Technical Design Information

Documents required as a minimum

Roadworks Construction details
Roadworks Construction details
Drainage Construction details
Drainage general arrangement Drainage calculations
Gully catchment areas
Streetlighting
Longsections/cross-sections showing gradients
Drawings showing vis-splays
Surface material layout
Swept Path Analysis using 11.2m refuse vehicle.
Traffic signals and communication (CCTV) designs.
Ground Investigation report
Combined utilities drawing

Standard Details

All kerbing, edging and channel blocks to be laid on and backed up with ST4 concrete

All kerbing, edging and channel blocks to be laid on a minimum of 350mm wide race.

All kerb faces to be a minimum 125mm upstand.

All kerb faces at private vehicle crossovers to be between 20-25mm upstand.

All kerb faces at pedestrian crossovers to be between 0-6mm upstand.

Footway construction to be a minimum of 20mm Surface Course, 50mm Binder Course & Sub base 200mm

Blockwork to be 80mm thick in carriageway and 60mm thick in footway.

Blockwork roads binder course to be punctured at 1 metre intervals starting 500mm from each kerb line and filled with pea shingle to act as drainage medium.

Blocks to be laid on maximum 30mm sand course –2no. course of stretcher bond for carriageway. Chamber surrounds within carriageway at 2course surrounds also. 45 deg Herringbone pattern using Brindles.

Sub base to be quarried Type 1, in rare circumstances we will accept recycled, but each load must be inspected prior to laying.

Capping material to be 6F1 NOT 6F2.

PSV on approaches to crossings roundabouts etc. to be a minimum 68 PSV.

Tactiles – see DETR 'Guidance on the use of Tactile Paving Surfaces'

Speed Cushions & Tables 75mm max height - 60mm on bus route. Max Gradient 1 in 8.

Ramps to be constrained with kerbs top and bottom and not to be constructed using blockwork

Formation to be covered with Geotextile prior to laying Capping/Sub-base course.

All utility covers in adoptable areas to be ductile material – NOT PLASTIC

Drainage Details

Side Hinged Gulleys only - D400 loading

150mm Deep Chamber covers only - D400 loading

Gulley pots to be cast concrete 1050mm deep

Gulleys to discharge into chambers or arrange collection of commuted sums

Gulley connections - 12m max pipe length

Gulley surround to be ST4 Concrete

The number of Gulleys provided will depend upon the gradient of the carriageway. Normally at least one gulley per $200m^2$ of carriageway for gradients between 1% and 3%, one per $150m^2$ for carriageway gradients between 3% = 1:30 and 5% = 1:20 one per $100m^2$ for carriageway gradients exceeding 5%. = 1:20 Double gulleys in low points.

External face of inspection chambers to be 0.5 m from kerbline

Pipes to be a minimum of 1m from kerbline

Pipes within 1200 of surface level in carriageway must have concrete cover

Pipes within 900 of surface level in footway & verge must have concrete cover

Concrete cover must have flexible joints at pipe joints

No private water into highway system

All existing and proposed utilities must be below formation level of footway/carriageway construction, and comply with NJUG recommended guidelines.

Any proposed gullies to be installed must not be located in-front of driveway crossovers.

Street Lighting

Streetlights and cabling must be in highway.

Traffic Calming features require Highways Spec lighting – not Parish

Highway Design

NOTE: Please provide chainages on relevant plans

No vision splays to be across Non Highway land – regardless of private property planning conditions.

Please use standard radius sizes where possible. Minimum 6m on new accesses except where we accept MFS spec tight junction radii with Carriageway depth construction footways either side to reduce approach speeds on access to shared space side roads

Footway crossfall 1 in 40 or 2.5% for crossovers in footway

Private VX max crossfall 1:12 or 8%

Carriageway Crossfalls 1 in 40 2.5%

Width of shared surface in general 5.5m minimum

Carriageway widths minimum 4.8m 2 way, with 2m footway one side & 1m maintenance strip the other – with exception of localised narrowing

Max width if single lane carriageway 3.5m or hatched if over. (to stops cars trying to squeeze past cyclists)

Min distance between back edge of f/w or c/w to significant drop = 1m flat

Footway widths - 1.8m min (2m preferred) however if available widths are restricted we will accept a 2m footway one side with a 1m service margin opposite.

Verges/maintenance strips to be grass, bollards and full height kerbs will be required to deter parking damage.

Where Verges/maintenance strips are hardened pedestrian deterrent paving is to be used so that they are not confused as sub-standard width footways

Highway delineation to be installed where extents are not obvious. Continuous edgings or Highway Boundary markers to be used.

Controlled crossing points to be 4m wide

Roundabouts

All roundabout designs to include details of:

Inscribed Circle Diameter
Entry Path Curvature on each arm.
Entry Angle (s)
Entry Width
Approach Half Width
Entry Kerb Radius
Exit Kerb Radius
Effective Flare Length
Visibility (s)

Junctions

All junction designs to include details of:

Design speed limit

SSD

Turning length (a)

Deceleration length (b)

Through Lane width (c)

Turning lane width (d)

Direct taper length (e)