

Drainage & Highways Reply to LCC
Comments for Development
at Wardentree Lane, Pinchbeck, Lincolnshire
PE11 3UG
Application Ref H14-0720-18

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Introduction

The Highway and Lead Local Flood Authority have requested additional information regarding the development Site at Wardentree Lane, Pinchbeck.

The Comments were split into Highway, Public Footpath and Drainage. Taking each section in turn;

Highways

Comments

1. There are three proposed cycleway/footway links off Wardentree Lane to the site, one is located to the South-western side that links on to a private drive and the other two are in close proximity of each other on the South-eastern side that links on to private parking courts. These will be problematic in terms of safe movements and control, therefore further consideration is required on more suitable locations.
2. Service margin strips are not required on the proposed adoptable turning head carriageways, however consideration of suitable carriageway width and footways will be required.
3. Further consideration on the private drives is required in order to form adoptable edge lanes.
4. The existing access off Wardentree Lane to the South-western side is to be reinstated back to a cycleway/footway with grass verge and full up stand kerb.
5. Consideration of a carriageway design feature located on the main access road in front of the central POS area, similar to that shown at the first junction with block paving and landscaping.
6. The turning heads appear to be proposed as platform areas, i.e. ramps. This transition needs to be level between block paving and bitmac carriageway surface.

Reply

- 1 As can be seen on latest revised scheme the majority of these links have been removed, with only one, directly linked to the adopted road at the eastern end of the site, still proposed as a cycleway/footway link
- 2 Noted and amended.
- 3 This has been considered and awaiting exact details from LCC on requirements for Edge Lane, although the principle is noted and will be utilised where appropriate as shown on the layout.
- 4 We can confirm that this will be undertaken as part of the S278 works for the site.
- 5 Noted and shown on layout.
- 6 Confirm that no ramps are utilised in transition from Block paving to Bitmac Roads.

Public Footpath

Comments

- 1 The section of PF 2 through the site between Wardentree Lane and the footbridge should be surfaced to adoptable standard. This should be separate to the roadside footway.
- 2 It would also be desirable to provide an additional footpath linking the estate to the footbridge in recognition of the likelihood of residents undertaking recreational and utility journeys.
- 3 It is expected that there will be no encroachment, either permanent or temporary, onto the right of way as a result of the proposal.
- 4 The proposed development should not pose any dangers or inconvenience to the public using the right of way.
- 5 Informal footway links through the POS area and IDB'S easement would also be desirable.

Reply

- 1 2 & 5 As discussed at our meeting, it is not possible to pave PF2 within the IDB easement as it could be damaged by IDB maintenance vehicles and the IDB would not take any responsibility for maintenance for footpaths, therefore it would not be appropriate to formally pave any of the footpaths within the open space, however, informal links throughout the POS area and IDBs easement will be encouraged with regard to potential mown areas.
- 3 No encroachment onto the right of way is intended, a formal application for temporary works will be made at the appropriate time by the Developer.
- 4 Noted and agreed.

Drainage

Comments

- 1 No Ground Investigation report has been provided or soakage testing in accordance with BRE365 to assess, ground conditions for infiltration or recorded ground waterlevels, therefore this will be required, including CBR values.
- 2 The current ground levels are recorded at 3.5 metres to the North-west corner and 2.6 metres to the North-east corner with FFL's to be set at 3.4 metres, therefore ground levels will have to be raised. That said, it would appear an attenuation basin/pond will be located at the highest point rather than the lowest.
- 3 It is now proposed to discharge surface water into the IDB's Blue Gowlf Drain in three locations at restricted rates, however, no confirmation/consent/acceptance has been received from the IDB.
- 4 It is proposed that AWA are to maintain the surface water drainage under the carriageways, however, no confirmation/consent/acceptance has been received from AWA. Additionally, there are 750mm diameter pipes proposed under the adoptable highway and we should advise that there needs to be clearance of 0.9 metres from the underside of the carriageway sub-base to the top of the pipe.
- 5 Construction CBR Values have not been provided.
- 6 The Drainage Strategy has not addressed the reason why swales are not proposed as these are better at attenuating surface water closer to its source and provides a sense of place. We are aware of the gas main running through the site from North to South and along the frontage of the site with Wardentree Lane, however there is space in the development for this. In principle it is better to attenuate above surface than below.
- 7 A Construction Management Plan and Method Statement is required and shall include;
 - phasing of the development to include access construction;
 - the parking of vehicles of site operatives and visitors;
 - loading and unloading of plant and materials;
 - storage of plant and materials used in constructing the development;
 - wheel washing facilities;
 - the routes of construction traffic to and from the site including any off site routes for the disposal of excavated material and;
 - strategy stating how surface water run off on and from the development will be managed during construction and protection measures for any sustainable drainage features. This should include drawing(s) showing how the drainage systems (permanent or temporary) connect to an outfall (temporary or permanent) during construction.

Reply

- 1 Ground Investigation forwarded with details of ground water and CBR Values. The site has a reasonably high water table which precludes us from utilising soakage techniques into the ground, whilst still offering 1m separation to the groundwater table. Likewise, with levels having to be raised, it is not recommended to utilise soakage within areas of fill.
- 2 The site is being raised generally to the east but in affect all over to assist with drainage of the site, both foul and Surface water. This is primarily due to the existence of a gas main running through the middle of the site, which will discuss in more detail later, This has meant that the site is split into two for surface water drainage hence two attenuation basins; this also explains;
- 3 The reason for two (not three as per comment) outfalls into the IDBs Blue Gowt Drain is as the site is split by the gas main, there are two outfalls, each adding up to the agreed rate for the whole site, Craig Shinkin at the IDB was able to confirm directly to you that this was acceptable to the IDB.
- 4 We can confirm that AW will be responsible for adoption of the drainage within the site, however they are unable to comment at this stage as no formal application can be put forward for approval until planning has been granted, Your comment regarding 750mm diameter pipes is noted and will be actioned within the detailed design stage.
- 5 See item 1
- 6 As discussed in our meeting, the gas main crossing the site and along Wardentree Lane, causes severe restrictions on build zones and proximity to dwellings for the development. To this end a deviation from the original concept has been developed, which whilst not exactly the same, follows the same principles of SUDS design, however the swales fronting roads in the central spine road, have been moved adjacent to the private drives, within the no build zone, as these are acceptable to built in this zone. Private drives with parked cars are indeed the largest source of hydrocarbon pollution, so the placing of these swales adjacent to these larger drives will provide more treatment train than they would have adjacent to the roads, where cars would only pass and repass. It should be noted that the length of swale proposed is marginally longer than that which was previously proposed, it is now purely in the private area as opposed to the adopted area. The areas will be maintained by suitable management company. We believe this compromise position will still give the benefits of SuDS to the site, and still give a sense of place along the frontage of the site. Comments made during the meeting will be taken on board and will be utilised within the scheme where possible to further improve the drainage scheme.
- 7 Noted – this will be forwarded separately.

In summary, it is believed that the comments raised by LCC Highways and LLFA, are either covered within the revised layout, or within comments above, or can be addressed as part of the detailed design stage, but that all items to allow for planning consent have been addressed at this stage.

Rob Hill BSc MCIHT

Director