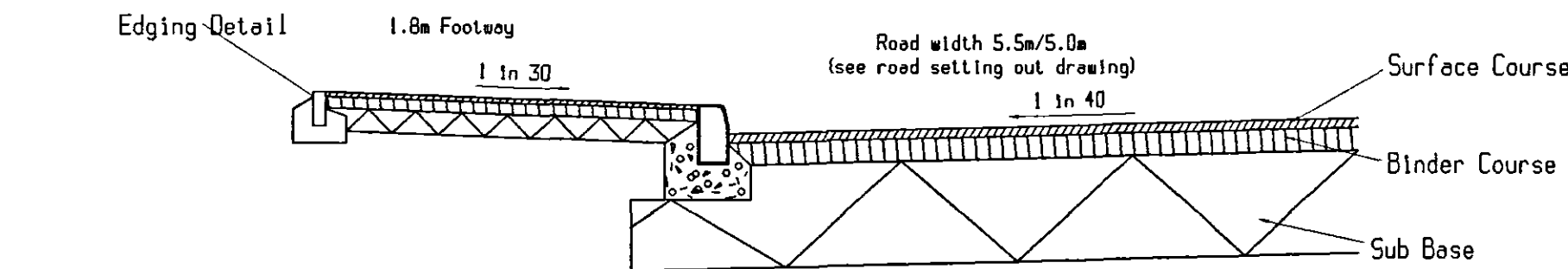


Note: Channel blocks required where gradient is less than 1/150. See detail on right.



BLACKTOP CARRIAGEWAY
Typical Cross Section

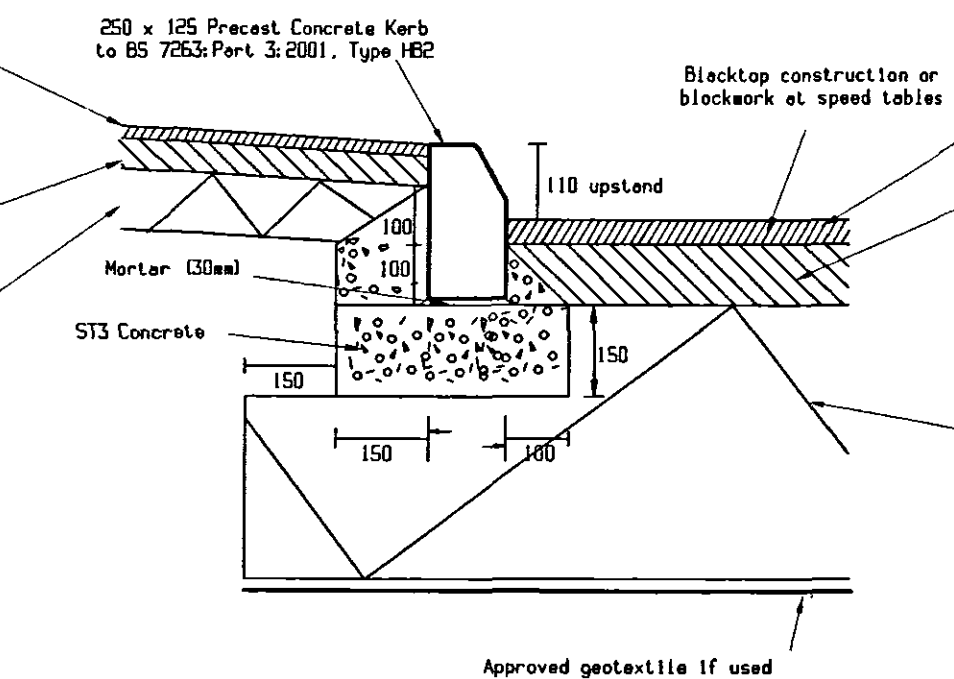
ROADWAY CONSTRUCTION

BITUMINOUS SURFACING

SURFACE COURSE
25mm of 8/20mm size dense Surface Course to Clause 9.4 compacted to a void content within the range 25-10%.

BINDER COURSE
50mm of 0/20mm size dense Binder Course to Clause 9.1 compacted to a void content within the range 25-10%.

SUB-BASE
100mm of Type 1 sub-base to clause 1.2.



Carriageway and Kerb Detail-
up to 5.5m (construction chart 1)
(Blacktop Construction)

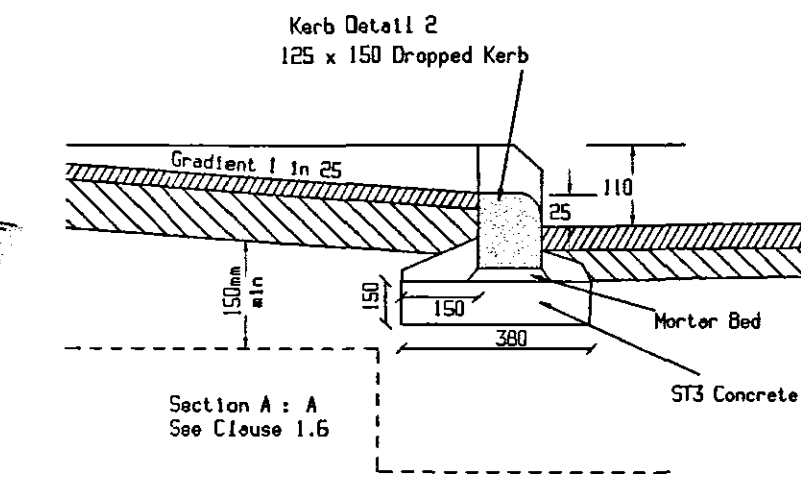
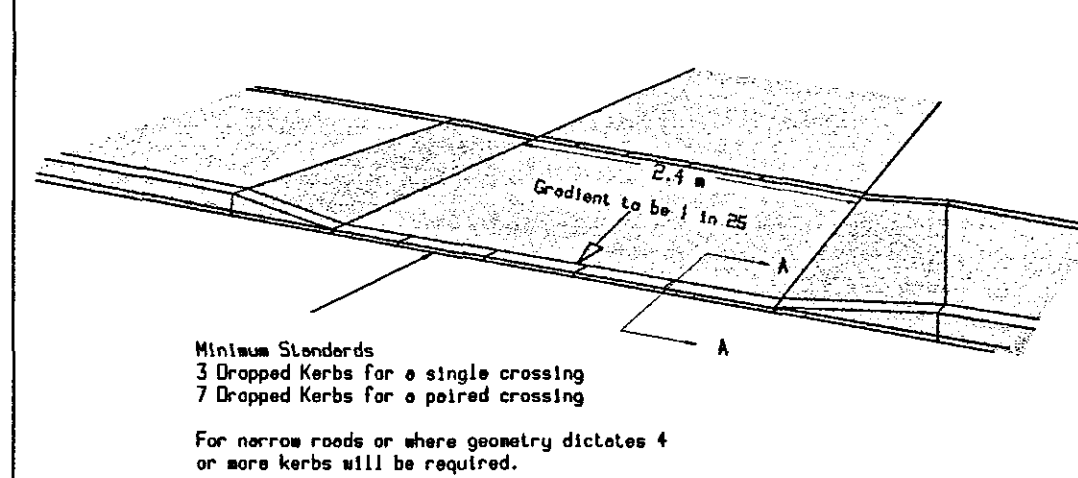
CR NOTE

CR testing was carried out by Lincs Labs in October 2005 with updated values of between 0.4% and 1.5%. For road construction, we will assume a value of less than 1.5%.

CONSTRUCTION CHART 1 NORMAL FLEXIBLE CONSTRUCTION (For roads up to 0.25 m.s.e.)

SUB-GRADE	SUB-BASE (mm)	SURFACING (mm)	TOTAL THICKNESS REQUIRED (mm)
Bearing Capacity (CBR)	Without geosynthetic	With geosynthetic	
Below 1.5% & soft spots	Not suitable	710mm min	850mm min
1.5%	Not suitable	440	590
2%	400	340	550
3%	310	300	460
4%	300	300	450
5%	300	300	450
6-15%	300	300	450
Above 15%	300	300	450

- Note 1 See Clause 1.1.6 and 1.1.7
Note 2 See Clause 1.1.6 - Assumes no improvement is possible using either sub-soil drainage or soil strengthening technique. 710mm is 410mm of GFS Capping Layer Granular Fill to clause 6.8 and 300mm of Type 1 sub-base. The thickness of 710mm can be reduced to 500mm if all Type 1 sub-base is used.
Note 3 For soft spots and sub-grades with a CBR of less than 1.5% the geosynthetic shall be an approved geogrid.
Note 4 Initial Binder Course layer thickness 70mm if the alternative binding installation method (two stage construction - kerbing to be laid at a later stage) is used. Total Binder Course thickness becomes 130mm in these circumstances. See Clause 1.1.17.
Note 5 Total thickness to be increased by 20mm above these values if the alternative kerbing installation method is used.
Note 6 See Clause 1.1.17.
Note 7 The use of a geosynthetic with a sub-grade with this bearing capacity offers no advantage or economy.



CLAUSE 1.6 VEHICLE ACCESS CROSSING

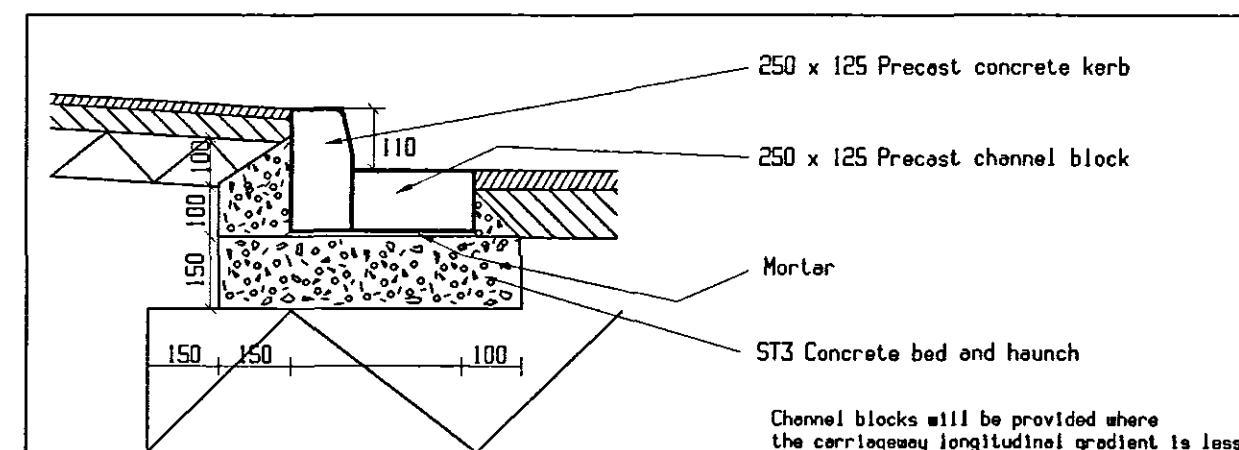
(A) Light Duty Domestic Crossings

150mm of Type 1 sub-base to clause 1.2
100mm of 0/20mm size dense Macadam Binder Course to Clause 9.1 compacted to a void content within the range 25-10%.

The joint between the access crossing and the carriageway shall be delineated across the access crossing with 50mm x 150mm square cut precast concrete kerbs on a 150mm x 300mm base of ST3(15N/mm²) concrete (approx. 1 cement:2 sand:4 aggregate by volume mix). A 125mm x 150mm x 25mm layer kerb will be required on each side of the crossing along the carriageway edge.

The highway boundary shall be delineated across the access crossing with 50mm x 150mm square cut precast concrete edging on a 75mm x 330mm base of ST3(15N/mm²) concrete, and where there is no footway the edges of the access crossing shall also be delineated with the same edging and base (see Drawing Ref Clause 1.6 (a)).

DOMESTIC VEHICLE CROSSING
(REF. CLAUSE 1.6 (A))



Channel Block Detail
(required where gradient < 1 in 150)

1.9 SMALL BLOCK PAVERS

Concrete blocks and clay pavers shall comply with Clause 10.2 and 10.3. They shall be laid in accordance with the requirements of BS 7533-3.

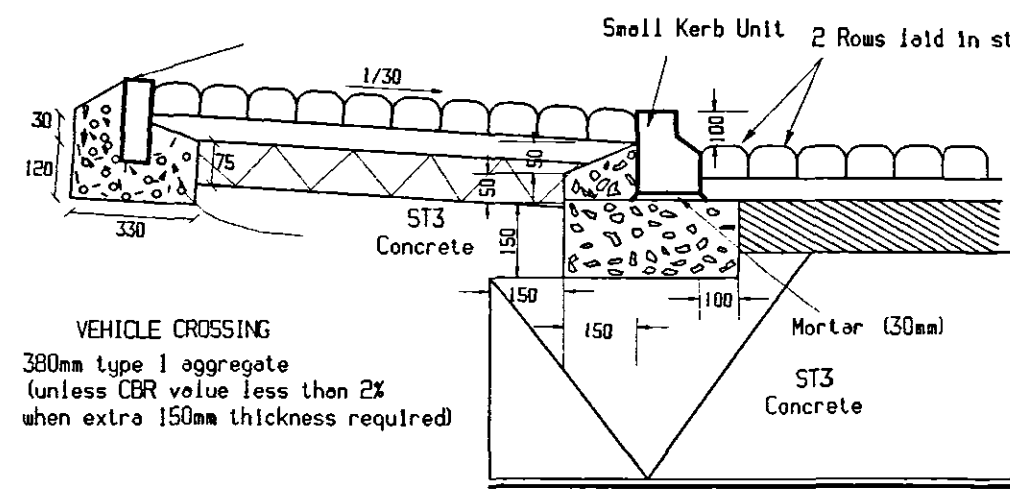
Herringbone bond pattern is required for all block paved areas. Only rectangular shaped blocks shall be permitted.

The layout of blocks/pavers and details at edges, manholes, gullies and other openings shall be recommended by the supplier and agreed with the Highway Authority in advance of laying.

The developer may traffic the carriageway after the placement of the bituminous binder course across the full width of the carriageway provided that the thickness of the binder course is in accordance with the relevant Construction Chart.

When the block paver construction is to be completed prior to building being commenced then the thickness of the binder course layer quoted in Construction Chart 3 for roads up to 0.25 m.s.e. may be reduced to 50mm. The sub-base shall be correspondingly increased by 30mm in such cases.

Bedding and jointing sand used in conjunction with small block pavers shall be in accordance to Clause 10.4.



Carriageway and Kerb Detail-
up to 5m (construction chart 3)
(Block Road Construction)

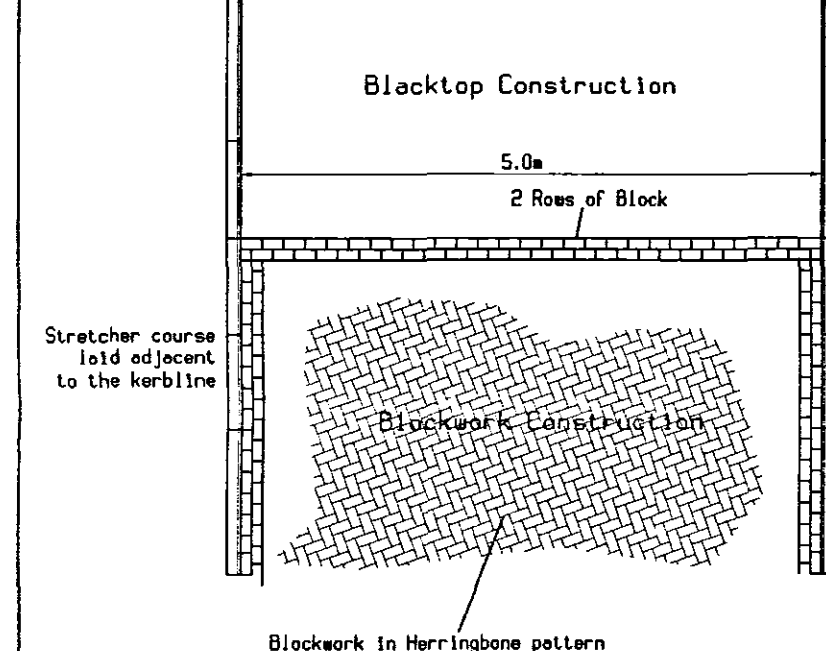
CR NOTE

CR testing was carried out by Lincs Labs in October 2005 with updated values of between 0.4% and 1.5%. For road construction, we will assume a value of less than 1.5%.

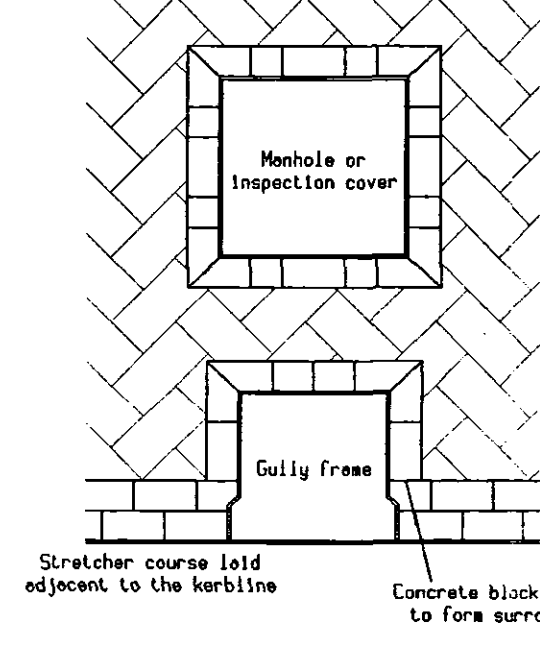
CONSTRUCTION CHART 3 BLOCK PAVEMENT CONSTRUCTION (For roads up to 0.25 m.s.e.)

SUB-GRADE	SUB-BASE (mm)	SURFACING (mm)	TOTAL THICKNESS REQUIRED (mm)
Bearing Capacity (CBR)	Without geosynthetic	With geosynthetic	
Below 1.5% & soft spots	Not suitable	710mm min	850mm min
1.5%	Not suitable	440	590
2%	400	340	550
3%	310	300	460
4%	270	270	450
5%	270	270	450
6-15%	270	270	450
Above 15%	270	270	450

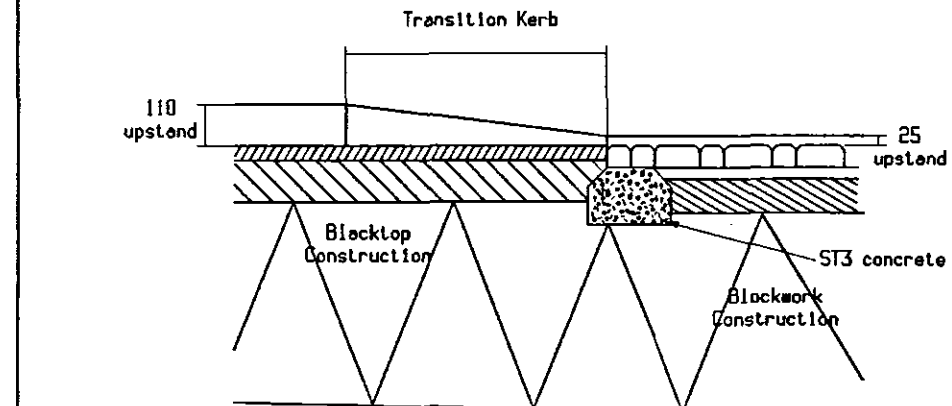
- Note 1 See Clause 1.1.6 and 1.1.7
Note 2 See Clause 1.1.6 - Assumes no improvement is possible using either sub-soil drainage or soil strengthening technique. 710mm can be reduced to 500mm if all Type 1 sub-base is used.
Note 3 For soft spots and sub-grades with a CBR of less than 1.5% the geosynthetic shall be an approved geogrid.
Note 4 See Clause 1.9
Note 5 The use of a geosynthetic with a sub-grade with this bearing capacity offers no advantage or economy.



Flush Blockwork Square



Blockwork - Detail
Around Ironworks



Cross Section of
Blacktop to Blockwork
Flush Alignment

SHDC
Planning & Development
27 JUL 2007
Ref: 1030107

NOTE FOR ALL WORKS:

The Specification shall be in all respects the County Council's 'Development Road Specification and Construction 2005', published by Lincolnshire County Council.

Rev. No.	REVISION	Date	Drawn By	Checked By
A	CR note amended to assume value of less than 1.5%	1.3.06	NJB	HGC
B	Flush blockwork square and detail around ironworks added	15.6.06	NJB	HGC
C	Blockwork square detail amended and cross section added	26.6.06	NJB	HGC

Written dimensions to be taken. Do not scale off the drawings.
Any discrepancies, written or scaled, should be brought to the attention of the engineer immediately.
This drawing is to be read in conjunction with the relevant Bills of Materials and Local Authority Specification.
COM NOTE: The design has been undertaken as far as possible to avoid risks to health and safety or to reduce and control the effects of any unavoidable risks.
All relevant information identifying the unavoidable risks has been passed to the planning supervisor for inclusion in the Health & Safety plan.
The Health & Safety plan will be issued by the planning supervisor with these drawings.

WORMALD, BURROWS PARTNERSHIP
Civil Engineering Consultants
12a & 14a Hitchin Street, Biggleswade, Beds SG18 8AX, U.K. Tel 01767 317244 Fax 315434

Project
Development at Wygate South, Spalding, Lincolnshire

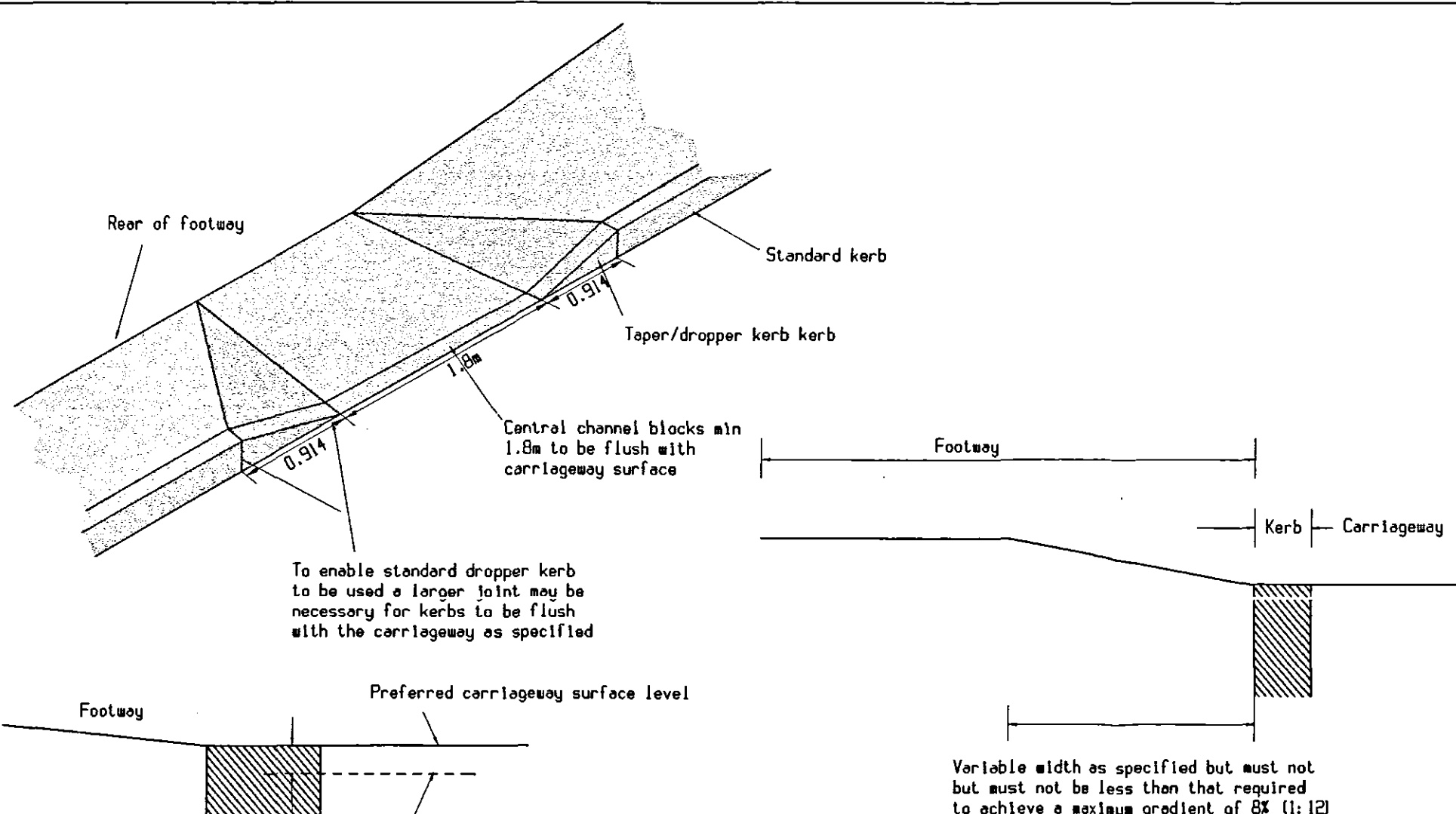
Drawing Description
Standard Road Construction Details

Client
Allison Homes Eastern Ltd
Holland Place
Herdon Park
Pinchbeck
Spalding
Lincs. PE11 3ZN

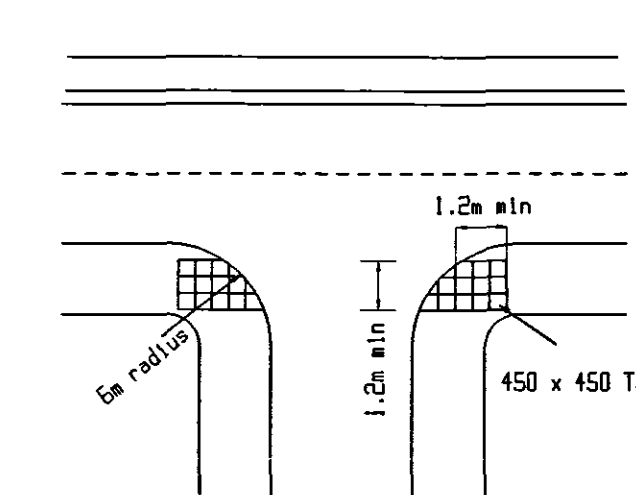
Client Drawing Number
A027/204/02/C

Drawn By
NJB
Date 14.12.05

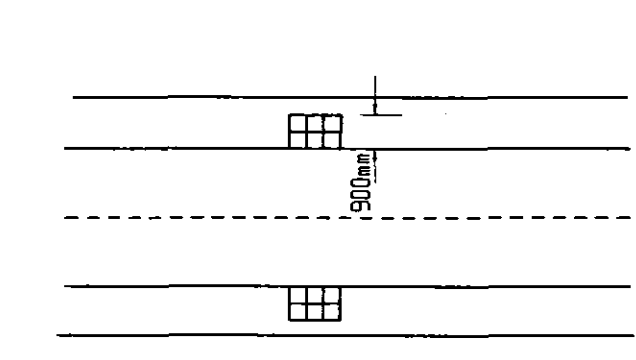
Checked By
HGC
Date 1.3.06



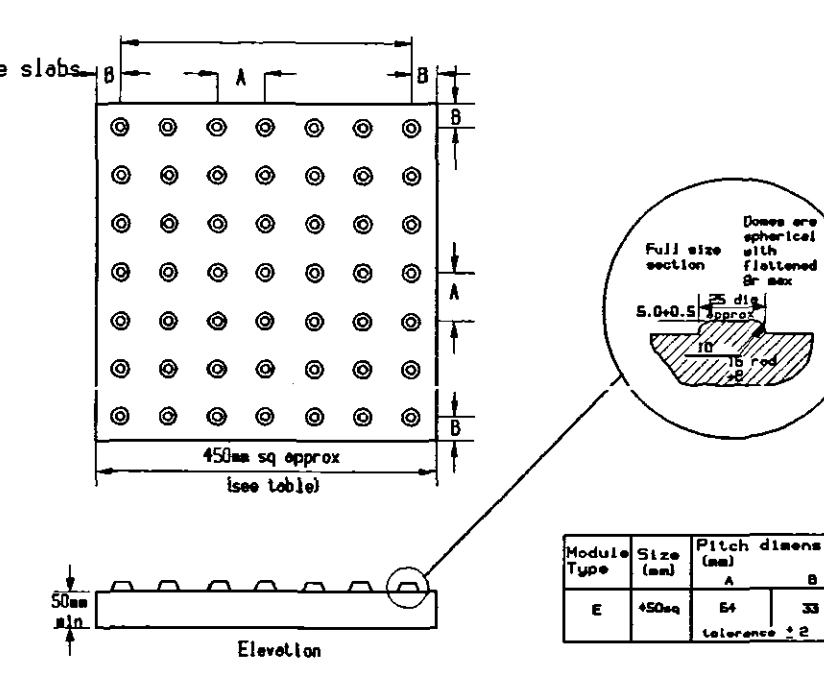
DROPPED KERB DETAIL PRIOR TO
INSTALLATION OF BLISTER SURFACE



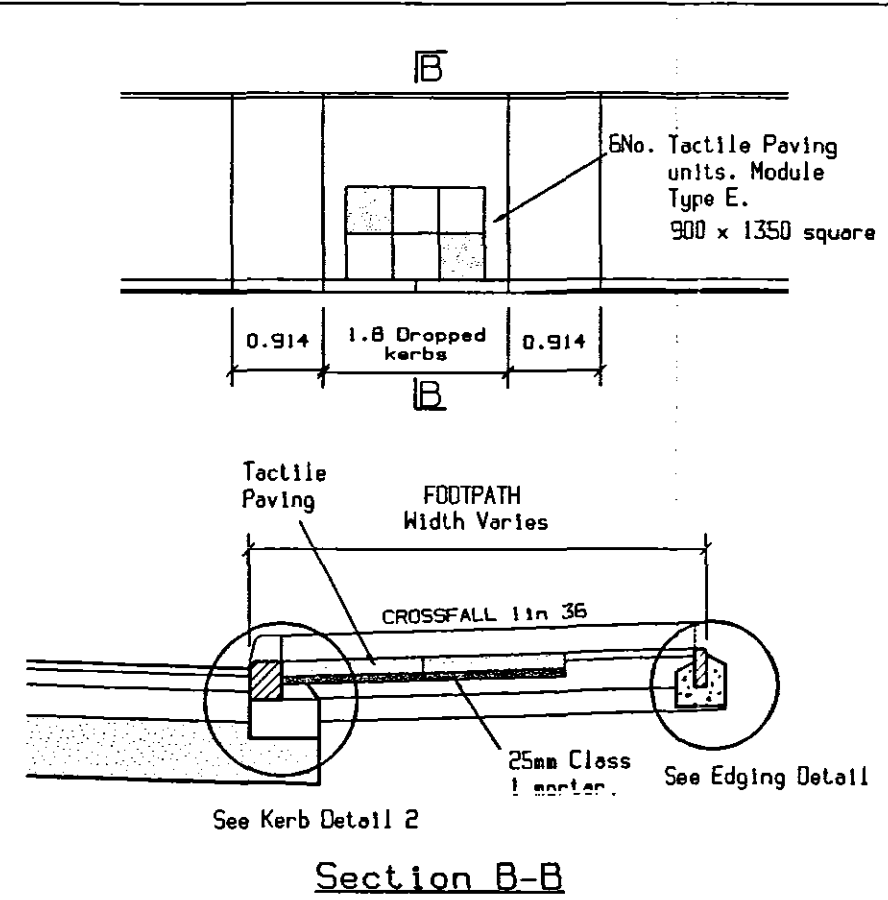
Uncontrolled Crossing
At Junction



Uncontrolled Crossing
Away from Junction



PRAM CROSSING DETAILS



Section B-B

1.8 TACTILE PAVING CROSSING FOR PEDESTRIANS
Blister tactile paving crossing points shall be provided at all junctions, crossing at link footways and at kerb to kerb flat top road crossings.

Tactile paving to be 'Dimple' blocks, 450mm x 450mm x 50mm. Surface colour to be buff.

Tactile paving shall be installed in the line of travel, along the full length of a minimum of 1.8m flush dropped channel blocks. Flush kerbs to comprise 150mm x 150mm precast concrete channel blocks. The depth of the paving will be 1.8m or 450mm depending on its location (see drawing to the left). The back edge of the tactile paving surface shall be at right angles to the direction of crossing. Developers shall take care not to locate service boxes (e.g. BT) where tactile paving is required.