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# A83 Rest and Be Thankful

LTS EIAR VOLUME 4, APPENDIX 13.2 - MATERIAL ASSETS AND  
WASTE METHODOLOGY

Transport Scotland

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## A13-2. Material Assets and Waste

### Methodology

#### A13-2.1. Assessment Methodology

A13-1.1.1. The primary guidance used to inform the assessment process is set out in [Design Manual for Roads and Bridges \(DMRB\) LA 110](#) (herein referred to as 'DMRB LA 110').

##### Study Area

A13-1.1.2. The study areas for Materials Assets and Waste that are applicable to the Proposed Scheme (as defined in DMRB LA 110) are as follows:

A13-1.1.3. The primary study area is defined by the extent of works within the site boundary for the Proposed Scheme. The Proposed Scheme comprises the likely footprint and any areas required for temporary access, working platforms and other enabling activities as far as appropriate for a DMRB Stage 3 assessment.

A13-1.1.4. The secondary study area comprises the extent to which infrastructure is suitable and available for the management of arisings and waste generated by the Proposed Scheme. Accordingly, the second study area for waste is determined to be the local authorities of Argyll and Bute, The Highlands, Inverclyde, North Ayrshire, Perth and Kinross, Stirling, and West Dunbartonshire (as defined by SEPA), and – where necessary or especially where regional data are unavailable – Scotland and then the UK. The secondary study area has been set using professional judgement of the balance between the proximity principle and value for money (with regard to materials and waste logistics) and considering the extent of available data to compile a baseline assessment.

A13-1.1.5. In accordance with good practice, a study area for the availability of typical materials required for the Proposed Scheme has been included. The study

area for materials has the same geographical extent as that for waste management infrastructure.

### Baseline Data Collection

A13-1.1.6. Through desktop research, the baseline scenario describes the current and likely future state (in the absence of the Proposed Scheme) of:

- the types and quantity of material required associated with the operation of the existing land use within the primary study area defined above
- the types and quantities of waste produced associated with the operation of the existing land use within the primary study area
- the availability of key construction materials required for the Proposed Scheme within the secondary study area defined above
- waste infrastructure and remaining landfill capacity within the secondary study area.

### Assessment Data Collection

A13-1.1.7. In accordance with DMRB LA 110, the assessment of material assets and waste is a quantitative exercise that aims to identify the following.

#### For material assets

- types and quantities of materials required to construct the Proposed Scheme
- information on materials that contain secondary / recycled content
- information on any known sustainability credentials of materials to be consumed
- the type and volume of materials that will be recovered from off-site sources for use on the Proposed Scheme
- the cut and fill balance
- details of on-site storage and stockpiling arrangements, and any supporting logistical details.

- A13-1.1.8. An assessment of the effects of consuming materials required during the construction phase and first year of operation has been undertaken by considering the origins and sources of materials, including their general availability (production, stock, sales) and the proportion of recovered (reused or recycled) materials they contain (as well as other sustainability features).
- A13-1.1.9. The reuse of excavated and other arisings (that meet waste exemption and other recognised reuse criteria) has been evaluated as part of the assessment of materials, to determine whether the adverse impacts associated with the consumption of primary resources can be reduced.

#### For waste

- the amount of waste (by weight) that would be recovered and diverted from landfill either on site or off site (i.e. for use on other projects)
  - types and quantities of waste arising from the Proposed Scheme (demolition, excavation arisings and remediation) requiring disposal to landfill
  - details of on-site storage and segregation arrangement for waste and any supporting logistical arrangements
  - potential for generation of hazardous waste (type and quantity).
- A13-1.1.10. The assessment considers the type and volume of waste to be generated by the Proposed Scheme and determines the potential impact on remaining landfill capacity in the secondary study area; this is completed for inert and non-inert (non-hazardous and hazardous) waste types, where data are available. Wherever waste is recovered (diverted from landfill) the influence of this action is taken into account in the assessment of significance.
- A13-1.1.11. The quantitative exercise of assessment conducted has used current design data provided by the design team.

#### Significance Criteria

- A13-1.1.12. The assessment in the Material Assets and Waste chapter has adopted the significance criteria set out in DMRB LA 110, as replicated in Table A13-1.1.

The criteria set out by DMRB LA 110 does not require a separate assessment of sensitivity and magnitude of change. Instead, assessment criteria are applied individually to material assets (using Column 2 of Table A13-1.1) and waste (using Column 3).

**Table A13-2.1: Material Assets and Waste significance criteria**

Significance Category	Material Assets	Waste
Very Large	(No criteria for 'Very Large': use criteria for 'Large').	>1% reduction or alteration in national capacity of landfill, as a result of accommodating waste from the Proposed Scheme or Construction of new (permanent) waste infrastructure is required to accommodate waste from the Proposed Scheme.
Large	The Proposed Scheme achieves <70% overall material recovery / recycling (by weight) of non-hazardous Construction and Demolition Waste (CDW) to substitute use of primary materials and Aggregates required to be imported to site comprise <1% re-used / recycled content.	>1% reduction in the regional capacity of landfill as a result of accommodating waste from the Proposed Scheme and >50% of the Proposed Scheme waste for disposal outside of the region.

Significance Category	Material Assets	Waste
Moderate	The Proposed Scheme achieves <70% overall material recovery / recycling (by weight) of non-hazardous CDW to substitute use of primary materials and Aggregates required to be imported to site comprise re-used/recycled content below the relevant regional percentage target*.	>1% reduction or alteration in the regional capacity of landfill as a result of accommodating waste from the Proposed Scheme and 1-50% of the Proposed Scheme waste for disposal outside of the region.
Slight	The Proposed Scheme achieves 70-99% overall material recovery / recycling (by weight) of non-hazardous CDW to substitute use of primary materials and Aggregates required to be imported to site comprise re-used/recycled content in line with the relevant regional percentage target*.	≤1% reduction or alteration in the regional capacity of landfill; and Waste infrastructure has sufficient capacity to accommodate waste from the Proposed Scheme, without compromising integrity of the receiving infrastructure (design life or capacity) within the region.
Neutral	The Proposed Scheme achieves >99% overall material recovery / recycling (by weight) of non-hazardous CDW to substitute use of primary materials and Aggregates required to be imported to site comprise >99% re-used / recycled content.	No reduction or alteration in the capacity of waste infrastructure within the region.

Notes: The Recycled Aggregate Targets included in DMRB LA 110 are applicable to England and its regions only. Therefore, for Scotland, in accordance with Scotland National Application Annex to DMRB LA 110 Material Assets and Waste Rev 0 2019 the England target is used as the target for Scotland for major road network infrastructure projects..

A13-1.1.13. The descriptions provided in Table A13-1.2 are used to define whether effects identified are likely to be significant or not, where one or more criteria are met.

**Table A13-2.2: Significance of Effect Thresholds**

Significance Criteria	Materials significance of effect	Waste significance of effect
Very Large	(no criteria)	Significant
Large	Significant	Significant
Moderate	Significant	Significant
Slight	Not significant	Not significant
Neutral	Not significant	Not significant