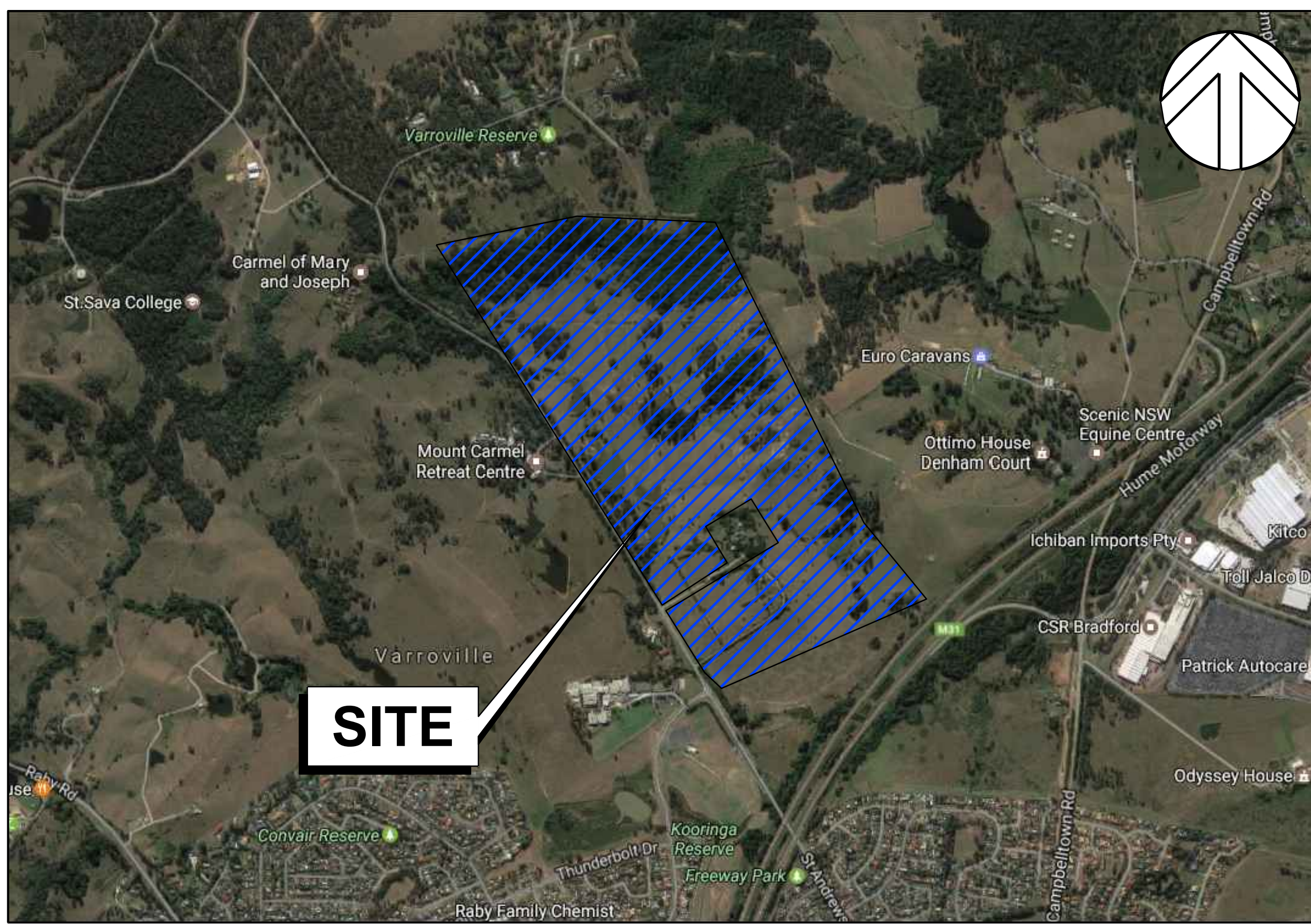


MACARTHUR MEMORIAL PARK



LOCALITY AERIAL

NOT TO SCALE

SOURCE : GOOGLE EARTH.

DRAWING SCHEDULE		
DRG No.	DRAWING TITLE	REV.
C1.00 Arrangement and Overview Plans		
C1.01	Cover Sheet	3
C1.03	General Arrangement Plan	3
C4.00 Siteworks Plans		
C4.01	Soil and Water Management Plan	3
C4.02	Soil and Water Management Details	2
C7.00 Stormwater Drainage		
C7.01	Stormwater Key Plan	3
C7.02	Stormwater Layout Plan Sheet 1 of 15	2
C7.03	Stormwater Layout Plan Sheet 2 of 15	2
C7.04	Stormwater Layout Plan Sheet 3 of 15	2
C7.05	Stormwater Layout Plan Sheet 4 of 15	2
C7.06	Stormwater Layout Plan Sheet 5 of 15	2
C7.07	Stormwater Layout Plan Sheet 6 of 15	3
C7.08	Stormwater Layout Plan Sheet 7 of 15	2
C7.09	Stormwater Layout Plan Sheet 8 of 15	2
C7.10	Stormwater Layout Plan Sheet 9 of 15	2
C7.11	Stormwater Layout Plan Sheet 10 of 15	2
C7.12	Stormwater Layout Plan Sheet 11 of 15	2
C7.13	Stormwater Layout Plan Sheet 12 of 15	2
C7.14	Stormwater Layout Plan Sheet 13 of 15	2
C7.15	Stormwater Layout Plan Sheet 14 of 15	2
C7.16	Stormwater Layout Plan Sheet 15 of 15	2
C7.17	Stormwater Pit Schedule Sheet 1 of 5	3
C7.18	Stormwater Pit Schedule Sheet 2 of 5	2
C7.19	Stormwater Pit Schedule Sheet 3 of 5	2
C7.20	Stormwater Pit Schedule Sheet 4 of 5	2
C7.21	Stormwater Pit Schedule Sheet 5 of 5	3
C8.00 Sight Distances		
C8.01	Sight Distance - Access A	1
C8.02	Sight Distance - Access B	1
C8.03	Sight Distance - Access C	1
C9.00 Staging Plans		
C9.01	Staging Plan Sheet 1	1
C9.02	Staging Plan Sheet 2	1
C9.03	Staging Plan Sheet 3	1
C9.04	Staging Plan Sheet 4	1
C9.05	Staging Plan Sheet 5	1

CLIENT	CATHOLIC METROPOLITAN CEMETERIES TRUST
PROJECT MANAGER	URBIS
ARCHITECT	FJMT

Warren Smith & Partners Pty Ltd

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Consulting Engineers

Hydraulic Services | Civil Engineering | Fire Protection | Sydney Water Accredited • Water Servicing Co-ordinator • Design and Project Management

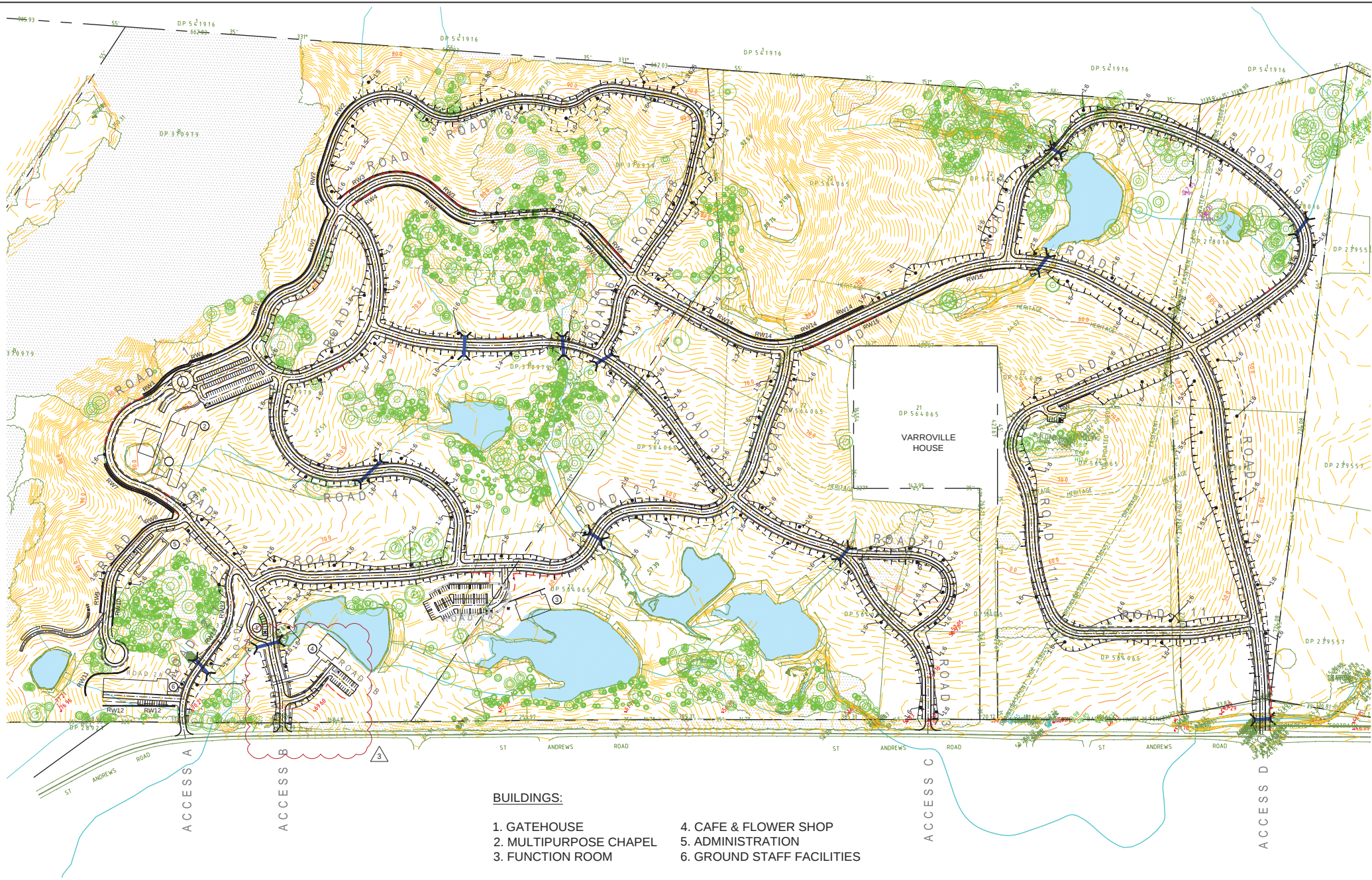


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COMPANY
ISO 9001**
International Standards Certification

Lic: QAC/R61/0771

TITLE					
COVER SHEET					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
AS SHOWN	M.C.Z.	N.M.	N.Q.	M.C.	
JOB No.		DRAWING No.		ISSUE	
5162001		C1.01		3	
DATE	STATUS				
AUG 1977	APPROVAL				
Rev. Date					

Plot Date



BUILDINGS:

- | | |
|------------------------|----------------------------|
| 1. GATEHOUSE | 4. CAFE & FLOWER SHOP |
| 2. MULTIPURPOSE CHAPEL | 5. ADMINISTRATION |
| 3. FUNCTION ROOM | 6. GROUND STAFF FACILITIES |

PRELIMINARY - NOT FOR CONSTRUCTION

 NORTH	 SCALE 1:2000 A1 SHEET	REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE	CLIENT	 PROJECT MACARTHUR MEMORIAL PARK	PREPARED BY  Warren Smith & Partners 141 Pitt Street, 12/13 Corporate Street, Sydney, 2000 NSW, Australia T 02 9208 1312 F 02 9208 1205 wsp@warrensmith.com.au www.warrensmith.com.au ABN 36 303 430 126	TITLE GENERAL ARRANGEMENT PLAN						
		1	DEVELOPMENT APPLICATION	24/09/17								SCALE	SCALE SHOWN	DRAWN	DESIGNED	CHECKED	APPROVED
		2	REISSUE FOR DEVELOPMENT APPLICATION	01/09/17								FOR No.	5162001	J.W.	C.S.	N.Q.	M.C.
		3	REISSUE FOR APPROVAL	27/06/18								DRAWING No.	C1.03				3
										DATE	AUG 2017	STATUS	APPROVAL				

SHEET 03 SHEET 04 SHEET 09 SHEET 10 SHEET 15

SHEET 02 SHEET 05 SHEET 08 SHEET 11 SHEET 14

SHEET 01 SHEET 06 SHEET 07 SHEET 12 SHEET 13

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NORTH



SHEET SIZE A1

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	DEVELOPMENT APPLICATION	24/09/17			
2	REISSUE FOR DEVELOPMENT APPLICATION	01/09/17			
3	REISSUE FOR APPROVAL	27/06/18			

CLIENT	Catholic Cemeteries & Crematoria New South Wales
PROJECT	MACARTHUR MEMORIAL PARK

PREPARED BY

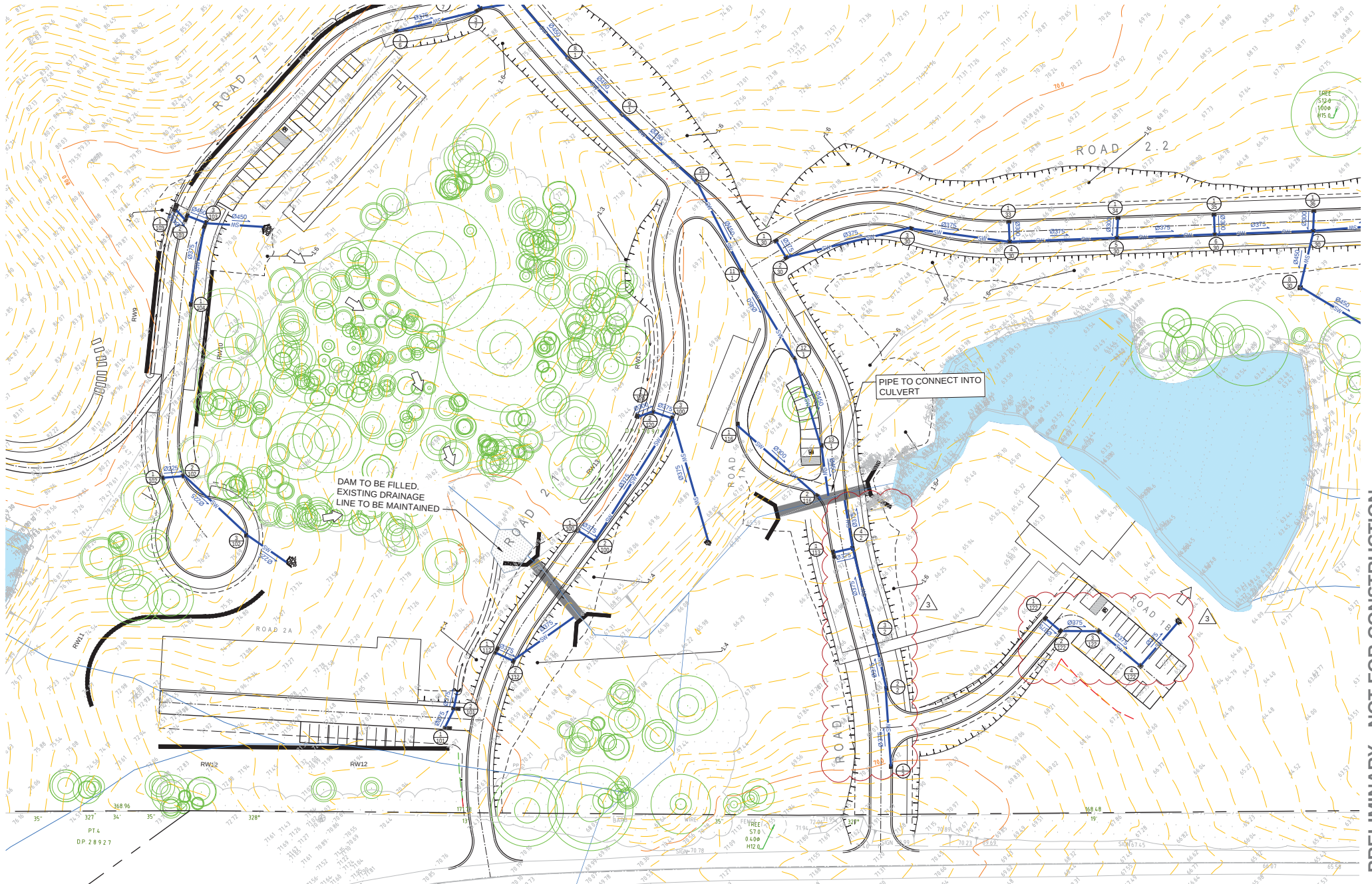
Warren Smith & Partners Pty Ltd
Tel: 02 9206 1312 Fax: 02 9206 1205 wsp@warrensmith.com.au
www.warrensmith.com.au ABN 36 303 430 126

CONSULTING ENGINEERS

- Hydraulic Services
- Fire Protection
- Civil Engineering
- Surveying
- Water Accumulation
- Water Sampling
- Coastal Protection
- Design Project Management
- Building Plan Approvals

SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

TITLE					
STORMWATER KEY PLAN					
SCALE		DRAWN		DESIGNED	
AS SHOWN		M.C.Z.		N.M.	
				CHECKED	
				N.Q.	
JOB No.		DRAWING No.			ISSUE
5162001		C7.01			3
DATE		STATUS			
AUG 2017		APPROVAL			



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REVISION

NO.	AMENDMENT	DATE
1	DEVELOPMENT APPLICATION	24/09/17
2	REISSUE FOR DEVELOPMENT APPLICATION	01/09/17
3	REISSUE FOR APPROVAL	27/06/18

CLIENT

Catholic Cemeteries & Crematoria
Perth Cemeteries Trust

PROJECT

MACARTHUR MEMORIAL PARK

PREPARED BY

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CONSULTING ENGINEERS

Hydraulic Services Fire Protection Civil Engineering
Surveying Interior Accredited Water Servicing Coordination
Design Project Management Building Plan Approvals

SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

TITLE

STORMWATER LAYOUT PLAN
SHEET 6 OF 15

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	M.C.Z.	N.M.	N.Q.	M.C.

DRAWING NO. 5162001

DATE AUG 2017

STATUS DEVELOPMENT APPLICATION

Name	Surface Elev. (m)	Pit Depth (m)	Pit Size and Type	From	To	Length (m)	U/S IL (m)	D/S IL (m)	Slope (%)	Pipe Type	Dia (mm)	No. Pipes
Pit 1/1	83.038		600 x 900 PIT, CLASS D GRATE	Pit 1/1	Pit 2/1	6.5	81.146	81.081	1	SRC Concrete	450	1
Pit 2/1	83.038		600 x 900 PIT, CLASS D GRATE	Pit 2/1	Pit 3/1	31.224	81.051	80.739	1	SRC Concrete	450	1
Pit 3/1	82.738		600 x 900 PIT, CLASS D GRATE	Pit 3/1	Pit 4/1	31.534	80.709	80.394	1	SRC Concrete	525	1
Pit 4/1	82.407		600 x 900 PIT, CLASS D GRATE	Pit 4/1	Pit 5/1	30.55	80.364	80.058	1	SRC Concrete	525	1
Pit 5/1	81.273		600 x 900 PIT, CLASS D GRATE	Pit 5/1	Pit 6/1	30.802	80.028	77.668	7.66	SRC Concrete	525	1
Pit 6/1	78.818		600 x 900 PIT, CLASS D GRATE	Pit 6/1	Pit 7/1	34.172	77.638	74.343	9.64	SRC Concrete	525	1
Pit 7/1	75.493		600 x 900 PIT, CLASS D GRATE	Pit 7/1	Pit 8/1	20.794	74.154	72.484	8.03	SRC Concrete	525	1
Pit 8/1	73.667		600 x 900 PIT, CLASS D GRATE	Pit 8/1	Pit 9/1	21.839	72.454	70.788	7.63	SRC Concrete	525	1
Pit 9/1	71.969		600 x 900 PIT, CLASS D GRATE	Pit 9/1	Pit 10/1	28.659	70.758	68.898	6.49	SRC Concrete	525	1
Pit 10/1	70.081		600 x 900 PIT, CLASS D GRATE	Pit 10/1	Pit 11/1	28.172	68.868	67.837	3.66	SRC Concrete	525	1
Pit 11/1	69.043		600 x 900 PIT, CLASS D GRATE	Pit 11/1	Pit 12/1	28.894	67.807	67.134	2.33	SRC Concrete	525	1
Pit 12/1	68.314		600 x 900 PIT, CLASS D GRATE	Pit 12/1	Pit 13/1	25.506	67.104	66.05	4.13	SRC Concrete	525	1
Pit 13/1	67.17		600 x 900 PIT, CLASS D GRATE	Pit 13/1	Pit 14/1	14.998	66.02	65.059	6.41	SRC Concrete	525	1
Pit 1/2	69.62		600 x 900 PIT, CLASS D GRATE	Pit 1/2	Pit 2/2	20.87	68.645	66.565	9.96	SRC Concrete	375	1
Pit 2/2	67.54		600 x 900 PIT, CLASS D GRATE	Pit 2/2	Pit 3/2	14.036	66.535	65.928	4.34	SRC Concrete	375	1
Pit 3/2	66.9		600 x 900 PIT, CLASS D GRATE	Pit 3/2	Pit 4/2	24.28	65.895	65.505	2.77	SRC Concrete	375	1
Pit 4/2	66.48		600 x 900 PIT, CLASS D GRATE	Pit 4/2	Culvert	13.157	65.475	65.059	3.16	SRC Concrete	375	1
Pit 1/3	83.289		2 x 900SQ PIT, CLASS C GRATE	Pit 1/3	Pit 2/3	12.127	81.513	81.27	2	SRC Concrete	525	1
Pit 2/3	82.424		2 x 900SQ PIT, CLASS C GRATE	Pit 2/3	Pit 3/1	5.581	81.2	81.144	1	SRC Concrete	525	1
Pit 1/4	82.41		600 x 900 PIT, CLASS D GRATE	Pit 1/4	Pit 4/1	6.501	81.435	81.37	1	SRC Concrete	375	1
Pit 1/5	78.824		600 x 900 PIT, CLASS D GRATE	Pit 1/5	Pit 6/1	6.5	77.849	77.784	1	SRC Concrete	375	1
Pit 1/6	77.466		600 x 900 PIT, CLASS D GRATE	Pit 1/6	Pit 3/7	21.932	75.916	75.149	3.5	SRC Concrete	375	1
Pit 1/7	77.944		900SQ PIT, CLASS C GRATE	Pit 1/7	Pit 2/7	6.5	75.334	75.269	1	SRC Concrete	375	1
Pit 2/7	76.331		2 x 600x900 PIT, CLASS D GRATE	Pit 2/7	Pit 3/7	8.708	75.259	75.172	1	SRC Concrete	375	1
Pit 3/7	76.126		2 x 600x900 PIT, CLASS D GRATE	Pit 3/7	Pit 7/1	14.317	75.119	74.184	6.53	SRC Concrete	375	1
Pit 1/8	70.95		2 x 900SQ PIT, CLASS C GRATE	Pit 1/8	Pit 3/47	3.968	68.69	68.67	0.5	SRC Concrete	450	1
Pit 1/9	82.511		600 x 900 PIT, CLASS D GRATE	Pit 1/9	Pit 2/9	6.5	81.285	81.155	2	SRC Concrete	375	1
Pit 2/9	82.511		600 x 900 PIT, CLASS D GRATE	Pit 2/9	Pit 3/9	30.229	81.135	80.53	2	SRC Concrete	375	1
Pit 3/9	81.578		600 x 900 PIT, CLASS D GRATE	Pit 3/9	Pit 4/9	34.518	78.714	78.434	0.81	SRC Concrete	375	1
Pit 4/9	80.401		600 x 900 PIT, CLASS D GRATE	Pit 4/9	Pit 5/9	17.302	78.404	78.238	0.96	SRC Concrete	375	1
Pit 5/9	80.5		900SQ PIT, CLASS C GRATE	Pit 5/9	Pit 6/9	14.595	78.208	78.057	1.03	SRC Concrete	375	1
Pit 6/9	80.5		900SQ PIT, CLASS C GRATE	Pit 6/9	Pit 7/9	14.739	78.027	77.554	3.21	SRC Concrete	375	1
Pit 7/9	80.5		900SQ PIT, CLASS C GRATE	Pit 7/9	Pit 8/9	14.842	77.524	76.893	4.25	SRC Concrete	375	1
Pit 8/9	80.5		900SQ PIT, CLASS C GRATE	Pit 8/9	Pit 9/9	15.543	76.893	76.262	4.06	SRC Concrete	375	1
Pit 9/9	78.515		600 x 900 PIT, CLASS D GRATE	Pit 9/9	Pit 10/9	20.182	76.232	75.871	1.79	SRC Concrete	450	1
Pit 10/9	77.67		600 x 900 PIT, CLASS D GRATE	Pit 10/9	Pit 11/9	8.407	75.841	75	10	SRC Concrete	375	1
Pit 11/9	76.692		600 x 900 PIT, CLASS D GRATE	Pit 11/9	Pit 12/9	21.897	74.98	74.761	1	SRC Concrete	450	1
Pit 12/9	75.735		600 x 900 PIT, CLASS D GRATE	Pit 12/9	Pit 13/9	6.505	74.731	74.666	1	SRC Concrete	450	1
Pit 13/9	75.722		600 x 900 PIT, CLASS D GRATE	Pit 13/9	Pit 14/9	31.6	74.636	72.761	5.93	SRC Concrete	450	1
Pit 14/9	73.736		600 x 900 PIT, CLASS D GRATE	Pit 14/9	Pit 15/9	34.777	72.658	70.468	6.3	SRC Concrete	450	1
Pit 15/9	71.518		600 x 900 PIT, CLASS D GRATE	Pit 15/9	Pit 16/9	33.159	70.438	68.41	6.12	SRC Concrete	450	1
Pit 16/9	69.461		600 x 900 PIT, CLASS D GRATE	Pit 16/9	Pit 17/9	28.422	68.38	67.714	2.34	SRC Concrete	450	1
Pit 17/9	68.765		3 x 600 x 900 PIT, CLASS D GRATE	Pit 17/9	Pit 18/9	22.462	67.684	67.46	1	SRC Concrete	450	1

Pit 1/10	85.278		900SQ PIT, CLASS C GRATE	Pit 1/10	Pit 2/10	8.547	79.694	78.839	10	SRC Concrete	375	1
Pit 2/10	81.577		600 x 900 PIT, CLASS D GRATE	Pit 2/10	Pit 3/9	6.5	78.809	78.744	1	SRC Concrete	375	1
Pit 1/11	83.859		900SQ PIT, CLASS C GRATE	Pit 1/11	Pit 2/11	7.753	78.536	78.497	0.5	SRC Concrete	375	1
Pit 2/11	80.416		600 x 900 PIT, CLASS D GRATE	Pit 2/11	Pit 4/9	6.516	78.467	78.434	0.51	SRC Concrete	375	1
Pit 1/12	81.903		900SQ PIT, CLASS C GRATE	Pit 1/12	Pit 2/12	7.182	79.102	78.384	10	SRC Concrete	375	1
Pit 2/12	81.475		900SQ PIT, CLASS C GRATE	Pit 2/12	Pit 3/12	4.811	78.354	78.305	1.02	SRC Concrete	375	1
Pit 3/12	79.645		600 x 900 PIT, CLASS D GRATE	Pit 3/12	Pit 4/12	6.502	78.275	78.21	1	SRC Concrete	375	1
Pit 4/12	79.647		600 x 900 PIT, CLASS D GRATE	Pit 4/12	Pit 5/12	33.713	77.243	76.906	1	SRC Concrete	375	1
Pit 5/12	79.035		600 x 900 PIT, CLASS D GRATE	Pit 5/12	Pit 9/9	17.535	76.876	76.262	3.5	SRC Concrete	375	1
Pit 1/13	73.728		600 x 900 PIT, CLASS D GRATE	Pit 1/13	Pit 14/9	6.501	72.753	72.688	1	SRC Concrete	375	1
Pit 1/14	71.518		600 x 900 PIT, CLASS D GRATE	Pit 1/14	Pit 15/9	6.5	70.543	70.478	1	SRC Concrete	375	1
Pit 1/15	69.482		600 x 900 PIT, CLASS D GRATE	Pit 1/15	Pit 16/9	6.516	68.507	68.442	1	SRC Concrete	375	1
Pit 1/16	68.764		3 x 600x900, CLASS D GRATE	Pit 1/16	Pit 17/9	6.501	67.789	67.724	1	SRC Concrete	375	1
Pit 1/17	79.244		600 x 900 PIT, CLASS D GRATE	Pit 1/17	Pit 2/17	6.526	78.269	78.203	1.01	SRC Concrete	450	1
Pit 2/17	79.246		600 x 900 PIT, CLASS D GRATE	Pit 2/17	Pit 3/17	26.441	78.081	77.817	1	SRC Concrete	450	1
Pit 3/17	79.115		600 x 900 PIT, CLASS D GRATE	Pit 3/17	Pit 4/17	22.233	77.787	76.729	4.76	SRC Concrete	450	1
Pit 4/17	79.011		600 x 900 PIT, CLASS D GRATE	Pit 4/17	Pit 5/17	32.601	76.699	76.373	1	SRC Concrete	450	1
Pit 5/17	78.842		600 x 900 PIT, CLASS D GRATE	Pit 5/17	Pit 6/17	30.696	76.343	76.036	1	SRC Concrete	450	1
Pit 6/17	78.679		600 x 900 PIT, CLASS D GRATE	Pit 6/17	Pit 7/17	32.455	76.006	74.383	5	SRC Concrete	450	1
Pit 7/17	78.363		600 x 900 PIT, CLASS D GRATE	Pit 7/17	Pit 8/17	31.005	74.353	74.043	1	SRC Concrete	450	1
Pit 8/17	77.293		600 x 900 PIT, CLASS D GRATE	Pit 8/17	Pit 9/17	28.451	74.013	72.59	5	SRC Concrete	450	1
Pit 9/17	76.175		600 x 900 PIT, CLASS D GRATE	Pit 9/17	Pit 10/17	30.31	72.56	71.044	5	SRC Concrete	450	1
Pit 10/17	74.846		600 x 900 PIT, CLASS D GRATE	Pit 10/17	Pit 11/17	31.029	71.014	70.465	1.77	SRC Concrete	525	1
Pit 11/17	73.478		600 x 900 PIT, CLASS D GRATE	Pit 11/17	Pit 12/17	31.277	70.435	68.871	5	SRC Concrete	525	1
Pit 12/17	72.635		3 x 600 x 900 PIT, CLASS D GRATE	Pit 12/17	Pit 13/17	46.537	68.841	67.91	2	SRC Concrete	525	1
Pit 13/17	69.168		3 x 600 x 900 PIT, CLASS D GRATE	Pit 13/17	Pit 14/17	6.509	67.88	67.815	1	SRC Concrete	525	1
Pit 14/17	69.149		600 x 900 PIT, CLASS D GRATE	Pit 14/17	Pit 15/17	27.844	67.785	67.334	1.62	SRC Concrete	525	1
Pit 15/17	68.483		600 x 900 PIT, CLASS D GRATE	Pit 15/17	Pit 16/17	28.313	67.304	66.49	2.88	SRC Concrete	525	1
Pit 16/17	68.342		600 x 900 PIT, CLASS D GRATE	Pit 16/17	Pit 17/17	14.063	65.476	65.335	1	SRC Concrete	525	1
Pit 17/17	67		600 x 900 PIT, CLASS D GRATE	Pit 17/17	Pit 18/17	22.68	65.305	64.587	3.17	SRC Concrete	525	1
Pit 18/17	65.417		600 x 900 PIT, CLASS D GRATE	Pit 18/17	Pit 19/17	29.865	64.557	64.408	0.5	SRC Concrete	600	1
Pit 19/17	65.383		600 x 900 PIT, CLASS D GRATE	Pit 19/17	Pit 20/17	9.017	64.378	64.333	0.5	SRC Concrete	600	1
Pit 1/18	79.01		600 x 900 PIT, CLASS D GRATE	Pit 1/18	Pit 4/17	6.5	78.036	77.971	1	SRC Concrete	375	1
Pit 1/19	78.679		600 x 900 PIT, CLASS D GRATE	Pit 1/19	Pit 6/17	6.501	77.704	77.639	1	SRC Concrete	375	1
Pit 1/20	83.15		600 x 900 PIT, CLASS D GRATE	Pit 1/20	Pit 2/20	34.296	80.033	78.023	5.86	SRC Concrete	450	1
Pit 2/20	80.173		600 x 900 PIT, CLASS D GRATE	Pit 2/20	Pit 3/20	28.023	77.993	76.592	5	SRC Concrete	450	1
Pit 3/20	77.671		600 x 900 PIT, CLASS D GRATE	Pit 3/20	Pit 4/20	20.192	75.075	74.873	1	SRC Concrete	525	1
Pit 4/20	76.296		600 x 900 PIT, CLASS D GRATE	Pit 4/20	Pit 5/20	27.06	74.843	74.572	1	SRC Concrete	525	1
Pit 5/20	75.727		2 x 600 x 900 PIT, CLASS D GRATE	Pit 5/20	Pit 6/20	6.5	74.542	74.477	1	SRC Concrete	525	1
Pit 6/20	75.728		2 x 600 x 900 PIT, CLASS D GRATE	Pit 6/20	Pit 7/20	8.763	74.447	74.359	1	SRC Concrete	525	1

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REVISION

AMENDMENT

DATE

REVISION

AMENDMENT

DATE

CLIENT

Catholic Cemeteries & Crematoria Inc./Companies, Christchurch

MACARTHUR MEMORIAL PARK

PREPARED BY

Warren Smith & Partners Pty Ltd

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www.warrensmith.com.au ABN 36 300 430 128

TITLE

STORMWATER PIT SCHEDULE

SHEET 1 OF 5

SCALE

A5 SHOWN

DRAWN

M.C.Z.

DESIGNED

N.M.

CHECKED

N.Q.

APPROVED

M.C.

DRAWING NO.

5162001

ISSUE

C7.17

DATE

JUNE 2018

STATUS

DEVELOPMENT APPLICATION

3

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 SHEET SIZE A1

PRELIMINARY - NOT FOR CONSTRUCTION

Pit 1/97	79		900SQ PIT, CLASS C GRATE	Pit 1/97	Pit 2/97	19.752	77.832	77.393	2.22	SRC Concrete	375	1
Pit 2/97	79		900SQ PIT, CLASS C GRATE	Pit 2/97	Pit 3/97	19.626	77.363	76.886	2.43	SRC Concrete	375	1
Pit 3/97	79		900SQ PIT, CLASS C GRATE	Pit 3/97	Pit 4a/97	14.461	76.856	76.697	1.1	SRC Concrete	375	1
Pit 4a/97	79		900SQ PIT, CLASS C GRATE	Pit 4a/97	Pit 10/9	15.145	76.667	75.871	5.26	SRC Concrete	375	1
Pit 1/98	56.65		2 x 600x900 PIT, CLASS D GRATE	Pit 1/98	Pit 2/98	6.564	55.75	55.717	0.5	SRC Concrete	300	1
Pit 2/98	56.638		600 x 900 PIT, CLASS D GRATE	Pit 2/98	Pit 3/98	35.056	55.687	54.703	2.81	SRC Concrete	300	1
Pit 3/98	55.603		600 x 900 PIT, CLASS D GRATE	Pit 3/98	Pit 4/98	33.569	54.673	54.505	0.5	SRC Concrete	300	1
Pit 1/99	55.609		600 x 900 PIT, CLASS D GRATE	Pit 1/99	Pit 3/98	6.505	54.736	54.703	0.51	SRC Concrete	300	1
Pit 1/100	70.031		600 x 900 PIT, CLASS D GRATE	Pit 1/100	Pit 4/120	6.529	69.056	68.991	1	SRC Concrete	375	1
Pit 1/101	71.289		3 x 600x900 PIT, CLASS D GRATE	Pit 1/101	Pit 2/101	6.869	69.878	69.549	4.79	SRC Concrete	375	1
Pit 2/101	71.186		3 x 600x900 PIT, CLASS D GRATE	Pit 2/101	Pit 3/101	21.413	69.519	69.305	1	SRC Concrete	375	1
Pit 3/101	70.445		600 x 900 PIT, CLASS D GRATE	Pit 3/101	Pit 4/101	9.652	69.275	69.178	1	SRC Concrete	375	1
Pit 1/102	77.809		600 x 900 PIT, CLASS D GRATE	Pit 1/102	Pit 2/102	6.568	76.984	76.875	1.66	SRC Concrete	225	1
Pit 2/102	77.745		600 x 900 PIT, CLASS D GRATE	Pit 2/102	Pit 3/102	24.256	76.845	74.11	11.28	SRC Concrete	225	1
Pit 3/102	75.369		600 x 900 PIT, CLASS D GRATE	Pit 3/102	Pit 4/102	9.474	74.07	73.975	1	SRC Concrete	225	1
Pit 1/103	77.6		2 x 900SQ PIT, CLASS C GRATE	Pit 1/103	Pit 2/103	5.64	76.279	76.223	0.99	SRC Concrete	450	1
Pit 2/103	77.668		2 x 600x900 PIT, CLASS D GRATE	Pit 2/103	Pit 3/103	6.5	76.193	76.128	1	SRC Concrete	450	1
Pit 3/103	77.668		2 x 600x900 PIT, CLASS D GRATE	Pit 3/103	Pit 4/103	13.184	76.098	75.966	1	SRC Concrete	450	1
Pit 1/104	78.385		600 x 900 PIT, CLASS D GRATE	Pit 1/104	Pit 3/103	25.29	77.449	76.733	2.83	SRC Concrete	300	1
Pit 1/105	78.499		600 x 900 PIT, CLASS D GRATE	Pit 1/105	Pit 2/105	39.495	77.285	75.3	5.03	SRC Concrete	375	1
Pit 2/105	76.514		600 x 900 PIT, CLASS D GRATE	Pit 2/105	Pit 3/105	26.08	75.27	73.603	6.39	SRC Concrete	375	1
Pit 1/106	83.699		600 x 900 PIT, CLASS D GRATE	Pit 1/106	Pit 2/106	4.315	82.731	82.688	1	SRC Concrete	300	1
Pit 1/107	87.635		600 x 900 PIT, CLASS D GRATE	Pit 1/107	Pit 2/107	7.824	86.709	86.558	1.93	SRC Concrete	300	1
Pit 1/108	88.747		600 x 900 PIT, CLASS D GRATE	Pit 1/108	Pit 2/108	7.273	87.743	87.67	1	SRC Concrete	300	1
Pit 1/109	45.738		2 x 600x900 PIT, CLASS D GRATE	Pit 1/109	Pit 19/78	6.1	44.918	44.888	0.49	SRC Concrete	300	1
Pit 1/111	59.807		2 x 600x900 PIT, CLASS D GRATE	Pit 1/111	Pit 4/90	9.511	58.838	58.615	2.34	SRC Concrete	450	1
Pit 1/112	70.445		3 x 600x900 PIT, CLASS D GRATE	Pit 1/112	Pit 3/101	6.501	69.47	69.405	1	SRC Concrete	375	1
Pit 1/113	66.52		2 x 600x900 PIT, CLASS D GRATE	Pit 1/113	Pit 4/2	6.501	65.545	65.505	0.6	SRC Concrete	375	1
Pit 1/114	60.105		2 x 600x900 PIT, CLASS D GRATE	Pit 1/114	Pit 2/114	6.5	59.13	59.065	1	SRC Concrete	375	1
Pit 2/114	60.105		600 x 900 PIT, CLASS D GRATE	Pit 2/114	Pit 4/32	26.25	59.035	58.772	1	SRC Concrete	375	1
Pit 1/115	72.95		2 x 900SQ PIT, CLASS C GRATE	Pit 1/115	Pit 4/42	4.657	71.312	71.265	1.01	SRC Concrete	375	1
Pit 1/116	68.465		600 x 900 PIT, CLASS D GRATE	Pit 1/116	Pit 12/1	9.89	67.431	67.28	1.53	SRC Concrete	375	1
Pit 1/117	55.617		2 x 600x900 PIT, CLASS D GRATE	Pit 1/117	Pit 7/68	6.519	54.642	54.577	1	SRC Concrete	375	1

Pit 1/118	43.082		2 x 600x900 PIT, CLASS D GRATE	Pit 1/118	Pit 12/75	6.5	42.107	42.042	1	SRC Concrete	375	1
Pit 1/119	66.312		3 x 600x900 PIT, CLASS D GRATE	Pit 1/119	Pit 14/43 (2)	6.5	64.913	64.848	1	SRC Concrete	450	1
Pit 1/120	69.7		2 x 900SQ PIT, CLASS C GRATE	Pit 1/120	Pit 2/120	3	67.729	67.639	3	SRC Concrete	300	1
Pit 2/120	68.487		600 x 900 PIT, CLASS D GRATE	Pit 2/120	Pit 3/120	13.408	67.512	67.445	0.5	SRC Concrete	375	1
Pit 3/120	68.487		600 x 900 PIT, CLASS D GRATE	Pit 3/120	Pit 4/120	40.939	67.415	67.21	0.5	SRC Concrete	375	1
Pit 4/120	70.009		600 x 900 PIT, CLASS D GRATE	Pit 4/120	Pit 5/120	16.119	67.18	67.099	0.5	SRC Concrete	375	
Pit 1/121	62.619		900SQ PIT, CLASS C GRATE	Pit 1/121	Pit 3/32	16.741	61.141	59.797	8.03	SRC Concrete	375	1
Pit 1/122	66.14		900SQ PIT, CLASS C GRATE	Pit 1/122	Pit 2/122	4.7	65.165	65.118	1	SRC Concrete	375	1
Pit 2/122	66.16		900SQ PIT, CLASS C GRATE	Pit 2/122	Pit 3/122	9.39	65.088	64.995	1	SRC Concrete	375	1
Pit 3/122	65.835		900SQ PIT, CLASS C GRATE	Pit 3/122	Pit 4/122	14.127	64.965	64.824	1	SRC Concrete	375	1
Pit 4/122	65.758		900SQ PIT, CLASS C GRATE	Pit 4/122	Head wall	15.3	64.814	64.739	0.5	SRC Concrete	375	1
Pit 1/123	84.329		2 x 900SQ PIT, CLASS C GRATE	Pit 1/123	Pit 2/1	5.629	81.362	81.081	4.99	SRC Concrete	375	1
Pit 1/124	79.425		900SQ PIT, CLASS C GRATE	Pit 1/124	Pit 2/17	4.795	78.207	78.111	2	SRC Concrete	375	1
Pit 1/125	79.215		900SQ PIT, CLASS C GRATE	Pit 1/125	Pit 4/17	5.909	77.623	77.564	1	SRC Concrete	375	1
Pit 1/126	80.972		900SQ PIT, CLASS C GRATE	Pit 1/126	Pit 5/17	4.94	76.62	76.373	5	SRC Concrete	375	1
Pit 1/127	81.126		900SQ PIT, CLASS C GRATE	Pit 1/127	Pit 7/17	4.868	74.987	74.5	10	SRC Concrete	375	1
Pit 1/128	80.416		900SQ PIT, CLASS C GRATE	Pit 1/128	Pit 3/20	8.762	75.929	75.105	9.4	SRC Concrete	375	1
Pit 1/129	82.376		900SQ PIT, CLASS C GRATE	Pit 1/129	Pit 2/20	8.854	78.466	78.023	5	SRC Concrete	375	1
Pit 1/130	84.065		900SQ PIT, CLASS C GRATE	Pit 1/130	Pit 1/20	8.785	82.449	81.233	13.84	SRC Concrete	375	1
Pit 1/132	65.55		2 x 900SQ PIT, CLASS C GRATE	Pit 1/132	Pit 6/31	7.945	63.341	63.262	0.99	SRC Concrete	300	1
Pit 1/133	59.353		2 x 900SQ PIT, CLASS C GRATE	Pit 1/133	Pit 4/59	5.011	58.642	58.622	0.4	SRC Concrete	300	2
Pit 1/135	68.439		900SQ PIT, CLASS C GRATE	Pit 1/135	Pit 1/29	6.524	66.65	66.585	1	SRC Concrete	525	1
Pit 1/136	55.78		900SQ PIT, CLASS C GRATE	Pit 1/136	Pit 13/68	9.9	54.88	53.811	10.8	SRC Concrete	300	1

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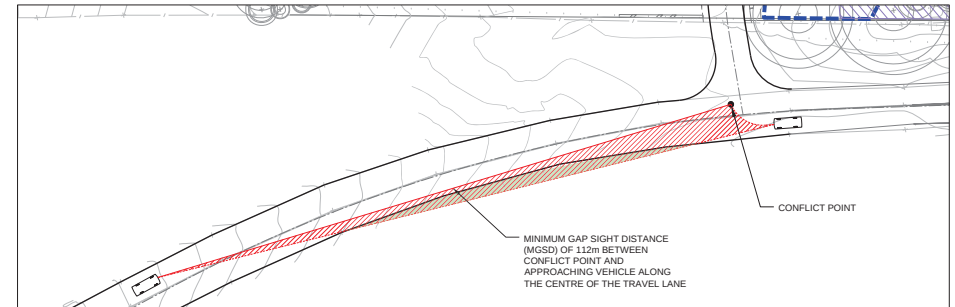
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1	DEVELOPMENT APPLICATION	24/09/17			
2	REISSUE FOR DEVELOPMENT APPLICATION	01/09/17			
3	ISSUE FOR APPROVAL	27/06/18			

PROJECT	MACARTHUR MEMORIAL PARK
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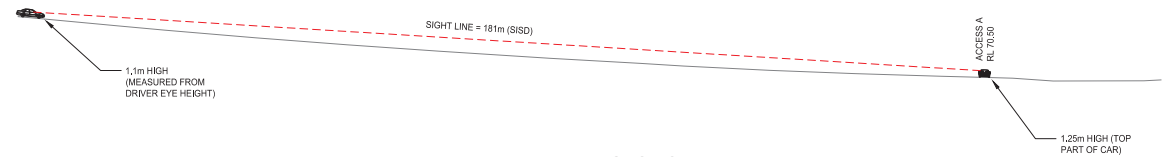
PREPARED BY	Warren Smith & Partners Pty Ltd 1st Floor, 121 Garsfield Street, Sydney, 2010 NSW Australia T 02 9206 1312 F 02 9206 1205 wsl@warrensmith.com.au www.warrensmith.com.au ABN 36 301 430 126
CONSULTING ENGINEERS	Hydraulic Services Fire Protection Civil Engineering Survey Vector Accredited Water Sampling Co-ordinator Design Project Management Building Plan Approvals
SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.	

TITLE					
STORMWATER PIT SCHEDULE SHEET 5 OF 5					
SCALE	AS SHOWN	DRAWN	M.C.Z.	DESIGNED	N.M.
FOR No.	5162001	DRAWING No.	C7.21	CHECKED	N.Q.
DATE	JUNE 2018	STATUS	DEVELOPMENT APPLICATION	APPROVED	M.C.
					3

1. APPROACH SIGHT DISTANCE BASED ON DESIGN SPEED OF 50Km/hr.
2. SAFE INTERSECTION SIGHT DISTANCE AND MINIMUM GAP SIGHT DISTANCE BASED ON DESIGN SPEED OF 80Km/hr.



SCALE 1:500



SECTION A
SCALE 1:500

LEGEND

	SIGHT LINES (SISD)
	SIGHT LINES (ASD)
	SIGHT ENVELOPE (MGSD)
	APPROX. EXTENTS OF VEGETATION TRIMMING
	APPROX. EXTENTS OF LOCALISED ROAD WIDENING



NORTH

[illegible]

PROJECT	MACARTHUR MEMORIAL
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PREPARED BY	
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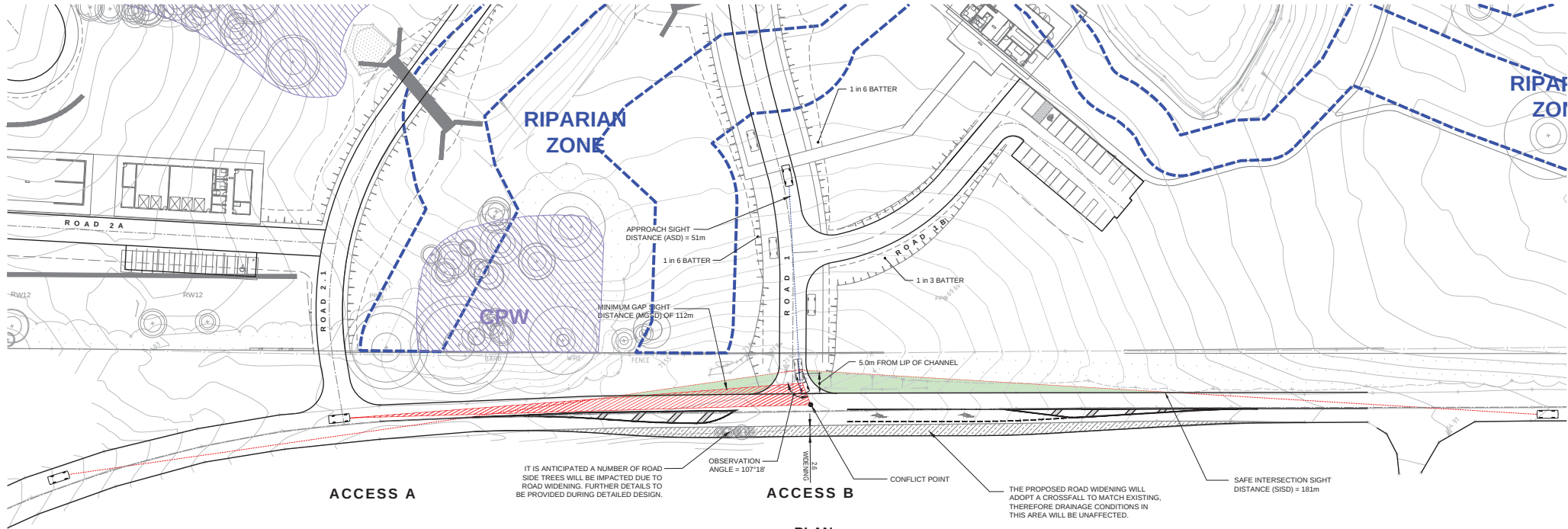
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T 02 9299 1312 F 02 9299 1295 wsq@warrensmith.com.au
www.warrensmith.com.au **ABN** 56 300 430 126

CONSULTING ENGINEERS
 ■ Hydraulic Services ■ Fire Protection ■ Civil Engineering
 ■ Sydney Water Accredited Water Servicing Co-ordinator
 - Design Project Management - Building Plan Approvals

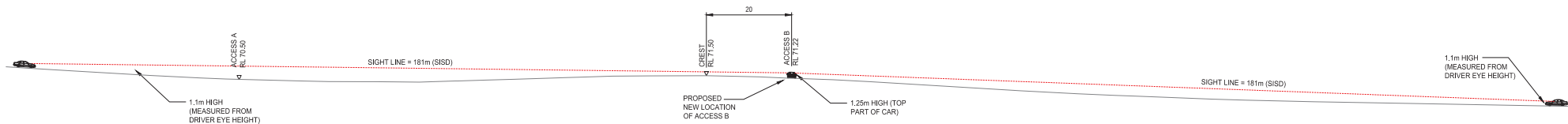
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TITLE				
SIGHT DISTANCE - ACCESS A				
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:500 @ A1	J.W.	J.W.	N.Q.	M.C.
JOB No.		DRAWING No.		ISSUE
5162001		C8.01		1
DATE	STATUS		APPROVAL	
14/06/19				

PRELIMINARY - NOT FOR CONSTRUCTION



PLAN
SCALE 1:500



SECTION B
SCALE 1:500

NOTES:

1. APPROACH SIGHT DISTANCE BASED ON DESIGN SPEED OF 50Km/hr.
2. SAFE INTERSECTION SIGHT DISTANCE AND MINIMUM GAP SIGHT DISTANCE BASED ON DESIGN SPEED OF 80Km/hr.

LEGEND

- SIGHT LINES (SISD)
- SIGHT LINES (ASD)
- SIGHT ENVELOPE (MGSD)
- APPROX. EXTENTS OF VEGETATION TRIMMING
- APPROX. EXTENTS OF LOCALISED ROAD WIDENING

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REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR APPROVAL	27/06/18			

CLIENT
**Catholic Cemeteries
& Crematoria**
Catholic Cemeteries, Christchurch

PROJECT
**MACARTHUR MEMORIAL
PARK**

PREPARED BY
Warren Smith & Partners
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1st Floor, 123 Clarence Street, Sydney 2000 NSW Australia
T 02 9238 1112 F 02 9238 1285 w.s.p@warrensmith.com.au
www.warrensmith.com.au ABN 36 300 430 126

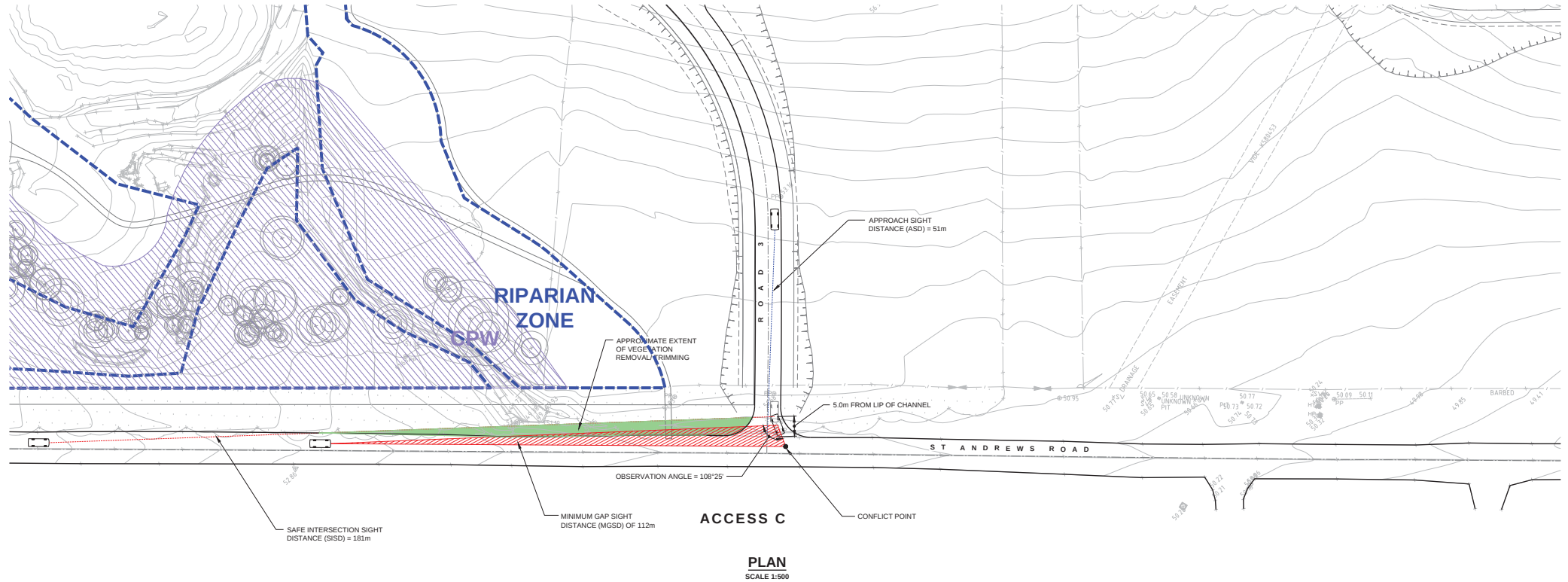
CONSULTING ENGINEERS
Hydraulic Services Fire Protection Civil Engineering
Survey Water Acquisition Water Sampling Co-ordinator
Design Project Management Building Plan Approvals
SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

SIGHT DISTANCE - ACCESS B					
SCALE	AS SHOWN	DRAWN	J.W.	DESIGNED	CHECKED
DSS No.	5162001	DRAWING No.	C8.02	ISSUE	1
DATE	14/06/18	STATUS	APPROVAL		

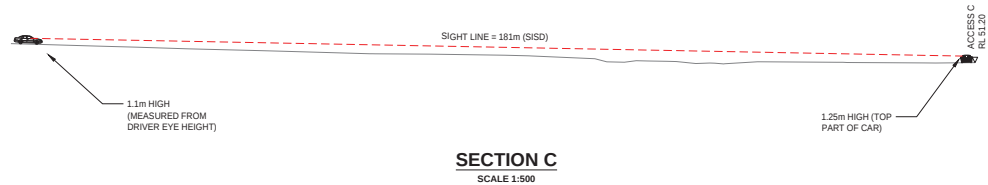
PRELIMINARY - NOT FOR CONSTRUCTION

NOTES:

1. APPROACH SIGHT DISTANCE BASED ON DESIGN SPEED OF 50km/hr.
2. SAFE INTERSECTION SIGHT DISTANCE AND MINIMUM GAP SIGHT DISTANCE BASED ON DESIGN SPEED OF 80km/hr .



LEGEND	
	SIGHT LINES (SISD)
	SIGHT LINES (ASD)
	SIGHT ENVELOPE (MGSD)
	APPROX . EXTENTS OF VEGETATION TRIMMING
	APPROX . EXTENTS OF LOCALISED ROAD WIDENING



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NORTH



SCALE 1:500
A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR APPROVAL	27/06/18			

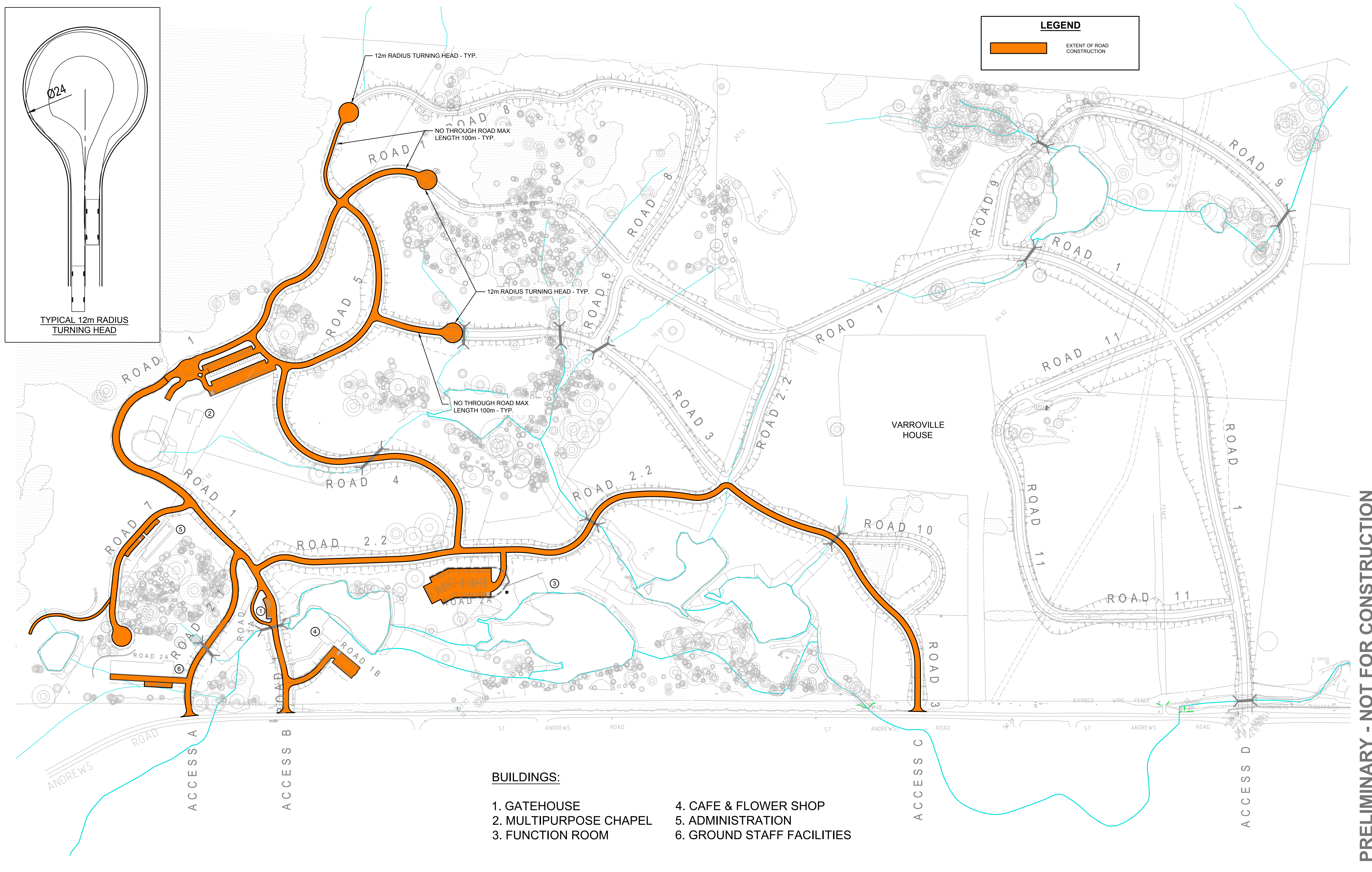
PROJECT
MACARTHUR MEMORIAL PARK

PREPARED BY
Warren Smith & Partners Pty Ltd
101 Pitt Street, 122 Clarence Street, Sydney, 2000 NSW Australia
T 02 9200 1312 F 02 9200 1205 wsp@warrensmith.com.au
www.warrensmith.com.au ABN 36 303 430 126

CONSULTING ENGINEERS
Hydraulic Services Fire Protection Civil Engineering
Surveying & As-built Surveying Geotechnical
Design Project Management Building Plan Approvals
SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

SIGHT DISTANCE - ACCESS C					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
1:500 @ A1	J.W.	J.W.	N.Q.	M.C.	
DOR No.	5162001		C8.03		1
DATE	14/06/18		STATUS		DEVELOPMENT APPLICATION

PRELIMINARY - NOT FOR CONSTRUCTION



BUILDINGS:

- 1. GATEHOUSE
- 2. MULTIPURPOSE CHAPEL
- 3. FUNCTION ROOM
- 4. CAFE & FLOWER SHOP
- 5. ADMINISTRATION
- 6. GROUND STAFF FACILITIES

PRELIMINARY - NOT FOR CONSTRUCTION

NORTH

20 0 20 40 60 80 100m
PLAN SCALE 1:2000 A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR APPROVAL	27/06/18			

Catholic Cemeteries & Crematoria
Core, Compassion, Choice

PROJECT
MACARTHUR MEMORIAL PARK

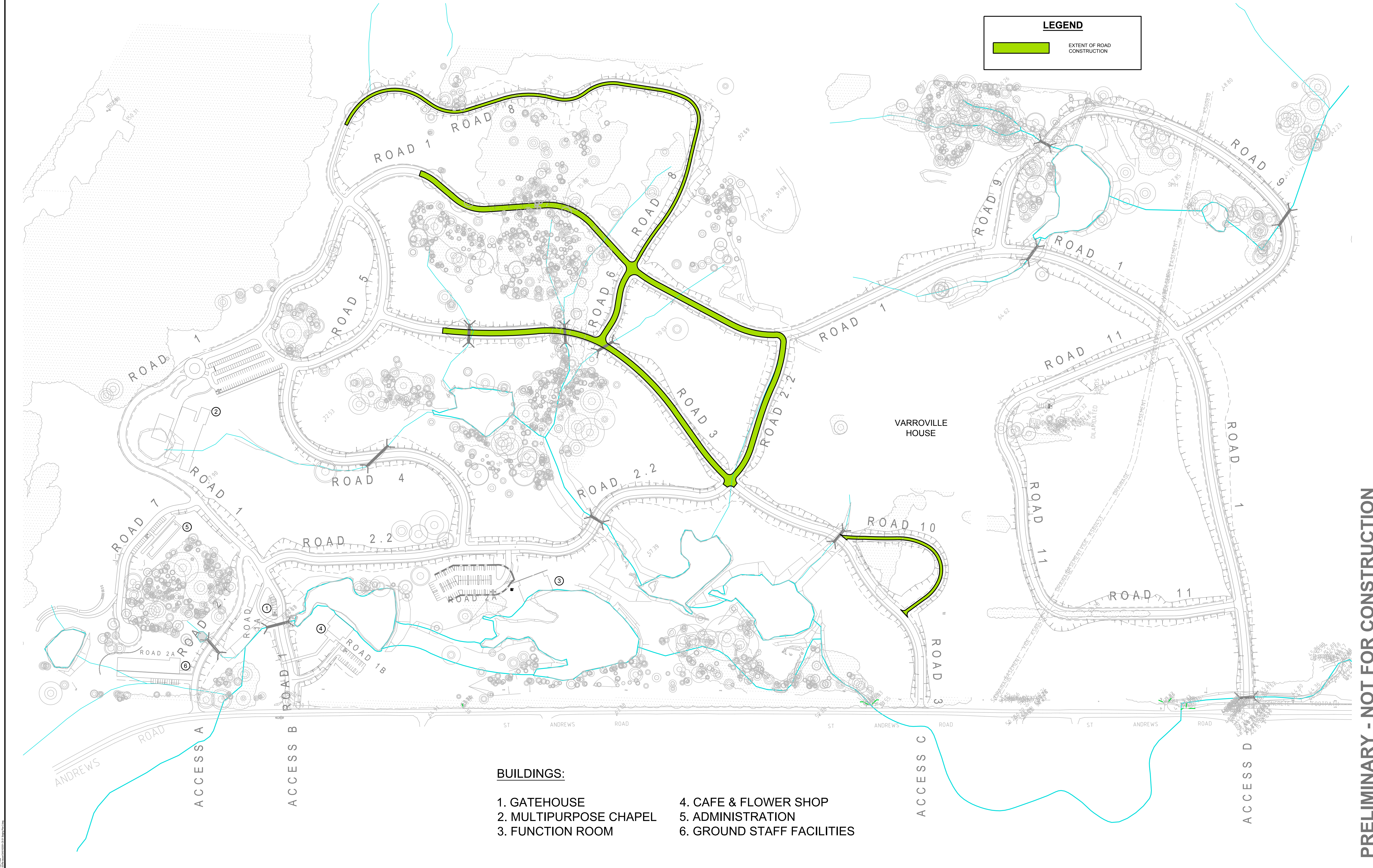
Warren Smith & Partners

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1st Floor, 123 Clarence Street, Sydney 2000 NSW Australia
T 02 9298 1312 F 02 9290 1295 wsp@warrensmith.com.au
www.warrensmith.com.au ABN 36 300 430 126

TITLE
STAGING PLAN 1

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	J.W.	J.W.	N.Q.	M.C.

JOB No.	5162001	DRAWING No.	C9.01	ISSUE	1
DATE	AUG 2017	STATUS	APPROVAL		



BUILDINGS:

1. GATEHOUSE

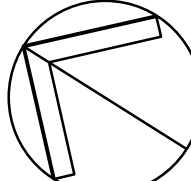
2. MULTIPURPOSE CHAPEL

3. FUNCTION ROOM
4. CAFE & FLOWER SHOP

5. ADMINISTRATION

6. GROUND STAFF FACILITIES

PRELIMINARY - NOT FOR CONSTRUCTION



NORTH



20 0 20 40 60 80 100m
PLAN SCALE 1:2000 A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR APPROVAL	27/06/18			



Catholic Cemeteries
& Crematoria
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PROJECT

MACARTHUR MEMORIAL PARK



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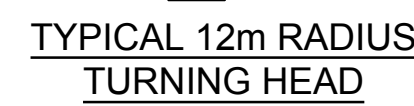
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T 02 9299 1312 F 02 9290 1295 wsp@warrensmith.com.au
www.warrensmith.com.au ABN 36 300 430 126

CONSULTING ENGINEERS

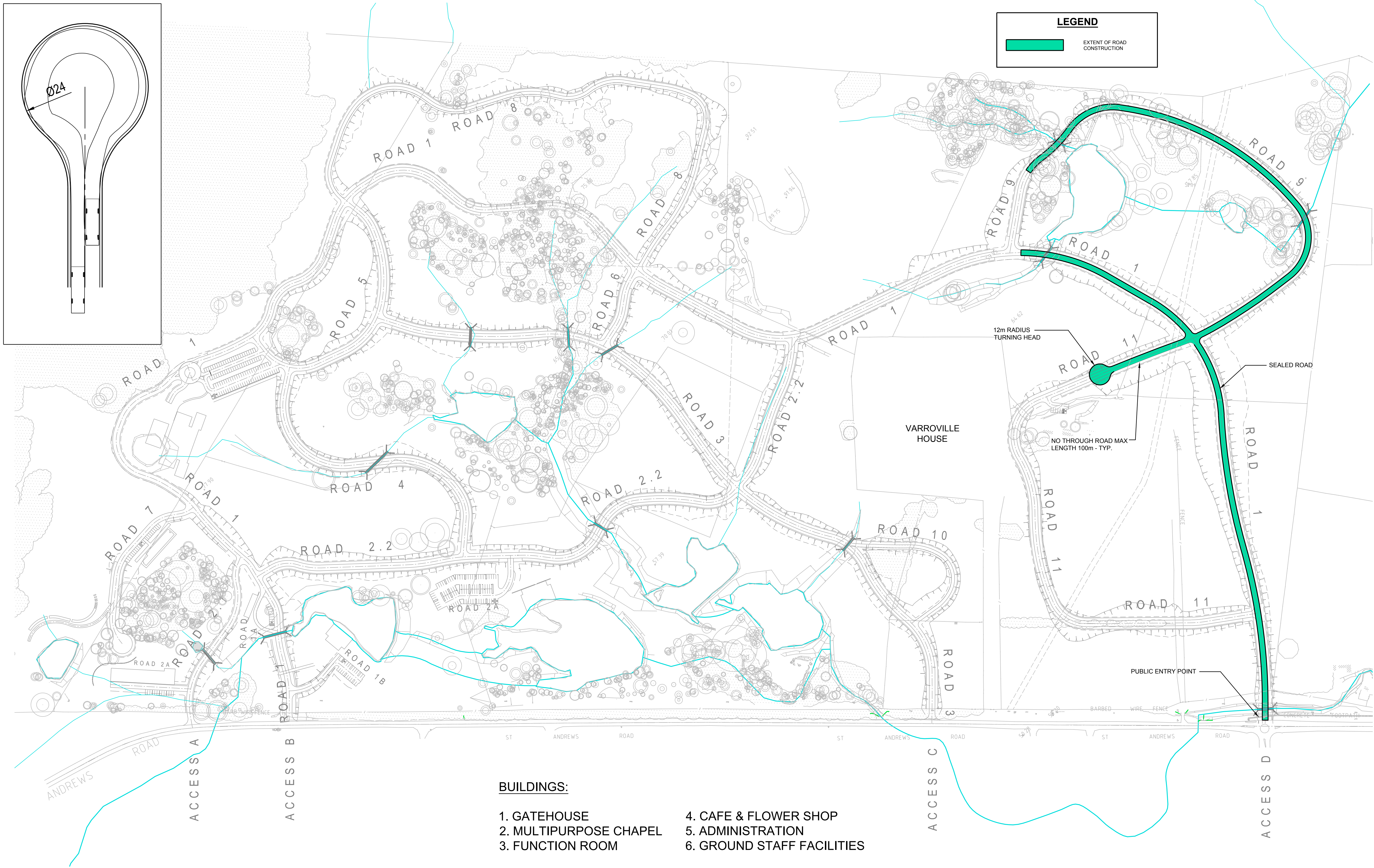
- Hydraulic Services
- Fire Protection
- Civil Engineering
- Sydney Water Accredited Water Servicing Co-ordinator
- Design Project Management - Building Plan Approvals

SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

TITLE				
STAGING PLAN 2				
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	J.W.	J.W.	N.Q.	M.C.
JOB No.		DRAWING No.		ISSUE
5162001		C9.02		1
DATE		STATUS		
AUG 2017		APPROVAL		



NORTH 20 0 20 40 60 80 100m PLAN SCALE 1:2000 A1 SHEET	REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE	Catholic Cemeteries & Crematoria <i>Care, Compassion, Choice</i> PROJECT MACARTHUR MEMORIAL PARK	Warren Smith & Partners Pty Ltd 1st Floor, 123 Clarence Street, Sydney 2000 NSW Australia T 02 9299 1312 F 02 9290 1295 wsp@warrensmith.com.au www.warrensmith.com.au ABN 36 300 430 126 QMS QUALITY MANAGEMENT SYSTEM Li No: QA/CHE/10711 CONSULTING ENGINEERS ■ Hydraulic Services ■ Fire Protection ■ Civil Engineering ■ Sydney Water Accredited Water Servicing Co-ordinator - Design Project Management - Building Plan Approvals SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.	TITLE STAGING PLAN 3 <table><tr><td>SCALE</td><td>DRAWN</td><td>DESIGNED</td><td>CHECKED</td><td>APPROVED</td></tr><tr><td>A.S SHOWN</td><td>J.W.</td><td>J.W.</td><td>N.Q.</td><td>M.C.</td></tr><tr><td>JOB No. 5162001</td><td colspan="3">DRAWING No. C9.03</td><td>ISSUE 1</td></tr><tr><td>DATE AUG 2017</td><td colspan="4">STATUS APPROVAL</td></tr></table>	SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	A.S SHOWN	J.W.	J.W.	N.Q.	M.C.	JOB No. 5162001	DRAWING No. C9.03			ISSUE 1	DATE AUG 2017	STATUS APPROVAL			
	SCALE	DRAWN	DESIGNED	CHECKED	APPROVED																								
	A.S SHOWN	J.W.	J.W.	N.Q.	M.C.																								
	JOB No. 5162001	DRAWING No. C9.03			ISSUE 1																								
	DATE AUG 2017	STATUS APPROVAL																											
	1	ISSUE FOR APPROVAL	27/06/18																										



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NORTH

SCALE 1:2000
A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR APPROVAL	27/06/18			

Catholic Cemeteries & Crematoria
Core, Compassion, Choice

PROJECT
MACARTHUR MEMORIAL PARK

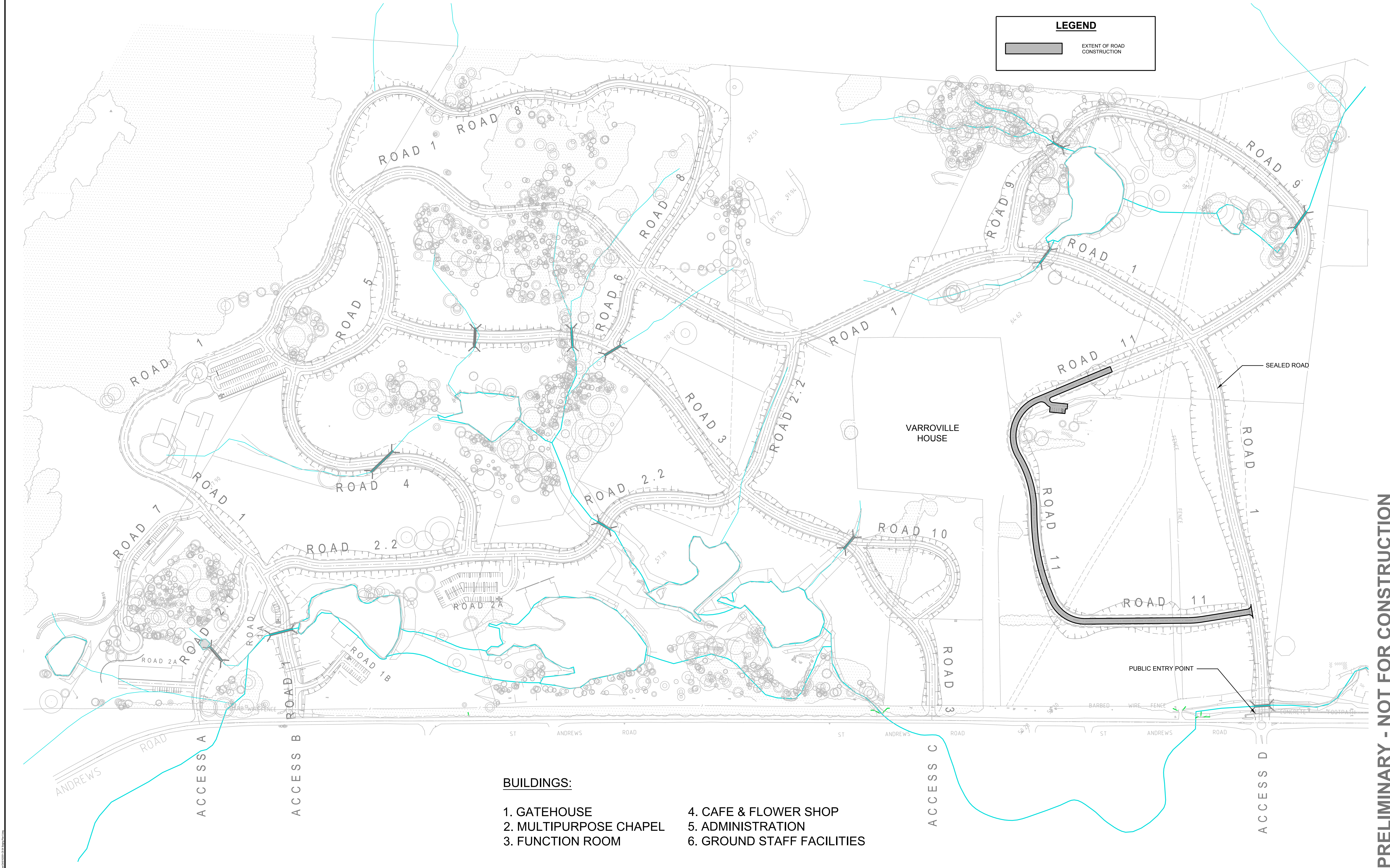
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www.warrensmith.com.au ABN 36 300 430 126

CONSULTING ENGINEERS
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■ Sydney Water Accredited Water Servicing Co-ordinator
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SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

STAGING PLAN 4				
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	J.W.	J.W.	N.Q.	M.C.
JOB No. 5162001		DRAWING No. C9.04		ISSUE 1
DATE AUG 2017		STATUS APPROVAL		



- BUILDINGS:**
1. GATEHOUSE

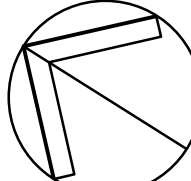
2. MULTIPURPOSE CHAPEL

3. FUNCTION ROOM
4. CAFE & FLOWER SHOP

5. ADMINISTRATION

6. GROUND STAFF FACILITIES

PRELIMINARY - NOT FOR CONSTRUCTION



NORTH



SCALE 1:2000 A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR APPROVAL	27/06/18			



Catholic Cemeteries & Crematoria
Core, Compassion, Choice

PROJECT
MACARTHUR MEMORIAL PARK



Warren Smith & Partners

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CONSULTING ENGINEERS

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- Sydney Water Accredited Water Servicing Co-ordinator
- Design Project Management - Building Plan Approvals

SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

STAGING PLAN 5				
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	J.W.	J.W.	N.Q.	M.C.
JOB No. 5162001		DRAWING No. C9.05		ISSUE 1
DATE AUG 2017		STATUS APPROVAL		

Wednesday, 27th June 2018



35 YEARS OF SERVICE

Attention: Campbelltown Council
Civic Centre,
91 Queen St,
Campbelltown, NSW 2560

Project No. 5162001

RE: Macarthur Memorial Park Development Application
Campbelltown Council Request for Information – WS+P Response

To whom it may concern,

Please see below, Warren Smith & Partners response to the following comments issued as part of Campbelltown Council RFI on 30th May 2018:

Council Comment 2.3 – Sight Distances:

The TIA indicates that all new site access driveways will not comply with the Austroads required sight distances and will require relocation of the boundary treatments and trimming/removal of the roadside vegetation. However, no details in this regard have been submitted as part of the DA.

Further details regarding the extent of vegetation and boundary treatment amendments is required prior to determination of the DA and this may necessitate amended architectural, landscape and civil engineer plans.

Warren Smith & Partners' response to comment 2.3:

Access A: Please find attached drawing C8.01. This drawing provides information on relevant sightlines from Access A including extent of vegetation trimming/removal. As it is a proposed maintenance access, utilisation will be low. The Safe Intersection Sight Distance is achieved on the southbound approach. The majority of movements at this intersection are envisaged to be right turn movements entering the cemetery and left turn movements exiting the cemetery as it is anticipated all maintenance vehicles will be coming from the Hume Motorway/Campbelltown direction.

Access C: Please see attached drawing C8.03. This drawing provides information on relevant sightlines from Access C including extent of vegetation trimming/removal. This access may be limited to left in/left out movements as it is the first intersection people will encounter coming from the residential area and therefore motorists may use it in preference to the main Access B.

Council Comment 2.4 – Road Widening:

Insufficient details have been provided with regard to the proposed design for Access B including details of impact on trees, drainage and whether any localised road widening is required.

Warren Smith & Partners' response to comment 2.4:

Please see attached drawing C8.02. This drawing provides further details in relation to localised road widening required for the proposed Channelised Right-Turn (CHR) layout at Access B including details of impacts to trees and drainage.

Council Comment 3.1 - Chapel Location

The proposed Chapel straddles an existing overland flow path. Site inspection of the small headwater catchment located in the adjoining Council land showed evidence of significant Hewlettian (saturation excess) flow, as well as interflow, contributing to overland flow. The soil layer hydraulic conductivities provided in the Soil Landscapes of the Wollongong Port Hacking 1:100,000 sheet would be expected to result in significant Hewlettian flow in the right circumstances. In this regards the hydrology model used to generate overland flow only accounts for Hortonian (infiltration excess) flow. Hewlettian flow can be dominant in small headwater catchments such as the sub catchments draining to the road above the Chapel.

This possibility of how overland flow can be diverted away from the Chapel must be addressed in an amended Flood Assessment."

Warren Smith & Partners' response to comment 3.1:

Whilst it is acknowledged that Hewlettian flow may be occurring at the site, by definition, should a flood event occur, this mechanism of flow generation will be minor relative to overland flow. As such, the design put in place by Warren Smith & Partners, which is described below, will function to divert the flow such that it is controlled and drained in an orderly fashion. Hence, regardless of its origin (whether Hewlettian or Hortonian), flow will not reach the chapel.

The design referred to above consists of a swale and kerb and gutter system on Road 1 north (and upstream) of the Chapel. This is shown in Drawing C7.01- Stormwater Layout Plan.

Council Comment 7.1 – Road Access

Additional information is required to demonstrate that all internal roads for each stage will be through roads or dead ends on longer than 100m with a 12m outer radius turning circle, noting that some roads in Stage 1 and Stage 4 will be dead ends until later stages are completed.

Warren Smith & Partners' response to comment 7.1:

Please find attached drawing numbers C9.01 - C9.05. These drawings provide information in relation to proposed layout of internal roads throughout each construction stage.

Should you require any further information, please do not hesitate to contact the undersigned,

Kind Regards,



Michael Cahalane

Director - Water and Civil Engineering
Mobile: 0433 522 569
Email: michael@warrensmith.com.au

PROJECT NAME : Macarthur Memorial Park PROJECT NO.: 5162001 CLIENT : Catholic Cemeteries and Crematoria REVISION: 03 DATE CREATED: 01/02/2018	DISCIPLINE : Civil ISSUED BY: Jack Wang	
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DOCUMENT TRANSMITTAL																				
				Day	27															
				Month	6															
				Year	18															
Drawing Number	Drawing Title				Revision															
C1.01	COVER SHEET				3															
C1.03	GENERAL ARRANGEMENT PLAN				3															
C7.01	STORMWATER KEY PLAN				3															
C7.07	STORMWATER LAYOUT PLAN SHEET 6 OF 15				3															
C7.17	STORMWATER PIT SCHEDULE 1 OF 5				3															
C7.21	STORMWATER PIT SCHEDULE 5 OF 5				3															
C8.01	SIGHT DISTANCE ACCESS A				1															
C8.02	SIGHT DISTANCE ACCESS B				1															
C8.03	SIGHT DISTANCE ACCESS C				1															
C9.01	STAGING PLAN 1				1															
C9.02	STAGING PLAN 2				1															
C9.03	STAGING PLAN 3				1															
C9.04	STAGING PLAN 4				1															
C9.05	STAGING PLAN 5				1															