

CIVIL ENGINEERING WORKS

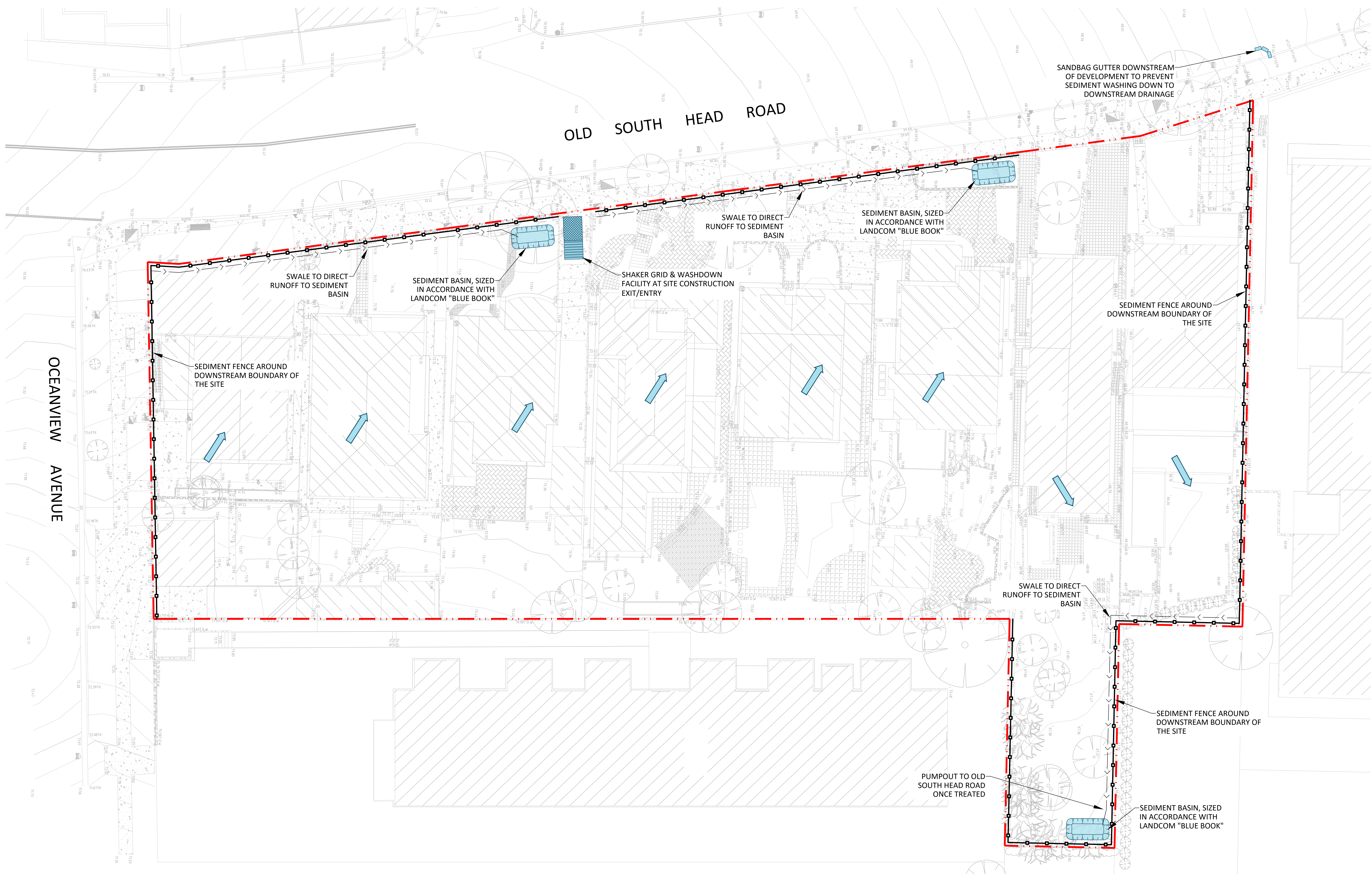
DEVELOPMENT APPLICATION



SITE LOCATION PLAN
SCALE 1:500

PROJECT SUMMARY

SITE ADDRESS:	669-683 OLD SOUTH HEAD ROAD, VAUCLUSE
LOCAL GOVERNMENT AREA:	WAVERLEY COUNCIL
SITE AREA:	4,345.03m ²
DEVELOPMENT DESCRIPTION:	MULTI-STOREY SENIORS LIVING DEVELOPMENT WITH TWO LEVELS OF BASEMENT.



LEGEND

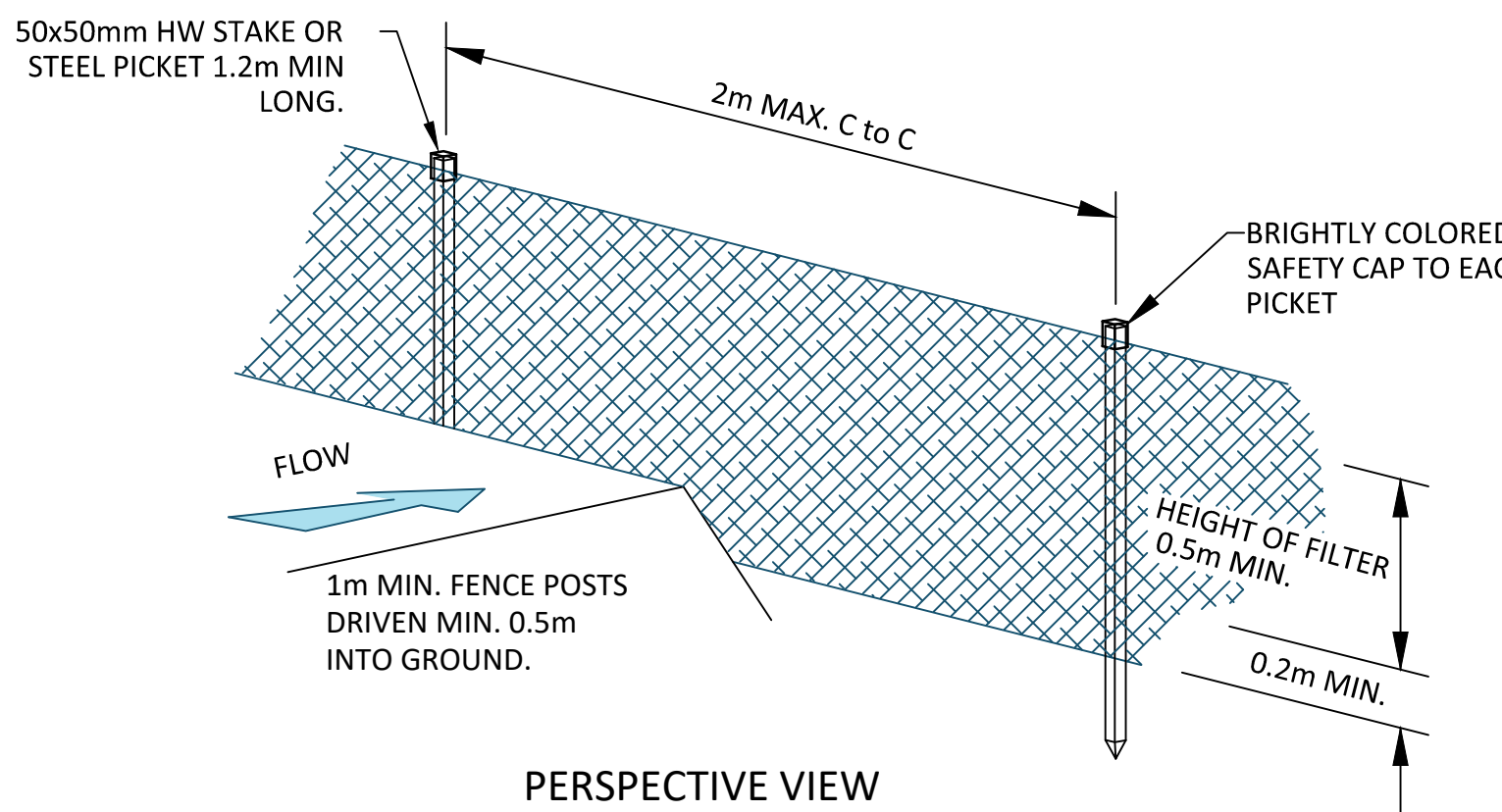
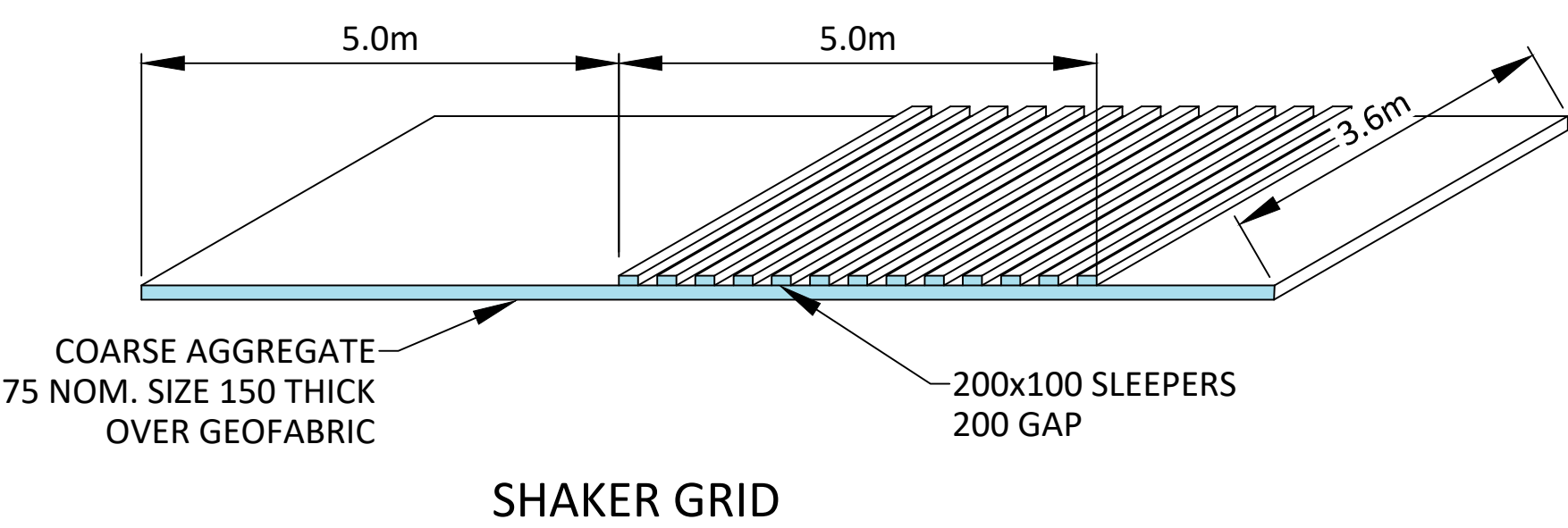
- SITE BOUNDARY
- PROPOSED SITE HOARDING
- VEHICLE SHAKEDOWN DEVICE
- PROPOSED SILT FENCE
- PROPOSED DIVERSION SWALE
- PROPOSED SEDIMENT BASIN
- PROPOSED SANDBAG PROTECTION

EROSION AND SEDIMENT CONTROL NOTES

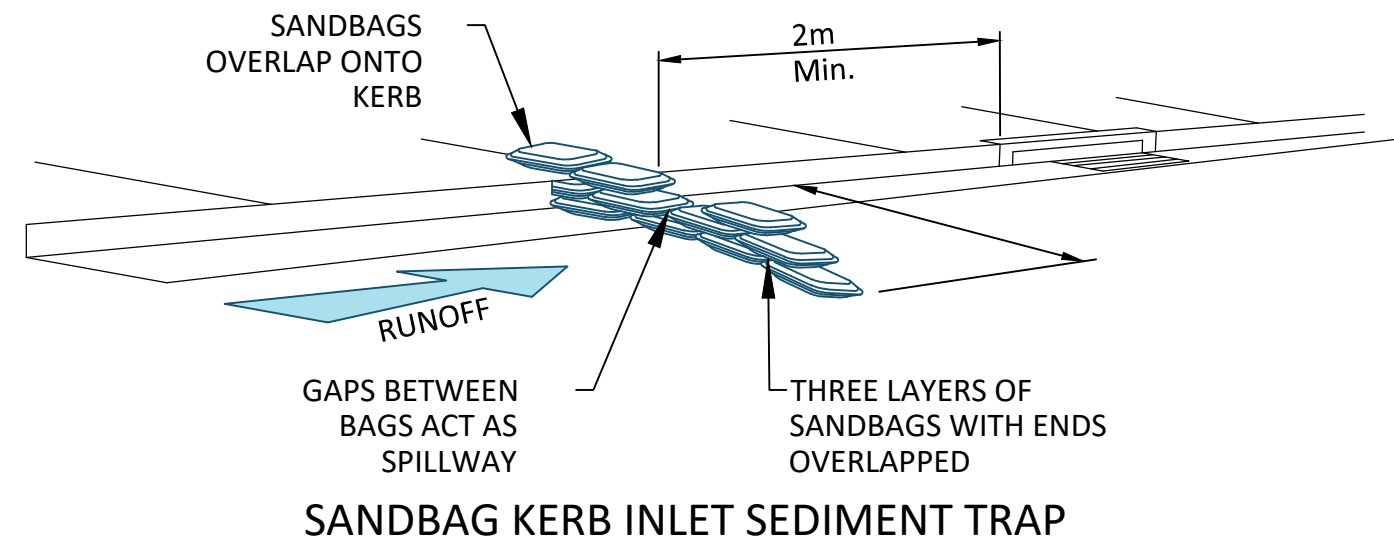
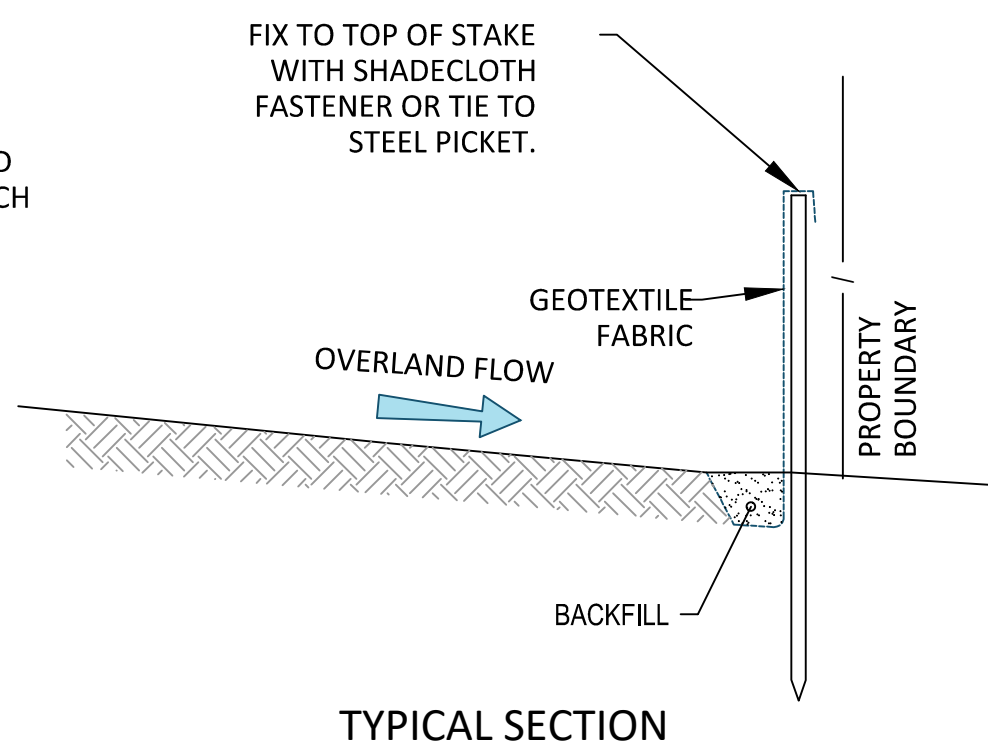
- ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH:
 - LOCAL AUTHORITY REQUIREMENTS,
 - EPA - POLLUTION CONTROL MANUAL FOR URBAN STORMWATER,
 - DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT MANUAL - "URBAN EROSION & SEDIMENT CONTROL".
- EROSION AND SEDIMENT CONTROL DRAWINGS AND NOTES ARE PROVIDED FOR THE WHOLE OF THE WORKS. SHOULD THE CONTRACTOR STAGE THESE WORKS THEN THE DESIGN MAY REQUIRE TO BE MODIFIED. VARIATION TO THESE DETAILS MAY REQUIRE TO BE APPROVED BY THE RELEVANT AUTHORITIES. THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE IMPLEMENTED AND ADOPTED 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 APPROVED CONSTRUCTION ENTRY/EXIT ROUTE.
- 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.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AS SOON AS THE RELEVANT WORKS HAVE BEEN COMPLETED.

SEQUENCE OF WORKS

- PRIOR TO COMMENCEMENT OF EXCAVATION THE FOLLOWING SOIL MANAGEMENT DEVICES MUST BE INSTALLED:
 - CONSTRUCT SILT CONTROL DEVICES BELOW THE SITE AND ACROSS ALL POTENTIAL RUNOFF SITES.
 - CO-ORDINATE CONSTRUCTION ENTRY/EXIT ROUTES WITH PROJECT MANAGER. ARRANGE SUITABLE LOCATION FOR THE INSPECTION OF TRUCKS PRIOR TO LEAVING SITE AND DIVERT RUNOFF TO SUITABLE CONTROL SYSTEM.
 - CONSTRUCT MEASURES TO DIVERT UPSTREAM FLOWS INTO EXISTING STORMWATER SYSTEM.
 - PROVIDE SANDBAG SEDIMENT TRAPS UPSTREAM OF EXISTING PITS.
 - LOCATE A 1.8 METRE CHAIN WIRE FENCE AROUND THE BOUNDARIES AND ATTACH HESSIAN CLOTH TO IT ON THE WINDWARD SIDE (TIES AT THE TOP CENTER AND BOTTOM AND AT 1 METRE INTERVALS).
- DISTURBED AREAS ARE TO BE REGULARLY WATERED TO REDUCE DUST POLLUTION.
- 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.



SEDIMENT FENCE DETAIL



1:200 2 0 2 4 6 8 10 A1
1:400 A3

REV	DESCRIPTION	DRAWN	APP'D	DATE
A	ISSUED FOR DA APPROVAL	IH	IH	15.12.23

OSHR AT VAUCLUSE HOLDINGS
PTY LTD

CLIENT

BATES SMART

ARCHITECT

669-683 OLD SOUTH
HEAD ROAD
VAUCLUSE

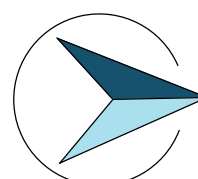
PROJECT

SEDIMENT & EROSION
CONTROL PLAN

TITLE

enscape
studio

tel 0411 267 151
info@enscapestudio.com.au
ABN 91 649 181 171



PRELIMINARY
NOT FOR CONSTRUCTION

AS NOTED

0333

PROJECT No

C-05

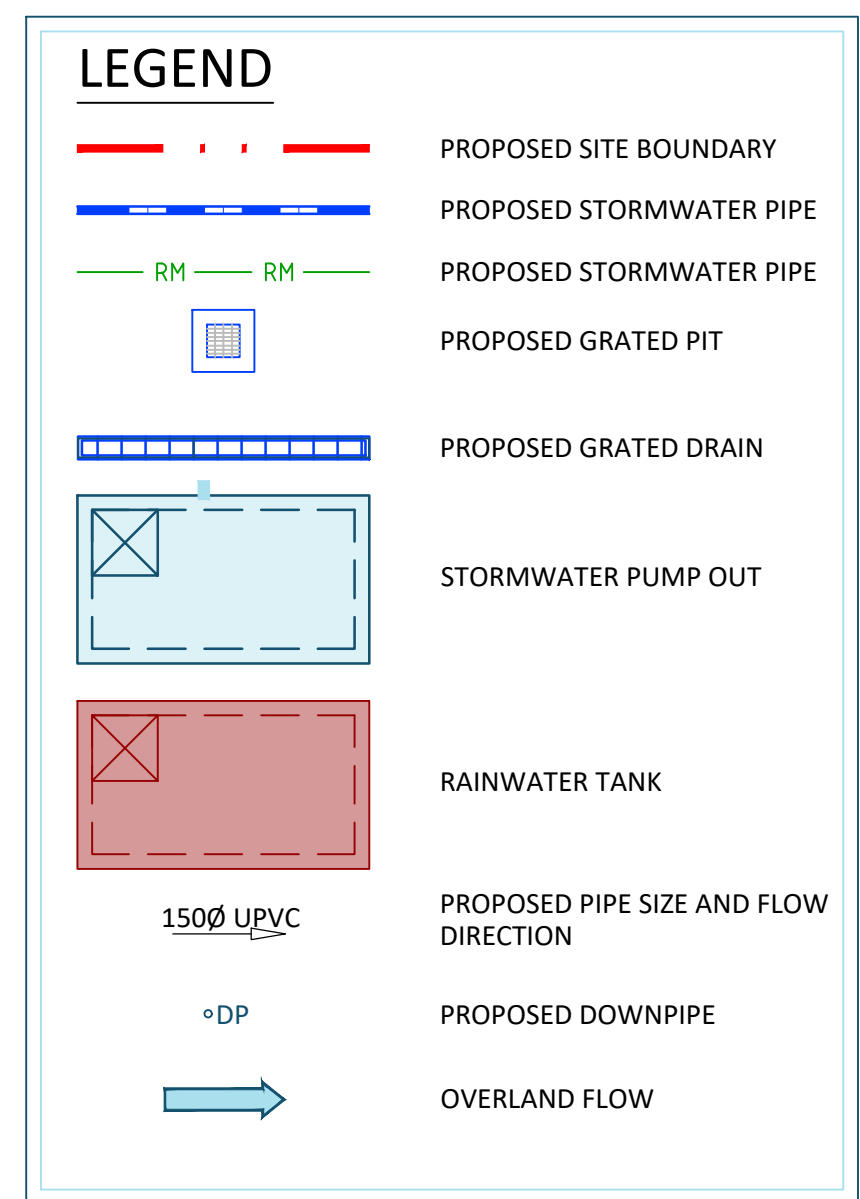
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A

REV

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TANK B	WIDTH	6.0m	
	LENGTH	8.5m	
	DEPTH	1.1m	
	VOLUME	56.10m ³	
	INVERT OF OUTLET:		66.15m AHD
	ORIFICE PLATE DIAMETER:		250mm

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REV	DESCRIPTION	DRAWN	APP'D	DATE
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CLIENT	ARCHITECT
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ARCHITECT

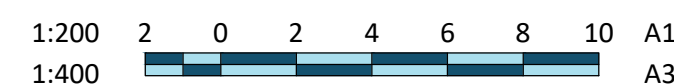
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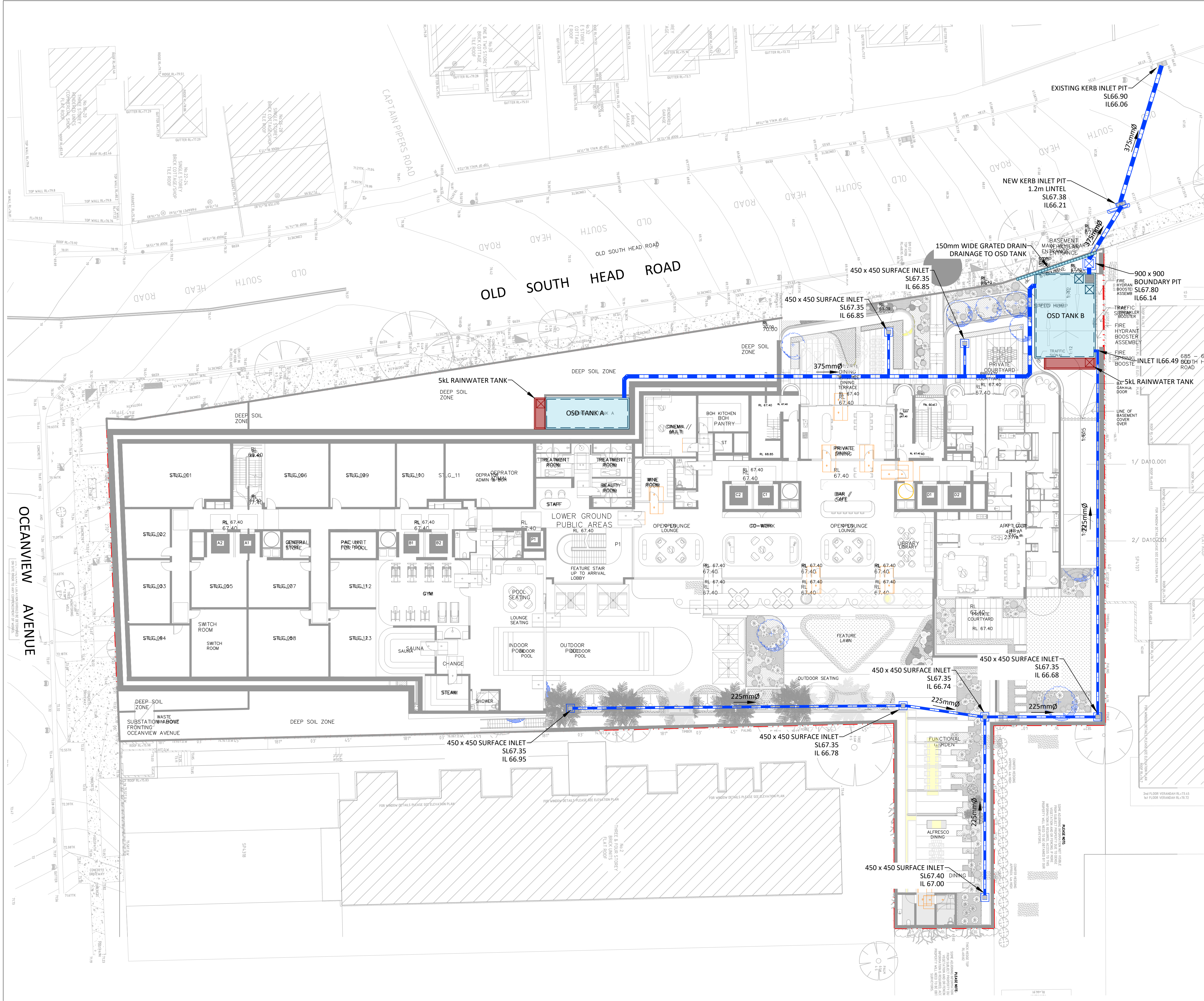
TITLE

info@enscapestudio.com.au	SCALE @ A1	PROJECT No	DRAWING No	REV
ABN 91 649 181 171				

PRELIMINARY
NOT FOR CONSTRUCTION

SCALE @ A1	PROJECT No	DRAWING No	REV
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LEGEND

PROPOSED SITE BOUNDARY

PROPOSED STORMWATER PIPE

RM

PROPOSED STORMWATER PIPE

PROPOSED GRATED PIT

PROPOSED GRATED DRAIN

STORMWATER PUMP OUT

RAINWATER TANK

1500 UPVC

PROPOSED PIPE SIZE AND FLOW DIRECTION

DP

PROPOSED DOWNPIPE

OVERLAND FLOW

STORMWATER MANAGEMENT NOTES

SITE INFORMATION

ADDRESS: 669-683 OLD SOUTH HEAD ROAD, VAUCLUSE
LOCAL GOVERNMENT AREA: WAVERLEY COUNCIL
SITE AREA: 4,354.03m²

DEVELOPMENT CONTROL REQUIREMENTS

GOVERNING DOCUMENT: WAVERLEY COUNCIL WATER MANAGEMENT TECHNICAL MANUAL - OCTOBER 2021
DESIGN STORMS: MINOR = 5% AEP
MAJOR = 1% AEP

DISCHARGE ATTENUATION REQUIREMENT:

1. THE PERMISSIBLE SITE DISCHARGE (PSD) IS LIMITED TO THE MAXIMUM DISCHARGE FROM THE SITE DURING THE 20% AEP FOR A 5 MINUTE STORM EVENT UNDER THE UNDEVELOPED SITE CONDITIONS.

WATER QUALITY TREATMENT REQUIREMENTS:

- 90% REMOVAL OF GROSS POLLUTANTS (> 5MM);
- 85% REMOVAL OF TOTAL SUSPENDED SOLIDS;
- 55% REMOVAL OF TOTAL PHOSPHOROUS; AND
- 40% REMOVAL OF TOTAL NITROGEN.

SITE ATTENUATION DESIGN

ALLOWABLE PEAK DISCHARGE RATE: 20% AEP = 112L/s

UNATTENUATED POST DEVELOPMENT DISCHARGE RATES: 20% AEP = 153L/s
1% AEP = 206L/s

ATTENUATED POST DEVELOPMENT DISCHARGE RATES: 20% AEP = 69L/s
1% AEP = 110L/s

REFER TO DRAINS CALCULATIONS BY ENSCAPE STUDIO FOR MORE INFORMATION.

OSD DESIGN SUMMARY

OSD VOLUME REQUIRED: 109.60m³
OSD VOLUME PROVIDED: 112.50m³

OSD DIMENSIONS:

TANK A

WIDTH 3.0m
LENGTH 8.4m
DEPTH 2.58m
VOLUME 64.50m³
INVERT OF OUTLET: 68.00m AHD
ORIFICE PLATE DIAMETER: 115mm

TANK B

WIDTH 6.0m
LENGTH 8.5m
DEPTH 1.1m
VOLUME 56.10m³
INVERT OF OUTLET: 66.15m AHD
ORIFICE PLATE DIAMETER: 250mm

C	LAYOUT UPDATED	IH	IH	08.07.24
B	ISSUED FOR DA APPROVAL	IH	IH	27.05.24
A	ISSUED FOR DA APPROVAL	IH	IH	15.12.23
REV	DESCRIPTION	DRAWN	APP'D	DATE

OSHR AT VAUCLUSE HOLDINGS PTY LTD	BATES SMART
CLIENT	ARCHITECT

669-683 OLD SOUTH HEAD ROAD VAUCLUSE	STORMWATER MANAGEMENT PLAN LOWER GROUND
PROJECT	TITLE

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studio

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0333

C-12

C

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SCALE @ A1

PROJECT No

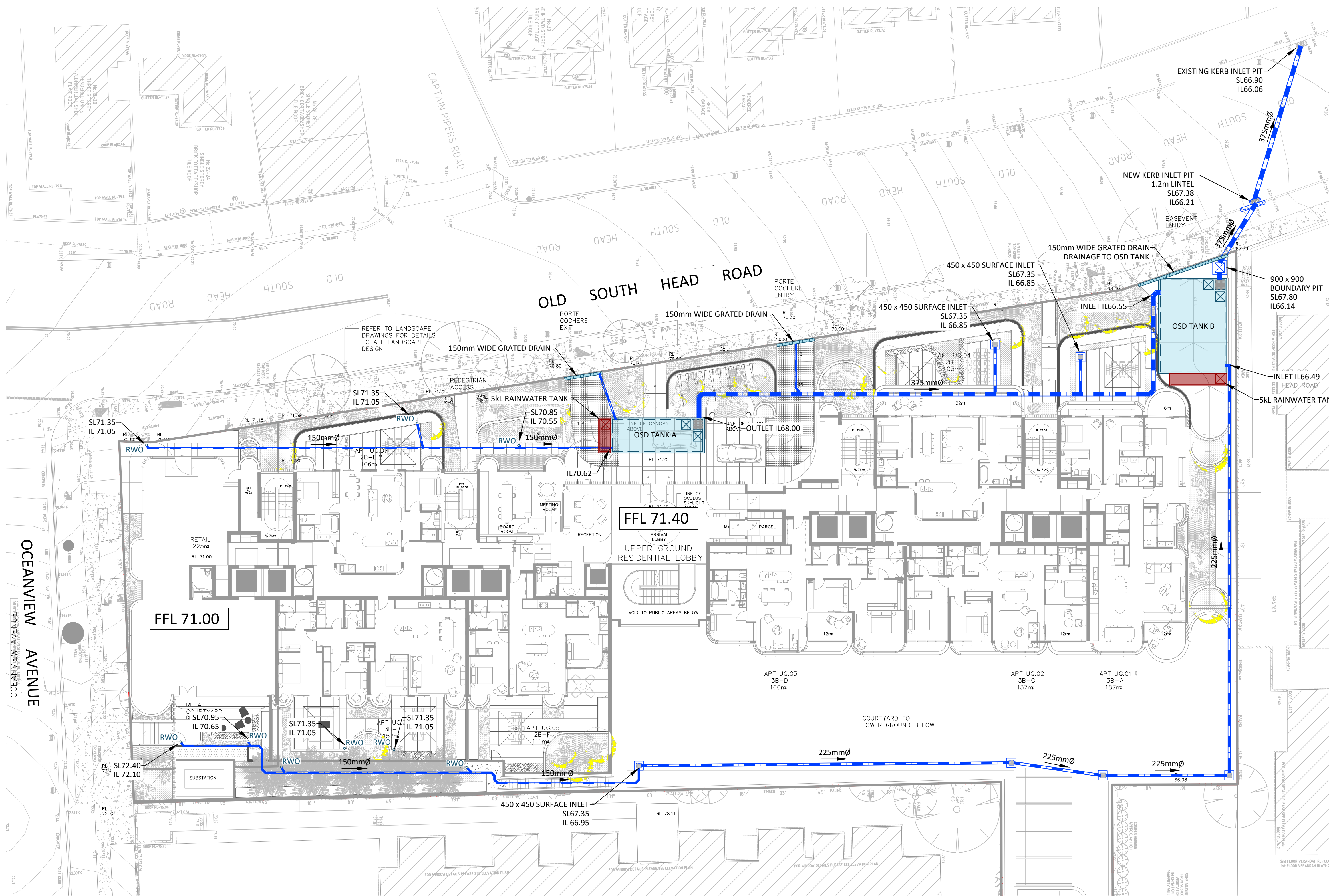
DRAWING No

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PRELIMINARY
NOT FOR CONSTRUCTION

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LEGEND

PROPOSED SITE BOUNDARY

PROPOSED STORMWATER PIPE

PROPOSED STORMWATER PIPE

PROPOSED GRATED PIT

PROPOSED GRATED DRAIN

STORMWATER PUMP OUT

RAINWATER TANK

PROPOSED PIPE SIZE AND FLOW DIRECTION

PROPOSED DOWNPIPE

OVERLAND FLOW

STORMWATER MANAGEMENT NOTES

SITE INFORMATION

ADDRESS: 669-683 OLD SOUTH HEAD ROAD, VAUCLUSE
LOCAL GOVERNMENT AREA: WAVERLEY COUNCIL
SITE AREA: 4,354.03m²

DEVELOPMENT CONTROL REQUIREMENTS

GOVERNING DOCUMENT: WAVERLEY COUNCIL WATER MANAGEMENT TECHNICAL MANUAL - OCTOBER 2021
DESIGN STORMS: MINOR = 5% AEP
MAJOR = 1% AEP

DISCHARGE ATTENUATION REQUIREMENT:

1. THE PERMISSIBLE SITE DISCHARGE (PSD) IS LIMITED TO THE MAXIMUM DISCHARGE FROM THE SITE DURING THE 20% AEP FOR A 5 MINUTE STORM EVENT UNDER THE UNDEVELOPED SITE CONDITIONS.

WATER QUALITY TREATMENT REQUIREMENTS:

- 90% REMOVAL OF GROSS POLLUTANTS (> 5MM);
- 85% REMOVAL OF TOTAL SUSPENDED SOLIDS;
- 55% REMOVAL OF TOTAL PHOSPHOROUS; AND
- 40% REMOVAL OF TOTAL NITROGEN.

SITE ATTENUATION DESIGN

ALLOWABLE PEAK DISCHARGE RATE:

20% AEP = 112L/s

UNATTENUATED POST DEVELOPMENT DISCHARGE RATES:

20% AEP = 153L/s
1% AEP = 206L/s

ATTENUATED POST DEVELOPMENT DISCHARGE RATES:

20% AEP = 69L/s
1% AEP = 110L/s

REFER TO DRAINS CALCULATIONS BY ENSCAPE STUDIO FOR MORE INFORMATION.

OSD DESIGN SUMMARY

OSD VOLUME REQUIRED: 109.60m³
OSD VOLUME PROVIDED: 112.50m³

OSD DIMENSIONS:

TANK A

WIDTH 3.0m
LENGTH 8.4m
DEPTH 2.58m
VOLUME 64.50m³
INVERT OF OUTLET: 68.00m AHD
ORIFICE PLATE DIAMETER: 115mm

TANK B

WIDTH 6.0m
LENGTH 8.5m
DEPTH 1.1m
VOLUME 56.10m³
INVERT OF OUTLET: 66.15m AHD
ORIFICE PLATE DIAMETER: 250mm

1:200 2 0 2 4 6 8 10 A1
1:400 A3

C	LAYOUT UPDATED	IH	IH	08.07.24
B	ISSUED FOR DA APPROVAL	IH	IH	27.05.24
A	ISSUED FOR DA APPROVAL	IH	IH	15.12.23
REV	DESCRIPTION	DRAWN	APP'D	DATE

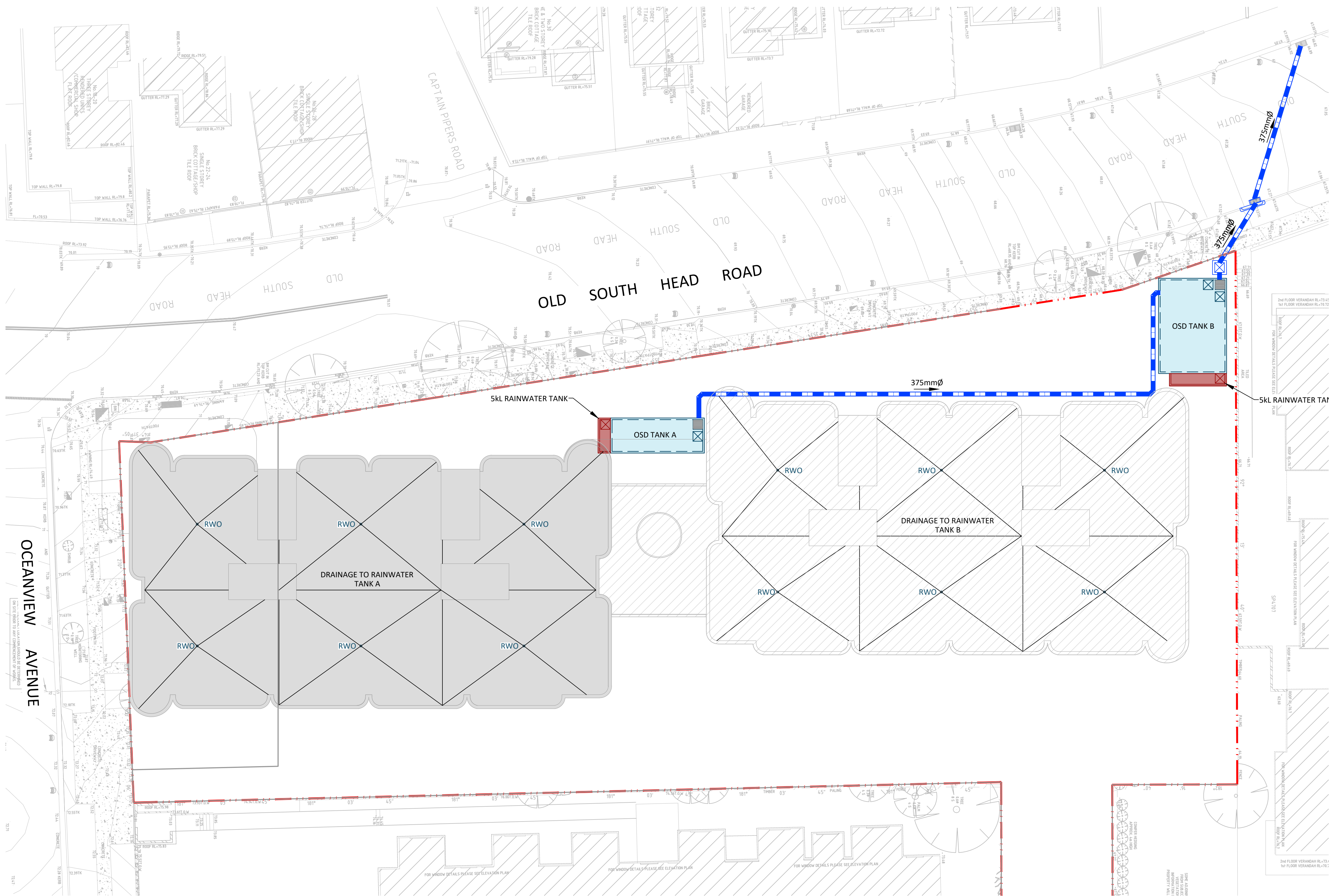
OSHR AT VAUCLUSE HOLDINGS PTY LTD	BATES SMART
CLIENT	ARCHITECT

669-683 OLD SOUTH HEAD ROAD VAUCLUSE	STORMWATER MANAGEMENT PLAN UPPER GROUND
PROJECT	TITLE

0333-C-13.dwg

enscape studio	AS NOTED	PRELIMINARY		C
		NOT FOR CONSTRUCTION		
tel 0411 267 151 info@enscapestudio.com.au ABN 91 649 181 171	SCALE @ A1	0333	C-13	REV
		PROJECT No	DRAWING No	

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LEGEND

- PROPOSED SITE BOUNDARY
- PROPOSED STORMWATER PIPE
- PROPOSED STORMWATER PIPE
- PROPOSED GRATED PIT
- PROPOSED GRATED DRAIN
- STORMWATER PUMP OUT
- RAINWATER TANK
- PROPOSED PIPE SIZE AND FLOW DIRECTION
- PROPOSED DOWNPIPE
- OVERLAND FLOW

STORMWATER MANAGEMENT NOTES

SITE INFORMATION

ADDRESS: 669-683 OLD SOUTH HEAD ROAD, VAUCLUSE
LOCAL GOVERNMENT AREA: WAVERLEY COUNCIL
SITE AREA: 4,354.03m²

DEVELOPMENT CONTROL REQUIREMENTS

GOVERNING DOCUMENT: WAVERLEY COUNCIL WATER MANAGEMENT TECHNICAL MANUAL - OCTOBER 2021
DESIGN STORMS: MINOR = 5% AEP
MAJOR = 1% AEP

DISCHARGE ATTENUATION REQUIREMENT:

1. THE PERMISSIBLE SITE DISCHARGE (PSD) IS LIMITED TO THE MAXIMUM DISCHARGE FROM THE SITE DURING THE 20% AEP FOR A 5 MINUTE STORM EVENT UNDER THE UNDEVELOPED SITE CONDITIONS.

WATER QUALITY TREATMENT REQUIREMENTS:

- 90% REMOVAL OF GROSS POLLUTANTS (> 5MM);
- 85% REMOVAL OF TOTAL SUSPENDED SOLIDS;
- 55% REMOVAL OF TOTAL PHOSPHOROUS; AND
- 40% REMOVAL OF TOTAL NITROGEN.

SITE ATTENUATION DESIGN

ALLOWABLE PEAK DISCHARGE RATE:	20% AEP	= 112L/s
UNATTENUATED POST DEVELOPMENT DISCHARGE RATES:	20% AEP	= 153L/s
	1% AEP	= 206L/s
ATTENUATED POST DEVELOPMENT DISCHARGE RATES:	20% AEP	= 69L/s
	1% AEP	= 110L/s

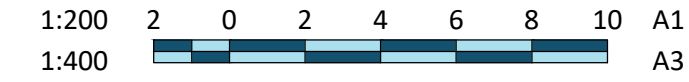
REFER TO DRAINS CALCULATIONS BY ENSCAPE STUDIO FOR MORE INFORMATION.

OSD DESIGN SUMMARY

OSD VOLUME REQUIRED: 109.60m³
OSD VOLUME PROVIDED: 112.50m³

OSD DIMENSIONS:

TANK A	WIDTH 3.0m	LENGTH 8.4m	DEPTH 2.58m	VOLUME 64.50m ³	INVERT OF OUTLET: 68.00m AHD	ORIFICE PLATE DIAMETER: 115mm
TANK B	WIDTH 6.0m	LENGTH 8.5m	DEPTH 1.1m	VOLUME 56.10m ³	INVERT OF OUTLET: 66.15m AHD	ORIFICE PLATE DIAMETER: 250mm



A	ISSUED FOR DA APPROVAL	IH	IH	27.05.24
REV	DESCRIPTION	DRAWN	APP'D	DATE

OSHR AT VAUCLUSE HOLDINGS PTY LTD	BATES SMART
CLIENT	ARCHITECT

669-683 OLD SOUTH HEAD ROAD VAUCLUSE	STORMWATER MANAGEMENT PLAN ROOF
PROJECT	TITLE

0333-C-14.dwg

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AS NOTED

0333

C-14

A

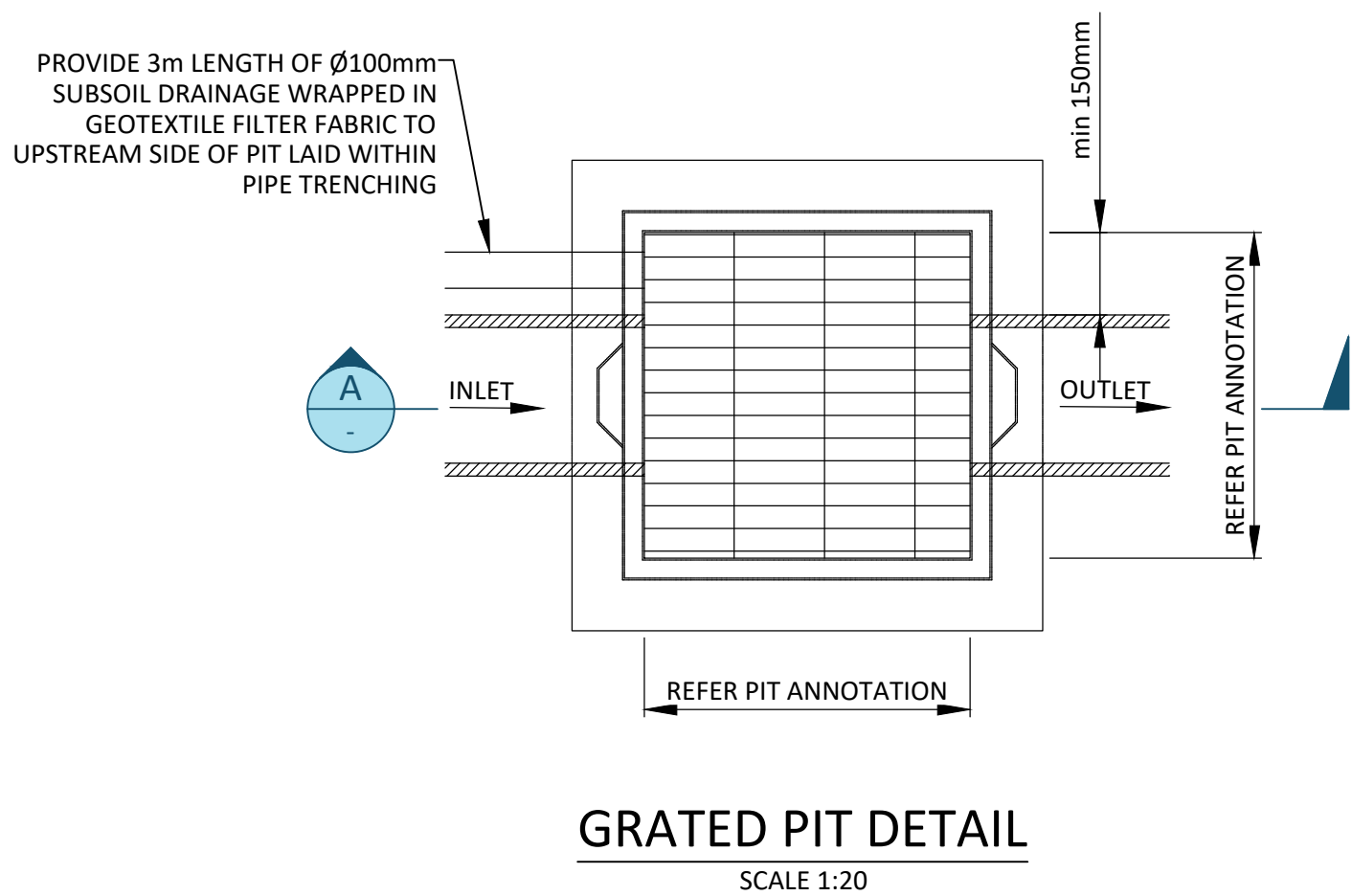
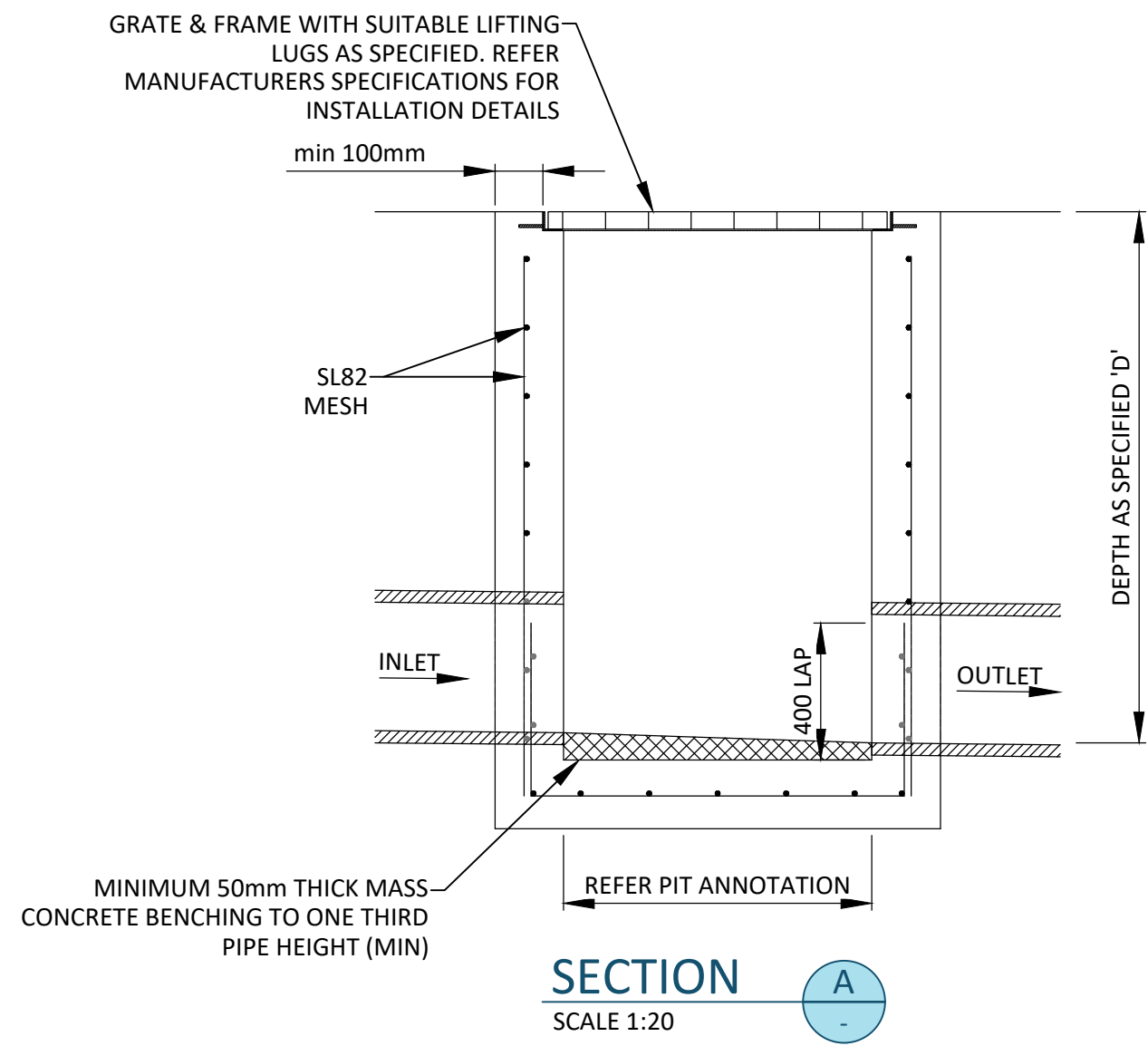
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PROJECT No

DRAWING No

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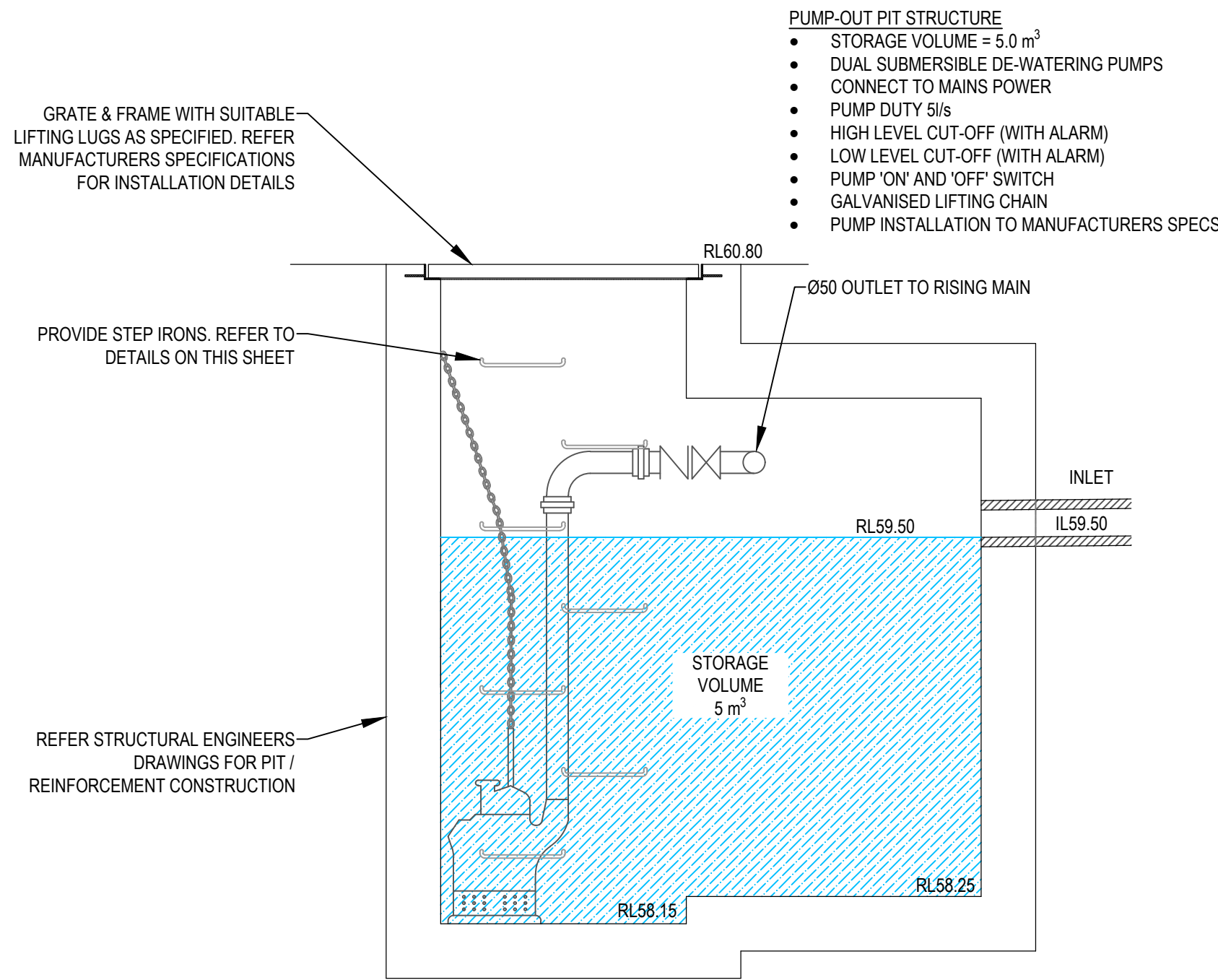
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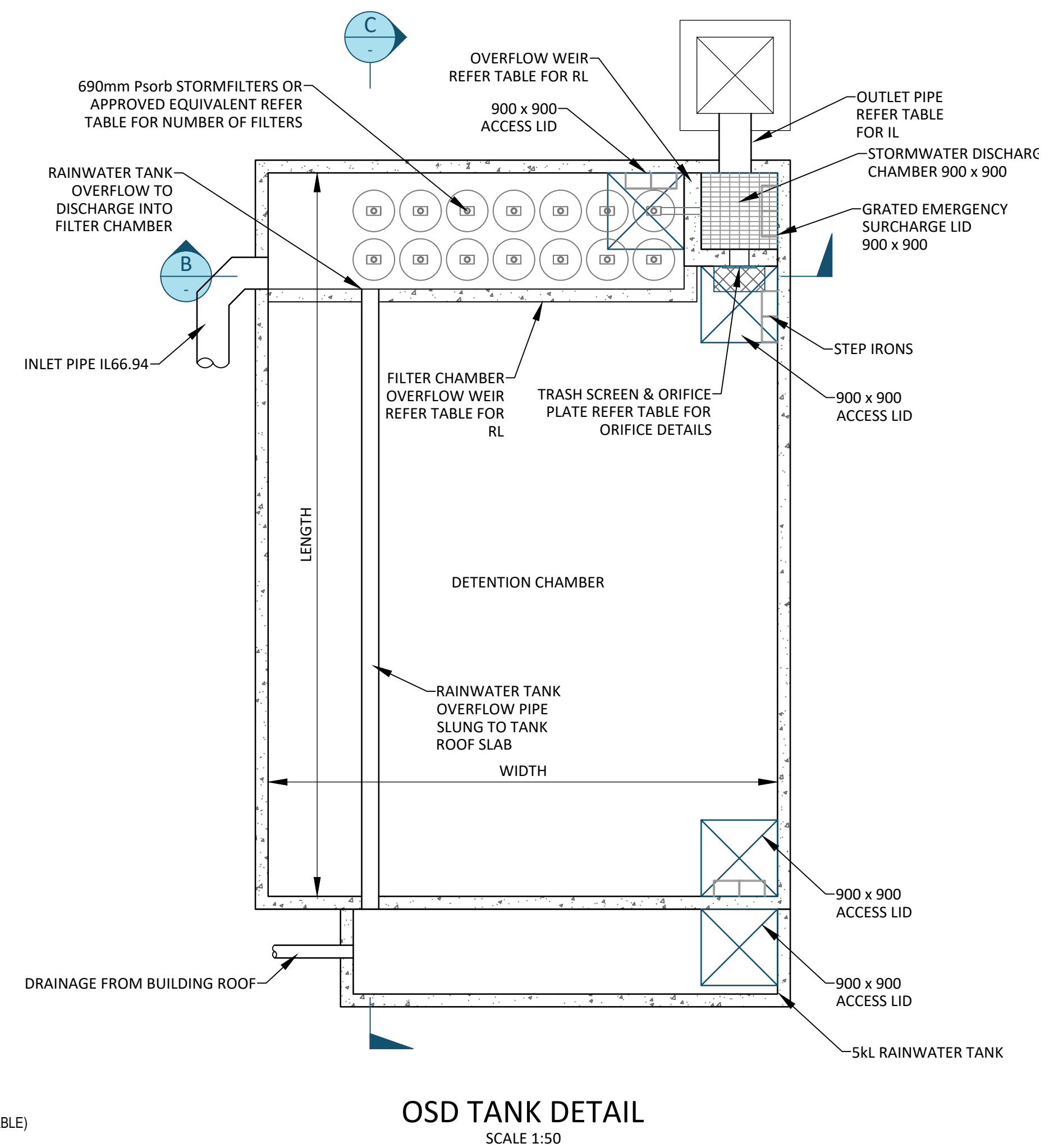
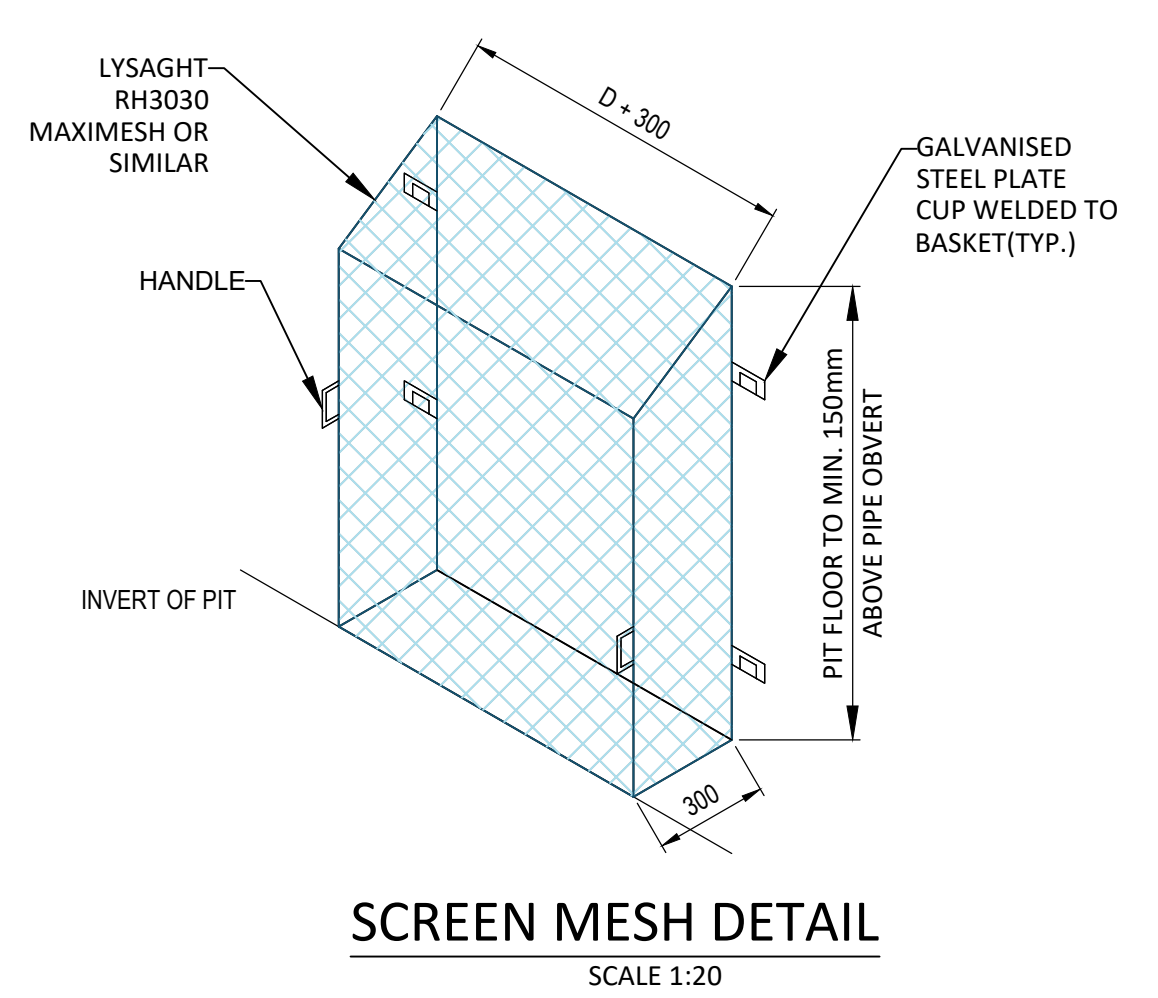
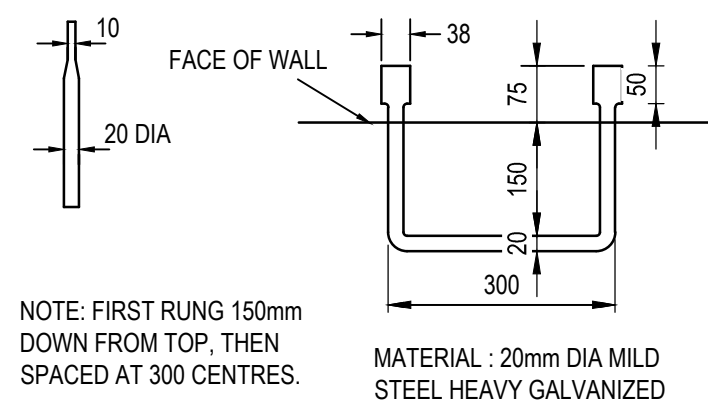
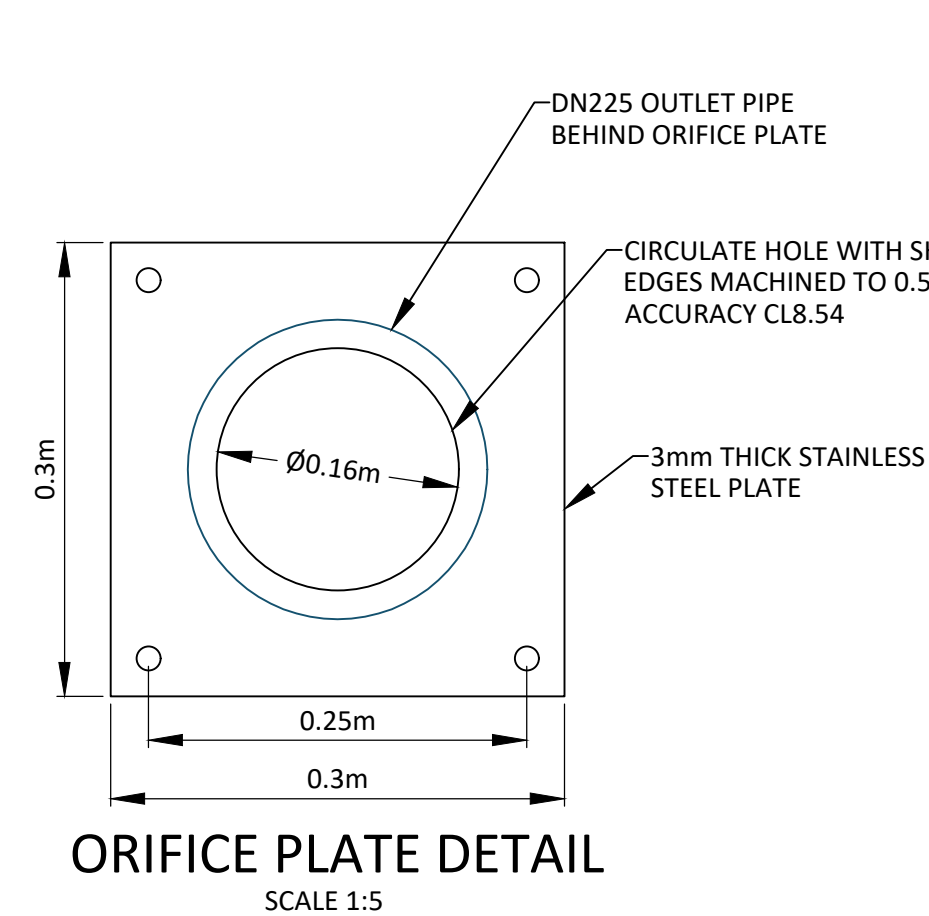
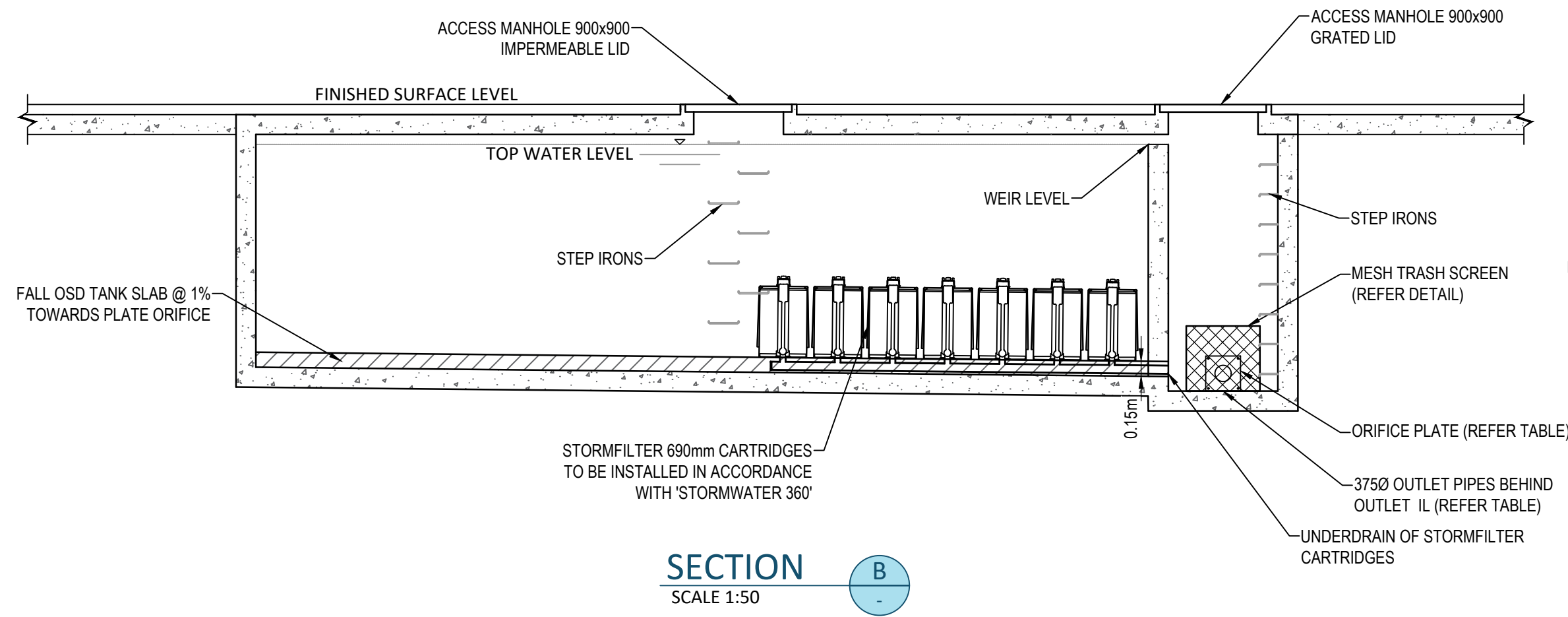
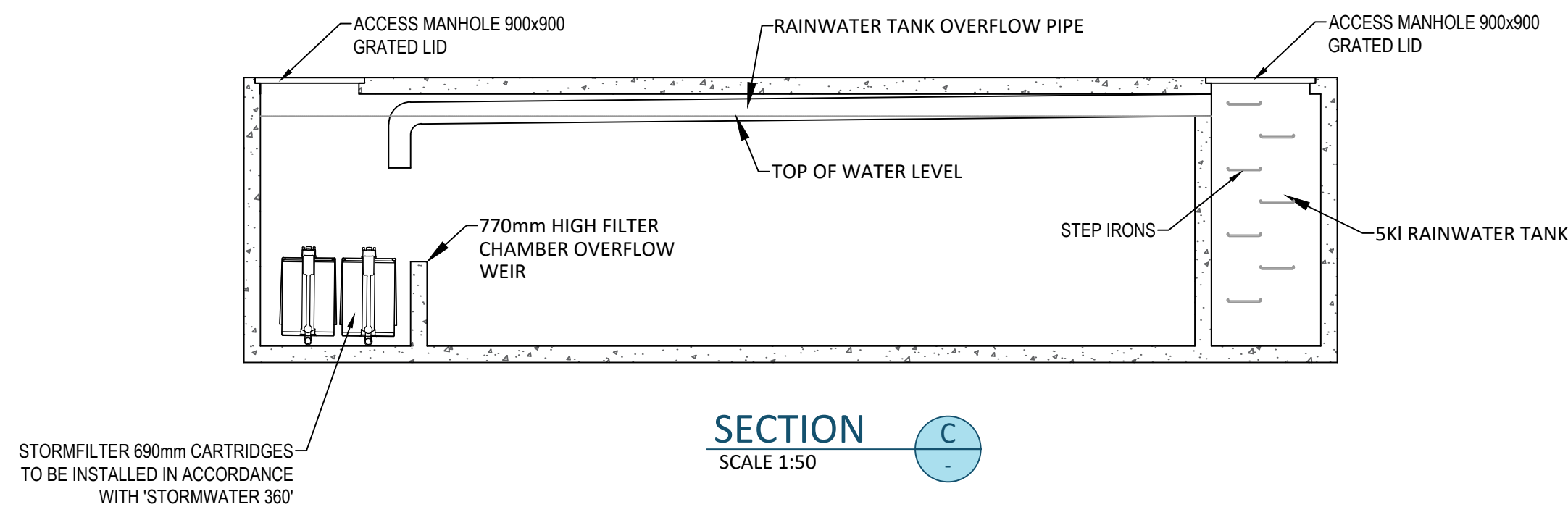
OSD TANK INFORMATION		
ELEMENT	TANK A	TANK B
VOLUME	64.50m³	56.10m³
DEPTH	2.58m	1.1m
LENGTH	8.4m	8.5m
WIDTH	3.0m	6m
TOP OF TANK LEVEL (RL)	71.30m	67.80m
OUTLET INVERT LEVEL (IL)	68.00m	66.15m
OVERFLOW WEIR LEVEL	70.58m	67.15m
ORIFICE PLATE DIAMETER	115mm	250mm
ORIFICE PLATE ϵ	68.06m	66.26m
No. OF FILTER CARTRIDGES	10	15

1:100 2 1 0 2 4 A1
1:200 HORIZONTAL A3

1:40 0.4 0 0.4 0.8 1.2 1.6 2 A1
1:80 VERTICAL A3



PUMP-OUT PIT DETAIL - DRIVEWAY DRAINAGE
SCALE 1:20



REV	DESCRIPTION	DRAWN	APP'D	DATE
C	ISSUED FOR DA APPROVAL	IH	IH	27.05.24
B	ISSUED FOR DA APPROVAL	IH	IH	18.01.24
A	ISSUED FOR DA APPROVAL	IH	IH	15.12.23

OSHR AT VAUCLUSE HOLDINGS
PTY LTD

BATES SMART

669-683 OLD SOUTH
HEAD ROAD
VAUCLUSE

STORMWATER
MANAGEMENT DETAILS

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studio

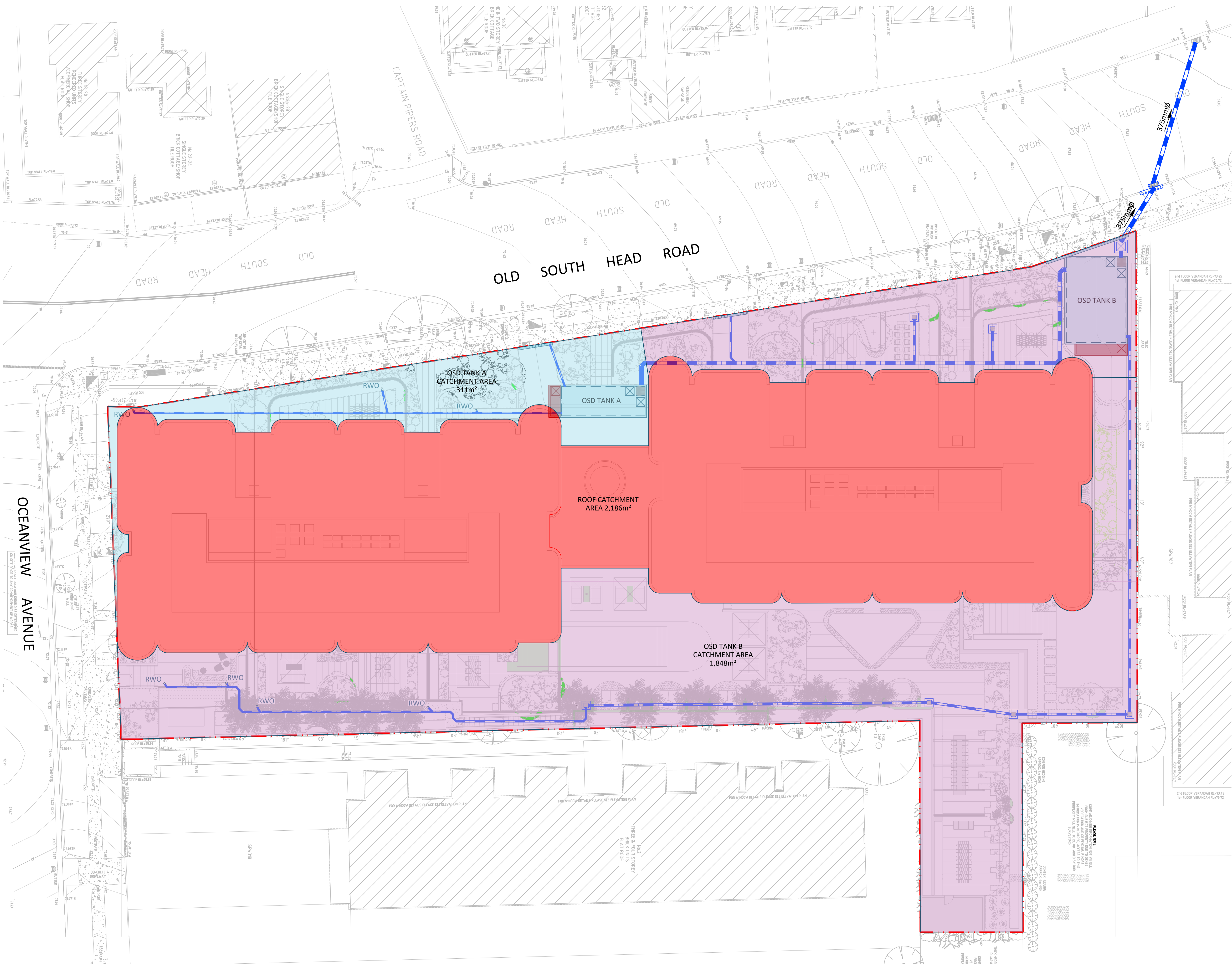
tel 0411 267 151
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ABN 91 649 181 171

PRELIMINARY
NOT FOR CONSTRUCTION

AS NOTED	0333	C-15	C
SCALE @ A1	PROJECT No	DRAWING No	REV

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LEGEND

PROPOSED SITE BOUNDARY

PROPOSED STORMWATER PIPE

PROPOSED STORMWATER PIPE

PROPOSED GRATED PIT

PROPOSED GRATED DRAIN

STORMWATER PUMP OUT

RAINWATER TANK

1500 UPVC

PROPOSED PIPE SIZE AND FLOW DIRECTION

DP

PROPOSED DOWNPIPE

OVERLAND FLOW

STORMWATER MANAGEMENT NOTES

SITE INFORMATION

ADDRESS: 669-683 OLD SOUTH HEAD ROAD, VAUCLUSE
LOCAL GOVERNMENT AREA: WAVERLEY COUNCIL
SITE AREA: 4,354.03m²

DEVELOPMENT CONTROL REQUIREMENTS

GOVERNING DOCUMENT: WAVERLEY COUNCIL WATER MANAGEMENT TECHNICAL MANUAL - OCTOBER 2021
DESIGN STORMS: MINOR = 5% AEP
MAJOR = 1% AEP

DISCHARGE ATTENUATION REQUIREMENT:

1. THE PERMISSIBLE SITE DISCHARGE (PSD) IS LIMITED TO THE MAXIMUM DISCHARGE FROM THE SITE DURING THE 20% AEP FOR A 5 MINUTE STORM EVENT UNDER THE UNDEVELOPED SITE CONDITIONS.

WATER QUALITY TREATMENT REQUIREMENTS:

- 90% REMOVAL OF GROSS POLLUTANTS (> 5MM);
- 85% REMOVAL OF TOTAL SUSPENDED SOLIDS;
- 55% REMOVAL OF TOTAL PHOSPHOROUS; AND
- 40% REMOVAL OF TOTAL NITROGEN.

SITE ATTENUATION DESIGN

ALLOWABLE PEAK DISCHARGE RATE: 20% AEP = 112L/s
UNATTENUATED POST DEVELOPMENT DISCHARGE RATES: 20% AEP = 153L/s
1% AEP = 206L/s
ATTENUATED POST DEVELOPMENT DISCHARGE RATES: 20% AEP = 69L/s
1% AEP = 110L/s

REFER TO DRAINS CALCULATIONS BY ENSCAPE STUDIO FOR MORE INFORMATION.

OSD DESIGN SUMMARY

OSD VOLUME REQUIRED: 109.60m³
OSD VOLUME PROVIDED: 112.50m³

OSD DIMENSIONS:

TANK A

WIDTH 3.0m
LENGTH 8.4m
DEPTH 2.58m
VOLUME 64.50m³
INVERT OF OUTLET: 68.00m AHD
ORIFICE PLATE DIAMETER: 115mm

TANK B

WIDTH 6.0m
LENGTH 8.5m
DEPTH 1.1m
VOLUME 56.10m³
INVERT OF OUTLET: 66.15m AHD
ORIFICE PLATE DIAMETER: 250mm

1:200 2 0 2 4 6 8 10 A1
1:400 A3

A	ISSUED FOR DA APPROVAL	IH	IH	27.05.24
REV	DESCRIPTION	DRAWN	APP'D	DATE

OSHR AT VAUCLUSE HOLDINGS
PTY LTD

BATES SMART

669-683 OLD SOUTH
HEAD ROAD
VAUCLUSE

STORMWATER
MANAGEMENT
CATCHMENT

CLIENT ARCHITECT

PROJECT TITLE

0333-C-16.dwg

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AS NOTED	0333	C-16	A
SCALE @ A1	PROJECT No	DRAWING No	REV

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