Summary of STAG/Amey Joint Street Tree Investigations

Abbeydale Park Rise, S17, outside 3. Cherry

Tree condemned because - DAMAGING Extensive footway uplift.

ITP advice and comments – Remove and replace tree.

Work done – No kerb issues. No roots were found under the footway humps at the depth excavated (approximately 25 cm). A large amount of mostly cement and some tarmac was causing the footway humps. To accommodate roots, a curve was made into the footway with newly laid concrete edgings. The footway width is still fine. Footway tarmac completed.

Before work showing displaced footway edgings.

#3 Excavated No roots

Showing excess tarmac forming hump, not roots.

New footway edging. Flat tarmac on footway.
Abbeydale Park Rise, S17, outside 6-8. Cherry Tree condemned because - DAMAGING
Footway cracked and lifted by shallow roots.

ITP advice and comments – Engineering solutions. 8, 10, 1, 3, 4.

Work done – No kerb issues. Old humped tarmac still in place, to be removed on resurfacing. No new edgings.
Abbeydale Park Rise, S17, outside 22-24.

Cherry

Tree condemned because - DAMAGING
Kerb pushed out of alignment and rooting over edges.

ITP advice and comments – Engineering solutions. 8, 10, 1, 3, 4.

Work done – Kerb pushed out of alignment and rooting over edgings. One slightly protruding kerbstone was trimmed at the front, gutter side, in situ creating a completely straight kerbline. Wooden edgings added on pavement side curved slightly around tree roots, but leaving adequate footway width. Pavement disturbance not attended to, as it can be dealt with easily during planned resurfacing.

Kerb shaved to bring into alignment.

Before work showing minor kerb displacement.

New wooden edgings on pavement side.
Summary of STAG/Amey Joint Street Tree Investigations

Briar Road, S7, outside 2. Lime

Tree condemned because - DAMAGING
Kerbs absent, cannot repair with tree in situ without causing unacceptable damage to roots.

ITP advice and comments - Engineering solutions 1, 3, 5, 7 and 8


Before work. A narrow kerbstone had been fitted previously, but was out of line.

Kerb trough excavated, need to trim kerb at root.

Flat pavement and full-width kerb fitted.

Tarmac completed.
Chatsworth Road, S17, outside 43. Lime

Tree condemned because - DAMAGING Kerbs, footway and edgings all disrupted.

ITP comments and advice - Engineering solutions. These would include extended tree pits (solution 12), combination of root pruning and excavation beneath the roots (solutions 8 and 10), permitting some interruption to the continuous kerb line (solution 5) and permitting some very short steep slopes on the pavement between the kerb and the base of the tree trunks.

Work done - After excavation and minor root pruning, it was possible to replace with full-width kerbstones trimmed underneath. Tree pit was enlarged using wooden formers. Footway tarmac replaced to give a flat pavement.

Before work showing displaced kerb.

After excavation, no significant roots in kerb line.

Complete, full-width kerb and flat tarmac.
Crawford Road, S8, outside 83. Lime

Tree condemned because - DAMAGING
Kerb and footway damaged.


Work done - Some pruning of small roots, Narrow kerbstones not practical so they have cast a new concrete kerb in-situ. New tree pit with wooden formers. Footway tarmac replaced to give a flat pavement.
Kerb has 60mm deviation from straight line.
Chelsea Road, S11, adj 111 Union Rd. Elm

Tree condemned because - DAMAGING
Rooting above tarmac in carriageway, completely unable to work round without severing roots.

ITP advice and comments - Engineering solutions. Notable and rare species, which we advise there is a strong arboricultural case to retain. The tree is causing some disruption to the pavement, and to the carriageway, where there are numerous utility covers. We nevertheless believe that a combination of engineering solutions could be used to retain this tree, install dropped kerbs, and render the pavement and carriageway satisfactory and safer at all parts of the Chelsea Road and Union Road junction. We recognise that this may incur additional costs.

13/02/19

Work done - Kerb line lifted to allow roadway to ramp over roots, cobbles under tarmac replaced with concrete layer to prevent roots breaking through. Some root pruning. New tree pit and better grading on footway.

Roots growing up through old cobbles and break through worn tarmac.

Kerb trough ready to reinstall ramped kerb.

New tree pit.

Kerb refitted.

Pavement tarmac redone.
Chelsea Road, S11, outside 2. Plane

Tree condemned because - DAMAGING
Kerbs displaced, footway and carriageway uplifted, will be damaged upon reconstruction

ITP advice and comments - It is causing significant disruption to the pavement, and some disruption to the kerb. There is an adjacent gully and a utility cover. We do not believe this disruption can be acceptably resolved. We therefore advise that this tree should be removed and replaced.

Work done - The kerb in front of the tree was misaligned with one kerbstone actually having been dislodged to leave a gap (this happened during the last three months). Two further kerbstones were removed in front of the tree. There was a major root in the kerbline which couldn't be cut. There was some minor root pruning done. Two new kerbstones were fixed either side of the protruding root. Both these were shaved down the length (at the back) to narrow them slightly. An in situ concrete kerb was formed over the root to connect the kerbstones either side. The tarmac round the tree was cut out with a stihl saw to create a clean edged tree pit. The edges of the tree pit were sealed with "liquid tarmac". Tree was mulched. The tarmacing of the pavement at the sides and back of the tree had already been done.
Summary of STAG/Amey Joint Street Tree Investigations

Edgedale Road, S7, outside 78. Sycamore

Tree condemned because - DAMAGING
Buttress roots growing into carriageway - kerbs absent, will be damaged upon reconstruction.

ITP advice and comments - Remove and replace tree. The tree outside number 78 has buttress roots in the carriageway and is causing significant damage to the pavement. We do not consider this damage can be resolved without removing the tree. We therefore advise that the Council would be justified in removing and replacing this tree.

Work done - Buttress root/epicormic growth in the kerbline. Some kerbstones are covered by the roots so would be difficult to move. One kerbstone at the upper (left end) is missing and the root is in the kerbline so it looks like difficult job to incorporate a new kerbstone. Mounded tarmac removed from footway. Tree pit fitted with wooden formers cut to accommodate a root at the back of the tree pit. Tarmac has been done.

Before work showing misaligned kerb and humped tarmac.

New kerb stone refitted on upper side with gap left for root.

Tarmac removed from round the tree. New tree pit. Pavement tarmac complete.

Kerbstone not put in.
Hunter House Road, S11, outside 176. Lime

Tree condemned because - DAMAGING
Kerbs absent, unable to install without root damage, rooting above tarmac level in footway.

ITP comments and advice - Engineering solutions 1, 3, 7 and 12 (thin kerbs, ramping and re-profiling the footway, tree pits, root pruning).

Work done - Minor roots pruned, narrow kerb trimmed to bridge over buttress root, enlarged tree pit. Footway tarmac replaced to give a flat pavement.

Before work showing missing kerbstones replaced with tarmac.

'Bridge' kerbstone installed to accommodate the buttress root.

Root protected from concrete bed. New tree pit with wooden formers. Flat tarmac.
Hunter House Road, S11, outside 181. Lime

Tree condemned because - DAMAGING
Kerbstone missing, footway damaged, cannot repair without unacceptable root damage.

ITP comments and advice - Remove and replace tree. Significant damage to the pavement and kerb. We do not believe there to be engineering solutions which could resolve these problems.

Work done - Very thick layer of tarmac up to and around the tree causing hump in footway was removed. Minor root pruning, kerbs refitted, and new tree pit with wooden formers. Footway tarmac replaced to give a flat pavement.

Before work showing humped tarmac and displaced kerb.

Complete, flat tarmac on footway.

New kerb and tree pit.
Khartoum Road, S10, opposite 1. Lime

Tree condemned because - DAMAGING
Footway lifted and damaged by substantial lateral rooting

ITP advice and comments – Tree not referred to ITP

Work done - Flagstones on footway displaced by tree roots. No root pruning required or possible after inspection by Arborist. Flags cut and shaped to fit over any protruding roots. Relayed to level surface on sand with some cement support at edges. No work on kerbs required. Ground off the top of two flags which protruded slightly at the edges above level surface. Large tree pit formed by the placement of the flagstones and then mulch laid.

Flagstones cut and shaped as appropriate and relaid.

Before work showing displaced flagstones and kerb.

Finished work.
Summary of STAG/Amey Joint Street Tree Investigations

Ecclesall Road, outside 565 (Sainsburys Local), Plane

Tree condemned because – DAMAGING
Kerb displaced by root pressure immediately behind and extensive footway damage

ITP said - Remove and replace tree. Kerb displaced. Footway significant damage.

Work done - Kerb cannot be relaid to get a straight kerb line within specification. There is the potential to relay 40m of kerb stones to form a new kerb line matching up with kink in kerb from tree further up the road but permission to go outside normal practice required. Footway surface damage caused by numerous surface roots that are too large to be pruned. Keeping these within tree pit area may require too large a tree pit to be formed. Not practical to relay standard Tarmac over roots. Tree roots close to surface of footway. Flexipave is being considered.

Before work showing displaced kerb and humped tarmac up to the tree.

Unable to fit narrow kerbstone to align correctly.

Tarmac removed showing extensive rooting in the footway.
Edgedale Road, S7, outside 3-11. Sycamore

Tree condemned because - DAMAGING
Extensive footway uplift/ramping, unable to work around-repair without root damage.

ITP comments and advice - Remove and replace tree. Significant uplift of the pavement. We do not consider this damage can be resolved without removing the tree.

Work done - Mounds of tarmac (6 layers) removed from around the tree. Exposed relatively shallow cables in footway. Kerbline dug out. New kerbline installed with different sized stones to accommodate root protrusion into kerbline. Tarmac will be used to patch up the footway with a tree pit edged with tarmac around the tree. Too difficult to fit a wooden tree pit. Possible that flexipave will be used but need to review this. Pavement has been tarmaced but there is still an exposed root in the footway.

- Pavement has been tarmaced but there is still an misaligned kerb. exposed root in the footway.

- Mounded and cracked tarmac around the tree.

- Kerb dug out and realigned.

- Tarmac removed from around tree.

- Tarmac replaced temporarily.
Summary of STAG/Amey Joint Street Tree Investigations

Engineering Solutions
1. Installation of thinner profile kerbs.
2. Excavation of footways for physical root examination prior to an ultimate decision being made on removal.
3. Ramping / Re-profiling of footway levels over roots (within acceptable deviation levels).
4. Flexible paving/surfacing solution.
5. Removal of displaced kerbs leaving a gap in the channel.

Alternative Solutions
7. Root pruning.
8. Root shaving.
10. Excavation beneath the roots damaging the footway.
11. Tree growth retardant.
12. Creation of larger tree pits around existing trees.
13. Heavy tree crown reduction/pollarding to stunt tree growth.
14. Retain dead, dying, dangerous and diseased trees for their habitat value.

Other solutions (out of contract)
15. Line markings on the carriageway to delineate where it is not safe to drive or park.
16. Building out kerb line into carriageway.
17. Footpath deviation around the tree.
18. Installation of a Geo-grid under the footway to reduce reflective cracking.
19. Reconstruction of the path using loose fill material rather than a sealed surface.
20. Reduce the road width and widen the footways as well as converting them to grass verges.
21. Close a road to traffic.
22. Change to contract specification to leave the footways as they are without carrying out any repairs and removing trip hazards.
23. Abandonment of the existing footway in favour of construction of a new footway elsewhere.
24. Permanent closure of footways to pedestrians. Dig up and replace as grass verges.
25. Seeking the views of residents about removal where that is considered by the Council to be the only option and getting the residents to sign a legal agreement regarding accepting liabilities.