PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

DRAWING REGISTER		
DRAWING NO.	TITLE	REVISION
DA-SW100	COVERSHEET	7
DA-SW200	STORMWATER CONCEPT DESIGN - BASEMENT 2 PLAN	7
DA-SW201	STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN-SHEET 1 OF 2	7
DA-SW201b	STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN-SHEET 2 OF 2	7
DA-SW202	STORMWATER CONCEPT DESIGN - LEVEL 2 PLAN (STREET LEVEL)	7
DA-SW300	STORMWATER CONCEPT DESIGN - DETAIL SHEET	7
DA-SW400	STORMWATER CONCEPT DESIGN - DRAINAGE EASEMENT CAPACITY ASSESSMENT	7
DA-SW500	STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT PLAN	7
DA-SW600	EROSION AND SEDIMENT CONTROL PLAN & DETAILS	7

REV.	DATE	AMENDMENT	INT.	APP.
7	17/01/2024	UPDATED STORMWATER AS PER COUNCIL'S COMMENTS	J.H	J.H
6	7/03/2023	ISSUE FOR DA	J.H	J.H
5	28/02/2023	ISSUE FOR DA	J.H	J.H
4	25/10/2022	ISSUE FOR DA	J.H	J.H
3	8/09/2022	PRELIMINARY ISSUE	J.H	J.H
2	22/08/2022	PRELIMINARY ISSUE	J.H	J.H
1	28/07/2022	PRELIMINARY ISSUE	J.H	J.H

Client: LINDFIELD GROUP PTY LTD

Architect: TEXCO DESIGN

JCO CONSULTANTS PTY LTD
SUITE 801C, NO.1 RIDER BOULEVARD, RHODES NSW 2138
EMAIL: JASON@JCOCONSULTANTS.COM.AU

Project: PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: COVERSHEET

Design: J.H | Drawn: J.H | Validate: J.H

Job Number: 20220129

Drawing Number: DA-SW100

Scale: NTS | Date: 17/01/2024 | Size: A1 | Datum: A.H.D

North Point: N

Status: FOR APPROVAL
NOT FOR CONSTRUCTION

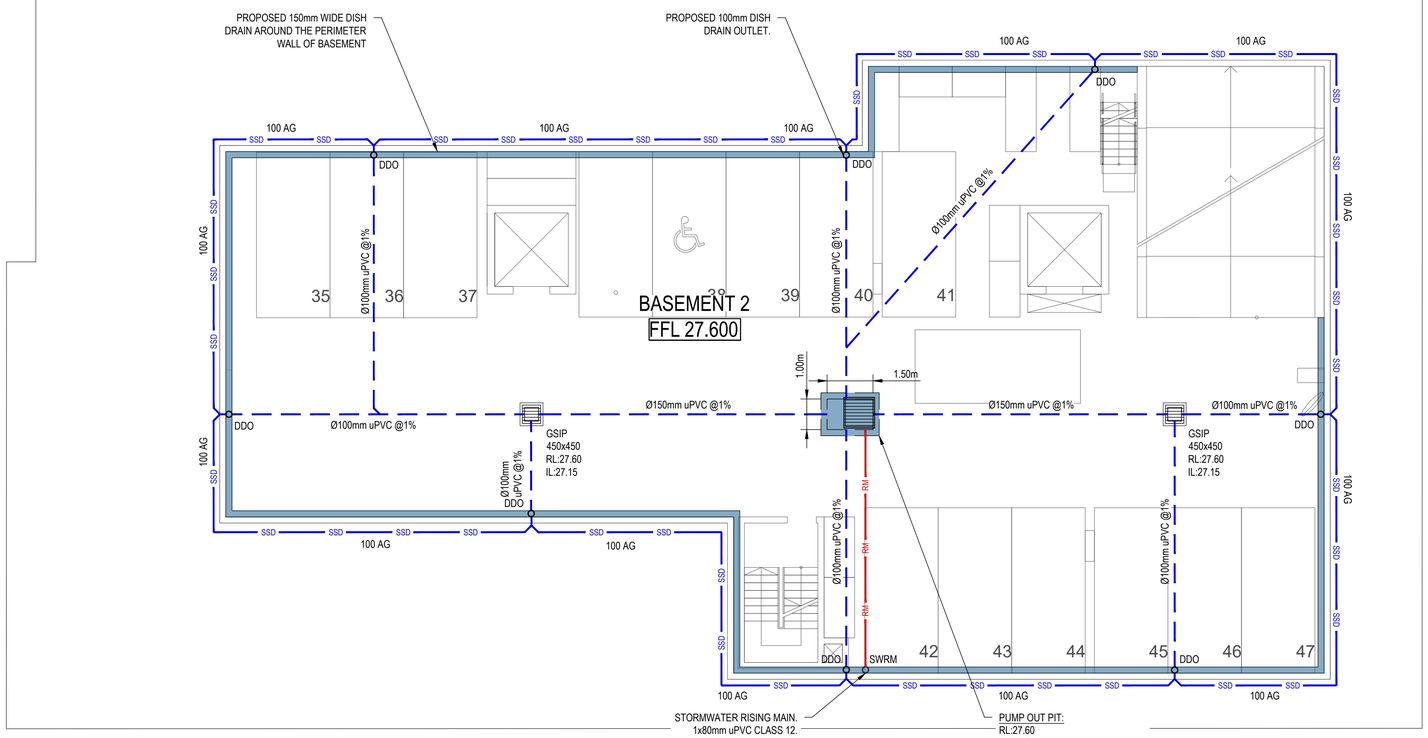
Scale:

DATE PLOTTED: 1 February 2024 2:55 PM

CAD File: P:\2022\20220129-182-186 Gertrude Street, North Gosford\Civil\cad\DA-SW100.dwg

PUMP OUT DESIGN CALCS

SINCE THERE ARE NO UNCOVERED DRIVEWAY RAMP AREAS DRAINING INTO BASEMENT 2 PUMP SYSTEM. THE PUMP OUT PIT STORAGE TO HAVE MIN. 3m3 AS PER AS3500.3.



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Client: LINDFIELD GROUP PTY LTD

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182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: STORMWATER CONCEPT DESIGN - BASEMENT 2 PLAN

Design: J.H | Drawn: J.H | Validate: J.H

Job Number: 20220129

Drawing Number: DA-SW200

Scale: 1:100

Date: 17/01/2024

Size: A1

Datum: A.H.D

North Point: N

Status: FOR APPROVAL
NOT FOR CONSTRUCTION

Scale: 0 1 2 4 6 8 10m
SCALE 1:100 @A1

DATE PLOTTED: 1 February 2024 2:55 PM

CAD File: P:\2022\20220129-182-186 Gertrude Street, North Gosford\Civil\cad\DA-SW200.dwg

DESIGN NOTE:

THE DEVELOPMENT SITE FALLS INTO CENTRAL COAST COUNCIL (FORMERLY GOSFORD CITY COUNCIL).

SITE AREA = 1808m2

FOR RAINWATER TANK REQUIREMENTS, AS PER GOSFORD DCP 2013 SECTION 6.7.7.2.4 DEEMED TO COMPLY,

V = 0.01*A*(0.02f)^2 = 0.01*1808*(0.02*69)^2 =34.43m3

WE HAVE ASSUMED 5L/day WATER USE PER SQUARE METRE OF ROOF AREA, 40% IRRIGATION AND 60% TOILET AND LAUNDRY.

THE DESIGN RAINWATER TANK ALSO MEETS THE 40% POTABLE WATER REUSE REQUIREMENT AS PER COUNCIL'S DCP.

ON-SITE DETENTION IS PROVIDED TO RESTRICTED THE POST-DEVELOPMENT FLOW TO PRE-DEVELOPMENT FLOW FROM 50% AEP TO 1% AEP.

LEGEND

- TELECOMMUNICATION PIT
- WATER METER
- ELECTRICITY POLE
- GULLY PIT & LINTEL
- CONNECTING POWER
- TREE (Ø: TRUNK/ S: SPREAD/ H: HEIGHT)

FOR CONTINUATION REFER DRG. SW201b

GSIP AT OVERLAND FLOW PATH FOR CAPTURING LOW FLOW. 450x450 RL:33.14 IL:32.64 INSTALL OCEAN GUARD

GTD 200x100 RL:33.50 IL:33.40

GSIP AT OVERLAND FLOW PATH FOR CAPTURING LOW FLOW. 450x450 RL:33.45 IL:33.00

DENOTES LINE OF BASEMENT WALL BELOW. (TYP.)

GSIP AT OVERLAND FLOW PATH FOR CAPTURING LOW FLOW. 450x450 RL:32.80 IL:32.35 INSTALL OCEAN GUARD

GSIP AT OVERLAND FLOW PATH FOR CAPTURING LOW FLOW. 450x450 RL:32.70 IL:32.15 INSTALL OCEAN GUARD

HATCHED AREA DENOTES AREA BYPASSES OSD SYSTEM. AREA = 347m2 FLOW = 21L/s (100yr)

EXISTING EASEMENT STORMWATER PIT 6.0. RL:31.44 IL:30.89

RCP PIPE

Ø375mm RCP

POTHOLE 1 PIPE IL 29.93

CONNECT TO EXISTING COUNCIL DRAINAGE EASEMENT PIPE RL:32.37 IL:31.47 (BASED ON CCTV INVESTIGATION)

EXISTING EASEMENT STORMWATER PIT 5.0. RL:32.41 IL:31.81

JP 900x900 RL:32.50 IL:31.50

BELOW GROUND OSD TANK WITH MIN. 300mm SOIL ON TOP RL:33.60 (MIN.) IL:31.65 WATER PONDING DEPTH:1.10m AVERAGE PONDING DEPTH:1.06m AREA:31.40m2 (INTERNAL) VOLUME REQUIRED:30.20m3 (17m3 OFFSET FROM RAINWATER TANK) VOLUME PROVIDED:33.28m3 TWL:32.90 PSD:62L/s ORIFICE Ø:121mm ORIFICE CL:31.80

STORMFILTER CHAMBER WITH 3 x PSORB CARTRIDGE 690mm BY OCEAN PROTECT. AREA:6m2 (INTERNAL) RL:33.60 (MIN.) IL:31.91 (ON TOP OF FALSE FLOOR) WEIR LEVEL:32.68

BELOW GROUND RAIWNATER TANK AS PER COUNCIL DCP WITH MIN. 300mm SOIL ON TOP RL:33.60 (MIN.) IL:30.40 WATER PONDING DEPTH:2.60m AREA:13.60m2 (INTERNAL) VOLUME REQUIRED:34.43m3 VOLUME PROVIDED:35.00m3 TWL:33.00

REFER TO LEVEL 2 LEVEL FOR CONTINUATION.

STORMWATER RISING MAIN FROM BASEMENT SUBSOIL PUMP OUT PIT.

LOCATION OF DOWNPIPE IS NOMINAL AND TO BE DETERMINED AT CC STAGE. (TYP.)

DOWNPIPE COLLECTS STORMWATER RUNOFF FROM LEVELS ABOVE. (tYP.)

GROUND FLOOR FFL 32.250

GROUND FLOOR FFL 33.900

GROUND FLOOR FFL 33.800

NOTES:
(A) EASEMENT FOR DRAINAGE VAR
(B) EASEMENT FOR DRAINAGE 1.8
(C) EASEMENT FOR DRAINAGE 1.83 m WIDE (VIDE H642170)

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Client: LINDFIELD GROUP PTY LTD

Architect: TEXCO DESIGN

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SUITE 801C, NO.1 RIDER BOULEVARD, RHODES NSW 2138
EMAIL: JASON@JCOCONSULTANTS.COM.AU

Project: PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN-SHEET 1 OF 2

Design: J.H | Drawn: J.H | Validate: J.H

Job Number: 20220129

Drawing Number: DA-SW201

Scale: 1:100

Date: 17/01/2024

Size: A1

Datum: A.H.D

North Point

Status: FOR APPROVAL
NOT FOR CONSTRUCTION

Scale: 0 1 2 4 6 8 10m
SCALE 1:100 @A1

DATE PLOTTED: 1 February 2024 2:55 PM

CAD File: P:\2022\20220129-182-186 Gertrude Street, North Gosford\Civil\cad\DA-SW201.dwg

DESIGN NOTE:

THE DEVELOPMENT SITE FALLS INTO CENTRAL COAST COUNCIL (FORMERLY GOSFORD CITY COUNCIL).

SITE AREA = 1808m2

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V = 0.01*A*(0.02f)^2 = 0.01*1808*(0.02*69)^2 =34.43m3

WE HAVE ASSUMED 5L/day WATER USE PER SQUARE METRE OF ROOF AREA, 40% IRRIGATION AND 60% TOILET AND LAUNDRY.

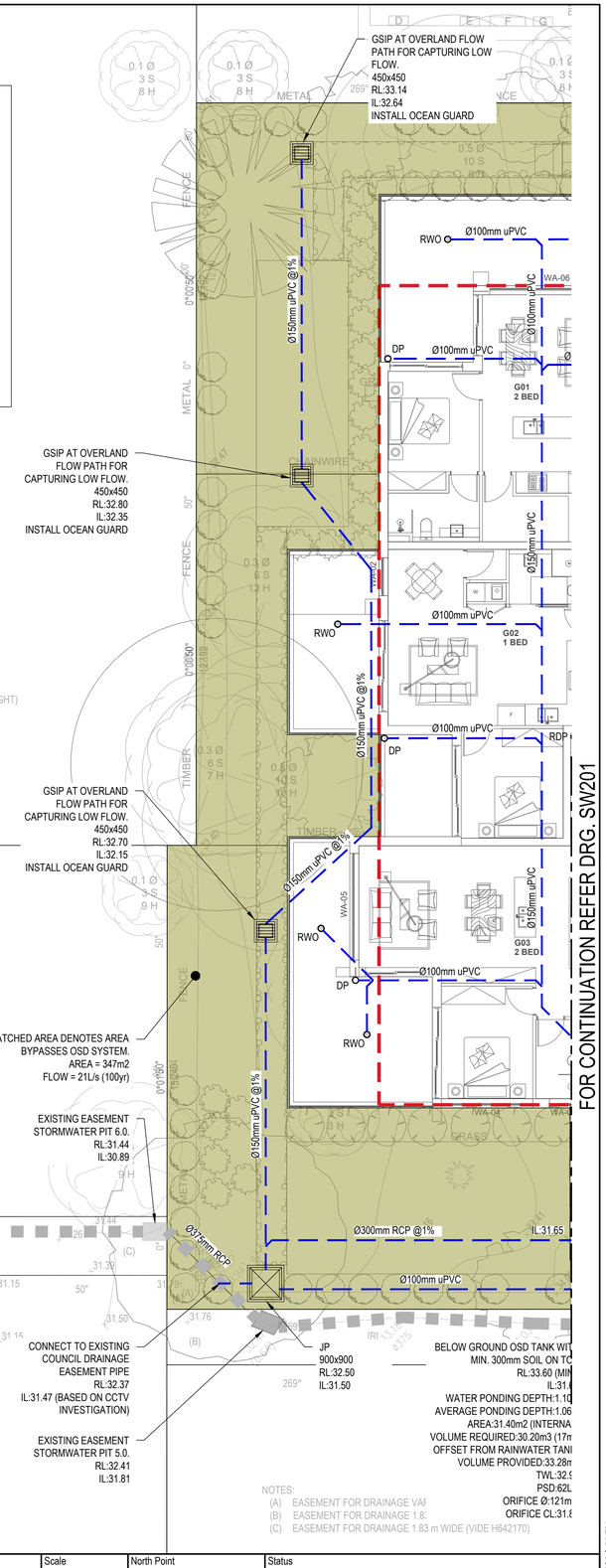
THE DESIGN RAINWATER TANK ALSO MEETS THE 40% POTABLE WATER REUSE REQUIREMENT AS PER COUNCIL'S DCP.

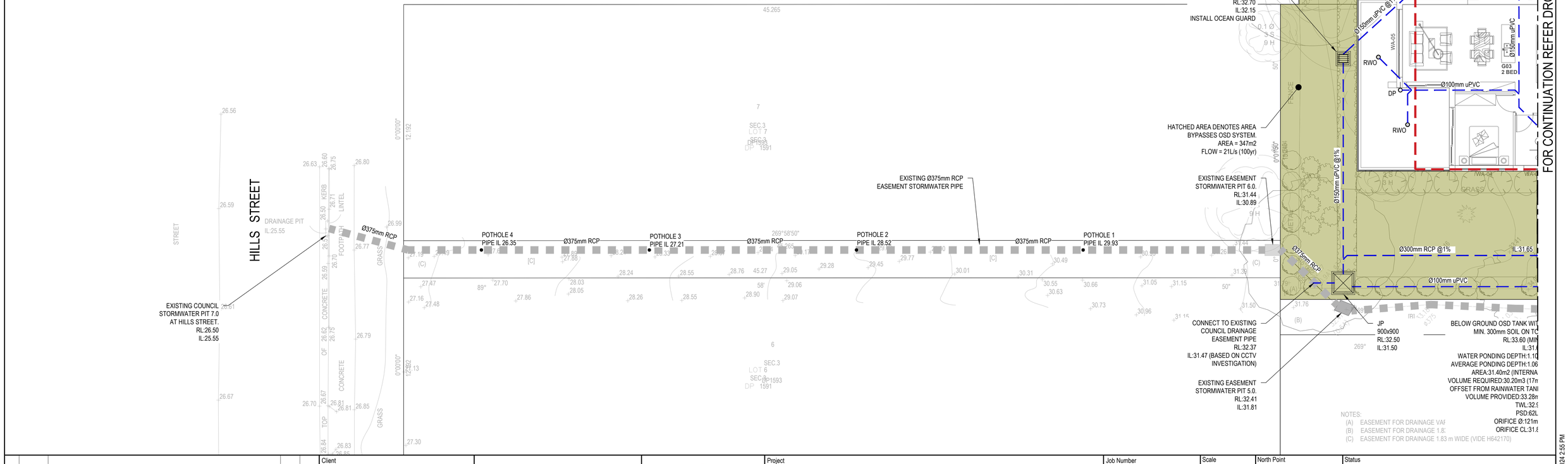
ON-SITE DETENTION IS PROVIDED TO RESTRICTED THE POST-DEVELOPMENT FLOW TO PRE-DEVELOPMENT FLOW FROM 50% AEP TO 1% AEP.

T.N. M.M. APPROX. Var. 10° 00'

LEGEND

- TELECOMMUNICATION PIT
- WATER METER
- ELECTRICITY POLE
- GULLY PIT & LINTEL
- CONNECTING POWER
- -TREE (Ø: TRUNK/ S: SPREAD/ H: HEIGHT)





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Client: LINDFIELD GROUP PTY LTD

Architect: TEXCO DESIGN

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SUITE 801C, NO.1 RIDER BOULEVARD, RHODES NSW 2138
EMAIL: JASON@JCOCONSULTANTS.COM.AU

Project: PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN-SHEET 2 OF 2

Design	Drawn	Validate
J.H	J.H	J.H

Job Number: 20220129

Drawing Number: DA-SW201b

Scale: 1:100

Date: 17/01/2024

Size: A1

Datum: A.H.D

North Point: N

Status: FOR APPROVAL
NOT FOR CONSTRUCTION

Scale: 0 1 2 4 6 8 10m
SCALE 1:100 @A1

DATE PLOTTED: 1 February 2024 2:55 PM

CAD File: P:\2022\20220129-182-186 Gertrude Street, North Gosford\Civilcad\DA-SW201b.dwg

GSIP AT OVERLAND FLOW PATH FOR CAPTURING LOW FLOW.
450x450
RL:36.61
IL:36.21

GTD
150x150
RL:36.61
IL:36.41

GSIP AT OVERLAND FLOW PATH FOR CAPTURING LOW FLOW.
450x450
RL:36.61
IL:36.18

Ø100mm uPVC

RWO

Ø100mm uPVC

RDP

201
2 BED

202
1 BED

203
2 BED

204
2 BED

205
2 BED

206
2 BED

207
STUDIO

LEVEL 2
FFL 40.300

Ø100mm uPVC @1%

Ø375mm RCP

LOWER GERTRUDE STREET

UPPER GERTRUDE STREET

DENOTES LINE OF LEVEL 1 BASEMENT WALL BELOW.

GSIP AT OVERLAND FLOW PATH FOR CAPTURING LOW FLOW.
450x450
RL:39.30
IL:38.90

DOWNPIPE DROPS DOWN TO NEXT LEVEL BELOW. (TYP.)

GSIP AT OVERLAND FLOW PATH FOR CAPTURING LOW FLOW.
450x450
RL:39.39
IL:38.99

RAINWATER OUTLET COLLECTS STORMWATER RUNOFF FROM HARDSTANDING AREAS. (TYP.)

REFER TO FLOOD REPORT PREPARED BY JCO CONSULTANTS FOR PROPOSED 1m WIDE GRATED INLET TO CAPTURE WATER OVER-TOPPING BOUNDARY LINE INTO OVERLAND FLOW PATH UNDER.

GTD
200x200
RL:39.94
IL:39.74

EXISTING COUNCIL'S STORMWATER KERB INLET PIT 2.0 AT LOWER GERTRUDE STREET.
RL:39.74
IL:39.29

EXISTING COUNCIL'S STORMWATER KERB INLET PIT 1.0 AT UPPER GERTRUDE STREET.
RL:43.11
IL:42.11 (ASSUMED)

REFER TO GROUND FLOOR LEVEL FOR CONTINUATION.

EXISTING EASEMENT STORMWATER PIT 4.0.
RL:35.24
IL:34.29

GTD
100x100
RL:36.20
IL:36.10

GTD
100x100
RL:38.40
IL:38.30

EXISTING COUNCIL STORMWATER JUNCTION PIT 3.0.
RL:39.82
IL:38.82

LEGEND

- TELECOMMUNICATION PIT
- WATER METER
- ELECTRICITY POLE
- GULLY PIT & LINTEL
- CONNECTING POWER
- -TREE (Ø: TRUNK/ S: SPREAD/ H: HEIGHT)

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Architect: TEXCO DESIGN

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EMAIL: JASON@JCOCONSULTANTS.COM.AU

Project: PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: STORMWATER CONCEPT DESIGN - LEVEL 2 PLAN (STREET LEVEL)

Design: J.H | Drawn: J.H | Validate: J.H

Job Number: 20220129

Drawing Number: DA-SW202

Scale: 1:100

Date: 17/01/2024

Size: A1

Datum: A.H.D

North Point

Status: FOR APPROVAL
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Scale: 0 1 2 4 6 8 10m
SCALE 1:100 @A1

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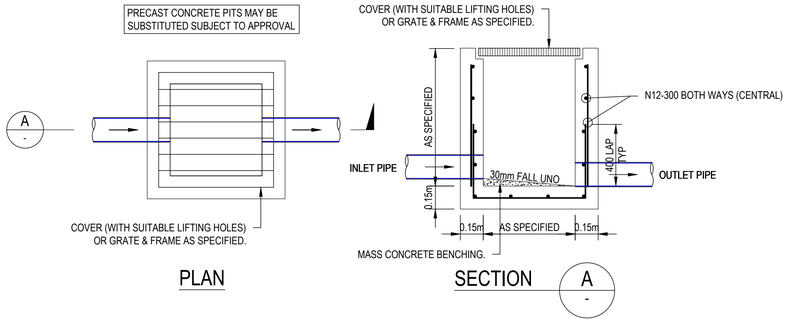
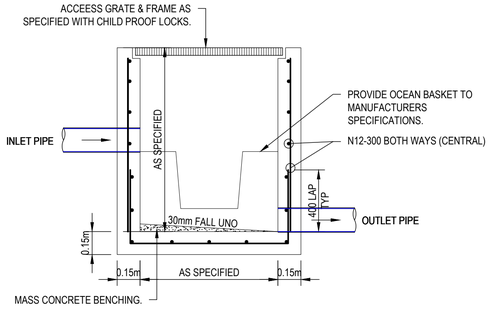
CAD File: P:\2022\20220129-182-186 Gertrude Street, North Gosford\Civil\cad\DA-SW202.dwg



TYPICAL SURFACE INLET PIT (GSIP)

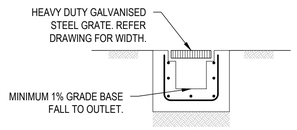
SCALE 1:20

DRAINS-OSD-UNIT A RESULTS										
TOTAL SITE AREA (m2)	PRE-DEV. IMPERVIOUS (%)	POST-DEV. IMPERVIOUS (%)	STORM (AEP)	PRE-DEV. FLOW (m3/s)	POST-DEV. FLOW (m3/s)	PIPE OUTFLOW (m3/s)	WEIR OUTFLOW (m3/s)	BYPASS FLOW (m3/s)	TOTAL PSD (m3/s)	OSD VOL. (m3)
1808	0	84	50%	0.020	0.036	0.016	0	0.004	0.020	47.20
			20%	0.040	0.057	0.021	0	0.008	0.029	
			10%	0.056	0.073	0.024	0	0.011	0.035	
			5%	0.072	0.090	0.027	0	0.014	0.041	
			2%	0.092	0.113	0.031	0	0.018	0.049	
			1%	0.110	0.133	0.033	0.029	0.021	0.083	



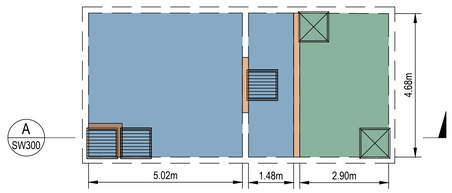
STORMWATER FILTER BASKET TREATMENT PIT

SCALE 1:20

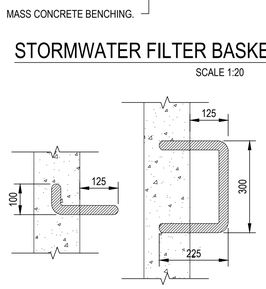


GRATED TRENCH DRAIN

SCALE 1:20

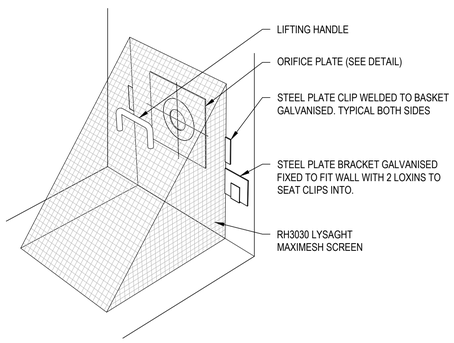


OSD PLAN VIEW



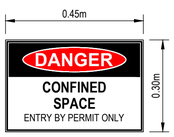
STEP IRONS

SCALE 1:10



DEBRIS SCREEN

SCALE 1:10

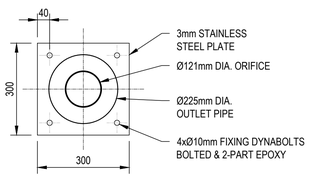


CONFINED SPACE SIGN

SCALE 1:10

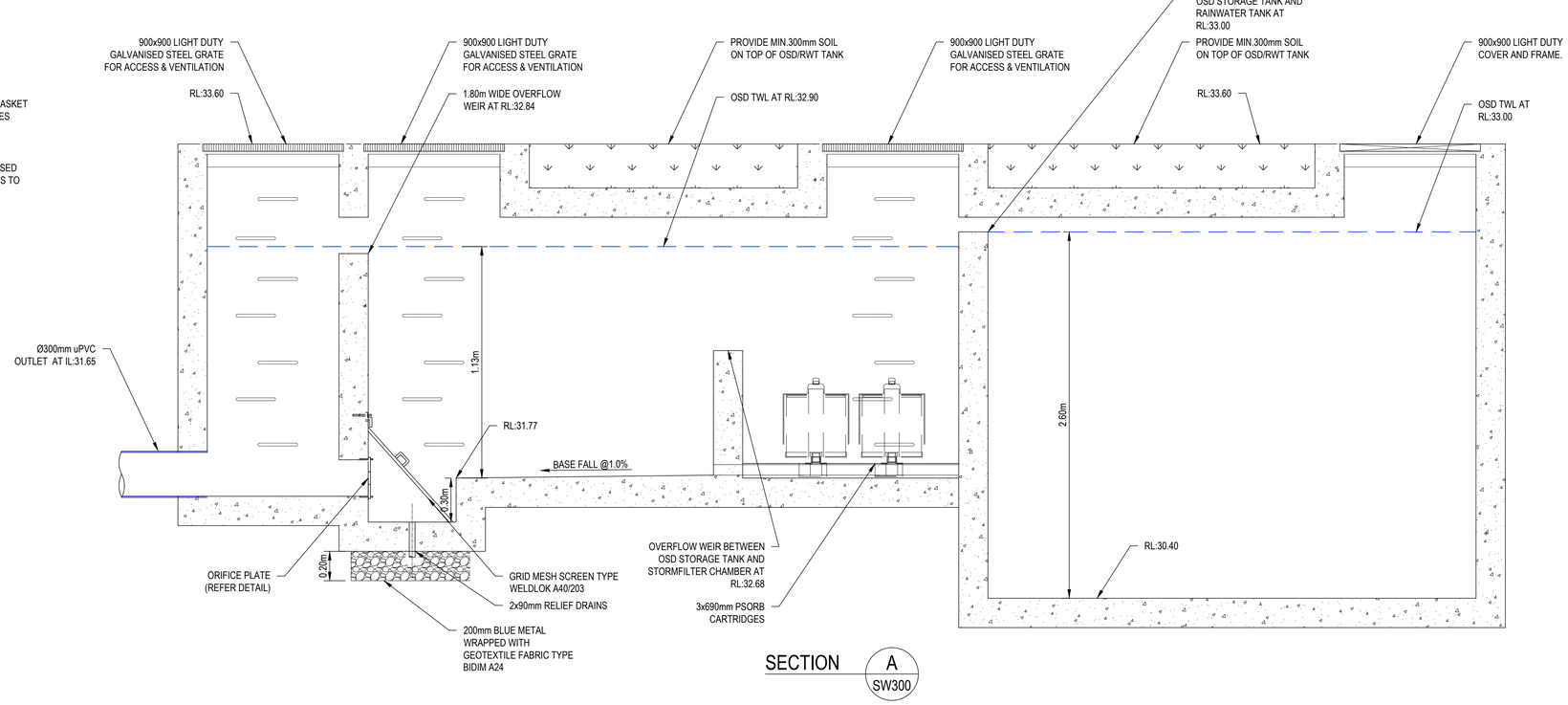
OSD SIGN

NOT TO SCALE



ORIFICE PLATE

SCALE 1:10



SECTION A (SW300)

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2	22/08/2022	PRELIMINARY ISSUE	J.H	J.H
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Client: LINDFIELD GROUP PTY LTD

Architect: TEXCO DESIGN

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EMAIL: JASON@JCOCONSULTANTS.COM.AU

Project: PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: STORMWATER CONCEPT DESIGN - DETAIL SHEET

Design: J.H | Drawn: J.H | Validate: J.H

Job Number: 20220129

Drawing Number: DA-SW300

Scale: AS SHOWN

Date: 17/01/2024

Size: A1

Datum: A.H.D

North Point

Status: FOR APPROVAL
NOT FOR CONSTRUCTION

Scale

DATE PLOTTED: 1 February 2024 2:55 PM

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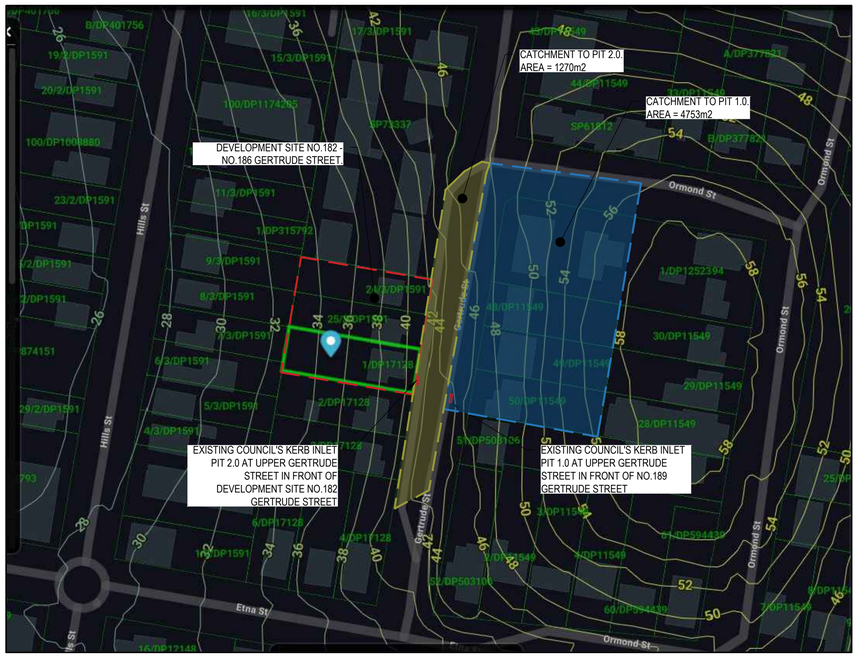
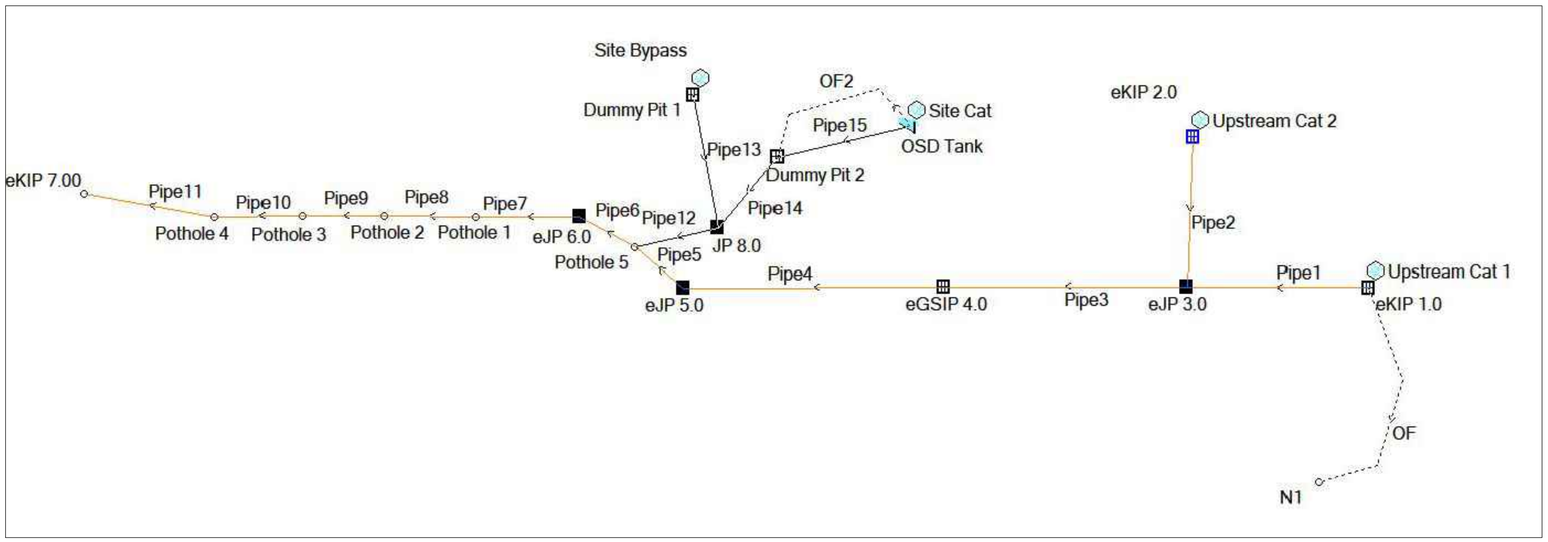
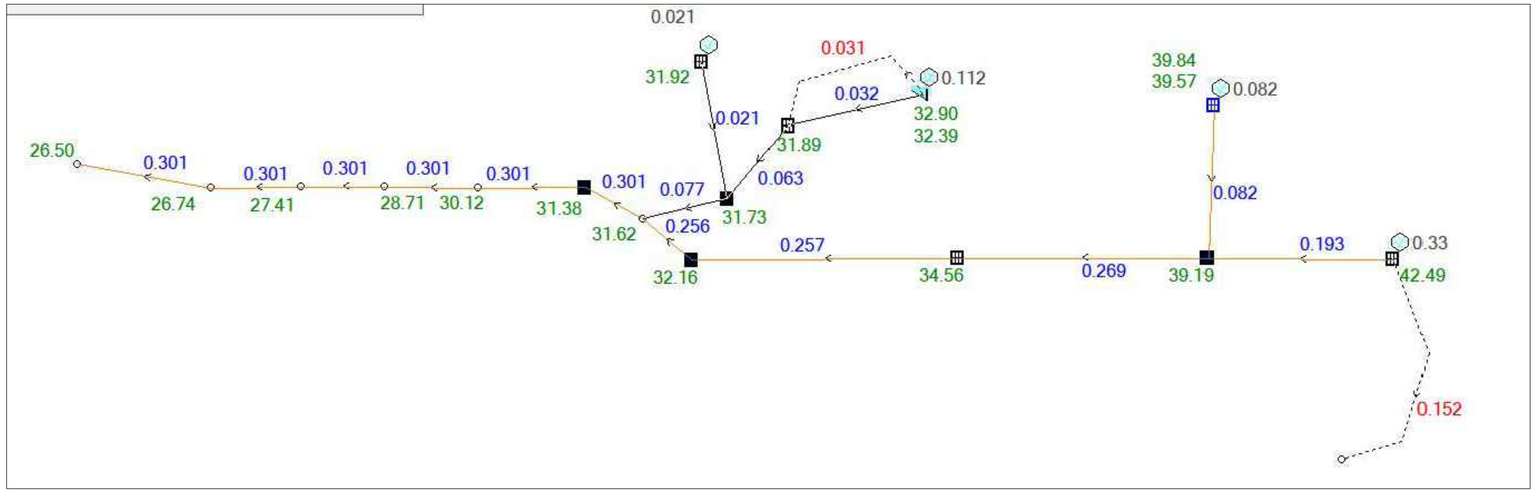




DRAINS MODEL SET UP

nputs				Results			
Pipe diameter, d_0	375	mm	X	Flow depth, y	0.3750	m	X
Manning roughness, n	0.013		X	Flow area, a	0.1104	m^2	X
Pressure slope (possibly ? equal to pipe slope), S_0	10	% rise/run	X	Pipe area, a0	0.1104	m^2	X
Relative flow depth, y/d_0	1	fraction	X	Relative area, a/a0	1.0000	fraction	X
				Wetted perimeter, P_w	1.1781	m	X
				Hydraulic radius, R_h	0.0938	m	X
				Top width, T	0.0000	m	X
				Velocity, v	0.0000		X
				Velocity head, h_v	0.0000		X
				Froude number, F	0.00		X
				Average shear stress (tractive force), tau	91.9313	N/m^2	X
				Flow, Q (See notes)	0.5544	m^3/s	X
				Full flow, Q0	0.5544	m^3/s	X
				Ratio to full flow, Q/Q0	1.0000	fraction	X



DRAINS RESULT (1% AEP)

NOTE:

BASED ON THE DRAINS MODEL, THE POST DEVELOPMENT FLOW WITHIN COUNCIL'S DRAINAGE EASEMENT IS EQUAL TO 301L/s (1% AEP), INCLUDING OUR DEVELOPMENT SITE WATER DISCHARGE FROM ON-SITE DETENTION.

THE EXISTING COUNCIL'S DRAINAGE EASEMENT PIPE IS RUNNING AT AN AVERAGE OF 10% SLOPE, WHICH HAVE FLOW RATE CAPACITY OF 554L/s (>301L/s) BASED ON THE MANNING CALCULATION ABOVE.

THEREFORE, UPSIZING COUNCIL'S DRAINAGE EASEMENT PIPE AT THE DOWNSTREAM OF THE DEVELOPMENT SITE IS NOT REQUIRED WHEN OUR SITE WATER IS DISCHARGING INTO IT.

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2	22/08/2022	PRELIMINARY ISSUE	J.H	J.H
1	28/07/2022	PRELIMINARY ISSUE	J.H	J.H

Client: LINDFIELD GROUP PTY LTD

Architect: TEXCO DESIGN

JCO CONSULTANTS PTY LTD
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EMAIL: JASON@JCOCONSULTANTS.COM.AU

Project: PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: STORMWATER CONCEPT DESIGN - DRAINAGE EASEMENT CAPACITY ASSESSMENT

Design: J.H | Drawn: J.H | Validate: J.H

Job Number: 20220129

Drawing Number: DA-SW400

Scale: AS SHOWN

Date: 17/01/2024

Size: A1

Datum: A.H.D

North Point

Status: FOR APPROVAL
NOT FOR CONSTRUCTION

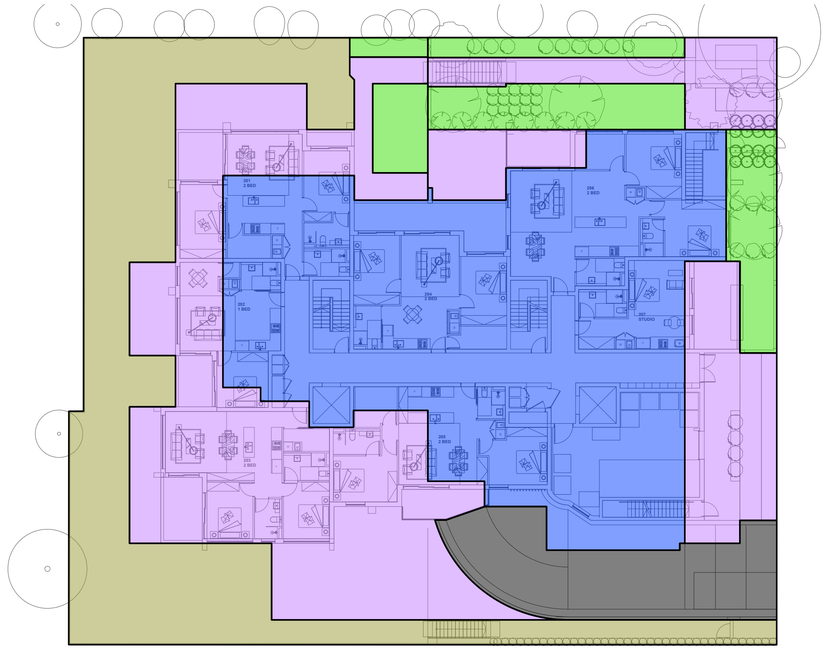
Scale

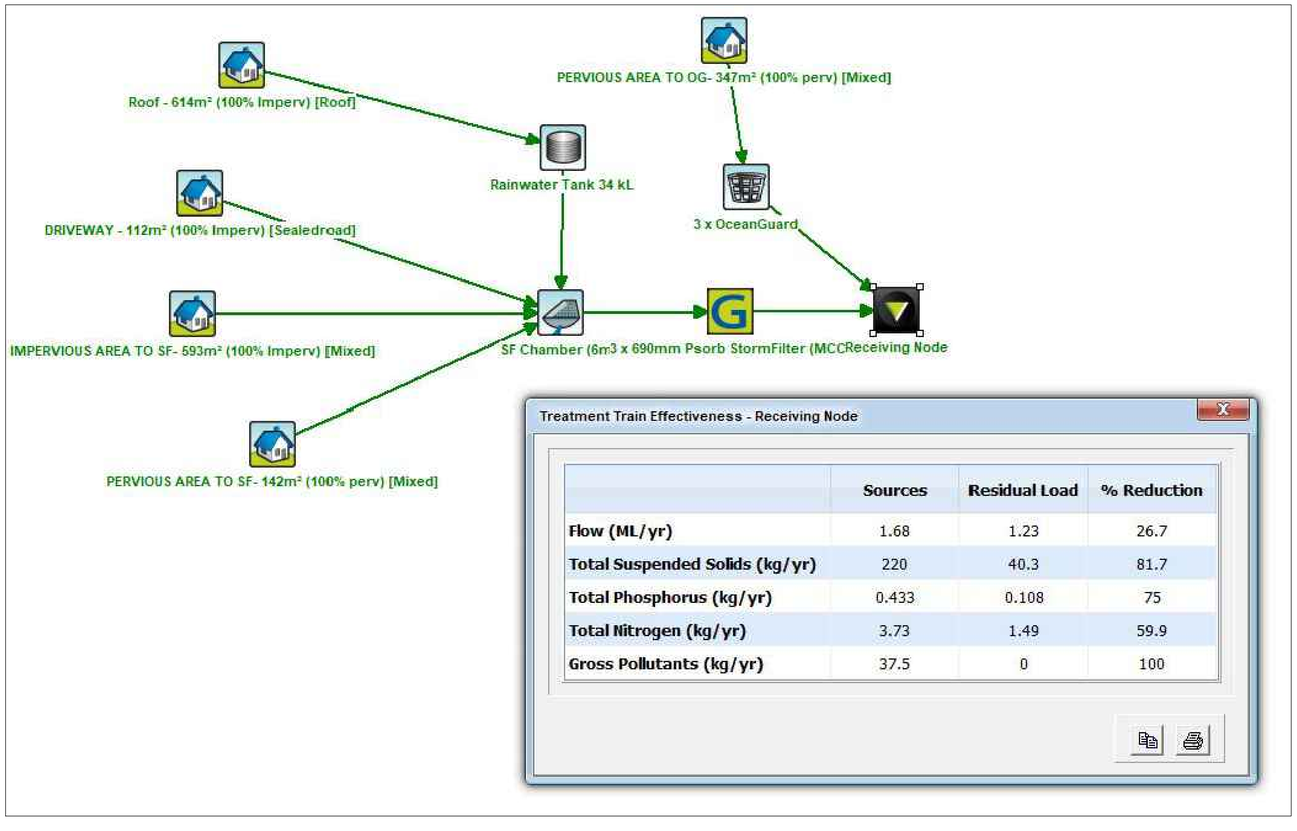
DATE PLOTTED: 1 February 2024 2:55 PM

CAD File: P:\2022\20220129-182-186 Gertrude Street, North Gosford\Civil\cad\DA-SW400.dwg

LEGEND

- ROOF AREAS TO 34m3 RAINWATER TANK AND STORMFILTER (614m2)
- DRIVEWAY AREAS TO STORMFILTER (112m2)
- IMPERVIOUS AREAS TO STORMFILTER (593m2)
- PERVIOUS AREAS TO STORMFILTER (142m2)
- PERVIOUS AREAS BYPASS STORMFILTER BUT DRAIN TO 3 x OCEAN GUARD (347m2)





Treatment Train Effectiveness - Receiving Node

	Sources	Residual Load	% Reduction
Flow (ML/yr)	1.68	1.23	26.7
Total Suspended Solids (kg/yr)	220	40.3	81.7
Total Phosphorus (kg/yr)	0.433	0.108	75
Total Nitrogen (kg/yr)	3.73	1.49	59.9
Gross Pollutants (kg/yr)	37.5	0	100

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Client: LINDFIELD GROUP PTY LTD

Architect: TEXCO DESIGN

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EMAIL: JASON@JCOCONSULTANTS.COM.AU

Project: PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT PLAN

Design: J.H | Drawn: J.H | Validate: J.H

Job Number: 20220129

Drawing Number: DA-SW500

Scale: 1:200 | Date: 17/01/2024 | Size: A1 | Datum: A.H.D

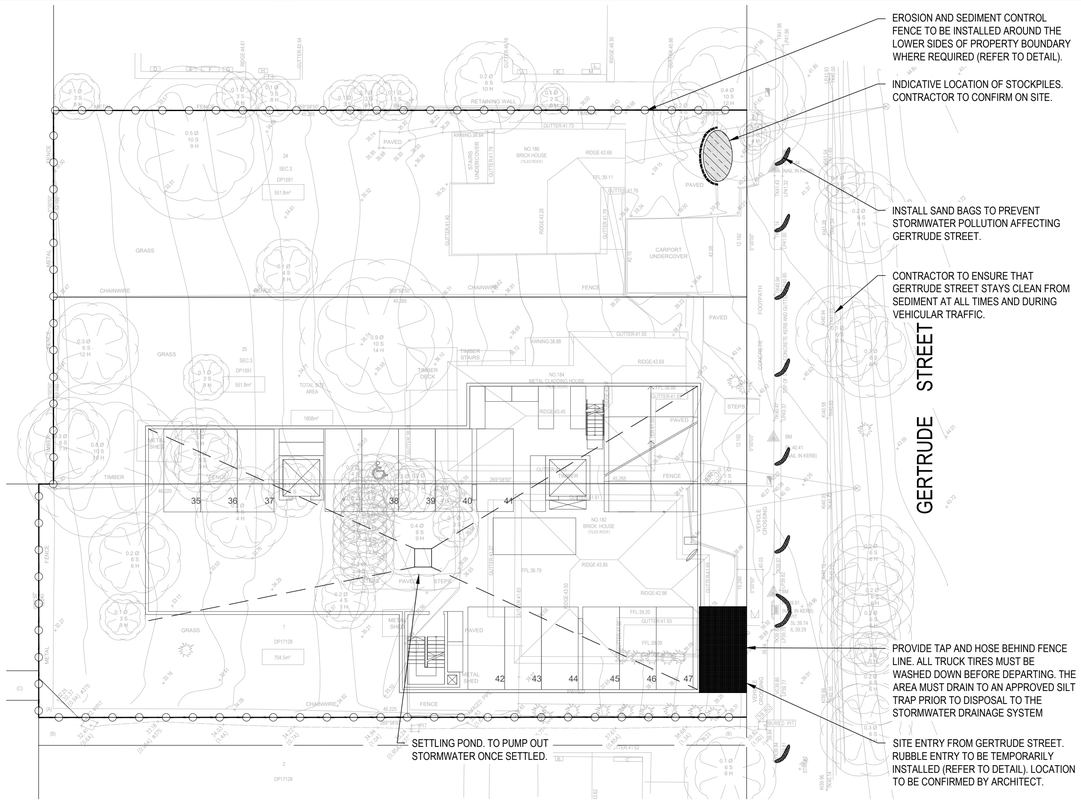
North Point

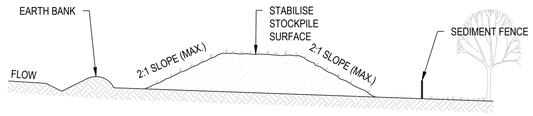
Status: FOR APPROVAL
NOT FOR CONSTRUCTION

Scale: 0 5 10 15 20m
SCALE 1:200 @A1

DATE PLOTTED: 1 February 2024 2:55 PM

CAD File: P:\2022\20220129-182-186 Gertrude Street, North Gosford\Civil\cad\DA-SW500.dwg

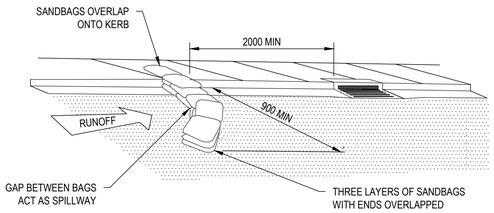




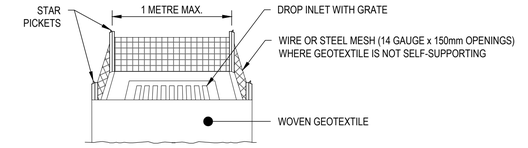
CONSTRUCTION NOTES

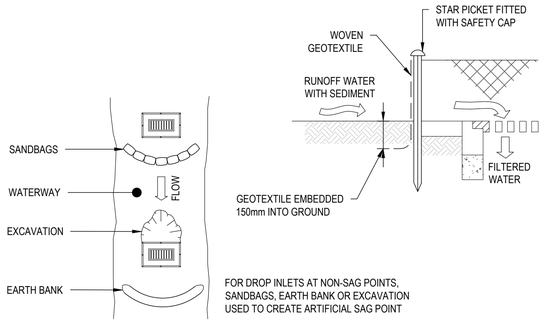
1. PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE 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 2m DOWNSLOPE.

STOCKPILES (SD 4-1)



SANDBAG SEDIMENT TRAP

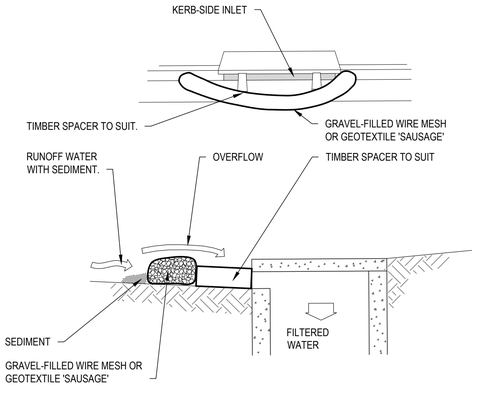




CONSTRUCTION NOTES

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)

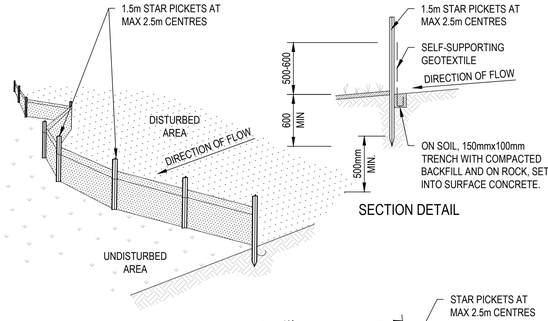


NOTE:THIS PRACTICE ONLY TO BE USED WHERE SPECIFIED IN APPROVED SWMP/ESCP.

CONSTRUCTION NOTES

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

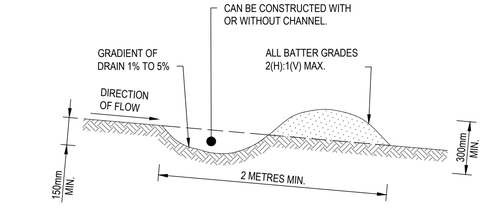
MESH AND GRAVEL INLET FILTER (SD 6-11)



CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE (SD 6-8)

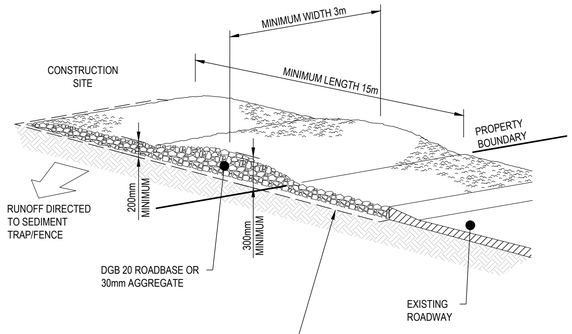


CONSTRUCTION NOTES

1. BUILD WITH GRADIENTS BETWEEN 1 AND 5 PERCENT.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

NOTE: ONLY TO BE USED AS TEMPORARY BANK WHERE MAXIMUM UPSLOPE LENGTH IS 80 METRES.

EARTH BANK - LOW FLOW (SD 5-5)



GEOTEXTILE FABRIC DESIGNED TO PREVENT INTERMIXING OF SUBGRADE AND BASE MATERIALS AND TO MAINTAIN GOOD PROPERTIES OF THE SUB-BASE LAYERS. GEOFABRIC MAY BE A WOVEN OR NEEDLE-PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500 N

CONSTRUCTION NOTES

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm 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)

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Architect: TEXCO DESIGN

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Project: PROPOSED RESIDENTIAL DEVELOPMENT
182-186 GERTRUDE STREET, NORTH GOSFORD
STORMWATER CONCEPT DESIGN

Drawing Title: EROSION AND SEDIMENT CONTROL PLAN & DETAILS

Design: J.H | Drawn: J.H | Validate: J.H

Job Number: 20220129

Drawing Number: DA-SW600

Scale: 1:200

Date: 17/01/2024

Size: A1

Datum: A.H.D

North Point: N

Status: FOR APPROVAL
NOT FOR CONSTRUCTION

Scale: 0 5 10 15 20m
SCALE 1:200 @A1

DATE PLOTTED: 1 February 2024 2:55 PM

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