

# CORPORATE REPORT

NO: L002 COUNCIL DATE: February 28, 2011

### **REGULAR COUNCIL - LAND USE**

TO: Mayor & Council DATE: February 22, 2011

FROM: General Manager, Engineering FILE: 4520-20(17155-01200)

City Solicitor XC: 4520-80(17155-01200)

SUBJECT: Unauthorized Infilling of a Canal within a Statutory Right-of-Way at 11678 - 130

Street

#### RECOMMENDATION

The Engineering Department and City Solicitor recommend that Council:

1. Receive this report as information;

#### 2. Resolve that:

"WHEREAS Sections 72 and 75 of the *Community Charter* (the "Charter") authorize Council to impose a remedial action requirement on a person that has obstructed, filled up or damaged a ditch, drain, creek or watercourse and to require that person to undertake restoration work in accordance with the directions of Council or a person authorized by Council;

WHEREAS Sections 72 and 74 of the *Charter* authorize Council to declare a drain, ditch, or watercourse, or a matter or thing that is in or about a drain, ditch or watercourse a nuisance and to impose a remedial action requirement in relation to that nuisance on the owner of land on which the drain, ditch or watercourse is located and to require the owner to alter or otherwise deal with the nuisance in accordance with the directions of Council or a person authorized by Council;

WHEREAS Gurcharan Enterprises Ltd. is the registered owner (the "Owner") of land with the civic address 11678 130 Street, Surrey, B.C. and legally described as PID: 024-646-407, Lot 2 Section 4 Block 5 North Range 2 West New Westminster District Plan LMP44274 (the "Property");

WHEREAS there is a ditch commonly known as the East Bridgeview Canal that was constructed for drainage purposes that runs through a City statutory right-of-way on the Property (the "Canal") that has been obstructed, filled in or damaged without the City's approval or consent (the "Unauthorized Fill")";

#### THEREFORE Surrey City Council:

Declares that the Owner has obstructed, filled up, damaged or destroyed the Canal on the Property within the meaning of Section 75 of the *Charter*;

Declares that the Unauthorized Fill in and about the Canal on the Property is a nuisance within the meaning of Section 74 of the *Charter*; and

Requires the Owner to, no later than thirty (30) days after notice of this requirement under Section 77 of the *Charter* has been sent by the City to the Owner to:

- a. Remove the Unauthorized Fill in and about the Canal on the Property and undertake and complete the restoration work identified in Section 3 of the engineer report prepared by Delcan dated <u>February 15</u>, 2011 in respect of the Canal (the "Engineer Report") and any additional measures as directed by a registered Professional Engineer approved by General Manager, Engineering to restore the Canal to its previous condition (collectively, the "Remedial Work") including the removal to a property with a valid Soil Deposition Permit of the Unauthorized Fill from the Property; and
- b. Obtain certification in writing from a registered Professional Engineer approved by the General Manager, Engineering that the Remedial Work has been completed in accordance with the requirements of the Engineer Report.

(collectively known as the "Remedial Action Requirement")"; and

3. Authorize staff to notify the Owner that the Owner may request that Council reconsider the Remedial Action Requirement by providing the City written notice within fourteen (14) days of the date on which the notice of the Remedial Action Requirement under Section 77 of the *Charter* is sent to the Owner and that if any or all of the actions required by the Remedial Action Requirement is not completed by the date specified for compliance, the City may take action in accordance with Section 17 of the *Charter* and undertake any or all of the actions required by the Remedial Action Requirement without further notice to and at the expense of the Owner.

#### **INTENT**

The purpose of this report is to advise Council of unauthorized filling along 330 metres of open ditch, commonly known as East Bridgeview Canal (the "Canal"), within the property known as 11678 - 130 Street and to seek Council direction for a course of action to correct this critical situation.

#### **BACKGROUND**

Storm drainage in East Bridgeview is provided by means of open ditches and storm sewers, which flow to the Fraser River through floodboxes at 128 Street and 124 Street or through the Royal City Pump Station at 126A Street.

When the Fraser River water level is high due to high tides or the spring freshet, the floodboxes automatically close and the pump station is the only means by which drainage from the area can be directed to the Fraser River. During events that exceed the pump capacity, stormwater is temporarily detained in the open ditch network in the area.

There is a large open Canal, known as the East Bridgeview Canal (the "Canal"), that runs on a public right-of-way through the property at 11678 – 130 Street (the "Property"). This Canal was an established drainage feature in the area at the time when CN Rail subdivided their land to create the lot at 11678 - 130 Street (the "Property").

In 1999, the City, with approval from the BC Ministry of Environment and the Federal Department of Fisheries (BCE 76910-60/99.23031), completed significant maintenance works on the Canal to improve its conveyance capacity and its ability to provide detention storage capacity during times when the Fraser River levels are high.

The registered owner of the Property through which the Canal is located is Gurcharan Enterprises Ltd. There are two covenants and a statutory right-of-way ("SRW") registered on the title of the Property that grants the City certain rights to place and maintain drainage and other works on the Property.

#### **DISCUSSION**

A field inspection by staff in December 2010 established that 330 metres of the Canal within the property at 11678 - 130 Street, as illustrated in Appendix I, has been filled in. The owner had made requests to City staff in the past, most recently in June 2009, to be allowed to fill in the Canal and had been denied. The owner has acknowledged to staff that he was responsible for the infilling of the Canal.

In December 2010, staff also retained civil engineering consultants, Delcan Corporation, to provide an opinion on the potential impacts due to the filling of the Canal. Delcan studied the circumstances and submitted a report dated <u>February 15</u>, 2011, a copy of which is provided in Appendix II. The Delcan report provides the following information:

- Sometime between April 2009 and May 2010, approximately 200 metres of the Canal had been filled;
- Field visits during the week of December 20, 2010 revealed that the remainder of the Canal, approximately 130 metres, had been filled;
- Approximately 4,500 cubic metres, roughly equal to 500 dump trucks, was required to fill the Canal, and it is most likely that this material was imported to the site;
- By filling the Canal, the overall capacity of the system has been reduced; and,
- The reduction in conveyance and storage volume in the Canal could lead to higher water levels in the ditches and canals upstream and more frequent overtopping and surcharging of the upstream storm sewer system, which could then result in an increase in flooding and related property damage.

Based on the above conclusions, Delcan recommended that the Canal be restored to its 1999 condition as documented in the 1999 construction and as-built drawings for the Canal.

On January 12, 2011 staff issued a letter to the owner of the property, instructing the owner to take immediate action to remove the fill from the Canal and restore the Canal to its former condition. The letter, a copy of which is attached as Appendix III, required the owner to provide an engineered plan to the Engineering Department by January 20, 2011 and to have remedial work commenced by January 31, 2011.

On January 19, 2011, the owner responded by letter indicating that they were hiring a consultant specializing in storm remediation to address the City's concerns and that they would be informing the City of the Consultant soon. The letter, a copy of which is provided in Appendix IV, contains a comment that it will take some time for the Consultant to find a solution. Staff was advised by the Owner on January 31, 2011 that a Consultant has been retained; however, the Owner or the Consultant has not provided any engineering plan nor construction schedule to date.

#### Remedial Action Requirement under the Sections 74 and 75 of the Community Charter

To restore the Canal to its 1999 condition, the City recommends that Council impose pursuant to Section 74 and Section 75 of the *Community Charter* a "remedial action requirement" on the owner to undertake the repair work to the Canal.

Under this approach Council may order the owner to repair the Canal in the manner required by the City. If the owner fails to do so, the City may conduct the repairs itself and recover costs from the Owner.

Pursuant to Section 75 of the *Community Charter*, Council may impose a remedial action requirement if a person has:

- (a) obstructed, filled up or damaged a ditch, drain, creek or watercourse that was constructed or improved under the *Community Charter* or the *Local Government Act*; or
- (b) damaged or destroyed a dike or other drainage or reclamation work connected with it.

Pursuant to Section 72(3), the remedial action requirement may require a person to undertake restoration work in accordance with the directions of Council or a person authorized by Council.

Pursuant to Section 74, Council may also declare that a "drain, ditch, watercourse, pond, surface water, or a similar matter or thing" is a nuisance and impose a remedial action requirement in relation to the nuisance.

Pursuant to Section 72(2)(b) the remedial action requirement may require the owner of the land on which the matter or thing is located to undertake the following measures:

- (i) remove or demolish it;
- (ii) fill it in, cover it over or alter it;
- (iii) bring it up to a standard specified by by-law; or
- (iv) otherwise deal with it in accordance with the directions of Council or a person authorized by Council.

A remedial action requirement may only be imposed under Section 75 if Council considers and declares that harm has been done.

It is staff's assessment and the conclusion of the engineering consultant retained by the City that harm has been done to the proper functioning of the Canal in the Property by the infilling of the Canal. The Delcan Report indicates that 330m of the Canal has been filled in since April 2009. The Delcan Report indicates that there are a number of impacts that the infilling will have on the drainage system. A remedial action requirement if approved by Council will require the owner to remove the fill and restore the Canal to its 1999 condition as recommended in the Delcan Report.

Council may also impose a remedial action requirement under Section 74(1)(c) if Council considers and declares the infilling of the drainage Canal is a "nuisance". The Delcan Report indicates that there are a number of impacts that the infilling will have on the drainage system including an increased likelihood of flooding of neighbouring properties which could constitute a nuisance.

If the City imposes a remedial action requirement on the Owner and the Owner fails to comply with that requirement, the City may exercise its powers under Section 17 of the *Community Charter* by carrying out the remedial action requirement at the expense of the owner and recover the costs in the same manner as property taxes provided that the proper procedure is followed.

There are detailed procedures set out in the *Community Charter* that must be followed after Council imposes a remedial action requirement. Importantly, the time limit for compliance must not be earlier than 30 days after notice under Section 77 of the *Community Charter* has been sent to the owner that is subject to the remedial action requirements. This time limit may be shortened if Council considers that there is a significant risk to health or safety if action is not taken earlier.

Further, the owner may seek reconsideration of Council's decision to impose a remedial action requirement if the owner provides a written request within 14 days of the notice of the remedial action requirement being sent to the owner. Council must then provide an opportunity to the owner to make representations before Council. Council after hearing the owner may confirm, amend, or cancel the remedial action requirement.

#### **Recommended Course of Action:**

In consideration of the need to take action in a timely manner to minimize the potential for damage to upstream properties and the related potential for liability to the City, the potential for recovering remediation costs from the property owner and to exercise reasonable care and control related to the remediation works, staff recommends that Council impose "remedial action requirements" under Sections 74 and 75 of the *Community Charter* as more particularly documented in the Recommendations section of this report.

#### **CONCLUSION**

The Engineering Department and the City Solicitor recommend that Council proceed with the issuance of a remedial action requirement to the Owner of the Property as contained in the Recommendations section of this report and as generally described in this report as a means to remedy the unauthorized filling that has occurred in the Canal within the property known as 11678 – 130 Street.

Vincent Lalonde, P.Eng. General Manager, Engineering Craig Macfarlane City Solicitor

JA/JL/brb Attachment

Appendix I - Location Map

Appendix II - Delcan Report, dated February 15, 2011

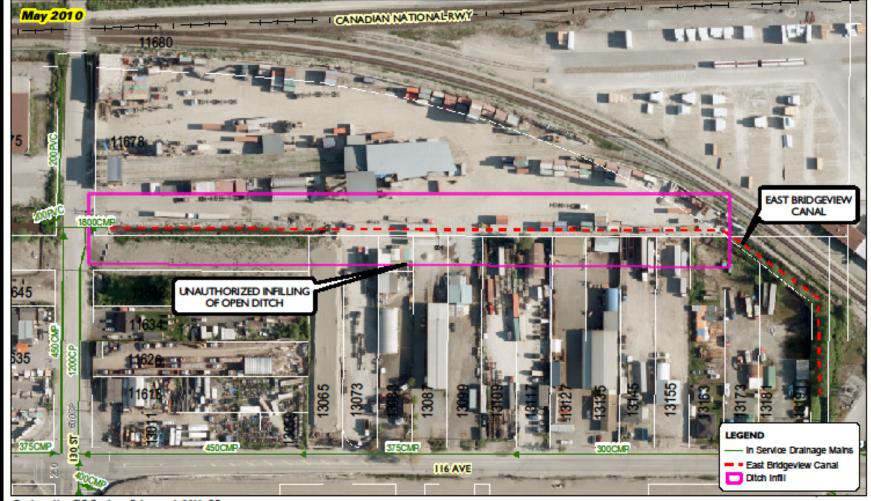
Appendix III - Letter, dated January 12, 2011, from the City to the Owner

Appendix IV - Correspondence from the Owner to the City, dated January 19, 2011

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# APPENDIX I LOCATION MAP



Produced by GIS Section: February 4, 2011, CS



# 11678 - 130 STREET UNAUTHORIZED DITCH INFILL

ENGINEERING DEPARTMENT

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey.
This information is provided for information and convenience purposes only.
Lot alway, Logal descriptions and conumbrances must be confirmed at the Land Title Office.

G:Mapping/G:SMapsi Corporate Report & Eng-Utilities/ AW-11678-130ST\_v4-AP.mxd

### APPENDIX II



Metrotower I, Suite 2300, 4710 Kingsway Burnaby, British Columbia V5H 4M2 Tel: 604.438.5300 • Fax: 604.438.5350 www.delcan.com

### **Technical Memorandum**

To:

Carrie Baron, City of Surrey

Date:

Feb 15, 2011

From:

RE:

Tom Reeve, Delcan

Project #:

EB3737

Adrian Corlett, Delcan

11678 130th Street - Ditch Infill

The City of Surrey has retained Delcan to provide an engineering opinion on the potential impacts of the ditch infilling that has occurred on #11678 130<sup>th</sup> Street. The drainage ditch, sometimes referred to as the East Canal, is within a City of Surrey 12.192 metre wide easement. It is part of the Bridgeview system that ultimately outlets either through flood boxes at 128<sup>th</sup> Street and 124<sup>th</sup> Street or the Royal City Pump Station. When the river level is high, either because of high Fraser River flows during the spring freshet or during high tides, the pump station is the only outlet available for this drainage water.

#### 1. Extent of Ditch Infilling

A review of the air photos available online from the City of Surrey's COSMOS system shows that the ditch was clear in April 2009 and by May 2010 an approximately 200 metre portion of the ditch had been filled in to the west of the CN rail. Field visits performed in the week of December 20, 2010 revealed that the remainder of the ditch to 130<sup>th</sup> Street had been filled. A total of 330 metres of ditch have been infilled running the entire southern length of the #11678 130<sup>th</sup> Street property. **Figure 1** shows the location of the ditch, right-of-way (ROW) and approximate extent of ditch filling. During the site visit there was visible indication on the east end of the filled ditch that underground drainage infrastructure (visually estimated as 1200mm diameter) was installed in place of the ditch. See photos in **Appendix A**.

The construction drawings for the ditch by New East Consulting (1999) indicate that in 1999 it was constructed with a 1 metre bottom width and 2:1 side slopes with an invert of -0.5 metres. The construction drawings and the as-constructed drawings are attached in **Appendix B**.

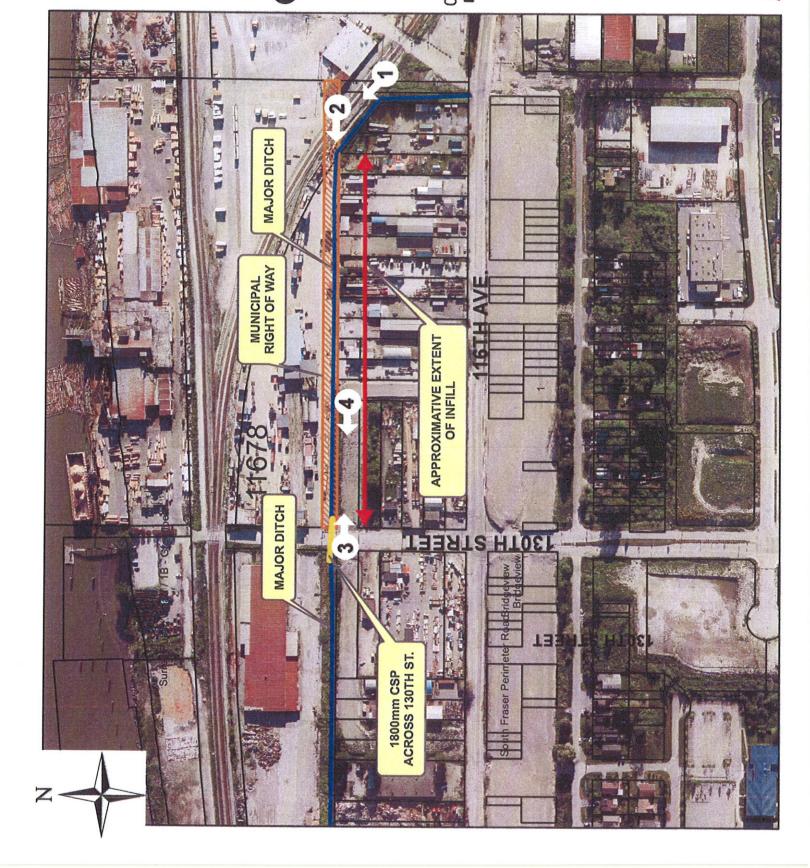
It is apparent that 4500 m³ of fill was required to fill the ditch. The source of the fill is unknown. It is possible that the material could have been scraped off the surface of the site, and assuming that 50% of the surface was scraped, approximately 0.5 meters in depth would need to have been scraped off. This would have been difficult to do without impacting the operations on the property and would require careful grading around rail spurs and stationary containers and structures on the property. It is more likely that some or all of the material was imported from off site. It is estimated that it would take approximately 500 standard trucks of material to fill the ditch.



FIGURE 1: Drainage Features

PHOTO LOCATION





#### 2. Potential Impact

There are a number of impacts that this infilling will have on the drainage system. These impacts are listed and discussed below.

#### 2.1 Conveyance of external flows

The ditch is part of the network of ditches in the Bridgeview area that provide drainage conveyance for approximately 26 hectares of upstream land. By changing the open channel to an enclosed pipe, the overall capacity of the system has been reduced. Using XPSWMM, a dynamic hydraulic model, Delcan has estimated the conveyance capacity of the system for both the open ditch and 1200 mm pipe scenarios. In examining conveyance capacity, the analysis assumed the downstream pump station and floodboxes will be able to maintain the downstream ditch level at normal operating level of 0.6 metres. The 1200mm pipe will be full for events above the two year return period event while the open ditch would not overtop in events up to the 100 year event.

The reduction in conveyance could lead to higher water levels in the ditches upstream and more frequent overtopping and surcharging of the upstream storm sewer systems. This in turn could cause property damage. Available elevation data indicates that properties immediately south of the ditch are some of the lower properties in the area and are most likely to be impacted by an increase in flooding. These properties would be more likely to experience flooding more frequently, for longer durations and to greater depths then before the ditch was infilled. As well, the current 116<sup>th</sup> Avenue and future South Fraser Perimeter Road could have increased operational issues related to flooding and drainage. The property at #11678 130<sup>th</sup> Street is generally higher than the surrounding land and is less likely to be impacted. It is expected that the changes in conveyance capacity would not be noticeable during frequent rainfall events (less than two years).

#### 2.2 Available storage volume within the system

Available water storage is impacted by the ditch infilling. The Bridgeview drainage system consists of over two kilometres of major ditches, which provide storage volume potential. This storage is a necessary part of servicing the area because, during rainfall events, the storage is used to detain the water until it can be pumped out of the system or drained via floodbox. According to past engineering reports (KWL, 1996 and New East Consulting, 1997), storage within the ditch system is a critical part of the system's performance and has been used in pump station assessments and considered when recommending pump station upgrades.

The ditch infilling and replacement with a pipe has reduced the amount of storage in a typical cross section area from  $15.0 \text{ m}^2$  if the ditch is full to an elevation of 2.0 metres to  $1.1 \text{ m}^2$  in the pipe. Over the full length of the ditch infill, this means over  $4500 \text{ m}^3$  of storage is no longer available in the system. Although the information is presently not available to estimate the

percentage of the storage volume lost, the 330 meters of enclosed ditch from a two kilometre total ditch system represents a loss of over 15% of length in available storage.

The location of the storage within the cross section is also important. In the case of the open ditch, greater storage volume is available as the water depth increases. This is significant because the ditch water levels are generally maintained at approximately 0.5 to 1 metre in elevation so the volume of storage below that depth is normally not available during rainfall events. The storage available above that depth is considered 'live storage' and is available during rainfall events. By installing a 1200mm pipe in the bottom of the ditch, almost all of the live storage in this section has been eliminated.

The elimination of live storage from the system would cause greater storage depths elsewhere in the system, which in turn could lead to an increased chance of flooding. This loss of storage could also increase the frequency and duration of the pump station being used.

### 2.3 Local surface drainage outlet for neighbouring properties

Available GIS mapping on COSMOS shows that the properties fronting 116<sup>th</sup> Avenue generally slope from south to north. It is likely that some or all of these properties make use of the ditch as an outlet for surface water generated during rainfall events. Now that the ditch has been infilled, these properties may experience more frequent surface ponding and flooding. Air photos indicate that most of the properties are making use of the north portion of the properties for goods storage or structures and these are now at higher risk for water damage caused by ponding or flooding.

A site visit and topographical survey would be required to quantify in greater detail which properties would be affected and how much flooding would result.

#### 2.4 Alteration or destruction of fish and riparian habitat

A portion of this ditch had been mapped as a Class A(O) (red-coded) stream based on Surrey's COSMOS system. This is a classification system of an open water course indicating its value as fish habitat. Classes A(O) denote year-round presence of salmonid species and healthy creek habitat. The property owner may be subject to the Fisheries Act, Subsection 35(1) which is a general prohibition of harmful alteration, disruption or destruction (HADD) of fish habitat. This memo does not comment further on environmental impacts. If additional information is required, a Qualified Environmental Professional should review the site.

#### 3. Recommendation

Delcan recommends that the ditch be restored to its previous condition with a 1 metre bottom width, 2:1 side slopes and an invert elevation of -0.5 metres. The New East Construction and As-Built Drawings in **Appendix B** provide further detail.

The City of Surrey must be able to access all portions of its infrastructure for inspection and maintenance. The easement on this site contained not only the ditch but an additional setback to allow for maintenance of the system. When the ditch is restored, the access should also be restored so that City of Surrey staff can visit the site for inspection, regular maintenance and possible emergency maintenance.

#### 4. References

Kerr Wood Leidal Associates (KWL) Ltd. <u>Bridgeview Stormwater Management Study</u>. October 1996.

New East Consulting Services Limited. <u>Bridgeview Drainage Improvement – Conceptual Design</u>. June 10, 1997.

New East Consulting Services Limited. <u>Bridgeview Drainage Phase IV (1999) Works</u>. March 12, 1999. (Attached in Appendix B)

New East Consulting Services Limited. <u>As Constructed Drawings: Bridgeview East Drainage Canal East of 130 St. to 132</u>. November 25, 1999. (Attached in Appendix B)

#### 5. Closure



Thomas Reeve, P.Eng.

Water Resource Engineer

#### **APPENDIX A - SITE VISIT PHOTOS**

For photo locations see Figure 1.



Photo 1: Drainage ditch southeast of the Photo 2: Culvert headwall at southeast corner southeast corner of #11678 130<sup>th</sup> Street of #11678 130<sup>th</sup> Street. looking west.



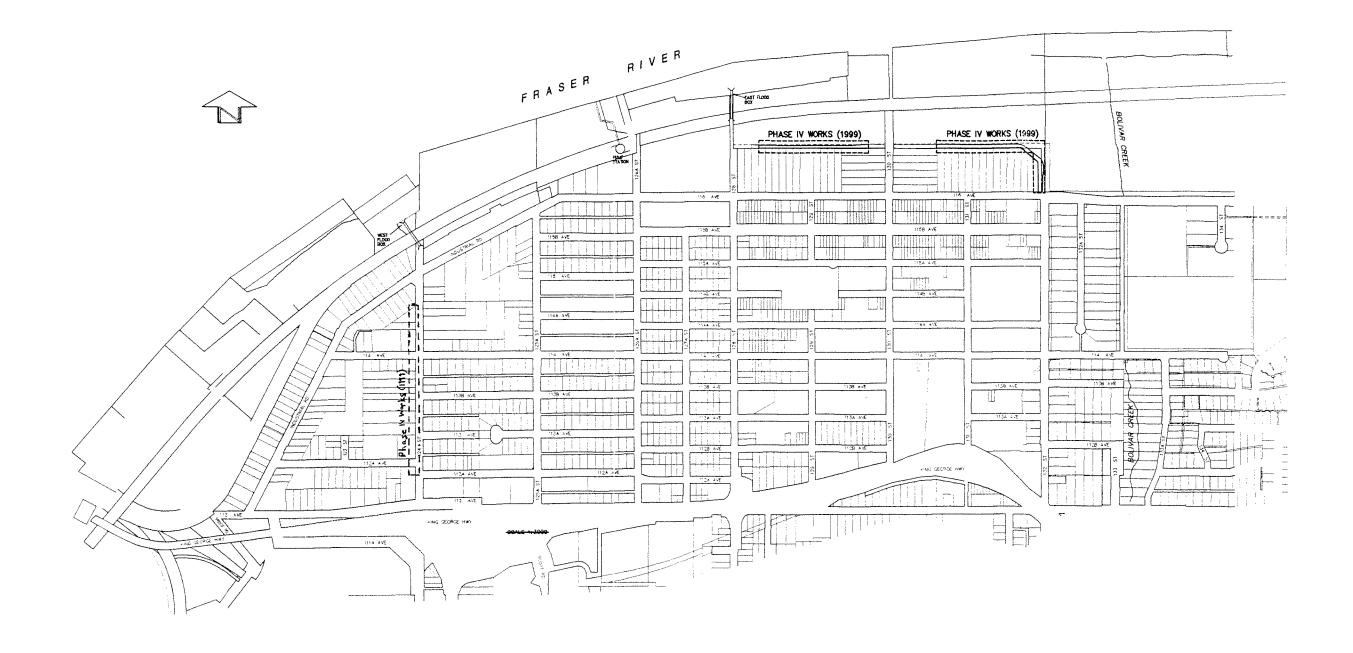


property line of 11678 130<sup>th</sup> Street.



Photo 3: Photo from 130<sup>th</sup> Street along south Photo 4: Photo from top of South Fraser Perimeter Road preload looking west along 11678 130<sup>th</sup> Street property line.

### **APPENDIX B – Construction Drawings and As-Builts**



NECS DRAWING NUMBER-

NEW EAST CONSULTING SERVICES LTD.

206-6840 King George Highway
Surrey, B.C., Canada V3W 479
TEL (604) 591-1916, FAX 581-9923
Email: necsodirect.ca

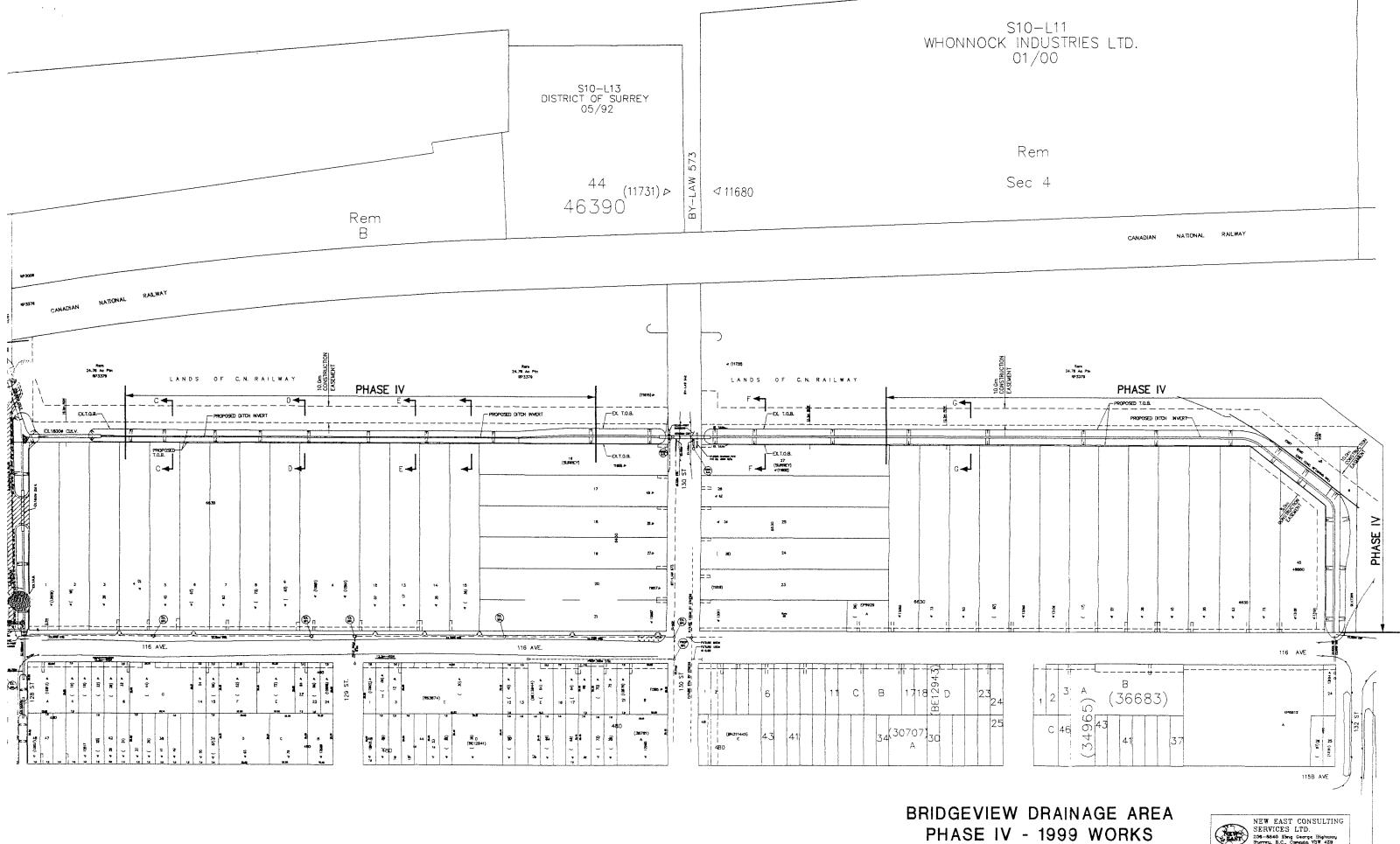
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ALL PIPE SIZES ARE IN MILLINETRES
REVISION DESCRIPTION BY DATE

ENGINEERING DEPARTMENT SURREY CITY OF SURREY

SITE LOCATION PLAN BRIDGEVIEW DRAINAGE PHASE IV (1999) WORKS

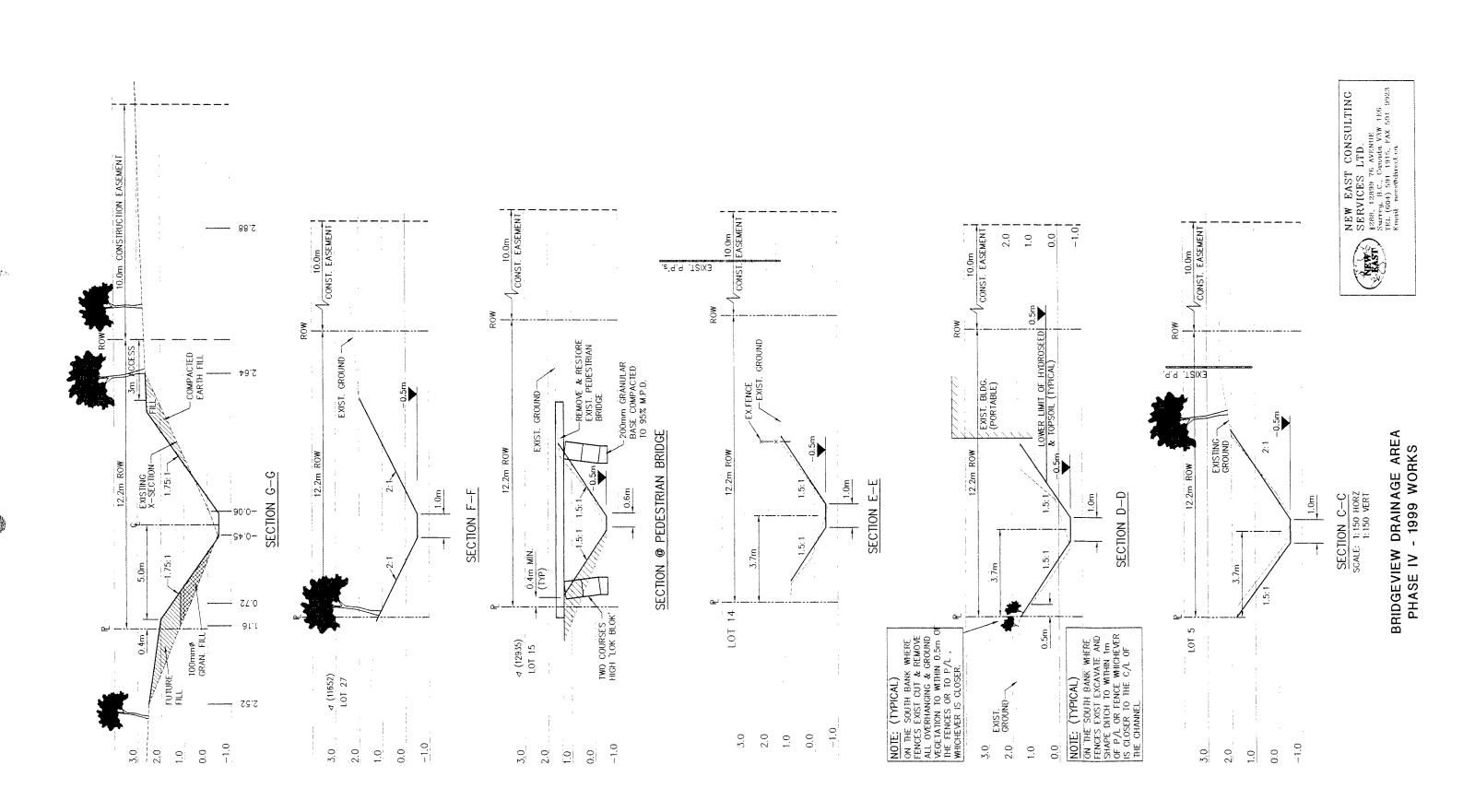
BENCH MARK - S.M.#

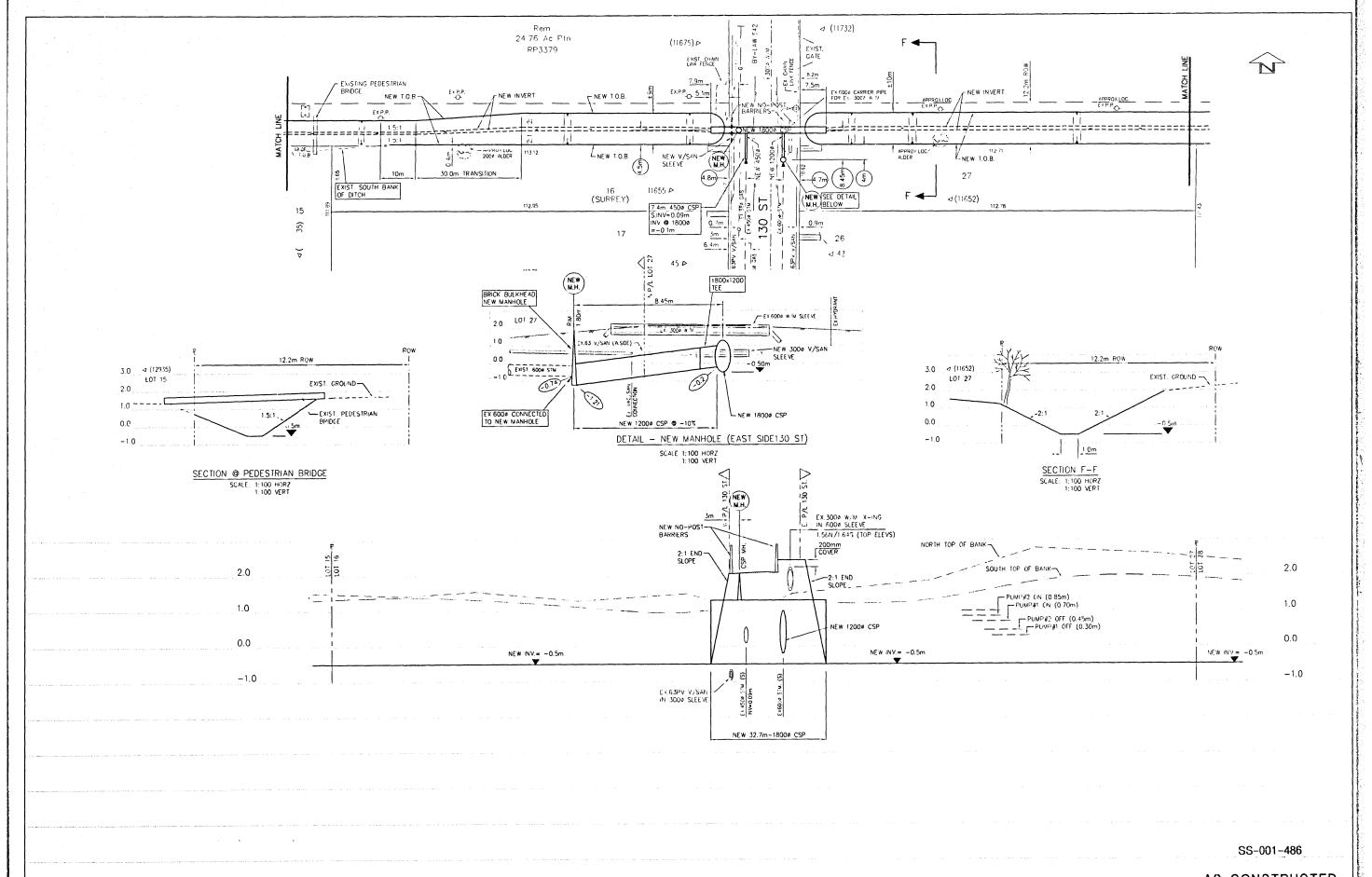
1:20 000 DATE 12 MAR'99 PROJECT NUMBER SCALE: ++,T.S. DRAWN CHECKED DESIGNED CHECKED P.W. AS BUILT SHEET OF APPROVED DESTROY ALL PRINTS BEARING REVISION



SCALE 1: 2000







### AS CONSTRUCTED

NEW EAST CONSULTING SERVICES LTD. 206-6840 King George Highway Surrey, B.C., Canada V3W 429 TEL (604) 591-1915, FAX 591-9923 Email: necs@direct.ca

LEGEND

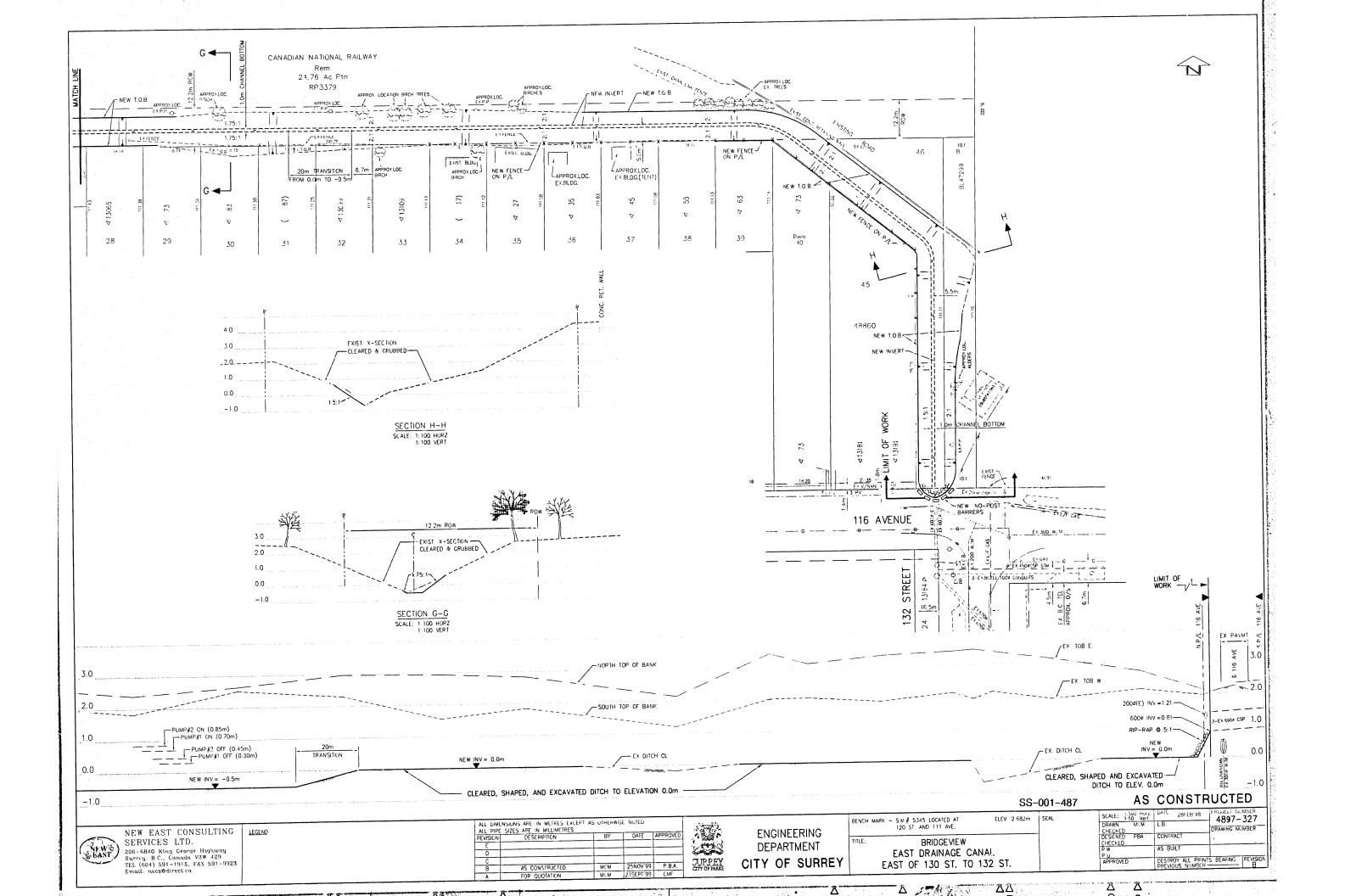
ALL DIMENSIONS ARE IN METRES EXCEPT AS OTHERWISE NOTED
ALL PIPE SIZES ARE IN MILLIMETRES
REVISION DESCRIPTION BY DATE AS CONSTRUCTE FOR TENDER M.C.M. 29NOV'99 P.B.A.



**ENGINEERING** DEPARTMENT CITY OF SURREY

BENCH MARK - SM# 5345 LOCATED AT 120 ST. AND 111 AVE. ELEV 2 682m SEAL BRIDGEVIEW
EAST DRAINAGE CANAL EAST OF 128 ST. TO EAST OF 130 ST.

SCALE: 1.500 Horz. 1:50 Vert. DRAWN MCM CHECKED DESIGNED PBA DATE 28FEB 98 4897-327 AS BUILT SHEET OF DESTROY ALL PRINTS BEARING REVISION PREVIOUS NUMBER



### **APPENDIX III**



the future lives here.

January 12, 2011

Gurcharan Enterprises Ltd. c/o Buckley Hogan Law Office 200 – 8120 128 Street, Surrey, BC. V3W 1R1

Attention:

Amrik Sangha

Dear Sir,

Re: Drainage Retention Reservoir Infill

We write regarding the action you have taken to fill in the drainage retention reservoir which is located in the City right-of-way on your property.

The drainage retention reservoir located on your property, and which is in a City of Surrey right-of-way, is an important piece of infrastructure in the Bridgeview drainage plan. You were previously advised of the right-of-way and that it was owned by the City and that it was to be left as constructed. We would strongly urge you to take immediate action to rectify this situation. Due to the seriousness of your trespass and the potential safety issues upstream should the area flood, we have already retained legal representation to pursue an injunction compelling your removal of property from our right-of-way and replacement of the retention reservoir as it was installed. All costs of removal and remediation will be borne by you as well as costs associated with obtaining the injunction. With the reservoir filled, the area is at greater risk for flooding, particularly at high tide. Should the area experience flooding problems, we will hold you liable for any loss or damage arising out of your trespass and infill of the reservoir. We would ask that you have an engineered plan to complete the work to the City of Surrey Engineering Department by January 20, 2011 and work commended by January 31, 2011. The City will respond to the engineered plan and provide a deadline for the completion of construction.

We would suggest that you present this letter to your insurers as they may provide some coverage for your negligent actions.

We trust you will find this to be in order. Should you have any further questions or concerns, please do not hesitate to contact the undersigned.

Jeff Schaafsma, RF

Manager, Risk Management

Cc. Mr. Don Howieson, Young Anderson

Mr. Phillip Huynh, Assistant City Solicitor

Amrik Sangha, 7453 124 Street, Surrey, BC. V3W 3X2

#### GURCHARAN ENTERPRISES LTD. 11678-130<sup>TH</sup> St. Surrey BC V3R2Y3

January 19, 2011 Jeff Schaafsma, RF Manager, Risk Management 14245-56 Ave, Surrey BC V3X3A2 Fax::604-598-5744

Dear Mr. Jeff Schaafsma:

Re: Your letter to us dated January 12, 2011

We have received your letter dated Jan 12, 2011 regarding drain running at the above mentioned site.

We submit that we are taking immediate action to hire a Consultant specializing in storm remediation to address your concerns. This is the only letter we have received concerning this issue of grave consequences for us, with a very short notice. I was out of town and returned on January 19<sup>th</sup> 2011.

To understand it better and help, I contacted Mr. Tom Gill. He agreed to arrange the meeting with the stake holders for better understanding.

The drain in question is not a Red Coded Creek. The letter indicating the classification is attached herewith. We have constructed the culvert to replace the open drain. The neighbours have no issue with it. Rather they are happy and pleased.

We are sorry that we did not take permission from City. In future we want to work with City and with Consultants so that the concerns of the City are met.

We will soon inform you about the Consultant and hope to work. With considering the complexity of the drainage near the river you understand that it will take some time for Consultant to find a solution.

We thank you for your kind consideration in this matter.

With best Regards,

AMRIK SANGHA (604-830-8158)

### Attachment to January 19, 2011 Letter from Amrik Sangha CITY OF SURRBY 14245 - 56th Avenue, Surrey



Engineering Department-

British Columbia, Canada V3X 3A2

**APPENDIX IV (Cont'd)** 

Telephone (604) 591-4340

Fax (604) 591-8693

May 19, 1999

File: 4898-727

Remax Progroup Realty Ladner Harbour Centre #100 - 5000 Bridge Street Delta, B.C. V4K 2K4

Dear Mr. Lorne Chernochan:

Stream Classification Bridgeview Canal System

This letter is in response to your request for clarification on the fisheries value of the Bridgeview Canal system located north of 116 Avenue between 132 Street and 128 Street. The canal serves as a significent component in the local storm water management plan. It is designed to hold and convey stom; flows from upper catchment areas to the Fraser River. The in-line storage is key to the function of the canal system.

The canal system services only the lowland Bridgeview area and is not connected to any upstream fish bearing streams. This lack of connectivity to upland fish corridors and its locals drainage function have led the system to be classified as "Schedule C" or green coded on Surrey's Fisheries Watercourse Classification Map. This classification is defined as "insignificant food/nutrient value, no fish present". No setbacks have been imposed from a fisherles perspective on this type of a system. It's primary importance is from a drainage conveyance/storage perspective, not fisheries.

If you have any further questions, please call the undersigned at 591-4278.

Yours truly,

Carris Baron, P. Eng.

Drainage and Environment Manager

CAB:km

c.c. - Mike Lal, Trunsportation Engineer - Eng. Dept.

Leif Bjorseifi, Land Development Manager - Eng. Dept.

y i potratikyráminejokos (9) 140 cob U asi sop 14.40 prá

## APPENDIX IV (Cont'd) Attachment to January 19, 2011 Letter from Amrik Sangha

Notes to the meeting of April 16th, 1999 at the offices of the City of Surrey Engineering Department Present at the meeting were;

Ms. Carrie Baron City of Surrey Engineering Department Senior Drainage Systems Engineer Engineering Planzing Division (604) 591-4278 Phone (604) 591-8693 Fax

Mr. Mike Lai City of Surrey Engineering Department Senior Transportation Engineer (604) 591-4446 Phone (604) 591-8693 Fax Mr. Len Robertson Aplin & Martin Consultants Ltd. Project Engineer (604) 597-9058 Phone (604) 597-9061 Fax

Mr. Lome Chemochan RE/MAX Progroup Realty (604) 275-5759 Direct Phone (604) 275-5789 Direct Fax

#### Information received indicates;

- The City of Surrey classification is "Green" for the channel along the South side of the subject properties. It
  is considered a holding and drainage channel for area drainage only; and not for upland drainage. There are
  no environmental issues and it is not regarded as fish habitat.
- The City of Surrey is responsible for the cleaning and maintenance of the channel. The balance of the channel
  (along it's entire length) is expected to be cleaned of vegetation in 1999 or 2000 after the freshet has passed.
   The work will be done as per the work done to date on City owned properties at 130th street.
- 3. The channel is within a 12,192 meter right of way. There is no plan to increase the size of the channel.
- 4. The channel acts as a holding area for run off water until the pumps at 126th street can empty the water into the Fraser River. Because of the desired run off water holding capacity of the channel, the City does not wish to have the channel replaced with a culvert and filled in; but this does not preclude installing culverts at points along the channel to create access driveways connecting the subject properties to the proposed road to be created along the South side of the channel.
- 5. The proposed road along the South side of the channel will be installed by the City on City owned land and along the existing right of way. The timetable will be concurrent with the development of 116th Avenue into the South Fraser Perimeter Road. The timetable for this is unknown but will not be short term.
- 6. The current MBE is set at 4.4 meters (3.8 meters + .6 meters) to equate to the 200 year high water return (= 3.8 meters) plus 2 feet of freeboard (= .6 meters). The subject properties are more or less an MBE of 2 meters, which is higher than much of the residential areas South of 116th Avenue.
- 7. The new Bridgeview access road will feed into 130th Street and will replace 128th street for access to the
  - The City will continue to expand it's ownership of lands in the area South of 116th for development into an Industrial use region.
  - There will be restrictive covenants over both lots for; Sanitary Sewer to limit the rate of waste discharge; engineered foundations; and commercial siltation control.

Execute the Buyer's obligation to complete their own due diligence in investigation and inquiry. The aforementioned parties do not warrant the information and accept no liability for it's accuracy. Direct confirmation with The City of rey is recommended for all information herein and all matters related thereto.

Notes-CNR-130th St.