

General Notes
 1. FOR DIMENSIONS AND KERB TYPES REFER TO SETOUT PLANS
 2. UNLESS OTHERWISE NOTED, SUBSURFACE DRAINS TO OUTLET TO DRAINAGE PITS

SAFETY FIRST
 SAFETY STARTS WITH YOU

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Rev	Amendment	YR	Date



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Project
**LUCAS ESTATE
 RESIDENTIAL SUBDIVISION
 STAGE B1/B2**
 Lucas, Vic

Authority
 Ballarat City Council - (03) 6320 5560

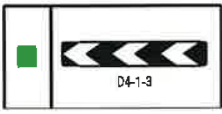
Drawing Title
DRAINAGE PLAN

Status
APPROVED
 ISSUED FOR CONSTRUCTION

Designer
 D.Georgalas
 Checker
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 Scale (A1) 1:500
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 HD 0 5 10 15 20 25
 MET

Sheet Number
12 of 39
 Drawing Number
LUB1-CD-012
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B

APPROVED
 By Jeff Colbourne at 12:52 pm, Aug 22, 2013



LEGEND

- SEWER PITS
- SEWER MAIN
- STORMWATER PITS
- STORMWATER PIPE
- SUBSOIL PIT & RISER
- SUBSOIL DRAIN
- WATER MAIN
- SEWER RISING MAIN
- OPTUS FIBRE OPTIC
- FINISHED SURFACE LEVEL
- EXISTING SURFACE LEVEL
- 15.00 RUNNING CHAINAGE OF HD
- FOOTPATH / DRIVEWAY
- ASHPALT
- CONCRETE PAVEMENT

WARNING
 BEWARE OF UNDERGROUND SERVICES
 THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

PIT SCHEDULE

PIT No.	TYPE	PIT DIMENSIONS			PIT LEVELS		PIT LOCATION		FACE BRG	COMMENTS
		L	W	D	INVERT	TOP	EASTING	NORTHING		
B7-2-4	JP	900	800	0.659	443.904	444.183	745093.060	5840332.326	03° 09'	
B7-11	JP	900	900	2.068	443.879	445.937	745222.038	5840362.468	183° 57'	
B7-12	SEP	900	900	1.888	443.986	446.676	745222.408	5840340.105	117° 2'	
B7-13	SEP	900	900	1.771	444.077	445.648	745223.313	5840330.044	244° 47'	
B8	JP	900	1200	2.070	440.461	442.531	745059.059	5840362.515	185° 07'	FOR PIT DETAIL LS REFER TO LUB1-CD-019
B10	SEP	900	1200	2.075	440.807	442.682	745053.989	5840324.363	189° 51'	FOR PIT DETAIL LS REFER TO LUB1-CD-019
B10-1	SEP	900	750	1.154	441.496	442.682	745045.653	5840326.528	9° 51'	FOR PIT DETAIL LS REFER TO LUB1-CD-019
B11	SEP	900	1200	2.106	440.894	442.990	745040.704	5840249.010	189° 51'	FOR PIT DETAIL LS REFER TO LUB1-CD-019
B11-1	SEP	900	750	1.184	441.806	442.990	745032.021	5840250.536	9° 51'	
B12	JP	900	1200	2.104	440.826	443.032	745041.888	5840243.880	149° 28'	FOR PIT DETAIL LS REFER TO LUB1-CD-019
B13	JP	900	1200	2.132	440.986	443.100	745046.886	5840240.434	99° 52'	FOR PIT DETAIL LS REFER TO LUB1-CD-019
B14	JP	900	1200	2.194	441.049	443.243	745062.107	5840237.787	89° 52'	FOR PIT DETAIL LS REFER TO LUB1-CD-019
B14-1	JP	900	800	0.749	442.756	443.505	745067.747	5840270.226	189° 51'	
B14-2	JP	900	800	0.810	442.943	443.733	745078.078	5840256.256	89° 51'	
B14-3	JP	900	800	0.731	443.453	444.194	745087.471	5840316.532	99° 52'	
B15	SEP	1200	1200	2.474	441.197	443.671	745098.823	5840231.128	99° 51'	FOR PIT DETAIL LS REFER TO LUB1-CD-020
B15-1	JP	900	900	1.909	442.593	443.902	745117.637	5840236.087	189° 59'	
B15-1-1	SEP	900	1.291	443.130	444.421	745125.077	5840273.464	189° 59'		

Note: Pit setout to centre of base.
 All pit lids located within road reserve to be medium duty.

PIT SCHEDULE

PIT No.	TYPE	PIT DIMENSIONS			PIT LEVELS		PIT LOCATION		FACE BRG	COMMENTS
		L	W	D	INVERT	TOP	EASTING	NORTHING		
B15-1-2	SEP	900	750	1.184	443.237	444.421	745118.482	5840280.956	9° 51'	
B15-2	JP	900	900	1.341	443.303	444.644	745151.826	5840230.187	9° 51'	
B15-3	JP	900	800	0.788	444.338	445.127	745161.816	5840237.840	9° 51'	
B15-4	JP	900	800	0.731	444.861	445.612	745170.588	5840338.107	3° 14'	
B16	SEP	1200	1200	2.383	441.278	443.671	745098.285	5840222.182	279° 51'	FOR PIT DETAIL LS REFER TO LUB1-CD-020
B17	SEP	900	1200	2.318	441.374	443.650	745132.927	5840218.394	99° 51'	FOR PIT DETAIL LS REFER TO LUB1-CD-020
B18	JP	1200	1300	2.910	442.595	445.211	745175.940	5840201.318	99° 51'	FOR PIT DETAIL LS REFER TO LUB1-CD-020
B19	JP	1200	900	2.279	442.748	445.026	745194.950	5840206.911	182° 36'	FOR PIT DETAIL LS REFER TO LUB1-CD-020
B20	SEP	900	900	1.571	443.228	444.800	745200.484	5840211.711	189° 51'	
B20-1	SEP	900	1.489	443.410	444.899	745194.525	5840221.486	9° 51'		
B21	SEP	900	1.671	443.709	445.440	745209.340	5840269.646	189° 51'		
B22	SEP	900	1.489	443.951	445.440	745193.382	5840272.421	9° 51'		
B81	SEP	900	1.008	438.689	441.236	744678.232	5840345.820	189° 51'		
B82	JP	900	1.461	440.790	442.251	745012.381	5840338.993	9° 51'		
B82-1	JP	900	0.888	441.599	442.285	745013.963	5840340.090	9° 51'		
B83	JP	900	1.303	441.110	442.413	745004.673	5840295.658	9° 51'		
B84	JP	900	0.731	441.510	442.241	744998.188	5840238.220	9° 51'		
70a	SEP	2000	900	2.495	443.251	445.746	745221.820	5840195.906	10° 03'	CAST IN SITU
Ex 72a	JP	-	-	-	443.381	446.386	745301.182	5840178.057	100° 00'	
72a-1	SEP	900	1.219	445.233	446.451	745301.545	5840181.126	100° 00'		

Note: Pit setout to centre of base.
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LEGEND

- SEWER PITS
- SEWER MAIN
- STORMWATER PITS
- STORMWATER PIPE
- SUBSOIL PIT & RISER
- SUBSOIL DRAIN
- WATER MAIN
- SEWER RISING MAIN
- OPTUS FIBER OPTIC
- FINISHED SURFACE LEVEL
- EXISTING SURFACE LEVEL
- HD 15.00 RUNNING CHAINAGE OF HD
- FOOTPATH / DRIVEWAY
- ASHPALT
- CONCRETE PAVEMENT

PIT SCHEDULE

PIT No	TYPE	PIT DIMENSIONS L x W x D	PIT LEVELS INVERT TOP	PIT LOCATION EASTING NORTHING	FACE BRG DEG MIN	COMMENTS	
B1	EW	-	-	438.955	-	745033.327 5840690.543 255° 59'	
B2	JP	1200 x 900	3.546 438.691	442.037	745055.772 5840636.149 106° 14'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B2-1	SEP	800 x 900	1.824 440.190	442.112	745068.945 5840632.209 98° 30'		
B2-2	SEP	800 x 900	1.813 440.299	442.112	745068.854 5840623.467 278° 36'		
B2-2-1	SEP	900 x 900	1.281 440.796	442.077	745062.540 5840621.777 228° 52'		
B2-3	JP	900 x 900	1.827 440.617	442.244	745096.326 5840623.891 261° 04'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B2-4	JP	900 x 900	1.511 440.736	442.378	745121.875 5840631.461 246° 09'		
B2-5	JP	900 x 900	2.061 442.187	444.229	745150.228 5840600.245 317° 44'		
B2-5-1	JP	900 x 800	0.661 443.995	444.558	745159.921 5840499.575 317° 44'		
B2-6	JP	900 x 900	1.243 442.755	443.989	745098.605 5840475.036 88° 01'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B3	SEP	900 x 1400	3.312 438.815	442.127	745051.533 5840520.141 8° 04'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B4	JP	900 x 1200	3.248 439.919	443.161	745051.205 5840467.004 180° 41'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B6	SEP	1200 x 1200	3.127 439.870	443.097	745045.185 5840456.954 88° 28'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B6	SEP	900 x 1400	3.185 440.058	443.243	745042.273 5840450.390 318° 06'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B7	SEP	1200 x 1200	2.355 440.198	442.543	745067.127 5840418.418 73° 10'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B7-1	SEP	900 x 900	1.477 441.281	442.738	745070.015 5840413.287 250° 13'		
B7-2	JP	800 x 800	1.412 442.288	443.700	745108.865 5840430.083 245° 20'		
B7-2-1	JP	900 x 900	1.384 442.498	443.873	745111.190 5840425.094 3° 14'		
B7-2-2	JP	900 x 800	1.175 443.027	444.205	745108.366 5840383.309 3° 14'		
B7-2-3	JP	900 x 800	0.796 443.116	443.914	745095.138 5840389.106 233° 34'		
B7-3	JP	1200 x 800	1.436 443.534	444.070	745118.323 5840434.423 245° 19'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B7-3-1	SEP	900 x 750	1.184 442.790	443.374	745114.776 5840442.505 85° 19'		
B7-4	SEP	900 x 1200	1.546 442.983	444.139	745127.762 5840431.650 332° 28'	FOR P/T DETAILS REFER TO LUB1-CD-018	
B7-4-1	JP	900 x 900	1.597 442.699	444.288	745131.005 5840412.889 01° 01'		
B7-4-2	JP	900 x 900	1.478 442.778	444.258	745139.901 5840412.878 181° 30'		
B7-4-3	GSEP	900 x 750	1.648 442.948	444.494	745146.824 5840405.183 273° 13'	FOR P/T DETAILS REF. TO M/C ROADS SD 1321 E	
B7-4-4	JP	900 x 900	1.715 442.947	444.582	745147.030 5840412.387 93° 13'		
B7-4-5	JP	900 x 900	1.496 443.824	445.422	745174.487 5840410.837 93° 13'		
B7-4-6	JP	900 x 900	0.726 445.030	445.758	745203.491 5840409.198 93° 13'		
B7-4-7	JP	900 x 900	0.726 444.904	445.630	745172.166 5840370.065 3° 13'		

PIT SCHEDULE

PIT No	TYPE	PIT DIMENSIONS L x W x D	PIT LEVELS INVERT TOP	PIT LOCATION EASTING NORTHING	FACE BRG DEG MIN	COMMENTS
B7-5	SEP	900 x 900	1.375 442.784	444.139	745136.143 5840436.014 159° 36'	
B7-6	SEP	900 x 900	1.585 442.939	444.524	745140.821 5840444.498 245° 19'	
B7-7	JP	900 x 900	1.733 443.030	444.795	745156.172 5840453.183 245° 19'	
B7-8	SEP	900 x 900	1.747 443.254	445.001	745208.739 5840453.366 322° 53'	
B7-9	SEP	900 x 900	1.856 443.351	445.001	745220.822 5840463.180 184° 40'	
B7-10	SEP	900 x 900	1.869 443.456	445.125	745228.822 5840442.393 177° 41'	
B7-10-1	SEP	900 x 900	1.489 443.536	445.125	745208.640 5840441.869 357° 42'	
B7-11	JP	900 x 800	2.056 443.879	445.937	745222.036 5840382.488 177° 41'	
B8	SEP	900 x 1400	2.064 440.296	442.390	745061.660 5840605.998 185° 51'	
B8-1	SEP	900 x 750	1.184 441.184	442.398	745051.323 5840401.924 332° 54'	

Note: Pit setout to centre of base. All pit lids located within road reserve to be medium duty and all pits deeper than 1.2m to have step irons

- General Notes**
- FOR DIMENSIONS AND KERB TYPES REFER TO SETOUT PLANS
 - UNLESS OTHERWISE NOTED, SUBSURFACE DRAINS TO OUTLET TO DRAINAGE PITS
 - ALL HD CONNECTIONS WITH CHAINAGE TO CONNECT TO UNDERGROUND DRAINAGE
 - RUNNING CHAINAGE OF HD TAKEN FROM NEXT DOWN STREAM PIT

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 SAFETY STARTS WITH YOU

J		
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A	ISSUED FOR APPROVAL	22/07/15
Rev	Amendment	Title Date



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Project
LUCAS ESTATE RESIDENTIAL SUBDIVISION STAGE B1/B2
 Lucas, Vic

Authority
 Ballarat City Council - (03) 5320 5500

Drawing Title
DRAINAGE PLAN

Status
APPROVED
 ISSUED FOR CONSTRUCTION

Designer: D. Georgalas
 Checker: T. Oldaker
 Scale (A1): 1:500
 Scale (A3): 1:1000
 HCR: 0 5 10 15 20 25
 VER

Sheet Number
13 of 39
 Drawing Number
LUB1-CD-013
 Revision
A

APPROVED
 By Jeff Colbourne at 12:52 pm, Aug 22, 2013

