

**As Constructed Plans**

<b>FOR CONSTRUCTION</b>		
ON COMPLETION, MARK UP THIS PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO SPA		
CHANGES: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
<b>ELECTRICAL CONTRACTOR</b>		
NAME: <u>K.Martin (Hendric Bros P/L)</u>		
SIGNATURE: _____		
DATE: <u>14/8/13</u>		
<b>CIVIL CONTRACTOR</b>		
NAME: _____		
SIGNATURE: _____		
DATE: _____		

NOTE: CONDUITS SHOWN ARE INDICATIVE ONLY. DO NOT USE AS REFERENCE FOR CONDUIT LAYING. REFER TO CONDUIT SCHEDULE FOR STATION TO STATION DETAILS AND CONDUIT BEND INFORMATION. REFER TO SITE PLAN FOR TRENCH SECTION DETAILS.

**WORKPLAN NOTES**

- FOR STANDARD UNDERGROUND DUCT SECTIONS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5168.
- STANDARD TRENCH ALIGNMENT IS 0.3 TO 0.9 METRES OFF PROPERTY ALIGNMENT SUBJECT TO LOCATION OF OTHER SERVICES. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5167 SHEET 1 TO 6. POLYMERIC COVER IS REQUIRED ON ALL OUT OF ALIGNMENT SECTIONS. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5167 SHEET 2 AND 4 FOR DETAILS. FOR TRENCHES WITH NBNC<sub>0</sub> CONDUITS REFER TO DRAWING 5228 AND 5249.
- STREETLIGHT POLE FOOTINGS SHALL BE LOCATED PERPENDICULAR TO THE KERB, AT THE PROLONGATION OF THE SIDE PROPERTY BOUNDARY, UNLESS DETAILED OTHERWISE. WHERE DIMENSIONS ARE SHOWN THEY TAKE PRECEDENCE OVER GRID COORDINATES.
- ALL CONDUITS SHALL BE CONTINUOUS UNLESS DETAILS OTHERWISE.
- FOR STANDARD UDC CONSTRUCTION PRACTICES REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5022, 5085 AND 5124.
- THERE ARE 1x70W HPS MAXI URBAN MINOR ROAD STREETLIGHTS, 2x100W HPS SYLVANIA ROADSTER AEROSCREEN MAJOR ROAD STREETLIGHTS & 1x150W HPS SYLVANIA ROADSTER MAJOR ROAD STREETLIGHTS ON RATE 2.
- STREETLIGHT DESIGN TO AS1158 CATEGORY P4 ON LOMANDRA AVE, P3 ON UPPER McDOWALL ST AND V5 ON CURREY STREET.
- MINOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 1200mm FOR MINOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-6-4-1 & 2. CENTRELINE OF STREETLIGHT POLE SHALL BE 1m FROM THE BACK OF KERB.
- MAJOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 2250mm FOR MAJOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-5-6-1 & 2 FOR BPM FOOTINGS. FOR ALL FOOTPATHS, CENTRELINE OF STREETLIGHT SHALL BE 1m FROM THE BACK OF KERB AND CHANNEL.
- THE LIGHTING DESIGN HAS NO ALLOWANCE FOR CONSTRUCTION TOLERANCE OF LIGHT POLES. SPA MUST BE ADVISED OF ANY CHANGES TO DESIGN LOCATION AS COMPLIANCE WILL NEED TO BE VERIFIED AND APPROVALS SOUGHT FROM ERGON ENERGY.
- CONFIRM ALL CONDUIT AND CABLE LENGTHS PRIOR TO INSTALLATION.
- IN ACCORDANCE WITH ELECTRICAL SAFETY ACT, A SAFETY OBSERVER MUST BE PRESENT AT ALL TIMES WHEN WORKING IN THE VICINITY OF ENERGIZED CABLES. CONTACT ERGON ENERGY ON 131046.
- ELECTRICAL CABLE MARKERS (ECM) ARE TO BE SUPPLIED AND INSTALLED AT ENDS OF SPARE CONDUITS INCLUDING (SPARE ROAD CROSSINGS, CONDUIT STUBS FOR FUTURE STAGES, SPARE CONDUITS FOR FUTURE HV, ETC) AND AT ALL CABLE JOINTS. REFER TO ERGON STANDARD SPECIFICATIONS RSC07, RSC08, RSM01 7 RSM02.
- SUPPLY AND INSTALL EXTRA CONDUIT BENDS TO ACHIEVE INCREASED BURIAL DEPTH AT ROAD CROSSINGS. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5022.
- ALL CONTRACTORS MUST CARRY OUT A DIAL BEFORE YOU DIG ENQUIRY BEFORE COMMENCING ANY EXCAVATION.
- INSTALL BEDDING SAND WITH A RESISTIVITY OF 0.8 ABOVE ALL 150mm HV CONDUITS ACROSS ENTIRE TRENCH WIDTH AS PER DWG 5167.BEDDING SAND MAY BE SOURCED FROM RAVENSBORNE SAND & SOIL, 96 PHILIP RD, RAVENSBORNE, Ph 0428748125 / 0408022489 OR FROM BOLZAN AT ALLORA.

Code	Date	Description	Revised	Code	Date	Description	Approved
C	21/1/13	REVISION AMENDED TO C FOR ERGON	IDW				
B	12/12/12	STREETLIGHTS & NOTES AMENDED	IDW				
A	27/11/12	FOR CONSTRUCTION					
		AMENDMENTS AS PER AMS REPORT	IDW				
3	16/10/12	NEW BACKGROUND LAYOUT AMENDED	IDW				
2	5/9/12	AMENDED FOR ERGON APPROVAL	IDW				
1	1/5/12	FOR APPROVAL	IDW				

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URBAN LAND DEVELOPMENT AUTHORITY

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**LEGEND**

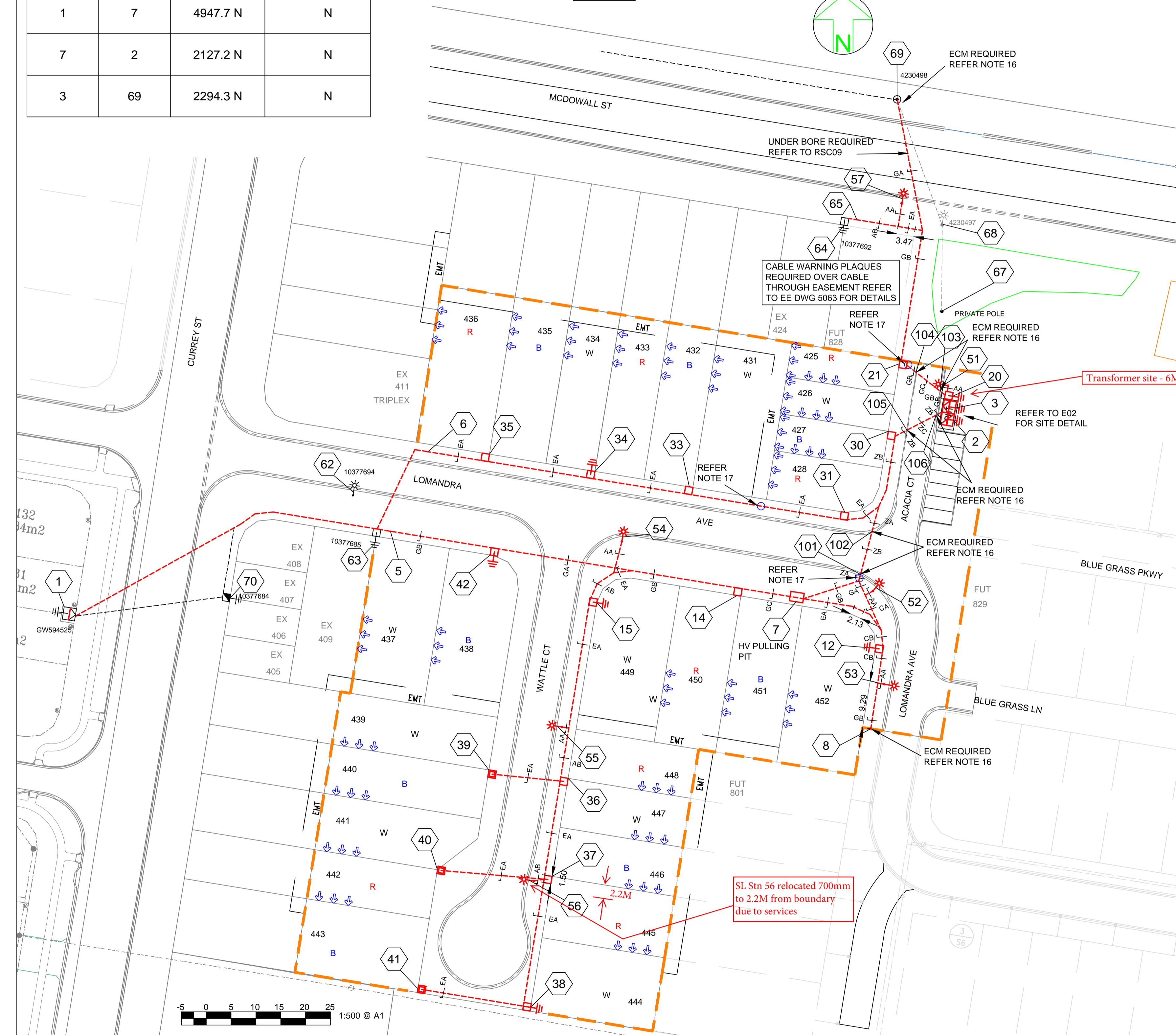
--- CABLE EXISTING	□ SUBSTATION	□ COMMERCIAL/ INDUSTRIAL PILLAR
--- CABLE PLANNED	✓ HV ISOLATING DEVICE	□ DISTRIBUTION CABINET
--- CABLE RECOVER	LV ISOLATING DEVICE	* STREETLIGHT
--- EQUIPMENT EXISTING	□ NORMAL PILLAR	⊥ EARTH
--- EQUIPMENT RECOVER	□ CROSS ROAD PILLAR	○ POLE
--- LIGHTING DUCT	□ LINKING PILLAR	
--- 35mm sq ANNEALED BARE COPPER EARTH		
--- EQUIPMENT PLANNED		

Drawing Title		Date	APRIL 2012
CLEARVIEW RISE, STAGE 4A URD ELECTRICAL RETICULATION SITE PLAN AND CONDUIT SCHEMATIC		Scale	1:500 @ A1
Project Description		Drawn	IDW
CLEARVIEW RISE, ROMA ULDA, STAGE 4A BOWEN STREET, ROMA		Approved	JE
ERGON Project Number	SPA Drawing Number	Revision	
652820	2094-E01	C	

### HV PULLING TENSION CALCULATED AND RECORDED

STATION FROM	STATION TO	CALCULATED	RECORDED
1	2	15757.7 N	N
1	7	4947.7 N	N
7	2	2127.2 N	N
3	69	2294.3 N	N

### SITE PLAN



### WORKPLAN NOTES

- FOR STANDARD UNDERGROUND DUCT SECTIONS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5168.
- STANDARD TRENCH ALIGNMENT IS 0.3 TO 0.9 METRES OFF PROPERTY ALIGNMENT SUBJECT TO LOCATION OF OTHER SERVICES. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5167 SHEET 1 TO 6. POLYMERIC COVER IS REQUIRED ON ALL OUT OF ALIGNMENT SECTIONS. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5167 SHEET 2 AND 4 FOR DETAILS. FOR TRENCHES WITH NBNC CONDUITS REFER TO DRAWINGS 5228 AND 5249.
- STREETLIGHT POLE FOOTINGS SHALL BE LOCATED PERPENDICULAR TO THE KERB, AT THE PROLONGATION OF THE SIDE PROPERTY BOUNDARY, UNLESS DETAILED OTHERWISE. WHERE DIMENSIONS ARE SHOWN THEY TAKE PRECEDENCE OVER GRID COORDINATES.
- ALL CONDUITS SHALL BE CONTINUOUS UNLESS DETAILS OTHERWISE.
- FOR STANDARD UDC CONSTRUCTION PRACTICES REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5022, 5085 AND 5124.
- INSTALLATION OF CO-LOCATED PADMOUNT SUBSTATION AND RMU REQUIRED IN ROAD RESERVE ADJACENT TO THE PARK, STATION 3 AND STATION 2. PADMOUNT SITE 3.0m x 3.0m AND RMU SITE 3.0m x 3.0m.
- DEVELOPER SHALL INSTALL PLINTH AND CONCRETE SURROUND. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5004 & 5005 FOR PADMOUNTS AND DRAWINGS 5255, 5217 AND 5232 FOR THE RMU.
- INSTALL PADMOUNTED SUBSTATION AND RMU EARTHING - COMMON EARTH ARRANGEMENT. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5013 AND RMU DRAWING 5221.
- THERE ARE 6x70W HPS MAXI URBAN MINOR ROAD STREETLIGHTS & 1x 100W HPS SYLVANIA AEROSCREEN ROADSTER MAJOR ROAD STREETLIGHT ON RATE 2.
- STREETLIGHT DESIGN TO AS1158 CATEGORY P3 ON UPPER McDOWALL ST & P4 ON WATTLE CT, ACACIA CT AND LOMANDRA AVE.
- MINOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 1200mm FOR MINOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-6-4-1 & 2. CENTRELINE OF STREETLIGHT POLE SHALL BE 1m FROM THE BACK OF KERB.
- MAJOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 2250mm FOR MAJOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-5-6-1 & 2 FOR BPM FOOTINGS. FOR ALL FOOTPATHS, CENTRELINE OF STREETLIGHT SHALL BE 1m FROM THE BACK OF KERB AND CHANNEL.
- THE LIGHTING DESIGN HAS NO ALLOWANCE FOR CONSTRUCTION TOLERANCE OF LIGHT POLES. SPA MUST BE ADVISED OF ANY CHANGES TO DESIGN LOCATION AS COMPLIANCE WILL NEED TO BE VERIFIED AND APPROVALS SOUGHT FROM COUNCIL AND ERGON ENERGY.
- CONFIRM ALL CONDUIT AND CABLE LENGTHS PRIOR TO INSTALLATION.
- IN ACCORDANCE WITH ELECTRICAL SAFETY ACT, A SAFETY OBSERVER MUST BE PRESENT AT ALL TIMES WHEN WORKING IN THE VICINITY OF ENERGIZED CABLES. CONTACT ERGON ENERGY ON 131046.
- ELECTRICAL CABLE MARKERS (ECM) ARE TO BE SUPPLIED AND INSTALLED AT ENDS OF SPARE CONDUITS INCLUDING (SPARE ROAD CROSSINGS, CONDUIT STUBS FOR FUTURE STAGES, SPARE CONDUITS FOR FUTURE HV, ETC) AND AT ALL CABLE JOINTS. REFER TO ERGON STANDARD SPECIFICATIONS RSC07, RSC08, RSM01 & RSM02.
- WHERE PREVIOUSLY AGREED BY ERGON, SUPPLY AND INSTALL CONCRETE COVER ABOVE CONDUIT, WHERE CONDUIT BURIAL DEPTH IS LESS THAN THAT SPECIFIED IN UNDERGROUND CONSTRUCTION MANUAL DRAWING 5163. FOR FOOTPATHS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5016. FOR ROAD CROSSINGS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5017.
- SUPPLY AND INSTALL EXTRA CONDUIT BENDS TO ACHIEVE INCREASED BURIAL DEPTH AT ROAD CROSSINGS. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5022.
- ALL CONTRACTORS MUST CARRY OUT A DIAL BEFORE YOU DIG ENQUIRY BEFORE COMMENCING ANY EXCAVATION.
- NON STANDARD TRENCH SECTION ZA = 4X HV CONDUITS & 1X LV CONDUIT. ZB = 4X HV CONDUITS & 2X LV CONDUITS. ZC = 4X HV CONDUITS & 3X LV CONDUITS.
- INSTALL BEDDING SAND WITH A RESISTIVITY OF 0.8 ABOVE ALL 150mm HV CONDUITS ACROSS ENTIRE TRENCH WIDTH AS PER DWG 5167. BEDDING SAND MAY BE SOURCED FROM RAVENSBORNE SAND & SOIL 96 PHILIP RD RAVENSBORNE Ph 0428748125 / 0408022489 OR FROM BOLZAN AT ALLORA.
- PRIVATE POLE TO REMAIN. ELECTRICAL CONTRACTOR TO TRENCH FROM PILLAR STATION 20 TO POLE STATION 67 WITH NEW SERVICE FOR IRRIGATION CONTROLLER METER LOCATED ON PRIVATE POLE.

### As Constructed Plans

#### FOR CONSTRUCTION

ON COMPLETION, MARK UP THIS PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO SPA

CHANGES: YES/NO

#### ELECTRICAL CONTRACTOR

NAME: K.Martin (Hendrie Bros P/L)

SIGNATURE: \_\_\_\_\_

DATE: 15/8/13

#### CIVIL CONTRACTOR

NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

Code	Date	Description	Revised	Code	Date	Description	Approved
A	21/2/13	FOR CONSTRUCTION	IDW				
3	17/12/12	NOTES AMENDED	IDW				
2	12/12/12	STREETLIGHT & NOTES AMENDED	IDW				
1	15/11/12	FOR APPROVAL	IDW				

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**LEGEND**  
 --- CABLE EXISTING  
 --- CABLE PLANNED  
 --- CABLE RECOVER  
 --- EQUIPMENT EXISTING  
 --- EQUIPMENT RECOVER  
 --- EQUIPMENT PLANNED  
 --- LV DUCT  
 --- LIGHTING DUCT  
 --- 35mm sq ANNEALED BARE COPPER EARTH

--- SUBSTATION  
 --- HV ISOLATING DEVICE  
 --- LV ISOLATING DEVICE  
 --- NORMAL PILLAR  
 --- CROSS ROAD PILLAR  
 --- LINKING PILLAR

--- COMMERCIAL/ INDUSTRIAL PILLAR  
 --- DISTRIBUTION CABINET  
 --- STREETLIGHT  
 --- EARTH  
 --- POLE

Drawing Title		Date	JULY 2012
CLEARVIEW RISE, STAGE 4B URD ELECTRICAL RETICULATION SITE PLAN		Scale	1:500 @ A1
Project Description		Drawn	IDW
CLEARVIEW RISE, ROMA ULDA, STAGE 4B BOWEN STREET, ROMA		Approved	JE
ERGON Project Number	SPA Drawing Number	Revision	
652823	2096-E01	A	