ARBORICULTURAL REPORT

New Car Parking Facilities

Isebrook School
Kettering
Northants

January 2008

The site, looking southeast

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1.0 Instruction

We are instructed by Jon Vale on behalf of Sursham Tompkins & Partners, to conduct an assessment of the existing trees on site in relation to a proposed new car park, and further, to assess the likely impact of the proposed design on the trees and offer appropriate design solutions so as to mitigate any such impact.

2.0 Site Visit

A site visit was carried out by Robert C Yates on 18th January 2008. Also in attendance were Jon Vale of Sursham Tompkins and the site supervisor for Isebrook School.
At the time of the site visit the ground conditions were very wet, and there was much evidence of serious ground disturbance resulting from the passage of contractors’ plant and equipment.

3.0 The Trees

The trees on site (in relation to the proposed external works) comprise a group of five early mature Sycamore to the west of the site (Group 1), a further group of three early mature Sycamore and one Whitebeam in the southeast corner (Group 2) and a group of four mature hybrid Poplars to the northeast of the site (Group 3). A further group of four hybrid Poplars exists slightly further to north (Group 4). See Sursham, Tompkins & Partners drawing 4400/02B for the location of each group.

Group 1 :
The most northerly tree in this group has been significantly damaged by the recent construction traffic, having several bark wounds on the stem and several branches indiscriminately removed. Further damage is likely to have been caused through ground compaction, and it is recommended that this tree be removed.
At the southern end of this group it is proposed to grade the slope down to the edge of the newly constructed car park (a fall of approximately 1.0m). This would destroy the majority of the roots on the east side of at least two of the remaining trees, thus having a major impact on their health and vitality.

To mitigate this impact we would recommend that instead of grading the slope, a retaining wall (possibly constructed in timber Criblock), should be located at the edge of the car park and extend northwards to at least as far as the end of bay 18. The inside edge of the retaining wall (i.e. closest to the trees) should be at least 3.0 metres from the centre of any of the trees in the group.

Group 2 :
This group of trees, which are in good to fair condition, are likely to be the most affected by the proposed construction works. The excavation required to install the required sub-base and kerbs would destroy a large proportion of the roots on the west side of three of these trees (the edge of the car park would be only 2.0 metres from the base of the nearest trees). We also understand that a drainage channel, possibly connecting to a soak-away, has been proposed for the eastern edge of the car park – This would cause further, and possibly more severe root damage.
Since it is unlikely that a 'No-Dig' method of construction could be accommodated on this site, we would therefore recommend that this group of trees is removed, and replaced with a single row of Western Red Cedar (Thuja plicata). These young trees, when planted at 1.5m centres, can thereafter be maintained by routine trimming, such that they will not exceed 3.5 metres in height, thereby avoiding future problems with surface roots and possible damage to the new hard surfacing. Planting should only be carried out following completion of all construction works, and during the period early November to mid March. (See planting specification Section 5 below)

Group 3 :
This group of large mature trees are of a species inherently prone to branch failure, even in moderate weather conditions, and irrespective of health and condition. Furthermore; they are already mature, and as such will have a relatively short useful life expectancy (a maximum of 15 years).

For these reasons, and in view of the potential increase in usage of the site, we would strongly recommend that this group of trees is removed prior to commencement of any construction works. Following removal to ground level we would also recommend that the stumps (including the stump of one tree previously removed) are treated with an approved herbicide to prevent re-growth. After a period of at least six weeks the stumps may then be removed by specialist equipment.

Once removed, these trees will no longer impose a constraint on the development proposal, nor the method of construction.

Following completion of all construction works, we would recommend that replacement planting as described for Group 2, is undertaken.

Group 4 :
This final group is largely irrelevant as a potential constraint, although it should be noted that the most southerly tree in this group is within falling distance of the northeast corner of the proposed car park. Since it is of the same species as those in group 3, and although currently in good condition, we would suggest that some crown reduction works are considered – A reduction of 20% would adequately mitigate any risk of branch or stem failure.

We understand that all the trees on the school site are routinely inspected by a competent person, and as such, future remedial works would be recommended for this group of trees based on the target area.
4.0 Conclusion

Providing that the mitigation measures described above, are incorporated into the design of the car park, and such remedial works to retained trees as described, are implemented, the long term impact on the health and vigour of those trees that can be usefully retained, will be insignificant.

5.0 Planting Specifications

- Thuja plicata. Container grown. Average 1.2m in height. Planted at 1.5m centres
- Prepare ground by; removal of stumps of felled trees, break up ground by use of ‘subsoiler’ to a depth of 450mm
- Excavate planting pits – twice diameter of root ball / 1 ½ times depth – incorporate organic peat free planting compost at base of each pit
- Mulch entire area (between edge of car park & boundary fence) with 100mm of clean woodchip or bark chips
- Support each tree with one diagonal 75mm diameter stake, and one plastic tree tie at approximately 400mm above ground