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Introduction

This document is a revision of the Footway Crossings in relation to Trees Policy that was adopted from its draft format in February 2018.

The purpose of this revision is to take into account any amendments that have been identified during the previous years of operation.

Background to changes

The initial process for attaining a score for any tree affected by the proposal for installation of a footway crossing has been running for over 24 months and has proved to be reasonably effective in the determination process. However while the process for scoring the road is similarly effective it makes no provision for the assessment of other off-street parking available to the applicant – this is especially the case for those properties with rear access roads and garages/ space providing secure parking within the applicant's curtilage.

The city declared a Climate Change Emergency (July 2019) and set an aspiration to be net zero carbon by 2030. As part of the city wide requirements to meet these challenges greater consideration needs to be given to the role that green infrastructure and especially trees will play. To this end as assessment of the canopy cover for the ward will be factored in.

The changes made to the assessment process will be back office functions and are set out within the assessment criteria.

This process is to be applied to all highway trees including those being considered within a formal application for planning permission.

Assessment Process

First principles and Assessment

- 1. Tree Preservation to sustain good trees and avenues and canopy cover
- 2. Resident right to access.
- 3. Parking provision and its effects on the street.
- 4. Consideration of access to public transport.
- 5. No tree will be removed or detrimentally pruned for in-out access or crossing extensions.
- 6. The criteria will not apply retrospectively such that where a tree is sited within 1m of a crossing this alone will not be justification for removal.
- 7. Historical practice will not provide a justification for removal or work contrary to this document.
- 8. The Scoring system outlined in Table 1 will in this version be a start point. Reassessment and/ or revisions to the scoring may be made to achieve a more desirable result.

For detailed explanation of the criteria in table 1 please see appendix 1.

The assessment is based on a score with maximum of 5 points for each criterion. The maximum for the tree is 20 while the maximum for the road is 18. This is based on the fact that a tree scoring 19 or twenty is likely to be of exceptional quality and value.

The 2 total scores are tabulated and a compared.

Two new factors have been added within this V2 document these are;

- 1. Access to other off street parking within applicant's ownership
- 2. Tree canopy cover percentage for the ward.

These will seek to address issues in a systematic and objective way; these assessments will be undertaken as a back office function using GIS and aerial mapping as data sources. The access score will be added to the overall road score while canopy cover will be added to the tree score. The assessment criteria and scoring are set out in tables 2 and 3.

These additional scores will bring the totals to a maximum of 25 for the tree and 22 for the road.

Site:				Tree Species	Height	Spread	DBH	Min
Conservation Area (Y/N):								Clearance
App No								
Tree Position								
Tree Assessment				Road a	and User	Assessm	ent	
Amenity Assessment				Congestion Score				
Prime Health	5			Major parking	5			
				shortage				
Good Health	4			Parking shortage	4			
Fair Health	3			Parking Limit	3			
Poor health	2			Easy parking	2			
Dead	1			Free parking	1			
Retention				Road Score				
100+	5			less than 5.7m wide	5			
40-99	4			5.8m to 7.6m wide	4			
20-40	3			7.7 to 9.5m wide	3			
10-20	2			greater than 9.5m	1			
Newly planted and within establishment phase	1							
Public Visibility				Other Factors				
Major strategic (a roads)	5			Registered Disabled	5			
Distributor (b roads)	4			Whole Verge Parking	4			
Residential main roads	3			Obstructions	3			
Residential access roads	2			Partial verge parking	2			
Cul de sacs	1			No damage	1			
Avenue Score				Parking Policy Score				
Contiguous wide	5		•	Zone 3	3			•
Contiguous close	4			zone 2	2			
Contiguous remnants	3			Zone 1	1			
intermittent	2							
solitary	1							
Total Tree Score				Total Road Score				
		\vdash						
		\vdash			+		-	
						l .	1	

Table1. Tree- Crossing Assessment Form. – See appendix 1 for notes.

Access to off street parking	Score
Easy access directly of a road	0
Access via shared private access <150m	1
Access via shared private access <300m	2
Access via shared private access <450m	3
No other space available or Access via	4
shared private access >500m	

Table 2. Access to off street parking

Ward Canopy Cover	Score
Canopy >35%	0
Canopy 25% - 34.9%	1
Canopy 20.1% 25%	2
Canopy 15.1% - 20%	3
Canopy 10% - 15%	4
Canopy <10%	5

Table 3. Ward Canopy cover

Removal or Retention

Where the total tree's score is higher than the total road score then the tree will probably remain under all circumstances. Where the road's score is higher than the tree score then the tree will be allowed to be removed subject to a suitable replant location being identified. In instances where the score does not appear to reasonably reflect what is observed the result will be reviewed.

If it still does not reflect the situation then the TCA will only be used as a guide to the assessor.

Trees must not be removed by anyone other than the city's appointed contractors. Where unauthorised tree removal has occurred the full financial value of the tree (using the CAVAT system) will be sought.

Crossing type and Installation

Prior to any consideration of tree removal an assessment must be made to determine if a footway crossing can be installed in a position as sensitive to the tree roots as possible. In order to achieve some common standards the designs are outlined and the principles are defined below.

Tolerance

Where a crossing is set too close to the tree significant damage to the tree during construction and/ or during use is likely. 'Reaction wood' can develop as a response to traffic which may later damage the crossing. Where younger trees are near a crossing, the stem expansion may cause uplift to the crossing and wounding on the tree. Setting the crossing in the place least likely to affect the tree is essential. The absolute minimum distance for installation is set in line with NJUG volume 4.

- a) Target minimum distance from a tree will be '4 stem diameters' (4XD zone) or 0.5 m from visible ground disturbance attributed to that tree.
- b) Absolute minimum distance, in any case, will be 1m from tree stem

Size and Design

Standard 2.75m width is the usual size crossing – this will be allowed where 4XD (2 meter minimum) is possible. Total necessary frontage. = 4.75m

Minimum 2.45m is the absolute minimum – this will be required where the encroachment is within the 4XD zone (1metre minimum). Total necessary frontage = 3.45m.

Dipper kerb designs require the apron of the crossing to be splayed. This will require extra width which in turn will encroach on larger tree roots. The dipper also re-levels the whole apron as oppose to the front 0.8m. Unless there is ample space for the crossing a radius kerb or a half-length dipped kerb will be required.

Choice hierarchy in relation to trees

The following hierarchy of designs will normally be considered:

- 1. Extension to existing or neighbour's dropped kerb crossing minimal tree encroachment
- 2. 2.75 standard radius
- 3. 2.75 Dipper
- 4. 2.45 Radius
- 5. 2.45 Dipper
- 6. 2.45 Minimum
- 7. Larger than standard only where trees or tree space are not an issue.

Tree Works

Root Prunes

Supervised Root prunes are required both to ensure trees health and longevity and also to ensure that trees are left in a safe and stable condition as far as is reasonably practicable. A tree that has had its roots cuts indiscriminately may fail leading to injury, death and/or litigation. Therefore Birmingham City Council must discharge this duty of care under expert supervision. The applicant is responsible for funding this process.

A supervised root prune will be required where the tree is greater than 10cm in diameter, and ten times the trees diameter e.g. 25cm diameter = crossing within 2.5m, 70cm diameter = crossing within 7m.

If the assessment determines that a root prune is unlikely and as such the crossing is refused the resident may pay for a root inspection trench to be dug in the grass verge (where present). If no roots are found the resident will pay for the remaining hard surfacing to be 'root pruned'.

Tree Removal and Replacement

Where a tree is deemed an unnecessary obstruction as a result of the TCA but not falling into a condition required for removal under the Tree condition standards for highways, the resident will be required to fund the costs for both removal and one replacement.

Proposed Standard Responses

Root Prune.

(Tree score greater than road score)

"In processing your application we have assessed the tree near the proposed crossing. The assessment has deemed the tree worthy of retention. Included in your quote is the cost of professional arboricultural supervision in order to complete the crossing with minimal impact to the tree and to leave the tree in a safe condition. As part of this supervision, roots will be cut where necessary.

Due to the value placed on the tree, if the root prune is not possible we regret we will not be able to complete the crossing. All monies excluding the application fee will be refunded".

(Tree scores less than road score)

"In processing your application we have assessed the tree near the proposed crossing. The assessment has deemed the tree capable of being retained however, due to the potential for large roots in the vicinity of the crossing tree retention may not be possible. We have therefore provided a quote on the basis of tree removal and replacement.

We will investigate the ground first to see if there are significant roots present. If roots are not present or of a size that we can cut then we will retain the tree and refund the difference as shown in the quote below. Please provide payment on the basis of removal and replacement in the first instance.

Refusal

(TCA tree score greater than road score – cannot root prune)

"In processing your application we have assessed the tree near the proposed crossing. The assessment has deemed the tree worthy of retention and we regret to inform you that your application has been refused.

In carrying out the tree assessment we have followed industry standard guidelines and applied these to our decision process. We have also considered a number of layouts to allow construction but unfortunately, none will allow tree retention. If you wish to discuss the matter further please contact me on the attached correspondence below."

Acceptance removal

(Tree score less than road score – cannot root prune)

"Further to your dropped kerb application I can confirm that it has been accepted with the provision that the tree outside your property will be required to be removed and replaced as part of the quote provided.

In carrying out the tree assessment we have followed industry standard guidelines and applied these to our decision process. We have also considered a number of layouts to allow construction but unfortunately, none will allow tree retention.

Appendix 1 Tree Crossing Evaluation Form Notes

Tree Assessment

<u>Amenity Assessment</u> – An overall valuation of tree condition

Prime Health – At least early mature trees that are notable because of the representative form for the species showing no or very minor signs of poor health. Little or no detrimental pruning has taken place. Old or veteran trees that are suitable for the location or of such importance that location is a secondary consideration.

Good Health –Trees that show no or little signs of poor health that are of reasonable form for the species and have had reasonable pruning work carried out. Trees that have re-grown from historic pruning in a healthy manner and are desirable in the current location.

Fair Health –Trees that show signs of notable impaired vigour and/or disease or decay that is not a structural concern. Trees that have been poorly pruned and present reasonable health but poor form. Trees that are beginning to outgrow their location where pruning is not a medium term viable option. Evidence of localised dieback, deadwood or large wounds.

Poor Health – Trees that are of significantly reduced vigour with serious structural defects present such as large decay cavities, extensive deadwood, extensive included bark, fruiting bodies from known parasitic fungi. Trees causing obvious damage to third party property that is not rectifiable without removing the tree.

Dead or unsafe—Trees showing little or no signs of life. Trees with major safety issues requiring urgent or imminent removal.

Note 1: Trees classed as poor or dead will be removed.

<u>Retention Assessment – How long will the tree survive in its present location?</u>

100+ years – Trees that are past their establishment phase that are in areas likely to confer maximum growth potential allowing 100+ years of life span. Early mature trees in highway open spaces for example.

40 - 99 years – Trees that are past their establishment phase that are in areas likely to confer maximum growth potential allowing between 40-99 years of potential life span. Mature trees in Highway open spaces or grass verges for example. Early mature trees in smaller verges and footways

20-39 years - Trees that are past their establishment phase that are in areas likely to confer maximum growth potential of 20-39 years of life span. Mature Highway trees in smaller grass verges or footways for example.

10-19 Years - Trees that are older than ten years that are in areas likely to confer maximum growth potential allowing 10-19 years of potential life span remaining. Poor to fair health trees.

<10 years or young trees- Generally trees within the first 3 years of their establishment phase/ not yet established and/ or in poor condition.

Note 2: Newly planted trees or those still in establishment phase should ideally be retained wherever possible and removal a last resort.

<u>Avenue Assessment</u> – How established is the avenue in the street and what are the likely consequences for the current removal. What are the implications for the rest of the trees and therefore the avenue?

Contiguous Avenue Wide Spacing – Where greater than 80% of the avenue remains in uniform repetition. Where the wide spacing would mean that tree removal would open the highway up instantly and excessively, where the spacing allows for other residents to apply without affecting the trees. **ALSO Solitary trees that are of important landscape value in their own right AND trees in Conservation Areas.**

Contiguous Avenue Narrow Spacing – Where greater than 80% of the avenue remains in uniform repetition. Where the narrow spacing would mitigate the impact of 1 tree removal however the implications for removal would slowly erode the avenue value overall.

Contiguous Remnants – Where sections of a contiguous avenue remain and more than 30% of trees have been removed. The avenue has lost its character but it would be desirable to retain the remaining trees.

Intermittent – No real avenue is present. Trees are of varied size and species. Some parts of an avenue may remain but not to the point of any defined structure.

Solitary - Individual Trees that are not part of any avenue and that confer no real benefit in their own right.

Note 3 Solitary low value trees will not prevent crossing approval where ward canopy cover is >25%

Public Visibility Assessment – How visible are the trees to the general public as opposed to the local residents?

Major Strategic – "A" roads found within the city such as the A38 or A4040. Areas near major shopping centres, village greens – community focal points.

Distributor roads – Roads that arise or end at an "A" road or roads with near continuous or regular traffic where use is mixed. Roads that link residential roads together.

Residential Main roads – Roads that are primarily residential in nature that have regular but discontinuous traffic. Roads that link residential access roads together.

Residential Access Road – Roads that are through roads but serve in ordinary circumstances as access to property as oppose to thoroughfares for local traffic.

Cul-de-sacs – Dead end roads whose sole purpose is access to residents of that road only.

Road and User Assessment

Congestion Score – how is the parking situation affecting the residents and road users?

Major Parking Shortage- Cars double parked or illegally parked due to lack of alternative parking.

Parking Shortage – most available spaces are full with no immediately visible locations. Extensive parking restrictions exist within the area through traffic regulation orders.

Parking Limit – Parking is available but shortages are likely to occur from time to time.

Easy Parking – there is no real restriction on parking within sight of resident's property.

Free Parking – resident can more often than not park directly outside their property.

<u>Road Assessment</u> - Road width calculated on the width of a large family car at 1.9m. Multiples to take account of a passing space of around 60cm+.

Less than 5.7m – Road would only allow three cars width such that multiple cars parked on the road would significantly impede two-way traffic.

5.8 to 7.6m - Road would only allow up to four cars width such that multiple cars parked on both sides of the road would impede two-way traffic.

7.7 to 9.5m - Road would allow 5 cars width such that multiple cars parked on both sides of the road would allow two-way traffic.

Greater than 9.5m – Road would allow more than 5 cars width such that multiple cars parked on the road would not impede two-way traffic.

Other Factors – Other considerations which should be balanced against tree retention.

Registered Disabled – Resident is a blue badge holder and as such needs direct access however if on-street parking is available, a disabled bay may be more appropriate.

Whole Verge Parking – Resident parking car on grass verges or crossing verges causing significant damage. **Only to be used where the tree scores less than 12**.

Obstructions – Residents parking cars creating footpath obstructions or parking on corners etc.

Partial Verge Parking – Residents parking partly on the carriageway and partly on the footway. Particularly applies where damage to grass verge is present.

No Damage - No transgressions are evident at the time of assessment.

Road and User Assessment Cont..

<u>Parking Policy Score</u> - Based on planning guidance the assessment factors in planning policy as follows.

Zone 3 - No immediate access to amenities via alternative means – not within easy walk of shopping centre or train station.

Zone 2 - Access to amenities via alternative means – within easy walk of shopping centre or train station.

Zone 1 – City Centre – any area within the inner ring road (A4050).

Note 4. Trees in the city centre or in local shopping areas will not generally be removed unless in poor condition.

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Birmingham City Council, (2001) Places for Living 2001.

Birmingham City Council (2003), Overview and Scrutiny Review of Policies for Residential Parking 2003.

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Forbes-Laird, J. (2009) Tree Evaluation Method for Preservation Orders: A systematised assessment tool for TPO suitability.

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