# LONDON STANSTED AIRPORT

## Stansted Transformation Programme (STN-TP)

## Terminal Extension

# Land Contamination Statement

# (July 2023)

MAG London Stansted Airport

BUILDING FOR THE FUTURE

MOTT MACDONALD

# Issue and Revision Record

| Revision | Date | Originator | Checker | Approver | Description |
|---|---|---|---|---|---|
| **P01** | 17.07.23 | D Giordanelli | J Southall | | Issued to MAG for Comment |
| **P02** | 26.07.23 | D Giordanelli | J Southall | A Carruthers | Final Issue for Planning |
| **P03** | 27.07.23 | D Giordanelli | J Southall | D Giordanelli | Final Issue for Planning incorporating MAG comments |
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## Document Reference:

N/A - Planning

## Information Class: Standard

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# Contents

# 1.0 Introduction

## 1.1 Purpose of Document

Mott MacDonald Limited (MML) was commissioned by Stansted Airport Limited (STAL) to undertake the design work for the proposed terminal extension and associated infrastructure at London Stansted Airport.

The purpose of this statement is to support the planning application for the terminal extension in relation to matters associated with land contamination.

## 1.2 Development Details

The proposed development includes the following:

- Partial demolition of the existing Track Transit System;
- Full demolition of two Skylink walkways and the bus-gate building;
- Construction of:
  - a three bay extension to the existing passenger terminal ;
  - a baggage handling building;
  - a plant enclosure,
  - three Skylink walkways and
  - associated hardstanding.

The proposed development extents subject of the planning application (shown in red) is presented in Figure 1.

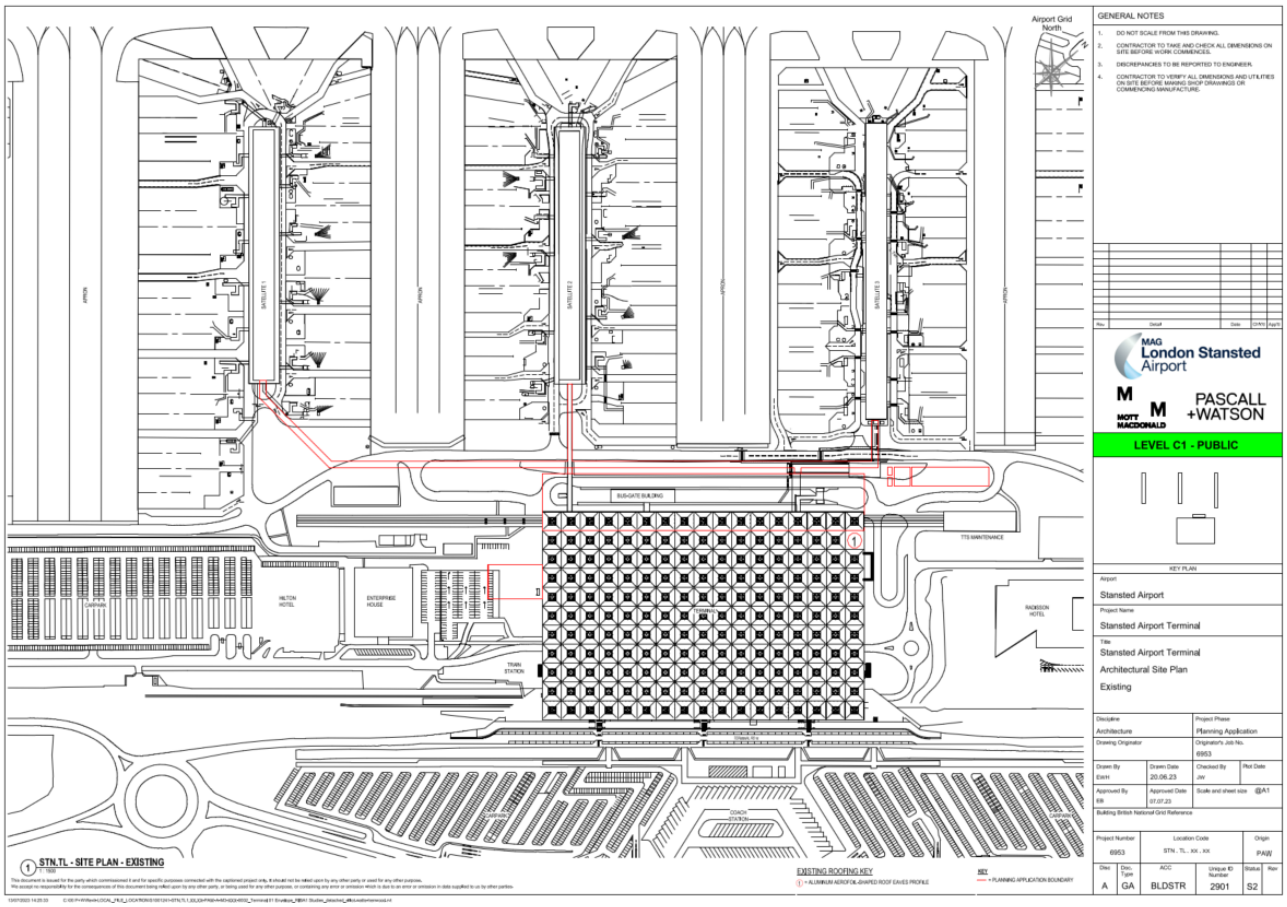


*Figure 1 – Proposed planning application boundary*

## 1.3 Planning Policy

The statement has been prepared in consideration of local and national planning policy.

Policy ENV14 (Contaminated Land) of the Uttlesford Local Plan Policy states the following:

*"Before development, where a site is known or strongly suspected to be contaminated, and this is causing or may cause significant harm, or pollution of controlled waters (including groundwater) the site investigation, risk assessment, proposals and timetable for remediation will be required."*

The statement also considers the National Planning Policy Framework (NPPF) which provides guidance on the implementation of contaminated land and pollution management requirements to address contamination risks through the planning system. Paragraphs 183, 184 and 185 of the NPPF state the following:

*"183: Planning policies and decisions should ensure that:*

- *A site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential threats on the natural environment arising from that remediation);*
- *After remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and*
- *Adequate site investigation information, prepared by a competent person, is available to inform these assessments.*

*184: Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.*

*185: Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development."*

# 2.0 Land Contamination Baseline and Assessment

## 2.1 Introduction

The following statement is based upon a Land Contamination Preliminary Risk Assessment (PRA) which forms part of a wider Geotechnical and Geo-environmental Desk Study Report.

The Desk Study Report considers the guidance given in the Environment Agency's Land Contamination Risk Management Framework (LCRM) (Environment Agency, 2022) as well numerous other documents including BS10175: Investigation of Potentially Contaminated Sites: Code of Practice (BSI, 2013).

The report is being produced by competent persons who hold recognised qualifications and/or accreditation in land contamination assessment.

## 2.2 Summary of Preliminary Risk Assessment

### 2.2.1 Overview

In terms of land contamination, the purpose of the PRA is to summarise readily available ground related information for the site and identify potential geo-environmental hazards and risks which may place a constraint upon the proposed works. These hazards may pose a risk to the development itself, human health or the environment.

Overall the objectives of the report are as follows:

- Establish the likely geological sequence at the site, and any known variations within the wider area;
- Review the historical development of the site;
- Summarise geo-environmental considerations associated with the proposed scope of works;
- Develop a conceptual site model of potentially complete pollutant linkages using a source-pathway-receptor approach;
- Undertake a preliminary land contamination risk assessment; and
- Outline recommendations for any mitigation and further work including additional intrusive ground investigation to further understand levels of risk that can be used to inform a remediation strategy phase, if required.

### 2.2.2 Findings

The proposed development is located in an area with limited previous development prior to the construction of the existing airport. The planning application development site is expected to be underlain by:

- a limited thickness of made ground associated with the existing development;
- superficial deposits comprising the Lowestoft Formation (Glacial Till) and in turn a variable thickness of the Kesgrave Sand and Gravels; and
- bedrock geology comprising the London Clay Formation.

The superficial deposits are classified by the Environment Agency as either Secondary Undifferentiated (Lowestoft Formation) or Secondary A (Kesgrave Sand and Gravels) and the bedrock deposits as Unproductive strata. Groundwater is not utilised for supply in the area and may be regarded as relatively low sensitivity. The nearest surface water feature is a small stream located approximately 300m to the south east of the development. The Pincey Brook which forms part of the Upper Lea catchment is present approximately 380m to the west in a culvert.

Airports can represent a source of contamination due to activities such as aircraft refuelling, de-icing, use of firefighting foams or importation of made ground, including those that may have been used to infill a moat formerly present on site. Other than possible underground storage and distribution of fuels, which could present a source of gases and vapours, significant ground gas sources such as landfill deposits (or methane bearing strata) have not been identified on or within the site vicinity (250m).

The following risks are assessed in the Desk Study Report:

- low to moderate/low risks to human health (e.g. construction workers, maintenance workers and final end users);
- very low risk to offsite/adjacent land users during construction
- very low risk to surface water
- moderate/low risk to the built environment; and
- a low to moderate/low risk to groundwater.

Overall, it is assessed that some further site-specific ground investigations should be undertaken on the planning application site in conjunction with investigations for geotechnical purposes. The findings of this investigation will be reported in a further risk assessment report which, where necessary, will include recommendations for remedial works to ensure the safe development of the site.

It is expected that land contamination risks can be adequately controlled through the use of planning conditions requiring further investigations to enable the safe development of the site for the proposed development.

# 3.0 Conclusions

Land contamination risks have been assessed in accordance with local and national planning policy and guidance in order to support the planning application. This is achieved through the provision of a Preliminary Risk Assessment report prepared by competent persons.

Recommendations made in the report include the need for site specific ground investigations to be undertaken in conjunction with investigations for geotechnical purposes. The findings of these investigations will be reported in a further risk assessment report. Where necessary, the further report will include recommendations for a remediation strategy to be implemented to ensure the safe development of the site.

Overall, it is expected that land contamination risks can be adequately controlled through the use of planning conditions requiring further investigations to enable the safe development of the site in accordance with planning policy.