

The Contractor is to check and verify in conjunction with the Architects details all setting out points, building and site dimensions, levels and sewer invert levels at connection points and ensure that they are fully compliant with the contents and requirements of the site investigation report before work starts. The Contractor is to comply in all respects with current building legislation, British Standards, Building Regulations etc. and/or as not specifically stated in this drawing. The Contractor is to ensure that the site investigation report is not used to infer details of ground conditions or ground contaminants. Each area of ground relied upon to support any structure must be investigated by the Contractor and the results of the investigation must be immediately notified to the Engineer, where appropriate. Any suspect fill ground or ground contaminants or where the ground should be further investigated by a suitable expert. Any earthwork shown within typical slopes for guidance only and should be investigated further by a suitable professional expert. Where existing trees are shown to be retained they should be protected by a suitable tree protection system. 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. If this drawing and the building works depicted are the copyright of Banners Gate Ltd and may not be reproduced or amended except by written permission. No liability will be accepted for amendments made by other parties.

GENERAL NOTES

- This drawing is to be read in conjunction with all relevant approved Architects/Planning/Designers drawings and details.
- Construction details for adopted roads to be in accordance with:-
 - Knowsley Metropolitan Borough Council
- The Contractor shall comply with the following:-
 - All operations should be carried out in accordance with the General Health and Safety Policy of the Developer as required by Sections 2 of the Health and Safety at Work Act 1974 and in particular the Construction (General Provisions) Regulations.
 - The Local Authority and service companies are to be notified prior to commencement of work on site.
 - Prior to construction the actual positions and depths of services likely to be affected by the works should be established by means of hand dig in close liaison with the service companies. The Contractor shall immediately advise the Adopting Engineer of any services exposed which may affect the design.
 - All operatives working on the highway must have street works accreditation which must be first checked and approved by the Highways Authority before any works are commenced.
 - The Contractor and/or Developer are entirely responsible for compliance with the Health and Safety at Work Act. He shall be specifically responsible for all temporary works and for the stability of the affected land and structures.
 - CBR values to be determined on site with the Highways Authority at the time of construction and CBR testing carried out as necessary by an independent UKAS laboratory. This will be required on formation level, capping layer and sub-base layers at a minimum spacing of 20m and/or as instructed by the Adopting Engineer.
 - The Contractor shall check all road and pavement levels before commencing the permanent adoptable works. The Adopting Engineer shall be informed immediately if any levels do not tie-in or will lead to areas of standing water. If this occurs the Developer will have to correct such problems, at his own cost, after first agreeing the necessary remedial measures required with the Adopting Engineer.
 - Clauses for materials refer to the latest DTP specification for highway works published by HMSO.
 - Vertical steps in the existing carriageway are to be formed by saw cutting.
 - Nuclear density tests must be undertaken on all layers of the road and base course layers by an independent UKAS accredited laboratory whilst the materials are being laid.
 - All bituminous materials are to be machine laid unless otherwise directed by the Engineer.
 - No limestone aggregate to be permitted in any wearing courses whether permanent wearing course or temporary.
 - Recycled material can only be used with the approval of the Adopting Engineer.
 - All highway works must be signed and guarded in accordance with Chapter 8.
 - All materials to be kite marked where applicable.
 - All existing kerbing and footway to the entrance of the site shall be renewed and made good to the satisfaction of the Adopting Engineer. As per the extents shown on the Section 38 Layout.
 - All final wearing courses must only be laid once construction operations on site have been completed, this being done in one continuous operation without any breaks/joints or as agreed with the Adopting Engineer.
 - Delivery tickets must be provided for other materials used in the construction process where requested by the Adopting Engineer.
 - No loose bound materials to be used adjacent to the Adoptable Highway.
 - Any retaining walls within 4m of the proposed adoptable highway and greater than 1.5m in height will need to be checked and structurally approved by the Authority prior to construction. These may need to be adopted by the Authority with an appropriate commuted sum being paid.
 - No boundary fences or walls will be adopted by the Authority. Under no circumstances should these be used to retain the adoptable highway in any way.
 - No private gates/doors/windows/ or other projections to open onto the adoptable highway.
 - All ironwork within block paved areas is to be a minimum of 150mm deep.
 - Service margins to remain clear of all planting, walls, fences etc. including any other obstructions deemed unacceptable by the Adopting Engineer.
 - Where disabled access needs to be provided to private properties and the adoptable highway needs to be adapted and altered to facilitate this. The Adopting Engineer must be informed and this must be done in full consultation with them. All costs associated with such works are to be borne by the Developer.

CAPPING LAYER REQUIREMENTS			
1	2	3	4
SUBGRADE CBR (%)	CAPPING LAYER THICKNESS (mm)	SUB-BASE THICKNESS (mm)	KMBC STANDARD MINIMUM SUB-BASE (mm)
<2	600	150	-
2 - 2.5	450	150	-
>2.5 - 3	-	-	350
>3 - 4	-	-	300
>4 - 5	-	-	260
>5	-	-	230

Notes:
1. For subgrades of 2.5% or less, a combination of 150mm Type 1 sub-base together with a capping layer as indicated in column 2&3 above shall be used.
2. For very weak subgrades a geotextile may be required.
3. For subgrades greater than 2.5%, the sub-base thickness to be used shall be the greater of:
a) That indicated in column 4 above
b) That shown in the section above

Rev	Description	Date	By
A	Updated to reference masterplan	09.05.2023	DA
-	First Issue	08.07.2022	DA

Drawing Status
PLANNING
SUBJECT TO DETAILED DESIGN

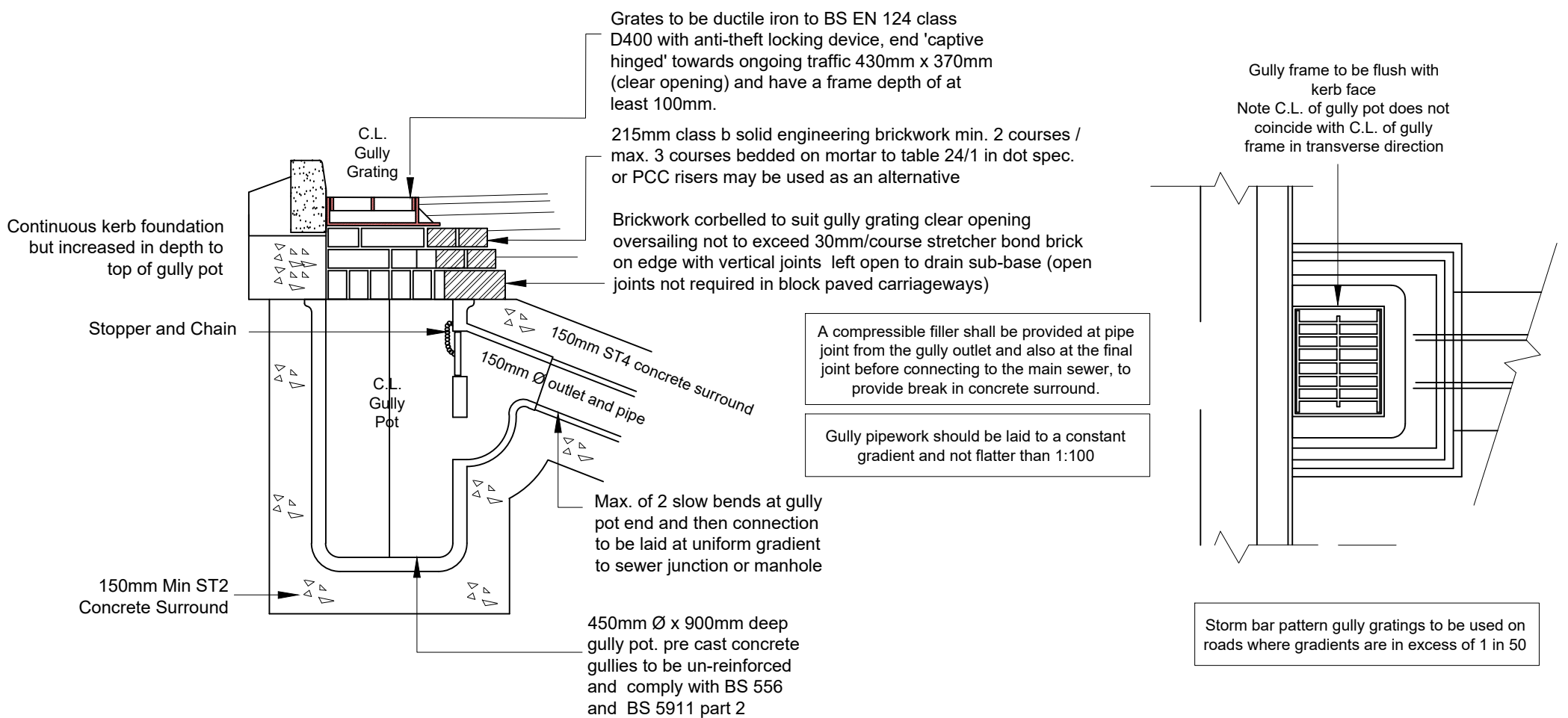
Client
REDROW

Project
Lower Road, Halewood
Phase 3

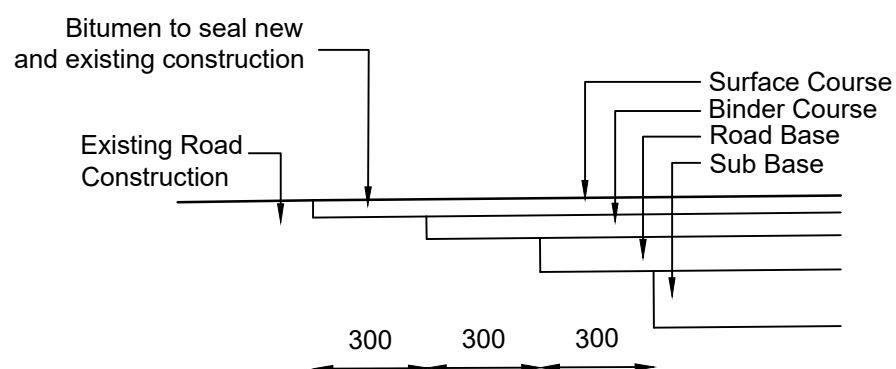
Title
Adoptable Highway Construction Details
Sheet 3 of 3

BANNERS GATE
CIVIL, STRUCTURAL & ARCHITECTURAL DESIGN SERVICES
10-11 Birmingham Street, Halewood, West Midlands B63 3HN
Tel: 0121 687 1500 Fax: 0121 687 1501
E-mail: mail@bannersgate.com

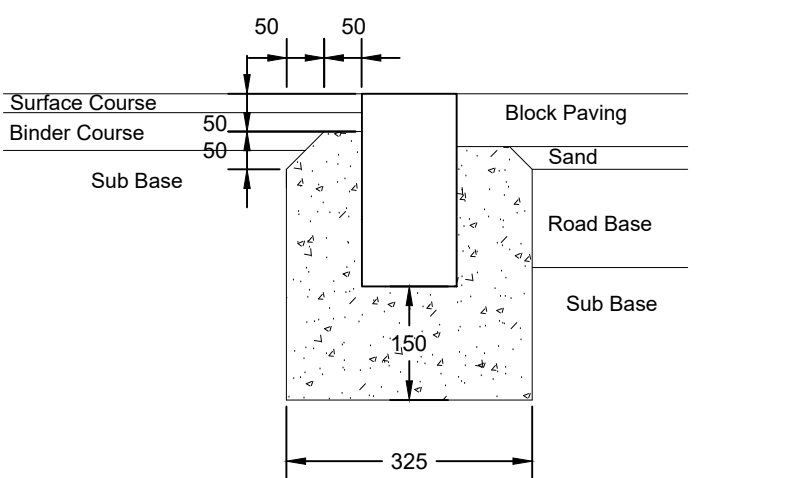
Scale	NTS (A1)	Drawn	DA
Date	July 2022	Checked	OB
File	20040/dwgs/civilis/current/planning/PH3	Drawing	20040 - PH3 / PL13 A



Typical Road Gully



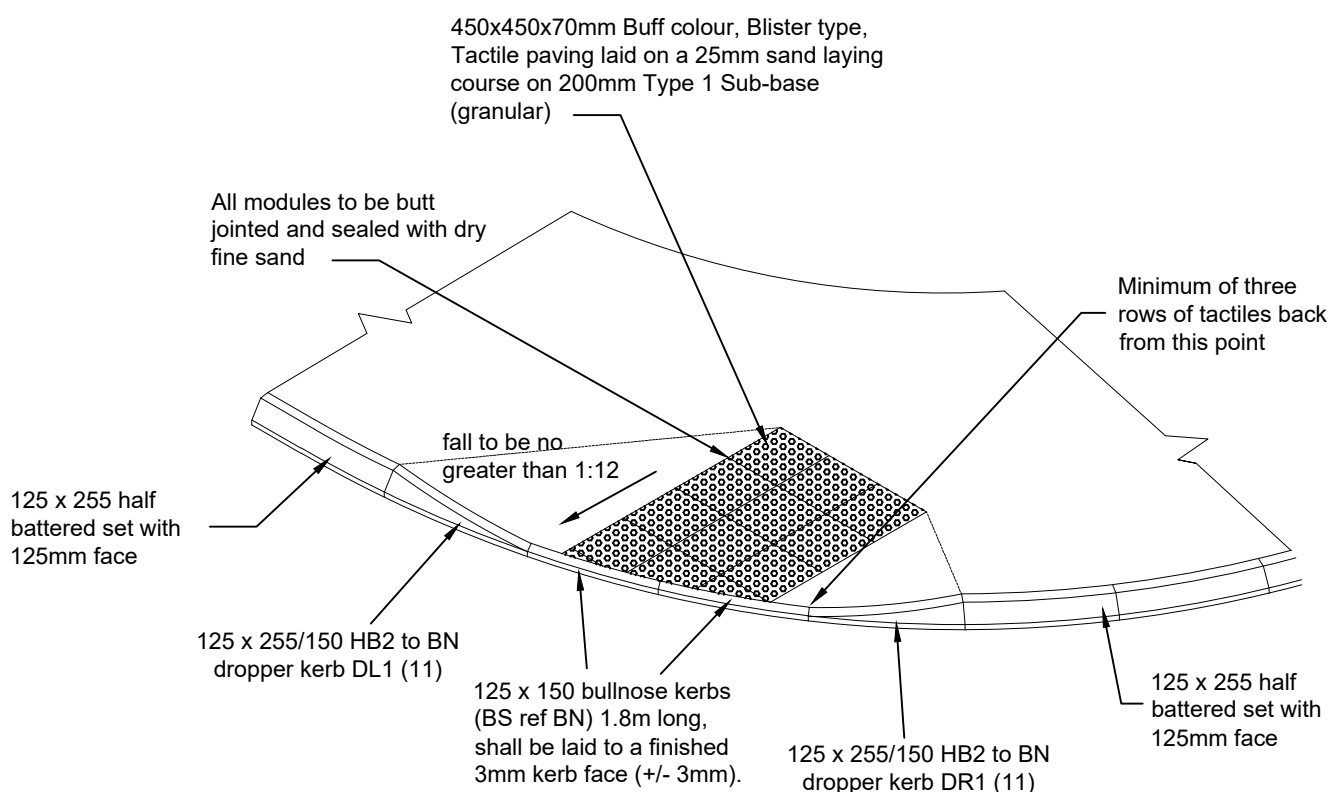
(Road Tie-In Detail)



CS1 Channel

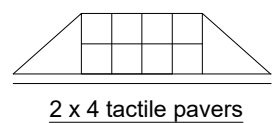
125x255mm PCC CS1 Channel block to BS EN 1340 laid directly on ST2 concrete foundation whilst plastic with minimum 150mm sub-base bedding.

Tactile paving shall be installed so that the rows of one side of the crossing point fully align with the other.



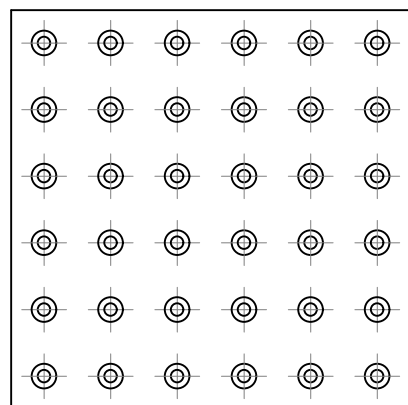
Dropped Pedestrian Crossing

(Online crossing illustrated)

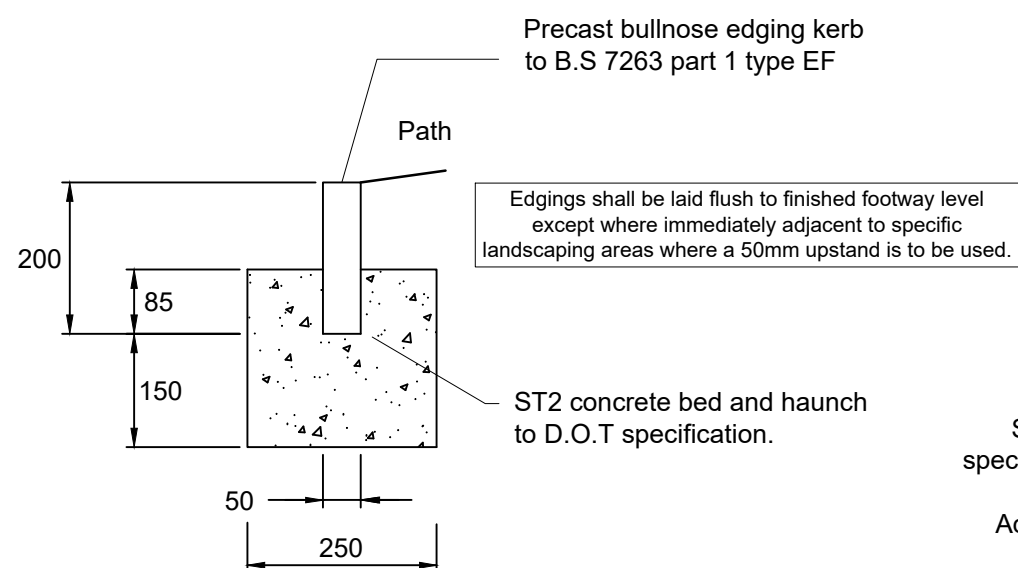


Dropped Pedestrian Crossing

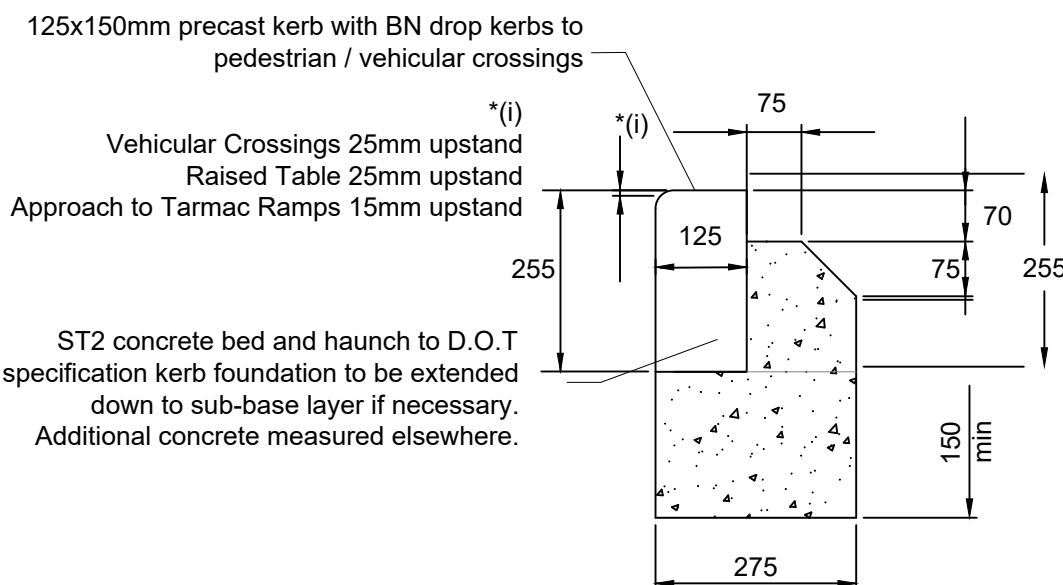
(Offline crossing illustrated)



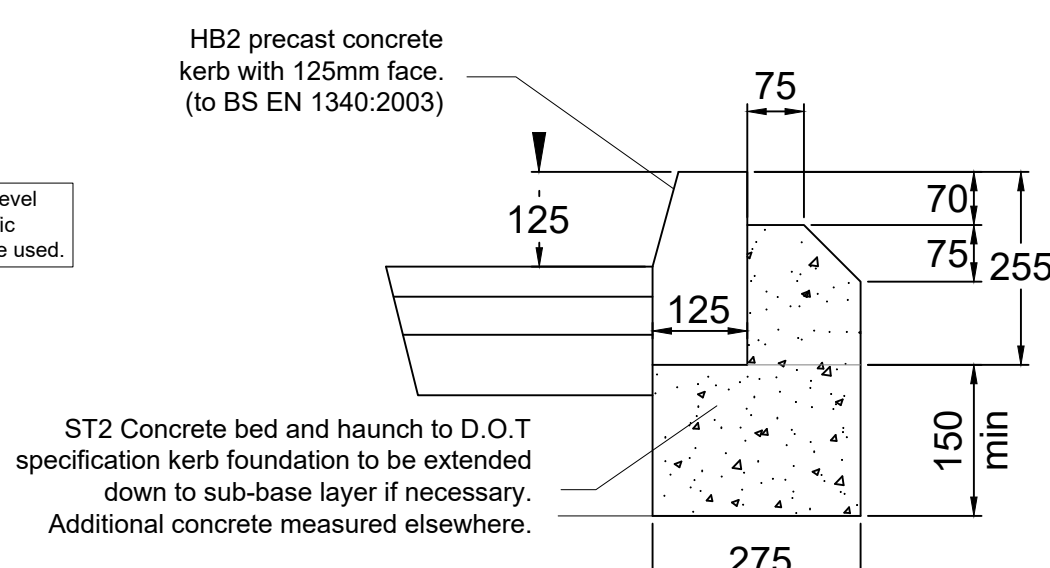
Size	Pitch Dimensions	
	A	B
450 x 450	64	33



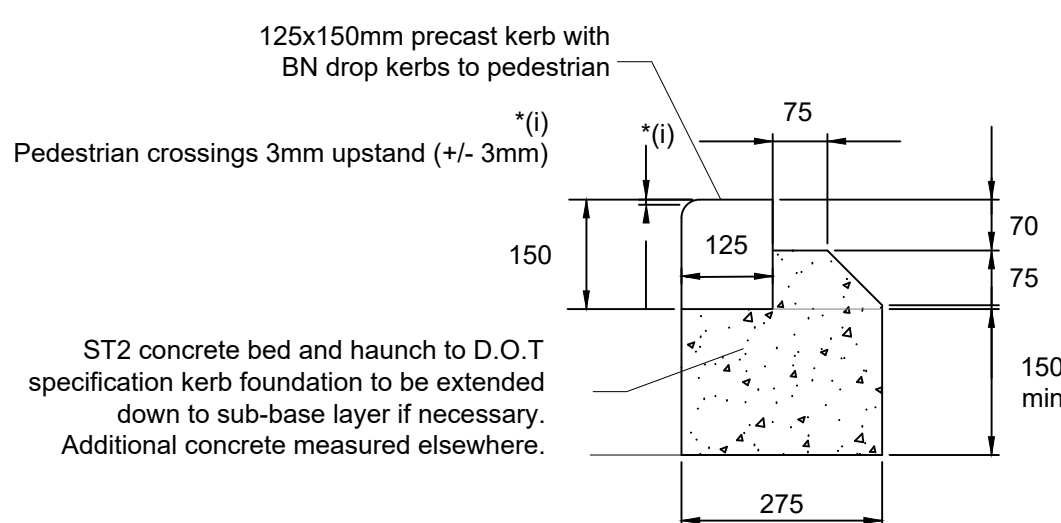
EF Edging



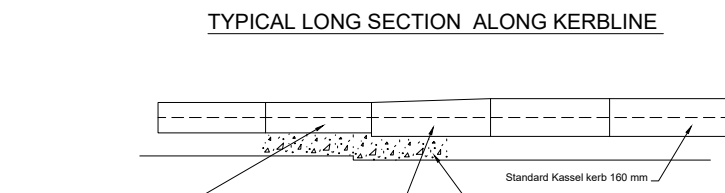
BN Kerb



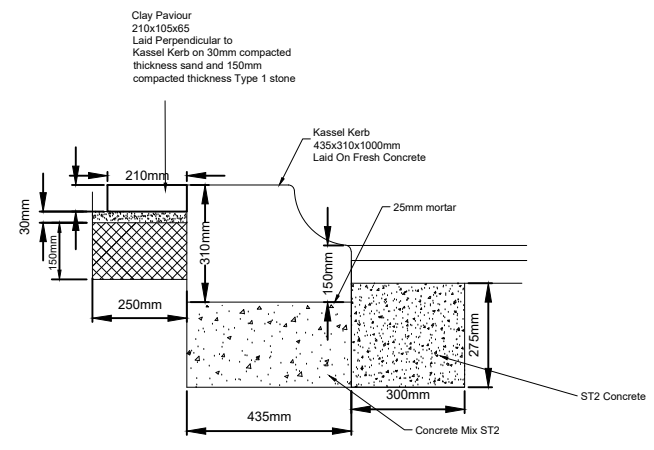
HB2 Kerb



BN Kerb



TYPICAL LONG SECTION ALONG KERBLINE



CROSS SECTION

Notes:

- Frames shall be constructed from 50mm x 50mm x 5mm mild steel angle.
- All steel work shall be hot dip galvanised to BS 729
- Foundations shall be concrete mix ST2

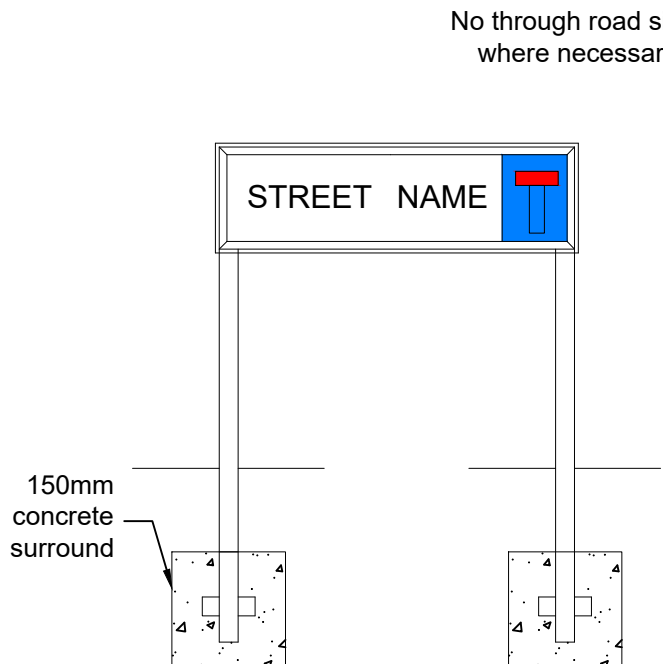
Specification:

Size - 900mm x 230mm aluminium plate 11 gauge with pressed lettering, Department of Transport style. (Circular 1/63)

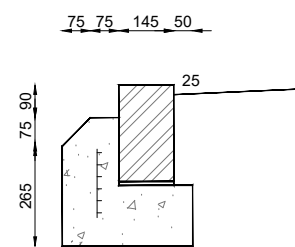
Height - 90mm high when name is in single line. 75mm high when name extends to two lines

Colour - White on Black Frame

No through road sign:- blue background, white stem and red cross bar



Street Name Plate



Conservation Kerb

(For Local Streets Only)

145 x 255mm Marshalls Conservation Kerb to BS EN 1340:2003 with concrete class ST2 bed and haunch Colour to be specified by planners. For two part construction 16mm Ø dowel bars to be provided at 450mm centres. Bedding mortar for two part construction is to conform to BS7533-6.