

9. CHAPTER 9 – GROUND CONDITIONS

9.1. General

The original ES Chapter 9 describe the impact of the proposed development in consideration of environmental risk, geology and engineering with respect to the extent of cutting and filling the site. The references throughout the document pertained to the site layout and levels of the plans at that time.

The current master plan has now undergone a relatively straightforward layout change whereby among less significant layout changes to the northern portion of the site the original buildings south of the railway line Ind E at 54.0m level and Ind F at 61.0m level have been combined into one new building Ind E set at a level of 54.0m. This supplement to Chapter 9 addresses only the changes to the cut and fill arising out of the scheme changes. The remainder of Chapter 9 remains unaffected.

This layout change leaves the existing woodland to its east intact and eases the difference in levels with respect to the adjacent railway. Retaining walls will be installed between the new loading area and preserved woodland to the east.

As stated in the Ground Conditions Chapter in the ES the top soil will be stripped and stockpiled, re-utilised and excess disposed of separately from sub soil. The volume to be stripped is 260,000 m³. It is envisaged that it will be retained on site and reutilised as formed embankments, bunds and landscaping with a minimum 250mm thick top soil. Where top soil is used as bulk fill in embankments, bunds and landscaping it will be engineered accordingly by techniques including mixing, special compaction and earth reinforcement, etc.

The new layout and levels discussed above generate revised excavated material figures, which can be incorporated on site. This can be accommodated within the parameters set by the revised Parameter Plans.

The principals established in the original ES are unchanged. The new cut and fill quantities stated previously in item 9.4.21 are as follows:-

- a) Estimated Excavation (cut) adjusted to include top soil and allow for make up = 1,568,221 m³
- b) Estimated structural fill = 909,094 m³
- c) Estimated landscape fill including top soil = 647127 m³
- d) Material requiring to be disposed of, off site = 12000 m³

Throughout the original Ground Conditions Chapter there are many references to Figures 9.2, 9.3 and 9.4 etc which were the engineering / geological plans and sections. These drawings included much additional physical and geological information and in that respect are still relevant. However, additional plans and sections are appended herewith

to support the implications of the new layout in accordance with the revised parameters plans.