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SECTION 38 KEY

- Footways, Footpaths and cycleways
- Carriageway Construction
- Blockpaved Carriageway Construction
- Kerbline (thin solid line)
- Highway Drain (LCC Adoptable)
- Gully and connection (LCC Adoptable)
- Foul Water Drainage (Anglian Water)
- Surface Water Drainage (Anglian Water)
- Adoptable Area Boundary
- Drainage Easement

MATERIALS KEY

In accordance with Lincolnshire County Council Development Road Specification and Construction document for Housing Development Roads carrying up to 0.25 m.s.a.

ADOPTED AREAS

Carriageway Construction

- Surface course: 40mm - AC10 close surf 100/150 in accordance with BSEN13108 to clause 7.3. The Surface Course must be bonded to the Binder Course.
- Binder course: 110mm - AC20 dense bin 40/60 rec laid in a single layer to clause 9.1 or combination of layers not less than 50mm not greater than 110mm in accordance with BSEN13108 assuming kerbing laid prior to surfacing (if two stage construction - kerbing laid at a later stage is used) then initial binder course layer to be 70mm and Total Binder Course thickness becomes 130mm in accordance with clause 1.1.17.
- Sub Base: Min 340mm granular sub base material Type 1 to Clause 803 of the Highway Agency Specification (2% CBR). Thickness dependent upon on site CBR values (see table). From Site Investigation report GML15181 prepared by Geomatters, CBR values of less than 2% could be encountered in made ground and topsoil areas.
  CBR testing to be undertaken at 20m intervals on all road centrelines at formation level to verify the design.
- A geotextile is to be provided to fold up the sides of the excavation (300mm lap min)
- Tensar TriAX TXG Geogrid with integral geomembrane laid at formation level. (Assuming CBR's at 2% or lower)

All pavement material within 450mm of finished external levels shall be non frost susceptible sub-base / capping, depth dependent upon CBR of sub-base.

Carriageway Sub-Base thicknesses (Construction Chart 1 - Lincolnshire County Council Development Road Specification and Construction Document)

CBR%	Sub-base (mm) with geosynthetic
Less than 1½ and soft spots	710 (410mm of 6F5 capping and 300mm Type 1) alternatively use 620mm if all Type 1 is used)
1½	440
2	340
3	300
4	300
5	300
6 to 15	300
More than 15	300
Where the equilibrium CBR falls between values in the above table, round down the value to the lowest figure.	

Footway Construction

Surface course: 25mm - AC6 dense surf 100/150 in accordance with BSEN13108 compacted to a void content within the range 2%-10%. To clause 9.4.
The Surface Course must be bonded to the Binder Course.

Binder course: 100mm - AC20 dense bin rec 100/150 in accordance with BSEN13108 to clause 9.1.

Sub Base: 100mm granular sub base material Type 1 to Clause 803 of the Highway Agency Specification

Vehicle crossing

Surface course: 25mm - AC6 dense surf 100/150 in accordance with BSEN13108 to clause 9.4.
The Surface Course must be bonded to the Binder Course.

Binder course: 100mm - AC20 dense bin rec 100/150 in accordance with BSEN13108 to clause 9.1.

Sub Base: 150mm min granular sub base material Type 1 to Clause 803 of the Highway Agency Specification

Street Lighting Key

PN # — Proposed 6 metre galvanised tubular steel lighting column c/w root protection to G1a (LCC) spec. Column to have vertically mounted TRT Aspect Eco 1 12 LED WW (3000K) General Road 4 (GR4) lens Powerset lantern set to 19W. Lantern to have SELC 8480 35 lux Part Night (OFF 0000-0600) photocell. Lantern to be installed with 0° tilt.

PN # — Lighting column to be installed as part of Phase 1

S38 Street Lighting Notes

1. Column foundations to be as per SD/14/2A
2. All columns to be provided with Distribution Network Operator (D.N.O.) Services and Termination Type A to LCC Standard Detail SD/14/4A unless otherwise specified. DNO Cutouts to be fitted with 16Amp BS88 Fuse Link. Double Pole Isolator to be fitted with BS 88 Fuse Link to L.C.C Appendix 14/4.
3. Column setbacks shall comply with Table 2 Section 4.3.3.3 of BS 5489-1:2013.
4. Columns shall not be installed within Drop Kerb areas and shall have a minimum clearance of 1.5m from Drives/Accesses.
5. It is preferred that all Street Lighting works are undertaken by L.C.C Approved Contractors.
6. Lanterns to be cleaned and re-lamped (during maintenance period) prior to adoption as detailed in S38 Agreement unless the specification is for LED lanterns which will require clean only.
7. Developer to liaise with Distribution Network Operator (D.N.O.) with regards to connections and disconnections of columns and appropriate black ducting. Where an independent D.N.O. (I.D.N.O.) has been used the cutout must be clearly and indelibly marked with the I.D.N.O. name and contact number.
8. It is the Developers responsibility to inform property owners of part night street lighting switching where applicable.
9. All private cabling shall have correct core colour identification as detailed in BS7671. Sleeving of conductors is not permitted.
10. Due to ongoing technical innovations within the industry, if the street lighting equipment is to be ordered in excess of three years after the drawing approval date, the Authority reserves the right to upgrade the equipment specification.
11. Lighting has been designed to comply with BS5489-1:2013 Lighting Class P5.



KEY PLAN
Scale 1:2500

GENERAL NOTES
Do not scale this drawing. If in any doubt ask.

This drawing is to be read in conjunction with all relevant engineers and specialists drawings and specifications.

All setting out is to be checked on site prior to any works commencing. Any discrepancies are to be reported to millward immediately.

All dimensions are shown in millimetres unless otherwise noted.
All levels are shown in metres unless otherwise noted.

The specification in all respects shall be in accordance with the current "Lincolnshire Development Road and Sustainable Drainage Design Guide" and "Development Road and Sustainable Drainage Specification and Construction" publications in force in the county at the time of construction

The Minimum Longitudinal fall for highways, without channel blocks shall be 1 in 150 , and with channel blocks 1 in 250 (see Clause 10.1)

In addition, ensure that the first section of any side road fall away from the road to which is is connecting. If general topography requires it to rise, the change in direction should take place after the first set of gullies. This is to ensure a 'false channel' with associated drainage problems is not created in the bellmouth of junctions.

General deterioration of the existing highway/footway/verges created through construction of the new |Section 38 Development will be reinstated to the current Development Road Specification at the developer's own cost at the agreement of the inspecting Highway Officer Prior to Construction

All signs and line marking are to be agreed with the Senior Highways Officer prior to construction

No Private surface water shall discharge onto the adoptable highway

REV	DATE	BY	DETAILS	CHK'D
C	10.01.18	SKG	MH S15 AMENDED TO LCC HIGHWAY DRAINAGE	JMcK
B	15.12.17	CB	SHADING AMENDED, KEY ALTERED EASEMENT ADDED, PRIVATE DRAINAGE	JMcK
A	12.12.17	SKG	ADDED STREET LIGHTING DESIGN REMOVED FOOTPATHS FROM ADOPTION	JMcK

A1 AMENDMENTS

NOTES

TITLE: Section 38 Layout Sheet 1
PROJECT: Backgate Cowbit Phase 2
CLIENT: Ashwood Homes Ltd

DATE	CHECKED	APPROVED BY	SCALE	DRAWN	ENGINEER	DRAWING No:	DRAWING STATUS
August 2017	J.McKellar	J.McKellar	1:250 @ A1	B.Camill	J.McKellar	MA10575/603-1 rev C	PRELIMINARY

millward
t: 0115 941 4560
no.1 malin hill, nottingham ng1 1jq
e: info@millward.co.uk w: www.millward.co.uk