

Residential Development off  
Bolton on Dearne, Phase 3 development

Drainage Statement

# Residential Development off Lowfield Road, Bolton on Dearne Phase 3

## **Drainage Statement**

Gleeson Developments Limited intends to construct a new residential development on the land comprising 97 dwellings. There is to be a mixture of detached and semi-detached type properties. The development will be served by new estate roads and sewers which will be offered for adoption by Barnsley Metropolitan Borough Council and Yorkshire Water respectively.

## **Site Description**

The site is located immediately to the south east of the current Gleeson Homes residential estate off Lowfield Road National Grid Reference 446109,402326 and comprises a single piece of land approximately rectangular in shape with an area of approx. 2.6ha.

The site is bounded by the existing Gleeson Phase 1 estate to the North West the new Gleeson Phase 2 site to the West. Existing residential properties on Lowfield Grove to the North, open green field farm land to the East and Lowfield Lodge and fishing ponds to the South.

## **Existing Drainage**

There are no public sewers within the development however there is a combined water rising main running along the Western and Southern boundaries of the site. There is also public foul and surface water sewers located within Lowfield Meadows and the adjacent Gleeson Homes phase 2 development. The sewers within the phase 2 site are the subject of a section 104 agreement and will therefore be adopted by Yorkshire Water.

The site has previously been undeveloped and remains farmland.

## **Ground Conditions**

We have undertaken a Stage 1 and Stage 2 intrusive ground investigation to determine the nature of the ground conditions. This investigation has identified that the soils are generally topsoil over Gravelly Sand occasionally clayey natural soils over moderately strong sandstone.

Following infiltration testing these ground conditions are confirmed not to be suitable for soakaway installation.

The sites slopes gradually from north west to south east at a steady gradient averaging 1:35.

## **Development Proposals**

The development proposals have been assessed and we are in discussion with Yorkshire Water the Land Drainage Board and the EA over the most acceptable point of connection and discharge rates.

It is intended to construct a new foul water drainage system to convey flows to the previously installed section 104 sewers from phase 1. Part of this drainage system may need to be pumped due to the site topography.

The surface water flows from the site will be restricted to the agreed discharge rates and attenuated on site.

It is intended to discharge surface water to Lowfield Lakes or directly to the River Dearne subject to agreement by the regulators and obtaining a satisfactory consent to discharge.

## **Conclusion**

A residential development comprising 97 dwellings is to be constructed. It will be served by new estate roads and have a separate system of foul and surface water drainage. The drainage system will incorporate a foul drainage system and attenuation on site to cater for restricted discharge of surface water, both of which are to be offered for adoption by the Water Authority.

Appendix A – Existing sewer records.

ATKINS CHECKED

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## YORKSHIRE WATER PROTECTION OF MAINS AND SERVICES

1. The position of Yorkshire Water Services Ltd (YWS) apparatus shown on the existing mains record drawing(s) indicates the **general** position and nature of our apparatus and the accuracy of this information cannot be guaranteed. Any damage to YWS apparatus as a result of your works may have serious consequences and you will be held responsible for all costs incurred. Prior to commencing major works, the exact location of apparatus must be determined on site, if necessary by excavating trial holes. The actual position of such apparatus and that of service pipes which have not been indicated must be established on site by contacting the Customer Helpline on 0845 124 24 24 for both water and sewerage.
2. The public sewer and water network is lawfully retained in its existing position and the sewerage and water undertaker is entitled to have it remain so without any disturbance. The provisions of section 159 of the Water Industry Act 1991 provides that the undertaker may "inspect, maintain, adjust, repair or alter" the network. Those rights are given to enable the undertaker to perform its statutory duties. Any development of the land or any other action that unacceptably hindered the exercise of those rights would be unlawful. The provisions contained in Section 185 of the Water Industry Act 1991 state that where it is reasonable to do so, a person may require the water supply undertaker to alter or remove a pipe where it is necessary to enable that person to carry out a proposed change of use of the land. The provisions contained in Section 185 also require the person making the request to pay the full cost of carrying out the necessary works.
3. Ground levels over existing YWS apparatus are to be maintained. Sewers in highways will **generally** be laid to give 1200mm of cover from finished ground level working to kerb races, other permanent identification of the limits of the road or to an agreed line and level. Substantial increases or decreases to this 1200mm depth of cover will result in the sewer being re-laid at your expense. Water mains and services will **generally** be laid with a minimum of 750mm depth of cover however some mains and services usually those installed over 50 years ago may have less ground cover.
4. If surface levels are to be decreased / increased significantly the effects on existing water supply apparatus will be carefully considered and if any alterations are necessary, the costs of the alterations will be recharged to you in full. Outlets on fire hydrants must be no more than 300mm below the new levels and all surface boxes must be adjusted as part of the scheme.
5. To enable future repair works to be carried out without hindrance; any pipe, cable, duct, etc. installed parallel to a water main or service pipe should not be installed directly over or within 300mm of a water main or service pipe or 1000mm of a waste water asset. Where a pipe, cable, duct, etc. crosses a main or service it should preferably cross perpendicular or at an angle of no less than 45° and with a minimum clearance of 150mm. These requirements apply to activities within an existing highway and are relevant to the installation of pipes, cables, ducts, etc. up to and including 250mm in diameter (*see illustration below*). Necessary protection measures for installations greater than 250mm in diameter and/or in private land will need to be agreed on an individual basis. Installations within a new development site must comply with the National Joint Utilities Group publication Volume 2: NJUG Guidelines On The Positioning Of Underground Utilities Apparatus For New Development Sites.
6. All excavation works near to YW apparatus should be by hand digging only.
7. Backfilling with a suitable material to a minimum 300mm above YW apparatus is required.
8. Adequate support must be provided where any works pass under YW apparatus.
9. Jointing chambers, lighting columns and other structures must be installed in such a way that future repair or maintenance works to YW apparatus will not be hindered.
10. Apparatus such as; railings, sign posts, etc. must not be placed in such a way that they prevent access to or full operation of controlling valves, hydrants or similar apparatus. YWS surface boxes must not be covered or buried. Any adjustment, alteration or replacement of manhole covers must be agreed on site prior to the commencement of the works with a YWS Inspector who may be contacted via our Call Centre on 0845 124 24 24.
11. Explosives shall not be used within 100 metres of any Yorkshire Water Services apparatus or installations.
12. Vibrating plant should not be used directly over any apparatus. Movement or operation by vehicles or heavy plant is not to be permitted in the immediate vicinity of YWS plant or apparatus unless there has been prior consultation and, if necessary, adequate protection provided without cost to YWS.
13. **Under no circumstances** should thrust boring or similar trenchless techniques commence until the actual position of the Company's mains/services along the proposed route have been confirmed by trial holes.
14. Any alterations to the highway should be notified following the procedures outlined in the New Road and Street Works Act 1991 Code of Practice; Measures Necessary Where Apparatus Is Affected By Major Works (Diversionary Works).

15. You will be held responsible for any damage or loss to YWS apparatus during and after completion of work, caused by yourselves, your servant or agent. Any damage caused or observed to YWS plant or apparatus should be immediately reported to YWS. Should YW incur any costs as a result of non-compliance with the above, all costs will be rechargeable in full.
16. You should ensure that nothing is done on the site to prejudice the safety or operation of YWS employees, plant or apparatus.
17. In accordance with the New Roads and Street Works Act 1991, Chapter 22, Part 3, Section 80. The location of any identified YW asset *"which is not marked, or is wrongly marked, on the records made available"* should be communicated back to Yorkshire Water. The location of the apparatus should be identified on copies of the supplied plans which should be returned to Yorkshire Water (Asset Records Team) with photographic supporting evidence where possible.
18. The Government has decided that responsibility for private sewers serving two or more properties and lateral drains (the section of pipe beyond the boundary of a single property, connecting it to the public sewer) will be transferred to the water companies on Oct 1 2011. Private pumping stations will also transfer during the period 1 October 2011 – 1 Oct 2016. Records of these assets may not yet be shown on the existing mains record drawing(s). If you encounter any of these assets you must inform Yorkshire Water Services Ltd (YWS).
19. Please note that the information supplied on the enclosed plans is reproduced from Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number 1000019559.
20. This information is for guidance only and the position and depth of any YW apparatus is approximate only. Likewise, the nature and condition of any YW apparatus cannot be guaranteed. YW has no responsibility for recording the locations of privately owned apparatus. As of 1 October 2011, there may be some lateral drains and/or public sewers which are not documented on YW records but may still be present. For the avoidance of doubt, this information is not a substitute for appropriate professional and/or legal advice. YW accepts no responsibility for any inaccuracy or omissions in this information. The actual position of YW apparatus must be determined on site by excavating trial holes by hand. YW requires a minimum of two working days' written notice of the intention to excavate any trial holes before any excavation can be undertaken. If there are any queries in this respect please contact Yorkshire Water on 0845 124 24 24.



445658 : 40176



**YorkshireWater**





Map Name : SE4502SE

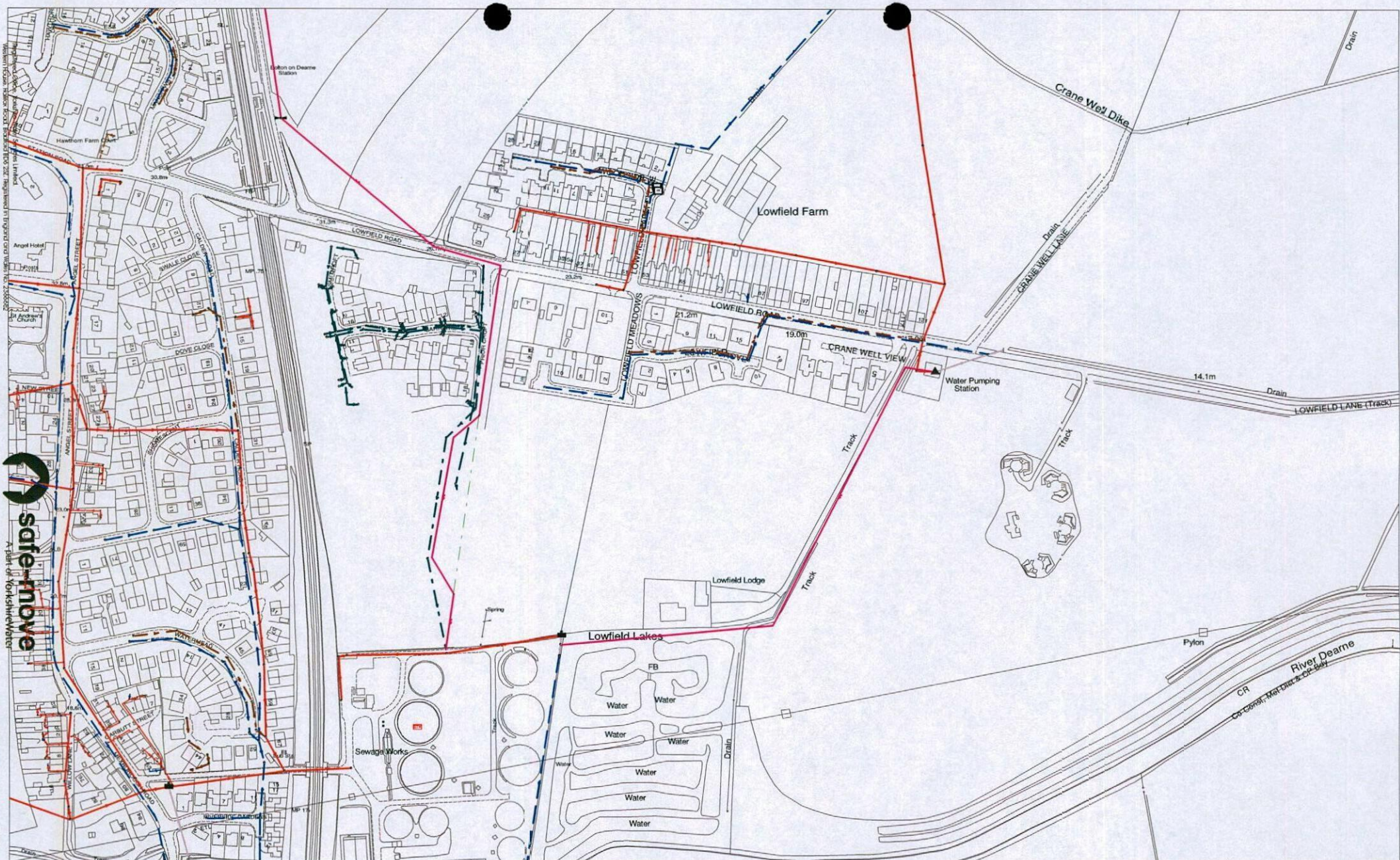
Yorkshire Water,  
PO Box 500,  
Halifax Road,  
Bradford BD6 2LZ  
Contact Name :  
Ms H Webster  
Contact Tel :


Title

Notes













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Partial Key		The position and depths of apparatus shown on this plan are approximate only. The exact positions and depths should be obtained by excavation trial holes.
Water mains up to 4" in diameter		
Water mains over 4" in diameter		
Raw water mains		
Private water mains		Scale : 1:2500
Dwg No :		Maris No :
Date Pltq :	25/09/2014, 09:23:47	Date Gen : 25/09/2014, 09:20:48
Source :	Water network Enquiry	









<p>UPN: Undefined</p> <p>Originator: H Webster, Safe Move,</p>	<p>445658 : 4C2176</p>  <p>YorkshireWater</p>	<p>Map Name : SE4502SE</p> <p>Yorkshire Water, PO Box 500, Halifax Road, Bradford BD6 2LZ Contact Name : Me H Webster Contact Tel :</p>	<p>Title</p> <p>Notes</p> <p>(c) COPYRIGHT STATEMENTS: Reproduced by permission of Ordnance Survey on behalf of HMSSO © Crown copyright and database 2004. All rights reserved Ordnance Survey Licence number 100019559</p>	<p>PartialKey</p> <p>Foul Sewer = F Combined Sewer = C Surface Water Sewer = SW Track Sewer = TD Partially Separated = PS</p> <p>Date Feq : 25/09/2014, 09:21:14</p> <p>Source : Sewer Network Enquiry</p>	<p>This plan is furnished as a general guide only and no warranty as to its correctness is given or implied. This plan must not be relied upon in the event of excavations or other works made in the vicinity of public sewers. No house or property connections are shown.</p> <p>Date Gen : 25/09/2014, 09:21:15</p>
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## Sewer Legend

	Combined Sewer		S24 Combined Sewer
	Surface Water Sewer		S24 Surface Water Sewer
	Foul Sewer		S24 Foul Sewer
	Section 104 Sewer		Public Rising Main
	Pumping Station		Abandoned Sewer
	Public Sewage Treatment Works		Syphon Sewer & Vacuum Sewer
<b>+</b>			Property Identifier

## Water Legend

	Water Main 4" and below
	Water Main 4" and above
	Raw Water Main
	Private Water Main
	Fire Hydrant
	Pumping Station