

STORMWATER DRAINAGE CONCEPT PLAN FOR THE PROPOSED ALTERATIONS & ADDITIONS TO 1107 OXFORD FALLS RD, OXFORD FALLS

NORTHERN BEACHES COUNCIL STORMWATER REQUIREMENTS

THE PROPOSAL IS FOR ALTERATIONS AND ADDITIONS TO AN EXISTING RESIDENCE. THE PROPERTY SLOPES FROM THE NORTHWEST TO THE SOUTHWEST BOUNDARY. THE SITE DRAINS INTO A CREEK.

IN ACCORDANCE WITH WARRINGAH COUNCIL'S DCP PART C4 STORMWATER, ON SITE DETENTION FOR STORMWATER IS NOT REQUIRED.

IN ACCORDANCE WITH BASIX REPORT, A 15000L RAINWATER TANK IS PROVIDED WHICH CAPTURES ALL ROOF RUNOFF. THE SITE DISCHARGES IN THE SOUTH WEST CORNER OF THE PROPERTY INTO CREEK.

GENERAL NOTES

ALL SURVEY INFORMATION AND PROPOSED BUILDING AND FINISHED SURFACE LEVELS SHOWN IN THESE DRAWINGS ARE BASED UPON LEVELS OBTAINED FROM DRAWINGS BY OTHERS.

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 OR ADJUST IF NECESSARY

ALL PIPELINES AND DOWNPOPEs ARE TO BE 100MM SEWER GRADE UPVC. ALL OTHER PIPELINES AS SHOWN ON THE PLANS. COVER TO ALL PIPELINES INCLUDING THOSE WITH TRAFFICABLE LOADS MUST COMPLY WITH AS/NZS3500.3:2003

ALL DOWNPIPES ARE SHOWN DIAGRAMMATICALLY. POSITION OF DOWNPIPES ARE TO BE CONSIDERED ON SITE USING WORK DRAWINGS. THE DESIGN OF THE ROOF DRAINAGE SYSTEM AND SUB SOIL DRAINAGE IS THE RESPONSIBILITY OF OTHERS.

ALL ROOF GUTTERS TO HAVE OVERFLOW PROVISION IN ACCORDANCE WITH AS3500.3:2003.

ALL LEVELS ARE IN AUSTRALIAN HEIGHT DATUM WITH THE SURVEY AS ITS BASES.

ANY DAMAGE TO SERVICES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS OWN EXPENSE

ALLOW TO OBTAIN ALL APPROVALS AND PAY ALL FEES AND CHARGES TO ALL AUTHORITIES IN RELATION TO THE PROPOSED SERVICES INSTALLATIONS INDICATED ON THIS DRAWING.

ALL SURFACE AND INVERT LEVELS ARE INDICATIVE ONLY. CONFIRM LEVELS ON SITE BEFORE COMMENCING INSTALLATION WORK. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTS AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES NEEDS TO BE REFERRED TO ENGINEER BEFORE PROCEEDING WITH WORK.

ALL DIMENSIONS AND LEVELS TO BE VERIFIED BY THE BUILDER ON SITE PRIOR TO COMMENCEMENT OF WORKS. THESE DRAWINGS ARE NOT TO BE CLASSED FOR DIMENSIONS NOR TO BE USED FOR SETOUT PURPOSES.

IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND DETERMINE LEVELS OF ALL EXISTING SERVICES OR OTHER STRUCTURES WHICH MAY AFFECT/ BE AFFECTED BY THIS DESIGN PRIOR TO COMMENCEMENT OF WORKS.

ALL MATERIALS AND WORKMANSHIP TO BE IN ACCORDANCE WITH AS/NZS3500.3:2003 STORMWATER DRAINAGE, BCA, AND LOCAL COUNCIL POLICY/ REQUIREMENTS.

OVERLAND FLOW PATHS MUST BE PROVIDED AROUND THE DWELLING.

SUBSOIL DRAINAGE AND WATERPROOFING FOR BUILDING AND STRUCTURES TO BE DESIGNED BY OTHERS.

30MM BENCHING IN ALL PITS

PIT DEPTHS BASED ON RELN PIT DEPTH DETAILS WHERE POSSIBLE.

DOWNPIPE SCHEDULE

D1 TO D15	100MM UPVC DOWNPIPE
LS1 TO LS6	100MM UPVC DOWNPIPE

DEPTH OF COVER FOR PVC PIPES

MINIMUM PIPE COVER SHALL BE AS FOLLOWS;

LOCATION	MINIMUM COVER
NOT SUBJECT TO VEHICLE LOADING	100 MM SINGLE RESIDENTIAL 300 MM ALL OTHER DEVELOPMENTS
SUBJECT TO VEHICLE LOADING	450 MM WHERE NOT IN A ROAD
UNDER A SEALED ROAD	600 MM
UNSEALED ROAD	750MM
PAVED DRIVEWAY	100MM PLUS DEPTH OF CONCRETE

SEE AS 2032 INSTALLATION OF UPVC PIPES FOR FURTHER INFORMATION.

WHERE INSUFFICIENT COVER IS PROVIDED, THE PIPE SHALL BE COVERED BY AT LEAST 50 MM THICK OVERLAY AND SHALL THEN BE PAVED WITH AT LEAST:

- 150 MM REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICLE LOADING;
- 75 MM THICKNESS OF BRICK OR 100 MM OF CONCRETE PAVING WHERE SUBJECT TO LIGHT VEHICLE TRAFFIC; OR
- 50 MM THICK BRICK OR CONCRETE PAVING WHERE NOT SUBJECT TO VEHICLE TRAFFIC.

GENERAL MAINTENANCE NOTES

THE ENTIRE STORMWATER SYSTEM INCLUDING ALL PITS, TRENCHES, GUTTERS AND PIPELINES MUST BE REGULARLY INSPECTED AND CLEANED

RAINWATER TANK

THE FIRST FLUSH ON THE RAINWATER TANK MUST BE CLEANED BY OPENING THE CAP AT THE BASE OF THE FIRST FLUSH RESERVOIRS, DRAINING THE WATER AND REMOVE ANY DEBRIS. MAKE SURE THE SMALL BORE OUTLET IS NOT BLOCKED.

THE TANKS SHOULD BE INSPECTED FOR CRACKS OR DEFECTS ALONG THE EXTERNAL LINING. THE LIDS SHOULD BE OPENED AND THE SYSTEM VISUALLY INSPECTED ALONG THE INTERNAL LINING AS WELL. THE INLET, OUTLET AND CONNECTING PIPES SHOULD BE INSPECTED FOR DEFECTS AND BLOCKAGE TO ENSURE THEY ARE FULLY OPERATIONAL.

ONCE A YEAR THE MAINS TOP UP DEVICE FOR THE RAINWATER TANK, INCLUDING THE FLOAT SWITCH AND VALVES, SHOULD BE TESTED AND REPAIRED WHERE REQUIRED. THE REUSE SYSTEM SHOULD BE DRAINED AND DESLUDGED AS REQUIRED (SLEDGE BUILD UP SHOULD NOT EXCEED 50MM) BY EMPTYING THE REUSE SYSTEM WITH THE DRAIN OUTLET AND WASHING AWAY THE SLUDGE WITH THE HOSE ON HIGH PRESSURE.

THE WATER PRESSURE PUMP NEEDS TO BE INSPECTED EVERY 1 -2 YEARS. OWNER TO VISUALLY INSPECT THE PUMP FOR ANY LEAKS. CHECK AIR PRESSURE WITHIN PRESSURE CELL AND ADJUST AS REQUIRED. CHECK SOLENOID AND PRESSURE SWITCH FOR CORRECT OPERATION. RUN PUMP AND CHECK FOR EXCESSIVE BEARING AND IMPELLER NOISE AND REPLACE IF NECESSARY. CHECK ALL ELECTRICAL CONNECTIONS FOR ANY DEFECTS AND REPAIR AS NECESSARY.

THE TANKS ARE TO BE INSPECTED BY A SUITABLY EXPERIENCED PROFESSIONAL AT LEAST ONE A YEAR.

CHECKLIST FOR MAINTENANCE OF RAINWATER SYSTEMS		
INDICATIVE FREQUENCY	INSPECTION AND CRITERIA	MAINTENANCE ACTIVITIES (WHERE REQUIRED)
ANNUAL	CHECK WHETHER ANY TREE BRANCHES OVERHANG THE ROOF OR ARE LIKELY TO GROW TO OVERHANG THE ROOF	IF SAFE AND WHERE PERMITTED, CONSIDER PRUNING BACK ANY OVERHANGING BRANCHES
	CHECK THAT ACCESS COVERS TO STORAGE TANKS ARE CLOSED	SECURE ANY OPEN ACCESS COVERS TO PREVENT RISK OF ENTRY
	CHECK THAT SCREENS ON INLETS, OVERFLOWS AND OTHER OPENINGS DO NOT HAVE HOLES AND ARE SECURELY FASTENED	REPAIR ANY DEFECTIVE SCREENS TO KEEP OUT MOSQUITOES
	INSPECT TANKS WATER FOR PRESENCE OF RATS, BIRDS, FROGS, LIZARDS OR OTHER VERMIN OR INSECTS	REMOVE ANY INFESTATIONS, IDENTIFY POINT OF ENTRY AND CLOSE VERMIN AND INSECTS-PROOF MESH
	INSPECT TANKS WATER FOR PRESENCE OF MOSQUITO LARVAE (INSPECT MORE FREQUENTLY IN SUB-TROPICAL AND TROPICAL NORTHERN AUSTRALIA, BASED ON LOCAL REQUIREMENTS)	IDENTIFY POINT OF ENTRY AND CLOSE WITH INSECTS-PROOF MESH WITH HOLES NO GREATER THAN 1.6 MM IN DIAMETER
	INSPECT GUTTERS FOR LEAF ACCUMULATION AND PONDING	CLEAN LEAVES FROM GUTTERS—REMOVE MORE REGULARLY IF REQUIRED. IF WATER IS PONDING, REPAIR GUTTER TO ENSURE WATER FLOWS TO DOWNPIPE
	CHECK SIGNAGE AT EXTERNAL ROOFWATER TAPS AND THAT ANY REMOVABLE HANDLE TAPS ARE BEING PROPERLY USED	REPLACE OR REPAIR THE MISSING OR DAMAGED SIGNAGE AND FITTINGS
	CHECK FOR CROSS-CONNECTIONS AND INAPPROPRIATE TAPINGS BY CHECKING VISIBLE PLUMBING FITTINGS AND ALTERNATELY TURNING OFF SUPPLIES	REMOVE ANY CROSS-CONNECTIONS AND INAPPROPRIATE TAPINGS IDENTIFIED
	CHECK PLUMBING AND PUMP CONNECTIONS ARE WATERLIGHT/WITHOUT LEAKAGE	REPAIR ANY LEAKS ARE NECESSARY
	CHECK SUCTION STRAINERS, IN-LINE STRAINERS AND PUMP LOCATION FOR DEBRIS	CLEAN SUCTION STRAINERS, IN-LINE STRAINERS OR DEBIRS FROM PUMP LOCATION
	CHECK PUMP INSTALLATION IS ADEQUATE FOR RELIABLE ONGOING OPERATION	MODIFY AND REPAIR AS REQUIRED
	CHECK FIRST FLUSH DIVERTER, IF PRESENT	CLEAN FIRST FLUSH DIVERTER, REPAIR AND REPLACE IF NECESSARY
	CHECK HEALTH OF IRRIGATION AREA AND IRRIGATED GRASS OR PLANTS	INVESTIGATE ANY ADVERSE IMPACTS OBSERVED THAT MIGHT BE DUE TO IRRIGATION
	CHECK CONDITION OF ROOF AND COATINGS	INVESTIGATE AND RESOLVE ANY APPARENT CHANGES TO ROOF CONDITION, SUCH AS LOSS OF MATERIAL COATINGS
	DRAIN, CLEAN OUT AND CHECK THE CONDITION OF THE TANK WALLS AND ROOF TO ENSURE NO HOLES HAVE ARISEN DUE TO TANK DETERIORATION	REPAIR ANY TANK DEFECTS
TRIENNIAL	CHECK SEDIMENT LEVELS IN THE TANK	ORGANISE A SUITABLE CONTRACTOR TO REMOVE ACCUMULATED SEDIMENT IF LEVELS ARE APPROACHING THOSE THAT MAY BLOCK TANK OUTLETS
	UNDERTAKE A SYSTEMATIC REVIEW OF OPERATIONAL CONTROL OF RISK TO TO THE SYSTEM	IDENTIFY THE REASON FOR ANY PROBLEMS DURING INSPECTIONS AND TAKE ACTIONS TO PREVENT FAILURES OCCURRING IN FUTURE
AFTER 20 YEARS AND THEN EVERY 5 YEARS	MONITOR THE EFFECTIVENESS OF THE IRRIGATION EQUIPMENT TO ASSESS FOR ANY CLOGGING DUE TO ALGAL GROWTH	CLEAN OR RAPLACE CLOGGED EQUIPMENT
ONGOING	INSPECT AND FOLLOW UP ON ANY COMPLAINTS OR CONCERNS REISED THAT COULD INDICATE PROBLEMS WITH THE SYSTEM	REPAIR OR REPLACE ANY PROBLEMS THAT ARE NOTIFIED

REVISIONS

DATE	REMARKS	APP	REV
28/08/20	DA SUBMISSION		A

WARNING
BEWARE OF EXISTING OVERHEAD
ELECTRICITY CABLES IN VICINITY OF WORKS.



WARNING
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MUST BE VERIFIED ON SITE

WARNING
DOES NOT INCLUDE WORKS TO UTILITY SERVICES



Stormwater Flooding Parking Traffic
40 Melbourne Street Concord NSW 2137
1300 556 447 0419 128 732
www.ryeco.com.au
info@ryeco.com.au

HEIGHT DATUM	AHD
DRAWN	RM
DESIGNED	RM
CHECKED	RM
APPROVED	RM

DA SUBMISSION

CLIENT TITLE

TOURSOUNOGLOU RESIDENCE

DWG TITLE

STORMWATER DRAINAGE CONCEPT PLAN
FOR THE PROPOSED ALTERATIONS AND ADDITIONS
AT 1107 OXFORD FALLS ROAD, OXFORD FALLS

DATE: 28 AUG 2020

SCALE: NTS REVISION

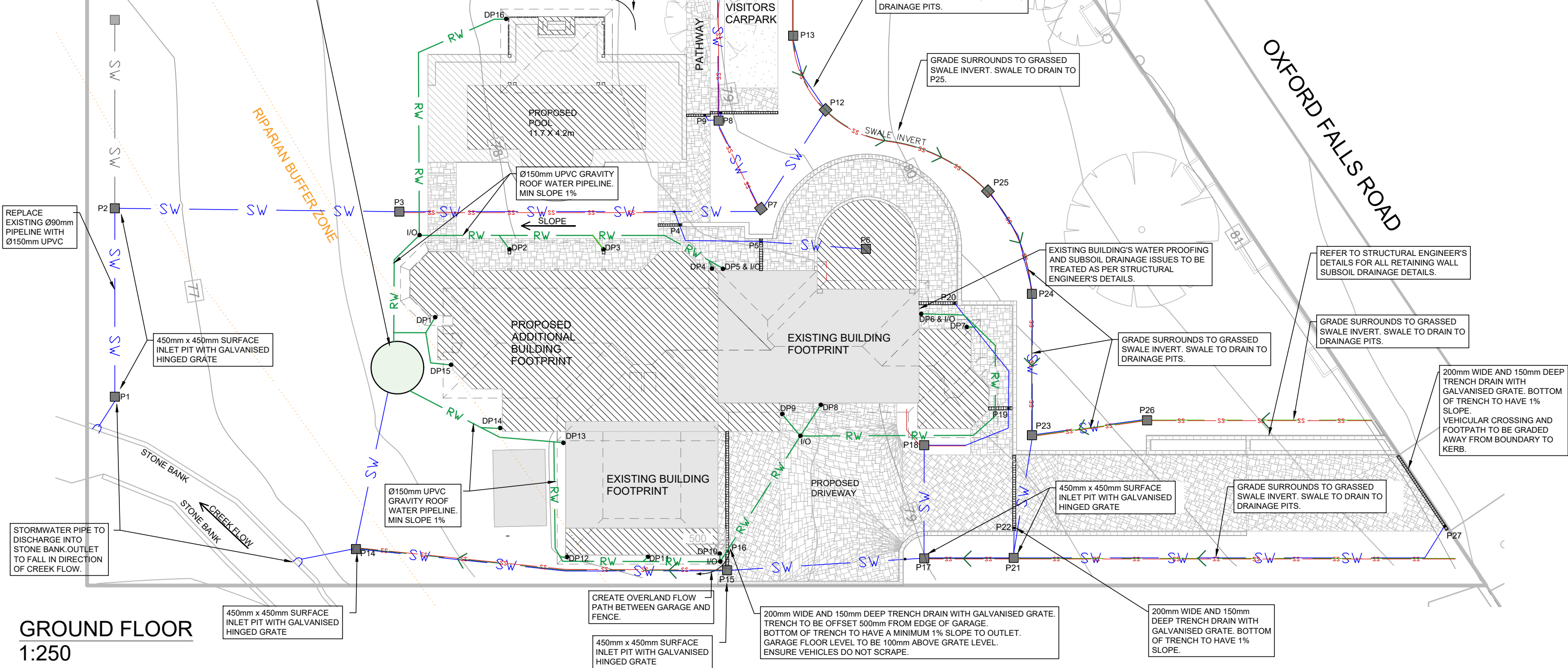
DWGNo. SW/11070X A

SHEET 1 OF 5

LEGEND

- SW SW DONATES Ø150mm UPVC SOLVENT WELDED (UNO) GRAVITY STORMWATER/SURFACE WATER SYSTEM AT 1% MIN SLOPE (UNLESS STATED OTHERWISE).
- RW RW DONATES GRAVITY ROOF WATER SYSTEM AT MINIMUM 1% SLOPE. Ø100mm UPVC SOLVENT WELDED (UNO)
- 150mm WIDE AND 150mm DEEP TRENCH DRAIN WITH GALVANISED GRATE (UNLESS STATED OTHERWISE). BOTTOM OF TRENCH TO HAVE 1% SLOPE TO OUTLET (UNO)
- DP Ø100mm UPVC DOWNPIPE
- SW SW DONATES EXISTING PIPE TO BE RETAINED.
- SS SS Ø100 SLOTTED PVC AGRICULTURAL SUBSOIL PIPE WRAPPED IN GEOFABRIC SOCK. AT 1% MIN SLOPE
- 300mm x 300mm SURFACE INLET PIT WITH GALVANISED HINGED GRATE (UNLESS STATED OTHERWISE).

15,000L PRE-CAST CONCRETE RAINWATER TANK
UNDERGROUND PRE-CAST CONCRETE RAINWATER TANK WITH 3450mm DIAMETER. TANK TO BE CONNECTED TO A PUMP SYSTEM TO SUPPLY ALL TOILETS, CLOTHES WASHERS, AT LEAST ONE OUTDOOR TAP AND A TAP LOCATED WITHIN 10m OF POOL.
INSTALL TANK AND FIRST FLUSH SYSTEM TO MANUFACTURES DETAILS. SEE TYPICAL DETAIL 1.

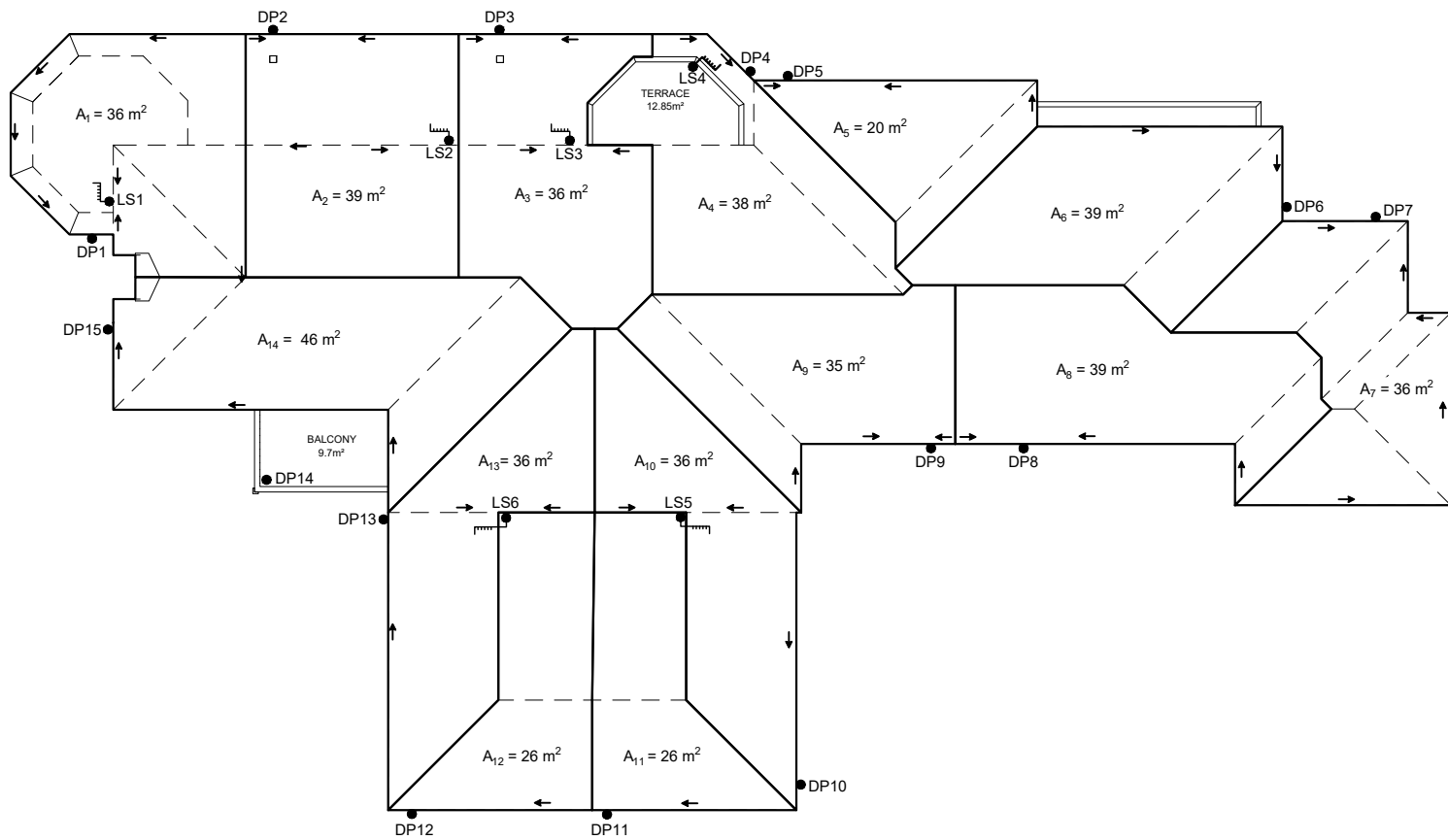
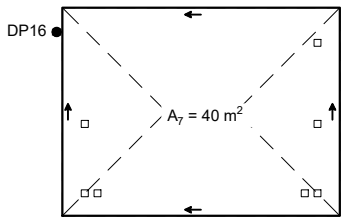


GROUND FLOOR
1:250

REVISIONS				WARNING				DIAL BEFORE YOU DIG				ryeco Consulting Engineers				Stormwater Flooding Parking Traffic				HEIGHT DATUM				CLIENT TITLE				DWG TITLE				DATE: 28 AUG 2020			
DATE	REMARKS	APP	REV	BEWARE OF EXISTING OVERHEAD ELECTRICITY CABLES IN VICINITY OF WORKS.				www.1100.com.au				40 Melbourne Street Concord NSW 2137				1300 556 447 0419 128 732				AHD				TOURSOUNOGLLOU RESIDENCE				STORMWATER DRAINAGE CONCEPT PLAN				SCALE: NTS			
28/08/20	DA SUBMISSION		A	WARNING ALL LEVELS INTERPOLATED FROM SURVEY MUST BE VERIFIED ON SITE				WARNING DOES NOT INCLUDE WORKS TO UTILITY SERVICES				info@ryeco.com.au				DA SUBMISSION				RM				FOR THE PROPOSED ALTERATIONS AND ADDITIONS AT 1107 OXFORD FALLS ROAD, OXFORD FALLS				DWG No. SW/11070X				REVISION			
																				RM								A				SHEET 2 OF 5			

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ROOF PLAN
1:200

REVISIONS

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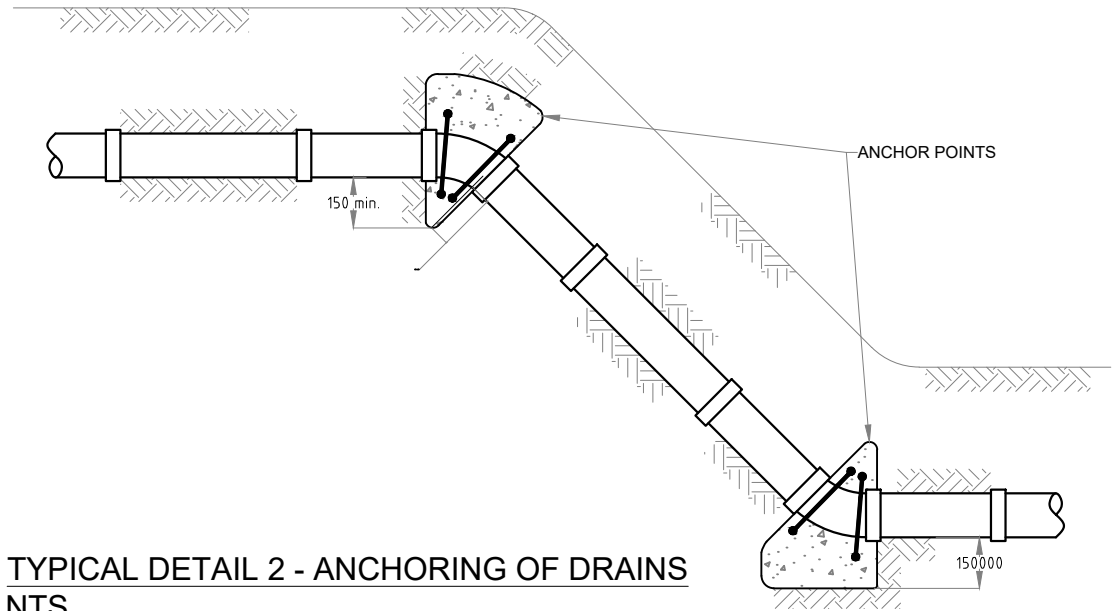
CLIENT TITLE

TOURSOUNOGLLOU RESIDENCE

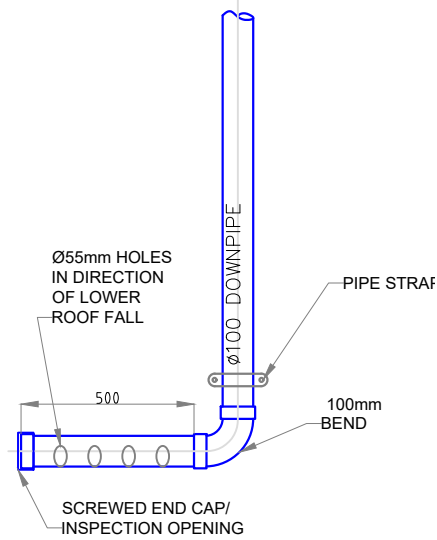
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AT 1107 OXFORD FALLS ROAD, OXFORD FALLS

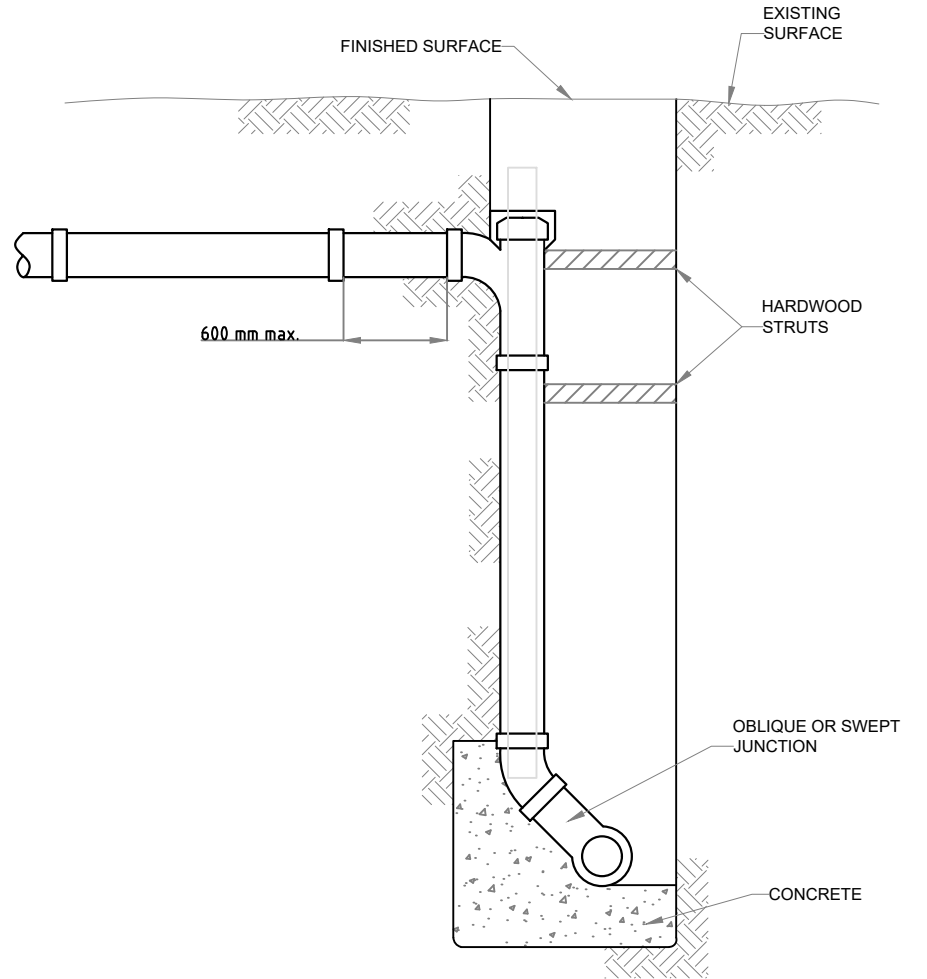
DATE: 28 AUG 2020	REVISION
SCALE: NTS	A
DWG No. SW/11070X	A
SHEET 3 OF 5	



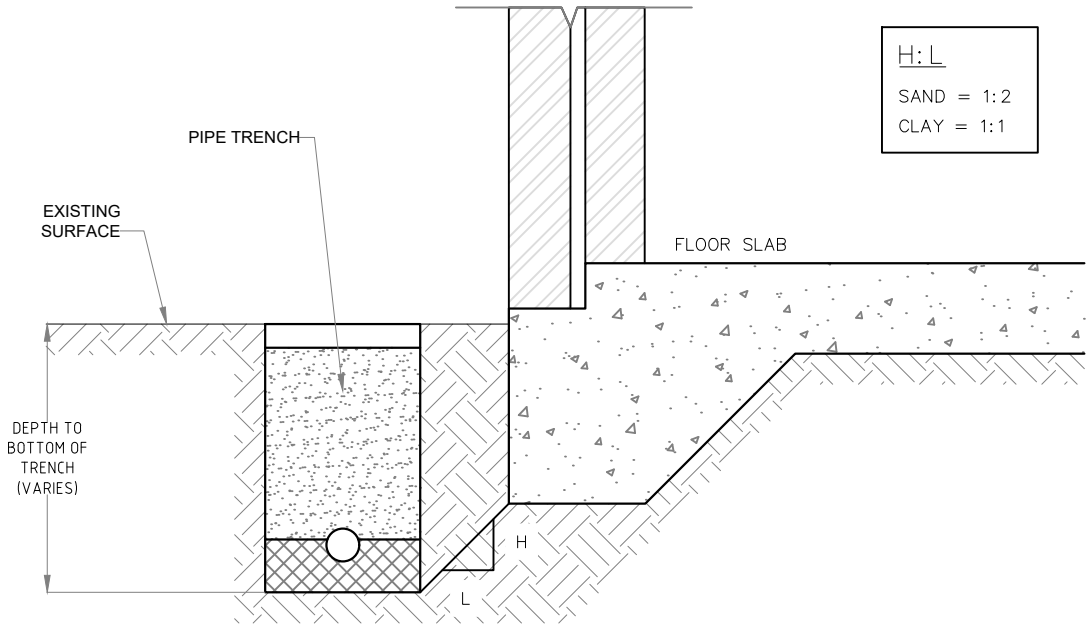
TYPICAL DETAIL 2 - ANCHORING OF DRAINS
NTS



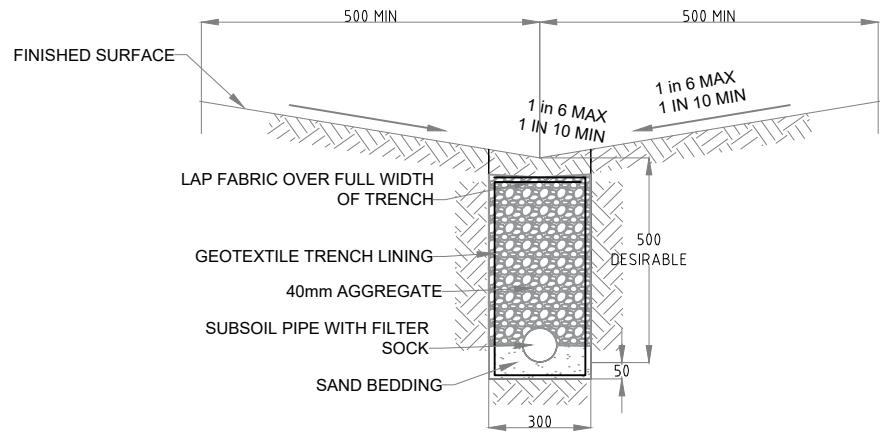
TYPICAL DETAIL 4 - DOWNPIPE SPREADER
NTS



TYPICAL DETAIL 5 - VERTICAL JUMP
NTS



TYPICAL DETAIL 3 - TRENCH NEAR FOOTINGS
NTS



TYPICAL DETAIL 6 - GRASS SWALE
NTS