

15 June 2022

y/ref - MW.0115/21

Mr Alex Swann
Environment Agency
Wallingford

Re: Flood risk assessment (FRA) for Extraction And Processing Of Sand And Gravel Including The Construction Of New Site Access Roads, Landscaping And Screening Bunds, Minerals Washing Plant And Other Associated Infrastructure With Restoration To Agriculture And Nature Conservation Areas, Using Inert Fill

Dear Mr Swann,

Further to your letter to Oxfordshire County Council on the 31 May 2022 and our conversation yesterday, you will recall that we discussed the flow scenarios and the status of the hydraulic model reported in our Flood Risk Assessment (Wallingford Mineral Workings: Revision B: Jan 2022).

In relation to flow scenarios I explained, and you agreed that the extraction of sand and gravel on the floodplain is water compatible development. This means that the Central climate change allowance must be used to evaluate flood risk at the end of the lifetime of the scheme.

Moreover, there is no requirement in the guidance to test water compatible against the Higher Central or Upper End climate change allowances. This approach agrees with the Environment Agency's guidance (Flood Risk Assessments: Climate Change Allowances).

I can confirm that the hydraulic modelling contained in Revision B of the FRA incorporates an assessment of the Central Climate change allowance.

In relation to the provenance of the hydraulic model, I can confirm that the Environment Agency's Abingdon Flood Schemes (AFS) River Thames model was used to evaluate flood risk as noted in Section 6.2 of the FRA.

There is some understandable confusion concerning the version of the model used for the scheme. You will recall that an application for a marina development on the same site in 2015 was based on a 1D-2D FMP-TUFLOW model developed by Edenvale Young using the original 1D FMP model of the Thames at Abingdon.

The AFS River Thames model became available after the submission of the planning application for the marina in (circa) 2019. Accordingly, the Environment Agency requested Edenvale Young to use the most up to date evidence to inform the FRA via your letter to Oxfordshire County Council (y/ref MW.0033/18: 6 March 2020). By implication this meant reverting to the AFS Thames model.

Whilst there is good agreement between the Edenvale Young and AFS Thames models, I reconfirm that the Environment Agency AFS River Thames model was used to evaluate flood risk for the sand and gravel workings for both Revisions A and B of the FRA for the sand and gravel workings. It is my understanding that the AFS River Thames Model was calibrated and comprehensively reviewed by the Environment Agency. Indeed, the following statement was included with the Product 7 data supply:

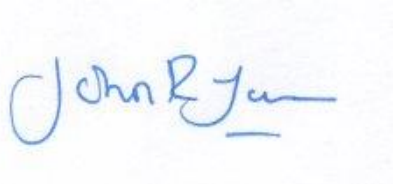
"The design hydrology for the supplied model has been re-evaluated using up to date data and techniques from when the modelling was undertaken.! The design hydrology for the supplied model has been re-evaluated using up to date data and techniques from when the modelling was undertaken. This has been reported in June 2017. The Thames is a large and complex catchment; this analysis was undertaken in cooperation with the EA and may be considered to be the best current understanding of flow probabilities for the area."

It is also worthwhile pointing out that:

- Sand and gravel workings are classified as water compatible development which is an acceptable form of construction within Flood Zone 3b in accordance with the NPPF.
- Sand and gravel workings are not classified as essential infrastructure and does not therefore require consideration of the Higher Central allowance.
- The lifespan of the development will be five years by which time site levels within the red line will be restored to original following completion of the mineral extraction phase.
- There is no measurable or material change in flood extent or peak flood level by virtue of the fact that existing ground levels will be reinstated following the completion of the mineral extraction.
- Offices which are less vulnerable uses are situated in Flood Zone 1 and will be at a low risk of flooding.
- Stockpiling of materials will be in Flood Zone 1 and there will be no issues with flood storage compensation.

I trust that this is sufficient information for you to reconsider your objection to the works. However, if you have any further questions, please do let me know.

Yours sincerely

A handwritten signature in blue ink that reads 'John Young'.

John Young
Director