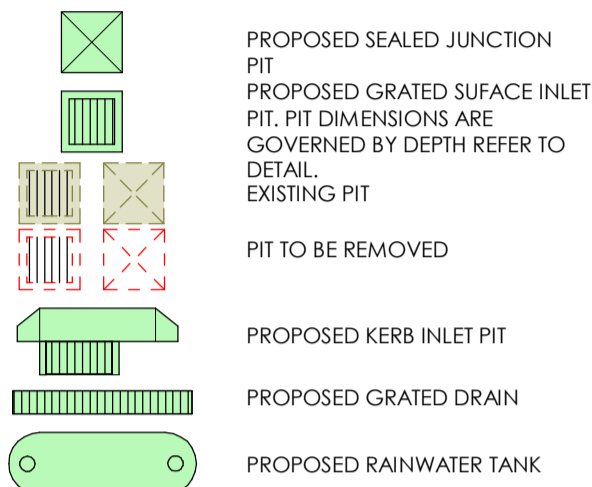


STORMWATER SERVICES

— STORMWATER PIPE

- - - - - SUB-SOIL DRAINAGE LINE

STORMWATER LEGEND



SAFETY IN DESIGN

THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING THIS DESIGN THAT ARE TYPICAL OF SIMILAR DESIGNS. AS FAR AS IS REASONABLY PRACTICABLE RISKS HAVE BEEN ELIMINATED OR MINIMISED THROUGH THE DESIGN PROCESS. HAZARD CONTROLS MUST STILL BE IMPLEMENTED BY THE CONTRACTOR, OWNER OR OPERATOR TO ENSURE THE SAFETY OF WORKERS.

* JN DO NOT CONSIDER THAT THERE ARE ANY UNIQUE RISKS ASSOCIATED WITH THE DESIGN OF THIS PROJECT.

DRAWING STATUS

PRELIMINARY
PRELIMINARY DRAWINGS ARE NOT TO BE USED FOR TENDER OR CONSTRUCTION PURPOSES.

TENDER
TENDER DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES AND ARE INTENDED FOR AN EXTENT OF WORKS. ALL OTHER CONSULTANT DRAWINGS AND CONTRACT DOCUMENTS SHOULD BE READ IN CONJUNCTION WITH THESE DOCUMENTS TO DETERMINE THE FULL EXTENT OF WORKS.

CONSTRUCTION CERTIFICATE
CONSTRUCTION CERTIFICATE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION UNLESS APPROVED & STAMPED BY THE PCA.

CONSTRUCTION
CONSTRUCTION DRAWINGS CAN BE USED FOR CONSTRUCTION PURPOSES AND/OR FOR THE CREATION OF FABRICATION DRAWINGS.

GENERAL

- ALL EXISTING LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS
- ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION. WHERE A SPECIFICATION HAS NOT BEEN NOMINATED THEN THE CURRENT NSW DEPARTMENT OF HOUSING CONSTRUCTION SPECIFICATION IS TO BE USED. THE NOMINATED SPECIFICATION SHALL TAKE PRECEDENCE TO THESE NOTES.
- THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR ON SITE. ENGINEERS DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
- ALL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS & DRAWINGS FROM OTHER CONSULTANTS.
- THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
- THE CONTRACTOR SHOULD LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND PROJECT AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE AND/OR ADJUST IF NECESSARY. INFORMATION GIVEN ON THE DRAWINGS IN RESPECT TO SERVICES IS FOR GUIDANCE ONLY AND IS NOT GUARANTEED COMPLETE NOR CORRECT.
- CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
- SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- ALL DRAINAGE LINES THROUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S STANDARDS.
- THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS ETC. TO THE EXTENT SPECIFIED.
- PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY AN ACCREDITED PERSON IN ACCORDANCE WITH RMS REQUIREMENTS. FOR ANY WORK ON OR ADJACENT TO PUBLIC ROADS, PLAN TO BE SUBMITTED TO COUNCIL & RMS.

SURVEY

- JONES NICHOLSON IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY 3RD PARTY INFORMATION PROVIDED ON THIS DRAWING.
- ALL LEVELS ARE TO A.H.D.
- ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES.
- SET OUT COORDINATES ARE BASED ON SURVEY DRAWINGS PROVIDED FOR THE PURPOSE OF CARRYING OUT THE ENGINEERING DESIGN.
- CONTRACTOR SHALL VERIFY ALL SET OUT COORDINATES SHOWN ON THE PLANS BY A REGISTERED SURVEYOR
- CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED SURVEYOR.
- ANY DISCREPANCIES SHOULD BE CLARIFIED IN WRITING WITH THE ENGINEER PRIOR TO COMMENCEMENT OF THE WORK FOR CONFIRMATION OF THE SURVEY.

STORMWATER DRAINAGE

- STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS AND COUNCIL'S SPECIFICATION.
- PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC.
- PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO.
- ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O.
- MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO.
- PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS.
- PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O.
- PIPES 225mm DIA AND OVER SHALL BE LAID AT 0.5% MIN. GRADE U.N.O.
- BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY.
- ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS.
- PITS SHALL BE AS DETAILED WITH METAL GRATES AT LEVELS INDICATED. ALL PITS DEEPER THAN 1200mm TO HAVE CLIMB IRONS.
- BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS.
- ALL COURTYARD & LANDSCAPED PITS TO BE 450 SQUARE LOAD CLASS A UNLESS NOTED OTHERWISE.
- ALL DRIVEWAY & OSD PITS TO BE 600 SQUARE LOAD CLASS D UNLESS NOTED OTHERWISE.
- INSTALL TEMPORARY SEDIMENT BARRIERS TO INLET PITS. TO COUNCIL'S STANDARDS UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED.
- PITS & DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER.
- DOWNPIPES SHOWN ARE INDICATIVE ONLY. ALL ROOF GUTTERING AND DOWNPIPES TO THE CURRENT AUSTRALIAN STANDARDS.
- ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
- HAND-EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS.
- FOOTPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FINAL COUNCIL'S ISSUED LEVELS.
- GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION.
- ALL BASES OF PITS TO BE BENCH TO HALF PIPE DEPTH AND PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATE.
- SUBSOIL LINE PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO CURRENT AUSTRALIAN STANDARDS. LAY PIPES ON FLOOR OF TRENCH GRADED AT 1% MIN. AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL.
- SHOULD THE CONTRACTOR ELECT TO INSTALL PRECAST STORMWATER PITS AND THEY ARE PERMITTED BY COUNCIL AND THE CLIENT, THE PRECAST PITS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH RMS STANDARDS INCLUDING:
 - SEAL THE SEGMENTS TOGETHER USING A SITE-APPROVED NON-SHRINK GROUT OR MASTIC-TYPE PRODUCT. APPLY THE SEALANT IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S REQUIREMENTS.
 - ENSURE THAT NO GAPS REMAIN AND THAT A SMOOTH FACE EXISTS BETWEEN MULTIPLE UNITS.
 - LEAVE THE SEGMENTS UNDISTURBED UNTIL THE PERIOD OF CURING IS COMPLETED IN ACCORDANCE WITH THE GROUT OR SEALANT PRODUCT MANUFACTURER'S REQUIREMENTS.

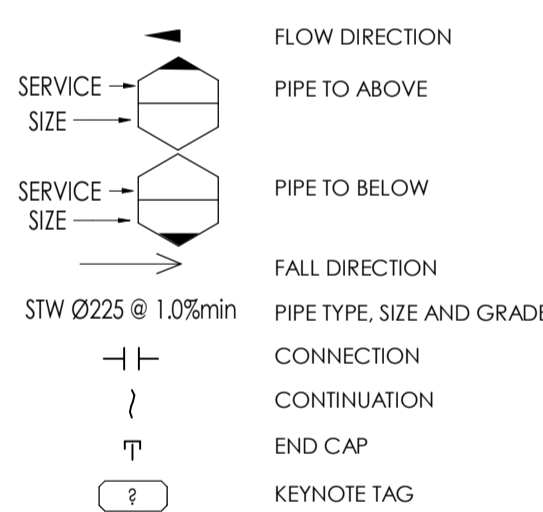
STORMWATER DRAINAGE INSTALLATION

- SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN ACCORDANCE WITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN STANDARDS.
- BEDDING OF THE PIPELINES IS TO BE TYPE 'HSZ' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS:
 - COMPACTED GRANULAR MATERIAL IS TO COMPLY WITH THE FOLLOWING GRADINGS:

SIEVE SIZE (mm)	19	2.36	0.60	0.30	0.15	0.075
% MASS PASSING	100	50-100	20-90	10-60	0-25	0-10

- AND THE MATERIAL PASSING THE 0.075 SIEVE HAVING LOW PLASTICITY AS DESCRIBED IN APPENDIX D OF AS1726.
- BEDDING DEPTH UNDER THE PIPE TO BE 100mm.
 - BEDDING MATERIAL TO BE EXTENDED FROM THE TOP OF THE BEDDING ZONE UP TO 0.3 TIMES PIPE OUTSIDE DIAMETER. THIS REPRESENTS THE 'HAUNCH ZONE'.
 - THE BEDDING & HAUNCH ZONE MATERIAL IS TO BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 98% WITHIN ROAD RESERVES AND TRAFFICABLE AREAS AND 95% ELSEWHERE FOR COHESIVE MATERIAL OR A MINIMUM DENSITY INDEX OF 70% IN ACCORDANCE WITH THE STANDARDS FOR COHESIONLESS MATERIAL.
 - COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED ORGANISATION WITH A NATA CERTIFIED LABORATORY FOR ALL DRAINAGE LINES LAID WHOLLY OR PART UNDER THE KERB & GUTTER OR PAVEMENT.
- BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A GRANULAR GRAVEL AGGREGATE MATERIAL (<10mm) BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO ITS SELF COMPACTING ABILITY.
 - A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D/6 CLEARANCE FOR PIPES > 1200 DIA.

GENERAL PIPEWORK LEGEND



GENERAL ABBREVIATIONS

AB	ABOVE BENCH
AFFL	ABOVE FINISHED FLOOR LEVEL
CIS	CAST IN SLAB
CL	CENTRELINE
CS	CEILING SPACE
Cu	COPPER
DIA	DIAMETER
DP	DOWNPIPE
EX	EXISTING
FC	FALSE CEILING
FFL	FINISHED FLOOR LEVEL
GL	GROUND LEVEL
HBS	PIPES HUNG BELOW SLAB
HL	HIGH LEVEL
IG	IN-GROUND
IL	INVERT LEVEL
LL	LOW LEVEL
O/F	OVERFLOW
PVC	POLYVINYLCHLORIDE
RL	REDUCED LEVEL
SL	SURFACE LEVEL
S/S	STAINLESS STEEL
UB	UNDER BENCH
uPVC	UNPLASTICISED POLYVINYLCHLORIDE
US	UNDER SIDE
VD	VERTICAL DROP



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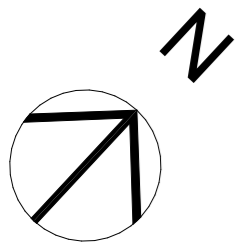
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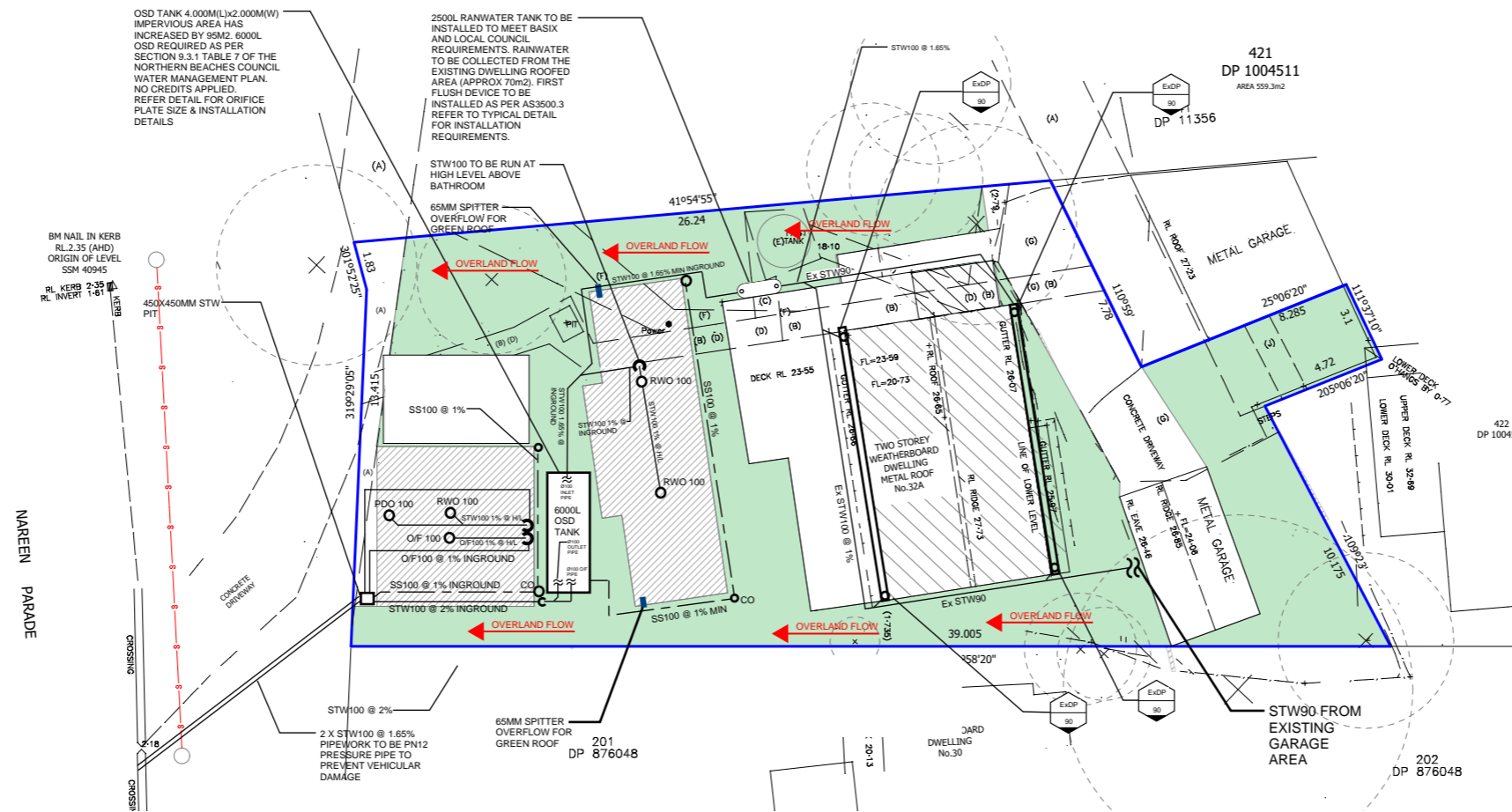
RESIDENTIAL ADDITION

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HSK-00C



Lot 421
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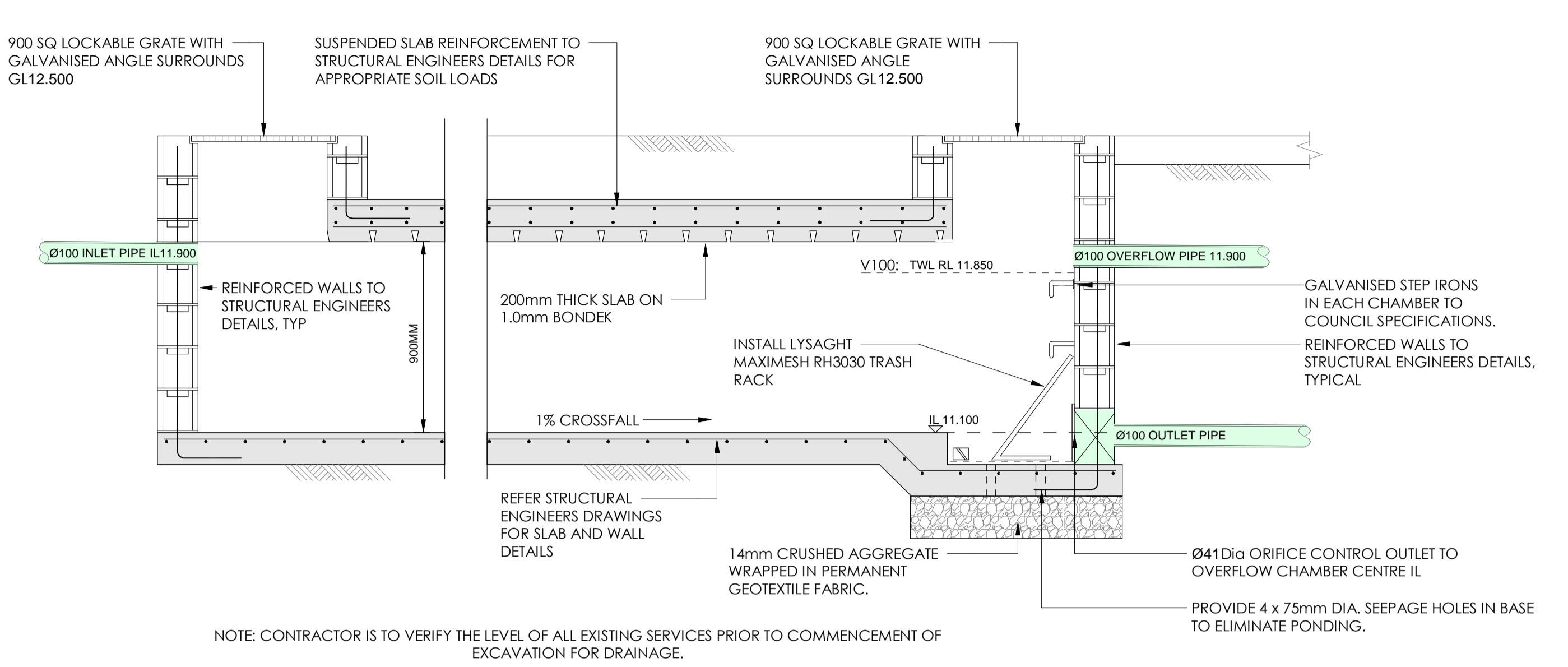
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STORMWATER PLAN

RESIDENTIAL ADDITION

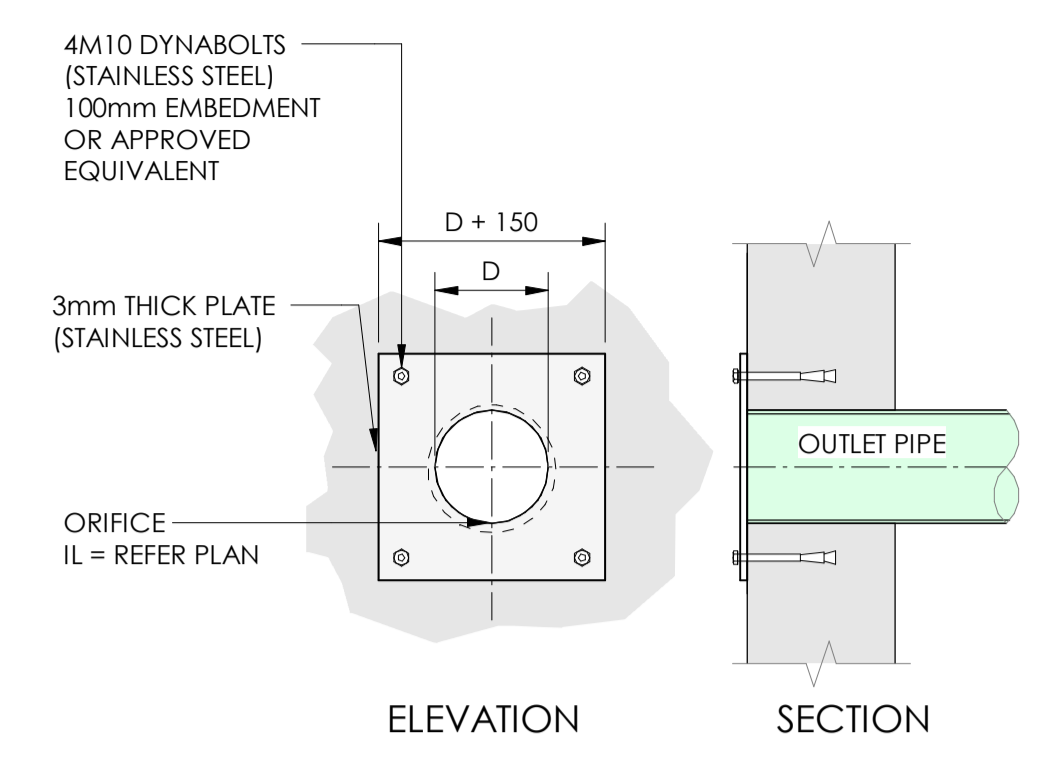
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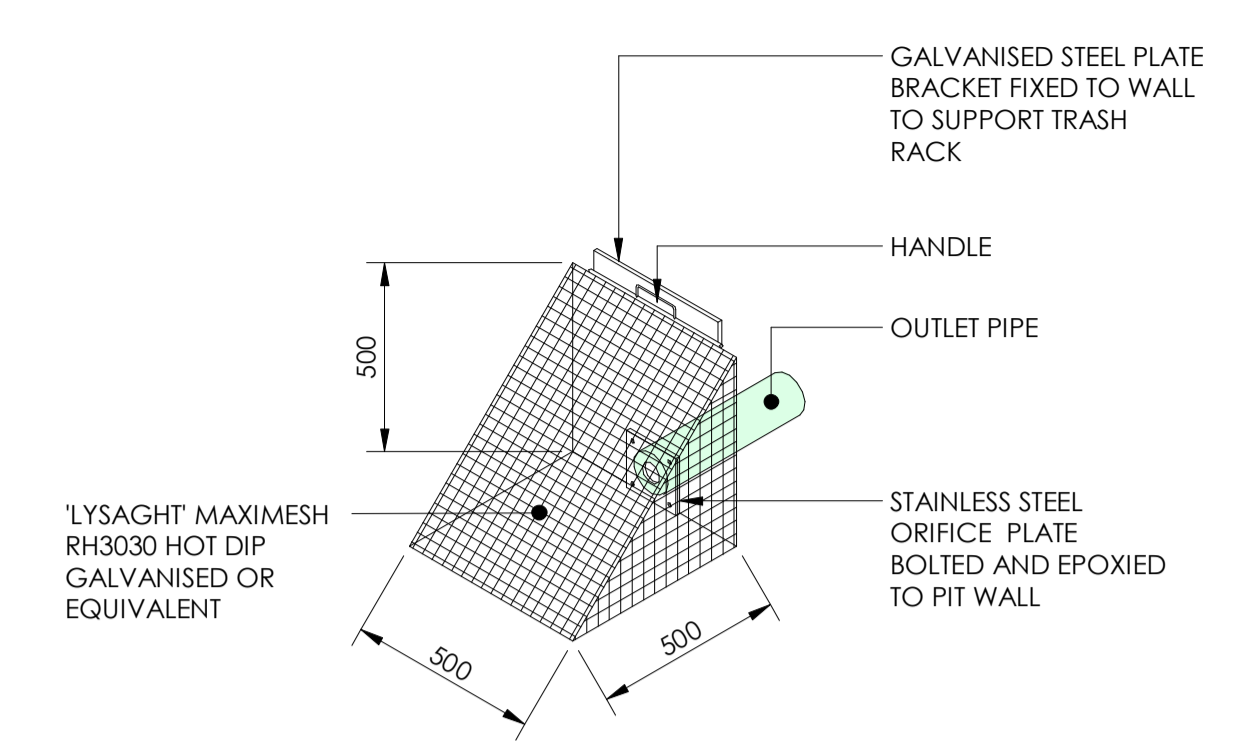


NOTE: CONTRACTOR IS TO VERIFY THE LEVEL OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION FOR DRAINAGE.

ON SITE DETENTION TANK DETAIL - LANDSCAPE AREA WITH SUMP
SCALE 1 : 20

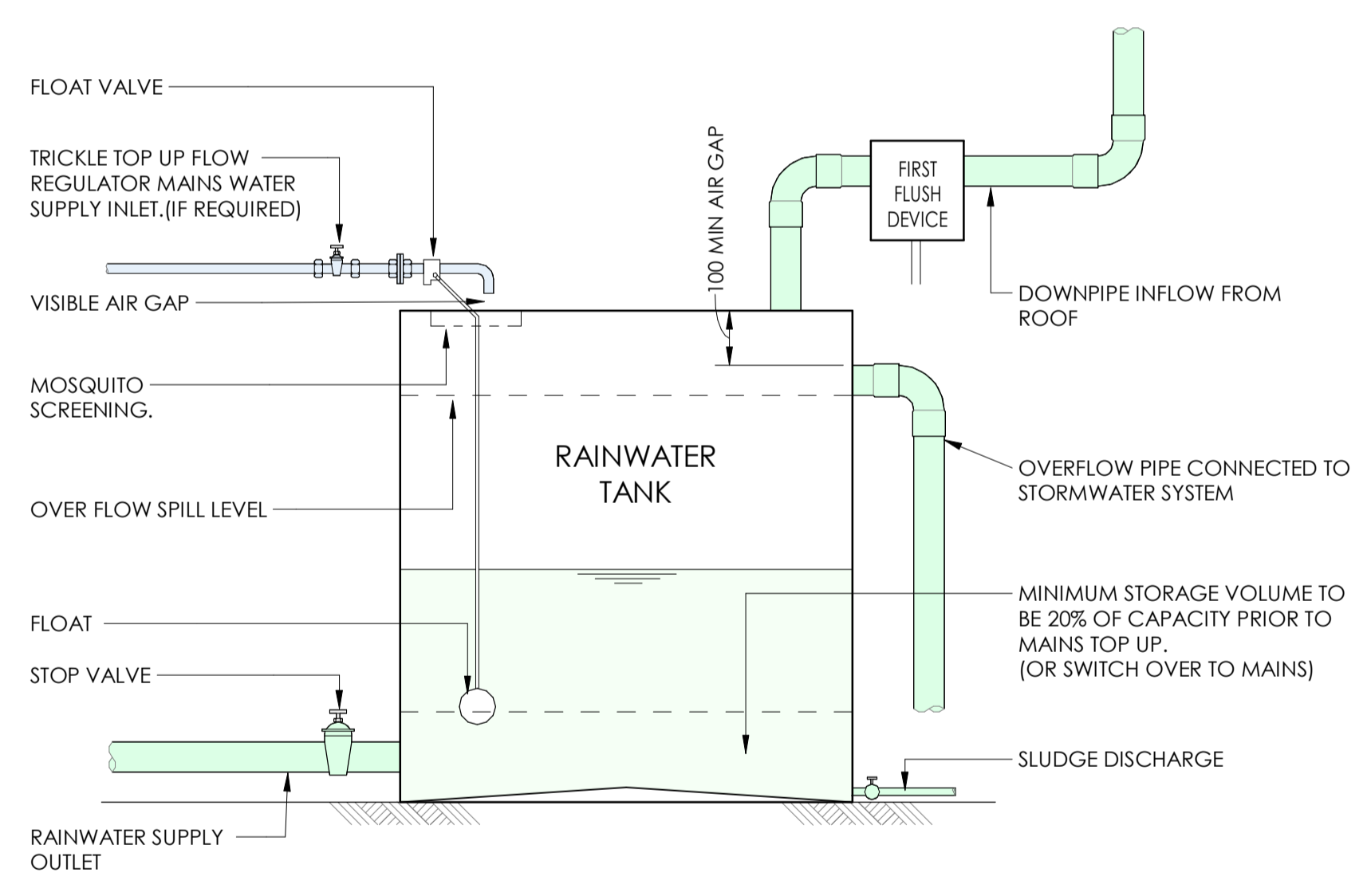


TYPICAL ORIFICE PLATE DETAIL
SCALE 1 : 10



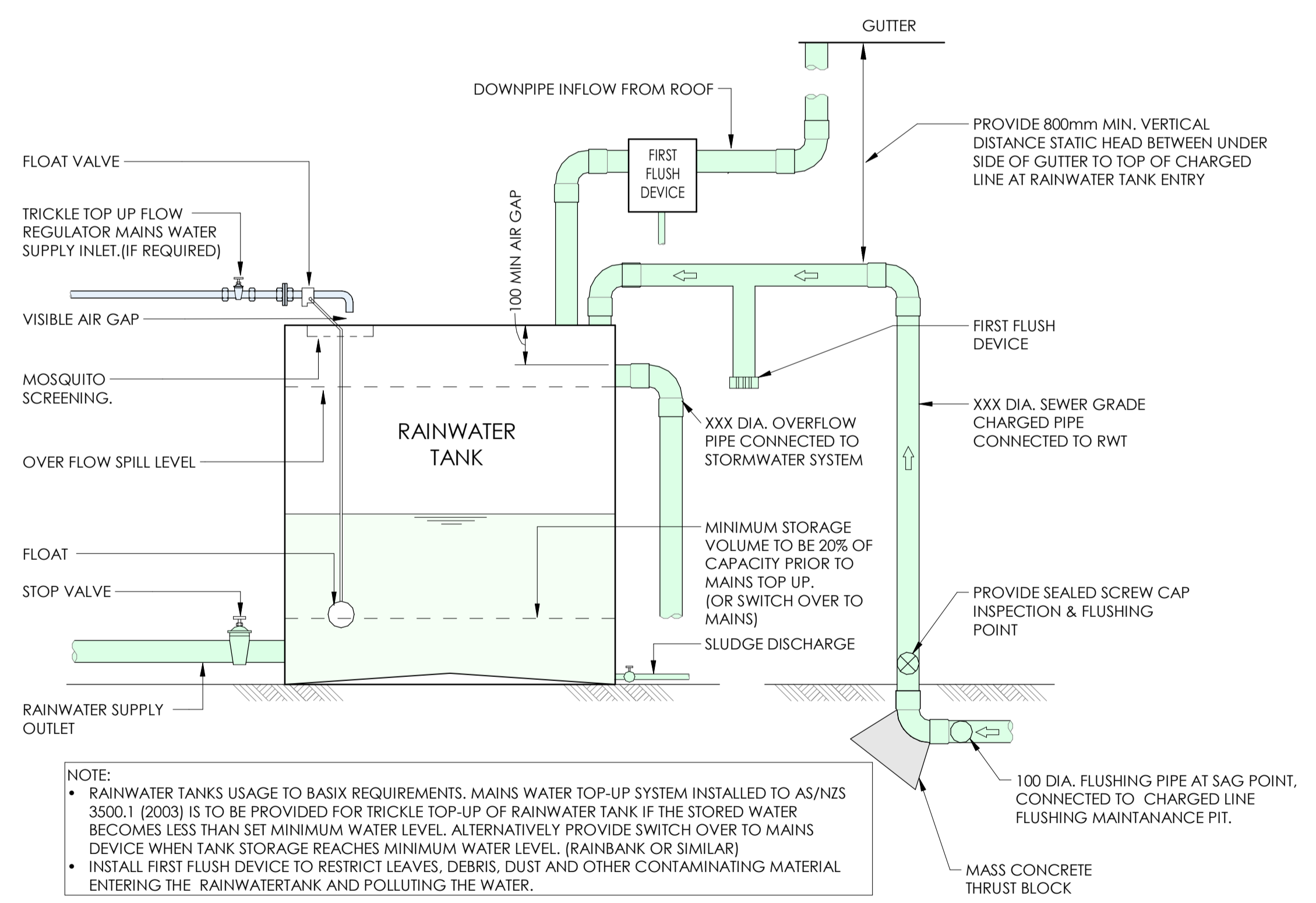
TYPICAL TRASH RACK SCREEN DETAIL
SCALE 1 : 20

Orifice Plate Calculation		
Formula for orifice plate calculation		
$Q = C . A . \sqrt{(2 . g . H)} . 10^3$		
Design Discharge Rate	Head over orifice Centre	Recommended Diameter
[L/s]	[m]	[mm]
3	0.750	41



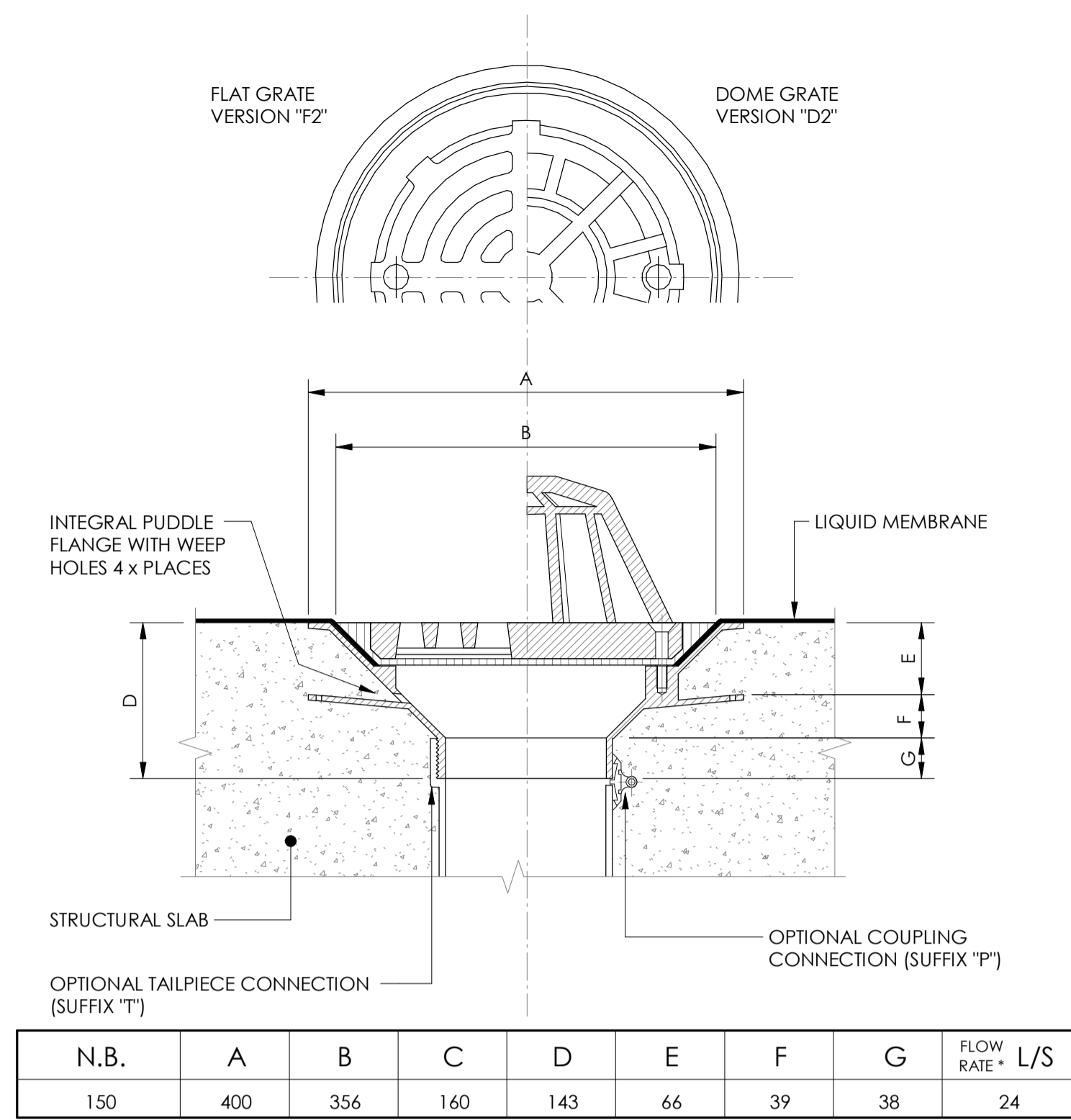
NOTE:
 • RAINWATER TANKS USAGE TO BASIX REQUIREMENTS. MAINS WATER TOP-UP SYSTEM INSTALLED TO AS/NZS 3500.1 (2003) IS TO BE PROVIDED FOR TRICKLE TOP-UP OF RAINWATER TANK IF THE STORED WATER BECOMES LESS THAN SET MINIMUM WATER LEVEL. ALTERNATIVELY PROVIDE SWITCH OVER TO MAINS DEVICE WHEN TANK STORAGE REACHES MINIMUM WATER LEVEL. (RAINBANK OR SIMILAR)
 • INSTALL FIRST FLUSH DEVICE TO RESTRICT LEAVES, DEBRIS, DUST AND OTHER CONTAMINATING MATERIAL ENTERING THE RAINWATER TANK AND POLLUTING THE WATER.

TYPICAL RAINWATER TANK DETAIL
SCALE 1 : 20



NOTE:
 • RAINWATER TANKS USAGE TO BASIX REQUIREMENTS. MAINS WATER TOP-UP SYSTEM INSTALLED TO AS/NZS 3500.1 (2003) IS TO BE PROVIDED FOR TRICKLE TOP-UP OF RAINWATER TANK IF THE STORED WATER BECOMES LESS THAN SET MINIMUM WATER LEVEL. ALTERNATIVELY PROVIDE SWITCH OVER TO MAINS DEVICE WHEN TANK STORAGE REACHES MINIMUM WATER LEVEL. (RAINBANK OR SIMILAR)
 • INSTALL FIRST FLUSH DEVICE TO RESTRICT LEAVES, DEBRIS, DUST AND OTHER CONTAMINATING MATERIAL ENTERING THE RAINWATER TANK AND POLLUTING THE WATER.

TYPICAL RAINWATER TANK DETAIL - CHARGED LINE
SCALE 1 : 20



N.B.	A	B	C	D	E	F	G	FLOW RATE* L/S
150	400	356	160	143	66	39	38	24

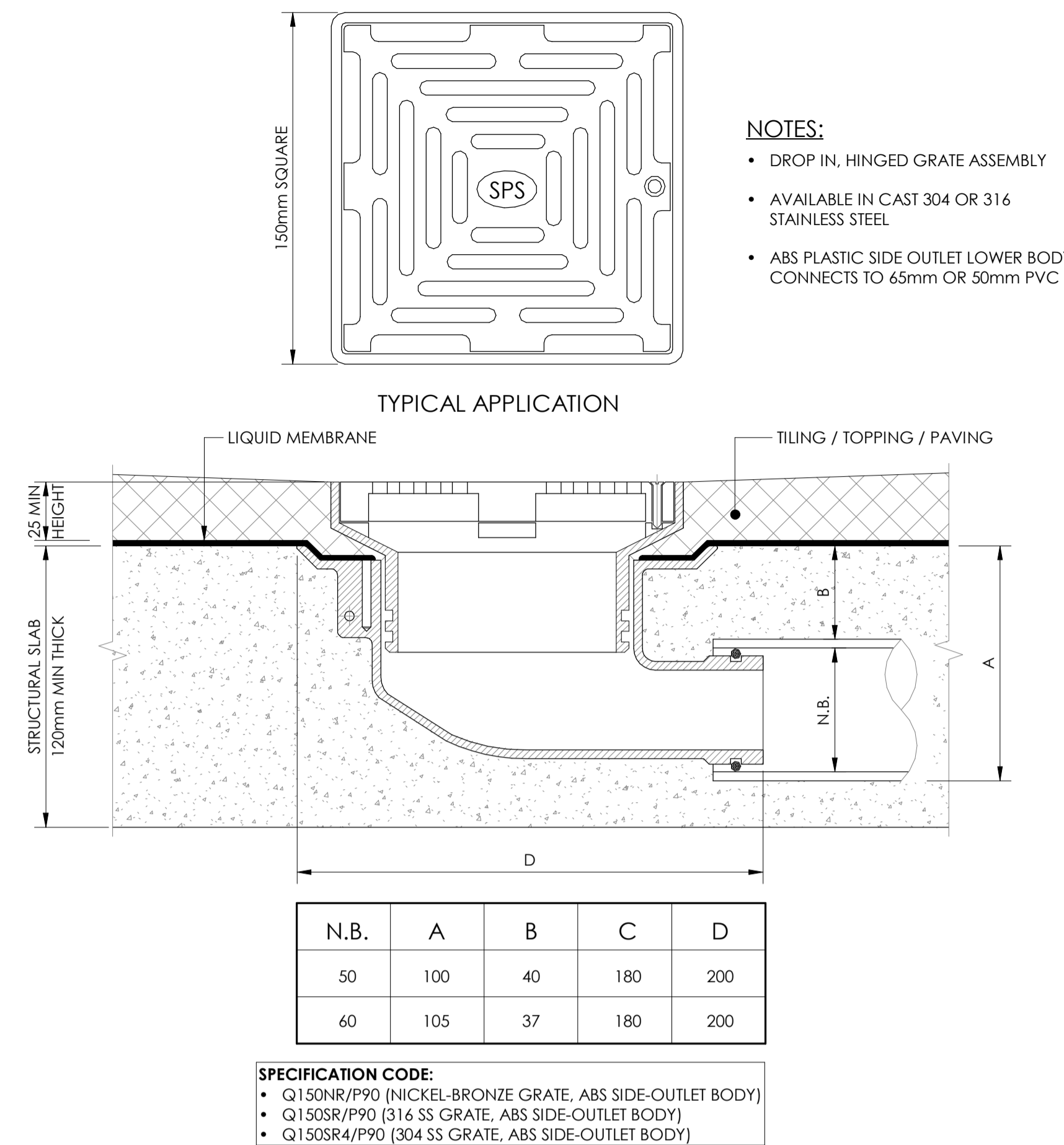
* BASED ON 50mm HEAD OF WATER ABOVE SURFACE LEVEL. FOR FURTHER DATA REFER TO FLOW CHARTS.

SPECIFICATION CODE:

- SIA150F2 (150mm SUPERFLO C1 BODY, GALVANISED CAST IRON FLAT GRATE AND ALUMINIUM MEMBRANE CLAMP RING).
- SIA150D2 (150mm SUPERFLO - C1 BODY, ALUMINIUM DOME GRATE AND MEMBRANE CLAMP RING).

SUGGESTED APPLICATIONS:

- LARGE CONCRETE ROOFS WITH HEAVY MEMBRANE.
- SPRINKLER/HYDRANT TEST AREA.



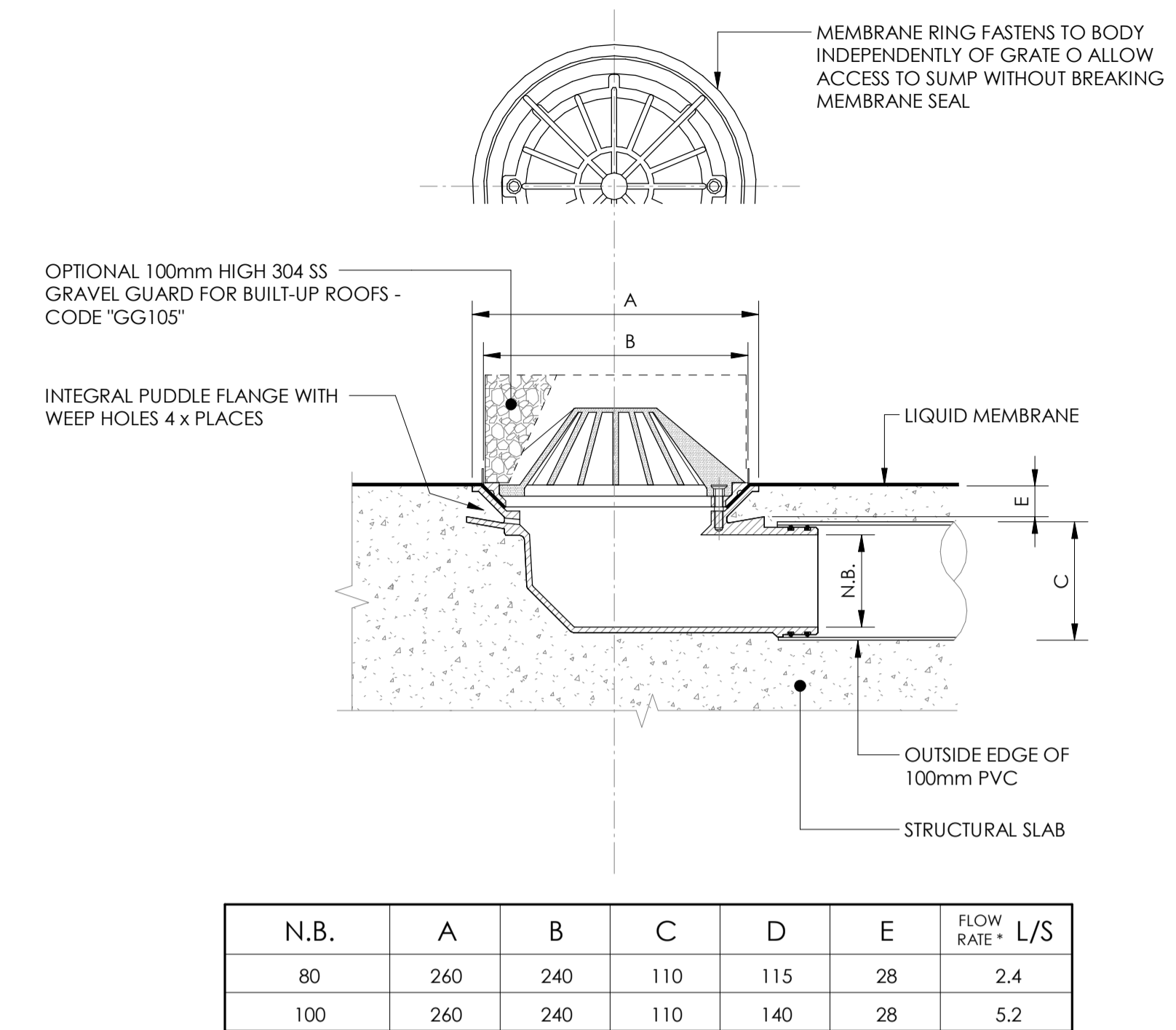
- NOTES:**
- DROP IN, HINGED GRATE ASSEMBLY
 - AVAILABLE IN CAST 304 OR 316 STAINLESS STEEL
 - ABS PLASTIC SIDE OUTLET LOWER BODY CONNECTS TO 65mm OR 50mm PVC

TYPICAL APPLICATION

N.B.	A	B	C	D
50	100	40	180	200
60	105	37	180	200

SPECIFICATION CODE:

- Q150NR/P90 (NICKEL-BRONZE GRATE, ABS SIDE-OUTLET BODY)
- Q150SR/P90 (316 SS GRATE, ABS SIDE-OUTLET BODY)
- Q150SR4/P90 (304 SS GRATE, ABS SIDE-OUTLET BODY)



N.B.	A	B	C	D	E	FLOW RATE* L/S
80	260	240	110	115	28	2.4
100	260	240	110	140	28	5.2

* BASED ON 50mm HEAD OF WATER ABOVE SURFACE LEVEL. FOR FURTHER DATA REFER TO FLOW CHARTS.

SPECIFICATION CODE:

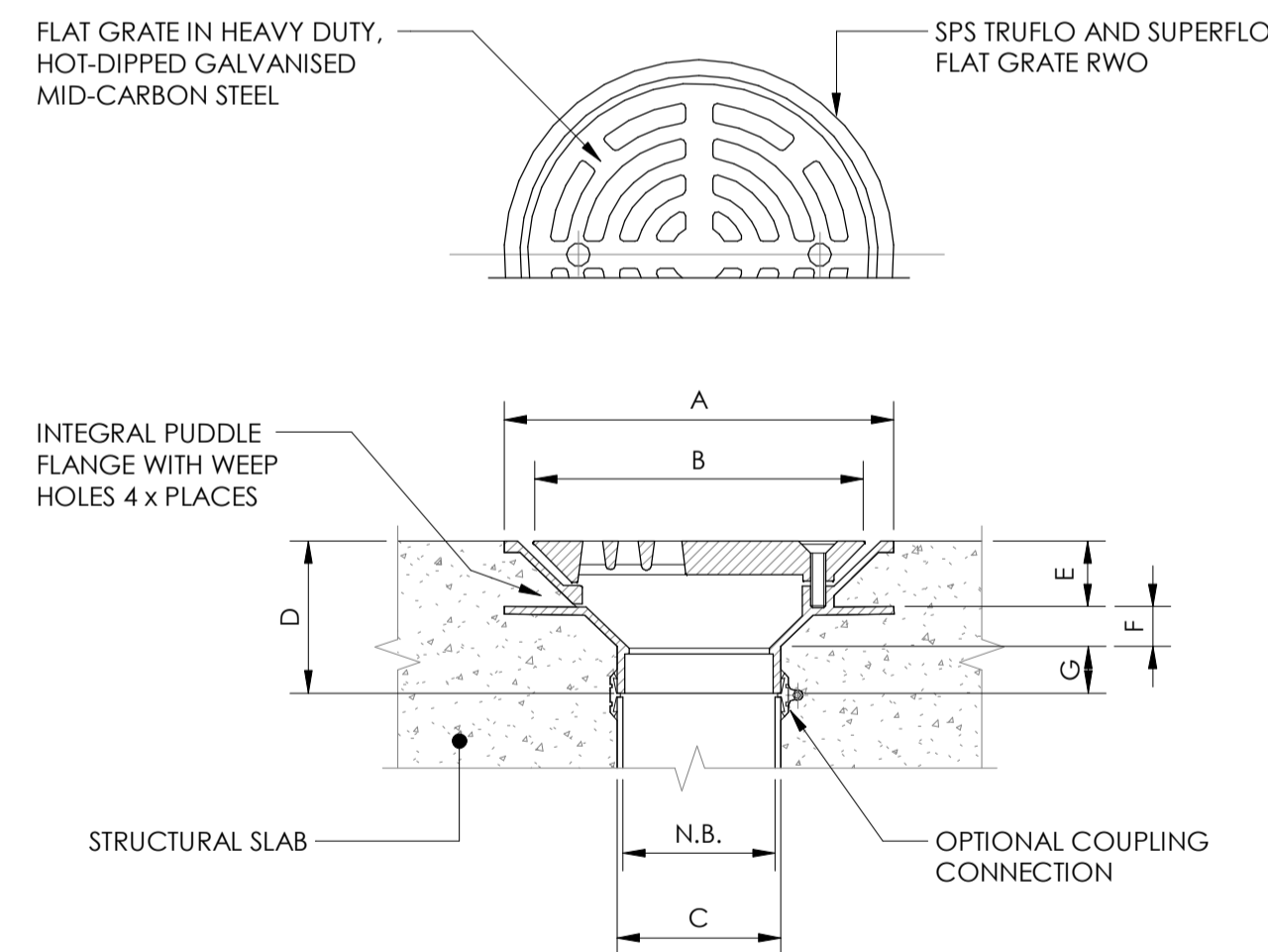
- TIA80/90D2 (80mm CI BODY, ALUMINIUM CLAMP RING AND DOME).
- TIB80/90D2 (80mm CI BODY, BRONZE RING AND DOME).
- TIA100/90F2 (100mm CI BODY, ALUMINIUM CLAMP RING AND DOME).
- TIB100/90D2 (100mm CI BODY, BRONZE RING AND DOME).

SUGGESTED APPLICATIONS:

- ROOF DECKS WITH PIPE CAST IN.

SPS 150mm SUPERFLO FLAT OR DOME RWO

DETAILS BY SPS DRAINS PTY LTD. FOR REFERENCE ONLY. REFER TO MANUFACTURE INSTALLATION SPECIFICATIONS



N.B.	A	B	C	D	E	F	G	FLOW RATE* L/S
100	260	200	110	95	44	26	25	8.2
150	260	200	160	80	48	29	28	10.2
SUPERFLO**	400	290	160	143	66	39	38	17

* BASED ON 50mm HEAD OF WATER ABOVE SURFACE LEVEL. FOR FURTHER DATA REFER TO FLOW CHARTS.

** SUPERFLO AVAILABLE IN 150mm OUTLET ONLY.

SPECIFICATION CODE:

- TIA100F (100mm TRUFLO CI BODY, GALVANISED FLAT GRATE).
- TIA150F (150mm TRUFLO CI BODY, GALVANISED FLAT GRATE).
- TIA100/90F2 (150mm SUPERFLO CI BODY, GALVANISED FLAT GRATE).

SUGGESTED APPLICATIONS:

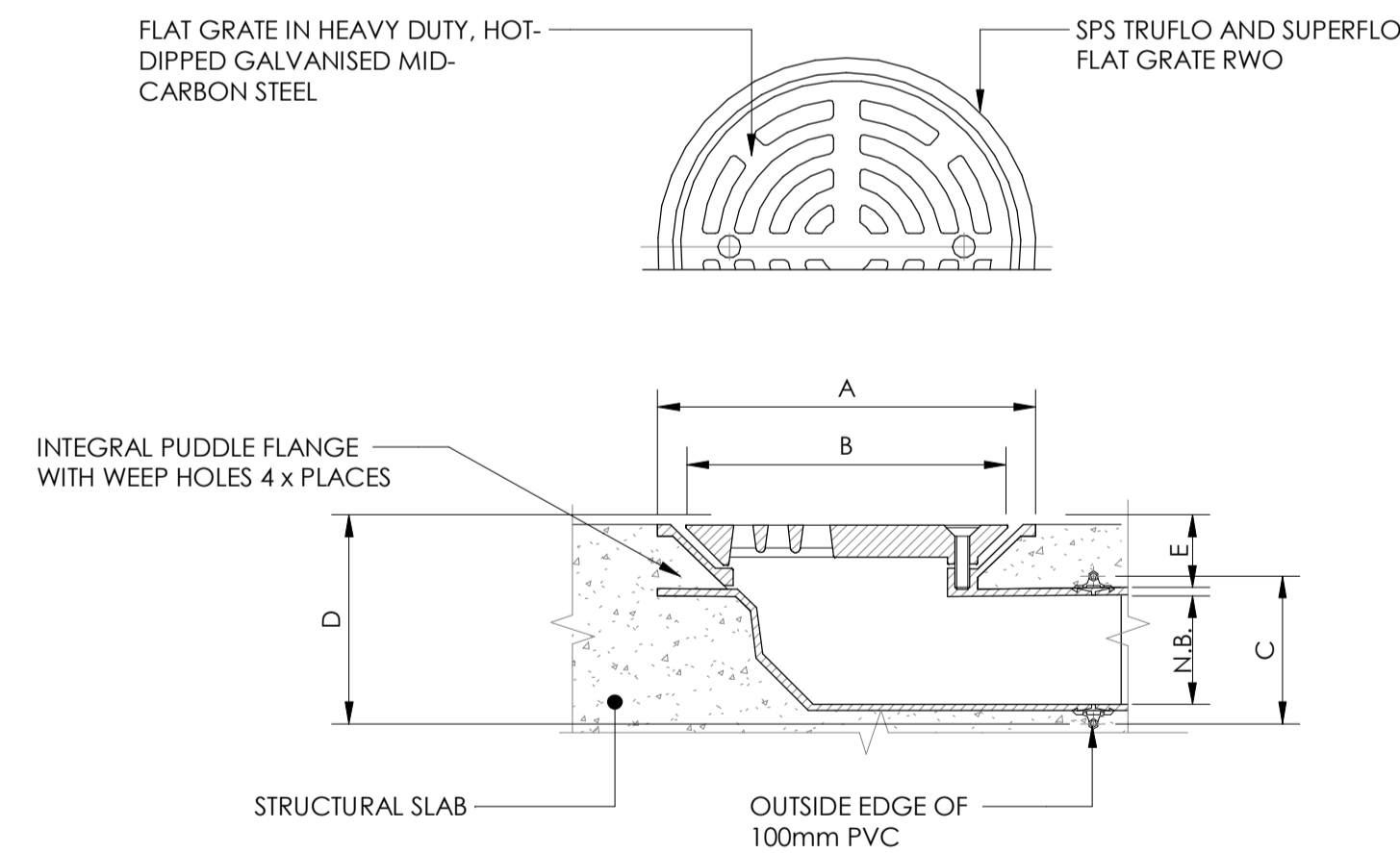
- CAR PARK DECKS.
- PLANT ROOMS.
- PEDESTRIAN PRECINCTS.

SPS TRUFLO & SUPERFLO FLAT GRATE RWO

DETAILS BY SPS DRAINS PTY LTD. FOR REFERENCE ONLY. REFER TO MANUFACTURE INSTALLATION SPECIFICATIONS

SPS SPECIAL LARGE GRATE BALCONY DRAIN

DETAILS BY SPS DRAINS PTY LTD. FOR REFERENCE ONLY. REFER TO MANUFACTURE INSTALLATION SPECIFICATIONS



N.B.	A	B	C	D	E	FLOW RATE* L/S
80	260	240	110	115	28	4.2
100	260	240	110	140	28	5.2

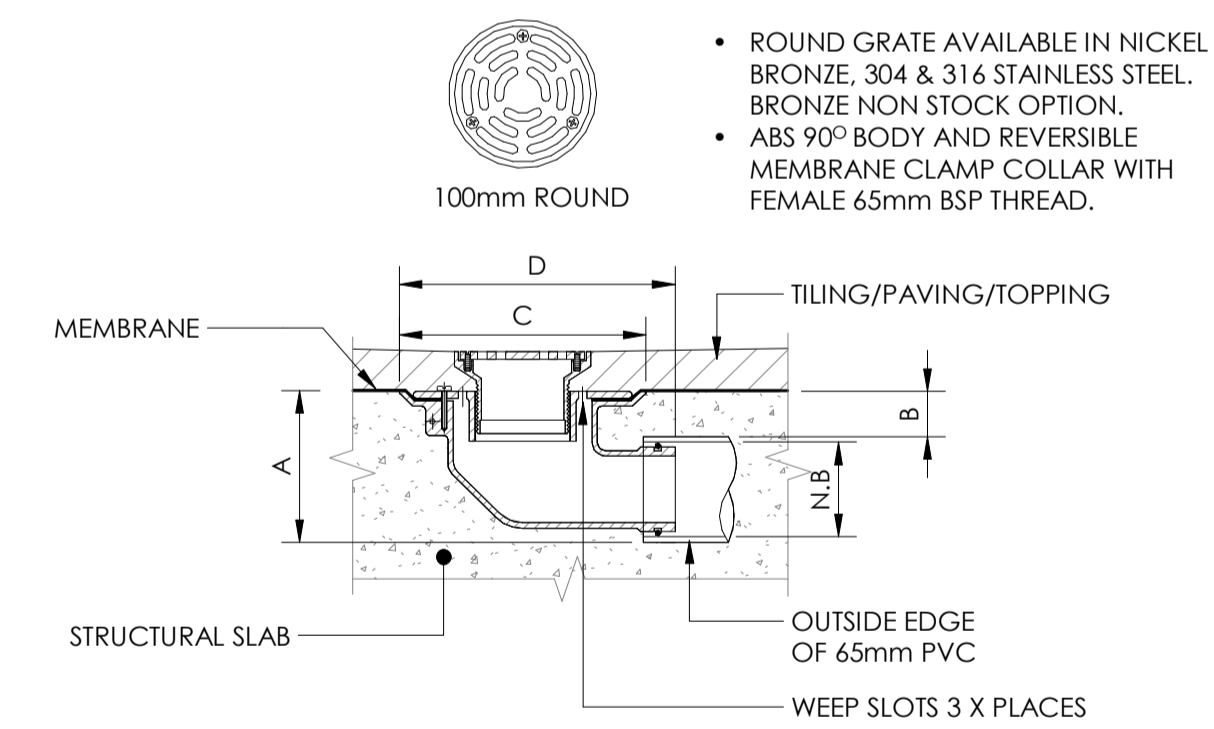
* BASED ON 50mm HEAD OF WATER ABOVE SURFACE LEVEL. FOR FURTHER DATA REFER TO FLOW CHARTS.

TYPICAL ROOF DRAINAGE OUTLET (RDO) DETAIL

DETAILS BY SPS DRAINS PTY LTD. FOR REFERENCE ONLY. REFER TO MANUFACTURE INSTALLATION SPECIFICATIONS

SPS 80mm & 100mm TRUFLO RWO WITH DOME GRATE & MEMBRANE RING

DETAILS BY SPS DRAINS PTY LTD. FOR REFERENCE ONLY. REFER TO MANUFACTURE INSTALLATION SPECIFICATIONS



N.B.	A	B	C	D
50	100	40	180	200
65	105	37	180	200

SPECIFICATION CODE:

- R100B/C90 (BRASS GRATE, ABS LOWER BODY).
- R100N/C90 (NICKEL BRONZE GRATE, ABS LOWER BODY).
- R100S4/C90 (POLISHED 304 STAINLESS STEEL, ABS LOWER BODY).
- R100S/C90 (SATIN 316 STAINLESS STEEL GRATE, ABS LOWER BODY).

SPS 100mm ROUND VARI-LEVEL SIDE OUTLET DRAIN

DETAILS BY SPS DRAINS PTY LTD. FOR REFERENCE ONLY. REFER TO MANUFACTURE INSTALLATION SPECIFICATIONS



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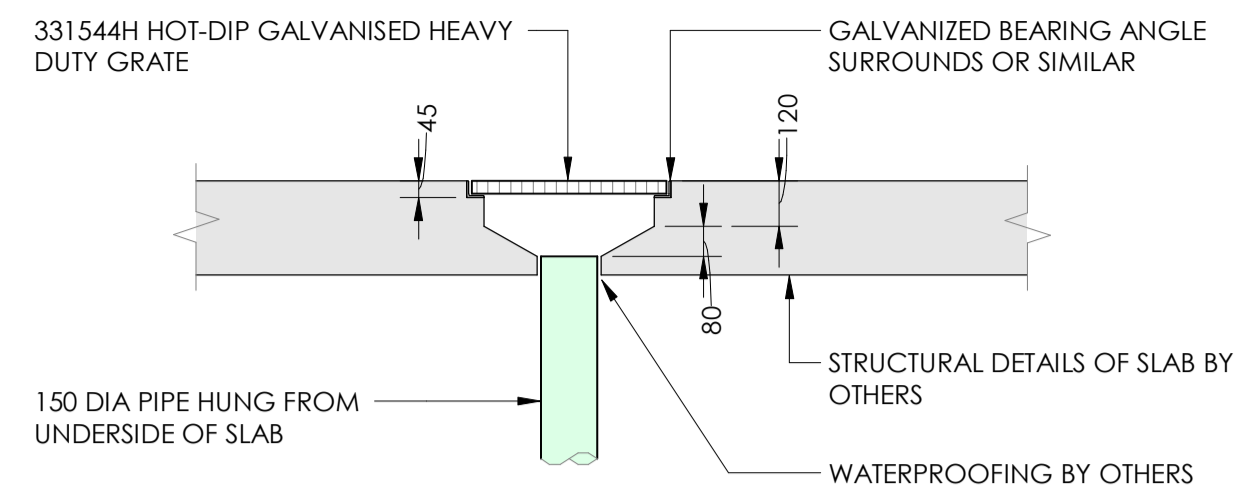
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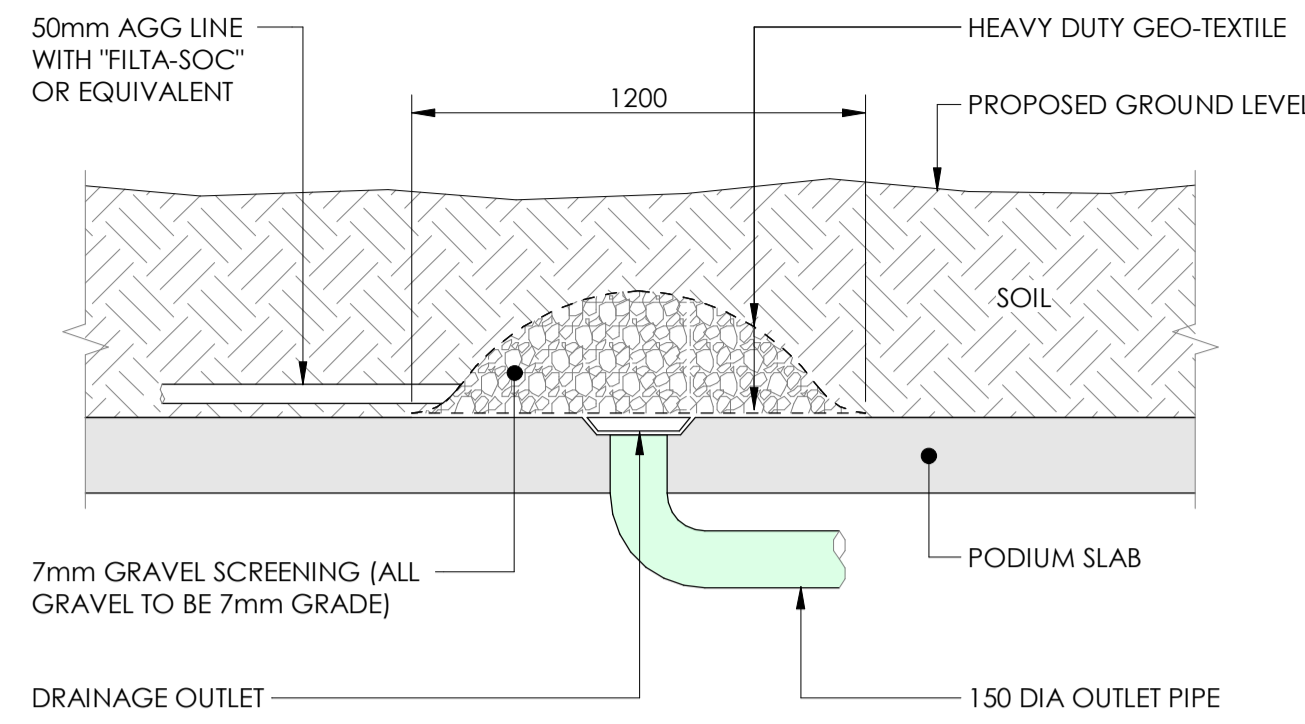
TYPICAL DETAILS

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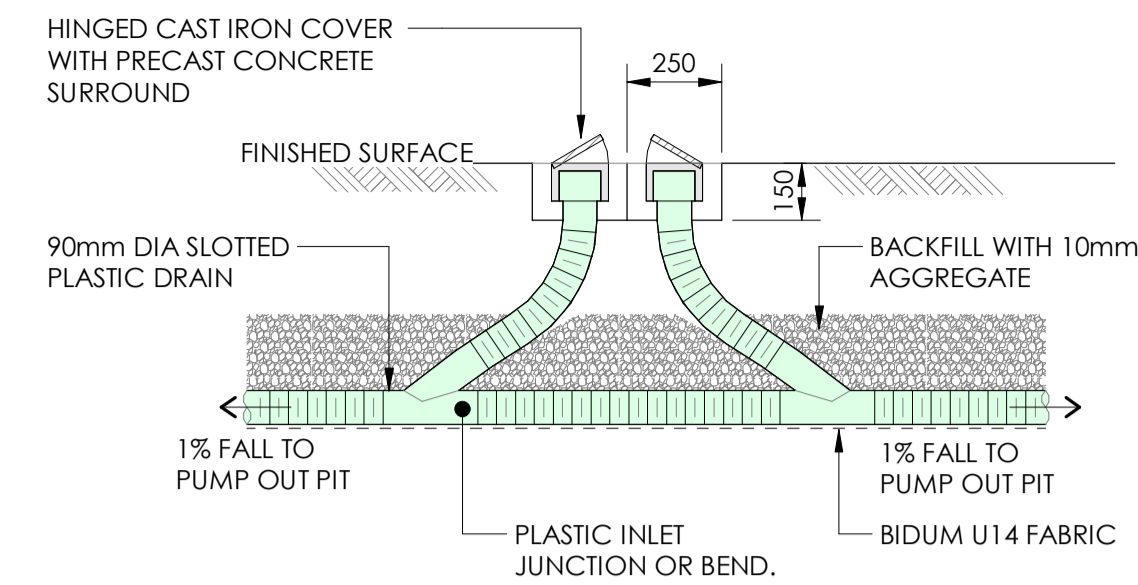
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TYPICAL GRATED INLET PIPE THROUGH SLAB DETAIL
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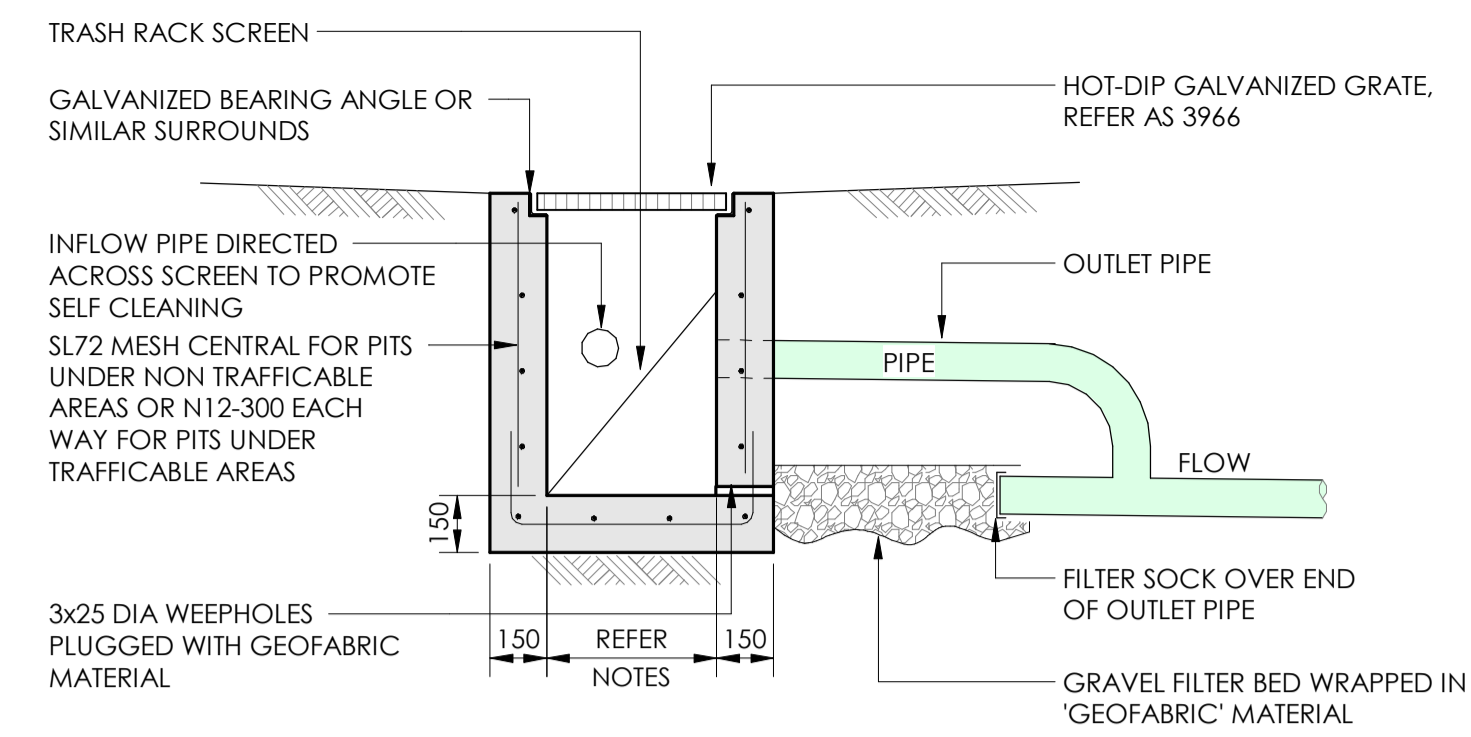


TYPICAL SUBSOIL OUTLET DETAIL

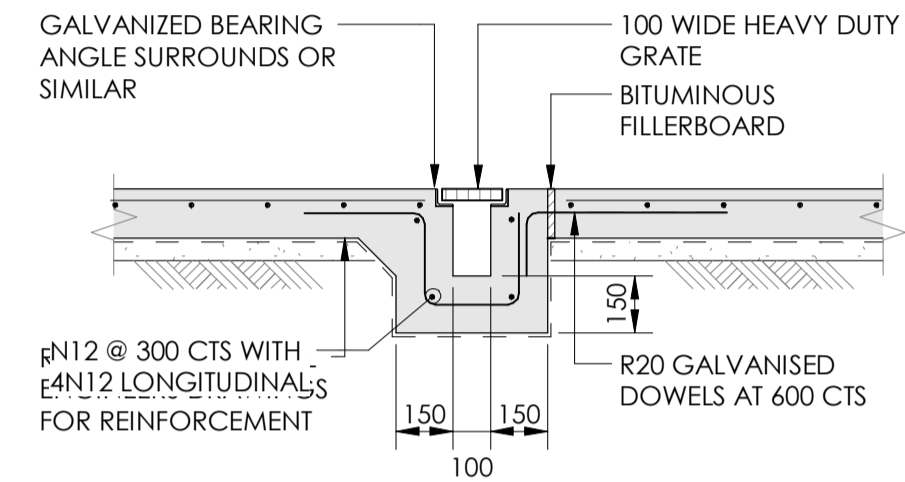


NOTES :
 • MINIMUM GRADE OF SUBSOIL DRAINAGE PIPES IS TO BE 1.0%. JOINTS IN FILTER FABRIC TO BE LAPPED A MINIMUM 300mm.

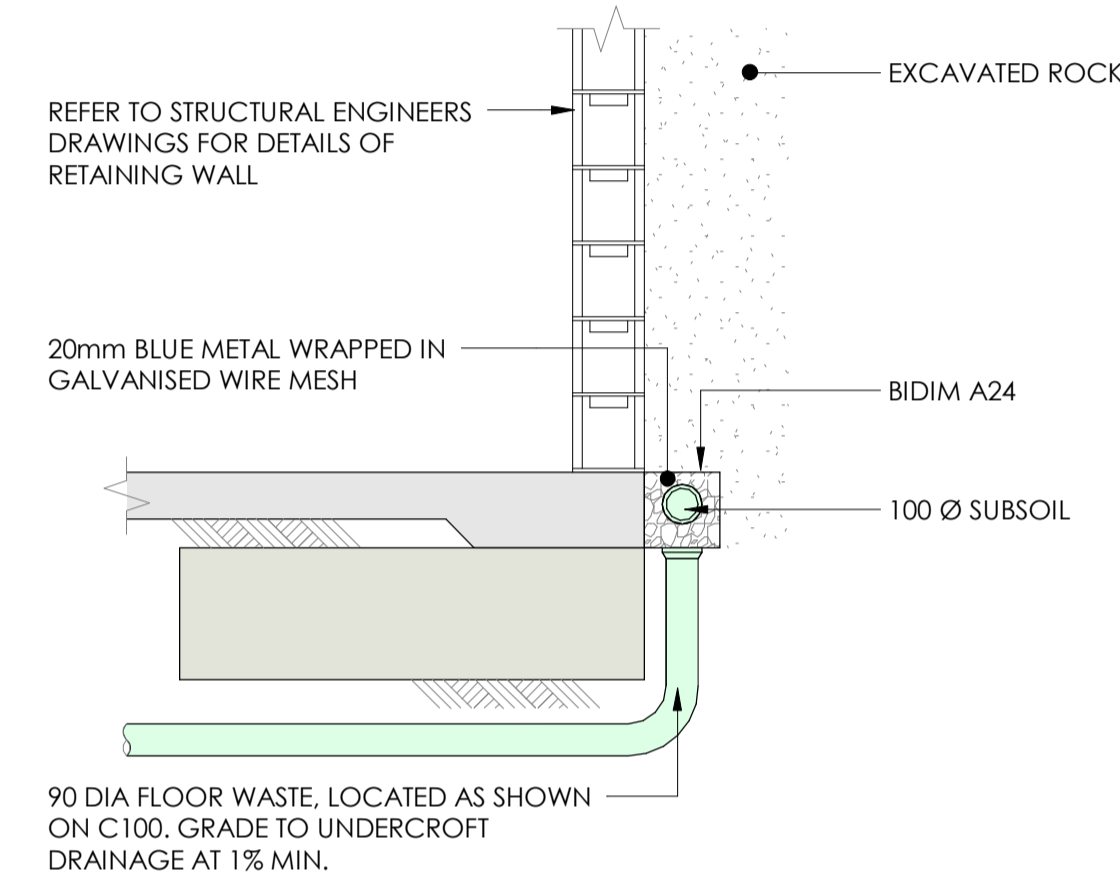
SUBSOIL PIPE FLUSHING POINT
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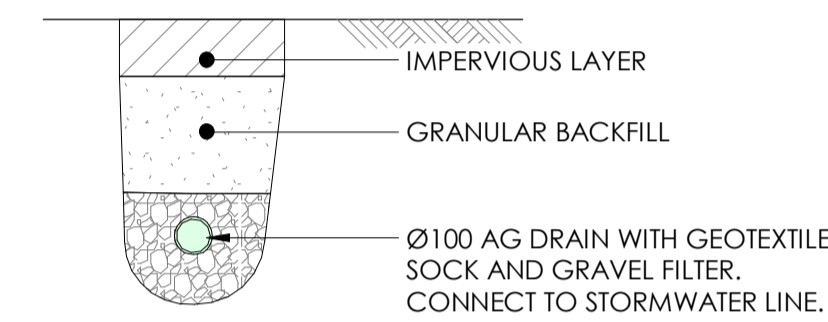
TYPICAL SILT ARRESTOR PIT
SCALE 1 : 20



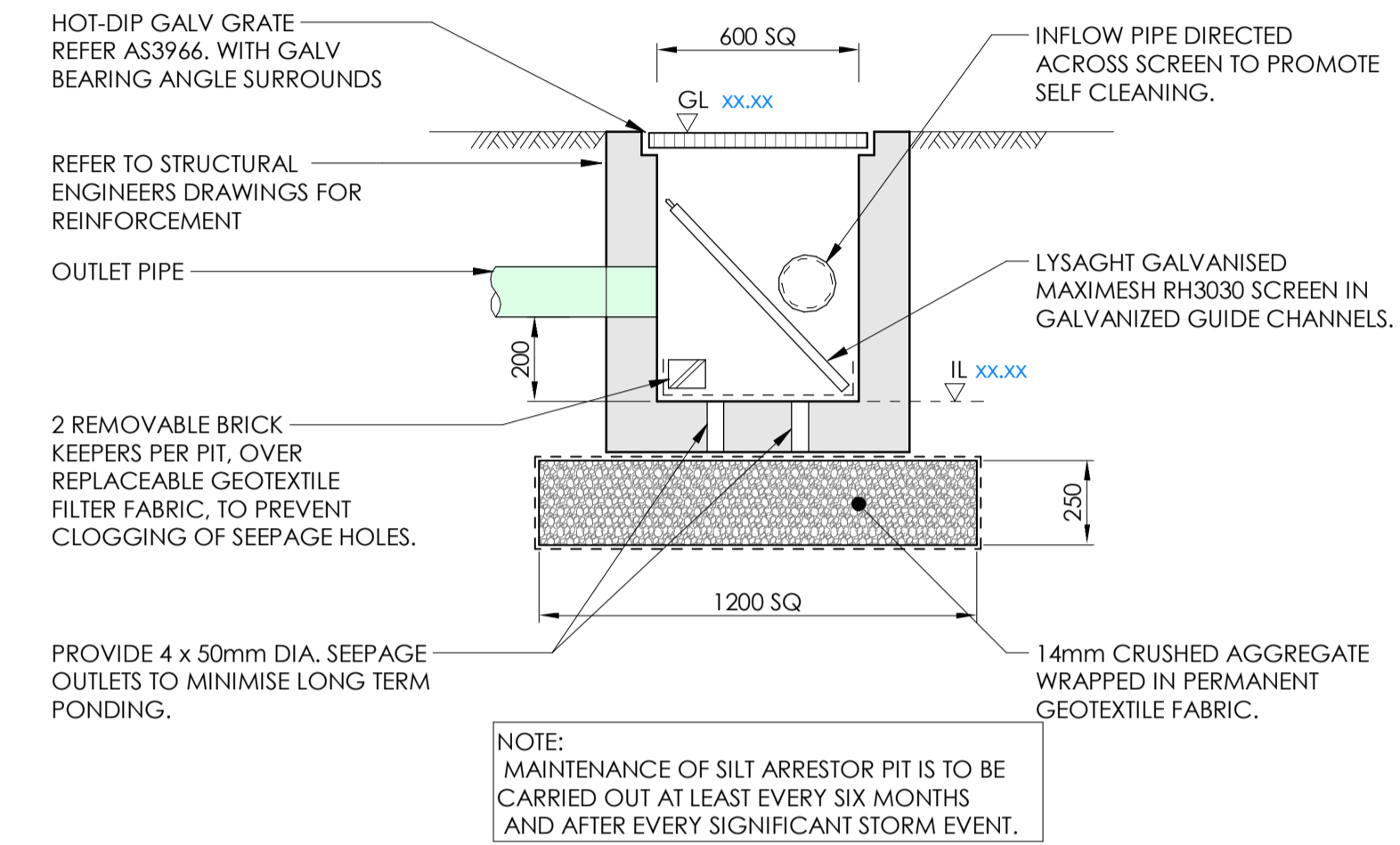
TYPICAL 100mm GRATED DRAIN DETAIL
SCALE 1 : 20



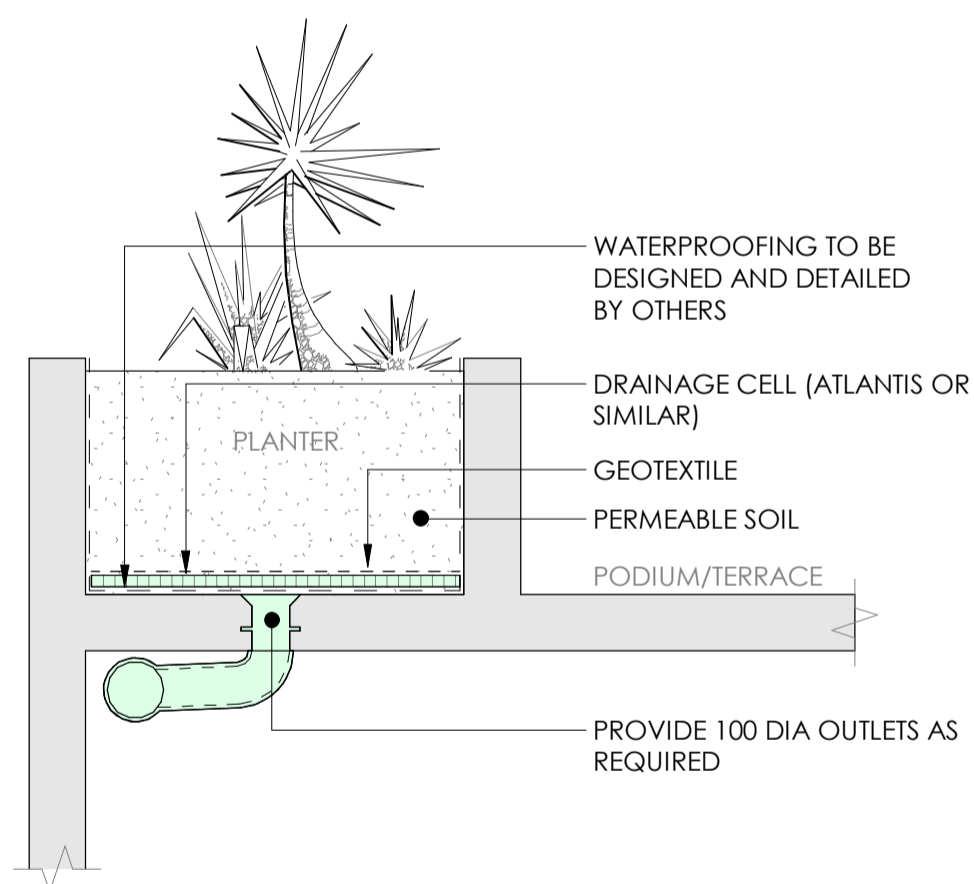
TYPICAL GROUNDWATER DRAINAGE DETAIL
SCALE 1 : 20



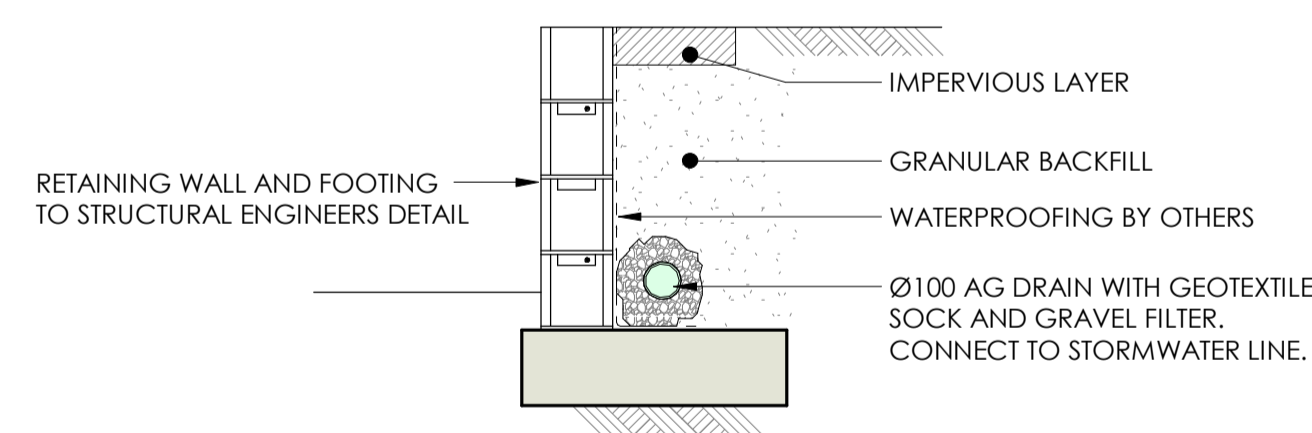
TYPICAL SUBSOIL LINE
SCALE 1 : 20



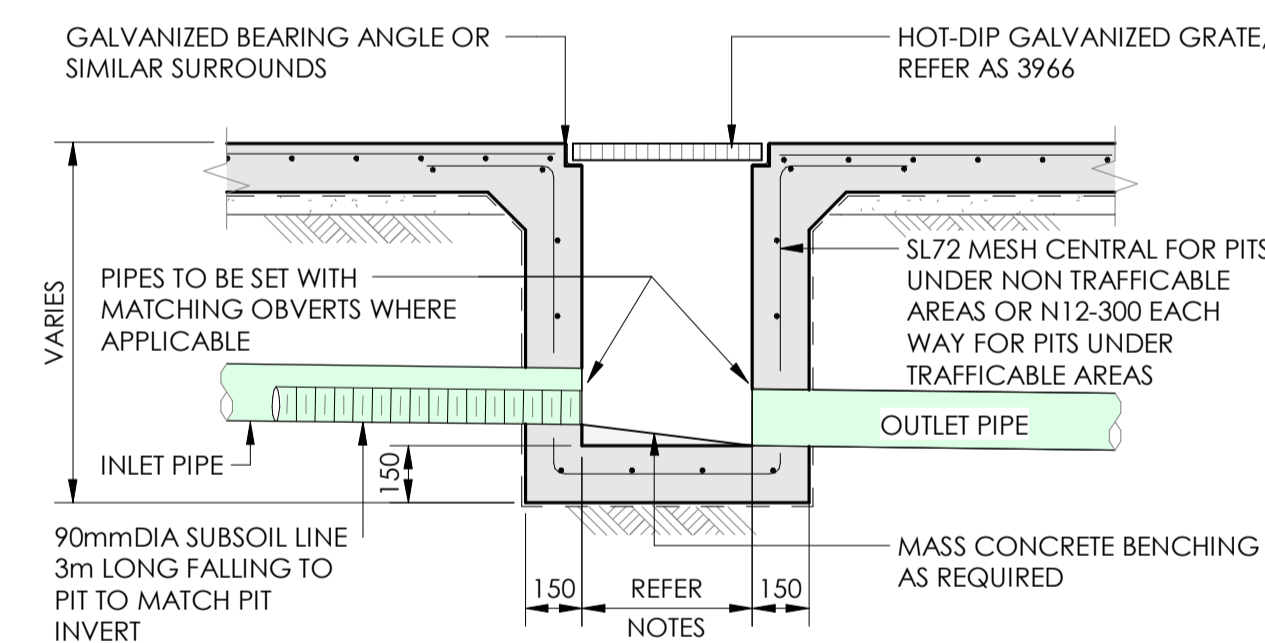
TYPICAL SILT ARRESTOR PIT
SCALE 1 : 20



TYPICAL PLANTER DRAINAGE DETAIL
SCALE 1 : 20



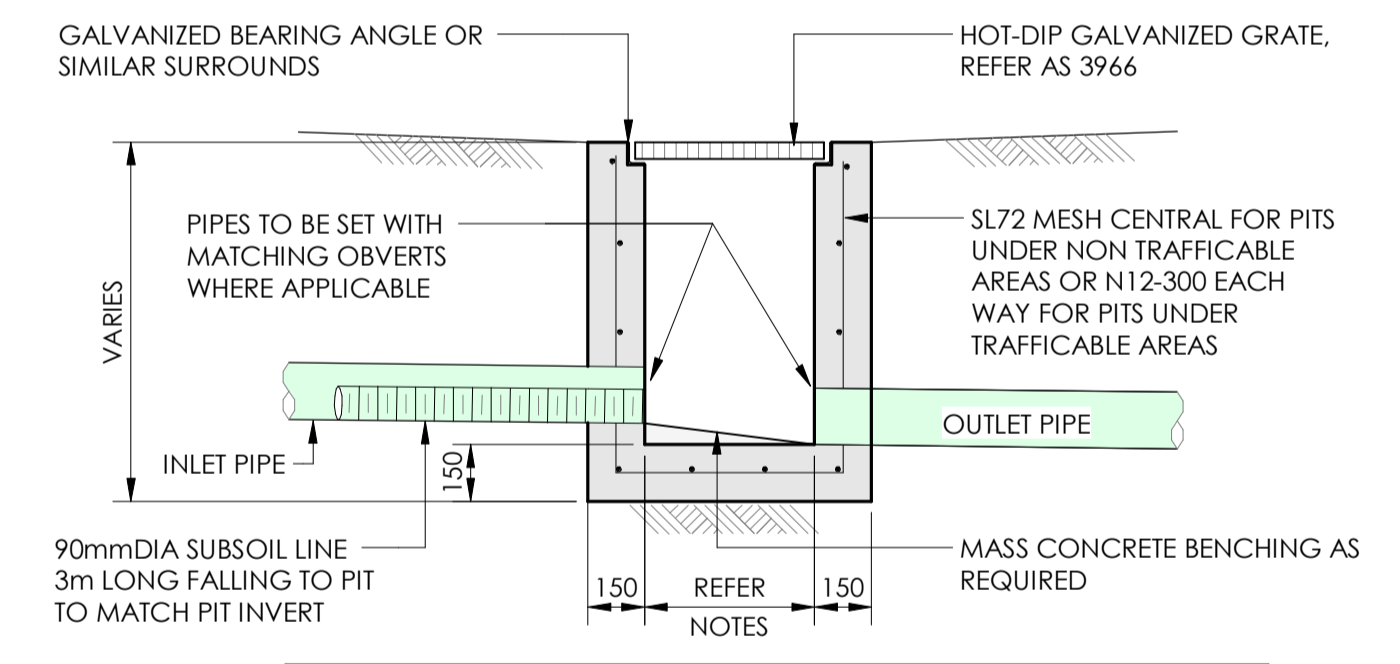
TYPICAL SUBSOIL RETAINING WALL DETAIL
SCALE 1 : 20



MINIMUM INTERNAL DIMENSIONS FOR STORMWATER PITS			
DEPTH OF INVERT OF OUTLET	DEPTH OF INVERT OF OUTLET		
	WIDTH	LENGTH	
< 600	450	450	
> 600	600	600	
> 900	600	900	
> 1200	900	900	

NOTE:
 1. CLIMB IRONS SHALL BE PROVIDED UNDER LID AT 300 CTS TO COUNCIL STANDARDS WHERE PIT DEPTH IS DEEPER THAN 1000.
 2. PROVIDE 90dia x 3000 LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC. (BIDUM A24 OR APPROVED SIMILAR). TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE.
 3. ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL.
 4. CONCRETE STRENGTH Fc = 32 MPa

TYPICAL CONCRETE INLET PIT - CONCRETE SURFACE
SCALE 1 : 20



MINIMUM INTERNAL DIMENSIONS FOR STORMWATER PITS			
DEPTH OF INVERT OF OUTLET	DEPTH OF INVERT OF OUTLET		
	WIDTH	LENGTH	
< 600	450	450	
> 600	600	600	
> 900	600	900	
> 1200	900	900	

NOTE:
 1. CLIMB IRONS SHALL BE PROVIDED UNDER LID AT 300 CTS TO COUNCIL STANDARDS WHERE PIT DEPTH IS DEEPER THAN 1000.
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 4. ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL.
 5. CONCRETE STRENGTH Fc = 32 MPa

TYPICAL CONCRETE INLET PIT - NATURAL SURFACE
SCALE 1 : 20