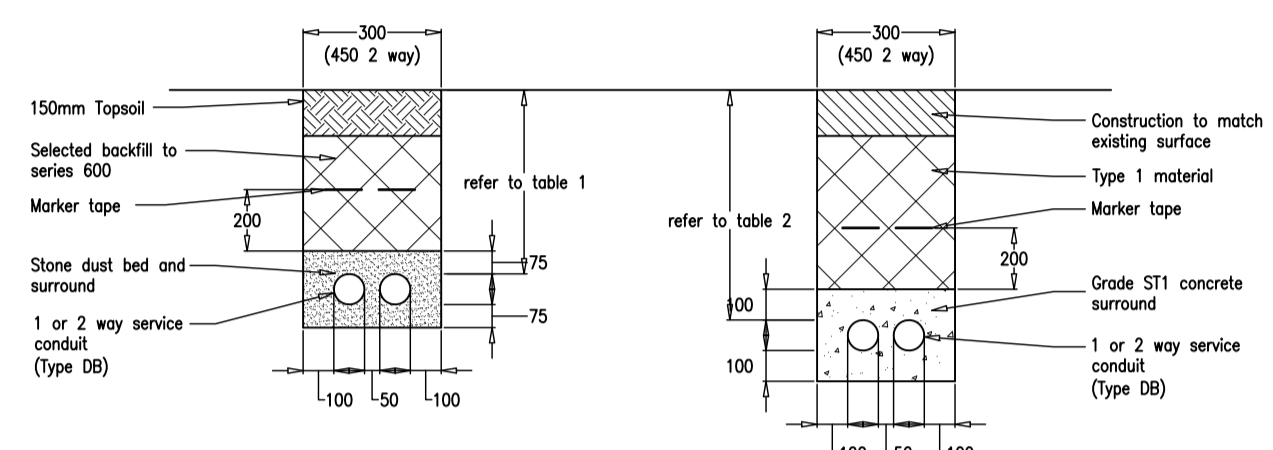


- Carriageway Construction**
- 40mm CLOSE GRADED MACADAM WEARING COURSE TO BS.4987 PART 1 CLAUSE 7.3 (CLAUSE 912) (14mm NOMINAL SIZE AGGREGATE WITH A MINIMUM P.S.V. OF 65)
  - 60mm DENSE BITUMEN MACADAM BINDER COURSE TO BS.4987 PART 1 CLAUSE 5.2 (CLAUSE 906) (20mm NOMINAL AGGREGATE) (125 PEN BITUMEN BINDER)
  - 100mm DENSE BITUMEN MACADAM BASE COURSE TO BS. 4987 PART 1 CLAUSE 5.2 (28mm NOMINAL SIZE) (CLAUSE 903) (125 PEN BITUMEN BINDER)
  - 250mm MOT TYPE 1 SUB BASE MATERIAL TO SPECIFICATION CLAUSE 803.
  - CAPPING LAYER (SUBJECT TO CBR VALUE) (CLAUSE 613) SEE TABLE BELOW.
- Footway Construction**
- 255mm x 125mm REF.HB2 PRECAST CONCRETE HALF BATTERED KERB TO BS.7263 LAID ON 150mm ST1 CONCRETE BED AND HAUNCH.
  - 20mm MEDIUM GRADED WEARING COURSE TO BS.4987 PART 1 CLAUSE 7.5 (6mm NOMINAL SIZE AGGREGATE) (200 PEN BITUMEN BINDER)
  - 60mm DENSE BITUMEN MACADAM BASE COURSE TO BS.4987 PART 1 CLAUSE 6.5 (CLAUSE 906) (20mm NOMINAL SIZE AGGREGATE) (100 PEN BITUMEN BINDER)
  - 150mm MIN. TYPE 1 GRANULAR SUB BASE MATERIAL (CLAUSE 803)
  - 50mm x 150mm REF.EBN PRECAST CONCRETE BULLNOSED EDGING TO BS.7263 LAID ON 100mm ST1 CONCRETE BED AND HAUNCH. KERB TO BE RAISED BY 6mm NOMINALLY ACROSS DRIVES.

- Notes:**
- All existing surfaces to be overlaid to be thoroughly cleaned and receive a complete and uniform coating of A1-40 or K1-40 bitumen emulsion, laid at the rate of 0.3 - 0.5 litres/sq.m.
  - All joints to be saw cut through the full depth of the layer to be tied in.

**Surface Tie-In Detail**



**Conduits in Verges Detail**

**Conduits in footway/carriageway Detail**

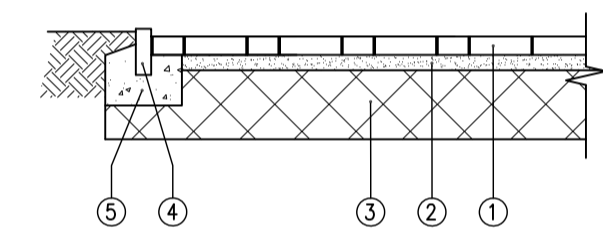
Table 1		Table 2	
Service	Cover	Service	Cover
SWE	600mm	SWE	750mm
P/Light	450mm	P/Light	600mm
	450mm	BT	600mm

CBR VALUE	< 2%		2% - 5%	
	TYPE OF ROAD BASE	THICKNESS (mm)	TYPE OF ROAD BASE	THICKNESS (mm)
	SUB-BASE + CAPPING LAYER	150	SUB-BASE + CAPPING LAYER	350

**5.5m Access Road & 1.8m Footpath Construction Details**

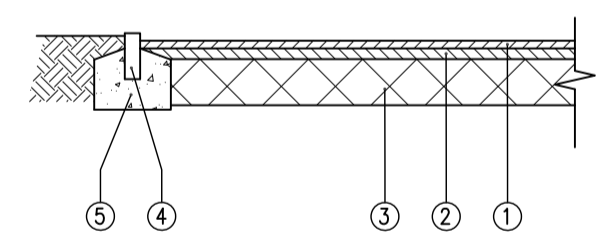
**Vehicle Crossover Construction Detail**

Powys County Council



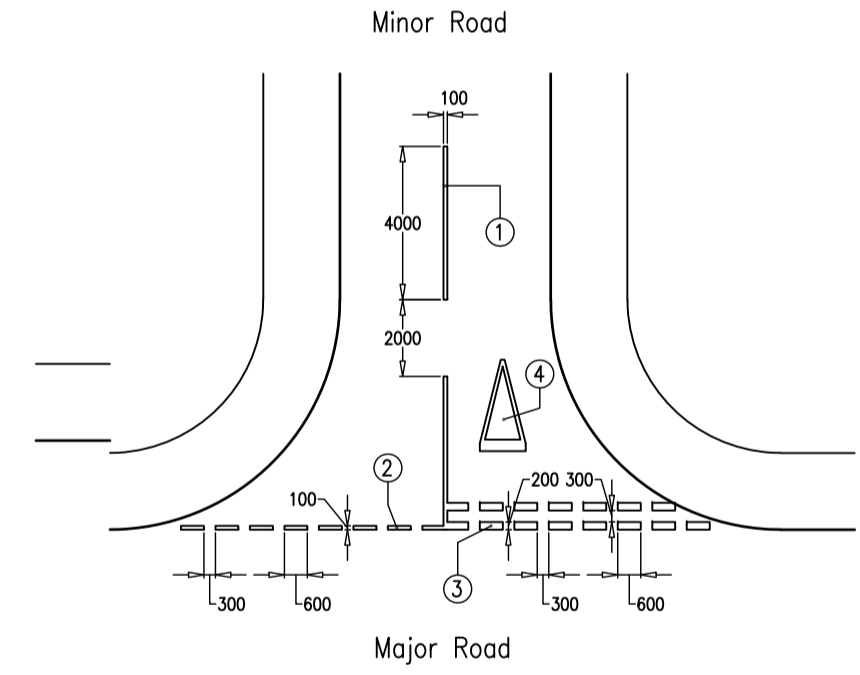
- Min. 60mm thk block paviors.
- 50mm Consolidated thickness course sharp sand in accordance with BS 6717: Part 3.
- 225mm granular sub base Type 2, Table 8/3: Clause 804 Specification for Highway Works.
- 50 x 150 bull nosed edging (type EBN) to BS 7263: Part 3, 2001
- Bed and haunching to edging. Class of concrete to Clause 1001, ST1, Specification for Highway Works.

**Shared Drive Construction (Block Pavior)**



- 25mm Consolidated thickness medium graded macadam surface course (6mm nominal size aggregate) to BS 4987: Part 1, 200 pen bitumen binder.
- 35mm Consolidated thickness dense macadam base course (20mm nominal size aggregate) to BS 4987: Part 1, 100 pen binder. Clause 906.
- 150mm granular sub base Type 2, Table 8/3: Clause 804 Specification for Highway Works.
- 50 x 150 bull nosed edging (type EBN) to BS 7263: Part 3, 2001
- Bed and haunching to edging. Class of concrete to Clause 1001, ST1, Specification for Highway Works.

**Private Drive/Parking Construction**

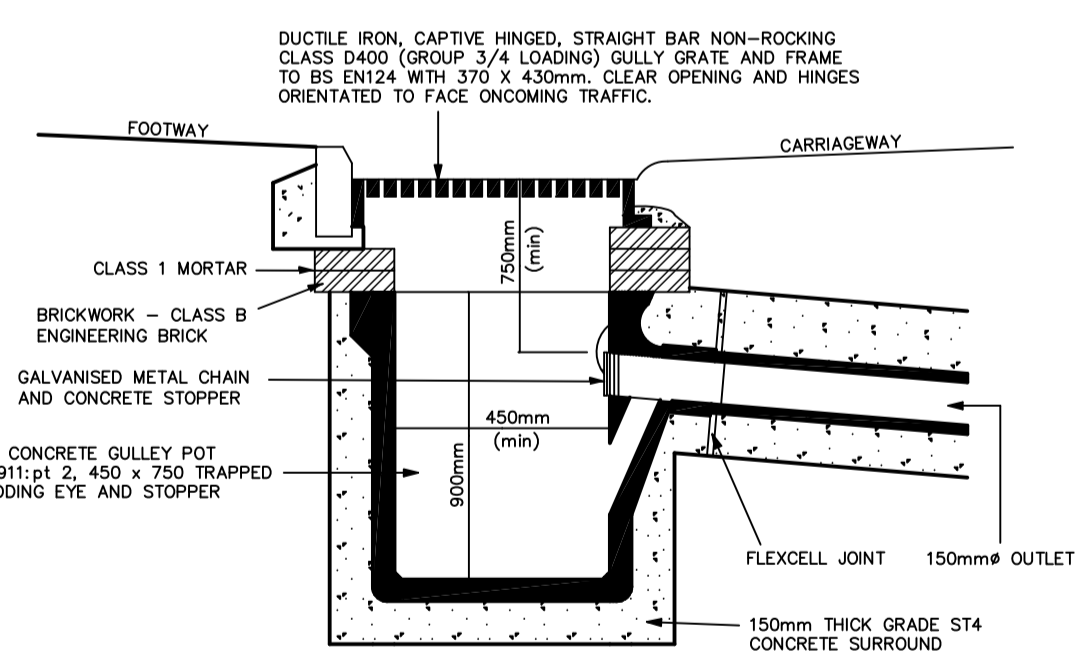


- Legend**
- Sno. markings: White 4m mark, 2m Gap, TSRGD 2002 Diagram No. 1004.
  - White 600mm mark, 300 gap, 100 wide, TSRGD 2002 Diagram 1009.
  - White 600mm mark, 300 gap, 200 wide, TSRGD 2002 Diagram 1003.
  - Give Way marking, TSRGD 2002 Diagram 1023, No Give Way sign unless specifically noted.

- Notes**
- All markings to be thermoplastic screed, with applied solid glass beads and designed in accordance with Chapter 5 of the Traffic Signs Manual (HMSO) 1985.
  - Road markings must be in accordance with Chapter 3 of the Traffic Signs Manual and be approved by the Local Highway Authority.

**Give Way Road Markings for Junctions**

- Service Conduit Notes**
- Minimum conduit cover as shown in table 1 and 2
  - Cable conduits to be polyethylene or polypropylene, of smooth internal diameter 100mm. Either smooth external or twin wall format and colour coded to suit NJUG and LA requirements: UTC - Brown, Street Lighting - Orange. Each length of duct to be clearly and durably marked "traffic signals" or "street lighting". All conduits shall in addition be marked with a tape annotated "live cable".
  - Covers and frames to be grade B in footpaths, grade A in carriageways.
  - Where conduits are laid in existing carriageways, 300mm stepped joints are to be cut using a disc cutter and reinstatement must include for tack coat, rolled asphalt to vertical faces and final bitumen sealing run.
  - Only one type of conduit to be used between consecutive inspection chambers.
  - Trenches containing several conduits to be structured such that no contact takes place between ducts.
  - Adequate compaction to be carried out to achieve a minimum bulk density of 2300kg/m with backfill material in trenches.



**TYPICAL ROAD GULLEY DETAIL**

Rev	Drawn	Check	Pass	Date
-	-	-	-	-

Client <b>Butler Wall Homes</b>	
Project <b>Llanddewi Hall, Llandrindod Wells</b>	
Title <b>Road Construction Details</b>	<b>blackburn griffiths ltd</b> Consulting Civil & Structural Engineers Unit 3, Evans Business Centre, Western Ind. Est. Coerphilly, CF85 1BE T: 02921 052 750 E: info@blackburngriffiths.co.uk
Drawn HG	Checked NG
Approved NG	Date Jan '21
Scales @ A1 NTS	Project Ref. 3207
Drawing No. 230	Rev. -