



## **CITY OF CORNER BROOK**

**Dear Sir\Madam:**

I have been directed by His Worship the Mayor to summon you to a Regular Meeting of the Corner Brook City Council, to be held on **September 27, 2021 at 7:00p.m. Council Chambers, City Hall.**

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CITY CLERK

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**1 CALL MEETING TO ORDER**

**2 APPROVALS**

2.1 Approval of Agenda

3 - 11 2.2 Approval of Minutes

13 - 14 2.3 Confirmation of Minutes

**3 BUSINESS ARISING FROM MINUTES**

3.1 Business Arising From Minutes

**4 TENDERS**

15 - 38 4.1 RFP#2021-21 Supply, Delivery, Set-up, and Maintenance of Four(4) Leased Photocopiers

39 - 43 4.2 Replacement of Two 30-Ton Water-to-Water Heat Pumps 2021-20

**5 CAPITAL WORKS**

45 - 81 5.1 Mount Bernard Avenue Sanitary Sewer Upgrade

**6 ADJOURNMENT**



**MINUTES OF A REGULAR MEETING OF  
THE COUNCIL OF THE CITY OF CORNER BROOK  
VIDEO CONFERENCE  
MONDAY, 23 AUGUST, 2021 AT 12:00 PM**

**PRESENT:**

Mayor	J. Parsons	R. Cumby, City Manager
Deputy Mayor	B. Griffin	D. Park, Director of Finance & Administration
Councillors:	J. Carey	D. Charters, Director Community Engineering Development and Planning
	L. Chaisson	T. Flynn, Director of Protective Services
	V. Granter	D. Burden, Director of Public Works, Water and Waste Water Services
	B. Staeben	M. Redmond, City Clerk

**Absent with regrets:** Councillor T. Buckle

**21-108      Approval of Agenda**

On motion by Deputy Mayor B. Griffin, seconded by Councillor B. Staeben, it is **RESOLVED** to approve the agenda as circulated. **MOTION CARRIED.**

**21-109      Approval of Minutes (Regular Meeting - 26 July 2021)**

On motion by Councillor B. Staeben, seconded by Councillor V. Granter, it is **RESOLVED** to approve the Minutes of the Regular Council Meeting of 26 July 2021 as presented. **MOTION CARRIED.**

**21-110      Business Arising From Minutes**

Councillor Chaisson commented there was an error in Minute COW1-009. The Minute references raising the Qalipu Grand Council Flag. It Should have read - Mik'Maq Grand Council Flag.

**21-111      Transit Report Presentation**

The Director of Community Engineering Development and Planning presented a summary of the Transit Report prepared by Dillion Consulting.

**21-112      Transit Study and System Design Report – Dillon Consulting**

On motion by Deputy Mayor B. Griffin, seconded by Councillor V. Granter, it is **RESOLVED** to accept the report submitted by Dillion Consulting Ltd. the Corner Brook Transit Study and System Design - Final Report, and the recommendations presented by the Director of Community Engineering Development and Planning. **MOTION CARRIED.**

**21-113      Corner Brook Transit Contract Extension**

On motion Deputy Mayor B. Griffin, seconded by Councillor L. Chaisson, it is **RESOLVED** to extend the current contract with Murphy Brother's Ltd., beginning September 1, 2021, for a one year period at a cost of \$468,774.50 (HST included). **MOTION CARRIED.**

**21-114      Proclamations**

Mayor Parsons commented that there will be a proclamation and flag raising event on 4 September 2021 recognizing National Polycystic Kidney Disease Aware Day.

**21-115      Supply of Winter Sand**

On motion by Councillor V. Granter, seconded by Councillor B. Staeben, it is **RESOLVED** to accept the bid of \$51,836.25 (HST included) by Humber Arm Contracting for winter sand. **MOTION CARRIED.**

**21-116      Discretionary Use (Home Based Child Care) – 25 Hann Crescent**

On motion by Councillor L. Chaisson, seconded by Councillor J. Carey, it is **RESOLVED** to approve the application to operate a home based child care business from the dwelling located at 25 Hann Crescent in accordance with Regulation 11- Discretionary Powers of Authority. **MOTION CARRIED.**

**21-117      Confirmation of Order**

On motion by Councillor L. Chaisson, seconded by Deputy Mayor B. Griffin, it is **RESOLVED** pursuant to Section 109(4) of the Urban and Rural Planning the Act the Council of the City of Corner Brook hereby confirms order #2021-03. **MOTION CARRIED.**

**21-118      Margaret Bowater Park Update**

Deputy Mayor B. Griffin announced the following recreational division updates:

- Margaret Bowater Park will close effective 29 August 2021. From Aug 26-29 there will be no lifeguards on duty.
- The City will be hosting Ribfest at Margaret Bowater Park from August 27-29, 2021
- Steep Ultramarathon will be taking place on 4 September 2021. The race will commence and end in Margaret Bowater Park.

**21-119      Municipal Election 2021**

Deputy Mayor B. Griffin announced details on the upcoming municipal election:

- Nomination Period will run from August 24-31(except Saturday and Sunday).
- Applications for Vote By Mail are now being accepted. Residents have up to September 20, 2021, to apply for a Vote by Mail Kit. Kits being returned by mail must be sent by September 20, 2021. Kits will be accepted via the DropBox outside City Hall must be returned by 27 September 2021.

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**21-120      Ultimate Recipient Gas Tax Agreement Funding Amendment 2019-2024**

On motion by Councillor J. Carey, seconded by Councillor B. Staeben, it is **RESOLVED** to approve execution of the letter to the Government of Newfoundland and Labrador for the amended gas tax allocation for the 2019-2024 period for the Ultimate Gas Tax Agreement in the amount of \$6,135,329. **MOTION CARRIED.**

**21-121      Lease Agreement - Corner Brook Curling Association Inc.**

On motion by Councillor B. Staeben, seconded by Councillor V. Granter, it is **RESOLVED** to approve execution of the lease agreement between the City of Corner Brook and the Corner Brook Curling Association Inc. for the period October 1, 2021 to September 30, 2022. **MOTION CARRIED.**

**21-122      Pratt Street Phase 3 Land Sale**

On motion by Councillor B. Staeben, seconded by Councillor J. Carey, it is **RESOLVED** to approve execution of the Purchase and Sale Agreement with 52453 Newfoundland and Labrador Limited for City land located near Pratt Street (approximate area: 5.23 acres with two access points between 59/65 Pratt Street and 75/79 Pratt Street). **MOTION CARRIED.**

**ADJOURNMENT**

The meeting adjourned at 1:10 p.m.

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City Clerk

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Mayor



**MINUTES OF A COMMITTEE OF THE WHOLE OF  
THE COUNCIL OF THE CITY OF CORNER BROOK  
MONDAY, 13 SEPTEMBER, 2021 AT 7:00 PM  
COUNCIL CHAMBERS, CITY HALL**

**PRESENT:**

Mayor	J. Parsons	R. Cumby, City Manager
Deputy Mayor	B. Griffin	D. Park, Director of Finance & Administration
Councillors:	T. Buckle	D. Charters, Director Community Engineering Development and Planning
	J. Carey	T. Flynn, Director of Protective Services
	L. Chaisson	D. Burden, Director of Public Works, Water and Waste Water Services
	V. Granter	M. Redmond, City Clerk
	B. Staeben	J. Banes, Seargent-At-Arms

Absent with regrets: Councillor J. Carey

**COW21-131 Approval of Agenda**

On motion by Councillor V. Granter, seconded by Councillor T. Buckle, it is **RESOLVED** to approve the agenda as circulated. **MOTION CARRIED.**

**COW21-132 Approval of Minutes [August 9, 2021]**

On motion by Councillor B. Staeben, seconded by Deputy Mayor B. Griffin, it is **RESOLVED** to approve the Minutes of the Committee of the Whole Agenda of 9 August 2021 as attached. **MOTION CARRIED.**

**COW21-133 Confirmation of Minutes**

In accordance with the section 41(3) of the City of Corner Brook Act, "*Where a decision is made by the councillors at a privileged meeting, the decision in order to be valid shall be ratified at a public meeting of the council.*", the following resolutions were brought forward for ratification and were motioned:

It is **RESOLVED** to ratify Minute CC19-022 [Granter/Staeben]

It is **RESOLVED** to ratify Minute CCCC19-023 [Granter/Chaisson]

It is **RESOLVED** to ratify Minute CCCC19-096 [Granter/Buckle]

it is **RESOLVED** to ratify Minute CC20-072 [Granter/Buckle]

It is **RESOLVED** to ratify Minute CC20-074 [Granter/Chaisson]

It is **RESOLVED** to ratify Minute CC21-019 [Granter/Buckle]

**MOTION CARRIED on all minutes.**

**COW21-134 Business Arising From Minutes**

No items were brought forward.

**COW21-135 Proclamations**

Mayor Parsons announced that Council has signed proclamations declaring the following:

- Prostate Cancer Awareness Month - Sept 2021
- Childhood Cancer Awareness Month- September 2021
- Suicide Awareness Day- Sept 10, 2021
- Wrongful Conviction Day- October 2, 2021

**COW21-136 Replacement of Single Dwelling - 800 O'Connell Drive**

On motion by Councillor L. Chaisson, seconded by Deputy Mayor B. Griffin, it is **RESOLVED** to approve the application to replace the single dwelling located at 800 O'Connell Drive in accordance with Regulation 11-Discretionary Power of Authority. **MOTION CARRIED.**

**COW21-137 Development and Planning Committee Updates**

Councillor Chaisson presented the Development and Planning Activity Report as follows:

IMSP team is processing input received from the consultation session.

- **Corner Brook Acute Care Hospital** project is proceeding with an anticipated completion date of 2024
- **Research and Innovation Hub** redevelopment is ongoing and all building permits have been issued.
- **Pro Choice Auto Glass** (396 O'Connell Drive)- permit has been issued for above grade and architectural development
- **SPCA**- final permit has been issued for building
- **Veterinary Clinic** (Popular Road)- Civic/Site Work permit was amended to include below slab and site electrical
- **Medical Building**(Grenfell Drive)- majority of building is occupied.
- **Shopper's Drug Mart** Expansion (Millbrook Mall)- construction is ongoing. The project is expected to be completed in several weeks.
- **Subway Building** (Union Street)- Permit have been issued to complete the building
- **Barry' Seafood Expansion**- permits have been issued for the replacement of three large buildings

**COW21-136 Approval to Adopt the proposed Municipal Plan and Development Regulation 21-01 amendments and Approve to advertise a scheduled public hearing for October 12, 2021**

On motion by Councillor B. Staeben, seconded by Councillor T. Buckle, it is **RESOLVED**:

- to adopt the proposed Municipal Plan Amendment 21-01 as per Section 16 of the Urban and Rural Planning Act.
- Set October 12, 2021 at 7:00 p.m., in the Hutching Room at City Hall. as the date for the Public Hearing
- Authorize staff to cancel the Public Hearing in the event no objections are received in or no member of the public expresses



intent to attend the Public Hearing, 48 hour prior to the tentative public hearing date.

**MOTION CARRIED.**

**COW21-139 Community Services Project Update**

Councillor Buckle presented the monthly activity report from the Community Services Division including:

- Trail Network - Mountain Bike Atlantic (MBA) are developing a report for the City and are developing content on the trails for their social networks.
- Mill Whistler - shut down for the year, still available in the fall for special event.
- CB Nuit will be from September 24th-26th
- Cabox Art and Adventure Festival will be from September 17th-19th
- Composters - Composters are available for residents for \$44 plus HST.
- Transit Study and System Design - staff is working on the implementation phase

**COW21-140 Capital Project Updates**

Deputy Mayor Griffin presented the monthly Capital Projects Report including:

- 2021 Asphalt Program - 80% complete, contractor beginning patch work
- Mt Bernard Sanitary Sewer Study - study is complete and staff will be developing a plan for moving forward
- Steady Brook Water Study - report is expected to be completed by the end of this month to allow Town of Steady Brook to apply for funding in the fall if the report recommends proceeding

**COW21-141 Accessibility and Inclusiveness Committee Report**

Councillor L. Chaisson reported that the Accessibility and Inclusiveness Committee met. She stated the Committee is hoping that initiatives introduced by the Committee will continue to be pursued by the new Council.

**COW21-142 Youth Advisory Committee Report**

Councillor L. Chaisson reported the Youth Advisory Committee recently met on 31 August 2021. The Committee is hoping to continue its efforts with the new Council.

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**COW21-143 Request from 49 Carberrys Rd to Lease City Land between 49 & 53 Carberrys Rd**

This item was deferred. It was agreed to bring this item forward for consideration by the new Council.

**COW21-144 Request from 50 Carberrys Rd to Lease City Land between 49 & 53 Carberrys Rd**

Decision Deferred. Matter to be brought forward for consideration by the new Council.

**COW21-145 Request from 53 Carberrys Rd to Lease City Land between 49 & 53 Carberrys Rd**

Decision deferred. To be considered by the new Council.

**COW21-146 City Hall Exterior Repairs Contract 2021-16**

On motion by Councillor T. Buckle, seconded by Councillor B. Staeben, it is **RESOLVED** to award the tender for Contract 2021-16 - City Hall Exterior Repairs to Brook Construction at a price of \$221,835.00 HST included. **MOTION CARRIED.**

**COW21-147 St. Mary's Brook Box Culvert Rehabilitation - Phase 2 - 2021-22**

On motion by Councillor V. Granter, seconded by Councillor B. Staeben, it is **RESOLVED** to award Contract 2021-22- St. Mary's Brook Box Culvert Rehabilitation to Marine Contractor at the price of \$294,083.75 (HST included). **MOTION CARRIED.**

**COW21-148 City Hall Cleaning Services 2021-18**

On motion by Deputy Mayor B. Griffin, seconded by Councillor T. Buckle, it is **RESOLVED** to award Contract 2021-18- City Hall Cleaning Services to Blair Holding at the tender price of \$409,288.26 (HT included). **MOTION CARRIED.**

**COW21-149 City Manager Report's Report**

The City Manager reported on the following:

- change order for \$11,102.70 increase for the West Valley Road/Confederation Drive Roundabout project to complete material testing construction

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ADJOURNMENT

The meeting adjourned at 7:59 p.m.

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City Clerk

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Mayor





# Request for Decision (RFD)

**Subject:** Confirmation of Minutes

**To:** Marina Redmond  
**Meeting:** Regular Meeting - 27 Sep 2021  
**Department:** City Manager  
**Staff Contact:** Jessica Smith, Legislative Assistant  
**Topic Overview:** To approve Minutes from Council in Committee Meetings

## BACKGROUND INFORMATION:

In accordance with section 41 (3) of the City of Corner Brook Act, *"Where a decision is made by the Councillors at a privileged meeting, the decision, in order to be valid, shall be ratified at a public meeting of the council."*

## PROPOSED RESOLUTION:

[Council in Committee Meeting – August 23, 2021](#)

**It is RESOLVED to ratify minute CC21-018- 2021 Tax Sale Auction**

**RESOLVED** to approve staff to submit bids on properties at the 2021 Tax Sale Auction in accordance with section 162 of the City of Corner Brook Act for the properties as per the following:

PID	PROPERTY ADDRESS	CITY BIDS
051-055	Youngs Avenue	\$7,500.00
047-814	O'Connell Drive	\$5,800.00
049-599	St. Mary's Road	\$6,100.00
049-689	Station Road	\$10,000.00
200-107	O'Connell Drive	\$2,200.00
046-773	233 Humber Road	\$3,800.00
044-646	Georgetown Road	\$3,600.00
208-836	Ezekiels Lane	\$2,600.00
050-729	Wheelers Road	\$2,500.00
042-772	8 Batstones Lane	\$7,400.00
047-812	O'Connell Drive	\$1,400.00
048-353	Petries Street	\$2,500.00
045-649	Gearyville Road	\$2,300.00
045-644	Gearyville Road	\$10,000.00

Legislation  
City of Corner Brook Act  
41(3)

Approved - 24 Sep 2021

City Manager



# Request for Decision (RFD)

**Subject:** RFP#2021-21 Supply, Delivery, Set-up, and Maintenance of Four(4) Leased Photocopiers

**To:** Rodney Cumby  
**Meeting:** Regular Meeting - 27 Sep 2021  
**Department:** Finance and Administration  
**Staff Contact:** Dale Park, Director of Finance & Administration  
**Topic Overview:** The City recently issued an Request for Proposals for Four(4) leased photocopiers at various locations within the City.  
**Attachments:** [RFP#2021-21 Addendum#1 Sept-7-21](#)  
[RFP#2021-21 Supply, Delivery, Set-up and Maintenance of Four\(4\) Leased Photocopiers](#)

## BACKGROUND INFORMATION:

Request for Proposals were recently invited by the City of Corner Brook for the supply, delivery and maintenance of four(4) leased photocopiers. These multifunctional photocopiers are needed in the City Manager's Office, Engineering Department, Treasury Department and at the Civic Centre. The lease agreements for all four units is to be for a five(5) year term and will include consumables, maintenance, and training. The RFP closed on Thursday, September 16, 2021 at 12:00 pm(noon) with five (5) proposals received. There were five (5) responses received and they were evaluated based on a number of factors including: price, equipment specifications, maintenance, service and response times, and delivery and installation timelines. Ricoh Canada Inc. was the top ranked proposal.

## PROPOSED RESOLUTION:

It is RESOLVED that the Corner Brook City Council approve the Request for Proposal submission from Ricoh Canada Inc. for the supply, delivery and maintenance of four (4) leased photocopiers, and to approve the entering into of an lease agreement.

## FINANCIAL IMPACT:

Annual expected cost of \$13,965.40 for the four copiers are included in the normal operating budgets of the departments. This includes lease costs, as well as estimated per copy charge. The lease cost is lower than the lease cost for the current units they are replacing.

**Budget Code:** 01-\*\*\*-\*\*\*\*-62100

**Finance Type:** Budget

**RECOMMENDATION:**

It is the recommendation of staff to award the Request for Proposal to Ricoh Canada Inc. for the supply, delivery and maintenance of four (4) leased photocopiers for a five (5) year term.

Director of Finance & Administration	Approved - 22 Sep 2021
Executive Assistant	Approved - 24 Sep 2021

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City Manager



**Request for Proposals  
Supply, Delivery, Set-Up and Maintenance of Four (4) Leased Photocopiers**

**Addenda #1**

**Issued September 7, 2021**

**OBJECTIVE:**

Photocopier Specifications:

The specifications provided below are the minimum specifications required for all four (4) leased units.

- a. 20 seconds maximum warm-up
- b. Limitless queue for copy and/or print jobs
- c. Scan to e-mail, folder, USB ~~and SD card~~
- d. Dual-scan document feeder for duplex printing
- e. Console screen
- f. 40 ppm copy speed
- g. Black/colour copy options
- h. Minimum of four (4) paper trays, 500 sheet capacity each
- i. Paper trays must accommodate 8.5 x 11 (2 trays), 8.5 x 14 (1 tray), and 11 x 17 (1 tray) paper
- j. One (1) bypass tray able to accommodate various sizes of paper and have a minimum of ~~150~~ 100 sheet capacity
- k. Automatic paper size detection
- l. Heavy paper support – 16 lb bond – 140 lb (min) bond; index through drawers and large capacity feeder
- m. Full duplex copy/print/scan – 1:2, 2:2, 2:1
- n. Duplexing print resolution up to 1200 x 1200 dpi
- o. Finisher must have ability to staple up to 50 documents and hold 500 sheets
- p. USB flash memory support
- q. Minimum 1.33 GHz processor
- r. Min. 4GB RAM
- s. 320-500 GB hard drive – SELF EXCRYPTING DRIVE
- t. Supported operating systems – Windows 7/8/10 Server 2012/2012R2/2016/2019

- u. Network TCP/IP (IPv4, IPv6)
- v. Mobile printing ability
- w. Print security such as password/pin access or swipe card
- x. File Formats, TIFF, JPEG, PDF, PDF High Compression, PNG, Searchable PDF
- y. Fax – 33.6 kbps; full network fax with ability to fax documents directly from a PC through the copier fax modem and receive faxes as PDF forwarded to a user e-mail account.
- z. Active Directory Integration
- aa.** OCR Scanning

**END OF ADDENDA #1**



**City of Corner Brook  
REQUEST FOR PROPOSALS**

**Supply, Delivery, Set-Up, and Maintenance  
of Four (4) Leased Photocopiers  
RFP#2021-21**

**Closing: September 16, 2021  
12:00 PM**

## Section 1 – Instructions to Proponents

### OBJECTIVE:

The City of Corner Brook is seeking proposals for the lease of four (4) multi-functional photocopiers for various departments in the City (City Manager's office, Engineering Department, Treasury Department and the Civic Centre). The lease agreement for all four units is to be for a five (5) year term and is to include consumables, maintenance, training, and removal of units at the end of the agreement.

### OVERVIEW:

This is a request for proposal ("RFP") process leading to the award of a contract. The City maintains full discretion over this RFP process and the award. The City intends to evaluate proposals on the basis of evaluation criteria included in this proposal, and to make an award based on the results of the Technical Evaluation and Pricing. The City's assessment is its sole discretion of which proposal provides the best value and is in the City's best interests. The City does not bind itself to accept the lowest or any proposal.

### BACKGROUND:

The City of Corner Brook became an incorporated municipality in 1956. The City provides municipal services to a population of approximately 20,000 people. The services include engineering, public works, community planning, development inspection, leisure services, human resources and finance and administration. The City also provides fire protection and rescue services, has its own municipal enforcement division for by-law and traffic enforcement, and maintains all city streets including snow and ice control, street and traffic lights, parks, playgrounds and the water and sewer systems. Additionally the City has a state of the art Water Treatment Plant facility and operates the Civic Centre.

### PROJECT AUTHORITY:

The services provided will be subject to review and acceptance by the Director of Finance & Administration or designate.

### INQUIRIES:

Should further information about the RFP be required please contact Alicia Park by e-mail [apark@cornerbrook.com](mailto:apark@cornerbrook.com). The City will assume no responsibility for oral instructions or suggestions. Should the Proponent find discrepancies in, or omissions from the specifications, or should the Proponent be in doubt as to their meaning, the Proponent shall notify the City, who may if necessary, post written addenda to this RFP.

### SUBMISSION OF PROPOSALS:

- I. RFP's must clearly show the complete organization name, name and telephone number of primary contact person(s).
- II. After the closing time and date, all RFP's received by the City become the property of the City.
- III. Proponents' responses to this RFP must be submitted by **E-MAIL format only**. The City shall accept responses that have been prepared and submitted in **E-MAIL format only**.

- IV. It is **mandatory that all submissions are in PDF format and are submitted via e-mail to the following address: [apark@cornerbrook.com](mailto:apark@cornerbrook.com)**
- V. The E-MAIL subject line shall be: ***RFP # 2021-21 – Leased Photocopiers Four(4) Units.***
- VI. **E-mail** responses must be submitted to the above noted e-mail address and must be received by **12:00 noon, NDT on September 16<sup>th</sup>, 2021**. Submittal time will be the time date stamp of the received e-mail at the above address. Responses submitted by fax, courier, drop-off or by any other method other than e-mail, **shall not be accepted**.
- VII. The City's network has a 25 megabyte (MB) e-mails size limit for incoming e-mails. Submissions greater than 25MB may be at risk of rejection by the network, or being undeliverable to the e-mail address above. It is the responsibility of the proponent submitting a proposal to ensure that the e-mail size is suitably below the file size threshold.

The City reserves the right to cancel this RFP for any reason without any liability to any proponent or to waive irregularities at their own discretion.

All RFP's will remain confidential, subject to *Access to Information and Protection of Privacy Act, 2015* (ATIPPA).

Any interpretation of, additions to, deletion from, or any other corrections to the RFP, will be issued as written addenda by the City of Corner Brook.

#### **GENERAL INSTRUCTIONS:**

Written inquiries and requests for clarification shall be accepted up to September 8, 2021 at 12:00 PM, unless otherwise specified in the instructions. Inquiries are to be e-mailed to [apark@cornerbrook.com](mailto:apark@cornerbrook.com). Inquiries and requests for clarification received after this date shall not be addressed.

Verbal responses shall not be binding on either party.

To ensure consistency and quality in the information provided to proponents, the City shall provide, by way of amendment to this Request for Proposals, in the form of an addendum to all proponents who have registered to receive amendments, any relevant information with respect to the RFP inquiries received in writing without revealing the source of those inquiries.

Proponents are cautioned that it is their responsibility to ensure that they receive all information relevant to this RFP. The City shall not be responsible for Proponents who fail to inform themselves regarding the scope and nature of the work.

The City will not defray any expenses incurred by proponents in the preparation and submission of their proposals.

The City will not necessarily accept any proposal.

Every interpretation of, or addition to, the RFP document to be considered a valid part of the RFP document will be issued in the form of a written addendum.

Where there is a question of general interpretation of the RFP document, the decision of the Finance & Administration Department shall be final and binding.

The documentation submitted in response to this Request for Proposals, as well as any correspondence or additional information provided to the City by proponents, in connection with this RFP, shall become the City record, and thus will be deemed subject to the *Access to Information and Protection of Privacy Act, 2015*.

In their submission, proponents are encouraged to identify any scientific, technical, commercial, etc. information of confidential nature disclosure of which could reasonably cause them harm.

The financial value of the contract will be publicly released as a part of the award notification.

## **1.0 Definitions**

In this Request for Proposal, the following terms will be defined as follows:

- “RFP” means the Request for Proposal, including all Appendices and Addenda issued hereafter by the City of Corner Brook;
- “Proponent” means the “Supplier”, “Consultant”, “Vendor” or “Bidder”, who submits a Proposal under the RFP;
- “Subcontractor” or “Sub-Consultant” refers to any individual or firm to whom a Proponent intends to delegate all or part of the execution of the services, to be provided under the Agreement;
- “Successful Proponent” means the Proponent, if any, whose Proposal is accepted by the City of Corner Brook.

## **2.0 Law**

The law applicable to this agreement shall be the law in force in the Province of Newfoundland and Labrador.

In responding to this RFP, Proponents warrant their compliance with all appropriate Municipal, Provincial and Federal regulations, laws and orders. Proponents must agree to indemnify the City and its employees if they fail to comply, and the City reserves the right to cancel any agreement arising from this RFP if the Proponent fails to comply with the above.

The successful Proponent shall agree to indemnify the City, its officers and employees against any damage caused to the City as a result of any negligence or unlawful acts of the Proponent or its employees. Similarly, the successful Proponent shall agree to indemnify the City, its officers and employees against any claims or costs initiated by third parties as a result of any negligence or wrongful acts of the Proponent or its employees.

### **3.0 General Terms and Conditions**

#### **3.1 Good Faith Statement and Errors in Proposals**

All information provided by the City is offered in good faith. The City is not liable for any errors in this RFP or in supplier proposals.

#### **3.2 Non Disclosure and Confidentiality**

The RFP document may not be used for any purpose other than the submission of a proposal. All proposals submitted, as a result of this RFP will be held in confidence. The recipient of these documents shall not disclose to anyone, other than its employees directly connected with responding to this RFP, any confidential information provided by the City.

#### **3.3 The City Reserves the Right to:**

- reject any or all offers and discontinue this RFP process without obligation or liability to any potential Vendor;
- reject any proposal in its sole and absolute discretion for any reason whatsoever;
- reject any proposal that contains any irregularity, informality, or non-conformance with these instructions in any proposal received by the City;
- award a contract on the basis of initial offers received, without discussions or requests for best and final offers; and
- accept proposals other than the lowest price offer.
- Negotiate one or more of the highest ranked proposals regarding any proposal component

#### **3.4 Changes to RFP Wording**

The Proponent will not change the wording of its RFP after closing and no words or comments will be added to the general conditions or detailed specifications unless requested by the City for purposes of clarification.

The Proponent may change a previously submitted RFP by withdrawal, amendment or submission of a replacement if done prior to the closing date and time. This information or request should be submitted in writing on company letterhead or equivalent and contain the signature of the individual or individuals submitting the original RFP.

### **4.0 Additional Terms**

#### **4.1 Validity of Request for Proposal**

RFP's shall be open for acceptance by the City for a period of six months from the closing date for the submission of RFP's or such additional time as mutually agreed to in writing.

#### **4.2 Contract**

Notice in writing to a Proponent of the acceptance of its proposal by the City and the subsequent full execution of a written contract will constitute a contract for the services.

No Proponent will acquire any legal or equitable rights or privileges relative to the goods or services until the occurrence of both such events.

#### **4.3 Termination of Contract**

It is hereby understood and agreed that the City of Corner Brook reserves the right to terminate this contract and withhold payment if the proponent does not adhere to all the terms, conditions and specifications of the contract.

#### **5.0 Successful Proponent**

The successful Proponent will be the one that provides the best overall value to the City. The City is under no obligation to award the contract to the lowest price or to any Proponent.

- The agreement resulting from this RFP will be a Newfoundland and Labrador, Canada Agreement, and will be governed by the laws of Newfoundland and Labrador, Canada.
- The City may refuse to award an Agreement to a Proponent who has not complied with existing Municipal, Provincial or Federal licensing regulations.
- The successful Proponent will indemnify and hold the City harmless from any loss resulting from suits or claims against the Proponent, by reason of infringement of Patents/Copyrights in force at the time of, or after award of this RFP.
- Prior to commencement of work, the proponent shall provide the following documents to receive direct deposit payment:
  - i. Direct Deposit Enrolment Form
  - ii. Void Cheque

#### **6.0 Project Schedule**

The proposed schedule for the project:

<b>Activity</b>	<b>Timeline</b>
Release of Request for Proposal (RFP)	August 20, 2021 @ 8:30 am
Inquiry Deadline	September 8 @ 4:30 PM
Closing of Request for Proposal (RFP)	September 16 @ 12:00 PM
Delivery & Setup	60 days after contract awarded

The dates provided in this schedule are estimates only and are therefore subject to change.

#### **7.0 Access to Information & Protection of Privacy Act**

- 7.1 The financial value of a contract resulting from this procurement process will be publicly released as part of the award notification process.
- 7.2 The procurement process is subject to the **Access to Information and Protection of Privacy Act, 2015**.
- 7.3 The bidder agrees that any specific information in its bid that may qualify for an exemption from disclosure under subsection 39(1) of the **Access to Information and Protection of**



**Privacy Act, 2015** has been identified. If no specific information has been identified it is assumed that, in the opinion of the bidder, there is no specific information that qualifies for an exemption under subsection 39(1) of the **Access to Information and Protection of Privacy Act, 2015**.

#### 8.0 Award

This document and the proposal shall be attached to and form part of the contract.

## SECTION 2 - PROPOSAL EVALUATION CRITERIA

### 1. Method of Evaluation

The City will evaluate and recommend the selection of a proponent based on proposal submissions and pricing. The selected proponent will be recommended to the Corner Brook City Council who will vote to accept or reject the submission.

### 2. Proposal Evaluation

A proponent(s) will be chosen by the City based on their capability of providing the goods and services identified in this proposal. In their proposal, proponents shall provide responses to the requirements and otherwise demonstrate through samples, publications, narrative explanations and references that they have the necessary qualifications to undertake the work as described in this RFP.

### 3. Overview of the Evaluation Process

The proposal packages will be opened by the Selection Committee on the closing.

The City will evaluate all proposals using the following criteria:

Evaluation Criteria	Sub Score	Maximum Points
<b>1.0 Background</b>		<b>5</b>
1.1 Background information		
1.2 Personnel and experience		
1.3 References		
<b>2.0 Methodology and Approach</b>		<b>45</b>
2.1 Scope of work statement and overall quality of the proposal	5	
2.2 Proposed equipment specifications	15	
2.3 Maintenance service and response times	20	
2.4 Delivery and installation schedule	5	
<b>3.0 Cost</b>		<b>50</b>
<b>Total</b>	<b>100</b>	<b>100</b>

**Proponents should note that failure to meet any of the requirements set forth in this section may result in your proposal being rejected.**

Note: The proposal with the lowest cost will be awarded the maximum 25 points. The remaining proposals will receive points based on the following method/formula:

Points Awarded = (Lowest Proposal Cost/Cost of Proposal Being Evaluated) x Maximum Points.

## Section 3 – Overview & Specifications

### 1. Overview

The City is seeking to enter into a lease agreement for four (4) new multi-functional photocopiers. The successful proponent will be responsible for the supply, delivery, set-up, and maintenance of each unit.

Additionally the successful proponent will be required to provide training to City staff regarding the primary functions of the units as well as how to replenish such consumables as paper and toner.

The lease agreement will be for a sixty (60) month term, with the option to renew for one (1) additional twelve (12) month term. At that time, the successful proponent will be responsible for the removal of the multifunctional units.

### 2. Photocopier Specifications

The specifications provided below are the minimum specifications required for all four (4) leased units.

- a. 20 seconds maximum warm-up
- b. Limitless queue for copy and/or print jobs
- c. Scan to e-mail, folder, USB and SD card
- d. Dual-scan document feeder for duplex printing
- e. Console screen
- f. 40 ppm copy speed
- g. Black/colour copy options
- h. Minimum of four (4) paper trays, 500 sheet capacity each
- i. Paper trays must accommodate 8.5 x 11 (2 trays), 8.5 x 14 (1 tray), and 11 x 17 (1 tray) paper
- j. One (1) bypass tray able to accommodate various sizes of paper and have a minimum of 150 sheet capacity
- k. Automatic paper size detection
- l. Heavy paper support – 16 lb bond – 140 lb (min) bond; index through drawers and large capacity feeder
- m. Full duplex copy/print/scan – 1:2, 2:2, 2:1
- n. Duplexing print resolution up to 1200 x 1200 dpi
- o. Finisher must have ability to staple up to 50 documents and hold 500 sheets
- p. USB flash memory support
- q. Minimum 1.33 GHz processor

- r. Min. 4GB RAM
- s. 320-500 GB hard drive – SELF EXCRYPTING DRIVE
- t. Supported operating systems – Windows 7/8/10 Server 2012/2012R2/2016/2019
- u. Network TCP/IP (IPv4, IPv6)
- v. Mobile printing ability
- w. Print security such as password/pin access or swipe card
- x. File Formats, TIFF, JPEG, PDF, PDF High Compression, PNG, Searchable PDF
- y. Fax – 33.6 kbps; full network fax with ability to fax documents directly from a PC through the copier fax modem and receive faxes as PDF forwarded to a user e-mail account.
- z. Active Directory Integration
- aa. OCR Scanning

### **3. Maintenance Service Agreement**

As part of the cost per copy Maintenance Service Agreement, the following services and products are to be provided for a 60 month period at a fixed rate with no minimum billings and no flat rates;

- a. Repairs and maintenance of the equipment is to be executed with a guaranteed maximum response time of four (4) working hours, commencing at the time a trouble report is made either electronically or verbally. Equipment that is not in good running condition and/or not producing quality copies must be repaired within a maximum time period of eight (8) hours.
- b. All servicing is to be performed by the successful proponent by appropriately certified staff. Subagents will not be permitted to perform the work, unless previously approved by the City.
- c. If/When it is determined that a unit cannot be repaired in a satisfactory manner within an eight (8) hour period from the time the initial complaint was registered, a replacement unit will be provided immediately at no cost to the City.
- d. Local stock must be kept of all consumables, such as toner and other development compounds, and replacement parts to maintain the production of quality duplicate documents to the satisfaction of the City.
- e. City staff will be responsible for replacing toner on units as needed. All other supplies (excluding paper), parts and service to be replaced/completed by a technician.
- f. The successful proponent must currently have employed a minimum of two (2) trained service technicians. Service technicians must be authorized by the manufacturer as qualified to perform repairs and maintenance on the models proposed.
- g. The Successful proponent will be required to produce service reports when requested by the City. Reports are to include the following information:
  - i. Copier Information
  - ii. Number of service calls per copier

- iii. Number of copies between calls
- iv. Record of past servicing

- h. If/When it is determined by the City that the service provided by the successful proponent is unsatisfactory, the successful proponent will be required to remove the malfunctioning unit and replace it with an acceptable substitute as agreed to by the City and at no expense to the City.

#### **4. Usage Fees**

Regular maintenance, repairs, troubleshooting, remedial support, toner, and staples shall be billed as a click or per copy charge. Units capable of meeting colour and black/white usage are required. Furthermore:

- a. Scan and Fax (electronic imaging) will not be a billable usage charge;
- b. B&W and colour Click/CPC charges will be the same across all copiers;
- c. There will be no additional charge to print to ledger sized paper; and
- d. The Click/CPC charge is to remain the same throughout the entire 60 month term

#### **5. Lease, Delivery and Training**

- a. The City will consider 60 month lease agreements that include delivery, setup, training, maintenance and removal of the units at the end of the term.
- b. The City reserves the right to add or delete units without penalty to the City.
- c. Delivery and installation of all copiers is to be made within 60 days after receipt of an executed contract unless a longer period is authorized in writing.
- d. An operator's manual is to be delivered with each unit. An e-copy of the setup, administration and operator's manual shall be available through the manufacturer's or successful proponent's website.
- e. The City reserves the right to extend the agreement for one (1) additional 12-month term. At that time the City reserves the right to re-negotiate the rate for the 12-month extension.
- f. Onsite training is to be completed at the time of installation at no cost to the City. Additionally, the City reserves the right to request re-training for staff after the time of implementation at no cost to the City.

## 6. Current Usage

Copier Location	Existing Equipment	Estimated Average Monthly Volume	
		Black and White	Colour
City Manager's Office (City Hall)	Toshiba E-4555C	2322	1624
Engineering Department (City Hall)	Toshiba E-4555C	4225	3132
Treasury Department (City Hall)	Toshiba E-4555C	5223	608
Civic Centre	Toshiba E-4555C	1732	1059

## 7. Insurance

Proof of insurance is required in order to be awarded the RFP. Certificate of insurance must be submitted **within five (5) business days from the closing date of this RFP**. However, proponents are encouraged to submit with their proposal. The City will notify the preferred proponent, in writing, of any remaining requirements to submit.

The five (5) business day period includes original submission and any resubmission of documentation that is insufficient or not complete. The deadline is firm and there will be no allowance for proponents who fail to be prepared with their documentation.

### a. Commercial General Liability Insurance

The successful proponent shall obtain and maintain, for the duration of the contact, Commercial General Liability Insurance against Bodily Injury and Property Damage claims.

Such Insurance shall include coverage for:

1. Completed Operations,
2. Occurrence Property Damage.

The policy shall be subject to an inclusive limit of not less than \$ 2,000,000. The insurance shall include the City of Corner Brook as an additional insured on all policies.

### b. Property Coverage

The successful proponent is responsible to obtain and maintain Property Coverage for all its own equipment while on the City of Corner Brook premises.

### c. Insurance Certificate

Prior to the signing of the agreement and the commencement of any work under this contract, the successful proponent must have filed to the attention of the Procurement Officer, the CERTIFICATE OF INSURANCE which forms part of this document, evidencing full compliance with the clauses pertaining to INSURANCE.

- i. The Certificate of Insurance MUST be signed by AN INSURANCE AGENT.
  - ii. The Insurer must be licensed to do business in the province of Newfoundland and Labrador.
  - iii. Certificate must state the specific contract covered by the policy
  - iv. Shall contain a clause stating that such insurance shall remain in force and not be amended, cancelled, or allowed to lapse without thirty (30) days prior written notice being given to each of the named and additional insured.
  - v. Any updated Certificate of Insurance throughout the contract MUST be forwarded to the Director of Finance & Administration.
- d. **Certificate of Insurance SHALL BE REQUIRED from the successful Proponent before executing the agreement.**

## Section 4 – Proposal Requirements

Evaluation of proposals is made easier when proponents respond in a similar manner. The following format and sequence should be followed in order to provide consistency in proponent response and ensure each proposal receives full consideration. Proposals must be based on the instructions and Conditions laid out in this document.

### 1. **Format**

- a. Digital copies of proposals shall be 8 ½ x 11 inch format with a font size no smaller than 11 pts.
- b. All pages should be consecutively numbered
- c. The main body of the proposal should be limited to thirty (30) single sided pages. Limit does not include mandatory forms required in this RFP, Appendix A and Appendix B.

### 2. **Title Page**

Proposals shall include a title page stating the proponent's full legal name, address telephone number and contact person.

### 3. **Table of Contents**

Responses shall include a table of contents properly indicating the section and page numbers of the information included.

### 4. **Executive Summary**

Responses shall include an abstract of no more than one (1) page on the information presented in the proposal and the proponent's qualifications and services.

The executive summary shall be signed by the person or persons authorized to sign on behalf, of and bind the proponent to, statements made in the proposal.

### 5. **Forms**

Proponents shall fill out and include in their proposal, Appendix A – Proposal Form "A", and Appendix B – Fee Proposal. The forms shall be dated and properly signed in the space(s) by a duly authorized official(s) of the entity submitting a proposal. Signatures on behalf of a non-incorporated entity or by individuals shall be witnessed. **Forms must contain an original manual signature in ink in the specified place by an authorized signing office – digital, mechanical or electronic signatures will be rejected.**

No part of the Proposal Form "A" or the Fee Proposal included in this package shall be altered or deleted.

### 6. **Background**

#### a. **Background Information:**

Provide general information on the proponent, included a brief history of the proponent, number of years in business, mission statement etc.

#### b. **Personnel and Experience**

- i. Proponents must demonstrate that they have sufficient staff and resources available to provide required maintenance services within the response/repair times outlined in this RFP document. Proponents must specify the number of service



technicians trained on the proposed equipment in this geographic areas and guaranteed onsite.

- ii. At a minimum, the successful proponent must currently have employed two (2) trained service technicians. Service technicians must be authorized by the manufacturer as qualified to perform repairs and maintenance on the models proposed. Proponents must include documentation verifying the credentials of the service technicians and network specialists.

c. **References**

The proponent shall provide references of at least one (1) but no more than two (2) current clients and at least two (2) but not more than three (3) former clients. Services and products provided for these clients must be of similar size and scope as that which is outlined in this RFP. Proponents should include any current or former municipal clients and at least two references must be local. For each reference, proponents shall include the company name, contact person, contact person's title, phone number, e-mail address and a brief description of the services provided.

**7. Methodology and Approach**

- a. Proponents are to provide a statement demonstrating a complete understanding of the scope of work.
- b. Proponents are to include a complete listing of all equipment, including components and software to be supplied, along with specifications and literature of the proposed unit(s).
- c. Proponents are to provide complete details of what services are included under the maintenance agreement and specify the response time from the moment an issue is first reported. Any maintenance requirements not included in the service agreement must be clearly stated. Any features or services that the proponent would consider to be their competitive advantage are to be identified in Appendix B. Proponents must also state their ability to meet the City's response time requirements.
- d. As per Appendix B, proponents are to state their projected delivery timeline and installation schedule. All units are to be delivered to the City no later than 60 days after receipt of an executed contract unless a longer period is authorized in writing

**8. Cost**

As per requirements of Appendix B, proponents are to provide complete pricing details for the leasing of four (4) photocopiers, including equipment delivery, set-up, usage fees, training, maintenance and any other applicable charges as identified in the RFP.

## Appendix A PROPOSAL FORM "A"

### The City of Corner Brook – Photocopier Leased for Four (4) Units

1. I/We hereby submit a Proposal for **Supply, Delivery & Install Four(4) Leased Photocopiers** in accordance with the requirements of this RFP.
2. I/We have carefully examined all of the contents of this RFP, including the RFP terms and conditions.
3. In the event of our proposal being accepted, I/We agree to enter into a contract with the City of Corner Brook.
4. I/We acknowledge receipt of, and have taken into consideration, the following addenda issued during this Request for Proposals: #\_\_\_\_\_ #\_\_\_\_\_ #\_\_\_\_\_ #\_\_\_\_\_ #\_\_\_\_\_
5. Proposal Closing Time: September 16, 2021 @ 12:00 PM (noon) NDT.
6. I/We acknowledge the proposals will be based on the results of all the factors outlined in the proposal package, and that the City of Corner Brook will select a proposal which provides the City of Corner Brook with the best value and which the Corner Brook City Council determines is in its best interests.
7. I/We agree to treat as confidential and to not, without the written permission of the City of Corner Brook, publish, release or disclose or permit to be published, released or disclosed either before or after submission of its RFP and any negotiation with the City, any information supplied to, obtained by or which comes to the knowledge of the Proponent under this process. The Proponent will ensure its facilities, systems and files are secure and that access to data and confidentiality of data and information gained while negotiating, are strictly controlled, to the satisfaction of the City of Corner Brook.
8. **I/We** will indemnify and save harmless the City of Corner Brook and Corner Brook City Council from and against all claims, demands, losses, damages, costs, expenses, actions and suits that may arise, directly or indirectly, from the preparation of this RFP and any negotiations pertaining thereto.

PROPONENT'S FULL REGISTERED BUSINESS NAME: \_\_\_\_\_

\_\_\_\_\_

PROPONENT'S FULL BUSINESS ADDRESS: \_\_\_\_\_

\_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

SIGNATURE(S): \_\_\_\_\_

TITLE: \_\_\_\_\_

SIGNATURE(S): \_\_\_\_\_

TITLE: \_\_\_\_\_

PRINTED NAME AND SEAL IF ANY \_\_\_\_\_

\_\_\_\_\_

Sign this form as follows:

**Sole Proprietorship:** Sole Proprietor to sign in the presence of a witness who will also sign where indicated. Insert the words "Sole Proprietor" under Title(s).

**Partnership:** Partner(s) to sign in the presence of a witness or witnesses who will also sign where indicated. Insert the word "Partner" against each signature under Title(s).

**Limited Company:** This Form must be signed by duly authorized signing officers of the company in their normal signatures designating against each signature the official capacity in which the signing officer acts. The Corporate seal of the company, if any, must also be affixed to this Form by a person authorized to do so. When this form is signed by officials other than the President and Secretary of the Company a copy of the bylaw or resolution of the Board of Directors authorizing them to do so must be submitted with the proposal/proposal documents.

## Appendix B Fee Proposal

### RFP#2021-21 Supply, Delivery, Set-Up, and Maintenance of Four(4) Leased Photocopiers

#### 1. 60 Month Lease Pricing for Four Units

Having carefully examined the RFP including all information to proponents, terms, conditions, objectives, appendices and any addenda for this project, WE, THE UNDERSIGNED, hereby offer to provide all necessary labour, materials, tools, superintendence and everything else required to perform expeditiously the work required in a satisfactory manner for the sum of:

Section	Description			Amount
1	<b>Lump Sum Prices</b>			
	Initial payment (if applicable)			
	<b>Subtotal of Lump Sum Prices:</b>			
2	<b>Annual Lease Cost</b>	<b>Quantity</b>	<b>Price per Month</b>	<b>Extended Price</b>
	Lease cost for Four Copiers	60 Months		
3	<b>Maintenance Contract (per copy Charges)</b>	<b>Quantity (based on yearly estimates)</b>	<b>Price per Copy</b>	<b>Extended Price</b>
	Black/White	162,000 x 5(yrs)		
	Colour	77,000 x 5 (yrs)		
	<b>Estimated Subtotal of Maintenance Contract:</b>			
4	<b>Subtotal of Bid Prices</b> (Sum of Section 1, 2, and 3)			
5	<b>Harmonized Sales Tax</b> (Multiply Section 4 by 15%)			
6	<b>Total Amount</b> (Sum of Sections 4 and 5)			

#### Notes:

a. For the purposes of the Public Procurement Act and the evaluation of proposals received, the fee proposal shall be the **Total Amount** (Section 6). In case of error in the Total Amount calculation, the Lump Sum Prices, Price per Month and the Price per Copy shall govern.

b. The quantities provided for black/white and colour copier are estimates based on annual usage and will be used for evaluation purposes only.

c. Costs associated with the maintenance contract (per copy charges) will vary depending upon actual usage. The price per copy is to remain fixed for the duration of the initial term of the agreement.

## 2. Value Added

Below, proponents are to state any innovative product or maintenance information that they would consider their competitive advantages. Any supporting literature may be provided with their proposal submission.

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## 3. Installation Schedule

Installation will commence on or before \_\_\_\_\_, 2021.

Installation time will be a total of \_\_\_\_\_ days.

## 4. Signatures

\_\_\_\_\_  
Signature Officer

\_\_\_\_\_  
Signature Office

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Position

\_\_\_\_\_  
Position

\_\_\_\_\_  
Witnessed by Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name



# Request for Decision (RFD)

**Subject:** Replacement of Two 30-Ton Water-to-Water Heat Pumps 2021-20

**To:** Darren Charters  
**Meeting:** Regular Meeting - 27 Sep 2021  
**Department:** Engineering  
**Staff Contact:** Melody Roberts,  
**Topic Overview:**  
**Attachments:** [R&R HVAC - Bid Submission 2021-20 Redacted](#)

## BACKGROUND INFORMATION:

The City of Corner Brook has requested bids for thereplacement of two 30-ton water-to-water heat pumps for the Corner Brook City Hall.

The City Hall geothermal heating system is run by water-to-water heat pumps. This is to replace two out of the six heat pumps at City Hall.

Tenders for the City Hall Heat Pump Replacement closed on September 14, 2021 with the following five (5) bids received:

R&R HVAC and Controls Ltd.	\$162,419.00 (HST Inc)
GJ Cahill & Co. (1979) Ltd.	\$176,977.00 (HST Inc)
Northridge Developments Ltd.	\$179,975.00 (HST Inc)
Air Tite Sheet Metal Ltd.	\$194,695.00 (HST Inc)
Newfoundland HVAC Ltd.	\$209,957.80 (HST Inc)

## PROPOSED RESOLUTION:

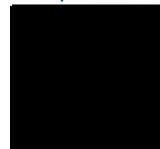
**Be it resolved that the Council of the City of Corner Brook** award the tender to R&R HVAC & Controls Ltd. for the Tender price of \$162,419.00 (HST Included), Replacement of Two 30-Ton Water-to-Water Heat Pumps.

Director of Community, Engineering, Development & Planning	Approved - 21 Sep 2021
Executive Assistant	Approved - 24 Sep 2021

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City Manager

Sept. 14/2021  
12:16 pm



**CITY OF CORNER BROOK**  
**CONTRACT NO. 2021-20**  
**REPLACEMENT OF TWO 30-TON WATER-TO-WATER HEAT PUMPS**  
**TENDER / CONTRACT FORM**

CONTRACT NAME: Replacement of Two 30-Ton Water-to-Water Heat Pumps

CONTRACT No: 2021-20

TENDER CLOSING TIME: 12:00 Noon, Tuesday August 31, 2021

TENDER ADDRESS: City Clerk's Office  
City of Corner Brook  
2<sup>nd</sup> Floor, City Hall  
P. O. Box 1080  
5 Park Street  
Corner Brook, NL A2H 2W8

OWNER: City of Corner Brook

CONTRACTOR: R & R HVAC and Controls Ltd.

1. TENDER AND CONTRACT AGREEMENT

Having carefully examined the attached materials, specifications, and all drawings listed in the specifications, WE, THE UNDERSIGNED, hereby offer to supply & install all the materials at Corner Brook City Hall, 5 Park Street, Corner Brook, NL, for the lump sum of

One hundred Sixty two thousand, Four hundred nineteen

(\$ 162,419.00 ) in lawful money of Canada which includes all Government sales or excise taxes in force at this date.

The Bidder agrees that this Tender/Contract Form, subject to all provisions contained herein, when accepted and executed on behalf of the City of Corner Brook shall constitute a binding Contract between the Bidder and the City of Corner Brook.



2. TENDER PRICES

The Bidder declares that the bid price includes and covers all contingencies and provisional sums and all duties, taxes, handling charges and all transportation and all other charges.

3. GENERAL AGREEMENT

The Bidder also agrees that:

- 3.1. this tender shall remain effective for a period of 30 days from the closing date;
- 3.2. the City of Corner Brook may reject any and all tenders and that the lowest tender may not necessarily be accepted;
- 3.3. the prices herein tendered include all sales taxes, royalties, custom duties, foreign exchange charges, transportation, travelling costs, all overhead and profit, all co-ordination fees, insurance premiums and all other charges;
- 3.4. failure to enter into a contract with the City of Corner Brook if this tender is accepted may necessitate forfeiture of the tender security, if such security is required.

4. ADDENDA

We hereby acknowledge receipt of the following Addenda:

Numbers: 1, 2, 3, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

5. COMPLETION OF THE WORK

The work will be completed within sixty (60) days upon award of Contract.

6. PAYMENT

Subject to applicable legislation respecting holdback percentages and in accordance with the provisions of the General Conditions of the Contract, the City of Corner Brook shall make payments to the Bidder under such arrangements as may be agreed to by both the Bidder and the City of Corner Brook.

CONTRACTOR'S SIGNATURE

RER HVAC and Controls Ltd.

Contractor's Name

961 CBS Highway

Contractor's Address

C.B.S. NL A1X 7T2

[REDACTED]

Contractor's Phone Number

[REDACTED]

Signed By

(SEAL)

Signed By

[REDACTED]

Witnessed By

Sept 14<sup>th</sup> / 2021

Date

OWNER'S ACCEPTANCE

Accepted on behalf of the Owner

Signed By

Signed By

Witnessed By

Date



To verify the authenticity of this bond please go to Trisura's website <https://secure.trisura.com/bondcheck/> and upload a copy of this bond.  
To verify the bond, please refer to the instructions attached to this bond.



## BID BOND

Bond No: **TCS0299033-21-11**

Bond Amount: **10% of Tender**

**R&R HVAC and Controls Ltd.** as Principal, hereinafter called the Principal, and **Trisura Guarantee Insurance Company** a corporation created and existing under the laws of Canada and duly authorized to transact the business of Suretyship in Canada as Surety, hereinafter called the Surety, are held and firmly bound unto **City of Corner Brook** as Obligor, hereinafter called the Obligor, in the amount of **Ten Percent of Tender (10% of Tender)** lawful money of Canada, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

WHEREAS, the Principal has submitted a written bid to the Obligor, dated this **September 14, 2021**, for **Replacement of Two 30-Ton Water-To-Water Heat Pumps - Contract No: 2021-20, Corner Brook**.

The condition of this obligation is such that if the Principal shall have the bid accepted within the time period prescribed in the Obligor's bid documents, or, if no time period is specified in the Obligor's bid documents, within **Thirty (30)** days from the closing date as specified in the Obligor's bid documents, and the Principal enters into a formal contract and gives the specified security, then this obligation shall be void; otherwise, provided the Obligor takes all reasonable steps to mitigate the amount of such excess costs, the Principal and the Surety will pay to the Obligor the difference in money between the amount of the bid of the Principal and the amount for which the Obligor legally contracts with another party to perform the work if the latter amount be in excess of the former.

The Principal and Surety shall not be liable for a greater sum than the Bond Amount.

It is a condition of this bond that any suit or action must be commenced within seven (7) months of the date of this Bond.

No right of action shall accrue hereunder to or for the use of any person or corporation other than the Obligor named herein, or the heirs, executors, administrators or successors of the Obligor.

**IN WITNESS WHEREOF**, the Principal and the Surety have Signed and Sealed this Bond dated September 13, 2021.

SIGNED and SEALED

**R&R HVAC and Controls Ltd.**  
Principal

R.H.

E-SIGNED by Roy Hollett  
on 2021-09-13 16:21:29 GMT

in the presence of :

*Name of Signator for Principal*

*Signature*



**Trisura Guarantee Insurance Company**  
E-SIGNED by Kim Grant  
on 2021-09-13 16:11:46 GMT

**Kim Grant, Attorney-in-Fact**



copyright 2002

Canadian Construction Documents Committee

(CCDC 220 – 2002 has been approved by the Surety Association of Canada))





# Request for Decision (RFD)

**Subject:** Mount Bernard Avenue Sanitary Sewer Upgrade

**To:** Rodney Cumby

**Meeting:** Regular Meeting - 27 Sep 2021

**Department:** Engineering

**Staff Contact:** Darren Charters, Director of Community, Engineering, Development & Planning

**Topic Overview:**

**Attachments:** [Mount Bernard Sanitary Sewer Capacity Report 2021](#)

## BACKGROUND INFORMATION:

Staff are preparing an application for funding to the Investing in Canada Infrastructure Program (ICP) at the request of the Department of Transportation and Infrastructure (DTI). A minute of Council supporting the funding application is required to complete the application.

Staff identified a concern regarding the capacity of the sanitary sewer line along Mt. Bernard Avenue that will be required to accept the sanitary flows from the new Acute Care Hospital. As such, a study was commissioned, in partnership with DTI, to determine the impacts of the anticipated sanitary flows from the new hospital and to determine upgrades to the system that may be required as a result of the increased flows.

## PROPOSED RESOLUTION:

**Be it resolved that the Council of the City of Corner Brook** approve the Mt. Bernard Sanitary Sewer Upgrade Project funding application to the Investing in Canada Infrastructure Program (ICIP) in the amount of \$8,075,000 (HST included).

## FINANCIAL IMPACT:

The study was completed in August of 2021 and has been reviewed by City and DTI staff. The report recommended a full rebuild of the street and all services in the roadway from O'Connell Drive to the Old City Hall Lift Station at a cost of \$8,075,000 (Class D estimate).

This is considered to be a regional project and as such, the City would only be responsible for funding 20% of the total project cost, should the City decide to move forward with project.

**Finance Type:** Budget

**Other Type:** 2022-2023 Capital Funding

### **RECOMMENDATION:**

City and DTI staff recommend that project proceed as outlined in the attached report and it is recommended that Council support Option 1 and that the following resolution be supported:

#### **Options:**

1. That the Council of the City of Corner Brook approve the Mt. Bernard Sanitary Sewer Upgrade Project funding application to the Investing in Canada Infrastructure Program (ICIP) in the amount of \$8,075,000 (HST included).
2. That the Council of the City of Corner Brook not approve the Mt. Bernard Sanitary Sewer Upgrade Project funding application to the Investing in Canada Infrastructure Program (ICIP) for \$8,075,000 (HST included).
3. That the Council of the City of Corner Brook give other direction to Staff.

Director of Community, Engineering, Development & Planning	Approved - 23 Sep 2021
Executive Assistant	Approved - 24 Sep 2021

---

City Manager

# Corner Brook Sanitary Sewer Capacity Analysis and Upgrades

*Final Report*




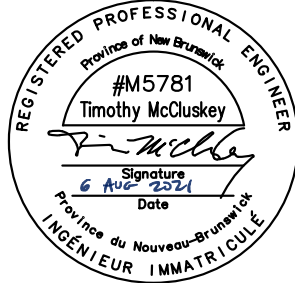
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Aug 06, 2021

Erik Neilson  
Supervisor of Engineering Services (W&S)  
City of Corner Brook

Dear Erik:

**RE: Corner Brook Sanitary Sewer Capacity Analysis and Upgrades**

The report summarizes the work completed to date on the above noted project. This report is intended to supplement the Project Update Memo provided March 17, 2021.

As described in the project proposal, the work scope was broken into three parts, including:

- ▶ Part A: Data Collection and Flow Monitoring
- ▶ Part B: Model Calibration
- ▶ Part C: Preliminary Design and Cost Estimates

Yours very truly,

CBCL Limited

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Project No: 203060.00

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A CHSLS Pump Curves

B Class D Cost Estimate



## Chapter 1 Background Information

The municipal wastewater system downstream of the location where the new Acute Care Hospital will connect is currently at, or over the intended design capacity in several areas. The study of this system involved various field investigations to confirm and quantify the extent of capacity issues within the existing system.

The sanitary basin is approximately 250 Hectares (Ha). The majority of sanitary flow is gravity fed to the City Hall Sewage Lift Station (CHSLS), located near the intersection of Mount Bernard Avenue and Main Street. Sanitary flow from the Brook Street commercial area reaches the CHSLS via the Brook Street Sewage Lift Station (BSSLS), and a 100mm forcemain which discharges to a manhole on the local sanitary sewer which parallels Corner Brook Stream, behind the old City Hall Building.

Two (2) sewer mains run parallel along Mount Bernard Avenue from the CHSLS to O'Connell Drive: a trunk sewer and a local sanitary sewer servicing the Mount Bernard residential area. The sewers are cross-connected with overflow pipes in multiple locations. The size of the sewers ranges from 200mm to 450mm. Residential areas and side streets serviced by these sewers include Elizabeth Street, Randolph Place, Victoria Street, and Wellington Place. The sewers also service the College of the North Atlantic, Memorial University – Grenfell Campus, Corner Brook Regional Senior High, and the Civic Centre.

The proposed Hospital development was modelled to determine whether there is sufficient capacity in the downstream sanitary sewer systems during dry and wet weather events, and where upgrades to the existing system are needed to accommodate the proposed development.

### 1.1 Part A: Data Collection and Flow Monitoring

The development of servicing options for the new Hospital involved an intensive and well-coordinated data acquisition program to enable proper calibration of model simulations and to properly size and design upgrades (where required).

The project involved gathering relevant information and updating the City's hydraulic model for the sanitary sewer systems in the affected area. The model created for the Wastewater Strategic Plan serves as the backbone for analyzing capacities in the City's sewer system, and



has been an invaluable tool to analyze the sanitary sewer system, identify issues with capacity, and prioritize improvements. With field data collected in the Mt Bernard Ave. area, the model has been used to verify recommended preliminary design options for recommended servicing options.

### 1.1.1 Desktop Analysis

A desktop review of available information was completed which included:

- ▶ Review of record drawing information of sewers along the study corridor.
- ▶ Review of background information on theoretical flows.
- ▶ Developing a Civil 3D Model of the existing sewer pipe network along Mount Bernard Avenue, University Drive, and Corporal Pinksen Memorial Drive.
- ▶ Calibrating the hydraulic model of the system using field-collected data.

### 1.1.2 Field Work

In addition to the desktop review, the field data collection and flow metering program began in October 2020 and included:

- ▶ A topographic survey collecting tops of manholes, and road cross sections at various locations along Mount Bernard Avenue, University Drive, and Corporal Pinksen Memorial Drive.
- ▶ Recording pipe inverts and pipe sizes at each surveyed manhole.
- ▶ Installation of five (5) flow meters distributed along Mount Bernard Avenue between the City Hall Lift Station and O'Connell Drive, and installation of one (1) flow meter located near the City Hall Lift Station (Figure 1).
- ▶ Installation of a rain gauge at the Corner Brook Municipal Depot (Figure 2).

The flow monitors and rain gauge were retrieved with the City's assistance on December 17th, 2020 by CBCL staff. The data was downloaded, analyzed, and discussed in the March 2021 memo.

Some of the meter data collected during the initial program appeared to have inaccurate data. The measured data did not align with the expected data based on theoretical calculations. A second flow metering program was requested by the City, to supplement the information collected during the 2020 metering program. On April 15, 2021, CBCL staff installed six (6) flow meters with the City's assistance, and a rain gauge was placed at the Corner Brook Municipal Depot (Figure 2). Data was downloaded from the flow meters on May 18, 2021 and analyzed, as discussed below.

### 1.1.3 Flow Meter Locations

Utilizing the information collected during the 2020 flow metering program, and existing sanitary sewer drawings, flow meter locations were determined for April 2021 install. Table 1 summarizes flow meter placement for the 2020 and 2021 flow metering programs.

2020 Metering Program	2021 Metering Program	Key Sanitary Flow Contributors	Downstream Flow Meters	Upstream Flow Meters
Meter 1		- Memorial University – Grenfell Campus - Corner Brook Regional High - Pepsi Centre - Royal Newfoundland Constabulary	Meter 5	
	Meter 1	- Memorial University – Grenfell Campus - Corner Brook Regional High - Pepsi Centre - Royal Newfoundland Constabulary	Meter 5 Meter 8 Meter 9	
Meter 2		- Elizabeth Street Residential Area - Union Street Commercial Area	Meter 5	
	Meter 2	- Elizabeth Street Residential Area - Union Street Commercial Area	Meter 5 Meter 8 Meter 9	Meter 7
Meter 3		- Randolph Place Residential Area	Meter 4 Meter 5	
Meter 4		- Dorchester Avenue Residential Area - Colemans Grocery Store	Meter 5	Meter 3
Meter 5		- Wellington Street Residential Area - Victoria Street Residential Area - College of the North Atlantic		Meter 1 Meter 2 Meter 3 Meter 4
	Meter 5	- Elizabeth Street Residential Area - Wellington Street Residential Area - Victoria Street Residential Area - College of the North Atlantic	Meter 9	Meter 1 Meter 2 Meter 7 Meter 8
Meter 6		- Brook Street Commercial Area		
	Meter 7	- Elizabeth Street Residential Area	Meter 2 Meter 5 Meter 8 Meter 9	
	Meter 8	- Memorial University – Grenfell Campus - Elizabeth Street Residential area	Meter 5 Meter 9	Meter 1 Meter 2 Meter 7
	Meter 9	- Memorial University – Grenfell Campus - Elizabeth Street Residential Area - Mt. Bernard Residential Area		Meter 1 Meter 2 Meter 5 Meter 7 Meter 8

#### 1.1.4 Theoretical Flows

Average dry weather theoretical flows for the sanitary sewershed to each flow meter location were developed and compared to the metered flow rates. Criteria used for developing the theoretical flows was obtained from the Newfoundland and Labrador Guidelines for the

Design, Construction and Operation of Water and Sewerage Systems Manual (Guidelines), including:

- Estimated Wastewater Generation:
  - o Residential – 340 Litres/Day/Person;
  - o Schools – 115 Litres/Day/Person;
  - o Stores/Shopping/Office Buildings – 6 Litres/Day/m<sup>2</sup> of floor space; and
  - o Churches – 15 Litres/Day/Seat.
- Peaking Factor:
  - o Residential (Population Generated) – Harmon's Peaking Factor; and
  - o Peaking factor of 1.5 for Schools.
- Infiltration allowance:
  - o 0.28 Litres/Second/Hectare.

These criteria were compared to the 2017 City of Corner Brook Wastewater Strategic Plan. A difference in the infiltration allowance was observed, however, the more conservative value provided by the Guidelines was determined to be overly conservative and the value used in the Strategic Plan was used (see Section 2.2). Table 2 summarizes the comparison.

*Table 2: Comparison to 2017 Report*

Parameter	2017 City of Corner Brook Wastewater Strategic Plan	Guidelines
Wastewater Generation	0.340 m <sup>3</sup> /d/Person (340 L/D/P)	340 L/D/P
Peaking Factor	Harmon's Peaking Factor	Harmon's Peaking Factor
Infiltration Allowance	11m <sup>3</sup> /D/Ha (0.128 L/s/Ha)	0.28 L/s/Ha

The theoretical average dry weather flow (ADF) and peak dry weather flows (PDF) expected at each flow meter are summarized in Table 3 and 4.

*Table 3: Theoretical Flows – 2020 Metering Program*

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5	Meter 6	CHSL
ADF (L/s)	9.6	39.8	1.9	3.2	58.9	23.6	83.8
PDF (L/s)	13.1	68.7	2.6	4.9	97.0	23.6	122.0

*Table 4: Theoretical Flows – 2021 Metering Program*

	Meter 1	Meter 2	Meter 5	Meter 7	Meter 8	Meter 9	CHSL
ADF (L/s)	9.6	39.8	58.9	36.5	49.4	60.1	83.8
PDF (L/s)	13.1	68.7	97.0	65.4	81.8	98.4	122.0

## Chapter 2 Part B: Model Calibration

The model provides the ability to characterize the flows generated in each tributary area for the various collection systems that ultimately convey wastewater to the trunk sewer on Mt Bernard. The main objective of this calibration is to replicate how flows that are generated along the trunk sewer. Once the model is accurately calibrated, it can then be used to accurately model how the sewer reacts to changes in flows and / or changes in the pipe network.

### 2.1 Evaluation of Flow Metering Programs

The flow metering stations were comprised of depth sensors and data loggers. The sensors were placed in the upstream sewers at each manhole, and the data loggers recorded sewage depths, velocities, and flows, in five-minute intervals.

The metered data quality is influenced by both site set-up and site maintenance. Site setup conditions which may impact data quality include pipe slope and sewage velocity. Site maintenance includes keeping sensors free of accumulated debris, however, it is not possible to keep the sensors clean at all times. Therefore, periods of the recorded data were deemed not suitable for analysis, for example, zero and negative recordings.

The average dry weather theoretical flows were assigned to a typical daily diurnal curve to develop peak morning and evening flows for each sanitary sewersheds. Using the rainfall data, dry period(s) were identified. The theoretical diurnal curve flows were compared to the recorded flow in each sanitary sewersheds during a dry period. The findings of these comparisons are discussed below.

Flow monitoring data from the Flow Metering Programs underwent thorough analysis, including a QA/QC review, to determine the validity of the results obtained. The time period over which the flow meters showed the most promising results was from April 23<sup>rd</sup> to April 28<sup>th</sup> 2021, near the start of the second flow monitoring program. This period was selected for further analysis. It is possible that the flow meters provided better quality data early on in the flow monitoring program due to accumulation of debris on the sensors, among other possible factors.

## Flow Meter Analysis Results

Overall, the flow monitoring data from Meters 5, 7 and 8 passed QA/QC checks during the April 23<sup>rd</sup> to April 28<sup>th</sup> period analyzed and are shown on Graph 1, seen below.

Graph 1: Analyzed Period with Selected Meters

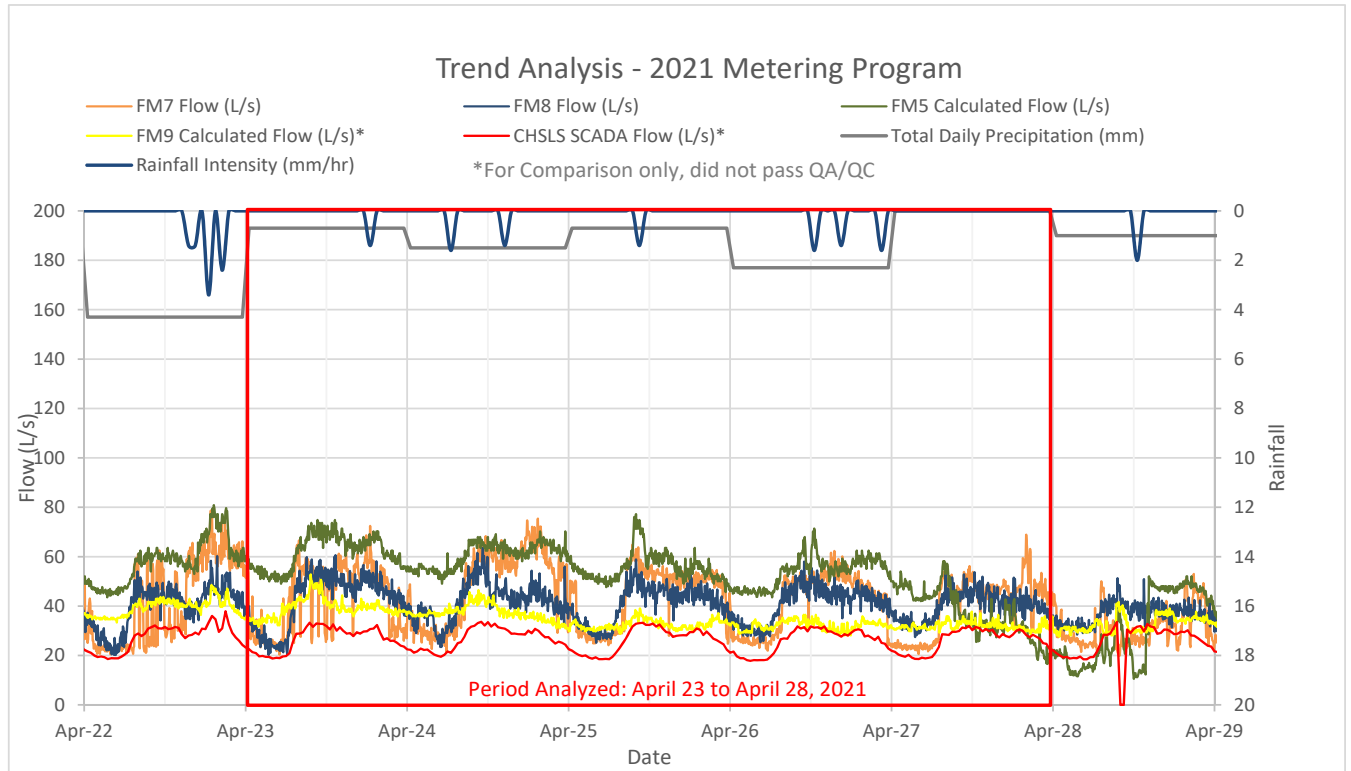




Figure 1 and 2, on the following page, shows the location of each flow meter installed. A summary of the results of the meter analysis for the 2021 Flow Metering Program is presented below:

- ▶ **Meter 1:** This flow meter was damaged during the metering program and a crack appeared on the top of the logger. As a result, the data could not be retrieved. CBCL contacted the meter manufacturer to assist in troubleshooting; however, data could not be retrieved.
- ▶ **Meter 2:** The recorded flow meter data at Meter 2 does not trend well with the other meters with respect to the diurnal pattern and wet weather response. The flow meter did not pass QA/QC analysis and is considered to be poor quality data overall. The recorded flow is very low compared to the theoretical flow and is also low when compared to the upstream Meter 7 and the downstream Meter 8. In summary, Meter 2 did not pass the QA/QC review and it is recommended to use flows from the immediately upstream Meter 7 instead of from Meter 2 in subsequent sewer capacity analysis and design.
- ▶ **Meter 5:** Metered flows from Meter 5 were higher than expected when compared to theoretical flows calculated based on the tributary catchment area and also when comparing the metered velocity to the calculated velocity. Metered flows were also higher than would be expected based on a comparison with flows recorded at Meter 7 and Meter 8. Flows calculated from the meter-recorded depth were used to determine the flow for Meter 5 using a calculated velocity. Adjusted flows now align with recorded flows at Meter 8 and Meter 9. It is recommended to use flows calculated from the Meter 5 depth data to establish flows into the City Hall Sewage Lift Station (CHSLS).
- ▶ **Meter 7:** Meter 7 passed the QA/QC review and the recorded flow trends well with the other meters during the period analyzed. The average recorded flow is approximately 20% higher than the theoretical average flow at Meter 7 (based on the tributary catchment area) and may be a result of the small precipitation events observed during the period analyzed.
- ▶ **Meter 8:** Meter 8 passed the QA/QC review and the recorded flow trends well with the other meters during the period analyzed. However, flows are slightly lower than expected with the average recorded flow for the period about 20% lower than the theoretical average flow (based on the tributary catchment area). Additionally, recorded flows at Meter 8 are consistently lower than the upstream Meter 7. This may indicate that actual flow at this location is higher than that recorded by the flow meter.
- ▶ **Meter 9:** The recorded flow from Meter 9 trends well with the other meters and the CHSLS SCADA flow. However, the magnitude of the flows is significantly lower than the theoretical flow (based on the tributary catchment area), the CHSLS SCADA flows, and





Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



City of Corner Brook

Sanitary Sewer Capacity  
Analysis and Upgrades

Legend

- Local Sanitary Sewer
- Sanitary Trunk Sewer
- Sanitary Forcemain
- Sewage Lift Station
- Flow Meter

0 100 200  
Meters  
Scale: 1:3,500

Figure 1

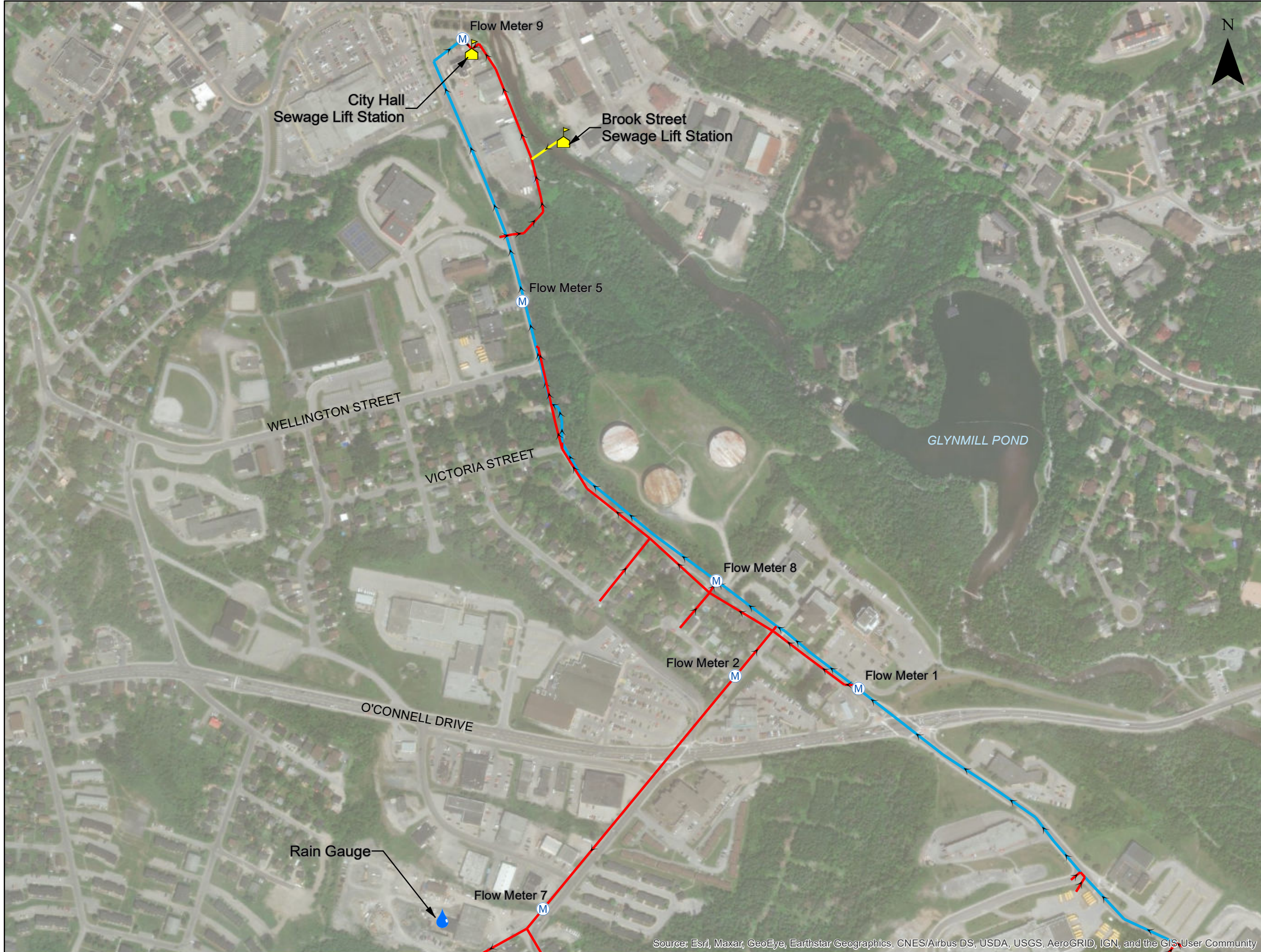
2020 Flow Metering Program  
Flow Meter Locations

Issued for: --

Date: June 2021







City of Corner Brook

Sanitary Sewer Capacity Analysis and Upgrades

Legend

- Local Sanitary Sewer
- Sanitary Trunk Sewer
- Sanitary Forcemain
- Sewage Lift Station
- Flow Meter
- Rain Gauge

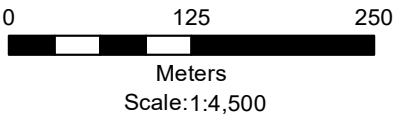


Figure 2

2021 Flow Metering Program  
Flow Meter Locations

Issued for: --

Date: June 2021



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



the flows at the upstream Meters 5, 7 and 8. Calculated flows based on the meter-recorded depth were established and generally match the flow values recorded by the CHSLS SCADA system, however remain significantly lower than the upstream metered flows at Meters 5, 7 and 8. In summary, data from Meter 9 did not pass the QA/QC review and is not recommended to establish flow requirements into the CHSLS. It is recommended to instead use data from the next upstream meter, Meter 5.

- **City Hall Sewage Lift Station (CHSLS) SCADA Data:** Based on discussion with the City, the CHSLS SCADA system was not calibrated after a new meter was installed and the SCADA data recorded may not be of the correct magnitude. This deduction is reinforced by metered flows being higher than those reported by the SCADA system at the upstream Meters 5, 7 and 8; all of which passed the QA/QC review. It is not recommended to establish flows into the CHSLS based on SCADA data from the time period analyzed.

Overall, the results of the 2021 Metering Program, specifically flows recorded at Meters 5, 7 and 8, generally align with the calculated average theoretical flows for the tributary area. A comparison of the theoretical and actual flows from the 2021 Metering Program are presented in Table 1.

*Table 1: Comparison of Theoretical and Measured Flows from the 2021 Flow Metering Program*

	Meter 1	Meter 2	Meter 5	Meter 7	Meter 8	Meter 9	CHSLS
<b>Theoretical ADF (L/s)</b>	9.6	39.8	58.9	36.5	49.4	60.1	83.8
<b>2021 Measured Flow (L/s)</b>	N/A	N/A <sup>1</sup>	53.8	43.6	41.2	N/A <sup>1</sup>	N/A <sup>1</sup>

<sup>1</sup> Data did not pass QA/QC checks

### Precipitation Events

Data from Environment Canada Station 8401298 shows that approximately 5.6 mm of precipitation fell in the 3 days leading up to the April 23<sup>rd</sup> to April 28<sup>th</sup> 2021 period and 5.2 mm of precipitation fell within the same time period.

It is important to note that the 2021 Metering Program was conducted in the spring, when significant periods of dry weather do not always occur.

**Rain Gauge:**

In addition to the flow meters installed, a rain gauge was placed at the Municipal Depot. The gauge data was not collected during the May 18 sitework, as it was noted by City personnel that a significant rain event had not occurred. Both the rain gauge and the flow meters were left in place to continue metering. Rainfall data was retrieved from Environment Canada's Corner Brook Station (Station Number 8401298), for the 2021 metering program for review.

Date	Total Precipitation (mm)
19-Apr-21	6.2
20-Apr-21	0.6
21-Apr-21	0.7
22-Apr-21	4.3
23-Apr-21	0.7
24-Apr-21	1.5
25-Apr-21	0.7
26-Apr-21	2.3
27-Apr-21	0
28-Apr-21	1

## 2.2 City Hall Sewage Life Station

From information provided by the City, it is understood that the CHSLS is a triplex pumping system, where two pumps can operate in parallel, with a third pump available for high flow conditions. The pump curves for the CHSLS are included in Appendix A, and summarized below:

- Pump Curve – 1 Pump Operation
  - o Flow: 124.3 L/s
  - o Head: 13.3m
  - o Hydraulic Efficiency: 74.8%
- Pump Curve – 2 Pump Operation
  - o Flow: 203.0 L/s
  - o Head: 16.9m
  - o Hydraulic Efficiency: 80.1%

CHSLS sewage inflow is measured by a pressure transducer and recorded in the City's SCADA system. There are two inflows to the CHSLS, one inflow from the trunk sewer on Mount Bernard Avenue, and one inflow from the local sanitary sewer behind the former City Hall building, which delivers flow from the BSSLS.

During the 2020 metering program (Mid-November to Mid-December), inflows retrieved from the SCADA system ranged from 11 L/s to 76 L/s, with an average inflow of 36 L/s. During the 2021 metering program (Mid-April to Mid-May), inflows retrieved from the SCADA system ranged from 17 L/s to 62 L/s, with an average inflow of 29 L/s. The average recorded inflow to

the CHSLS is approximately 2 times less than the theoretical average dry weather flow (83.8 L/s). City staff noted that the pressure transducer for the station is a relatively new install that replaced the original ultrasonic sensor. This new pressure transducer has not been calibrated therefore the flow data will not be an accurate benchmark.

Based on the program and comparisons it was determined that the calculated theoretical flows are accurate estimates of sewershed flows and were therefore used to evaluate the capacity of the existing sanitary sewer along Mount Bernard Avenue. The theoretical peak dry weather flow was used to evaluate the system capacity, as discussed below.

### 2.3 Capacity Analysis of Existing System

Using information collected in the field, a PCSWMM model of the system was created. The theoretical peak dry weather flows were assigned to a typical daily diurnal curve to develop peak morning and evening flows for the sanitary sewersheds. The peak dry weather theoretical flows were input in the model to evaluate the capacity of the existing system. A Manning's n value of 0.012 was assumed for the existing pipe roughness. The model results indicate there is adequate capacity in the sanitary system to pass the theoretical peak dry weather flow under existing conditions.

The section of 355mm pipe along Mount Bernard Avenue between Randolph Place, and Dorchester Avenue, where the pipe was approximately 60%-65% full for peak dry weather flow, showed limited capacity outside of dry conditions.

### 2.4 Surcharging Existing System

A large precipitation event was not captured during the flow metering programs. However, the City identified that on January 13<sup>th</sup>, 2018, a section of sanitary sewer between O'Connell Drive and Randolph Place surcharged. While the exact location of the surcharging is unknown it is assumed that it was due to the 355mm pipe exceeding its capacity.

To further investigate the surcharging event historical flow data from the CHSLS and rainfall data in December 2017 and January 2018 was reviewed.

#### *December 2017 – January 2018 Inflow Review - CHSLS*

Inflow at the CHSLS appears to be relatively consistent, fluctuating between 20 and 60 L/s in the days leading up to January 12<sup>th</sup>. However, on January 12<sup>th</sup>, there is a significant jump in recorded inflow from 37 L/s at 6:00am to 159.5 L/s on January 13<sup>th</sup> at 12:30am. Recorded inflow remains constant at, and does not exceed 159.5 L/s for 1.5 days after 12:30am January 13<sup>th</sup>.



### *December 2017 – January 2018 Weather Review – City of Corner Brook*

From daily rainfall records retrieved from Environment Canada's Corner Brook Station (Station Number 8401300), approximately 35.6mm and 20mm of rain fell on January 12<sup>th</sup> and 13<sup>th</sup>, respectively. Unfortunately, the hourly precipitation amounts are missing from historical records, therefore rainfall intensity is unknown. Also noteworthy is the average temperature recorded on January 12<sup>th</sup> (4.8°C) and January 13<sup>th</sup> (12°C), which could have caused snowmelt to occur, which would have contributed to runoff. The City declared a state of emergency during this time period. (<http://ntv.ca/corner-brook-declares-state-of-emergency/>).

To force the model to surcharge the existing sanitary system, additional flow was entered in the model, in addition to the peak dry weather theoretical flows. The additional flow was entered in the model upstream of the connection between Randolph Place and Mount Bernard sanitary systems. A total flow of approximately 250-260 L/s caused the sanitary system to surcharge (see Figure 3).

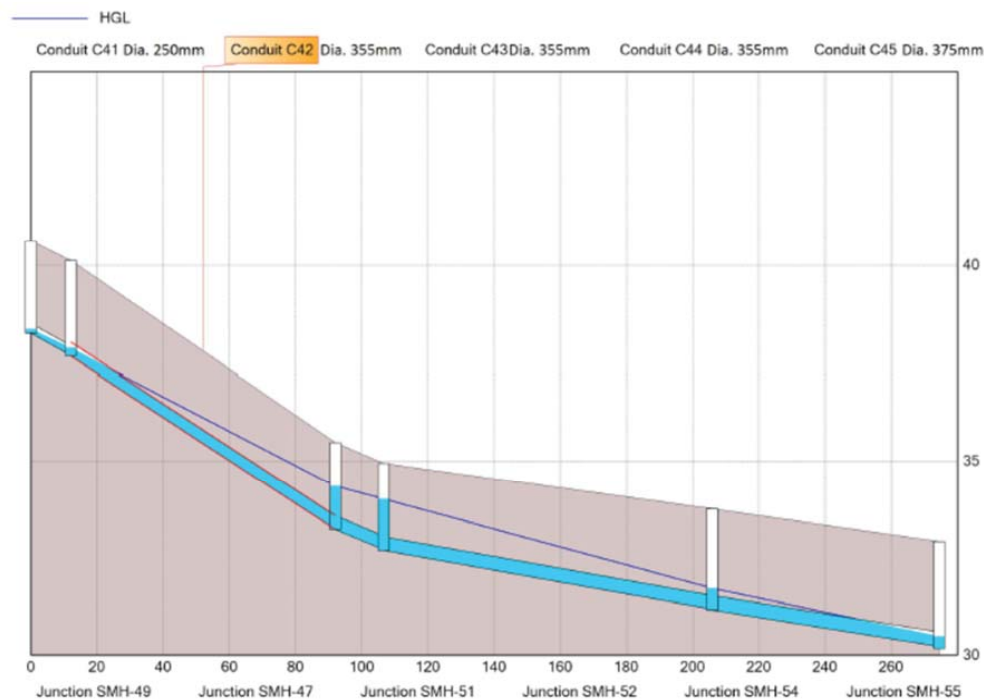


Figure 3 - Existing Hydraulic Grade line Profile under max flow conditions Mt. Bernard @ Randolph

Further downstream, near the City Hall SLS, surcharging of the existing pipes was also observed in the model under these flow conditions. This finding is not surprising as the sewers in this lower area were constructed with a flatter slope and therefore the depth of flow is expected to increase due to a corresponding decrease in velocity of the liquid.

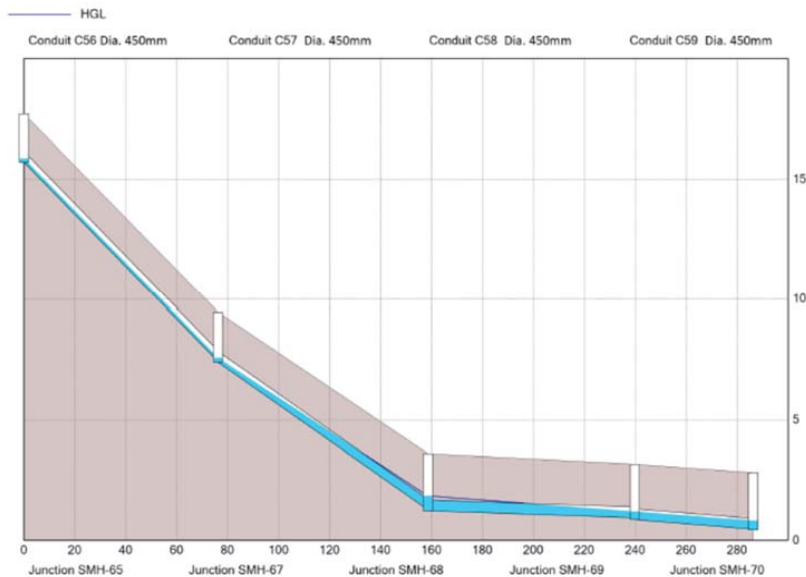


Figure 4 - Existing Hydraulic Grade Line Profile under max flow conditions @ CHSLs

The surcharging event suggests that there is storm inflow to the sanitary system, however, it is not known how, or where, the storm flow enters the existing sanitary system. Possible sources of storm inflow may include a sanitary/storm cross connection, building sump pumps, and/or residential roofing drains tied into the sanitary sewers.

## 2.5 Design Flows Model Results – New LTCH and ACH

The functional servicing report for the new Long Term Care Home (LTCH) and Acute Care Hospital (ACH) provided sanitary flow demands. The sanitary flow is 29.7L/s, which was confirmed to be peak flow with diurnal patterns accounted for.

This sanitary flow for the new LTCH and ACH was assigned to the existing system in combination with the theoretical peak dry weather flows in the model. The model results indicate the current sanitary sewer is undersized to pass the design flow, particularly the section of 355mm pipe along Mount Bernard Avenue between Randolph Place and Dorchester Avenue.

## 2.6 Design Flow Field Test – New LTCH and ACH

As a follow-up to the metering program, it was decided that a field test could be conducted to input flows into the existing sanitary sewers to mimic the estimated flows for the LTCH and ACH facilities. This test was conducted on June 8<sup>th</sup>, 2021 by City of Corner Brook Operations staff and CBCL to confirm the findings of the hydraulic model. As stated



previously, design sanitary flow rates for the Hospital have been provided to the City in the WSP Functional Servicing Report as follows:

The Long term Care Building estimated to generate	4.4 L/s (70GPM)
The Acute Care Hospital estimated to generate	25.3 L/s (400GPM)
Total flow	29.7 L/s (470GPM)

These flows were added to the municipal system through a hydrant near the location of the LTCH and ACH facilities to simulate future flows. During the simulation, downstream manholes were monitored to observe actual depth of flow in the pipes.

The manholes shown on SK1 – SK4 on the following pages were observed throughout the test period.

At the start of the test, field crews recorded flow depths in the sewers under existing dry weather conditions. This allowed CBCL to establish a base flow condition to compare changes in depth of flow in the sewer when additional flows were introduced. Typically, depth of flow in trunk sewer on Mt. Bernard was about 15-20% of the pipe barrel. The exception to this was the sewers near the City Hall SLS that had a depth of flow of approximately 40-50% of the pipe barrel. As mentioned previously, this finding was expected as the sewers in this lower area were constructed with a flatter slope and therefore the depth of flow is expected to increase due to a corresponding decrease in velocity of the liquid.

City Operations staff then introduced flow into sanitary system via a hydrant near the Hospital at a flowrate of approximately 29 L/s. Once this flow was given time to travel through the trunk system, the depth of flow in the existing pipes was again recorded. Under the increased flowrate, the depth of flow in the sewers near the City Hall SLS increased to 65% of the pipe barrel. The trunk sewer near the intersection of Mt. Bernard and O'Connell, as well as at the intersection of Corporal Pinksen and University, increased to 40% of the barrel capacity.

Once the observations with the inclusion of the Hospital flow was completed, additional flow was added to the system to determine what additional capacity the sanitary system has. A second test was conducted with a 1.5 x safety factor, which would be comparable to a theoretical peak dry weather flow in the system.

City Operations staff increased flow into the sanitary system via the hydrant near the Hospital to a flowrate of 44.6 L/s. Once this flow was given time to travel through the trunk system, the depth of flow in the existing pipes was again recorded. Under the peak flowrate, the depth of flow in the sewers near the City Hall SLS increased to 75% of the pipe barrel. The trunk sewer near the intersection of Mt. Bernard and O'Connell increased to 100% of the pipe barrel, as well as at the manhole near the intersection of Corporal Pinksen and University began to surcharge.



Based on this field test, the model results are accurate and indicate that the existing sanitary system has a capacity limitation to receive future flows from the LTCH and ACH.

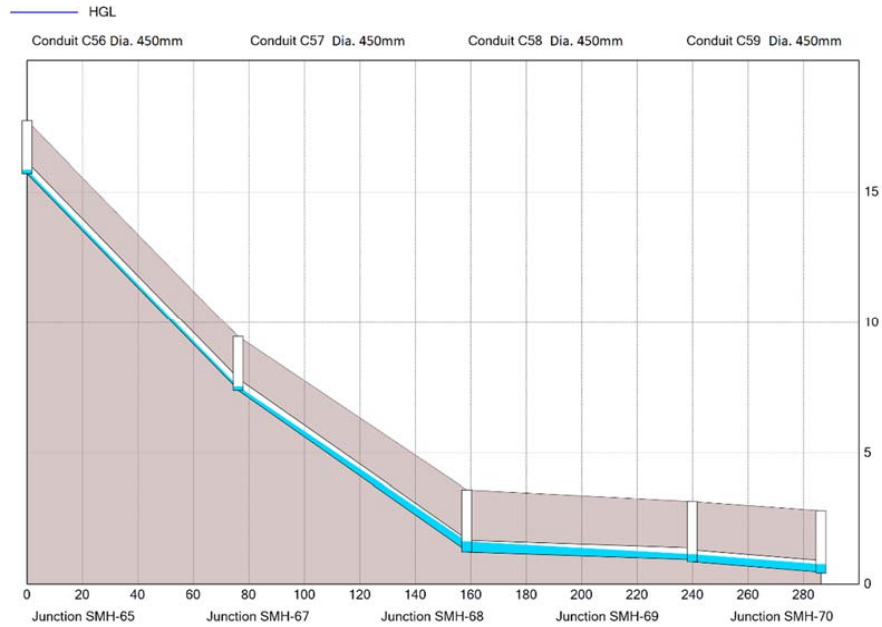


Figure 5 - Existing Dry-Weather Hydraulic profile near CHSLs

## Chapter 3 Part C: Recommendations and Cost Estimates

### 3.1 Recommended Sanitary Sewer Sizing

It is important to note that the existing sanitary sewer between O'Connell Drive and Randolph Place has surcharged on multiple occasions in the past. Furthermore, capacity limitations were observed in the sewers during the design flow field test described in section 2.6. Again, based on the field test, the existing sanitary system has a capacity limitation to receive future flows from the LTCH and ACH and upgrades must be completed.

As the existing, downstream pipes are undersized during high-flow events, they may be acting as an upstream "throttle", restricting the amount of flow downstream to the CHSLS. It is possible, that with sanitary sewer upgrades to the existing system, the "throttle" will be removed and flows at the CHSLS will be higher than currently recorded.

Based on these findings, it is recommended that a large section of sewer be upgraded. It was assumed that sanitary sewer upgrades will closely resemble the existing pipe slopes, inverts, and manhole locations, and the guidelines were used for the Manning's  $n$  (0.013). Figure 7 shows the preliminary upgrades for Mount Bernard Avenue. These proposed pipe sizes and lengths may change during detailed design to accommodate other infrastructure.

- ▶ On dry weather days, there is limited capacity to allow the LTCH and ACH to connect to the existing sanitary system. The hydrant test indicated that the system could accommodate the additional flows under low-flow, dry weather conditions. However, under the increased flow rate simulated during the field test to replicate a peak dry weather sanitary flow, depth of flow in the pipe barrels increased to 70% and in some locations to 100% of the pipe cross-section (surcharged conditions).
- ▶ Under peak dry weather conditions, the municipal sanitary system on Mt. Bernard requires upgrades to accommodate the additional flows from the LTCH and ACH.
- ▶ Provincial sewer design criteria requires an allowance for wet weather conditions. Based on the peak dry-weather tests, as well as the calibrated model results, on wet





City of Corner Brook

Sanitary Sewer Capacity Analysis and Upgrades

- Legend
- Sewage Lift Station
  - Existing Sanitary Sewer to Remain
  - Proposed 300mm Sanitary Sewer
  - Proposed 450mm Sanitary Sewer
  - Proposed 600mm Sanitary Sewer

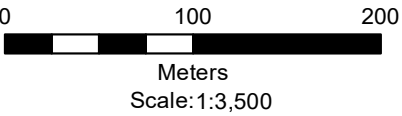


Figure 7

Proposed Preliminary Upgrades

Issued for: --

Date: June 2021





weather days the capacity limitations of the existing municipal system will be aggravated by any additional flows until upgrades are made.

### 3.2 Recommended Design Flow

As discussed above, the CHSLS is a triplex pumping system, where two pumps can operate in parallel, with a third pump available for high flow conditions. The pump curves indicate that discharge flow from the CHSLS is 203 L/s with two pumps in operation. This flow is approximately 1.6 times greater than the theoretical peak dry weather flow.

The flow metering program, past surcharge events, and CHSLS SCADA records suggest that there is storm inflow to the sanitary system. However, a precipitation event large enough to generate a surcharge event has not occurred during our monitoring period, and hence a peak inflow value for design cannot be estimated. However, it is known that the system reacts and has limited capacity with even the additional flows from the Hospital under average day conditions.

To maximize the future system capacity, the discharge flow of 203 L/s (discharge flow from CHSLS for two pumps in operation) was selected as the design flow for sizing the new trunk sewer from the CHSLS to Randolph Place. The sanitary trunk sewer upstream of Randolph Place to O'Connell Drive was sized using the LTCH and ACH design flow plus the theoretical peak dry weather flow.

### 3.3 Class D Cost Estimate

A Class D cost estimate summary is provided below in Table 6. A detailed cost breakdown is provided in Appendix B. It should be noted that, where sewer upgrades within the street right of way are recommended, costing has been included for additional upgrades to the existing infrastructure that would likely be negatively impacted during construction.

For the purposes of this Class D estimate, the following assumptions have been made:

- ▶ The existing sanitary trunk sewer will be removed and upgraded from the CHSLS to O'Connell Drive.
- ▶ The existing local sanitary sewer servicing Mount Bernard residents will be left in place and connected in one location to the new trunk sewer. All cross connections between the trunk sewer and the local sewer will be removed.
- ▶ There are two separate water systems on Mt. Bernard (distribution and transmission mains). These watermains are over 60 years old and were constructed with lead solder joints. During sanitary trunk sewer upgrades, these watermains will be disturbed, since the sanitary sewers and service laterals would be constructed lower, and in cases,

directly under the watermain. As well, the lead solder joint of the watermain is likely to be negatively impacted throughout construction. Historically, these joints have failed when construction activities take place adjacent to them. As such, it is assumed both water systems will be removed and replaced.

- ▶ The existing asphalt and granulars, concrete sidewalk, curb, and gutter will be removed and replaced from Main Street to O'Connell Drive.
- ▶ Along Mt. Bernard there are mature trees that will require removal. The dripline of the trees are such that the roots will be damaged during sanitary pipe construction. The City has tree removal and replacement policies that have been accounted for in the cost estimates.
- ▶ Existing storm sewers have not been fully surveyed. A contingency cost for potential storm sewer upgrades is included in the cost estimate.
- ▶ The manhole at the intersection of Corporal Pinksen and University Drive will be replaced with a larger structure with proper benching.
- ▶ The existing sanitary trunk sewer manholes will be removed and replaced from CHSL to O'Connell Drive.

*Table 6: Class D Cost Estimate for Mount Bernard Avenue Sanitary Sewer Upgrades*

Item	Cost
Sanitary Sewer, Water, Sidewalk & Roadway Upgrades	\$5,045,000
Engineering (12%)	\$605,000
Design Contingency (20%)	\$1,010,000
Storm Sewer Upgrade Contingency	\$200,000
Tree Removal & Replacement Contingency	\$150,000
Sub-Total	\$7,010,000
HST (15%)	\$1,051,500
Total	\$8,061,500
Budget	\$8,075,000

# APPENDIX A

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## CHSLS Pump Curves

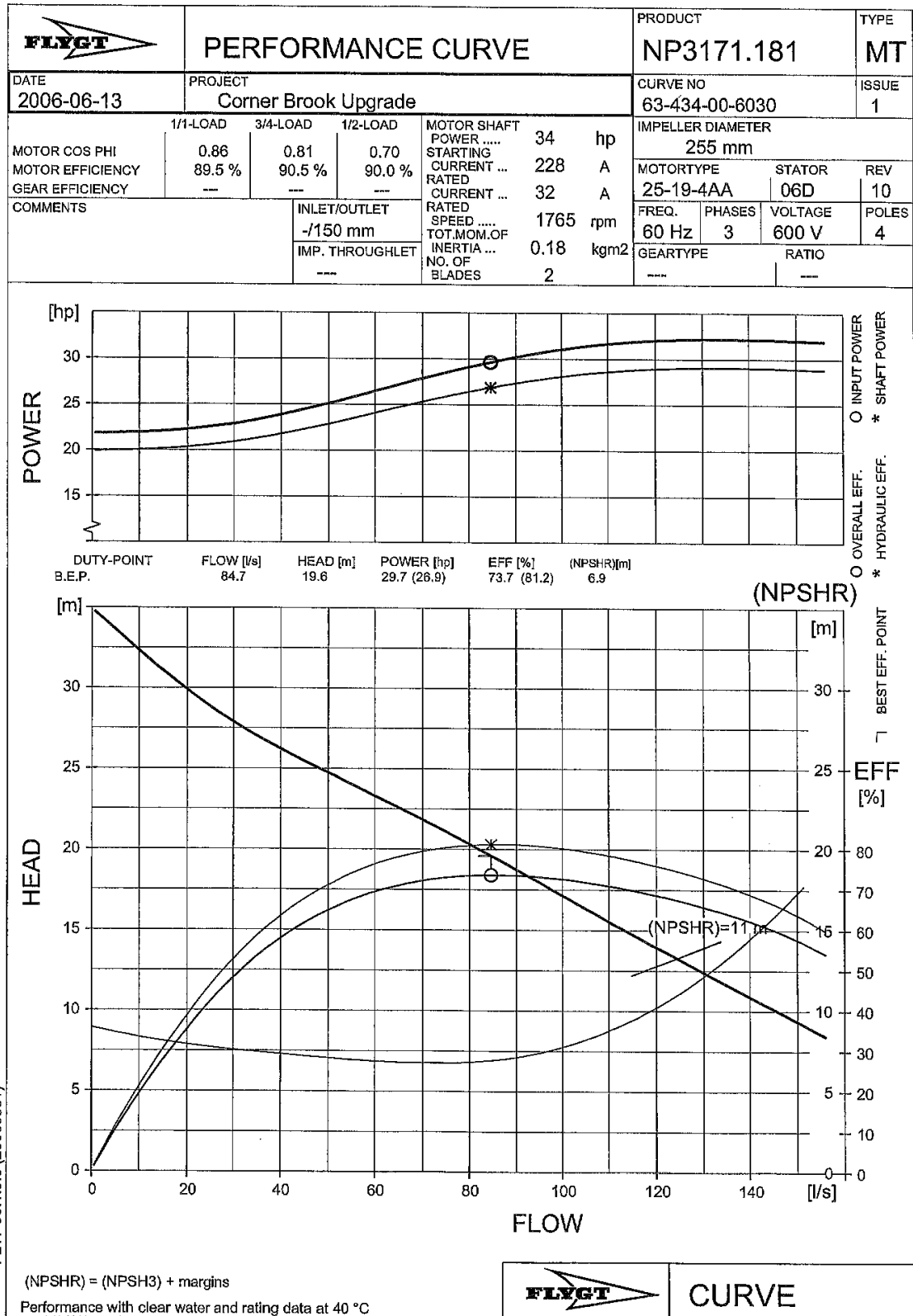




## 2.0 Specification Summary

Project Location:	<b>Corner Brook, City Hall</b>
Project name:	<b>Corner Brook, City Hall Lift station Upgrade</b>
File Number:	<b>06-10-2517</b>
Tank material:	<b>Concrete Sump</b>
Pumps:	
Model:	<b>NP-3171 MT</b>
Impeller number:	<b>434</b>
Supply Voltage:	<b>600 Volt / 3-Phase / 60 Hz</b>
Station Arrangement Drawing No.:	<b>M-129522</b>
Control Schematic No.:	<b>I06-3437</b>



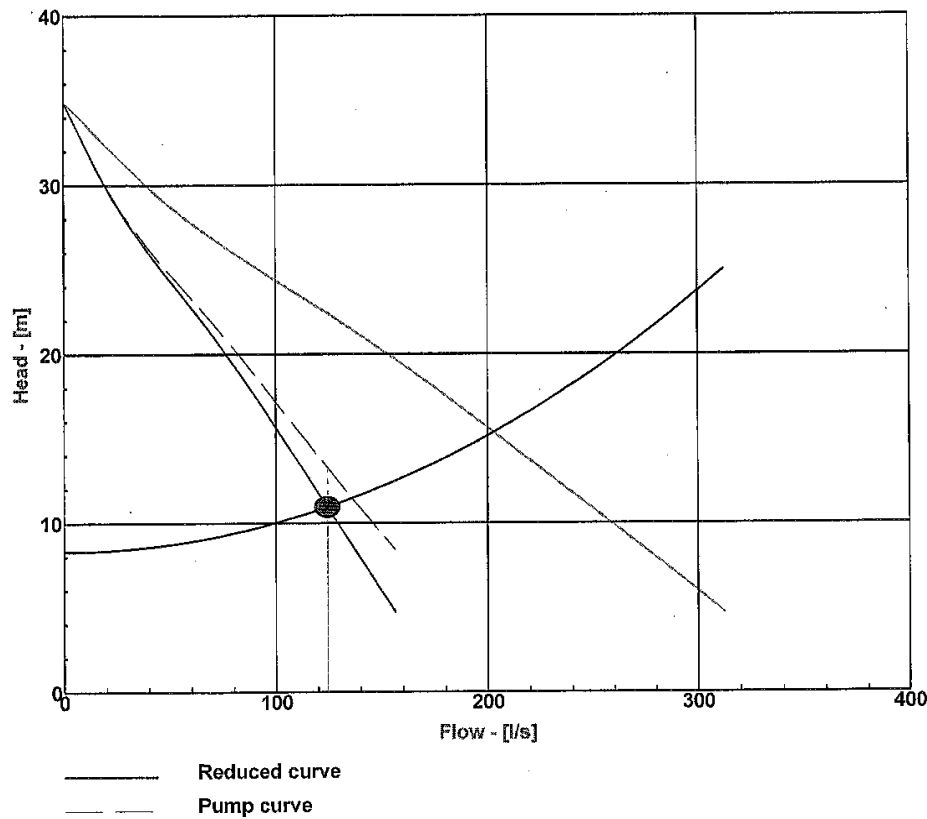




## Duty Analysis - Duty conditions

Project: Corner Brook Upgrade

Owner: ITT Industries



1 NP 3171 63-434-00-6030

### PRODUCT DATA

Rat. pow.: 34 hp

Imp.diam.: 255 mm

Vanes: 2

### DUTY CONDITIONS

No of pumps: 1

Flow: 124.3 l/s

Head: 13.3 m

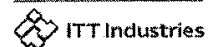
Reduced head: 10.9 m

Hydraulic power: 29.0 hp

Hydraulic eff.: 74.8 %

Spec. energy: 0.0536 kWh/m<sup>3</sup>

Flygt



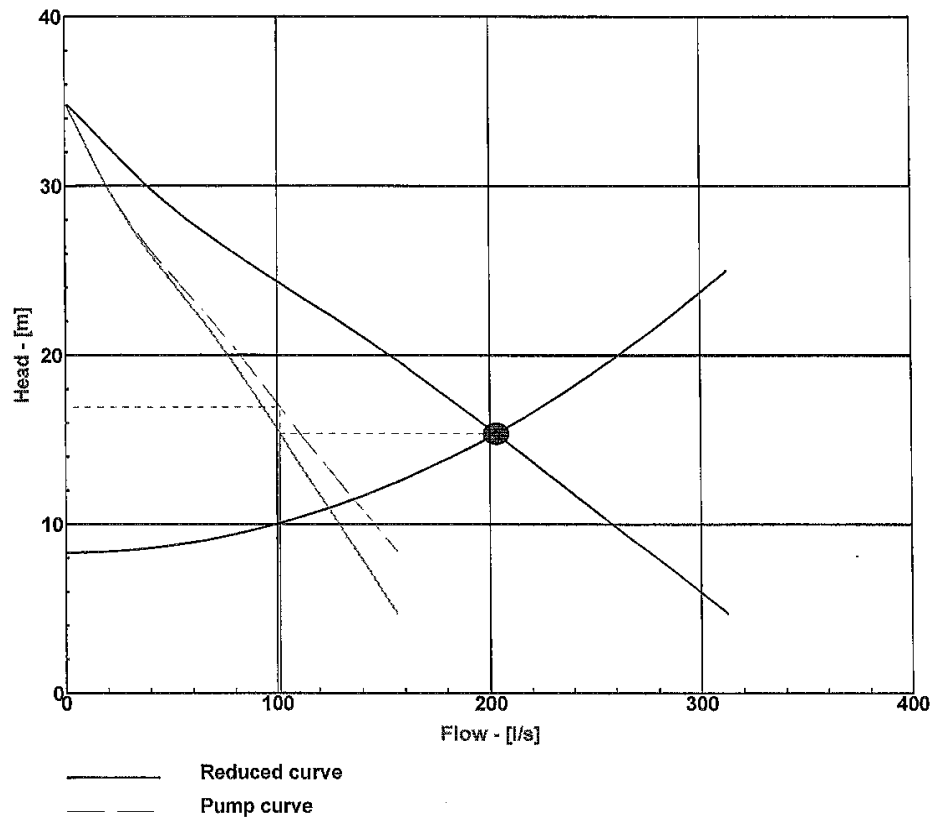


## Duty Analysis - Duty conditions



Project: Corner Brook Upgrade

Owner: ITT Industries



2 NP 3171 63-434-00-6030

### PRODUCT DATA

Rat. pow.: 34 hp

Imp.diam.: 255 mm

Vanes: 2

### DUTY CONDITIONS

No of pumps: 2

Flow: 203.0 l/s

Head: 16.9 m

Reduced head: 15.4 m

Hydraulic power: 56.4 hp

Hydraulic eff.: 80.1 %

Spec. energy: 0.0636 kWh/m<sup>3</sup>

Flygt



ITT Industries



## Rating

Frequency	<b>60 Hz</b>	Product	<b>3171 . 181</b>	Issue	<b>1</b>
Phases	<b>3</b>	Motor	<b>25-19-4AA</b>	Start max	<b>30</b>
Poles	<b>4</b>	Output power	<b>34.0 hp</b>	Issue date	
Approval		Installations	<b>PSTZ</b>	Valid from	<b>08/06/2005</b>
Cooling		Type of duty	<b>S1</b>	Status	<b>APPR</b>

Max temperature **40 ° C / 104 ° F**

	<i>Alternative 1</i>	<i>Alternative 2</i>		
Voltage	<b>600 V</b>	<b>V</b>	Stator variant	<b>06</b>
Connection	<b>D</b>		Speed	<b>1765 r/min</b>
Current	<b>32.0 A</b>	<b>A</b>	Module number	<b>165</b>
Starting	<b>228.0 A</b>	<b>A</b>	Motor issue	<b>10</b>
Power factor	<b>0.86</b>			
Locked rotor code	<b>H</b>			

### *Warm liquid data*

Note! Reduced rated output power

Max temperature	<b>70 ° C / 158 ° F</b>	<b>° C / ° F</b>
Current (1)	<b>29.0 A</b>	<b>A</b>
Current (2)	<b>A</b>	<b>A</b>
Max input power	<b>25.0 kW</b>	<b>kW</b>

Flygt



ITT Industries

# APPENDIX B

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## Class D Cost Estimate



Project: City of Corner Brook - Mount Bernard Upgrades  
 Consultant: CBCL Limited  
 Date: Aug 2021

This opinion of probable costs is presented on the basis of experience, qualifications and best judgement. It has been prepared in accordance with acceptable principles and practices. Sudden market trend changes, non-competitive bidding situations, unforeseen labour and material adjustments and the like are beyond the control of CBCL Limited. We cannot warrant or guarantee that actual costs will not vary significantly from the opinion provided.

SECTION	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
<b><u>DIVISION # 1</u></b>					
<b><u>01010</u></b>	<b><u>Mobilization and Demobilization</u></b> (not greater than 5% if on the Island, or 10% if in Labrador, or 15% north of Cartwright, of item a. "sub-total" on last page)	L.S.	Unit	\$ 150,000.00	\$ 150,000.00
<b><u>DIVISION #2</u></b>					
<b><u>01020</u></b>	<b><u>Cash Allowance</u></b>				
	1. Pole Relocation/Shoring/Bracing	Allow.		\$ 20,000.00	\$ 20,000.00
	2. Supply of Water (Section 01005.14)	Allow.		\$ 30,000.00	\$ 30,000.00
	3. Supply of Sewer Service (Section 01005.15)	Allow.		\$ 50,000.00	\$ 50,000.00
<b><u>01500</u></b>	<b><u>Temporary Facilities</u></b>				
	1. Consultant Site Office	L.S.	1	\$ 10,000.00	\$ 10,000.00
<b><u>01560</u></b>	<b><u>Environmental Requirements</u></b>				
	1. Silt Fence	m	1100	\$ 10.00	\$ 11,000.00
<b><u>01570</u></b>	<b><u>Traffic Regulations</u></b>				
	1. Traffic Control	L.S.	1	\$ 55,000.00	\$ 55,000.00
<b><u>01580</u></b>	<b><u>Project Signs and Sign Posts and Installation</u></b>				
	1. Project Sign (drawing 04010)	L.S.	1	\$ 1,500.00	\$ 1,500.00
<b><u>01710</u></b>	<b><u>Reinstatement and Cleaning</u></b>				
	1. Supply and Place Topsoil	m <sup>2</sup>	1100	\$ 10.00	\$ 11,000.00
	2. Hydraulic Seeding	m <sup>2</sup>	600	\$ 10.00	\$ 6,000.00
	3. Sod	m <sup>2</sup>	500	\$ 15.00	\$ 7,500.00
<b><u>02070</u></b>	<b><u>Sitework, Demolition and Removals</u></b>				
	1. Removal of Curb and Gutter	m	2075	\$ 20.00	\$ 41,500.00
	2. Removal of Concrete Sidewalk	m <sup>2</sup>	1700	\$ 50.00	\$ 85,000.00
	3. Removal of Sanitary Manholes	Each	28	\$ 3,000.00	\$ 84,000.00
	4. Removal of Sanitary Sewers	m	1250	\$ 40.00	\$ 50,000.00
	5. Removal of Water Lines	m	2200	\$ 35.00	\$ 77,000.00
<b><u>02223</u></b>	<b><u>Excavation, Trenching &amp; Backfilling</u></b>				
	1. Main Trench Excavation				
	1. Rock	m <sup>3</sup>	2300	\$ 100.00	\$ 230,000.00
	2. Common	m <sup>3</sup>	6800	\$ 30.00	\$ 204,000.00
	2. Imported Common Backfill	m <sup>3</sup>	4900	\$ 40.00	\$ 196,000.00
	3. Granular Pipe Bedding	m <sup>3</sup>	2000	\$ 50.00	\$ 100,000.00
	4. Supply and Placement of Marking Tape				
	1. Metallic Tape	m	3350	\$ 2.50	\$ 8,375.00

**DIVISION #2****02224 Roadway Excavation, Embankment & Compaction**

1. Mass Common Excavation	m <sup>3</sup>	3200	\$	18.00	\$	57,600.00
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**02233 Selected Granular Base and Sub Base Materials**

1. Class "A" Granular Base	m <sup>3</sup>	1400	\$	50.00	\$	70,000.00
2. Class "B" Granular Sub-Base	m <sup>3</sup>	2800	\$	50.00	\$	140,000.00

**02528 Concrete Walk, Curb & Gutters**

1. Supply and Place Granular Material	m <sup>3</sup>	315	\$	50.00	\$	15,750.00
2. Concrete Walk (1.35m wide)	m	2200	\$	175.00	\$	385,000.00
3. Curb & Gutter	m	2200	\$	120.00	\$	264,000.00

**02547 Asphalt Tack Coat**

1. Supply & Placement of Asphalt Tack Coat	m <sup>2</sup>	8800	\$	2.50	\$	22,000.00
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**02552 Hot Mix Asphalt Concrete Paving**

1. Asphaltic Concrete						
1. Base Course	tonnes	1250	\$	200.00	\$	250,000.00
2. Surface Course	tonnes	1250	\$	200.00	\$	250,000.00

**02574 Reshaping & Patching Asphalt Pavement**

1. Removal of Asphalt Pavement	m <sup>2</sup>	8800	\$	10.00	\$	88,000.00
2. Cutting of Asphalt Pavement	m	20	\$	10.00	\$	200.00

**02580 Pavement Marking**

1. Pavement Marking	L.S	1	\$	15,000.00	\$	15,000.00
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**02601 Manhole, Catchbasins, Ditch Inlets & Valve Chambers**

1. Supply & Placement of 1200mm dia. Pre-Cast Manholes	Each	16	\$	9,000.00	\$	144,000.00
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**02702 Pipe Sewer Construction**

1. Supply and Placement of Sanitary Sewer						
1. Main Line						
1. 300mm, PVC, SDR35	m	220	\$	350.00	\$	77,000.00
2. 450mm, PVC, SDR35	m	700	\$	450.00	\$	315,000.00
3. 600mm, PVC, SDR35	m	230	\$	650.00	\$	149,500.00
2. T.V. Camera Inspection Services	m	1150	\$	2.00	\$	2,300.00
3. Locate and Connect to Existing Sewer Mains	Each	5	\$	2,000.00	\$	10,000.00

**02713 Water Mains**

1. Supply and Installation of Water Main (Distribution)	m	1100	\$	300.00	\$	330,000.00
2. Supply and Installation of Water Main (Transmission)	m	1100	\$	450.00	\$	495,000.00
3. Supply and Installation of Service Pipe	m	200	\$	300.00	\$	60,000.00
4. Supply and Installation of Fittings	Each	200	\$	750.00	\$	150,000.00
5. Supply and Installation of 200mm Dia. Valves	Each	15	\$	5,000.00	\$	75,000.00
6. Supply and Installation of 400mm Dia. Valves	Each	5	\$	20,000.00	\$	100,000.00
7. Supply and Installation of Fire Hydrants	Each	11	\$	7,500.00	\$	82,500.00
8. Supply and Placement of Thrust Blocks	m <sup>3</sup>	50	\$	500.00	\$	25,000.00
9. Swabbing of Water Lines	m	2400	\$	5.00	\$	12,000.00
10. Locate and Connect to Existing System	Each	8	\$	2,000.00	\$	16,000.00
11. Locate and Connect to Existing Service Laterals	Each	30	\$	500.00	\$	15,000.00

OPINION OF PROBABLE COSTS

(A) SUB-TOTAL	\$ 5,043,725.00
(B) ENGINEERING (12%)	\$ 605,247.00
(C) DESIGN CONTIGENCY (20%)	\$ 1,008,745.00
(D) STORM SEWER UPGRADE CONTINGENCY	\$ 200,000.00
(E) TREE REMOVAL/REPLACEMENT CONTINGENCY	\$ 150,000.00
(F) SUB-TOTAL	\$ 7,007,717.00
(G) HST (15%)	\$ 1,051,157.55
(H) GRAND TOTAL	\$ 8,058,874.55
(I) Budget	\$ 8,060,000.00



