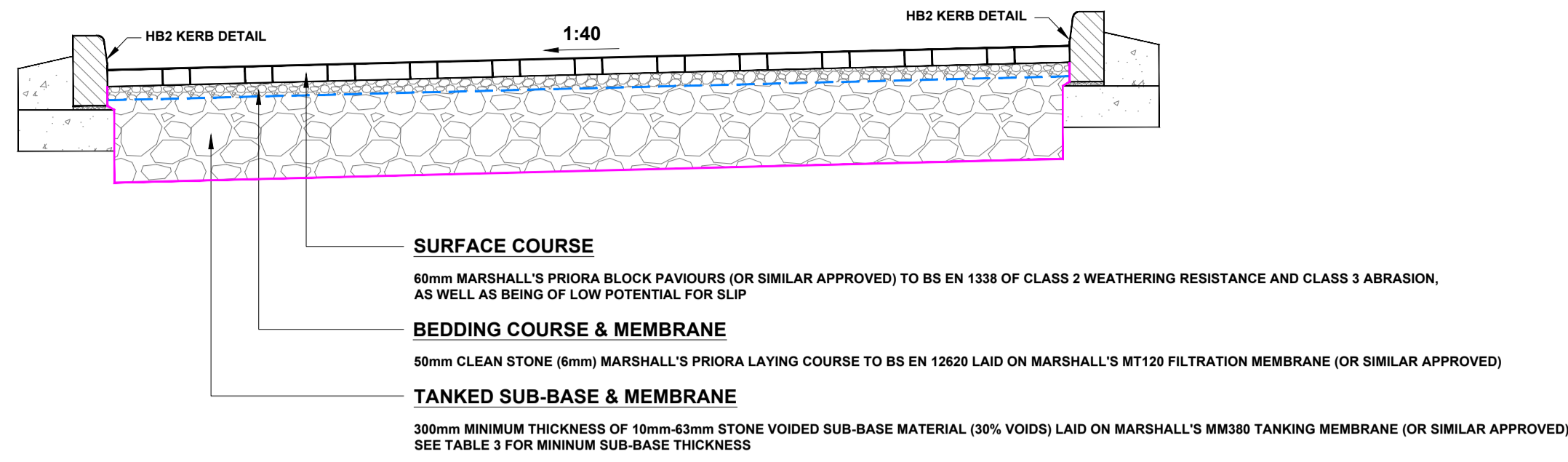


PERMEABLE BLOCK PAVED SINGLE / DOUBLE DRIVEWAY WITH TANKED SUB-BASE TYPICAL CONSTRUCTION DETAIL HAVING FREQUENT USE BY CARS AND LIGHT VEHICLES



NHBC 10.2 NOTES

- IN THE FIRST COLUMN, EUROPEAN HARMONISED NAMES FOR THE PAVEMENT LAYERS ARE WITH THE OLD UK DESIGNATIONS INCLUDED IN BRACKETS.
- WHERE A CAPPING LAYER IS SPECIFIED, SUB-BASE THICKNESS CAN BE REDUCED. PAVEMENT DESIGN CD 223 REVISION 1 GIVES GUIDANCE ON CAPPING AND SUB-BASE THICKNESS DESIGN BASED ON CBR VALUES WITH AND WITHOUT A CAPPING LAYER.
- FOR THE MINIMUM THICKNESS OF THE SUB-BASE FOR DIFFERENT CBR VALUES, REFER TO TABLE 3.
- BOND COAT IN ACCORDANCE WITH BS 69487 SHOULD BE APPLIED TO ENSURE EFFECTIVE BONDING OF THE ASPHALT LAYERS.
- BITUMINOUS MIXTURES/ASPHALT CAN BE USED AS A PARTIAL REPLACEMENT OF A FULL THICKNESS GRANULAR SUB-BASE TYPE 1 MATERIAL.
- 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.
- 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 BUTTING DRAINAGE CHANNELS, GULLEY 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).
- A 30MM THICKNESS OF GRADED 15/20MM UNBOUND AGGREGATE TO BS EN 13242 (GRAVEL), WELL ROLLED AND COMPACTED, SHOULD BE USED.
- REFERENCE TO CLAUSES ARE IN RELATION TO THE RELEVANT EUROPEAN AND/OR BRITISH STANDARDS.
- ASPHALT CONTRACTORS SHOULD BE CERTIFIED IN ACCORDANCE WITH THE NATIONAL HIGHWAY SECTOR SCHEMES FOR QUALITY MANAGEMENT IN HIGHWAY WORKS - SCHEME 16.

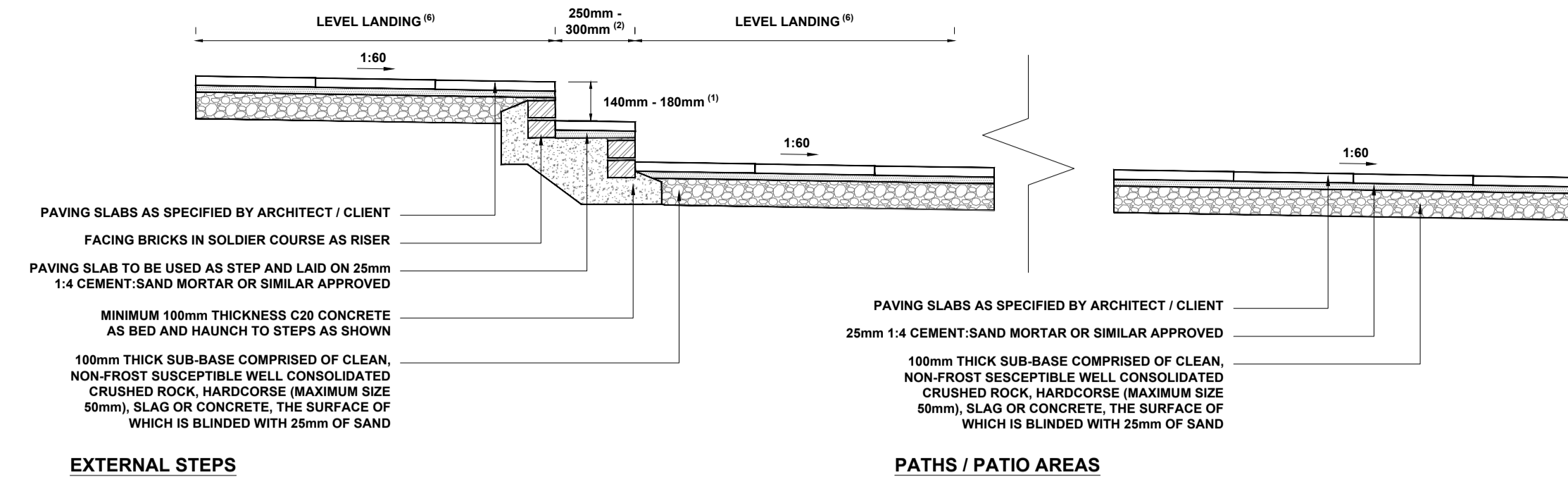
TABLE 3

CBR VALUES	MINIMUM THICKNESS (mm) OF SUB-BASE ⁽¹⁾ (CONSOLIDATED IN ACCORDANCE WITH MCHW VOLUME 1 CLAUSE 801, TABLE 8/4)
LESS THAN 2%	SUBGRADE REQUIRES IMPROVEMENT ⁽²⁾
2% - 3%	325
3% - 5%	250
5% - 7%	150
7% - 20%	100

TABLE 3 NOTES

- 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.
- SPECIALIST ADVICE SHOULD BE SORT TO IMPROVE THE SUBGRADE.

EXTERNAL STEPS / PATHS AND PATIO AREAS TYPICAL CONSTRUCTION DETAIL



SUB-BASE FOR POROUS PAVING

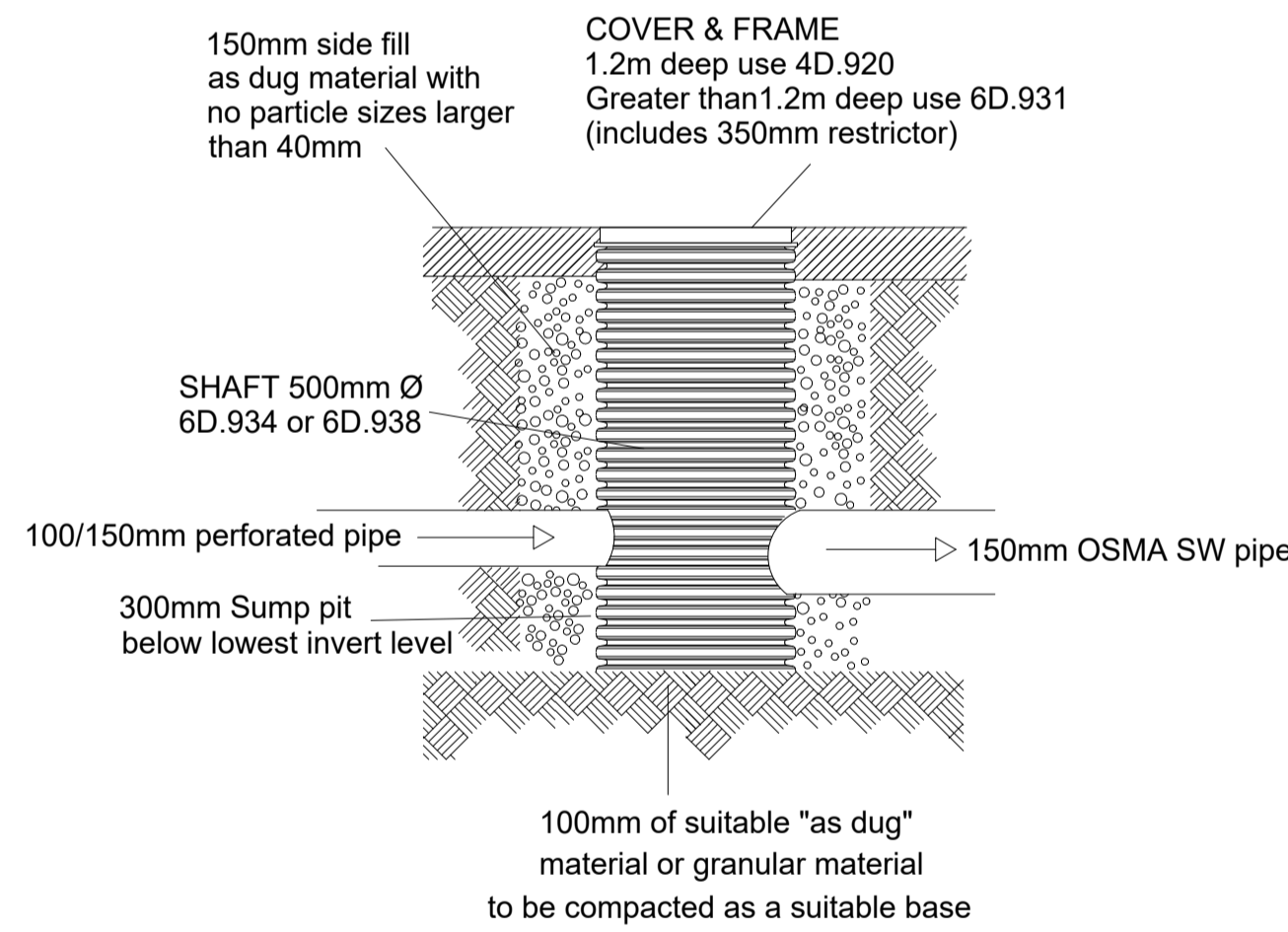
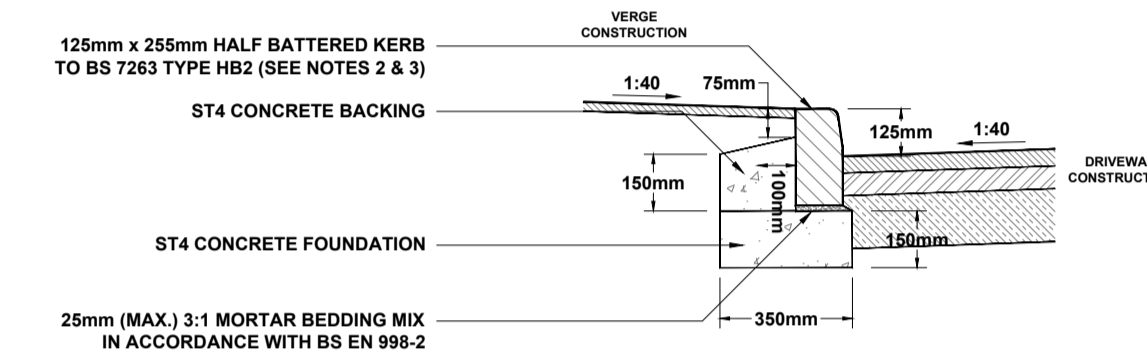
GRADING FOR POROUS GRANULAR SUB-BASE MATERIAL

SIEVE SIZE	% PASSING
100mm	100
63mm	90-100
37.5mm	60-80
20mm	15-30
10mm	0-5

NOTES

- IN CAR PARKING AND LIGHTLY TRAFFICKED AREAS WHERE CBR IS LESS THAN 8% A CAPPING LAYER OF 200mm THICKNESS IS REQUIRED. IN HEAVILY TRAFFICKED AREAS A CAPPING LAYER IS TO BE PROVIDED TO ENSURE THAT THE SUB-GRADE HAS A CBR OF AT LEAST 15%.

HALF BATTED KERB TYPICAL CONSTRUCTION DETAIL



SILT TRAP DETAIL FOR USE IN LANDSCAPED AREAS

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GENERAL NOTES

- This drawing is to be read in conjunction with relevant architectural and engineering drawings.
- Any discrepancies between the details shown and actual on site conditions to be reported immediately to the engineer prior to commencement of work.
- This drawing is not intended to show details of ground conditions or ground contaminants. Each area of ground relied upon to support any structure depicted (including drainage) must be investigated by the Contractor any areas of formation for said structures which do not accord with the anticipated conditions as described in the site investigation report are to be immediately notified to the Engineer, where applicable. Any suspect fluid ground or ground contaminants on or within the ground should be further investigated by a suitable expert. Any earthworks shown indicate typical slopes for guidance only and should be investigated further by a suitable geotechnical expert.
- Where existing trees are shown to be retained they should be subject to a full Arboricultural inspection for safety. All trees are to be planted so as to ensure they are a minimum of 5 metres from buildings and 3 metres from drainage and services, where applicable. A foundation is to be provided to accommodate the proposed tree planting, where applicable.

EXTERNAL WORKS & FEATURES NOTES

- All retaining structures to be designed by a structural engineer.
- Type of retaining structure to be confirmed by the client.
- Extents of illustrated retaining structures, exposed brickwork below DPC, tanking, and double DPC's are shown as indicative only and may vary due to site conditions.
- Retained heights shown are indicative and may vary along the length of feature.
- All flat path or drive gradients shown must provide suitable cross-fall (1:40) to ensure drainage of any surface water.
- All plots have been designed to Part M (Category 1) requirements unless we have been directly instructed by our client, any plots that fail to meet the necessary requirements should be reported to the engineer immediately, prior to construction.
- Any additional Part M requirements (i.e. Category 2 or Category 3) must be confirmed to the engineer in writing prior to commencement of any construction works.
- All proposed shed levels are based on garden gradient illustrated and may vary due to site conditions.
- All rear garden gradients are approximate and may vary due to site conditions.
- The contractor is to ensure that all proposed banks do not have any effect on surrounding infrastructure or buildings regardless of whether they are proposed or existing.
- The contractor is to ensure that all proposed parking bays / access paths are built to the correct dimensions. Any retaining features that breaches the required dimensions must be reported to the engineer immediately.
- For Part M4 (Category 2 & 3) units, any gate (or gateway) between the footway and the main communal or private entrance should comply with the following:
1) Minimum clear opening width of 800mm
2) Minimum 300mm nib to the leading edge
3) Minimum 200mm nib to the following edge (Category 3 only)

Rev.	Description	Date	By
-	First Issue	04/09/2025	LJ

Drawing Status **PLANNING**
SUBJECT TO BARNESLEY COUNCIL APPROVAL AS PART OF ONGOING CONSULTATIONS AND DESIGN CHECK, AMENDMENTS MAY THEREFORE BE REQUESTED.

Client **Barker**

Project **Bank End Primary School, Barnsley**

Title **Drainage & Driveway Construction Details**
Sheet 1 of 1

BANNERS GATE
CIVIL, STRUCTURAL & ARCHITECTURAL DESIGN SERVICES
16-11 Birmingham Street, Halesowen, West Midlands, B63 3HN
Tel: 0121 687 1500 Fax: 0121 687 1501
E-mail: mail@bannersgate.com

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