

A43 Moulton Bypass Phase 1b

Site Waste Management Plan (SWMP)

Final

March 2015



Balfour Beatty KierWSP **PARSONS
BRINCKERHOFF**

**A43 MOULTON BYPASS PHASE 1B
DRAFT SITE WASTE MANAGEMENT
PLAN**

Northamptonshire County Council

Final

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DRAFT SITE WASTE MANAGEMENT PLAN

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GLOSSARY AND ABBREVIATIONS

NCC	Northamptonshire County Council	The applicant
CDM	Construction Design Management	Legal duties for the safe operation of UK construction sites.
CEMP	Construction Environmental Management Plan	A plan prepared by a contractor before the start of construction work, detailing 'environmental aspects' that may be affected by the construction work and management methods to prevent any such effects. The CEMP would include methods and site management practices to be applied to prevent generation of nuisance dust, accidental pollution events and a range of other potential sources of accidental damage to the environment, and response and reporting procedures to minimise the damage in the event of a pollution incident.
EWC	European Waste Catalogue	A hierarchical list of waste descriptions established by Commission Decision 2000/532/EC.
SGV	Soil Guideline Values	A series of measurements and values used by the DEFRA to measure contamination of the soil.
SWMP	Site Waste Management Plan	A plan required by law in England for all construction projects worth more than £300,000, governing the minimisation, management, storage, re-use and disposal of wastes generated through construction work.
WAC	Waste Acceptance Criteria	These are rules on how waste is received and disposed of at landfills.

1 PURPOSE

- 1.1.1 This Site Waste Management Plan (SWMP) has been prepared to accompany the Construction Environmental Management Plan (CEMP) for the A43 Moulton Bypass development on behalf of Northamptonshire County Council (NCC).
- 1.1.2 The purpose of the SWMP is to enable the issue of waste arisings from the scheme to be dealt with in a planned and auditable manner from the commencement of the project, during design, through construction, to its operation and monitoring, and beyond. This is in order that waste minimisation forms a core objective from the outset of the project in addition to ensuring that the waste produced during the construction phase of the project is dealt with in accordance with the Duty of Care Provisions, the Waste Strategy (2007) and principles outlined within the Waste Hierarchy (reduction, reuse, recovery and recycling).
- 1.1.3 Surplus or waste materials arise from materials imported to site and those generated on site. Imported materials are those which are brought on to the project for inclusion into the permanent works. Generated materials are those which exist on the project such as topsoil, sub-soil and cleared vegetation etc.
- 1.1.4 Other considerations include reduction, segregation and disposal of waste, the financial impacts of waste disposal, and recording, monitoring, education and reviewing. This plan outlines the procedures that have been put in to place and demonstrates how they benefit the environment, how we can measure the effects and how these procedures and practices are sustainable.

2 SCOPE

- 2.1.1 This SWMP is a working document. It is intended to act as a template and provide guidance to the project team on the management of waste generated by the project. The document will be updated on a six-monthly basis or when significant project changes are made. The document will be managed by the waste champion and distributed to all relevant parties.
- 2.1.2 This document has been prepared having regard to the following documents:
- The Control of Pollution Act 1974
 - The Control of Pollution (Amendment) Act 1989
 - Environmental Protection Act 1990 (EPA)
 - The Environment Act 1995
 - The Finance Act 1996
 - Waste Minimisation Act 1998
 - The Waste and Emissions Trading Act 2003
 - The Clean Neighbourhoods and Environment Act 2005; and
 - Other relevant legislation.

3 PROJECT OVERVIEW

- 3.1.1 The proposal is to construct a new dual carriageway, 2.5km in length, to modifying the A43 existing alignment and bypass the village of Moulton. This development is located north east of Northampton, east of Moulton village and north of Southfields and Round Spinney. The new road forms part of the wider A43 Kettering to Northampton congestion improvement scheme, aiming to reduce delays and increased journey reliability for A43 users. A typical cross section of the Bypass will consist of:

- 2m footway;
- 1m verge;
- Two 7.3m of dual carriageway;
- 2m median;
- 3m verge; and
- 3m shared footway cycleway.

3.1.2 This proposed Moulton Bypass highway improvement is also closely linked to the proposed Overstone Leys Development, for which a separate planning application has been prepared. The majority of the proposed Overstone Leys development will be located to the east of the new alignment with a small amount located on the west side of the A43.

4 ADMINISTRATION AND PLANNING

4.1 Responsibilities

4.1.1 The Principal Contractor will be responsible for overseeing and documenting results of the SWMP, and will monitor the effectiveness and accuracy of the documentation. Copies of the plan will be distributed to subsequent relevant parties when necessary. On construction the Construction Manager will be responsible for the SWMP and will ensure that a copy of the plan is distributed to the Construction Design Management (CDM) Coordinator, Client, Project Manager and each Subcontractor. This will be undertaken every time the plan is updated.

4.2 Waste Minimisation Statement

4.2.1 The purpose of the SWMP is to facilitate the principles of the waste hierarchy and minimise the production of waste from the outset of the project. Such measures are to be incorporated into the design of the project works and implemented in the construction stages of the project. This is in addition to ensuring correct waste disposal procedures in accordance with the Waste Duty of Care provisions. This will be achieved by ensuring that, wherever possible, existing materials at the site are reused. Where waste cannot be re-used or recycled, it shall be disposed of in accordance with the Landfill Directive (1999/31/EC) and Waste Acceptance Criteria procedures. It is hoped that these values can be transferred from this site to the next, promoting adoption of sustainable waste management practices on a wider scale.

4.3 Waste Minimisation

Planning waste minimisation during project	Waste minimisation decisions taken	Resource saving	Responsibility	Date action commenced
Nature of project	See Waste Minimisation Statement above	If deemed appropriate all material from excavation works should be re-used either as infill, bunding, or in landscaping of the surrounding area.	Project Manager	From design outset
Design	Materials that have to be ordered in should be done in accordance with the contract, this should be determined prior to the commencement of the works. Within the design stage, reuse and recycling of existing materials and structures will be taken into consideration.	Minimal waste will be produced.	Project Manager	From design outset
Construction methods	The works chiefly consist of material excavation and filling, and laying of new and overlay road construction.	Potential does exist for the made ground material produced from the excavation works to be re-used as infill.	Project Manager	From the design outset
Materials	Ordering of material and equipment should be done so in line with the contract. Secure storage to prevent damage and theft.	Prevents lost time in re-ordering of damaged equipment, reduces need for storage if over ordering takes place.	Project Manger	From the design outset

- 4.3.1 The above table demonstrates the components and decisions involved in ensuring a reduction in the amount of waste and surplus materials being produced during the works at the site. This has the effect of minimising the amount of material which traditionally would be sent to landfill and to ensure a cradle to grave approach. Waste minimisation actions will need to be kept under continuous review and new actions or practices will be updated in the above table.
- 4.3.2 It is essential that the construction work is carried out closely with the waste management contractors, in order to determine the best techniques for managing waste and ensure a high level of recovery of materials for recycling.
- 4.3.3 A specific area shall be laid out and labelled to facilitate the separation of materials for potential recycling, salvage, reuse and return. Recycling and waste bins are to be kept clean and clearly marked in order to avoid contamination of materials. Skips proposed to be provided for segregation of waste identified currently are:
- Metal (e.g. copper and iron)
 - Inert (e.g. inert plastics, concrete and rubble)
 - Mixed non-hazardous (biodegradable waste)

5 FORECASTING AND PLANNING FOR REUSE, RECYCLING

- 5.1.1 This section details the forecast of approximate volumes of waste to be produced from the works, based on the preliminary design information. This information will be updated during the design process. The bulk of the waste arisings will come from excavation of the existing ground within the footprint of the new road.

5.2 Excavated Material

- 5.2.1 At the time of writing it is assumed that all of the excavated material can be reused within the site. The overall quantity of excavated waste material (solid) from the construction is estimated to be Unknown. This figure is a measure of excavated material in the ground and bulk material. The majority of this will be retained and reused on site.

Waste arisings from the Project	Quantities of waste arisings	Additional information on waste arisings
Earthworks		
Topsoil	Unknown	If surplus will be used in landscape mitigation
Subsoil	Unknown	If surplus will be used in landscape mitigation
Unacceptable material – Bitmac, Concrete etc.	Unknown	No offsite disposal

5.3 Construction Wastes

5.3.1 The waste arising from construction is estimated in the table below.

Waste arisings from the Project	Quantities of waste arisings	Additional information on waste arisings	Responsibility
Site Construction			
Timber post and rail fencing	80m	Stored offsite for re-use or recycled	Contractor
Timber field gate	n/a		
Chamber cover and frame	1no.	Stored offsite for re-use or recycled	Contractor
Hazard marker post	n/a		
Kilometre post	n/a		
Double sided crash barrier	66m	Stored offsite for re-use	Contractor
Pre-cast concrete kerbs & edgings	500m	Stored offsite for recycled aggregate	Contractor
Traffic signs including posts	Nil.		
Trees up to 1700mm girth	Nil.		
Cleared Vegetation (hedges, scrub, grass etc)	n/a		
Gully grating and frame	10no.	Stored offsite for re-use.	Contractor
Road stud	n/a		
Bollard	n/a		
Cattle grid	n/a		
Granite gate posts	n/a		
Key stones (retained on site for reuse)	n/a		
Stonework	n/a		Contractor
Site Accommodation – municipal waste	112cm	2 cm/ wk for 56 wks. Recycled or to landfill	Contractor

5.4 Disposal Options

5.4.1 The Landfill (England and Wales) Regulations 2002 require that disposal sites are classified into one of three categories dependent on the chemical composition of the material; these are hazardous, non-hazardous and inert. Prior to disposal, if material

is deemed hazardous it must be pre-treated to meet the Waste Acceptance Criteria. Further stipulations within the Landfill Regulations are as follows:

- Higher engineering and operating standards to be followed.
- Hazardous liquids, flammable, corrosive, explosive, oxidising and infectious wastes have been banned from landfill since July 2002.
- Non hazardous liquids have been banned since 2007.
- Co-disposal (the combined disposal of hazardous and non-hazardous material in the same place) has been banned since 16 July 2004.
- Whole tyres were banned from 2003, and shredded tyres have been banned since 2006.
- Waste will be required to be treated prior to landfilling.
- Operators must demonstrate that they and their staff are technically competent to manage the site, and have made adequate financial provision to cover the maintenance and aftercare requirements.

5.4.2 If the excavated material is not contaminated in accordance with the WAC testing* and Soil Guideline Values (SGVs), then there are a number of reuse and recycling opportunities that exist; for example using the excavated material as infill on the site will be considered. Further uses could be for construction or maintenance of gates, fences and poles. Material produced could also be used in the laying of roads around the site or stored for later use, providing there are adequate storage areas and the material would have to be managed to minimise dust and run off.

5.4.3 Prior to re-use, excavated concrete would have to be crushed either on site if there is adequate space for a crusher to be hired, or provisions made for the concrete to be taken to a nearby depot, crushed and stored there and brought back onto site.

* WAC testing will be carried out prior to removal offsite for landfill disposal.

5.5 Waste Declaration

5.5.1 The client and principal contractor will take all reasonable steps to ensure that:

<p>a) all waste from the site is dealt with in accordance with the waste Duty of Care in Section 34 of the Environmental Protection Act 1990 and the Environmental Protection (Duty of Care) Regulations 1991; and</p> <p>b) materials will be handled efficiently and waste managed appropriately.</p>	
<p>Signatures (Client and Principal Contractor)</p>	

Site Security

5.5.2 Both client and principal contractor will be responsible for ensuring site security measures are in place to prevent illegal disposal of waste at the site.

6 IMPLEMENTATION OF THE SWMP**6.1 Register of waste carrier licences and permits**

6.1.1 The table overleaf gives information on the waste management contractors, their waste management licenses, waste carrier licenses and exempt site licenses that have been checked and verified for use on this project.

6.1.2 The Landfill Regulations (2002) also require that waste is described by European Waste Catalogue (EWC) codes on Transfer Notes required under the Duty of Care Regulations. The EWC categorises wastes into 20 main groups and approximately 900 codes. The EWC also identifies Hazardous Wastes, many of which are currently Special Waste and dealt with by the Special Waste Regulations, but some of which are not, such as fluorescent tubes, certain batteries and cathode ray tubes.

6.1.3 The table overleaf outlines the likely construction wastes that will be generated during excavation and construction. These will be quantified at a later stage when more information is known.

6.2 Training and Communication

6.2.1 In accordance with our intention to develop a culture of promoting best practice and increasing knowledge and awareness, education on the issues surrounding our waste management plan as well as the procedures to be followed will be given to all operatives in their site induction and 'Tool Box' talks. Tool Box talks will be carried out every month on waste issues and all subcontractors will be expected to attend.

6.3 Monitoring

6.3.1 The contractors will fill in a weekly log of all materials that come on to site, and the principal contractor will receive a printed sheet from the waste disposal company of the amount of waste materials removed from site. This sheet also identifies how much materials went to landfill and how much went for recycling.

6.3.2 The skips need to be monitored to ensure that cross-contamination of segregated skips does not occur. Therefore regular Tool Box talks will be held on how the waste management system is working and point out the extra costs associated with contamination.

6.3.3 The Principal Contractor will continually review the type of surplus materials being produced and change the site arrangements to maximise reuse or recycling and the use of landfill will be the last option.

6.3.4 This plan will be included as an agenda item at the construction meetings. In addition, the plan will be communicated to the whole team (including the client) at the monthly meetings. This will include any updates from the last version.

6.4 Waste Records

Date removed	Waste type	Identity of the person removing the waste	Site the waste is being taken to and whether licensed or exempt	Waste carrier and registration number*	Confirmation of delivery*	Waste management route (reuse on/offsite, recycled on/offsite, recovery, landfill, other)

*evidence of waste carrier registration and waste transfer or hazardous waste consignment notes for each removal of waste is filed and cross-referenced.

6.5 SWMP Implementation Checklist

Checks (please tick)	Y	N
Have terms and commercial rates been agreed with the waste management contractor(s)?		
Have data reporting procedures been agreed with waste management contractor(s)?		
For offsite waste management or disposal- Are all the waste destination details correct?		
Has a waste segregation/ collection area been prepared?		
Has the waste management area been adequately sign posted?		
Has the SWMP planning meeting been set?		
Has the waste management document control/filing system been set up?		
Have all necessary staff and contractors read and signed the SWMP?		
Have all the SWMP training/ briefing requirements for staff been met?		
Have all the SWMP training/ briefing requirements for contractor/s been met?		
Have all the waste management targets been set?		
Has the SWMP been approved by the Project Manager?		

Comments/ Further Actions:

1. Excavated material to be tested for contamination prior to re-use and/or disposal
- 2.
- 3.

6.6 Updating the SWMP

6.6.1 The plan will be updated at least every six months or at each change in ownership dependent on the stage of the works and not inclusive of any other parties. It should be noted that there is no liability on the other parties for the works not undertaken by them. Revisions are recorded in the table below.

Nature of revision	Date of revision	Author of revision
[waste records updated]		

7 REVIEW OF SWMP

7.1 Post Construction Confirmation

This plan has been monitored on a regular basis to ensure that work is progressing according to the plan and has been updated to record details of the actual waste management actions and waste transfers that have taken place.

Signatures
(Client & Principal Contractor)

7.2 Estimated Versus Actual Waste Quantities

7.2.1 Enabling Works

Waste type	Waste material	Estimated quantity [unit]	Actual quantity [unit]	Difference (+/-)	Reason for variance
Inert	Concrete				
	Brick				

	Rubble				
Non-hazardous	Excavated material				
	Soil				
	Green waste/vegetation				
	Mixed waste				
	Metal				
	Timber				
	Plasterboard				
	Packaging				
	Cable & wiring				
	Office/Canteen				
	Glass				
	Other				
Hazardous	Asbestos				
	Contaminated land				
	Paint tins, line markers, mastic				
	Other				

7.2.2 Construction Works

Waste type	Waste material	Estimated quantity [unit]	Actual quantity [unit]	Difference (+/-)	Reason for variance
Inert	Concrete				
	Brick				
	Rubble				
Non-hazardous	Soil				
	Green waste/vegetation				
	Mixed waste				

Waste type	Waste material	Estimated quantity [unit]	Actual quantity [unit]	Difference (+/-)	Reason for variance
	Metal				
	Timber				
	Plasterboard				
	Packaging				
	Cable & wiring				
	Office/Canteen				
	Glass				
	Other				
Hazardous	Asbestos				
	Contaminated land				
	Paint tins, line markers, mastic				
	Other				

7.3 Deviations

Issue	Details
[waste forecasts- exceeded]	
[waste forecasts- not met]	

7.4 Estimate of Cost Savings

7.4.1

7.5 Relevant Signature

Principal Contractor:

Date:

Client:

Date:

SWMP Author:

Date: