

EXACT ENGINEERS

PROPOSED PRIMARY & SECONDARY DWELLING

33 LASCELLES AVENUE, GREENACRE

DRAWING INDEX - STORMWATER			
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PROJECT
PROPOSED PRIMARY & SECONDARY DWELLING
33 LASCELLES AVENUE, GREENACRE

TITLE
COVER SHEET

CLIENT
DE`BONNAIRE DESIGNZ

REV	ISSUE / REVISION DESCRIPTION	DATE	TITLE	NAME
A	ISSUE FOR APPROVAL	03/03/25	DRAWN	E.N
-	-	-	CHECKED	Z.C
-	-	-	SCALE @ A3	N/A
-	-	-	JOB No.	SHEET No.
-	-	-	JB831	S-0.0

GENERAL NOTES:

1. ALL WORKS SHALL BE IN ACCORDANCE WITH B.C.A AND AS3500.3.
2. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
3. THE BUILDER SHALL ENSURE THAT THE STORMWATER ENGINEERS DRAWINGS CORRESPOND TO THE ARCHITECTURAL, STRUCTURAL, AND LANDSCAPING DRAWINGS. IF THERE EXISTS ANY DISCREPANCIES BETWEEN THE DRAWINGS, THE BUILDER SHALL REPORT THE DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORKS.
4. PRIOR TO COMMENCING ANY WORKS, THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTS INTO THE COUNCILS KERB/DRAINAGE SYSTEM MATCHED THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER.
5. THE DRAINAGE CONTRACTOR IS TO LOCATE AND RELOCATE AS NECESSARY ALL SERVICES ON SITE.
6. ALL LEVELS SHALL RELATE TO THE ESTABLISHED BENCH MARK. THIS IS TYPICALLY METRES TO AUSTRALIAN HEIGHT DATUM (AHD).
7. ALL DOWNPIPES TO BE 100MM DIAMETER UNLESS NOTED OTHERWISE.
8. ALL DOWN PIPES TO HAVE LEAF GUARDS.
9. ALL LINES ARE TO BE 100MM DIAMETER uPVC AT A MINIMUM 1.0% SLOPE UNLESS NOTED OTHERWISE. LINES ARE TO BE SEWER-GRADE AND SEALED.
10. ALL PIPES TO HAVE MINIMUM 150MM COVER IF LOCATED WITHIN PROPERTY.
11. ALL THE CLEANING EYES (OR INSPECTION EYES) FOR THE UNDERGROUND PIPES HAVE TO BE TAKEN UP TO THE FINISHED GROUND LEVEL FOR EASY IDENTIFICATION AND MAINTENANCE PURPOSES.
12. ALL SUB-SOIL DRAINAGE SHALL BE OF A MINIMUM 100MM DIAMETER AND SHALL BE PROVIDED WITH A FILTER SOCK. THE SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS TO BE PROVIDED BY THE LANDSCAPE ARCHITECT OR STORMWATER ENGINEER.
13. ALL RETAINING WALLS SHALL BE CONSTRUCTED COMPLETELY WITHIN THE PROPERTY BOUNDARY LIMITS TO DETAILS PREPARED BY THE STRUCTURAL ENGINEER. WALLS FORMING THE ON-SITE DETENTION SYSTEM SHALL BE OF MASONARY/BRICK/CONCRETE CONSTRUCTION AND WATER TIGHT.
14. ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ON-SITE DETENTION STORAGE SHALL BE OF A NON-FLOATABLE MATERIAL SUCH AS DECORATIVE RIVER GRAVEL. PINE PARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA.
15. ALL DRAINAGE WORKS ARE TO AVOID TREE ROOTS. ROOT BARRIER TO BE INSTALLED ADJACENT TO TREE ZONES WHERE DRAINAGE MAY BE AT RISK.
16. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
17. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.

RAINWATER TANKS:

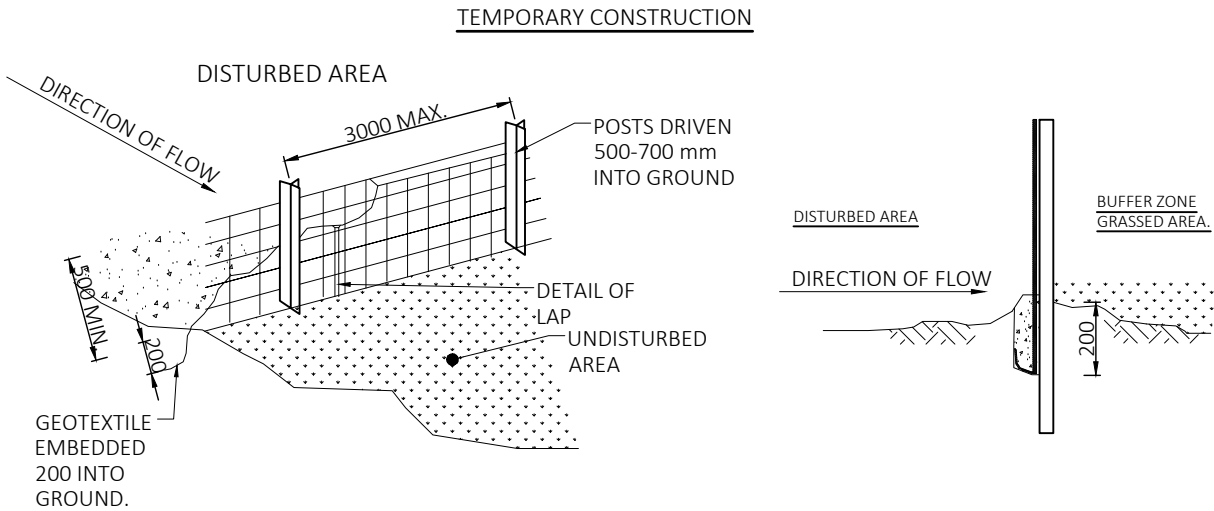
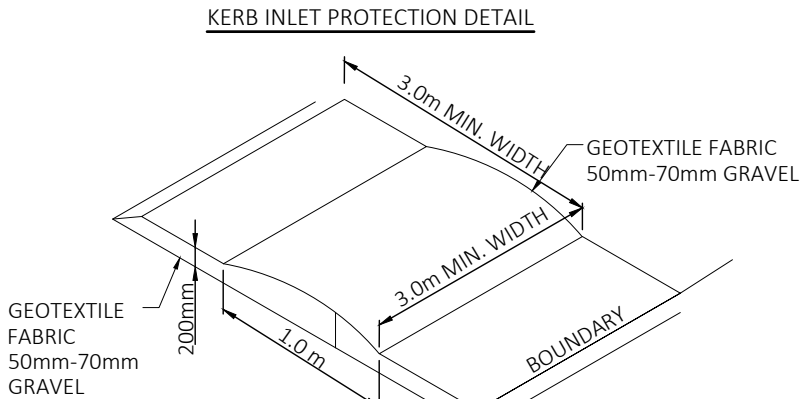
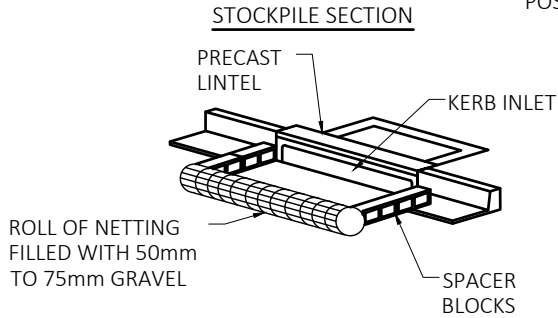
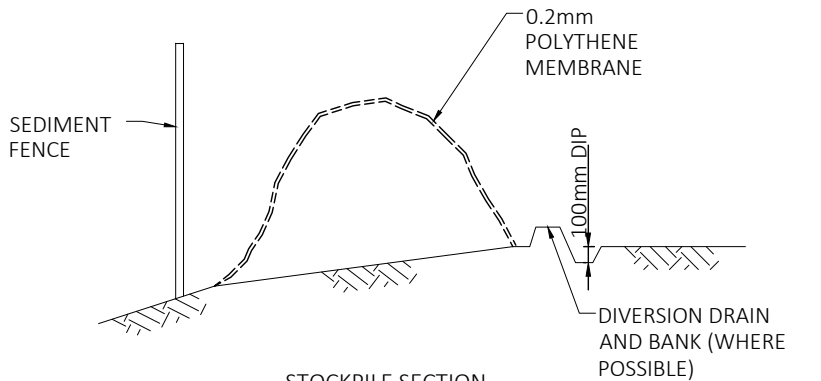
1. RAINWATER TANK, DRAINED ROOF AREAS AND REUSE PLUMBING TO COMPLY WITH BASIX REQUIREMENTS AND CERTIFICATE.
2. ADEQUATE SCREENING TO PREVENT MOSQUITO BREEDING AND ENTRY OF ANIMAL OR FLOATING MATTER.
3. A 'FIRST FLUSH' DIVERSION TO REMOVE ROOF CONTAMINANTS MUST BE PROVIDED.
4. TANKS TO BE PUMPED TO TOP-UP FROM THE POTABLE WATER SUPPLY DURING DRY PERIOD WHEN THE TANK IS 80% EMPTY.
5. PUMP TO BE SUITABLY SOUNDPROOFED.
6. A SIGN IS TO BE INSTALLED NEAR THE RAINWATER TANK HIGHLIGHTING “NOT FOR HUMAN CONSUMPTION”.

SEDIMENT & EROSION CONTROL:

1. PLANS ARE MINIMUM REQUIREMENTS AND ARE TO BE USED AS A GUIDE ONLY. EXACT MEASURES USED SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH PROGRAM OF CONTRACTORS WORKS.
2. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURE TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
3. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE, THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
4. PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
5. PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
6. ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
7. ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
8. WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
9. NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
10. APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGHOUT CONSTRUCTION.
11. IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
12. TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON SITE BY THE SUPERINTENDENT.

SEDIMENT FENCE:

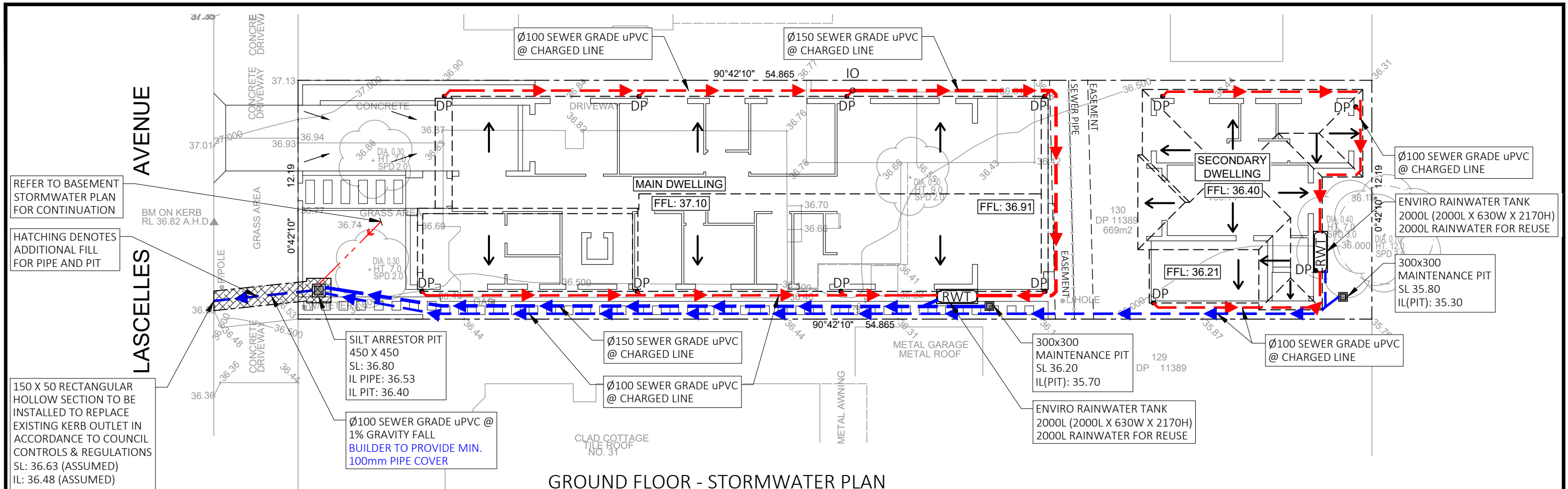
1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150MM AND FOLDED.
3. POSTS SHALL NOT BE SPACED MORE THAN 3.0 METRES APART.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14MM GAUGE, 150MM MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, SPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40M ON FLAT TERRAIN DECREASING TO 20M SPACINGS ON STEEP TERRAIN
- ALL WORK TO BE IN ACCORDANCE WITH AS3500.3.1 AND AS3500.3.2
- NOTIFY ENGINEER OF ANY DISCREPANCIES ON SITE
- DIAL BEFORE YOU DIG. PRIOR TO COMMENCING WORK.
- SILT ARRESTOR/ GRATED INLET PITS 450X450 U.N.O
- ALL WORK IN ACCORDANCE WITH THE LOCAL GOVERNMENT ACT. COUNCILS STANDARD SPECIFICATION AND CODES AND TO THE SATISFACTION OF COUNCILS SUPERVISING OFFICER.
- THIS PLAN TO BE READ IN CONJUNCTION WITH PLANS PREPARED BY THE ARCHITECTS AND STRUCTURAL ENGINEERS PLANS.
- INSTALL TEMPORARY SEDIMENT BARRIERS AROUND ALL INLET PITS TO DETAIL UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED.
- CONTRACTOR IS TO VERIFY THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION FOR DRAINAGE.
- ALL PITS TO BE BENCH TO HALF PIPE SECTION AND TO HAVE GALVANISED STEEL GRATES AND SURROUNDS.
- PIPE GRADES SHOWN ARE INDICATIVE MINIMUM.
- PIPES ARE TO BE LAID TO I.L. LEVELS INDICATED AT PITS.
- ALL STORMWATER TO CONNECT TO EXISTING STORMWATER MAIN, LOCATION TO BE CONFIRMED ONSITE



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PROJECT	REV	ISSUE / REVISION DESCRIPTION	DATE	TITLE	NAME
PROPOSED PRIMARY & SECONDARY DWELLING 33 LASCELLES AVENUE, GREENACRE	A	ISSUE FOR APPROVAL	03/03/25	DRAWN	E.N
	-	-	-		
TITLE GENERAL NOTES - SHEET 1	-	-	-	CHECKED	Z.C
	-	-	-	SCALE @ A3	N/A
CLIENT DE`BONNAIRE DESIGNZ	-	-	-	JOB No.	SHEET No.
	-	-	-	JB831	S-0.1



LEGEND

- PROPOSED STORMWATER
- PROPOSED STORMWATER DRAINING TO RWT
- PROPOSED PUMP LINE
- ROOF SLOPE
- SURFACE FLOW ARROWS
- 90Ø DOWNPIPE
- INSPECTION OPENING
- DESIGN SURFACE LEVEL
- PROPOSED RWT

DESIGN SUMMARY

CANTERBURY-BANKSTOWN COUNCIL
SITE AREA = 668.90 (APPROX) m²
MAIN DWELLING ROOF AREA = 318.7 m² (APPROX)
SECONDARY DWELLING ROOF AREA = 113.75 m² (APPROX)
TOTAL ROOF AREA = 429.4 m² (APPROX)
1:100 ARI 5MIN. = 208 mm/hr
1:20 ARI 5MIN. = 166 mm/hr
MAIN DWELLING CATCHMENT PER DP = 40m²
SECONDARY DWELLING CATCHMENT PER DP = 29m²

- MAIN DWELLING EAVE GUTTER MINIMUM EFFECTIVE AREA 8100mm²
- SECONDARY DWELLING EAVE GUTTER MINIMUM EFFECTIVE AREA 6200mm²
- ALL CHARGED LINES MUST BE OF PRESSURE GRADE AND JOINTS ARE TO BE SOLVENT WELDED
- THE PIPE SYSTEM INCLUDING DOWNPIPES MUST BE CONSTRUCTED FROM SUITABLY DURABLE MATERIALS
- FLUSHING POINTS/SEALED CLEANING EYES ARE TO BE PROVIDED AT LOWEST POINTS IN THE SYSTEM AND AT FRONT BOUNDARY PRIOR TO COUNCIL LAND AND SHOULD BE EASE TO ACCESS
- ALL SURFACE PIT SHALL BE CAST - IN - SITU OR PRECAST CONCRETE PIT

PUMP SYSTEM IS IN ACCORDANCE WITH CANTERBURY BANKSTOWN DCP 2023, CHAPTER 3.11 - REQUIREMENTS FOR PUMP OUT SYSTEMS AND AS/NZS 3500.3.

CHARGED LINE SYSTEM IS IN ACCORDANCE WITH CANTERBURY BANKSTOWN DCP 2023, CHAPTER 3.9 - REQUIREMENTS FOR CHARGED LINES.

OSD WARRANT:
SITE AREA = 668.90m² (APPROX)
PROPOSED IMPERVIOUS AREA = 461.4m²
PROPOSED PERVIOUS AREA = 207.5m²
 $\frac{461.4}{668.90} \times 100 = 69.0\%$ IMPERVIOUS AREA HENCE NO OSD REQUIRED AS IT IS LESS THAN 75%,
REFER TO CANTERBURY BANKSTOWN DCP 2023, CHAPTER 3.1 - DEVELOPMENT ENGINEERING STANDARDS, SECTION 4 - ON-SITE DETENTION SYSTEMS.

SITE IMPERVIOUS PLAN

1:400

SERVICES SHOWN ARE INDICATIVE ONLY. CONTRACTOR SHALL CONFIRM ALL SERVICE LOCATIONS AND DEPTH PRIOR TO EXCAVATION

ALL PIPES AND GUTTERS SIZED FOR STORM EVENTS UP TO AND INCLUDING THE 5% AEP. ALL PIPES TO BE SEWER GRADE uPVC

ALL DRAINAGE LINES BEND AND PITS ARE TO BE SEALED.

PLUMBER TO MAKE GOOD CONNECTION TO COUNCIL STORMWATER PIPE. IF ANY ISSUES CONTACT ENGINEER IMMEDIATELY.

ALL DRAINAGE LINES ARE TO BE A MINIMUM OF Ø100mm SEWER GRADE uPVC @ 1% UNLESS NOTED OTHERWISE. ALL PIPES SIZED FOR 1% AEP STORM EVENT

ALL PIPE WORK IS SHOWN INDICATIVELY/ DIAGRAMMATICALLY AND SHOULD NOT BE SCALED OF THE PLAN, THE DOWNPIPES ARE TO RUN ALONG THE WALL OF THE SECONDARY DWELLING

- ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S DCP
- THE CONTRACTOR IS TO LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE IF NECESSARY
- ALL PIPES ARE TO BE 100mm U.P.V.C ON 1% MINIMUM GRADE U.N.O AND TO HAVE MIN 200mm COVER



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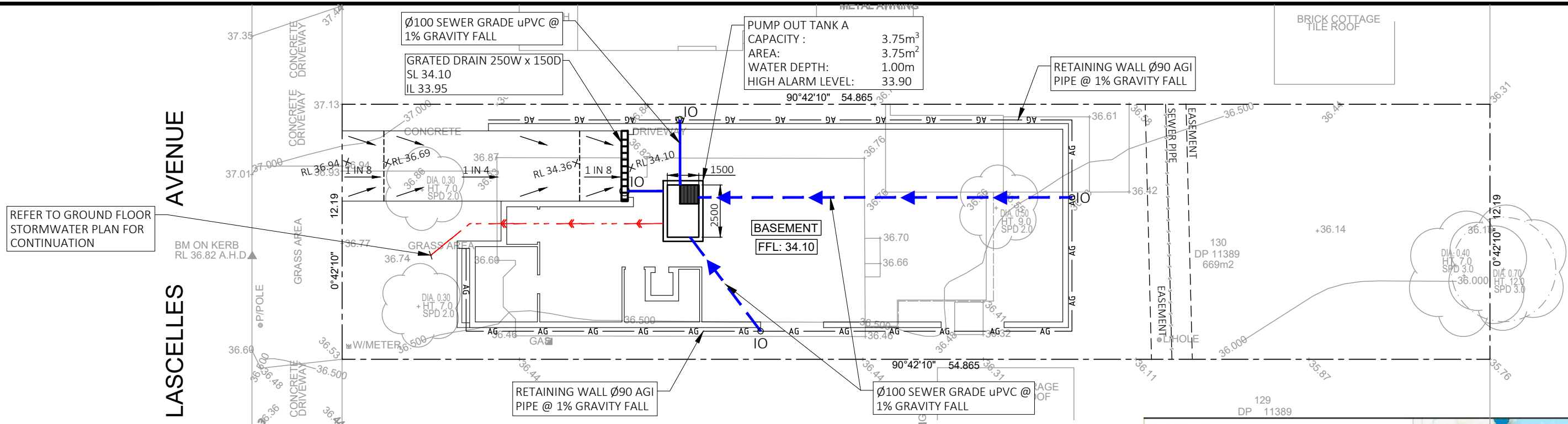


PROJECT
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33 LASCELLES AVENUE, GREENACRE

TITLE
STORMWATER PLAN

CLIENT
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A	ISSUE FOR APPROVAL	03/03/25	DRAWN	E.N
-	-	-	CHECKED	Z.C
-	-	-	SCALE @ A3	1:200
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-	-	-	JB831	S-1.1



BASEMENT - STORMWATER PLAN

PUMP TANK CALCULATION:

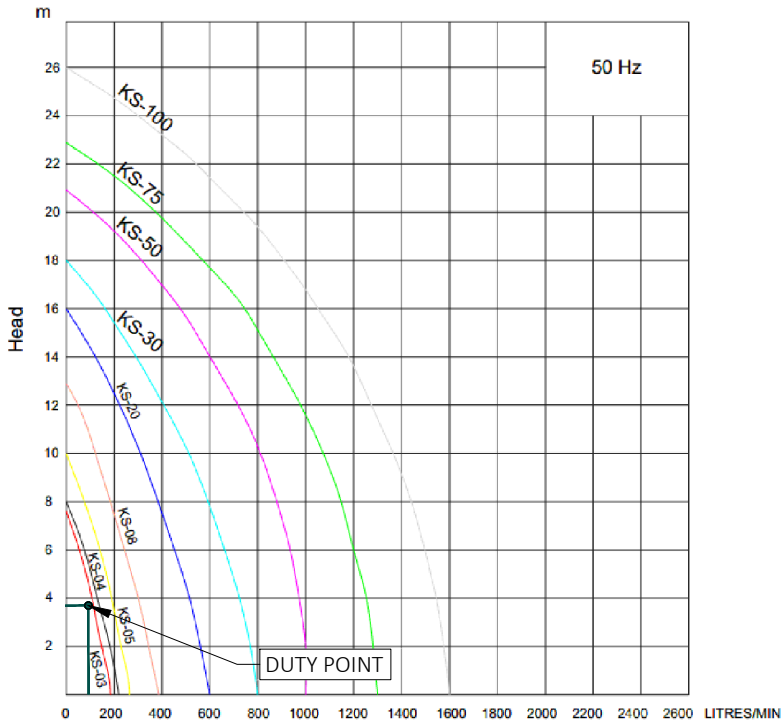
CATCHMENT AREA TO PUMP = 25 m²
INTENSITY 20YEAR ARI 2 HOURS = 30.1 mm/h
CO-EFFICIENT = 1.006

FLOW OF CATCHMENT = 0.21 L/s
VOLUME OVER 2 HOURS = 1.51 m³
PUMP OUT PER SECOND = 1.5 L/s
(DUAL SUBMERSIBLE PUMPS DUTY: 1.5L/S @ EACH)
VOLUME PUMP OUT IN 0.5 HOURS = 2.7 m³
(ASSUMING ONE PUMP FAILURE)

WET WELL STORAGE = 3.00 m³
REQUIRED VOLUME = 3.00 m³
PROVIDED VOLUME = 3.75 m³

PUMP SELECTION:
PUMP-OUT RATE PROVIDED = 1.5L/s = 90L/min
HEAD = 3.83m
PROVIDE TWO AUTO SUBMERSIBLE PUMP KS-04 APPROVED
EQUIVALENT OPERATING ALTERNATIVE AND PUMPING 90L/min

MODEL NO.	OUTPUT		DISCHARGE		RATED		MAXIMUM		WEIGHT	DIMENSION
	HP	kW	mm	INCH	HEAD	CAPACITY	HEAD	CAPACITY		
KS-03	1/3	0.25	40	1 1/2"	3	130	8	180	9	188 X 141 X 305
KS-04	1/2	0.4	50	2"	5	150	8	220	11	208 X 140 X 359
KS-05	1/2	0.4	50	2"	5	160	10	260	14	230 X 156 X 375
KS-10	1	0.75	50 (80)	2"(3")	6	240	13	380	21	290 X 180 X 425
KS-20	2	1.5	80	3"	10	300	16	600	31	278 X 182 X 475
KS-30	3	2.2	80	3"	10	500	18	800	42	390 X 250 X 450
KS-50	5	3.7	100	4"	10	800	21	1100	48	450 X 240 X 530
KS-75	7.5	5.6	100	4"	15	800	23	1300	60	550 X 310 X 590
KS-100	10	7.5	150	6"	18	900	26	1600	70	550 X 310 X 610



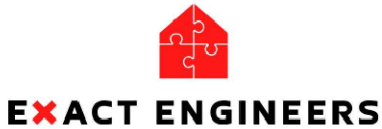
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IFD Design Rainfall Intensity (mm/h) Issued: 18 November 2024

Rainfall intensity for Durations, Exceedance per Year (EY), and Annual Exceedance Probabilities (AEP).
[FAQ for New ARR probability terminology](#)

Unit: mm/h

Duration	Annual Exceedance Probability (AEP)						
	63.2%	50%#	20%*	10%	5%	2%	1%
1 min	134	148	191	220	247	283	310
2 min	111	120	151	172	193	220	241
3 min	103	112	141	161	181	207	227
4 min	96.6	106	134	154	173	198	217
5 min	91.4	100	128	147	166	190	208
10 min	72.2	79.9	104	119	134	154	169
15 min	60.0	66.5	86.3	99.5	112	128	141
20 min	51.7	57.2	74.1	85.3	96.0	110	120
25 min	45.5	50.3	65.1	74.8	84.2	96.5	106
30 min	40.9	45.1	58.2	66.9	75.2	86.1	94.4
45 min	31.8	34.9	44.7	51.3	57.7	66.1	72.5
1 hour	26.4	28.9	36.9	42.3	47.6	54.6	59.9
1.5 hour	20.3	22.1	28.1	32.2	36.3	41.7	45.9
2 hour	16.8	18.3	23.3	26.7	30.1	34.7	38.3
3 hour	13.0	14.2	18.0	20.7	23.5	27.2	30.1
4.5 hour	10.1	11.1	14.2	16.4	18.7	21.8	24.2
6 hour	8.52	9.37	12.1	14.1	16.0	18.8	21.0
9 hour	6.73	7.45	9.79	11.5	13.2	15.5	17.4
12 hour	5.71	6.36	8.48	9.98	11.5	13.6	15.3



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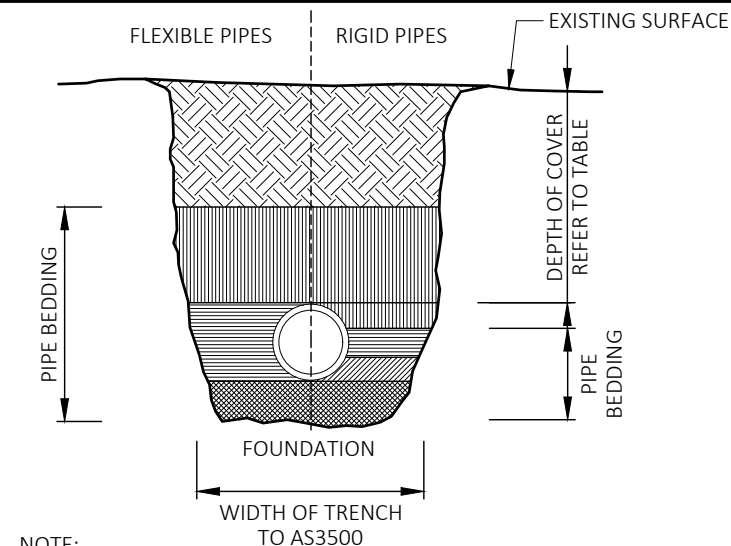
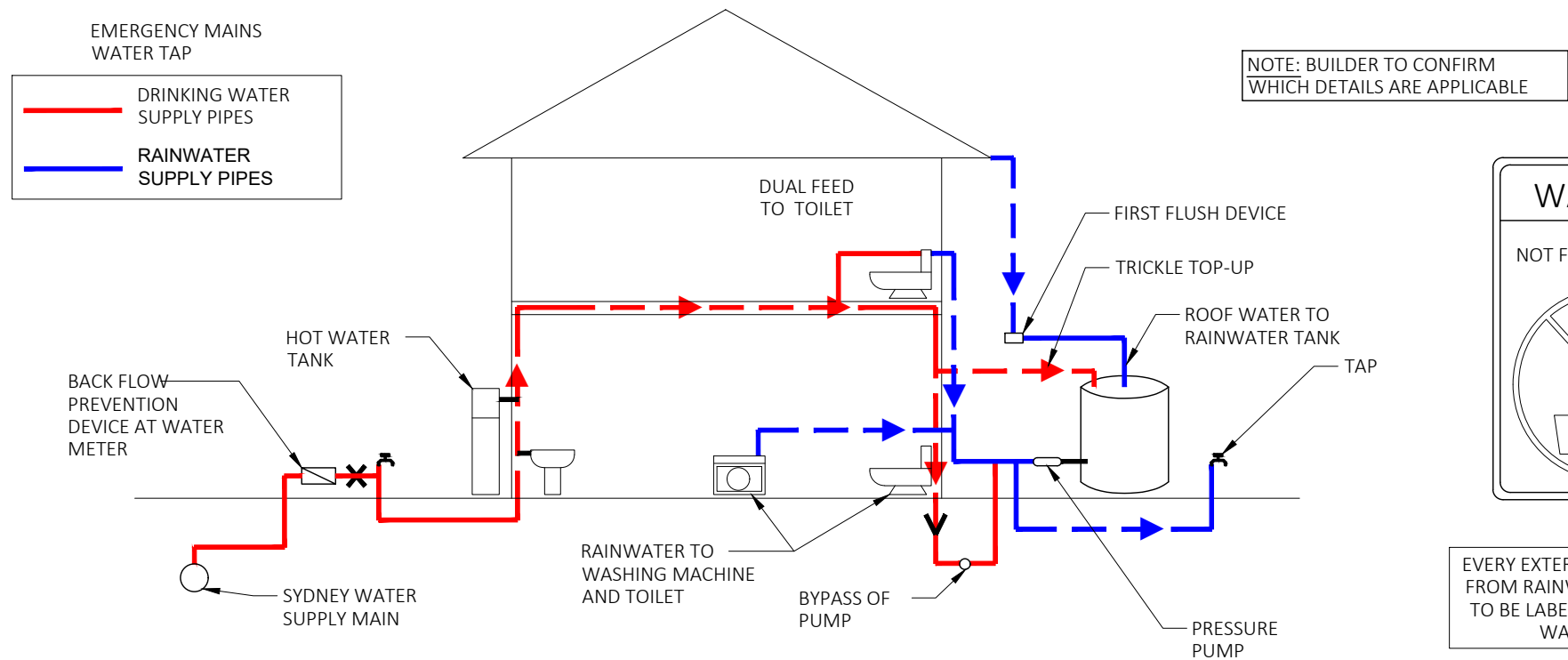


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NOTE:
STORMWATER DRAINS CONSTRUCTED OF OTHER THAN CAST IRON, DUCTILE IRON OR GALVANISED STEEL HAVING COVER LESS THAN THAT SPECIFIED IN THE TABLE SHALL BE COVERED WITH AT LEAST 50mm OVERLAY AND SHALL BE PAVED WITH AT LEAST:
a. 100mm THICKNESS OF REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICULAR LOADING.

TYPICAL PIPE LAYING DETAIL

LEGEND - TRENCH BACKFILL		
SYMBOL	FLEXIBLE PIPES	RIGID PIPES
	BACK FILL	
	PIPE OVERLAY	
	PIPE SIDE SUPPORT	SIDE ZONE
	-	HAUNCH ZONE
	PIPE UNDERLAY	BED ZONE

MINIMUM PIPE COVER

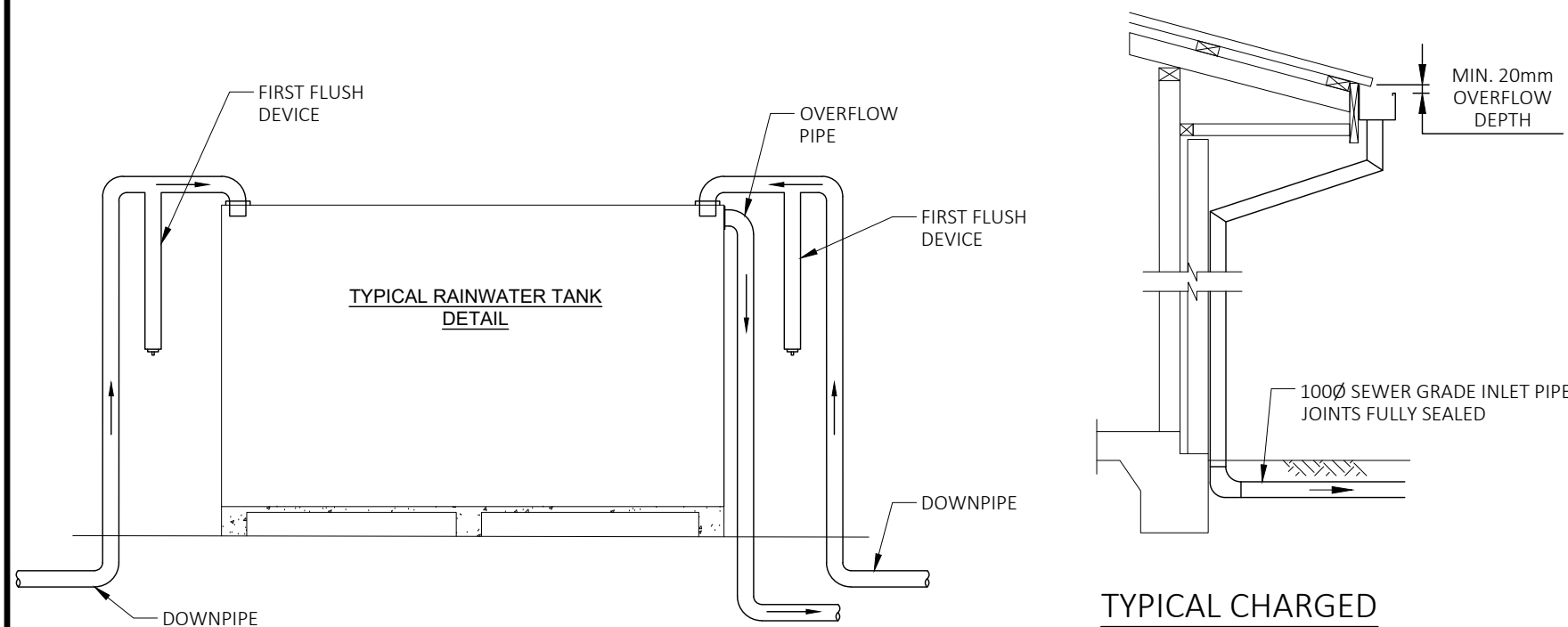
(FROM FINISHED SURFACE TO TOP OF PIPE)

FOOTINGS	MINIMUM COVER (mm)	
	CAST/ DUCTILE IRON GAL STEEL	OTHER AUTHORISED PRODUCTS(*)
1. NOT SUBJECT TO VEHICULAR LOADING: A. WITHOUT PAVEMENT i. FOR SINGLE DWELLING. ii. OTHER THAN SINGLE DWELLINGS. B. WITH PAVEMENT OF BRICK/ UNREINFORCED CONCRETE	0 0	100 300
	0(**)	50(**)
1. SUBJECT TO VEHICULAR LOADING: A. OTHER THAN ROADS: i. WITHOUT PEVEMENT. ii. WITH PAVEMENT OF. - REINF. CONC. FOR HEAVY VEHICLES - BRICK/UNREINF. CONC. LIGHT VEHICLES	300 0(** #) 0(** #)	450 10(** #) 75(** #)
	300 300	500 500
3. SUBJECT TO CONSTRUCTION VEHICLES OR IN EMBANKMENT CONDITIONS	300	500

*) INCLUDES OVERLAY ABOVE THE TOP OF THE PIPE OF NOT LESS THAN 50mm THICK

**) BELOW THE UNDERSIDE OF THE PAVEMENT

#) SUBJECT TO COMPLIANCE WITH AS1762, AS2033, AS/NZS 2566.1, AS3725 OR AS 4060



RAINWATER TANK DETAIL

TYPICAL CHARGED DOWNPIPE OVERFLOW



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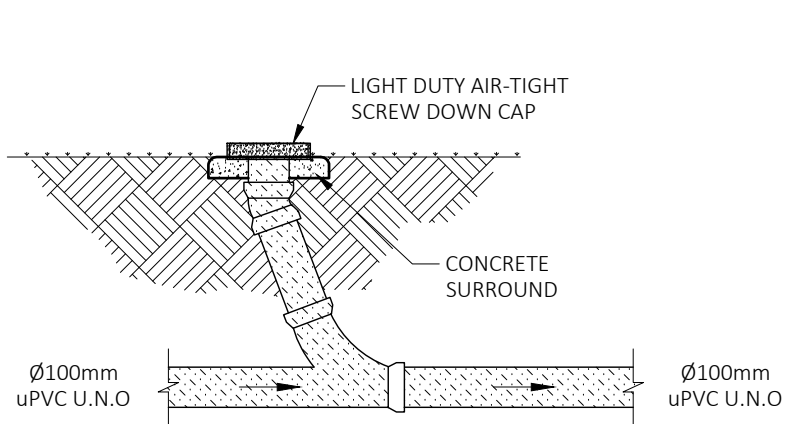


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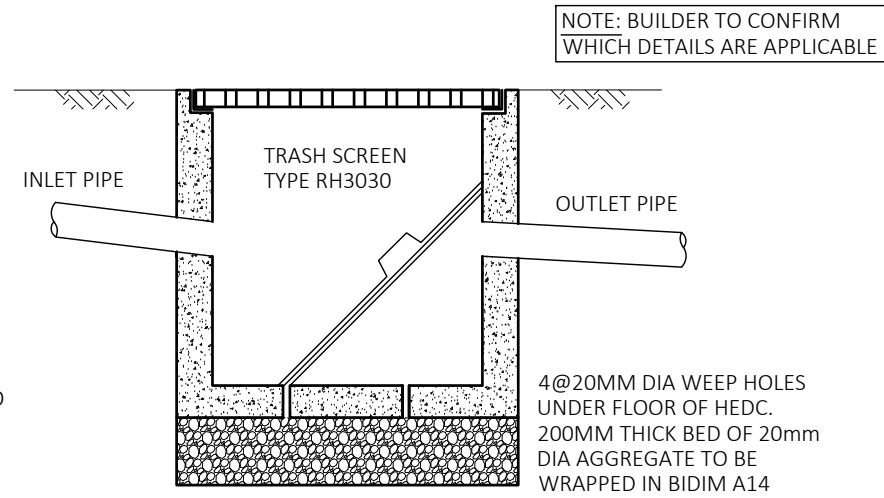
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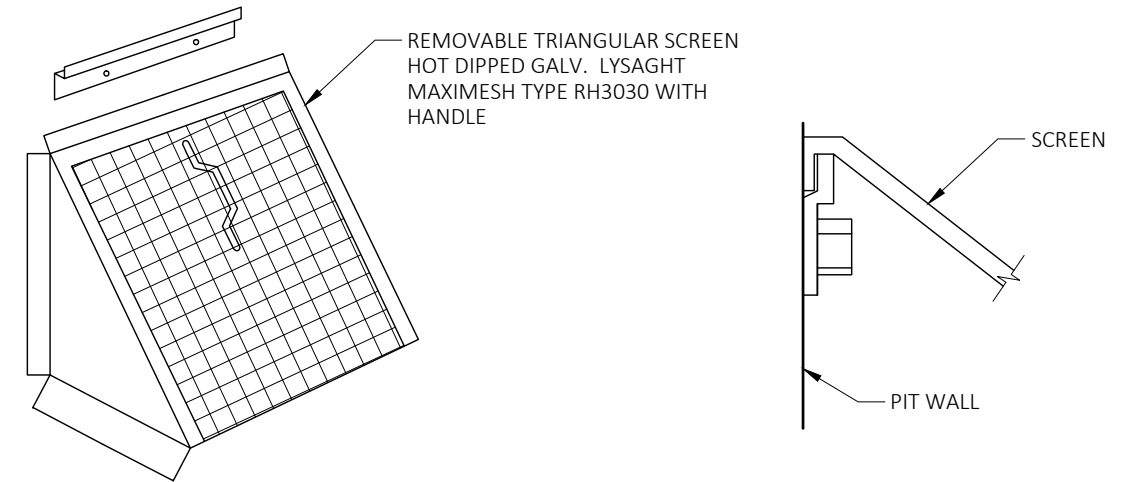
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-	-	-	JOB No.	SHEET No.
-	-	-	JB831	S-2.1



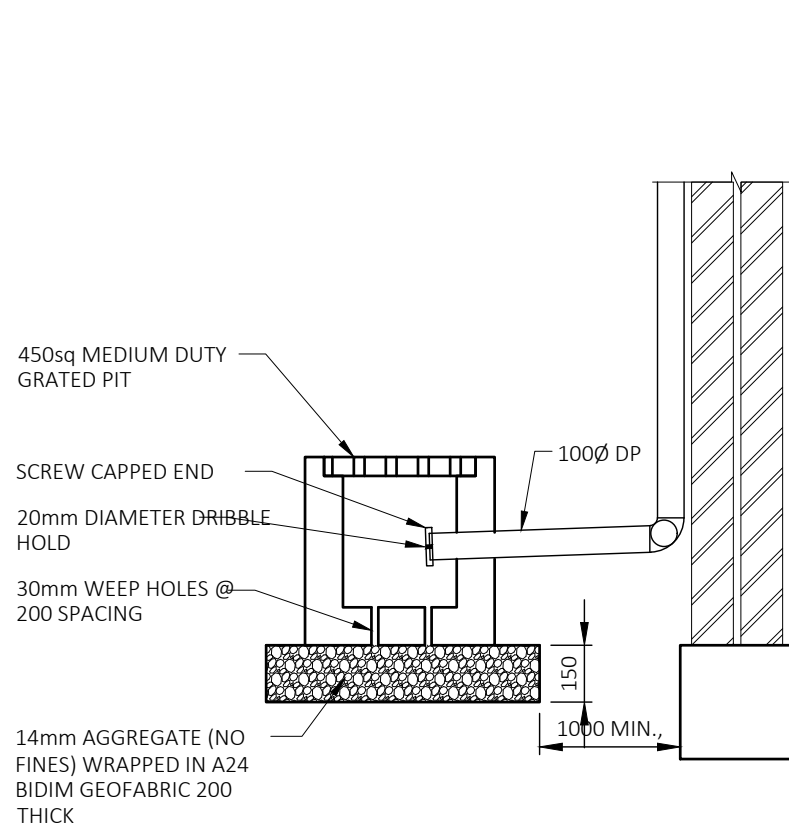
TYPICAL INSPECTION RISER DETAIL



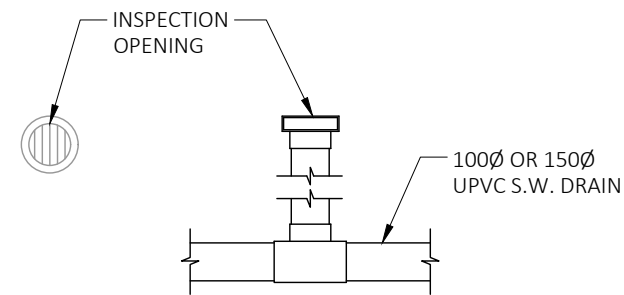
TYPICAL SILT ARRESTOR PIT DETAIL



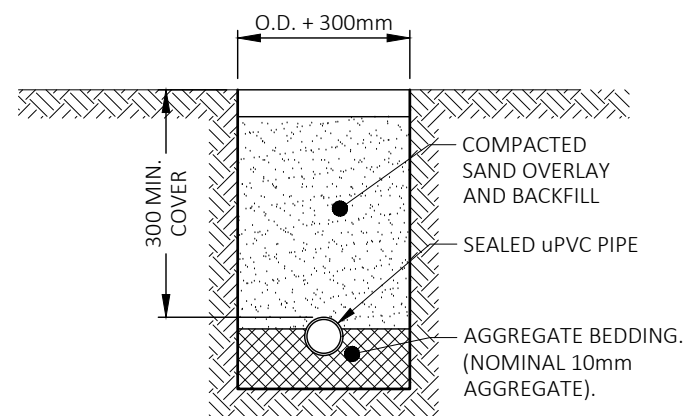
TYPICAL MULTI-PURPOSE FILTER SCREEN



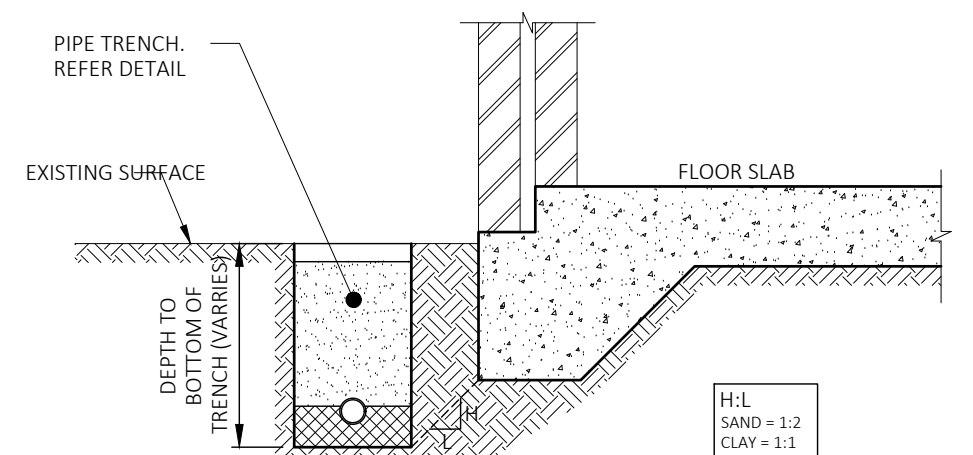
TYPICAL "CLEAN-OUT" PIT FOR CHARGED LINES



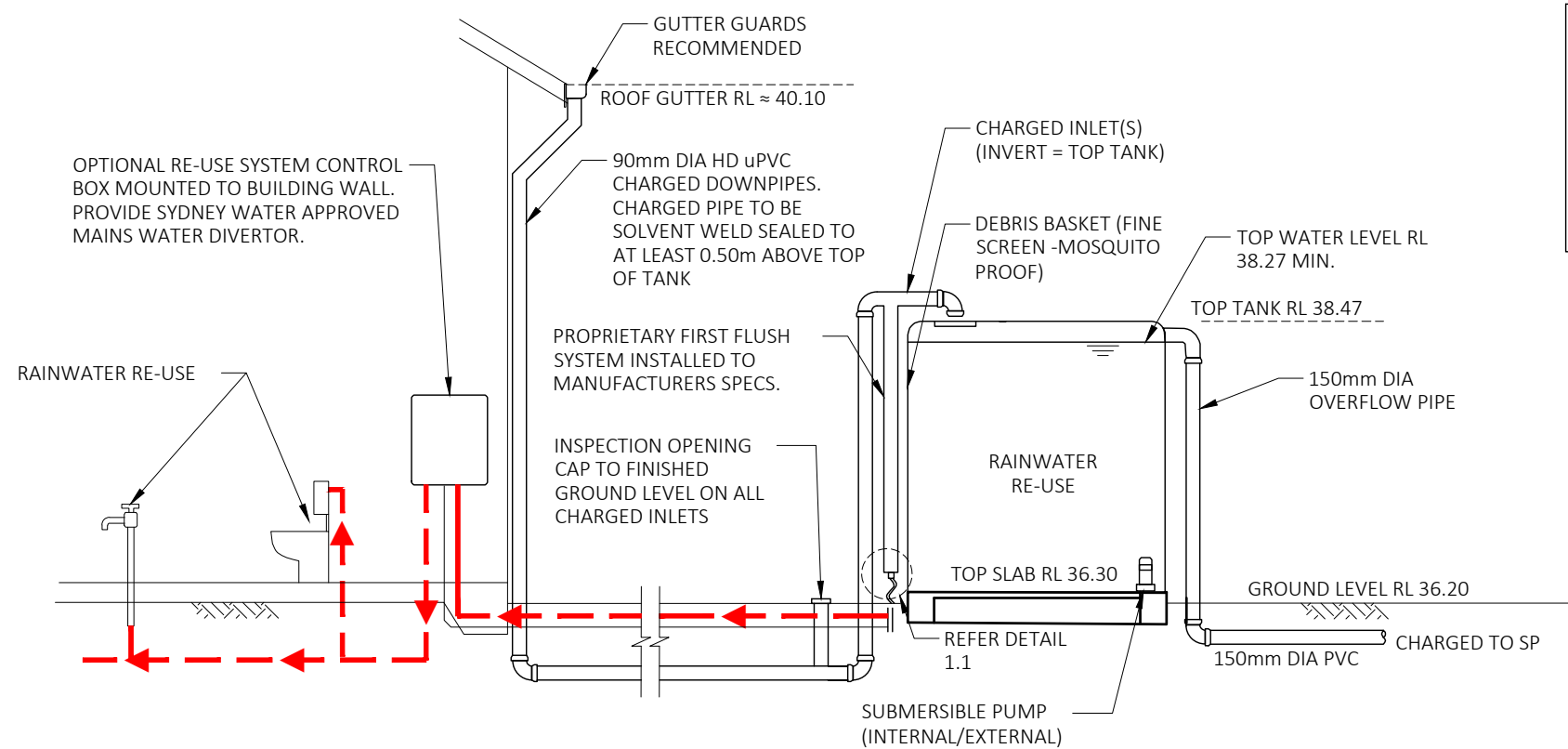
TYPICAL INSPECTION OPENING DETAIL
SCALE N.T.S.



PIPE TRENCH DETAIL

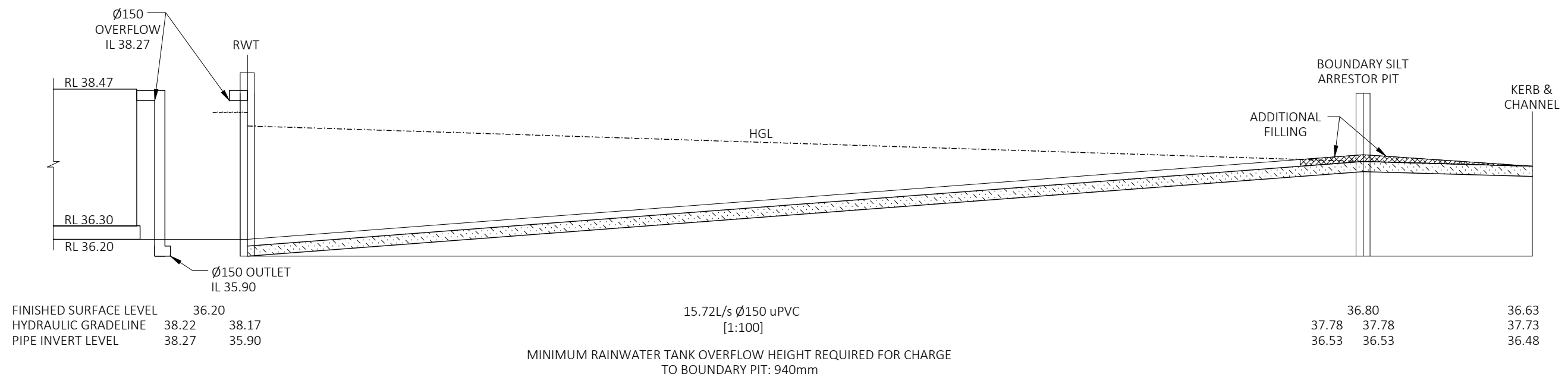


TRENCH EXCAVATION NEAR FOOTINGS

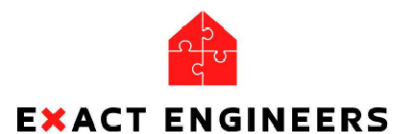


V: 0.89m/s
 Q_{ROOF} : 15.72L/s
 HEAD LOSSES: 0.44m
 TOTAL LOSSES = 0.5m + HEAD LOSSES = 0.94m
 (REFER TO ANTERBURY BANKSTOWN DCP 2023, CHAPTER 3.9 - REQUIREMENTS FOR CHARGED LINES)
 PROVIDED HEAD: 1.74m (SAFE)
 RWT OVERFLOW TO BE MIN 0.94m ABOVE SILT PIT INLET
 THE FLOW FROM SILT PIT TO EXISTING KERB AND CHANNEL MUST BE BY GRAVITY

RAINWATER RE-USE TANK (MAIN DWELLING)



HGL ANALYSIS DIAGRAM (MAIN DWELLING)



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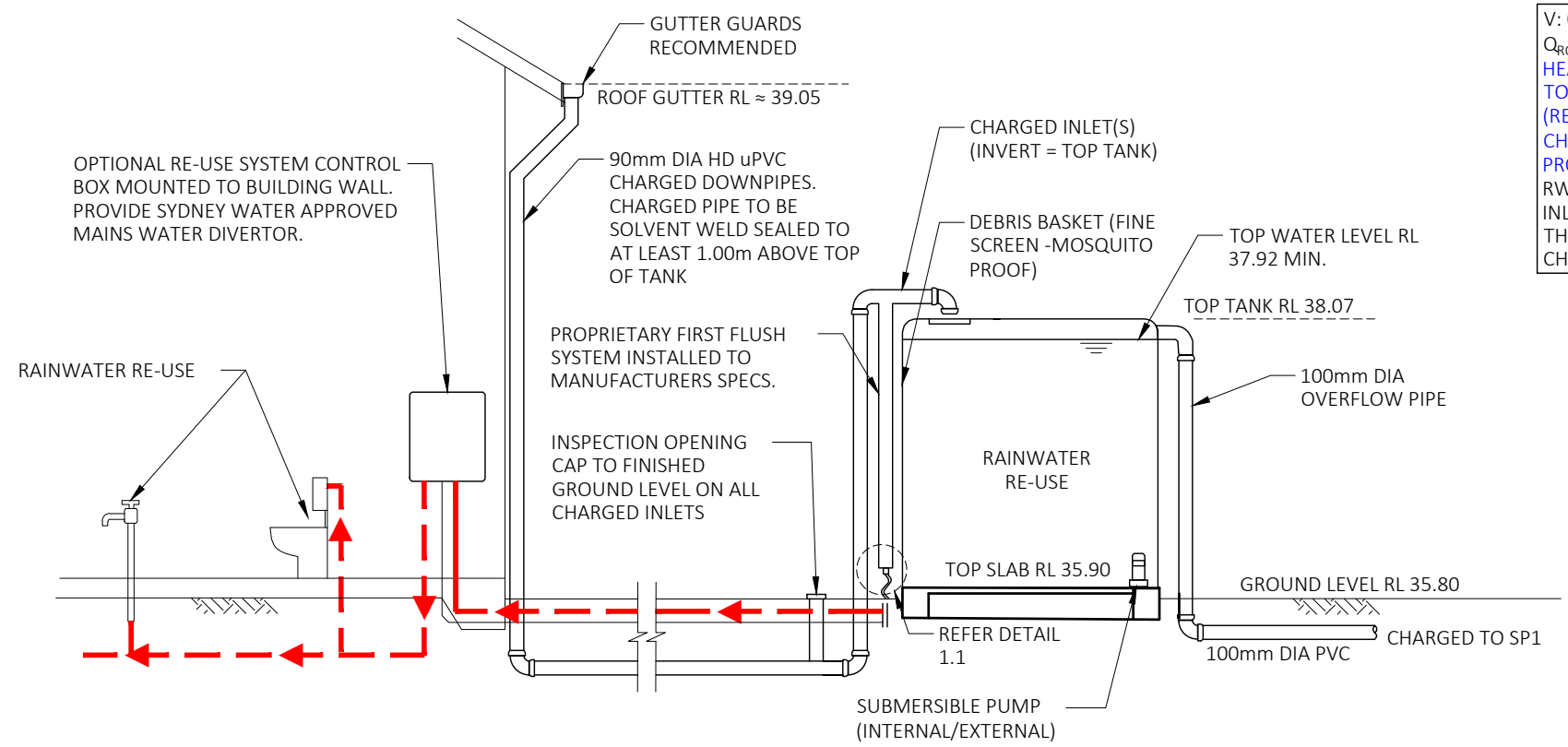


PROJECT
 PROPOSED PRIMARY & SECONDARY DWELLING
 33 LASCELLES AVENUE, GREENACRE

TITLE
 STORMWATER DETAILS - SHEET 3

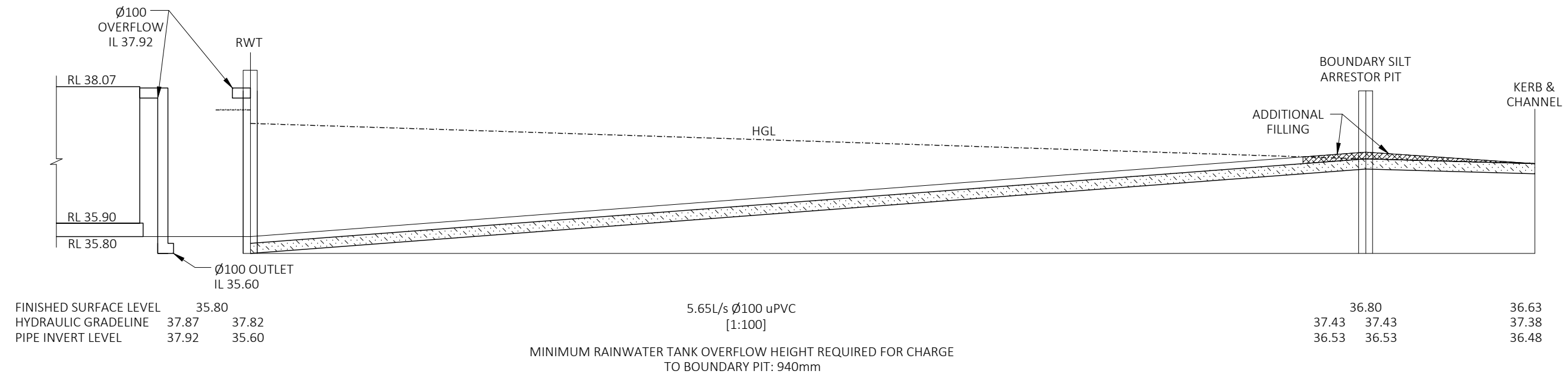
CLIENT
 DE'BONNAIRE DESIGNZ

REV	ISSUE / REVISION DESCRIPTION	DATE	TITLE	NAME
A	ISSUE FOR APPROVAL	03/03/25	DRAWN	E.N
-	-	-	CHECKED	Z.C
-	-	-	SCALE @ A3	1:20
-	-	-	JOB No.	SHEET No.
-	-	-	JB831	S-2.3

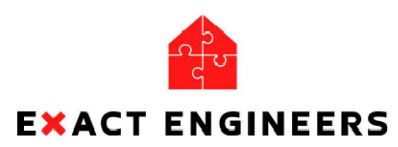


V: 0.72m/s
Q_{roof}: 5.65L/s
HEAD LOSSES: 0.44m
TOTAL LOSSES = 0.5m + HEAD LOSSES = 0.94m
(REFER TO ANTERBURY BANKSTOWN DCP 2023,
CHAPTER 3.9 - REQUIREMENTS FOR CHARGED LINES)
PROVIDED HEAD: 1.39m (SAFE)
RWT OVERFLOW TO BE MIN 0.94m ABOVE SILT PIT
INLET LEVEL
THE FLOW FROM SILT PIT TO EXISTING KERB AND
CHANNEL MUST BE BY GRAVITY


RAINWATER RE-USE TANK (SECONDARY DWELLING)



HGL ANALYSIS DIAGRAM (SECONDARY DWELLING)



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PROJECT	PROPOSED PRIMARY & SECONDARY DWELLING 33 LASCELLES AVENUE, GREENACRE	REV	ISSUE / REVISION DESCRIPTION	DATE	TITLE	NAME
TITLE	STORMWATER DETAILS - SHEET 4	A	ISSUE FOR APPROVAL	03/03/25	DRAWN	E.N
		-	-	-	CHECKED	Z.C
CLIENT	DE`BONNAIRE DESIGNZ	-	-	-	SCALE @ A3	1:20
		-	-	-	JOB No.	SHEET No.
		-	-	-	JB831	S-2.4



1. THE PUMP SHALL BE PROGRAMMED TO WORK ALTERNATELY TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.
2. A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT 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.
3. A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 500mm ABOVE THE MINIMUM WATER LEVEL, THEREBY ONE OF THE PUMPS WILL OPERATE & DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.
4. A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATE & ACTIVATE THE ALARM.
5. AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT & 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.

