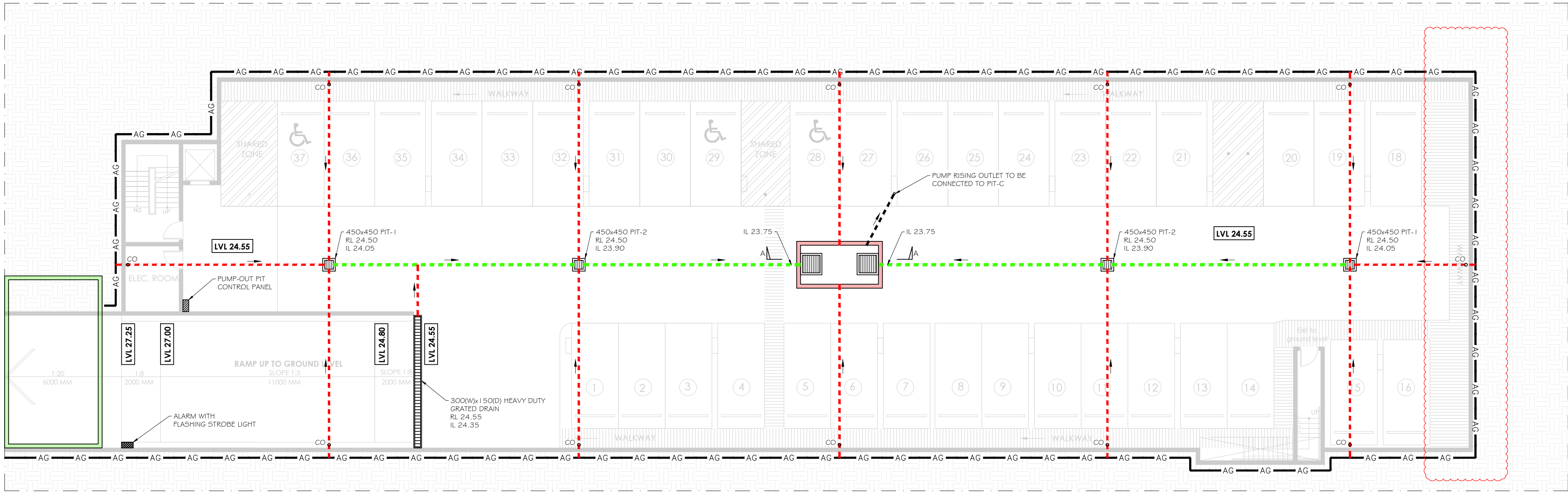


## STORMWATER PLANS

Proposed Childcare Centre  
16 Chapman Street, Werrington NOV 2021

**ARCHIDROME**

206, 8 HELP STREET, CHATSWOOD N.S.W. 2067 [TARUNCHADHA@ARCHIDROME.NET](mailto:TARUNCHADHA@ARCHIDROME.NET)  
NOMINATED ARCHITECT TARUN CHADHA REGISTRATION NUMBER IN NSW: 8777 ☎ 0433901701  
ABN: 496 272 11778



NOTE: CONTRACTOR TO ENSURE MIN. 1% SURFACE FALL IS PROVIDED TO THE FLOOR WASTES

NOTE: A GEOTECHNICAL ENGINEER MUST APPROVE THE PROPOSED BASEMENT DRAINAGE SYSTEM PRIOR TO CONSTRUCTION

LEGEND:  
DP: Ø100mm UPVC ROOF DOWNSPIPE  
BDP: BALCONY DOWNSPIPE  
LDP: 150mm UPVC DOWNSPIPE  
RL 11.20 PROPOSED LEVEL  
RL 11.20 EXISTING LEVEL (AHD)  
ex. RL 11.20 EXISTING LEVEL

SYMBOLS:  
PIPE FLOW DIRECTION  
SURFACE FLOW DIRECTION  
ROOF OUTLINE  
SITE BOUNDARY  
PROPOSED 0.9m INTER-ALLOTMENT SW DRAINAGE EASEMENT

Ø100mm SEWER GRADE SEALED LINE TO RWT  
Ø150mm SEWER GRADE SEALED LINE TO RWT  
Ø225mm SEWER GRADE SEALED LINE TO RWT  
Ø100mm PVC PIPE AT MIN. 1% SLOPE U.N.O.  
Ø150mm PVC PIPE AT MIN. 1% SLOPE U.N.O.  
Ø225mm PVC PIPE AT MIN. 1% SLOPE U.N.O.

AG Ø100mm SUBSOIL AT MIN. 1% SLOPE  
IO / CO INSPECTION OPENING / CLEAN OUT  
FW 200x200mm FLOOR WASTE  
FP FLUSHING POINT

PLOT IN COLOUR FOR CLARITY

#### PUMP-OUT PIT CALCULATIONS

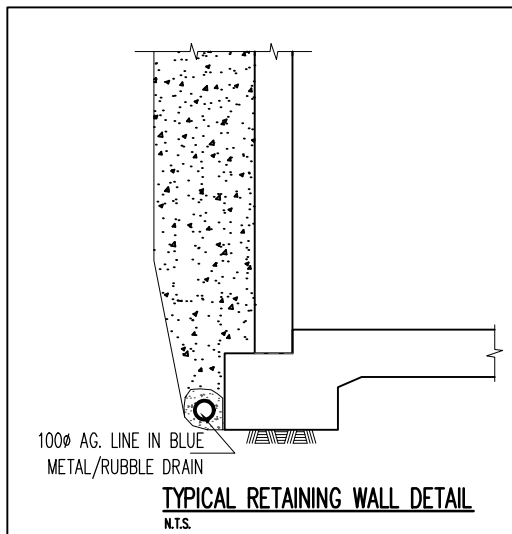
1-STORAGE VOLUME  
AREA DRAINING TO PUMP-OUT PIT=33.92m<sup>2</sup>  
VOLUME REQUIRED=D<sub>1</sub>(1.00YR, 2HR)xA  
VOLUME REQUIRED=2x44.1x33.92/3600=3.00m<sup>3</sup>  
VOLUME PROVIDED=4.00m<sup>3</sup>

2-PUMP-OUT RATE  
PUMP-OUT RATE PER PUMP=1.0L/s

3-PUMPS SELECTION  
PUMP-OUT RATE PROVIDED PER PUMP=1.0L/s  
HEAD=7.0m  
PROVIDE TWO AUTO SUBMERSIBLE PUMPS KS-30

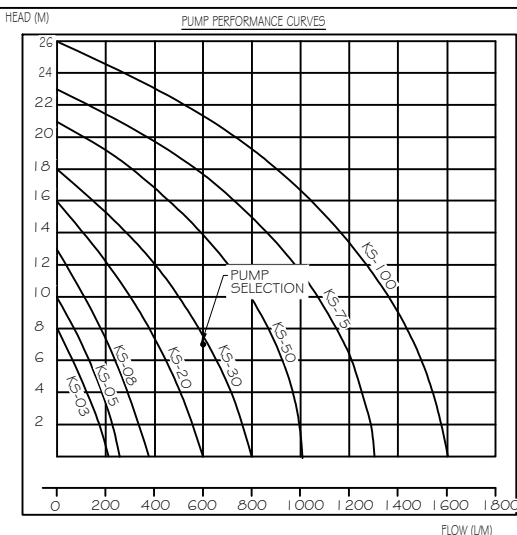
#### PUMP-OUT PIT NOTES AND SPECS

- PUMPS SHALL WORK ALTERNATIVELY
- A LOW LEVEL FLOAT TO BE PROVIDED TO MAINTAIN MIN. WATER LEVEL IN THE TANK (OFF SWITCH)
- A SECOND FLOAT, 300mm HIGHER SHOULD BE PROVIDED TO ACTIVATE ONE PUMP THAT WILL DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT
- A THIRD FLOAT SHALL BE PROVIDED APPROX. AT THE SOFFIT OF THE TANK; THIS FLOAT WILL ACTIVATE THE SECOND PUMP THAT IS NOT IN OPERATION AND WILL ACTIVATE THE ALARM
- AN ALARM SYSTEM SHALL BE PROVIDED WITH FLASHING STROBE LIGHT AND A PUMP FAILURE SIGN WHICH ARE TO BE PROVIDED IN A VISIBLE SPOT AT THE DRIVEWAY ENTRANCE.
- A BACK-UP BATTERY SHALL BE PROVIDED FOR THE ALARM SYSTEM IN CASE OF POWER FAILURE

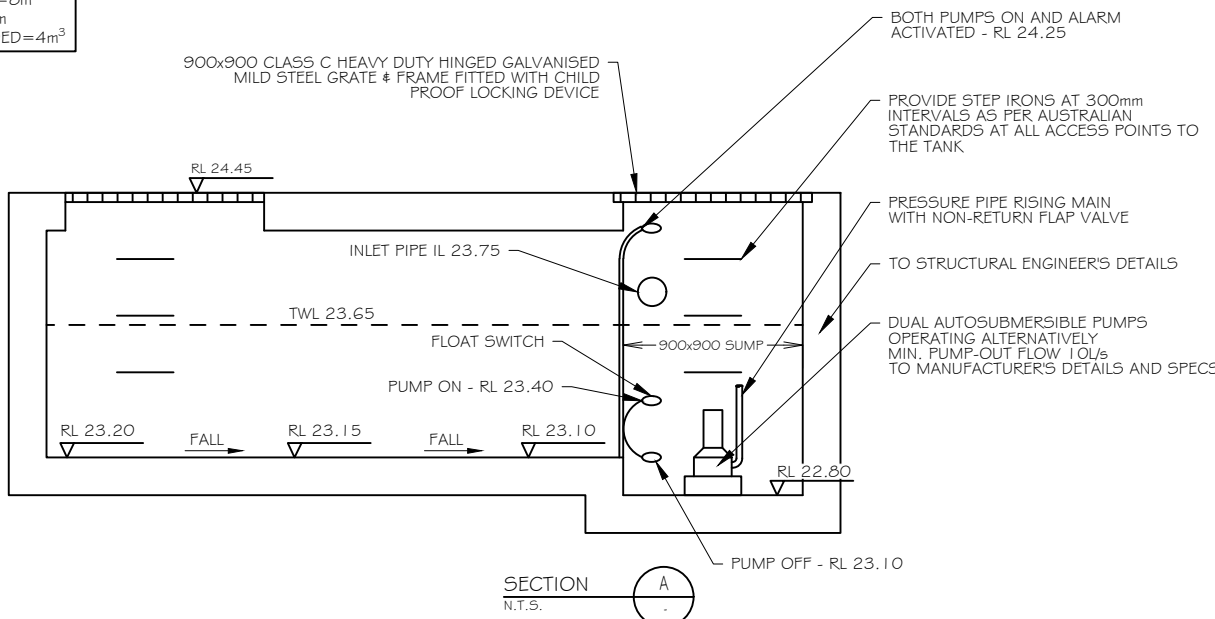


TYPICAL RETAINING WALL DETAIL  
N.T.S.

Type	Output		Outlet		Rated Head Capacity		Maximum Head Capacity		Weigh Kg	Dimension		
	HP	kW	mm	Inch	M	LPM	M	LPM		L(mm)	W(mm)	H(mm)
KS-03	1/3	0.25	40	1 1/2"	3	130	8	180	9	188	141	305
KS-04	1/2	0.4	50	2"	5	150	8	220	11	208	140	359
KS-05	1/2	0.4	50	2"	5	160	10	260	14	230	156	375
KS-08	1	0.75	50	2"	6	240	13	380	21	290	180	425
KS-20	2	1.5	80	3"	10	300	16	600	31	278	182	475
KS-30	3	2.2	80	3"	10	500	18	800	42	390	250	450
KS-50	5	3.7	100	4"	10	800	21	1100	48	450	240	530
KS-75	7 1/2	5.6	100	4"	15	800	23	1300	60	550	310	590
KS-100	10	7.5	150	6"	18	900	25	1600	70	550	310	610



PUMP-OUT PIT DETAILS  
TWL 23.65  
AREA=410x210=86m<sup>2</sup>  
AV. DEPTH=0.5m  
VOLUME PROVIDED=4m<sup>3</sup>



NOTE: WARNING SIGN TO BE PLACED IN CLEAR AND VISIBLE LOCATION

#### WARNING

PUMP OUT SYSTEM  
FAILURE IN BASEMENT  
WHEN LIGHT IS FLASHING  
AND SIREN SOUNDING

PUMP-OUT PIT WARNING SIGN  
N.T.S.

NOTE: A DANGER CONFINED SPACE ENTRY SIGN TO BE PLACED IN A VISIBLE LOCATION IN PROXIMITY TO THE PUMP-OUT PIT ACCESS

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35 COBHAM STREET, KINGS PARK NSW 2148.

#### PROPOSED DEVELOPMENT

LOT 4001-No. 14 CHAPMAN STREET  
MERRINGTON, NSW

ARCHITECT / BUILDER

ARCHITECT / BUILDER

#### STORMWATER MANAGEMENT - BASEMENT LAYOUT

SCALE: 1:150 U.N.O.

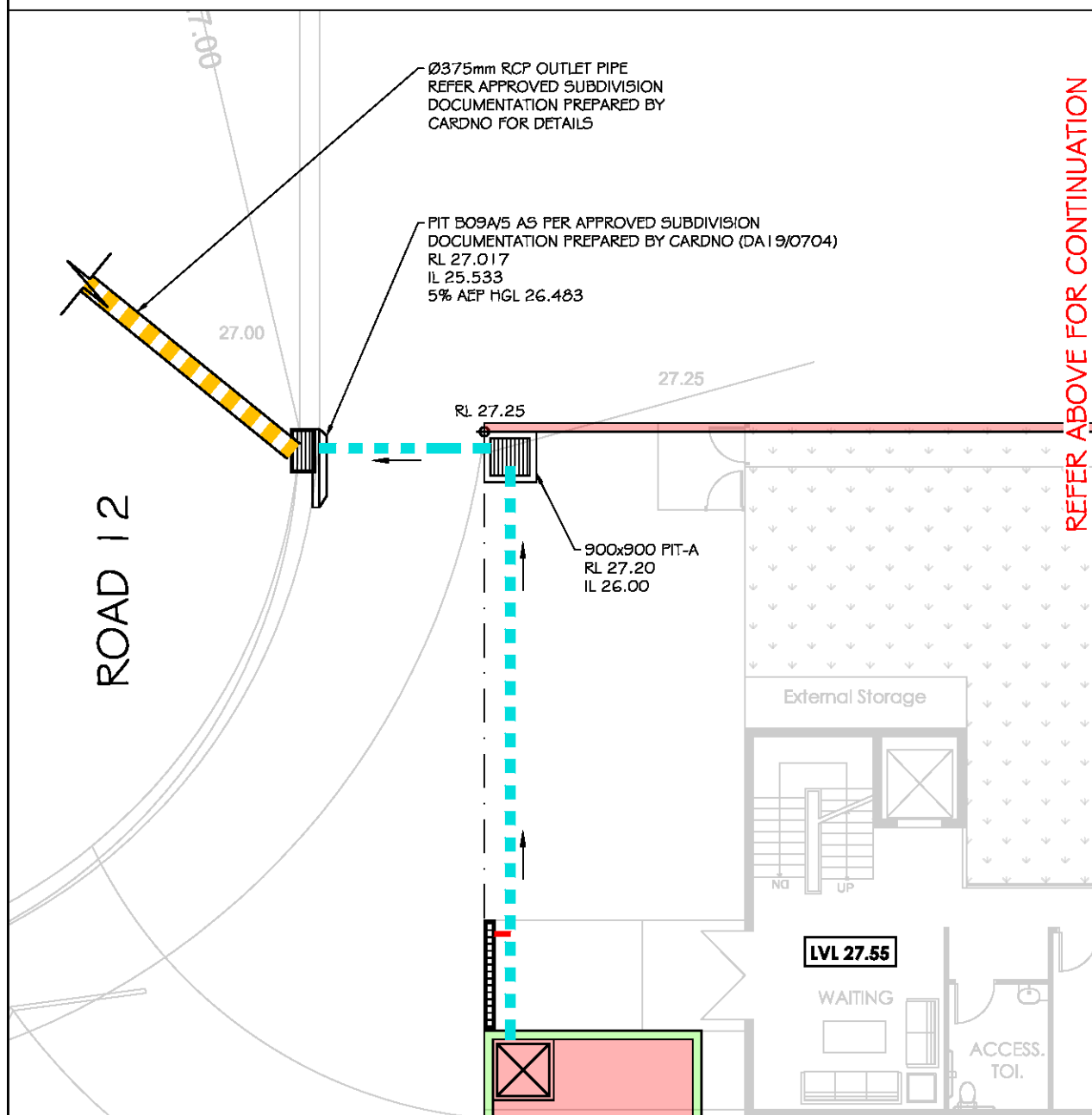
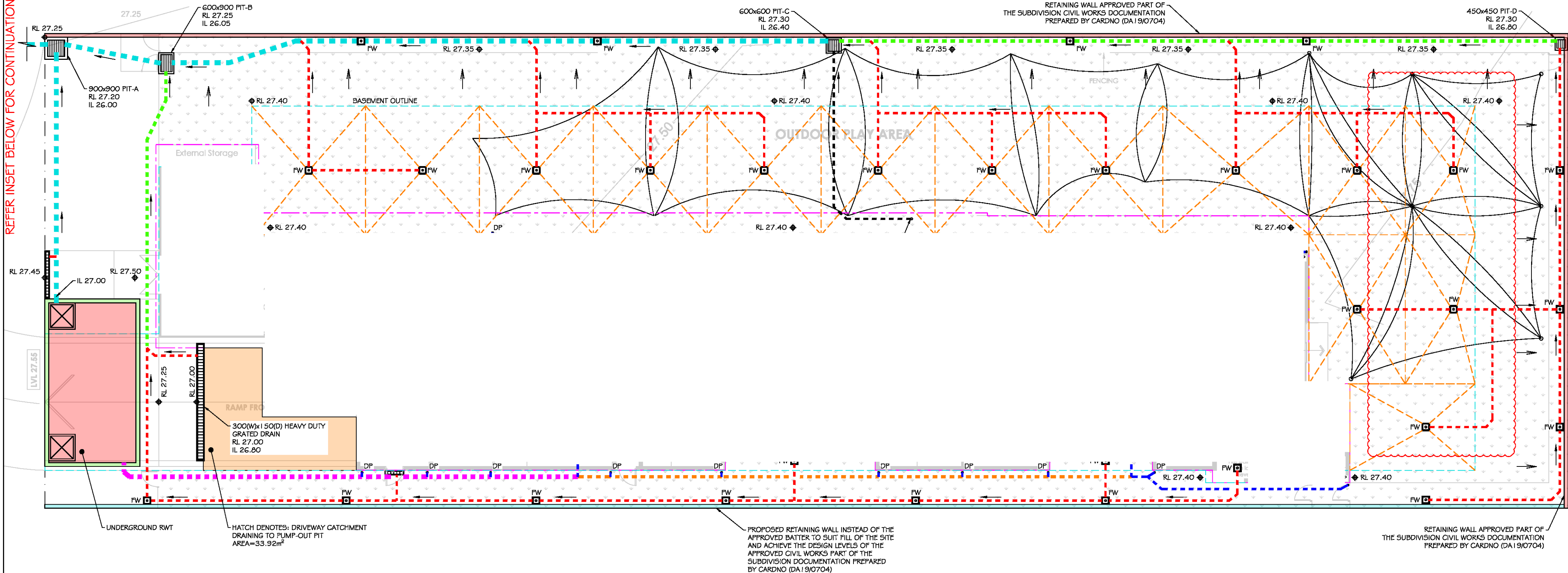
DESIGN BY: R.H. DRAWN BY: I.R. CHECK BY: R.H. DRAWING No. 1 OF 5

JOB NUMBER: 211108ARC

ISSUE: B



REFER INSET BELOW FOR CONTINUATION



REFER ABOVE FOR CONTINUATION



NOTE: PITS DEEPER THAN 1.0m TO BE FITTED WITH STEP IRONS

NOTE: EX. LEVELS HAVE BEEN INTERPOLATED / ASSUMED BASED ON PROVIDED SURVEY INFORMATION; THESE NEED TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION AND AUSSIE STRUCTURAL ENGINEERS NOTIFIED OF ANY INCONSISTENCIES WITH WHAT HAS BEEN SHOWN ON THESE SET OF DRAWINGS IMMEDIATELY

NOTE: ADEQUATE ACOUSTIC MEASURES TO BE PROVIDED FOR PIPEWORK RUNNING WITHIN HABITABLE AREAS

NOTE: THE SEALED PORTION OF THE DOWNPIPES MUST BE PAINTED IN COLOUR TO COMPLEMENT THE DEVELOPMENT AND TO PROTECT THEM AGAINST UV LIGHT DAMAGE FROM THE SUN

NOTE: ALLOW FOR EMERGENCY OVERFLOW SPILLER SYSTEM AWAY FROM BUILDING FOR ALL TRAPPED AREAS AND ROOF GUTTER SYSTEM

NOTE: DRIVEWAY GRADES, LEVELS TO COMPLY WITH COUNCIL'S ISSUED ALIGNMENT LEVELS (WHERE APPLICABLE), AND TO COMPLY WITH AUSTRALIAN STANDARDS INCLUDING AS2890; TRAFFIC ENGINEER TO BE CONSULTED WHERE REQUIRED

NOTE: ALL GRATES AND LIDS TO BE HINGED TYPE AND FITTED WITH CHILDPROOF LOCKS LIDS WITHIN TRAFFICABLE AREAS TO BE ALSO BIKE SAFE, HEAVY DUTY

NOTE: PIT SURFACE LEVELS SHOWN ON THESE SET OF DRAWINGS MUST BE CHECKED BY CONTRACTOR PRIOR TO CONSTRUCTION AGAINST LANDSCAPE AND ARCHITECTURAL LEVELS AND AUSSIE STRUCTURAL ENGINEERS TO BE NOTIFIED IMMEDIATELY SHOULD ANY DISCREPANCIES BE IDENTIFIED FOR AN ALTERNATIVE DESIGN

NOTE: AGG LINES TO ALL RETAINING WALLS AND FOOTINGS TO BE PROVIDED AND CONNECTED TO THE NEAREST PROPOSED STORMWATER DRAINAGE SYSTEM BY GRAVITY

**OSD & WSUD NOTES:**

1- IN ACCORDANCE WITH PENRITH CITY COUNCIL'S WSUD POLICY, WATER QUALITY IS NOT REQUIRED FOR THE SITE SINCE THE SITE AREA DOES NOT EXCEED 2,500m<sup>2</sup>.

2- IN ADDITION, THE SUBJECT LOT HAS BEEN PROPOSED TO DRAIN TO A PROPOSED DETENTION AND WATER QUALITY BASIN AS PER THE APPROVED CIVIL WORKS PART OF THE SUBDIVISION DOCUMENTATION PREPARED BY CARDNO (DA19/0704), THEREFORE, AN INDIVIDUAL OSD IS NOT REQUIRED FOR THIS LOT 400!

NOTE: PROVIDE AGG LINES TO ALL LANDSCAPE AREAS AND CONNECT IT TO THE NEAREST PROPOSED STORMWATER DRAINAGE SYSTEM BY GRAVITY; THESE HAVE NOT BEEN SHOWN ON THE PLANS IN ALL AREAS FOR CLARITY OF THE PLANS; CONTACT AUSSIE STRUCTURAL ENGINEERS IMMEDIATELY FOR ANY CLARIFICATIONS PRIOR TO CONSTRUCTION

NOTE: REFER ARCHITECTURAL/LANDSCAPE ARCHITECTURAL DRAWINGS FOR FINAL DETAILS OF PROPOSED RETAINING WALLS

NOTE: REFER ARCHITECTURAL DRAWINGS FOR FINAL INTERNAL LEVELS, DRIVEWAY PROFILE AND NUMBER AND LOCATION OF DOWNPIPES AND LANDSCAPING RLs

**LEGEND:**

DP: Ø100mm UPVC ROOF DOWNPIPE  
BOP: BALCONY DOWNPIPE  
LDP: 150mm UPVC DOWNPIPE  
RL 11.20: PROPOSED LEVEL  
EX: EXISTING LEVEL (AHD)  
EX: RL 11.20: EXISTING LEVEL

**SYMBOLS:**

PIPE FLOW DIRECTION  
SURFACE FLOW DIRECTION  
ROOF OUTLINE  
SITE BOUNDARY  
PROPOSED 0.9m INTER-ALLOTMENT SW DRAINAGE EASEMENT  
Ø100mm SEWER GRADE SEALED LINE TO RWT  
Ø150mm SEWER GRADE SEALED LINE TO RWT  
Ø225mm SEWER GRADE SEALED LINE TO RWT  
Ø100mm PVC PIPE AT MIN. 1% SLOPE U.N.O.  
Ø150mm PVC PIPE AT MIN. 1% SLOPE U.N.O.  
Ø225mm PVC PIPE AT MIN. 1% SLOPE U.N.O.  
AG: Ø100mm SUBSOIL AT MIN. 1% SLOPE  
IO / CO: INSPECTION OPENING / CLEAN OUT  
PW: 200x200mm FLOOR WASTE  
FP: FLUSHING POINT

**NOTE:** SEWER PEG-OUT TO BE CONDUCTED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORKS AND AUSSIE STRUCTURAL ENGINEERS TO BE NOTIFIED OF ANY CLASH IMMEDIATELY

**NOTE:** WORKS PROPOSED IN PROXIMITY OF EX. TREES TO REMAIN MUST BE CONDUCTED USING NON-DESTRUCTIVE HAND DIGGING METHODS; ARBORIST TO BE CONSULTED AND TO APPROVE THE PROPOSED WORKS

**NOTE:** CHARGED PORTION OF THE DRAINAGE SYSTEM, RISING OUT OF THE GROUND, MUST BE SEALED TO THE UNDERSIDE OF THE GUTTER

**NOTE:** PROVIDE CLEAN-OUT PIT TO CHARGED LINES AT LOWEST POINT IN THE LINE

**NOTE:** ALLOW MIN. 2% FALL AWAY FROM BUILDING AT ALL ENTRIES

**NOTE:** SYDNEY WATER TO BE NOTIFIED OF WORKS IN PROXIMITY TO THEIR ASSETS AND NECESSARY APPROVALS TO BE OBTAINED BY DEVELOPER PRIOR TO CONSTRUCTION

**NOTE:** SEATED DOWNPIPES SHOULD BE CONSTRUCTED OF ONE MATERIAL TO THE UNDERSIDE OF THE ROOF GUTTER

**NOTE:** CHARGED PORTION OF THE DRAINAGE SYSTEM, RISING OUT OF THE GROUND, MUST BE SEALED TO THE UNDERSIDE OF THE GUTTER

**NOTE:** PROVIDE CLEAN-OUT PIT TO CHARGED LINES AT LOWEST POINT IN THE LINE

ISSUE	DESCRIPTION	DATE	ISSUE	DESCRIPTION	DATE
B	ISSUED FOR APPROVAL	17.11.21			
A	ISSUED FOR APPROVAL	15.11.21			

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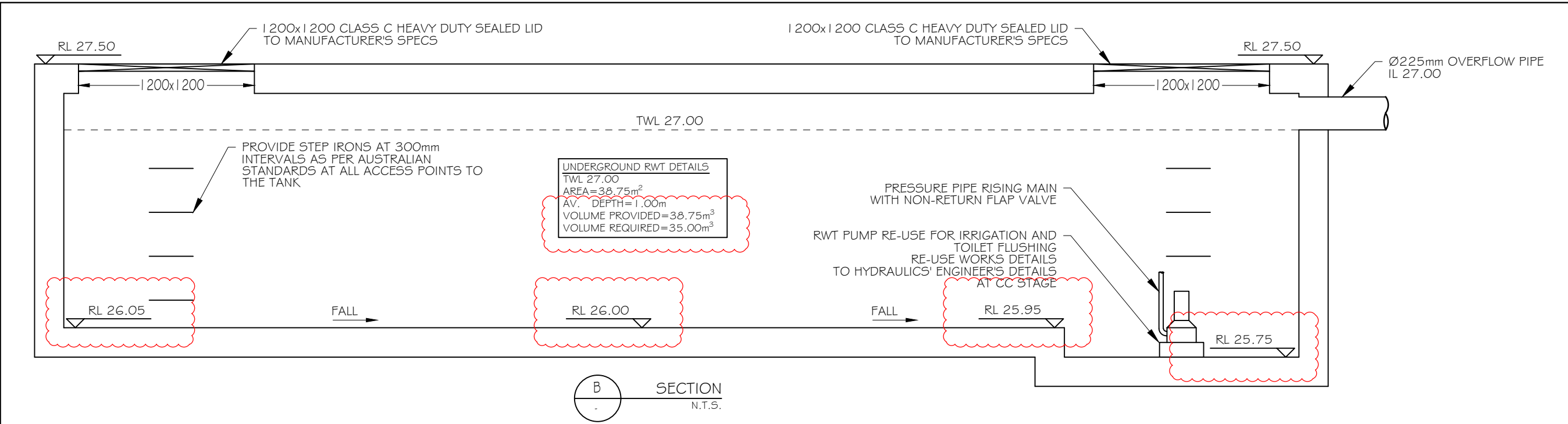
ABN 96 619 616 625  
Mobile: 0416 747 645  
Email: [design@aussieseng.com](mailto:design@aussieseng.com)  
35 COBHAM STREET, KINGS PARK NSW 2148.

**PROPOSED DEVELOPMENT**  
LOT 4001-No. 14 CHAPMAN STREET  
MERRINGTON, NSW

ARCHITECT / BUILDER  
**ARCHIDROME**

STORMWATER MANAGEMENT - GROUND FLOOR LAYOUT			
SCALE: 1:150 U.N.O.			
DESIGN BY: R.H.	DRAWN BY: I.R.	CHECK BY: R.H.	DRAWING No. <b>2 OF 5</b>
JOB NUMBER: <b>211108ARC</b>			ISSUE: <b>B</b>



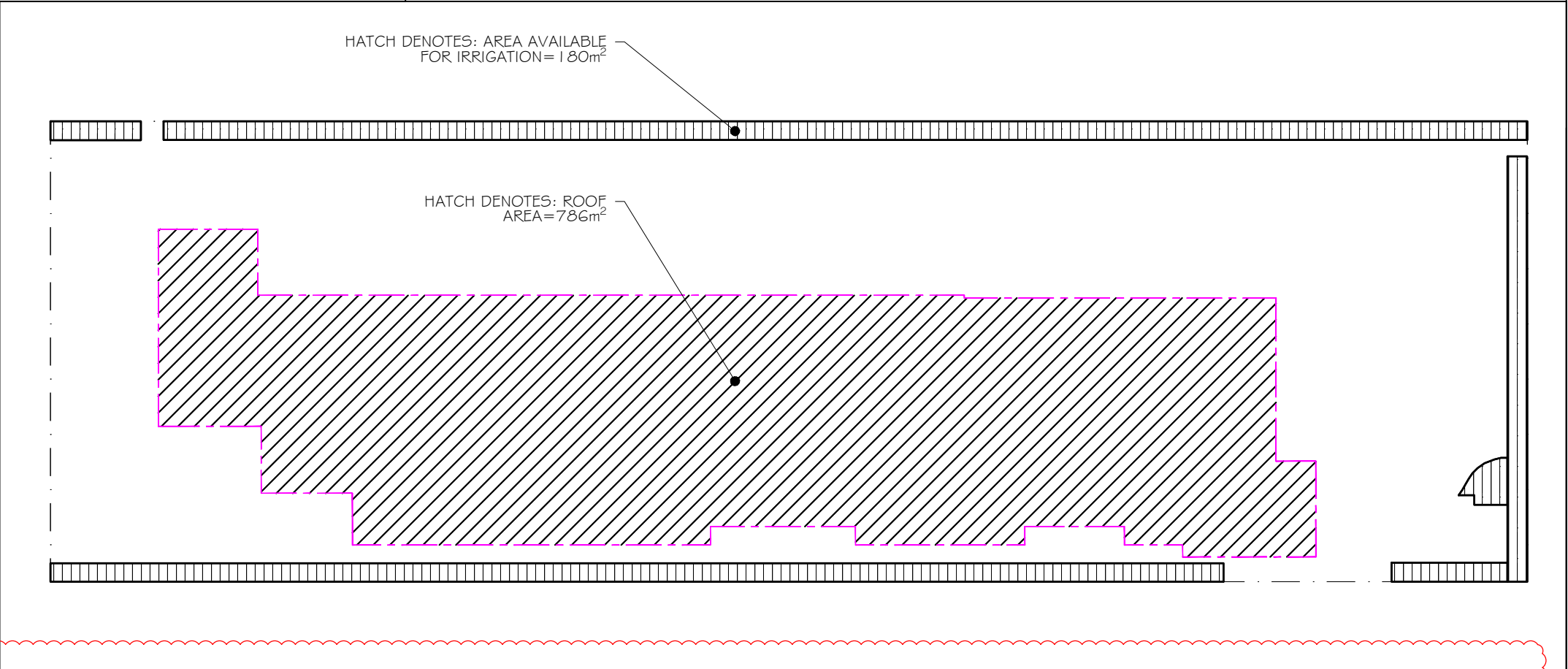
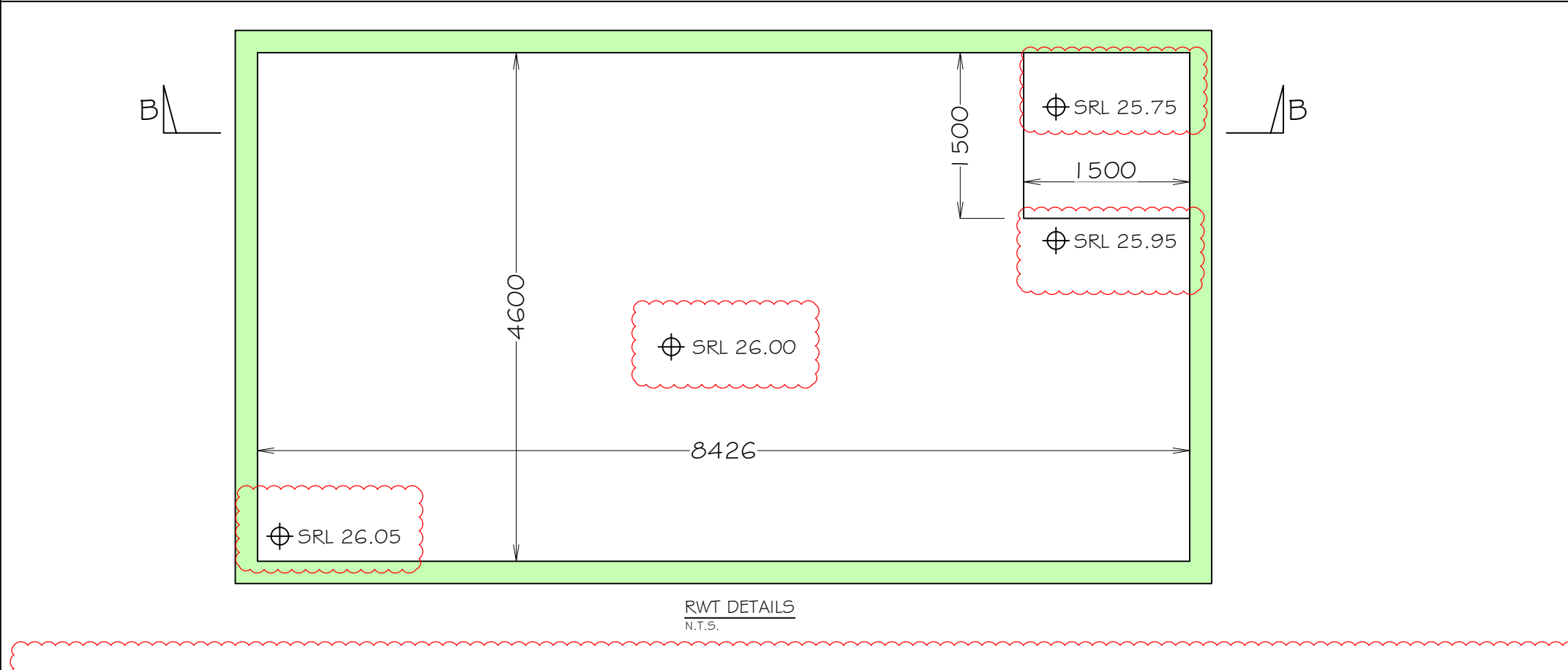


**RWT RE-USE DETAILS**

1. AREA AVAILABLE FOR IRRIGATION = 180.00m<sup>2</sup>  
1.1 YEARLY RE-USE DEMAND FOR IRRIGATION = 0.4KL/YR/m<sup>2</sup> x 180m<sup>2</sup> = 72 KL/YR
2. NUMBER OF PROPOSED NON-ACCESSIBLE TOILETS ON SITE (LEVEL 1) = 0  
2.1 DAILY RE-USE = 0.1 KL/DAY/#, THEREFORE, DAILY RE-USE (LEVEL 1) = 0 x 0.1 # = 0 KL/DAY
3. NUMBER OF PROPOSED NON-ACCESSIBLE TOILETS ON GROUND FLOOR LEVEL = 0  
3.1 NUMBER OF PROPOSED URINALS ON GROUND FLOOR LEVEL = 12

**CASE SCENARIO #1:**  
DAILY RE-USE = 0.1 KL/DAY/#, THEREFORE, DAILY RE-USE = 12 x 0.1 # = 1.02 KL/DAY  
THEREFORE TOTAL DAILY RE-USE = 1.02 KL/DAY  
RESULTS HAVE BEEN PLOTTED ON CHART #1 FOR SENSITIVITY ANALYSIS PURPOSES AND IT SHOWS THAT THE REQUIRED 80% RE-USE DEMAND IS NOT PRACTICAL TO ACHIEVE VIA A REASONABLE RWT VOLUME CONSIDERING THE SCALE OF THE DEVELOPMENT DUE TO THE LIMITED PROPOSED ROOF AREA; PLEASE REFER SCENARIO 1 CHART ON THIS DRAWING

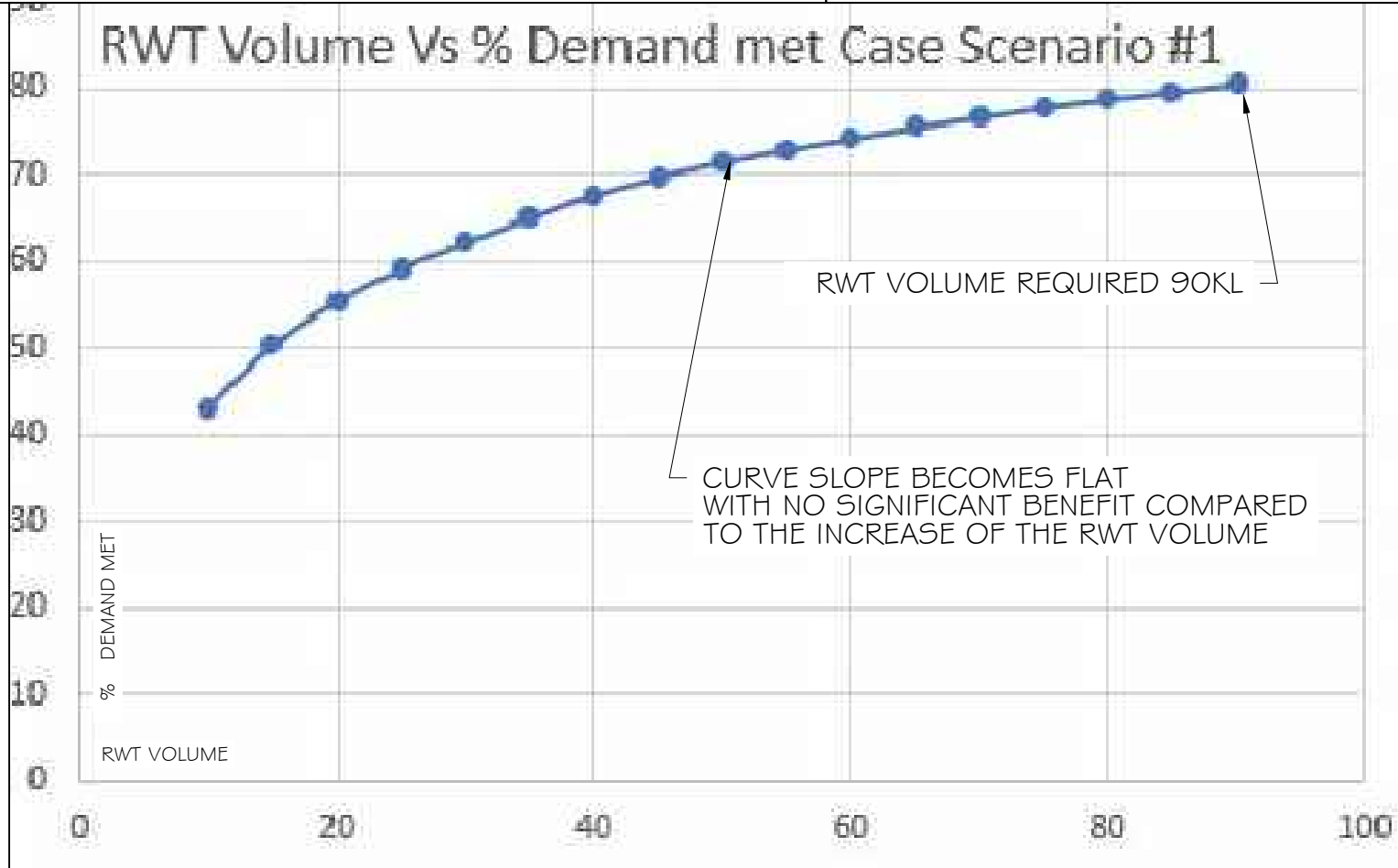
**CASE SCENARIO #2:**  
A REDUCED DAILY RE-USE FOR THE URINALS HAS BEEN PROPOSED.  
DAILY RE-USE = 0.06 KL/DAY/#, WHICH IS SPECIFIED FOR URINALS IN SCHOOLS, IN BLACKTOWN CITY COUNCIL'S WSUD DEVELOPER HANDBOOK, MUSIC MODELLING AND DESIGN GUIDE (2020).  
THEREFORE, DAILY RE-USE = 12 x 0.06 # = 0.61 KL/DAY  
THEREFORE TOTAL DAILY RE-USE = 0.61 KL/DAY  
RESULTS HAVE BEEN PLOTTED ON CHART #2 AND IT SHOWS THAT THE REQUIRED 80% RE-USE DEMAND CURVE IS PRACTICAL TO ACHIEVE BY PROPOSING A REASONABLE RWT VOLUME; PLEASE REFER SCENARIO 2 CHART ON THIS DRAWING



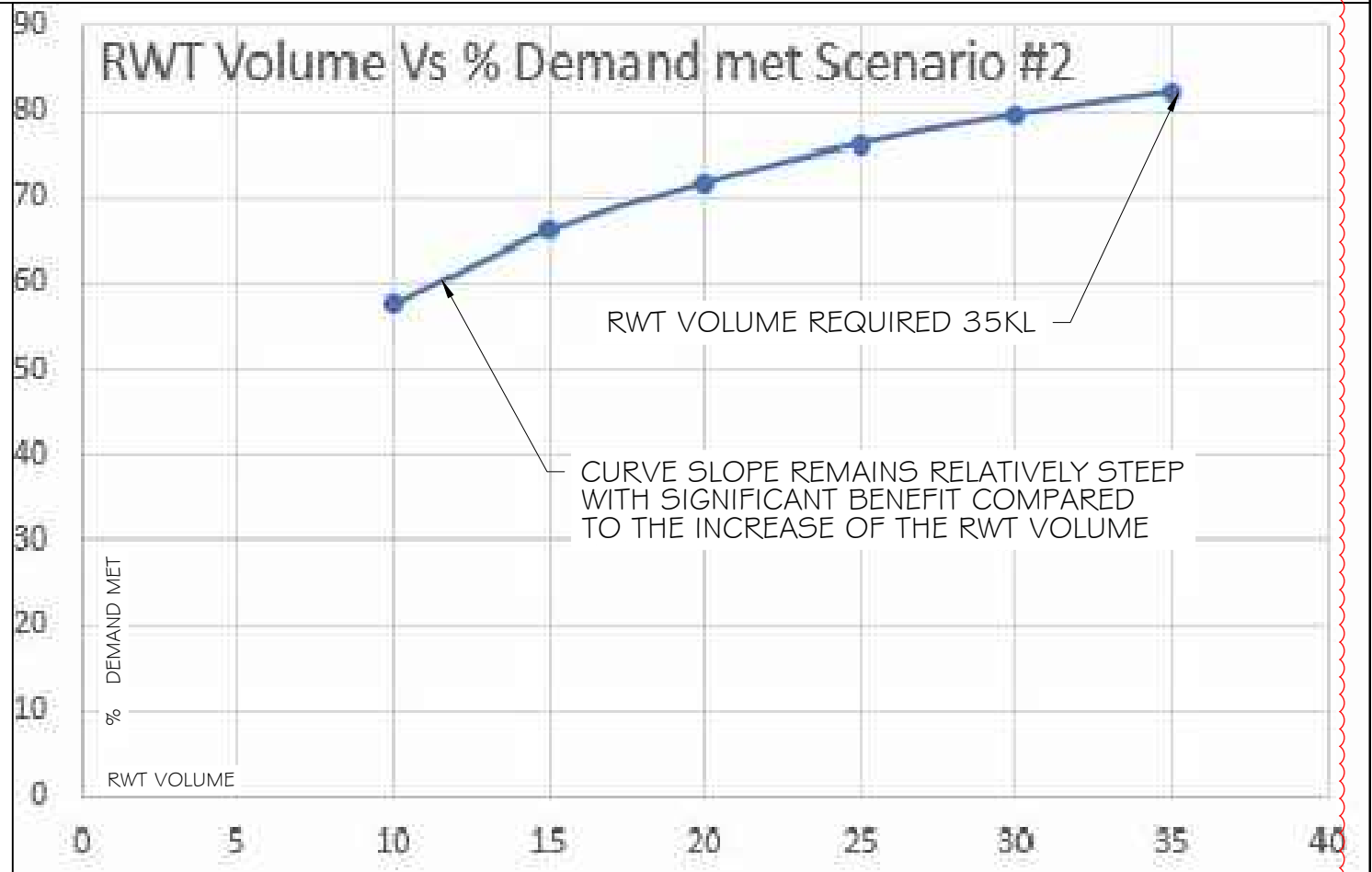
Node Water Balance - 35KL Rainwater Tank					
	Flow (ML/yr)	TSS (kg/yr)	TP (kg/yr)	TN (kg/yr)	GP (kg/yr)
Flow In	0.47	12.08	0.07	1.02	13.09
ET Loss	0.00	0.00	0.00	0.00	0.00
Infiltration Loss	0.00	0.00	0.00	0.00	0.00
Low Flow Bypass Out	0.00	0.00	0.00	0.00	0.00
High Flow Bypass Out	0.00	0.00	0.00	0.00	0.00
Pipe Out	0.23	3.59	0.03	0.42	0.00
Weir Out	0.00	0.00	0.00	0.00	0.00
Transfer Function Out	0.00	0.00	0.00	0.00	0.00
Reuse Supplied	0.24	2.96	0.03	0.37	0.00
Reuse Requested	0.29	0.00	0.00	0.00	0.00
% Reuse Demand Met	82.28	0.00	0.00	0.00	0.00
% Load Reduction	51.60	70.29	56.56	58.40	100.00

Decimal Places 2

SCENARIO 2 MUSIC RESULTS



SCENARIO 1 CHART



SCENARIO 2 CHART

ISSUE	DESCRIPTION	DATE	ISSUE	DESCRIPTION	DATE
B	ISSUED FOR APPROVAL	17.11.21			
A	ISSUED FOR APPROVAL	15.11.21			

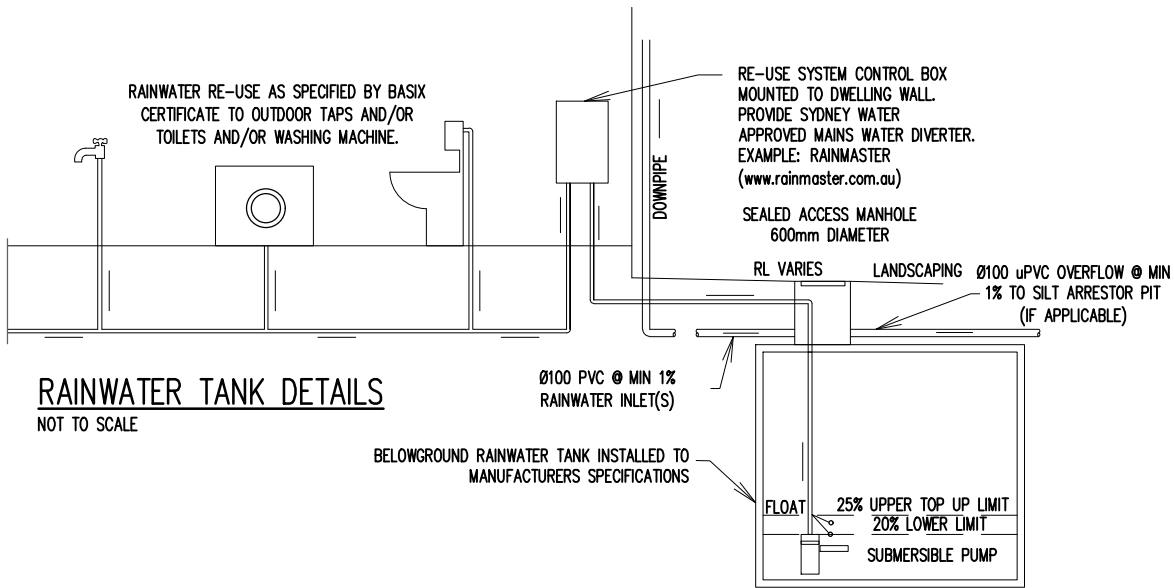
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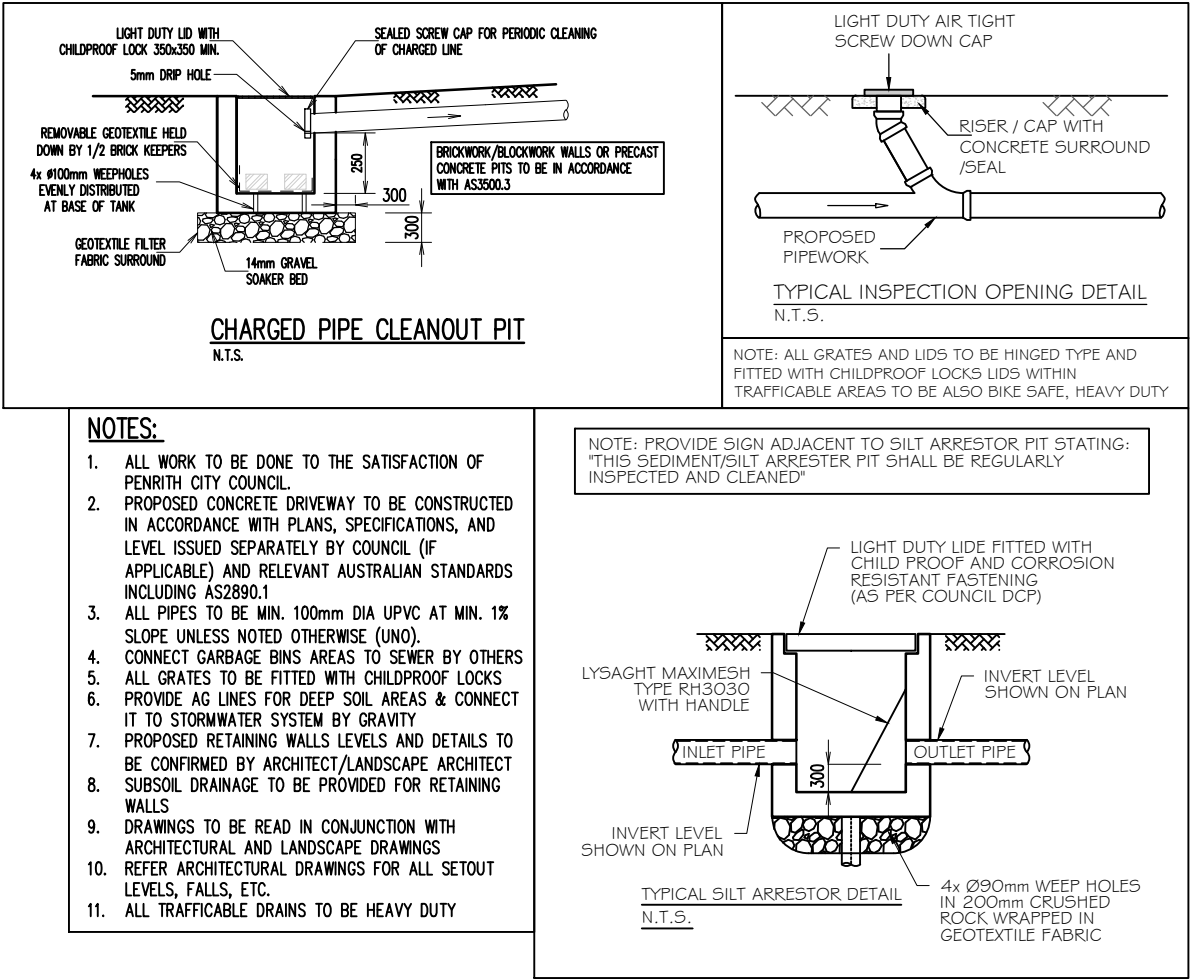
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Mobile: 0416 747 645  
Email: [design@aussieseng.com](mailto:design@aussieseng.com)  
35 COBHAM STREET, KINGS PARK NSW 2148.

PROPOSED DEVELOPMENT		STORMWATER MANAGEMENT - RWT DETAILS			
LOT 4001-No. 14 CHAPMAN STREET MERRINGTON, NSW		SCALE: 1:300 U.N.O.			
ARCHITECT / BUILDER <b>ARCHIDROME</b>		DESIGN BY: R.H.	DRAWN BY: I.R.	CHECK BY: R.H.	DRAWING No. <b>3 OF 5</b>
		JOB NUMBER: <b>211108ARC</b>			ISSUE: <b>B</b>



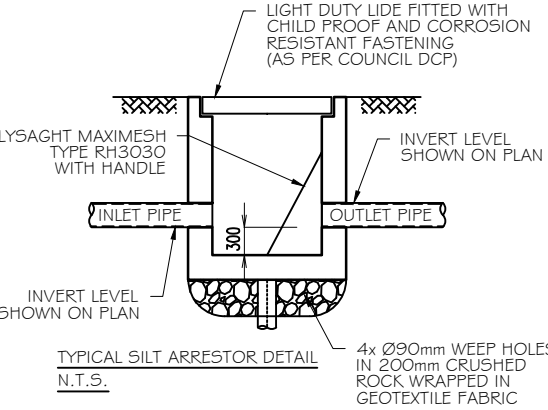
RAINWATER TANK DETAILS  
NOT TO SCALE



NOTES:

1. ALL WORK TO BE DONE TO THE SATISFACTION OF PENRITH CITY COUNCIL.
2. PROPOSED CONCRETE DRIVEWAY TO BE CONSTRUCTED IN ACCORDANCE WITH PLANS, SPECIFICATIONS, AND LEVEL ISSUED SEPARATELY BY COUNCIL (IF APPLICABLE) AND RELEVANT AUSTRALIAN STANDARDS INCLUDING AS2890.1
3. ALL PIPES TO BE MIN. 100mm DIA UPVC AT MIN. 1% SLOPE UNLESS NOTED OTHERWISE (UNO).
4. CONNECT GARBAGE BINS AREAS TO SEWER BY OTHERS
5. ALL GRATES TO BE FITTED WITH CHILDPROOF LOCKS
6. PROVIDE AG LINES FOR DEEP SOIL AREAS & CONNECT IT TO STORMWATER SYSTEM BY GRAVITY
7. PROPOSED RETAINING WALLS LEVELS AND DETAILS TO BE CONFIRMED BY ARCHITECT/LANDSCAPE ARCHITECT
8. SUBSOIL DRAINAGE TO BE PROVIDED FOR RETAINING WALLS
9. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND LANDSCAPE DRAWINGS
10. REFER ARCHITECTURAL DRAWINGS FOR ALL SETOUT LEVELS, FALLS, ETC.
11. ALL TRAFFICABLE DRAINS TO BE HEAVY DUTY

NOTE: PROVIDE SIGN ADJACENT TO SILT ARRESTOR PIT STATING: "THIS SEDIMENT/SILT ARRESTOR PIT SHALL BE REGULARLY INSPECTED AND CLEANED"



GENERAL INFORMATION

GENERAL NOTES

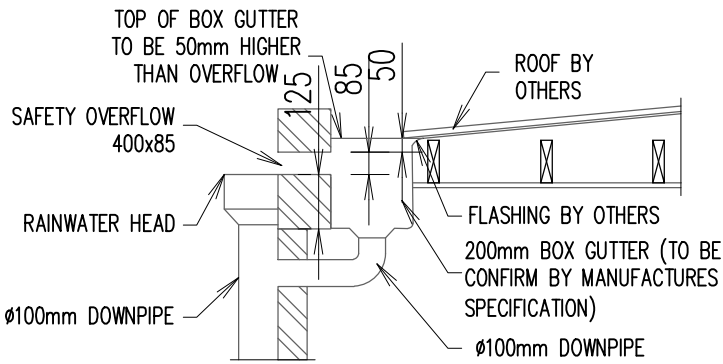
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, LANDSCAPE AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTION AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEERS BEFORE PROCEEDING WITH THE WORK.
2. ALL DIMENSIONS ARE IN MILLIMETERS & ALL LEVELS ARE IN METERS, UNO (UNLESS NOTED OTHERWISE).
3. NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.
4. EXISTING SERVICES LOCATIONS SHOWN INDICATIVE ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORKS.
5. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS. ALL EXTERNAL SLABS TO BE WATERPROOFED.
6. DURING EXCAVATION WORK, THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.
7. ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & SPECIFICATION.
8. EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICE PRIOR TO THE COMMENCEMENT OF WORK.
9. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.
10. ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
11. ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.
12. CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS DIRECTED OTHERWISE.
13. LOCATION OF DOWNPIPES AND FLOOR WASTES ARE INDICATIVE ONLY. DOWN PIPE AND FLOOR WASTE SIZE, LOCATION AND QUANTITY TO BE DETERMINED BY BUILDER & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARD.
14. ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE DESIGN ENGINEER FOR RESOLUTION.
15. ALL PITS OR GRATES IN TRAFFICABLE AREAS TO BE HEAVY DUTY. ALL GRATES TO HAVE CHILD PROOF LOCKS
16. ALL GUTTERS WILL BE FITTED WITH LEAF GUARDS AND SHOULD BE INSPECTED AND CLEANED TO ENSURE LEAF LITTER CANNOT ENTER THE DOWNPIPES.
17. ENSURE ALL DRAINAGE WORKS ARE AWAY FROM TREE ROOTS.

RAINWATER TANK INFORMATION

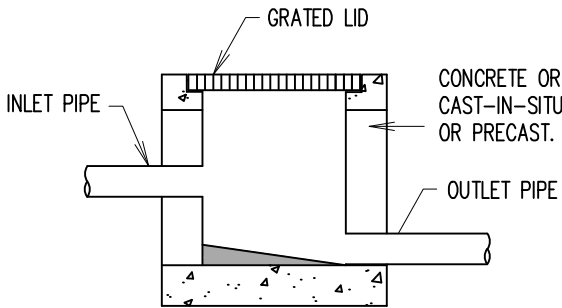
1. RAINWATER TANK TO COLLECT RAIN RUNOFF FROM AT LEAST AS PER BASIX SQUARE METERS OF ROOF AREA.
2. PROPOSED RAINWATER TANK SIZE AS PER SUPPLIERS SPECIFICATIONS
3. RAINWATER TANKS SHALL BE CONNECTED TO MAINS WATER SUPPLY AS BACKUP.
4. PUMPS SHALL PROVIDE MINIMUM 150kPa PRESSURE.
5. RAINWATER TANK TO BE CONNECTED AS PER BASIX REQUIREMENTS.
6. A SIGN TO BE INSTALLED STATING "NOT FOR HUMAN CONSUMPTION".
7. TANKS TO BE PLUMBED TO TOP-UP FROM THE POTABLE WATER SUPPLY DURING DRY PERIODS WHEN THE TANKS ARE 80% EMPTY.
8. NO DIRECT CROSS-CONNECTION WITH THE SYDNEY WATER POTABLE SUPPLY AND AN AIR GAP MAINTAINED ABOVE THE OVERFLOW IN THE TANK.
9. ANY OPENINGS SHALL BE MESHED OR SEALED TO PREVENT MOSQUITOS BREEDING AND ENTRY OF ANIMALS OR FOREIGN MATTER.
10. RAINWATER TANKS TO BE CLEANED OUT EVERY 6 MONTHS.
11. ALL DOWNPIPES TO BE SEALED TO UNDERSIDE OF FIRST FLOOR GUTTER AS DRAINAGE SYSTEM IS CHARGED TO FACILITATE PROPOSED ABOVE GROUND REUSE TANK.
12. THIS SYSTEM TO BE DESIGNED WITH A 'FIRST FLUSH' DIVERSION TO REMOVE ROOF CONTAMINANTS.
13. REUSE WATER TO BE DIRECTED TO THE FOLLOWING:
  - A. MINIMUM 1 OUTDOOR GARDEN TAP
  - B. ALL CISTERNS (TOILETS)
  - C. COLD WATER SERVICE TO THE CLOTHES WASHER.

DRAINAGE REQUIREMENTS

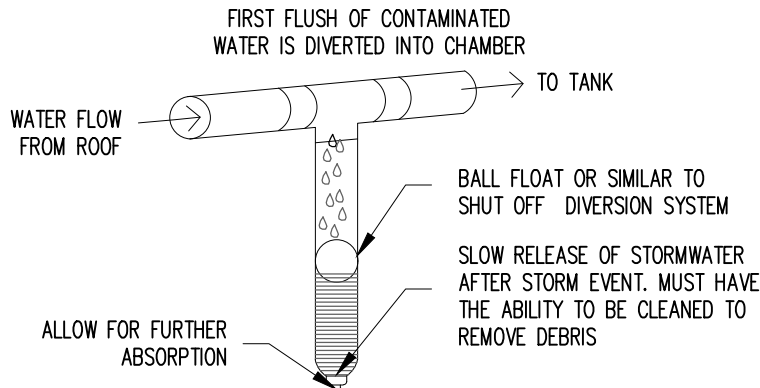
- D1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH CURRENT EDITIONS OF AS2870, AS/NZS 2032 INTALL OF PVC PIPES AND AS/NZS 3500 PLUMBING & DRAINAGE.
- D2. PLUMBING TRENCHES SHALL BE SLOPED AWAY FROM THE HOUSE AND SHALL BE BACKFILLED WITH CLAY IN THE OP 300mm WITHIN 1.5m OF THE HOUSE. THE CLAY USED FOR BACKFILLING SHALL BE COMPACTED. WHERE PIPES PASS UNDER THE FOOTING SYSTEM, THE TRENCH SHALL BE BACKFILLED WITH CLAY OR CONCRETE TO RESTRICT THE INGRESS OF WATER BENEATH THE FOOTING SYSTEM.
- D3. DRAINAGE SHALL BE CONSTRUCTED TO AVOID WATER PONDING AGAINST OR NEAR THE FOOTING.
- D4. ECATION NEAR THE EDGE OF THE FOOTING SYSTEM SHALL BE BACKFILLED IN SUCH A WAY AS TO PREVENT ACCESS OF WATER TO THE FOUNDATION.
- D5. WATER RUN-OFF SHALL BE COLLECTED AND CHANNELLED AWAY FROM THE HOUSE DURING CONSTRUCTION.
- D6. PENETRATIONS OF THE EDGE BEAMS AND FOOTING BEAMS ARE TO BE AVOIDED, BUT WHERE NECESSARY SHALL BE SLEEVED TO ALLOW FOR MOVEMENT.
- D7. CONNECTION OF STORMWATER DRAINS AND WASTE DRAINS SHALL BE INCLUDED FLEXIBLE CONNECTIONS.



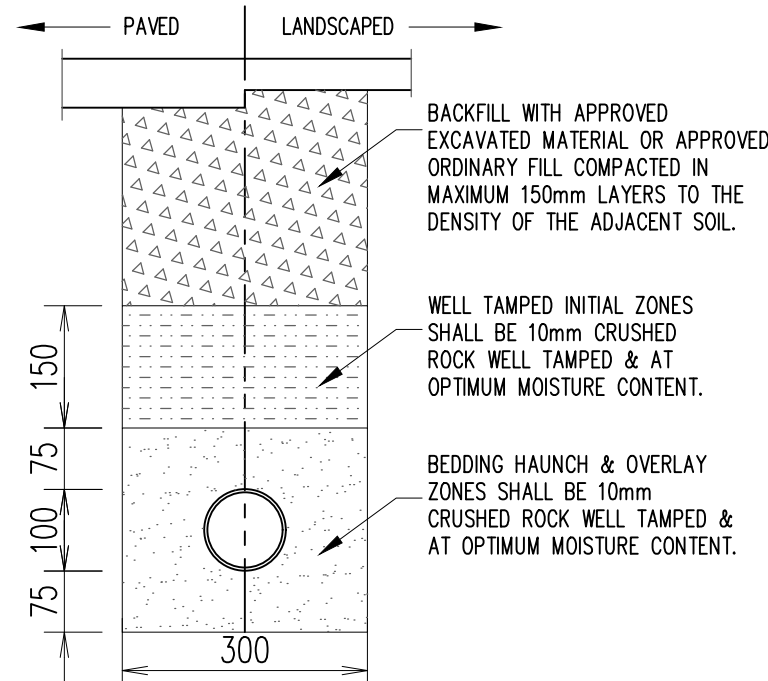
RAINWATER OUTLET WITH BOX GUTTER  
TO BE USED IF REQUIRED



TYPICAL GRATED PIT  
TO BE USED IF REQUIRED



FIRST FLUSH WATER DIVERTER DETAIL



TYPICAL PIPE LAYING DETAILS

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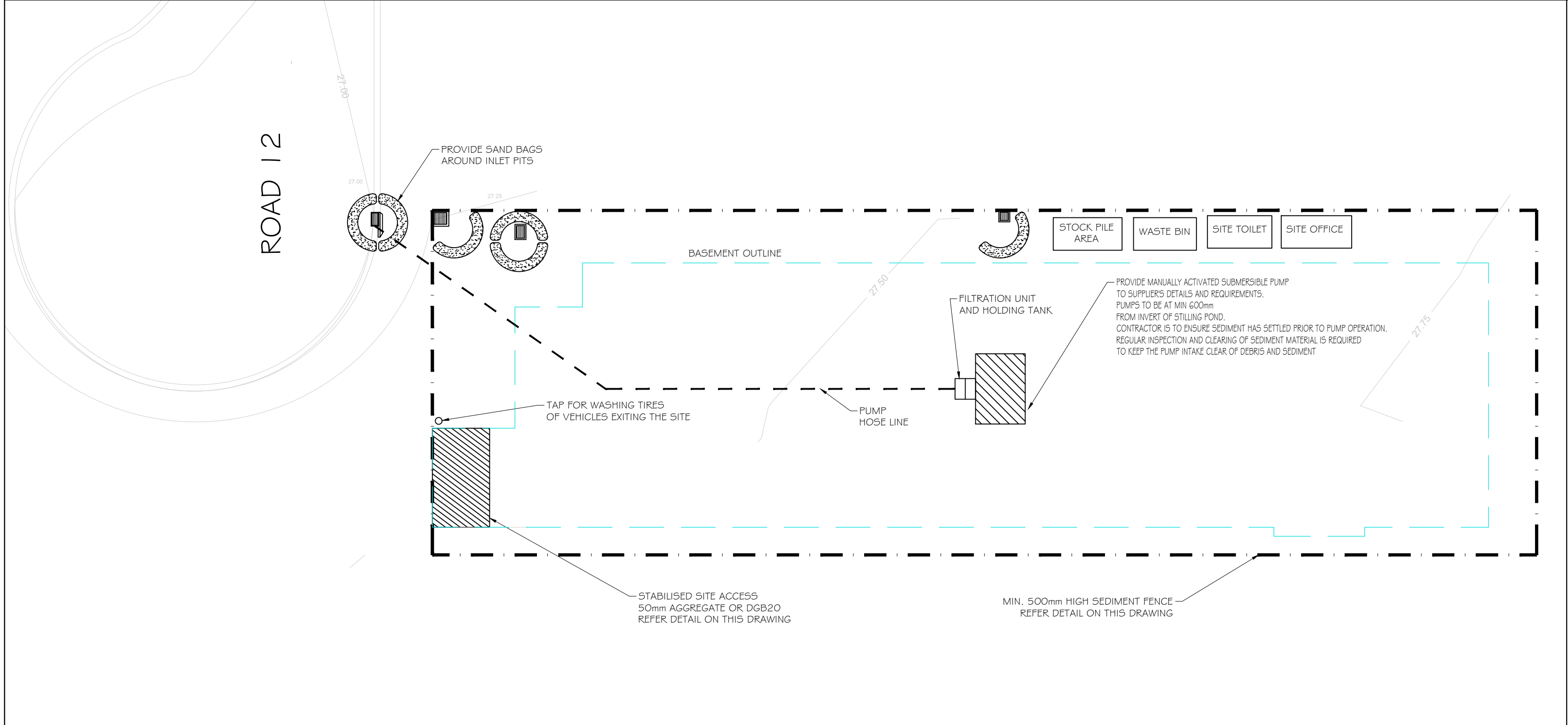


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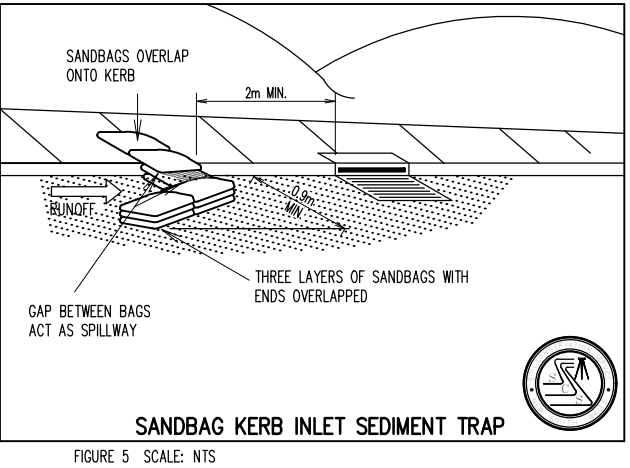
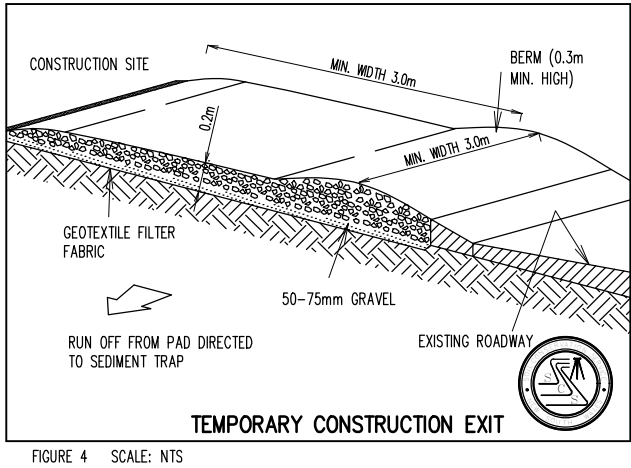
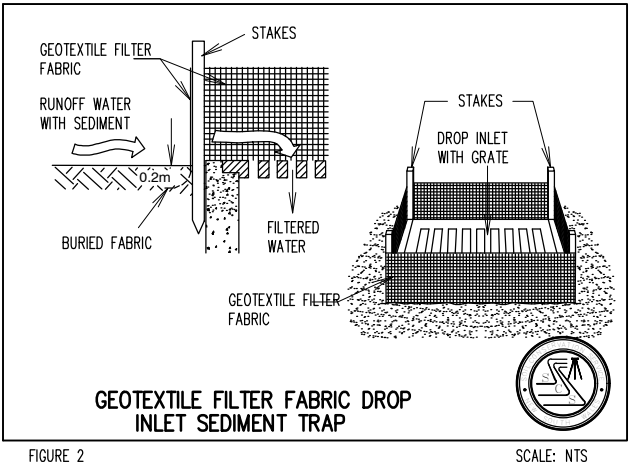
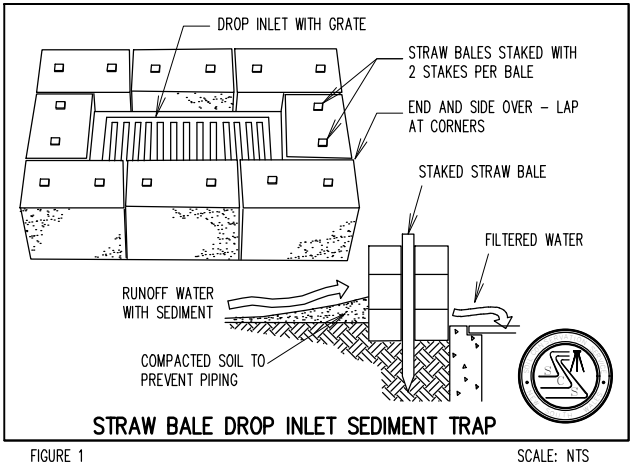
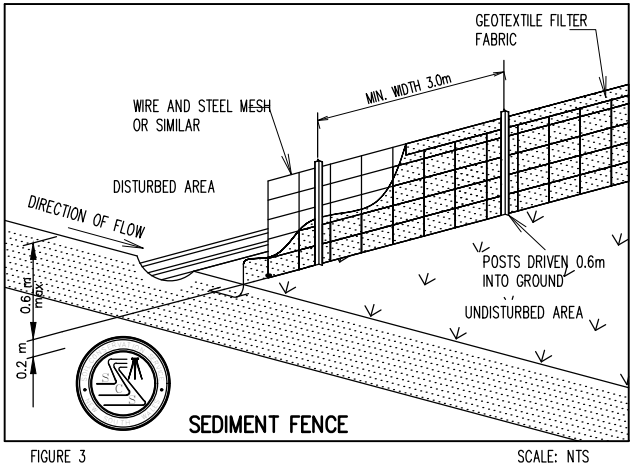
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PROPOSED DEVELOPMENT		STORMWATER MANAGEMENT - SECTIONS AND DETAILS			
LOT 4001-No. 14 CHAPMAN STREET WERRINGTON, NSW		SCALE: N.T.S.			
ARCHITECT / BUILDER <b>ARCHIDROME</b>		DESIGN BY: R.H.	DRAWN BY: I.R.	CHECK BY: R.H.	DRAWING No. <b>4 OF 5</b>
		JOB NUMBER: <b>211108ARC</b>			ISSUE: <b>A</b>





- EROSION AND SEDIMENT CONTROL NOTES**
- THESE NOTES ARE TO BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL DETAILS IN THIS DRAWING SET.
  - THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY AND TO THE SATISFACTION OF THE RELEVANT LOCAL AUTHORITY PRIOR TO THE COMMENCEMENT OF AND DURING CONSTRUCTION. NO DISTURBANCE TO THE SITE SHALL BE PERMITTED OTHER THAN IN THE IMMEDIATE AREA OF THE WORKS AND NO MATERIAL SHALL BE REMOVED FROM THE SITE WITHOUT THE RELEVANT LOCAL AUTHORITY APPROVAL. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STANDARDS OUTLINED IN NSW DEPARTMENT OF HOUSING'S "MANAGING URBAN STORMWATER – SOILS AND CONSTRUCTIONS".
  - PLACE STRAW BALES LENGTH WISE IN A ROW AS PARALLEL AS POSSIBLE TO THE SITE CONTOURS, UNO. BALE ENDS TO BE TIGHTLY BUTTED. BALES ARE TO BE PLACED SO THAT STRAWS ARE PARALLEL TO THE ROW. BALES ARE TO BE PLACED 1.5M TO 2M DOWNSLOPE FROM THE TOE OF THE DISTURBED BATTER, UNO.
  - COUNCIL APPROVED FILTER FABRIC TO BE ENTRENCHED 150MM DEEP UPSLOPE TOWARDS DISTURBED SURFACE. FABRIC TO BE A MINIMUM SF2000 OR BETTER. FIX FABRIC TO POSTS WITH WIRE TIES OR AS RECOMMENDED WITH MANUFACTURER'S SPECIFICATIONS. FABRIC JOINTS TO HAVE A MINIMUM OF 150MM OVERLAP. WIRE TO BE STRUNG BETWEEN POSTS WITH FILTER FABRIC OVERLAP TO PREVENT SAGGING.
  - STABILISED ENTRY/EXIT POINTS TO REMAIN INTACT UNTIL FINISHED DRIVEWAY IS COMPLETE. CONSTRUCTION OF ENTRY/EXIT POINTS TO BE MAINTAINED AND REPAIRED AS REQUIRED SO THAT IT'S FUNCTION IS NOT COMPROMISED. CONSTRUCTION OF ENTRY/EXIT POINT TO BE IN ACCORDANCE WITH THE DETAIL CONTAINED WITHIN THIS DRAWING SET.
  - ALL DRAINAGE PIPE INLETS TO BE CAPPED UNTIL: DOWNPIPES CONNECTED & PITS CONSTRUCTED AND PROTECTED WITH SILT BARRIER
  - PROVIDE AND MAINTAIN SILT TRAPS AROUND ALL SURFACE INLET PITS UNTIL CATCHMENT IS REVEGETATED OR PAVED.
  - THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVE ACCUMULATED SILT FROM SUCH DEVICES SUCH THAT MORE THAN 60% OF THEIR CAPACITY IS LOST. ALL THE SILT IS TO BE PLACED OUTSIDE THE LIMIT OF WORKS. THE PERIOD FOR MAINTAINING THESE DEVICES SHALL BE AT LEAST UNTIL ALL DISTURBED AREAS ARE REVEGETATED AND FURTHER AS MAY BE DIRECTED BY THE SUPERINTENDENT OR COUNCIL.
  - THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL BY REGULARLY WETTING DOWN (BUT NOT SATURATING) DISTURBED AREA.
  - LAY 300 WIDE MINIMUM TURF STRIP ON 100 TOPSOIL BEHIND ALL KERB AND GUTTER WITH 1000 LONG RETURNS EVERY 6000 AND AROUND STRUCTURES IMMEDIATELY AFTER BACKFILLING AS PER THE RELEVANT LOCAL AUTHORITY SPECIFICATION.
  - THE CONTRACTOR SHALL GRASS SEED ALL DISTURBED AREAS WITH AN APPROVED MIX AS SOON AS PRACTICABLE AFTER COMPLETION OF EARTHWORKS AND REGRADING.
  - REVEGETATE ALL TRENCHES IMMEDIATELY UPON COMPLETION OF BACKFILLING.
  - PROVIDE AND MAINTAIN SILT TRAPS AROUND ALL SURFACE INLET PITS UNTIL CATCHMENT IS REVEGETATED OR PAVED. TOPSOIL SHALL BE STRIPPED AND STOCKPILED OUTSIDE HAZARD AREAS SUCH AS DRAINAGE LINES. THIS TOPSOIL SHALL BE RESPREAD LATER ON AREAS TO BE REVEGETATED AND STABILISED ONLY, (I.E. ALL FOOTPATHS, BATTERS, SITE REGARDING AREAS, BASINS AND CATCHDRAINS). TOPSOIL SHALL NOT BE RESPREAD ON ANY OTHER AREAS UNLESS SPECIFICALLY INSTRUCTED BY THE SUPERINTENDENT. IF THEY ARE TO REMAIN FOR LONGER THAN ONE MONTH STOCKPILES SHALL BE PROTECTED FROM EROSION BY COVERING THEM WITH A MULCH AND HYDROSEEDING AND, IF NECESSARY, BY LOCATING BANKS OR DRAINS DOWNSTREAM OF A STOCKPILE TO RETARD SILT LADEN RUNOFF. WHEN ANY DEVICES ARE TO BE HANDED OVER TO COUNCIL THEY SHALL BE IN CLEAN AND STABLE CONDITION.



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<b>PROPOSED DEVELOPMENT</b> LOT 4001-No. 14 CHAPMAN STREET WERRINGTON, NSW	
ARCHITECT / BUILDER <b>ARCHIDROME</b>	

<b>SW MANAGEMENT – EROSION AND SEDIMENT CONTROL PLAN</b>			
SCALE: 1:250 U.N.O.			
DESIGN BY: R.H.	DRAWN BY: I.R.	CHECK BY: R.H.	DRAWING No. <b>5 OF 5</b>
JOB NUMBER: <b>211108ARC</b>			ISSUE: <b>A</b>