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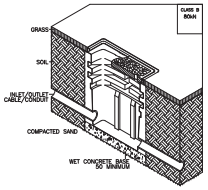
DO NOT SCALE from this drawing.Use given dimensions.CONTRACTOR is to check all dimensions on the job prior to commencement of shop drawings or fabrication. Any discrepancies are to be refered to Council prior to commencement of work.

LEGEND

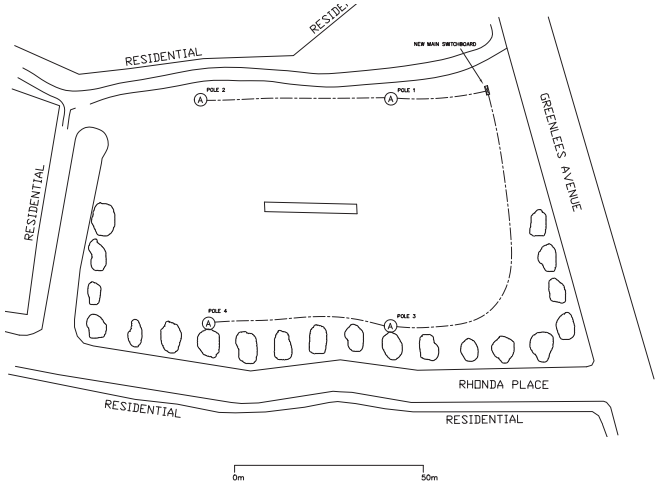
- PROPOSED NEW CONDUIT/CABLE ROUTES
- (A) PROPOSED NEW LIGHTING POLE
  POLE HEIGHT 18m
  TYPICALLY: 20W METAL HALIDE
  BEAM WIDTH TO SUIT
  REMOTE 415V 2000W METAL HALIDE GEAR
  LAMP: 2000W 220000 LUMEN MULTIVAPOUR
- LIGHTS — POLE MOUNTED LIGHT FITTINGS
- NEW PULLING PIT THIS CONTRACT
- LIGHTING SWITCHBOARD.
- 100A — CIRCUIT BREAKER
- nA — CIRCUIT BREAKER CURRENT RATING DETERMINED BY LOAD
- FUSE
- R1 — RELAY COIL
- C2 — CONTACTOR COIL
- 3 PHASE
- KEY — MANUAL KEYED BYPASS SWITCH
- C2 — NORMALLY OPEN CONTACTS
- C2 — NORMALLY CLOSED CONTACTS

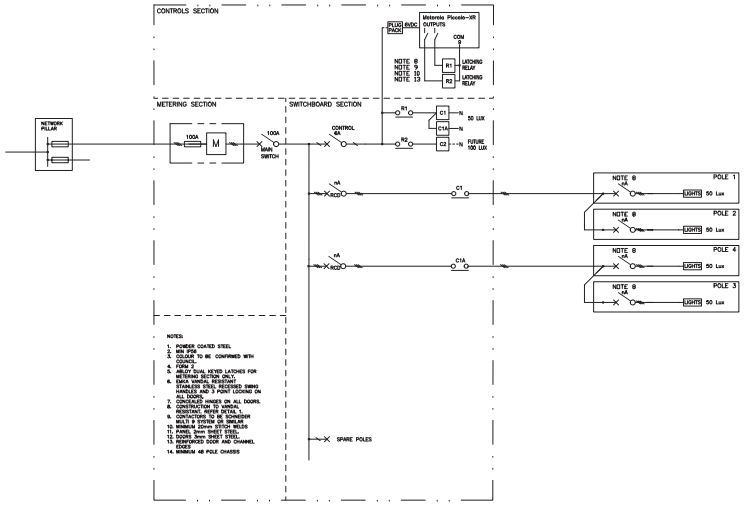


TYPICAL PIT DETAIL

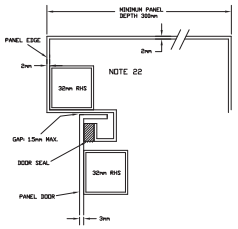
NOTES:

1. SEAL ALL NEW CONDUITS THAT ENTER PITS WITH EXPANDING FOAM ON COMPLETION.
2. CONDUIT ROUTES SHOWN ARE INDICATIVE ONLY.
   CONFIRM CONDUIT ROUTES WITH COUNCIL PRIOR TO INSTALLATION.
3. PROVIDE FAULT LEVEL PROTECTION TO CODE AND LOCAL AUTHORITY REQUIREMENTS.
4. CONFIRM LOCATION OF EXISTING SERVICES ON SITE.
5. CONFIRM ALL DIMENSIONS ON SITE. REFER TO COUNCIL FOR SCALED SURVEY PLAN.
6. PULLING PITS PROVIDED AS REQUIRED. FINISH FLUSH WITH GRASS SURFACE. CONFIRM PIT LOCATIONS WITH COUNCIL PRIOR TO INSTALLATION. MINIMUM CLASS B 80 kN POINT LOADING
7. PROVIDE MULTICORE MIN 2.5mm2 PVC/PVC CONTROL CABLE TO POLES AS SHOWN .
8. CIRCUIT BREAKERS SIZED FOR STARTUP LOAD.
9. NEW ELECTRICAL WORKS TO COMPLY WITH THE LATEST SERVICE AND INSTALLATION RULES OF NSW.
10. NA
11. NA
12. PROVIDE SURGE SUPPRESSION AT THE MAIN SWITCHBOARD.
13. PROVIDE MINIMUM 2MM GALVANIZED COVER BRACKETS WHERE CONDUITS ARE EXPOSED TO PUBLIC CONTACT AS REQUIRED.
14. ALL EXTERNAL CONDUITS INSTALLED BETWEEN GROUND LEVEL AND 3M ABOVE GROUND LEVEL THAT ARE IN PUBLIC AREAS SHALL BE GALVANIZED.
15. MOTOROLA PICCOLO XR OUTPUT VOLTAGE IS A DC PULSE THROUGH A TWO WIRE CIRCUIT SUITABLE FOR ACTIVATING DC LATCHING COILS. DEFAULT OUTPUT VOLTAGE IS 12V. RELAY NUMBERS ARE FOR GUIDENCE ONLY. CONFIRM PIN NUMBER AND OUTPUT WIRE COLOUR. PROVIDE INTERPOSING RELAYS IF REQUIRED. CONFIRM ALL DETAILS OF THE INFINET SYSTEM (PICCOLO XR) PRIOR TO TENDER SUBMISSION.
    REFER TO CENTRATECH – CRAIG SIMPSON 0401 321 219 csimpson@centratech.com.au
16. EACH LIGHT FITTING TO BE WIRED SEPARATELY FROM THE BOTTOM OF THE POLE.
    DO NOT LOOP AT THE TOP.
17. CONFIRM LOCATION OF NEW LIGHTING SWITCHBOARD WITH COUNCIL PRIOR TO INSTALLATION.



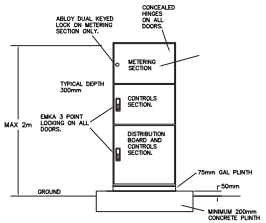


PROPOSED POWER RETICTULATION



TYPICAL MSB VANDAL RESISTANT CONSTRUCTION DETAIL (ALL DOORS) ⅋
(DIMENSIONS SHOWN ARE MINIMUM VALUES)

DETAIL 1



(NTS)

TYPICAL PANEL CONSTRUCTION FOR NEW MSB FLOOR MOUNTER

No.	DATE	Description	Drawn
P1	23/08/16	Preliminary issue.	CC

Electrical Engineer

GRA ELECTRICAL ENGINEERS
GARY ROBERTS & ASSOCIATES PTY LTD ACN 064331086
PHONE (02) 9457 6455
MOBILE (0412) 442 871
E-mail: grassoc@optusnet.com.au

Client: CANADA BAY COUNCIL

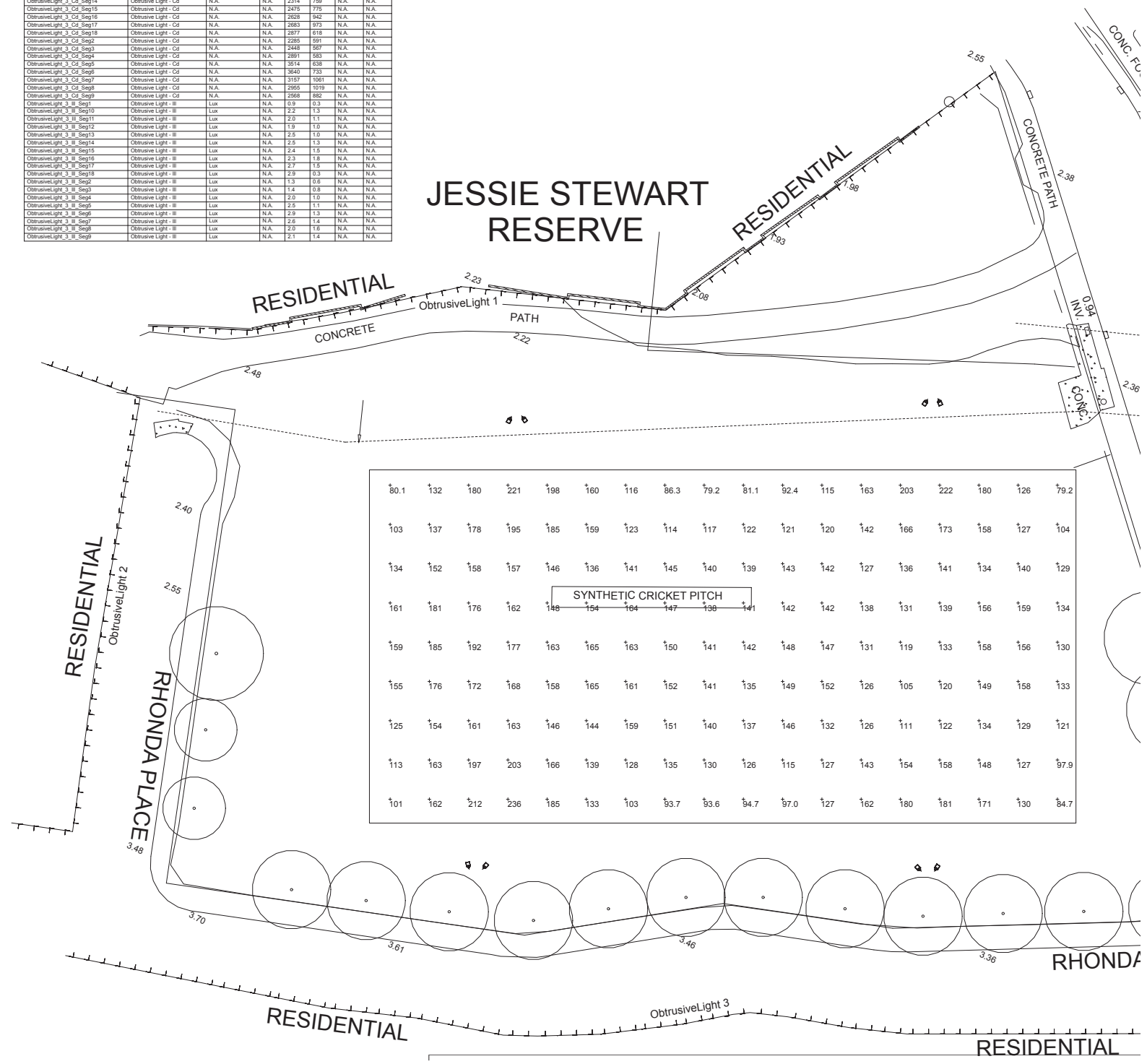
Project:
JESSE STEWART RESERVE
RHONDA PLACE CONCORD NSW 2137
2016 LIGHTING UPGRADE

Drawing: ELECTRICAL SERVICES LIGHTING LAYOUT

Drawing No: E-1 Issue: P1

Date:	Drawn:	Checked:	Proj.No:	Scale:
23/08/16	C.C.		371	1:500@A0

PLOT DATE: 23-08-16

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	8	SR4H757A2 Raptor 1270W NB gla	SINGLE	136000	0.800	SR4H757A2 NB_0

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max
CalcPts_1	Illuminance	Lux	144.20	236	79.2	0.55	0.34
ObtrusiveLight_1_Cd_Seg1	Obtrusive Light - Cd	N.A.	N.A.	2587	671	N.A.	N.A.
ObtrusiveLight_1_Cd_Seg2	Obtrusive Light - Cd	N.A.	N.A.	2815	722	N.A.	N.A.
ObtrusiveLight_1_Cd_Seg3	Obtrusive Light - Cd	N.A.	N.A.	2893	854	N.A.	N.A.
ObtrusiveLight_1_Cd_Seg4	Obtrusive Light - Cd	N.A.	N.A.	3062	565	N.A.	N.A.
ObtrusiveLight_1_III_Seg1	Obtrusive Light - III	Lux	N.A.	0.9	0.3	N.A.	N.A.
ObtrusiveLight_1_III_Seg2	Obtrusive Light - III	Lux	N.A.	3.8	0.7	N.A.	N.A.
ObtrusiveLight_1_III_Seg3	Obtrusive Light - III	Lux	N.A.	4.7	1.7	N.A.	N.A.
ObtrusiveLight_1_III_Seg4	Obtrusive Light - III	Lux	N.A.	2.3	0.2	N.A.	N.A.
ObtrusiveLight_2_Cd_Seg1	Obtrusive Light - Cd	N.A.	N.A.	0	0	N.A.	N.A.
ObtrusiveLight_2_Cd_Seg2	Obtrusive Light - Cd	N.A.	N.A.	7013	560	N.A.	N.A.
ObtrusiveLight_2_Cd_Seg3	Obtrusive Light - Cd	N.A.	N.A.	4783	985	N.A.	N.A.
ObtrusiveLight_2_III_Seg1	Obtrusive Light - III	Lux	N.A.	0.0	0.0	N.A.	N.A.
ObtrusiveLight_2_III_Seg2	Obtrusive Light - III	Lux	N.A.	3.1	0.7	N.A.	N.A.
ObtrusiveLight_2_III_Seg3	Obtrusive Light - III	Lux	N.A.	0.6	0.1	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg1	Obtrusive Light - Cd	N.A.	N.A.	1804	587	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg10	Obtrusive Light - Cd	N.A.	N.A.	2107	713	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg11	Obtrusive Light - Cd	N.A.	N.A.	1850	707	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg12	Obtrusive Light - Cd	N.A.	N.A.	1763	704	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg13	Obtrusive Light - Cd	N.A.	N.A.	2535	743	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg14	Obtrusive Light - Cd	N.A.	N.A.	2314	759	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg15	Obtrusive Light - Cd	N.A.	N.A.	2475	775	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg16	Obtrusive Light - Cd	N.A.	N.A.	2628	942	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg17	Obtrusive Light - Cd	N.A.	N.A.	2683	973	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg18	Obtrusive Light - Cd	N.A.	N.A.	2877	618	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg2	Obtrusive Light - Cd	N.A.	N.A.	2285	591	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg3	Obtrusive Light - Cd	N.A.	N.A.	2448	567	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg4	Obtrusive Light - Cd	N.A.	N.A.	2891	583	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg5	Obtrusive Light - Cd	N.A.	N.A.	3514	638	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg6	Obtrusive Light - Cd	N.A.	N.A.	3640	733	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg7	Obtrusive Light - Cd	N.A.	N.A.	3157	1061	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg8	Obtrusive Light - Cd	N.A.	N.A.	2955	1019	N.A.	N.A.
ObtrusiveLight_3_Cd_Seg9	Obtrusive Light - Cd	N.A.	N.A.	2568	882	N.A.	N.A.
ObtrusiveLight_3_III_Seg1	Obtrusive Light - III	Lux	N.A.	0.9	0.3	N.A.	N.A.
ObtrusiveLight_3_III_Seg10	Obtrusive Light - III	Lux	N.A.	2.2	1.3	N.A.	N.A.
ObtrusiveLight_3_III_Seg11	Obtrusive Light - III	Lux	N.A.	2.0	1.1	N.A.	N.A.
ObtrusiveLight_3_III_Seg12	Obtrusive Light - III	Lux	N.A.	1.9	1.0	N.A.	N.A.
ObtrusiveLight_3_III_Seg13	Obtrusive Light - III	Lux	N.A.	2.5	1.0	N.A.	N.A.
ObtrusiveLight_3_III_Seg14	Obtrusive Light - III	Lux	N.A.	2.5	1.3	N.A.	N.A.
ObtrusiveLight_3_III_Seg15	Obtrusive Light - III	Lux	N.A.	2.4	1.5	N.A.	N.A.
ObtrusiveLight_3_III_Seg16	Obtrusive Light - III	Lux	N.A.	2.3	1.8	N.A.	N.A.
ObtrusiveLight_3_III_Seg17	Obtrusive Light - III	Lux	N.A.	2.7	1.5	N.A.	N.A.
ObtrusiveLight_3_III_Seg18	Obtrusive Light - III	Lux	N.A.	2.9	0.3	N.A.	N.A.
ObtrusiveLight_3_III_Seg2	Obtrusive Light - III	Lux	N.A.	1.3	0.6	N.A.	N.A.
ObtrusiveLight_3_III_Seg3	Obtrusive Light - III	Lux	N.A.	1.4	0.8	N.A.	N.A.
ObtrusiveLight_3_III_Seg4	Obtrusive Light - III	Lux	N.A.	2.0	1.0	N.A.	N.A.
ObtrusiveLight_3_III_Seg5	Obtrusive Light - III	Lux	N.A.	2.5	1.1	N.A.	N.A.
ObtrusiveLight_3_III_Seg6	Obtrusive Light - III	Lux	N.A.	2.9	1.3	N.A.	N.A.
ObtrusiveLight_3_III_Seg7	Obtrusive Light - III	Lux	N.A.	2.6	1.4	N.A.	N.A.
ObtrusiveLight_3_III_Seg8	Obtrusive Light - III	Lux	N.A.	2.0	1.6	N.A.	N.A.
ObtrusiveLight_3_III_Seg9	Obtrusive Light - III	Lux	N.A.	2.1	1.4	N.A.	N.A.