

**IMPLEMENTATION & MAINTENANCE PLAN**  
**FOR**  
**THE PROPOSED PREMIER INN HOTEL**  
**LANGSTONE ROAD, HAVANT**

**Client:**

Whitbread Property PLC  
Whitbread Court  
Houghton Hall Business Park  
Porz Avenue  
Dunstable, Bedfordshire  
LU5 5XE

JDC/13097/I&M  
May 2015

1.1 During construction, it is normal practice for a drainage system to be installed at an early stage in the programme. However, the use of permeable paving requires changes to conventional construction practices and procedures used in the construction of traditional car parking and other paved areas, which during the initial stages of the development are used as access roads and storage areas. Together with runoff from the construction site, which can be heavily laden with silt, such activities are likely to block the permeable paving system. Therefore the following measures will be considered to address this issue.

- Areas of permeable paving proposed on the development will be carried out at the end of the development programme, when most construction activities are complete, thus minimising the risk of clogging.
- Should it necessary to construct any area of permeable paving at an early stage in the construction programme, an impermeable layer of Dense Bitumen Macadam (DBM) will be laid beneath the block paving and bedding layer to act as a temporary road surface. When most remaining construction activities are complete, holes will be punched through the impermeable layer and block paving laid. During construction, it is normal practice for a drainage system to be installed at an early stage in the programme. However, it is not possible to ensure that new impermeable areas created as part of the development are immediately connected to the new drainage system.

1.2 To ensure areas downstream of the development are protected during construction of the development, the following management measures are proposed during construction:

- A straw barrier or silt fence will be placed along the site boundary at the base of the natural slope to prevent sediments such and soil and mud from washing downstream.
- Protective coverings will be used to help prevent runoff stripping material stockpiles.
- Plant and wheel washing will take place in a designated location. The area will be tanked and not allowed to discharge into the existing drainage system. Effluent will be treated as contaminated waste and disposed off site by a licensed waste management operator.
- Surfaces used as access roads and storage areas during construction will be swept regularly to prevent the accumulation of dust and mud.
- Should groundwater be encountered in excavations such water will not be discharged to the drainage system until the amount of suspended solids has been reduced though the controlled use of skips or tanks, which will act as stilling basins.

| Reference     | Revision | Client                 | Date        | Author |
|---------------|----------|------------------------|-------------|--------|
| JDC/13097/I&M | -        | Whitbread Property PLC | 14 May 2015 | JDC    |

- To prevent contamination associated with the use of oils and hydrocarbons during construction, the Contractor shall ensure that the following precautionary measures are employed during construction:
    - Regular maintenance of machinery and plant.
    - Use of drip trays.
    - Regular checking of machinery and plant for oil leaks.
    - Use of correct storage facilities.
    - Regular checks for signs of wear and tear on tanks.
    - Specific procedures are followed when refuelling.
    - Use of a designated area for refuelling.
    - Emergency spill kit to be located near refuelling area.
    - Regular emptying of bunds.
    - Tanks should be located in secure areas to stop vandalism.
- 1.3 During construction monthly progress meetings will be held, which will offer the opportunity for regular inspection of the surface water drainage system by the design Engineer. This will provide a means of ensuring that the drainage system is installed correctly whilst also allowing the opportunity to make any necessary adjustments that may improve the performance of the system.
- 1.4 As a further construction management measure, on completion of the scheme all permeable paving areas will be swept and inspected and all below ground drainage will be jet cleaned. A maintenance provision will be allowed within the Construction Contract to review the performance of the drainage system during the first year of operation to allow for any necessary modifications or repairs to be made to defects that may arise during this period.
- 1.5 A copy of this report will form part of the construction contract documentation for the scheme and the above construction management measures will be detailed on design drawings and construction specifications. Therefore, it is possible to ensure that the above construction practice and management measures will be employed during construction.
- 1.6 It should be noted that the Developer, Whitbread, has successfully constructed car park using permeable paving on a number of its Hotel sites throughout the UK using a selected pool of Contractors who possess a firm understanding of constructing such systems. One of these Contractors will be used on this development and this will provide a further means of ensuring that the permeable paving system is installed correctly.
- 1.7 In a similar manner to the above, the Developer, Whitbread, retains responsibility for the on-site drainage systems serving its Hotel sites throughout the UK and tasks a selected pool of Contractors with the maintenance of these systems. One of these Contractors will be used on this development and tasked with ensuring that the below maintenance plan is carried out.

| Reference     | Revision | Client                 | Date        | Author |
|---------------|----------|------------------------|-------------|--------|
| JDC/13097/I&M | -        | Whitbread Property PLC | 14 May 2015 | JDC    |

1.8 The following maintenance plan has been developed for the drainage system and will be incorporated into the Operation and Maintenance Manual for the site.

- Following completion of the development inspect and identify any areas that are not operating correctly on a monthly basis for the first 3 months and thereafter every six months. If required, take any remedial action considered necessary.
- On a monthly basis remove all debris from drained surfaces, which may cause risk to the performance of the system.
- As required, stabilise and mow contributing and adjacent landscaped areas and remove weeds.
- Sweep permeable paved areas two to three times a year at end of winter, mid-summer, after autumn leaf fall, or as required based on site-specific observations of clogging. If necessary use jet wash or suction sweeper.
- As required, remediate any landscaping which, has been raised to within 50mm of the level of the paving.
- As required carry out remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users.
- As required carry out repair/rehabilitation works to inlets, outlet, overflows and vents.
- Annually and after severe storm events inspect / check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed.

| Reference     | Revision | Client                 | Date        | Author |
|---------------|----------|------------------------|-------------|--------|
| JDC/13097/I&M | -        | Whitbread Property PLC | 14 May 2015 | JDC    |