

10 November 2021

FAO Jenny Evans
London Borough of Hillingdon
Civic Centre
High Street
Uxbridge
Middlesex
UB8 1UW

Our ref: CGK/00150

Please reply to: emmat@cgl-uk.com

Dear Sirs,

CGK/00150 – Otterfield Road – Preliminary Risk Assessment Addendum Letter

During early 2014, CET Infrastructure (CET) issued tiered risk assessment reports following CLR11 to Frankhams Consultancy Ltd, who were acting on behalf of The London Borough of Hillingdon. The reports considered a site in West Drayton proposed to be developed for mixed leisure, commercial and residential end use. The proposed development was not completed and in October 2021, The London Borough of Hillingdon instructed CGL to provide works to update the reports previously compiled by CET Infrastructure. The objective of this letter report is to provide an addendum to the existing PRA delivering information relevant to land condition at the site between completion of the CET Infrastructure 2014 report and the date above, whilst considering a refreshed development proposal that comprises a public library and residential units with associated parking.

Introduction and Background

The study site comprised a triangular shaped plot of land situated to the west of Otterfield Road, West Drayton UB7 8PE. The site is centred on National Grid Reference TQ 062 807 and occupies an approximate area of 0.3Ha.

A Phase I Preliminary Risk Assessment (PRA) and Phase II Generic Risk Assessment (GRA) report relating to the site at Otterfield Road, West Drayton were issued by CET to Frankham Consultancy Group Ltd in 2014. The aim of this report is to provide an addendum to this report, referring to a site walkover visit alongside maps and photographs of the site and the surrounding area published since 2014.

Since the initial PRA, the proposed site plans have changed. In the 2014 PRA the redevelopment involved the construction of residential housing, healthcare and leisure facilities, whilst the new development plans involve the construction of a library, residential housing, a playground, parking spaces and various gardens with soft and hard landscaping features, as shown in Appendix A.

Summary of Phase I Preliminary Risk Assessment (PRA) issued in 2014

The site is mapped as being underlain by the London Clay Formation with superficial deposits of the Lynch Hill Gravel Member. On-site risks identified in the PRA included Made Ground, associated with a historical backfilled swimming pool and redevelopment as well as historical commercial activities including rubber/plastic manufacturing and a historical sub-station. Potential contaminants identified included metals, PAHs, asbestos, phenols, PCBs, VOCs and ground gases.

The risk via direct contact and ingestion was deemed to be moderate to future site users, construction workers and buried services, with the greatest risk of exposure in proposed gardens and soft landscaped areas associated with proposed residential properties. The risk from ground gases was deemed low to future site users as the hazard was thought to be applicable only if the material used to backfill the swimming pool contained significant levels of organic matter.

Necessary protection measures mentioned in the PRA included appropriate PPE, dust suppression and health and hygiene measures in place to mitigate the risk from dust and ingestion of any contaminants.

Summary of Phase II Generic Risk Assessment (GRA) issued in 2014

An intrusive investigation in 2014 comprised eight shallow hand excavated trial pits to depths of up to 1.2m below ground level (bgl) and three cable percussion boreholes to 25m bgl. Made Ground was proved to a maximum depth of 1.7m bgl, which was underlain by superficial deposits of Lynch Hill Gravel Member then the London Clay Formation.

The GRA report concluded that elevated concentrations of arsenic and three PAH compounds were recorded when the laboratory results of Made Ground samples were compared against the 'residential with plant uptake' generic assessment criteria. The GRA recommended that remedial works should take place before the site would be suitable for residential use.

It was judged that there was a negligible ground gas risk on the site due to the low total organic carbon (TOC) of the Made Ground and backfill materials were noted to comprise site-won demolition rubble.

Walkover Survey – October 2021

The site description provided below is based on a site walkover undertaken by a CGL Environmental Scientist on 22nd October 2021. Photographs from the site walkover are included in Appendix A.

The site comprised a fenced-off triangular shaped plot of disused land surfaced with areas of asphalt to the south alongside concrete and grass areas across the site. Uneven ground was noted across the site with short tree stumps present across the entire site. The site was bound by residential gardens to the east, a road and public car park to the south with recreation areas to the west. There was evidence that the general public had been accessing the area with a range of rubbish noted across the site, including gas canisters, bottles, cans, plastic bags, chairs and fly tipped household electronics.

A stockpile of fresh woodchips was noted in the south west corner of the site on an area of asphalt hardstanding. It is understood this material was placed there following the management and cut-back of trees and vegetation on the site in August/September 2021.

Historical Maps

Extracts of the aerial photographs taken from Google Earth between 2014 and 2021 are presented as Plate 1a to Plate 1f.

Plate 1a. 2014 Google Earth Extract



Plate 1b. 2015 Google Earth Extract



Plate 1c. 2017 Google Earth Extract



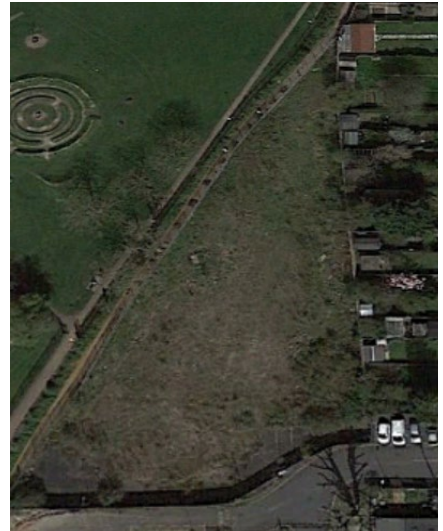
Plate 1d. 2019 Google Earth Extract



Plate 1e. 2020 Google Earth Extract



Plate 1f. 2021 Google Earth Extract



Plates 1a to 1f show limited changes in the site since 2014. Vegetation growth on the site can be observed.

Conclusions

From the walkover survey, aerial photographs and comparison of the site description and photographs from the GRA report issued by CET in 2014, it is judged that the contamination risk on the site has not changed significantly. The risk from inhalation, ingestion and direct contact of contaminants to future site users, construction workers and buried services is judged to be moderate due to the proposed development plan including highly sensitive soft landscaping and garden areas.

Recommendations

Due to the contamination noted in the previously issued GRA by CET and the proposed changes to the redevelopment since 2014, further intrusive investigations should be carried out in the newly proposed soft landscaping and garden areas to assess the human health risk and compare the necessary Suitable for Use Levels (S4UL) for 'residential with plant uptake'. If exceedances against this criteria are noted, a remediation strategy will need to be formulated.

We trust that the above is of assistance and that you will not hesitate to contact us should you have any queries.

Yours sincerely

A handwritten signature in grey ink that reads 'E. Tyson'.

Emma Tyson

Card Geotechnics Limited

- Appendix A – Proposed Development Plan
- Appendix B – Walkover Survey Photographs



01 Proposed Site Plan
1:200

PARKING SCHEDULE				
	Fairfield Public Car Park	Car Parking on site	Total	Cycle Parking
Ground				
TOTAL:	20	35	55	88

6 spaces are disabled parking bays

REFUSE AND RECYCLING STRATEGY			
	Total Units	Projected Weekly Waste per household	Waste Produced from all households
1 Bed	24	100 Litres	24 x 100 = 2400 Litres
2 Bed	13	170 Litres	13 x 170 = 2210 Litres
3 Bed	13	240 Litres	13 x 240 = 3120 Litres
TOTAL WEEKLY WASTE ARISING:			7730 Litres
No. of bins required = 7730 Litres / 1100 Litres = 7 x 1100 Litre Bins As per Hillingdon 'Guidance for Waste and Recycling Storage and Collection'			

Shared Amenity Space		Unit Mix	
Level	Area	Unit Type	Count
00 Ground Floor	170.9 m²		20
03 Third Floor FFL	212.5 m²	1Bed Wheelchair	4
04 Fourth Floor FFL	91 m²		13
Grand total	474.4 m²		
		3Bed	12
		3Bed Wheelchair	1
Grand total:	50		



EXISTING SITE LOCATION PLAN 1:1250

Area Schedule (80 GIA)			
Level	Number	Unit Type	Area
00 Ground Floor	06	1Bed Wheelchair	65.2 m²
00 Ground Floor	05	1Bed Wheelchair	69.4 m²
00 Ground Floor	04	1Bed Wheelchair	69.6 m²
00 Ground Floor	03	1Bed Wheelchair	65.8 m²
1Bed Wheelchair: 4			270 m²
00 Ground Floor	02	2Bed	65.6 m²
00 Ground Floor	01	2Bed	65.2 m²
2Bed: 2			131 m²
00 Ground Floor: 6			401 m²
01 First Floor Plan	08	1Bed	50.2 m²
01 First Floor Plan	09	1Bed	50.1 m²
01 First Floor Plan	11	1Bed	51.1 m²
01 First Floor Plan	18	1Bed	54.2 m²
01 First Floor Plan	15	1Bed	54.3 m²
01 First Floor Plan	12	1Bed	51.7 m²
1Bed: 5			311.6 m²
01 First Floor Plan	19	2Bed	65 m²
01 First Floor Plan	14	2Bed	65.1 m²
01 First Floor Plan	13	2Bed	65.1 m²
01 First Floor Plan	16	2Bed	63.6 m²
01 First Floor Plan	17	2Bed	63.7 m²
2Bed: 5			322.6 m²
01 First Floor Plan	10	3Bed	100.5 m²
3Bed: 1			100.5 m²
01 First Floor Plan	07	3Bed Wheelchair	114.6 m²
3Bed Wheelchair: 1			114.6 m²
01 First Floor Plan: 13			849.4 m²
02 Second Floor FFL	27	1Bed	54.3 m²
02 Second Floor FFL	30	1Bed	54.2 m²
02 Second Floor FFL	24	1Bed	51.1 m²
02 Second Floor FFL	21	1Bed	50.2 m²
02 Second Floor FFL	22	1Bed	50 m²
1Bed: 5			259.8 m²
02 Second Floor FFL	31	2Bed	65.1 m²
02 Second Floor FFL	29	2Bed	63.7 m²
02 Second Floor FFL	28	2Bed	63.6 m²
2Bed: 3			192.5 m²
02 Second Floor FFL	20	3Bed	114.6 m²
02 Second Floor FFL	23	3Bed	100.5 m²
02 Second Floor FFL	25	3Bed	103.5 m²
02 Second Floor FFL	26	3Bed	84.9 m²
3Bed: 4			413.6 m²
02 Second Floor FFL: 12			865.9 m²
03 Third Floor FFL	40	1Bed	54.2 m²
03 Third Floor FFL	38	1Bed	54.3 m²
03 Third Floor FFL	37	1Bed	50.7 m²
03 Third Floor FFL	36	1Bed	51.1 m²
03 Third Floor FFL	34	1Bed	50.1 m²
03 Third Floor FFL	33	1Bed	50.2 m²
1Bed: 6			310.7 m²
03 Third Floor FFL	39	3Bed	87.4 m²
03 Third Floor FFL	35	3Bed	100.5 m²
03 Third Floor FFL	32	3Bed	114.7 m²
3Bed: 3			302.6 m²
03 Third Floor FFL: 9			613.3 m²
04 Fourth Floor FFL	44	1Bed	51.1 m²
04 Fourth Floor FFL	41	1Bed	50.1 m²
04 Fourth Floor FFL	42	1Bed	50 m²
1Bed: 3			151.2 m²
04 Fourth Floor FFL	45	2Bed	64 m²
04 Fourth Floor FFL	46	2Bed	63.2 m²
04 Fourth Floor FFL	47	2Bed	63.1 m²
2Bed: 3			190.3 m²
04 Fourth Floor FFL	43	3Bed	100.5 m²
3Bed: 1			100.5 m²
04 Fourth Floor FFL: 7			442.1 m²
05 Fifth Floor FFL	50	3Bed	75.9 m²
05 Fifth Floor FFL	48	3Bed	80.6 m²
05 Fifth Floor FFL	49	3Bed	83 m²
3Bed: 3			249.5 m²
05 Fifth Floor FFL: 3			249.5 m²
Grand total:	50		3421.1 m²

Private Amenity Space			Private Amenity Space		
Level	Name	Area	Level	Name	Area
00 Ground Floor	1Bed Wheelchair	105.8 m²	03 Third Floor FFL		90.2 m²
00 Ground Floor	2Bed	63.2 m²	03 Third Floor FFL	1Bed	42.4 m²
00 Ground Floor	3Bed	169 m²	03 Third Floor FFL	3Bed	47.1 m²
01 First Floor Plan	1Bed	53 m²	04 Fourth Floor FFL		89.5 m²
01 First Floor Plan	2Bed	29.9 m²	04 Fourth Floor FFL	1Bed	35 m²
01 First Floor Plan	3Bed	5.8 m²	04 Fourth Floor FFL	2Bed	30.7 m²
01 First Floor Plan	3Bed Wheelchair	6.4 m²	04 Fourth Floor FFL	3Bed	6.4 m²
		95.2 m²	05 Fifth Floor FFL		72.1 m²
02 Second Floor FFL			05 Fifth Floor FFL	3Bed	97.2 m²
02 Second Floor FFL	1Bed	36.7 m²	05 Fifth Floor FFL		97.2 m²
02 Second Floor FFL	2Bed	18.8 m²	Grand total		613.1 m²
02 Second Floor FFL	3Bed	34.7 m²			

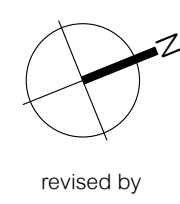
- Application Site boundary (to be checked and verified by the client before any site works commence)
- Line of building above
- 300mm dwarf brick wall with 1800mm railings, primed and painted black
- 1800mm railings, primed and painted black
- 2400mm ht and miss timber fence
- Existing CAT A, B & C trees to be retained with root protection zone
- Proposed new bushes
- Proposed new trees
- Mown Grass
- Wild Flower - seeded meadow grass
- New mixed low level shrub planting (no thorn or poisonous species)
- 800mm Mixed Evergreen Species Hedge (no thorn or poisonous species)
- Residential Patio Terrace and Footpaths - Marshalls Concrete paving 450x450. Colour buff
- Library Footpath - Marshalls Paving smooth surface with concrete edgings. Colour: Stonespars Dava Blend
- Car park - Tarmac Surface. Colour beige
- Footpaths: Macadam Path with concrete edgings. Colour: Buff
- Parking Bays - Herringbone block permeable paving. Colour bracken

0 1m 5m 10m 20m
Scale: 1:200

drawing title:
M9534- APL202

**YIEWSLEY FORMER POOL SITE
PROPOSED SITE PLAN**

Issued for **PLANNING**



revised by

Yiewsley Housing and Library Sites
Space One, Hammersmith,
London, W6 0EA

hunters project number: M9534 client project number: - drawn by: GV checked by: JW scale: 1:200 @ A0

All drawings are to be printed in colour.
Use figured dimensions only. All levels and dimensions to be checked on site. This drawing is to be read in conjunction with all other relevant drawings and specifications. Hunters is a trading name of Hunter & Partners Limited. © Hunter & Partners Limited. All rights reserved.
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mail@hunters.co.uk
www.hunters.co.uk

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model ref: C:\Revit Local\M9534-Otterfield Road_Central File.dwg v14csoa.nl

Revision History

PHOTO SHEET – OTTERFIELD ROAD



Photograph 1 – Facing the southern boundary of the site



Photograph 2 – Photograph showing ground conditions in central area of the site



Photograph 3 – Eastern site boundary




Photograph 4 – Eastern site boundary



Photograph 5 – Refuse in south east corner of the site



Photograph 6 – Facing north of the site

Client	Project		Job No
London Borough of Hillingdon	Otterfield Road		CGK00150
	Title		Page 1 of 1
	Photographic Plates		