Great Billing II Waste Transfer Station

Environmental Statement Proposed Waste Transfer Station

December 2014

MICK GEORGE

Contents

Annexures

1. INTRODUCTION

1.1. Aims of the Environmental Statement

1.1.1. This Environmental Statement, as required by the Town & Country Planning (Environmental Impact Assessment) (Amendment) (England) Regulations 2011 (EIA Regulations), accompanies the planning application submitted by Mick George Ltd for a new Waste Recycling and Waste Transfer Station on land within the Great Billing Sewage Treatment Works. Environmental Impact Assessment was first introduced into English law by regulations in 1988, though the original procedure was known as Environmental Assessment. The EIA Regulations came into force in March 1999 and were one of the ways in which the European Commission Directive 98/11 (which amended Directive 85/337) was transposed into English law. The Regulations were amended in 2011 coming into force in August 2011.

1.1.2. The Environmental Impact Assessment (EIA) Regulations integrate the EIA procedures into this existing framework of local authority control and these procedures provide a systematic method of assessing the environmental implications of developments that are likely to have significant effects. It is the task of the local planning authority to judge each planning application on its merits within the context of the development plan, taking account of all material considerations, including potential environmental impacts. EIA can help to identify the likely effects of a particular project at an early stage and this can produce improvements in the planning and design of the development and in decision-making.

1.1.3. The presentation of environmental information in a systematic way may also simplify the local planning authority's task of appraising the application and drawing up appropriate planning conditions, enabling swifter decisions to be reached. The main objectives of this statement are to identify and describe the existing environmental status of the land; to describe the proposed developments, having full consideration of the size, scale and duration of various elements of the scheme; to identify any significant environmental effects of the development and, in the case of any effect, which may be perceived to be harmful, the measures which are proposed in order to ameliorate it; finally, a summary and conclusions are provided.

1.1.4. The Environmental Statement is available for inspection at the offices of Northamptonshire County Council. Further copies of the Environmental Statement may be purchased at a cost of £85.00 (including postage and packaging) from:

Miss K Howe
Mick George Limited
Second Drove
Meadow Lane
St Ives
Cambridgeshire
PE27 4YQ

1.1.5. The Environmental Statement (ES) is additionally accompanied by a Non-Technical Summary (NTS), the purpose of which is to ensure that the findings of the studies undertaken can more readily be disseminated to the general public and that the conclusions are easily understood by non-experts as well as decision makers. It is therefore essential that the NTS

reflects in an accurate and balanced way the key information contained in the ES, describing all conclusions, and the facts and judgements on which they are based.

1.2. Summary of Proposal

1.2.1. Planning consent is being sought to establish a waste handling facility on land within Great Billing Waste Water Treatment Works. The proposed application area extends to 2.79ha and is located along the northern periphery of the existing sewage works complex, and would use the existing access point off Crow Lane.

1.2.2. Planning consent exists for waste handling operations on land 100m west of the proposed site and these operations undertaken by Mick George Ltd will cease if and when the "new" area becomes fully operational.

1.2.3. It is proposed that the new site would handle a wide range of dry materials for recycling, segregation before being despatched off site. It is envisaged that up to 300,000 tonnes of waste would be handled annually and this would include general (black bag) waste, hardcore, soils and green waste, metals and woods as well as a bio-remediation facility.

1.2.4. Moreover, it is proposed that a medium sized concrete batching plant would be established along with a series of aggregate storage bays. The proposed layout of the site is shown on Drg N^{o} GB/14/02 contained within Annexure 1 of this statement.

1.2.5. Central Government advice confirms that positive planning has an important role to play in delivering sustainable waste management through the development of appropriate strategies for growth, regeneration and the prudent use of resources and by providing sufficient opportunities for new waste management facilities in appropriate locations. Key planning objectives of the policy statement requires that planning authorities should prepare planning strategies that help deliver development through driving waste management up the waste hierarchy and addressing waste as a resource.

1.2.6. The proposed operations at the site aim to achieve this strategic objective in respect of handling waste in a sustainable manner and can be undertaken with minimal impact to local amenity and within acceptable criteria levels identified within both development plan policies and guidance contained within the National Planning Policy Framework.

1.2.7. In line with such recognised sustainability objectives, and as a reflection of the growth agenda, recycling will be undertaken on the site at Great Billing to maximise the recovery and recycling a variety of waste materials. The development will be operated in the light of the principles for sustainable waste management i.e. sustainability, self-sufficiency, proximate management of waste, and the waste hierarchy which is reflected in development plan policies and full regard has been paid to minimising any potential environmental harm or adverse impacts. The scheme of working seeks to limit any harm to the local community as strict noise, odour and dust control measures will be applied.

1.2.8. The National Planning Policy Framework adopted in 2012 confirms that a planning application must be determined in accordance with the development plan unless material considerations indicate otherwise and in assessing and determining development proposals, *"local planning authorities should apply the presumption in favour of sustainable development."*

1.3. Methodology Framework

1.3.1. Various good practice guidance notes encourage the use of accepted methodologies for undertaking technical appraisals along with the expert opinion of the specific consultant employed. The following provides a brief summary of those methodologies employed as relevant to this Environmental Statement.

Ecology

1.3.2. A detailed assessment has been undertaken to determine the ecological value of the site and involved a field survey and desktop assessment. A Phase I Habitat Survey was undertaken in accordance with Natural England's recommendations.

Soils

1.3.3. The land has been classified in accordance with the Agricultural Land Classification ("ALC") of England and Wales - revised guidelines and criteria for grading the quality of Agricultural Land (MAFF 1988). In view of the limitations to the interpretation of published reconnaissance maps, a detailed ALC survey has been carried out according to the ALC guidelines. The survey included soil auger sample points based on a regular 100m grid. During the survey, soils were examined by a combination of pits and augerings to a maximum depth of 1.2 m.

Archaeology

1.3.4. A non-intrusive geo-physical survey of the site was previously undertaken by the landowners (Anglian Water) and this was used to establish a trial trenching program agreed with the curatorial authority. These works were undertaken in 2014.

Hydrology/Hydrogeology

1.3.5. The hydrological and hydrogeological assessment has been undertaken by a consulting engineer and the format has previously proved acceptable to the regulatory authorities. The Flood Risk Assessment has been undertaken fully in accordance with the methodology detailed within the Planning Practice Guidance (2014).

Traffic (Highways)

1.3.6. A Transport Assessment has been prepared by independent highways consultants, David Tucker Associates and the appraisal conforms to good practise guidance in accordance with the Guidelines for the Transport Assessment, and the criteria set out in Government Circular 02/2007. The assessment reviews existing highways conditions including personal injury accidents and appraises potential highway capacity and highway safety impacts.

Landscape and Visual Appraisal

1.3.7. A Landscape and Visual Impact Assessment of the proposed scheme has been conducted by independent consultants (FPCR Environment and Design Ltd) encompassing the "Guidelines for Landscape and Visual Impact Assessment" (GLVIA) published by the Landscape Institute and the Institute of Environmental Management and Assessment 2002, and "Landscape Character Assessment. Guidance for England and Scotland" (LCA) published by the Countryside Agency and Scottish National Heritage 2002. These documents do not provide a prescriptive approach to assessment but identify principles and good practice. The

assessment of visual impact is based on field survey and interpretation of the extraction phase and completion of the scheme, taking account of any mitigating features identified. Views from residential properties and footpaths in the vicinity of the site have been considered.

1.3.8. The key steps in the methodology were as follows:

- to describe the landscape character areas and types present in the area;
- to identify significant landscape features that may be affected by the development proposals;
- to identify key viewpoints and viewers likely to be affected by the proposals;
- to predict the effect on landscape resources and character and on visual amenity;
- to evaluate the significance of these impacts; and
- to identify measures that will be taken to mitigate significant adverse impacts.

1.3.9. A clear distinction is drawn between impacts on landscape character and visual impacts. Landscape impacts relate to the effects of the proposals on the physical and aesthetic qualities of the landscape and its resulting character and quality, whereas visual impacts relate to the effects on views from visual receptors (e.g. locations where residents, employees, tourists etc. can view the scheme) and on the visual amenity experienced by those people.

1.4. The Applicant Company

1.4.1. Mick George Limited is a privately owned Company and one of the leading suppliers to the construction industry in the region specialising in providing bulk excavation & earthmoving services, aggregate supply and waste management services, with quarries, landfill sites and waste transfer stations spread across Northamptonshire, Cambridgeshire, Peterborough, Lincolnshire, Bedfordshire and Hertfordshire. The Company's commercial fleet size is in excess of 150 HGV vehicles and specialises in bulk excavation and earthmoving services, supplying a range of aggregates and providing a variety of waste management services. In 2013 the Company produced just over 400,000 tonnes of aggregate (sand & gravel plus limestone), 180,000 tonnes of recycled aggregate and handled 1,550,000 tonnes of inert waste and approximately 220,000 tonnes of non-hazardous waste (85% being recycled). In 2013 all five of Mick George Ltd's waste transfer stations were achieving a 87% or higher landfill diversion rate. The 14 quarries and waste handling facilities operated by the Company include a range of aggregate supply, waste transfer stations, landfill and recycling facilities. At present, the Company employs over 360 staff. Mick George Concrete was established in 2013 and currently employees 13 staff and produced 68,000m^3 of concrete in the first year of trading.

1.4.2. Mick George Ltd is one of the largest independent owners and operators of waste related sites in East Anglia and the East Midlands and employ a number of WAMITAB (Waste Management Industry Training & Advisory Board) accredited staff throughout the company to ensure compliance with the regulatory requirements and can effectively handle all types of waste disposal. The Company's waste transfer and associated facilities recycle a high proportion of the waste collected, minimising the need for landfill.

2. SITE SETTING AND EXISTING SITUATION

2.1. Introduction

2.1.1. The site comprises 2.79ha of rough grassland bounded by sparse hedgerows to the west and north with Ecton Brook running along the northern boundary providing separation from Lower Ecton Lane which runs parallel to the site. The A45 is located to the north beyond Lower Ecton Lane carried on a raised embankment and bridge. To the west and eastern boundary lies grassland with field margins that are low and poorly defined. An existing concrete road within the sewage works provides access to the site to the south, and beyond this a large sewage works extends to the south and west with smaller scale waste processing facilities located on neighbouring land. The land is flat and low-lying, with an average elevation of approximately 53m AOD. The landscape is heavily influenced by industrial activities and waste and transport infrastructure.

2.2. Soils

2.2.1. A detailed appraisal was undertaken by Land Research Associates in respect of the soils and agricultural quality of the application site. The land investigated comprises part of a single field on the south side of Lower Ecton Lane. Published data shows the land as underlain by clayey or silty Holocene alluvium, with a small area of Quaternary river terrace sand and gravel in the north-east. These surface deposits are recorded to be underlain by Jurassic mudstone of the Whitby Mudstone Formation.

2.2.2. A detailed soil resource and agricultural quality survey was carried out in July 2014 and was based on observations at alternate intersects of a 100m grid, giving a sampling density of two observations per hectare. During the survey soils were examined by a combination of pits and augerings.

2.2.3. The soils comprise medium clay loam or silty clay loam topsoil to a depth of approximately 30-35 cm, underlain by fine loamy subsoil. The upper subsoil is permeable, above a slowly permeable lower subsoil layer. The depth to the slowly permeable layer varies across the site, and at one observation the lower subsoil appeared moderately permeable. These soils are slowly permeable within 55cm depth and have a high capacity to absorb excess winter rainfall and to attenuate pollutants falling on the land surface during the growing season, but this capacity is moderate in winter, when runoff is likely during prolonged wet periods.

2.2.4. The agricultural quality of the land is determined by wetness over slowly permeable subsoil layers. Land of sub-grade 3a quality exists at the site. The slowly permeable subsoil causes drainage impedance, and in combination with the moderately high clay content of the topsoil, makes land access difficult during wet periods. Under the local climate, this means that there are restrictions to field operations during the early spring work period, which limits flexibility of cropping for spring sowings. There are few restrictions for autumn sowings however.

2.3. Archaeology

2.3.1. During September 2014 Phoenix Consulting Archaeology Ltd. carried out an archaeological trench evaluation across the proposed development site. The work carried out forms an archaeological evaluation required to assess the archaeological character of the site. The site lies in an area of known archaeology, predominantly dating from the Iron Age and Roman periods. A recent geophysical survey suggested the presence of an enclosure and a

ring ditch close to the northern edge of the area. In agreement with the curatorial authority, seven trial trenches were excavated in order to appropriately evaluate the site although no archaeological deposits or finds were encountered during the trenching exercise. The geophysical anomalies were shown to be variations in the natural geology. A full copy of the report prepared by Phoenix Consulting is contained at Annexure 7.

2.4. Noise

2.4.1. The noise assessment undertaken by Vibrock and contained within Annexure 3 has addressed potential noise sensitive locations surrounding the site, with the measurement and description of existing background noise levels at selected locations. Prediction of noise levels from proposed operations at various phases of the project using the procedures contained in the British Standards B.S. 5228-1:2009. Notwithstanding the relatively remote location of the site from residential areas, a background noise monitoring survey was previously carried out. The closest monitoring location was chosen to be representative of the potential sensitive receptors around the site and this was the traveller's caravan site to the north of Lower Ecton Lane.

2.4.2. Noise monitoring was undertaken using a precision integrating sound level meter which fully complies with British Standard BS6698: Specification of integrating-averaging sound level meters. Noise monitoring was carried out with the microphone in free-field conditions, the instrument being positioned at least 3.5 metres away from any reflecting surface and 1.5 metres above the ground. The background noise levels, defined as the L_{A90} parameter, represent the noise level exceeded for 90% of the measurement period, or ninety percentile level. The equivalent continuous sound pressure level of L_{Aeq} parameter, is a measurement of the average sound energy over a given time period and will include noise from all contributing sources.

2.4.3. All monitoring was undertaken when weather conditions were appropriate, i.e. wind speeds below 5 metres/second. Temperatures not less than $3^{o}C$ with no significant rainfall and personnel were present throughout the monitoring exercise therefore ensuring that an accurate representation of the prevailing noise climate was recorded.

2.5. Landscape

2.5.1. A Landscape and Visual Appraisal of the proposed development has been undertaken by FPCR and their report is contained at Annexure 2 of this Supporting Statement. The topography is described as being typical of a river valley; being flat around the site and its immediate context with landform slowly rising away from the valley floor. Some man made embankments are found in the vicinity of the site and are associated with the elevated route of the A45 and bridges passing over the stream.

2.5.2. The landscape character of the site is simple due to its grassland nature and does not contain any landscape features of intrinsic value. Overall the site has medium landscape sensitivity due to its present land usage and surrounding context of land uses. Despite the open nature of land to the east, the site is well contained in landscape terms to the north, west and south due to existing vegetation and built form.

2.5.3. The landscape is not recognised by any national or local designations such as National Park or AONB. No historic designations are found within a 1km radius of the site. Between 1km and 2km of the site three conservation areas and numerous listed buildings are located. The

closest Scheduled Ancient Monument to the site is 2.2km from the site and experiences no intervisibility; as such it is not considered further within this study.

2.6. Ecology

2.6.1. A desk based assessment was undertaken by Whitcher Wildlife who cross referenced maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*. Mammal Society:-

- Badger setts.
- Badger latrines or dung pits.
- Badger snuffle holes and evidence of foraging.
- Badger paths.
- Badger prints in areas of soft mud.
- Badger hairs caught on fencing.

2.6.2. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Rob Strachan, Tom Moorhouse and Merryl Gelling (2011). *Water Vole Handbook: Third Edition*:-

- Water vole burrows.
- Water vole faeces and latrines.
- Water vole feeding stations.
- Water vole runs.
- Water vole prints in areas of soft mud.
- Water vole lawns.
- Predator field signs.

2.6.3. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs in line with the P Chanin (2003). *Monitoring the Otter* and *Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines:-*

- Otter prints in soft mud.
- Otter spraints.
- Otter Holts.5

2.6.4. The survey area was searched for mature trees and derelict buildings and where found these were checked for potential bat roosting sites in line with L Hundt (2012). *Bat Conservation Trust Good Practice Guidelines* by looking for the following signs:-

- Holes, cracks or crevices.
- Bat droppings.

2.6.5. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on

site and using maps of the area. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.6.6. The survey area was searched for watercourses and waterbodies and where found all watercourses and waterbodies within the survey area and for approximately 50m in each direction were thoroughly searched for the presence of crayfish where safe to enter the water. The survey was carried out in accordance with the *Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish.*

2.6.7. The survey area was assessed for the potential for reptiles and suitable reptile habitats. Where applicable the area was also searched for the presence of reptiles with all surveys carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.7. Traffic and Highways

2.7.1. The site is located on the southern edge of Great Billing on the outskirts of Northampton adjacent to an existing sewage works and industrial units. Vehicular access to the site is via Lower Ecton Lane immediately to the south of the A45. An internal access road leads to sewage treatment works and this measures approximately 6m for the majority of its length, narrowing to around 3.5m within the vicinity of the main site.

2.7.2. Lower Ecton Lane is a single carriageway road measuring approximately 8.2m and is an established HGV route. Lower Ecton Lane links with Crow Lane at a simple priority junction approximately 85m to the west of the access junction. Crow Lane is a single carriageway road running north-south with a width of approximately 8m. Crow Lane is in good condition and street lighting is provided. This road forms the main route for existing HGV traffic to and from the adjacent industrial areas. The slip roads to the A45 are immediately north of the junction of Crow Lane with Lower Ecton Lane. Existing signage is provided for HGV traffic using Lower Ecton Lane to route north on Crow Lane directly onto the A45 for the wider network.

3. WORKING PROPOSALS

3.1. Site Access

3.1.1. The proposed site will initially be accessed via the existing internal access road which leads to an existing access point onto Lower Ecton Lane close to Crow Lane and the intersection with the A45. Anglian Water are possibly proposing a new internal access road through the sewage treatment works which will create a new junction onto the public highway. Which ever route is taken, this provides excellent access onto the Strategic Trunk Road.

3.2. Recycling Operation

3.2.1. It is proposed to establish a covered steel framed building measuring 50m x 50m within which dry waste will be separated and recycled then despatched from site. Elevations of this structure are shown on Drg N^{o} GB/14/04.

3.2.2. It is proposed to undertake the following additional operations, some undercover and some externally.

- Plasterboard storage and screening
- Green waste storage and screening
- Wood waste storage and screening
- Topsoil storage and screening
- Hardcore storage, crushing and screening
- General waste storage, segregation, shredding, baling and bulking for recycling
- Storage of Aggregates and Soils in bays
- Concrete batching plant and silos
- Bagging plant (Minerals, soil, shredded wood)
- Black Bag Waste
- Bio-remediation
- Hazardous Waste Storage (e.g.WEEE, asbestos, drummed waste)
- Scrap metal recycling

Plasterboard storage

3.2.3. Plasterboard and gypsum wastes will be brought to the site and stored within the buildings for shredding and screening. The screens will remove all foreign bodies such as paper and other waste types that contaminate the powdered product. The product will be used to recycle into the plasterboard and cement industries and can also be used as an agricultural fertilizer.

Green waste storage

3.2.4. Green waste will be segregated from mixed waste loads, bulked up and removed from site to local compost sites. Storage of green waste on site will be for no longer than 3 months. Green waste may be put through a large slow speed shredder to reduce volume.

Wood waste storage

3.2.5. Waste wood will be delivered to site and manually segregated into different grades that are suitable for different end uses and are stockpiled separately. At the centre of the wood

waste recycling operation is a high performance wood shredder designed to shred large quantities of wood whilst having low energy consumption. The wood is fed into the hopper and shredded by rotor blades. The wood chips are then extracted through a screen which ensures the size consistency of the wood chip particles. The chip passes by a magnet to remove any metal fragments.

3.2.6. The end result is the production of various grades of wood such as a premium quality wood chip fuel for use in biomass boilers and animal bedding and material suitable for producing a Medium Density Fibreboard (MDF).

3.2.7. Bunded stored wood waste awaiting processing will be in bunds no larger than 6 metre high and no greater than 500 tonnes with 2m fire breaks between. Heap heat monitoring will be undertaken and best practice and records kept for good house keeping. The key holder for the site will be notified to the fire service to enable full time access.

Topsoil storage and screening

3.2.8. Topsoils will be brought to site and stockpiled in heaps not exceeding 6m and screened using a mobile plant to produce a product for resale. The clean screened and sifted soils will be separately stockpiled in similar sized storage areas as shown on the site layout plan.

Hardcore storage, crushing and screening

3.2.9. Concrete, hardcore and bricks will be taken to site and stockpiled on the concrete pad in stockpiles. A mobile crusher will size reduce the material and if required screen the small particles for the larger aggregate to produce a higher quality product.

3.2.10. Typical machines proposed for crushing and screening of aggregates are as listed below:

- Kleeman crusher 110R
- Pegson 428 impact crusher
- Screener 3 way split

General waste storage, segregation, shredding, baling and bulking for recycling

3.2.11. General waste will be taken to the site using bulk waste carriers and stored within the covered buildings. The waste will be sorted into different fractions, stored, shredded, baled and bulked. The baled waste will be sent for recycling or waste to energy with the ultimate aim in eliminating landfill wherever practicable to do so.

Bio-remediation

3.2.12. Bio-remediation is an environmentally acceptable process of treating hydrocarbon contaminated soils that would otherwise be disposed of within a landfill site. This process is a cost effective method of moving waste up the waste hierarchy by treating contaminated soils using micro-organisms and accelerating the process by use of chemicals as nutrients and the addition of oxygen producing aerobic conditions for remediation. The process will degrade and detoxify organic compounds to harmless products such as carbon dioxide and water.

3.2.13. Pipework will be established on the paved area with granular material placed over the slotted pipework prior to the contaminated material being placed. The pipework will be

established typically at 1 to 2 metre centres and the waste stockpiled to a height between 2.5m and 3m. A microbial accelerant such as manure will be added to the contaminated material to be treated and air is then drawn through the stockpiled material to accelerate the treatment process. Material would typically be remediated within a 12 to 14 week period and as air is drawn through the material the likelihood of odour being created is greatly reduced.

3.2.14. The soil remediation area would be located on the suitable hard base with a positive water collection and management system in place. The material will normally be placed in windrows and subject to its chemical composition be subject to the appropriate remediation process prior to placement within the non-hazardous waste cell.

3.3. Concrete batching plant and silos

3.3.1. Ready mixed concrete (RMC) is manufactured from a plant which would be located in the northern sector the site. The plant will be of modern design with a fully computerised batching process, for the production of wet batched concrete using aggregate, cement, water and admixtures. The installation would consist of a batch control cabin, aggregate storage bays, cementitous silos, batch conveyors, mixing unit and loading chute.

3.3.2. The mixing loading head would be enclosed on 3 sides incorporating a sprinkler system to control dust emissions. Aggregate bins and conveyors are incorporated in the plant structure and have full protection against wind whipping minimising airborne dust.

3.3.3. Deliveries to site of cementitious powders would be made only by tankers fitted with on board relief valve and filtration system. All cement silos will be fitted with an automatic system to cut off delivery in the event of pressurisation or overfilling. A similar facility with two cement silos is installed at the Company's St.Ives waste transfer station and recycling facility and a photograph of that is shown below.

3.4. Storage of aggregates and soils in bays

3.4.1. Bays will be built for supply of a range of aggregates primarily produced from various Mick George Ltd operated quarries. These bays will also be used for the ready mix concrete plant referred to above and for small loads to be delivered to the general public. The bays will contain sands, gravels, topsoils, composts, limestones and granite and will be approximately 5m x 5m and 3m high.

3.5. Operational Hours

3.5.1. It is proposed to operate the recycling and waste handling operations between 0700 hours to 1900 hours, Monday to Friday and 0700 hours to 1300 hours on Saturday with no handling operations on Sundays or Public/Bank Holidays. Consistent with the scheme approved for the existing waste handling facility to the west, it is additionally proposed to allow HGV's to leave the site from 6am (Monday to Friday). Furthermore it is proposed that up to 15 HGV's would be permitted to deliver material on Saturday afternoons (up to 5pm) and Sundays or Public/Bank Holidays between 10am and 4pm.

3.5.2. Given the site's location and access point onto the strategic road network remote from any residential dwellings, it is not considered that limited operations at such a time of the morning would result in any material harm. The noise appraisal considered the noise impact of such an operation compared against the relevant criteria level within BS:5228 and concludes that this operation can be undertaken in accordance with the guidance or significantly below existing measured levels at any residential dwelling for the period prior to 7am or on Saturday afternoons or Sundays.

3.6. Dust Control Measures

3.6.1. To assist in the management of dust on site the following methods will be employed.

Activity	Possible Dust Control Methods
Loading/Unloading activities	Reduce drop heights wherever practicable. Protect activities from wind.
Transport by vehicle within and off site	Restrict vehicle speeds. Water unsurfaced roads and paved roads. Load and unload in areas protected from wind. Minimise drop heights. Sheet or cover loaded vehicles. Use water sprays to moisten material. Sweep/wash paved roads. Use paved roads where practicable.

3.6.2. A water bowser and road sweeper will be made available during the site operations, to spray water to the paved site access road and to clean any deposits from the road as and when necessary. Water sumps within the site will be maintained to provide an ample supply of water for dust suppression requirements. The site access road will be inspected by the site manager on a daily basis to determine the need for maintenance, cleaning and dust suppression. All HGV's will be sheeted in order to minimise spillages or wind whipping of loose material. All departing road transport will be inspected for cleanliness, prior to leaving the site.

3.6.3. The foregoing standard good working practices and additional mitigation measures are generally accepted by the Government as providing effective control against the impact of airborne dust. With the implementation of these measures, the risk of a dust-related impact at the closest residential dwellings will be negligible. Overall, with the application of standard good practices, the residual risk of adverse effects outside the site due to dust will be slight or negligible at all receptors. Daily observations and inspections by the site management are required in order to minimise these risks.

3.7. Odour Control

3.7.1. The site will be operated under a bespoke Environment Permit to be issued by the Environment Agency. Under the permit the site will be required to provide and implement an Odour Management Plan (OMP) the essence of which will be the minimisation of the generation of odours by the materials handled and temporarily stored on site. The OMP will consider all site activities with the potential to generate odour, required odour control measures for normal and abnormal events and management procedures. Appropriate measures will be necessary to prevent odour pollution, where practicable to do so.

3.7.2. As an over-riding requirement, particularly during a long warm period, if any operations or materials are identified as causing, or likely to cause, an odour annoyance beyond the site boundary, or if abnormal odours are observed within the site, then the site manager will immediately modify, reduce or suspend those operations until effective remedial actions can be taken. All incoming loads will be inspected by either the site manager and any loads considered to be highly odorous, or likely to give rise to strong and offensive odours during storage on site, will be refused entry to the site. A high standard of house-keeping will be adopted and any spillages around the area or stockpiles will be cleared promptly. Loose

materials will be cleaned from, on or under the plant structures at least weekly to avoid the build-up of anaerobic material.

3.7.3. Operational measures and techniques that will be implemented as part of the general site management that will also serve to minimise any fugitive odours arising from the site activities are:

- regularly checking and removal of any organic wastes by sweeping from the surfaced route and general yard area to ensure that no deposits of anaerobic material are allowed to accumulate;
- inspection, and cleaning if necessary, by the driver of vehicles leaving the site before proceeding onto the public highway;
- sheeting of all incoming and outgoing loads to avoid the release of fugitive emissions during transport and spillage of materials on the public highway;
- cleaning of the HGV access road to prevent track-out of any spilled materials;
- maintenance of plant in a clean condition and removal of all accumulations of waste materials and debris;
- formation of stockpiled material within clearly designated areas, and;
- maintenance of the edges of stockpiles to minimise trafficking through stored materials.

3.7.4. Staff at all levels will receive the necessary training and instruction in their duties relating to control of all operations and the potential sources of odour emissions. Training records will be kept and will be made available for inspection on request. The primary mechanism for odour control on site will be the strict control of waste types and recycling processes.

3.7.5. Recycling processes such as remediation of contaminated soils and the recycling of waste wood will be proactively managed to minimise storage times and disturbance of stored materials. Such activities will be conducted in the most suitable part of site given the prevailing weather conditions and the risk of odour generation.

3.7.6. Any odours detected on site by site personnel shall be reported to the site manager for investigation. Where a strong odour is detected at the site boundary then suitable corrective action shall be taken such as the process modification or removal of materials from site.

3.8. HGV Parking

3.8.1. Up to 15 HGV's will be parked on site overnight and these will be located as shown on the site plan.

4. POTENTIAL ENVIRONMENTAL IMPACTS

4.1. Introduction

4.1.1. Mick George Ltd is committed to ensuring that adequate resources are available to reduce any potential environmental impacts whilst successfully managing their health and safety arrangements. To that end, the Company have developed an Integrated Management System Policy (IMSP). The IMSP aims to maintain an integrated management system designed to meet the requirements of ISO 9001:2008 (Quality Management System), ISO 14001:2004 (Environmental Management Standard) and OHSAS 18001:2007 (Occupational Health and Safety Management Standard) and recognises the need to demonstrate effective quality, environmental and health and safety management and a commitment to continual improvement. The above quality and management standards are independently reviewed by external auditors annually.

4.2. Dust Suppression

4.2.1. To minimise the potential impacts upon the amenity of the isolated residential dwellings, the waste handling operations will be conducted in accordance with best practice guidance. The essence of the Central Government Guidance is that dust emissions can be controlled by effective onsite management. The measures for the control of dust on site will comply with the provisions of a Dust Action Plan and with any conditions which may be specified by the planning authority, whilst additionally according with Mick George Ltd's Integrated Management System Policy. Mick George Ltd will apply a pro-active approach to the management of fugitive dust by implementing a Dust Action Plan.

4.2.2. General matters and the management of the site can affect the likelihood of significant dust emissions. These include:

- provision on site of a pressurised water bowser adequate year-round water supply to permit an appropriate filling cycle,
- high standards of house-keeping to minimise track-out and windblown dust,
- a preventative maintenance programme, including readily available spares, to ensure the efficient operation of plant and equipment, including fixed and mobile dust suppression plant, and
- effective staff training in respect of the causes and prevention of dust.

4.2.3. The site manager will carry out daily inspections and log observations of site conditions including any occurrences of dust or the onset of potential dust generating conditions. A graded scale of dust occurrences is proposed within the Dust Action Plan, together with responses, as follows:

Condition	Action required
No visible dust	None
Visible dust travelling up to 5m from the source	Damp surfaces down, review operations and weather conditions, and take further preventative actions as appropriate.
Visible dust travelling 20m from the source	Damp down and reduce/relocate any operations causing a problem; review operations and weather conditions, and take further preventative actions as appropriate to prevent further releases.
Visible dust approaching the site boundary	Carry out emergency damping down and treatment of source areas; carry out inspections to ascertain extent and amount of dust migrations and provide plan for any modification to operations to prevent recurrence.

4.2.4. The above seeks to identify circumstances when additional dust suppression measures should be considered during site operations. In general, the strategy will require the site manager, to take necessary precautions to prevent adverse dust emissions. Under critical conditions when the wind direction is towards dust sensitive locations within the Critical Dust Control Zone then the additional dust suppression measures will be implemented.

4.2.5. Accordingly, dust suppression measures in the form of a Dust Action Plan will be implemented to minimise any potential adverse amenity impact and best available techniques shall be employed to minimise dust arising during site operations and a number of measures will be used in order to minimise and control dust nuisance. All paved areas will be kept damp as required by motorised spraying units during site operations (i.e. water bowsers) and the direction of exhausts of on-site vehicles will be such that exhaust gases cannot be emitted in a downward direction. Observations will be made of the wind direction and when it appears from visual inspection that the wind direction is towards dust sensitive locations.

4.2.6. During critical conditions, the site manager or other nominated person will consider the need for additional measures to be taken to eliminate fugitive dust. Where additional measures are necessary, these may include the imposition of additional speed limits on all internal haul roads, the consideration of moving site activities to an alternative location until suitable weather conditions return or the additional use of bowsers although as broadly reflected within the site design, the distance between sensitive uses and dust-generating activities has been maximised. Consistent with recognised good practice a register of any complaints will be maintained on site. All complaints will be reported direct to the site manager who will investigate every complaint ensuring that any necessary corrective measures are taken, details of which will be recorded.

4.2.7. In conclusion, given the separation distance of site activities from sensitive receivers and the nature of the operations carried out and the implementation of the Dust Action Plan, fugitive dust can be controlled to within acceptable levels in the planning context.

4.3. Control of Odour

4.3.1. As noted in Section 3, Mick George Ltd will promote a pro-active management regime to control potential impacts odour generation. The site manager will be responsible for ensuring full compliance with any planning permission which may be issued and with the odour management scheme. Specifically, the site manager will be responsible for:

- incoming and outgoing vehicle movements,
- loading, tipping and material handling operations,
- inspection and cleaning of departing transport,
- inspection, cleaning and maintenance of all plant,
- house-keeping,
- record keeping, and
- satisfactory working of the whole site.

4.3.2. An assessment of the odour at the site will be made daily prior to the commencement of site operations, and then twice daily during off-loading or loading operations, with a daily record being maintained. All observations and findings, including wind and other weather conditions, will be noted in the site diary and should strong odours be present at the site boundary, the site manager will act promptly to identify the source(s) of the odours and take the necessary corrective action. Each event, its cause and the action taken will be recorded in the site logbook. The site daily records will be kept available for inspection by the regulatory authorities on request.

4.3.3. Any complaints will be recorded and reported to the site manager, who will investigate the circumstances and ensure that any necessary corrective measures are taken. A prompt response will be made to the complainant and a record, including copies of all correspondence and telephone filenotes, will be made in the complaints register to be held at the site office. In the event of any substantiated complaint, the odour management scheme will be reviewed and amended as necessary.

4.4. Surface Water (Flood Risk Assessment)

4.4.1. Hafren Water has been commissioned to produce a Flood Risk Assessment (FRA) in respect of the proposed development at Great Billing and that report is contained at Annexure 4 of this Statement. As the application site is in excess of 1ha, then in accordance with the National Planning Policy Framework (NPPF) 2012 and the Planning Practice Guidance (2014), a Flood Risk Assessment is required to support the planning application. In line with the Planning Practice Guidance, the FRA will also consider other potential sources of flood risk, such as sewers, overland flow routes, groundwater flooding, and 'Ordinary' watercourses not shown on EA flood map.

4.4.2. The site is entirely within Flood Zone 1 and therefore considered to be at low risk of fluvial flooding, however, an assessment is required in order to consider surface water run-off generated by the site, and to establish a management regime for that runoff and that is included within the FRA.

4.4.3. Overall, given the various data sources available, the site is considered by hydrological consultants Hafren Water to be at low risk of flooding from fluvial flooding and at low risk of flooding from pluvial overland flow, groundwater and from reservoir failure.

4.5. Control of Noise

4.5.1. Relevant current planning advice on the control of noise generation and impact was issued by the Government in 2014 within the Planning Practice Guidance which provides advice on how both planning controls and good environmental practice can be used to keep noise emissions to environmentally acceptable levels on quarries. The presence of mobile plant and equipment on sites can lead to an increase in local neighbourhood noise levels although the degree of increase at any given point varies considerably depending upon the nature of the operation being undertaken, the proximity of the operations to noise sensitive properties and the mitigating measures instigated.

4.5.2. The noise appraisal prepared by Vibrock and contained at Annexure 3 has considered the potential impacts of operations during the working day and more restricted activities prior to 7am and on Saturday afternoons and Sundays. With regard to reversing alarms, this can be a cause of particular nuisance and therefore it is proposed to use "white noise" reversing alarms or intelligent alarms that can only be heard in the immediate vicinity of the machine.

4.5.3. The appraisal by Vibrock has been undertaken fully in accordance with BS5228 and gauged against the criteria levels established to ensure the local amenity is not unduly harmed. Their report confirms the predicted noise levels from all site activities when compared with the British Standard are compliant or below those criteria levels. Section 2 of the noise report considers the predicted noise limits at dwellings at the travellers site. The table below summarises the results;

Assessment Period	Predicted Noise Level from Proposed Waste Recycling Facility dB LAeq,1h	NPPF / PPG Assessment Criteria dB LAeq,1h	Difference Predicted Site Noise and Assessment Criteria Db(A)
Monday – Friday 06:00 – 07:00	41	42	-1
Monday – Friday 07:00 – 19:00	52	55	-3
Saturday 07:00 – 16:00	52	55	-3
Sunday plus Bank Holidays 07:00 – 10:00	34	55	-21

4.6. Lighting

4.6.1. A majority of the site operations will be carried out during daylight hours. However, during the winter months there may be a requirement to have some artificial lighting around the site for health, safety and security requirements. Such lighting will be downward facing to minimise any potential adverse impact upon local communities. Floodlighting in the winter months may be required around the plant up to half an hour outside of site operating hours. Lighting will concentrate light down on to the immediate operational areas and not any outlying areas. The elevation of the floodlights will be limited to maximum 5m height. The

intensity of lights will vary between 25 and 75 LUX, with the spread of light up to 30 metres. Light spillage to the rear of fixed units (i.e. those attached to the plant offices etc.) will be negligible and glare from lighting towers will be limited by shrouds. Up to two lights may be required for security purposes through the night time period, but such lights will be limited to LUX levels not exceeding 20 and in any event would be downwards facing. Peripheral soil screening mounds between 3 and 5 metres in height would additionally assist in limiting light intrusion.

4.7. Landscape and Visual Impact

4.7.1. The Landscape and Visual Appraisal undertaken by FPCR (Annexure 2) has sought to establish the visibility of the site from a representative sample of surrounding receptors (i.e. people who have a viewing opportunity over or towards the site). The Landscape and Visual Impact Appraisal considered the potential effects of the development upon:

- Individual landscape features and elements
- Landscape character
- Visual amenity and the people who view the landscape. 8.3 The development lies within the National Character Area (NCA) 89 'Northamptonshire Vales'.

4.7.2. A Landscape Character Assessment of Northamptonshire was previously commissioned by Northampton County Council and forms a part of a much broader suite of studies that assess the character of the environment, biodiversity and green infrastructure within Northamptonshire. The site and land immediately within its context fall within Landscape Type 'Urban Area'.

4.7.3. In the opinion of FPCR, during construction there would be some short term landscape and visual effects resulting from the construction work. None of these effects would be of greater significance than the effects arising through the operational phase of the development.

4.7.4. Development is located within NCA 89 'Northamptonshire Vales' as identified by Natural England. There would be Minor overall effects at year 0 on this National Landscape Character Area with Minor effects at year 15. At a Regional/Local level, the development is located within an area classified as 'Urban Area' within The Northamptonshire Environmental Character and Green Infrastructure Suite of Assessments. These documents do not offer a description or analysis of the urban landscape identified.

4.7.5. Development would not have a notable effect on the character of the immediate site context due to the prominence of industrial scale activity from the sewage works and waste processing facility. To the west and eastern boundary lies grassland with hedgerow margins that are low and poorly defined. A narrow road provides access to the site to the south and beyond this, a large sewage works extends to the south and west with smaller scale waste processing facilities located on neighbouring land. Overall landscape effects would be Minor at Year 0 to Minor at Year 15.

4.7.6. The effects of the development on visual amenity vary depending on distance from the development, the nature of views and the degree of screening provided by the topography, vegetation and existing built form. All viewpoints and receptors are identified and assessed within the Visual Effects Table shown at Appendix 2 of the FPCR report.

4.7.7. The development would be visible from limited locations within local settlements, public rights of way and parts of the local road network. The clearest views would be possible along short sections of Lower Ecton Lane. Views towards development would be possible but only partial/glimpsed between existing vegetation. Major roads such as the A45 pass approximately 100m from the site's northern boundary. Views towards the site are restricted along its length due to the screening effects of mature vegetation. The visual effects are considered to be Negligible due to the limited views and taking into account the speeds when travelling at dual carriageway speeds. Local roads to the west and north west of the site are largely screened from view by the residential area of Great Billing and the combined effects of topography and vegetation. There are few other roads in the vicinity with any views towards the site, so there would be Negligible effects on other road users.

4.7.8. On balance, the site is well contained within the wider landscape and visual effects are well contained. Existing vegetation in the surrounding landscape will screen much of the site from potential views and it is considered that where views are possible, the sites location next to existing industrial buildings and activity will allow the development to assimilate with the existing industrial landscape character. In conclusion, there are no overriding landscape or visual effects that should prevent the development of the site as proposed and there should be no unacceptable or overriding landscape or visual effects that should preclude the expansion of the waste recycling operations as proposed.

4.8. Traffic and Transport

4.8.1. The proposal is expected to typically generate around 220 HGV loads per day which is a slight increase on that serving the existing waste handling facility (to the west).

4.8.2. Assuming 10% is generated during peak periods, typically 44 movements (22 in and 22 out) will be generated on the local network during the peak hours. The distribution of traffic is assumed that the majority of traffic will use the A45 and local road network collecting waste from in and around Northampton. The level of traffic generation is not significant and is well within the variation of background daily traffic flows.

4.8.3. It is considered that the continued traffic would not have a material impact on the safety or operation of the local road network. In the context of NPPF paragraph 32 it can clearly be concluded that the impact of the development in terms of traffic capacity and junction operation will not be "severe".

4.9. Ecology

4.9.1. A Phase 1 ecological survey has been undertaken of the application site and the 2.8ha area was identified as being of limited ecological value. As part of the progression of the County's Minerals and Waste Development Framework in 2010, an Appropriate Assessment was undertaken to consider the potential impacts of its land-use plan against conservation objectives of prospective individual minerals and waste sites. The current application site forms a small proportion of the larger Great Billing Waste Management facility where incineration of waste was considered as being the principle potential source of adverse impacts.

4.9.2. Within the Appropriate Assessment (AA) prepared by the County Council, the broader waste site extending to over 18ha, was identified as being located between the Earls Barton (3.5km east) and Northampton (2.3km west) sections of the pSPA. The report identified principle emission components to include organic compounds carbon dioxide, acid gases, heavy

metals, particulates, dioxins and furans but these all primarily relate to waste incineration (which is not proposed on the current application). The AA went on to refer to *"limited potential for dust and ash release (mainly through accidental spillage and fugitive emissions). The site overlays a minor aquifer and is located within an indicative flood plain and an identified flood risk area and has several drains which drain to the River Nene. The river valley is susceptible to high levels of flood risk. Potential for contamination of water due to waste management operations is limited; however capture and treatment of surface run-off will be necessary to mitigate any risk. Potential for noise and odour impact on the pSPA is limited."*

4.9.3. The proposed operations are similar to those currently permitted on the site 100m west and the scale of development is for less than that envisaged within the AA. Matters such as noise, dust and surface and ground water referred to within the AA can readily be controlled and will be monitored by virtue of the Environmental Permit (issued by the Environment Agency) and planning conditions that will be imposed by the determining waste planning authority.

5. DESIGN AND ACCESS STATEMENT

5.1. Introduction

5.1.1. A design and access statement is a short report accompanying and supporting a planning application to illustrate the process that has led to the development proposal, and to explain the proposal in a structured way. The level of detail required in a design and access statement depends on the scale and complexity of the application, and the length of the statement varies accordingly. Statements must be proportionate to the complexity of the application, but need not be long.

5.1.2. Design and access statements help to ensure that development proposals are based on a thoughtful design process and a sustainable approach to access. Statements should improve the quality of proposals: in preparing the design and access statement, developers need to consider and subsequently explain the merit of the design and how it relates to the existing setting.

5.1.3. Design and access statements enable local planning authorities to better understand the analysis which has underpinned the design and how it has led to the development of the scheme. This helps decision-making and should lead to an improvement in quality, sustainability and inclusiveness of the development.

5.1.4. Design and access statements allow stake holders to involve themselves more directly in the planning process without the need to interpret plans that can be technical and confusing. This helps to increase certainty for people affected by development and improve trust between communities, developers and planners. It also enables the design rationale for the proposal to be more transparent to stakeholders and the local planning authority.

5.2. Design Statement

5.2.1. In accordance with the requirements of Circular 01/2006, a design statement has been prepared in connection with the proposed operations at the Great Billing site, that examines the following design principles:

- site context and use;
- layout and scale; and
- landscaping and appearance.

5.2.2. The site has a few physical constraints to development of the type proposed. Existing hedgerows on periphery of the site would be unaffected by the proposals. The site is located within the curtilage of the existing sewage treatment works and will replace a similar waste handling facility 100m to the west.

5.2.3. The site is close to the main highways network and there are no significant social or neighbourhood constraints that would limit development of the site. The low environmental sensitivity of the site means there are no significant environmental constraints upon the development proposals.

5.2.4. Development would not have a notable effect on the character of the immediate site context due to the prominence of industrial scale activity from the sewage works and waste processing facility. To the west and eastern boundary lies grassland with hedgerow margins that are low and poorly defined. A narrow road provides access to the site to the south and

beyond this a large sewage works extends to the south and west with smaller scale waste processing facilities located on neighbouring land.

5.2.5. The Landscape and Visual Appraisal confirms that on balance, the site is well contained within the wider landscape and visual effects are well contained. Existing vegetation in the surrounding landscape will screen much of the site from potential views and it is considered that where views are possible, the site's location next to existing industrial buildings and activity will allow the development to assimilate with the existing industrial landscape character. There are no overriding landscape or visual effects that should prevent the development of the site as proposed and it is considered there should be no unacceptable or overriding landscape or visual effects that would preclude the expansion of the waste recycling operations as proposed.

5.2.6. In respect of the layout and scale, Drg N^{o} GB/14/02 details the proposed areas, both of which are accessed by existing internal haul routes and existing access point onto Lower Ecton Lane, which provides appropriate turning circles and manoeuvring facility of heavy goods vehicles that will be used in part to deliver suitable material to restore the area. Boundaries around the site are defined by overgrown hedgerow vegetation that forms a reasonable screen.

5.3. Access Statement

5.3.1. The proposed development is for the treatment of a variety of wastes on a site where a similar facility was previously approved for such activities within 100m. Central Government advice confirms that positive planning has an important role in delivering sustainable waste management through the development of appropriate strategies for growth, regeneration and the prudent use of resources and by providing sufficient opportunities for new waste management facilities in appropriate locations. Key planning objectives of the policy statement requires that all planning authorities should prepare planning strategies that help deliver development through driving waste management up the waste hierarchy and addressing waste as a resource.

5.3.2. As noted above, the existing site benefits from its own purpose-built access onto the public highway and associated infrastructure and no highway safety or capacity issues have been identified with the confirmed use of the access point. In order that the operations on site can be fully managed, it is envisaged that the existing traffic management system onto Lower Ecton Lane will be retained to incorporate the vehicle movements associated with the waste recycling operations. The public will not be allowed to access the area for health and safety reasons.

5.3.3. The site provides no significant environmental or design constraints to the type of development proposed. There would be a range of benefits arising from the proposed site layout. In terms of the building design, the simple industrial type building would be appropriate to the context of surrounding. The waste recycling building has been designed to integrate with the setting. The site layout and mobile office units are designated to occupy the minimum footprint and height necessary for operations and to allow safe and efficient access for vehicles, mobile plant and staff.

5.3.4. The building would comprise a simple clean modern industrial type building. The shed elevations show the treatments. In summary the proposed materials comprise:

- Roof – Box Profile Plastisol Coated Steel Cladding (7mm thick)

Colour - Olive Green

- Side and End elevations – Box Profile Plastisol Coated Steel Cladding (5mm Thick) Clad to within 3.5m of ground level
- Gutters – 170mm Half Round Gutter with diameter 110mm UPVC downpipe Colour – Grey

5.3.5. The weighbridge will be positioned to ensure easy access and egress within the site enabling HGV's to turn into the covered building and dispatch the payload. The proposed development will form part of the operational area of the site and will not be open to members of the public. Pedestrian access to the development area will be limited to employees and the occasional visitors who will normally arrive by appointment and will be escorted while on site. Staff and visitors to the site will enter via the identified access point. Parking will be available on site.

5.3.6. Mick George Ltd is committed to the development of a site which is environmentally, socially and economically sustainable. The design and the layout of the existing waste handling facility will ensure that waste is handled in a more efficient manner consistent with development plan policies and Central Governmental advice whilst visual impacts of the site activities are minimised.

5.3.7. The design process has been interactive and as a result has addressed a wide range of issues resulting in the proposals for the proposed facility.

6. ENVIRONMENTAL CONSIDERATIONS

6.1. Introduction

6.1.1. Impact prediction for the scheme involves the analysis of the proposed operations upon local amenity and environment and the determination of likely effects. An integral part of the design process for projects such as that proposed at the Great Billing sewage works is to ensure that as far as practicable to do so, potentially adverse effects are avoided or minimised to an acceptable level by working to high environmental standards. The project design is aimed at balancing protection of the local environment with the need to handle waste consistent with acknowledged sustainable development objectives. The 'receptors' of environmental impacts arising from the proposed operations are those elements of the environment that will be affected in some way by the development and these are identified below.

6.2. Landscape and Visual Impact

6.2.1. Any operations of the nature proposed will invariably result in an element of some visual and landscape impact due to the scale and nature of operations and subsequent restoration proposals. The site layout follows a number of landscape design objectives introduced to minimize any perceived visual impact during the operational phase. The significance of the visual effects is largely related to the potential for the development to affect the views experienced by people from areas they frequent, including residential property and areas of public access. The significance of any visual intrusion will also be determined by the nature of the existing view, distance of the viewpoints, duration of the effect and perception or sensitivity of the viewer or receptor. A preliminary desk study was undertaken to establish the physical components of the local landscape and to identify the boundaries of the study area. Published maps were utilised to identify the significant local features relating to topography, field shape, drainage pattern and woodland cover, existing settlement pattern, transport corridors and important historic features.

6.2.2. Topographical analysis was used to identify the extent of potential visibility of the proposed development and initial analysis included contour mapping and the construction of working sections to produce a zone of theoretical visibility to identify potential visually sensitive receptors, which included areas with public access within the visual envelope, roads, public rights of way, public open space, key vantage points, together with residential properties.

6.2.3. A Landscape and Visual Impact Assessment (LVIA) of the proposed scheme has been conducted by independent consultants (FPCR) encompassing the "Guidelines for Landscape and Visual Impact Assessment" (GLVIA) published by the landscape institute and the institute of environmental management and assessment 2002, and "Landscape Character Assessment. Guidance for England and Scotland" (LCA) published by the Countryside Agency. These documents do not provide a prescriptive approach to assessment but identify principles and good practice. The LVIA prepared by FPCR is contained within Annexure 2.

6.2.4. The implementation and operation of the proposals will give rise to temporary direct and indirect landscape impacts resulting from alterations to the landscape, however, operations are well screened and as such the overall potential impact of the scheme will be reduced. The overall magnitude of change within this character area is considered to be low in nature. Studies and field surveys undertaken demonstrate the significant visual effects of the proposal development would be highly localised. In the opinion of FPCR the landscape

quality within the site is described as poor and the landscape value of the site itself is, overall, considered to be low. The landscape structure and screening potential offered by the existing tree and hedgerows present around the periphery of the site are considered to be valuable landscape characteristics worthy of retention.

6.2.5. The landscape sensitivity of the landscape characteristics within the site to the proposed type of development is considered to be very low. Overall, the magnitude of adverse impacts on the landscape elements within the site is considered to be very limited and the overall significance is considered to be negligible. The landscape at the site has been subject to much change, with the areas around the sewage works substantially affected. The proposed operations would be an incongruous element within the landscape, in the context of existing sewage works and associated activities.

6.2.6. The prevalent landscape character experienced within the area is heavily influenced by the context in which any views are experienced. With views primarily limited to close range, the proposals exert a limited effect on the surrounding landscape and are in the context of existing operations, within the sewage works. FPCR confirm that the capacity of the landscape is sufficient to accept the proposal without incurring significant adverse effects on landscape character, with existing landscape elements worthy of retention around the periphery of the site retained.

6.3. Nature Conservation

6.3.1. The site is of limited ecological value and no species protected by statute will be adversely affected by the development proposals.

6.4. Flood Risk

6.4.1. An assessment of potential impact upon surface resources has been undertaken by independent consultants Hafren Water and their report is contained at Annexure 3 of this Environmental Statement. Treated water from the site will be discharged from the site fully in accordance with the requirements of the consent issued by the Environment Agency in the form of an Environmental Permit. This will ensure that there will be no increased risk of downstream flooding, but also maintain the quality of the water.

6.4.2. The proposed water treatment facilities will be regularly inspected and this will ensure that immediate action is taken to maintain their stability, security and efficient operation. Mick George Ltd will have in place emergency measures to deal with any spillages (e.g. the deployment of absorbent mats and booms). Fuel oil storage areas will be adequately bunded in accordance with Control of Pollution (Oil Storage) (England) Regulations 2001 to protect both surface and groundwater.

6.4.3. The site is situated within a low probability Flood Zone, and therefore the sequential test as defined in the Planning Practice Guidance (PPG) confirms the development of the site is appropriate and acceptable in this location. It is considered that the proposed development will have no adverse impact on flood risk. (The site is located in Flood Zone 1 and is not at risk from fluvial flooding). There is not considered to be any risk to the site from groundwater flooding. Flooding from surface water run-off is not anticipated to be a risk to the site taking into account the effectiveness of the current surface water management, which will be retained.

6.5. Air Quality

6.5.1. The site is relatively remote from residential dwellings setting is dominated to rural sources upwind in the prevailing wind direction. Background levels of dust are therefore expected to be normal, although no deposition monitoring has been undertaken. Typical dust deposition rates range from 10 to 50mg/m^2/day in rural areas, 30 to 80 mg/m^2/day in suburban areas and 80 to 160mg/m^2/day in town centre and industrial areas.

6.5.2. The potential for the generation of dust from site activities and its consequential dispersal through the atmosphere is dependent not only on the type and level of site activity, but also on prevailing meteorological conditions. Notwithstanding the limited periods when adverse weather conditions are likely to occur, it is proposed to implement a Dust Action Plan, which will ensure that extra vigilance is undertaken when working within what is referred to as the Critical Dust Control Zone where operations will be more closely monitored and if required the potentially dust generating operations modified or ceased as considered necessary.

6.5.3. Careful consideration is given to the relationship of activities within the site to sensitive areas outside the operational area. All potential dust generating activities are located away from dust sensitive land uses and receptors, but in any event the Company are promoting a management protocol which provides a pro-active approach to dust control. In the absence of any agreed standards or guidelines for operational dust levels and their potential to generate a nuisance, published Governmental advice confirms that the emphasis in the regulation and control of dust should be the adoption and promotion of best practices on site.

6.5.4. The principal potential sources of airborne dust associated with the proposed operations at Great Billing include processing of recycled aggregate and stocking, site haulage, and wind blow across bare ground and stockpiles. All loaded lorries and HGVs carrying material to the site will be sheeted to minimise the effects of wind-whipping. Overall, road transport will not result in significant dust emissions within the site boundaries. During dry windy conditions, visible wind blown dust could be raised from areas of open bare ground. This potential nuisance can be substantially reduced where surface wetting occurs, for example by the use of motorised dust suppression units (water bowsers). With considerate site management and implementation of a management plan the risk can be controlled to within acceptable levels.

6.5.5. The principle dust sources have been identified as stripping, haulage and restoration operations, as summarised below, along with the proposed mechanism to control.

Source	Potential significance	Comment
Recycling	Low significance due to location of plant in a screened location	Cleaning of access roads and conditioning of stockpiles with water sprays may be required under dry windy conditions
Site Access/Transport	Low significance	Road transport will be inspected prior to leaving the site, and road surfaces will be cleaned as necessary

6.5.6. In conclusion, given the nature of the operations purposed and the implementation of the Dust Action Plan, dust can be controlled to within acceptable levels in the planning context. The best practice guidance will be adopted to ensure that the amenity of local residents will

not be adversely affected, thereby reflecting current Central Government advice. As a positive means of controlling dust, the Dust Action Plan identifies trigger levels that relate to wind direction and proximity to residential properties and other sensitive uses.

6.6. Noise

6.6.1. Relevant current planning advice on the control of noise generation and impact is contained within BS:5228 which provides advice on how both planning controls and good environmental practice can be used to keep noise emissions to environmentally acceptable levels.

6.6.2. Strict environmental controls and sensitive working practices will be sufficient to ensure no harm will be caused to the amenity of local residents. An independent noise appraisal has been undertaken by Vibrock (contained within Annexure 3) and the conclusions of that assessment state the predicted noise levels of both normal daytime operations and limited activities prior to 7am and on Saturday afternoon and Sunday are within the guidelines as contained within BS:5228. In each case, the worst case predicted levels at representative locations around the site are significantly below the criteria levels detailed in the British Standard.

6.6.3. With regard to reversing alarms, this can be a cause of particular nuisance and therefore it is proposed to use "white sound" reversing alarms or intelligent alarms that can only be heard in the immediate vicinity of the machine.

6.6.4. In summary, the predicted noise levels from all site activities when compared with NPPF guidance are significantly below those criteria levels for "normal" operations for the predicted scenarios at residential dwellings.

6.7. Highways

6.7.1. A Transport Assessment has been prepared by David Tucker Associates and that considers the potential traffic impact of the proposals at the Great Billing Sewage Treatment Works. The Transport Assessment demonstrates that there are no road safety or highway capacity issues associated with the proposals and will therefore have no detrimental impact on the free flow and safety of traffic. Moreover, the assessment has considered the suitability of the existing site access in terms of design standards and capacity and confirms this is acceptable. The proposed development will have no material adverse impact on the safety or operation of the adjacent highway network and there are therefore no grounds for refusal of the application due to detrimental impact on the free flow and safety of traffic or the impact of routeing of goods vehicles to and from the application site.

6.8. Soils

6.8.1. The soils that exist on site will be carefully stockpiled and then used in a sustainable manner on construction projects in and around Northampton.

6.9. Archaeology

6.9.1. The site lies in an area of known archaeology, predominantly dating from the Iron Age and Roman periods. A recent geophysical survey suggested the presence of an enclosure and a ring ditch close to the northern edge of the area. Seven trial trenches were excavated in order to appropriately evaluate the site although no archaeological deposits or finds were encountered during the trenching exercise. The geophysical anomalies were shown to be

variations in the natural geology. A full copy of the report prepared by Phoenix Consulting is contained at Annexure 7.

7. SUMMARY AND CONCLUSIONS

7.1. Summary

7.1.1. The proposal at Great Billing Sewage Treatment Works includes the establishment of a waste handling facility. The proposed application area extends to 2.79ha and is located along the northern periphery of the sewage works, and would initially use the existing access point off Lower Ecton Lane. Planning consent exists for waste handling operations on land to the west of the proposed site and these operations undertaken by Mick George Ltd will cease if and when the "new" area becomes fully operational.

7.1.2. It is proposed that the site would handle a wide range of dry materials for recycling, segregation before being despatched off site. It is envisaged that up to 300,000 tonnes of waste would be handled annually. Moreover, it is proposed that a medium sized concrete batching plant would be established along with a series of aggregate storage bays.

7.1.3. In accordance with the Environmental Impact Assessment requirements, various appraisals have been undertaken in order to identify potential effects and to consider the significance of any such effects. The site is located within an operational sewage treatment works with a waste handling operation already approved. The visibility of the site is currently limited primarily by the existing landform, hedgerows and woodland components at various points in the landscape. The development is generally well-screened with only limited views.

7.1.4. In respect of water quality, the assessment undertaken confirms that with appropriate mitigation there will be no significant negative impacts in respect of surface or ground water resources. The appraisal confirms all surface run-offs will be properly managed to ensure there are no uncontrolled discharges from the site and no potential flood risk. Surface water from the site shall be treated and this will establish the quality and quantity of the water leaving the site thereby ensuring that there is no adverse impact on any receiving watercourses. The flows will be maintained at or below greenfield run-off rates and consequently there will be no increased risk of downstream flooding. Moreover, the hydrogeological appraisal considers groundwater resources and confirms there are no predicted adverse impacts.

7.1.5. With regard to local amenity (i.e. dust and noise), the statement highlights good practice guidance as referred to within the Planning Practice Guidance and additional mitigation measures which are generally accepted by Central Government and Mineral and Waste Planning Authorities as providing effective protection against airborne dust from mineral sites. Adoption of such good practice including the implementation of a Dust Action Plan will ensure that operations will not cause unacceptable impacts due to airborne dust emissions in the vicinity of the site. The distance between sensitive uses and dust-generating activities has been maximised.

7.1.6. An independent noise assessment has concluded that the operations can be undertaken at levels below those identified within the Planning Practice Guidance (2014) as being acceptable to ensure the amenity of local residents is safeguarded. The predicted equivalent continuous sound pressure level over a 1 hour period (LAeq 1hr) considering the worst-case scenario when operations were closest to the nearest noise sensitive location were below the accepted criteria levels and detailed within the Planning Practice Guidance (2014).

7.1.7. With regard to highways and traffic, the Transport Assessment prepared by David Tucker Associates considers the potential traffic impact of the proposal. The assessment

demonstrates that there are no road safety or highway capacity issues associated with the development and will therefore have no detrimental impact on the free flow and safety of traffic. The levels of traffic flows are well within the practical and environmental capacity of the highways in question and on that basis it is apparent that overall impact from HGV flows is modest in terms of traffic capacity.

7.1.8. The Phase 1 Habitat Survey confirms the limited ecological value of the proposed site area. The Landscape and Visual Impact Assessment (LVIA) confirms the site does not lie within an area of statutory or local landscape designation. The landscape value of the site has been described as being of a low level, whilst the landscape quality of the site has been described as poor to ordinary. The proposed development has been designed to reflect the landscape policies in the various development plan documents and the specific management and planning guidelines provided in the various landscape character assessment and landscape policy documents and biodiversity plans relating to the site. A number of representative viewpoints have been assessed and the significance of visual effects was found to be minor to moderate or less. The proposed development would not result in any significant adverse visual effects either individually or cumulatively. The capacity of the landscape is sufficient to accept the proposed development without incurring significant effects on landscape character.

7.1.9. Development would not have a notable effect on the character of the immediate site context due to the prominence of industrial scale activity from the sewage works and waste processing facility. To the west and eastern boundary lies grassland with hedgerow margins that are low and poorly defined. A narrow road provides access to the site to the south and beyond this, a large sewage works extends to the south and west with smaller scale waste processing facilities located on neighbouring land.

7.1.10. The archaeological investigation has shown that whilst the site is within an area of known archaeology, the geophysical survey and subsequent trial trenching have demonstrated the site to be of no cultural heritage value.

7.2. Conclusion

7.2.1. It is considered on balance that with appropriate mitigation the proposal to handle waste at the Great Billing site can be carried out in an acceptable manner, without causing demonstrable harm to matters of noted importance. The facility will replace the existing waste handling operations on a site 100m further west but the new location will enable the recycling operations to be undertaken in a far more efficient manner consistent with local and national policy and guidance.

7.2.2. Matters such as noise and dust emissions can be controlled within recognised acceptable levels to ensure local amenity is not harmed, whilst the surface water management proposals will ensure there is no flood risk and receiving watercourses will be protected throughout.

7.2.3. The proposals are in conformity with the development plan and the National Planning Policy Framework. The appraisals confirm there are no unacceptable environmental impacts resulting from the proposed operations which will be undertaken in a sensitive manner. The proposed scheme of working has been devised to reflect local and national policy objectives with regard to the handling of waste clearly representing sustainable development in terms identified within the National Planning Policy Framework.