APPENDIX 3:
COUNCIL OFFICER EVIDENCE

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ROBERTS
CONSULTING

June 13, 2018

RE: Significant tree T303, 62 Chambers Street

Jeremy Grey
City Planning
Dunedin City Council
PO Box 5045
Dunedin 9058

Dear Jeremy,

As per your June 6, email request, I have conducted a site visit to number 62 Chambers Street, Dunedin to inspect significant tree T303 listed on Schedule 25.3 as a Golden elm (*Ulmus glabra 'Lutescens'*). The purpose of the visit was to assess the condition of the tree, specifically in relation to tree removal works as described in Planning Application LUC-2018-295 and the April 29, 2018 Green Trees Limited report; Evaluation of Golden Elm (*Ulmus glabra 'Lutescens'*) T303.

The tree was visually inspected from ground level on the afternoon of June 12, the weather was clear and calm at the time of the visit.

1 Condition assessment and observations

1.1 In general, at the time of the assessment, the tree looked to be in good health and have vitality within the normal range for the species and age.

1.2 The tree had a relatively symmetrical canopy [image one], was approximately 16m tall with an evenly spreading canopy of around 20m
1.3 The base of the tree was approximately 5m from the northern most corner of the house at number 62 Chambers Street and approximately 3.5m from the house at number 58 Chambers Street.
1.4 The tree is deciduous and had very few leaves, which was to be expected for the time of year. Bud-size, density and location suggested that the tree would be evenly foliated when in leaf.
1.5 The tree has had pruning work undertaken in the past which appears to have been carried out in accordance with industry accepted pruning standards
1.6 The tree had a series of three (3) steel cable-brace supports connecting the three main stems together. The cable-braces were old (30+ years according to the applicant), still intact and appear to have been installed in accordance with the then industry accepted standards.
1.7 The tree had grown over the connection point (the point of attachment on each stem), therefore I was unable to assess the integrity of the connection. The cable itself appeared to be in relatively good condition
1.8 The trees had good trunk taper and root flare, and the root plate appeared to be stable.

1.9 Assuming that the cable supports retained integrity, the tree appeared to free from obvious defects that suggested imminent failure.
1.10 Overall, the tree appeared to be a near specimen example of the species and worthy of inclusion on the Dunedin City Council Schedule of Significant Trees

2 Comments in relation to the Green Trees Limited report; Evaluation of Golden Elm (*Ulmus glabra 'Lutescens'*) T303, by Peter Waymouth.

2.1 Peter Waymouth on tree age (Page 3). Mr Waymouth notes that; '*Ulmus glabra are a forest tree species capable of growing over 30m tall and being long-lived (i.e. 250 years)'.*

2.1.1 The common name *Ulmus glabra* is wych or Scotch elm, T303 is a golden elm (*Ulmus glabra 'Lutescens'*). It is incorrect to make size and age comparisons between two different tree types therefore I question the relevance of this comment.

New Zealand and Australian nursery standards generalised Golden elm as; *a medium-sized, fast-growing deciduous tree that reaches a height of approximately 15 m with a spread of about 20 m.* T303 is currently at or larger than the expected nursery standards, which would suggest that the three is not going to get much larger.

2.2 Peter Waymouth on shading (Page 3). Mr Waymouth notes that T303 shades both numbers 58 and 62 Chambers Street, but so does the land mass above the houses. Mr. Waymouth's points are valid, but;

2.2.1 Based on the cable-brace system being installed approximately 30 years ago and the fact the tree had be large enough to be cabled at the time the system was installed, it is probable that the tree has been casting shadow over both of these properties for over 50 years.

2.2.2 Removal of the tree will not address any shading cast by the contours of the section and the land mass above the house.

2.3 Peter Waymouth on tree STEM Evaluation (Page 3). Mr Waymouth uses STEM to award T303 138 points, noting that *'the Dunedin City Council require a significant tree to attain 147 total points for inclusion on the District Plan'.*

2.3.1 There is a certain amount of subjectivity in STEM. I have assessed the tree and gave it a score of 150 points, the STEM form included in Mr. Waymouth's report (which I assume is a copy of the Dunedin City Council (DCC) initial inclusion document) gave the tree a STEM score of 159. According to page 6 of the DCC 2GP, Second Generation District Plan document [Scheduled Trees, Section 32 Report] trees are included in the schedule of significant trees is they; pass a STEM benchmark score of 145.

2.3.2 The tree is currently included on the schedule of significant trees, and has good vigour, health and has grown larger since it was listed in 2001 (as noted on page 3 and 13 of the Waymouth report). With that in mind, the tree has not decreased in value therefore I do see the relevance of re assessing the tree to provide a different STEM score.

2.4 Peter Waymouth on tree risk assessment (Page 4). Mr Waymouth uses the International Society of Arboriculture Tree risk assessment method Tree Risk Assessment Qualification (TRAQ) and provides a copy of a Peter Waymouth 'adapted' TRAQ data sheet. Using this methodology Mr. Waymouth has given the tree a moderate risk rating.

2.4.1 To generated a Moderate risk rating, Mr. Waymouth has set the occupancy of the target in the target zone as being frequent.

A target zone is the location where target must be to be impacted by the tree or tree part if or when it fails. The target given is 'people passing beneath the canopy of the tree'.

Frequent occupancy, is defined by the TRAQ when the *target zone is occupied for a large portion of the day or week.* Suburban streets with moderate traffic volume, car parks for facilities that are open during the daytime only, sidewalks in shopping areas, and busy delivery areas are examples of frequent occupancy. The area beneath the canopy of the tree does not meet the TRAQ definition of frequent.

Mr. Waymouth is suggesting that there are people beneath the canopy of the tree for a large portion of the day or week, which I do not believe to be an accurate assessment.

A more accurate assessment of occupancy would be Occasional Occupancy. Occasional occupancy is described through TRAQ as; *a site that is occupied by people or other targets infrequently or irregularly.* Examples include country roads, low-use footpaths, and low-use sections of parks.

With the corrected occupancy rate, the TRAQ the risk posed by T303 on people passing beneath the canopy of the tree is reduced to low.

2.5 In Mr. Waymouth's conclusion, he notes two options:

i) Replace the cable support system, under take some reduction pruning and retain the tree, *and*
ii) Remove the tree and replant with something smaller

3 Comments in relation to the applicant's reasoning

3.1 The applicant notes that; the tree as simply outgrown its location.

3.1.1 As per 2.2.1, T303 is currently at or larger than the expected nursery standards, which would suggest that it is not going to get much larger.

3.2 The applicant notes that; the tree towers over the house leaving the house in premiant shade

3.2.1 As per 2.1.2; the removal of the tree will not address any shading cast by the contours of the section and the land mass above the house.

3.2.2 As per 2.1.1; it is probable that the tree has been casting shadow over the applicants property for over 50 years.

3.3 The applicant notes that; the tree is currently cabled and that these cables are 30 years

3.3.1 As per 1.7, the cable itself appeared to be in relatively good condition

3.4 The applicant notes that; the tree is a Signiant safety risk

3.4.1 As per 2.4.1, With the corrected occupancy rate, the TRAQ the risk posed by T303 on people passing beneath the canopy of the tree is low.

3.5 The applicant notes that; the tree is a beautiful tree

3.5.1 As per 1.10, the tree appeared to be a near specimen example of the species and worthy of inclusion on the Dunedin City Council Schedule of Significant Trees

4 Conclusion and recommendations

4.1 T303 is a near specimen example of the species and worthy of inclusion on the Dunedin City Council Schedule of Significant Trees

4.2 T303 is currently at or larger than the expected nursery standards, which would suggest that it is not going to get much larger.

4.3 It is probable that the tree has been casting shadow over number 58 and 62 Chambers Street for over 50 years, and removal of the tree will not address any shading cast by the contours of the section and the land mass above the house.

4.4 There is a certain amount of subjectivity in STEM and I do see the relevance of re assessing the tree to provide a different STEM score.

4.5 With the corrected occupancy rate the risk posed by T303 on people passing beneath the canopy of the tree is low.

4.5.1 With a replace the cable support system and some reduction pruning the risk posed by T303 on people passing beneath the canopy of the tree can be kept at low.

4.6 I do not support the removal of T303 based on the applicant's assessment

4.7 I do not support the removal of T303 based on the content of the April 29, 2018 Green Trees Limited report; Evaluation of Golden Elm (*Ulmus glabra 'Lutescens'*) T303.

4.8 I do support Mr. Waymouth's conclusion/mitigation option one:

i) Replace the cable support system, under take some reduction pruning and retain the tree

4.9 I recommend that the tree is retained, and approval is given for minor trees works to be undertaken on T303. Those tree works are to be limited to the installation of a new cable support system, (the old system is to be retained), some branch end reduction and crown raising over the dwellings at Number 58 and 62 Chambers Street. All works are to be carried out by an experienced and qualified arborist in accordance with recognised arboricultural practices and pruning standards.

This tree condition assessment has only considered known targets and visible or detectable tree conditions at the time of the inspection.

As per your request, I have provided a relatively concise report. If you require an explanation of any of the recommendations provided, or documentary evidence to support any of the content in this report please do not hesitate to ask.

Yours sincerely

Mark Roberts
Roberts Consulting Ltd

Image one: Image of T303 from 62 Chambers Street, showing the relatively symmetrical canopy

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DUNEDIN CITY COUNCIL

Memorandum

TO:	Jeremy Gray, Planner
FROM:	Luke McKinlay, Urban Designer
DATE:	18-June-2018
SUBJECT	Land Use Consent – Scheduled Tree LUC-2018-295 – 62 Chambers Street

Hi Jeremy,

This memorandum is in response to a request for comment on the application to remove a scheduled tree, T303 (Golden Elm), protected in Schedule 25.3 of the Dunedin City District Plan. The tree was also recently carried over to the Second Generation Plan (2GP) significant tree schedule.

The original STEM assessment, a copy of which is attached to this memo, was made in 2001 and the tree scored 159, which is above the required 147 "pass" total.

Background

When an assessment of a resource consent application for the removal of a significant tree is required, an updated STEM assessment is usually completed by the in-house landscape architect and by a consultant arborist.

In the case of this application, Mark Roberts has been engaged by council to provide an expert arboricultural assessment. He has provided a very thorough set of comments and has also provided a total score of 150 points for the tree using the STEM evaluation system.

I did not manage to co-ordinate a joint site visit with Mr Robert's; however, I did visit the site on 11 June 2018 in order to undertake the amenity component of the STEM evaluation.

General Comment

There are two broad assessment categories to a STEM report– condition (health) and amenity (community benefit). My role in the assessment of applications to remove a scheduled tree or group of trees is to comment on the amenity related matters.

Overall, it is my opinion that T303 retains amenity values which contribute positively to Chambers Street. I consider that the tree continues to merit inclusion on the protected tree schedule from an amenity perspective and the existing STEM assessment remains largely valid, from an amenity perspective.

Amenity Values

The amenity component of the STEM assessment considers five factors; stature, visibility, proximity, role and climate. My comments below relate to these factors.

Stature:
The stature of T303, estimated at approximately 16m high and 20m wide, means that it forms a prominent local feature. As identified in the STEM assessment document, the stature rating can be based on either the height or width of the tree, whichever is greater. As such, T303 easily fits within the 15-20m bracket (an increase from the 2001 assessment).

Visibility:
The existing stem assesses T303 as being visible from 2km. The STEM criteria require that the visibility rating is based on the *furthest distance that the tree can be seen from any observation point.* The site visit revealed that the location of the tree is visible from surrounding hill suburbs such as Pine Hill, Maori Hill and Wakari. While the majority of clear views of the tree are within 1km of the site, it is considered likely that when the tree is in leaf it would be visible from 2km. Therefore, the existing rating remains valid.

Proximity of other trees:
Dwellings on the southern side of this steep part of Chambers Street are typically set back a considerable distance from the carriageway, with generous front yards that feature several relatively large trees. However, in the immediate proximity of T303, there appears to be less than 10 trees forming a cluster. As such, the existing STEM rating for the proximity of other trees remains valid. Because there is not a tight cluster of other trees in the immediate vicinity of T303, it's removal would be clearly noticeable from surrounding locations.

Role: The stature, largely symmetrical canopy, and characteristic and prominent lime green foliage (when in leaf) make this tree a particularly prominent feature within Northeast Valley. It notably contributes to the treed character of Chambers Street and the wider valley landscape. The existing STEM role rating appears to be appropriate.

Climate: Trees of this scale provide a role in term of improving air quality, sequester greenhouse gases and enhance biodiversity by providing habitat for birds and invertebrates. The existing 'moderate' STEM rating for this factor appears appropriate for this tree.

Concluding Comments

Overall, given the STEM assessment pass mark, which has been confirmed from an amenity perspective, and the positive assessment of the condition of the tree in the arborist report by Mr Roberts, it is considered that T303 maintains its broader community amenity values and warrants continued inclusion in Schedule 25.3.

Regards,

Luke McKinlay

CITY PLANNING

Attachment 1: Existing Operative District Plan STEM Assessment.

STEM EVALUATION FORM

T303

Date	17.5.01					
Tree	Golden Elm					
Address	62 Chambers St					
Height (m)	**Radius**		**Diameter (mm) @ 1.2m**			**600**
CONDITION EVALUATION						
Points	**3**	**9**	**15**	**21**	**27**	**Score**
Form	Poor	Moderate	Good	Very Good	Specimen	21
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	15
Vigour & Vitality	Poor	Some	Good	Very Good	Excellent	15
Function	Minor	Useful	Important	Significant	Major	15
Age (Yr)	10 Yrs+	20 Yrs +	40 Yrs +	80 Yrs +	100 Yrs+	15
					Subtotal	**81**
AMENITY EVALUATION						
Points	**3**	**9**	**15**	**21**	**27**	
Stature (m)	3-8	9-14	15-20	21-26	27+	15
Visibility (km)	0.5	1.0	2.0	4.0	8.0	15
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	21
Role	Minor	Moderate	Important	Significant	Major	15
Climate	Minor	Moderate	Important	Significant	Major	9
					Subtotal	**75**
NOTABLE EVALUATION						
Recognition	**Local**	**District**	**Regional**	**National**	**International**	**Score**
Points	**3**	**9**	**15**	**21**	**27**	
Stature						
Feature						
Form						
Historic						
Age 100+						
Association						
Commemoration						
Remnant						
Relict						
Scientific						
Source						
Rarity						
Endangered						
					Subtotal	
					Total	**159**

Attachment 2: Re-evaluation of ODP STEM Assessment (amenity component only).

STEM EVALUATION FORM

T303

Date	11.6.18					
Tree	Golden Elm					
Address	62 Chambers St					
Height (m)	**Radius**		**Diameter (mm) @ 1.2m**			
CONDITION EVALUATION						
Points	**3**	**9**	**15**	**21**	**27**	**Score**
Form	Poor	Moderate	Good	Very Good	Specimen	21
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	15
Vigour & Vitality	Poor	Some	Good	Very Good	Excellent	15
Function	Minor	Useful	Important	Significant	Major	15
Age (Yr)	10 Yrs+	20 Yrs +	40 Yrs +	80 Yrs +	100 Yrs+	15
					Subtotal	**81**
AMENITY EVALUATION						
Points	**3**	**9**	**15**	**21**	**27**	
Stature (m)	3-8	9-14	15-20	21-26	27+	15
Visibility (km)	0.5	1.0	2.0	4.0	8.0	15
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	21
Role	Minor	Moderate	Important	Significant	Major	15
Climate	Minor	Moderate	Important	Significant	Major	9
					Subtotal	**81**
NOTABLE EVALUATION						
Recognition	**Local**	**District**	**Regional**	**National**	**International**	**Score**
Points	**3**	**9**	**15**	**21**	**27**	
Stature						
Feature						
Form						
Historic						
Age 100+						
Association						
Commemoration						
Remnant						
Relict						
Scientific						
Source						
Rarity						
Endangered						
					Subtotal	
					Total	**165**

Figure 1: Google Streetview Image (January 2008)

Figure 2: View of T303 from near the entrance to 62 Chambers Street (11 June 2018)