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Our ref: KT/2022/129991/01-L01
Your ref: N/A
Project code: ENVPAC/1/KSL/00006

Date: 12 September 2022

Dear John,

Refined Area of Search Report for Crawley Western Link Road

Crawley Western Link Road

Thank you for contacting the Environment Agency for pre-application advice for the Crawley Western Link Road project. We have reviewed the Refined Area of Search – Northern Section Study Report by Systra (ref: GB01T21C15-RPT-01; dated: 23/03/2022) and the associated Appendices A-G.

Please see the Section 1 – technical comments (attached) for comments relating to flood risk, surface water drainage, biodiversity and groundwater and contaminated land.

Please note that our comments mostly relate to advice for the detailed design stage. We look forward to working with you as this project progresses to advice on final designs.

We hope you find our response useful. Please contact us if you have any questions.

Yours sincerely,

Rachel Holmes
Planning Specialist

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Section 1 – technical comments

Flood Risk

The applicant has set out a refined area of search for the Northern section of the proposed Crawley Western Link Road (CWLR) report. This study aims to reduce the current number of options for the alignment of this section of the proposed road through the identification of constraints and how the range of options for alignment would impact on these constraints.

We note that one of the constraints recognised is the presence of the River Mole and its associated floodplain. The western and part of the middle sections of the Northern extent of the CWLR cross the floodplain of the River Mole. In addition, the proposed alignments of the western section would also require the crossing of the watercourse itself. From the details contained in the supporting information, the width of the proposed road as it crosses the river and floodplain could be quite significant, though there is some variation on the length of the road within the floodplain depending upon the route option.

Flooding has been recorded in this area a number of times in the recent past, and it is understood properties have also been affected during these flood events. As mentioned above, and recognised by the CWLR report, the western and part of the middle sections are located within Flood Zones 3 and 2, with areas close to the river considered as falling within the functional floodplain, or Flood Zone 3b. Any development proposal should not increase the risk of flooding and should actively seek to reduce the overall risk of flooding to the area.

This project is still in its early stages and therefore details are not currently available for the design of the road, and how it might cross the river or floodplain. We would be keen to view these details as soon as they were available, and a detailed Flood Risk Assessment would be required to demonstrate how the risk to flooding would be managed, there was no loss of floodplain storage capacity and flood flow routes were maintained. This would also apply to any bridge structure, which should not impact on flow routes or floodplain storage capacity. Section 3.3.2 of the CWLR report notes the risk to flooding and aspects which needs to be taken into consideration as the project develops.

We note and welcome that in the report, the applicant has highlighted consultation with Homes England regarding their proposed development. This is essential as we are aware the Homes England development includes a new road which will cross the floodplain of the River Mole. We are concerned about the possibility of cumulative impacts on flood risk to the area from both these projects, and it is essential that a joined-up approach is taken to manage the risk of flooding. We understand the timescales for the two projects will be different, but an integrated approach will ensure that what is brought forward for one development will not compromise the ability of another to fully manage flood risk.

Based on the options as set out within the report, from a flood risk perspective we do not have a specific preference for a particular route at the present time. Options which have the least impact on the floodplain may be preferable, however, we would review details set out by the applicant all options taken forward to ensure the risk to flooding was not increased and in preference, decreased overall.

In more general terms, any works in, over or under the river, within 8 metres of the top of the bank and some activities on the floodplain would likely to require a Flood Risk Activity Permit prior to works commencing.

Surface water drainage
The final designs must consider how road run-off from this busy road is managed to protect the River Mole and drainage ditches that run into the Crawter's Brook from pollution. We would recommend that SuDS are employed to minimise the polluting effects of the run-off. We would like to be consulted on drainage plans in detail as this project progresses.

Biodiversity

Biodiversity Net Gain
The Environment Act 2021 defines a legal obligation that new development must deliver an overall Biodiversity Net Gain (BNG) of 10% in both terrestrial and aquatic habitats, once it comes into force. A numerical commitment to biodiversity net gain is required in order to be in line with the Environment Act 2021 and we encourage using the Natural England Biodiversity Metric and specifically the Rivers Metric of the Defra BNG tool to demonstrate how a net gain is achieved for the watercourse. In the CWLR study all proposed routes appear to run through Willoughby Fields (Ifield Brook Wood and Meadows LWS) in the Middle Section. We would advise that Local Wildlife Sites should be avoided. However where this is not feasible, as a last resort the losses must be compensated for in line with the requirement for BNG. Mitigation through enhancing the watercourse and habitat elsewhere is likely necessary to achieve a net gain due to the impact of the proposed routes. An aspiration toward 20% BNG will help to future proof the proposal.

Minimise span
The study outlines a proposed corridor for the CWLR and at this early stage there are no structural designs, however we would urge that a clear span design is essential. The route option selected for the CWLR should aim to ensure that the crossing is as short as possible. This is important for the ecology of the river and will aid the continuation of the vegetated riparian corridor underneath the structure. In addition, this reduces the risk of creating a barrier to fish passage, allows mammal passage under the structure and helps to prevent the need for bed and bank reinforcement. The design should consider safe passage for otters during high flood events, i.e. there must be a mammal shelf/pass that is above flood levels. Consideration should be given during the design phase to light penetration and soil moisture deficit. Lack of light and moisture can prevent the establishment of vegetation under the crossing and weaken the banks.

Buffer zone

Development that encroaches on watercourses can have a potentially severe impact on their ecological value. The importance of the continuity of the ecological network should be considered during design. Networks of undeveloped buffer zones assist landscape connectivity of habitats, might help wildlife adapt to climate change and will help restore watercourses to a more natural state as required by the river basin management plan. The proposed Crawley Western Link Road will therefore require a scheme for the provision and management of a minimum 10 metre wide buffer zone alongside the whole reach of the River Mole in the area of development. Creating semi natural habitat along this corridor will provide the most benefit for wildlife.

This approach is supported by paragraphs 174 and 180 of the National Planning Policy Framework (NPPF) which recognise that the planning system should conserve and enhance the environment by minimising impacts on and providing net gains for biodiversity. If significant harm resulting from a development cannot be avoided, adequately mitigated, or as a last resort compensated for, planning permission should be refused. This position is also supported by legislation set out in the Natural Environment and Rural Communities Act 2006 and Article 10 of the Habitats Directive which stresses the importance of natural networks of linked corridors to allow movement of species between suitable habitats, and promote the expansion of biodiversity.

Groundwater and contaminated land

The plans will need to ensure groundwater within the superficial deposits, and the surface waters they are in hydraulic connection with, are protected from any potential pollution associated with any proposed works. Usual steps in relation to the identification of previous land uses, any potential land contamination, and risks posed to controlled waters protection will need to be taken.