

ITEM	3
MANAGER'S REPORT NO.	31
COUNCIL MEETING	1984 04 24

RE: COSTS ASSOCIATED WITH THE PLANTING OF TREES BY THE MUNICIPALITY  
(ITEM 5, REPORT NO. 17, 1984 MARCH 05)

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Director Recreation & Cultural Services be adopted.

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1984 APRIL 18

TO: MUNICIPAL MANAGER  
FROM: DIRECTOR RECREATION & CULTURAL SERVICES  
RE: COSTS ASSOCIATED WITH THE PLANTING OF TREES  
BY THE MUNICIPALITY - ITEM 5, MUNICIPAL MANAGER'S  
REPORT NO: 17, 1984 MARCH 05

RECOMMENDATION:

1. THAT this report be received for information purposes.

REPORT

At its meeting of 1984 March 05, the Council requested that a report be prepared outlining the costs associated with the maintenance of boulevard trees and comparative costs with those in private industry. This information is provided within the report, as well as comparative figures with neighbouring cities. Also, a further discussion on planting costs is included.

At its meeting of 1984 April 18, the Parks and Recreation Commission received the information contained in this report and by motion, forwarded it for Council's information.

MAINTENANCE COSTS:

1. Ornamental Trees

The Parks and Recreation Department maintains all ornamental boulevard trees planted either by the Corporation or by contractor through subdivision development. To date, there are approximately 8,200 such trees. In 1983, these trees were maintained on an Engineering Department's budget for a total cost of \$37,783. This included all regular maintenance work plus the replacement of 125 trees lost due to death and vandalism.

The average cost per tree can vary greatly in a year depending on weather, disease, insects and amount of vandalism. This average cost last year was \$4.63 including the charges associated with replacing lost trees. If this cost is subtracted, the average cost of maintenance is approximately \$3.51 per tree.

1. (Continued)

The Cities of Vancouver and New Westminster were polled for comparative figures. Representatives from both Cities indicated that their average cost per tree, including replacement costs, is approximately \$6.00 - \$11.00 per tree. The City of Vancouver indicated additional costs for watering trees on arterial streets and a reserve fund for eventual tree replacement.

Staff contacted one professional tree care company for an estimated maintenance cost. Excluding replacements, the contractor indicated that his cost would be approximately \$3.00 - \$4.00 per tree. In addition to this cost, there would be an increase in Municipal supervisory costs to ensure that the same standard of maintenance and dedication to quality was upheld.

In an earlier report, staff advised that the average cost of maintenance was \$6.00 per tree per year. This was not a calculated total but instead a projected figure from the 1982 cost of \$5.00 per tree.

In fact, the 1983 costs decreased to \$4.63 per tree. The decrease in cost can be attributed to the wet weather in the summer of 1983 that negated the need for supplementary watering. In 1982, \$9,800 was spent watering trees compared to \$1,200 in 1983.

It would appear that the 1983 rate of \$4.63 per tree is in line with both the private sector and the neighboring cities.

2. Existing Trees

In addition to those municipally planted trees, the Parks Department also maintains all naturally occurring boulevard trees. This work is restricted to diseased, damaged and potentially hazardous trees and stems primarily from public requests. In most cases the trees are either pruned or removed.

In 1983 approximately 250 trees were treated at a cost of \$38,000, again, as part of the same Engineering account. Most of these trees are too large for Municipal crews to handle or in potentially hazardous locations and, therefore, a professional tree company is hired. Contracting out of this work is the safest, more cost effective approach. However, the costs are reaching the limit that could justify the expansion of the Municipal crews to undertake this phase of tree care, including preventative maintenance as well as emergency work.

II. TREE PLANTING COSTS:

The Municipality now plants very few boulevard trees each year. In 1983 only 210 were planted with funds from an Engineering Boulevard Tree Planting Account. The Parks and Recreation Department does not have a boulevard tree planting program. The average planting cost for a boulevard tree is approximately \$27.00 per tree, plus the cost of the tree. All trees are purchased from local nurseries. Staff cannot raise trees as cost effectively as private nurseries. The cost of trees varies from \$60.00 - \$80.00, depending on type, size and availability.

The Cities of Vancouver and New Westminster were surveyed for comparative costs. Both cities reported similar planting costs, although Vancouver costs were higher due to slightly different planting procedures and the use of larger trees.

Both cities prefer to purchase the trees over growing their own because of lower costs.

In an earlier report staff indicated that planting large caliper trees in sidewalks, such as along Hastings Street, costs an average of \$435.00 per tree. For the same work, the City of Vancouver reported an average cost of \$460.00 per tree. The City of New Westminster reported approximately \$500.00 per tree and the City of West Vancouver recently estimated the cost to be between \$450.00 - \$500.00.

III. USE OF PLANTERS

At the 1984 March 05 Council meeting, the use of planters in boulevard tree planting was mentioned. Planters perform a vital function by allowing trees to be placed where otherwise no trees could be planted due to underground utilities. Currently there are only seven planters on sidewalks. Staff have noted a significant improvement in the survival of those trees compared to trees planted at grade along Hastings Street. Therefore, the original higher planting costs are balanced by a lower and less frequent replacement cost. Staff have not received any public complaints regarding the planters.

IV. STEPS TOWARD COST REDUCTION

Over the past several years, staff have endeavoured to reduce both tree planting and maintenance costs. For example, traditional horticulture practices dictate that boulevard trees should be planted in topsoil. Recent evidence has indicated that the addition of topsoil to the tree pit may not greatly affect tree survival. Staff have been experimenting with this by amending the existing soil without adding additional topsoil. While the results are not yet conclusive, the cost of boulevard tree planting has been reduced by \$12.00 - \$15.00 per tree.

Staking boulevard trees is also a recommended procedure to ensure proper root establishment. Staff have begun to examine the value of this approach, not because of the cost, \$7.00 - \$10.00 per tree, but because it increases the rate of vandalism. Vandals use the strap around the tree as a leverage for snapping the tree in half. The cost to replace one vandalized tree is approximately \$100.00 each. Additionally, staff have increased the size of trees planted. While this increases the initial cost, it decreases the rate of vandalism and represents a cost savings in the long run.



DENNIS GAUNT  
Director Rec. & Cultural Services

JWK/WJ:ka/seo

cc: Director Engineering  
Director Planning & Building Inspection

