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David Major
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16th December 2024

Dear David,

WSSC-661461166 – Street Record, Huntsland Lane, Crawley Down, West Sussex, RH10 4HB

WSSC Flood Risk Management Team Level 2 Pre-Application Advice has been sought for a 34.7ha site in Crawley Down, Mid Sussex. The application will be for outline planning permission for 400 houses with all matters reserved except for access, therefore our response reflects the level of information required for outline planning permission. It is noted that this site is an allocated site in MSDC Reg 19 Local Plan 2021-2039 (DPA9). Following a meeting on 27th November 2024, I have the following comments to make:

1. We discussed surface water flow paths through the site contradicting with topographic survey and Lidar data. To overcome this, please provide cross sections comparing current EA mapping (please note this is updated early next year) with Lidar data/topo data. Suggested cross sections required can be seen in Appendix A (happy to discuss further). This should also help if LPA mention sequential approach when application is submitted.
2. We have no records of surface water or groundwater flooding within the red line boundary or wider area. This does not necessarily mean there has been no flooding, just that it has not been reported to us.
3. It has been adequately demonstrated that infiltration is unlikely to be viable for this site as the geology is clay which has poor infiltration capacity (this is based on desk-based investigation and a site visit, no groundwater monitoring or infiltration testing has been completed/provided). For the reserved matters ground investigations will be required but I'm happy to condition this due to the type of application and the characteristics of the site.
4. Following the drainage hierarchy, it is proposed to discharge surface water to ordinary watercourses. In principle, I'm supportive of the use of swales and basins/ponds to manage surface water for this site. It is good to see additional open, source control SuDS features being suggested for the detailed design (permeable paving/tarmac and rain gardens) (Table 3.4 in drainage strategy). SuDS features should be designed following the Ciria SuDS Manual.

5. For the discharge rates, when I recommend conditions, I'll write it as XXX l/s/ha for the impermeable area being drained. The current proposal to discharge based on whole site area means the rates are likely to be too high and that additional storage may be required. Based on the current proposed impermeable areas, Northern discharge rate should be 4.78 l/s/ha (so discharge rate should be 25.62 l/s based on proposed impermeable area of 25.36 ha) and Phase 2 discharge rate should be 4.78 l/s/ha (so discharge rate should be 31.309 l/s based on proposed impermeable area of 6.55 ha). Currently it is proposed to control flows to 1 in 1 year event, we also accept Qbar as the discharge rate. We'll need evidence of the calculations for greenfield runoff rate and the quick storage estimates as part of the submitted documents.
6. Clarification sought for the box which says surface water sewer required to deliver flows from diverted ditch off Hunstland-if proposing to culvert an ordinary watercourse this is unlikely to get ordinary watercourse consent. I have had issues loading the topo so couldn't check.
7. Any watercourses/ditches within the red line boundary must not be infilled as part of the development proposals. The applicant is reminded that the landowner (riparian owner) must maintain all watercourses now and as the development progresses, to ensure there are no blockages and that they are free-flowing. All watercourses, including ones not on OS mapping that were found through topographical survey or the site visit, must be clearly shown on drawings (suggest the drainage strategy and a separate watercourse map for ease later in planning process).
8. Please note that in relation to section 3.10, as LLFA we currently do not adopt SuDS or are responsible for their maintenance. If Schedule 3 of the Flood and Water Management Act 2010 is adopted, then this is very likely to change but there is currently no timescale for this. WSCC Highways do adopt highway SuDS; this can be discussed with the Highways Adoption team. I can provide their contact details if needed.
9. For the directional drilled sewers in the Ancient Woodland area, it is suggested this is discussed with the relevant consultee/body early on in the planning process (Mid Sussex LPA should be able to point you in the right direction as I'm not 100% sure who it would be for Ancient Woodland).
10. The Environment Agency will be releasing new flood risk mapping early 2025. If the application is submitted after the new mapping is released I'd strongly suggest including the updated mapping (we've not had clear instructions yet on whether the updated mapping will be required for applications submitted but not determined before new mapping is released, I'm assuming the EA will clarify this nearer the time the mapping is released to the public).
11. When submitting documents to the Local Planning Authority, please ensure the following are submitted:
 - Flood Risk Assessment assessing all sources of flooding (further guidance can be found here: [Flood risk assessments: applying for planning permission](#)).

- SuDS Proforma and Validation Checklist-says what calculations are required for outline stage Flood Risk Management: Pre-application advice - West Sussex County Council
- Drainage Strategy, including an assessment of 4 pillars of SuDS (water quality, water quantity, biodiversity and amenity). The layout must demonstrate the volume of storage can be achieved in the layout, and that there is enough room for all SuDS features (3m easements around basins with off road parking for maintenance required for SuDS features).
- Calculations must include up to date climate change allowance (45% for this site), MADD factor/additional storage of 0, Cv value 1 for both summer and winter storms and FEH2022 rainfall. 10% urban creep should be added to the volumes required for storage and not increase discharge rates.
- High level assessment of the maintenance of any SuDS features and structures and who will be adopting these features for the lifetime of the development.
- Drawing showing minimum 3m easement from top of both banks of all watercourses/ditches.
- Construction management plan and phasing plan for the construction of the sustainable drainage system will be required (happy to condition this).

I'm happy to review FRA and Drainage Strategy before application is submitted. Any further queries please get in touch.

Yours sincerely,

Ellie Read
Flood Risk Management Team

cc: Anthony Guay (Ramboll)

Documents reviewed for this letter and the meeting:

Flood Risk Assessment by Ramboll, version 1.0, 23rd October 2024

Drainage Strategy by Ramboll, version 3.0, 23rd October 2024

Appendix A



