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Contractors must verify all dimensions, levels and co-ordinates at the site before commencing any work or making any shop drawings; no dimensions to be taken from drawing.

Adoptable Manhole Schedule - Highway Drain

MH Ref:	Cover Level	Invert Level	Pipe Dia	Depth to soffit	MH Type	MH Size	MH Cover
HWD1	3.075	1.735	Twin 450	0.890	Type D	1615 x 900	D400
HWD2	3.113	1.725	450	0.938	Type D	900 x 900	D400
HWD3	2.925	1.699	Twin 450	0.776	Type D	1615 x 900	D400
HWD4	2.775	1.655	150	0.970	Control	1615 x 2400	D400
HWD5	2.825	1.608	Existing	0.967	Type D	900 x 675	D400
HWD6	3.113	1.975	Twin 450	0.688	Type D	1615 x 900	D400
HWD7	3.128	1.959	450	0.719	Type D	900 x 900	D400
HWD8	3.013	1.938	Twin 450	0.625	Control	1615 x 900	D400
HWD9	2.933	1.889	150	0.894	Type D	1615 x 2400	D400

Adoptable Pipeline Schedule - Highway Drain

Pipe Ref:	Upstream IL	Downstream IL	Pipe dia	Distance	Pipe gradient 1:X	Pipe gradient %	Pipe material
1.000	1.735	1.699	Twin 450	18.008	500.2	0.2%	Concrete
2.000	1.725	1.699	450	12.923	497.0	0.2%	Concrete
1.001	1.699	1.655	Twin 450	21.989	499.8	0.2%	Concrete
1.002	1.655	1.608	150	7.003	149.0	0.7%	Clay
3.000	1.975	1.938	Twin 450	18.250	493.2	0.2%	Concrete
4.000	1.959	1.938	450	10.525	501.2	0.2%	Concrete
3.001	1.938	1.889	Twin 450	24.549	501.0	0.2%	Concrete
3.002	1.889	1.870	150	2.768	145.7	0.7%	Clay

Hydrobrake Units:

HWD 4 - MD-SHE-0093-4000-1125-4000 - Flow restricted to 4 l/s in all storms

HWD 9 - MD-SHE-0094-4000-1042-4000 - Flow restricted to 4 l/s in all storms

Flooded volume 0.972 m3 in the 100 year + 40% c/c event from PN 1.002 retained within carriageway.

Flooded volume 1.460m3 in the 100 year + 40% c/c event from PN 3.002 retained within carriageway.

Existing Highway Drain manhole. New connection from Road 2 into existing chamber. Replace cover and frame with D400 cover and frame.

Key:

- Adoptable Highway
- Site Boundary
- Proposed Highway Drain
- Road Gully and Connection

1) "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.

2) 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).

3) In addition, ensure that the first section of any side road falls away from the road to which it is connecting. If general topography requires it to rise, this change of 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.

4) "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 developers' own cost at the agreement of the inspecting Highway and Flood Authority Officer".

5) "No Private surface water shall discharge onto the adoptable highway"

6) "No private, structural features shall overhang the adoptable highway".

7) "No private retaining walls exceeding 1.37m shall be within 3.66m of the highway boundary".

ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF LINCOLNSHIRE COUNTY COUNCILS DEVELOPMENT ROAD AND SUSTAINABLE DRAINAGE DESIGN GUIDE AND DEVELOPMENT ROAD AND SUSTAINABLE DRAINAGE SPECIFICATION AND CONSTRUCTION.

Rev	Description	Drn	Vf'd	Date
-	Issued for S38 Approval	CM	AG	12/18

As outlined in section 2.3 of the CITB Industry Guidance to Designers, insignificant risks can usually be ignored, as can risks arising from routine construction activities, unless the design compounds or significantly alters these risks. In accordance with CDM Regulations 8, 9 and 11, any significant risks relating to the design features shown on this drawing have been identified and are annotated thus: [I]

☒ No significant risks have been identified.

☐ Significant risks have been identified - refer to notes on drawing for information on residual risks and any control measures to be employed.

Refer to the current Designer's Risk Assessment sheets for further details.

Designer's Signature CM | Date 12/18

Drawing Status: APPROVAL

williamsaunders
architecture: engineering: building consultancy
Sheppard Lockton House
Cafferata Way
Newark-on-Trent
Nottinghamshire. NG24 2TN
Tel: 01636 704361
Fax: 01636 702809
W: wm-saunders.co.uk
Also at Leeds, Lincoln, Wirksworth

Project: RESIDENTIAL DEVELOPMENT
SMALL DROVE
WESTON
SPALDING

Client: SOUTH HOLLAND DISTRICT COUNCIL

Title: S38 DRAINAGE LAYOUT

Drawn	Date	Scale	
CM	DECEMBER 2018	1:200	@ A1
Discipline	**Project Number**	**Drawing Number**	**Revision**
CIVILS	11505	(9)06	-