

PROPOSED TWO STOREY DWELLING

GENERAL NOTES

- G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER RELEVANT CONSULTANTS DRAWINGS, SPECIFICATIONS AND OTHER WRITTEN INSTRUCTION THAT MAY BE ISSUED.
- G2 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THESE DRAWINGS. CONTRACTOR IS TO CONFIRM ALL SETOUT, RL'S AND DIMENSIONS WITH THE CONTRACT ARCHITECTURAL PLANS PRIOR TO COMMENCING ON SITE.
- G3 ANY DISCREPANCY TO THAT SHOWN ON THESE DRAWINGS SHALL BE REFERRED TO THE ENGINEER FOR RESOLUTION PRIOR TO COMMENCEMENT OF WORK.
- G4 ALL MATERIALS AND WORKMANSHIP TO BE IN ACCORDANCE WITH AS3500.3 - STORMWATER DRAINAGE, BCA AND THE LOCAL COUNCIL POLICY/CONSENT/REQUIREMENTS.
- G5 ALL SURVEY INFORMATION AND PROPOSED BUILDING AND FINISHED SURFACE LEVELS SHOWN IN THESE DRAWINGS ARE BASED ON LEVELS OBTAINED FROM DRAWINGS BY OTHERS. MAYCO ENGINEERING IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY 3RD PARTY INFORMATION PROVIDED ON THESE DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETERS U.N.O.
- G7 ALL LEVELS ARE METERS TO AUSTRALIAN HEIGHT DATUM (A.H.D)
- G8 THE CONTRACTOR SHOULD LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING WORK AND PROTECT 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.
- G9 IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN ANY REQUIRED TREE REMOVAL PERMITS FROM THE RELEVANT LOCAL COUNCIL PRIOR TO THE COMMENCEMENT OF WORKS.
- G10 NO WORK IS PERMITTED WITHIN ADJOINING PROPERTIES WITHOUT THE WRITTEN PERMISSION OF THE OWNER OR RELEVANT AUTHORITY.
- G11 ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
- G12 THESE DRAWINGS ARE NOT TO BE USED AS CERTIFICATION OF COMPLIANCE WITH ANY CODE OR DOCUMENT WITHOUT A SEPARATE DESIGN CERTIFICATE BEING ISSUED WHICH REFERENCES THESE DRAWINGS.
- G13 THESE DRAWINGS ARE THE PROPERTY OF MAYCO ENGINEERING AND SHALL NOT BE USED, REPRODUCED OR COPIED, WHOLLY OR IN PART, IN ANY FORM WITHOUT THE PRIOR WRITTEN CONSENT OF MAYCO ENGINEERING.

RAINWATER RE-USE

- R1 ONLY ROOF RUN-OFF IS TO BE DIRECTED TO THE RAINWATER TANK. SURFACE WATER INLETS ARE NOT TO BE CONNECTED.
- R2 A 'FIRST FLUSH' DIVERSION DEVICE MUST BE PROVIDED TO REMOVE ROOF CONTAMINANTS.
- R3 PROVIDE ADEQUATE SCREENING TO ALL INLETS AND OUTLETS TO THE RAINWATER TANK TO PREVENT MOSQUITO AND VERMIN ENTRY.
- R4 RAINWATER TANK, CONTRIBUTING ROOF AREA AND PLUMBING FOR REUSE TO COMPLY WITH BASIX REQUIREMENTS (BY OTHERS)
- R5 PIPE MATERIALS FOR RAINWATER SUPPLY PLUMBING ARE TO BE APPROVED MATERIALS TO AS3500 PART 1 SECTION 2 AND TO BE CLEARLY AND PERMANENTLY IDENTIFIED AS 'RAINWATER'. THIS MAY BE ACHIEVED FOR BELOW GROUND PIPES USING IDENTIFICATION TAPE (MADE IN ACCORDANCE WITH AS2648) OR FOR ABOVE GROUND PIPES BY USING ADHESIVE PIPE MARKERS (MADE IN ACCORDANCE WITH AS1345)
- R6 EVERY RAINWATER SUPPLY OUTLET POINT AND THE RAINWATER TANK ARE TO BE LABELED 'RAINWATER' ON A METALLIC SIGN IN ACCORDANCE WITH AS1316.9
- R7 STORMWATER CONNECTION TO RAINWATER TANK TO THE SATISFACTION OF THE REGULATORY AUTHORITY. THIS WAY REQUIRES THE PROVISION OF:
- PERMANENT AIR GAP
 - BACKFLOW PREVENTION DEVICE
- R8 NO DIRECT CONNECTION BETWEEN TOWN WATER SUPPLY AND THE RAINWATER SUPPLY.
- R9 AN APPROVED STOP VALVE AND/OR PRESSURE LIMITING VALVE AT THE RAINWATER TANK.
- R10 PROVIDE AT LEAST ONE EXTERNAL HOSE COCK ON THE TOWN WATER SUPPLY FOR FIRE FIGHTING
- R11 PROVIDE APPROPRIATE FLOAT VALVES AND/OR SOLENOID VALVES TO CONTROL TOWN WATER SUPPLY INLET TO TANK IN ORDER TO ACHIEVE THE TOP-UP WHEN THE TANK IS 80% EMPTY.

STORMWATER DRAINAGE

- S1 ALL DOWN PIPES TO HAVE LEAF GUARDS.
- S2 PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC
- S3 PIPES OF 300MM DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO.
- S4 ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O.
- S5 PIPES UP TO 150mm DIA. SHALL BE LAID AT MIN. 1% GRADE U.N.O.
- S6 PIPES 225mm DIA. AND OVER SHALL BE LAID AT MIN. 0.5% GRADE U.N.O.
- S7 ALL BASES OF PITS TO BE BENCHED TO OUTLET PIPE. PITS SHALL BE DETAILED WITH METAL GRATES AT LEVELS INDICATED. ALL PITS DEEPER THAN 1200mm TO HAVE STEP IRONS.
- S8 INSTALL TEMPORARY SEDIMENT BARRIERS TO INLET PITS, TO COUNCILS STANDARDS UNTILL SURROUNDING AREAS ARE PAVED OR GRASSED.
- S9 PITS, DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER.
- S10 ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
- S11 HAND EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS.
- S12 ALL DRAINAGE WORKS ARE TO AVOID TREE ROOTS. ROOT BARRIER TO BE INSTALLED ADJACENT TO TREE ZONES WHERE DRAINAGE MAY BE AT RISK.
- S13 FOOTPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FINAL COUNCILS ISSUED LEVELS.
- S14 ALL SUBSOIL DRAINAGE IS TO COMPRISE OF MIN. 100MM DIA. AG. PIPE IN FILTER SOCK. PROVIDE FLUSHING EYES AT HIGH POINTS OR TO COUNCILS REQUIREMENTS. SUBSOIL DRAINAGE SHALL BE DESIGNED AND DETAILED BY THE STRUCTURAL ENGINEER.
- S15 CONTRACTOR IS TO CONFIRM ALL DRAINAGE OUTLET LEVELS ON SITE, PRIOR TO CONSTRUCTION. ANY DISCREPANCY SHALL BE REFERRED TO THE DESIGN ENGINEER.
- S16 PITS UP TO 600 DEEP THE BE 450 x 450 U.N.O., PITS UPTO 900 DEEP TO BE 600 x 600 U.N.O., PITS UP TO 1200 DEEP TO BE 900 x 600 U.N.O., PITS EXCEEDING 1200 IN DEPTH TO BE 900 x 900
- S17 PIPES TO BE V.C. CLASS 'X' OR U.P.V.C CLASS STORMWATER PIPE TO AS1257, 1260, 1273, 1477, 2179.2 AND WHERE EXPOSED TO DIRECT SUNLIGHT TO HAVE ADEQUATE PROTECTION TO U.V. RADIATION IN ACCORDANCE WITH AS2032. SEWER GRADE/GALV. PIPES AND KERB ADAPTORS TO BE USED WHERE COUNCIL POLICY OR CONSENT REQUIRE AS SUCH.
- S18 PROVIDE OVERFLOW SPITTERS TO ALL COVERED BALCONIES/TERRACES. NOT TO BE DIRECTED ON TO ROOF SURFACES.
- S19 BUILDER TO ENSURE ALL DRAINAGE AREAS INCLUDING EXPOSED BALCONIES TO HAVE OVERFLOW MECHANISM IN PLACE IN THE EVENT OF BLOCKAGE WITH ADEQUATE OVERFLOW SECTION THROUGH PLANTERS, PARAPETS ETC.
- S20 ALL RETAINING WALLS SHALL BE CONSTRUCTED COMPLETELY WITHIN THE PROPERTY BOUNDARY LIMITS TO DETAILS PREPARED BY THE STRUCTURAL ENGINEER.
- S21 RISING MAINS (PRESSURE PIPE) TO BE IN ACCORDANCE WITH AS3500.3.2:2.7 AND AS3500.3.2
- S22 NO SEWER VENTS, GULLY PITS OR SIMILAR TO BE LOCATED BELOW THE MAXIMUM WATER SURFACE LEVEL IN DETENTION BASINS. ALL BASIN WALLS TO BE WATERTIGHT AND DESIGNED BY A STRUCTURAL ENGINEER.
- S23 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.
- S24 ALL EXTERIOR FINISHED GROUND LEVELS TO BE SLOPING AWAY FROM PERIMETER WALLS IN ALL CASES.
- S25 CONFINED SPACE SIGNAGE TO BE INSTALLED IN ACCESSIBLE UNDERGROUND TANKS TO WORK COVER SPECIFICATIONS. ALL PITS EXCEEDING 600mm DEPTH TO HAVE 'J' BOLTS INSTALLED TO GRATES.
- S26 MAINTENANCE DEVICES REQUIRED BY AUTHORITIES ARE NOT TO BE ASSUMED SHOWN ON DRAWINGS.
- S27 ALL PITS IN ROADWAYS ARE TO BE FITTED HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINUOUS HINGE. PITS TO BE PRECAST CONCRETE OR CEMENT RENDERED BRICK WITH HEAVY DUTY GRATES. LIGHT DUTY PITS AND GRATES MAY BE USED ONLY IN LIGHT/FOOT TRAFFICABLE AREAS.
- S28 ALL PITS WITHIN THE PROPERTY ARE TO BE FITTED WITH 'WEDLOK' OR APPROVED EQUIVALENT GRATES
- LIGHT DUTY FOR LANDSCAPED AREAS
 - HEAVY DUTY WHERE SUBJECTED TO VEHICULAR TRAFFIC

EROSION AND SEDIMENT NOTES

- E1 THESE PLANS SHALL BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL DETAILS AS ATTACHED.
- E2 EROSION AND SEDIMENT CONTROLS TO BE INSTALLED IN ACCORDANCE WITH COUNCILS SPECIFICATION AND THE NSW DEPARTMENT OF HOUSING "BLUE BOOK" - SOILS AND CONSTRUCTION - MANAGING URBAN STORMWATER, 2004. REFER TO THE BLUE BOOK FOR STANDARD DRAWINGS "SD"
- E3 SEDIMENT AND EROSION CONTROLS MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OR DEMOLITION ACTIVITY. THE LOCATION OF SUCH DEVICES IS INDICATIVE ONLY AND FINAL POSITION SHOULD BE DETERMINED ON SITE.
- E4 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM. SUPERVISING ENGINEER SHOULD BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE.
- E5 RETAIN ALL EXISTING GRASS COVER WHEREVER POSSIBLE. TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED TO BE STRIPPED AND STOCKPILED AT THE NOMINATED SITE. A SEDIMENT FENCE TO BE PLACED DOWNSTREAM OF THE STOCKPILE.
- E6 AREAS OF SITE REGRADING ARE TO BE COMPLETED PROGRESSIVELY DURING THE WORKS AND STABILISED AS EARLY AS POSSIBLE. THE SUPERVISING ENGINEER MAY DIRECT THE CONTRACTOR TO HAVE AREAS OF DISTURBANCE COMPLETED AND STABILISED DURING THE COURSE OF THE WORKS.
- E7 ALL DISTURBED AREAS ARE TO BE TURFED AT COMPLETION OF CONSTRUCTION.
- E8 ALL DRAINAGE PIPE INLETS TO BE CAPPED UNTIL:
- DOWNPIPES ARE CONNECTED
 - PITS CONSTRUCTED AND PROTECTED WITH SILT BARRIER
- E9 ALL EXISTING TREES TO BE RETAINED UNLESS SHOWN OTHERWISE ON APPROVED DRAWINGS. TREES RETAINED ARE TO BE PROTECTED WITH A HIGH VISIBILITY FENCE, PLUS FLAGGING TO INDIVIDUAL TREES AS NECESSARY.
- E10 INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER, UNTIL SURROUNDING AREAS ARE PAVED OR REGRASSED. GRAVEL OR GEOTEXTILE INLET FILTERS TO SD6-11 AND SD6-12.
- E11 ALL SILT FENCES AND BARRIERS ARE TO BE MAINTAINED IN GOOD ORDER AND REGULARLY DESILTED DURING THE CONSTRUCTION PERIOD. SILT FENCES TO SD6-8 OR SD6-9.
- E12 STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL, GRAVEL AND TOPSOIL MUST BE COVERED WITH GEOTEXTILE SILT FENCE MATERIAL. PLASTIC SHEETING OR MEMBRANE MUST NOT BE USED. SAFETY BARRICADING SHOULD BE USED TO ISOLATE STOCKPILES OF SOLID MATERIALS SUCH AS STEEL REINFORCING, FORMWORK AND SCAFFOLDING.
- E13 WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SKIP-BINS LOCATED ON SITE AS SHOWN ON PLAN.
- E14 NO MORE THAN 150mm OF TRENCHING TO BE OPEN AT ANY ONE TIME. IMMEDIATELY AFTER TRENCH BACKFILLING, PROVIDE SANDBAGS OR SAUSAGE FILTERS ACROSS EACH TRENCH AT MAXIMUM 20m SPACING. FILTERS TO REMAIN IN PLACE UNTIL REVEGETATION HAS OCCURRED.
- E15 THE HEAD CONTRACTOR IS TO INFORM ALL SITE STAFF AND SUB-CONTRACTORS OF THEIR OBLIGATIONS UNDER THE EROSION AND SEDIMENT CONTROL PLAN.
- E16 ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY, INCLUDING FOOTPATH RESERVE AND ROAD SURFACE, IS TO BE REMOVED IMMEDIATELY.
- E17 PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOTPATH AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.
- E18 TRUCKS REMOVING EXCAVATED/DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PATHS. MATERIAL TO BE TAKEN TO THE TRUCK TO REDUCE TRUCK MOVEMENT ON SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT HEAVY RIGID VEHICLES. (NO SEMITRAILERS)
- E19 ANY EXCAVATION WORK ADJACENT TO ADJOINING PROPERTIES OR THE PUBLIC ROADWAY IS NOT TO BE COMMENCED UNTIL THE STRUCTURAL ENGINEER IS CONSULTED AND SPECIFIC INSTRUCTION RECEIVED FROM THE ENGINEER.

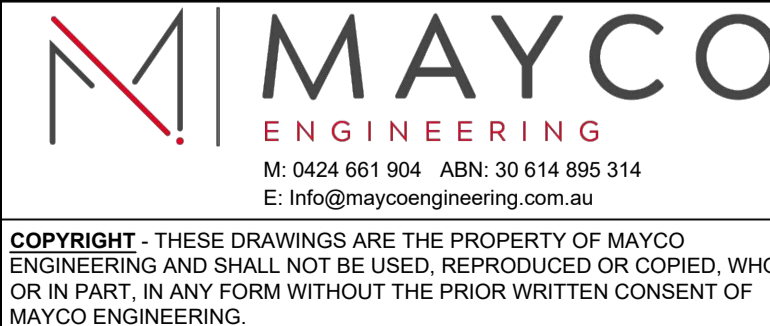
- E20 TOILET FACILITIES MUST BE EITHER A FLUSHING TYPE OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE TO BE MAINTAINED AND SERVICED ON A REGULAR BASIS SO THAT OFFENSIVE ODOUR IS NOT EMITTED.
- E21 DURING TRENCH EXCAVATION ALL SPOIL SHALL BE MOUNDED ON THE UPHILL SIDE OF TRENCHES AND PLACEMENT IS TO COMPLY WITH THE SUPERINTENDENTS REQUIREMENT.
- E22 DIVERSION BANKS SHOULD BE CONSTRUCTED BY MOUNDING STRIPPEDTOPSOIL (MIN. HEIGHT 600mm) WHERE DIRECTED. MATERIAL TO BE RESPREAD ON FOOTWAYS AFTER FINAL TRIMMING.
- E23 TRAFFIC MANAGEMENT MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION IN ACCORDANCE WITH 'R.T.A TRAFFIC CONTROL AT WORK SITES - CURRENT EDITIONS' AND AS1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'
- E24 PEDESTRIAN CONTROL MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION IN ACCORDANCE WITH AS1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'

LEGEND

PRESSURE PIPE (CHARGED LINE).	
GRAVITY PIPE AT MIN. 1% SLOPE U.N.O.	
AG. LINE AT MIN. 1% SLOPE.	
DOWNPIPE MIN. Ø100 U.N.O.	
DOWPIPE SPREADER MIN. Ø100 U.N.O.	
RAINWATER OUTLET.	
PLANTER DRAIN.	
VERTICAL DROP.	
RAINWATER HEAD.	
SUMP WITH SIDE OVERFLOW.	
GRATED TRENCH.	
GRATED PIT.	
KERB INLET PIT.	
INSPECTION EYE.	
FLUSH POINT.	
OVERLAND FLOW PATH.	
EXISTING RL.	∇ RL 21.90
DESIGN RL.	∇ RL 21.90



NOTE
DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THESE DRAWINGS. CONTRACTOR IS TO CONFIRM ALL SETOUT, RL'S AND DIMENSIONS WITH THE CONTRACT ARCHITECTURAL PLANS PRIOR TO COMMENCING ON SITE. ANY DISCREPANCY TO THAT SHOWN ON THESE DRAWINGS SHALL BE REFERRED TO THE ENGINEER FOR RESOLUTION PRIOR TO COMMENCEMENT OF WORK.



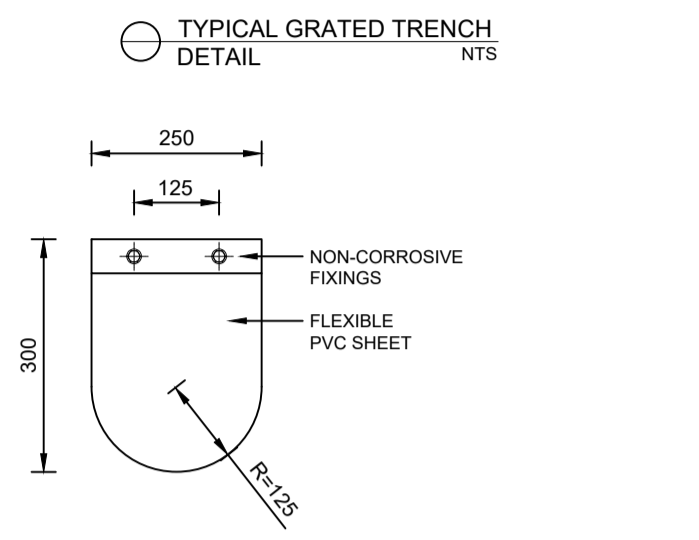
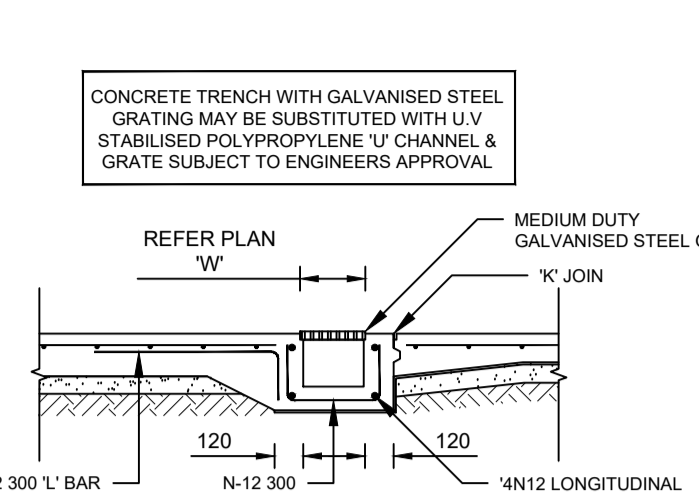
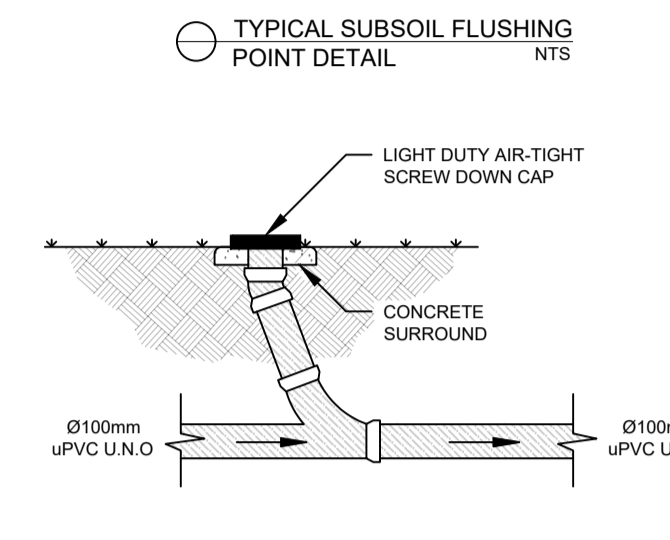
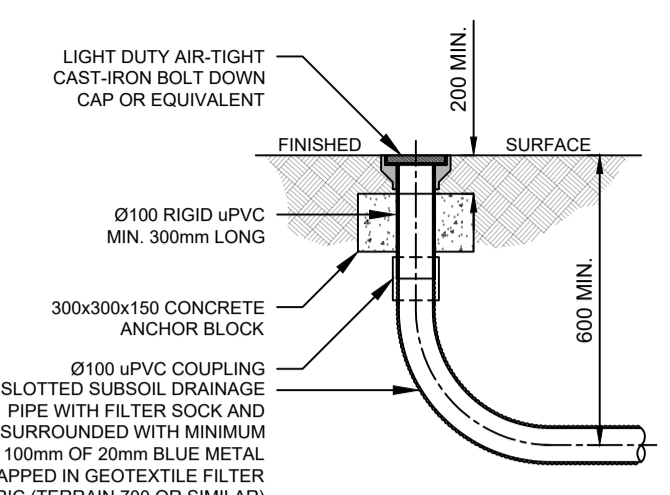
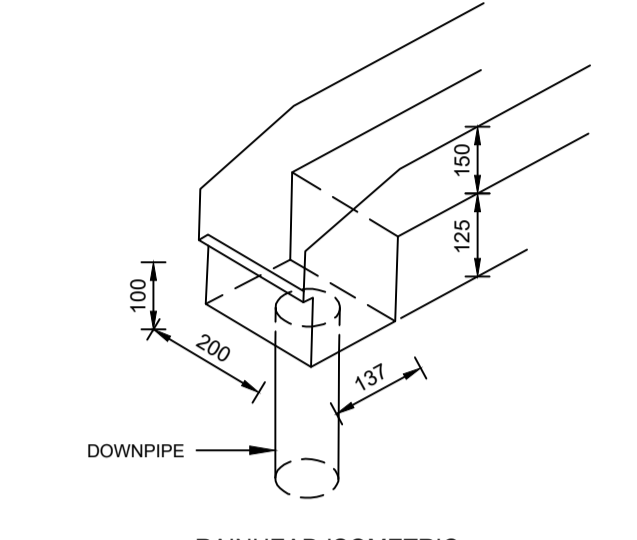
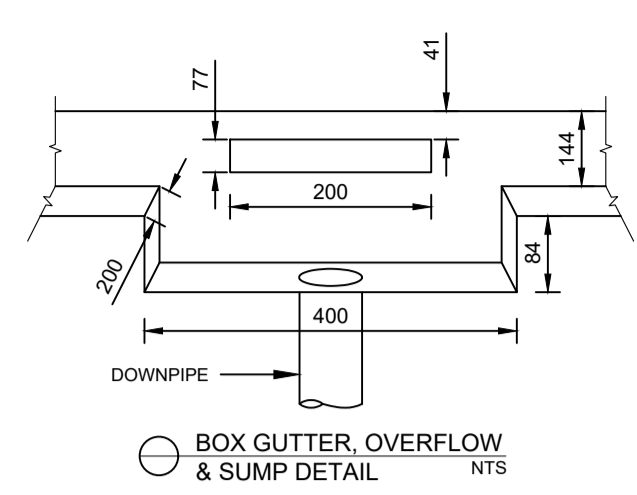
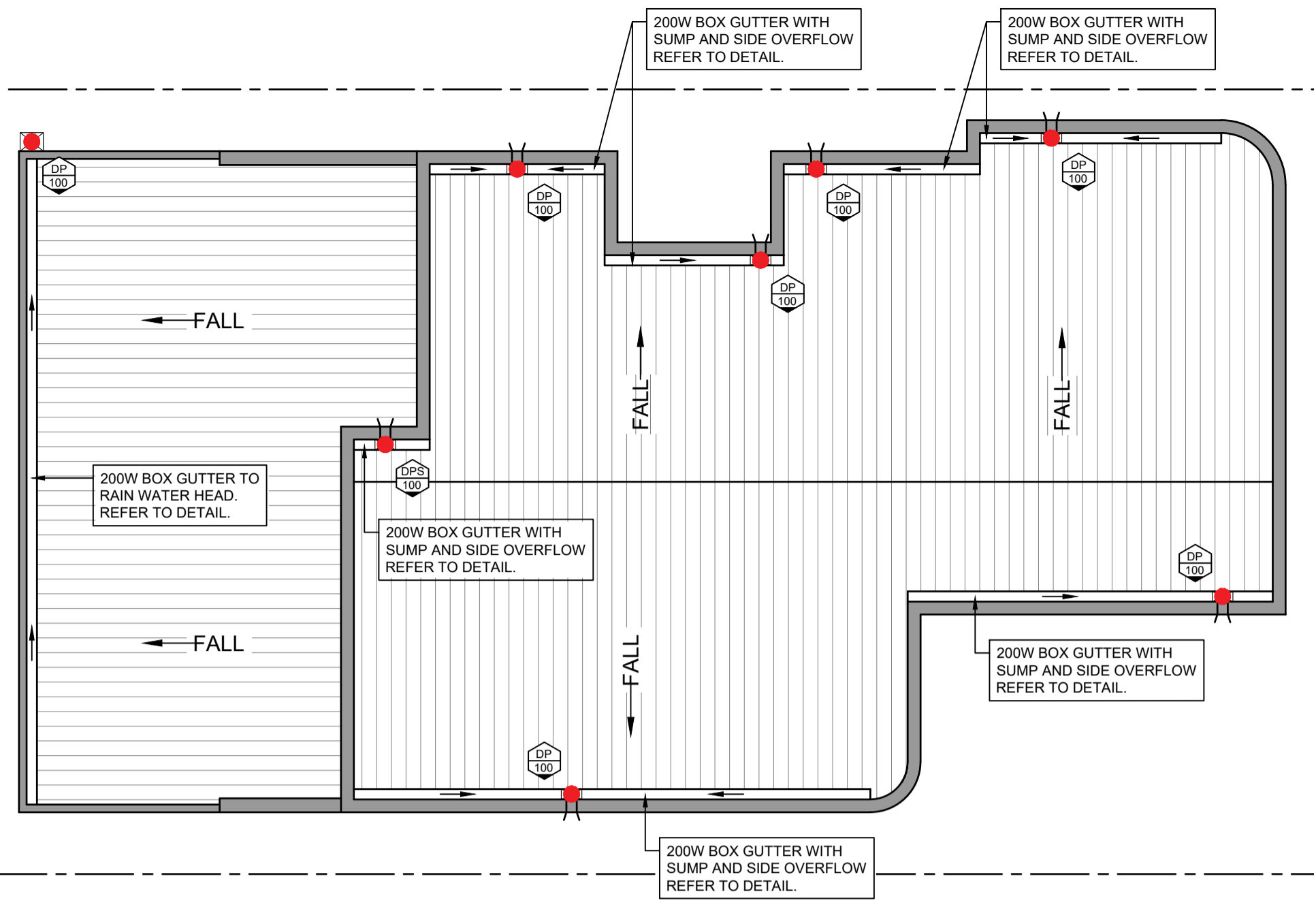
REV	DESCRIPTION	DATE

PROPOSED TWO STOREY DWELLING

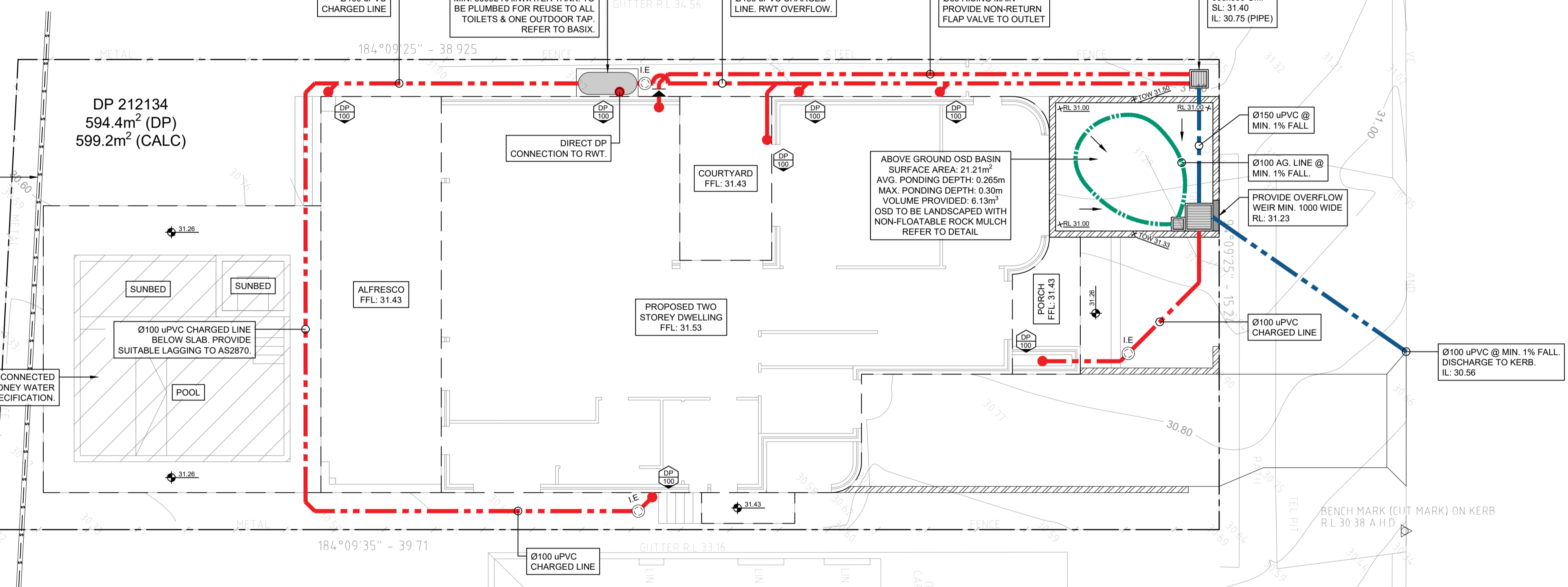
AT:

GENERAL NOTES

DESIGNED BY:	ORIGINAL SIZE:	
DRAWN BY:	SCALE:	
PROJECT No.	DRAWING No.	REVISION No.
	C000	A



ROOF DRAINAGE PLAN
1:100



GROUND FLOOR DRAINAGE PLAN
1:100

ON-SITE DETENTION CALCULATION:

DRAINS SOFTWARE USED TO RESTRICT FLOWS FROM WHOLE SITE FOR ALL STORM EVENTS UPTO AND INCLUDING THE 1% AEP STORM EVENT. TOTAL DISCHARGE MUST NOT EXCEED PRE-DEVELOPMENT FLOW RATE.

TOTAL SITE AREA = 599.2 m²

PRE-DEVELOPMENT CONDITIONS:

IMPERVIOUS AREA = 285.7m²
PERVIOUS AREA = 313.5m²

POST-DEVELOPMENT CONDITIONS:

IMPERVIOUS AREA TO OSD = 332.1m²
IMPERVIOUS AREA BYPASSING = 53.7m²
PERVIOUS AREA BYPASSING = 166.5m²

DRAINS MODELLING OUTPUT:

DURATION	PRE DEV FLOW RATE (L/S)	OSD PIPE FLOW (L/S)	BYPASS (L/S)	TOTAL FLOW (L/S)
5 YEAR ARI (20% AEP)	10	6	3	9
20 YEAR ARI (5% AEP)	16	6	4	10
100 YEAR ARI (1% AEP)	20	6	6	12

ORIFICE DIAMETER = 65mm
1% AEP TWL = 31.23m AHD
OSD VOLUME PROVIDED = 6.13m³

MINIMUM PIPE COVER (FROM FINISHED SURFACE TO TOP OF PIPE)

LOCATION	MINIMUM COVER (mm)	OTHER AUTHORIZED REDUCTIONS
1. NOT SUBJECT TO VEHICULAR LOADING - A. WITHOUT PAVEMENT - FOR SINGLE DWELLINGS - B. OTHER THAN SINGLE DWELLINGS - C. WITH PAVEMENT OF BRICK/PAVEMENT/ENFORCED CONCRETE -	0	100
2. SUBJECT TO VEHICULAR LOADING - A. WITHOUT PAVEMENT - B. WITH PAVEMENT OF - REIN. CONC. FOR HEAVY VEHICLES - BROOKHURST CONC. LIGHT VEHICLES - C. REASD - D. UNREASD -	300	450
3. SUBJECT TO CONSTRUCTION VEHICLES OR IN SUBSEQUENT CONSTRUCTION	300	500 (P)

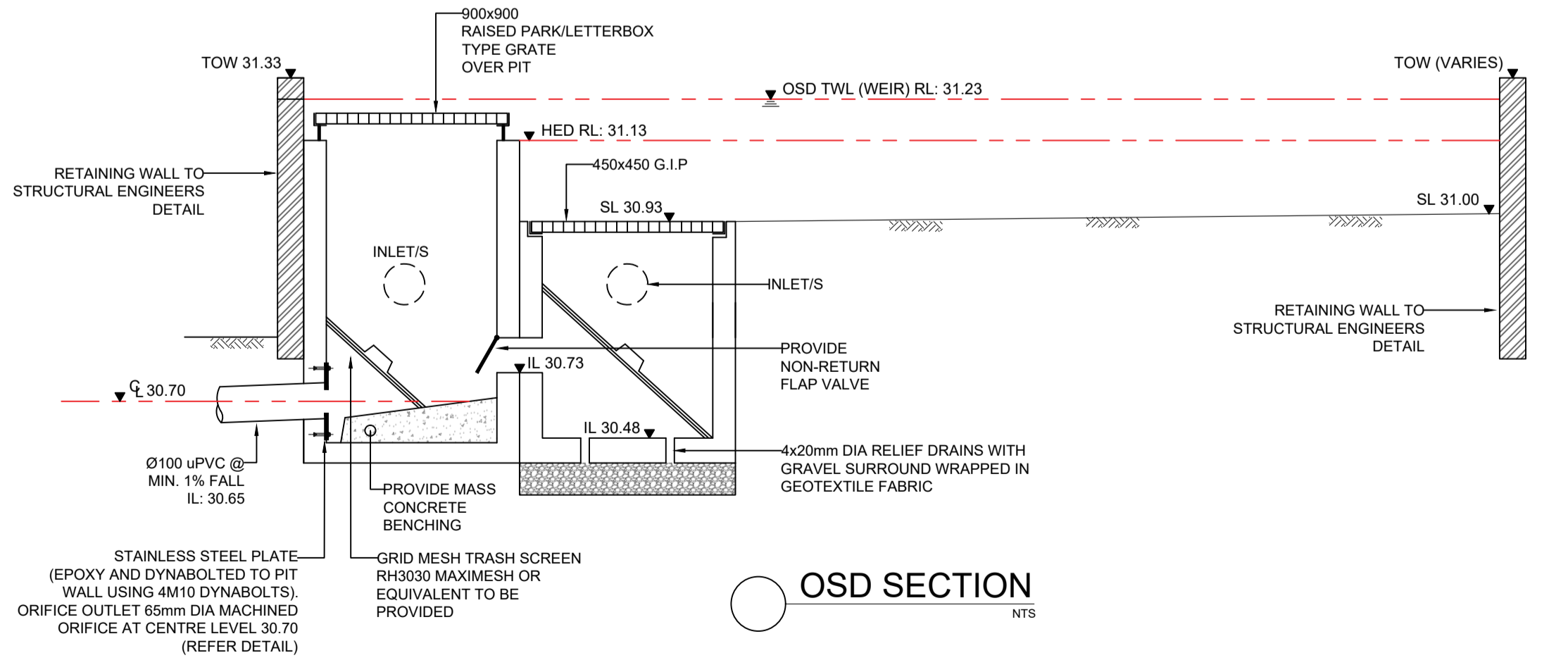
LEGEND - TRENCH BACKFILL

SYMBOL	FLEXIBLE PIPES	RIGID PIPES
[Pattern]	BACKFILL	BACKFILL
[Pattern]	PIPE OVERLAY	PIPE OVERLAY
[Pattern]	PIPE SIDE SUPPORT	PIPE SIDE SUPPORT
[Pattern]	HAUNCH ZONE	HAUNCH ZONE
[Pattern]	PIPE UNDERLAY	PIPE UNDERLAY

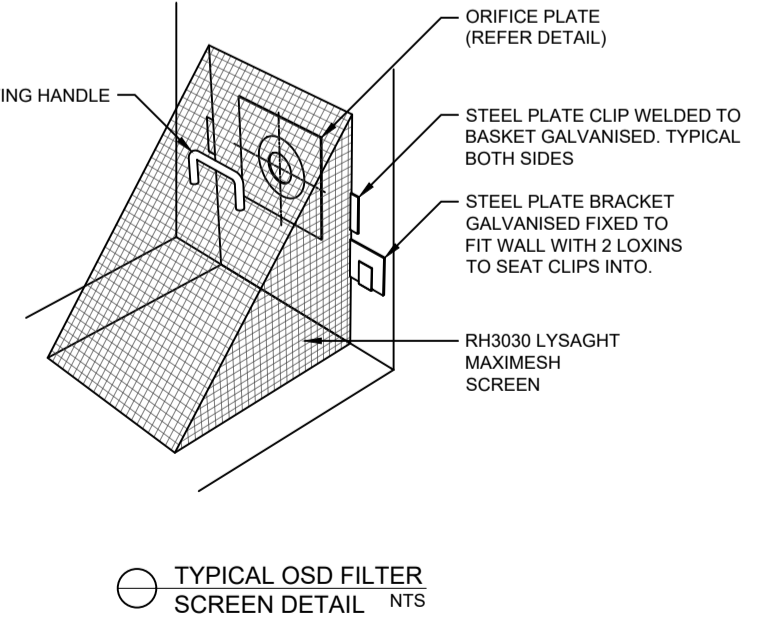
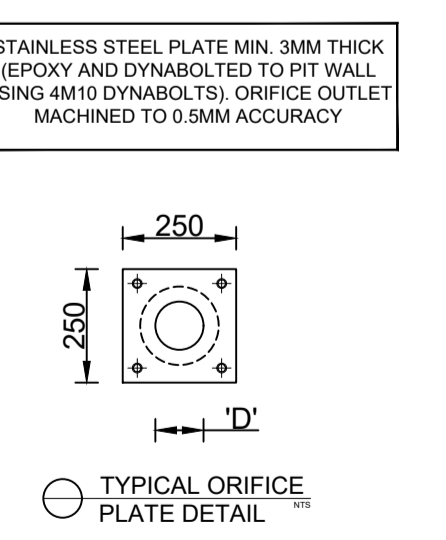
TYPICAL PIPE LAYING DETAIL

TYPICAL ABOVE-GROUND RAINWATER RE-USE TANK DETAIL

TYPICAL OSD FILTER SCREEN DETAIL



OSD SECTION
NTS



NOTE
DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THESE DRAWINGS. CONTRACTOR IS TO CONFIRM ALL SETOUT, R.L'S AND DIMENSIONS WITH THE CONTRACT ARCHITECTURAL PLANS PRIOR TO COMMENCING ON SITE. ANY DISCREPANCY TO THAT SHOWN ON THESE DRAWINGS SHALL BE REFERRED TO THE ENGINEER FOR RESOLUTION PRIOR TO COMMENCEMENT OF WORK.

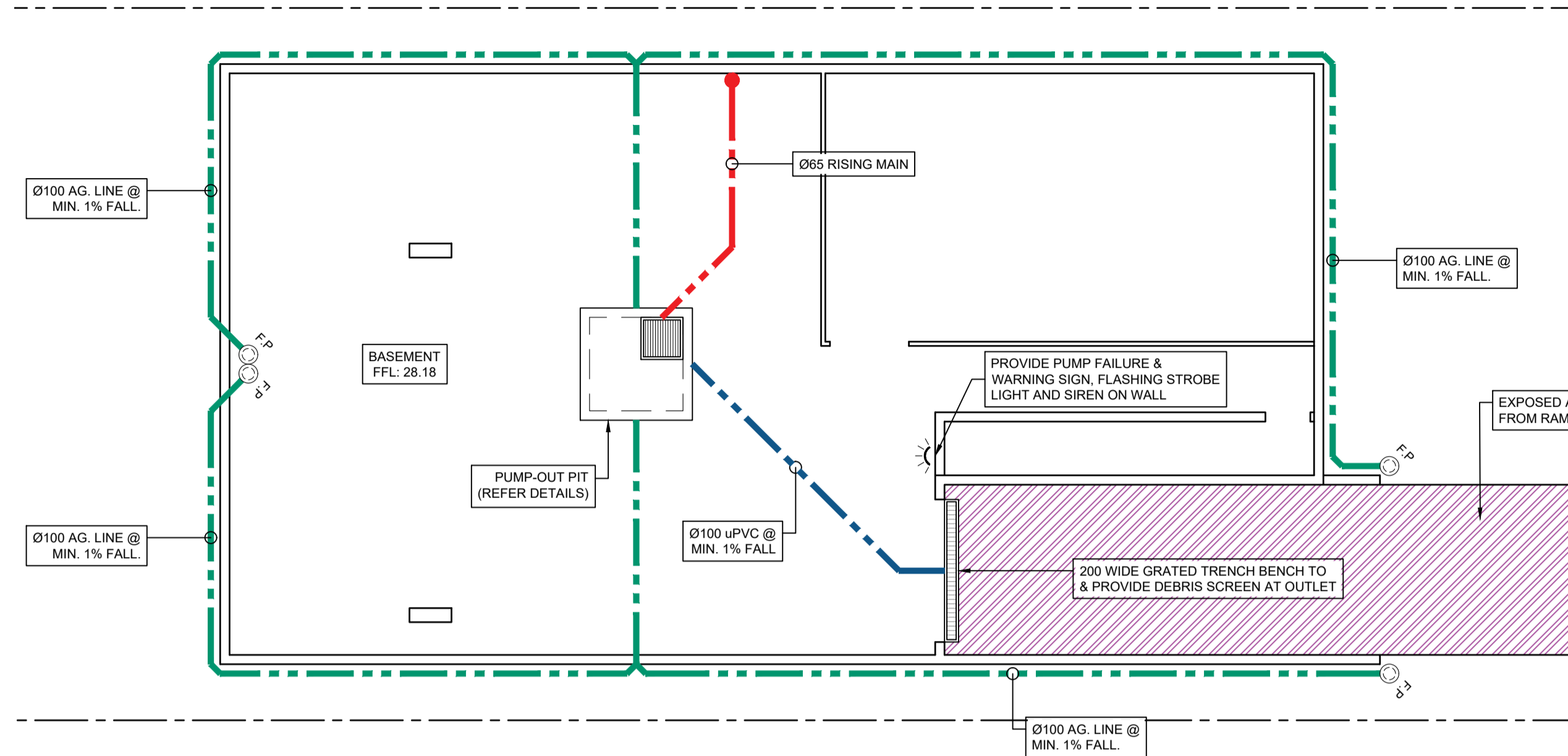
MAYCO ENGINEERING
M: 0424 661 904 ABN: 30 614 895 314
E: Info@maycoengineering.com.au

COPYRIGHT - THESE DRAWINGS ARE THE PROPERTY OF MAYCO ENGINEERING AND SHALL NOT BE USED, REPRODUCED OR COPIED, WHOLLY OR IN PART, IN ANY FORM WITHOUT THE PRIOR WRITTEN CONSENT OF MAYCO ENGINEERING.

REV	DESCRIPTION	DATE

PROPOSED TWO STOREY DWELLING
AT:
STORMWATER DRAINAGE PLAN/DETAILS

DESIGNED BY:	ORIGINAL SIZE:	
DRAWN BY:	SCALE:	
PROJECT No.	DRAWING No.	



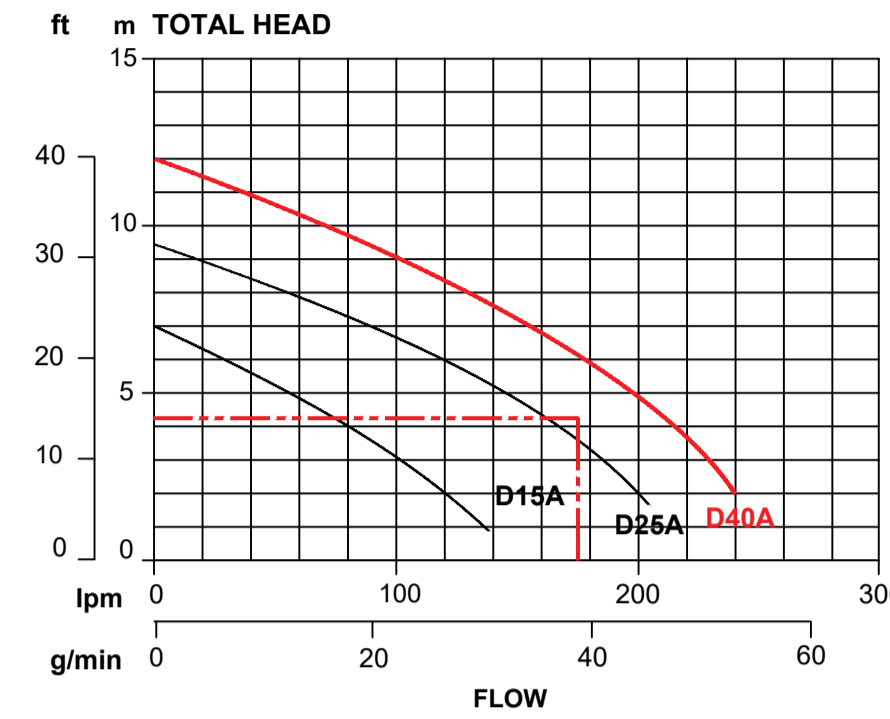
BASEMENT DRAINAGE PLAN
1:100

PUMP-OUT PIT DESIGN

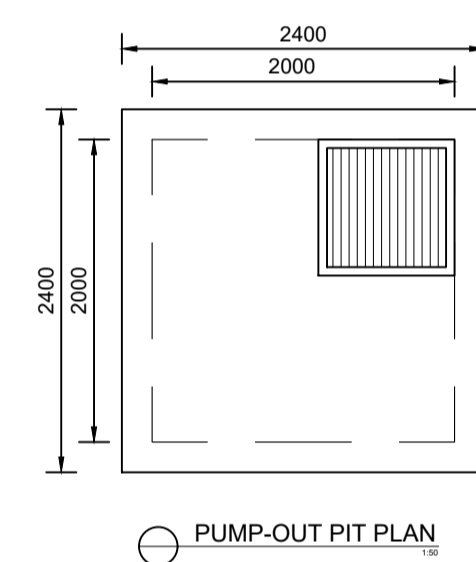
Storage Design		
Exposed Area	50	m ²
2hr. 1% AEP Rainfall Intensity	37.3	mm/hr
Rainfall Intensity	1.03611E-05	m/s
Q	0.000518056	m ³ /s
Rqd. Storage Volume	3.73	m ³

Pump Design		
5min. 1% AEP Rainfall Intensity	210	mm/hr
Rainfall Intensity	5.83333E-05	m/s
Q	175	L/m
Pump Conduit Ø	65	mm
Pump Conduit Area	0.003318	m ²
Pump Flow Velocity	0.879	m/s
Pump Head Loss	0.43	m
Elevation (Outlet)	30.75	m
Elevation (Pump)	26.98	m
Pump Head	3.77	m
Total Head	4.20	m

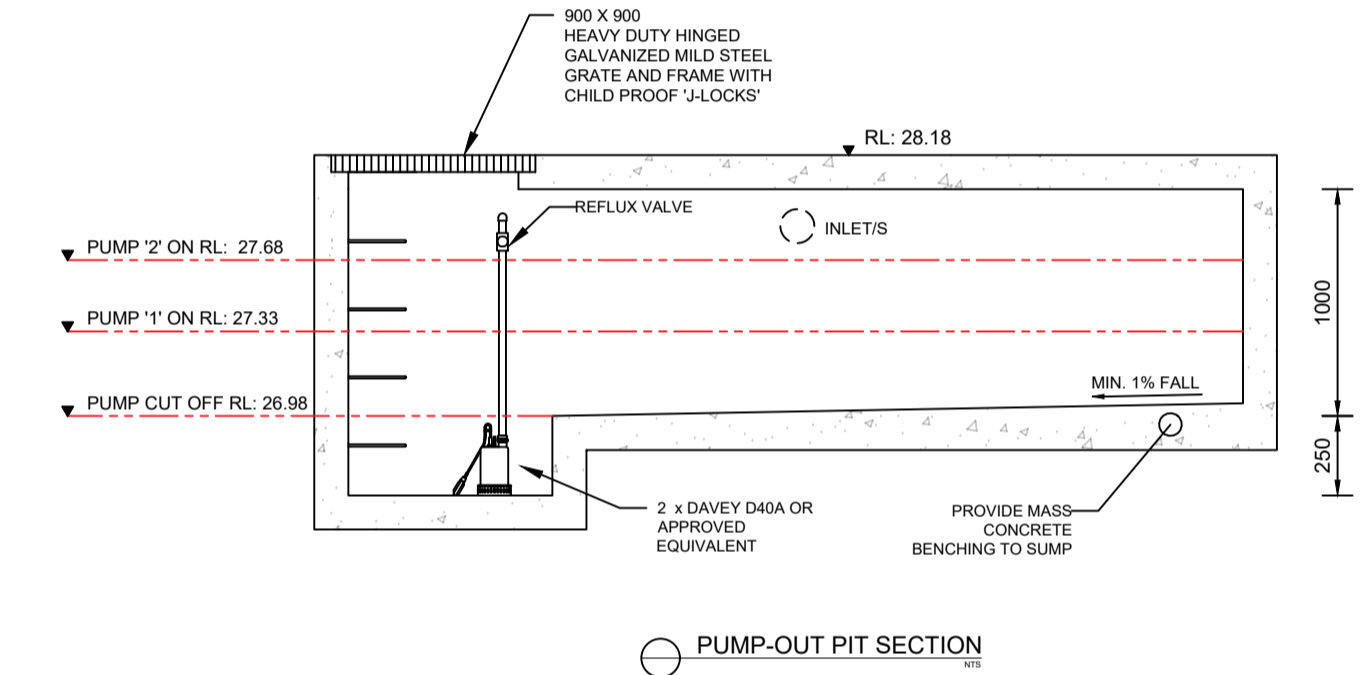
Pump Head	4.20	m
Pump Rate	175	L/m



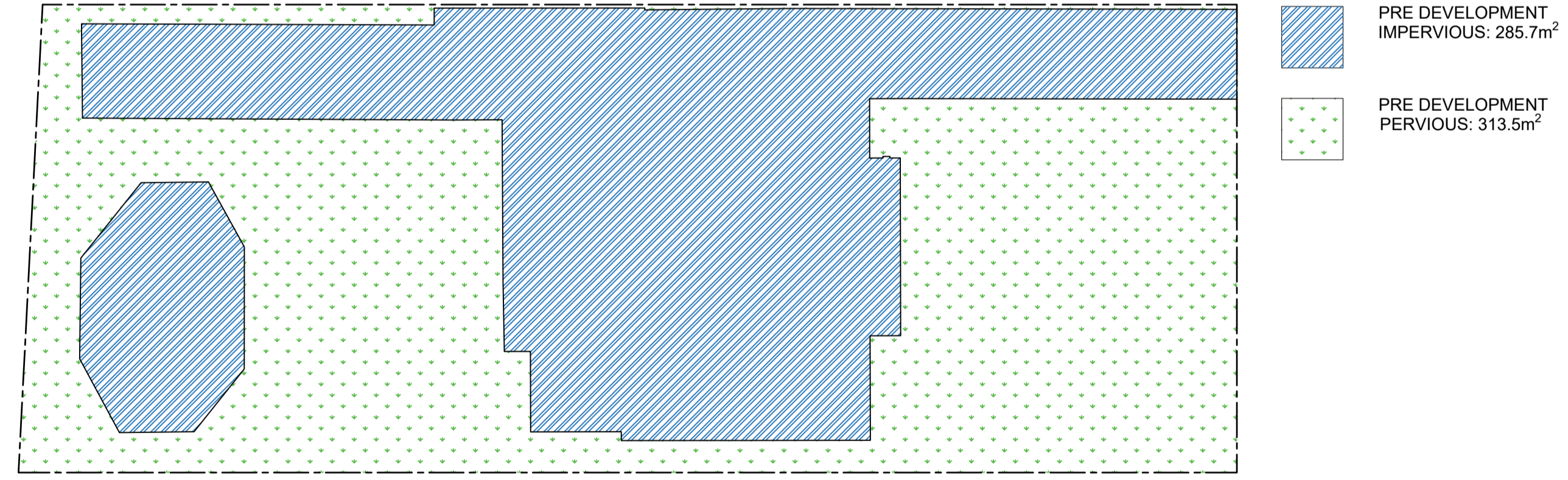
- PUMP-OUT NOTES**
- THE PUMP-OUT SYSTEM SHALL BE DESIGNED TO BE OPERATED AS FOLLOWS:
1. A MINIMUM OF TWO PUMPS ARE TO BE PROVIDED - ONE DUTY PUMP AND ONE STAND-BY PUMP.
 2. THE PUMPS SHALL BE PROGRAMMED TO OPERATE ALTERNATIVELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN OPERATIONAL LOAD AND PUMP LIFE.
 3. A LOW-LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE UNDERGROUND TANK. THE FLOAT SHALL FUNCTION AS AN 'OFF' SWITCH FOR THE PUMP.
 4. A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL WHICH IS APPROXIMATELY 350mm ABOVE THE MINIMUM WATER LEVEL. IN WHICH ONE OF THE PUMPS WILL OPERATE AND DRAIN THE UNDERGROUND TANK TO THE LEVEL OF THE LOW-LEVEL FLOAT.
 5. A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY 350mm ABOVE THE SECOND FLOAT. THIS FLOAT SHALL BE DESIGNED TO START THE STAND-BY PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.
 6. AN ALARM WARNING SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT, SIREN AND PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT. THE ALARM WARNING SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.



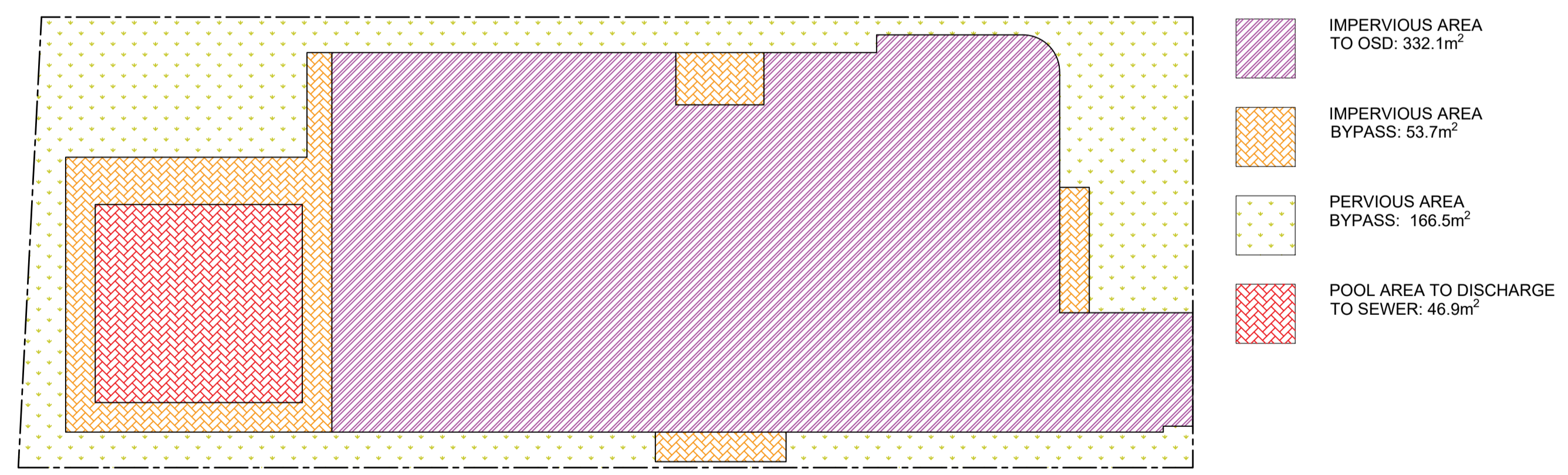
PUMP-OUT PIT PLAN



PUMP-OUT PIT SECTION



PRE-DEVELOPMENT CATCHMENT PLAN
1:150



POST-DEVELOPMENT CATCHMENT PLAN
1:150

NOTE
DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THESE DRAWINGS. CONTRACTOR IS TO CONFIRM ALL SETOUT, RL'S AND DIMENSIONS WITH THE CONTRACT ARCHITECTURAL PLANS PRIOR TO COMMENCING ON SITE. ANY DISCREPANCY TO THAT SHOWN ON THESE DRAWINGS SHALL BE REFERRED TO THE ENGINEER FOR RESOLUTION PRIOR TO COMMENCEMENT OF WORK.

M. 0424 661 904 ABN: 30 614 895 314
E: Info@maycoengineering.com.au

REV	DESCRIPTION	DATE

PROPOSED TWO STOREY DWELLING

AT:

BASEMENT DRAINAGE/ CATCHMENT PLAN

DESIGNED BY:	ORIGINAL SIZE: A1
DRAWN BY:	SCALE: AS SHOWN
PROJECT No.	DRAWING No. C002
REVISION No.	A