



CITY OF RICHMOND

REPORT TO COUNCIL

TO: Richmond City Council
FROM: Councillor Malcolm Brodie, Chair
Planning Committee
DATE: January 19th, 2000
FILE: 4200-05
**RE: REMOVAL OF HERITAGE DESIGNATION FOR MAGAR HERITAGE TREE AT
5980 GRANVILLE AVENUE**

The Planning Committee, at its meeting held on Tuesday, January 18th, 2000, considered the attached report, and recommends as follows:

COMMITTEE RECOMMENDATION

That Bylaw No. 7074, which removes the heritage designation of the Magar heritage tree at 5980 Granville Avenue be introduced and given first, second and third readings, subject to the concurrence of the Heritage Commission.

Councillor Malcolm Brodie, Chair
Planning Committee

Attach.

VARIANCE

Please note that staff recommended the following:

That Bylaw No. 7074, which removes the heritage designation of the Magar heritage tree at 5980 Granville Avenue be introduced and given first, second and third readings

STAFF REPORT

ORIGIN

The Magar heritage tree at 5980 Granville Avenue (formerly 7031 No. 2 Road, Attachment 1 shows the location of the tree) was designated by Council in 1991 in conjunction with redevelopment at the site which resulted in the removal of the Magar House and several mature trees (Attachment 2 is a copy of the original designation bylaw). As part of the redevelopment the applicant agreed to preserve and dedicate one of the trees.

The tree is currently in poor health, as shown in the attached arborist report (Attachment 3). The purpose of this report is to recommend that the tree be de-designated so that it can be removed prior to trunk failure.

FINDINGS OF FACT

The heritage value of the Magar House was due to:

- the long association of the house with an early local farming family;
- its illustration of two early settlement patterns, in which corner lots were developed first, and in which farmhouses were built adjacent to the corners of section roads;
- the existence of a number of significant and landmark landscaping elements; and
- its value as an early remaining example of a modest farmhouse, possibly once common, but now rare due to redevelopment in the City.

When the site was redeveloped for townhouses in 1991, it was noted that the subject tree, a horse chestnut specimen, was listed on the Significant Tree Inventory. As part of the application process the applicant agreed to designate the tree as well as ensure that the tree would be protected during construction and that the grade near the trunk was maintained.

However, the current arborist's report states that due to the internal decay, the trees' trunk does not have sufficiently sound shell thickness to support it. Therefore, removal of the tree is recommended to mitigate potential hazards.

Richmond City staff agree with the recommendation but note that as the tree is designated. To remove the tree either the tree must be de-designated or a heritage alteration permit would be required. A heritage alteration permit is generally used when a designated building or structure is being altered, not removed, therefore it would make the most sense to remove the heritage designation.

The procedure for de-designating the tree is similar to the designation process. The bylaw removing the heritage designation must proceed to Public Hearing and must also be filed at the Land Title Office and with the Minister responsible for the Heritage Conservation Act.

STAFF COMMENTS

It appears as though the construction of the townhouse units surrounding the tree resulted in root loss and heavy pruning which has led to the trees' current unhealthy state. While, it is important to maintain trees where possible, it is also important to consider the long term health of the tree when trying to preserve it. In this case the preservation was not successful and unfortunately the last reminder of the historic use of the site will be removed.

FINANCIAL IMPACT

None.

CONCLUSION

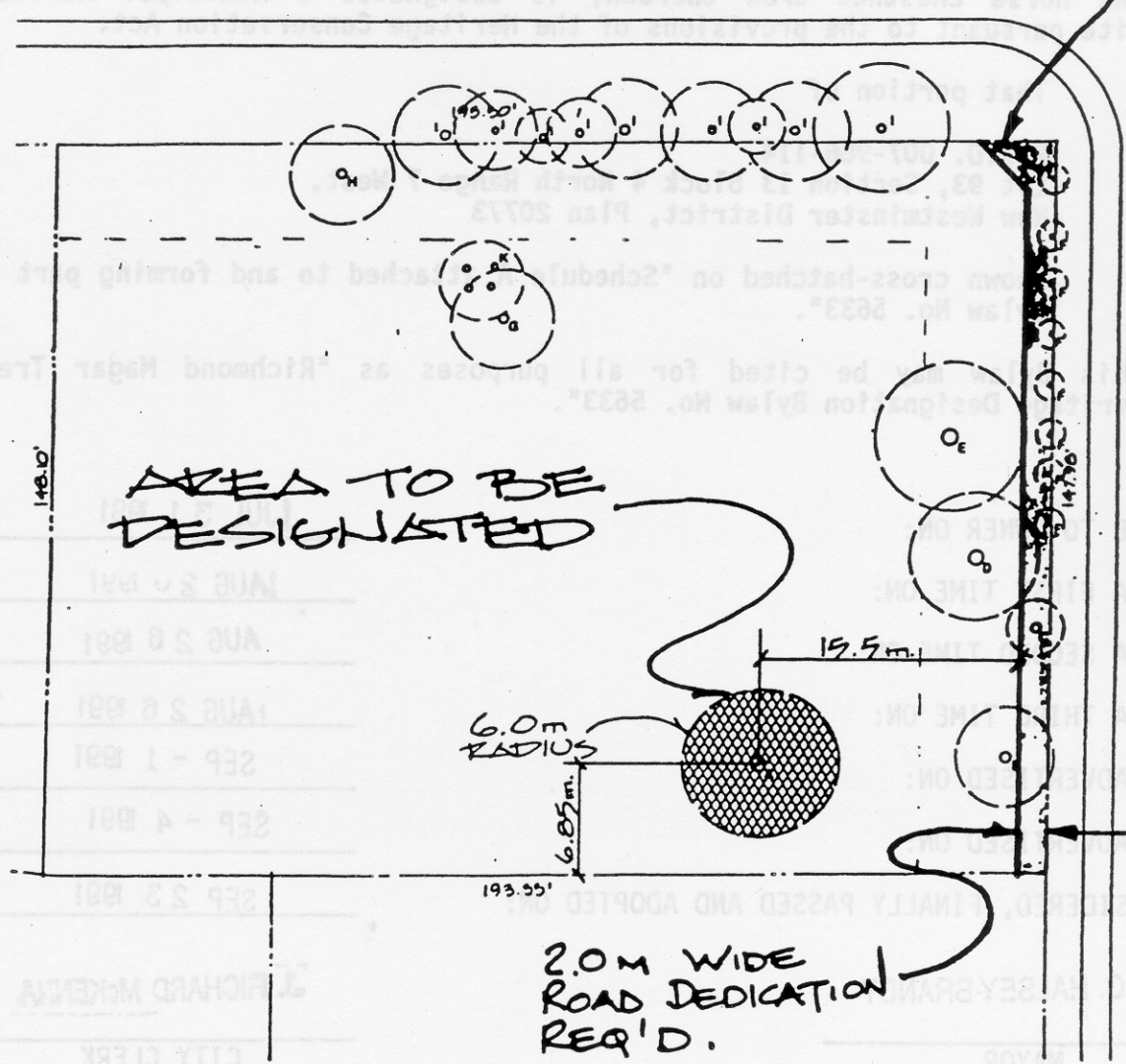
1. The Magar Heritage Tree at 5980 Granville Avenue (formerly 7031 No.2 Road) was given heritage designation by Council in 1991.
2. The tree is currently in poor health and an independent arborist has recommended that it be removed.
3. Staff recommend that the tree be de-designated to facilitate its removal.

Jenny Beran, MCIP
Planner 1

JMB:cam

3x3M CORNER DEDICATION REQUIRED

GRAVILLE AVE.



AREA TO BE DESIGNATED

6.0m RADIUS

2.0M WIDE ROAD DEDICATION REQ'D.

NUMBER TWO ROAD



CITY OF RICHMOND

HERITAGE DESIGNATION BYLAW NO. 5633

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

- 1. The following area, described as the Magar Heritage Tree, together with the horse chestnut tree thereon, is designated a Municipal Heritage Site pursuant to the provisions of the Heritage Conservation Act:

That portion of

P.I.D. 007-986-114
Lot 93, Section 13 Block 4 North Range 7 West,
New Westminster District, Plan 20773

shown cross-hatched on "Schedule A attached to and forming part of Bylaw No. 5633".

- 2. This Bylaw may be cited for all purposes as "Richmond Magar Tree Heritage Designation Bylaw No. 5633".

NOTICE TO OWNER ON:

JUL 31 1991

READ A FIRST TIME ON:

AUG 20 1991

READ A SECOND TIME ON:

AUG 26 1991

READ A THIRD TIME ON:

AUG 26 1991

DULY ADVERTISED ON:

SEP - 1 1991

DULY ADVERTISED ON:

SEP - 4 1991

RECONSIDERED, FINALLY PASSED AND ADOPTED ON:

SEP 23 1991

G.C. HALSEY-BRANDT

J. RICHARD MCKENNA

MAYOR

CITY CLERK

Certified a true and correct copy of Bylaw No. 5633 of the City of Richmond.

5063K

[Handwritten Signature]
CITY CLERK

**ARBORTECH CONSULTING LTD.**

Professional Tree and Landscape Consultants

4700 Windjammer Drive
Richmond, B.C. Canada, V7E 4L6Ph: (604) 275-3484
Fax: (604) 275-9554
e-mail: arbortech@bc.sympatico.ca

FILE: 99180R1

ATTACHMENT 3

Attn.: Mr. Alex Thorburn

DECEMBER 6 1999

City of Richmond - Parks Department
5599 Lynas Lane
Richmond BC V7C 5B2

Via fax: 244 1242

Site: UNIT 5 - 5980 GRANVILLE AVENUE RICHMOND BC

Re: TREE ASSESSMENT REPORT

Dear Mr. Thorburn,

As requested, on December 01 1999, I made an inspection of the horsechestnut tree located at the above noted site. The City of Richmond has designated this tree as a heritage tree, and provisions for its protection are implemented through a bylaw. My inspection has resulted in the following assessment of the trees' health and structure. I include my opinion of the long term viability for this tree.

TREE DESCRIPTIONSpecies: Horsechestnut, *Aesculus hippocastanum*

Dbh: 76 cm (measured at 0.6 m high, below the scaffold crotch)

Spread: 5 m NW, 7m SE

Height: 17 m

The tree is structured with a single bole, up to a height of 1.0 m, where it divides into three scaffold leaders each larger than 43 cm diameter. The southern scaffold appears to have been removed within the last decade, creating a large wound, and allowing the entry of decay into the bole. The crown has

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DECEMBER 6 1999

Page 1 of 4

93



FILE: 99180R1

**CITY OF RICHMOND - PARKS DEPARTMENT
SITE: UNIT 5 - 5980 GRANVILLE AVENUE RICHMOND BC
TREE ASSESSMENT REPORT**

been pruned and raised to a height of 5 metres. One secondary limb crosses the northwest scaffold, partially girdling the lower side of the scaffold. A crack was observed in the same scaffold, just above the girdling injury. The root system has a history of encroachment, and a large wound was observed on the northwest buttress root. A surface root was observed to partially girdle the northeast quadrant of the root collar.

The tree health is fair. No dieback was observed, but some dead branchlets were found on the ground around the tree. Annual growth over the past few years appears to be normal, based on shoot elongation.

SITE

The tree is located approximately 9 m from the south property line of the subject site. The adjacent property is a church, housing a daycare centre for children. The tree is situated in a breezeway between two townhouses. It is crowded by the two buildings, to the extent that the scaffold limb on the east side is within 8 inches of the roof eave, and the upper canopy branches hang over and touch the roof of both adjacent buildings. The buildings were constructed approximately 7 years prior, when root loss and heavy pruning was sustained to the tree. The building foundations are as close as 1.8 m on the east side, and 2.8 m on the west side.

It appears that in order to accommodate the development, the lower crown was pruned of all side branches to a height of approximately 5 m, and roots were removed within 1.0 m and 2.0 m on the east and west sides respectively. The original grade appears to have been maintained, however the soils appear to have been modified. A layer of sandy topsoil, and grass groundcover was installed as part of the landscape design.

DECAY ANALYSIS

The old pruning wound at the scaffold crotch is decayed. I suspect the presence of decay in the buttress roots, considering the presence of a large wound on the northwest buttress root and the history of root loss sustained from construction encroachment. I used the Resistograph decay detector to measure the extent of decay. Three drillings were undertaken through the trunk, and through three of approximately seven buttress roots. The results are as follows:

Trunk Decay (at 0.6 m high) - Dbh 73 cm (excluding bark)

Sound shell, drilling 1 = 3 cm with decay extending 36 cm into tree
Sound shell, drilling 2 = 26 cm
Sound shell, drilling 3 = 28 cm

FILE: 99180R1

**CITY OF RICHMOND - PARKS DEPARTMENT
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TREE ASSESSMENT REPORT**

Root Decay (3 of 7 buttress roots)

Root 1 = sound through cross section

Root 2 = local decay between 6 to 10 cm, sound

Root 3 = decay in regions of upper 6 cm

Trunk decay exceeds acceptable levels for sustaining structural integrity, knowing that the decay is non-concentric. The notional radius of the defect is 40 cm, with a 3 cm shell thickness, and it encroaches past the mid point of the trunk. Using the accepted failure criteria of 30% minimum shell thickness (Mattheck, C., Body Language of Trees), the tree cannot be considered safe.

Although the buttress roots were measured for decay, they were found to be essentially sound. My scope did not allow for a detailed analysis of the underground root structure, however I do suspect decay would be found within the woody roots that were cut or broken during the construction activity. It is a costly analysis to undertake, and considering that the trunk decay assessment has resulted in hazard designation, further testing will not be performed.

DISCUSSION

The internal decay of this tree limits its long term viability. Catastrophic trunk breakage is the expected mode of failure. Further to this obvious defect, the tree contains several other defects that enhance the trunk failure potential, or pose risks of partial tree failure. The tree structure has been altered sufficiently to modify the stresses occurring from wind loading. The top heavy crown, scaffold limb crack, partially girdled root collar and small root plate are defects unto themselves.

Based on the trunk defect type and its location within the tree, the most likely direction for failure is toward the south. The target rating within striking distance is high. Although no structures are located in this area, the back yard of the townhouse and the adjacent church yard are within striking distance.

I am not familiar with the historical significance of the subject tree that warranted it being designated as a heritage tree. If the significance is great, there is an opportunity to retain the tree by reducing the crown, or to restrict access within the striking zone. The tree is located wholly on private property and is not unique or otherwise special. This species is found in abundance in the Greater Vancouver region. It is of moderate size, and much larger specimens of this species are found readily.

FILE: 99180R1

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TREE ASSESSMENT REPORT**

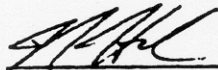
CONCLUSION

This horsechestnut tree is in my opinion, a hazard to the site. The internal decay of the trunk does not have sufficient sound shell thickness to support it. Due to the dangers to residents on the subject site, and to visitors on the adjacent site, mitigation is required.

RECOMMENDATIONS

Remove the tree to mitigate the hazard.

Please call me directly at 604 275 3484 if you have any questions regarding this report.



Norman Hol
Consulting Arborist
ISA Certification # PN-0730

enclosures: none

Limitations:

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Only the subject tree was inspected, and no others. This report does not imply or in any other way infer that other trees on this site or near this site are sound and healthy.

The inherent characteristics of trees or parts of trees to fall due to environmental conditions and internal problems are unpredictable. Defects are often hidden within the tree or underground. The project arborist has endeavored to use his skill, education and judgement to assess the potential for failure, with reasonable methods and detail. It is the owner's responsibility to maintain the trees to reasonable standards and to carry out recommendations for mitigation suggested in this report.



City of
RICHMOND

7577 ELMBRIDGE WAY, RICHMOND, B.C. V6X 2Z8
(604) 276-1000

July 30, 1998
File: 4200-05

Dorset Realty
200 - 8211 Ackroyd Road
Richmond, BC V6X 3K8

Attention: Louis Wolf

Dear Ms. Wolf

Re: 7031 NO. 2 ROAD - MAGAR HERITAGE TREE

The purpose of this letter is to point out that a tree located on the above noted property is designated a Heritage tree. The location of the tree is indicated on the sketch attached to the Heritage Designation Bylaw, and a copy of the bylaw is enclosed.

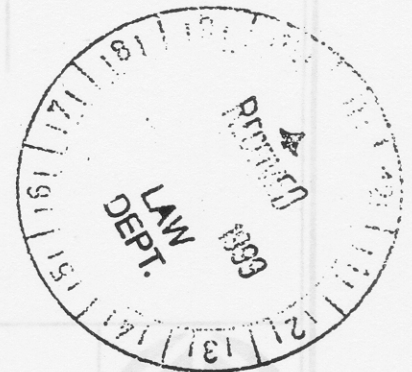
The designation of this tree is also included in the Registry of Designated Sites published by the Ministry of Small Business, Tourism and Culture.

This tree can not be altered in any way that would damage it and to do so could result in fines and penalties of up to \$50,000 for an individual or \$1,000,000 for a corporation.

Yours truly,

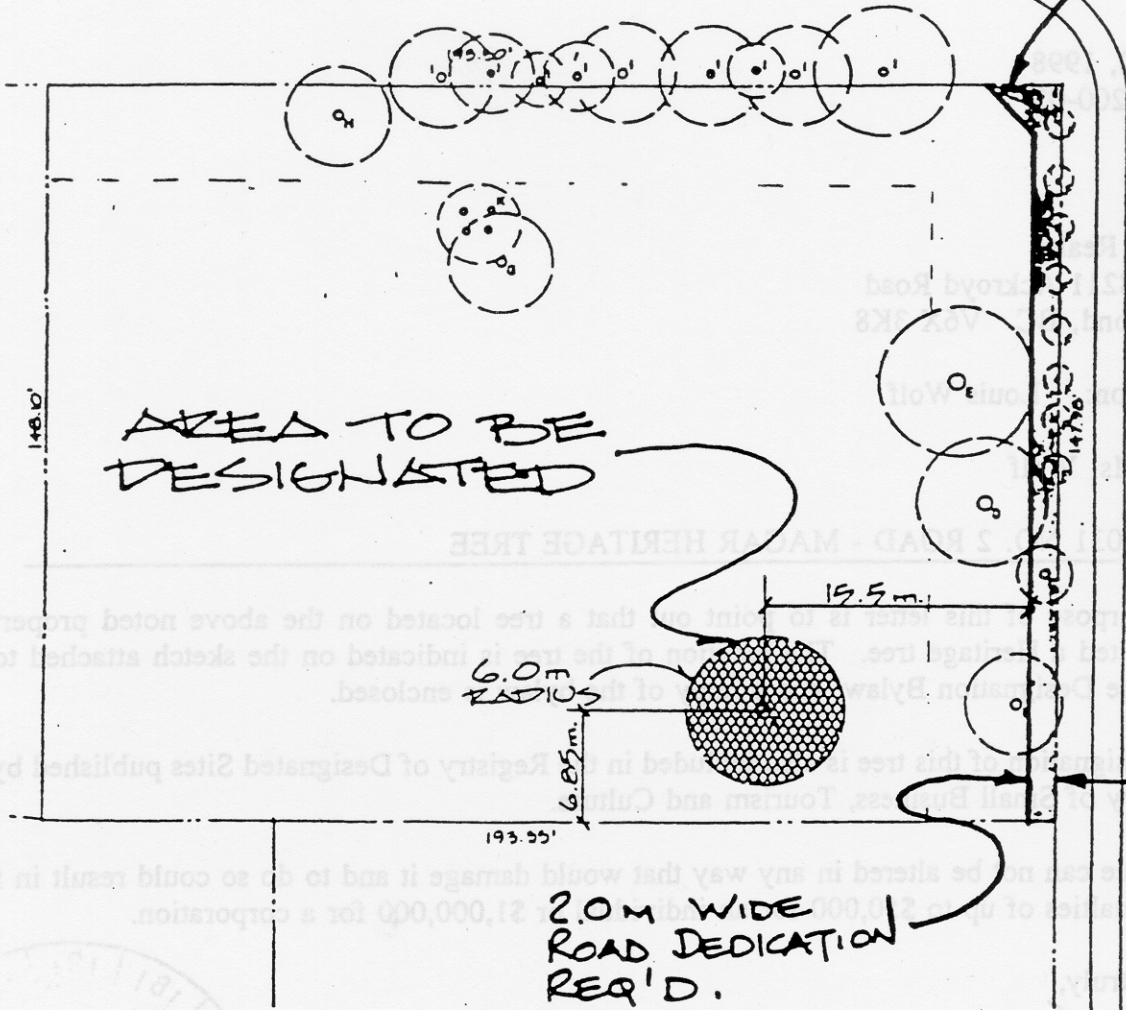
Paul Kendrick
City Solicitor

PK:cam
Enc.



3x3M CORNER
DEDICATION
REQUIRED

GRAVILLE AVE.



NUMBER TWO ROAD



"SCHEDULE A ATTACHED AND
FORMING PART OF BYLAW NO. 5633"

DATE
08/15/91

CITY OF RICHMOND

HERITAGE DESIGNATION BYLAW NO. 5633

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That portion of

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shown cross-hatched on "Schedule A attached to and forming part of Bylaw No. 5633".

- 2. This Bylaw may be cited for all purposes as "Richmond Magar Tree Heritage Designation Bylaw No. 5633".

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SEP 23 1991

G.C. HALSEY-BRANDT

J. RICHARD MCKENNA

MAYOR

CITY CLERK

Certified a true and correct copy of Bylaw No. 5633 of the City of Richmond.


CITY CLERK

5063K

CITY OF RICHMOND

BYLAW 7074

HERITAGE DESIGNATION REPEAL BYLAW NO. 7074

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. Bylaw No. 5633 is hereby repealed in its entirety.
2. This Bylaw may be cited as "Richmond Magar Tree Heritage Designation Repeal Bylaw No. 7074".

NOTICE TO OWNER:

READ A FIRST TIME ON:

READ A SECOND TIME ON:

READ A THIRD TIME ON:

DULY ADVERTISED ON:

DULY ADVERTISED ON:

ADOPTED ON:

MAYOR

CITY CLERK

CITY OF RICHMOND
APPROVED for content by originating dept. <i>[Signature]</i>
APPROVED for legality by Solicitor <i>[Signature]</i>