

22 West Road, West Butterwick, Pre-development Tree Survey and Tree Protection Plan March 2022

1. Introduction

22 West Road is a residential property that is the subject of a planning application to demolish and build a terrace of three houses. There is a mature lime tree on the highway verge in front of the property adjacent to the current entrance drive. This is an assessment of the tree and of the potential impact of the proposed development on it. There is also an out-grown Leyland cypress hedge bordering the north of the property that has been included.

The trees are assessed and recommendations given following British Standard 5837:2012 Trees in relation to design, demolition and construction – Recommendations.

2. Tree Survey

The positions of the trees are shown in Plan1.

T1. The tree in front of the property is a lime 16m tall and 65cm stem diameter at chest height.

The crown-spread extends to 5m to the north, 7m to the east, 5m to the south and 4m to the west.

The tree has been previously pollarded at 6m height.

The tree is in moderate condition with minor dieback throughout the crown and some fallen deadwood on the verge.

There is a vertical seam in the bark of the stem on the north-side from ground-level to 1.5m (photo), the heartwood exposed by the seam is decayed but no sign of current decay fungi. The stem was sounded with a sounding hammer and did not sound hollow.

The base of the tree is immediately adjacent to the footway and the roots are causing minor lifting of the footway.

The tree is categorised using the BS5837 method as B, of moderate quality. It is outside the land owned by the developer so must not be adversely affected by the development works.

The root protection radius of the tree is $65\text{cm} \times 12 = 7.8\text{m}$.



Lime tree T1,

conifer hedge in background.

Immediately to the north of the property is a tall hedge of Leyland cypress; Group 2, this is also outside the property ownership. The hedge trees are 12m tall, they are multiple-stemmed but typically 50cm diameter at the base they overhang the property by 4m. They have been attributed the BS5837 category C, of low quality, they are healthy but of low amenity value and can be anticipated to start shedding branches owing to the multiple-stem form which is structurally weak.

3. Arboricultural Implications of Proposals

The lime tree T1 stands outside the property proposed for development but its root protection area (RPA) extends into the property by about 4m. The proposed housing is further from the tree than the existing house but the 2 proposed parking areas do extend into the RPA, both of these areas are currently not hard surfacing so the construction of the parking areas should not adversely affect the tree roots.

Most of the RPA is under the hard surfacing of the road, footway and drives making the RPA within the grass verge and front garden important to the tree.

The proposed parking area in front of the houses will need to be accessed across the existing footway and verge, this access is likely to be hard surfacing and will encroach into the RPA of T1.

The RPA of the conifer hedge G1 encroaches 5m into the site from the north, this should not overlap with the construction area, the crown spread of G1 extends over the site by 4m, down to 1m height, this can be pruned back to the property boundary, taking care to avoid disturbing nesting birds.

4. Tree Protection Plan

The rooting areas (RPAs) of the trees adjacent to the site should be protected throughout the construction process. Where the RPAs are not overlapped by vehicle parking and access areas they are to be protected using tree protection barriers as illustrated in Appendix 1. The position of the tree protection barriers is shown in Plan 2 below. The tree protection barriers are to be erected before demolition and construction begins on site and remain in place until construction works are complete. The area protected by the barriers is the Construction Exclusion Zone, shown as red hatching on Plan2.

The highway verge within the RPA of T1 is within the Construction Exclusion Zone, it will not be appropriate to protect this by tree protection barrier because there is a right of public access to the verge but this verge will have the same protection from construction works.

The parking and vehicle access areas within the RPA of T1 should be constructed to avoid compaction of soil and tree roots this is the Root Protection Zone shown as blue hatching on Plan 2. The Root Protection Zone will be no-dig construction using a load-bearing, cellular confinement system of 100mm depth installed following manufacturer's instructions. The cellular confinement system is to be installed before demolition and construction begins, to allow traffic to cross the rooting area without compacting the soil and roots of T1.

Once the tree protection barrier has been installed for the conifer hedge G1, it should not be necessary to enter the Construction Exclusion Area during the construction process.

Within the Construction Exclusion Zone and Root Protection Zone the following are not allowed throughout the construction process

- Storage of building materials
- Excavations, without written permission of the planning authority
- Fires
- Mixing of cement
- Storage of fuel or fuelling of vehicles.

Plan 1, Tree Survey, 22 West Road, West Butterwick, March 2022

Scale 1:250 at A4

Key

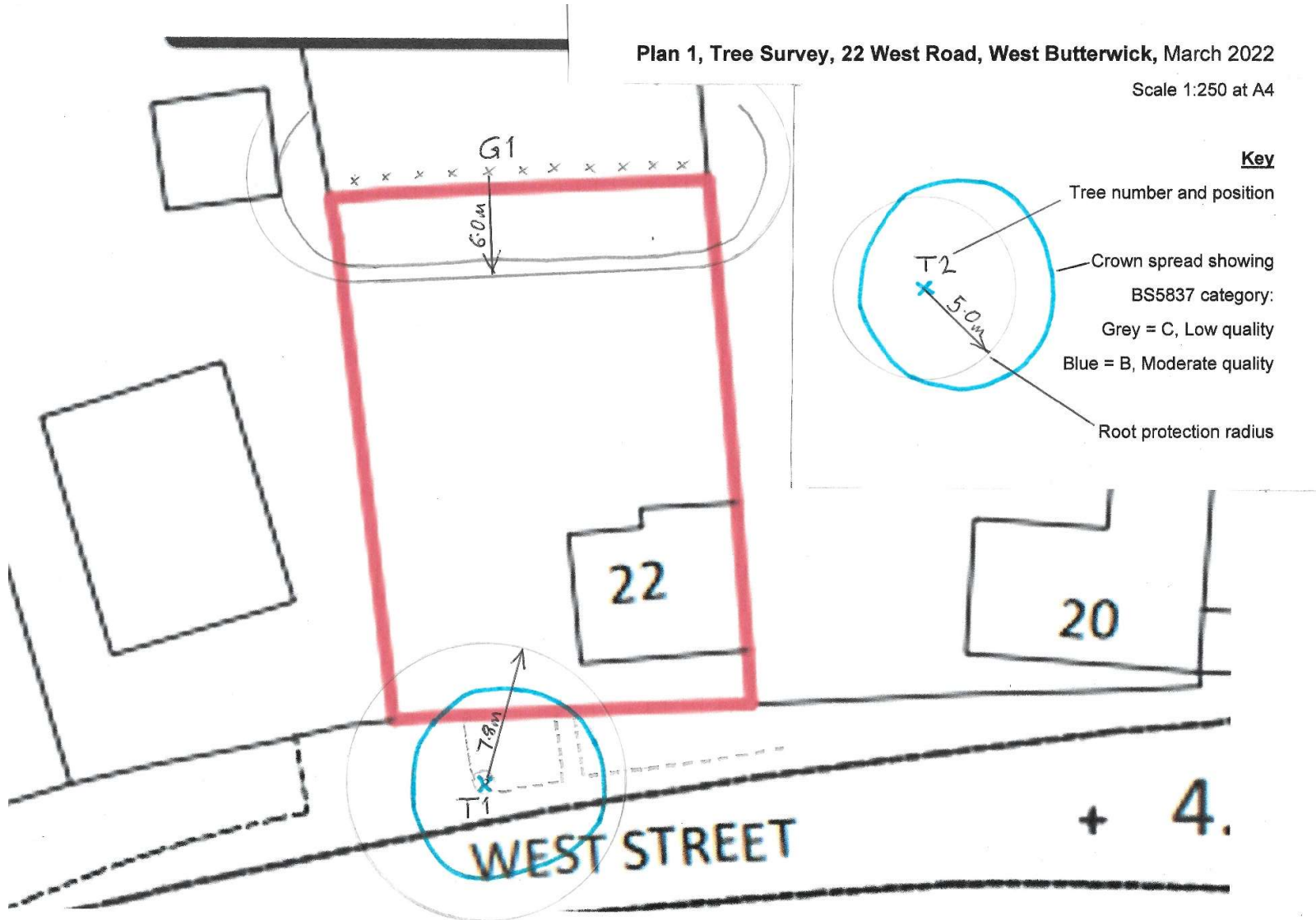
Tree number and position

Crown spread showing
BS5837 category:

Grey = C, Low quality

Blue = B, Moderate quality

Root protection radius



The site manager is to be responsible for the implementation of the Tree Protection Plan.

**Plan 2, Tree Protection Plan,
22 West Road, West Butterwick,**

March 2022

Scale 1:200 at A4

Key

Tree number and position

Root protection radius

Tree Protection Barrier

Construction Exclusion Zone

Root Protection Zone



Reference: British Standard 5837:2012 Trees in relation to design, demolition and condition – Recommendations

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10 March 2022

Appendix A. Tree protection barrier from BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations

