 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
⊕	PAD MOUNT TRANSFORMER
⊕	PMT LV GEOGRAPHIC
⊕	PMT HV GEOGRAPHIC
⊕	RING MAIN UNIT
⊕	RNU 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
⊕	10kV 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
STREET LIGHT SYMBOL LEGEND	
⊕	PROPOSED S/L (RATE 3)
⊕	EXISTING S/L (RATE 3)

EQUIPMENT SCHEDULE													
LOCATION	STN No.	SITE ID.	EXIST	REC	INSTALL	SIZE & DESCRIPTION	INI	COMP ID	PLANT No.	MODEL ID	QTY	LOC	REMARKS
LINEAR PARK	1, 2, 3, 4, 5, 6, 7, 8				*	S/L PIT & LID (TYPE 4)		P11		ASSY633-1	7		

!WARNING!
FIRE ANT TERRITORY
THIS SITE IS WITHIN A RED IMPORTED FIRE ANT BIOSECURITY ZONE. CALL 132523 FOR FURTHER INFORMATION.

!WARNING!
ACID SULPHATE SOILS
THIS SITE HAS BEEN IDENTIFIED AS WITHIN OR IN VICINITY OF AN ACID SULPHATE SOILS (ASS) AREA. ASS MAY BE PRESENT.

COMBINED RATE 3 & ENERGEX URD CIVIL WORKS SCHEDULE (ROAD CROSSINGS BY CIVIL CONTRACTOR)																							
LOCATION	STATIONS FROM-TO	CONDUIT LENGTH (m)												BENDS (°/No)									
		RATE 3				ENERGEX URD																	
		50	No	50	No	100C	No	100	No	125	No	150	No	40	No	100C	No	100	No	125	No	150	No
LINEAR PARK	1 - 2	5	2																				
	2 - 3	15	1																				
TOTALS		20																					

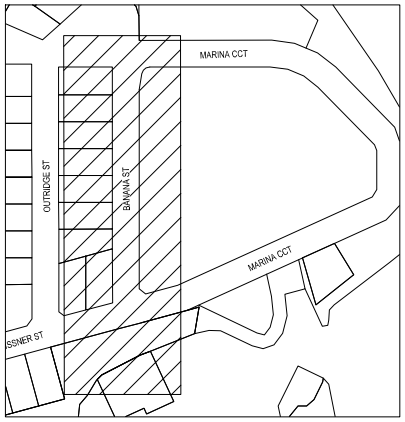
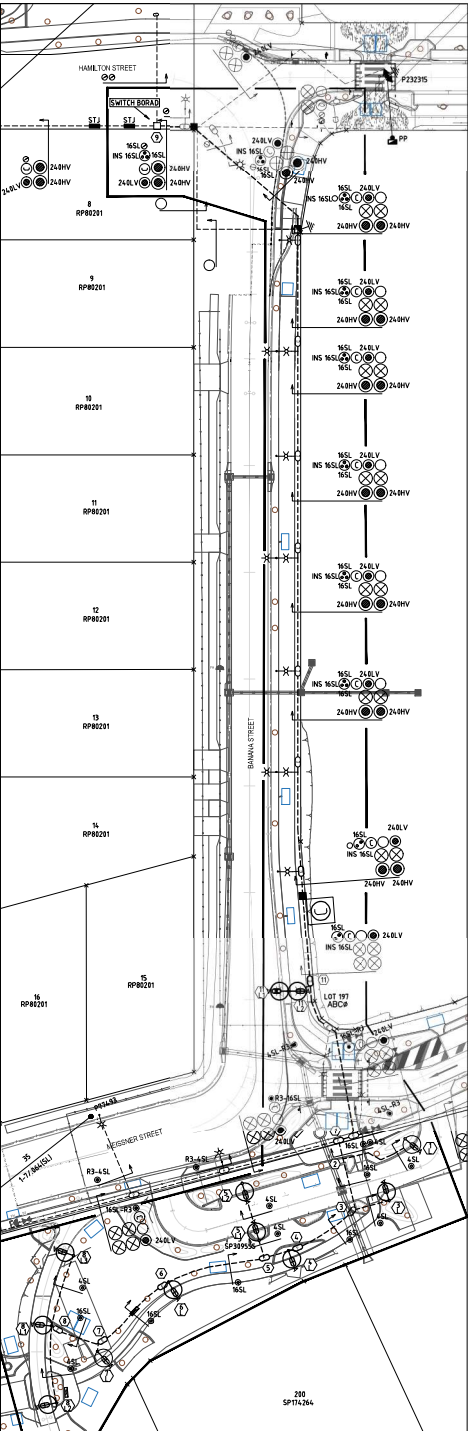
MAINTENANCE REGIME	
Maintenance Factor Assumed: The maintenance factor assumed in the calculations is as follows: * Luminaire Maintenance Factor (refer AS 1158 1.1:2022 APPENDIX E). * Lamp Lumen Depreciation Factor (Refer Lamp Manufacturer's "Lamp Lumen Depreciation Curve").	
Maintenance Factor Calculated	0.75 (L80)
Schedule of Maintenance: This road lighting design is based on the following maintenance schedule: Bulk lamp replacement carried out at 88000 hrs intervals. 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. * All 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.	

ELECTRICAL CERTIFICATION	
THIS IS TO CERTIFY THAT THE DESIGN OF ENERGEX RETICULATION IS IN ACCORDANCE WITH ENERGEX DESIGN MANUALS AND WORK CATEGORY SPECIFICATION 47.1 & 47.3 WHERE APPLICABLE.	
KRS BOVENIS (P/EIG 22272)	<i>K. Bovenis</i>
DATE	22.09.23
REFER TO PROJECT S1302047 WORKS PLANS FOR RATE 3 LIGHTING WORKS PLANS.	

COMBINED RATE 3 & ENERGEX URD CIVIL WORKS SCHEDULE (ALONG FOOTPATHS BY ELECTRICAL CONTRACTOR)																							
LOCATION	STATIONS FROM-TO	CONDUIT LENGTH (m)												BENDS (°/No)									
		RATE 3				ENERGEX URD																	
		50	No	50	No	100C	No	100	No	125	No	150	No	40	No	100C	No	100	No	125	No	150	No
LINEAR PARK	1L - 2	15	1																				
	2L - 3	85	1																				
	5 - 6L2	20	1																				
	8 - 9L1	5	1																				
	8 - 8L2	15	1																				
TOTALS		150																					

RATE 3 CONDUIT SECTIONS	
* NOTE: MINIMUM 100mm CLEARANCE REQ BETWEEN ENERGEX URD AND RATE 3 CONDUITS.	
DETAIL R3-SP1	DETAIL R3-O





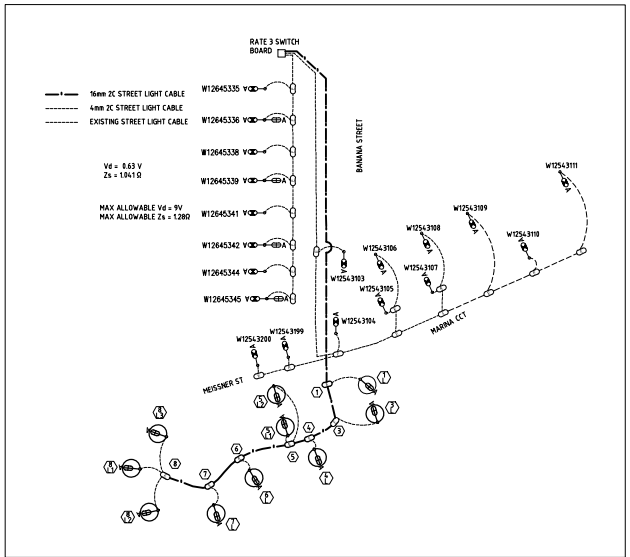
SITE LOCALITY (SCALE 1:5000 @A1)

RATE 3 UNDERGROUND CABLE SCHEDULE												
LOCATION	STATIONS FROM/TO	VOLTS	EXST	TRF	REC	INSTALL	CABLE SIZE/TYPE	MODEL NO	ROUTE LENGTH (m)	CABLE LENGTH (m)	LCG	REMARKS
LINEAR PARK	1 - 3	SL	-	-	-	-	16mm ² 2C Cu PVC/PVC	LCV218PVPV	17	20	-	-
	3 - 4	SL	-	-	-	-	16mm ² 2C Cu PVC/PVC	LCV218PVPV	12	15	-	-
	4 - 6	SL	-	-	-	-	16mm ² 2C Cu PVC/PVC	LCV218PVPV	7	10	-	-
	6 - 8	SL	-	-	-	-	16mm ² 2C Cu PVC/PVC	LCV218PVPV	22	25	-	-
	6 - 7	SL	-	-	-	-	16mm ² 2C Cu PVC/PVC	LCV218PVPV	17	20	-	-
	7 - 8	SL	-	-	-	-	16mm ² 2C Cu PVC/PVC	LCV218PVPV	12	15	-	-
	1 - 11	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	17	20	-	-
	3 - 3L	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	17	20	-	-
	4 - 4L	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	2	5	-	-
	5 - 5L	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	2	5	-	-
	5 - 5L2	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	12	15	-	-
	6 - 6L	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	17	20	-	-
	7 - 7L	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	2	5	-	-
	8 - 8L1	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	2	5	-	-
	8 - 8L2	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	17	20	-	-
BANANA ST	1 - 9	SL	-	-	-	-	16mm ² 2C Cu PVC/PVC	LCV218PVPV	217	220	-	-
	TOTALS	SL	-	-	-	-	4mm ² 2C Cu PVC/PVC	LCV24PVPV	-	325	-	-

CERTIFICATE OF COMPLIANCE	
DESIGN DOCUMENTATION IN ACCORDANCE WITH THE REQUIREMENTS OF COMPLIANCE OF AS/NZS 1158	
* Refer AS1158.1:2005 Appendix D for information regarding V category * Refer AS1158.3:2005 Appendix E for information regarding P category * Perfect-its 5.00 computer software used	
ITEM	PROJECT SPECIFICATION
LIGHTING CATEGORY	
Road Name	LINEAR PARK
Nominised Lighting Category	PP3
Road Surface Reflection Characteristic	R3
INSTALLATION GEOMETRY	
Road Reserve Lighting Design Width	2m
Mounting Height	4.5
Overhang	0
Lighting Arrangement	ARR1
Pole Setback	0.5 EOP
Upcast Angle	0°
LUMINAIRE/LAMP 1 DETAILS	
Lamp Type / Wattage	ITALO
Luminaire Identification	ITALO
Lamp Flux (Lumens)	2100
I-Table Number (cde)	MOD 2.0 URBAN OF2 3.3-2M
Lighting Tarrif	3
Power Factor	HPF (≥ 0.9)
Start/Run Currents (Amps)	27A / 6.087A
IP Rating	IP66
CATEGORY PHS LUMINAIRE/LAMP 1 MAXIMUM SPACING CALC	
Average Horizontal Illuminance (E _h)	33.0 lx
Minimum Point Horizontal Illuminance (E _h)	26.8 lx
Illuminance Uniformity (U ₀)	0.8
Upward wast light ratio (UPLR) %	50%
Road Reserve Lighting Design Width (m)	Maximum Spacing (m)
2	27

!WARNING!
FIRE ANT TERRITORY
THIS SITE IS WITHIN A RED IMPORTED FIRE ANT BIOSECURITY ZONE. CALL 13253 FOR FURTHER INFORMATION.

!WARNING!
ACID SULPHATE SOILS
THIS SITE HAS BEEN IDENTIFIED AS WITHIN OR IN VICINITY OF AN ACID SULPHATE SOILS (ASS) AREA.
ASS MAY BE PRESENT.



PROPOSED STREETLIGHT GEOGRAPHICS (NOT TO SCALE)

STREET LIGHT CERTIFICATION	
ROAD LIGHTING CERTIFIED TO COMPLY WITH IPSWICH CITY COUNCIL PLANNING SCHEME POLICY 3 AND REQUIREMENTS FOR AS/NZS 1158.1:2002 FOR V CATEGORY & AS/NZS 1158.3:2005 FOR P CATEGORY FOR LUMINAIRES AND LAMPS SUPPLIED UNDER AHEAD APPROVED UNLIMITED 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 8000 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	
CERTIFICATION APPLIES TO SHEETS 1 TO 1 OF ENERDEX DRAWING NUMBER S1302046 REVISION A	
STREET NAME LINEAR PARK	LIGHTING CATEGORY PP3
KRIS BOVENIS (RPEQ 22272)	DATE 22.09.23
REFER TO PROJECT S1302046 WORKS PLANS FOR ENERDEX WORKS PLANS.	

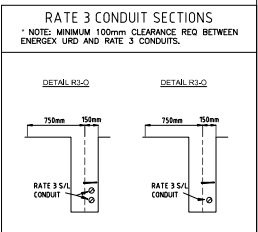
MAINTENANCE REGIME	
Maintenance Factor Assumed: The maintenance factor assumed in the calculations is as follows: * Luminaire Maintenance Factor (refer AS 1158.1:2005 APPENDIX E) * Lamp Lumens Depreciation Factor (Refer Lamp Manufacturer's Lamp Lumens Depreciation Curves) Maintenance Factor Calculated: 0.75 (LED)	
Schedule of Maintenance: This road lighting design is based on the following maintenance schedule: Bi-lamp replacement carried out at 8000 hrs intervals. 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.	

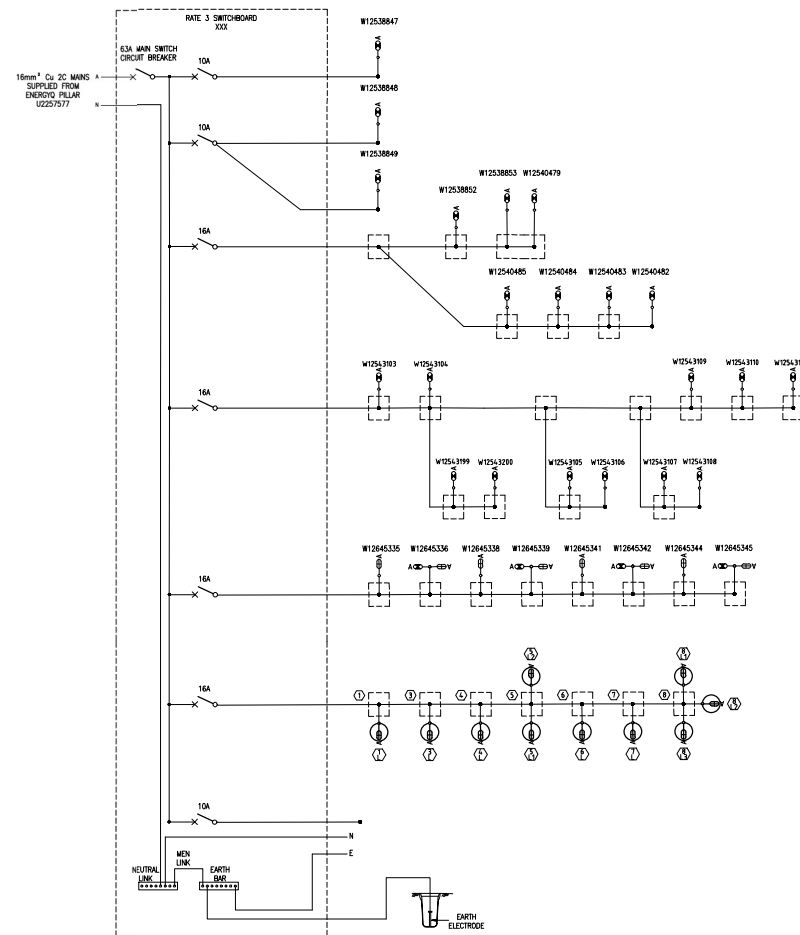
SYMBOL LEGEND

- PROPOSED 50mm S/L
- ⊙ PROPOSED ENERDEX 100mm COMMS
- ⊗ PROPOSED 19mm
- ⊗ PROPOSED 125mm
- EXISTING 40mm S/L
- ⊙ EXISTING ENERDEX 100mm COMMS
- ⊗ EXISTING 10mm
- ⊗ 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
- ⊕ PADMOUNT TRANSFORMER
- ⊕ PHT LV GEOGRAPHIC
- ⊕ PHT HV GEOGRAPHIC
- ⊕ RING MAIN UNIT
- ⊕ RNU 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
- ⊕ T/W STRAIGHT JOINT
- ⊕ OVERHEAD POLE TRANSFORMER
- ⊕ OVERHEAD POLE HV ONLY
- ⊕ OVERHEAD POLE LV ONLY
- ⊕ OVERHEAD 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

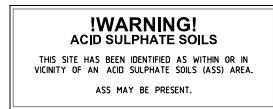
STREET LIGHT SYMBOL LEGEND

- ⊕ PROPOSED S/L MOD 2.0 URBAN 200 BY 872 STA 3.3-2M (MOD 2.0)
- ⊕ EXISTING S/L (RATE 3)



[illegible]

RATE 3 STREETLIGHT SCHEDULE																						
LOCATION	STN No.	SITE ID (POLE NO.)	COMP ID	POLE or COMPONENTS						LANTERN						OUTREACH BRACKET				MOUNT HEIGHT (ft)	REMARKS	
				EXIST	REC (m)	ELECT (m)	SLM or IN	AJORN IN	COMP ID	LUMIN	DUST DATE	DE-ENERG	ERECT LUN	CURT ELEC	DAT ENERGY	EXIST (m)	REC (m)	ELECT (m)	SLM or IN			UPCAST ft)
LINEAL PARK	NL 1	W12046002	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	NL 2	W12046003	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	SL 1	W12046004	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	NL 1	W12046005	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	SL 2	W12046006	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	BL 1	W12046007	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	NL 1	W12046008	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	SL 2	W12046009	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
HIGHWAY	BL 2	W12046010	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	HV 1	W12046011	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	
	BL 2	W12046012	PO 1	-	-	-	-	4.6SM	REFER SPEC	0.5/EqP SL I	L19	REDL	MDD 2.0 Urban 200 RXR QP2 RPTA 3.2-M (500)	-	-	-	-	-	-	0"	4.5	



PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2023/1411

Date: 11 July 2024


Queensland
Government

SYMBOL LEGEND	
○	PROPOSED 50mm S/L
⊙	PROPOSED ENERGY 100mm COMPS
○	PROPOSED 100mm
⊗	PROPOSED 150mm
○	EXISTING 40mm S/L
⊙	EXISTING ENERGY 100mm COMPS
○	EXISTING 100mm
⊗	EXISTING 150mm
●	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
⊕	PADMOUNT TRANSFORMER
G	PMT LV GEOGRAPHIC
G	PMT HV GEOGRAPHIC
○	RING MAIN LUT
⊙	RHV HV TERMINATION
□	PROPOSED SUPPLY PILLAR
⊙	PROPOSED SUPPLY PILLAR
⊕	PROPOSED LINK PILLAR
⊕	EXISTING LINK PILLAR
⊕	COMMERCIAL PILLAR
⊕	EARTH
⊕	PROPOSED TYPE & PIT
⊕	EXISTING TYPE & PIT
⊕	RECOVER EQUIPMENT
ST	TRV 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)
W	WATER METER
+	SURVEY PEG

STREET LIGHT SYMBOL LEGEND	
⊕	PROPOSED S/L MD 2.5 3-3-20 (200) REPAIR
⊕	EXISTING S/L REPAIR 3I