Landscape character, landscape and visual impact, and flood risk

Summary

This representation objects to the cumulative change of landscape character, landscape and visual impacts and increased flood risk arising from Hornsea Three and the Proposed Development (DEP & SEP) and the reality of onshore substation construction. These cumulative impacts now need to be assessed not in theory, but in the light of current practice and the emerging as-built situation.

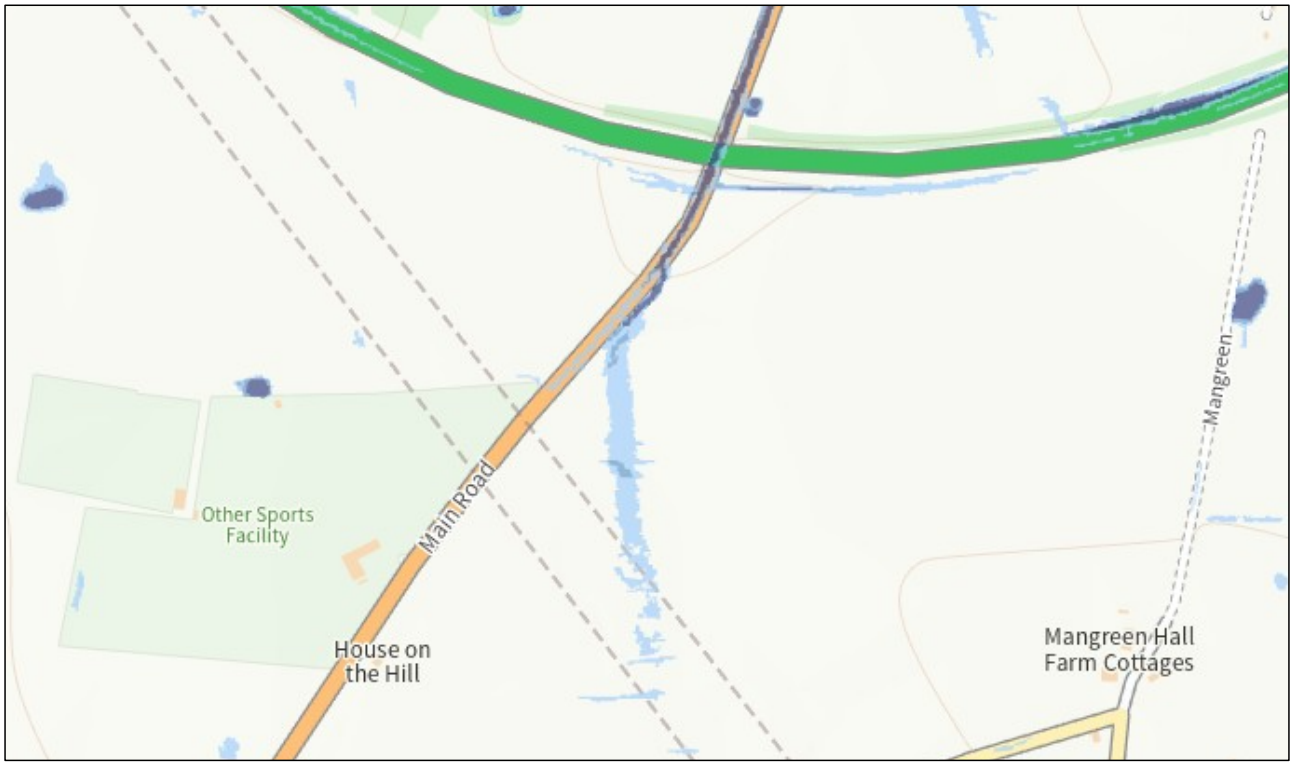
Objection

By way of example, photographs are included to show the change of landscape character, landscape and visual impact, and flooding of the public highway at the Hornsea Three substation site adjacent to the B1113. This location was visited by the Examining Authority during the second Accompanied Site Inspection on 24th March 2023. It is located in a long-established area of high surface water flood risk, as shown on the map reproduced below. The local highway authority recently completed a major project to reduce flooding on this section of the highway, which included new underground drainage pipes and a roadside attenuation pond. This effort to manage and reduce flooding seems to have been made ineffective by site preparation work for the Hornsea Three onshore substation. It is likely that all of these adverse cumulative effects will be long term.

The cumulative impacts of Hornsea Three and the Proposed Development are unacceptable.

Conclusion

In the absence of adequate onward grid transmission capacity, the cumulative landscape and visual impacts, change of landscape character and increased flood risk arising from offshore wind projects are not justified by the actual contribution the projects will make to the need for renewable energy.



Source: UK government surface water flood risk map showing high, medium and low risk areas.

Norwich Southern Bypass Landscape Protection Zone

The Examining Authority viewed this location as part of its Accompanied Site Inspection on Friday 24th March 2023, prior to the recent removal by the Hornsea Three contractor of the majority of the mature roadside trees and hedgerows shown in Figures 1 and 2 below, and the filling in of roadside drainage ditches to form temporary site accesses for the onshore substation preparation works.

Figure 1: View looking north towards the Southern Bypass

Figure 2: View looking south along the B1113

Landscape and visual impact

Figures 3 and 4 show the landscape and visual impact along the eastern side of the B1113 within the Landscape Protection Zone including the removal of mature roadside trees and hedgerows to form a site entrance and the discharge of surface water run-off onto the public highway. Figure 4 shows the visual impact of the substation site preparation works looking southwards.

Figure 3: View looking north

Figure 4: View looking south

Flood risk and drainage

The onshore substation site is located on relatively high ground, contrary to the established Horlock and Holford design principles. Figure 5 shows surface water flowing onto the public highway where roadside ditches have been filled in to gain access to the site for heavy construction traffic. Figure 6 shows the build-up of surface water on the B1113 as it passes under the Southern Bypass (A47).

Figure 5: Hornsea Three onshore substation site entrance

Figure 6: Surface water build-up at the onshore substation site

Change of landscape character and visual impact

Figure 7 shows the removal of mature roadside trees and hedgerows along the eastern side of the B1113 to form a site entrance. The onshore substation structure is expected to be up to 25m high and surrounded by storage battery containers. It will be seen against the northern skyline. Figure 8 shows the visual impact of temporary office accommodation constructed alongside the highway.

Figure 7: Change of landscape character

Figure 8: Visual impact of temporary office accommodation