



Greater Cambridge Partnership

CAMBOURNE TO CAMBRIDGE

Technical Report 10 – Material Assets and Waste





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1 INTRODUCTION AND SUMMARY

- 1.1.1 The C2C Scheme will include a 13.6km long mainly dedicated busway connecting Cambourne in the west with Cambridge in the east. A service road and maintenance track, to be used as an active travel path, will run alongside the segregated sections of busway. The C2C Scheme will use hybrid vehicles (and in due course, electric vehicles), providing a service of around 10 buses per hour each way. The Scotland Farm travel hub (a park and ride facility) will be situated along the route, just north of the A428, approximately 5km west of Cambridge. Further details about the Scheme proposal are set out in Chapter 3 of the ES1.
- 1.1.2 This Technical Report reports the outcome of the assessment of likely significant environmental effects arising from the Cambourne to Cambridge (C2C) Scheme on Materials and Waste. Impacts during the construction phase of the C2C Scheme have been assessed.
- 1.1.3 In accordance with the Scoping Report², the operation phase has been scoped out for further assessment.
- 1.1.4 This Technical Report:
- Describes the methodology followed for the assessment;
 - Identifies the potential impacts as a result of the C2C Scheme;
 - Details the design, mitigation and enhancement measures that have been so far identified, and the effectiveness and certainty with which they are expected to be applied;
 - Reports the assessment of the significant environmental effects of the C2C Scheme; and
 - Details the monitoring that should be carried out for the C2C Scheme.
- 1.1.5 The C2C Scheme has the potential to affect Materials and Waste due to the consumption of natural and non-renewable resources and the potential reduction in landfill capacity.
- 1.1.6 This assessment has considered the potential impacts and effects associated with the construction stage of the C2C Scheme. The assessment has been informed by the relevant national, regional and local planning policies (the latter outlined in Section 3) and detailed within the Planning Statement .
- 1.1.7 There is a requirement to import a total of approximately 495,000 tonnes of bulk construction materials to construct the C2C Scheme, the majority of this comprises imported earthworks material intended to be used for backfill material for embankments, structures and drainage.
- 1.1.8 Information on sustainable features of materials (such as recycled or secondary content) includes the reduced use of virgin material and aggregates by decreasing material requirements in the design itself, using site-won or recycled materials, and through the use of materials with a high proportion of recycled content.

¹ Environmental statement (Document reference: C2C-10-00-Environmental Statement (Volume 1))

² [Greater Cambridge Partnership: ES Scoping Report, February 2022](#)

- 1.1.9 The C2C Scheme has committed (in line with regional targets) to achieve at least a 31% recycled aggregate content to ensure that the effects of material consumption are not significant. Furthermore, it has been demonstrated that 80% of the total earthworks (from excavations) are to be reused on the C2C Scheme as fill, where suitable e.g., recompacting them as backfill for piling and drainage.
- 1.1.10 Based on a worst-case scenario, the total volume of waste from the C2C Scheme is expected to be 70,190 Tonnes (87,740 m³). Disposal of this waste (potentially to landfill) is anticipated to be <1% of the forecast regional capacity of landfill of 31.7 Mm³.
- 1.1.11 Overall, the construction of the C2C Scheme would result in a Slight Adverse (Not Significant) effect, in accordance with standard assessment criteria set out in LA1103 (Table TR10-3-1) and taking into account the mitigation measures outlined in Section 4.

³ Design Manual for Roads and Bridges (2019) LA 110 Material Assets and Waste. Available at: <https://www.standardsforhighways.co.uk/prod/attachments/6a19a7d4-2596-490d-b17b-4c9e570339e9?inline=true>

2 BASELINE CONDITIONS

2.1.1 This section describes the materials required to be consumed, and waste to be generated and disposed of, by the current land use (the baseline) of the C2C Scheme; information provides the context in which an assessment of environmental impacts and significant effects can be undertaken. The following structure for this part of the Technical Report has been applied:

Materials

- baseline materials consumption, as determined by the materials currently required for the existing land use and assets;
- regional and national information and data for material resource availability, specifically in relation to construction materials typically required for highways schemes and improvement works; and
- location of mineral site and peat resources in relation to the C2C Scheme.

Site arisings

- baseline site arisings as determined by any resources generated by construction, excavation or demolition activities on the existing land use and assets; and
- regional and national information and data for existing transfer, recovery and recycling waste management facilities.

Waste generation and disposal

- baseline data for the type and volume of waste generated and disposed of by the existing land use and current assets; and
- regional / national information and data describing current landfill capacity.

2.1.2 The baseline data collected and presented in this section were obtained by desk study, from publicly available sources; the most up to date sources of information have been used. Indication of the most recent year from which data has been acquired is provided throughout.

2.1.3 The following data sources have been consulted to inform the baseline review:

- Mineral Products Association, Profile of the UK Mineral Products Industry, 2020 Edition⁴
- Department for Business, Energy & Industrial Strategy (2020), Monthly Bulletin of Building Materials and Components⁵
- East of England Aggregates Working Party Annual Monitoring Report (2017)⁶
- United Kingdom Steel Production | 1969-2020 Data | 2021-2022 Forecast | Historical (Online)⁷
- The Cambridgeshire and Peterborough Minerals and Waste Local Plan (adopted 2021)⁸
- Natural England MAGIC mapping website⁹
- Defra Basis of the UK BAP target for the reduction in use of peat in horticulture SP0573 (2009)¹⁰
- Defra (2020) UK Statistics on Waste¹¹
- Department for Communities and Local Government (2009). National and regional guidelines for aggregates provision in England 2005-2020¹²
- Environment Agency, Waste Data Interrogator (2021) 2020 Waste Summary Tables for England – Version 4: East of England and England¹³
- Environment Agency, Remaining landfill capacity – Version 2, England (2021)¹⁴

⁴ Mineral Products Association (2020). Profile of the UK Mineral Products Industry 2020 Edition. Available at: <https://www.mineralproducts.org/Facts-and-Figures/Profile-of-the-UK-Mineral-Products-Industry.aspx>.

⁵ Department for Business, Energy & Industrial Strategy (2020). Monthly Bulletin of Building Materials and Components. Available at: [Monthly Statistics of Building Materials and Components - data.gov.uk](https://www.data.gov.uk/dataset/2017-annual-monitoring-report-east-of-england-aggregates-working-party).

⁶ UK Government (2017). East of England Aggregates Working Party Annual Monitoring Report (2017). Available at: [2017 Annual Monitoring Report: East of England Aggregates Working Party \(centralbedfordshire.gov.uk\)](https://www.centralbedfordshire.gov.uk/2017-Annual-Monitoring-Report-East-of-England-Aggregates-Working-Party).

⁷ World Steel Association (2020). United Kingdom Steel Production | 1969-2020 Data | 2021-2022 Forecast | Historical. Available at: <https://tradingeconomics.com/united-kingdom/steel-production>.

⁸ Cambridgeshire County Council and Peterborough City Council (July 2021) Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036. Available at: <https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/adopted-minerals-and-waste-plan>

⁹ Natural England MAGIC mapping website (2021). Available at: [MAGIC \(defra.gov.uk\)](https://www.magic.gov.uk/).

¹⁰ Department for Environment Food and Rural Affairs (DEFRA) (2009). Basis of the UK BAP target for the reduction in use of peat in horticulture – SP0573 (2009). Available at: [Defra, UK - Science Search](https://www.defra.gov.uk/science/search/).

¹¹ Defra (2020). UK Statistics on Waste. Available at: [UK Statistics on Waste \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/444444/uk-statistics-on-waste-2020.pdf).

¹² Department for Communities and Local Government (2009). National and regional guidelines for aggregates provision in England 2005-2020. Available at: [National and regional guidelines for aggregates provision in England 2005 to 2020 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/144444/national-and-regional-guidelines-for-aggregates-provision-in-england-2005-to-2020.pdf).

¹³ Environment Agency (2022). Waste Data Interrogator 2021 Waste Summary Tables for England – Version 2. Available at: <https://www.data.gov.uk/dataset/d8a12b93-03ef-4fbf-9a43-1ca7a054479c/2021-waste-data-interrogator>.

¹⁴ Environment Agency (2021). Remaining landfill capacity – England, Version 1 (2020). Available at: [Remaining Landfill Capacity - data.gov.uk](https://www.data.gov.uk/dataset/2021-remaining-landfill-capacity-england).

2.2 MATERIAL RESOURCES

Materials currently required.

- 2.2.1 The C2C Scheme lies to the west of Cambridge, running for approximately 13.6km between the town of Cambourne and Cambridge City along the A428/A1303 corridor, terminating on Grange Road in the western outskirts of Cambridge. Approximately 2.12km of the route lies on existing roads with the remaining 11.53km on a new alignment for the segregated carriageway.
- 2.2.2 The current land use along the route corridor comprises predominantly agricultural land (mainly arable farmland and one orchard) and grassland, woodland or scrub. A smaller proportion of the current land use comprises existing single carriageway and residential roads located in the village of Cambourne and in the West Cambridge area.
- 2.2.3 Therefore, the operation and maintenance of the current assets within the C2C Scheme areas require a small number of specialist components (for example, light bulbs, signage and street furniture) as well as some bulk products (e.g. asphalt and block-paving for minor re-surfacing) for routine works and repairs of the roads.
- 2.2.4 Although no data exists to quantify material consumption for the current land use, it is anticipated that this is limited to nominal quantities of resource required for routine maintenance and repairs of the existing assets. Therefore, the current requirement to use resources within the C2C Scheme areas is determined – using professional judgement – to be minimal in the context of regional supply.

Availability of construction materials

- 2.2.5 A summary of the availability of the main construction materials required to deliver typical highways schemes in the East of England and the UK is provided in **Table TR10-2-1 - Construction materials availability in the East of England and the UK**. The overview provides a context in which the assessment of potential environmental impacts and significant effects from material consumption from the C2C Scheme can be undertaken.

Table TR10-2-1 - Construction materials availability in the East of England and the UK

Material Type	East of England	UK
Sand and gravel ^{*5}	10.7 million tonnes (Mt)	60.2 million tonnes (Mt) (GB)
Permitted crushed rock ^{*4}	0.0 Mt (2019)	116.5 million tonnes (Mt) (GB) (2019)
Primary aggregate (comprises sand and gravel and crushed rock) ^{*4}	13.7 Mt (2019)	198.8Mt (2019)
Concrete blocks ^{#5}	1.4 million square meters (Mm ²) (Midlands)	6.2 Mm ² (GB)
Recycled and secondary aggregate + [*]	No data available ⁶	71.0 Mt ⁴ (GB) (2018)
Ready-mix concrete ^{*4}	1.5 million cubic meters (Mm ³) (2019)	24.7 Mm ³ (2019)
Steel + ⁷	(no data)	7.2 Mt (2020)
Asphalt ^{*4}	2.5 Mt (2019)	27.4 Mt (2019)
# stocks + production * sales	Data availability: 2021 unless otherwise stated GB: Great Britain (England, Wales and Scotland) figures used where UK figures (including Northern Ireland) are unavailable	

2.2.6 The Cambridgeshire and Peterborough Minerals and Waste Local Plan (CPMWLP)⁸ indicates that there are Mineral Safeguarding Areas (MSA) located within the C2C Scheme Order Limits:

- the eastern end of the C2C Scheme (between Bin Brook and Grange Road) overlies part of a large Sand and Gravel MSA within the wider Cambridge area; and
- the area to the north of Coton and west of the M11 which forms part of the offline route parallel to the A1303 intersects a large Chalk MSA which extends across the wider Cambridge area.

- 2.2.7 There are no Mineral Allocation Areas or Mineral Development Areas¹⁵ identified along the route of the C2C Scheme.
- 2.2.8 There are no known peat resources⁹ or active peat extractions¹⁰ within the development study area (defined in Section 3.1).
- 2.2.9 Across the UK, the availability of construction materials typically required for highways construction schemes indicates that supply and demand remain buoyant.
- 2.2.10 Where data is available, the average availability of construction materials in East of England is commensurate with other UK regions. For example, stocks of concrete blocks, and sales of primary aggregate, ready-mix concrete and asphalt are comparable. However, sales of sand and gravel are higher than the average, whilst permitted crushed rock is zero.

Furthermore, it should be noted that the East of England has a higher recycled content target for aggregate (31%) by comparison with the average for England (25%)¹².

2.3 SITE ARISING

Site arisings currently generated

- 2.3.1 The current land use within the primary study area is expected to generate minimal volumes of site arisings, limited to potential earthworks on agricultural land, and surplus materials generated during minor repair works on roads – some of which is expected to be diverted from landfill. Although no data exist to confirm this, professional judgement can be used to assert that the current generation of site arisings are minimal in the context of material recovery facilities and regional waste management infrastructure.

UK and regional perspective: transfer, recovery and recycling

- 2.3.2 In this Technical Report, waste recovery facilities within the region have been assessed to identify the availability of infrastructure and capacity for the transfer and recovery of Construction, Demolition and Excavation (CDE) wastes from the C2C Scheme. The availability of such infrastructure encourages practices that will divert waste from landfill.
- 2.3.3 Defra data (**Table TR10-2-2 - Non-hazardous construction and demolition waste recovery in England**) show that in England, the recovery rate for non-hazardous construction and demolition wastes has remained above 90% between 2010 and 2018. This exceeds the EU target of 70% (by weight), which the UK must have met by 2020¹¹. Note that the 70% target *excludes* naturally occurring materials (specifically, category 17 05 04 in the List of Wastes, which is defined as non-hazardous soils and stones)¹⁶.

¹⁵ Mineral Safeguarding Areas (MSAs) are identified on the Policies Map for mineral resources of local and/or national importance. They constitute the extent of known reserves plus a 250m buffer. Mineral Development Areas are specific sites identified on the Policies Map. They consist of existing operational sites and committed sites (i.e. sites with planning permission but which are not yet operational or are dormant). Areas not yet consented but allocated in the Plan for the future extraction of mineral are identified as Mineral Allocation Areas.

¹⁶ The European Parliament and the Council of the European Union (2008). Directive 2008/98/EC of the European parliament and of the council of 19 November 2008 on waste and repealing certain directives. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098> [Accessed 01 December 2021].

Table TR10-2-2 - Non-hazardous construction and demolition waste recovery in England

Year	Generation (Mt)	Recovery (Mt)	Recovery rate (%)
2010	53.6	49.4	92.2%
2011	54.9	50.8	92.5%
2012	50.5	46.4	92.0%
2013	51.7	47.6	92.0%
2014	55.9	51.7	92.4%
2015	57.7	53.3	92.3%
2016	59.6	55.0	92.1%
2017	62.2	57.9	93.1%
2018	61.4	57.5	93.8%
2019	62.3	58.3	93.6%
2020	53.6	50.0	93.2%

Note: Defra's 2022 update of this table does not extend the data range beyond 2020

Data in **Plate TR10-2-1 – Transfer, materials recovery and recycling in the East of England region (2000/1 – 2021)** has been collated to show that trends for waste recovery in the region have risen steadily over the past 20 years¹³. Data are provided for all waste types in the East of England and hence will include, but are not specific to, CDE waste arisings.

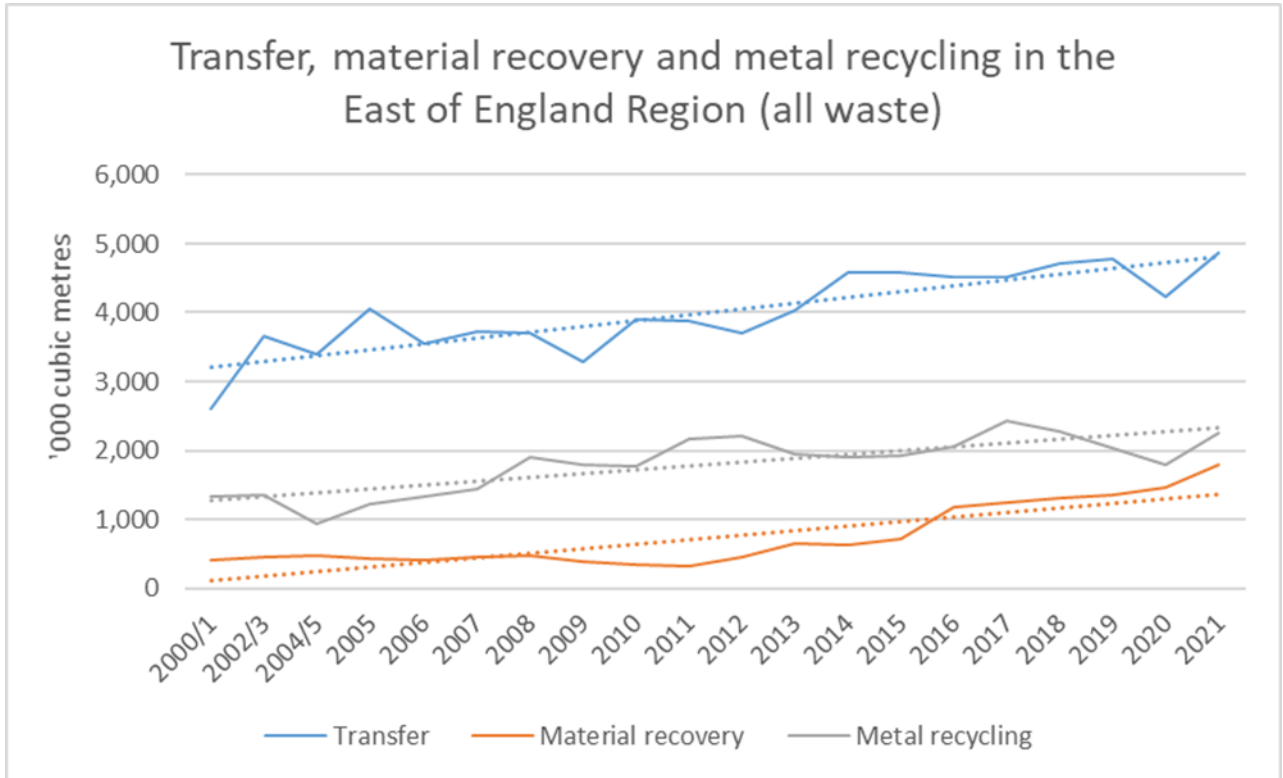


Plate TR10-2-1 – Transfer, materials recovery and recycling in the East of England region (2000/1 – 2021)

2.3.4 Trends for transfer, recovery and metal recycling in the East of England indicate that there is likely to be regional infrastructure and capacity for managing CDE wastes from the C2C Scheme. Construction and demolition recovery trends across England (**Plate TR10-2-1 – Transfer, materials recovery and recycling in the East of England region (2000/1 – 2021)**) and the data in **Table TR10-2-3 – Permitted waste recovery sites in the East of England region (2021)** confirm this assertion¹³

Table TR10-2-3 – Permitted waste recovery sites in the East of England region (2021)

Waste recovery facility type	Number of sites
Incineration	21
Transfer	311
Treatment	349
Metal recovery	258
Use of waste	2

Waste recovery facility type	Number of sites
Total	1,094

2.3.5 Regional data for construction and demolition waste is presented in the graph (**Plate TR10-2-2 – Construction and demolition waste management by route for the region**) based on analysis of publicly available information in the Waste Data Interrogator¹³.

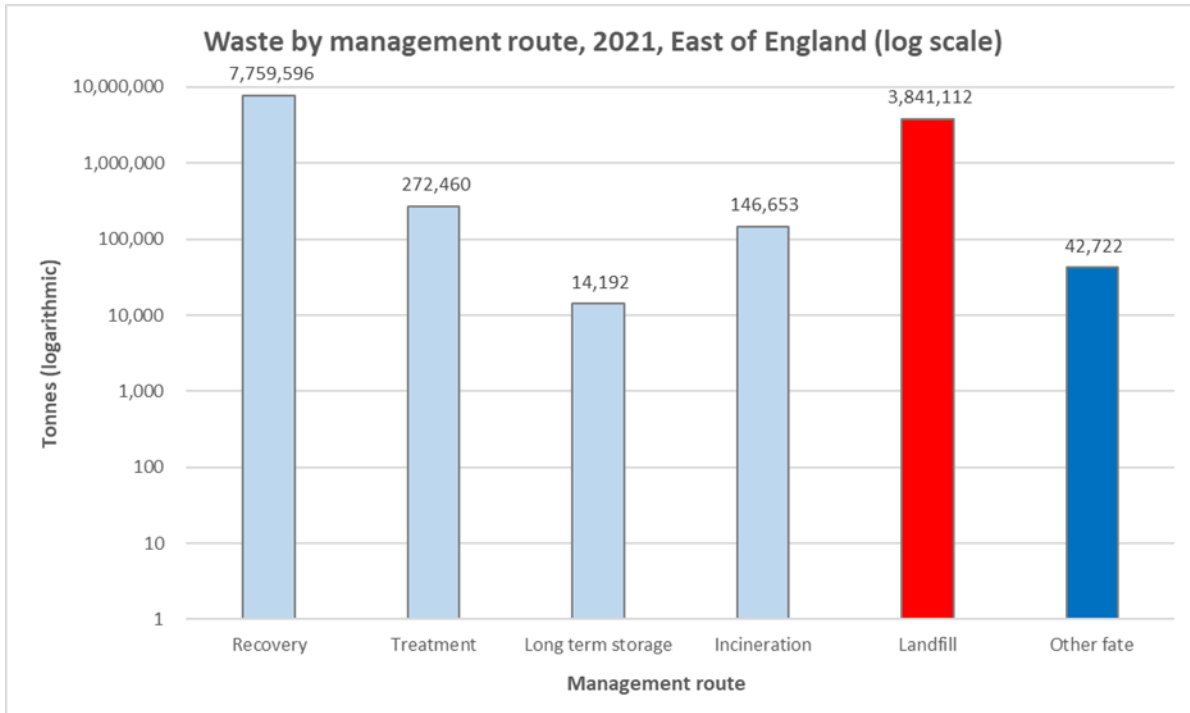


Plate TR10-2-2 – Construction and demolition waste management by route for the region

2.3.6 The CPMWLP8 estimates that in 2017 waste arisings within the plan area totalled approximately 2.8 million tonnes per annum (Mtpa), of which 59% comprised CDE waste and 2% hazardous waste. Data in **Plate TR10-2-2 – Construction and demolition waste management by route for the region** shows that, in 2021, the volume of waste recovered, including treatment and incineration, was more than double the volume of waste sent to landfill in the region. This is confirmed by data in **Table TR10-2-4 – Waste management routes for waste received in the East of England region (2021)** which show that 68% of waste received in the region was diverted from landfill through management and recovery methods. Data include the total waste received by the East of England, both within region and from other regions in the UK.

Table TR10-2-4 – Waste management routes for waste received in the East of England region (2021)

Waste Management Route	Inert and non-hazardous waste (tonnes)	Hazardous waste (tonnes)	Total waste (tonnes)	Percentage
Recovery	8,087,391	105,511	8,192,901	67.8%

Waste Management Route	Inert and non-hazardous waste (tonnes)	Hazardous waste (tonnes)	Total waste (tonnes)	Percentage
Landfill	3,773,164	67,948	3,841,112	31.8%
Other fate	31,635	11,087	42,722	0.4%
Totals	11,892,190	184,545	12,076,735	100%

The charts and data presented in this section of **ES Technical Report 10: Materials and Waste** confirm the availability of waste management facilities in the region to enable recovery of anticipated site arisings generated by the C2C Scheme.

The availability of materials recovery infrastructure in the East of (and across) England suggests that there is strong potential to divert from landfill site arisings generated by the C2C Scheme. The importance of this infrastructure indicates there is capacity to maximise the value of site arisings through reuse and recycling. Recovering arisings and diverting them from landfill has the ability to materially influence the findings of the assessment of impacts and effects from materials and waste.

2.4 WASTE GENERATION AND DISPOSAL

Waste currently generated and disposed of

- 2.4.1 Waste generated for disposal to landfill from activities undertaken on the current land use is expected to comprise non-recoverable wastes from farming practices, and routine maintenance and infrequent repair of the roads and ancillary infrastructure. Although no waste data exists, it is anticipated (using professional judgement) that even in the worst-case scenario, the current waste generation and disposal is minimal in the context of available regional capacity.

Regional Perspective: Remaining Landfill Capacity

- 2.4.2 Environment Agency data¹⁴ confirm that at the end of 2021, 53 landfill sites in the East of England region were recorded as having 47.3 million cubic meters (Mm³) of remaining capacity. Data in **Table TR10-2-5 - Remaining landfill capacity in the East of England (2020-2021)** summarises this information by landfill type; the change in capacity from 2020 to 2021 is also shown.

Table TR10-2-5 - Remaining landfill capacity in the East of England (2020-2021)

Landfill type	Remaining capacity in 2020 (m ³)	Remaining capacity in 2021 (m ³)	Change in capacity Mm ³ (%)
Hazardous (merchant)	0	0	0
Hazardous (restricted*)	0	0	0
Inert	24,979,617	24,088,595	-0.9 (-3.6%)

Landfill type	Remaining capacity in 2020 (m ³)	Remaining capacity in 2021 (m ³)	Change in capacity Mm ³ (%)
Non-hazardous (including stable non-restricted hazardous waste cells (SNRHW))	27,514,659	23,189,639	-4.3 (-15.7%)
Total	52,494,276	47,278,234	-5.2 (-9.9%)
Notes	*Restricted landfill sites only accept waste from a limited number of sources and producers, e.g. site operator / managing sites.		

2.4.3 The CPMWLP8 determines that there is sufficient landfill void space for inert and non-hazardous waste (including SNRHW) over the plan period (to 2036). In addition, some committed and allocated mineral extraction sites will require restoration through accommodating inert fill. Therefore, there is no requirement for additional landfill or recovery void space over the plan period.

2.4.4 Baseline regional capacity is detailed in **Plate TR10-2-3 - Remaining landfill capacity in East of England**. Statistical forecasting (using the Microsoft Excel forecasting function) has been used to demonstrate long term void capacity to the year of planned C2C Scheme completion in the absence of future provision. Construction is anticipated to commence in 2025 and continue over approximately 24 months, for a scheme opening in 2027.

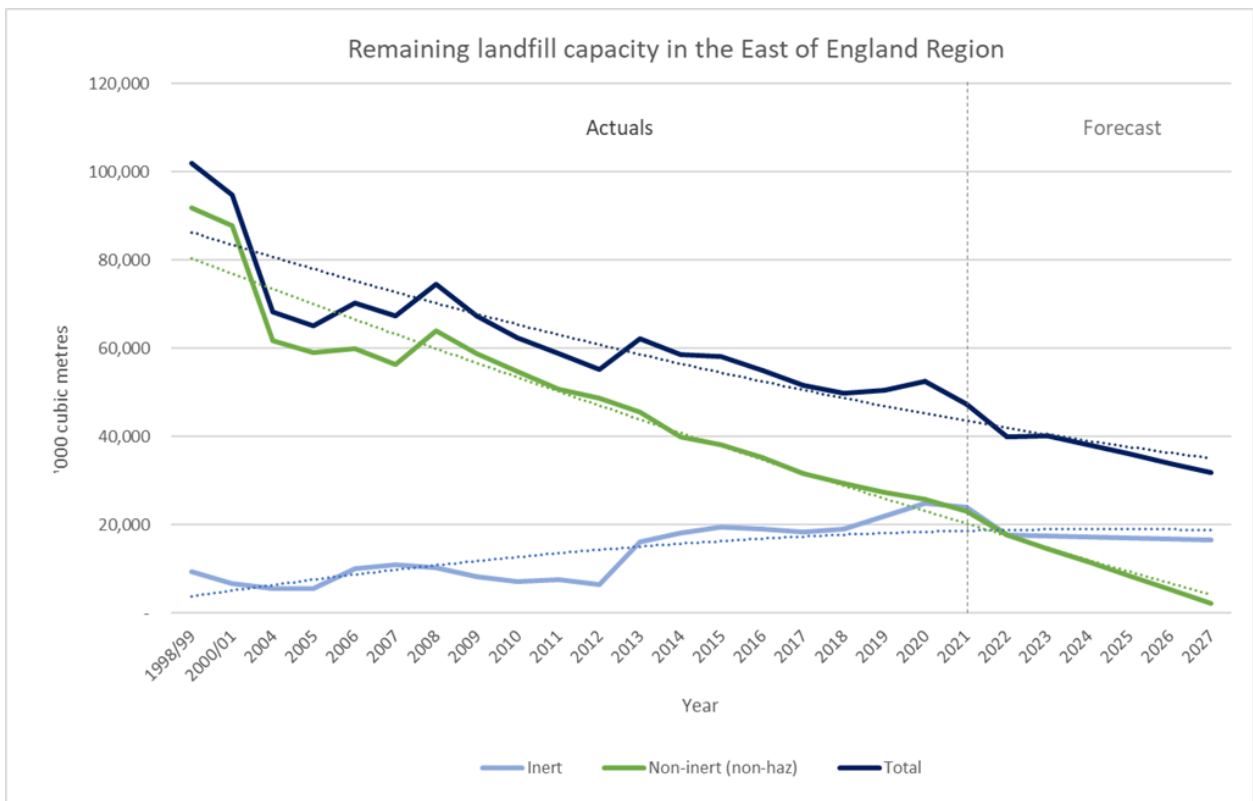


Plate TR10-2-3 - Remaining landfill capacity in East of England

2.4.5 Baseline data indicates that in the absence of future provision, inert, non-inert and total landfill capacity is likely to become an increasingly sensitive receptor throughout the duration of the construction phase and in operation. **Plate TR10-2-3 - Remaining landfill capacity in East of England** shows that in the absence of future provision, waste capacity in the East of England region is forecast to reduce from 2021 to 2027 by as much as:

- Inert waste - 31% to 16.8 Mm³;
- Non-inert waste – 90% to 2.2 Mm³; and
- Total waste - 33% to 31.7 Mm³.

2.5 FUTURE BASELINE

2.5.1 In the future baseline and in the absence of the C2C Scheme, it is considered that the current land use within the development study area would remain the same, in particular as Bourn Airfield development would not be developed. It is noteworthy that as the highway and associated infrastructure ages, increased maintenance and repair work may be required. However, given the scale of the current infrastructure within the Order Limits, the consumption of materials resources and the recovery of site arisings is considered to remain minimal. Similarly, the potential for waste generation to landfill in the future baseline is also anticipated to remain minimal.

3 METHODOLOGY SUMMARY

3.1 STUDY AREA

3.1.1 The study areas that are applicable to the C2C Scheme are defined in the DMRB LA110 standard; the standard sets out two geographically different study areas against which the examination and assessment of material assets (and resource use) and waste generation, can be undertaken:

- The **primary study area** is defined by the extent of works within the C2C Scheme Order Limits. This comprises the C2C Scheme footprint and any areas required for temporary access, site compounds, working platforms and other enabling activities; and
- The **secondary study area** is represented by the geographical extent to which infrastructure is suitable and could accept arisings and waste generated by the C2C Scheme. Accordingly, the secondary study area for waste is determined to comprise England and the East of England region (based on Environment Agency data being set out against former planning regions and sub-regions) including Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk and Suffolk. This area has been set using professional judgement, also taking into account the balance between the Proximity Principle and value for money (re materials and waste logistics) and in consideration of the extent of available data to compile a baseline assessment.

3.1.2 Complementing these study areas, a regional (and where necessary, national) study area for resource availability and hazardous waste has been applied, for construction materials typically required for a scheme of this scale and nature.

3.2 ASSESSMENT METHODOLOGY

ASSESSMENT APPROACH

3.2.1 This assessment follows the approach set out in National Highways' Design Manual for Road and Bridges (DMRB) LA 110 Material Assets and Waste¹⁷ (herein referred to as 'LA 110'). This standard identifies that the construction and maintenance of motorway and trunk roads can have adverse environmental effects associated with the consumption and use of material assets, and the disposal and recovery of waste.

3.2.2 As described in Section 2, data collection has been undertaken - using desktop research - to verify the baseline scenario.

3.2.3 An assessment of the effects of consuming materials required during the construction phase has (therein) 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. Other sustainability features e.g. improved durability, have been considered in specific instances, where applicable.

¹⁷ Design Manual for Roads and Bridges (2019) LA 110 Material Assets and Waste. Available at: <https://www.standardsforhighways.co.uk/prod/attachments/6a19a7d4-2596-490d-b17b-4c9e570339e9?inline=true>

- 3.2.4 The reuse of excavated and other arisings (that meet waste exemption criteria, comply with the CL:AIRE DoWCoP¹⁸ or comply with other suitable assurances) has been evaluated as part of the assessment of material assets, to determine whether the adverse impacts associated with the consumption of primary resources are reduced.
- 3.2.5 The quantitative elements of the assessment are based on material and site arisings data (by type and quantity), as provided by the design team in the form of a Bill of Quantities for the Scheme.

SIGNIFICANCE CRITERIA

- 3.2.6 The assessment adopts the significance criteria set out in Table 3.13 in LA110, which does not require separate assessment of sensitivity and magnitude of change. Significance criteria set out in LA110 are replicated in **Table TR10-3-1 – Effect categories and typical descriptors**.

Table TR10-3-1 – Effect categories and typical descriptors

Effect Category	Material assets	Waste
Neutral	<ol style="list-style-type: none"> 1) project achieves >99% overall material recovery / recycling (by weight) of non-hazardous Construction Demolition Waste (CDW) to substitute use of primary materials; and 2) aggregates required to be imported to site comprise >99% re-used /recycled content. 	<ol style="list-style-type: none"> 1) no reduction or alteration in the capacity of waste infrastructure within the region.
Slight	<ol style="list-style-type: none"> 1) project achieves 70-99% overall material recovery / recycling (by weight) of non-hazardous CDW to substitute use of primary materials; and 2) aggregates required to be imported to site comprise re-used/recycled content in line with the relevant regional percentage target*. 	<ol style="list-style-type: none"> 1) ≤1% reduction or alteration in the regional capacity of landfill; and 2) waste infrastructure has sufficient capacity to accommodate waste from a project, without compromising integrity of the receiving infrastructure (design life or capacity) within the region.
Moderate	<ol style="list-style-type: none"> 1) project achieves less than 70% overall material recovery / recycling (by weight) of non-hazardous CDW to substitute use of primary materials; and 2) aggregates required to be imported to site comprise re-used/recycled content below the relevant regional percentage target*. 	<ol style="list-style-type: none"> 1) >1% reduction or alteration in the regional capacity of landfill as a result of accommodating waste from a project; and 2) 1-50% of project waste for disposal outside of the region

¹⁸ CL:AIRE (2011) The Definition of Waste: Development Industry Code of Practice [<https://www.claire.co.uk/projects-and-initiatives/dowcop-training>]

Effect Category	Material assets	Waste
Large	<ol style="list-style-type: none"> 1) project achieves <70% overall material recovery / recycling (by weight) of non-hazardous Construction and Demolition Waste (CDW) to substitute use of primary materials; and 2) aggregates required to be imported to site comprise <1% re-used / recycled content; and 3) project sterilises ≥ 1 mineral safeguarding site and/or peat resource. 	<ol style="list-style-type: none"> 1) >1% reduction in the regional capacity of landfill as a result of accommodating waste from a project; and 2) >50% of project waste for disposal outside of the region.
Very Large	<ol style="list-style-type: none"> 1) No criteria: as criteria for Large category above. 	<ol style="list-style-type: none"> 1) >1% reduction or alteration in national capacity of waste infrastructure as a result of accommodating waste from a project; or 2) Construction of new (permanent) waste infrastructure is required to accommodate waste from a project.
Notes:	<p>'Primary materials' describes materials that are from a non-renewable source.</p> <p>*Recycled aggregate target.</p> <p>The recycled aggregate target for the East of England region is 31% ¹⁹.</p>	

Table TR10-3-2 – Significant criteria for material assets and waste generation

Significance	Description
Not significant	<p>Material assets: Category description met for Neutral or Slight effect</p> <p>Waste: Category met for Neutral or Slight effect</p>
Significant (one or more criteria met)	<p>Material assets: Category description met for Moderate or Large effect</p> <p>Waste: Category met for Moderate, Large or Very Large effect</p>
Notes	See Table TR10-3-1 for definitions of scale of effect.

¹⁹ Standards for Highways (2019) Design Manual for Roads and Bridges Sustainability & Environment Appraisal LA110 Material Assets and Waste [online] Appendix E/1. Regional and national recycled aggregate targets for England. Available at: <https://www.standardsforhighways.co.uk/dmrb/search/6a19a7d4-2596-490d-b17b-4c9e570339e9> [Accessed 24/06/2021]

3.3 ASSUMPTIONS AND LIMITATIONS

3.3.1 The following assumptions and limitations apply to this topic:

ASSUMPTIONS

3.3.2 The assessment of effects on material assets and landfill void capacity is based upon collated information available at the time of writing, including third party data, which is assumed to be valid.

LIMITATIONS

3.3.3 For Material Assets, the assessment baseline uses the most recent available published data at the time of writing, which is up to and including 2021 (unless stated otherwise). Future trends are not available for scrutiny and are – at the time of publication – generally accepted to be relatively unpredictable (particularly with residual supply chain impacts resulting from COVID-19).

3.3.4 For Waste, the assessment baseline uses the most recent available data and publicly available information at the time of writing for the assessment (unless otherwise stated) use data up to and including 2021.

3.3.5 Landfill operators can claim commercial confidentiality for their landfill data at time of submission to the Environment Agency; data for sites with a commercial confidentiality agreement in place are therefore unavailable for the analyses presented in this document. As publicly available data from the Environment Agency has been used to inform the assessment, any absence of data through confidentiality agreements are considered unlikely to materially affect the findings of this assessment.

3.3.6 The materials and construction waste data used for this assessment were taken from a Bill of Quantities (BoQ) prepared in November 2022 by the Applicant. The data is not expected to be affected by changes to the construction programme and only includes key material resources required for construction.

4 EMBEDDED MITIGATION

ASSUMED MITIGATION

- 4.1.1 Compliance with the Code of Construction Practice²⁰ (CoCP) is expected to help avoid or reduce environmental impacts during on site works. The CoCP is to be secured by conditions in the deemed planning permission. As set out in the draft CoCP, measures that are particularly relevant to Material Assets and Waste currently (or are expected to) include:
- the application of designing-out waste principles to minimise construction waste;
 - working towards a cut and fill balance; and
 - segregation of construction materials and demolition arisings on site to maximise diversion from landfill through re-use, recycling and recovery.
- 4.1.2 Designing-out waste principles include measures such as ‘just in time’ deliveries (to reduce unnecessary surplus materials, storage and subsequent potential damage on site), suitable storage of materials on site, minimisation of packaging and the use of reusable packaging.
- 4.1.3 With regard to the cut and fill balance, the CoCP requires that an estimated 80% of the excavated arisings comprising earthworks will be reused as fill on the C2C Scheme.
- 4.1.4 The C2C Scheme shall achieve the regional aggregate recycled content of 31%. This would be secured through the CoCP to ensure the Principal Contractor is committed to achieve the regional percentage target for recycled aggregate content.
- 4.1.5 Waste management measures will be prepared that facilitate the reuse and recovery of excavated material and diversion of waste from landfill in line with the waste hierarchy. Excavated material that is uncontaminated (or can be remediated to a suitable standard for site engineering and restoration purposes) will be managed in accordance with the controls specified by the CL:AIRE Definition of Waste: Development Industry Code of Practice²¹ or in accordance with an appropriate environmental permit or exemption from permitting. As specified in the CoCP, a materials management plan (MMP) will be developed by the Principal Contractor describing the methods for reusing soils to maximise opportunities for reuse of excavated arisings and comply with the measures set out under the CL:AIRE Code of Practice.
- 4.1.6 Suitable third-party projects or other opportunities for reuse of excavated arisings may be identified as the detailed construction planning of the C2C Scheme progresses, including future projects across the GCP programme.

²⁰ Code of Construction Practice (Document reference: C2C-26-00-Code of Construction Practice

²¹ CL:AIRE (2011) The Definition of Waste: Development Industry Code of Practice [<https://www.claire.co.uk/projects-and-initiatives/dowcop-training>]

4.1.7 In line with good practice, and as specified in the CoCP, a site waste management plan (SWMP) will be prepared and maintained by the Principal Contractor. This will be used to identify the specific types and quantities of waste likely to arise during the construction process and record the intended management, treatment or disposal methods. Where generated, waste will be classified in accordance with the statutory controls governing the management of inert, non-hazardous and hazardous wastes.

POTENTIAL MITIGATION MEASURES

4.1.8 The following design measures should be explored to further avoid, prevent or reduce the potential for significant environmental effects:

- Design for the future: Considering how materials can be designed to be more easily adapted over an asset lifetime, and how deconstructability and demountability of elements can be maximised at end-of-first-life;
- Opportunities should also be explored to incorporate recycled or secondary content in the concrete structures; and
- Identification and specification of material resources that can be acquired responsibly, in accordance with BES 6001 Responsible Sourcing of Construction Products.

5 ASSESSMENT OF IMPACTS AND EVALUATION OF EFFECTS

- 5.1.1 The construction of the C2C Scheme will require the use and consumption of material assets, including primary raw materials and manufactured construction products. It will also result in the generation of waste, which will require effective management and disposal. These activities may result in potential adverse impacts and effects on the environment, and could include direct and / or indirect impacts related to the depletion of natural resources and the reduction in landfill capacity. Potential impacts are summarised in **Table TR10-5-1 - Potential environmental impacts during construction**.
- 5.1.2 Indirect impacts from material assets and waste have been assessed in the following topic specific technical reports: **ES Technical Report 01: Acoustics; ES Technical Report 03: Climate Resilience; ES Technical Report 04: Community and Human Health, Land Use and Land Take; ES Technical Report 05: Ecology; ES Technical Report 06: Greenhouse Gases; ES Technical Report 08: Landscape and Visual; ES Technical Report 11: Soil, Geology and Land Contamination; ES Technical Report 12: Traffic and Transport and Technical Report 13: Water.**

Table TR10-5-1 - Potential environmental impacts during construction

Element	Direct Impacts	Indirect Impacts
Materials	Consumption of natural and non-renewable resources.	<ul style="list-style-type: none"> ■ Release of greenhouse gas emissions (through transportation); ■ Water consumption; ■ Visual impacts, noise and vibration, and other nuisance issues; and ■ Human health.
Waste	Reduction in landfill capacity.	<ul style="list-style-type: none"> ■ Release of greenhouse gas emissions (through transportation and management); ■ Ecological impacts; and ■ Visual impacts, noise vibration and other nuisance issues.

Materials

- 5.1.3 The key construction materials required for the C2C Scheme are presented in Table TR10-5-2 - Material resources required for . The information provided in the table describes the material type and estimated total quantities, along with any available information relating to the use of the material in the construction of the C2C Scheme.
- 5.1.4 Construction site arisings which would be generated and recovered on the C2C Scheme are presented in **Table TR10-5-3 - Site arisings generated and reused during** . Construction waste generated by the C2C Scheme that cannot be diverted from landfill is presented in Table TR10-5-4 - Forecast waste management during construction.

5.1.5 All material resources, site arisings and waste quantities reported in this Technical Report have been rounded up to the nearest ten tonnes, where applicable, and as based on the BoQ data as available at the time of writing.

Table TR10-5-2 - Material resources required for construction.

Materials	Quantity (tonnes)	Use of Material in the C2C Scheme
Asphalt (Bituminous mixtures)	41,560	For road base and surface course.
Concrete	2,210	This includes reinforced concrete for structures, foundations, piling and pre-cast concrete for drainage, paving and kerbing materials.
Aggregate	240	Used for drainage.
Earthworks (imported material)	480,000	Used for backfill material for embankments, structures and drainage etc.
Steel	1,030	Used in concrete reinforcement and structural steel bridge, as well as pre-fabricated elements such as street lighting columns, CCTV masts and road signs etc.
Plastics (excluding packaging)	1	Polypropylene Geogrid for landscaping.

5.1.6 Information on sustainable features of materials (such as recycled or secondary content) (see **ES Section 3.9 (Materials and waste)**), includes the following:

- reduced use of virgin material and aggregates by decreasing material requirements in the design itself, using site-won or recycled materials, and through the use of materials with a high proportion of recycled content;
- achieve around one third recycled aggregate content (in line with the regional target of 31%) to minimise the need to import or export materials, and to balance cut and fill as far as possible;
- Calculating embodied carbon emissions of the material resource required for the C2C Scheme as the C2C Scheme progresses, subsequently aiding in the reduction of material requirements to inform a low carbon design; and
- maximising reuse and recycling of extracted materials through the application of the waste hierarchy. Excavated arisings (earthworks and vegetation) can be reused on site for landscaping, and inert materials can be recycled by crushing, blending and subsequently reusing as aggregate.

Site Arisings

- 5.1.7 The quantity of site arisings from the excavation of materials, and the proportion that will potentially be reused on the C2C Scheme, is summarised in **Table TR10-5-3 - Site arisings generated and reused during** .

Table TR10-5-3 - Site arisings generated and reused during construction.

Arisings	Quantity (tonnes)	Comments
Cut volume	211,000	The volume of material anticipated to be excavated to facilitate construction.
Earthworks (reused arisings from earthworks cut)	168,800	80% of the total earthworks (from excavations) are to be reused on the C2C Scheme as fill, where suitable e.g. recompacting them as backfill for piling and drainage.

- 5.1.8 The recovery and reuse on site of surplus arisings means that the project achieves 80% overall materials recovery / recycling (by weight), which will substitute the use of primary materials on site.
- 5.1.9 The re-used/recycled content of aggregates to be used on site is not known at this stage. In this case, a worst-case scenario must be adopted, i.e. the C2C Scheme would use <1% recycled aggregate. However, commitments by the Principal Contractor (secured through the CoCP), to use recycled aggregate content at the regional percentage target of 31% would ensure that the C2C Scheme would not reach the threshold to trigger a Moderate Adverse (Significant) effect.
- 5.1.10 With regard to mineral safeguarding areas, the following Mineral Safeguarding Areas are located within the C2C Scheme boundary area:
- Sand and Gravel MSA - access to this resource is already constrained by existing housing and infrastructure in this area; and
 - Chalk MSA - the proportion of the MSA that is impacted is considered to be relatively small compared to the size of the available resource. The affected deposit is approximately 1km in length beneath the C2C Scheme.
- 5.1.11 It is important to note that the CPMWLP8 includes Chalk in the 'Other minerals' category, whereby the strategy for such minerals is to continue extraction on a small scale to meet specialist needs and no allocations are made for these 'other minerals'.
- 5.1.12 Furthermore, there are no allocated mineral safeguarded sites (described as Mineral Development Areas and Mineral Allocation Areas in the local plan) identified within the C2C Scheme boundary. Therefore, in accordance with the assessment criteria, the C2C Scheme does not sterilise any mineral safeguarding site or peat resource.
- 5.1.13 In response to the information provided in this section, in accordance with standard criteria set out in LA110 (Table TR10-3-1) and taking into account the mitigation measures outlined in Section 4, material resource consumption by the project would have a Slight Adverse (Not Significant) effect.

Waste

- 5.1.14 Forecasts for construction waste are given in **Table TR10-5-4 - Forecast waste management during construction**, based on data provided by the design team. Additional waste types (hazardous waste and general construction waste) have been included in the list as, based on professional judgement and previous experience of road construction schemes, they are expected to be generated. Some quantities (e.g. bitumen, concrete, aggregate and steel) have been extrapolated using WRAP wastage rates²². Wastage rates forecast for the expected proportion of resource that ends up as waste during the application of good practice construction process.
- 5.1.15 A range of potential sources of ground contaminants have also been identified in the assessment in ES Technical Report 11: Soil, Geology and Land Contamination, including – but not limited to - petroleum hydrocarbons, heavy metals, hazardous materials (for example, asbestos), pathogens and pesticides. It is understood that a Ground Investigation will be undertaken prior to construction in order to characterise and quantify the contamination risks. It is anticipated that contaminants found during the construction phase would be remediated in accordance with applicable legislation and good practice guidance.

Table TR10-5-4 - Forecast waste management during construction

Excavated and other materials	Quantity (tonnes unless otherwise stated)	Management process identified
Bituminous mixtures	1,110	This figure is based on a good practice wastage rate of 2.5% for imported bitumen. The total figure also includes asphalt removed from cold milling the existing road pavement; whilst asphalt could be recovered for reuse or recycling, this has not yet been confirmed conclusively. For the purposes of the assessment, therefore, a worst-case scenario of 'landfill' has been applied to this waste type.
Concrete (poured)	10	This figure is based on a good practice wastage rate of 2%. At the time of writing, it has not been confirmed whether this is to be recovered or disposed of to landfill. For the purposes of the assessment, a worst-case scenario of 'landfill' has been applied.
Earthworks cut (surplus)	42,200	At the time of writing it has not been confirmed whether this volume of earthworks is to be recovered or disposed of to landfill. The exact

²² [PDF] [The Designing out Waste Tool for Civil Engineering Projects - Free Download PDF \(silo.tips\)](#)

Excavated and other materials	Quantity (tonnes unless otherwise stated)	Management process identified
		<p>quantity would depend on tests that would be conducted on the arisings once excavated. It is anticipated that all material that is identified as suitable would be stockpiled for reuse on other construction schemes. In the absence of further information, and for the purposes of the assessment, a worst-case scenario of 'landfill' has been applied to this waste type.</p>
Surplus imported fill	24,010	<p>This figure is based on a good practice wastage rate of 5%. At the time of writing, it has not been confirmed whether this is to be recovered and reused (on- or off-site), or disposed of to landfill. For the purposes of the assessment, a worst-case scenario of 'landfill' has been applied.</p>
Steel	60	<p>This figure is based on a good practice wastage rate of 5%. At the time of writing, it has not been confirmed whether this is to be recovered (recycled/ reused off-site), or disposed of to landfill. For the purposes of the assessment, a worst-case scenario of 'landfill' has been applied.</p>
Mixed demolition waste	2,800	<p>This comprises waste from the necessary demolition of an existing building, as well as waste associated with site clearance. At the time of writing, it has not been confirmed whether this is to be recovered (recycled/ reused off-site), or disposed of to landfill. For the purposes of the assessment, a worst-case scenario of 'landfill' has been applied.</p>
Hazardous waste	Quantity unknown	<p>Hazardous waste would be sent for ongoing processing and management, if it is not possible to treat it for reuse on the Proposed Scheme. It is best practice that any such waste would be disposed of to a licensed hazardous landfill if it was not possible to treat it for reuse on the Proposed Scheme.</p>
Contaminated waste	Undefined	<p>Contaminated waste has not (to date) been identified in the data provided. However, it is best practice that any such waste would be</p>

Excavated and other materials	Quantity (tonnes unless otherwise stated)	Management process identified
		disposed of to a licensed hazardous landfill if it was not possible to treat it for reuse on the Proposed Scheme.
General construction waste (packaging, surplus materials / off-cuts)	Quantity unknown at this stage	General construction waste will be reused on the Proposed Scheme, where possible, or sent to an off-site recycling facility. Any waste that cannot be recycled or reused would be disposed of to landfill.

- 5.1.16 Waste anticipated to be disposed of to landfill comprises earthwork and aggregate arisings, hazardous wastes and general construction wastes. The quantity of such waste is currently anticipated to comprise a minimum of 66,210 tonnes earthworks, 2,800 tonnes of demolition waste and a further 1,180 tonnes comprising bituminous mixtures, steel and concrete (as set out in Table TR10-5-4 - Forecast waste management during construction). A ‘to be defined’ quantity of hazardous and general construction wastes could also be expected.
- 5.1.17 As stated in the baseline section, the availability of remaining landfill capacity within the East of England region is forecast to be 31.7 Mm³. The total volume of waste from the C2C Scheme is expected to be 70,190 Tonnes (87,740 m³), based on a worst-case scenario. Therefore, using the criteria set out in Table TR10-3-1 – Effect categories and typical descriptors, the effect on remaining regional landfill capacity is considered to be Slight Adverse (Not Significant), as there is anticipated to be <1% reduction in the regional capacity of landfill.

Cumulative Effects

- 5.1.18 As a result of constructing the C2C Scheme prior to, during, or after other proposed developments within the region, there is potential for cumulative environmental impacts and effects with regard to the depletion of natural resources and the generation of waste. A review of the developments identified within the Zone of Influence has been undertaken to determine the potential for cumulative effects from the C2C Scheme.
- 5.1.19 The potential types and volumes of resource to be consumed, and the waste to be generated and disposed of, during the construction and operation of the majority of the proposed short-listed developments have not (at the time of writing) been quantified. It is therefore not possible to robustly determine the potential significance of any associated cumulative effects.
- 5.1.20 In order to reflect a proportionate assessment, it is a reasonable expectation that – through planning or other committed measures – good and best practice measures for sustainable resource management and waste will be deployed to practicably minimise the potential for significant adverse effects.
- 5.1.21 There is data available on likely waste generation for Cambourne West Development (S/2903/14/OL). As part of the application, the environmental impact assessment determined that the types and volumes of waste expected during the construction and operation of the proposed

development will not result in residual significant effects. Therefore, cumulative effects of waste are not expected with the C2C Scheme.

- 5.1.22 Detailed Waste Management Plans were produced to support the planning applications for Darwin Green Phase One (07/0003/OUT) and Darwin Green Phases Two and Three Development Site (22/02528/OUT). The potential types and volumes of waste to be generated and disposed of during construction and operation phases were quantified, where data was available, along with the identified waste management processes and forecast recovery targets. For example, Darwin Green 1 has a target of 80% of waste (by volume) to be reused on site or recycled. This has been used to conclude that the current phase under construction and the planned phase of works are expected to have a residual effect that is not significant, due to the good and best practice measures for sustainable resource and waste management adopted in the Waste Management Plans.
- 5.1.23 Based on these findings, no significant cumulative effects are expected.

6 SUMMARY OF LIKELY SIGNIFICANT EFFECTS

Summary of effects

Key to table:

P / T = Permanent or Temporary, D / I = Direct or Indirect, ST / MT / LT = Short Term, Medium Term or Long Term, N/A = Not Applicable

Receptor	Potential Effects	Additional Mitigation	Residual Effects	Monitoring
Construction Phase				
Natural and non-renewable resources	<p>The scheme achieves more than 70% overall material recovery/recycling on non-hazardous CDW.</p> <p>However, a pre-mitigation worst-case scenario would expect that <1% recycled aggregates are to be used.</p> <p>Moderate adverse Significant P / D / LT</p>	<p>The scheme has committed (in line with regional targets) to achieve at least a 31% recycled aggregate content to ensure that the effects of material consumption are not significant.</p>	Slight Adverse Not Significant	<p>Contract specifications to include the requirement to use at least 31% recycled aggregate (by volume).</p> <p>The percentage of recycled aggregate achieved is to be reported in accordance with the requirements of the CoCP.</p>
Landfill void capacity	<p>Slight Adverse Not Significant P / D / LT</p>	N/A	N/A	N/A
Operational Phase – SCOPED OUT (N/A)				

7 GLOSSARY

Item	Description
Circular economy	Maximising the sustainable use and value of resources, eliminating waste from all stages of the resource lifecycle, whilst benefiting both the economy and the environment.
Construction materials	Primary, recycled / secondary and renewable sources of materials required for constructing a project.
Demolition (work)	The action or process of deconstructing, demounting or otherwise bringing down / breaking out of buildings and structures.
Disposal	Any operation which is not recovery, (e.g. discarding waste to landfill). This includes any operation that has as a secondary consequence the reclamation of substances or energy.
End of first life	The point at which an asset is no longer useful in the capacity for which it was originally intended.
Key construction materials	Construction materials which constitute the majority of material required to deliver the scheme (by weight).
Landfill capacity	The known, forecast or estimated remaining landfill void space, either regionally or nationally, generally measured in cubic metres.
Mineral sites	Operation sites or sites identified within strategic planning documents for the extraction of minerals.
Opening year	The first year of operation
Peat resource	Existing or potential peat extraction sites.
Preparing for reuse	Checking, cleaning or repairing operations, by which products or components of products that have become waste are prepared for reuse without further pre-processing.
Primary materials	Materials that are from a non-renewable source (also referred to as virgin materials).
Recovery	Any operation which results in a waste serving a useful purpose by replacing materials which would otherwise have been used to fulfil that particular function. Recovery also includes waste being prepared or processed to fulfil a particular function.
Recycle	Any recovery operation where waste is reprocessed into products, materials or substances whether for its original or other purposes. Recycling includes the reprocessing of organic material but excludes energy recovery and the reprocessing of waste into materials to be used as fuels or for backfilling operations.

Item	Description
Reuse	Any operation by which products or components that are not waste are used again for the same purpose for which they were conceived; reuse presumes that significant reprocessing is not required.
Secondary materials	Useful by-products from manufacturing or industrial processes.
Site arisings	Construction, demolition, excavation and other arisings generated from within a project boundary.
Sterilise	Substantially constrain / prevent existing and potential future use and extraction of materials.
Site Waste Management Plan	A system or document for implementing, monitoring and reviewing waste prevention measures
Waste	Any substance or object that is discarded, and that has not been subject to acceptable recovery (including recycling) or disposal.
Waste types:	
Inert waste	<p>Waste :</p> <ol style="list-style-type: none"> 1) that does not undergo any significant physical, chemical or biological transformations; 2) that does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter from which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and 3) where its total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater (see Directive 1993/31/EC 'The Landfill Directive')
Hazardous waste	Any waste that displays one or more of the hazardous properties listed in Annex III of the Waste Directive (2008/98/EC).
Non-hazardous waste	Waste that is neither classified as inert nor hazardous.
Waste infrastructure	Facilities that handle, treat/prepare for reuse, recycle and dispose (landfill) of waste.

8 ACRONYMS

Acronym	Description
BES	Building Research Establishment Environmental Sustainability Standard
BRE	British Research Establishment
BoQ	Bill of Quantities
CDE	Construction, Demolition and Excavation
CDW	Construction and demolition waste
CL:AIRE	Contaminated Land: Applications in Real Environments
CoCP	Code of Construction Practice
CPMWLP	Cambridgeshire and Peterborough Minerals and Waste Local Plan
DoW	Definition of Waste
MMP	Materials Management Plan
MSA	Mineral Safeguarding Area
MWJP	Minerals and Waste Joint Plan
SWMP	Site Waste Management Plan
WRAP	Waste & Resources Action Programme



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