



- NOTES**
- Manholes, sewers etc. and any other part of the works intended for adoption under a Section 104 Agreement or gullies etc. intended for adoption as Highway Drainage are to be constructed in accordance with the W.A.A specification "Sewers for Adoption" 6th Edition, and to any requirements of the Adopting Authority and the Local Council.
  - Unadopted FW and SW Drainage is to be constructed in accordance with the Building Regulations Part H, BS EN 752:2008 and relevant Agreement Certificates.
  - All private drainage to be 100mmØ unless indicated otherwise. All connections from private to adoptable manholes/sewers to be 150mmØ (min).
  - Private drainage with less than 0.9m of cover in drives and car parking areas to have minimum 150mm concrete bed and surround.
  - Private Drains are to be constructed using flexibly-jointed vitrified clay pipes to BS 65 "Super Strength" specification and BS EN 295 (e.g. Hepworth SuperSleeve or similar) or PVCu Building Drainage system pipe work to EN 1401-1, bedded and back filled in accordance with the manufacturers instructions and the specifications listed in Note 2.
  - Backfilling of drain trenches adjacent to dwellings or other structures to be in accordance with section 2.25 and diagrams 7 and 8 of the Building Regulations Part H.
  - Access fittings and inspection chambers less than 1m deep are to be clayware or pre-formed polypropylene as appropriate to the depth and number of connections. Chambers greater than 1.2m deep are to be of pre-cast concrete construction with 150mm in-situ concrete surround, or polypropylene reduced access system. Inspection chamber sizes are to be in accordance with Table 8 of BS.8301.
  - Cover levels indicated on the drawing are nominal and may be adjusted to suit finished ground levels as necessary. Private inspection chamber covers should be Grade B in areas accessible to wheeled vehicles and Grade C elsewhere.
  - Rainwater down pipes to be connected direct to drain using an appropriate adaptor and removable section of down pipe to permit rodding access.
  - Where drains pass through foundations or other rigid structures, a limel or sleeve is to be used and provision for flexibility is to be made with "rocker pipes".
  - The positions of SVPs, stub-stacks, W.C. outlets etc. and rainwater down pipes are to be accurately located from the house-type working drawings.
  - Gullies situated in areas accessible to wheeled vehicles are to be of suitable construction. For communal parking areas refer to the detail shown on ID Civils Design Ltd Highway Construction Details Drawing.
  - Drains within areas of "made ground" to be constructed by first making up the area to approx. finished level and then excavating through the fill material into undisturbed ground. The drain trench is then to be back filled to formation level using suitable granular fill material well-compacted in layers not exceeding 225mm.
  - Drains to be constructed under dwellings with suspended floor slabs should either be installed using a proprietary hanger system where "beam and pot" or similar construction is used, or should be cast into local slab thickening where reinforced concrete ground slabs are to be poured in-situ.
  - Finished ground levels have been prepared assuming that the level threshold to the building, in accordance with part W of the building regulations, is at the front of the property unless otherwise stated.
  - For all details of fences/walls and enclosures refer to the architect for details.

**Health and Safety Notes/CDM Regulations 2015**

In line with the above regulations we are obliged to inform the Contractor of the abnormal risks that may be encountered in the construction of these works. As part of the design process all the relevant health & safety aspects are given full consideration and these are observed within the design. Although considerable effort is undertaken to eliminate risks, the very nature of the project gives rise to some hazards and risks.

Significant risks that cannot be eliminated by design and could not be foreseen by a competent contractor are noted in the risk assessment boxes on the drawings.

**LEGEND**

- Existing combined sewer.
- Proposed foul water manhole and sewer.
- Proposed foul water lateral and demarcation manhole.
- Proposed foul water rising main.
- Proposed surface water manhole and sewer.
- Proposed surface water lateral and demarcation manhole.
- Proposed highway drainage gully.
- Proposed surface water inspection chamber and invert level.
- Proposed rainwater down pipe.
- Proposed rodding eye.
- Proposed ACO channel drain.
- Proposed dish channel and gully.
- Proposed surface water back drop.
- Proposed rainwater butt connected to downpipe and surface water drain.
- Proposed foul water inspection chamber and invert level.
- Proposed foul water access chamber, max. 0.6m deep.
- Proposed soil vent pipe/back inlet gully.
- Proposed foul back drop.
- Proposed Geowall retaining wall (1.0m max. height).
- Proposed Georock retaining wall (1.0 - 2.0m height).
- Proposed additional facing bricks below F.F.L.
- Proposed F.F.L. level.
- Proposed ground level.
- Existing ground level.
- Proposed street lighting.

CONSTRUCTION RISKS		
CONSTRUCTION RISKS	MAINTENANCE RISKS	DEMOLITION RISKS
Collapse of excavations.		No future abnormal demolition risks associated with Roads and Sewers.
Un-charted buried existing services.		
Working on live sewers.		
Working adjacent to the public highway.		
Working within existing watercourses.		

In addition to the hazards/risks normally associated with this type of work detailed on this drawing take note of the above. ID Civils Design are only required to provide information about any significant risks associated with the design.

Rev	Description	By	Date
Client:			

**Barratt Yorkshire West**

Project Title:  
**Well House Lane, Penistone**

Drawing Title:  
**External Works Levels Sheet 7**

Scale	Date	
1:250 @ A1	14.07.21	
Drawing No	Revision	Status
4619-C-D1-12	0	Approval

**Geo Structures Civils**

**ID Civils Design Consulting Engineers**

**North East & Yorkshire:**  
Aske Stables, Aske, Richmond,  
North Yorkshire, DL10 5HG  
T: 01748 889015  
F: 01565 740263

**North West & Midlands:**  
Caledonian House,  
Tatton Street, Knutsford,  
Cheshire, WA16 6AS  
T: 01565 755557  
F: 01565 740263