1. ALL ADOPTABLE SEWER WORKS AND MATERIALS TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE (CODE FOR ADOPTION), THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARD/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SW PUMPING STATIONS AND KITEMARKED ADDENDUM TO THE MECHANICAL AND ELECTRICAL: SPECIFICATION AND KITE MARKED.

2. MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND CLASS D400 TO BS EN 124 WITH A 150mm DEEP FRAME IN HIGHWAYS.

3. CONTRACTOR TO ESTABLISH POSITION SIZE AND DEPTH OF ALL EXISTING SEWERS AND SERVICES PRIOR TO COMMENCEMENT ON SITE.

4. THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT, AND TEMPORARY AND PERMANENT DIVERSION WORKS, AS NECESSARY TO ALL EXISTING SERVICES.

5. THE CONTRACTOR SHALL ALLOW FOR ALL TRAFFIC MANAGEMENT IN CONNECTION WITH ROAD AND SEWER WORKS.

6. THE CONTRACTOR SHALL ALLOW FOR KEEPING SEWER TRENCHES AND EXCAVATIONS AS DRY AS PRACTICABLE BY PUMPING FROM TEMPORARY SUMPS AND DE WATERING AS APPROPRIATE. THE POINT AND METHOD OF DISCHARGE TO BE AGREED WITH THE DRAINAGE AUTHORITY.

7. PIPES UP TO AND INCLUDING 300mmØ TO BE TWIN WALLED PLASTIC PIPES. PIPES 375mmØ AND GREATER TO BE CONCRETE CLASS H.

8. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERBS FACES AND SERVICE MARGINS.

9. SEWERS MUST HAVE 5 METERS CLEARANCE FROM TREES AND HEDGES OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT.

10. ADOPTABLE PLASTIC SWER PIPES TO BE KITEMARKED (CERTIFIED TO WIS 4-35-01 AND BS EN 13476)

11. COVER SLABS MUST CARRY THE BSI KITE MARK OR WILL BE REJECTED BY YORKSHIRE WATER INSPECTOR. WHERE THE CLEAR OPENING OF THE KITE MARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME A LOAD BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600mmx600mm FOR THE YORKSHIRE WATER SPECIFIED COVER SIZE. PLEAS REFER TO CONCRETE PIPE SYSTEMS ASSOCIATIONS TECHNICAL BULLETIN ISSUED AUTUMN 2004 FOR KITE MARKED COVER SLAB OPENING SIZES.

12. SULPHATE RESISTING CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY..

13. GULLY GRATES AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN124 AND BE OF A NON-ROCKING DESIGN WITH CAPTIVE HINGE ACCESS AND BE KITE MARKED. LOAD CLASS D400 FOR ROADS REGULAARLY CARRYING FAST MOVING HEAVY VEHICLES. CLASS C250 TO BE USED IN LESSER TRAFFICKED AREAS eg. ESTATE ROADS, CUL-DE-SACS, RESIDENTIAL CAR PARKING AREAS ETC.

14. SEWERS TO BE LAID IN CLASS 'S' BEDDING (150MM GRANULAR BED AND SURROUND WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THA1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 0.9m IN NONE VEHICULAR ACR ACCESS AREAS) THEN A CONCRETE SLAB SHALL BE PROVIDED ABOVE THE GRANULAR BED AND SURROUND

15. BACKFILLING AND REINSTATEMENT TO TRENCHES IN PUBLIC HIGHWAYS SHALL BE TYPE 1 GRANULAR MATERIAL IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE ADOPTING AUTHORITY. OR, IN THE ABSENCE OF SUCH, IN ACCORDANCE WITH THE REQUIREMENTS OF "THE STREET WORKS REGULATIONS 1992" AND RELEVANT PROVISIONS OF H.A.U.C. "SPECIFICATION FOR THE REINSTATEMENT OF OPENINGS IN HIGHWAYS" JUNE 1992, BOTH UNDER SECTION 71 OF THE NEW ROADS AND STREET WORKS ACT 1991.

16. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENTS OF WATER INDUSTRY SPECIFICATION 4-08-02(TABLE A2)

17. ALL ROAD GULLIES ARE TO BE TRAPPED GULLIES. ALL GULLY LEADS TO BE 150mm DIAMETER.

18. ALL REDUNDANT EXISTING DRAINAGE TO BE GRUBBED UP OR GROUTED, ANY EXISTING LIVE DRAINAGE SHOULD BE REPORTED TO THE ENGINEER AND RECONNECTED.

19. ALL ROAD GULLIES & LEADS TO BE CLEARED OF DEBRIS UPON COMPLETION OF WORKS.

20. THE CONTRACTOR MUST ENSURE THAT ANY OF THE EXISTING DRAINAGE WHICH IS LIVE IS KEPT CLEAR OF DEBRIS AND SHOULD ALLOW FOR JETTING THROUGH THE NEW & EXISTING DRAINAGE UPON COMPLETION.

21. CONTRACTOR TO TAKE MEASURES TO PROTECT HIS OPERATIVES WITH RESPECT TO THE PRESENCE OF GAS IN SEWER TRENCHES AND MANHOLES THROUGH THE USE OF GAS MONITORING EQUIPMENT AND BREATHING APPARATUS AS REQUIRED.

22. CONTRACTOR TO APPLY FOR SEWER PERMITS AND ROAD OPENING PERMITS AS NECESSARY FROM THE APPROPRIATE AUTHORITIES, PRIOR TO COMMENCING WORKS.

23. YORKSHIRE WATER IS NOT OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE SYSTEM (DIRECTLY OR INDIRECTLY). AND ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY LAND DRAINAGE SECTION WITH REGARD TO DISPOSAL OF THE FILTER/LAND DRAINAGE RUN OFF.

24. FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.

25. 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.

26. THERE MUST BE ENOUGH CLEARANCE AT CROSSOVER TO ACCOMMODATE BEDDING TO BOTH PIPES, APPROX 300mm. IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY BE INCREASED.

27. YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE C BRICK MANHOLES AND 1050mm DIAMETER MANHOLE RINGS. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE B MANHOLE WITH 1200mm DIAMETER OR 1500mm DIAMETER RINGS WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1-1.5m.

28. WHERE A B125 COVER AND FRAME HAS BEEN APPROVED THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.

29. EXISTING MANHOLES WILL NEED TO BE INSPECTED BY A YORKSHIRE WATER INSPECTOR TO ENSURE IT CAN ACCOMMODATE THE PROPOSED CONNECTION AND TO CHECK IF ANY REMEDIAL WORKS ARE REQUIRED (IT MAY BE NECESSARY TO RECONSTRUCT THE MANHOLE AT YOUR CLIENT'S EXPENSE)

UPVC PIPES TO BE CERTIFIED TO WIS 4-35-01 and BSEN13476

CLAY PIPE STRENGTH REQUIREMENTS
100mm DIA. MINIMUM CRUSHING STRENGTH = 40kN/m
150mm DIA. MINIMUM CRUSHING STRENGTH = 40kN/m
225mm DIA. MINIMUM CRUSHING STRENGTH = 45kN/m
300mm DIA. MINIMUM CRUSHING STRENGTH = 72kN/m

CONCRETE PIPE TO EN 1916/BS5911-1:202
STRENGTH REQUIREMENTS
ALL CONCRETE PIPES SHOULD BE CLASS 120 (TO EN 1916/BS5911-1 2002)

C-1001
C-1002
KEY PLAN
HALIFAX ROAD
HIGHMOOR LANE
ROAD 1
ROAD 2
2m SERVICE MARGIN
EXMH0501 CL158.16 IL156.60(r)
EXMH1601 CL157.64 IL153.84(r)
EXMH1502 CL156.01 IL153.21(r)
EXMH1501 LOCATED FROM RECORDS
EXMH2603 CL156.13S IL153.46(r)
EXMH1 CL156.64 IL152.34(r)
EX 300Ø CW
EX 225Ø SW
EX 150Ø FOUL
EX 225Ø FOUL
EX 300Ø FOUL
EX 150Ø CW (TAKES FROM PRECOSS)
EX 225Ø CW (TAKES FROM EXISTING MANHOLE)
NEW SW CONNECTION INTO EXISTING MANHOLE 2603. EXISTING ARRANGEMENT IN MH TO BE CONFIRMED FOLLOWING SURVEY. CONNECTION SUBJECT TO A SECTION 106 APPLICATION TO BE MADE BY THE CONTRACTOR.
FLOW RESTRICTED IN MANHOLE S0 WITH HYDROBRAKE HEAD 2.15m MAX FLOW 3.5 l/s REF CTL-SHE-0075-3500-2150-3500
EXISTING SERVICE LOCATION BEFORE HIGHWOOR LANE TO BE CONFIRMED FINAL OUTFALL LOCATION
NEW MANHOLE CONSTRUCTED ON EXISTING COMBINED SEWER. SECTION 106 SEWER CONNECTION APPLICATION TO BE SUBMITTED BY CONTRACTOR.
BIRCH HALL CLOSE
ASHLEA MOORSIDE
FFL 157.85
FFL 157.80
FFL 157.50
FFL 157.45
FFL 157.40
FFL 157.30
FFL 157.20
FFL 157.00
FFL 156.90
FFL 156.80
FFL 156.70
FFL 156.60
FFL 156.50
FFL 156.40
FFL 156.30
FFL 156.20
FFL 156.10
FFL 156.00
FFL 155.90
FFL 155.80
FFL 155.70
FFL 155.60
FFL 155.50
FFL 155.40
FFL 155.30
FFL 155.20
FFL 155.10
FFL