

Our Ref: 20-1543.06

Date: 09/09/2021

Planning Ref : AL/87/21/PL

Location : Oldlands Farm Newlands Road Bognor Regis PO22 9FJ

Proposed : Erection of a warehouse (Use Class B8) with ancillary office, associated vehicle parking, van storage, plant, ancillary structures, lighting landscaping and infrastructure works including earthworks to facilitate flood compensation area. This site may affect listed buildings, may affect the character & appearance of the Shripney Conservation Area, is a Departure from the Development Plan, affects a Right of way & is in CIL Zone SP3 (Zero Rated) as other development.

To whom it may concern,

We are writing to respond to Herrington Consulting Limited summary points which were raised on behalf of Arun District Council (ADC) in the letter dated 27 July 2021. The LLFA's comments are presented in blue below with the Delta Simons / EirEng Consulting Engineers Ltd response in black.

1. Herrington Consulting Limited Comment

The site lies partially within the functional floodplain and as such, consideration should be given to the suitability of development at this location and whether it is in accordance with the NPPF. The Applicant should provide evidence to support the appropriateness of this development within Flood Zone 3b.

Delta Simons Response

The maximum water level during the 5% AEP event (defended) is 1.18 m AOD. However, the majority of the Site is located outside the flood outline, as shown in Appendix H1 of the FRA. During this event, shallow flooding (largely between 0.1 m and 0.2 m) is expected along the south western boundary associated with Oldlands Farm Ditch. Areas within the 5% AEP event constitute functional floodplain, however given the coarse resolution of the data the flows are considered to be constrained to the channel.

Figure 1: EA Modelled Flood Extent and Depths - 5% AEP (Defended)



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The Flood Zone 3b extent is therefore limited to the channel and channel crossings are required given the watercourse flows north to south through the site. It is a common occurrence to cross watercourses for access and the crossings will be designed to provide the appropriate level of freeboard to their soffits to ensure existing flow is not impeded.

From a planning perspective, the Site's history demonstrates it has previously been considered to be an appropriate location for Use Class B8 development approved under permission AL/58/15/OUT alongside B2 floorspace. This relatively recent planning permission establishes the principle for the development of the Site. There are a number of recent developments at Oldlands Farm including the recently constructed Rolls Royce warehouses that have incorporated flood compensatory storage to the north of the A259 which has been assessed as being appropriate by the Environment Agency.

In terms of planning policy, the Site is located within the Strategic Employment Site 'Oldlands Farm' and is situated within the adopted 'Built-up Area Boundary' of Bognor Regis. Local Plan Policy EMP DM2 ('Enterprise Bognor Regis') identifies the areas constituting Enterprise Bognor Regis are allocated to promote economic growth in Bognor Regis and the wider Coastal West Sussex sub-region, outlining a mix of B1, B2 and B8 uses will be supported.

The proposed use of the site as a last mile delivery facility is considered to be compliant with national and local planning policy seeking to secure sustainable economic growth and productivity.

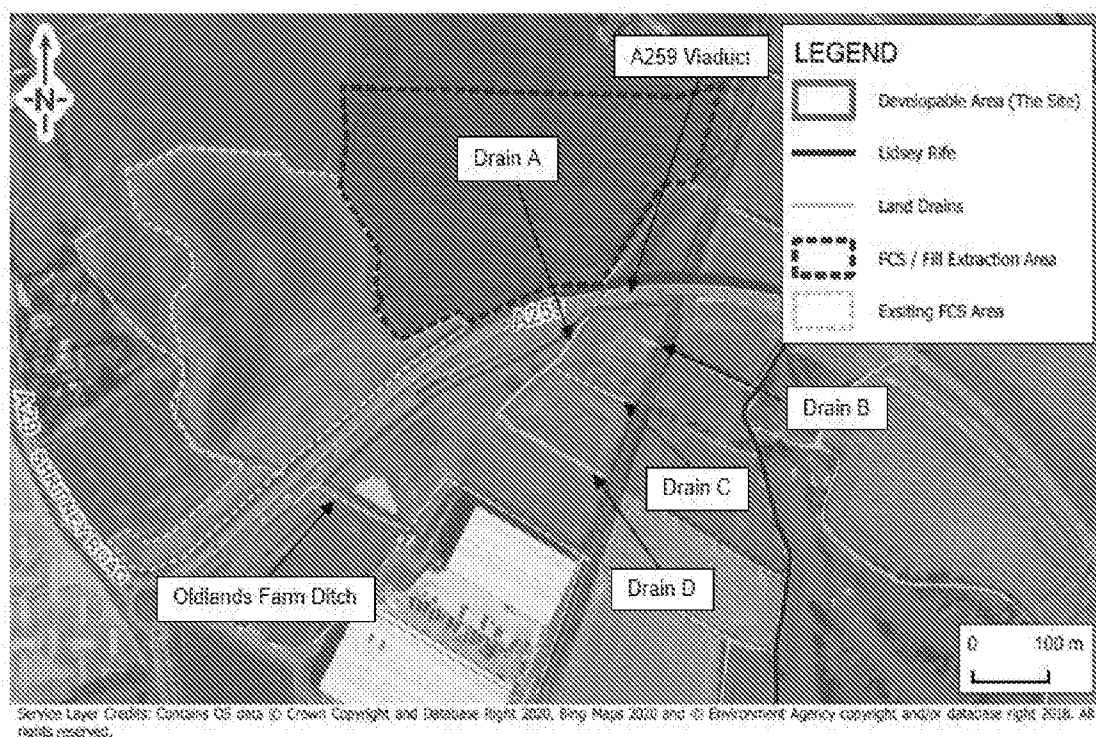
2. Herrington Consulting Limited Comment

Further site investigations into the existing drainage network and the function of this system should be considered to provide more certainty that the proposals to infill and bury these ditches will not have a long-term detrimental impact. Any loss of these ditches should be compensated for, not just in terms of volume, but taking into consideration the impacts on habitat too.

Delta Simons Response

There are several land drains within the Site boundary which are understood to be associated with the Sites former agricultural use. An unnamed land drain is identified to pass beneath the A259 Viaduct, this drain is shown as Drain A in the above figure. A map showing on-site and surrounding watercourses obtained from Arun District Council indicates that the Drain A flows in a north eastern direction, away from the Site (Appendix C of the FRA).

Figure 2: Illustrative Site Layout Plan



Drains B, C and D convey flows eastwards, beneath the railway lines within 450 mm diameter culverts and eventually drain into Lidsey Rife. The topographical survey (Appendix B of the FRA) shows there to be no direct connection between Drain A and Drains B, C or D.

The latest development identifies that Drain A will be maintained with sections bridged or culverted as necessary. The infilling of the upstream extents of Ditches B, C and D is not considered to have a detrimental impact given their catchment area is the Site and the Site will retain, and release water through the introduction of a drainage system constructed to modern standards.

A full Ecological Appraisal has been undertaken and the ditches were found to be of negligible significance and can be removed.

3. Herrington Consulting Limited Comment

It is strongly recommended that hydrodynamic numerical flood modelling is undertaken to compare the existing (baseline) situation with the post-developed (with mitigation) site. The results of this model will allow the ADC to clearly establish whether flow paths will be retained and will ensure no increased risk of flooding offsite which can be attributed to the proposed works. This modelling should take into consideration the proposed culverting, the service road levels and the culverts beneath the service road. The principles of these changes are required to be agreed with the LPA before the planning layout is agreed.

Delta Simons Response

The principal of flood plain compensation for use in this area has been set through the surrounding schemes, initially the Bognor North Relief Road and then the neighbouring Rolls Royce development and again for the previous application at this Site. This is further reinforced by the fact that the statutory consultee for flood risk in this area (the EA) have not objected to the Site.

Hydraulic conductivity between the site and the flood compensation area was assessed during the construction of the previous schemes and the existing FCS area lies on either side of Oldlands Farm Ditch and was designed to attenuate displaced flood water from the A259 and Phase 1 development to the south of the Site. A new box culvert for the Oldlands Farm Ditch and corrugated arch culverts were constructed beneath the A259 during its development. Flood water from the existing flood compensation area is transported eastwards, under the A259 box and arched culverts and then within Oldlands Farm Ditch along the south western Site boundary, beneath the railway lines and eventually discharges to Lidsey Rife to the east.

Given the above the principal of compensation in this area has been assessed and agreed as part of the wider area development and further hydraulic modelling is not considered necessary for this scheme.

4. Herrington Consulting Limited Comment

It is recommended that Network Rail are reconsulted, given the original consultation in 2016 was based on development proposals that did not incorporate a drainage ditch running parallel to the railway embankment. If Network Rail adopt a more precautionous approach to development in the locality of their infrastructure, this could result in a significant redesign of the drainage system.

Delta Simons Response

The design team are in consultation with Network Rail and are completing the necessary statements requested by them.

5. Herrington Consulting Limited Comment

ADC should request that the Applicant confirms the correct M5-60 value has been applied to the drainage calculations/model, as adjustments to this value can alter the volume of storage required onsite.

EirEng Response

M5-60 value of 17.0 was used in drainage network model, based on site co-ordinates and calculated using surface water storage estimation tool on www.uksuds.com webpage.

6. Herrington Consulting Limited Comment

Greenfield runoff rates currently exceed the existing runoff rates for the 1 in 1 year return period.

EirEng Response

Outflow calculated from drainage model is 20.93 l/s for 1 in 100 year + 40% cc event (sum of outflows for all 4 outfalls)

7. Herrington Consulting Limited Comment

The proposals do not provide evidence to demonstrate that volume control has been considered, e.g. restricting to Qbar, or alternatively providing long-term storage on site. In addition, ADC has confirmed that Qbar must be based upon the positively drained area only.

EirEng Response

Qbar = 20.93 l/s as contained in the appendices to the Drainage Report (rev PL05) submitted for planning.

HydroBrakes currently shown on drainage layout limit discharge to:

Outfall1: 6.5 l/s

Outfall2: 6.2 l/s

Outfall3: 5.9 l/s

Outfall4: 2.3 l/s

Su, = 20.9 l/s

8. Herrington Consulting Limited Comment

No hydraulic locking (tidal locked scenario) model results have been provided. These results should be provided by the applicant for ADC's review.

Delta Simons Response

EA 2015 Model Combined Fluvial And Tidal Flood Extent And Depth Outputs are included as Appendix I of the FRA.

EirEng Response

Tidal locking was modelled in drainage network as surcharged outfall with high tide considered as 1.3 m A.O.D.

9. Herrington Consulting Limited Comment

The Applicant has stated that Land Drainage consent was submitted in March 2021 and a response from ADC is outstanding. However, ADC confirm that a response to the Applicant was issued in May 2021, suggesting a site visit to determine the way forward on some aspects. The Applicant is therefore encouraged to re-engage with the Drainage Officers at ADC regarding the proposals.

EirEng Response

We are not aware of application for Land Drainage consent or request for site visit. We have previously liaised with ADC re planning requirements and have re-engaged with ADC following the LLFA's recent comments.

10. Herrington Consulting Limited Comment

The FRA incorrectly states that the LLFA are responsibility for maintain the ditches, this is incorrect and should be amended within the FRA.

Delta Simons Response

Noted, it is acknowledged that it is the riparian land owner's responsibility to maintain the ditches however the LLFA are the statutory consultee.

Conclusions

Given our responses above, we believe that the LLFA should have all of the information it requires to further this application. Please do not hesitate to call either myself on [REDACTED] 5 or my colleagues on [REDACTED] you have any further enquiries.

Yours sincerely,



Joshua Rigby
Associate
Delta Simons

