Geo-Environmental

Shoreham Airport Rail Substation | Case Study

Services Supplied on these Projects:

- Attendance of a PTS qualified Geo-Environmental Engineer to undertake a site walkover.
- The production of a National Planning Policy Framework (NPPF) compliant Flood Risk Assessment (FRA) for the proposed construction of a new railway substation.

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Geo-Environmental Services Limited was instructed by Network Rail to undertake a Flood Risk Assessment for the construction of an extension to an existing railway electrical substation site on land that was adjacent to Shoreham Airport.

It was understood that the proposed development was to comprise the construction of a construction of an extension to an existing electrical substation associated with the railway.

In producing the Flood Risk Assessment, the following work was carried out:

- A site walkover to obtain photographs of the area and liaison with the EA to obtain and analyse detailed information on previous flood events and modelled flood levels;
- An assessment of the sites geological, hydrogeological and hydrological setting
- A detailed assessment of flood risk to the site and the surrounding area in relation to fluvial, tidal, surface water, groundwater and sewer flooding sources to include the analysis of the likelihood of local flood defence failure;
- Analyses were then be carried out to compare modelled extreme flood levels with levels across the site; and
- This was followed by negotiation with the EA in order to inform the appropriate building design.