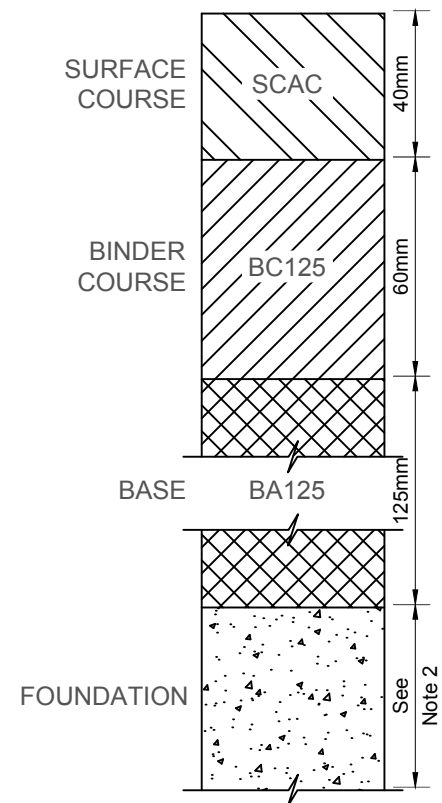
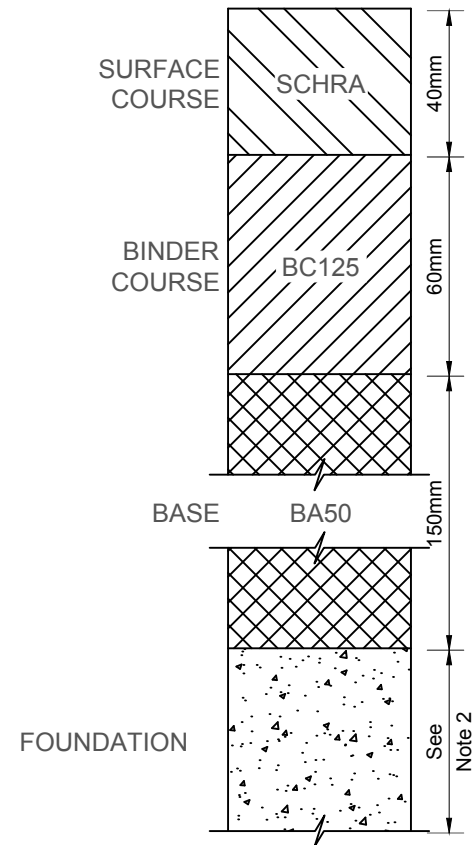


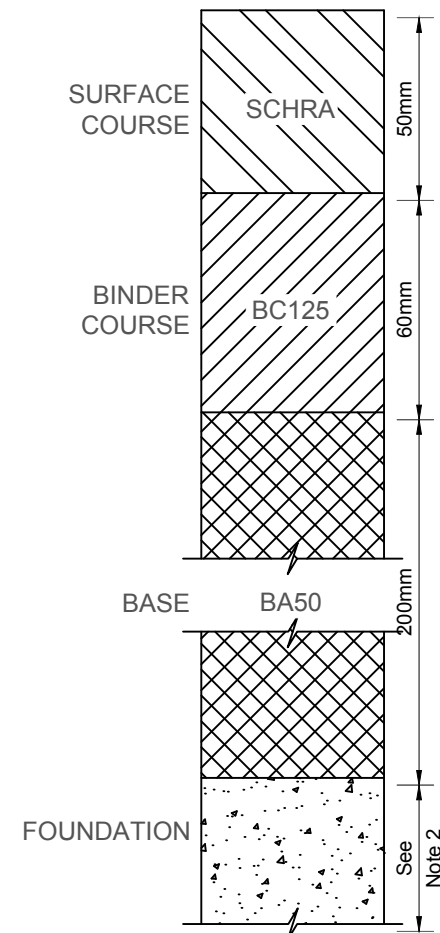
UNCLASSIFIED/RESIDENTIAL -
Upto 12 dwellings + Maximum 5
Commercial Vehicles per day



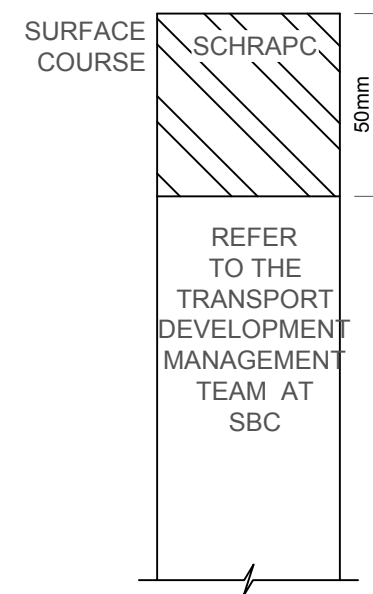
UNCLASSIFIED/RESIDENTIAL -
(Spine Roads **NOT** including Bus Routes)
6 - 40 Commercial Vehicles per day



UNCLASSIFIED ROADS -
(Including Non-strategic Bus Routes +
Light/Medium Industrial Estate roads)
41 - 100 Commercial Vehicles per day



CLASSIFIED/RESIDENTIAL -
(Including Primary + District,
Distributor, Heavy Industrial Estate
roads) 101 - 300 Commercial
Vehicles per day



NOTES:

1. All dimensions are in millimetres unless otherwise stated.
2. Refer to the sub-base and capping thickness chart on SBC/STD/700/08.
3. Refer to drawing SBC/STD/700/02 for material specification.

Revisions



B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

FULLY FLEXIBLE (ASPHALT)

CARRAIGEWAY

Sheet 1/2

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no.		
Checked SG	SBC/STD/700/01		A

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no.		A
Checked SC	SBC/STD/700/02		

FOOTWAYS ON RESIDENTIAL ROADS (OCCASIONAL OVER-RUN)

FOOTWAY CROSSINGS
ON RESIDENTIAL
ROADS ONLY
(REGULAR OVER-RUN)

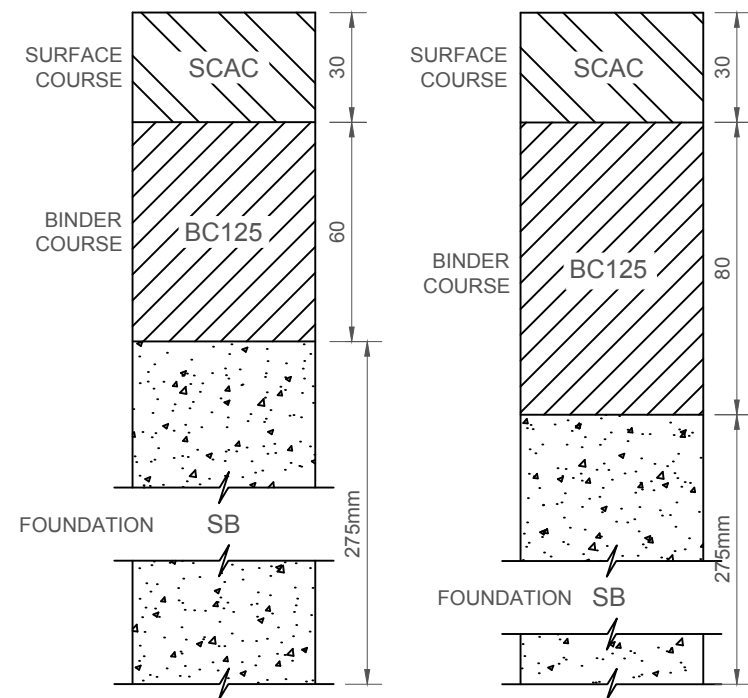


TABLE 1: Asphalt Footways and Cycleways - Materials Specification

Material Ref.	SHW Clause	Description	Requirements
SCAC	909	Dense Asphalt Concrete Surface Course	AC6 dense surf 100/150 Min PSV: 55 Max AAV: 16
BC125	906	Dense Binder Course Asphalt Concrete (Recipe Mixtures)	AC20 dense bin 100/150 rec
SB	803	Type 1 Unbound Mixture	Minimum CBR 30%

TABLE 2: Specification Notes

SWH Clause	Requirement
801.2 & 801.3	Limiting distance for deposition of unbound mixtures shall be 500mm
801.7	All materials within 450mm of pavement surface shall be non-frost susceptible
802.4	Materials up to 225mm thickness shall be spread and compacted in one layer. Except where otherwise stated in Appendix 7/1
900 Series	All supplies of Asphalt materials shall be approved under Sector Scheme 14, "Quality Assurance of the Production of Asphalt Mixes".
901.3	In addition to the requirements of clauses 901.3 the coarse aggregate in all base and binder course materials shall be crushed rock. Blast furnace slag and steel are not permitted in the aggregate
903.24	Sealant shall be applied to the top surface of all base and binder course joints.
903.25	Sealant shall be applied to any freestanding edge of the finished pavement.
903 & 920	Bond coat is required in all areas where materials are machine laid. All layers shall otherwise be tack - coated as a minimum
Materials shall only be hand laid where the layout means that machine laying is not possible.	
The maximum deviation of a footway under a 1m straight edge shall not exceed 3mm	
Subbase thickness: A separate foundation design must be supplied when the CBR value is less than 2%	

NOTES:

1. Footway Crossings for Commercial/Industrial properties require relevant bellmouth construction, to the relevant carriageway construction details.
2. All bituminous layers must be machine laid.

[illegible]

B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

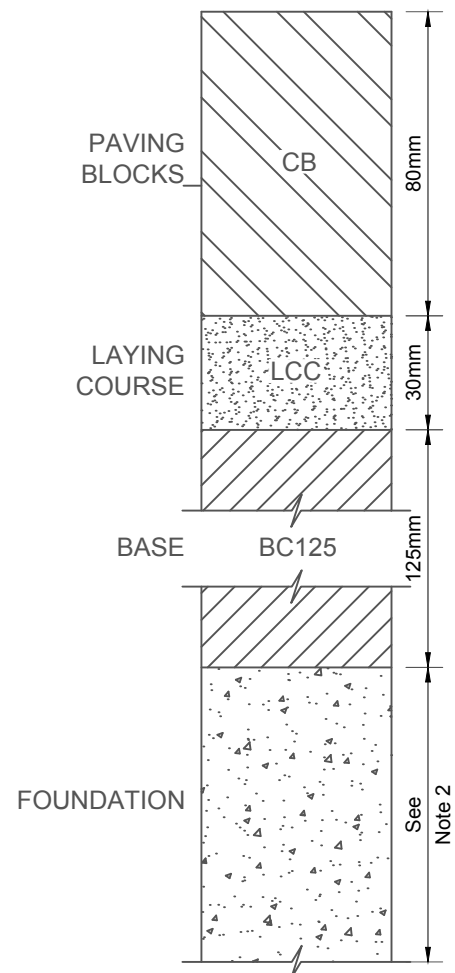
J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

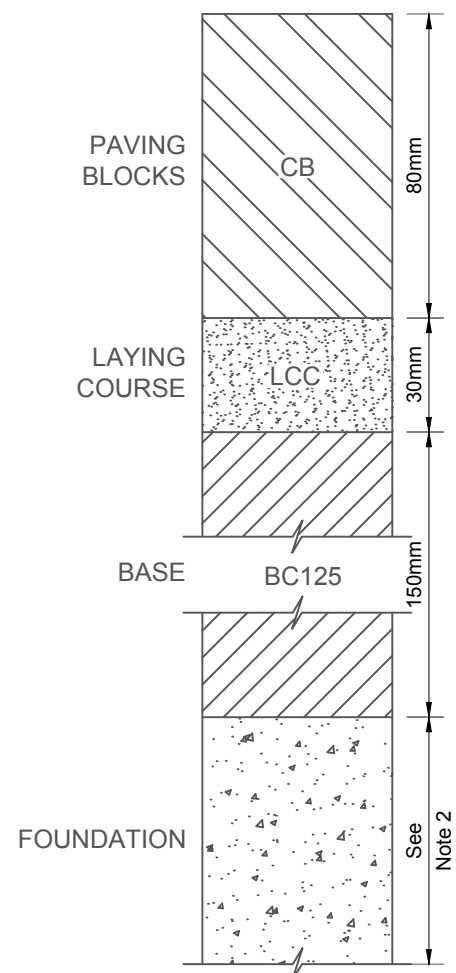
ASPHALT FOOTWARS & CYCLEWAYS

Designed DW	Scale NTS	Date MAR 2017	Revision A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/700/03		

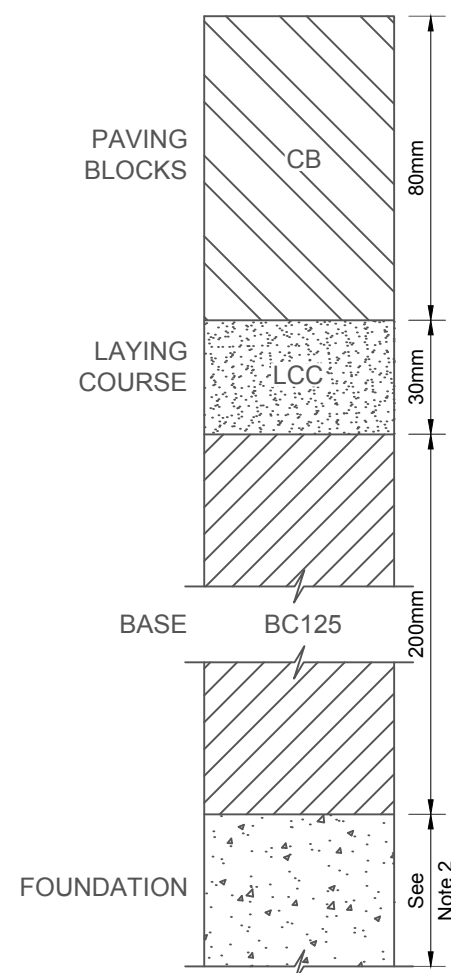
Upto 12 dwellings + Maximum 5
Commercial Vehicles per day



(Spine Roads **NOT** including Bus Routes)
6 - 40 Commercial Vehicles per day



UNCLASSIFIED ROADS -
(Including Non-strategic Bus Routes +
Light/Medium Industrial Estate roads)
41 - 100 Commercial Vehicles per day



NOT
PERMITTED

CLASSIFIED/RESIDENTIAL -
(Including Primary + District, Distributor,
Heavy Industrial Estate roads) 101 - 300
Commercial Vehicles per day

1. All dimensions are in millimetres unless otherwise stated.
2. Refer to the sub-base and capping thickness chart on SBC/STD/700/08.
3. Refer to drawing SBC/STD/700/05 for material specification.

[illegible]

B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

FULLY FLEXIBLE (ASPHALT)
BLOCKED PAVED CARRIAGEWAYS
AND FOOTWAYS - SHEET 1/2

Designed DW	Scale NTS	Date MAR 2017	Revision A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/700/04		

FOOTWAYS CROSSINGS ON RESIDENTIAL ROADS ONLY (REGULAR OVER-RUN)

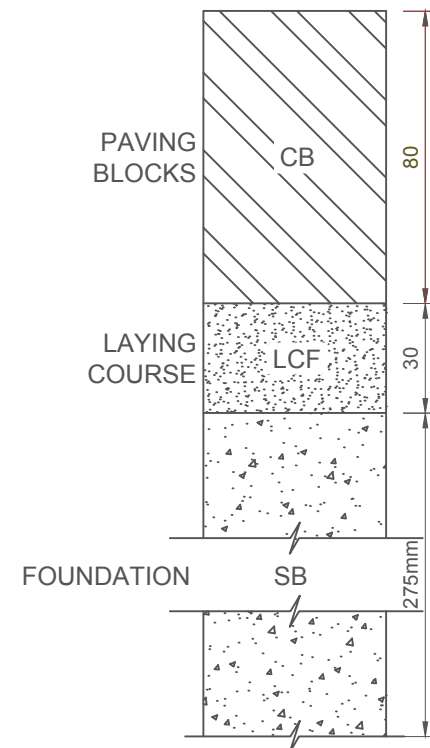
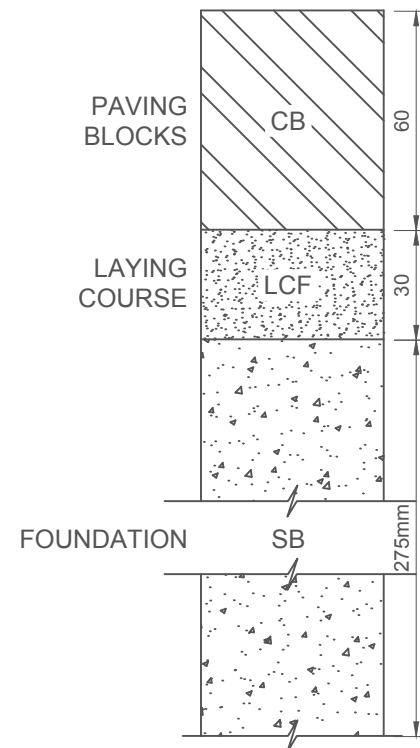


TABLE 1: Block Paved Carriageway and Footways - Materials Specification

Material Ref.	SHW Clause	Description	Requirements
CB		Concrete Paving Blocks	Block plan dimensions 200x100mm BS EN 1338: Table 2; Maximum Differences (dimension tolerance): Class 2 Table 4.1; Water absorption: Class 2 Table 5; Abrasion Resistance: Class 5
LCF		Laying Course (Sand)	BS 7533 Part 3 Table D2 and D3 (Class III)
LCC		Laying Course (Sand)	BS 7533 Part 3 Table D2 and D3 (Class II)
JOIN		Jointing Sand	BS 7533 Part 3 Table D4
BC125	906	Dense Binder Course Asphalt Concrete (Recepie Mixtures)	AC20 dense bin 100/150 rec
SB	803	Type 1 Unbound Mixture	Minimum CBR 30%

TABLE 2: Specification Notes

For granular and asphalt materials, Series 700, 800, 900, 1000 and 1100, refer to Specification For Highway Works,

Asphalt materials shall only be hand laid where the layout means that machine laying is not possible.

All block paving shall be laid fully in accordance with BS7533 Part 3

Laying bond for blocks: Blocks shall be laid in Herringbone Bond at 45° to the direction of travel in carriageways, and at 90° or 45° for footways.

Part blocks are permitted but no part block shall be less than a third of the plan area of the block.

Laying Tolerance: The maximum deviation under a 3m straightledge shall not exceed 10mm.
The difference in level at the joint of adjacent paving units shall not exceed 2mm.

Jointing: 2-3mm, 5mm Max.

[illegible]

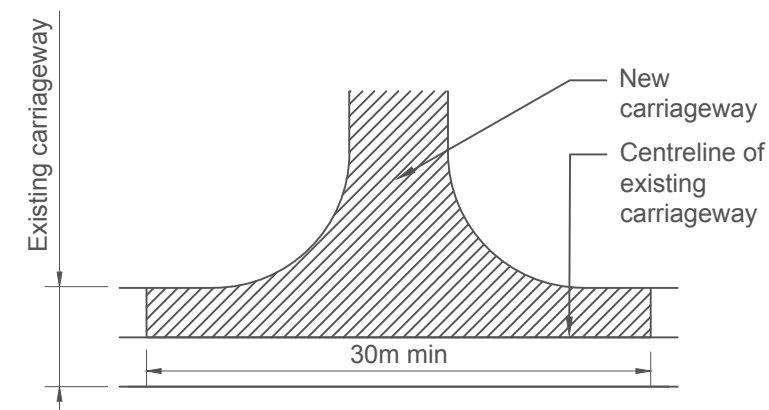
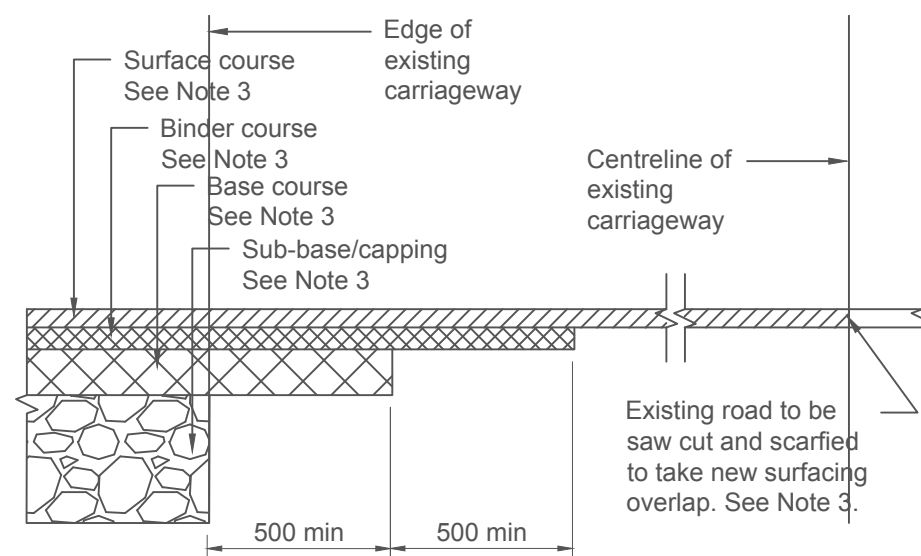
B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

BLOCKED PAVED
CARRIAGEWAYS AND FOOTWAYS
SHEET 2/2

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no.		A
Checked SC	SBC/STD/700/05		



- Notes:

1. All dimensions in millimetres unless otherwise stated.
2. See Drawing No. SBC/STD/1100/02 for details of kerbs, channels and edgings, haunch bedding and mortar.
3. See Drawing No. SBC/STD/700/01 to 07 for details of pavement specification and construction thickness.
4. Tack coat spread at rate of 0.15 to 0.50kg per m² in accordance with BS 13108.
5. K50 Tack Coat to be provided between all bituminous layers

[illegible]

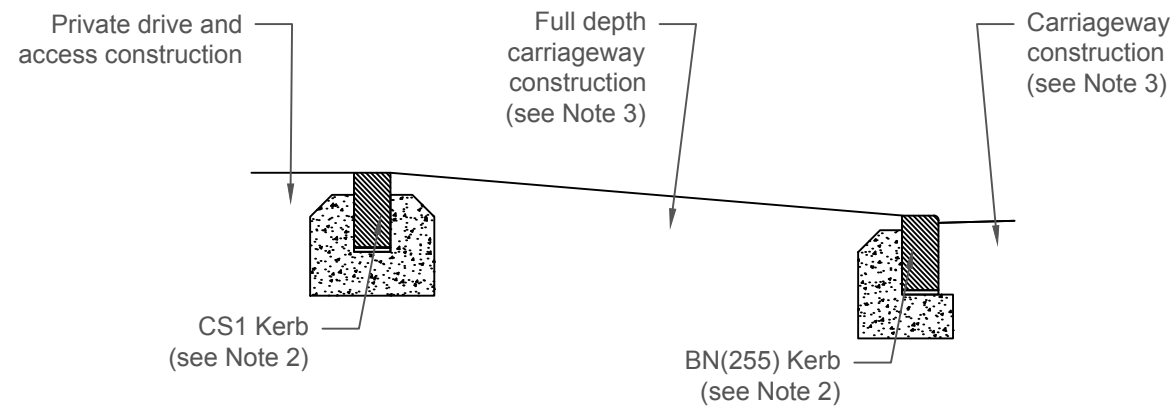
B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

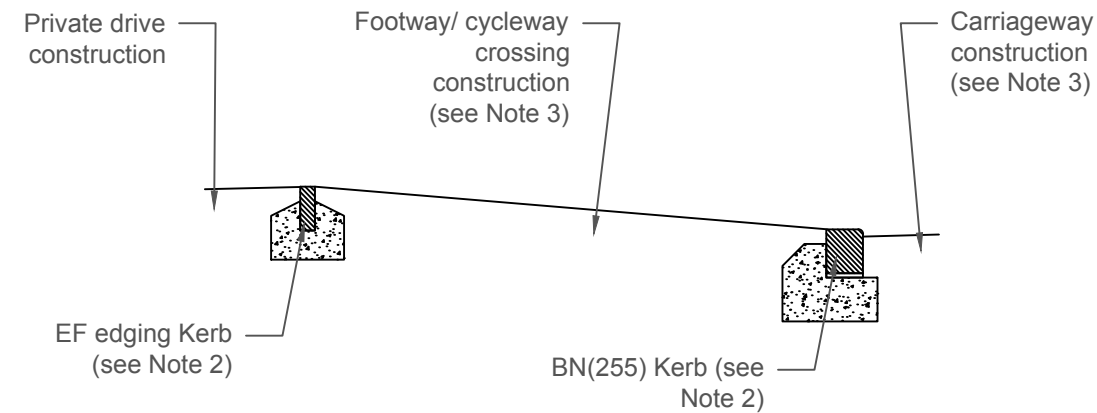
Client: Swindon Borough Council

PAVEMENT TIE-IN DETAILS

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no.		A
Checked SG	SBC/STD/700/06		



RESIDENTIAL ROADS WHERE ACCESS SERVES 3+ DWELLINGS



RESIDENTIAL ROADS WHERE ACCESS SERVES UP TO 3 DWELLINGS

Notes:

1. All dimensions in millimetres unless otherwise stated.
2. See Drawing No. SBC/STD/1100/02 for details of kerbs, channels and edgings, haunch bedding and mortar.
3. See Drawing No. SBC/STD/700/01 to 07 for details of pavement specification and construction thickness.
4. All temporary vehicle crossings (e.g. into building sites) are required to be full carriageway construction in line with the carriageway construction details as shown on Drawing No.s SBC/STD/700/01 to 07.
5. Vehicle access into commercial/industrial areas/premises is to be via a bellmouth junction with full carriageway construction in line with the carriageway construction details as shown on Drawing No. SBC/STD/700/01 to 07. Use of the crossing details shown on this drawing are not permitted.

Revisions



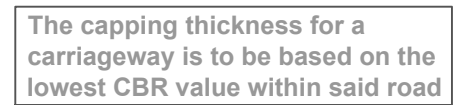
B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

VEHICULAR FOOTWAY/
CYCLEWAY CROSSING

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no. SBC/STD/700/07		A
Checked SG			

[illegible]

B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

SUBBASE AND CAPPING THICKNESSES

Designed DW	Scale NTS	Date MAR 2017	Revision A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/700/08		

Notes:

Pavement foundation

1. The developer will be expected to provide evidence that ground conditions have been investigated and assessed to provide design information (CBR values) for pavement foundation design.
A list of options without supporting evidence will not be sufficient. Where CBR values are less than 2% an additional 500m deep capping improvement layer will be required.
2. In situ CBR values alone are not sufficient for pavement foundation design. The CBR values of clay soils can vary considerably with varying moisture content; in situ values in drier periods will significantly under-estimate the long-term CBR. Much of the area of Swindon Borough Council is underlain by moisture susceptible clays and design CBR values are unlikely to exceed 4%, many areas will be about 2%.
3. All excavations required for CBR tests shall be under taken on the day of testing.
4. The pavement foundation shall be checked during construction. Measurements shall be taken, as required, and to a method agreed by, by Swindon Borough Council's representative, on the formation, top of capping, and top of subbase. Formation is checked to ensure that the prevailing CBR is not less than the design value; if the measured in situ value is greater than the design value the foundation thickness must not be reduced, if the value is less the foundation must be re-designed. The top of capping shall achieve a CBR of at least 15% and the top of subbase at least 30%.
5. Capping and subbase shall not be used as haul roads or to carry construction traffic unless they are protected or strengthened. The design values are based on the premise that the formation, top of capping, and top of subbase will only be trafficked to construct the layer above, as required by Series 800 of the specification for Highway works.

Asphaltic Pavement Designs

6. Pavement designs are shown on Drawings SBC/STD/700/02 to 04. ; any deviation from these designs shall be agreed with Swindon Borough Council's representative before construction commences. For roads with significant heavy goods vehicle flows (in excess of 300 commercial vehicles/ day) designs shall be separately agreed with Swindon Borough Council's representative.

Modular Paving

7. Designs for block paving in carriageway and footway are indicated on Drawings SBC/STD/700/05 TO 06 ; any deviation from these designs shall be agreed with Swindon Borough Council's representative before construction commences and shall be strictly in accordance with the relevant section of BS 7533; a list of documents is provided below. Where alternative designs include slabs/ flags greater than 450mm x 450mm, or with an aspect ratio (width/length) of 2 or greater it is most likely that rigid construction will be required with high strength bedding mortars with bonding agents, and a concrete base.

8. References to BS 7533 are provided below.

BS 7533: Pavements Constructed with Clay, Natural Stone, or Concrete Pavers

Part 1: Guide for the structural design of heavy duty pavements constructed of clay pavers or precast concrete paving blocks;

Part 2: Guide for the structural design of lightly trafficked pavements constructed of clay pavers or precast concrete paving blocks;

Part 3: Code of practice for laying precast concrete paving blocks and clay pavers for flexible pavements;

Part 4: Code of practice for the construction of pavements of precast concrete flags or natural stone slabs;

Part 6: Code of practice for laying natural stone, precast concrete and clay kerb units;

Part 7: Code of practice for the construction of pavements of natural stone paving units and cobbles, and rigid construction with concrete block paving;

Part 8: Guide for the structural design of lightly trafficked pavements of precast concrete flags and natural stone flags;

Part 9: Code of practice for the construction of rigid pavements of clay pavers;

Part 10: Guide for the structural design of trafficked pavements constructed of natural stone setts and bound construction with concrete paving blocks;

Part 11: Code of practice for the opening, maintenance and reinstatement of pavements of concrete, clay and natural stone;

Part 12: Guide to the structural design of trafficked pavements constructed on a bound base using concrete paving flags and natural stone slabs;

Part 13: Guide for the design of permeable pavements constructed with concrete paving blocks and flags, natural stone slabs and setts and clay pavers.

[illegible]

B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

PAVEMENT NOTES

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no.		A
Checked SC	SBC/STD/700/09		

Diagram illustrating a 1m wide granite sett feature on a block paved share surface road. The diagram shows a cross-section of the road surface. The main road surface is composed of rectangular blocks laid in a herringbone pattern. A central feature, 1m wide, is composed of rectangular granite setts laid in a vertical pattern. The feature is bordered by a 750mm wide strip of the same block paving material. The total width of the feature and its border is 1.75m. The diagram is labeled with dimensions and descriptive text:

- Block paved share surface road. See Note 3.
- 1m wide granite sett feature
- Carriageway construction. See Note 3.
- 750
- Carriageway width varies
- 750

Diagram illustrating the cross-section of a road construction, showing the following layers and materials:

- Granite setts (vehicular 100mm cube) with 5mm 50 10mm max jointed gap. Filled with flow point rapid set circuit or similar and approved to BS 7533.
- 30mm thick laying course (See note 3).
- 200mm thick 32/40 concrete base in accordance with min. 50mm cover
- 255 x 125 CS1 channel laid flush and on end. (See Note 2)
- Block paved shared surface road. See Note 3.
- Carriageway construction. See Note 3.
- 255 x 125 CS1 channel laid flush and on end. (See Note 2)

SECTION A-A

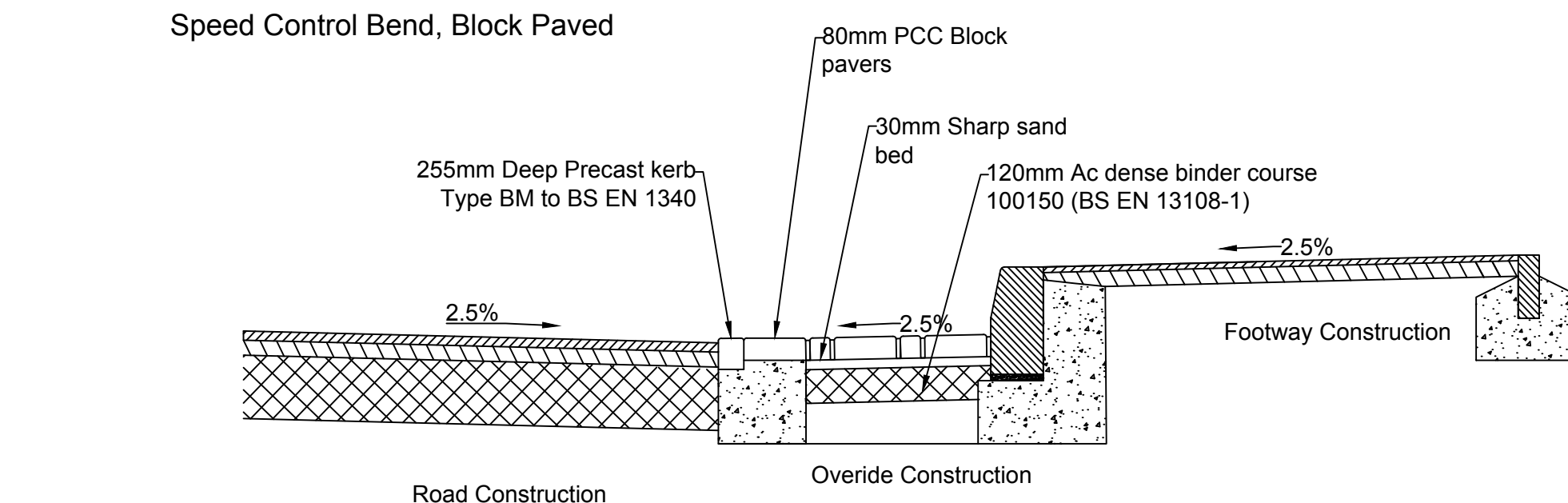
[illegible]

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

CYCLE FRIENDLY
RUMBLE STRIP

Designed DW	Scale NTS	Date MAR 2017	Revision A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/700/10		



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.

[illegible]

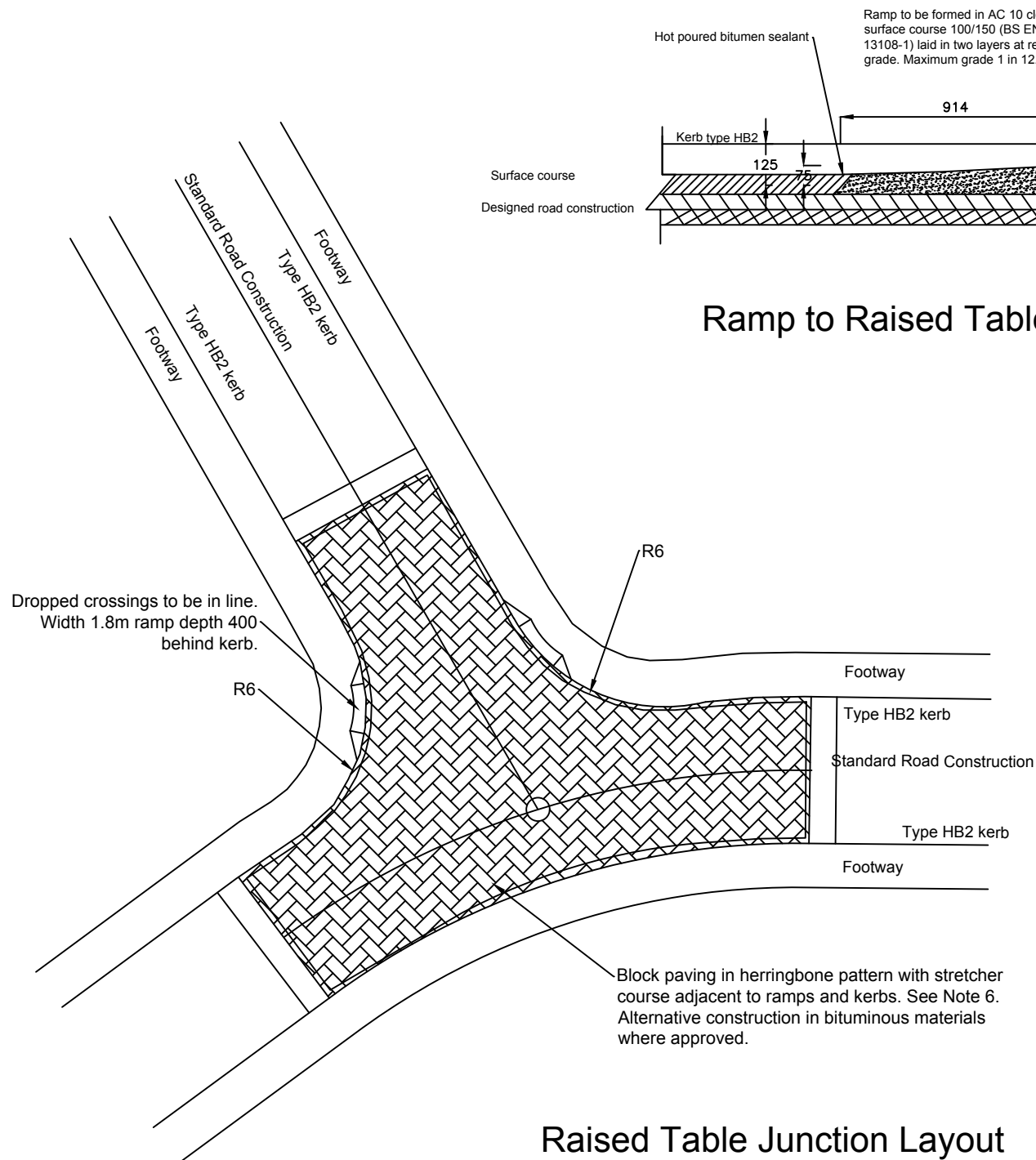
B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

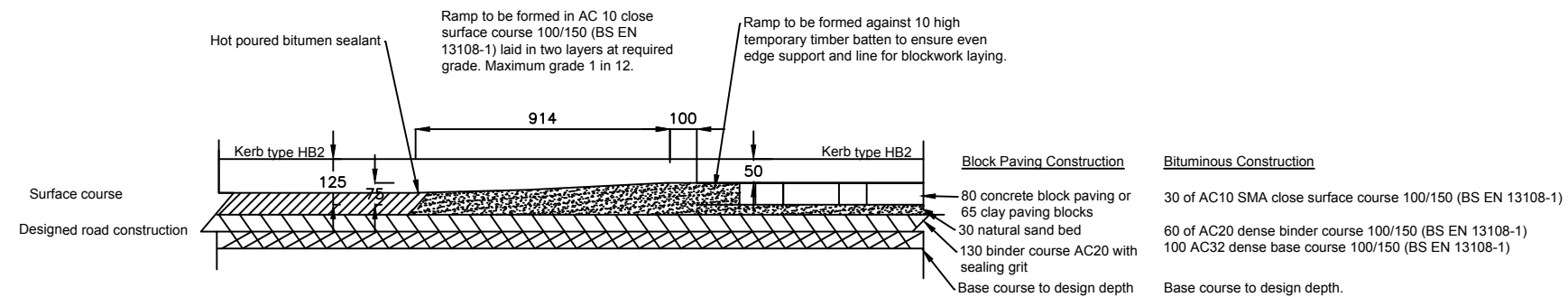
Client: Swindon Borough Council

SPEED CONTROL BEND

Designed DW	Scale NTS	Date Mar 2017	Revision
Drawn MA	Drawing no.		A
Checked SG	SBC/STD/700/11		



Raised Table Junction Layout



Ramp to Raised Table and Block Paving Construction Detail

NOTES:

1. Kerb upstand to be 0mm at pedestrian crossing points with tactiles and 6mm without tactiles.
2. Raised table to be constructed just prior to the laying of carriageway surface course.
3. All dimensions to be in millimetres unless shown otherwise.
4. If table construction is within existing carriageway then 40mm of existing surfacing to be removed by cold planning.
5. Additional gullies to be installed to high side of table where channel drainage is obstructed.
6. Block or clay paving construction to BS 7533.
7. Precast concrete kerbs to BS EN 1340.

Revisions



B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

Raised Table Junction

Designed DW	Scale NTS	Date Mar 2017	Revision
Drawn MA	Drawing no. SBC/STD/700/012		A
Checked SG			



NOTES:

1. Block surrounds to Manhole Cover and Gullies to be laid on designation (i) Mortar Bed.
2. In accordance with BS 7533 no cut block should be less than 1/4 of the size of a whole block.

[illegible]

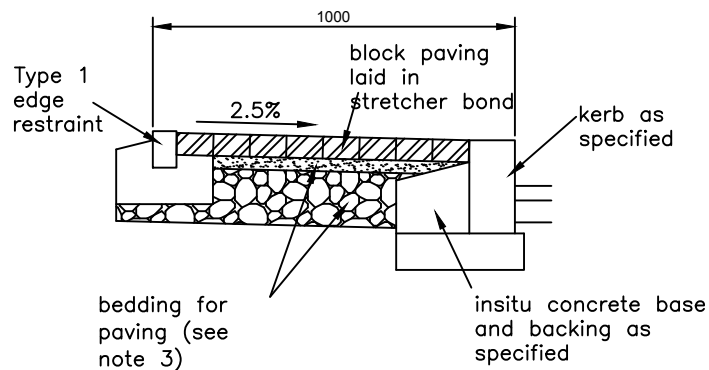
B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

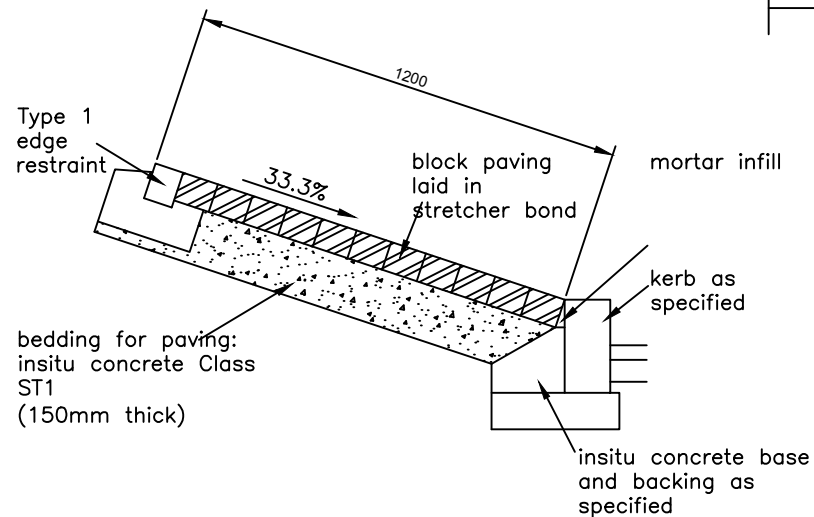
Client: Swindon Borough Council

Block Surround To Covers

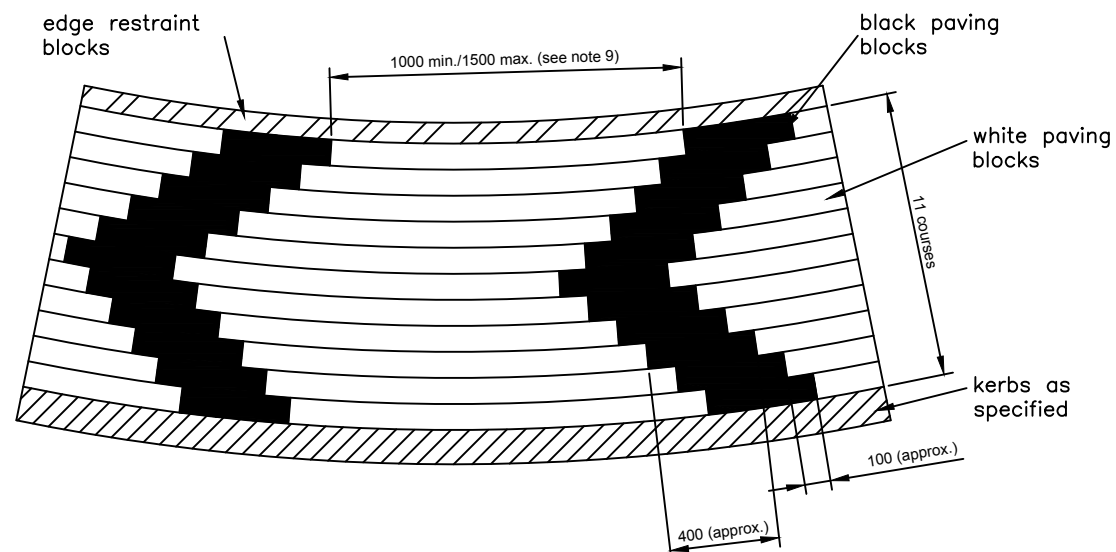
Designed DW	Scale NTS	Date Mar 2017	Revision A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/700/013		



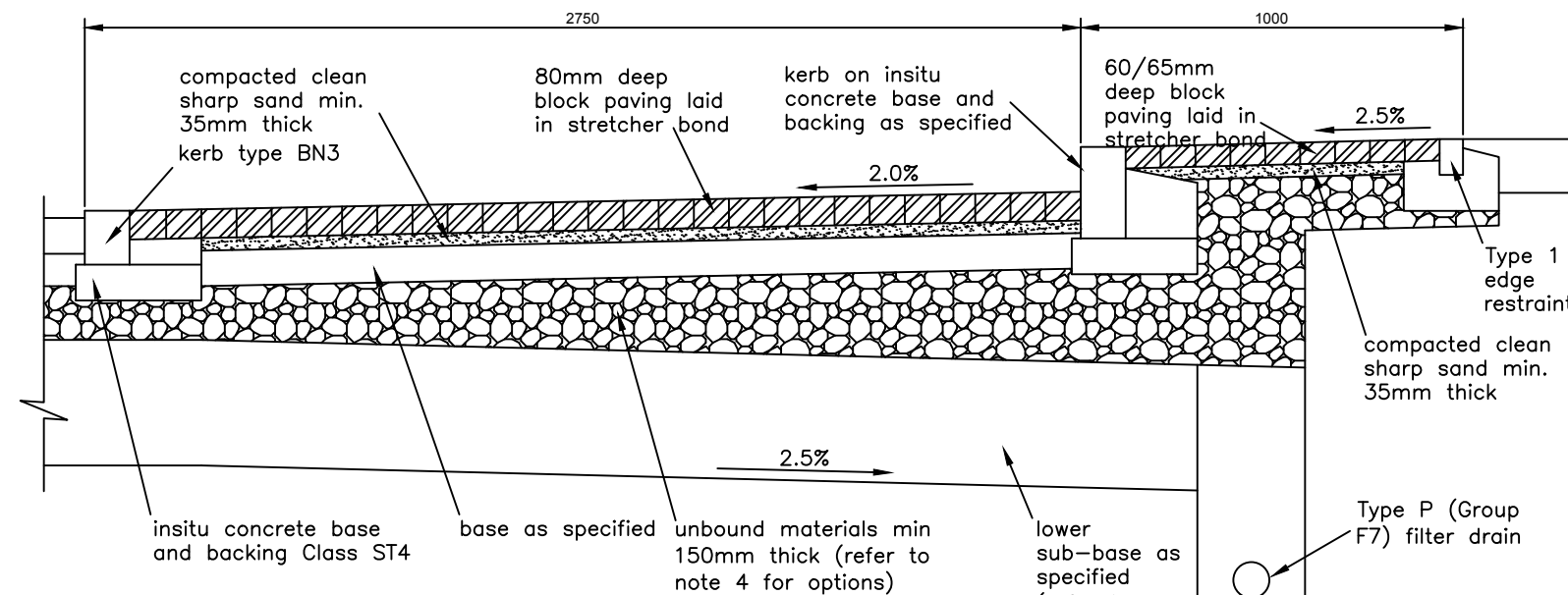
TYPE 1 ROUNDABOUT ISLAND



**TYPE 3 ROUNDABOUT ISLAND
(WITH CHEVRON BLOCK PAVING)**



**TYPE 3 ROUNDABOUT ISLAND
(CHEVRON DETAILS)**



**TYPE 2 ROUNDABOUT ISLAND
(INCLUDING OVER-RUN AREA)**

NOTES

1. Blocks, and the laying of blocks shall comply with S.H.W. Clause 1107.
2. Block dimensions shall be 200mm x 100mm x 60/65mm for Type 1 roundabout islands, and 200mm x 100mm x 80mm for Type 2 and 3 roundabout islands.
3. Block paving for Type 1 roundabout islands shall be bedded on compacted clean sharp sand 35mm thick underlaid with Type 1 Unbound Mixtures to S.H.W Clause 803, Type 2 Unbound Mixtures (if they contain at least 80% bituminous planings) to S.H.W Clause 804) or Type 3 (open graded) Unbound Mixtures to S.H.W Clause 805, 150mm thick.
4. Block paving for Type 3 roundabout islands shall be laid while the concrete bedding remains plastic (max. 6 hrs after batching).
5. 'Black' paving blocks shall have a black resin bonded finish. 'White' paving blocks shall have a white resin bonded reflective finish with applied solid glass beads.
6. Block paving shall be supported (on edges other than the kerbside edge) by edge restraint Types 1 or 2 (as shown on B 704.3), or by the edging for bituminous paving shown on B 702.1.
7. Refer to Appendix 11/1 for block paving details including edge restraint details.
8. Where blocks are laid in stretcher bond on curves, cut blocks shall be inserted where necessary so that joints on adjacent rows are no closer together than one quarter of a block length.
9. On Type 3 roundabout islands, chevrons shall be spaced equally. The number of chevrons will depend on the size of the roundabout, but the spacing between chevrons shall be no less than 1000mm and no greater than 1500mm.
10. Mortar shall comply with S.H.W. Clause 2402 designation (i).

Revisions



B Brannan,
Board Director - Service Delivery
Wat Tyler House West,
Swindon, SN1 2JG
Telephone (01793) 463000

J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

BLOCK PAVING ON ROUNDABOUT ISLANDS

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no. SBC/STD/700/14		A
Checked SG			



Finish in Brass: smooth antique brass

Designed DW	Scale NTS	Date MAR 2017	Revision A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/700/15		