

**M42 Junction 6 Improvement
Scheme Number TR010027
Volume 6
6.3 Environmental Statement
Appendix 11.1 Excavated Materials Study**

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

January 2019

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms
and Procedure) Regulations 2009**

**M42 Junction 6 Improvement
Development Consent Order 202[]**

**6.3 Environmental Statement
Appendix 11.1 Excavated Materials Study**

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Table of contents

Chapter	Pages
Appendix 11 Excavated Materials Study	1
1 Introduction	1
1.2 Types and quantities of earthworks materials	1
2 Methodology	2
2.2 Types of receptor site	2
2.3 Sources of information	3
3 Long list of potentially suitable receptor sites	4
3.1 Methodology	4
3.2 Findings from the long list and screening	4
4 Shortlist of potentially suitable receptor sites	5
4.1 Assessment methodology	5
4.2 Assessment criteria	5
4.3 Outcomes of the assessment	6
4.4 Identification of potentially suitable receptor sites	13
4.5 Limitations	14

List of Tables:

Table 1: Estimated main types and quantities of earthworks materials arising and used during the construction of the Scheme	1
Table 2: Screening criteria	4
Table 3: Assessment criteria	6
Table 4: Assessment of permitted waste transfer and treatment operations located within 30 miles of the Scheme	7
Table 5: Assessment of permitted deposit for recovery sites (A25 permit type only) located within 30 miles of the Scheme	8
Table 6: Assessment of permitted landfill sites located within 30 miles of the Scheme	9
Table 7: Assessment of permitted mineral production sites located within 20 miles of the Scheme	11
Table 8: Indicative priority list of potentially suitable receptor sites	13

Appendix 11 Excavated Materials Study

1 Introduction

- 1.1.1 This excavated materials options assessment (EMOA) provides an initial review of potential offsite receptor sites that may be suitable for the management of the surplus earthworks materials that are expected to arise during construction of the Scheme.
- 1.1.2 Offsite management routes for surplus earthworks materials arising during construction of the Scheme are currently unknown and will be the responsibility of the contractor.
- 1.1.3 The shortlist of potentially suitable receptor sites set out in this EMOA is not intended to be restrictive. The appointed contractor would be able to use alternative receptor sites that meet the required need.

1.2 Types and quantities of earthworks materials

- 1.2.1 The main types and quantities of earthworks materials estimated to arise during construction of the Scheme are shown in **Table 1**. This includes the estimated cut and fill balance and the surplus materials requiring management.

Table 1 Estimated main types and quantities of earthworks materials arising and used during the construction of the Scheme

Earthworks material	Cut (m3)	Fill (m3) (Note 1)	Surplus (m3)	Possible management route for surplus
Acceptable fill material	895,635	259,711	635,924	Offsite beneficial use or disposal (unknown location).
Unacceptable fill material	90,905	0	90,905	Offsite treatment, beneficial use or disposal (unknown location).
Topsoil	181,207	125,013	56,193	Onsite or offsite permanent storage, reuse, recovery or disposal (unknown location).
TOTAL	1,167,747	384,724	783,022	

Note 1: No bulking factor has been applied.

- 1.2.2 Earthworks materials, including acceptable fill materials and topsoil, will be used within the construction of the Scheme. It is estimated that approximately 260,000m³ of site-won acceptable fill material and 125,000m³ of site-won topsoil will be used in construction of the Scheme, as shown in **Table 1**. This material will be used in accordance with a Materials Management Plan (MMP) within the OEMP [TR010027/APP/6.11] prepared under the CL: AiRE Definition of Waste: Code of Practice¹ and will not be classified as waste.

¹ CL: AiRE. Definition of Waste: Code of Practice. Available at: <https://www.claire.co.uk/projects-and-initiatives/dow-cop>

- 1.2.3 **Table 1** shows that the construction of the Scheme is estimated to generate a surplus of earthworks materials that will require alternative management arrangements. The total quantity of surplus earthworks materials is estimated to be approximately 783,000m³, comprising, 636,000m³ of acceptable fill material, 91,000m³ of unacceptable fill material and 56,000m³ of topsoil. The majority of this material, if managed as a waste, would be classified as having waste code 17 05 04 non-hazardous soil and stones.
- 1.2.4 This EMOA aims to provide additional clarity around the likely availability of potentially suitable receptor sites for the management of the surplus materials, including site locations and their potential capacity.
- 1.2.5 The appointed Contractor should consider the waste hierarchy when determining the management route for surplus earthworks materials arising from the Scheme, as set out in the Site Waste Management Plan (SWMP) **[TR010027/APP/6.11]**. As such, the contractor should seek to reduce waste arisings where possible and to identify reuse opportunities, such as in other development projects that may have an overall material deficit. Where viable reuse opportunities are not available, the surplus earthworks materials may require alternative off site management. This report identifies receptor sites that may be potentially suitable for use.

2 Methodology

- 2.1.1 This EMOA identifies the likely viability of potential receptor sites for the use, recovery or disposal of the surplus excavated earthworks materials expected to arise from the construction of the Scheme.
- 2.1.2 The methodology comprises the following approach:
- identification of the main types of suitable receptor sites;
 - identification of a long list of potentially suitable receptor sites within defined proximity to the Scheme;
 - initial screening of the long list of potentially suitable receptor sites based on a set of screening criteria;
 - further assessment of the potentially suitable receptor sites against a set of assessment criteria; and
 - identification of potentially suitable receptor sites.

2.2 Types of receptor site

- 2.2.1 The receptor sites considered in this assessment include:
- waste management sites operating under an environmental permit that receive non-hazardous soil and stones (waste code 17 05 04);
 - operational landfill sites that may require restoration materials and/or offer capacity for landfill disposal; and

- c. operational mineral extraction sites that may require restoration materials.

2.3 Sources of information

2.3.1 The following sources of information were used to identify the long list of potentially suitable receptor sites and to provide data for the screening and assessment of the sites:

- a. Environment Agency datasets including:
 - i. Waste Data Interrogator 2017 Waste Returns (<https://data.gov.uk/dataset/dd8629ad-bd32-4db3-a07a-879737964f23/waste-data-interrogator-2017>);
 - ii. Remaining landfill capacity by site for 2015, 2016 and 2017 (<https://data.gov.uk/dataset/fa667727-256d-4237-8399-904bf62a0451/remaining-landfill-capacity>). Data for sites with a commercial confidentiality in place are not provided in the dataset;
 - iii. Public Registers (<https://environment.data.gov.uk/public-register/view/index>);
 - iv. Environmental Permitting Regulations - Waste Sites (<https://data.gov.uk/dataset/1683346b-abf9-4712-ba84-02871a318212/environmental-permitting-regulations-waste-sites>);
 - v. Environmental Permitting Regulations - Waste Sites Quarterly Summary (<https://data.gov.uk/dataset/ea22d374-1e72-4ee2-9b15-e7f7ddc9aea4/environmental-permitting-regulations-waste-sites-quarterly-summary>);
 - vi. Environmental Permitting Regulations - Landfill Sites Quarterly Summary (<https://data.gov.uk/dataset/f32df1eb-e571-440c-8d1c-75a5233f92f5/environmental-permitting-regulations-landfill-sites-quarterly-summary>) and
 - vii. Environmental Permitting Regulations - Industrial Sites (<https://data.gov.uk/dataset/20319dde-cd31-4cfe-abc3-5d36c5f91f85/environmental-permitting-regulations-industrial-sites>)
- b. British Geological Survey BRITPITS dataset (<https://www.bgs.ac.uk/products/minerals/britpits.html>);
- c. local planning policy documents and minerals and waste planning documents; and
- d. Google Earth satellite imagery.

3 Long list of potentially suitable receptor sites

3.1 Methodology

- 3.1.1 The study area for identifying the long list of potentially suitable receptor sites was defined as approximately 60 mile straight line distance from the Scheme.
- 3.1.2 Screening criteria were applied to the long list of potentially suitable receptor sites in order to filter out non-operational sites and those with limited capacity. The screening criteria are set out in **Table 2**.

Table 2 Screening criteria

Type of receptor site	Screening criteria
Permitted waste transfer and treatment sites	Include: Sites receiving >25,000 tonnes of waste code '17 05 04 non-hazardous soil and stones' in 2017
Permitted deposit for recovery sites	Include: Permit type A25 (bespoke permit)
	Exclude: Standard rules permit type S1539 (maximum capacity of 60,000m ³)
Permitted landfill sites	Include: Sites with a permit type prefix of "L". These sites meet the requirements of the Landfill Directive and are able to operate.
	Exclude: Sites with a permit type prefix of "A". These sites are not compliant with the landfill directive and therefore are no longer able to accept waste.
Mineral production sites	Exclude: Sites with a status of "ceased".
	Include: Sites with a status of "active", "inactive" or "dormant".

3.2 Findings from the long list and screening

- 3.2.1 A summary of the long list of potentially suitable receptor sites within approximately 60 miles of the Scheme, as identified after applying the screening criteria, are summarised below.

Permitted waste transfer and treatment facilities

- 3.2.2 The identification and screening of the long list of permitted waste operations identified that in 2017:
- twenty four permitted waste treatment and/or transfer sites located within 60 miles of the Scheme received more than 25,000 tonnes each of waste code '17 05 04 non-hazardous soil and stones'; and
 - these 24 sites together received approximately 1.5 million tonnes of waste code '17 05 04 non-hazardous soil and stones'.

Deposit for recovery sites

- 3.2.3 The identification and screening of the long list of permitted deposit for recovery sites identified that in 2017:
- seventy six deposit for recovery sites (active A25 permit type only) were located within 60 miles of the Scheme; and

- b. these sites received a total of approximately 2.4 million tonnes of waste (for sites where data was reported), of which approximately 2.1 million tonnes comprised waste code '17 05 04 non-hazardous soil and stones'.

Landfill

- 3.2.4 The identification and screening of the long list of landfill sites identified that in 2017:
- a. ninety four landfill sites were located within 60 miles of the Scheme that reported receiving waste and/or having remaining landfill capacity;
 - b. these landfill sites reported approximately 87.7 million cubic metres of remaining landfill capacity (only includes capacity for sites that reported non-commercially confidential data to the Environment Agency); and
 - c. landfill sites within 60 miles of the Scheme received a total of approximately 15.3 million tonnes of waste (in 2017), of which approximately 9.5 million tonnes comprised waste code '17 05 04 non-hazardous soil and stones'.

Mineral production sites

- 3.2.5 The identification and screening of the long list of mineral production sites identified:
- a. eight hundred and three records of active, inactive and ceased pits located within 60 miles of the Scheme; and
 - b. further consideration of the sites located within 30 miles of the Scheme identified, 192 individual records of active, inactive and ceased pits, within 101 site locations/groupings.

4 Shortlist of potentially suitable receptor sites

4.1 Assessment methodology

- 4.1.1 The long list of sites, following screening, identified a large number of potential receptor sites located within 60 miles of the Scheme. Further assessment of the long list was undertaken in order to identify a shortlist of potentially suitable receptor sites.

4.2 Assessment criteria

- 4.2.1 A set of assessment criteria were developed and applied to the long list of potentially suitable receptor sites in order to identify locations with the greatest potential for use as suitable receptor sites. The assessment criteria are set out in **Table 3** and address the following suitability indicators:
- a. proximity;
 - b. capacity; and
 - c. material acceptability.

Table 3 Assessment criteria

Type of receptor site	Assessment criteria	Priority		
		High	Medium	Low
Permitted waste transfer and sites	Proximity: straight line distance from the Scheme	<10 miles	10-20 miles	20-30 miles
	Capacity/Material acceptability: Quantity of waste code '17 05 04 non-hazardous soil and stones' received (2017)	>100,000 tonnes	50,000-100,000 tonnes	<50,000 tonnes
Permitted deposit for recovery sites	Proximity: straight line distance from the Scheme	<10 miles	10-20 miles	20-30 miles
	Capacity: Total input quantity (2017)	>100,000 tonnes	50,000-100,000 tonnes	<50,000 tonnes
	Capacity / Material acceptability: Quantity of waste code '17 05 04 non-hazardous soil and stones' received (2017)	>100,000 tonnes	50,000-100,000 tonnes	<50,000 tonnes
Permitted landfill sites	Proximity: straight line distance from the Scheme	<10 miles	10-20 miles	20-30 miles
	Material acceptability: Landfill site type (inert, non-hazardous, hazardous)	Inert	Non-hazardous	hazardous
	Capacity: Remaining permitted capacity	>1 million m ³	200,000 - 1 million m ³	<200,000m ³
	Capacity: Total quantity of waste received in 2017	>300,000 tonnes	100,000-300,000 tonnes	<100,000 tonnes
	Capacity / Material acceptability: Quantity of waste code '17 05 04 non-hazardous soil and stones' received (2017)	>300,000 tonnes	100,000-300,000 tonnes	<100,000 tonnes
Mineral production sites	Proximity: straight line distance from the Scheme	<10 miles	10-20 miles	20-30 miles
	Capacity: Review of pit location on Google Earth to identify the presence of a visible void and / or activity	Visible void, with benches	Visible void, no benches	Activity, no visible void

4.3 Outcomes of the assessment

- 4.3.1 Due to the large number of potential receptor sites located within 60 miles of the Scheme, the assessment focused on sites located within 30 miles of the Scheme (and 20 miles for mineral production sites due to large site numbers).
- 4.3.2 The outcomes of the assessment are shown in: **Table 4** for permitted waste transfer and treatment sites; **Table 5** for permitted deposit for recovery sites; **Table 6** for permitted landfill sites; and **Table 7** for mineral production sites.

Table 4 Assessment of permitted waste transfer and treatment operations located within 30 miles of the Scheme

Site Name	Operator	Permit number (WML)	Site postcode	Easting	Northing	Approx distance from the Scheme (miles)	Permit Type	Waste code "170504 soil and stones other than those mentioned in 17 05 03" received (2017) (tonnes)
Coleshill Quarry	Coleshill Recycled Aggregates Limited	EB3805XX (401612)	B46 1JU	420387	290588	6	A16 : Physical Treatment Facility	28,805
Dunton Recycling Centre	K S D Recycled Aggregates Ltd	GB3633RY (104156)	B76 0BB	418906	293106	7	A16 : Physical Treatment Facility	70,676
Land At 1 Coronel Avenue	Tom White Waste Ltd	HP3193LV (101653)	CV6 6AP	434169	283656	10	S0803 : HCI Waste TS + treatment	38,317
Weeford Quarry	H. D. Ricketts Limited	CB3204TH (103968)	B75 5SZ	414017	302133	13	SR2010 No12: Treatment of waste to produce soil <75,000 tpy	31,318
Land At Bott Lane	Pegasus Grab Hire Limited	EB3500HJ (403539)	DY9 7AW	391835	284814	17	A16 : Physical Treatment Facility	25,100
Cranebrook Quarry Landfill	W C L Brownhills Quarry Limited	FB3701KK (104252)	WS14 0BD	406970	306490	17	A16 : Physical Treatment Facility	49,303
Direct Contracts Limited	Direct Contracts Limited	DB3308CM (402729)	LE17 5BA	446579	288762	18	SR2010 No12: Treatment of waste to produce soil <75,000 tpy	53,403
Soil And Aggregate Reprocessing Facility	J P E (Holdings) Limited	CB3205LM (401903)	WV5 7EY	384475	295344	23	SR2010 No12: Treatment of waste to produce soil <75,000 tpy	67,518
Wastecycle Waste Transfer, Treatment & Recycling Centre	Wastecycle Ltd	EB3939DQ (100485)	LE4 5PZ	458900	307300	30	A11 : Household, Commercial & Industrial Waste T Stn	53,609

Table 5 Assessment of permitted deposit for recovery sites (A25 permit type only) located within 30 miles of the Scheme

Site Name	Operator	Permit number (WML)	Site postcode	Easting	Northing	Approx distance from the Scheme (miles)	Permit Type	Total waste received (2017) (tonnes)	Waste code "170504 soil and stones other than those mentioned in 17 05 03" received (2017) (tonnes)
Arden Brickworks	Armac Demolition Limited	CB3438AX	B92 0DY	420400	282600	1	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Berkswell Quarry	Cemex U K Materials Limited	BB3333RH	CV7 7LH	422909	280758	3	A25 : Deposit of waste to land as a recovery operation	17,496	17,496
Meriden Quarry	N R S Waste Care Ltd	LB3235RJ	CV7 7LG	423095	282160	3	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Freshwater Pond Restoration Site	N R S Waste Care Limited	LB3931AF	CV7 7LG	423374	281851	3	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Meriden Quarry	N R S Waste Care Ltd	EB3930AS	CV7 7LG	423439	281953	3	A25 : Deposit of waste to land as a recovery operation	24,000	24,000
Coleshill Quarry	Cemex U K Materials Ltd	CB3339AX	B45 1JU	420300	290100	5	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Heart Of England Conference And Events Centre	Heart Of England Promotions Limited	CB3108FS	CV7 8DX	427232	285245	6	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Cummings Civils Limited	Cummings Civils Limited	CB3104HD	B78 2DL	421616	297728	10	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Wolston Fields Farm	Smiths Concrete Limited	KB3035RW	CV8 3LG	439900	275200	14	A25 : Deposit of waste to land as a recovery operation	169,987	169,987
Land Off Winterley Lane	M And A Doocey Civil Engineering Limited	BB3601XE	WS4 1LR	403383	300851	15	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Church View Site	Redrow Homes Limited	HP3896EU	DY4 9PA	396240	292680	15	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Ling Hall Landfill	Veolia E S Landfill Limited	BU2381IE	CV23 9HH	444500	273500	17	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Railway Cutting East Of Ward Street, Bilston, Wolverhampton	Persimmon Homes Limited	FB3109TY	WV2 2NT	393878	296601	18	A25 : Deposit of waste to land as a recovery operation	40,841	40,841
The Range	Max Plant (Midlands) Limited	CB3100CG	WV11 2RJ	398100	303760	19	A25 : Deposit of waste to land as a recovery operation	42,498	42,498
Wood Farm	Jack Moody Civil Engineering Limited	DB3601KM	WV11 2RE	397400	304000	19	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Wood Farm	Jack Moody Landscaping And Civil Engineering Ltd	FB3501MX	WV11 2RE	397210	304071	19	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Saredon Hill Quarry	N R S Aggregates Ltd	BB3937RX	WV10 7DD	394454	307980	22	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Rugeley Ash Lagoons	Rugeley Power Ltd	UP3699VZ	WS15 1PR	406700	316800	23	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Burlish Park Golf Club	Burlish Golf Centres Limited	AB3808UU	DY11 7EX	380980	273233	24	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Newbold Quarry	Aggregate Industries U K Limited	CB3633RW	DE13 8EF	420314	320713	24	A25 : Deposit of waste to land as a recovery operation	46,716	45,947
Blackstone Quarry	Hills Waste Solutions Ltd	BB3136AR	DY13 8RN	379500	273400	25	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Bradgate Landfill Site (Borrow Pit Area)	F C C Recycling (U K) Limited	CB3330RU	LE67 9RH	450903	308580	26	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Abbots Wood Farm	Prosser Christopher	KB3430AJ	WR5 3QJ	388800	248900	28	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified
Shephed Clay Pit	Michelmersh Brick Holdings Plc	BB3906FZ	LE12 9FE	447960	317920	29	A25 : Deposit of waste to land as a recovery operation	Not specified	Not specified

Table 6 Assessment of permitted landfill sites located within 30 miles of the Scheme

Site Name	Operator	Permit number (WML)	Site address	Site postcode	Easting	Northing	Approx distance from the Scheme (miles)	Permit Type	Remaining Capacity end 2017 (cubic metres)	Total waste received (2017) (tonnes)	Waste code "170504 soil and stones other than those mentioned in 17 05 03" received (2017) (tonnes)	Comments
Packington Landfill	SUEZ Recycling and Recovery UK Ltd	BW0533ID	Little Packington, Coventry CV7 7HF	CV7 7HN	420900	285300	3	L02 - Non hazardous landfill (with SNRHW cell)	0	348,879	227,009	Site closed / zero capacity. Restoration materials only.
Meriden Quarry Area G	N R S Waste Management Services Limited	CB3805HC (402326)	Solihull	CV7 7PL	423134	282758	3	L05 - Inert landfill	Not specified	722,989	617,889	
Coleshill Landfill	Cemex U K Materials Ltd	WP3432LU (210092)	Gorsey Lane, Off Station Road, Coleshill B46 1JU	B46 1JU	420500	290700	6	L05 - Inert landfill	0	43,716	43,716	Site closed / zero capacity. Restoration materials only.
Minworth Landfill	Severn Trent Water Ltd	BV4541IR	Minworth Sewage Treatment Works, Kingsbury Road, Sutton Coldfield B76 9DP	B76 9DP	416976	292116	6	L06 - Hazardous restricted landfill	195,048	Not specified	Not specified	
Middleton Site	Hanson Quarry Products Europe Ltd	NP3334MQ (210067)	North Warwickshire	B78 2BB	418900	297160	9	L05 - Inert landfill	Not specified	208,987	208,987	
Kingsbury Landfill	Biffa Waste Services Ltd	NP3635SZ	Rush Lane, Tamworth B77 1LT	B77 1LT	421875	299509	11	L04 - Non hazardous landfill	3,460,555	Not specified	Not specified	
Wilecote Landfill	Biffa Waste Services Ltd	BV4975IN	Rush Lane, Dosthill, Tamworth B77 1LT	B77 1LT	422100	299800	11	L04 - Non hazardous landfill	2,700,000	Not specified	Not specified	
Griff No4 Quarry Landfill	Wcl Nuneaton Quarry Limited	FB3207SA (400153)	Griff Quarry, Gipsy Lane, Nuneaton, Warks, CV10 7PH	CV10 7PH	436342	288666	12	L05 - Inert landfill	4,179,528	684,433	678,470	
Judkins Landfill Phase 3	Waste Recycling Group (Central) Limited / Crown Waste Limited	AP3533LF	Tuttle Hill, Nuneaton CV10 0JQ	CV10 0JQ	434600	293000	12	L04 - Non hazardous landfill	2,300,000	47,922	47,903	
Weights Farm Landfill	Wood	BV3995IE (210034)	Weights Lane, Redditch B97 6RG	B97 6RG	403430	269340	12	L05 - Inert landfill	1,600,000	12,710	3,926	
Bubbenhall Landfill	Waste Recycling Group (Central) Limited	BW0037IA	Weston Lane, Warwick CV8 3BN	CV8 3BN	435720	271660	12	L04 - Non hazardous landfill	1,428,788	96,778	3,103	
Glebe Farm Landfill	Smiths Concrete Ltd	GP3492LR (210015)	Weston Lane, Bubbenhall, Coventry, West Midlands, CV8 3BN	CV8 3BN	436100	271300	13	L05 - Inert landfill	64,309	8,503	8,503	
Branton Lane Quarry / Branton Hill Quarry	Bliss Sand and Gravel Company	210029	30a Branton Hill Lane, Aldridge WS9 0NS	WS9 0NS	406575	300188	14	L05 - Inert landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Pinches 3 Landfill	J & V Kelly Ltd	WP3299VG (102641)	Pinches 3 Quarry, Wildmoor Lane, Wildmoor, Bromsgrove, Worcestershire, B61 0RF	B61 0RF	396729	275353	14	L05 - Inert landfill	200,000	98,151	98,151	
Edwin Richards Landfill Site	Waste Recycling Group (Central) Limited	BU0834IP	Portway Road, Rowley Regis, Warley B65 9BT	B65 9BT	396500	288200	14	L04 - Non hazardous landfill	10,789,230	211,827	211,827	
Aldridge Quarry	RMC Aggregates (Western) Ltd	42901	Birch Lane, Aldridge WS9 0NF	WS9 0NF	406700	302700	15	L05 - Inert landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Vigo Utopia Landfill Site	Cory Environmental (Central) Ltd	BV2999U	Coppice Lane, Walsall Wood, Walsall WS9 8TB	WS9 8TB	404700	302464	15	L04 - Non hazardous landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Highfields South Landfill Site	Enovert North Limited	NP3135SL	Lichfield Road, Walsall WS9 9AH	WS9 9AH	404200	302500	16	L04 - Non hazardous landfill	1,137,668	106,529	14,054	
Shire Oak Quarry / Shireoak Quarry	J P E (Holdings) Limited / Tarmac Ltd	AB3100UQ (40059)	Shireoak Quarry, Chester Road, Shire Oak, Walsall, Staffordshire, WS9 9PE	WS9 9PE	406037	303924	16	L05 - Inert landfill	1,521,858	308,766	308,766	
Tollgate Farm	A S Earthmoving And Developments Ltd	102188	Stratford-on-Avon	CV33 9QJ	431242	259702	16	L05 - Inert landfill	Not specified	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Cranebrook Landfill	Walsall Concrete Ltd	43765	A5 Watling Street, Muckley Corner, Brownhills WS14 0BD	WS14 0BD	407020	306450	17	L05 - Inert landfill	614,040	Not specified	Not specified	
Ling Hall Landfill	Veolia ES Landfill Limited	BU2381IE	Coalpit Lane, Lawford Heath CV23 9HH	CV23 9HH	444500	273500	17	L02 - Non hazardous landfill (with SNRHW cell)	4,526,958	313,881	41,219	
Ufton Farm Landfill Site	Biffa Waste Services Ltd	NP3435PX	Southam Road, Leamington Spa CV33 9PP	CV33 9PP	438300	261300	18	L02 - Non hazardous landfill (with SNRHW cell)	3,000	33,567	0	
Ketley Quarry Landfill	W C L Cranebrook Quarry Limited	FB3230DV (103912)	North West Leicestershire	DY6 8WT	389937	289187	18	L05 - Inert landfill	Not specified	190,362	170,390	

Table 6 Assessment of permitted landfill sites located within 30 miles of the Scheme (continued)

Site Name	Operator	Permit number (WML)	Site address	Site postcode	Easting	Northing	Approx distance from the Scheme (miles)	Permit Type	Remaining Capacity end 2017 (cubic metres)	Total waste received (2017) (tonnes)	Waste code "170504 soil and stones other than those mentioned in 17 05 03" received (2017) (tonnes)	Comments
Southam Landfill	Cemex UK Cement Ltd	DP3335ME	Southam Road, Long Itchington, Southam CV47 9RA	CV47 9RA	442161	263831	18	L06 - Hazardous restricted landfill	340,000	Not specified	Not specified	
Oak Farm Quarry Landfill	Himley Environmental Limited	UP3830NT	Oak Farm Quarry Landfill, Crooked House Lane, Himley, West Midlands, DY3 4DA	DY3 4DA	390010	290770	19	L02 - Non hazardous landfill (with SNRHW cell)	0	557,408	162,296	Site closed / zero capacity. Restoration materials only.
Himley Quarry Landfill	Enovert North Limited	BV7265IS	Kingswinford DY6 7YS	DY6 7JS	389600	290240	19	L02 - Non hazardous landfill (with SNRHW cell)	602,977	119,501	30,999	
Whitemoor Haye Landfill Site	Tarmac Aggregates Limited	FP3193ME (210084)	Alrewas Quarry, Barley Green Lane, Alrewas DE13 7DL	DE13 7DL	417600	312800	19	L05 - Inert landfill	0	119,563	119,563	Site closed / zero capacity. Restoration materials only.
Enville Road / Sand Quarry Landfill	F G Davis & Sons (Contractors) Ltd	210016	Enville Road, Kingswinford, Nr Dudley DY6 0AS	DY6 0AS	387352	289685	20	L05 - Inert landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Poplars Landfill & AD Facility	Biffa Waste Services Ltd	BW0584IL	Lichfield Road, Cannock WS11 3EQ	WS11 3EQ	399300	309400	21	L04 - Non hazardous landfill	5,130,039	650,315	14,296	
Poplars PFA Landfill Site	Biffa Waste Services Limited	BP3436VS	Lichfield Road, Cannock WS11 3EQ	WS11 3EQ	399600	309760	21	L04 - Non hazardous landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Sandy Lane Landfill Site	Veolia ES Landfill Limited	VP3036GQ	Sandy Lane, Worcester B61 0QT	B61 0QT	386012	270412	21	L04 - Non hazardous landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Hartlebury Landfill Site	Biffa Waste Services Ltd	ZP3232SF	Whitleng Lane, Hartlebury DY10 4HB	DY10 4HB	385500	271050	22	L02 - Non hazardous landfill (with SNRHW cell)	493,600	34,491	34,491	
Waresley Landfill Site	Biffa Waste Services Ltd	LP3032UR	Hartlebury Trading Estate, Hartlebury, Kidderminster DY10 4JA	DY10 4JA	385349	270402	22	L04 - Non hazardous landfill	2,500,000	Not specified	Not specified	
Cotesbach Landfill	Tarmac Aggregates Limited	BK1449IK	Cotesbach Landfill, Gibbet Lane, Shawell, Lutterworth LE17 6AA	LE17 6AA	454000	280600	22	L02 - Non hazardous landfill (with SNRHW cell)	10,594,400	229,133	3,914	
Saredon Hill Quarry	N R S Aggregates Ltd / N R S Waste Care Ltd	FB3009GX (104159)	Saredon Hill Quarry, Great Saredon Road, Saredon, Staffs, WV10 7LL	WV10 7LL	394454	307980	22	L05 - Inert landfill	3,000,000	176,283	164,215	
Huncote Quarry	Acresford Sand & Gravel Limited	HP3290CL (43566)	Huncote Quarry, Forest Road, Huncote, Leicester LE9 3LE	LE9 3LE	451200	298200	23	L05 - Inert landfill	1,873	5,613	5,613	
Slip Inn Quarry	Cemex U K Materials Ltd	EB3005HU (210039)	Leicestershire	LE17 4LT	454420	288870	23	L05 - Inert landfill	Not specified	73,525	73,525	
Seisdon Landfill Site	Seisdon U K Ltd	CP3299CV (46134)	Staffordshire	WV5 7ES	384431	295332	23	L05 - Inert landfill	Not specified	39,223	38,611	
New Albion Landfill	Veolia ES Landfill Ltd	BJ6003IF	Occupation Road, Spring Cottage, Albert Village, Swadlincote DE11 8HA	DE11 8HD	429960	316940	23	L04 - Non hazardous landfill	195,299	196,181	2,703	
Rugeley Power Station	Rugeley Power Limited	JP3139SG	Station Road, Rugeley WS15 1PR	WS15 1PR	406600	316900	23	L04 - Non hazardous landfill	107,902	Not specified	Not specified	
Ellistown Quarry Inert Landfill	Mick George Limited	CB3504GL (402105)	Tewkesbury	LE67 1ET	443510	310831	24	L05 - Inert landfill	Not specified	282,492	282,492	
Hill and Moor Landfill	Severn Waste Services Limited	ZP3933LD	Throckmorton, Pershore, Worcester WR10 2PW	WR10 2LW	396900	248400	25	L04 - Non hazardous landfill	2,009,395	137,305	8,751	
Kilsby Phase VII Landfill Site	Biffa Waste Services Ltd	BX0792IX	Grove Farm, Daventry Road, Daventry CV23 8XF	CV23 8XF	456890	269740	25	L04 - Non hazardous landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Bradgate Landfill	FCC Environment (UK) Limited	BW0509IU	Leicester Road, Field Head, Leicester LE67 9RH	LE67 9RH	451200	308900	26	L04 - Non hazardous landfill	0	990	990	Site closed / zero capacity. Restoration materials only.
Alkerton Landfill Site	SITA UK Limited	BU7090IZ	Alkerton, Banbury OX15 6NL	OX15 6NL	438300	243400	27	L04 - Non hazardous landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Barnsley Lane Landfill Site	Shropshire Waste Management Limited	BU5992IT	Lodge Farm, Barnsley Lane, Bridgnorth WV15 5HG	WV15 5HG	375767	292651	27	L04 - Non hazardous landfill	0	Not specified	Not specified	Site closed / zero capacity. Restoration materials only.
Husbands Bosworth Landfill Site	Tarmac Aggregates Limited	VP3292NK (73281)		LE17 6JH	464600	283000	29	L05 - Inert landfill	Not specified	84,673	76,658	
Swarkestone Landfill Site	Tarmac Aggregates Limited	FP3193SY (210081)	New Swarkestone Quarry, Twyford Road, Barrow upon Trent DE73 7HA	DE73 7HA	434700	327800	30	L05 - Inert landfill	0	78,684	78,624	Site closed / zero capacity. Restoration materials only.

Table 7 Assessment of permitted mineral production sites located within 20 miles of the Scheme

Site Name	Operator	Site address	Site postcode	Easting	Northing	Approx distance from the Scheme (miles)	Google Earth review of void	Comments
Arden Landfill / Arden Brickworks / Jackson's Brickworks	Armac Demolition	Coventry Road, Bickenhill, SOLIHULL, West Midlands, B92 0DY	B92 0DY	420460	282685	1	Visible void, no benches.	
Packington Quarry	Packington Estates	Middle Bickenhill, COVENTRY, Warwickshire		420600	283850	2	Visible void, no benches.	
Meriden Quarry Extension	Tarmac	Cornets End Lane, Meriden, COVENTRY, West Midlands, CV7 7LG	CV7 7LG	422455	281700	2	Visible void, no benches.	
Berkswell Quarry	CEMEX UK Materials Ltd.	Cornets End Lane, Meriden, COVENTRY, West Midlands, CV7 7LH	CV7 7LH	422755	280200	3	Visible void, with benches.	
Dunton Quarry	K S D (Haulage Contractors) Ltd.	Lichfield Road, Curdworth, SUTTON COLDFIELD, West Midlands, B76 0BB	B76 0BB	418950	293115	7	Visible void, no benches.	
Kingsbury Quarry	Wienerberger Ltd.	Rush Lane, Dost Hill, TAMWORTH, Staffordshire, B77 1LT	B77 1LT	421900	298300	10	Visible void, with benches.	
Hockley 2 Clay Pit / Dosthill	Walbrook Trustees	Dosthill, TAMWORTH, Staffordshire		421590	299290	11	Activity, no visible void.	
Mancetter Quarry	Tarmac	Mancetter, ATHERSTONE, Warwickshire, CV9 2RF	CV9 2RF	430930	294925	11	Visible void, with benches.	
Wilnecote Quarry	Forterra Building Products Ltd.	Hedging Lane, Wilnecote, TAMWORTH, Staffordshire, B77 5EU	B77 5EU	422200	299900	11	Visible void, with benches.	
Griff No. 4 Quarry / Griff Hill Quarry	WCL Griff Quarry Ltd.	NUNEATON, Warwickshire, CV10 7PH	CV10 7PH	436310	288615	12	Visible void, with benches.	
Jees & Boon Quarry / Camphill Grange / Hartshill Quarries	Midland Quarry Products Ltd.	Hartshill, Chapel End, NUNEATON, Warwickshire, CV10 0RU	CV10 0RU	433240	294025	12	Activity, no visible void.	
Weeford Quarry / Moneymore	Hanson Aggregates, Central Region	Canwell, SUTTON COLDFIELD, Staffordshire		413385	301845	13	Activity, no visible void.	
Branton Hill Lane Quarry	Bliss Aggregates.com Ltd.	Branton Hill Lane, Aldridge, WALSALL, West Midlands, WS9 0NS	WS9 0NS	407000	300200	13	Visible void, no benches.	
Brinklow Quarry / Highwood Farm	Brinklow Quarry	Coventry Road, Brinklow, RUGBY, Warwickshire, CV23 0NJ	CV23 0NJ	440800	278780	14	Visible void, no benches.	
Edwin Richards Quarry	Midland Quarry Products Ltd.	Portway Road, Rowley Regis, WARLEY, West Midlands, B65 9DN	B65 9DN	396900	288300	14	Visible void, with benches.	
Pinches 3	M. V. Kelly Ltd.	Wildmoor Lane, Wildmoor, BROMSGROVE, Worcestershire		396730	275400	14	Activity, no visible void.	
Hints Quarry	Tarmac	Hints, TAMWORTH, Staffordshire, B78 3DH	B78 3DH	415795	304560	14	Visible void, no benches.	
Chadwich Lane Quarry	Salop Sand & Gravel Supply Co., Ltd.	Chadwich Lane, Madeley Heath, BROMSGROVE, Worcestershire		395640	276980	15	Activity, no visible void.	
Aldridge Quarry	CEMEX UK Materials Ltd.	Stonnall, WALSALL, West Midlands, WS9 0NF	WS9 0NF	406755	302695	15	Visible void, with benches.	
Atlas Quarry	Ibstock Brick Ltd.	Stubbers Green Road, Aldridge, ALDRIDGE, West Midlands, WS9 8BL	WS9 8BL	404400	301200	15	Visible void, with benches.	
Wildmoor Quarry	J. Williams (Cinetic Sands) Ltd.	Sandy Lane, Wildmoor, BROMSGROVE, Worcestershire, B61 0QR	B61 0QR	395100	275900	15	Visible void, no benches.	
Sandy Lane Quarry	Veolia Environmental Services Plc	Sandy Lane, Wildmoor, BROMSGROVE, Worcestershire, B61 0QT	B61 0QT	395000	276300	15	Activity, no visible void.	
Sandown Quarry	Wienerberger Ltd.	Stubbers Green Road, Aldridge, WALSALL, West Midlands		404210	301980	15	Visible void, no benches.	
Highfields South Quarry	Cory Environmental (Central) Ltd.	Lichfield Road, Aldridge, WALSALL, West Midlands		404200	302450	16	Visible void, no benches.	
Shire Oak Quarry	JPE Holdings Ltd.	Lichfield Road, Walsall Wood, WALSALL, Staffordshire, WS9 9TE	WS9 9TE	406300	304000	16	Visible void, no benches.	
Cranebrook Quarry	WCL Quarries Ltd.	A5 Watling Street, Muckley Corner, LICHFIELD, Staffordshire, WS14 0BD	WS14 0BD	407050	306430	17	Visible void, no benches.	
Birch Coppice Stockpile	Potters Coal & Clay Co., Ltd.	Brownhills, WALSALL, West Midlands		403700	305590	17	Activity, no visible void.	
Brownhills Common	Potters Clay & Coal Company Ltd.	Brownhills Common, Brownhills, WALSALL, West Midlands		403751	305950	18	Activity, no visible void.	
High Cross Quarry	K S D (Haulage Contractors) Ltd.	High Cross, RUGBY, Warwickshire		446505	288940	18	Visible void, no benches.	
Ketley Quarry	Hinton, Perry & Davenhill Ltd.	Dudley Road, KINGSWINFORD, West Midlands, DY6 8WT	DY6 8WT	389750	288915	18	Visible void, no benches.	
Ketley Quarry Recycling	WCL Ketley Quarry Ltd.	Dudley Road, KINGSWINFORD, West Midlands, DY6 8WT	DY6 8WT	389750	288915	18	Visible void, no benches.	Secondary / recycled aggregate production site
Southam Cement Quarry Extension / Spiers Farm	CEMEX UK Cement	Long Itchington, RUGBY, Warwickshire, CV23 8RA	CV23 8RA	442490	263895	19	Visible void, with benches.	
Oak Farm Clay Pit	Wienerberger Ltd.	Off Oak Lane, KINGSWINFORD, West Midlands		389800	290630	19	Activity, no visible void.	
Himley Quarry	Cory Environmental (Central) Ltd.	Oak Lane, KINGSWINFORD, West Midlands		389540	290245	19	Visible void, with benches.	
Alrewas Quarry / Whitmore Hay	Tarmac	Alrewas, BURTON UPON TRENT, Staffordshire, DE13 7DL	DE13 7DL	417905	312420	19	Visible void, no benches.	

Table 7 Assessment of permitted mineral production sites located within 20 miles of the Scheme (continued)

Site Name	Operator	Site address	Site postcode	Easting	Northing	Approx distance from the Scheme (miles)	Google Earth review of void	Comments
Essington Works	Black Country Reclamation Ltd	CANNOCK, Staffordshire, WS11 3LS	WS11 3LS	396860	304675	20	Visible void, with benches.	
Redhurst Quarry	Ibstock Brick Ltd.	Warstones Road, WOLVERHAMPTON, Staffordshire, WS11 2AR	WS11 2AR	396650	304695	20	Visible void, with benches.	
Hollybank Clay Pit	Holly Bank LLP Ltd.	ESSINGTON, Staffordshire		397155	305255	20	Visible void, with benches.	
Cadeby Quarry	Tarmac	Brascote Lane, Cadeby, MARKET BOSWORTH, Leicestershire, CV13 0BB	CV13 0BB	444300	300856	20	Activity, no visible void.	
Measham Quarry	Forterra Building Products Ltd.	Measham Brickworks, Atherstone Road, Measham, SWADLINCOTE, Derbyshire, DE12 7EL	DE12 7EL	433195	310910	20	Visible void, no benches.	
Campions Wood Quarry	Booth Ventures Ltd.	Wolverhampton Road, Shareshill, WOLVERHAMPTON, West Midlands, WV10 7LY	WV10 7LY	397140	306400	20	Visible void, no benches.	

4.4 Identification of potentially suitable receptor sites

4.4.1 The assessment of potentially suitable receptor sites presented in **Table 4** to **Table 7** was used to identify a priority list of potentially suitable receptor sites, as set out in **Table 8** below.

Table 8 Indicative priority list of potentially suitable receptor sites

Site Name	Approx. distance from the Scheme (miles)	Site postcode	Operator	Comments
Arden Landfill / Arden Brickworks	1	B92 0DY	Armac Demolition	Quarry with visible void, no benches A25 deposit for recovery permit (status unknown)
Meriden Quarry	3	CV7 7LG	Tarmac	Quarry with visible void, no benches
		CV7 7PL	N R S Waste Management Services Limited	L05 - Inert landfill
		CV7 7LG	N R S Waste Care Ltd	A25 deposit for recovery permit (x3)
Berkswell Quarry	3	CV7 7LH	Cemex UK Materials Limited	Quarry with visible void, no benches A25 deposit for recovery permit (status unknown)
Middleton Site	9	B78 2BB	Hanson Quarry Products Europe Ltd	L05 - Inert landfill (capacity unknown)
Kingsbury Quarry / Landfill	10	B77 1LT	Wienerberger Ltd.	Quarry with visible void, with benches
			Biffa Waste Services Ltd	L04 – Non hazardous landfill, capacity c. 3.4 million m ³
Wilnecote Quarry / Landfill	11	B77 5EU	Forterra Building Products Ltd.	Quarry with visible void, with benches
		B77 1LT	Biffa Waste Services Ltd	L04 – Non hazardous landfill, capacity c. 2.7 million m ³
Griff No. 4 Quarry / Landfill	12	CV10 7PH	WCL Griff Quarry Ltd.	Quarry with visible void, with benches
			WCL Nuneaton Quarry Limited	L05 - Inert landfill, capacity c. 4.2 million m ³
Weights Farm Landfill	12	B97 6RG	Wood	L05 - Inert landfill, capacity c. 1.6 million m ³
Wolston Fields Farm	14	CV8 3LG	Smiths Concrete Limited	A25 deposit for recovery permit (received 170,000 tonnes in 2017)
Edwin Richards Quarry / Landfill	14	B65 9DN	Midland Quarry Products Ltd.	Quarry with visible void, with benches
		B65 9BT	Waste Recycling Group (Central) Limited	L04 - Non hazardous landfill, capacity c. 10.8 million m ³
Shire Oak Quarry	16	WS9 9TE	JPE Holdings Ltd	Quarry with visible void, no benches
				L05 - Inert landfill, capacity c. 1.5 million m ³

Site Name	Approx. distance from the Scheme (miles)	Site postcode	Operator	Comments
Cranebrook Quarry / Landfill	17	WS14 0BD	WCL Quarries Ltd.	Quarry with visible void, no benches
			Walsall Concrete Ltd	L05 - Inert landfill, capacity c. 615,000m ³
			W C L Brownhills Quarry Limited	A16 : Physical Treatment Facility
Ling Hall Landfill	17	CB23 9HH	Veolia ES Landfill Limited	L02 - Non hazardous landfill (with SNRHW cell), capacity c. 4.5 million m ³
				A25 deposit for recovery permit (status unknown)
Ketley Quarry /Landfill/ recycling	18	DY6 8WT	Hinton, Perry & Davenhill Ltd.	Quarry with visible void, no benches
			WCL Ketley Quarry Ltd.	Secondary and recycled aggregate production
			W C L Cranebrook Quarry Limited	L05 - Inert landfill, capacity unknown
Cotesbach Landfill	22	LE17 6AA	Tarmac Aggregates Limited	L02 - Non hazardous landfill (with SNRHW cell), capacity c. 10.6 million m ³
Saredon Hill Quarry	22	WV10 7LL	N R S Aggregates Ltd / N R S Waste Care Ltd	L05 - Inert landfill, capacity c. 3 million m ³
				A25 deposit for recovery permit (status unknown)

4.5 Limitations

- 4.5.1 The shortlist of potentially suitable receptor sites set out in this EMOA is not intended to be restrictive. The appointed Contractor may use alternative receptor sites that meet the required need. The contractor will also undertake its own investigations as to the suitability or not of any particular receptor site.
- 4.5.2 This EMOA is based on publicly available information. It is possible that some potential receptor sites may not have been identified using these sources of information and therefore the list of sites may not be exhaustive.
- 4.5.3 The assessment reflects information available from the sources referenced at the time of writing. The accuracy of information cannot be guaranteed and the status of sites (in terms of, for example, capacity, permissions and ownership) may also change over time.