

Cleator Moor Innovation Quarter – Unit 20A&B

INTERIM BAT ROOST ASSESSMENT REPORT

784-B034942 Rev 1

Copeland Borough Council

April 2022

Prepared on Behalf of Tetra Tech Management Services Limited .

Tetratecheurope.com



DOCUMENT CONTROL

Project:	Cleator Moor Innovation Quarter (CMIQ) Unit 20A & B
Document:	Interim Bat Roost Assessment Report
Client:	Copeland Borough Council
Job Number:	784-B034942
File Origin:	\\lds-dc-vm-101\Data\Projects\784-B034942 CBC Leconfield Phase 1 Proposed Works\60 Project Output\61 Work in Progress\Ecology\

Revision:	1	Status:	FINAL	
Date:	April 2022	2		
Prepared by:		Checked & Approved By:		
Elizebeth Wilcox		Candice Howe	MCIEEM	
-				
Description of	Description of revision: First Issue			

Revision:	Status:	Status:	
Date:			
Prepared by:	Checked by:	Approved By:	
Description of rev	/ision:		



CONTENTS

EXECUTIVE SUMMARY	
1.0 INTRODUCTION	1
1.1 Background	1
1.2 Site Description	1
1.3 Development Proposals	1
1.4 Purpose of Report	1
2.0 METHODOLOGY	3
2.1 Desk Study	3
2.2 Limitations	3
3.0 BASELINE CONDITIONS	4
3.1 Previous Reports	4
3.1.1 Desk Study	4
3.1.2 Daytime Building Inspection	4
3.1.3 Bat Emergence and Re-Entry Surveys	5
3.1.4 Bat Roost Assessment – Trees	5
4.0 RELEVANT PLANNING POLICY & LEGISLATION	6
4.1 Legislation	6
4.2 Local Biodiversity Action Plan	6
5.0 DISCUSSION	7
5.1 Bat Roost Assessment	7
5.2 BAT EMERGENCE SURVEYS	7
5.3 Enhancement	7
FIGURES	

APPENDIX A – REPORT CONDITIONS

APPENDIX B – PROPOSED PLAN (DRAWING REFERENCE: CMIQ-NOR-A20-ZZ-DR-A-90002_REV P03)

APPENDIX C – BUILDING ASSESSMENT RESULTS12



EXECUTIVE SUMMARY

Contents	Summary		
Site Location	Unit 20A&B is located in Cleator Moor and is centred at Ordnance Survey National Grid Reference NY 01791 15561. The site on the north side of Leconfield Street.		
Proposals	Unit 20A&B is proposed for refurbishment which includes recladding of walls and recladding of roof.		
Scope of this Survey(s)	 Previous reports available for the site: Tetra Tech (2021a) Cleator Moor Innovation Quarter: Bat Roost Assessment Report. On behalf of Copeland Borough Council. Ref: 784-B029668 Tetra Tech (2021b) Cleator Moor Innovation Quarter: Ecological Appraisal. On behalf of Copeland Borough Council. Ref: 784- B029668 WYG (2020) Leconfield Industrial Estate: Ecological Appraisal Report. 		
Results and Evaluation	No bat roosts were identified in Unit 20A&B in 2021, however the building is considered to provide low bat roosting suitability. A bat survey update is recommended in 2022 to update conditions.		
Recommendations	One bat box installed on the building (or suitable tree in the wider CMIQ site) will provide enhancement roosting provision for bats. The replacement lighting proposed should be placed in the same positions and LED warm lights should be used, with no UV output.		



GLOSSARY

BCT	Bat Conservation Trust		
BMCL	Bat Mitigation Class Licence		
CBC	Copeland Borough Council		
CIEEM	Chartered Institute of Ecology & Environmental Management		
EPS	European Protected Species		
EPSML	European Protected Species Mitigation Licence		
LERC	Local Ecological Record Centre		
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management		
NE	Natural England		
NERC Act	Natural Environment and Rural Communities Act 2006		
NPPF	National Planning Policy Framework		
PRF	Potential Roost Feature		



1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech was commissioned by Copeland Borough Council in April 2022 to review existing bat reports and baseline information to compile an Interim Bat Roost Assessment report for the refurbishment of Unit 20A&B. This building was subject to a detailed bat roost assessment in 2021 for the wider Cleator Moor Innovation Quarter (CMIQ) site (Tetra Tech, 2021a).

This report was prepared by Tetra Tech Consultant Ecologist Elizebeth Wilcox Qualifying CIEEM and the conditions pertinent to it are provided in Appendix A.

1.2 SITE DESCRIPTION

Unit 20A&B is located in Cleator Moor and is centred at Ordnance Survey National Grid Reference NY 01791 15561 – see Figure 1 for site location plan.

Unit 20A&B is located north-west of Leconfield Street on the wider CMIQ site and includes part of Leconfield Street access road within the site Red Line Boundary.

Industrial units are present to the north-west of Unit 20A&B with unimproved grassland and woodland habitats present to the north and bare hardstanding, unimproved grassland and scrub habitats present to the south. Cleator Moor town centre is located approximately 350m south of the site.

1.3 DEVELOPMENT PROPOSALS

Unit 20A&B is proposed to be refurbished. These proposals are shown in Appendix B (Drawing Reference: CMIQ-NOR-A20-ZZ-DR-A-90002_Rev P03) and are summarised below:

- Proposed recladding of walls;
- Proposed recladding of roof;
- Replacement PPC metal gutters and downpipes, gulleys and drain connectors adapted to suit;
- Replacement garage doors;
- Replacement windows and doors;
- Security shutters integrated into new window and door assemblies and re-cladding;
- Internal sanitary and welfare provisions;
- Repairs including:
 - Repair to low level walling both leaves of cavity wall;
 - o Allow for treatment of corrosion to exposed steel frames to canopies
 - Remove existing concrete landing to two fire exits and replace concrete flags to form level platform; and
 - Isolate and remove external lighting and replace external lighting above all external doors.

1.4 PURPOSE OF REPORT

The purpose of this report is to complete a review of existing reports / baseline information in order to undertake a bat roost assessment of Unit 20A&B red line boundary, identify impacts to roosting bats and provide appropriate recommendations and mitigation.



Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.



2.0 METHODOLOGY

2.1 DESK STUDY

Previous Reports

The following previous reports with information relating to bats have been issued to Copeland Borough Council (CBC):

- Tetra Tech (2021a) Cleator Moor Innovation Quarter: Bat Roost Assessment Report. On behalf of Copeland Borough Council. Ref: 784-B029668
- Tetra Tech (2021b) Cleator Moor Innovation Quarter: Ecological Appraisal. On behalf of Copeland Borough Council. Ref: 784-B029668
- WYG (2020) Leconfield Industrial Estate: Ecological Appraisal Report.

2.2 LIMITATIONS

Details of the 2021 report are considered to remain valid for one year (i.e. 15th September 2022) however update nocturnal surveys are recommended during the 2022 to provide an update of conditions and inform any European Protected Species Mitigation Licence (EPSML) if required (i.e. if a roost is identified). This interim report will be updated with the results of these surveys.



3.0 BASELINE CONDITIONS

3.1 PREVIOUS REPORTS

The 2021 bat roost assessment at the CMIQ (Tetra Tech (2021a)) was reviewed and is summarised below:

3.1.1 Desk Study

The desk study found records for a variety of bat species within a 2 km radius of the CMIQ site (from the past 10 years) they are displayed in Table 1

Species	No. of records	Date	Recording	Distance & Direction
Soprano pipistrelle <i>Pipistrellus</i> <i>pygmaeus</i>	1	2011	5 count	1.5 km NE
Noctule Nyctalus noctula	1	2011	1 count	1.5 km NE
Common pipistrelle Pipistrellus	2	2011	1 count	1.5 km NE
pipistrellus		2012	Count of more than 5 bats	2 km S
Unidentified bat	1	2016	Not specified	1.6 km N

Table 1: Desk study bat results (only records post 2010 are shown)

One bat EPSML was granted for the destruction of a resting site for whiskered bat *Myotis mystacinus*, Natterer's bat & Brandt's bat *Myotis brandti* in 2013, located approximately 0.8 km west of the CMIQ site.

3.1.2 Daytime Building Inspection

Unit 20A&B comprised a single-story brick building with a slight single pitch facing north (Photograph 1).



Photograph 1 – Eastern corner of Unit 20A & B on Leconfield Street

The exterior of B13 was considered to offer negligible suitability for use by roosting bats (Appendix C). However, since there was no access to the interior, it was not possibly to completely rule out likelihood of bats using the internal are of the building therefore it was upgraded to **low suitability** so that this limitation could be addressed through nocturnal survey.



No bat droppings / signs of bat occupancy were noted on the exterior of Unit 20A&B and it was considered unlikely to be suitable for use by maternity colonies or hibernating bats.

3.1.3 Bat Emergence and Re-Entry Surveys

Dusk emergence survey Unit 20A&B – 20th July 2021

During the dusk emergence survey no bats were observed emerging from Unit 20A & B.

Low levels of common pipistrelle commuting and foraging were recorded on every face of the building, with activity observed on the road to the southeast and southwest faces. Activity was also observed to the north of the building. A single noctule bat pass was recorded at 21:47 (13 minutes after sunset) and was the first bat recorded.

The first common pipistrelle was recorded northwest of the building at 21:55. A single common pipistrelle was observed north of the building at 22:02, 22:09, 22:19, 22:29, 22:26, 22:40, and 22:42. A single common pipistrelle was observed commuting north parallel to the building at 22:59. A single common pipistrelle was recorded southeast of the building at 22:29 and 22:45.

3.1.4 Bat Roost Assessment – Trees

Woodland groups in the wider CMIQ site were assessed from the ground in 2021. There are no woodland blocks on site, with woodland blocks W1 and W6 offsite adjacent to the north and eastern boundaries (Figure 2).



4.0 RELEVANT PLANNING POLICY & LEGISLATION

4.1 LEGISLATION

All British bat species are given special protection within England by their inclusion on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended) and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). As a result, it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat's roosting place (even if bats are not occupying a roost at the time);
- Possess or advertise, sell or exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

With specific reference to the offence of disturbance, Regulation 41(1) of the Conservation of Habitats and Species Regulations 2017 (as amended) states that a person commits an offence if they:

"...deliberately disturb wild animals of any such species [i.e. a European Protected Species] in such a way as to be likely significantly to affect:

- (i) the ability of any significant group of animals of that species to survive, breed, or rear or nurture their young; or
- (ii) the local distribution or abundance of that species".

Where development will result in damage to, or obstruct access to, any bat roost (whether occupied or not) or risks harming or significantly disturbing bats, a European Protected Species Mitigation Licence (EPSML) is required from Natural England to allow the development to proceed. Bats are also afforded more general protection in England (and Wales) within the Natural Environment and Rural Communities Act (NERC) 2006. This imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, "...to have due regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity" [Section 40 (1)]. It notes that "conserving biodiversity includes restoring or enhancing a population or habitat" [Section 40 (3)]. Consequently, attention should be given to dealing with the modification or development of an area if aspects of it are deemed important to bats, such as roosts, flight corridors and foraging areas. Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 habitats of principal importance and 1,150 species of principal importance.

Seven species of bats (soprano pipistrelle, brown long-eared bat, greater horseshoe bat *Rhinolophus ferrumequinum*, lesser horseshoe bat, *Rhinolophus hipposideros* barbastelle *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii* and noctule) are listed under Section 41 of the NERC Act 2006.

4.2 LOCAL BIODIVERSITY ACTION PLAN

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Cumbria Biodiversity Action Plan (CBAP) list bats (all species occurring in Cumbria) as the SPI for the county.



5.0 DISCUSSION

5.1 BAT ROOST ASSESSMENT

No evidence of bat roosting on site was recorded during the daytime bat roost assessment and external inspections.

Unit 20A & B was assessed to offer **low** roost suitability for spring/summer bats as a precaution as the building could not be fully inspected internally. Unit 20A&B is not considered to be of suitability for hibernating bats.

5.2 BAT EMERGENCE SURVEYS

No roosts were identified during the bat emergence survey on the 20th July 2021. An update survey is recommended in the 2022 survey season to update conditions on site.

Sensitive Lighting

Low numbers of two species of bats were recorded using the site or adjacent habitats during the emergence surveys, with common pipistrelle activity to the north associated with W2 and W6. W2 and W6 will not be directly impacted by the proposals, however may be indirectly impacted through artificial light spill. Commuting and foraging bats are sensitive to light spill and light pollution.

Replacement of existing lighting is included in the current proposals; therefore, no additional light spill is anticipated. Lights should be replaced in the same positions and LED warm lights should be used, which have no UV output, therefore attracting fewer insects with warmer colours reducing impacts on bats (Stone 2012, 2015a, and 2015b; and ILP, 2018).

5.3 ENHANCEMENT

There is an opportunity to increase the bat roosting provisions on site in accordance with the National Planning Policy Framework (NPPF) in order to 'minimise impacts on biodiversity and provide net gains in biodiversity where possible.

It is recommended that a bat box (Schwegler 1FF or similar) is installed on the refurbished building (or suitable retained trees within the wider CMIQ site) as enhancement for roosting bats.



REFERENCES

- Collins, J. (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd Edition, The Bat Conservation Trust. London.
- English Nature (2004). Mitchell-Jones, A.J. Bat Mitigation Guidelines, Version January 2004.
- ILP (2018) Bats and artificial lighting in the UK, Guidance Note 08 / 18.
- Stone, E.L., Jones, G., Harris, S. (2012). Conserving energy at a cost to biodiversity? Impacts of LED lighting on bats. Glob. Change Biol. 18, 2458–2465.
- Stone, E.L., Harris, S., Jones, G. (2015a). Impacts of artificial lighting on bats: A review of challenges and solutions. Mammal. Biol. 80, 213-219.
- Stone, E.L., Wakefield, A., Harris, S., Jones, G. (2015b). The impacts of new street light technologies: experimentally testing the effects on bats of changing from low-pressure sodium to white metal halide. Philos. T. R. Soc. B. 370, 20140127
- Tetratech (2021a) Cleator Moor Innovation Quarter: Bat Roost Assessment. On behalf of Copeland Borough Council. Ref: 784-B029668
- Tetratech (2021b) Cleator Moor Innovation Quarter: Ecological Appraisal. On behalf of Copeland Borough Council. Ref: 784-B029668
- WYG (2020) Leconfield Industrial Estate: Ecological Appraisal Report. On behalf of Copeland Borough Council. Ref: A114312

FIGURES

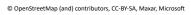
Figure 1 – Site Location Plan

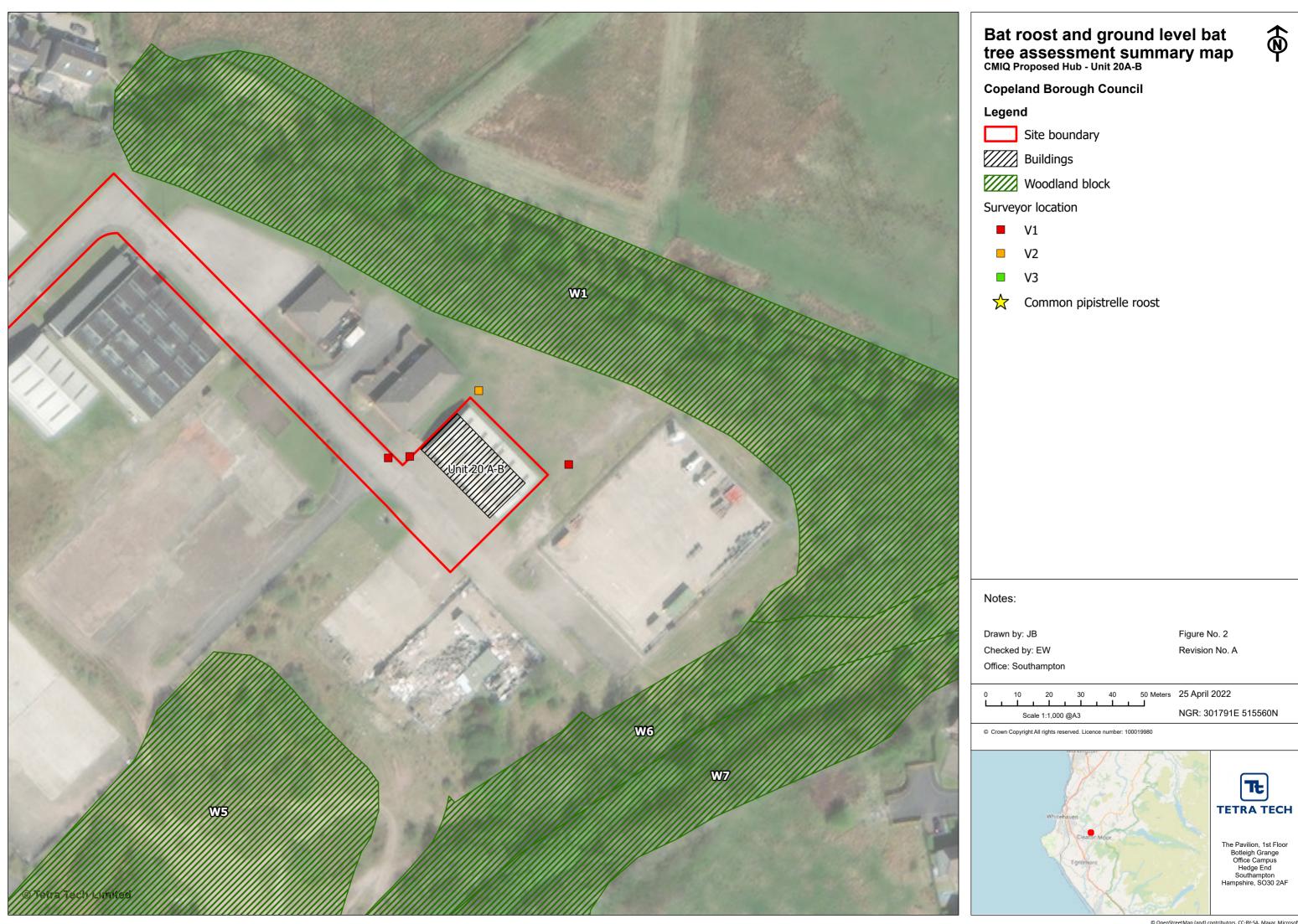
Figure 2 – Bat roost and ground level bat tree assessment summary map











© OpenStreetMap (and) contributors, CC-BY-SA, Maxar, Microsof



APPENDIX A – REPORT CONDITIONS

This Report has been prepared using reasonable skill and care for the sole benefit of Copeland Borough Council ("the Client") for the proposed uses stated in the report by Tetra Tech Management Services Limited ("Tetra Tech"). Tetra Tech exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

No liability is accepted, or warranty given for; unconfirmed data, third party documents and information supplied to Tetra Tech or for the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report. Tetra Tech does not purport to provide specialist legal, tax or accounting advice.

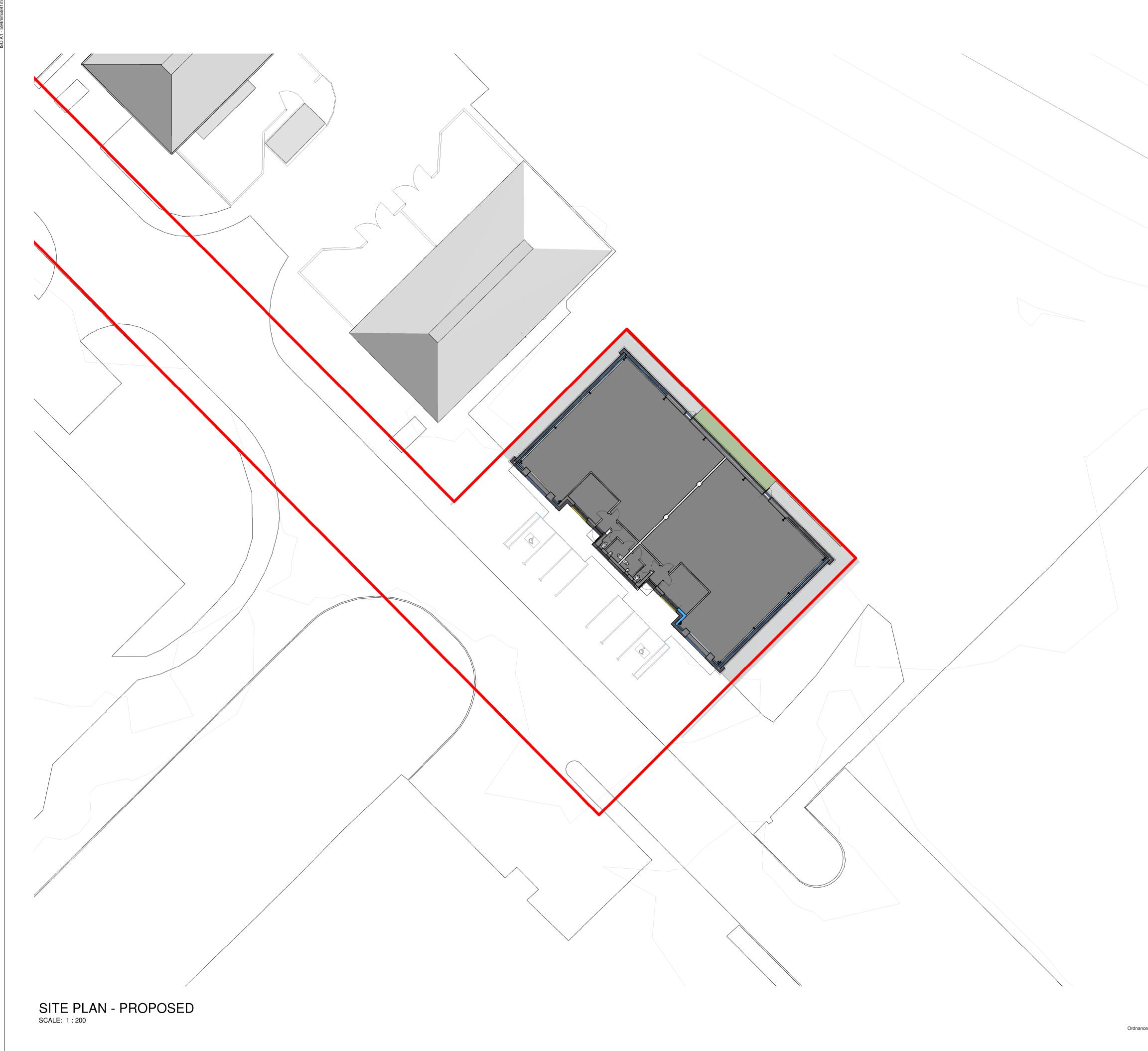
The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections. Environmental conditions can vary, and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of the Report will be determined by a number of factors including; its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.



APPENDIX B – PROPOSED PLAN (DRAWING REFERENCE: CMIQ-NOR-A20-ZZ-DR-A-90002_REV P03)



						1
		DATE 30-03-22	REVISION	REV P01	DR AM	CH SM
		01-04-22 20-04-22	LANDSCAPE REVISION RED LINE AMENDMENT AND REMOVAL	P01 P02 P03	JS JS	DK DK
			OF RAMP			
		THIS DRAW	NG IS SUBJECT TO FULL VERIFICATION BY MEAS		ND	
		EASEMENTS UTILITIES, T	AL SURVEY, ENGINEERING DESIGN, CONFIRMATI 3 AND COVENANTS, FLOOD RISK ASSESMENT, SE OPOGRAPHICAL SURVEY, ECOLOGY ASSESMEN	ON OF B RVICES T, CONT	OUNDAF AND AMINATIO	ON
		THESE ADD	F, PLANNING / BUILDING CONTROL AND HIGHWA' ITIONAL REQUIREMENTS ARE NOT EXAUSTIVE. TE SITE INFORMATION WAS SUPPLIED BY COPEL	AND BOI	ROUGH	
		COUNCIL AN THE ACCUR	ND ORDINANCE SURVEY. NORR IN NO WAY ACCE ACY OF THIS INFORMATION OR THAT SUPPLIED	PTS LIAE BY THIRE	BILITY FO	ES.
		AND ASSOC	ING IS SUBJECT TO FULL CONSULTATION WITH S IATED CONSENTS. ESIGN DEVELOPMENT YET TO TAKE PLACE THAT	MAY AFI	ECT	
		REPORTED DRAWINGS TO BE MADE	AREAS, UNIT NUMBERS AND DRAWINGS, AND TH SHOULD BE TREATED AS APPROXIMATE, THEREI E ON THE BASIS OF THESE PREDICTIONS, WHETH RE-LETTING, LEASE ARRANGEMENTS, INTERNAL	IEREFOF FORE AN HER AS T	E THES	SION
		FURNITURE ALLOWANC DESIGN DE	/EQUIPMENT ARRANGEMENT OR THE LIKE SHOU E FOR THE POSSIBLE INCREASE OR DECREASE I /ELOPMENT AND BUILDING PROCESSES. ALL ARI	LD INCLU NHEREN EAS ARE	T IN THE THERE	
		GIVEN AS AI	PPROXIMATE ONLY AND SUBJECT TO DESIGN DE PANCIES ON THESE DRAWINGS ARE TO BE HIGH IMMEDIATELY. DO NOT SCALE FROM THESE DRA	EVELOPM HLIGHTEI	ENT. D TO TH	E
		PLEASE REC	QUEST CLARIFICATION.			
		COPE	awing has been prepared solely LAND BOROUGH COUNCIL and	d there	e use e are	of no
		Consu	entations of any kind made by NC Itants Limited to any party with with Itanta Limited bas not entered into	hom N	IORR	} •
		This dr	Itants Limited has not entered into awing must not be used, reprodu			ť.
		revised	without written permission.			
		purpos	awing shall not be used for const es until a "Ax - APPROVED FOF	tructio	n GE x'	,
			appears in the Sheet Status.	dire	_ 1-	
		which a	uctors must only work to figured on are to be checked on site. Do not			
		nard co	opy drawings.			
		Keyplar				
		~~		X		Ave.
		A Stat				
					~¥	
				S.		
					X	\geq
		~~~///				
			North			
			JORR			
			RR Consultants Limite	ed		
		-	ngenium International Company	<b>.</b>		
		Perc	y House, 8th Floor Percy Street, castle NE1 4PW			
			and, UK			
		Drawn	Date			
		AM	23.03.22			
		Checke CP	d Date 23.03.22			
		Scale	s indicated @ A1			
		Client				
			ELAND BOROUGH CC	OUN	CIL	
		Project			J	
			RTER - PLOT 20		•	
		Drawing	g Title			
			- PROPOSED PLAN			
	′ /	Sheet S	Status			
			FOR REVIEW			
		Project				
e Survey © Crown Copyright 2021. All rights reserved. Licence n		Drawing	IANC21-0043			Rev.
0 1 2 4 6	6 10 m	-	2-NOR-A20- ZZ-DR-A-9	9000		203



# **APPENDIX C – BUILDING ASSESSMENT RESULTS**

Building Reference	Roosting Features / Description	Photo
B13	Occasional gaps within the steel wall / roof overlaps. <b>Negligible suitability.</b>	