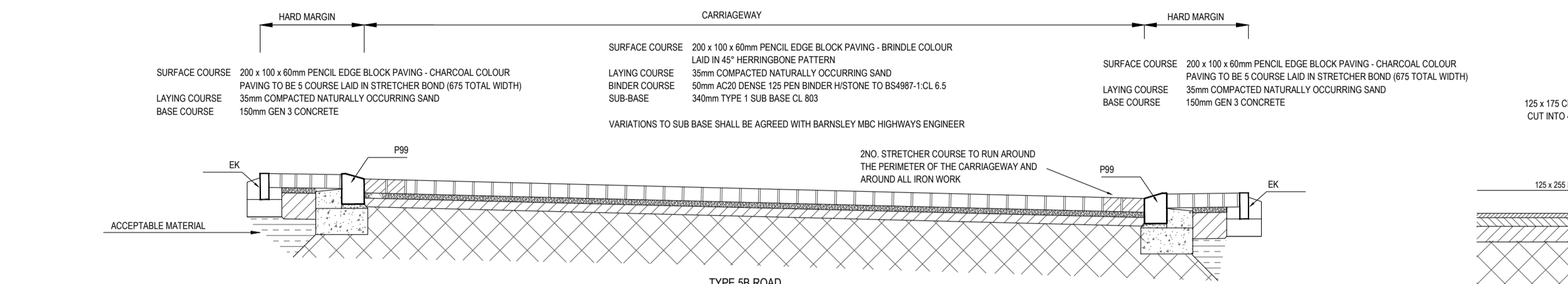
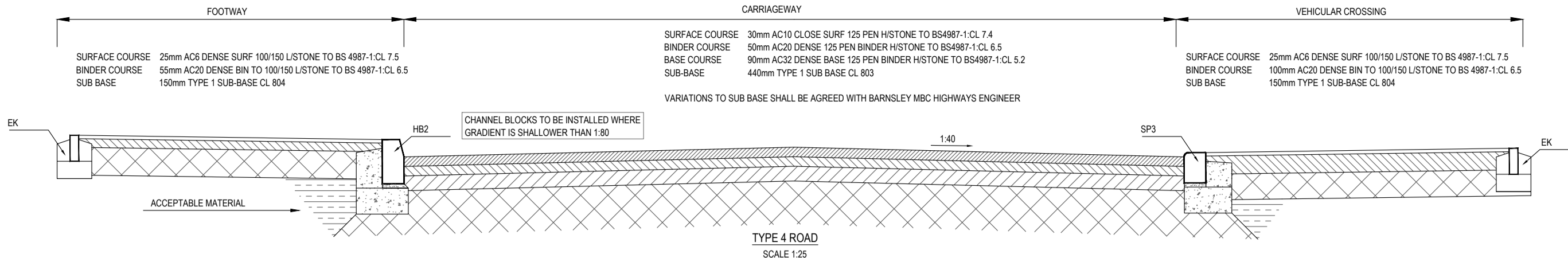


**GENERAL NOTES:**

1. UNLESS OTHERWISE SPECIFIED IN THIS DRAWING, THIS DRAWING HAS BEEN PREPARED AS PART OF A SET AND THEREFORE BEING IN CONJUNCTION WITH ALL OTHER DRAWINGS ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.
2. THIRD PARTY INFORMATION IS USED TO PREPARE THE ENGINEERING DESIGN (INCLUDING ARCHITECTURAL LAYOUT, GROUND INVESTIGATION, EXISTING UTILITIES RECORDS, AND SPECIALIST TESTS). THE ENGINEERING DESIGN MUST THEREFORE BE READ IN CONJUNCTION WITH ALL THIRD PARTY INFORMATION PRIOR TO COMMENCING WORK. QUEENSBERRY DESIGN LTD ARE NOT RESPONSIBLE FOR ANY THIRD PARTY INFORMATION OR DETAILS.
3. HOUSE TYPE WORKING DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE PLOT SETTING OUT DRAWING.
4. DRAWING STATUS WILL REMAIN PRELIMINARY UNTIL FULL TECHNICAL APPROVAL IS RECEIVED FROM LOCAL AUTHORITY AND SEWERAGE UNDERTAKER WORKS COMMENCED PRIOR TO TECHNICAL APPROVAL ARE DONE SO AT RISK AND MAY BE SUBJECT TO CHANGE. THE CONTRACTOR IS EXPECTED TO PREPARE APPROPRIATE CONSTRUCTION METHOD STATEMENTS FOR ALL ASPECTS OF APPOINTED WORK. THIS SHOULD INCLUDE ANY TEMPORARY PROTECTION WORKS.
5. LAND DRAINAGE IS NOT PERMITTED TO DISCHARGE INTO THE PUBLIC SEWER NETWORK ANY NEED FOR LAND DRAINAGE SHOULD BE ASSESSED BY THE GROUND WORKER AND LANDSCAPER DURING CONSTRUCTION AND PLACEMENT OF GARDENS ON AN INDIVIDUAL PLOT BASIS. IF LAND DRAINAGE DESIGNS ARE REQUIRED, THEY SHOULD BE APPROVED PRIOR TO PLOT COMPLETION.
6. THE CONTRACTOR IS EXPECTED TO CROSS CHECK ALL DRAINAGE INVERTS PRIOR TO COMMENCING WORK. THIS MAY INVOLVE COMPLETION OF TRAIL HOLES IF INVERT LEVELS HAVE BEEN INTERPOLATED. THE POSITION, LINE AND DIAMETER OF ALL EXISTING DRAINAGE APPARATUS SHOULD BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.
7. THE CONTRACTOR MUST MONITOR THE 'AS BUILT' PROGRESS OF EACH CONSTRUCTION STAGE. ROADWORKERS/OPERATORS ETC. TO EMULATE THE NEXT STAGES OF CONSTRUCTION TO BE CHECKED FOR BEFORE INSTALLATION.

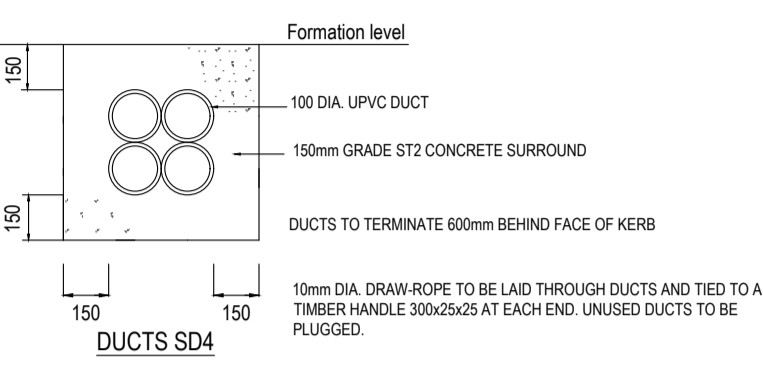
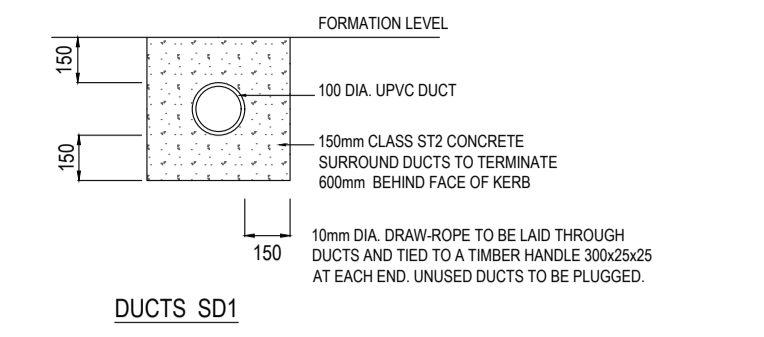
**HIGHWAYS**

1. ALL HIGHWAY WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT LOCAL AUTHORITY DESIGN GUIDE AND SPECIFICATION.
2. ALL EXCAVATIONS BELOW PROPOSED AND EXISTING HIGHWAYS TO BE BACK FILLED WITH GRANULAR TYPE 1 SUB-BASE AND WELL COMPACTED IN LAYERS NOT EXCEEDING 150MM.
3. HIGHWAY AUTHORITY TO BE NOTIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS.
4. FOR KERB LOCATION REFER TO DRAWING QD1386-01-01.02.03.04.
5. BETWEEN LAYERS OF THE TARMACADAM ROADS A HOT TACK APPLIED BITUMEN TACK COAT IS REQUIRED IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS, AS FOLLOWS:
  - i. BINDER CLASSIFICATION AND APPLICATION DETAILS TO CL 520
  - ii. THE BINDER SHALL BE BITUMEN EMULSION TO BS 64/PART 1
  - iii. THE BINDER SHALL BE CLASS A1-40 OR K1-40
  - iv. RATE OF SPREAD SHALL BE 0.3 TO 0.5MP
  - v. PRINTED ADDITIVES TO BINDER: NONE
  - vi. BINDING MATERIAL: NONE
6. WHERE CONCRETE KERBS ABUT TARMACADAM SURFACING IS TO BE PAINTED WITH A TACK COAT OF 200 PART BITUMEN.
7. WHEN WIDTH OF THE BASE OR SUB-BASE IS LESS THAN 1.0, CONCRETE MIX STS 25 NMM, SHALL BE USED. CONCRETE MIX TO VARY BETWEEN 50M TO 10M IN LENGTH OF SUB-BASE UNDER KERBS. THE TOTAL WIDTH SHALL NOT BE LESS THAN TOTAL THICKNESS OF FULL CONSTRUCTION. 100MM SURFACING IS REQUIRED ON TOP OF THE STS CONCRETE MIX.
8. ANY INSPECTION CHAMBERS WITH TACTILE CROSSINGS REQUIRE AN IN-FILL COVER WITH SLABS BEDDED ON AN EPOXY RESIN MORTAR.
9. ALL VERGES TO BE LOW MAINTENANCE GRASS SEED MIX - BRITISH SEED HOUSES AZ1 (OR SIMILAR APPROVED).
10. ALL STREET LIGHTING TO BE INSTALLED IN HARD MARGINS OR FOOTWAYS.
11. WHERE DRIVEWAYS FALL TOWARDS THE ADAPTABLE HIGHWAY A LINEAR DRAINAGE CHANNEL ARE TO BE PROVIDED AT THE BACK EDGE OF THE FOOTWAY WITHIN THE DRIVEWAYS TO PREVENT DISCHARGE OF SURFACE WATER ONTO THE HIGHWAY.
12. THE LAYOUT AND POSITIONS OF ALL PEDESTRIAN CROSSINGS ARE TO BE AGREED WITH BMB ENGINEER ON SITE.
13. FOR MANHOLES/GULLIES/SERVICE BOXES ECT SOLID CLASS B ENGINEERING BRICKS ARE TO BE USED WITHIN THE ADAPTED HIGHWAY.
14. MANHOLE COVERS REQUIRING ANTI-SKID PROTECTION TO BE RETROFITTED WITH PREMIX ANTI-SKID RESISTANCE MATERIAL TO BS 1436 CL 55.

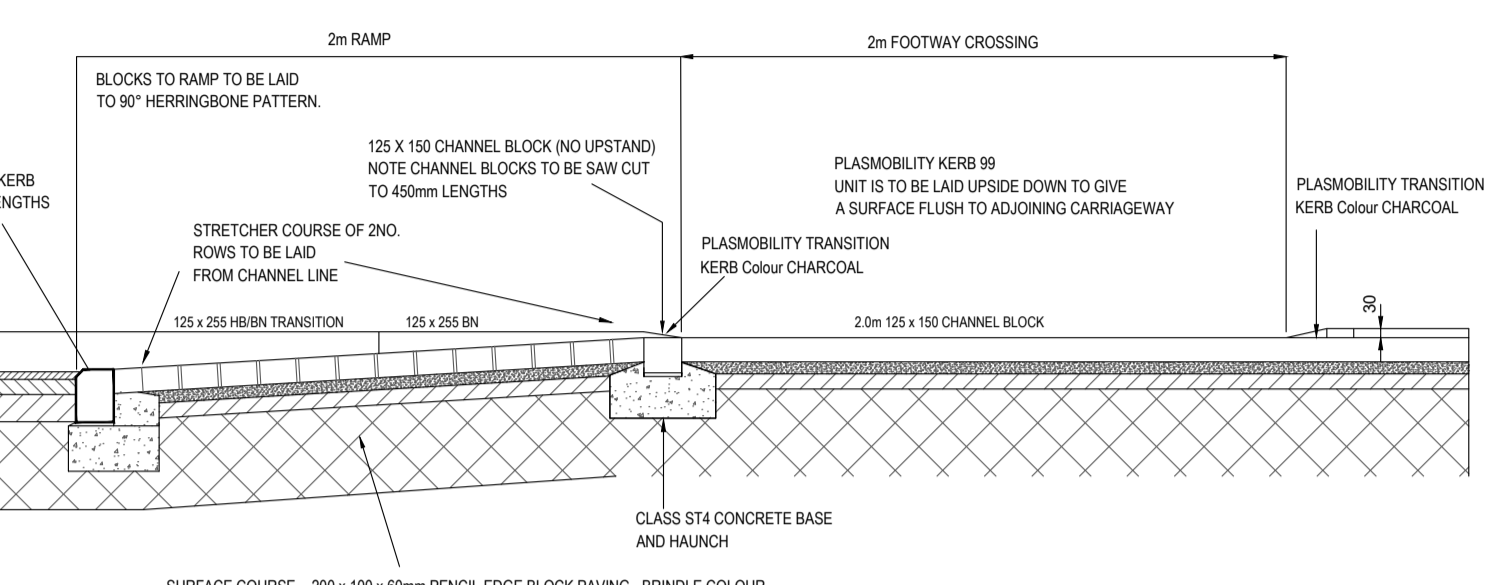


**FOUNDATION NOTE**

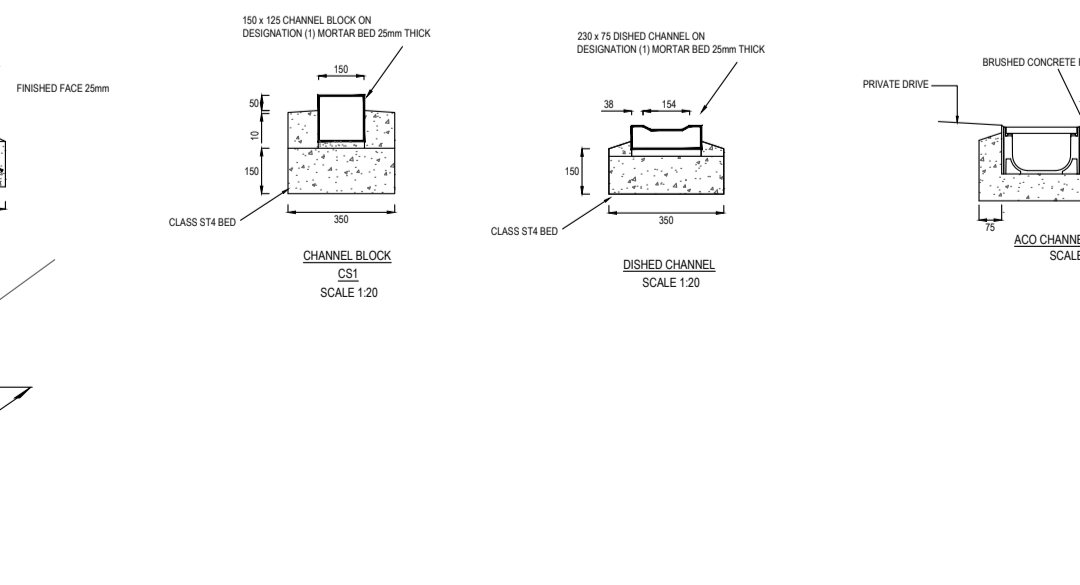
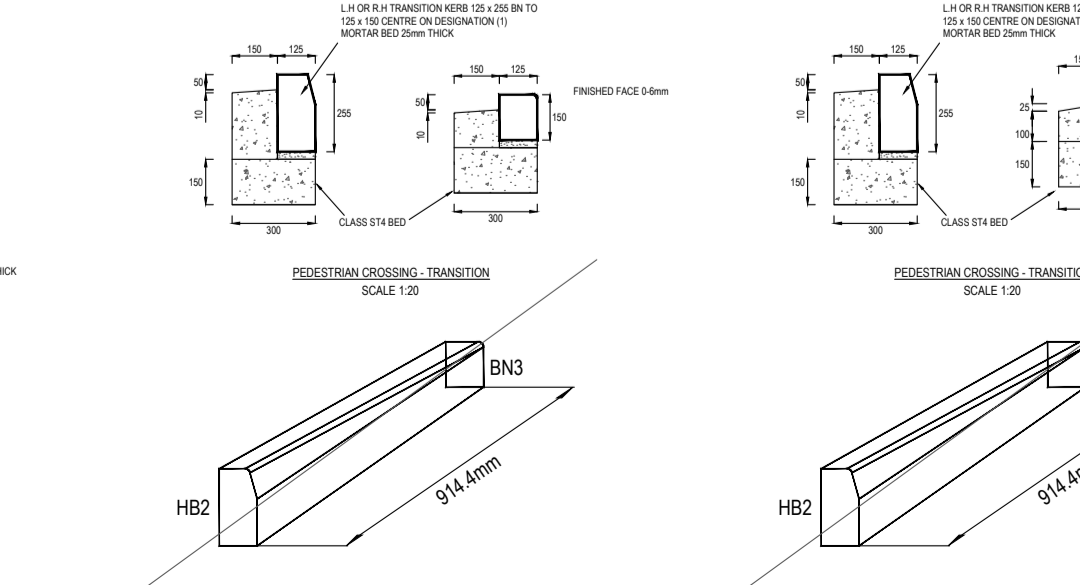
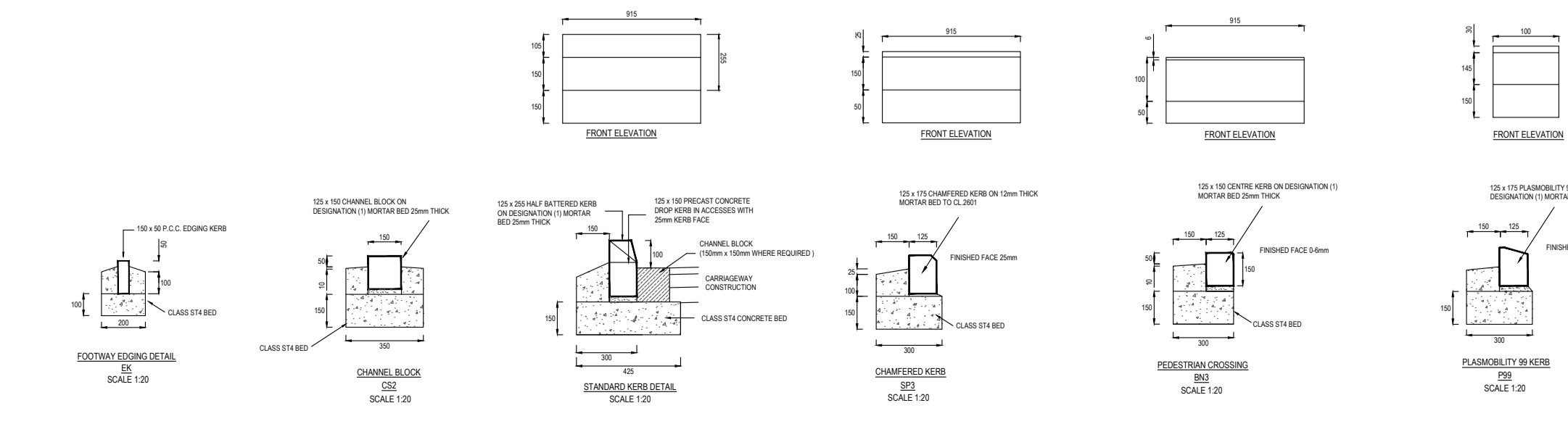
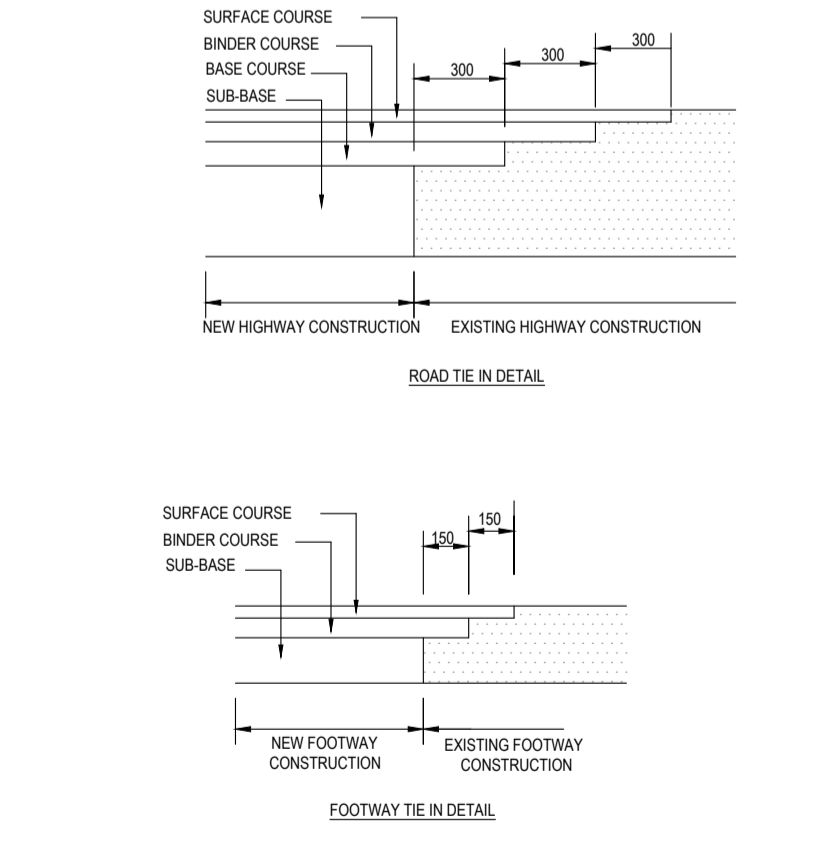
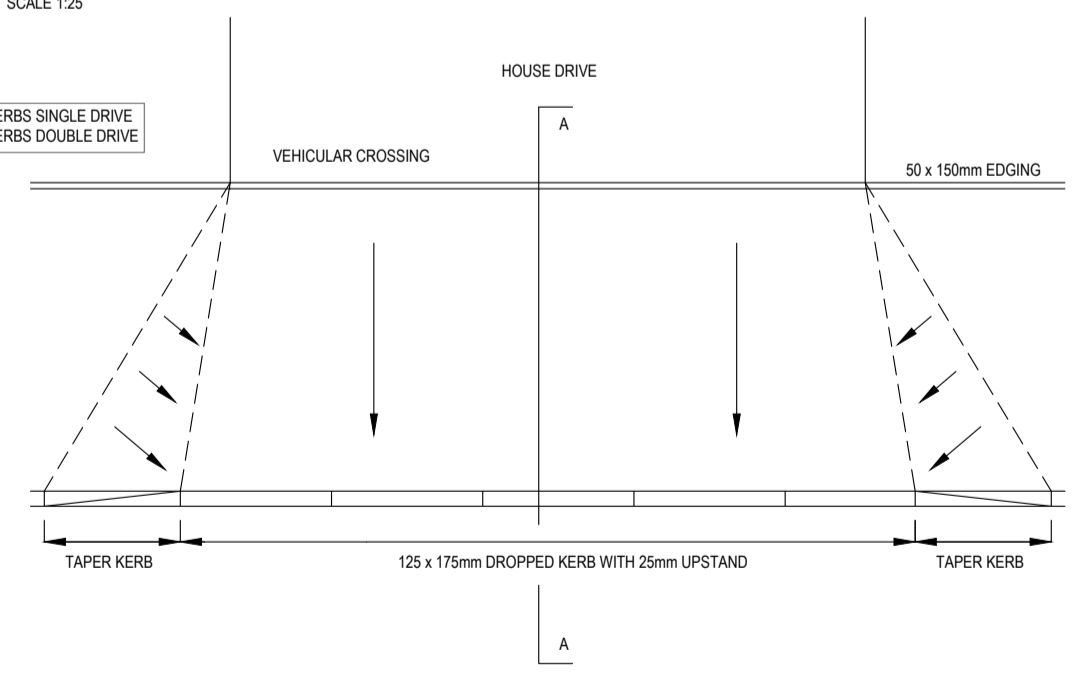
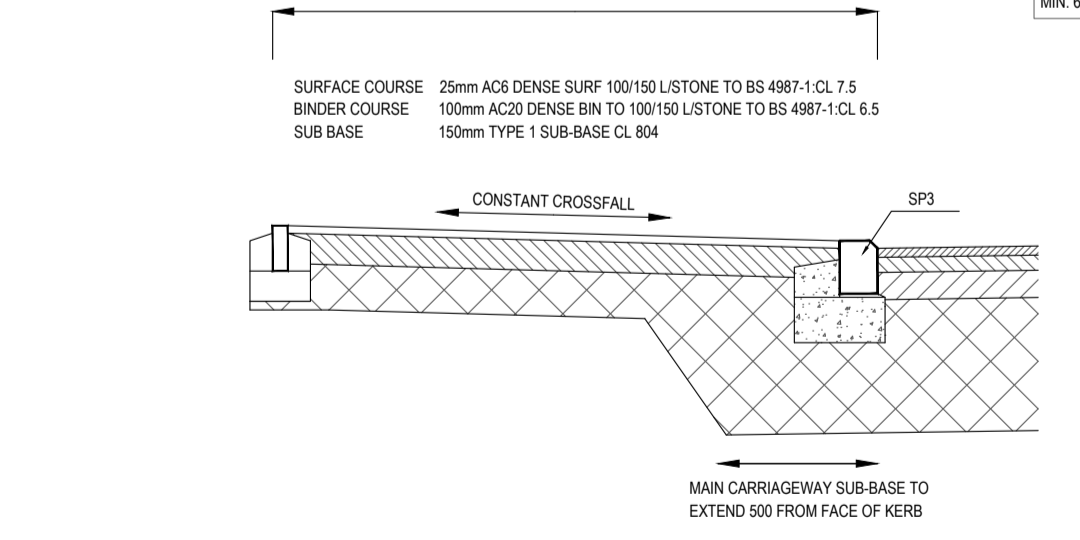
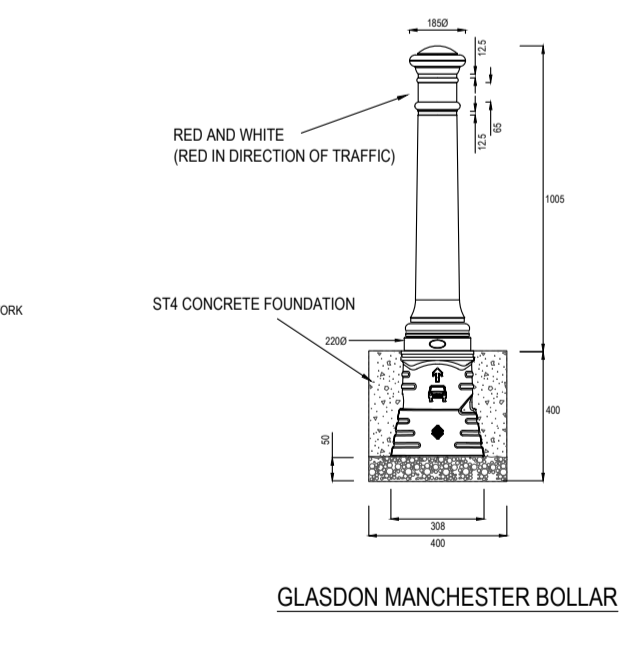
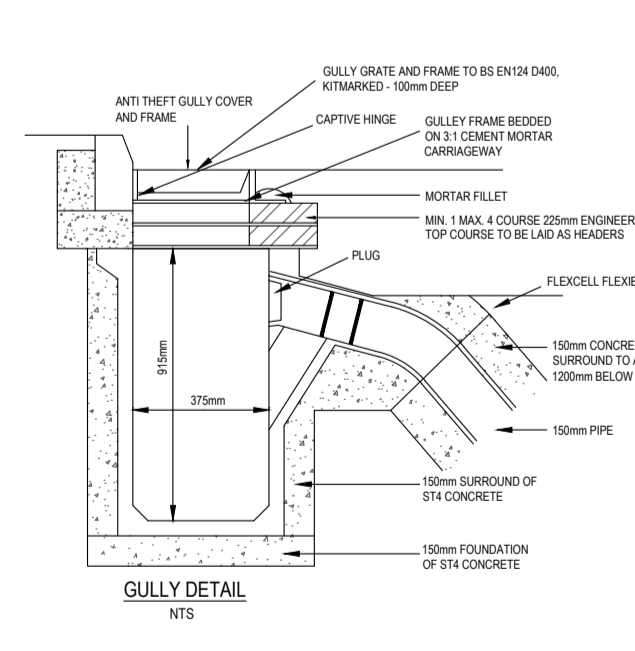
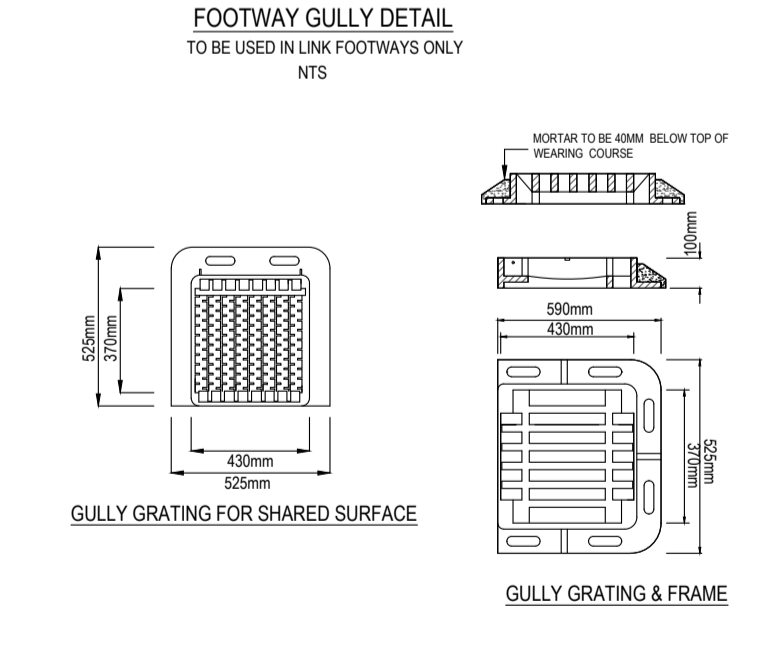
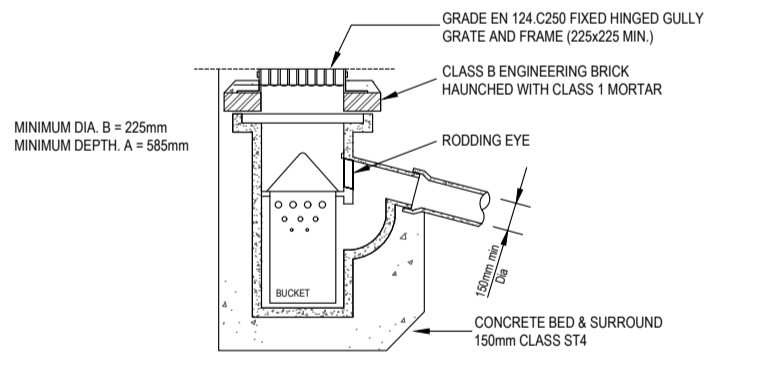
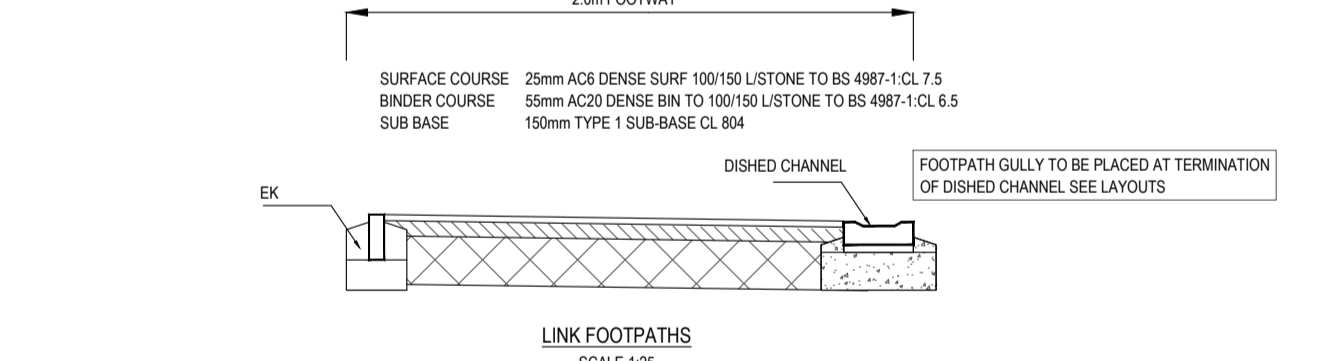
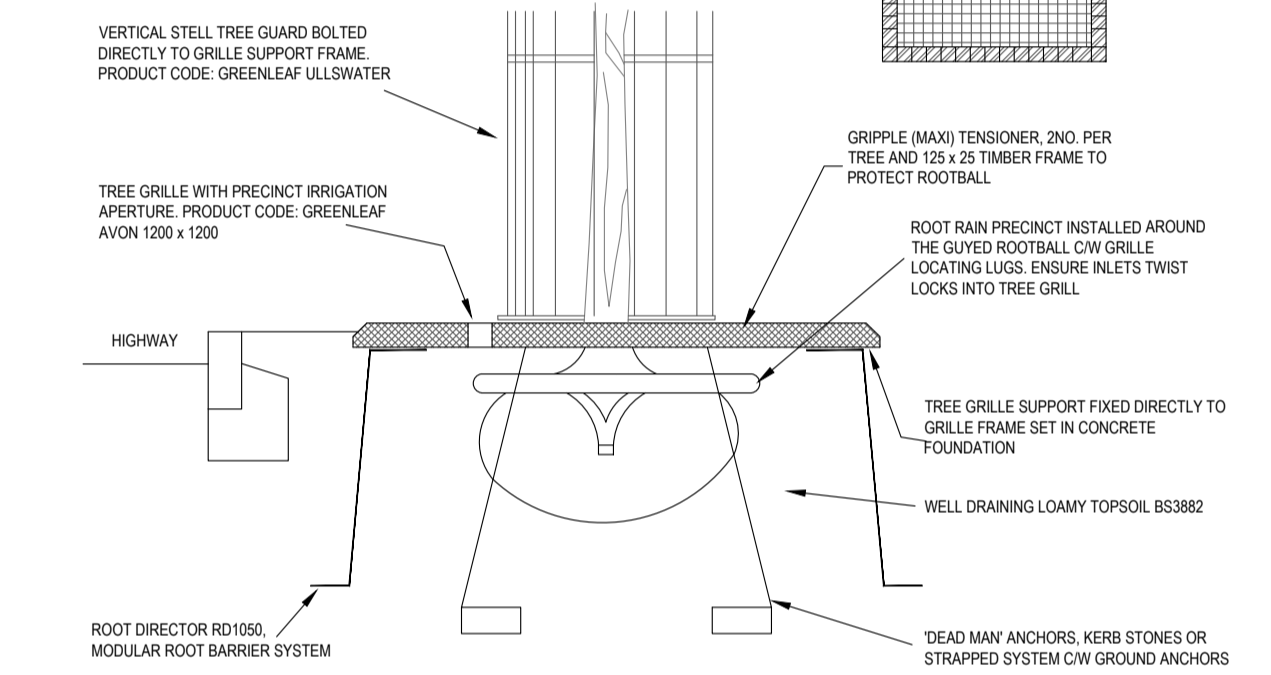
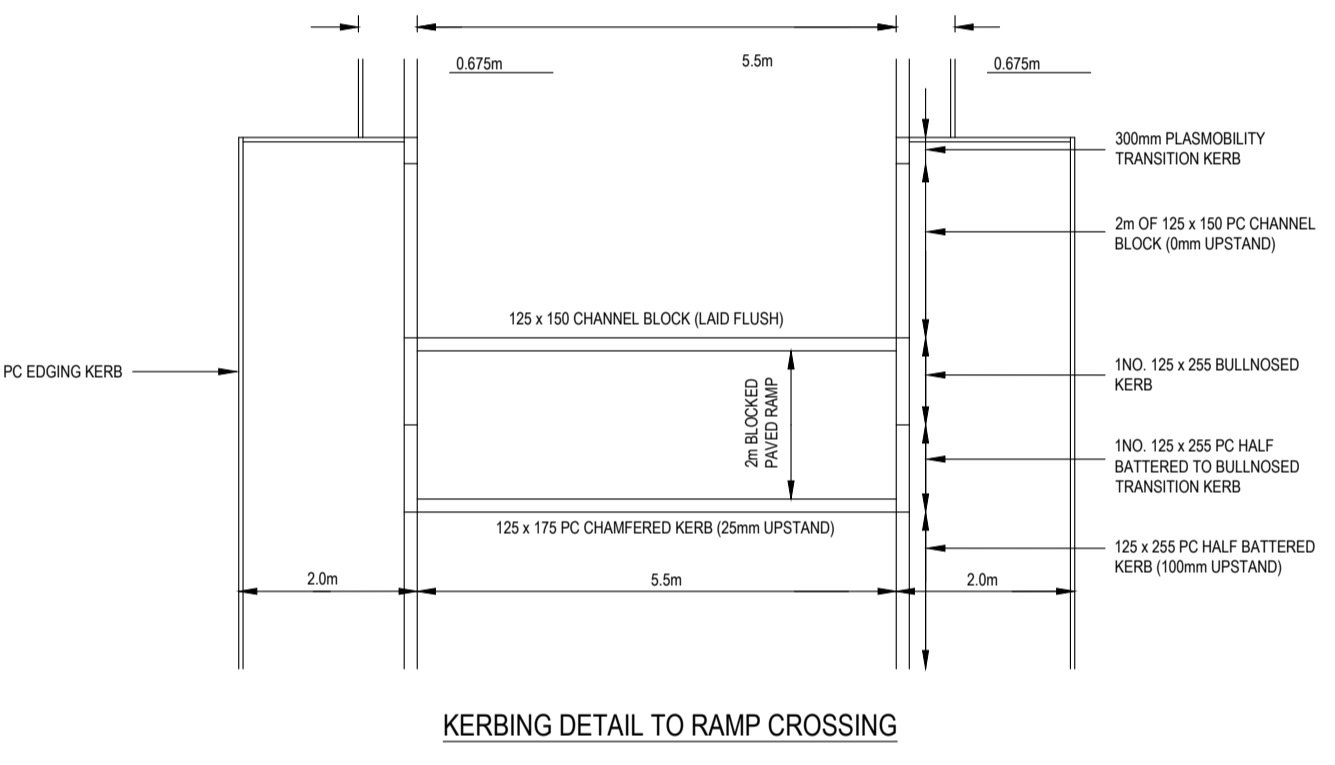
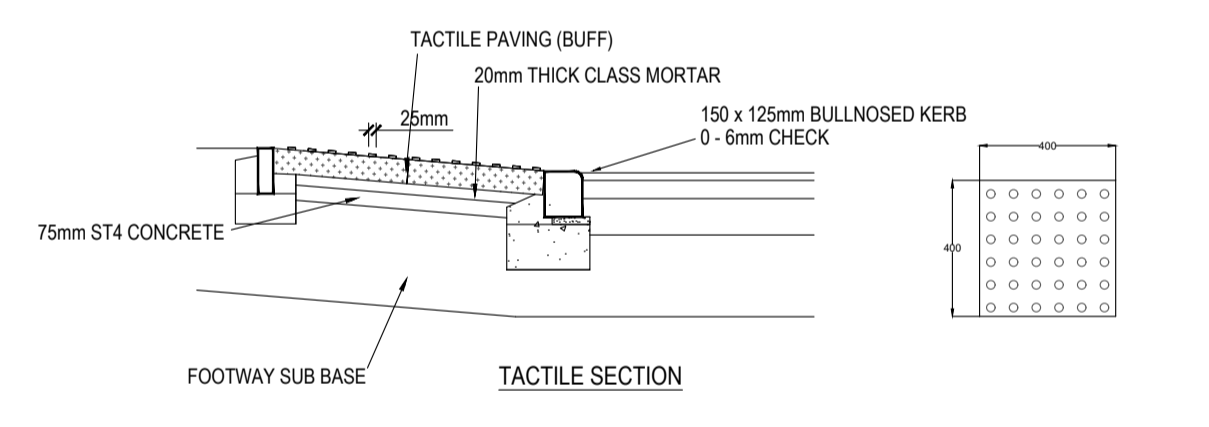
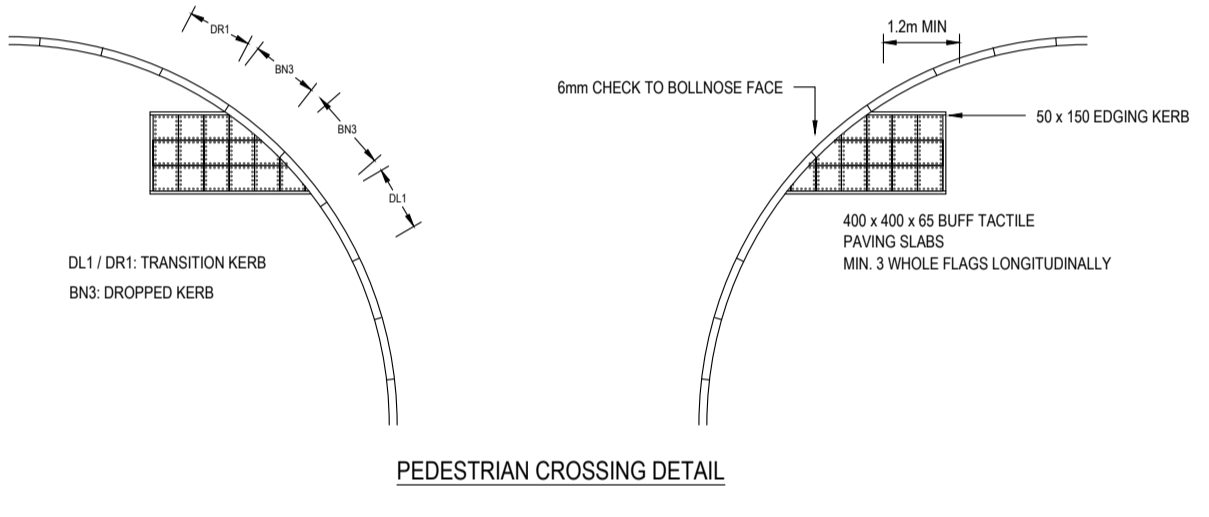
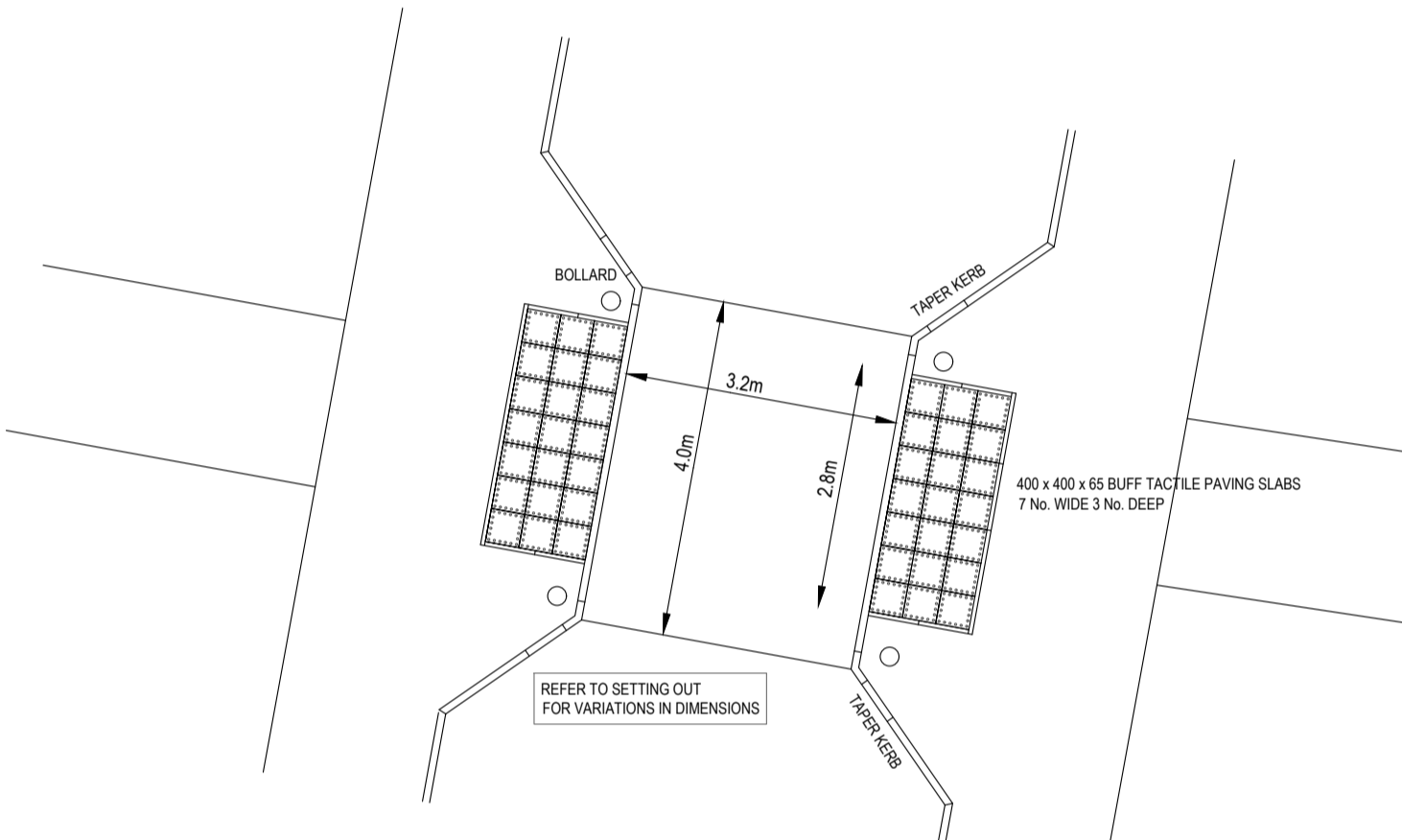
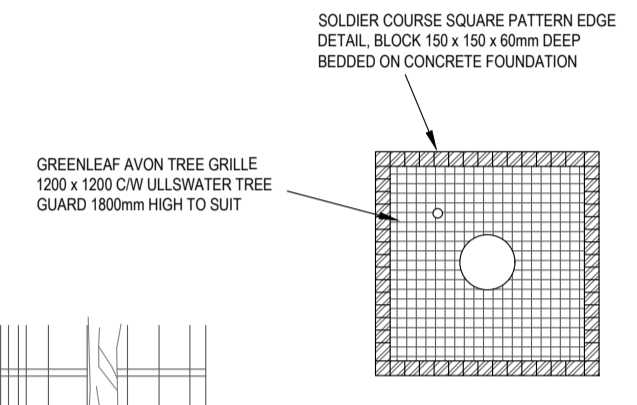
1. CBR TESTS ARE TO BE TAKEN AT ROAD FORMATION LEVEL AT 20m INTERVALS USING A 600mm DIAMETER PLATE THE RESULTS OF WHICH ALONG WITH A LOCATION PLAN IS TO BE SUBMITTED TO BMB/HIGHWAYS ENGINEER.
2. IF NEEDED NECESSARY TO VARY THE FOUNDATION DESIGN TO ACCOMMODATE DESIGN CHANGES IN SUB-GRADE PROPERTIES ACROSS THE SITE. HOWEVER, THE FOUNDATION DESIGN SHOULD NOT VARY FREQUENTLY ALONG THE ROAD. ON SITES WHERE NUMEROUS CHANGES IN SUB-GRADE PROPERTIES ARE ENCOUNTERED, A DESIGN BASED UPON THE LOWEST CBR VALUE WILL OFTEN PROVIDE THE MOST SATISFACTORY SOLUTION.
3. WHERE A CBR VALUE BETWEEN THOSE IN THE ABOVE TABLE IS OBTAINED THE LOWER VALUE IN THE ABOVE TABLE SHALL BE USED FOR THE PURPOSE OF DESIGN.
4. SUB-GRADES THAT HAVE CBR VALUES SIGNIFICANTLY LESS THAN 2% AND DEFORM UNDER CONSTRUCTION TRAFFIC MAY BE UNSUITABLE TO SUPPORT THE PAVEMENT. IN THIS CASE, SPECIAL MEASURES WILL BE REQUIRED. FURTHER ADVICE IS GIVEN IN DIMS.
5. NO MATERIAL WITHIN 450mm OF THE FINISHED ROAD MATERIAL SURFACE SHALL BE FROST SUSCEPTIBLE. MATERIALS USED IN CAPPING LAYERS SHALL COMPLY WITH THE SPECIFICATION FOR HIGHWAY WORKS TABLE 61 (AND ANY ADDITIONAL REQUIREMENTS OF THE COUNCIL). THE MATERIALS SHALL BE SAMPLED IN THE FREQUENCY STATED IN THE SPECIFICATION AND TESTED TO DEMONSTRATE THAT IT HAS AN IN-SITU CBR VALUE OF 15% (OR EQUIVALENT TEST RESULT). THE DEVELOPER SHOULD PROVIDE CONFIRMATION THAT THE TESTED MATERIALS COMPLY WITH THE REQUIRED SPECIFICATION.
6. SUB-BASE SHALL BE TYPE 1 IN ACCORDANCE WITH THE 'SPECIFICATIONS FOR HIGHWAY WORKS'.
7. AREA OF SOFT ALLUVIAL SOILS WHERE FORMER WATERCOURSE RUN ARE TO BE INSPECTED FOR SOFT MATERIAL. WHERE NECESSARY CBR TESTS SHOULD BE TARGETED IN THESE AREAS TO ENSURE CBR IS ACHIEVED.



IN THE CASE OF NEW ROADS, DUCTS TO BE LOCATED BELOW FOUNDATION LEVEL. FOR EXISTING CARRIAGEWAYS, DUCTS MUST BE LOCATED 80mm BELOW THE SURFACE OF EXISTING CARRIAGEWAY (MEASURED TO TOP OF CONCRETE SURROUND) AND MARKED WITH DUCT MARKERS ON KERBS.



ALL PROPOSED TREES CENTRED IN A LOCATION WITHIN 3.0m OF THE PROSPECTIVELY ADOPTED HIGHWAY. ROOT BARRIERS MEMBRANES ARE TO BE INSTALLED ON THE TREE SIDE ALONG THE BACK EDGE OF THE HIGHWAY BOUNDARY AND ARE TO EXTEND A MINIMUM OF 3.0m IN EACH DIRECTION FROM A POINT TAKEN PERPENDICULAR FROM THE TREE TRUNK TO THE HIGHWAY BOUNDARY. ROOT BARRIERS ARE TO EXTEND TO A MINIMUM DEPTH OF 1000mm.



Rev	Date	Revision Details	Drawn	Checked
D	10.11.20	0400 NOTE ADDED TO GULLY - BOLLARD FOUNDATION NOTE ADDED	ND	ND
C	08.10.20	SECTION 38 COMMENTS ADDED	ND	ND
B	15.09.20	SECTION 38 COMMENTS ADDED	ND	ND
A	24.01.20	UPDATE TO RE-DESIGNED PLANNING PROPOSAL	FA	ND
-	29.07.19	FIRST ISSUE	ND	ND

© This drawing is the property of Queensberry Design Limited and the permission can only be reproduced with their prior permission.

**QUEENSBERRY DESIGN**  
CIVIL, STRUCTURAL, ARCHITECTURAL & GEOTECHNICAL CONSULTANTS

NORTH-EAST OFFICE  
SUITE 2A METRO HOUSE, METRO CENTRE,  
GATSFIELD, NE11 9RN  
0181 460 9000

NORTH-WEST & YORKSHIRE OFFICE  
2A ST MARTINS LANE, YORK, YO1 6LN  
01904 800000

www.queensberrydesign.co.uk

Client	KEEPMOAT HOMES		
Project	THURNSCOE PHASE 3		
Title	ROAD CONSTRUCTION DETAILS		
Drawn	LA	Checked	ND
Drawn Number	25.07.2019		
Drawing Status	QD1386-06-01		
Scale	TENDER	AS NOTED - A1	Rev. D