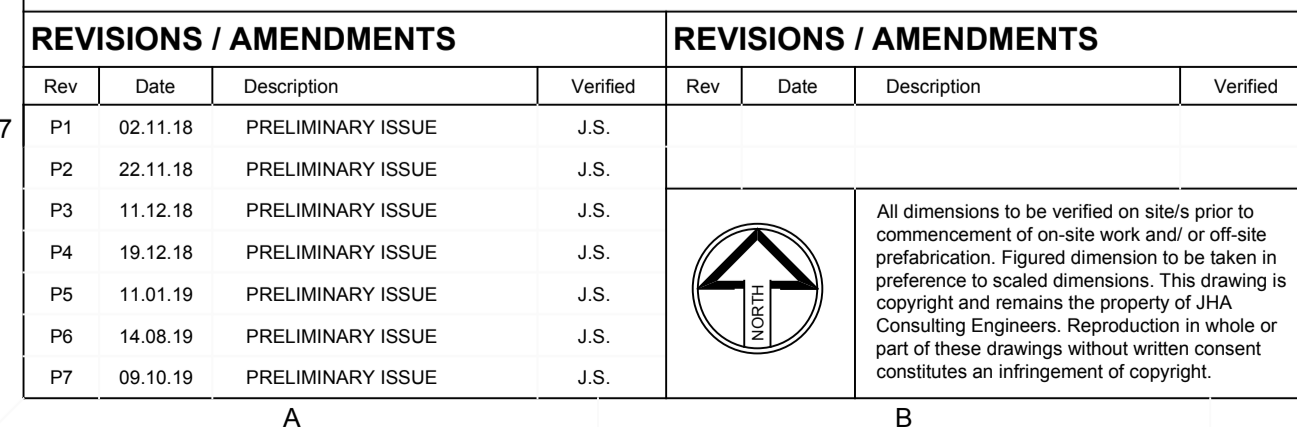


WEE HUR REDFERN STUDENT VILLAGE

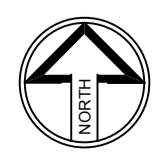
DEVELOPMENT APPLICATION STORMWATER CONCEPT PLAN



180391	C000	P7
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REVISIONS / AMENDMENTS				REVISIONS / AMENDMENTS			
Rev	Date	Description	Verified	Rev	Date	Description	Verified
P1	02.11.18	PRELIMINARY ISSUE	J.S.				
P2	22.11.18	PRELIMINARY ISSUE	J.S.				
P3	11.12.18	PRELIMINARY ISSUE	J.S.				
P4	19.12.18	PRELIMINARY ISSUE	J.S.				
P5	11.01.19	PRELIMINARY ISSUE	J.S.				
P6	14.08.19	PRELIMINARY ISSUE	J.S.				
P7	09.10.19	PRELIMINARY ISSUE	J.S.				



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PROJECT
**WEE HUR REDFERN STUDENT
VILLAGE**
13-23 GIBBONS STREET,
REDFERN, NSW 2016

TITLE
**STORMWATER SERVICES
GROUND LEVEL
SOIL AND EROSION
CONTROL PLAN**

PRELIMINARY
NOT FOR CONSTRUCTION

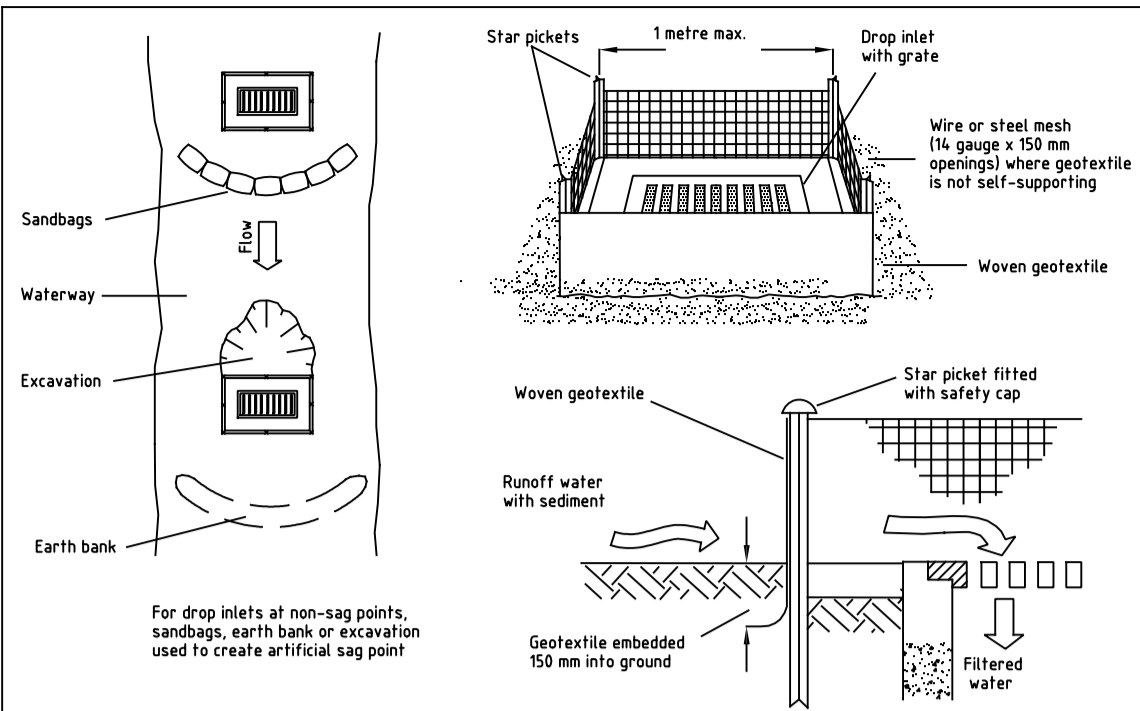
DRAWN J.S.
CHECKED J.S.
APPROVED J.S.
CREATED 08/19
JOB No. DRAWING No. REV

180391 C101 P7

SEDIMENT & EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF ANY WORKS BEING CARRIED OUT. ALL SOIL AND EROSION MEASURES SHALL BE MAINTAINED AND KEPT IN PLACE FOR THE FULL DURATION OF THE WORKS AND SHALL ONLY BE REMOVED AT FINAL STABILISATION OF THE WORKS. WHERE IT IS NECESSARY TO UNDERTAKE STRIPPING IN ORDER TO CONSTRUCT A SEDIMENT CONTROL DEVICE ONLY SUFFICIENT GROUND SHALL BE STRIPPED TO ALLOW CONSTRUCTION.
2. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED AS INDICATED ON THESE DRAWINGS. LOCATION AND EXTENT OF SOIL AND WATER MANAGEMENT DEVICES IS DIAGRAMMATIC ONLY AND THE ACTUAL REQUIREMENTS SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT.
3. CONFORMITY WITH THIS PLAN SHALL IN NO WAY REDUCE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AGAINST WATER DAMAGE DURING THE COURSE OF THE CONTRACT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ANY NECESSARY CONTROL IS IN PLACE EVEN THOUGH SUCH CONTROL MAY NOT BE SHOWN ON THE PLAN.
4. THE CONTRACTOR SHALL INFORM ALL SUBCONTRACTORS AND ALL EMPLOYEES OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSTREAM AREAS
5. APART FROM SEDIMENT BASINS, THE CONTRACTOR SHALL REGULARLY MAINTAIN SEDIMENT AND EROSION CONTROL STRUCTURES AND DESILT SUCH STRUCTURES PRIOR TO THE REDUCTION IN CAPACITY OF 30% DUE TO ACCUMULATED SEDIMENT. THE SEDIMENT SHALL BE DISPOSED OF ON SITE IN A MANNER APPROVED BY THE ENGINEER.
6. THE CONTRACTOR SHALL TEMPORARILY REHABILITATE WITHIN TEN (10) DAYS ANY DISTURBED AREAS PROVIDING A MINIMUM 60% COVER. FINAL REHABILITATION IS TO BE PROVIDED WITHIN A FURTHER 60 DAYS WITH A MINIMUM 70% COVER.
8. THE CONTRACTOR SHALL PROVIDE WATERING OF THE VEGETATED BATTERS FOR MAINTENANCE PERIOD. PLANT, MACHINERY AND VEHICLES SHALL NOT BE DRIVEN OVER GRASSED AREAS UNLESS ON AN APPROVED HAULAGE ROUTE.
9. ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILISED AS QUICKLY AS POSSIBLE TO MINIMISE RISK OF EROSION.
10. SITE ACCESS SHALL BE RESTRICTED TO THE NOMINATED POINTS. THE CONTRACTOR SHALL PROVIDE STABILISED SITE ACCESS.
11. DUST AND SITE DISTURBANCE MUST BE KEPT TO A MINIMUM. DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS MUST BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO REDUCE WIND EROSION. ERECT BARRIER FENCING TO MINIMISE LAND DISTURBANCE BY PREVENTING VEHICULAR AND PEDESTRIAN ACCESS TO AREAS BEING REHABILITATED AND LANDS THAT DO NOT NEED TO BE DISTURBED BY THIS PROJECT.
12. STOCKPILE TOPSOILS, SUBSOILS AND OTHER MATERIALS SEPARATELY.
13. TOPSOIL SHALL BE STORED IN LOW MOUNDS NO MORE THAN 2 METRES HIGH AND RE-USED WITHIN TWO MONTHS TO MAINTAIN ACTIVE POPULATIONS OF BENEFICIAL SOIL MICROBES AND SEED.
14. PLACE ALL STOCKPILES AT LEAST FIVE METRES FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS, ESPECIALLY EARTH BANKS AND ROADS. IF NECESSARY, EARTH BANKS OR DRAINS WILL BE CONSTRUCTED TO DIVERT LOCALISED RUN-ON.
15. TURN TOPSOIL STOCKPILES OVER TO AERATE THEM AT MONTHLY INTERVALS. ENSURE VEGETATION IS NOT INCORPORATED INTO THE SOIL.
16. AVOID REVERSING THE SOIL PROFILE MATERIALS DURING FILL OPERATIONS - REPLACE DISTURBED SOILS IN THEIR ORIGINAL ORDER.

17. ON COMPLETION OF MAJOR EARTHWORKS AND BEFORE ADDING TOPSOIL, LEAVE DISTURBED LANDS WITH A LOOSE SURFACE. ALTERNATELY, DISTURBED AREAS PREVIOUSLY COMPACTED BY CONSTRUCTION WORKS WILL BE RIPPED TO MORE THAN 200-MM ALONG THE CONTOUR BEFORE APPLYING TOPSOIL.
18. PROVIDING MATERIALS ARE AVAILABLE, SPREAD TOPSOIL TO A MINIMUM DEPTH OF 75mm IN REVEGETATION AREAS ON SLOPES OF 4(H):1(V) OR LESS AND TO A DEPTH OF 40 TO 60mm IN REVEGETATION AREAS STEEPER THAN 4:1.
19. LEAVE TOPSOIL IN A SCARIFIED OR ROUGH CONDITION ONCE REPLACED TO HELP MOISTURE INFILTRATION AND REDUCE SOIL EROSION.
20. ENSURE SOIL IS THOROUGHLY SOAKED TO A DEPTH OF 75mm (RAIN OR IRRIGATION) IMMEDIATELY BEFORE PLANTING.
21. HANDLE TOPSOIL ONLY WHEN IT IS MOIST (NOT WET OR DRY) TO AVOID DECLINE OF SOIL STRUCTURE
22. SEDIMENT BASINS SHALL BE MAINTAINED FOR THE ENTIRE DURATION OF THE PROJECT OR UNTIL SUCH TIME AS ALL DISTURBED AREAS ARE HYDROMULCHED.
23. WHERE FLOCCULATION OF BASINS IS REQUIRED UNLESS OTHERWISE SPECIFIED THE RECOMMENDED INITIAL DOSING IS 30KG OF GYPSUM PER 100 CUBIC METRES OF BASIN VOLUME. THE CONTRACTOR MAY VARY THIS RATE SUBJECT TO TESTING OF PREVIOUS WATER SAMPLES AND THE ACHIEVEMENTS OF THE REQUIRED WATER QUALITY STANDARDS.
24. ANY DAMS TO BE DESILTED SHALL BE FLOCCULATED TO SETTLE ANY SUSPENDED SOLIDS CLEAR WATER SHALL THEN BE PUMPED OUT IN A MANNER THAT WILL NOT CAUSE DOWNSTREAM EROSION. THE DAM WALL SHALL THEN BE BREACHED AND ANY SILT REMOVED AND PLACED IN A SUITABLY CONSTRUCTED DRYING BASIN. WHEN DRY, THE SILT SHALL BE REMOVED FROM SITE OR MIXED WITH TOP SOIL FOR FUTURE SPREADING.
25. THE CONTRACTOR SHALL MAINTAIN A LOG BOOK DETAILING:
- RECORDS OF ALL RAINFALL
 - CONDITION OF SOIL AND WATER MANAGEMENT STRUCTURES
 - ANY APPLICATION OF FLOCCULATING AGENTS TO SEDIMENT BASIN
 - VOLUMES OF ALL WATER DISCHARGED FROM SEDIMENT BASINS
 - ANY ADDITIONAL REMEDIAL WORKS REQUIRED.
26. THE LOG BOOK SHALL BE MAINTAINED ON A WEEKLY BASIS AND BE MADE AVAILABLE TO ANY AUTHORISED PERSON UPON REQUEST. THE ORIGINAL LOG BOOK SHALL BE ISSUED TO THE PROJECT MANAGER AT THE COMPLETION OF WORKS
27. ALL ROAD EMBANKMENTS TO BE STABILISED AS PER LANDSCAPE ARCHITECTS DETAILS.
28. A SELF AUDITING PROGRAM SHOULD BE ESTABLISHED BASED ON A CHECK SHEET DEVELOPED FOR THE SITE. A SITE INSPECTION USING THE CHECK SHEET SHOULD BE MADE BY THE SITE MANAGER AT LEAST WEEKLY, IMMEDIATELY BEFORE SITE CLOSURE AND IMMEDIATELY FOLLOWING RAINFALL EVENTS THAT CAUSE RUNOFF.
29. UNDERTAKE THE SELF AUDIT BY:
- WALKING AROUND THE SITE SYSTEMATICALLY (E.G. CLOCKWISE)
 - RECORDING THE CONDITION OF EVERY BMP EMPLOYED
 - RECORDING MAINTENANCE REQUIREMENTS (IF ANY) FOR EACH BMP
 - RECORDING THE VOLUMES OF SEDIMENT REMOVED FROM THE SEDIMENT
 - RETENTION SYSTEMS WHERE APPLICABLE
 - RECORDING THE SITE WHERE SEDIMENT IS DISPOSED
 - FORWARDING A SIGNED DUPLICATE OF THE COMPLETED CHECK SHEET TO THE PROJECT MANAGER/DEVELOPER/SITE OPERATOR FOR THEIR INFORMATION
30. IN PARTICULAR, INSPECT:
- LOCATIONS WHERE VEHICLES ENTER AND LEAVE THE SITE
 - ALL INSTALLED EROSION AND SEDIMENT CONTROL MEASURES, ENSURING THEY ARE OPERATING CORRECTLY
 - AREAS THAT MIGHT SHOW WHETHER SEDIMENT OR OTHER POLLUTANTS ARE LEAVING THE SITE OR HAVE POTENTIAL TO DO SO
 - ALL DISCHARGE POINTS, TO ASSESS WHETHER THE EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING IMPACTS TO THE RECEIVING WATERS
31. A SITE INSPECTION USING THE CHECK SHEET WILL BE MADE BY THE SITE MANAGER AT LEAST WEEKLY, IMMEDIATELY BEFORE SITE CLOSURE, AND IMMEDIATELY FOLLOWING RAINFALL EVENTS GREATER THAN 5mm IN 24 HOURS.

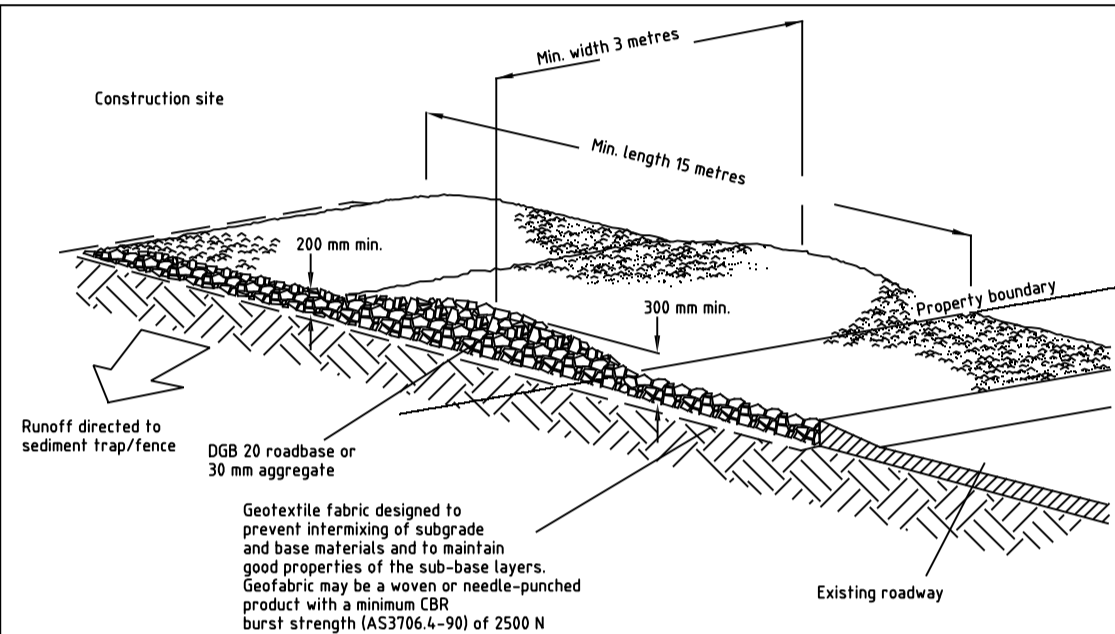


Construction Notes

1. Fabricate a sediment barrier made from geotextile or straw bales.
2. Follow Standard Drawing 6-7 and Standard Drawing 6-8 for installation procedures for the straw bales or geofabric. Reduce the picket spacing to 1 metre centres.
3. In waterways, artificial sag points can be created with sandbags or earth banks as shown in the drawing.
4. Do not cover the inlet with geotextile unless the design is adequate to allow for all waters to bypass it.

GEOTEXTILE INLET FILTER

SD 6-12

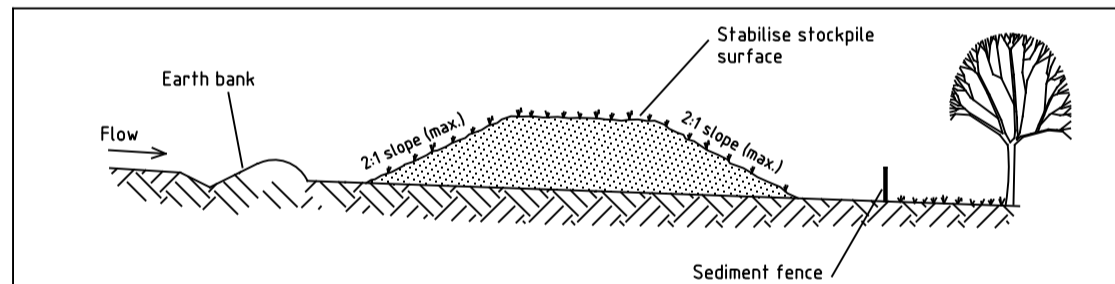


Construction Notes

1. Strip the topsoil, level the site and compact the subgrade.
2. Cover the area with needle-punched geotextile.
3. Construct a 200 mm thick pad over the geotextile using road base or 30 mm aggregate.
4. Ensure the structure is at least 15 metres long or to building alignment and at least 3 metres wide.
5. Where a sediment fence joins onto the stabilised access, construct a hump in the stabilised access to divert water to the sediment fence

STABILISED SITE ACCESS

SD 6-14

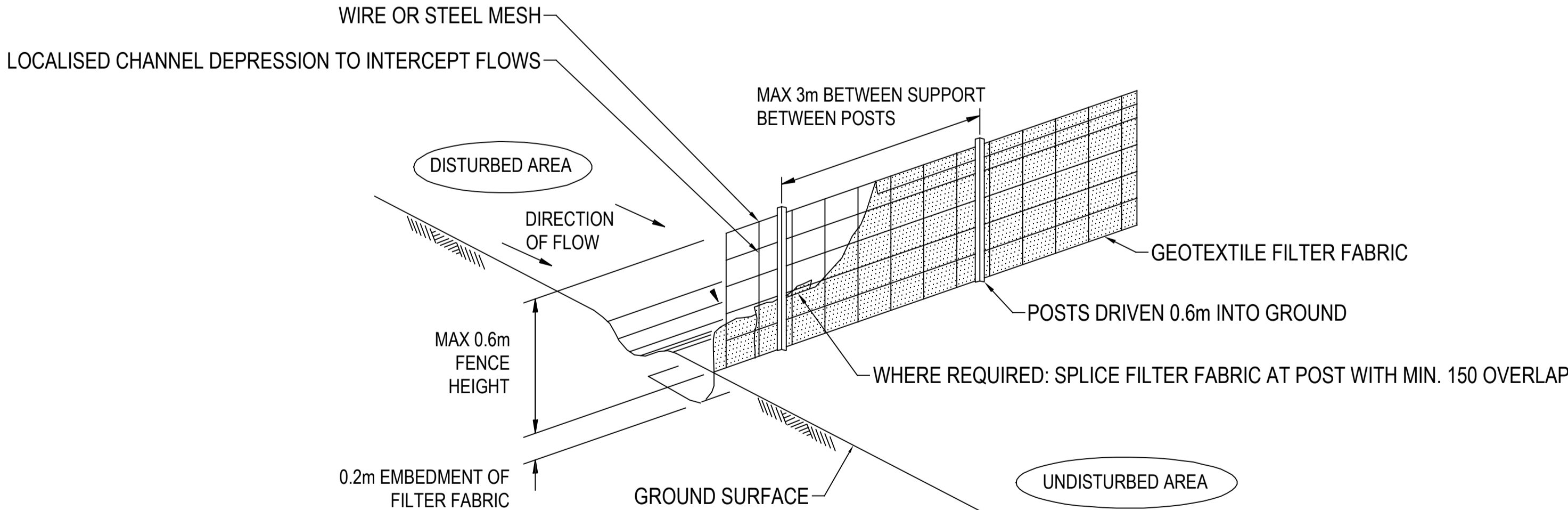
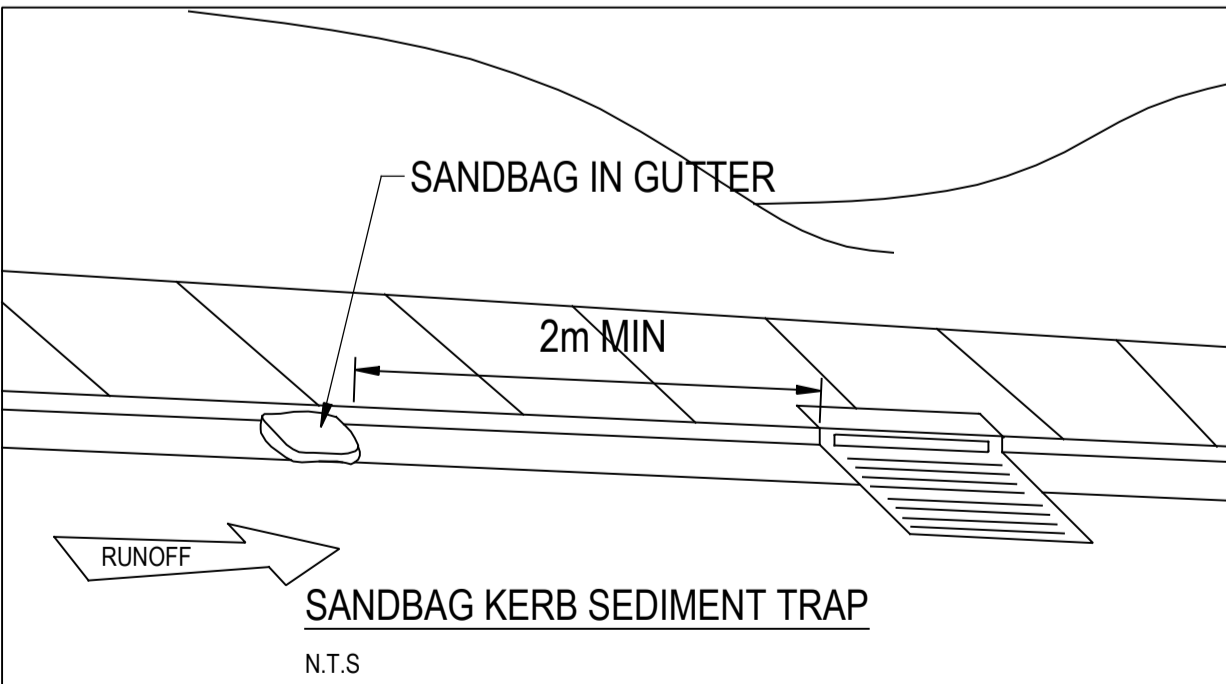


Construction Notes

1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds.
3. Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
4. Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

STOCKPILES

SD 4-1



TEMPORARY SEDIMENT FENCE

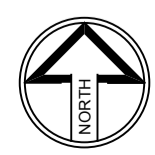
NOT TO SCALE
BUILDER TO COORDINATE APPROPRIATE
CONSTRUCTION SEQUENCE WITH CONSIDERATION
FOR MATERIAL STORAGE AND ANTICIPATED
SEDIMENT MOVEMENT DURING CONSTRUCTION

REVISIONS / AMENDMENTS

Rev	Date	Description	Verified
P1	02.11.18	PRELIMINARY ISSUE	J.S.
P2	22.11.18	PRELIMINARY ISSUE	J.S.
P3	11.12.18	PRELIMINARY ISSUE	J.S.
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P7	09.10.19	PRELIMINARY ISSUE	J.S.

REVISIONS / AMENDMENTS

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PROJECT

WEE HUR REDFERN STUDENT
VILLAGE
13-23 GIBBONS STREET,
REDFERN, NSW 2016

TITLE

STORMWATER SERVICES
SOIL AND EROSION
CONTROL DETAIL

PRELIMINARY
NOT FOR CONSTRUCTION

DRAWN J.S. SCALE @ A1
CHECKED J.S.
APPROVED J.S. NTS
CREATED 08/19
JOB No. DRAWING No. REV

180391

C102

P7

SITE AREA TABULATION

OVERALL SITE AREA = 1365 m²

EXISTING SITE AREAS

IMPERMEABLE AREAS = 1144 m²
PERMEABLE AREAS = 221 m²

PERCENTAGE IMPERMEABLE = 84 %P

PROPOSED SITE AREAS

LANEWAY AREA DRAINING TO FILTERRA TREE PIT = 330 m²
ROOF & HARDSTAND AREA DRAIN TO FILTERRA GARDEN = 998 m²
BYPASS AREA = 37 m²

TOTAL AREAS = 1365 m²

PERCENTAGE IMPERMEABLE = 100 %



BOUNDARY WITH BP STATION, EXISTING WALL AT THIS LOCATION

LANEWAY, FLOOD DRAIN AND LANDSCAPING AREA, TOTAL CATCHMENT AREA 330 m² DRAINING INTO FILTERRA TREE/SHRUB PIT

FLOOD DRAIN 800mm WIDTH DETAIL. REFER TO C401

LANDSCAPING AREAS

KERB RETURN

FILTERRA TREE/SHRUB PIT

BYPASS CATCHMENT AREA 37 m²

ROOF, BALCONIES AND HARDSTAND CATCHMENT AREAS 998 m² DRAINING TO FILTERRA GARDEN

FILTERRA GARDEN

POSSIBLE BYPASS CATCHMENT AREA. ASSUME 37 m² FOR A CONSERVATIVE CALCULATION



REVISIONS / AMENDMENTS				REVISIONS / AMENDMENTS			
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PROJECT
WEE HUR REDFERN STUDENT
VILLAGE
13-23 GIBBONS STREET,
REDFERN, NSW 2016

TITLE
STORMWATER SERVICES
GROUND LEVEL
SITE AREA TABULATION

PRELIMINARY
NOT FOR CONSTRUCTION

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APPROVED J.S. 1:100
CREATED 08/19
JOB No. DRAWING No. REV

180391 C201 P7

JHA CONSULTING ENGINEERS

Address: Wee Hur Student Village Redfern, NSW 2016

OSD TANK SIZING

Development Site Area Ar = 1365 m²

Sydney Water OSD volume requirement = 24 m³

1) Provide OSD tank plan area 31 m²

Required OSD tank min depth 0.78 m

Sydney Water PSD requirement = 48 l/s

Orifice Calculation

Top water level TWL = 23.83 m

Outlet pipe invert level IL_{outlet} = 22.95 m

2) Diameter of orifice d = 150 mm

Diameter of outlet Pipe d = 225 mm

Center of orifice = 23.063 m

Invert of orifice or tank = 22.988 m

Head for orifice H = 0.767 m

C = 0.6 (Orifice 0.6, Pipe 0.8)

Q = C.A.√(2.g.h)

Capacity of one orifice Q = 41.1 l/sec

No. of orifices used = 1 Orifice

Total discharge Q_{tot} = 41.1 l/sec

PSD Q_{psd} = 48 l/sec OK!

ORIFICE PLATE 150mm Ø
OUTLET PIPE 225mm Ø
DETAIL TO C301

300mm Ø INLET PIPE TO OSD TANK

FILTERRA GARDEN (AREA 6.5m²)
DETAIL REFER TO C301

FILTERRA INLET PIT FOR
DOWNPIPES FROM ROOF
(REFER TO HYDRAULIC DRAWINGS).
DUCTILE IRON GRATES TO COS
STANDARD

LEGEND

- PROPERTY BOUNDARY
- PROPOSED PIPE NETWORK
- EXISTING PIPE NETWORK
- SURFACE FLOW PATH

REVISIONS / AMENDMENTS				REVISIONS / AMENDMENTS			
Rev	Date	Description	Verified	Rev	Date	Description	Verified
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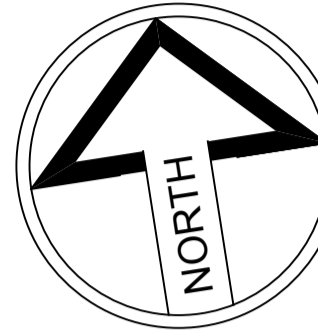
PROJECT
**WEE HUR REDFERN STUDENT
VILLAGE**
13-23 GIBBONS STREET,
REDFERN, NSW 2016

TITLE
**STORMWATER SERVICES
GROUND LEVEL
OVERALL DRAINAGE LAYOUT
GRATES COVER TYPES
OSD CALCULATION**

PRELIMINARY
NOT FOR CONSTRUCTION

DRAWN J.S. SCALE @ A1
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APPROVED J.S. **1:100**
CREATED 08/19
JOB No. DRAWING No. REV

180391 C202 P7



PROPOSED 800mm WIDTH FLOOD DRAIN
WITH BESPOKE GRATE COVER, DUCTILE
IRON GRATE TO COS SPECIFICATION

OSD TANK TO SYDNEY WATER REQUIREMENT
SSR : 24m³
PSD : 48 l/s

225mm Ø INLET PIPE TO OSD TANK

FILTERRA OUTLET CHAMBER. DUCTILE IRON
GRATE TO COS STANDARD

FILTERRA SHRUB PIT (3.5m²),
DETAIL REFER TO C204.

FILTERRA INLET CHAMBER. DUCTILE IRON GRATE
TO COS STANDARD

TRENCH DRAIN (BESPOKE DUCTILE IRON GRATES TO C.O.S.
PUBLIC DOMAIN SPECIFICATION).

900X900 PIT DUCTILE IRON GRATE TO COS STANDARD,
REFER TO C203 FOR FURTHER DETAIL

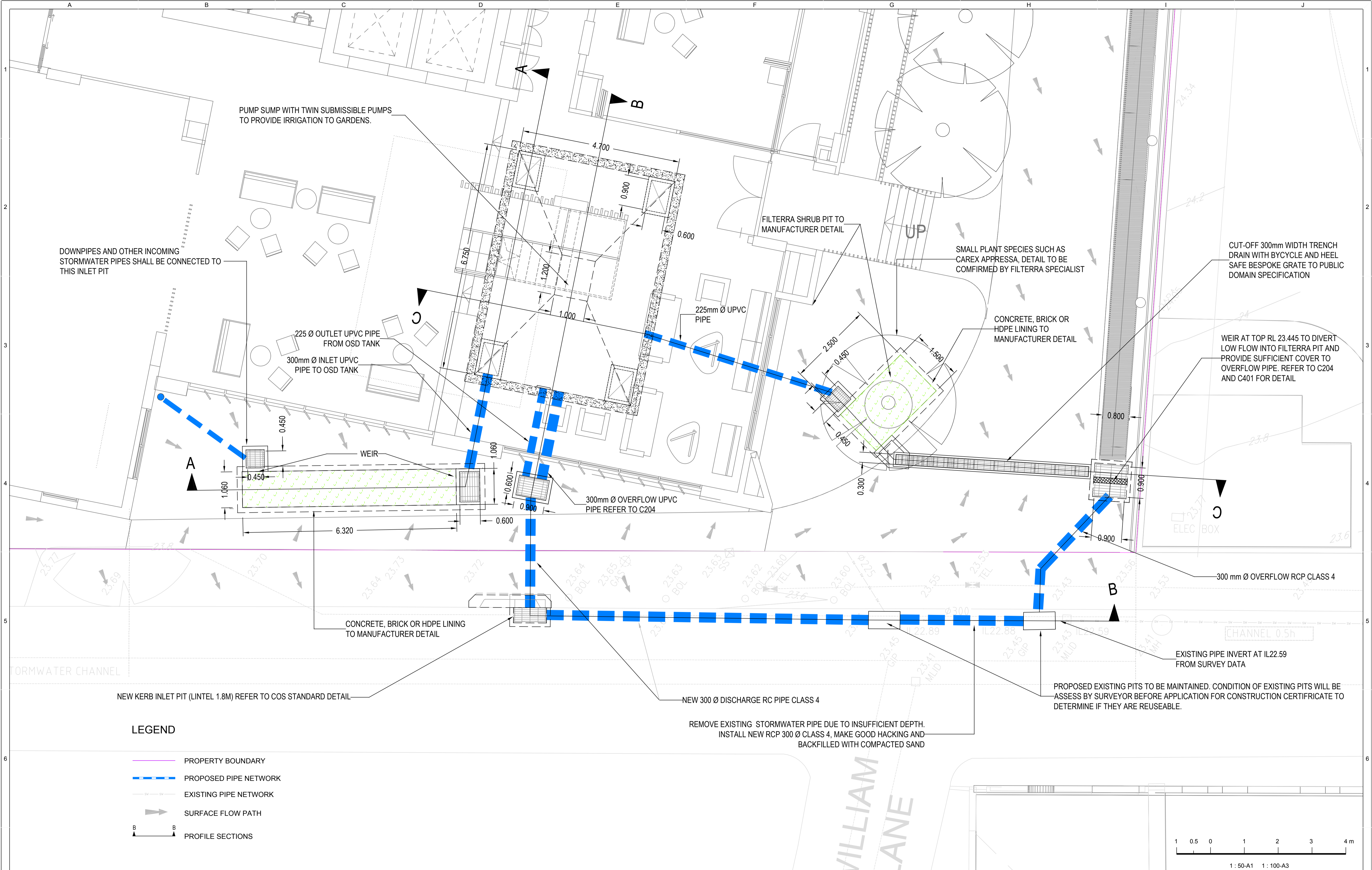
NEW 300mm Ø RC PIPES CLASS 4

EXISTING KERB INLET PITS TO BE MAINTAINED.
REFER TO C203 FOR FURTHER DETAIL

CONNECTION TO EXISTING KERB INLET PITS. CONTRACTOR
TO APPLY APPROVAL FROM THE RELEVANT AUTHORITIES,
MAKE GOOD AND COMPLY TO RELEVANT STANDARDS.

2 1 0 2 4 6 8 m

1 : 100-A1 1 : 200-A3



REVISIONS / AMENDMENTS				REVISIONS / AMENDMENTS			
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PROJECT
**WEE HUR REDFERN STUDENT
VILLAGE**
13-23 GIBBONS STREET,
REDFERN, NSW 2016

TITLE
STORMWATER SERVICES
GROUND LEVEL
OSD TANK DIMENSION
PIT AND PIPE DIMENSION

PRELIMINARY
NOT FOR CONSTRUCTION

DRAWN	J.S.	SCALE @ A1
CHECKED	J.S.	1:50
APPROVED	J.S.	
CREATED	08/19	
JOB No.	DRAWING No.	REV
180391	C203	P7



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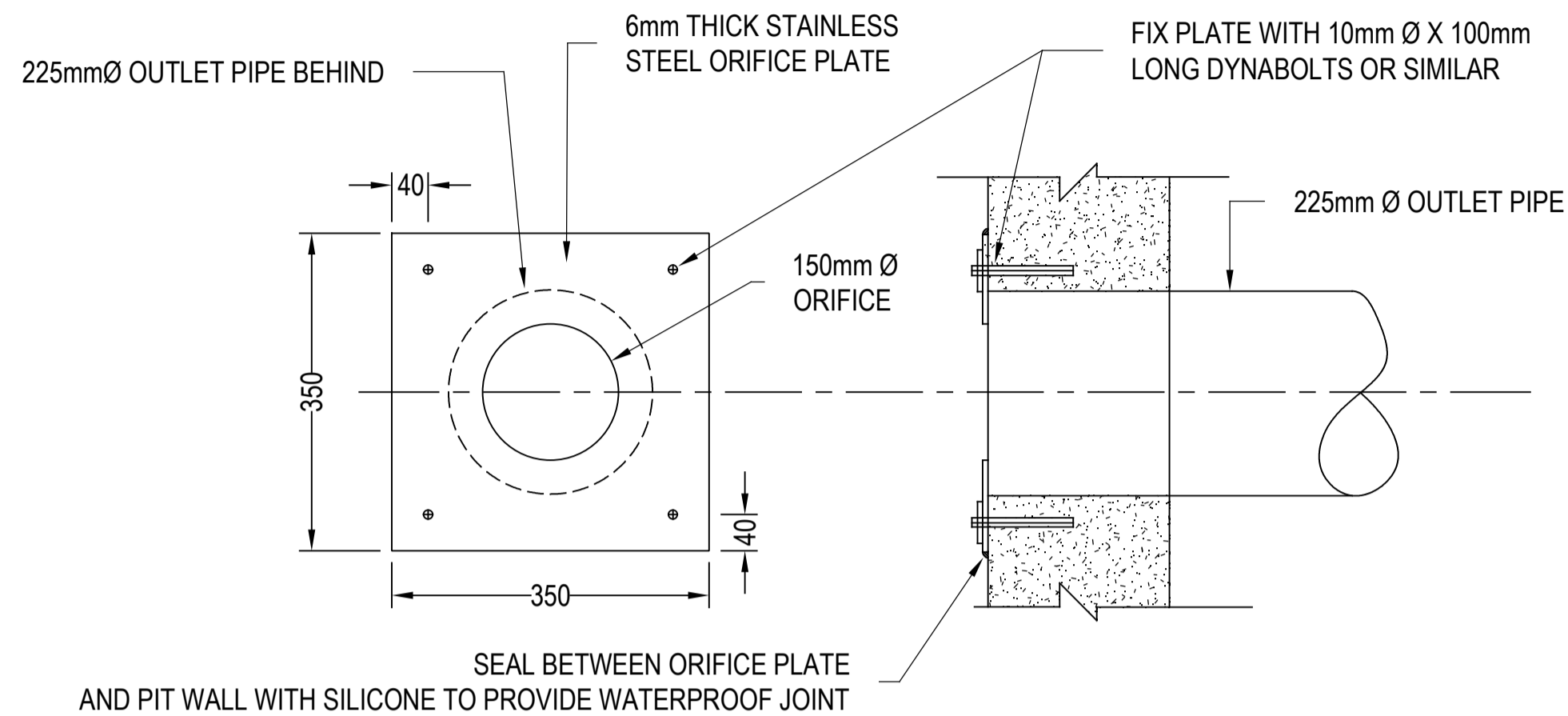
PROJECT

**WEE HUR REDFERN STUDENT
VILLAGE**

13-23 GIBBONS STREET,
REDFERN, NSW 2016

TITLE	STORMWATER SERVICES DRAINAGE SECTIONS INVERT AND SURFACE LEVELS
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<h1 style="text-align: center;">PRELIMINARY</h1> <p style="text-align: center;">NOT FOR CONSTRUCTION</p>		
DRAWN	J.S.	SCALE @ A1
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APPROVED	J.S.	1:40
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JOB No.	DRAWING No.	REV
180391	C204	P7

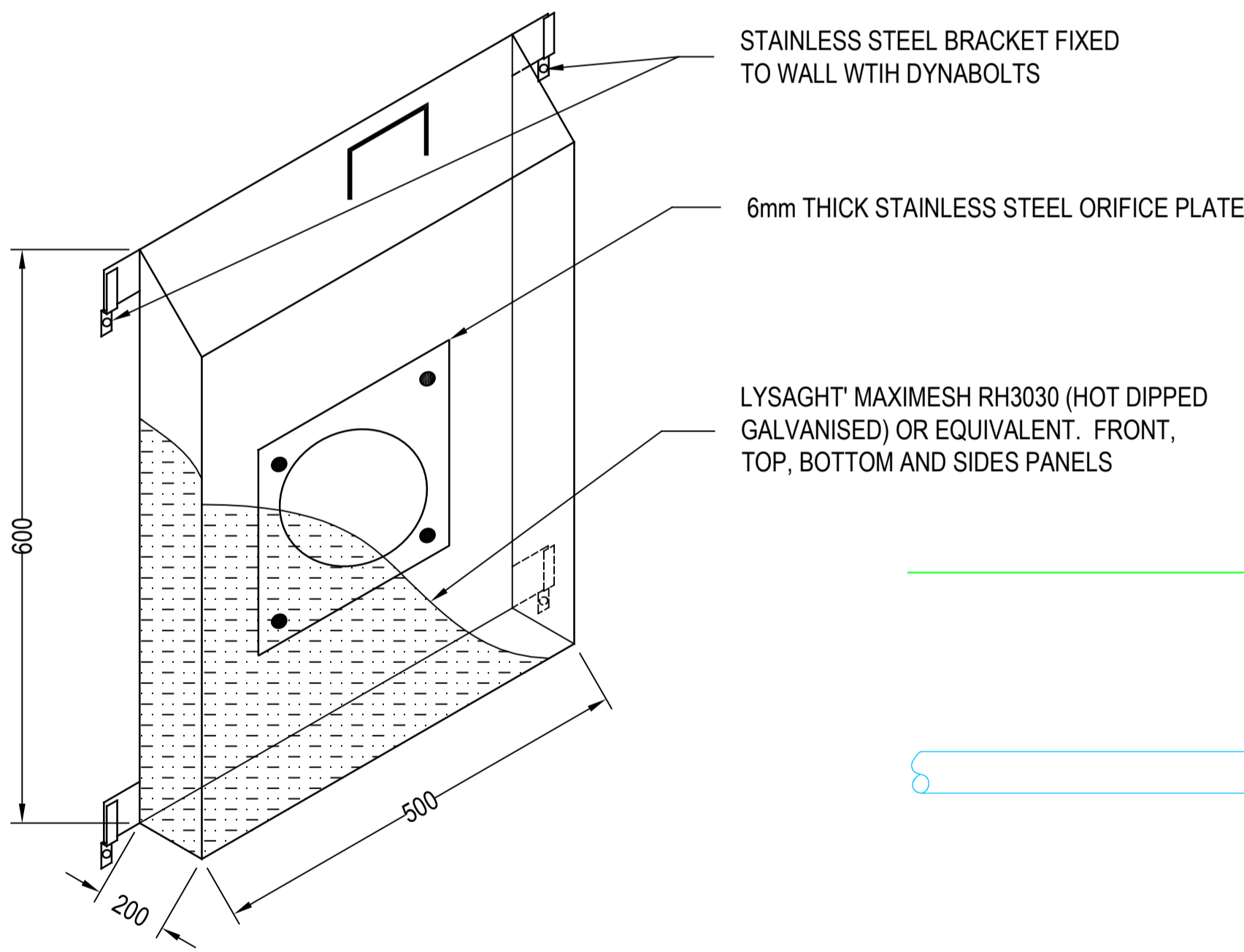


ORIFICE PLATE DETAIL
SCALE: NTS

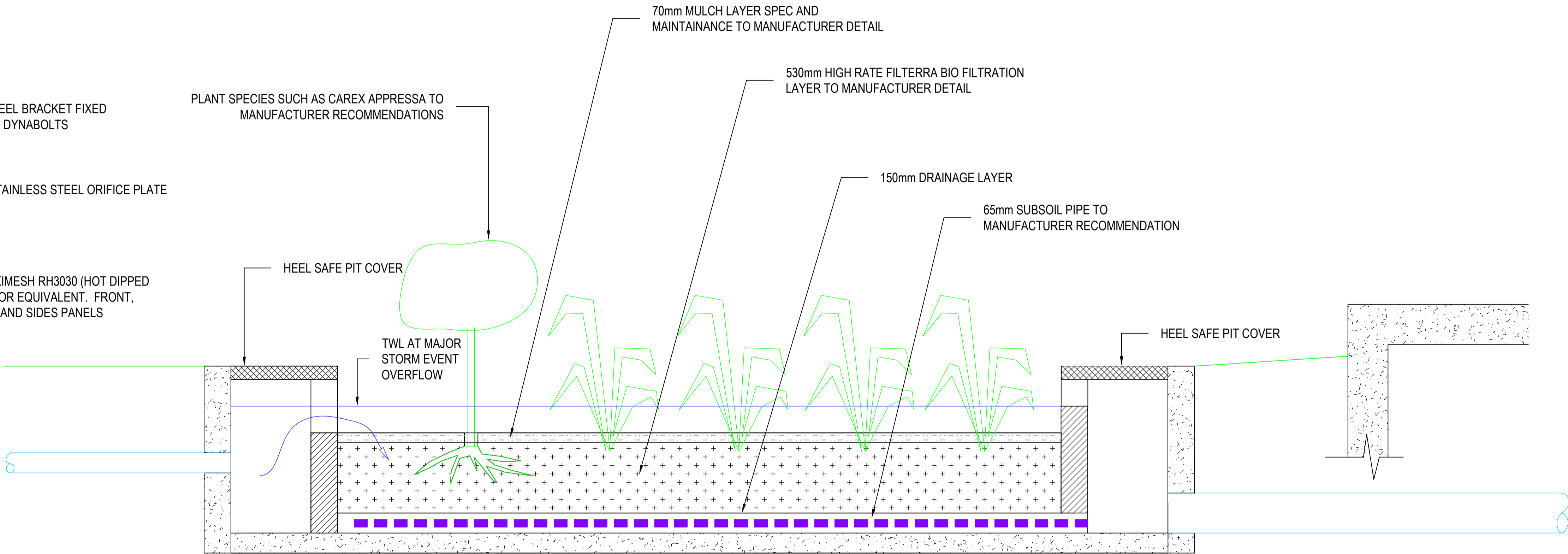


- ORIFICE PLATE NOTES
- HOLE IN ORIFICE PLATE TO BE PRECISION CUT WITH SHARP EDGES TO THE SPECIFIED DIAMETER.
 - ORIFICE PLATE TO BE PLACED CENTRALLY OVER THE OUTLET PIPE.
 - PLATE TO BE MADE FROM STAINLESS STEEL. HOT DIPPED GALVANISED OR OTHERS NOT ACCEPTABLE.
 - OUTLET PIPE TO BE CAST INTO THE WALL OF THE PIT.
 - HOLE IN PLATE TO BE CENTRALLY PLACED.

- TRASH SCREEN NOTES
- MAXIMESH SCREEN 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
 - THE SCREEN IS TO BE FORMED BY WELDING TWO TRIANGULAR MAXIMESH (OR EQUIVALENT) PANELS TO A RECTANGULAR FRONT MAXIMESH PANEL (OR EQUIVALENT)

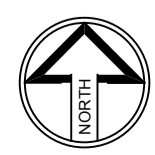


TRASH SCREEN DETAIL
SCALE: NTS



TYPICAL FILTERRA LAYERS DETAIL
SCALE: NTS

REVISIONS / AMENDMENTS				REVISIONS / AMENDMENTS			
Rev	Date	Description	Verified	Rev	Date	Description	Verified
P1	02.11.18	PRELIMINARY ISSUE	J.S.				
P2	22.11.18	PRELIMINARY ISSUE	J.S.				
P3	11.12.18	PRELIMINARY ISSUE	J.S.				
P4	19.12.18	PRELIMINARY ISSUE	J.S.				
P5	11.01.19	PRELIMINARY ISSUE	J.S.				
P6	14.08.19	PRELIMINARY ISSUE	J.S.				
P7	09.10.19	PRELIMINARY ISSUE	J.S.				



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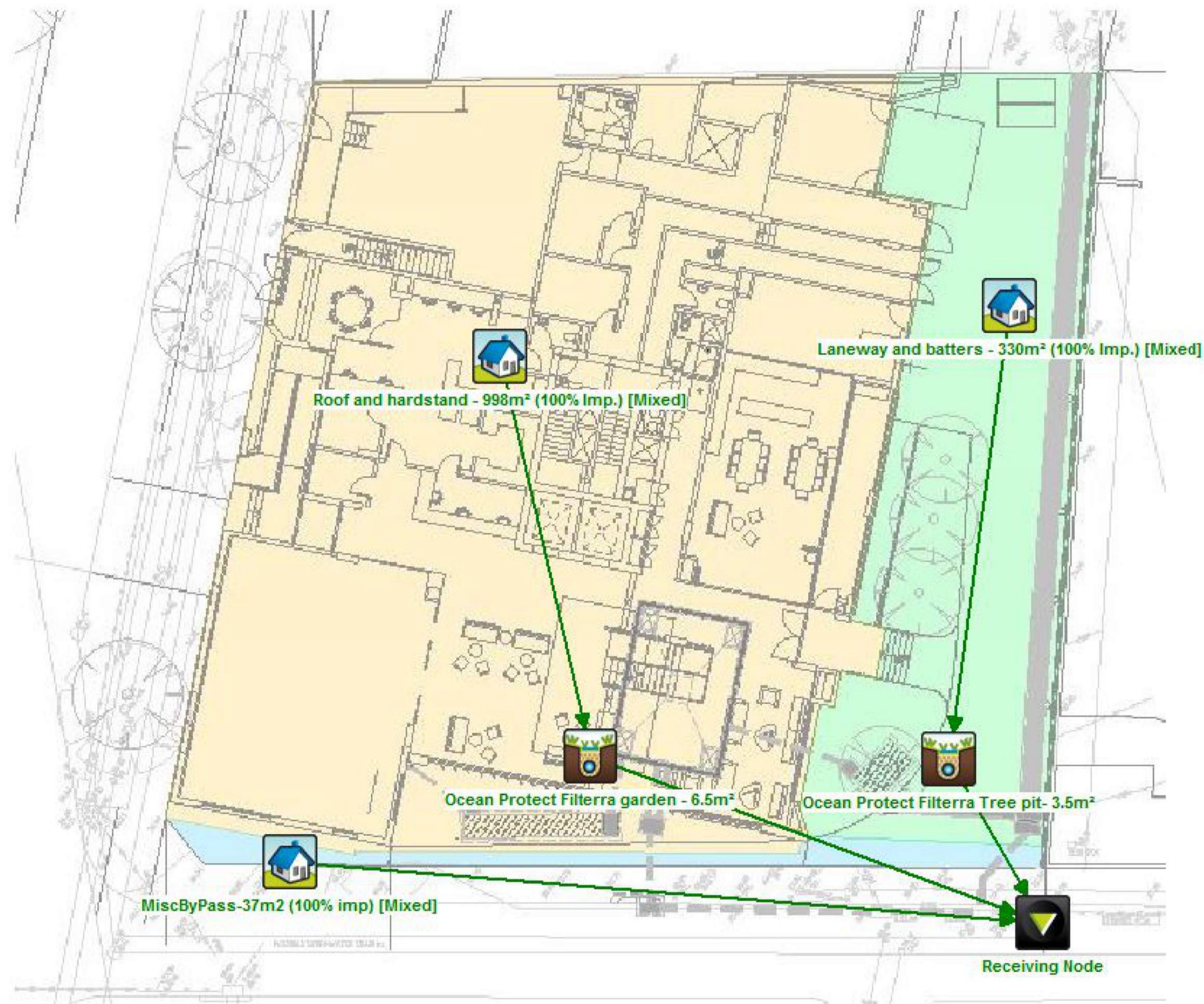
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PROJECT
WEE HUR REDFERN STUDENT
VILLAGE
13-23 GIBBONS STREET,
REDFERN, NSW 2016


TITLE
STORMWATER SERVICES
ORIFICE PLATE DETAIL
TYPICAL FILTERRA DETAIL

PRELIMINARY
NOT FOR CONSTRUCTION

DRAWN	J.S.	SCALE @ A1
CHECKED	J.S.	
APPROVED	J.S.	NTS
CREATED	08/19	
JOB No.	DRAWING No.	REV
180391	C301	P7





Results

Parameter	Min	Max	Actual	Result
Other Nodes				
Receiving Nodes				
Receiving Node				
REPORT				
% Load Reduction	None	None	1.36	✔
GP % Load Reduction	90	None	97.3	✔
TN % Load Reduction	45	None	66.8	✔
TP % Load Reduction	65	None	85.3	✔
TSS % Load Reduction	85	None	88.8	✔
Source Nodes				
Urban Source Nodes				
Laneway and batters - 330m² (100% Imp.)				
AREA				
Area Impervious (ha)	None	None	0.033	✔
Area Pervious (ha)	None	None	0	✔
Total Area (ha)	None	None	0.033	✔

▼
Next Steps

▼
Create Report

REVISIONS / AMENDMENTS					REVISIONS / AMENDMENTS				
Rev	Date	Description	Verified		Rev	Date	Description	Verified	
7	P1	02.11.18	PRELIMINARY ISSUE	J.S.					
	P2	22.11.18	PRELIMINARY ISSUE	J.S.					
	P3	11.12.18	PRELIMINARY ISSUE	J.S.					
	P4	19.12.18	PRELIMINARY ISSUE	J.S.					
	P5	11.01.19	PRELIMINARY ISSUE	J.S.					
	P6	14.08.19	PRELIMINARY ISSUE	J.S.					
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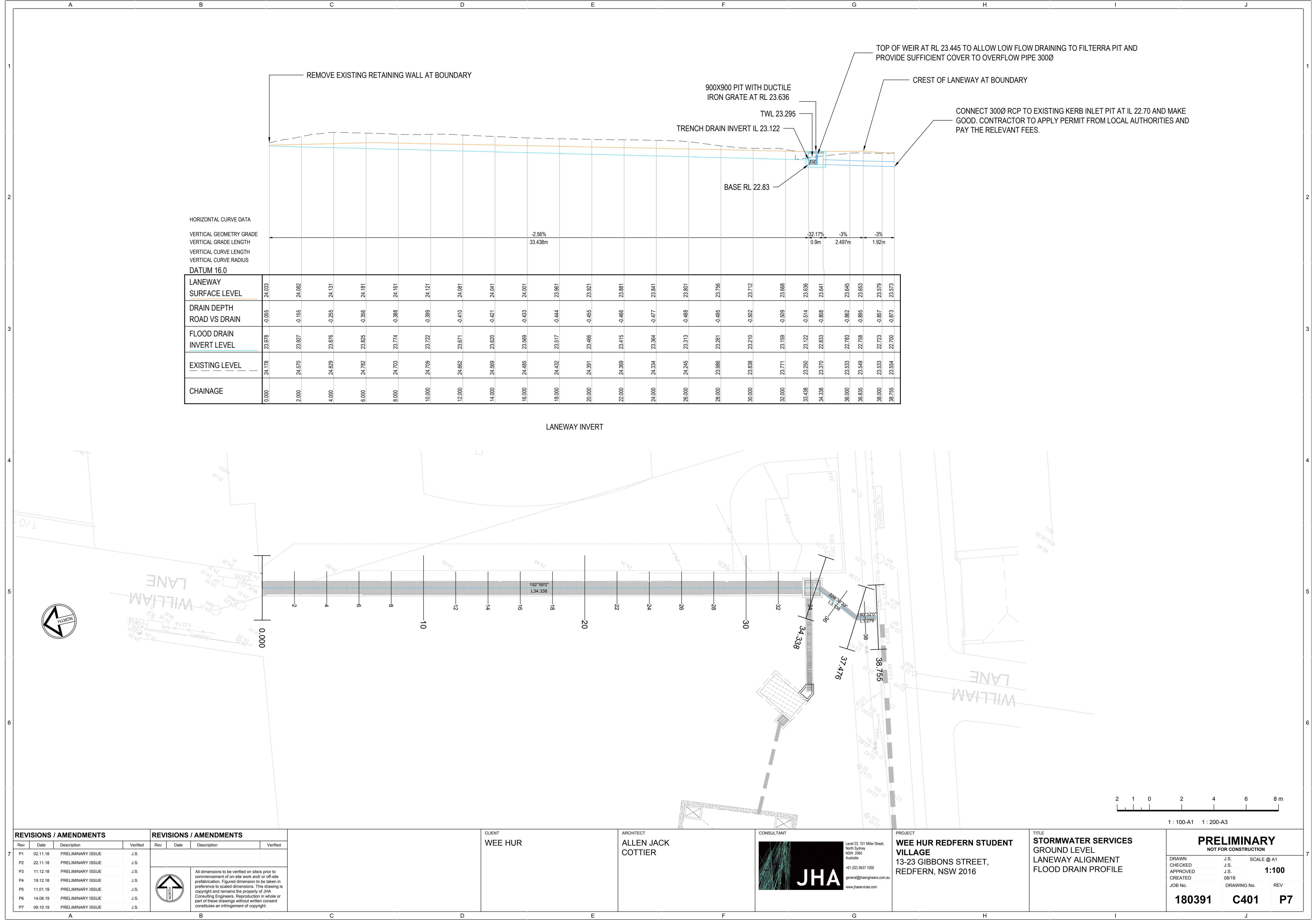
PROJECT
**WEE HUR REDFERN STUDENT
VILLAGE**
13-23 GIBBONS STREET,
REDFERN, NSW 2016

TITLE	STORMWATER SERVICES WATER SENSITIVE URBAN DESIGN MUSIC ANALYSIS AND RESULTS	
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CHECKED	J.S.	NTS
APPROVED	J.S.	
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JOB No.	DRAWING No.	REV

180391	C302	P7
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REVISIONS / AMENDMENTS				REVISIONS / AMENDMENTS			
Rev	Date	Description	Verified	Rev	Date	Description	Verified
P1	02.11.18	PRELIMINARY ISSUE	J.S.	<div><div></div><div>All dimensions to be verified on site/s prior to commencement of on-site work and/ or off-site prefabrication. Figured dimension to be taken in preference to scaled dimensions. This drawing is copyright and remains the property of JHA Consulting Engineers. Reproduction in whole or part of these drawings without written consent constitutes an infringement of copyright.</div></div>			
P2	22.11.18	PRELIMINARY ISSUE	J.S.				
P3	11.12.18	PRELIMINARY ISSUE	J.S.				
P4	19.12.18	PRELIMINARY ISSUE	J.S.				
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P7	09.10.19	PRELIMINARY ISSUE	J.S.				

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Rev	Date	Description	Verified

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PROJECT
WEE HUR REDFERN STUDENT VILLAGE 13-23 GIBBONS STREET, REDFERN, NSW 2016

TITLE
STORMWATER SERVICES GROUND LEVEL LANEWAY ALIGNMENT FLOOD DRAIN PROFILE

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CHECKED	J.S.		
APPROVED	J.S.	1:100	
CREATED	08/19		
JOB No.	DRAWING No.	REV	
180391	C401	P7	