

26-42 EDEN STREET & 161-179 PRINCES HIGHWAY, ARNCLIFFE

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.
- Strip all topsoil from the construction area. All stripped topsoil shall be disposed of off-site unless directed otherwise.
- Make smooth connection with all existing works.
- Compact subgrade under buildings and pavements to minimum 98% standard maximum dry density in accordance with AS 1289 5.1.1. Compaction under buildings to extend 2m minimum beyond building footprint.
- 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, the Contractor is to ensure that the drawings used for construction have been approved by all relevant authorities prior to commencement site.
- 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 requirements of the relevant Authority. The Contractor shall obtain these requirements from the Authority. Where the requirements of the Authority are different to the drawings and specifications, the requirements of the Authority shall be applicable.
- For all temporary batters refer to geotechnical recommendations.

REFERENCE DRAWINGS

These drawings have been based from, and to be read in conjunction with the following Consultants drawings. Any conflict to the drawings must be notified immediately to the Engineer.

Consultant	Dwg Title	Dwg No	Rev	Date
GROUP GSA	LANDSCAPE GENERAL ARRANGEMENT PLAN			
	LOWER GROUND LEVEL	DA9200	4	11/05/21
	UPPER GROUND LEVEL	DA9201	5	11/05/21
	BASEMENT LEVEL 1	DA2003	13	10/05/21
	LOWER GROUND LEVEL	DA2004	13	10/05/21
CARDNO	UPPER GROUND LEVEL	DA2005	13	10/05/21
	BOUNDARIES, DETAIL CONTOUR SURVEY	11834500	02	05/07/17

SURVEY AND SERVICES INFORMATION

SURVEY

Origin of levels : RL –
Datum of levels : A.H.D. AUSTRALIAN HEIGHT DATUM
Coordinate system : MGA
Survey prepared by : CARDNO
Setout Points : SSM 105190

Taylor Thomson Whitting 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 whatsoever.

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.

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: CARDNO dated 05/07/17
23–25 FREDERICK STREET, ROCKDALE NSW 2216
PH: 9597 9700

Taylor Thomson Whitting makes no guarantees that the boundary or easement 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.

SAFETY IN DESIGN

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

EXISTING SERVICES

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 relocate.

EXISTING STRUCTURES

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).

EXISTING TREES

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 protect trees.

GROUNDWATER

Contractor to be aware ground water levels are close to existing surface level. Temporary de-watering may be required during construction works.

EXCAVATIONS

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.

GROUND CONDITIONS

Contractor to be aware of the site geotechnical conditions, refer to geotechnical report by (insert report details) for details.

HAZARDOUS MATERIALS

Existing asbestos products & contaminated material may be present on site. Contractor to ensure all hazardous materials are identified prior to commencing works. Safe working practices as per relevant authority to be adopted and appropriate PPE to be used when handling all hazardous materials. Refer to geotechnical/environmental report by (insert report details) for details.

CONFINED SPACES

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.

MANUAL HANDLING

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.

WATER POLLUTION

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

SITE ACCESS/EGRESS

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.

VEHICLE MOVEMENT

Contractor to supply and comply with traffic management plan and provide adequate site traffic control including a certified traffic marshal to supervise vehicle movements where necessary.

SITEWORKS NOTES

- All basecourse material to comply with RMS specification No 3051 and compacted to minimum 98% modified standard dry density in accordance with AS 1289 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 with an approved select material and compacted to a minimum 98% standard maximum dry density in accordance with AS 1289 5.1.1.

STORMWATER DRAINAGE NOTES

- Stormwater Design Criteria :
 - Average exceedance probability –
 - 1% AEP for roof drainage to first external pit
 - 5% AEP for paved and landscaped areas
 - Rainfall intensities –
 - Time of concentration: 5 minutes
 - 1% AEP =179.0 mm/hr
 - 5% AEP =168.0 mm/hr
 - Rainfall losses –
 - Impervious areas: IL = 1.5 mm , CL = 0 mm/hr
 - Pervious areas: IL =22.4mm , CL =0.84mm/hr
- Pipes #300 and larger to be reinforced concrete Class "2 " approved spigot and socket with rubber ring joints U.N.O.
- Pipes up to #300 may be sewer grade uPVC with solvent welded joints (subject to approval by the engineer).
- Equivalent strength VCP or FRP pipes may be used (subject to approval).
- Enlargers, connections and junctions to be manufacture fittings where pipes are less than #300.
- Where subsoil drains pass under floor slabs and vehicular pavements, unslopped uPVC sewer grade pipe is to be used.
- Grates and covers shall conform with AS 3996–2006, and AS 1428.1 for access requirements.
- Pipes are to be installed in accordance with AS 3725. All bedding to be type H12 U.N.O.
- Care is to be taken with invert levels of stormwater lines. Grades shown are not to be reduced without approval.
- All stormwater pipes to be #150 at 1.0% (MIN) fall U.N.O.
- Subsoil drains to be slopped flexible uPVC U.N.O.
- Adopt invert levels for pipe installation (grades shown are only nominal).

EXISTING SERVICES LEGEND

S	Existing sewer
W	Existing water
E	Existing electrical
T	Existing communications
G	Existing gas
SW	Existing stormwater

SITEWORKS LEGEND

● F22.20	Finished surface level
--- F22.00	Finished contour
==== K&G	Kerb and gutter
==== KO	Kerb only
==== [RWS]	Civil retaining wall type RWS
→ [] →	Stormwater pit and pipe line with flow direction
→ [] →	Suspended stormwater pipe line with flow direction to future detail
==== GD	Grated drain
→ [] →	Overland flow path
○ [RO]	Rain water outlet



SITE LOCALITY PLAN
NOT TO SCALE – IMAGE COURTESY OF NEARMAP

DRAWING SCHEDULE

No	DRAWING TITLE
C01	COVER SHEET, GENERAL NOTES, LOCALITY PLAN AND DRAWING SCHEDULE
C02 C03	SEDIMENT AND EROSION CONTROL PLAN SEDIMENT AND EROSION CONTROL DETAILS
C05	OVERALL STORMWATER PLAN
C07	STORMWATER MANAGEMENT PLAN - COUNCIL'S IN-GROUND PIPE
C09 C10	SITEWORKS PLAN, LOWER GROUND FLOOR SITEWORKS PLAN, UPPER GROUND FLOOR
C15 C16	OSD TANK DETAILS, SHEET 1 OSD TANK DETAILS, SHEET 2
C17	STORMWATER DETAILS, SHEET 1

ISSUED FOR SSDA

Rev	Description	Eng	Draft	Date	Rev	Description	Eng	Draft	Date
P2	ISSUED FOR SSDA	DT	LA	31.01.22					
P1	ISSUED FOR COMMENTS	DT	LA	27.05.21					

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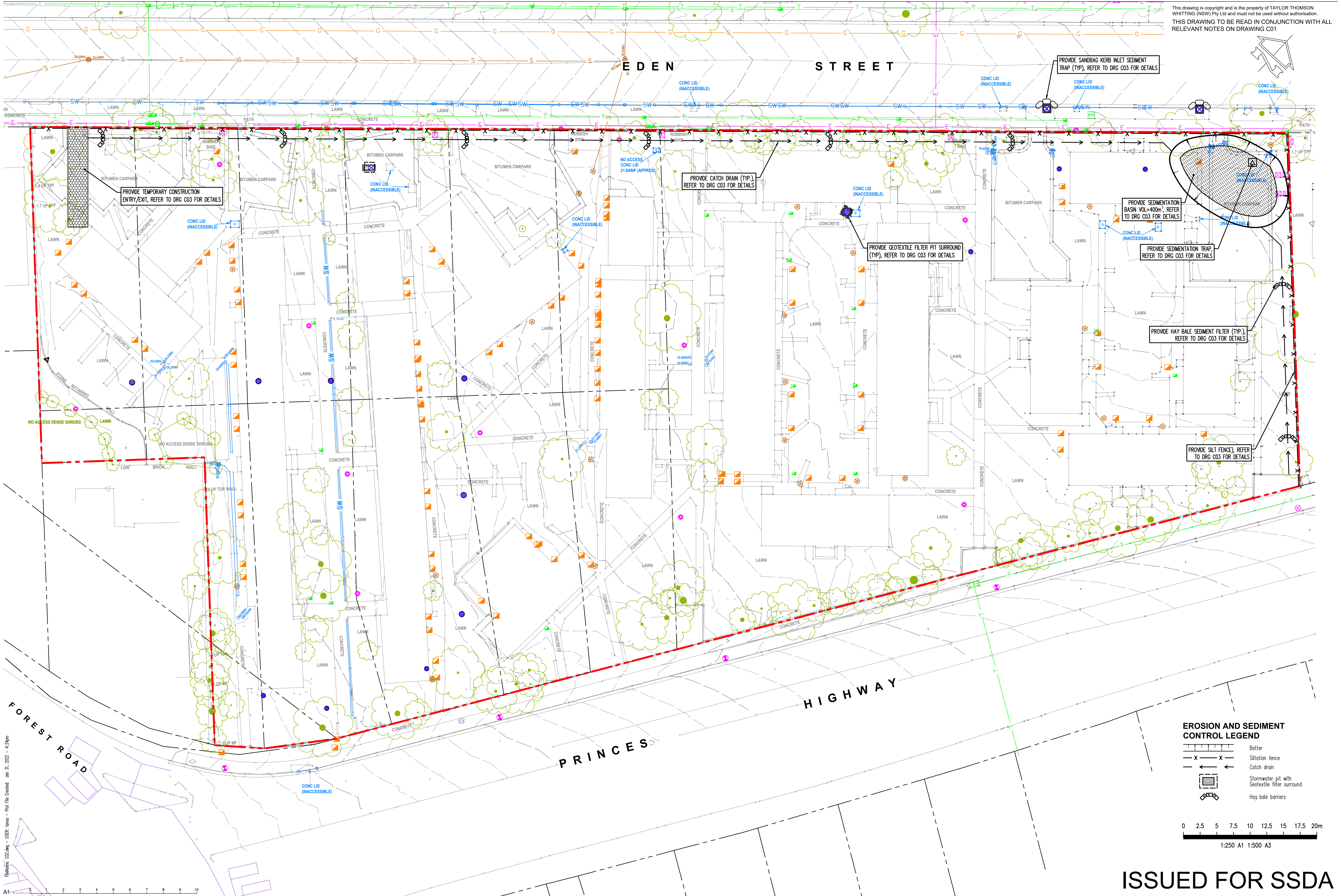
Project

26-42 EDEN STREET & 161-179 PRINCESS HIGHWAY, ARNCLIFFE

Sheet Subject

COVER SHEET, LOCALITY PLAN, GENERAL NOTES AND DRAWING SCHEDULE

Scale : A1	Drawn	Authorised
N/A	LA	NB
Job No	Drawing No	Revision
201609	C01	P2
Plot File Created: Jan 31, 2022 - 9:23pm		



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EROSION AND SEDIMENT CONTROL LEGEND

- Batter
- Siltation fence
- Catch drain
- Stormwater pit with Geotextile filter surround
- Hay bale barriers

0 2.5 5 7.5 10 12.5 15 17.5 20m
1:250 A1 1:500 A3

ISSUED FOR SSDA

Rev	Description	Eng	Draft	Date	Rev	Description	Eng	Draft	Date	Rev	Description	Eng	Draft	Date
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Sheet Subject
SEDIMENT AND EROSION
CONTROL PLAN

Scale : A1
1:250
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201609
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LA
Drawing No
C02
Authorised
NB
Revision
P2

EROSION AND SEDIMENT CONTROL NOTES

- All work shall be generally carried out in accordance with
(A) Local authority requirements,
(B) EPA – Pollution control manual for urban stormwater,
(C) LANDCOM NSW – Managing Urban Stormwater: Soils and Construction ("Blue Book").
- Erosion and sediment control drawings and notes are provided for the whole of the works. Should the Contractor stage these works then the design may be required to be modified. Variation to these details may require approval by the relevant authorities.
The erosion and sediment control plan shall be implemented and adapted to meet the varying situations as work on site progresses. Maintain all erosion and sediment control devices to the satisfaction of the superintendent and the local authority.
- When stormwater pits are constructed prevent site runoff entering the pits unless silt fences are erected around pits.
- Minimise the area of site being disturbed at any one time.
- Protect all stockpiles of materials from scour and erosion. Do not stockpile loose material in roadways, near drainage pits or in watercourses.
- All soil and water control measures are to be put back in place at the end of each working day, and modified to best suit site conditions.
- Control water from upstream of the site such that it does not enter the disturbed site.
- All construction vehicles shall enter and exit the site via the temporary construction entry/exit.
- All vehicles leaving the site shall be cleaned and inspected before leaving.
- Maintain all stormwater pipes and pits clear of debris and sediment. Inspect stormwater system and clean out after each storm event.
- Clean out all erosion and sediment control devices after each storm event.

Sequence Of Works

- Prior to commencement of excavation the following soil management devices must be installed.
- Construct silt fences below the site and across all potential runoff sites.
- Construct temporary construction entry/exit and divert runoff to suitable control systems.
- Construct measures to divert upstream flows into existing stormwater system.
- Construct sedimentation traps/basin including outlet control and overflow.
- Construct turf lined swales.
- Provide sandbag sediment traps upstream of existing pits.
- Construct geotextile filter pit surround around all proposed pits as they are constructed.
- On completion of pavement provide sand bag kerb inlet sediment traps around pits.
- Provide and maintain a strip of turf on both sides of all roads after the construction of kerbs.

WATER QUALITY TESTING REQUIREMENTS

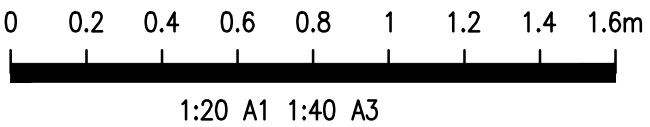
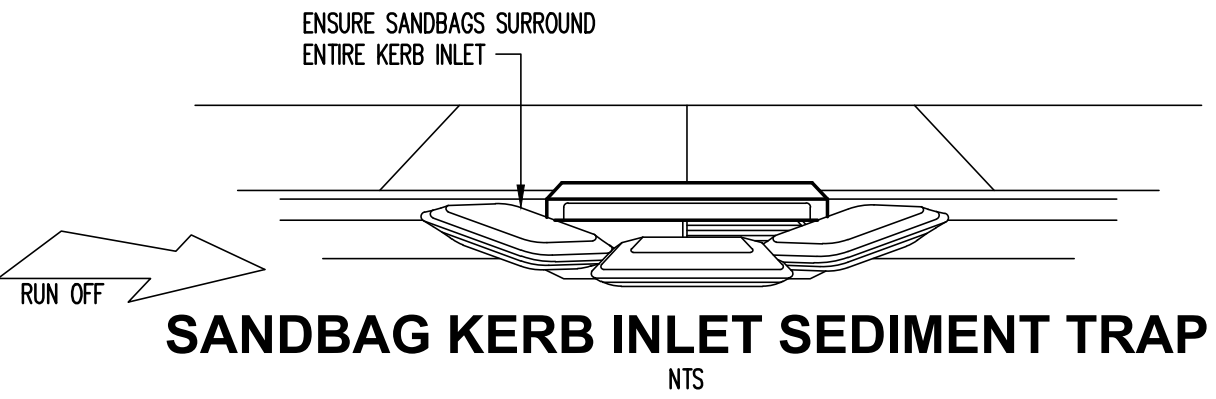
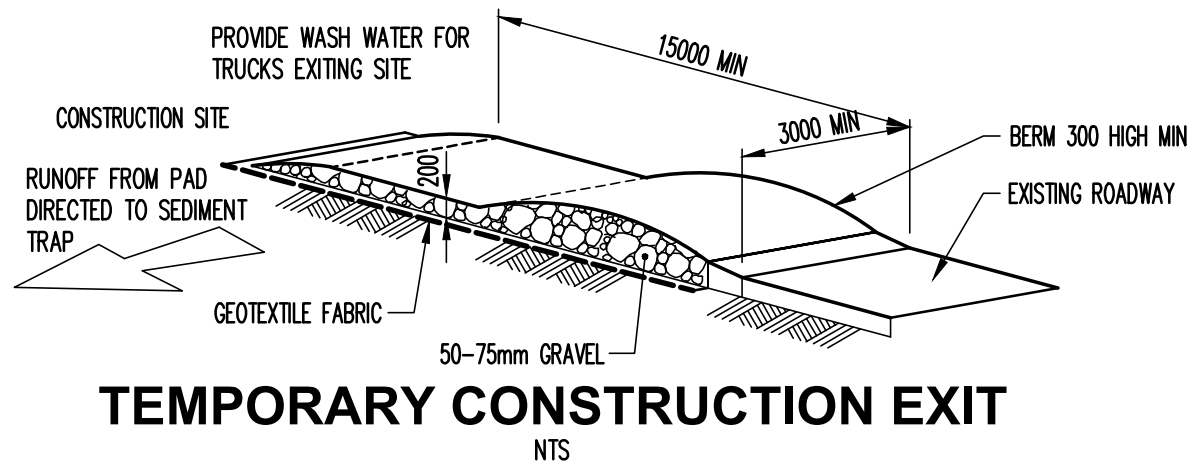
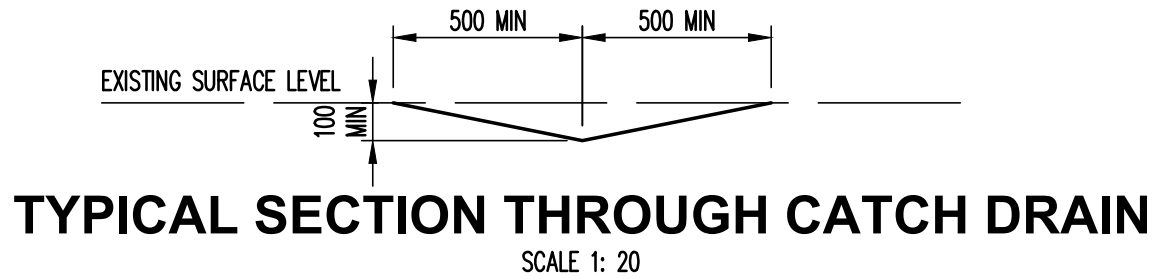
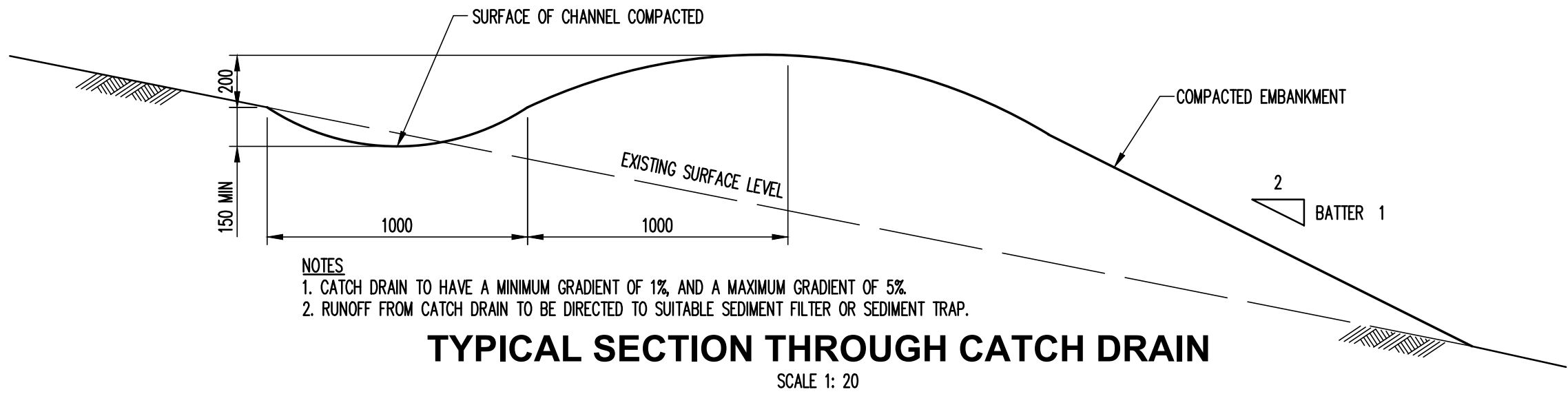
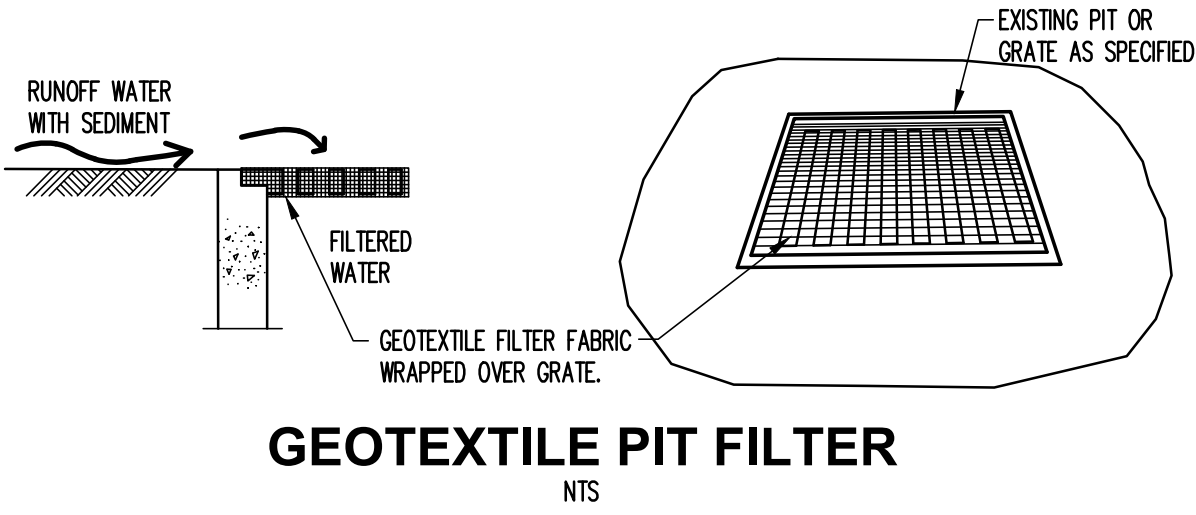
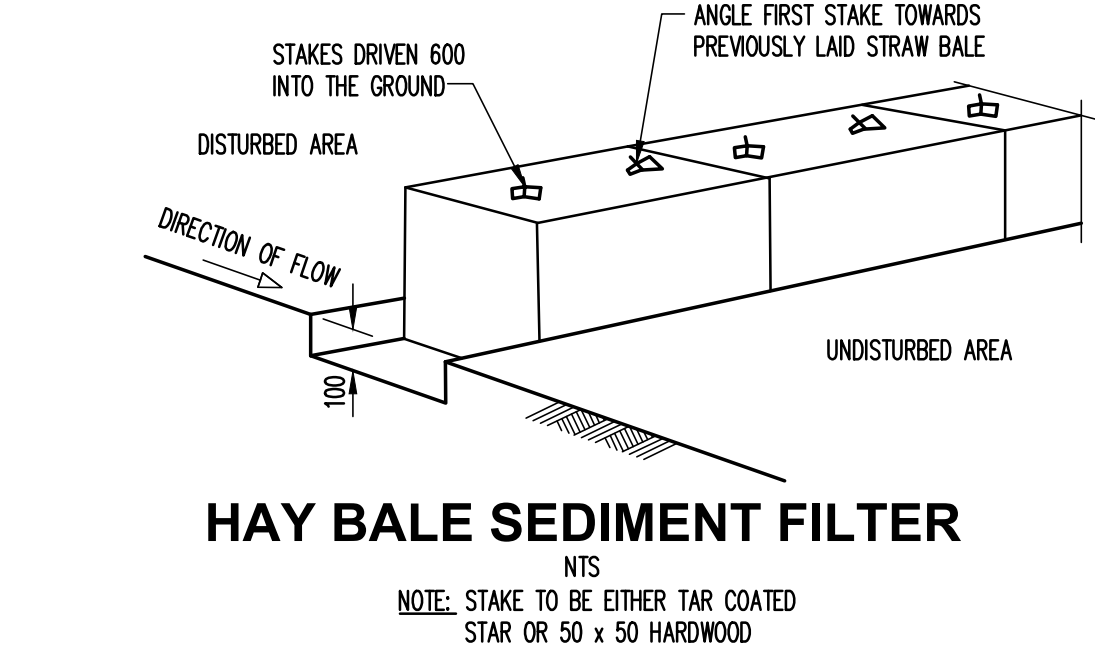
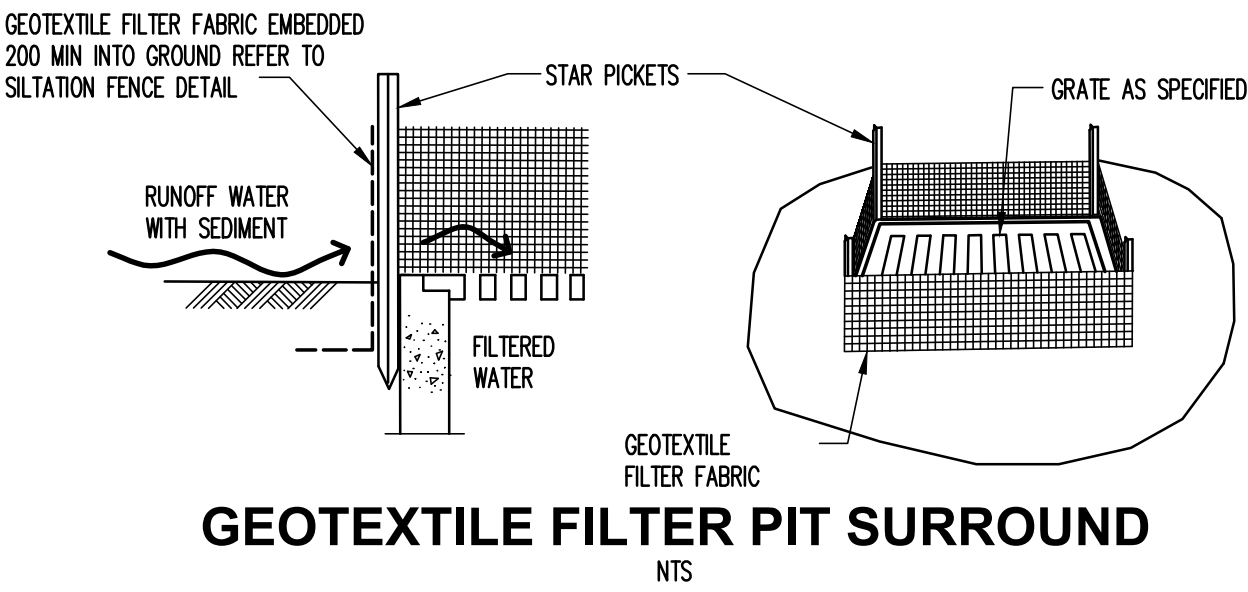
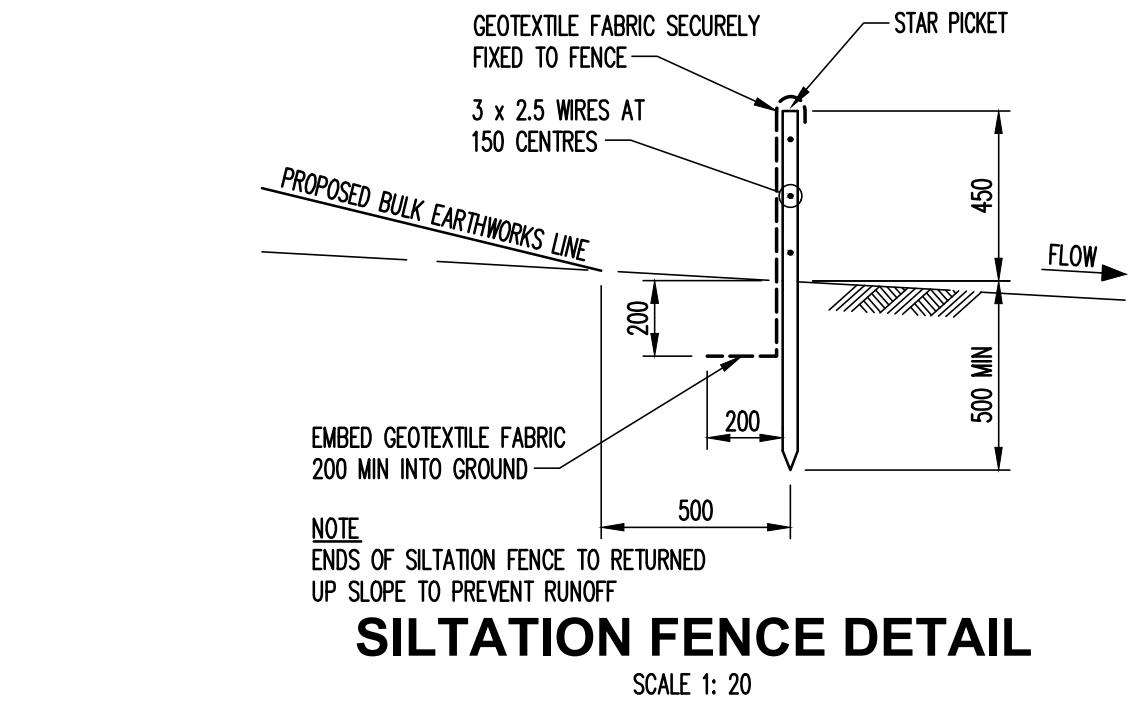
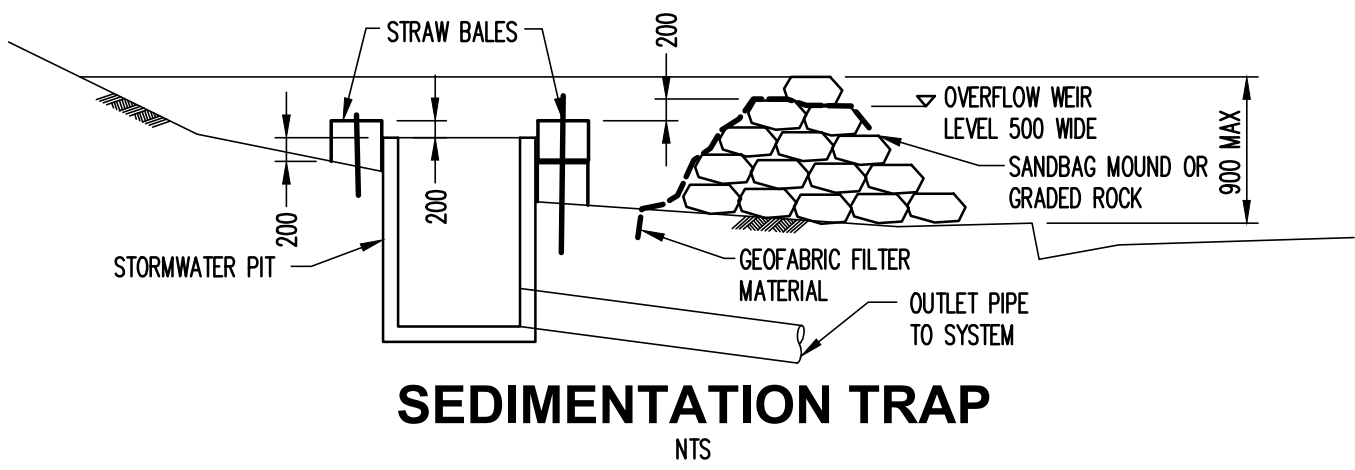
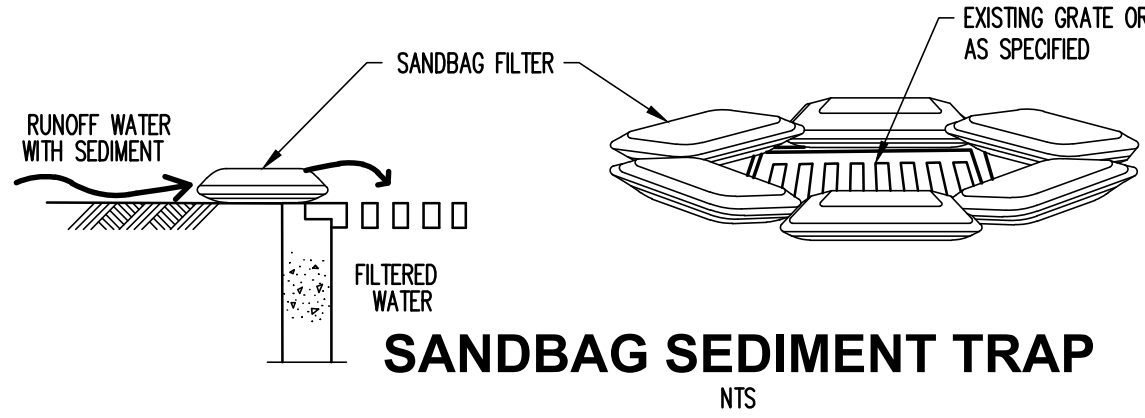
Prior to discharge of site stormwater, groundwater and seepage water into council's stormwater system, contractors must undertake water quality tests in conjunction with a suitably qualified environment consultant outlining the following:

- Compliance with the criteria of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000)
- If required subject to the environmental consultants advice, provide remedial measures to improve the quality of water that is to be discharged into Councils storm water drainage system. This should include comments from a suitably qualified environmental consultant confirming the suitability of these remedial measures to manage the water discharged from the site into Councils storm water drainage system. Outlining the proposed, ongoing monitoring, contingency plans and validation program that will be in place to continually monitor the quality of water discharged from this site. This should outline the frequency of water quality testing that will be undertaken by a suitably qualified environmental consultant.

PUMP OUT NOTES

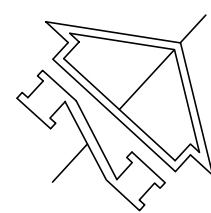
Any accumulated water contaminated with sediment, from a sediment basin or excavation pit, is to be flocculated or filtered in order to lower the suspended solid load to less than 50mg per litre. Gypsum gas or other approved flocculant should be applied within 24 hours of the end of the storm event. The gypsum must be spread evenly over the entire water surface. Pumping is not to occur for at least 36 hours and preferably 48 hours after application. Clean water is to be discharged to the water table via a hole ball sediment filter in a way that does not pick up sediment that has dropped to the bottom.

Note: gypsum is a hydrated form of calcium sulphate and is available at many swimming pool shops and hardware stores.

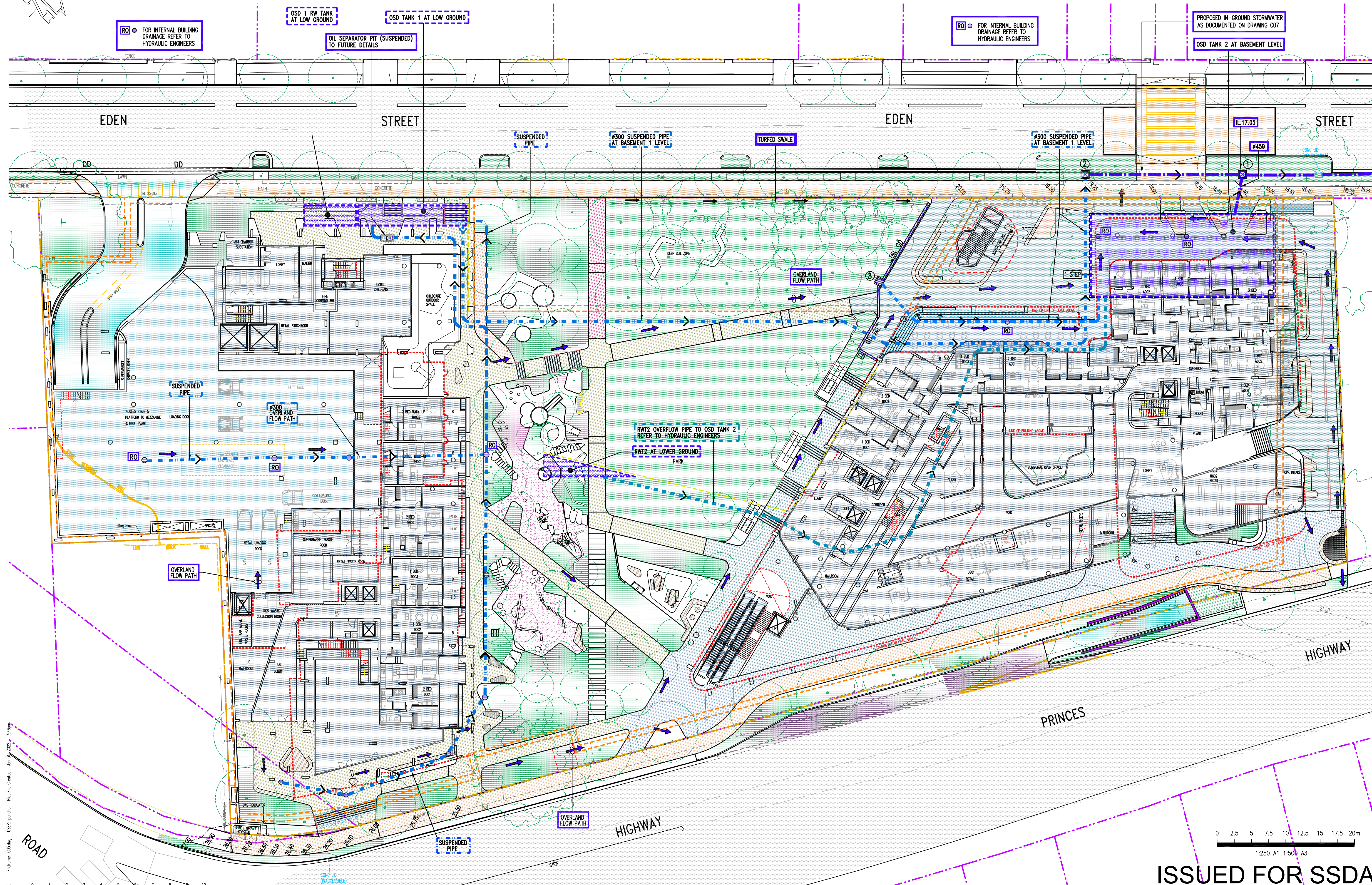


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P2 ISSUED FOR SSDA										DT LA 31.01.22																Job No				Drawing No				Revision			
P1 ISSUED FOR COMMENTS										DT LA 27.05.21																201609				C03				P2			
Rev Description										Eng Draft Date				Rev Description				Eng Draft Date																Plot File Created: Jan 31, 2022 - 4:25pm			



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P1	ISSUED FOR COMMENTS	DT	LA	27.05.21
Rev	Description	Eng	Draft	Date

Rev	Description	Eng	Draft	Date
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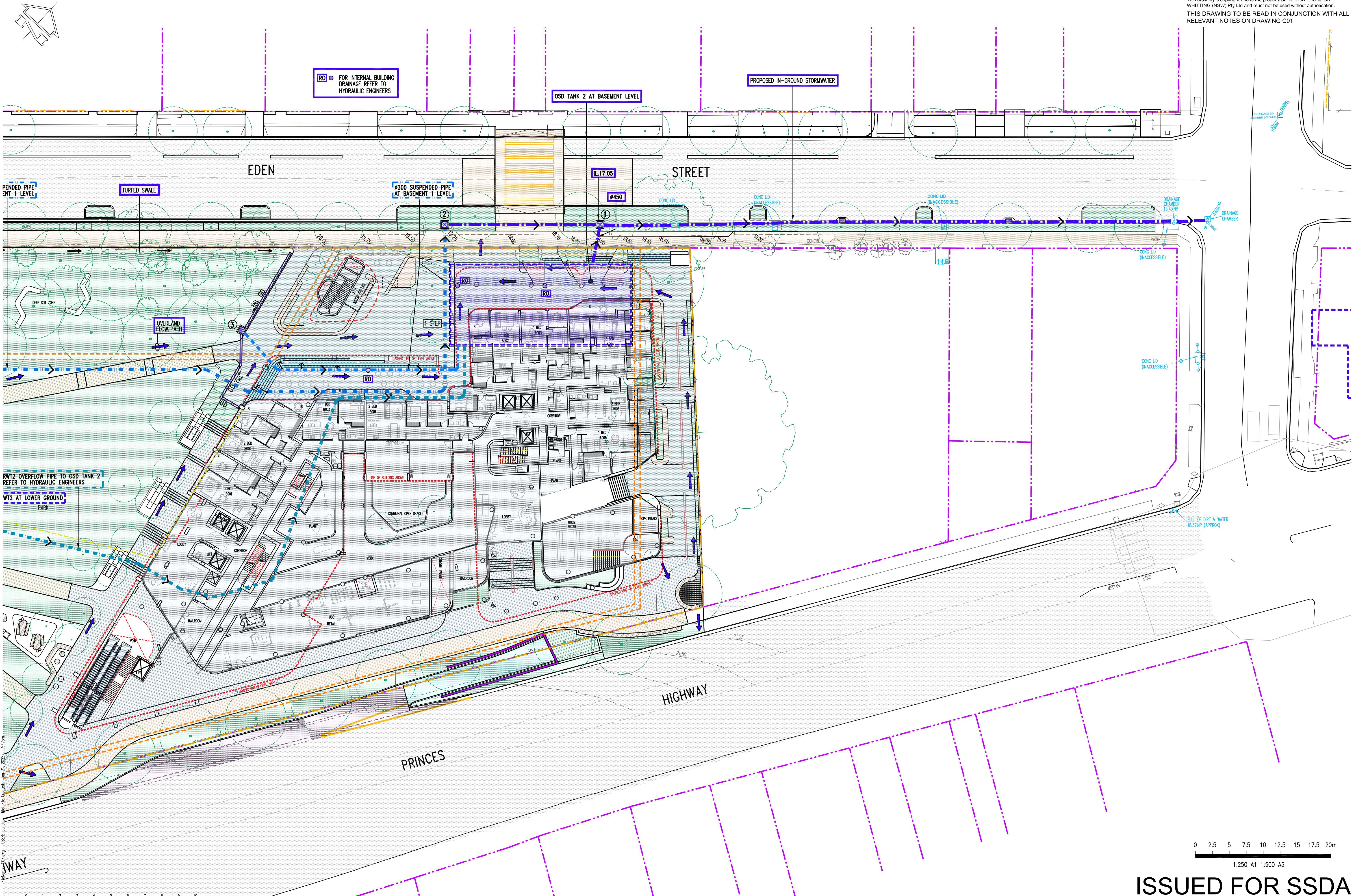
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Project
26-42 EDEN STREET & 161-179
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Sheet Subject
OVERALL STORMWATER PLAN

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1:250
Job No
201609
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Revision
P3

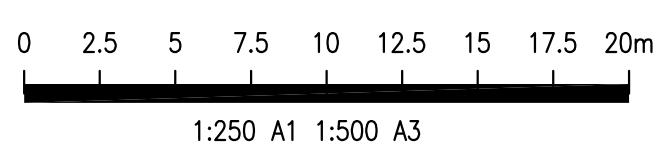
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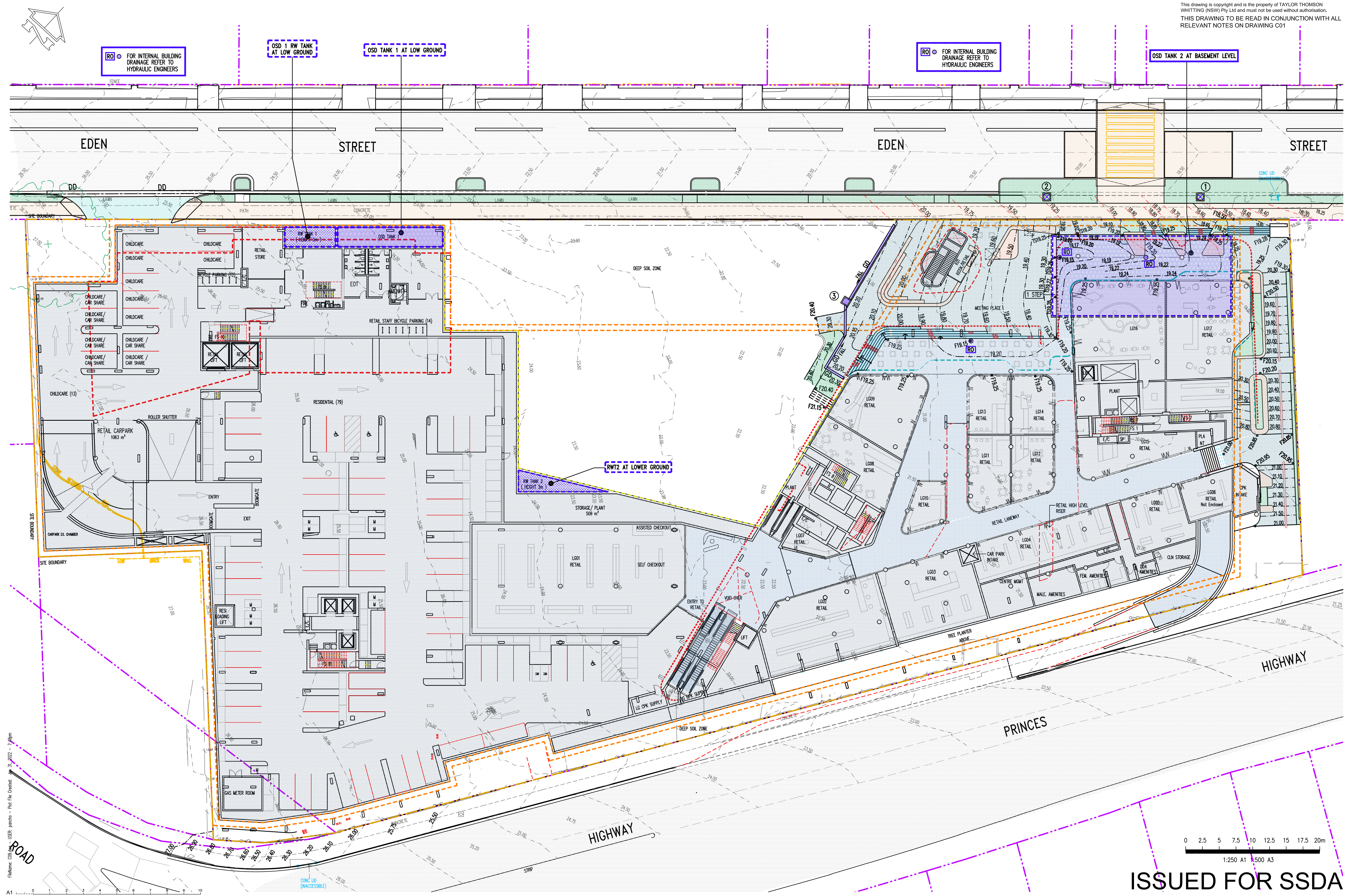
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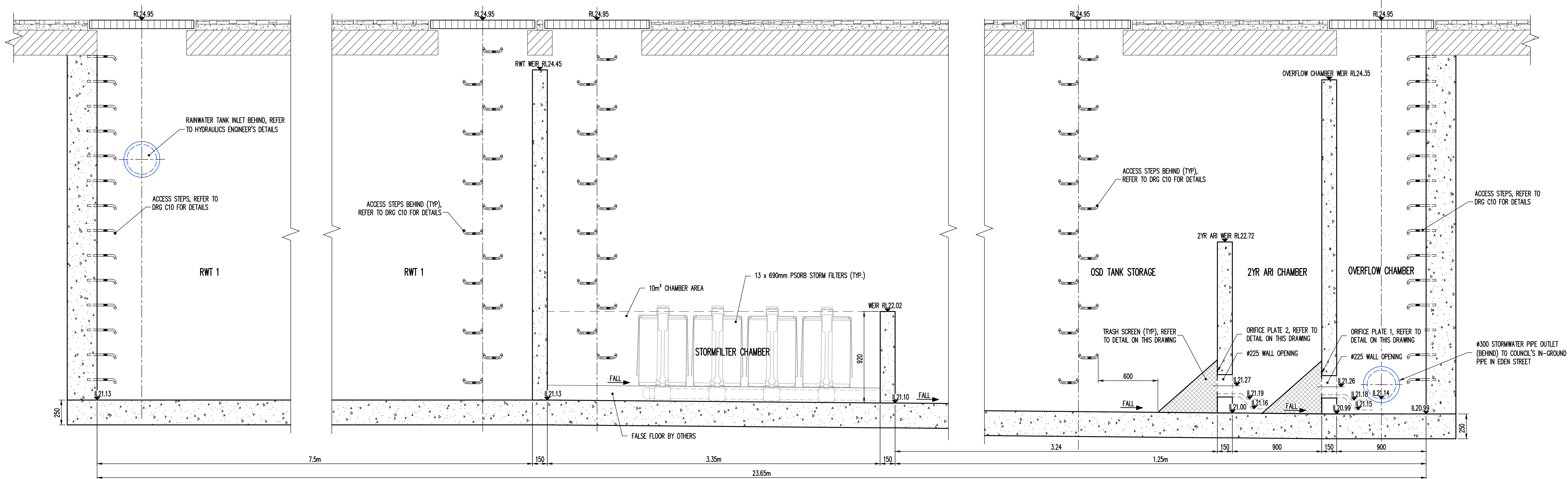
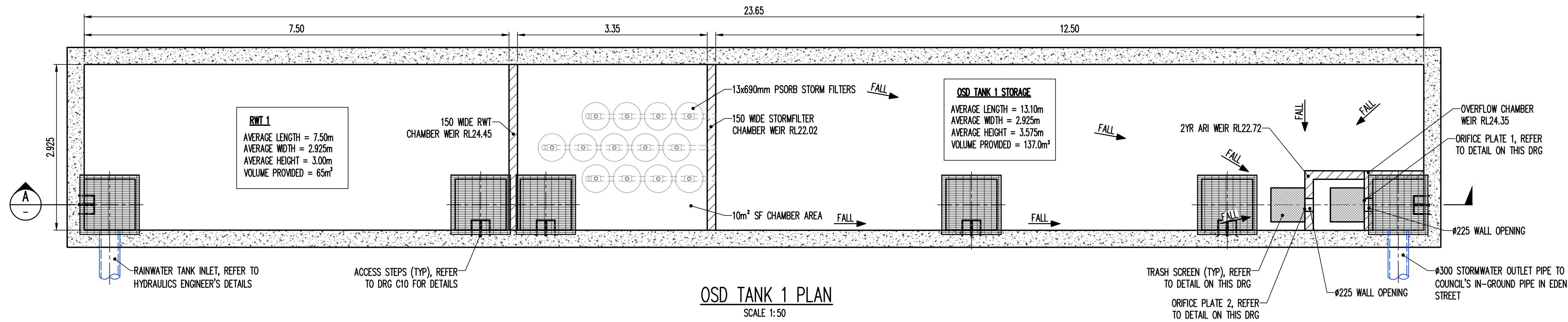
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26-42 EDEN STREET & 161-179
PRINCESS HIGHWAY,
ARNCLIFFE

Sheet Subject
STORMWATER MANAGEMENT
PLAN - COUNCIL'S IN-GROUND
PIPE

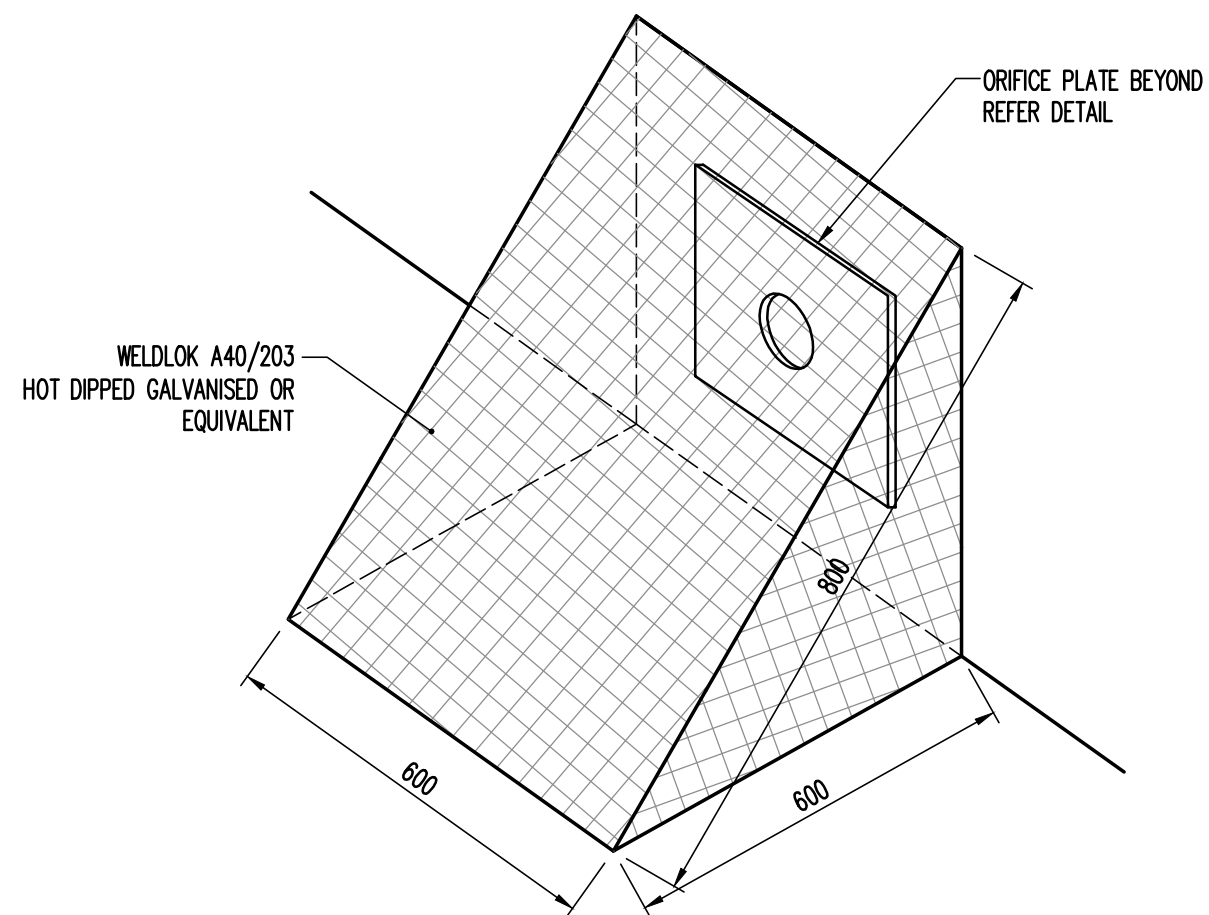
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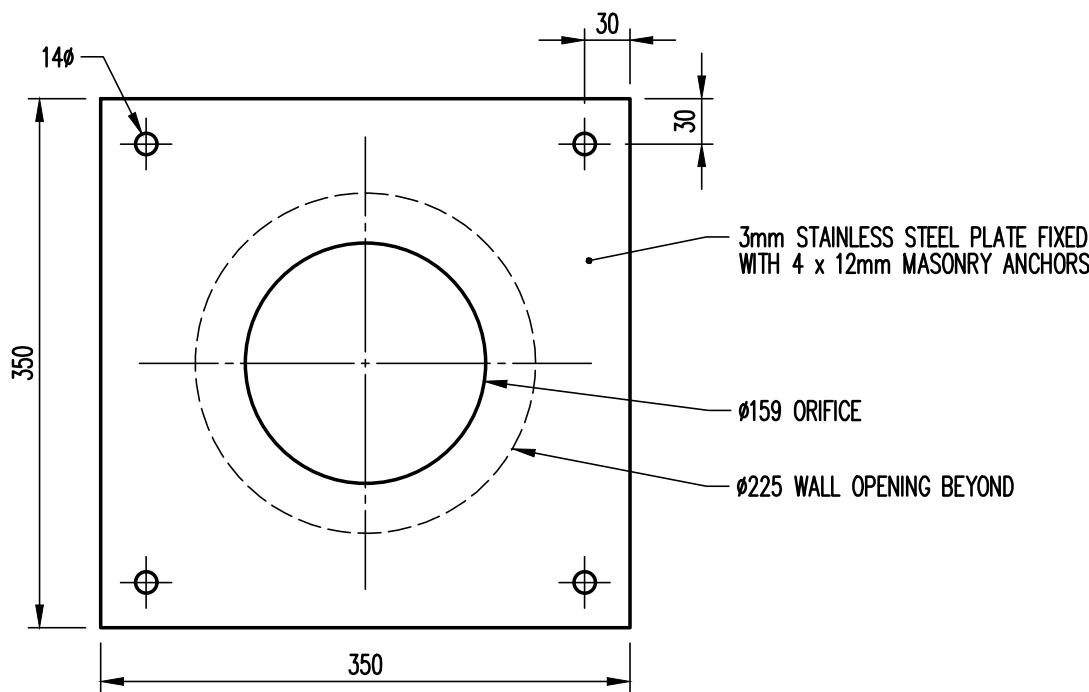
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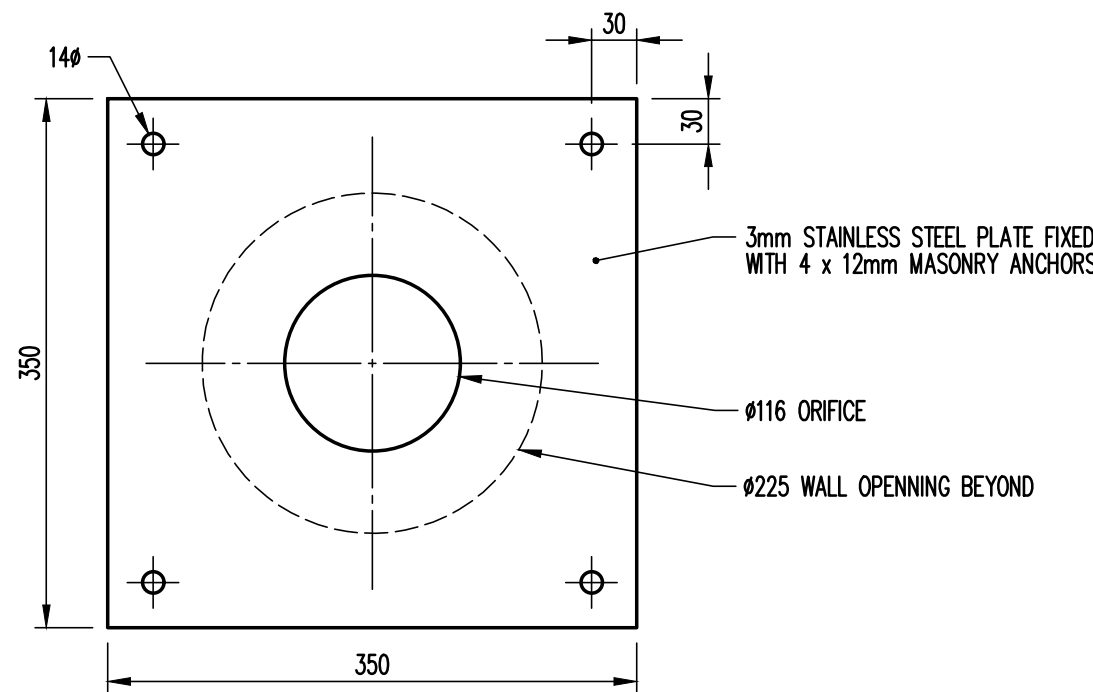
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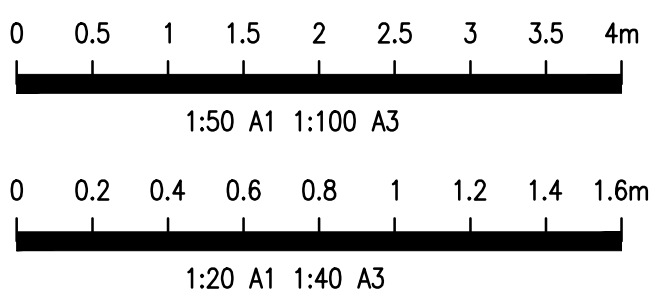
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NTS



ORIFICE PLATE 1 DETAIL
SCALE 1:5



ORIFICE PLATE 2 DETAIL
SCALE 1:5



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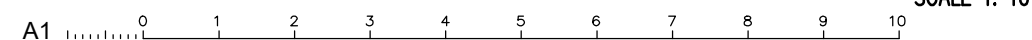
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Structural
Civil
Traffic
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Project
26-42 EDEN STREET & 161-179
PRINCESS HIGHWAY,
ARNCLIFFE

Sheet Subject

**STORMWATER DETAILS,
SHEET 1**

Scale : A1	Drawn	Authorised
AS SHOWN	LA	NB

Job No	Drawing No	Revision
201609	C17	P1

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