



Our ref: 70014753-001

June 21, 2019

Fitzroy Park Residents' Association

Dancers End
Fitzroy Park
Highgate
London
N6 6HT

Subject: 53 Fitzroy Park 2018/2104/P – Swept Path Analysis Technical Review

Introduction

WSP has been appointed by The Fitzroy Park Residents' Association (FPRA) to review and advise them on the suitability and acceptability of the method statement and site setup plan, prepared by Oakbridge Bespoke Homes (OBH) and submitted as part of planning application 2018/2104/P, to discharge planning condition 14 for the proposed residential development at 53 Fitzroy Park, Highgate.

WSP as part of their review have undertaken independent swept path analysis for construction vehicle movements associated with a new residential development at 53 Fitzroy Park, Highgate.

The analysis follows on from a previous review of Swept Path Analysis undertaken by WSP, the findings of that review are summarised in WSP letter dated July 2016. WSP have also previously undertaken a desktop review of the previous applicants CTMP, summarised in our letter dated July 2017. This statement should be read in conjunction with the findings of the above reviews.

This statement includes a description of the analysis carried out, the test conditions and observations on the results of the analysis.

Synopsis

We believe the full implications of the proposed demolition and construction including the associated temporary works on the existing adjacent trees, one of which we understand has a TPO on it, has not been accurately or appropriately presented.

Base Information

OS data was procured to conduct the analysis to replicate the layout of the OBH drawing. Note we would recommend the use of topographical survey for detailed swept path analysis due to the inherent inaccuracies (of up to 0.5 metres) in OS survey data.

In order to recreate the site constraints under the planning application the OBH plan 'E322-02' was inserted as a reference into the base model. The OS data in the site setup plan was used to locate and position the proposed building.

The analysis has been undertaken on the potential constraints and site arrangements for the final development layout (previously known as Phase 3 in the applicants submitted CMP).

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While this information has been submitted to discharge the demolition condition 14 it does not include any swept path analysis or site layouts for the demolition phase. This is a noteworthy omission and should be provided to allow for an accurate and realistic assessment of the site conditions prior to approval for this condition.

Temporary Works

It is noted in the applicant's method statement revision C that "The materials that arise from the demolition will be stored on site until a temporary access road has been constructed to allow the materials to be safely loaded onto a vehicle that has been driven onto the site, turned and is able to leave the site in a forward gear." However without further detail we do not see how this feasible.

The temporary construction platform layout does not appear to factor in the level changes to the east of the existing building. We therefore have a reservation the construction vehicles could reverse onto site as shown on OBH drawing E-333-02 unless ground works are undertaken to raise the ground level however it is unclear how this might be achieved without unduly impacting on the adjacent trees.

Independent Assessment

As the above information was not included in the submission, and due to the limited times in which to advise the FPRA, WSP has undertaken independent swept path analysis with the largest construction vehicle proposed by the applicant, a 12m rigid vehicle, to assess the feasibility for demolition with the existing structure in place, as shown on drawing 4753-001-ATR-004.

Assessment Conditions

The WSP swept path analysis was undertaken under the following conditions:

- 12m rigid truck;
- A tolerance / safe clearance zone of 450mm from the face of the vehicle to any physical, vertical, constraints; and
- Turning on the spot not activated.

The 450mm specified is consistent with the minimum recommended offset for street furniture and other physical features on the public highways and removes the disparity between what can be shown to be achieved theoretically and the reality in practice.

Assessment Results

4753-001-ATR-003 (proposed development site layout)

The WSP swept path analysis confirms the following:

- It will take numerous individual movements for the 12m rigid vehicle to be able to fully turn around and depart from site;
- Insufficient space for vehicles or pedestrians to pass the construction vehicle safely in between individual movements;
- In an effort to execute the desired manoeuvres in an easier manner, we envisage the operator will end up employing a combination of the following;
 - Reversing on Fitzroy Park to complete the movements;
 - Over running the root protection zones and damaging the existing trees along the Fitzroy Park site frontage; and
 - Use of dry steering by the operator, with associated increased impact on the Fitzroy Park carriageway surface and vehicle;

The above items would all have a more significant impact on Fitzroy Park and would not be in accordance with the applicant's proposals.



4753-001-ATR-004 (existing development site layout)

The WSP swept path analysis confirms the following:

- A 12m rigid vehicle is not able to enter the site and is too large for the existing vehicular area at the 53 Fitzroy Park frontage;
- As the vehicle is unable to enter the site in a forward motion it would also be unable to turn around and therefore depart the site in a forward motion;
- It is noted that no swept path analysis has been provided by the applicant for the demolition phase to remove the existing 53 Fitzroy Park building in place;

Summary

WSP have undertaken a review of the OBH site setup plan and method statement, dated February 2019, on behalf of the Fitzroy Park Residents' Association to review and provide them with independent advice on the suitability and acceptability of these proposals.

The findings of WSP's reviews of previous applicants CTMP's in July 2016 and July 2017 remain, unaddressed in the new applicants submissions.

There are noteworthy omissions in the new information provided with no swept path analysis or site layout plan for the demolition phase included.

Our independent analysis, applying a sensible separation between the vehicle and any physical constraints when manoeuvring and the omission of dry steering, leads us to reasonably conclude the 12m rigid construction vehicles will require a greater number of movements than shown within the OBH's supporting information to unload, turn around and depart from site.

The greater number of movements will in turn lead to an increase in the duration Fitzroy Park is obstructed. We believe, for the largest of deliveries, this would not be an insignificant amount of time.

We believe the full implications of the proposed demolition and construction including the associated temporary works on the existing adjacent trees has not been accurately or appropriately presented.

We recommend the above are all addressed by the applicant to allow the complete impacts of the development to be understood and assessed prior to any determination by the Local Planning Authority.

Prepared by:

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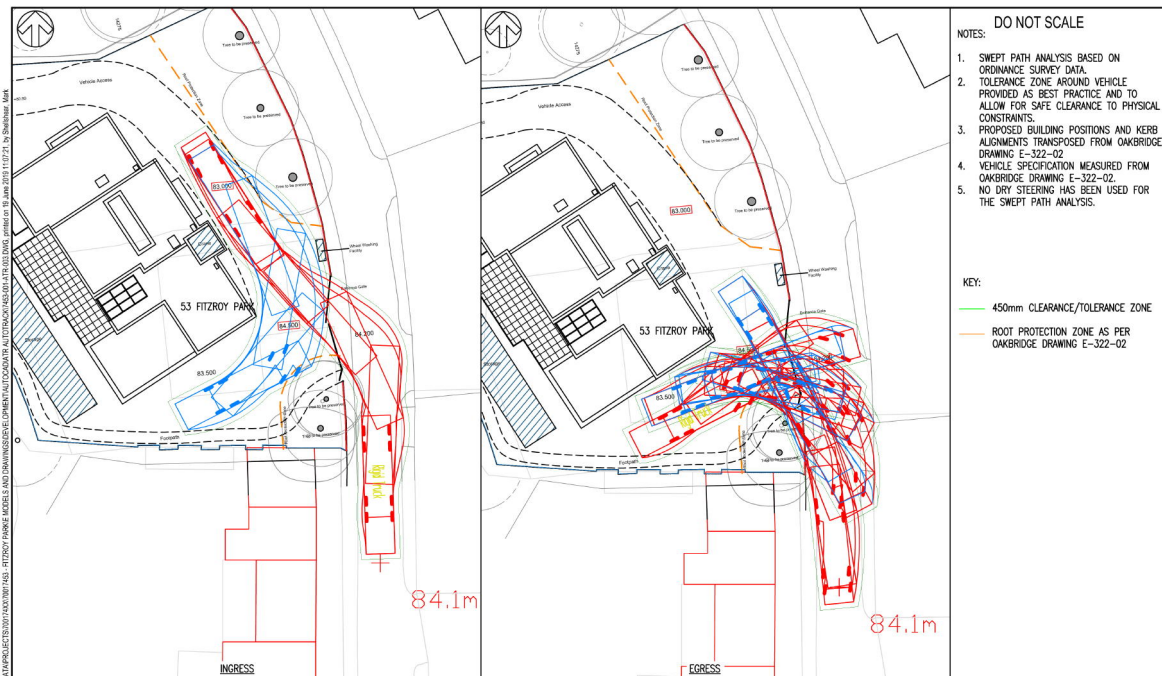
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- NOTES: DO NOT SCALE
1. SWEEP PATH ANALYSIS BASED ON ORDNANCE SURVEY DATA.
 2. TOLERANCE ZONE AROUND VEHICLE PROVIDED AS BEST PRACTICE AND TO ALLOW FOR SAFE CLEARANCE TO PHYSICAL CONSTRAINTS.
 3. PROPOSED BUILDING POSITIONS AND KERB ALIGNMENTS TRANSPOSED FROM OAKBRIDGE DRAWING E-322-02
 4. VEHICLE SPECIFICATION MEASURED FROM OAKBRIDGE DRAWING E-322-02.
 5. NO DRY STEERING HAS BEEN USED FOR THE SWEEP PATH ANALYSIS.

KEY:

- 450mm CLEARANCE/TOLERANCE ZONE
- ROOT PROTECTION ZONE AS PER OAKBRIDGE DRAWING E-322-02

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REV	DATE	BY	DESCRIPTION	CHK	APP																			
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<p>S2 - FOR INFORMATION</p>		ARCHITECT:		TITLE:	PROPOSED DEVELOPMENT ACCESS 12M RIGID TRUCK SWEEP PATH ANALYSIS	DRAWING NO.:	7453-001-ATR-003	DESIGNED:	HK	DRAWN:	HK	DATE:	June 19											
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