TABLE 1 – CONSTRUCTION DETAILS OF PAVED AREAS (NHBC 2023 TABLES 2A, 2B, 2C & 2D).

CONSTRUCTION – ROAD TYPE (1)		SUB BASE COURSE	BASE COURSE		BINDER COURSE	SURFACE COURSE				BEDDING COURSE	PAVERS
		GRANULAR SUB BASE MATERIAL TYPE 1 TO CLAUSE 803 TABLE 8/2 M.C.H.W. VOL. 1. SERIES 800 (2)	ASPHALT CONCRETE TO BS EN 13108–1 AND PD 6691 UTILISING AGGREGATE TO BS EN 13043 AND PD 6682–2	CONCRETE DESIGNATION (BS 8500–2:2015 + A2:2019 TABLE 6)	ASPHALT CONCRETE TO BS EN 13108–1 AND PD 6691 UTILISING AGGREGATE TO BS EN 13043 AND PD 6682–2	SMA TO BS EN 13108–5 AND PD 6691 WITH AGGREGATE TO BS EN 13043 AND PD 6692–2	HOT ROLLED ASPHALT TO BS EN 13108–4 AND PD 6691 UTILISING AGGREGATE TO BS EN 13043 AND PD 6692–2	CONCRETE DESIGNATION (BS 8500–2:2015 + A2:2019 TABLE 6)	ASPHALT CONCRETE TO BS EN 13108–1 AND PD 6691 UTILISING AGGREGATE TO BS EN 13043 AND PD 6682–2	COARSE SAND TO BS 7533–3 CATEGORY II OF ANNEX D	BLOCK PAVERS TO BS EN 1338 OF CLASS 2 WEATHERING RESISTANCE AND CLASS 3 ABRASION, AS WELL AS BEING LOW POTENTIAL FOR SLIP (REF: TABLE NA.2 OF BS EN 1338)(7)
PRIVATE ROAD HAVING FREQUENT USE BY COMMERCIAL VEHICLES	ROAD (BITUMINOUS MIXTURES)(ASPHALT)	REFER TO TABLE 2	100mm (AC 32 DENSE BASE 100/150 DES)	N/A	60mm (AC 20 DENSE BIN 100/150 DES)	30mm (SMA 10 SURF 40/60)	40mm (HRA 55/10 SURF 40/60 DES)	N/A	N/A	N/A	N/A
	ROAD (BLOCK PAVERS/TEGULA PAVERS)	IF CBR IS 5% OR LESS = 150mm (3) WHERE CBR IS GREATER THAN 5% = REFER TO TABLE 2	N/A	N/A	60mm (AC 20 DENSE BIN 100/150 DES)	N/A	N/A	N/A	N/A	50mm	80mm
	FOOTPATH (BITUMINOUS MIXTURES)	225mm (3)	N/A	N/A	60mm (AC 20 DENSE BIN 100/150 DES)	20mm (AC 6 DENSE SURF 100/150 DES)	N/A	N/A	N/A	N/A	N/A
SHARED PARKING AND ASSOCIATED ACCESS AREAS HAVING FREQUENT USE BY COMMERCIAL VEHICLES	BITUMINOUS MIXTURES (ASPHALT)	REFER TO TABLE 2	80mm (AC 32 DENSE BASE 100/150 DES)	100mm GRADE GEN2 (4)	60mm (AC 20 DENSE BIN 100/150 DES)	30mm (SMA 10 SURF 40/60)	N/A	N/A	N/A	N/A	N/A
	BLOCK PAVERS/ TEGULA PAVERS	REFER TO TABLE 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50mm	80mm
SHARED DRIVES HAVING INFREQUENT USE BY COMMERCIAL VEHICLES	BITUMINOUS MIXTURES (ASPHALT)	REFER TO TABLE 2	REFER TO NOTE 5	N/A	80mm (AC 20 DENSE BIN 100/150 DES (6))	30mm (SMA 10 SURF 40/60)	40mm (HRA 55/10 SURF 40/60 DES)	N/A	N/A	N/A	N/A
	CONCRETE	REFER TO TABLE 2	N/A	N/A	N/A	N/A	N/A	150 GRADE PAV2	N/A	N/A	N/A
	BLOCK PAVERS/ TEGULA PAVERS	REFER TO TABLE 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50mm	80mm
	GRAVEL	REFER TO TABLE 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PRIVATE DRIVES AND PARKING AREAS HAVING USE BY CARS AND LIGHT VEHICLES	BITUMINOUS MIXTURES (ASPHALT)	REFER TO TABLE 2	N/A	N/A	60mm (AC 20 DENSE BIN 100/150 DES)	25mm (SMA 6 SURF 40/60)	N/A	N/A	25mm (AC 6 DENSE SURF 100/150 DES)	N/A	N/A
	CONCRETE	REFER TO TABLE 2	N/A	N/A	N/A	N/A	N/A	100 GRADE PAV1	N/A	N/A	N/A
	BLOCK PAVERS/ TEGULA PAVERS	REFER TO TABLE 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50mm	50mm
	GRAVEL	REFER TO TABLE 2	N/A	N/A	N/A	N/A	N/A	N/A	REFER TO NOTE 8	N/A	N/A

NOTES

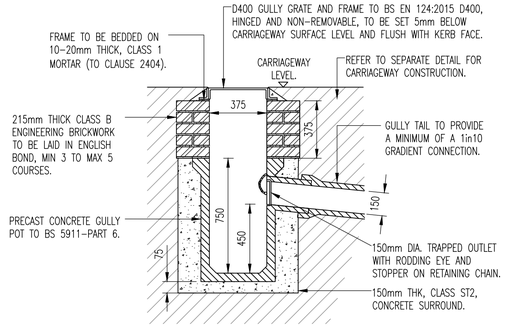
1. IN THE FIRST COLUMN, EUROPEAN HARMONISED NAMES FOR THE PAVEMENT LAYERS ARE WITH THE OLD UK DESIGNATIONS INCLUDED IN BRACKETS.
2. WHERE A CAPPING LAYER IS SPECIFIED, SUB–BASE THICKNESS CAN BE REDUCED. PAVEMENT DESIGN CD 225 REVISION 1 GIVES GUIDANCE ON CAPPING AND SUB–BASE THICKNESS DESIGN BASED ON CBR VALUES WITH AND WITHOUT A CAPPING LAYER.
3. FOR THE MINIMUM THICKNESS OF THE SUB–BASE FOR DIFFERENT CBR VALUES, REFER TO TABLE 2.
4. BOND COAT IN ACCORDANCE WITH BS 594987 SHOULD BE APPLIED TO ENSURE EFFECTIVE BONDING OF THE ASPHALT LAYERS.
5. BITUMINOUS MIXTURES/ASPHALT CAN BE USED AS A PARTIAL REPLACEMENT OF A FULL THICKNESS GRANULAR SUB–BASE TYPE 1 MATERIAL.
6. IF THE BINDER COURSE IS SUBJECTED TO AN EXTENSIVE PERIOD OF TRAFFICKING BEFORE THE SURFACE COURSE IS APPLIED, A RECIPE MIXTURE CONTAINING A HIGHER BITUMEN CONTENT WILL BE MORE DURABLE/RESISTANT TO FRETTING/RAVELLING UNDER TRAFFIC.
7. WHERE LAID TO EITHER A 90 OR 45 DEGREE HERRINGBONE PATTERN, THE EDGE PERIMETER SHOULD BE LAID WITH ONE SINGLE ROW OF STRETCHER BOND SET PARALLEL TO THE EDGE RESTRAINT. WHERE BLOCK PAVERS ARE LAID ABUTTING DRAINAGE CHANNELS, GULLY GRATES, ETC. THE UPPER SURFACE OF THE BLOCK PAVERS SHOULD BE SET 3–6MM ABOVE THE GRATING. MANUFACTURER'S DECLARED VALUE MARKINGS W3 AND S4 ARE ACCEPTABLE. WHERE W3 IS 1.0KG/M2 OR LESS AND S4 IS 45 OR MORE BASED ON 'C SCALE UNIT (FOR ABRASION, CLASS A2 = MAXIMUM RESULT IS 23MM, CLASS A1 = NO PERFORMANCE DETERMINED).
8. A 38MM THICKNESS OF GRADED 15/20MM UNBOUND AGGREGATE TO BS EN 13242 (GRAVEL), WELL ROLLED AND COMPACTED, SHOULD BE USED.
9. REFERENCE TO CLAUSES ARE IN RELATION TO THE RELEVANT EUROPEAN AND/OR BRITISH STANDARDS.
10. ASPHALT CONTRACTORS SHOULD BE CERTIFIED IN ACCORDANCE WITH THE NATIONAL HIGHWAY SECTOR SCHEMES FOR QUALITY MANAGEMENT IN HIGHWAY WORKS – SCHEME 16.

TABLE 2 – MINIMUM SUB BASE THICKNESS FOR PAVED AREAS (NHBC 2023 TABLE 3).

CBR VALUES	MINIMUM THICKNESS OF SUB BASE (1) (CONSOLIDATED IN ACCORDANCE WITH M.C.H.W. VOL. 1 CLAUSE 801, TABLE 8/4)
LESS THAN 2%	N/A – SUBGRADE REQUIRES IMPROVEMENT (2)
2%–3%	325mm
3%–5%	250mm
5%–7%	150mm
7%–20%	100mm

NOTES

1. MINIMUM THICKNESS OF SUB–BASE MAY BE CONSIDERED FOR REDUCTION WHEN USING PROPRIETARY GEOGRID, PROVIDED THEY CAN BE ADEQUATELY JUSTIFIED AND DESIGNED BY AN ENGINEER IN ACCORDANCE WITH TECHNICAL REQUIREMENT R5.
2. SPECIALIST ADVICE SHOULD BE SORT TO IMPROVE THE SUBGRADE.

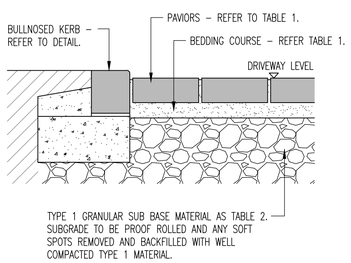


TYPICAL ROAD GULLY DETAIL
SCALE 1:20

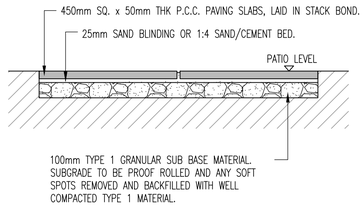
GENERAL

1. DO NOT SCALE THIS DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. ANY DISCREPANCIES ARE TO BE RECORDED AND REPORTED TO THE ENGINEERS IMMEDIATELY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERS AND ARCHITECTS DRAWINGS AND THE SPECIFICATION.
3. ALL WORK IS TO BE TO THE SATISFACTION OF THE ENGINEER AND LOCAL AUTHORITY BUILDING CONTROL.
4. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE STABILITY OF THE WORKS AT ALL TIMES DURING CONSTRUCTION.
5. ALL WORKMANSHIP AND MATERIALS ARE TO BE TO CURRENT BRITISH STANDARDS.
6. ALL SERVICES ARE TO BE LOCATED AND PROTECTED AS NECESSARY BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF THE WORKS.
7. ANY EXISTING DETAILS WHICH ARE SHOWN ON THIS DRAWING ARE FOR GUIDANCE ONLY AND ARE TO BE CHECKED ON SITE BY THE CONTRACTOR. ANY VARIATIONS ARE TO BE RECORDED AND REPORTED TO THE ENGINEER IMMEDIATELY.
8. DURING CONSTRUCTION WORKS ON SITE, ALL ROADS AND FOOTPATHS ARE TO BE SWEPT AND KEPT CLEAR OF OBSTRUCTIONS, THIS IS TO INCLUDE EXISTING HIGHWAYS AS APPROPRIATE TO ENSURE SAFE PASSAGE OF ALL ROAD USERS.
9. PROVISION SHALL BE MADE FOR THE INSTALLATION OF ALL MAINS SERVICES INCLUDING DUCTING PRIOR TO THE LAYING OF THE ROAD BASE–COURSE.

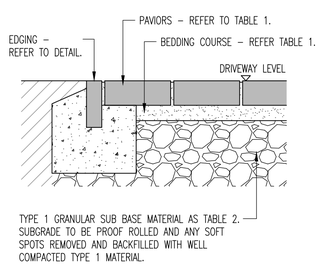
FOR DETAILS AND SPECIFICATION FOR SOFT LANDSCAPING, GRAVEL, TIMBER EDGINGS, COBBLES, KNEE RAILS ETC. – REFER TO LANDSCAPE ARCHITECT



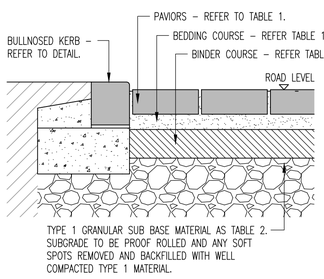
SHARED PRIVATE DRIVE/CAR PARKING DETAIL (BLOCK PAVED)
SCALE 1:10



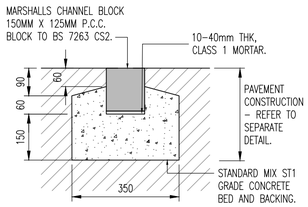
PRIVATE FOOTPATH/PATIO DETAIL
SCALE 1:10



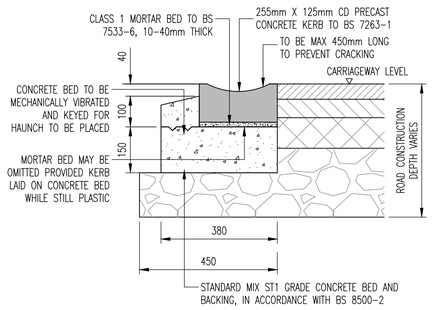
INDIVIDUAL PRIVATE DRIVE (BLOCK PAVED)
SCALE 1:10



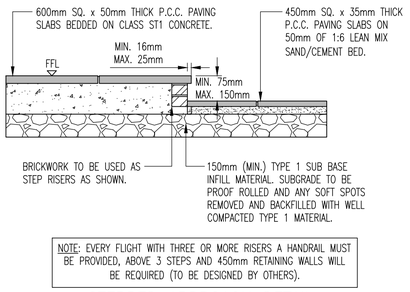
PRIVATE ROAD (BLOCK PAVED)
SCALE 1:10



CHANNEL BLOCK DETAIL
SCALE 1:10

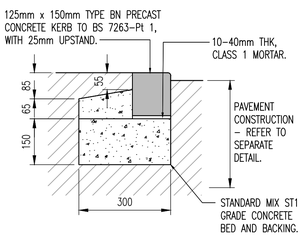


CHANNEL DISH KERB (CD) DETAIL
SCALE 1:10

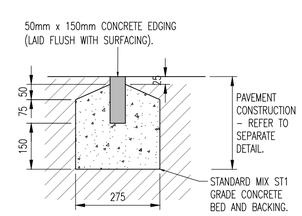


NOTE: EVERY FLIGHT WITH THREE OR MORE RISERS A HANDRAIL MUST BE PROVIDED, ABOVE 3 STEPS AND 450mm RETAINING WALLS WILL BE REQUIRED (TO BE DESIGNED BY OTHERS).

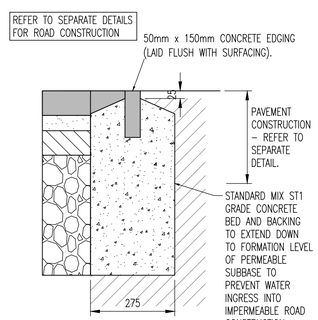
STEPPED APPROACH DETAIL
SCALE 1:20



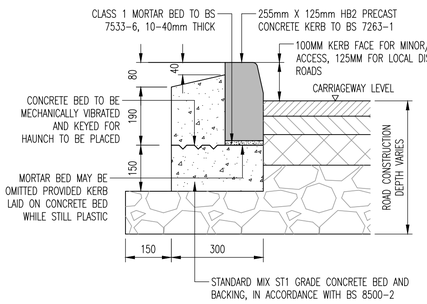
TYPICAL BULLNOSED KERB DETAIL
SCALE 1:10



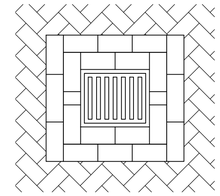
TYPICAL EDGING DETAIL
SCALE 1:10



EDGING ADJACENT TO PERMEABLE SUBBASE DETAIL
SCALE 1:10



HALF–BATTERED KERB (HB2) DETAIL
SCALE 1:10



ALL AREAS OF BLOCK PAVING ARE TO BE LAID WITH 2No. STRETCHER COURSES LAID PARALLEL TO THE KERB LINE AND ALL DRAINAGE COVERS WITH THE REMAINDER LAID TO A 45° HERRINGBONE PATTERN.

BLOCK PAVING DETAIL TO ALL DRAINAGE COVERS AND GRATES
SCALE 1:20

Rev	Revision Notes	Dwn	Apvd	Date

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PRELIMINARY

Project: RICHER ROAD, BADWELL ASH SUFFOLK			
Drawing Title: PRIVATE ROAD CONSTRUCTION DETAILS SHEET 1 OF 3			
Client: BG & JM SUTTON			Date: OCT 2023
Drawn: JH	Designed: JH	Checked: DCH	Approved: RGW
Scale: As Shown			
Project No: 2005-453	Drawing No & Revision: 060		Size: A1