Minerals and Waste

ANNEX 1 Preferred Site Criteria and Assessment

Waste Site Suitability Criteria - Summary

A number of Evaluation Criteria using environmental, social and economic indicators were initially identified. These 19 draft criteria were analysed and discussed at a Workshop held on 21st April 2006, which included officers from Waste, Planning, Environmental Health, Countryside and Landscape, Archaeology and Conservation and Highways Development Control. Three draft criteria were discarded and two additional ones added.

The final list of criteria, by indicator, is: -

Indicator	
Areas of Attractive Landscape	Controlled Surface Waters (e.g.
Visual Impact	rivers, lakes, ponds, streams, canals, ditches)
Landscape Character	Flooding
Ecology and Biodiversity	Noise
Geology (& soil)	Existing Land Use
Suitability of Land	Sensitive Human Receptors
Archaeology	Site Access/Transport Network
Historic Built Environment and	Waste Transport Mode
Historic Landscapes	Accessibility for people
Hydrogeology & Groundwater Risk	Opportunity for co-location

Sites

The Waste Development Plan Document Issues and Options consultation in August/September 2005 asked several questions about suitable locations for waste sites. However, there was a very limited response. We therefore wrote to waste operators/consultants/agents and to land owners in February 2006 to request that any proposals for waste management facilities within Milton Keynes be submitted to the Council to be considered. A variety of sites were put forward for smaller facilities such as waste transfer, vehicle depots, composting and recycling sites. It is now considered that these sites will be considered under Preferred Site Option 3 – Other Waste Facilities to offer flexibility throughout the life of the Plan. Sites for larger treatment facilities were put forward from a Land owner, waste operators and the Waste Department of the Council. A further site was identified by the Waste Planning Authority in the Western Expansion Area to meet the views expressed from the consultation of the issues and the options stage that a site should be found before housing is developed around it.

The larger sites were then assessed using the site suitability criteria and also looking at the size of the sites required. This is listed in full in this annex, with the method of determination criteria. The full results with site plans can also be seen in this annex.



Environment Directorate

Minerals and Waste



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Waste Site Suitability Criteria - Detail and Definition

Environmental Criteria

Areas of Attractive Landscape (AAL)

Score	Criteria
1	Unacceptable impact on AAL
2	
3	Within, adjacent to or likely to impact on the setting of the AAL
4	
5	Outside AAL

Visual Impact

Score	Criteria
1	High
2	High Medium
3	Medium
4	Low Medium
5	Low

Landscape Character

Score	Criteria
1	High
2	High Medium
3	Medium
4	Low Medium
5	Low

Ecology and Biodiversity

Score	Criteria
1	Contains or potentially impacts a Site of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Special Protection Area (SPA), Special area of Conservation (SAC) or Ramsar (Wetlands) site.
2	Contains or potentially impacts a Site of Importance for Nature Conservation (SINC), Ancient Woodland, legally protected species, or Biodiversity Action Plan (BAP) priority species or habitat. Within 100m of a nationally/internationally designated site.
3	Within 100m of a SINC or Ancient Woodland, within 250m of a nationally/internationally designated site or within 100m of a BAP priority habitat or species or record of a legally protected species.
4	Contains no nature conservation designations but has potential for nature conservation interest. Important for wildlife linkages or habitat contiguity. Within 500m of a nationally/internationally designated site or within 250m of a SINC, Ancient Woodland or BAP habitat/species. Potential for legally protected species to be present.
5	Contains no nature conservation designations or potential for nature conservation interest but has potential for nature conservation enhancement.





Geology (and soil)

Score	Criteria
1	
2	Contains Regionally Important Geological and Geomorphological Sites (RIGS).
3	Adjacent to RIGS.
4	Potential to impact on RIGS.
5	Site does not impact on RIGS.

Suitability of Land

Score	Criteria
1	Land unsuitable for stable development
2	Major engineering solutions required for development
3	Intermediate engineering solutions required for development
4	Minor engineering solutions required for development
5	No treatment required to Land

Archaeology

Score	Criteria
1	Site contains a Scheduled Ancient Monument.
2	Site is within a Heritage Interest Area*, or provides the setting to a Category A site.
3	Site provides the setting to a Heritage Interest Area, or has high Archeological potential**.
4	Site contains no known Archeological sites, but has Archeological potential.
5	Site contains no known Archeological sites and has limited or uncertain Archeological potential.

^{*} As defined on the MKi Observatory website.

Historic built environment and historic landscapes

Category	Criteria
1	Site contains a Listed Building or is within a Conservation area or a registered Park or Garden of Special Historic Interest*
2	Site provides the setting to a Category A site and/or is located within an historic landscape**.
3	Site is partly within an historic landscape.
4	Site is adjacent to an historic landscape.
5	Site does not influence a Category A site and/or is not located within or adjacent to an historic landscape.

^{*} Includes local historic buildings and local parks and gardens of special historic interest, where appropriate.

^{**} To be established by the Council's Archeological Officer using data from the MK Site and Monuments Record.

^{**}Constraints will be based on their impact on sensitive historic landscapes and will use Historic Landscape Characterisation data as the primary source.

Hydrogeology and groundwater risk

Score	Criteria
1	
2	Site overlies an Source Protection Zone (SPZ) 1
3	Site overlies an SPZ 2 or a Major Aquifer.
4	Site overlies an SPZ3 or Minor Aquifer.
5	Site does not overlie an SPZ or Major/Minor Aquifer

Controlled surface waters

Score	Criteria
1	
2	Site contains controlled surface water
3	Site is adjacent to controlled surface water
4	Site is likely to influence controlled surface water
5	Site does not contain or influence controlled surface water

Flooding

Score	Criteria
1	
2	Site is within the floodplain
3	Site is partly within the floodplain
4	Site is not located within the floodplain but may increase flood risk
5	Site is not located within the floodplain, will not increase flood risk

Noise

Score	Criteria	
1	Background levels at nearest noise sensitive receptor	< 35 dB
2	Background levels at nearest noise sensitive receptor	>35 <45 dB
3	Background levels at nearest noise sensitive receptor	> 45 <55 dB
4	Background levels at nearest noise sensitive receptor	>55 <65 dB
5	Background levels at nearest noise sensitive receptor	> 65 dB

Existing Land use

Score	Criteria
1	Site is best and most versatile agricultural land and/or greenfield land or Environmentally Sensitive Area and/or Village Green or Common Land and/or safeguarded mineral land
2	Site is contaminated and remediation is not economically viable or a previous mineral working
3	Site is allocated for industrial/employment uses*
4	Site is contaminated and remediation is economically viable.
5	Site is previously developed land** and/or allocated land for waste management and no remediation is required.

^{*} Including Use Classes B1a, B1b, B1c, B2 and B8.



^{**}Previously developed land - derelict, previous industrial, redundant agricultural buildings.



Social Criteria

Sensitive human receptors*

Score	Criteria				
1	Site is adjoining to a human receptor				
2	Site is < 50 m to a human receptor				
3	Site is >50 < 100 m to a human receptor				
4	Site is >100 < 250 m to a human receptor				
5	Site is > 250 m to a human receptor				

^{*}Sensitive Human Receptor - hospitals, hospices, schools, residential property, prisons, tourism facilities, travellers sites and cemeteries

The **DEFRA** guidance recommended further study into the health effects of composting on human health. The Environment Agency has a position statement and draft technical guidance on composting operations, which includes a 250m buffer zone between composting operations and places of residence and work.

Site Access/Transport Network

Score	Criteria
1	Access is in an unacceptable location off a high-speed road and has an unacceptable surrounding network.
2	Access is in an acceptable location off a high-speed road and has an acceptable surrounding network.
3	Access is in good location off high-speed road or in a poor location off a low speed road and has acceptable surrounding network.
4	Access is in an acceptable location off a low speed road and has an acceptable surrounding network.
5	Access is in a good location off a low speed road and has a good surrounding network.

A low speed road is one with a speed limit of 30/40 mph.

A high-speed road is one with a speed limit of 60/70 mph.

An access in acceptable location is where visibility is unrestricted for the speed of the road and there is no complication with other access points.

Economic Criteria

Waste Transport Mode

Score	Criteria
1	
2	
3	Road transport only
4	Accessible rail depot / Access to navigable waterways
5	Established rail depot

Accessibility for People (Dictates type of facility)

Score	Criteria
1	Site is not accessible via public transport.
2	Site is not accessible via public transport but is accessible via pedestrian and cycling networks.
3	Site is accessible via public transport*.
4	Site is accessible via public transport* & cycling network.
5	Site is accessible via public transport* & cycling/pedestrian networks.

^{*}A bus or train link is within 400 metres of the site.

Opportunity for co-location

Score	Criteria
1	Site does not have an opportunity for co-location
2	
3	
4	
5	Site has excellent opportunities for co-location (e.g. the site is adjacent to an existing waste management facility, the site is an existing waste management facility with opportunity for expansion or the site can accommodate more than facility).





Waste Site Suitability Criteria - Determination

Determining of Criteria

Indicator	Method of Determining				
Areas of Attractive Landscape	Desktop and Landscape & Countryside Strategy Team				
Visual Impact	Desktop and Landscape & Countryside Strategy Team				
Landscape Character	Desktop and Landscape & Countryside Strategy Team				
Ecology and Biodiversity	Desktop and Landscape & Countryside Strategy Team plus Defra and English Nature				
Geology (& soil)	Desktop and Environmental Protection Team				
Suitability of Land	Desktop and Consultant & English Partnerships				
Archaeology	Desktop and Design & Conservation Team				
Historic Built Environment etc.	Desktop and Design & Conservation Team plus English Heritage				
Hydrogeology & Groundwater Risk	Desktop and Environment Agency				
Controlled Surface Waters	Desktop and Environment Agency				
Flooding	Desktop and Environment Agency				
Noise	Desktop & Environment Protection Team				
Existing Land Use	Desktop and Planning & Environmental Protection Team				
Sensitive Human Receptors	Desktop & Environment Protection Team				
Site Access/Transport Network	Desktop and Highway Development Control Team				
Waste Transport Mode	Desktop and Highway Development Control Team				
Accessibility for people	Desktop and Highway Development Control Team				
Opportunity for co-location	Property Services				

Results of Site Suitability Assessment

Site	Α	В	С	D	Ε	F	G	Н	I	J	K	L	M
Areas of Attractive Landscape	5	5	4	5	5	4	4	5	5	5	1	1	5
Visual Impact	3	3	3	3	2	3	2	2	4	4	2	2	2
Landscape Character	4	4	4	3	3	3	3	2	4	4	2	2	4
Ecology and Biodiversity	3	3	3	3	3	3	4	2	4	2	3	3	3
Geology (& Soil)	5	5	5	5	5	5	5	5	5	1	2	5	5
Suitability of land	4	4	4	4	4	4	4	3	4	2	3	3	3
Archaeology	5	5	5	3	5	3	3	5	3	5	2	4	4
Historic Built Environment	5	5	5	5	5	5	5	5	5	5	2	5	1
Hydrogeology & Groundwater Risk	5	5	5	4	5	4	4	4	4	4	3	3	5
Controlled Surface Waters	5	5	5	3	4	5	5	2	4	2	2	5	2
Flooding	5	5	5	4	5	5	5	3	5	3	3	5	5
Noise	4	4	4	3	4	2	2	3	2	3	2	2	3
Existing Land Use	5	5	5	5	5	5	5	1	5	5	1	1	3
Sensitive Human Receptors	3	2	3	4	3	5	5	3	5	4	1	5	2
Site Access/Transport	4	4	5	5	5	5	5	3	5	5	3	1	5
Waste Transport Mode	3	3	3	3	3	4	4	3	4	4	3	3	3
Accessibility for people	5	5	3	5	5	1	1	5	1	1	1	1	5
Opportunities for co-location	1	1	1	1	1	5	5	1	5	5	5	1	5
Total	74	73	72	68	72	71	71	57	74	64	41	52	65





Sites Location and Size

		Cino	Ci-a maaata	Dorole
Site	Location	Size Hectares (Acres)	Size meets footprint required	Rank (total)
А	Denbigh Road, Denbigh West	1.75 (4.32)	*	-
В	Denbigh Road, Denbigh West	3.28 (8.09)	*	-
С	Third Avenue, Denbigh West	2.61 (6.44)	*	-
D	Garamonde Drive, Wymbush	6.06 (14.97)	V	2nd (68)
E	Foxhunter Drive, Linford Wood	3.27 (8.07)	*	-
F	Colts Holm Road, Old Wolverton	3.93 (9.70)	V	1st (71)
G	Colts Holm Road, Old Wolverton	0.93 (2.30)	*	-
Н	Land at West Ashland	12.60 (31.10)	~	5th (57)
I	Materials Recycling Facility, Colts Holm Road, Old Wolverton	1.62 (4.00)	×	-
J	Bletchley Landfill Site	51.03 (126.00)	~	4th (64)
K	Quarry Hall Farm, Lathbury	*	~	6th (41)
L	Land North of Sherington	3.57 (8.83)	*	-
М	Western Expansion Area	6.59 (16.28)	~	3rd (65)

^{*} Site boundaries not defined.

The thirteen sites have been assessed with the site suitability criteria. Work has been carried out identifying the size of existing waste management facilities for final treatment in the UK and also taking into account guidelines for the size of different types of waste management facilities. It has been identified that Milton Keynes requires a site of approx 4.00 hectares (9.88 acres). This footprint has been identified by considering what the maximum area is required for a facility to take Milton Keynes to 2032. Planned and existing facilities (Within Derbyshire, London, Gwynedd, Eastcroft, East Midlands and Leicester) site sizes were considered. These represent a number of different types of facility, as the type of facility has not been decided. The maximum site area for an advanced thermal treatment plant was approximately 2.3 hectares, with the maximum land take for a Mechanical Biological Treatment facility being 3.6 hectares and the maximum land take for an Energy to Waste plant was 3 hectares. Therefore the greatest land take is 3.6 hectares. Then allowing for a buffer area, gives the maximum land take area required to 4 hectares. Sites D, F, H, J, K and M meet this size requirement and have been ranked in order.

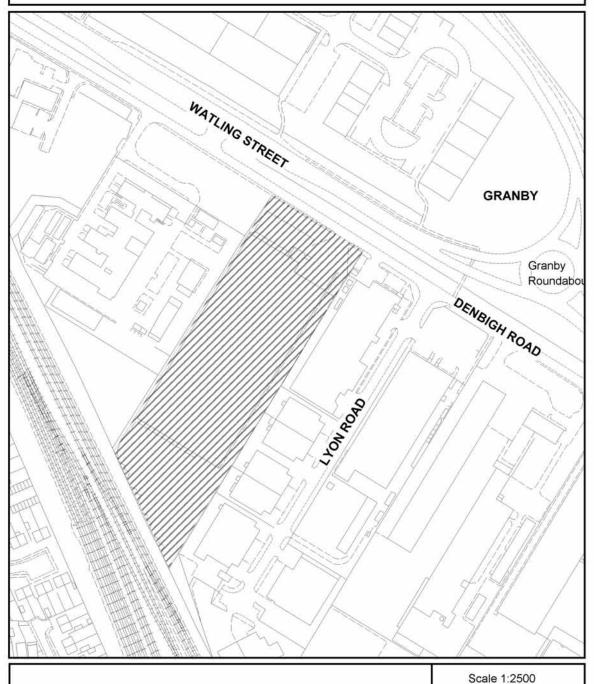
F is identified as the Preferred Site Option, with Site D as the reserved site if F does not come forward. Sites I and J are highlighted, as they are existing waste management sites, which will be safeguarded.



Plans of Sites Assessed







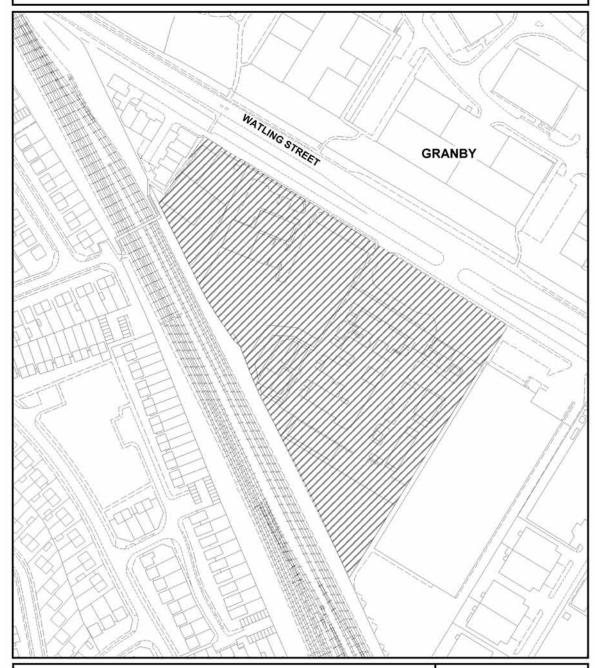
Denbigh Road, Denbigh West

Scale 1:2500

NORTH Grid North



Site B



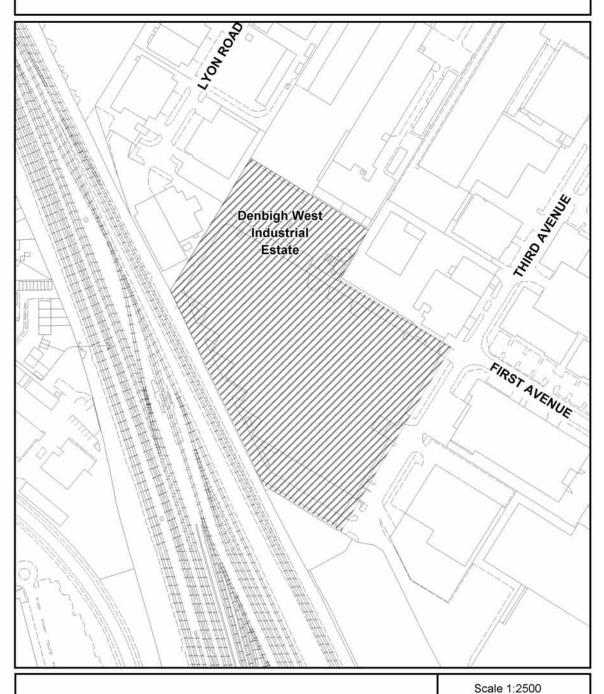
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Denbigh Road, Denbigh West



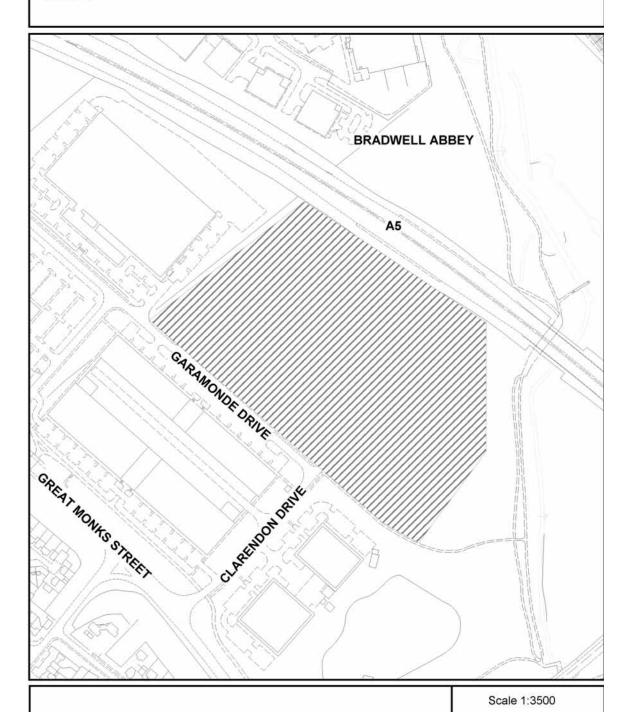






Third Avenue, Denbigh West

Site D

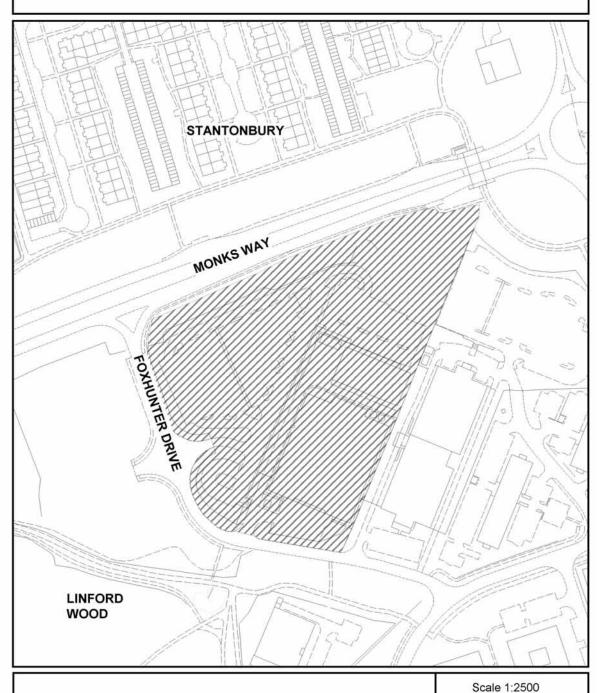


Garamonde Drive, Wymbush

NORTH Grid North



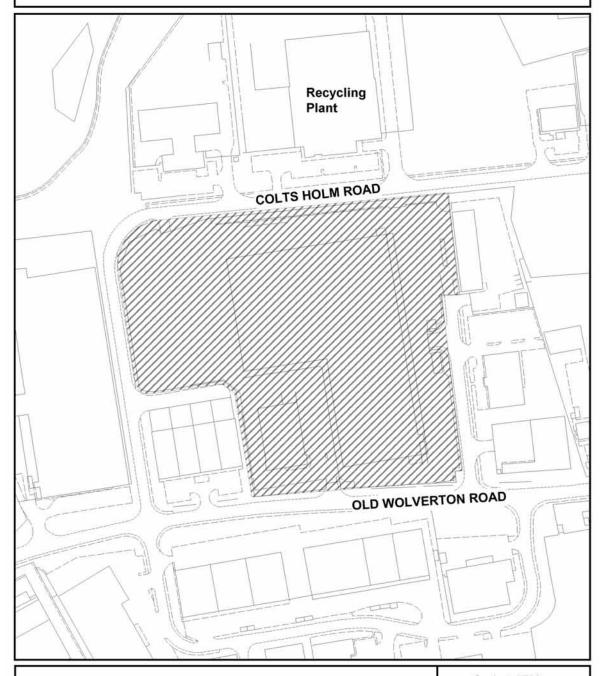




Foxhunter Drive, Linford Wood



Site F

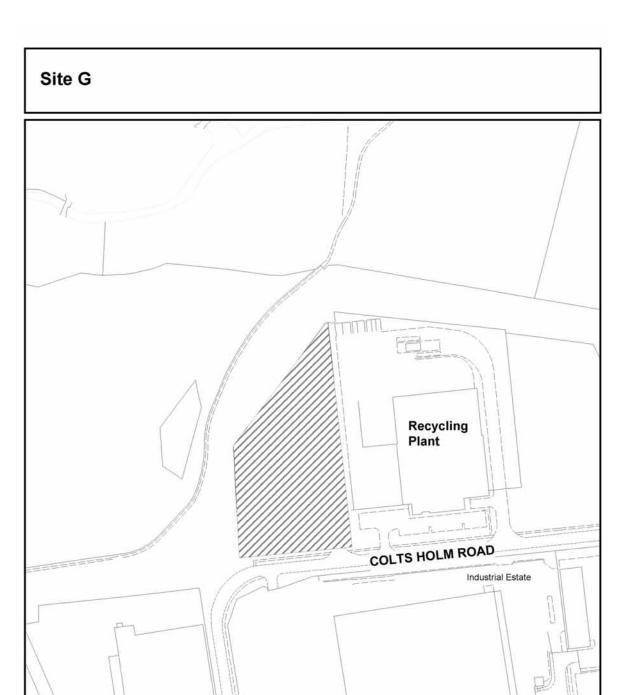


Colts Holm Road, Old Wolverton

Scale 1:2500



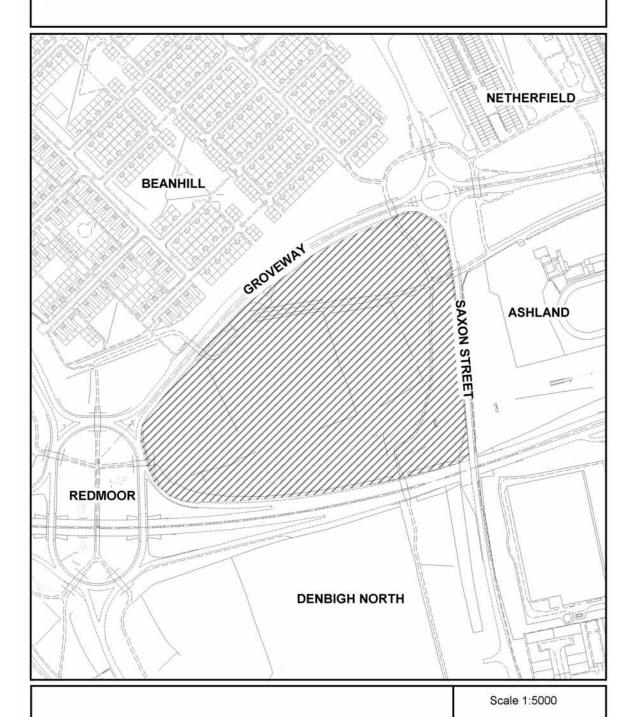




Colts Holm Road, Old Wolverton



Site H

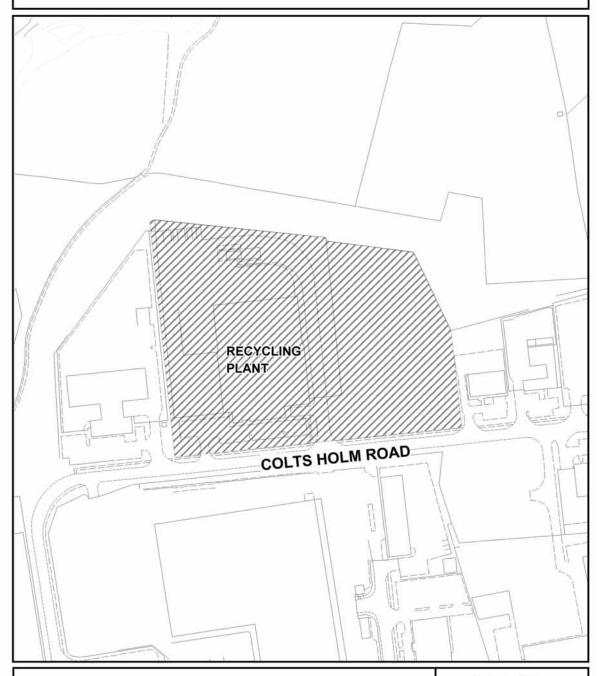


Land at West Ashland

NORTH Grid North





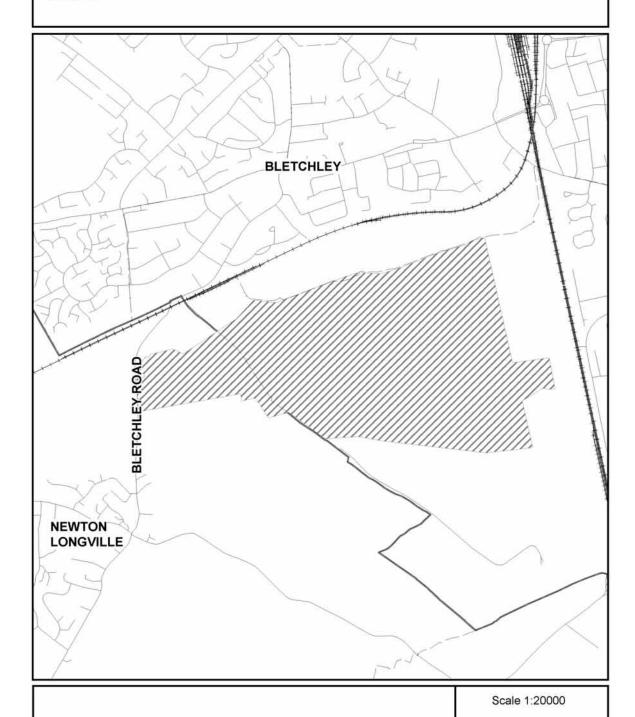


Materials Recycling Facility, Old Wolverton

Scale 1:2500



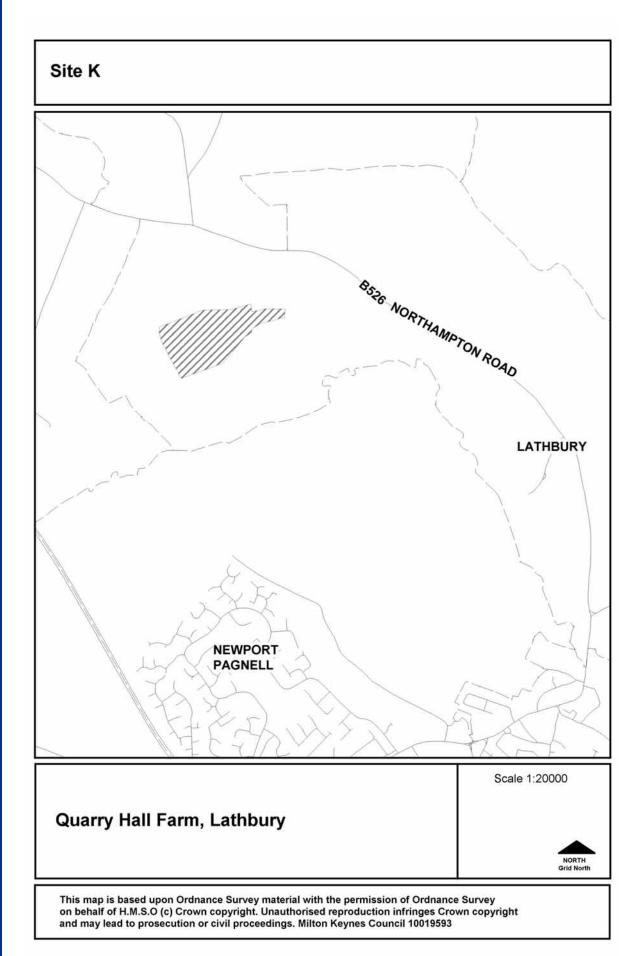
Site J



Bletchley Landfill Site

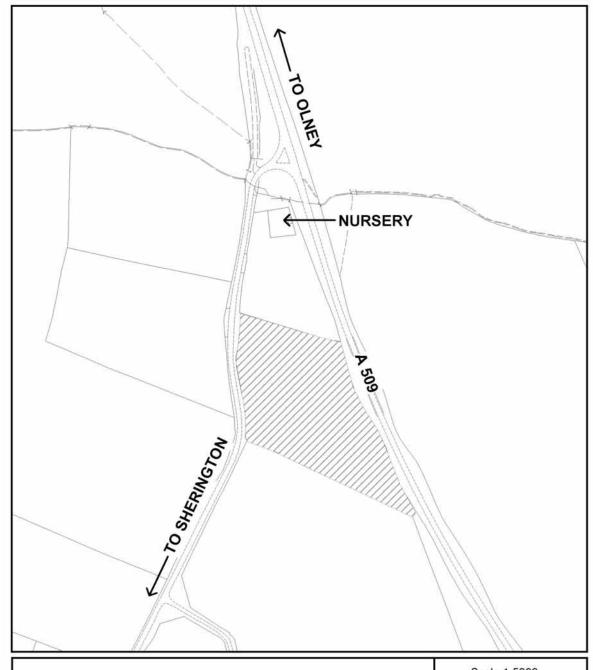
NORTH Grid North







Site L



Land North of Sherington

Scale 1:5000





