



Gatwick Airport Northern Runway Project

Appendix F: Note on Pentagon Field

Book 10

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1 Appendix F – Response to Deadline 4 Submissions regarding Pentagon Field

- 1.1.1 As explained in **ES Chapter 5: Project Description** [[REP1-016](#)], Pentagon Field is identified as a spoil receptor site to accommodate approximately 100,000m³ of spoil. The import of these arisings from the Project's construction activities would be used to level and landscape Pentagon Field and improve its ecological habitat and biodiversity. In particular, the new landscaping provisions at Pentagon Field will include a tree belt of approximately 15 metres wide along the eastern boundary of Pentagon Field; and approximately 1 hectare of landscape and ecological planting south of Pentagon Field.
- 1.1.2 This document has been prepared to provide further detail on the use of Pentagon Field as a spoil receptor site, including its context in relation to the wider movement of spoil for the Project, the site's design components and construction management. This document also summarises the scope of the final design information for the site which is to be submitted to the relevant authority under the relevant DCO Requirements.
- 1.1.3 This document has been prepared in response to comments in the Deadline 4 submissions from the Local Authorities and other Interested Parties regarding Pentagon Field. In particular, this document responds to queries / requests relating to Pentagon Field within the following Deadline 4 submissions:
- **Legal Partnership Authorities' Comments on the Applicant's Response to ExQ1 – Landscape, Townscape and Visual Resources** [[REP4-067](#)];
 - **Legal Partnership Authorities' Comments on the Applicant's Response to ExQ1 – Development Consent Order and Control Documents** [[REP4-062](#)]; and
 - **West Sussex Joint Local Authorities' Comments on any further information / submissions receive by Deadline 3** [[REP4-042](#)].
- 1.1.4 Responses to discreet queries on Pentagon Field, including those related to the Environmental Impact Assessment, is contained in the **Response to Deadline 4 Submissions** report (Doc Ref. 10.38) against the relevant comment from the Local Authorities.

1.2 Movement of spoil relating to Pentagon Field

- 1.2.1 Pentagon Field extends to approximately 8.8 hectares of which approximately 4.6 hectares will be used to accommodate spoil arisings from the Project of approximately 100,000m³ of spoil, taking account of existing utilities on the site, flood risk and other environmental considerations (such as visual impacts). Further detail about spoil management is in section 1.4 below.
- 1.2.2 The estimated volume of 100,000m³ was informed by an assessment of the excavation, movement and placement of materials based on the current preliminary Project designs.
- 1.2.3 In the permanent solution, excavated materials arising from the Project will be accommodated through a cut-and-fill balance in the Project's delivery, the Pentagon Field spoil receptor site or exported to off-site facilities (including appropriately licensed facilities for any contaminated material). **ES Appendix 5.3.2: Annex 5 – Construction Resources and Waste Management Plan [REP4-009]** makes clear that the overall objective to earthwork management is to maximise material reuse, reduce truck movement and reduce the amount of material to be taken to off-site facilities. As such, the volume of materials to be exported off-site will be reduced and any movements to off-site facilities would be minimised and managed through the construction management plans (discussed further below). If required during the Project's construction (such as, due to construction sequencing or timing constraints), materials will also be temporarily stored in storage locations to be detailed in the relevant Soil Management Plans (discussed further below).
- 1.2.4 The spoil deposits on Pentagon Field will entail uncontaminated excess soft (cohesive and other soils) excavated materials arising from the Project. Such materials will arise from earthwork operations to deliver the Museum Field flood compensation area, Car Park X flood compensation area, Car Park Y attenuation storage facility, River Mole diversion and extension, repositioning of the Northern Runway, Taxiway Lima extensions and Taxiway Juliet repositioning and works to the aircraft holding area (Charlie Box). Based on **ES Appendix 5.3.3: Indicative Construction Sequencing [REP2-016]**, such earthwork activities are to take place between 2024 and 2031 and will therefore result in works to deposit spoil at Pentagon Field during this period.
- 1.2.5 Any surplus excavated material use, beyond the capacity of Pentagon Field or cut-and-fill within the Project site, will be exported off-site to registered facilities.

Such arrangements will be detailed in the relevant Soil Management Plans, Site Waste Management Plans (where applicable) and the Construction Traffic Management Plan which are subject to approval by the planning authority (discussed further below).

1.3 Pentagon Field design and sequencing of works

- 1.3.1 The grazing pasture at Pentagon Field would be temporarily removed, involving the stripping and storage of topsoil followed by the placement of spoil. The spoil will be progressively landscaped to its final levels, to accommodate approximately 100,000m³ spoil.
- 1.3.2 During construction of the site (including the import and movement of excavations within the site), temporary stockpiles will be created on the site which will not exceed 3m in height for topsoil and 5m for subsoils as specified in **ES Appendix 5.3.2: Annex 4 – Soil Management Strategy** [[APP-086](#)] (para 6.1.5) secured under Requirement 29 of the **Draft DCO** (Doc Ref. 2.1). Temporary internal roads, welfare facilities and hardstanding will also be required to move the excavations within the site. This will involve the use of heavy plant and operations required to place and spread the spoil.
- 1.3.3 The final (permanent) landform will be up to 4m high (above ground level), with side slopes of a maximum of 1 in 3 in gradient, as assessed in **ES Chapter 8: Landscape, Townscape and Visual Resources** [[APP-033](#)] (Table 8.7.1). In response to the Local Authorities' Deadline 4 comments, further detail on the Pentagon Field works has been added to the description of Work No. 41 in the **Draft DCO** (Doc Ref. 2.1); and the site-specific design principle (DLP19) in the **Design Principles** (Doc Ref. 7.3), including the maximum height of the spoil bunds. The detailed design of the site, including the scale and form of the final landform, will be confirmed through a Landscape and Ecology Management Plan discharged under Requirement 8 of the **Draft DCO** (Doc Ref. 2.1) submitted to Crawley Borough Council.
- 1.3.4 Following the placement and final grading of the spoil deposition, the land will be reseeded and returned to grazing land. A native woodland belt parallel to Balcombe Road and a block of native woodland south of Pentagon Field would be established to enhance the existing green infrastructure of hedgerows and woodland. Such design features are specified in the site-specific design principle (DLP19) in the **Design Principles** (Doc Ref. 7.3), secured under Requirement 4 of the **Draft DCO** (Doc Ref. 2.1).

- 1.3.5 The final landform at Pentagon Field, based on the maximum height and grading, is illustrated in the photomontages contained in **Figures 8.9.33 to 8.9.40 of ES Landscape, Townscape and Visual Resources Figures – Part 2 [REP2-007]**.
- 1.3.6 A sketch landscape concept of the final solution for Pentagon Field is shown in Figure 1.2.18 of the **Outline Landscape and Ecology Management Plan (Part 2) [REP4-014]**, of which an extract is shown below in **Figure 1**.

Figure 1: Outline Landscape and Ecology Management Plan extract - Figure 1.2.18



1.4 Construction Management

- 1.4.1 Construction works at the Project site will be managed in accordance with the **Code of Construction Practice [REP4-007]** and its relevant Annexes under DCO Requirements 7, 27, 28, 29 and 30. Of particular relevance to Pentagon Field as a spoil receptor site, Annex 4 containing the **Soil Management Strategy [APP-086]** secured under DCO Requirement 29 sets out the:

- management and supervision of the soil handling process;
- method and sequence of soil stripping and storage;
- methods for placement;
- seasonal consideration and ground conditions for soil handling; and
- aftercare considerations.

1.4.2 Detailed Soil Management Plans (SMP) for individual areas of work, including Pentagon Field, will be prepared and must be substantially in accordance with the **Soil Management Strategy** [\[APP-086\]](#). The SMPs will be submitted to Crawley Borough Council for approval prior to construction works commencing in the specific area, in line with Requirement 29 of the **Draft DCO** (Doc Ref. 2.1).

1.4.3 The implementation of best practice techniques, provided in the **Soil Management Strategy** [\[APP-086\]](#), would enable these temporary areas to be restored to their former agricultural use.

1.4.4 Based on the design work undertaken to date, suitable vehicular access can be obtained to the site via the existing surfaced track to the north and without requiring the temporary stopping up or closure of the existing Public Right of Way (PRoW) running parallel with the site's northern boundary (Footpath 359Sy). It is anticipated that a construction banksman would be positioned at the site entrance, responsible for directing vehicular movement into the site and ensuring the safety of PRoW users. The PRoW route would be maintained along its existing alignment outside the perimeter construction fencing of Pentagon Field. Such arrangements will be confirmed through the PRoW Implementation Plans, to be subject to approval in line with Requirement 22 of the **Draft DCO** (Doc Ref. 2.1).

1.5 Approval of the Detailed Design

1.5.1 The detailed design of Pentagon Field will be informed by detailed survey work to be carried out during the early stages of detailed design and including ground investigations, topographical survey work, utility identifications surveys and updated tree survey work.

1.5.2 The detailed design will be subject to consultation and/or approval post-DCO consent through the discharge of various DCO Requirements. This includes:

- The detailed design of the site (including its layout, siting, scale and external appearance) in line with DCO Requirement 4, including compliance with the **Design Principles** (Doc Ref. 7.3).
- The final tree and vegetation removal through the detailed Arboricultural and Vegetation Method Statements, to include Detailed Vegetation and Removal Plans and Detailed Tree Removal and Protection Plans, to be approved in line with DCO Requirement 28.
- The landscape design details through the relevant Landscape and Ecology Management Plan (LEMP), to be approved in line with DCO Requirement 8. The content of the future LEMPs is described in the **Outline Landscape and Ecology Management Plan (Part 1)** [[REP4-012](#)] (para 1.1.4) and is to include earth shaping, embankments or bunds; planting species, quantities and their locations; and monitoring and management arrangements.
- Measures relating to the movement and management of soil to be detailed in the Soil Management Plans and approved through DCO Requirement 29.
- Measures relating to the movement and management of construction waste to be detailed in the Site Waste Management Plans approved through DCO Requirement 30.
- Arrangements for the existing PRoWs, to be detailed in the PRoW Implementation Plan and approved through DCO Requirement 22.
- The construction routing and point of access to the site to be confirmed through the Construction Traffic Management Plan for approval under DCO Requirement 12.

1.5.3 The detailed design must be in accordance with the **Design Principles** (Doc Ref. 7.3) under DCO Requirement 4(2). This includes a series of landscaping related Project-wide Design Principles, including design requirements for new and retained planting, earth shaping and an Ancient Woodland buffer zone, together with a site-specific Design Principle for Pentagon Field. CBC will be consulted on these details under DCO Requirement 4(1).