

Civil Traffic & Hydraulics DA Report -ROC

Selwyn Snow Resort

Prepared for Blyton Group / 21st October 2020

209064

Taylor Thomson Whitting (ACT) Pty Ltd (ACN 113 578 368) as trustee for the Taylor Thomson Whitting ACT Trust (ABN 70 179 961 620) I Consulting Engineers 103 Tennant Street, Fyshwick ACT 2609

Your Partner in Engineering

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1.0 INTRODUCTION

This report has been prepared for the purpose of providing civil, traffic and hydraulics technical information to accompany the Development Application submission for the Resort Operations Centre (ROC) at the Selwyn Snow Resort.

2.0 Vehicle Access

2.1 Connection to Kings Cross Road

Vehicle access from the public road system to the ROC is provided from Kings Cross Road via the existing vehicle crossover nominally in the north western corner of the site. The existing gravel road is proposed to be maintained with only local regrading proposed within nominally 15m of the ROC to provide connections to the proposed building.

Sight distances at the vehicle crossover have been checked in accordance with the Austroads Road Design Guidelines and sight distances available at the proposed intersection are in excess of 80m, exceeding the minimum requirements for an at grade intersection within a 60km/hr speed limited zone.

TTW have assessed the relationship between the Snowy Hydro – Kings Cross Road Alternations and the existing vehicle access arrangements to the ROC and can confirm that the alterations to Kings Cross Road will reduce traffic through the intersection. Sight distances to the north will be affected, and if the speed limit to the internal car park access road is reduced to 20km/hr or less after the Kings Cross Road alterations, the requirements for sight distances at the intersection would be further reduced.

2.2 Internal Roadway

The existing gravel road is proposed to be maintained with only local regrading proposed within nominally 15m of the ROC to provide connections to the proposed building.

The internal roadway is generally 6m wide to cater for 2 way traffic and to permit single vehicle movements into and out of the ROC and Ambulance Turning Bay.

The internal road is used for emergency vehicle access and has been designed in accordance with the requirements of the Planning for Bushfire Protection Code 2019 for maximum cross falls on roads to be 3 degrees and longitudinal grades to be less than 10 degrees.

2.3 Car Parking

Car parking has been facilitated adjacent the ROC for operational vehicles, and shall be managed operationally with staff.

To restrict access to the ROC car parking by guests of the resort, it is proposed that a no entry sign (authorised vehicles only) be placed at the intersection with Kings Cross Road.

3.0 Stormwater

Stormwater is proposed to be drained to the north as per the drainage arrangements of the previous development area currently drains.

The hardstand elements are drained to the discharge point through a grassed swale located on the north side of the internal access road. The roadway and carparking areas will drain directly to the channel, and the roof areas will be piped to avoid issues associated with erosion over extended periods of wet weather.

TTW has carried out a stormwater assessment of the development site using DRAINS. The existing site conditions were modelled to determine an existing peak site discharge (48L/s), then the proposed development was modelled with all impervious areas (roads and roof areas) added to the model.

Protection of the downstream environment from contamination caused by spilling of diesel during refilling of the operational vehicles at the entrance to the ROC is provided. The protection system consists of a pit and pipe stormwater system draining the refilling area through an oil separator to pick up any diesel contaminants before discharging downstream through a swale.

Due to the works area being previously developed and containing impervious areas, the peak stormwater discharge from the developed site did not increase over the existing conditions. As such a detention strategy is not required.

Erosion of the proposed swales is prevented through grassing of the channels. Further erosion protection measures are not required due to the small catchment and the low flow rates.

For details of the proposed stormwater management system refer to the civil plans.

4.0 Water Supply

Water is supplied from the water tank nominated as part of the Staff Accommodation DA. For the route of the water main connecting to the ROC refer to the civil plans and details.

4.1 Firefighting Water Supply

A total of 576,000L of dedicated firefighting water supply is proposed within the Quarry located atop the Selwyn Ski Resort. The 576kL of dedicated fire supply water will provide for flows of 10L/s per hydrant (4 off) for a period of 240 mins.

The fire fighting water supply is connected to four in ground spring hydrants located at least 10m from the ROC and at intervals not exceeding 60m.

All reticulation mains are to be buried steel, except for where they connect to the fire pump which is required to achieve the required pressure (700kPa) and 40L/s total flow rate.

5.0 Wastewater Treatment

Wastewater from the ROC is proposed to be collected and treated using an 1000L aerated septic system with a drip feed discharge system. The septic system is designed to cater for loading from up to 10 people and will be in operational outside of peak season. A bypass to the low volume septic treatment system will be provided in future stages of works, where wastewater will be dealt with using a large system.

The treatment tank will be installed below ground, with a nominal depth of 2.0m and nominal diameter of 2.4m. The treated waste water from the tank is suitable for drip irrigation and above ground spray irrigation, however only drip irrigation or subsurface filtration through subsoil is proposed (depending on rock level within irrigation areas) The extent of drip irrigation are is illustrated on the civil general arrangement plan C020 and is only proposed for use outside of peak season.

No fencing is proposed around the Wastewater Treatment System as the manholes are gatic type and access to all working parts or controls can be restricted through locking mechanisms.

For further details of the proposed septic system refer to the civil plans and Appendix A of this report.

6.0 Maintenance Considerations

This section of the report deals with maintenance issues such as snow build up and clearing snow off roads.

<u>Snow Push Material:</u> Snow pushed off the ROC access road is anticipated to be pushed to the landscape area north of the road.

There are no envisaged operational issues associated with clearing snow from gravel roads if the base course and gravel layers are compacted and trimmed to a smooth surface. The gravel road shall have a layer of road base laid to achieve a tightly compacted base with a layer of gravel rolled into the top 50mm to achieve an even surface providing a reasonable level of traction.

Sediments from the snow pushing activities will be captured by the landscaped area to the north of the ROC access road unless the area is covered in snow, then the sediment will be stopped by the downstream snow conditions.

Snow Build-up: Snow loading and build-up will not affect the proposed civil and hydraulics works in this package.

Prepared by TAYLOR THOMSON WHITTING (ACT) PTY LTD in its capacity as trustee for the TAYLOR THOMSON WHITTING ACT TRUST

CHRISTIE PLAYER Associate Director

Authorised By TAYLOR THOMSON WHITTING (ACT) PTY LTD in its capacity as trustee for the TAYLOR THOMSON WHITTING ACT TRUST

ROSS MCDOUGALL Director

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Appendix A

Civil Plans

SELWYN SNOW RESORT REDEVELOPMENT - ROC CIVIL PACKAGE



LOCALITY PLAN

Eng Draft Date Rev Description

SNOWY MONARO REGIONAL, LOT 36 DP46316

REFERENCED DRAWINGS

hese drawings are based on and are to be read in conjunction with the following drawings. Any conflict to these drawings must be notified immediately o the engineer.				
Consultant	Title	No.	Rev	<u>Date</u>
PETER W. BURNS PTY LT	CONTOUR AND DETAIL SURVEY	5312 SELWYN_MGA	-	24.09.20
SISSONS	ROC – SITE PLAN	PL3-00-07	1	16.10.20

DRAWING SCHEDULE

DWG No.	DWG TITLE
C101	COVER SHEET, LOCALITY PLAN, NOTES & LEGENDS
C110	EROSION AND SEDIMENT CONTROL PLAN
C120	GENERAL ARRANGEMENT PLAN
C140	SITE WORKS PLAN
C150	SITE WORKS DETAILS
C180	TURNING VEHICLE DEMONSTRATION

SURVEY LEGEND

110.40	Surface lovel	0.50	Flootrie Lieht Dele
19	Surface level	01	Traffic Light Fole
	Contour		Traffic Light Lid
	Kerb line		Traffic Light Box
	Batter	ТВ	Telephone Box
	Retaining wall	O PKM	Parking Meter
EASEMENT FOD / m WDE)	Enomont	DI PM 1234	Permanent Mark
CASEMENT FOR(DT MDE)	Lusement	A BM 51.10	Bench Mark
/	Fence	— - ВН О	Borehole
\otimes	Tree to be removed/be retained	TP No	Test Pit
	Boundary	O FC	Fuel Cock
O SGN	Sign		_
D H	Hydrant	o fl	Flood Light
MH	Manhole	O LH	Lamp Hole
G	Gas	○ BUB	Bubbler
SV SV	Stop Valve	LB	Letter Box
□ W	Water	D FP	Flag Pole
TEL	Telecomunications	FP BOX	Flag Pole Box
TRAP	Trap	O BOL	Bollard
	Gully	SEAT	Seat
	Grate	BIN	Bin
<u> </u>	Sewer Manhole	0 K0	Kerb Outlet
E	Electricity		

GENERAL NOTES

- . Contractor must verify all dimensions and existing levels on site prior to commencement of works. Any discrepancies to be reported to the ENGINEER
- 2. Strip all topsoil from the construction area. All stripped topsoil shall be stockpiled on site as in location confirmed by owner
- Stoke smooth connection with dult community owner.
 Micke smooth connection with a lexisting works to minimum 98%.
 Compact subgrade under buildings and povements to minimum 98% standard monimum dry desity in accordance with AS 1289 5.1.1.
 Compaction under buildings to extend 2m minimum beyond building
- 5. All work on public property, property which is to become public property, or any work which is to come under the control of the Statutory Authority is to be carried out in accordance with the Statutory Authonry is to be carried out in accordance with the requirements of the relevant Authority. The Contractor shall obtain these requirements from the Authority. Where the requirements of the Authority are different to the drowings and specifications, the requirements of the Authority shall be applicable. 6. For all temporary batters refer to geotechnical recommendations.

SURVEY AND SERVICES INFORMATION

- Origin of levels Datum of levels Coordinate system : CONTACT SURVEYOR AHD : Mga Survey prepared by : PETER W. BURNS PTY LT Setout Points : CONTACT SURVEYOR

Taylor Thomson Whitling does not guarantee that the survey information shown on these drawings is accurate and will accept no liability for any inaccuracies in the survey information provided to us from any cause

UNDERGROUND SERVICES - WARNING

The locations of underground services shown on Taylor Thomson Whittings drawings have been plotted from diagrams provided by service authorities. This information has been prepared solely for the authorities own use and may not necessarily be updated or accurate

The position of services as recorded by the authority at the time of installation may not reflect changes in the physical environment subsequent to installation.

Taylor Thomson Whitting does not guarantee that the services information shown on these drawings shows more than the presence or absence of services, and will accept no liability for inaccuracies in the services information shown from any cause whatsoever.

The Contractor must confirm the exact location and extent of services prior to construction and notify any conflict with the drawings immediately to the Engineer/Superintendent. SURVEY

The contractor is to get approval from the relevant state survey department, to remove/adjust any survey mark. This includes but is not limited to; State Survey Marks (SSM), Permanent Marks (PM), cadastral reference marks or any other survey mark which is to be removed or

adjusted in any way. Taylor Thomson Whitting plans do not indicate the presence of any survey mark. The contractor is to undertake their own search. BOUNDARY AND EASEMENT NOTE

The property boundary and easement locations shown on Taylor Thomson Whitting drawing's have been based from information received from : <u>PETER W. BURNS PTY LT</u>

Taylor Thomson Whitting makes no guarantees that the boundary or

reprint indication mittains about its guarantees and the boundary of essentent information shown is correct. Taylor Thomson Whitting will accept no liabilities for boundary inaccuracies. The contractor/builder is advised to check/confirm all boundaries in relation to all proposed work prior to the commencement of construction. Boundary inaccuracies found are to be reported to the superintendent prior to construction starting. SITEWORKS NOTES

- All basecourse material to comply with specification requirements and compacted to minimum 98% modified maximum dry density in accordance with AS 1299 5.2.1.
 All trench backfill material shall be compacted to the same
- density as the adjacent material.
- All service trenches under vehicular pavements shall be backfilled vith DGB20 and compacted to a minimum 98% modified maximum dry density in accordance with AS 1289 5.1.1

JOINTING NOTES

FABRIC LAPS

TENSION LAPS

N32 N36

KERBING NOTES

 BAR
 TOP
 BARS IN BAA

 SZE
 AND BEAMS
 N12

 N12
 570
 N16
 800

 N20
 1150
 N24
 1500

 N28
 1850
 N28
 1850

REINFORCEMENT NOTES

Pavements to be jointed as shown on civil plans.

Fix reinforcement as shown on drawings. The type and grade is indicated by a symbol as shown below. On the drawings this is followed by a numeral which indicates the size in millimetres of the

3. Cover to reinforcement ends to be 50 mm u.n.o. 4. <u>Provide N12-450</u> support bars to top reinforcement as required, Lap

500 U.N.O. Maintain cover to all pipes, conduits, reglets, drip graoves etc All cogs to be standard cogs unless noted otherwise. Fabric end and side laps are to be placed strictly in accordance with the manufacturers requirements to achieve a full tensie lap. Fabric shall be laid so that there is a maximum of 3 layers at any location.

_____25

Laps in reinforcement shall be made only where shown on the drawings unless otherwise approved. Lap lengths as per table below.

ALL OTHER BARS

1800 2100

Includes all kerbs, gutters, dish drains, crossings and edges.

1. All kerbs, autters, dish drains and crossings to be constructed on

tollowed by a maintain the manual structure of the former of the maintain the manual structure of the maintain the maintai

BULK EARTHWORKS NOTES

- 1. All bulk earthworks setout from arid lines U.N.O.
- All batters at a slope of 2 (H) : 1 (V) U.N.O.
 Excavated material may be used as structural fill provided, (i) it complies with the specification requirements for fill material.
- (i) the placement moisture content complies with the facetonical Consultants requirements, and allows filling to be placed and proofrolled in accordance with the specification. Where
- necessary the Contractor must moisture condition the excavated material to meet these requirements.

Compact	fill areas and	subgrade to not less than:	
Location		Standard dry density (AS 1289 5.1.1.)	Moisture (OMC)

±2% ±2% ±2% 98% 98% 95% Under building slabs on ground: Under roads and carparks: Landscaped areas: 5. Before placing fill, proof roll exposed subgrade with a 10 tonne minimum roller to test subgrade and then remove soft spots

- (areas with more than 3mm movement under roller). Soft spots to be replaced with DGB 20 fill U.N.O.
- Contractor shall place solety barriers around excavations in accordance with relevant safety regulations.
 For interpretation of bulk acrthworks forb print line shown on the bulk earthworks drawings refer to the bulk earthworks construction
- legend. B. Bulk earthwork drawings are not to be used for detailed excavation. Refer to Geotechnical Report prepared by – ACT GEOTECHNICAL ENGINEERS
- REPORT # C10872 from July 2020

STORMWATER DRAINAGE NOTES

1 Stormwater Desian Criteria :

- (A) Average recurrence interval 1:100 years for roof drainage to first external pit 1:5 years for paved and landscaped areas
- (B) Rainfall intensities Time of concentration: 5 minutes

- Time of concentration: 5 minutes 1:100 years = 160 mm/hr 1:5 years = 86 mm/hr (C) Runoff coefficients -Roads and poved areas: Cas = 0.90 Roads and poved areas: Cas = 0.90 Landscaped areas: Cas = 0.90 2. Pipes 300 dia and larger to be reinforced concrete Class "2" approved spiqot and socket with rubber ring joints U.N.O. 3. Pipes up 100 dia and larger to be serier grade uP/C with solvent welded joints. 4. Equivalent strength VCP or FRP pipes may be used subject to approval. 5. Precest pits may be used external to the building subject to approval by ENGINEER
- ENGNEER 6. Enlargers, connections and junctions to be manufactured fittings where pipes are less than 300 dia. 7. Where subsolit drains pass under floor slabs and vehicular pavements, unstotted uPVC sever grade pipe is to be used. 8. Grates and covers shall conform with AS 3996-2006, and AS 1428.1 for access renuirements
- Pipes are to be installed in accordance with AS 3725. All bedding to be type H2 U.N.O. type H2 U.N.O. 10. Care is to be taken with levels of stormwater lines. Grades shown are
- not to be reduced with up to so solutions of solutions of the solution of the
- Adopt invert levels for pipe installation (grades shown are only nominal).
 Subsoil drains are to be installed as shown on drawings.

External : A2

CONCRETE NOTES

EXPOSURE CLASSIFICATION CONCRETE

Place concrete of the following characteristic compressive strength fc

ation	AS 1379 fc MPa at 28 days	Specified Slump	Nominal Agg. Size
hicle	S35	80	20
Use Type 'GP' cement, unless All concrete shall be subject 1 AS 1379. Consolidate by mechanical vibr directed in the Specification. For all falls in sich, drip grow Architects drawings and specific Unless shown on the drawings, shall be submitted to Engineer No holes or chases shall be and of the Engineer. Conduits and pipes are to be reinforcement layer. Slurry used to lubricate concre any structural members. All slabs cast on ground requi Underlay	otherwise specified. o project assessment ation. Cure all conci- es, reglets, chamfer cations. I the location of all for review. ande in the slab with fixed to the undersi- the pump lines is no re sond blinding with	nt and tesi rete surfac construction hout the a de of the st to be us n a Concre	ting to es as r to on joints pproval top sed in ite
\frown .			

10. (170) Indicates Slab or Band thickness variation.

FORMWORK

Common, certification, construction and performance of the formwork, falsework and backpropping shall be the responsibility of the contractor. Proposed method of installation and removal of formwork is to be submitted to the superintendent for comment prior to work being carried out.

CONCRETE FINISHING NOTES

- 1. All exposed concrete pavements are to be broomed finished.
- All edges of the concrete pavement including keyed and dowelled
- an eages to the content provenent including keyed and adverted joints are to be finished with an edging tool.
 Concrete provements with grades greater than 10 % shall be heavily broamed finished.
 Controundum to be added to all stair treads and ramped crossings



D FOR DEVELOPMENT APPLICATION

B FOR DEVELOPMENT APPLICATION

A FOR DA REVIEW

Rev Description

FOR DEVELOPMENT APPLICATION

CP EM 18.11.20 CP EM 26.10.20

CP EM 20.10.20 CP EM 02.10.20

Eng Draft Date Rev Descriptio

Upon completion of new kerbs, new basecourse and surface is to be laid 900mm wide to match existing materials and thicknesses Existing allotment drainage pipes are to be built into the new kerb with a 100mm dia hole Existing kerbs are to be completely removed where new kerbs are

- minimum 75mm granular basecourse compacted to minimum 98% modified maximum dry density in accordance with AS 1289 5.2.1. CONFINED SPACES Expansion joints (EJ) to be formed from 10mm compressible cork filler board for the full depth of the section and cut to profile. Expansion joints to be located at drainage pits, on tangent points of curves and elsewhere at 12m centres except for integral kerbs where the expansion joints are to match the joint locations in slabs.
- . Weakened plane joints to be min 3mm wide and located at 3m Weakened plane joints to be min 3mm wide and located at 3m centres except for integral kerbs where weakened plane joints are to match the joint locations in slabs.
 Broomed finished to all ramped and vehicular crossings, all other kerbing or dish drains to be steel float finished.
 In the replacement of kerbs – Existing road powement is to be sawcut 900mm from lip of gutter.
 - SITE ACCESS/EGRESS

vehicle movements where necessary.

MANUAL HANDLING

WATER POLLUTION

VEHICLE MOVEMENT

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Finished surface level

Finished contou

SIGNS AND LINE MARKING NOTES

SAFETY IN DESIGN

Solutions Register.

EXISTING SERVICES

relocate. EXISTING STRUCTURES

EXISTING TREES

protect trees.

GROUNDWATER

FXCAVATIONS

for details.

GROUND CONDITIONS

HAZARDOUS MATERIALS

Pavement marking and sign posting on public roads shall be in accordance with the requirements of the relevant Road Authority. The contractor shall obtain these requirements from the Road Authority.

Contractor to refer to Appendix B of the Civil Specification for the Civil Risk and

Contractor to be aware existing services are located within the site. Location of all services to be verified by the Contractor prior to commencing works. Contractor to confirm with relevant authority regarding measures to be taken to ensure services are protected or procedures are in place to demolish and/or

Contractor to be aware existing structures may exist within the site. To prevent damage to existing structure(s) and/or personnel, site works to be carried out as far as practicably possible from existing structure(s).

Contractor to be aware existing trees exist within the site which need to be protected. To prevent damage to trees and/or personnel, site works to be carried out as far as practicably possible from existing trees. Advice needs to be sought from Arborist and/or Landscape Architect on measures required to

Contractor to be aware around water levels are close to existing surface level Temporary de-watering may be required during construction work

Deep excavations due to stormwater drainage works is required. Contractor to ensure safe working procedures are in place for works. All excavations to be fenced off and batters adequately supported to approval of Geotechnical Engineer

Contractor to be aware of the site geotechnical conditions. Refer to geotechnical report # C10872 by ACT GEOTECHNICAL ENGINEERS from July 2020

Existing asbestos products & contaminated material may be present on site.

Contractor to be aware of potential hazards due to working in confined spaces such as stormwater pits, trenches and/or tanks. Contractor to provide safe working methods and use appropriate PPE when entering confined spaces.

Contractor to be aware manual handling may be required during construction Contractor to take appropriate measures to ensure manual handling procedures and assessments are in place prior to commencing works.

Contractor to ensure appropriate measures are taken to prevent pollutants from construction works contaminating the surrounding environment.

Site Access/concess Contractor to be aware site works occur in close proximity to footpaths and roadways. Contractor to erect appropriate barriers and signage to protect site personnel and public.

Contractor to supply and comply with traffic management plan and provide adequate site traffic control including a certified traffic marshall to supervise

SITEWORKS LEGEND





SJ	
KJ	
EJ	
‹ ‹	
<	

Kerb and gutte Kerb only Flush kerb Dish drain Thickened edge Integral kerb with edge downturn Kerb and to Stormwater pit, flow direction and line with Invert level upstream Pipe size and class Pipe grade Flow (Litres per second) nvert level downstream Intermediate riser with subso drainage line (100 dig) Flushing point with subsoi drainage line (100 dia) Rodding point Dowelled expansion join Sawn joint Keyed construction join Expansion joint Grass catch drain Overland flow path







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GENERAL ARRANGEMENT PLAN

Eng Draft Date



This drawing is copyright and is the property of TAYLOR THOMSON WHITTING (ACT) Pty Ltd and must not be used without authorisation. THIS INDEE USES WINDLE SUMMING SUMMINISMENT. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT NOTES ON DRAWING C101

LLOLIN	ID		
	— w —	PROPOSED WATER RETICUL	ATION
	— s ——	PROPOSED WASTEWATER RE	TICULATION
FS	FS FS	PROPOSED FIRE SERVICES	
\rightarrow	\longrightarrow —	STORMWATER OVERLAND FL	OW PATH
ject	Scale : A1	Drawn	Authorised
NERAL ARRANGEMENT	1:1000	EM	RMD
N	Job No	Drawing No	Revision
	209064	C120	F
	Plot File Created: Nov	/ 19, 2020 - 9:05am	



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Туре	Description	Cover (Clear Opening)	Number
A	Surface inlet pit	450 x 450 Class C galvanised mild steel heelguard grate hinged to frame	1 - 4, 6
B	Oil separattor	50L OIL SEPARATOR	5







SANITARY DRAINAGE - TYPICAL SECTION

612 6285 1766 | 103 Tennant Street Fyshwick ACT 2069

Civil Engin

CONSTRUCTION METHODOLOGY FOR INSTALLATION OF MAINS IN GRASSED AREAS TO PRESERVE ECOLOGICAL CONDITIONS

CAREVULY REMOVE EXISTING SODE FROM THE AREA TO BE DISTURBED BY FOLDING THEM OUT TO THE WORKS EXTENT. ONLY REMOVE SODE STO SUIT EXTENT OF WORKS FOR THAT DAY.
 INSTALL PIPEWORK OVER EXISTING FOR THAT DAY. BACKFLL AND COMPACT.
 MOSTEN SOLES OVER DISTURBED AREA AND CAREFULLY SOLE DACK SODE STO ENISTINGE DISTURBED AREA.
 ENSURE DISTURBED AREAS ARE MONITORED, WATERED AND CONSOLIDATED IN ACCORDANCE WITH AGREED MANAGEMENT STRATEGY WITH NATIONAL PARKS.





Sheet Subject Taylor Thomson Whitting SELWYN SNOW RESORT - ROC SITE V

	PRE		MINA	ARY
	Scale : A1	Drawn	Auth	norised
NORKS DETAILS	NTS	EM		
	Job No		Drawing No	Revision
	209064		C150	С
	Plot File Created: No	ov 19, 2020 -	9:04am	

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THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT NOTES ON DRAWING C101



D FOR DEVELOPMENT APPLICATION C FOR DEVELOPMENT APPLICATION B FOR DEVELOPMENT APPLICATION A FOR DA REVIEW Rev Description

Appendix B

Wastewater Treatment System Details



Certificate of Accreditation Sewage Management Facility Septic Tanks & Collection Wells

This Certificate of Accreditation is issued by the Secretary of the NSW Ministry of Health pursuant to Clause 41(1) of the Local Government (General) Regulation 2005.

Manufacturer: Eco-Septic Pty Ltd t/a Econocycle

Of: 65 Warradale Road, Warragamba, NSW, 2752

The concrete Eco-Septic Septic Tanks and Collection Wells as described in the following Schedule have been accredited as sewage management facilities for use in single domestic premises in NSW.

Director, Environmental Health for Secretary (delegation PH335)

Issued: 3 July 2018 Certificate No: STCW037 Expires: 31 December 2022



Accreditation Schedule

The Certificate of Accreditation applies to the following Septic Tanks and Collection Wells

Model	Description	Size
Septic Tank	Vertical axis type cylindrical precast steel fibre reinforced concrete, with partitions, lid, access cover, and inlet and outlet fittings. Burial depth of all tank lid is restricted to 0-500 mm	2,800 L 3,150 L 3,600 L 4,500L 5,500L 7,000L
Collection Well	Vertical axis type cylindrical precast steel fibre reinforced concrete. Certification applies only to the construction of the tank, lid, access cover and inlet fitting. It does not include the internal fittings or partitions. Burial depth of all tank lid is restricted to 0-500 mm	3,250 L 3,750 L 4,500L 5,500L 7,000 L 7,000 L flat/side 7,300 L 7,300 L flat/side 8,000L 9,000L 10,000L
Combined Septic Tank/ Collection well	Vertical axis type cylindrical precast steel fibre reinforced concrete. Certification applies only to the construction of the tank, lid, access cover and inlet fitting. It does not include the internal fittings or partitions.	7100 L



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Combined Septic Tank/ Collection well	Vertical axis type cylindrical precast steel fibre reinforced concrete. Certification applies only to the construction of the tank, lid, access cover and inlet fitting. It does not include the internal fittings or partitions.	7100 L

