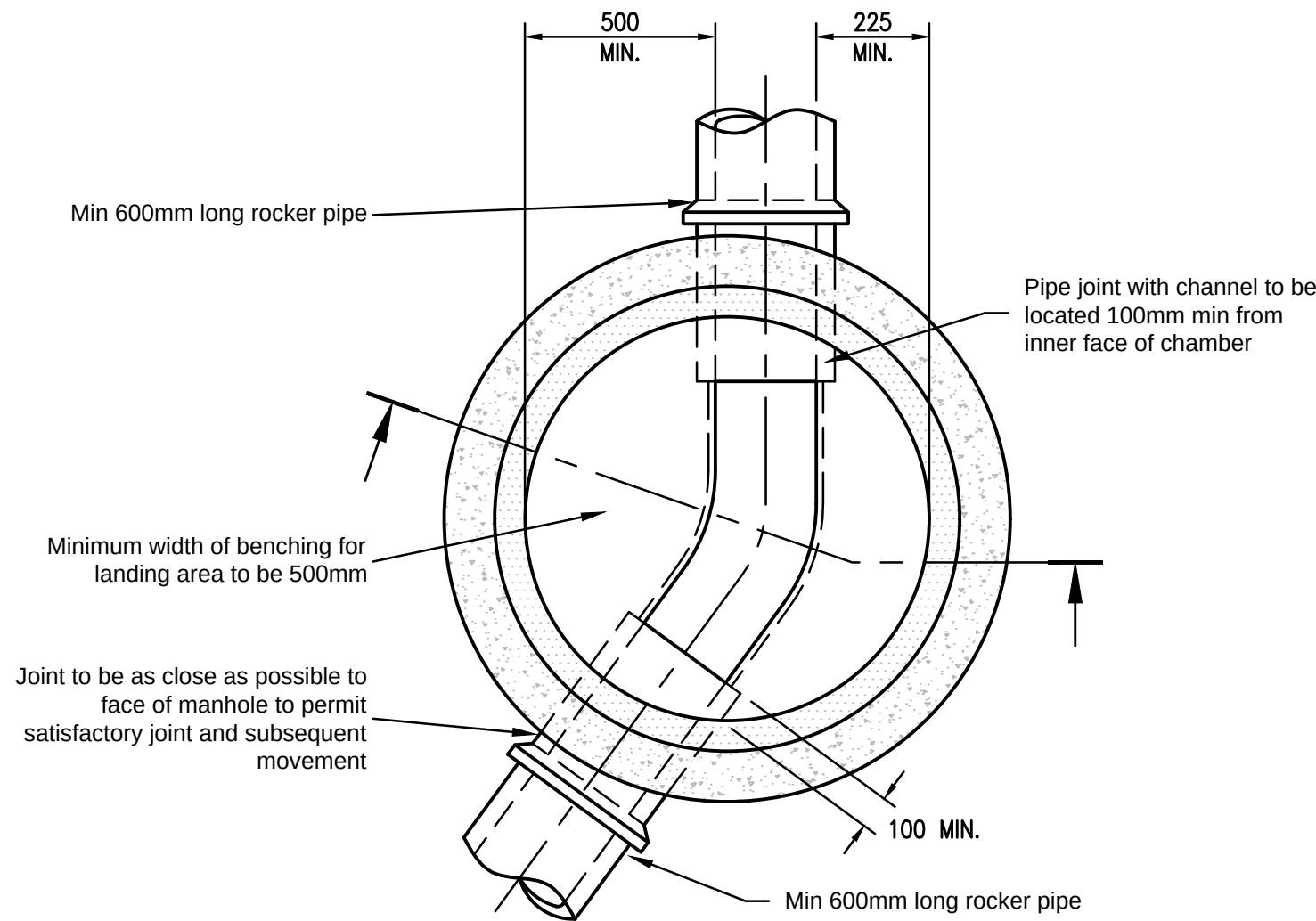
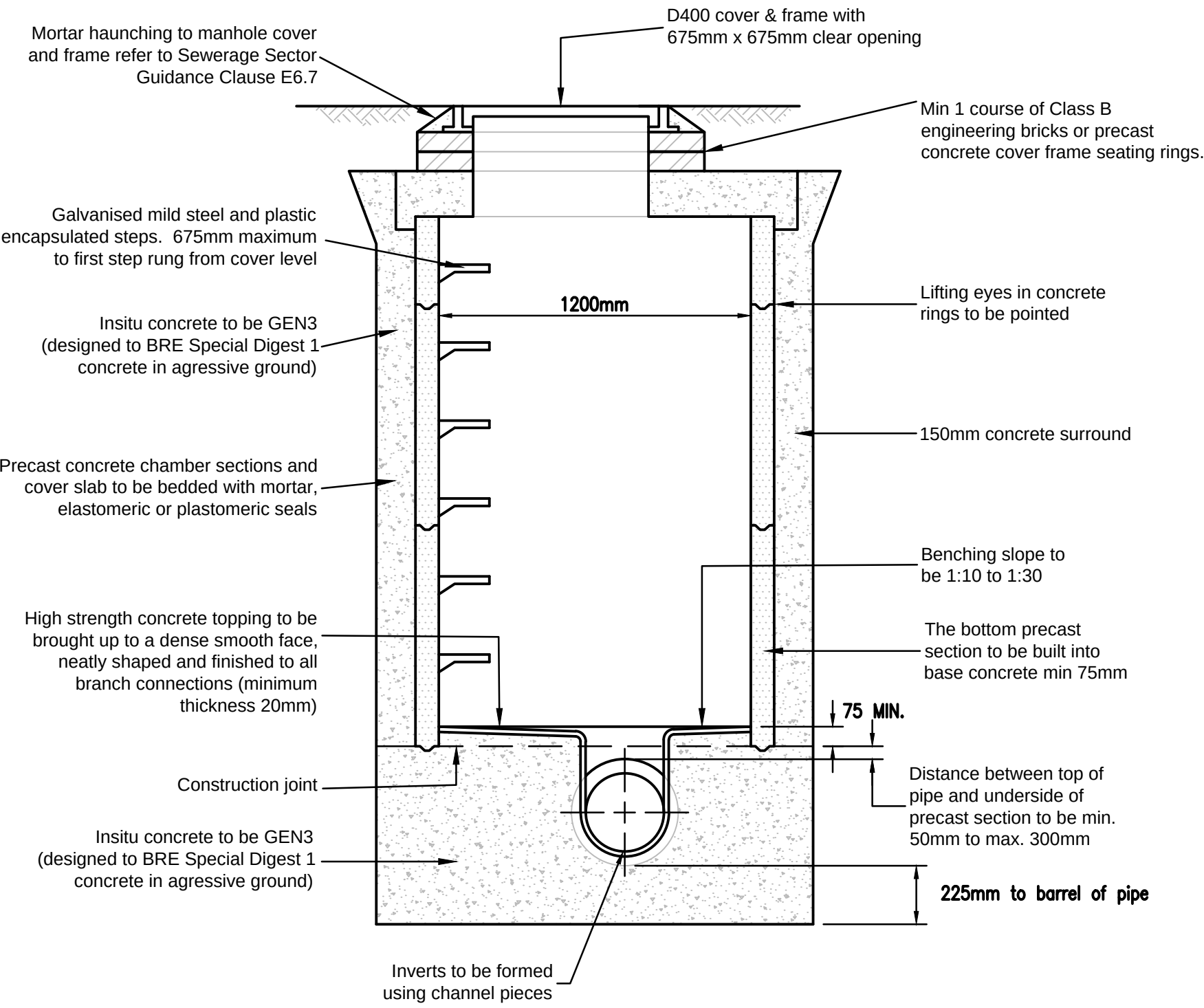
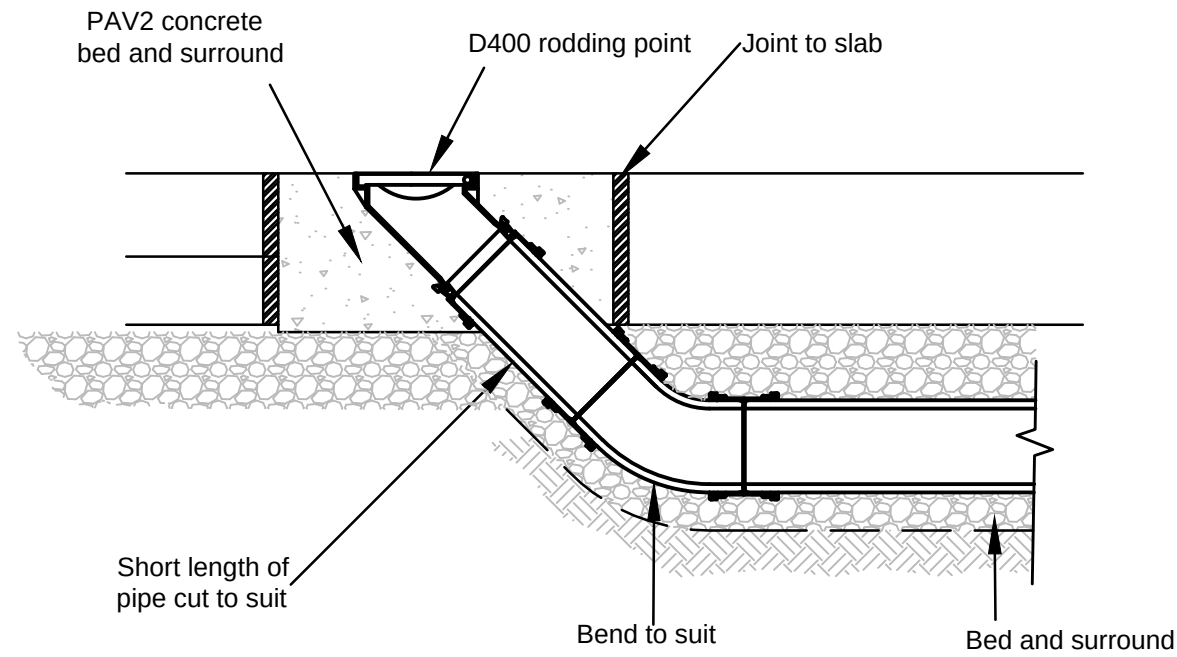




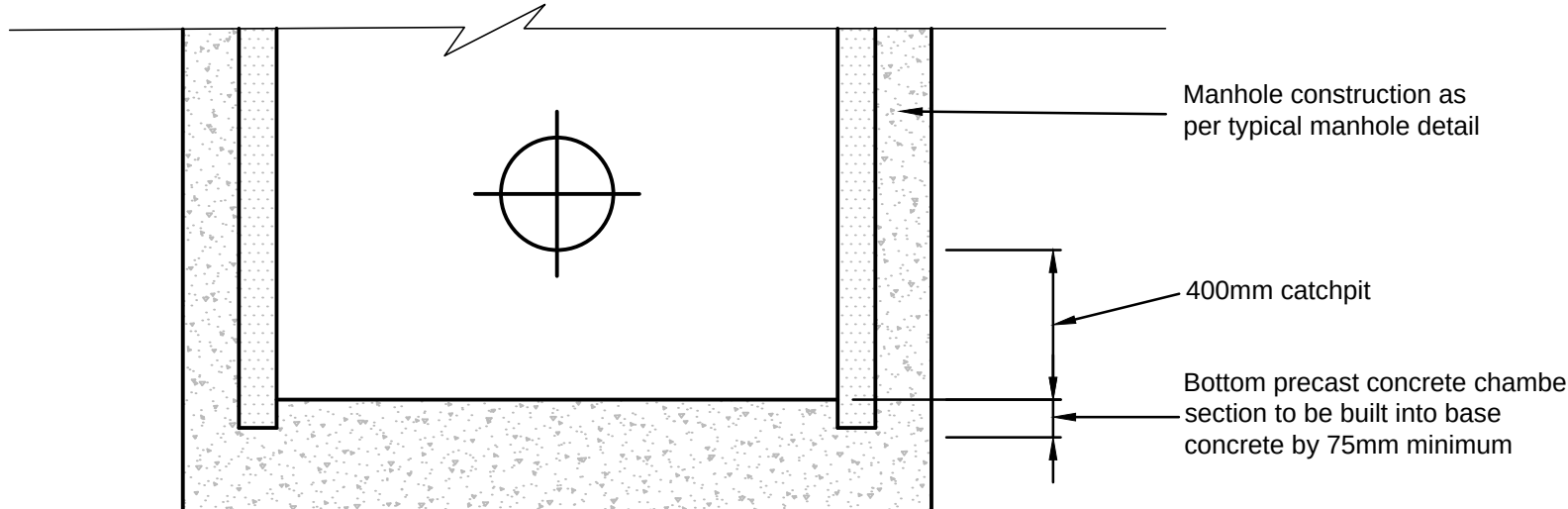
Typical Manhole Detail
Scale 1:20



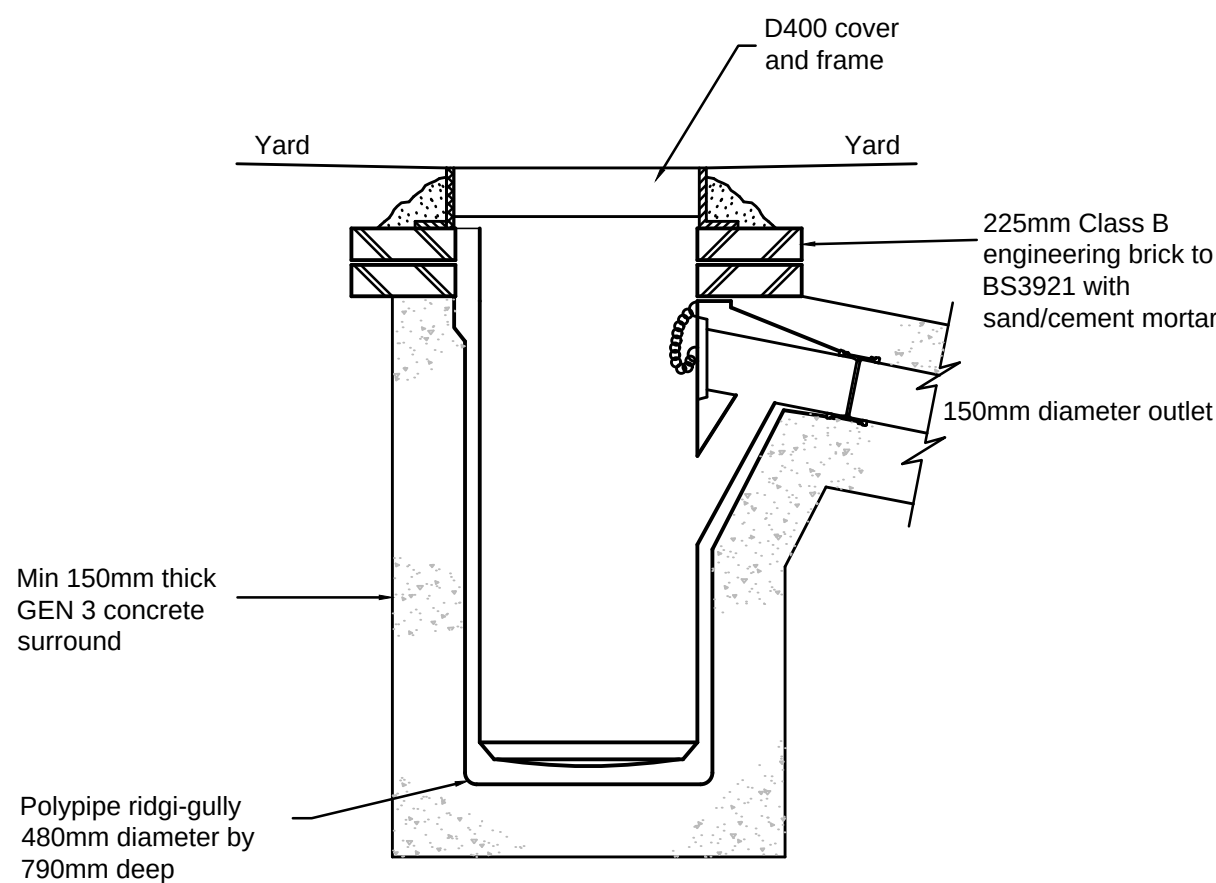
Rodding Eye Detail
Scale 1:10

Notes : Rodding Eye

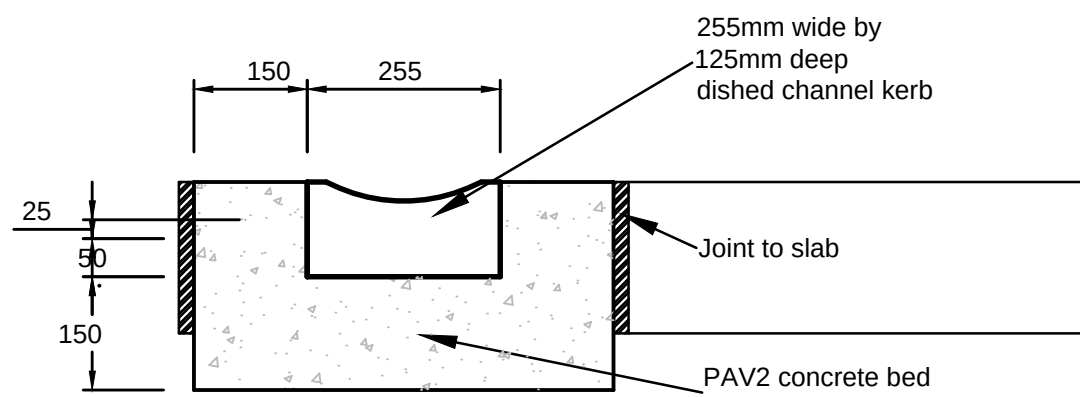
- Access shall be installed with proprietary frames and covers of suitable strength to suit location.
- Covers shall be set to level and fall of finished surface.



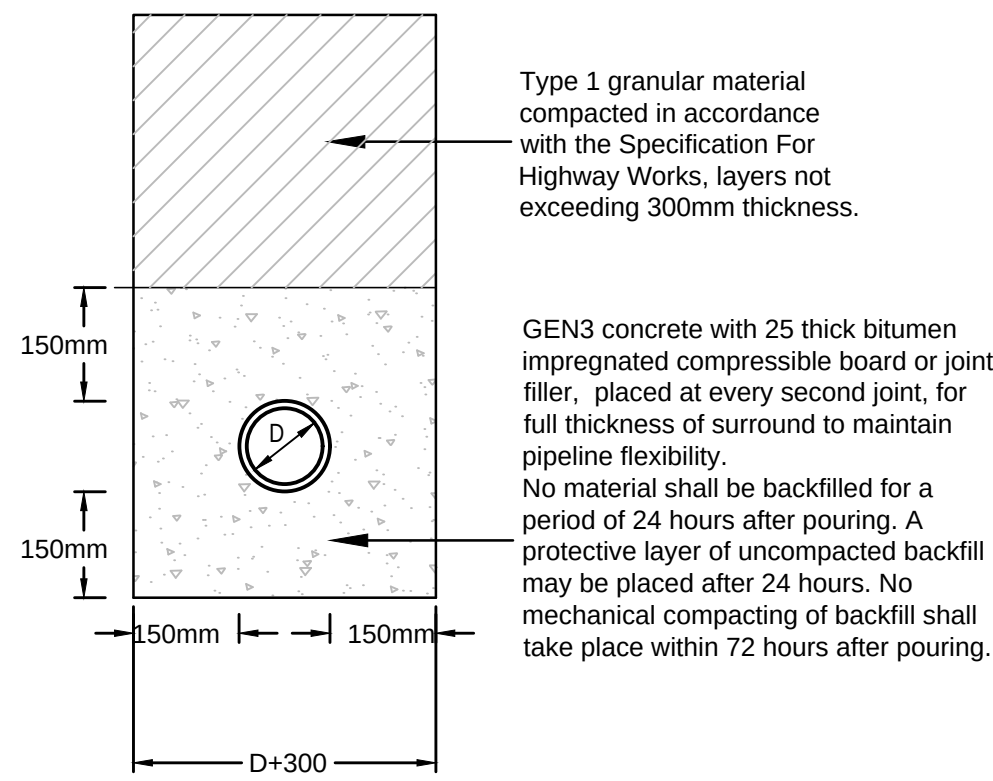
Catchpit Manhole Base
Scale 1:20



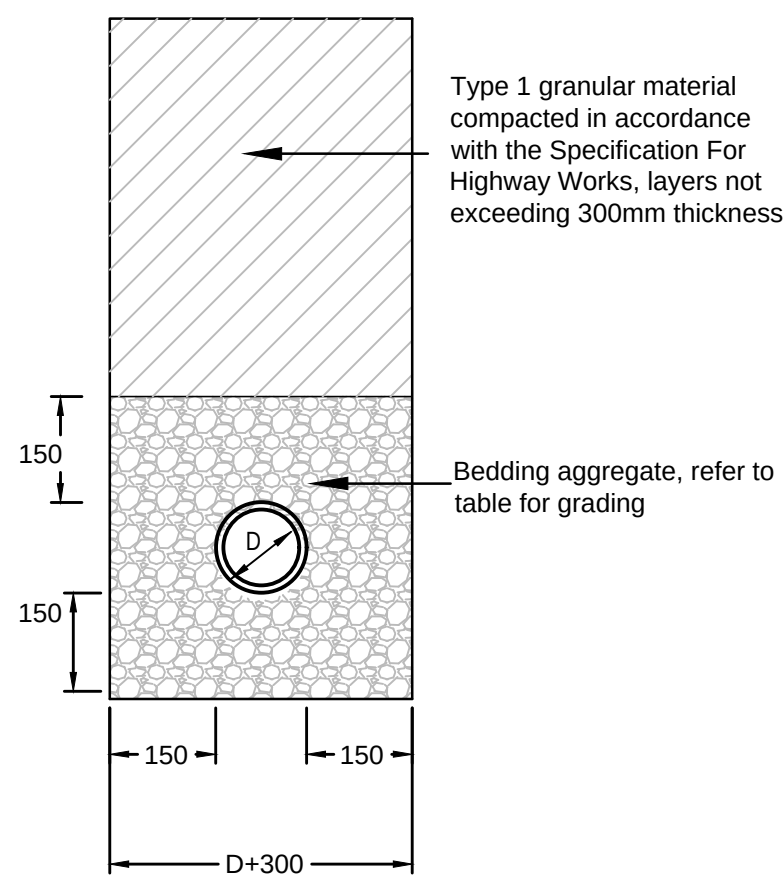
Gully Detail
Scale 1:20



Dished Channel - Laid Flush
Scale 1:10



Type Z Bedding
Depth to soffit <1.2m in trafficked areas
Depth to soffit <0.9 in pedestrian areas



Type S Bedding
Depth to soffit >1.2m in trafficked areas
Depth to soffit <0.9 in pedestrian areas

Pipe Bedding Details
Scale 1:10

Drainage Notes

- ALL PRIVATE DRAINAGE WORKS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH THE CURRENT BRITISH STANDARDS AND BUILDING REGULATIONS.
- HIGHWAY CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS.
- THE PRINCIPAL CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE EXISTING LINE, INVERT LEVEL AND PIPE DIAMETER OF THE EXISTING CONNECTION POINTS FOR BOTH THE FOUL AND SURFACE WATER SYSTEMS, PRIOR TO UNDERTAKING INSTALLATION OF ANY NEW DRAINAGE WORKS. ANY DEVIATION TO THE LEVELS AND POSITIONS INDICATED ON THE DRAWING SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
- ALL PIPES TO BE PHENOL RESISTANT.
- ALL PIPE RUNS TO BE LAID WITH FLEXIBLE JOINTS.
- CONNECTIONS TO BE MADE BY PURPOSE MADE JUNCTIONS AS FAR AS PRACTICABLE, OR USING PIPE BENDS TO BE TURNED IN DIRECTION OF FLOW.
- DESIGN SULPHATE CLASS CONCRETE MIXES TO BE CONFIRMED AND USED IN ACCORDANCE WITH BS8500).
- ALL PIPES ENTERING AND EXITING MANHOLES ARE TO BE CONNECTED WITH PIPE SOFFITS LEVEL UNLESS NOTED OTHERWISE.
- PRE-FORMED CHANNELS ARE TO BE USED IN MANHOLES WHERE APPLICABLE.
- FIRST FLEXIBLE JOINT IN PIPES ADJACENT TO A MANHOLE SHALL BE A MAXIMUM OF 600MM FROM INSIDE FACE OF MANHOLE, CONNECTING TO A ROCKER PIPE.
- THE LENGTH OF THE ROCKER PIPE TO BE 600MM.
- MANHOLE COVERS AND FRAMES TO BE IN ACCORDANCE WITH THE SEWERAGE SECTOR GUIDANCE (LATEST EDITION). ADOPTABLE FRAMES TO BE 150MM DEEP. FRAME STRENGTHS TO BE D400 IN TRAFFICKED AREAS AND B125 IN FOOTWAY AND VERGE AREAS.
- GRANOLITHIC CONCRETE BENCHING TO BE STEEL TROWELLED TO A DENSE SMOOTH FACE NEATLY SHAPED AND FINISHED TO ALL BRANCH CONNECTIONS.
- THE FIRST MANHOLE UPSTREAM FROM THE CONNECTION TO THE CONNECTION TO THE EXISTING DRAINAGE SHOULD BE FITTED WITH A SCREEN IN ORDER TO PREVENT DEBRIS ENTERING THE EXISTING DRAIN. THE SCREEN SHOULD NOT BE REMOVED UNTIL IMMEDIATELY PRIOR TO THE OCCUPATION OF THE PREMISES TO BE SERVED BY THE SEWER.
- ROAD GULLY CONNECTIONS TO BE 150MM DIAMETER LAID AT A MINIMUM GRADIENT OF 1:150 UNLESS NOTED OTHERWISE.
- ALL DRAINAGE WORKS WITHIN THE ZONE OF INFLUENCE OF TREES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE NHBC STANDARDS AND TREE PRESERVATION OFFICES REQUIREMENTS.
- ALL SVP'S AND RWP'S TO HAVE A VERTICAL RODDING ACCESS POSITIONED ABOVE GROUND LEVEL.
- POSITION AND SETTING OUT OF ALL SVP'S AND RWP'S TO BE PROVIDED BY THE ARCHITECT.
- ALL DRAINS TO BE TESTED PRIOR TO BACKFILLING, AND UPON COMPLETION OF SURFACING. ALL DRAINS TO BE INSPECTED BY CCTV IMMEDIATELY PRIOR TO PRACTICAL COMPLETION.

Notes: Pipe Bedding and Trenches

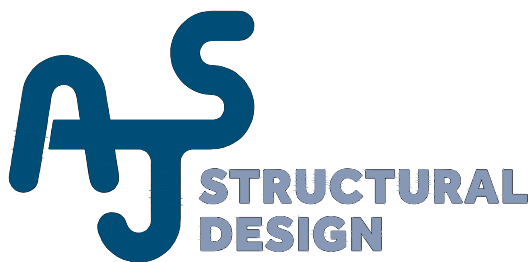
- Trench excavation and pipe bedding shall comply with the requirements of Sewers For Adoption.
- Trenches shall be excavated and supported as and when necessary.
- To ensure uniform support along the run all hard or soft spots, that may cause differential settlement, shall be removed and replaced with tamped selected as-dug backfill or Type 1 granular material.
- The finished trench base shall be true to line and gradient.
- Trench bases shall be free of standing water and have minimal disturbance by foot traffic to reduce damage to the formation.
- Immediately following the excavation of the trench, the pipes shall be laid and jointed on the pipe bed. Pipes shall be laid so that each one is in contact with the bed throughout the length of its barrel.
- Trenches shall be backfilled as soon as possible to prevent injury by falls, where trenches are left open they shall be appropriately secured by barriers to prevent access into the excavation. Backfilling shall be undertaken in such manner to prevent uneven loading or damage to the pipe. Filling material shall be deposited in layers not exceeding 225mm unconsolidated thickness, and then compacted to form a stable backfill. Where the excavations have been supported and the supports are to be removed, these where practicable, shall be withdrawn progressively as backfilling proceeds. The progressive withdrawal shall be done in such a manner as to minimise the danger of collapse and all voids formed behind the supports shall be carefully filled and compacted to prevent depressions forming in the final surface.

SIZING OF PIPE BEDDING		
NOMINAL BORE OF PIPE	SINGLE SIZE (mm)	GRADED (mm)
100 - 150	10	14 TO 5
150 - 200	10 OR 14	14 TO 5
225 - 300	10, 14 OR 20	14 TO 5 OR 20 TO 5

Notes

- DO NOT SCALE OFF THIS DRAWING.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS AND ALL OTHER RELEVANT DESIGN INFORMATION.
- THE CONTRACTOR SHALL INFORM THE ENGINEER OF ANY DISCREPANCIES BETWEEN DRAWINGS, PRIOR TO THE WORKS COMMENCING.
- FOR GROUND CONDITIONS REFER TO GROUND INVESTIGATION REPORT. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY VARIATIONS TO THE REPORTED GROUND CONDITIONS.
- THE CONTRACTOR TO IDENTIFY AND ACCURATELY LOCATE ANY EXISTING SERVICES, PRIOR TO THE COMMENCEMENT OF WORK, AND PROVIDE ANY PROTECTIVE MEASURES IN ACCORDANCE WITH THE STATUTORY AUTHORITY REQUIREMENTS.
- ALL DRAWINGS ISSUED ARE DEEMED TO HAVE PRELIMINARY STATUS UNTIL ANY REQUIRED APPROVALS HAVE BEEN OBTAINED FROM THE RELEVANT AUTHORITIES.

Rev.	Revision Description	Drn	Date



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Derby Office: Suite 5 Keynes House, Alfreton Road, Derby, DE21 4AS
Uttoxeter Tel: 01889 723003 Derby Tel: 01332 913011

Contract Title:	Glass Recycling Ltd 418 Carlton Road, Barnsley S71 3HX
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Drawing Contents:	New Industrial Warehouse Drainage Details Sheet 1 of 2
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Drawing Status:	preliminary
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Drawn by:	Date:	Scale:
AF	April 2022	As shown @ A1

Drawing No:	A5570 - 160	P1
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