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NOTES:

ALL SERVICE PROVISION FOR ADOPTED ROADS, SEWERS & FOUL/SW AS AGREEMENT OF THE WATER UNDERTOUT ACT 1991 TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF SEWERS FOR ADOPTION & THE DESIGN & CONSTRUCTION GUIDANCE (DCG) TO A SATISFACTORY LEVEL AND SPECIFICATION AND CONSTRUCTION GUIDANCE (SCG) TO A SPECIFICATION.

FOUL DRAINAGE CONSTRUCTION TO BE: 150mm dia. to 225 dia VC PLASTICISED TRADE CLAY OR VITRIFIED CERAMIC + PLASTICS OR CLAY) AND 150mm dia. to 600 dia VC PLASTICISED TRADE CLAY OR VITRIFIED CERAMIC + PLASTICS OR CLAY) LAID TO A UNIFORM GRADING, ALTERNATIVELY BE MADE UNDER A SPECIFICATION TO BE APPROVED BY THE LOCAL AUTHORITY.

ALL SEWERS AND LATERAL DRAINS WITHIN DOMESTIC CURTILAGE OF DWARTERS 100mm dia. (100mm I.D) PVC-U TO BS EN 1401-1:1998 & BS 4660:2000.

ALL PIPEWORK TO BE LAID SAFELY TO SAFETY ENGLISH STANDARDS UNLESS.

ALL PIPES: 100mm dia. (100mm I.D) PVC-U TO BS EN 1401-1:1998 & BS 4660:2000.

ALL PIPES: 150mm dia. (150mm I.D) PVC-U TO BS EN 1401-1:1998 & BS 4660:2000.

ALL PIPES: 225mm dia. (225mm I.D) PVC-U TO BS EN 1401-1:1998 & BS 4660:2000.

ALL PIPES: 300mm dia. (300mm I.D) PVC-U TO BS EN 1401-1:1998 & BS 4660:2000.

ALL PIPES: 450mm dia. (450mm I.D) PVC-U TO BS EN 1401-1:1998 & BS 4660:2000.

ALL PIPES: 600mm dia. (600mm I.D) PVC-U TO BS EN 1401-1:1998 & BS 4660:2000.

PRECAST CONCRETE PRODUCTS AND BLOCKS CONCRETE TO CONFORM A MINIMUM CLASS C 32/40.

ALL MANHOLE COVERS TO BE IN ACCORDANCE WITH BS 5135:1984 AND PART TO BE LOCATED IN TRAFFIC AREAS WHERE REINFORCED TO 400 GRN IN ALL OTHER LOCATIONS.

CAST CONCRETE SHALL BE STRENGTH TO PRODUCE A "FAIR" SURFACE WHERE EXPOSED AND SHALL HAVE A "SMOOTH" FINISH IN ALL OTHER LOCATIONS.

TYING OVER SHALL BE IN ACCORDANCE WITH DETAILS.

ALL MANHOLE COVERS TO BE: galvanised CLEAR OPENING IN ACCESSIBLE MANHOLE WITH A 2M CLEAR HAND AND GRID DIMENSION TO

Drainage Notes

Plot 1 DENOTES CHARACTER PLOT NUMBER
Ø.1.000 DENOTES COLLECTED CLEAR OF SWEEPED FLOOR LEVEL, NORMALLY 450mm ABOVE EXISTING GROUND LEVEL, max 1.000m HIGH
C.0.451 DENOTES EXISTING GROUND LEVEL

- 150mm Ø vent 1:150 c/w 35 PLASTIC FOUL WATER SEWER (Foul).
- 225mm DIP PIPE FOUL 1:150 c/w 35 vent. FOUL WATER PUMPING MAIN (Foul).
- 150mm Ø vent 1:150 c/w 35 vent. FOUL WATER DRAIN (PRIVATE).
- 150mm Ø 1:50mm Ø. 150mm Ø SURFACE WATER LINE DRAIN (PRIVATE).

- F.F. SOFFITH
- WATER MAIN / WATER / SERVICE ADAPTOR
- POLYPROPYLENE ACCESS CHAMBER TYPE 1 (PRIVATE) - FOUL
- POLYPROPYLENE MINI ACCESS CHAMBER TYPE 1 (PRIVATE) - FOUL
- POLYPROPYLENE ACCESS CHAMBER TYPE 1 (PRIVATE) - SURFACE WATER
- 1200mm Ø PRECAST CONCRETE MANHOLE (PRIVATE) - FOUL
- 1200mm Ø PRECAST CONCRETE MANHOLE (PRIVATE) - SURFACE WATER
- BIO-DISK/BALL UNITS - LARGE GENERAL PURPOSE PRE-FORMED BIO-DISK/BALL UNIT (SEE DETAILS)

POLYPROPYLENE ACCESS CHAMBERS (TYPE 1) TO BE DESIGN OF TO 1.5m BELOW
ALL CHAMBERS WITHIN ADOPTED AREAS TO BE CONSTRUCTED WITH CLASS B ENGINEERING BRICK, LAID IN HEADING BOND.
ALL CHAMBERS WITHIN GARDEN AREAS, DRIVEWAYS AND PARTS SUCH AS THESE SHALL BE CONSTRUCTED WITH 150mm THICK REINFORCED CONCRETE SURROUND.
ALL CHAMBERS WITHIN TURNING HEADS AND OTHER AREAS TO BE SUBJECT TO HEAVY LOADING SHALL BE CONSTRUCTED WITH 150mm THICK REINFORCED CONCRETE SURROUND.
WHERE CHAMBERS ARE WITHIN 1.5m OF ANY BUILDING AND THE DEPARTURE LEVEL OF THE CHAMBER IS MORE THAN 600mm BELOW ADJACENT BUILDING FOUNDATION LEVEL, A CLOSE FITTING PLUG OR CAP SHALL BE USED TO PREVENT ANY BACKFILL MATERIAL FROM ENTERING THE CHAMBER (PRIVATE ONLY).
DOMESTIC MANHOLE TO BE PVC-U TO BS EN 1401-1:1998 & BS 4660:2000.
150mm Ø DOMESTIC MANHOLE (see Note) TO BE LAID TO LEVEL AND PLASTER TRADE (1:4) (load class A 15 tonne) (see GRADIENT SPECIFICATION).
150mm Ø DOMESTIC MANHOLE (see Note) TO BE LAID IN PLASTER TRADE (1:4) (GRADIENT SPECIFICATION).

DRY POND (DENSE REEDS) at time of survey - Nov 2020
Base Area = 6808m² (after realignment work to accommodate new road)
soil infiltration in this area is 7.785b10-6mm so naturally soaks away.
No existing or proposed physical connection to "Ten Foot Drain"
high level overflow inflows from mini networks 1, 2, 3 & 4
could potentially contribute a maximum volume of
2057.7m³ for the 100 year plus 40% climate change event
which would equate to a maximum water depth of 30mm
with a 50% drain down time of 71 minutes.

Road 3 Dike Strip A
Chainage 122.40m - 298.40m
2.209x10-5ms infiltration rate.
trench width = 2000mm
trench depth = 900mm
Trench filled with Type 3 (5/20) granular sub base 150mm to 350mm
giving 30% voids to BS8301:2012:2002, lined with geotextile to
prevent migration of fines.
0.100 year + 40% climate change results.
fill depth = 827mm
50% drain down time = 2029 mins

Road 3 Dike Strip A
Chainage 122.40m - 298.40m
2.209x10-5ms infiltration rate.
trench width = 2000mm
trench depth = 900mm
Trench filled with Type 3 (5/20) granular sub base 150mm to 350mm
giving 30% voids to BS8301:2012:2002, lined with geotextile to
prevent migration of fines.
0.100 year + 40% climate change results.
fill depth = 827mm
50% drain down time = 32 mins

Table 1: Summary of soakaway results

Trial pit	Fill 1 (m/s)	Fill 2 (m/s)	Fill 3 (m/s)
TP1	$1.66x10^{-4}$ ms	$6.43x10^{-5}$ ms	$1.56x10^{-4}$ ms
TP2	$9.27x10^{-5}$ ms	$7.07x10^{-5}$ ms	$5.78x10^{-5}$ ms
TP3	$2.41x10^{-4}$ ms	$5.44x10^{-5}$ ms	$2.21x10^{-4}$ ms
TP4	$1.12x10^{-4}$ ms	$1.08x10^{-5}$ ms	$1.38x10^{-4}$ ms
TP5	No infiltration	No infiltration	No infiltration
TP6	No infiltration	No infiltration	No infiltration
TP7	$1.31x10^{-4}$ ms	$2.03x10^{-5}$ ms	$2.59x10^{-4}$ ms
TP8	$7.51x10^{-5}$ ms	$5.08x10^{-5}$ ms	$4.50x10^{-5}$ ms
TP9	$1.28x10^{-4}$ ms	$5.07x10^{-5}$ ms	$5.17x10^{-5}$ ms

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sheet 10 of 11 | sheet 9 of 11 | sheet 8 of 11
sheet 7 of 11 | sheet 6 of 11 | sheet 5 of 11
sheet 4 of 11 | sheet 3 of 11 | sheet 2 of 11 | sheet 1 of 11

Road Widths (including channel edgings)

Road No	Type	Referred Width (m)
1	1 way	Varies 5.50
2	1 way	Varies 5.50
3	1 way	Varies 5.50
4	1 way	Varies 5.50
4 (2)	2 way	Varies 5.50
4 (3)	2 way	Varies 5.50
5	1 way	Varies 5.50
6	1 way	Varies 5.50
7	1 way	Varies 5.50
8	1 way	Varies 5.50
10	2 way	Varies 6.00
11	1 way	Varies 5.50
12	1 way	Varies 5.50

DO NOT SCALE. USE FIGURED DIMENSIONS ONLY. CHECK ON SITE AND ALL DISCREPANCIES TO BE REPORTED TO HALL infrastructure DESIGN Ltd.

AMENDMENTS:

REF.	DESCRIPTION.	DATE.	BY.
A	Updated roads for submission to Boston Borough Council for planning condition discharge.	19.01.21	GW

CLIENT: Boston West Holiday Park Ltd

PROJECT: Boston West Golf Centre

TITLE: Road and Sewer Layout
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SCALE:	DATE:	SIZE:
1:250	November 2020	A0

DRAWING No:	DRAWN BY:	CHECKED BY:
2011/07-A		

HALL INFRASTRUCTURE DESIGN LTD.
Silverdale, 116 Humberston Avenue,
Humberston, N E Lincs, DN36 4SU
Tel: 01472 814137 Mob: 07891 503179
email: hall.design@btinternet.com
web: sites.google.com/site/hallinfrastructuredesign