

Remediation Method Statement



Site | 1-11a Swains Lane
London N6 6QX

Client | Swain's Lane Ltd

Date | October 2016

Our Ref | RMS/7713

Chelmer Site Investigation Laboratories Ltd

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1.0 INTRODUCTION

- 1.1 This report has been prepared by Chelmer Site Investigations (CSI) to the instructions of the Client, Swain's Lane Ltd.
- 1.2 The irregular shaped 0.16 Ha site under consideration comprised a row of former shops along Swains Lane to the south and Highgate West Hill to the west. A yard and parking area was present to the rear of the former shops, accessible from an unnamed driveway from Swain's Lane and Highgate West Hill.
- 1.3 The rear yard area was concrete hardstanding, with evidence of underground storage tanks within two areas, associated with the site's former use as a filling station.
- 1.4 It is understood that the proposed development will comprise the demolition of the existing on-site buildings and construction of part two, part three storey buildings with commercial units at ground floor and basement level and residential units on the upper floors, with associated parking and landscaping.
- 1.5 Chelmer Site Investigations have now been commissioned to prepare a Remediation Method Statement for this site associated with the development and specifically works associated with bringing the site to a suitable condition given the proposed end use.
- 1.6 The remediation strategy is aimed at reducing the risks identified to date, as well as providing a general approach for the ongoing management of ground quality issues at the site during groundworks and construction phases of the proposed residential development.
- 1.7 This work has been commissioned to assist in the discharge of Conditions relating to the investigation of contaminated land *ref 2013/6674/P*.

2.0 HISTORIC SITE INVESTIGATIONS & BACKGROUND

- 2.1 An investigation at the site is known to have been undertaken by others, which should be read in conjunction with this report, which include:
- Harrison Group Environmental Ltd - Desk Study dated May 2012 ref GL16486 DS.
 - Harrison Group Environmental Ltd – Ground Investigation dated November 2013 ref GL16486 GI.
- 2.2 Based on a review of historical mapping records during the Desk Study investigation, the site appears to have been part of an extensive garden to a parsonage located to the north of the site until 1936, when the as present shops fronting Swain's Lane were indicated, with garages to the rear. Underground fuel tanks, filler pipes and an oil interceptor were later installed on-site, used as a filling station since at least the early 1990's, and was later used as a coach depot. From approximately 2002, the north of the site behind the former shops was a car washing facility.
- 2.3 Given the on-site storage tanks and associated operations, a potential risk of contamination was considered and intrusive investigation was undertaken.
- 2.4 The intrusive site investigation was undertaken in April 2012, and although no gross contamination was identified, localised hydrocarbon contamination was suspected adjacent to and beneath the buried tanks and associated pipework.
- 2.5 During the return monitoring visits, low concentrations of carbon dioxide, methane and VOCs were recorded. However, given the localised hydrocarbon contamination expected, there was considered a potential risk from vapours and further action was considered necessary.
- 2.6 A low risk to groundwater was considered, given the low sensitivity and the impermeable nature of the underlying clay geology.

Additional Investigation

- 2.7 Chelmer undertook further investigation at the site on 5th October 2016, to attempt to locate the suspected underground storage tanks associated with the former filling station within the north of the site and between the two existing buildings.
- 2.8 The accessible man hole covers were lifted or broken out and identified what appeared to be two storage tanks, each split into 3 sections, each water filled. Fuel filling pipes were also identified, which indicated both petrol and diesel fuel filling points. A third, smaller diesel tank was also identified. Each of the tanks identified was approximately 1.50m in depth of the base of the tank.

- 2.9 Two of the tanks within the north of the site area understood to be in an area proposed for parking. The third tank is understood to be beneath the proposed Unit 5 within the west building.
- 2.10 The manhole covers of the suspected oil interceptor adjacent to the western building were also lifted or broken out and appeared to indicated a 3-stage interceptor filled with water.
- 2.11 The 3stage oil interceptor is understood to be located adjacent to the proposed basement development of the west building.
- 2.12 A plan and associated photographs of this investigation are appended to this report.

3.0 BASIC ENVIRONMENTAL SETTING AND CONCEPTUAL SITE MODEL

Basic Environmental Setting

- 3.1 According to information published by the British Geological Survey the underlying geology at this site is shown the London Clay Formation.
- 3.2 The site is indicated on Environment Agency mapping to lie on an 'Unproductive' bedrock strata. In addition, Environment Agency information indicated that the site is not within a groundwater Source Protection Zone (SPZ).
- 3.3 Ground investigation across the site identified Made Ground to a maximum depth of 1.50m below existing ground level (bgl), however is expected to be deeper within the vicinity of the underground storage tanks. The Made Ground was underlain by the London Clay Formation which was not penetrated at the maximum borehole termination depth of 30.00m bgl.
- 3.4 Groundwater was not encountered during the drilling works, however perched water was encountered during return monitoring visits between 0.42m and 1.50m bgl.

Conceptual Site Model

- 3.5 Fundamental to the assessment of contaminated land is the development of a Conceptual Site Model (CSM). This is an evaluation of the site conditions and its particular characteristics with respect to so called Source-Pathway-Receptor relationships, or plausible pollutant linkages. The CSM can then be used to assess and define risk and in turn it provides a basis for determining the condition of the land in the context of the proposed development and what if any action needs to be taken to allow the proposed development to proceed safely and without detrimental impact to the site itself or the wider environment.

A plausible pollutant linkage is defined by three elements;

- | | |
|-----------------|--|
| Source | A hazard which exists within the site or its environs which has the potential to cause harm (e.g. contaminated soil, ground gas, unstable ground, etc.) |
| Receptor | Something associated with the site (e.g. end-user, building, off-site feature, etc.) which can be harmed. |
| Pathway | A <u>plausible</u> linkage between the Source and Receptor such that harm can be realised (e.g. end-user coming into direct contact with contaminated soil, mobile contamination adversely impacting groundwater, etc.). |

- 3.6 By definition a pollutant linkage can only exist where the three elements, source-pathway-receptor, are present and co-exist. If one of the elements that make up the pollutant linkage are not present then it follows that there can be no related risk. The breaking of pollutant linkages is a fundamental principal in the management of contaminated land risk and where the risk is identified and deemed to be unacceptable the appropriate action taken will be “breaking” the pollutant linkage in some way.
- 3.7 Risk in the context of contaminated land is considered in terms of its significance and this is qualitatively assessed on the basis of magnitude of harm that may occur and likelihood of that harm occurring. The risk assessment follows the general principles as set out within BS10175:2001 and CIRIA Report C552.
- 3.8 The CSM is used to provide both a context and framework for undertaking any intrusive site investigation which may be deemed necessary to characterise the site with respect to contamination. Where a pollutant linkage is identified further investigation may be needed to confirm or quantify specific conditions, validate the existence of the pollutant linkage and thereby confirm and quantify the degree of risk. This is an important element of the assessment process and under the principles of risk assessment constitutes “*hazard identification*” and “*hazard assessment*”.
- 3.9 Such an approach was undertaken in the previous site investigation undertaken as indicated within the Harrison Group Environmental Ltd – Ground Investigation report dated November 2013 ref GL16486 GI, which shows the site in its current condition is considered to represent a risk to a number of Receptors/Targets and therefore remedial action was considered necessary.
- 3.10 Further to the additional investigation which identified the location and position of the underground storage tanks, it is considered that these may present a potential risk to future users of the development.

4.0 OUTLINE REMEDIATION STRATEGY

- 4.1 Due to the underground storage tanks and the oil interceptor and the suspected localised hydrocarbon contamination within the vicinity of the tanks, there was considered to be potential risks present to future site residents/users.
- 4.2 It is therefore recommended that further action be undertaken with regards to the underground tanks, protection from vapours and protection of future residents in areas of soft landscaping.
- 4.3 Final design and construction methods have not yet been finalised for the development, therefore the fate of the tanks and oil interceptor have not yet been decided as to whether they will be left in-situ or excavated and removed from site. Options have therefore been given within this report for both leaving the underground storage tanks in-situ and for their removal.

General Remediation Outline

- 4.4 The site is not considered to pose an unacceptable risk to groundworkers, provided that appropriate health and safety protocols are employed and appropriate PPE are worn and made available, including gloves and overalls etc to prevent dermal contact with the soils. However, it is recommended that detailed method statements should be provided by the appointed groundworker, prior to their work commencing. High levels of personal hygiene should be adopted by the contractors, with washing facilities made available on-site to reduce extended contact with site soils. Groundworks contractors should also refrain from smoking whilst on site. Contractors should also comply with the recommendations presented in the HSE Guidance Document HS(G)66 'Protection of Workers and the General Public during the Development of Contaminated Land'.
- 4.5 During the groundworks and construction phases, dust suppression measures may be required to minimise potential inhalation of dust by neighbours or groundworks contractors.

Watching Brief/Discovery Strategy

- 4.6 During the course of the development it will be the responsibility of the on-site manager to ensure watching briefs are kept. Specific areas of concern include the vicinity of the underground storage tanks and oil interceptor on-site. Therefore, a watching brief should be completed by an appropriately qualified site manager and/or an environmental consultant. A watching brief consists of a record of:
- Any observations of contamination made during the course of development by any member of site staff, contractor or visitor;
 - A photographic record of the key stages of development and key occurrences including any contamination found during the course of the development, the

formation levels of excavations, any reduced level dig/mass excavation, formation of landscaped or garden areas, etc.

4.7 Upon completion of associated works, a written and signed statement will be obtained by the following parties:

- Ground works contractor(s) upon completion of foundations and ground works;
- On-site manager upon completion of groundworks and landscaping work;
- Environmental Consultant upon completion of groundworks and landscaping works.

4.8 The written statement must clearly state whether or not evidence of contamination was identified during the course of the development and the action that was taken.

Staff training/brief

4.9 All site staff, site contractors and, where significant contamination is expected site visitors, will be briefed on the potential presence of land, water or air bourn contamination before commencing work on the site. Apart from any standard Health & Safety practices this will include the following information:

- Health & Safety considerations;
- The type of land, water or air bourn contamination expected at the development site based on previous use and available site investigation information;
- Any particular areas of the site which are likely to be affected;
- Staff responsibilities under the discovery strategy.

4.10 The on-site manager will need to provide written confirmation that site staff were briefed about contaminated land in line with these recommendations.

Discovery strategy

4.11 The discovery strategy sets out the actions that must be taken if unexpected contamination is encountered during the course of a development.

4.12 Examples of the types of contamination that may be encountered include visual or olfactory evidence such as from fuel or oil like substances and waste materials, as well as from on-site wellbeing such as light headedness or skin reddening.

4.13 All suspected contamination must be reported to the site manager, who will contact the Environmental Consultant for advice and further actions, if deemed necessary. These must also be reported to the Planning Authority and Contaminated Land Officer at the London Borough of Camden.

Underground Storage Tanks (USTs)

Remaining in-situ

- 4.14 Should the final design of the development allow the underground storage tank(s) to remain in-situ, then once the hard standing around the tank(s) vicinity is broken out, the tank(s) will be pumped of their liquid contents and degassed by a suitably licenced contractor with appropriate certification provided. The tank(s) will then be concrete slurry filled. Once the slurry fill has set, the area surrounding the tank(s) will be suitably backfilled and compacted.
- 4.15 Should any hydrocarbon contamination be identified during these stages, this should be excavated and stockpiled on-site, ready for removal.

Excavation and Removal

- 4.16 If the underground storage tanks are required to be removed, then once the hard standing around the tank(s) vicinity is broken out, the tank(s) will be pumped of their liquid contents and degassed by a suitably licenced contractor with appropriate certification provided. The tank(s) will then be excavated and removed from site.
- 4.17 The surrounding soils will be assessed for contamination, with any suspected hydrocarbon impacted soils excavated and temporarily stockpiled within a designated area.
- 4.18 Validation testing from the excavation area will be undertaken, with a minimum of two samples per vertical surface length and from the base of the excavation.
- 4.19 The excavation shall then be suitably backfilled with arisings and where any deficit is encounter, should be made up using certified 6F2 material or similar.

Oil Interceptor

- 4.20 Given the location of the 3-stage oil interceptor, it is likely to be required to be excavated and removed from site.
- 4.21 Once the hard standing around the oil interceptor vicinity is broken out, the chambers will be pumped of their liquid contents. The chambers will then be excavated and removed from site.
- 4.22 The surrounding soils will be assessed for contamination, with any suspected hydrocarbon impacted soils excavated and temporarily stockpiled within a designated area until disposed of.
- 4.23 Validation testing from the excavation areas of the underground storage tanks and oil interceptor will be undertaken, with a minimum of two samples per vertical surface length and from the base of the excavation.

- 4.24 The excavation shall be suitably backfilled with arisings and where any deficit is encountered, should be made up using certified 6F2 material or similar.

Pipework

- 4.25 All associated pipe work and filling points, including the ventilation stacks, should be excavated, chased out and removed.
- 4.26 The surrounding soils will be assessed for contamination, with any suspected hydrocarbon impacted soils excavated and temporarily stockpiled within a designated area until disposed of.

Stockpiling

- 4.27 A suitable storage/stockpiling area should be designated prior to the works. This will include a geotextile membrane at the base and should be bunded if leached contamination is observed.

Excavation & Removal of Contamination for Clean Cover System

- 4.28 Where any proposed gardens or areas of soft landscaping are proposed, a clean cover system will be adopted. This will include excavation to 600mm below finish levels or to a depth when natural soils are encountered (whichever is less).
- 4.29 Excavated soils which are not proposed for on-site reuse will be taken to appropriate local landfill sites for disposal/treatment. The haulage disposal/treatment docket will be retained for inclusion in the Remediation Verification Report (see below). Suitable laboratory testing may be required to assist with soil classification prior to removal from site.

Clean Cover & Importation of Clean Soils

- 4.30 Imported certified clean topsoils/subsoils will be used to complete the excavated areas of proposed soft landscaping/garden areas, with a minimum thickness of 600mm underlain by a geotextile indicator membrane. This will effectively break the pollution pathway between the contaminant sources and receptors on-site and thus reduce the risk to future site residents and users, with the indicator membrane providing a physical barrier to the underlying soils and a visual indicator to future groundworks.

Protection against Ground Gases

- 4.31 Due to the potential of vapours from hydrocarbon contamination and in line with CIRIA C665 and BS8485 (Modified Wilson and Card), it is considered that gas protection measures in line with **Characteristic Situation 2** should be incorporated in the design, to help reduce the risk to future residents.

- 4.32 A scoring system is referred to within BS 8485:2015, whereby each protection measure has an individual score. The proposed development is for private and commercial dwellings of multiple occupancy and includes a basement with passive ventilation, therefore would be classified as Type B building. The combined score for such a development must equal or exceed a gas protection score of **3.5** for **Characteristic Situation 2**.
- 4.33 The following solutions are provided to meet requirements for **Characteristic Situation 2** (taken from Tables 4, 5, 6 and 7 in BS 8485:2015) and are dependent on achieving the necessary points score as detailed above. Different requirements are required for each area of the development, split into the basement, the western building (Units 1-5) and the eastern building (Units 6-8);

Basement

- 4.34 **Floor and substructure design:**
Basement floor and walls conforming to BS 8102:2009, Grade 3 waterproofing
(Score 2.5)
Breaches in floor slabs such as joints have to be effectively sealed against gas ingress in order to maintain these performances.
- 4.35 **Proprietary gas resistant membrane (Score 2):**
- Gas and hydrocarbon vapour resistant membrane.
This should be approved by the Local Authority prior to installation

West Building (Units 1-5)

- 4.36 **Floor and substructure design:**
- Precast suspended segmental subfloor (i.e. beam and block) **(Score 0)**
- Cast in situ ground-bearing floor slab (with only nominal mesh reinforcement) **(Score 0.5)**
- Cast in situ monolithic reinforced ground bearing raft or reinforced cast in situ suspended floor slab with minimal penetrations **(Score 1 or 1.5)**
- 4.37 **Ventilation protection measures:**
Passive sub floor dispersal layer **(Score up to 2.5)**
- 4.38 **Proprietary gas resistant membrane:**
- Gas and hydrocarbon vapour resistant membrane **(Score 2)**
This should be approved by the Local Authority prior to installation

East Building (Units 6-8)

- 4.39 No ground gas or vapour protection measures required.
- 4.40 It is important that the membrane is durable so that damage is prevented during construction on-site and is installed correctly by a competent contractor. All joints and

penetrations (e.g. services) should be appropriately sealed and bonded to the membrane. The use of pre-fabricated or site fabricated top hats should be used to minimise leaks.

- 4.41 The above options are considered to best compliment the anticipated foundation design, however, other options can be developed using BS8485 if required.
- 4.42 It is beneficial to design simple foundations to aid the easy incorporation of gas protection systems. For example, the reduction of service penetrations through a slab by relocation through the outer wall above ground level will reduce the detailing required if laying a membrane and therefore reduce the risk of failure.
- 4.43 As a precursor to site construction works the investigation boreholes and monitoring wells located beneath the proposed building structures should be grouted with a low permeability slurry.
- 4.44 Service entry locations and physical penetrations through basement structures pose a potentially high risk to the continuity and integrity of any waterproofing and/or gas protection system. These are to be fully considered during the building design and not left to chance during construction. Appropriate detailing around service penetrations and appropriate ducts, puddle flanges or proprietary systems that allow adequate sealing is important.
- 4.45 If piling techniques are incorporated within the development, this can create or exacerbate migration pathways from the deeper underlying material to directly beneath the building structure. Therefore, should a piling solution be used, careful consideration of the methods employed should be given so to not create a preferential pathway for ground-gases to migrate to the buildings, with cast in-situ concrete piles preferred.
- 4.46 The construction quality control is a very important issue of the basement and tanking, to ensure that the structure is protected against ingress of both water and ground gases. In this regard, appropriate specification, supervision and control will be needed during design and construction, including validation and verification of the construction.

Services/Potable Water Supplies

- 4.47 Upgraded water supply pipes may be required to be installed on the site in accordance with a document published jointly by Water UK and the Home Builders Federation (Water UK HBF (2014)). The protocols in that document are for guidance and are not subject to enforcement by Water UK or any agency, but have been adopted by Water UK and by HBF as best practice for their members. It is recommended that the results of the soil chemical analyses undertaken on the site should be provided to the potable water supply company in order to ensure that any pipe provided complies with their requirements.

Validation & Verification

- 4.48 Validation and verification of the above works will be undertaken to ensure the works are undertaken as agreed.

Validation testing from the excavation areas of the underground storage tanks and oil interceptor will be undertaken, with a minimum of two samples per vertical surface length and from the base of the excavation.

The depths of excavation and importation of clean soils for the clean cover system will be verified to ensure they complied with recommendations and that the clean imported material is suitable for use.

- 4.49 Analysis of the quality of the imported soils will be carried out to ensure their suitability for use. This should include in-situ sampling of the imported soil once placed, at a rate of 1 N^o. sample per 50m³ of material with a minimum of 4 N^o. samples being obtained per source of material, along with chemical certification from the soil supplier. Analysis of the imported soils will include heavy metals, speciated Polycyclic Aromatic Hydrocarbon (PAH), speciated Total Petroleum Hydrocarbon (TPH) and asbestos screening.
- 4.50 Verification of the depths of the imported soils will be obtained, either prior to or after the importation of clean soils. Photographic evidence of these works will be obtained.
- 4.51 The fines portion of any site sourced or imported demolition sourced materials will also need to be sampled and analysed for asbestos (asbestos screening followed by quantification if asbestos is found), at a rate of 1 N^o. sample per 200m³ of material with a minimum of 4 N^o. samples being obtained per source of material.
- 4.52 Independent verification/validation of the gas membrane and foundation options will also be undertaken via site visits during installation in accordance with CIRIA 748 and CIRIA 735.

5.0 REMEDIATION VALIDATION REPORT

5.1 A Remediation Verification Report will be prepared following completion of remedial works detailing:

- The remedial works undertaken;
- Waste transfer documentation;
- Documentary and photographic evidence to indicate that the imported soils are of suitable thickness and geotextile membrane is present;
- Results of analyses of validation and verification samples tested including imported clean topsoils;
- Validation of gas protection measures



Prepared By:

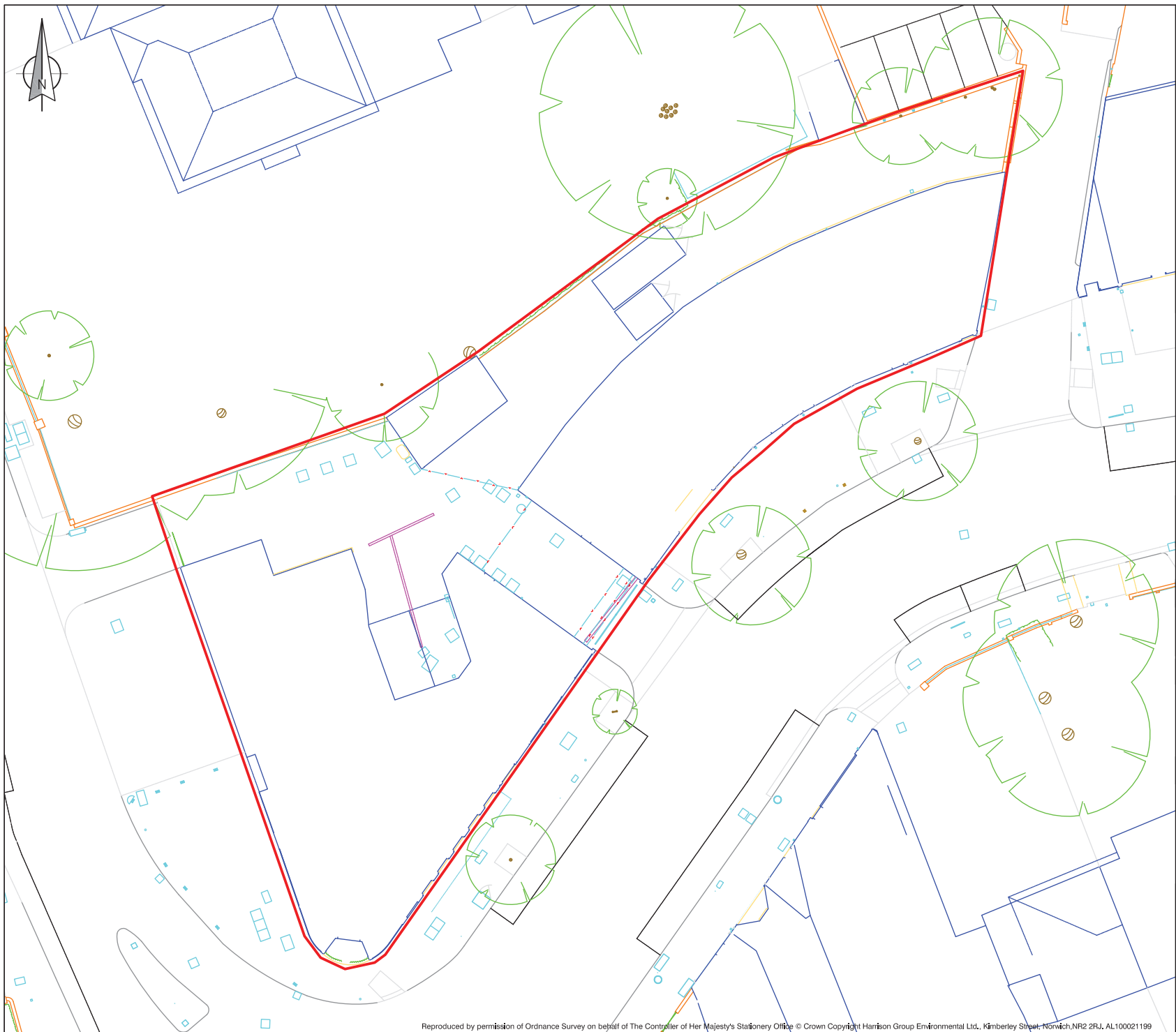
Jack Hunter BSc (Hons), AMIEnvSc
Senior Geo-Environmental Engineer

END OF REPORT


References

1. CIRIA (2007) C665. Assessing Risks posed by Hazardous Ground Gases to Buildings.
2. BS8485:2014 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings.

- a) This report has been prepared for the purpose of providing advice to the client pursuant to its appointment of Chelmer Site Investigation Laboratories Limited (CSI) to act as a consultant.
- b) Save for the client no duty is undertaken or warranty or representation made to any party in respect of the opinions, advice, recommendations or conclusions herein set out.
- c) All work carried out in preparing this report has used, and is based upon, our professional knowledge and understanding of the current relevant English and European Community standards, approved codes of practice, technology and legislation.
- d) Changes in the above may cause the opinion, advice, recommendations or conclusions set out in this report to become inappropriate or incorrect. However, in giving its opinions, advice, recommendations and conclusions, CSI has considered pending changes to environmental legislation and regulations of which it is currently aware. Following delivery of this report, we will have no obligation to advise the client of any such changes, or of their repercussions.
- e) CSI acknowledges that it is being retained, in part, because of its knowledge and experience with respect to environmental matters. CSI will consider and analyse all information provided to it in the context of our knowledge and experience and all other relevant information known to us. To the extent that the information provided to us is not inconsistent or incompatible therewith, CSI shall be entitled to rely upon and assume, without independent verification, the accuracy and completeness of such information.
- f) The content of this report represents the professional opinion of experienced environmental consultants. CSI does not provide specialist legal advice and the advice of lawyers may be required.
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- h) The assessments made in this report are based on the ground conditions as revealed by walkover survey and/or intrusive investigations, together with the results of any field or laboratory testing or chemical analysis undertaken and other relevant data, which may have been obtained including previous site investigations. In any event, ground contamination often exists as small discrete areas of contamination (hot spots) and there can be no certainty that any or all such areas have been located and/or sampled.
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Key :

 Site Boundary

Client :
Earl of Lisowel
Project : Swain's Lane
Job No : GL16486 Date : April 2012
Drawing Title : Fieldwork Location Plan
Drawing No : GL16486 - DR002
Scale : 1 : 500 @ A3
Drawn by : YN Checked by : KB
Eastings : 528300 Northings : 186400

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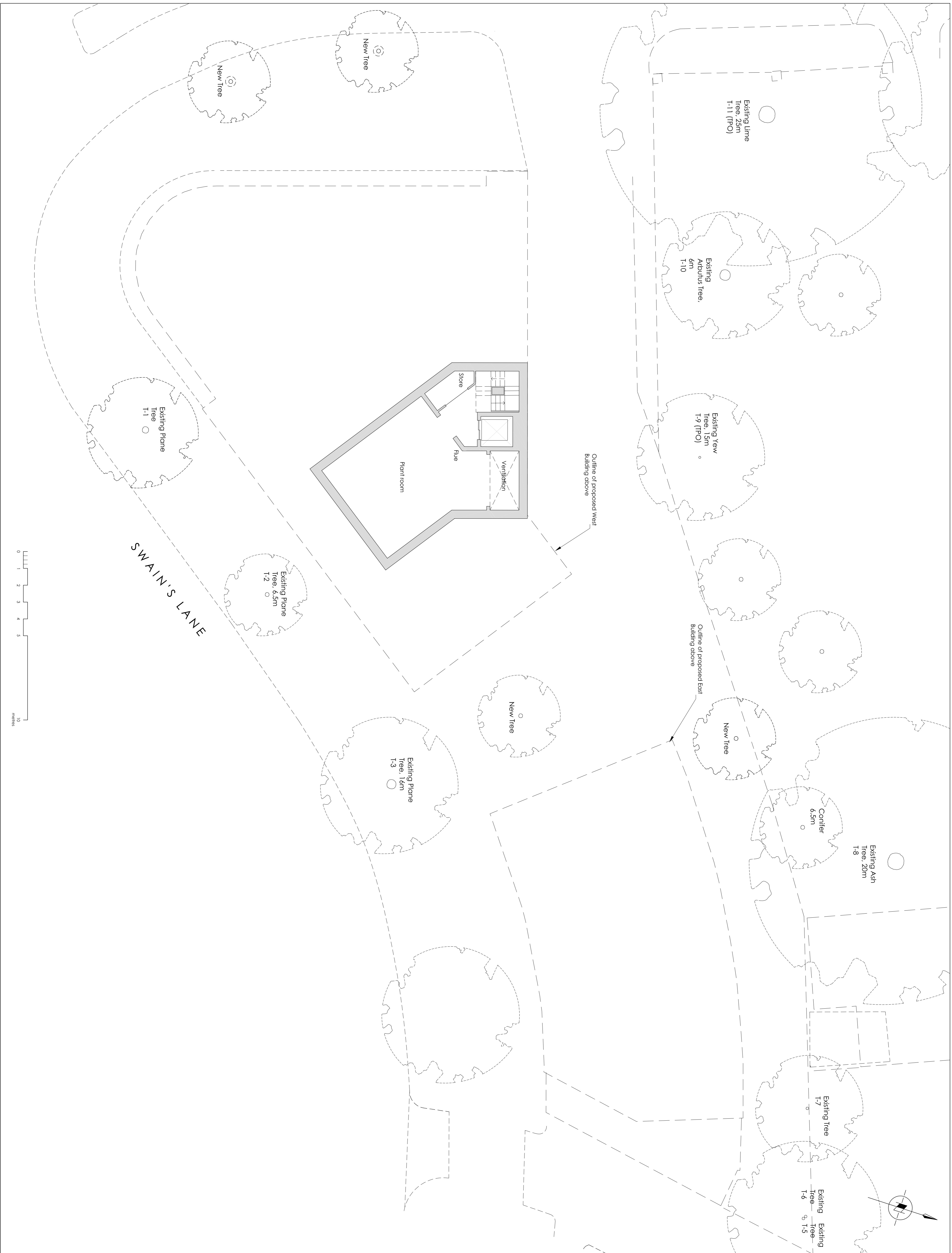


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NOTES
FOR TREE REFERENCES SEE
BIONOMIQUE TREE REPORT



PLANNING

STATUS:

REV	DATE	AMENDMENT

CLIENT:
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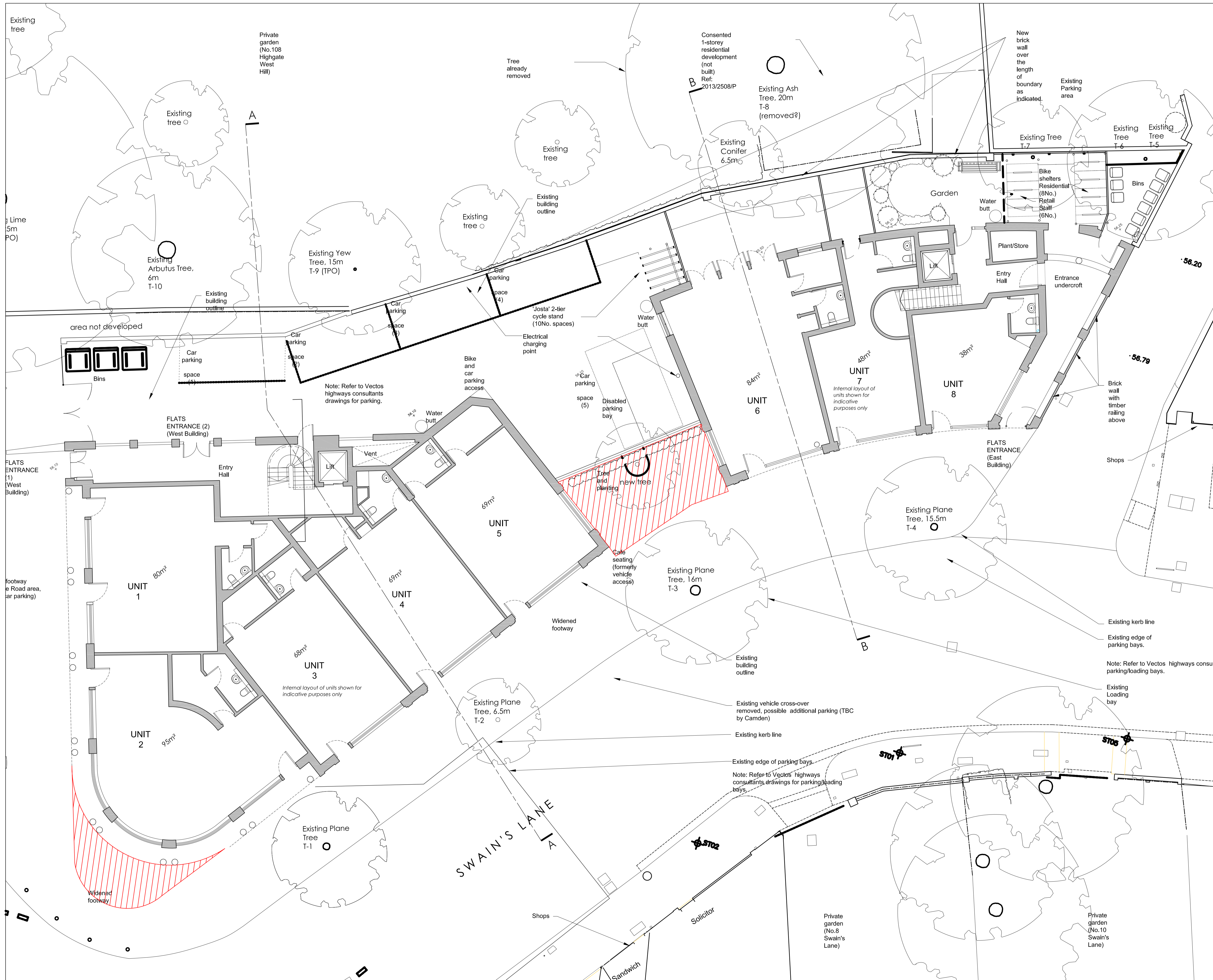
PROJECT:
**SWAIN'S LANE
LONDON, N6 6QX**

LIAM O'CONNOR
ARCHITECTS
AND PLANNING CONSULTANTS
75 COWCROSS STREET
LONDON EC1M 6EL
TEL NO: 0207 250 1983
FAX NO: 0207 251 6310
E-MAIL: info@liamocconnor.com

DRAWING TITLE:
PROPOSED BASEMENT PLAN

SCALE	DATE	DRAWN
1:100	SEPT 2013	
@A1		CHECKED

DRAWING NUMBER	REVISION
SWI/PL/11.0	



Do not scale off this drawing.

All indicated dimensions to be checked and verified on site by the Main Contractor before commencement of any fabrication drawings or work whatsoever on site.

Report all discrepancies to the Architect immediately.

This drawing is to be read in conjunction with all the related Architect's and Structural Engineer's drawings, details and all relevant information.

rev.	rev. date	rev. description

tasou
associates
architects + structural engineers

4 Amwell Street, London, EC1R 1UG T: 020 7713 7070 F: 020 7713 7071 E: tasou@tasou.co.uk		
project Swain's Lane London N6 6QX		
dwg title Proposed Ground Floor Plan		
date July 2016	dwg no. GA-002	rev. /
scale @ A1 1:100	job no. 1658	



Do not scale off this drawing.

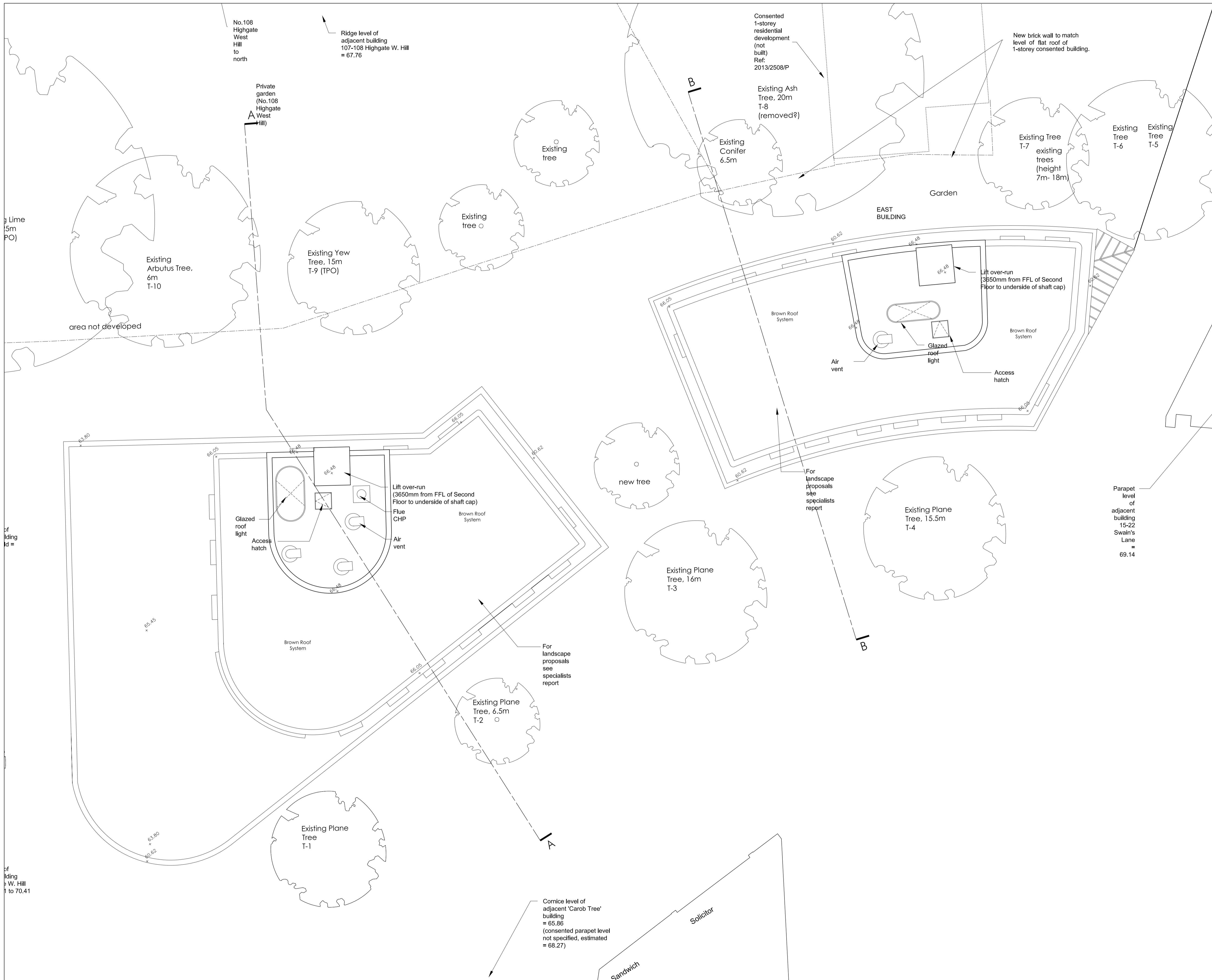
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rev.	rev. date	rev. description

tasou
 associates architects + structural engineers

4 Amwell Street, London, EC1R 1UG T: 020 7713 7070 F: 020 7713 7071 E: tasou@tasou.co.uk		
project Swain's Lane London N6 6QX		
drwg title Proposed Second Floor Plan		
date July 2016	drwg no. GA-004	rev. /
scale @ A1 1:100	job no. 1658	



Do not scale off this drawing.

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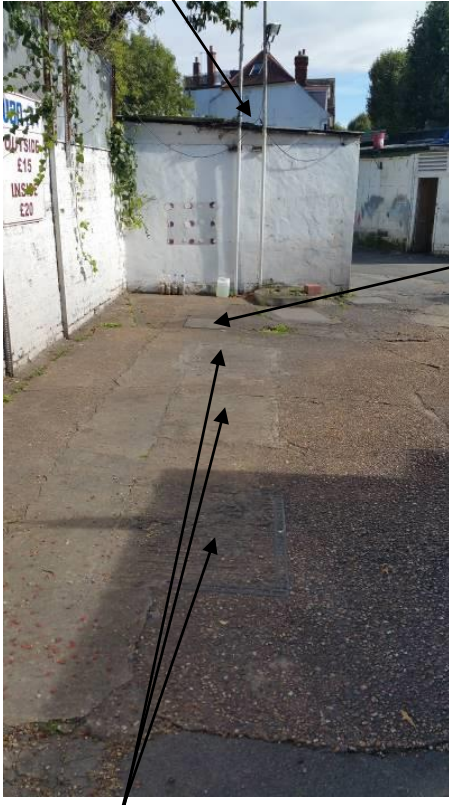
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rev.	rev. date	rev. description

tasou
associates architects + structural engineers

4 Amwell Street, London, EC1R 1UG T: 020 7713 7070 F: 020 7713 7071 E: tasou@tasou.co.uk		
project Swain's Lane London N6 6QX		
drwg title Proposed Roof Plan		
date July 2016	drwg no. GA-005	rev. /
scale @ A1 1:100	job no. 1658	

Ventilation stacks



Row of three manholes covers
- suspected tank



Diesel Tank

Filling points



**CHELMER SITE INVESTIGATION
LABORATORIES LTD**

Tel: 01245 400 930
Fax: 01245 400 933

Title:

**SITE
PHOTOGRAPHS**

1-11A Swain's Lane

Scale: NTS

Date: October 2016

Plate: 1

CCS Ref: 7713



Ventilation Stacks



Lifted manhole covers with pipe work and tanks



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		SITE PHOTOGRAPHS	Date: October 2016
		1-11A Swain's Lane	Plate: 2
			CCS Ref: 7713



Area of suspected 3-stage interceptor



Suspected isolator switch



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PHOTOGRAPHS**

1-11A Swain's Lane

Scale: NTS

Date: October 2016

Plate: 3

CCS Ref: 7713

