British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

Site	Borehole Number
CTRL GI DATA - Entire NDATA19 data set	SA3667

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion		47.02	UR/LCE	Issue 1
	Location	**Dates**	**Engineer**	**Sheet**
	603355 E 140571 N	06/10/1994	RLE	3/4

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
19.80-20.25	D44								
20.70-21.15	U45			150 blows					
21.20-21.65	PT N=37			5,8/8,9,9,11					
21.20-21.20	D46								
21.20-21.65	D47								
22.20-22.65	U48			140 blows					
22.70-23.15	PT N=44			7,8/8,9,12,15					
22.70-22.70	D49								
22.70-23.15	D50								
23.70-24.15	U51			150 blows					
24.25-24.70	PT N=42			5,9/9,9,12,12					
24.25-24.25	D52								
24.25-24.70	D53								
25.30-25.80	B54								
25.80-26.25	PT N=43			7,8/10,11,10,12					
25.80-26.25	D55								
26.70-27.15	U56			150 blows					
27.20-27.65	PT N=43			6,7/9,9,12,13					
27.20-27.20	D57								
27.20-27.65	D58								
28.20-28.60	U59			150 blows					
28.70-29.07	PT 50/222			9,11/12,16,22					
28.70-28.70	D60								
28.70-29.07	D61								
29.40-29.85	U62			150 blows					
29.90-30.18	PT 50/130			15,10/17,33					

Remarks	Scale (approx)	Logged By
	1:50	PR
	Figure No.	

British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

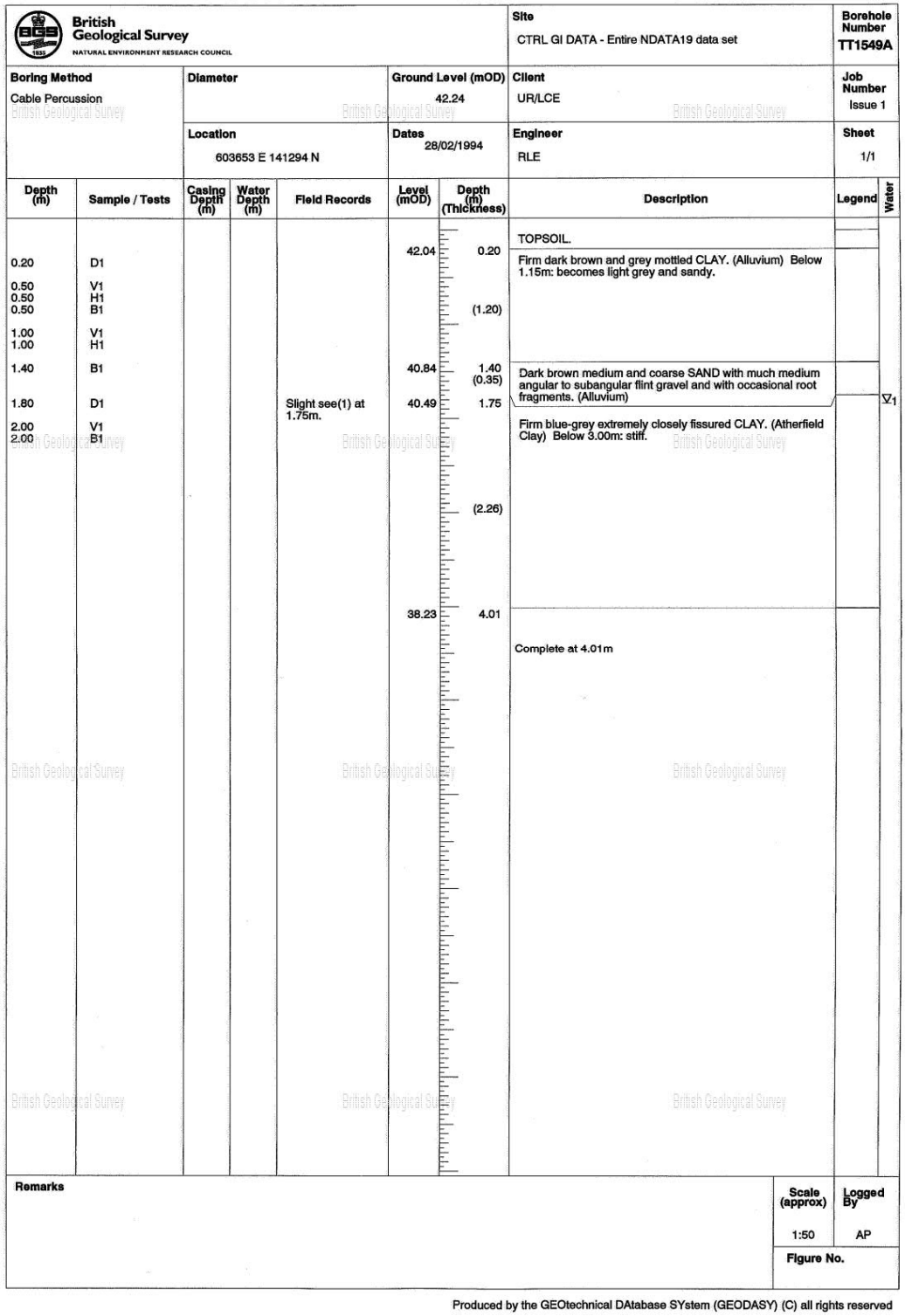
Site	Borehole Number
CTRL GI DATA - Entire NDATA19 data set	SA3667

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion		47.02	UR/LCE	Issue 1
	Location	**Dates**	**Engineer**	**Sheet**
	603355 E 140571 N	06/10/1994	RLE	4/4

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
29.90-29.90 29.90-30.15	D63 D64				16.86	(12.66) 30.16	Complete at 30.16m		

Remarks	Scale (approx)	Logged By
	1:50	PR
	Figure No.	

Figure B.13: TR04SW441



British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

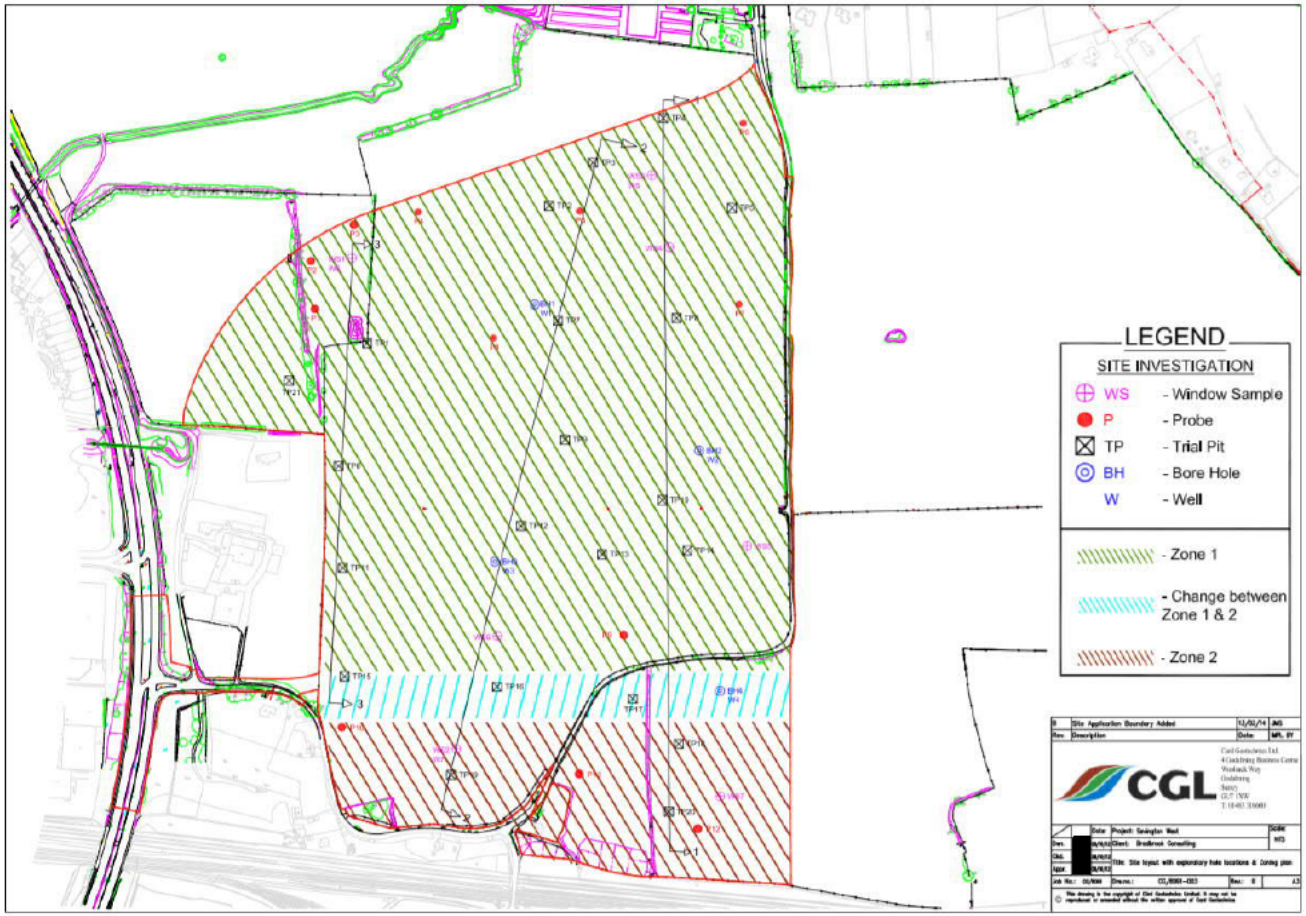
Site	Borehole Number
CTRL GI DATA - Entire NDATA19 data set	TT1549A

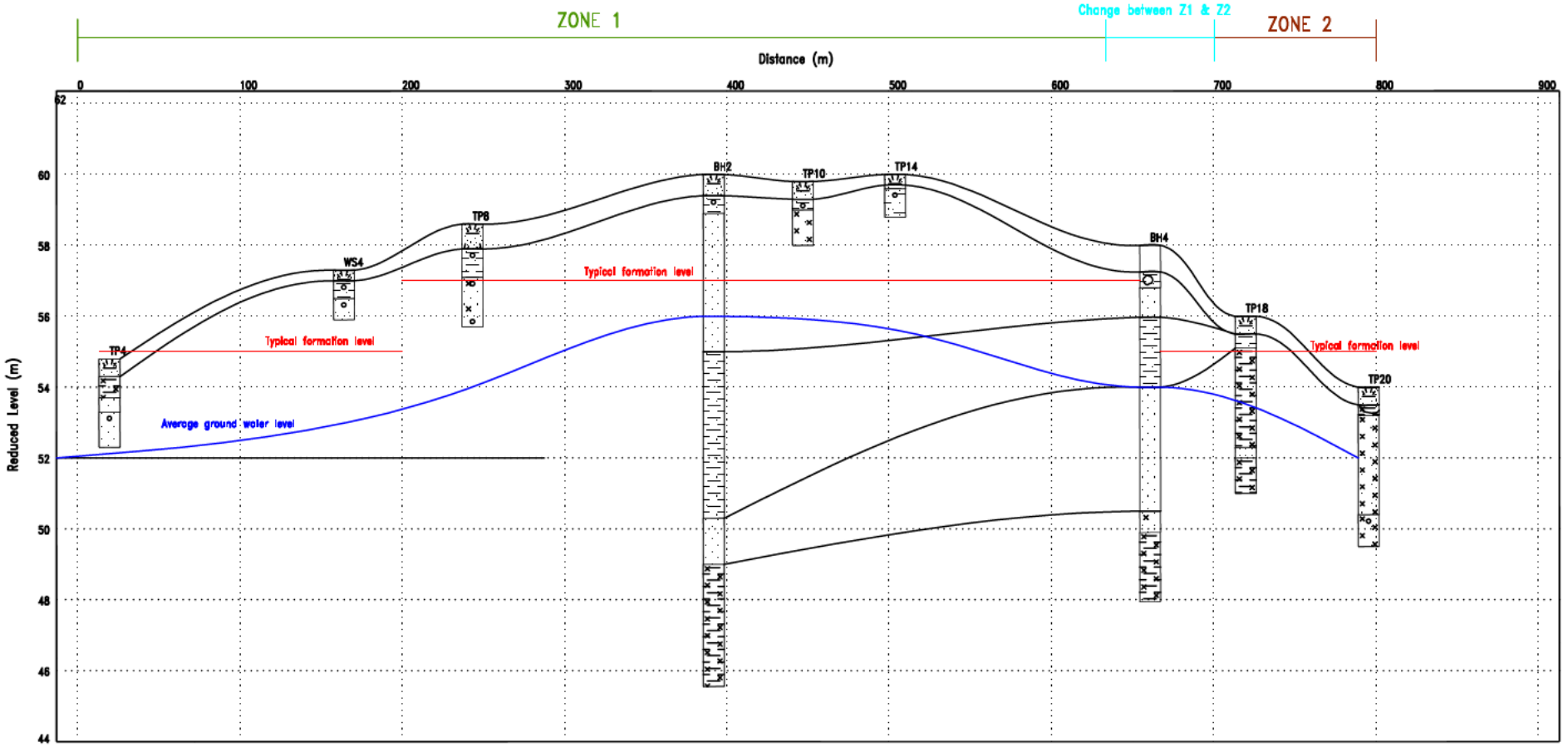
Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion		42.24	UR/LCE	Issue 1
	Location	**Dates**	**Engineer**	**Sheet**
	603653 E 141294 N	28/02/1994	RLE	1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					42.04	0.20	TOPSOIL.		
0.20	D1						Firm dark brown and grey mottled CLAY. (Alluvium) Below 1.15m: becomes light grey and sandy.		
0.50	V1								
0.50	H1								
0.50	B1					(1.20)			
1.00	V1								
1.00	H1								
1.40	B1				40.84	1.40 (0.35)	Dark brown medium and coarse SAND with much medium angular to subangular flint gravel and with occasional root fragments. (Alluvium)		
1.80	D1			Slight see(1) at 1.75m.	40.49	1.75			▽1
2.00	V1						Firm blue-grey extremely closely fissured CLAY. (Atherfield Clay) Below 3.00m: stiff.		
2.00	B1								
						(2.26)			
					38.23	4.01			
							Complete at 4.01m		

Remarks	Scale (approx)	Logged By
	1:50	AP
	Figure No.	

C. On-site Third-Party Ground Investigation (CGL 2012)





Plan position

LITHOLOGY GRAPHICS

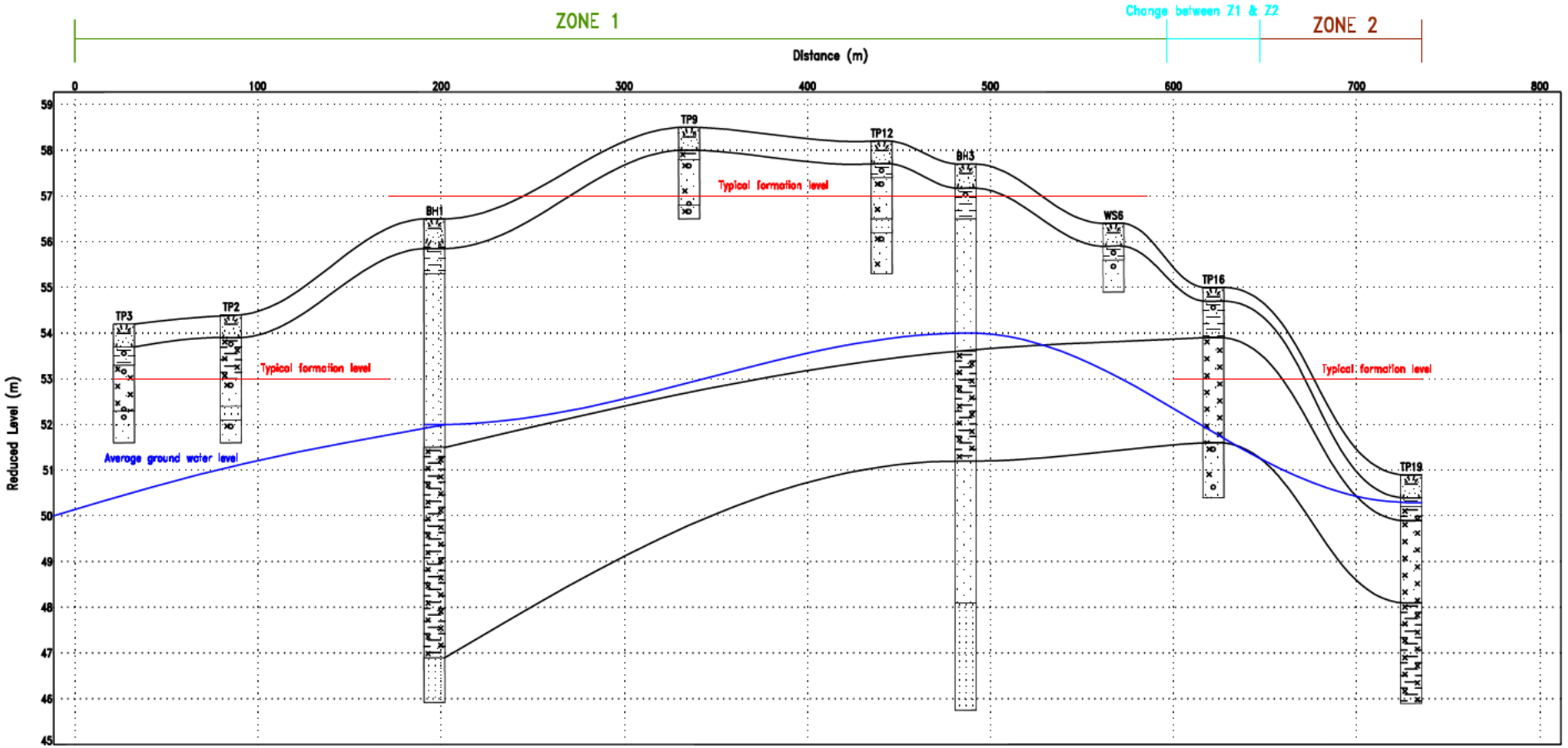
TOPSOIL	Sandy gravelly CLAY	SAND	Sandy CLAY	Silty CLAY
	Sandy cobbly CLAY	Silty SAND	Gravelly SAND	Silty gravelly SAND
Sandy SILT	Clayey gravelly SAND	SANDSTONE	Silty sandy bouldery CLAY	Sandy gravelly SILT

Formation levels based on FFL's given on proposed development plan

REV	DESCRIPTION_REV	DATE_REV	IMPL.BY
Rev.	Description	Date:	IMPL BY

Card Geotechnics Ltd.
4 Godalming Business Centre
Woolsack Way
Godalming
Surrey
GU7 1XW
T: 01483 310600

	Date:	Project: Sevington West	Scale: NTS
Drn.	28/10/15	Client: Brachbrook Consulting	
Chd.	28/10/15	Title: Ground profile: Section 1-1	
Appr.	28/10/15		
Job No.: CG/8091	Drw.no.: CG/8091-005	Rev.: A	A4



Plan position

LITHOLOGY GRAPHICS

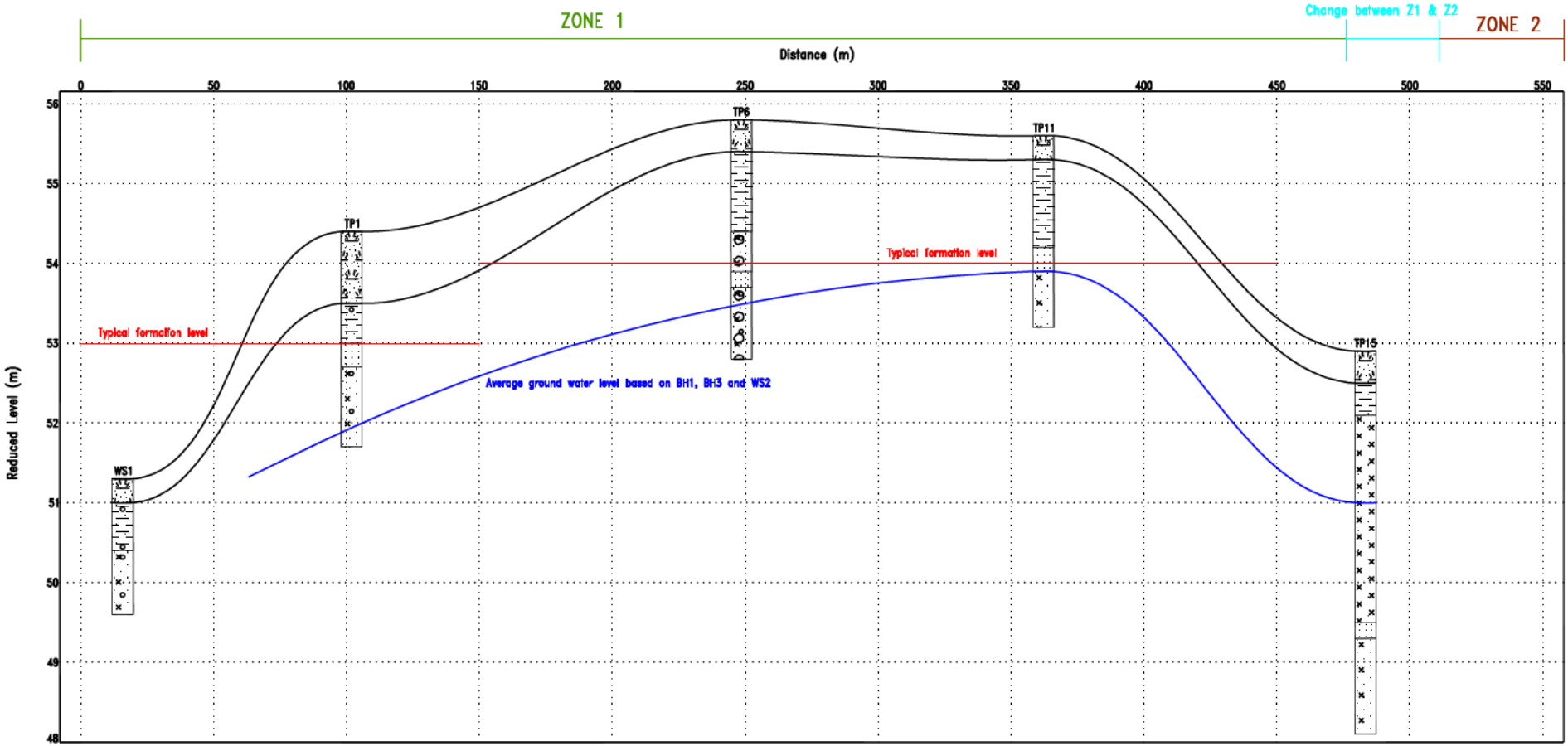
TOPSOIL	Sandy CLAY	SAND	Silty sandy CLAY	SANDSTONE
Sandy gravelly CLAY	Silty gravelly CLAY	Silty gravelly SAND	Sandy gravelly SILT	Gravelly SAND
Sandy SILT	Silty CLAY			

Formation levels based on FFL's given on proposed development plan

REV	DESCRIPTION_REV	DATE_REV	IMPL.BY
Rev.	Description	Date:	IMPL. BY

Card Geotechnics Ltd.
4 Godalming Business Centre
Woolsack Way
Godalming
Surrey
GU7 1XW
T: 01483 310600

		Date:	Project: Sevington West	Scale:
Dsn.		28/10/12	Client: Brachbrook Consulting	NTS
Chd.		28/10/12	Title: Ground profile: Section 2-2	
Appr.		28/10/12		
Job No.: CG/8091		Drw.no.: CG/8091-007	Rev.: A	A4

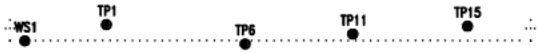


Formation levels based on FFL's given on proposed development plan

REV	DESCRIPTION_REV	DATE_REV	IMPL.BY
Rev.	Description	Date:	IMPL. BY

Card Geotechnics Ltd.
4 Godalming Business Centre
Woolsack Way
Godalming
Surrey
GU7 1XW
T: 01483 310600

Plan position

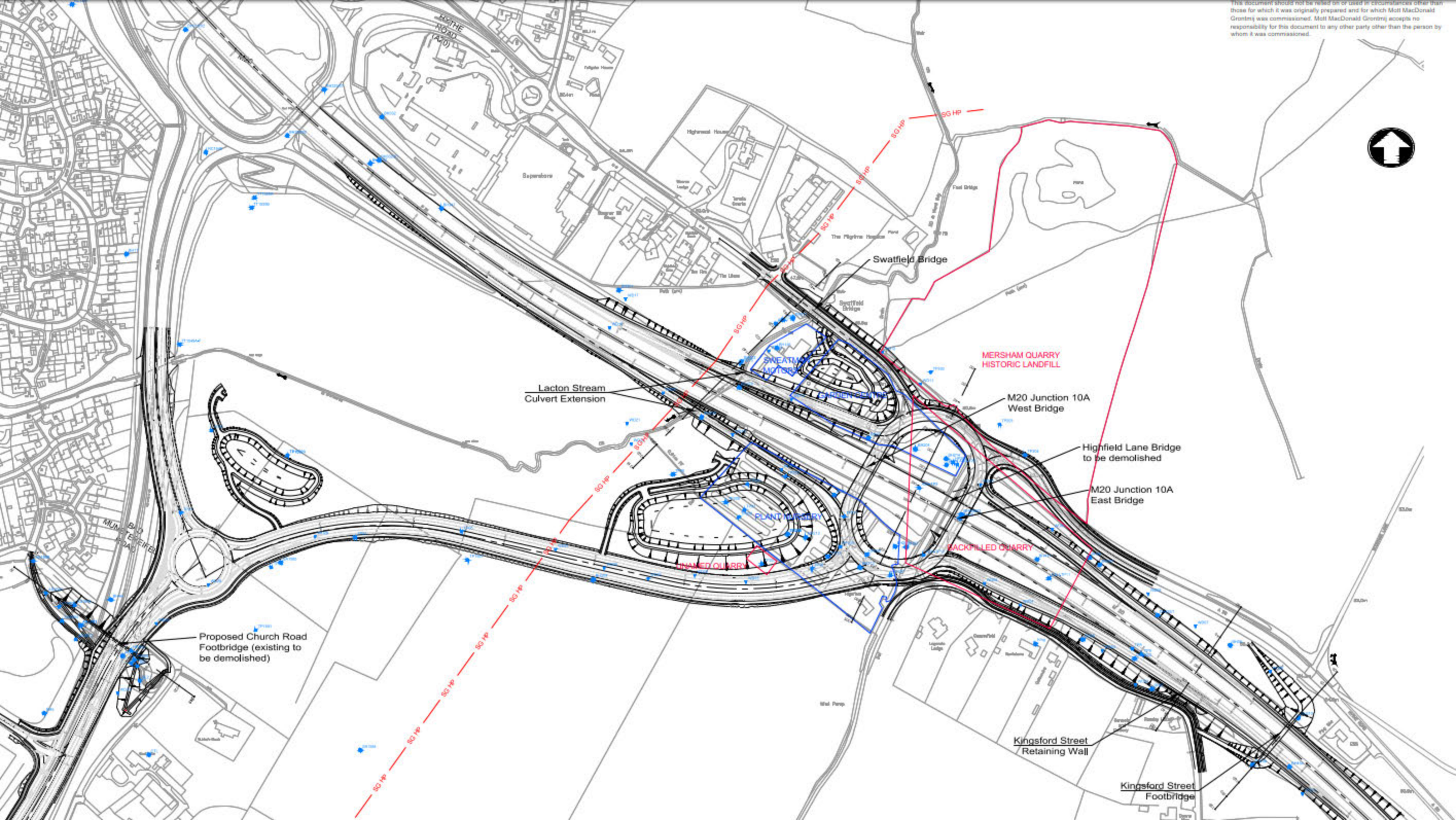


LITHOLOGY GRAPHICS

TOPSOIL
Sandy gravelly CLAY
SANDSTONE
Silty gravelly SAND
Sandy CLAY
Silty gravelly cobbly SAND
Silty SAND
Sandy SILT

		Date:	Project: Sevington West	Scale:
Dsn.		28/10/12	Client: Brachbrook Consulting	NTS
Chd.		28/10/12	Title: Ground profile: Section 3-3	
Appr.		28/10/12		
Job No.: CG/8091		Drw.no.: CG/8091-008	Rev.: A	A4

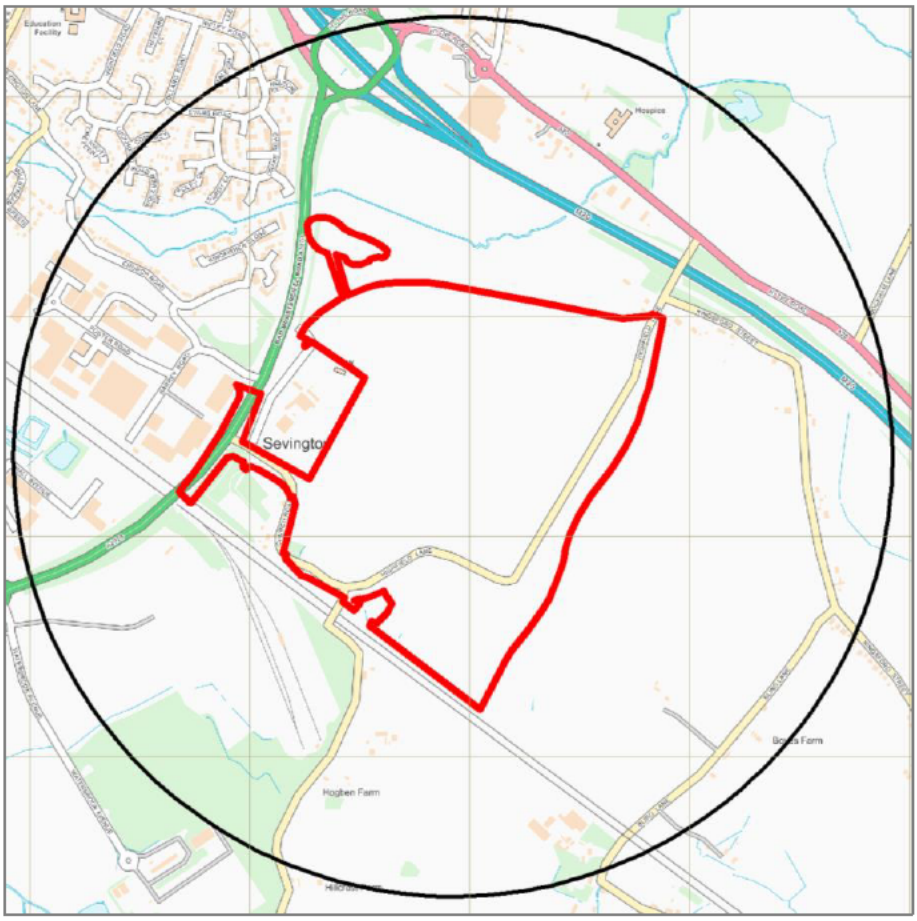
D. Off-Site Third-Party Ground Investigation (URS 2010 and Concept 2015)



E. Preliminary UXO Threat Risk Assessment

PRELIMINARY UNEXPLODED ORDNANCE (UXO) THREAT ASSESSMENT

Meeting the requirements of *CIRIA* C681 'Unexploded Ordnance (UXO) – A guide for the Construction Industry' Risk Management Framework



PROJECT NUMBER	8270	**ORIGINATOR**	[redacted]
VERSION NUMBER	1.0	**REVIEWED BY**	[redacted] (23rd June 2020)
CLIENT	Mott MacDonald	**RELEASED BY**	[redacted] (24th June 2020)
STUDY SITE	MOJO Site, TN24 0LD		
RECOMMENDATION	No further action is required to address the UXO risk at this Study Site		

alpha ASSOCIATES
special risks consultancy

6 Alpha Associates Limited, Unit 2A Woolpit Business Park, Bury St Edmunds, IP30 9UP, United Kingdom
T: +44 (0)2033 713 900 | W: www.6alpha.com

UNEXPLODED ORDNANCE THREAT ASSESSMENT

STUDY SITE

The Study Site is described as "MOJO Site, TN24 0LD", and it is centred on National Grid Reference 603962, 140682.

THREAT POTENTIAL AND RECOMMENDATIONS

The potential for a UXO hazard to occur, and more specifically, the potential for unexploded WWI and WWII ordnance to exist at this site is assessed as being UNLIKELY (*Figure 2*).

In accordance with *CIRIA* C681 Chapter 5 on managing UXO risks, *6 Alpha* concludes that **NO FURTHER ACTION** is required to address the UXO risk at this Study Site. Should you have any queries, please contact *6 Alpha*.

REPORT SUMMARY

During WWII, the Study Site was situated within *East Ashford Rural District* and *Ashford Urban District*, which recorded one and seven High Explosive (HE) bomb strikes per 100 hectares, respectively; both very low levels of bombing.

Luftwaffe aerial reconnaissance photography associated with the Study Site did not identify any primary bombing targets within 1,000m.

Neither *Air Raid Precaution* (ARP) records nor official bomb damage mapping were available. However, further research of historical records and post-war mapping did not identify any evidence of bomb strikes or bomb damage within the vicinity of the Study Site.

Further research has nonetheless identified evidence that an unexploded WWII projectile was discovered in a field off *Kingsford Street, Mersham* (approximately 585m south-east) on the 3rd November 2016, near to the site of a former Heavy Anti-Aircraft (HAA) Artillery Battery.

As there was no bombing or bomb damage recorded in the Study Site's immediate vicinity during WWII, there is no evidence to suggest that further investigation into UXO is warranted.

USING THIS REPORT

This Preliminary Assessment is designed to inform environmental and construction professionals of the potential threat of military related explosives and/or ordnance on, or in, the vicinity of the Study Site.

This assessment is designed to be employed as a site-screening tool to meet with the requirement of Phase One of the *CIRIA UXO Risk Management Framework*; there are two broad prospective outcomes; either the threat level requires a detailed threat & risk assessment; or no further action is required. In the former instance we can provide a report within 10 working days (or more quickly upon application).

Two figures accompany the report, the *Second World War* (WWII) High Explosive (HE) Bomb Density and the final Probability of UXO Encounter. The purpose of this approach is to demonstrate that whilst bomb density statistics give an indication for WWII bombing, they should not be relied upon exclusively to generate a holistic assessment.

For further information, please contact *6 Alpha*:
Website: http://www.6alpha.com
Telephone: +44 (0)2033 713 900
Email: enquiry@6alpha.com

DATA FINDINGS

Threat Source (within 1,000m)		Detail	
		Identified	Comments
	Airfields/Military Facilities	✗	None recorded within 1,000m.
	Ordnance Manufacture/Storage	✗	None recorded within 1,000m.
	WWII Decoy Bombing Sites	✗	None recorded within 1,000m.
	WWII Defensive Features	✓	An HAA Artillery Battery was located 585m south-east.
	WWII *Luftwaffe* Designated Bombing Targets	✗	*Luftwaffe* aerial photography did not identify any primary bombing targets within 1,000m.
	WWII Bomb Strikes Within Study Site Boundary	✗	ARP records were not available.
	WWII Bomb Strikes Near Study Site Boundary	✗	ARP records were not available.
	WWII Bomb Damage	✗	Official bomb damage mapping was not available.
	Abandoned Bomb Register	✗	The official abandoned bomb list did not identify any abandoned bombs located within 1,000m.
	Potential Threat Sources	✗	Further research has not uncovered any potential UXO threat sources associated with the Study Site.
	WWII Bombing Density Per 100 Hectares	✓	*East Ashford Rural District* and *Ashford Urban District* recorded one and seven HE bomb strikes per 100 hectares, respectively.

IMPORTANT NOTES

1. The term 'Preliminary UXO Threat Assessment' has been used to describe this report, to fall in line with the *CIRIA* C681 guidelines. Whilst the term 'Risk' can be justifiably used at this stage, the reader should note that the 'Consequence' function of 'Risk' is not considered. Should it be required, this would be addressed in the 'Detailed UXO Threat & Risk Assessment' (Stages 2 and 3).
2. This report is accurate and up to date at the time of writing.
3. The assessment levels have been generated from historical data and third-party sources. Where possible *6 Alpha* have sought to verify the accuracy of such data, but cannot be held accountable for inherent errors that may be in third party data sets (e.g. *National Archives* or library sources).
4. *6 Alpha* have exercised all reasonable care, skill and due diligence in producing this service.
5. Whilst every effort has been used to identify all potential UXO/explosive threats, there were a number of private facilities, which may not have released privately recorded information concerning UXO/explosive threats into the public domain. It is therefore possible that some of the aforementioned sites may not be included within the database.

BRITISH NATIONAL GRID

MOJO SITE, TN24 0LD

WWII High Explosive Bomb Density

BOMB SEARCH
WWW.6ALPHA.COM

PROJECT NO.	FIGURE	DRAWN	CHECKED	DATE			
8270	1	CC	LG	22 June 2020	Contains Ordnance Survey data © Crown copyright and database right 2017	Produced by and Copyright to 6 Alpha Associates Ltd. Users noting any errors please notify 6 Alpha.	alpha ASSOCIATES

BRITISH NATIONAL GRID

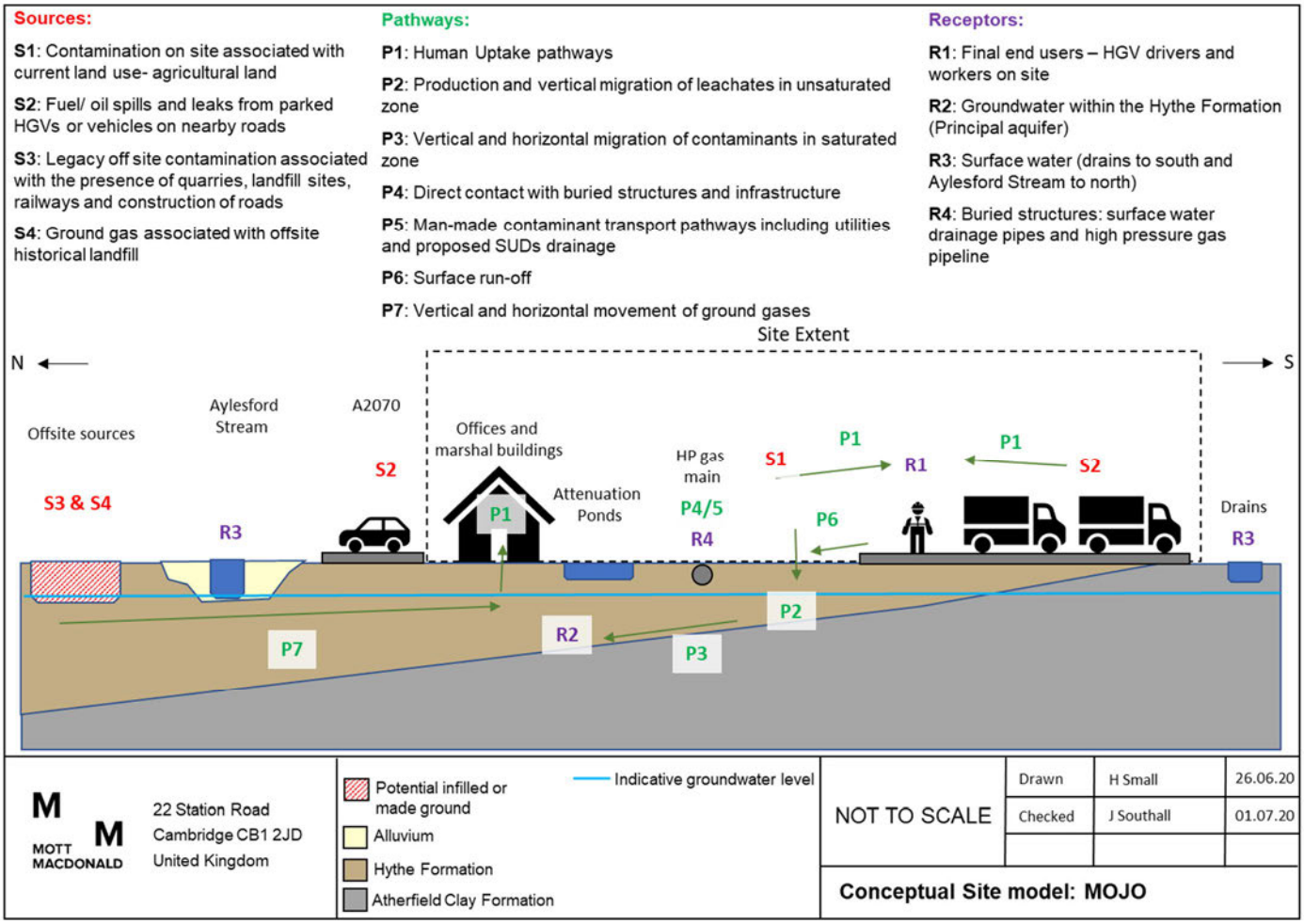
MOJO SITE, TN24 0LD

Probability of UXO Encounter

BOMB SEARCH
WWW.6ALPHA.COM

PROJECT NO.	FIGURE	DRAWN	CHECKED	DATE			
8270	2	CC	LG	22 June 2020	Contains Ordnance Survey data © Crown copyright and database right 2017	Produced by and Copyright to 6 Alpha Associates Ltd. Users noting any errors please notify 6 Alpha.	alpha ASSOCIATES

F. Conceptual Site Model



G. Qualitative Contamination Assessment

The following Contaminated Land Risk Assessment methodology is based on Construction Industry Research and Information Association (CIRIA) C552 (2001) *Contaminated Land Risk Assessment – A Guide to Good Practice*, in order to quantify potential risk via **risk estimation** and **risk evaluation**, which can be adopted at the Phase I (Desk Study) stage. This will then determine an overall risk category which can be used to identify potential investigation or remedial actions. This methodology uses qualitative descriptors and therefore is a qualitative approach based on desk information. The risk assessment should be refined following receipt of ground investigation data. The methodology requires the classification of:

- The magnitude of the **consequence** (severity) of a risk occurring
- The magnitude of the **probability** (likelihood) of a risk occurring

The potential consequences of contamination risks occurring at this Site are classified in accordance with Table G.1 below, which is adapted from the CIRIA guidance.

Table G.1: Classification of Consequence

Classification	Definition of Consequence
Severe	Short-term (acute) risks to human health likely to result in "significant harm" as defined by the Environmental Protection Act 1990, part IIA. Short-term risk of pollution of sensitive water resource. Catastrophic damage to buildings / property. A short-term risk to a particular ecosystem, or organism forming part of such an ecosystem.
Medium	Chronic damage to Human Health (significant harm as defined in DEFRA, 2012). Pollution of sensitive water resources. A significant change in a particular ecosystem, or organism forming part of such an ecosystem.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures, and services ("significant harm" as defined in the Defra, 2012). Damage to sensitive buildings / structures / services or the environment.
Minor	Harm, though not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.). Easily repairable effects of damage to buildings, structures, and services.

The probability of contamination risks occurring at this Site will be classified in accordance with Table G.2 below from the CIRIA guidance. Note that for each category, it is assumed that a pollution linkage exists. Where a pollution linkage does not exist, the likelihood is zero, as is the risk.

Table G.2: Classification of Probability

Classification	Definition of Probability
High likelihood	There is a pollutant linkage and an event that appears very likely in the short term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low likelihood	There is a pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the shorter-term.

Classification	Definition of Probability
Unlikely	There is a pollutant linkage, but circumstances are such that it is improbable that an event would occur even in the very long-term.

For each possible pollution linkage (source – pathway - receptor) identified, the potential risk can be evaluated based upon the following probability x consequence matrix shown in Table G.3.

Table G.3: Overall Contamination Risk Matrix

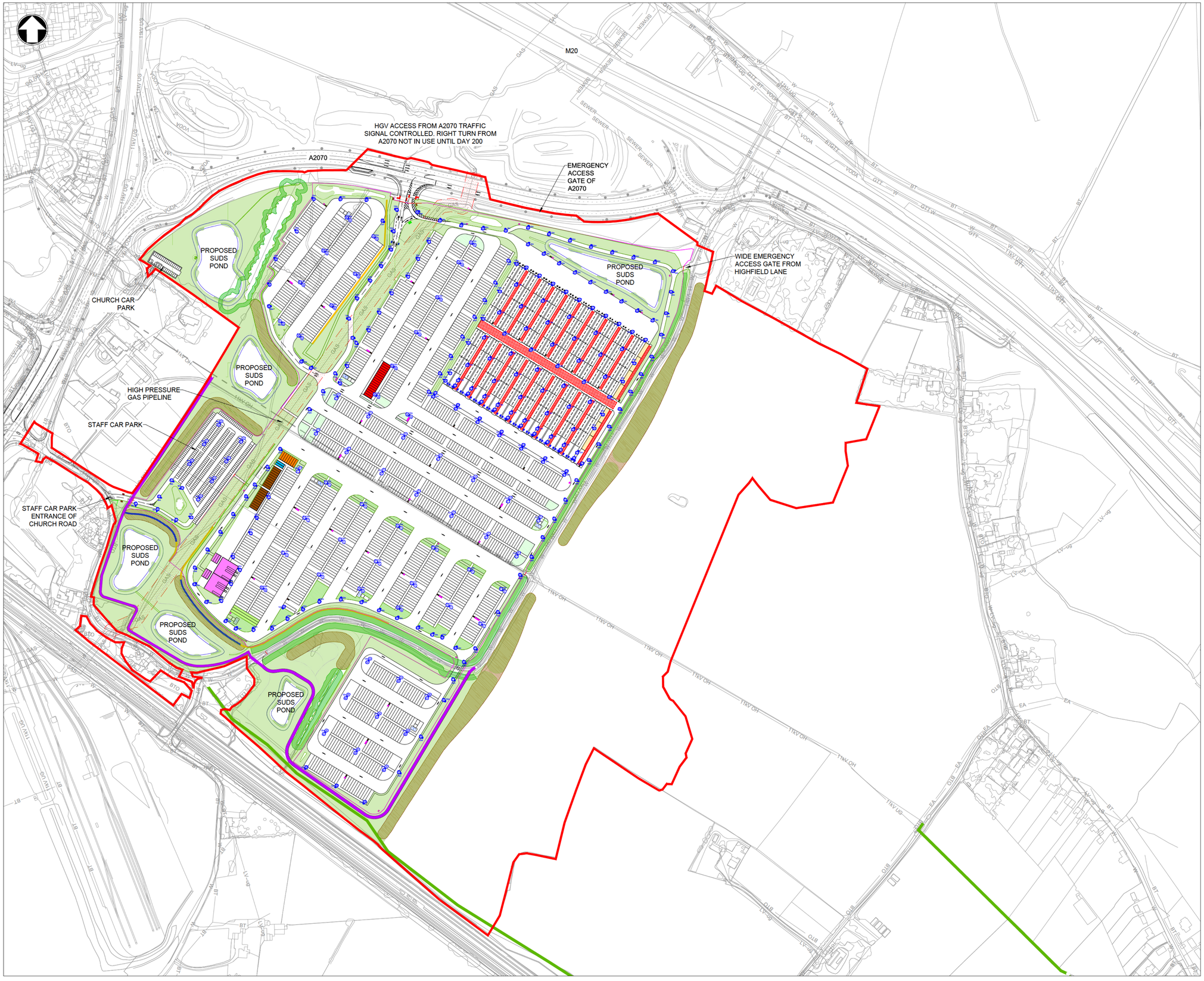
		Consequence			
		Severe	Medium	Mild	Minor
Probability	High likelihood	Very High Risk	High Risk	Moderate Risk	Moderate / Low Risk
	Likely	High Risk	Moderate Risk	Moderate / Low Risk	Low Risk
	Low likelihood	Moderate Risk	Moderate / Low risk	Low Risk	Very Low Risk
	Unlikely	Moderate / Low Risk	Low Risk	Very Low Risk	Very Low Risk

Based upon this, CIRIA C552 presents definitions of the risk categories, together with the investigatory and remedial actions that are likely to be necessary in each case, as in Table G.4. These risk categories apply to each pollutant linkage, not simply to each hazard or receptor.

Table G.4: Overall Contamination Risk Matrix

Risk Category	Definition and Likely Actions required
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability Urgent investigation (if not undertaken already) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short-term and are likely over the longer-term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, if [it] is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer-term.
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised would at worst be relatively mild.
Very Low	There is a low possibility that harm could rise to a receptor. In the event of such harm being realised it is not likely to be severe.

H. Site Drawings



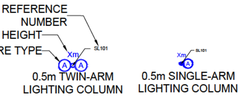
1:2500 0 125m 250m

Notes

1. DO NOT SCALE FROM THIS DRAWING
2. ALL CURRENT PROPOSALS SUBJECT TO ONGOING PLANNING PERMISSION PROCESS
3. THE MAXIMUM HEIGHT OF BUILDINGS IS 8.5M ABOVE GROUND.

KEY:

- SITE BOUNDARY
- POTENTIAL LANDSCAPING AREA
- PROPOSED BUND
- EXISTING VEGATATION LANDSCAPE BUFFER
- DFT/DVSA OFFICE BUILDING
- HMRC ACCOMMODATION BUILDING
- HMRC DRIVER WELFARE BUILDING
- HMRC MARSHALS BUILDING
- HMRC INSPECTION SHEDS (25m x 25m)
- HAZARDOUS CHEMICALS LANE
- DRIVE THROUGH BAYS FOR LARGE DRAWBAR VEHICLES
- PROPOSED LOCATION OF SPILLKIT
- PROPOSED LOCATION OF FIRE EXTINGUISHERS
- PROPOSED LOCATION OF FIRE ALARM CALL POINT
- PROPOSED FENCING (2.1m PALISADE FENCE)
- PROPOSED GATE
- PROPOSED 1.8M CHAIN LINK FENCE
- PROPOSED 3M NOISE BARRIER ON BUND
- PROPOSED 4.5M NOISE BARRIER
- PROPOSED 5M NOISE BARRIER
- PROPOSED 2.1M HIGH CLOSE BOARDED FENCE
- FIRE WATER TANKS
- PUBLIC RIGHT OF WAY DIVERSION
- EXISTING PUBLIC RIGHT OF WAY TO REMAIN
- ENTRANCE GATE CABIN
- RAISED MARSHAL BOOTHS
- MARSHAL SHELTERS
- LARGE SECURITY MARSHAL CABIN
- COLUMN REFERENCE NUMBER
- COLUMN HEIGHT
- LUMINAIRE TYPE



0.5m TWIN-ARM LIGHTING COLUMN

0.5m SINGLE-ARM LIGHTING COLUMN

PRIVATE & CONFIDENTIAL

Rev	Date	Drawn	Description	Ch'k'd	App'd
P01	12/10/20	SK	ISSUE TO STAKEHOLDERS	SM	KG
P02	16/10/20	SK	ISSUED FOR ENVIRONMENTAL CONSENT	GT	FT
P03	20/10/20	RB	KEY AMENDED	SM	KG

Status Stamp: NOT FOR CONSTRUCTION

MOTT MACDONALD
Stoneham Place
Stoneham Lane
Southampton
SO50 9NW
United Kingdom
T +44 (0)23 8062 8800
F +44 (0)23 8062 8801
W www.mottmac.com

Client
Department for Transport
Great Minster House
33 Horseferry Road
Westminster
London SW1P 4DR

Title
FUTURE EU ROADS RELATIONSHIP
SEVINGTON IBF
DAY 1 OVERVIEW PLAN DRAWING

Sheet 1 of 1

Designed	[redacted]	SM	Eng check	[redacted]	SM
Drawn	[redacted]	RB	Coordination	[redacted]	SM
Dwg check	[redacted]	RB	Approved	[redacted]	KG

MMD Project Number	Scale at A1	Security
419419	1:2500	STD

Suitability Description	Suit. Code
Suitable for Information	S2

Drawing Number	Revision
419419-MMD-01-MO-DR-C-0108	P03

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