

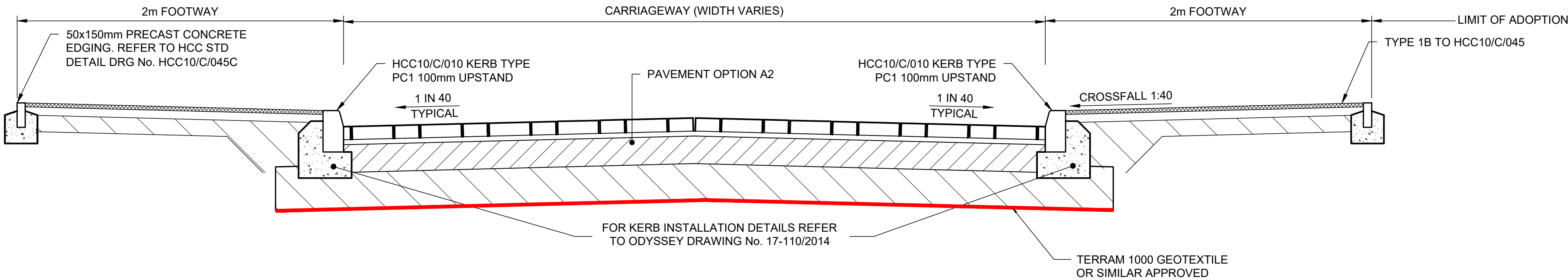
P:17-110 - Woodcroft Farm, Havant\Tech\Acad\Drawings\2000 Series - Phase 1A\17-110-2014 Highway Construction Details.dwg

SCHEDULE 1: GENERAL REQUIREMENTS - PAVEMENT TREATMENT		
Grid for checking surface levels of pavement courses [702.4]	Longitudinal Dimension	10m max
	Transverse Dimension:	2m max
Surface regularity [702.5, TABLE 7/2]	Category of Road:	A
Interval for measurements of longitudinal regularity		Continuous
Interval for measurements of transverse regularity		20mm
Whether measurement of surface texture is required [921.2]		Yes
Average: 1.2mm; Maximum: 1.5mm; Minimum: 0.90mm		

SCHEDULE 2: PERMITTED CONSTRUCTION MATERIALS				
	Pavement type A1		Pavement type A2	
Pavement Layer	Material Ref.	Thickness (mm)	Material Ref.	Thickness (mm)
Surface course	SC.AC	45	SC.BLK	80
Binder course	BC.AC	65	LC.AGR	30
Base	RB.AC	160	RB.AC	160
Subbase	SB	225	SB	200
Capping	6F1	600mm based upon 2% assumed CBR: see Capping Table 1	6F1	600mm based upon 2% assumed CBR: see Capping Table 2

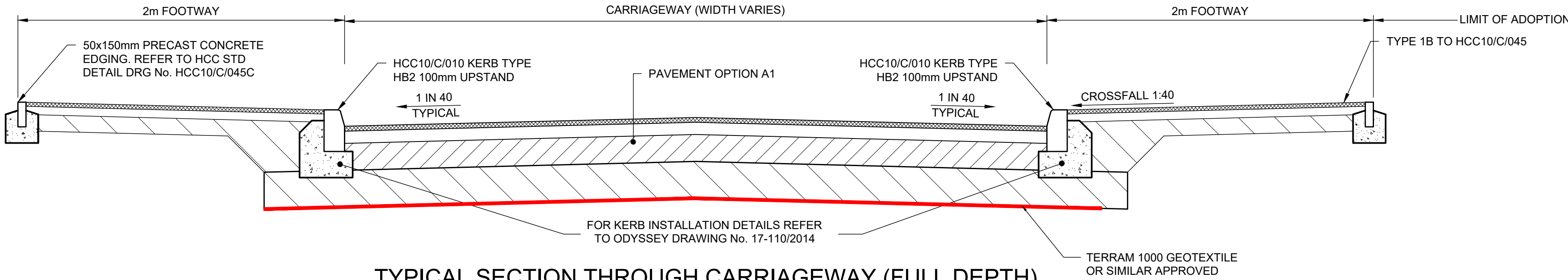
SCHEDULE 3: General Requirements for Construction Materials	
Clause	Requirement
801.2	Limited distance for deposition of unbound mixtures referred to in sub clause 801.2
801.3	Limited distance for deposition of unbound mixtures referred to in sub clause 801.3
802.14	Thickness of compacted sub-base layer required for trafficking trial, to be specified in Schedule 2
801.7	All sub-base material shall comply with sub-clause 801.7
901.2	Requirements for hardness, durability and cleanness of aggregates shall comply with sub-clause 901.2
901.19	The compaction level of base and binder course macadam's shall comply with sub-clause 901.19
903.27	A minimum PSV ₅₀ is required for a temporary running surface
924SR	Surfaces to which non-thermoplastic type 1 materials are to be applied shall be trafficked for at least 3 weeks and deemed suitable by the contractor prior to application. 'Slippery Road Surface Ahead' Signs to TSRGD Diagram No. 557 shall be erected at each site until the type 1 material has been applied.

SCHEDULE 4: Requirements for Construction Materials			
Material Ref.	Clause	Description	Requirement
SB		Granular Sub-base Material Type 1	
RB.AC	948SR	Cold Recycled Bituminous Bound Material	Min. Indirect Tensile Stiffness Modulus (ITSM) Dry: Individual Value =2000MPa Mean Value=2500MPa Min. Indirect Tensile Stiffness Modulus (ITSM) water saturated: Individual Value =1500MPa Mean Value=2000MPa Minimum added bitumen content = 3% Compaction =93% min PRD
BC.AC	929	Dense Binder Course Asphalt Concrete (Design Mixes)	BS EN 13108-1, PD 6691, BS 594987 AC 20 dense bin 40/60 DES Clause 945 applies. Binder Grade : 40/60 Aggregate Size : 20 Wheel-tracking in accordance with BS 598-110 45°C Wheel-tracking criteria applies: Max. Wheel-tracking rate = 2mm/hr Max. Rut Depth = 4mm Coarse Aggregate to be crushed rock or slag. Fine Aggregate to exclude natural sand fines.
SC.HRA	911	Hot Rolled Asphalt	BS EN 13108-4, PD 6691, BS 594987 HRA 30/14F surf des Min Delivered Temp 165°C Max Wind Speed km/hr: 40 km/hr Min Laying Air Temp: 0°C Course Aggregate percentage: Course aggregate to be crushed rock or slag, excluding limestone. Min PSV = 50 Aggregate Grading BS EN 13208-4 Table 4 Column No. 30/14F Min target Binder Content Bact - 7.0% Min Stability of 7 KN (across the whole of the + or - 0.6% bir. content tolerance) determined in accordance with annex H of BS 594987. Coated Chippings Nominal Size 14/20mm Max flow: 5mm Min PSV: 65 Max AAV: 12
LC.AGR		Graded aggregate laying course	Laying course category II. to BS 7533-3 table D.1 Grading to table D.2 Fines content category f1.5 to BS EN 12620. Compactor details to table F.1 site category II
SC.BLK		80 Thick block paving surface course.	200 x 100 x 80 Concrete paving blocks to BS EN 1338. Colour brindle blocks laid in 45° herringbone pattern in direction of traffic flow to figure E.1(a) to BS 7533-3. Jointing & void filling material to BS EN 7533-3 table D.4



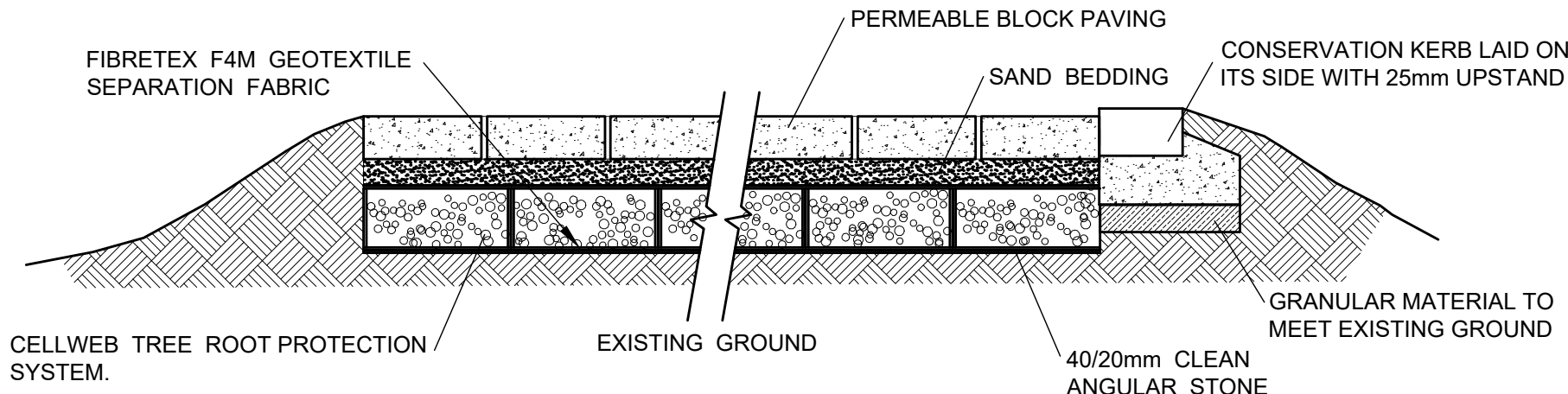
TYPICAL SECTION THROUGH BLOCK PAVED CARRIAGEWAY (FULL DEPTH)

BASED ON 2% CBR



TYPICAL SECTION THROUGH CARRIAGEWAY (FULL DEPTH)

BASED ON 2% CBR



CELLWEB SECTION - TREE ROOT PROTECTION

C/W BLOCK PAVING SURFACE

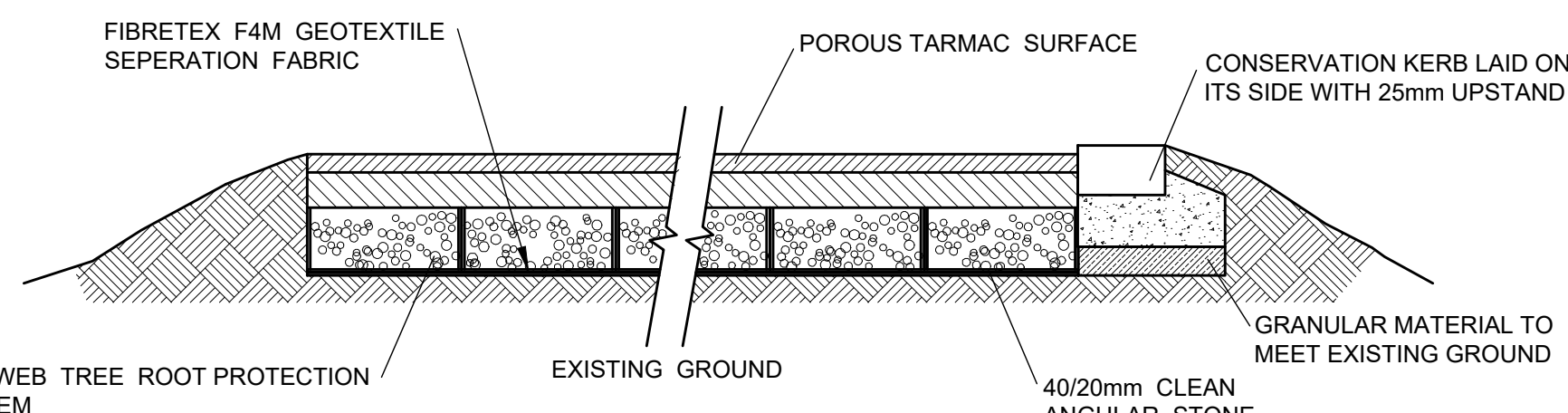
Capping Table 1 - HCC MIS Companion Document		
Subgrade	Capping Layer Thickness	Sub-Base Thickness
CBR >5% - 15%	-	225mm
CBR 2% - 5%	350mm	150mm
CBR Less than 2%	600mm	150mm

Capping Table 2- BS 7533-1	
Subgrade	Capping Layer Thickness
CBR 3%	450mm
CBR 2%	450mm
CBR Less than 2%	600mm*

* Specialist guidance should be sought

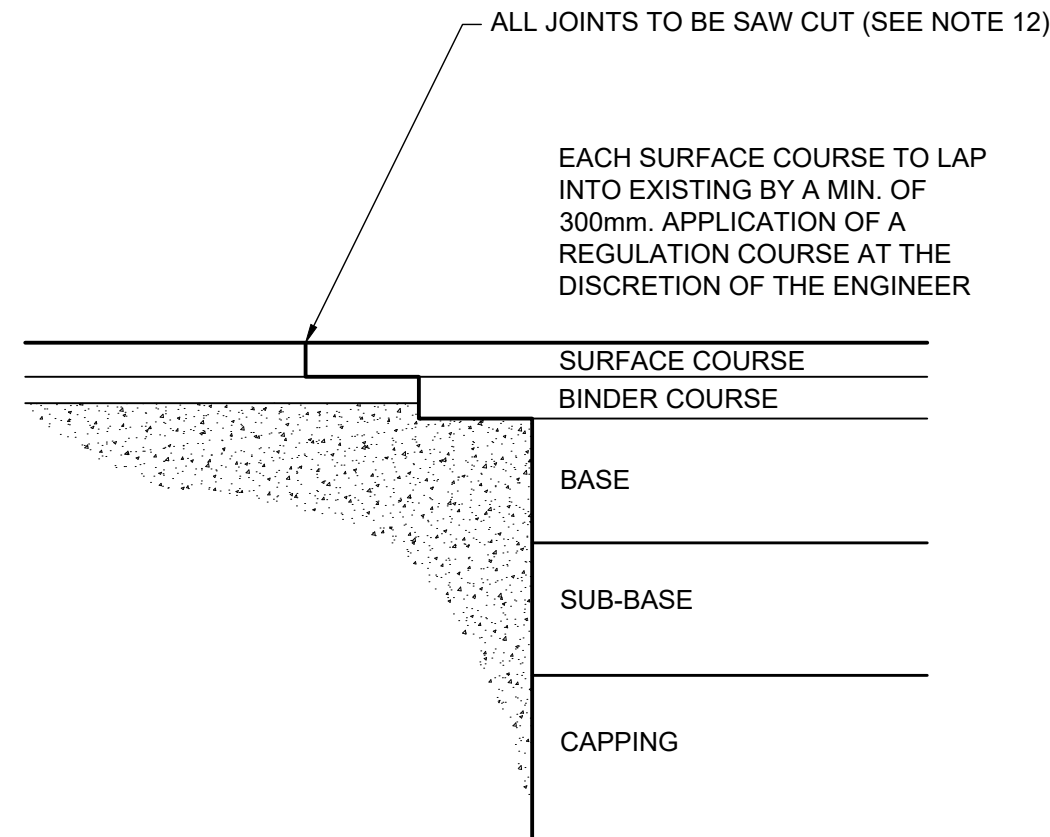
THE CONSTRUCTION MAKE UP IS TO BE BASED UPON CBR TESTING AT FORMATION LEVEL OF ROAD CONSTRUCTION. GROUND INVESTIGATION REFERENCE 'GE16662/GR04/170929' SUGGESTS 2% CBR TO BE EXPECTED BUT TO BE CONFIRMED ON SITE WITH FORMATION LEVEL TESTS.

HAMPSHIRE COUNTY COUNCIL STANDARD DETAILS TO BE REFERRED TO THROUGH THE CONSTRUCTION	
DRAWING NO:	TITLE
HCC10/C/010	PRECAST CONCRETE KERB.
HCC10/C/025	CONSERVATION KERBS
HCC10/C/045	FOOTWAYS TYPE 1A, 1B, 2 AND 3.
HCC10/C/055	FOOTWAY TYPE 5, TYPE 6A AND 6B STRENGTHENED.
HCC10/C/060	UNCONTROLLED PEDESTRIAN CROSSING IN NEW WORKS.
HCC10/C/155	CARRIAGEWAY DETAIL FOR CONSTRUCTION WITHIN THE ROOT PROTECTION AREA OF RETAINED TREES
HCC10/C/160	NO DIG FOOTWAY DETAILS FOR CONSTRUCTION WITHIN THE ROOT PROTECTION AREA OF RETAINED TREES
HCC10/D/015	GULLY TYPE 1

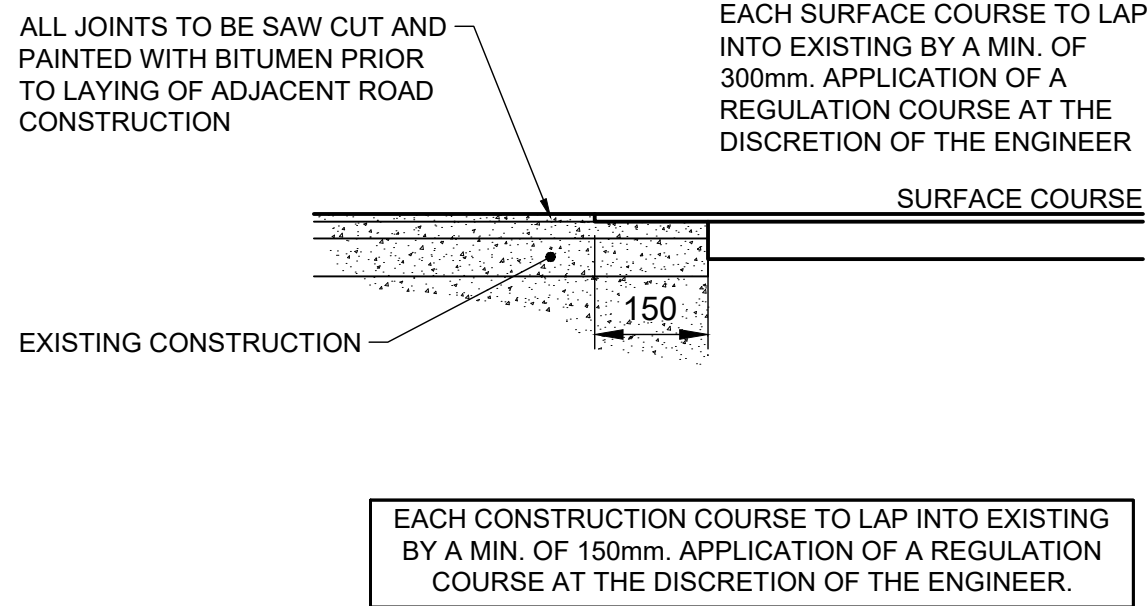


CELLWEB SECTION - TREE ROOT PROTECTION

C/W TARMAC SURFACE



TYPICAL CARRIAGEWAY TIE-IN DETAIL



TYPICAL FOOTWAY TIE-IN DETAIL

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE MANUAL FOR CONTRACT DRAWINGS, VOLUME 1, SPECIFICATION FOR HIGHWAY WORKS, HAMPSHIRE COUNTY COUNCIL SPECIFICATION 'SEWERS FOR ADOPTION 6/7TH EDITIONS - A DESIGN GUIDE FOR DEVELOPERS AND ALL OTHER RELATED DRAWINGS ISSUED.
- IF THERE IS ANY AMBIGUITY BETWEEN THE SPECIFICATION AND THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER.
- CONTRACTOR TO CONFIRM THE CBR VALUES TO INFORM CONSTRUCTION THICKNESSES.
- CAPPING AND SUB-BASE AS PER TABLES ON THIS DRAWING.
- PERMITTED CLASSES OF CAPPING LAYERING MATERIAL ARE 6F1.
- IN CUTTINGS AND EMBANKMENTS THE PROCEDURE TO BE ADOPTED FOR CONSTRUCTION OF CAPPING IS AS SET OUT IN CLAUSES 613.11 AND 613.12 RESPECTIVELY.
- THE CONTRACTOR, WHEN REQUESTED BY THE OVERSEEING ORGANISATION, SHALL DEMONSTRATE THE METHODS, EQUIPMENT AND MATERIALS HE INTENDS TO USE IN THE PREPARATION AND SURFACE TREATMENT OF THE SUB-FORMATION AND FORMATION IN AREAS SPECIFIED BY THE OVERSEEING ORGANISATION.
- FOR DETAILED CARRIAGEWAY CROSS FALLS REFER TO THE SETTING OUT DOCUMENT TO BE ISSUED AT CONSTRUCTION STAGE.
- FOR TOPSOIL AND SEEDING SPECIFICATION THE CONTRACTOR SHALL CLARIFY THE SPECIFICATIONS SHOWN ON THIS DRAWING AGAINST THE LATEST DETAILS ISSUED BY THE LANDSCAPE ARCHITECT. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

TENDER
ISSUE

Rev	Amendments	Dm	Chk	App	Date
 Tuscany House White Hart Lane Basingstoke Hampshire RG21 4AF Telephone: 01256 331144 Fax: 01256 331134 E: info@odysseyconsult.co.uk W: www.odysseyconsult.co.uk					
Job Title WOODCROFT FARM, HAVANT PHASE 1A					
Drawing Title HIGHWAY CONSTRUCTION DETAILS					
Client 					
Scale NTS @A1	Date MARCH 18	Designed			
Drawn MA	Checked ND	Approved LH			
Job No 17-110	Drawing No 17-110/2014	Rev			