Our Ref: SB/007/001/006 6 January 2011

DETERMINATION OF COMPLIANCE WITH REQUIREMENT H4 (BUILDING OVER SEWERS) IN PART H (DRAINAGE AND WASTE DISPOSAL) OF SCHEDULE 1 TO THE BUILDING REGULATIONS 2000 (AS AMENDED), IN RESPECT OF A PROPOSED EXTENSION

The proposed work and question arising

- 4. The papers submitted indicate that the site to which this determination relates is a narrow plot currently occupied by a detached three bedroom, two storey house, with a single flat-roofed garage constructed between the east flank of the house and the eastern site boundary adjacent to a footpath. Opposite the garage, on the other side of the footpath which at this point is approximately 3.2m wide, is a two storey gable wall of a neighbouring house.
- 5. The proposed building work involves the demolition of the existing garage and the lean-to toilet to the east side of the house and the sun lounge to the south side. These will be replaced by the proposed side and rear extension, which you describe as being one and a half storeys (ie. the upper floor area is designed as rooms-in–the–roof), that will "wrap" around the east and south sides of the house. It will contain a garage, utility and wet room area and an open plan kitchen and dining space on the ground floor, and a double bedroom with an ensuite bathroom area on the first floor. Prior to submitting a full plans application for the work, you entered into discussions with Water Services Ltd (hereafter referred to as "the Sewerage Undertaker") regarding your proposals in relation to the foul and surface water sewers that run under the length of the adjacent footpath.
- 6. Your plans were deposited on 5 July 2010 and, in accordance with regulation 14A of the Building Regulations 2000 (as amended), the Council consulted the Sewerage Undertaker. Regulation 14A requires the local authority in question to have regard to any views expressed by the Sewerage Undertaker. Accordingly, your plans were rejected by the Council on 5 August 2010, primarily on the grounds that the Sewerage Undertaker stated that your proposals did not comply with Requirement H4 (Building over sewers) in Part H (Drainage and waste disposal) of Schedule 1 to the Building Regulations 2000 (as amended), in that they would be detrimental to the continued maintenance of the sewers which run under the adjacent footpath. However, you argue that your plans for the work comply with Requirement H4 and it is in respect of this question that you have applied for a determination.

The applicant's case

7. You recognise that, as stated in paragraph H4 1.6 of the current guidance in Approved Document H (Drainage and waste disposal), in order to comply with Requirement H4 of the Building Regulations a proposal to build over or within 3m of any drain or sewer more than 3m deep or greater than 225mm in diameter – as in your case - requires the permission of the owner. Although you have not gained this permission from the Sewerage Undertaker in your case, you do not accept that your design is not compliant with Requirement H4.

- 8. You explain that you have spent over a year in discussions with the Sewerage Undertaker trying to mitigate its concerns without success and that the Undertaker has not given you any technical reason for its refusal to accept your proposals. You say that the Sewerage Undertaker has simply re-stated its concerns that the proposed extension will make future maintenance of the sewers more difficult and is therefore non-compliant with Requirement H4. In your view your proposals actually make the existing circumstances safer for all concerned, reducing the risks associated with future maintenance work.
- 9. You add that a number of alternative design options have been considered by the designers in an effort to find an acceptable solution, but the only solution the Sewerage Undertaker would accept would be to build a two storey extension on the footprint of the existing garage (which is scheduled for demolition), but this does not solve the needs of the house owner.
- 10. You have submitted a detailed report describing the history of the situation and the development of various designs culminating in the design finally submitted for approval, which includes details, drawings and specifications relating to:
 - your understanding of the purpose of Requirement H4 and the related guidance in Approved Document H;
 - the house owner / applicant;
 - the site:
 - the Sewerage Undertaker services in question, i.e. foul and surface water sewers;
 - the existing house, proposed design / building work and recent planning history; and
 - your discussions and correspondence with the Sewerage Undertaker, including access details and the consequences of the Undertaker's position.
- 11. You summarise your position in your report by referring to your belief that the proposed design has addressed the adjacency of the sewers in question through the incorporation of offset pile foundations and by angling the wall of the extension away from the site boundary. You consider that these measures will ensure that future access to the Sewerage Undertaker's services will be easier and safer than the existing situation, while also significantly reducing the potential effect of any such work on your property. In your view the proposals therefore comply with the intention of Requirement H4.
- 12. You also commented further reiterating your case in response to the Council's representations to the Secretary of State and conclude that:
 - permitting your extension would avoid your house from being blighted forever by the adjacent sewers, which is currently the case;
 - your proposals do not prevent future work to the sewers from being undertaken, including replacement. Such work would be constrained but not "unduly difficult" and would therefore comply with Requirement H4; and
 - the proposals improve the existing situation both structurally and in terms of safety.

The Council's case

- 13. The Council confirms that it consulted the Sewerage Undertaker on your proposals and received a response in a letter dated 27 July 2010 (a copy of which the Council has submitted) giving reasons why the proposed building work was not considered acceptable. Having had regard to the Sewerage Undertaker's views and the general guidance given in Approved Document H, the Council rejected your plans on the grounds of non-compliance with Requirement H4 of the Building Regulations.
- 14. The Sewerage Undertaker's letter refers to its previous discussions with you and its advice that your proposals are not acceptable "as the extension would be considered detrimental to the continued maintenance of the sewer". The Sewerage Undertaker refers to the application of Requirement H4 and the guidance in paragraph H4 1.6 of Approved Document H (see paragraph 7 above) to support its view. In this case the Sewerage Undertaker considers that the width between the properties would be 3.1 or 3.3 metres, i.e. half that referred to in the Approved Document, and that there are two sewer pipes in this gap (i.e. a 900mm diameter surface water sewer averaging 3.1m deep, and a 375mm diameter foul sewer averaging 3.5m deep), with no satisfactory diversionary route for these.

The Secretary of State's consideration

- 15. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by the parties, including the Sewerage Undertaker. He notes that the matter in dispute relates to whether the proposed erection of an extension would be detrimental to the foul and surface water sewers in the adjacent footpath and their continued maintenance.
- 16. The Secretary of State notes that the purpose of Requirement H4 of the Building Regulations is to ensure that the erection or extension of a building (or underpinning of a building) is carried out in a way that is not detrimental to the building/extension or to the continued maintenance of a drain or sewer. In the case of the latter, this means that the building or extension should be constructed in such a way that it will not overload or damage the drain or sewer. Wherever possible, there should be sufficient space around the sewer to permit reasonable access for repair and, if necessary, to provide a route for diverting the sewer.
- 17. To enable the functional requirements of Part H to be applied consistently, the guidance in Approved Document H contains performance criteria that can be used to determine whether a proposal meets these requirements. In the following paragraphs, the Secretary of State therefore assesses the proposed extension against each of the performance criteria relating to Requirement H4.
- 18. The proposed extension will be supported on a piled foundation, with the centreline of the piles nearest to the sewers being set approximately 600mm from the boundary. As well as being set back from the boundary, the specification requires the piles to be bored, in order to minimize the risk of disturbance of the sewers during installation. The Secretary of State considers that this arrangement should avoid overloading or damaging the sewers both in use and during construction, and therefore is capable of satisfying the performance criteria as stated in paragraph H4 a) i) of Approved Document H. Installation of the piles is likely to be an area to which you and the Council will pay particularly close interest.

- 19. The proposed extension will not obstruct access to the manholes on the foul and surface water sewers, which are located at both ends of the footpath. This means that the Sewerage Undertaker can gain access to the interior of the pipes for routine maintenance operations, such as inspection, cleaning, blockage removal and internal repairs, which is no different from now. Therefore, the Secretary of State considers that the performance criteria stated in paragraph H4 a) ii) of Approved Document H is satisfied.
- 20. The use of piles to replace the existing shallow garage foundations should also provide increased resilience to loss of ground caused by leakage into or out of the sewers. Therefore, the Secretary of State considers that the performance criteria relating to the risk of damage to the building stated in paragraph H4 c) of Approved Document H is satisfied.
- 21. With regard to paragraph H4 b) of Approved Document H, an examination of the sewer record map shows there to be no obvious local diversionary route that could be used now, should the sewers need to be replaced. Therefore, the Secretary of State notes that the proposed extension would not make the situation materially worse than it is now.
- 22. The footpath is around 3m wide but, in the Secretary of State's view, the working width for excavating down to the sewers could be increased if the Sewerage Undertaker was to arrange to use the adjacent garden areas of either of the buildings, excluding the length between the buildings that exists now. This restricted length is shown on the drawings you submitted as being approximately 3.2m wide and around 4.5m long. Erection of the proposed extension would increase the length of the restriction to about 7m.
- 23. In the Secretary of State's opinion, it would be unlikely to be practical to install a replacement sewer by 'open cut' along the 4.5m long restriction as it exists now (an alternative solution such as an in-situ internal renovation technique would be needed). Therefore, extending the length of restriction to 7m should not significantly increase the difficulty or cost of in-situ renovation.
- 24. The Secretary of State also notes with interest from the papers submitted that downstream of the footpath the sewers are installed in three subways below the railway. These subways, the one nearest to the footpath being approximately 1.9m wide, 2.7m high and 23m long, are likely to present a far more significant constraint on any future sewer replacement than the footpath, which further increases the likelihood that in-situ internal renovation would be employed anyway.
- 25. The Secretary of State therefore considers that the increased length of flank wall brought about by the building of the proposed extension should not create an obstruction to works on the sewers that is practically worse than exists now, and so the performance criteria stated in paragraph H4 b) of Approved Document H is satisfied.
- 26. As each of the relevant performance criteria in Approved Document H have been satisfied, the Secretary of State concludes that the proposed extension would not be detrimental to the sewers or building, and would therefore comply with Requirement H4 of the Building Regulations.

The determination

- 27. As indicated above, the Secretary of State considers that your proposals as submitted, relating to an erection of an extension, should provide adequate protection for the adjacent sewers. He has therefore concluded and hereby determines that the plans of your proposed building work comply with Requirement H4 (Building over sewers) in Part H (Drainage and waste disposal) of Schedule 1 to the Building Regulations 2000 (as amended).
- 28. You should note that in the application of building regulations to the proposed building work, it is relevant when that work begins. Where the work which as in your case is the subject of full plans deposited with the Council before 1 October 2010 is started before 1 October 2011 the Building Regulations 2000 (as amended) will apply and the Secretary of State has made his determination on this basis. But if the work is started after that date, the consolidated Building Regulations 2010 (which came into force on 1 October 2010) will apply instead. However, although you should be aware of this, currently there is no difference in practice as the substantive provisions have not changed.
- 29. You should also note that the Secretary of State has no further jurisdiction in this case and that any matters that follow should be taken up with the building control body.