

1. THESE DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE LATEST ARCHITECTURAL DRAWINGS.
2. DO NOT SCALE FROM THESE DRAWING.
3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.

- A1. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH AUSTRALIAN STANDARDS (LATEST VERSION) AND THE REQUIREMENTS OF THE LOCAL COUNCIL AND ANY APPLICABLE AUTHORITIES.
- A2. ALL LEVELS SHOWN ARE TO THE AUSTRALIAN HEIGHT DATUM (AHD) UNLESS NOTED OTHERWISE.
- A3. THE LOCATION OF ALL DRAINAGE ELEMENTS ARE SHOWN INDICATIVELY BASED ON AVAILABLE SURVEY OR OTHER INFORMATION. ALL DRAINAGE ELEMENTS ARE TO BE INSTALLED WITH CONSIDERATION TO SITE CONSTRAINTS AND THE INTENT OF THE DRAINAGE CONCEPT.
- A4. ANY MATERIAL VARIATIONS TO THE DRAINAGE CONCEPT OR DETAILED STORMWATER ELEMENTS MUST BE APPROVED BY NORTHERN BEACHES CONSULTING ENGINEERS PTY LTD PRIOR TO COMMENCEMENT.

- B1. CONTRACTORS TO LOCATE ALL EXISTING SERVICES PRIOR TO EXCAVATION AND NOTIFY ENGINEER OF ANY POTENTIAL CLASHES WITH THE PROPOSED STORMWATER DRAINAGE SYSTEM.
- B2. ANY ELEMENTS OF THE EXISTING STORMWATER SYSTEM WHICH ARE PROPOSED TO BE RETAINED MUST BE INSPECTED AND APPROVED BY AN ENGINEER PRIOR TO CONSTRUCTION AS BOTH HAVING ADEQUATE CAPACITY TO CATER FOR THE RUNOFF DIRECTED TO IT AND BEING IN ADEQUATE CONDITION FOR USE.
- B3. EXISTING STORMWATER SYSTEM ALSO TO BE INSPECTED BY A SUITABLY QUALIFIED PLUMBER PRIOR TO CONSTRUCTION AND UPGRADED AS REQUIRED IN ACCORDANCE WITH AS3500.3.
- B4. CARE SHOULD BE TAKEN WHEN UNDERTAKING WORKS IN THE VICINITY OF TREES NOT TO DISTURB THE TREE ROOT SYSTEM. HAND DIGGING OF TRENCHES MAY BE REQUIRED SUBJECT TO THE PROJECT ARBORISTS REQUIREMENTS. REFER TO THE ARBORIST REPORT FOR EXCAVATION REQUIREMENTS SURROUNDING PROTECTED TREE ROOT ZONES.
- B5. SWIMMING POOL SURCHARGE OVERFLOW TO BE CONNECTED VIA GRAVITY TO THE SEWER IN ACCORDANCE WITH AS3500. DETAILS AND CERTIFICATION BY OTHERS.
- B6. EXTENT, ALIGNMENT, DEPTH AND CONDITION OF ANY COUNCIL STORMWATER PIPELINE WITHIN A DEVELOPMENT SITE MUST BE VERIFIED PRIOR TO CONSTRUCTION AND THE ENGINEER MUST BE NOTIFIED UPON VERIFICATION. ANY NEW CONNECTION TO A COUNCIL STORMWATER PIPELINE WILL BE SUBJECT TO COUNCIL APPROVAL AND MUST BE INSTALLED IN ACCORDANCE WITH THE LOCAL COUNCIL SPECIFICATIONS.
- B7. BUILDER TO PROVIDE A MINIMUM 100mm WIDE x 30mm HIGH OR 50mm DIA OVERFLOW FOR EVERY 6m² OF EXPOSED AREA THAT IS TRAPPED OR SURROUNDED BY HOBS/BALUSTRADES/WALLS/ETC. THE FULL OVERFLOW DEPTH MUST BE LOCATED BELOW ANY ADJACENT INTERNAL FLOOR LEVELS OR OPENINGS TO PROTECT AGAINST WATER INGRESS DUE TO BLOCKAGE OF THE PRIMARY OUTLET(S).

- C1. ALL PIPES TO BE MINIMUM 100mm Ø UNLESS NOTED OTHERWISE.
- C2. ALL PIPES TO BE uPVC SEWER GRADE TO AS 1254 UNLESS NOTED OTHERWISE.
- C3. ALL PIPES TO BE LAYED AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
- C4. ALL CONNECTIONS INTO EXISTING PIPES MUST BE MADE IN THE DIRECTION OF FLOW
- C5. ANY NEW uPVC CONNECTIONS INTO EXISTING R.C. PIPES MUST BE MADE INTO THE TOP HALF OF THE PIPE USING A FLOWCON CONNECT FITTING U.O
- C6. ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D. BELOW PAVEMENTS. (NO COMPACTING REQUIRED BELOW LANDSCAPING) COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH NO-FINES GRANULAR MATERIAL AS SPECIFIED.
- C7. ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.
- C8. MINIMUM PIPE COVER TO ALL IN-GROUND PIPEWORK SHALL BE CARRIED OUT IN ACCORDANCE WITH TABLE 7.1 - A53500.3.
- C9. ALL SUSPENDED PIPE FIXINGS ARE TO BE CARRIED OUT IN ACCORDANCE WITH AS2032.
- C10. ENSURE THAT ALL STORMWATER PITS AND PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- C11. ALL PIPEWORK MUST BE INSTALLED WITHIN THE SITE BOUNDARY OF THE DEVELOPMENT SITE. ANY NEW OR EXISTING PIPEWORK EXTENDING THROUGH PRIVATE PROPERTY BEYOND THE BOUNDARY OF THE DEVELOPMENT SITE MUST BE CONTAINED SOLELY WITHIN A DRAINAGE EASEMENT. IF NO DRAINAGE EASEMENT EXISTS, A NEW DRAINAGE EASEMENT MUST BE SOUGHT AND REGISTERED PRIOR TO UTILISING OR INSTALLING PIPEWORK THROUGH NEIGHBOURING PROPERTIES. CONTACT THE ENGINEER IF A DRAINAGE EASEMENT CANNOT BE OBTAINED.

- D1. ALL DOWN PIPES TO BE 100mm Ø UNLESS NOTED OTHERWISE.
- D2. DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- D3. PROVIDE CLEANING EYES AT ALL DOWNPIPES.
- D4. GUTTER GUARDS MUST BE INSTALLED ON ALL GUTTERS UNLESS NOTED OTHERWISE.
- D5. ALL EAVES GUTTER AND VALLEY GUTTER SYSTEMS MUST BE INSTALLED IN ACCORDANCE WITH AS3500.3 REQUIREMENTS.
- D6. ALL BOX GUTTER SYSTEMS MUST BE INSTALLED STRICTLY IN ACCORDANCE WITH THE DETAILS SHOWN ON THE APPROVED STORMWATER MANAGEMENT PLAN. IF NO DETAILS ARE SHOWN, THE BOX GUTTER SYSTEM MUST BE INSTALLED IN ACCORDANCE WITH AS3500.3. IF ANY CHANGE TO THE BOX GUTTER SYSTEM CONFIGURATION IS PROPOSED, THE ENGINEER MUST BE NOTIFIED FOR A RE-DESIGN. IF THE INSTALLED BOX GUTTER DOES NOT STRICTLY COMPLY WITH THE DESIGN DETAILED ON THE STORMWATER MANAGEMENT PLAN, CERTIFICATION OF THE HYDRAULIC SYSTEM MAY BE REFUSED.



- E1. ALL STORMWATER PITS MUST BE INSTALLED IN ACCORDANCE WITH AS3500.3.
- E2. ALL CONCRETE PITS TO BE CAST INSITU OR, IF PRECAST, APPROVED BY ENGINEER. CAST INSITU PITS TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH 1 N12 TOP THE UNLESS NOTED OTHERWISE. CAST INSITU PITS GREATER THAN 900 DEEP TO BE MINIMUM 900x600 AND TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH N12 AT 300 EACH WAY UNLESS NOTED OTHERWISE.
- E3. MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS TO BE IN ACCORDANCE WITH TABLE 8.2, AS3500.3.
- E4. ALL PITS GREATER THAN 1200mm DEEP SHALL HAVE STEP IRONS INSTALLED. STEP IRON INSTALLATION MUST BE IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.
- E5. THE BOUNDARY OR SILT ARRESTOR PIT MUST INCORPORATE A SUMP OF MINIMUM 200mm DEPTH BELOW THE INVERT OF THE OUTLET PIPE AND A MAXI-MESH SCREEN AS PER LOCAL COUNCIL AND THE AUSTRALIAN STANDARD REQUIREMENTS. HOWEVER, UNLESS SPECIFICALLY REQUIRED BY COUNCILS POLICY OR IF THE SITE CONSISTS OF A CLAY OR ROCK SUBGRADE, ALL OTHER DRAINAGE PITS WILL NOT REQUIRE A SUMP.
- E6. ALL STORMWATER PITS TO BE LOCATED AT LOW POINTS TO PREVENT PONDED WATER.
- E7. FOR STORMWATER PITS LOCATED BELOW THE WATER TABLE, CUT INTO ROCK OR IN POORLY DRAINED SOILS, THE PIT SUMP MAY BE FILLED WITH MORTAR AND SCREEDED TOWARDS THE OUTLET AT MINIMUM 1% FALL, SUBJECT TO THE ENGINEERS APPROVAL.

F1. ALL SUB-SOIL DRAINAGE TO BE INSTALLED AS REQUIRED IN ACCORDANCE WITH AS3500 REQUIREMENTS, SPECIFICALLY SECTION 6, 7 AND APPENDIX M.

F2. UNLESS NOTED OTHERWISE, SUB-SOIL DRAINS ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.3 ALONGSIDE WALLS THAT IMPEDE THE NATURAL FLOW OF GROUNDWATER. THIS MAY ALSO INVOLVE TRENCHING INTO THE CLAY OR ROCK SUBGRADE TO DIRECT GROUNDWATER AWAY FROM STRUCTURES. SUB-SOIL DRAINAGE MUST ALSO BE INSTALLED IN SHALLOW LANDSCAPED AREAS OVER ROCK OR POORLY DRAINED SOILS TO PREVENT OVERLY SATURATED LANDSCAPING AREAS.

F3. 100mm ϕ x 3000 LONG TAIL OUT SUBSOIL LINE TO BE PROVIDED ON THE UPSTREAM SIDE OF ALL LARGE PITS OR IN AREAS WITH HIGH SEEPAGE FLOWS. SUBSOIL LINE TO BE COVERED WITH GEOTEXTILE FILTER SOCK FOR THE FULL LENGTH AND END COVERED.

G1. ALL PIPEWORK IN A CHARGED SYSTEM TO BE 100mm Ø UPVC PRESSURE OR SEWER GRADE PIPES WITH ALL JOINTS PRESSURE SEALED TO A MINIMUM OF 500mm (UNLESS NOTED OTHERWISE) ABOVE THE INLET OF THE DISCHARGE POINT. ALL JOINTS TO BE SOLVENT WELDED IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS.

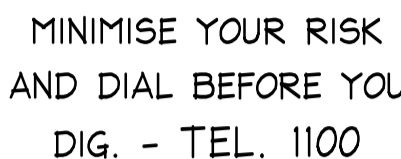
G2. ALL CHARGED SYSTEMS MUST HAVE A BLEED OUT LINE AT THE LOW POINT IN THE CHARGED SYSTEM WHICH MUST BE CONNECTED TO A FLUSH OUT PIT VIA GRAVITY. THE BLEED LINE MUST BE MAINTAINED AND REGULARLY FLUSHED OUT.

- H1. ORIFICE PLATE MUST BE INSTALLED PRIOR TO INSTALLATION OF THE ROOF DRAINAGE SYSTEM AND CONNECTION OF THE SITE STORMWATER SYSTEM TO THE ONSITE DETENT TANK.
- H2. THE HEIGHT DIFFERENCE (H*) BETWEEN THE ORIFICE CENTRELINE AND THE TOP WATER LEVEL OF THE ON-SITE DETENTION TANK MUST BE CONSTRUCTED IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN. IF H* CHANGES DUE TO SITE CONDITIONS, THE ENGINEER MUST BE NOTIFIED FOR AN ORIFICE PLATE SIZE ADJUSTMENT.
- H3. ANY PIPE FITTINGS FOR BELOW GROUND ON-SITE DETENTION TANK TANKS MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
- H4. ACCESS HATCHES MUST BE INSTALLED AT BOTH ENDS OF THE ON-SITE DETENTION TANK IF THE DEPTH OF THE TANK IS GREATER THAN 1200mm, STEPS IRONS MUST BE INSTALLED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.
- H5. ABOVE GROUND ON-SITE DETENTION BASINS MUST NOT EXCEED A PONDING DEPTH OF 300mm, UNLESS NOTED OTHERWISE. THE BUILDER MUST ENSURE THAT THE REQUIRED DETENTION VOLUME IS ACHIEVED DURING CONSTRUCTION. A WORK-AS-EXECUTED PLAN DETAILING THE FINISHED LEVELS AND VOLUME OF THE ON-SITE DETENTION BASIN MUST BE CARRIED OUT AT THE COMPLETION OF WORKS BY A REGISTERED SURVEYOR AND APPROVED BY THE ENGINEER PRIOR TO FINAL CERTIFICATION.

RWT12: RAINWATER TANK TO BE WATER PROOFED IN ACCORDANCE WITH HB 230-200B

ST6: BEFORE PURCHASING MATERIALS OR PAINT TO BE USED ON ROOF CATCHMENT AREAS, THE MANUFACTURER'S RECOMMENDATIONS ON LABELS AND BROCHURES FOR RAINWATER TANK SUITABILITY TO BE READ AND ADHERED TO.

- CAUSE DEATH OR SERIOUS INJURY TO WORKERS AND THE GENERAL PUBLIC
- INCONVENIENCE USERS OF ELECTRICITY, GAS, WATER AND COMMUNICATIONS
- LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS
- CAUSE EXPENSIVE FINANCIAL LOSSES TO BUSINESS
- CUT OFF EMERGENCY SERVICES
- DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED



ONSITE DETENTION CALCULATIONS ACCORDING TO PITTSWATER 21	
TOTAL SITE AREA	= 698 m ²
EXISTING IMPERVIOUS AREA	= 217.2 m ² (31.1 %)
PROPOSED IMPERVIOUS AREA	= 249.1 m ² (35.7 %)
NETT INCREASE	= 32 m ² (< 50m ²)
NO OSD REQUIRED FOR THIS DEVELOPEMNT	
RWT REQUIREMENT (AS PER BASIX)	
TOTAL RWT (RWT 1 & 2) = 6000 L	
- RWT 1 = 3000 L	
- RWT 2 = 3000 L	
BASIX REQUIRES 6000 L	

D01 - GENERAL NOTES
D02 - STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 1
D03 - STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 2
D04 - STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 3
D05 - STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 4
D06 - SECTIONS & DETAILS

A1[illegible]

STORMWATER NOTES REVISION DATE: 22/12/2020

(O)	DNOTES PIPE OVER
(U)	DNOTES PIPE UNDER
 	FFL AND/OR SPOT LEVEL REFER TO ARCHITECT. TO BE CONFIRMED PRIOR TO CONSTRUCTION
	HATCHING DNOTES AREA SIDE AND REAR PATH PERVIOUS PAVING BY OTHERS.
	100mm ϕ DOWNPIPE TO BE DIRECTED TO BOUNDARY PIT
	STORMWATER PIPE FLOW DIRECTION
	STORMWATER PIPE FALL DIRECTION
	STORMWATER PIT
	GDI - 150 WIDE x 150 MIN DEEP GRATED DRAIN, REFER DETAILS.
	100mm AGG LINE WRAPPED IN GEOFABRIC DISCHARGE TO STORMWATER IN AN APPROVED MANNER BY OTHERS TO A33500.3
VFF	FIRST FLUSH DEVICE WALL MOUNTED OR INLINE TO MANUFACTURERS SPECIFICATIONS
RWT 1 & 2	RWT TANK, REFER NOTES AND DETAILS.

NOTE: DRAINAGE LINE INDICATIVE ONLY
DRAINAGE LINE LOCATIONS ARE INDICATIVE ONLY
AND MAY VARY DUE TO CONSTRAINTS.
IF IN DOUBT CONTACT THE ENGINEER.

CONTRACTOR TO LOCATE ALL EXISTING SERVICES PRIOR TO EXCAVATION AND NOTIFY ENGINEER OF ANY POTENTIAL CLASHES WITH THE PROPOSED DRAINAGE

SUBSOIL DRAINAGE BY OTHERS. ALL
SUBSOIL DRAINAGE TO DISCHARGE
TO STORMWATER SYSTEM IN AN
APPROVED MANNER TO AS3500.3.

RETAINING WALLS, BATTERS AND SHORING INCLUDING DRAINAGE BY OTHERS REFER ARCHITECT FOR SPECIFICATIONS & DETAILS

WANDEEN

KERB OUTLET
TOK: 24.85
PIL: 24.73
BOK: 24.70

450x450
BOUNDARY PIT
SL: 25.66
IL: 25.21
450 DEEP

— DRIVEWAY & CROSSOVER
GRADES REFER CIVIL PLANS
BY NB CONSULTING PTY LTD.

MINIMUM 12m²
PERVIOUS PAVING
AREA BY OTHERS.
REFER ARCHITECT

— FOR CONTINUATION REFER
DRAWING 201063-D03

GROUND LEVEL
BUILDING OUTLINE OVER

300x300 GRATED
JUNCTION PIT
SL: 25.77
IL: 25.35

300x300 —
GRATED PL
SL: 25.80
IL: 25.50


— 100mm ϕ uPVC SEWER OR PRESSURE GRADE BALANCE PIPE AT BASE OF TANKS. REFER DETAILS.

— 150mm ϕ AT 1% MIN FALL

FOR CONTINUATION REFER
DRAWING 201062-D02

GARAGE LEVEL & SITE DRAINAGE PLAN

SCALE = 1 : 100

Date : 
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SEBASTIAN WATKINS

STORMWATER MANAGEMENT
DRAINAGE PLAN - SHEET 1

ISSUED FOR D.A.
SUBMISSION ONLY
NOT FOR
CONSTRUCTION

IF IN DOUBT ASK

Job No: 201062

Drawing No:
D02

—Scale check - 100mm when printed to scale—→

A1

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Client: SEBASTIAN WATKINS

Drawing Title: STORMWATER MANAGEMENT
DRAINAGE PLAN - SHEET 1

Job No: 201062

Drawing No:
D02

B Consulting Engineers

LEGEND

- (o) DENOTES PIPE OVER
(u) DENOTES PIPE UNDER
- X 24.000 FFL AND/OR SPOT LEVEL REFER TO ARCHITECT. TO BE CONFIRMED PRIOR TO CONSTRUCTION
- HATCHING DENOTES AREA SIDE AND REAR PATH PERVIOUS PAVING BY OTHERS
- DP1 100mm Ø DOWNPIPE TO BE DIRECTED TO RWT
• DP2 100mm Ø DOWNPIPE TO BE DIRECTED TO BOUNDARY PIT
• CDP2 100mm Ø CONCEALED DOWNPIPE (TO ARCHITECTS DETAILS) TO BE DIRECTED TO BOUNDARY PIT
- STORMWATER PIPE FLOW DIRECTION
STORMWATER PIPE FALL DIRECTION
PIT STORMWATER PIT
SUSPENDED 100mm Ø PIPE

NOTES: ALL DRAINAGE LINES ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS.

NOTE: DRAINAGE LINE INDICATIVE ONLY

DRAINAGE LINE LOCATIONS ARE INDICATIVE ONLY AND MAY VARY DUE TO CONSTRAINTS. IF IN DOUBT CONTACT THE ENGINEER.

NOTE: EXISTING SERVICES

CONTRACTOR TO LOCATE ALL EXISTING SERVICES PRIOR TO EXCAVATION AND NOTIFY ENGINEER OF ANY POTENTIAL CLASHES WITH THE PROPOSED DRAINAGE

SUBSOIL DRAINAGE NOTE:

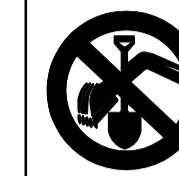
SUBSOIL DRAINAGE BY OTHERS. ALL SUBSOIL DRAINAGE TO DISCHARGE TO STORMWATER SYSTEM IN AN APPROVED MANNER TO AS3500.3.

RETAINING STRUCTURES NOTE:

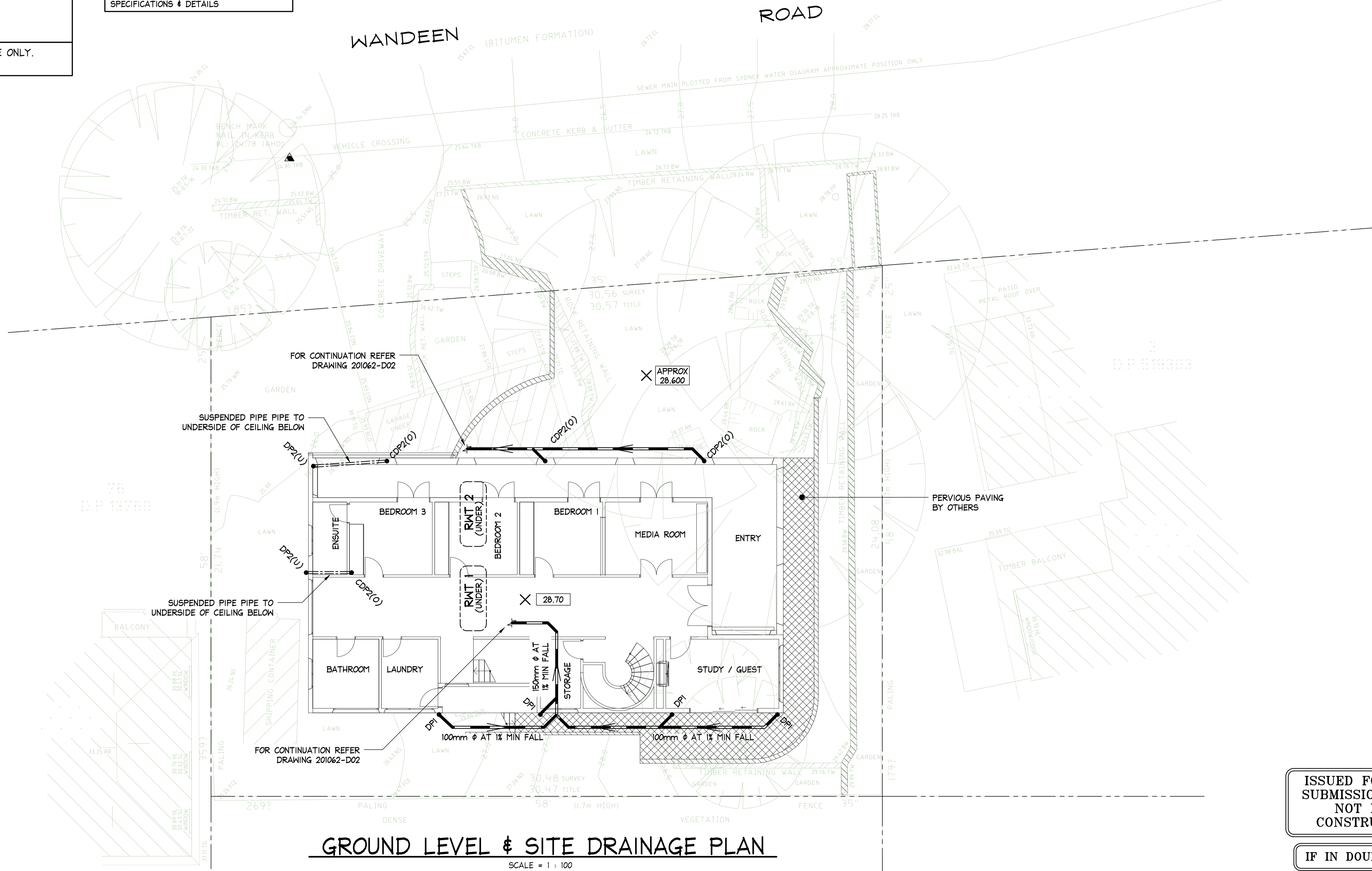
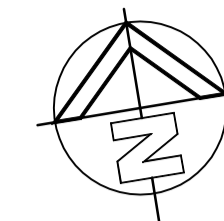
RETAINING WALLS, BATTERS AND SHORING INCLUDING DRAINAGE BY OTHERS REFER ARCHITECT FOR SPECIFICATIONS & DETAILS

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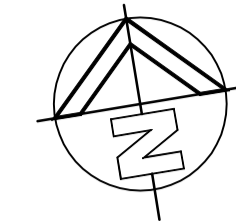
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LEGEND	
(o)	DENOTES PIPE OVER
(u)	DENOTES PIPE UNDER
X 24.000	FFL AND/OR SPOT LEVEL REFER TO ARCHITECT. TO BE CONFIRMED PRIOR TO CONSTRUCTION
• DP1	100mm Ø DOWNPIPE TO BE DIRECTED TO RWT
• DP2	100mm Ø DOWNPIPE TO BE DIRECTED TO BOUNDARY PIT
• CDP2	100mm Ø CONCEALED DOWNPIPE (TO ARCHITECTS DETAILS) TO BE DIRECTED TO BOUNDARY PIT
→	STORMWATER PIPE FLOW DIRECTION
↘	STORMWATER PIPE FALL DIRECTION
=====	50mm Ø uPVC STORMWATER PIPE CAST INTO SLAB
-----	PLANTER SUB SOIL DRAINAGE DRAINAGE BY OTHERS TO DISCHARGE TO STORMWATER IN AN APPROVED MANNER TO FUTURE DETAIL
OF1	EMERGENCY OVERFLOW REFER BALCONY/TERRACE NOTE
OF2	200x50(D) EMERGENCY OVERFLOW WEIR SLOT
FDI	200x200 FLOOR DRAIN

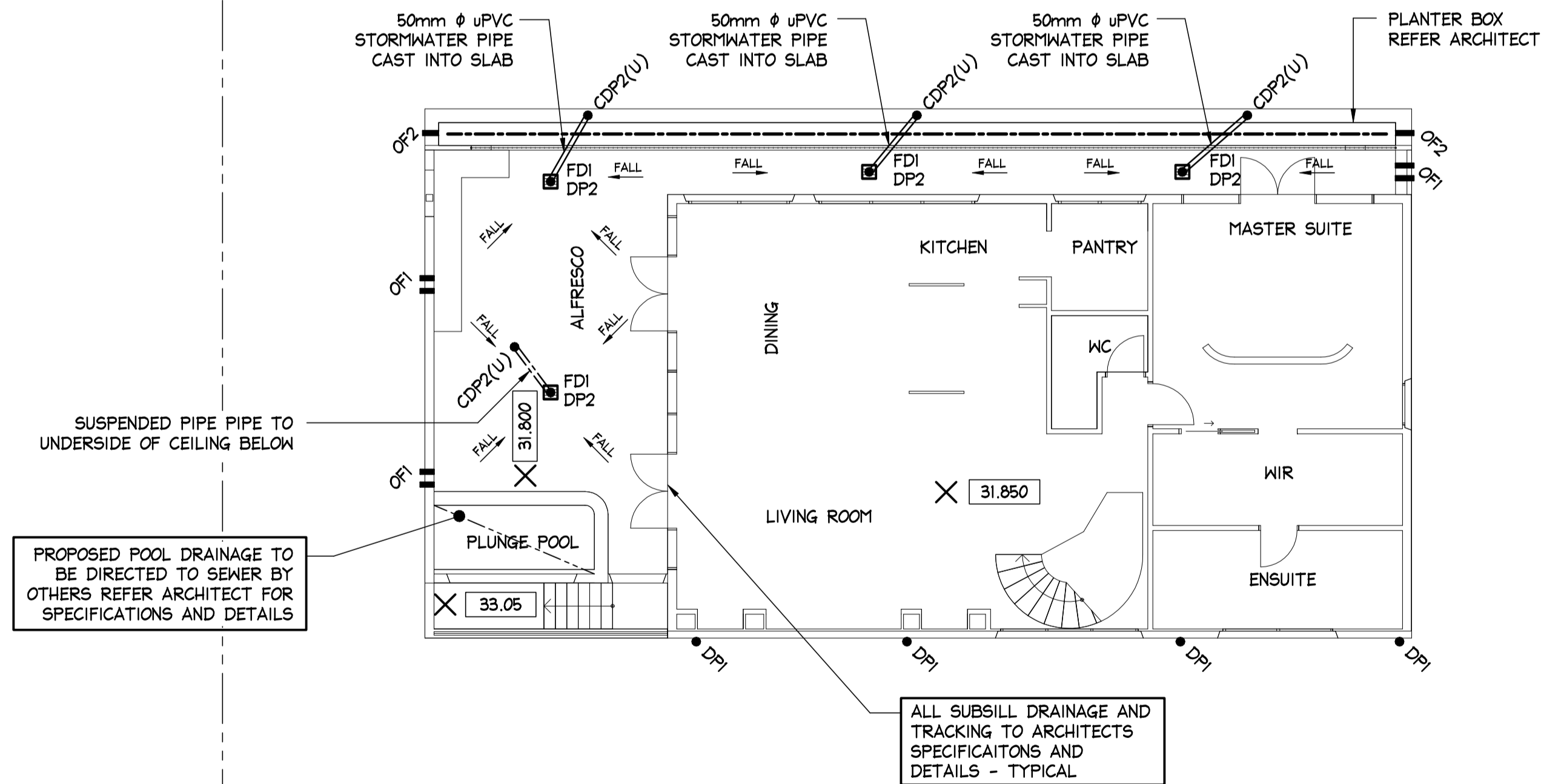
NOTES: ALL DRAINAGE LINES ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS.

NOTE: DRAINAGE LINE INDICATIVE ONLY
DRAINAGE LINE LOCATIONS ARE INDICATIVE ONLY AND MAY VARY DUE TO CONSTRAINTS. IF IN DOUBT CONTACT THE ENGINEER.

BALCONY/TERRACE OVERFLOW NOTE
BUILDER TO PROVIDE A MINIMUM 100mm WIDE x 30mm HIGH OR 50mm DIA OVERFLOW FOR EVERY 6m² OF EXPOSED TERRACE/BALCONY AREA. THE FULL OVERFLOW DEPTH MUST BE LOCATED BELOW THE ADJACENT INTERNAL FLOOR LEVEL TO PROTECT AGAINST INCIDENTAL FLOODING DUE TO A BLOCKED FLOOR OUTLET.



- NOTES:
- THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
 - DO NOT SCALE FROM THIS DRAWING.
 - ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
 - FOR GENERAL NOTES REFER TO DRAWING NUMBER: D01.



FIRST LEVEL DRAINAGE PLAN

SCALE = 1 : 100

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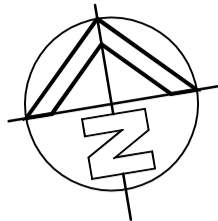
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Date : 26/11/2020				By: Rick G Wray		Client:		Drawing Title:		Job No:		Drawing No:		Issue:	
Description: ISSUED FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION				Review: D.K. C.F.		SEBASTIAN WATKINS		STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 3		201062		D04		A	
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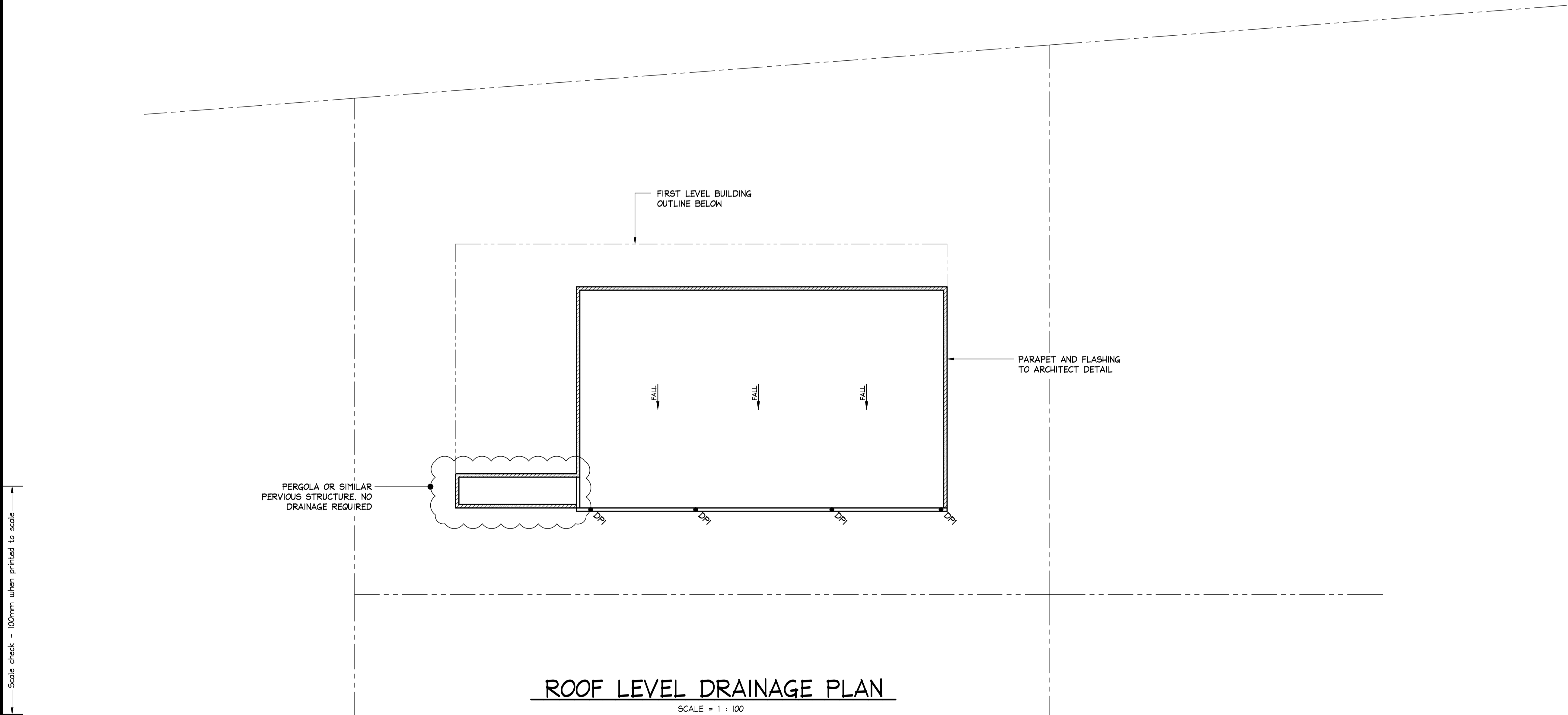
NB Consulting Engineers

LEGEND
(O) DENOTES PIPE OVER
(U) DENOTES PIPE UNDER
• DPI 100mm Ø DOWNPIPE TO BE DIRECTED TO RWT

NOTES: ALL DRAINAGE LINES ARE INDICATIVE ONLY.
LOCATION MAY VARY DUE TO CONSTRAINTS.



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Scale check - 100mm when printed to scale
A1

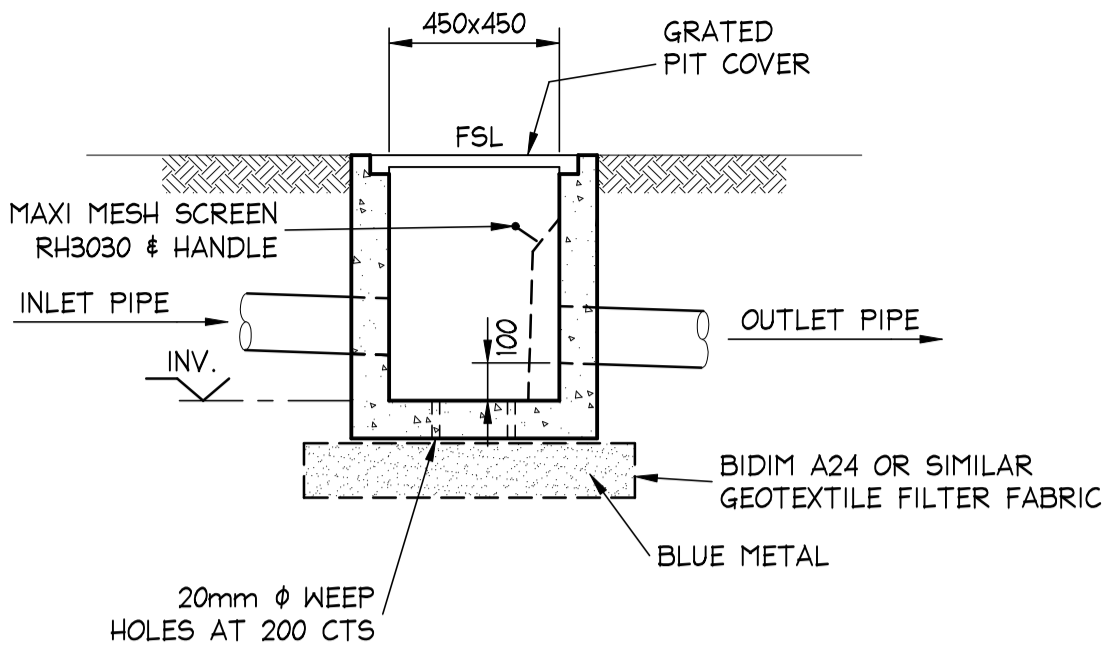
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DOCUMENT CERTIFICATION				NB Consulting Engineers		Project Manager:	TURNBULL PLANNING INTERNATIONAL PTY LTD	Project:	PROPOSED DRIVEWAY AT 9 WANDEEN ROAD, CLAREVILLE	Date:	NOV 2020	Design:	L.G.	Drawn:	D.K.
Date : Rick G Wray BE(Civil), CPEng, MIEAust., NER, RPEQ: 08243. (Director NB Consulting Engineers)				Sydney: Ph: (02) 9984 7000 Suite 207, 30 Fisher Road Dee Why N.S.W. 2099 Gold Coast: Ph: (07) 5631 4744 Unit 8, 1726 Gold Coast Highway Burleigh Heads QLD 4220 E : nb@nbconsulting.com.au W : www.nbconsulting.com.au		Client:	SEBASTIAN WATKINS	Drawing Title:	STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 4	Job No:	201062	Drawn No:	D05	Issue:	A
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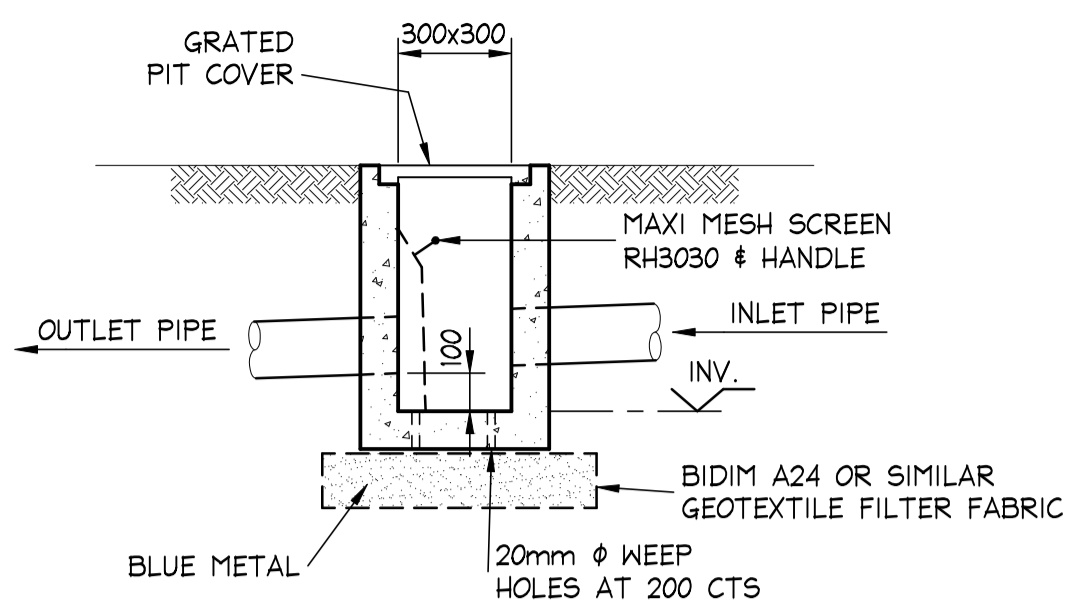
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PRECAST OR CAST INSITU PIT
REFER STORMWATER NOTES
ALTERNATE POLYPROPYLENE PIT BY MANUFACTURER

450x450 BOUNDARY PIT DETAIL

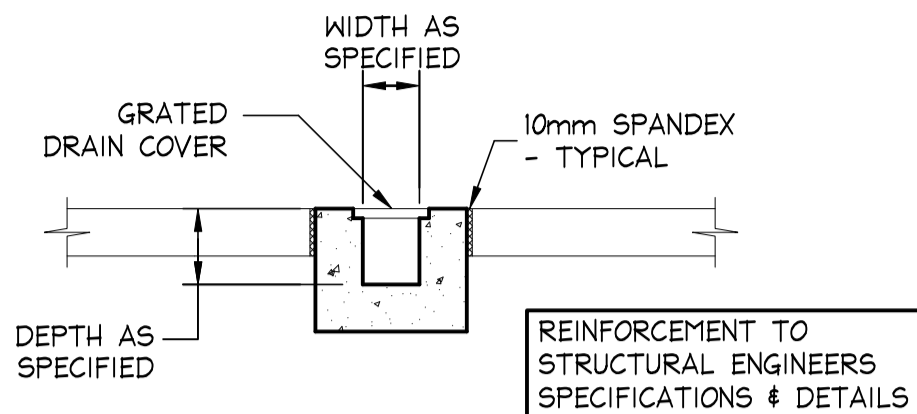
SCALE = 1 : 20



PRECAST OR CAST INSITU PIT
REFER STORMWATER NOTES
ALTERNATE POLYPROPYLENE PIT BY MANUFACTURER

300x300 FLUSH OUT PIT DETAIL

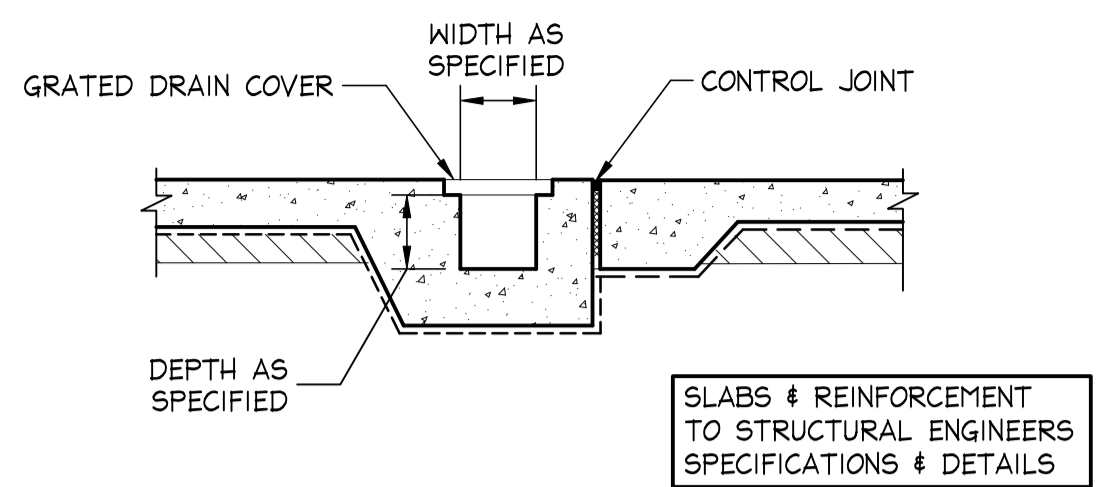
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OR PRECAST GRATED DRAIN ALTERNATE
POLYPROPYLENE DRAIN BY MANUFACTURER

TYPICAL GRATED DRAIN

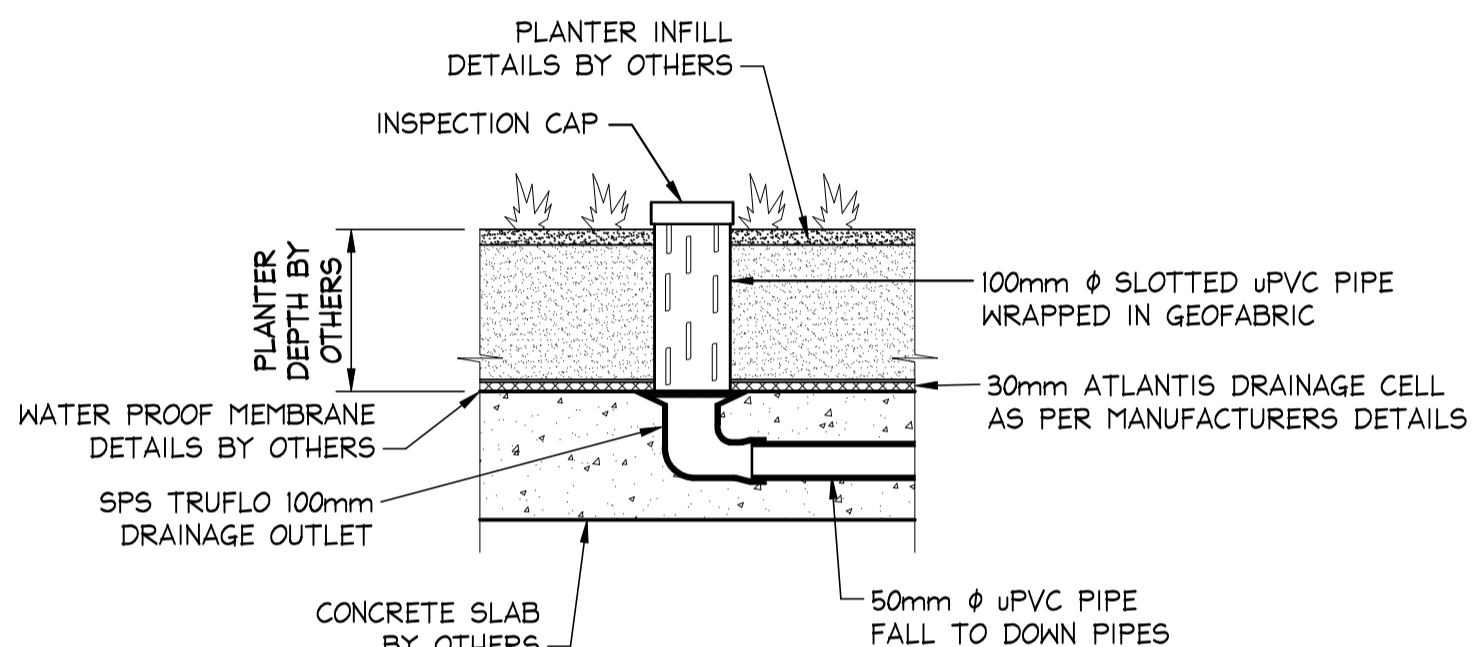
SCALE = 1 : 20



OR PRECAST GRATED DRAIN
ALTERNATE POLYPROPYLENE
DRAIN BY MANUFACTURER

**ALTERNATIVE
GRADED DRAIN DETAIL**

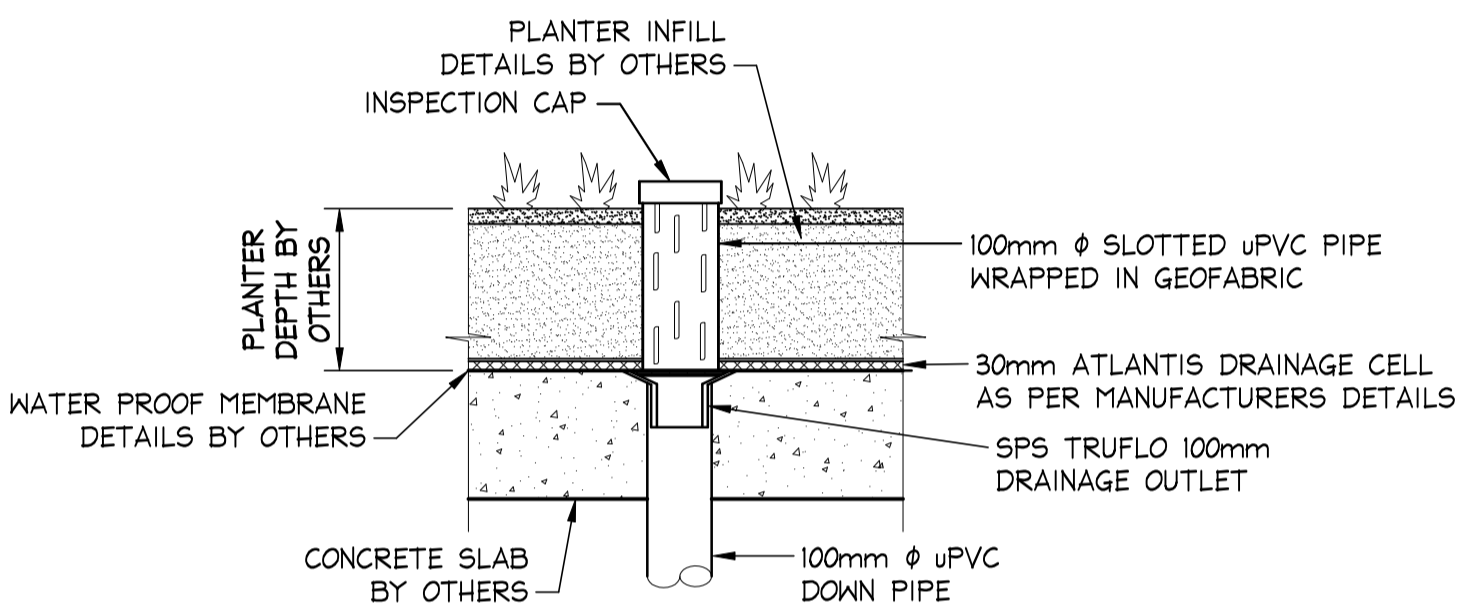
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REFER TO MANUFACTURERS SPECIFICATION
FOR SPS DRAINAGE OUTLETS

STANDARD PLANTER DRAIN - 'PDI'

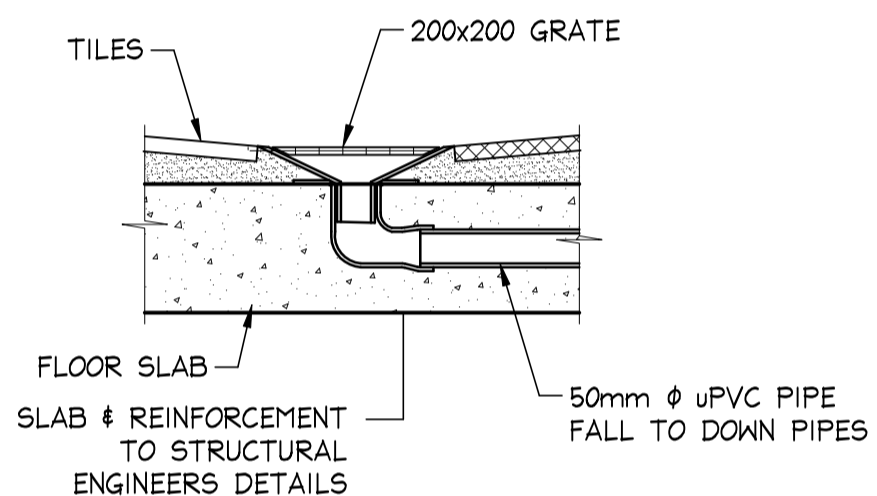
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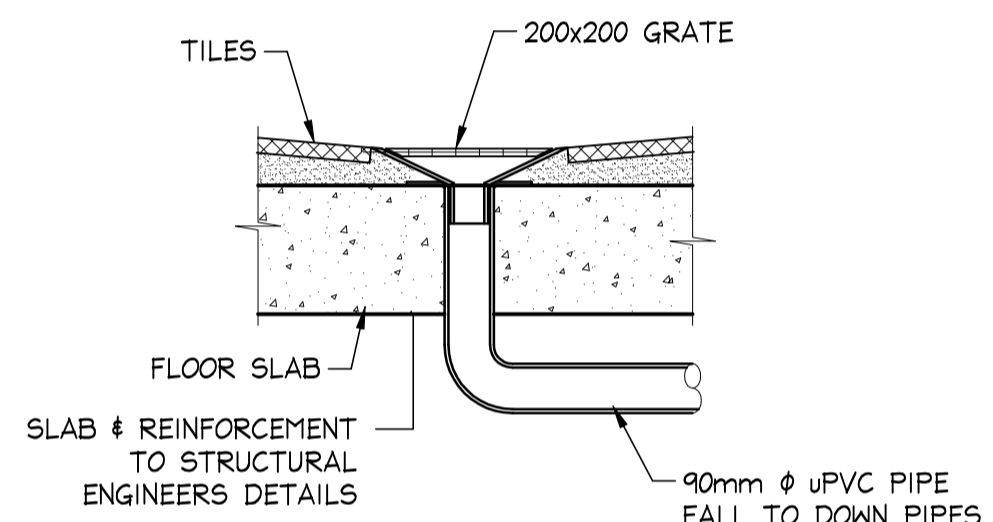
**ALTERNATIVE
STANDARD PLANTER DRAIN - 'PDI'**

SCALE = 1 : 10



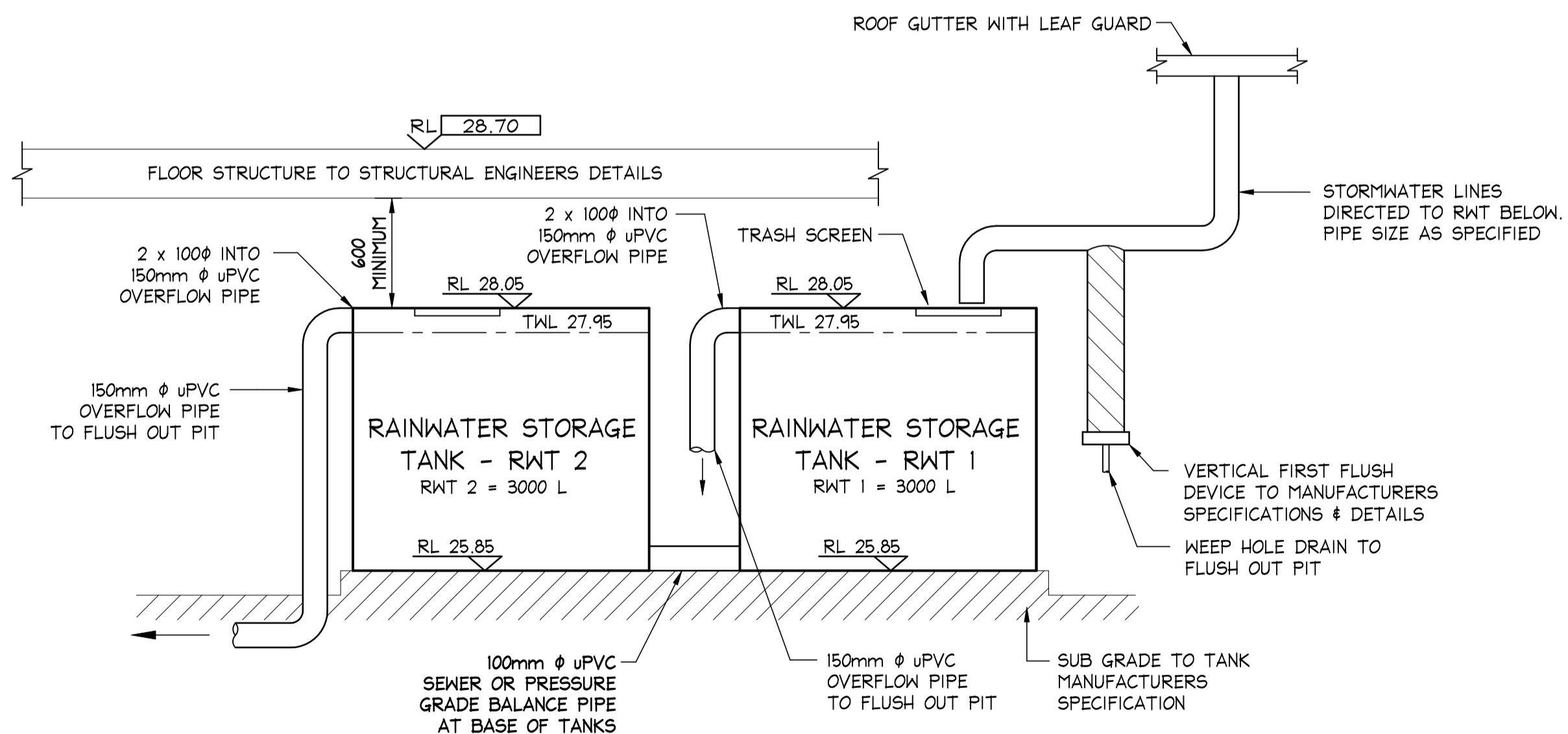
STANDARD FLOOR DRAIN - 'FD'

SCALE = 1 : 10



STANDARD FLOOR DRAIN - 'FD'

SCALE = 1 : 10



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Date: 26/11/2020				Issue: A		Description: ISSUED FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION		By: D.K.		Review: C.F.		Job No: 201062		Drawing No: D06	
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