# **Arboriculture Statement**

The proposed docking station is located within the Root Protection Area (RPA) of the mature trees situated on the carriageway on South Crescent south of the site, and on the footway north of the site on Store Street. The trees are mature, and in good physiological condition.

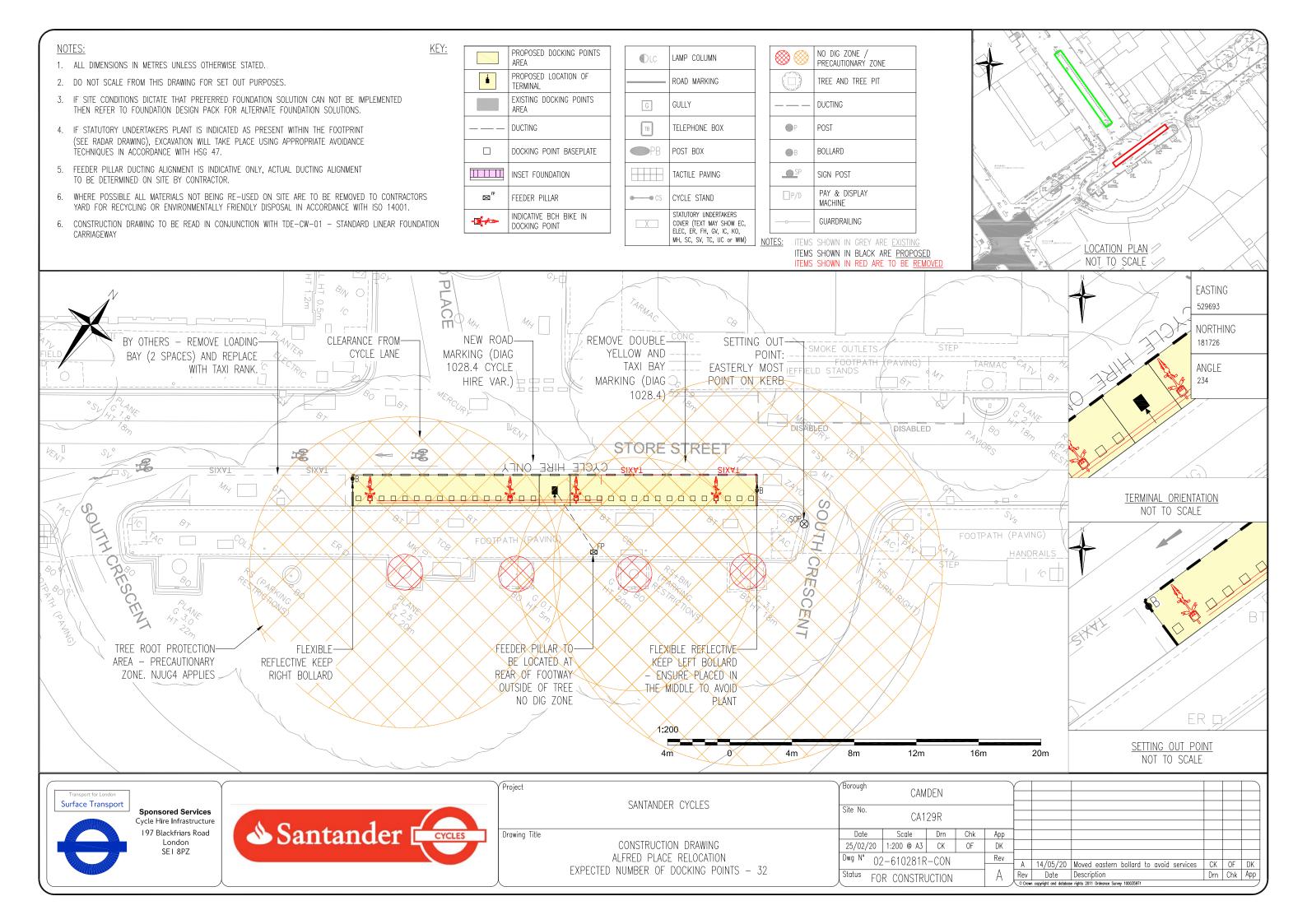
There is no evidence of disturbance to the carriageway where the docking station is proposed to be located on Store Street. Street View also shows recent works to the paving of the footway adjacent to the carriageway where the docking station is proposed to be located. This suggests that roots are unlikely to be found beneath the carriageway at the maximum excavation depth of 0.225m for standard foundations. The impact on the trees from trenching operations for the docking station is considered to be minimal.

Construction mitigation is proposed, and will be undertaken in accordance with the National Joint Utilities Group (NJUG) guidance:

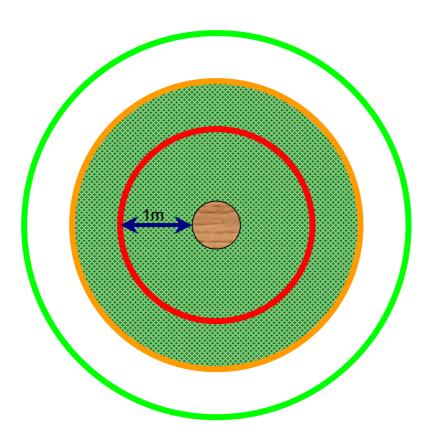
- •No remedial pruning is required to complete the works. The stem of the tree will be protected prior to commencement of any construction works;
- •During construction all excavation work must proceed with caution, surfaces within the root protection area will be removed using hand tools looking out for any tree roots which may be located in the excavation areas. If roots below 25mm in diameter are encountered, these should be retained undamaged wherever possible, and protected from desiccation by damp hessian sacking or a similar protective material. Roots below 10mm diameter should be trimmed back neatly in line with the edge of the excavation trench using secateurs.
- •Should any roots over 25mm diameter be exposed, excavation works should cease immediately and an arboriculture consultant called to the site for a professional judgement.
- •Any mixing of cement based materials is to take place outside the RPAs of the tree.
- •Construction activity would be compliant with NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees Issue 2. Ensuring that there would be no excavation within 1m of the trunk and precautionary excavation (machinery prohibited/hand only) in areas of 4x the circumference of the tree.
- •A Clerk of Works will be appointed by TfL to oversee the installation of all Cycle Hire Scheme docking stations. Prior to the commencement of any on-site activities, the Clerk of Works will be fully briefed on all potential arboriculture issues and will ensure that the specified tree protection measures are implemented.

Assuming that the measures outlined above are adopted, it is considered that the proposed docking station would not detrimentally impact on the tree within the vicinity of the works.









# TREE PROTECTION ZONE

# Key to Diagram



Trunk of Tree



Spread of canopy or branches



**PROHIBITED ZONE – 1m from trunk.** Excavations of any kind must not be undertaken within this zone unless full consultation with Local Authority Tree Officer is undertaken. Materials, plant and spoil must not be stored within this zone.



PRECAUTIONARY ZONE – 4 x tree circumference. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with Local Authority Tree Officer if in any doubt.



**PERMITTED ZONE – outside of precautionary zone.** Excavation works may be undertaken within this zone however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.



NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Issue 2

#### **DAMAGE TO TREES**

Tree roots keep a tree healthy and upright. Most roots are found in the top 600mm of soil and often grow out further than the tree's height. The majority of these roots are very fine; even close to a tree few will be thicker than a pencil. Most street tree roots grow under the footway but may also extend under the carriageway. If roots are damaged the tree may suffer irreversible harm and eventually die.

#### PROTECTING ROOTS - DO'S and DON'TS

There are three designated zones around a tree each of which has its own criteria for working practices.

#### THE PROHIBITED ZONE

Don't excavate within this zone.

Don't use any form of mechanical plant within this zone

**Don't** store materials, plant or equipment within this zone.

Don't move plant or vehicles within this zone.

Don't lean materials against, or chain plant to, the trunk.

Do contact the local authority tree officer or owner of the tree if excavation within this zone is unavoidable.

Do protect any exposed roots uncovered within this zone with dry sacking.

Do backfill with a suitable inert granular and top soil material mix as soon as possible on completion of works.

Do notify the local authority tree officer or the tree's owner of any damage.

## THE PRECAUTIONARY ZONE

**Don't** excavate with machinery. Where excavation is unavoidable within this zone excavate only by hand or use trenchless techniques.

**Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.

**Don't** repeatedly move / use heavy mechanical plant except on hard standing.

**Don't** store spoil or building material, including chemicals and fuels, within this zone.

Do prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.

**Do** backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non highway sites backfill only with excavated soil.

Do protect any exposed roots with dry sacking ensuring this is removed before backfilling.

Do notify the local authority tree officer or the tree's owner of any damage.

## THE PERMITTED ZONE

Don't cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.

Do use caution if it is absolutely necessary to operate mechanical plant within this zone.

**Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.

Do protect any exposed roots with dry sacking ensuring this is removed before backfilling.

Do notify the local authority tree officer or the tree's owner of any damage.