The Regional Approach to Landfill Diversion Infrastructure

Main Report

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1. Executive Summary

Advantage West Midlands (AWM) has launched the UK’s first low carbon regional economic strategy (WMES) and delivery framework which both contribute to the delivery of projects in AWM's corporate plan. AWM identified the need to develop an approach to identifying the priority locations for investment in Waste Infrastructure in the region, and overcome the forecasted capacity gap, and appointed DTZ and SLR to undertake this project.

The purpose of this document is:

- To define the regional approach to landfill diversion infrastructure
- To describe the methodology used to draw up this approach
- To describe the tools available to the public and private sectors to undertake analysis of potential locations for waste infrastructure
- To identify a shortlist of priority locations for the development of waste infrastructure
- To make recommendations on how this document and associated tools should be communicated and disseminated

The project team (DTZ and SLR) devised a five-stage process for undertaking this project:

1. Agree Location Drivers
2. Map Location Drivers
3. Identify Areas of Search
4. Identify Available Sites
5. Communication

This project has considered a range of different waste technology types, grouped into the following Technology Clusters:

- **Organic** – including open windrow composting, in-vessel composting and anaerobic digestion
- **Dry Recycling** – including primary segregation and secondary reprocessing
- **Recovery** – including energy from waste/CHP, MBT and Autoclave

The key outputs developed are as follows:

- An overview document (this document) setting out the regional approach to identifying priority locations for waste infrastructure development
- A series of maps identifying the 'Areas of Search' for waste infrastructure development
- A location analysis tool (GIS–based) containing all of the data collated during this project
- An initial shortlist of locations for further investigation which have high potential for the development of waste infrastructure
- A communication plan, describing how this document and GIS tool will be disseminated, used and updated going forward

The following diagram shows how these outputs inter-relate, and how they will ultimately lead to increased infrastructure delivery.
Going forward, this document and associated tools will need to be disseminated to the following key stakeholder groups:

- Owners of the *shortlisted sites* identified
- Other Landowners and developers (and their agents)
- Waste and Energy companies
- The West Midlands Public Sector - Local Authorities, Government Office and the development agency within the West Midlands
- Other West Midlands stakeholders interested in infrastructure development of this type (e.g. WMRO, interest groups, etc.)
- Stakeholders outside the region - e.g. Defra, other regional development agencies, government offices and local authorities, the private sector

The regional approach to landfill diversion will be communicated and implemented through the following means:

- Circulation and web hosting of this document and associated tools
- Lobbying of private sector – landowners & developers
- Lobbying of private sector – waste and energy companies
- Lobbying of public sector
- Promotion at regional stakeholder workshop events
- Linking in with other regional stakeholder events
- News and media communications
- Provision of technical support to users in relation to the Location Analysis Tool
- Undertaking detailed site evaluation (including site visits)
- Undertaking detailed feasibility work / business case
- Involvement in funding / planning of waste infrastructure sites
2. Aims and Objectives

Context

Advantage West Midlands (AWM) has launched the UK’s first low carbon regional economic strategy (WMES) and delivery framework which both contribute to the delivery of projects in AWM’s corporate plan. Achieving a low carbon economy is a key aspiration of the WMES. A number of programmes have been developed and allocated funding, including a capital funding project for investment in waste infrastructure.

The West Midlands RTAB commissioned SLR to undertake work on waste arising and waste treatment capacity, and a follow on study for AWM to develop an evidence base, leading to a Waste Infrastructure Development Programme. This work forecasted a future waste resource infrastructure capacity gap of 3.7 million tonnes by 2021 within the region; equivalent to 250 million black bags of waste per year. The quantity of waste infrastructure development required to deal with this waste equates to around 260 hectares of land take.

Objectives

AWM identified the need to develop an approach to identifying the priority locations for investment in Waste Infrastructure in the region, to help bring forward infrastructure development to help overcome the forecasted capacity gap. The objectives of this approach are to:

- Help divert commercial and industrial waste from landfill
- Move waste resources in the region as high up the waste hierarchy as economically practical
- Build flexibility to address market fluctuations in recycled/reclaimed product market values
- Maximise carbon reduction through technology selection and location leading to efficient reuse and recycling
- Reduce the demand for virgin materials and meet local demand for materials.
- Mitigate the additional cost burden to the regional economy from rises in landfill tax.

Outputs

AWM appointed DTZ and SLR to carry out work on behalf of the regions Waste Infrastructure Advisory Group (WIAG) to help develop the regional approach to landfill diversion infrastructure. The key outputs developed are as follows:

- An overview document (this document) setting out the regional approach to identifying priority locations for waste infrastructure development
- A series of maps identifying the ‘Areas of Search’ for waste infrastructure development (key maps shown in Section 4, with further maps in Appendix 5)
- A location analysis tool (GIS–based) containing all of the data collated during this project (see Section 5)
- An initial shortlist of locations for further investigation which have high potential for the development of waste infrastructure (see Section 6)

1 A list of members of the Waste Infrastructure Advisory Group (WIAG) is provided in Appendix 6
A communication plan, describing how this document and GIS tool will be disseminated, used and updated going forward (see section 7)

A detailed description of the methodology used to develop these outputs is shown in the Appendices to this document.
3. **Approach to Landfill Diversion Infrastructure**

This section provides an overview of the methodology used in developing the regional approach to landfill diversion infrastructure. This should be read in conjunction with the Appendices to this document, which provide a more detailed description of methodology. The outputs from this project are shown in Sections 4-6.

**Overview of Methodology**

The project team (DTZ and SLR) devised a five-stage process for undertaking this project, as shown in Figure 3.1.

**Figure 3.1: Study Overview**

The delivery of this project was overseen by a Project Steering group. The project delivery team also sought input from the Waste Infrastructure Advisory Group in the West Midlands at regular intervals throughout this project (a list of members of the WIAG is provided in Appendix 6).

Stages 1-3 of the process have led to the creation of a series of GIS maps based on a range of criteria which influence the location of waste infrastructure. These form the basis of the Location Analysis Tool. Figure 3.2 provides an overview in terms of the process of moving from around 50 individual criteria to overall maps of the ‘Areas of Search’ for locations for waste infrastructure.

**Figure 3.2: Overview of Stages 1-3 - Mapping**

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2 The Project steering group consisted of the following individuals: Tim Baldwin (AWM), Bruce Braithwaite (Staffordshire County Council), Adrian Cooper (Shropshire County Council), Andrew Orchard (GOWM), Peter Jones (Chair of WIAG).
This project has considered a range of different waste technology types. For simplicity, and following feedback from the WIAG group, the project team have grouped waste technologies into three types:

- **Organic** – including open windrow composting, in-vessel composting and anaerobic digestion
- **Dry Recycling** – including primary segregation and secondary reprocessing
- **Recovery** – including energy from waste/CHP, MBT and Autoclave

For each of the technology types, the relevance and importance of the full range of location criteria has been considered. Further details of the methodology used in each of the steps identified in Figure 3.1 and Figure 3.2 are described in the Appendices to this document.
4. **Areas of Search**

One of the key objectives of this project was to develop a series of maps identifying the priority areas for the development of waste infrastructure in the region. The following maps have been produced using data on a range of factors, identifying the ‘Areas of Search’, or areas with the greatest level of opportunity and lowest constraint for the development of waste infrastructure.

Figures 4.1 – 4.3 reflect the Areas of Search for the development of waste infrastructure for organics, dry recycling and recovery processes respectively. In addition, we have also considered the potential to co-locate a range of waste uses in locations across the West Midlands, with an addition Area of Search map shown in Figure 4.4.

The overall findings from these maps can be summarised as follows:

- **Organic** – The locations with the greatest level of potential to develop organic waste processes are concentrated in the rural West of the region, particularly in Herefordshire, and Shropshire. There are also some pockets of locations with high levels of potential within Birmingham, the Black Country, and Staffordshire. Comparing locations across the whole region, the level of potential for organic waste processes is lowest in Worcestershire and the Southern part of Warwickshire.

- **Recycling** – The locations with the greatest potential for the development of recycling infrastructure in the region are concentrated in Birmingham and the Black Country. Outside this area, there are pockets of opportunity around Stoke, North Warwickshire and Rugby. The areas of least opportunity in the region are Herefordshire, Shropshire, and Worcestershire.

- **Recovery** – The areas of high potential for the development of recovery infrastructure are dispersed across the region – with particular focus on areas with access to gas and electricity networks. The areas of greatest opportunity are located in Birmingham, the Black Country, Stoke and Staffordshire, Warwickshire, Coventry and Solihull. The areas of least opportunity in the region are Herefordshire, Worcestershire, and parts of Shropshire.

- **Co-location** – The scores for co-location reflect the overall potential to develop a range of waste uses including organics, recycling and recovery facilities. The locations with the greatest level of opportunity in the region are in Birmingham, the Black Country, Stoke, and North Warwickshire. The area with the lowest level of potential (on a regional basis) is Worcestershire.

The following maps represent the overall assessment of each area, combining the opportunities and constraints for the development of waste infrastructure. Maps have also been produced depicting the level of opportunity and level of constraint individually, as shown in Appendix 5.

The figures shown in brackets on the maps represent the number of Super Output Areas in each classification.
Figure 4.1: Overall Opportunity & Constraint Map – Organic
Figure 4.2: Overall Opportunity & Constraint Map - Recycling

- Very High Constraint: 11
- High Constraint: 80
- Medium Constraint: 80
- Low Constraint: 1,038
- Low Opportunity: 703
- Medium Opportunity: 566
- High Opportunity: 284
- Very High Opportunity: 11
Figure 4.3: Overall Opportunity & Constraint Map – Recovery
Figure 4.4: Overall Opportunity & Constraint Map – Co-location
5. Location Analysis Tool

A fundamental part of this project was the development of a GIS-based tool for the analysis of potential waste infrastructure locations. The purpose of the analysis tool is to allow assessment of the opportunities and constraints in developing waste infrastructure in locations across the region. For the purposes of this project, the location analysis tool has been used to produce a set of maps of the ‘Areas of Search’ for waste infrastructure (as shown in Section 4) and an initial shortlist of sites (as shown in Section 6). The Location Analysis Tool will be made available to a wide range of users for the analysis of waste infrastructure locations on an ongoing basis. The analysis tool is flexible to allow individual layers to be added or removed (or weightings altered), depending on their relevance to specific technologies or areas.

The analysis tool is the culmination of all of the data collected and analysed as part of this project. All of the data collection and analysis has been undertaken at Lower Super Output Area level (LSOA), as described in Appendix 1.

The analysis tool comprises the following elements:

- Raw data for all indicators based on existing tabular data (e.g. unemployment, population density)
- Calculated data for all datasets based on geographic data (e.g. proximity to gas and electricity networks, flood risk)
- Modelled data for waste arisings at LSOA and Local Authority level, by waste stream
- Calculated data for all Primary Indicator Categories
- Opportunity and Constraint scores for each technology type
- Overall scores for each technology type

Further detail on the methodology for modelling waste arisings, and calculating scores for Primary Indicator Categories and Opportunities/Constraints is contained in Appendix 3.

Access and Suggested Usage

The analysis tool is available through Advantage West Midlands. The tool comprises an excel data file, a GIS file compatible with both MapInfo and ArcGIS, and a brief User Guide.

Broadly, there are three ways in which the analysis tool can be used, as follows:

1. A wide range of users will be interested in the mapping outputs from this study, namely the overall opportunity and constraint maps provided in Section 3. All of the mapping outputs are provided as a GIS file. This allows users to produce standard or bespoke maps (e.g. zoom in on certain areas) for the overall opportunity and constraint scores. Equally it allows the user to map any of the other data layers.
2. Building on the above, users may wish to undertake analysis of particular locations using the tool. For the majority of users, one or more of the defined technology types (organic, recycling, recovery, co-location) will be appropriate. Therefore, the user can refer to the overall opportunity and constraint scores already produced for the appropriate technology type. The user will simply have to identify which LSOA their
site(s) are located within, using postcodes or X-Y co-ordinates. The MapInfo GIS file contains the overall scores for each LSOA for each technology type.

3. There may be instances in which the pre-defined technology types do not reflect the location characteristics of the site or technology being proposed. In this case, the weightings of individual Primary Indicator Categories used to produce overall opportunity and constraint scores will need to be altered. Alternatively, there may be a situation in which the user wishes to reduce or increase the weighting of a particular Primary Indicator Category e.g. if the waste technology is particularly vulnerable in the case of flood, then the user may want to boost the weighting on flood risk versus other constraints.

In this case, the user must edit the weightings of Primary Indicator Categories in the excel data file, and then feed the new opportunity and constraint scores (at LSOA level) into a GIS system. As in Route 2, the user will then need to map their sites to identify the relative scoring of each site using the new criteria.

Figure 5.1 provides a summary of these two distinct routes for using the analysis tool:

**Figure 5.1: Suggested methods of using the analysis tool**

- **Route 1**
  - Mapping Outputs
  - Use GIS file
  - Access mapping outputs
  - Produce bespoke mapping outputs (e.g. zoom in on certain areas)
  - Produce maps of any individual data layer

- **Route 2**
  - Location analysis
  - Standard tech type
  - Use GIS file
  - Map location(s) in GIS
  - Score locations using overall score for technology being proposed

- **Route 3**
  - Location analysis
  - Bespoke Analysis
  - Use excel file
  - Input bespoke weightings for Primary Indicator Categories
  - Output overall scores to GIS
  - Map location(s) in GIS
  - Identify overall score for relevant LSOA(s)

Section 7 outlines the support which will be available to users of the tool going forward.
6. Shortlist of Locations

Building on the Opportunity and Constraint maps and Location Analysis Tool, the regional approach to landfill diversion infrastructure has been tested using a long-list of potential locations in the region. The objective of this element of the project was to identify an initial shortlist of the priority locations for development of waste infrastructure in the region, which on the balance of opportunity and constraint scores and detailed site assessment, appear to offer the greatest potential as locations for waste infrastructure development.

The methodology used to identify the long-list of locations and to narrow this down to a shortlist is described in Appendix 1. Broadly, the long-list of locations were scored using the opportunity and constraint scores – i.e. using the Area of Search maps and Location Analysis Tool. The long-list of locations was reduced to a shortlist of 34 locations on this basis.

Beyond this, a more detailed site assessment was carried out on each of the shortlisted locations, as described in Appendix 4. The shortlisted locations were then ranked using a weighted combination of the opportunities and constraints score (from the Location Analysis Tool) and the detailed location analysis score (from desk-based research and field visits). The locations were then ranked to identify the top 12 scoring locations for each technology type. The anonymised results are presented in Figure 6.1 below, with an identification letter (the letters A to Z and A1 to I1) and the location’s sub-region. The names of the locations have been anonymised to maintain commercial confidentiality. A summary table of locations by technology cluster is presented in Figure 6.2.

Figure 6.1: Final Ranked Locations (Anonymised)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Recycling</th>
<th>Organics</th>
<th>Recovery</th>
<th>Co-location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I (BC)</td>
<td>D1 (S&amp;S)</td>
<td>I (BC)</td>
<td>I (BC)</td>
</tr>
<tr>
<td>2</td>
<td>K (BC)</td>
<td>I (BC)</td>
<td>D (B’ham)</td>
<td>D (B’ham)</td>
</tr>
<tr>
<td>3</td>
<td>D (B’ham)</td>
<td>K (BC)</td>
<td>K (BC)</td>
<td>F (BC)</td>
</tr>
<tr>
<td>4</td>
<td>F (BC)</td>
<td>D (B’ham)</td>
<td>D1 (S&amp;S)</td>
<td>P (BC)</td>
</tr>
<tr>
<td>5</td>
<td>D1 (S&amp;S)</td>
<td>P (BC)</td>
<td>F (BC)</td>
<td>T (C,S&amp;W)</td>
</tr>
<tr>
<td>6</td>
<td>P (BC)</td>
<td>F (BC)</td>
<td>P (BC)</td>
<td>B1 (S&amp;T&amp;W)</td>
</tr>
<tr>
<td>7</td>
<td>L (BC)</td>
<td>S (C,S&amp;W)</td>
<td>N (BC)</td>
<td>S (C,S&amp;W)</td>
</tr>
<tr>
<td>8</td>
<td>N (BC)</td>
<td>T (C,S&amp;W)</td>
<td>T (C,S&amp;W)</td>
<td>V (H&amp;W)</td>
</tr>
<tr>
<td>9</td>
<td>G (BC)</td>
<td>N (BC)</td>
<td>S (C,S&amp;W)</td>
<td>Z (S&amp;T&amp;W)</td>
</tr>
<tr>
<td>10</td>
<td>E (BC)</td>
<td>V (H&amp;W)</td>
<td>E (BC)</td>
<td>H1 (S&amp;S)</td>
</tr>
<tr>
<td>11</td>
<td>S (C,S&amp;W)</td>
<td>A1 (S&amp;T&amp;W)</td>
<td>Q (BC)</td>
<td>A (B’ham)</td>
</tr>
<tr>
<td>12</td>
<td>T (C,S&amp;W)</td>
<td>Z (S&amp;T&amp;W)</td>
<td>B (B’ham)</td>
<td>F1 (S&amp;S)</td>
</tr>
</tbody>
</table>
**Figure 6.2: Summary of final ranking by sub-region**

<table>
<thead>
<tr>
<th>Sub-region</th>
<th>Final Shortlist (34)</th>
<th>Recycling</th>
<th>Organics</th>
<th>Recovery</th>
<th>Co-location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birmingham</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Black Country</td>
<td>14</td>
<td>8</td>
<td>5</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Coventry, Solihull &amp; Warwickshire</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Herefordshire &amp; Worcestershire</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Shropshire &amp; T&amp;W</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Staffordshire &amp; Stoke</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>12</strong></td>
<td><strong>12</strong></td>
<td><strong>12</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

The field visits involved a judgement on the location’s suitability for organic, recycling, recovery and co-location. Not all locations were deemed suitable for all technology uses. Within the short list of 34 locations: 29 were identified as having potential for recycling, 21 for organics, 16 for recovery and 13 for co-location of these technologies (due to site sizes >5 hectares).

Figures 6.1 and 6.2 provide an indicative output from the Location Analysis Tool and detailed site assessment process. AWM will work with the owners of these sites, and potentially carry out additional work to investigate the feasibility of developing waste infrastructure on these sites.

It is important to bear in mind that the above represents an initial sift of sites from the long-list of sites identified. However, as additional sites are identified in the future, they will need to be assessed, and a decision taken as to whether they too present regionally important opportunities to bring forward waste infrastructure. The approach to assessing ‘windfall’ sites in the future is outlined in Section 7.
7. Communication plan

The Regional Approach to Landfill Diversion

In delivering against the aims and objectives of this project, the following core elements have been developed:

- **A Location Analysis Tool** – providing evidence to assist in searching for potential locations for future infrastructure development
- **A location evaluation process** – providing a consistent approach and methodology to assess and evaluate specific locations (including detailed site assessment)
- **An initial shortlist of sites** – utilizing the location evaluation process to shortlist and rank a list of potential sites for waste infrastructure
- **The Regional Approach to Landfill Diversion Infrastructure** – This document effectively houses the above elements, as well as setting out key actions and recommendations, including a communications plan

Figure 7.1: Core elements

It should be recognized that this document does not identify the scale or type of infrastructure that needs to be delivered, as this was identified as part of an earlier AWM study.

This document (and the tools described within it) will support the public and private sector working together to identify specific locations with the highest potential to deliver landfill diversion infrastructure. In order to achieve the maximum benefit from this project and the tools developed, it needs to be communicated and disseminated widely.
Infrastructure Delivery Cycle

The infrastructure delivery cycle is set out in Figure 5.2 below highlighting the core elements of this project and how they relate to the next stage validation process, and detailed business planning.

Figure 7.2: Infrastructure delivery cycle

The infrastructure delivery cycle illustrates the process of location identification and infrastructure development through the use of this document and the supporting tools. Once a potential location(s) has been identified the first stage of assessment is the use of the Location Analysis Tool to generate an overall opportunities and constraints score. The output score can be compared with the scores developed for the shortlisted sites identified in Section 6. If the output score from the Location Analysis Tool is within a certain range of the top scoring sites (to be determined, and will change in the future as the top scoring locations list is updated), the potential location will progress to the next stage of location assessment.

The location evaluation process involves a more detailed analysis of the location, reviewing additional more detailed desk based criteria (such as air quality management areas and local plan data) and involves a brief visit to the location to develop a detailed understanding of the opportunities or potential constraints of the location. If the location has potential (on completion of the Opportunities and Constraints scoring and location evaluation) then it will be identified as a priority site for waste infrastructure development.

Further more detailed business planning will be required to confirm the potential to develop the site, and it will then need to be progressed through funding and planning. The resulting infrastructure delivery and new capacity will be included in annual regional monitoring of infrastructure, allowing recalculation of the capacity gap. Future reviews of the regional capacity will ultimately feedback an update in terms of capacity requirement and facility type need, and hence the cycle continues. The above process (Figure 5.2) will form the basis of
reviewing future windfall sites and should be considered in tandem with further detailed business planning and delivery processes as illustrated in Figure 5.3.

Objectives of the Communications Plan

In drawing up a communication and dissemination plan for this project, Advantage West Midlands want to achieve the following:

- **Engage with key stakeholders** to stimulate appropriate development of landfill diversion infrastructure
- **Promote the adoption of the GIS tool & Location Assessment process** by all parties in West Midlands
- **Raise awareness** of the opportunities available to businesses, developers and agents within the region
- **Provide targeted support** for those wishing to develop infrastructure in West Midlands for diverting waste from landfill
- **Reduce the forecasted waste treatment capacity gap** through inward investment and better resource management
- **Lead by excellence** and provide a best practice example for other regions within the UK

**Audience**

There is a broad audience for this strategy including the following key stakeholder groups:

- Owners of the **shortlisted sites** identified
- **Other Landowners and developers** (and their agents)
- **Waste and Energy companies**
- **The West Midlands Public Sector** - Local Authorities, Government Office and the development agency within the West Midlands
- **Other West Midlands stakeholders** interested in infrastructure development of this type (e.g. WMRO, interest groups, etc.)
- **Stakeholders outside the region** - e.g. Defra, other regional development agencies, government offices and local authorities, the private sector

Engagement with key stakeholders requires careful consideration to ensure maximum benefit can be gained from this process. Initial communication may need to be made on a confidential basis to ensure commercially sensitive information is not compromised.

**Dissemination & Co-ordination**

Communication of the regional approach to landfill diversion infrastructure, should now enter a dissemination process to ensure widespread stakeholder engagement and discussion of the support tools now available. This dissemination can take a number of forms including (but not limited to):

- Lobbying of Public and Private sectors (mainly regional but in some cases at the sub-regional and national levels)
- Regional Stakeholder Workshop Events
- News & Media Communications targeting the business community in the West Midlands
• Linking in with other regional stakeholder events and initiatives (including GOWM, AMW, WRAP, RTAB, etc.) targeting the business and planning communities within the region

Provision of Support

During and after dissemination, AWM will co-ordinate responses to their engagement, dissemination and awareness raising processes, and provide appropriate support. This enables a considered and staged approach to validating potential opportunities and initiatives. Figure 5.3 provides an overview of the stages in identifying and progressing individual locations. Individual locations will need to be evaluated, assessed (using the support tools now developed in this document) and a detailed business plan developed, before entering the formal planning and permitting and wider public arena.

Figure 5.3: Location development stages and potential AWM support.

A number of ‘top scoring’ sites (as anonymised in Section 6) have already been identified through the development of this Location Analysis Tool and location evaluation process. The top scoring sites require further consideration by AWM and dialogue with the land owners and planners. The process to date has completed the first three stages in Figure 5.3. Future work (following discussions with the land owners and local planners) will involve a more detail site feasibility and due diligence exercise, detailed business case development, funding, design, planning and permitting prior to the construction and eventual operation of new infrastructure to divert waste from landfill.

All future locations identified will be required to go through the process outlined in Figure 5.3, with the potential for the location to drop out at any stage due to constraints on the location or scheme.
Prioritisation of Support

As there is a finite level of support available, it will be prioritised accordingly. The extent of AWM’s involvement may vary according to the level of opportunity and benefit to the region, but could potentially include site feasibility work, funding for detailed business cases, and potentially some funding (as shown in Figure 5.3). As this project is focussed on identifying specific locations for landfill diversion infrastructure development, the extent of support on offer to stakeholders could be based upon a number of criteria, including (but not limited to):

- The number of specific locations on offer / to be evaluated
- The size of specific locations (individual or aggregated) to be evaluated
- The potential throughput for specific locations
- The development value of potential locations on offer
- Whether the specific locations are in high opportunity areas (based on an initial GIS assessment)

7.1 Recommendations and Next Steps

We have identified the following necessary steps to engage with each of the key stakeholder groups:

- Owners of the shortlisted locations identified
  - Promote the use of this document and associated tools
  - Discuss landowner aspirations for the site
  - Highlight level of opportunity to develop waste infrastructure
  - Discuss potential for AWM to support owners in bringing forward waste uses on the site
  - Progress to detailed feasibility work / business planning

- Other Landowners, developers, and agents
  - Promote the use of this document and associated tools
  - Engage stakeholders to suggest potential sites to AWM
  - Carry out initial site assessment work using Location Analysis Tool
  - Take forward higher scoring sites to detailed location evaluation
  - Compare outcomes to initial shortlist of sites
  - Discuss potential for AWM to support owners in bringing forward waste uses on the site
  - Progress to detailed feasibility work / business planning

- Waste and Energy companies
  - Promote the use of this document and associated tools
  - Engage stakeholders to suggest potential sites to AWM and/or identify areas of search for waste uses
  - Proactively encourage waste/energy companies to consider new technologies
  - Facilitate discussions between waste/energy companies and landowners in areas of search
  - Carry out initial site assessment work using Location Analysis Tool
  - Take forward higher scoring sites to detailed location evaluation
  - Compare outcomes to initial shortlist of sites
- Discuss potential for AWM to support owners in bringing forward waste uses on the site
- Progress to detailed feasibility work / business planning

- Local Authorities
  - Promote the use of this document
  - Promote use of the Location Analysis Tool in local planning (including LDF preparation)
  - Review existing site allocations
  - Test new sites / reconsider allocations
  - Carry out bespoke local studies

- Other West Midlands stakeholders interested in waste infrastructure development
  - Promote the use of this document and associated tools

- Stakeholders outside the region
  - Promote the use of this document and associated tools

In taking forward the above next steps, AWM have considered how future support will be resourced, in conjunction with DTZ and SLR. We have collectively identified the following actions required, and have assigned responsibility for delivery.

<table>
<thead>
<tr>
<th>Task</th>
<th>Action</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hosting Document and Location</td>
<td>AWM to host the project for a 6 month trial period</td>
<td>AWM</td>
<td>Sept 2009 – Mar 2010</td>
</tr>
<tr>
<td>Analysis Tool</td>
<td>AWM to recruit internally for a Project Manager to understand how to evaluate sites and update the data. (DTZ to draw up job description</td>
<td>AWM/DTZ</td>
<td>Aug 2009</td>
</tr>
<tr>
<td></td>
<td>DTZ/SLR to help train AWM Project Manager</td>
<td>DTZ/SLR</td>
<td>Sept 2009</td>
</tr>
<tr>
<td>Web access to tool</td>
<td>Developing a user-friendly web interface to ensure successful uptake of the tool</td>
<td>AWM with assistance from DTZ/SLR</td>
<td>Aug/Sept 2009</td>
</tr>
<tr>
<td>News and Media Communications</td>
<td>News release to technical press and West Midlands business news</td>
<td>AWM</td>
<td>Sep 2009</td>
</tr>
<tr>
<td>Lobbying of the Private Sector</td>
<td>Set up meetings / seminars / workshops with Regional Stakeholders and National interest groups</td>
<td>AWM</td>
<td>Sept 2009 – Mar 2010</td>
</tr>
<tr>
<td>Regional Stakeholder events</td>
<td>Set up series of meetings with RTAB; WIAG; Chambers of Commerce; Investment groups; legal fora; Property managers; ESA West Midlands.</td>
<td>AWM</td>
<td>Sep/Oct 2009</td>
</tr>
<tr>
<td>Linking with other Regions</td>
<td>Report (possible presentation) to RDA and RTAB national meetings</td>
<td>AWM, GOWM, Bruce Braithwaite</td>
<td>Oct/Nov 2009</td>
</tr>
<tr>
<td>Task</td>
<td>Action</td>
<td>Who</td>
<td>When</td>
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<tr>
<td>Lobbying Central Government</td>
<td>Meetings with Defra / CLG / BIS / DECC</td>
<td>AWM</td>
<td>Oct/Nov 2009</td>
</tr>
<tr>
<td>Dealing with Enquiries</td>
<td>Circulating this document and Location Analysis tool. Assisting users in scoring locations using standard tool or bespoke analysis</td>
<td>AWM</td>
<td>Sept 2009 – Mar 2010</td>
</tr>
<tr>
<td>Provision of Technical Support</td>
<td>Assistance with the implementation and use of the tool on an ongoing basis</td>
<td>DTZ/SLR</td>
<td>Sept 2009 – Mar 2010</td>
</tr>
<tr>
<td>Detailed Site Evaluation</td>
<td>Undertaking detailed site evaluations (equivalent to those undertaken on the shortlist of sites) including site visits</td>
<td>AWM with assistance from DTZ/SLR</td>
<td>Sept 2009 – Mar 2010</td>
</tr>
<tr>
<td>Detailed Feasibility Work / Business Case</td>
<td>Discussion on how to link potential developers to various AWM internal groups – international inquiries, UK inquiries, property acquisition, regeneration, sustainability teams Utilise external consultants for detailed feasibility work where required</td>
<td>AWM working with potential developers External Consultants</td>
<td>Sept 2009 onwards</td>
</tr>
<tr>
<td>Involvement in Funding and Planning</td>
<td>Liaison with potential developers looking to bring forward waste infrastructure Discuss the possibility of AWM involvement in funding or assisting development(s) Use of external consultants to assist in drawing up funding plans and planning applications</td>
<td>AWM working with potential developers External consultants</td>
<td>Sept 2009 onwards</td>
</tr>
<tr>
<td>Maintaining the Location Analysis Tool</td>
<td>Periodic review of the tool, and update of data (where appropriate)</td>
<td>AWM with assistance from DTZ/SLR</td>
<td>Dec 2009 and Mar 2010</td>
</tr>
</tbody>
</table>