

TFL_PSF_9131 SITE INVESTIGATIONS: SMALL SITES INITIATIVE LAND AT PALMERSTON CRESCENT AND BOWES ROAD, N13 4NH

Summary Report

FEBRUARY 2020



Land at Palmerston Crescent and Bowes Road, N13 4NH

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1 Introduction

Arcadis Consulting (UK) Limited (Arcadis) has been commissioned by Transport for London (TfL) to undertake a number of technical surveys for a site referred to as at Land at Palmerston Crescent and Bowes Road, N13 4NH ('the Site').

TfL is aiming to divest a number of small sites to enable prospective regeneration. The objective of the Small Sites Initiative is to provide robust and pragmatic advice that sensibly de-risks each of the sites such that unreasonable "abnormal" development costs are not incurred by developers.

This report provides a summary of the technical surveys commissioned for the Site and reference should be made to the individual reports for further detailed information.

The Site is approximately 0.4 hectares in size and is centred on National Grid Reference 530775, 192135. It is located to the north of the North Circular Road and is currently grassed with a number of trees present.

The surveys carried out for Palmerston Crescent and Bowes Road comprise the following:

- Topographical and Buried Services Survey (Ref 1);
- Arboricultural Survey (Ref 2); and
- Ecological Survey (Ref 3);
- Geotechnical and Geo-Environmental Desk Study (Ref 4);
- Flood Risk Review (Ref 5);
- Detailed Unexploded Ordnance report (Ref 6);

A summary of the findings of these surveys are detailed in the following sections.

2 Topographical Survey and Buried Services

The survey shows the levels across the Site. There are a number of trees and young saps indicated.

Services are present along the southern boundary and there are main holes covers within the Site boundary supporting surface drainage.

There is a Utility Mapping Survey report which should be reviewed to understand the full extent of services on the site.

3 Arboricultural Survey

An arboricultural constraints walkover and assessment was conducted to describe the general arboricultural features and potential constraints regarding trees on Site.

A total of ten arboricultural items were recorded within the study area as follows:

- Two individual trees, two groups of trees and one hedge were recorded on-Site; and
- Four individual trees and one group of trees were recorded off-Site.

Three individual trees were graded as Category B (trees of moderate quality) and three individual trees, three groups of trees and one hedge were graded as Category C (trees of low quality).

There is currently no proposed design layout and therefore it is not possible to say whether the trees would need to be removed and if there is space for any new trees to be re-provisioned on the Site. This can be determined once designs are developed.

The arboricultural assessment of the feasibility of development at Palmerstone Crescent is guided by the extent and quality of the existing tree stock and the benefits provided by these features to the biodiversity of the locality.

A total of ten arboricultural items - two individual trees, two groups and one hedge were recorded on-Site and four individual trees and one group of trees were recorded off-Site; all items recorded may present a potential constraint to development.

The Site is not within a Conservation Area nor are any of the trees covered by a TPO. If third-party trees are to be affected as part of the development, landowner consent will be required.

The only on-Site tree of significance in overall terms of quality and visual amenity is the Lime identified at T1 (see main report). This mature specimen has been managed as pollard, but it offers very little by way of habitat or biodiversity benefits. Any development proposal that involved the removal of this tree would need to demonstrate why the loss of this would not breach policies D2, G13 or G14 of the emerging local plan. The retained policy under the Core Strategy is more general in its desire to maintain habitat and therefore the loss of this tree is unlikely to be in breach of that policy requirement.

There are off-Site trees that were not assessed due to lack of access and/or a suitable vantage point. Root Protection Areas are capped at 15m from the stem of individual trees (as per BS:5837 paragraph 4.6.1). Therefore, trees within 15m of the Site have the potential to be affected by ground-breaking works within the Site. Several of these trees were potentially within 5m of the Site and therefore may be impacted by Site development.

While unlikely to prevent development, tree protection for trees to be retained and tree re-provisioning for any trees lost due to development are a material consideration for planning determination. If trees cannot be replaced on-Site due to development, off-Site options for tree re-provisioning to ensure no net loss should be considered. Individual Local Planning Authorities may ask for re-provisioning in excess of 1 to 1 for trees of Category B grade.

The main development considerations for the trees are:

- The Root Protection Area (RPA) of the trees within and off-Site; and
- The retention and/or replacement of trees.

Consideration also needs to be given any future constraint that those off-Site trees present. This is unlikely to arise from issues relating the shading given that the trees will be on the northern side of any development, but the size of the trees could give rise to concerns relating the safety and the enjoyment that residents may have of their gardens.

Both the retained and emerging local plans seek to enhance green infrastructure through new planting schemes. Soil is an important component of the success of establishment of new trees, and it will therefore be necessary to understand the composition of the soils in the site.

4 Ecological Survey

The ecological assessment comprised a desk-based study using publicly available information and an ecological constraints survey to identify potential constraints present on Site.

Based on the assessment undertaken to date, there are no likely significant ecological constraints with regards to the development of this Site.

No statutory or non-statutory designated sites (including ancient woodlands or woodlands listed on the AWI) identified within the vicinity of the Site have the potential to be significantly impacted by development on the Site.

The closest statutory designation to the Site is Alexandra Palace and Park Local Nature Reserve (LNR), located approximately 1.8km to the south of the Site. Due to the location of this LNR in close proximity to the Site, increased recreational pressures as a result of the development of the Site were considered however, due to the size of the Site and the limited number of units that the developable area could accommodate, additional recreational pressures are considered to be negligible.

A number of non-statutory designations are present within the area surrounding the Site, the closest of which is New River Site of Metropolitan Importance for Nature Conservation (SMINC), located approximately 150m to the west of the Site at its closest point. Given the proximity of the Site to this designation, recreational pressures on the SMINC were considered, however, as set out above with respect to Alexandra Palace and Park LNR, due to the size of the Site and the limited number of units that the developable area could accommodate, additional recreational pressures are considered to be negligible.

Potential constraints are listed below:

- The Site was dominated by frequently managed amenity grassland and hardstanding, along with scattered broadleaved trees, scattered scrub and areas of dense continuous scrub. The habitats on Site were generally un-diverse due to species selection and management for ornamental purposes. However, these habitats have value in terms of green infrastructure, likely performing important ecosystem services (such as water quality and volume attenuation and air quality attenuation etc.).
- There is potential for nesting birds to be utilising the trees, scattered scrub and areas of dense scrub habitats on Site, including species listed on London BAP and Priority Species S41 such as house sparrow. Removal of suitable vegetation on the Site will need to be conducted outside of the bird nesting season (March – August inclusive) or under an ecological watching brief.
- There is potential for hedgehogs which is a London BAP and Priority Species S41 (also protected from inhumane killing or injury) to use the Site. Should vegetation clearance be required during the hibernation season (November to March), this should be undertaken by an ecological watching brief. Badger is a mobile species and setts can be constructed at any time, although no badger sett or signs were observed during the visit, suitable setting habitat is present, therefore a walkover by an ecological specialist prior to ground-breaking works commencing is recommended.
- There will be some ecological benefit from the removal of non-native and invasive species on LSI, which is likely to occur when the Site is cleared for any construction. There is no legal obligation to control any of the LSI species (Butterfly-bush and Green Alkanet) recorded within the Site or to remove them as controlled waste but it is good practice to remove them and to avoid their spread.
- Trees and other vegetation should be included within any proposed soft landscaping and these designs should be evolved in liaison with an ecologist and arboriculturist. In addition, rain gardens, biodiversity roofs and other green infrastructure should be considered within any development.
- Biodiversity net gain is due to become mandatory for new development. There are opportunities for the incorporation of integral bird and bat boxes, micro SuDS, the implementation of permeable fencing to benefit small mammals such as hedgehog which is a priority species currently in decline, sensitive lighting strategy, tree replacement and new tree planting where feasible.

5 Geotechnical and Geo-Environmental Desk Study

The geo-environmental and geotechnical desk study comprises a review of existing historical and current information on the Site. No intrusive site investigations have taken place.

The Site is currently grassed land surrounded by fencing and includes a car park area on the eastern edge of site. Residential housing with gardens were previously on the Site, now demolished, therefore there is the potential for Made Ground to be present.

Potential risks to human health, controlled waters and the built environment have been identified. It is recommended that an intrusive site investigation is carried out prior to redevelopment to quantify these risks. This should include the contamination testing of soils and leachates, groundwater monitoring and gas monitoring in accordance with best practices and current guidance.

Potential founding solutions will be dependent on the encountered thickness of Made Ground and the geotechnical properties of the natural deposits. Made Ground is generally considered unsuitable for foundations due to its variable composition and its potential for high total and differential settlement. Services may be present beneath the site which may require removal/ relocating prior to redevelopment.

Conventional shallow foundations may be appropriate for the site, but this would depend on the thickness of the Made Ground and the presence of competent underlying ground conditions. In areas of deeper Made Ground, or where deeper soft / loose bands are recorded either piling or ground treatment e.g. vibro-stone columns could provide a suitable foundation solution. The advice of a specialist ground improvement contractor should be sought to verify the suitability of the ground for treatment.

Consideration will need to be given to the presence of existing trees on site, which may need to be removed or retained, and the planting of future trees when deciding upon the depths of the foundations. The potential for the shrinkage and swelling of the underlying London Clay and sulphate attack to below ground concrete should also be considered.

6 Flood Risk Review

Flood risk to the site from all potential sources has been considered in the Flood Risk Review.

The site is located in Flood Zone 1 on the Environment Agency (EA) Flood Map for Planning (Rivers and the Sea) and therefore has a 'very low' risk of flooding from rivers and the sea, equivalent to an annual chance less than 1 in 1,000 (0.1%). No other local sources of flooding are considered to pose an onerous risk to the site in the context of its potential redevelopment.

According to the National Planning Policy Framework (NPPF), there is no requirement to produce a Flood Risk Assessment (FRA) to support future redevelopment of the site given the size (<1 hectare) and location of the site within Flood Zone 1. The Planning Practice Guidance (PPG) indicates that the site would be suitable for all types of development, including residential uses

A Drainage Strategy should also be prepared to support future redevelopment of the site to ensure that proposals meet national and local requirements and off-site flood risk is not increased as a result of redevelopment proposals.

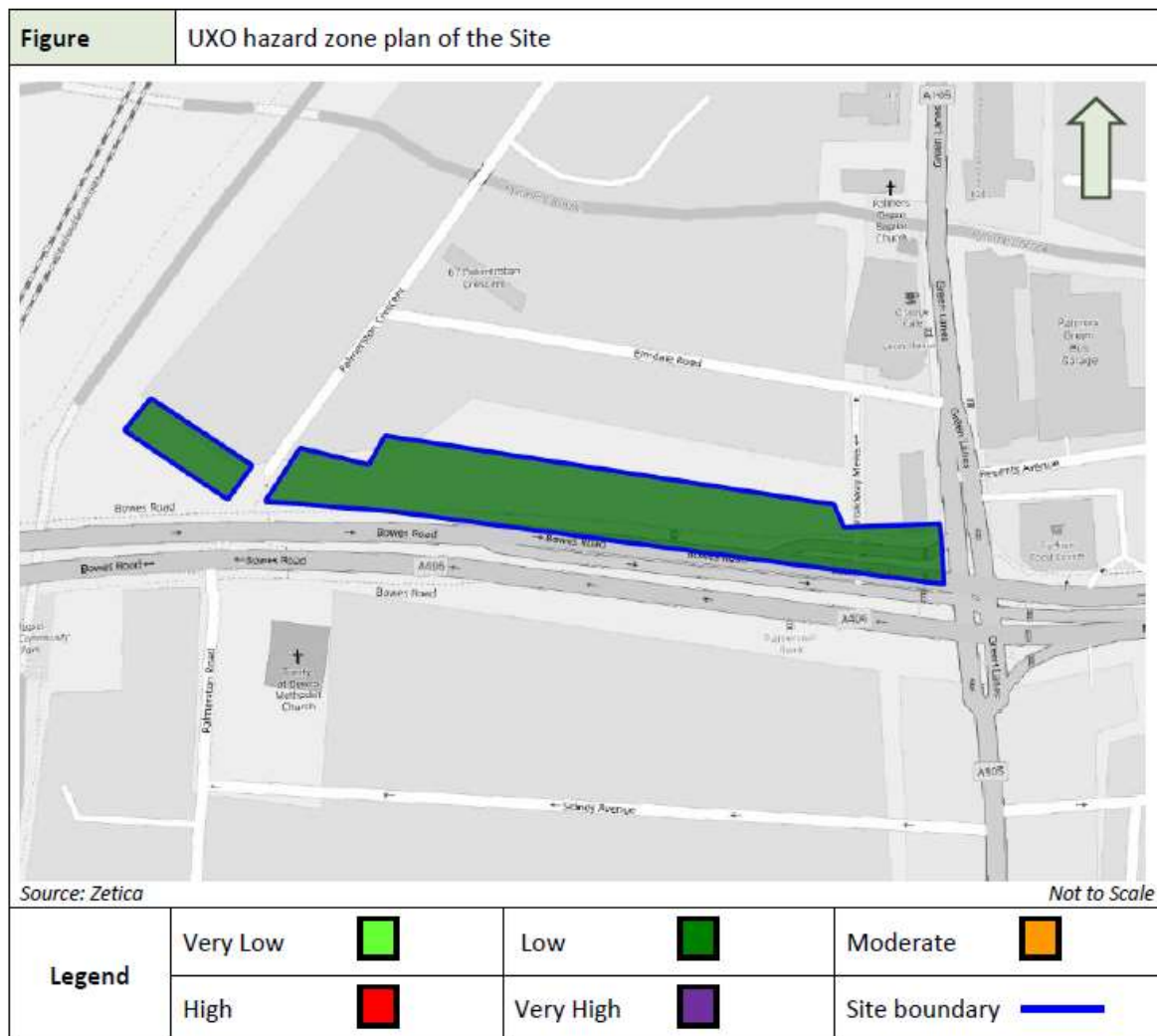
7 Detailed Unexploded Ordnance Report (Zetica)

Key findings: No sources of Unexploded Ordnance (UXO) hazard have been identified.

Key actions: Proceed with works.

No records have been found indicating that the Site was bombed and no other significant sources of UXO hazard have been identified on the Site.

Given this, it is considered that the Site has a low UXO hazard level, as shown in the following the Figure, which is reproduced as Figure 3 in the Zetica report.



The main findings of the report are summarised below.

- No records of bombing or military activity on the Site during World War One (WWI) have been found.
- During World War Two (WWII) the main strategic targets in the vicinity of the Site included transport infrastructure and public utilities.
- No records have been found indicating that the Site was bombed during WWII. Records indicate that the nearest High Explosive (HE) bombs fell approximately 0.1km south of the Site.
- No records of military activity on the Site post-WWII have been found.

The Zetica report should be reviewed to fully understand the risk associated with developing the site and the mitigation measures that should be put in place.

8 References

1. 40Seven (2020) Topographical Survey – Palmerston Crescent (Site Ref: 1178_P_Palmerston Crescent)
2. Arcadis Consulting (UK) Limited (2020), Preliminary BS5837 :2012 Tree Survey (Report Number 10038043-ARC-05-XX-RP-YY-0021-01-Arboricultural Report_Palmerston Crescent and Bowes Road).
3. Arcadis Consulting (UK) Limited (2020), (Report Number 10038043-ARC-05-XX-RP-YY-0020-01-Ecology Report_Palmerston Crescent and Bowes Road).
4. Arcadis Consulting (UK) Limited (2020), Geotechnical and Geo Environmental Desk Study (Report Number 10038043-ARC-05-XX-RP-YY-0017-01-Geo Report_Palmerston Crescent and Bowes Road).
5. Arcadis Consulting (UK) Limited (2020), Flood Risk Review (Report Number 10038043-ARC-05-XX-RP-YY-0018-01-Flood Risk Review_Palmerston Crescent and Bowes Road).
6. Zetica Ltd (2020) UXO Desk Study and Risk Assessment Watford Way (P9364-20-R1).

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