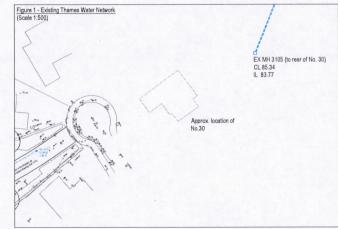


- The British Geological Survey map indicates that the site is underlain by London Clay with permeable sands and gravels present to the west of the site. The Strategic Flood Risk Assessment for Welwyn Hatfield Borough Council (WHBC) indicates that the sands and gravels are River Terrace Deposits.
- 2. Although WHBC has indicated that soakaways are not always effective in this area due to the presence of clay, a drainage survey carried out by AB Pipelines (Reference AB 2533) was unable to locate any surface water sewers or manholes from the existing property, suggesting soakaways may be present.

PROPOSED SURFACE WATER DRAINAGE

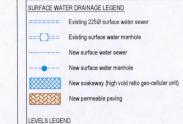
- 1. In accordance with Building Regulations (Part H), the preferred option for discharge of surface water is infiltration. It is proposed that clean not funoff will be directed to high void ratio geo-cellular soakways designed in accordance with BRE 365, to be at least 5m from dwellings and accommodate up to the 1m 100 + 30% storm event. The soakways shown have been sized up using a rate of 1.0 x 10.7 m/s to represent poor permeability.
- Surface water runoff from private parking areas will infiltrate to ground via permeable paving and runoff from the
 adopted road will drain to a highway soakaway. Further consultation should be undertaken with the SuDS Approving
 Body (SAB) to establish whether a high void ratio geo-cellular soakaway meets adoptable standards.
- A Site Investigation should be carried out in due course to confirm the geology and establish whether suitable soakage rates can be achieved.
- 4. If infiltration is not feasible, the alternative is to connect to public sewers.
- 5. The cul-de-sac at the end of Kingsmead fronts the development and Thames Water (TW) records indicate that an existing 225mØ surface water sewer is located to the rear of No. 30 (as shown in Figure 1). TW has suggested that MH 3105 may pick up road drainings from the cul-de-sac and other properties, but that there is no record of this. On-site demollition works will be required to confirm a connection from the existing property to Manhole 3105, prior to the detailed design stage.
- 6. The surface water drainage strategy will be designed to accommodate runoff for up to the 1 in 100 + 30 storm event ensuring that there is no increased flood risk both on and off site.



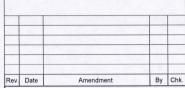
- 1. Where this drawing has been issued in electronic .dwg format it has been done so in good faith. jnggroup do not take any responsibility for any inaccuracies in the electronic data, which should be checked against the paper (or .pdf) drawing issue. Any apparent discrepancies should be immediately reported to inprorup. The electronic .dwg file should not be assumed to be to scale and should not be used for 'overlaying,' setting out or checking of any third party information. All dimensions should be taken from the paper (or .pdf) version of the drawing. Electronic drawings may contain third party information. Inpgroup take no responsibility for this information, which should be checked against the originators paper drawing(s).
- 2. All working dimensions to be checked on site.
- Any discrepancies between drawings of different scales, and between drawings and specification where appropriate to be notified to The Engineer for decision.
- Copyright reserved. This drawing may only be used for The Client and location specified in the title block. It may not be copied or disclosed to any third party without the prior written consent of jnpgroup.
- This drawing should only be used for construction if the drawing status is "Construction", inpgroup take no responsibility for construction works undertaken to drawings which are not marked with this change. with this status.

Health and Safety Note:
The details on this drawing have been prepared on the assumption that a competent contractor will be carrying out the works. If the contractor(s) considers that there is insufficient Health and Safety information on this drawing, this should immediately be brought to the attention of the designer.

fulfil their obligat	ions under the CDM F	Regulations 2007
Construction Hazard	Maintenance / Cleaning Hazard	Demolition / Adaption Hazard



+ 88.52 Existing site levels



×89.40 Proposed site levels (as per Architect's drawing)

Preliminary



nam • Brighouse • Learnington Spa • Sheffield • Tees Tel: 01494 771221 E-mail: southern@jnpgroup.co.uk



C82880-SK-001