

18 January 2022

Heath McNab
50 Aubreen Street,
Collaroy Plateau NSW 2097

Stormwater designs for CDC at 50 Aubreen Street, Collaroy Plateau

Dear Heath,

Please find attached the drawings describing the stormwater management plan for the proposed development at 50 Aubreen Street, Collaroy Plateau.

The stormwater management plan is described in the following Stellen Consulting drawings:

<i>DR-100</i>	<i>Revision 0</i>	<i>Legend</i>
<i>DR-101</i>	<i>Revision 0</i>	<i>Pipe Layout</i>
<i>DR-102</i>	<i>Revision 0</i>	<i>Details</i>
<i>DR-103</i>	<i>Revision 0</i>	<i>Site Area</i>

The stormwater management plan for the proposed works conforms to the relevant design requirements of the following:

- *Australian Standard AS3500.3 (2018) – Plumbing and Drainage: Part 3 Stormwater Drainage*
- *Northern Beaches Council – Water Management for Development Policy February 2021*

Northern Beaches Council–DCP 2021 s9.3.2.3, (Streamlined Methods) requires an OSD of size 12.7m³. Furthermore, s9.3.2.1 (Rainwater Re-Use for Single Residential Development) allows for RW reuse to be credited against the calculated OSD volume. We have credited the BASIX certificate storage volume of 6.0m³ against the calculated OSD storage volume and determined the revised OSD volume of 6.7m³.

We recommend the stormwater design (as described in the drawings) as a safe and practical solution to support the development.

Kind regards,



Digvijay Desai
Engineer

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50 AUBREEN STREET, COLLAROY PLATEAU

STORMWATER MANAGEMENT PLAN


DRAWING INDEX:

- DR-000 LEGEND
- DR-001 PIPE LAYOUT
- DR-002 DETAILS
- DR-003 SITE AREAS


LEGEND:




DOWNPIPE



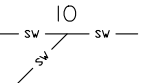
STORMWATER PIPE




RAINWATER PIPE



DRAINAGE PIT AND SIZE



INSPECTION OPENING



SEALED PIT

NOTES:

1. ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.

2. SITE LAYOUT BASED ON ARCHITECTURAL PLANS BY MASTERTON (13/10/2021)

3. LOCATION OF ALL SERVICES MUST BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.

4. ALL STORMWATER DRAINAGE PIPES AND ASSOCIATED DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE RELEVANT STANDARDS, THE BUILDING CODE OF AUSTRALIA, MANUFACTURER’S RECOMMENDATIONS, SYDNEY CATCHMENT AUTHORITY RECOMMENDED PRACTICE, AND LOCAL COUNCIL, AS APPLICABLE.

5. ALL INVERT LEVELS PROVIDED ON THIS DRAWING ARE REDUCED TO AHD AND BASED ON INTERPOLATED SURFACE LEVELS AND SYSTEM REQUIREMENTS.
6. WHERE POSSIBLE, PIPEWORK SHALL BE LOCATED EXTERNAL TO THE BUILDING.

7. DOWNPIPES AND STORMWATER LINES TO BE SEALED DN100 uPVC UNLESS OTHERWISE NOTED.

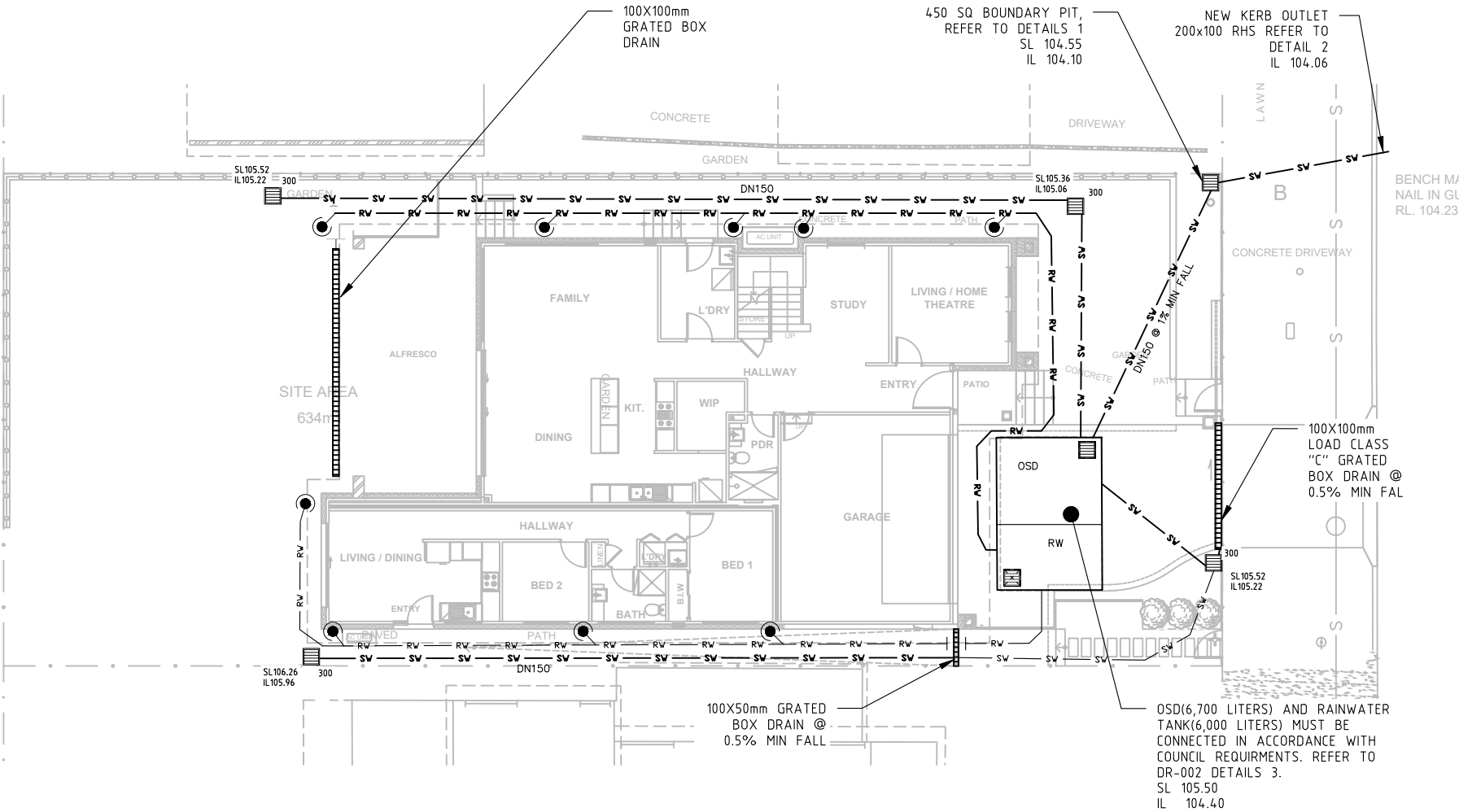
8. STORMWATER PIPES TO BE GRADED AT A MINIMUM 1% UNLESS NOTED OTHERWISE.

9. ALTERNATIVE GUTTER AND DOWNPIPE CONFIGURATION MAY BE INSTALLED PROVIDED IT COMPLIES WITH AS3500.

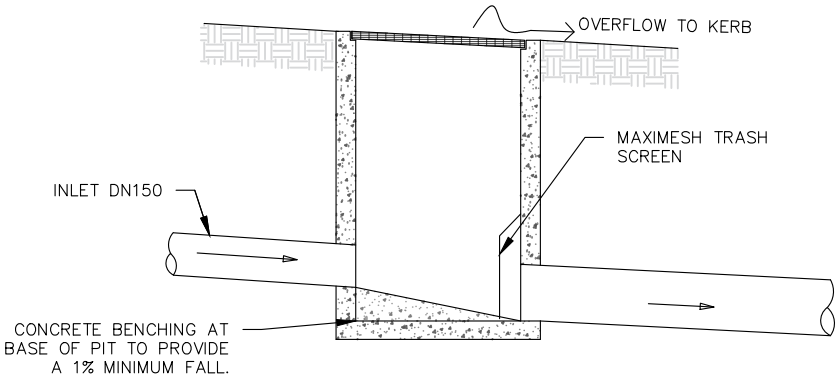
10. ALL PIPE AND CONDUITS TO BE MARKED IN ACCORDANCE WITH AS1345 – 1995.

11. TRENCHES AND SERVICE SEPARATIONS IN ACCORDANCE WITH AS/NZS 5601, AS/NZS 3500, AND AS/CA S009.

- NOTE:
1. ALL DOWNPIPES TO BE DIRECTED TO RAINWATER TANK FOR REUSE.
 2. RAINWATER SYSTEM TO BE KEPT SEPARATE FROM ALL SURFACE DRAINAGE.

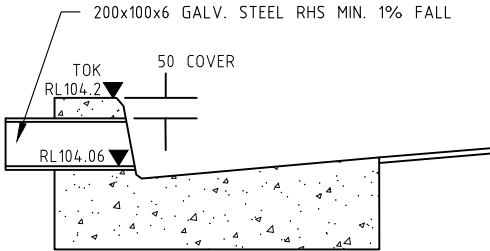


PLAN
1
PIPE LAYOUT-GROUND FLOOR
1: 200




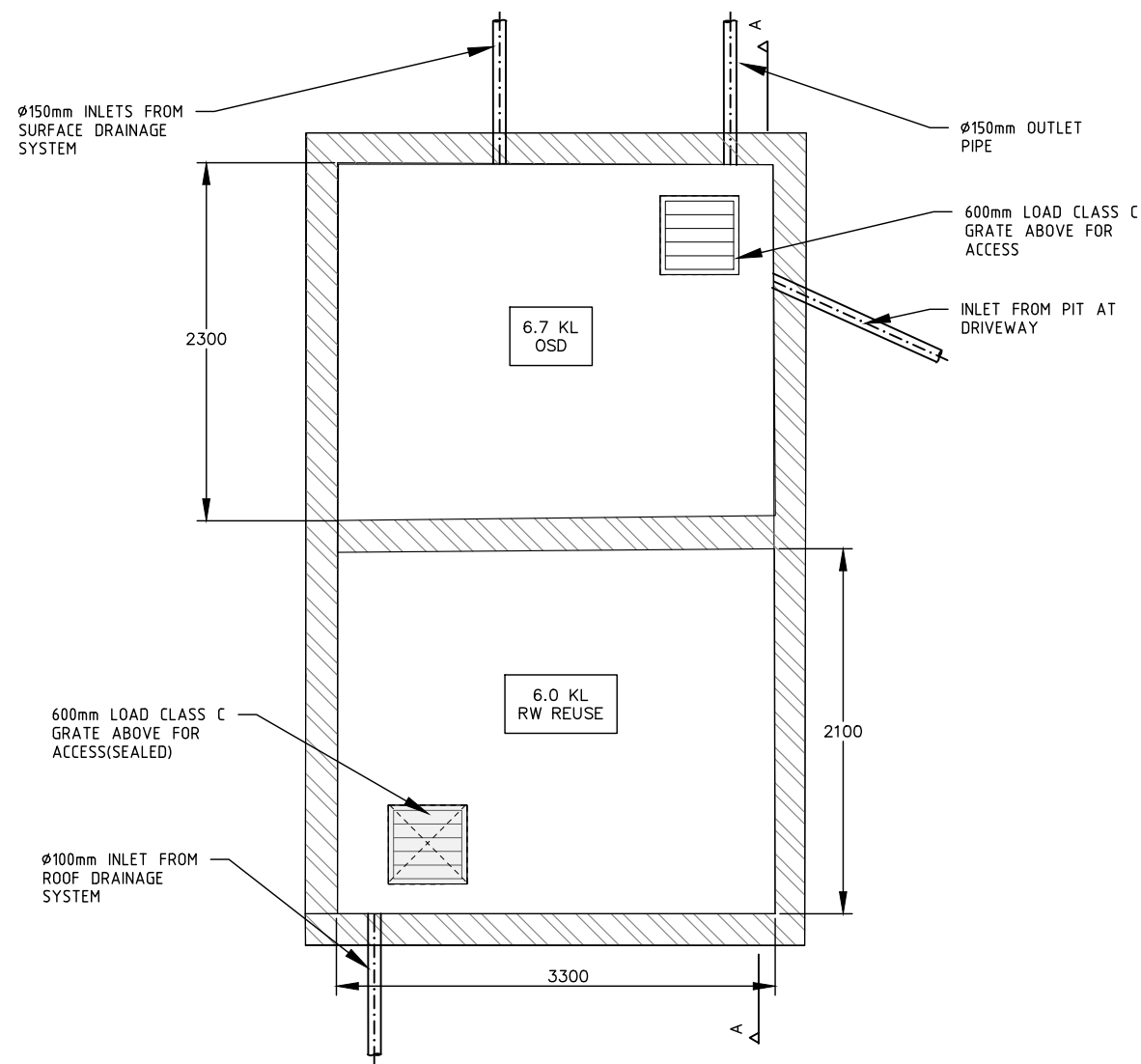
DETAIL
1
450 SQUARE MEDIUM DUTY PIT
NOT TO SCALE

- NOTES:
1. 'LYSAGHT' MAXIMESH RH3030 (HOT DIPPED GALVANISED) OR EQUIVALENT.
 2. MAXI MESH SCREENS MUST BE PLACED SUCH THAT THE LONG AXIS OF THE OVAL SHAPED HOLES ARE ORIENTATED HORIZONTALLY WITH THE PROTRUDING LIP ANGLED UPWARDS AND FACING TOWARDS THE OUTLET.

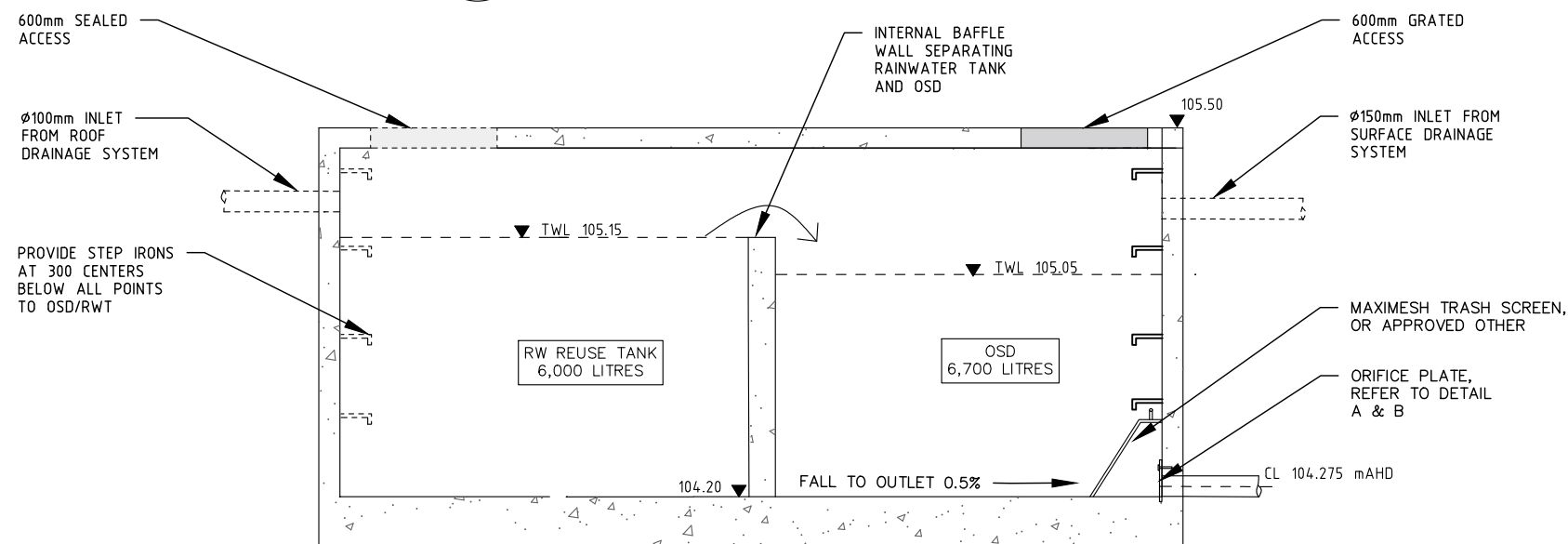


DETAIL
2
TYPICAL KERB CONNECTION
NOT TO SCALE

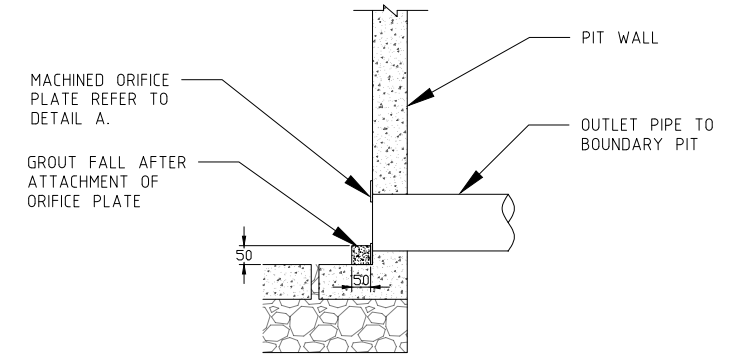
This drawing is confidential and shall only be used for the purposes of this project.					Scale	THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE STELLEN QUALITY ASSURANCE SYSTEM				This design complies with: AS3500.3:2018				50 AUBREEN STREET, COLLAROY PLATEAU				
					1:200					 Stellen				PIPE LAYOUT				
						DESIGNED DD CHECKED LES												
						DRAWN DD CHECKED LES												
						APPROVED LES DATE 18/01/2022												
0 DD 18/01/2022 FOR CDC LES					DO NOT SCALE. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED													
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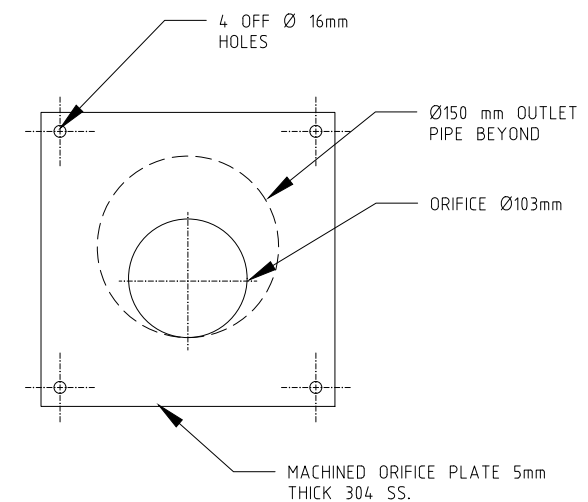
DETAIL 3 ON SITE DETENTION/RW REUSE TANK
NOT TO SCALE



SECTION A-A



DETAIL B TYPICAL ORIFICE CONNECTION
NOT TO SCALE



DETAIL A ORIFICE PLATE
NOT TO SCALE

NOTES:

RAINWATER TANK TO BE CONNECTED TO INTERNAL TOILETS FOR FLUSHING, AS PER COUNCIL REQUIREMENTS.


OSD & RAINWATER TANK REQUIREMENT:

THE DEVELOPMENT PROPOSES A NET INCREASE IN PERVIOUS AREA OF 132m². IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL WATER MANAGEMENT FOR DEVELOPMENT POLICY 2021 9.3.2.3 TABLE 8 MINIMUM CAPACITY OF ON- SITE DETENTION TANK IS 12.7m³, VOLUME OF RAINWATER REUSE TO BE CREDITED AGAINST THE CALCULATED OSD STORAGE VOLUME IS AS FOLLOWS:

REVISED OSD VOLUME = DETERMINED OSD VOLUME - BASIX CERTIFIED STORAGE VOLUME.

REVISED OSD VOLUME = 12.7m³ - 6.0m³ = 6.7m³

OSD VOLUME PROVIDED= 6.7m³

This drawing is confidential and shall only be used for the purposes of this project.					Scale NA	THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE STELLEN QUALITY ASSURANCE SYSTEM				 Stellen Consulting ABN 61 149 095 189	This design complies with: AS3500.3:2018	50 AUBREEN STREET, COLLAROY PLATEAU			
REVISIONS	0	DD	18/01/2022	FOR CDC		DESIGNED	DD	CHECKED	LES			DETAILS			
		BY	DATE	DESCRIPTION		DRAWN	DD	CHECKED	LES			Size	A3	Status	APPROVED FOR CDC SUBMISSION
						APPROVED	LES	DATE	18/01/2022			Drig No.	DR-102	Rev.	0

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