

Re: Swangard Stadium Playing Field Reconstruction

Following is a report from the Parks and Recreation Administrator regarding reconstruction to the playing field at Swangard Stadium.

RECOMMENDATIONS:

THAT the request for a 4-year guarantee on Cells 1,5,9, and 13 be rescinded; and

THAT the construction of Cells 1,5,9, and 13 be accepted under the 2-year guarantee included in the contract; and

THAT payment be made on the main contract as claimed in the Cellsystem Design invoice of the 28th August, 1974, namely:

Contract price	\$81,710.00
Two-year holdback	<u>7,200.00</u>
	\$74,510.00
Less 15% Retention for Lien Period	<u>11,176.50</u>
Amount of Payment	\$63,333.50 ; and

THAT the 40-day maintenance period for the turf commence August 30, 1974; and

THAT the 40-day lien period not commence until full completion of the contract; and

THAT the invoice request for payment of the automatic sub-irrigation extra not be paid until the work is substantially completed; and

THAT a copy of this report item be forwarded to the Parks and Recreation Commission.

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THE CORPORATION OF THE DISTRICT OF BURNABY

TO: MUNICIPAL MANAGER      DEPT: Manager's      September 9, 1974  
 FROM: ADMINISTRATOR      DEPT: Parks & Recreation      C17-1

RE: SWANGARD STADIUM PLAYING FIELD RECONSTRUCTION

On Thursday, the 29th of August, 1974, we received from J.P. Izatt of Cellsystem Design an invoice for 85% of the main contract for the reconstruction of Swangard Stadium playing field in the amount of \$63,333.50, and 85% of the extra to the contract being the automatic sub-irrigation system in the amount of \$6,009.50. On the same date the job was inspected by the Parks and Recreation staff, namely the Administrator, the Supervisor Design, and the Park Development Technician in accompaniment with Mr. J.P. Izatt of Cellsystem Design. Representatives of our consultants, Klohn Leonoff Consultants Ltd., and Lord and Green, agronomists, made a joint inspection of the site on the 31st of August, 1974.

1. CONTRACT FOR THE PLAYING FIELD

a) Staff findings

- i. The playing field surface is 100% completed with the sod growing well.
- ii. There are a few dead spots which will call for simple replacement.
- iii. Following the laying of the sod a test of the field by saturation with water proved the drain system to be running freely.

- iv. The only outstanding work is a pressure test and an irrigation test on the water pipes and a general cleanup of the construction site with some sod patching along the sidelines outside the playing field.
- v. The final levels on the field have been checked by the Engineering Department on a 20' grid. Less than 10% of the readings fall outside the 1" tolerance called for in the contract. They are of minor significance and most of them can be corrected by cultural methods such as top dressing and coring and rolling with a minimum of patching.

b) Lord and Green, Agronomists

In his letter addressed to the Corporation, dated 3rd of September, 1974, Agronomist T.M. Lord advises that the major agronomic aspects of reconstruction have been substantially completed by the contractor. He suggests that the 40-day maintenance period should not commence until a number of cultural operations have been carried out, namely: sod patching, mowing, sanding, and rolling. In our opinion these items are all cultural operations which can properly be carried out during the 40-day maintenance period and the contractor is currently working on them. Mr. Lord's final point is that the pH level in the top four inches is slightly below the tolerance and that he is prepared to recommend an application of limestone following the completion of the above cultural operations. The contractor has agreed to make this application at his, the contractor's cost.

c) Klohn Leonoff Consultants Ltd.

Mr. K.I. Morrison of Klohn Leonoff Consultants Ltd., advises in his letter of 30th August, 1974, addressed to the Corporation that he considers that the drainage capacity of the sand drainage layer and the perforated piping system installed at the field exceeds all but the most exceptional cloudburst conditions. If the outlets are opened in the wet season, the underdrainage capacity of the field will exceed all expected demands. He also states that the underdrainage pipe system and sand drainage layer has been installed within the intent of his recommendations, with the exception that the quantity and gradation of drain gravel placed around the perforated pipe at Cells 1, 5, 9, and 13 did not meet the intent of his specification.

d) Cells 1, 5, 9, and 13

The contractor installed coarse drain rock around the pipes in the above cells which did not fall within the intent of the specification of the drainage consultant. The Parks and Recreation Commission and Municipal Council agreed to accept the installation conditional on the contractor supplying the Municipality with an extra two-year guarantee on those 4 cells. This would be in addition to the two-year guarantee which covers the whole field for a total of four years of guarantee on Cells 1, 5, 9, and 13. The contractor has declined at this time to provide, in writing, this extension to the guarantee because these four cells are interdependent on the entire field for overall drainage capability and the remainder of the field has been built by methods which constitute amendments to his, the contractor's original design. This contract has been an extremely difficult one to administer, and the completed construction provides us with a cell system that has been modified by both our consulting drainage engineer and our consulting agronomist. The contractor has had a tendency to continually revert back to constructing his original design causing conflict between the administration, the consultants and the contractor.

It is pointed out that any error in the design, which might result in a malfunction of the system, should become apparent in the first two years of operation. If this should happen it would be difficult to isolate the problem from the rest of the field because design and construction of all cells are so similar, with overall drainage capability, that it is our opinion that any such problems would be universal.

For the first two years we have a written guarantee from Cellsystem Design for the entire field together with a cash holdback of \$7,200 for the first year reduced to \$3,600 for the second year. In our opinion this should be sufficient to guarantee the Municipality a properly operating field. It is therefore considered that the Municipality should consider reverting to the original two-year guarantee on the entire field and clear the way for the substantial completion payment to the contractor, who to date has not received any payments throughout the 3½-month construction period.

2. AUTOMATIC SUB-IRRIGATION EXTRA

This item was claimed on the same invoice of the 28th of August, 1974, in the amount of \$6,009.50. Our findings are that the control valves, the field electrical boxes and the control panel are not yet installed for this system, in addition the wiring for the sensors is temporary and still has to be replaced with the approved wire. In our opinion, therefore, the work on this part of the contract is less than 50% completed.

3. RECOMMENDATION

It is recommended that:

1. The request for a 4-year guarantee on Cells 1, 5, 9, and 13 be rescinded and that the construction of Cells 1, 5, 9, and 13 be accepted under the 2-year guarantee included in the contract.
2. Payment be made on the main contract as claimed in the Cellsystem Design invoice of the 28th August, 1974, namely:

Contract Price	\$81,710.00
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	\$74,510.00
Less 15% Retention for Lien Period	<u>11,176.50</u>
Amount of Payment	<u>\$63,333.50</u>

3. The 40-day maintenance period for the turf commence on Friday, the 30th of August, 1974.
4. The 40-day lien period on the main contract not commence until full completion of the contract.
5. That the invoice request for payment of the automatic sub-irrigation extra not be paid until the work is substantially completed.

NOTE:

I am forwarding this recommendation direct to the Municipal Manager in view of the fact that Council will not be meeting for two weeks. I have conducted a telephone poll of the Parks and Recreation Commissioners with the following results:

For the recommendation	5	
Against the recommendation	1	
Chairman (vote not required)	<u>1</u>	(For the recommendation)
	<u>7</u>	

Respectfully submitted

*Dennis Gaunt*

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