# **REPORT ON WESTERN ROAD**

1. <u>Background:</u> Indicates a general background of the report.

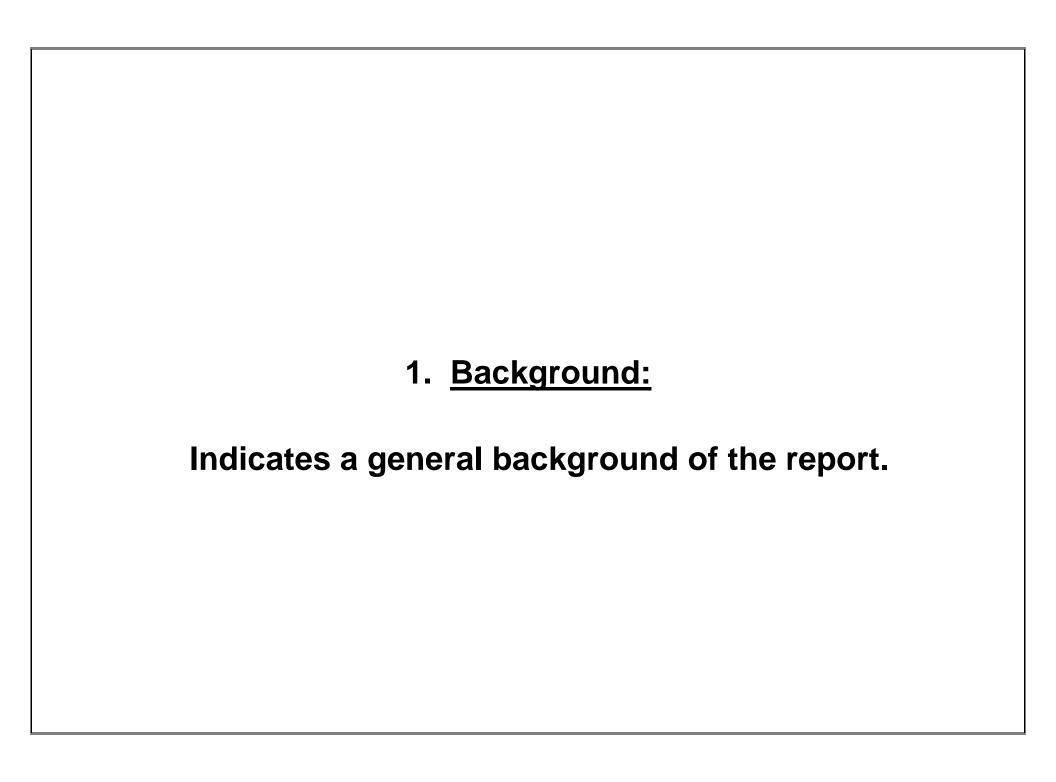
2. Plan of Trees Reported: Plan indicating existing trees and proposed replacements.

3. <u>Plan of Replacements:</u> Plan indicating proposed replacement locations.

4. <u>Table Summary:</u> Table of streets sent to ITP for Report.

5. <u>Site Locations / Photos:</u> Locations and photos of individual site locations.

6. <u>Additional Information:</u> Additional information concluding the report.



#### **Report on Western Road:**

#### **Background**

A total of 54 trees within the corridor of Western Road were initially surveyed by Amey as part of the PFI contractual agreement. Following this survey 23 trees were identified for replacement and 31 trees were identified for retention. These decisions were made after consideration by both Amey and separately the Council on whether any of the list of 25 engineering solutions could be used to retain trees. On posting the letter survey to households the response was as follows:

•	Households surveyed.	151	
•	Households responded	62	= 41% of total households responded
•	Households agreed	10	= 16% of respondents = 6.6% of total households
•	Households disagreed	52	= 84% of respondents = 34% of total households

This response meant that the proposals were sent to the ITP for their consideration and possible advice.

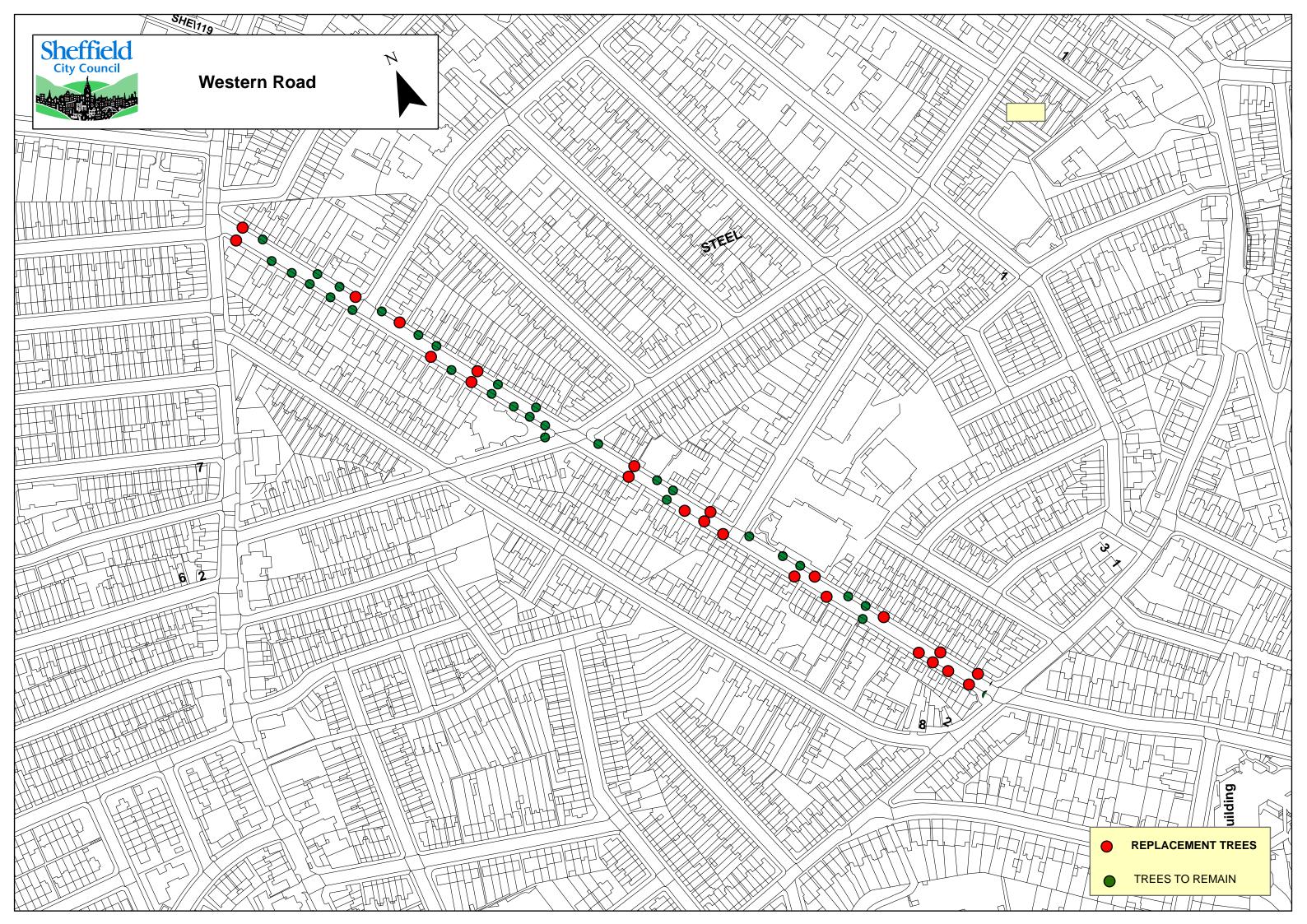
Whilst the proposals were with the ITP the Council commissioned a site review of some trees using Airspades to investigate as to whether any engineering solutions could be applied to retain any of the trees. The findings of that work are included in this report

The Council has received the following advice from the ITP on the 23 trees.

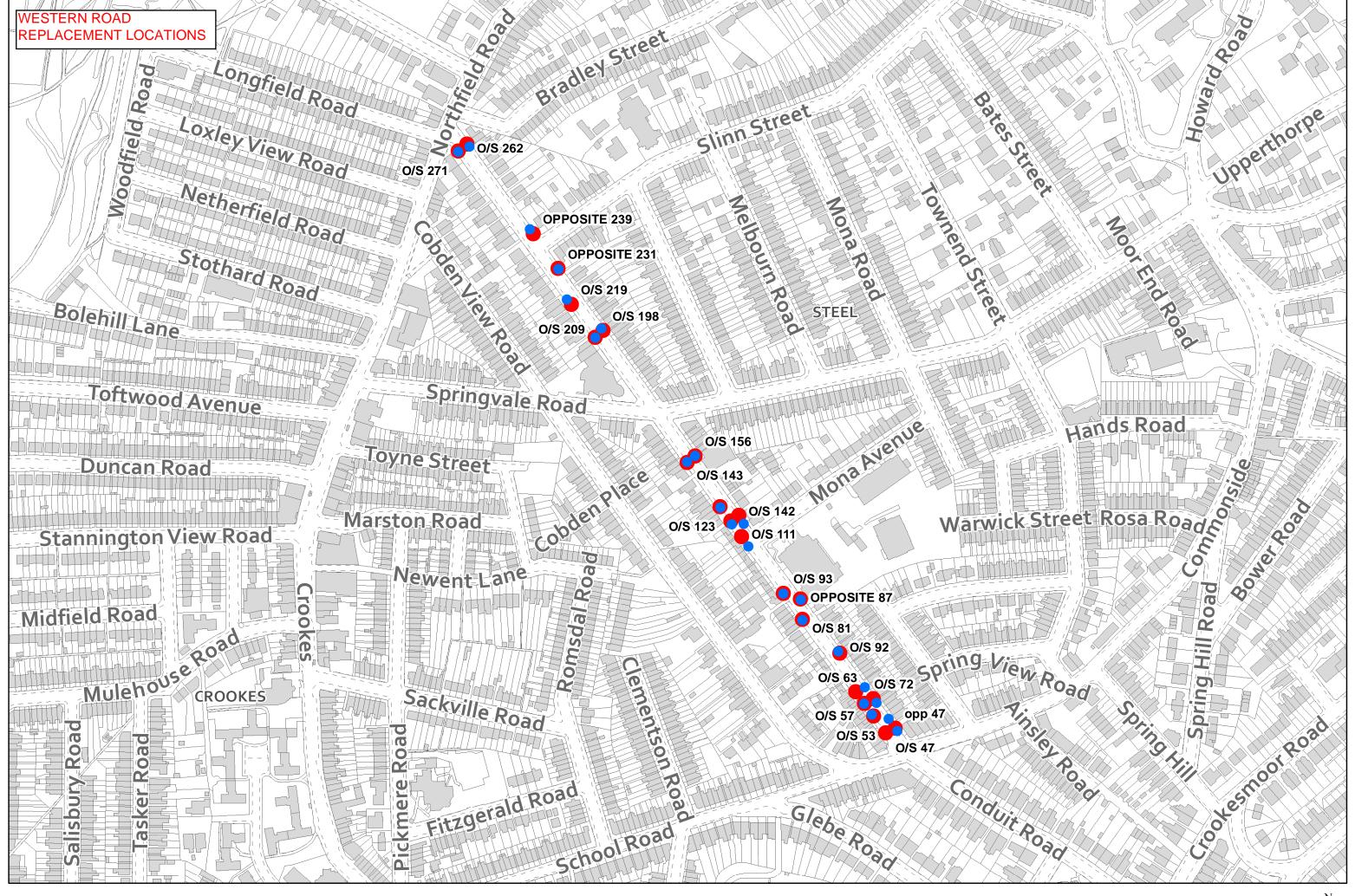
•	Agreed with proposal	11 Trees
•	Suggested consideration of narrow kerb	10 Trees
•	Suggested reduction in crown	1 Tree
•	Further investigation	1 Tree

A further site visit was carried out to review the proposals and in conjunction with the Airspades work [indicated in Red], the Council's decision is contained in the following table, together with additional individual site comments and photo's.

2. Plan of Trees Reported:
Plan indicating existing trees and proposed replacements.



3. Plan of Replacements:	
Plan indicating proposed replacement locations.	



**WESTERN ROAD** 

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#### REPORT ON WESTERN ROAD – TREE PROPOSALS

Site Name	Location	Existing tree species	Replant Species	6 D's	ITP Recommendati on	Airspade Report	Streets Ahead Recommends
WESTERN ROAD	O/S 47	Platanus x hispanica	Betula ermanii	Damaging	Agree with proposal		Proceed as planned with removal and replacement
WESTERN ROAD	OPP 47	Tilia x europea	Tilia cordata 'Rancho'	Damaging	Agree with proposal		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 53	Acer pseudoplatanus	Corylus colurna	Damaging	Half width kerb suggested	Agree with proposal	Proceed as planned with removal and replacement
WESTERN ROAD	O/S 57	Platanus x hispanica	Betula ermanii	Damaging	Half width kerb suggested	Remove Kerb and Ramp	Proceed as planned with removal and replacement
WESTERN ROAD	O/S 63	Platanus x hispanica	Acer rubrum 'October Glory'	Damaging	Further Investigate	Agree with proposal	Proceed as planned with removal and replacement
WESTERN ROAD	O/S 72	Platanus x hispanica	Tilia cordata 'Rancho'	Damaging	Agree with proposal	Remove Kerb and Ramp	Proceed as planned with removal and replacement
WESTERN ROAD	O/S 81	Platanus x hispanica	Tilia cordata 'Rancho'	Damaging	Agree with proposal		Proceed as planned with removal and replacement
WESTERN ROAD	OPP 87	Platanus x hispanica	Acer rubrum 'October Glory'	Damaging	Half width kerb suggested	Remove Kerb and Ramp	Proceed as planned with removal and replacement
WESTERN ROAD Roots to high	O/S 92	Platanus x hispanica	Betula ermanii	Damaging	Half width kerb suggested		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 93	Platanus x hispanica	Betula ermanii	Damaging	Agree with proposal		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 111	Acer pseudoplatanus	Betula ermanii	Damaging	Agree with proposal		Proceed as planned with removal and replacement

WESTERN ROAD	O/S 115	Acer pseudoplatanus	Corylus colurna	Damaging	Half width kerb suggested		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 123	Platanus x hispanica	Tilia cordata 'Rancho'	Damaging	Agree with proposal		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 142	Acer pseudoplatanus	Corylus colurna	Damaging	Half width kerb suggested		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 143	Acer pseudoplatanus	Tilia cordata 'Rancho'	Dangerous	Agree with proposal	Agree with proposal	Proceed as planned with removal and replacement
WESTERN ROAD	O/S 156	Fraxinus excelsior	Tilia cordata 'Rancho'	Disease	Reduce Crown		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 198	Platanus x hispanica	Betula ermanii	Damaging	Half width kerb suggested	Remove Kerb and Ramp	Proceed as planned with removal and replacement
WESTERN ROAD	O/S 209	Platanus x hispanica	Tilia cordata 'Rancho'	Damaging	Agree with proposal	Agree with proposal	Proceed as planned with felling & replace see photo
WESTERN ROAD	O/S 219	Acer pseudoplatanus	Acer campestre 'Elegant'	Dangerous	Agree with proposal		Proceed as planned with felling & replacement
WESTERN ROAD	OPP 231	Platanus x hispanica	Corylus colurna	Damaging	Half width kerb suggested		Proceed as planned with removal and replacement
WESTERN ROAD	OPP 239	Fraxinus excelsior	Betula ermanii	Damaging	Agree with proposal		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 262	Fraxinus excelsior	Tilia cordata 'Rancho'	Damaging	Half width kerb suggested		Proceed as planned with removal and replacement
WESTERN ROAD	O/S 271	Platanus x hispanica	Corylus colurna	Damaging	Half width kerb suggested	Agree with proposal	Proceed as planned with removal and replacement

The individual sites information relating to these decisions are indicated below.

5. Site Locations / Photos:  Locations and photos of individual site locations.	



### Outside No 47: SA. Recommend Replacement: ITP in Agreement:

Kerb Displaced by buttress, footway already ramped by shallow root disturbance causing backfall, also roots tracing into the adjoining property.



O/S 47 Additional showing roots tracing to forecourt area.



#### Opposite No 47: SA. Recommend Replacement: ITP in Agreement:

Kerb Displaced by buttress, footway already ramped by roots outside vehicular access point and disturbance by roots tracing to private property. Evidence of wall distortion also by roots tracing to third party boundary wall.





### Outside No 53: SA. Recommend Replacement: Airspade In Agreement

Cannot install full or half kerb due to buttress which was suggested by ITP. Risk of vehicle strike damaging existing wounds allowing entry of pathogens: Independent Airspade report recommends replacement.



#### O/S No 53 Additional:

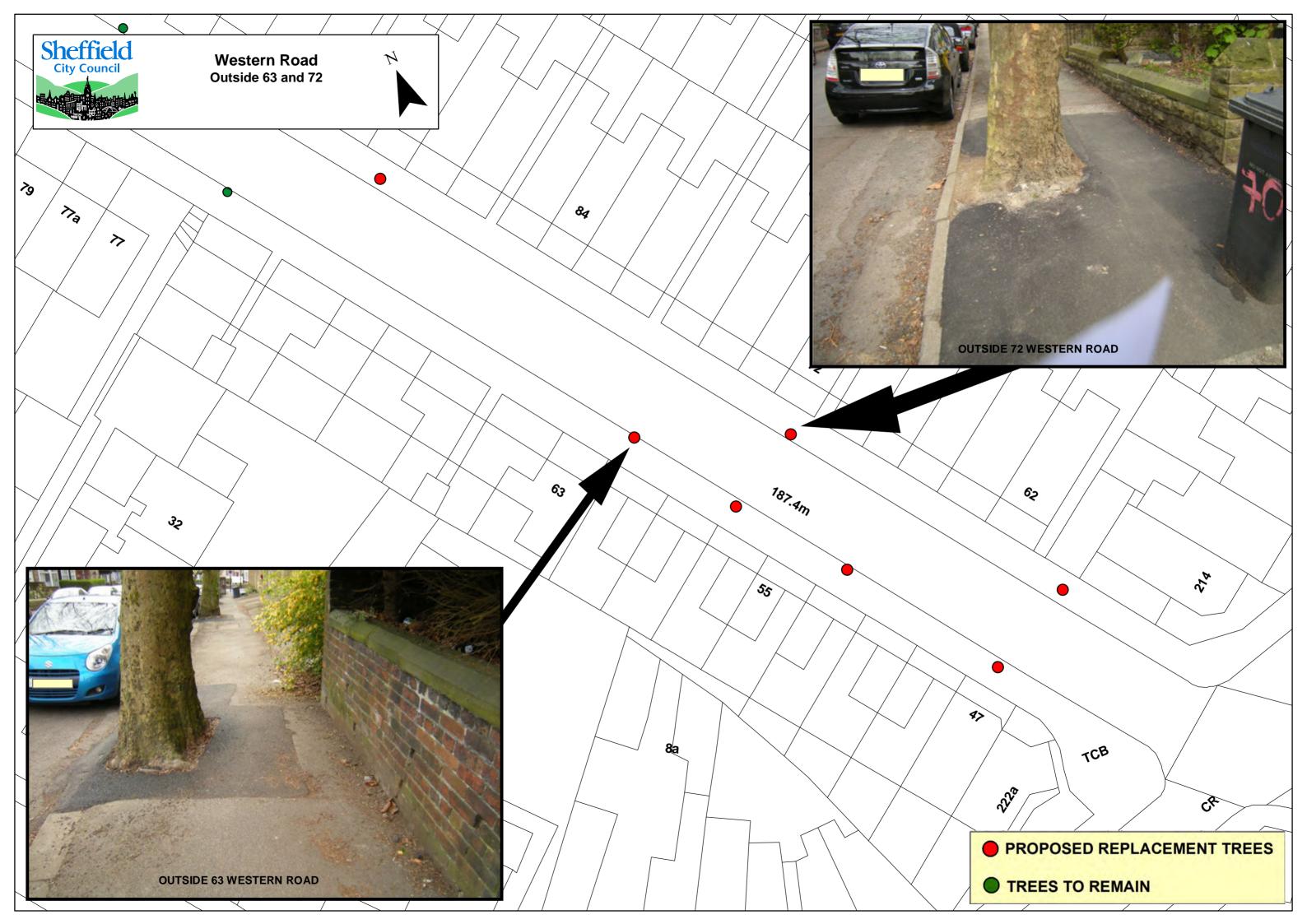
The root continues to grow into the carriageway and will get damaged when surfacing is completed. Proceed as planned with replacement



#### Outside 57: SA. Recommend Replacement

Cannot be kerbed due to root locations kerb displaced by buttress. The location of the roots prevents any form of kerb being provided as suggested by ITP. The footway also cannot be ramped within normal tolerance due to forecourt at rear.





#### Outside No. 63: SA. Recommend Replacement: Airspade in Agreement:

Replacement only option - Kerb displaced, unable to reset or provide half kerb. Roots continuing to trace under carriageway causing significant structural damage. Footway already ramped and damaged by shallow roots.



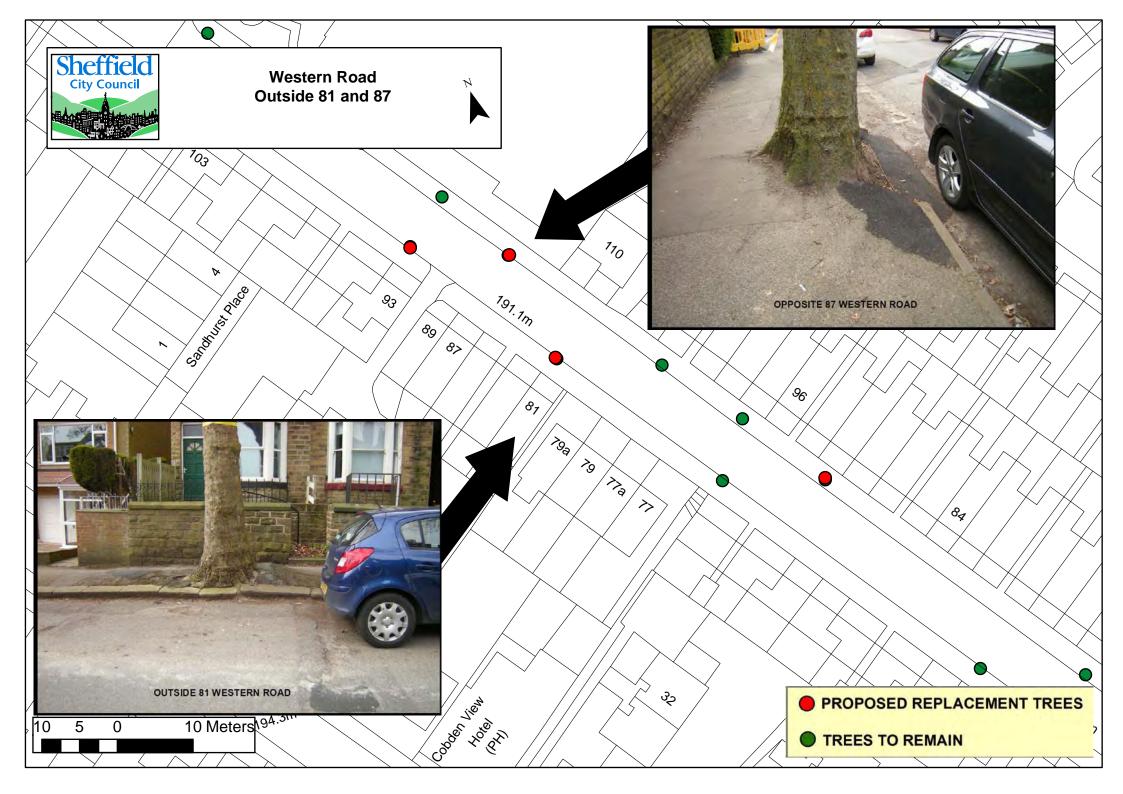


### Outside No. 72: SA. Recommend Replacement: ITP in Agreement:

The existing kerb have been displaced and footway are severely ramped by over 30cm in height. Footway ramped by shallow roots,

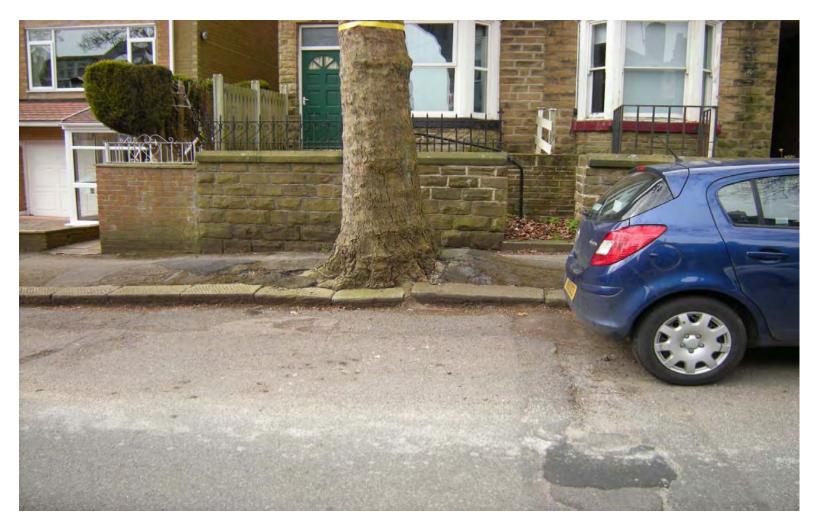


The location of the roots prevents the kerb being correctly aligned and backed up with concrete.



#### **Outside No 81:** SA. Recommend Replacement: ITP in Agreement:

Footway already significantly ramped by roots tracing to boundary wall: Kerb pushed out into channel line: Photo also showing recently repaired wall to the property



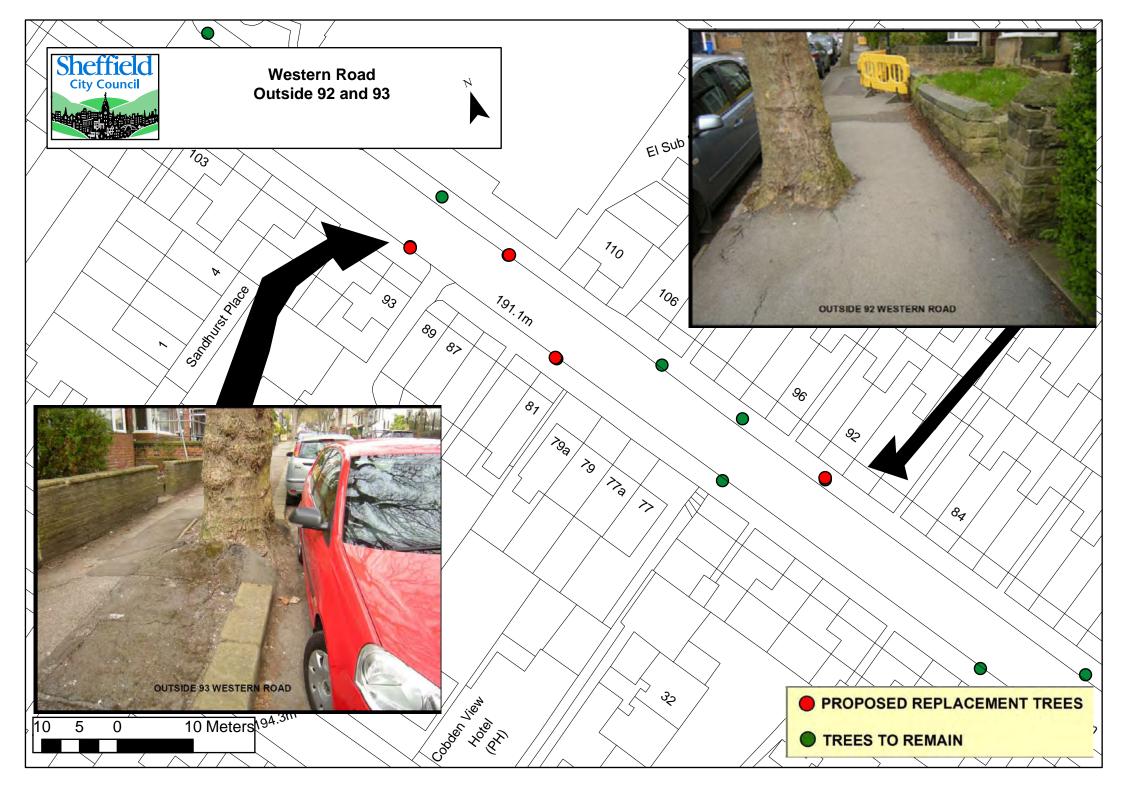
# Opposite 87: SA. Recommend Replacement

Mat of roots emanating from a historical wound where a piece of pedestrian guard rail has grown into the tree. Cannot be kerbed or half kerb as suggested by ITP due to root buttress protruding into carriageway





Temporary repair in Bitmac to cover roots into carriageway. Evidence of roots tracing towards property. Previous thin kerb already failed and removed due to roots, unable therefore to replace half kerb.



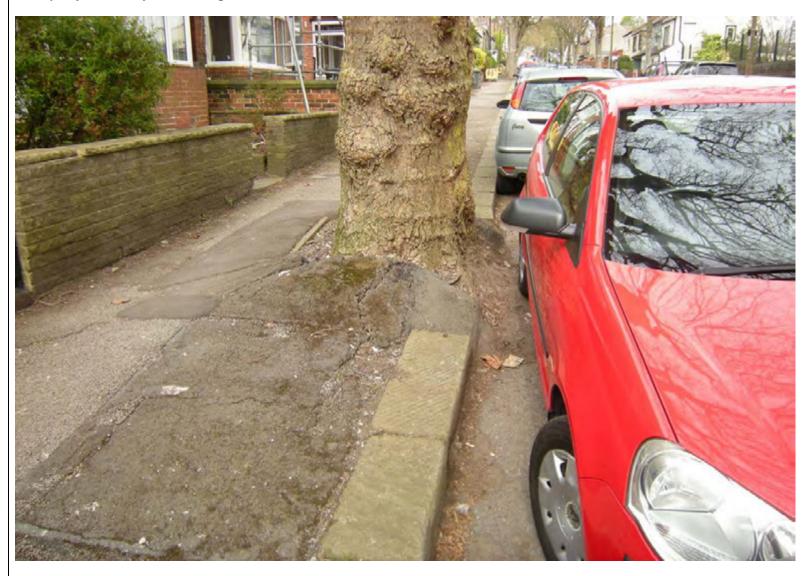
## Outside No. 92: SA. Recommend Replacement

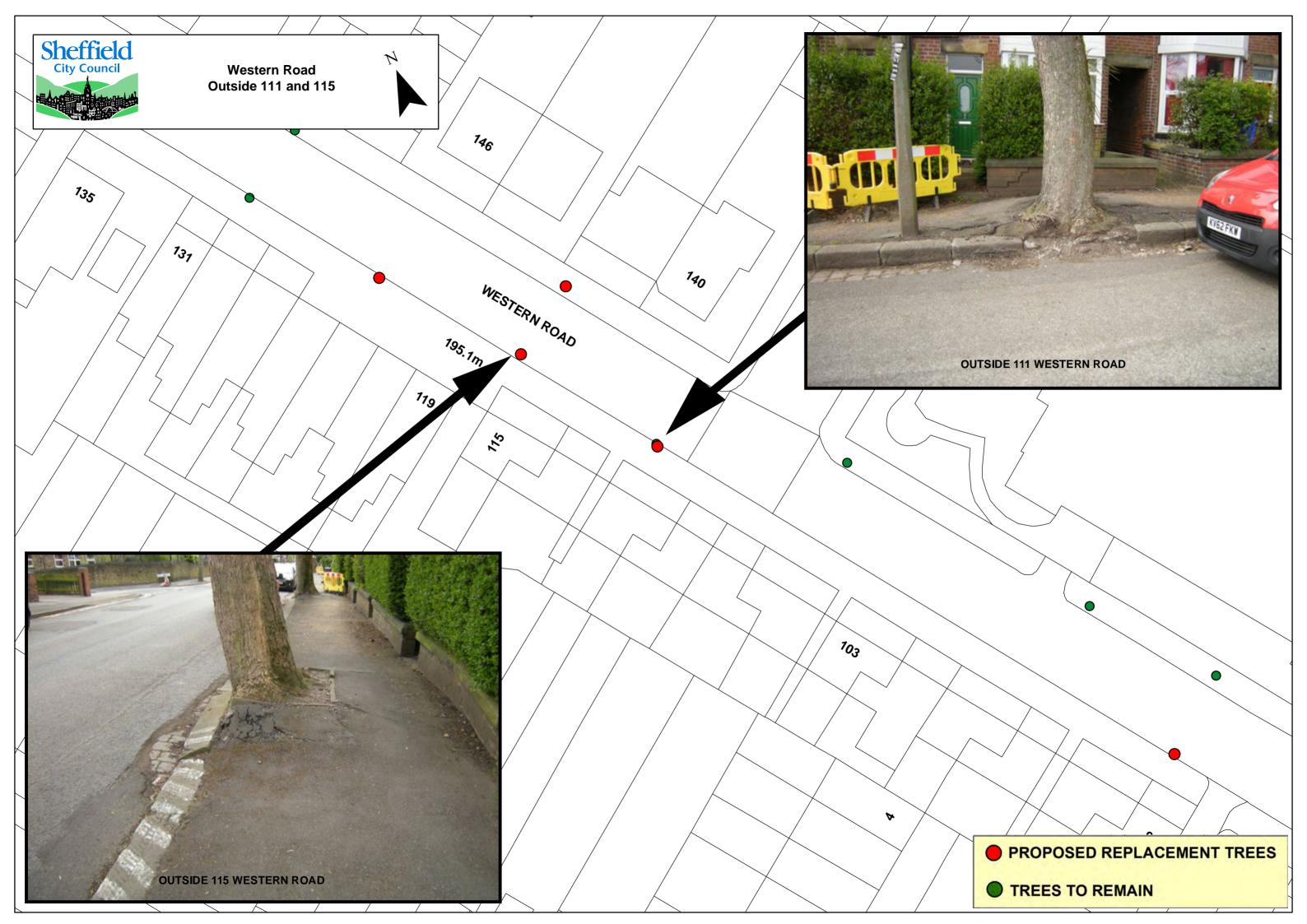
Evidence of slight bowing to wall: Cannot install full kerb at this location as it would encroach channel line. Kerb already missing due to be pushed out by roots. Roots would therefore prevent half kerb suggested by ITP



#### Outside No. 93: SA. Recommend Replacement: ITP in Agreement:

Root/buttress in carriageway causing damage and preventing any further kerb placement. Roots also in channel line of traffic and tracing towards third party boundary wall near gate.





### Outside No. 111: SA. Recommend Replacement: ITP in Agreement:

Cannot install full profile kerb as roots growing under carriageway. Footway already ramped by shallow roots. Damage to private wall by roots tracing to property is very evident

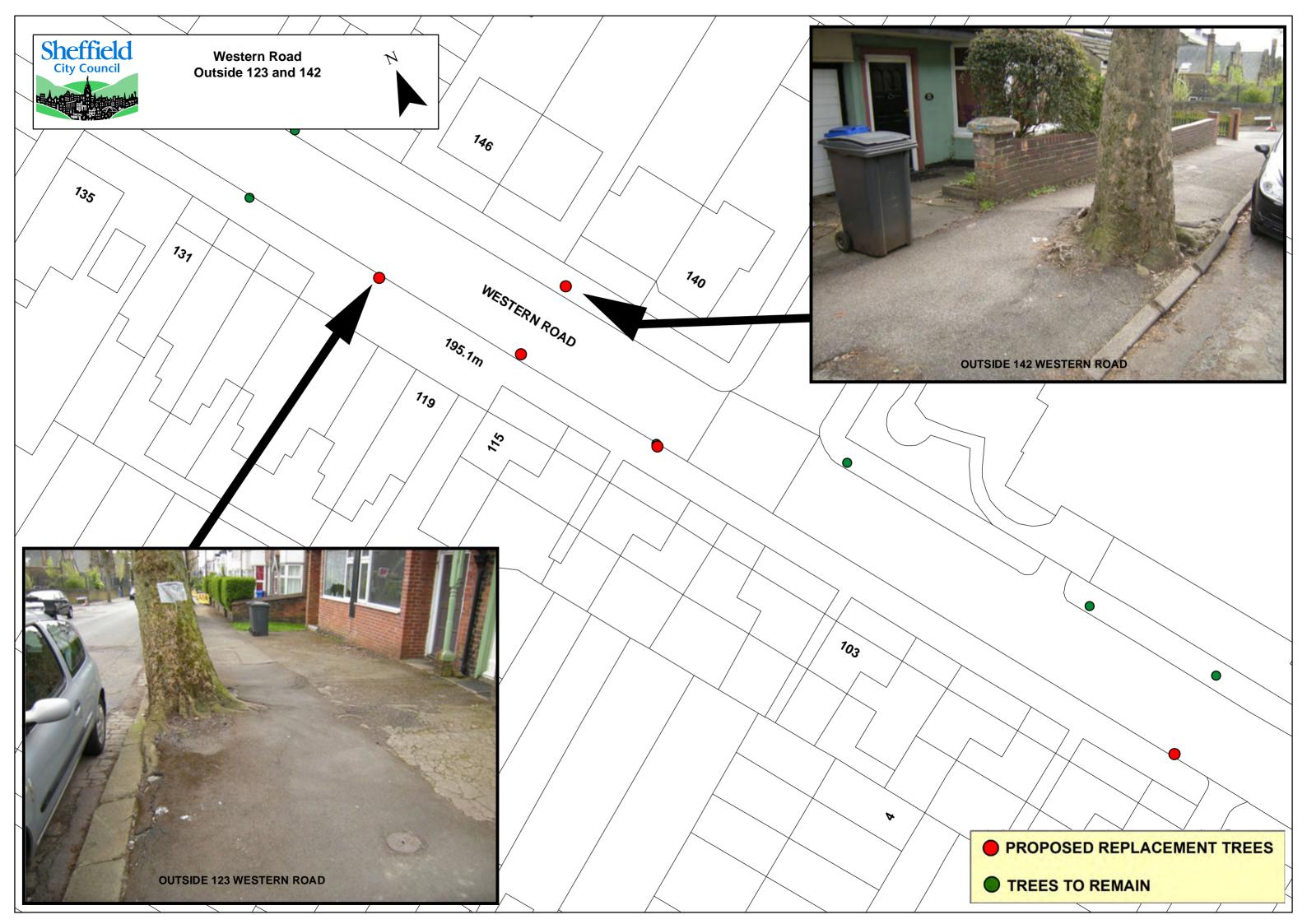


O/S 111: Additional evidence showing severe damage to boundary wall

### Outside No 115: SA. Recommend Replacement:

Kerb displaced by buttress. Unable to reset or provide half kerb as suggested by ITP due to roots already in kerbline. Also damage by roots tracing to boundary wall, this is evident by bowing





### Outside No. 123: Recommend Replacement:

Shallow roots damage to footway including evidence of roots showing at surface level in private forecourt causing crazing to bituminous material.



Further Ramping of this footway would also incur a severe backfall into private forecourt area

## Outside No. 142: Recommend Replacement:

Kerb displaced. Unable to reset half kerb as roots in carriageway line of channel as suggested by ITP. Also evidence of roots tracing to third party wall with slight distortion occurring to wall near access point which is partially being obstructed. Further ramping would cause severe backfall into property on the narrowed section of footway.





## Outside No. 143: SA. Recommend Replacement: ITP & Airspade in Agreement:

Roots overgrowing kerb and causing trip hazard. Footway damage severe. Potential 3<sup>rd</sup> party wall damage Felling and replacement, due to decay. Basel Ganoderma. Sp. fungal fruiting body.



The tree is now showing signs of major health issues. It was agreed on site that due to its condition further investigation was not required, Continue with replacement



## Outside No. 156: SA. Recommend Replacement

Decay at topping points and poor structural condition: Concrete frontage in place of kerb is only temporary as roots will displace into carriageway causing further distortion to the alignment.





# Outside No. 198: SA. Recommend Replacement

Main buttress root is preventing the replacing of the kerb or half kerb as suggested by ITP.



O/S 198 Additional photo: showing temporary ramping and tree leaning severely



#### Outside No. 209: Recommend Replacement: ITP & Airspade in Agreement:

Roots displaced kerbs beyond existing channel line. Severe root damage to footway and potential 3<sup>rd</sup> party wall damage. Tree felling and replacement - kerbs displaced by buttress. Footway ramped by shallow roots - Verified third party damage



Roots growing into 3<sup>rd</sup> party property causing damage. Continue with replacement.

O/S 209 Additional photo showing double ramping of temporary surface.





## Outside No. 219: Recommend Replacement: ITP in Agreement:

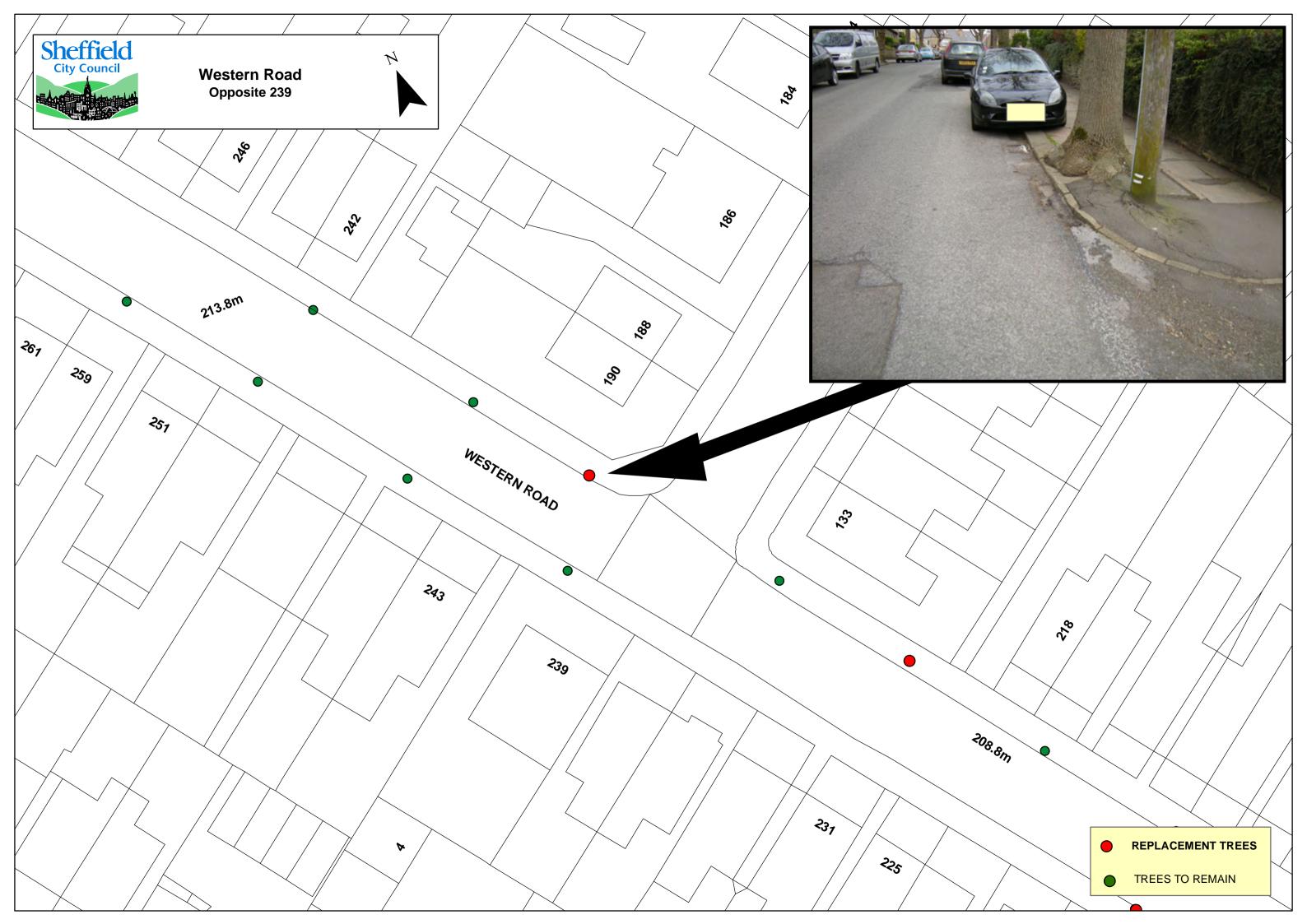
Due to declining physiological condition and basel decay. Slight damage to wall by roots tracing



## Opposite No. 231: SA Recommend Replacement

Kerb displaced by buttress. Unable to reset or provide half kerb suggested by ITP. due to roots in kerbline. Roots tracing to and undermining third party wall, future damage is imminent.

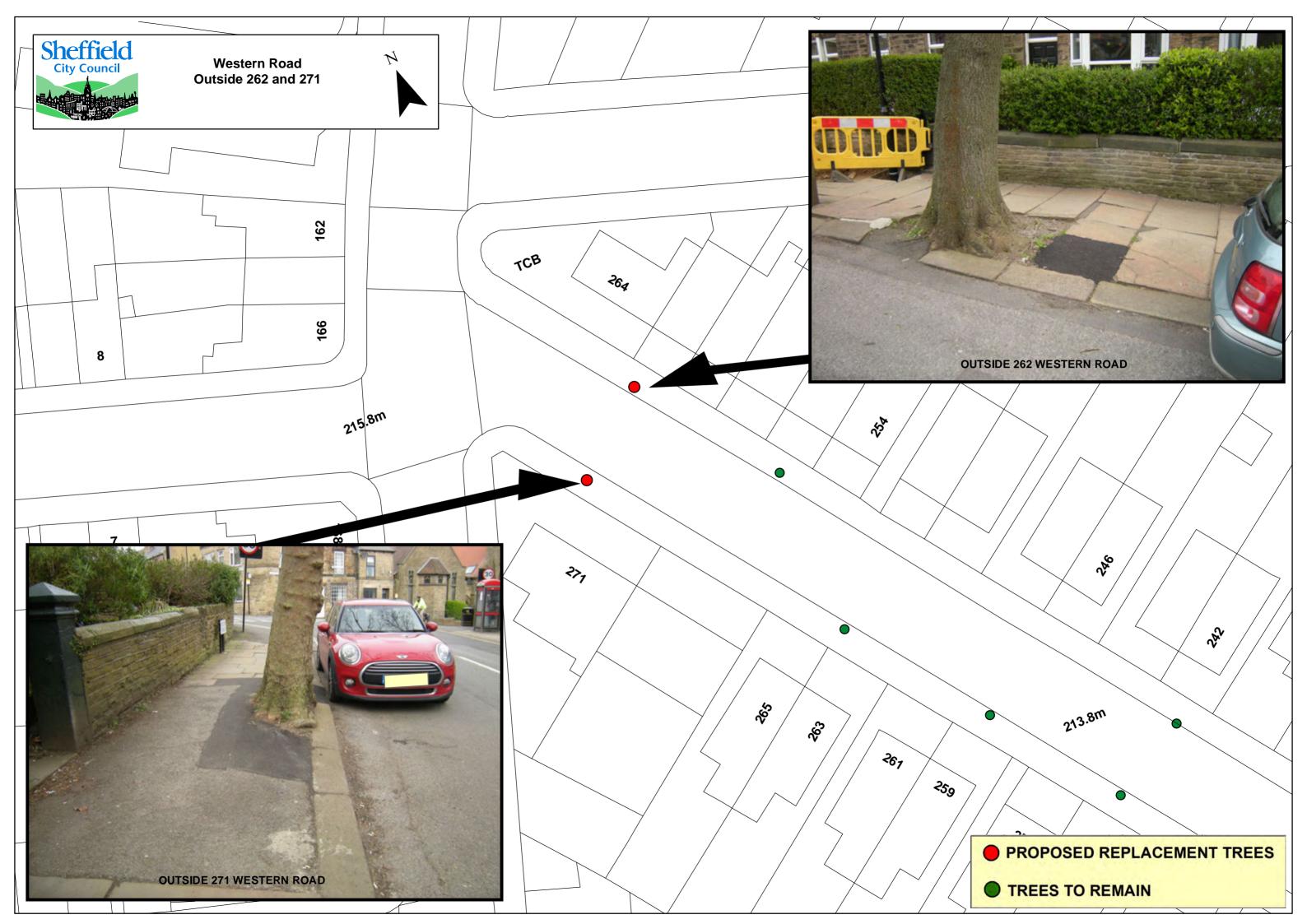




## Opposite No. 239: SA. Recommend Replacement: ITP in Agreement:

Buttress enveloping kerbs and preventing access to service cover. Unable to provide half kerb.





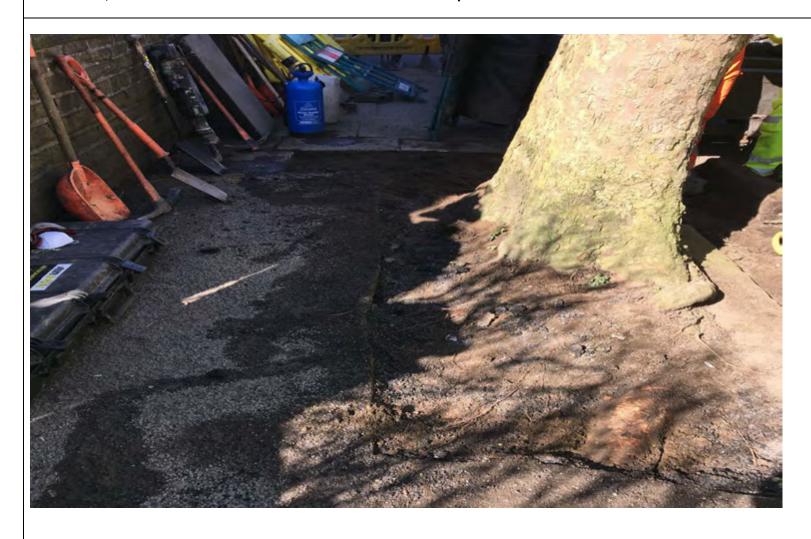
#### **Outside No. 262: SA Recommend replacement:**

Kerb missing: Unable to reinstall half kerb as suggested by ITP due to buttress roots tracing into carriageway. Damage to third party wall by roots tracing below flags is evident.

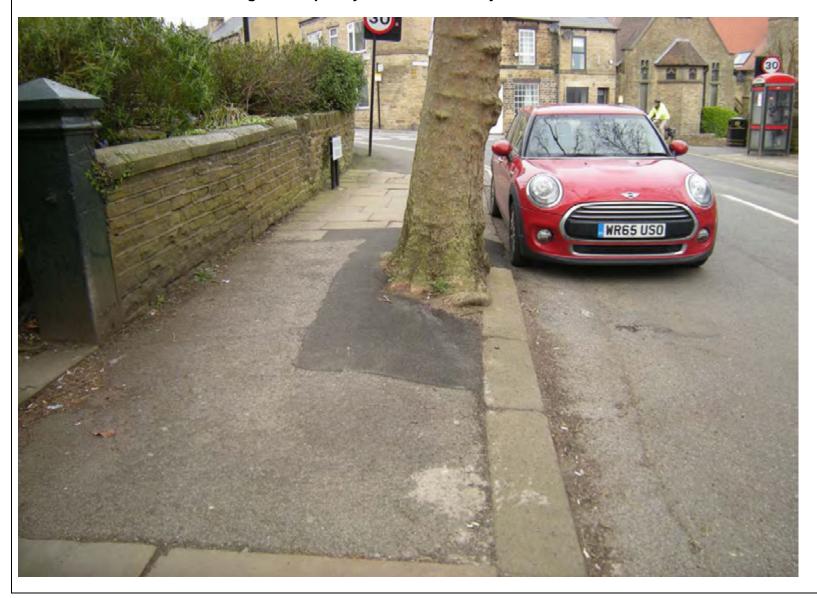


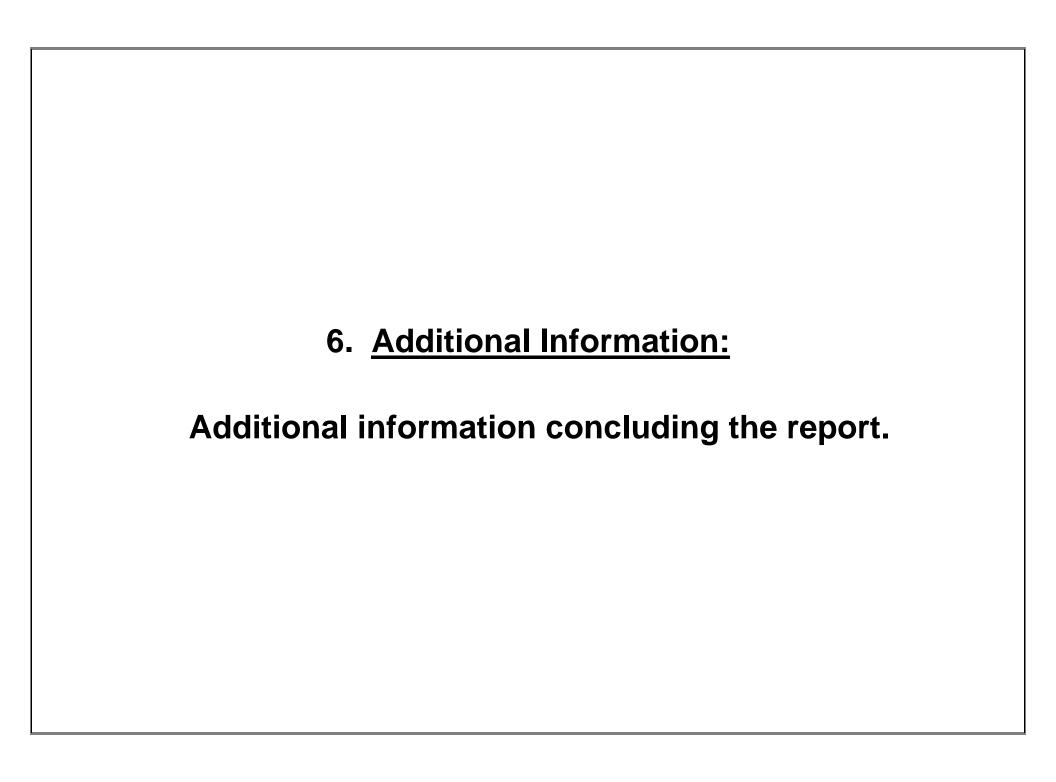
# Outside No. 271: Recommend replacement: Airspade in Agreement: -

Kerb displaced by roots, unable to reset due to roots in kerbline. Branches shearing out and in decline. Roots high in footway near gate from house, therefore further increase in build over would cause problems. Branches from this tree have fallen



O/S 271 Additional: Photo showing the temporary tarmac solutions just above roots on site .





#### **Additional Information**

In relation to the ITP advice to consider installing thinner kerbs we can make some general points about where this solution can be used and record some important restrictions.

The solution can be used only where tree roots push existing kerbs into the road by a small amount. It involves using the reduced size HB3 kerb which means a minimum width of 275mm across from the front of the kerb to the tree roots. Concrete edgings can also replace the kerb and Stihl sawing by trimming the kerb could be an option in certain circumstances. However, if there is insufficient width, or the roots are in the kerb line or carriageway channel, the kerb cannot be bedded adequately as it would be unsafe and unstable or kill off the tree. In these circumstances therefore, this solution cannot be used. The option of thinner kerb is also a short term solution, as a tree will continue to grow and so the problem is likely to recur over time and once the limits are exceeded the tree would require removal and replacement.

A further option that can be considered where the width is insufficient, is to leave a gap in the kerb. This option may be considered where there will not be a detrimental effect on drainage or present a hazard to cars by roots protruding into the channel. This option is also a short term solution as the tree will continue to grow and so the problem will always get worse over time. There could also be issues with vehicle impact or the tree rotting over time if drainage cannot be adequately maintained. Our further site inspection took into account these factors when reviewing the ITP and Airspades advice.

Please note at this stage that any solutions that fall short of standard kerb installation and resurfacing the footway and carriageway with standard or normal highway maintenance materials in line with current guidelines and legislation, are not possible, as they would not be compliant with the contractual requirements between Amey and Sheffield City Council, therefore, incurring specific contractual variation, costs and formal instruction by Sheffield City Council.

The report therefore, only indicates the latest proposals on spreadsheets and plans, together with the current action required following a review of the ITP as a highway maintenance solution. Any further engineering solutions would require a survey, traffic design and safety / traffic calming scheme, which may be able to incorporate build outs and traffic lining at significant cost to the Council.

## **Independent Tree Panel for Sheffield**

Paul Billington
Director of Culture
Sheffield City Council

By email

31 March 2017

Dear Paul

#### Western Road

The Independent Tree Panel has reviewed Sheffield City Council's plans for the removal and replacement of trees on this street. The summary data for the street are:

Number of trees	53
Number of trees referred to ITP	23
% of trees referred to ITP	43.4%
Number of households	151
Number of households responding to survey	62
Number of households responding to the survey who objected to the proposals	52

Andy Bagshaw, David Graham and I inspected the trees on 3 February.

We have considered the structural and physiological condition of each tree, and hence whether to advise the Council to consider removing and replacing the tree for this reason. Please note that in the absence of a comment to the contrary, we found the tree to be healthy and not in need of replacement for an arboricultural reason.

We considered whether the engineering solutions provided for in the Streets Ahead programme could be deployed to enable each tree to be retained, and hence whether to advise the Council to consider deploying one or more solutions for this purpose. We took account of the information provided by the Council about the engineering solutions.

We have summarised our comments and advice in the attached table.

Yours sincerely

Anglin

Andy Buck

Chair

Copy:

James Henderson

Independent Tree Panel members

Western R	Western Road				
Fall Joh No	Tree I eastion	Commant	Advisa		
Fell Job No	Tree Location	Comment	Advice		
12026816	O/S 271	Kerb displaced.	Half width or tapered kerb.		
12026847	O/S 209	Substantial damage to footway.	Remove and replace tree.		
12026915	O/S 115	Kerb displaced.	Half width or tapered kerb.		
12026911	O/S 111	Substantial damage to footway.	Remove and replace tree.		
12026906	O/S 93	Substantial damage to footway.	Remove and replace tree.		
12026901	O/S 81	Substantial damage to footway.	Remove and replace tree.		
12026894	O/S 63	Kerb not displaced. Minor ramping.	Investigate roots with view to retaining tree.		
12026876	O/S 57	Kerb displaced.	Half width or tapered kerb.		
12026874	O/S 53	Kerb displaced.	Half width or tapered kerb.		
12026872	O/S 47	Substantial damage to footway.	Remove and replace tree.		
12026870	орр 47	Substantial damage to footway.	Remove and replace tree.		
12026868	O/S 72	Substantial damage to footway.	Remove and replace tree.		
12026864	O/S 92	Kerb displaced.	Half width or tapered kerb.		
12026860	OPPOSITE 87	Kerb displaced.	Half width or tapered kerb.		
12026850	O/S 142	Kerb displaced.	Half width or tapered kerb.		
12026843	O/S 198	Kerb displaced. Flagstones lifted.	Half width or tapered kerb. Replace flags with tarmac.		
12026836	OPPOSITE 231	Kerb displaced.	Half width or tapered kerb.		
12026830	OPPOSITE 239	Substantial damage to footway. Access to service cover prevented.	Remove and replace tree.		
12026819	O/S 262	Kerb missing.	Half width or tapered kerb.		
12026919	O/S 123	Substantial damage to footway.	Remove and replace tree.		
12000803	O/S 219	Tree in poor condition.	Remove and replace tree.		
12000799	O/S 143	Tree in poor condition.	Remove and replace tree.		
12000779	O/S 156	Tree previously topped. Decaying cavities at topping point.	Reduce crown to retain tree.		