

**Environmental Support for Development Brief of  
Longueville Nurseries, St Saviour, Jersey**

October 2009

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# Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>4</b>
1.1	This document.....	4
1.2	Background and Purpose.....	4
1.3	Who are AECOM? .....	5
1.4	AECOM's Jersey Experience.....	5
1.5	AECOM's Accreditation.....	6
<b>2</b>	<b>Methodologies</b> .....	<b>7</b>
2.1	Ecology.....	7
2.2	Noise Survey .....	8
2.3	Contaminated Land.....	10
2.4	Transport.....	11
2.5	Final Reporting.....	12
<b>3</b>	<b>Project Staff</b> .....	<b>13</b>
<b>4</b>	<b>Fees and Financial</b> .....	<b>14</b>
4.1	Fees .....	14
4.2	Invoicing .....	15
4.3	Terms and Conditions .....	15
	<b>Appendix A – Terms and Conditions</b> .....	<b>16</b>

# 1 Introduction

**1.1 This document**  
This proposal relates to proposed development at the Longueville Nurseries in St Saviour, Jersey. It has been prepared on the basis of the information received to date, including extracts from the development brief and drawings indicating the site boundary (solid red line).

The proposal is for the provision of professional consultancy services in support of proposed changes associated with current requirements set out in the development brief of the current Draft Island Plan (2009). AECOM has been invited to provide the fee proposals including in this document for the following aspects related to the nursery site:

- an ecological assessment to identify mitigation measures with reference to the nearby Rue Des Pres Marsh ecological Site of Special Interest (SSI);
- a detailed noise assessment of traffic and commercial noise sources owing to its proximity to Rue Des Pres Trading Estate;
- a contamination land assessment because of an existing oil tank and the historic use of the site;
- a traffic assessment because of a proposed material change in site use from a garden retail centre to residential housing.

**1.2 Background and Purpose**  
The site is located just outside St Helier at St Saviour, to the east off New York Lane. The latter forms two priority junctions with the A3 Longueville Road in the vicinity of the site, a principal route out of St Helier to the east.

We understand that the site is included in the Draft Jersey Island Plan, September 2009 (which is currently in its consultation phase until the 18<sup>th</sup> December 2009), as one of a handful of sites proposed to be zoned for Category A housing (Policy H1), and as set out in paragraph 6.79 the theoretical yield of homes from all of these sites is estimated to be in a range of a minimum of 197 (10 dwellings per acre) to a maximum of 298 (15 dwellings per acre). This equates to a potential maximum of approximately 30 dwellings at Longueville Nurseries. However, the potential housing yield for each site, as set out in the draft Appendix B 'Draft Housing Development Briefs', suggests only half of the site for development, as follows:

<b>Site</b>	<b>Longueville Nurseries, New York Lane, St Saviour</b>
<b>Existing Use</b>	Retail Garden Centre
<b>Suitable Use</b>	Category A housing
<b>Approximate Site Area</b>	<p>The site is 2.1 acres (4.75 vergées) consisting of:</p> <ul style="list-style-type: none"> <li>• Covered retail area of 1,100sq.m</li> <li>• Customer and staff parking 1,680sq.m</li> <li>• Glass and polytunnels 900sq.m</li> </ul> <p>Area available for housing:</p> <ul style="list-style-type: none"> <li>• Total site = 2.1 acres (4.75 vergées)</li> <li>• Developable area = 1.0 acres (2.25 vergées), with an area of communal open space (10% of site approx) = 0.1 acre (0.225 vergées)</li> <li>• Remainder of the northern end of the site to be restored to grazing or woodland</li> </ul>
<b>Estimated Housing Yield</b>	Based on the developable site area of 1.0 acres, the site is capable of being developed for between 10 no dwellings (10 dwellings per acre) to 15 no dwellings (15 dwellings per acre)

The owner of the nursery site (the client) wishes to make a submission (in writing before 18 December 2009 and during the Examination in Public in February 2010) to the Planning Inspector to increase the allocation for the Longueville Nurseries site during the Island Plan consultation phase so that the full brown field site, increasing the housing allocation to 30 dwellings, is recommended for development in the new adopted Jersey Island Plan.

### 1.3

#### **Who are AECOM?**

AECOM Ltd (formerly Faber Maunsell Ltd) is one of the top building engineering, transportation, infrastructure and environmental consultancies in the UK. With over 30 offices in the UK and some in Europe, and close to 3000 specialists, we are proud to be an international, award-winning consultancy with a reputation for quality, innovation, sustainability and added value.

In a typical year AECOM, as one of the UK's key providers of multi-disciplinary consultancy services, undertakes over 5,000 projects and has an annual turnover of £205 million.

As of October 2009 we are truly part of the global AECOM with access to 43,000 employees around the world. Our ultimate parent AECOM Technology Corporation is a recognised global provider of professional technical, consultancy, and management support services to a broad range of markets, including transportation, facilities, environmental and energy, and engineering infrastructure requirements of the rail, highways and water industries.

Our four main integrated business lines in the UK, also serving clients overseas such as in Jersey, the Isle of Man and countries in Europe and North Africa, are:

#### Water and Environment (here presented for convenience still as one)

AECOM's experience in environmental engineering, environmental management, utilities, development and asset management, brings together a wealth of skills, enabling us to provide a fully integrated service focussed on our clients' needs. There is a significant emphasis on services provided to the water industry including water resource, treatment and distribution; and wastewater collection, treatment and disposal. Environmental management includes planning, environmental impact assessment, water and air quality monitoring as well as river and coastal engineering.

#### Transportation

AECOM is one of the largest, most respected and experienced transportation consultancies in the UK with a reputation for technical excellence in both its planning and engineering disciplines. Within transportation planning our teams focus on transport policy and strategy, traffic engineering, intelligent transport systems, public transport and development planning. Our teams are currently working very closely with public and private clients alike to deliver a range of transport solutions, which are bespoke to each location and to each specific set of demands.

#### Building Engineering

AECOM has a wide-ranging building engineering capability that includes innovative building services solutions, structural and civil engineering driven by quality and added value, and a first class business solutions offering. We are able to offer specialist skills in disciplines such as energy efficiency, acoustics, fire engineering, specialist lighting, mechanical handling, sustainable development, geotechnical, research and development, health and safety, and information technology and communications. For business solutions, our in-depth knowledge of property management stretches from maintenance planning and management to strategic issues.

To cover such a broad spectrum of work successfully, we assemble cross-disciplinary project teams who work collaboratively to ensure that our solutions benefit from our collective all-round expertise as well as from the in-depth knowledge of individual consultants who are acknowledged specialists in their fields.

### 1.4

#### **AECOM's Jersey Experience**

AECOM has completed numerous environmental impact assessments (EIA, including EIA management and specialist studies), transport assessment and other separate specialist studies (such as noise and air quality) in Jersey for various types and scales of developments, including:

- EIA - Zephyrus site (south of the Esplanade Quarter), St Helier (2009)
- Noise assessment - L'Hermitage Gardens Care Home, St Helier (2009)
- EIA - Esplanade Quarter, St Helier (2007-2008)
- Transport Assessment and layout design - St Helier Transportation Centre (Liberation Place) (2002-2008)
- EIA - Esplanade Square, St Helier (2006)
- EIA and Transport Statement - Jardins de la Mer, St Helier (2005-2006)
- Transport Assessment, traffic modelling and preliminary design - Esplanade Quarter, St Helier (2005 – ongoing)
- Transport Statement - Castle Quays, St Helier (2005)
- Preliminary design - Jersey Harbour Ferry Terminal Improvements (2004)
- Micro Simulation Model Preparation of a VISSIM traffic model to assess impact of development proposals - Waterfront Development area St Helier (2003-2005).

On the back of these projects we have established a network of relationships with relevant organisations and individuals in Jersey, including in States of Jersey departments.

## 1.5

### **AECOM's Accreditation**

AECOM's offices operate an Integrated Management System (IMS) which is certified and regularly audited under ISO 9001:2000 (quality), ISO 14001:2004 (environmental management) and OHSAS 18001 (health & safety). We are, as a company and many of our professional environmental staff as individuals, members of the UK Institute of Environmental Management and Assessment (IEMA) and many other professional organisations. For example, staff in our noise team are Full or Associate members of the Institute of Acoustics. The company is also a member of the UK Environmental Law Association (UKELA) and the Environmental Industries Commission (EIC).

## 2 Methodologies

### 2.1 Ecology

#### 2.1.1 Approach

Conducting an initial protected species walkover is a useful way of identifying any potential ecological constraints to a development. By identifying any such constraints at an early stage, it is possible to include further surveys and / or any mitigation required in the development programme, thus reducing the risk of unexpected issues that could cause delays or increase costs. It also provides the opportunity to identify possible ecological enhancement options that could be included in the project design.

#### 2.1.2 Methodology

A walkover survey would be conducted by a suitably qualified ecologist. All accessible areas of the site would be surveyed for the presence of, or potential for, protected species. On a relatively urban site such as this the most common ecological constraints are likely to be bats and nesting birds and potentially reptiles. However, the surveyor would also assess the site for any other protected species and habitats and species of nature conservation interest.

The surveyor would assess all of the habitats on site (including built habitats such as buildings and roof voids if safely accessible), any areas of planting and/or trees for their potential to support protected species, as well as looking for protected species themselves and evidence / field signs of protected species.

Field signs for bats include droppings, corpses, scratch marks, urine stains and clean, cob-web free gaps around potential entrance points in buildings and roofs. Ideally, the surveyor would need access to the roof voids (if present) to assess their potential for bats.

Signs such as old, or occupied nests, bird dropping beneath suitable ledges and generally high levels of bird activity (including breeding behaviour) on a site indicate a risk of nesting birds.

The suitability of habitat on, or immediately around, the site would be assessed for its potential to support other protected species. The presence of some types of ponds in the vicinity may increase the risk of newts being present, if suitable hibernacula exist on site, for example.

The client and the States of Jersey Ecologist (with client prior approval) would be contacted for any pre-existing knowledge of protected species at or in close proximity to the site.

#### 2.1.3 Initial Reporting

Following on from the site visit, we would produce a letter to the client outlining the findings of the survey. The letter would provide a preliminary summary of any potential constraints to the proposed development and highlight where further surveys would be required (if necessary). It would also provide some general recommendations on timings, such as when to demolish the buildings to avoid the bird nesting season, if applicable.

Please note that this letter is not a full Biodiversity Survey report and further, specialist, surveys may be required if the walkover identifies the presence of, or potential for, protected species.

The final reporting format, to be agreed with the client, is described in a separate section further below.

#### 2.1.4 Programme

The proposed ecological work can be completed, subject to data availability, and normal flight schedules and site access, in two weeks.

## 2.2 Noise Survey

### 2.2.1 Approach

In summary our approach includes:

- Measurement on site of local existing (day and night time) noise levels;
- Assessment of the suitability of the site for residential use with regard to planning approval; this will use:
  - noise prediction modelling, to demonstrate how noise propagates across the site;
  - planning policy guidance standards;
- Report including recommendations for mitigation measures (if the latter are required).

### 2.2.2 Methodology

#### 2.2.2.1 Site Survey

To provide an indication of existing ambient noise levels, a site survey will be conducted to establish the noise character of the area over different time periods. Recorded parameters will include the  $L_{A90}$ , an indicator of background noise and  $L_{Aeq}$ , the equivalent continuous noise level. Measurement practice will be in accordance with the principles of the relevant British and International Standards.

A series of short term attended measurements will be conducted within a 24 hour period. This will provide a record of the existing noise climate. It is envisaged that monitoring will be undertaken at either 2 or 3 locations at suitable locations near the site.

#### 2.2.2.2 Noise Assessment

The relevant assessment guidance is provided in the UK's Planning Policy Guidance 24 (PPG 24) 'Planning and Noise', which is used to assess the suitability of an area for residential use.

For larger development sites it is quite possible that different areas of the site will fall into different daytime and night-time Noise Exposure Categories (NEC) due to varying distance from local noise sources (major roads, railway lines, airports, industrial sources for example). The recommended values for specifying NEC bands is tabulated in PPG24 and repeated exactly below:

Noise Levels Corresponding to the Noise Exposure Categories for New Dwellings $L_{Aeq,T}$ (dB)				
Noise Source	Noise Exposure Category			
	A	B	C	D
Road Traffic				
07.00 - 23.00	<55	55 - 63	63 - 72	>72
23.00 - 07.00	<45	45 - 57	57 - 66	>66
Rail Traffic				
07.00 - 23.00	<55	55 - 66	66 - 74	>74
23.00 - 07.00	<45	45 - 59	59 - 66	>66
Air Traffic				
07.00 - 23.00	<57	57 - 66	66 - 72	>72
23.00 - 07.00	<48	48 - 57	57 - 66	>66
Mixed Sources				
07.00 - 23.00	<55	55 - 63	63 - 72	>72
23.00 - 07.00	<45	45 - 57	57 - 66	>66

The action to be taken once the NEC rating of the site has been assessed is extracted directly from PPG24 as follows:

NEC	Determination
A	Noise need not be considered as a determining factor in granting planning permission, although the noise level at the high end of the category should not be regarded as a



	desirable level.
B	Noise should be taken into account when determining planning applications and, where appropriate, conditions imposed to ensure an adequate level of protection against noise.
C	Planning permission should not normally be granted. Where it is considered that permission should be given, for example because there are no alternative quieter sites available, conditions should be imposed to ensure a commensurate level of protection against noise.
D	Planning permission should normally be refused.

For example, for an area of a site subject predominantly to road traffic noise an existing daytime noise level of less than 55 dB  $L_{Aeq,16h}$  corresponds to Noise Exposure Category A. An existing night time noise level of less than 45 dB  $L_{Aeq,8h}$  corresponds to Noise Exposure Category A. No noise mitigation measures would be required at a site falling entirely into NEC A for day and night-time purposes.

For areas falling into Noise Exposure Category B or C it is possible to address moderate or high levels of environmental noise for future residents by specifying noise reduction measures such as acoustic barriers to reduce noise levels to future gardens and facades, and acoustic ventilation and glazing to reduce internally transmitted noise.

In order to demonstrate how noise propagates across the site, a noise prediction model will be constructed using the Cadna-A software package. Cadna-A has been proven during extensive use in Germany and the UK over the last decade for mapping urban environments and industrial sites.

The model would allow noise levels to be predicted across the site to demonstrate the effect of screening, distance from the principal noise sources and other propagation factors. The measured noise levels would be used to validate the predicted levels.

Noise contour plots will be produced, similar to the example in Figure 1. These maps provide a convenient and readily understood format to present the results.



Figure 1 Example of a Cadna-A Noise Contour Map

From the predicted noise levels and the noise survey data, a PPG24 assessment will be conducted, to demonstrate the suitability of the site for residential development. Generic mitigation measures will be proposed if necessary.

### 2.2.3

#### Data Requirements

Detailed electronic maps showing the area concerned will be required, in dwg or dxf format. These maps are essential as they allow distances between noise sources and sensitive receptors to be measured accurately. These maps should cover not just the development site,

but the wider area to include, for example, roads, railway lines and noise sensitive properties in the vicinity of the proposed development. It is understood that suitable mapping is available from the client or his planning advisors.

For roads surrounding the development, the following traffic data will be required for both the existing, do something (with scheme) and do minimum (without scheme) scenarios:

- Traffic flow (18 hour annual average weekday traffic AAWT)
- Proportion of HGVs using the link
- Speed of vehicles on each link.

Traffic data will be provided from the AECOM transport planning assessment, should they be appointed. Otherwise this information may be available from the States of Jersey Transport and Technical Services Department.

#### 2.2.4

##### Initial Reporting

An initial letter style report will be provided to the client, highlighting the findings and any recommendations, also allowing client team comments.

The final reporting format, to be agreed with the client, is described in a separate section further below.

#### 2.2.5

##### Programme

We will, upon appointment and provision of the required data, start immediately and would aim to submit the report within 3 weeks. It should be noted that noise surveys on site are dependent on fair weather conditions.

### 2.3

#### Contaminated Land

#### 2.3.1

##### Approach

We propose a geo-environmental contaminated land assessment and an assessment of geotechnical foundation aspects for the project. The approach we propose is phased, with three main phases that are required at different subsequent stages in the project cycle.

The three phases are:

- Phase 1 – an initial site evaluation, which comprises a non-intrusive desk study assessment and walkover, with an assessment of historical records, maps and site usage, review of the site geological, hydrogeological, topographical and geomorphological setting, an outline of investigation requirements, and preparation of a Desk Study Report;
- Phase 2 - design and procurement of a targeted intrusive investigation to obtain data for the assessment of site specific issues followed by preparation of a Interpretative Report that addresses site risk issues;
- Phase 3 works – these generally comprise a Remediation Strategy and post fieldworks Validation Report, the need for which can only be determined following the completion of Phase 1 and Phase 2 activities

The requirement at planning stage is likely to be only for a first phase, thereafter, dependent on the risks identified, second phase investigations may be following in advance of the design work, as follows:

Phase 2 - at a later stage in the project a Phase 2 ground investigation can be designed and specified to assess the site ground and groundwater conditions in relation to the site liabilities (e.g. ground or groundwater contamination) and geotechnical aspects for the proposed development (e.g. drainage, foundations). Contractor costs for Phase 2 can be established once the Phase 1 works are done and risks identified. The extent and cost of the ground investigation will require a cost risk balance to obtain the right level of information for the development. This can be examined following the Phase 1 desk study assessment;

Phase 3 - following the Phase 2 works, if significant contamination is identified a remediation strategy would be required for implementation during construction. This would be followed by a validation report to close out the works completed. The requirement for Phase 3 works is dependent on the findings of the risk assessment work done for the Phase 2 report.

Based on the above approach, this proposal, therefore, only includes details of the Phase 1 for planning stage.

### 2.3.2

#### Methodology

The scope of the Phase 1 Desk Study Report involves the following activities:

- A review of relevant data held by statutory authorities
- Documentation of the history of development on and around the site, via discussions with the site owners and historical records
- A site walkover aimed at identifying an obvious potential sources of contamination and/or geotechnical hazards
- A study of the local geology and hydrogeology from published literature sources
- Review of available borehole records for the site and nearby
- Obtain details of site service records from statutory authorities and Client
- A review of previous site investigation data provided by the Client (if available)
- A preliminary assessment of the geo-environmental liability issues (i.e. contaminated land) associated with the site; and
- A preliminary assessment of the geotechnical issues likely to influence the development
- Preparation of a Phase 1 Desk Study Report

### 2.3.3

#### Initial Reporting

An initial letter style report will be provided to the client, highlighting the findings and any recommendations, also allowing client team comments.

The final reporting format, to be agreed with the client, is described in a separate section further below.

### 2.3.4

#### Programme

We propose a two week period to complete the Phase 1 activities (a 13 week period should be allowed for as an indicative timescale only for subsequent Phase 2 works)

## 2.4

### Transport

### 2.4.1

#### Approach

We would propose to hold discussions (by telecommunication) with, and get data from, the States of Jersey Authority Highways Development Control officer (TTS Highway Engineer) to scope out the key issues / constraints with regard to the local highway network, the access and parking requirements for the proposals.

### 2.4.2

#### Methodology

Following the TTS consultation we propose to undertake:

- Understanding the current morning (0800-0900) and evening (1700-1800) peak hour vehicle trips associated with the existing Garden Centre and the operation of the following key junctions on the local highway network:
  1. A3 Longueville Road (W) / New York Lane;
  2. A3 Longueville Road (E) / New York Lane;

- Description and consideration of sustainable accessibility, including the existing public transport, walking and cycling facilities serving the site to demonstrate the availability of alternative travel modes;
- Derive residential trip rates to reflect the characteristics of the site (15 and 30 dwellings) and calculate the proposed vehicle trip generation;
- Initial trip netting to determine the net change in vehicle trips and the associated traffic impact during the morning and evening peak hours as a result of increasing the size of the development at the site from 15 to 30 dwellings;
- Initial consideration of site access arrangements;
- Consideration of parking requirements;
- We have identified and included in our fee the supply of traffic data in a format suitable for the Noise Assessment. Where available this information will be obtained from the States of Jersey Transport and Technical Services Department. Should a requirement for further traffic surveys be identified, the client will be advised of the scope of work and approximate cost prior to any surveys being undertaken.

#### 2.4.3 Initial reporting

An initial letter style report will be provided to the client, highlighting the findings and any recommendations, also allowing client team comments.

The final reporting format, to be agreed with the client, is described in a separate section further below.

#### 2.4.4 Programme

We propose a two week period to complete the above tasks, subject to suitable data being available from local Jersey sources.

### 2.5 Final Reporting

The 4 study proposals described above can be reported as a final report format, following the initial letter report to the client, in several ways:

- a brief letter style report,
- separate AECOM approved style reports, or
- an integrated environmental report with the four aspects forming chapters in one AECOM approved style report and checked against each others' findings by an EIA specialists used to deal with integrated reports for planning purposes.

We would recommend, in view of the overall purpose of this project the latter option, subject to client's approval. We will provide 5 hard copies along with one electronic version in pdf format.

## 3 Project Staff

As a main principle, all our work, including that as proposed in this document, will be conducted and quality checked by suitably qualified professionals and their superiors respectively. Brief summaries for the key staff responsible for the proposed work in Jersey are shown below. Full CVs can be provided upon request.

### **Ecology**

*Richard Graves BSc MSc Dip MIEEM CEnv*

Richard Graves is the ecology director UK for AECOM Ltd. He is responsible for the technical supervision and direction of one of the largest ecology teams in the UK. He has particular experience of providing ecological advice for development, for both public and private clients and for major housing, industrial, road and rail schemes. Richard is a trained expert witness and has given evidence at major public inquiries. He is a member of the council of IEEM, is a chartered environmentalist and is on the Eire National Parks and Wildlife Service ecologists panel.

### **Noise**

*Nigel Triner BSc MSc MIOA AIEMA*

Nigel Triner is Associate Director and environmental noise specialist with project experience in transportation, residential, commercial and industrial noise assessments. Recent projects include a Stage 3 DMRB (Design Manual for Roads & Bridges) study for a proposed trunk road improvement scheme and a proposed residential development site adjacent to the A40 in London. Both projects involved detailed noise modelling (using the Cadna-A software package) and giving evidence at Public Inquiry. Other projects include; preparation of the noise & vibration ES chapter for the Glasgow Airport Rail Link heavy rail scheme, a Plan Level TAG assessment for a busy town centre traffic management scheme (involving the use of Cadna-A) and a baseline noise study for a proposed tram scheme in London. He is experienced in a number of assessment methodologies including PPG24, BS4142, BS8233, BS5228, DMRB and TAG. As well as the Institute of Acoustics (IOA) Diploma in Acoustics and Noise Control, he also holds the IOA Environmental Noise Measurement Certificate of Competence. He won the Association of Noise Consultants National Prize for Best Diploma Project 2003 and was specially commended for achieving Merits in all parts of the Diploma.

### **Contaminated Land**

*Paul Stewart BSc MSc DIC FGS*

Paul is an Associate Director in the Geotechnical Section, with responsibility for the management and technical aspects of a variety of building, infrastructure and environmental projects. Specific areas of his expertise include: site investigations, contaminated land, soil sampling, geotechnical work; site appraisals; land and marine site investigation design; geotechnical interpretative reporting; tunnelling feasibility and settlement analysis; slope stability analysis, foundation analysis and design, due diligence; building assessment of settlement effects.

### **Transportation**

*Nick Anderson BSc CEng MICE FIHT*

Nick is a Regional Director responsible for the Development Planning Division services in the East and South East of England. He has over 30 years experience in transportation and highway design. He has extensive experience in development planning for a large number of land uses. For the last twenty years he has led a team of engineers working on all transportation and highway aspects of development projects from master planning through to implementation.

### **Environmental Impact Assessment**

*Jørgen Schouten Drs CEnv AIEMA MIEEM*

Jørgen Schouten, Technical Director (Environment) at AECOM Ltd is an environmental specialist with over 25 years professional international experience. His skills include: impact assessments (EIA, ESIA), strategic environmental assessment (SEA), environmental risk assessment (PEA), environmental management systems (EMS) and certification to ISO 14001), ecology and sustainability aspects. He integrated environmental performance in major construction projects, and applied sustainability at both corporate level and in construction projects, focusing on waste management, re-use of recovered resources and recycling of materials that remained. Jørgen has often initiated the use of project or corporate environmental improvements for internal and external PR activities. Jørgen has worked on projects in Western Europe (UK, Jersey, Spain, France, Netherlands), Africa (Morocco, Nigeria, Ghana), the Middle East (Oman, Qatar), and Eastern Europe (Bulgaria, Georgia).

## 4 Fees and Financial

This section brings together the four proposed fees and related assumptions, as proposed above, as well as proposed Invoicing (in Jersey VAT is not applicable) and Terms & Conditions.

### 4.1 Fees

#### 4.1.1 Ecology Fees

We propose the following fees for the proposed ecology work: **£2,963**, which includes disbursements for one site visit and data / reporting costs.

#### 4.1.2 Noise Fees

The cost for the proposed methodology is **£3,838**, based on the following assumptions:

- All travel, subsistence, costs and disbursements, instrumentation time and reporting, including a review of relevant literature and standards, are included in the above fixed sum;

#### 4.1.3 Contaminated Land Fees

Based on the above scope and our fee proposal the contaminated land fees would be **£4,263**, including £700 disbursements for one site visit and data / reporting costs. These fees are based on the following assumptions:

- The proposal assumes that site work can be undertaken during normal weekday working hours and that continuity of work can be maintained;
- Regulatory sign off cannot be guaranteed due to influences outside our direct control.
- Excluded are: Phase 2 and 3 works; costs for specialist reports (UXO, Archaeology, etc) and for obtaining full statutory service plans; ground investigation contractor costs excluded; contract administration, site supervision and verification sampling of any contaminated land remediation works excluded; revisions to specifications or reports arising from changes to the development layout or clients requirements will be regarded as contract variations and time charged using the schedule of rates;

#### 4.1.4 Transport Fees

We would propose the following fees of **£3,363**, including an allowance of £150 for some reasonable disbursements. At this stage, we have not allowed for:

- The design or detailed capacity assessment of any junctions; work in connection with improved sustainable transport infrastructure or services.

#### 4.1.5 Additional work

It is proposed that, where appropriate, any work items not included in the above proposals or those that will be identified as required at a later stage, would be charged at our standard 2009 hourly rates as set out in the table below, and depending on who would be required. These rates are subject to review in January 2010.

##### 2009 Hourly Rates

Grade	Hourly Rate (including reasonable expenses)
Director	£125 -145
Regional Director	£100 - 110
Associate Director	£85 - 90
Principal Consultant	£70 - 75
Senior Consultant	£60
Consultant	£50 - 53
Graduate	£48
Technician	£40

= £14,427

Such additional work could include: site visits or any project related meetings (e.g. design team meetings); data purchase costs; further survey work. For any such additional costs prior client approval will be sought.

**4.2 Invoicing**

Individual tasks identified above will be invoiced at month end following completion of the task, unless otherwise agreed, and is subject to payment within 30 days net.

**4.3 Terms and Conditions**

We propose that the works will be undertaken in accordance with the standard terms and conditions, as appended (Appendix A). We would be pleased to consider any particular standard forms of agreement. However, in the interim the attached terms and conditions of engagement will apply until the mutual agreement of an alternative. This fee proposal is valid for 90 days from the date of issue.

# Appendix A – Terms and Conditions

## Terms and Conditions of Appointment



You acknowledge that in instructing AECOM Limited to commence the services described in our proposal (the "Services") you agree to the application of the terms and conditions below (the "Appointment") to the exclusion of any other terms or conditions that have been proposed by you.

- |  |   |                                      |
|--|---|--------------------------------------|
| <p>1. We shall exercise reasonable skill, care and diligence in the performance of the Services and any programme agreed in relation thereto. In the event that you request a variation to the Services we shall notify you as soon as is reasonably practicable of the impact of such variation on the cost and programme of the Services.</p>  | } | PARTIES' OBLIGATIONS                 |
| <p>2. You shall supply us with all relevant data and information available to you in relation to the Services and shall give such assistance, decisions and access as may be reasonably required by us and in sufficient time to enable the performance of the Services in accordance with any agreed programme.</p>   |   |                                      |
| <p>3.1 Unless otherwise agreed in writing, we shall issue invoices one (1) month in arrears for Services performed during the preceding calendar month and on termination or completion of the Services. For the purposes of this Appointment, the payment due to us shall be the sums set out in the invoices. The due date for payment shall be two (2) days following the issue of invoices. The final date for payment shall be twenty eight (28) days after the due date.</p>   | } | PAYMENT                              |
| <p>3.2 In the event of late payment, we may (a) charge default interest calculated in accordance with the Late Payment of Commercial Debts (Interest) Act 1998 or default interest at three (3) percent above the relevant Barclay's Bank plc base rate (whichever is the higher) on all amounts remaining unpaid after the final date together with all other costs reasonably incurred by us and/or (b) suspend the Services until payment of the arrears plus applicable interest is received in cleared funds, without prejudice to Clause 6.</p>  |   |                                      |
| <p>4.1 We shall maintain professional indemnity insurance for an amount no less than that described in Clause 4.2 below, provided always that such insurance remains available in the market on commercially reasonable rates and terms.</p>   | } | INSURANCE AND LIABILITY              |
| <p>4.2 Our liability under or in connection with this Appointment whether in contract, tort (including negligence), breach of statutory duty or otherwise shall not exceed the lesser of (a) ten (10) times our aggregate fee for the Services or (b) two hundred and fifty thousand pounds (£250,000) in the aggregate, provided always that nothing in this Appointment shall exclude or limit our liability for death or personal injury caused by our negligence or for fraudulent misrepresentation.</p>  |   |                                      |
| <p>4.3 Without prejudice to Clause 4.2, our liability shall be further limited to such sums as we ought reasonably to pay having regard to our responsibility for the loss and damage suffered on the assumptions that any other consultants, contractors and sub-contractors who also have a liability to you shall be deemed to have provided you with contractual undertakings on terms no less onerous than those set out in Clause 1 and paid you such proportion of loss and damage which it would be just and equitable for them to pay having regard to the extent of their responsibility.</p>                |   |                                      |
| <p>4.4 In the event that any claims, demands or proceedings are advanced by any person against us under or in connection with this Appointment which result in us paying any amount in excess of the limit of our liability described in Clause 4.2, you shall indemnify and hold us harmless in respect of any and all amounts in excess of the limit of our liability.</p>   |   |                                      |
| <p>4.5 Save in respect of death or personal injury, you shall only look to us (and not to any individual employee of ours) for redress if you consider that there has been any breach of this Appointment. You agree not to pursue any claims in contract, tort (including negligence), statute or otherwise against any individual employee of ours as a result of them carrying out the Services.</p>  |   |                                      |
| <p>5. Copyright in all drawings, designs, documents and materials of any nature prepared by us for you (the "Intellectual Property") shall remain vested in us but you shall have a licence to use the Intellectual Property for the purposes for which it was prepared by us, subject always to us having received full payment for the Services in accordance with this Appointment. We shall not be liable for the use of any Intellectual Property for any purpose other than that for which it was originally prepared by us.</p>   | } | COPYRIGHT                            |
| <p>6.1 Either party may by written notice terminate this Appointment immediately if the other party has a bankruptcy order made against it or makes an arrangement or composition with its creditors, or enters into liquidation (whether voluntary or compulsory) or if any proceedings are commenced relating to its insolvency or possible insolvency.</p>  | } | TERMINATION                          |
| <p>6.2 Either party may by written notice terminate this Appointment if the other substantially fails to perform its obligations under this Appointment, provided that the terminating party has first given the other party not less than fourteen (14) days written notice served by recorded delivery to the other specifying the default and referring to this Clause and the default has not been remedied prior to termination taking place.</p>   |   |                                      |
| <p>6.3 In the event of termination for any cause whatsoever, we shall be entitled to be paid for all Services performed up to the date of termination and not yet paid for by you.</p>   |   |                                      |
| <p>7. This Appointment is personal to you and non-assignable. This Appointment shall not confer and shall not purport to confer on any third party any benefit or any right to enforce any term of this Appointment for the purposes of the Contracts (Rights of Third Parties) Act 1999 or otherwise. The provision of collateral warranties to third parties is excluded.</p>  | } | THIRD PARTY RIGHTS                   |
| <p>8.1 If at any time a dispute arises under this Appointment which cannot be settled amicably between the parties, either party may refer the dispute to adjudication in accordance with the Construction Industry Council ("CIC") Model Adjudication Procedure current at the date the dispute arises. The parties shall agree a sole adjudicator or failing such agreement, the CIC will nominate a sole adjudicator. The adjudication shall be conducted in English under the laws of England and Wales. This Appointment shall be governed by and construed in accordance with the laws of England and Wales.</p> | } | GOVERNING LAW AND DISPUTE RESOLUTION |
| <p>8.2 This Appointment represents the entire agreement and understanding between the parties relating to the subject matter of this Appointment. You acknowledge that you have had an opportunity to negotiate the terms and conditions of this Appointment prior to the commencement of the Services.</p>  |   |                                      |