Adonis Ecology

Arboricultural Method Statement and Tree Protection Plan for Proposed Re-development of Stanborough Park North, Welwyn Garden City

Project Ref: 1117

Prepared on behalf of:

Welwyn Hatfield Borough Council
The Campus
Welwyn Garden City
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0 SUMMARY

0.1 Adonis Ecology Ltd. was commissioned by Welwyn Hatfield Borough Council to produce an Arboricultural Method Statement for the re-development of land at Stanborough Park North, Welwyn Garden City, Hertfordshire, AL8 6DF (Grid Reference TL 225 115). It was understood that planning consent has been received for the re-development, and that the provision of an Arboricultural Method Statement is a condition of the planning consent. It was understood that the consented plans are to create new leisure facilities on site, including a splash park, children's play area, sports pitches, outdoor gym and picnic spaces.

0.2 A site survey was undertaken on the 5th of March 2019 which consisted of an inspection from ground level of all trees on site in line with the guidance of BS5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations. Each of the trees were measured and assessed for their physiological and structural condition, and then categorised based on the above guidance. A report was provided for the site which included details of the Tree Survey and provided an Arboricultural Impact Assessment for the site (Adonis Ecology, 2019).

0.3 There are no trees that will require removal to facilitate the proposed development and no facilitation pruning will be necessary, therefore there will be no impact upon the amenity value of trees on the site, and no replacement planting for mitigation is required. However, significant planting will be undertaken which will improve the amenity value on the site.

0.4 Re-profiling of the ground close to trees T1 and T2 will involve a slight increase in the ground level of the Root Protection Areas (RPA) of these trees, to a maximum of 50mm. It was considered that this would be unlikely to have any significant impact on the tree so long as the soil is not compacted down and the works are completed using machinery stood outside of the RPA.

0.5 Protective fencing and ground protection measures will be provided to prevent risk of impact to the RPAs, trunks and canopies of the all the trees on site. Where works are required within the RPA, or under the canopy of any tree, the fencing will be removed temporarily and a banksman will ensure heavy vehicles are prevented from accessing the RPA and that works do not directly impact the canopy of the tree(s).

0.6 Where existing hard-surfacing requires removal, the works will be undertaken with care as outlined in this method statement, and be overseen by an arboriculturist. All new surfacing will be provided using a 'no-dig' methodology as also outlined in this method statement.

0.7 By following the measures outlined in this document and the corresponding Tree Protection Plan, the proposed development will be able to proceed with a likely positive impact upon the existing amenity value of the site, and with negligible risk of harm to retained trees on and around the site.

1 INTRODUCTION

1.1 Background

1.1.1 Adonis Ecology Ltd. was commissioned by Welwyn Hatfield Borough Council to produce an Arboricultural Method Statement for the re-development of land at Stanborough Park North, Welwyn Garden City, Hertfordshire, AL8 6DF (Grid Reference TL 225 115). It was understood that planning consent has been received for the re-development, and that the provision of an Arboricultural Method Statement is a condition of the planning consent.

1.1.2 The following site plans "Splashlands, Stanborough Park: Materials GA. Drawing No. TM386L02" and "Splashlands, Stanborough Park: Planting GA. Drawing No. TM386L03", both dated 27th March 2019 and produced by Turkington Martin, were used to assess the impacts from the planned development works as outlined in this report. Further details were provided by members of the design team from Welwyn Hatfield Borough Council, Turkington Martin and Conisbee via email.

1.1.3 The proposed site was approximately 1ha in extent and consisted predominantly of amenity grassland with scattered trees, as well as a café/toilet block and areas of paths and play areas with either tarmac or rubberised surfaces. The scattered trees were predominantly located within the southern corner of the site, with low numbers at the northeast corner and adjacent to a central path. There were further trees adjacent to the northeast boundary of the site, as well as just beyond the southern corner of the site.

1.1.4 The permitted plans are to re-develop the site to include a water park, play areas, seating areas and new planting, which will include some re-profiling of areas of the site and removal of some existing facilities. It was further understood that no trees require removal or any access facilitation pruning, but that additional tree, hedgerow and shrub planting is proposed for the site.

1.1.5 Since provision of the Arboricultural Impact Assessment, regrading close to trees T1 and T2 has been altered so that there will be only a slight increase in the ground level within the Root Protection Areas (RPAs) of these trees and no retaining wall will be required.

1.1.6 This method statement is based on the guidance of BS5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendations' and this is referred to throughout this report. BS5837:2012 is a nationally recognised standard used by most Local Planning Authorities (LPAs) to assess planning applications in relation to trees. It is used to enforce protection or control of development works that may be harmful to trees both on and off the site.

1.1.7 This report has been solely produced following the guidance of BS5837:2012 for the purpose of tree protection during the proposed development as outlined in this report, and should not be used for any other purpose.

2 ARBORICULTURAL METHOD STATEMENT

2.1 Tree Works

2.1.1 No tree works such as felling or facilitation pruning are required on the site as all trees will be retained, and can be protected during the works on site without any need for facilitation pruning.

2.2 Tree Planting

2.2.1 As there will be no removal of trees or facilitation pruning required, there will be no negative impact on the amenity value of the trees on site.

2.2.2 However, additional tree and shrub planting will be undertaken, including planting of five wild cherry *Prunus avium* 'Plena' trees to enhance the existing tree-line adjacent to the central track, as well as some mixed native hedgerow and other herbaceous and shrub planting. Full details of planting planned for the site can be found on the Planting Schedule produced by Turkington Martin. It was considered that the planned planting would provide a moderate increase in the amenity value of the site.

2.2.3 All planting of trees and shrubs will be undertaken in line with the guidance of BS4428:1989, and should therefore consist of tree pits being dug to twice the diameter of the roots and 1.5 times the depth of the roots, with all trees over 1m in height to be staked and provided with suitable mulch. Planting will be undertaken in late autumn/winter.

2.3 Protective Barriers and Ground Protection

2.3.1 The protective barriers and ground protection measures as outlined below will be installed prior to any development works being undertaken on site or any materials or vehicles being brought on to the site.

2.3.2 On completion of the protective measures as outlined below, prior to any works commencing on the site, an arboriculturist must visit the site and confirm that the measures have been suitably installed in line with the guidance of this document.

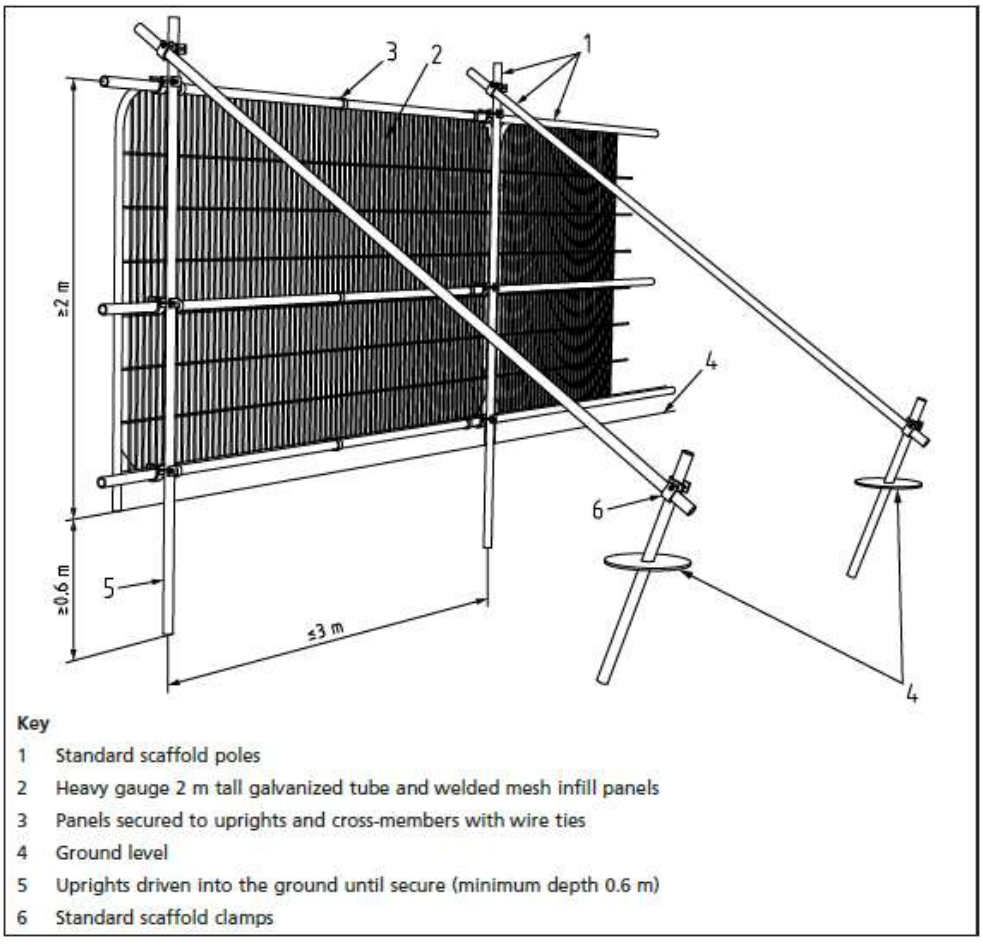
Protective Fencing

2.3.3 Protective fencing will be installed on the site as outlined in the Tree Protection Plan (TPP) provided in Figure 4, Appendix 1, and which will exclude vehicles and pedestrians from all Root Protection Areas and areas beneath the canopies of trees on site. The fencing once installed will be maintained and will not be removed, moved or altered in any way until works are finished on site, unless a specific task requires temporary access to the fenced area. Where this is required, a banksman will oversee the works to ensure no vehicles or heavy machinery are used within the RPA of any tree, and to ensure there is no impact to the canopies of the trees. The fencing will be replaced as soon as the specific works are completed.

2.3.4 Protective fencing will meet the default specification for tree protection as outlined in BS5837:2012 and will therefore consist of a vertical and horizontal scaffold framework designed to resist impacts (see Figure 1 below).

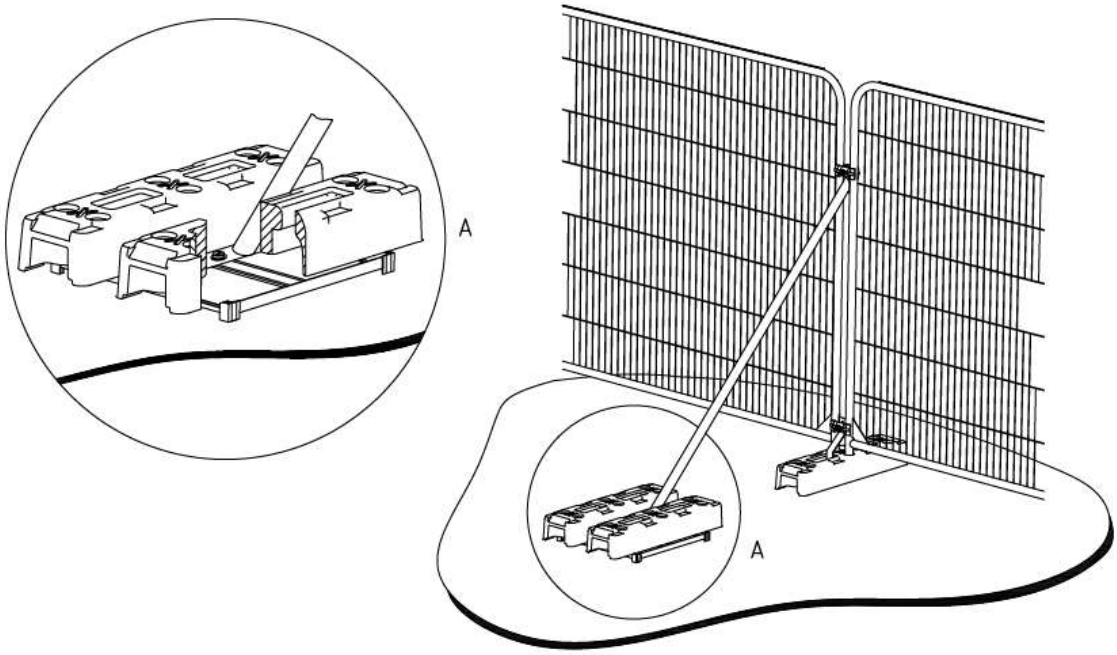
2.3.5 Where possible, vertical tubes, which should be driven securely into the ground, should be spaced at no more than 3m intervals. Horizontal scaffold should then be attached to the uprights and bracing supports provided, with welded mesh panels to then be securely fastened to the framework. Where ground pins are to be used, consideration should be given to the presence of any below ground services.

Figure 1: BS5837:2012 Default Tree Protection Fencing Specification



2.3.6 Where the fencing falls within the RPA of any tree or over existing hardstanding, and thus ground pins and uprights may impact upon the roots of the trees or could not be feasibly installed, an above ground stabilisation system as shown in Figure 2 below will be used.

Figure 2: BS5837:2012 Example of an Above Ground Stabilising System



Ground Protection

2.3.7 As all Root Protection Areas will be excluded by protective fencing, ground protection measures are unlikely to be required. If it is determined that any specific works are required within the fenced area, and that there will be a requirement for any vehicles or heavy machinery to be used within the RPA of any tree, ground protection measures will be installed prior to the works being undertaken.

2.3.8 The ground protection will consist of a proprietary system or pre-cast reinforced concrete slabs capable of preventing compaction of soil beneath, suitable for the largest vehicle to be used on the site, likely to be an 8-wheel lorry weighing up to 32 tonnes. An engineer will confirm the suitability of the ground protection system for the size of vehicles required to access the site.

2.4 Access and Contractors Parking

2.4.1 As all RPAs will be protected by fencing, no specific access route will need to be delineated.

2.4.2 Contractors parking will be off-site, in the adjacent existing car park, and no parking will be allowed within the development site.

2.5 Works In Close Proximity to Trees T1 and T2

2.5.1 The regrading works in close proximity to trees T1 and T2 will be undertaken with care, with all machinery to be located outside of the RPA of these trees during the works. There will be no need to excavate any soil within the RPA of these trees, and additional soil to be placed over the RPAs will be to a maximum of 50mm in depth. The soil will be carefully placed within the RPA and raked out carefully to ensure no compaction of the soils beneath. Given

the small increase in soil depth, it was considered there would be negligible impact to these trees from the works.

2.6 Removal of Existing Surfaces

2.6.1 Where existing tarmac or rubberised surfaces within the RPA of any tree are to be removed, this will be done with care, using handheld tools to carefully break up and remove the surface, causing as little impact to the surface beneath as possible. The works will be overseen by an arboriculturist who would provide advice on how to undertake the works.

2.6.2 If any roots are uncovered during the works, these should be immediately covered with damp hessian or other suitable material to prevent desiccation. The surface over the exposed roots, whether this be new turf or a new hard surface, will be provided as soon as possible to reduce the time that any roots are exposed, and the material used to cover the roots should be removed prior to provision of the new turf/surface. A thin layer of topsoil or uncompacted sharp sand should be placed over the roots prior to the new surface.

2.7 No-dig Surfacing

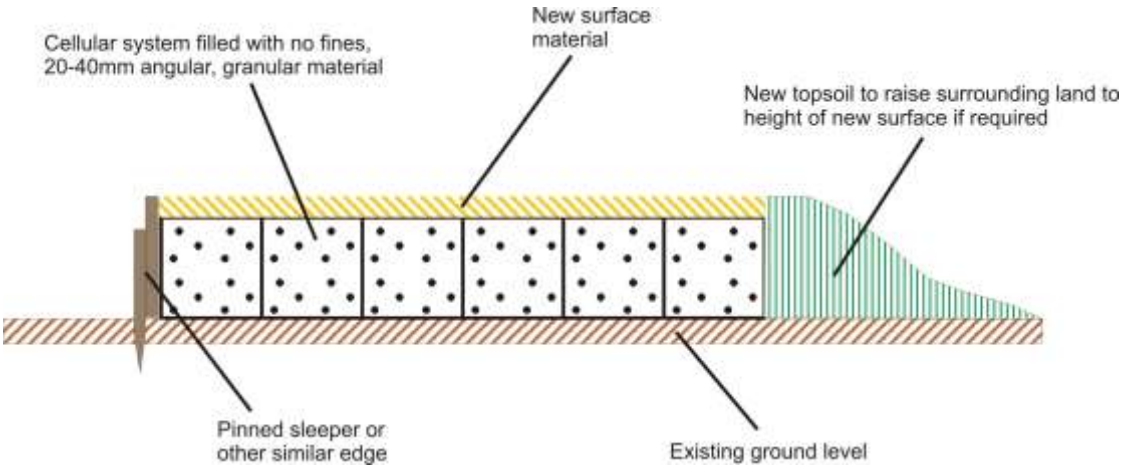
2.7.1 The construction of any new surfacing (hard-surface or rubberised surfacing) where this falls within the RPA of any tree, will be of a design that does not require any excavation of soil for ground levelling or scraping. The existing surface or vegetation will be removed as outlined above (existing surface) or using hand tools (vegetated surface) prior to the construction of the new surface. The new surfaced will be designed and installed following the guidance of BS5837:2012, as outlined below.

2.7.2 The structure of the surface will be designed by the project engineers to ensure an even distribution of load over the surface, and avoid any localised compaction. The design will therefore incorporate a three dimensional cellular confinement system (or similar alternative) within the sub-base to distribute the load evenly over the ground beneath.

2.7.3 The edging of any new surface will consist of sleepers, gabions or other, non-invasive ground contact structures, which will be pinned using road pins where necessary.

2.7.4 The cellular confinement system will be filled with a no fines, angular granular material of 20-40mm, which will remain un-compacted. The final surface will then be created over the top. Figure 3 below provides the specification for the no-dig surface as outlined.

Figure 3: Example of a Suitable No-Dig Surface for Access Driveway



3 CONCLUSION

3.1 No trees will be removed and no tree pruning is required to facilitate the proposed development. Significant tree and shrub planting will be undertaken which should result in an increase in amenity value of trees and shrubs on the site.

3.2 Throughout the majority of the works, vehicles and pedestrians will be excluded from within the Root Protection Areas or beneath the canopies of all trees by protective fencing. During any temporary works within the protected area, fencing will be temporarily removed, and ground protection provided if necessary, with the fence to be replaced immediately after completion of works. With the other careful working methods followed, and no-dig surfacing provided within the RPAs of any trees where necessary, it was considered the risk of impact to retained trees on and near the proposed development site would be negligible.

4 REFERENCES

Adonis Ecology (2019). *Tree Survey Report and Arboricultural Impact Assessment for Proposed Re-development of Stanborough Park North, Welwyn Garden City, Hertfordshire*. Adonis Ecology, Lavenham.

5 APPENDICES

5.1 Appendix 1: Figures

Figure 4: Tree Protection Plan for Proposed Re-development of Stanborough Park North, Welwyn Garden City.