HIGHWAYS PHASE 1 - VIEWPORT A

PERMANENT HIGHWAY OPTION

SURFACE WATER DRAINAGE

SCALE 1:500

PROPOSED ROAD 4
CL 57.651
IL 56.526
CL 61.995
IL 60.945
CL 60.681
IL 58.631
CL 58.638
IL 57.588
IL 57.513
CL 57.589
IL 56.433
IL 56.358
CL 56.371
IL 55.576
CL 56.883
IL 55.016
PROPOSED ROAD 2
CL 61.997
IL 60.947
CL 59.955
IL 58.905
CL 58.609
IL 57.559
IL 57.484
CL 57.724
IL 56.599
PROPOSED ROAD 1
CL 54.735
IL 53.525
CL 54.593
IL 53.403
CL 53.077
IL 51.960
CL 52.398
IL 51.348
CL 54.611
IL 53.420
CL 53.078
IL 51.828
IL 51.753
CL 52.441
IL 51.391
CL 57.297
IL 55.588
CL 56.974
IL 55.108
CL 54.734
IL 53.435
IL 53.360
OUTFALL
PIPE IL = 51.1
CL 51.375
IL 50.009
CL 50.515
IL 49.465
PROPOSED CONNECTION VIA NEW MANHOLE
ON EXISTING CULVERTED WATERCOURSE.
DISCHARGE RATE = 3l/s.
ESTIMATED IL = 49.755 m AOD
PROPOSED ROAD 3
CL 57.654
IL 56.505
IL 56.430
IL 56.355
CL 58.384
IL 57.334
FLOW CONTROL MANHOLE
ALLOWED DISCHARGE: 3 l/s
ATTENUATION TANK 1
MIN COVER LEVEL: 52.5m
TANK INVERT LEVEL: 51.1m
TANK DEPTH: 0.9m
STORAGE VOLUME REQUIRED: 900 m3
CL 47.027
IL 45.902
IL 45.827
CL 48.233
IL 47.108
CL 48.961
IL 47.911
IL 47.836
CL 48.233
IL 46.808
CL 50.144
IL 49.094
CL 49.154
IL 48.104
IL 48.029
CUT LINE 1

REFER TO SHEET BELOW

PROPOSED CONNECTION VIA EXISTING
MANHOLE ON CULVERTED WATERCOURSE.
PIPE TO BE LOCATED UNDER EXISTING
RAVESNTHORPE ROAD CUL-DE-SAC.
DISCHARGE RATE = 14 l/s.
SURVEY REQUIRED TO DETERMINE EXISTING
LEVEL (ASSUMED IL = 40.425 m AOD)
RAVENSTHORPE ROAD
EXISTING AREA OF ROAD TO
DRAIN TO EXISTING GULLIES.
GULLIES TO BE CLEANED AND
FLUSHED AS REQUIRED.
2 NEW GULLIES NEEDED IN
TEMPORARY ACCESS
EXISTING
HOUSING
CL 44.699
IL 41.284
CL 46.513
IL 45.773 (BD)
IL 45.087
IL 44.937
CL 46.435
IL 45.310
CL 47.027
IL 45.902
IL 45.827
CL 46.406
IL 45.281
BD
CL 46.873
IL 45.448
CL 46.569
IL 45.039
IL 44.889
CL 46.106
IL 44.804
CL 45.818
IL 44.693
CL 45.316
IL 42.320
FLOW CONTROL MANHOLE
ALLOWED DISCHARGE: 5.1 l/s
CL 44.872
IL 42.060
CL 44.7
IL 42.08
OUTFALL PIPE
IL 42.1
ATTENUATION BASIN 3
MIN COVER LEVEL: 44.0m
TANK INVERT LEVEL: 42.1m
TANK DEPTH: 1.4m
STORAGE VOLUME REQUIRED: 450 m3
INCOMING PIPE
IL = 42.777
EXISTING ROAD 2
CL 44.772
IL 43.282
CL 44.210
IL 42.812
CL 45.173
IL 43.740
CL 44.089
IL 43.075
INCOMING PIPE
IL = 42.925
CL 44.962
IL 43.789
CL 44.648
IL 43.150
IL 43.000
NEW GULLIES FOR DRAINAGE
OF JUNCTION UPGRADE
INCOMING PIPE
IL = 44.609
CL 45.015
IL 43.889
CARPARK DRAINS
TO SWALE
CL 45.797
IL 43.872
CL 44.345
IL 43.380
ATTENUATION TANK 2
MIN COVER LEVEL: 46.1m
TANK INVERT LEVEL: 43.87m
TANK DEPTH: 1.4m
STORAGE VOLUME REQUIRED: 365 m3
OUTFALL
PIPE IL = 43.9
FLOW CONTROL MANHOLE
ALLOWED DISCHARGE: 8.9 l/s
EXISTING ROAD 3
EXISTING ROAD 1
EXISTING AREA OF ROAD TO
DRAIN TO PROPOSED GULLIES
CL 48.961
IL 47.911
IL 47.836
CL 48.233
IL 47.108
CL 50.144
IL 49.094
CL 53.077
IL 51.960
CL 52.398
IL 51.348
CL 52.441
IL 51.391
CL 51.375
IL 50.009
CL 50.515
IL 49.465
CL 49.154
IL 48.104
IL 48.029
CUT LINE 1
CL 48.233
IL 46.808
PROPOSED ROAD 1
CL 47.023
IL 46.598
CL 46.406
IL 44.862
PROPOSED CONNECTION VIA NEW MANHOLE
ON EXISTING CULVERTED WATERCOURSE.
DISCHARGE RATE = 3l/s.
ESTIMATED IL = 49.755 m AOD
FLOW CONTROL MANHOLE
ALLOWED DISCHARGE: 3 l/s

HIGHWAYS PHASE 1 - VIEWPORT B

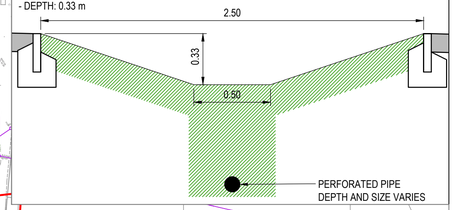
PERMANENT HIGHWAY OPTION

SURFACE WATER DRAINAGE

SCALE 1:500

SWALE SECTION - SCALE @1:20
- BASE WIDTH: 0.5 m
- TOP WIDTH: 2.5 m
- SIDE SLOPE: 1:3
- DEPTH: 0.33 m

CHECK DAMS ARE REQUIRED FOR
LONGITUDINAL SLOPES > 3%.



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CONSTRUCTION.

MAINTENANCE/CLEANING/OPERATION.

DECOMMISSIONING/DEMOLITION.

GENERAL NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS, DETAILS, SPECIFICATIONS AND REPORTS PREPARED AS PART OF THE PLANNING APPLICATION SUBMITTED IN SEPTEMBER 2021.
2. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
3. THE TOPOGRAPHICAL DATA IS BASED ON INFORMATION PROVIDED BY:
   - SILKSTONE SURVEY - DRAWING REFERENCE : 21056
   - SURVEY OPERATIONS - DRAWING REFERENCE : 19G064
   - ORDNANCE SURVEY DATA HAS BEEN USED FOR ADDITIONAL WIDER BACKGROUND CONTEXT.
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6. PIPES UNDER SWALES WILL BE PERFORATED. ELSEWHERE PIPES WILL BE SOLID WALL.
7. GULLIES WILL DRAIN TO SWALE

KEY

- PLANNING BOUNDARY
- EXISTING GAS MAIN
- EXISTING SURFACE WATER DRAINAGE

PROPOSED DRAINAGE

- SWALES
- WIDER MASTERPLAN SWALES
- CHECK DAMS ON ATTENUATION BASINS
- PIPES (Ø150)
- PIPES (Ø225)
- PIPES (Ø300)
- PIPES (Ø375)
- WIDER MASTERPLAN PIPES
- ATTENUATION BASINS
- WIDER MASTERPLAN ATTENUATION BASINS
- MANHOLE / INSPECTION CHAMBER
- WIDER MASTERPLAN MANHOLE / INSPECTION CHAMBER
- G GULLY
- BD BACKDROP

Rev	Description	Date	Iss'd	Rev'd	App'd

PLANNING

Project Stage

FOR INFORMATION

Status of Drawing

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Architect	BARTON WILLMORE
Project	DEWSBURY RIVERSIDE
Drg Title	HIGHWAYS PHASE 1 AND 2 HIGHWAYS DRAINAGE

Job No.	Scale@A1
0048206	1- 500

Drawn/Designed By.	Checked By.	Approved By.
KH	AH	AH

Drawing No. | Revision P07

10 5 0 10 20 30 40
1 : 500
SCALE BEFORE REDUCTION

Cameron Robinson P:\0048206 Dewsbury Riverside\06 Cities - Infra\01_Sheet\02_Highways\02_Detailed Design\DR-BH-XX-XX-DR-C-00-2170 P2 (Phase 1 Drainage) Tank Alternative.dwg