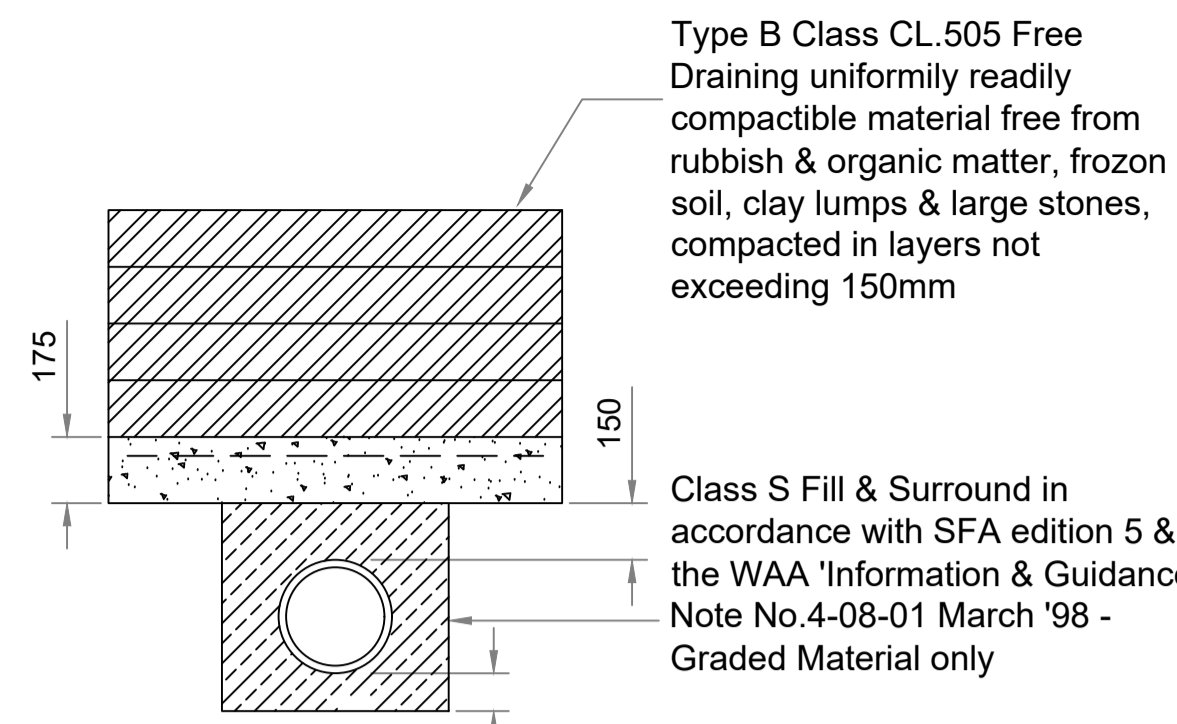


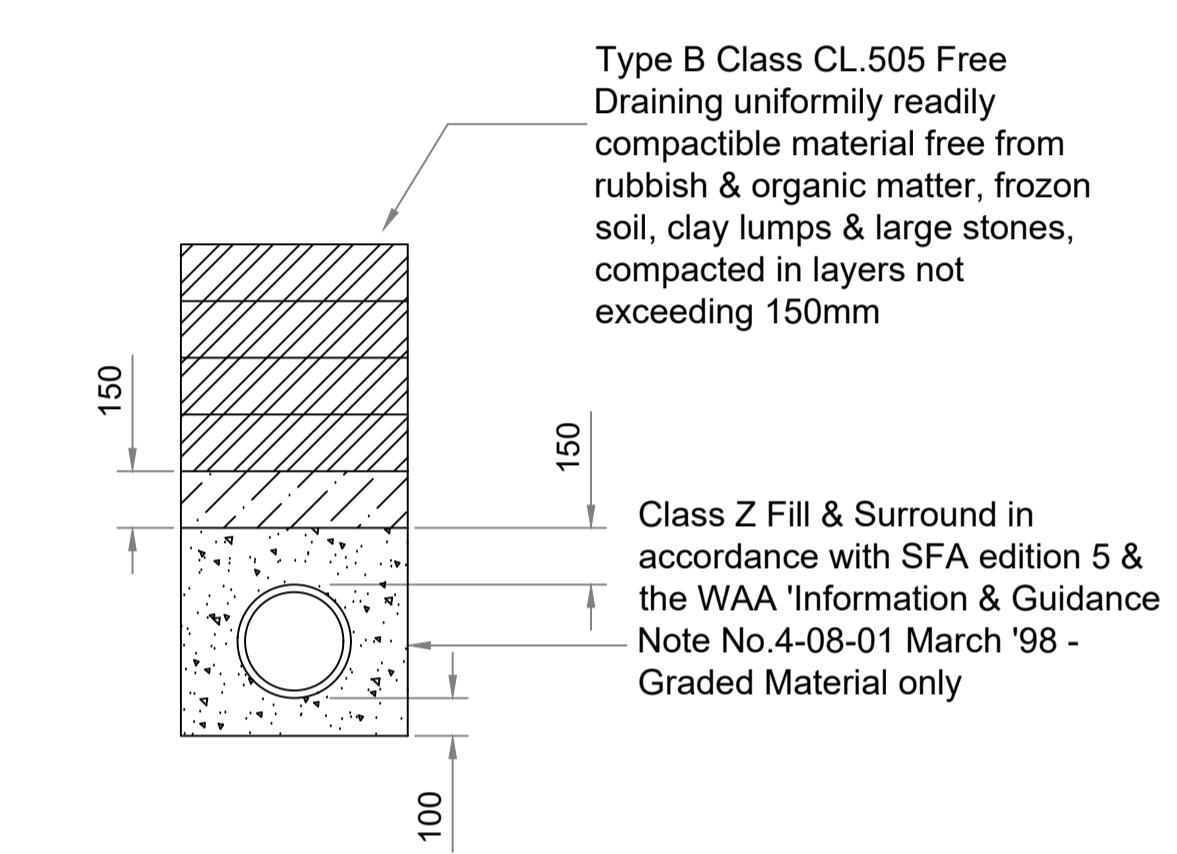
Pipe Diameter	Rocker Pipe Length
150 - 450	500 - 750
450 - 750	750 - 1000
> 750	Seek Guidance

NB. Toe Holes to be Provided in Benching of Sewers Greater than 450mm $\phi$  for Access to Invert

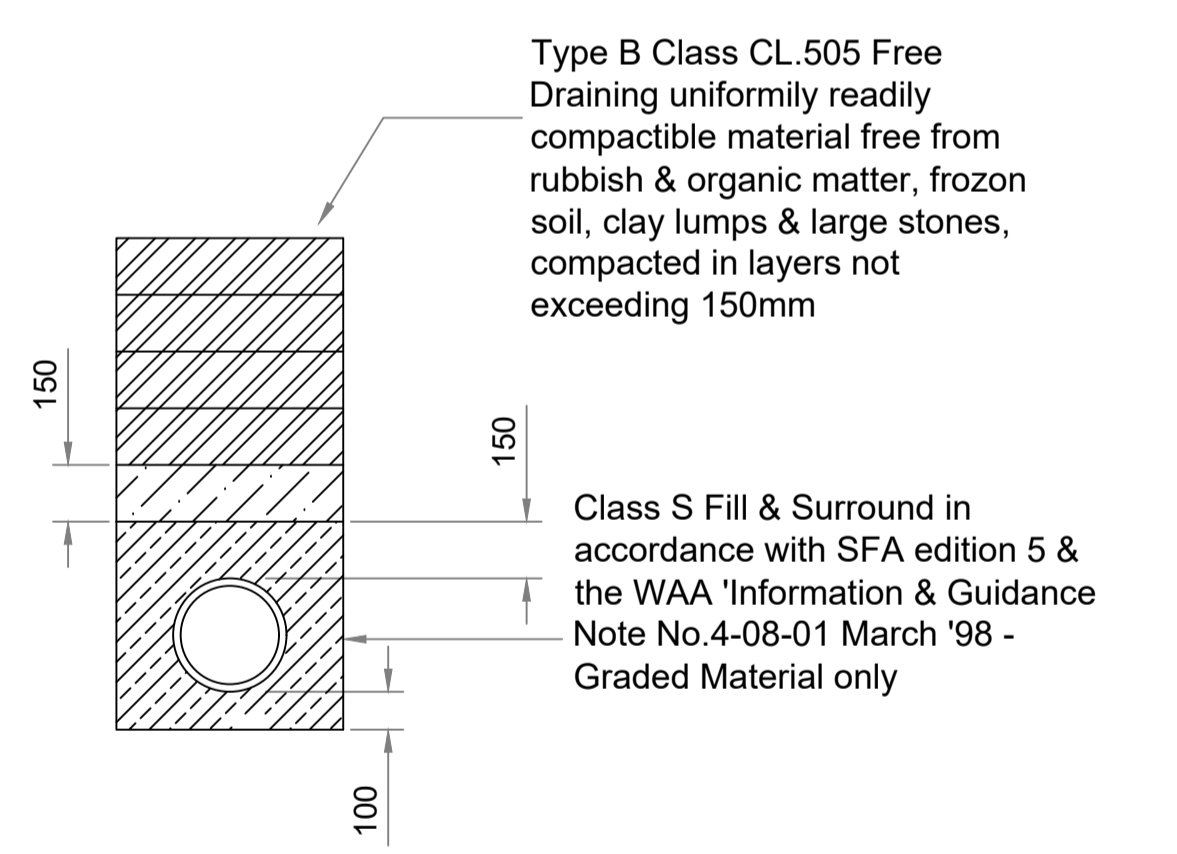
**TYPICAL MANHOLE DETAILS** Depth to suit Soffit 1.35 - 3.0m  
Scale 1:20



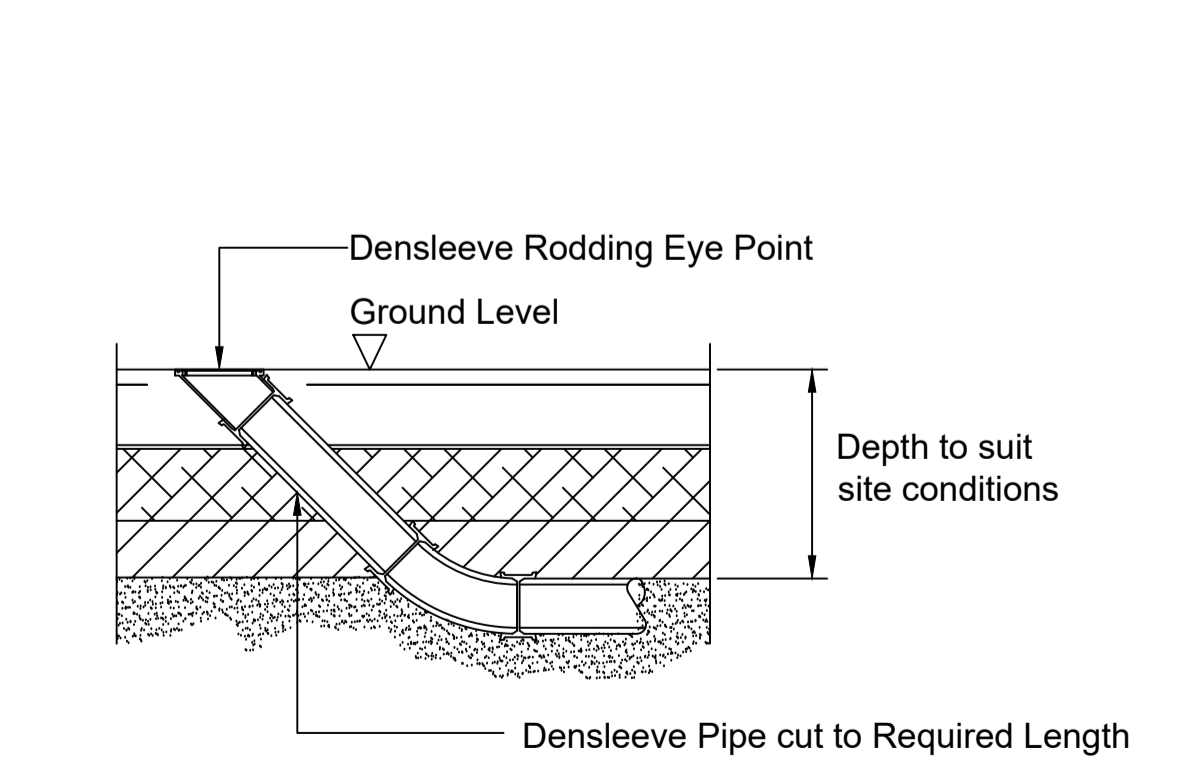
**CONCRETE PROTECTION DETAIL**  
Scale 1:20



**CONCRETE ENCASEMENT DETAIL**  
Scale 1:20



**STANDARD BEDDING DETAIL**  
Scale 1:20



**RODDING POINT DETAIL**  
Scale 1:20

**Hardstanding notes:**

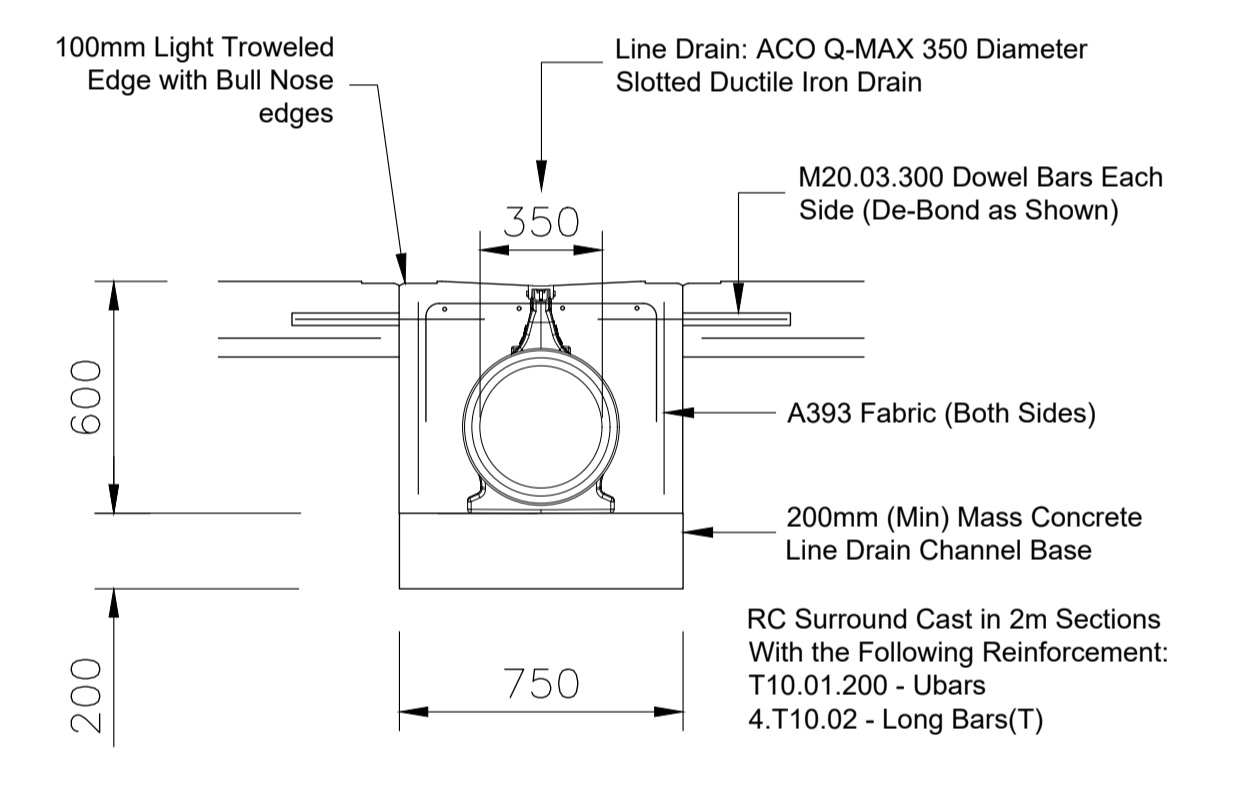
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND BAILEY JOHNSON HAYES DRAWINGS AND SPECIFICATIONS
- ALL TOPSOILS, SUBSOILS AND DELETERIOUS MATERIAL IS TO BE STRIPPED FROM BENEATH THE BUILDING ZONE FOR FORMATION LEVELS. THE EXPOSED FORMATION TO BE PROOF ROLLED WITH A TWIN WHEELED VIBRATORY ROLLER WITH A STATIC LOAD OF NOT LESS THAN 35KG/25MM WIDTH. ROLLING IS TO CONTINUE UNTIL THERE IS NO NOTICABLE DEFORMATION UNDER THE ACTION OF THE ROLLER. (MINIMUM OF 8 NO. PASSES)
- ANY SOFT SPOTS ARE TO BE EXCAVATED OUT AS INSTRUCTED BY BJH AND FILLED/ROLLED WITH ACCEPTABLE SAND/GRAVEL FROM SITE EXCAVATIONS IN LAYERS NOT EXCEEDING 150MM THICK
- SLABS TO BEAR UPON 1200 GAUGE VISQUEEN WHICH IS TO BE FULLY LAPPED/SEALED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS
- ALL CONCRETE IS TO BE GRADE C35 TO BS8110, MIN CEMENT CONTENT 330KG/M3 OPC MAXIMUM FREE WATER CEMENT RATIO 0.6 MAXIMUM AGGREGATE SIZE 20MM + 5% AIR ENTRAINED.
- THE SLAB IS TO BE LAID IN LONG BAY FASHION IN ASSOCIATION WITH THE CONCRETE SOCIETY RECOMMENDATIONS TO RECEIVE A LIGHT BRUSH FINISH
- MINIMUM MESH LAPS 300MM SIDE AND ENDS: MINIMUM VISQUEEN LAP 300MM
- IT IS ESSENTIAL THAT ALL TRANSVERSE JOINTS ARE CUT WITHIN 24 HOURS OF CASTING
- ALL JOINTS ARE TO BE SEALED USING THIOFLEX 600 OR SIMILAR APPROVED
- SLAB POURING PROGRAMME SHOULD ALLOW 72 HOURS CLEAR BETWEEN CASTING ADJACENT BAYS

**Drainage notes:**

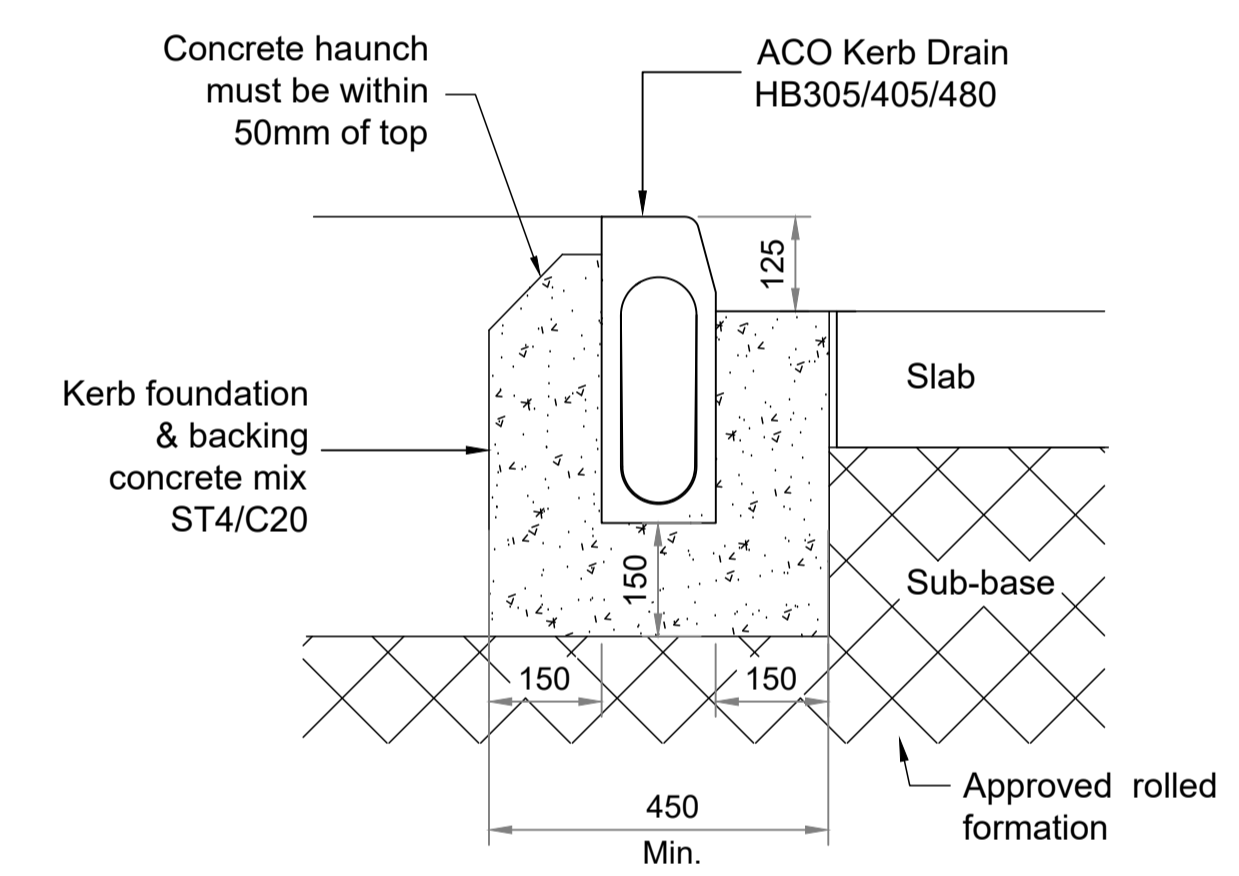
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEERS DRAWINGS & SPECIFICATIONS.
- DRAINS TO BE PLASTIC HEPWORTH SUPERSLEEVE OR NAYLOR DENSLEEVE: LAID ON CLASS N GRANULAR BEDDING TO BS 882: TABLE 4 OR TO BS 8301: 1985 APPENDIX D. CONCRETE ENCASED PIPES IDENTIFIED ON BJH DRAWINGS.
- ALL TRENCHES WITHIN TRAFFICKED AREAS TO BE BACKFILLED WITH 75MM DOWNGRADED STONE FILL, PLACED & COMPACTED IN LAYERS OF 150MM. ALL PIPES IN ROADWAYS / PARKING, LESS THAN 900MM DEEP TO BE ENCASED IN CONCRETE. PROVIDE FLEXIBLE JOINTS AT 3000MM CENTRES.
- MANHOLES TO BE CONSTRUCTED OF PRECAST CONCRETE RINGS TO BS 5911-PART 1. RINGS TO BE BEDDED IN SEALANT STRIPS.
- MANHOLES BENEATH ROADS & PARKING AREAS TO BE CASED IN 150MM CONCRETE SURROUND.
- ALL CONNECTIONS TO RAIN WATER PIPES TO BE PROVIDED WITH RODDING ACCESS.
- ROAD GULLIES TO BE HEPWORTH ROAD GULLIES REF: 213 WITH 150MM DIAMETER OUTLET OR SIMILAR APPROVED. GULLIES TO BE ENCASED IN 150MM MINIMUM CONCRETE. PLASTIC GULLY'S CAN BE USED IN YARDS AND CAR PARKS IN CONSULTATION WITH ENGINEER
- DRAWINGS TO BE ISSUED TO HE & LOCAL AUTHORITY WELL IN ADVANCE OF COMMENCEMENT OF DRAINAGE CONSTRUCTION.
- EXISTING MANHOLES IN ROADS TO HAVE INVERT LEVELS CONFIRMED PRIOR TO DRAINAGE CONSTRUCTION.
- ROADS TO BE REINSTATED TO STANDARD REQUESTED BY LOCAL AUTHORITY WHERE DRAINAGE CROSSES CARRIDGEWAY.

**General notes:**

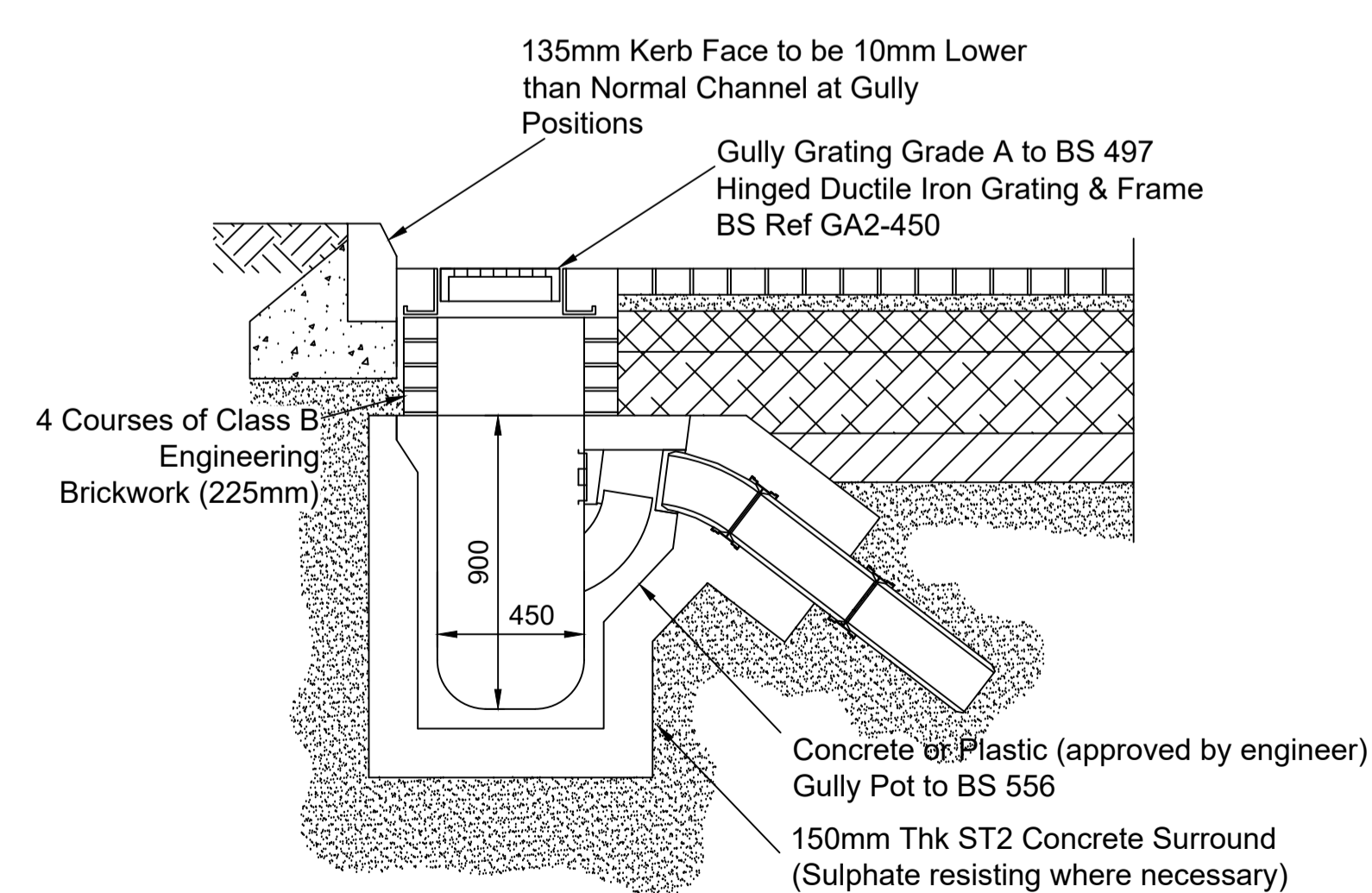
- ALLOW FOR ALL SOFT SPOTS.
- ALLOW FOR ALL REMOVAL OF EXISTING HEDGES / TRESS & ADDITIONAL CONSTRUCTION DEPTH AS NECESSARY OR REQUIRED.
- ALL EARTH BATTERS REMAINING TO NOT BE STEEPER THAN 1 IN 2.5.
- ALLOW FOR THE USE OF TERRAM OR SIMILAR GEOTEXTILE MEMBRANE AS NECESSARY IN SOFTER AREAS.



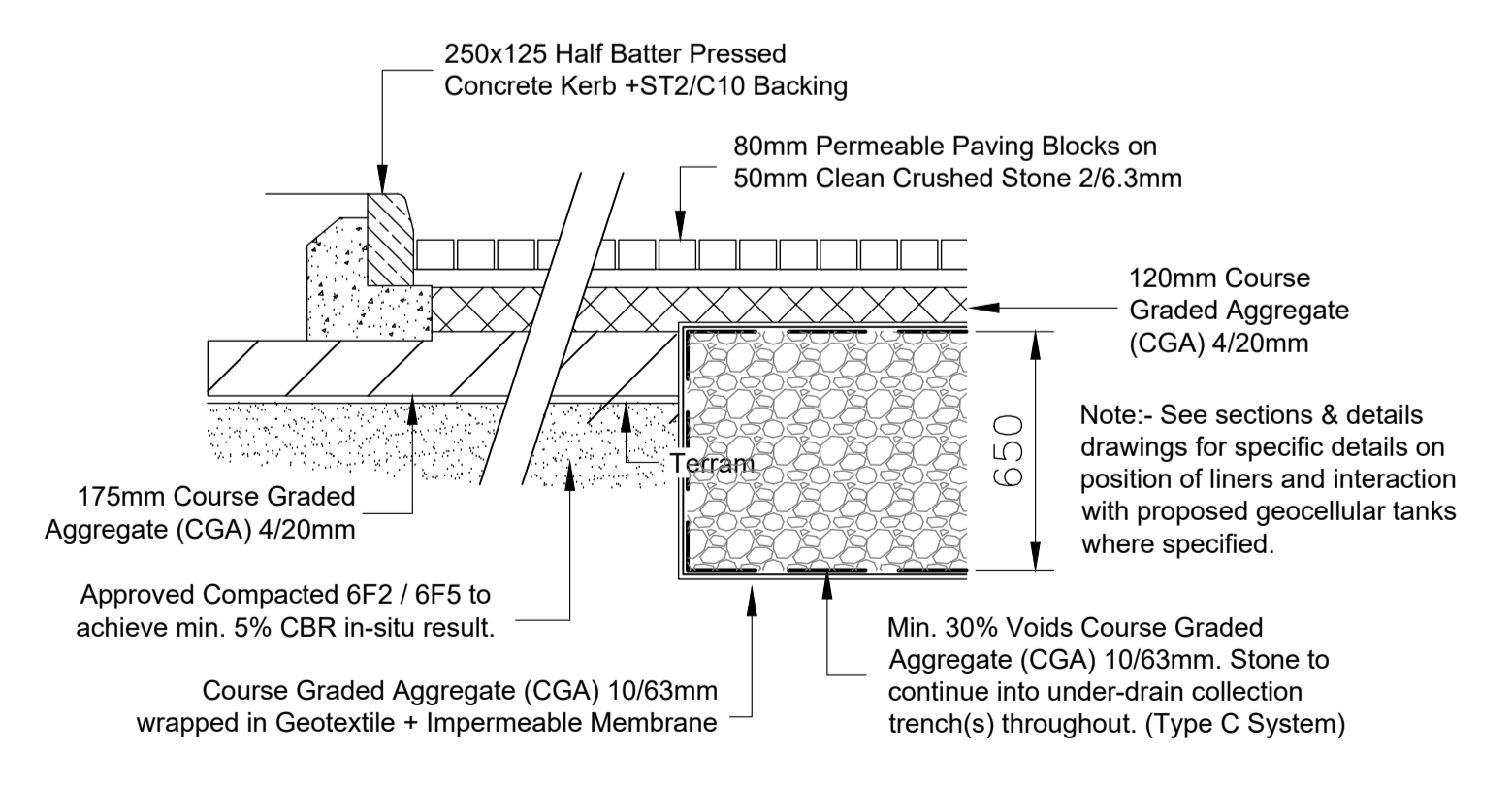
**TYPICAL QMAX LINE DRAIN DETAIL**  
Scale 1:20



**TYPICAL KERB DRAIN DETAILS**  
Scale 1:10



**TYPICAL GULLY DETAILS**  
Scale 1:20



**TYPICAL PERMEABLE PAVING DETAIL**  
Scale 1:20

**TOWN PLANNING**

B	09.05.24	Issued for Planning Submission
A	19.04.24	Issued for Planning Submission
Rev	Date	Revision Description

**Revision Schedule**

Project Title  
**Catalyst Bicester Phase 4, Wendlebury Road, Bicester**

Client  
**ALBION LAND**

Drawing Title  
**Typical Drainage Details**

**BAILEY JOHNSON HAYES**  
Consulting Engineers

ST.ALBANS: Suite 4, Phoenix House, 63 Campfield Rd, ST.ALBANS, Herts AL1 5FL

Scale 1:20, 10 @A1  
Date 18.04.24  
Drawn JNG

Drawing Number  
**S1502-04 B**