

PROPOSED RESIDENTIAL DEVELOPMENT

TYPE: DUAL OCCUPANCY

ADDRESS: No. 94 EDGECLIFFE BOULEVARD, COLLAROY PLATEAU

TITLE: LOT C/DP341590

DRAWING SERIES: STORMWATER MANAGEMENT PLAN

DRAWINGS SERIES TO BE PRINTED IN COLOUR

DEVELOPMENT APPLICATION ISSUE NOT FOR CONSTRUCTION

GENERAL NOTES		STORMWATER NOTES		DRAWING LEGEND		SITE SUMMARY OF COUNCIL SPECIFICATION	
GN1	ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.	SN1	ALL STORMWATER DRAINAGE PIPES AND ASSOCIATED DEVICES, ARE TO BE INSTALLED IN ACCORDANCE WITH THE RELEVANT STANDARDS, THE BUILDING CODE OF AUSTRALIA, MANUFACTURER'S RECOMMENDATIONS, SYDNEY CATCHMENT AUTHORITY RECOMMENDED PRACTICE, AND LOCAL COUNCIL, AS APPLICABLE.		INDICATES ESTIMATED EXTENT OF EXISTING DWELLING	1.	COUNCIL: NORTHERN BEACHES COUNCIL
GN2	THE CONTRACTOR SHALL LOCATE AND DETERMINE LEVELS OF ALL EXISTING SERVICES PRIOR TO COMMENCING EXCAVATION WORK. ALL SERVICES SHOWN ON THIS DRAWING ARE INDICATIVE AND FOR GUIDANCE ONLY.	SN2	ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE AS/NZS3500 AND THE REQUIREMENTS OF THE LOCAL GOVERNMENT AREAS POLICIES, CODES AND SPECIFICATIONS. ENSURE INSPECTION OPENINGS ARE INSTALLED TO DRAINAGE LINES AT REQUIRED LOCATIONS.		INDICATES ESTIMATED EXTENT OF PROPOSED WORKS	2.	RELEVANT DOCUMENTS:
GN3	THIS DRAWING SERIES IS TO BE READ IN CONCURRENCE WITH RELEVANT DRAWINGS SERIES FROM OTHER CONSULTANTS, COUNCIL OR RELEVANT SPECIFICATIONS, WHERE DISCREPANCIES ARE DETECTED THE DESIGN ENGINEER IS TO BE CONTACTED IMMEDIATELY FOR VALIDATION/ RECTIFICATION.	SN3	STORMWATER PIPES UP TO DN150 SHALL BE LAID AT A MINIMUM 1% GRADE UNLESS OTHERWISE NOTED.		INDICATES ESTIMATED EXTENT OF PROPOSED DRIVEWAY	2.1.	NORTHERN BEACHES COUNCIL WATER MANAGEMENT FOR DEVELOPMENT POLICY (FEB 2021)
GN4	BUILDER AND CONTRACTORS IS TO ENSURE THAT ALL COUNCIL DEVELOPMENT CONSENT CONDITIONS, CONSTRUCTION CERTIFICATE AND BASIX REQUIREMENTS ARE MET.	SN4	WHERE NECESSARY PUBLIC UTILITY SERVICES ARE TO BE ALTERED AND AMENDED AT THE CLIENT'S EXPENSE.		INDICATES PROPOSED ON-SITE DETENTION TANK/S	2.2.	AS/NZS 3500.3
GN5	A STRUCTURAL ENGINEER IS TO DESIGN AND DETAIL SUBSOIL DRAINAGE. UNLESS APPROVED BY OUR OFFICE, SUBSOIL DRAINAGE IS NOT TO CONNECT INTO THE STORMWATER SYSTEM DISPLAYED WITHIN THIS DRAWING SERIES.	SN5	ALL NEW WORK MAKE SMOOTH TRANSITIONS AND CONNECTIONS WITH EXISTING WORK.		INDICATES PROPOSED RAINWATER TANK/S	3.	ENGINEERING COMMENTS:
GN6	PLANS ISSUED FOR DEVELOPMENT APPLICATION, SHALL NOT BE USED FOR OBTAINING A CONSTRUCTION CERTIFICATE.	SN6	LOCAL GOVERNMENT AREAS TREE PRESERVATION AND MANAGEMENT ORDERS TO BE ABIDED BY. A PERMIT IS REQUIRED BEFORE TREE/S CAN BE REMOVED .		INDICATES PROPOSED ABSORPTION SYSTEM		STORMWATER DISCHARGE
GN7	PLANS ISSUED FOR DEVELOPMENT APPLICATION PURPOSES, SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.	SN7	ALL PITS TO BE STREAMLINED AND BENCHED IN ACCORDANCE WITH LOCAL GOVERNMENTS AREAS SPECIFICATIONS.		INDICATES GRATED BOX DRAIN WITH OUTLET		THE DEVELOPMENT PROPOSES TO DRAIN THE MAJORITY OF THE SITE, BY GRAVITY, TO EDGECLIFF BOULEVARD VIA NEW KERB OUTLETS . A PUMP OUT SYSTEM HAS ALSO BEEN PROPOSED FOR EACH BASEMENT AREA.
RAINWATER RE-USE NOTES		SN8	STEP IRONS ARE TO BE PROVIDED FOR ALL PITS OVER 1.2m DEEP IN ACCORDANCE WITH AS/NZS3500 AND LOCAL GOVERNMENT AREAS CODES AND POLICES.		INDICATES LINEAR GRATE TO ARCHITECTURAL DETAIL		THE DEVELOPMENT PROPOSES TO KEEP DRAINAGE FROM EACH UNIT SEPARATE.
RN1	THE RAINWATER TANK IS TO BE INSTALLED AND EMPLOYED AS PER BASIX, SYDNEY WATER, COUNCIL AND NSW HEALTH REQUIREMENTS FOR NON DRINKING USE ONLY.	SN9	DOWNPIPES, RAINWATER LINES AND STORMWATER LINES TO BE FULLY SEALED UNLESS OTHERWISE NOTED.		INDICATES DRAINAGE PIT WITH GRATED OPENING		
RN2	ALL PLUMBING WORKS ARE TO BE CARRIED OUT BY LICENSED PLUMBERS IN ACCORDANCE WITH AS/NZS3500.1 NATIONAL PLUMBING AND DRAINAGE CODE.	SN10	ALL GRATE AND INVERT LEVELS PROVIDED ON THIS DRAWING ARE EXTRACTED FROM SURVEY AND REDUCED TO AHD. FOLLOWING EARTHWORKS, PIT INSTALLATION AND BENCHING THE LEVELS ARE TO BE VERIFIED OR ADJUSTED TO MEET THE DESIGN INTENT. IF EVER IN DOUBT CONTACT DESIGN ENGINEER.		INDICATES DRAINAGE PIT WITH SEALED COVER		
RN3	BUILDER AND PLUMBER TO ENSURE THE INSTALLATION OF THE RAINWATER TANK SYSTEM IS IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND THE RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK (HB 230- 2008).	SN11	ALL SUSPENDED DRAINAGE PIPES ARE TO STRAPPED IN ACCORDANCE WITH AS/NZ 2032.		INDICATES STORMWATER PIPE INVERT LEVELS. UNLESS OTHERWISE NOTED PIT BASE IS TO EQUAL PIPE BASE		
RN4	DO NOT DIRECT CONNECT TOWN WATER SUPPLY AND THE RAIN WATER SUPPLY.	SN12	LOW POINTS OF CHARGED DRAINAGE SYSTEMS REQUIRE DEVICES FOR FLUSHING AND MAINTENANCE.		INDICATES PIPE DIRECTION, DIAMETER, AND MIN FALL		
RN5	THE RAINWATER TANK AND EVERY RAINWATER SUPPLY OUTLET POINT ARE TO BE LABELLED (RAINWATER) ON A METAL SIGN IN ACCORDANCE WITH AS1319.	SN13	THE NUMBER AND LOCATION OF DOWNPIPES, ON THIS DRAWING SERIES, ARE SHOWN INDICATIVELY AND ARE TO BE CONFIRMED ON-SITE BY BUILDER PRIOR TO CONSTRUCTION. ROOF DRAINAGE, BY OTHERS, AND TO BE INSTALLED IN ACCORDANCE WITH AS/NZs 3500 SERIES.		INDICATES EAVES GUTTER ORIFICE		
RN6	SCREENED DOWNPIPE RAINWATER HEAD OR OTHER SUITABLE LEAF AND DEBRIS DEVICE TO BE INSTALLED ON EACH DOWNPIPE. SCREEN MESH TO BE 4-6mm AND DESIGNED TO BE SELF-CLEANING.	SN14	NEW WORKS SHALL NOT CREATE ANY TRAPPED SURFACE AREAS. IN SUCH CASES WHERE TRAPPED AREAS EXIST, A DRAINAGE NETWORK WITH ADEQUATE CAPACITY SHALL BE REQUIRED TO DRAIN STORMWATER TO AN APPROVED DISCHARGE POINT. A PUMP-OUT SYSTEM MAY BE REQUIRED IF THE TRAPPED AREA IS BELOW THE NATURAL SURFACE LEVEL. IN EACH INSTANCE, THE DESIGN ENGINEER MUST BE CONTACTED FOR DESIGN DETAILS (AS REQUIRED) BEFORE CONSTRUCTION.		INDICATES PROPOSED DOWNPIPE/RISER		
RN7	ROOF RUN-OFF ONLY IS BE DIRECTED TO THE RAINWATER TANK . SURFACE WATER SYSTEMS/INLETS ARE NOT TO BE CONNECTED.	SN15	WHEN SURFACES FALL TOWARDS A BUILDING, INCLUDING LAND OUTSIDE OF THE SITE, GROUND SURFACE LEVELS ADJACENT TO THE BUILDING ARE TO BE RE-GRADED SUCH THAT THE FIRST METER HAS A MINIMUM 50mm FALL AWAY FROM THE BUILDING AS PER THE NATIONAL CONSTRUCTION CODE.		INDICATES EXISTING DOWNPIPE/RISER		
RN8	ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE DEVICES TO PREVENT MOSQUITO AND VERMIN ENTRY TO THE SATISFACTION OF THE REGULATORY AUTHORITY.	SN16	BALCONY DRAINAGE AND WATERPROOFING TO BE INSTALLED IN STRICT ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARD AND NATIONAL CONSTRUCTION CODE, DESIGN IS TO BE BY OTHERS.		INDICATES PROPOSED PIPE DROPPER		
RN9	PROVIDE APPROPRIATE FLOAT VALVES TO CONTROL TOWN WATER SUPPLY INLET TO TANK IN ORDER TO ACHIEVE THE TOP-UP INDICATED ON THE TYPICAL DETAIL				INDICATES INSPECTION OPENING WITH SCREW DOWN LID		
RN10	PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT BY A LICENSED ELECTRICIAN				INDICATES GUTTER HIGH POINT		
BEFORE YOU DIG AUSTRALIA					INDICATES PROPOSED SCUPPER/SPITTER OVERFLOW/S		
					INDICATES PROPOSED PLANTER DRAIN OUTLET/S,		
					INDICATES PROPOSED BALCONY DRAIN OUTLET/S		
					INDICATES PROPOSED ROOF DRAIN OUTLET/S		
					INDICATES PROPOSED LINEAR DRAIN OUTLET/S		
					INDICATES PROPOSED BOX GUTTER FLOW DIRECTION		
					INDICATES PROPOSED EAVE GUTTER FLOW DIRECTION		
					INDICATES PROPOSED VALLEY GUTTER FLOW DIRECTION		
					INDICATES BOX GUTTER SUMP/RAINWATER HEAD SUMP		
					INDICATES PROPOSED DOWNPIPE SPREADER		
					INDICATES ESTIMATED ROOF PITCH		
					INDICATES PROPOSED SURFACE FALL DIRECTION		
					INDICATES PROPOSED REDUCED LEVEL/S OR PIPE INVERT LEVEL/S		
					PROPOSED STEP HEIGHT		
					PIPE LINE CONTINUES TO REFERENCED PAGE		
					PENETRATION/FLOW DIRECTION		
					SERVICE TYPE: SW (STORMWATER), RW (RAINWATER)		
					SIZE		
					PENETRATION/FLOW DIRECTION		
					INDICATES 100mm DIA. RAINWATER PIPE, U.N.O.		
					INDICATES 100mm DIA. STORMWATER PIPE, U.N.O		
					INDICATES EXISTING STORMWATER PIPE		
					INDICATES EXISTING RAINWATER PIPE		
					INDICATES 100mm DIA. SEWER GRADE CHARGED STORMWATER PIPE.		
					INDICATES INDICATIVE LOCATION OF PROPOSED RISING MAIN		
					ESTIMATED LOCATION OF EXISTING SEWER MAINS		
					ESTIMATED LOCATION OF EXISTING ELECTRICITY LINE		
					ESTIMATED LOCATION OF EXISTING TELECOMMUNICATION		
					ESTIMATED LOCATION OF EXISTING WATER MAINS		
					ESTIMATED LOCATION OF EXISTING GAS MAINS		
					INDICATES SITE BOUNDARY		
					INDICATES EASEMENT WITHIN SITE, REFER TO DETAILED SURVEY		
					INDICATES INDICATIVE ROOF OUTLINE		
					INDICATES SIZE & DIRECTION OF RAINWATER PIPE GREATER THAN 100mm DIA.		
					INDICATES SIZE & DIRECTION OF STORMWATER PIPE GREATER THAN 100mm DIA.		
					INDICATES SIZE & DIRECTION OF EXISTING STORMWATER PIPE GREATER THAN 100mm DIA.		

LEGEND PIPE TYPES:
— RW — INDICATES PROPOSED FULLY SEALED RAINWATER PIPE.
— SW — INDICATES PROPOSED STORMWATER
— w.RM — INDICATES RISING STORMWATER MAIN
← DN100@1% PIPE DIRECTION, DIAMETER, AND MIN FALL

LOT B
DP 341590

BASEMENT PUMPOUT TANK
PROVIDE THE FOLLOWING PUMPOUT TANK:
DRIVEWAY CATCHMENT AREA: 50 m²
PUMPOUT MINIMUM VOLUME: 3.0 m³
TANK SL: 67.240 NOM.

PUMP/ RISING MAIN INSTALLED IN
ACCORDANCE WITH MANUFACTURES
SPECIFICATION
REFER TO PAGE S5 FOR DETAILS

LIFT DRAINAGE
BY OTHERS

LIFT DRAINAGE
BY OTHERS

BASEMENT PUMPOUT TANK
PROVIDE THE FOLLOWING PUMPOUT TANK:
DRIVEWAY CATCHMENT AREA: 50 m²
PUMPOUT MINIMUM VOLUME: 3.0 m³
TANK SL: 67.240 NOM.

PUMP/ RISING MAIN INSTALLED IN
ACCORDANCE WITH MANUFACTURES
SPECIFICATION
REFER TO PAGE S5 FOR DETAILS

SUBSOIL DRAINAGE AND
TANKING OF BASEMENT TO
STRUCTURAL ENGINEERS
DETAIL

IF STEP IS LESS
THAN 70mm
PROVIDE
THRESHOLD
DRAINAGE
T.B.C AT CC STAGE

PROVIDE GRATED
BOX DRAIN (GBD):
SIZE: 100mm WIDE x
100mm DEEP GBD.
GRADE: ENSURE A
MINIMUM 2% GRADE
FROM GBD INVERT
TO OUTLET PIPE IL.

JUNCTION PIT - SIP2
SIZE: 450 SQUARE
GRATE: CLASS C GRATED
INLET
GRATE SL: 67.21 NOM.
OUTLET IL: 66.76 NOM.

PROVIDE GRATED BOX DRAIN (GBD):
SIZE: 250mm WIDE x 250mm DEEP GBD.
GRADE: ENSURE A MINIMUM 2% GRADE
FROM GBD INVERT TO OUTLET PIPE IL.
GBD SURFACE LEVEL TO BE 25mm BELOW
GARAGE FINISHED FLOOR LEVEL. ENSURE
UNHINDERED OVERFLOW PATH IN THE
EVENT OF DRAIN OR OUTLET BLOCKAGE

THE RESPONSIBILITY FOR DESIGNING
THE VEHICULAR ACCESS, LAYBACK,
AND DRIVEWAY IN ACCORDANCE
WITH AS/NZs2890 SERIES AND
COUNCIL SPECIFICATIONS SHALL BE
BY OTHERS

PROVIDE GRATED
BOX DRAIN (GBD):
SIZE: 100mm WIDE x
100mm DEEP GBD.
GRADE: ENSURE A
MINIMUM 2% GRADE
FROM GBD INVERT
TO OUTLET PIPE IL.

JUNCTION PIT - SIP1
SIZE: 450 SQUARE
GRATE: CLASS C GRATED INLET
GRATE SL: 67.21 NOM.
OUTLET IL: 66.76 NOM.

PROVIDE GRATED BOX DRAIN (GBD):
SIZE: 250mm WIDE x 250mm DEEP GBD.
GRADE: ENSURE A MINIMUM 2% GRADE
FROM GBD INVERT TO OUTLET PIPE IL.
GBD SURFACE LEVEL TO BE 25mm BELOW
GARAGE FINISHED FLOOR LEVEL. ENSURE
UNHINDERED OVERFLOW PATH IN THE
EVENT OF DRAIN OR OUTLET BLOCKAGE

THE RESPONSIBILITY FOR DESIGNING
THE VEHICULAR ACCESS, LAYBACK,
AND DRIVEWAY IN ACCORDANCE
WITH AS/NZs2890 SERIES AND
COUNCIL SPECIFICATIONS SHALL BE
BY OTHERS

MANAGEMENT OF STORMWATER

PLAN - BASEMENT

SCALE - 1:75/A1, 1:150/A3

0 1.5m 3m 4.5m 6m 7.5m

PROPOSED INTEGRATED ON-SITE DETENTION AND RAINWATER RE-USE TANK - LOT A
SUPPLY AND INSTALL A SINGLE RAINWATER RE-USE TANK AND ON-SITE DETENTION TANK THAT ADHERES TO THE MANUFACTURER AND COUNCIL SPECIFICATIONS, BASIX CERTIFICATE, AND AS/NZS3500.3 STANDARDS. IN ADDITION, FIT LEAF FILTERS, INSECT/VERMIN CONTROL, AND FIRST FLUSH DEVICES TO ALL RAINWATER TANK INLETS, AND INCLUDE AN INSECT/VERMIN CONTROL ON THE TANK OUTLET. THE RAINWATER TANK RE-USE PUMP AND UNIT MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

TYPE: PRECAST BELOW GROUND TANK
TOTAL VOLUME 6,100 LITRES
RAINWATER VOLUME: 3,348 LITRES (BASIX MIN 2,000)
OSD VOLUME: 2,752 LITRES (DRAINS MODELLING MIN 2,430)

FINAL PLACEMENT OF TANKS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION. REFER PAGE S4 FOR DETAILS.

THE SEWER SYSTEM MUST BE DESIGNED TO SUPPORT A POOL OVERFLOW CONNECTION AND COMPLY WITH ALL RELEVANT WATER REGULATIONS.

THE ARBORIST MUST VERIFY THE FINAL PLACEMENT OF THE PIPE, WHERE NECESSARY.

THE SEWER SYSTEM MUST BE DESIGNED TO SUPPORT A POOL OVERFLOW CONNECTION AND COMPLY WITH ALL RELEVANT WATER REGULATIONS.

PROPOSED INTEGRATED ON-SITE DETENTION AND RAINWATER RE-USE TANK - LOT B
SUPPLY AND INSTALL A SINGLE RAINWATER RE-USE TANK AND ON-SITE DETENTION TANK THAT ADHERES TO THE MANUFACTURER AND COUNCIL SPECIFICATIONS, BASIX CERTIFICATE, AND AS/NZS3500.3 STANDARDS. IN ADDITION, FIT LEAF FILTERS, INSECT/VERMIN CONTROL, AND FIRST FLUSH DEVICES TO ALL RAINWATER TANK INLETS, AND INCLUDE AN INSECT/VERMIN CONTROL ON THE TANK OUTLET. THE RAINWATER TANK RE-USE PUMP AND UNIT MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

TYPE: PRECAST BELOW GROUND TANK
TOTAL VOLUME 6,100 LITRES
RAINWATER VOLUME: 3,348 LITRES (BASIX MIN 2,000)
OSD VOLUME: 2,752 LITRES (DRAINS MODELLING MIN 2,430)

FINAL PLACEMENT OF TANKS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION. REFER PAGE S4 FOR DETAILS.

LOT B
DP 341590

JUNCTION PIT - SIP5
SIZE: 600 x 900 SQUARE
GRATE: CLASS A GRATED INLET
GRATE SL: 69.99 NOM.
OUTLET IL: 68.58 NOM.

FULLY SEALED RAINWATER LINE FOR UPPER ROOF ONLY. REFER TO CATCHMENT AREAS ON PAGE S6

LANDSCAPE PIT
SIZE: 350 SQUARE
GRATE: CLASS A GRATED INLET
GRATE SL: 69.94 NOM.
OUTLET IL: 69.51 NOM.

JUNCTION PIT - SIP3
SIZE: 450 SQUARE
GRATE: CLASS A GRATED INLET
GRATE SL: 68.00 NOM.
OUTLET IL: 67.45 NOM.
PROVIDE ONE WAY VALVE ON RISING MAIN OUTLET

DISCHARGE STORMWATER TO KERB AND GUTTER TO COUNCIL SATISFACTION. THE PROPOSED CONSTRUCTION MUST CONFORM TO THE COUNCIL'S SPECIFICATIONS, AND THE INVERT LEVEL OF THE OUTLET MUST BE CONFIRMED ON-SITE PRIOR TO CONSTRUCTION.
OUTLET MATERIAL: DN100 SEWER GRADE uPVC
OUTLET IL: 67.20 NOM.

LEGEND PIPE TYPES:
RW INDICATES PROPOSED FULLY SEALED RAINWATER PIPE.
SW INDICATES PROPOSED STORMWATER
w.RM INDICATES RISING STORMWATER MAIN
DN100@1% PIPE DIRECTION, DIAMETER, AND MIN FALL

BOULEVARD
EDGECLIFFE

THE EXISTING VEHICLE CROSSING SITUATED WITHIN THE PUBLIC AREA SHALL BE REMOVED AND REPLACED WITH TURF. ROAD PAVEMENT, KERB AND GUTTER TO COMPLY WITH COUNCIL SPECIFICATION AND THEIR SATISFACTION. ENSURE PIPE COVER COMPLIES WITH AS3500.3

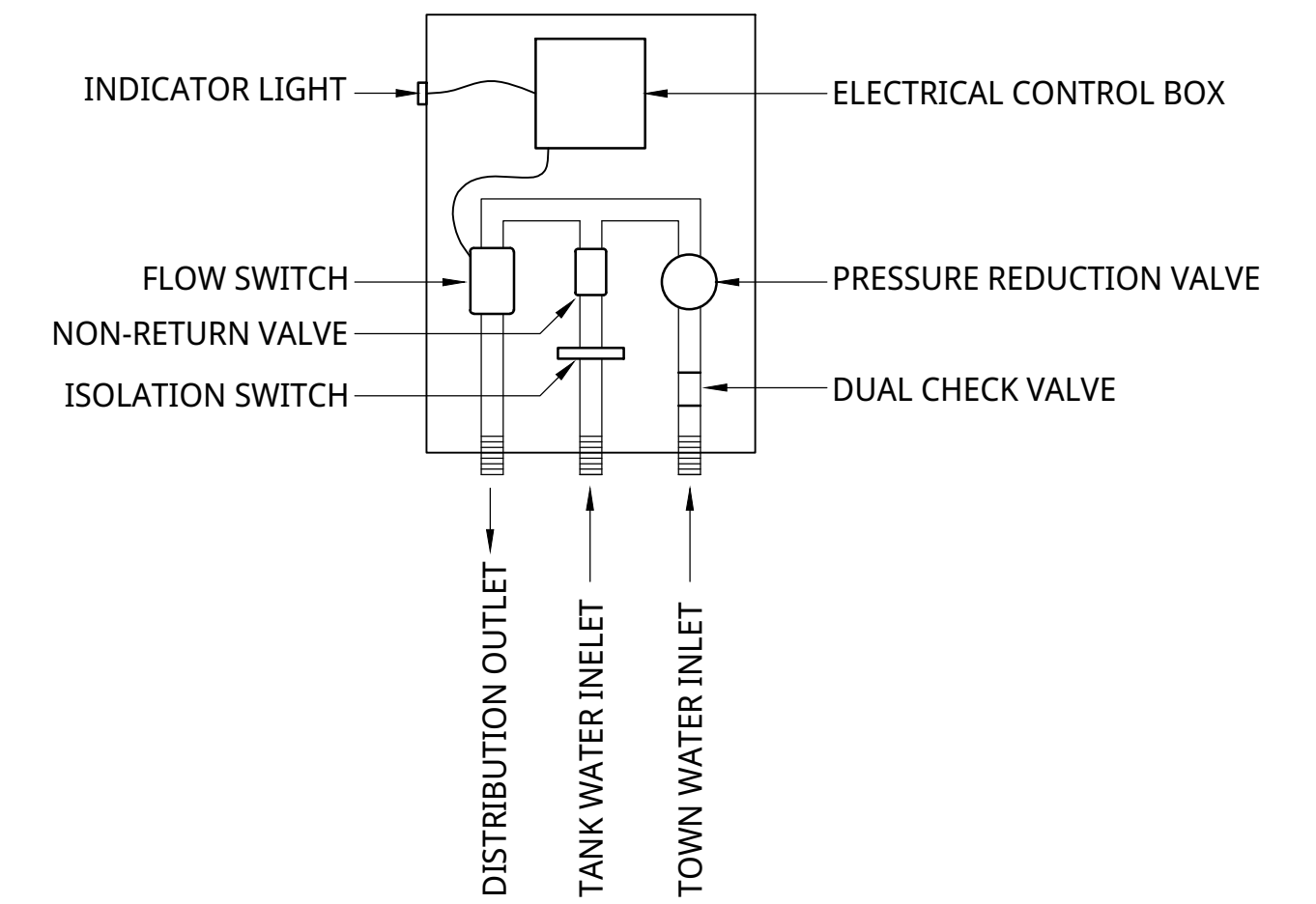
THE ARBORIST MUST VERIFY THE FINAL PLACEMENT OF THE PIPE, WHERE NECESSARY.

JUNCTION PIT - SIP4
SIZE: 450 SQUARE
GRATE: CLASS A GRATED INLET
GRATE SL: 68.08 NOM.
OUTLET IL: 67.70 NOM.
PROVIDE ONE WAY VALVE ON RISING MAIN OUTLET





DISCHARGE STORMWATER TO KERB AND GUTTER TO COUNCIL SATISFACTION. THE PROPOSED CONSTRUCTION MUST CONFORM TO THE COUNCIL'S SPECIFICATIONS, AND THE INVERT LEVEL OF THE OUTLET MUST BE CONFIRMED ON-SITE PRIOR TO CONSTRUCTION.
OUTLET MATERIAL: DN100 SEWER GRADE uPVC
OUTLET IL: 67.51 NOM.

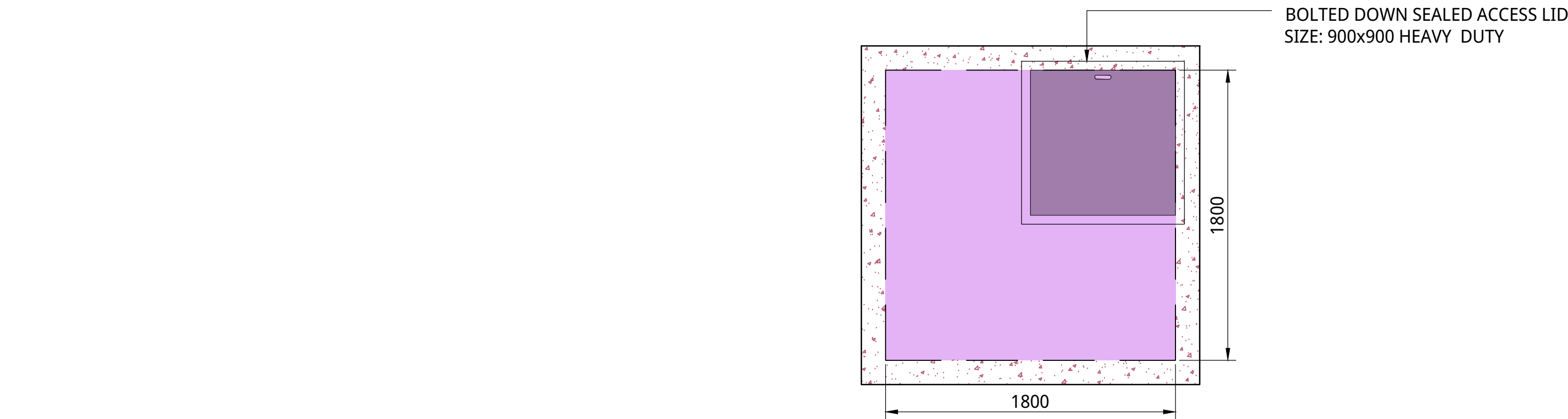
MANAGEMENT OF STORMWATER PLAN - GROUND FLOOR

SCALE - 1:75/A1, 1:150/A3
0 1.5m 3m 4.5m 6m 7.5m



LEGEND:

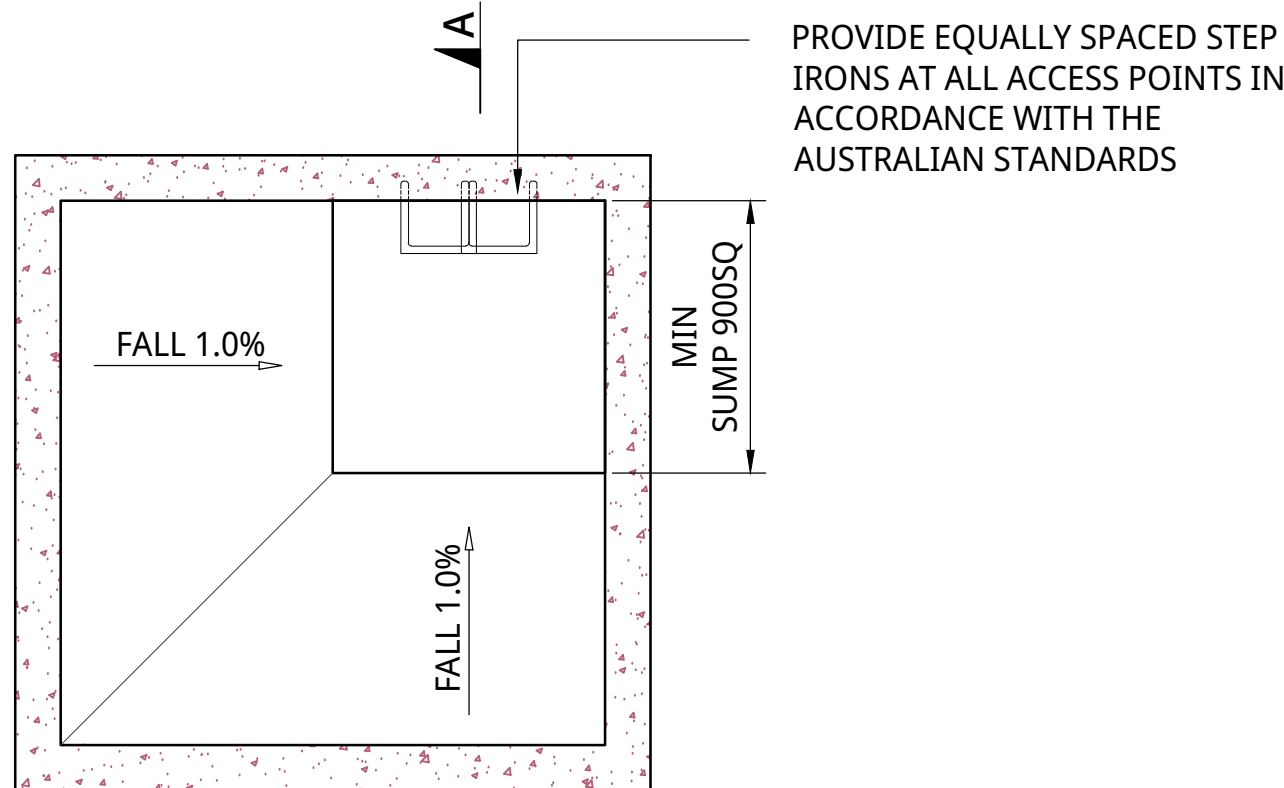
-  BACKFILL WITH FREE DRAINING SANDY LOAM MATERIAL SUITABLE FOR TURF
-  PROVIDED CLEAN BACKFILL (NO ROCKS OR SHARP OBJECTS)
-  PROVIDE CONCRETE ANCHOR IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION, WHERE REQUIRED
-  PROVIDE A MINIMUM 100mm WELL COMPACTED BEDDING IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION. EACH SIDE OF THE TANK SHOULD HAVE EXCAVATION CLEARANCE 300mm



PUMP OUT TANK CEILING
PLAN

SCALE - NTS

- NOTES:
- 1. CAST IN SITU PUMP OUT TANK TO STRUCTURAL ENGINEERS DETAIL
 - 2. BASEMENT DRAINAGE SUBJECT TO GEOTECHINCAL ENGINEERS INVESTIGATION AND STRUCTURAL ENGINEERS DESIGN OF SLAB AND WALLS.
 - 3. ALTERNATIVE PROPRIETY PRODUCT TO MANUFACTURES DESIGN PROVIDED IT COMPLIES WITH AS/NZs3500.3 SECTION 8 PUMPED SYSTEM REQUIREMENTS
 - 4. PROVIDE EQUALLY SPACED STEP IRONS AT ALL ACCESS POINTS IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS



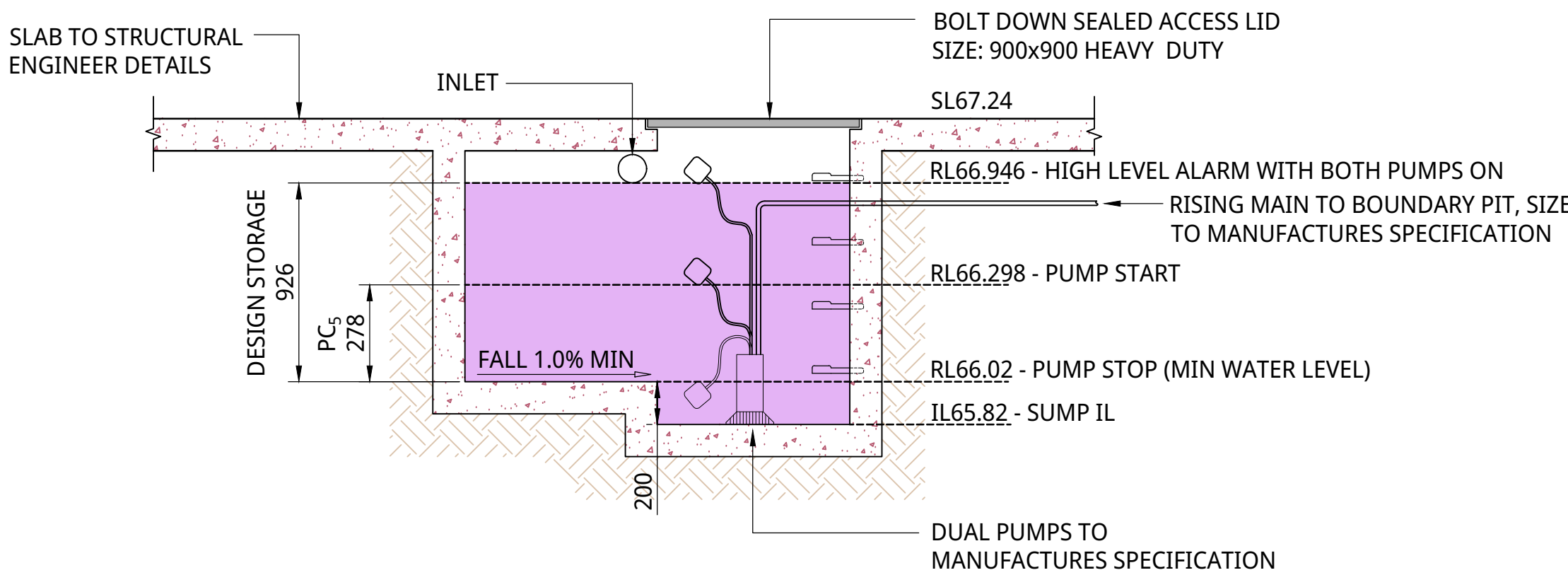
PUMP OUT TANK BASE
PLAN

SCALE - NTS

STORMWATER BASEMENT PUMP OUT TANK CALCULATIONS

- WET WELL STORAGE:
CATCHMENTS DRAINING TO PUMP OUT TANK (A) 33m² x 1.5 (FACTOR OF SAFETY) = 50m²
STORM EVENT 10% AEP
STORM PERIOD (T) 2 HOUR
RAINFALL INTENSITY (I) 40 mm/hr
COEFFICIENT RUNOFF (C) 1

PEAK DISCHARGE Q = (C x I x A) / 3600 0.556L/S
ACCUMULATED VOLUME V = (Q x T x 3600) / 1000 4.00m³ (2HR, 10% AEP)
- PUMPED VOLUME:
ASSUMED PUMPED CAPACITY (PC) 3L/S
PC₃₀ = (PC X (30/60) x 3600) / 1000 5.40m³
PC₅ = (PC X (5/60) x 3600) / 1000 0.90m³
- MINIMUM WET WELL STORAGE:
V - PC₃₀ = 4.00 - 5.40 = - 1.40m³ THEREFORE ADOPT 3m³ AS PER AS/NZs3500.3 CLAUSE 8.3.6



PUMP OUT TANK
SECTION (A - A)

SCALE - NTS

