

ITEM SUPPLEMENTARY	25
MANAGER'S REPORT NO.	35
COUNCIL MEETING	1981 07 27

RE: CONTRACT #8103, GREYSTONE DRIVE/BURNWOOD DRIVE SUBDIVISION

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the lowest tender in the amount of \$1,798,486.10 submitted by Kany Construction & Engineering Ltd. be accepted, with final payment based on actual quantities and unit prices tendered.

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TO: MUNICIPAL MANAGER

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FROM: MUNICIPAL ENGINEER

SUBJECT: CONTRACT #8103

RECOMMENDATION:

1. THAT Contract #8103 be awarded to the second lowest tenderer, Jack Cewe Ltd.

REPORT:

This particular Contract (#8103) is somewhat different from normal Burnaby Municipal works programs in that it is more of a land development project required primarily to fulfill two commitments, namely:

- (1) to provide Municipal services for the commercial site lying to the southwest of the Greystone/Burnwood intersection, which was sold to Bosa Bros. on the basis of being fully serviced, and,
- (2) to provide full services to a 54-lot Municipal subdivision lying to the northeast and northwest of the Greystone/Burnwood intersection.

It is essential to realize that, although good quality workmanship and on-time completion are always required, the consequences of failure to achieve these objectives would be much greater with this project than with the more usual type of work because of the additional costs associated with not fulfilling the foregoing commitments.

These costs would take the form of:

- (1) loss of early return on several million dollars worth of Municipal property to be sold to the public, and/or

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(2) failing to meet outside requirements of the commercial site, and/or

(3) potential increased costs resulting from the work extending into the winter months.

For the foregoing reasons, the Engineering Department and Consultant's staff felt that it was their duty to consider the basis of recommending award of this major Contract (#8103) from a somewhat different viewpoint than the more normal public works type of work. The Corporation in this case is a major land-owner and should therefore react in the same way as would a private developer facing the same circumstances of marketing his property to his best overall advantage.

The Municipal property on Burnaby Mountain could have been sold in a raw state. The Corporation would have had an obligation to inform prospective purchasers that the ground conditions were difficult to work in and that there were the four pipelines and water main requiring full protection. Having pointed this out to the purchasers, the risk to them would have been reflected in a somewhat lower return to the Corporation for its land.

In order to maximize the return to the Corporation on its properties, the Engineering Department has assumed the responsibility for dealing with the risks mentioned on an up-front basis before sale of the properties.

In order to minimize the Corporation's risks, we need some flexibility in examining the tenders on a "best value" basis; that we have striven to do in our recommendation on Contract #8103. This flexibility is provided by always advising the tenderers that the lowest or any tender will not necessarily be accepted; its use in this case is justified because we are attempting to maximize the return on a very valuable Municipal asset.

If we were to simply award the tender to the lowest bidder, the real end cost to the Corporation would possibly never be really known because of difficulty in calculating it. Then, having taken on the obligation of working with the lowest tenderer, we also assume an obligation to see it through as there is no practicable way to break off the contract once having started on it.

From a technical viewpoint, this project involves a number of construction challenges; the work on Greystone Drive between Duthie Avenue and Burnwood Drive will be, by far, the most difficult part of the project. Not only must the road be constructed beside and over four oil pipelines and a 1050 mm (42 inch) diameter trunk water main, but also all the peat which is up to 3 m (10 feet) in depth underlying the proposed road and pipelines, must be excavated and replaced with granular fill. While all this work is being carried out, the existing watercourses, and other surface and subsurface storm water flows, must be controlled to prevent disastrous erosive damage, such as excessively undermining and rupturing the water main which would be a catastrophic event.

The whole project area is known for its high storm water and groundwater flows. Thus, competent control of these storm water flows is essential if the project is to be successfully completed within the budget and on schedule. Any storm water damage could put the project behind schedule and could be costly to the Corporation.

The method and sequence of building the earth berms using the excavated native soils and peat requires expert coordination so that the berms are correctly constructed in an efficient sequence with a minimum of truck and traffic congestion.

Existing residential traffic must be inconvenienced as little as possible and under no circumstances may the residents serviced by Aubrey Street east of Burnwood Drive be cut off.

Finally, inclement weather will be a very severe challenge. By mid-November, such construction work can not be carried out on "wet days" and existing work can be jeopardized by the storm water flows. Such operations as asphalt paving can be completely precluded just by cold weather, even if it is not raining. As winter approaches, more and more calendar days are lost as work days owing to inclement weather and the date of final completion is then pushed even further into the winter, thus compounding the scheduling problem and in turn leading to even later dates of completion.

The Special Provisions section of the contract documents, which every bidder obtains in order to compile a tender, makes it very clear that there are special problems on this project which must be recognized and allowed for by the tenderer.

In recognition of all of the foregoing considerations and owing to both Burnaby and the Consultant's staff not being satisfied with Kany Construction & Engineering Ltd.'s performance on previous Burnaby contracts, the lowest and second lowest tenderers were invited to make presentations which would cover:

- (1) detailed schedule of construction events and activities,
- (2) equipment available to work on the project,
- (3) names of personnel and positions which would be assigned to the project,
- (4) information regarding gravel supplies and use of sub-contractors,
- (5) other factors having a bearing on the job.

Both Companies (Kany Construction & Engineering Ltd. and Jack Cewe Ltd.) were made aware that the other had been requested to make a presentation.

Kany Construction & Engineering Ltd. have worked on previous Burnaby contracts but these were of the "single utility" nature, i.e. either water or sewer works but not a combination of works such as those in Contract #8103 where careful scheduling of inter-related activities is required. Both Burnaby and the Consultant's staff have expressed concern over:

1. Completion time extensions.
2. Scheduling of work.
3. Work methods.
4. Extra supervision cost arising from the foregoing problems

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In our opinion, Kany Construction & Engineering Ltd. have not yet demonstrated that they have overcome these problems sufficiently to allow staff to be satisfied that they can effectively perform the work in Contract #8103.

Jack Cewe Ltd., subject to our approval, propose to work six 10-hour days per week which, in this case, could prove very efficient. Jack Cewe Ltd.'s schedule is designed to take maximum advantage of the year's probable remaining good weather and indicates completion about one month sooner than Kany's schedule, which is extremely significant, as previously discussed. Jack Cewe Ltd. demonstrated that they have made themselves familiar with the most acute elements peculiar to this project, namely the pipelines, the drainage problems, culvert installation, berm construction, and the required scheduling of each of these elements.

Jack Cewe Ltd. have, in the past, displayed that they possess the physical resources and innovative and administrative skills required to undertake a project of this nature and size. Previous work by Jack Cewe Ltd. indicates that they are highly likely to adhere to their indicated schedule.

Other than the earlier completion date offered by Jack Cewe Ltd., one other important factor is that they propose to do all the work except street lighting with their own forces. This is very significant because of the obvious direct control over scheduling and the ability of their superintendents to demand special aggregate materials and other services available from within the organization. Kany Construction & Engineering Ltd.'s tender is based upon the use of sub-contractors and supplies for three primary elements of the project, namely:

1. Aggregate (gravel) supply,
2. Supply and installation of asphaltic concrete (blacktop), and,
3. Installation of Portland Cement concrete for the sidewalks and curbs and gutters.


Although it is a difficult calculation to make with any definitive degree of certainty, it is considered that one month earlier completion could be worth \$75,000 to \$100,000 to the Corporation.

After considering all factors, especially those discussed at the interviews, it was clear to the senior members of the Consultants (R.F. Binnie & Associates Ltd.) and to the corresponding Corporation employees (Operations & Construction Engineer and Contracts & Construction Supervisor) that the second lowest tender submitted by Jack Cewe Ltd. represented the best overall value to the Corporation and it was so recommended.

It was also clear to your Municipal Engineer and he concurs with the recommendations.

EEO/ch

c.c. () Municipal Manager
() Purchasing Agent


MUNICIPAL ENGINEER