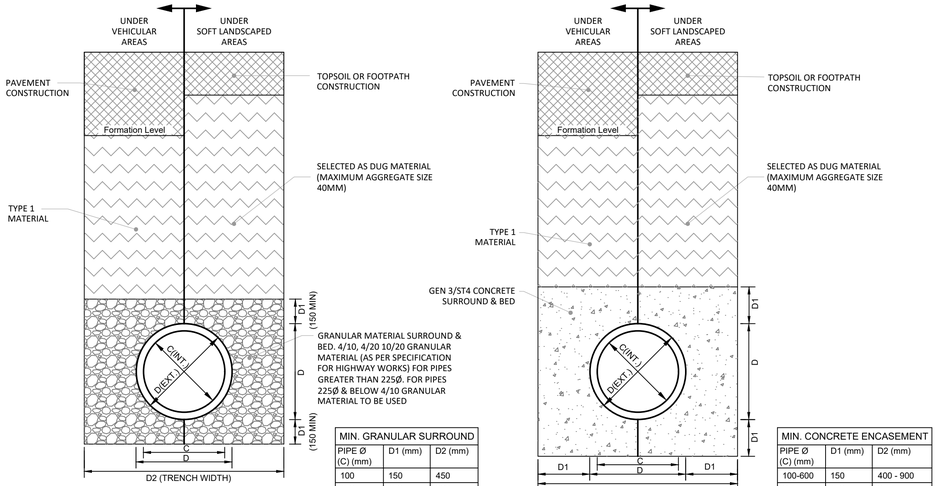


TO BE USED UNDER:

1. VEHICULAR AREAS WHERE COVER TO PIPE SOFFIT IS GREATER THAN 900mm.
2. ALL SOFT LANDSCAPE AREAS WHERE COVER TO PIPE SOFFIT IS GREATER THAN 600mm.

NOTE:
ALL PIPEWORK SHALL HAVE FLEXIBLE COUPLINGS

MIN. GRANULAR SURROUND		
PIPE Ø (C) (mm)	D1 (mm)	D2 (mm)
100	150	450
150	150	600
225	150	700
300	150	850
375	200	1050
450	200	1150
525	200	1200
600	200	1350
675	200	1450
750	200	1500

CLASS S PIPE BEDDING & SURROUND
(TO BE USED FOR PLASTIC, VITRIFIED CLAY & CONCRETE PIPEWORK)

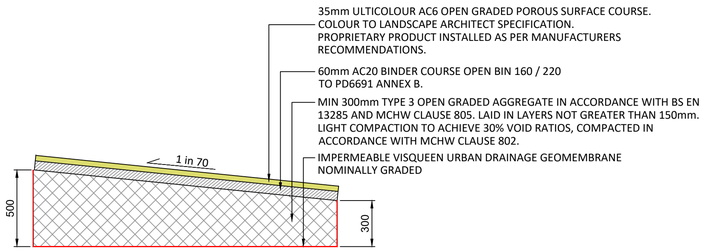
TO BE USED UNDER:

1. VEHICULAR AREAS WHERE COVER TO PIPE SOFFIT IS EQUAL TO OR LESS THAN 900mm.
2. ALL SOFT LANDSCAPE AREAS WHERE COVER TO PIPE SOFFIT IS EQUAL TO OR LESS THAN 600mm.

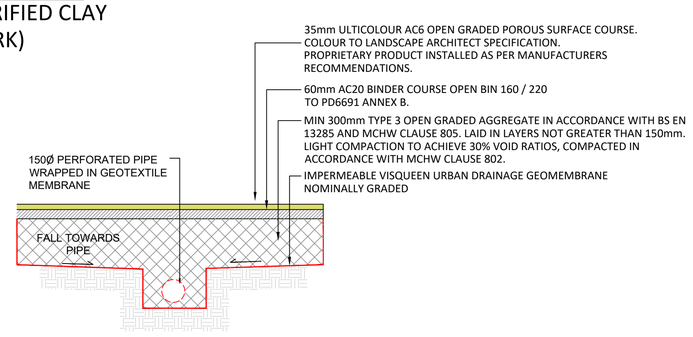
NOTE:
ALL PIPEWORK WITH CLASS Z (GEN 3/ST4) CONCRETE SURROUND SHALL HAVE FLEXIBLE COUPLINGS WITH FLEXI-BOARDS ON ALL JOINTS (REFER TO DETAIL D8)

MIN. CONCRETE ENCASEMENT		
PIPE Ø (C) (mm)	D1 (mm)	D2 (mm)
100-600	150	400 - 900
675	150	975
750	150	1100
825	150	1125
900	150	1200
975	150	1275
1050	150	1350
1200	170	1540
1350	180	1710
1500	200	1900
1650	220	2090

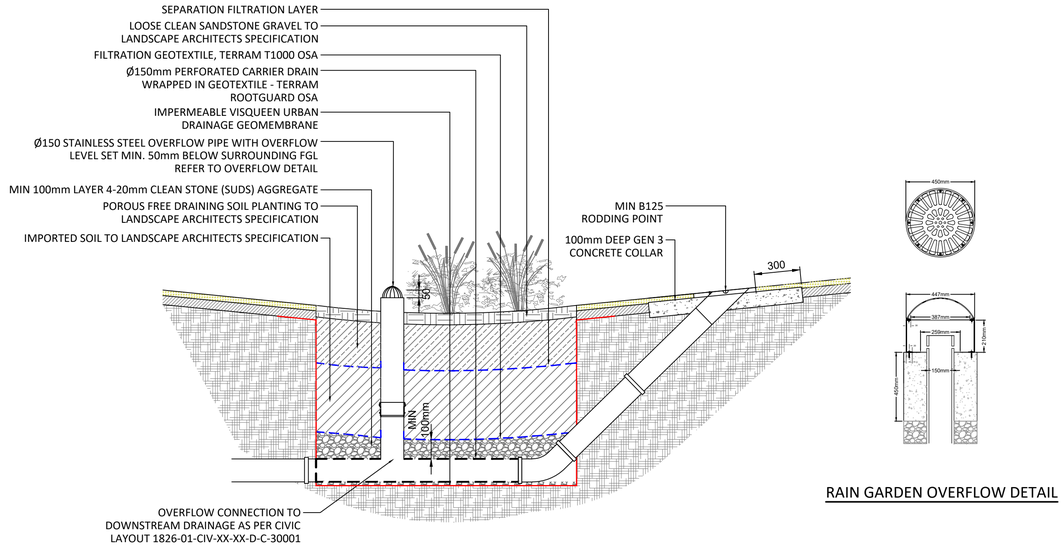
CLASS Z PIPE BEDDING & SURROUND
(TO BE USED FOR PLASTIC, VITRIFIED CLAY & CONCRETE PIPEWORK)



CROSS SECTION A-A
DRAWING 1826-01-CIV-XX-XX-D-C-30001



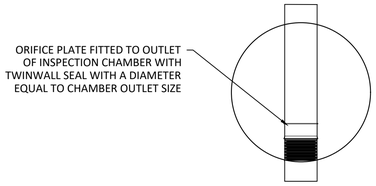
TYPICAL PERMEABLE PAVING DETAIL



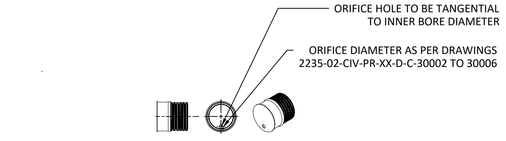
TYPICAL RAIN GARDEN DETAIL (RG1 & RG2)

PLANTING AND GROWING MEDIUM TO LANDSCAPE ARCHITECTS SPECIFICATION

RAIN GARDEN OVERFLOW DETAIL



TYPICAL ORIFICE PLATE WITHIN INSPECTION CHAMBER



REMOVABLE ORIFICE PLATE BY TURTLE ENVIRO OR SIMILAR APPROVED

ORIFICE PLATE DETAIL

Standard Notes

1. This drawing is to be read in conjunction with all relevant Architect's and Engineer's drawings and the specification.
2. This drawing should not be scaled.
3. All dimensions are to be verified by the contractor on site.
4. All discrepancies should be reported to the C.A. prior to the commencement of the works.

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Notes

BENCHING NOTES
MAIN & BRANCH CHANNELS TO BE BEDDED AND JOINTED IN 1:3 CEMENT MORTAR.
MAIN CHANNEL BENCHING TO BE FORMED VERTICALLY TO A MINIMUM OF THE SOFFIT OF THE OUTLET PIPE. THE BENCHING SHALL BE ROUNDED OFF TO A RADIUS OF APPROXIMATELY 25MM AND SLOPED UPWARDS AT A GRADIENT OF 1:10 TO 1:30 TO CHAMBER WALLS.
BENCHING SHALL BE FLOATED TO A SMOOTH, HARD SURFACE WITH A 1:2 CEMENT MORTAR LAID MONOLITHIC WITH THE BENCHING.

SIDE BRANCHES OF DIAMETER UP TO AND INCLUDING 150Ø SHOULD DISCHARGE TO THE MAIN CHANNEL IN THE DIRECTION OF FLOW, PREFERABLY AT HALF PIPE LEVEL. WHERE THE CONNECTING ANGLE IS MORE THAN 45°, THREE QUARTER SECTION BENDS SHOULD BE SHAPED SO AS TO CONTAIN THE FLOW WITHOUT PERMITTING FOULING AND FACILITATE RODDING OF BRANCH DRAINS.

A BRANCH WITH GREATER THAN 150Ø SHOULD BE SET WITH THE SOFFIT LEVEL WITH THAT OF THE MAIN DRAIN.

COVERS & FRAMES
INTERNAL COVERS AND FRAMES TO BE DOUBLE LOCKED AND SEALED AND SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE INFILL MATERIAL.

COVERS WITHIN BLOCK PAVED AREAS SHALL BE ORIENTATED TO SUIT ORIENTATION OF SURROUNDING BLOCKWORK. MANHOLE COVERS AND FRAMES SITUATED WITHIN VEHICULAR AREAS ARE TO BE CLASS D400. MANHOLE COVERS AND FRAMES SITUATED WITHIN NON-VEHICULAR AREAS ARE TO BE CLASS B125. MANHOLE COVERS AND FRAMES ARE TO COMPLY WITH BS EN124-2 IF CAST IRON.

MANHOLE ACCESS TO BE ORIENTATED SUCH THAT STEP IRONS LEAD TO BENCHING AND NOT PIPE CHANNELS.

OVERSAIL CORBELLING SHALL NOT EXCEED 30MM ON EACH COURSE.

CHAMBERS WITH OUTGOING PIPES GREATER THAN 600MM DIAMETER SHALL BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.

TOE HOLES TO BE PROVIDED IN BENCHING OF SEWER GREATER THAN 450MM DIAMETER FOR ACCESS TO PIPE INVERT.

ALL CONNECTIONS INTO AND OUT OF CHAMBERS/GULLIES TO HAVE CLASS Z CONCRETE SURROUND WITH FLEXIBLE COUPLINGS AND FLEXIBOARDS ON ALL COUPLINGS WHERE COVER TO PIPE SOFFIT IS EQUAL TO OR LESS THAN:
1) 1200MM UNDER VEHICULAR AREAS
2) 600MM UNDER NON-VEHICULAR AREAS

ALL CONCRETE USED IN CONSTRUCTION WITHIN SEWER/DRAIN AND DOMESTIC DRAINAGE TO BE CONSTURCTED WITH SULPHATE RESISTING CEMENT.

FINAL CONSTRUCTION
THIS DRAWING HAS BEEN ISSUED AS A RECORD OF DESIGN INFORMATION PROVIDED FOR CONSTRUCTION. IT SHOULD NOT BE RELIED UPON AS AN ACCURATE AS-BUILT RECORD OF COMPLETED WORKS

Date	Rev	Description	Drawn	Chkd
19.06.25	C05	FINAL CONSTRUCTION ISSUE	TC	CK
16.04.24	C04	ADDITIONAL NOTE ADDED TO RAIN GARDEN DETAIL AND ORIFICE PLATE DETAIL ADDED	ZG	TC
15.04.24	C03	RAIN GARDEN DETAIL UPDATED	ZG	TC
21.03.24	C02	UPDATED FOLLOWING TQ19	ZH	TC
12.01.24	C01	ISSUED FOR STAGE 5	BW	ZG
05.01.24	P03	SUBMITTED FOR PRE COMMENCEMENT CONDITIONS	BW	ZG
31.07.23	P02	ISSUED FOR TENDER	BW	CK
10.05.23	P01	ISSUED FOR TENDER	BW	CK

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www.civicengineers.com

Project
POLAND STREET ZONE

Title
ANCOATS GREEN
DRAINAGE DETAILS
SHEET 3

Status
FINAL CONSTRUCTION

Project Number	Scale @ A1	Date Created	Drawn	Checked	Suitability
1826-01	1:20	MAY'23	BW	CK	-

Drawing Number	Revision
1826-01-CIV-XX-XX-D-C-31003	C05