M60/M62/M66 Simister Island Interchange

TR010064

6.5 FIRST ITERATION ENVIRONMENTAL MANAGEMENT PLAN

APPENDIX G: OUTLINE MATERIALS MANAGEMENT PLAN

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CONTENTS

Outline Materials Management Plan

G.1 Background to the plan

G.1.1 This Outline Materials Management Plan (Outline MMP) sets out the measures that will be implemented by the Principal Contractor (PC) to manage excavated materials and imported materials during construction of the M60/M62/M66 Simister Island Interchange (the "Scheme"). This management plan will be updated by the PC and included within the Second Iteration Environmental Management Plan (EMP) , as appropriate and necessary, prior to commencement of works in accordance with the relevant Requirements in Schedule 2 of the draft Development Consent Order (DCO) (TR010064/APP/3.1) and the requirements of this First Iteration EMP.

G.2 Purpose of the Outline MMP

G.2.1 This Outline MMP outlines the procedures and measures that will be adopted and implemented by the PC to classify, track, store, reuse and dispose of the excavated materials that will be encountered during the construction of the Scheme, as require by the following legislation and guidance:

- The Environmental Protection Act 1990 (UK Government , 2016).
- Contaminated Land: Applications in Real Environments (CL:AIRE), The Definition of Waste: Development Industry Code of Practice (V2), March 2011 (DoWCoP).
- The Environmental Permitting (England and Wales) Regulations 2016 (UK Government , 2016).

G.3 Overview

G.3.1 Under DoWCoP, the MMP is prepared based on scheme-specific information. The scheme-specific information is used to set out the tracking system for material movement, contingency arrangements, and verification plan.

G.3.2 The tracking system is a plan for tracking, monitoring, and reporting on material use and the quantity of residual waste, including the creation of waste contingent to other on-site activities, for recovery and/or for off-site recovery or disposal.

G.3.3 The use of uncontaminated excavated materials within the Scheme will be undertaken in accordance with the MMP (or earthworks plan) prepared

following the principles of CL:AIRE DoWCoP (CL:AIRE, 2011) and these materials will not be classified as waste.

G.3.4 Uncontaminated soil and other naturally occurring material excavated during construction activities, where it is certain that the material would be used for the purposes of construction in its natural state on the site from which it was excavated, is excluded from waste regulation by the Waste Framework Directive (2008).

G.3.5 Reuse of fill materials may require remedial treatment and will be developed with the MMP for the CL:AIRE DoWCoP declaration (CL:AIRE, 2011). Construction activities carried out on uncontaminated soils solely for the purpose of improving geotechnical properties are not generally regarded as a waste treatment operation and would not prevent the excavated material being regarded as a non-waste.

G.3.6 It is anticipated that the MMP will complement, and be an integral part of, the earthworks for the construction of the Scheme. The details of the MMP would be dependent on the Design Statement, and/or the Series 600 Specification Appendices for the Scheme. The overall earthworks balance will be heavily dependent on design developments and the reuse of generated materials will be addressed in the MMP.

G.3.7 This Outline MMP is based on the information currently available. The PC will prepare the MMP prior to the commencement of works. The PC will be responsible for preparing, updating, and implementing the MMP and ensuring that all required authorisations, consents, and permissions are obtained.

G.4 Roles and Responsibilities

G.4.1 Roles and parties involved in the preparation and implementation of the MMP (or earthworks plan) for the Scheme are set out in the Table below; this will be updated and included within the Second Iteration EMP.

Role Title	Responsible Persons	Primary Contact
Applicant	National Highways	TBC
Planning Authority	The Planning Inspectorate	TBC
Environment Agency	Greater Manchester, Merseyside and Cheshire	TBC
Principal Contractor	Costain	TBC
Designer	Jacobs	TBC
Qualified Person	TBC	TBC

G.4.2 In relation to the control and management of excavated materials, the PC will establish the appropriate roles and responsibilities for individual site staff in accordance with the roles and responsibilities set out in the EMP.

G.4.3 The PC will be responsible for ensuring that all people working on the site, including sub-contractors, are working in line with the requirements of the MMP, where appropriate.

G.5 Expected Material Generation

Soils

G.5.1 A preliminary geology and soil assessment has been undertaken, which in turn has helped to consider the geology, soil resources and land contamination within the footprint of the Scheme.

G.5.2 Maximising reuse and diverting waste away from landfill would reduce the environmental impacts associated with materials production, thereby supporting a circular economy. The MMP will aim to set out a plan that reduces materials sent to landfill.

G.5.3 There is expected to be excavated material generated from each section of the Scheme, with most of the excavated material coming from attenuation pond excavations. Initial ground investigation (GI) in each quadrant shows a variety of poor-quality material located around the Simister Island Junction and at the northern extents of the Scheme.

G.5.4 Isolated peat has been recorded within the Scheme boundary, within the North-West Quadrant (NWQ).

G.5.5 Handling and management of excavated peat from the site will be as detailed in ‘Appendix F – Outline Soil Management Plan’ of this First Iteration EMP.

G.5.6 The presence of inert waste deposited to the east and west of the M60 has been highlighted through GI. GI has proven the inert waste deposits to be a high-quality material, which would be suitable for reuse in construction, if permitted.

G.5.7 There is currently limited information available regarding the precise material requirements and waste quantities associated with constructing the Scheme. Initial assessments based on the preliminary design and the GI show that the generation and disposal of waste material are likely to be not significant, however, this is heavily dependent on the material classification, material treatment opportunities and Series 600 Specification appendices for the Scheme.

Concrete

G.5.8 It is expected that there will be concrete generated from the Scheme from the demolition of existing technology infrastructure located on the M60 and M66 on the approach to Junction 18.

G.5.9 Concrete generated from the Scheme will be stockpiled separately to other materials. Material treatment opportunities will be investigated to reclassify generated concrete for reuse in the Scheme.

G.5.10 Where possible, the source segregated aggregate material arising from the demolition activities would be reused in earthworks as a reclassified material, e.g., as sub-base or drainage materials. The opportunities for reuse will depend on the material generated and the Series 600 Specification Appendices.

Plainings

G.5.11 It is expected that there will be tarmac plainings generated during the pavement construction of the Scheme. Initial pavement investigation has shown that there is no coal tar present within the existing pavement within the provisional order limits of the Scheme.

G.5.12 Plainings that are generated from the Scheme will be stockpiled separately to other materials. Where possible, the source segregated aggregate material arising from the planning activities would be reused in earthworks or temporary works on the Scheme. The opportunities for reuse will be dependent on material classification and the Series 600 Specification Appendices.

G.6 Material Classification

G.6.1 A material classification system will be identified in the Series 600 Specification, which will likely be in line with the Specification for Highways Works 600 Series Appendices Table 6/1 (Standard For Highways, 2017). Site-won excavated materials would be reused onsite wherever practicable and offsite disposal minimised. Offsite disposal would be a last resort.

G.6.2 If a material classification does not allow for reuse for either landscaping or engineering functions and instead classifies the material as unacceptable, then opportunities to treat and reclassify the material will be investigated. Treatment of materials considered will include, but may not be limited to; cement stabilisation, lime stabilisation, soil washing and soil drying. All treatment will be undertaken in line with the Series 600 Specification Appendices, including Table 6/1.

G.6.3 Earthworks flexibility areas have been identified across the Scheme as areas where bunds can be used to permanently deposit landscape fill that is unable to be used for engineering application. The earthworks flexibility areas will contribute to the reuse of material on-site wherever possible, to minimise offsite disposal.

G.6.4 Expected material types and the anticipated destination are detailed in the table below.

Material	Anticipated Final Destination (subject to classification)	Comments on suitability
Topsoil	Agricultural restoration / landscaping	Topsoil suitability across site good but requirements addressed in the Soil Handling Management Plan (SMP). Testing/reporting at agreed frequencies.
Subsoil	Agricultural restoration / landscaping / general fill	Use as general fill dependent on classification and treatment. Testing/reporting at agreed frequencies.
Made Ground	General fill	Some areas of made ground currently noted as inert waste. Reuse of this material will be investigated further. Testing/reporting at agreed frequencies.
Natural Ground	General fill	Varying suitability across site expected based on GI. Poor quality material expected at the northern extents of the Scheme. Testing/reporting at agreed frequencies.
Demolition Materials (Concrete)	General fill / sub-base / drainage materials	Require suitable processing prior to reclassification. Testing/reporting at agreed frequencies.
Imported Materials	Structural fill	Testing/reporting at agreed frequencies.

Material	Anticipated Final Destination (subject to classification)	Comments on suitability
Planings	General fill / Sub-base / Temporary Works	No contamination expected. Testing/reporting at agreed frequencies.

G.7 Material tracking and storage

G.7.1 The PC would identify, measure, and record the types, quantities and provenance of all materials used in constructing the Scheme in a materials procurement register (or equivalent). A template is provided within Annex B of the Outline Site Waste Management Plan (Appendix C of this First Iteration EMP). All material movements will be tracked during the construction of the Scheme. The materials procurement register will detail the location of all site-won excavated materials during construction and demolition, materials treated and reclassified, the imported materials during construction, and any materials disposed of during construction.

G.7.2 The PC will be responsible for assigning a specified person(s) for record keeping during the construction process onsite. All records of material movements will be kept for a minimum of 2 years following the completion of the Scheme.

G.7.3 Site-won material will be stockpiled based on its characteristics and classification. Site won soils will be tested and classified prior to use as landscaping or engineering fill and at a frequency specified in the Series 600 Specification.

G.7.4 Imported material will be stored in stockpiles based on the characteristics and classification. Imported materials will be tested and classified prior to use in engineering application and at a frequency specified in the Scheme specific specification appendices.

G.8 Data Management

G.8.1 Data would be stored electronically onsite. Data uploads will be undertaken at an appropriate agreed frequency during the construction phase. Location data would be geo-referenced, and all stockpile sample nomenclature would ensure individual identification.

G.9 Reporting

G.9.1 Reporting requirements would be set out in the MMP. It would identify how the placement of materials would be recorded and the quantity of

material to be used. It would also state how the use of the materials relates to the design objectives of the Scheme. The design objectives can be found in the Scheme Design Report (TR010064/APP/7.6)

G.9.2 The Scheme objectives will be addressed in the MMP, and specific quantities of material will be specified as the design is developed. The design will be developed in line with the objectives of the Scheme.

G.10 Demonstrating Geotechnical Acceptability

G.10.1 All site-won material classification will be subject to geotechnical analysis. The results of the geotechnical analysis will be assessed against the material classification criteria included in the Earthworks (Series 600) Specification Appendices. The material classification will be documented and reported in an agreed format.

G.10.2 Material placement and compaction techniques will be subject to in-situ and laboratory geotechnical testing to determine the achieved level of compaction in accordance with the Earthworks (Series 600) Specification Appendices. Material compaction testing will be documented and reported in an agreed format. No material would be allowed to remain in place where, following comprehensive review, the results indicate the achieved level of compaction does not meet the required standard.

G.10.3 Other geotechnical testing may be specified in the Earthworks (Series 600) Specification Appendices. The PC will undertake geotechnical testing at the specified frequency from the Scheme specific specification appendices. All testing will be documented and reported in an agreed format.

G.11 Demonstrating Geochemical Acceptability

G.11.1 During the detailed design phase site-specific material acceptability criteria would be developed and incorporated into the Earthworks (Series 600) Specification Appendices for the Scheme. Site-specific material acceptability criteria would be derived from a detailed site-specific quantitative risk assessment (DQRA).

G.11.2 Site-won earthworks materials (including materials from areas of cut), site-won demolition materials and any imported earthworks materials would be subject to a suite of chemical laboratory analysis appropriate to the ground conditions at the site. The results of the analysis would be assessed against the site-specific material acceptability criteria for the Scheme. The material review process would be documented.

G.11.3 The material would be classified as either suitable for reuse, unsuitable for reuse or that further testing is required. No materials would be used in the

Scheme where the results indicate exceedance of the acceptability criteria, which would be developed to be protective of human health and controlled waters in respect to the end use.

G.11.4 If the materials are deemed unsuitable for use on the site, the data used for the assessment, or any additional testing identified, would also be used to characterise any waste in line with Technical Guidance WM3 (Environment Agency, 2021).

G.12 Demonstrating Effectiveness of Treatment

G.12.1 Where materials have been identified as unsuitable for use within the Scheme, they would be either designated for offsite disposal or onsite processing or treatment.

G.12.2 Where materials are subject to treatment, the specific treatment approach would be monitored via field measurements and laboratory sampling of the materials. The testing would be carried out by the PC providing the processing or treatment process within the terms of the (Mobile) Environmental Permit and Site-Specific Working Plan.

G.12.3 The results of the laboratory testing and field measurements would provide lines of evidence to allow validation of the treatment works, in addition to comparison of determined concentrations against the site-specific material acceptability criteria. Where a material cannot be validated as having been treated to the required standard it would either be sent for additional treatment or, if this is impractical, the material would be sent for offsite management or disposal.

G.12.4 The results of all field and laboratory testing and the acceptability assessment would be documented and reported in an agreed format.

G.13 Demonstrating Effective Removal of Unsuitable Materials

G.13.1 Materials that are surplus to requirements onsite or are assessed as being unsuitable for use within the Scheme, may need to be removed from site as waste.

G.13.2 The waste classification of the material would be determined prior to removal from site. The ’Guidance on the classification and assessment of waste’(Environment Agency, 2021) and Disposal of waste to landfill (Agency, Environmental, 2020) would be followed and includes:

- An assessment, based on chemical analysis data, to determine whether the material is hazardous waste, or not. Reuse acceptability criteria testing can be used provided the approach to sampling

matches the requirements of the 'Guidance on the classification and assessment of waste'.

- Preparation of basic waste characterisation, including identifying the source, origin and composition of the waste, and the relevant waste code.
- Identification of appropriate pre-treatment of waste, registered waste carrier(s) and destination of the waste materials.
- Where wastes are to be disposed of to landfill, undertaking Waste Acceptance Criteria (WAC) testing to identify the type of landfill that the waste can be sent to and to enable landfill operators to determine whether they can accept it.

G.13.3 The results of all waste classification and assessment would be documented and reported in an agreed format. Further discussion with regards to the duty of care requirements for disposing of waste offsite is provided within the Outline Site Waste Management Plan (Appendix G) of this First Iteration EMP.

G.14 Demonstrating Protection of Controlled Waters

G.14.1 Environmental monitoring will include sampling of groundwater and surface water to provide evidence that the works are not mobilising contaminants in groundwater which may also impact surface waters. The results of all monitoring rounds would be documented. The groundwater and surface water monitoring programme would be agreed with the Environment Agency prior to the start of construction and included within the Second Iteration EMP.

G.15 Monitoring

G.15.1 The PC would undertake regular audits and inspections of material procurement and waste management activities to ensure compliance with the requirements of this plan, statutory controls and other Scheme policies and procedures relevant to material assets and wastes.

G.16 Verification Reporting

G.16.1 Upon completion of the works and subsequent monitoring (where deemed necessary) a verification report will be produced which will bring together all the "as built" information and geotechnical / geochemical laboratory testing results to provide a narrative to the development earthworks.

G.16.2 The verification report for the Scheme will include the following information relating to the geochemical and geotechnical assessment of materials:

- A general description of the works and earthworks.
- Details of all excavated material classifications including site location references and volumes.
- Details of all exposed (at base or sides of excavations) material classifications including site location references and volumes.
- Details of all visual and olfactory inspections of material.
- Details of all imported material classifications and volumes.
- Results of all geochemical and geotechnical testing relating to all imported and treated materials.
- The results of the assessments of material acceptability.
- Details of any geotechnical remedial measures that have been undertaken (e.g. lime modification).
- Details of the achieved levels of compaction of earthworks materials.
- Details of all geochemical remedial treatment undertaken (including process details, volumes, specific materials undergoing treatment, results of the treated material).
- Details of the final placement of excavated, treated, and imported materials (linked to the assessment of material acceptability).
- Details of any geotechnical remedial measures that have been undertaken (e.g. lime modification).
- Details of the materials sent for off-site disposal, including waste classification, volumes and disposal location.
- Results of all WAC testing.
- All waste transfer and consignment documentation for the materials disposed of off-site.
- Details of any discharge consents (Environmental Permits) required for the works.
- The Environmental Permit details for the landfill operators accepting wastes from site or relating to any on-site remedial treatment processes.
- The monitoring records and laboratory analysis results for all monitoring.
- Details of any alterations/amendments made to the Design Statement or Remediation Strategy (as appropriate).
- Details of any contingency measures undertaken during the works.
- Details of all correspondence with the regulatory authorities during the works.

- As-built drawings showing surveyed original ground levels, levels of base of temporary excavations, temporary side slopes of excavations, positions of samples and test carried out, and the MMP grid system.
- As-built drawings showing surveyed finished ground levels and positions of point-of-placement samples and tests carried out.

G.17 References

Agency, Environmental. (2020, January 30). *Disposal of waste to landfill*. Retrieved from www.gov.uk: https://www.gov.uk/guidance/dispose-of-waste-to-landfill

CL:AIRE. (2011, March 01). *Definition of Waste: Development Industry Code of Practice .* Retrieved from ww.claire.co.uk: https://www.claire.co.uk/projects-and-initiatives/dow-cop/28-framework-and-guidance/111-dow-cop-main-document

Environment Agency. (2021). *Waste Classification.* Bristol: Environment Agency. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1021051/Waste_classification_technical_guidance_WM3.pdf

SEPA. (2010). *SEPA Regulatory Position Statement – Developments on Peat.* Motherwell: National Waste Policy Unit.

Standard For Highways. (2017, February 01). *Manual of contarct documents for highway works .* Retrieved from www.standardsforhighways.co.uk: https://www.standardsforhighways.co.uk/tses/attachments/471049cb-7dd8-452a-81e6-fc8af7d31b91?inline=true

UK Government . (2016, January 01). *The Environmental Permitting (England and Wales) Regulations* . Retrieved from Legilation.Gov.UK: https://www.legislation.gov.uk/uksi/2016/1154/contents/made