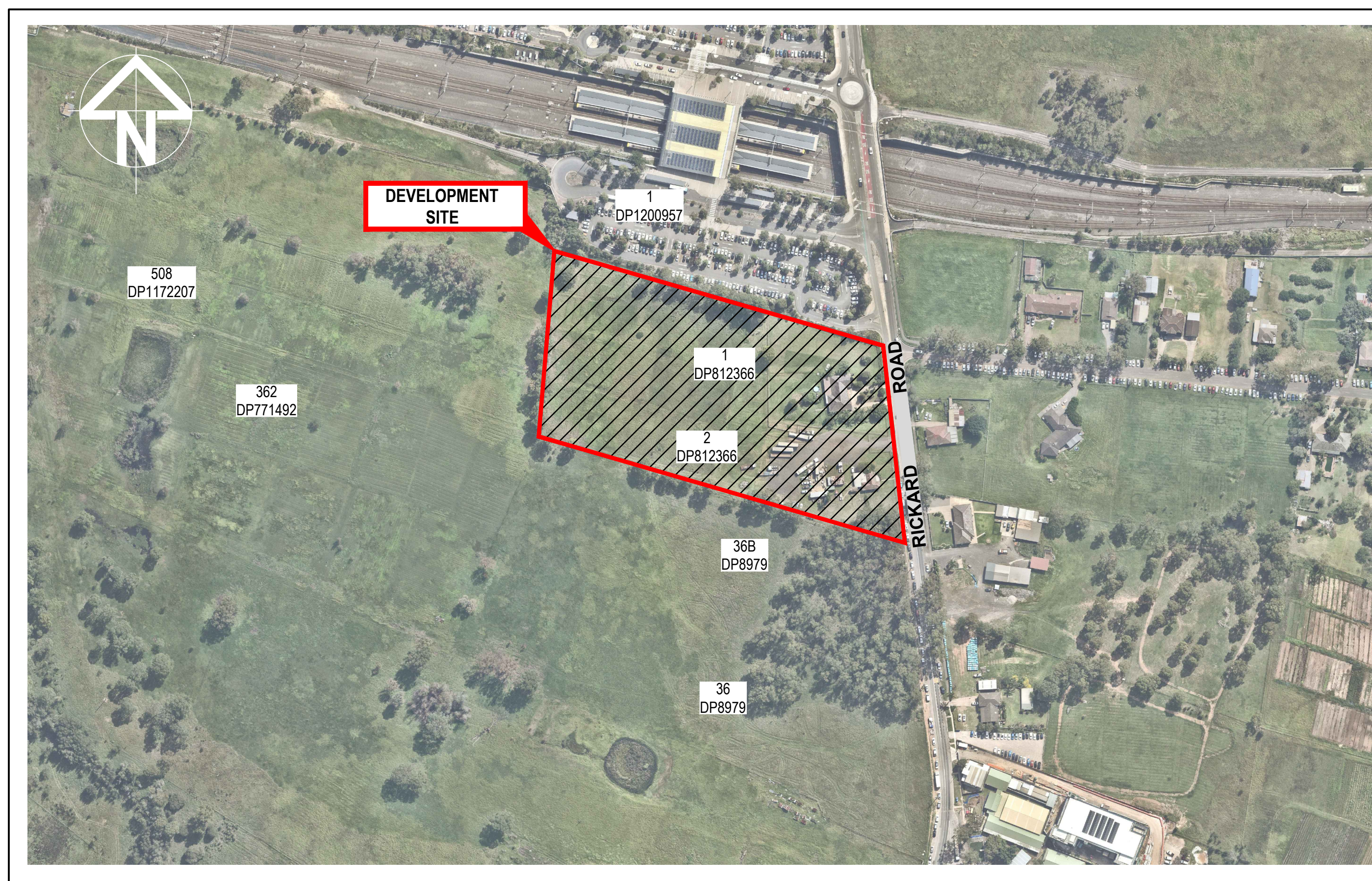


PROPOSED MIXED-USE DEVELOPMENT 173-183 RICKARD ROAD, LEPPINGTON STORMWATER CONCEPT PLANS

ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION



LOCALITY PLAN
N.T.S

LOT 1 DP812366
LOT 2 DP812366

DRAWING LIST

NO	SHEET TITLE
GENERAL	
000	COVER SHEET
STORMWATER CONCEPT PLANS	
100	STORMWATER CONCEPT PLAN BASEMENT
110	STORMWATER CONCEPT PLAN LOWER GROUND FLOOR
120	STORMWATER CONCEPT PLAN SITE PLAN
STORMWATER CALCULATIONS AND DETAILS	
200	BASEMENT DRAINAGE DETAILS AND CALCULATIONS
210	ON-SITE DETENTION DETAILS AND CALCULATIONS SHEET 1 OF 3
211	ON-SITE DETENTION DETAILS AND CALCULATIONS SHEET 2 OF 3
212	ON-SITE DETENTION DETAILS AND CALCULATIONS SHEET 3 OF 3
220	WSUD CATCHMENT PLAN AND MUSIC RESULTS
230	OSD CATCHMENT PLAN
MISCELLANEOUS	
300	MISCELLANEOUS DETAILS

PROPOSED MIXED-USE DEVELOPMENT 173-183 RICKARD ROAD, LEPPINGTON STORMWATER CONCEPT PLANS

PROJECT No.:	STAGE:	MILESTONE:	REVISION DATE:	DRAWING No.:	REVISION:
23629	1	SSDA	01/06/2026	000	B



NOTE
FOR CLEANING OPENINGS (CO)
BEHIND STORAGE CAGES, ALLOW
600x600 OPENING WITHIN THE REAR
MESH FOR MAINTENANCE PURPOSES.

NOTE:
ALL LINEAR GRATED DRAINS
TO BE MIN. 100mm DEEP.

NOTE:
REFER ARCHITECTURAL DRAWINGS
FOR FINAL SET-OUT LEVELS.

PIPES NOTE:
Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

LEGEND

- — — — — **1** PROPOSED STORMWATER
- VD Ø100mm VERTICAL DROP
- SURFACE FLOW DIRECTION
- SS — SS — Ø100mm SUBSOIL DRAINAGE
TO BE WRAPPED IN
GEOTEXTILE BIDIMA34
@ MIN 1.0% SLOPE
- ⊙ CLEANING EYE
(OR INSPECTION EYE)
- IO INSPECTION OPENING
- RL 29.65 FINISHED SURFACE LEVEL
- ▬ GRATED DRAIN
- (HD) HEAVY DUTY
- FG Ø150mm FLOOR GRATE

STANDARD PUMP OUT DESIGN NOTES

- THE PUMP OUT SYSTEM SHALL BE DESIGN TO BE OPERATED IN THE FOLLOWING MANNER:
- 1 - THE PUMP SHALL BE PROGRAMMED TO WORK ALTERNATELY TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.
 - 2 - A FLOAT SHALL BE PROVIDED TO ENSURE OF THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS AT THE MINIMUM WATER LEVEL. THE SAME FLOAT SHALL BE SET TO TURN ONE OF THE PUMPS ON UPON THE WATER LEVEL IN THE TANK RISING TO APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL. THE PUMP SHALL OPERATE UNTIL THE TANK IS DRAINED TO THE MINIMUM WATER LEVEL.
 - 3 - A SECOND FLOAT SHALL BE PROVIDE AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHALL START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.
 - 4 - AN ALARM SYSTEM SHALL BE PROVIDE WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.
 - 5 - A CONFINED SPACE DANGER SIGN SHALL BE PROVIDED AT ALL ACCESS POINT TO THE PUMP-OUT STORAGE TANK IN ACCORDANCE WITH THE UPPER PARRAMATTA RIVER CATCHMENT TRUST OSD HANDBOOK.



BASEMENT PUMP OUT FAILURE WARNING SIGN

SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT

COLOURS:
"WARNING" = RED
BORDER AND OTHER LETTERING = BLACK



CONFINED SPACE DANGER SIGN

A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK'S CONFINED SPACE.

B) MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS) -250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)

C) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPYLENE

D) SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN

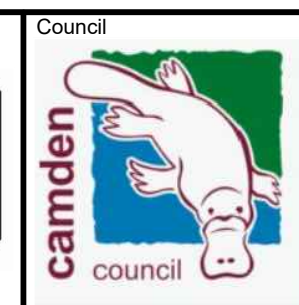
COLOURS:
"DANGER" & BACKGROUND = WHITE
ELLIPTICAL AREA = RED
RECTANGLE CONTAINING ELLIPSE = BLACK
BORDER AND OTHER LETTERING = BLACK

NOT FOR CONSTRUCTION

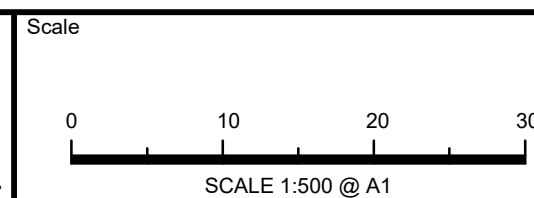
B	ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION	01/06/2026	MIG	SBF
A	ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION	25/05/2026	MIG	SBF
Issue	Description	Date	Design	Checked

Certification By Dr. Michel Chasaya
B.E., M.E. (Res), Ph.D., F.I.E. Aust., CPEng.,
Civil & Structural Engineer

Architect
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Project
173-183 RICKARD ROAD, LEPPINGTON
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
STATE SIGNIFICANT DEVELOPMENT APPLICATION

Drawing Title	STORMWATER CONCEPT PLAN BASEMENT			
Scale	A1	Project No.	Dwg. No.	Issue
1:500		23629	100	B

PIPES NOTE:
Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

NOTE:
ALL STORMWATER DRAINAGE PIPES ARE Ø100 PVC
AT MIN 1.0% SLOPE UNLESS NOTED OTHERWISE.

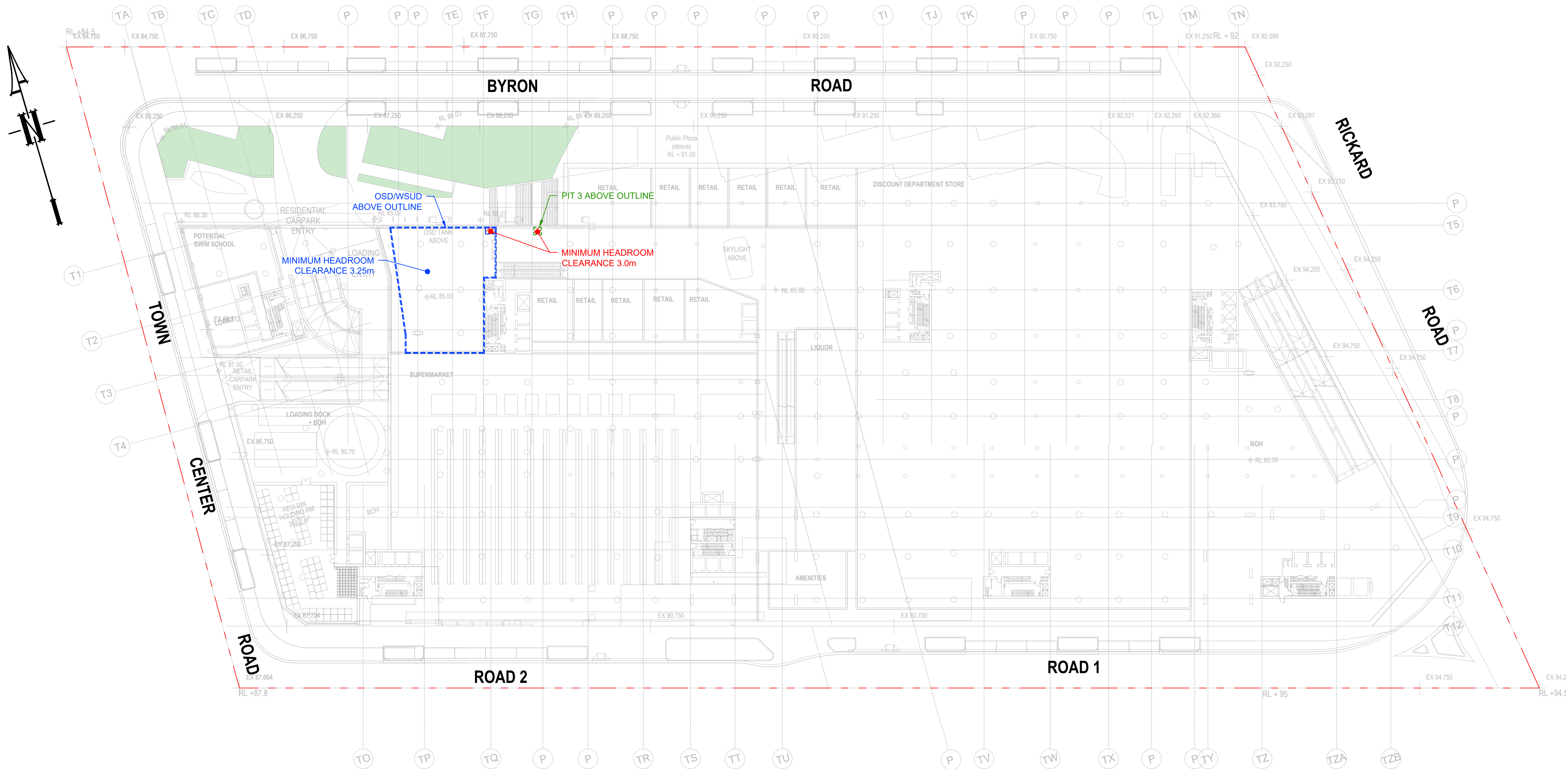
NOTE:
1. CONTRACTOR IS TO PROVIDE OVERFLOW OUTLETS & EMERGENCY OVERFLOW
SPITTERS TO ALL TRAPPED AREAS.
2. DP/VD ARE Ø100 PIPES UNLESS NOTED OTHERWISE.
3. ALL TRANSFERRING PIPES ARE SUSPENDED UNLESS NOTED OTHERWISE.
4. BALCONIES PIPES ARE Ø50mm HDPE OR PVC CAST IN SLAB AT MIN 1.0% SLOPE.

NOTE:
IT IS CONTRACTOR'S RESPONSIBILITY
TO ENSURE MINIMUM PONDING IS
ACHIEVED OVER THE FLOOR WASTES
BY GRADING CATCHMENTS' SURFACES
AT MINIMUM 1.0% FALL.

NOTE:
REFER ARCHITECTURAL DRAWINGS
FOR FINAL SET-OUT LEVELS.

LEGEND

- PROPOSED STORMWATER DRAINAGE PIPE
- PROPOSED STORMWATER DRAINING TO OSD
- PROPOSED STORMWATER BYPASSING OSD
- Ø100 SUBSOIL DRAINAGE TO BE WRAPPED IN GEOTEXTILE BIDIMA34
- RISER PIPE
- DOWNPIPE Ø100
- VERTICAL DROP Ø100
- VERTICAL DROP FROM SLAB
- PLANTER GRATE Ø150
- FLOOR GRATE Ø150
- FLOOR GRATE 200x200 (ALLOW MINIMUM 1.0% FALL TO FG)
- FLOOR GRATE 300x300 (ALLOW MINIMUM 1.0% FALL TO FW)
- RAINWATER OUTLET Ø260 SPS (ALLOW MINIMUM 1.0% FALL TO RWO)
- SUSPENDED PLANTER BOX RAINWATER OUTLET
- AC CONDENSER TUNDISH TO MANUFACTURER'S DETAILS
- Ø50mm EMERGENCY OVERFLOW SPITTERS/PIPES U.N.O.
- INVERT LEVEL
- DESIGN SURFACE LEVEL
- EXISTING SURFACE LEVEL



LOWER GROUND FLOOR PLAN
SCALE 1:100

NOT FOR CONSTRUCTION

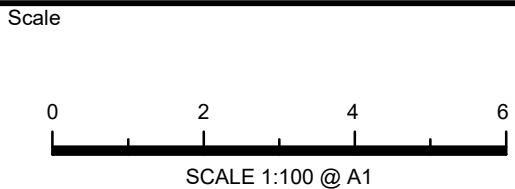
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STORMWATER CONCEPT PLANS
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Scale	A1	Project No.	Dwg. No.	Issue
1:100		23629	110	B

PIPES NOTE:

Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

NOTE:

ALL STORMWATER DRAINAGE PIPES ARE Ø100 PVC AT MIN 1.0% SLOPE UNLESS NOTED OTHERWISE.

NOTE:

- CONTRACTOR IS TO PROVIDE OVERFLOW OUTLETS & EMERGENCY OVERFLOW SPITTERS TO ALL TRAPPED AREAS.
- DP/VD ARE Ø100 PIPES UNLESS NOTED OTHERWISE.
- ALL TRANSFERRING PIPES ARE SUSPENDED UNLESS NOTED OTHERWISE.
- BALCONIES PIPES ARE Ø50mm HDPE OR PVC CAST IN SLAB AT MIN 1.0% SLOPE.

NOTE:

IT IS CONTRACTOR'S RESPONSIBILITY TO ENSURE MINIMUM PONDING IS ACHIEVED OVER THE FLOOR WASTES BY GRADING CATCHMENTS' SURFACES AT MINIMUM 1.0% FALL.

NOTE:

ALL LINEAR GRATED DRAINS TO BE MIN. 200mm (W) x 100mm (D) UNLESS NOTED OTHERWISE.

NOTE:

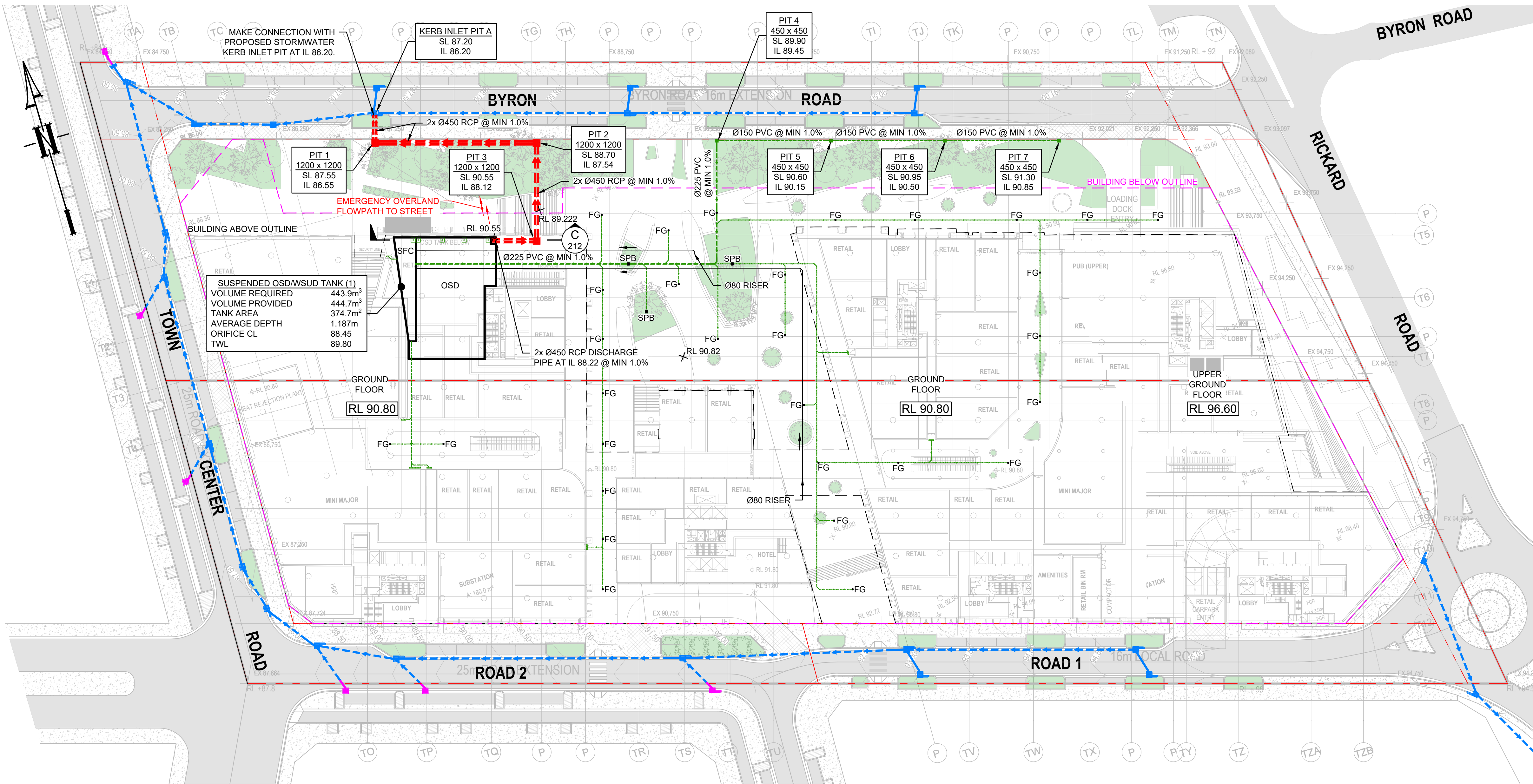
ALL GRATES WITHIN FOOTWAY AREAS TO BE HEEL GUARD & BIKE SAFE.

NOTE:

PITS DEEPER THAN 1.0m TO BE FITTED WITH STEP IRONS.

LEGEND

- PROPOSED STORMWATER DRAINAGE PIPE
- PROPOSED STORMWATER DRAINING TO OSD
- PROPOSED STORMWATER BYPASSING OSD
- PROPOSED STORMWATER EXTERNAL DRAINAGE
- PROPOSED FUTURE STORMWATER EXTERNAL DRAINAGE
- Ø100 SUBSOIL DRAINAGE TO BE WRAPPED IN GEOTEXTILE BIDIMA34
- RISER PIPE
- DP DOWNPIPE Ø100
- VD VERTICAL DROP Ø100
- VD VERTICAL DROP FROM SLAB
- PG PLANTER GRATE Ø150
- FG FLOOR GRATE Ø150
- FG FLOOR GRATE 200x200 (ALLOW MINIMUM 1.0% FALL TO FG)
- FW FLOOR GRATE 300x300 (ALLOW MINIMUM 1.0% FALL TO FW)
- RWO RAINWATER OUTLET Ø260 SPS (ALLOW MINIMUM 1.0% FALL TO RWO)
- SPB SUSPENDED PLANTER BOX RAINWATER OUTLET
- TD AC CONDENSER TUNDISH TO MANUFACTURER'S DETAILS
- OF Ø50mm EMERGENCY OVERFLOW SPITTERS/PIPES U.N.O.
- IL 31.00 INVERT LEVEL
- RL 29.85 DESIGN SURFACE LEVEL
- NS 28.31 EXISTING SURFACE LEVEL
- ExSW EXISTING STORMWATER DRAINAGE
- ExW EXISTING WATER MAIN
- ExS EXISTING SEWER MAIN
- ExT EXISTING TELESTRA
- ExE EXISTING ELECTRICAL
- ExEU EXISTING ELECTRICAL UNDERGROUND
- ExEQ EXISTING OVERHEAD ELECTRICAL
- ExG EXISTING GAS
- HD EXISTING HOUSE DRAINAGE
- ExDP EXISTING OPTIC FIBER



SITE PLAN
SCALE 1:500

GENERAL NOTES

- ALL LINES ARE TO BE Ø90 uPVC 1.0% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWERGRADE & SEALED.
- EXISTING SERVICES LOCATIONS SHOWN INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
- ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
- ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450 PLASTIC.
- PITS LESS THAN 600mm DEEP MAY BE BRICK, PRECAST OR CONCRETE.
- ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- ALL EXTERNAL SLABS TO BE WATERPROOFED.
- ALL GRATES TO HAVE CHILD PROOF LOCKS.
- ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
- ALL DPs TO HAVE LEAF GUARDS.
- ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
- ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
- COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
- ALL WORK SHALL BE IN ACCORDANCE WITH B.C.A. AND A.S.3500.3.
- REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPING.
- CARE TO BE TAKEN AROUND EXISTING SEWER. STRUCTURAL ADVICE IS REQUIRED FOR SEWER PROTECTION AGAINST ADDITIONAL LOADING FROM NEW PITS, PIPES, RETAINING WALLS AND OSD BASIN WATER LEVELS.
- ALL PIPES IN BALCONIES TO BE Ø65 uPVC CAST IN CONCRETE SLAB. CONTRACTOR TO PROVIDE A BREAK / OPEN VOID IN RAIL / BALUSTRADE FOR STORMWATER EMERGENCY OVERFLOW. ALL ENCLOSED AREAS/PLANTER BOXES TO BE FITTED WITH FLOOR WASTES & DRAINED TO OSD DOWNPIPES TO BE CHECKED BY ARCHITECT & PLUMBER PRIOR TO CONSTRUCTION.
- THE OSD BASIN / TANK IS TO BE BUILT TO THE CORRECT LEVELS & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN ADDITIONAL FEES FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS REQUIRED UNDER THE CONTRACTOR'S EXPENSES

NOTE:

REFER ARCHITECTURAL DRAWINGS FOR FINAL SET-OUT LEVELS.

NOTE:

ALL UPPER LEVELS DRAINAGE SYSTEM TO BE CONNECTED TO WSUD TANK, SUBJECT TO DETAILED DESIGN STAGE.

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
B	ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION	01/06/2026	MIG	SBF
A	ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION	25/05/2026	MIG	SBF

Certification By Dr. Michel Chasaya
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Civil & Structural Engineer

Architect

DKO

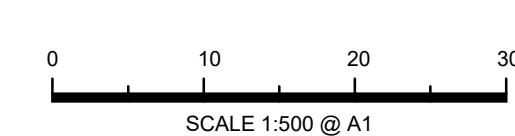
Council



Client

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Scale



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Project

173-183 RICKARD ROAD, LEPPINGTON
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
STATE SIGNIFICANT DEVELOPMENT APPLICATION

Drawing Title

STORMWATER CONCEPT PLAN
SITE PLAN

Scale

1:500

Project No.

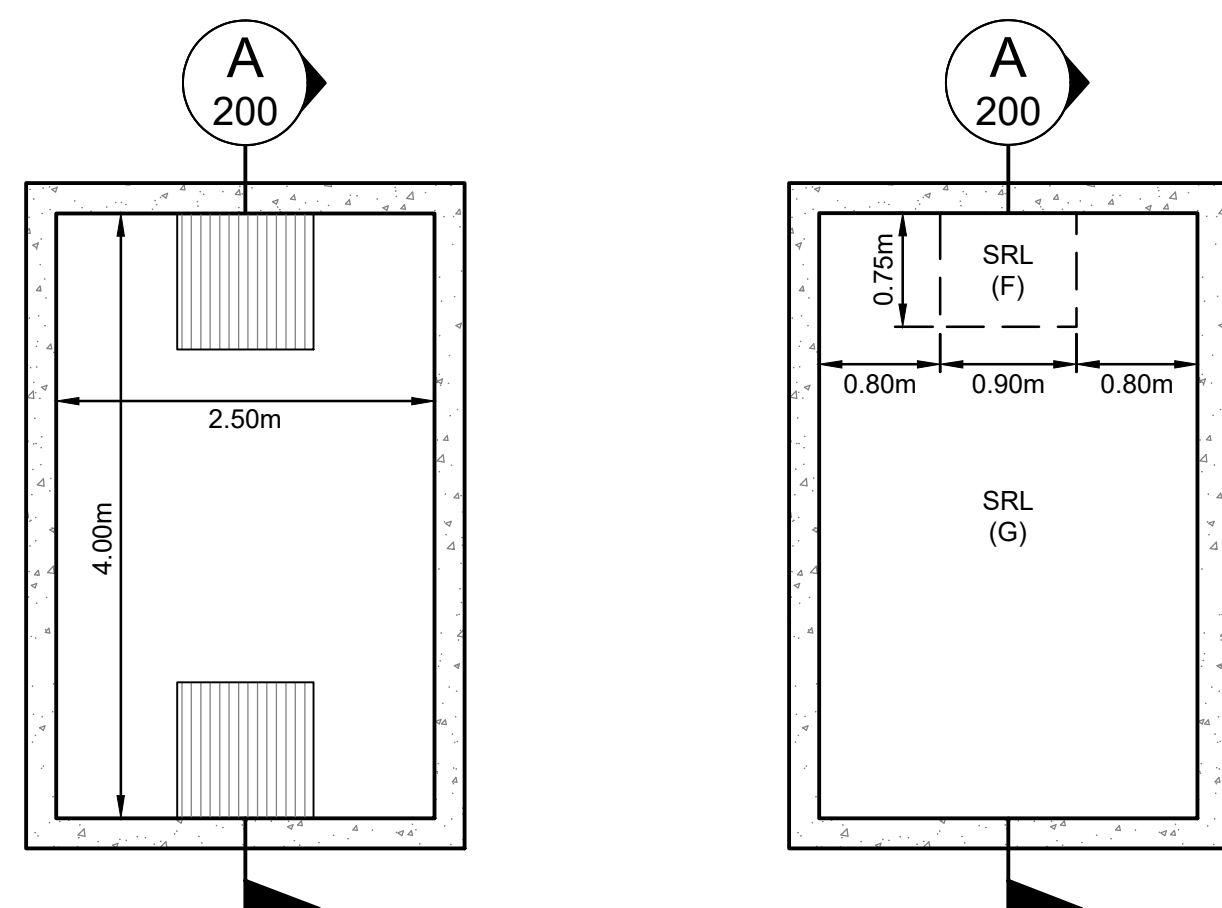
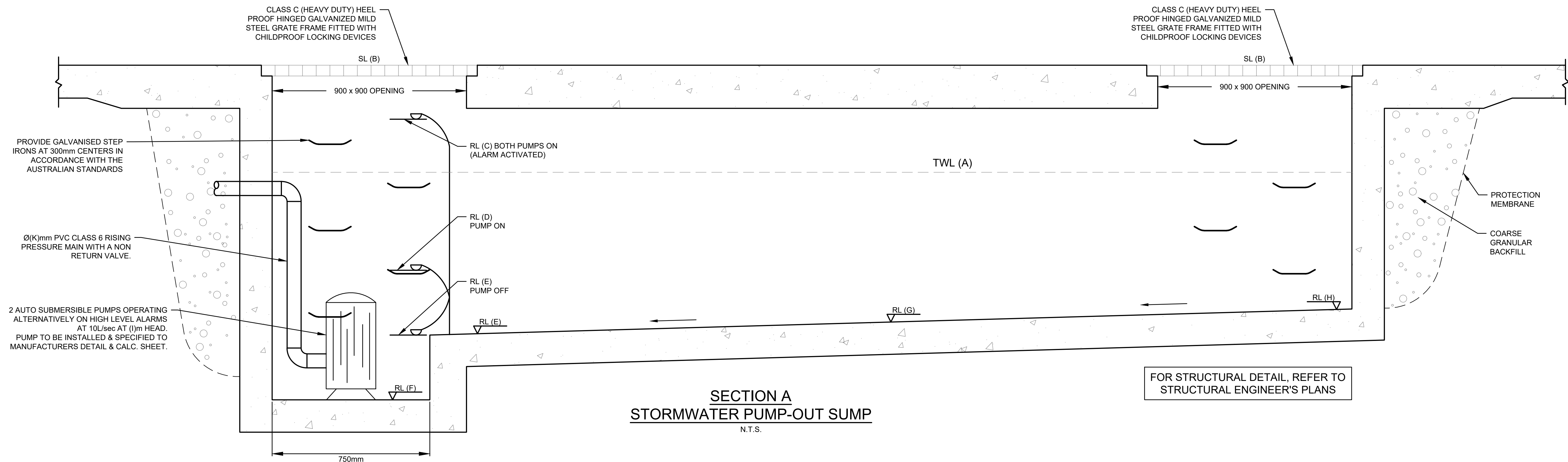
23629

Dwg. No.

120

Issue

B



- NOTE:**
- FOR ALL THE STRUCTURAL DETAILS, REFER TO STRUCTURAL ENGINEER'S PLAN.
 - ALL THE AG LINES BEHIND THE BASEMENT WALLS TO BE CONNECTED TO PUMP-OUT SUMP.

PUMP-OUT SUMP DETAIL
PLAN VIEW
SCALE 1:50

PUMP-OUT SUMP DETAIL
SRL
SCALE 1:50

PUMP (1) STORAGE VOLUME CALCULATION

AREA DRAINING TO SUMP (1) = 135.6 m²

SUMP SIZE BASED ON 10 YEAR 2 HR STORM, I = 25.8 mm/hr,
 $Q = CIA/3600 = 1 \times 25.8 \times 135.6/3600 = 0.972$ L/sec
 VOLUME REQUIRED = $0.972 \times (2 \times 60 \times 60) = 6998$ L = 7.0 m³
 STORAGE PROVIDED = $4.0 \times 2.5 \times 0.7 = 7.0$ m³

PUMP OUT RATE BASED ON 100YR 5MIN STORM, I = 227 mm/hr
 (MIN RATE REQUIRED AS PER AS3500.3 IS 10L/sec)
 $Q = CIA/3600 = 1 \times 227 \times 135.6/3600 = 8.55$ L/sec

DUAL (J) PUMP OR EQUIVALENT TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMP TO OPERATE ALTERNATIVELY ON HIGH LEVEL WITH ALARM AT 10 L/sec AT (I)m HEAD.

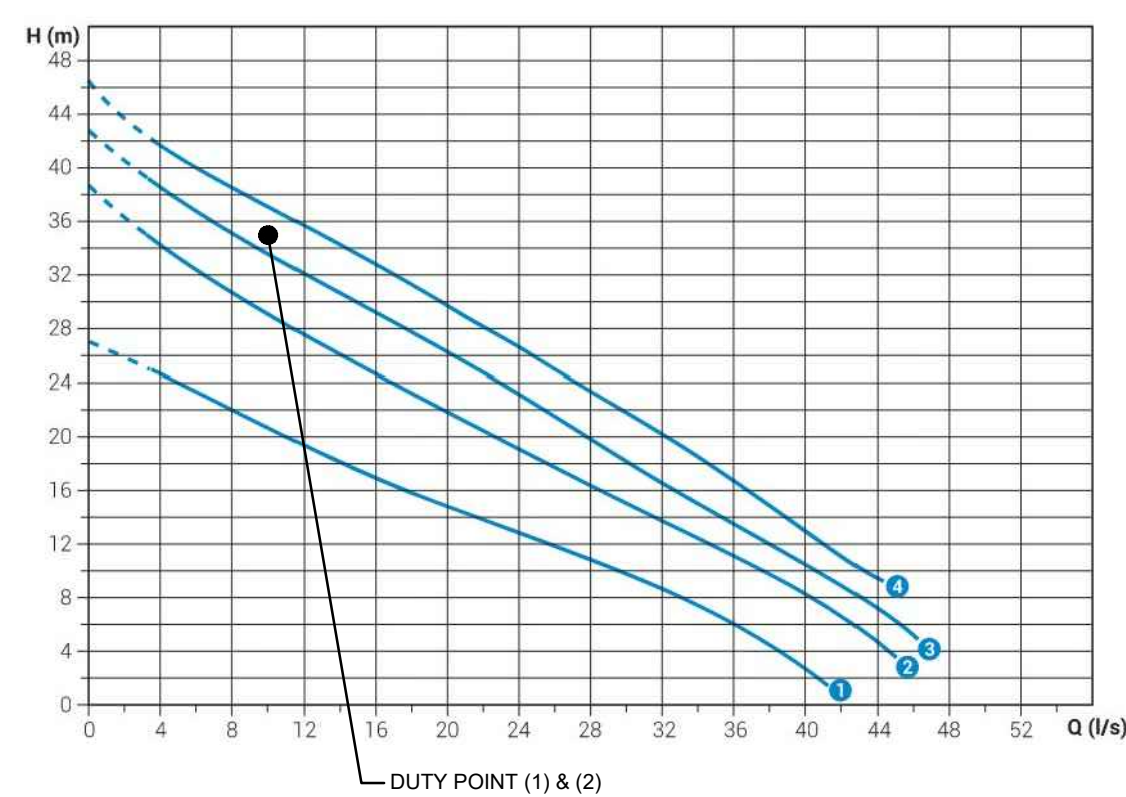
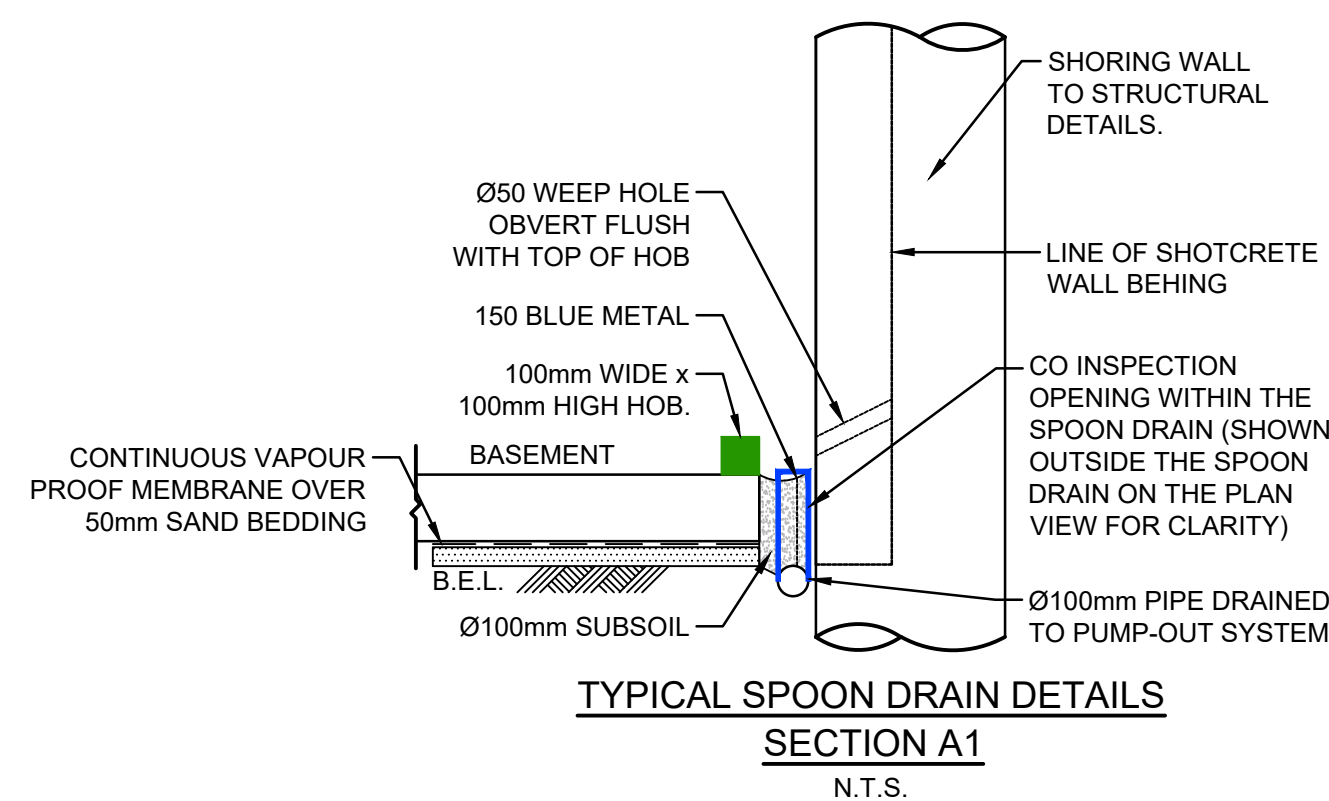
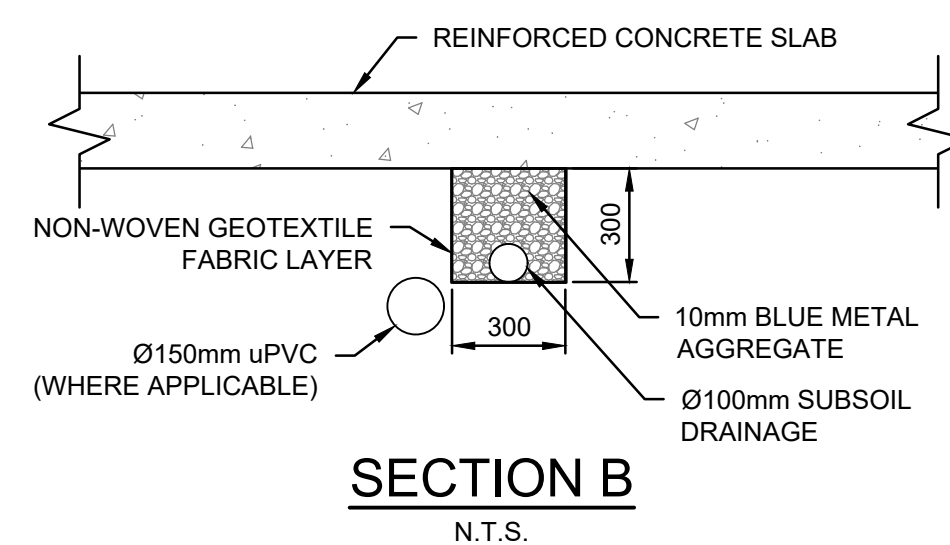
PUMP (2) STORAGE VOLUME CALCULATION

AREA DRAINING TO SUMP (2) = 0.00 m²

SUMP SIZE BASED ON 10 YEAR 2 HR STORM, I = 25.8 mm/hr,
 $Q = CIA/3600 = 1 \times 25.8 \times 0.00/3600 = 0.0$ L/sec
 VOLUME REQUIRED = $0.0 \times (2 \times 60 \times 60) = 0$ L = 0.0 m³
 STORAGE PROVIDED = $4.0 \times 2.5 \times 0.5 = 5$ m³

PUMP OUT RATE BASED ON 100YR 5MIN STORM, I = 227 mm/hr
 (MIN RATE REQUIRED AS PER AS3500.3 IS 10L/sec)
 $Q = CIA/3600 = 1 \times 227 \times 0.00/3600 = 0.0$ L/sec

DUAL (J) PUMP OR EQUIVALENT TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMP TO OPERATE ALTERNATIVELY ON HIGH LEVEL WITH ALARM AT 10 L/sec AT (I)m HEAD.



	V	1~3~	P ₁ [kW]	P ₂ [kW]	A	Rpm	DOL Y/Δ			
1 DRG 750/2/80 A0FT5	400	3~	6.3	5.5	10.8	2900	DOL	4G1.5+3x1	DN80	40 mm
2 DRG 1000/2/80 A0FT5	400	3~	8.5	7.5	13.7	2900	DOL	4G1.5+3x1	DN80	40 mm
3 DRG 1200/2/80 A0GT5	400	3~	10.4	9.0	16.1	2900	Y/Δ	7G1.5+3x1	DN80	40 mm
4 DRG 1500/2/80 A0GT5	400	3~	12.6	11.0	19.5	2900	Y/Δ	7G1.5+3x1	DN80	40 mm

PUMP OUT PIT	(1)	(2)
(A)	62.17	61.97
(B)	63.90	63.90
(C)	63.70	63.70
(D)	61.72	61.72
(E)	61.42	61.42
(F)	61.22	61.22
(G)	61.47	61.47
(H)	61.52	61.52
(I)	35	35
(J)	DRG 1500/2/80 A0GT5	DRG 1500/2/80 A0GT5
(K)	80	80

NOT FOR CONSTRUCTION

A	ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION	25/05/2026	MIG	SBF
Issue	Description	Date	Design	Checked

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 Civil & Structural Engineer

Architect
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Council
camden council

Client
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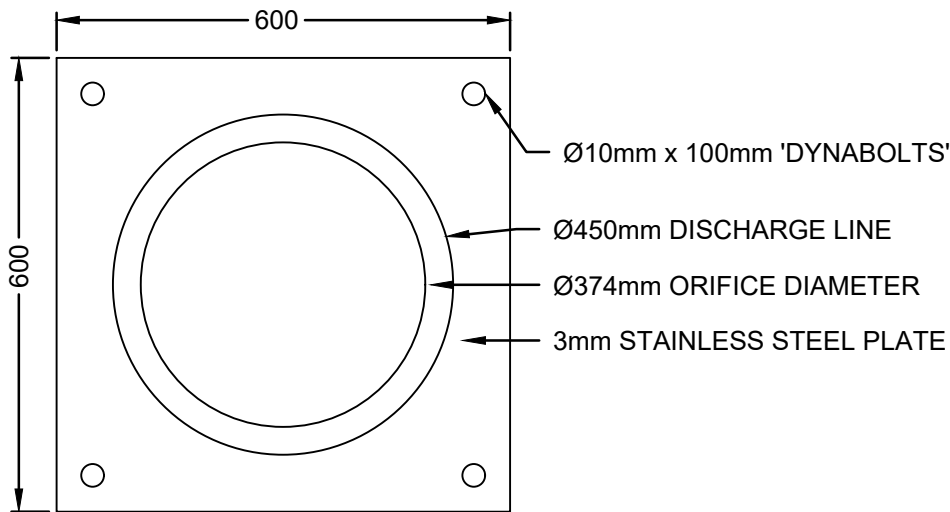
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 0 1 2 3 m
 SCALE 1:50 @ A1

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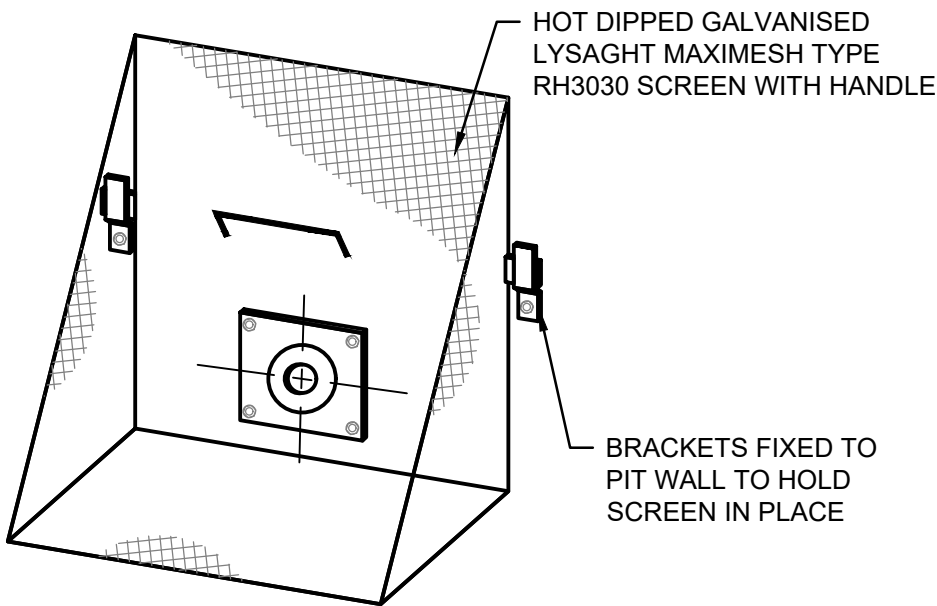
Project
173-183 RICKARD ROAD, LEPPINGTON
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
STATE SIGNIFICANT DEVELOPMENT APPLICATION

Drawing Title
BASEMENT DRAINAGE DETAILS AND CALCULATIONS
 Scale A1 Project No. 23629 Dwg. No. 200 Issue A

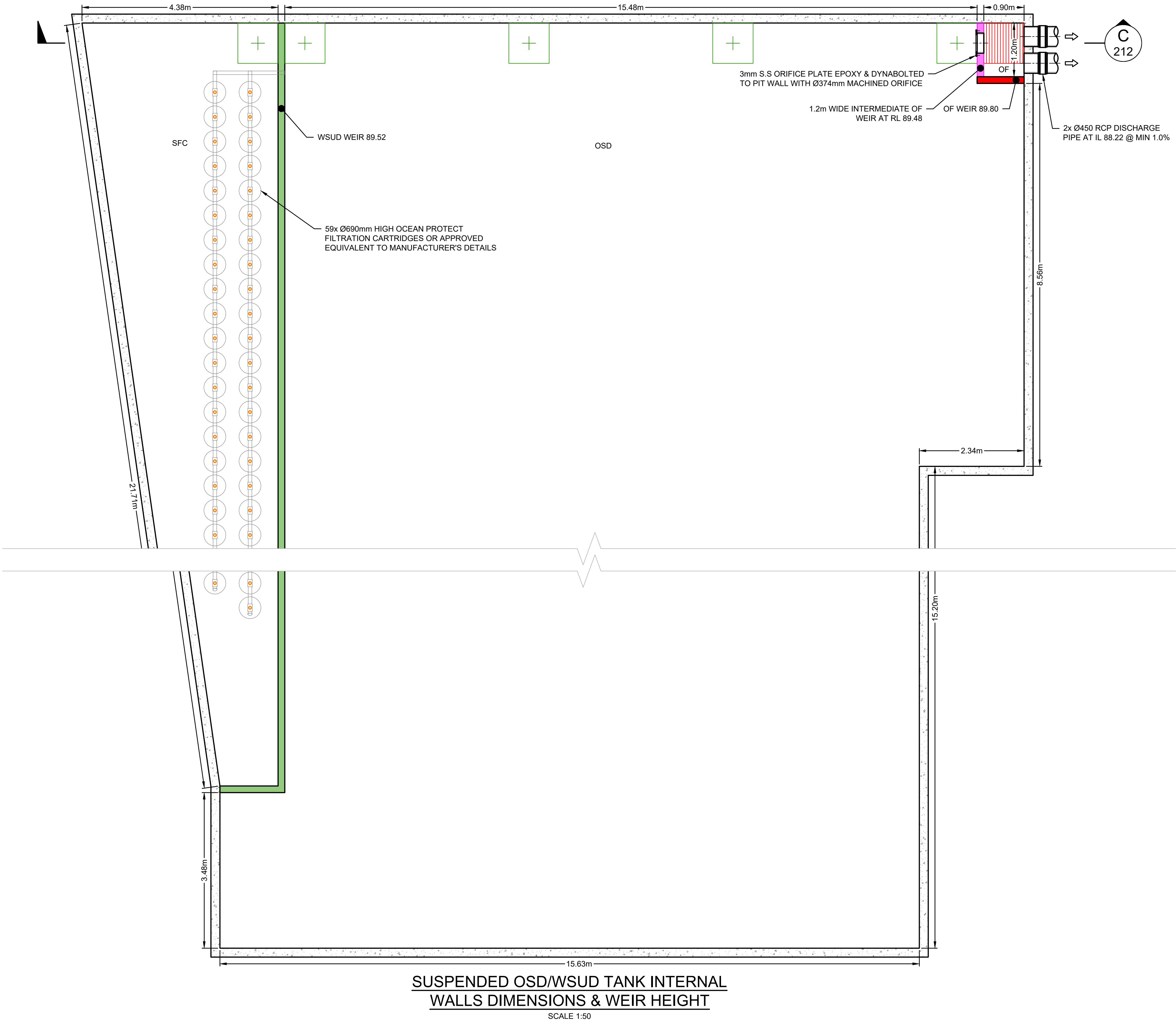
DRAINS RESULTS					
STORM EVENT (AEP)	PRE-DEV INTERNAL FLOWS (L/s)	OSD POST-DEV FLOWS (L/s)	BYPASS FLOWS (L/s)	TOTAL POST-DEV FLOWS (L/s)	WATER STORAGE LEVEL (m) OSD
0.2EY	580	251	329	580	89.23
10%	760	275	398	673	89.39
5%	929	344	467	811	89.56
2%	1,210	542	564	1,106	89.71
1%	1,430	684	635	1,319	89.80



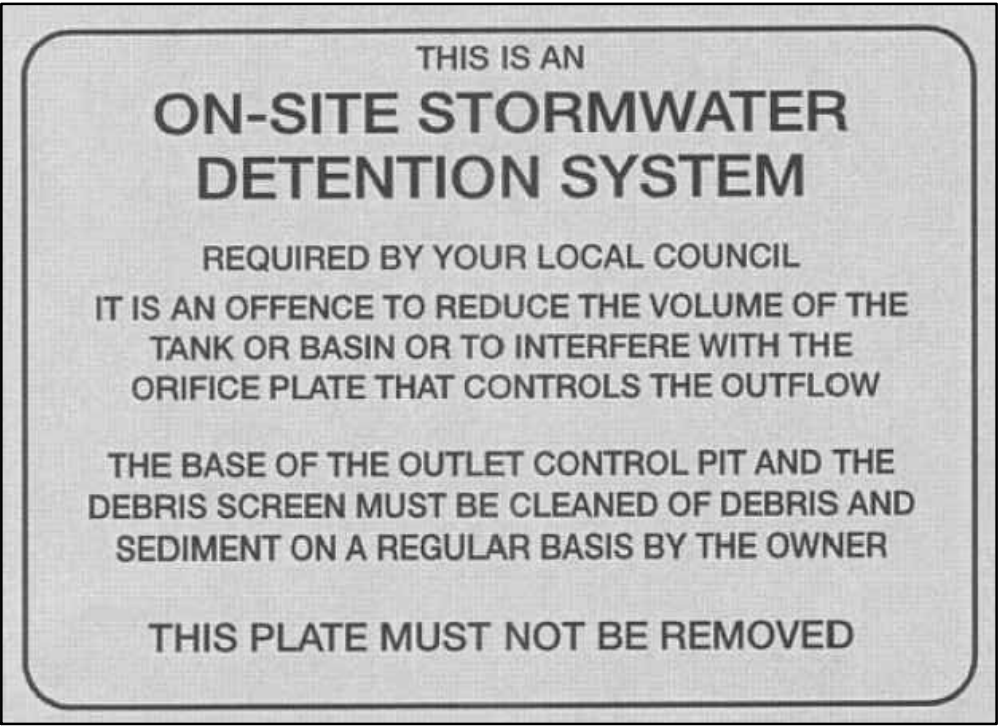
ORIFICE PLATE DETAIL
SCALE 1:10



TRASH SCREEN DETAIL
N.T.S



SUSPENDED OSD/WSUD TANK INTERNAL
WALLS DIMENSIONS & WEIR HEIGHT
SCALE 1:50



NOT FOR CONSTRUCTION

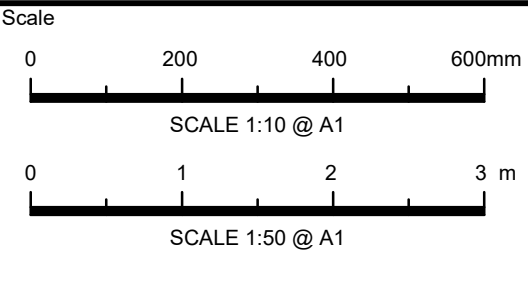
Issue	Description	Date	Design	Checked
B	ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION	01/06/2026	MIG	SBF
A	ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION	25/05/2026	MIG	SBF

Certification By Dr. Michel Chasaya
B.E., M.E. (Res), Ph.D., F.I.E. Aust., CPEng.,
Civil & Structural Engineer

Architect



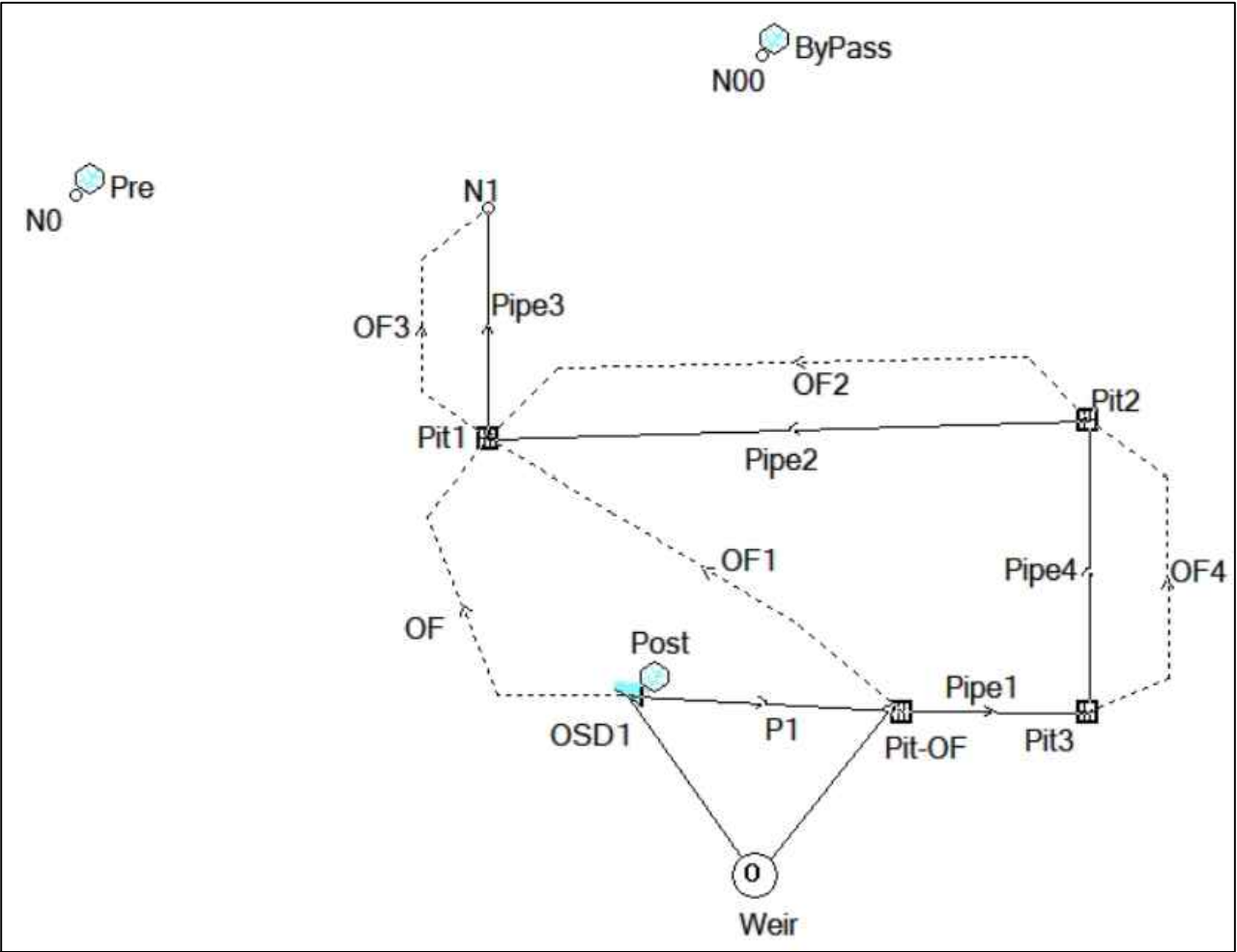
Client
Leppington
(1) 88
Development
Pty Ltd



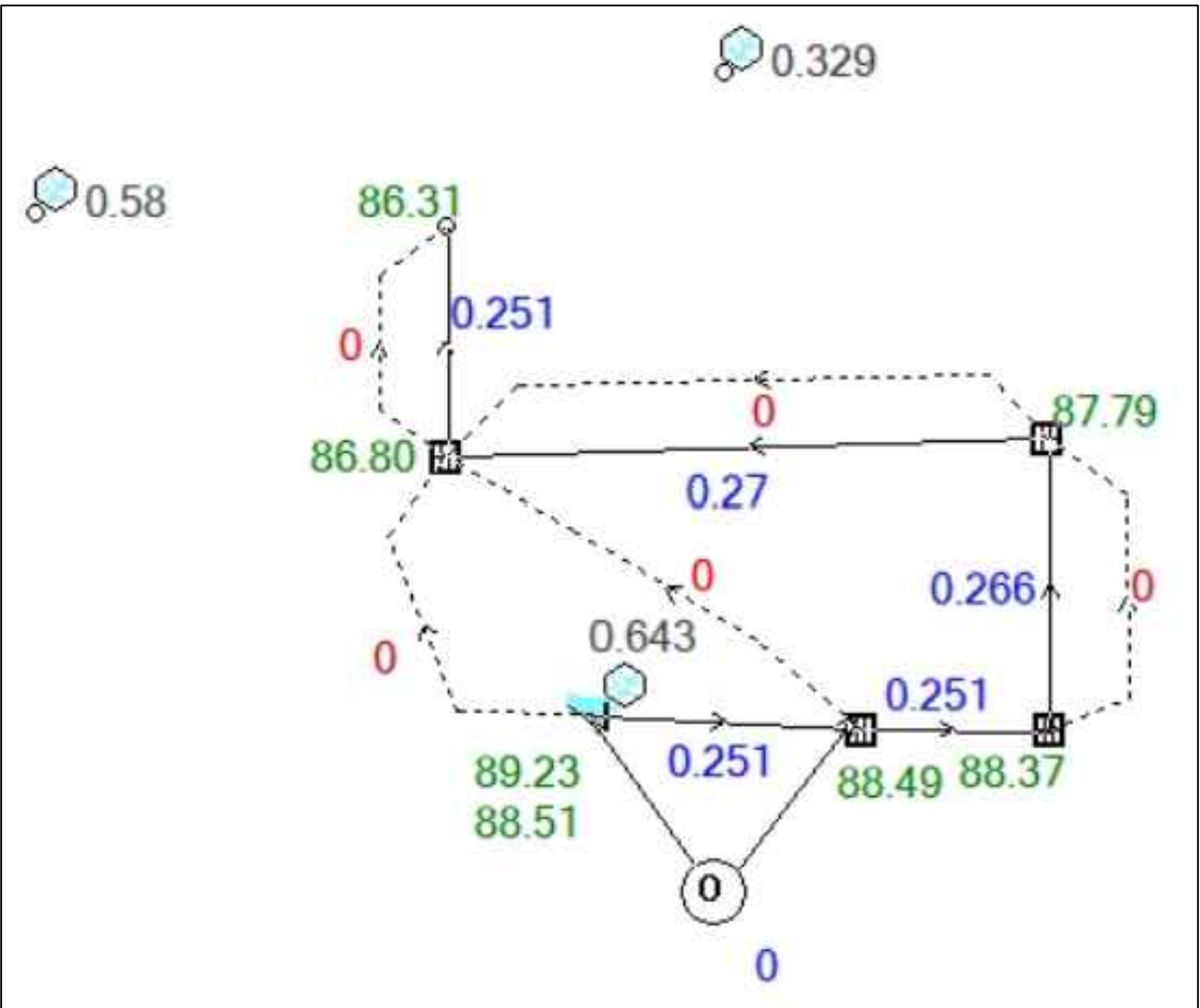
TELFORD CIVIL
CONSULTING CIVIL & STORMWATER ENGINEERS
Level 14, 32 Smith Street,
Parramatta NSW 2150
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Trading As : Telford Consulting Pty Ltd

Project
173-183 RICKARD ROAD, LEPPINGTON
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
STATE SIGNIFICANT DEVELOPMENT APPLICATION

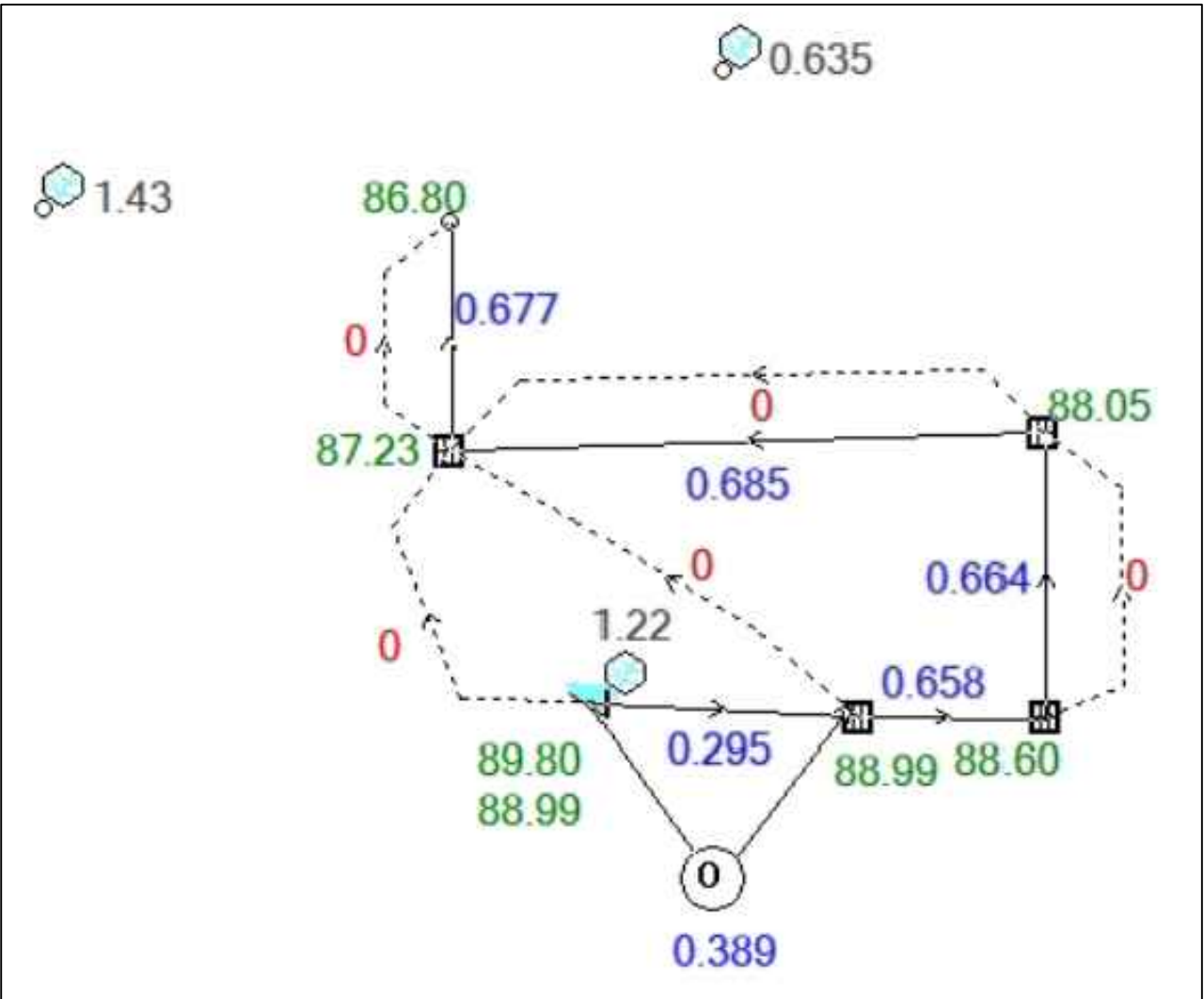
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ON-SITE DETENTION DETAILS AND CALCULATIONS			
SHEET 1 OF 3			
Scale	A1	Project No.	Dwg. No.
As Shown		23629	210
			Issue
			B



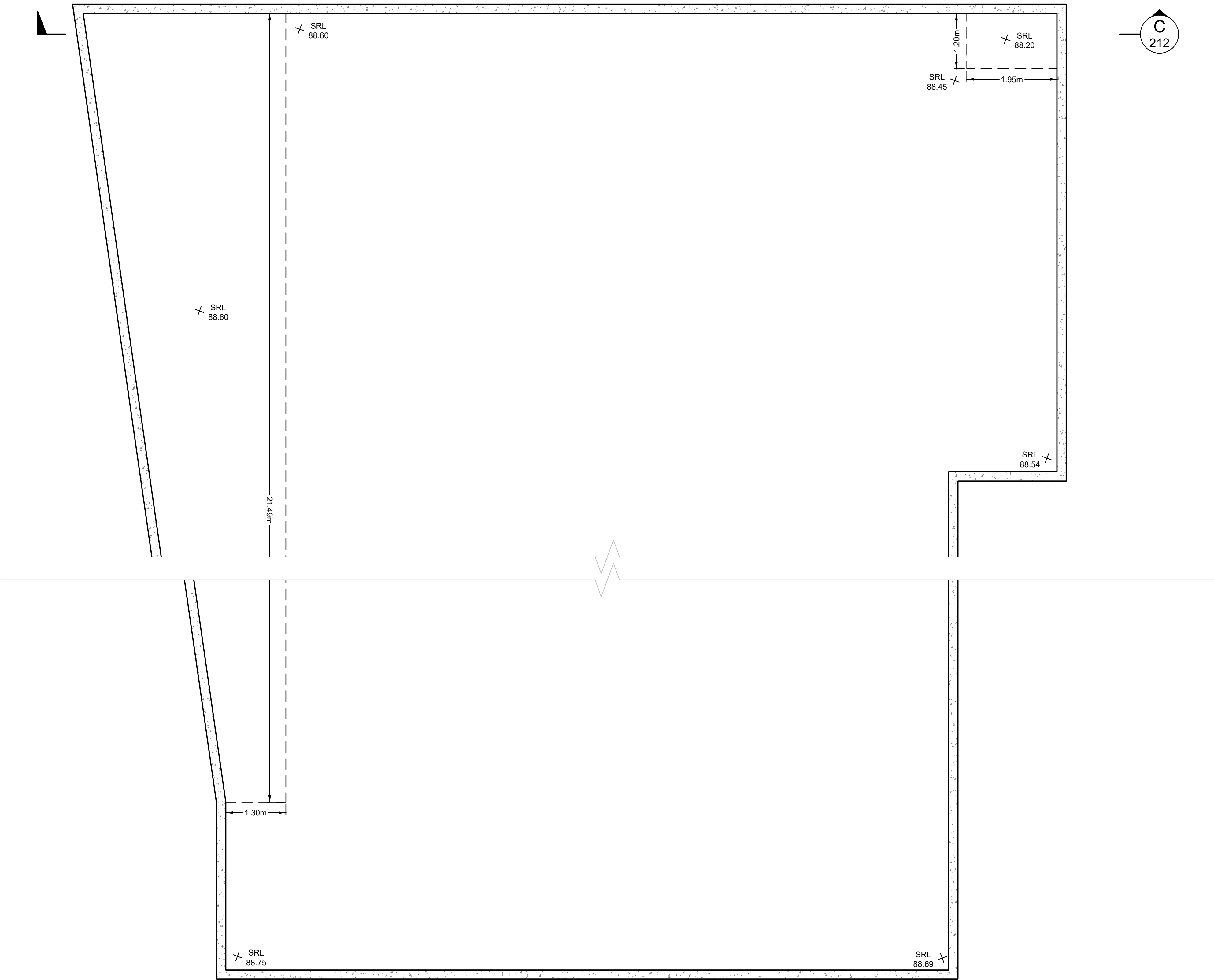
DRAINS MODEL
N.T.S.



DRAINS RESULTS- 0.2EY AEP STORM
N.T.S.



DRAINS RESULTS - 1% AEP STORM
N.T.S.



SUSPENDED OSD/WSUD TANK
BOTTOM S.R.L.
SCALE 1:50

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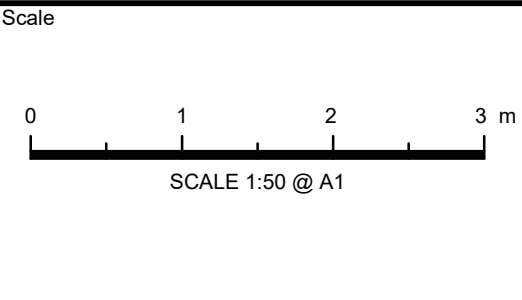
Issue	Description	Date	Design	Checked
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Architect



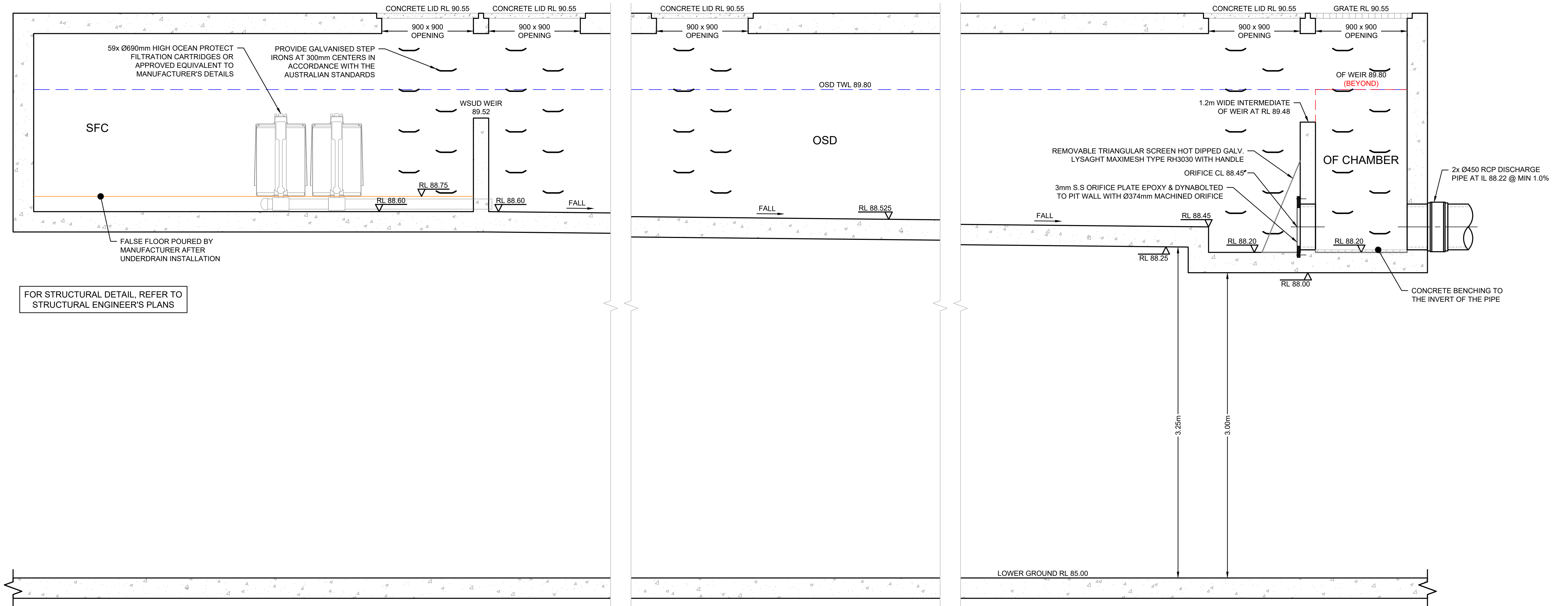
Council
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PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
STATE SIGNIFICANT DEVELOPMENT APPLICATION

Drawing Title	Scale	Project No.	Dwg. No.	Issue
ON-SITE DETENTION DETAILS AND CALCULATIONS SHEET 2 OF 3	A1 As Shown	23629	211	B

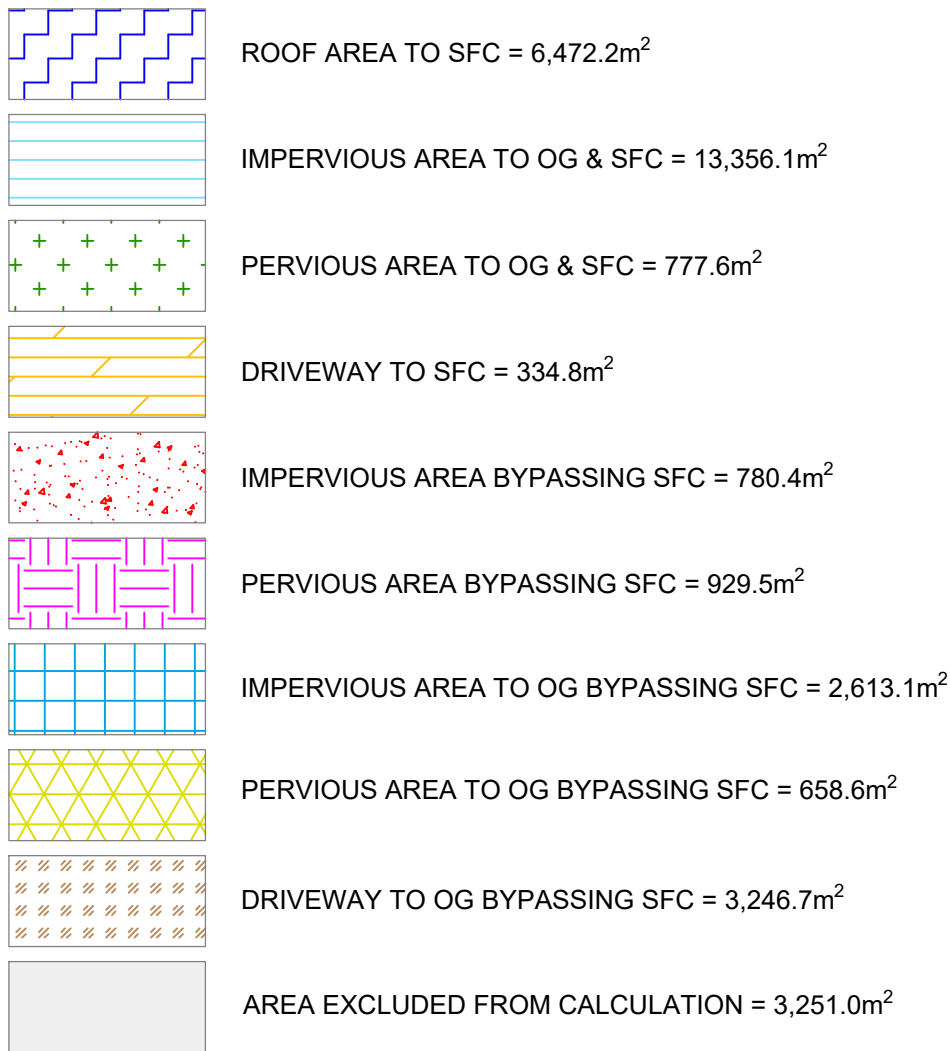


SUSPENDED OSD/WSUD TANK DETAILS
SECTION C
SCALE 1:20

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										Leppington (1) 88 Development Pty Ltd						Level 14, 32 Smith Street, Parramatta NSW 2150 PO BOX 3579 Parramatta 2124 Email : info@telfordcivil.com.au Phone : 02 7809 4931 Trading As : Telford Consulting Pty Ltd		173-183 RICKARD ROAD, LEPPINGTON PROPOSED MIXED-USE DEVELOPMENT STORMWATER CONCEPT PLANS STATE SIGNIFICANT DEVELOPMENT APPLICATION				ON-SITE DETENTION DETAILS AND CALCULATIONS SHEET 3 OF 3			
B ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION				01/06/2026		MIG		SBF																	
A ISSUE FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION				25/05/2026		MIG		SBF																	
Issue Description				Date		Design		Checked																	

WSUD CATCHMENT LEGEND

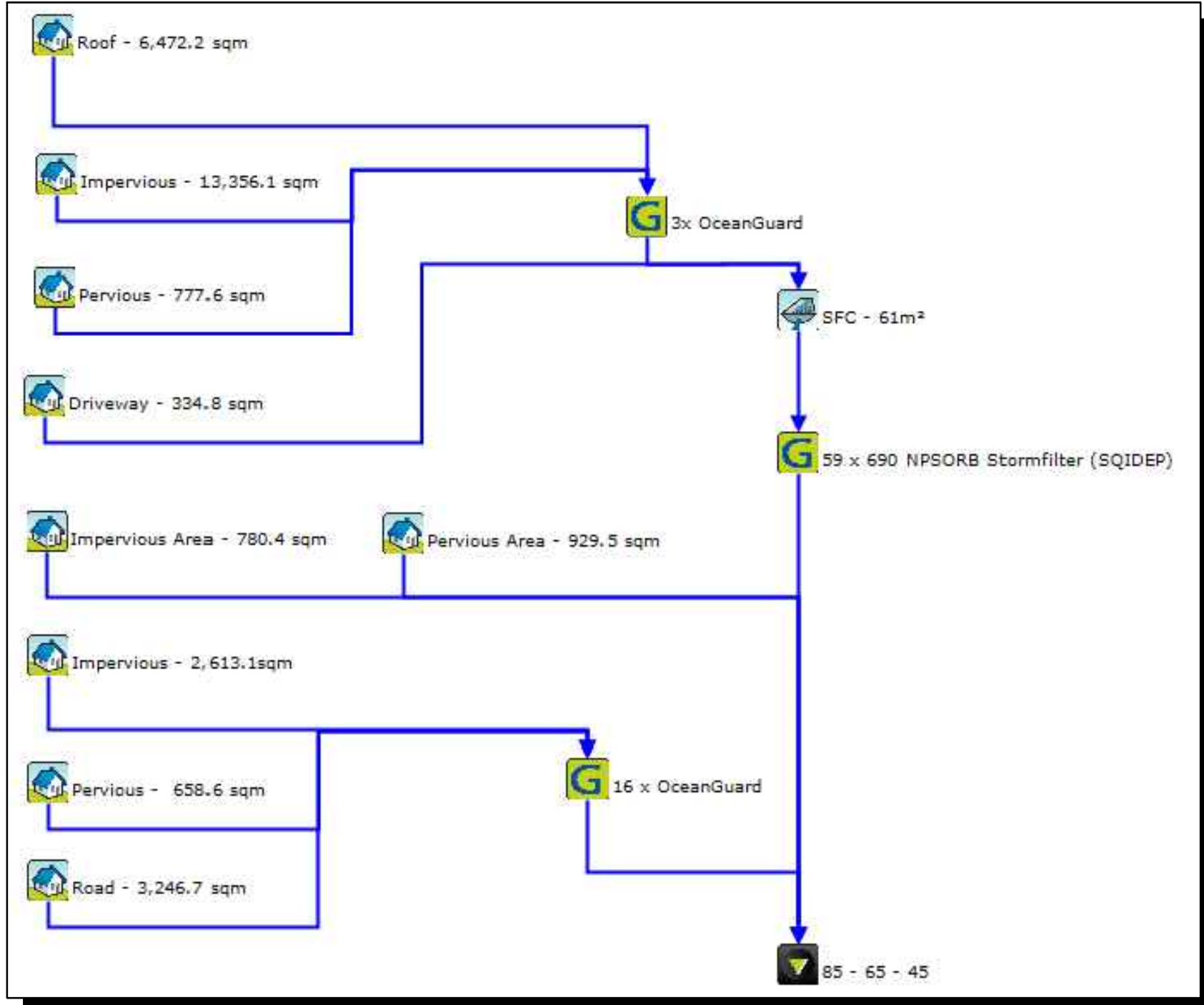


TOTAL SITE AREA = 32,420m²
TOTAL SITE AREA (INCLUDED IN CALCULATION) = 29,169.0m²
TOTAL AREA TO SFC = 20,940.7m² (71.8% OF TOTAL SITE AREA INCLUDED IN CALCULATION)
TOTAL BYPASS AREA = 8,228.3m² (80.0% IMPERVIOUS)

	Sources	Residual Load	% Reduction
Flow (ML/yr)	19	19	0.0006842
Total Suspended Solids (kg/yr)	3472	520.8	85
Total Phosphorus (kg/yr)	7.122	2.493	65
Total Nitrogen (kg/yr)	50.54	25.56	49.43
Gross Pollutants (kg/yr)	510	14.85	97.09

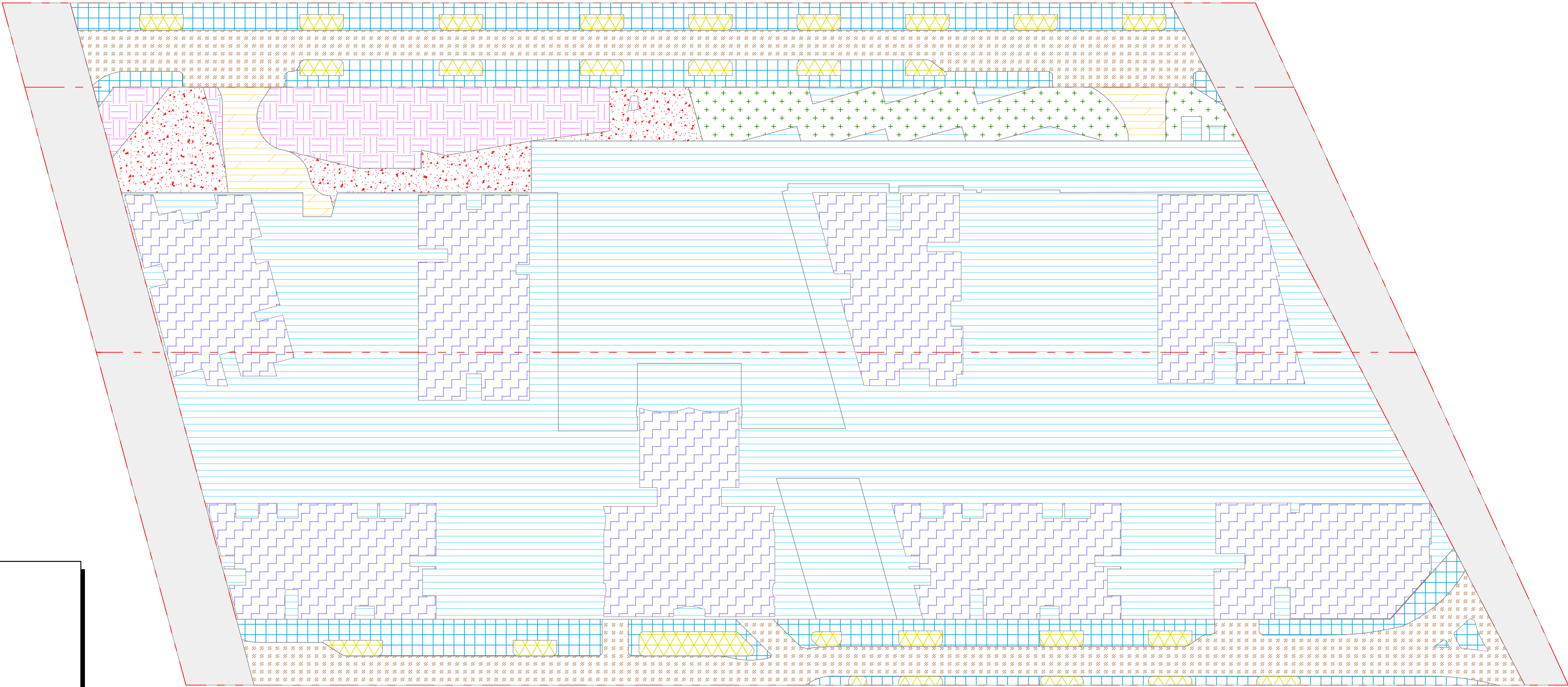
MUSIC RESULTS

N.T.S.



MUSIC MODEL

N.T.S.

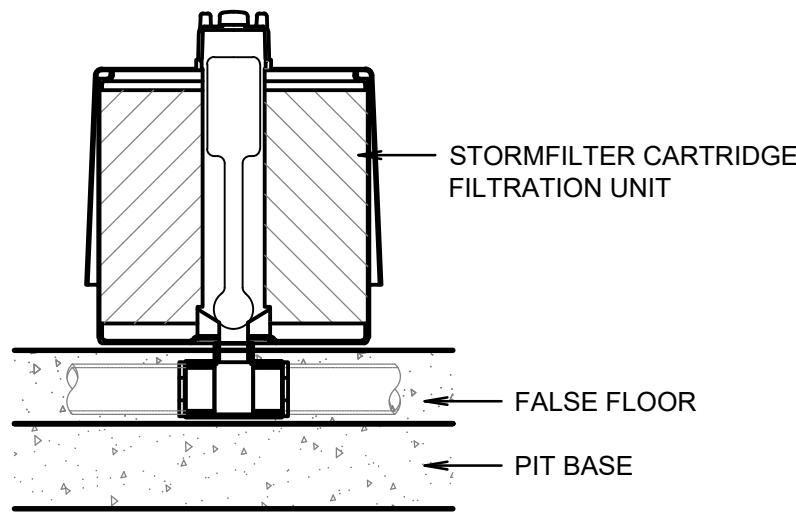


WSUD CATCHMENT PLAN

SCALE 1:500

GENERAL NOTES:

1. INLET AND OUTLET PIPES TO BE IN ACCORDANCE WITH APPROVED PLANS.
2. A HIGH FLOW BYPASS ARRANGEMENT OR DISSIPATION STRUCTURE MAY BE REQUIRED TO MINIMISE RE-SUSPENSION OF SOLIDS OR ANY SIGNIFICANT INERTIAL FORCES ON THE CARTRIDGES.
3. ALL WATER QUALITY TREATMENT DEVICES REQUIRE PERIODIC MAINTENANCE. REFER TO OPERATION AND MAINTENANCE MANUAL FOR GUIDELINES AND ACCESS REQUIREMENTS.
4. SITE SPECIFIC PRODUCTION DRAWING WILL BE PROVIDED ON PLACEMENT OF ORDER.
5. THE INVERT LEVEL OF THE INLET PIPE MUST BE GREATER THAN THE RL OF THE FALSE FLOOR WITHIN THE CARTRIDGE CHAMBER.
6. CONCRETE STRUCTURE AND ACCESS COVERS DESIGNED AND PROVIDED BY OTHERS. ACCESS COVERS TO BE A MINIMUM 900 x 900 ABOVE CARTRIDGES. OH&S REGARDING ACCESS COVERS AND TANK ACCESS TO BE ASSESSED BY OTHERS ON SITE.
7. THE STRUCTURE THICKNESSES SHOWN ARE FOR REPRESENTATIONAL PURPOSES.
8. DRAWINGS NOT TO SCALE.



STORMFILTER CARTRIDGE

DETAIL

N.T.S.

Facility Component Requiring Maintenance	Maintenance Activity	When Maintenance Activity Is Required	Expected Facility Performance After Maintaining	INSPECTION/MINOR MAINTENANCE (TIMES/YEAR)	MAJOR MAINTENANCE (TIMES/YEAR)
StormFilter® Cartridges and Containment Structure	Trash and Debris Removal	Floatable objects or other trash is present in the filter. Remove to avoid hindrance of filtration and eliminate unsightly debris and trash.	Permanent removal from storm system.	2 (and after major storms)	1 (except in case of a spill)
	Cartridge Replacement and Sediment Removal	1. Media has been contaminated by high levels of pollutants, such as after a spill.	1. New media is able to effectively treat stormwater.	-	-
Drainage System Piping	Flushing With Water	Drainage system is obstructed by debris or sediment.	Outflow is not restricted.	-	-

FILTRATION UNIT MAINTENANCE SCHEDULE

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Architect

DKO

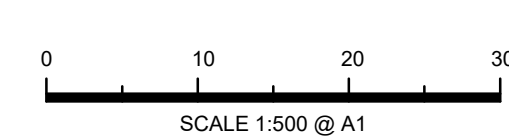
Council



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Project

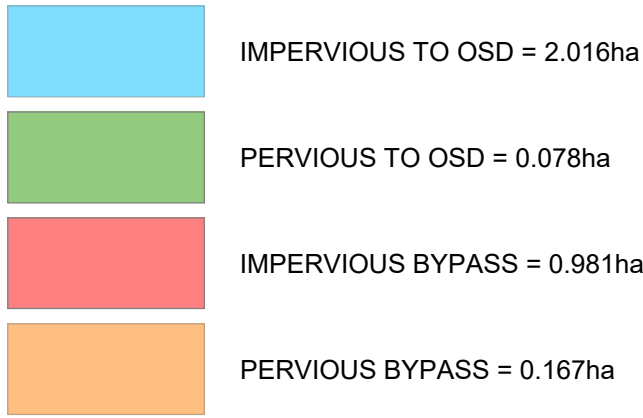
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Drawing Title

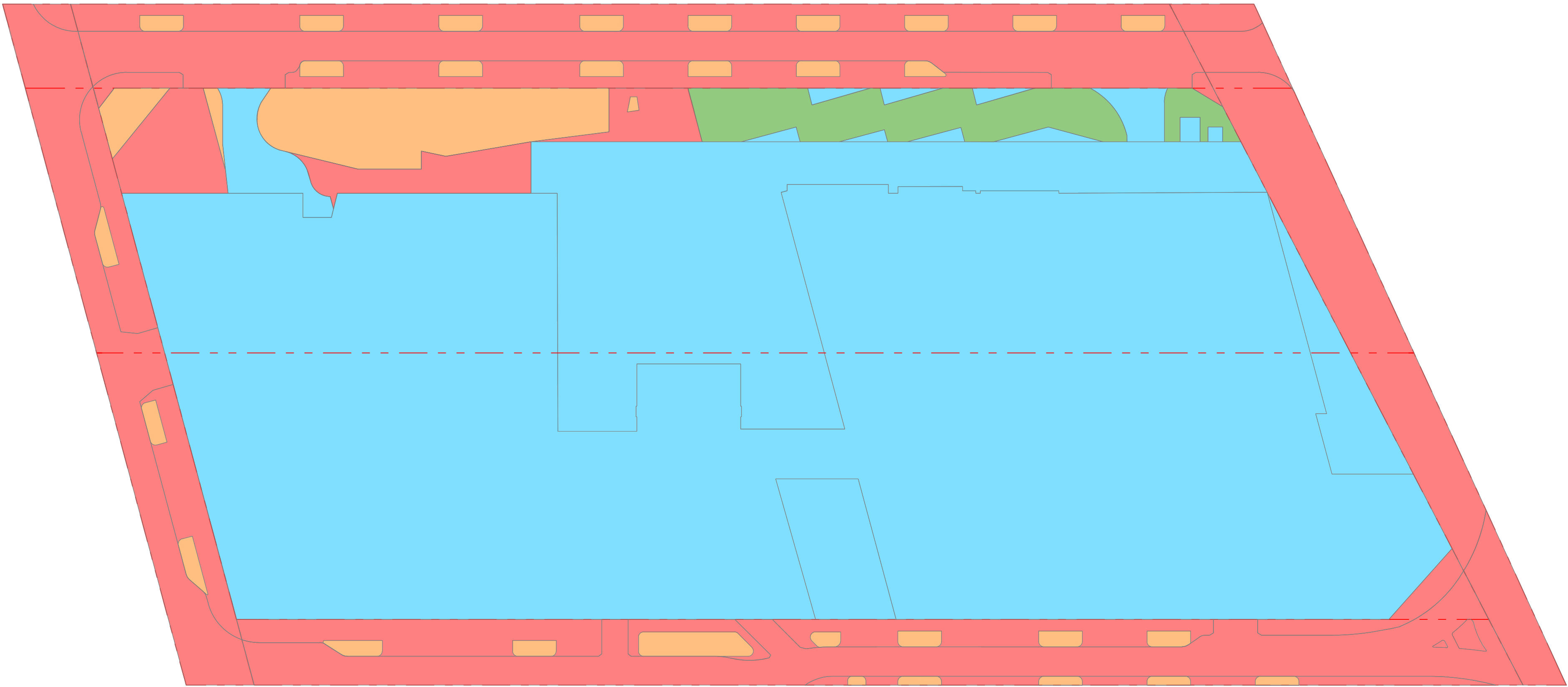
WSUD CATCHMENT PLAN
AND MUSIC RESULTS

Scale	A1	Project No.	Dwg. No.	Issue
As Shown		23629	220	B

POST DEVELOPMENT CATCHMENT LEGEND



TOTAL SITE AREA = 32,420m² = 3.242ha
TOTAL AREA TO OSD = 2.094ha (96.3% IMPERVIOUS)
TOTAL BYPASS AREA = 1.148ha (85.45% IMPERVIOUS)



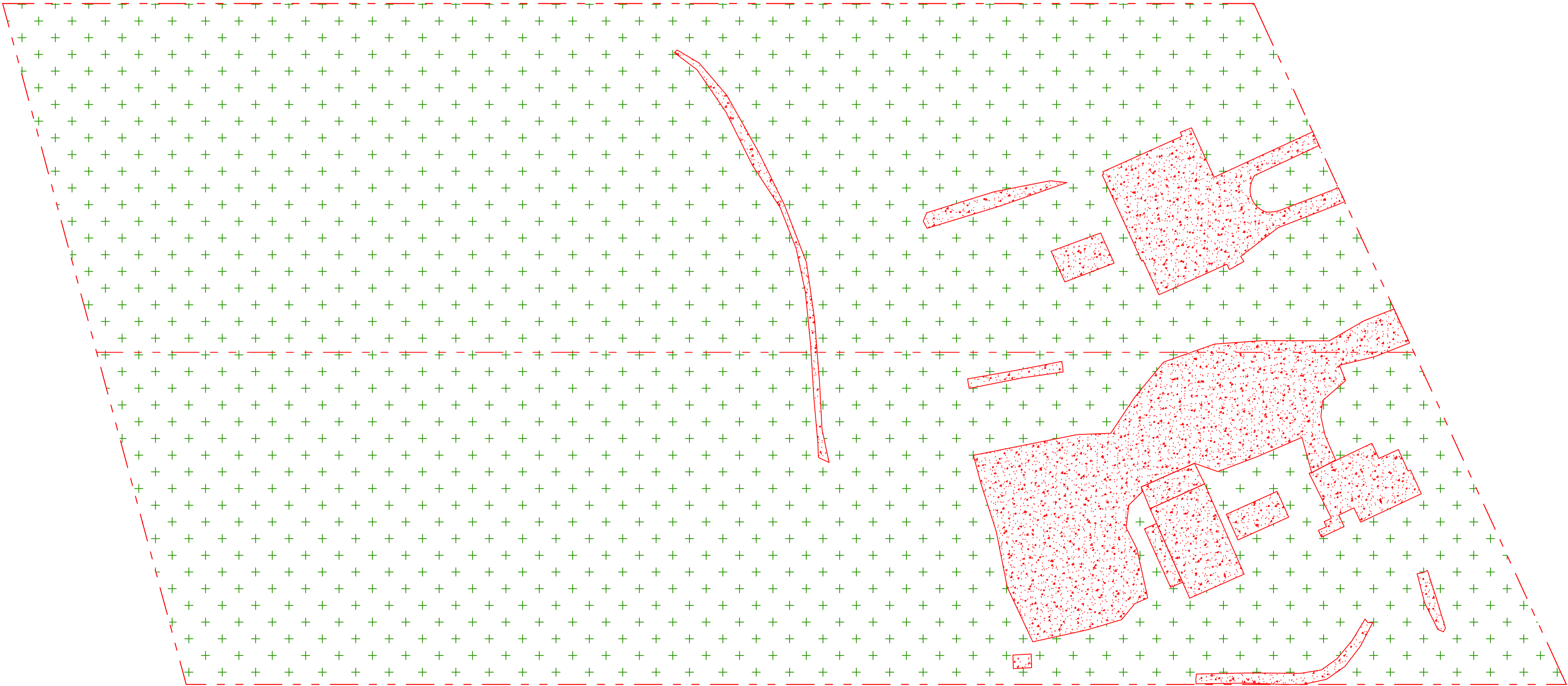
OSD POST DEVELOPMENT CATCHMENT PLAN

SCALE 1:600

PRE DEVELOPMENT CATCHMENT LEGEND



TOTAL SITE AREA = 32,420m² (10.72% IMPERVIOUS)



OSD PRE DEVELOPMENT CATCHMENT PLAN

N.T.S.

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Issue	Description	Date	Design	Checked
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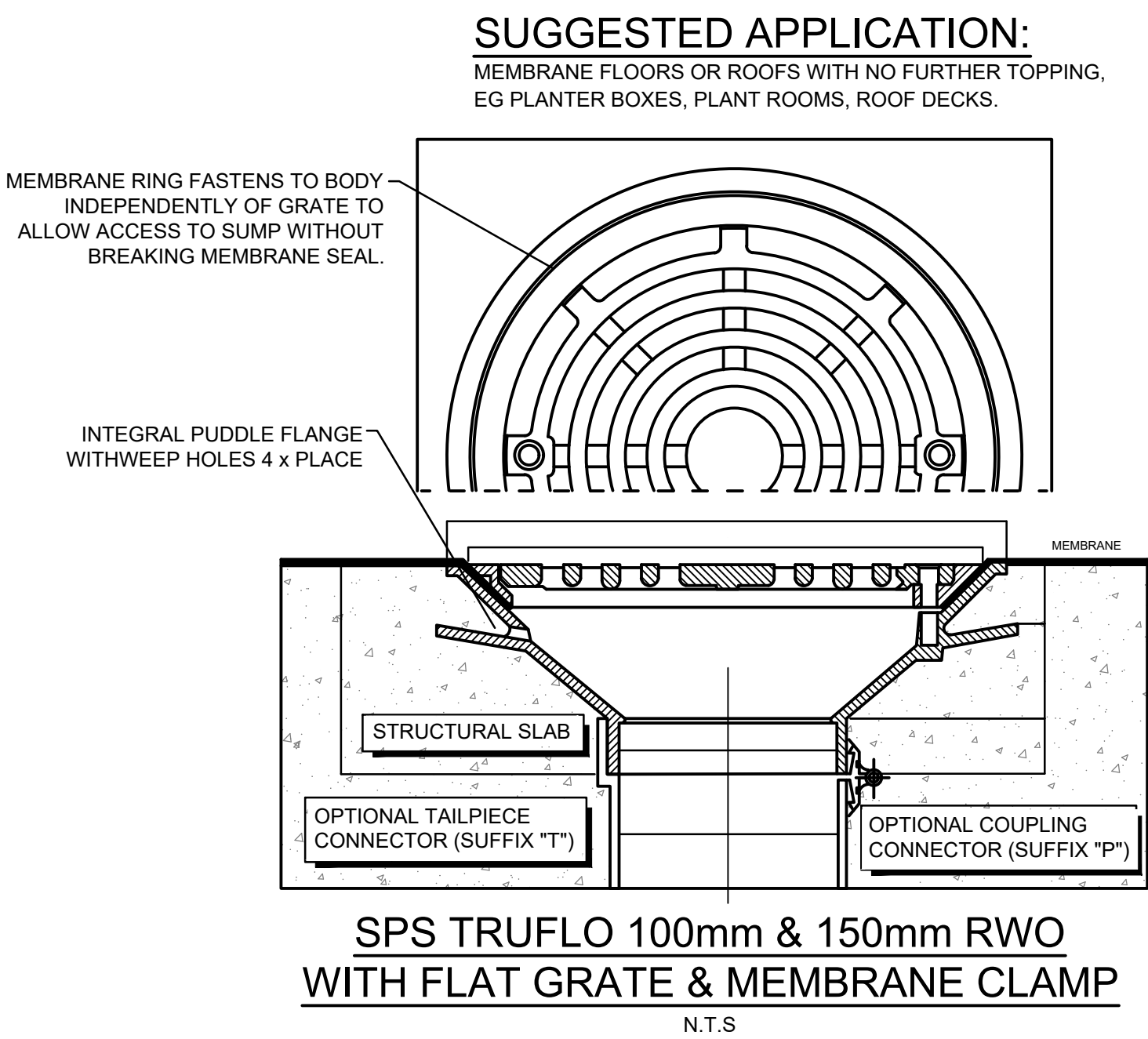
Scale

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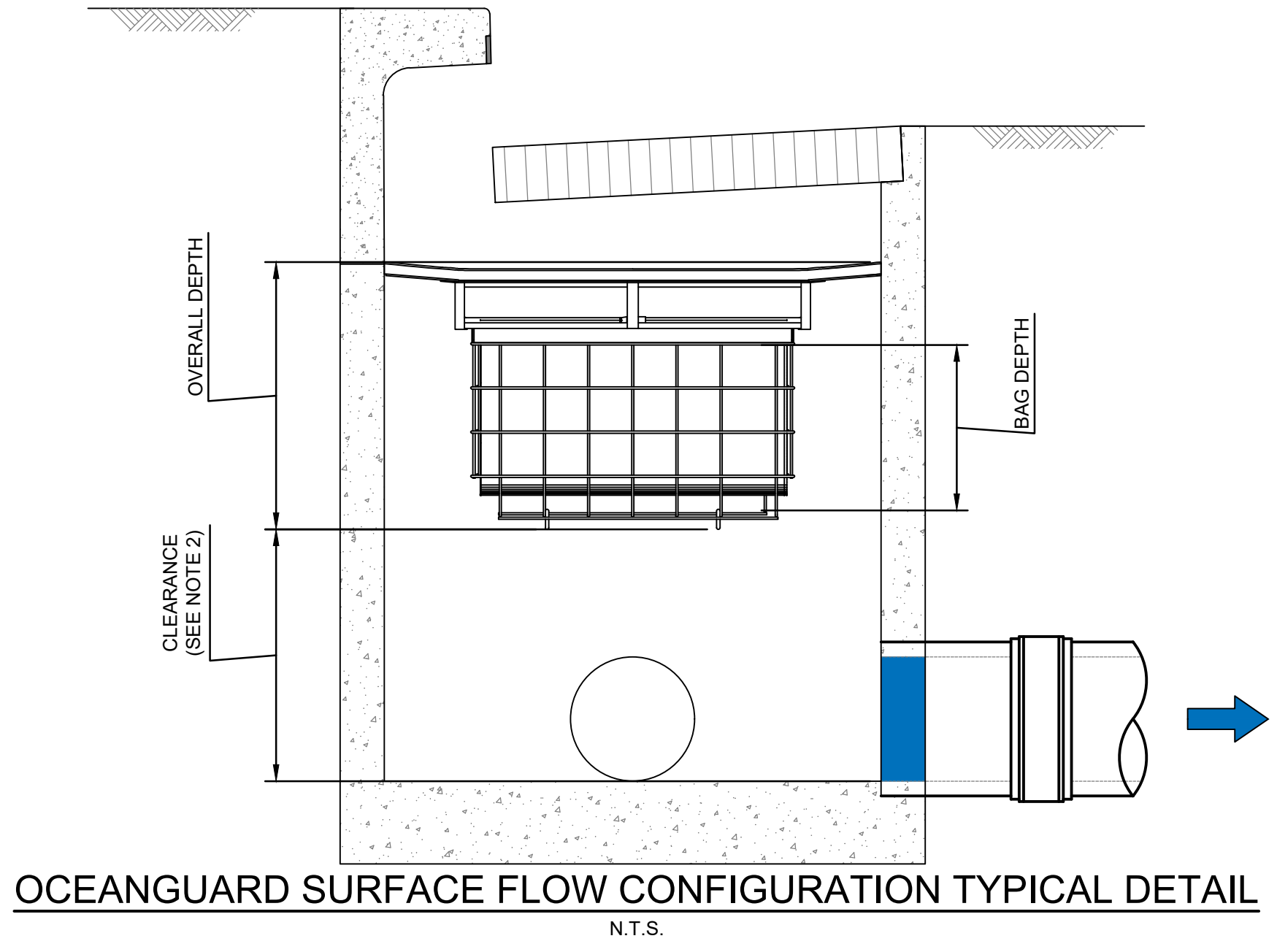
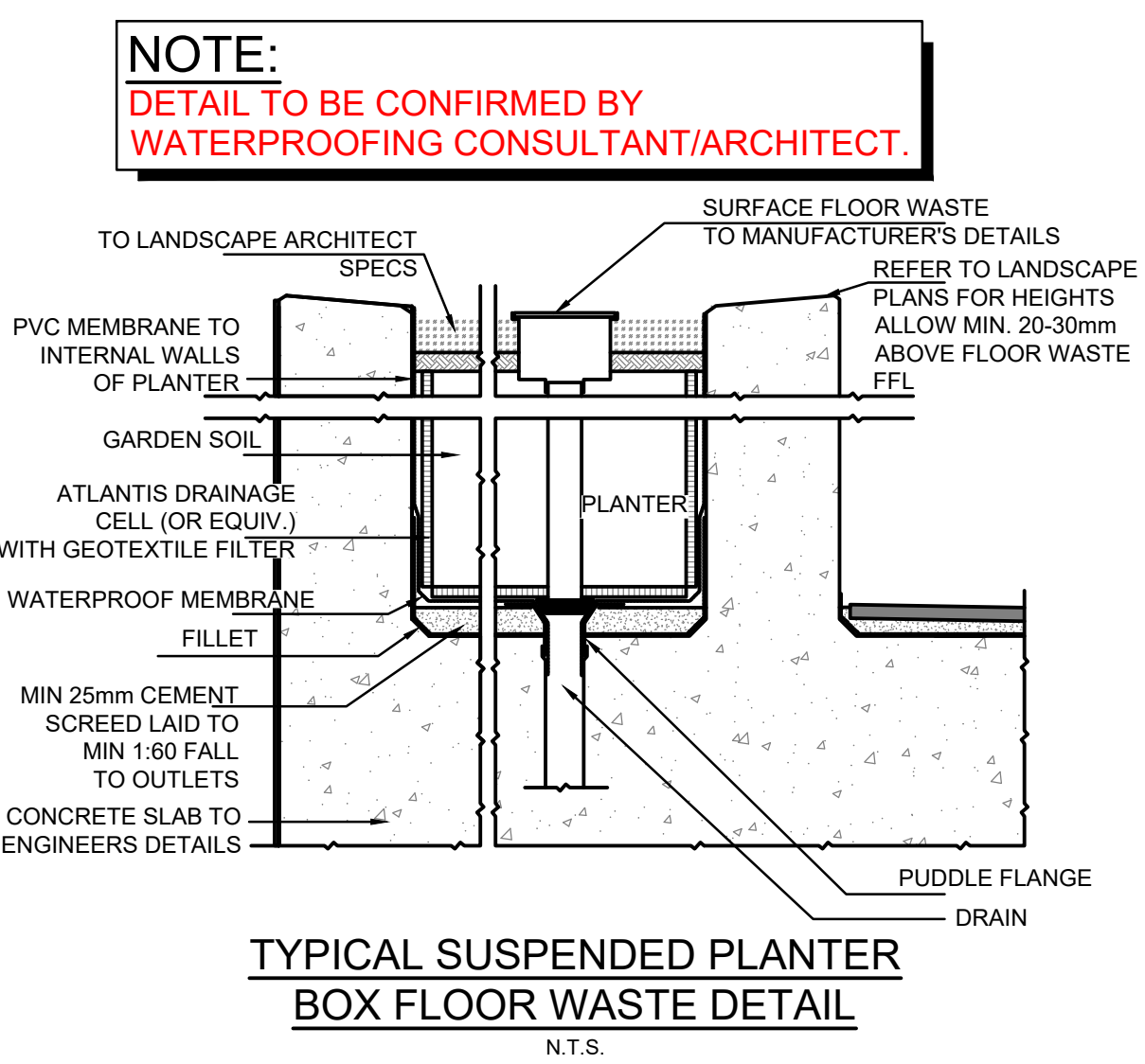
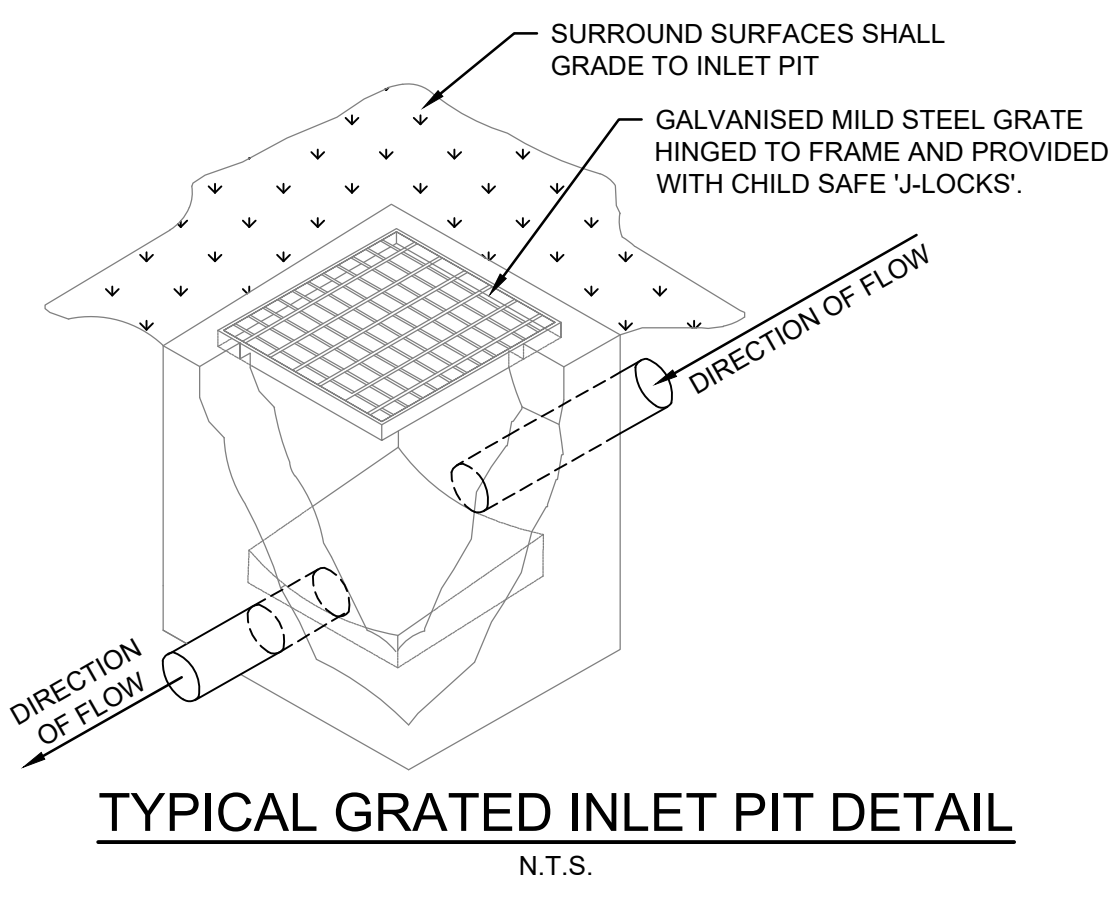
Drawing Title			
OSD CATCHMENT PLAN			
Scale	A1	Project No.	Dwg. No.
As Shown		23629	230
Issue	B		

RAINWATER OUTLET DETAILS



SPECIFICATION CODE:
TIA100F2 (CI BODY, ALUMINIUM FLAT GRATE & MEMBRANE RING) TIB100F2 (CI BODY, BRONZE FLAT GRATE & MEMBRANE RING) TBA100F2 (ALL-BROZE ASSEMBLY)
-FRO 150mm OUTLET, USE "150" INSTEAD OF "100"

N.B	A	B	C	D	E	F	G	FLOW RATE* L/S
100	260	240	110	98	28	45	25	8.5
150	260	238	160	90	28	37	25	9.4



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