

- GENERAL NOTES:
- Do not scale from this drawing. Use only written dimensions.
 - All dimensions are in millimeters unless stated otherwise.
 - This drawing is to be read in conjunction with and checked against all other WBC Standard Detail Drawings, Highways Design Guide, British Standards and all other relevant guidance's. In the event of any conflict with said guidance's, the standards shall prevail.
 - Appointed WBC Highway Engineer to be present during inspections/CBR testing.
 - All kerbs to BS EN 1340:2003.
 - All concrete within ground to be AC-4 with design sulphate class of DS-4.
- CONSTRUCTION NOTES:
- See Highways Design Guide Table A1 for details on carriageway dimensions according to street hierarchy.
 - Edging kerbs shall be provided on all free edges of paved areas not confined by a kerb or boundary wall.
 - Footway and highway verges shall fall at 1:40-1:60 towards the carriageway unless otherwise approved by appointed WBC Engineer.
 - Vertical alignment of back edging shall be maintained at crossing points and the crossing graded from edging to carriageway level.
 - All soft spots and organic material must be removed before construction.
 - An approved residual weedkiller which does not contain atrazine or simazine must be applied to all formations.
 - Verge areas shall have a 150 covering of topsoil spread 25 above top of kerbback to allow for settlement and shall be seeded in accordance with the specification.
 - Existing verges edging to new kerbing must be regraded and seeded.
 - If Bituminous layers are not laid immediately after one another, a Bond Coat shall be applied.
 - Tact coat to be applied to kerb-faces and ironworks prior to bituminous surface course being laid.
 - The aggregate in surface course materials shall have a minimum polished stone value of 60 and a maximum aggregate abrasion value of 14.
 - Gravel aggregate will not be permitted in asphaltic concrete.
 - Limestone aggregate will not be permitted in surface course material or binder course material which is to be trafficked.
 - Type 1 material with crushed gravel aggregate shall not be used in the top 150mm below base course level unless permitted by WBC.
 - Use of recycled/reclaimed aggregate material is not permitted unless approved by appointed WBC Engineer.
 - Levels of ironworks and apparatus to be adjusted accordingly prior to the laying of bound construction layers. If bituminous layers are placed prior to raising, 300 kerbback is required; cut to be made with diamond saw, if cracking or failure occurs, the cut position is to be extended at least 50 beyond that point.
 - For the purpose of reinstatement/repairs or tie-ins, material used will typically be that of existing. Departure subject to discretion of approving/supervising WBC engineer.
 - If it is not possible grade private land behind the public highway to drain surface water away from the highway, the owner must install a linear channel drain within the extents of their land at the highway boundary and connected to a suitable outfall.
 - Any existing Highway Authority or Statutory Undertaker service covers within the area of the plateau or ramp shall be re-levelled, strengthened and replaced with appropriate load bearing cover. Existing Highway Authority or Statutory Undertaker services within the same areas shall be lowered where necessary.
 - The Highway Authority reserves the right to require Applicants to relocate any Highway Authority or Statutory Undertaker service covers and chambers (including gullies) within the carriageway should these be located immediately in front of ramps.
 - See WBC Highways Design Guide Table A1 'Dimensions of Main Carriageway' for carriageway widths according to street hierarchy.
 - See WBC Highways Design Guide Table A1 'Parking' for parking bay (including inset bay) widths according to street hierarchy.
 - See WBC Highways Design Guide Table A1 'Footway, Cycleway, Verge & Margins' for footway widths according to street hierarchy.
 - Ramp to extend the full width of the footway with a max gradient of 8%.
 - Plateau width to be $\geq 45\%$ of the total Footway width providing maximum ramp gradient of 8% is not exceeded.
 - If it is not possible grade private drives to drain surface water away from the Highway, the owner must install a linear channel drain within the extents of their land at the Highway boundary and connected to a suitable outfall.
 - Overbanding is not to be used on the public highway unless it features anti-slip properties and is a proprietary product with HARPAS approval including conforming to British Standards for anti-slip BS EN 1423:2012.

TARMACADAM (FLEXIBLE) FOOTWAY/CYCLEWAY

COURSE	SPECIFICATION	THICKNESS
SURFACE	CLOSE GRADED AC6, PEN 100/150.	25
BINDER	CLOSE GRADED AC20, PEN 40/60.	75
SUB-BASE	DIT TYPE 1	SEE TABLE NOTE 2

- TABLE NOTES
- SEE NOTE 9 FOR DETAILS ON BOND COATS BETWEEN LAYERS;
 - SUB-BASE REQUIREMENTS TO BE DETERMINED BY CBR TEST;
 - CARRIAGEWAY CAPPING REQUIREMENTS TO BE DETERMINED BY CBR TEST;
 - CBR TEST TO BE CARRIED OUT BY THE CONTRACTOR AT 20-30m INTERVALS AND RESULTS REPORTED TO THE HIGHWAY AUTHORITY/ENGINEER.

MODULAR PAVING (RIGID) FOOTWAY

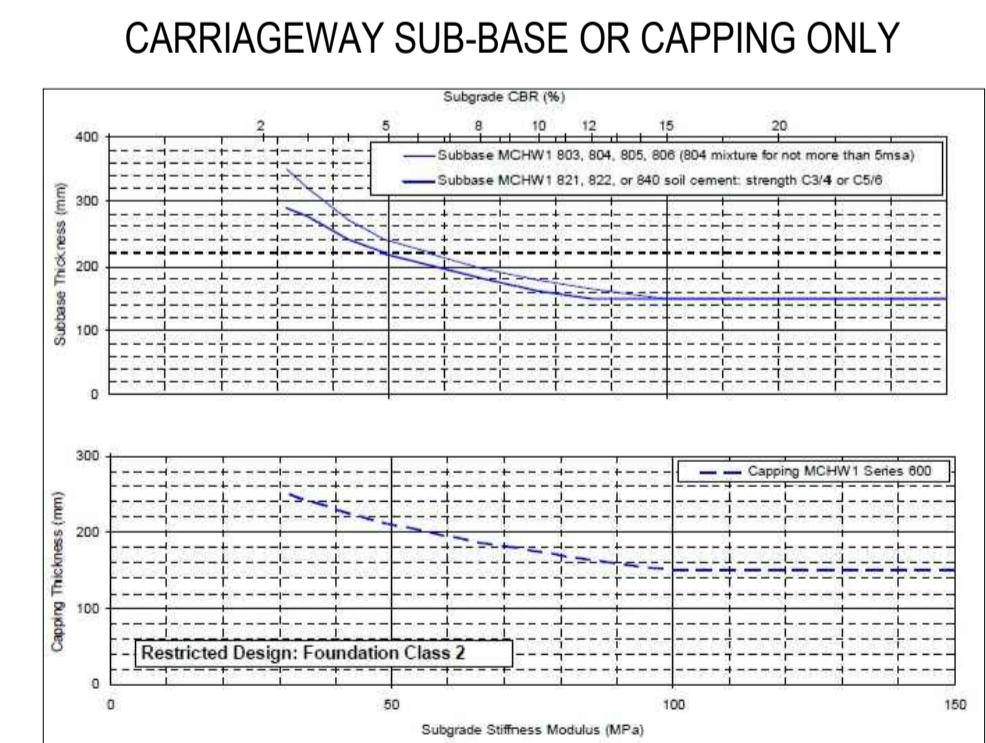
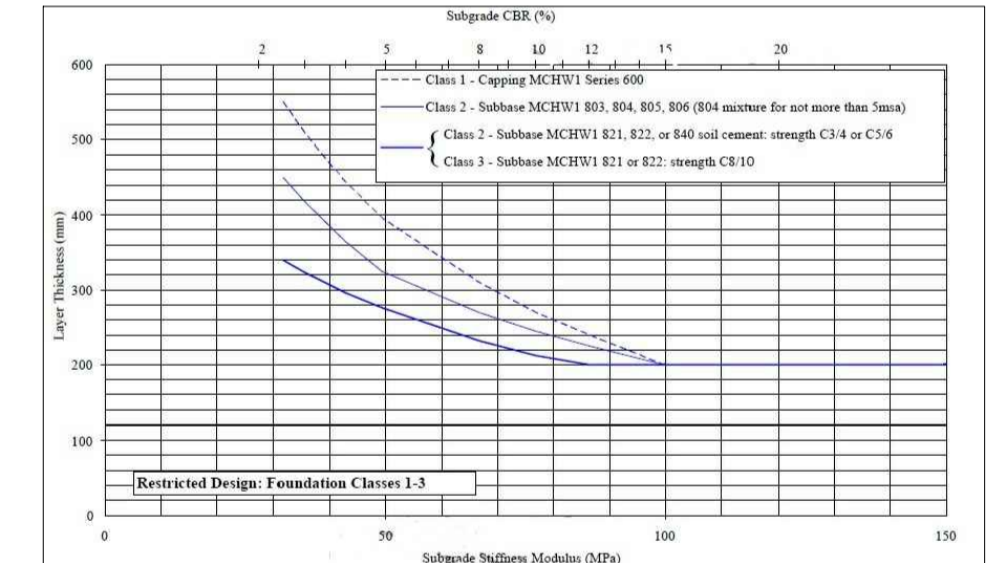
COURSE	SPECIFICATION	THICKNESS
SURFACE	DEPENDENT ON LOCATION. SEE TABLE NOTES 1.	SEE TABLE NOTE 1
LAYING	COURSE SHARP SAND. SEE TABLE NOTES 2.	30-50
SUB-BASE	DIT TYPE 1	SEE TABLE NOTE 3

- TABLE NOTES
- RIGID CONSTRUCTION ONLY APPLICABLE TO TOWN CENTRES AND OTHER PUBLIC REALM LOCATIONS. SEE HIGHWAYS DESIGN GUIDE TABLE A2 PAGE 52 'FOOTWAY AND PAVED AREA' FOR APPROVED MATERIALS;
 - TO BE TREATED WITH APPROVED ACTIVE PRE AND POST EMERGENCE RESIDUAL WEED KILLER.
 - SUB-BASE REQUIREMENTS TO BE DETERMINED BY CBR TEST;
 - CARRIAGEWAY CAPPING REQUIREMENTS TO BE DETERMINED BY CBR TEST;
 - CBR TEST TO BE CARRIED OUT BY THE CONTRACTOR AT 20-30m INTERVALS AND RESULTS REPORTED TO THE HIGHWAY AUTHORITY/ENGINEER.

VEHICULAR CROSSOVERS

COURSE	SPECIFICATION	THICKNESS
SURFACE	CLOSE GRADED AC6, PEN 100/150.	25
BINDER	CLOSE GRADED AC20, PEN 40/60.	75
SUB-BASE	DIT TYPE 1.	SEE TABLE NOTE 2

- TABLE NOTES
- SEE NOTE 9 FOR DETAILS ON BOND COATS BETWEEN LAYERS;
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CARRIAGEWAY SUB-BASE ON CAPPING

CBR (%)	Subbase on Capping (mm)	
	Subbase	Capping
≤2.5	Ground Stabilisation	Ground Stabilisation
2.6 - 2.9	350	250
3.0 - 3.9	320	240
4.0 - 4.9	270	220
5.0 - 5.9	240	210
6.0 - 7.9	210	200
8.0 - 9.9	200	180
10 - 11.9	180	180
12.0 - 14.9	170	160
15.0+	150	200

(figures used in the table above have been extracted from figures 3.1 and 3.2 of IAN 73/06 Rev 1)

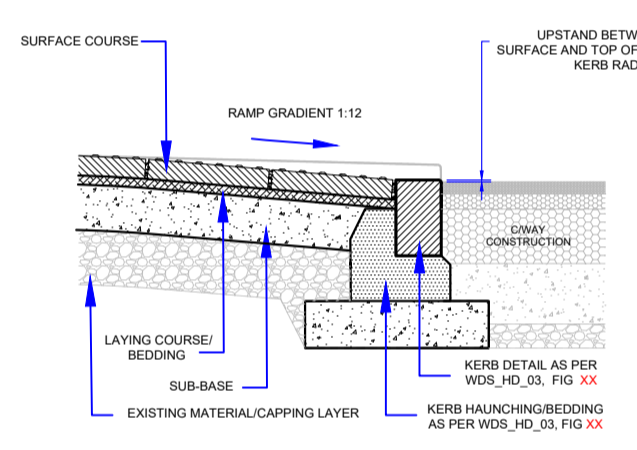
TARMACADAM CARRIAGEWAY

COURSE	SPECIFICATION	THICKNESS
SURFACE	HOT ROLLED ASPHALT. 30/14F + PCC 14/20, PEN 40/60, MIN PSV 63, MAX AAV 14.	40
	CLOSE GRADED AC10, PEN 100/150, MIN PSV 60, MAX AAV 14	40
BINDER	CLOSE GRADED AC20, PEN 40/60.	60
BASE	CLOSE GRADED AC32, PEN 40/60.	130
SUB-BASE	DIT TYPE 1	SEE TABLE NOTE 3
CAPPING	CLASS 6F1 OR 6F2 GRANULAR CAPPING MATERIAL	SEE TABLE NOTE 4

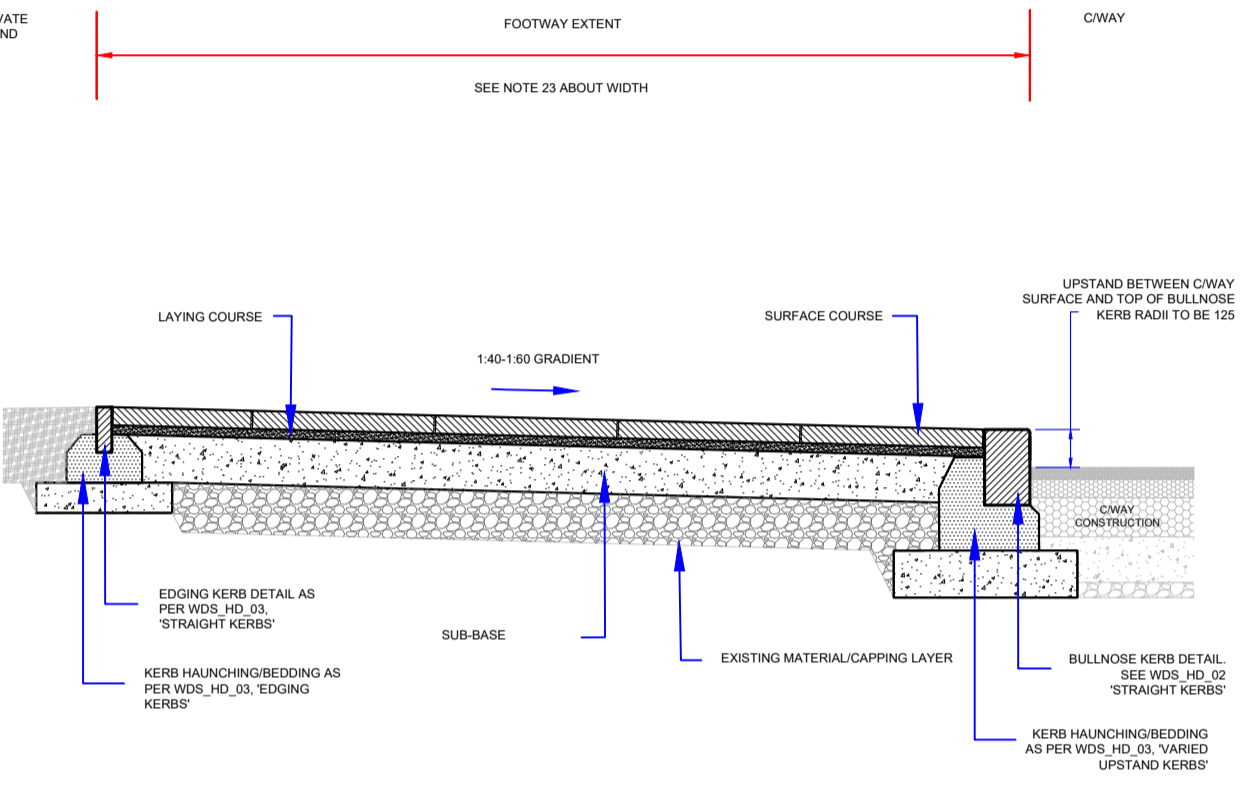
- TABLE NOTES
- SEE NOTE 9 FOR DETAILS ON BOND COATS BETWEEN LAYERS;
 - SUB-BASE REQUIREMENTS TO BE DETERMINED BY CBR TEST;
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Surface Options	Bituminous	Pavers	Flags	Concrete
Surfacing ⁽¹⁾	20mm surface course ⁽²⁾ 60mm binder course ⁽²⁾	≥50mm clay pavers 30mm laying course sand (compacted)	300mm x 300mm x 60mm or 400mm x 400mm x 65mm or 450mm x 450mm x 70mm 25mm laying course sand (compacted) or mortar	150mm unreinforced, Grade C30P
Sub-base ⁽³⁾	150mm	250mm 200mm 150mm	250mm 200mm 150mm	75mm
Subgrade ⁽⁴⁾	-	CBR ≥2% CBR ≤5%	CBR ≥5% CBR ≤2% CBR ≤5%	CBR >5%

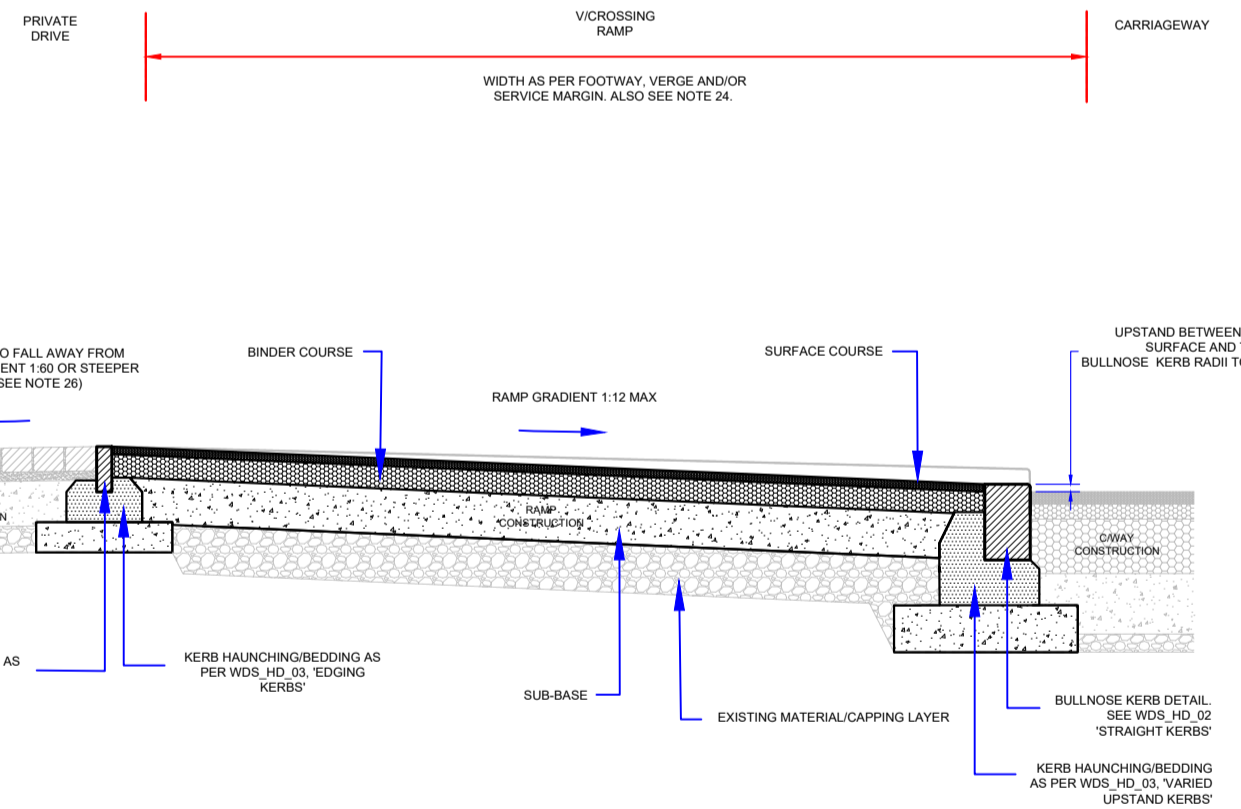
CBR FOR FOOTWAYS & CYCLEWAYS SUBJECT TO VEHICULAR LOADING



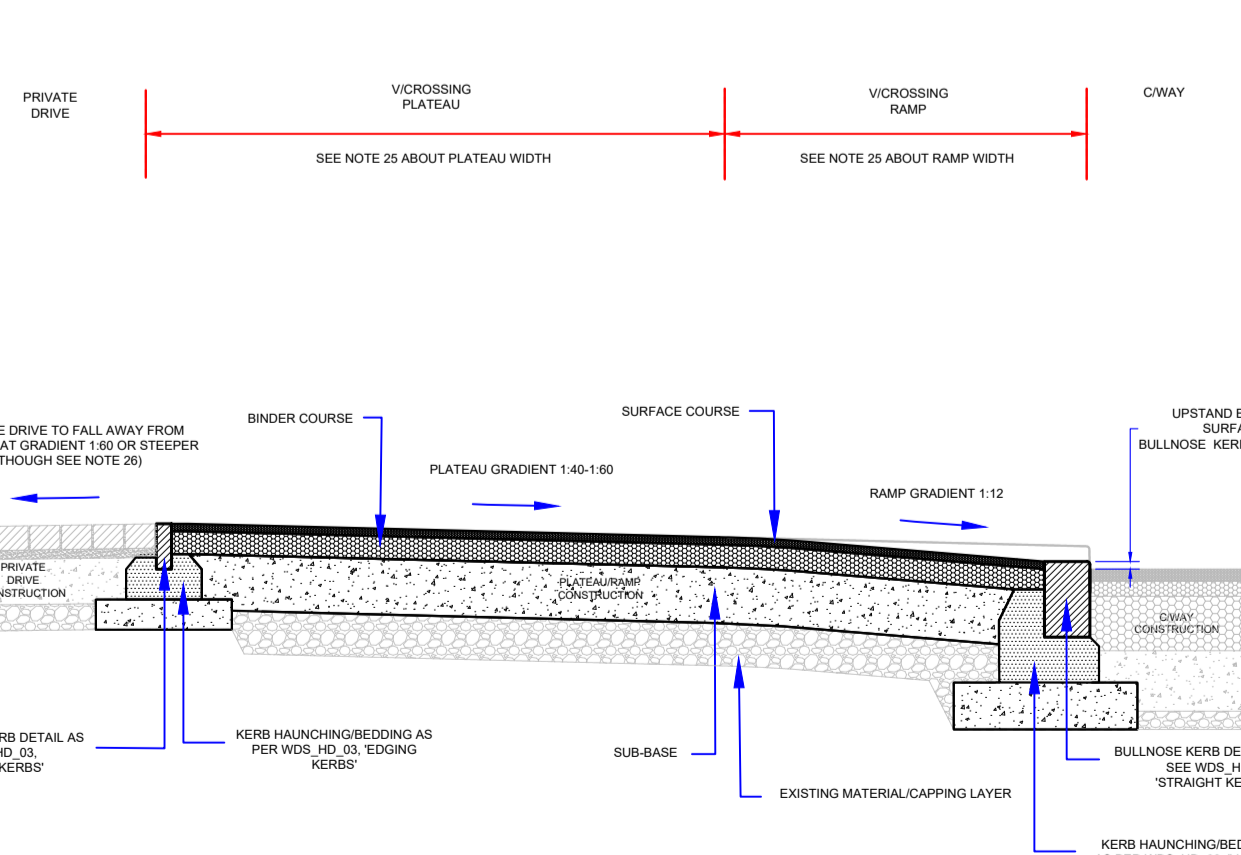
TARMACADAM FOOTWAY/CYCLEWAY
SEE TABLE FOR CONSTRUCTION DETAILS



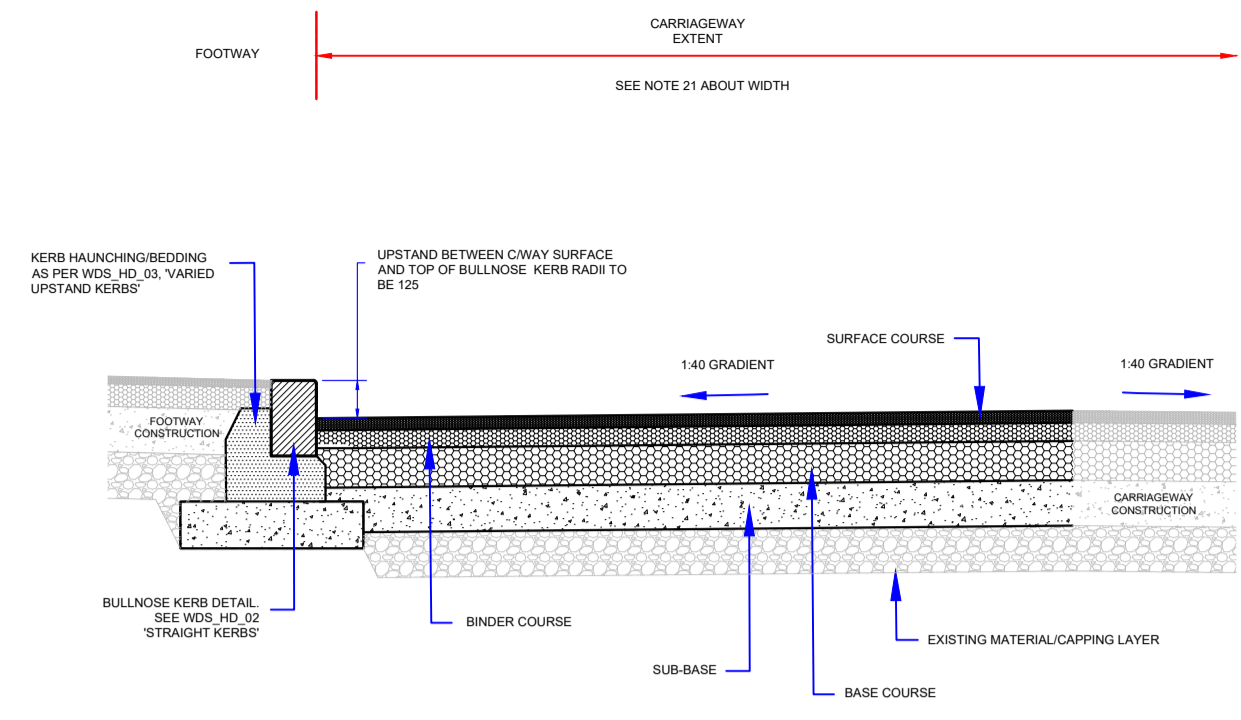
MODULAR PAVING FOOTWAY
SEE TABLE FOR CONSTRUCTION DETAILS



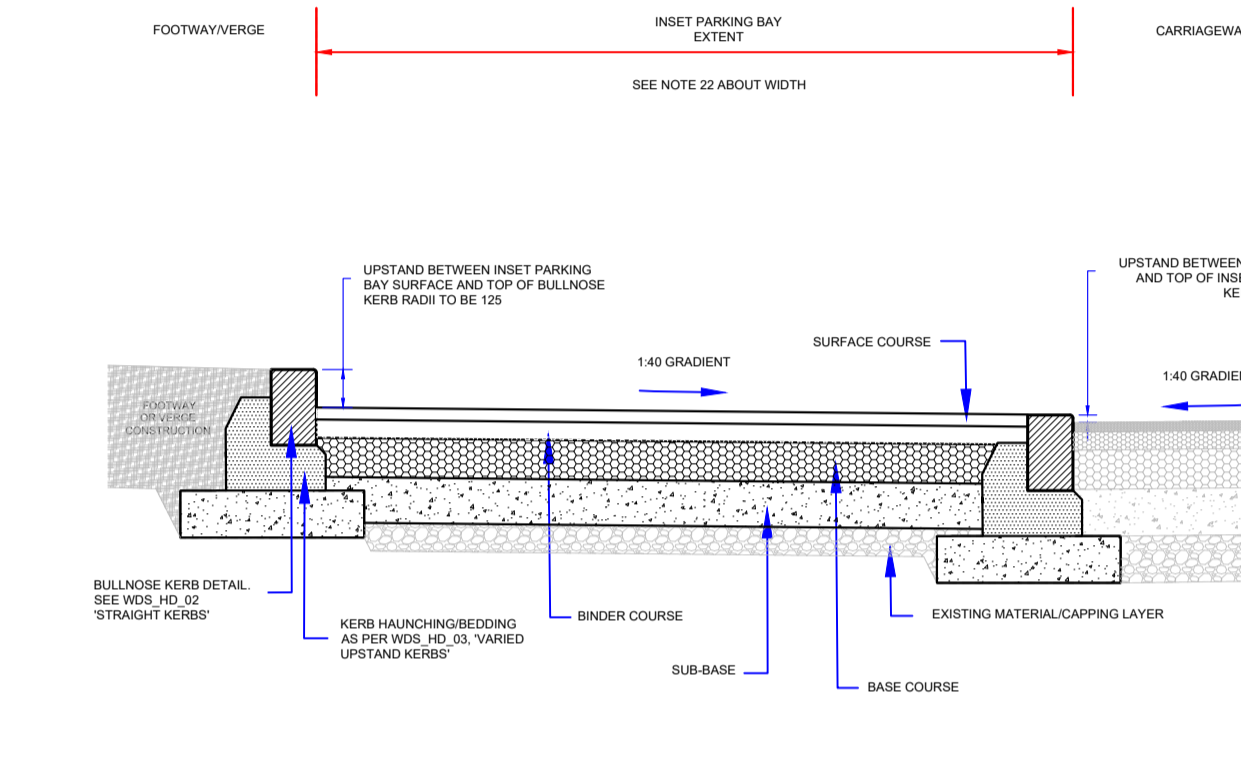
VEHICULAR CROSSING (TYPE 1)



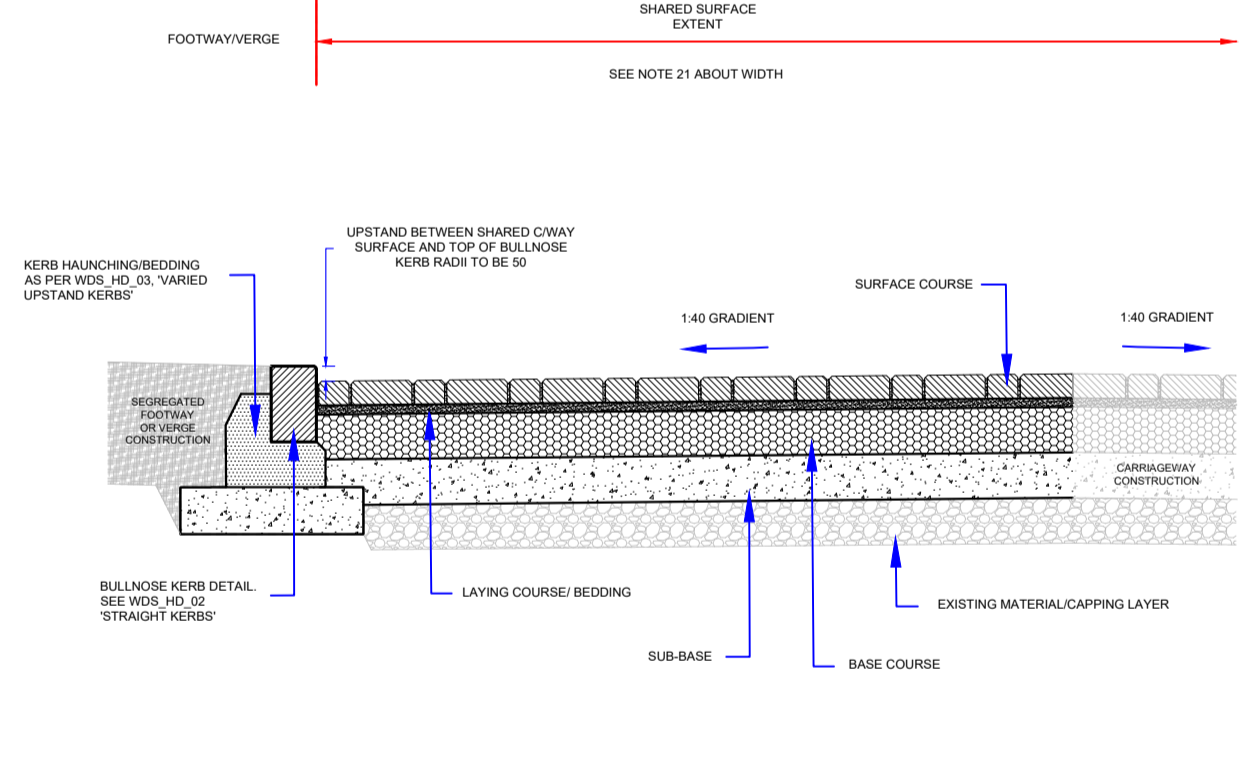
VEHICULAR CROSSING (TYPE 2 & 3)
SEE TABLE FOR CONSTRUCTION DETAILS



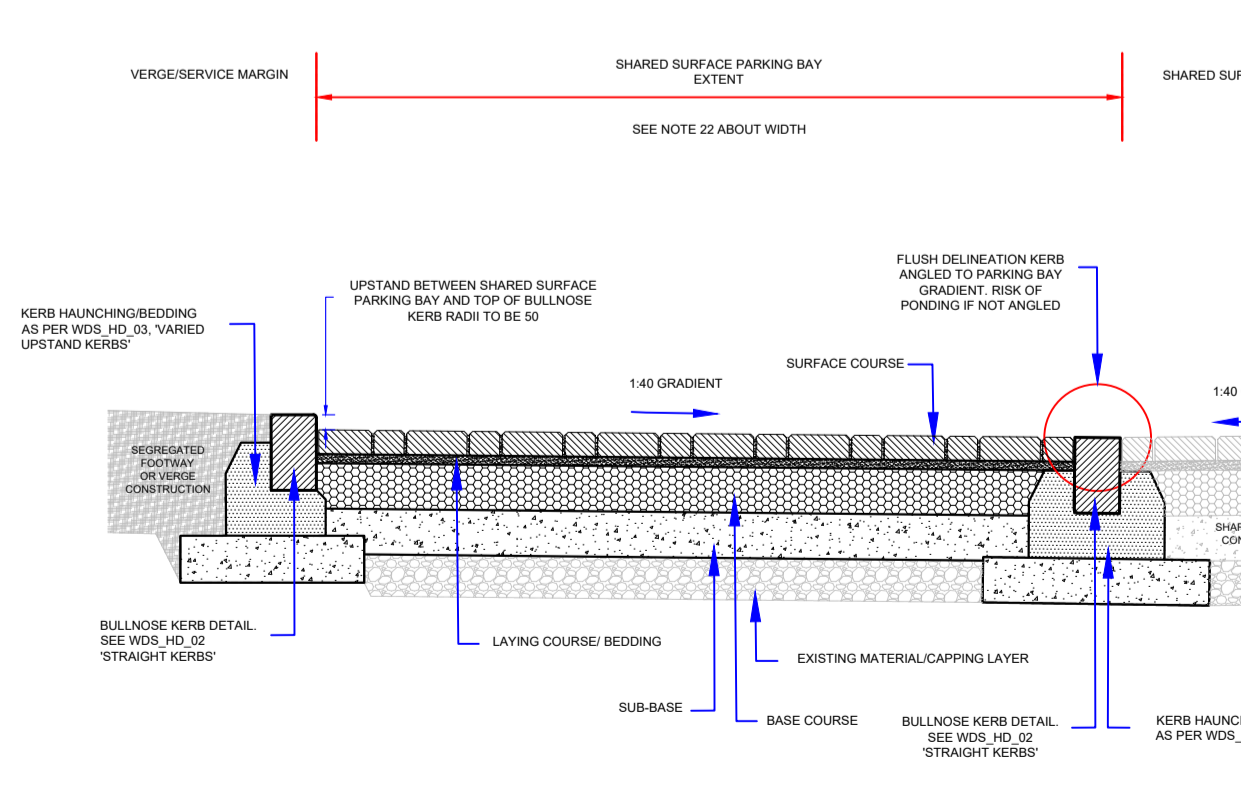
TARMACADAM CARRIAGEWAY
SEE TABLE FOR CONSTRUCTION DETAILS



TARMACADAM CARRIAGEWAY (INSET PARKING BAYS)
SEE TABLE FOR CONSTRUCTION DETAILS



SHARED SURFACE ZONE
SEE TABLE FOR CONSTRUCTION DETAILS



SHARED SURFACE ZONE (INSET PARKING BAYS)
SEE TABLE FOR CONSTRUCTION DETAILS

TACTILE PAVING PEDESTRIAN CROSSING
SEE TABLE FOR CONSTRUCTION DETAILS

TACTILE CROSSINGS

COURSE	SPECIFICATION	THICKNESS
SURFACE	400x400 TACTILE BLISTER PAVING FLAGS	65
LAYING	SAND/CEMENT MORTAR BED	30
SUB-BASE	DIT TYPE 1.	SEE TABLE NOTE 3

- TABLE NOTES
- TACTILES WITHIN AREAS WITH VEHICLE OVER-RUN WILL REQUIRE 200x100x65 TACTILE BLOCKS.
 - SERVICE COVERS WITHIN TACTILE EXTENTS WILL REQUIRE RECESS COVERS AND FRAMES;
 - SUB-BASE REQUIREMENTS TO BE DETERMINED BY CBR TEST;
 - CARRIAGEWAY CAPPING REQUIREMENTS TO BE DETERMINED BY CBR TEST;
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SHARED SURFACE ZONES

COURSE	SPECIFICATION	THICKNESS
SURFACE	MARSHALLS KEYBLOCK (200x100) CONCRETE PAVING LAID IN HERRINGBONE PATTERN. COLOUR: GREYS: 'CHARCOAL' OR 'NATURAL', REDS: 'BRINDLE' OR 'RED' - SUBJECT TO CONTRAST WITH ADJACENT HIGHWAY AND HOUSES.	80
LAYING	COURSE SHARP SAND. TO BE TREATED WITH APPROVED ACTIVE PRE AND POST EMERGENCE RESIDUAL WEED KILLER.	30-50
BASE	CLOSE GRADED AC32, PEN 40/60.	130
SUB-BASE	DIT TYPE 1.	SEE TABLE NOTE 3
CAPPING	CLASS 6F1 OR 6F2 GRANULAR CAPPING MATERIAL.	SEE TABLE NOTE 4

- TABLE NOTES
- ALL BLOCK PAVEMENT JOINTS TO BE SEALED WITH PRE-POLYMER URETHANE;
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 - CARRIAGEWAY CAPPING REQUIREMENTS TO BE DETERMINED BY CBR TEST;
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17/07/2020 A

Date Approved Revision



WOKINGHAM BOROUGH COUNCIL
HIGHWAYS DEVELOPMENT
DESIGN STANDARD PLANS

STANDARD DETAILS
SHEET 1 OF 4

Scale: NOT TO SCALE
Drawing No: WDS_HD_01
Date Drawn: 16/07/2020
Rev: A
Checked: Approved
Date Approved: 17/07/2020