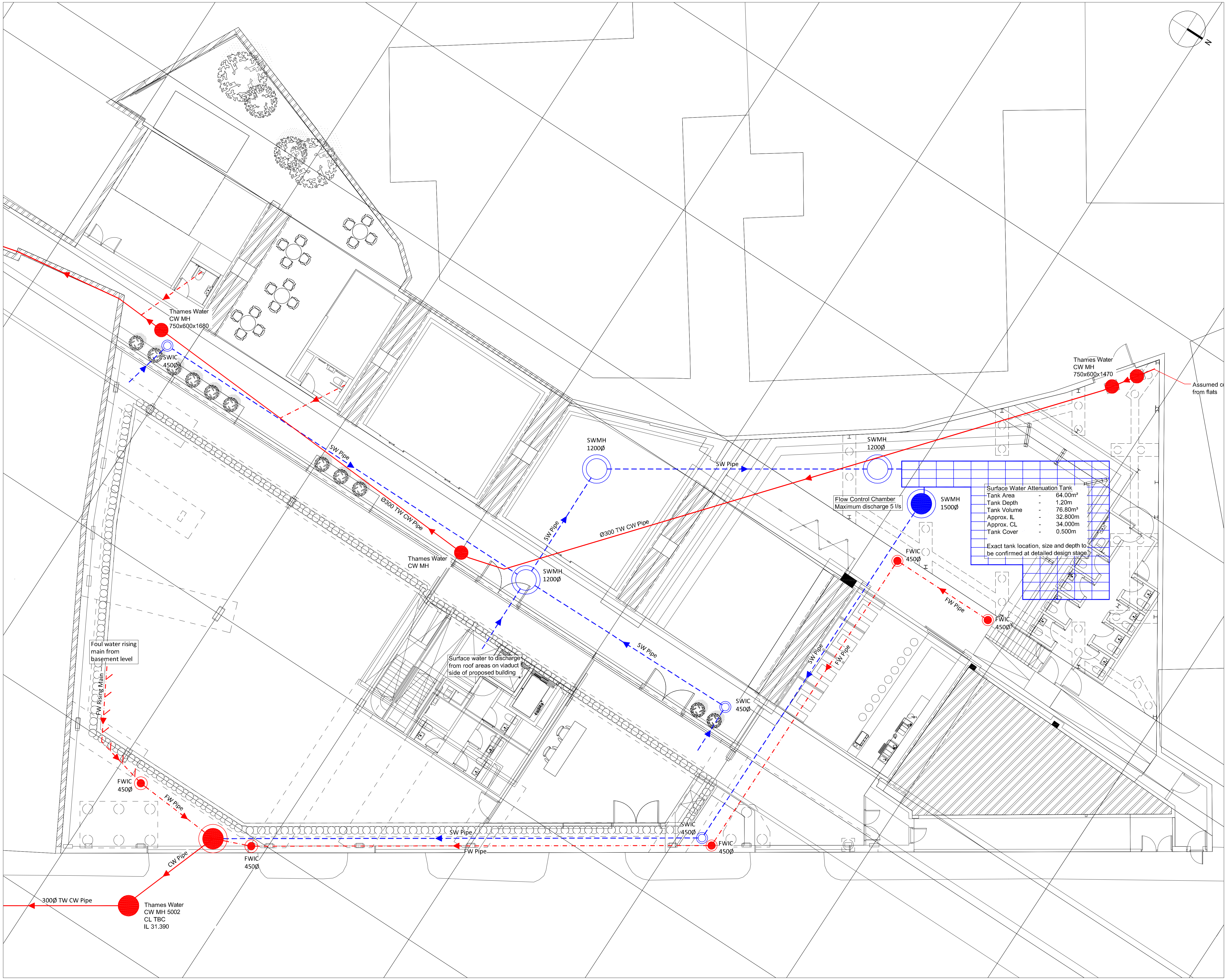

100mm @ A1 (50mm @ A3)

1. This Drawing is to be read in conjunction with all relevant Architect's Engineer's and specialists' drawings and specifications.

2. Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check drawing has been printed to the intended scale the above bar should be 100mm long @A1 or 50mm long @ A3.

Drainage Legend

- Proposed FW Drainage Pipe
- Proposed FW Rising Main
- Proposed SW Drainage
- Existing / Proposed CW Drainage
- 1200Ø SW Manhole
- 1200Ø SW Control Chamber
- 450Ø SW Inspection Chamber
- 450Ø FW Inspection Chamber
- Existing CW Manhole

Rev	Date	By	Eng	Amendments
P2	01.09.16	MDS	SL	Planning Issue
P1	19.05.16	MDS	SL	Planning Issue

HEYNE TILLETT STEEL

STRUCTURAL ENGINEERS

hts.uk.com

Job Name
3–6 Spring Place
London

Drawing Title
Prposed Drainage Strategy
Ground Floor

Purpose of Issue Planning
Scale at A1 1:100

Drawing No. 1399/DR601 Rev. P2

Appendix E

GEA Geotechincal Report

HEYNE TILLETT STEEL

GROUND INVESTIGATION AND BASEMENT IMPACT ASSESSMENT REPORT

3-6 Spring Place
London NW5

Client: Spring Place Limited

Engineer: Heyne Tillett Steel

J16143

August 2016




Geotechnical & Environmental Associates

Document Control

Project title	3-6 Spring Place, London, NW5 3BA		**Project ref**	J16143
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Issue No	Status	Amendment Details	Date	Approved for Issue
1	Final		26 August 2016	
2	Final (minor amendment)		30 August 2016	SB

This report has been issued by the GEA office indicated below. Any enquiries regarding the report should be directed to the office indicated or to Steve Branch in our Herts office.

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Geotechnical & Environmental Associates Limited (GEA) disclaims any responsibility to the Client and others in respect of any matters outside the scope of this work. This report has been prepared with reasonable skill, care and diligence within the terms of the contract with the Client and taking account of the manpower, resources, investigation and testing devoted to it in agreement with the Client. This report is confidential to the Client and GEA accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known, unless formally agreed beforehand. Any such party relies upon the report at their own risk. This report may provide advice based on an interpretation of legislation, guidance notes and codes of practice. GEA does not however provide legal advice and if specific legal advice is required a lawyer should be consulted.

This report is intended as a Ground Investigation Report (GIR) as defined in BS EN1997-2, unless specifically noted otherwise. The report is not a Geotechnical Design Report (GDR) as defined in EN1997-2 and recommendations made within this report are for guidance only.

CONTENTS

EXECUTIVE SUMMARY

Part 1: INVESTIGATION REPORT

Part 2: DESIGN BASIS REPORT

Part 3: GROUND MOVEMENT ANALYSIS

EXECUTIVE SUMMARY

This executive summary contains an overview of the key findings and conclusions. No reliance should be placed on any part of the executive summary until the whole of the report has been read. Other sections of the report may contain information that puts into context the findings that are summarised in the executive summary.

BRIEF

This report describes the findings of a site investigation carried out by Geotechnical and Environmental Associates Limited (GEA) on the instructions of Heyne Tillett Steel, on behalf of Spring Place Limited, with respect to the demolition of the existing buildings and construction of two new office buildings; comprised of a single storey with a mezzanine floor and six-storeys. A single level basement is also proposed beneath part of the site, extending to a depth of about 4.00 m (30.00 m OD). The purpose of the investigation has been to determine the ground conditions and hydrogeology, to assess the extent of any contamination and to provide information to assist with the design of the basement structure and suitable foundations. The report also includes information required to comply with London Borough of Camden (LBC) Planning Guidance CPG4, relating to the requirement for a Basement Impact Assessment (BIA), including a ground movement analysis and building damage assessment. A desk study report has previously been undertaken for the site by GEA (report ref J15241).

GROUND CONDITIONS

The investigation generally encountered the expected ground conditions. Beneath a moderate to significant thickness of made ground, London Clay was encountered and proved to the maximum depth investigated of 24.00 m (11.51 m OD). The made ground generally comprised brown silty sandy clay with flint gravel, brick and concrete fragments and extended to depths of between 1.30 m and 2.10 m (33.92 m OD and 32.33 m OD), although extended to a depth of at least 2.50 m at a single location. The London Clay initially comprised firm becoming stiff fissured medium strength becoming high strength brown mottled grey silty clay, becoming brownish grey from a depth of about 6.00 m which extended to depths of 8.90 m and 9.00 m (25.48 m OD and 26.51 m OD). Below this depth, stiff becoming very stiff fissured high strength becoming very high strength grey silty clay was encountered. Claystones were encountered at various depths within the London Clay. Seepages were encountered from the made ground locally and perched water was encountered around claystones. Monitoring has measured groundwater at depths of between 1.17 m and 1.64 m (33.96 m OD and 33.16 m OD). Vapours were detected during a soil vapour survey and during headspace analysis on recovered soils, in the southeastern corner of the site.

Contamination testing has not measured any elevated concentrations of contaminants on the basis of a commercial end use; however, asbestos has been identified within the made ground during routine screening.

RECOMMENDATIONS

It may be possible to adopt spread foundations for the new single-storey building, provided that loads are not high, whilst piled foundations will be required for heavier loads and will probably be required for the proposed six-storey building.

Excavations for the proposed basement structure will require temporary support to maintain stability of the excavation and surrounding structures at all times. Shallow groundwater has been measured within the standpipes and this probably reflects the presence of perched water that has become trapped by the low permeability clay. A contiguous bored pile wall should be appropriate.

It is understood that the site will remain covered by hardstanding and thus no remedial measures are deemed to be required to protect end users of the site. Site workers should be made aware of potential contamination and asbestos fibres may be present within the made ground. A hydrocarbon resistant membrane may be required to protect end users from vapours, although as the soil contaminated with high concentrations of TPH is likely to be removed by the basement excavation it may be possible to show that this is not required by additional monitoring after excavation. A watching brief should be maintained during groundworks.

BASEMENT IMPACT ASSESSMENT

The BIA has not indicated any concerns with regard to the effects of the proposed basement on the site and surrounding area. It has been concluded that the impacts identified can be mitigated by appropriate design and standard construction practice. A ground movement analysis and building damage assessment have been carried out in support of the planning application and the findings are included in this report and a copy will need to be provided to Network Rail.

Part 1: INVESTIGATION REPORT

This section of the report details the objectives of the investigation, the work that has been carried out to meet these objectives and the results of the investigation. Interpretation of the findings is presented in Part 2.

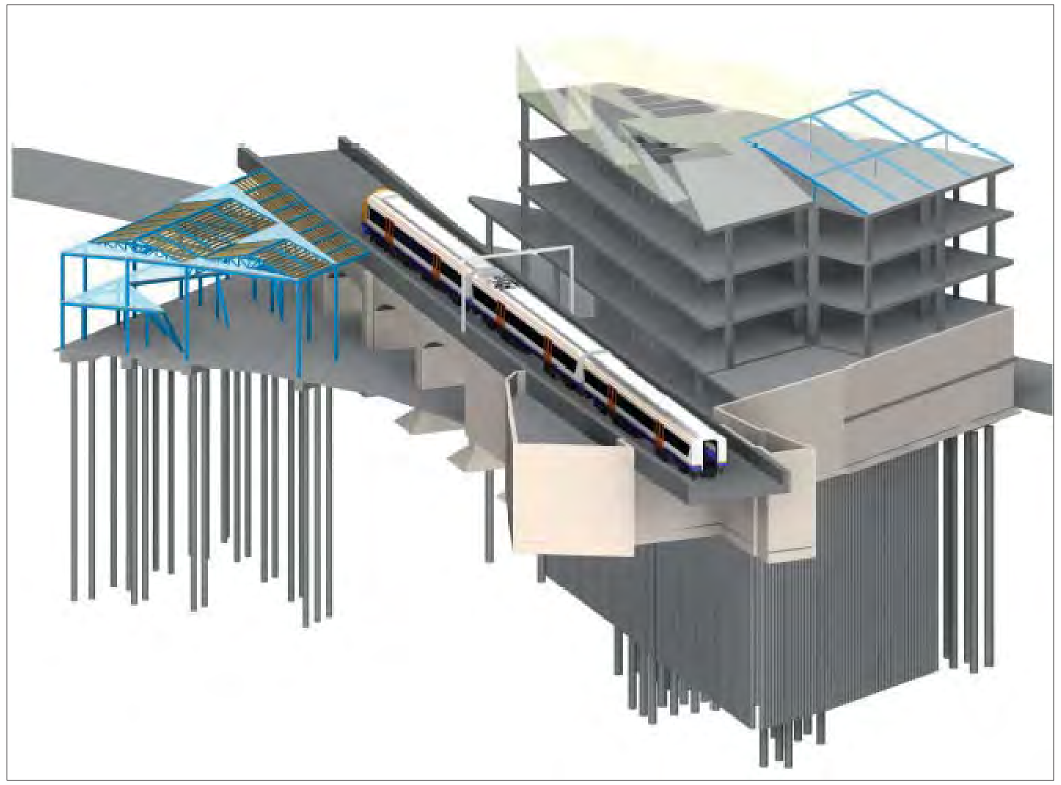
1.0 INTRODUCTION

Geotechnical and Environmental Associates Limited (GEA) has been commissioned by Heyne Tillett Steel, on behalf of Spring Place Limited, to carry out a desk study and ground investigation at 3–6 Spring Place, London, NW5 3BA. This report also forms part of a Basement Impact Assessment (BIA), which has been carried out in accordance with guidelines from the London Borough of Camden (LBC) in support of a planning application, including a ground movement analysis and building damage assessment. A desk study has previously been undertaken by GEA for the site (report ref J15241, dated September 2015).

The work undertaken comprises a first phase of ground investigation and it is proposed to undertake additional trial pits along the railway viaduct, once agreed with Network Rail.

1.1 Proposed Development

It is proposed to demolish the existing buildings and construct two new office buildings, either side of the viaduct. On the western side, the new building will be single-storey with a mezzanine and no basement, whilst the building on the eastern side will be six-storeys plus a partial single level basement, extending to a depth of about 4.00 m. The proposed basement will be located outside the 4 m exclusion zone of the railway viaduct.



This report is specific to the proposed development and the advice herein should be reviewed once the development proposals have been finalised.

1.2 Purpose of Work

The principal technical objectives of the work carried out were as follows:

- to review the previous desk study findings;
- to commission a specialist to undertake preliminary and detailed UXO risk assessments;
- to commission a utilities survey,
- to determine the ground conditions and their engineering properties;
- to investigate the configuration of existing foundations;
- to provide advice and information with respect to the design of suitable foundations and retaining walls;
- to assess the impact of the proposed basement on the local hydrogeology, hydrology and stability of the surrounding natural and build environment;
- to provide an indication of the degree of soil contamination present; and
- to assess the risk that any such contamination may pose to the proposed development, its users or the wider environment.

1.3 Scope of Work

On the basis of the previous desk study findings an intrusive ground investigation was carried out which comprised, in summary, the following activities:

- two cable percussion boreholes advanced to depths of 20.45 m and 24.00 m, by means of a dismantlable rig;
- standard penetration tests (SPTs), carried out at regular intervals in the cable percussion boreholes to provide quantitative data on the strength of the soils;
- five open-drive sampler boreholes advanced to depths of up to 6.00 m;
- five trial pits pre-cored and hand-excavated to depths of between 0.75 m and 0.90 m, to expose the existing foundations of the perimeter walls;
- a soil vapour survey carried out at 30 locations within the northeastern corner of the site, in the area of suspected former buried fuel tanks, using a Photo-Ionisation Detector (PID);
- headspace testing on all shallow samples of recovered soils the boreholes and trial pits;
- installation of three groundwater monitoring standpipes; two pipes to depths of 6.00 m and a single standpipe to a depth of 1.50 m;
- installation of a 19 mm diameter standpipe piezometer to a depth of 6.00 m in order to determine pore water pressures in the London Clay;

- two subsequent groundwater monitoring visits undertaken over a period of four weeks to monitor groundwater levels;
- testing of selected soil samples for contamination and geotechnical purposes; and
- provision of a report presenting and interpreting the above data, together with our advice and recommendations with respect to the proposed development.

The report includes a contaminated land assessment which has been undertaken in accordance with the methodology presented in Contaminated Land Report (CLR) 11[1] and involves identifying, making decisions on, and taking appropriate action to deal with, land contamination in a way that is consistent with government policies and legislation within the United Kingdom. The risk assessment is thus divided into three stages comprising Preliminary Risk Assessment, Generic Quantitative Risk Assessment, and Site-Specific Risk Assessment.

The methods of investigation adopted in this investigation have been selected on the basis of the constraints of the site including but not limited to access and space limitations, together with any budgetary or timing constraints. Where it has not been possible to reasonably use an EC7 compliant investigation technique a practical alternative has been adopted to obtain indicative soil parameters and any interpretation is based upon GEA's engineering experience, local precedent where applicable and relevant published information.

1.3.1 Basement Impact Assessment

The work carried out also includes a Hydrological and Hydrogeological Assessment and Land Stability Assessment (also referred to as Slope Stability Assessment), all of which form part of the BIA procedure specified in the London Borough of Camden (LBC) Planning Guidance CPG4[2] and their Guidance for Subterranean Development[3] prepared by Arup ('the Arup Report'). The aim of the work is to provide information on surface water, groundwater and land stability and in particular to assess whether the development will affect neighbouring properties or groundwater movements and whether any identified impacts can be appropriately mitigated by the design of the development.

1.3.2 Qualifications

The land stability element of the Basement Impact Assessment (BIA) has been carried out by Martin Cooper, a BEng in Civil Engineering, a chartered engineer (CEng), member of the Institution of Civil Engineers (MICE), and Fellow of the Geological Society (FGS) who has over 20 years' specialist experience in ground engineering. The subterranean (groundwater) flow assessment has been carried out by John Evans, MSc in Hydrogeology, Chartered Geologist (CGeol) and Fellow of the Geological Society of London (FGS). The surface water and flooding assessment has been carried out by Rupert Evans, a hydrologist with more than ten years consultancy experience in flood risk assessment, surface water drainage schemes and hydrology / hydraulic modelling. Rupert Evans is a Chartered Environmentalist, Chartered Water and Environmental Manager and a Member of CIWEM.

The assessments have been made in conjunction with Steve Branch, a BSc in Engineering Geology and Geotechnics, MSc in Geotechnical Engineering, a Chartered Geologist (CGeol) and Fellow of the Geological Society (FGS) with some 30 years' experience in geotechnical engineering and engineering geology.

All assessors meet the qualification requirements of the Council guidance.

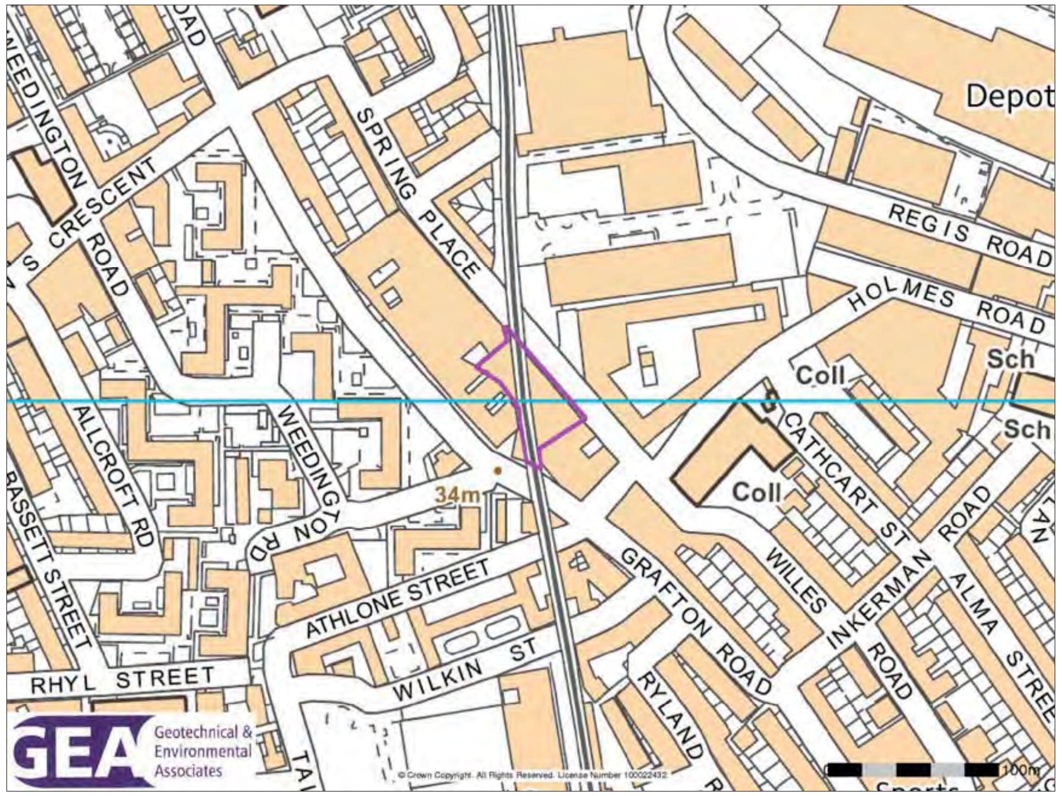
1 *Model Procedures for the Management of Land Contamination* issued jointly by the Environment Agency and the Department for Environment, Food and Rural Affairs (DEFRA) Sept 2004
2 London Borough of Camden Planning Guidance CPG4 *Basements and lightwells*
3 Ove Arup & Partners (2010) *Camden geological, hydrogeological and hydrological study. Guidance for Subterranean Development.* For London Borough of Camden November 2010

1.4 Limitations

The conclusions and recommendations made in this report are limited to those that can be made on the basis of the investigation. The results of the work should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, gas or groundwater samples tested; no liability can be accepted for information in other data sources or conditions not revealed by the sampling or testing. Any comments made on the basis of information obtained from the client or other third parties are given in good faith on the assumption that the information is accurate; no independent validation of such information has been made by GEA.

2.0 THE SITE

2.1 Site Description



The site is located in the London Borough of Camden, in a predominantly commercial area, roughly 350 m north of Kentish Town West railway station. It fronts onto Spring Place to the northeast and is bounded to the southwest by Grafton Road. It is adjoined to the north by No 7 Spring Place, a seven-storey building, and to the south by No 2 Spring Place, a two-storey commercial building. The site is bounded to the southwest by a three-storey building, known as Star House, which fronts onto Grafton Road to the west. A railway viaduct traverses the site at roof level. The site may additionally be located by National Grid Reference 528560, 185000 and is shown on the map extract above.

The site is occupied by a warehouse building, which is divided into designated areas for car maintenance, with the majority of the site occupied by bays used for maintaining and repairing vehicles.

During the site walkover in 2015, a room along the western elevation was noted to contain four 4000 litre tanks used for the storage of oil, which were located above ground on concrete hardstanding. Minor staining was noted on the concrete hardstanding beneath one of the used oil tanks.

Beneath the railway arches, a storage area was noted which included drums for storing oil, lubricants and screen wash. The drums were located on bunds, over concrete hardstanding. Spillages were noted on the surface of the concrete in this area.

An electricity substation is currently present in the central part of the site.

The site is devoid of vegetation, but an approximately 15 m high tree is present on the pavement outside the site on Grafton Road.

The site has remained unchanged since the initial site walk-over in summer 2015.

2.2 Previous Desk Study Findings

The desk study research indicated that the site has had a potentially contaminative history, having been occupied by a motor repair garage for the majority of its known developed history. The site has also been occupied by a glass works and a smithy. The 1957 Goad Insurance plan indicates that two underground petrol tanks were present in the southeastern corner of the site. An enquiry was made to the local petroleum officer, but no further information is held and it is not known if the tanks have been decommissioned or removed. The immediate surrounding area has also had a range of commercial uses, including a colour works, optical works, coal depot, incinerator and garages.

2.3 Other Information

The Envirocheck report sourced as part of the previous desk study indicates that there are no landfill sites or waste transfer sites located within 500 m of the site. However, the search indicated that a licensed waste management facility located 225 m northeast of the site.

Reference to records compiled by the Health Protection Agency (formerly the National Radiological Protection Board) indicates that the site falls within an area where less than 1% of homes are affected by radon emissions and therefore radon protective measures will not be necessary.

An enquiry was made to the London Fire and Emergency Planning Authority, but no information was held on any tanks present on site and it is therefore not known if tanks have been filled or removed.

The railway viaduct is owned by Network Rail and liaison is taking place between them and Heyne Tillett Steel regarding permission to undertake site investigations within 10 m of the viaduct. Further discussions will need to take place with Network Rail to ensure that the development proposals do not impact upon their assets.

2.4 UXO Risk Assessment

A preliminary UXO risk assessment has been carried out by 1st Line Defence (ref EP3672-00, dated 7 July 2016) and the report is included in the Appendix. The risk assessment has been carried out in accordance with guidelines provided by CIRIA[4], which state that the likelihood of encountering and detonating unexploded ordnance (UXO) below a site should be assessed along with establishing the consequences that may arise. The first phase comprises a

4 Stone K, Murray A, Cooke S, Foran J, & Gooderham L (2009) Unexploded ordnance (UXO) A guide for the construction industry CIRIA Report C681

preliminary risk assessment, which should be undertaken at an early stage of the development planning. If such an assessment identifies a high level of risk then a detailed risk assessment should be carried out by a UXO specialist, which will identify an appropriate course of action with regard to risk mitigation.

Bomb damage maps indicate that at least one high explosive (HE) bomb strike is recorded in close proximity to the southern section of the site. Additionally a V1 strike is noted to the immediate west. London County Council damage mapping indicates that the site area was subjected to serious but repairable damage and many of the surrounding properties sustained significant damage or were totally destroyed. Further research will be required to determine the exact location of the HE bomb strike and determine whether the proposed site was damaged prior to the V1 strike

The preliminary UXO risk assessment recommended further research in the form of a Detailed UXO Risk assessment, which was commissioned by the client. The detailed UXO risk assessment (ref DA3672-00, dated 14 July 2016) recommended that site specific unexploded ordnance awareness briefings are undertaken by all personnel conducting intrusive works.

2.5 Geology

The British Geological Survey (BGS) map of the area[5], and the BGS 1:50,000 Bedrock and Superficial Geological Map Sheet 256 indicate that the site is directly underlain by the London Clay Formation. An area of worked ground is present to the northeast of the site, but in view of the age of the workings any infill is unlikely to pose any ongoing risk of soil gas.

According to the BGS memoir, the London Clay Formation is homogenous, slightly calcareous silty clay to very silty clay, with some beds of clayey silt grading to silty fine grained sand.

A record of a borehole on the BGS archive, which was drilled roughly 200 m to the northeast of the site, found the made ground to extend to a depth of 5.70 m, within the area of worked ground to the northeast of the site, overlying suspected Alluvium to a depth of 7.20 m, in turn underlain by the London Clay (borehole ref TQ28NE128).

2.6 Hydrology and Hydrogeology

The London Clay is classified as “Unproductive Strata”, as defined by the Environment Agency as rock or drift deposits with low permeability that have negligible significance for water supply or river base flow.

Groundwater was encountered within the Alluvium during drilling of the aforementioned BGS borehole.

There are no surface water features or listed water abstraction points within 250 m of the site. The site is not located within a Groundwater Source Protection Zone, as defined by the Environment Agency.

Reference to the Lost Rivers of London[6] indicates that the site is located between the western and eastern tributaries of the River Fleet, which flowed about 200 m to the west and roughly 230 m to the east. The tributaries joined just to the west of Kentish Town Road. The Fleet has since been diverted, culverted and is now contained in a sewer.

The site lies outside the catchment of the Hampstead Heath chain of ponds.

[5] www.bgs.ac.uk/geoindex
[6] Barton, N (1992) *The Lost Rivers of London* Historical Publications Ltd

Due to the predominantly cohesive nature of the soils, the groundwater flow rate beaneath the site is likely to be negligible. Published data for the permeability of the London Clay indicates the horizontal permeability to generally range between 1 x 10^{-10} m/s and 1 x 10^{-8} m/s, with an even lower vertical permeability.

The site is not at risk of flooding from rivers or sea, as defined by the Environment Agency and Spring Place and Grafton Road have not been identified as a street at risk of surface water flooding, specified in the London Borough of Camden (LBC) Planning Guidance CPG4.

The site is entirely covered by the existing building and hardstanding and therefore infiltration of rain water into the ground beneath the site is limited and therefore the majority of surface runoff is likely to drain into combined sewers in the road.

3.0 SCREENING

The LBC guidance suggests that any development proposal that includes a subterranean basement should be screened to determine whether or not a full BIA is required.

3.1 Screening Assessment

A number of screening tools are included in the Arup document and for the purposes of this report reference has been made to Appendices E1, E2 and E3 which include a series of questions within screening flowcharts for surface flow and flooding, subterranean (groundwater) flow and land stability. The flowchart questions and responses to these questions are tabulated below.

3.1.1 Subterranean (groundwater) Screening Assessment

Question	Response for 3-6 Spring Place
1a. Is the site located directly above an aquifer?	No. The Site is underlain by the London Clay which is designated as Unproductive Strata by the Environment Agency and cannot store and transmit water in sufficient quantities to support groundwater abstractions or watercourses.
1b. Will the proposed basement extend beneath the water table surface?	Unlikely. The London Clay cannot transmit groundwater flow and therefore cannot support a water table.
2. Is the site within 100 m of a watercourse, well (used/ disused) or potential spring line?	No. The site is located.200m to the west and c.230m to the east of tributaries of the River Fleet. This river is not present at surface and is likely to have been culverted to form part of the local surface water sewer. .
3. Is the site within the catchment of the pond chains on Hampstead Heath?	No. Figure 14 of the Camden geological, hydrogeological and hydrological study – Guidance for subterranean development dated 2010, confirms that the site is not located within this catchment area.
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No. The existing site is covered entirely by the existing building and hard-standing areas so will not increase the amount of hard covered surfaces.
5. As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	No. The London Clay is not suitable for SUDS based soakaways.
6. Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to or lower than, the mean water level in any local pond or spring line?	No. There are no local ponds or spring lines present.

The above screening has identified no potential issues that need to be assessed.

3.1.2 Stability Screening Assessment

Question	Response for 3-6 Spring Place
1. Does the existing site include slopes, natural or manmade, greater than 7°?	No.
2. Will the proposed re-profiling of landscaping at the site change slopes at the property boundary to more than 7°?	No.
3. Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	No. With reference to the Camden Geological, Hydrogeological and Hydrological Study, (refer Figure (16).
4. Is the site within a wider hillside setting in which the general slope is greater than 7°?	No. With reference to the Camden Geological, Hydrogeological and Hydrological Study, (refer Figure (16).
5. Is the London Clay the shallowest strata at the site?	*Yes.*
6. Will any trees be felled as part of the proposed development and / or are any works proposed within any tree protection zones where trees are to be retained?	No. It is understood that no trees will be felled as part of the redevelopment of the site.
7. Is there a history of seasonal shrink-swell subsidence in the local area and / or evidence of such effects at the site?	*Yes. The area is prone to these effects as a result of the presence of shrinkable clay soils, such as London Clay.*
8. Is the site within 100 m of a watercourse or potential spring line?	No. The site is not located within 100 m of a watercourse or potential spring line.
9. Is the site within an area of previously worked ground?	No.
10. Is the site within an aquifer?	No. The site is underlain by the London Clay which is designated as Unproductive Strata by the Environment Agency and cannot store and transmit usable amounts of water.
11. Is the site within 50 m of Hampstead Heath ponds?	No.
12. Is the site within 5 m of a highway or pedestrian right of way?	*Yes. The site fronts onto Spring Place to the northeast and Grafton Road to the southwest.*
13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	*Yes.*
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	No.

The above assessment has identified the following potential issues that need to be assessed:

Q5. London Clay is the shallowest stratum at the site.
Q7. The site is within an area of seasonal shrink-swell.
Q12. The site is within 5 m of a public highway.
Q13 The proposal will increase the depth of the footings

The potential issues that need to be assessed, along with the possible effects of the basement construction on the local hydrology and hydrogeology, are discussed further in Part 2 of this report.

3.1.3 Surface Flow and Flooding Screening Assessment

Question	Response for Response for 3-6 Spring Place
1. Is the site within the catchment of the pond chains on Hampstead Heath?	No. Figure 14 of the Arup report confirms that the site is not located within this catchment area.
2. As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	No. There will not be an increase in impermeable area across the ground surface above the basement, so the surface water flow regime will be unchanged. The basement will entirely be beneath the existing hardstanding/building footprint, therefore the 1m distance between the roof of the basement and ground surface as recommended by the Arup report and para 2.16 of the CPG4 does not apply.
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No. There will not be an increase in impermeable area across the ground surface above the basement.
4. Will the proposed basement development result in changes to the profile of the inflows (instantaneous and long term) of surface water being received by adjacent properties or downstream watercourses?	No. There will not be an increase in impermeable area across the ground surface above the basement, so the surface water flow regime will be unchanged. The basement will entirely be beneath the existing hardstanding/building footprint, therefore the 1m distance between the roof of the basement and ground surface as recommended by the Arup report and para 2.16 of the CPG4 does not apply.
5. Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No. The proposed basement is very unlikely to result in any changes to the quality of surface water being received by adjacent properties or downstream watercourses as the surface water drainage regime will be unchanged and the land uses will remain the same.
6. Is the site in an area identified to have surface water flood risk according to either the Local Flood Risk Management Strategy or the Strategic Flood Risk Assessment or is it at risk of flooding, for example because the proposed basement is below the static water level of nearby surface water feature?	No. The Camden Flood Risk Management Strategy dated 2013, together with Figures 3ii, 4e, 5a and 5b of the SFRA dated 2014, and Environment Agency online flood maps show that the site has a very low flooding risk from surface water, sewers, reservoirs (and other artificial sources), groundwater and fluvial/tidal watercourses. In accordance with paragraph 5.11 of the CPG a positive pumped device will be installed in the basement in order to further protect the site from sewer flooding. It is possible that the basement will be constructed within pockets of perched water and the recommendations outlined in the BIA with regards to water-proofing and tanking of the basement will reduce the risk to acceptable levels. The site is located within the Critical Drainage Area number GROUP3-003, but is not in a Local Flood Risk Zone, as identified in the Camden SWMP and Updated SFRA Figure 6/Rev 2.

The above screening has identified no potential issues that need to be assessed.

4.0 SCOPING AND SITE INVESTIGATION

The purpose of scoping is to assess in more detail the factors to be investigated in the impact assessment. Potential impacts are assessed for each of the identified potential impact factors.

4.1 Potential Impacts

The following potential impacts have been identified by the screening process

Potential Impact	Consequence
London Clay is the shallowest stratum on the site.	The London Clay is prone to seasonal shrink-swell and can cause structural damage.
Seasonal shrink-swell	If a new basement is not dug to below the depth likely to be affected by tree roots this could lead to damaging differential movement between the subject site and adjoining properties.
Site within 5 m of a public highway.	Excavation of a basement may result in structural damage to the road or footway.
Increase in depth of foundations	If not designed and constructed appropriately, the excavation of a basement may result in structural damage to neighbouring buildings and structures, including the nearby Network Rail viaduct.

These potential impacts have been investigated through the site investigation, as detailed in Section 9.0.

5.0 EXPLORATORY WORK

Prior to carrying out any intrusive investigation a utility survey was undertaken by Intersect surveys by a combination of GPR (ground penetrating radar) and CAT and Genny and the findings of the survey were plotted onto a drawing. A copy of which is included within the appendix.

The locations of the boreholes and trial pits were to a large extent governed by the exclusion zone of the Network Rail railway viaduct. In order to meet the objectives described in Section 1.2, as far as possible within these constraints, two cable percussion boreholes were drilled within the garage building to depths of 20.45 m and 24.00 m. Disturbed and undisturbed samples were recovered for subsequent laboratory examination and testing. Standard Penetration Tests (SPTs) were carried out at regular intervals in the cable percussion boreholes to provide quantitative data on the strength of soils encountered.

A total of five trial pits was hand-dug to a maximum depth of 0.90 m to expose the existing foundations of the perimeter walls. The concrete floor slab at each pit location was diamond cored to minimise noise to nearby neighbours and for dust suppression.

To supplement the deep boreholes, five open-drive sampler boreholes were advanced through the base of the trial pits, up to depths of 6.00 m, using a tracked rig (Terrier), to provide additional coverage of the shallow soils at the site, with respect to contamination.

Headspace testing was undertaken on samples recovered from the boreholes and trial pits using a Photo-Ionisation Detector (PID) to detect any hydrocarbon vapours within the soil.

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In addition, a soil vapour survey using a Photo-Ionisation Detector (PID) was undertaken on a grid pattern at a total of 33 probe locations in the southeastern corner of the site, in the area of suspected former buried fuel tanks.

Standpipes were installed in three boreholes to depths of up to 6.00 m and groundwater monitoring has been undertaken on two occasions to date, over a period of roughly four weeks.

A selection of the undisturbed and disturbed samples recovered from the boreholes and trial pits was submitted to a soil mechanics laboratory for a programme of geotechnical testing and an analytical laboratory for a programme of contamination testing.

All of the field work was carried out under the supervision of a geotechnical engineer from GEA.

The borehole and trial pit records and the results of the laboratory analyses are appended, together with a site plan indicating the exploratory positions. The Ordnance Datum (OD) levels shown on the borehole and trial pit records have been interpolated from spot heights shown on a drawing (ref 160106_plan_level.00, dated 8 January 2016), which was provided by the consulting engineers.

Further intrusive work is proposed at a later date to investigate the foundations of the railway viaduct, subject to approval from Network Rail.

5.1 Sampling Strategy

The initial scope of the works and locations of the cable percussion boreholes and trial pits was specified by Heyne Tillett Steel, with input from GEA.

The locations of the trial pits and boreholes were finalised following a pre-site meeting between the consulting engineers and tenant, and following a review of the desk study findings, service plans and the Network Rail exclusion zone.

A total of 14 samples from across the site were analysed for the presence of contamination, including 12 samples of made ground and two samples of natural soils for a range of common industrial contaminants and contamination indicative parameters. For this investigation the analytical suite for the soil included a range of metals, speciation of total petroleum hydrocarbons (TPH), polycyclic aromatic hydrocarbons (PAH), total cyanide and monohydric phenols. The soil samples were selected to provide a general view of the chemical conditions of the soils that are likely to be involved in a human exposure or groundwater pathway and to provide advice in respect of re-use or for waste disposal classification. In addition the samples were screened for asbestos as and a single sample taken closest to the electricity substation was screened for Polychlorinated Biphenyls (PCBs).

The contamination analyses were carried out at a MCERTs accredited laboratory with the majority of the testing suite accredited to MCERTS standards. Details of the MCERTs accreditation and test methods are included in the Appendix together with the analytical results.

A number of samples recovered from the boreholes were submitted to a geotechnical laboratory for a programme of testing that included moisture content and Atterberg limit tests, undrained triaxial compression tests and soluble sulphate and pH level analysis.

6.0 GROUND CONDITIONS

The investigation has confirmed the expected ground conditions in that, below a moderate to significant thickness of made ground, the London Clay was encountered to the full depth investigated.

6.1 Made Ground

The concrete floor slab was generally not found to be reinforced across the site and generally extended to depths of 0.15 m and 0.26 m (34.34m OD and 34.10 m OD), overlying plastic membrane in the east of the site. Whilst, in Borehole No 2 and Trial Pit No 5, located in the west of the site, the floor slab extended to depths of 0.40 m (35.11 m OD) and 0.17 m (35.35 m OD), respectively, directly overlying made ground.

The made ground generally extended to depths of between 1.30 m and 2.10 m (33.92 m OD and 32.33 m OD) and generally comprised brown silty sandy clay with flint gravel, brick and concrete fragments.

The full thickness of the made ground was not proved in the southeastern corner of the site, close to the area of the buried fuel tanks shown on the old Goad Insurance plans. In Borehole No 5 a concrete slab was encountered at a depth of 2.50 m (31.86 m OD) and poor recovery was noted in this borehole from 0.70 m to 2.50 m which may have been indicative of a void. Borehole No 4 was abandoned after encountering an obstruction at a depth of 0.50 m (33.96 m OD).

An organic matter of 0.9 % was measured within a sample of made ground at a depth of 1.00 m from Borehole No 1.

Visual and olfactory evidence of hydrocarbon contamination was noted in Trial Pit Nos 2 and 3 and in Borehole Nos 1 and 7, in the area of historical buried petrol tanks.

Head-space testing on recovered soil samples measured vapour concentrations of up to 83.5 ppm in the southeastern corner of the site. The highest concentrations of vapours were recorded within Borehole Nos 1 and 5, with trace concentrations of vapours measured in the trial pits in this part of the site. No vapours were detected on recovered soils in the northwestern corner of the site.

A total of 12 samples of the made ground was tested for the presence of contamination and the results are presented in Section 5.5.

6.2 London Clay

The London Clay initially comprised firm becoming stiff brown mottled grey silty fissured clay, becoming stiff brownish grey with occasional partings of orange-brown fine sand and silt and selenite crystals, which extended to depths of 8.90 m (25.48 m OD) and 9.00 m (26.51 m OD) and was proved to the base of the window sampler boreholes. Below this depth, unweathered London Clay, consisting of stiff becoming very stiff grey silty fissured clay with rare grey burrows, specklings of mica, shell fragments, black specks and rare partings of dark grey silt and fine sand was encountered and proved to the maximum depth investigated of 24.00 m (11.41 m OD). Claystones were encountered at various depths within the London Clay.

Decayed rootlets were noted in Borehole No 6 from a depth of 2.00 m to 2.40 m and at a depth of 2.00 m in Borehole No 1. No evidence of desiccation was noted at the exploratory locations investigated, but no positions were located close to any trees.

Atterberg limit tests indicate the clay to be of high volume change potential. The results of the undrained triaxial tests generally indicate an increase in strength with depth. The results indicate the clay to generally be of high strength.

No evidence of contamination was noted in these soils, although two samples of natural soil were sent for contamination testing as a precautionary measure and the results are discussed in Section 4.5 below.

6.3 Groundwater

Groundwater was encountered during drilling in Borehole No 3 at a depth of 3.00 m (31.49 m OD) from within the London Clay. A seepage was also encountered in Borehole No 6 at a depth of 1.55 m (33.97 m OD) associated with a claystone. In Borehole No 7 water was encountered at a depth of 1.80 m (32.53 m OD) from within the made ground. On completion of Borehole No 5 water was standing at a depth of 2.47 m (31.89 m OD). Groundwater was not encountered at the other borehole locations or within the trial pits.

Three groundwater monitoring standpipes and a single standpipe piezometer were installed and have been monitored on two occasions to date, over a period of roughly four weeks, after installation. The results of the monitoring visit are shown in the table below.

Date	Borehole No	Depth of pipe	Depth to water (m (m OD))
20/07/2015	1	1.50	1.17 (33.21)
	1	6.00	DRY to 6.00 (Dry to 28.38)
	2	6.00	1.64 (33.87)
	3	6.00	1.22 (33.27)
23/08/2016	1	1.50	1.22 (33.16)
	1	6.00	DRY to 6.00 (Dry to 28.38)
	2	6.00	1.55 (33.96)
	3	6.00	1.29 (33.20)

6.4 Soil Contamination

A soil vapour survey (SVS) was undertaken on a grid pattern in the southeastern corner of the site, where historical records indicated that the former fuel tanks were located. The SVS comprised 33 probe holes, drilled with a ‘Hilti’ drill to a depth of 0.40 m. A plan showing the locations of the probe holes is included in the appendix. Vapour concentrations of up to 30 ppm were detected during the SVS, which would not normally be considered to be particularly significant.

The table below sets out the US95 values measured within 12 samples of made ground analysed; all concentrations are in mg/kg unless otherwise stated.

Determinant	Maximum concentration recorded (mg/kg)	Minimum concentration recorded (mg/kg)	Number of samples below detection limit	Normalised upper bound US_{95}
pH	10.9	8.0	-	-
Arsenic	22	11	NONE	18.5
Cadmium	0.40	<0.20	SEVEN	0.77
Chromium	190	18	NONE	70.8
Lead	1300	17	NONE	728
Mercury	2.9	<0.30	NONE	1.85
Selenium	1.4	<1.0	NINE	1.23
Copper	150	19	NONE	100.5
Nickel	51	16	NONE	33.6
Zinc	340	50	NONE	252.9
Total Cyanide	<1.0	<1.0	ALL	<1.0
Total Phenols	<1.0	<1.0	ALL	<1.0
Total PAH	26.9	<1.60	SEVEN	15.68
Sulphide	37	<1.0	FOUR	73.8
Benzo(a)pyrene	0.22	<0.10	EIGHT	0.51
Naphthalene	1.2	<0.05	EIGHT	0.40
TPH – C8 – C10	<10	<10	ALL	<10
TPH – C10 – C12	210	<1.0	FIVE	87.4
TPH – C12 – C16	2000	<10	FIVE	748.56
TPH – C16 – C21	2500	<10	THREE	910
TPH – C21 – C35	7200	2.9	NONE	1965
Total Organic Carbon %	2.3	0.4	NONE	2.04

At five locations (TP3; 0.50 m, TP3;0.80 m, BH1; 1.00 m, BH5; 2.45 m and BH7; 1.95 m), the TPH concentration exceeded 1000 mg/kg and automatically triggered speciated TPH testing. The results of this additional testing do not indicate any elevated concentrations of speciated TPHs within the made ground tested, above screening values for a commercial end use. Asbestos was also identified during screening of the samples of made ground and the results are detailed in the table below.

Determinant	BH 1 – 0.4 m	BH 2 – 0.5 m	BH 5 – 2.45 m	TP 2 – 0.5 m
Asbestos	Detected - Chrysotile	Detected - Chrysotile	Detected – Chrysotile and Crocidolite	Chrysotile
Quantification (5)	<0.001	<0.001	0.122	<0.001

6.4.1 Generic Quantitative Risk Assessment

The use of a risk-based approach has been adopted to provide an initial screening of the test results to assess the need for subsequent site-specific risk assessments. To this end contaminants of concern are those that have values in excess of a generic human health risk

based guideline values which are either that of the CLEA[7] Soil Guideline Value where available, or is a Generic Guideline Value calculated using the CLEA UK Version 1.06 software assuming a commercial end use. The key generic assumptions for this end use are as follows:

- that groundwater will not be a critical risk receptor;
- that the critical receptor for human health will be working female adults aged 16 to 65 years old;
- that young children will not have prolonged exposure to the site;
- that the exposure duration will be a working lifetime of 49 years;
- that the critical exposure pathways will be direct soil and indoor dust ingestion, skin contact with soils and dust, and inhalation of dust and vapours; and
- that the building type equates to a three-storey office.

It is considered that these assumptions are acceptable for this generic assessment of this site. The tables of generic screening values derived by GEA and an explanation of how each value has been derived are included in the Appendix.

Where contaminant concentrations are measured at concentrations below the generic screening value it is considered that they pose an acceptable level of risk and thus further consideration of these contaminant concentrations is not required. However where concentrations are measured in excess of these generic screening values there is considered to be a potential that they could pose an unacceptable risk and thus further action will be required which could include;

- additional testing to zone the extent of the contaminated material and thus reduce the uncertainty with regard to its potential risk;
- site specific risk assessment to refine the assessment criteria and allow an assessment to be made as to whether the concentration present would pose an unacceptable risk at this site; or
- soil remediation or risk management to mitigate the risk posed by the contaminant to a degree that it poses an acceptable risk.

The results of the contamination testing have not measured any elevated concentrations of contaminants within the made ground or natural soils, above the generic screening values for a commercial end use.

Sulphate concentrations also exceeded 2400 mg/kg within five samples of made ground.

No polychlorinated biphenyls (PCBs) were detected above the detection limit on the single sample of made ground tested from Trial Pit No 4 at a depth of 0.60 m.

Asbestos screening under an electron microscope identified Chrysotile and Crocidolite in four samples of made ground. Asbestos quantification has identified <0.001 % to 0.122 % of asbestos.

The results are discussed in detail in Section 2 of this report.

7 *Updated Technical Background to the CLEA Model (Science Report SC050021/SR3) Jan 2009* and Soil Guideline Value reports for specific contaminants; all DEFRA and Environment Agency.

6.5 Existing Foundations

A total of five trial pits was excavated and the findings are summarised in the table below. Sketches and photographs of the pit are included in the Appendix.

Trial Pit No	Structure	Foundation detail	Bearing Stratum
1	Southeastern elevation (Section A-A')	Concrete Top about 0.18 m Base 0.50 m (33.96 m OD) Lateral projection 290 mm	MADE GROUND
2	Southeastern elevation (Section A-A')	Brick over concrete Top 0.46 m Base 0.70 m (33.66 m OD) Lateral projection 325 mm	MADE GROUND
3	Northeastern elevation (Section A-A')	Brick over concrete Top 0.39 m Base 0.74 m (33.59 m OD) Lateral projection 220 mm	MADE GROUND
4	Northeastern elevation (Section A-A')	Brick over concrete Top 0.15 m Base 0.82 m (33.67 m OD) Lateral projection 400 mm	MADE GROUND
4	Northeastern elevation (Section B-B')	Concrete Top 0.15 m Base 0.79 m (33.70 m OD) Lateral projection 300 mm	MADE GROUND
4	Southeast-northwest (Section C-C')	Concrete Top 0.15 m Base 0.50 m (33.99 m OD) Lateral projection 100 mm	MADE GROUND

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Part 2: DESIGN BASIS REPORT

This section of the report provides an interpretation of the findings detailed in Part 1, in the form of a ground model, and then provides advice and recommendations with respect to foundation options and contamination issues.

7.0 INTRODUCTION

It is proposed to demolish the existing buildings and construct two new office buildings, either side of the viaduct. On the western side, the new building will be single-storey with a mezzanine floor and no basement, whilst the building on the eastern side will be six-storeys plus a partial single level basement, extending to a depth of about 4.00 m. The basement will be located outside the 4 m exclusion zone of the railway viaduct. No soft landscaped areas will be incorporated into the proposed scheme.

It is understood that the preferred foundation solution is to support the new buildings on piles. Proposed pile loads are expected to be in the region of 1000 kN for the new five-storey building.

8.0 GROUND MODEL

The desk study research indicates that the site has had a potentially contaminative history, having been occupied by a glass works in the north of the site and a motor repair works in the south, with a number of buried tanks. The site is currently occupied by a motor repair garage, used by Addison Lee. The immediate surrounding area has also had a potentially contaminative history, including two colour works, optical works, shoe factory, incinerator and garages. On the basis of the fieldwork, the ground conditions at this site can be characterised as follows:

- below a moderate to significant thickness of made ground, the London Clay was encountered and proved to the maximum depth investigated of 24.00 m;
- the concrete floor slab generally extended to depths of between 0.15 m and 0.40 m (35.35 m OD and 34.11 m OD);
- the made ground generally extends to depths of between 1.30 m and 2.10 m (33.92 m OD and 32.33 m OD), where proved and generally comprises brown silty sandy clay with flint gravel, brick and concrete fragments;
- in the southeastern corner of the site, where tanks have been indicated by historical records, the made ground extends to a depth of at least 2.50 m (31.86 m OD) and a void was encountered in Borehole No 5;
- hydrocarbon odour was noted within the made ground in the southeastern corner of the site;
- the London Clay initially comprises an upper weathered horizon of firm becoming stiff fissured medium strength becoming high strength brown mottled grey silty clay becoming stiff brownish grey from a depth of 6.00 m (28.38 m OD and 29.51 m OD), and extends to depths of 8.90 m (25.48 m OD) and 9.00 m (26.51 m OD);

- below this depth, unweathered London Clay comprising stiff becoming very stiff fissured high strength becoming very high strength grey silty clay was proved to the maximum depth investigated of 24.00 m (11.51 m OD);
- claystones were encountered at various depths within the London Clay;
- groundwater was encountered during drilling as perched water within the made ground or seepages associated with claystones;
- subsequent groundwater monitoring has measured water at depths of between 1.17 m and 1.64 m (33.96 m OD and 33.16 m OD), whereas the 19 mm standpipe piezometer sealed entirely within the London Clay was recorded on two occasions to be dry;
- the contamination testing has not measured any elevated concentrations of contaminants above the screening values for a commercial end use; and
- asbestos has been identified within four samples of made ground in the form of Chrysotile and Crocidolite, with concentrations of <0.001 % to 0.122 %.

9.0 ADVICE AND RECOMMENDATIONS

In view of the anticipated relatively high loads, piled foundations are likely to be required for the six-storey building plus a single level basement, but it may be possible to adopt spread foundations for the new single-storey building.

Formation level for the 4.00 m deep basement at about 30 m OD is likely to be within the firm weathered London Clay and some form of groundwater control is likely to be required during excavation, although significant groundwater inflows are not anticipated.

The existing foundations comprise concrete footings that extend to depths of between 0.50 m and 0.85 m, bearing on made ground. The proposed basement will extend to a significant depth relative to the existing foundations of the neighbouring properties and it is understood that the loads from the boundary walls will be supported by new retaining walls. The basement will need to be designed to ensure the stability of the site and any potentially sensitive structures that are in close proximity to the site, including the Network Rail viaduct.

9.1 Basement Excavation

9.1.1 Basement Construction

It is understood that it is proposed to form a single level basement beneath part of the new six-storey building, on the eastern side of the railway viaduct. The proposed basement will extend to a depth of approximately 4.00 m with a formation level at about 30 m OD. On this basis, the proposed single level basement will extend through the made ground and formation level should be within the firm weathered London Clay.

Groundwater seepages were noted during the fieldwork, perched near the base of the made ground and around claystones in the London Clay. Groundwater was also encountered during drilling in Borehole No 3 at a depth of 3.00 m (31.49 m OD) from within the London Clay.

Subsequent groundwater monitoring has measured groundwater at depths of between 1.17 m and 1.64 m (33.96 m OD and 33.16 m OD) within the shallow soils and it is apparent that the water measured within the standpipes is probably perched within the made ground as a

piezometer installed within Borehole No 1, sealed entirely within the London Clay, was recorded to be dry on two occasions, although groundwater monitoring should be continued to confirm this view.

Whilst groundwater monitoring should be continued, it is not possible to draw entirely meaningful conclusions from the measurements made in the standpipes, as the level of the water is not necessarily as significant as the volume of water that may flow into the excavation. For example, a high level of water measured in a standpipe may not be significant if this represents only a small volume of water. The London Clay encountered on the site, included partings of fine sand and silt and the occurrence of groundwater into the basement may be controlled by such, along with claystones. This water should only be perched and it is expected that sump pumping will be adequate to maintain a dry excavation.

Shallow inflows of perched water may also be encountered from within the made ground, particularly within the vicinity of existing foundations, although such inflows are also unlikely to be significant.

It would be prudent to excavate trial pits to the maximum depth of the proposed basement and if groundwater is encountered pumping tests should be carried out, in order to assess the groundwater inflow rates. The trial pits will be over a larger area than investigated by the boreholes, and provide additional information to supplement the findings to date. At this stage it is also recommended that simple permeability tests are undertaken within the standpipes installed to provide preliminary information on likely groundwater inflow rates into the proposed basement excavation, until full access can be provided to the site.

There are a number of methods by which the sides of the basement excavation can be supported in the temporary and permanent conditions. The choice of wall may be governed to a large extent by whether it is to be incorporated into the permanent works and have a load bearing function. The final choice will depend to a large extent on the need to protect nearby structures from movements, the required overall stiffness of the support system, and the need to control groundwater movement through the wall in the temporary condition. Consultation with Network Rail will also need to be undertaken at the earliest opportunity to ensure that they are satisfied with measures to limit movement of the railway viaduct, once the proposals have been finalised.

The noise and vibrations associated with sheet piling is likely to make it unacceptable. A bored pile wall is likely to be the most appropriate method of supporting the basement excavation in the temporary and permanent conditions and could have the advantage of being incorporated into the permanent works and will be able to provide support for structural loads.

On the basis of the monitoring to date, it should be possible to adopt a contiguous bored pile wall, with the use of localised grouting and / or pumping if necessary in order to deal with groundwater inflows, subject to the results of the further testing and investigation to assess the rate of groundwater inflow as noted above.

The ground movements associated with the basement excavation will depend on the method of excavation and support and the overall stiffness of the basement structure in the temporary condition. Thus, a suitable amount of propping will be required to provide the necessary rigidity. In this respect the timing of the provision of support to the wall will have an important effect on movements. The stability of the adjacent foundations will need to be ensured at all times and the existing foundations will need to be underpinned prior to construction of the proposed new basement or will need to be supported by new retaining walls.

9.1.2 Retaining Walls

The following parameters are suggested for the design of the permanent basement retaining walls.

Stratum	Bulk Density (kg/m³)	Effective Cohesion (c' – kN/m²)	Effective Friction Angle (Φ' – degrees)
Made Ground	1700	Zero	20
London Clay	1950	Zero	23

Groundwater has been measured at depths of between 1.17 m and 1.64 m (33.96 m OD and 33.16 m OD) and groundwater may be encountered during basement excavation. Further groundwater monitoring and trial excavations should be undertaken as detailed in Section 8.1.1. Reference should be made to BS8102:2009[8] with regard to requirements for waterproofing and design with respect to groundwater pressures. At this stage it is recommended that a design water level of 1.00 m below ground level is adopted. It may be possible to review this advice, following the findings of continued monitoring and trial excavations.

9.1.3 Basement Heave

Formation level of the approximately 4.00 m deep basement is likely to be within the firm weathered London Clay and will result in a net unloading of up to approximately 75 kN/m². The proposed excavations will result in elastic heave and long term swelling of the London Clay. The effects of the longer term swelling movement will to a certain extent be counteracted by the applied loads from the development. Further consideration is given to heave movements in Part 3.0 of this report.

9.2 Spread Foundations

It may be possible to adopt spread foundations to support the new single-storey building, provided that proposed loads are light to moderate. All new foundations should bypass the made ground and any potentially desiccated clay soils.

Moderate width or pad foundations bearing in the firm London Clay may be designed to apply a net allowable bearing pressure of 120 kN/m² at a minimum depth of 1.0 m, assuming that restrictions are applied on planting of shrubs in the vicinity of foundations, or at a depth of 1.5 m if there is unrestricted planting of shrubs in the new development, subject also to the further restrictions on new tree planting as detailed in the NHBC guidelines. Foundations, will however, need to be extended to depths greater than 2.10 m to bypass the made ground.

In any case, foundations will need to be deepened in the vicinity of existing and proposed trees and National House Building Council (NHBC) guidelines should be followed in this respect. High shrinkability clays should be assumed. Where trees are to be removed the required founding depth should be determined on the basis of the existing tree height if it is less than 50% of the mature height and on the basis of full mature height if the current height is more than 50% of the mature height. Where a tree is to be retained the final mature height should be adopted. Notwithstanding NHBC guidelines, all foundations should extend beyond the zone of desiccation. In this respect all foundation excavations should be inspected by a suitably experienced engineer.

The requirement for compressible material alongside foundations should be determined by reference to the NHBC guidelines.

If the proposed loads are high or the required founding depths become uneconomic piled foundations would provide a suitable alternative foundation option.

8 BS8102 (2009) *Code of practice for protection of below ground structures against water from the ground*

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9.3 Piled Foundations

For the ground conditions at this site some form of bored pile is likely to be the most appropriate. A conventional rotary augered pile may be appropriate but consideration will need to be given to the possible instability and water ingress in the made ground and from within any silty or sandy zones within the London Clay. The use of bored piles installed using continuous flight auger (cfa) techniques may therefore be the most appropriate.

The following table of ultimate coefficients may be used for the preliminary design of bored piles, based on the SPT and cohesion / depth graph in the west of the site, where a basement is not proposed.

Stratum	Depth (m) (Level m OD)	kN / m²
Ultimate Skin Friction		
Made Ground	All soil above 2.10 (approx 33.00)	Ignore
London Clay	2.10 to 24.00 (approx 33.00 to 11.50)	Increasing linearly from 25 to 92
Ultimate End Bearing		
London Clay	10.00 to 24.00 (approx 25.00 to 11.50)	Increasing linearly from 900 to 1665

The following table of ultimate coefficients may be used for the preliminary design of bored piles, based on the SPT and cohesion / depth graph in the east of the site, where a single level basement is proposed.

Stratum	Depth (m) (Level m OD)	kN / m²
Ultimate Skin Friction		
Basement	All soil above 4.00 (approx. 30.00)	Ignore
London Clay	4.00 to 24.00 (roughly 30 to 11.5)	Increasing linearly from 30 to 90
Ultimate End Bearing		
London Clay	10.00 to 24.00 (roughly 25.00 to 11.5)	Increasing linearly from 585 to 1665

In the absence of pile tests, guidance from the London District Surveyors Association (LDSA)[9] suggests that a factor of safety of 2.6 should be applied to the above coefficients in the computation of safe theoretical working loads.

9 LDSA (2009) *Foundations No 1 – Guidance notes for the design of straight shafted bored piles in London Clay*. LDSA Publications

On the basis of the above coefficients, the following pile capacities have been estimated for the west of the site, where the two-storey building without a basement is proposed.

Pile Diameter mm	Pile length m (Toe level m OD)	Safe Working Load kN
450	15 (18.00)	465
600	15 (18.00)	650
750	15 (18.00)	815

On the basis of the above coefficients, the following pile capacities have been estimated where a basement is proposed in the eastern part of the site.

Pile Diameter mm	Pile length m (Toe level m OD)	Safe Working Load kN
450	12 (18.00)	410
600	12 (18.00)	580
	17 (13.00)	890
750	15 (15.00)	980

The above examples are not intended to constitute any form of recommendation with regard to pile size or type, but merely serve to illustrate the use of the above coefficients. Specialist piling contractors should be consulted with regard to the design of an appropriate piling scheme and their attention should be drawn to potential groundwater inflows within the made ground and from within silt and sand partings and claystones within the London Clay.

Consideration will also need to be given to the effects of heave as a result of the basement excavation.

9.4 Ground and Basement Floor Slabs

Following the excavation of the single level basement, it is likely that the floor slab for the proposed basement will need to be suspended over a void or layer of compressible material to accommodate the anticipated heave and any potential uplift forces from groundwater pressures unless the slab can be suitably reinforced to cope with these movements. This should be reviewed once the levels and loads are known.

Where the new buildings do not include a basement, the ground floor slab will need to be suspended over a void in in accordance with NHBC guidelines within the zone of influence of any existing or proposed trees. Outside the zone of influence of trees and following the removal of the made ground and a proof rolling exercise it should be possible to adopt a ground bearing floor slab bearing on the natural soils.

9.5 Shallow Excavations

On the basis of the borehole and trial pit findings it is considered likely that it will be feasible to form relatively shallow excavations terminating within the made ground and London Clay without the requirement for lateral support, although localised instabilities may occur. Where

personnel are required to enter excavations, a risk assessment should be carried out and temporary lateral support or battering of the excavation sides considered in order to comply with normal safety requirements.

Significant inflows of groundwater into shallow excavations are not generally anticipated, although seepages may be encountered from localised perched water tables within the made ground or from within more silty and sandy horizons or around claystones from within the London Clay, although such inflows should be suitably controlled by sump pumping. However, if deeper excavations are considered or if excavations are to remain open for prolonged periods it is recommended that provision be made for battered side slopes or lateral support. Where personnel are required to enter excavations, a risk assessment should be carried out and temporary lateral support or battering of the excavation sides considered in order to comply with normal safety requirements.

9.6 Effect of Sulphates

Chemical analyses have been carried out on a total of 18 samples, including four samples of natural soils. The results on the natural soils of the London Clay have revealed a pH of between 8.1 and 9.0, in accordance with Class DS-3 conditions of Table C2 of BRE Special Digest 1 Part C (2005). The measured pH value of the samples shows that an ACEC class of AC-3s would be appropriate for the site. This assumes a static water condition in the London Clay at the site.

With regard to the made ground, the pH range from 8.0 to 10.9, in accordance with Class DS-1 to DS-5 and an ACEC class of AC-1 to AC-5 would be appropriate, which assumes mobile water in the made ground. Class DS-5 was recorded in two samples from Borehole No 2 at a depth of 0.50 m and Borehole No 5 at a depth of 2.45 m.

The guidelines contained in the above digest should be followed in the design of foundation concrete.

9.7 Site Specific Risk Assessment

The desk study research has indicated that the site was developed prior to 1875 with numerous buildings and the existing viaduct was in its current position. The site has had a potentially contaminative history, having previously been occupied by a smithy, trimming shop, machine shop and saw mill and the remainder of the site is occupied by a motor body repairers, occupied by London Lorries. In 1953, the northern half of the site was labelled as a glass works and by 1957, the southern half was occupied by British Road Services Depot and a garage; a workshop and tyre stores was located within the railway arches. Two underground petrol tanks are shown in the southeastern corner of the site on historical maps and an electricity substation was present in the central part of the site. By 1963, a refrigeration engineers and materials yard was present to the west of the site and an incinerator adjoined the southern boundary of the site. The petrol tanks are no longer shown on the 1963 Goad Insurance map, so were presumably not in use by that time. On the 1974 map, the site is shown to be occupied by two works and this use has remained to the present day.

Within 250 m of the site, there have been railway sidings, a number of warehouses, garages, depots, and works.

An enquiry was made to the local petroleum officer, but no further information is held and it is not known if the tanks have been decommissioned or removed.

The results of the contamination testing revealed elevated concentrations of hydrocarbons within the made ground, but these concentrations and concentrations of other contaminants were not above the generic screening values for a commercial end use. However the concentrations of TPH measured may represent a vapour risk.

Two samples of natural soils were screened and no elevated concentrations of contaminants were measured. The samples of London Clay were taken near the top of this stratum, directly beneath made ground, where higher TPH concentrations were measured.

Currently end users are isolated from direct contact with the identified contaminants by the extent of buildings and areas of external hardstanding and will remain so following the proposed redevelopment of the site for offices.

The area of the proposed basement is located over the area where the historical tanks are shown on the Goad Insurance plan and therefore all of the contamination found in this part of the site, located in the southeastern corner, should be removed during basement excavation, and as such a hydrocarbon resistant membrane should not be required. However, this should be confirmed by a geoenvironmental engineer during basement excavation and it is possible that the local authority may request longer term monitoring to demonstrate the absence of hydrocarbons, in which case it may be preferable to incorporate basic gas protection measures in the design of the basement.

Contamination testing has also detected asbestos within four of the 12 samples of made ground screened, although asbestos was not noted during logging of recovered samples on site. The asbestos screening was undertaken at the laboratory using a microscope and asbestos fibres in the form of Chrysotile and Crocidolite were identified. The asbestos quantification has identified less than 0.001 % to 0.122 % of asbestos. In Borehole No 5 at a depth of 2.45 m, the concentration of asbestos leads to a hazardous waste classification.

It is likely therefore that asbestos fibres are present within the made ground on site and site workers should be made aware of this and a programme of working should be identified to protect workers handling any soil. The method of site working should be in accordance with guidelines set out by HSE[10] and CIRIA[11].

9.7.1 Protection of Site Workers

Site workers should be made aware of the contamination and asbestos fibres within the soils and a programme of working should be identified to protect workers handling any soil. The method of site working should be in accordance with guidelines set out by HSE[12] and CIRIA[13] and the requirements of the Local Authority Environmental Health Officer.

In view of the potentially contaminative history of the site, it would be prudent to maintain a watching brief during the groundwork, and if suspicious soils are encountered then a suitably qualified engineer should inspect the soils and further testing should be carried out if required.

A Discovery Strategy should be in place during the construction phase, the purpose of which is to define the procedures to be followed on site in the event that previously unidentified contamination or suspicious objects are discovered. It is intended to be understood and followed by all on-site workers and for all new site workers to be made aware of the procedure.

10 HSE 1992 HS(G)66 – *Protection of workers and the public during the development of contaminated land* HMSO
11 CIRIA (1996) *A guide for safe working on contaminated sites* - Report 132, Construction Industry Research and Information Association
12 HSE (1992) HS(G)66 *Protection of workers and the general public during the development of contaminated land* HMSO
13 CIRIA (1996) *A guide for safe working on contaminated sites* Report 132, Construction Industry Research and Information Association

Asbestos was encountered within the made ground at the site at four different locations, and may be present within the made ground not sampled. It would be prudent to carry out additional intrusive investigations at the locations of additional trial pits, to ensure the absence of further asbestos fibres or asbestos containing materials within he made ground and remove it if encountered.

9.7.2 Protection of Buried Services

Consideration may need to be given to the protection of buried plastic services laid within the made ground, given the elevated concentrations of TPH recorded. Details of the proposed protection measures for buried plastic services will in any case need to be approved by the EHO and local water authority prior to the adoption of any scheme. It is possible that barrier pipe will be required or additional testing will need to be carried out.

9.8 Waste Disposal

Under the European Waste Directive, waste is classified as being either Hazardous or Non-Hazardous and landfills receiving waste are classified as accepting hazardous or non-hazardous wastes or the non-hazardous sub-category of inert waste in accordance with the Waste Directive. Waste classification is a staged process and this investigation represents the preliminary sampling exercise of that process. Once the extent and location of the waste that is to be removed has been defined, further sampling and testing may be necessary. The results from this ground investigation should be used to help define the sampling plan for such further testing, which could include WAC leaching tests where the totals analysis indicates the soil to be a hazardous waste or inert waste from a contaminated site. It should however be noted that the Environment Agency guidance WM3[14] states that landfill WAC analysis, specifically leaching test results, must not be used for waste classification purposes.

Any spoil arising from excavations or landscaping works, which is not to be re-used in accordance with the CL:AIRE[15] guidance, will need to be disposed of to a licensed tip. Waste going to landfill is subject to landfill tax at either the standard rate of £84.40 per tonne (about £150 per m^3) or at the lower rate of £2.65 per tonne (roughly £5 per m^3). However, the classifications for tax purposes and disposal purposes differ and currently all made ground and topsoil is taxable at the 'standard' rate and only naturally occurring soil and stones, which are accurately described as such in terms of the 2011 Order, would qualify for the 'lower rate' of landfill tax.

Based upon on the technical guidance provided by the Environment Agency it is considered likely that the soils encountered during this ground investigation, as represented by the 14 chemical analyses carried out, would be generally classified as follows;

Soil Type	Waste Classification (Waste Code)	WAC Testing Required Prior to Landfill Disposal?	Comments
Made Ground	Hazardous (17 05 03)	Yes	Classification attributable to concentrations of asbestos, lead and TPH
London Clay (in area of buried tanks)	Hazardous (17 05 03)	Yes	Any soils saturated with hydrocarbons would be classified as a hazardous waste, so on site screening may be required – likely to be required in the southeastern corner of the site
London Clay	Inert (17 05 04)	Possibly	Requires confirmation from receiving tip as site has had a contaminative history, although risk of leaching of TPH contamination into underlying London Clay is low given its low permeability

14 Environment Agency 2015. *Guidance on the classification and assessment of waste.* Technical Guidance WM3 First Edition
15 CL:AIRE March 2011. *The Definition of Waste: Development Industry Code of Practice* Version 2

Any soils containing asbestos may be classified as HAZARDOUS waste if the concentration is over 0.1%, which has been at concentration of 0.122%in Borehole No 5 at a depth of 2.45 m at a concentration of 0.122 %. A hazardous classification has been assigned to the made ground because of high lead and TPH concentrations measured within some samples.

As the site has previously been used as a depot for the maintenance of vehicles it is possible that WAC leaching tests may be required by the receiving landfill to confirm that the natural soils can be disposed of to landfill as an inert waste.

Under the requirements of the European Waste Directive all waste needs to be pre-treated prior to disposal. The pre-treatment process must be physical, thermal, chemical or biological, including sorting. It must change the characteristics of the waste in order to reduce its volume, hazardous nature, facilitate handling or enhance recovery. The waste producer can carry out the treatment but they will need to provide documentation to prove that this has been carried out. Alternatively, the treatment can be carried out by an approved contractor. The Environment Agency has issued a position paper[16] which states that in certain circumstances, segregation at source may be considered as pre-treatment and thus excavated material may not have to be treated prior to landfilling if the soils can be segregated onsite prior to excavation by sufficiently characterising the soils insitu prior to excavation.

The above opinion with regard to the classification of the excavated soils is provided for guidance only and should be confirmed by the receiving landfill once the soils to be discarded have been identified.

The local waste regulation department of the Environment Agency (EA) should be contacted to obtain details of tips that are licensed to accept the soil represented by the test results. The tips will be able to provide costs for disposing of this material but may require further testing.

16 Environment Agency 23 Oct 2007 *Regulatory Position Statement Treating non-hazardous waste for landfill - Enforcing the new requirement*

Part 3: GROUND MOVEMENT ANALYSIS

This section of the report comprises an analysis of the ground movements arising from the proposed basement and foundation scheme discussed in Part 2 and the information obtained from the investigation, presented in Part 1 of the report.

10.0 INTRODUCTION

The sides of a basement excavation will move to some extent regardless of how they are supported. The movement will typically be both horizontal and vertical and will be influenced by the engineering properties of the ground, groundwater level and flow, the efficiency of the various support systems employed during underpinning and the efficiency or stiffness of any support structures used.

An analysis has been carried out of the likely movements arising from the proposed basement excavation and the results of this analysis have been used to predict the effect of these movements on surrounding structures.

10.1 Construction Sequence

For the purposes of the ground movement assessment, the datum is taken as the existing ground level, at an arbitrary level of zero. It is proposed to construct a basement to 4.0 m depth beneath across the eastern part of the site footprint. The proposed basement walls will be formed by means of a contiguous piled wall embedded to 10.0 m depth below existing ground level.

The following sequence of operations has been assumed to enable analysis of the ground movements around the proposed basement both during and after construction.

In general, the sequence of works for basement construction will comprise the following stages.

1. Construct contiguous piled walls; and
2. excavate new basement and temporarily retain and strengthen, with sufficient propping and walling beams, the new retaining walls. Construct new ground beams.

It is assumed that the corners of the excavation will be supported by cross-bracing or similar and that the new retaining walls will not be cantilevered at any stage during the construction process.

The detail of the support provided to adjacent walls is beyond the scope of this report at this stage and the structural engineer will be best placed to agree a methodology with the underpinning contractor once appointed.

When the final excavation depths have been reached the permanent works will be formed, which are likely to comprise reinforced concrete walls with a drained cavity lining the inside of the contiguous piled wall. Reinforced concrete will be used for the floor slabs and it is anticipated that heave protection may be installed beneath the basement slab. Following this, the floor slab will be constructed at basement depth and the temporary props will be removed.

10.2 Ground Movements

An assessment of ground movements within and surrounding the excavation has been undertaken using the X-Disp and P-Disp computer programs licensed from the OASYS suite of geotechnical modelling software from Arup. These programs are commonly used within the ground engineering industry and are considered to be appropriate tools for this analysis.

The X-Disp program has been used to predict ground movements likely to arise from the construction of the proposed basement. This includes the settlement of the ground (vertical movement) and the lateral movement of soil behind the proposed retaining walls (horizontal movement).

The analysis of potential ground movements within the excavation, as a result of unloading of the underlying soils, has been carried out using the Oasys P-Disp software package and is based on the assumption that the soils behave elastically, which provides a reasonable approximation to soil behaviour at small strains.

For the purpose of these analyses, the corners have been defined by x and y coordinates, with the x-direction being approximately west-east and the y-direction being north-south. Vertical movement is in the z-direction.

It is assumed that suitable propping will be provided during the construction of the basement and in the permanent condition.

The full outputs of all the analyses in addition to movement contour plots are included within the appendix.

10.3 Ground Movements – Surrounding the Basement

10.3.1 Model Used

For the X-Disp analysis, the soil movement relationships used for the embedded retaining walls are the default values within CIRIA report C580[17], which were derived from a number of historic case studies of the short term movements that result from wall installation and basement excavation.

The analysis has adopted the values for ‘installation of a contiguous bored pile wall’ when considering the installation of the new retaining walls, which are considered to be the most appropriate due to the likely construction method to be utilised. The toe of the new retaining wall is assumed to be installed to a depth of 10.00 m below existing ground level.

The magnitudes of ground differential movement predicted by the program have been assessed.

10.3.2 Results

The movements predicted X-Disp are summarised in the table below; the results are presented below and in subsequent tables to the degree of accuracy required to allow predicted variations in ground movements around the structure to be illustrated, but may not reflect the anticipated accuracy of the predictions.

17 Gaba, A, Simpson, B, Powrie, W and Beadman, D (2003) *Embedded retaining walls – guidance for economic design* .CIRIA Report C580.

Phase of Works	Wall Movement (mm)	
	Vertical Settlement	Horizontal Movement
Installation of piled retaining walls	0 to 4	0 to 5
Combined Movements	6 to 7	10 to 11

The analysis has indicated that the maximum vertical settlement and horizontal movement that will result from wall installation are likely to be approximately 5 mm, whilst the movements arising from the combined piled wall installation and excavation phases are likely to be between 6 mm and 7 mm of vertical settlement immediately outside of the excavation, reducing to about 5 mm approximately 5 m from the edge of the excavation. The maximum horizontal movements are anticipated to be in the order of between 10 mm and 11 mm immediately outside of the excavation, reducing to approximately 7 mm, about 5 m from the edge of the excavation.

The estimated movements are considered to represent a worst case scenario, particularly as the movements resulting from basement excavation will be minimised due to control of the propping in the temporary works. A regime of monitoring should be in place to enable to excavation to be fully controlled.

10.4 Movements within the Excavation (Heave)

10.4.1 Model Used

At this site unloading of the London Clay will take place as a result of the basement excavation and the reduction in vertical stress will cause heave to take place. Undrained soil parameters have been used to estimate the potential short term movements, which include the “immediate” or elastic movements as a result of the basement excavation. Drained parameters have been used to provide an estimate of the total long-term movement.

The elastic analysis requires values of soil stiffness at various levels to calculate displacements. Values of stiffness for the soils at this site are readily available from published data and we have used a well-established method to provide our estimates. This relates values of E_u and E', the undrained and drained stiffness respectively, to values of undrained cohesion, as described by Padfield and Sharrock[18] and Butler[19] and more recently by O’Brien and Sharp[20]. Relationships of $E_u = 500\ C_u$ and $E' = 300\ C_u$ for the cohesive soils and 2000 x SPT ‘N’ for granular soils have been used to obtain values of Young’s modulus. More recent published data[21] indicates stiffness values of 750 x Cu for the London Clay and a ratio of E’ to Cu of 0.75, but it is considered that the use of the more conservative values provides a sensible approach for this stage in the design.

The proposed construction of the 4.00 m deep basement will result in an unloading of roughly 75 kN/m².

The soil parameters used in this assessment are tabulated below.

18 Padfield CJ and Sharrock MJ (1983) *Settlement of structures on clay soils*. CIRIA Special Publication 27
19 Butler FG (1974) *Heavily overconsolidated clays: a state of the art review*. Proc Conf Settlement of Structures, Cambridge, 531-578, Pentech Press, Lond
20 O’Brien AS and Sharp P (2001) *Settlement and heave of overconsolidated clays - a simplified non-linear method*. Part Two, Ground Engineering, Nov 2001, 48-53
21 Burland JB, Standing, JR, and Jardine, FM (2001) Building response to tunnelling, case studies from construction of the Jubilee Line Extension. CIRIA Special Publication 200

Stratum	Depth range (m) [Level range mOD]	Eu (MPa)	E' (MPa)
Made Ground	G/L to 2.0	17.5	10.5
London Clay	2.0 to 40	25 to 142.5	15 to 85.5
Lambeth Group (Clay)	40 to 50	142.5 to 172.5	85.5 to 103.5

A rigid boundary for the analysis has been set at a depth of about 50 m below existing ground level, which is the maximum depth to which the clay layers of the Lambeth Group are proved in the nearby BGS records.

10.4.2 Results

An assessment of ground movements within the basement excavation has been undertaken by GEA using the P-Disp computer program licensed from the OASYS suite of programs from Arup. The predicted movements are summarised in the table below.

Location	Movement (mm)	
	Short-term Heave (Demolition & Excavation)	Total Heave
Centre of excavations	13 to 14	34 to 35
Edge of excavations	6 to 7	14 to 15
Corner of excavations	6 to 7	14t0 15
At 5 m outside of the edge of excavations	3 to 4	8 to 9

The P-Disp analysis indicates that, by the time the basement construction is complete, up to 14.0 mm of heave is likely to have taken place within the centre of the excavation, reducing to about 7 mm of heave at the edges. This value is further reduced approximately 5 m away from the excavation where between 2 mm and 3 mm of heave is likely to occur.

An additional 20 mm of long term heave may theoretically occur at the centre of the proposed excavation following construction while an additional 10 mm of heave may occur at the edges of the excavation.

The results of the P-Disp analysis also indicate the likely impact of the proposed basement construction beyond the site boundaries.

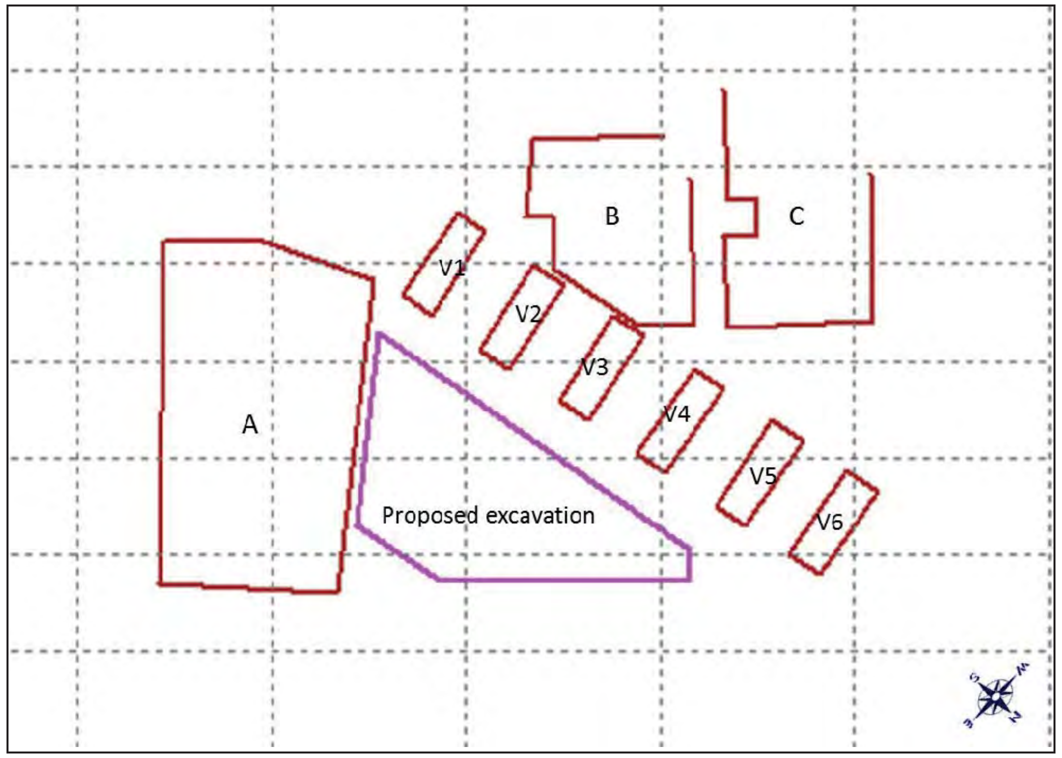
It is understood that it is proposed to design the basement floor slab to be suspended over a void to accommodate the likely heave movements which should be designed in accordance with the overall movements provided in the above table.

11.0 DAMAGE ASSESSMENT

In addition to the above assessment of the likely movements that will result from the proposed development, some of the neighbouring structures have been considered as sensitive structures, requiring Building Damage Assessments, on the basis of the classification given in Table 2.5 of C580 . These include:

- the adjacent properties 104-108 Grafton Road, 110-114 Grafton Road and 2 Spring Place (labelled A to C); and
- the six piers supporting the railway viaduct traversing the site (labelled V1 to V6).

The sensitive structures outlined above have been modelled as lines in the analysis, along which the damage assessment has been undertaken, as shown on the plan below.



None of the structures analysed are thought to have a basement. The founding depth of Structure A was determined during fieldwork at 1.8 m below ground level and the footings of the piers have been assumed with an estimated depth of approximately 2.0 m has been supplied by the consulting engineer. The founding depths for Structures B and C are unknown and have been assumed at 1.5 m depth.

An initial assessment has shown the predicted damage to some of the nearby structures surrounding the site are below the limit of sensitivity and as a result, only those that are showing Damage Category of 0 (Negligible) and above are considered in the detailed assessment below.

11.1 Damage to Neighbouring Structures

The combined movements resulting from both pile installation and basement excavation calculated using the X-Disp modelling software have been used to carry out an assessment of the likely damage to adjacent properties and the results are summarised in the table below.

Building Damage Assessment		
Sensitive Structure	**Elevation**	**Category of Damage***
Structure A	AN	0 (Negligible)
	AN1	0 (Negligible)
	AE	1 (Very Slight)
	AW	0 (Negligible)
Structure B	BE	0 (Negligible)
	BS1	0 (Negligible)
	BS2	0 (Negligible)
	BS3	0 (Negligible)
	BS4	0 (Negligible)
	BW	0 (Negligible)
Viaduct Pier 1	V1N	0 (Negligible)
	V1E	1 (Very Slight)
	V1S	1 (Very Slight)
	V1W	0 (Negligible)
Viaduct Pier 2	V2N	0 (Negligible)
	V2E	1 (Very Slight)
	V2S	0 (Negligible)
	V2W	1 (Very Slight)
Viaduct Pier 3	V3N	0 (Negligible)
	V3E	1 (Very Slight)
	V3S	0 (Negligible)
	V3W	1 (Very Slight)
Viaduct Pier 4	V4N	0 (Negligible)
	V4E	1 (Very Slight)
	V4S	0 (Negligible)
	V4W	1 (Very Slight)
Viaduct Pier 5	V5N	0 (Negligible)
	V5E	0 (Negligible)
	V5S	0 (Negligible)
	V5W	1 (Very Slight)
Viaduct Pier 6	V6N	0 (Negligible)
	V6E	0 (Negligible)
	V6S	0 (Negligible)
	V6W	0 (Negligible)

**From Table 2.5 of C580: Classification of visible damage to walls.*

The building damage reports for sensitive structures highlighted in the above table predict that the damage to the adjoining and nearby structures included in the above analysis would generally be between Category 0 (negligible) and Category 1 (Very Slight). These movements are within the acceptable limits outlined in CPG4.

11.2 Monitoring of Ground Movements

The predictions of ground movement based on the ground movement analysis should be checked by monitoring of adjacent properties and structures. The structures to be monitored during the construction stages should include:

- all of the railway pier viaducts; and
- 104-108 Grafton Road (Structure A).

Condition surveys of the above existing structures should be carried out before and after the proposed works. The precise monitoring strategy will be developed at a later stage and it will be subject to discussions and agreements with the owners of the adjacent properties and structures. Contingency measures will be implemented if movements of the adjacent structures exceed predefined trigger levels. Both contingency measures and trigger levels will need to be developed within a future monitoring specification for the works.

12.0 CONCLUSIONS

The analysis has concluded that the predicted damage to the neighbouring properties would generally be between ‘negligible’ and ‘very slight’.

The separate phases of work, including the installation of contiguous bored pile retaining walls and subsequent excavation of the proposed basement, will in practice be separated by a number of weeks. This will provide an opportunity for the ground movements during and immediately after excavation to be measured and the data acquired can be fed back into the design and compared with the predicted values. Such a comparison will allow the ground model to be reviewed and the predicted wall movements to be reassessed prior to the main excavation taking place so that propping arrangements can be adjusted if required.

13.0 BASEMENT IMPACT ASSESSMENT

The screening identified a number of potential impacts. The desk study and ground investigation information has been used below to review the potential impacts, to assess the likelihood of them occurring and the scope for reasonable engineering mitigation.

The table below summarises the previously identified potential impacts and the additional information that is now available from the site investigation in consideration of each impact.

The ground investigation has confirmed the presence of London Clay beneath the site, proved to the maximum depth investigated of 24.00 m.

It is proposed to construct two new buildings, up to six-storeys, plus a single level basement, extending to a depth of approximately 4.00 m below the eastern part of the site. The proposed basement will be wholly within the London Clay. Monitored water levels in the shallow standpipes have been measured between 1.17 m and 1.64 m (33.96 m OD and 33.16 m OD), whilst the standpipe piezometer, sealed entirely within the London Clay, has been recorded to be dry. Shallow monitored groundwater levels within standpipes is a common feature of low permeability clay strata and is not necessarily indicative of a consistent water table as would be the case within a permeable water bearing strata. Thus, although the basement may extend below the monitored water levels in standpipes it is not the case that it extends below a general and continuous groundwater table.

The London Clay is classified by the Environment Agency as Unproductive Strata; not capable of storing and transmitting groundwater in sufficient quantities to support baseflow to watercourses or private supplies.

On the basis of the results of the ground investigation, it is not considered that the proposed basement would result in a significant change to the groundwater flow regime in the vicinity of the proposal or on the amount of annual recharge into the London Clay. This is due to its very low permeability and its inability to conduct groundwater flow.

Potential Impact	Site Investigation Conclusions
Seasonal shrink-swell can result in foundation movements	The London Clay is the shallowest stratum at the site and laboratory testing has indicated a high low volume potential change. Shrinkable clay is present within a depth that can be affected by tree roots. No evidence of desiccation of the clay soils was noted and there is only one tree on Grafton Street. However, new foundations will need to be designed in accordance with NHBC guidelines to protect from future shrinking and swelling associated with tree removal / growth. Subject to inspection of foundation excavations in the normal way.
Damage to trees – heave of clay soils	Damage to tree roots during construction works may lead to the death of trees, which would result in long term swelling of the clay. An arboriculturist should be consulted for advice, along with the tree officer at the Local Authority, to ensure damage does not occur and this could lead to structural damage of neighbouring properties and new building on site.
Site within 5 m of a highway – excavation of basement could lead to damage	The investigation has not indicated any specific problems, such as weak or unstable ground, voids or a high water table that would make working within 5 m of public infrastructure particularly problematic at this site. A retention system will be adopted that maintains the stability of the excavation at all times.
Increase in the differential depth of foundations relative to neighbouring properties	The existing foundations may need to be underpinned to form the basement and these underpins will need to be designed to minimise movement of the adjacent structures. A ground movement analysis and building damage assessment has been undertaken to confirm that the damage category remains within acceptable limits and the results are presented within Part 3 of this report.
Location of the Railway Viaduct	A ground movement assessment has been undertaken to confirm movements that may affect the viaduct as a result of demolition of the existing building and construction of two new buildings and the results are discussed in Section 3 of this report. Consultation will be required with Network Rail prior to commencement.

The results of the site investigation have been used below to review the remaining potential impacts, to assess the likelihood of them occurring and the scope for reasonable engineering mitigation.

Shrink / swell potential of London Clay

The existing foundations are bearing on made ground. Underlying the made ground is London Clay which is prone to shrink / swell movements. A single 15 m high tree is present to the west of the site on the pavement of Grafton Road. It is understood that this tree will be retained as part of the development proposals and any new foundations will need to extend beyond the zone affected by seasonal changes. Consideration will need to be given to the future growth of this tree.

Location of public highway

A retention system will need to be adopted that maintains the stability of the excavation at all times to protect the highways. This is however standard construction practice.

Increase in the differential depth of neighbouring foundations

The stability of neighbouring structures will need to be ensured at all times.

Location of railway viaduct

The stability of the railway viaduct will need to maintained at all times during demoition, basement excavation and foundation installation and Network Rail should agree this in due course.

13.1 Non-Technical Summary of Evidence

This section provides a short summary of the evidence acquired and used to form the conclusions made within the BIA.

13.1.1 Screening

The following table provides the evidence used to answer the surface water flow and flooding screening questions.

Question	Evidence
1. Is the site within the catchment of the pond chains on Hampstead Heath?	Figures 12 and 14 of the Arup report.
2. As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	A site walkover and existing plans of the site have confirmed that the site will remain entirely covered in hardstanding as part of the development proposals.
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	
4. Will the proposed basement development result in changes to the profile of the inflows (instantaneous and long term) of surface water being received by adjacent properties or downstream watercourses?	As above.
5. Will the proposed basement result in changes to the quantity of surface water being received by adjacent properties or downstream watercourses?	

Question	Evidence
6. Is the site in an area known to be at risk from surface water flooding such as South Hampstead, West Hampstead, Gospel Oak and Kings Cross, or is it at risk of flooding because the proposed basement is below the static water level of a nearby surface water feature?	Flood risk maps acquired from the Environment Agency as part of the desk study, Figure 15 of the Arup report, the Camden Flood Risk Management Strategy dated 2013 and the North London Strategic Flood Risk Assessment dated 2008.

The following table provides the evidence used to answer the subterranean (groundwater flow) screening questions.

Question	Evidence
1a. Is the site located directly above an aquifer?	Aquifer designation maps acquired from the Environment Agency as part of the desk study and Figures 3, 5 and 8 of the Arup report.
1b. Will the proposed basement extend beneath the water table surface?	Site investigation.
2. Is the site within 100 m of a watercourse, well (used/ disused) or potential spring line?	Historical maps acquired as part of the desk study and Figures 11 and 12 of the Arup report.
3. Is the site within the catchment of the pond chains on Hampstead Heath?	Figures 12 and 14 of the Arup report.
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	A site walkover and existing plans of the site have confirmed that the site will remain entirely covered in hardstanding as part of the development proposals.
5. As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	The details of the proposed development do not indicate the use soakaway drainage.
6. Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to or lower than, the mean water level in any local pond or spring line?	Topographical maps acquired as part of the desk study and Figures 11 and 12 of the Arup report.

The following table provides the evidence used to answer the subterranean (groundwater flow) screening questions.

Question	Evidence
1. Does the existing site include slopes, natural or manmade, greater than 7°?	Site survey drawing and Figures 16 and 17 of the Arup report and confirmed during a site walkover
2. Will the proposed re-profiling of landscaping at the site change slopes at the property boundary to more than 7°?	The details of the proposed development provided do not include the re-profiling of the site to create new slopes
3. Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	Topographical maps and Figures 16 and 17 of the Arup report and confirmed during a site walkover
4. Is the site within a wider hillside setting in which the general slope is greater than 7°?	
5. Is the London Clay the shallowest strata at the site?	Geological maps and Figures 3, 5 and 8 of the Arup report
6. Will any trees be felled as part of the proposed development and / or are any works proposed within any tree protection zones where trees are to be retained?	A site walkover confirmed that there is a 15 m high tree on the pavement outside of the site on Grafton Street frontage. An arboriculturist should be consulted to ensure no damage to tree roots and if trees are to be removed
7. Is there a history of seasonal shrink-swell subsidence in the local area and / or evidence of such effects at the site?	Knowledge on the ground conditions of the area was used to make an assessment of this, in addition to a visual inspection of the buildings carried out during the site walkover

Question	Evidence
8. Is the site within 100 m of a watercourse or potential spring line?	Topographical maps acquired as part of the desk study and Figures 11 and 12 of the Arup report and the Lost Rivers of London book.
9. Is the site within an area of previously worked ground?	Geological maps and Figures 3, 5 and 8 of the Arup report
10. Is the site within an aquifer?	Aquifer designation maps acquired from the Environment Agency as part of the desk study and Figures 3, 5 and 8 of the Arup report.
11. Is the site within 50 m of Hampstead Heath ponds?	Topographical maps acquired as part of the desk study and Figures 12 and 14 of the Arup report.
12. Is the site within 5 m of a highway or pedestrian right of way?	Site plans and the site walkover.
13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	Camden planning portal and the site walkover confirmed the position of the proposed basement relative the neighbouring properties.
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	Maps and plans of infrastructure tunnels were reviewed.

13.1.2 Scoping and Site Investigation

The questions in the screening stage that there were answered ‘yes’, were taken forward to a scoping stage and the potential impacts discussed in Section 4.0 of this report, with reference to the possible impacts outlined in the Arup report.

A ground investigation has been carried out, which has allowed an assessment of the potential impacts of the basement development on the various receptors identified from the screening and scoping stages. Principally the investigation aimed to establish the ground conditions, including the groundwater level and the engineering properties of the underlying soils to enable suitable design of the basement development. The findings of the investigation are discussed in Section 6.0 of this report and summarised in both Section 8.0 and the Executive Summary.

13.1.3 Impact Assessment

Section 9.0 of this report summarises whether or not, on the basis of the findings of the investigation, the potential impacts still need to be given consideration and identifies ongoing risks that will require suitable engineering mitigation. Section 8.0 of this report also provides recommendations for the design of the proposed development, whilst Part 3 provides the outcomes of a ground movement analysis and building damage assessment, which has also been used to provide a conclusion on any potential impacts from the proposed basement development.

14.0 OUTSTANDING RISKS AND ISSUES

This section of the report aims to highlight areas where further work is required as a result of limitations on the scope of this investigation, or where issues have been identified by this investigation that warrant further consideration. The scope of risks and issues discussed in this section is by no means exhaustive, but covers the main areas where additional work may be required.

The ground is a heterogeneous natural material and variations will inevitably arise between the locations at which it is investigated. This report provides an assessment of the ground conditions based on the discrete points at which the ground was sampled, but the ground conditions should be subject to review as the work proceeds to ensure that any variations from the Ground Model are properly assessed by a suitably qualified person.

Asbestos was encountered within the made ground at the site at four different locations, and may be present within the made ground not sampled. It would be prudent to have an asbestos specialist to undertake some additional intrusive investigations at the locations of the additional ten trial pits, to ensure the absence of further asbestos fibres or asbestos containing materials within he made ground and remove it if encountered.

Further groundwater monitoring should be carried out to establish equilibrium levels and the extent of any seasonal fluctuations. It would be prudent to carry out a number of trial excavations, to depths as close to the full basement depth once access becomes available, to provide an indication of the likely groundwater conditions.

All new foundations should extend beyond the zone of desiccation. In this respect it would be prudent to have all foundation excavations inspected by a suitably experienced engineer.

It is understood that the southeastern corner of the site contained buried fuel tanks, but no further details are known. It is possible that buried fuel tanks are still present beneath the site and elevated concentrations of hydrocarbons were identified in this area. It would be prudent to undertake trial excavations in this area, once full access is available and to further investigate the void that was encountered during the window sampling exercise through the base of Trial Pit No 2.

Ground workers should be made aware of the potential for contamination at this site, given the history of the site and should any odorous, discoloured or suspicious material be encountered, or evidence of buried tanks, are encountered during groundworks the works should be suspended in that area and an experienced geoenvironmental engineer should be contacted to attend site to inspect and provide further advice in this regard, with regards to remedial measures. Any buried tanks will need to be decommissioned and removed by a suitably experienced and qualified contractor.

It would also be prudent to maintain a watching brief during groundworks, particularly in view of the historical use of the site as a garage and as a result of the potential presence of asbestos containing materials within the made ground.

If during ground works any visual or olfactory evidence of contamination is identified it is recommended that further investigation be carried out and that the risk assessment is reviewed.

Appropriate records, such as waste transfer notes, demonstrating that the transport of soil material off-site for treatment and/or disposal should be kept appropriately. Waste tickets should be retained for the production of the verification report.

These areas of doubt should be drawn to the attention of prospective contractors and further investigation will be required or sufficient contingency should be provided to cover the outstanding risk.

APPENDIX

Geotechnical & Environmental Associates (GEA) — Widbury Barn, Widbury Hill, Ware, Herts, SG12 7QE

Boring Method	Casing Diameter	Ground Level (mOD)	Site	Borehole Number
Cable Percussion	150mm cased to 2.00m	34.38	3-6 Spring Place, London, NW5 3BA	BH1
	Location	**Dates**	**Client**	**Job Number**
		15/07/2016-16/07/2016	Spring Place Limited	J16143
			Engineer	**Sheet**
			Heyne Tillett Steel	1/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records
0.25	D1			PID = 4.2 ppm
0.40-0.60	D2			PID = 82 ppm
0.50	D3			PID = 47 ppm
0.80	D4			PID = 23.7 ppm
1.00-1.45	D5			PID = 3.5 ppm
1.00-1.45	SPT N=5	1.00	DRY	0,1/1,1,1,2
1.60	D6			PID = 0.3 ppm
2.00-2.45	U7			
2.45	D8			PID = 0.2 ppm
2.50	D9			
2.80	D10			
3.00-3.45	SPT N=6	2.00	DRY	1,1/1,1,2,2
3.00-3.45	D11			
3.80	D12			
4.00-4.45	D13			
4.45	D14			
4.80	D15			
5.00-5.45	U16			
5.45	D17			
6.00	D18			
6.50-6.95	U19			
6.95	D20			
7.50	D21			
8.00-8.45	SPT N=14	2.00	DRY	2,3/3,3,4,4
8.00	D22			
8.70-8.90	D23			
8.90	D24			
9.50-9.95	U25			

Level (mOD)	Depth (m) (Thickness)	Description
34.18	0.20 (0.20)	MADE GROUND (concrete, over plastic membrane. Rebar at depths of 0.08 m and 0.115 m, 10 mm diameter)
34.03	0.35 (0.15)	MADE GROUND (brown clay with brick and concrete)
33.58	0.80 (0.45)	MADE GROUND (dark grey silty clay with flint gravel, brick and concrete)
33.08	1.30 (0.50)	MADE GROUND (grey clayey silt with occasional fragments of brick - hydrocarbon odour)
31.88	2.50 (1.20)	Firm fissured medium strength brown mottled orange-brown silty CLAY with bluish grey veins and specklings of mica. Decayed roots noted at 2.00 m. Claystone encountered at a depth of 2.45 m
28.38	6.00 (3.50)	Firm fissured high strength brown mottled grey silty CLAY with occasional partings of orange-brown fine sand and silt and rare selenite crystals ...becomes stiff at a depth of 5.00 m
25.48	8.90 (2.90)	Stiff fissured high strength brown silty CLAY with occasional to abundant partings of orange-brown fine sand and silt and rare selenite crystals
		Stiff becoming very stiff fissured high strength dark grey silty CLAY with abunbdant specklings of mica, rare grey and black burrows, rare black specks, rare partings of grey fine sand and silt and rare fine shell fragments

Remarks
Hand-dug starter pit to a depth of 1.00 m (60 minutes)
Chiselling on claystone at 8.70 m (45 minutes)
Groundwater not encountered during drilling
Standpipe (50 mm) installed to a depth of 1.50 m - response zone from 0.50 m to 1.50 m and standpipe piezometer (19 mm) installed to a depth of 6.00 m - piezo tip at 6.00 m
Water measured in 50 mm stanpdipe at a depth of 1.17 m on 20/07/2016 and 1.22 m on 23/08/2016
Standpipe piezometer (19 mm) recorded to be dry on 20/07/2016 and 23/08/2016

Scale (approx)	Logged By
1:50	HD

Figure No. J16143.BH1

Geotechnical & Environmental Associates (GEA) — Widbury Barn, Widbury Hill, Ware, Herts, SG12 7QE

Boring Method	Casing Diameter	Ground Level (mOD)	Site	Borehole Number
Cable Percussion	150mm cased to 2.00m	34.38	3-6 Spring Place, London, NW5 3BA	BH1
	Location	**Dates**	**Client**	**Job Number**
		15/07/2016-16/07/2016	Spring Place Limited	J16143
			Engineer	**Sheet**
			Heyne Tillett Steel	2/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records
9.95	D26			
10.50	D27			
11.00-11.45	U28			
11.45	D29			
12.00	D30			
12.50-12.95	U31			
12.95	D32			
13.50	D33			
14.00-14.45	SPT N=26	2.00	DRY	2,3/4,6,8,8
14.00-14.45	D34			
15.00	D35			
15.50-15.95	U36			
15.95	D37			
16.50	D38			
17.00-17.45	U39			
17.45	D40			
18.00	D41			
18.50-18.95	U42			
18.95	D43			
19.50	D44			
20.00-20.45	SPT N=37	2.00	DRY	4,5/7,9,10,11

Level (mOD)	Depth (m) (Thickness)	Description
	(11.55)	...continues ..pyrite nodule at 17.00 m

Remarks

Scale (approx)	Logged By
1:50	HD

Figure No. J16143.BH1

GEA Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware,Herts
SG12 7QE

Site	Borehole Number
3-6 Spring Place, London, NW5 3BA	**BH1**

Boring Method	Casing Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion	150mm cased to 2.00m	34.38	Spring Place Limited	J16143
	Location	**Dates**	**Engineer**	**Sheet**
		15/07/2016-16/07/2016	Heyne Tillett Steel	3/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Water
20.00-20.45	D45					(11.55)		
					13.93	20.45		
							Complete at 20.45m	

Remarks	Scale (approx)	Logged By
	1:50	HD
	Figure No. J16143.BH1	

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GEA Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware,Herts
SG12 7QE

Site	Borehole Number
3-6 Spring Place, London, NW5 3BA	**BH2**

Boring Method	Casing Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion	150mm cased to 4.00m	35.51	Spring Place Limited	J16143
	Location	**Dates**	**Engineer**	**Sheet**
		15/07/2016-16/07/2016	Heyne Tillett Steel	1/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Water
						(0.40)	MADE GROUND (150 mm concrete, over 50 mm concrete, over 200 m brick and concrete mix - no reinforcement noted)	
					35.11	0.40		
0.50	D1			PID = 0 ppm			MADE GROUND (brown gravelly clay with brick)	
0.50-1.00	D3			PID = 0 ppm		(0.60)		
				PID = 0 ppm				
					34.51	1.00		
1.00	D2			PID = 0 ppm			MADE GROUND (brown sandy clay with brick)	
						(0.50)		
1.20-1.65	SPT N=2		DRY	1,1/0,1,0,1				
1.20-1.65	D4				34.01	1.50		
1.50	D5			PID = 0 ppm			MADE GROUND (brown sandy clay with fine to coarse subrounded flint gravel and brick fragments)	
						(0.60)		
2.00-2.45	SPT N=5	2.00	DRY	1,0/1,1,1,2	33.41	2.10		
2.00-2.45	D6						Firm orange-brown silty CLAY with rare bluish grey veins	
2.00-2.50	D7							
						(0.90)		
2.50	D8							
2.50	D9							
					32.51	3.00		
3.00-3.45	U10						Firm fissured high strength brown mottled grey silty CLAY with rare to occasional partings of orange-brown fine sand and silt and rare to occasional selenite crystals	
3.50	D11							
						(1.50)		
4.00-4.45	SPT N=11	2.00	DRY	1,1/2,2,3,4				
					31.01	4.50		
4.50	D12						Stiff fissured high strength brown silty CLAY with rare to ...becomes stiff at a depth of 4.50 m occasional partings of orange-brown fine sand and silt and rare selenite crystals	
5.00-5.45	U13							
5.50	D14							
6.50-6.95	SPT N=15	4.00	DRY	2,2/3,4,4,4				
						(4.50)		
7.00	D15							
8.00-8.45	U16							
8.50	D17			Water strike(1) at 8.50m.				∇1
					26.51	9.00		
							Stiff becoming very stiff fissured high strength becoming very high strength dark grey silty CLAY with specklings of mica, rare fine shell fragments, rare grey burrows, occasional black specks	
9.50-9.95	SPT N=22	4.00	DRY	3,4/5,5,6,6				
9.50	D18							
9.50-9.95	D19							

Remarks
Hand-dug starter pit to 1.20 m (60 minutes)
Groundwater not encountered during drilling
Standpipe (50 mm diameter) installed to a depth of 6.00 m - response zone from 2.00 m to 6.00 m
Water measured in standpipe at a depth of 1.64 m on 20/07/2016 and 1.55 m on 23/08/2016

Scale (approx)	Logged By
1:50	HD
Figure No. J16143.BH2	

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GEA Geotechnical & Environmental Associates Widbury Barn, Widbury Hill, Ware,Herts, SG12 7QE	Site: 3-6 Spring Place, London, NW5 3BA	Borehole Number: BH2
Boring Method: Cable Percussion Casing Diameter: 150mm cased to 4.00m Ground Level (mOD): 35.51 Location: Dates: 15/07/2016-16/07/2016	Client: Spring Place Limited Engineer: Heyne Tillett Steel	Job Number: J16143 Sheet: 2/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.50	D20						...continued		
11.00-11.45	U21								
11.50	D22								
12.50-12.95 12.50	SPT N=26 D23	4.00	DRY	4,5/6,6,7,7					
13.50	D24								
14.00-14.45	U25								
14.50	D26								
15.50-15.95 15.50	SPT N=29 D27	4.00	DRY	4,4/6,6,7,10					
16.50	D28								
17.00-17.45	U29					(15.00)			
17.50	D30								
18.50-18.95 18.50	SPT N=30 D31	4.00	DRY	4,5/7,7,8,8					
19.50	D32								

Remarks	Scale (approx)	Logged By
	1:50	HD
	Figure No. J16143.BH2	

GEA Geotechnical & Environmental Associates Widbury Barn, Widbury Hill, Ware,Herts, SG12 7QE	Site: 3-6 Spring Place, London, NW5 3BA	Borehole Number: BH2
Boring Method: Cable Percussion Casing Diameter: 150mm cased to 4.00m Ground Level (mOD): 35.51 Location: Dates: 15/07/2016-16/07/2016	Client: Spring Place Limited Engineer: Heyne Tillett Steel	Job Number: J16143 Sheet: 3/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
20.00-20.45	U33								
20.50	D34						...continued		
21.50-21.95 21.50	SPT N=34 D35	4.00	DRY	5,6/7,8,10,9					
						(15.00)			
22.50	D36								
23.50 23.50-23.90	D37 U38								
					11.51	24.00			
24.00	D39						Complete at 24.00m		

Remarks	Scale (approx)	Logged By
	1:50	HD
	Figure No. J16143.BH2	

GEA Geotechnical & Environmental Associates	Widbury Barn, Widbury Hill, Ware, Herts, SG12 7QE	Site: 3-6 Spring Place, London, NW5 3BA	Number: BH3
Excavation Method: Open-drive sampler	Dimensions:	Ground Level (mOD): 34.49	Client: Spring Place Limited	Job Number: J16143
	Location:	Dates: 19/07/2016	Engineer: Heyne Tillett Steel	Sheet: 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				34.34	(0.15) 0.15	MADE GROUND (concrete, over plastic membrane)		
0.60	D1		PID = 0.4 ppm		(0.95)	MADE GROUND (greyish brown silty sandy clay with flint gravel, oyster shells, glass, ceramic tile, ash, burnt coal and brick)		
				33.39	1.10			
1.20	D2				(0.70)	MADE GROUND (brown silty sandy clay with rare partings of orange-brown fine sand and silt, fine gravel, composed of chalk, dead rootlets and rare fragments of fine red brick)		
1.80	D3			32.69	1.80	Firm brown mottled grey silty fissured CLAY with rare partings of orange-brown fine sand and silt and specklings of mica. Rare carbonaceous material noted to a depth of 2.50 m. Claystones noted at 1.80 m and 2.30 m		
2.30	D4							
2.80	D5				(2.20)			∇1
			Water strike(1) at 3.00m.			...poor recovery from 3.00 m to 3.30 m		
3.30	D6							
3.80	D7							
				30.49	4.00	Stiff brownish grey with rare grey mottlings silty fissured CLAY with rare partings of orange-brown fine sand and silt		
4.30	D8							
4.80	D9				(2.00)	...occasional selenite crystals after 5.00 m		
5.30	D10							
5.80	D11							
				28.49	6.00	Complete at 6.00m		

Remarks
Borehole undertaken through base of Trial Pit No 4
On completion of borehole water standing at 4.35 m, after 20 minutes
Standpipe (35 mm diameter) installed to a depth of 6.00 m - response zone from 1.00 m to 6.00 m
Water measured within standpipe at a depth of 1.22 m on 20/07/2016

Scale (approx)	Logged By
1:50	HD

Figure No. J16143.BH3

GEA Geotechnical & Environmental Associates	Widbury Barn, Widbury Hill, Ware, Herts, SG12 7QE	Site: 3-6 Spring Place, London, NW5 3BA	Number: BH4
Excavation Method: Open-drive sampler	Dimensions:	Ground Level (mOD): 34.46	Client: Spring Place Limited	Job Number: J16143
	Location:	Dates: 18/07/2016	Engineer: Heyne Tillett Steel	Sheet: 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				34.28	(0.18) 0.18	MADE GROUND (concrete, over plastic membrane)		
0.40	D1		PID = 0.7 ppm	33.96	(0.32) 0.50	MADE GROUND (greyish brown silty sandy clay with rare flint gravel and fragments of chalk, oyster shells, brick, slate, metal and burnt coal. Half bricks noted to a depth of 0.40 m)		
						Complete at 0.50m		

Remarks
Borehole carried out through base of Trial Pit No 1
Borehole terminated on obstruction at a depth of 0.50 m
Groundwater not encountered

Scale (approx)	Logged By
1:50	HD

Figure No. J16143.BH4

GEA Geotechnical & Environmental Associates
Widbury Barn, Widbury Hill, Ware, Herts, SG12 7QE

Site	Number
3-6 Spring Place, London, NW5 3BA	BH5

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Open-drive sampler		34.36	Spring Place Limited	J16143
	Location	**Dates**	**Engineer**	**Sheet**
		19/07/2016	Heyne Tillett Steel	1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				34.10	(0.26) 0.26	MADE GROUND (screed, 80 mm thick, over membrane and wire mesh, over concrete, 180 mm thick, overlying plastic membrane)		
				33.66	(0.44) 0.70	MADE GROUND (greyish brown silty sandy clay with whole bricks, burnt coal and glass)		
				31.86	(1.80) 2.50	VOID? Poor recovery noted from a depth of 0.70 m to 2.50 m. Made ground recovered as wet grey mottled black silty sand with abundant concrete fragments - hydrocarbon odour noted. Concrete obstruction encountered at a depth of 2.50 m - rig bouncing - borehole abandoned)		
2.45	D1		PID = 83.5 ppm					
						Complete at 2.50m		

Remarks
Borehole carried out through base of Trial Pit No 2
On completion of borehole - water standing at 1.47 m

Scale (approx)	Logged By
1:50	HD

Figure No. J16143.BH5

GEA Geotechnical & Environmental Associates
Widbury Barn, Widbury Hill, Ware, Herts, SG12 7QE

Site	Number
3-6 Spring Place, London, NW5 3BA	BH6

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Open-drive sampler		35.52	Spring Place Limited	J16143
	Location	**Dates**	**Engineer**	**Sheet**
		21/07/2016	Heyne Tillett Steel	1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				35.35	(0.17) 0.17	MADE GROUND (concrete)		
0.65	D1		PID = 1.4 ppm	34.42	(0.93) 1.10	MADE GROUND (greyish brown silty sandy clay with brick, concrete, burnt coal, glass and pottery)		
1.25	D2		PID = 0.3 ppm	33.92	(0.50) 1.60	Soft becoming firm after 1.30 m, orange-brown mottled grey gravelly sandy CLAY with rare shell fragments. Gravel is fine to coarse subrounded flint. Claystone encountered at a depth of 1.55 m - churned appearance		∇1
			Seepage around claystone(1) at 1.55m.					
1.70	D3		PID = 0.3 ppm	33.52	(0.40) 2.00	Firm brownish grey with rare grey mottlings silty CLAY with abundant fine claystones, rare partings of orange-brown fine sand and silt and rare selenite crystals		
2.00	D4		PID = 0.1 ppm					
2.30	D5		PID = 0.3 ppm	33.02	(0.50) 2.50	Firm brown mottled grey silty CLAY with partings of orange-brown fine sand and silt and specklings of mica. Decayed rootlets noted at a depth of 2.00 m and 2.40 m		
						Complete at 2.50m		

Remarks
Borehole carried out through base of Trial Pit No 5
On completion of drilling, borehole dry

Scale (approx)	Logged By
1:50	HD

Figure No. J16143.BH6

Geotechnical & Environmental Associates
Widbury Barn
Widbury Hill
Ware,Herts
SG12 7QE

Site	Number
3-6 Spring Place, London, NW5 3BA	BH7

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Open-drive sampler		34.33	Spring Place Limited	J16143
	Location	**Dates**	**Engineer**	**Sheet**
		21/07/2016	Heyne Tillett Steel	1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				34.14	(0.19) 0.19	MADE GROUND (concrete, over plastic membrane)		
0.50	D1		PID = 31.5 ppm			MADE GROUND (orange-brown mottled greyish brown silty clay with flint gravel and brick. Between 0.35 m and 0.67 m - layer of black ash - hydrocarbon odour noted throughout)		
0.80	D2		PID = 5.6 ppm	32.93	(1.21) 1.40			
1.70	D3		PID = 0.9 ppm Water strike(1) at 1.80m.			MADE GROUND (orange-brown gravelly clay with brick and concrete and grey staining. Between 1.90 m and 2.00 m, black clayey silt with concrete fragments - hydrocarbon odour)		∇1
1.95	D4		PID = 25.9 ppm	32.33	(0.60) 2.00			
2.10	D5		PID = 0.6 ppm			Firm orange-brown mottled grey silty fissured CLAY with rare partings of orange-brown fine sand and silt. Rare fine claystone noted to a depth of 2.30 m		
2.50	D6		PID = 0.9 ppm					
3.00	D7		PID = 0.6 ppm	31.33	(1.00) 3.00			
						Complete at 3.00m		

Remarks
Borehole carried out through base of Trial Pit No 3
On completion of drilling, water standing at a depth of 1.24 m

Scale (approx)	Logged By
1:50	HD

Figure No. J16143.BH7

Geotechnical & Environmental Associates
Widbury Barn
Widbury Hill
Ware,Herts
SG12 7QE

Standard Penetration Test Results

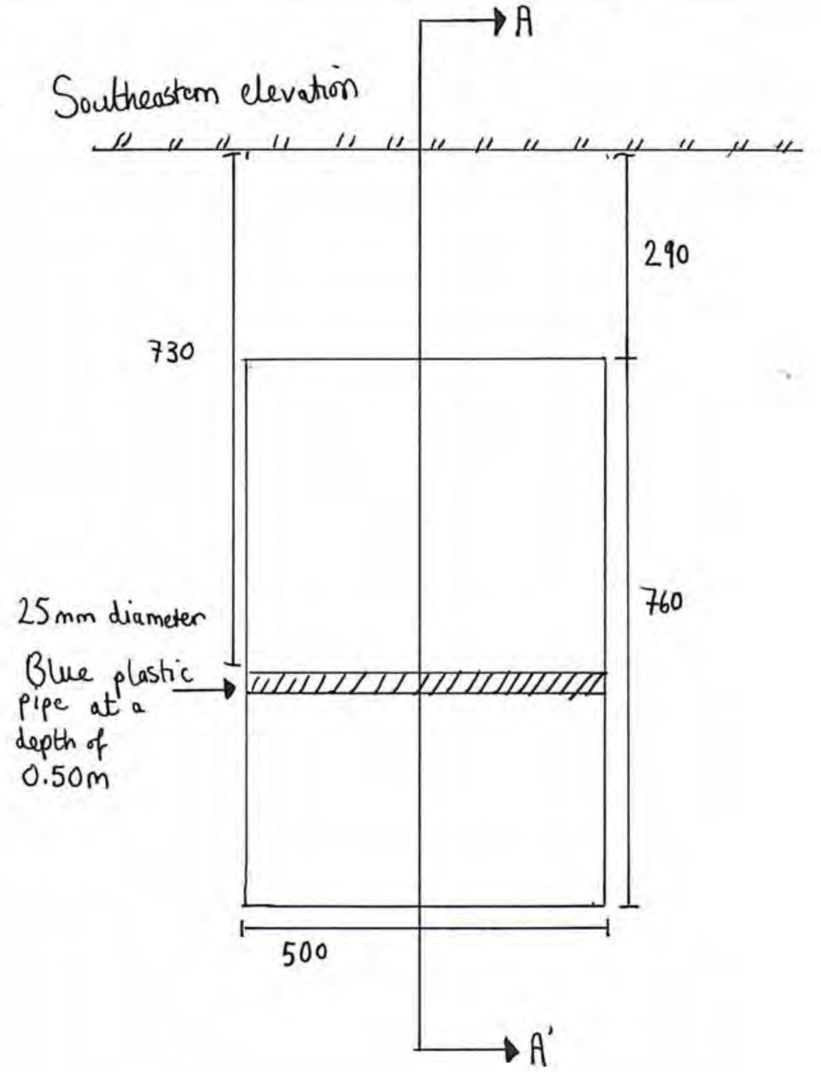
Site : 3-6 Spring Place, London, NW5 3BA
Client : Spring Place Limited
Engineer : Heyne Tillett Steel

Job Number J16143
Sheet 1 / 1

Borehole Number	Base of Borehole (m)	End of Seating Drive (m)	End of Test Drive (m)	Test Type	Seating Blows per 75mm		Blows for each 75mm penetration				Result	Comments
					1	2	1	2	3	4		
BH1	1.00	1.15	1.45	SPT	0	1	1	1	1	2	N=5	
BH1	3.00	3.15	3.45	SPT	1	1	1	1	2	2	N=6	
BH1	8.00	8.15	8.45	SPT	2	3	3	3	4	4	N=14	
BH1	14.00	14.15	14.45	SPT	2	3	4	6	8	8	N=26	
BH1	20.00	20.15	20.45	SPT	4	5	7	9	10	11	N=37	
BH2	1.20	1.35	1.65	SPT	1	1	0	1	0	1	N=2	
BH2	2.00	2.15	2.45	SPT	1	0	1	1	1	2	N=5	
BH2	4.00	4.15	4.45	SPT	1	1	2	2	3	4	N=11	
BH2	6.50	6.65	6.95	SPT	2	2	3	4	4	4	N=15	
BH2	9.50	9.65	9.95	SPT	3	4	5	5	6	6	N=22	
BH2	12.50	12.65	12.95	SPT	4	5	6	6	7	7	N=26	
BH2	15.50	15.65	15.95	SPT	4	4	6	6	7	10	N=29	
BH2	18.50	18.65	18.95	SPT	4	5	7	7	8	8	N=30	
BH2	21.50	21.65	21.95	SPT	5	6	7	8	10	9	N=34	

GEA Geotechnical & Environmental Associates	Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	Site: Spring Place, Kentish Town, NW5 3BA	Trial Pit Number: 1
Excavation Method Manual	**Dimensions (mm)** 500 x 760 x 750	**Ground Level (mOD)** 34.46	**Client** Spring Place Limited	**Job Number** J16143
	Location	**Dates** 18/07/2016	**Engineer** Heyne Tillett Steel	**Sheet** 1/18

PLAN

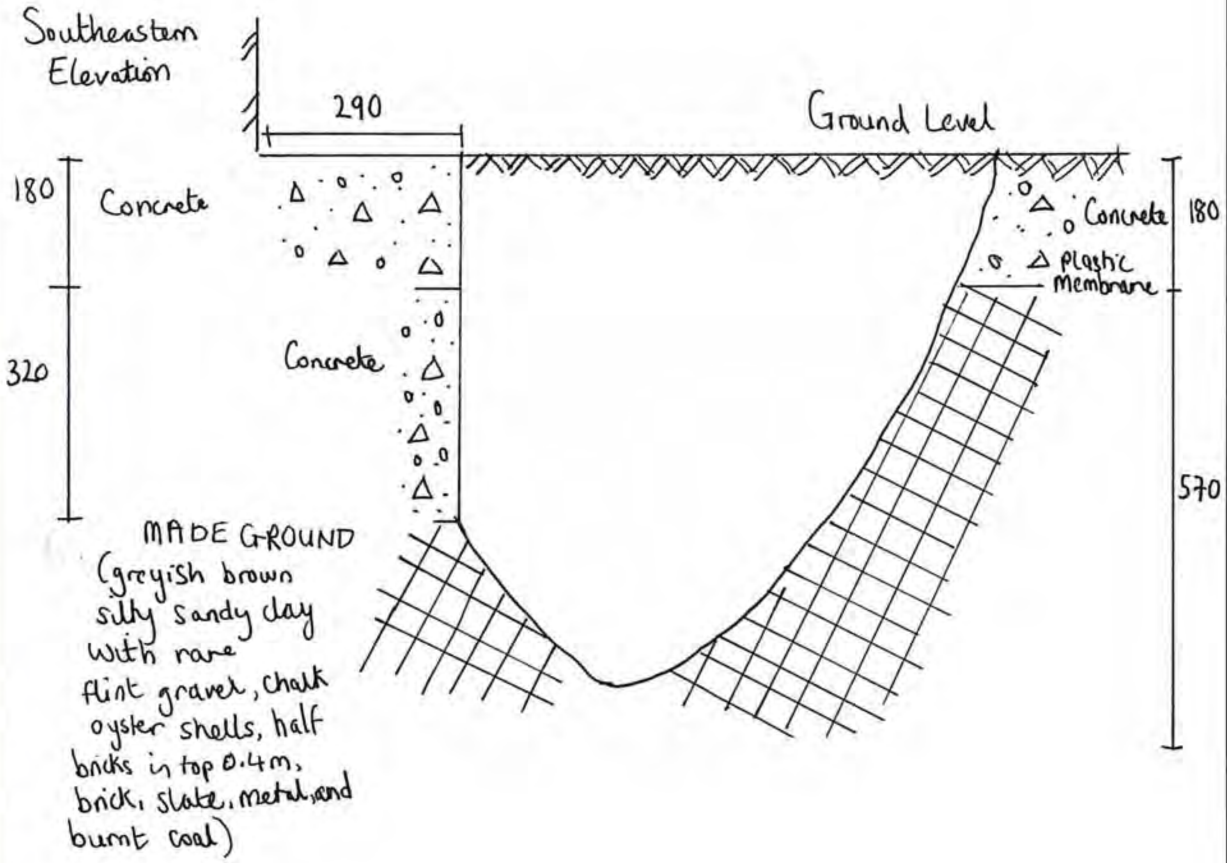


✱ Borehole No 4 carried out through base of trial pit

Remarks:	Scale: 1:10
All dimensions in millimetres	Logged by: HD
Sides of trial pit remained stable during excavation	
Groundwater: Not encountered	

GEA Geotechnical & Environmental Associates	Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	Site: Spring Place, Kentish Town, NW5 3BA	Trial Pit Number: 1
Excavation Method Manual	**Dimensions (mm)** 500 x 760 x 750	**Ground Level (mOD)** 34.46	**Client** Spring Place Limited	**Job Number** J16143
	Location	**Dates** 18/07/2016	**Engineer** Heyne Tillett Steel	**Sheet** 2/18

SECTION A - A'



Remarks:	Scale: 1:10
All dimensions in millimetres	Logged by: HD
Sides of trial pit remained stable during excavation	
Groundwater: Not encountered	

GEA Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Trial Pit No 1

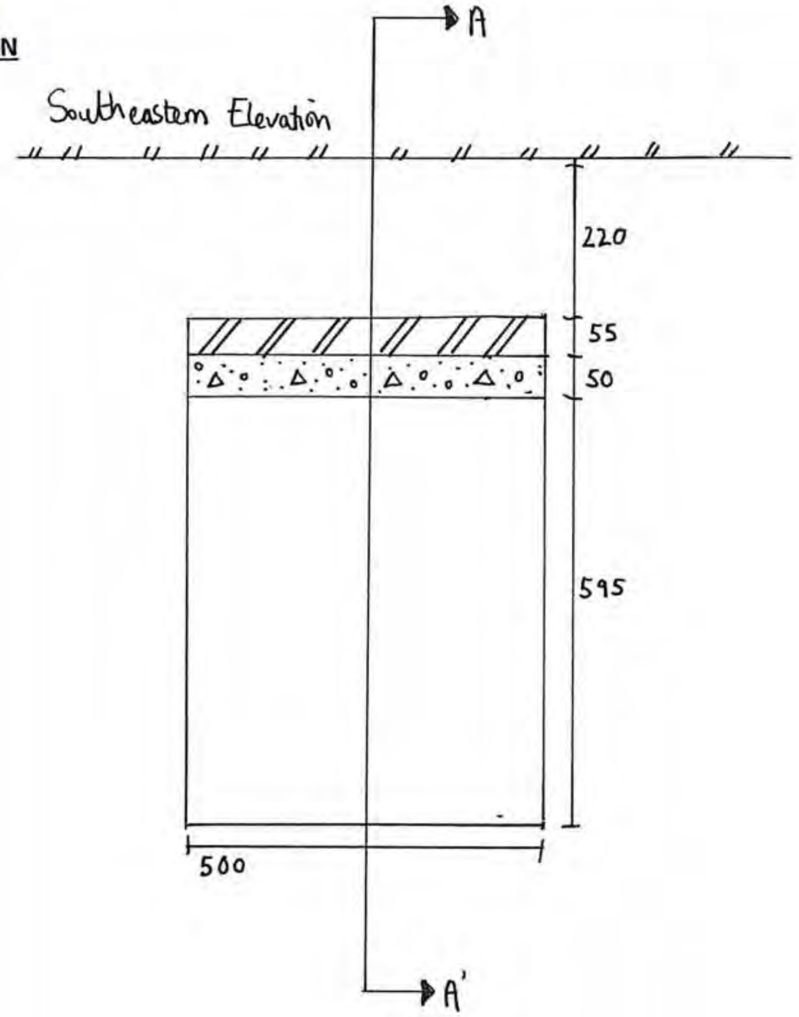
Site	Spring Place, Kentish Town, NW5 3BA	**Job Number** J16143
Client	Spring Place Limited	**Sheet** 3 / 18
Engineer	Heyne Tillett Steel	

GEA Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

			Site Spring Place, Kentish Town, NW5 3BA	**Trial Pit Number** 2
Excavation Method Manual	**Dimensions (mm)** 700 x 500 x 850	**Ground Level (mOD)** 34.36	**Client** Spring Place Limited	**Job Number** J16143
	Location	**Dates** 18/07/2016	**Engineer** Heyne Tillett Steel	**Sheet** 4/18

PLAN

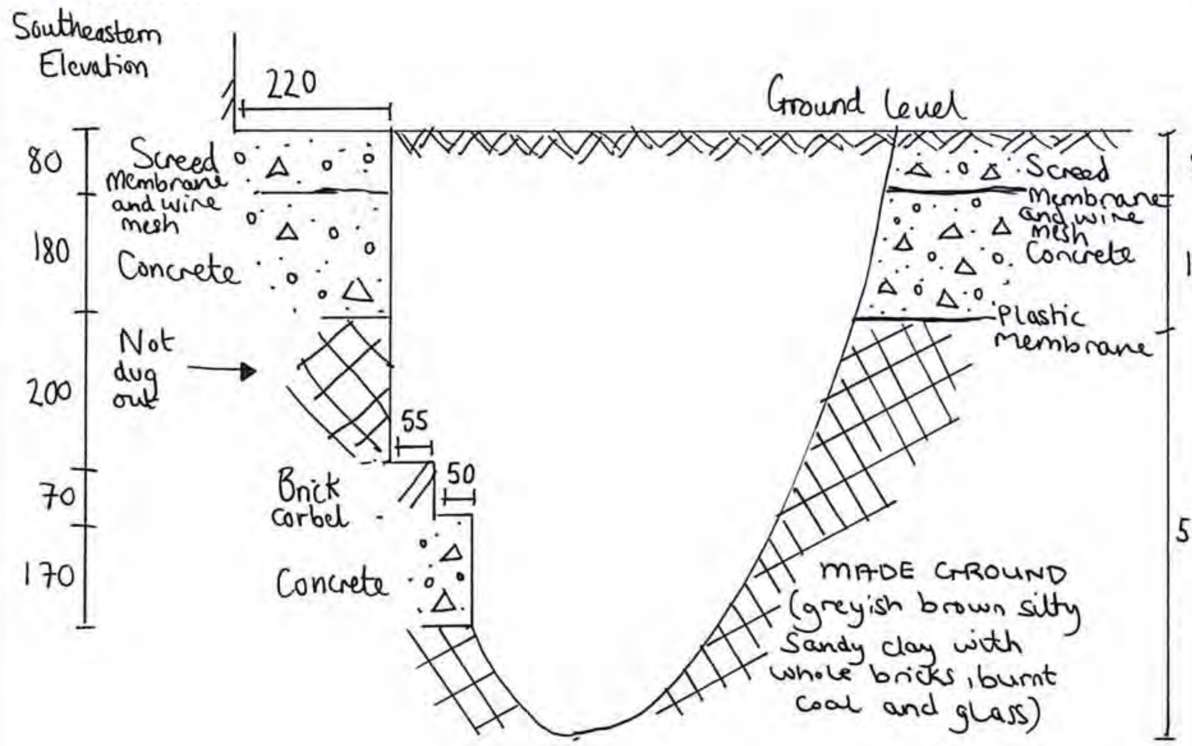


* Borehole No 5 carried out through base of trial pit

Remarks:	Scale:
All dimensions in millimetres	1:10
Sides of trial pit remained stable during excavation	Logged by:
Groundwater: Not encountered	HD

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE		Site: Spring Place, Kentish Town, NW5 3BA	Trial Pit Number: 2
Excavation Method Manual	**Dimensions (mm)** 700 x 500 x 850	**Ground Level (mOD)** 34.36	**Client** Spring Place Limited	**Job Number** J16143
	Location	**Dates** 18/07/2016	**Engineer** Heyne Tillett Steel	**Sheet** 5/18

SECTION A - A'

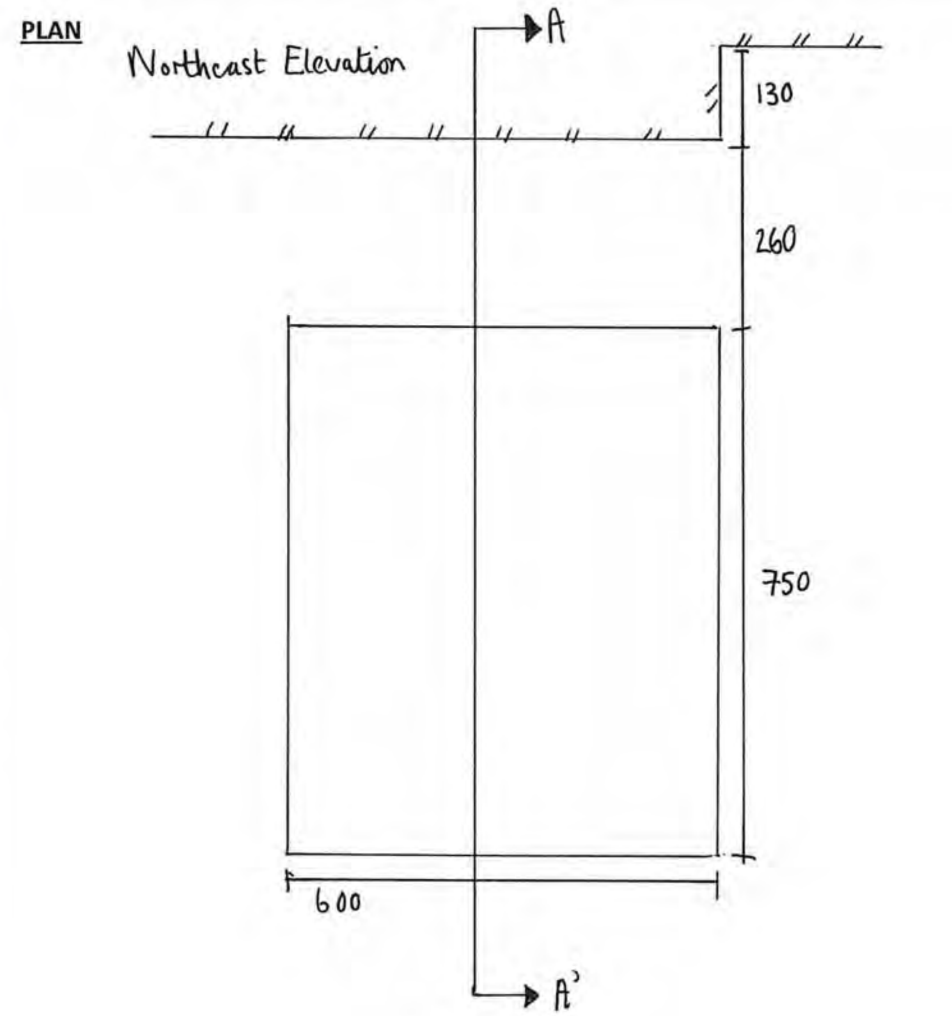


Remarks:	Scale: 1:10
All dimensions in millimetres Sides of trial pit remained stable during excavation Groundwater: Not encountered	Logged by: HD

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	**Trial Pit No 2**
Site Spring Place, Kentish Town, NW5 3BA	**Job Number** J16143
Client Spring Place Limited	**Sheet** 6 / 18
Engineer Heyne Tillett Steel	

GEA Geotechnical & Environmental Associates	Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	Site Spring Place, Kentish Town, NW5 3BA	Trial Pit Number 3
Excavation Method Manual	Dimensions (mm) 730 x 560 x 820	Ground Level (mOD) 34.33	Client Spring Place Limited	Job Number J16143
	Location	Dates 20/07/2016	Engineer Heyne Tillett Steel	Sheet 7/18

PLAN

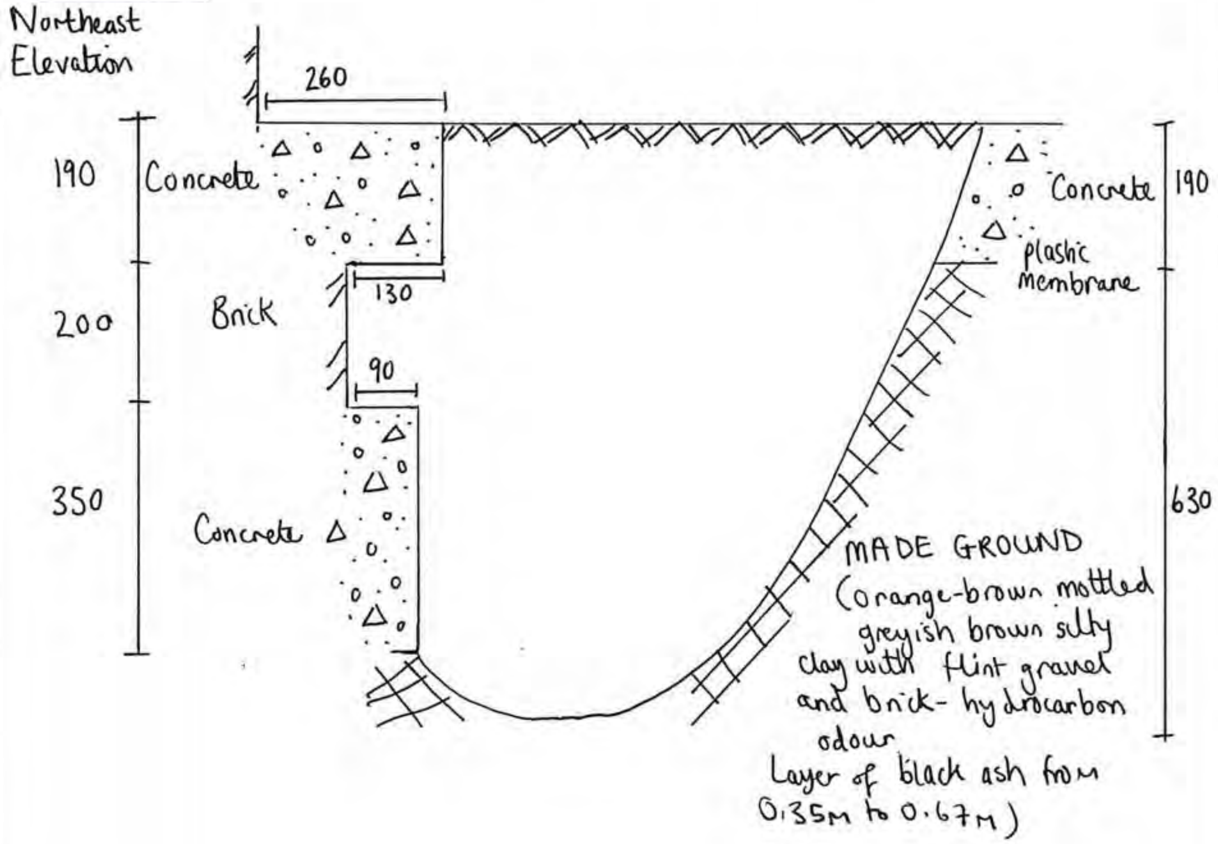


* Borehole No 7 carried out through base of trial pit.

Remarks:	Scale:
All dimensions in millimetres	1:10
Sides of trial pit remained stable during excavation	Logged by:
Groundwater: Not encountered	HD

GEA Geotechnical & Environmental Associates	Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	Site Spring Place, Kentish Town, NW5 3BA	Trial Pit Number 3
Excavation Method Manual	Dimensions (mm) 730 x 560 x 820	Ground Level (mOD) 34.33	Client Spring Place Limited	Job Number J16143
	Location	Dates 20/07/2016	Engineer Heyne Tillett Steel	Sheet 8/18

SECTION A - A'



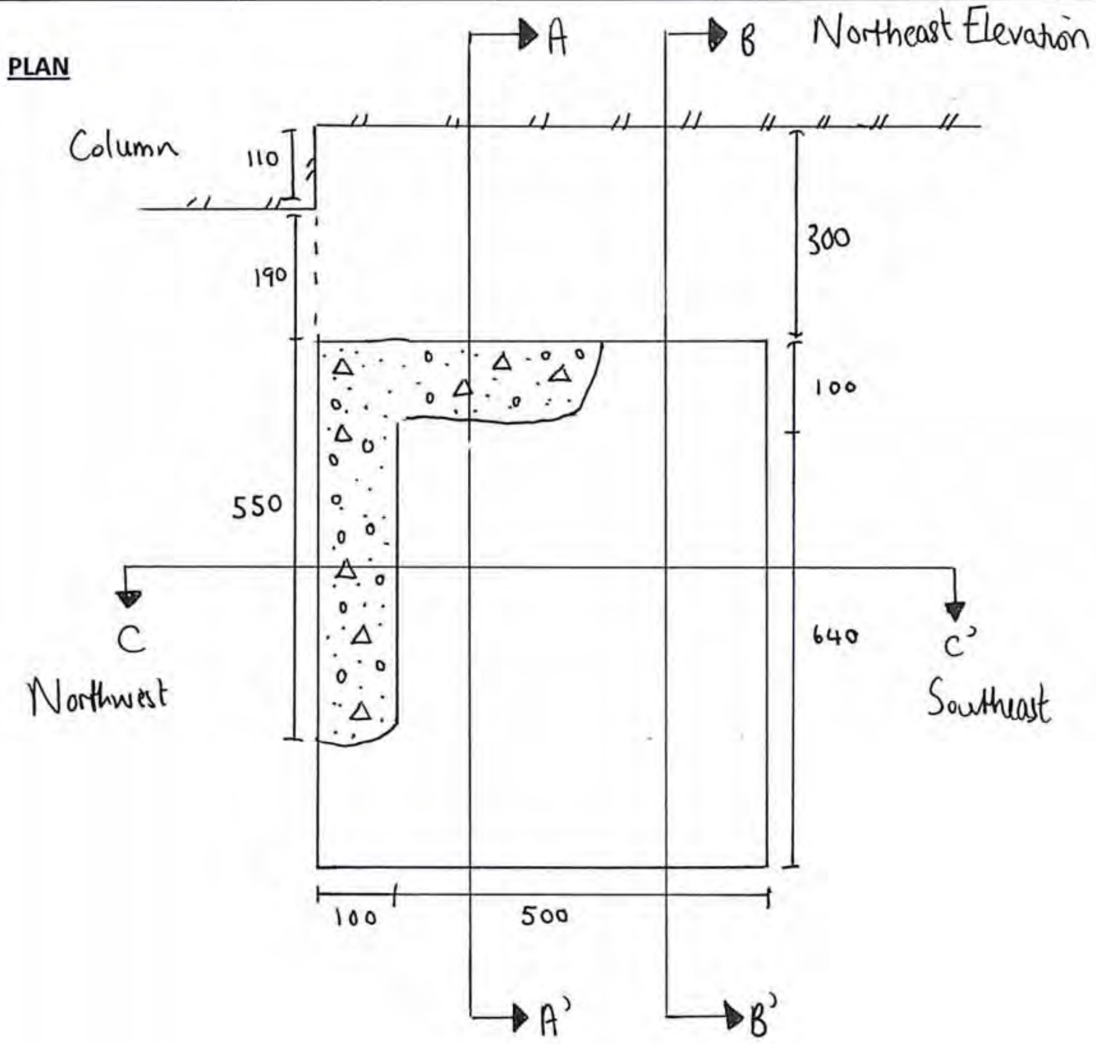
Remarks:	Scale:
All dimensions in millimetres	1:10
Sides of trial pit remained stable during excavation	Logged by:
Groundwater: Not encountered	HD

GEA Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware Herts SG12 7QE	**Trial Pit No 3**

Site	Spring Place, Kentish Town, NW5 3BA	**Job Number** J16143
Client	Spring Place Limited	**Sheet** 9 / 18
Engineer	Heyne Tillett Steel	

GEA Geotechnical & Environmental Associates		Widbury Barn Widbury Hill Ware Herts SG12 7QE	**Site** Spring Place, Kentish Town, NW5 3BA	**Trial Pit Number** 4
Excavation Method Manual	**Dimensions (mm)** 740 x 600 x 840	**Ground Level (mOD)** 34.49	**Client** Spring Place Limited	**Job Number** J16143
	Location	**Dates** 18/07/2016	**Engineer** Heyne Tillett Steel	**Sheet** 10/18

PLAN

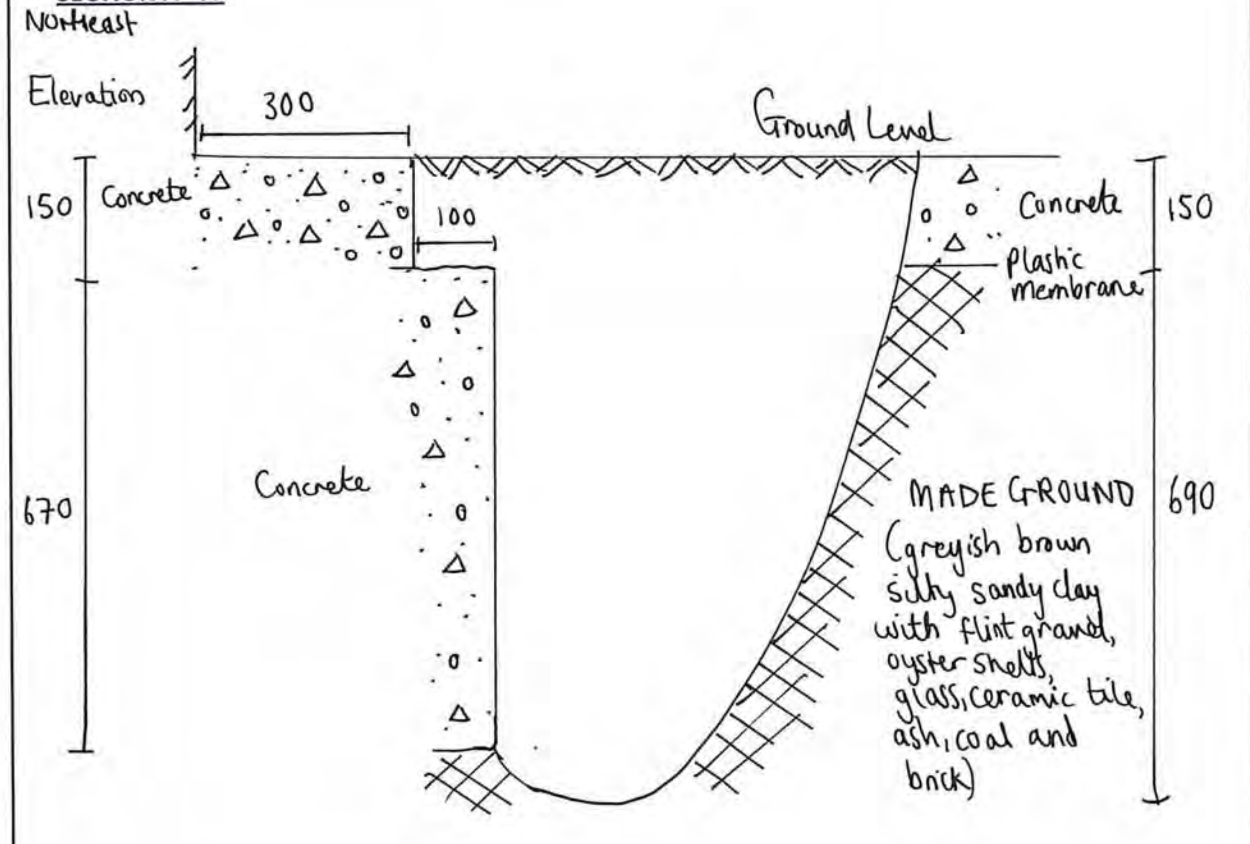


* Borehole No 3 carried out through base of trial pit

Remarks: All dimensions in millimetres Sides of trial pit remained stable during excavation Groundwater: Not encountered	Scale: 1:10 Logged by: HD

GEA Geotechnical & Environmental Associates	Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	Site: Spring Place, Kentish Town, NW5 3BA	Trial Pit Number: 4
Excavation Method: Manual	**Dimensions (mm)**: 740 x 600 x 840	**Ground Level (mOD)**: 34.49	**Client**: Spring Place Limited	**Job Number**: J16143
	Location:	**Dates**: 18/07/2016	**Engineer**: Heyne Tillett Steel	**Sheet**: 11/18

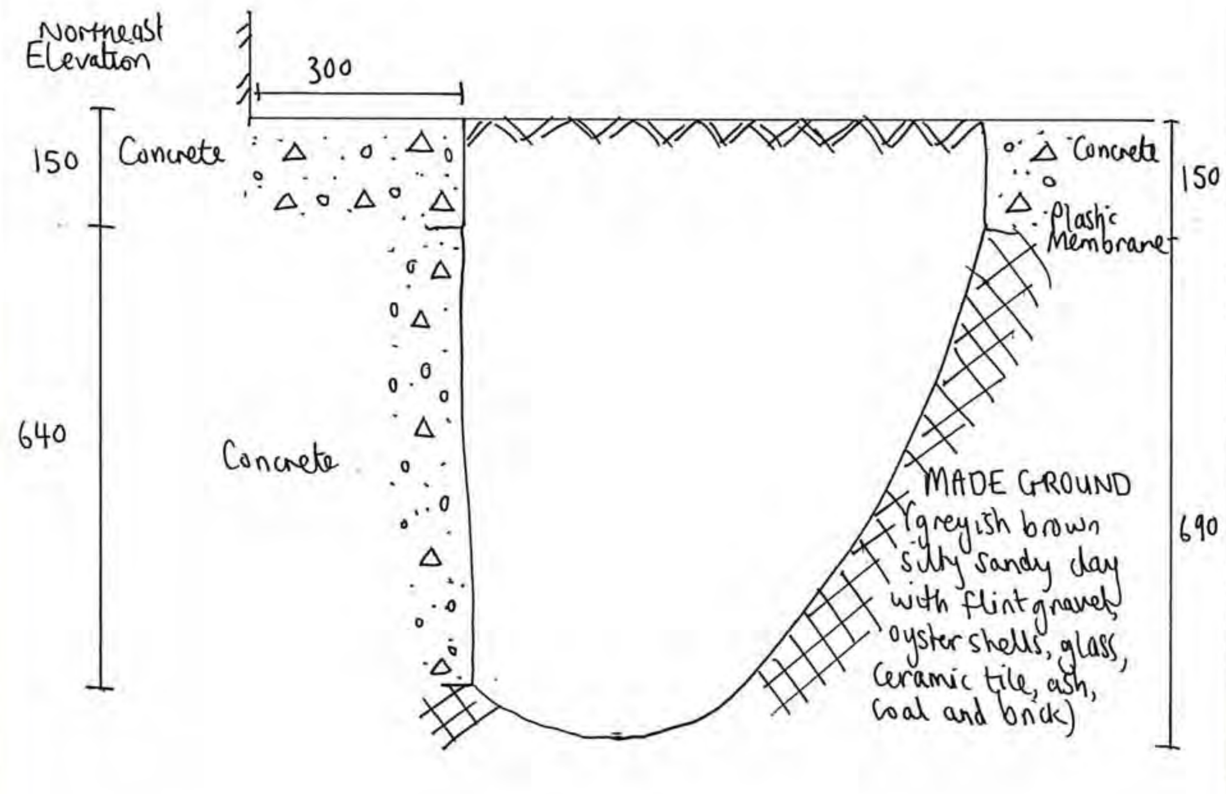
SECTION A - A'



Remarks:	Scale: 1:10
All dimensions in millimetres	Logged by: HD
Sides of trial pit remained stable during excavation	
Groundwater: Not encountered	

GEA Geotechnical & Environmental Associates	Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	Site: Spring Place, Kentish Town, NW5 3BA	Trial Pit Number: 4
Excavation Method: Manual	**Dimensions (mm)**: 740 x 600 x 840	**Ground Level (mOD)**: 34.49	**Client**: Spring Place Limited	**Job Number**: J16143
	Location:	**Dates**: 18/07/2016	**Engineer**: Heyne Tillett Steel	**Sheet**: 12/18

SECTION B - B'



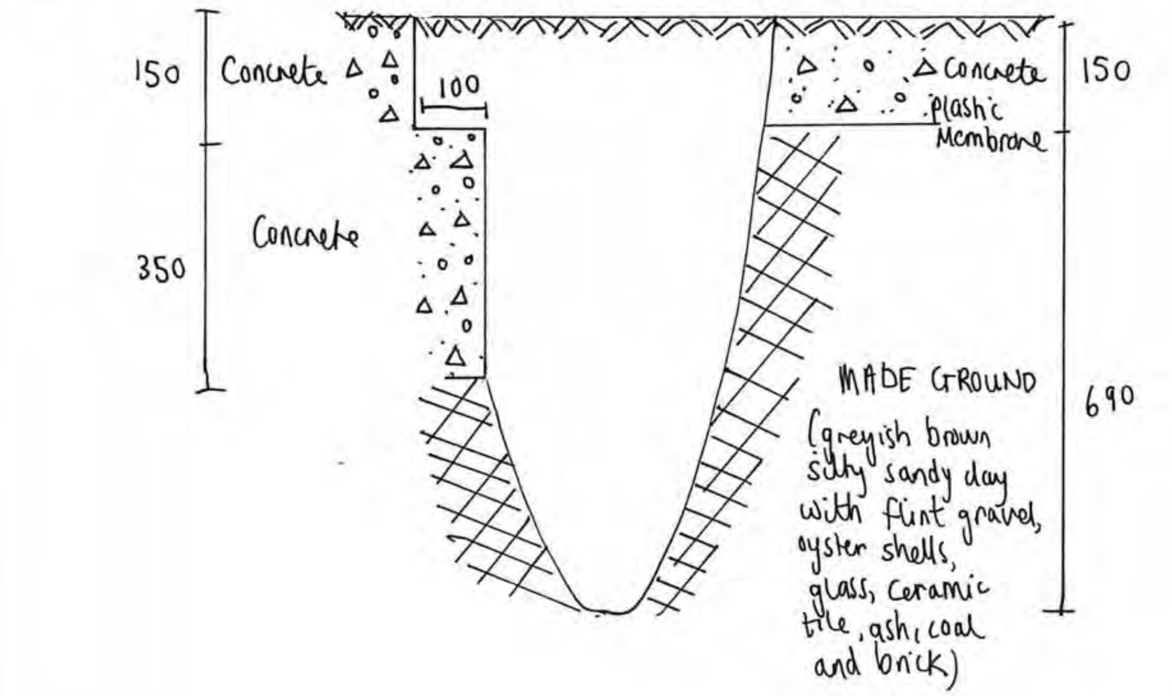
Remarks:	Scale: 1:10
All dimensions in millimetres	Logged by: HD
Sides of trial pit remained stable during excavation	
Groundwater: Not encountered	

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE		**Site** Spring Place, Kentish Town, NW5 3BA	**Trial Pit Number** 4
Excavation Method Manual	**Dimensions (mm)** 740 x 600 x 840	**Ground Level (mOD)** 34.49	**Client** Spring Place Limited
	Location	**Dates** 18/07/2016	**Engineer** Heyne Tillett Steel

Job Number	J16143
Sheet	13/18

SECTION C - C'

Southeast-Northwest

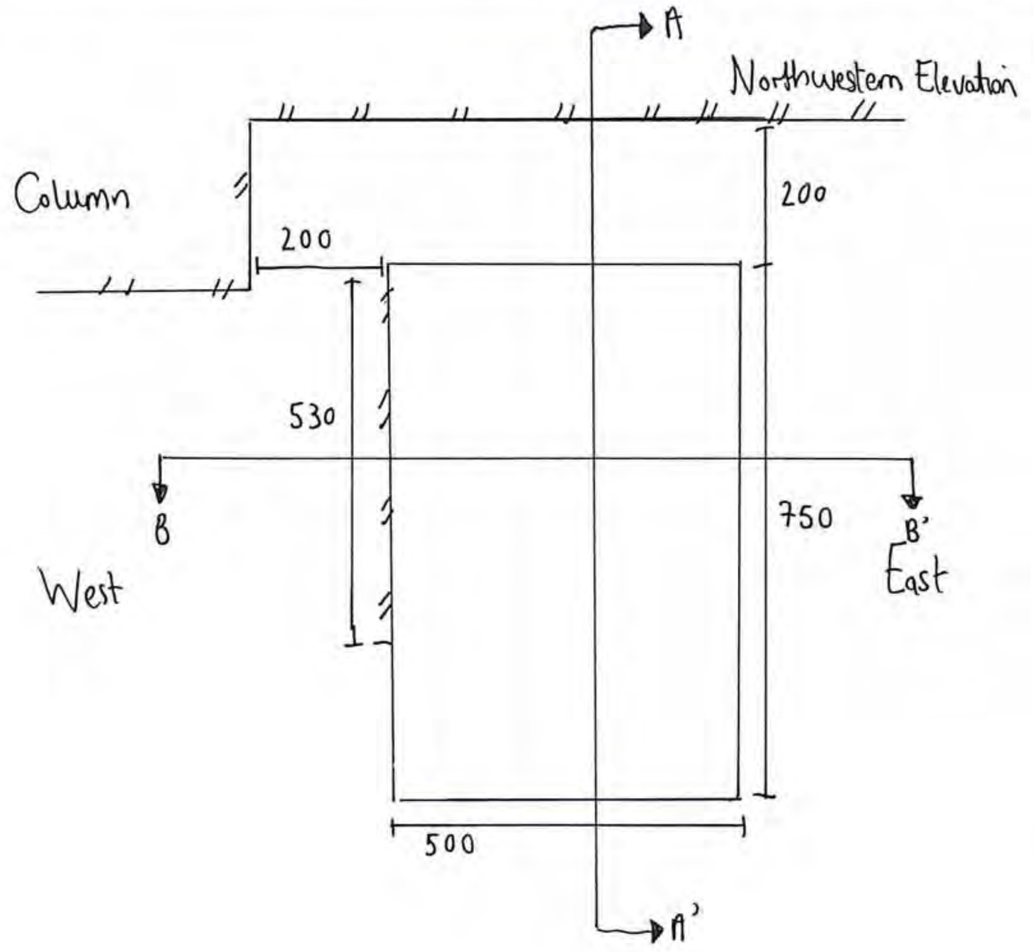


Remarks:	Scale:
All dimensions in millimetres	1:10
Sides of trial pit remained stable during excavation	Logged by:
Groundwater: Not encountered	HD

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE		**Trial Pit No 4**
Site	Spring Place, Kentish Town, NW5 3BA	**Job Number** J16143
Client	Spring Place Limited	
Engineer	Heyne Tillett Steel	**Sheet** 14 / 18

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE			Site: Spring Place, Kentish Town, NW5 3BA	Trial Pit Number: 5
Excavation Method: Manual	Dimensions (mm): 780 x 500 x 900	Ground Level (mOD): 35.52	Client: Spring Place Limited	Job Number: J16143
	Location:	Dates: 20/07/2016	Engineer: Heyne Tillett Steel	Sheet: 15/18

PLAN

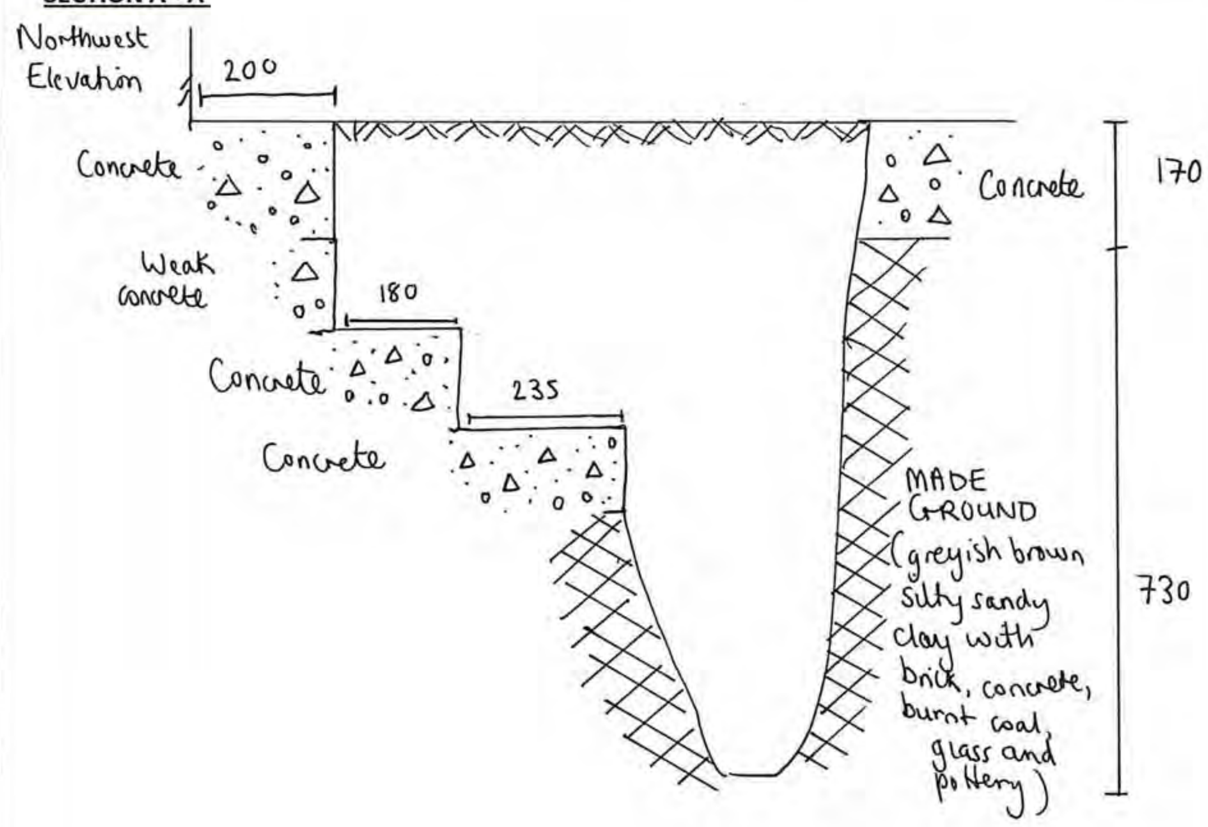


* Borehole No 6 carried out through base of trial pit

Remarks:	Scale:
All dimensions in millimetres	1:10
Sides of trial pit remained stable during excavation	Logged by:
Groundwater: Not encountered	HD

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE			Site: Spring Place, Kentish Town, NW5 3BA	Trial Pit Number: 5
Excavation Method: Manual	Dimensions (mm): 780 x 500 x 900	Ground Level (mOD): 35.52	Client: Spring Place Limited	Job Number: J16143
	Location:	Dates: 20/07/2016	Engineer: Heyne Tillett Steel	Sheet: 16/18

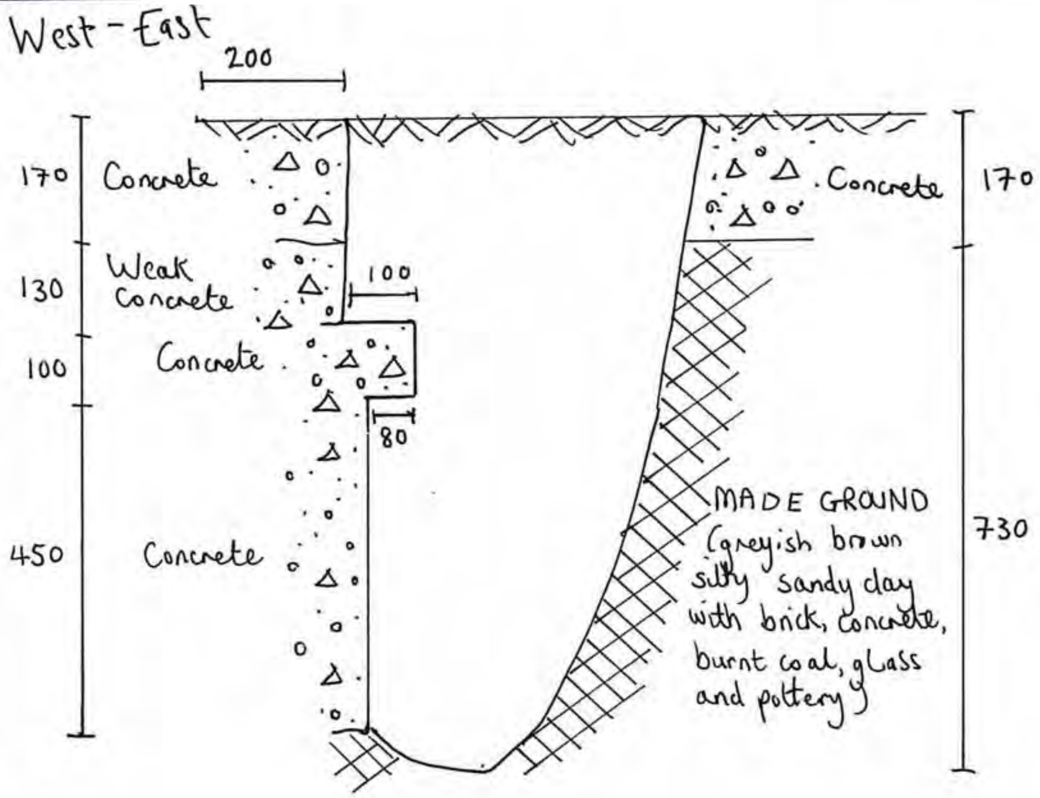
SECTION A - A'



Remarks:	Scale:
All dimensions in millimetres	1:10
Sides of trial pit remained stable during excavation	Logged by:
Groundwater: Not encountered	HD

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE		Site Spring Place, Kentish Town, NW5 3BA	Trial Pit Number 5
Excavation Method Manual	Dimensions (mm) 780 x 500 x 900	Ground Level (mOD) 35.52	Client Spring Place Limited	Job Number J16143
	Location	Dates 20/07/2016	Engineer Heyne Tillett Steel	Sheet 17/18

SECTION B - B'



Remarks: All dimensions in millimetres Sides of trial pit remained stable during excavation Groundwater: Not encountered	Scale: 1:10 Logged by: HD

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	Trial Pit No 5
Site Spring Place, Kentish Town, NW5 3BA	**Job Number** J16143
Client Spring Place Limited	
Engineer Heyne Tillett Steel	**Sheet** 18 / 18

Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Soil Vapour Survey

Site	3-6 Spring Place, London, NW5 3BA	**Job Number**	J16143
Client	Spring Place Limited	**Sheet**	1/1
Engineer	Heyne Tillett Steel		

SOIL VAPOUR SURVEY

Survey Position	1	2	3	4	5	6	7	8	9
VOCS (ppmv)	0.7	1.1	1.7	2.7	4.8	9.5	3.0	0.6	5.8
Survey Position	9a	10	11	12	13	14	15	16	17
VOCS (ppmv)	2.3	17.0	1.8	9.0	10.4	4.0	3.0	11.0	9.5
Survey Position	18	19	20	21	22	23	24	25	26
VOCS (ppmv)	6.9	30.0	25.9	12.4	12.6	1.50	0.7	2.0	0.1
Survey Position	27	28	29	30	31	32	33		
VOCS (ppmv)	0.4	1.3	2	2.1	6.0	4	2.9		

Equipment Photo-ionistation detector (PID) fitted with a 10.6 eV lamp

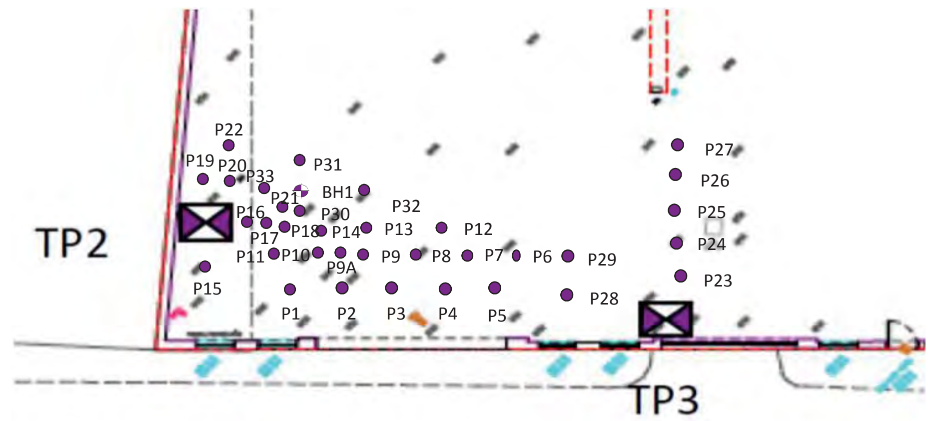
Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Soil Vapour Survey

Site	3-6 Spring Place, Kentish Town, London, NW5 3BA	**Job Number**	J16143
Client	Spring Place Limited	**Sheet**	1 / 1
Engineer	Heyne Tillett Steel		

Soil vapour survey in southeast corner of site



Summary of Natural Moisture Content, Liquid Limit and Plastic Limit Results

Job No.	Project Name	Programme	
21286	3-8 Spring Place, London NW5 3BA	Samples received	18/07/2016
		Schedule received	19/07/2016
Project No.	Client	Project started	19/07/2016
J16143	GEA	Testing Started	10/08/2016

Hole No.	Sample Ref	Top	Base	Type	Soil Description	NMC %	Passing 425μm %	LL %	PL %	PI %	Remarks
BH2	10	3.00	3.45	U	High strength fissured brown mottled bluish grey silty CLAY	31	100	74	29	45	
BH2	16	8.00	8.45	U	High strength fissured dark brown slightly sandy silty CLAY	29	100	74	29	45	
BH2	21	11.00	11.45	U	High Strength fissured dark grey silty CLAY	24	100	79	30	49	
BH2	33	20.00	20.45	U	High Strength fissured dark grey silty CLAY	27	100	78	29	49	

Test Methods: BS1377: Part 2: 1990:
Natural Moisture Content : clause 3.2
Atterberg Limits: clause 4.3 and 5.0

Test Report by K4 SOILS LABORATORY
Unit 8 Olds Close Olds Approach
Watford Herts WD18 9RU
Tel: 01923 711 288
Email: James@k4soils.com

Checked and Approved
Initials J.P
Date: 12/08/2016

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

MSF-5-R1(b)

Sulphate Content (Gravimetric Method) for 2:1 Soil: Water Extract and pH Value - Summary of Results

Tested in accordance with BS1377 : Part 3 : 1990, clause 5.3 and clause 9

Job No.	Project Name	Programme	
21286	3-8 Spring Place, London NW5 3BA	Samples received	18/07/2016
		Schedule received	19/07/2016
Project No.	Client	Project started	19/07/2016
J16143	GEA	Testing Started	08/08/2016

Hole No.	Sample Ref	Top	Base	Type	Soil description	Dry Mass passing 2mm %	SO3 Content g/l	SO4 Content g/l	pH	Remarks
BH1	3	0.50	-	D	Dark grey slightly gravelly sandy CLAY with occasional fm brick and light brown cemented silt fragments (gravel is fm sub-rounded to rounded)	90	0.47	0.56	8.53	
BH2	2	1.00	-	D	Brown slightly sandy silty CLAY with occasional fmc brick fragments and fine carbonaceous fragments	92	0.76	0.91	8.33	
BH2	11	3.50	-	D	Brown mottled bluish grey silty CLAY with pockets of orangish brown fine sand	100	1.91	2.29	8.37	
BH2	22	11.50	-	D	Dark brownish grey silty CLAY	100	0.30	0.36	8.59	

Test Report by K4 SOILS LABORATORY
Unit 8 Olds Close Olds Approach
Watford Herts WD18 9RU
Tel: 01923 711 288
Email: James@k4soils.com

Checked and Approved
Initials J.P
Date: 12/08/2016

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

MSF-5-R29

Results Summary

Report No.: 16-08093

			ELAB Reference	70211
			Customer Reference	D5
			Sample ID	
			Sample Type	SOIL
			Sample Location	BH1
			Sample Depth (m)	1.00
			Sampling Date	Not Provided
Determinand	**Codes**	**Units**	**LOD**	
Miscellaneous				
Soil Organic Matter	U	%	0.1	0.9

Method Summary

Report No.: 16-08093

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Soil organic matter	U	Air dried sample	12/08/2016	BS1377:P3	Titrimetry

Unconsolidated Undrained Triaxial Compression tests without measurement of pore pressure
Summary of Results

Tests carried out in accordance with BS1377:Part 7 : 1990 clause 8 or 9 as appropriate to test

Job No.	Project Name	Programme	
21286	3-8 Spring Place, London NW5 3BA	Samples received	18/07/2016
		Schedule received	19/07/2016
Project No.	Client	Project started	19/07/2016
J16143	GEA	Testing Started	03/08/2016

Hole No.	Sample				Soil Description	Test Type	Density		w	Length	Diameter	σ3	At failure				Remarks
	Ref	Top	Base	Type			bulk	dry					Axial strain	σ1 - σ3	cu	Mode	
							Mg/m3		%	mm	mm	kPa	%	kPa	kPa		
BH1	7	2.00	2.45	U	Medium strength fissured brown mottled bluish grey silty CLAY	UU	1.97	1.51	30	205	105	40	14	149	74	C	
BH1	13	4.00	4.45	U	High strength fissured brown mottled bluish grey slightly sandy silty CLAY with selenite	UU	1.93	1.48	30	205	105	80	9.8	176	88	B	
BH1	16	5.00	5.45	U	High strength fissured brown mottled bluish grey slightly sandy silty CLAY with selenite	UU	1.95	1.51	29	205	105	100	2.9	192	96	B	
BH1	19	6.50	6.95	U	High strength fissured brown mottled bluish grey slightly sandy silty CLAY with selenite	UU	1.97	1.52	30	205	105	130	3.4	192	96	B	
BH1	25	9.50	9.95	U	High Strength fissured dark grey silty CLAY	UU	1.96	1.51	30	205	105	190	2.0	187	94	B	
BH1	28	11.00	11.45	U	High Strength fissured dark grey silty CLAY	UU	1.96	1.51	30	205	105	220	3.4	299	149	B	
BH1	31	12.50	12.95	U	High Strength fissured dark grey silty CLAY	UU	1.97	1.50	31	205	105	250	2.4	227	113	B	
BH1	36	15.50	15.95	U	Extremely high Strength fissured dark grey silty CLAY	UU	2.02	1.60	26	205	105	310	5.4	663	331	B	
BH1	39	17.00	17.45	U	High Strength fissured dark silty CLAY	UU	2.00	1.58	26	205	105	340	2.4	194	97	B	
BH1	42	18.50	18.95	U	High Strength fissured dark grey silty CLAY	UU	2.00	1.59	26	205	105	370	2.0	203	102	B	
BH2	10	3.00	3.45	U	High strength fissured brown mottled bluish grey silty CLAY	UU	1.96	1.49	31	198	102	60	11	159	80	C	
BH2	13	5.00	5.45	U	High strength fissured brown mottled bluish grey slightly sandy silty CLAY with selenite	UU	1.95	1.51	29	198	102	100	4.5	169	84	B	
BH2	16	8.00	8.45	U	High strength fissured dark brown slightly sandy silty CLAY	UU	1.99	1.53	30	198	102	160	4.5	189	94	B	

Legend
UU - single stage test (single and multiple specimens) σ3 Cell pressure Mode of failure ; B - Brittle
UUM - Multistage test on a single specimen σ1 - σ3 Maximum corrected deviator stress P - Plastic
suffix R - remoulded or recompacted cu Undrained shear strength, ½ (σ1 - σ3) C - Compound

Test Report by K4 SOILS LABORATORY
Unit 8 Olds Close Olds Approach
Watford Herts WD18 9RU
Tel: 01923 711 288
Email: james@k4soils.com

UKAS TESTING 2519

Checked and Approved
Initials: J.P
Date: 12/08/2016

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

MSF-5-R7b

Unconsolidated Undrained Triaxial Compression tests without measurement of pore pressure
Summary of Results

Tests carried out in accordance with BS1377:Part 7 : 1990 clause 8 or 9 as appropriate to test

Job No.	Project Name	Programme	
21286	3-8 Spring Place, London NW5 3BA	Samples received	18/07/2016
		Schedule received	19/07/2016
Project No.	Client	Project started	19/07/2016
J16143	GEA	Testing Started	03/08/2016

Hole No.	Sample				Soil Description	Test Type	Density		w	Length	Diameter	σ3	At failure				Remarks
	Ref	Top	Base	Type			bulk	dry					Axial strain	σ1 - σ3	cu	Mode	
							Mg/m3		%	mm	mm	kPa	%	kPa	kPa		
BH2	21	11.00	11.45	U	High Strength fissured dark grey silty CLAY	UU	1.99	1.56	28	198	102	220	3.5	276	138	B	
BH2	25	14.00	14.45	U	High Strength fissured dark grey silty CLAY	UU	1.96	1.53	28	198	102	250	4.5	246	123	B	
BH2	29	17.00	17.45	U	High Strength fissured dark grey silty CLAY	UU	1.99	1.56	28	198	102	340	8.6	274	137	B	
BH2	33	20.00	20.45	U	High Strength fissured dark grey silty CLAY	UU	1.92	1.51	27	198	102	400	3.5	235	117	B	
BH2	38	23.50	23.90	U	Very high strength fissured dark grey silty CLAY	UU	1.99	1.59	25	198	102	460	7.6	549	274	B	

Legend
UU - single stage test (single and multiple specimens) σ3 Cell pressure Mode of failure ; B - Brittle
UUM - Multistage test on a single specimen σ1 - σ3 Maximum corrected deviator stress P - Plastic
suffix R - remoulded or recompacted cu Undrained shear strength, ½ (σ1 - σ3) C - Compound

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Date: 12/08/2016

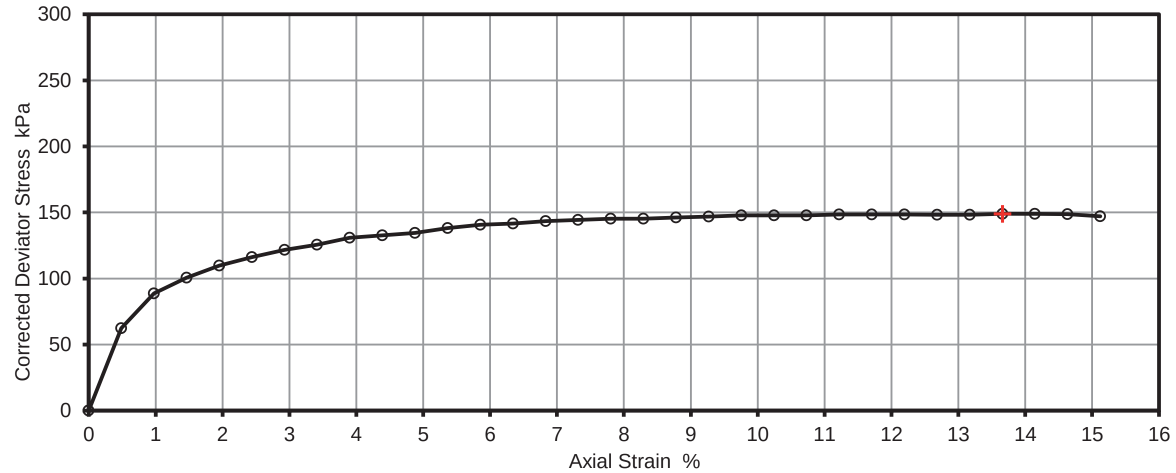
K4 SOILS	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**	Job Ref	21286
		Borehole/Pit No.	BH1
Site Name	3-8 Spring Place, London NW5 3BA	Sample No.	7
Project No.	J16143 Client GEA	Depth	2.00 m
Soil Description	Medium strength fissured brown mottled bluish grey silty CLAY	Sample Type	U
		Samples received	18/07/2016
		Schedules received	19/07/2016
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen	Date of test	03/08/2016

Remarks

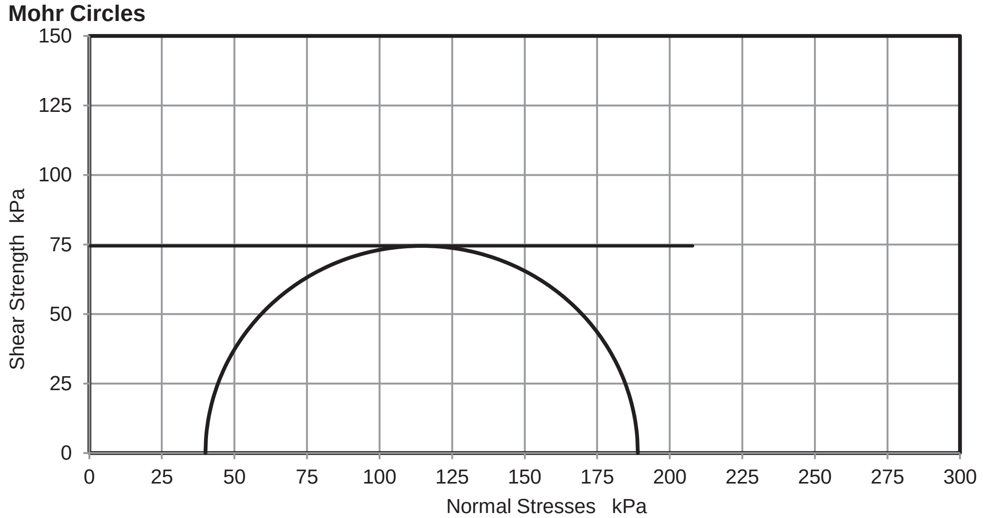
Position within sample

Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	1.97	Mg/m3
Moisture Content	30	%
Dry Density	1.51	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	40	kPa
Axial Strain	13.7	%
Deviator Stress, (σ1 - σ3)f	149	kPa
Undrained Shear Strength, cu	74	kPa ½(σ1 - σ3)f
Mode of Failure	Compound	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.

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Date 12/08/2016

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

MSF-5 R7

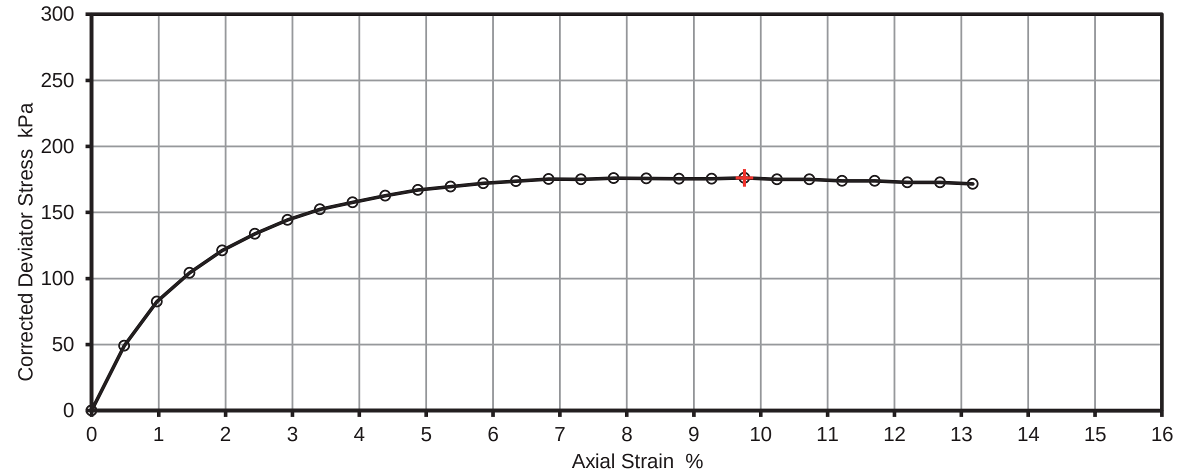
K4 SOILS	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**	Job Ref	21286
		Borehole/Pit No.	BH1
Site Name	3-8 Spring Place, London NW5 3BA	Sample No.	13
Project No.	J16143 Client GEA	Depth	4.00 m
Soil Description	High strength fissured brown mottled bluish grey slightly sandy silty CLAY with selenite	Sample Type	U
		Samples received	18/07/2016
		Schedules received	19/07/2016
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen	Date of test	03/08/2016

Remarks

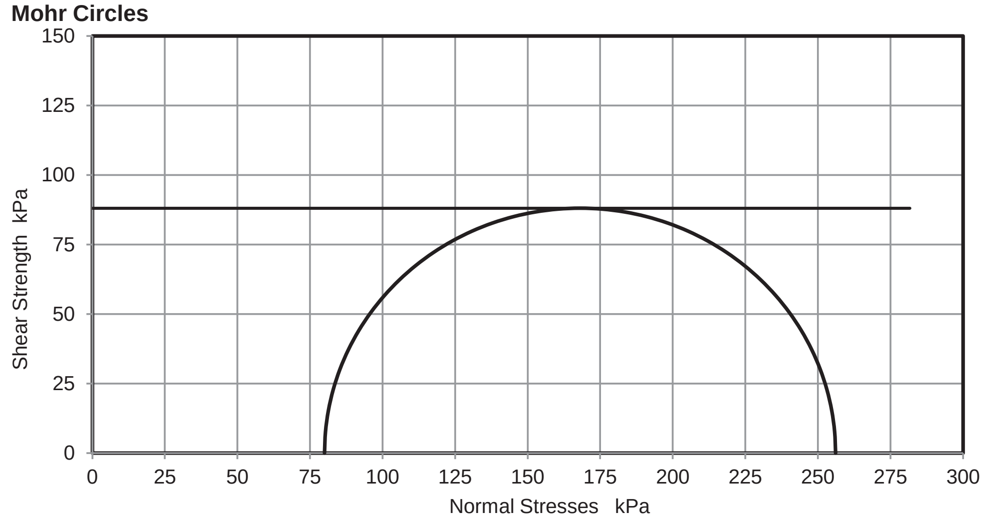
Position within sample

Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	1.93	Mg/m3
Moisture Content	30	%
Dry Density	1.48	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	80	kPa
Axial Strain	9.8	%
Deviator Stress, (σ1 - σ3)f	176	kPa
Undrained Shear Strength, cu	88	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



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MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

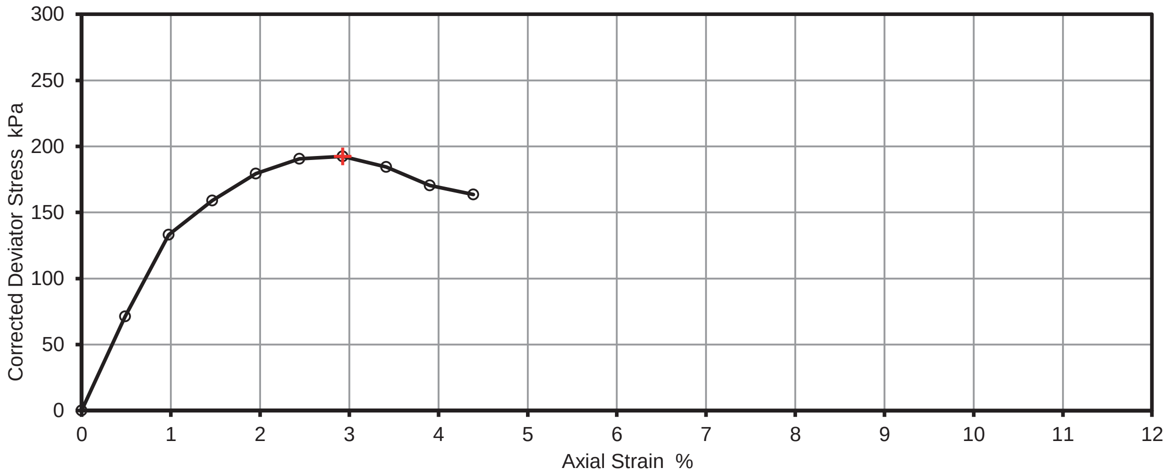
Job Ref	21286				
Borehole/Pit No.	BH1				
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	16
Project No.	J16143	Client	GEA	Depth	5.00 m
Soil Description	High strength fissured brown mottled bluish grey slightly sandy silty CLAY with selenite			Sample Type	U
				Samples received	18/07/2016
				Schedules received	19/07/2016
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	03/08/2016

Remarks

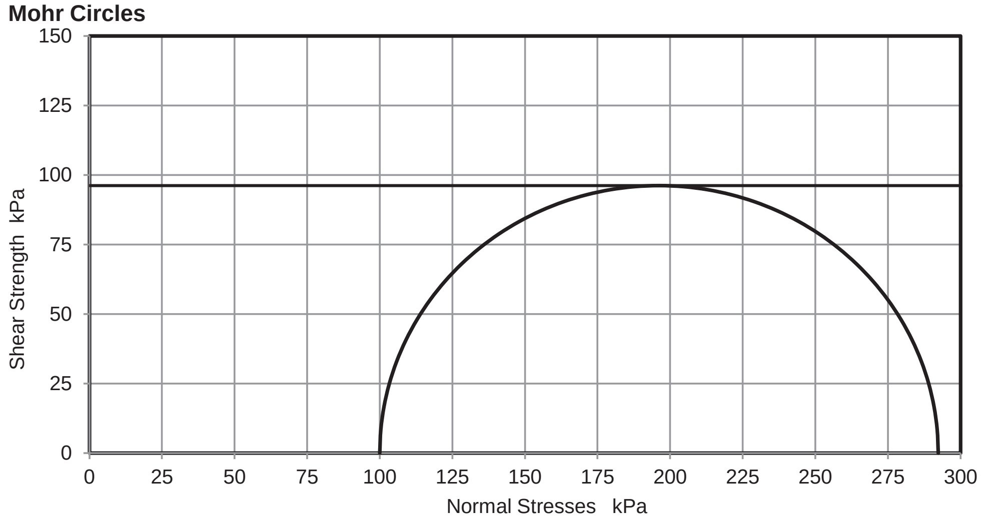
Position within sample

Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	1.95	Mg/m3
Moisture Content	29	%
Dry Density	1.51	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	100	kPa
Axial Strain	2.9	%
Deviator Stress, (σ1 - σ3)f	192	kPa
Undrained Shear Strength, cu	96	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

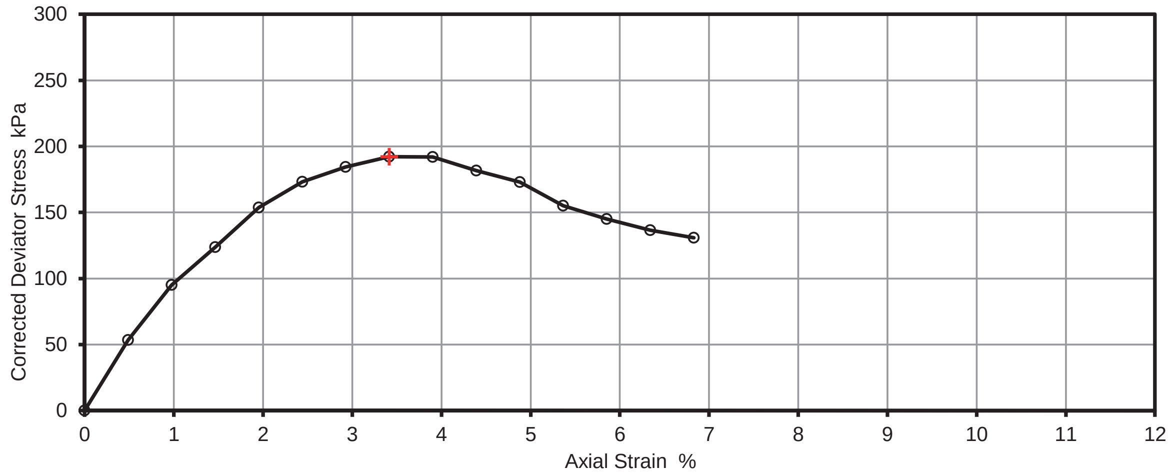
Job Ref	21286				
Borehole/Pit No.	BH1				
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	19
Project No.	J16143	Client	GEA	Depth	6.50 m
Soil Description	High strength fissured brown mottled bluish grey slightly sandy silty CLAY with selenite			Sample Type	U
				Samples received	18/07/2016
				Schedules received	19/07/2016
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	03/08/2016

Remarks

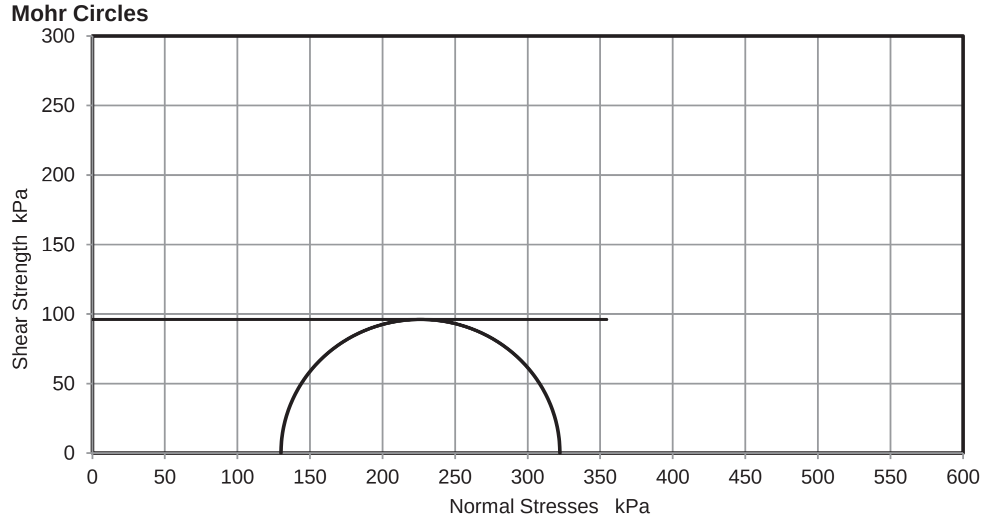
Position within sample

Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	1.97	Mg/m3
Moisture Content	30	%
Dry Density	1.52	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	130	kPa
Axial Strain	3.4	%
Deviator Stress, (σ1 - σ3)f	192	kPa
Undrained Shear Strength, cu	96	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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MSF-5 R7

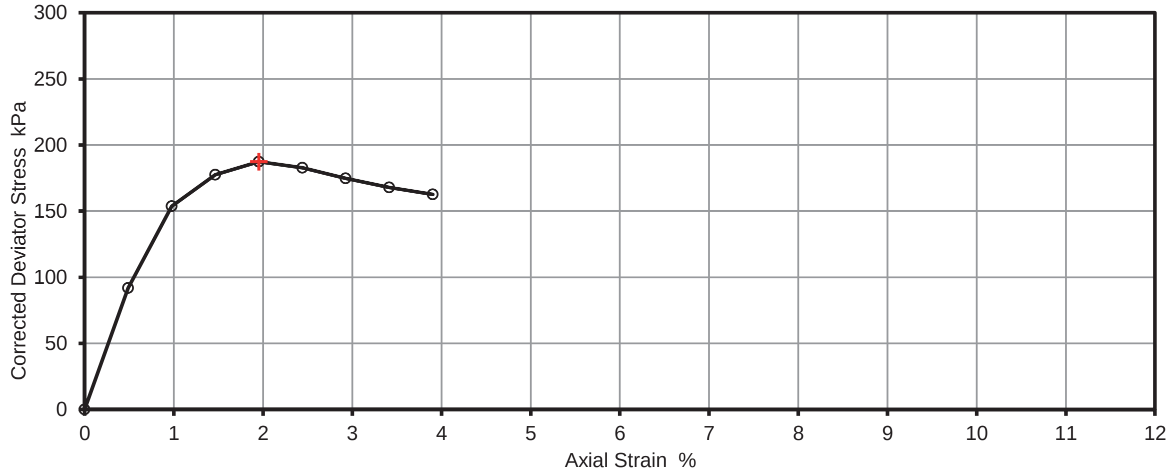
K4 SOILS	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**	Job Ref	21286
		Borehole/Pit No.	BH1
Site Name	3-8 Spring Place, London NW5 3BA	Sample No.	25
Project No.	J16143 Client GEA	Depth	9.50 m
Soil Description	High Strength fissured dark grey silty CLAY	Sample Type	U
		Samples received	18/07/2016
		Schedules received	19/07/2016
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen	Date of test	03/08/2016

Remarks

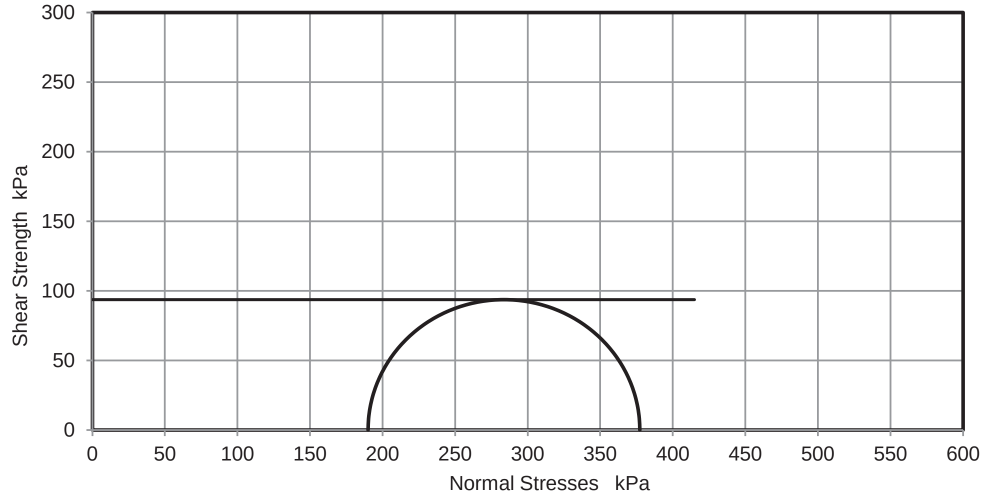
Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	1.96	Mg/m3
Moisture Content	30	%
Dry Density	1.51	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	190	kPa
Axial Strain	2.0	%
Deviator Stress, (σ1 - σ3)f	187	kPa
Undrained Shear Strength, cu	94	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Position within sample

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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MSF-5 R7

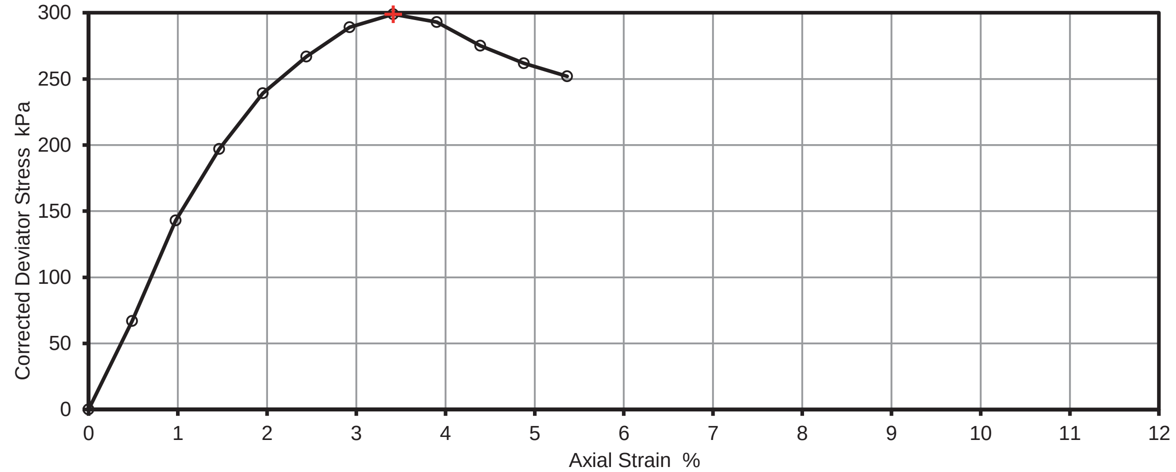
K4 SOILS	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**	Job Ref	21286
		Borehole/Pit No.	BH1
Site Name	3-8 Spring Place, London NW5 3BA	Sample No.	28
Project No.	J16143 Client GEA	Depth	11.00 m
Soil Description	High Strength fissured dark grey silty CLAY	Sample Type	U
		Samples received	18/07/2016
		Schedules received	19/07/2016
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen	Date of test	03/08/2016

Remarks

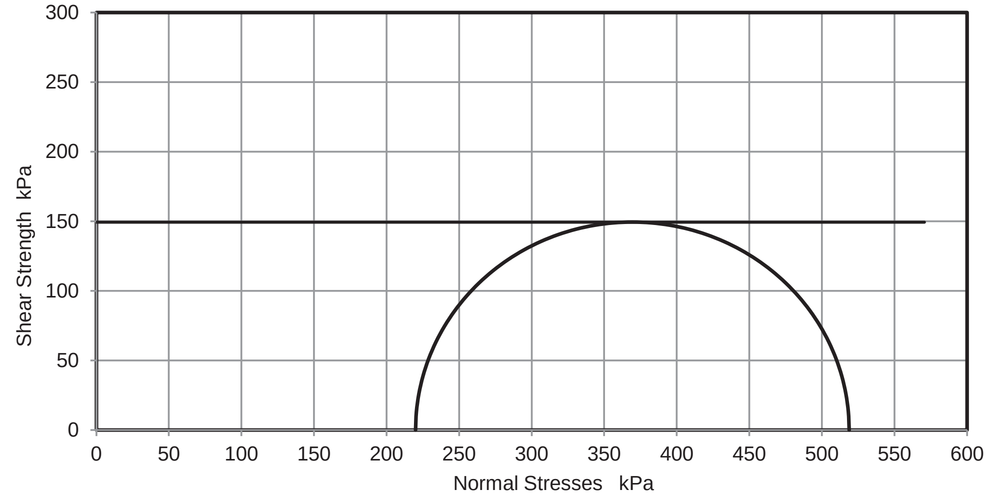
Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	1.96	Mg/m3
Moisture Content	30	%
Dry Density	1.51	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	220	kPa
Axial Strain	3.4	%
Deviator Stress, (σ1 - σ3)f	299	kPa
Undrained Shear Strength, cu	149	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Position within sample

Deviator Stress v Axial Strain



Mohr Circles



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MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

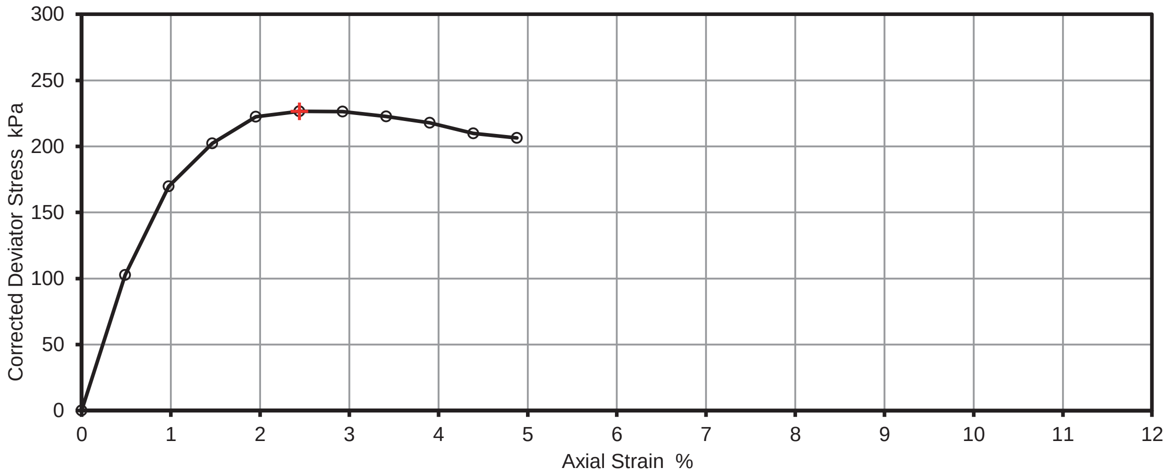
Job Ref	21286				
Borehole/Pit No.	BH1				
Site Name	3-8 Spring Place, London NW5 3BA	Sample No.	31		
Project No.	J16143	Client	GEA	Depth	12.50 m
Sample Type	U				
Soil Description	High Strength fissured dark grey silty CLAY	Samples received	18/07/2016	Schedules received	19/07/2016
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen	Date of test	03/08/2016		

Remarks

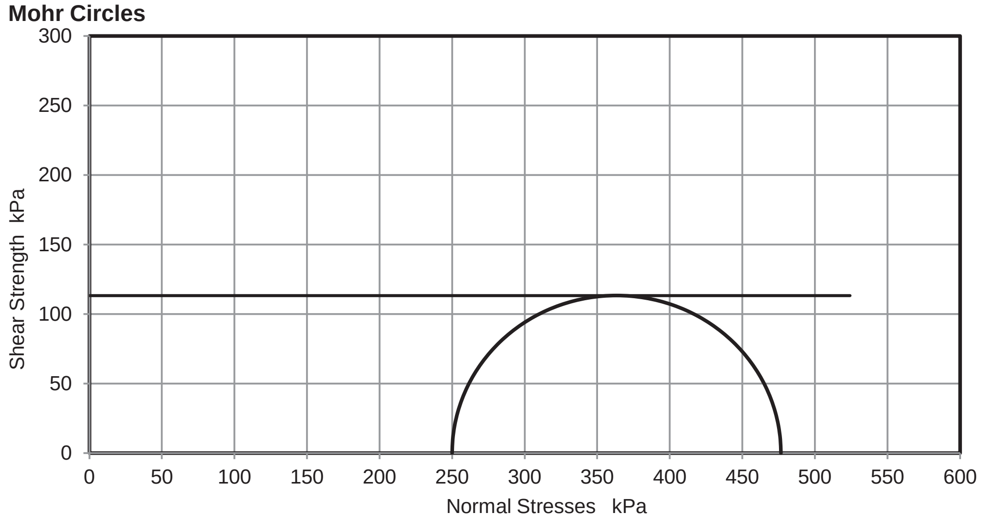
Position within sample

Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	1.97	Mg/m3
Moisture Content	31	%
Dry Density	1.50	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	250	kPa
Axial Strain	2.4	%
Deviator Stress, (σ1 - σ3)f	227	kPa
Undrained Shear Strength, cu	113	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



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Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

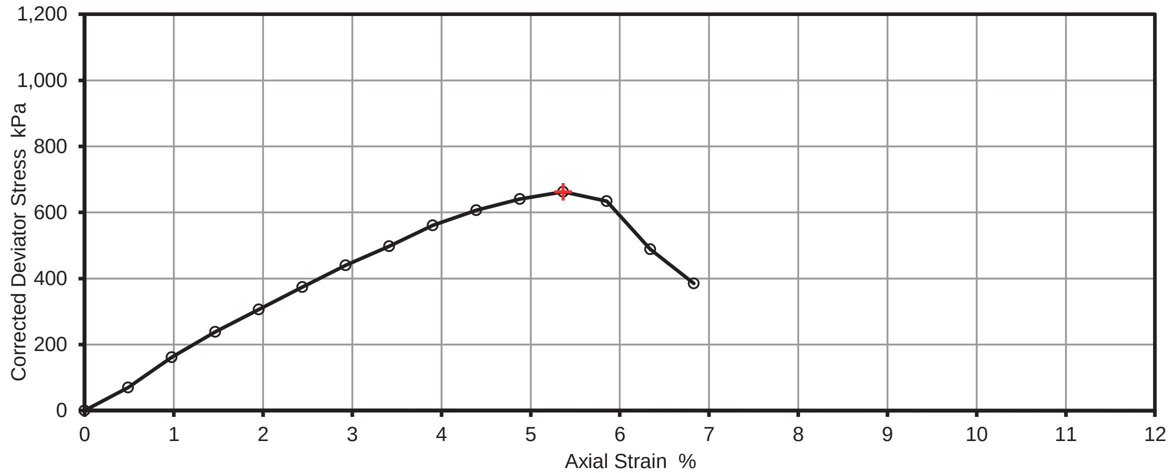
Job Ref	21286				
Borehole/Pit No.	BH1				
Site Name	3-8 Spring Place, London NW5 3BA	Sample No.	36		
Project No.	J16143	Client	GEA	Depth	15.50 m
Sample Type	U				
Soil Description	Extremely high Strength fissured dark grey silty CLAY	Samples received	18/07/2016	Schedules received	19/07/2016
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen	Date of test	03/08/2016		

Remarks

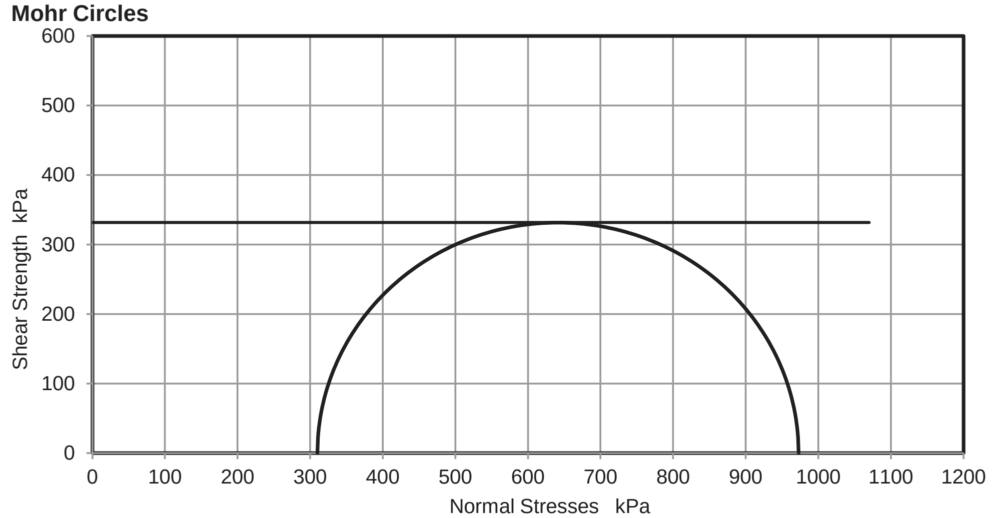
Position within sample

Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	2.02	Mg/m3
Moisture Content	26	%
Dry Density	1.60	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	310	kPa
Axial Strain	5.4	%
Deviator Stress, (σ1 - σ3)f	663	kPa
Undrained Shear Strength, cu	331	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



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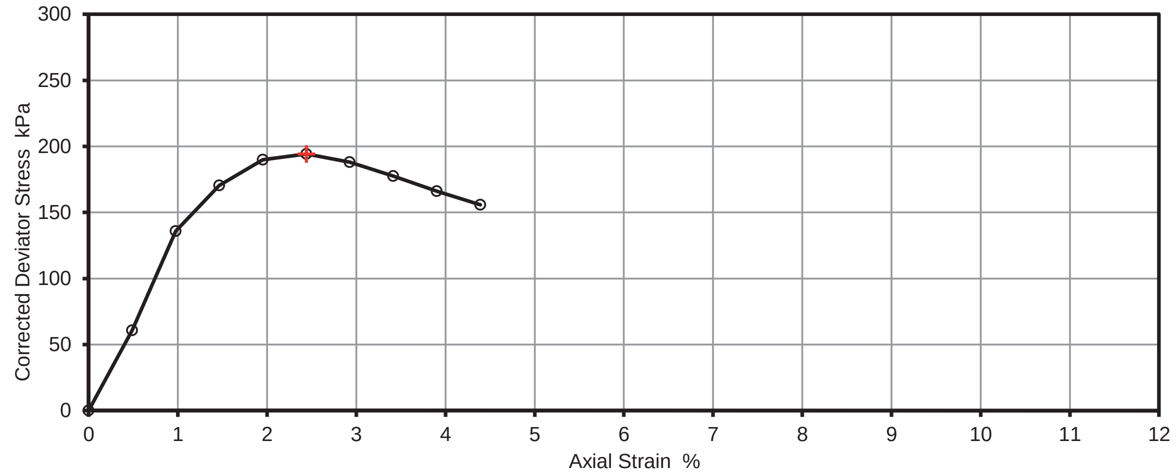
				Borehole/Pit No.	BH1	
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	39	
Project No.	J16143	Client	GEA	Depth	17.00	m
Soil Description	High Strength fissured dark silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	03/08/2016	

Remarks

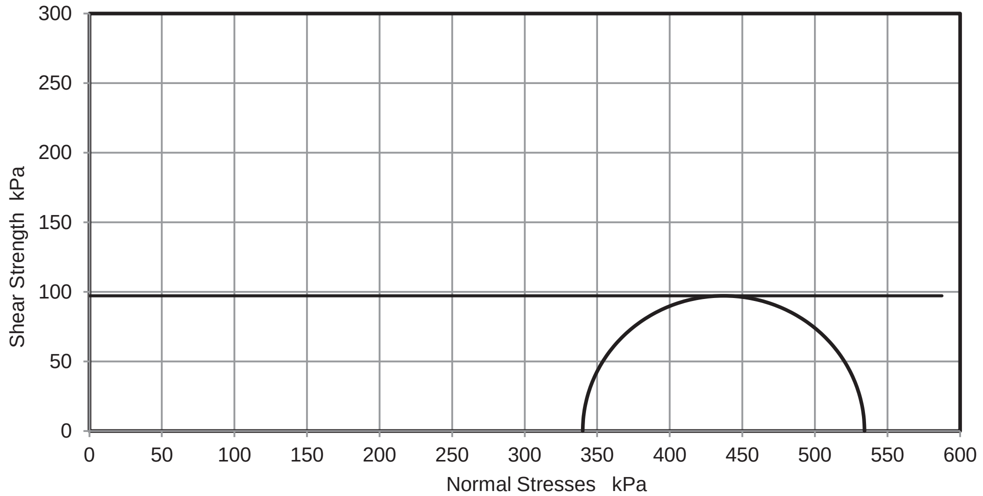
Position within sample

Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	2.00	Mg/m3
Moisture Content	26	%
Dry Density	1.58	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	340	kPa
Axial Strain	2.4	%
Deviator Stress, (σ1 - σ3)f	194	kPa
Undrained Shear Strength, cu	97	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



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MSF-5 R7

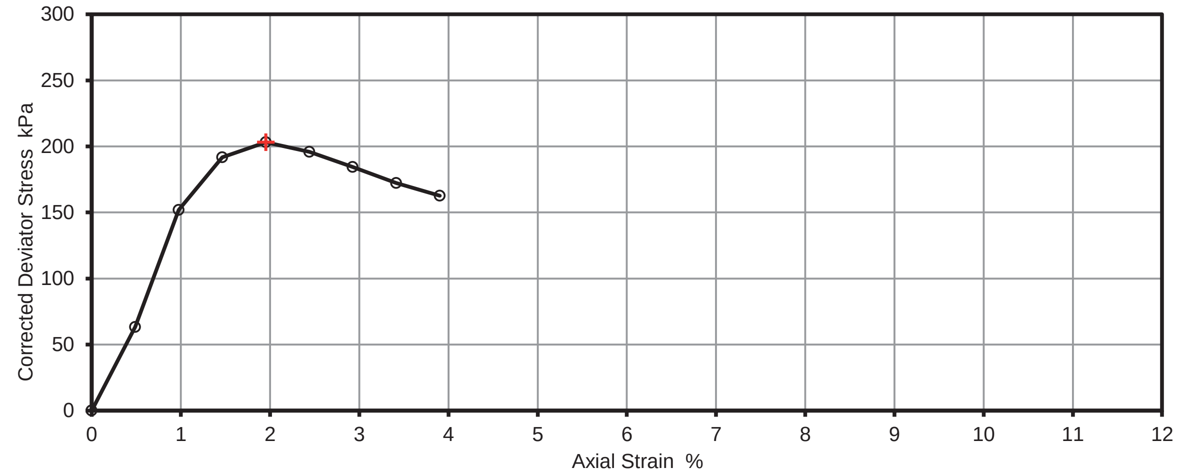
	Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen			Job Ref	21286	
				Borehole/Pit No.	BH1	
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	42	
Project No.	J16143	Client	GEA	Depth	18.50	m
Soil Description	High Strength fissured dark grey silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	03/08/2016	

Remarks

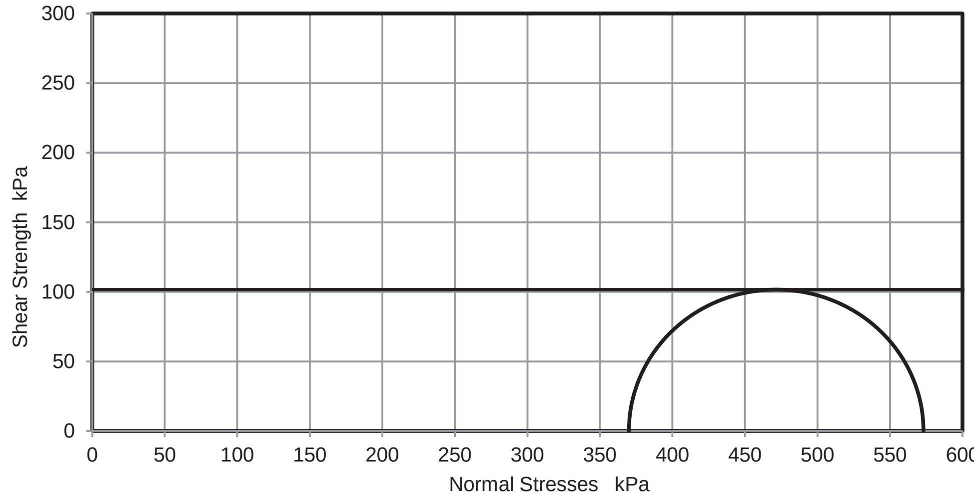
Position within sample

Test Number	1	
Length	205.0	mm
Diameter	105.0	mm
Bulk Density	2.00	Mg/m3
Moisture Content	26	%
Dry Density	1.59	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	370	kPa
Axial Strain	2.0	%
Deviator Stress, (σ1 - σ3)f	203	kPa
Undrained Shear Strength, cu	102	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



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MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

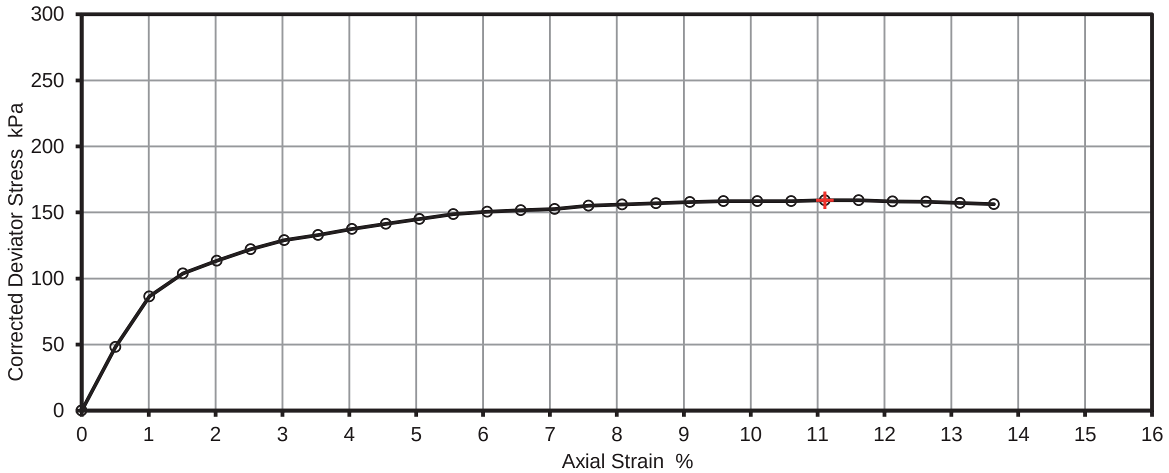
Job Ref	21286					
Borehole/Pit No.	BH2					
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	10	
Project No.	J16143	Client	GEA	Depth	3.00	m
Soil Description	High strength fissured brown mottled bluish grey silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	03/08/2016	

Remarks

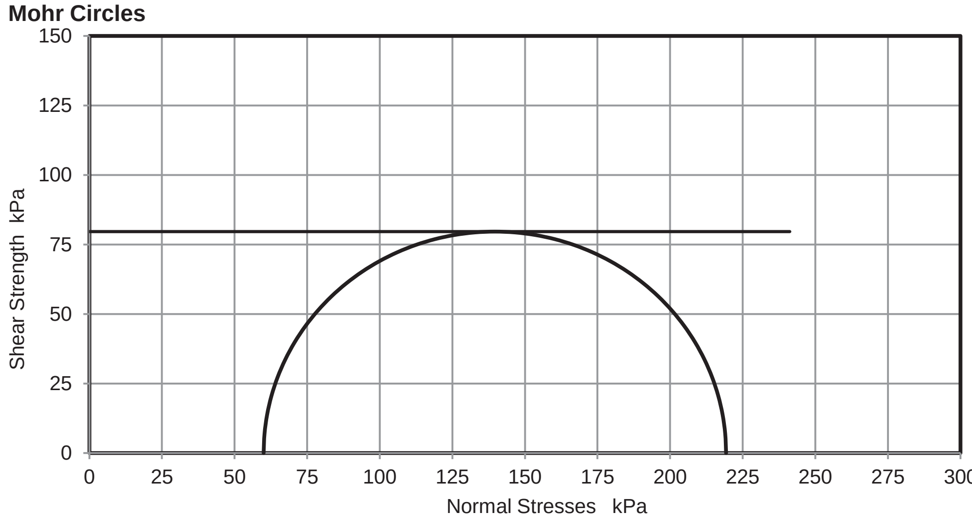
Position within sample

Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.96	Mg/m3
Moisture Content	31	%
Dry Density	1.49	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	60	kPa
Axial Strain	11.1	%
Deviator Stress, (σ1 - σ3)f	159	kPa
Undrained Shear Strength, cu	80	kPa ½(σ1 - σ3)f
Mode of Failure	Compound	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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Test Report by K4 SOILS LABORATORY
Unit 8 Olds Close Olds Approach
Watford Herts WD18 9RU
Tel: 01923 711 288
Email: James@k4soils.com

Checked and Approved
Initials: J.P
Date 12/08/2016

2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

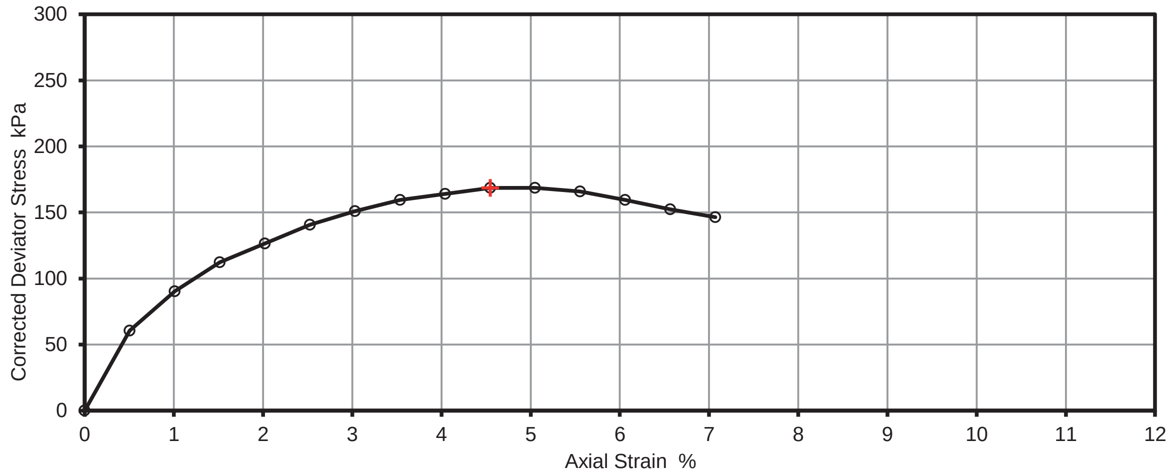
Job Ref	21286					
Borehole/Pit No.	BH2					
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	13	
Project No.	J16143	Client	GEA	Depth	5.00	m
Soil Description	High strength fissured brown mottled bluish grey slightly sandy silty CLAY with selenite			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	03/08/2016	

Remarks

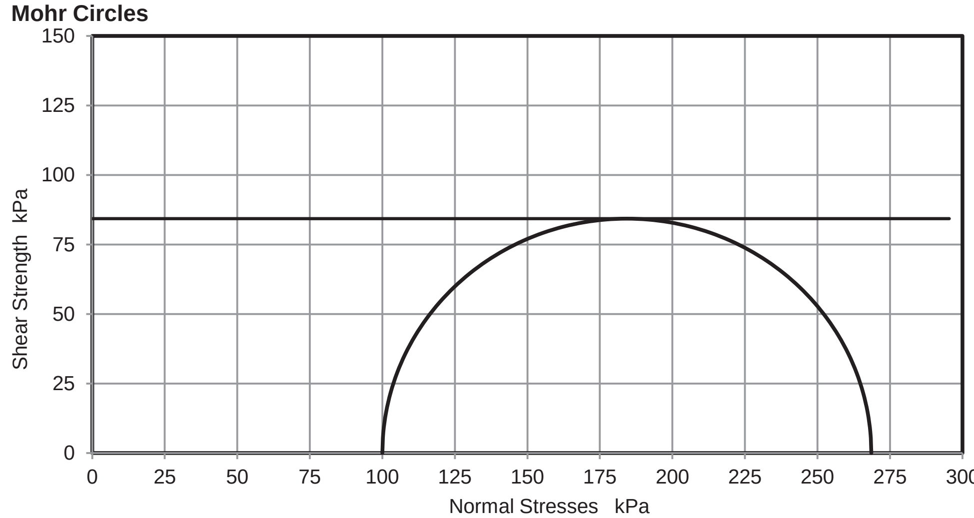
Position within sample

Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.95	Mg/m3
Moisture Content	29	%
Dry Density	1.51	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	100	kPa
Axial Strain	4.5	%
Deviator Stress, (σ1 - σ3)f	169	kPa
Undrained Shear Strength, cu	84	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



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MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

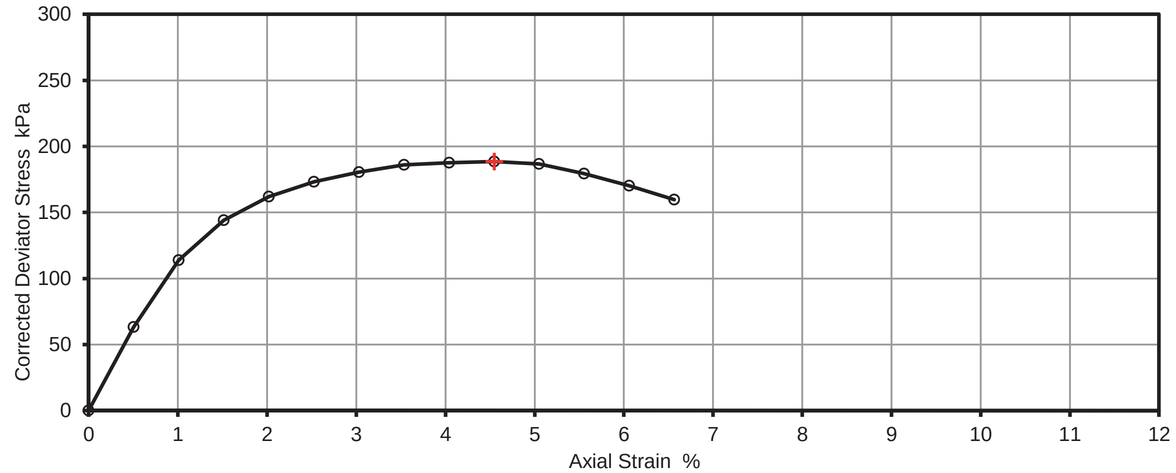
Job Ref	21286					
Borehole/Pit No.	BH2					
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	16	
Project No.	J16143	Client	GEA	Depth	8.00	m
Soil Description	High strength fissured dark brown slightly sandy silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	04/08/2016	

Remarks

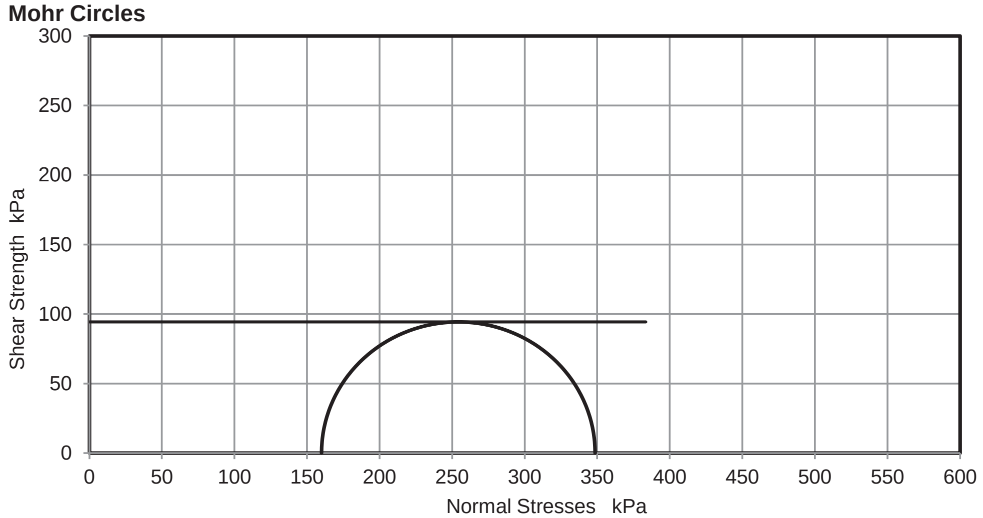
Position within sample

Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.99	Mg/m3
Moisture Content	29	%
Dry Density	1.53	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	160	kPa
Axial Strain	4.5	%
Deviator Stress, (σ1 - σ3)f	189	kPa
Undrained Shear Strength, cu	94	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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UKAS TESTING 2519

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MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

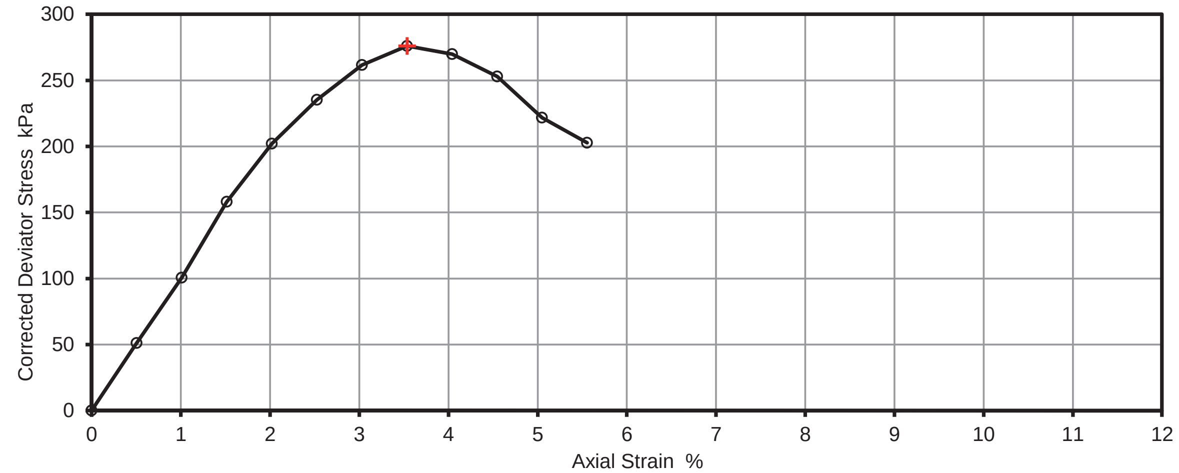
Job Ref	21286					
Borehole/Pit No.	BH2					
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	21	
Project No.	J16143	Client	GEA	Depth	11.00	m
Soil Description	High Strength fissured dark grey silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	04/08/2016	

Remarks

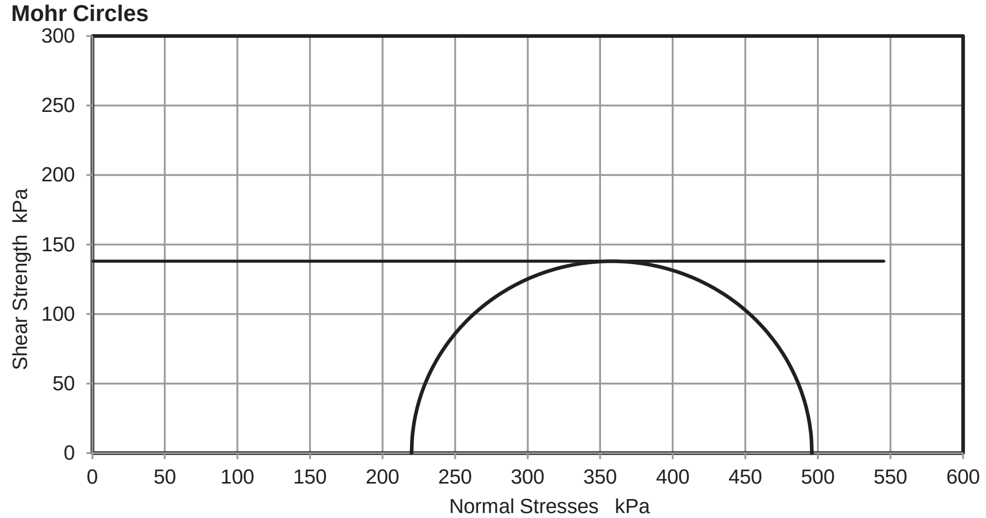
Position within sample

Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.99	Mg/m3
Moisture Content	28	%
Dry Density	1.56	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	220	kPa
Axial Strain	3.5	%
Deviator Stress, (σ1 - σ3)f	276	kPa
Undrained Shear Strength, cu	138	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

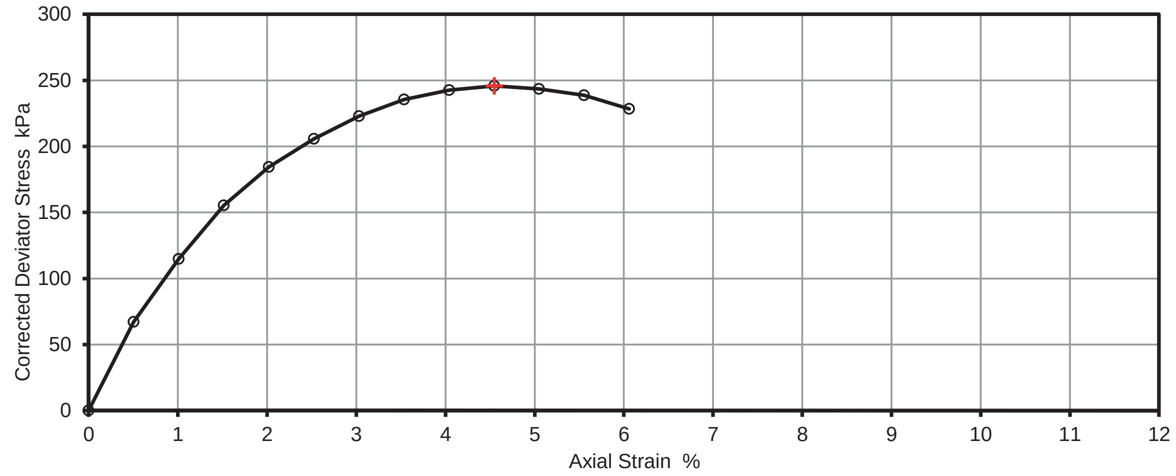
Job Ref	21286					
Borehole/Pit No.	BH2					
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	25	
Project No.	J16143	Client	GEA	Depth	14.00	m
Soil Description	High Strength fissured dark grey silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	04/08/2016	

Remarks

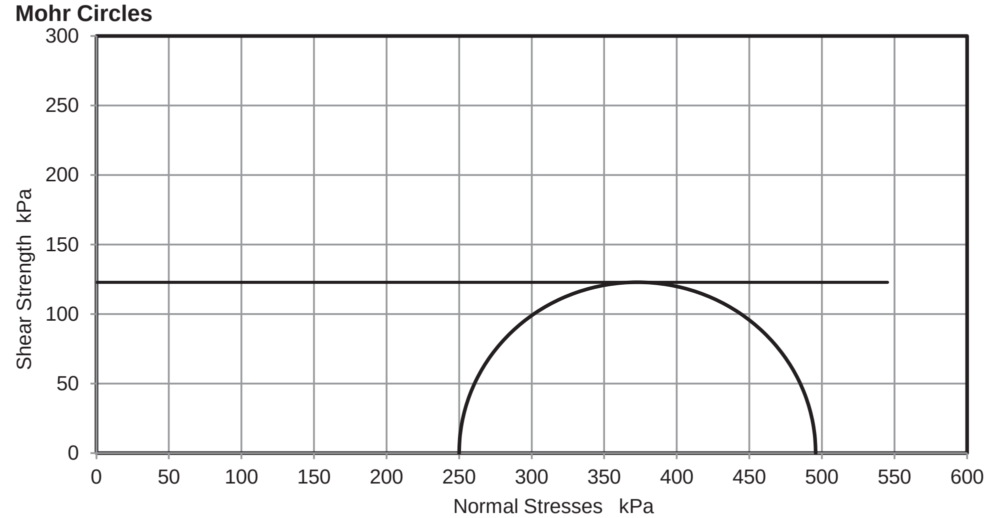
Position within sample

Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.96	Mg/m3
Moisture Content	28	%
Dry Density	1.53	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	250	kPa
Axial Strain	4.5	%
Deviator Stress, (σ1 - σ3)f	246	kPa
Undrained Shear Strength, cu	123	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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MSF-5 R7

Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen

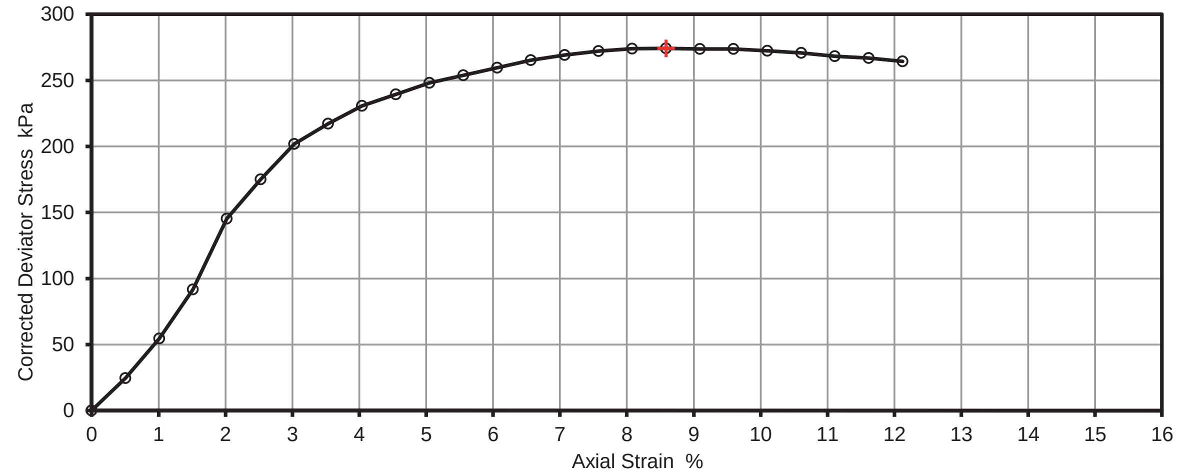
Job Ref	21286					
Borehole/Pit No.	BH2					
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	29	
Project No.	J16143	Client	GEA	Depth	17.00	m
Soil Description	High Strength fissured dark grey silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	04/08/2016	

Remarks

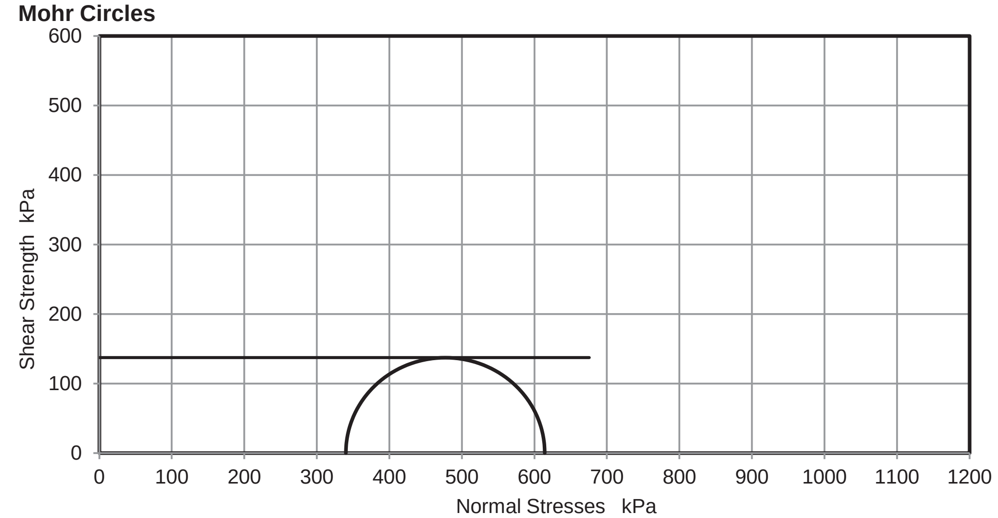
Position within sample

Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.99	Mg/m3
Moisture Content	28	%
Dry Density	1.56	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	340	kPa
Axial Strain	8.6	%
Deviator Stress, (σ1 - σ3)f	274	kPa
Undrained Shear Strength, cu	137	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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MSF-5 R7

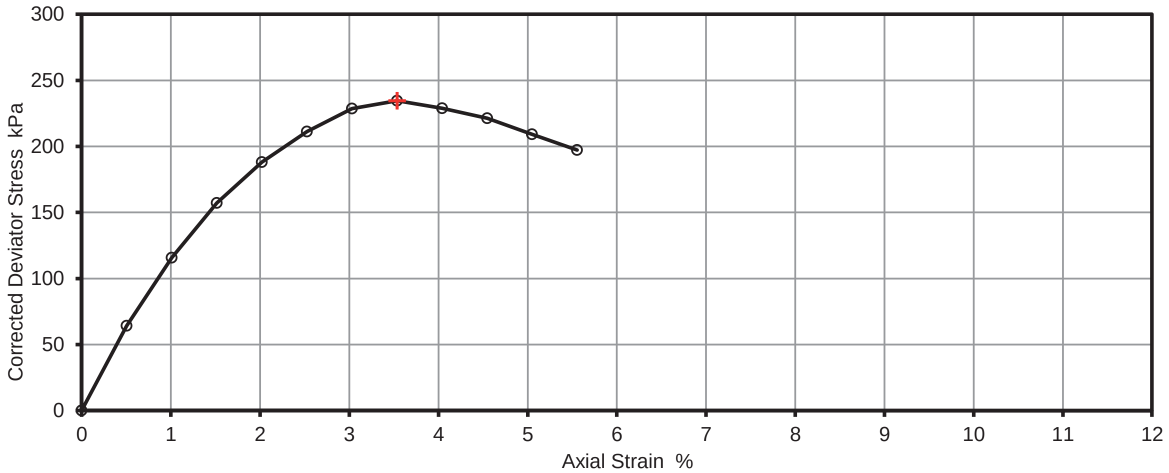
K4 SOILS	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**			Job Ref	21286	
				Borehole/Pit No.	BH2	
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	33	
Project No.	J16143	Client	GEA	Depth	20.00	m
Soil Description	High Strength fissured dark grey silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	04/08/2016	

Remarks

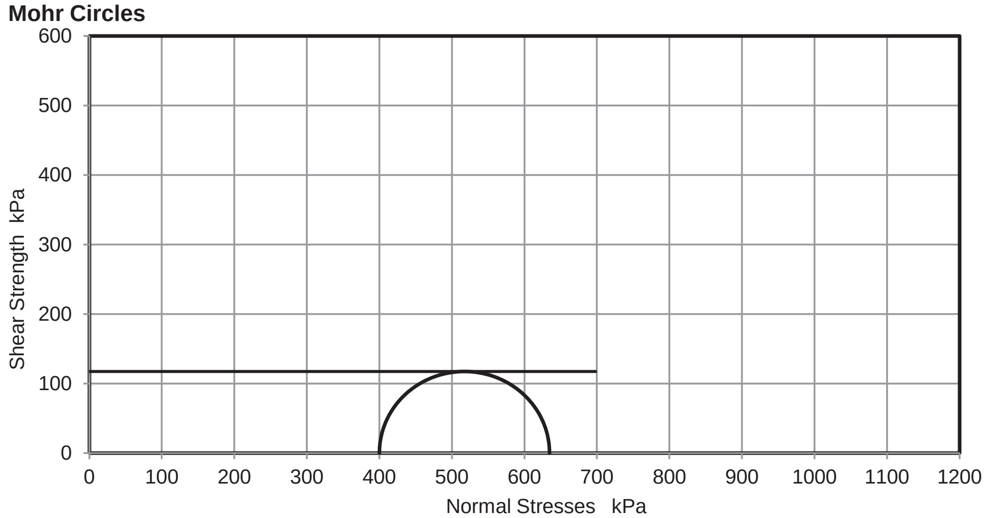
Position within sample

Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.92	Mg/m3
Moisture Content	27	%
Dry Density	1.51	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	400	kPa
Axial Strain	3.5	%
Deviator Stress, (σ1 - σ3)f	235	kPa
Undrained Shear Strength, cu	117	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



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UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

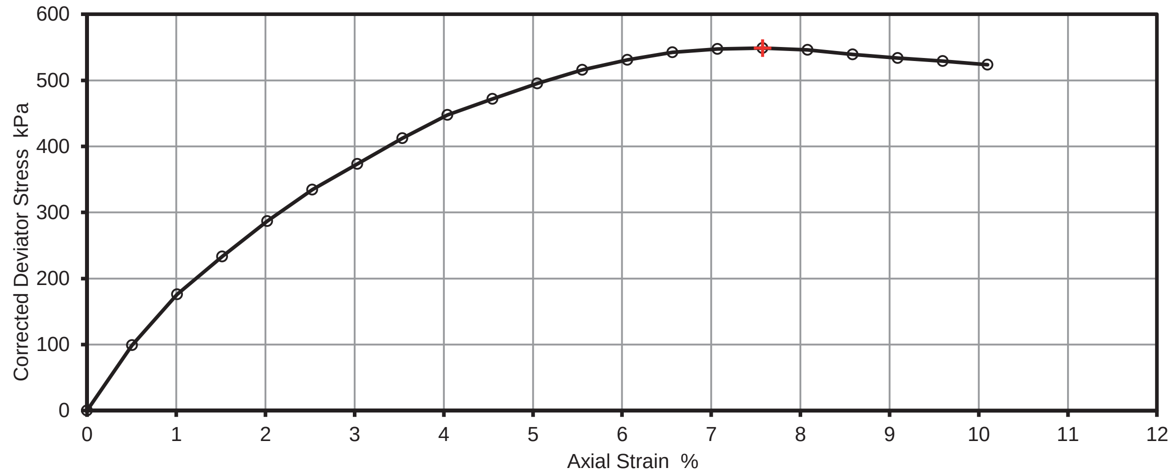
K4 SOILS	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**			Job Ref	21286	
				Borehole/Pit No.	BH2	
Site Name	3-8 Spring Place, London NW5 3BA			Sample No.	38	
Project No.	J16143	Client	GEA	Depth	23.50	m
Soil Description	Very high strength fissured dark grey silty CLAY			Sample Type	U	
				Samples received	18/07/2016	
				Schedules received	19/07/2016	
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen			Date of test	04/08/2016	

Remarks

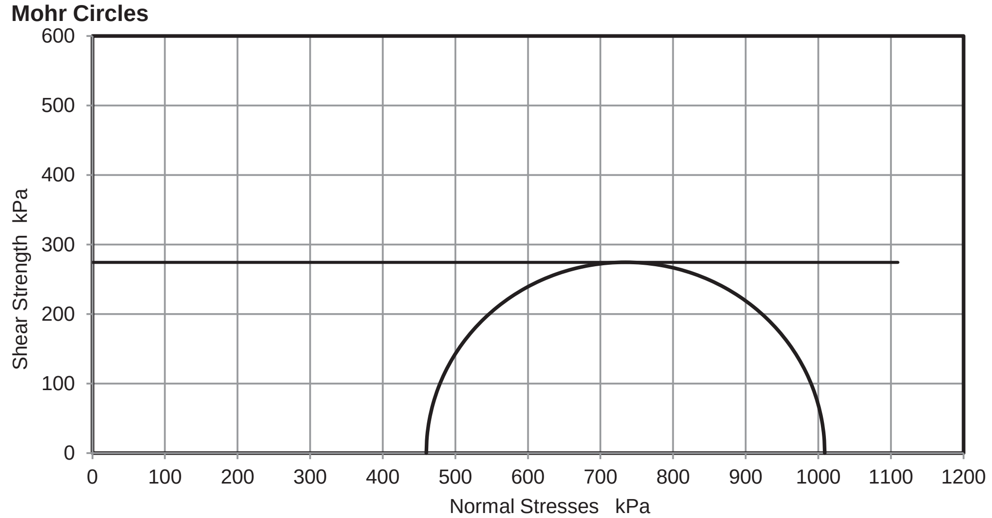
Position within sample

Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.99	Mg/m3
Moisture Content	25	%
Dry Density	1.59	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	460	kPa
Axial Strain	7.6	%
Deviator Stress, (σ1 - σ3)f	549	kPa
Undrained Shear Strength, cu	274	kPa ½(σ1 - σ3)f
Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



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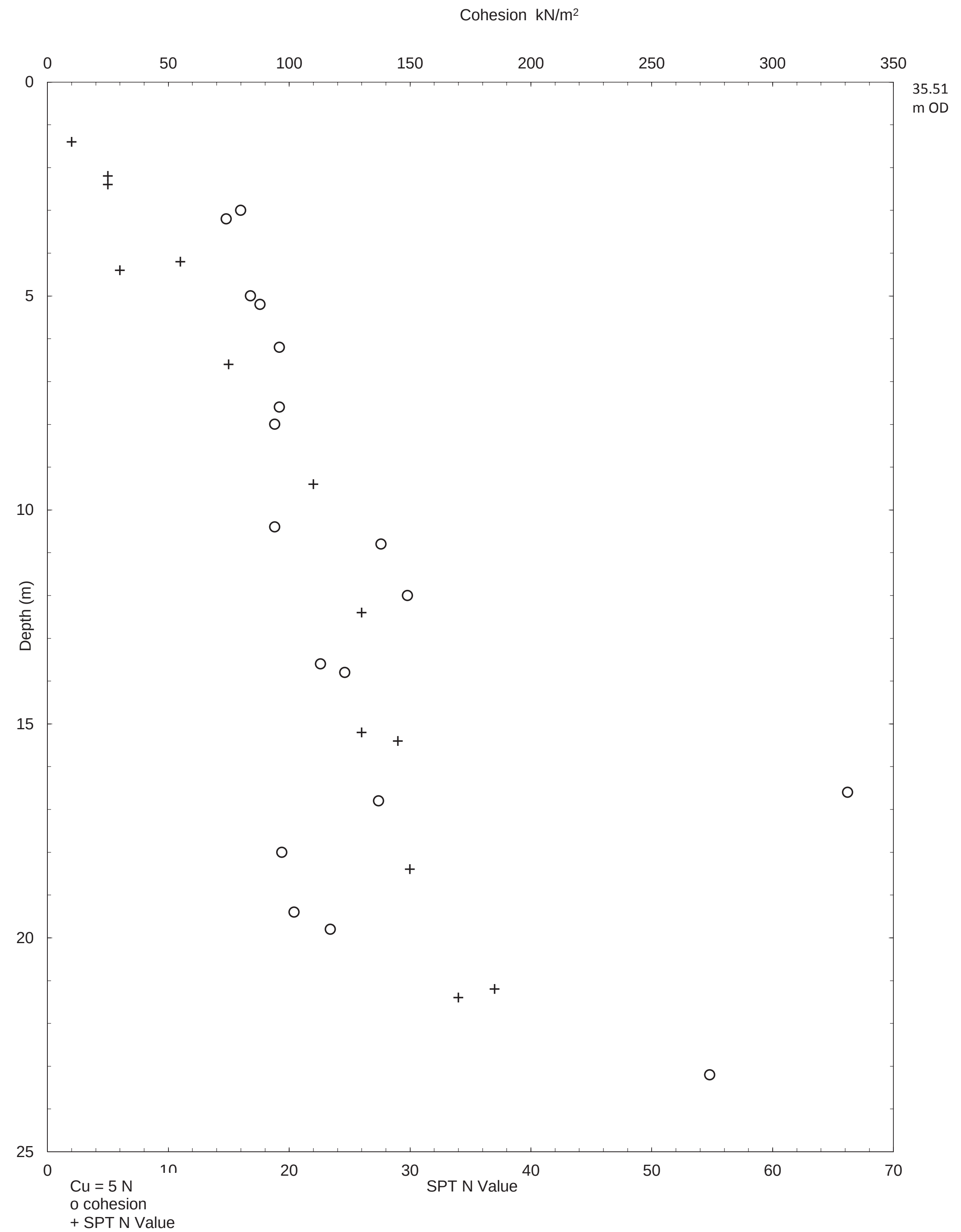
GEA Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

SPT & Cohesion / Depth Graph

Site	3-6 Spring Place, London, NW5 3BA	**Job Number**	J16143
Client	Spring Place Limited	**Sheet**	1 / 1
Engineer	Heyne Tillett Steel		



4041

Analytical Report Number: 16-23381

Project / Site name: Spring Place, London, NW3

Lab Sample Number				605445	605446	605447	605448	605449
Sample Reference				BH1	BH1	BH1	BH2	BH2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.00	2.50	0.50	1.00
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	15	24	24	24	19
Total mass of sample received	kg	0.001	NONE	1.1	1.1	1.0	1.2	1.5
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	< 0.001	-
General Inorganics								
pH	pH Units	N/A	MCERTS	8.1	8.0	8.4	8.2	8.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	50	MCERTS	1600	230	800	6100	5600
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.56	0.044	0.19	1.2	1.2
Sulphide	mg/kg	1	MCERTS	9.1	< 1.0	1.9	2.2	< 1.0
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	70	79	85	48	36
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.7	0.6	0.3	1.2	0.4
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	1.2	0.33	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	3.8	1.8	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	4.1	3.8	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.51	10	5.5	< 0.10	0.50
Anthracene	mg/kg	0.1	MCERTS	< 0.10	0.88	0.69	< 0.10	0.13
Fluoranthene	mg/kg	0.1	MCERTS	0.46	3.9	7.9	< 0.10	0.54
Pyrene	mg/kg	0.1	MCERTS	0.44	2.6	5.2	< 0.10	0.33
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.26	0.48	1.1	< 0.10	0.26
Chrysene	mg/kg	0.05	MCERTS	0.30	0.45	0.99	< 0.05	0.27
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.33	< 0.10	0.47	< 0.10	0.23
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.21	< 0.10	0.27	< 0.10	0.11
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.21	< 0.10	0.20	< 0.10	0.13
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	3.93	26.9	27.8	< 1.60	2.50

Lab Sample Number				605445	605446	605447	605448	605449
Sample Reference				BH1	BH1	BH1	BH2	BH2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.00	2.50	0.50	1.00
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22	12	12	19	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	< 0.2	0.4	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	55	45	18	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	99	19	25	78	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	1000	17	21	390	77
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.2	0.4	0.5	1.9	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	24	46	18	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1.9	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	59	85	340	55
Monoaromatics								
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								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	0.2	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	140	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	370	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	200	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	370	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	1100	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	55	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	320	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	260	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	320	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	950	-	-	-
TPH (C21 - C35)	mg/kg	1	NONE	230	690	95	28	2.9
TPH Texas (C8 - C10)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Texas (C10 - C12)	mg/kg	1	NONE	6.1	200	3.7	< 1.0	< 1.0
TPH Texas (C12 - C16)	mg/kg	10	NONE	55	690	38	< 10	< 10
TPH Texas (C16 - C21)	mg/kg	10	NONE	91	450	60	< 10	< 10

Lab Sample Number				605445	605446	605447	605448	605449
Sample Reference				BH1	BH1	BH1	BH2	BH2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.00	2.50	0.50	1.00
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 52	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 101	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 118	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 138	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 153	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 180	mg/kg	0.001	MCERTS	-	-	-	-	-
Total PCBs by GC-MS								
Total PCBs	mg/kg	0.007	MCERTS	-	-	-	-	-

Analytical Report Number: 16-23381

Project / Site name: Spring Place, London, NW3

Lab Sample Number				605450	605451	605452	605453	605454
Sample Reference				BH5	BH7	BH7	TP1	TP2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.45	1.95	2.50	0.40	0.50
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	23	21	20	20	22
Total mass of sample received	kg	0.001	NONE	0.47	1.3	0.89	1.4	1.1
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Crocidolite	-	-	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.122	-	-	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	0.122	-	-	-	< 0.001
General Inorganics								
pH	pH Units	N/A	MCERTS	10.9	8.5	9.0	8.4	8.6
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	50	MCERTS	8100	1700	420	1500	1800
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.2	0.57	0.089	0.32	0.36
Sulphide	mg/kg	1	MCERTS	280	37	< 1.0	< 1.0	< 1.0
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	1200	170	58	48	56
Total Organic Carbon (TOC)	%	0.1	MCERTS	4.5	0.8	0.3	1.4	1.6
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	2.7	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	4.9	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	10	< 0.10	< 0.10	< 0.10	0.34
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	9.7	< 0.10	< 0.10	0.39	0.70
Pyrene	mg/kg	0.1	MCERTS	7.9	< 0.10	< 0.10	0.35	0.60
Benzo(a)anthracene	mg/kg	0.1	MCERTS	2.6	< 0.10	< 0.10	< 0.10	0.30
Chrysene	mg/kg	0.05	MCERTS	2.8	< 0.05	< 0.05	< 0.05	0.33
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	2.3	< 0.10	< 0.10	< 0.10	0.41
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	1.6	< 0.10	< 0.10	< 0.10	0.23
Benzo(a)pyrene	mg/kg	0.1	MCERTS	1.8	< 0.10	< 0.10	< 0.10	0.22
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	0.83	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.3	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	48.9	< 1.60	< 1.60	< 1.60	3.13

Analytical Report Number: 16-23381

Project / Site name: Spring Place, London, NW3

Lab Sample Number				605450	605451	605452	605453	605454
Sample Reference				BH5	BH7	BH7	TP1	TP2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.45	1.95	2.50	0.40	0.50
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	12	13	21	18
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	2.5	< 0.2	< 0.2	< 0.2	0.3
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	48	46	60	26	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	150	25	29	72	88
Lead (aqua regia extractable)	mg/kg	1	MCERTS	810	30	20	820	760
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.6	< 0.3	< 0.3	2.0	2.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	32	50	51	24	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.7	< 1.0	2.3	< 1.0	1.3
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	440	72	73	110	310
Monoaromatics								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
Toluene	µg/kg	1	MCERTS	25	< 1.0	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
p & m-xylene	µg/kg	1	MCERTS	590	< 1.0	-	-	-
o-xylene	µg/kg	1	MCERTS	790	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	0.9	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	140	34	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	920	560	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	1500	530	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	5200	210	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	7700	1300	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	2.8	< 0.1	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	66	47	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	1000	820	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	1100	1100	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	2000	500	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	4200	2500	-	-	-
TPH (C21 - C35)	mg/kg	1	NONE	7200	710	38	70	320
TPH Texas (C8 - C10)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Texas (C10 - C12)	mg/kg	1	NONE	210	82	< 1.0	< 1.0	1.7
TPH Texas (C12 - C16)	mg/kg	10	NONE	2000	1400	17	< 10	21
TPH Texas (C16 - C21)	mg/kg	10	NONE	2500	1600	34	22	71

Analytical Report Number: 16-23381

Project / Site name: Spring Place, London, NW3

Lab Sample Number				605450	605451	605452	605453	605454
Sample Reference				BH5	BH7	BH7	TP1	TP2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.45	1.95	2.50	0.40	0.50
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 52	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 101	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 118	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 138	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 153	mg/kg	0.001	MCERTS	-	-	-	-	-
PCB Congener 180	mg/kg	0.001	MCERTS	-	-	-	-	-
Total PCBs by GC-MS								
Total PCBs	mg/kg	0.007	MCERTS	-	-	-	-	-

Analytical Report Number: 16-23381

Project / Site name: Spring Place, London, NW3

Lab Sample Number				605455	605456	605457	605458	
Sample Reference				TP3	TP3	TP4	TP5	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.50	0.80	0.60	0.65	
Date Sampled				Deviating	Deviating	Deviating	Deviating	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
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	18	14	17	26	
Total mass of sample received	kg	0.001	NONE	0.85	1.2	1.3	1.8	
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	
General Inorganics								
pH	pH Units	N/A	MCERTS	10.3	8.2	8.8	9.6	
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	
Total Sulphate as SO_4	mg/kg	50	MCERTS	8100	900	3700	2700	
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.72	0.26	0.99	0.23	
Sulphide	mg/kg	1	MCERTS	34	23	2.5	2.6	
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	320	110	140	42	
Total Organic Carbon (TOC)	%	0.1	MCERTS	2.3	1.0	0.9	1.4	
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.67	< 0.05	< 0.05	< 0.05	
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	

Analytical Report Number: 16-23381

Project / Site name: Spring Place, London, NW3

Lab Sample Number				605455	605456	605457	605458	
Sample Reference				TP3	TP3	TP4	TP5	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.50	0.80	0.60	0.65	
Date Sampled				Deviating	Deviating	Deviating	Deviating	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	11	21	17	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.3	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	31	37	190	24	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	78	26	150	110	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	290	79	1300	500	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	0.6	1.8	2.0	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	17	51	16	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.4	< 1.0	< 1.0	< 1.0	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	81	50	250	290	
Monoaromatics								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	25	3.3	-	-	
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	170	130	-	-	
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	250	190	-	-	
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	350	190	-	-	
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	790	520	-	-	
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	27	2.8	-	-	
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	300	97	-	-	
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	490	250	-	-	
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	830	200	-	-	
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	1600	540	-	-	
TPH (C21 - C35)	mg/kg	1	NONE	1200	380	79	190	
TPH Texas (C8 - C10)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	
TPH Texas (C10 - C12)	mg/kg	1	NONE	52	6.2	< 1.0	< 1.0	
TPH Texas (C12 - C16)	mg/kg	10	NONE	470	230	< 10	< 10	
TPH Texas (C16 - C21)	mg/kg	10	NONE	730	440	< 10	130	

Analytical Report Number: 16-23381

Project / Site name: Spring Place, London, NW3

Lab Sample Number				605455	605456	605457	605458	
Sample Reference				TP3	TP3	TP4	TP5	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.50	0.80	0.60	0.65	
Date Sampled				Deviating	Deviating	Deviating	Deviating	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	-	-	< 0.001	-	
PCB Congener 52	mg/kg	0.001	MCERTS	-	-	< 0.001	-	
PCB Congener 101	mg/kg	0.001	MCERTS	-	-	< 0.001	-	
PCB Congener 118	mg/kg	0.001	MCERTS	-	-	< 0.001	-	
PCB Congener 138	mg/kg	0.001	MCERTS	-	-	< 0.001	-	
PCB Congener 153	mg/kg	0.001	MCERTS	-	-	< 0.001	-	
PCB Congener 180	mg/kg	0.001	MCERTS	-	-	< 0.001	-	
Total PCBs by GC-MS								
Total PCBs	mg/kg	0.007	MCERTS	-	-	< 0.007	-	

Analytical Report Number: 16-23381
Project / Site name: Spring Place, London, NW3
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

"The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
605445	BH1	0.40	133	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
605448	BH2	0.50	115	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
605450	BH5	2.45	91	Loose Fibres & Insulation Lagging	**Chrysotile & Crocidolite**	0.122	**0.122**
605454	TP2	0.50	122	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Geotechnical & Environmental Associates
Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Generic Risk-Based Soil Screening Values

Site	3-6 Spring Place, London, NW5 3BA	**Job Number**	J16143
Client	Spring Place Limited		
Engineer	Heyne Tillett Steel	**Sheet**	1 / 1

Proposed End Use Commercial

Soil pH 8

Soil Organic Matter content % 2.5

Contaminant	Screening Value mg/kg	Data Source
Metals		
Arsenic	640	C4SL
Cadmium	410	C4SL
Chromium (III)	30400	LQM/CIEH
Chromium (VI)	49	C4SL
Copper	71,700	LQM/CIEH
Lead	2330	C4SL
Elemental Mercury	170	SGV
Inorganic Mercury	3600	SGV
Nickel	1350	LQM/CIEH
Selenium	13000	SGV
Zinc	665,000	LQM/CIEH
Hydrocarbons		
Benzene	50	C4SL
Toluene	2200	SGV
Ethyl Benzene	48000	SGV
Xylene	1300	SGV
Aliphatic C5-C6	6200	LQM/CIEH
Aliphatic C6-C8	18000	LQM/CIEH
Aliphatic C8-C10	5100	LQM/CIEH
Aliphatic C10-C12	24000	LQM/CIEH
Aliphatic C12-C16	83000	LQM/CIEH
Aliphatic C16-C35	1,800,000	LQM/CIEH
Aromatic C6-C7	See Benzene	LQM/CIEH
Aromatic C7-C8	See Toluene	LQM/CIEH
Aromatic C8-C10	8600	LQM/CIEH
Aromatic C10-C12	29000	LQM/CIEH
Aromatic C12-C16	37000	LQM/CIEH
Aromatic C16-C21	28000	LQM/CIEH
Aromatic C21-C35	28000	LQM/CIEH
PRO (C_5 –C_{10})	40150	Calc
DRO (C_{12} –C_{28})	1,948,000	Calc
Lube Oil (C_{28} –C_{44})	1,828,000	Calc
TPH	**1000**	Trigger for speciated testing

Contaminant	Screening Value mg/kg	Data Source
Anions		
Soluble Sulphate	500 mg/l	Structures
Sulphide	50	Structures
Chloride	400	Structures
Others		
Organic Carbon (%)	10	Methanogenic potential
Total Cyanide	12000	WRAS
Total Mono Phenols	3200	SGV
PAH		
Naphthalene	480.00	C4SL exp & LQM/CIEH
Acenaphthylene	97,000	LQM/CIEH
Acenaphthene	98,000	LQM/CIEH
Fluorene	69,000	LQM/CIEH
Phenanthrene	22,000	LQM/CIEH
Anthracene	540,000	LQM/CIEH
Fluoranthene	23,000	LQM/CIEH
Pyrene	54,000	LQM/CIEH
Benzo(a) Anthracene	95.0	C4SL exp & LQM/CIEH
Chrysene	140	C4SL exp & LQM/CIEH
Benzo(b) Fluoranthene	100.0	C4SL exp & LQM/CIEH
Benzo(k) Fluoranthene	140.0	C4SL exp & LQM/CIEH
Benzo(a) pyrene	42.40	C4SL
Indeno(1 2 3 cd) Pyrene	61.0	C4SL exp & LQM/CIEH
Dibenzo(a h) Anthracene	13.00	C4SL exp & LQM/CIEH
Benzo (g h i) Perylene	660	C4SL exp & LQM/CIEH
Screening value for PAH	**605.7**	B(a)P / 0.15
Chlorinated Solvents		
1,1,1 trichloroethane (TCA)	1280	LQM/CIEH
tetrachloroethane (PCA)	332	LQM/CIEH
tetrachloroethene (PCE)	146	LQM/CIEH
trichloroethene (TCE)	14.8	LQM/CIEH
1,2-dichloroethane (DCA)	1	LQM/CIEH
vinyl chloride (Chloroethene)	0.113	LQM/CIEH
tetrachloromethane (Carbon tetra	6.6	LQM/CIEH
trichloromethane (Chloroform)	180	LQM/CIEH

Notes

Concentrations measured below the above values may be considered to represent 'uncontaminated conditions' which pose 'LOW' risk to human health. Concentrations measured in excess of these valuesindicate a potential risk which require further, site specific risk assessment.

SGV - Soil Guideline Value, derived from the CLEA model and published by Environment Agency 2009
LQM/CIEH - Generic Assessment Criteria for Human Health Risk Assessment 2nd edition (2009)derived using CLEA 1.04 model 2009
C4SL - Defra Category 4 Screening value based on Low Level of Toxicological Risk
C4SL exp & LQM/CIEH calculated using C4SL revisions to exposure assessment but LQM/CIEH health croiteria values
Calc - sum of nearest available carbon range specified including BTEX for PRO fraction
B(a)P / 0.15 - GEA experince indicates that Benzo(a) pyrene (one of the most common and most carcenogenic of the PAHs) rarely exceeds 15% of the total PAH concentration, hence this Total PAH threshold is regarded as being conservative

GEA Geotechnical & Environmental Associates — Widbury Barn, Widbury Hill, Ware, Herts SG12 7QE	Generic Risk-Based Soil Screening Values
Site 3-6 Spring Place, London, NW5 3BA	**Job Number** J16143
Client Spring Place Limited	
Engineer Heyne Tillett Steel	**Sheet** 2 / 2

Proposed End Use **Commercial**

The key generic assumptions for this end use are as follows;

- that groundwater will not be a critical risk receptor;
- that the critical receptor for human health will be a working female aged 16 to 65 years old;
- that the exposure duration will be be 49 years;
- that the building type equates to a to a three-storey office.
- that the critical exposure pathways will be direct soil and indoor dust ingestion, skin contact with soils and dust, and inhalation of dust and vapours;

Where contaminant concentrations are measured at concentrations below the generic screening value it is considered that they pose an acceptable level of risk and thus further consideration of these contaminant concentrations is not required. However, where concentrations are measured in excess of the generic screening value there is considered to be a potential that they could pose an unacceptable risk and thus further action will be required which could include:

- additional testing to zone the extent of the contaminated material and thus reduce the uncertainty with regard to its potential risk;
- site specific risk assessment to refine the assessment criteria and allow an assessment to be made as to whether the concentration present would pose an unacceptable risk at this site; or
- soil remediation or risk management to mitigate the risk posed by the contaminant to a degree that it poses an acceptable risk.

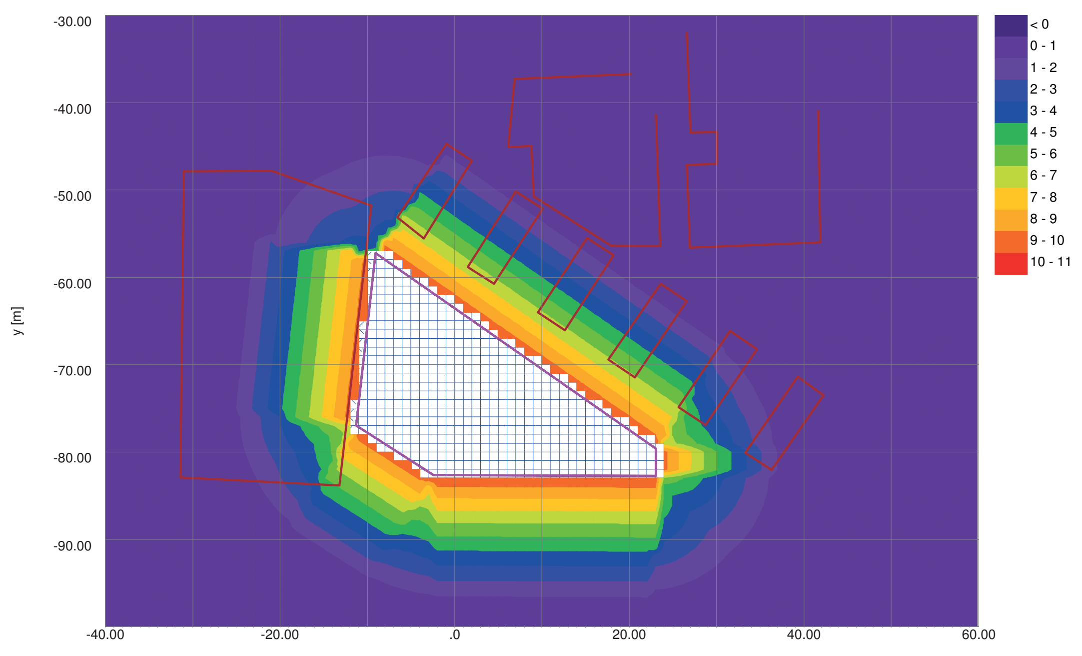
Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Horizontal Displacement Contours: Grid 1 (level 0.000m) Interval 1mm



Scale x 1:619 y 1:619

Program Xdisp Version 19.3.1.35 Copyright © Oasys 1997-2015
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Oasys

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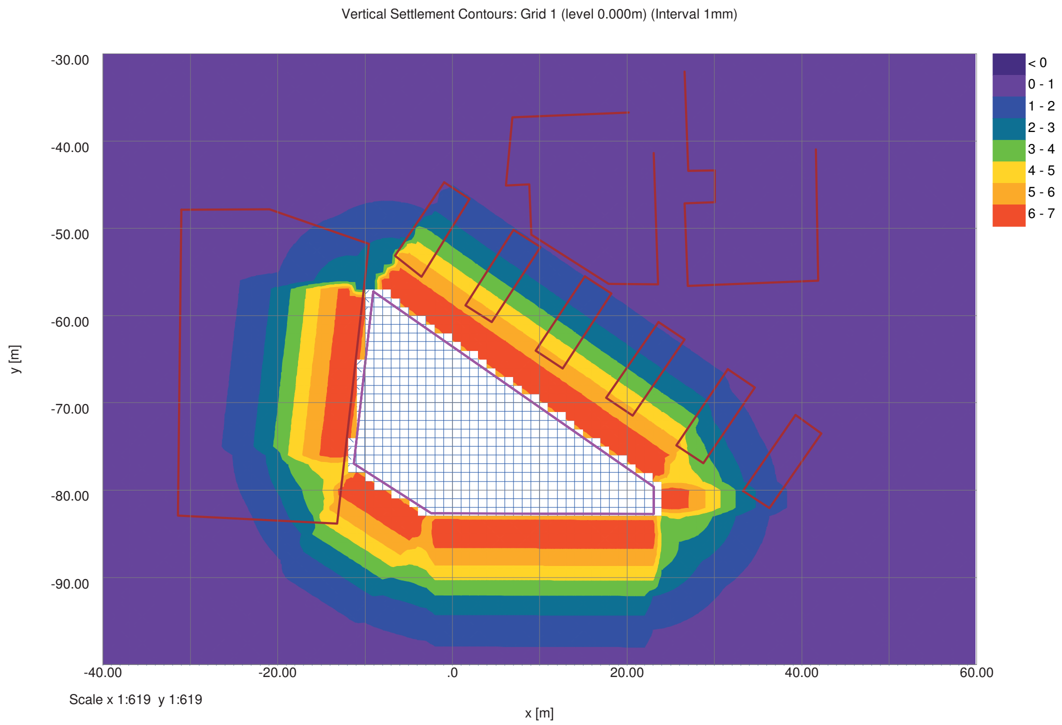
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked



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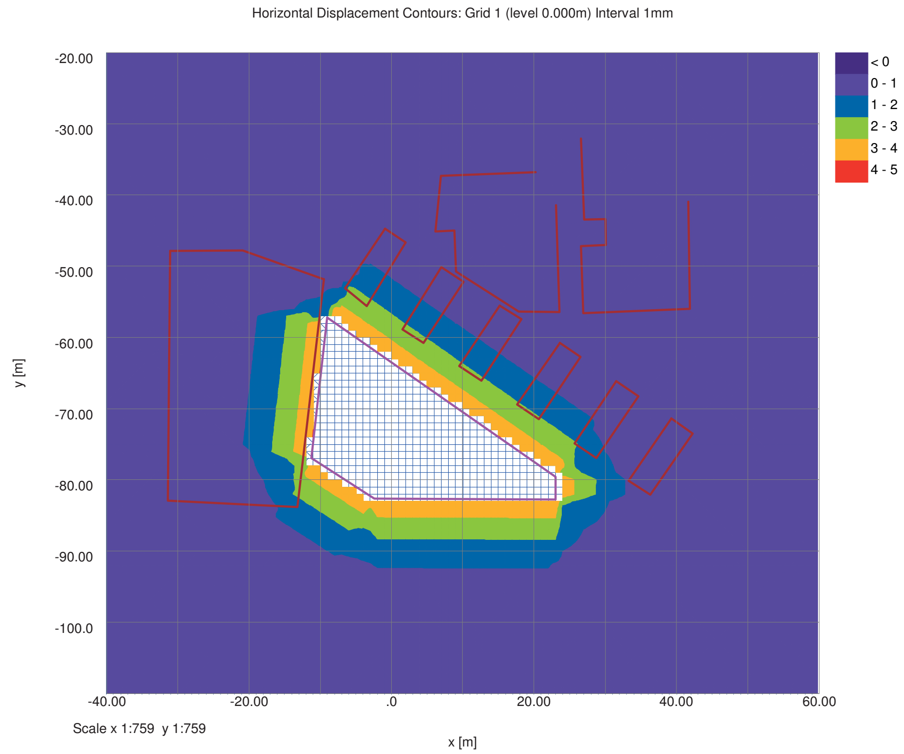
3-6 Spring Place, London
Wall installation

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked



Oasys

GEA LIMITED
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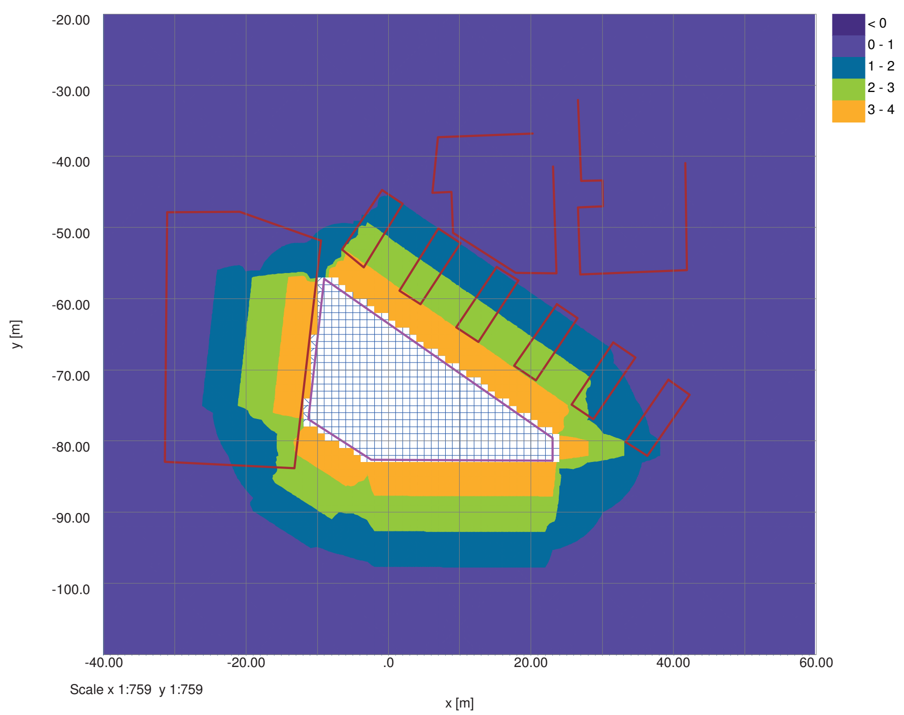
3-6 Spring Place, London
Wall installation

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Vertical Settlement Contours: Grid 1 (level 0.000m) (Interval 1mm)



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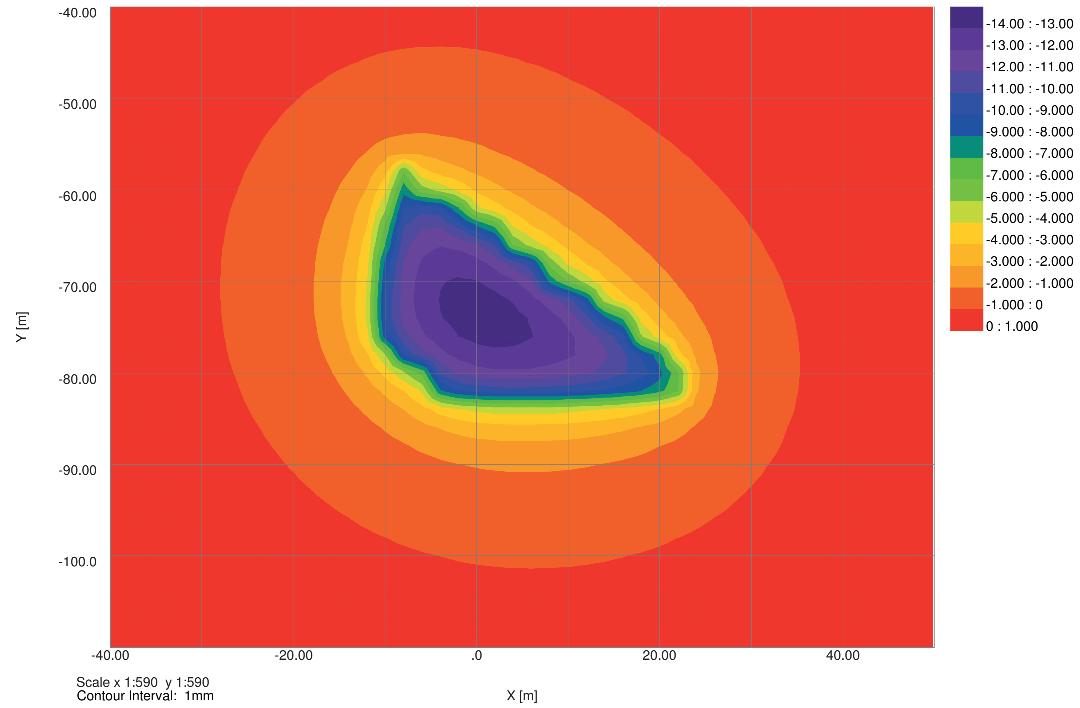
3-6 Spring Place, London
Short Term

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date	Checked

Settlement Contours : Grid 1 at -4.0000m



Scale x 1:590 y 1:590
Contour Interval: 1mm

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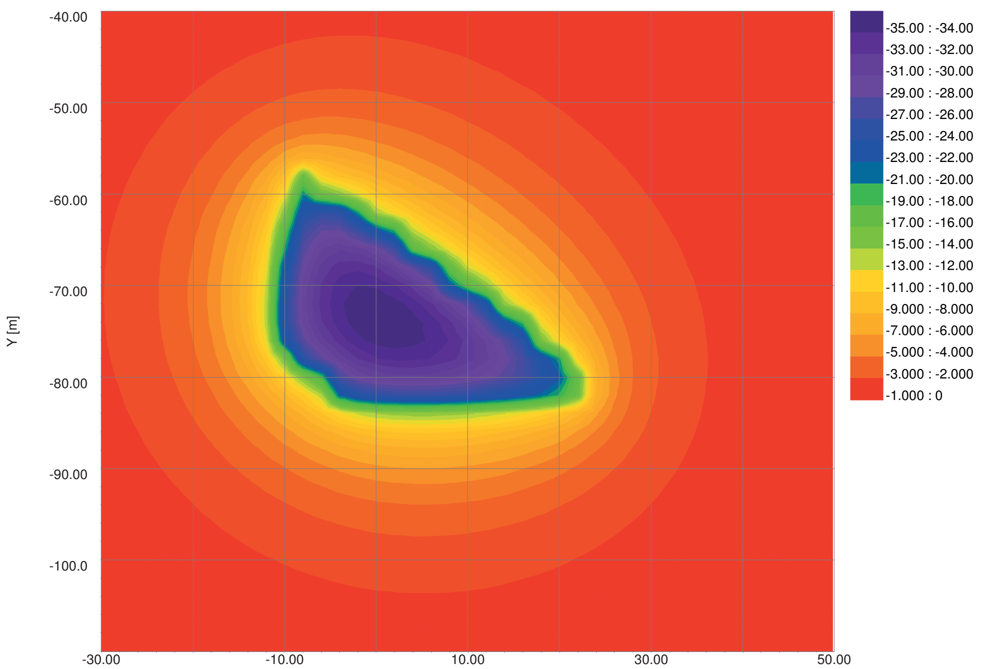
3-6 Spring Place, London
Total

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date	Checked

Settlement Contours : Grid 1 at -4.0000m



Scale x 1:590 y 1:590
Contour Interval: 1mm

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GEA LIMITED
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3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
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Displacement and Strain Results

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement along the Line	Horizontal displacement perpendicular to Line	to x Axis
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]
AN	Line 1	-31.06000	-47.85800	-1.80000	0.0	0.0	0.0	0.0	0.0	0.22633
	2.0252	-29.03480	-47.85000	-1.80000	0.0	0.0	0.0	0.0	0.0	0.22633
	4.0504	-27.00960	-47.84200	-1.80000	0.0	0.0	0.0	0.0	0.0	0.22633
	6.0756	-24.98440	-47.83400	-1.80000	0.0	0.0	0.12623	0.0	0.0	0.22633
	8.1009	-22.95920	-47.82600	-1.80000	0.0	0.0	0.26187	0.0	0.0	0.22633
	10.126	-20.93400	-47.81800	-1.80000	0.10126	-0.080467	0.40619	0.10094	-0.080867	0.22633
AN1	Line 2	-20.93400	-47.81800	-1.80000	0.10126	-0.080467	0.40619	0.12214	-0.042544	340.73
	2.0076	-19.03883	-48.48050	-1.80000	0.39346	-0.34602	0.57993	0.48560	-0.19680	340.73
	4.0153	-17.14367	-49.14300	-1.80000	0.64000	-0.64265	0.79205	0.81622	-0.39546	340.73
	6.0229	-15.24850	-49.80550	-1.80000	0.80543	-0.97103	1.0605	1.0807	-0.65085	340.73
	8.0305	-13.35333	-50.46800	-1.80000	0.83517	-1.3248	1.3443	1.2256	-0.97496	340.73
	10.038	-11.45817	-51.13050	-1.80000	0.66675	-1.7177	1.6153	1.1962	-1.4015	340.73
	12.046	-9.56300	-51.79300	-1.80000	0.19732	-2.2725	2.0064	0.93619	-2.0801	340.73
AE	Line 3	-9.56300	-51.79300	-1.80000	0.19732	-2.2725	2.0064	2.2356	0.45341	263.50
	2.0172	-9.79144	-53.79719	-1.80000	0.53994	-2.6455	2.2688	2.5673	0.83606	263.50
	4.0343	-10.01988	-55.80138	-1.80000	1.7024	-2.6165	2.2872	2.4069	1.9878	263.50
	6.0515	-10.24831	-57.80556	-1.80000	9.1288	-1.0196	6.2162	-0.020757	9.1855	263.50
	8.0687	-10.47675	-59.80975	-1.80000	9.1251	-1.0192	6.2179	-0.020749	9.1819	263.50
	10.086	-10.70519	-61.81394	-1.80000	9.1215	-1.0188	6.2196	-0.020740	9.1782	263.50
	12.103	-10.93363	-63.81812	-1.80000	9.1179	-1.0184	6.2212	-0.020732	9.1746	263.50
	14.120	-11.16206	-65.82231	-1.80000	9.1143	-1.0180	6.2229	-0.020724	9.1710	263.50
	16.137	-11.39050	-67.82650	-1.80000	9.1107	-1.0176	6.2246	-0.020716	9.1673	263.50
	18.154	-11.61894	-69.83069	-1.80000	9.1071	-1.0172	6.2262	-0.020708	9.1637	263.50
	20.172	-11.84738	-71.83487	-1.80000	9.1035	-1.0168	6.2278	-0.020699	9.1601	263.50
	22.189	-12.07581	-73.83906	-1.80000	9.0999	-1.0164	6.2295	-0.020691	9.1564	263.50
	24.206	-12.30425	-75.84325	-1.80000	9.0963	-1.0160	6.2311	-0.020683	9.1528	263.50
	26.223	-12.53269	-77.84744	-1.80000	4.9046	3.5743	4.3598	-4.1067	4.4683	263.50
	28.240	-12.76113	-79.85162	-1.80000	4.0884	6.3434	6.2587	-6.7656	3.3437	263.50
	30.257	-12.98956	-81.85581	-1.80000	3.4015	5.2776	5.5052	-5.6289	2.7819	263.50
	32.275	-13.21800	-83.86000	-1.80000	2.7594	4.2814	4.4500	-4.5664	2.2568	263.50
AS	Line 4	-13.21800	-83.86000	-1.80000	2.7594	4.2814	4.4500	-2.5306	-4.4205	176.99
	2.0237	-15.23889	-83.75367	-1.80000	2.4188	3.7530	3.8413	-2.2183	-3.8749	176.99
	4.0474	-17.25978	-83.64733	-1.80000	1.8483	2.0764	2.3501	-1.7366	-2.1707	176.99
	6.0711	-19.28067	-83.54100	-1.80000	1.6072	1.3274	1.7578	-1.5352	-1.4100	176.99
	8.0947	-21.30156	-83.43467	-1.80000	1.1797	0.76506	1.2748	-1.1379	-0.82599	176.99
	10.118	-23.32244	-83.32833	-1.80000	0.66087	0.35074	0.91400	-0.64153	-0.38498	176.99
	12.142	-25.34333	-83.22200	-1.80000	0.13634	0.060920	0.62826	-0.13295	-0.067999	176.99
	14.166	-27.36422	-83.11567	-1.80000	0.0	0.0	0.36948	0.0	0.0	176.99
	16.189	-29.38511	-83.00933	-1.80000	0.0	0.0	0.12356	0.0	0.0	176.99
	18.213	-31.40600	-82.90300	-1.80000	0.0	0.0	0.0	0.0	0.0	176.99
AW	Line 5	-31.40600	-82.90300	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	2.0616	-31.38565	-80.84153	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	4.1231	-31.36529	-78.78006	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	6.1847	-31.34494	-76.71859	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	8.2463	-31.32459	-74.65712	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	10.308	-31.30424	-72.59565	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	12.369	-31.28388	-70.53418	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	14.431	-31.26353	-68.47271	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	16.493	-31.24318	-66.41124	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	18.554	-31.22282	-64.34976	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	20.616	-31.20247	-62.28829	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	22.677	-31.18212	-60.22682	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	24.739	-31.16176	-58.16535	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	26.800	-31.14141	-56.10388	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	28.862	-31.12106	-54.04241	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	30.924	-31.10071	-51.98094	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	32.985	-31.08035	-49.91947	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
	35.047	-31.06000	-47.85800	-1.80000	0.0	0.0	0.0	0.0	0.0	89.434
BE	Line 6	23.08000	-41.38700	-1.50000	0.0	0.0	0.0	0.0	0.0	271.72
	1.8814	23.13662	-43.26750	-1.50000	0.0	0.0	0.0	0.0	0.0	271.72
	3.7627	23.19325	-45.14800	-1.50000	0.0	0.0	0.0	0.0	0.0	271.72
	5.6441	23.24987	-47.02850	-1.50000	0.0	0.0	0.0	0.0	0.0	271.72
	7.5254	23.30650	-48.90900	-1.50000	0.0	0.0	0.0	0.0	0.0	271.72
	9.4068	23.36313	-50.78950	-1.50000	0.0	0.0	0.0	0.0	0.0	271.72
	11.288	23.41975	-52.67000	-1.50000	0.0	0.0	0.0	0.0	0.0	271.72
	13.169	23.47638	-54.55050	-1.50000	0.0	0.0	0.0	0.0	0.0	271.72
	15.051	23.53300	-56.43100	-1.50000	0.0	0.0	0.14072	0.0	0.0	271.72
BS1	Line 7	23.53300	-56.43100	-1.50000	0.0	0.0	0.14072	0.0	0.0	179.49
	0.93837	22.59467	-56.42267	-1.50000	0.0	0.0	0.24659	0.0	0.0	179.49
	1.8767	21.65633	-56.41433	-1.50000	0.0	0.0	0.35245	0.0	0.0	179.49
	2.8151	20.71800	-56.40600	-1.50000	0.0	0.0	0.45832	0.0	0.0	179.49
	3.7535	19.77967	-56.39767	-1.50000	0.0	0.0	0.56418	0.0	0.0	179.49
	4.6919	18.84133	-56.38933	-1.50000	0.0	0.0	0.67005	0.0	0.0	179.49
	5.6302	17.90300	-56.38100	-1.50000	0.0	0.0	0.77591	0.0	0.0	179.49
BS2	Line 8	17.90300	-56.38100	-1.50000	0.0	0.0	0.77591	0.0	0.0	147.39
	1.7520	16.42717	-55.43683	-1.50000	0.0	0.0	0.78960	0.0	0.0	147.39
	3.5040	14.95133	-54.49267	-1.50000	-0.0035301	-0.0050701	0.80801	241.37E-6	0.0061733	147.39
	5.2560	13.47550	-53.54850	-1.50000	-0.018197	-0.026136	0.82686	0.0012442	0.031823	147.39
	7.0080	11.99967	-52.60433	-1.50000	-0.032865	-0.047201	0.84544	0.0022471	0.057472	147.39
	8.7600	10.52383	-51.66017	-1.50000	-0.047532	-0.068267	0.86376	0.0032500	0.083121	147.39
	10.512	9.04800	-50.71600	-1.50000	-0.062199	-0.089333	0.88184	0.0042529	0.10877	147.39
BS3	Line 9	9.04800	-50.71600	-1.50000	-0.062199	-0.089333	0.88184	-0.086911	0.065541	92.173
	0.95402	9.01183	-49.76267	-1.50000	0.0	0.0	0.70571	0.0	0.0	92.173
	1.9080	8.97567	-48.80933	-1.50000	0.0	0.0	0.55337	0.0	0.0	92.173
	2.8621	8.93950	-47.85600	-1.50000	0.0	0.0	0.40103	0.0	0.0	92.173
	3.8161	8.90333	-46.90267	-1.50000	0.0	0.0	0.24869	0.0	0.0	92.173
	4.7701	8.86717	-45.94933	-1.50000	0.0	0.0	0.096351	0.0	0.0	92.173
	5.7241	8.83100	-44.99600	-1.50000	0.0	0.0	0.0	0.0	0.0	92.173
BS4	Line 10	8.83100	-44.99600	-1.50000	0.0	0.0	0.0	0.0	0.0	182.10
	0.88392	7.94767	-45.02833	-1.50000	0.0	0.0	0.050265	0.0	0.0	182.10
	1.7678	7.06433	-45.06067	-1.50000	0.0	0.0	0.15652	0.0	0.0	182.10
	2.6518	6.18100	-45.09300	-1.50000	0.0	0.0	0.26278	0.0	0.0	182.10
BW	Line 11	6.18100	-45.09300	-1.50000	0.0	0.0	0.26278	0.0	0.0	84.675
	0.97923	6.27187	-44.11800	-1.50000	0.0	0.0	0.092359	0.0	0.0	84.675
	1.9585	6.36275	-43.14300	-1.50000	0.0	0.0	0.0	0.0	0.0	84.675
	2.9377	6.45363	-42.16800	-1.50000	0.0	0.0	0.0	0.0	0.0	84.675
	3.9169	6.54450	-41.19300	-1.50000	0.0	0.0	0.0	0.0	0.0	84.675
	4.8961	6.63537	-40.21800	-1.50000	0.0	0.0	0.0	0.0	0.0	84.675
	5.8754	6.72625	-39.24300	-1.50000	0.0	0.0	0.0	0.0	0.0	84.675
	6.8546	6.81713	-38.26800	-1.50000	0.0	0.0	0.0	0.0	0.0	84.675
	7.8338	6.90800	-37.29300	-1.50000	0.0	0.0	0.0	0.0	0.0	84.675
BW2	Line 12	6.90800	-37.29300	-1.50000	0.0	0.0	0.0	0.0	0.0	2.2894
	1.9061	8.81257	-37.21686	-1.50000	0.0	0.0	0.0	0.0	0.0	2.2894
	3.8122	10.71714	-37.14071	-1.50000	0.0	0.0	0.0	0.0	0.0	2.2894
	5.7183	12.62171	-37.06457	-1.50000	0.0	0.0	0.0	0.0	0.0	2.2894
	7.6244	14.52629	-36.98843	-1.50000	0.0	0.0	0.0	0.0	0.0	2.2894
	9.5305	16.43086	-36.91229	-1.50000	0.0	0.0	0.0	0.0	0.0	2.2894
	11.437	18.33543	-36.83614	-1.50000	0.0	0.0	0.0	0.0	0.0	2.2894
	13.343	20.24000	-36.76000	-1.50000	0.0	0.0	0.0	0.0	0.0	2.2894
CE	Line 13	41.60300	-40.92000	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
	1.8824	41.63788	-42.80213	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
	3.7649	41.67275	-44.68425	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
	5.6473	41.70763	-46.56638	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
	7.5298	41.74250	-48.44850	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
	9.4122	41.77737	-50.33062	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
	11.295	41.81225	-52.21275	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
	13.177	41.84712	-54.09488	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
	15.060	41.88200	-55.97700	-1.50000	0.0	0.0	0.0	0.0	0.0	271.06
CS	Line 14	41.88200	-55.97700	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38
	1.8700	40.01362	-56.05475	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
	3.7400	38.14525	-56.13250	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38
	5.6100	36.27687	-56.21025	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38
	7.4800	34.40850	-56.28800	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38
	9.3500	32.54012	-56.36575	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38
	11.220	30.67175	-56.44350	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38
	13.090	28.80337	-56.52125	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38
	14.960	26.93500	-56.59900	-1.50000	0.0	0.0	0.0	0.0	0.0	182.38
CW1	Line 15	26.93500	-56.59900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	1.0507	26.89756	-55.54900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	2.1013	26.86011	-54.49900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	3.1520	26.82267	-53.44900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	4.2027	26.78522	-52.39900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	5.2533	26.74778	-51.34900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	6.3040	26.71033	-50.29900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	7.3547	26.67289	-49.24900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	8.4053	26.63544	-48.19900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
	9.4560	26.59800	-47.14900	-1.50000	0.0	0.0	0.0	0.0	0.0	92.042
CW2	Line 16	26.59800	-47.14900	-1.50000	0.0	0.0	0.0	0.0	0.0	2.0888
	1.1614	27.75867	-47.10667	-1.50000	0.0	0.0	0.0	0.0	0.0	2.0888
	2.3229	28.91933	-47.06433	-1.50000	0.0	0.0	0.0	0.0	0.0	2.0888
	3.4843	30.08000	-47.02200	-1.50000	0.0	0.0	0.0	0.0	0.0	2.0888
CW3	Line 17	30.08000	-47.02200	-1.50000	0.0	0.0	0.0	0.0	0.0	90.360
	0.91527	30.07425	-46.10675	-1.50000	0.0	0.0	0.0	0.0	0.0	90.360
	1.8305	30.06850	-45.19150	-1.50000	0.0	0.0	0.0	0.0	0.0	90.360
	2.7458	30.06275	-44.27625	-1.50000	0.0	0.0	0.0	0.0	0.0	90.360
	3.6611	30.05700	-43.36100	-1.50000	0.0	0.0	0.0	0.0	0.0	90.360
CW4	Line 18	30.05700	-43.36100	-1.50000	0.0	0.0	0.0	0.0	0.0	181.55
	1.0107	29.04667	-43.38833	-1.50000	0.0	0.0	0.0	0.0	0.0	181.55
	2.0214	28.03633	-43.41567	-1.50000	0.0	0.0	0.0	0.0	0.0	181.55
	3.0321	27.02600	-43.44300	-1.50000	0.0	0.0	0.0	0.0	0.0	181.55
CW5	Line 19	27.02600	-43.44300	-1.50000	0.0	0.0	0.0	0.0	0.0	92.067
	1.8987	26.95750	-41.54550	-1.50000	0.0	0.0	0.0	0.0	0.0	92.067
	3.7975	26.88900	-39.64800	-1.50000	0.0	0.0	0.0	0.0	0.0	92.067
	5.6962	26.82050	-37.75050	-1.50000	0.0	0.0	0.0	0.0	0.0	92.067
	7.5949	26.75200	-35.85300	-1.50000	0.0	0.0	0.0	0.0	0.0	92.067
	9.4937	26.68350	-33.95550	-1.50000	0.0	0.0	0.0	0.0	0.0	92.067
	11.392	26.61500	-32.05800	-1.50000	0.0	0.0	0.0	0.0	0.0	92.067
V1N	Line 20	-0.96200	-44.71200	-2.00000	-0.10363	-0.15956	0.48928	-770.56E-6	-0.19026	327.23
	0.88868	-0.21475	-45.19300	-2.00000	-0.23154	-0.33254	1.0709	-0.014701	-0.40495	327.23
	1.7774	0.53250	-45.67400	-2.00000	-0.22139	-0.31796	1.0632	-0.014056	-0.38719	327.23
	2.6660	1.27975	-46.15500	-2.00000	-0.21128	-0.30345	1.0555	-0.013415	-0.36951	327.23
	3.5547	2.02700	-46.63600	-2.00000	-0.20437	-0.29353	1.0477	-0.012976	-0.35743	327.23
V1E	Line 21	2.02700	-46.63600	-2.00000	-0.20437	-0.29353	1.0477	0.35719	-0.018548	238.12
	1.7548	1.10033	-48.12617	-2.00000	-0.75411	-1.0831	1.4768	1.3180	-0.068441	238.12
	3.5096	0.17367	-49.61633	-2.00000	-1.3147	-1.8882	2.0251	2.2977	-0.11932	238.12
	5.2644	-0.75300	-51.10650	-2.00000	-1.8907	-2.7154	2.7806	3.3043	-0.17159	238.12
	7.0192	-1.67967	-52.59667	-2.00000	-2.4899	-3.5760	3.7377	4.3516	-0.22597	238.12
	8.7740	-2.60633	-54.08683	-2.00000	-3.1201	-4.4812	4.7971	5.4531	-0.28318	238.12
	10.529	-3.53300	-55.57700	-2.00000	-3.7893	-5.4423	5.7660	6.6227	-0.34391	238.12
V1S	Line 22	-3.53300	-55.57700	-2.00000	-3.7893	-5.4423	5.7660	-0.49530	6.6131	140.87
	0.97686	-4.29075	-54.96050	-2.00000	-3.7606	-5.4010	5.7309	-0.49155	6.5629	140.87
	1.9537	-5.04850	-54.34400	-2.00000	-3.7319	-5.3599	5.6951	-0.48780	6.5129	140.87
	2.9306	-5.80625	-53.72750	-2.00000	-3.7033	-5.3188	5.6588	-0.48406	6.4630	140.87
	3.9074	-6.56400	-53.11100	-2.00000	-1.5175	-2.4729	2.5365	-0.38353	2.8759	140.87
V1W	Line 23	-6.56400	-53.11100	-2.00000	-1.5175	-2.4729	2.5365	-2.8993	-0.10973	56.297
	2.0192	-5.44360	-51.43120	-2.00000	-1.2290	-1.9536	2.0166	-2.3073	-0.061572	56.297
	4.0383	-4.32320	-49.75140	-2.00000	-0.93950	-1.4735	1.4794	-1.7471	-0.036006	56.297
	6.0575	-3.20280	-48.07160	-2.00000	-0.65623	-1.0206	1.0354	-1.2132	-0.020364	56.297
	8.0767	-2.08240	-46.39180	-2.00000	-0.37865	-0.58549	0.71909	-0.69719	-0.0098719	56.297
	10.096	-0.96200	-44.71200	-2.00000	-0.10363	-0.15956	0.48928	-0.19024	-0.0023293	56.297
V2N	Line 24	7.01000	-50.15700	-2.00000	-0.21343	-0.30653	1.0579	-0.013458	-0.37327	327.22
	0.92896	7.79100	-50.66000	-2.00000	-0.20626	-0.29623	1.0498	-0.013006	-0.36073	327.22
	1.8579	8.57200	-51.16300	-2.00000	-0.19909	-0.28593	1.0418	-0.012554	-0.34819	327.22
	2.7869	9.35300	-51.66600	-2.00000	-0.19191	-0.27563	1.0337	-0.012101	-0.33564	327.22
	3.7158	10.13400	-52.16900	-2.00000	-0.18474	-0.26533	1.0256	-0.011649	-0.32310	327.22
V2E	Line 25	10.13400	-52.16900	-2.00000	-0.18474	-0.26533	1.0256	0.32317	-0.0094816	236.83
	2.0505	9.01220	-53.88540	-2.00000	-0.81932	-1.1767	1.5324	1.4333	-0.042050	236.83
	4.1010	7.89040	-55.60180	-2.00000	-1.4780	-2.1227	2.2191	2.5855	-0.075856	236.83
	6.1514	6.76860	-57.31820	-2.00000	-2.1608	-3.1034	3.1963	3.7799	-0.11090	236.83
	8.2019	5.64680	-59.03460	-2.00000	-2.8803	-4.1367	4.3991	5.0385	-0.14783	236.83
	10.252	4.52500	-60.75100	-2.00000	-3.6490	-5.2408	5.5878	6.3832	-0.18728	236.83
V2S	Line 26	4.52500	-60.75100	-2.00000	-3.6490	-5.2408	5.5878	0.23297	6.3817	147.24
	0.88618	3.77975	-60.27150	-2.00000	-3.6616	-5.2588	5.6045	0.23377	6.4037	147.24
	1.7724	3.03450	-59.79200	-2.00000	-3.6742	-5.2769	5.6210	0.23458	6.4258	147.24
	2.6585	2.28925	-59.31250	-2.00000	-3.6868	-5.2951	5.6374	0.23538	6.4478	147.24
	3.5447	1.54400	-58.83300	-2.00000	-3.6994	-5.3132	5.6537	0.23619	6.4699	147.24
V2W	Line 27	1.54400	-58.83300	-2.00000	-3.6994	-5.3132	5.6537	-6.4674	0.29784	57.789
	2.0509	2.63720	-57.09780	-2.00000	-2.9275	-4.2046	4.4785	-5.1180	0.23569	57.789
	4.1017	3.73040	-55.36260	-2.00000	-2.2056	-3.1678	3.2681	-3.8559	0.17757	57.789
	6.1526	4.82360	-53.62740	-2.00000	-1.5211	-2.1847	2.2731	-2.6593	0.12247	57.789
	8.2034	5.91680	-51.89220	-2.00000	-0.86157	-1.2374	1.5694	-1.5062	0.069364	57.789
	10.254	7.01000	-50.15700	-2.00000	-0.21343	-0.30653	1.0579	-0.37312	0.017183	57.789
V3N	Line 28	15.19900	-55.51400	-2.00000	-0.15281	-0.21947	0.98912	-0.012003	-0.26716	327.72
	0.90451	15.96375	-55.99700	-2.00000	-0.14411	-0.20697	0.97910	-0.011320	-0.25195	327.72
	1.8090	16.72850	-56.48000	-2.00000	-0.13541	-0.19448	0.96902	-0.010637	-0.23674	327.72
	2.7135	17.49325	-56.96300	-2.00000	-0.12671	-0.18198	0.95889	-0.0099533	-0.22153	327.72
	3.6180	18.25800	-57.44600	-2.00000	-0.11801	-0.16949	0.94871	-0.0092700	-0.20632	327.72
V3E	Line 29	18.25800	-57.44600	-2.00000	-0.11801	-0.16949	0.94871	0.20642	-0.0065548	236.97
	2.0640	17.13300	-59.17640	-2.00000	-0.72478	-1.0409	1.4523	1.2678	-0.040258	236.97
	4.1279	16.00800	-60.90680	-2.00000	-1.3853	-1.9896	2.1070	2.4232	-0.076947	236.97
	6.1919	14.88300	-62.63720	-2.00000	-2.0685	-2.9709	3.0507	3.6183	-0.11490	236.97
	8.2558	13.75800	-64.36760	-2.00000	-2.7872	-4.0031	4.2417	4.8754	-0.15481	236.97
	10.320	12.63300	-66.09800	-2.00000	-3.5541	-5.1046	5.4586	6.2169	-0.19741	236.97
V3S	Line 30	12.63300	-66.09800	-2.00000	-3.5541	-5.1046	5.4586	0.12199	6.2188	146.28
	0.92309	11.86525	-65.58550	-2.00000	-3.5611	-5.1146	5.4684	0.12223	6.2310	146.28
	1.8462	11.09750	-65.07300	-2.00000	-3.5681	-5.1246	5.4781	0.12246	6.2433	146.28
	2.7693	10.32975	-64.56050	-2.00000	-3.5751	-5.1347	5.4878	0.12270	6.2555	146.28
	3.6924	9.56200	-64.04800	-2.00000	-3.5821	-5.1447	5.4974	0.12294	6.2677	146.28
V3W	Line 31	9.56200	-64.04800	-2.00000	-3.5821	-5.1447	5.4974	-6.2671	0.15339	56.554
	2.0455	10.68940	-62.34120	-2.00000	-2.8197	-4.0498	4.2968	-4.9332	0.12075	56.554
	4.0911	11.81680	-60.63440	-2.00000	-2.1053	-3.0237	3.1083	-3.6833	0.090154	56.554
	6.1366	12.94420	-58.92760	-2.00000	-1.4264	-2.0486	2.1561	-2.4956	0.061082	56.554
	8.1821	14.07160	-57.22080	-2.00000	-0.77055	-1.1067	1.4906	-1.3481	0.032997	56.554
	10.228	15.19900	-55.51400	-2.00000	-0.15281	-0.21947	0.98912	-0.26734	0.0065436	56.554
V4N	Line 32	23.60700	-60.74600	-2.00000	-0.043391	-0.062319	0.85861	-721.65E-6	-0.075934	325.70
	0.89340	24.34500	-61.24950	-2.00000	-0.041572	-0.059706	0.85635	-691.39E-6	-0.072750	325.70
	1.7868	25.08300	-61.75300	-2.00000	-0.039752	-0.057093	0.85407	-661.13E-6	-0.069566	325.70
	2.6802	25.82100	-62.25650	-2.00000	-0.037933	-0.054481	0.85180	-630.88E-6	-0.066383	325.70
	3.5736	26.55900	-62.76000	-2.00000	-0.036114	-0.051868	0.84952	-600.62E-6	-0.063199	325.70
V4E	Line 33	26.55900	-62.76000	-2.00000	-0.036114	-0.051868	0.84952	0.063197	-804.57E-6	235.88
	1.7543	25.57500	-64.21233	-2.00000	-0.50638	-0.72728	1.2788	0.88613	-0.011282	235.88
	3.5086	24.59100	-65.66467	-2.00000	-1.0632	-1.5269	1.7579	1.8605	-0.023686	235.88
	5.2629	23.60700	-67.11700	-2.00000	-1.6319	-2.3437	2.4169	2.8556	-0.036356	235.88
	7.0172	22.62300	-68.56933	-2.00000	-2.2203	-3.1889	3.2919	3.8854	-0.049466	235.88
	8.7714	21.63900	-70.02167	-2.00000	-2.8365	-4.0738	4.3251	4.9636	-0.063193	235.88
	10.526	20.65500	-71.47400	-2.00000	-3.4881	-5.0097	5.3648	6.1039	-0.077710	235.88
V4S	Line 34	20.65500	-71.47400	-2.00000	-3.4881	-5.0097	5.3648	0.070801	6.1040	145.82
	0.91751	19.89600	-70.95850	-2.00000	-3.4922	-5.0155	5.3707	0.070884	6.1111	145.82
	1.8350	19.13700	-70.44300	-2.00000	-3.4962	-5.0214	5.3766	0.070967	6.1183	145.82
	2.7525	18.37800	-69.92750	-2.00000	-3.5003	-5.0273	5.3824	0.071050	6.1254	145.82
	3.6700	17.61900	-69.41200	-2.00000	-3.5044	-5.0331	5.3883	0.071133	6.1326	145.82
V4W	Line 35	17.61900	-69.41200	-2.00000	-3.5044	-5.0331	5.3883	-6.1329	0.021910	55.356
	1.7556	18.61700	-67.96767	-2.00000	-2.8513	-4.0951	4.3502	-4.9900	0.017827	55.356
	3.5112	19.61500	-66.52333	-2.00000	-2.2340	-3.2085	3.3139	-3.9096	0.013967	55.356
	5.2668	20.61300	-65.07900	-2.00000	-1.6445	-2.3618	2.4338	-2.8779	0.010281	55.356
	7.0224	21.61100	-63.63467	-2.00000	-1.0750	-1.5439	1.7696	-1.8812	0.0067207	55.356
	8.7780	22.60900	-62.19033	-2.00000	-0.51755	-0.74332	1.2874	-0.90574	0.0032358	55.356
	10.534	23.60700	-60.74600	-2.00000	-0.043391	-0.062319	0.85861	-0.075937	271.28E-6	55.356
V5N	Line 36	31.52800	-66.14400	-2.00000	-0.022793	-0.032735	0.83271	-442.11E-6	-0.039886	325.79
	0.94171	32.30675	-66.67350	-2.00000	-0.016392	-0.022938	0.65831	-658.21E-6	-0.028185	325.79

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
	1.8834	33.08550	-67.20300	-2.00000	-0.0082709	-0.010238	0.63705	-0.0010831	-0.013117	325.79
	2.8251	33.86425	-67.73250	-2.00000	0.0	0.0	0.60530	0.0	0.0	325.79
	3.7668	34.64300	-68.26200	-2.00000	0.0	0.0	0.57145	0.0	0.0	325.79
V5E	Line 37	34.64300	-68.26200	-2.00000	0.0	0.0	0.57145	0.0	0.0	235.81
	1.7455	33.66217	-69.70583	-2.00000	-0.35445	-0.33122	0.88182	0.47316	-0.10708	235.81
	3.4910	32.68133	-71.14967	-2.00000	-0.88586	-0.77925	1.1973	1.1424	-0.29489	235.81
	5.2364	31.70050	-72.59350	-2.00000	-1.4457	-1.1745	1.6043	1.7839	-0.53587	235.81
	6.9819	30.71967	-74.03733	-2.00000	-2.0448	-1.4885	2.1278	2.3803	-0.85498	235.81
	8.7274	29.73883	-75.48117	-2.00000	-2.6899	-1.6643	2.7217	2.8882	-1.2899	235.81
	10.473	28.75800	-76.92500	-2.00000	-3.4459	-1.6259	3.3469	3.2812	-1.9367	235.81
V5S	Line 38	28.75800	-76.92500	-2.00000	-3.4459	-1.6259	3.3469	1.9834	3.2533	146.63
	0.92352	27.98675	-76.41700	-2.00000	-3.4235	-2.2211	3.5915	1.6373	3.7380	146.63
	1.8470	27.21550	-75.90900	-2.00000	-3.2999	-2.9414	3.8899	1.1378	4.2716	146.63
	2.7706	26.44425	-75.40100	-2.00000	-2.9556	-3.6783	4.1494	0.44496	4.6976	146.63
	3.6941	25.67300	-74.89300	-2.00000	-3.4646	-4.9759	5.3308	0.15623	6.0612	146.63
V5W	Line 39	25.67300	-74.89300	-2.00000	-3.4646	-4.9759	5.3308	-6.0622	0.11185	56.209
	1.7546	26.64883	-73.43483	-2.00000	-2.8143	-4.0420	4.2876	-4.9244	0.090859	56.209
	3.5091	27.62467	-71.97667	-2.00000	-2.1992	-3.1586	3.2579	-3.8482	0.071002	56.209
	5.2637	28.60050	-70.51850	-2.00000	-1.6115	-2.3145	2.3900	-2.8198	0.052028	56.209
	7.0183	29.57633	-69.06033	-2.00000	-1.0434	-1.4985	1.7385	-1.8256	0.033684	56.209
	8.7728	30.55217	-67.60217	-2.00000	-0.48681	-0.69916	1.2638	-0.85180	0.015716	56.209
	10.527	31.52800	-66.14400	-2.00000	-0.022793	-0.032735	0.83271	-0.039882	735.86E-6	56.209
V6N	Line 40	39.30000	-71.42300	-2.00000	0.0	0.0	0.25111	0.0	0.0	325.30
	0.90340	40.04275	-71.93725	-2.00000	0.0	0.0	0.19141	0.0	0.0	325.30
	1.8068	40.78550	-72.45150	-2.00000	0.0	0.0	0.12539	0.0	0.0	325.30
	2.7102	41.52825	-72.96575	-2.00000	0.0	0.0	0.053360	0.0	0.0	325.30
	3.6136	42.27100	-73.48000	-2.00000	0.0	0.0	0.0	0.0	0.0	325.30
V6E	Line 41	42.27100	-73.48000	-2.00000	0.0	0.0	0.0	0.0	0.0	235.30
	1.7406	41.28000	-74.91100	-2.00000	0.0	0.0	0.17491	0.0	0.0	235.30
	3.4813	40.28900	-76.34200	-2.00000	0.0	0.0	0.37130	0.0	0.0	235.30
	5.2219	39.29800	-77.77300	-2.00000	0.0	0.0	0.56333	0.0	0.0	235.30
	6.9626	38.30700	-79.20400	-2.00000	-0.22074	-0.0059354	0.78672	0.13055	-0.17809	235.30
	8.7032	37.31600	-80.63500	-2.00000	-0.78308	0.0057378	1.2339	0.44112	-0.64705	235.30
	10.444	36.32500	-82.06600	-2.00000	-1.3254	0.0097111	1.4795	0.74658	-1.0951	235.30
V6S	Line 42	36.32500	-82.06600	-2.00000	-1.3254	0.0097111	1.4795	1.1185	0.71107	147.13
	0.90065	35.56850	-81.57725	-2.00000	-1.7485	0.012811	1.6957	1.4756	0.93807	147.13
	1.8013	34.81200	-81.08850	-2.00000	-2.1752	0.015938	1.9451	1.8357	1.1670	147.13
	2.7019	34.05550	-80.59975	-2.00000	-2.6066	0.019099	2.2334	2.1998	1.3985	147.13
	3.6026	33.29900	-80.11100	-2.00000	-3.0440	0.022304	2.5635	2.5689	1.6331	147.13
V6W	Line 43	33.29900	-80.11100	-2.00000	-3.0440	0.022304	2.5635	-1.7116	2.5173	55.366
	1.7598	34.29917	-78.66300	-2.00000	-1.8945	-0.16029	1.6487	-1.2086	1.4677	55.366
	3.5197	35.29933	-77.21500	-2.00000	-1.3124	-0.25722	1.2881	-0.95753	0.93367	55.366
	5.2795	36.29950	-75.76700	-2.00000	-0.73674	-0.21406	0.99000	-0.59484	0.48454	55.366
	7.0394	37.29967	-74.31900	-2.00000	-0.20350	-0.075664	0.72627	-0.17791	0.12443	55.366
	8.7992	38.29983	-72.87100	-2.00000	0.0	0.0	0.46977	0.0	0.0	55.366
	10.559	39.30000	-71.42300	-2.00000	0.0	0.0	0.25111	0.0	0.0	55.366
Grid 1	Grid 1	-50.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		34.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-150.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		13.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-149.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-148.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-8.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		-7.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		-6.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		-5.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		-4.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		-3.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		-2.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		-1.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		0.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		1.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		2.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		3.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		4.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		5.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		6.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		7.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		8.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		9.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		10.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		11.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		12.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		13.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		14.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		15.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		16.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		17.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		18.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		19.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		20.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		21.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		22.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		23.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		24.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		25.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		26.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		27.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		28.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		29.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		30.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		31.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		32.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		33.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		34.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		35.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		36.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		37.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		38.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		39.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		40.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		41.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		42.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		43.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		44.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		45.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		46.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		47.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		48.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		49.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		50.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		51.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		52.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		53.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		54.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		55.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		56.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		57.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		58.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		59.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		60.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		61.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		62.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		63.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		64.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		65.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		66.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		67.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		68.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		69.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		70.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		71.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		72.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		73.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		74.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		75.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		76.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		77.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		78.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		79.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		80.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		81.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		82.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		83.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		84.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		85.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		86.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		87.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		88.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		89.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		90.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		91.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		92.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		93.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		94.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		95.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		96.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		97.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		98.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		99.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		100.00000	-148.00000	0.00000	0.0	0.0	0.0	–	–	–
		-50.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-49.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-48.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-47.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-46.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-45.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-44.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-43.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-42.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-41.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-40.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-39.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-38.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-37.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-36.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-35.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-34.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-33.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-32.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-31.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-30.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-29.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-28.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-27.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-26.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-25.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-24.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-23.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-22.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-21.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-20.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-19.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-18.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-17.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-16.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-15.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-14.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-13.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-12.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-11.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-10.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-9.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-8.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-7.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-6.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-5.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-4.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-3.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-2.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		-1.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		0.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		1.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		2.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		3.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		4.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		5.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		6.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		7.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		8.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		9.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		10.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		11.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		12.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		13.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		14.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		15.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		16.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		17.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		18.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		19.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		20.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		21.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		22.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		23.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		24.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		25.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		26.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		27.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		28.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		29.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		30.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		31.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		32.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		33.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		34.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		35.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		36.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		37.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		38.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		39.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		40.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		41.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		42.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		43.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		44.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		45.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		46.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		47.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		48.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		49.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		50.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		51.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		52.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		53.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		54.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		55.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		56.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		57.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		58.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		59.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		60.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		61.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		62.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		63.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		64.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		65.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		66.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		67.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		68.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		69.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		70.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		71.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		72.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		73.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		74.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		75.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		76.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		77.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		78.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		79.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		80.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		81.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		82.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		83.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		84.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		85.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		86.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		87.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		88.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		89.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		90.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		91.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		92.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		93.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		94.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		95.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		96.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		97.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		98.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		99.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–
		100.00000	-147.00000	0.00000	0.0	0.0	0.0	–	–	–

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		-50.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-49.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-48.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-47.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-46.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-45.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-44.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-43.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-42.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-41.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-40.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-39.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-38.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-37.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-36.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-35.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-34.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-33.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-32.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-31.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-30.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-29.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-28.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-27.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-26.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-25.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-24.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-23.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-22.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-21.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-20.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-19.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-18.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-17.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-16.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-15.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-14.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-13.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-12.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-11.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-10.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-9.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-8.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-7.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-6.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-5.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-4.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-3.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-2.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-1.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		0.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		1.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		2.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		3.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		4.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		5.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		6.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		7.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		8.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		9.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		10.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		11.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		12.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		13.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		14.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		15.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		16.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		17.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		18.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		19.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		20.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		21.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		22.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		23.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		24.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		25.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		26.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		27.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		28.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		29.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		30.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		31.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		32.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		33.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		34.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		35.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		36.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		37.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		38.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		39.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		40.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		41.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		42.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		43.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		44.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		45.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		46.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		47.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		48.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		49.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		50.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		51.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		52.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		53.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		54.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		55.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		56.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		57.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		58.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		59.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		60.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		61.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		62.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		63.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		64.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		65.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		66.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		67.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		68.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		69.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		70.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		71.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		72.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		73.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		74.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		75.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		76.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		77.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		78.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		79.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		80.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		81.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		82.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		83.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		84.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		85.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		86.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		87.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		88.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		89.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		90.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		91.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		92.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		93.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		94.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		95.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		96.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		97.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		98.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		99.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		100.00000	-146.00000	0.00000	0.0	0.0	0.0	–	–	–
		-50.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-49.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-48.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-47.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-46.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-45.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-44.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-43.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-42.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-41.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-40.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-39.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-38.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-37.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-36.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-35.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-34.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-33.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-32.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-31.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-30.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-29.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-28.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-27.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-26.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-25.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-24.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-23.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-22.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-21.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-20.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-19.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-18.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-17.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-16.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-15.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-14.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-13.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-12.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-11.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-10.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-9.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-8.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-7.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-6.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-5.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-4.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-3.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-2.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		-1.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		0.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		1.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		2.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		3.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		4.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		5.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		6.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		7.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		8.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		9.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		10.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		11.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		12.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		13.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		14.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		15.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		16.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		17.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		18.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		19.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		20.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		21.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		22.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		23.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		24.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		25.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		26.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		27.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		28.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		29.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		30.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		31.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		32.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		33.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		34.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		35.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		36.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		37.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		38.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		39.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		40.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		41.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		42.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		43.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		44.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		45.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		46.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		47.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		48.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		49.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		50.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		51.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		52.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		53.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		54.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		55.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		56.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		57.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–
		58.00000	-145.00000	0.00000	0.0	0.0	0.0	–	–	–

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		59.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-145.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		38.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-144.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		17.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-143.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		-4.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-142.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by: JD	Date: 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-25.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-141.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by: JD	Date: 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-46.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		84.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-140.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		63.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-139.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		42.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-138.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		21.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-137.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-136.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.		

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		0.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		1.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		2.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		3.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		4.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		5.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		6.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		7.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		8.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		9.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		10.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		11.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		12.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		13.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		14.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		15.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		16.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		17.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		18.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		19.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		20.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		21.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		22.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		23.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		24.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		25.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		26.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		27.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		28.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		29.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		30.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		31.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		32.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		33.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		34.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		35.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		36.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		37.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		38.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		39.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		40.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		41.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		42.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		43.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		44.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		45.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		46.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		47.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		48.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		49.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		50.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		51.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		52.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		53.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		54.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		55.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		56.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		57.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		58.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		59.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		60.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		61.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		62.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		63.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		64.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		65.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		66.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		67.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		68.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		69.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		70.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		71.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		72.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		73.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		74.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		75.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		76.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		77.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		78.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		79.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		80.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		81.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		82.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		83.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		84.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		85.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		86.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		87.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		88.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		89.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		90.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		91.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		92.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		93.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		94.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		95.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		96.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		97.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		98.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		99.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		100.00000	-136.00000	0.00000	0.0	0.0	0.0	–	–	–
		-50.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-49.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-48.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-47.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-46.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-45.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-44.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-43.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-42.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-41.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-40.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-39.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-38.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-37.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-36.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-35.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-34.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-33.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-32.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-31.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-30.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-29.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-28.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-27.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-26.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-25.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-24.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-23.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-22.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.		

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-21.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-20.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-19.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-18.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-17.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-16.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-15.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-14.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-13.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-12.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-11.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-10.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-9.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-8.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-7.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-6.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-5.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-4.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-3.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-2.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-1.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		0.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		1.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		2.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		3.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		4.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		5.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		6.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		7.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		8.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		9.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		10.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		11.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		12.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		13.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		14.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		15.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		16.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		17.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		18.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		19.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		20.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		21.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		22.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		23.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		24.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		25.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		26.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		27.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		28.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		29.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		30.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		31.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		32.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		33.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		34.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		35.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		36.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		37.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		38.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		39.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		40.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		41.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		42.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		43.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		44.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		45.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		46.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		47.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		48.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		49.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		50.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		51.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		52.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		53.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		54.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		55.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		56.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		57.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		58.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		59.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		60.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		61.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		62.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		63.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		64.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		65.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		66.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		67.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		68.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		69.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		70.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		71.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		72.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		73.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		74.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		75.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		76.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		77.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		78.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		79.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		80.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		81.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		82.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		83.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		84.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		85.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		86.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		87.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		88.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		89.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		90.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		91.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		92.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		93.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		94.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		95.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		96.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		97.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		98.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		99.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		100.00000	-135.00000	0.00000	0.0	0.0	0.0	–	–	–
		-50.00000	-134.00000	0.00000	0.0	0.0	0.0	–	–	–
		-49.00000	-134.00000	0.00000	0.0	0.0	0.0	–	–	–
		-48.00000	-134.00000	0.00000	0.0	0.0	0.0	–	–	–
		-47.00000	-134.00000	0.00000	0.0	0.0	0.0	–	–	–
		-46.00000	-134.00000	0.00000	0.0	0.0	0.0	–	–	–
		-45.00000	-134.00000	0.00000	0.0	0.0	0.0	–	–	–
		-44.00000	-134.00000	0.00000	0.0	0.0	0.0	–	–	–
		-43.00000	-134.00000	0.00000	0.0	0.0	0.0	–	–	–

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-42.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		88.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-134.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No. Name	Type/No. Dist.	Coordinates x	Coordinates y	Coordinates z	Displacements x	Displacements y	Displacements z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		67.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-133.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

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(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
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Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No. Name	Type/No. Dist.	Coordinates x	Coordinates y	Coordinates z	Displacements x	Displacements y	Displacements z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		46.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-132.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		25.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-131.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		4.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-130.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-17.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-129.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-38.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.		
Made by	**Date**	**Checked**
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		92.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-128.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.		
Made by	**Date**	**Checked**
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		71.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-127.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		50.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-126.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		29.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-125.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		8.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-124.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-13.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-123.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		-34.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		96.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-122.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		75.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-121.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		54.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-120.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		33.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-119.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by JD	Date 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		12.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-118.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by: JD	Date: 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		-9.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-117.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by: JD	Date: 23-Aug-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
		-30.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		100.00000	-116.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		79.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-115.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		58.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-114.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.

Made by	Date	Checked
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		37.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-113.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.		
Made by	**Date**	**Checked**
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		16.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-112.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		

Drg. Ref.		
Made by	**Date**	**Checked**
JD	23-Aug-2016	

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-5.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-111.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-47.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by: JD	Date: 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-26.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		83.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		84.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		85.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		86.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		87.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		88.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		89.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		90.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		91.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		92.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		93.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		94.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		95.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		96.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		97.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		98.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		99.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		100.00000	-110.00000	0.00000	0.0	0.0	0.0	-	-	-
		-50.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-49.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-48.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

3-6 Spring Place, London
Combined

Job No.	Sheet No.	Rev.
J16143		
Drg. Ref.		
Made by: JD	Date: 23-Aug-2016	Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		-47.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-46.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-45.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-44.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-43.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-42.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-41.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-40.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-39.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-38.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-37.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-36.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-35.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-34.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-33.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-32.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-31.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-29.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-28.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-27.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-26.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-25.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-24.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-23.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-22.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-21.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-20.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-19.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-18.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-17.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-16.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-15.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-14.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-13.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-12.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-11.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-10.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-9.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-8.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-7.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-6.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-5.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-4.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-3.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-2.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		-1.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		0.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		1.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		2.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		3.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		4.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		5.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		6.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		7.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		8.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		9.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		10.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		11.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		12.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		13.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		14.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		15.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		16.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		17.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		18.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		19.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		20.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		21.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		22.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		23.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		24.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		25.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		26.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		27.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		28.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		29.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		30.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		31.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		32.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		33.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		34.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		35.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		36.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		37.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		38.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		39.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		40.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		41.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		42.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		43.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		44.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		45.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		46.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		47.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		48.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		49.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		50.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		51.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		52.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		53.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		54.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		55.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		56.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		57.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		58.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		59.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		60.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		61.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		62.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		63.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		64.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		65.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		66.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		67.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		68.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		69.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		70.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		71.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		72.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		73.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		74.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		75.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		76.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		77.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		78.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		79.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		80.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		81.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-
		82.00000	-109.00000	0.00000	0.0	0.0	0.0	-	-	-