JP Chick & Partners Ltd
Consulting Civil & Structural Engineers

Demolition of Buildings at the Junction of Blyth Road and Station Road, Southwold, Suffolk

Southwold Town Council

PRE-DEMOLITION INFORMATION

Produced in accordance with the CDM Regulations 2015

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DOCUMENT CONTROL

Documentation Produced by:

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On behalf of J P Chick & Partners Limited

JPC ISSUING OFFICE ***7 Museum Street, Ipswich, IP1 1HQ***

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This document is to assist with the compilation of the Demolition Phase Plan. The Principal Contractor is to ensure that this document is made available/issued together with the Principal Contractor's Demolition phase plan to all contractors prior to working on site. When the Demolition phase plan is completed, the Client is responsible for ensuring that it is adequate before a start can commence on site. The Principal Designer will require to have a copy of the Client's/Client advisor's confirmation of adequacy.

J P Chick & Partners Limited Competence:

We have highly experienced and trained team undertaking the CDM roles of Principal Designer and Client Advisor who are qualified to Nebosh construction certificate level (qualifying them to inspect construction sites) and are members of the Association of Project Safety. As Designers (Civil & Structural Engineers) we are well placed to undertake all aspects of CDM. We had been undertaking CDM Co-ordinator role since 2007 up until the 2015 regulation changes. We now undertake the Principal Designer and Assistant Principal Designer role as well as the non-regulatory Client Advisor role.

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1.0 Brief

J P Chick & Partners Limited were appointed by Southwold Town Council to undertake the Principal Designer/Assistant role for the project described below, on 08 April 2021.

2.0 Planning and Status of Project

Has the design process started?	**Yes**
Under CDM Regulations, is the client domestic or commercial?	**Commercial**
Has planning been granted?	**Yes**
Has the Client appointed a PD prior to our appointment?	**No**
Does the demolition require an F10 notification?	**N/A**

3.0 Description of the Project:

3.1 The Project is: Demolition of garages, together with decommissioning of underground tanks. Located; at the junction of Blyth Road and Station Road, Southwold, Suffolk in accordance with the Demolition specification produced by J P Chick & Partners Ltd.

Grid Reference: X (Easting): 650470 Y (Northing): 276597

3.2 The client must allow the Principal Contractor sufficient mobilisation time between appointment and start of the demolition phase, so they have enough time to carry out their duties to plan and manage the demolition phase.

Minimum mobilisation time	**3 Weeks**
When is the project expected to start?	TBA
Approximately how many weeks will the project last?	TBA
Is the site contaminated	**Yes**
Is any part of the site expected to be occupied during demolition?	**Yes**

4.0 Contact Details:

Design Team	Company Name, Address, email, telephone no.,	Contact Name
Client	Southwold Town Council Town Hall Market Place, Southwold, Suffolk, IP18 6EF	Will Windell - Councillor
Principal Designer for demolition only	J P Chick & Partners Ltd 7 Museum Street, Ipswich, Suffolk IP1 1HQ - Tel: 01473 280699	Yvonne Crowther Mob: 07766542958
Quantity Surveyor and Project Manager	Richard Utting Associates LLP 63c Thorpe Road Norwich, Norfolk, NR1 1UD Tel: 01603 611 281	Jason Wells Mob: 07702 098779
Structural Engineer/ Environmental Engineer	J P Chick & Partners Ltd 7 Museum Street, Ipswich, Suffolk IP1 1HQ - Tel: 01473 280699	Gavin Brundell Mob: 07917 776149 Robin Crowther Mob: 07525 909184

5.0 Existing records

Description of records	YES/NO	LOCATION ITEM CAN BE SOURCED/Associated Risk	APPENDED to this document
Electrical service drawings	**No**	Strike of live service	**No**
Gas service drawings	**No**	Strike of live service	**No**
Water service drawings	**No**	Strike of live service	**No**
Drainage service drawings	**No**	Contamination of existing service	**No**
Asbestos Survey – within demolition specification	**Yes**	Ashbee Surveying Ltd	**Yes**
Contamination Reports Phase I, II	**Yes**	J P Chick & Partners Ltd – See Appendices	**Yes**
Demolition Specification	**Yes**	J P Chick & Partners Limited – see appendices to this document	**Yes**

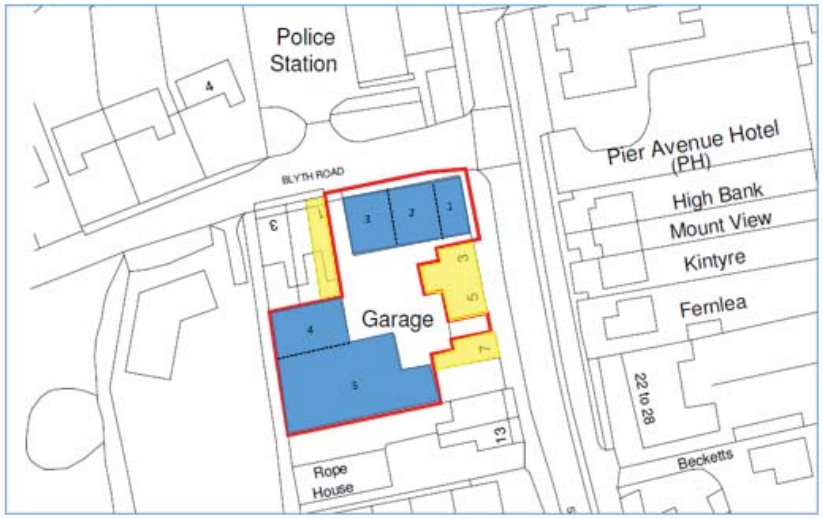


Figure 1 – Extract of Site Location Map showing buildings to be demolished and retained.

COLLATION OF INFORMATION OF SIGNIFICANT RISK IDENTIFIED DURING DESIGN:

- **Demolition Risks**
- Adjacent neighbouring occupied properties – security, debris protection
- Tennant/occupiers accesses within the site boundary – security management, debris protection
- Adjacent roads and public footpaths – diversion/temporary closure, debris protection
- Neighbouring local allotments - debris/ dust contamination protection
- Party walls forming part of buildings to be demolished – Security for occupants and debris protection.
- Services isolation
- Unexploded Bomb Ordinance (UXO) Preliminary survey required a detailed survey being undertaken by the Client.
- Asbestos – removal by licensed operator
- Dust and Noise – nuisance to neighbours and adjacent road users
- Stability of existing structures to remain during excavation of slabs and tanks

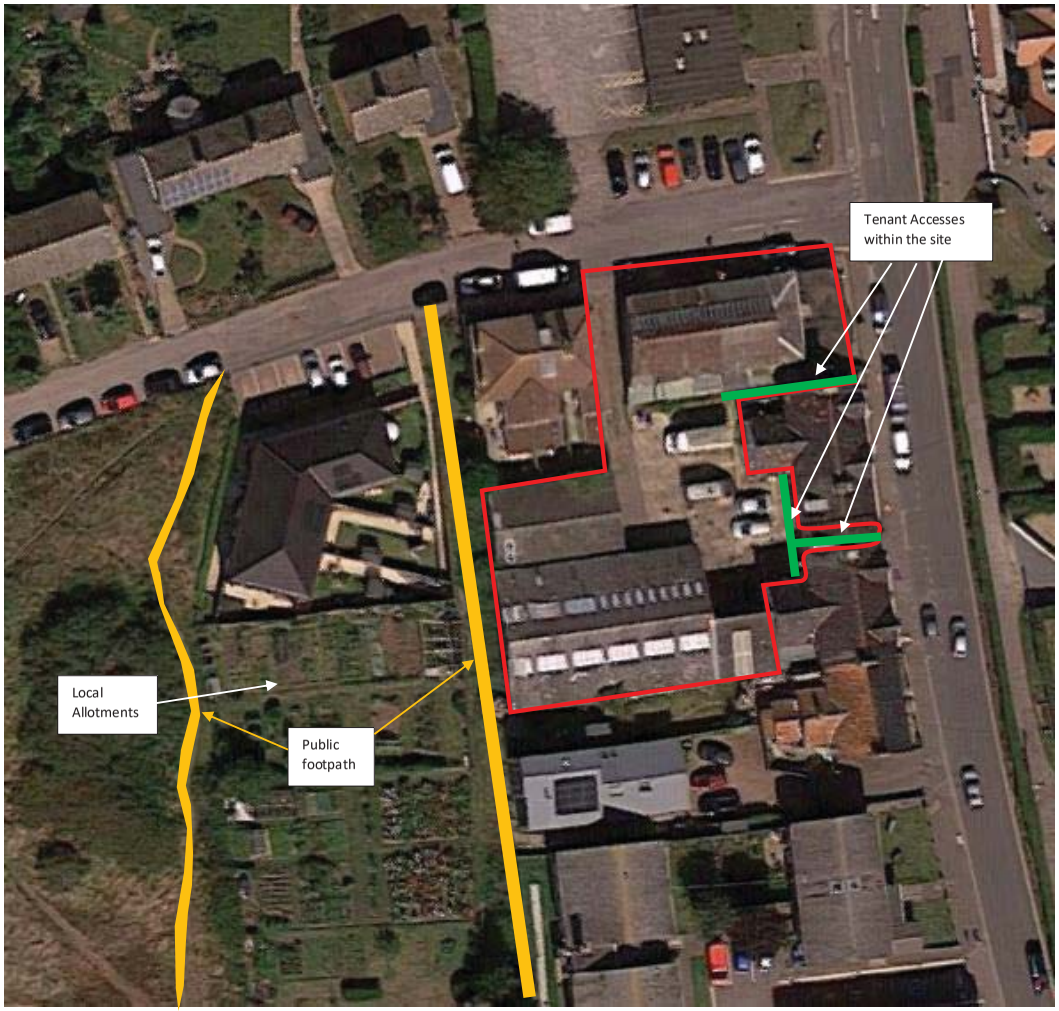


Figure 2 – Extract of Google Maps showing boundaries and public footpaths.

6.0 CLIENT'S CONSIDERTATIONS AND MANAGEMENT REQUIREMENTS:

6.1 Arrangements for Planning & Management

6.1.1 The Principal Contractor is responsible for the arrangements for planning and managing the demolition work including any health & safety goals for the project. Together with the production of a demolition plan.

6.1.2 The Client must make suitable arrangements for managing a project, including the allocation of sufficient in time and other resources. Arrangements are suitable if they ensure that:

6.1.3 Demolition work can be carried out, so far as is reasonably practicable, without risks to the health or safety of any person affected by the project.

6.1.4 The facilities required by Schedule 2 are provided in respect to any person carrying out demolition work.

6.1.5 To ensure that the demolition Plan is drawn up by the Principal Contractor before demolition work begins.

6.2 Communications and Liaison between Client and Others

6.2.1 The design team will communicate on an as needed basis to allow for the co-ordination of the tank removal on site.

6.2.2 State how communications will take place via email and Microsoft Teams.

6.2.3 The Principal Contractor is to ensure that the site is secure at all times.

6.3 Welfare

6.3.1 The Client must ensure that there is sufficient welfare on site from the start of the project through to the completion of it. The Principal Contractor will demonstrate and report on the welfare arrangements. **See Appendix A for CDM Regulations 2015 Schedule 2 Welfare.**

Description	Risk/Mitigation	Information Required within CPP
Welfare Arrangements		**Yes**
Welfare provision must be provided on site (must include male & female toilets, washing facilities hot and cold, drying facilities and rest room provision - minimum of kettle and microwave) **All indicated in HSE – CIS59 available for download from HSE website. http://www.hse.gov.uk/pubns/cis59.pdf** **What will be the arrangements on site? – please indicate on a site plan where the facilities are located.**		

7.0 SITE WIDE CONSIDERATIONS AND PRINCIPAL CONTRACTOR REQUIREMENTS:

Description	Risk/Mitigation	Information Required within Demolition plan
Is the site in a rural area or city/town? Will the public be close by?		**Yes**
• Management arrangements • Traffic management plan • Fire plan		
Delivery and Access Restrictions		Yes/No/N/A
The principal contractor is to plan any deliveries in advance to avoid clashing with any activities of adjacent sites, rush hour and or schools. The principal contractor is to ensure that the safety of the public when unloading deliveries if not within site boundaries – a banksman should be utilised to control these deliveries. The site is accessed off the A12 off the A1095 on the junction of Blyth Road and Station Road in Southwold		
Will the site/structure be occupied by the Client/employees during the works		**Yes**
The site dwellings will remain in occupation during demolition work. In these circumstances, the precautions will need to be considered to make sure the risks to the occupants (and adjacent public areas) are properly controlled. Separating the occupiers from the work, storage of materials and preventing unauthorised access will be required to be set out within the demolition phase plan. • Access arrangements • Phasing requirements • Protection/Segregation **The principal contractor is to have adequate COVID-19 procedures in place. These COVID-19 procedures are to include social distancing arrangements, cleaning routines, systems of travel etc. The COVID 19 procedures are to be communicated with all visitors to site. This is to be included within the demolition phase plan (CPP).**		
Site Security/Hoarding		**Yes**
The principal contractor must define boundaries physically, where necessary, by suitable fencing. The type of fencing should reflect the nature of the site and its surroundings. Either heras style fencing or hoarding. Determining the boundary is an important aspect of managing public risk. You need to: a. provide the fencing; and		

b. maintain the fencing.

- The boundaries and public right of ways and accesses will need to be planned for.

The Principal Contractor is to outline security arrangements within their Demolition Plan.

Site Transport arrangements and or vehicle movement restrictions	**Yes**

The following actions will help keep pedestrians and vehicles apart:

a. Entrances and exits - provide separate entry and exit gateways for pedestrians and vehicles;
b. Walkways - provide firm, level, well-drained pedestrian walkways that take a direct route where possible;
c. Crossings - where walkways cross roadways, provide a clearly signed and lit crossing point where drivers and pedestrians can see each other clearly;
d. Visibility - make sure drivers driving out onto public roads can see both ways along the footway before they move on to it;
e. Obstructions – do not block walkways so that pedestrians have to step onto the vehicle route; and
f. Parking – establish on site if room or utilise the surrounding areas ensuring that disruption is not caused locally or to adjacent residents.

Please indicate information on a site plan.

Are there any working area/time restrictions?	**Yes**

The Town and Country Planning Act 1990 permits the planning authority to attach conditions to planning decisions and it is a requirement to fully comply with any conditions imposed.

The Control of Pollution Act 1974 and Environmental Protection Act 1990 places specific duties on building contractors to ensure that noise, smoke and dust is kept to a minimum.

The demolition works shall not take place other than between the following times, subject to amendment by East Suffolk District Council:

07.30 – 1800 hours (Monday to Friday)
08.00 – 13.00 hours - Saturday

No Sunday or Bank Holiday working will be permitted.

Are there any existing client designated confined spaces?	**Yes**

Any areas with restricted access and egress, natural ventilation and not used as a regular place of work must be treated as a confined space. This includes excavations, loft spaces etc.

- There are existing inspection pits within the garages.

Are there any no go areas –permit to work systems?	**Yes**

Some work of a particularly hazardous nature may need to be carried out under a formal permit-to-work system.

- The Principal Contractor may need to utilise a permit to work for the following:
  - Isolation of electrical works.
  - Hot works.
  - Excavation.
  - Lone working.
  - Lifting operations.
  - Work in confined spaces.
  - Work at height.
  - Work to roofs.
  - Temporary works.

Are there any restrictions on waste collection or storage on site?	**Yes**

- Full details of the proposed waste disposal routes will be provided by the Principal Contractor prior to start on site.

- All waste will be legally managed. Any waste operations that the Principal Contractor carried out on site needs to be authorised by the appropriate exemption letter, licence, or permit. A copy of a valid Environmental Permit, Waste Management Licence or Waste Exemption registration letter (including a schedule of the waste categories and activities authorised as part of the licence/ exemption) will be recorded on site and available for inspection.

- If hazardous waste is produced on site, the Principal Contractor will comply with the Hazardous Waste Regulations.

- As the Site Waste Management Plan (SWMP) is implemented, the Principal Contractor will obtain evidence of actual waste management routes and provide Waste Transfer Notes as required.

- Waste Transfer Notes (WTNs) and Hazardous Waste Consignment Notes (HWCNs) must be completed with full details of the waste being removed, in accordance with Duty of Care legislation and Hazardous Waste Regulations. A copy of all WTNs, HWCNs and any other supporting evidence must be recorded and available for inspection.

What is the previous land usage?	

Up until 1904, this parcel of land was lying between Southwold Railway Station and Southwold's Gas Works on Station Road. Blyth Road was not yet in existence, it was a track to the town's sewage works. By 1905 Hurren Terrace had been constructed on the site, these appeared to be domestic properties with a laundry and garage in the courtyard behind the houses.

Does the site have a risk of Unexploded Ordinance (UXO)?	Yes

Southwold is within a high area for UXO. The Client has undertaken a Preliminary UXO Risk Assessment, which recommends a further detailed risk assessment is undertaken. The preliminary report is within the Appendices of the Demolition Specification.

The client will undertake a detailed UXO desk study and risk assessment, a copy of which will be provided to you. If the risk is found to be high the following must be followed:

- The Principal Contractor must have an operational UXO Emergency Response Plan held on site with planned actions in the event of a UXO discovery.
- The Principal Contractor must give UXO safety briefings and awareness training on the identification of an UXO/UXB and following procedures to all site workers.
- During excavations, trial pitting and trenching into the site, UXO survey equipment should be utilised prior to breaking ground.

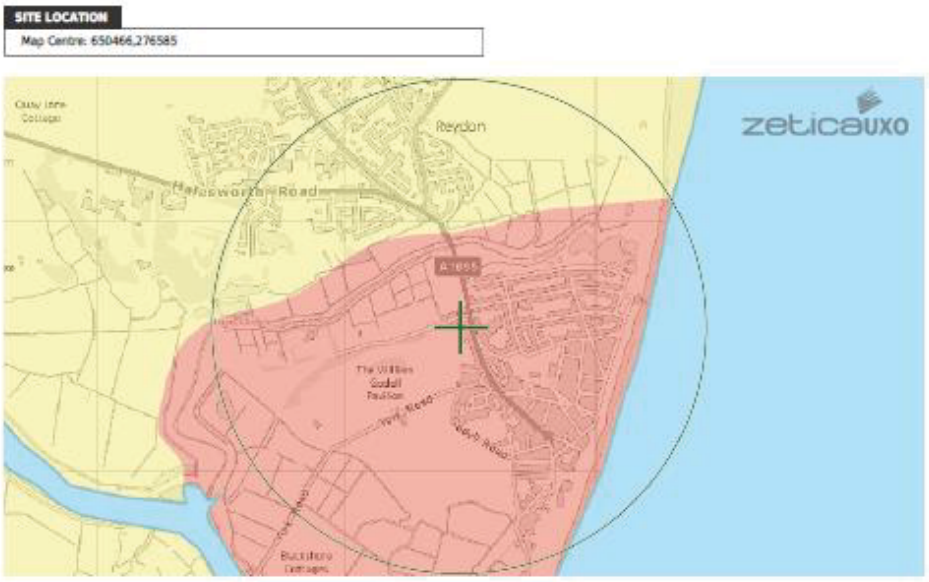


Figure 3 - Extract from UXO map showing high- risk

Is the site at risk from contamination, what surveys have been undertaken?	**Yes**

The legal definition identifies contaminated land as "land where substances could cause significant harm to people or protected species, significant pollution of surface waters or groundwater."

- There is a phase II Contaminated Land intrusive site investigation undertaken by JPC Environmental Services, is now reliant on the demolition to complete the site investigations and validation of tank removal – See Appendices.
- The demolition contractor is to have sufficient knowledge, training and expertise in contamination remediation practices.
-

If any further contamination is discovered whilst on site, the Principal Contract must report it to the Principal Designer asap.

Were the existing structures built before 2000. If so, then a demolition/renovation survey has to be undertaken prior to work starting	**Yes**

Asbestos is not a single type of mineral — rather, it refers to a group of silicate minerals that share the same fibrous nature. "white asbestos" (chrysotile), "blue asbestos" (crocidolite) and "brown asbestos" (amosite). See Appendices for further information.

- The main findings of the report are extensive areas of Asbestos cement. Some Ropes, yarns & cloth, reinforced plastics (cladding) and gaskets washings and strings
- The report can be found within the appendices.

Is there any storage of hazardous materials on site?	**Yes**

Designate storage areas for plant, materials, waste, flammable substances (e.g., foam plastics, flammable liquids and gases such as propane) and hazardous substances (e.g., pesticides and timber treatment chemicals). Flammable materials will usually need to be stored away from other materials and protected from accidental ignition.

- Ensure that all fuel storage is properly bunded and spill kits are available.
- All gas cylinders to be stored in cages in an open area.

Excessive Noise Dust and Vibration	**Yes**

Noise, dust and vibration do not usually pose a health risk to members of the public if their exposure is likely to be low and of a short duration. They can, however, cause serious problems in urban areas and work such as refurbishment, especially if part of the building is still occupied.

a. use noise suppression on equipment;
b. use water suppression;
c. provide solid barriers adjacent to public areas.

Security of excavations skips plant and machinery out of working hours	Yes

All plant should be immobilised out of hours; remove keys and starting handles and try to store them in a secure area; cab covers also make vehicles more difficult to enter. Excavations should not be left open overnight or out of hours unless protected from people falling in.

a. place excavator buckets, lift-truck forks etc on the ground at the end of the day;
b. check that all plant and equipment operatives are competent;
c. remove small hand tools from site or lock them up at the end of the day.

Does the project involve septic tanks or manhandling of existing drainage systems – Weil's Disease?	Yes

The risk of Weil's disease is linked to areas where rats are or have been present. Work is considered higher risk where there is evidence of rat infestation. This is most likely to be during refurbishment or demolition work. Other potential situations include work linked to canals, rivers or sewers.

- Buildings on the site have been empty for many months.
- Capping off drainage

If the project involves contact with Lead information on control within demolition plan	Yes

Lead can contaminate the skin and hands. The contamination can then be passed to a person's mouth when they eat or smoke. This is a particular problem when handling lead and sanding lead-based paint. Make sure people do not smoke or eat without washing first.

Are there any adjacent construction sites or any proposed?	No

- **None known.**

Are there any adjacent land users (Schools, railway lines, busy road etc., which may impact on the site?	Yes

- Station Road is the main route into Southwold, and this is extremely busy especially during the summer season.
- Blyth Road is access to neighbouring properties, the old police station area (still utilised for a Policy community support officer) and the sewage works further down the road this must remain accessible for access only.

Location of existing services/plans and their location	Yes

The Principal Contractor is to isolate services on site before works begin. The Principal Contractor is to also isolate services before establishing a temporary supply to site office/welfare unit.

The Principal Contractor is to consult all available drawings to determine the location of underground services. The Principal Contractor is to then survey ground with a CAT/Genny scanner or similar to determine

the exact location of underground services on site. The Principal Contractor is to mark the location of services on a drawing,

Protection of drainage to prevent demolition contamination of the sewer system.
Overhead services are in existence.

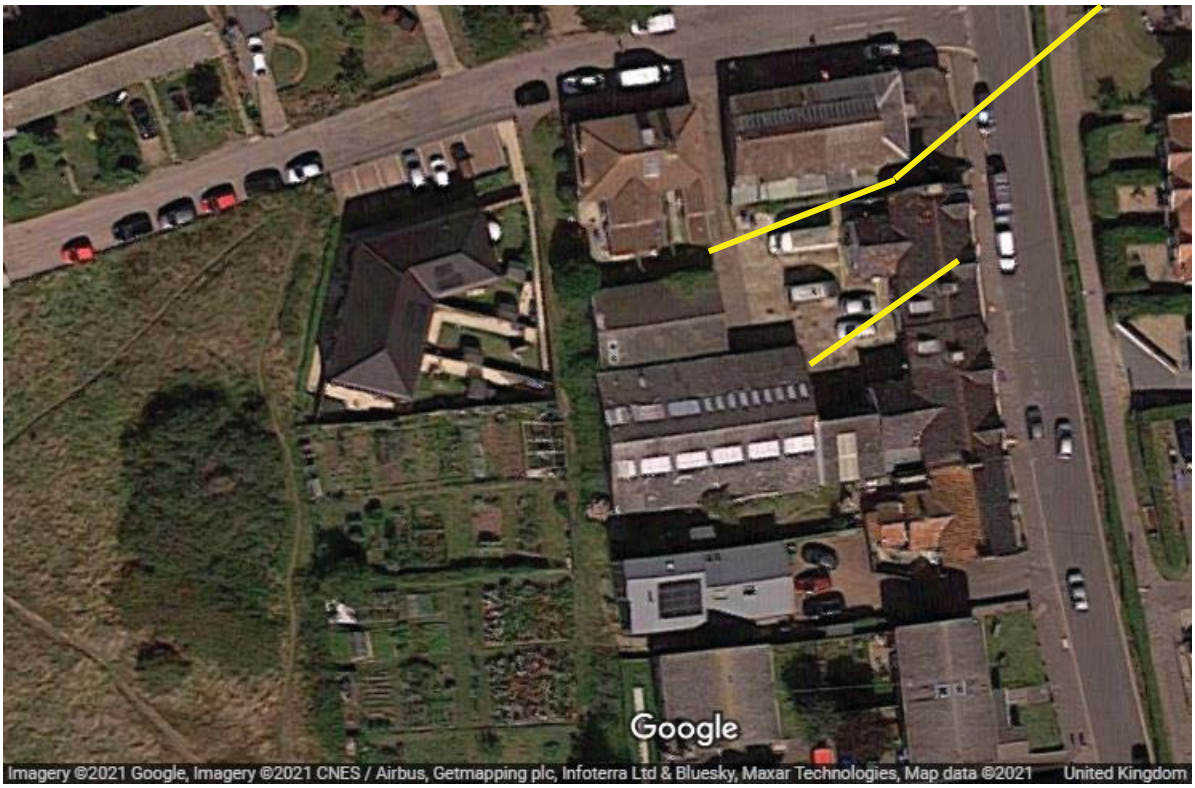


Figure 4 - Google map extract showing overhead cables.

Existing structures – stability, fragility, hazardous materials/ (Anchorage points for fall arrest systems during demolition):	**Yes**

If during the project, there is doubt of the building's stability then advice must be sort from a structural engineer.

- Stability of steel structures in the temporary state when roofs have been removed.
- Excavation of tanks destabilising existing structures.

Ground conditions –which may affect plant and ground workers:	**Yes**

Assessment of the likely ground conditions.

Figure 5 - BGS extract of geological deposits

Is the existing environment within a flood zone area, pluvial, fluvial or surface water?	**No**
The site is within flood zone 1.	

SIGNIFICANT DEMOLITION HAZARDS IDENTIFIED:

7.1 Significant design assumptions requiring risk assessment and method statement.

Demolition Risks	Required within Plan
• Adjacent neighbouring occupied properties – security, debris protection	**Yes**
• Tennant/occupiers accesses within the site boundary – security management, debris protection	**Yes**

• Adjacent road and public footpath – diversion/temporary closure, debris protection	**Yes**
• Neighbouring local allotments - debris protection	**Yes**
• Party walls forming part of buildings to be demolished – Security for occupants and debris protection.	**Yes**
• Unexploded Bomb Ordinance (UXO) Preliminary survey required a detailed survey being undertaken by the Client.	**Yes**
• Services isolation	**Yes**
• Asbestos – removal by licensed operator	**Yes**
• Dust and Noise – nuisance to neighbours and adjacent road users	**Yes**
• Stability of existing structures to monitored during excavation of slabs and tanks.	**Yes**
• Possible further contamination under tanks	**Yes**

8.0 FIRE PRECAUTIONS:

9.1 **Contractor to provide a comprehensive fire plan (which has to be updated regularly during Demolition).** Principal contractor is to take into account the joint code of practice of the protection from fire on Demolition sites and buildings undergoing renovation.

9.2 The Principal Contractor must strictly comply with the Regulatory Reform (Fire Safety) Order 2005 and Construction Design Management (CDM) Regulations 2015 (Regulation 32). A hot works permit should be issued for any hot works that takes place on site. In addition, if deemed necessary, a fire watch should be established during and after the work has finished. It is suggested to maintain a fire watch for 60 minutes after hot work finishes. For more information refer to HSE Leaflet - *INDG 297(rev1) – Safety in Gas Welding, Cutting and Similar Processes.*

9.3 NO SMOKING ON SITE – Designated areas to be established at site set up. In accordance with current UK legislation, a 'no smoking' policy must be established. Any designated safe open-air locations where smoking is allowed should be of a low fire risk design, away from any combustible or flammable materials and provided with metal ashtrays filled with sand.

Description	Risk/Mitigation	Information Required within Plan
Fire precautions		**Yes**
• Please ensure that a fire plan is completed and within the demolition plan.		

9.0 EMERGENCY PROCEDURES AND MEANS OF ESCAPE:

9.1 The Principal Contractor is to provide emergency procedures as required under Regulation 30 and 31 of the CDM 2015 Regulations. The Contractor is to outline the Fire/Emergency procedures within their Demolition Phase Plan.

9.2 The Principal Contractor when planning emergency procedures is to take into consideration the Emergency Workers (Obstruction) Act 2006 which makes it an offence to obstruct or hinder emergency workers who are responding to emergency circumstances.

9.3 Principal contractor is to ensure that safe means of access and egress from the site is maintained at all times.

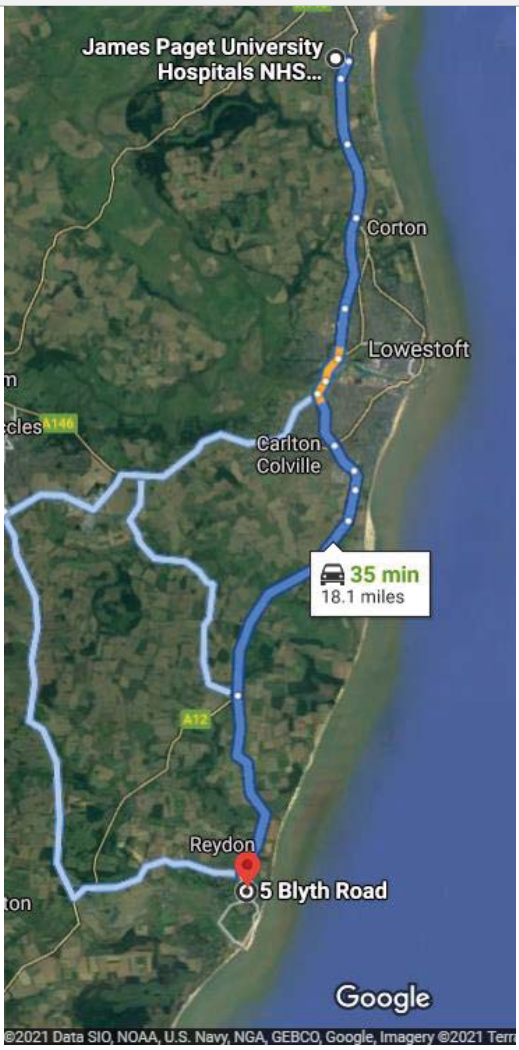
9.4

Description	Risk/Mitigation	Information Required within Plan
Emergency Procedures		**Yes**

In order to be prepared for any emergency event, the principal contractor will plan for reasonably foreseeable incidents and prepare a plan outlining procedure to be followed in such an event.

The principal contractor will, in consultation with workers and their representatives:
carry out a risk assessment to identify foreseeable major incidents for which emergency procedures would be required.

Nearest accident and emergency department:	**Yes**



https://www.nhs.uk/service-search/Urgent-Care/LocationSearch/0

James Paget University Hospital

Tel: 01493 452452
Lowestoft Road
Gorleston
Great Yarmouth
Norfolk
NR31 6LA

Opening Hours
Today: Open 24 hours

First Aid	Yes

The Health and Safety (First Aid) Regulations 1981 require all construction sites to have:

- A first aid box with enough equipment to cope with the number of workers on site.
- An appointed person to take charge of first aid arrangements.
- Information telling workers the name of the appointed person or first aider and where to find them. A notice in the site hut is a good way of doing this.
- Fewer than 5 people on site – at least one appointed person
- 5-50 people on site – at least one first aider trained in EFAW or FAW.
- More than 50 people on site – At least one first aider trained in FAW for every 50 people (or part of)

Details regarding name and qualifications for the site first aider are to be noted within the demolition plan

10.0 RISK ASSESSMENTS AND METHOD STATEMENTS:

10.1 Principal Contractor is to ensure that all necessary risk assessments and method statements for this project are kept up to date and signed off by those undertaking the works as proof of understanding works procedures. **ALL HIGHLIGHTED ITEMS TO BE SUBMITTED WITH THE DEMOLITION PHASE PLAN PRIOR TO ANY WORK STARTING.**

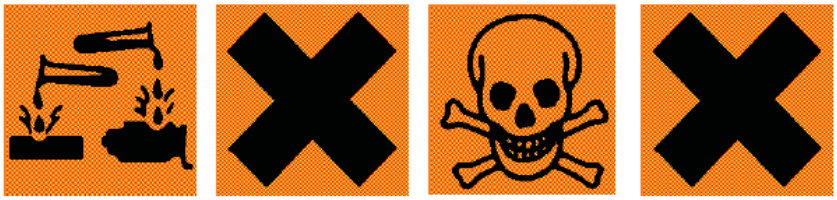
Risk Assessments/Method Statements for this project	Risk	Mitigation	Information Required Prior to Start on site
Security of the site	segregation of the public particularly out of hours	Fencing and locked entrance gate	**YES**
Site layout plan		Show access point, fence line, welfare, site office, parking locations and evacuation point and fire points.	**YES**
Traffic management plan	Plant strikes	Segregation of plant and workers and the public	**YES**
Fire/Emergency plan	Not knowing what to do or where to go	Installation of fire points and an up-to-date evacuation plan	**YES**
UXO	Explosion	Consult Clint's UXO reports	**YES**
Services Location	Service strike	CAT Scan for services prior to digging	**Yes**
Asbestos Removal	Health Issues	Trained operative and removal by licensed contractor	**Yes**
Demolitions	Collapse	Plan sequence of operation and tools/plant required	**Yes**
Stability of existing buildings	Collapse	Monitored by Client employed structural engineer to ensure no undermining of remaining structures	**Yes**
Working at height	Falls of people and tools/materials from height.	Debris protection, scaffolding/temporary works as required	**Yes**

Excavations	Falls/collapse	Excavated areas for tank removal are to be suitably barriered off to ensure no falls from height. Plant and equipment are to be kept away from excavation edge. ***Excavations not to be left open out of hours.***	**Yes**

10.2 Principal Contractor to ensure that records are kept of all necessary COSHH / product safety data sheets for materials used on site.

Description	Risk	Mitigation	Information Required within CPP
Normal construction materials: Fuels (petrol and diesel) Cement Sealants and adhesives Sewage	Mishandling of hazardous material	Make COSHH data sheets available to operatives	Yes/No/N/A

TYPICAL SYMBOLS DENOTING A COSHH SUBSTANCE



CORROSIVE HARMFUL TOXIC IRRITANT

11.0 ARRANGEMENTS FOR CO-ORDINATION OF ONGOING DESIGN AND DESIGN CHANGES:

11.1 All design changes are to be notified to the Principal Designer to logged onto the Design Risk Register for review for health & safety implications.

12.0 HEALTH RISK APPLICABLE TO THE SITE/STRUCTURE:

Description	Risk/Mitigation	Risk/Mitigation	Information Required within Plan
Asbestos	Inhalation of fibres by contractors and or public	Use of dust suppression and use of Trained licensed asbestos removers.	**Yes**

13.0 HEALTH & SAFETY FILE:

13.1 **All information on the clean completed site is to be compiled into a health & safety file, this is to include any residual risks left on the site and the location of all terminated/isolated services.**

13.2 The Principal Contractor is to assemble all of the information required for the Health & Safety File. He is to pass this to the Principal Designer prior to practical completion of the works in an agreed format.

13.3 The Principal Designer will review the above information supplied by the contractor and ensure handover of the health & safety file to the client.

APPENDICES:

Appendix A – Welfare Requirements

Appendix B – Risk Register

Appendix C – Contamination Report

Appendix D – Asbestos Report – within demolition specification below

Appendix E – Demolition Specification

Appendix A – Welfare Requirements

SCHEDULE 2

Minimum welfare facilities required for construction sites.

Sanitary conveniences

1.—(1) Suitable and sufficient sanitary conveniences must be provided or made available at readily accessible places.

(2) So far as is reasonably practicable, rooms containing sanitary conveniences must be adequately ventilated and lit.

(3) So far as is reasonably practicable, sanitary conveniences and the rooms containing them must be kept in a clean and orderly condition.

(4) Separate rooms containing sanitary conveniences must be provided for men and women, except where and so far as each convenience is in a separate room, the door of which is capable of being secured from the inside.

Washing facilities

2.—(1) Suitable and sufficient washing facilities, including showers if required by the nature of the work or for health reasons, must, so far as is reasonably practicable, be provided or made available at readily accessible places.

(2) Washing facilities must be provided—

(a)in the immediate vicinity of every sanitary convenience, whether or not also provided elsewhere; and

(b)in the vicinity of any changing rooms required by paragraph 4, whether or not provided elsewhere.

(3) Washing facilities must include—

(a)a supply of clean hot and cold, or warm, water (which must be running water so far as is reasonably practicable);

(b)soap or other suitable means of cleaning; and

(c)towels or other suitable means of drying.

(4) Rooms containing washing facilities must be sufficiently ventilated and lit.

(5) Washing facilities and the rooms containing them must be kept in a clean and orderly condition.

(6) Subject to sub-paragraph (7), separate washing facilities must be provided for men and women, except where they are provided in a room the door of which is capable of being secured from inside and the facilities in each room are intended to be used by only one person at a time.

(7) Sub-paragraph (6) does not apply to facilities which are provided for washing hands, forearms and the face only.

Drinking water

3.—(1) An adequate supply of wholesome drinking water must be provided or made available at readily accessible and suitable places.

(2) Where necessary for reasons of health or safety, every supply of drinking water must be conspicuously marked by an appropriate sign.

(3) Where a supply of drinking water is provided, a sufficient number of suitable cups or other drinking vessels must also be provided, unless the supply of drinking water is in a jet from which persons can drink easily.

Changing rooms and lockers

4.—(1) Suitable and sufficient changing rooms must be provided or made available at readily accessible places if a worker—

(a)has to wear special clothing for the purposes of construction work; and

(b)cannot, for reasons of health or propriety, be expected to change elsewhere.

(2) Where necessary for reasons of propriety, there must be separate changing rooms for, or separate use of rooms by, men and women.

(3) Changing rooms must—

(a)be provided with seating; and

(b)include, where necessary, facilities to enable a person to dry any special clothing and any personal clothing or effects.

(4) Suitable and sufficient facilities must, where necessary, be provided or made available at readily accessible places to enable persons to lock away—

(a)any special clothing which is not taken home;

(b)their own clothing which is not worn during working hours; and

(c)their personal effects.

Facilities for rest

5.—(1) Suitable and sufficient rest rooms or rest areas must be provided or made available at readily accessible places.

(2) Rest rooms and rest areas must—

(a)be equipped with an adequate number of tables and adequate seating with backs for the number of persons at work likely to use them at any one time;

(b)where necessary, include suitable facilities for any woman at work who is pregnant or who is a nursing mother to rest lying down;

(c)include suitable arrangements to ensure that meals can be prepared and eaten;

(d)include the means for boiling water; and

(e)be maintained at an appropriate temperature.

Appendix B - Risk Register Report

Project Risk Report

Generated for Yvonne M Crowther at 10:13am 14/04/2021

IC21/004 - Demolition of Buildings on the Junction of Blyth Road and Station Road, Southwold - Southwold Town Council

		Probability			Impact				Impact Areas				
	Risk Source	Low	Medium	High	Low	Medium	High	Result	Cost	Schedule	Performance	Response Plan	Status
1	Security and injuries to occupants - Party walls forming parts of boundaries with structures to be demolished Yvonne M			9			9	81	✕	✕	✕	All boundaries to be made safe and secure during demolition - communication with occupants essential * Methodology to be discussed with principal designer	Open
2	Injuries to the public - Adjacent public roadways and footpaths Yvonne M			7			9	63	✕	✕	✕	Management of security and protection, temporary diversions and closures during demolition. if required. Methodology to be discussed with principal designer. * Methodology to be discussed with principal designer	Open
3	Injuries to the occupants - Adjacent occupied domestic and commercial properties Yvonne M			7			9	63	✕	✕	✕	Management of security and protection of access areas to properties. Communication with occupants essential. * Methodology to be discussed with principal designer	Open
4	Collapse of remaining structures - due to undermining when excavating tanks for removal Yvonne M			7			9	63	✕	✕	✕	Excavation of underground tanks * In conjunction with the Client's Enviornmental Consultant excavation is to be monitored by the Client's Structural Engineer to ensure no undermining of remaining structures occurs	Open
5	Asbestos Yvonne M			7			8	56	✕	✕	✕	A demolition survey has been undertaken and must be made available to all operatives/licenced contractor. * All asbestos to be removed and disposed of by licenced contractor.	Open
6	Injury or service loss by											There are overhead cables.	

	Striking of Services Yvonne M			7			8	56	✕	✕	✕	* Principal contractor to ensure that all services are isolated and protected from damage and contamination. * All services to be marked on drawing and issued to the Principal Designer at the end of the demolition phase.	Open
7	**Nuisance from dust & noise** Yvonne M			7			7	49	✕	✕	✕	The Control of Pollution Act 1974 and Environmental Protection Act 1990 places specific duties on building contractors to ensure that noise, smoke and dust is kept to a minimum. • All dampening down of dust will be required during demolition. The demolition works shall not take place other than between the following times, subject to amendment by East Suffolk District Council: • 07.30 – 1800 hours (Monday to Friday) • 08.00 – 13.00 hours - Saturday • No Sunday or Bank Holiday working will be permitted.	Open
8	**Falls into Open Excavations** Yvonne M		6				7	42	✕	✕	✕	No excavations are to be left open out of hours. If excavations are required to be inspected following day then the excavation must be protected over night.	Open

Risk Item Details

	Risk	Date Created	Created By	Date Updated	Updated By
1	Security and injuries to occupants - Party walls forming parts of boundaries with structures to be demolished	14/04/2021 10:07am	Yvonne M	14/04/2021 10:35am	Yvonne M
2	Injuries to the public - Adjacent public roadways and footpaths	14/04/2021 10:05am	Yvonne M	14/04/2021 10:33am	Yvonne M
3	Injuries to the occupants - Adjacent occupied domestic and commercial properties	14/04/2021 10:03am	Yvonne M	14/04/2021 10:32am	Yvonne M
4	Collapse of remaining structures - due to undermining when excavating tanks for removal	14/04/2021 10:17am	Yvonne M	14/04/2021 10:39am	Yvonne M

	Risk	Date Created	Created By	Date Updated	Updated By
5	Asbestos	14/04/2021 10:12am	Yvonne M	14/04/2021 10:33am	Yvonne M
6	Injury or service loss by Striking of Services	14/04/2021 10:22am	Yvonne M	14/04/2021 10:34am	Yvonne M
7	Nuisance from dust & noise	14/04/2021 10:26am	Yvonne M	14/04/2021 10:42am	Yvonne M
8	Falls into Open Excavations	14/04/2021 10:42am	Yvonne M	14/04/2021 11:01am	Yvonne M

Appendix C – Contamination Report

JPC Environmental Services

(A Division of JP Chick & Partners Ltd)

PHASE 2 CONTAMINATED LAND INTRUSIVE SITE INVESTIGATION

Site at Junction of
Station Road & Blyth Road
Southwold
IP18 6AX

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EXECUTIVE SUMMARY

Site Name & Address:	Site at Junction of Station Road & Blyth Road, Southwold, IP18 6AX
Client:	Southwold Town Council
Local Planning Authority	East Suffolk Council
Historical Site Use:	Garage, Workshop and Cycle Hire
Present Site Use:	Garage inc. below-ground fuel tanks
Proposed Site Use:	Mixed use development comprising office, retail.
Date of investigation:	Wednesday, 16 September 2020, intrusive site investigation

Objectives:

- To explore and evaluate the existence and potential impact of plausible pollutant linkages identified by the previous desk study.
- To obtain and analyse soil samples to further inform the human health risk assessment.
- If appropriate, make recommendations on the extent of further intrusive investigations, which may be required to fully establish the condition of the site.

Previous Assessments

- The Phase I desk study established that the site was first developed in the early 1970s, when a garage and bus station were established. The bus station was no longer labelled on the 1995 map.
- Potential on-site sources of contamination included the below-ground tanks and previous site use. Off-site sources included nearby infilled land.
- The historical review of the surrounding area (within 500m of the site) has shown nearby activities comprise the town of Southwold to the east, various infilled pits and historic industries, and agricultural fields.
- In March 2020, JPC Environmental Services undertook an inspection of the below-ground fuel storage tanks. The inspection found that 8 No. tanks had been decommissioned, while 3 No. tanks required some form of decommissioning.
- It was recommended that the liquid contents are pumped out and the tanks de-gassed. This should take place in conjunction with the tank removal so that there is no risk of any gas accumulation. The waste should be taken to a suitably permitted waste/ recovery facility

Site Investigation

- The fieldwork comprised the conduct of 5 No. window sampler boreholes extended to depths of 5m bgl, and the installation of 3 No. gas monitoring wells.
- Made ground generally comprised a layer of asphalt or concrete hardstanding, overlaying gravelly clayey SAND with brick fragments.
- The natural underlying geology was encountered within each of the boreholes and comprised gravelly clayey SAND, identified as Lowestoft Formation.
- No evidence of asbestos was detected within any of the soil samples tested.
- Chemical analysis of the on-site soil has not identified any elevated concentrations of potential contaminants above the 'Commercial' screening criteria adopted for this assessment.

Risk Assessment:

- The sensitivity of the current land use will not increase once the new mixed-use development has completed, although a larger number of people are likely to use the site. Based on the level of contaminants within the soil samples taken to date, the risk to future site users from exposure to potential contaminants is considered to be LOW.
- Recent gas monitoring has recorded a peak methane concentration of <0.1% and a carbon dioxide concentration of 0.9%. The risk of ground gas migrating to/ accumulating beneath the new buildings is, therefore, considered to be NEGLIGIBLE.
- Although concentrations of petroleum hydrocarbons detected within the soil samples taken were very low, oil was reported within 1 No. of the historical gas monitoring wells. Due to this, we consider the risk to controlled waters to be MODERATE.

Recommendations:

As a result of the Phase II Investigation, JPC Environmental Services would make the following recommendations:

- The below-ground tanks and associated infrastructure should be removed by a suitably qualified contractor and the excavations validated. The tanks previously identified as containing liquids should be pumped out and de-gassed. This should take place in conjunction with the tank removal contract so that there is no risk of any gas accumulation.
- Once the existing buildings have been demolished and the site is cleared, further investigations should be undertaken to gain a more comprehensive understanding of the whole site. Samples should be taken from within the made ground and deeper natural geology and tested for a full set of typical contaminants, as well as a more comprehensive TPH suite. If possible, groundwater samples should be taken and tested for TPHs, particularly from the vicinity of WS02A (historical).
- If evidence of hydrocarbon contamination is encountered within on-site groundwater, it may be necessary to undertake a Detailed Qualitative Risk Assessment (DQRA).
- As the risk of yet undiscovered contaminants or buried material within the made ground cannot entirely be ruled out, we would advocate the adoption of a 'Discovery Strategy' across the site. If any suspicious or malodorous soils are encountered during future ground works, then work will need to be stopped until samples of the soil tested for a typical range of environmental contaminants.
- Based on our preliminary waste classification, undertaken as part of this assessment, any surplus soils are likely to be classified as 'Non-Hazardous' waste. Where the organic matter content is less than 3%, and the soils is free from significant deleterious material, the 'Non-hazardous' soils may be classified as 'Inert', subject to the results of a WAC test. If pockets of hydrocarbon-impacted soils are discovered beneath the tank, however, they may be classified as 'Hazardous'.
- Although not related to the condition of the on-site soils, we would recommend undertaking an HSG264 Pre-demolition asbestos survey on the existing garage/ workshop buildings. All identified asbestos containing materials (ACMs) should then be removed, by a suitably experienced contractor, prior to demolition.

1.0 INTRODUCTION

1.01 Brief

1.01.1 JPC Environmental Services were appointed by Southwold Town Council to undertake a Phase II Contaminated Land Investigation for 'Site at Junction of Station Road & Blyth Road, Southwold, IP18 6AX' (hereafter referred to as 'the site').

1.01.2 The investigation was broadly carried out in accordance with Contaminated Land Report 11 (CLR 11) and BS5930:2015 The Code of Practice for Ground Investigations.

1.01.3 Authority to carry out this work was received from Southwold Town Council via email on 25 August 2020.

1.01.4 This report shall be for the private and confidential use of Southwold Town Council for whom it was undertaken. It should not be reproduced in whole or in part, or relied upon by a third party for any use without the express written authority of JPC Environmental Services.

1.01.5 In producing this report, we have exercised all the reasonable skill, care and diligence to be expected of an appropriately qualified and competent consultant, experienced in carrying out equivalent services for developments of a similar size, scope and complexity, value and purpose to the development.

1.02 Scope

1.02.1 The main elements of the investigation were as follows: -

- To establish the depth & composition of any made ground present on site.
- To collect samples of the underlying soils for chemical testing.
- To obtain gas readings, to better understand the potential risk of ground gas or hydrocarbon vapours.
- To utilise the resulting information to undertake a human and environmental risk assessment.
- If appropriate, make recommendations on the extent of further intrusive investigations, which may be required to fully establish the condition of the site.

1.02.2 The on-site investigations comprised the following: -

- The conduct of 5 No. window sampler boreholes.
- The installation of 3 No. gas monitoring wells.
- The collection of near surface and sub-surface soil samples for off-site chemical testing.
- The recording of on-site geology.

1.03 Site Location

1.03.1 Full postal address: Site at Junction of Station Road & Blyth Road, Southwold, IP18 6AX

1.03.2 Map coordinates: Easting: 650477
Northing: 276599

1.03.3 The site is located in Southwold and is accessed from either Station Road or Blyth Road.

1.03.4 A detailed map of the location is presented within the appendices.

1.04 Development Proposal

1.04.1 We understand that the intention is to demolish the existing buildings and re-develop the site to create a mixture of flexible office space and retail units.

1.04.2 An extract of the proposed site plan is shown below. A full-scale copy is presented within the appendices.

Figure 1 – Architect's Proposed Layout (extract)

2.0 PREVIOUS ASSESSMENTS

2.01 General

2.01.1 The site has been the subject of a Phase I and II Geo-Environmental Assessment, undertaken by EPS Strategies Ltd to "determine ground conditions, establish if there are any environmental risks associated with the site and its development, and provide a geotechnical appraisal".

2.01.2 The desk study identified a series of below-ground fuel tanks as the main driver of environmental risk on the site. Following chemical analysis of 5 No. soil samples, the report concluded that no risks to future site users or controlled waters had been identified but recommended some precautionary measures.

2.02 Site History

2.02.1 As part of the Phase I report, a historical review of the site was undertaken, which showed that the site was unoccupied on the earliest historic maps (1880s). Later mapping (1970s) showed that the site was used as a garage and bus station, with the bus station no longer shown by 1995.

2.02.2 The historical review of the surrounding area (within 500m of the site) has shown nearby activities comprise the town of Southwold to the east, various infilled pits and historic industries, and agricultural fields.

2.03 Phase I and II Recommendations

2.03.1 Although not a result of contamination, it was recommended that a minimum of 300mm of clean topsoil was placed in all landscaped areas. Gas protection measures were not considered necessary based on the low levels of gas detected.

2.03.2 The primary focus of this investigation is to get achieve a better understanding of the site conditions and provide updated recommendations.

2.04 Geology, Hydrogeology and Hydrology

2.04.1 The 1:50,000 scale British Geological Survey (BGS) online referencing advises that the site is likely to be underlain directly by bedrock geology comprising Crag Group - Sand.

2.04.2 In relation to the overall hydrology, the site is almost entirely laid to concrete hardstanding and buildings, with only a few very small areas of soft landscaping. There is, therefore, only limited opportunity for vertical migration. Historical activities on the site have likely resulted in deposits of made ground, which could affect the overall hydrology at the site.

2.04.3 With reference to the groundwater mapping presented on DEFRA's MAGIC map, the bedrock geology, which directly underlies the site, is described as Principal Aquifer.

2.05 Tank Inspection Report

2.05.1 In March 2020 JPC Environmental Services undertook an inspection of the below-ground fuel storage tanks. A total of 10 No. tanks were located, which represented an increase over the number previously believed to be on-site. The report identified the condition of the tanks as follows: 4 No. decommissioned (foam filled), 4 No. decommissioned (water filled), 1 No. was found to contain waste engine oil, 1 No. was blocked at a depth of 1m bgl, and 1 No. could not be located.

2.05.2 It was recommended that the liquid contents are pumped out and the tanks de-gassed. This should take place in conjunction with the tank removal contract so that there could be no risk of any gas accumulation. The waste should be taken to a suitably permitted waste facility.

3.0 INTRUSIVE INVESTIGATION

3.01 Objectives

3.01.1 The objectives of the intrusive investigation were as follows:

- To prove the extent of any Made Ground and the nature of the underlying geology.
- To obtain samples of the underlying soil for chemical testing.
- To install 3 No. gas monitoring wells, with 6 No. subsequent site visits to obtain gas readings.
- To determine the need for mitigation measures to make the site safe for its proposed use.

3.01.2 However, the key objective was to retrieve soil data from depths greater than the previous investigation, which may or may not have been extended below the level of the historic tanks.

3.02 Site Works

3.02.1 The intrusive investigation was supervised by Andrew Cartwright of JPC Environmental Services on Wednesday, 16 September 2020.

3.02.2 The fieldwork comprised the conduct of 5 No. window sampler boreholes extended to depths of 5m bgl, and the installation of 3 No. gas monitoring wells.

3.02.3 Boreholes were targeted around the identified below-ground tanks, with the gas monitoring wells installed within 3 No. of the boreholes. The locations of the boreholes and gas monitoring wells are shown in Figure 2 below and within the appendices, together with the associated logs.

3.02.4 It should be noted that the positioning of the exploratory holes was constrained by a dense and complicated network of buried utilities and other historic services, such as gas, water, electricity, drainage, and fuel distribution.

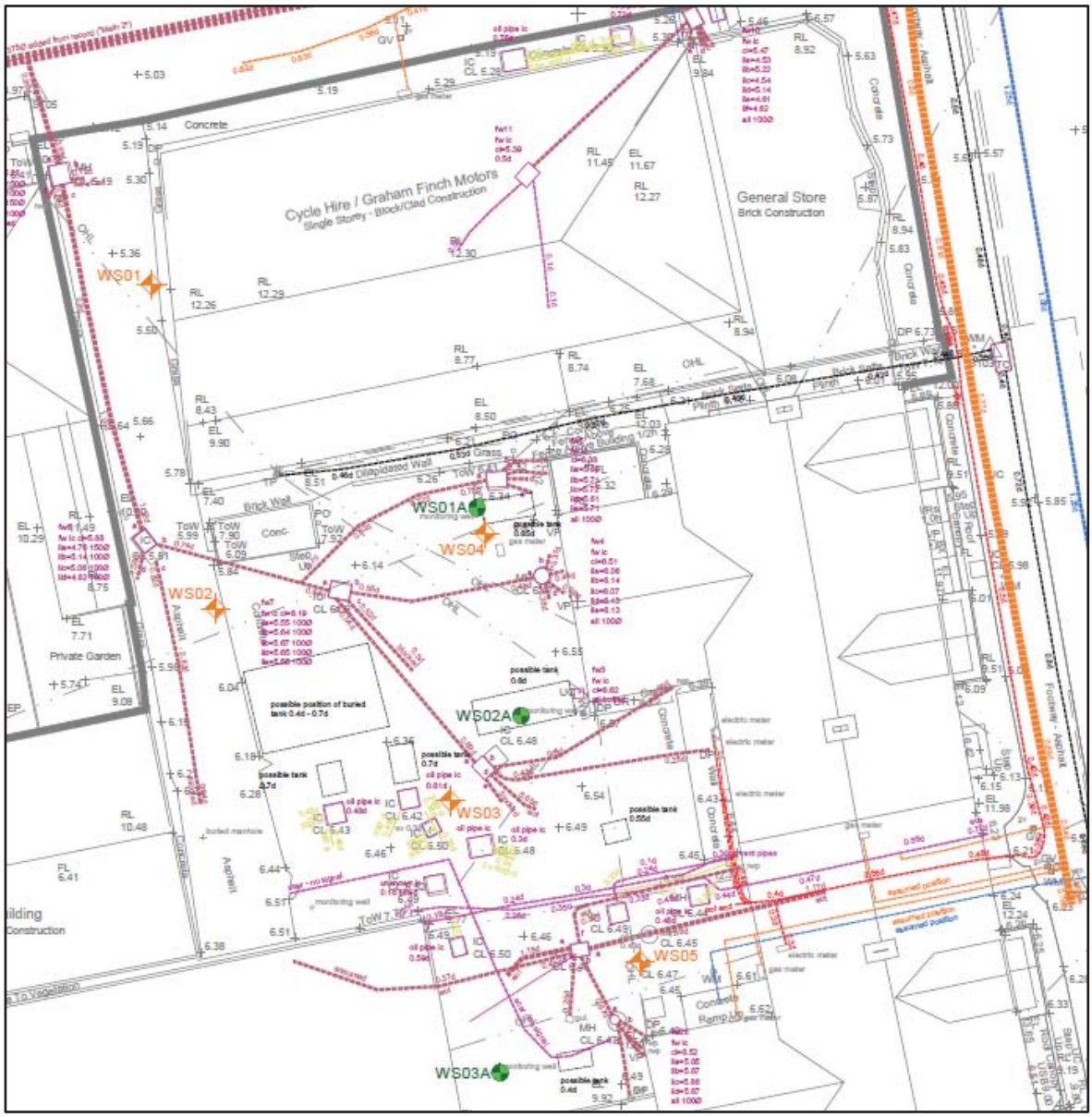


Figure 2 - Borehole Location Plan (extract)

3.02.5 Disturbed samples of surface and sub-surface soils were collected from selected depths, based on the visible presence of made ground, and evidence of potential contamination (odours/ staining). Samples were then scheduled for a range of chemical analyses based on a broad suite of environmental determinands and the findings of the Phase I desk study.

3.03 Ground Conditions

3.03.1 Made ground was encountered within all boreholes (WS01-WS05) to a depth of between 0.45m bgl and 1.0m bgl.

3.03.2 Made ground generally comprised a layer of asphalt or concrete hardstanding, overlaying gravelly clayey SAND with brick fragments.

3.03.3 The natural underlying geology was encountered within each of the boreholes and comprised gravelly clayey SAND, identified as Lowestoft Formation.

3.04 Chemical Testing

3.04.1 A total of 19 No. soil samples were collected from the 5 No. boreholes, all of which were submitted for chemical testing.

3.04.2 Samples were submitted to i2 Analytical, an MCerts & UKAS accredited contaminated land laboratory.

Table 1 - Sample Testing Schedule

Samples	Test	Trial Pit Location	Depths (m)
5 No.	CLEA Metals TPH 3-Band Speciated PAHs Asbestos ID	WS01-WS05	0.1 - 0.3 0.2 - 0.4 0.3 - 0.5 0.4 - 0.6
8 No.	TPH Total	WS01-WS05	0.8 - 1.0 1.4 - 1.6 3.5 - 3.5 3.7 - 4.0 4.0 - 4.2 4.5 - 4.8 4.7 - 5.0
4 No.	TPH 3-Band	WS01-WS04	1.8 - 2.0
2 No.	TPH CWG	WS04-WS05	0.9 - 1.1 2.4 - 2.6
1 No.	VOCs and SVOCs Fuel Typing	WS04	0.9 - 1.1

3.04.3 A full copy of the laboratory test results is presented within the appendices.

4.0 RESULTS OF INTRUSIVE INVESTIGATION

4.01 General

4.01.1 The 19 No. soil samples collected as part of the intrusive investigation were retrieved from depths ranging between 0.1 - 5.0m bgl, based on the likelihood of exposure and evidence of previously disturbed soils. Deeper samples were retrieved and tested to explore the possibility of a tank failure and hydrocarbon plume.

4.02 Chemical Testing – Soil

4.02.1 To determine the condition or severity of any contamination, environmental consultants and regulators, such as the Environment Agency and local authorities use a range of screening criteria developed by Defra & the Environment Agency in 2009 ('Soil Guidance Values' SGV2), and Generic Assessment Criteria produced by the Chartered Institute of Environmental Health (CIEH) / Land Quality Management (LQM).

4.02.2 A series of Category 4 Screening Levels (C4SLs) were published by Defra (March 2014) for use in determining when land is not considered to be contaminated. These values have also been approved by many planning authorities, as a means for deciding when land is 'suitable for use'. The C4SLs were proposed to be more pragmatic, whilst still strongly precautionary, compared to existing generic screening levels. Where a C4SL exists, this has been utilised instead of the previous screening value.

4.02.3 In addition to the above the Chartered Institute of Environmental Health (CIEH) and Land Quality Management Ltd (LQM) have together published S4UL's were published in 2015. S4ULs are based on the principles of 'minimal' or 'tolerable' risk and are therefore sufficiently conservative for this type of generic quantitative risk assessment under the planning regime, which need only demonstrate that new development is 'safe' and 'suitable for use'.

4.02.4 While not published by the Environment Agency, the C4SL's and S4UL's are largely accepted by the various regulators as a suitable means of determining the risk to human health. This screening assessment will therefore utilise the most recent Defra C4SL's and LQM/CIEH S4UL's to evaluate the potential risk to human health.

4.02.5 The potential 'availability' of contaminants can be affected by the proportion of organic matter in the soil (SOM). The C4SLs are calculated based on a SOM of 6%, whereas S4UL's are calculated on a SOM of 1%, 2.5% and 6%. For the purposes of this initial 'screen' the S4ULs will use the 1% values. Where on-site contaminant concentrations are close to or exceed these values, they will be interrogated further.

4.02.6 The soil-based screening criteria (SC) utilised for this assessment, have been selected based on a 'Commercial' land use. The adopted values are detailed in Table 2 below and overleaf:

Table 2 - Screening Criteria

Screening Category: Commercial		
Contaminant of Concern	**Risk Assessment Screening Value (mg/kg)**	**Source of Screening Value**
Toxic & Phytotoxic Metals		
Arsenic	640	C4SL (March 2014)
Cadmium	190	LQM/CIEH S4UL's (Nov 2014)
Chromium Hexavalent	33	LQM/CIEH S4UL's (Nov 2014)
Chromium (III)	8600	LQM/CIEH S4UL's (Nov 2014)
Copper	68000	LQM/CIEH S4UL's (Nov 2014)
Lead	2330	C4SL (March 2014)
Mercury	58	LQM/CIEH S4UL's (Nov 2014)
Nickel	980	LQM/CIEH S4UL's (Nov 2014)
Selenium	12000	LQM/CIEH S4UL's (Nov 2014)
Zinc	730000	LQM/CIEH S4UL's (Nov 2014)
Polycyclic Aromatic Hydrocarbons (PAHs)		
Naphthalene	190	LQM/CIEH S4UL's (Nov 2014)
Acenaphthylene	83000	LQM/CIEH S4UL's (Nov 2014)
Acenaphthene	84000	LQM/CIEH S4UL's (Nov 2014)
Flourene	63000	LQM/CIEH S4UL's (Nov 2014)
Phenanthrene	22000	LQM/CIEH S4UL's (Nov 2014)
Anthracene	520000	LQM/CIEH S4UL's (Nov 2014)
Fluoranthene	23000	LQM/CIEH S4UL's (Nov 2014)
Pyrene	54000	LQM/CIEH S4UL's (Nov 2014)
Benz(a)anthracene	170	LQM/CIEH S4UL's (Nov 2014)

Chrysene	350	LQM/CIEH S4UL's (Nov 2014)
Benzo(b)fluoranthene	44	LQM/CIEH S4UL's (Nov 2014)
Benzo(k)fluoranthene	1200	LQM/CIEH S4UL's (Nov 2014)
Benzo(a)pyrene	35	LQM/CIEH S4UL's (Nov 2014)
Indeno(123-cd)pyrene	500	LQM/CIEH S4UL's (Nov 2014)
Dibenz(ah)anthracene	3.5	LQM/CIEH S4UL's (Nov 2014)
Benzo(ghi)perylene	3900	LQM/CIEH S4UL's (Nov 2014)
Total Petroleum Hydrocarbons (TPHs)		
EC8-10 Combined (Gasoline)	2000	LQM/CIEH S4UL's (Nov 2014)
EC10-21 Combined (Diesel)	9700	LQM/CIEH S4UL's (Nov 2014)
EC21-40 Combined (Mineral)	28000	LQM/CIEH S4UL's (Nov 2014)
Aliphatic, EC5 - EC6	3200	LQM/CIEH S4UL's (Nov 2014)
Aliphatic, EC6 - EC8	7800	LQM/CIEH S4UL's (Nov 2014)
Aliphatic, EC8 - EC10	2000	LQM/CIEH S4UL's (Nov 2014)
Aliphatic, EC10 - EC12	9700	LQM/CIEH S4UL's (Nov 2014)
Aliphatic, EC12 - EC16	59000	LQM/CIEH S4UL's (Nov 2014)
Aliphatic, EC16 - EC21	1600000	LQM/CIEH S4UL's (Nov 2014)
Aromatic, EC5 - EC7	26000	LQM/CIEH S4UL's (Nov 2014)
Aromatic, EC7 - EC8	56000	LQM/CIEH S4UL's (Nov 2014)
Aromatic, EC8 - EC10	3500	LQM/CIEH S4UL's (Nov 2014)
Aromatic, EC10 - EC12	16000	LQM/CIEH S4UL's (Nov 2014)
Aromatic, EC12 - EC16	36000	LQM/CIEH S4UL's (Nov 2014)
Aromatic, EC16 - EC21	28000	LQM/CIEH S4UL's (Nov 2014)
Aromatic, EC21 - EC35	28000	LQM/CIEH S4UL's (Nov 2014)
BTEX and MTBE		
Benzene	27	LQM/CIEH S4UL's (Nov 2014)
Toluene	56000	LQM/CIEH S4UL's (Nov 2014)
Ethylbenzene	5700	LQM/CIEH S4UL's (Nov 2014)
Xylene	5900	LQM/CIEH S4UL's (Nov 2014)
Asbestos		
Asbestos	Positive ID	CIRIA C733

4.02.8 Table 3 below provides a summary of the laboratory test results, associated with the on-site soils:

Table 3 - Laboratory Test Results

Screening Category: Commercial			
Contaminant of Concern	**No. of samples tested**	**Range of concentrations (mg/kg)**	**No. of samples exceeding criteria**
Toxic & Phytotoxic Metals			
Arsenic	5	9.1 - 23	0
Cadmium	5	<0.2 - 1.1	0
Chromium Hexavalent	5	<4.0	0
Chromium (III)	5	11 - 14	0

Copper	5	10 - 71	0
Lead	5	39 - 370	0
Mercury	5	<0.3 - 0.5	0
Nickel	5	5.8 - 22	0
Selenium	5	<1.0	0
Zinc	5	56 - 180	0
Polycyclic Aromatic Hydrocarbons (PAHs)			
Naphthalene	5	<0.05	0
Acenaphthylene	5	<0.05	0
Acenaphthene	5	<0.05	0
Flourene	5	<0.05	0
Phenanthrene	5	<0.05 - 1.3	0
Anthracene	5	<0.05 - 0.33	0
Fluoranthene	5	<0.05 - 3.5	0
Pyrene	5	<0.05 - 3.2	0
Benz(a)anthracene	5	<0.05 - 3.0	0
Chrysene	5	<0.05 - 2.3	0
Benzo(b)fluoranthene	5	<0.05 - 3.4	0
Benzo(k)fluoranthene	5	<0.05 - 2.1	0
Benzo(a)pyrene	5	<0.05 - 3.4	0
Indeno(123-cd)pyrene	5	<0.05 - 2.2	0
Dibenz(ah)anthracene	5	<0.05 - 0.54	0
Benzo(ghi)perylene	5	<0.05 - 2.1	0
Total Petroleum Hydrocarbons (TPHs)			
EC8-10 (Gasoline)	9	<0.1	0
EC10-21 (Diesel)	9	<10 - 27	0
EC21-40 (Mineral)	9	<10 - 130	0
EC10-40 (Total)	8	<10	0
Aliphatic, EC5 - EC6	2	<0.001	0
Aliphatic, EC6 - EC8	2	<0.001	0
Aliphatic, EC8 - EC10	2	<0.001	0
Aliphatic, EC10 - EC12	2	<1.0	0
Aliphatic, EC12 - EC16	2	<2.0	0
Aliphatic, EC16 - EC21	2	<8.0 - 20	0
Aliphatic, EC21 - EC35	2	<8.0 - 260	0
Aliphatic (EC5 - EC35)	2	<10 - 280	0
Aromatic, EC5 - EC7	2	<0.001	0
Aromatic, EC7 - EC8	2	<0.001	0
Aromatic, EC8 - EC10	2	<0.001	0
Aromatic, EC10 - EC12	2	<1.0	0
Aromatic, EC12 - EC16	2	<2.0	0
Aromatic, EC16 - EC21	2	<10	0

Aromatic, EC21 - EC35	2	<10 - 74	0
Aromatic (EC5 - EC35)	2	<10 - 78	0
BTEX and MTBE			
Benzene	2	<1.0	0
Toluene	2	<1.0	0
Ethylbenzene	2	<1.0	0
p & m-xylene	2	<1.0	0
o-xylene	2	<1.0	0
MTBE	2	<1.0	N/A
Asbestos			
Asbestos	5	Not-detected	0
VOCs and SVOCs			
VOCs and SVOCs	1	< LoD*	N/A

*Less than the laboratory's limits of detection

Metals / Metalloids

4.02.9 The concentrations of all metals were found to be below the 'Commercial' screening criteria adopted for this assessment (as well as the more conservative 'Public Open Space - Residential' screening criteria) .

Polycyclic Aromatic Hydrocarbons (PAHs)

4.02.10 The background concentration of total PAH's within surface soils were recorded at levels of between <0.8 and 27.4 mg/kg.

4.02.11 While no screening criteria exists for total PAH's, LQM / CIEH have derived generic assessment criteria for the top 16 PAH compounds, recognised by the Environment Agency as potential human carcinogens.

4.02.12 The concentrations of all PAH compounds were found to be below the selected screening criteria.

Total Petroleum Hydrocarbons (TPHs)

4.02.13 9 No. samples were submitted for a '3-band' TPH suite, which divides TPH concentrations into the gasoline range (C8 – C10), diesel range (C10 – C21) and the mineral range (C21 – C40). A further 2 No. samples were submitted for the full TPHCWG suite, while 8 No. samples were submitted for TPH totals.

4.02.14 The TPH concentrations from all of the samples tested were below their respective screening criteria.

4.02.15 With reference to UKWIR's Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites, 3 No. all samples tested fell above the limits for PE pipes in the EC11-EC20 range. As such, standard PE pipe is not likely to be suitable for any new potable water connections to the development. See pipe selection table overleaf.

Table 4 – Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites (UKWIR, January 2011, Table 3.1: Pipe selection)

		Pipe Material All threshold concentrations are in mg/kg			
Test Group		**PE**	**PVC**	**Barrier Pipe**	**Metal Pipes**
Total VOCs		0.5	0.125	Pass	Pass
+ BTEX & MTBE		0.1	0.03	Pass	Pass
Total SVOCs (EC5-EC10 aliphatic and aromatic hydrocarbons)		2	1.4	Pass	Pass
+ Phenols		2	0.4	Pass	Pass
+ Cresols and chlorinated phenols		2	0.04	Pass	Pass
EC11-EC20 aliphatic and aromatic hydrocarbons		10	Pass	Pass	Pass
EC21-EC40 aliphatic and aromatic hydrocarbons		500	Pass	Pass	Pass
Ethers*		0.5	1	Pass	Pass
Nitrobenzene*		0.5	0.4	Pass	Pass
Ketones*		0.5	0.02	Pass	Pass
Aldehydes*		0.5	0.02	Pass	Pass
Amines*		Fail	Pass	Pass	Pass
Corrosive	PE/ PVC/ Barrier Pipe:	Pass			
	Wrapped Steel:	Corrosive if:	pH is <7 and Conductivity is >400µS/cm		
	Wrapped Ductile Iron:	Corrosive if:	pH is <5, Redox is not neutral and Conductivity is >400µS/cm		
	Copper:	Corrosive if:	pH is <5 or >8 and Redox is positive		

**Specific suite identified as relevant following Site Investigation*

BTEX, MTBE, VOCs and SVOCs

4.02.16 The concentrations of BTEX were found to be below the selected screening criteria adopted for this assessment within all soil samples tested. The concentrations of MTBE, VOCs and SVOCs were reported to be below the laboratory's limits of detection and are, therefore, considered to be within acceptable limits for the development.

Asbestos Screen

4.02.17 5 No. soil samples were screened for the presence of asbestos, to explore the potential presence of asbestos containing material or dispersed fibres in the on-site soil.

4.02.18 No asbestos was detected in any of the soil samples tested.

4.03 Gas Risk Assessment

4.03.1 The Phase I report identified several nearby infilled pits as potential sources of ground gas. The presence of below ground fuel tanks on-site also represents a source of hydrocarbon vapour and methane/ CO_2 arising from the breakdown of spilled fuels.

4.03.2 To obtain additional information for the risk assessment, 3 No. gas monitoring wells were installed on Wednesday, 16 September 2020.

4.03.3 The ground gas risk assessment has been carried out in accordance with the following:

- BS 8485:2015 – Code of Practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings.
- CIRIA C665- Assessing risks posed by hazardous ground gases to buildings.
- NHBC- Guidance on Evaluation of Development Proposals on Sites where Methane and Carbon Dioxide are present (Report Edition 4, March, 2007).
- BS 8576:2013- Guidance on investigations for ground gas- Permanent gases and Volatile Organic Compounds (VOCs).

4.03.4 To assess the potential risks associated with gas at the site, a number of factors have been considered. These are:

i.Potential Gas Sources

4.03.5 Methane (which is flammable and an asphyxiant) and carbon dioxide (which is toxic and an asphyxiant) can originate from potentially spilled or leaked petroleum hydrocarbons.

ii. Potential Pathways

4.03.6 The conceptual site model outlined in the Phase I Report indicated that ground gas had the potential to migrate through the underlying made ground, to accumulate beneath/ within the new buildings.

iii. Potential Receptors

4.03.7 The new buildings and future site users could be affected by potential gases entering the structures.

iv. Monitoring Requirements

4.03.8 To establish the number/ duration of the gas monitoring visits, we referred to the Decision Matrix set out in BS 8576:2013 (Figure 4 below). Based on the age and proximity of the identified sources, it was considered that the potential for gas generation from the nearby infilled land presented a LOW/ MODERATE Risk to the site.

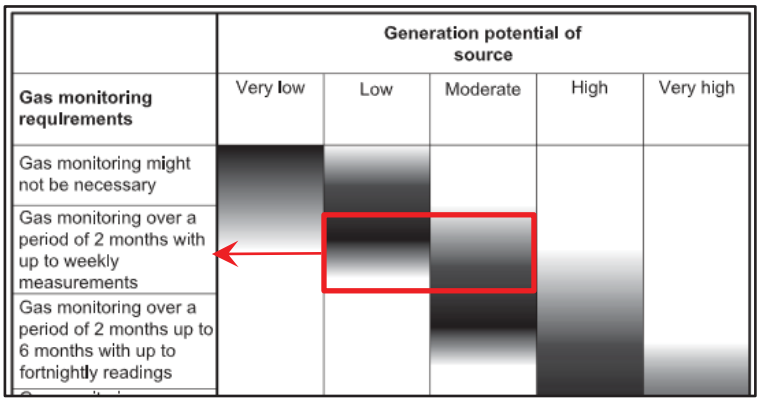


Figure 3 - Decision Matrix for Initial Monitoring (extract)

4.03.9 The monitoring requirements for a LOW/ MODERATE risk site are 'Gas monitoring over a period of 2 No. months, with up to weekly measurements'.

4.03.10 In accordance with the guidance, a programme of weekly monitoring was instigated. This began on the 16 September 2020 and ended on the 20 October 2020. A copy of the full results is enclosed in Appendix E.

4.03.11 A summary of the monitoring results are shown in Table 4 below.

Table 5 - Gas Monitoring Results

Location	Date of Monitoring Visit	Barometric Pressure (mb)	Methane (%)	Carbon Dioxide (%)	Flow (l/hr)	Depth to Groundwater (m bgl)
WS01	16/09/2020	1022	<0.1	0.2	0.0	DRY
	23/09/2020	1000	<0.1	0.4	0.0	DRY
	30/09/2020	1009	<0.1	0.6	0.0	DRY
	07/10/2020	1011	<0.1	0.7	0.0	DRY
	14/10/2020	1021	<0.1	0.0	0.0	3.88
	20/10/2020	1002	<0.1	0.9	0.0	3.88
WS03	16/09/2020	1021	<0.1	0.4	0.0	DRY
	23/09/2020	1000	<0.1	0.2	0.0	DRY
	30/09/2020	1009	<0.1	0.4	0.0	DRY
	07/10/2020	1010	<0.1	0.0	0.0	DRY
	14/10/2020	1021	<0.1	0.5	0.0	DRY
	20/10/2020	1000	<0.1	0.2	0.0	DRY
WS04	16/09/2020	1019	<0.1	0.0	0.0	DRY
	23/09/2020	1000	<0.1	0.3	0.0	DRY
	30/09/2020	1009	<0.1	0.3	0.0	4.87
	07/10/2020	1011	<0.1	0.1	0.0	4.81
	14/10/2020	1020	<0.1	0.5	0.0	4.81
	20/10/2020	1000	<0.1	0.3	0.0	4.80
WS01A (Historical)	16/09/2020	NM	NM	NM	NM	NM
	23/09/2020	1000	<0.1	0.3	0.0	DRY
	30/09/2020	1009	<0.1	0.4	0.0	DRY
	07/10/2020	1010	<0.1	0.3	0.0	DRY
	14/10/2020	1021	<0.1	0.4	0.0	DRY

	20/10/2020	1001	<0.1	0.5	0.0	DRY
WS02A* (Historical)	16/09/2020	NM	NM	NM	NM	NM
	23/09/2020	1000	<0.1	0.2	0.0	1.97
	30/09/2020	1009	<0.1	0.2	0.0	1.97
	07/10/2020	1011	<0.1	0.0	0.0	1.97
	14/10/2020	1020	<0.1	0.0	0.0	1.96
	20/10/2020	1000	<0.1	0.0	0.0	1.97
WS03A (Historical)	16/09/2020	NM	NM	NM	NM	NM
	23/09/2020	NM	NM	NM	NM	NM
	30/09/2020	1009	<0.1	0.1	0.0	DRY
	07/10/2020	1010	<0.1	0.5	0.0	DRY
	14/10/2020	1021	<0.1	0.8	0.0	DRY
	20/10/2020	1000	<0.1	0.4	0.0	DRY

NM - Not Measured

*No pipework or gas valve. Oil on end of dip tape during final reading.

4.03.12 Gas screening values for methane and carbon dioxide have been calculated based on the maximum (peak) readings obtained from the boreholes and maximum (peak) flow rates. The gas screening values are shown in the table below, together with the maximum gas concentration.

Table 6 - Gas Screening Values

Maximum Carbon Dioxide Flow (l/hr)	Maximum Carbon Dioxide (%)	Maximum Methane Flow (l/hr)	Maximum Methane (%)
<0.0009	0.9	<0.0001	<0.1

4.03.14 According to figure 5 below from BS8485:2015, the gas screening values shown in the table above would place the site in Characteristic Situation 1 (CS1).

BRITISH STANDARD **BS 8485:2015**

Table 2 **CS by site characteristic GSV**

CS	Hazard potential	Site characteristic GSV [A)] L/h	Additional factors
CS1	Very low	<0.07	Typically <1% methane concentration and <5% carbon dioxide concentration (otherwise consider an increase to CS2)
CS2	Low	0.07 to <0.7	Typical measured flow rate <70 L/h (otherwise consider an increase to CS3)
CS3	Moderate	0.7 to <3.5	–
CS4	Moderate to high	3.5 to <15	–
CS5	High	15 to <70	–
CS6	Very high	>70	–

[A)] The figures used in this column are empirical.

NOTE The CS is equivalent to the characteristic GSV in CIRIA C665 [6].

Figure 4 - BS8485:2015 – CS by Site Characteristic GSV

4.03.15 This level of classification indicates a 'Very Low' hazard potential and leads us to consider the risk of ground gas to the proposed development to be NEGLIGIBLE.

4.03.16 Groundwater was recorded within 3 No. of the boreholes (WS01, WS04, and WS02A), at depths of between 1.96m bgl and 4.87m bgl.

4.04 Developed Conceptual Site Model

4.04.1 Based on the information obtained and reviewed as part of this assessment, we have been able to refine the conceptual site model set out in the Phase I report. This is shown in Table 6 below.

Table 7 - Possible Pollutant Linkages

Possible Pollutant Linkage			RISK CHARACTERISATION
Potential Sources	**Pathways**	**Receptors**	
Below-ground fuel tanks (on-site)	Inhalation, Ingestion, Dermal absorption, Buried Services, Migration/ Leaching.	Future site users, Construction workers, On-site soil, Buried Services.	LOW
		Groundwater.	MODERATE
Contaminated Soil (on-site)	Inhalation, Ingestion, Dermal absorption, Buried Services, Migration/ Leaching.	Future site users, Construction workers, On-site soil, Buried Services, Groundwater.	LOW
Contaminated Soil/ Groundwater (on-site)	Inhalation, Ingestion, Dermal absorption, Buried Services, Migration/ Leaching.	Future site users, Construction workers, On-site soil, Buried Services.	LOW
		Groundwater.	MODERATE
Infilled Land (off-site)	Migration of Gas.	Future site users, Building and Infrastructure.	NEGLIGBLE

4.04.2 The level of potential risk ascribed to each linkage is based on the following criteria:

Table 8 - Risk Classification

Risk Classification	Description
Very high risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without appropriate remedial action.
High risk	Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remedial action.
Moderate risk	It is possible that without appropriate remedial action harm could arise to a designated receptor, but it is relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely that such harm would be relatively mild.
Low risk	It is possible that harm could arise to a designated receptor from an identified hazard but is likely that, at worst, this harm if realised would normally be mild.

Negligible risk	The presence of an identified hazard does not give rise to the potential to cause significant harm to a designated receptor.

5.0 ENVIRONMENTAL ASSESSMENT

5.01 Summary of Site Conditions

5.01.1 The site is almost entirely covered by concrete hardstanding and buildings, with only small areas of soft landscaping to the north of the site. The soils excavated during our investigation showed that the depth of made ground ranged between 0.45m and 1.0m bgl and comprised a layer of asphalt or concrete hardstanding, overlaying gravelly clayey SAND with brick fragments.

5.01.2 The concentrations of all potential contaminants were below their respective screening criteria within all of the soil samples tested.

5.01.3 The gas monitoring has identified the site as 'Characteristic Situation 1 (CS1)'.

5.02 Risk Assessment

Human Health

5.02.1 Under the client's proposal, the existing garage/ workshop structures will be demolished, and new buildings will be constructed comprising office and retail units. The proposals do not include any private gardens but may include new raised planters in a communal courtyard.

5.02.2 Based on the results from chemical testing undertaken to date, we consider the risk to future site users from potential soil contamination to be LOW.

Controlled Waters

5.02.3 Although concentrations of petroleum hydrocarbons detected within the soil samples taken were found to be very low, oil was reported within 1 No. of the historical gas monitoring wells when it was checked for groundwater during the final round of monitoring. Due to this, we consider the risk to controlled waters to be MODERATE and should be investigated further once the tanks have been removed.

Buildings

5.02.4 Recent gas monitoring has recorded a peak methane concentration of <0.1% and a carbon dioxide concentration of 0.9%. The risk of ground gas migrating to/ accumulating beneath the converted structure is, therefore, considered to be NEGLIGIBLE.

5.03 Waste Classification

5.03.1 As part of our evaluation process we have undertaken an assessment of the laboratory results to determine a likely waste classification for any soils requiring excavation and disposal from the site. The assessment has been undertaken in line with the Environment Agency's Guidance on the 'Classification and Assessment of Waste (Version 1.1) Technical Guidance WM3' (EA, 2018).

5.03.2 The waste classification has been undertaken by running the laboratory test results through 'HazWasteOnline' to produce a waste classification report.

5.03.3 The assessment was undertaken on 19 No. laboratory results, tested for a range of contaminants, including 5 No. samples tested for a full set of typical contaminants, and 14 No. for a combination of TPHs, VOCs and SVOCs. The depths of the samples varied from 0.1m bgl to 4.8m bgl.

5.03.4 Based on the soil laboratory results, any surplus soil from most of the site would be classified as 'Non-Hazardous', requiring a list of waste code of 17.05.04 (soil and stones other than those mentioned in 17.05.03*). Any soils with an organic matter content below 3%, and without any anthropogenic inclusions, will be able to be classified as inert. If pockets of hydrocarbon-impacted soils are discovered beneath the tank, however, they may be classified as 'Hazardous'.

5.03.5 The above waste classification is only indicative of the soil samples taken to date and it is possible that haulage contractors or landfill facilities may request a Waste Acceptance Criteria (WAC) test before removing any waste soil from the site. The soil test results attached to this report should be provided to the waste disposal contractor to ensure the waste is disposed of at a permitted site, which is licensed to accept the waste.

5.03.6 Extracts from the 'HazWasteOnline' software showing the waste classification of each soil sample are presented below and overleaf. Full copies of the waste classification reports are presented in the appendices.

Job summary

#	Sample Name	Depth [m]	Classification Result
1	WS1-A[2]	0.10-0.30	Non Hazardous
2	WS1-B[2]	0.80-1.00	Non Hazardous
3	WS1-C[2]	1.80-2.00	Non Hazardous
4	WS1-D[2]	3.70-4.00	Non Hazardous
5	WS2-A[2]	0.20-0.40	Non Hazardous
6	WS2-B[2]	0.80-1.00	Non Hazardous
7	WS2-C[2]	1.80-2.00	Non Hazardous
8	WS2-D[2]	4.70-4.00	Non Hazardous
9	WS3-A[2]	0.20-0.40	Non Hazardous
10	WS3-B[2]	1.80-2.00	Non Hazardous
11	WS3-C[2]	3.20-3.50	Non Hazardous
12	WS3-D[2]	4.50-4.80	Non Hazardous

Figure 5b - HazWasteOnline Classification (extract)

#	Sample Name	Depth [m]	Classification Result
13	WS4-A[2]	0.30-0.50	Non Hazardous
14	WS4-B[2]	0.90-1.10	Non Hazardous
15	WS4-C[2]	1.80-2.00	Non Hazardous
16	WS4-D[2]	4.00-4.20	Non Hazardous
17	WS5-A[2]	0.40-0.60	Non Hazardous
18	WS5-B[2]	1.40-1.60	Non Hazardous
19	WS5-C[2]	2.40-2.60	Non Hazardous

Figure 5a - HazWasteOnline Classification (extract)

5.04 Liaison with Regulators

5.04.1 A copy of this Phase II report should be submitted to the Council for their consideration, comments and the discharge of any related planning applications. However, it is unlikely that this report on its own will be sufficient to discharge such conditions and further investigation will be required once the buildings are removed. Based on our findings and the nature of the proposed end-use, we consider it unlikely that the planners will require a Remediation Strategy for the site, subject to further investigations.

5.05 Liaison with Water Supply Company

5.05.1 When making arrangements for a new mains water connection for the site, Anglian Water may require a copy of this report, to assure themselves that there is no risk to their infrastructure. Standard PE water supply pipe can become compromised by certain contaminants, most notably petroleum hydrocarbons, and therefore the extent of any contamination must be identified by the developer.

5.05.2 Based on the laboratory results, it is our opinion that standard PE pipe is not likely to be suitable for any new connections on-site, and that PVC or Barrier pipe should be considered. Further liaison with Anglian Water.

5.06 Environmental Protection

5.06.1 In addition to the further investigations detailed below, there are a number of practices that should be considered as part of general good working procedures, to minimise any future potential impact on the environment.

- Dust suppression during dry periods,
- Clean any construction related vehicles prior to them leaving site e.g. rumble/ vibration grid, physical scrape of material and/ or wheel wash, to prevent the spread of mud,
- Recycle surplus/ waste construction materials where practicable,
- All imported topsoil should be sourced from a reputable supplier and be accompanied by laboratory test results to confirm its condition and suitability for use on site,
- Careful segregation of soils based on inclusions of construction materials and any visible/ olfactory presence of contaminants.

6.0 RECOMMENDATIONS

6.01.1 As a result of the Phase II Investigation, JPC Environmental Services would make the following recommendations:

- The below-ground tanks and associated infrastructure should be removed by a suitably qualified contractor and the excavations validated. The tanks previously identified as containing liquids should be pumped out and de-gassed. This should take place in conjunction with the tank removal contract so that there is no risk of any gas accumulation.

- Once the existing buildings have been demolished and the site is cleared, further investigations should be undertaken to gain a more comprehensive understanding of the whole site. Samples should be taken from within the made ground and deeper natural geology and tested for a full set of typical contaminants, as well as a more comprehensive TPH suite. If possible, groundwater samples should be taken and tested for TPHs, particularly from the vicinity of WS02A (historical).

- If evidence of hydrocarbon contamination is encountered within on-site groundwater, it may be necessary to undertake a Detailed Qualitative Risk Assessment (DQRA).

- As the risk of yet undiscovered contaminants or buried material within the made ground cannot entirely be ruled out, we would advocate the adoption of a 'Discovery Strategy' across the site. If any suspicious or malodorous soils are encountered during future ground works, then work will need to be stopped until samples of the soil tested for a typical range of environmental contaminants.

- Based on our preliminary waste classification, undertaken as part of this assessment, any surplus soils are likely to be classified as 'Non-Hazardous' waste. Where the organic matter content is less than 3%, and the soils is free from significant deleterious material, the 'Non-hazardous' soils may be classified as 'Inert', subject to the results of a WAC test. If pockets of hydrocarbon-impacted soils are discovered beneath the tank, however, they may be classified as 'Hazardous'.

- Although not related to the condition of the on-site soils, we would recommend undertaking an HSG264 Pre-demolition asbestos survey on the existing garage/ workshop buildings. All identified asbestos containing materials (ACMs) should then be removed, by a suitably experienced contractor, prior to demolition.

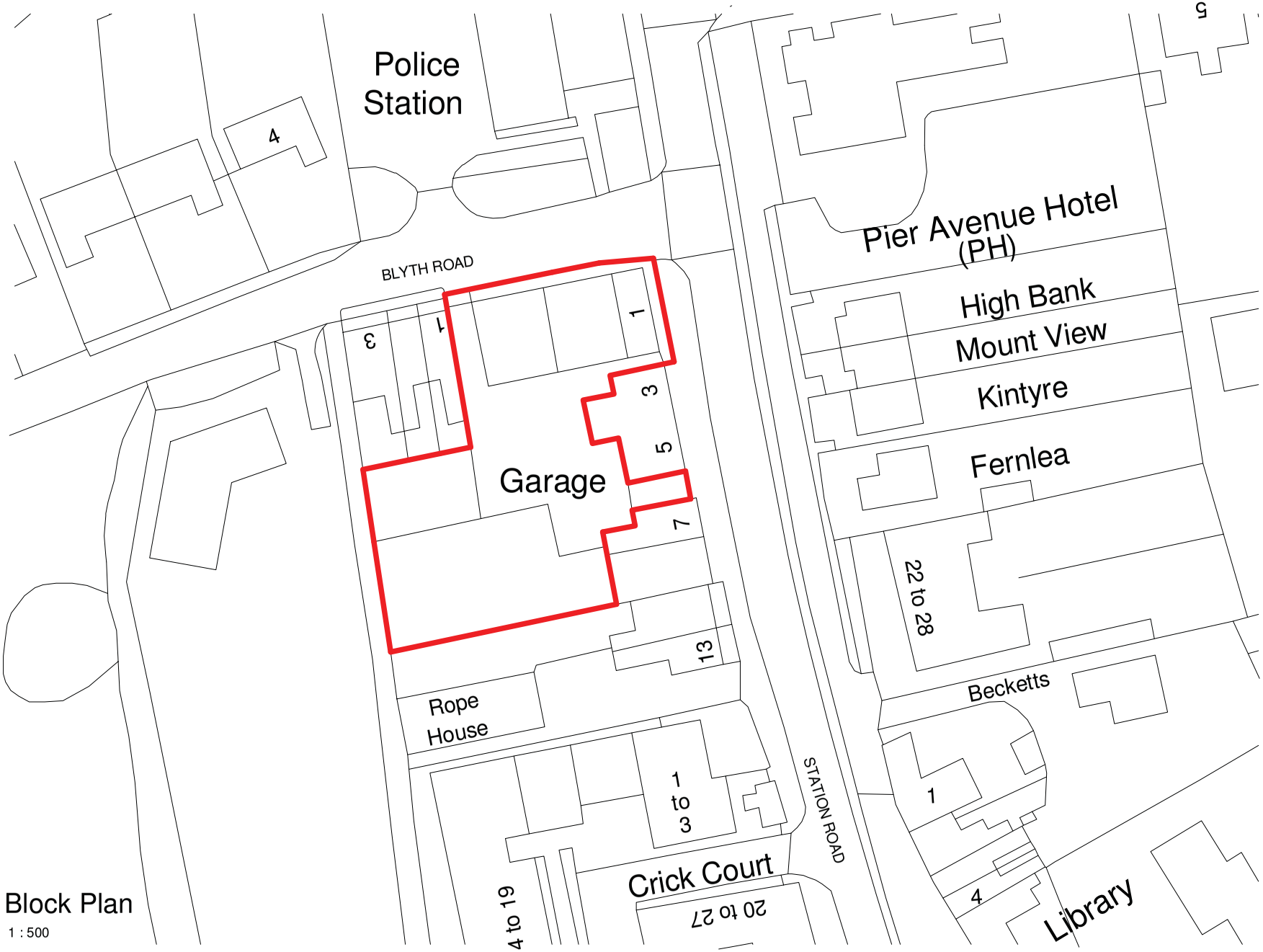
6.01.2 The opinions and recommendations expressed in this report are based on the ground conditions encountered on site, the results of field and laboratory testing and the interpretation between exploratory holes.

6.01.3 It should also be noted that the material encountered, and the samples obtained, represent only a small proportion of the soils present on site, and it is therefore possible that other conditions may prevail on the site, which have not been revealed by this investigation.

6.01.4 This report has been prepared in accordance with our understanding of current best practice. However, changes to best practice, guidance or legislation may necessitate revision of this report after the date of issue.

APPENDIX A

Site Location Plan



Block Plan

1 : 500

Rev	Comment	Date	Chk	Apr
P3	Red line adjustment	20/11/18	DF	DF
P2	Location Plan Update	23/08/18	DF	DF
P1	First Drawing Issue	10/04/18	DF	DF

Project No: 304529 | Scale @ A3: 1 : 500 | Drawn By: Author

Project:
Proposed Mixed Use Development
Station Road
Southwold

Client:
Southwold Town Council

Title:
Block Plan

Drawing Number:
304529-IW-DR-A-2204

Status: S2 | Purpose of Issue: Information | Revision: P3

Ingleton Wood
Property and Construction Consultants
Issuing office: Norwich
T: 01603 666847
www.ingletonwood.co.uk
Vision, form and function

APPENDIX B

Architect's Proposed Site Layout

00-Level Proposed Site Plan

1 : 100

P3	Space amendment		19/06/18	DF	DF
P2	Client Updates		18/04/18	DF	DF
P1	First Drawing Issue		16/04/18	DF	DF
Rev	Comment		Date	Chk	App
Project No: 304529		Scale @ A1: 1 : 100		Drawn By: DPF	

Ingleton Wood

Property and Construction Consultants

Vision, form and function

Project:
Proposed Mixed Use Development
Station Road
Southwold

Client:
Southwold Town Council

Title:
Proposed Site Plan

Drawing Number:
304529-IW-DR-A-2401

Status:	Purpose of Issue:	Revision:
S2	Information	P3

APPENDIX C

Site Investigation Report

TerraConsult
A BYRNELOOBY COMPANY

9 The Courtyards
Phoenix Square, Wyncolls Road
Colchester, CO4 9PE
Telephone: +44 (0)1206 585600
Email: mailbox@terraconsult.co.uk Website: www.terraconsult.co.uk

Your Ref
Our Ref 10513/L02-1/AS

18th September 2020

JPC Environmental Services
7 Museum Street
Ipswich
Suffolk
IP1 1HQ

By e-mail only: robin.crowther@chick.co.uk

For the attention of Robin Crowther

Dear Robin,

Phase 2 Ground Investigation – Station Road, Southwold

1. Introduction

Further to our quotation letter dated 16th December 2019, reference 10513/L01-1/JT, we visited site on the 16th September 2020 to undertake the works.

2. Site Works

The site works comprised the drilling of five dynamic window sampler boreholes, referenced WS01 to WS05, to depths ranging between 3.00mbgl to 5.00mbgl with associated in-situ testing and sampling. Sampling was undertaken by a JPC Environmental Services engineer. The aim was to provide information on the ground conditions across the site prior to redevelopment into a mixed-use development.

The site investigation was undertaken in accordance with the scope of works agreed with yourself and generally in accordance with industry guidance including BS10175: 2011 Investigations into Potentially Contaminated Sites – Code of Practice and BS5930: 2015 Code of Practice for Site Investigations – Amendment 2.

The exploratory hole location plan and fieldwork records are presented in **Appendix A**. The investigative positions were selected based on the available access and to provide coverage of the proposed development plot. Prior to boring a cable avoidance tool was used to confirm each location was clear of detectable services.

Single standpipe installations were placed in boreholes WS01, WS03 and WS04. Each standpipe comprised 63mm diameter HDPE piping, slotted below 1.00mbgl; installed to depths between 4.00mbgl (WS01) to 5.00mbgl (WS03 and WS04). Once installed, the slotted section was surrounded by suitable gravel pack, above which a sealing material (bentonite) was used. A rubber bung and gas tap were placed at the top of the pipework and a flush cover concreted at surface to protect the installation from damage. Flow was monitored for a period of up to two minutes, and the concentrations of ground gases including methane, carbon dioxide, oxygen, hydrogen sulphide and carbon monoxide were monitored for up to five minutes. The depth to groundwater was measured using a dip-meter. The monitoring results are presented in **Appendix A**.

3. Ground Conditions

The ground conditions encountered are summarised in **Table 1** and discussed below.

Table 1 Summary of Encountered Ground Conditions

Stratum	Location	Surface Depth (mbgl)	Proven Base Depth (mbgl)	Proven thickness (m)
Made Ground	All locations	0.00	0.45 to 1.00	0.45 to 1.00
Lowestoft Formation	All locations	0.45 to 1.00	Base not proved	Thickness not proved

Made Ground

Surface coverings of asphalt or concrete were encountered in boreholes WS01, WS03, WS04 and WS05 to depths between 0.05mbgl to 0.15mbgl. Brick was initially encountered in WS02 to a depth of 0.15mbgl.

The Made Ground generally comprised either a gravelly sand or sand. The gravel fraction comprised flint, brick, and concrete, with rare asphalt gravels noted in WS01 between depths of 0.05mbgl to 0.20mbgl, and in WS03 between depths of 0.20mbgl and 0.99mbgl. A very slight hydrocarbon odour was noted in WS04 at a depth between 0.50mbgl to 0.60mbgl.

In borehole WS03 the Made Ground underlying concrete became brick to a depth of 0.20mbgl and then a slightly clayey, gravelly sand to a depth of 0.99mbgl. A 0.01m band of concrete was detected beneath this which led to a void to a depth of 1.80mbgl.

The Made Ground was proved to depths between 0.45mbgl in WS01 to 1.00mbgl in WS03.

Lowestoft Formation

The Lowestoft Formation was encountered in all boreholes underlying Made Ground from depths ranging from 0.45mbgl to 1.00mbgl. The stratum comprised layers of sand and gravelly sand to the base of each borehole. Iron staining was noted towards the base of WS01 and WS03 from depths of 2.90mbgl and 2.50mbgl respectively. All boreholes were completed within this stratum at 3.00mbgl (WS05), 4.00mbgl (WS01) and 5.00mbgl (WS02, WS03 and WS04).

4. Ground Gas and Groundwater Monitoring Results

A single round of monitoring was undertaken during the site investigation. Carbon dioxide readings ranged from below detection levels to 0.4. The recorded methane, carbon monoxide and hydrogen sulphide (H_2S) concentrations were below detection levels.

No flow was detected at any of the monitoring points.

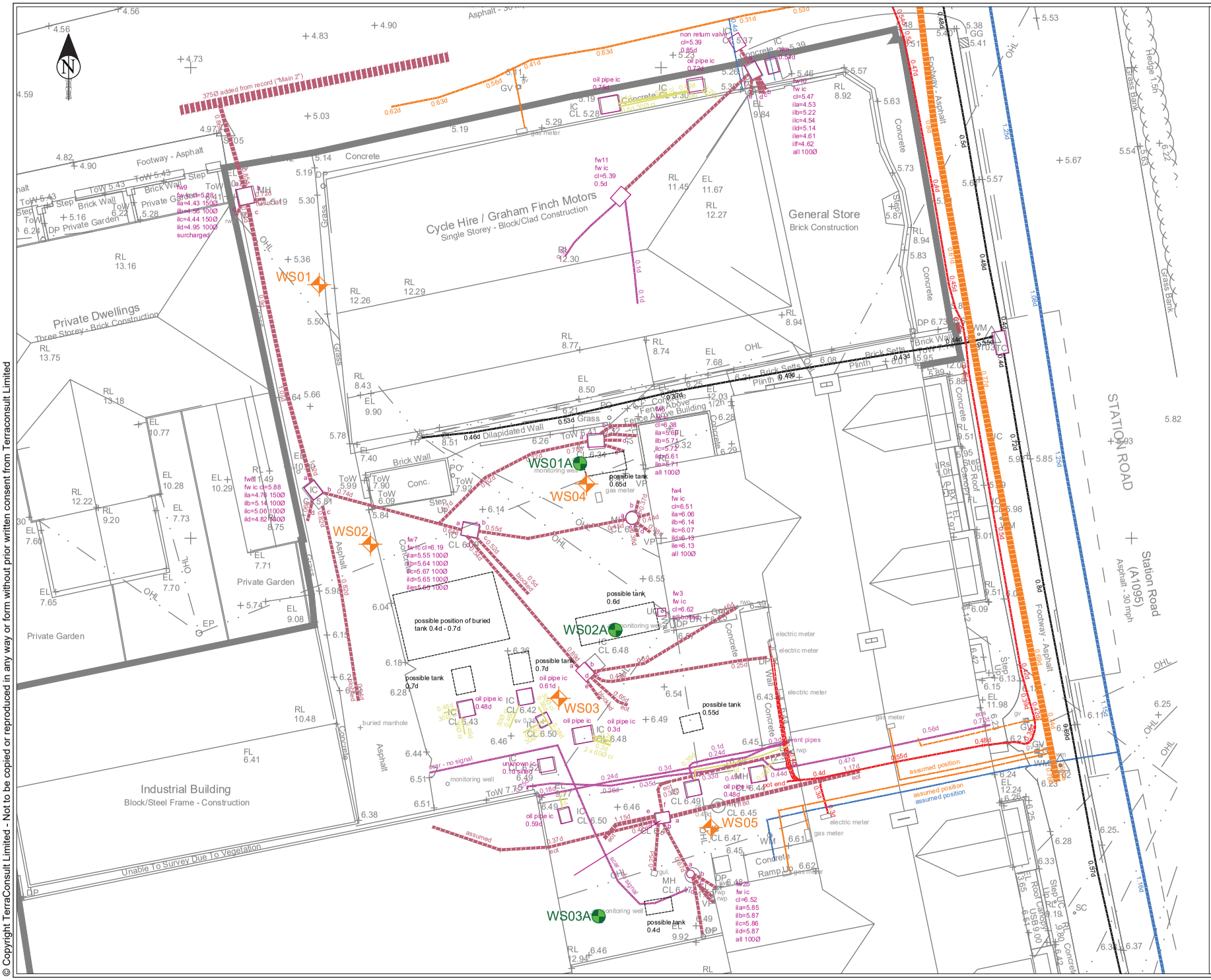
All the associated information is appended to the back of this letter report. We trust that this provides the information you require to further and complete the foundation design for the project. However, if you have any queries please do not hesitate to contact the undersigned.

Yours sincerely
for and on behalf of TerraConsult Ltd

A Steele

A Steele
Senior Geoenvironmental Consultant

APPENDIX A
FIELDWORK RECORDS AND MONITORING RESULTS



Notes

1. Survey information supplied by SurvaTech Limited. Drg Ref: DW2020-464
2. Do not scale
3. All dimensions are in millimetres and all levels are in metres above Ordnance datum
4. Any anomalies on this drawing are to be brought to the attention of Terraconsult Ltd

Key

WS01 Window Sample Location & Reference

WS01A Historical Borehole Location

TerraConsult

Bold Business Centre, Bold Lane, Sutton, St Helens WA9 4TX

Client

JP Chick & Partners Ltd
Consulting Civil & Structural Engineers

Site

Station Road, Southwold

Title

Window Sample and Historical Borehole Locations

Scale	1:150	@ A3	
Drawing No.	10513/1/002		
Rev	Date	Description	
File	10513.1.002 Window Sample and Historical Borehole Locations		
Date	23/10/2020	Engineer	GH
Drawn	PP GH	Checked	DRAFT

Dynamic Sample Log

TerraConsult

Borehole formation details:

Type:	From:	To:	Start date:	End date:	Crew:	Plant:	Logger:	Logged:	Remarks:
	0.00	4.00	16-09-20	16-09-20		Premier 110 Compact	AS	16-09-20	

Location details:

Grid:

Backfill/ Instal'n	Water-strike	Legend	Level	Depth (thick-ness)	Stratum Description	Samples & In Situ Testing: Water	Casing	Depth	Type & No	Results
				0.05	ASPHALT.					
				0.20	(MADE GROUND)					
				0.25	Multicoloured of yellow brown and blackish brown gravelly SAND. Gravel is medium subangular to rounded flint brick and rare subangular asphalt.					
				0.45	(MADE GROUND)					
				0.70	BRICK.					
	(51)				(MADE GROUND)	Dry	1.00	1.00 - 1.45	C	N=23 (5,6/6,5,6,6)
					Brown and reddish brown slightly gravelly slightly clayey SAND. Gravel is fine to medium subangular brick.					
				(1.70)	(MADE GROUND)					
					Orange and yellow fine SAND. (LOWESTOFT FORMATION)					
					Medium dense orangish yellow gravelly SAND. Gravel is medium angular to subangular flint. (LOWESTOFT FORMATION)	Dry	1.00	2.00 - 2.45	C	N=32 (6,6/8,8,8,8)
				2.40	Dense orange slightly clayey SAND.					
				(0.50)	(LOWESTOFT FORMATION)					
				2.90	Medium dense orange and yellowish orange slightly gravelly SAND. Gravel is fine to medium of angular to subangular flint. (LOWESTOFT FORMATION)	Dry	1.00	3.00 - 3.45	C	N=18 (4,4/4,4,5,5)
				(1.10)						
	SP (51)			4.00	Dynamic sample ends at 4.00 m (Overhead cables)	Dry	1.00	4.00 - 4.45	C	N=18 (3,4/4,4,5,5)
	Inst (Ø)					Water	Casing	Depth	Type & No	Results

Groundwater entries:

Struck:	Rose to:	Casing:	Sealed:

Casing:

Cased to:	Diameter (mm):
1.00	100

Depth related remarks:

From	to:	Remarks

Run details:

From:	to:	Ø	Duration:	Recovery:

Notes: For explanation of symbols and abbreviations see Key Sheet. All depths and reduced levels are in metres.

Log issue: DRAFT

Scale: 1:50

Project: Station Road, Southwold

Project No: 10513

Client: JPC Environmental Services

Exploratory position reference:

WS01

Dynamic Sample Log

TerraConsult

Borehole formation details:

Type:	From:	To:	Start date:	End date:	Crew:	Plant:	Logger:	Logged:	Remarks:
	0.00	5.00	16-09-20	16-09-20		Premier 110 Compact	AS	16-09-20	

Location details:

Grid:

Backfill/ Instal'n	Water-strike	Legend	Level	Depth (thick-ness)	Stratum Description	Samples & In Situ Testing				
						Water	Casing	Depth	Type & No	Results
				0.15	BRICK.					
				0.30	(MADE GROUND)					
				(0.55)	Black SAND. (MADE GROUND)					
				0.85	Multicoloured of brown light brown and yellowish brown slightly gravelly clayey SAND. Gravel is fine subangular brick and flint. (MADE GROUND)	Dry	1.00	1.00 - 1.45	C	N=24 (4,4/6,5,6,7)
					Medium dense orangish yellow gravelly SAND. Gravel is fine to medium of angular to subangular flint. (LOWESTOFT FORMATION)	Dry	1.00	2.00 - 2.45	C	N=24 (3,3/5,5,7,7)
				(3.25)		Dry	1.00	3.00 - 3.45	C	N=13 (3,4/3,3,4,3)
				4.10		Dry	1.00	4.00 - 4.45	C	N=5 (1,2/2,1,1,1)
				(0.90)	Loose orange and reddish orange slightly gravelly SAND. Gravel is medium subangular to rounded flint. (LOWESTOFT FORMATION)					
				5.00	Dynamic sample ends at 5.00 m (Target depth)	Dry	1.00	5.00 - 5.45	C	N=17 (4,4/4,4,4,5)
	Inst (Ø)					Water	Casing	Depth	Type & No	Results

Groundwater entries:

Struck:	Rose to:	Casing:	Sealed:

Casing:

Cased to:	Diameter (mm):
1.00	100

Depth related remarks:

From	to:	Remarks

Run details:

From:	to:	Ø	Duration:	Recovery:

Notes: For explanation of symbols and abbreviations see Key Sheet. All depths and reduced levels are in metres.

Log issue: DRAFT

Scale: 1:50

Project: Station Road, Southwold

Project No: 10513

Client: JPC Environmental Services

Exploratory position reference:

WS02

Dynamic Sample Log

TerraConsult

Borehole formation details:

Type:	From:	To:	Start date:	End date:	Crew:	Plant:	Logger:	Logged:	Remarks:
	0.00	5.00	16-09-20	16-09-20		Premier 110 Compact	AS	16-09-20	

Location details:

Grid:

Backfill/ Instal'n	Water-strike	Legend	Level	Depth (thick-ness)	Stratum Description	Samples & In Situ Testing: Water	Casing	Depth	Type & No	Results
				0.15	CONCRETE.					
				0.20	(MADE GROUND)					
					BRICK.					
				(0.79)	(MADE GROUND)					
					Brown greyish brown and blackish brown slightly clayey gravelly SAND. Gravel is medium angular to subangular flint brick and rare asphalt.					
	(51)			0.99	(MADE GROUND)	Dry	1.00	1.00 - 1.45	C	N=0 (0,1/0,0,0,0)
				1.00	CONCRETE.					
					(MADE GROUND)					
				(0.80)	VOID.					
				1.80						
				(0.30)	Loose yellow and orangish yellow slightly gravelly SAND. Gravel is fine to medium of subangular to subrounded flint.	Dry	2.00	2.00 - 2.45	C	N=4 (1,1/1,1,1,1)
				2.10	(LOWESTOFT FORMATION)					
				(0.40)	Loose yellowish grey cobbly GRAVEL of subrounded to rounded flint.					
				2.50	(LOWESTOFT FORMATION)					
					Medium dense orange and yellowish orange gravelly SAND. Gravel is fine to coarse of angular to subangular flint.	Dry	3.00	3.00 - 3.45	C	N=27 (12,13/8,7,6,6)
					(LOWESTOFT FORMATION)					
				(2.50)		Dry	3.00	4.00 - 4.45	C	N=18 (4,4/5,5,4,4)
	SP (51)			5.00	Dynamic sample ends at 5.00 m (Target depth)	Dry	3.00	5.00 - 5.45	C	N=20 (4,5/4,5,5,6)
	Inst (Ø)					Water	Casing	Depth	Type & No	Results

Groundwater entries:

Struck:	Rose to:	Casing:	Sealed:

Casing:

Cased to:	Diameter (mm):
3.00	100

Depth related remarks:

From	to:	Remarks

Run details:

From:	to:	Ø	Duration:	Recovery:

AGS

Notes: For explanation of symbols and abbreviations see Key Sheet.
All depths and reduced levels are in metres.

Log issue: DRAFT

Scale: 1:50

Project: Station Road, Southwold

Project No: 10513

Client: JPC Environmental Services

Exploratory position reference:

WS03

Dynamic Sample Log

TerraConsult

Borehole formation details:

Type:	From:	To:	Start date:	End date:	Crew:	Plant:	Logger:	Logged:	Remarks:
	0.00	5.00	16-09-20	16-09-20		Premier 110 Compact	AS	16-09-20	

Location details:

Grid:

Backfill/ Instal'n	Water-strike	Legend	Level	Depth (thick-ness)	Stratum Description	Samples & In Situ Testing: Water	Casing	Depth	Type & No	Results
				0.09	CONCRETE.					
				(0.41)	(MADE GROUND)					
				0.50	BRICK.					
				0.60	(MADE GROUND)					
				0.80	Yellow and yellowish grey gravelly clayey SAND. Gravel is fine to medium subangular flint.					
	(51)			(0.40)	(MADE GROUND)	Dry	1.00	1.00 - 1.45	C	N=3 (1,1/0,1,1,1)
				1.20	Black and dark brown very clayey SAND.					
					(MADE GROUND)					
					Very loose black and dark brown SAND.					
					Dense locally medium dense orange and yellowish orange gravelly SAND. Gravel is medium subangular flint.					
					(LOWESTOFT FORMATION)					
				(1.70)		Dry	1.00	2.00 - 2.45	C	N=25 (5,5/6,7,6,6)
				2.90	Dense becoming medium dense orange gravelly SAND. Gravel is fine to coarse of angular to subangular flint.	Dry	1.00	3.00 - 3.45	C	N=38 (8,8/9,9,10,10)
					(LOWESTOFT FORMATION)					
				(2.10)		Dry	1.00	4.00 - 4.45	C	N=20 (4,4/4,5,5,6)
	SP (51)			5.00	Dynamic sample ends at 5.00 m (Target depth)	Dry	1.00	5.00 - 5.45	C	N=24 (5,6/6,6,6,6)
	Inst (Ø)					Water	Casing	Depth	Type & No	Results

Groundwater entries:

Struck:	Rose to:	Casing:	Sealed:

Casing:

Cased to:	Diameter (mm):
1.00	100

Depth related remarks:

From	to:	Remarks

Run details:

From:	to:	Ø	Duration:	Recovery:

Notes: For explanation of symbols and abbreviations see Key Sheet. All depths and reduced levels are in metres.

Log issue: DRAFT

Scale: 1:50

Project: Station Road, Southwold

Project No: 10513

Client: JPC Environmental Services

Exploratory position reference:

WS04

Dynamic Sample Log

TerraConsult

Borehole formation details:

Type:	From:	To:	Start date:	End date:	Crew:	Plant:	Logger:	Logged:	Remarks:
	0.00	3.00	16-09-20	16-09-20		Premier 110 Compact	AS	16-09-20	

Location details:

Grid:

Backfill/ Instal'n	Water-strike	Legend	Level	Depth (thick-ness)	Stratum Description	Samples & In Situ Testing: Water	Casing	Depth	Type & No	Results
				0.10	CONCRETE.					
				(0.50)	(MADE GROUND) Dark brown and blackish brown very clayey gravelly SAND. Gravel is fine to coarse angular of subangular concrete brick and flint.					
				0.60	(MADE GROUND) Very loose brown and orangish brown slightly clayey gravelly SAND. Gravel is fine to coarse of subangular to subrounded flint. (LOWESTOFT FORMATION)	Dry	1.00	1.00 - 1.45	C	N=2 (0,1/1,0,1,0)
				(0.70)						
				1.30	Medium dense becoming dense orange and yellowish orange gravelly SAND. Gravel is medium angular to subangular flint. (LOWESTOFT FORMATION)	Dry	1.00	2.00 - 2.45	C	N=18 (3,3/4,4,5,5)
				(1.70)						
				3.00	Dynamic sample ends at 3.00 m (Overhead cables)	Dry	1.00	3.00 - 3.45	C	N=41 (8,9/11,10,11,9)

	Inst (Ø)					Water	Casing	Depth	Type & No	Results

Groundwater entries:

Struck:	Rose to:	Casing:	Sealed:

Casing:

Cased to:	Diameter (mm):
1.00	100

Depth related remarks:

From	to:	Remarks

Run details:

From:	to:	Ø	Duration:	Recovery:

Notes: For explanation of symbols and abbreviations see Key Sheet. All depths and reduced levels are in metres.

Log issue: DRAFT

Scale: 1:50

Project: Station Road, Southwold

Project No: 10513

Client: JPC Environmental Services

Exploratory position reference:

WS05

APPENDIX D

Waste Classification Report

Waste Classification Report

PA6LH-M5M2N-JLVYB

Job name

Blyth Road / Station Rd, Southwold

Description/Comments

Commercial redevelopment of a former garage / workshop site

Project

Commercial development

Site

Land off Blyth Rd / Station Rd, Southwold

Related Documents

#	Name	Description
None		

Waste Stream Template

JPC model waste stream for potentially contaminated sites

Classified by

Name:
Robin Crowther
Date:
23 Oct 2020 14:29 GMT
Telephone:
01473 280699

Company:
JP Chick & Partners Ltd
7 Museum Street
Ipswich
IP1 1HQ

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	06 Dec 2017
Advanced Hazardous Waste Classification	07 Dec 2017

Report

Created by: Robin Crowther
Created date: 23 Oct 2020 14:29 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS1-A[2]	0.10-0.30	Non Hazardous		3
2	WS1-B[2]	0.80-1.00	Non Hazardous		5
3	WS1-C[2]	1.80-2.00	Non Hazardous		6
4	WS1-D[2]	3.70-4.00	Non Hazardous		7
5	WS2-A[2]	0.20-0.40	Non Hazardous		8
6	WS2-B[2]	0.80-1.00	Non Hazardous		10
7	WS2-C[2]	1.80-2.00	Non Hazardous		11
8	WS2-D[2]	4.70-4.00	Non Hazardous		12
9	WS3-A[2]	0.20-0.40	Non Hazardous		13
10	WS3-B[2]	1.80-2.00	Non Hazardous		15
11	WS3-C[2]	3.20-3.50	Non Hazardous		16
12	WS3-D[2]	4.50-4.80	Non Hazardous		17

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
13	WS4-A[2]	0.30-0.50	Non Hazardous		18
14	WS4-B[2]	0.90-1.10	Non Hazardous		20
15	WS4-C[2]	1.80-2.00	Non Hazardous		22
16	WS4-D[2]	4.00-4.20	Non Hazardous		23
17	WS5-A[2]	0.40-0.60	Non Hazardous		24
18	WS5-B[2]	1.40-1.60	Non Hazardous		26
19	WS5-C[2]	2.40-2.60	Non Hazardous		27

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	28
Appendix B: Rationale for selection of metal species	29
Appendix C: Version	30

Classification of sample: WS1-A[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS1-A[2]
Sample Depth:
0.10-0.30 m
Moisture content:
8.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.5% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic acid and its salts with the exception of those specified elsewhere in this Annex }	033-005-00-1				12	mg/kg	1.895	22.734	mg/kg	0.00227 %		
2		boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		<0.2	mg/kg	23.173	<4.635	mg/kg	<0.000463 %		<LOD
3		cadmium { cadmium iodide }	048-007-00-8	232-223-6	7790-80-9		0.5	mg/kg	3.258	1.629	mg/kg	0.000163 %		
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		11	mg/kg	1.462	16.077	mg/kg	0.00161 %		
5		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.923	<7.692	mg/kg	<0.000769 %		<LOD
6		copper { copper sulphate pentahydrate }	029-023-00-4	231-847-6	7758-99-8		23	mg/kg	3.929	90.368	mg/kg	0.00904 %		
7		lead { lead di(acetate) }	082-005-00-8	206-104-4	301-04-2	1	230	mg/kg	1.57	361.076	mg/kg	0.023 %		
8		mercury { mercury(II) sulfide }		215-696-3	1344-48-5		<0.3	mg/kg	1.16	<0.348	mg/kg	<0.0000348 %		<LOD
9		nickel { nickel diiodide }	028-029-00-4	236-666-6	13462-90-3		10	mg/kg	5.324	53.243	mg/kg	0.00532 %		
10		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
11		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		180	mg/kg	2.774	499.346	mg/kg	0.0499 %		
12		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			201-695-5	86-73-7									
16	●	phenanthrene				0.75	mg/kg		0.75	mg/kg	0.000075 %		
			201-581-5	85-01-8									
17	●	anthracene				0.15	mg/kg		0.15	mg/kg	0.000015 %		
			204-371-1	120-12-7									
18	●	fluoranthene				2.2	mg/kg		2.2	mg/kg	0.00022 %		
			205-912-4	206-44-0									
19	●	pyrene				2.2	mg/kg		2.2	mg/kg	0.00022 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.8	mg/kg		1.8	mg/kg	0.00018 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[k]fluoranthene				0.89	mg/kg		0.89	mg/kg	0.000089 %		
		601-036-00-5	205-916-6	207-08-9									
23		benzo[a]pyrene; benzo[def]chrysene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
		601-032-00-3	200-028-5	50-32-8									
24		dibenz[a,h]anthracene				0.28	mg/kg		0.28	mg/kg	0.000028 %		
		601-041-00-2	200-181-8	53-70-3									
25	●	benzo[ghi]perylene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
			205-883-8	191-24-2									
26	●	indeno[123-cd]pyrene				0.91	mg/kg		0.91	mg/kg	0.000091 %		
			205-893-2	193-39-5									
27	●	TPH (C6 to C40) petroleum group				154	mg/kg		154	mg/kg	0.0154 %		
				TPH									
28	●	pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
29		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.11 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Hydrocarbons in soil. No visible free product or odour. Negligible risk of flammability.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0154%)

Classification of sample: WS1-B[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS1-B[2]
Sample Depth:
0.80-1.00 m
Moisture content:
5.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 5.6% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS1-C[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS1-C[2]
Sample Depth:
1.80-2.00 m
Moisture content:
6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS1-D[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS1-D[2]
Sample Depth:
3.70-4.00 m
Moisture content:
2.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 2.5% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS2-A[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS2-A[2]
Sample Depth:
0.20-0.40 m
Moisture content:
8.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.5% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic acid and its salts with the exception of those specified elsewhere in this Annex }		23 mg/kg	1.895	43.574 mg/kg	0.00436 %		
	033-005-00-1							
2	boron { boron tribromide }		0.8 mg/kg	23.173	18.538 mg/kg	0.00185 %		
	005-003-00-0 / 233-657-9 / 10294-33-4							
3	cadmium { cadmium iodide }		1.1 mg/kg	3.258	3.584 mg/kg	0.000358 %		
	048-007-00-8 / 232-223-6 / 7790-80-9							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		13 mg/kg	1.462	19 mg/kg	0.0019 %		
	215-160-9 / 1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
6	copper { copper sulphate pentahydrate }		71 mg/kg	3.929	278.963 mg/kg	0.0279 %		
	029-023-00-4 / 231-847-6 / 7758-99-8							
7	lead { lead di(acetate) }	1	290 mg/kg	1.57	455.27 mg/kg	0.029 %		
	082-005-00-8 / 206-104-4 / 301-04-2							
8	mercury { mercury(II) sulfide }		0.3 mg/kg	1.16	0.348 mg/kg	0.0000348 %		
	215-696-3 / 1344-48-5							
9	nickel { nickel diiodide }		22 mg/kg	5.324	117.135 mg/kg	0.0117 %		
	028-029-00-4 / 236-666-6 / 13462-90-3							
10	selenium { nickel selenate }		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5 / 239-125-2 / 15060-62-5							
11	zinc { zinc chromate }		320 mg/kg	2.774	887.727 mg/kg	0.0888 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
12	naphthalene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	205-917-1 / 208-96-8							
14	acenaphthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	201-469-6 / 83-32-9							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			201-695-5	86-73-7									
16		phenanthrene				1.3	mg/kg		1.3	mg/kg	0.00013 %		
			201-581-5	85-01-8									
17		anthracene				0.33	mg/kg		0.33	mg/kg	0.000033 %		
			204-371-1	120-12-7									
18		fluoranthene				3.5	mg/kg		3.5	mg/kg	0.00035 %		
			205-912-4	206-44-0									
19		pyrene				3.2	mg/kg		3.2	mg/kg	0.00032 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				3	mg/kg		3	mg/kg	0.0003 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				2.3	mg/kg		2.3	mg/kg	0.00023 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[k]fluoranthene				2.1	mg/kg		2.1	mg/kg	0.00021 %		
		601-036-00-5	205-916-6	207-08-9									
23		benzo[a]pyrene; benzo[def]chrysene				3.4	mg/kg		3.4	mg/kg	0.00034 %		
		601-032-00-3	200-028-5	50-32-8									
24		dibenz[a,h]anthracene				0.54	mg/kg		0.54	mg/kg	0.000054 %		
		601-041-00-2	200-181-8	53-70-3									
25		benzo[ghi]perylene				2.1	mg/kg		2.1	mg/kg	0.00021 %		
			205-883-8	191-24-2									
26		indeno[123-cd]pyrene				2.2	mg/kg		2.2	mg/kg	0.00022 %		
			205-893-2	193-39-5									
27		TPH (C6 to C40) petroleum group				81	mg/kg		81	mg/kg	0.0081 %		
				TPH									
28		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
29		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.178 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Hydrocarbons in soil. No visible free product or odour. Negligible risk of flammability.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0081%)

Classification of sample: WS2-B[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS2-B[2]
Sample Depth:
0.80-1.00 m
Moisture content:
7.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.5% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1	●	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
				TPH									
										Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS2-C[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS2-C[2]
Sample Depth:
1.80-2.00 m
Moisture content:
6.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.3% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS2-D[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS2-D[2]
Sample Depth:
4.70-4.00 m
Moisture content:
5.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 5.1% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1	●	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
				TPH									
										Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS3-A[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS3-A[2]
Sample Depth:
0.20-0.40 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic acid and its salts with the exception of those specified elsewhere in this Annex }	033-005-00-1				21	mg/kg	1.895	39.785	mg/kg	0.00398 %		
2		boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1	mg/kg	23.173	23.173	mg/kg	0.00232 %		
3		cadmium { cadmium iodide }	048-007-00-8	232-223-6	7790-80-9		<0.2	mg/kg	3.258	<0.652	mg/kg	<0.0000652 %		**<LOD**
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		14	mg/kg	1.462	20.462	mg/kg	0.00205 %		
5		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.923	<7.692	mg/kg	<0.000769 %		**<LOD**
6		copper { copper sulphate pentahydrate }	029-023-00-4	231-847-6	7758-99-8		44	mg/kg	3.929	172.878	mg/kg	0.0173 %		
7		lead { lead di(acetate) }	082-005-00-8	206-104-4	301-04-2	1	370	mg/kg	1.57	580.861	mg/kg	0.037 %		
8		mercury { mercury(II) sulfide }		215-696-3	1344-48-5		0.5	mg/kg	1.16	0.58	mg/kg	0.000058 %		
9		nickel { nickel diiodide }	028-029-00-4	236-666-6	13462-90-3		15	mg/kg	5.324	79.865	mg/kg	0.00799 %		
10		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		**<LOD**
11		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		170	mg/kg	2.774	471.605	mg/kg	0.0472 %		
12		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
13		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
14		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			201-695-5	86-73-7									
16	●	phenanthrene				0.54	mg/kg		0.54	mg/kg	0.000054 %		
			201-581-5	85-01-8									
17	●	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			204-371-1	120-12-7									
18	●	fluoranthene				1.8	mg/kg		1.8	mg/kg	0.00018 %		
			205-912-4	206-44-0									
19	●	pyrene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1	mg/kg		1	mg/kg	0.0001 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[k]fluoranthene				0.54	mg/kg		0.54	mg/kg	0.000054 %		
		601-036-00-5	205-916-6	207-08-9									
23		benzo[a]pyrene; benzo[def]chrysene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
		601-032-00-3	200-028-5	50-32-8									
24		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
25	●	benzo[ghi]perylene				0.6	mg/kg		0.6	mg/kg	0.00006 %		
			205-883-8	191-24-2									
26	●	indeno[123-cd]pyrene				0.56	mg/kg		0.56	mg/kg	0.000056 %		
			205-893-2	193-39-5									
27	●	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
				TPH									
28	●	pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
29		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.121 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS3-B[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS3-B[2]
Sample Depth:
1.80-2.00 m
Moisture content:
4.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 4.7% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
									Total:	0.001 %	

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS3-C[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS3-C[2]
Sample Depth:
3.20-3.50 m
Moisture content:
3.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 3.9% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS3-D[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS3-D[2]
Sample Depth:
4.50-4.80 m
Moisture content:
5.2%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 5.2% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS4-A[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS4-A[2]
Sample Depth:
0.30-0.50 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic acid and its salts with the exception of those specified elsewhere in this Annex }		9.1 mg/kg	1.895	17.24 mg/kg	0.00172 %		
	033-005-00-1							
2	boron { boron tribromide }		0.8 mg/kg	23.173	18.538 mg/kg	0.00185 %		
	005-003-00-0 / 233-657-9 / 10294-33-4							
3	cadmium { cadmium iodide }		0.2 mg/kg	3.258	0.652 mg/kg	0.0000652 %		
	048-007-00-8 / 232-223-6 / 7790-80-9							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		11 mg/kg	1.462	16.077 mg/kg	0.00161 %		
	215-160-9 / 1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
6	copper { copper sulphate pentahydrate }		10 mg/kg	3.929	39.291 mg/kg	0.00393 %		
	029-023-00-4 / 231-847-6 / 7758-99-8							
7	lead { lead di(acetate) }	1	39 mg/kg	1.57	61.226 mg/kg	0.0039 %		
	082-005-00-8 / 206-104-4 / 301-04-2							
8	mercury { mercury(II) sulfide }		<0.3 mg/kg	1.16	<0.348 mg/kg	<0.0000348 %		<LOD
	215-696-3 / 1344-48-5							
9	nickel { nickel diiodide }		5.8 mg/kg	5.324	30.881 mg/kg	0.00309 %		
	028-029-00-4 / 236-666-6 / 13462-90-3							
10	selenium { nickel selenate }		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5 / 239-125-2 / 15060-62-5							
11	zinc { zinc chromate }		100 mg/kg	2.774	277.415 mg/kg	0.0277 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
12	naphthalene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	205-917-1 / 208-96-8							
14	acenaphthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	201-469-6 / 83-32-9							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			201-695-5	86-73-7									
16		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			201-581-5	85-01-8									
17		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			204-371-1	120-12-7									
18		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-912-4	206-44-0									
19		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
23		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-032-00-3	200-028-5	50-32-8									
24		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
25		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-883-8	191-24-2									
26		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-893-2	193-39-5									
27		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
				TPH									
28		pH				9.1	pH		9.1	pH	9.1 pH		
				PH									
29		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0461 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS4-B[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS4-B[2]
Sample Depth:
0.90-1.10 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
1	●	TPH (C6 to C40) petroleum group TPH		358 mg/kg		358 mg/kg	0.0358 %		
2		benzene 601-020-00-8 / 200-753-7 / 71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
3	●	ethylbenzene 601-023-00-4 / 202-849-4 / 100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
4		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] 601-022-00-9 / 202-422-2 [1], 203-396-5 [2], 203-576-3 [3], 215-535-7 [4] / 95-47-6 [1], 106-42-3 [2], 108-38-3 [3], 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5		toluene 601-021-00-3 / 203-625-9 / 108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
						Total:	0.0362 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"
Force this Hazardous property to non hazardous because Hydrocarbons in soil. No visible free product or odour. Negligible risk of flammability.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0358%)

Classification of sample: WS4-C[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS4-C[2]
Sample Depth:
1.80-2.00 m
Moisture content:
3.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 3.9% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS4-D[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS4-D[2]
Sample Depth:
4.00-4.20 m
Moisture content:
4.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 4.1% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS5-A[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS5-A[2]
Sample Depth:
0.40-0.60 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic acid and its salts with the exception of those specified elsewhere in this Annex }		19 mg/kg	1.895	35.996 mg/kg	0.0036 %		
	033-005-00-1							
2	boron { boron tribromide }		1.1 mg/kg	23.173	25.49 mg/kg	0.00255 %		
	005-003-00-0 / 233-657-9 / 10294-33-4							
3	cadmium { cadmium iodide }		<0.2 mg/kg	3.258	<0.652 mg/kg	<0.0000652 %		<LOD
	048-007-00-8 / 232-223-6 / 7790-80-9							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		13 mg/kg	1.462	19 mg/kg	0.0019 %		
	215-160-9 / 1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
6	copper { copper sulphate pentahydrate }		36 mg/kg	3.929	141.446 mg/kg	0.0141 %		
	029-023-00-4 / 231-847-6 / 7758-99-8							
7	lead { lead di(acetate) }	1	130 mg/kg	1.57	204.086 mg/kg	0.013 %		
	082-005-00-8 / 206-104-4 / 301-04-2							
8	mercury { mercury(II) sulfide }		<0.3 mg/kg	1.16	<0.348 mg/kg	<0.0000348 %		<LOD
	215-696-3 / 1344-48-5							
9	nickel { nickel diiodide }		16 mg/kg	5.324	85.189 mg/kg	0.00852 %		
	028-029-00-4 / 236-666-6 / 13462-90-3							
10	selenium { nickel selenate }		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5 / 239-125-2 / 15060-62-5							
11	zinc { zinc chromate }		56 mg/kg	2.774	155.352 mg/kg	0.0155 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
12	naphthalene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	205-917-1 / 208-96-8							
14	acenaphthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	201-469-6 / 83-32-9							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			201-695-5	86-73-7									
16		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			201-581-5	85-01-8									
17		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			204-371-1	120-12-7									
18		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-912-4	206-44-0									
19		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
23		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-032-00-3	200-028-5	50-32-8									
24		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
25		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-883-8	191-24-2									
26		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-893-2	193-39-5									
27		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
				TPH									
28		pH				8	pH		8	pH	8pH		
				PH									
29		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0615 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS5-B[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS5-B[2]
Sample Depth:
1.40-1.60 m
Moisture content:
6.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.5% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS5-C[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS5-C[2]
Sample Depth:
2.40-2.60 m
Moisture content:
3.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 3.5% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
2		benzene	601-020-00-8	200-753-7	71-43-2		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
3	●	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
4		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
5		toluene	601-021-00-3	203-625-9	108-88-3		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
											Total:	0.0014 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Appendix A: Classifier defined and non CLP determinands

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **lead di(acetate)** (EC Number: 206-104-4, CAS Number: 301-04-2)

CLP index number: 082-005-00-8
Description/Comments: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following CLP protocols, considers many simple lead compounds to be Carcinogenic category 2.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
05 Jun 2020 - Carc. 2 H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

- **mercury(II) sulfide** (EC Number: 215-696-3, CAS Number: 1344-48-5)

Conversion factor: 1.16
Description/Comments: Data from ECHA's C&L and SDS Sigma Aldrich V6 dated 17/9/2019 Threshold for EUH031 based on calculation method in WM3 Box C12.1
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/8530
Data source date: 14 May 2020
Hazard Statements: EUH031 >= 1 %, EUH031 , Skin Sens. 1 H317 , STOT RE 2 H373

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

Appendix B: Rationale for selection of metal species

arsenic {arsenic acid and its salts with the exception of those specified elsewhere in this Annex}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

boron {boron tribromide}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

cadmium {cadmium iodide}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

chromium in chromium(VI) compounds {chromium(VI) oxide}

(enter justification for selecting this species)

copper {copper sulphate pentahydrate}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

lead {lead di(acetate)}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

mercury {mercury(II) sulfide}

In the petroleum industry mercury is typically found in its elemental form, but can react to form mercuric sulphide. we have adopted the worst case in this instance.

nickel {nickel diiodide}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

selenium {nickel selenate}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

zinc {zinc chromate}

Former site use is as a petrol filling station, workshop and other assort commercial uses a long period. Worst case compound selected based on a conservative approach.

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.289.4500.8764 (15 Oct 2020)
HazWasteOnline Database: 2020.290.4501.8765 (16 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

APPENDIX E

Gas/ Groundwater Monitoring Results

Gas & Groundwater Monitoring Record

TerraConsult

Project No:	10513	Project:	Station Road, Southwold
Date:	16/09/2020		
Operator:	AS		
Equipment used:	Dipmeter & GFM435 s/n 11378		

State of Ground:	Dry
Wind :	None
Wind direction:	N/A
Cloud cover:	30%
Precipitation:	None
Pressure trend:	Steady

Detection limits:	0.1% vol	0.1%	0.1% vol	0.1% vol	0.1 ppm	1.0 ppm	NA	0.1 ppm	

Borehole ID	Inst ID	Barometric Pressure (mbars)	Air temp (oC)	Depth of Installation (m BGL)	Time of Reading hh:mm	Depth to Groundwater (m BGL)	Differential Pressure (Pa)	FlowRate (l/hr)	CH4 (% vol)	CH4 (% LEL)	O2 (% vol)	CO2 (% vol)	CO (ppm)	H2S (ppm)	Nitrogen (% vol)	PID reading (ppm)	Remarks
WS01	1	1022	18	4.00	14:00	DRY	0	0	0	0	20.2	0.2	0	0	NM	NM	
WS03	1	1021	18	5.00	14:20	DRY	0	0	0	0	19.9	0.4	0	0	NM	NM	
WS04	1	1019	18	5.00	14:30	DRY	0	0	0	0	20.4	0.0	0	0	NM	NM	

NA - Not Applicable
NM - Not Measured

Gas & Groundwater Monitoring Record

TerraConsult

Project No:	10513	Project:	Station Road, Southwold
Date:	23/09/2020		
Operator:	DF		
Equipment used:	Dipmeter & GFM435 s/n 11378		

State of Ground:	Damp
Wind :	None
Wind direction:	N/A
Cloud cover:	100%
Precipitation:	None
Pressure trend:	Steady

Detection limits:	0.1% vol	0.1%	0.1% vol	0.1% vol	0.1 ppm	1.0 ppm	NA	0.1 ppm	

Borehole ID	Inst ID	Barometric Pressure (mbars)	Air temp (oC)	Depth of Installation (m BGL)	Time of Reading hh:mm	Depth to Groundwater (m BGL)	Differential Pressure (Pa)	FlowRate (l/hr)	CH4 (% vol)	CH4 (% LEL)	O2 (% vol)	CO2 (% vol)	CO (ppm)	H2S (ppm)	Nitrogen (% vol)	PID reading (ppm)	Remarks
WS01	1	1000	18	4.02	10:15	DRY	0	0	0	0	20.2	0.4	0	0	NM	NM	
WS03	1	1000	18	4.76	10:40	DRY	0	0	0	0	20.3	0.2	0	0	NM	NM	
WS04	1	1000	18	4.91	10:30	DRY	0	0	0	0	20.4	0.3	0	0	NM	NM	
WS01A (Historical)	1	1000	18	2.98	10:25	DRY	0	0	0	0	20.5	0.3	0	0	NM	NM	
WS02A (Historical)	1	1000	18	2.49	10:35	1.97	0	0	0	0	20.6	0.2	0	0	NM	NM	No pipework, see photos.
WS03A (Historical)	1	-	18	-	-	-	-	-	-	-	-	-	-	-	NM	NM	Unable to access.

NA - Not Applicable
NM - Not Measured

Gas & Groundwater Monitoring Record

TerraConsult

Project No:	10513	Project:	Station Road, Southwold
Date:	30/09/2020		
Operator:	DF		
Equipment used:	Dipmeter & GFM435 s/n 11378		

State of Ground:	Damp
Wind :	None
Wind direction:	N/A
Cloud cover:	50%
Precipitation:	None
Pressure trend:	Steady

Detection limits:	0.1% vol	0.1%	0.1% vol	0.1% vol	0.1 ppm	1.0 ppm	NA	0.1 ppm	

Borehole ID	Inst ID	Barometric Pressure (mbars)	Air temp (oC)	Depth of Installation (m BGL)	Time of Reading hh:mm	Depth to Groundwater (m BGL)	Differential Pressure (Pa)	FlowRate (l/hr)	CH4 (% vol)	CH4 (% LEL)	O2 (% vol)	CO2 (% vol)	CO (ppm)	H2S (ppm)	Nitrogen (% vol)	PID reading (ppm)	Remarks
WS01	1	1009	16	4.00	09:55	DRY	0	0	0	0	20.0	0.6	0	0	NM	NM	
WS03	1	1009	16	4.95	10:15	DRY	0	0	0	0	20.1	0.4	0	0	NM	NM	
WS04	1	1009	16	4.92	10:05	4.87	0	0	0	0	20.2	0.3	0	0	NM	NM	
WS01A (Historical)	1	1009	16	2.99	10:00	DRY	0	0	0	0	20.1	0.4	0	0	NM	NM	
WS02A (Historical)	1	1009	16	2.47	10:10	1.97	0	0	0	0	20.5	0.2	0	0	NM	NM	No pipework, see photos.
WS03A (Historical)	1	1009	16	3.03	10:20	DRY	0	0	0	0	20.1	0.1	0	0	NM	NM	

NA - Not Applicable
NM - Not Measured

Gas & Groundwater Monitoring Record

TerraConsult

Project No:	10513	Project:	Station Road, Southwold
Date:	07/10/2020		
Operator:	TM		
Equipment used:	Dipmeter & GFM435 s/n 11378		

State of Ground:	Dry
Wind :	Light breeze
Wind direction:	N/A
Cloud cover:	50%
Precipitation:	None
Pressure trend:	Falling

Detection limits:	0.1% vol	0.1%	0.1% vol	0.1% vol	0.1 ppm	1.0 ppm	NA	0.1 ppm	

Borehole ID	Inst ID	Barometric Pressure (mbars)	Air temp (oC)	Depth of Installation (m BGL)	Time of Reading hh:mm	Depth to Groundwater (m BGL)	Differential Pressure (Pa)	FlowRate (l/hr)	CH4 (% vol)	CH4 (% LEL)	O2 (% vol)	CO2 (% vol)	CO (ppm)	H2S (ppm)	Nitrogen (% vol)	PID reading (ppm)	Remarks
WS01	1	1011	14	4.00	11:45	DRY	0	0	0	0	19.9	0.7	0	0	NM	NM	
WS03	1	1010	14	4.95	12:23	DRY	0	0	0	0	20.5	0.0	0	0	NM	NM	
WS04	1	1011	14	4.92	12:01	4.81	0	0	0	0	20.5	0.1	0	0	NM	NM	
WS01A (Historical)	1	1010	14	2.99	12:15	DRY	0	0	0	0	20.4	0.3	0	0	NM	NM	
WS02A (Historical)	1	1011	14	2.47	12:10	1.97	0	0	0	0	20.5	0.0	0	0	NM	NM	No pipework or gas valve.
WS03A (Historical)	1	1010	14	3.03	12:29	DRY	0	0	0	0	20.1	0.5	0	0	NM	NM	

NA - Not Applicable
NM - Not Measured

Gas & Groundwater Monitoring Record

TerraConsult

Project No:	10513	Project:	Station Road, Southwold
Date:	14/10/2020		
Operator:	TM		
Equipment used:	Dipmeter & GFM435 s/n 11378		

State of Ground:	Damp
Wind :	None
Wind direction:	N/A
Cloud cover:	100%
Precipitation:	None
Pressure trend:	Steady

Detection limits:	0.1% vol	0.1%	0.1% vol	0.1% vol	0.1 ppm	1.0 ppm	NA	0.1 ppm	

Borehole ID	Inst ID	Barometric Pressure (mbars)	Air temp (oC)	Depth of Installation (m BGL)	Time of Reading hh:mm	Depth to Groundwater (m BGL)	Differential Pressure (Pa)	FlowRate (l/hr)	CH4 (% vol)	CH4 (% LEL)	O2 (% vol)	CO2 (% vol)	CO (ppm)	H2S (ppm)	Nitrogen (% vol)	PID reading (ppm)	Remarks
WS01	1	1021	11	4.00	11:03	3.88	0	0	0	0	20.3	0.0	0	0	NM	NM	
WS03	1	1021	11	4.95	11:21	DRY	0	0	0	0	19.8	0.5	0	0	NM	NM	
WS04	1	1020	11	4.92	11:13	4.81	0	0	0	0	19.9	0.5	0	0	NM	NM	
WS01A (Historical)	1	1021	11	2.99	11:07	DRY	0	0	0	0	20.0	0.4	0	0	NM	NM	
WS02A (Historical)	1	1020	11	2.47	11:18	1.96	0	0	0	0	20.3	0.0	0	0	NM	NM	No pipework or gas valve.
WS03A (Historical)	1	1021	11	3.03	11:30	DRY	0	0	0	0	19.6	0.8	0	0	NM	NM	

NA - Not Applicable
NM - Not Measured

Gas & Groundwater Monitoring Record

TerraConsult

Project No:	10513	Project:	Station Road, Southwold
Date:	20/10/2020		
Operator:	TM		
Equipment used:	Dipmeter & GFM435 s/n 11378		

State of Ground:	Dry
Wind :	None
Wind direction:	N/A
Cloud cover:	100%
Precipitation:	None
Pressure trend:	Falling

Detection limits:	0.1% vol	0.1%	0.1% vol	0.1% vol	0.1 ppm	1.0 ppm	NA	0.1 ppm	

Borehole ID	Inst ID	Barometric Pressure (mbars)	Air temp (oC)	Depth of Installation (m BGL)	Time of Reading hh:mm	Depth to Groundwater (m BGL)	Differential Pressure (Pa)	FlowRate (l/hr)	CH4 (% vol)	CH4 (% LEL)	O2 (% vol)	CO2 (% vol)	CO (ppm)	H2S (ppm)	Nitrogen (% vol)	PID reading (ppm)	Remarks
WS01	1	1002	16	4.00	12:35	3.88	0	0	0	0	19.6	0.9	0	0	NM	NM	
WS03	1	1000	16	4.95	13:02	DRY	0	0	0	0	20.4	0.2	0	0	NM	NM	
WS04	1	1000	16	4.92	12:49	4.8	0	0	0	0	20.3	0.3	0	0	NM	NM	
WS01A (Historical)	1	1001	16	2.99	12:44	DRY	0	0	0	0	20.0	0.5	0	0	NM	NM	
WS02A (Historical)	1	1000	16	2.47	12:55	1.97	0	0	0	0	20.5	0.0	0	0	NM	NM	No pipework or gas valve. Oil on end of dip tape.
WS03A (Historical)	1	1000	16	3.03	13:08	DRY	0	0	0	0	20.2	0.4	0	0	NM	NM	

NA - Not Applicable
NM - Not Measured

APPENDIX F

Laboratory Results

Andrew Cartwright
JP Chick & Partners Ltd
7 Museum Street
Suffolk
Ipswich
IP1 1HQ

e: andrew.cartwright@chick.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-31121

Project / Site name:	Station Road, Southwold	**Samples received on:**	21/09/2020
Your job number:	IE20-016	**Samples instructed on/ Analysis started on:**	21/09/2020
Your order number:		**Analysis completed by:**	25/09/2020
Report Issue Number:	1	**Report issued on:**	25/09/2020
Samples Analysed:	19 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625814	1625815	1625816	1625817
Sample Reference				WS1	WS1	WS1	WS1
Sample Number				A	B	C	D
Depth (m)				0.10-0.30	0.80-1.00	1.80-2.00	3.70-4.00
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				0900	0920	0940	1000
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	8.5	5.6	6	2.5
Total mass of sample received	kg	0.001	NONE	1.3	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	8.3	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	-	-
Free Cyanide	mg/kg	1	MCERTS	< 1	-	-	-
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	270	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	16	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0079	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	7.9	-	-	-
Sulphide	mg/kg	1	MCERTS	2	-	-	-
Organic Matter	%	0.1	MCERTS	1.9	-	-	-
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	0.75	-	-	-
Anthracene	mg/kg	0.05	MCERTS	0.15	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	2.2	-	-	-
Pyrene	mg/kg	0.05	MCERTS	2.2	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.8	-	-	-
Chrysene	mg/kg	0.05	MCERTS	1.1	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.5	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.89	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.6	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.91	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.28	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	-	-	-
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	14.5	-	-	-
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	230	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	180	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625814	1625815	1625816	1625817
Sample Reference				WS1	WS1	WS1	WS1
Sample Number				A	B	C	D
Depth (m)				0.10-0.30	0.80-1.00	1.80-2.00	3.70-4.00
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				0900	0920	0940	1000
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Monoaromatics & Oxygenates							
Benzene	µg/kg	1	MCERTS	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-
Petroleum Hydrocarbons							
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
TPH C10 - C40	mg/kg	10	MCERTS	-	< 10	-	< 10
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-
TPH (C10 - C25)	mg/kg	10	MCERTS	24	-	< 10	-
TPH (C25 - C40)	mg/kg	10	MCERTS	130	-	< 10	-
VOCs							
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625814	1625815	1625816	1625817
Sample Reference				WS1	WS1	WS1	WS1
Sample Number				A	B	C	D
Depth (m)				0.10-0.30	0.80-1.00	1.80-2.00	3.70-4.00
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				0900	0920	0940	1000
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625814	1625815	1625816	1625817
Sample Reference				WS1	WS1	WS1	WS1
Sample Number				A	B	C	D
Depth (m)				0.10-0.30	0.80-1.00	1.80-2.00	3.70-4.00
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				0900	0920	0940	1000
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-

Miscellaneous Organics

Product ID		N/A	NONE	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625818	1625819	1625820	1625821
Sample Reference				WS2	WS2	WS2	WS2
Sample Number				A	B	C	D
Depth (m)				0.20-0.40	0.80-1.00	1.80-2.00	4.70-4.00
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1020	1040	1100	1120
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	8.5	7.5	6.3	5.1
Total mass of sample received	kg	0.001	NONE	1.3	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	8.3	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	-	-
Free Cyanide	mg/kg	1	MCERTS	< 1	-	-	-
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	680	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	49	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.025	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	24.6	-	-	-
Sulphide	mg/kg	1	MCERTS	4.8	-	-	-
Organic Matter	%	0.1	MCERTS	3.6	-	-	-
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	1.3	-	-	-
Anthracene	mg/kg	0.05	MCERTS	0.33	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	3.5	-	-	-
Pyrene	mg/kg	0.05	MCERTS	3.2	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3	-	-	-
Chrysene	mg/kg	0.05	MCERTS	2.3	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	3.4	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	2.1	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.4	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.2	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.54	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.1	-	-	-
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	27.4	-	-	-
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	23	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.1	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	71	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	290	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	320	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625818	1625819	1625820	1625821
Sample Reference				WS2	WS2	WS2	WS2
Sample Number				A	B	C	D
Depth (m)				0.20-0.40	0.80-1.00	1.80-2.00	4.70-4.00
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1020	1040	1100	1120
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Monoaromatics & Oxygenates							
Benzene	µg/kg	1	MCERTS	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-
Petroleum Hydrocarbons							
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
TPH C10 - C40	mg/kg	10	MCERTS	-	< 10	-	< 10
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-
TPH (C10 - C25)	mg/kg	10	MCERTS	27	-	< 10	-
TPH (C25 - C40)	mg/kg	10	MCERTS	54	-	< 10	-
VOCs							
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-

Lab Sample Number				1625818	1625819	1625820	1625821
Sample Reference				WS2	WS2	WS2	WS2
Sample Number				A	B	C	D
Depth (m)				0.20-0.40	0.80-1.00	1.80-2.00	4.70-4.00
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1020	1040	1100	1120
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625818	1625819	1625820	1625821
Sample Reference				WS2	WS2	WS2	WS2
Sample Number				A	B	C	D
Depth (m)				0.20-0.40	0.80-1.00	1.80-2.00	4.70-4.00
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1020	1040	1100	1120
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-

Miscellaneous Organics

Product ID		N/A	NONE	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625822	1625823	1625824	1625825
Sample Reference				WS3	WS3	WS3	WS3
Sample Number				A	B	C	D
Depth (m)				0.20-0.40	1.80-2.00	3.20-3.50	4.50-4.80
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1140	1200	1220	1240
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	14	4.7	3.9	5.2
Total mass of sample received	kg	0.001	NONE	1.3	0.9	0.4	0.9
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	8.5	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	-	-
Free Cyanide	mg/kg	1	MCERTS	< 1	-	-	-
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	630	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	37	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.019	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	18.7	-	-	-
Sulphide	mg/kg	1	MCERTS	2	-	-	-
Organic Matter	%	0.1	MCERTS	2.7	-	-	-
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	0.54	-	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	1.8	-	-	-
Pyrene	mg/kg	0.05	MCERTS	1.6	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.1	-	-	-
Chrysene	mg/kg	0.05	MCERTS	1	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.5	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.54	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.1	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.56	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.6	-	-	-
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	10.2	-	-	-
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	44	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	370	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	170	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625822	1625823	1625824	1625825
Sample Reference				WS3	WS3	WS3	WS3
Sample Number				A	B	C	D
Depth (m)				0.20-0.40	1.80-2.00	3.20-3.50	4.50-4.80
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1140	1200	1220	1240
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Monoaromatics & Oxygenates							
Benzene	µg/kg	1	MCERTS	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-
Petroleum Hydrocarbons							
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-
TPH C10 - C40	mg/kg	10	MCERTS	-	-	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-
TPH (C10 - C25)	mg/kg	10	MCERTS	< 10	< 10	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	< 10	< 10	-	-
VOCs							
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-

Lab Sample Number				1625822	1625823	1625824	1625825
Sample Reference				WS3	WS3	WS3	WS3
Sample Number				A	B	C	D
Depth (m)				0.20-0.40	1.80-2.00	3.20-3.50	4.50-4.80
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1140	1200	1220	1240
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625822	1625823	1625824	1625825
Sample Reference				WS3	WS3	WS3	WS3
Sample Number				A	B	C	D
Depth (m)				0.20-0.40	1.80-2.00	3.20-3.50	4.50-4.80
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1140	1200	1220	1240
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-

Miscellaneous Organics

Product ID		N/A	NONE	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625826	1625827	1625828	1625829
Sample Reference				WS4	WS4	WS4	WS4
Sample Number				A	B	C	D
Depth (m)				0.30-0.50	0.90-1.10	1.80-2.00	4.00-4.20
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1300	1320	1340	1400
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	15	13	3.9	4.1
Total mass of sample received	kg	0.001	NONE	1.2	0.9	0.8	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	9.1	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	-	-
Free Cyanide	mg/kg	1	MCERTS	< 1	-	-	-
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	1400	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	78	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.039	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	39	-	-	-
Sulphide	mg/kg	1	MCERTS	< 1.0	-	-	-
Organic Matter	%	0.1	MCERTS	0.7	-	-	-
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	-	-
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.1	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	10	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	39	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	5.8	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625826	1625827	1625828	1625829
Sample Reference				WS4	WS4	WS4	WS4
Sample Number				A	B	C	D
Depth (m)				0.30-0.50	0.90-1.10	1.80-2.00	4.00-4.20
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1300	1320	1340	1400
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Monoaromatics & Oxygenates							
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-
Petroleum Hydrocarbons							
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
TPH C10 - C40	mg/kg	10	MCERTS	-	-	-	< 10
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	20	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	260	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	280	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	74	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	78	-	-
TPH (C10 - C25)	mg/kg	10	MCERTS	< 10	-	< 10	-
TPH (C25 - C40)	mg/kg	10	MCERTS	< 10	-	< 10	-
VOCs							
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-
Chloroethane	µg/kg	1	NONE	-	< 1.0	-	-
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	-	-
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	-	-
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-

Lab Sample Number				1625826	1625827	1625828	1625829
Sample Reference				WS4	WS4	WS4	WS4
Sample Number				A	B	C	D
Depth (m)				0.30-0.50	0.90-1.10	1.80-2.00	4.00-4.20
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1300	1320	1340	1400
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-
Styrene	µg/kg	1	MCERTS	-	< 1.0	-	-
Tribromomethane	µg/kg	1	NONE	-	< 1.0	-	-
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	< 0.1	-	-
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	-
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625826	1625827	1625828	1625829
Sample Reference				WS4	WS4	WS4	WS4
Sample Number				A	B	C	D
Depth (m)				0.30-0.50	0.90-1.10	1.80-2.00	4.00-4.20
Date Sampled				16/09/2020	16/09/2020	16/09/2020	16/09/2020
Time Taken				1300	1320	1340	1400
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	-	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-

Miscellaneous Organics

Product ID		N/A	NONE	-	See Appendix	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625830	1625831	1625832
Sample Reference				WS5	WS5	WS5
Sample Number				A	B	C
Depth (m)				0.40-0.60	1.40-1.60	2.40-2.60
Date Sampled				16/09/2020	16/09/2020	16/09/2020
Time Taken				1420	1440	1500
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	15	6.5	3.5
Total mass of sample received	kg	0.001	NONE	1.2	0.9	0.8
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	8	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	-
Free Cyanide	mg/kg	1	MCERTS	< 1	-	-
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	330	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	72	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.036	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	35.8	-	-
Sulphide	mg/kg	1	MCERTS	< 1.0	-	-
Organic Matter	%	0.1	MCERTS	2.5	-	-
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	-
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	-
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	56	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625830	1625831	1625832
Sample Reference				WS5	WS5	WS5
Sample Number				A	B	C
Depth (m)				0.40-0.60	1.40-1.60	2.40-2.60
Date Sampled				16/09/2020	16/09/2020	16/09/2020
Time Taken				1420	1440	1500
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Monoaromatics & Oxygenates						
Benzene	µg/kg	1	MCERTS	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0
Petroleum Hydrocarbons						
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	-
TPH C10 - C40	mg/kg	10	MCERTS	-	< 10	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10
TPH (C10 - C25)	mg/kg	10	MCERTS	< 10	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	< 10	-	-
VOCs						
Chloromethane	µg/kg	1	ISO 17025	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-

Lab Sample Number				1625830	1625831	1625832
Sample Reference				WS5	WS5	WS5
Sample Number				A	B	C
Depth (m)				0.40-0.60	1.40-1.60	2.40-2.60
Date Sampled				16/09/2020	16/09/2020	16/09/2020
Time Taken				1420	1440	1500
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Trichloroethene	µg/kg	1	MCERTS	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-

Analytical Report Number: 20-31121
Project / Site name: Station Road, Southwold

Lab Sample Number				1625830	1625831	1625832
Sample Reference				WS5	WS5	WS5
Sample Number				A	B	C
Depth (m)				0.40-0.60	1.40-1.60	2.40-2.60
Date Sampled				16/09/2020	16/09/2020	16/09/2020
Time Taken				1420	1440	1500
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Naphthalene	mg/kg	0.05	MCERTS	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-
Miscellaneous Organics						
Product ID		N/A	NONE	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 20-31121
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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1625814	WS1	A	0.10-0.30	Brown loam and sand with gravel and vegetation.
1625815	WS1	B	0.80-1.00	Brown loam and sand with gravel.
1625816	WS1	C	1.80-2.00	Brown loam and sand with gravel.
1625817	WS1	D	3.70-4.00	Brown loam and sand with gravel.
1625818	WS2	A	0.20-0.40	Brown loam and sand with gravel.
1625819	WS2	B	0.80-1.00	Brown loam and sand with gravel.
1625820	WS2	C	1.80-2.00	Brown loam and sand with gravel.
1625821	WS2	D	4.70-4.00	Brown loam and sand with gravel.
1625822	WS3	A	0.20-0.40	Brown loam and clay with gravel.
1625823	WS3	B	1.80-2.00	Brown loam and sand with gravel.
1625824	WS3	C	3.20-3.50	Brown loam and sand with gravel.
1625825	WS3	D	4.50-4.80	Brown loam and sand with gravel.
1625826	WS4	A	0.30-0.50	Brown loam and sand with gravel and brick.
1625827	WS4	B	0.90-1.10	Brown loam and clay with gravel.
1625828	WS4	C	1.80-2.00	Brown loam and sand with gravel.
1625829	WS4	D	4.00-4.20	Brown loam and sand with gravel.
1625830	WS5	A	0.40-0.60	Brown loam and clay with gravel.
1625831	WS5	B	1.40-1.60	Brown loam and sand with gravel.
1625832	WS5	C	2.40-2.60	Brown loam and sand with gravel.

Analytical Report Number : 20-31121
Project / Site name: Station Road, Southwold

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

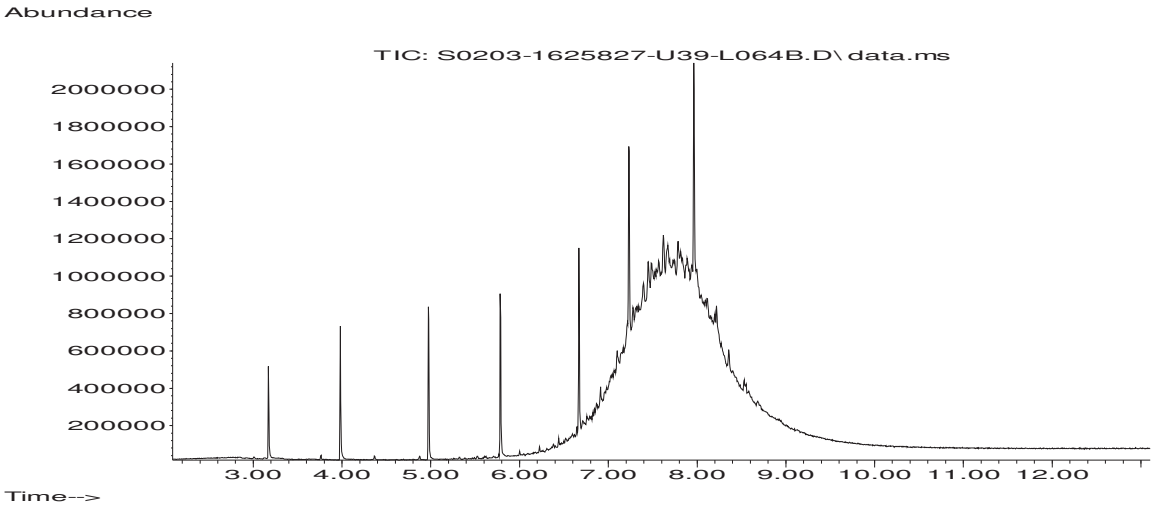
Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
PRO (Soil)	Determination of hydrocarbons C6-C10 by headspace GC-MS.	In-house method based on USEPA8260	L088-PL	W	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Thiocyanate in soil	Determination of thiocyanate in soil by extraction in water followed by acidification followed by addition of ferric nitrate followed by discrete analyser (spectrophotometer).	In-house method	L082-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS

Analytical Report Number : 20-31121
Project / Site name: Station Road, Southwold

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Product ID in soil	Determination of product ID by interpretation against standard chromatograms - Soil.	In-house method	L064-PL/UK	W	NONE
TPH Oils (Soils)	Determination of extractable hydrocarbons in soil by GC-MS/FID.	In-house method with silica gel split/clean up.	L076-PL	D	MCERTS
DRO (Soil)	Determination of extractable hydrocarbons in soil by GC-MS/FID.	In-house method with silica gel split/clean up.	L076-PL	D	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.



The total ion count (TIC trace) shows a carbon range from C10 to C22.
The sample TIC trace is complex, showing aliphatic product sources.
The trace does not match the standard product profiles.

Appendix D – Asbestos survey within demolition specification

Appendix E – Demolition Specification