

# MSC25232 - STKILDA BOTANIC GARDEN AMENITIES

## GENERAL NOTES

- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANT'S DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER FOR DECISION PRIOR TO THE COMMENCEMENT OF WORKS.
- ALL MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH THE RELEVANT SAA CODES AND PROJECT SPECIFICATION.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE CIVIL DRAWINGS.
- SUBSTITUTES WILL NOT BE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SITE IN A STABLE CONDITION AT ALL TIMES DURING CONSTRUCTION.
- ALL DIMENSIONS SHOWN ARE IN MILLIMETERS (UNLESS NOTED OTHERWISE).
- THE PRESENCE OF EXISTING OR ANY FUTURE SERVICES ON/OR ADJACENT TO THIS SITE SHALL BE BROUGHT TO THE PROJECT MANAGER'S ATTENTION PRIOR TO THE COMMENCEMENT OF WORKS.
- THESE DRAWINGS INCLUDE COLOURED INFORMATION. COPIES OF THESE DRAWINGS MUST BE PRODUCED IN COLOUR.

## CIVIL WORKS

- ALL LEVELS SHOWN ARE TO AUSTRALIAN HEIGHTS DATUM (UNLESS NOTED OTHERWISE). THE CONTRACTOR SHALL CONFIRM (ON SITE) THE EXISTING LEVELS SHOWN ON THIS DRAWING PRIOR TO THE COMMENCEMENT OF WORKS. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER PRIOR TO PROCEEDING WITH FURTHER WORK.
- ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL RELEVANT LOCAL AUTHORITIES REQUIREMENTS.
- WORK IS TO COMPLY WITH ALL OCCUPATIONAL HEALTH AND SAFETY REGULATIONS. BUILDER IS TO PROVIDE A HEALTH AND SAFETY MANAGEMENT PLAN PRIOR TO THE COMMENCEMENT OF ANY WORK. PLAN IS TO INCLUDE PROTECTION OF PUBLIC, SAFETY OF WORKMEN, SCAFFOLD AND HANDRAIL AND WALKWAY REQUIREMENTS, EXCAVATION AND SHORING, LIFTING PROCEDURES, ETC.

## STORMWATER DRAINAGE

- ALL STORMWATER DRAINAGE CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS AND THE RELEVANT LOCAL AUTHORITIES REQUIREMENTS.
- WHERE SIZES OR LEVELS ARE DENOTED C.O.S. THEY ARE APPROXIMATE ONLY AND SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK OR ORDERING OF MATERIALS.
- ALL DOWNPIPE CONNECTIONS ARE AS PER DRAWINGS LAID AT 1 IN 100 MINIMUM (UNO). REFER TO ARCHITECT'S DRAWINGS FOR DOWNPIPE LOCATIONS AND SIZING.
- ALL STORMWATER DRAINS OUTSIDE THE PROPERTY (OUTFALL DRAIN) 225mm DIAMETER OR LARGER SHALL BE CLASS 2 REINFORCED CONCRETE PIPE RUBBER RING JOINTED SPIGOT AND FAUCET (UNO). RL 0.00 MEANS THE LEVEL:  
(A) FOR SIDE ENTRY PIT - TOP OF KERB AT CENTRE OF PIT.  
(B) FOR OTHER PITS - CENTRE OF TOP OF PIT (THE COVER OTHERWISE TO MATCH GRADE OF SURFACE IN WHICH LOCATED.)
- ALL PIT COVERS TO BE INSTALLED IN COMPATIBLE FRAMES STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- PROVIDE 20mm DIAMETER GALVANIZED MILD STEEL STEP IRONS IN ALL PITS GREATER THAN 1000mm DEEP. SET INTO WALLS AT 200 MAX CENTRES.
- ALL SEEPAGE DRAINS TO BE 100mm DIAMETER SLOTTED PVC LAID AT 1 IN 100 MIN.
- INVERT OF SEEPAGE DRAIN AT PIT TO BE 450mm BELOW COVER LEVEL OR OVERT OF OUTLET PIPE, WHICHEVER IS HIGHER (UNLESS NOTED OTHERWISE).
- PROVIDE INSPECTION OPENING AT BASE OF ALL DOWNPIPES.

## SITE PREPARATIONS

- STRIP ALL TOPSOIL AND VEGETATION TO A MINIMUM DEPTH OF 150mm (UNO) AND STOCKPILE SUFFICIENT FOR FUTURE LANDSCAPE PURPOSES. REMAINDER TO BE REMOVED OFFSITE TO LEGAL DISPOSAL AND/OR AS DIRECTED BY THE PROJECT MANAGER.
- AFTER STRIPPING AND GRADING TO THE REQUIRED LEVELS, COMPACT EXISTING GROUND TO 98% MAXIMUM DRY DENSITY. ALL SOFT SPOTS SHALL BE REMOVED, BACKFILLED AND COMPACTED AS DIRECTED BY THE ENGINEER.
- ALL FILL MATERIAL SHALL BE NON-EXPANSIVE, GRANULAR MATERIAL PLACED IN 150mm MAXIMUM LAYERS AND COMPACTED TO 98% MAXIMUM DRY DENSITY (UNO).
- ALL SOIL DENSITIES REFERRED TO ABOVE SHALL BE DETERMINED IN ACCORDANCE WITH THE STANDARD COMPACTION TEST (AS1289 E.1.1).

## SLAB ON GROUND

- ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH AS 3600 AND ALL CODES REFERRED TO THEREIN.
- STRIP ALL ORGANIC MATERIAL AND TOP SOIL AND OTHER RUBBISH.
- AFTER PROOF ROLLING THE PREPARED SUBGRADE TO ACHIEVE 98% COMPACTION, EXCAVATE ANY SOFT SPOTS OR TREE ROOTS AND BACKFILL WITH APPROVED GRANULAR MATERIAL (E.G. CRUSHED ROCK). LAY FILL DOWN IN 150mm THICK LAYERS AND COMPACT TO 98% STANDARD COMPACTION.
- LAY FILL MATERIAL AS REQUIRED TO OBTAIN FLOOR LEVEL. FILL IS TO BE AN APPROVED GRANULAR MATERIAL LAID DOWN IN 150mm THICK LAYERS AND COMPACTED TO 98% STANDARD COMPACTION AS SPECIFIED IN NOTE 7.
- WET CURE CONCRETE FOR 7 DAYS AFTER POURING.
- GRADE SURROUNDING GROUND AWAY FROM SLAB EDGE. NO TREES ARE TO BE PLANTED CLOSER TO THE SLAB EDGE THAT THEIR HEIGHT WHEN FULLY GROWN.
- UNLESS SPECIFIED AS "SUSPENDED" FILLING UNDER ALL CONCRETE SLABS ON GROUND SHALL BE AS FOLLOWS:  
THE 50mm IMMEDIATELY BELOW THE SLAB SHALL BE AN APPROVED SAND WITH A MAXIMUM PARTICLE SIZE OF 1.0mm, OR CRUSHED ROCK, THOROUGHLY COMPACTED. BELOW THIS, WHERE REQUIRED TO BUILD UP TO CORRECT LEVEL, OR TO REPLACE SUBGRADE, THE FILL SHALL BE AN APPROVED GRAVEL, FINE CRUSHED ROCK, AND SITE DERIVED OR OTHER IMPORTED MATERIAL. ALL MATERIALS ARE TO BE PLACED AND COMPACTED IN 150mm THICK LAYERS TO 98% STANDARD COMPACTION. COMPACTION IS TO BE CARRIED OUT AT OPTIMUM MOISTURE CONTENT. GEOTECHNICAL TESTING OF COMPACTION IS TO BE UNDERTAKEN.

## DRAWING INDEX

SHEET NUMBER	SHEET NAME
C000-01	FACE SHEET & DRAWING INDEX
C000-02	CIVIL LEGEND OF SYMBOL
C001-01	GROUND LEVEL STORMWATER & DRAINAGE PLAN
C001-02	SITE PLAN STORMWATER & DRAINAGE PLAN
C002-01	STORMWATER & DRAINAGE DETAILS - SHEET 01

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# LEGEND OF SYMBOLS

## STORMWATER SERVICES

FOR PIPEWORK: DDDØ = PIPE DIAMETER IN MILLIMETERS  
 1:GG = PIPEWORK GRADE  
 ANY EXISTING PIPEWORK OR EQUIPMENT TO BE LOCATED PRIOR TO COMMENCING WORKS ONSITE AND SIZE, DEPTH AND LOCATION TO BE CONFIRMED. ANY DIFFERENCES FROM THE DESIGN TO BE REPORTED TO THE DESIGN ENGINEER.

	INGROUND STORMWATER PIPE
	CHARGED STORMWATER PIPE ENSURE PIPEWORK AND JOINTING METHOD SUITABLE FOR OPERATING PRESSURES. TEST TO ENSURE WATERTIGHT PRIOR TO CONCEALING.
	EXISTING STORMWATER PIPE
	SUSPENDED STORMWATER PIPE
	INGROUND GALVANISED PIPE
	AGI DRAIN (100Ø UNØ) WITH SOCK SURROUND, REFER TO DETAILS
	STORMWATER RISING (PUMPED) MAIN. ENSURE PIPEWORK AND JOINTING METHOD SUITABLE FOR OPERATING PRESSURES. TEST TO ENSURE WATERTIGHT PRIOR TO CONCEALING.
	EXISTING COUNCIL STORMWATER PIT
	NEW COUNCIL STORMWATER PIT - TO BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT AUTHORITY STANDARDS. OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
	POLY STORMWATER PIT REFER PIT SCHEDULE FOR SIZE DEPTH AND COVER TYPE
	GRATED STORMWATER PIT PIT NUMBER ØØ REFER PIT SCHEDULE FOR SIZE DEPTH AND COVER TYPE
	STORMWATER ORIFICE PIT PIT NUMBER ØØ REFER PIT SCHEDULE FOR SIZE DEPTH AND COVER TYPE TG2 = 100W x 100D
	GRATED STORMWATER TRENCH. PIT/TRENCH NUMBER TGØØ REFER PIT SCHEDULE FOR SIZE DEPTH AND COVER TYPE
	DOWNPIPE DDDØ REFER ARCHITECTURAL/HYDRAULIC PLAN FOR EXACT LOCATIONS AND SIZES
	FLOORWASTE OUTLET DDDØ REFER PLAN FOR SIZE AND LOCATIONS.
	TRENCH GRATE OUTLET DDDØ REFER PLAN FOR SIZE AND LOCATIONS.
	INSPECTION OPENING TO MATCH FINISHED SURFACE LEVEL PROVIDE TRAFFICABLE CAP IN TRAFFICABLE AREAS
	STORMWATER PUMP PUMP P-X REFER PUMP SCHEDULE FOR DETAILS
	RAINWATER TANK RWT-X REFER PLAN AND SCHEDULE FOR DETAILS
	ENVISS PIT. EVP-X REFER PLAN FOR DETAILS
	SOAKAGE PIT (ATLANTIS TANK) REFER PLAN FOR DETAILS

## PAVEMENTS

	PAVEMENT FINISHED LEVEL
	EXISTING PAVEMENT/GROUND FINISHED LEVEL
	NEW CONCRETE KERB TYPE ØØ REFER TO DETAILS PAGE
	SAW CUT JOINT REFER DETAILS
	CONSTRUCTION JOINT REFER DETAILS
	PAVEMENT INVERT
	PAVEMENT RIDGE
	PAVEMENT SLOPE 1:GG FOR STORMWATER RUNOFF

## STRUCTURAL

	RETAINING WALL REFER STRUCTURAL DRAWINGS FOR DETAILS
	TOP OF RETAINING WALL
	BOTTOM OF RETAINING WALL
	FINISHED FLOOR LEVEL TO BE READ IN CONJUNCTION WITH ARCHITECTURAL PLANS
	TYPICAL CONCRETE FOOTPATH DETAIL
	TYPICAL GRAVEL FOOTPATH DETAIL

## MISC

	SITE BOUNDARY SITE BOUNDARY SHOWN INDICATIVELY REFER SURVEY FOR INFORMATION
	EASEMENT REFER PLAN OF SUBDIVISION FOR INFORMATION
	TREE PROTECTION ZONE STRUCTURAL ROOT ZONE REFER ENDORSED TOWN PLANNING PLAN
	OVERLAND FLOW PATH
	SURVEY CONTOUR
	GRID LINE
	LONG SECTION

## IDENTIFIERS

	PIT NUMBER
	PIPE

## SERVICES

	EXISTING SEWER PIPEWORK
	EXISTING GAS PIPEWORK
	EXISTING TELECOMMUNICATION PIPE
	EXISTING FIRE SERVICE PIPEWORK
	EXISTING WATER MAIN PIPEWORK
	EXISTING ELECTRICITY LINE



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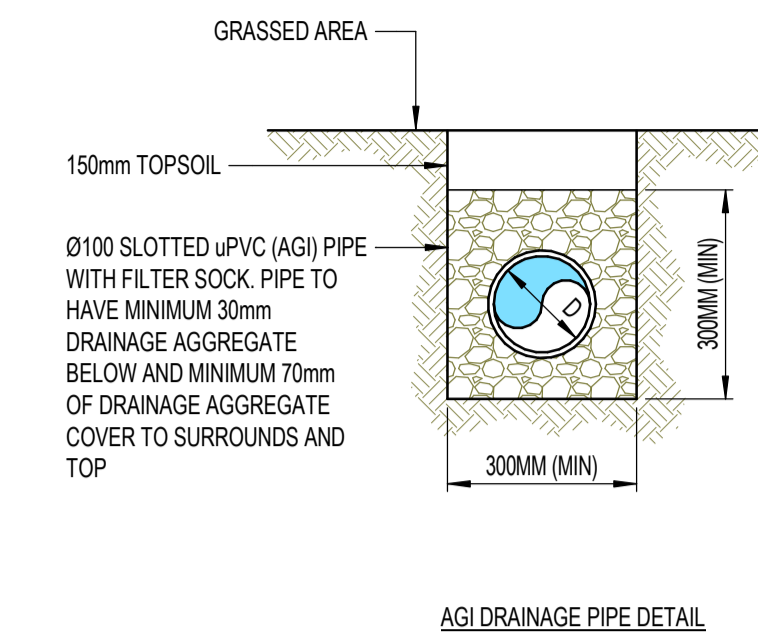
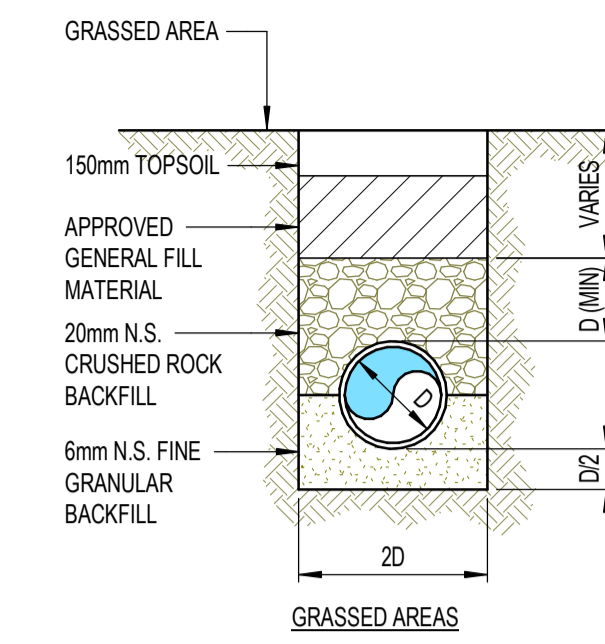
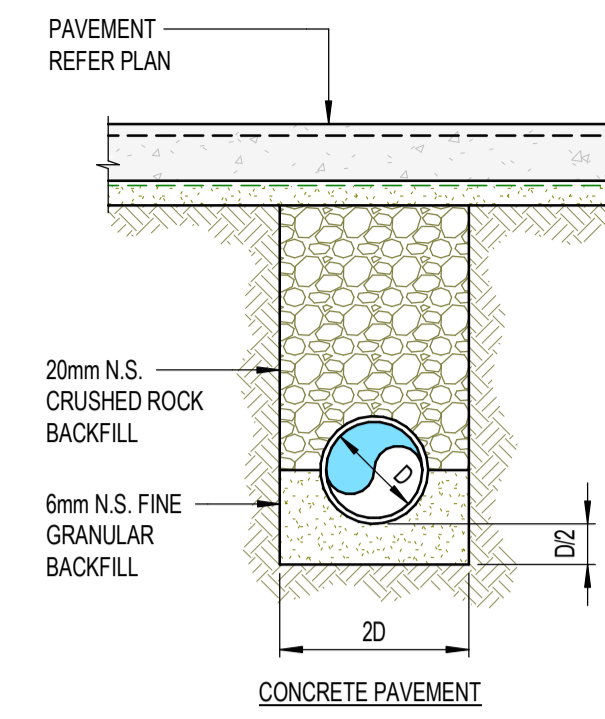
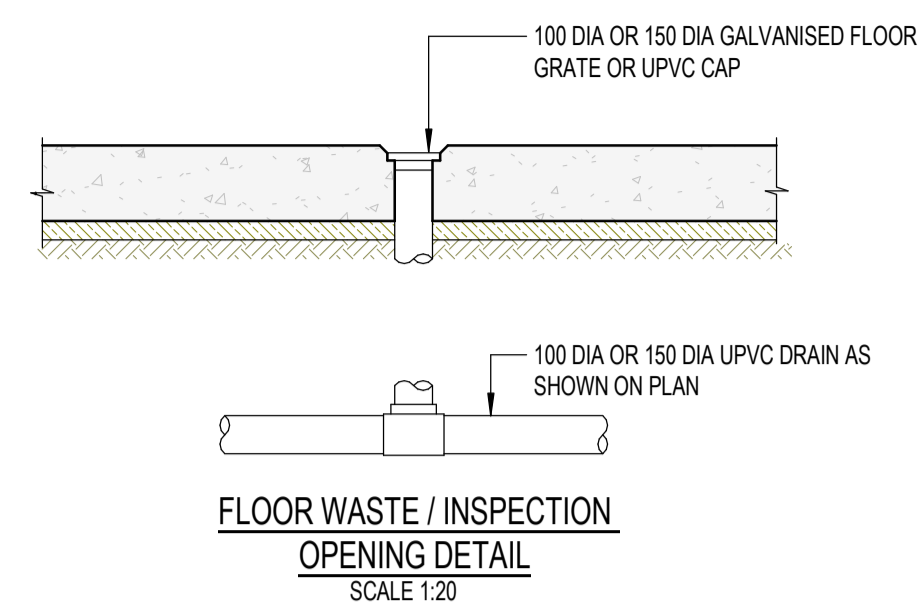
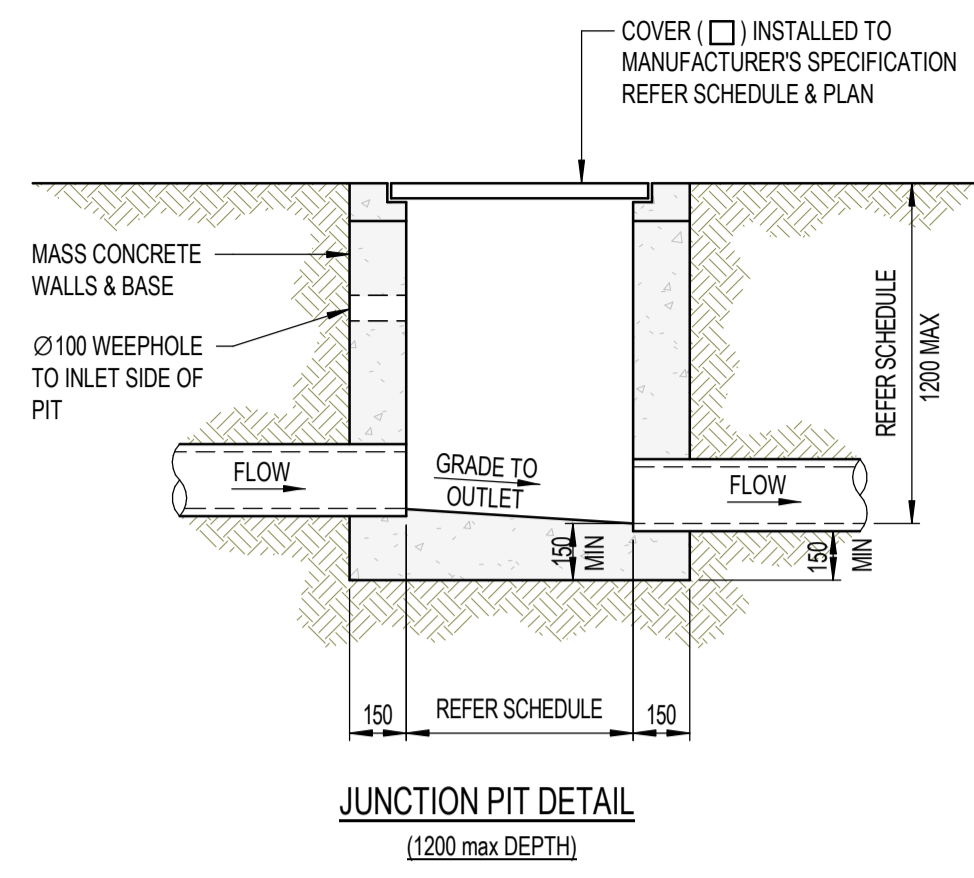
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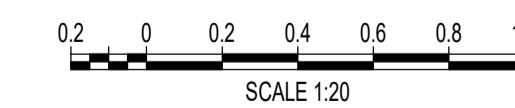
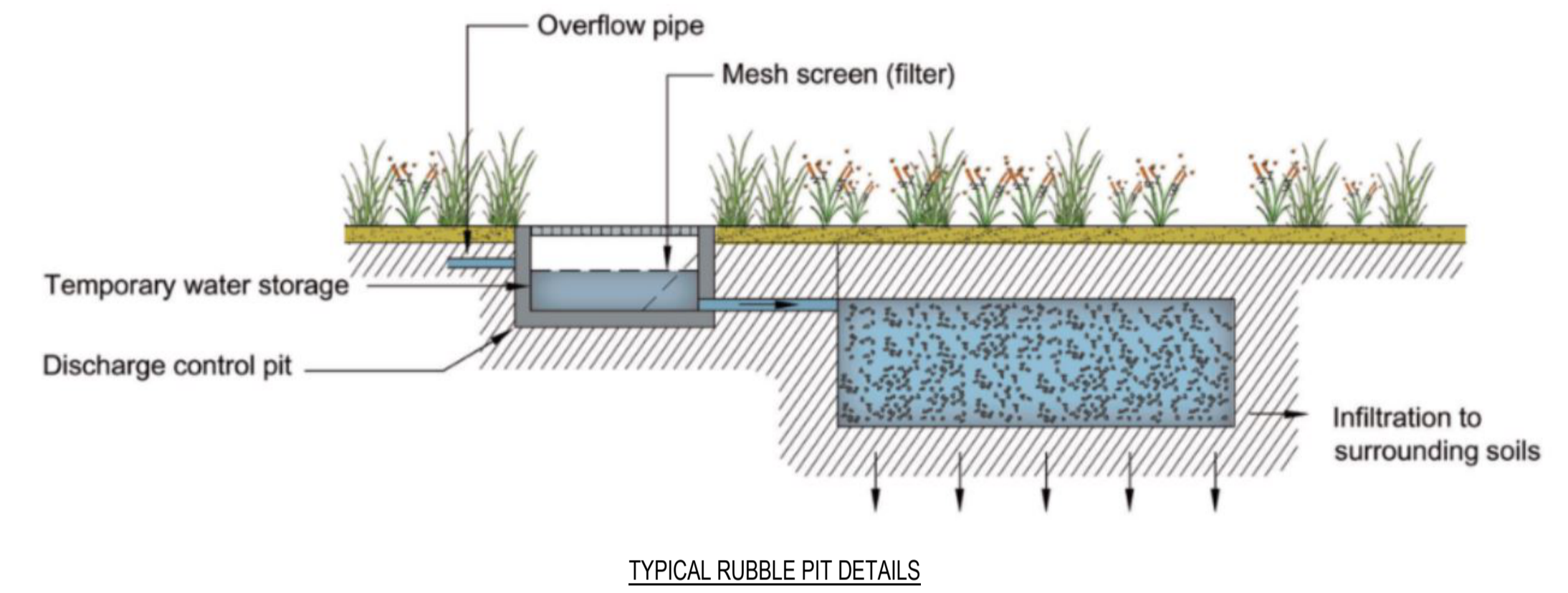
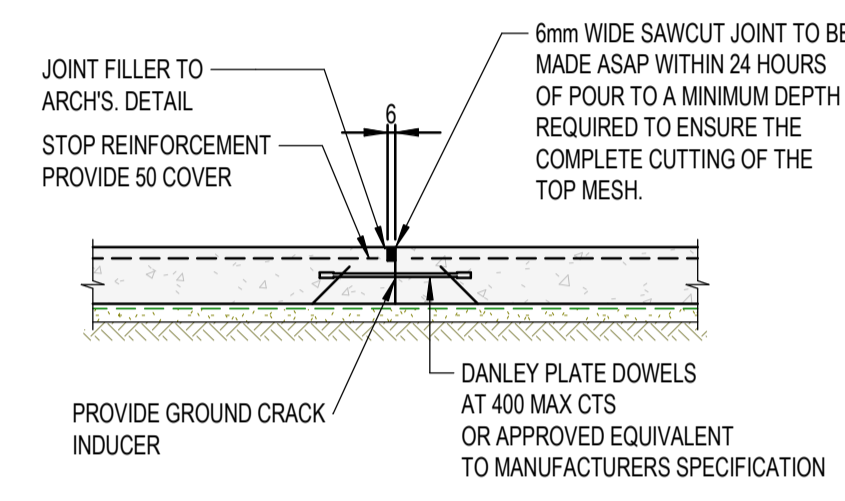
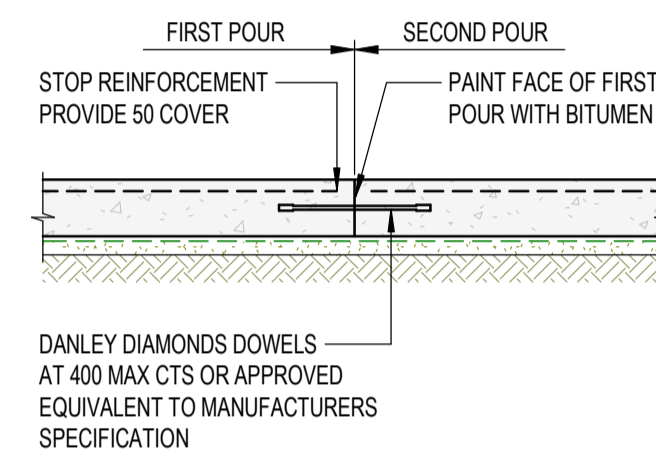
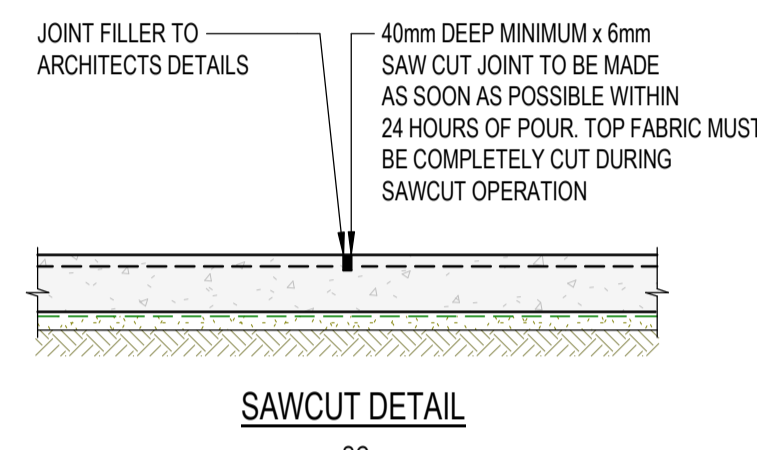
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**PIPE BEDDING DETAILS**



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