60.1m
DEARNE HALL ROAD
B 6428
Weir
River Dearne
Water Mill
Court
MILLERS INN
65
65a
67
69
71
83
87
114
118
130
142
MP .25
WATER LEVEL=52.45
BED LEVEL=52.23
WATER LEVEL=52.50
BED LEVEL=52.48
WATER LEVEL=52.50
BED LEVEL=52.42
NEW SURFACE WATER HEADWALL OUTFALL TO RIVER DEARNE WITH A RESTRICTED FLOW RATE OF 12.3LIT/SEC. RIGHTS TO CONSTRUCT SEWER OUTFALL THROUGH THIRD PARTY LAND TO BE GRANTED PRIOR TO WORK COMMENCING. INVERT LEVEL OF EXISTING SEWERS TO BE CONFIRMED ON SITE PRIOR TO WORK COMMENCING. ANY DISCREPANCIES TO BE REPOTED.
2 No. BOLLARDS ADDED TO END OF ROAD 1B. REFER TO HHA Drwg E14/6120/033-08 FOR DETAILS
EXISTING ACCESS TO BE RELAID TO SUIT NEW CHANNEL LINE
ACCESS MAINTAINED TO PUBLIC HOUSE
OVERHEAD CABLES
New Channel blocks
EXISTING CHANNEL LINE
FLOW CONTROL DEVICE 12.3lit/sec
ROAD 1
ROAD 1A
ROAD 1B
NEW GULLYS TO UTILISE EXISTING GULLY CONNECTIONS INTO EXISTING SEWER WHERE POSSIBLE
PROPOSED LINE OF ON-SITE ELECTRIC CABLE. TO BE CONFIRMED WITH STATUTORY AUTHORITY
TACTILE PAVED PEDESTRIAN CROSSING
Forward Visibility Splay
Sub Station
FLOOD ZONE
EXISTING PYLON
SECTION 278 LIMIT
Existing tree to be removed
Ø150mm Land Drain
150Ø Land drain to connect into existing 300Ø culvert
150Ø gully connection into existing 300Ø culvert with 3m easement, as agreed with BMBC
EXISTING 300Ø SW CULVERT
PROPOSED FOUL WATER SEWER TO CONNECT INTO EXISTING 300mm DIAM COMBINED SEWER. LOCATION AND INVERT LEVEL OF EXISTING MANHOLE TO BE CONFIRMED ON SITE PRIOR TO WORK COMMENCING ON SITE. ANY DISCREPANCIES TO BE REPORTED. *FOUL WATER SEWER NOT INCLUDED IN S278 WORKS*
POST & RAIL FENCING TO REAR OF PLATEAU REQUIRED WHERE EMBANKMENT IS GREATER THAN 1m HIGH
NEW FLOOD COMPENSATION AREA FORMED WITH 1:6 SLOPES, 0.6m MIN DEPTH, MIN 740m³ VOLUME REQUIRED.
N17/D10
N18
D11
N19
D12
N20
N21
D13
N22
D14
N1/D1
N23
N24
N25
S14
S15
S16
S17
S18
S19
S39
S40
F12
F13
F14
F15
New.G.
New Ped.G.
1/4 bank
+55.35
+55.30
+55.25
+55.20
+55.10
+54.90
408920N
408960N
409000N
409040N

1. ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "SEWERS FOR ADOPTION" 6th EDITION, YORKSHIRE WATER AND KITEMARKED.
2. MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS OR CLASS B 125 IN FOOTWAYS, PEDESTRIAN AREAS AND COMPARABLE LOCATIONS.
3. FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
4. YORKSHIRE WATER IS **NOT** OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUNOFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUNOFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARD TO THE DISPOSAL OF THE FILTER DRAIN/LAND DRAINAGE RUNOFF.
5. COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY YORKSHIRE WATER INSPECTOR. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME, A LOADING BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600x600mm FOR THE YORKSHIRE WATER SPECIFIED COVER SIZE. PLEASE REFER TO CONCRETE PIPE SYSTEMS ASSOCIATION (CPSA), 'TECHNICAL BULLETIN' ISSUED AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.
6. SULPHATE RESISTANT CEMENT AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
7. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
8. SEWERS MUST HAVE 5m CLEARANCE FROM TREES AND HEDGES.
9. SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED AND SURROUND). WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 900mm IN NONE VEHICULAR ACCESS AREAS) THEN A 175mm CONCRETECOVER SLAB WILL BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
10. ALL PIPEWORK 300mm DIAM. OR LESS TO BE VITRIFIED CLAY CONFORMING WITH BS 65. MINIMUM CRUSHING STRENGTHS TO BE AS FOLLOWS: 150mm DIA 40kN/m,
225mm DIA 45kN/m, 300mm DIA. 72kN/m.
11. ALL PIPEWORK 375mm DIAM. OR GREATER TO BE CONCRETE CLASS 120, 54kN/m MINIMUM CRUSHING STRENGTH.
12. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
13. YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE "C" BRICK MANHOLES AND 1050mm DIAM. MANHOLE RINGS. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIAM. OR 1500mm DIAM. RINGS, WITH THE OPENING SIGHTED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1-1.5m.
14. ALL HIGHWAY WORKS AND MATERIAL TO CONFORM WITH SOUTH YORKSHIRE SPECIFICATION.
15. GULLY COVER AND FRAMES SHALL BE D400 DUCTILE IRON AND COMPLY WITH EUROPEAN STANDARD BS EN 124. THOSE SIGHTED IN ACCESSWAYS AND MEWS COURTS MUST BE SUITABLE FOR USE IN PEDESTRIAN AREAS.
16. SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.

RISK ASSESSMENT: SIGNIFICANT RISKS THAT CANNOT BE DESIGNED OUT		
RISK	LEVEL OF RISK (H/M)	SUGGESTED ACTION
DEEP EXCAVATIONS ASSOCIATED WITH NEW DRAINAGE WORKS	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS
HANDLING LARGE DIAMETER MANHOLE RINGS AND CIRCULAR PIPES	HIGH	USE CORRECT LIFTING EQUIPMENT AND ENSURE OPERATIVES WEAR APPROPRIATE PROTECTIVE CLOTHING/HARD HATS/CORRECT PPE.
CONTACT WITH SEWAGE	MED	OPERATIVES TO USE CORRECT BREATHING EQUIPMENT/CORRECT PPE
NOISE	MED	OPERATIVES TO USE CORRECT EAR PROTECTION/CORRECT PPE
DRAINAGE EXCAVATIONS ADJACENT EXISTING BOUNDARY STRUCTURES	HIGH	ENSURE CORRECT SUPPORTS ARE PROVIDED TO TRENCHES AND BUILDINGS WHERE REQUIRED
DRAINAGE EXCAVATION IN PUBLIC HIGHWAY	HIGH	ENSURE CORRECT USE OF TRENCH SUPPORTS IN EXCAVATION AND SCREEN BARRIERS TO PROTECT MEMBERS OF THE PUBLIC
MAINTAIN ACCESS TO ADJACENT PROPERTIES AND OCCUPIERS	HIGH	ENSURE WORKS ARE PROTECTED WITH BARRIERS AND SIGNS TO GUIDE THE PUBLIC AWAY FROM THE WORKS
DRAINAGE EXCAVATIONS NEAR TO EXISTING SERVICES	HIGH	ENSURE WORKS ARE PROTECTED WITH BARRIERS AND SIGNS TO GUIDE MEMBERS OF THE PUBLIC AWAY FROM THE AREA
WORKING IN CONFINED SPACES. WORKING IN DRAINS AND MANHOLES	HIGH	CONFINED SPACES WORKING TRAINED PERSONNEL ONLY TO CARRY OUT WORKS UNDER A PERMIT TO WORK SCHEME IMPLEMENTED BY CONTRACTOR. GAS TESTING TO TAKE PLACE BEFORE ALL ENTRIES TO CONFINED SPACES.
WORKING IN HIGHWAYS / RISKS FROM VEHICLE AND PLANT	HIGH	ALL WORKS TO BE SIGNED AND FENCED FROM NORMAL VEHICULAR TRAFFIC. ALL WORKERS TO WEAR HIGH VISIBILITY CLOTHING. ALL PLANT TO HAVE VISUAL AND AUDIBLE WARNING SYSTEMS.
ROAD AND DRAINAGE CONSTRUCTION	HIGH	ALL EXCAVATIONS TO BE ADEQUATELY FENCED OFF AND SUPPORTED DURING CONSTRUCTION. ALL OPERATIVES TO BE TRAINED IN CORRECT METHODS OF LIFTING AND WORK IN ACCORDANCE WITH LOLER REGS
IT IS ASSUMED THAT WORKS ASSOCCIATED WITH THIS DESIGN WILL BE UNDERTAKEN BY A PERSON OR PERSONS WHO ARE COMPETANT AND HAVE THE REQUIRED LEVEL OF EXPERIENCE AND EXPERTISE		

PROPOSED SECTION 104 SURFACE WATER SEWER
PROPOSED SECTION 104 FOUL WATER SEWER
PROPOSED HIGHWAY DRAIN
EXISTING PUBLIC SEWER
NEW HIGHWAY GULLY & CONNECTION
DRAINAGE EASEMENT
FORWARD VISIBILITY SPLAY
PROPOSED EARTH BANKING
+0.00m PROPOSED ROAD / GROUND LEVELS
LOCATION OF NEW TRAFFIC SIGN
TACTILE PAVED PEDESTRIAN CROSSING
PROPOSED GRASSED AREA
VISIBILITY SPLAY
FLOOD ZONE
EXISTING SURVEY INFORMATION
PROPOSED ROAD ALIGNMENT
EXISTING HIGHWAY GULLY & CONNECTION
EXISTING HIGHWAY GULLY & CONNECTION TO BE REMOVED
+0.00m EXISTING SURVEY LEVELS
EXISTING SURFACE WATER
STREETNAME PLATES BMBC SPECIFICATION
PROPOSED LINE OF ON-SITE ELECTRIC CABLE
POST & RAIL FENCING TO REAR OF PLATEAU WHERE EMBANKMENT IS GREATER THAN 1m HIGH
PROPOSED BLOCK PAVING

Street Lighting Arrangement

Denotes 10M galvanised steel column with Aria 80LED complete with electronic PEC.

Denotes esisting column to be removed.

Denotes exisitng column with lantern change to AriaLED

All materials to comply fully with current BMBC Street Lighting Specification.

It is the responsibility of the developer to advise their clients of the location of street lighting columns relative to their property and to programme column installation works commensurate with property occupation.
Column positions may be adjusted slightly to suit site conditions and services, but must not normally be erected within 500mm of defined driveway boundaries.
BMBC will not enter into third party discussion on column positions, any such discussions will be carried out between BMBC and the developer.

The street lighting columns and lanterns and their maintenance remain the responsiblity of the developer until completion of the adoption process.

All lighting columns are to be provided with an unmetered single phase electricity supply via the REC cable network.
It is expected that the developer will coordinate with the REC regarding the installation of any cable ducts they may require.

REFER TO BMBC 'STREET LIGHTING ARRANGEMENT' 12.1/880 FOR DESIGN & SPECIFICATION

Revision	Date
Rev S. Amendments made to Roads 1A & 1B to suit BMBC comments & as built levels Double gully connection at chainage 580m amended to suit BMBC agreed comments.	26.07.17 HH
Rev R. 2no. gullys added to Road 1 - 1A junction as instruction by BMBC	13.06.17 HH
Rev P. Gully connections located near lighting columns D11 & N21 amended Gully & connection near D13 omitted.	05.06.17 HH
Rev N. Foul sewer amended to suit surveyed invert level (F15)	24.04.17 HH
Rev M. SWS updated to suit approved YW design	05.04.17 HH
Rev L. Proposed details approved by BMBC. 'Preliminary Issue' removed.	31.01.17 HH
Rev K. Directional arrows added, traffic signs repositioned and white lining amended to suit BMBC comments dated 10.11.16	11.11.16 HH
Rev J. Gully connection adjacent to lighting coloum D11, swept paths removed, key amended, plateau along Rd1 increased & bank levels amended to suit BMBC comments	04.11.16 HH
Rev H. On-site electric cable added, Proposed streetname locations added, Channel blocks added to Road 1B to suit BMBC comments dated 21.09.16	31.10.16 HH
Rev G. New gullys added to ch45m on Dearne Hall Road. Land drainage connection added. 0.5m Berm added to back of footpath. Additional road signs added to front of no. 87 & 93 Dearne Hall Road.	28.09.16 HH
Rev F. Sub station added to suit latest planning layout. Gullys amended to new link road.	20.09.16 HH
Rev E. BMBC street lighting arrangement added to layout	30.08.16 HH
Rev D. Proposed drainage amended to suit full on-site design. Amendments made to suit BMBC comments dated 02.06.16	17.08.16 HH
Rev C. Amended to suit BMBC requirements for the Section 278 works	01.06.16 HH
Rev B. Proposed road & sewer details amended. Long Sections removed	27.10.15 HH
Rev A. SWS outfall connection amended. Highway alignment amended to suit BMBC	15.10.15 HH

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Client
BARRATT DAVID WILSON HOMES

Project
LOW BARUGH

Detail
PROPOSED JUNCTION ENGINEERING LAYOUT
(located near Millers Inn, Dearne Hall Road)

Dwn	Chkd	Date	Scale	Dwg No.
HH		DEC-14	1:250 @A0	E14/6120/033-01S