Rev. No.	REVISION	Date	D
A	Houses repositioned and drives amended	26.3.97	
B	Plot 6 changed to version 2	3.4.97	
C	Street-lighting added to road 19	24.4.97	
D	Private drainage amended on plots 8 and 9	1.5.97	
E	Vacuum Main route direction changed	5.6.97	
F	Plot 12 changed to type V1	17.6.97	

Written dimensions to be taken. Do not scale off the dra

Any discrepancies, written or scaled, should be brought to the attentio the engineer immediately.

This drawing to be read in conjunction with the relevant Bills of Quant and Local Authority Specification.

CDM NOTE: The design has been undertaken as far as possible to avoid ris health and safety or to reduce and control the effects of any unavoidable risks.

All relevant information identifying the unavoidable risks has passed to the planning supervisor for inclusion in the Health Safety plan.

The Health & Safety plan will be issued by the planning supervi with these drawings.

SHDC
Planning Development
15 MAY 2002
Ref: 08/2102

DETERMINED
PLAN

WORMALD, BURROWS PARTNERS
Civil Engineering Consultants
12a & 14a Hitchin Street, Tel 01767 31
Biggleswade, Beds SG18 8AX, U.K. Fax 31

Project
Wygate Park, Spalding, Phase

Drawing Description
Private House Drainage

Client
Swallow Homes Ltd.
West Elloe Avenue
Spalding
Lincs
PE11 2BS

Drawing Number
E0868/1 F

Drawn By
AH
Date 17.3.97

Scale
1:20

Architect

Checked By
WD
Date 17.3.97

EAQ REGISTERED COMPANY ISO 9001

Buffer Pot No.	Cover Level	Lowest Invert Level
1	2.97	1.41
2	2.86	1.41
3	2.76	1.31
4	2.76	1.17

DRAINAGE NOTES

All works to comply with Building Regulations, 1991 (Amended 1992)
Road gully connections to be 150mm dia. clayware pipes.
Private drain connections to adoptable sewers to be clayware pipes.
Remaining private drains to be 110mm dia. U.P.V.C. or clayware unless otherwise stated.
All pipe chambers and fittings to be installed, bedded and backfilled in accordance with the manufacturers instructions.
Private drains and sewers which pass adjacent to building foundations to be constructed in accordance with Part H.1. of the Building Regulations.
All private drains to incorporate preformed inspection and shallow access chambers where possible.
Traditional chambers (private) to be constructed using precast concrete sections with 150mm concrete surround.

Depth to I.L.	Min. chamber size (internal).	
1.0m or less	450 x 450mm	(normally a preformed chamber 0.9m depth or less)
1.5m or less	1200 x 750mm or 1050mm dia.	
Over 1.5m	1200 x 750mm or 1200mm dia.	

Rainwater downpipes to be connected directly to surface water drain via 68/110mm adaptors, removable to allow for rodding.
Position of yard gullies shown in garage drives are nominal only and may be adjusted on site.
All existing land drains encountered during construction to be connected to surface water system.
All drains the vicinity of proposed trees to be constructed in accordance with the requirements of N.H.B.C. Practice Note 3.
All back inlet gullies to be roddable.

DRAINAGE LEGEND

Existing foul water sewer .....
Existing surface water sewer .....
Proposed foul water sewer .....
Proposed surface water sewer .....
Proposed backdrop .....
Proposed foul water drain .....
Proposed surface water drain .....
Proposed inspection chamber (traditional) ..... en
Proposed preformed inspection chamber (depth 1m. or less) ..... en
Proposed preformed inspection chamber (depth 600mm or less) ..... en
Proposed shallow access chamber .....
Proposed rodding eye ..... RE 7.50
Proposed chamber invert level .....
Proposed road gully ..... G
Proposed Trapped gully in drives .....
Suspended slab, where appropriate ..... SS
Proposed slab level ..... SL 9.750
Proposed soakaway .....
Target levels to car parks 7.82

rsp... C svp... ● svp via... ◉ durgo valve w/c... O sink... O big... ■ vent pipe... C required at head of system

NOTE
Where durgo valves are used they should not adversley effect the amount of ventilation necessary for the below ground system which is normally provided by the open stacks of the sanitary pipework.

◉ vacuum syste buffer pot

Limit of Phase 7A
Road 19
1600 Vacuum Main
1500Ø IDB PIPE DRAIN
4.5 x 90m Vision Splay
Public Open Space
Vacuum system
1250 Vacuum Main
Phase 5 Under Construction
Phase 6 Under Construction
Isolation Valve
Pot 1
Pot 2
Pot 3
Pot 4
SW11
SW12
SW13
Ramp
PC
N

S1	2150.294E 1760.909N
S2	2192.455E 1727.280N
S3	2205.891E 1694.229N
S4	2203.040E 1650.036N
S5	2203.361E 1605.751N
S6	2194.487E 1585.376N
S7	2179.717E 1720.193N
S8	2239.495E 1704.527N
S9	2229.039E 1732.489N
S11	2237.572E 1597.880N

S12	2087.640E 1754.999N
S13	2105.079E 1750.836N
S14	2133.695E 1710.028N
S15	2052.061E 1701.560N
S16	2091.490E 1686.751N
S17	2098.934E 1638.172N
S18	2115.365E 1641.453N
S19	2158.625E 1648.085N
S20	2121.680E 1600.952N

KEY

- Proposed SWS
- Proposed Vacuum Main
- Proposed Pram Crossing
- Proposed Gully
- Proposed Street Lighting to LCC specification S/35/C/95 with REC supplies
- S/35/RL/95 With REC Supplies. All Columns to have Type A Termination
- Concrete block construction
- Marker posts to LCC specification

* Give Way markings and any necessary signing is to be agreed on site with the Divisional Surveyor*

Road 2, 8 and 10 are to be 5.5m wide major access roads
Roads 3,4,5,,7,9,11 and 12 are to be 5.0m wide minor access roads
Road 6 to be 6m wide shared surface

THE SPECIFICATION IN ALL ASPECTS SHALL BE THE CURRENT "LAYOUT GUIDE & SPECIFICATION FOR DEVELOPMENT ROADS"

Rev. No.	REVISION	Date	Drawn By	Checked By
P	Plots 24-32 Phase 8b revised as requested on letter 23387	12.5.99	JMH	
N	GARAGES TO MOPORTH HOUSE ENLARGED ISOLATION VALVE PLOT 38 ADDED	29/3/99	HD	HD
M	Footpath Amended to Road 7, Footpath added to front of plot 44	24.3.99	TJH	HD
L	Phase 8A amendments re latest letters 15.2.99,22.2.99	3.3.99	BJC	AJMB
K	Phase 7c plots 8 & 10-13 amended	29.1.99	BJC	AJMB
J	Street lighting amended re L.C.C letter 13.1.99	18.1.99	BJC	HD
H	Buffer Pot 8/21 re-located	2.12.98	AJMB/BC	AJMB
G	Road 3 verge increased to 1m	5.11.98	BJC	HD
F	Amendments to Rd.3 & SW laterals	5.10.98	BJC	HD
E	Amendments re letter 17.4.98 Plots 28,28.30.31	23.4.98	BJC	HD
D	Amendments re letter 5.2.98 Plots 1-5,20.20a	9.2.98	BJC	HD
C	Amendments re letter 21.1.98. Road 6 amended	30.1.98	BJC	HD
B	ROAD 6 CHANGED TO CONCRETE BLOCK SHARED SURFACE	23/9/97	HD	HD
A	Street Lighting amended to L.C.C letter 4.9.97	12.9.97	BJC	HD

Written dimensions to be taken. Do not scale off the drawing.
Any discrepancies, written or scaled, should be brought to the attention of the engineer immediately.
This drawing to be read in conjunction with the relevant Bills of Quantities and Local Authority Specification.
CDM 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, Tel 01767 317244
Biggleswade, Beds SG18 8AX, U.K. Fax 315434

Project
Wygate, Spalding Phases 7,8 & 9

Drawing Description
Adoptable Roads & Sewers Plan For Section 38

SHDC Planning & Development 15 MAY 2002 Ref 0582/02

Client
Swallow Homes Ltd.
West Elloe Avenue
Spalding
Lincolnshire PE11 2BS

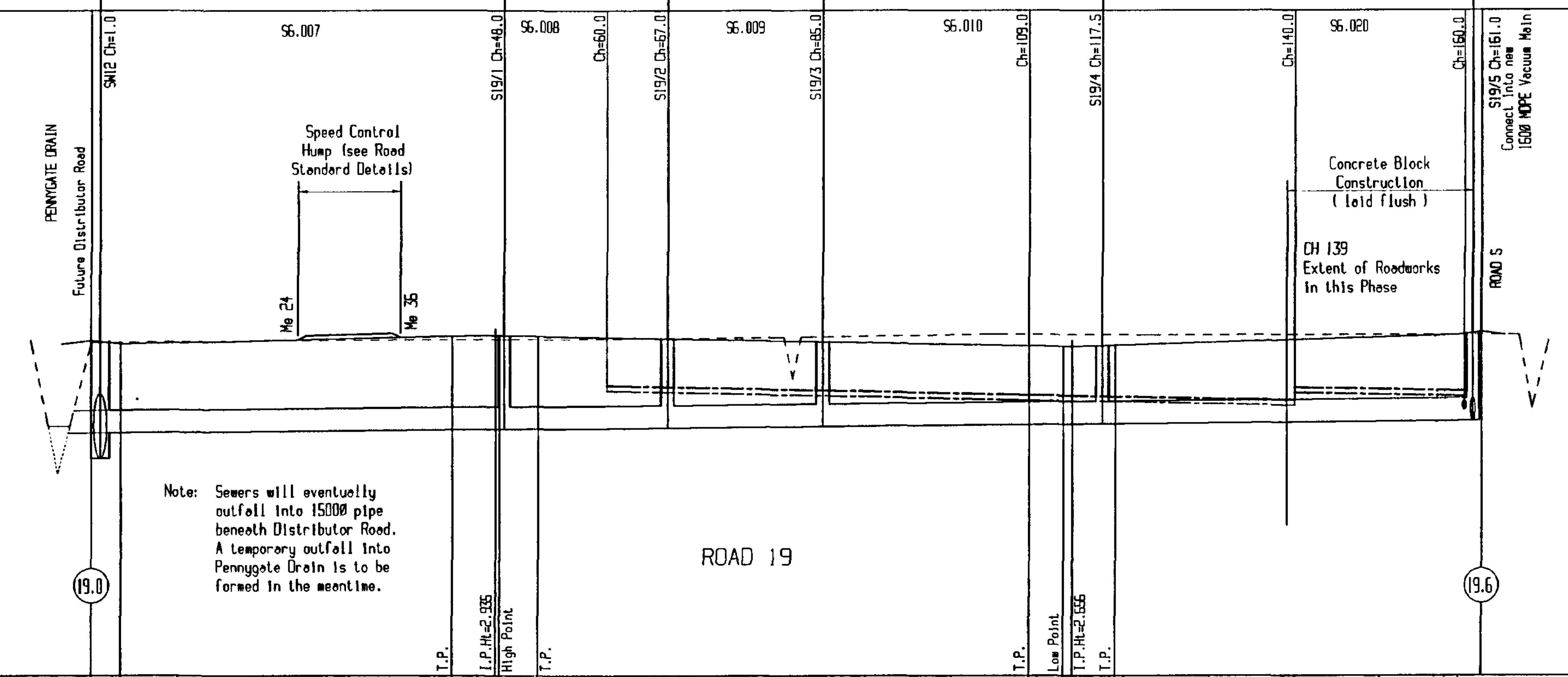
Drawing Number
E0670/2/P

Drawn By AH
Date

Scale 1:500

Architect

MANHOLE COVER LEVELS	2.78		2.90		2.83		2.75		2.56		3.00
FOUL WATER SEWER INVERT LEVELS					1.620	125Ø Vacuum Main 1/223 L=49m	1.400	125Ø Vacuum Main 1/258 L=31m	1.280 / 1.580	125Ø Vacuum Main 1/250 L=20m	1.500 / 1.200
SURFACE WATER SEWER INVERT LEVELS	0.634	525Ø 1/550 L=47m	0.722	525Ø 1/550 L=18m	0.754	525Ø 1/550 L=18m	0.787	525Ø 1/550 L=35m	0.851	525Ø 1/550 L=41m	0.925
MANHOLE DIAMETER	2100		1350		1500		1500		1500		1500



DATUM -5.000M.AOD

METRAGE ON CENTRELINE	LEVELS ON CENTRELINE OF CARRIAGEWAY	LEVELS ON LEFT HAND CHANNEL	LEVELS ON RIGHT HAND CHANNEL
0.000	2.801		
3.375	2.717		
10.000	2.750	2.681	2.681
20.000	2.800	2.731	2.731
30.000	2.850	2.781	2.781
40.000	2.900	2.831	2.831
42.000	2.910	2.841	2.841
45.000	2.921	2.852	2.852
47.455	2.923	2.854	2.854
50.000	2.920	2.851	2.851
52.000	2.914	2.945	2.945
60.000	2.881	2.812	2.812
70.000	2.839	2.770	2.770
80.000	2.797	2.728	2.728
90.000	2.756	2.687	2.687
100.000	2.714	2.645	2.645
109.000	2.676	2.607	2.607
110.000	2.673	2.604	2.604
112.963	2.668	2.599	2.599
115.000	2.670	2.601	2.601
119.000	2.687	2.618	2.618
120.000	2.699	2.630	2.630
130.000	2.771	2.702	2.702
140.000	2.842	2.773	2.773
150.000	2.914	2.845	2.845
159.280	2.981		

VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE	GRADIENT .5% (1 in 200)	HOG	GRADIENT -.417% (-1 in 240)	SAG	GRADIENT 0.719% (1 in 139.145)

HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE	STRAIGHT	L.H. CURVE	R.H. CURVE	STRAIGHT	L.H. CURVE	R.H. CURVE	STRAIGHT	CVE.	STRAIGHT

EXISTING LEVELS	2.810	0.790	0.790	2.750	2.800	2.830	2.880	1.900	2.890	2.950	2.940	2.950	1.200	2.810

MANHOLE COVER LEVELS
FOUL WATER SEWER INVERT LEVELS
SURFACE WATER SEWER INVERT LEVELS
MANHOLE DIAMETER
DATUM
METRAGE ON CENTRELINE
LEVELS ON CENTRELINE OF CARRIAGEWAY
LEVELS ON LEFT HAND CHANNEL
LEVELS ON RIGHT HAND CHANNEL
VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE
HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE
EXISTING LEVELS

All surface water sewers of 300mm or greater shall be Concrete Class M to BS 5911.

All pipe bedding shall be Class S. (FM 2.2) unless otherwise stated.

Vacuum Mains to be laid by Specialist Contractor.

Rev. No.	REVISION	Date	Drawn By	Checked By
A	Levels Ch.120 - 159.20 amended	5.12.95	W.D	W.D
B	Vacuum main details added, speed table added	24.4.97	AH	W.D
C	Vacuum main direction reversed, longsection altered	9.6.97	AH	W.D

Written dimensions to be taken. Do not scale off the drawing.

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

Planning & Development
15 MAY 2002
Ref 0382/02

Project
Wygate Park, Spalding Phase 7

DETERMINED PLAN

Drawing Description
Longitudinal Sections
Road 19

Client
Swallow Homes Ltd
West Elloe Avenue
Spalding
Lincolnshire
PE11 2BS

Drawing Number
E0706/4/C

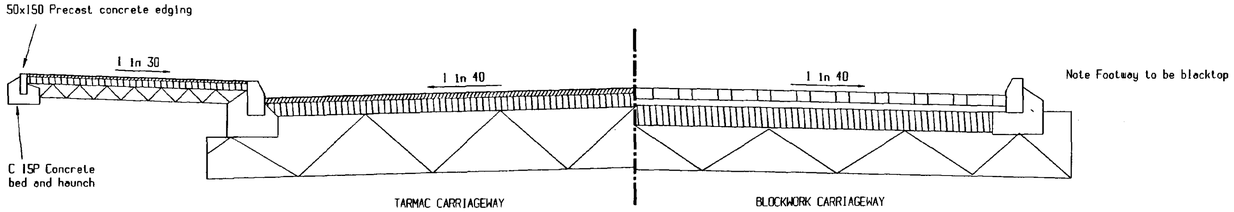
Drawn By WD
Date 14.11.95

Scale
Horiz 1:500
Vert 1:100

Architect

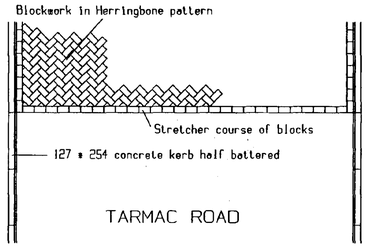
Checked By D.G.B.
Date 16.11.95

All Work to be Carried Out to Lincolnshire
County Council Current Specification
Dated 1991

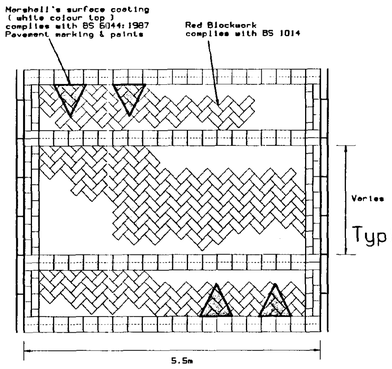


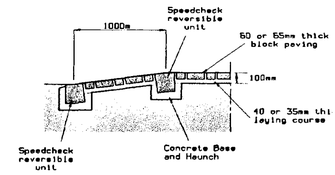
Typical Cross Sections

If required a sacrificial base course of 50mm of 20mm nominal DBM may be laid with the equivalent reduction in the sub base thickness.However if base to be left in place then it will be punched with 20mm holes at 500mm centres before laying blocks.



Tarmac/Blockwork Road Plan

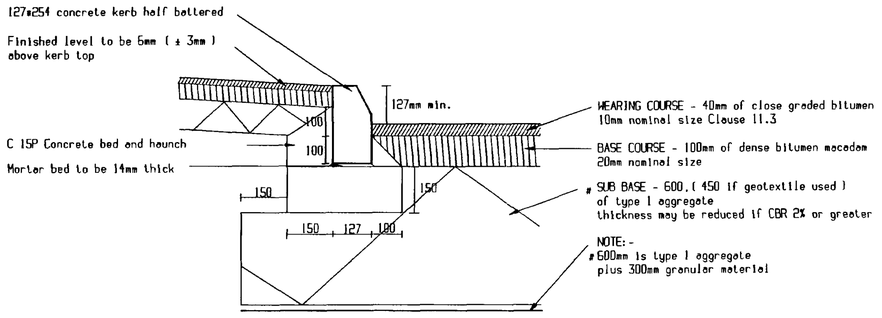




Typical Speedcheck installation

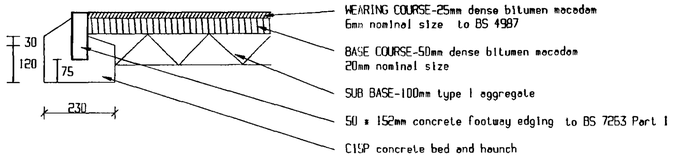
Marshall's Kerb-to -kerb
road hump system

SPEED CONTROL HUMP DETAILS
NTS

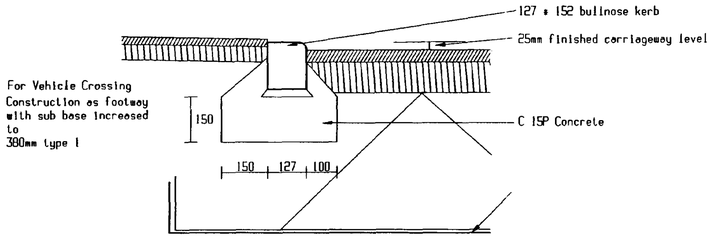


Carriageway and Kerb Detail-
up to 5.5m (construction chart 1)

Roads 5, 17

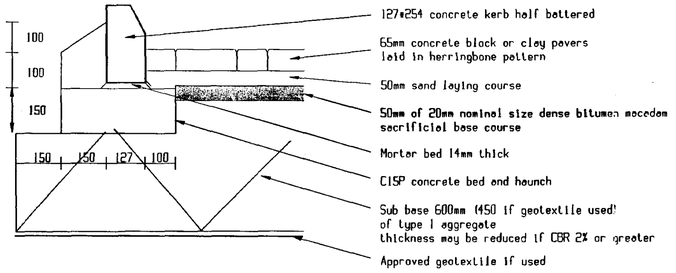


Footway Detail



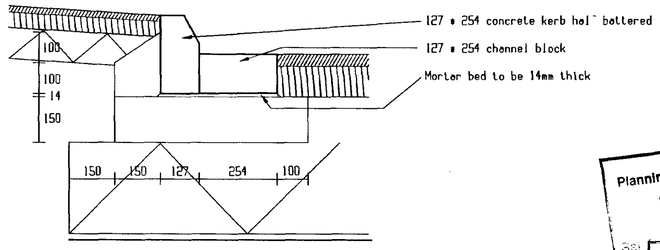
Drop Kerb Detail
pram/ vehicle crossing

Note Footway to be blacktop



Carriageway Concrete Block Construction
(construction chart 3)

Junction Roads 5,19



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

Rev. No.	REVISION	Date	Drawn By	Chec By
A	concrete block details added	4/12/95	MD	MD
B	SPEED HUMP ADDED	26/11/96	MD	MD
C	Speed control hump length changed	24/4/97	AH	MD

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

Project

Wygate Park, Spalding Phase 7

Drawing Description

Road Construction Details - Sheet 1

SHDC
Planning & Development
15 MAY 2002
S/0582/02
DETERMINED
PLAN

Client

Swallow Homes Ltd
West Elloe Road
Spalding
Lincolnshire
PE11 2BS

Drawing Number

E0706/5/C

Drawn By
JHH
Date 8.11.95

Scale
Various

Checked By
W.D.
Date 16.11.95

Architect

ISO 9001