



DESIGN CHECK REPORT

Project: Flood Risk & Drainage Strategy Review – Lower Stumble Exploration Site, Balcombe

Reference: WSCC/005/14/BA

Revision: 1

Date: 13th March 2014

1 General Comments

- 1.1 I can confirm I have **no objections** to the scheme with regards to the drainage and flood risk proposals.
- 1.2 The proposals remain as per the previous applicant ref: WSCC/005/14/BA whereby I formally responded.
- 1.3 A report of drainage strategy has been supplied and as such the comments therein relate to this report.
- 1.4 Please refer to section 4 for my conclusions and recommendations.

2 Surface Water Appraisal

Flood Risk:

- 2.1 The site is located partially within Flood Zone 1 as defined on The Environment Agency mapping. (local view mapping is out of date)
- 2.2 The developable site area is now advised in the report to be of the order of 0.55ha, thus a site specific FRA (Flood Risk Assessment) is not required, however these is covered within a section of the report.
- 2.3 Whilst the report advises a low risk of groundwater flooding and advises monitoring has been undertaken, this section would need to be approved in principle with The Environment Agency.
- 2.4 Section 2.2 confirms an impermeable area of 0.11ha and implies the rainwater recycling will be utilised to contain run-off within the site and/or recycle it.

Ultimate Outfall:

- 2.5 The proposed impermeable work zone (0.11ha) is noted to be bunded and thus demonstrates control in the event of a blow out or water being contaminated. There is no mention of design criterion or volume provision.

Surface Water Catchment:

- 2.6 Whilst the report suitably address pollution control/spills it still does not address what surface water infrastructure will be necessary for the internal haulage roads.
- 2.7 What existing/proposed catchment run-off and volume received at London Road and can this be removed/reduced as betterment?

3 Foul Water Appraisal

- 3.1 Section 6.3 of the report address the foul water requirements and advises foul effluent generated is to be removed off site routinely
- 3.2 No further comments.

Ultimate Outfall:

4 Conclusions & Recommendations

- 4.1 The drainage strategy report supplied is reasonably acceptable. We would however, convey that the comments herein this report are actioned at the detailed design stage.
- 4.2 I recommend that our requirements are conveyed by way of suitable conditions as follows:
- 4.2.1 Development shall not begin until a scheme of surface water drainage have been submitted to and approved by the local planning authority. Thereafter, the drainage details shall be implemented in full as approved. Those details shall include:
- Design for 1:100yr return period.
 - Inclusion of 30% peak run-off and 20% additional volume for climate change.
 - Infiltration rates and groundwater levels shall be determined by site investigation and/or testing during the winter period
 - Inclusion of a suitable freeboard above the seasonal high groundwater table (minimum 1m unless otherwise agreed by the Local Council's engineers).
 - Consideration of overland flows (pluvial impact).
 - Evidence of agreement with the Local Water Authority.
 - Assessment of pollution control measures in accordance with PPG3.
- 4.2.2 Development shall not begin until a scheme of foul water drainage have been submitted to and approved by the Local Planning Authority. Thereafter, the drainage details shall be implemented in full as approved.