

ANNEX Q

Main Development Site – Coastal Geomorphology: Additional information

Design changes since DCO.

Permanent HCDF

1. The permanent HCDF has increased in height to be more resilient to updated sea level rise forecasts. This has moved the seaward extent of the HCDF further seaward by 10 over the northern end (200m tbc) at the permanent BLF landing promontory. Over this frontage, the HCDF is ~50m further seaward than the line of the Sizewell A and Sizewell B sites. Over the southern majority of the site the HCDF is on a similar line to that proposed by the DCO i.e. ~30m further seaward than the line of the Sizewell A and Sizewell B sites. However, the foundation level over this part is higher than at the BLF promontory and so may require adaption in the future involving deepening and seaward advance by ~20m to align with the BLF promontory.
2. This further seaward advance is of concern to the Councils because it increases the probability of the HCDF having an earlier and more significant negative impact on coastal processes (and other factors). This raises the importance of there being a robust and enduring plan for monitoring and mitigation, including a structure for delivery, that must continue whilst the HCDF exists unless / until cessation is approved. The Councils have challenged the Applicant to justify, and to explore options to minimise, the seaward advance. To date no possible change involving a landward movement of all or part has been identified. The change has increased the Councils concerns expressed at Relevant Representation stage.

Temporary HCDF

3. The construction phase temporary HCDF has been modified from an earthworks structure to a sheet piled wall.
4. The Councils accept the reasoning for this change and agree with the Applicants view that it will have no significant negative impacts on coastal processes.

SCDF

5. The function of the SCDF has altered significantly. At DCO it was a one-off sacrificial deposit over the seaward face of the HCDF, that would be allowed to degrade without management, and be replaced ~ mid Operation phase by secondary mitigation involving bypassing, recycling and nourishment. The SCDF is now proposed to be a permanently maintained substantial sediment buffer and transport corridor extending a significant distance to seaward of the HCDF. It will have defined minimum volume triggers that will prompt action to refill or redistribute material. Secondary mitigation techniques described above are intended for use in parallel with maintenance of the SCDF.
6. The enhanced SCDF outline design and commitment to maintenance is welcomed by the Councils. The Councils have concerns at the long-term sustainability of the SCDF in a changing future shoreline environment that will probably be affected by Sea Level Rise

and shoreline retreat. the Applicant is undertaking further studies and modelling to respond to this.

Permanent BLF.

7. The design of this structure has been modified but is substantially similar. New impact assessments have been undertaken that show a greater potential magnitude and extent of change than was suggested by the DCO findings (tbc when we see the report).

8. The Councils agree with the Applicants view that the changed impacts do not alter the DCO classification of low. The Councils also note that if impacts occur at the shoreline or seabed they will be detected and corrected under the Monitoring and Mitigation Plan.

Temporary BLF (present during the Construction phase only).

9. This structure was not in the DCO submission. The Applicant has suggested that it is similar to a jetty that was under consideration earlier in the project development stage and so have used impact modelling undertaken for that to inform their assessment. New impact assessments have been undertaken that show some potential for modest impacts (tbc when we see the report) In-combination impacts have also been assessed.

10. The Councils agree with the Applicants view that the impacts may be classified as low. The Councils also note that if impacts occur at the shoreline or seabed they will be detected and corrected under the Monitoring and Mitigation Plan.

Storm water outfall (present during the Construction phase only).

11. This structure was not in the DCO submission. An impact assessment concluded no significant impacts. The Councils agree with the Applicants view.

ESC role in Approval and Enforcement.

12. There is unavoidable uncertainty in the prediction of future change at the shoreline. This increases with time and is therefore substantial in a project with a potential life to 2160.

As a result, the Coastal process Monitoring and Mitigation Plan CPMMP, and process for delivery and governance of it, is critical. This point is agreed by ESC and the Applicant.

13. The DCO proposed that the CPMMP would be a DCO condition to be delivered under the Deemed Marine Licence (DML). This was based on the premise that all structures covered by the CPMMP were able to be defined as marine.

14. Post DCO discussions involving the Applicant, MMO and ESC have revealed that the DML geographical coverage is limited to seaward of the MHWM and so will not include the HCDF nor all/the majority (tbc) of the SCDF nor parts of the BLFs. It will therefore be necessary for ESC to have an Approval and Enforcement role for those structures that are landward of the MHWM that is similar and complementary to the MMO role that applies to seaward of the MHWM. This situation will also require either a split or a delegation of roles by ESC and MMO in the approval and administration of the CPMMP

(ESC is seeking to be the lead). ESC welcomes this as it provides ESC with an opportunity to maximise its influence in the approval of 'for construction' designs and methods for construction, maintenance planning and execution and in the long-term management of the monitoring and mitigation process for the area landward of the MHWM that will change over time.