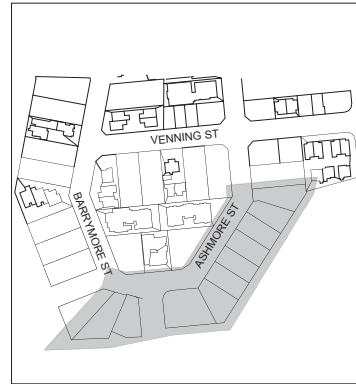


50 ASHMORE ST EVERTON PARK STAGE 1

LEGEND

LINES	SYMBOLS
— Boundary of Works	□ Electrical Pillar
— Electrical Overhead - Exist	□ Link Pillar
— Electrical Overhead - New	■ Commercial / Industrial Pillar
— Electrical Overhead - Recover / Future	□ Electrical Pit
— Electrical Underground - Exist	□ Underground Joint
— Electrical Underground - New	○ Pole - LV Only
— Electrical Underground - Recover / Future	○ Pole - HV Only
— Consumers Overhead - New	○ Pole - HV & LV
— Consumers Underground - New	○ Pole - HV, Future LV
— RP Boundary	○ Pole - LV, Future HV
— Easement Boundary	○ Pole Transformer
— Kerbline	○ Pole Termination - LV Only
— Railway	○ Pole Termination - HV Only
— Retaining Wall	○ Pole Termination - HV & LV
— Sewer Main	○ Earth Electrode
— Sewer Rising Main	○ Pole Stay - Ground / Sidewalk
— Water Main	○ Pole Stay - Aerial
— Stormwater	○ Padmount Transformer
— Rainwater	○ Ring Main Unit
— Open Drain / Swale	○ Conduit - 40mm
— Gas	○ Conduit - 100mm
— Telecommunications	○ Conduit - 125mm
— Fence	○ Conduit - Energex Communications
— Zero-lot Boundary	○ Street Light - LED
	○ Street Light - High Pressure Sodium 70W
	○ Street Light - High Pressure Sodium 100W
	○ Street Light - High Pressure Sodium 150W
	○ Street Light - High Pressure Sodium 250W
	○ Street Light - High Pressure Sodium 400W
	○ Street Light - Mercury Vapour 50W
	○ Street Light - Mercury Vapour 80W
	○ Street Light with Aeroscreen
	○ LV Disconnection Links - Open
	○ LV Disconnection Links - Closed
	○ HV Switch - Open
	○ HV Switch - Closed
	○ Drop Out Fuses - Open
	○ Drop Out Fuses - Closed
	○ Station Number
	○ Remove
	○ Phasing
	○ 'E' Kerb Marker
	○ Driveway

Sheet Index	
Sheet No.	Description
1	TITLE PAGE
2	DETAIL DESIGN
3	SCHEMATICS & LABELS
4	TRANSFORMER & EASEMENT DETAILS
5	SCHEDULES & MATERIAL LISTS
6	LINE PROFILES
7	LIGHTING COMPLIANCE STATEMENT



LOCALITY PLAN
N.T.S.

FINAL/PARTIAL
AS CONSTRUCTED
CV ENERGY SERVICES

PHONE (07) 3622 4333 FAX (07) 3622 4334

NAME: Dan Booth
SIGN: *[Signature]*
18/12/2020

UNDERGROUND SERVICES IDENTIFICATION
WORKERS WHO WILL BE DIGGING AT THIS SITE ARE ADVISED TO CONTACT THE 'DIAL BEFORE YOU DIG' SERVICE TO DETERMINE THE EXTENT OF EXISTING UNDERGROUND SERVICES AND THE REQUIREMENTS OF THE APPROPRIATE SERVICE PROVIDERS. IT IS THE RESPONSIBILITY OF THE WORKERS TO HAVE ALL EXISTING SERVICES AFFECTED BY THESE WORKS LOCATED ON SITE TO AVOID ANY DAMAGE DURING EXCAVATION WORKS. WHERE SERVICES HAVE BEEN SHOWN ON THE PLAN, THESE LOCATIONS ARE INDICATIVE ONLY AND NO WARRANTY IS IMPLIED AS TO THEIR ACCURACY.

DIAL 1100 BEFORE YOU DIG

DIAL BEFORE YOU DIG SERVICE
PHONE - 1100
WEB - www.1100.com.au
YOUR REQUEST SHOULD BE FORWARDED 5 WORKING DAYS BEFORE PLANNED EXCAVATION DATE.

LOCATION OF UTILITIES
THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL UNDERGROUND SERVICES PRIOR TO COMMENCING WORK AT THE SITE, AND IS RESPONSIBLE FOR THE REPAIR OF DAMAGE TO UNDERGROUND OR OVERHEAD UTILITY ASSETS, ARISING FROM THESE WORKS. CONTACT DIAL BEFORE YOU DIG.

PROPOSED COMMISSIONING PLAN
TENTATIVE ONLY - SUBJECT TO AMENDMENT BY ENERGEX OUTAGE CO-ORDINATOR

HV/LV SWITCHING X1 GENERATOR X1

- HV**
- GENERATOR REQUIRED AT SP2412
 - OPEN SOUTH PINE RD X4800
 - OPEN ELKHORN ST X9953
 - REPLACE VENNING ST P30823
 - INSTALL AND BRIDGE IN NEW 11kV U/G CABLE
 - REVERSE SWITCHING
 - TEST AND COMMISSION SC2216333

- LV**
- REPLACE BARRYMORE ST P31482
 - INSTALL AND BRIDGE IN NEW LV U/G CABLES AT VENNING ST P30823 AND BARRYMORE ST P34182
 - BRIDGE IN, TEST, & COMMISSION NEW LV PILLARS AND CABLE

Source Drawings		
File Name	Drawing Owner	Date Received
X:\7BNE-0071-BASE_dwg	MIRVAC	20/08/2019

SCOPE OF WORKS
THIS WORKS PLAN INCORPORATES A SUBDIVISION DEVELOPMENT ZONE. THE DESCRIPTION OF THE SUBDIVISION IS:

- 10 LOTS - RESIDENTIAL SUBDIVISION (SUBURBAN)

THE SCOPE OF WORKS ACROSS THE DEVELOPMENT ZONE INCLUDES:

- SUPPLY, TRENCH AND INSTALL ELECTRICAL CONDUITS
- SUPPLY AND INSTALL PADMOUNTED SUBSTATIONS
- SUPPLY AND INSTALL 11kV UNDERGROUND CABLES, JOINTS AND TERMINATIONS
- SUPPLY AND INSTALL LV UNDERGROUND CABLES, SERVICE PILLARS AND TERMINATIONS
- RECOVER EXISTING LV MAINS AND TRANSFER EXISTING MAINS AND SERVICES AS REQUIRED.
- SUPPLY AND INSTALL STREETLIGHTS AND ASSOCIATED OH & U/CABLES & TERMINATIONS
- TEST AND COMMISSION WORKS IN ACCORDANCE WITH COMMISSIONING PLANS.

STREETLIGHTING CERTIFICATION
ROAD LIGHTING CERTIFIED TO COMPLY WITH AS/NZS 1158.3.1:2005 FOR P-CATEGORY. THE LIGHTING DESIGN IS BASED UPON THE FOLLOWING MAINTENANCE SCHEDULE:

- LAMP REPLACEMENT AT 36 MONTH INTERVALS INCLUDING CLEANING & INSPECTION OF LUMINAIRE.
- VEGETATION TO BE KEPT CLEAR OF LUMINAIRES.
- INSPECTION PATROLS & SPOT LAMP REPLACEMENT TO MAINTAIN SERVICE AVAILABILITY AT MIN. 95%.
- LUMINAIRES AND LAMPS TO BE REPLACED WITH EXACT EQUIVALENTS.

Ashmore Street: CATEGORY P5

J. READ RPEQ No. 7727

Justin Read

Digitally signed by Justin Read
DN: cn=Justin Read, o=AU Australia, ou=AU Australia, ou=Consulting Strategic Engineering Services Pty Ltd, email=jr@consulting.com.au
Reason: I certify this document as a Registered Professional Engineer of Queensland (RPEQ 7727)
Location:
Date: 2020-03-03 07:59+10:00

Registered Professional Engineer of Queensland
MR JUSTIN READ
RPEQ 7727
DIV: ELECTRICAL
Signature: *[Signature]* Date: 3.03.2020

FOR CONSTRUCTION

REV	DATE	DETAILS	REV	DATE	DETAILS
PR1	4/9/19	FOR APPROVALS (NFC)			
PR2	22/10/19	UPDATED TO CLIENT REQUESTED CHANGES			
A	5/12/19	COUNCIL APPROVED			
B	26/02/2020	ENERGEX ACCEPTED - ISSUED FOR CONSTRUCTION			



SITE CONTACT DETAILS		ALIGNMENTS		PROPERTY DESCRIPTION		APPROVED:		
NAME	ENERGEX OH	3.0	NUMBER OF LOTS:	10	APPROVED:	T.FOSTER	PHONE:	0448 903 388
COMPANY	ENERGEX UG	0.9	PROPOSED LOTS 1, 2, 25, 32 & 900 (BALANCE LOT)		CHECKED:	N.DAVIES	PHONE:	0402 001 819
	TEL STRA	DBYD	CANCELLING LOTS 82 - 91 ON RP72156 & LOT 100 ON SP195726		DESIGNER:	D.RETTKE	PHONE:	(07) 3622 4365
	GAS	DBYD			PLANNER:	N.DAVIES	PHONE:	0402 001 819
	HP GAS	DBYD	LOCAL AUTHORITY:	BCC	ISSUE DATE:			
	WATER	DBYD	APPROVAL No:	A004708283				
	STORMWATER	DBYD						
	SEWERAGE	DBYD						
	OTHER	DBYD	J. READ	RPEQ: 7727				

ELECTRICAL RETICULATION & STREET LIGHTING

50 ASHMORE ST
EVERTON PARK STAGE 1

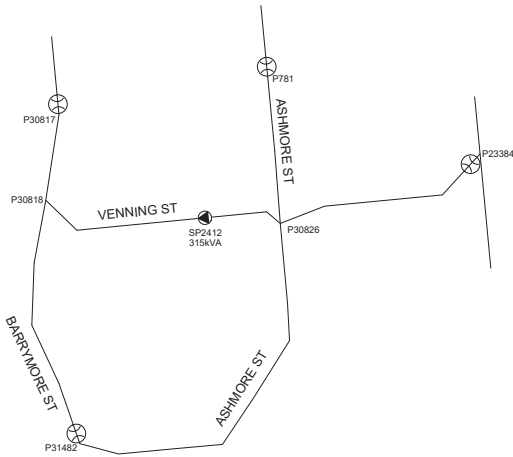
TITLE PAGE

SCALE: N/A @ A1

10244-1-1

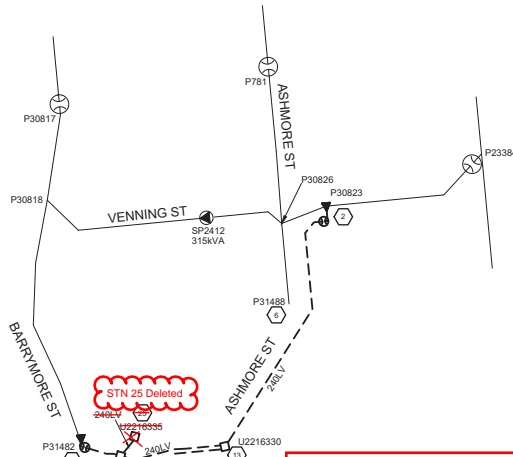
S4900134 B

Sheet 1 of 7



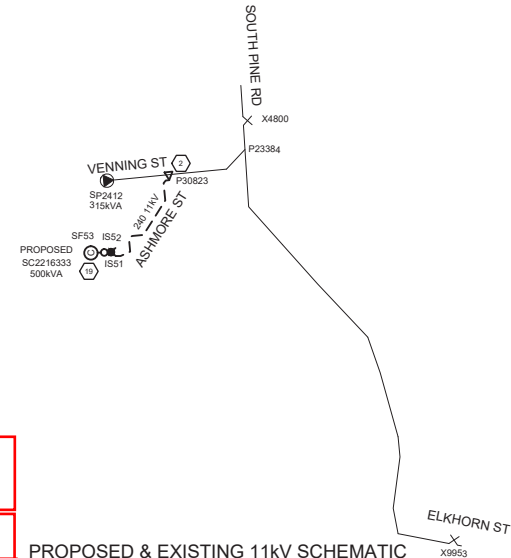
EXISTING LV SCHEMATIC

GEOGRAPHIC REPRESENTATION
SP2412-N/DL1
NOT TO SCALE



PROPOSED LV SCHEMATIC

GEOGRAPHIC REPRESENTATION
LV FEEDER SC2216333
SP2412-N/DL1
NOT TO SCALE



PROPOSED & EXISTING 11KV SCHEMATIC

GEOGRAPHIC REPRESENTATION
FEEDER ENG7A
NOT TO SCALE

**FINAL/PARTIAL
AS CONSTRUCTED
CV ENERGY SERVICES**

PHONE (07) 3622 4333 FAX (07) 3622 4334

NAME: Dan Booth
SIGN: *[Signature]*
18/12/2020

**HV / LV POLE TERMINATION
COMMON LABEL**

LABEL SIZE	SITE LOCATION	LABEL INFORMATION
300x100	POLE No. P30823 LOCATION VENNING STREET	11KV CABLE TO ASHMORE ST SC2216333 IS51 LV CABLE TO ASHMORE ST SC2216333/ BARRYMORE ST P31482 & SERVICES

REFER NETWORK LABELLING & SIGNAGE MANUAL 6450-A4

LV POLE TERMINATION LABEL

LABEL SIZE	SITE LOCATION	LABEL INFORMATION
300x100	POLE No. P31482 LOCATION BARRYMORE ST	LV CABLE TO ASHMORE ST SC2216333/ VENNING ST P30823 & SERVICES

REFER NETWORK LABELLING & SIGNAGE MANUAL 6448-A4

PADMOUNT TRANSFORMER LABEL @ SC2216333 (STN 19)

LABEL SIZE	LABEL COLOR	LETTER SIZE	LABEL INFORMATION	LABEL LOCATION	LABEL DESCRIPTION
150x40	WB	20	SC2216333	FRONT	RMU IDENTIFICATION
50x20	BLUE W	10		FRONT	DESIGN IDENTIFICATION
100x30	GW	8		NEAR EARTH SW	EARTH SWITCH DESCRIPTION
100x40	WB	15	ISS1	NEAR ISOLATOR	ISOLATOR IDENTIFICATION
150x40	BW	20		FRONT	FEEDER IDENTIFICATION
150x50	BW	10	TO VENNING ST P30823	CABLE BOX	CABLE DESTINATION
150x50	BW	10	TO VENNING ST P30823	INSIDE SIDE WALL	CABLE DESTINATION
			NEW		NEW

REFER NETWORK LABELLING & SIGNAGE MANUAL DWG 10849-A4B

**PMT LV SWBD - SWITCH FUSE CIRCUITS
@ SC2216333 (STN 19)**

CIRCUIT NO.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
	80x35	WB	6	TRANSFORMER ISOLATOR
1	80x35	WB	5	TO BARRYMORE ST P31482/ VENNING ST P30823 & SERVICES
2	80x35	WB	5	SPARE/ FUTURE
3	80x35	WB	5	SPARE/FUTURE TO CUSTOMER
	80x35	WB	5	SPARE/FUTURE


REFER NETWORK LABELLING & SIGNAGE MANUAL 6455-A4D

NEW
NEW
NEW
NEW
Parallel Kit Installed on FS3 and FS4 04/03/21

Registered Professional Engineer of Queensland
MR JUSTIN READ
RPEQ 7727
DIV: ELECTRICAL
Signature: *[Signature]* Date: 3.03.2020

FOR CONSTRUCTION

REV	DATE	DETAILS	REV	DATE	DETAILS
PR1	4/9/19	FOR APPROVALS (NFC)			
PR2	22/10/19	UPDATED TO CLIENT REQUESTED CHANGES			
A	5/12/19	COUNCIL APPROVED			
B	26/02/2020	ENERGEX ACCEPTED - ISSUED FOR CONSTRUCTION			



CV SERVICES GROUP
delivering the edge

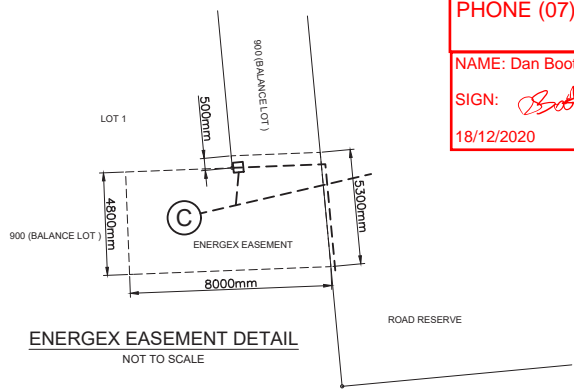
SITE CONTACT DETAILS		ALIGNMENTS		PROPERTY DESCRIPTION		APPROVED:	
NAME	ENERGEX OH	3.0	NUMBER OF LOTS:	10	PROPOSED LOTS 1, 2, 25 - 32 & 900 (BALANCE LOT)	T.FOSTER	T.FOSTER
COMPANY	ENERGEX UG	0.9	CHECKED:	N.DAVIES	PHONE:	0448 903 388	0448 903 388
TEL STRA	DBYD		DESIGNER:	D.RETTKE	PHONE:	0402 001 819	0402 001 819
GAS	DBYD		APPROVAL No:	A004708283	PLANNER:	N.DAVIES	N.DAVIES
PHONE	HP GAS	DBYD	LOCAL AUTHORITY:	BCC	PHONE:	(07) 3622 4365	(07) 3622 4365
MOBILE	WATER	DBYD	ISSUE DATE:		PHONE:	0402 001 819	0402 001 819
FAX	STORMWATER	DBYD					
EMAIL	SEWERAGE	DBYD					
	OTHER	DBYD	J. READ	RPEQ: 7727			

ELECTRICAL RETICULATION & STREET LIGHTING		SCALE: N/A @ A1
50 ASHMORE ST EVERTON PARK STAGE 1		10244-1-1
SCHEMATICS & LABELS		S4900134 B
		Sheet 3 of 7

FINAL/PARTIAL
AS CONSTRUCTED
CV ENERGY SERVICES

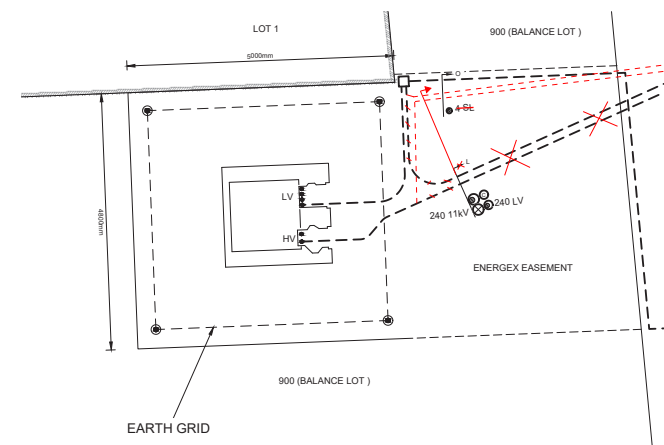
PHONE (07) 3622 4333 FAX (07) 3622 4334

NAME: Dan Booth
 SIGN: *[Signature]*
 18/12/2020



ENERGEX EASEMENT DETAIL
 NOT TO SCALE

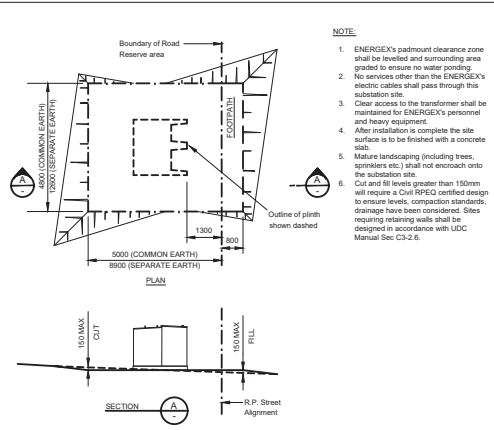
NOTE
 ALL WEATHER TRACK AND FINISHED SURFACE LEVELS ARE REQUIRED ALONG THE EASEMENT TO THE PADMOUNT FOR THE INSTALLATION OF ELECTRICAL INFRASTRUCTURE.



PROPOSED PADMOUNT TRANSFORMER SITE DETAIL
 SC2216333 (STN No. 19)
 SCALE 1:50 @ A1 UNREDUCED

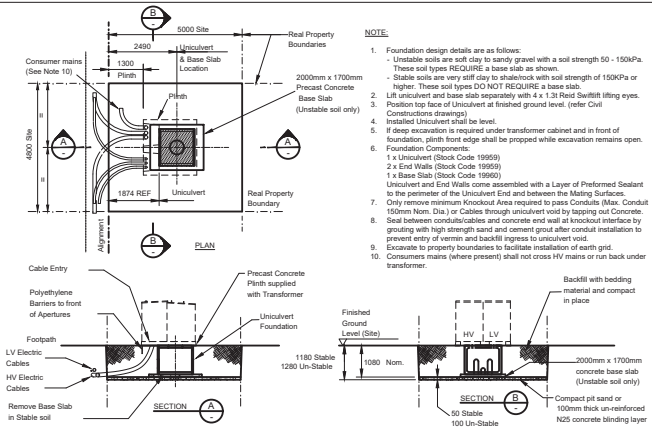
PADMOUNT TRANSFORMER SITE NOTES.

- Retaining walls shall be installed where a change in ground level of 300mm or more occurs within 2000mm of the substation clearance zone. Fences shall be installed for:
 - Residential areas (Typically 1200mm high)
 - Sloping sites (either front to back or left-right)
- Fences and Retaining walls shall be constructed to ENERGEX standards to satisfy minimum clearance zones of common earth configurations. Refer to section C3-1 for retaining wall construction notes. Alternative designs to those provided in this manual will require a Civil Engineer's Certification.
- Safety fences shall comply with the requirements of the Workplace Health and Safety Act, AS 1657 and AS 1926 and all amendments.
- Metal retaining wall fences shall be used in CMEN areas. (Refer UDCM C3.1 Sheet 6)
- All retaining walls and safety fencing on private property shall be maintained by the owner at no cost to Energen.
- All fencing materials shall be galvanneal or finished in an equally durable manner.
- All chairwire and support wires shall be PVC coated and coloured black or green.
- All elevated areas shall be provided with toe boards and infill type fencing.



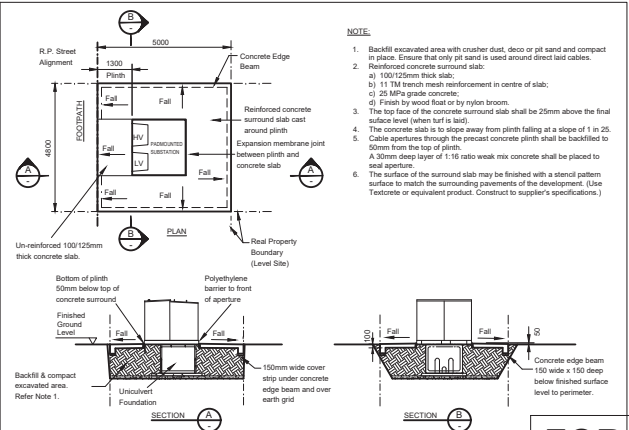
PMT SITE MAXIMUM CUT AND FILL
 (SEE UDC SECTION C3 SUB-SECT. 2.1)

- NOTE:**
- ENERGEX's padmount clearance zone shall be levelled and surrounding area graded to ensure no water ponding. No services other than the ENERGEX's electric cables shall pass through this substation site.
 - Clear access to the transformer shall be maintained for ENERGEX's personnel and heavy equipment.
 - After installation is complete the site surface is to be finished with a concrete slab.
 - Mature landscaping (including trees, sprinklers etc.) shall not encroach onto the substation site.
 - Cut and fill levels greater than 150mm will require a Civil RPEQ certified design to ensure levels, compaction standards, drainage have been considered. Sites requiring retaining walls shall be designed in accordance with UDC Manual Sec C3.2.6.



PMT SITE FOUNDATION DETAILS - UNICULVERT
 (SEE UDC SECTION C3 SUB-SECT. 2.2)

- NOTE:**
- Foundation design details are as follows:
 - Unstable soils are soft clay to sandy gravel with a soil strength 50 - 150kPa. These soil types REQUIRE a base slab as shown.
 - Stable soils are very stiff clay to shalrock with soil strength of 150kPa or higher. These soil types DO NOT REQUIRE a base slab.
 - Uniculvert and base slab separately with 4 x 13i Rods Swifit lifting eyes.
 - Position top face of Uniculvert as finished ground level. (refer Civil Construction drawings)
 - Installed Uniculvert shall be level.
 - If deep excavation is required under transformer cabinet and in front of foundation, plinth front edge shall be propped while excavation remains open.
 - Foundation Components:
 - 1 x Uniculvert (Ebook Code 19959)
 - 2 x End Walls (Ebook Code 19959)
 - 1 x Base Slab (Ebook Code 19960)
 - Uniculvert and End Walls come assembled with a Layer of Preformed Sealant to the perimeter of the Uniculvert End and between the Matting Surfaces.
 - Only remove minimum Knockout Area required to pass Conduits (Max. Conduit 150mm Nom. Dia.) or Cables through unculvert void by tapping out Concrete.
 - Seal between conduits/cables and concrete end wall at knockout interface by grouting with high strength sand and cement grout after conduit installation to prevent entry of vermin and backfill ingress to unculvert void.
 - Excavate to property boundaries to facilitate installation of earth grid.
 - Consumer mains (where present) shall not cross HV mains or run back under transformer.



PMT SITE CONCRETE SURROUNDS
 (SEE UDC SECTION C3 SUB-SECT. 2.3)

- NOTE:**
- Backfill excavated area with crusher dust, deco or pit sand and compact in place. Ensure that only pit sand is used around direct laid cables.
 - Reinforced concrete surround slab:
 - a) 100/125mm thick slab;
 - b) 11 TM trench mesh reinforcement in centre of slab;
 - c) 25 MPa grade concrete;
 - d) Finish by wood float or by nylon broom.
 - The top face of the concrete surround slab shall be 25mm above the final surface level (when laid to bed).
 - The concrete slab is to slope away from plinth falling at a slope of 1 in 25.
 - Cable apertures through the precast concrete plinth shall be backfilled to 50mm from the top of plinth. A 30mm deep layer of 1:16 ratio weak mix concrete shall be placed to seal aperture.
 - The surface of the surround slab may be finished with a stencil pattern surface to match the surrounding pavements of the development. (Use 'Textorette' or equivalent product. Construct to supplier's specifications.)

Registered Professional Engineer of Queensland
 MR JUSTIN READ
 RPEQ 7727
 DIV: ELECTRICAL
 Signature: *[Signature]* Date: 3.03.2020

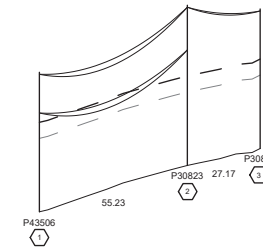
FOR CONSTRUCTION

REV	DATE	DETAILS	REV	DATE	DETAILS
PR1	4/9/19	FOR APPROVALS (NFC)			
PR2	22/10/19	UPDATED TO CLIENT REQUESTED CHANGES			
A	5/12/19	COUNCIL APPROVED			
B	26/02/2020	ENERGEX ACCEPTED - ISSUED FOR CONSTRUCTION			

SITE CONTACT DETAILS		ALIGNMENTS	PROPERTY DESCRIPTION	APPROVED:	T.FOSTER	ELECTRICAL RETICULATION & STREET LIGHTING	SCALE: N/A @ A1
NAME	ENERGEX OH	3.0	NUMBER OF LOTS: 10	PHONE:	0448 903 388		
COMPANY	ENERGEX UG	0.9	PROPOSED LOTS: 1, 2, 25 - 32 & 900 (BALANCE LOT)	CHECKED:	N DAVIES		
	TEL: STRA	DBYD	CANCELLING LOTS 82 - 91 ON RPP72156 & LOT 100 ON SP165726	PHONE:	0402 001 819		
	GAS	DBYD		DESIGNER:	D RETTKE		
PHONE	HP GAS	DBYD	LOCAL AUTHORITY: BCC	PHONE:	(07) 3622 4365		
MOBILE	WATER	DBYD	APPROVAL No: A004708283	PLANNER:	N DAVIES		
FAX	STORMWATER	DBYD		PHONE:	0402 001 819	TRANSFORMER & EASEMENT DETAILS	S4900134
EMAIL	SEWERAGE	DBYD		ISSUE DATE:			B
	OTHER	DBYD	J. READ				Sheet 4 of 7

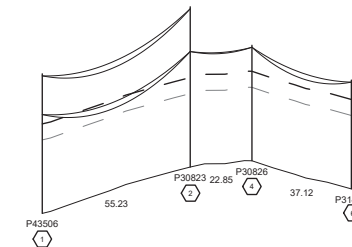


Circuit ID	L pole	L att ht	R pole	R att ht	Conductor	Sag	Span	Temperature	MES/RS	Tension	Tension Units	Segment	Actual no wind tens	Min clearance @ Ch	Blowout
standard	P43506	10.3	P30823	11.85	7/14C	1.35	55.42	15	47.83	440	Table	SS1	0.574	9.53 @ 21	1.43
hot	P43506	10.3	P30823	11.85	7/14C	1.82	55.42	75	47.83	440	Table	SS1	0.425	9.08 @ 23	1.764
standard	P30823	11.85	P30822	10.3	7/14C	0.32	27.27	15	47.83	440	Table	SS1	0.574	10.32 @ 82.42	0.344
hot	P30823	11.85	P30822	10.3	7/14C	0.44	27.27	75	47.83	440	Table	SS1	0.425	10.31 @ 82.42	0.423
standard	P43506	7.4	P30823	8.65	7/12C	1.35	55.42	15	48.06	440	Table	SS2	0.968	6.51 @ 23	1.283
hot	P43506	7.4	P30823	8.65	7/12C	1.82	55.42	75	48.06	440	Table	SS2	0.719	6.05 @ 24	1.588



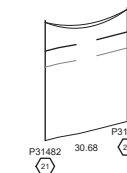
ID	Conductor	RS	Tension	Temperatures	Poles
SS1	3 x 7/14C - 7/14 CU	47.83	440 (Table)	cold (-5); uplift (0); standard (15); hot (75)	P43506, P30823, P30822
SS2	4 x 7/12C - 7/12 CU	48.06	440 (Table)	cold (-5); uplift (0); standard (15); hot (75)	P43506, P30823

Circuit ID	L pole	L att ht	R pole	R att ht	Conductor	Sag	Span	Temperature	MES/RS	Tension	Tension Units	Segment	Actual no wind tens	Min clearance @ Ch	Blowout
standard	P43506	10.3	P30823	11.85	7/14C	1.35	55.42	15	47.83	440	Table	SS1	0.574	9.53 @ 21	1.43
hot	P43506	10.3	P30823	11.85	7/14C	1.82	55.42	75	47.83	440	Table	SS1	0.425	9.08 @ 23	1.764
standard	P43506	7.4	P30823	8.65	7/12C	1.35	55.42	15	48.07	440	Table	SS2	0.968	6.51 @ 23	1.283
hot	P43506	7.4	P30823	8.65	7/12C	1.82	55.42	75	48.07	440	Table	SS2	0.719	6.05 @ 24	1.588
standard	P30823	8.65	P30826	8.5	7/12C	0.23	23.11	15	48.07	440	Table	SS2	0.968	8.31 @ 63.42	0.221
hot	P30823	8.65	P30826	8.5	7/12C	0.31	23.11	75	48.07	440	Table	SS2	0.719	8.23 @ 64.42	0.274
standard	P30826	8.5	P31488	8	FL	0.61	37.25	15	37.12	440	Table	SS3	0.474	7.68 @ 105.53	0.89
hot	P30826	8.5	P31488	8	FL	1.03	37.25	75	37.12	440	Table	SS3	0.28	7.32 @ 102.53	1.193



ID	Conductor	RS	Tension	Temperatures	Poles
SS1	3 x 7/14C - 7/14 CU	47.83	440 (Table)	cold (-5); uplift (0); standard (15); hot (75)	P43506, P30823
SS2	4 x 7/12C - 7/12 CU	48.07	440 (Table)	cold (-5); uplift (0); standard (15); hot (75)	P43506, P30823, P30826
SS3	4 x FL - Fly	37.12	440 (Table)	cold (-5); uplift (0); standard (15); hot (75)	P30826, P31488

Circuit ID	L pole	L att ht	R pole	R att ht	Conductor	Sag	Span	Temperature	MES/RS	Tension	Tension Units	Segment	Actual no wind tens	Min clearance @ Ch	Blowout
standard	P31482	8.85	P31481	8.4	7/12C	0.62	30.77	15	30.68	660	Table	SS1	0.646	8.03 @ 19	0.596
hot	P31482	8.85	P31481	8.4	7/12C	0.86	30.77	75	30.68	660	Table	SS1	0.469	7.8 @ 18	0.747



ID	Conductor	RS	Tension	Temperatures	Poles
SS1	4 x 7/12C - 7/12 CU	30.68	660 (Table)	cold (-5); uplift (0); standard (15); hot (75)	P31482, P31481

FINAL/PARTIAL

AS CONSTRUCTED

CV ENERGY SERVICES

PHONE (07) 3622 4333 FAX (07) 3622 4334

NAME: Dan Booth

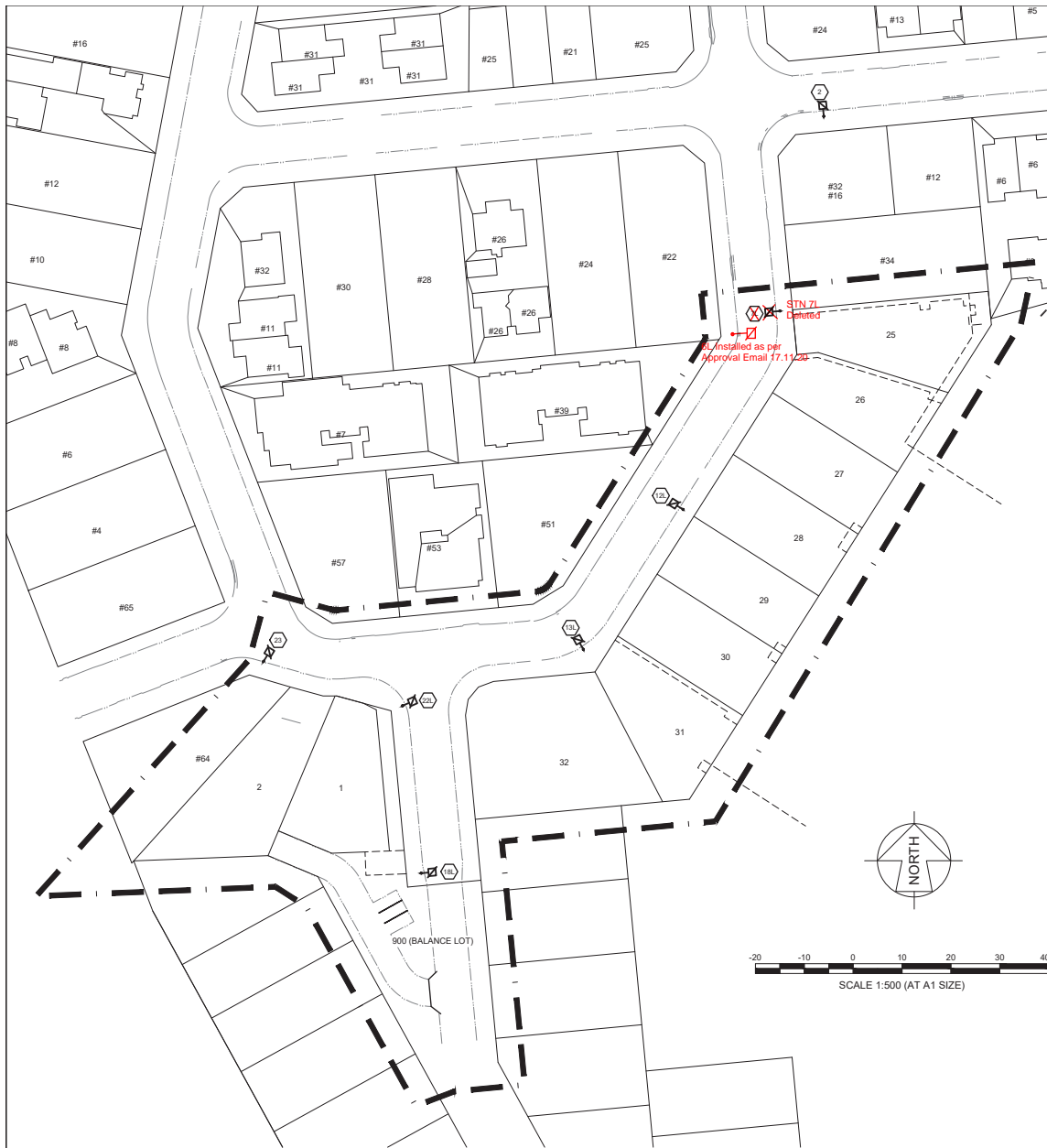
SIGN:

18/10/2020

Registered Professional Engineer of Queensland
 MR JUSTIN READ
 RPEQ 7727
 DIV: ELECTRICAL
 Signature: Date: 3.03.2020

FOR CONSTRUCTION

REV	DATE	DETAILS	REV	DATE	DETAILS	SITE CONTACT DETAILS		ALIGNMENTS		PROPERTY DESCRIPTION		APPROVED:	T.FOSTER	ELECTRICAL RETICULATION & STREET LIGHTING	SCALE: N/A @ A1
PR1	4/9/19	FOR APPROVALS (NFC)				 CV SERVICES GROUP <i>delivering the edge</i>	NAME	ENERGEX OH	3.0	NUMBER OF LOTS:	10	APPROVED:	T.FOSTER	50 ASHMORE ST EVERTON PARK STAGE 1 LINE PROFILES	10244-1-1
PR2	22/10/19	UPDATED TO CLIENT REQUESTED CHANGES			COMPANY		ENERGEX UG	0.9	PROPOSED LOTS:	1, 2, 25 - 32 & 900 (BALANCE LOT)	CHECKED:	N.DAVIES			
A	5/12/19	COUNCIL APPROVED			TEL STRA		DBYD		CANCELLING LOTS:	82 - 91 ON RP72156 & LOT 100 ON SP105725	PHONE:	0402 001 819			
B	26/02/2020	ENERGEX ACCEPTED - ISSUED FOR CONSTRUCTION			GAS		DBYD		LOCAL AUTHORITY:	BCC	DESIGNER:	D.RETTKE			
					HP GAS		DBYD		APPROVAL No:	A004708283	PHONE:	(07) 3622 4365			
					MOBILE	WATER	DBYD	PLANNER:	N.DAVIES	PHONE:	0402 001 819				
					FAX	STORMWATER	DBYD	ISSUE DATE:							
					EMAIL	SEWERAGE	DBYD	J. READ	RPEQ: 7727						
						OTHER	DBYD								



CERTIFICATE OF COMPLIANCE

DESIGN DOCUMENTATION IN ACCORDANCE WITH THE REQUIREMENTS OF AS1158.3.1 APPENDIX E

Element Details	Lighting Category												
Ashmore Street	P5												
Installation Arrangement/ Geometry:													
Mounting Height (h)	5.85m												
Outreach	1.0m												
Upcast Angle	5°												
Luminaire/ Lamp Details													
Luminaire Identification	StreetLED3 17W 4K 180804PH												
Lamp Type	LED												
Lamp Flux (Initial)	2078ms												
I-Table Number/ File	StreetLED3 17W 4K 180804PH												
Lighting Tariff (Proposed or Altered Lights)	Rate 2												
Ingress Protection Rating	IP66												
Photometric Data Details	Gerrard lighting												
Light Technical Parameters													
(1) Straight Section													
Design Method - Luminance Computer based calculations and design rules.													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Road Name</th> <th>Lighting Category</th> <th>Road/ carriageway Width (m)</th> <th>Luminaire</th> <th>Arrangement</th> <th>Spacing</th> </tr> </thead> <tbody> <tr> <td>Ashmore St</td> <td>P5</td> <td>15m</td> <td>L17</td> <td>Single Side</td> <td>79.3</td> </tr> </tbody> </table>	Road Name	Lighting Category	Road/ carriageway Width (m)	Luminaire	Arrangement	Spacing	Ashmore St	P5	15m	L17	Single Side	79.3	
Road Name	Lighting Category	Road/ carriageway Width (m)	Luminaire	Arrangement	Spacing								
Ashmore St	P5	15m	L17	Single Side	79.3								
(2) Intersections, Junctions and Other Specified Locations													
Design Method - Illuminance based computer calculations													
AS/NZS 1158.3.1:2005 Table 2.6													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Lighting Subcategory</th> <th>Average Horizontal Illuminance (E_h) lx</th> <th>Point Horizontal Illuminance (E_p) lx</th> <th>Illuminance (horizontal) Uniformity Cat P (U_h)</th> <th>Point Vertical Illuminance (E_v)</th> </tr> </thead> <tbody> <tr> <td>P5</td> <td>0.5</td> <td>0.07</td> <td>10</td> <td>N/A</td> </tr> </tbody> </table>	Lighting Subcategory	Average Horizontal Illuminance (E _h) lx	Point Horizontal Illuminance (E _p) lx	Illuminance (horizontal) Uniformity Cat P (U _h)	Point Vertical Illuminance (E _v)	P5	0.5	0.07	10	N/A			
Lighting Subcategory	Average Horizontal Illuminance (E _h) lx	Point Horizontal Illuminance (E _p) lx	Illuminance (horizontal) Uniformity Cat P (U _h)	Point Vertical Illuminance (E _v)									
P5	0.5	0.07	10	N/A									
Road Surface Reflection Characteristics Details:													
Road Surface Reflection Characteristics		R3											
Computer Software Details													
Name of Computer Program		Perfect Lite											
Source of Program		Trevor Caswell Software											
Compliance		Complies With the Requirements of AS/NZS 1158.2:2005											

LIGHTING AND ELECTRICAL DESIGN FOR NEW WORK CERTIFIED TO COMPLY WITH AS/NZS 1158.3.1:2005 WITHIN LIMIT OF RECOMMENDATIONS (LOR)

CERTIFIED JUSTIN READ _____ RPEQ No. 7727

FINAL/PARTIAL

AS CONSTRUCTED

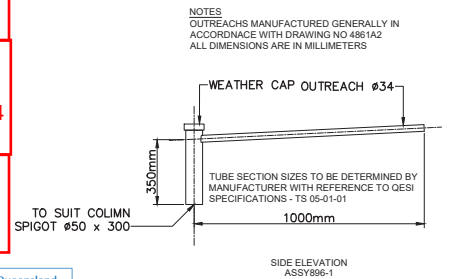
CV ENERGY SERVICES

PHONE (07) 3622 4333 FAX (07) 3622 4334

NAME: Dan Booth

SIGN:

18/12/2020



Registered Professional Engineer of Queensland
 MR JUSTIN READ
 RPEQ 7727
 DIV: ELECTRICAL
 Signature: Date: 3.03.2020

FOR CONSTRUCTION

REV	DATE	DETAILS	REV	DATE	DETAILS
PR1	4/8/19	FOR APPROVALS (NFC)			
PR2	22/10/19	UPDATED TO CLIENT REQUESTED CHANGES			
A	5/12/19	COUNCIL APPROVED			
B	26/02/2020	ENERGEX ACCEPTED - ISSUED FOR CONSTRUCTION			



SITE CONTACT DETAILS		ALIGNMENTS	PROPERTY DESCRIPTION	APPROVED:
NAME	ENERGEX OH	3.0	NUMBER OF LOTS: 10	T.FOSTER
COMPANY	ENERGEX UG	0.9	PROPOSED LOTS 1, 2, 25 - 32 & 900 (BALANCE LOT)	PHONE: 0448 903 388
TEL STRA	DBYD		CANCELLING LOTS 82 - 91 ON RP72156 & LOT 100 ON SP105726	CHECKED: N DAVIES
PHONE	HP GAS	DBYD	LOCAL AUTHORITY: BCC	PHONE: 0402 001 819
MOBILE	WATER	DBYD	APPROVAL No: A004708283	DESIGNER: D RETTKE
FAX	STORMWATER	DBYD		PHONE: (07) 3622 4365
EMAIL	SEWERAGE	DBYD		PLANNER: N DAVIES
	OTHER	DBYD	J. READ	PHONE: 0402 001 819
			RPEQ: 7727	ISSUE DATE:

ELECTRICAL RETICULATION & STREET LIGHTING		SCALE: N/A @ A1
50 ASHMORE ST EVERTON PARK STAGE 1		10244-1-1
LIGHTING COMPLIANCE STATEMENT		S4900134 B
		Sheet 7 of 7