



**TOWN OF GRAND FALLS-WINDSOR
CONTRACT DOCUMENTS**

Grenfell Heights Extension

**Road Upgrades and
Culvert Replacement**

Grand Falls-Windsor, NL

May 2024

Project No. 2024 - T2



May 2024

SPECIFICATIONS FOR
TOWN OF GRAND FALLS - WINDSOR
GRENFELL HEIGHTS EXTENSION

ROAD UPGRADES and
CULVERT REPLACEMENT

GRAND FALLS-WINDSOR
May 2024

PROJECT NO. 2024 - T2

THESE PROJECT DOCUMENTS HAVE BEEN PREPARED FOR USE WITH AND REQUIRE BEING READ IN CONJUNCTION WITH THE “*MUNICIPAL WATER, SEWER AND ROADS MASTER CONSTRUCTION SPECIFICATIONS*” LATEST REVISION, AS PUBLISHED BY THE DEPARTMENT OF TRANSPORTATION and INFRASTRUCTURE, MUNICIPAL INFRASTRUCTURE PROVINCE OF NEWFOUNDLAND AND LABRADOR. THIS PUBLICATION IS AVAILABLE ON THE DEPARTMENT’S WEB SITE UNDER PUBLICATIONS AT THE FOLLOWING LINK: <https://www.gov.nl.ca/ti/mi/mwsr/>

SPECIFICATIONS FOR
TOWN OF GRAND FALLS-WINDSOR

GRENFELL HEIGHTS EXTENSION

ROAD UPGRADES and
CULVERT REPLACEMENT

GRAND FALLS-WINDSOR, NL

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SPECIFICATIONS FOR
TOWN OF GRAND FALLS-WINDSOR
GRENFELL HEIGHTS EXTENSION
ROAD UPGRADES and
CULVERT REPLACEMENT
May 2024

1. LIST OF DRAWINGS

Sheet	1	of	6	Location Plan
Sheet	2	of	6	Plan & Profile 0+000 to 0+310
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2. SITE OF THE WORKS

The Site of the Works is on Grenfell Heights Extension in the vicinity of Civic #'s 457 to 479 within the Town of Grand Falls-Windsor, NL.

3. DESCRIPTION OF THE WORKS

1. This project involves the removal of existing driveway culverts ranging in size from 475 to 1000mm diameter and replaced with new culverts as noted on sheet 6 of 6 details. In order to improve better drainage, both the north and south sides of the road will require the existing ditches to be cleaned and deepened to the approved grade line.

2. Existing asphalt will be pulverized as per Section 02576 of the Municipal Specifications. The new road profile and cross section shall be restored to the satisfaction of the owner and paved with 1 lift of 50mm asphalt. Existing paved driveways at Civic # 448,457,463 and 465 will also need to be reinstated to the satisfaction of the homeowner.

SPECIFICATIONS FOR
TOWN OF GRANDFALLS-WINDSOR

GRENFELL HEIGHTS EXTENSION

ROAD UPGRADES and
CULVERT REPLACEMENT

May 2024

LIST OF ADDENDA

The following addenda, if and when issued, shall form part of the contract documents.

Part I

**STIPULATED AND UNIT PRICE CONTRACT
INDEX
INSTRUCTIONS TO BIDDERS**

1. Tenders
2. Tender Documents
3. Tender Surety and Bonding
4. Completion of Tender Form
5. Tender Form
6. Unacceptable Tenders
7. Amendments to Tender
8. Withdrawal of Tender
9. Substitution of Materials
10. Use of Bid Depository
11. Acceptance of Tender
12. Safety Training and Supervision
13. Certificate of Recognition
14. Period of Work

INSTRUCTIONS TO BIDDERS

1. TENDERS

- (a) Envelopes containing the tender are to be clearly marked:

Tender for:

Project No.
Project Name

ert Replacement

Addressed to:

(Owner)

P.O. Box 439
5 High Street
Grand Falls-Windsor, NL
A2A 2J8

The name and address of the bidder and the closing time must be shown on the envelope.

- (b) Tenders must be received at the above address on or before **2:00 pm on May 23, 2024**. TENDERS RECEIVED AFTER THAT TIME WILL NOT BE CONSIDERED.
- (c) The Form of Agreement is included in the contract documents at the time of tendering for the purpose of information to bidders and shall not be completed at the time of tendering.
- (d) Before submitting a tender, tenderers shall carefully examine the contract documents and the site of the proposed work and fully inform themselves of the existing conditions and limitations. No subsequent allowance under the contract documents will be considered for any bidder who had failed to become familiar with all aspects of the work.
- (e) The Owner will not defray any expenses incurred by the tenderers in the preparation and submission of their tenders.

2. TENDER DOCUMENTS

- (a) The tender documents consist of the Instructions to Bidders, Tender Form, Agreement, Drawings, Specifications, and any amendments to the contract documents issued during the tender period.
- (b) Every interpretation of or addition to the contract documents to be considered a valid part of the contract documents will be issued in the form of a written addendum.

INSTRUCTIONS TO BIDDERS

- (c) No addendums will be issued less than five (5) calendar days prior to the closing date of the tender.
- (d) Tenderers shall promptly notify the Engineer/Architect; of any error, inconsistency or omission discovered during the review of the contract document.

3. TENDER SURETY AND BONDING

(a) Bidding Security

Every tenderer shall submit with their tender a bid bond issued by an approved Surety Company licensed to do business in the Province of Newfoundland and Labrador and made out in favour of the Owner.

The bid bond shall be at least ten percent (10%) of the tendered amount. An approved certified cheque may be submitted in lieu of the bid bond on contracts under \$250,000 only. The bidding security will be returned upon receipt of the Performance and Labour and Materials Bonds.

The terms of the bid security will be invoked and the amount retained by the Owner, if the bidder fails to enter into an agreement when notified of the award of the work within the tender validity period; or fails to provide the Performance and Labour and Materials Bonds in the amount and within the period specified.

(b) Performance Bond

A Performance Bond will be required in the amount of fifty percent (50%) of the contract price. The Performance Security is to be received not later than two (2) weeks after the award of the contract by the letter of intent and prior to the formal execution of the agreement. No work is to be undertaken until the Performance Security has been received.

For contracts under \$250,000 only, in lieu of the Performance Bond, the Owner may accept at their sole discretion an approved certified cheque for ten percent (10%) of the tendered amount. The cheque will be retained until satisfactory completion of the work including the guarantee period, after which this amount will be returned to the contractor together with the accrued interest thereon.

(c) Labour and Materials Payment Bond

A Labour and Materials Payment Bond will be required in the amount of fifty percent (50%) of the contract price. The Labour and Materials Payment Bond is to be received not later than two (2) weeks after the award of the contract by the letter of intent and prior to the execution of the formal agreement. No work is to be undertaken until the Labour and Materials Security has been received.

INSTRUCTIONS TO BIDDERS

For contracts under \$250,000 only, in lieu of the Labour and Materials Bond, the Owner may accept at their sole discretion an approved certified cheque of ten percent (10%) of the tendered amount. The cheque will be retained until substantial completion of the work as defined by the Mechanics Lien Act and upon receipt of a completed and approved Statutory Declaration Form. This security, if in the form of a cheque, will be returned to the contractor together with the accrued interest thereon.

(d) Tender Surety and Bonding Materials Supply Only Contracts

Bid security in the amount of 10% of the contract price and Performance Security in the amount of 50% of the contract amount is required on contracts for supply of materials. Labour and Material Payment Security is not required. The Performance Security may be released 30 days after the date of substantial performance of a material supply contract.

In lieu of a Performance Bond or bid bond, the Owner may, at their sole discretion, approve the acceptance of a certified cheque for 10% of the tendered amount. The cheque will be deposited by the Owner until satisfactory completion of the work including the 30 day Mechanics Lien period, after which this amount will be returned to the contractor with the accrued interest thereon.

No bid security or bonding will be required for the supply of vehicles or earth moving equipment.

4. COMPLETION OF TENDER FORM

- (a) The Tender Form is to be completed in its entirety and submitted in the envelopes provided and the name of the tenderer entered in the "Name of Bidder" space on the tender envelope. The tenderer should retain a copy of the tender for their records.
- (b) Type or legibly print in ink the information required on the Tender Form.
- (c) Type or legibly print in ink the tenderer's full business name and address in the spaces provided on the Tender Form.
- (d) Sign the Tender Form in the space provided as indicated:

In the case of a Sole Proprietorship, the Sole Proprietor will sign where indicated in the presence of a witness who will sign where indicated. Insert the words "Sole Proprietor" next to the signature.

In the case of a Partnership, all partners will sign where indicated in the presence of a witness who will sign where indicated. Insert the word "Partner" next to signatures.

INSTRUCTIONS TO BIDDERS

In the case of a Limited Company, authorized signing officers in the presence of a witness who will also sign where indicated, and the corporate seal will be affixed as indicated.

- (e) Spaces or Appendices will be provided with the Tender Form if required for a list of subcontractors, use of bid depository, contractor's experience, and list of equipment. All such spaces and appendices must be completed in their entirety legibly by typewriter or by printing in ink.
- (f) If it becomes necessary to correct an error made on the Tender Form, such correction must be initialed and dated by the person or persons signing the Tender Form.
- (g) Failure to acknowledge receipt of addenda shall be considered an incomplete tender.

5. TENDER FORM (number of working days)

A Working Day is defined as 10 Working Hours.

6. UNACCEPTABLE TENDERS

- (a) Tenders not submitted on the Tender Form provided will not be considered.
- (b) Facsimile tenders will not be accepted.
- (c) Tenders received after the tender closing time will not be considered.
- (d) Incomplete tenders will be rejected.
- (e) Tenders not accompanied by an approved security in the correct amount will be rejected.
- (f) Tenders containing qualifications or additional clauses to the Tender Form will be rejected.
- (g) Incorrectly prepared tenders may be rejected.
- (h) For unit prices in a Stipulated Price Contract and under a Unit Price Contract, bidders are required to enter a unit price for each and every item bid; this includes lump sum bid items. If any unit price or lump sum price as a unit is omitted by the bidder then the bid shall be considered incomplete and automatically rejected.

INSTRUCTIONS TO BIDDERS

7. AMENDMENTS TO TENDER

Properly documented amendments to the tender will be permitted up to the tender closing time. Amendments documented by facsimile will be acceptable.

8. WITHDRAWAL OF TENDER

Bids may be withdrawn without penalty by facsimile request if received prior to the time fixed for the opening.

9. SUBSTITUTION OF MATERIALS

(a) Tenders shall be based upon using the materials or products as specified without substitution. Where two or more brand names are specified the choice shall be left to the contractor. Where only one brand name is stated there shall be no substitution, unless an approved equal is approved by the Engineer/Architect as per 10.(b).

(b) Where the Specifications include the "or approved equal" clause, substitutions may be proposed provided that:

1. the request for a substitution is made in writing at least fourteen calendar (14) days prior to the tender close date;
2. the request shall clearly define and describe the product for which the substitution is requested;
3. the substituted article is equivalent to the specified article with regards to design, function, appearance, durability, operation and quality.

Approval of the substitution by the Engineer/Architect shall be in the form of an addendum to the Specifications issued at least five (5) days prior to the tender closing date to all of those contractors listed as having received a copy of the contract documents.

10. USE OF BID DEPOSITORY

The attention of the bidder is drawn to the fact that the Bid Depository of the Newfoundland and Labrador Construction Association will be used for the Trade as listed in Appendix _____

INSTRUCTIONS TO BIDDERS

11. ACCEPTANCE OF TENDER

- (a) The Owner will not necessarily accept the lowest or any tender.
- (b) Upon written acceptance of the tender within the tender validity period, the Tender Form becomes part of the contract documents and the successful tenderer becomes the contractor. The contractor will be required to execute a formal agreement with the Owner within sixty (60) days of the date of the letter of intent.
- (c) The contractor shall, within 14 days of receipt of the letter of intent, submit to the Owner a breakdown of the bid to the satisfaction of the Owner.

12. SAFETY TRAINING AND SUPERVISION

Contractors shall ensure that work covered under these documents conforms, where required, to the following procedures and regulations set out by the Occupational Health and Safety Branch of Service NL or the Explosives Division of Energy, Mines and Resources Canada:

- a. Transportation of Dangerous Goods
- b. Navigation of Overhead Wires
- c. Use of Explosives
- d. Working in Confined Spaces
- e. Highway Flagging and Signage
- f. Workplace Hazardous Materials Information System
- g. Working with Small Tools/Shop Equipment
- h. First Aid and CPR
- i. Safety Committee
- j. CSA Z275.2-92 Occupational Safety Code for Diving Operations
- k. Other applicable health or safety procedures or regulations.

Contractors shall complete the "Safety Training and Supervision Certificate" before construction commences and supply proof of pertinent health and safety training of workers and supervisors.

On projects where blasting is to be done, the contractor shall file an Emergency Response Assistance Plan with the Explosives Division of Energy, Mines and Resources Canada.

INSTRUCTIONS TO BIDDERS

13. CERTIFICATE OF RECOGNITION

The contractor shall within 14 calendar days of award of the contract, and prior to commencement of the work, provide a Letter of Good Standing under the Certificate of Recognition Program from the Newfoundland and Labrador Construction Safety Association.

At any time during the term of contract, when requested by the Owner, the contractor shall provide such evidence of compliance by any or all of their subcontractors.

14. PERIOD OF WORK

- (a) Notwithstanding any other provision contained in these contract documents the Contractor shall not be permitted to work during the winter months between November 15 and April 15 of the following year unless otherwise approved or directed by the Engineer.
- (b) Unless otherwise specified or approved by the Engineer, the contractor shall be mobilized and on the work site within 14 calendar days after receipt of the letter of intent.
- (c) No work is to commence before the date of the formal agreement.



GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
TENDER FORM
UNIT PRICE CONTRACT

Tender for: Town of Grand Falls-Windsor, NL
Grenfell Heights Extension
Road Upgrades and Culvert Replacement
Project # 2024 - T2

To: Mr. Chad Clendenning
P.O. Box 439
5 High Street
Grand Falls-Windsor, NL
A2A 2J8

Gentlemen,

1. Having carefully examined the site of the proposed work and all conditions affecting such, as well as the Contract Documents including the Specifications, all Drawings listed in the Specifications, all Addenda, and the Instructions to Bidders for this project,

WE, THE UNDERSIGNED, hereby offer to furnish all necessary Labour, materials, superintendence, plant, tools and equipment, and everything else required to perform expeditiously and complete in a satisfactory manner the work for the sum of

(\$) in lawful money of Canada which includes all prime costs, allowances and Government sales or excise taxes, including HST, in force at this date, except as otherwise provided in the tendering documents.

2. The Work will be substantially performed within 60 (sixty) working days from the date of notification of award of contract.
3. WE ENCLOSE HEREWITH if required by the Instructions to Bidders
 - (a) A Bid Bond in an acceptable form and correct amount issued by a company licensed to carry on such a business in the Province of Newfoundland and Labrador or

- (b) a certified cheque in the correct amount.

In the event of this tender being accepted within the time stated in Section 4 below and our failure to enter into a contract in the form hereinafter mentioned for the amount of our tender the said security may at the option of the Owner be forfeited. The forfeiting of the security does not limit the right of action of the Owner against us for our failure or refusal to enter into a contract.

- 4. IF NOTIFIED IN WRITING BY THE OWNER OF THE ACCEPTANCE OF THIS TENDER WITHIN 60 DAYS OF THE TENDER CLOSING DATE SUBJECT TO SUCH OTHER PERIOD AS MAY BE SPECIFIED IN THE TENDERING DOCUMENTS, WE WILL:--

- (a) execute the Standard Form of Construction Contract;
- (b) if specified, furnish the security for the proper completion of the work, the said security, if in the form of bonds, to be issued on an acceptable form;
- (c) complete substantially all the work included in the contract within the time and under conditions specified.

- 5. WE understand that Performance Bond, Labour and Materials Bond and Insurance as required by the Contract Documents must be provided and in force prior to the commencement of any work and satisfactory proof of such be provided to the Owner.

- 6. WE declare that the rates and prices variously set forth in the Schedule of Quantities and Prices (Appendix A) have been correctly computed for the purposed of this Tender and that they include and cover all contingencies and provisional sums and all duties, taxes, and handling charges and all transportation and all other charges.

- 7. WE confirm that the sums 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.

- 8. WE understand and agree to list the names of sub-contractors and suppliers whose bids have been used in the preparation of this tender price in the General Conditions. The list will be subject to the approval of the Owner. "By own forces" will be considered valid and satisfactory only if the tenderer is recognized by the Newfoundland and Labrador Construction Association or by the Heavy Civil Association as being a "bona fide" contractor or supplier of that particular trade or item.

WE agree to authorize the Owner to release the names of subcontractors used in our tender where such information is requested from the Owner.

WE reserve to us the right to substitute other sub-contractors for any trades in the event of any sub-contractor becoming bankrupt after the date hereof. Any such substitution shall be subject to the approval of the Owner and contingent upon satisfactory evidence of bankruptcy.

9. WE understand and agree that the Owner may order changes to the work in the form of additions or deletions in accordance with the General Conditions, Supplementary General Conditions and the intent of the Contract Documents.
10. WE hereby acknowledge receipt of the following addenda:
Addendum No.
Addendum No.
11. In order for a Tender to be valid, it must be signed by duly authorized officials as indicated in the Instructions to Bidders.

SIGNATURE OF TENDERER

Firm Name: _____

Address: _____

Postal Code: _____ E-Mail _____

Ph # _____ Fax # _____

Corporate Seal

Signing Officer

Signing Officer

Witnessed by

**APPENDIX "A"
TENDER PRICE TABLE**

Schedule of Quantities and Prices

No.	Tender Item Description	Unit	Quantity	Unit Price	Amount
	See Schedule A				
N/A - PLEASE SEE REVISED SCHEDULE OF QUANTITIES WITH BREAKDOWN IN FOLLOWING PAGES					
SUB TOTAL TENDER AMOUNT				\$	
HARMONIZED SALES TAX (HST)				\$	
TOTAL TENDER AMOUNT				\$	
(Transfer Total Tender Amount to Section 1 on page 1 of the Tender Form)				\$	

Notes:

1. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
2. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

Appendix “B”

List of Sub-Contractors

The list of sub-contractors and/or manufacturers and/or suppliers that shall be employed on this project for each part of the work identified in the table below must be completed by the bidder. The use of these sub-contractors and/or manufacturers and/or suppliers is subject to the approval of the Owner. If the work identified below is to be done by own forces indicate by filling in “own forces” in the ‘Company Name’ column. “By own forces” will be acceptable only if approved by the owner in writing prior to tender close. Requests for approval of “By own forces” must be submitted 14 days before tender close.

This appendix was completed and submitted by:

Name _____

Address _____

Dated, _____, and is an integral part of the Tender Form for Project _____

And shall be submitted as part of the Form of Tender.

<i>information in this column to be supplied by owner</i>		<i>information in this column to be supplied by bidder</i>	
Work	Category: Sub-contractor or Manufacturer or Supplier	Company Name	Address

For each category identified in the table above work experience references may be required by the owner.

SCHEDULE OF QUANTITIES
PROJECT 2024 - T1

Schedule "A" - Quantities and Prices					6-May-24
Town of Grand Falls-Windsor - Project: Grenfell Heights Extension, Road Upgrades & Culvert Replacement					
ITEM #	DESCRIPTION	UNIT	Estimated Quantity	UNIT PRICE	AMOUNT
01010	Mobilization & Demobilization	L.S.	1		
01020	Cash Allowance				
	1. Pole Relocation/Shoring/Bracing	Allow.			10,000.00
01570	Traffic Regulations				
	1. Flagperson's Wages	Hour	700		
02070	Sitework, Demolition & Removal of Structures				
	1. Removal and Dispose of Existing Storm Sewer/ Driveway Culverts (All Sizes)	M	160		
	2. Removal and Salvage Driveway Culverts (All Sizes)	M	30		
	3. Removal of Existing Rip Rap (All Types)	M ³	50		
02104	Landscaping, Seeding, Sodding, & Tree Preservation				
	1. Supply & Placing Topsoil	M ²	250		
	2. Supply & Placing Agricultural Limestone	M ²	250		
	3. Supply & Application of Fertilizer	M ²	250		
	4. Supply & Placement of Sods	M ²	250		
02223	Excavation, Trenching & Backfilling				
	1. Main Trench Excavation - Common	M ³	400		
	2. Granular Pipe Bedding - Type 2	M ³	280		
	3. Imported Common Backfill	M ³	150		
02233	Selected Granular Base & Sub Base Materials				
	1. Class "A" Granular Base	M ³	425		
	2. Class "A" Granular Base - Driveways	M ³	130		
	3. Class "A" Granular Base - Driveways (Red)	M ³	50		
	4. Class "A" Granular Base - Shouldering	M ³	125		
02250	Calcium Chloride				
	1. Calcium Chloride	Tonne	1		

Schedule "A" - Quantities and Prices					6-May-24
Town of Grand Falls-Windsor - Project: Grenfell Heights Extension, Road Upgrades & Culvert Replacement					
ITEM #	DESCRIPTION	UNIT	Estimated Quantity	UNIT PRICE	AMOUNT
02270	Rip Rap Protection				
	1. Supply & Place Hand Laid Rip Rap c/w Sodding	M ³	90		
02434	Pipe Culverts				
	Supply & Placement of Driveway Culverts				
	1. 600 MM H.D.P.E. Minimum Stiffness 320 K.Pa	M	150		
	2. 900 MM H.D.P.E. Minimum Stiffness 320 K.Pa	M	36		
02552	Hot Mix Asphalt Concrete Pavement				
	1. Asphaltic Concrete				
	1. Surface Course	tonne	420		
02574	Reshaping & Patching Asphalt Pavement				
	1. Cutting Asphalt Pavement	M	100		
	2. Removal of Asphalt (50mm Thickness)	M ²	650		
	3. Patching of Asphalt Pavement (10M ² to 100M ²)	M ²	250		
02481	Channel Excavation, Cleaning, & Deepening				
	1. Cleaning and Deepening of Existing Channels	M	1000		
02576	Pulverize Existing Asphalt Pavement (150mm asphalt thickness-total reclamation depth 300mm)	M ²	3200		
Sub Total					
H.S.T. (15%)					
Total Estimate Amount:					

AGREEMENT BETWEEN OWNER AND CONTRACTOR
for use when a Bid Price forms the
basis of payment and to be used only
with the Contract Documents of the Contract

THIS AGREEMENT made on the _____ day of _____ in the year two
thousand and _____

BY AND BETWEEN

hereinafter called the "Owner"

AND

hereinafter called the "Contractor"

WITNESSETH: that the Owner and Contractor undertake and agree as follows:

ARTICLE 1: THE WORK

The Contractor shall:

- (a) perform all the Work required by the Contract Documents for _____
which have been signed by both the parties,
- (b) do and fulfil everything indicated by this Agreement, and
- (c) commence the Work by the _____ day of _____, 20__ and
substantially perform the Work of this Contract as certified by the Owner's
Representative by the _____ day of _____, 20_____.

ARTICLE 2: CONTRACT DOCUMENTS

The following is an exact list of the Contract Documents referred to in Article A-1: (SEE
INDEX FOR LIST OF DOCUMENTS AND DRAWINGS). **See Attached**

ARTICLE 3: CONTRACT PRICE

The Owner shall pay to the contractor in lawful money of Canada for the performance of the contract, the amounts determined for each of the items of work completed at the unit price stated in the unit price table, subject to the adjustments provided herein and in the General Conditions of the contract. The quantities contained in the unit price table are approximate only, and the final payment shall be made for the actual quantities that are incorporated in or made necessary by the work covered by the Contract.

THE CONTRACT PRICE IS \$

(HST INCLUDED) Canadian funds which price shall be subject to adjustments as may be required in accordance with the General Conditions of the Contract.

ARTICLE 4: PAYMENT

- (a) Subject to applicable legislation and, where such legislation does not exist or apply, in accordance with such prescribed regulations or industry practice respecting holdback percentages and in accordance with the provisions of the Contract, the Owner shall:
- (1) make monthly payments to the Contractor on account of the Contract Price. The amounts of such payments shall be as certified by the Owner; and
 - (2) upon Substantial Performance of the work as certified by the Owner pay to the contractor any unpaid balance of holdback monies then due; and
 - (3) upon Total Performance of the Work as certified by the Owner pay to the contractor any unpaid balance of the Contract Price then due.
- (b) If the Owner fails to make payments to the Contractor as they become due under the terms of this Contract or in any award by a court, interest at the rate and in the manner specified in GC 21-Certificates and Payments, shall become due and payable until payment. Such interest shall be calculated and added to any unpaid amounts monthly.

ARTICLE 5: ADDRESSES FOR NOTICES

All communications in writing between the parties or between them and the Owner shall be deemed to have been received by the addressee if delivered to the individual or to a member of the firm, or to an officer of the Corporation for whom they are intended or if sent by post addressed as follows:

The Owner or Owner's Representative at:

Name: _____

Address: _____

Email: _____

Phone Number: _____

The Contractor at:

Name: _____

Address: _____

Email: _____

Phone Number: _____

ARTICLE 6: SUCCESSION

The General Conditions of the Contract hereto annexed, and all other aforesaid Contract Documents, are all to be read into and form part of this Agreement and the whole shall constitute the Contract between the parties and subject to law and the provisions of the Contract Documents shall ensure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representatives, successors and assigns.

IN WITNESS WHEREOF the parties hereto have executed this Agreement under their respective corporate seals and by the hands of their proper officers hereunto duly authorized.

SIGNED, SEALED AND DELIVERED

in the presence of:

OWNER:

CONTRACTOR

signed

signed

name and title

name and title

date

signed / witnessed

name and title

date

N.B. Where any legal jurisdiction, local practice or client requirement calls for proof of authority to execute this document, proof of such authority in the form of a certified copy of a resolution naming the person or persons in question as authorized to sign the Agreement for and on behalf of the Corporation or Partnership, should be attached.

A-1 Index - List of Documents and Drawings

Part II

Section 02552 ASPHALT CONCRETE PAVING

1. SCOPE OF WORK

This specification covers the requirement for the production of, placing and compaction of hot mix, hot laid asphaltic base course and asphaltic surface concrete for pavement construction. Also covered are the requirements for asphaltic levelling course to fill pavement depressions.

The base and surface course asphaltic pavement shall consist of asphaltic cement, coarse and fine material aggregate plus mineral filler if required, combined as hereafter specified, placed and compacted on a prepared base in conformity with the lines, grades, dimensions and cross-sections, as set by the Engineer.

2. MATERIALS

Asphalt Cement

Unless otherwise specified, the asphalt binder shall conform to the latest edition of AASHTO MPI entitled "Standard Specification for Performance Graded Asphalt Binder". The Performance Grade of asphalt binder shall be PG 58-28 and shall conform to the requirements of Table 1 in the AASHTO Specification. Other PG grades may be specified in individual contracts when warranted.

A copy of certification of the asphalt binder shall be provided to the Engineer upon request.

The Contractor shall supply a temperature viscosity chart from the manufacturer/supplier for each source or type asphalt binder provided. The contractor shall also request of the manufacturer/supplier any information or recommendations regarding the production and handling of the mix relating to the asphalt binder. All such requested information shall be available one week in advance of the paving operation. During the hot mix production the maximum mixing temperature shall be the lower of either; the high end temperature for recommended mixing from the temperature viscosity chart provided by manufacturer/supplier or 165° C.

Any asphalt binder, other than the asphalt binder specified must be removed from the Contractor's tanks to prevent contamination. Binders meeting the performance specifications but obtained from different sources cannot be stored in the same tank unless approved by the asphalt suppliers.

For this project an approved liquid anti-stripping additive shall be added to all Hot Mix Asphaltic Concrete at a minimum application rate of 0.5% of additive by weight of asphalt.

Coarse Aggregate

Coarse aggregate shall consist of hard, durable crushed stone or crushed gravel particles reasonably uniform in quality throughout and free from soft or disintegrated pieces. The portion of material retained on the 4.76 mm sieve shall be known as coarse aggregate. Coarse aggregate shall be washed if necessary to have clean surfaces free from coatings of foreign matter.

Coarse aggregate shall conform to the physical requirements shown in Table 1. Representative samples taken during the production of Course Aggregates for asphalt shall contain not more than 1% poor quality or deleterious material which includes the following:

TABLE 1A

<i>Material</i>	<i>Test Method</i>
Clay Lumps	CSA A23.2-3A
Low Density Particles	CSA A23.2-4A
Friable or Slatey Siltstone	CSA A23.2-15A

The aggregates shall be of such nature that a thorough coating of asphalt cement will not strip off upon contact with water as determined by the Standard Method of Test for Coating and Stripping of Bitumen-Aggregate Mixtures (ASTM D 1664-85).

Irrespective of compliance with the physical requirements of Tables 1 and 1A, any aggregate may be accepted or rejected on the basis of past field performance.

TABLE 1
Physical Requirements for Coarse Aggregates

TEST METHOD	TEST NO.	ALL COURSES
Los Angeles Abrasion - % Maximum (a)	ASTM C131	35
Absorption - % Maximum	ASTM C127	1.75
Magnesium Sulfate-Soundness - 5 cycles- % Maximum (b)	ASTM C88	12
Petrographic Number- Maximum	CSA A23.2 - 15A	135
Freeze -Thaw Test -5 Cycle - % Maximum	CSA A23.2 - 24A	8

Crushed Particles - % Maximum (c)	ASTM D 5821	90
Flat & Elongated particles % Maximum (d)	ASTM D4791	20
Loss by Washing - % Maximum Passing 0.075mm Sieve (e)	ASTM C117	1.75
Micro Deval (% Max)	ASTM D6928	20
Clay Lumps - % MAX	CSA A23.2-3A	1
Low Density Particles - % MAX	CSA A23.2-4A	1
Friable or Slatey Siltstone (% MAX)	CSA A23.2-15A	1

Notes:

- a) The ratio of the loss after 100 revolutions to the loss after 500 revolutions shall not exceed 0.265.
- b) Test to be conducted on basalt rich or highly absorptive (>1.5%) aggregates.
- c) Pieces having two or more freshly fractured faces will be considered as crushed material. Pieces with only small chips removed will not be considered as crushed.
- d) Flat and elongated pieces are those whose greatest dimension exceeds four times their least dimension.
- e) When only quarried rock is used as a source of coarse aggregate, a maximum of 2 percent passing the 0.075 mm sieve shall be permitted.

Fine Aggregate

Fine Aggregate shall consist of clean, tough, rough-surfaced grains, free from clay, loam and other foreign matter. As delivered to the mixer it shall be free from clay lumps or loosely bonded aggregations, and the individual particles shall be free from adhering dust. The portion of the material passing the 4.76 mm sieve shall be known as fine aggregate.

The aggregates shall be of such nature that a thorough coating of asphalt cement will not strip off upon contact with water as determined by the Standard Method of Test for Coating and Stripping of Bitumen-Aggregate Mixtures (ASTM D 1664-85)

Fine aggregate shall conform to the physical requirements shown in Table 2.

Materials passing the 0.075 mm Sieve: In any fine aggregate, not more than 20% of the material passing the 0.075 mm sieve shall be finer than 2 mm in size.

Irrespective of compliance with the physical requirements stated herein, any aggregate may be accepted or rejected on the basis of past field performance.

TABLE 2
Physical Requirements for Fine Aggregates

Test Method	Test No.	All Courses
Micro Deval Test for Fine aggregate % Maximum	ASTM D7428	20
Plasticity Index	ASTM D4318	0
Sand Equivalent (% Maximum)	ASTM D2419	50
Fine Aggregate Angularity (% Maximum)	ASTM C1252	45

Blending Sand

Blending sand shall consist of clean, tough, rough surface grains, free from clay, loam, or any other foreign matter.

The gradation of the blending shall be such that when used in the asphalt mix, the resulting mix shall meet the requirements of Table 2 and 3 of this specification. In any case, the blending sand shall have 100% (by dry weight) passing the 12.5 mm sieve and at least 50% (by dry weight) passing the 0.425 mm sieve.

Filler

Filler shall consist of mineral filler, hydrated lime, Portland cement, or other material as designated and currently approved for use in asphaltic concrete.

Mineral filler shall consist of thoroughly dry dust produced from rock sources acceptable for coarse aggregates approved under physical requirements listed in Table 1, and shall meet the following gradation requirements.

Percent finer than 0.020 mm	35 - 100%
Percent finer than 0.005 mm	10 - 40%
Percent finer than 0.001 mm	1 - 25 %

Anti-Stripping Additive

For this project an approved liquid anti-stripping additive shall be added to all Hot Mix Asphaltic Concrete at a minimum application rate of 0.5% of additive by weight of asphalt.

3. COMPOSITION OF MIXTURE

General Requirements for Mixture

The composition of the mixture shall be as designated by the Engineer. The mixture shall consist of uniformly graded fine and coarse aggregate and thoroughly mixed with asphalt cement as specified. Unless otherwise specified, the aggregates shall be combined in such proportions as to produce a mixture conforming to the grading and asphalt content requirements of Table 3.

Once an acceptable aggregate gradation is achieved in the crushing operation, the tolerances for subsequent production are as follows:

Tolerance for the Production of Asphalt Aggregate

Aggregate Passing 4.76 mm Sieve	± 5%
Aggregate Passing 2.00 mm Sieve	± 4%
Aggregate Passing 0.425 mm Sieve	± 4%
Aggregate Passing 0.075 mm Sieve	± 2%

Aggregate gradation and asphalt cement content of mixture shall be as specified in the approved mix design. Asphalt cement contents varying from that specified in the mix design by more than 0.25% shall be **unacceptable**.

Asphalt Levelling Course shall consist of asphaltic surface course, except on those projects where there is not item for Asphaltic Surface Course, in which case Asphaltic Base Course may be used instead.

Physical Requirements for Mixture

The aggregates and the asphalt cement shall be mixed in such proportions as to satisfy the criteria contained in Table 3. These criteria are based on the Standard Marshall Test Procedures and using a compactive effort of 75 blows on each face of the specimen, or other compactive effort necessary during the mix design.

TABLE 3 - ASPHALT AGGREGATE MIXTURES

Sieve Size	Percent Passing by Dry Weight		
	Base Course	Surface Course	Levelling Course
19.0 mm	100	100	100
12.5 mm	80 – 100	100	100
4.76 mm	35 – 75	55 - 75	55 - 75
2.00 mm	20 – 60	35 - 55	35 - 55
0.425 mm	10 – 35	18 - 30	18 - 30
0.075 mm	4 – 10	4 - 10	4 - 10
Asphalt content (% by weight of total Mixture)	5.5 – 8.0	6.0 - 7.5	6.0 - 7.5

Designation of Mixture

The Engineer shall specify or approve a job mixture within the required limit of grading and conforming to the Marshall Test requirements given in Table 4 for each mix selected. The Engineer may select one or more mix productions to suit job conditions. The actual grading of the job mix, when plotted, shall so range from course through fine sizes that will approximate the shape of the plotted average grading for corresponding mix given in Table 3. For that portion of the aggregate passing the 4.76 mm sieve, grading's which range from the maximum of one sieve to the minimum of the next larger sieve, shall not be permitted.

TABLE 4
Physical Requirements for Asphaltic Concrete Mixture (All Courses)

	<i>Maximum</i>	<i>Minimum</i>
Marshall Stability N. at 60°C		
(i) (i) Local Streets	5400	-
(ii) (ii) Collector & Arterial Streets	8000	-
Marshall Flow Index MM	4.25	2.5
% Air Voids (a)	3.5	2.0
% Voids in Compacted Material Aggregates		
(i) Levelling & Base Course	13	-
(ii) Surface Course	14	-

Notes:

(a) The test method, ASTM 2041 “Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixture” shall be modified as follows: The residual pressure in the vacuum cell shall be 30 mm ± 1 mm.

Unauthorized Tampering with Plant Settings and Materials

Any person employed by the Contractor, who in the opinion of the Engineer, alters or causes to be altered, any settings or screens of an asphalt plant after it has been calibrated, or who adds or causes to be added, any unapproved material to a stockpile of aggregate or in any way hampers the production of the mix as designed, shall at the written request of the Engineer, be forthwith removed from the project and such persons shall not again be employed in the work.

4. USE OF PITS, QUARRIES AND STOCKPILES

Should the Contractor intend to use a Drum Mix Asphalt Mixing Plant, then the designated aggregates shall be split on the 6.35 mm screen and each material shall be stockpiled separately such that intermixing of each size and type does not occur. The course aggregate stockpile shall contain no more that 15% passing the 6.35 mm screen.

5. TESTING AND INSPECTION

The Contractor shall be notified of the designated composition of the mixture not later than 10 working days after the day on which all necessary samples have been received at the designated Asphalt and Soils Laboratory and shall not commence mix production before such notification.

Where a drum mix asphalt mixing plant is used, cold feed calibration and asphalt cement pump calibration shall be performed at the start of each contract and whenever deemed necessary by the Engineer. The calibration shall be done in the presence of the plant inspector. The cold feed shall be calibrated whenever the weighing conveyor is moved.

6. EQUIPMENT

Mixing Plants

Mixing Plants should comply with the requirements of the Department of Transportation and Works Specifications 330.05.03. However, please delete Section 330.05.03.01.10 "Capacity" and replace with the following:

- Asphalt mixing plants must have a minimum rated capacity of **75 tonnes per hour** delivered to the spreader. The Town may request supporting documentation to substantiate this requirement.

Haulage Equipment

Trucks for hauling asphaltic mix shall be of the metal box type and their use shall be approved by the Engineer. The metal box shall be treated with an approved release agent and be in smooth condition with no rust scales or foreign material.

Vehicles must be equipped with tarpaulins of water repellent material (no open mesh types) of sufficient size to completely cover the truck box and overhanging the box on all sides by a minimum of 150 mm. The tarpaulin shall have enough tie-down points so that they can be properly secured, and shall be in good condition and be free of holes and tears. They shall be securely tied down as an effective barrier against rain infiltration and airflow over the HMA mixture. Tarpaulins are to be used at all times for protection of the load of Hot Mix Asphalt. Tarpaulins shall be rolled back to uncover the hot mix for inspection immediately prior to dumping into the paver. Trucks will stop ahead of paver and allow the paver to smoothly pick up the truck.

Spreading Equipment

Mechanical self-powered pavers shall be used which are capable of spreading the mixture true to line, grade and crown as specified by the Engineer.

Pavers shall be equipped with hoppers and distributing screws to place the mixture evenly in front of the screed.

Pavers shall be equipped with heated vibratory screeds and shall be capable of spreading the mixture, without segregation, in thickness of from 10 mm to 200 mm and in width from 2500 mm to 4500 mm in increments of 150 mm.

The Contractor shall provide on each paver a 3 m straight edge with a level recessed in its upper surface parallel to the lower face and capable of detecting a variation from the horizontal of 2 mm in 1000 mm.

The Term "Screed" shall mean any strike-off device operating by cutting, crowning, or other practical action which is effective on the mixture and which produces a finished surface of evenness and texture required. The screed shall have an approved vibratory application and be adjustable as to level and crown and shall be heated in an approved manner.

Pavers shall be equipped with automatic screed controls, as recommended by the paver manufacturer, for the control of longitudinal grade and transverse slope. The longitudinal grade control shall be equipped to operate from a joint matching shoe when required except when a spreader with ski is required by the specifications. Longitudinal joints shall be matched by the spreader with ski where ever a spreader with ski is required or specified. The traverse slope control shall be capable of operating from either side of the paver.

When required, a paver shall be equipped with an approved 12 m ski. Where such a ski is a flexible unit, it shall be equipped with a spring-tensioned wire extending between brackets fitted on and slightly above each end of the ski. The sensing grid shall ride on the wire, not on the ski.

Rollers

All rollers shall be of the types specifically designed for asphalt compaction. All rollers shall be in good condition and capable of reversing without backlash. They should be operated at all times by competent and experienced operators. All rollers shall be weighed in the presence of the Engineer and balance, if required immediately before commencing work and when subsequently required by the Engineer.

Steel tired rollers shall be equipped with satisfactory means to supply water to the rolls to prevent adhesion of asphalt mixture. The rear rolls of three wheeled rollers shall be not less than 1250 mm in width. Steel wheeled rollers shall weigh at least 9 tonnes and shall exert a load on the compression roll of at least 4.5 tonnes per meter of wheel length. All pneumatic tired roller shall be self-propelled and shall have not less than nine wheels revolving on two axles. The tires on the front and rear axles shall be staggered to cover the entire area over which the roller travels with a minimum overlap of 15 mm. Under working conditions, the roller shall exert a load of not less than 5 tonnes per meter of tire width on the asphalt surface. The tires shall be inflated to an air pressure of not less than 400kPa. The roller shall be equipped with an adequate scraping or cleaning device on each tire to prevent the bituminous mixture from accumulating on the tires. The roller shall be equipped with a water system which will keep all tires uniformly wet, and which will have a capacity that will provide not less than two hours continuous operation without refilling.

7. CONSTRUCTION

Preparation of Gravel Surfaces

Where paving is to take place directly on top of a gravel surface, the Contractor shall prepare the road to the satisfaction of the Engineer before paving. Not less than 200 m of prepared grade shall be maintained in front of the paver at all times, except at the end of the paving operation for that day.

When the top layer of Granular "A" was placed under the same contract as the paving, then the preparation of the Granular "A" prior to paving shall be carried out in accordance with Section 02233 "Selected Granular Base Course" of the Municipal Water, Sewer and Roads Master Construction Specifications (MWSR), latest edition. However, where the paving is to take place directly on top of materials that were not placed in the paving contract, then such preparation prior to paving as the Engineer may require shall be carried out in accordance with Section 02231 "Scarifying and Reshaping" of the MWSR.

Preparation of Paved Surfaces

When required by the Engineer, old paved surfaces shall be treated with Tack Coat prior to repaving with asphaltic concrete.

Such treatment with Tack Coat as may be required shall be carried out in accordance with Section 02547 "Tack Coat" of the MWSR Specification.

Placing of Asphaltic Courses

The base on which paving is to take place shall be cleaned of all loose or foreign material before paving may take place. The Asphaltic mixture shall be laid only upon a base which is dry or at least free of standing water, and when weather conditions are suitable. No paving shall take place during rain.

No course shall be placed upon a previously laid course less than 12 hours after final compaction of the latter, except with the permission of the Engineer in circumstances where, in his opinion, this requirement would be impractical.

No hot mix shall be placed unless the air temperature at the surface of the road is 7°C or above without written permission of the Engineer. The temperature of the mixture immediately after spreading and prior to initial rolling shall not be less than 125°C.

The longitudinal joints in the surface course shall correspond to the demarcation between driving lanes, speed change lanes, tapers, etc. indicated in the contract or as directed by the Engineer. The width of succeeding courses shall be adjusted

by an offset of width of from 150 mm to 300 mm so that longitudinal joints do not coincide.

Immediately after any course is laid and before roller compaction is started the surface and edges shall be checked and any irregularities adjusted by the addition or removal of mixture.

Pavers must be equipped with heated vibratory screeds. There should be no allowance for pavers with non-vibratory screeds. All mechanical apparatus designed to aid compaction of the mixture shall have such devices operating continuously when the mixture is being placed unless otherwise directed. When screed extensions are used, such extensions shall be designed so that the tamping or vibratory action of the screed is effectively transferred to the extension in such a manner as to provide a uniform degree of initial compaction across the full width of the freshly laid mat.

To ensure continuous operation of the pavers they shall operate at whatever speed necessary to match the output of the plant provided that a consistent and satisfactory mat is being laid. However, in no case should the speed of the paver exceed 0.7 km/h.

Mixtures may be spread by hand only in places inaccessible to the paver. Hand placing shall be from a steel dump board by means of hot shovels. Hand spreading shall be with rakes of a suitable design. The mixture shall be spread to the depth required to give the compacted design thickness after rolling.

No loads shall leave the plant so late in the day as to preclude the spreading and compacting of the mixture during the daylight. Paving of intersections, ramps and driveway tie-ins are integral with the work. No separate payment or compensation will be provided for this work.

Paving Season for Asphalt Surface Course

The paving of top course asphalt will not be permitted to be placed prior to May 24th, or after September 30th, of any given year unless otherwise approved by the Engineer.

Joints

All joints shall be made in such a manner as to ensure a thorough and continuous bond and to provide a smooth riding surface.

All foreign and all loose material shall be removed from all faces against which joints are to be made. All cold faces against which joints are to be made shall be cut back to full depth to expose a fresh vertical face, and painted with a continuous thin coating of **hot liquid asphalt cement**. A cold face is defined as an asphalt

face (longitudinal or transverse) that has dropped below 60 degrees Celsius which will be checked and **enforced** by the Construction Inspector.

Longitudinal joints shall be rolled immediately upon placement of fresh mixture and before the adjacent strip has completely cooled. The joint shall be set up with the back of the rake or lute at proper height and grade to receive the required compression under rolling.

The depth of the newly laid mat shall be adjusted to allow for compaction (generally 25%). The paver shall overlap the existing mat by at least 50mm.

On surface courses, the method of making joints shall be such that the excess material is not scattered on the surface of the freshly laid mat. Such excess material shall be carefully removed and disposed of as directed.

Transverse joints shall be checked with a 3.0m straight edge immediately after initial rolling. Any irregularity in the pavement surface at the joint shall immediately be corrected by the addition or removal of mixture. When possible, the transverse joints shall be initially rolled perpendicular to the direction of paving.

General Requirements for Compaction

The mixture shall be compacted to a density of 97% of the density of the laboratory compacted mixture based on the criteria given in item 3 "Physical Requirements for Mixture". At the beginning of the project, a rolling pattern must be established to ensure the asphalt compaction density of 97% is obtained. This rolling pattern must then be maintained throughout the remainder of the construction season and can only be modified if approved by the Owner.

It is an express condition of these specifications that all mixtures be compacted to the specified density immediately following placement. If, during the course of the paving operation, measured in-site densities fall below the specified minimum, the Contractor shall revise his operation by slowing the rate of progress of the pavers, by using additional rollers or by any other means necessary to achieve the specified degree of compaction.

Rollers should normally operate the drive wheel forward in the direction of the paving. In all cases, the production and placement of mixture shall be controlled so that all rolling shall be completed before the pavement mat temperature falls below 80 degrees Celsius. The compaction process shall be completed before sunset. While rolling longitudinal joints, steel drums or rubber tires shall extend 150 mm over the previously placed mat.

Compacting Asphalt Base and Surface Courses with Static Wheel Rollers

Where the Contractor elects to compact the mixture using static wheel rollers, a minimum of 2 steel wheel and 1 pneumatic tired rollers will be required to operate with each paver used.

The initial breakdown rolling by a steel wheel roller shall commence as soon after placing as the mixture will bear the roller without checking or undue displacement. Rolling shall start longitudinally at the lower edge and proceed toward the higher edge of the course, overlapping on successive passes. Alternate passes of the roller shall be staggered.

Intermediate rolling, using pneumatic tired roller, shall follow the breakdown roller as closely as possible. Passes shall be so arranged as to ensure overlapping successive tire paths. The Contractor shall be responsible for ensuring that the tires are in proper condition at all times to prevent pick-up of the mixture.

Finishing rolling, using a steel roller, shall be accomplished with the minimum number of passes required to produce a satisfactory surface. Rolling shall start longitudinally at the higher edge and proceed towards the lower edge.

The operating speed of static steel rollers shall not exceed 5 km/h and shall be slow enough to avoid displacement of the mix.

Compacting Asphaltic Base and Surface Courses with Vibratory Rollers

Where the Contractor elects to compact the mixture using vibratory rollers, a minimum of one vibratory roller and one pneumatic tired roller will be required to operate with each paver used. Vibratory rolling is not permitted on sections containing underground water, sanitary or storm infrastructure.

The required compaction shall be obtained by using the vibratory roller followed by the pneumatic tired roller. Rolling shall commence as soon after placing, as the mixture will bear the roller without checking or undue displacement.

In areas where a vibratory roller proves ineffective (i.e. intersections and bridge decks) compaction shall be obtained using a suitable static steel wheel roller.

Compacting Asphaltic Levelling Course

Where the Contractor elects to compact levelling course using a static steel wheel roller, or a double steel wheel vibratory roller, then a pneumatic tire roller shall be used following the steel wheel roller.

However, where the Contractor elects to compact the levelling course using a vibratory roller of the type consisting of two or more pneumatic tires and a vibratory steel drum, then a separate pneumatic roller will not be required.

Requirement for Asphaltic Levelling Course

Asphaltic Levelling Course shall be used to fill surface depression on old pavement to restore the surface to the original profile and cross section.

Patching and levelling shall not be carried out simultaneously at the same place. The patch, consisting of asphaltic base course, shall be placed and carefully compacted before levelling operations may proceed over the patch.

Requirements for Completed Asphaltic Base and Surface Courses

Each course after final compaction shall be smooth and true to the established crown and grade, shall have the average thickness specified, and shall at no point vary more than 6 mm from the specified thickness. The surface of each course shall be free deviations exceeding 3 mm as measured with a 3 m straight edge paralleling the centerline of the roadway.

Any low or defective places shall immediately be remedied by cutting out the course as required and replacing it with fresh hot mixture which shall be immediately compacted to conform to the surrounding area and shall be thoroughly bonded to it.

Segregation and Other Surface Defects

The finished surface of any Pavement Course shall have a uniform texture and be free of signs of poor workmanship.

Any obvious defects, as determined by the Engineer, will be cause for rejection of the pavement course. Such defects shall include but not be limited to the following:

- 1. Segregated Areas**
- 2. Areas of Excess or Insufficient Asphalt Cement**
- 3. Roller Marks**
- 4. Cracking or Tearing**
- 5. Improper Matching of Longitudinal and Traverse Joints**
- 6. Tire Marks**
- 7. Improperly Constructed Patches**
- 8. Improper Cross Slope**
- 9. Fuel Spills on the Mat**

Segregation is defined here as areas with predominately coarser texture than that of the surrounding pavement, and will normally be first identified visually.

Severe Segregation

Areas appear very stony, with stone against and little or no matrix. All areas of severe segregation in any pavement course will require removal and repair across the full lane width.

Medium Segregation

Area has significantly more stone than surrounding acceptable mat and usually exhibits some lack of surface matrix. Medium segregation in surface-courses will be subjected to a penalty of \$25/m² for the area in question, but for any area of medium segregation that deteriorated prior to being overlaid by another pavement course must be repaired at the Contractor's cost.

Slight Segregation

Area where the matrix is in place between the stones but there is slightly more stone in comparison with the surrounding acceptable mix. Slight segregation will normally be left in place with price adjustment. The severity of segregation can be determined through a number of test methods, as specified by the Engineer.

8. MIX DESIGN SUBMISSION

Submit mix designs to Engineer for approval 2 weeks prior to commencing work. The mix design must be no older than one year from the date of the tender award and must be developed from the actual material stockpiles crushed for the Town of Grand Falls-Windsor paving. During the paving operation the Town will be collecting asphalt samples on every street being completed. These will be forward to the paving contractor who must take immediate action on any deviations outside the mix design tolerances.

9. MEASUREMENT FOR PAYMENT

Measurement for payment will only be made for those materials accepted for use under this specification and then only when incorporated into the work at the grades, lines, and location specified by the Engineer. The Contractor shall not be paid more than 110% of the calculated quantities based on theoretical limits.

Measure for payment for the particular type of asphaltic course shall be by the weight of that material in tonnes, rounded to one decimal point.

The material shall be weighed by means of truck scales. Only loads certified by the Road Checker as being placed in the works at the required locations shall be considered in the measurement for payment.

Measurement for payment of asphalt patching and asphalt removal shall be in square metres to Section 02574.

Asphalt walkways, where required, will be measured in square metres to the thickness specified in the Contract Documents.

The preparation and cutting of joints required as a result of a break in paving operations, will not be measured for payment.

Asphalt paved ditch will be paid in tonnes of asphalt delivered to the site in accordance with Section 02552.1.2.2. An extra and over payment will be made by the lineal metre for the additional work as detailed on the standard drawings.

10. ASPHALT PLANT AND WEIGH SCALE LOCATION

Asphalt Plant and weigh scales are to be located at a distance no greater than **30 km** from point of placement of finished asphalt product.

11. WEIGHT RESTRICTIONS ON STREETS

Contractors are advised that the Town of Grand Falls-Windsor has a weight restriction on various streets. Coordination of truck routes for access to paving must be coordinated through the Town's Development Office.

12. COORDINATION OF WORK WITH OTHER CONTRACTS

The successful Contractor must coordinate their work with the Development Office at the Town of Grand Falls-Windsor and the other contractors completing contracts for the Town.

Please contact Mr. Chad Clendenning, P. Eng at 489-0415 or chad.clendenning@townofgfw.com for further details.

13. PAYMENT

Payment shall be at the respective unit price bid for this item. The price shall be full compensation for all labour, equipment and materials necessary to complete the work with this specification other than where noted above.

**GENERAL CONDITIONS
OF UNIT PRICE CONTRACT**

GENERAL CONDITIONS OF CONTRACT

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GENERAL CONDITIONS OF CONTRACT

GC 1 DEFINITIONS

1.1 Amendment

Modifications to the Open Call for Bids Documents identifying any required additions, deletions, clarifications or corrections.

1.2 Business Day

Any day other than a Saturday, Sunday or statutory holiday in the Province.

1.3 Contract Documents

The Contract Documents consist of the Instruction to Bidders, Electronic Bid Form, executed Agreement, General Conditions of Contract, Supplementary General Conditions of Contract, Specifications, Drawings and such other documents as are listed in Article A-2 of the Agreement, including all amendments thereto incorporated before their execution and subsequent amendments thereto made pursuant to the provisions of the contract or agreed upon between the parties. The Successful Bidder's bid, and any amendments to the Specification issued during the bidding period shall also form part of the Contract Documents.

1.4 Contract Price

The Contract Price means the amount stipulated in Article A3 of the Agreement, or as adjusted through approved changes under GC 19-VALUATION AND CERTIFICATION OF CHANGES IN THE WORK.

1.5 Contractor

The Contractor means the person, firm or corporation identified as such in the Agreement. The term Contractor means the Contractor or the Contractor's authorized representative as designated by the Contractor to the Owner in writing.

1.6 Materials and Equipment

The term Materials and Equipment means all materials, machinery, equipment and fixtures forming the completed work as required by the Contract Documents but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the work and normally referred to as construction machinery and equipment.

1.7 Other Contractor

GENERAL CONDITIONS OF CONTRACT

The term Other Contractor means any person, firm or corporation employed by or having a separate contract directly or indirectly with the Owner for work other than that required by the Contract Documents.

1.8 Owner

The Owner is the person or entity identified as such in the Agreement. The term Owner means the Owner or the Owner's authorized representatives as designated by the Owner.

1.9 Owner's Representative

The Owner's Representative for the purposes of administering this construction Contract shall be the designated representative of the Owner or their consultant.

1.10 Products

The term Products means all material, machinery, equipment and fixtures forming the completed work as required by the Contract Documents but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work and normally referred to as construction machinery and equipment.

1.11 Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part.

1.12 Subcontractor

A Subcontractor is a person, firm or corporation having a direct contract with the Contractor to perform a part or parts of the Work included in the Contract, or to supply products worked to a special design according to the Contract Documents, but does not include one who merely supplies products not so worked.

1.13 Substantial Performance

A Contract shall be deemed to be substantially performed

- a) when the work or a substantial part thereof is ready for use or is being used for the purpose intended; and
- b) when the work to be done under the contract is capable of completion or correction at a cost of not more than:

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- (i) three per centum of the first two hundred and fifty thousand dollars (\$250,000) of the contract price,
- (ii) two per centum of the next two hundred and fifty thousand dollars (\$250,000) of the contract price, and
- (iii) one per centum of the balance of the contract price.

Where the work or a substantial part thereof is ready for use or is being used for the purpose intended and where the work cannot be completed expeditiously for reasons beyond the control of the contractor, the value of the work to be completed shall be deducted from the contract price in determining substantial performance.

1.14 Time

- a) The Contract Time is the time stated in Article A-1(c) of the Agreement for Substantial Performance of the Work.
- b) The date of Substantial Performance of the Work is the date certified by the Owner.
- c) The term day, as used in the Contract Documents, shall mean the calendar day.
- d) The term working day means any day observed by the construction industry in the area of the place of building.

1.15 Total Performance

Total Performance shall mean when the Work has been performed to the requirements of the Contract Documents and is so certified by the Owner.

1.16 Work

Work includes the whole of the works, materials, matters and things required to be done, furnished and performed by the Contractor under the Contract.

GC 2 DOCUMENTS

- 2.1 The Contract Documents shall be signed by the Owner and the Contractor.
- 2.2 Words which have well known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.
- 2.3 In the event of conflicts between Contract Documents the following shall apply:

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- a) Drawings of a later date shall govern.
- b) Figured dimensions shown on the Drawings shall govern even though they may differ from scaled dimensions.
- c) Drawings of larger scale shall govern over those of smaller scale of the same date.
- d) Project Specifications shall govern over Drawings.
- e) The General Conditions of Contract shall govern over Project Specifications.
- f) Supplementary General Conditions shall govern over the General Conditions of the Contract.
- h) The Agreement Between Owner and Contractor shall govern over all documents.

GC 3 ADDITIONAL INSTRUCTIONS AND SCHEDULE OF WORK

- 3.1 During the progress of the Work the Owner may furnish to the Contractor such additional instructions as may be necessary to supplement the Contract Documents. All such instructions shall be consistent with the intent of the Contract Documents.
- 3.2 Additional instructions may include minor changes to the Work which affect neither Contract Price nor the Contract Time.
- 3.3 Additional instructions may be in the form of drawings, samples, models or written instructions.
- 3.4 Additional instructions will be issued by the Owner with reasonable promptness and in accordance with any schedule agreed upon.
- 3.5 The Contractor shall, within fifteen (15) days of the signing of this contract provide the Owner with a schedule of work.

GC 4 DOCUMENTS PROVIDED

- 4.1 The Contractor will be provided, without charge, a copy of Contract Documents or parts thereof, in electronic format, as are reasonably necessary for the performance of the Work.

GC 5 DOCUMENTS ON THE SITE

- 5.1 The Contractor shall keep one copy of all current Contract Documents and shop drawings on the site, in good order and available to the Owner and/or their

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representatives. This requirement shall not be deemed to include the executed Contract Documents.

GC 6 OWNERSHIP OF DOCUMENTS AND MODELS

- 6.1 All Contract documents and copies thereof, and all models are and shall remain the property of the Owner and are not to be used on other work.
- 6.2 Such documents are not to be revised in any manner without the written authorization of the Owner.
- 6.3 Models furnished by the Contractor or the Owner are the property of the Owner.

GC 7 OWNER'S DECISIONS

- 7.1 The Owner, in the first instance, shall decide on questions arising under the Contract Documents and interpret the requirements therein. Such decisions shall be given in writing.
- 7.2 The Contractor shall notify the Owner in writing within five (5) days of receipt of a decision of the Owner referred to in GC 7.1 if the Contractor believes that a decision by the Owner is in error and/or at variance with the Contract Documents. Unless the Contractor fulfills this requirement subsequent claims by the Contractor for extra compensation, arising out of the decision, will not be accepted.
- 7.3 If the question of error and/or variance is not resolved immediately, and the Owner decides that the disputed work shall be carried out, the Contractor shall act according to the Owner's written decision.

Any question of change in Contract Price and/or extension of Contract Time due to such error and/ or variance shall be decided as provided in GC 16 - Settlement of Disputes and Claims.

GC 8 DELAY

- 8.1 If it can be clearly shown that the Contractor is delayed in the performance of the work by any act or fault of the Owner or other Contractor, then the Contract Time shall be extended for such reasonable time as the Owner may decide in consultation with the Contractor. The Contractor shall be reimbursed for any costs incurred by the Contractor as a result of such a delay occasioned by the act or fault, provided that it can be clearly shown that the Contractor's forces cannot work efficiently elsewhere on the project and that the incurred cost is limited to that which could not reasonably have been avoided.

GENERAL CONDITIONS OF CONTRACT

- 8.2 If the Contractor is delayed in the performance of the Work by a Stop Work Order issued by any court or other public authority, and providing that such order was not issued as the result of any act or fault of the Contractor or of any one employed by the Contractor directly or indirectly, then the Contract Time shall be extended for such reasonable time as the Owner may decide, in consultation with the Contractor, and the Contractor shall be reimbursed for any on-site costs incurred by the Contractor as the result of such delay.
- 8.3 If the Contractor is delayed in the performance of the Work by civil disorders, labour disputes, strikes, lock-outs (including lock-outs decreed or recommended for its members by a recognized Contractor's Association, of which the Contractor is a member) fire, unusual delay by common carriers or unavoidable casualties or, without limit to any of the foregoing, by any cause of any kind whatsoever beyond the Contractor's control, then the Contract Time shall be extended for such reasonable time as may be decided by the Owner, in consultation with the Contractor, but in no case shall the extension of time be less than the time lost as the result of the event causing the delay, unless such shorter extension of time be agreed to by the Contractor.
- 8.4 No extension shall be made for delay unless written notice of claim is given to the Owner within fourteen (14) days of its commencement, providing that in the case of a continuing cause of delay only one notice shall be necessary.

GC 9 OWNER'S RIGHT TO DO WORK

- 9.1 If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of the Contract, the Owner may notify the Contractor in writing that the Contractor is in default of the Contractor's contractual obligations and instruct the Contractor to correct the default within five (5) working days of receiving the notice.
- 9.2 If the correction of the default cannot be completed within the five (5) working days specified, the Contractor shall be considered to be in compliance with the Owner's instructions if the Contractor:
- a) commences the correction of the default within the specified time, and
 - b) provides the Owner with an acceptable schedule for such correction, and
 - c) completes the correction in accordance with such schedule.
- 9.3 If the Contractor fails to comply with the provisions GC 9.1 and GC 9.2 the Owner may, without prejudice to any other right or remedy the Owner may have, correct

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such default and may deduct the cost thereof from the payment then or thereafter due the Contractor.

GC 10 OWNER'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

10.1 If the Contractor should be adjudged bankrupt, or makes a general assignment for the benefit of creditors or if a receiver is appointed on account of the Contractor's insolvency, the Owner may, without prejudice to any other right or remedy the Owner may have, by giving the Contractor written notice, terminate the Contract.

10.2 The Owner may notify the Contractor in writing that the Contractor is in default of the Contractor's contractual obligations, if the Contractor.

- a) fails to proceed regularly and diligently with the Work; or
- b) without reasonable cause wholly suspends the carrying out of the Work before the completion thereof, or
- c) refuses or fails to supply sufficient properly skilled workers or proper quality of work, products or construction machinery and equipment for the scheduled performance of the Work within five (5) working days of receiving written notice from the Owner, except in those cases provided in GC 8 - Delay; or
- d) fails to make payments due to the Contractor's Subcontractors, suppliers or workers; or
- e) persistently disregards laws or ordinances, or the Owner's instructions; or
- f) otherwise violates the provisions of the Contract to a substantial degree.

Such written notice by the Owner shall instruct the Contractor to correct the default within five (5) working days from the receipt of the written notice.

10.3 If the correction of the default cannot be completed within the five (5) working days specified, the Contractor shall be considered to be in compliance with the Owner's instructions if the Contractor:

- a) commences the correction of the default within the specified time,
- b) provides the Owner with an acceptance schedule for such correction, and
- c) completes the correction in accordance with such schedule.

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- 10.4 If the Contractor fails to correct the default within the time specified or subsequently agreed upon, the Owner may, without prejudice to any other right or remedy the Owner may have, stop the Work or terminate the Contract.
- 10.5 If the Owner terminates the Contract under the conditions set out above, the Owner is entitled to:
- a) take possession of the premises and products and utilize the temporary buildings, plants, tools, construction machinery and equipment, goods, materials, intended for, delivered to and placed on or adjacent to the work and may complete the Work by whatever method the Owner may deem expedient but without undue delay or expense;
 - b) withhold any further payments to the Contractor until the Work is finished.
 - c) upon Total Performance of the Work, charge the Contractor the amount by which the full cost of finishing the Work including compensation to the Owner for the Owner's additional services and a reasonable allowance to cover the cost of any corrections required by GC 31 - Warranty, exceeds the unpaid balance of the Contract Price; or if such cost of finishing the Work is less than the unpaid balance of the Contract Price, pay the Contractor the difference.
 - d) on expiry of the warranty period, charge the Contractor the amount by which the cost of corrections under GC 31 - Warranty exceeds the allowance provided for such corrections, or if the cost of such corrections is less than the allowance, pay the Contractor the difference.

GC 11 CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

- 11.1 If the Owner should be adjudged bankrupt, or makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of the Owner's insolvency, the Contractor may, without prejudices to any other right or remedy the Contractor may have, by giving the Owner written notice, terminate the Contract.
- 11.2 If the Work should be stopped or otherwise delayed for a period of thirty (30) calendar days or more under an order of any court, or other public authority, and providing that such order was not issued as the result of any act or fault of the Contractor or of any one directly or indirectly employed by the Contractor, the Contractor may, without prejudice to any other right or remedy the Contractor may have, by giving the Owner fifteen (15) calendar days written notice, terminate the Contract.
- 11.3 The Contractor may notify the Owner in writing that the Owner is in default of the Owner's contractual obligations if:

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- a) The Owner fails to issue a certificate in accordance with GC 21 - Certificates and Payments;
- b) The Owner fails to pay to the Contractor when due any amount certified by the Owner and verified by the audit of the Owner.

Such written notice shall advise the Owner that if such default is not corrected within fifteen (15) calendar days from the receipt of the written notice the Contractor may, without prejudice to any other right or remedy the Contractor may have, stop the work and/ or terminate the contract.

- 11.4 If the Contractor terminates the Contract under the conditions set out above, the Contractor shall be entitled to be paid for all Work performed and for any loss sustained upon products and plant supplied with reasonable overhead, profit and damages.

GC 12 OTHER CONTRACTORS

- 12.1 The Owner reserves the right to let separate contracts in connection with the project of which the Work is part.
- 12.2 The Owner shall co-ordinate the work and insurance coverages of Other Contractors as it affects the Work of this Contract.
- 12.3 The Contractor shall coordinate the Contractor's work with that of Other Contractors and connect as specified or shown in the Contract Documents. Any change in the costs incurred by the Contractor in the planning and performance of such work which was not shown or included in the Contract documents as of the date of signing the Contract, shall be evaluated as provided under GC 19 - Valuation and Certification of Changes in the Work.
- 12.4 The Contractor shall report to the Owner any apparent deficiencies in other Contractor's work which would affect the Work of this Contract immediately when they come to the Contractor's attention and shall confirm such report in writing. Failure by the Contractor to so report shall invalidate any claims against the Owner by reason of the deficiencies of Other Contractor's work except as to those of which the Contractor was not reasonably aware.

GC 13 ASSIGNMENT

- 13.1 The Contractor shall not assign the Contract or any part thereof or any benefit or interest therein or thereunder with/without the written consent of the Owner.

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GC 14 SUBCONTRACTORS

- 14.1 The Contractor agrees to preserve and protect the rights of the Owner under the Contract with respect to any work to be performed under subcontract. The Contractor shall:
- a) require the Contractor's Subcontractors to perform their work in accordance with and subject to the terms and conditions of the Contract Documents, and
 - b) be fully responsible to the Owner for acts and omissions of the Contractor's Subcontractors and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the Contractor.

The Contractor therefore agrees that the Contractor will incorporate all the terms and conditions of the Contract Documents into all Subcontract Agreements the Contractor enters into with the Contractor's Subcontractors.

- 14.2 The Contractor shall employ those Subcontractors proposed by the Contractor in writing and accepted by the Owner prior to the signing of the Contract for such portions of the work as may be designated in the bidding requirements.
- 14.3 The Owner may, for reasonable cause, object to the use of a proposed Subcontractor and require the Contractor to employ another.
- 14.4 In the event that the Owner requires a change from any proposed Subcontractor the Contract Price shall be adjusted by the difference in cost occasioned by such required change.
- 14.5 The Contractor shall not be required to employ as a Subcontractor any person or firm to whom the Contractor may reasonably object.
- 14.6 The Owner may, upon reasonable request and at the Owner's discretion, provide to a Subcontractor information as to the percentage of the Subcontractor's work which has been certified for payment.
- 14.7 Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the Owner.

GC 15 EMERGENCIES

- 15.1 The Owner has authority in an emergency to stop the progress of the Work whenever in the Owner's opinion such stoppage may be necessary to ensure the safety of life, or the Work, or neighbouring property. This includes authority to make

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changes in the Work, and to order, assess and award the cost of such work, extra to the Contract or otherwise, as may in the Owner's opinion be necessary. The Owner shall, within two (2) business days, confirm in writing any such instructions. In such a case if work has been performed under direct order of the Owner, the Contractor shall keep the Contractor's right to claim the value of such work.

- 15.2 Should the Work be stopped by civil pickets, or other disorder, neither the Owner nor the Contractor shall have claim for change in the price of the Contract.
- 15.3 When requested in writing by the Owner, the Contractor shall, at no additional cost to the Owner, make appropriate alterations in the method, Product, or work force at any time the Owner considers the Contractor's actions to be unsafe, or damaging to either the Work or existing facilities or the environment.

GC 16 SETTLEMENT OF DISPUTES AND CLAIMS

- 16.1 In the case of any dispute or claim arising between the Owner and the Contractor as to their respective rights and obligations under the Contract, either party hereto may give the other written notification of such dispute or claim. The notification of dispute or claim shall be made within fourteen (14) calendar days of the dispute or cause of action arising. If the dispute or claim cannot be resolved to the satisfaction of both parties, either party may refer the matter to such judicial tribunal as the circumstances require.
- 16.2 Legal proceedings shall not take place until after the performance or the substantial performance of the disputed work except:
- a) when the dispute concerns a certificate for payment.
 - b) where either party can show that the matter in dispute requires immediate consideration while evidence is available.
 - c) in the case of legal proceedings, where the action may become prescribed by reason of delay.

GC 17 INDEMNIFICATION

- 17.1 Except as provided in GC 17.2, the Contractor shall be liable for, and shall indemnify and hold harmless the Owner against all claims, demands, losses, costs, damages, actions, suits or proceedings, whatsoever arising under any statute or Common Law:
- a) in respect of personal injury to or the death of any person whomsoever arising out of or in the course of or caused by the carrying out of the Work; and

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- b) in respect of any injury or damage whatsoever to any property, real or personal or any chattel real, insofar as such injury or damage arises out of or in the course of or by reason of the carrying out of the Work.

17.2 The Contractor shall not be liable under GC 17.1 if the injury, death, loss or damage is due to any act or neglect of the Owner.

GC 18 CHANGES IN THE WORK

18.1 The Owner may make changes by altering, adding to, or deducting from the Work, with the Contract Price and the Contract Time being adjusted accordingly.

18.2 Except as provided in GC 15 - Emergencies, no change shall be made without a written order from the Owner and no claim for an addition or deduction to the Contract Price or change in the Contract Time shall be valid unless so ordered and at the same time valued or agreed to be valued as provided in GC 19 - Valuation and Certification of Changes in the Work.

GC 19 VALUATION AND CERTIFICATION OF CHANGES IN THE WORK

19.1 The value of any change shall be determined in one or more of the following methods:

- a) by unit prices subsequently agreed upon
- b) by estimate and acceptance in a lump sum
- c) by cost and a fixed or percentage fee.

In the case of changes in the Work valued as outlined in GC 19.1 (a), where Unit Prices are provided in the Contract for Work to be done, those Unit Prices shall be used in determining the value of the change. If any Unit Price is not provided in the Contract for the Work, a Unit Price shall be subsequently agreed upon or an alternate method of determining the value of the Work shall be used.

In the case of changes in the Work valued as outlined in GC 19.1 (b), the Contractor shall submit an itemized estimate for all materials and labour to complete the extra work.

In the case of changes in the Work valued as outlined in GC 19.1 (c), the Contractor shall submit detailed invoices, vouchers and time sheets for all materials and labour to complete the extra work.

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Subject to the provisions of GC 19.2, when work is performed by the Contractor's own forces the Contractor's markup for overhead shall be ten (10) percent and the Contractor's profit ten (10) percent of the agreed or actual cost of the change. When work is performed by one of the Contractor's Subcontractors, the Subcontractor's markup for overhead shall be ten (10) percent of the agreed or actual cost of the change plus five (5) percent for profit. The Contractor's markup for overhead and profit shall be ten (10) percent of the Subcontractor's total price.

- 19.2 Notwithstanding the provisions of GC 19.1, in case of changes in the Work, (a) where unit prices are provided in the Contract for work to be done those unit prices shall be used in determining the value of any change and (b) the amount charged for equipment rentals shall be that provided in the Contract and no additional amount shall be paid as markup for overhead or profit for the Contractor or Subcontractor.
- 19.3 Notwithstanding the provisions of GC 19.1, in case of purchase of left over product or materials, the Contractor's profit shall be ten (10) percent of the cost as supported by invoices or vouchers, or agreed upon price. No markup for overhead shall be added. This applies to material or product that are supplied only and not installed on site.
- 19.4 When a change in the Work is proposed or required the Contractor shall present to the Owner for approval the Contractor's claim for any change in the Contract Price and/or change in the Contract Time. The Owner shall be satisfied as to the correctness of such claim and, when approved shall issue a written order to the Contractor to proceed with the change. The value of work performed in the change shall be included for payment with the regular certificate for payment.
- 19.5 In the case of changes in the Work to be paid for under GC 19.1, the form of presentation of costs and methods of measurement shall be agreed to by the Owner and Contractor before proceeding with the change. The Contractor shall keep accurate records, as agreed upon, of quantities or costs and present an account of the cost of the change in the Work, together with vouchers where applicable.
- 19.6 If the method of valuation, measurement and the change in Contract Price and/or change in Contract Time cannot be promptly agreed upon, and the change is required to be proceeded with then the Owner shall determine the method of valuation, measurement and the change in Contract Price and/or Contract Time subject to final determination in the manner set out in GC 16 - Settlement of Disputes and Claims. In this case the Owner shall issue a written authorization for the change setting out the method of valuation and if by lump sum the Owner's valuation of the change in Contract Price and/or Contract Time.

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- 19.7 In the case of a dispute in the valuation of a change authorized in the Work pending final determination of such value, the Owner shall certify the value of work performed and include the amount with the regular certificates for payment.
- 19.8 It is intended in all matters referred to above that both the Owner and Contractor shall act promptly.
- 19.9 Credits will be based on the net cost of material and labour or the net difference in unit price quantities.

GC 20 APPLICATION FOR PAYMENT

- 20.1 Applications for payment on account as provided for in Article A-4 of the Agreement may be made monthly as the Work progresses.
- 20.2 Application for payment shall be made monthly on a date to be agreed between the Owner and the Contractor and the amount claimed shall be for the value, proportionate to the amount of the Contract, of work performed and products delivered to the site at that date.
- 20.3 The Contractor shall submit to the Owner, before the first application for payment, a schedule of values of the various parts of the Work, aggregating the total amount of the Contract Price and divided so as to facilitate evaluation of applications for payment.
- 20.4 The revised schedule, if required, shall be made out in such form, and supported by such evidence as to its correctness, as the Owner may reasonably direct, and when approved by the Owner shall be used as the basis for application for payment.
- 20.5 When making application for payment, the Contractor shall submit a statement based upon this schedule. Claims for products delivered to the site but not yet incorporated into the Work shall be supported by such evidence as the Owner may reasonably require to establish the value and delivery of the products.
- 20.6 Applications for release of holdback monies following the Substantial Performance of the Work and the application for final payment shall be made at the time and in the manner set forth in GC 21 - Certificates and Payments.

GC 21 CERTIFICATES AND PAYMENTS

- 21.1 The Owner shall, within ten (10) days of receipt of an application for payment from the Contractor submitted in accordance with GC 20 - Application for Payment, issue a certificate for payment in the amount applied for or such other amount as

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the Owner shall determine to be properly due. If the Owner amends the application the Owner shall promptly notify the Contractor in writing, giving the Owner's reasons for the amendment.

- 21.2 The Owner shall within twenty-one (21) calendar days of the issuance of a certificate for payment by the Owner, make payment to the Contractor on account, in accordance with the provisions of the Agreement.
- 21.3 If payment is not made by the Owner within sixty (60) calendar days of issuance of a certificate for payment, the Owner will be liable for interest on the amount owing at the rate of Bank of Canada Prime rate +1 % per annum from the sixty-first (61st) day to the date of payment.
- 21.4 Notwithstanding any other provisions of this Contract:
- a) If on account of climatic or other conditions reasonably beyond the control of the Contractor there are items of work that cannot be performed, the payment in full for that which has been performed as certified by the Owner shall not be withheld or delayed by the Owner on account thereof, but the Owner may withhold from the Contract Price until the remaining work is finished an amount sufficient to cover the cost to the Owner of performing such remaining work and to adequately protect the Owner from claims.
 - b) Holdbacks will be released on the following conditions:
 - i) a copy of the contract between the Subcontractor and the Contractor, or some other suitable Document satisfactory to the Owner, must be presented to the Owner,
 - ii) the Subcontract is completed without deficiencies;
 - iii) the warranty for the Subcontract will not start until Substantial Performance of the General Contract;
 - iv) the Contractor provides an approved statutory declaration that all monies have been paid to the Subcontractors;
 - v) the Owner will, at that time, release the total amount specified on the Sub-contractor's Contract.
- 21.5 Notwithstanding the provisions of GC 21.4 (b) and notwithstanding the wording of such certificate the Contractor shall ensure that such work is protected pending the Total Performance of the Contract and be responsible for the correction of any defects in it regardless of whether or not they were apparent when such certificates were issued.

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- 21.6 The Owner shall, within ten (10) days of receipt of an application from the Contractor for a Certificate of Substantial Performance, make an inspection and assessment of the work to verify the validity of the application. The Owner shall within seven (7) days of Owner's inspection notify the Contractor of the Owner's approval or disapproval of the application. When the Owner finds the Work to be Substantially Performed the Owner shall issue such a certificate. The date of this certificate shall be the date of Substantial Performance of the Contract. Immediately following the issuance of the Certificate of Substantial Performance, the Owner, in consultation with the Contractor shall establish a reasonable date for the Total Performance of the Contract.
- 21.7 Following the issuance of the Certificate of Substantial Performance and upon receipt from the Contractor of all documentation called for in the Contract Documents the Owner shall issue a certificate for payment of holdback monies. The release of holdback monies authorized by this certificate shall become due and payable on the day following the expiration of the Statutory Limitation Period stipulated in the Mechanics' Lien Act applicable to the place of Work, providing that no lien or privilege claims against the Work exist and the Contractor has submitted to the Owner a sworn statement that all accounts for labour, subcontracts, products, construction machinery and equipment and any other indebtedness which may have been incurred by the Contractor in the Substantial Performance of the Work and for which the Owner might in any way be held responsible have been paid in full except holdback monies properly retained.
- 21.8 The Owner shall, within ten (10) days of receipt of an application from the Contractor for payment upon Total Performance of the Contract, make an inspection and assessment of the Work to verify the validity of the application. The Owner shall within seven (7) days of the Owner's inspection notify the Contractor of the Owner's approval or disapproval of the application. When the Owner finds the Work to be totally performed to the Owner's satisfaction the Owner shall issue a Certificate of Total Performance and certify for payment the remaining monies due to the Contractor under the Contract less any holdback monies which are required to be retained. The date of this certificate shall be the date of Total Performance of the Contract. The Owner shall, within thirty (30) days of issuance of such certificate, make payment to the Contractor in accordance with the provisions of Article A-4 of the Agreement.
- 21.9 The release of any remaining holdback monies shall become due and payable on the day following the expiration of the Statutory Limitation Period stipulated in the Mechanics' Lien Act applicable to the place of building or where such legislation does not exist or apply in accordance with such other legislation, regulations governing privileges, industry practice or such other provisions which may be agreed to between the parties, provided that no claims against the Work exist and the Contractor has submitted to the Owner a sworn statement that all accounts for labour, Subcontracts, products, construction machinery and equipment and any other indebtedness which may have been incurred by the Contractor in the Total

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Performance of the Work and for which the Owner might in any way be held responsible, have been paid in full except holdback monies properly retained.

21.10 No certificate for payment, or any payment made thereunder, nor any partial or entire use of occupancy of the Work by the Owner shall constitute an acceptance of any work or products not in accordance with the Contract Documents.

21.11 The issuance of the Certificate of Total Performance shall constitute a waiver of all claims by the Owner against the Contractor except those previously made in writing and still unsettled, if any, and those arising from the provisions of GC 31 - Warranty, or those arising from negligence on the part of the Contractor.

The acceptance of the Certificate of Total Performance or of the payment due thereunder shall constitute a waiver of all claims by the Contractor against the Owner except those made in writing prior to the Contractor's application for payment upon Total Performance of the Contract and still unsettled, if any.

21.12 The holdback to be used by the Owner when issuing certificate for payment will be ten (10) percent of the value of the Work completed at the date of the Contractor's claim.

21.13 Notwithstanding the provisions of GC 21.3 or any other provision of this Contract, the Owner may:

- a) in the event of a claim by the Owner against the Contractor for damages arising out of the performance or non-performance of the Contract, withhold payment of any amount equal to the alleged damages until the liability for damages is established and no amount of interest will be paid on amounts held under this clause;
- b) set-off amounts owing by the Contractor to the Owner,
- c) following the issuance of the Certificate of Substantial Performance, withhold payment of an amount equal to twice the cost, as estimated by the Owner, of remedying deficiencies until the issuance of a Certificate of Total Performance and no amount of interest will be paid on amounts held under this clause.

GC 22 TAXES AND DUTIES

22.1 The Contractor shall pay all government sales taxes, customs duties and excise taxes with respect to the Contract. All taxes and duties shall be added according to this GC.

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Contractors are advised that the Owner is not exempt from the Harmonized Sale Tax (HST). The Owner will pay the HST to the Contractor with each regular progress billing.

- 22.2 Any increase or decrease in costs to the Contractor due to changes in such taxes and duties after the date of the Agreement and up to the agreed date of completion shall increase or decrease the Contract Price accordingly. The Contractor is to co-operate with the Owner and permit access to books and records in order to establish the amount of such taxes involved.
- 22.3 The Contractor shall maintain full records of the Contractor's estimates of and actual cost to the Contractor of the Work together with all proper open call for bids, quotations, contracts, correspondence, invoices, receipts and vouchers relating thereto, shall make them available to audit and inspection by the Owner, the Auditor General for Newfoundland and Labrador or by persons acting on their behalf, shall allow them to make copies thereof and to take extracts therefrom, and shall furnish them with any information which they may require from time to time in connection with such records.

GC 23 LAWS, NOTICES, PERMITS AND FEES

- 23.1 The laws of the place of Work shall govern the Work.
- 23.2 The Contractor shall obtain all permits, licenses and certificates and pay all fees required for the performance of the Work which are in force at the date of the Open Call for Bids submission (but this shall not include the obtaining of permanent easements or rights of servitude).
- 23.3 The Contractor shall give all required notices and comply with all laws, ordinances, rules, regulations, codes and order of all authorities having jurisdiction relating to the Work, to the preservation of the public health and construction safety which are or become in force during the performance of the Work.
- 23.4 The Contractor shall not be responsible for verifying that the Contract Documents are in compliance with the applicable laws, ordinances, rules, regulations and codes relating to the Work. If the Contract Documents are at variance therewith, or changes which require modification to the Contract Documents are made to any of the laws, ordinances, rules, regulations and codes by the authorities having jurisdiction subsequent to the date of the Open Call for Bids submission, any resulting change in the cost shall constitute a corresponding change in the Contract Price. The Contractor shall notify the Owner in writing requesting direction immediately any such variance or change is observed by the Contractor.
- 23.5 If the Contractor fails to notify the Owner in writing and obtain the Owner's direction as required in GC 23.4 and performs any work knowing it to be contrary to any

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laws, ordinances, rules, regulations, codes and orders of any authority having jurisdiction, the Contractor shall be responsible for and shall correct any violations thereof and shall bear all costs, expense and damages, attributable to the Contractor's failure to comply with the Provisions of such laws, ordinances, rules, regulations, codes and orders.

- 23.6 The Contractor may be required to carry the cost of a municipal permit related to performance of the Work. If a municipal permit is requested, the Contractor shall advise the Owner of the request and where directed by the Owner, shall pay for and obtain a permit related to the conduct of the Work and the Owner will issue a change order to allow for payment of the cost of obtaining the permit. Nothing in this clause relieves the Contractor of its obligation to make such filings and to submit such documents and notices with respect to the Work on behalf of the Owner as are otherwise required by the municipality. All other permits are to remain the responsibility of the contractor.

GC 24 PATENT FEES

- 24.1 The Contractor shall pay all royalties and patent license fees required for the performance of the Contract and such royalties or fees shall be deemed to have been included in the contract price. The Contractor shall hold the Owner harmless from and against all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of the Contractor's performance of the Contract which are attributable to an infringement or an alleged infringement of any patent or invention by the Contractor or anyone for whose acts the Contractor may be liable.
- 24.2 The Owner shall hold the Contractor harmless against all claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of the Contractor's performance of the Contract which are attributable to an infringement or an alleged infringement of any patent or invention in executing anything for the purpose of the Contract, the model, plan or design of which was supplied to the Contractor by the Owner.

GC 25 WORKPLACE NL

- 25.1 At the time of bid submission, and prior to receiving payment on Substantial and Total Performance of the Work, the Contractor shall provide evidence of compliance with all requirements of the Province in the place of the Work with respect to worker's compensation including payments due thereunder.
- 25.2 At any time during the term of Contract, when requested by the Owner, the Contractor shall provide such evidence of compliance by the Contractor and any or all of the Contractor's Subcontractors.

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25.3 Non incorporated companies i.e.: partnerships, sole proprietorships, and independent operators must provide coverage for any employees and personal coverage for the principal(s).

GC 26 LIABILITY INSURANCE

26.1 Contractors are advised that the Bid Documents contain a Certificate of Insurance indicating the type and limit of liability (GC 26) and property insurance (GC 27) required for this project. The successful bidder will be required prior to commencement of work, to have the Certificate of Insurance completed by the Contractor's insurance company and delivered to the Owner not later than 30 days after the award of the contract. The Contractor shall not commence any work until they obtain, at their expense, all required insurances as specified on the Certificate of Insurance. Such insurance must have the approval of the Owner and be to the limits, form and amounts specified.

26.2 The Contractor's Insurance Company or its agent shall be licensed to do business in the Province of Newfoundland & Labrador.

26.3 The Contractor will not permit any Subcontractor to commence work on this Project until the same insurance requirements have been complied with by such Subcontractors.

26.4 If the Contractor should fail to effect and keep in force the policies referred to, or any other insurance which may be required to effect under the terms of the Contract, the Owner may effect and keep in force any such insurance and pay the premiums necessary for the purpose and from time to time deduct the amount so paid from any payments due to the Contractor to recover the same as a debt due from the Contractor.

26.5 Comprehensive General Liability Insurance

a) Without restricting the generality of GC 17 - Indemnification, the Contractor shall provide and maintain, either by way of a separate policy or by an endorsement to their existing policy, Commercial Liability Insurance acceptable to the Owner and subject to limits set out in detail in the Certificate of Insurance inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof.

b) This insurance shall include as an additional insured His Majesty the King in Right of Newfoundland and Labrador, the Owner, and the Occupant/Operator of the property. Such insurance must have the approval of the Owner and be to the limits, form and amounts specified. The Contractor will not permit any Subcontractor to commence work on this

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Project until the same insurance requirements have been compiled with by the Subcontractor.

- c) The insurance shall also include as Unnamed Insureds the Owner Representative of the Owner with respect to work performed by the Contractor, but excluding professional liabilities associated with such architectural and engineering consultants.
- d) The Comprehensive General Liability Insurance will not be limited to, but shall include coverage for:
 - 1) premises and operations liability
 - 2) products or completed operations liability
 - 3) blanket contractual liability
 - 4) broad form property damage
 - 5) cross liability
 - 6) elevator and hoist liability
 - 7) contingent employer's liability
 - 8) personal injury liability
 - 9) liability with respect to non-owned licensed vehicles
 - 10) shoring, blasting, excavating, underpinning, demolition, pile driving and caisson work, work below ground surface, tunneling and grading as applicable.
- e) The insurance shall include a minimum limit of \$5,000,000.00 inclusive for all claims for Bodily Injury or Property. Reduced limits for any part of the coverage is not acceptable.
- f) A deductible up to a maximum amount of \$5,000.00 will be permitted on blasting and demolition with the Contractor paying the deductible amount of each claim.
- g) Completed operations liability shall be maintained continuously until twelve (12) months from the date the Owner issues a Certificate of Substantial Performance.

26.6 Automobile Liability Insurance

- a) The Contractor shall provide and maintain liability insurance in respect of (i) owned licensed vehicles and (ii) leased vehicles, subject to limits set out in this Contract.
- b) This insurance shall include a minimum limit of \$2,000,000.00 inclusive for all claims for Bodily Injury or Property Damage arising from one accident.
- c) This insurance shall include a schedule of vehicles or a statement taken from the policy that all vehicles are covered.

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26.7 Aircraft and or Watercraft Liability Insurance

The Contractor shall provide and maintain liability insurance with respect to owned and non-owned aircraft and watercraft, as may be applicable, subject to limits set out in this Contract. Such insurance shall be in the names of the Contractor, His Majesty the King in Right of Newfoundland and Labrador, and the Owner as defined in 26.5 (b) and (c) where they have an insurable interest in the use and operation of such aircraft and watercraft.

26.8 Airport Contractor Liability Insurance

The Contractor shall provide and maintain liability insurance with respect to work completed on the tarmac side of an airport and/or inside an airport and the area outside an airport if this is not provided within the Contractor's Commercial General Liability Insurance.

26.9 Environmental Impairment Liability Insurance

a) The Contractor shall provide and maintain liability insurance with respect to environmental contamination/remediation at a work site.

b) The insurance shall include a minimum limit of \$2,000,000.00

26.10 All insurance policies shall contain an endorsement requiring notification of His Majesty the King and the Named Insured, in writing, thirty (30) days prior to cancellation of any policy or material change, except in the event of non-payment where policy conditions dealing with termination will apply.

GC 27 PROPERTY INSURANCE

27.1 The Contractor shall provide and maintain property insurance for contracts over \$25,000, acceptable to the Owner, insuring the full value of the Work in the amount of the Contract Price (excluding of HST) and the full value as stated of products for incorporation into the work. The insurance shall include as additional insured the Owner and His Majesty the King in Right of Newfoundland and Labrador.

27.2 The Contractor's Insurance Company or its agent shall be licensed to do business in the Province of Newfoundland & Labrador.

27.3 Such coverage shall be provided for by **either** Broad Form Builders' Risks Policy or an Installation Floater **or** Piers, Wharves, and Docks Rider.

27.4 The policies shall insure on a Broad Form basis direct loss or damage subject to any exclusions specified in the Contract. Such coverage shall apply to:

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- a) all products, labour, and supplies of any nature whatsoever, the property of the Insureds or of others for which the Insureds may have assumed responsibility, to be used in or pertaining to the site preparations, demolitions of existing structures, erections and/or fabrication and/or reconstruction and/or repair of the insured project, while on the site or in transit, subject to the exclusion of the property specified.
- b) the installation, testing and any subsequent use of machinery and equipment including boilers, pressure vessels or vessels under vacuum.
- c) damage to the Work caused by an accident to and/or the explosion of any boiler(s) or pressure vessel(s) forming part of the work.
- d) damage to Work caused by earthquake or flooding.

Such insurance may have a deductible clause but the amount of the deductible shall not exceed \$2,500.00.

Such coverage shall exclude construction machinery, equipment, temporary structural and other temporary facilities, tools, and supplies used in the construction of the work and which are not expendable under the Contract.

- 27.5 Policies provided shall contain an endorsement requiring notification of His Majesty the King and the Named Insured, in writing, thirty (30) days prior to cancellation of any policy or material change of coverage except in the event of non-payment where policy conditions dealing with termination will apply.
- 27.6 All such insurance shall be maintained continuously until the date the Owner issues a Certificate of Total Performance and be extended and kept in force during any Period of Delay. All such insurance shall provide for the Owner to take occupancy of the work or any part thereof during the term of the insurance. Any increase in the cost of this insurance arising out of such occupancy shall be at the Owner's expense.
- 27.7 The policies shall provide that in the event of a loss, payment for damage to the Work shall be made to the Owner and the Contractor as their respective interests may appear. The Contractor shall act on behalf of the Owner and the Contractor for the purpose of adjusting the amount of such loss with the Insurers. On the determination of the extent of the loss, the Contractor shall immediately proceed to restore the Work and shall be entitled to receive from the Owner (in addition to any sum due under the Contract) the amount at which the Owner's interest in the restoration work has been appraised, such amount to be paid as the work of restoration proceeds and in accordance with the Owner's certificates for payment. Damage shall not affect the rights and obligations of either party under the Contract

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except that the Contractor shall be entitled to such reasonable extension of time for Substantial and Total Performance of the work as the Owner may decide.

- 27.8 The Contractor shall be responsible for any deductible amounts under the policies and the payment of monies up to the deductible amount made in a satisfaction of a claim shall be borne by the Contractor.
- 27.9 The Contractor shall be responsible for providing such additional insurance as may be required to protect the insured against loss on items excluded from the policies referred to in the Contract. The provisions of the insurance coverage requirements contained in the Contract are not intended to cover all of the Contractor's obligations under GC 17 Indemnification. Any additional risk management measures or additional insurance coverages the Contractor may deem necessary to fulfill the Contractor's obligations under GC 17 shall be at the Contractor's discretion and expense.
- 27.10 The successful bidder will be required prior to commencement of work, to have the Certificate of Insurance completed by the Contractor's insurance company and delivered to the Owner not later than 30 days after the award of the contract. Such insurances must have the approval of the Owner and be to the limits, form and amounts specified. The Contractor will not permit any Subcontractor to commence work on this Project until the same insurance requirements have been complied with by the Subcontractor.
- 27.11 The interest of the Subcontractors are to be specifically included in the policy and the policy shall contain the following clause:
"Loss, if any, payable to the Owner and the Insured, as their respective interests may appear."
- 27.12 The Contractor further agrees that so much of the money due to them under and by virtue of this Contract as shall be considered necessary by the Owner may be retained by the Owner until all such suits or claims for damages shall have been settled and evidence to that effect furnished to the satisfaction of the Owner.
- 27.13 If the Contractor should fail to effect and keep in force the policies referred to, or any other insurance which may be required to effect under the terms of the Contract, the Owner may effect and keep in force any such insurance and pay the premiums necessary for the purpose and from time to time deduct the amount so paid from any payments due to the Contractor to recover the same as a debt due from the Contractor.

GC 28 PROTECTION OF WORK AND PROPERTY

- 28.1 The Contractor shall protect the property adjacent to the Project site from damage as the result of the Contractor's operations under the Contract.

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- 28.2 The Contractor shall protect the Work and the Owner's property from damage and shall be responsible for any damage which may arise as the result of the Contractor's operations under the Contract except damage which occurs as the result of:
- a) errors in the Contract Documents, and/or
 - b) acts or omissions by the Owner, the Owner's agents, employees or Other Contractors.
- 28.3 Should any damage occur to the Work and/or the Owner's property for which the Contractor is responsible, the Contractor shall make good such damage at the Contractor's own expense or pay all costs incurred by others in making good such damage.
- 28.4 Should any damage occur to the Work and/or the Owner's property for which the Contractor is not responsible as provided in GC 17 - Indemnification the Contractor shall make good such damage to the Work, and, if the Owner so directs to the Owner's property, and the Contract Price and Contract Time shall be adjusted in accordance with GC 18 - Changes in the Work.
- 28.5 The Contractor shall be completely responsible for the safety of the work as it applies to protection of the public and property and the construction of the work. All applicable Codes and Standards for the area and location of the Work shall apply to the project.
- 28.6 Any person not following the stipulated safety regulations or procedures shall be dismissed.

GC 29 DAMAGES AND MUTUAL RESPONSIBILITY

- 29.1 If either party to this Contract should suffer damage in any manner because of any wrongful act or neglect of the other party or anyone employed by that party then that party shall be reimbursed by the other party for such damages. The party reimbursing the other party shall be subrogated to the rights of the other party in respect of such wrongful act or neglect if it be that of a third party.
- 29.2 Claims under this GC shall be made in writing to the party liable within reasonable time after the first observance of such damage and not later than the time limits stipulated in GC 21 - Certificates and Payments, and may be adjusted by agreement or in the manner set out in GC 16 - Settlement of Disputes and Claims.
- 29.3 If the Contractor has caused damage to any Other Contractor on the work, the Contractor agrees upon due notice to settle with such Other Contractor by

GENERAL CONDITIONS OF CONTRACT

agreement or arbitration, if the Other Contractor will so settle. If such Other Contractor sues the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor and may require the Contractor to defend the action at the Contractor's expense. If any final order or judgment against the Owner arises therefrom the Contractor shall pay or satisfy it and pay all costs incurred by the Owner.

- 29.4 If the Contractor becomes liable to pay or satisfy any final order, judgment or award against the Owner then the Contractor, upon undertaking to indemnify the Owner against any and all liability for costs, shall have the right to appeal in the name of the Owner such final order or judgment to any and all courts of competent jurisdiction.

GC 30 BONDS

- 30.1 The Owner shall have the right during the period stated in the Bid Documents for acceptance of the bid to require the Contractor to provide and maintain in good standing until the fulfillment of the Contract, bonds covering the faithful performance of the Contract including the requirements of the Warranty provided for in GC 31 - Warranty, and the payment of all obligations arising under the Contract.
- 30.2 All such bonds shall be issued by a duly incorporated surety company approved by the Owner and authorized to transact a business or surety-ship in the Province of Newfoundland and Labrador.
- 30.3 If bonds are called for in the Bid Documents or instructions to bidders, the costs attributable to providing such bonds shall be included in the bid price.
- 30.4 Should the Owner require the provision of a bond or bonds by the Contractor other than those provided for under GC 30.3, the Contract Price shall be increased by all costs attributable to providing such bonds.
- 30.5 The Contractor shall promptly provide the Owner with any bonds that are required.
- 30.6 Tender Surety and Bonding for Materials Supply Only Contracts
- .1 On contracts for supply of materials:
- a) Bid Security in the amount of 10% of the contract price and Performance Security in the amount of 50% of the contract amount is required. The Performance Security may be released 30 days after the date of substantial performance of a material supply contract.
 - b) Labour and Material Payment Security is not required.

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.2 In lieu of a Performance Bond or Bid Bond, the Minister may, at their sole discretion, approve the acceptance of a certified cheque for 10% of the tendered amount. The cheque will be deposited by the Owner until satisfactory completion of the work including the 30 day Mechanics Lien period, after which this amount will be returned to the contractor with the accrued interest thereon. There will be no limit on the value of a tender for which certified cheques may be used.

.3 No bid security or bonding will be required for the supply of vehicles or earth moving equipment.

GC 31 WARRANTY

- 31.1 Without restricting any warranty or guarantee implied or stipulated by law the Contractor shall at the Contractor's own expense rectify and make good any defect or fault however caused appearing within a period of one year from the date of Substantial Performance of the Work, unless otherwise stated in the Contract, provided that the Contractor shall not be responsible for any defect or fault resulting from the design of the Work.
- 31.2 The Contractor shall correct and/or pay for any damage to other work resulting from any corrections required under the conditions of GC 31.1.
- 31.3 Neither the Owner's final certificate nor payment thereunder shall relieve the Contractor from the Contractor's responsibility hereunder.
- 31.4 The Owner shall give the Contractor written notice of observed defects promptly.
- 31.5 In any case where the Contractor states that they are not responsible for a defect or fault because such a defect or fault is the result from a design of the work by the Owner, the onus to establish the defect or fault in the design of the work shall be on the Contractor.
- 31.6 The Contractor shall, subject to the procedures for Settlement of Disputes contained in GC 16 – Settlement of Disputes and Claims, abide by the direction and decisions of the Owner made pursuant to the General Conditions and in particular GC 7 – Owner's Decisions regarding the correction by the Contractor of any defect or fault in the work discovered during the warranty period referenced in GC 31.1 hereof.
- 31.7 The Contractor shall submit a schedule, acceptable to the Owner, for the completion of the warranty work in respect of the defect or fault referenced in GC 31.1, within thirty (30) days of the Owner requesting in writing such a schedule from the Contractor.

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- 31.8 Where the Contractor rectifies and makes good any defect or fault for which the Contractor is responsible under this Warranty, the Contractor shall warrant the portion of the work that is corrected for a period equal to the original warranty period, from the date that the correction was done.

GC 32 CONTRACTOR'S RESPONSIBILITIES AND CONTROL OF THE WORK

- 32.1 The Contractor shall have complete control of the Work except as provided in GC 15 - Emergencies. The Contractor shall effectively direct and supervise the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all parts of the Work under the Contract.
- 32.2 The Contractor shall have the sole responsibility for the design, erection, operation, maintenance and removal of temporary structural and other temporary facilities and the design and execution of construction methods required in their use. The Contractor shall engage and pay for registered professional engineering personnel skilled in the appropriate discipline to perform these functions where required by law or by the Contract Documents and in all cases where such temporary facilities and their method of construction are of such a nature that professional engineering skill is required to produce safe and satisfactory results.
- 32.3 Notwithstanding the provisions of GC 32.1 and GC 32.2 above, or any provisions to the contrary elsewhere in the Contract Documents where such Contract Documents include designs for temporary structural and other temporary facilities and methods shall be deemed to comprise part of the overall design of the Work and the Contractor shall not be held responsible for that part of the design or the specified method of construction. The Contractor shall, however, be responsible for the execution of such design or specified method of construction in the same manner that the Contractor is responsible for the execution of the Work.
- 32.4 The Contractor shall carefully examine the Contract Documents and shall promptly report to the Owner any error, inconsistency or omission the Contractor may discover. The Contractor shall not be held liable for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents.

GC 33 SUPERINTENDENCE

- 33.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Work site at all times while work is being performed.

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- 33.2 The superintendent shall be satisfactory to the Owner and shall not be changed except for good reason and only then after consultation with and agreement by the Owner.
- 33.3 The superintendent shall represent the Contractor at the Work site. Directions given to the superintendent by the Owner shall be held to have been given to the Contractor. Important directions shall be confirmed to the Contractor in writing, other directions will be so confirmed if requested.

GC 34 LABOUR AND PRODUCTS

- 34.1 Unless otherwise stipulated elsewhere in the Contract Documents, the Contractor shall provide and pay for all labour and products, tools, construction equipment and machinery, water, heat, light, power, transportation and other facilities and services necessary for the proper performance of the Work.
- 34.2 All products provided shall be new unless otherwise specified in the Contract Documents. Any products which are not specified shall be of a quality best suited to the purpose required and their use subject to the approval of the Owner.
- 34.3 The Contractor shall at all times maintain good order and discipline among the Contractor's employees engaged on the Work and shall not employ on the Work any unfit person nor anyone not skilled in the task assigned to that person.

GC 35 SUBSURFACE CONDITIONS

- 35.1 The Contractor shall promptly notify the Owner in writing if, in the Contractor's opinion, the subsurface conditions at the Project site differ materially from those indicated in the Contract Documents or as may have been represented to the Contractor by the Owner before the time of Open Call for Bids submission.
- 35.2 After prompt investigation, should the Owner determine that conditions do differ materially, the Owner shall issue appropriate instructions for changes in the Work as provided for in GC 18 - Changes in the Work.

GC 36 USE OF PREMISES

- 36.1 The Contractor shall confine the Contractor's apparatus, the storage of products and the operations of the Contractor's workers to limits indicated by laws, ordinances, permits or by directions of the Owner and shall not unreasonably encumber the premises with the Contractor's products.

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- 36.2 The Contractor shall not load or permit to be loaded any part of the Work with a mass that will endanger its safety.
- 36.3 The Contractor shall enforce the Owner's instructions regarding signs, advertisements, fires and smoking.
- 36.4 Unless otherwise provided the Contractor shall, at the Contractor's own expense, and without extra cost to the Owner, make suitable provision to accommodate all traffic either pedestrian or vehicular, over or around, the project upon which work is being performed, in a manner satisfactory to the Owner.
- 36.5 The Contractor shall provide and maintain at the Contractor's own expense such fences, barriers, signs, lights and security as may be necessary to prevent avoidable accidents to residents or to the public generally.

GC 37 CLEANUP AND FINAL CLEANING OF WORK

- 37.1 The Contractor shall maintain the Work in a tidy condition and free from the accumulation of waste products and debris, other than that caused by the Owner, other Contractors or their employees.
- 37.2 When the Work is Substantially Performed the Contractor shall remove all of the Contractor's surplus products, tools, construction machinery and equipment not required for the performance of the remaining work. The Contractor shall also remove any waste products and debris and leave the Work clean and suitable for occupancy by the Owner unless otherwise specified.
- 37.3 When the Work is Totally Performed, the Contractor shall remove all of the Contractor's surplus Products, tools, construction machinery and equipment. The Contractor shall also remove any waste products and debris, other than that caused by the Owner, other Contractors or their employees.

GC 38 CUTTING AND REMEDIAL WORK

- 38.1 The Contractor shall do all cutting and remedial work that may be required to make the several parts of the Work come together properly.
- 38.2 The Contractor shall co-ordinate the schedule for the Work to ensure that this requirement is kept to a minimum.
- 38.3 Should the Owner or anyone employed by the Owner be responsible for ill-timed work necessitating cutting and/or remedial work shall be valued as provided in GC 19 Valuation and Certification of Changes in the Work and added to the Contract Price.

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38.4 Cutting and remedial work shall be performed by specialists familiar with the materials affected and shall be performed in a manner to neither damage nor endanger any Work.

GC 39 INSPECTION OF WORK

39.1 The Owner and the Owner's authorized representatives shall have access to the Work for inspection wherever it is in preparation or progress. The Contractor shall co-operate to provide reasonable facilities for such access.

39.2 If special tests, inspections or approvals are required by the Contract Documents, the Owner's instructions or the laws or ordinances of the place of building the Contractor shall give the Owner timely notice requesting inspection. Inspection by the Owner shall be made promptly. The Contractor shall arrange inspection by other authorities and shall notify the Owner of the date and time.

39.3 If the Contractor covers or permits to be covered any of the Work that is subject to inspection or before any special tests and approvals are completed without the approval of the Owner, the Contractor shall uncover the Work, have the inspection satisfactorily completed and make good the Work at the Contractor's own expense.

39.4 Examination of any questioned Work may be ordered by the Owner. If such Work be found in accordance with the Contract the Owner shall pay the cost of examination and replacement, together with the cost of subsequent verification testing. If such Work be found not in accordance with the Contract through the fault of the Contractor, the Contractor shall pay such cost.

39.5 The Contractor shall furnish promptly to the Owner all certificates and inspection reports relating to the Work.

GC 40 REJECTED WORK

40.1 Defective Work, whether the result of poor workmanship, use of defective products or damage through carelessness or other act or omission of the Contractor, and whether incorporated in the Work or not, which has been rejected by the Owner as failing to conform to the Contract Documents shall be removed promptly from the premises by the Contractor and replaced and/or executed promptly in accordance with the Contract Documents at the Contractor's expense.

40.2 Other Contractor's work destroyed or damaged by such removals or replacements shall be made good promptly at the Contractor's expense.

GENERAL CONDITIONS OF CONTRACT

40.3 If in the opinion of the Owner it is not expedient to correct defective work not done in accordance with the Contract Documents, the Owner may deduct from the Contract Price the difference in value between the Work as done and that called for by the Contract, the amount of which shall be determined in the first instance by the Owner.

GC 41 SHOP DRAWINGS

41.1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data which are to be provided by the Contractor to illustrate details of a portion of the Work.

41.2 The Contractor shall arrange for the preparation of clearly identified shop drawings as called for by the Contract Documents or as the Owner may reasonably request.

41.3 Prior to Submission to the Owner the Contractor shall review all shop drawings. By this review the Contractor represents that the Contractor has determined and verified all field measurements, field construction criteria, materials, catalogue numbers and similar data or will do so and that the Contractor has checked and coordinated each shop drawing with the requirements of the Work and of the Contract Documents. The Contractor's review of each shop drawing shall be indicated by stamp, date and signature of a responsible person.

41.4 The Contractor shall submit shop drawings to the Owner for the Owner's review with reasonable promptness and in orderly sequence so as to cause no delay in the Work or in the Work of Other Contractors. If either the Contractor or the Owner so requests they shall jointly prepare a schedule fixing the dates for submission and return of shop drawings. Shop drawings shall be submitted in electronic format (PDF) or prints as the Owner may direct. At the time of submission the Contractor shall notify the Owner in writing of any deviations in the shop drawings from the requirements of the Contract Documents.

41.5 The Owner will review and return shop drawings in accordance with any schedule agreed upon, or otherwise with reasonable promptness so as to cause no delay. The Owner's review shall be for conformity to the design concept and for general arrangement only and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the Contract Documents unless a deviation on the shop drawings has been approved in writing by the Owner.

41.6 The Contractor shall make any changes in shop drawings which the Owner may require consistent with the Contract Documents and resubmit unless otherwise directed by the Owner. When resubmitting the Contractor shall notify the Owner in writing of any revisions other than those requested by the Owner.

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GC 42 SAMPLES

- 42.1 The Contractor shall submit for the Owner's approval such standard manufacturers' samples as the Owner may reasonably require. Samples shall be labelled as to origin and intended use in the Work and shall conform to the requirements of the Contract Documents.
- 42.2 The Contractor shall provide samples of special products, assemblies, or components when so specified. The cost of such samples not specified shall be authorized as an addition to the Contract Price as provided in GC 18 - Changes in the Work.

GC 43 TESTS AND MIX DESIGNS

- 43.1 The Contractor shall furnish to the Owner test results and mix designs as may be requested. The testing company must first be approved by the Owner.
- 43.2 The cost of tests and mix designs beyond those called for in the Contract Documents or beyond those required by laws, ordinances, rules and regulations relating to the work and the preservation of public health, shall be authorized as an addition to the Contract Price as provided in GC 18 - Changes in the Work.

GC 44 LABOUR

- 44.1 In carrying out the Contractor's duties under this contract, the Contractor shall comply with all Provincial and Federal legislation respecting labour and the employment of labour, where applicable, including the labour standards code and shall not operate in conflict with the Human Rights legislation. In the employment of labour, preference should be given to persons normally resident in Newfoundland and Labrador.
- 44.2 The Contractor and Subcontractors shall maintain and keep available for inspection by the Owner, a record of the names and addresses of all workers employed on the Project.
- 44.3 All Work shall be done by workers skilled in their various trades.
- 44.4 There shall be no discrimination in the selection of workers for employment on the project in respect of gender, race, religious views or political affiliation.
- 44.5 The Contractor shall pay fair wages and shall pay rates of wages and allowances to the various classes of labour not less favourable than those prevailing in the area where the Work is being performed.

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44.6 The Contractor shall ensure that all employees (including owners, management, and subcontracted employees) are aware that workplace violence and harassment will not be tolerated. Allegations of workplace violence and harassment perpetrated against employees of the Department of Transportation and Infrastructure will be investigated and addressed as per the Department of Transportation and Infrastructure's Workplace Violence and Harassment Prevention Program, and may result in correction actions aimed at individuals or the Contractor. The Contractor hereby agrees to be bound by the Department of Transportation and Infrastructure's Workplace Violence and Harassment Prevention Program and shall cooperate fully in any resulting investigations and shall ensure compliance with any subsequent corrective actions.

GC 45 TIME OF ESSENCE

45.1 Time is of the essence of the Contract.

GC 46 ASSESSMENT AND DAMAGES FOR LATE COMPLETION

46.1 For purposes of this General Condition

- a) The Work shall be deemed to be completed on the date that a Certificate of Substantial Performance referred to in GC 21.6 is issued, and
- b) "Period of delay" means the number of days commencing on the day fixed by the Articles of Agreement for completion of the Work and ending on the day immediately preceding the day on which the Work is completed but does not include any day in which, in the opinion of the Owner, completion of the Work was delayed for reasons beyond the control of the Contractor.

46.2 If the Contractor does not complete the Work by the day fixed for its completion by the Articles of Agreement but completes it thereafter, the contractor shall pay the Owner an amount equal to the aggregate of

- a) all salaries, wages and travelling expenses incurred by the Owner in respect of persons overseeing the performance of the Work during the period of delay, and
- b) all other expenses and damages incurred or sustained by the Owner during the period of delay as a result of the Work not being completed by the day fixed for its completion.

46.3 Substantial Performance of part of the work shall not relieve the Contractor of their liabilities under this clause.

GENERAL CONDITIONS OF CONTRACT

GC 47 CERTIFICATE OF RECOGNITION FOR CONTRACTS

- 47.1 The Contractor shall, at the time of bid submission, submit a Letter of Good Standing stating Certificate of Recognition (COR) certified from the Newfoundland and Labrador Construction Safety Association (NLCSA), or equivalent. The Letter of Good Standing stating COR Certified must be valid at the Submission Deadline (Closing Date).
- 47.2 At any time during the term of the Contract, when requested by the Owner, the Contractor shall provide such evidence of compliance by any or all of their Subcontractors.

SUPPLEMENTARY GENERAL CONDITIONS

SGC 1.0 - LIQUID ASPHALT COST ADJUSTMENT

- (a) Adjustments will be made to progress estimates to compensate for changes in liquid asphalt prices at time of tender and prices in effect during construction. Increases or decreases in excess of 5% of the Benchmark Tender Price will be paid or deducted accordingly. The governing price will be the average price quoted by local suppliers on the 20th of each month for the Holyrood and Come by Chance Terminals. This adjustment will include any changes in taxes outlined in GC 22.2.
- (b) The benchmark price shall be the most recent price published on Municipal Infrastructure's website, under MI Liquid Asphalt and Petroleum Cost Adjustment at time of tender close. The adjustments shall be computed based on changes in the average monthly price in excess of or less than this benchmark at time of production. The Owner shall then calculate the adjustment to be stated in the Monthly Progress Estimates.
- (c) The liquid asphalt cost adjustment shall be calculated using the quantity of the item added to the progress estimate since the last estimate. In cases where liquid asphalt is included in the price of Asphalt Concrete, the liquid asphalt quantity will be determined using the mix design.

SGC 2.0 - FEDERAL/PROVINCIAL FUNDED PROJECTS

For Federal/Provincial funded projects the following should apply:

- (a) No former Federal public office holder who is not in compliance with the post-employee code for public office holders shall be permitted to benefit on this project.
- (b) No member of the House of Commons or Senate of Canada or the House of Assembly of Newfoundland & Labrador shall be permitted to benefit on this project.
- (c) His Majesty the King in right of Canada shall be added as an additional named insured in GC 26 and GC 27.

SGC 3.0 - PETROLEUM PRODUCTS COST ADJUSTMENT

Adjustment will be made to progress estimates to compensate for changes in fuel prices at time of tender closing and prices in effect during construction. Increases or decreases in excess of 10% of the Benchmark Tender Price will be paid or deducted accordingly. The governing price will be the most recent price, for the zone in which the majority of the contract is being carried out, established by the Petroleum Products Pricing Commissioner at time of tender close. This adjustment will include any changes in taxes outlined in GC 22.2.

SUPPLEMENTARY GENERAL CONDITIONS

The adjustment for fuel cost variation shall apply only to those items given in the accompanying list. For other tender items, there will be no fuel cost adjustments.

The benchmark price shall be the price established by the Petroleum Products Pricing Commissioner at time of tender. The adjustments shall be computed based on changes in the monthly price in excess of or less than this benchmark at time of production. The Owner's Representative shall then calculate the adjustment to be stated in the Monthly Progress Estimate.

For the contract items included in the accompanying list, the fuel cost adjustment shall be calculated using the quantity of the item added to the progress estimate since the last estimate.

The fuel cost adjustment shall be credited to, or debited from, the progress estimate depending on whether the prices during construction are higher than, or less than, the benchmark at time of tender closing.

- a) Mass Excavation Common Material shall include: site work and grading; excavation, trenching and backfilling; and roadway excavation, embankment and compaction.
- b) Mass Excavation Solid Rock shall also include: Ditching Solid Rock; Quarried Rock; Rock Fill in Place including Armour Stone; and Excavation for Foundation Solid Rock.
- c) If the granular material or asphalt aggregate is produced from a rock quarry source, an additional 1.0 L/t of clear diesel fuel will be added to the quantity shown in the table.

Contract Item	NOMINAL FUEL CONSUMPTION RATE (litres)		
	Clear Diesel Fuel	Furnace Oil	Marked Diesel Fuel
Mass Excavation Common & Imported Common	2.0 L/m ³	N/A	N/A
Mass Excavation Solid Rock	4.0 L/m ³	N/A	N/A
Trench Excavation: Common Material	5.0 L/m ³	N/A	N/A
Trench Excavation: Rock	10.0 L/m ³	N/A	N/A
Granular Material	1.0 L/t	N/A	1.0 L/t
Asphaltic, Base Surface & Levelling Courses	1.0 L/t	11.0 L/t	2.0 L/t
Armour Stone Excavation	4.0 L/m ³	N/A	N/A

SGC 4.0 CERTIFICATE FOR PAYMENT

SUPPLEMENTARY GENERAL CONDITIONS

In reference to GC 21, the sixty (60) day interest free period for payments starts the day after a mutually acceptable application for payment has been submitted by the Contractor.

SGC 5.0 - PROJECT DURATION

A Working Day shall be defined as ten (10) hours.

The estimated contract value must include cost of materials supplied under separate contracts.

The table below is a guide for determining Working Hours for Water and Wastewater projects only. The Owner reserves the right to alter the schedule to meet their needs.

For other project types, this table may or may not be referenced.

The Owner will base the allowable number of Working Days to substantially perform the project by the following table or an interpolation thereof:

Estimated Contract Value	Working Hours (Days) (for Substantial Performance)
0 to 150,000	220 (22)
500,000	450 (45)
1,000,000	740 (74)
1,500,000	940 (94)
2,000,000	1120 (112)
2,500,000	1220 (122)
3,000,000	1350 (135)
3,500,000	1480 (148)
4,000,000	1570 (157)

Should the final tender value differ from the estimate, there will be no allowance to change the working hours.

SGC 6.0 – Builder’s Risk Insurance

In reference to GC 27, Builder’s Risk insurance is only required where a structure (i.e. building) is being newly constructed or renovated. The requirement for Builder’s Risk insurance is outlined in the Insurance Form.

The value of the coverage for the Builder’s Risk Insurance is the total value of the completed structure, including materials.

CERTIFICATE OF INSURANCE

DESCRIPTION & LOCATION OF WORK				
PROJECT NO:		AWARD DATE:		VALUE:
INSURER:				
INSURER ADDRESS:				
BROKER:				
BROKER ADDRESS:				
INSURED NAME OF CONTRACTOR:				
CONTRACTOR ADDRESS:				
ADDITIONAL INSURED (Excluding Automobile Liability Policy) <input checked="" type="checkbox"/> The OWNER: <input checked="" type="checkbox"/> "His Majesty the King in Right of the Province of NL as represented by the Minister of Transportation & Infrastructure. Dept. of Transportation & Infrastructure, P.O. Box 8700, St. John's, NL., A1B 4J6, Attn: Tendering & Contracts <input checked="" type="checkbox"/> The Occupant/Operator of the Property: <input checked="" type="checkbox"/> Project Consultants of the OWNER (excluding professional liabilities)				
ADDITIONAL INSURED FOR FEDERAL FUNDED PROJECTS (where applicable) <input type="checkbox"/> His Majesty the King in Right of Canada				
This document certifies that the following policies of insurance and indicated coverage are at present in force subject to the terms, conditions and exclusions as contained therein covering the operations of the insured in connection with the above noted contract made between the named insured and the Owner.				
POLICY TYPE	POLICY NUMBER	INCEPTION DATE	EXPIRY DATE Y/M/D	LIMITS OF LIABILITY
1.1 COMMERCIAL GENERAL LIABILITY or 1.2 WRAP-UP LIABILITY (Including where indicated) A. BLASTING B. PILE DRIVING OR CAISSON WORK C. REMOVAL OR WEAKENING OF SUPPORT				\$5,000,000 Minimum
2A. BUILDERS' RISK "BROAD FORM" or 2B. INSTALLATION FLOATER "BROAD FORM" or 2C. PIERS, WHARVES, & DOCKS RIDER				100% Contract Value of structure if Exceeds \$25,000
3. AUTOMOBILE LIABILITY INSURANCE				\$2,000,000 Minimum
4. AIRCRAFT AND/OR WATERCRAFT WATERCRAFT LIABILITY (IF APPLICABLE)	Not required			\$2,000,000 Minimum
5. AIRPORT CONTRACTOR LIABILITY	Not required			\$5,000,000.00 Minimum
6. ENVIRONMENTAL IMPAIRMENT LIABILITY				\$2,000,000.00 Minimum
The Insurer agrees to notify the Owner and His Majesty, as defined above, in writing, thirty (30) days prior to cancellation, termination or material change of any policy.				
NAME OF INSURER'S OFFICER or AUTHORIZED REPRESENTATIVE :	SIGNATURE:		Date:	
			Tel.:	
			Email:	
Issuance of this certificate shall not limit or restrict the right of the Owner to request at any time duplicate certified copies of said insurance policies.				

Part III

MUNICIPAL WATER, SEWER AND ROADS MASTER CONSTRUCTION SPECIFICATION

**DEPARTMENT OF TRANSPORTATION and INFRASTRUCTURE, MUNICIPAL INFRASTRUCTURE
(LATEST VERSION AT TIME OF TENDER CLOSE)**

Part IV

Grenfell Heights Extension		
Project Specific Requirements	Town of Grand Falls-Windsor	May 2024

General Description of Work:

This project involves the removal of 17 driveway culverts from Civic #457 to #479 along Grenfell Heights Extension. The old culverts will be replaced with new 600mm HDPE pipes with the exception of Civic #479 which will require a new 900mm HDPE. The new HDPE pipe end treatments will be finished with hand laid rip rap including sod to prevent erosion at the driveways.

After the pipe installation is complete, cleaning and deepening of the existing ditches on both sides will be required to improve drainage.

The existing asphalt will be pulverized to the specified depth and reshaped including Class "A" to achieve the required grade. The completed road surface will require 1 lift of 50mm asphalt. Upon completion, any private property damaged during construction, including paved driveways, shall be restored to their original condition (or better) at the discretion of the towns representative or engineer.

SECTION 190

OCCUPATIONAL HEALTH AND SAFETY

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190.06 OWNER'S STATEMENT

190.01 GENERAL

- .1 The following requirements apply to all contracts awarded by the Department of Transportation and Infrastructure for maintenance, operations, upgrades, support services, or construction related to the transportation network assets including but not limited to roads, bridges, airports, marine assets, and similar.
- .2 All work is to be performed in accordance with the requirements of the Newfoundland and Labrador Occupational Health and Safety Act and Regulations as amended, the Department of Transportation and Infrastructure's Contractor Safety Management Program and any specified Contract requirements.
- .3 The Contractor shall comply with and enforce compliance by employees, subcontractors, suppliers and visitors with all safety requirements of the Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with the Project Site Specific Safety Plan.
- .4 The Contractor is responsible for all work coordination at the project site, safety oversight, and must maintain full ownership and control of safety within the project area at all times. The Contractor will be delegated and shall assume the duties of the Principle Contractor for the work area(s). As such, the Contractor shall ensure co-ordination of work schedules and tasks, and communication thereof for the purpose of ensuring health and safety on the worksite(s).

- .5 The Department shall perform project due diligence, site visits, safety monitoring activities, make suggestions or recommendations for improvement, and/or request changes in how work is performed. Notwithstanding, the Contractor has full responsibility, authority, and accountability for safely performing all work on the project site(s) and/or under the project. The Department solely relies on the Contractor to know how to safely perform all Work including making appropriate decisions on Department recommendations or requests.
- .6 Subsequent to awarding of the tender and at least 10 (ten) working days prior to commencement of work, and prior to the pre-start Health and Safety meeting, the Contractor must submit to the Owner's Representative a detailed Site Specific Safety Plan (SSSP). **See Section 190.2.**
- .7 Review of the Project Site Specific Safety Plan and other submitted documents by the Owner's Representative shall only be viewed as acknowledgment that the Contractor has submitted the required documentation under this specification. The Owner's Representative makes no representation and provides no warranty for the accuracy, completeness and legislative compliance of the Project Site Specific Safety Plan and other submitted documents by this acceptance. Responsibility for errors and omissions in the Project Site Specific Safety Plan and other submitted documents is not relieved by acceptance by the Owner's Representative.
- .8 For projects exceeding thirty (30) days or more, the Contractor shall, prior to the commencement of work, notify in writing the Department of Digital Government and Service NL, Occupational Health and Safety Division. **See Section 190.3.9.**

190.02 PROJECT SITE SPECIFIC SAFETY PLAN (SSSP)

190.02.01 PROJECT SITE SPECIFIC SAFETY PLAN REQUIREMENTS

The Contractor shall:

- .1 Prepare and complete all work in accordance with a detailed Project Site Specific Safety Plan (SSSP) specific to each project and specific project location conditions. The plan shall identify, evaluate and control job specific hazards through a detailed hazard assessment of the tendered project outlining phases of the project and hazards/controls associated with specific work, equipment, locations and tasks associated with the work conducted during each phase of the project. The plan shall also ensure adequate policies, procedures and safe work practices are in place to manage hazards identified in the hazard assessment that cannot be addressed through engineering controls. Furthermore, it is the responsibility of the Contractor to submit only one SSSP that incorporates all relevant portions of their subcontractors' safety documentation.
- .2 Provide a copy of the Project SSSP to the Owner's Representative.

190.02.02 PROJECT SITE SPECIFIC SAFETY PLAN CONTENTS

The Contractor is responsible to determine the appropriate safety actions, plans, and information for the Project SSSP.

Notwithstanding, the written SSSP shall incorporate the following minimum information:

- .1 An organizational structure, in the form of an organizational chart with contact information of the key positions, which shall establish the specific chain of command and specify the overall responsibilities of Contractors' employees at the work site. The chart shall also include relevant information for all subcontractors.
- .2 Identification of the designated qualified work coordinator(s) (i.e. Supervisor, Contractor Safety Representative) as per Section 21 of the OHS Regulations.
- .3 A comprehensive work plan which shall:
 - .1 Outline the phases of the Project and the required tasks, equipment, positions, resources and objectives for each phase, including all subcontracted work.
 - .2 Conduct a detailed hazard assessment of each project phase, including all subcontracted work, taking into consideration the objectives, tasks, equipment, positions, resources, training, etc.
 - .3 Identify the controls required for all identified hazards and project phases that may include engineering controls, policies, procedures, equipment, safe work practices, training and communication with staff, etc.
 - .4 Establish personnel requirements for implementing the plan and controls, and establish site-specific training and notification requirements and schedules.
- .4 General safety rules for the Project.
- .5 A Project training matrix (tabular or spreadsheet format) identifying all necessary training by occupation for the scope of the contract as per the Contractor's health and safety training plan. **Refer to Section 190.3.6.**
- .6 A personal protective equipment (PPE) Program. **Refer to Section 190.4.5.**
- .7 A traffic control plan. **Refer to Section 190.4.6.**
- .8 A fall protection plan, if necessary. **Refer to Section 190.4.7.**
- .9 A dust suppression management program, if necessary.
- .10 A hearing conservation program in accordance with Part VI, Section 68 of the OHS Regulations.
- .11 An assessment of all possible risks of violence for the project and corresponding control measures. Considerations should include location and circumstances of the site, previous history of incidents and or possible triggers.

- .12 A visitor safety and orientation policy that will include education on hazards, required PPE to be worn by visitors and accompaniment by staff while on site. This program shall also take into consideration the safety of the general public that may come in contact with the work site and appropriate measures for notification and safety.
- .13 As part of the SSSP the Contractor shall provide a vehicle inspection matrix (tabular or spreadsheet format) showing required inspection type and date of most recent inspection for all powered mobile equipment (including light vehicles) that will be used in fulfilling the terms of the contract, including rented and the subcontractor's equipment. Upon request, the Contractor shall provide to the Owner's Representative, individual inspection forms that at a minimum state that the equipment is in a safe operating condition and is signed by a qualified journeyman mechanic.
- .14 The SSSP shall include an acceptable parking plan for all powered mobile equipment (including light vehicles) to be used on the Project. The plan shall address both daytime parking requirements to reduce congestion in the work area, nighttime parking considerations, and overall impacts on the public (i.e., visibility/sightlines, impeding traffic flow, etc.). At a minimum, the plan shall be based on a hazard assessment that considers factors such as equipment type, potential for roll over, load capacity of the parking area, pedestrian and vehicular traffic, and potential for equipment tampering, equipment energy, and equipment contact with power lines.
- .15 The SSSP shall include a site specific emergency response plan for the job site and ensure that supervisors and workers are trained in the emergency response plan. The emergency response plan shall address, as a minimum:
 - .1 Emergency recognition and evaluation (identification of each potential type of emergency and evaluation of requirements for response).
 - .2 Pre-emergency planning (included the assessment of controls to reduce the likelihood of such an emergency if possible).
 - .3 Personnel roles, lines of authority and communication (include a communication list of all emergency services in the immediate and surrounding areas).
 - .4 Required communication equipment including landlines, mobile phones, radios, satellite phones, and/or other equipment needed to ensure appropriate emergency communications in the area of the Project.
 - .5 Safe distances and places of refuge.
 - .6 Site security and control.
 - .7 Evacuation routes and procedures.
 - .8 Decontamination procedures which are not covered by the Project SSSP.
 - .9 Emergency medical treatment and first aid.

- .10 Emergency alarm, notification and response procedures including procedures for reporting incidents to local, provincial and federal government departments.
- .11 PPE and emergency equipment.
- .12 Procedures for handling emergency incidents.
- .13 Procedures and protocol for working alone and/or remote working.
- .14 Site specific emergency response training requirements and emergency response drills shall be identified along with written rescue plan for high risk emergencies (i.e. fall rescue, confined space entry, etc.).
- .15 The emergency response procedures shall be tested regularly and the results documented. The frequency at which all aspects of the emergency response plan will be rehearsed must be stated.
- .16 Provide adequate first aid facilities for the job site and ensure that a minimum number of workers are trained in first aid in accordance with the OHS First Aid Regulations.
- .17 Provide requirements and permits for isolated campsite locations such as coordinates, fire suppression systems, alarms, camp monitoring, nuisance wildlife, drinking water provisions, etc.
- .18 Depending on the specifics of the contract, the SSSP may require other programs and documents to meet health and safety provisions as required in the OHS Act and Regulations. See **Sections 190.4 and 190.5** for examples of potential additional requirements.

190.03 SAFETY MONITORING

190.03.01 CONTRACTOR ROLES AND RESPONSIBILITIES

The Contractor shall:

- .1 Ensure that their organization is staffed appropriately to ensure completion of project tasks and all necessary safety related duties and responsibilities.
- .2 Ensure co-ordination of work schedules and tasks, and communication thereof for the purpose of ensuring health and safety on the worksite(s).
- .3 Develop a Project SSSP, as indicated above, that thoroughly assesses the health and safety hazards of each project phase, including all subcontracted work.
- .4 Implement all requirements of the Project SSSP. The Contractor shall take all necessary measures to immediately implement any engineering controls, administrative controls, personal protective equipment required or termination of work procedures to ensure compliance with the SSSP and the OHS Act and Regulations. All measures should be immediately communicated to staff.
- .5 The Contractor shall comply with and enforce compliance by employees, subcontractors, suppliers and visitors with all safety requirements of the Contract

- Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with the Project SSSP.
- .6 Periodically review and modify the SSSP as required including but not limited to when a new hazard is identified during completion of work or when an error or omission is identified in any part of the SSSP.
 - .7 Support/permit periodic inspections of the Contractor's work by the Owner's Representative and/ or the Department of Transportation and Infrastructure Occupational Health and Safety team to maintain compliance with the SSSP. Inspections may include visual inspections of the site and documentation, as well as testing and sampling as required.
 - .8 Be responsible for any and all costs associated with delays as a result of the Contractor's failure to comply with the requirements outlined in **Section 190** or the OHS Act and Regulations.
 - .9 Ensure that all workers receive necessary training as per the training matrix contained in the SSSP prior to the start of work. Maintain training records in a tabular format or spreadsheet for all employees on the project site and complete periodic reviews to ensure that necessary re-certifications are completed prior to expiration dates.
 - .10 Ensure all equipment, vehicles, tools, or other devices necessary throughout the Project are suitable for the task and are inspected and maintained in accordance with the manufacturers' specifications and/or CSA standards adopted by the OHS Regulations.
 - .11 Be responsible to ensure that site inspections have been completed at no less than 1 week intervals. These site inspections shall include risk assessments where the nature of the ongoing work or tasks associated with the work increase in risk or significantly change due to phases in the project or project progression.
 - .12 Ensure that toolbox meetings are held with staff no less than once per week and shall include review of safety related information that is pertinent to the safety of employees.
 - .13 Ensure that all toolbox meetings, site inspections, risk assessments, OHS Committee meetings and any OHS Directives or reports are documented and submitted with the Contractor's Monthly OHS Performance Report. **(Refer to forms appended to the end of Section 190).**
 - .14 Review for completeness the hazard assessment results immediately prior to commencing work, when a new hazard is identified during completion of work or when an error or omission is identified.
 - .15 Be solely responsible for investigating, evaluating and managing any report of actual or potential hazards.
 - .16 Retain copies of all completed hazard assessments at the project site and provide a copy to the Owner's Representative. Copies of any hazard

assessments not included in the original SSSP must be submitted immediately to the Owner's Representative and noted on the Contractor's Monthly OHS Performance Report.

- .17 Promote the employees' right to work in a respectful, harassment-free, and psychologically healthy and safe work environment. Assist the Owner's Representative to investigate incidents of workplace violence or harassment carried out against a TI employee by Contractor or Subcontractor employees.

190.03.02 SUPERVISION

190.03.02.01 The Contractor shall:

- .1 Develop an organizational structure that establishes a specific chain of command and overall responsibilities of all employees at the work site.
- .2 Assign a sufficient number of supervisory personnel to the work site and ensure that all work is performed under the direct supervision of competent persons.
- .3 Ensure that any person assigned to supervisory duties on site shall not conduct significant work in relation to the contract that inhibits them from the ability to properly supervise the work site.
- .4 Ensure the site supervisor(s) have complete understanding, working knowledge and familiarity with the Project SSSP, applicable codes and standards as well as the OHS Act and Regulations.
- .5 Ensure the site supervisor(s) fully implements, enforces, and monitors the SSSP.
- .6 Prior to the start of work, ensure that the site supervisor(s) have the training, knowledge, and understanding in:
 - .1 Project tasks and construction activities.
 - .2 Hazard recognition evaluation and control.
 - .3 Development and implementation of safe work practices and procedures.
 - .4 Accident incident investigations and reporting.
 - .5 Workplace violence and harassment prevention.
 - .6 Equipment maintenance and inspections required for preventive safety.
 - .7 Care and maintenance of PPE to be used on site.
 - .8 Standard First Aid training certified by WorkplaceNL.
 - .9 WHMIS 2015.
 - .10 Other certifications may be required depending on the work tasks associated with a specific contract to ensure that adequate controls are in place to mitigate the risks to workers, and to abide by all applicable legislation, codes and standards. This may include, but is not limited to:
 - i. Traffic Control Person (level I and II) training certified by WorkplaceNL.
 - ii. Power Line Hazards training certified by WorkplaceNL.

- iii. Fall Protection training certified by WorkplaceNL.
 - iv. Confined Space Entry training certified by WorkplaceNL.
 - v. Rescue and emergency response.
 - vi. Trenching and excavation.
 - vii. Scaffolding.
 - viii. Rigging and slinging.
 - ix. Transportation of Dangerous Goods.
 - x. Other training as specified by the Department.
- .7 Assign a dedicated on-site safety representative to assist the Site Supervisor during the completion of high-risk activities. This person shall have training, knowledge, and understanding regarding the activity(s) being completed. High-risk activities may include, but are not limited to:
- .1 Heavy lift operations which includes items greater than 1000 kg or which may need an engineered lift plan due to other identified risk factors.
 - .2 Lift operations that occur closer than 10 m of energized power lines or close proximity to moving traffic, public and residential areas, or other sensitive locations.
 - .3 When greater than 3 employers are working in close proximity at the same time. Close proximity execution means any time the operations of each employer are close enough to directly influence or add risk to another employer.
 - .4 Working within or near highly populated residential areas when there is an appreciable ongoing risk to the public that needs continual safety oversight.
 - .5 When a complex traffic control plan is needed in high volume areas.
 - .6 Work involving confined space entry.
 - .7 Working with or near toxic and hazardous substances.
 - .8 Any other high-risk activity identified through hazard/risk assessment by the Contractor or by the Department.

In such instances, the Contractor may request and the Department may agree that such dedicated safety representation is not needed if the Contractor demonstrates there are adequate safety controls in place to mitigate the risk.

190.03.02.02 The Site Supervisor(s) shall:

- .1 Be responsible for project safety by ensuring the work complies with all requirements of the SSSP and with the appropriate section(s) of OHS Act and Regulations, latest edition.
- .2 Prior to mobilization on site, hold a pre-start Health and Safety meeting with the Contractors, Subcontractors, and Owner's Representatives to review of the SSSP including all its contents.

- .3 Be responsible for the delivery and documentation of the site safety orientations and ensure that personnel who have not been oriented are not permitted to enter the site. This applies to all workers (Contractor, Subcontractor, and Department), and visitors. **Refer to Section 190.3.6.7.**
- .4 Advise of the health and safety hazards for the work site, provide written or verbal instructions of any precautions to be taken to protect everyone at the work site and ensure that the applicable personal protective equipment is used and worn on site at all times.
- .5 Review hazard assessment for completeness immediately prior to commencing work, when a new hazard is identified during completion of work, or when an error or omission is identified.
- .6 Address all safety concerns brought to their attention in a timely manner depending on the severity of the hazard.
- .7 Be responsible for the maintenance of a daily log of inspections, meetings, infractions and mitigating measures. The log is to be filed daily and copies provided to the Owner's Representative as requested.
- .8 Be responsible to log, investigate, track and follow-up on mitigations for all near misses, incidents and/or accidents.
- .9 Promote employees' right to work in a respectful, harassment-free, and psychologically healthy and safe work environment. Assist the Owner's Representative to investigate incidents of workplace violence or harassment carried out against a TI employee by Contractor or Subcontractor employees.
- .10 Ensure the correct traffic control signage plan is utilized on site and staff have been notified of the requirements. Ensure that road signage is inspected for accuracy and condition by a competent and trained person upon set-up, each morning prior to work, and at any point in which the signage requires change during the workday or life of the contract. A Traffic Control Signage log must be submitted with the Contractor's Monthly OHS Performance Report. **Refer to Section 190.4.6.**
- .11 If required for the project, coordinate with and support the efforts of the on-site safety representative.

190.03.03 PROJECT DEDICATED FULL TIME CONTRACTOR SAFETY REPRESENTATIVE (CSR)

The Department of Transportation and Infrastructure recognizes that, based on complexity, certain construction projects will need a higher level of diligence and focus on safety management and oversight. Providing such diligence by the Contractor may be accomplished by a dedicated safety resource to support the Contractor's Site Supervisor. For some projects the Department may elect to cover the additional costs of dedicated site support in the form of a full time Contractor Safety Representative (CSR) (formally

known as Contractor Safety Officer). A dedicated CSR means dedicated full time to the project and cannot be shared over multiple projects. As such, it will be identified in the Supplemental General Conditions and a cost line item will be included in the pricing table. Should it become evident after contract award that the CSR is only required on site part time, or where the duties can be performed by other members of the Contractor's site team, the bid price payments will be reduced/pro-rated accordingly.

For projects where the Department has not included for specific payment of a CSR, the Contractor will be expected to ensure the Contractor's organization is staffed appropriately to ensure completion of project tasks and all necessary safety related duties and responsibilities.

The CSR role is intended to provide expertise and dedicated site safety support to the Contractor's Site Supervisor(s). Under no situation does the requirement to have a CSR alleviate the safety responsibility of the Contractor or Site Supervisor(s). When specified for inclusion by the Department, the CSR is intended to be a focused role with formal training and knowledge in safety management. In this case, the Contractor shall ensure that a CSR is appointed, and has sufficient authority and resources to support the implementation and monitoring of the SSSP.

- .1 The CSR shall have:
 - .1 Formal training in OHS Management (degree, diploma, or certificate) combined with at least two (2) years of relevant experience, or
 - .2 A designation such as National Construction Safety Officer (NCSO), Construction Safety Officer (CSO), Canadian Registered Safety Technician (CRST), Canadian Registered Safety Professional (CRSP), or Certified Health and Safety Consultant (CHSC), or other similar designation.
- .2 Prior to the start of work, the CSR may also require additional certifications depending on the work tasks associated with a specific contract. This may include, but is not limited to:
 - .1 Traffic Control Person (level I and II) training certified by WorkplaceNL.
 - .2 Power Line Hazards training certified by WorkplaceNL.
 - .3 Standard First Aid training certified by WorkplaceNL.
 - .4 Fall Protection training certified by WorkplaceNL.
 - .5 Confined Space Entry training certified by WorkplaceNL.
 - .6 Rescue and emergency response.
 - .7 Trenching and excavation.
 - .8 Scaffolding.
 - .9 Rigging and slinging.

- .10 Transportation of Dangerous Goods.
- .11 WHMIS 2015.
- .12 Other training as specified by the Department.

190.03.04 HEALTH AND SAFETY COMMITTEE

The Contractor shall:

- .1 Establish a site Occupational Health and Safety Committee where ten or more workers are employed on the job site for greater than 30 days.
- .2 Committee members shall receive training from a WorkplaceNL recognized training provider.
- .3 Provide a copy of all committee minutes with the Contractor's Monthly OHS Performance Report.

190.03.05 REPORTING AND INVESTIGATION

The Contractor shall adhere to a documented incident, hazard, safety reporting, and investigation process. The system shall:

- .1 Ensure all hazards, near misses, incidents, accidents, injuries, equipment damage are recorded and properly investigated.
- .2 Rank actual and potential severity of observations and report all high potential near misses, accidents, and incidents immediately to the Owner's Representative and to the OHS Division of Digital Government and Service NL.
- .3 Advise the Owner's Representative and the OHS Division of Digital Government and Service NL verbally and in writing immediately of any incident that results in serious injury to a person or results in the death of a person; or had the reasonable potential to cause serious injury.
- .4 Provide a copy of all notifications made to the OHS Division of Digital Government and Service NL to Transportation and Infrastructure.
- .5 Where life safety risks or other high potential risks exists, the Contractor must stop work until such time as the risk can be mitigated to a safe level.
- .6 Make appropriate steps to ensure that the hazards are mitigated to a safe level, workers are notified of the hazards and how to protect themselves. Additionally, workers must be provided with any new safe work practices or information regarding mitigation of the risk.

190.03.06 INSTRUCTION AND TRAINING

- .1 Workers shall not participate in, or supervise, any activity on the work site until they have been trained to a level required by the job function and responsibility.
- .2 Contractors shall develop an OHS training program that reflects OHS Legislative requirements and specific safety hazards based on Project work.

- .3 Contractors must supply, as a component of the SSSP, a training matrix identifying all necessary training by occupation for the scope of the contract.
- .4 Training requirements will depend on the work tasks associated with a specific contract, however, as a minimum, shall include the following:
 - .1 Federal and/or Provincial Health and Safety Legislative requirements including roles and responsibilities of supervisors, workers and other person(s) responsible for implementing, monitoring and enforcing health and safety requirements.
 - .2 Instruction and training on the hazards associated with any work that workers will be performing and how to protect themselves and others. This will include a review of all safe work practices, the reporting and documentation of hazards, and the reporting of accidents and injuries.
 - .3 Limitations, use, maintenance and care of engineering controls and equipment.
 - .4 Workers must receive training from a WorkplaceNL recognized training provider as outlined in the OHS legislation (i.e. fall protection, confined space entry, power line hazards, traffic control persons training).
 - .5 Training in the use, care and maintenance of PPE to be used on site.
 - .6 Limitations, use, maintenance and disinfection/decontamination of personal protective equipment associated with completing work.
 - .7 Training in the Contractor's emergency response plan for the Project. Workers engaged in fall arrest or confined space rescue operations will require specific training for the tasks involved.
 - .8 Limitations and use of emergency notifications and response equipment including emergency response protocol(s).
 - .9 All workers at site must receive training in Workplace Violence and Harassment Prevention.
 - .10 Training in WHMIS 2015.
 - .11 Safety and health hazards associated with working in extreme weather conditions (i.e. heat/cold hazards).
 - .12 Appropriate number of persons trained in emergency and Standard First Aid according to the OHS First Aid Regulations.
 - .13 Safety and health hazards associated with working on a contaminated site, if applicable, including recognition of symptoms and signs which might indicate over exposure to hazards.
 - .14 Refer to **Sections 190.3.2 and 190.3.3** for training requirements for Site Supervisors and CSRs.
- .5 Detailed training records must be provided to the Owner's Representative upon request. Site training records must be in tabular or spreadsheet format, stating employee name, occupation, required training, date that training was obtained

and expiry date. This must be signed and dated by a member of the Contractor's management team.

- .6 Only qualified operators shall operator powered mobile equipment. Contractors must maintain records of worker's driver's license classification, expiry date, endorsements and the type of equipment (excavator, paver, loader etc...) they are qualified to operate for the complete scope of work on the Project. Such records must be provided to the Owner's Representative upon request. Records must be in tabular format or spreadsheet that has been signed and dated by a member of the Contractor's management team. Please note, that Driver's License Numbers should not be provided as this is confidential information. Provision of the License Number may breach PIPEDA - the Personal Information Protection and Electronic Documents Act. (Federal Act) or ATIPPA - Access to Information and Protection of Privacy Act - Part IV. (Provincial Act of NL & Lab).
- .7 Authorized visitors shall not access the work site until they have received orientation which would include :
 - .1 Notification of the names of persons responsible for implementing, monitoring and enforcing the Project SSSP.
 - .2 Briefed on safety and health hazards present on the site.
 - .3 Instruction in the proper use and limitations of personal protective equipment.
 - .4 Briefed on the emergency response protocols including notification and evacuation processes.
 - .5 Advisement of practices and procedures to minimize risks from hazards and applicable to activities performed by visitors.
 - .6 Being accompanied while on site and provided the appropriate PPE.

190.03.07 CONSTRUCTION SAFETY MEASURES

The Contractor shall:

- .1 Observe construction safety measures of the Federal or Provincial Government, OHS Act and Regulations, WorkplaceNL, and Municipal Authority. In cases of conflict or discrepancy, the more stringent requirement shall apply.
- .2 Administer the project in a manner that will ensure, at all times, full compliance with Federal and Provincial Acts, regulations and applicable safety codes and the Project Site Specific Safety Plan.
- .3 Provide the Owner's Representative with copies of all orders, directions and any other documentation, issued by the Occupational Health and Safety Division with the Department of Digital Government and Service NL and Employment and Social Development Canada (ESDC).
- .4 Forward copies of all orders, directions or any other documentation immediately after receipt.

190.03.08 POSTING OF DOCUMENTS

- .1 The Contractor shall ensure applicable items, articles, notices, minutes and orders are posted in a prominent location on site in accordance with OHS Act and Regulations or as required by WorkplaceNL.

190.03.09 NOTIFICATION

- .1 For projects exceeding thirty (30) days or more, the Contractor shall, prior to the commencement of work, notify in writing the Department of Digital Government and Service NL, Occupational Health and Safety Division the following information and provide a copy to the Owner's Representative:
 - .1 Completion of Notice of Project Form.
 - .2 Company name and mailing address of the Contractor doing the work.
 - .3 The number of workers to be employed.
 - .4 A copy of the Project Site Specific Safety Plan if requested.

190.03.10 CORRECTION OF NONCOMPLIANCE

- .1 The Contractor must immediately address health and safety non-compliance issues identified by the authority having jurisdiction or by the Owner's Representative.
- .2 The Contractor must provide the Owner's Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 The Owner's Representative may stop work if noncompliance of health and safety regulations are not corrected.

190.03.11 LIQUIDATED DAMAGES FOR NON-COMPLIANCE

- .1 Poor safety performance leads to extreme risks, delays, and overall extra resource by the Department of Transportation and Infrastructure to provide incremental administration and additional due diligence on the Contractor Work. As such, if the Work fails to meet any specific safety requirement in this **Section 190** the Department will apply Liquidated Damages to the work.
- .2 The Department shall document and provide the Contractor with notification, either verbal or written, when an infraction has been noted so as to allow the Contractor to develop corrective actions to prevent future infractions.
 - .1 The Contractor will be given a minimum of one written warning for failure to comply with this specification.
 - .2 The next three infractions will result in Liquidated Damages of \$500/day for non-compliance being applied to the work. For each successive infraction the Liquidated Damages increases to \$1,000/day.

- .3 The possibility of project shutdown or termination exists at any time where the Contractor fails to observe the provisions of **Section 190** and the Owner's Representative and the Department believe such action is warranted from a safety and/or contractual perspective. Such shutdown or termination may occur irrespective of whether Liquidated Damages were applied or not.
- .4 Typical infractions may include but are not limited to:
 - .1 CSR not present on site as required.
 - .2 Safety reports not provided within specified timelines.
 - .3 Working without appropriate safety work practices, procedures, etc.
 - .4 Incidents and hazards not investigated, nor communicated to the Owner's Representative in a timely fashion.
 - .5 Failure to action OHS orders and/or other identified safety gaps in a timely manner.
 - .6 Not adhering to training requirements.
 - .7 Utilizing or operating unsafe or uninspected mobile equipment (including light vehicles).
 - .8 Not adhering to approved signage plans and requirements.
 - .9 Violation of any portion of **Section 190** or the Contractor's Site Specific Safety Plan without appropriate investigations and mitigations. This includes not adhering to their SWP's, safety procedures, OHS Act and Regulations, and policies.

190.04 SAFETY REGULATIONS

The Department solely relies on the Contractor to know and adhere to appropriate safety regulations. The following sections are provided for convenience and are not intended to be an all-inclusive list of safety regulations. In addition to the items stated in **section 190.4**, it is the Contractor's responsibility to ensure compliance with applicable Federal, Provincial, Territorial and Local statutes, regulations, and ordinances. Should there be any conflicts in latest regulations, Contractor safe work practices, or other recognized safety needs the latest and most stringent safety requirements shall apply.

190.04.01 WHMIS 2015

The Contractor shall:

- .1 Ensure that all controlled products are in accordance with the Workplace Hazardous Materials Information System (WHMIS 2015) Regulations and Chemical Substances of the OHS Act and Regulations regarding use, handling, labeling, storage, and disposal of hazardous materials.
- .2 Deliver copies of relevant Safety Data Sheets (SDS) to job site and the Owner's Representative. The SDS must be acceptable to Health Canada for all controlled products that will be used in the performance of this Work.

- .3 Train workers required to use or work in close proximity to controlled products as per OHS Act and Regulations. This must be documented as part of the on-site orientation and a copy provided to the Owner's Representative.
- .4 Label controlled products at jobsite as per OHS Act and Regulations.
- .5 Provide appropriate emergency facilities as specified in the SDS where workers may be exposed to contact with chemicals, e.g. eyewash facilities, emergency shower.
 - .1 Workers shall be trained in use of such emergency equipment.
- .6 Provide appropriate personal protective equipment as specified in the SDS where workers are required to use controlled products.
 - .1 Properly fit workers for personal protective equipment.
 - .2 Train workers in care, use and maintenance of personal protective equipment.
- .7 Ensure that SDS remain on site at all times and are accessible to everyone on site.

190.04.02 OVERLOADING

The Contractor shall:

- .1 Ensure no part of the Work or associated equipment is subjected to loading that will endanger its safety or cause permanent deformation.
- .2 Ensure equipment operations follow manufacturer's operating manual.

190.04.03 FALSEWORK

The Contractor shall:

- .1 Design and construct falsework in accordance with CSA S269.1.

190.04.04 SCAFFOLDING

The Contractor shall:

- .1 Design, erect and maintain scaffolding in accordance with CSA S269.2: Access Scaffolding for Construction Purposes and Part XI: sections 147-249 of the OHS Regulations.
- .2 Ensure that fall protection devices are used by all workers working at elevations of 1.22 metres or greater in accordance with CSA Z259 and CSA S269.2.
- .3 All workers performing work at height and who will be required to utilize a fall arrest system must be trained in a fall protection program certified by WorkplaceNL.
- .4 Scaffolding shall be inspected each day prior to use by a competent inspector. Records and copies of these inspections shall be kept on site and provided upon

request to the Department of Transportation and Infrastructure officials, Owner's Representative, etc.

- .5 Scaffolding inspection reports may be required to be provided with the Contractor's Monthly OHS Performance Reports, at the discretion of the Owner's Representative.

190.04.05 PERSONAL PROTECTIVE EQUIPMENT

The Contractor shall:

- .1 Develop a Personal Protective Equipment (PPE) Program which shall detail:
 - .1 Selection criteria based on site hazards as determined by the hazard assessment.
 - .2 Use, maintenance, inspection and storage requirements and procedures.
 - .3 Decontamination and disposal procedures.
 - .4 Inspection procedures prior to, during and after use, and other appropriate medical considerations.
 - .5 Limitations during temperature extremes, heat stress and other appropriate medical consideration.
- .2 Ensure that in addition to those requirements set forth in the OHS Act and Regulations, all persons, including those employed by the Contractor or their Subcontractors, working on projects for The Department of Transportation and Infrastructure shall wear the following mandatory Personal Protective Equipment at **ALL** times while working on the project.
 - .1 CSA approved safety boots meeting the CSA Z195 Standard.
 - .2 CSA approved hard hat meeting the CSA Z94.1 Standard.
 - .3 CSA approved safety glasses meeting CSA Z94 Standard.
 - .4 High visibility apparel as defined in the OHS Regulations.
 - .5 Where noise exceeds standards set out in the OHS Regulations hearing protection shall be worn, and hearing conservation program implemented.
 - .6 Other personal protective equipment, as may be required by the work tasks, hazard assessments or the Contractor, depending on duties being performed.

190.04.06 TRAFFIC CONTROL

The Contractor shall:

- .1 Provide traffic control measures when working on, or adjacent to, roadways. This will include but is not limited to appropriate signage, traffic control persons and control vehicles.
- .2 Ensure that traffic control measures conform with the Department of Transportation and Infrastructure's Traffic Control Manual, latest edition and errata.

- .3 Ensure daily completion of the Department of Transportation and Infrastructure, Contractor Daily Traffic Control Signage Log. This log is to be completed daily at a minimum and at any point where the signage required changes to ensure accuracy. The log will be submitted monthly with the Contractor OHS Monthly Performance Report and may be inspected randomly by staff of Transportation and Infrastructure for completion and accuracy.
- .4 Ensure that signage utilized on site shall meet the requirements of the Traffic Control Manual.
- .5 Submit traffic control plans for all portions of the contract work to the Owner's Representative as part of the SSSP including all accompanying hazards assessments. These traffic control plans must note the location, plan number if referencing a plan contained in the Traffic Control Manual, spacing of signs, location and number of traffic control persons and be prepared in a professional manner. If the construction situation is not specifically addressed in the Traffic Control Manual then the Contractor must provide the Owner's Representative with a site specific traffic control plan addressing all of the items listed above in a professional format.
- .6 Complete hazard assessments for traffic control plans to identify hazards unique to the work (i.e., volume of heavy equipment, size of lanes and barriers to protect workers from traffic, additional decreases in posted speeds, etc.).
- .7 The Contractor shall ensure that traffic control persons have completed Traffic Control Person Level I training as certified by WorkplaceNL.
- .8 The Contractor shall ensure that a competent individual is responsible for monitoring, maintaining and adjusting traffic control plans throughout the life of the project. This individual shall:
 - .1 Have completed Traffic Control Person Level II training as certified by WorkplaceNL.
 - .2 Be provided with authority and resources to ensure continuous monitoring of the worksite and revision of the traffic control plan when necessary.
 - .3 Be responsible to complete the Daily Traffic Control Signage Log to accompany the Contractor's Monthly OHS Performance Report requirements.
- .9 Contractors should plan their work activities daily to ensure work will not occur in twilight or dark hours. However, if this does occur due to unforeseen circumstances, the Contractor shall have provisions in place for illumination of the work area and ensure the traffic control persons are properly equipped as required.
- .10 Ensure compliance with Part XVI of the OHS Regulations 5/12.

190.04.07 WORKING AT HEIGHT

The Contractor shall:

- .1 Ensure that Fall Protection devices in accordance with the regulations are utilized at a height of 1.22 metres.
- .2 Develop a site specific fall protection plan, including a rescue plan, and provide it to the Owner's Representative as a part of the SSSP when fall protection systems (as per Part X of the OHS Regulations), are required during the course of the Project.
- .3 Ensure that fall restraint or fall arrest devices used by workers are in accordance with CSA Z259.
- .4 Ensure that all workers performing work at height and who will be required to utilize a fall arrest system are trained in a fall protection program certified by WorkplaceNL.
- .5 Maintain a list of all persons trained in WorkplaceNL certified fall protection training on site. To be combined with other training records as required in a tabular or spreadsheet format listed throughout **Section 190**.
- .6 Ensure regular inspections of all fall protection and fall arrest equipment are completed and that records are maintained and kept on site. Daily inspections of fall restraint and horizontal fall protection/arrest systems shall be conducted.
- .7 Ensure that manufacturer's specifications for engineered fall protection/arrest/restraint systems are kept on site at all times.
- .8 Ensure that anchor points for fall arrest systems are identified and certified annually by a Professional Engineer per CSA standards.
- .9 Develop Working from Height Safe Work Practices specific to the Work, location and risks, and ensure the workers receive specific instruction regarding the work tasks and associated rescue plans.
- .10 Ensure that rescue equipment for fall rescues is kept in close proximity to workers working at height.
- .11 Where necessary the Contractor shall ensure that adequate protection from falling debris is addressed in site specific safety plans, this may include debris nets, barriers, etc.

190.04.08 WORKING OVER OR NEAR WATER

The Contractor shall:

- .1 Where the risk of entering water is identified and other means of fall protection or rescue are not adequate to prevent the worker from entering the water, develop water rescue plans and ensure that workers on site are trained.
- .2 Keep and maintain a list of all persons trained in water rescue on site. This list shall be combined with other training records as required in a tabular or spreadsheet format listed throughout **Section 190**.

- .3 Require that workers wear personal flotation devices where workers are at risk of entering the water.
- .4 Ensure that life-saving equipment is available near entry site for water rescue. This may include life boats, throw lines, life preservers, etc.

190.04.09 ACCESS, EGRESS AND WALKWAYS

The Contractor shall:

- .1 Ensure that all accesses, egresses and walkways are continuously monitored for hazards which may include slips, trips, slippery conditions and other hazards.
- .2 Develop provisions for snow clearing of walkways, accesses and egresses.
- .3 Ensure that all access, egress hatches, holes or other potential hazards of this nature are clearly identified to workers and adequately covered.

190.04.10 RIGGING AND SLINGING

The Contractor shall:

- .1 Ensure that workers required to perform work related to rigging and slinging are trained and deemed competent in such operations and practices.
- .2 Maintain and inspect all rigging and slinging equipment in accordance with manufacturers' specifications, CSA Standards and OHS Regulations.
- .3 Ensure that the working load limit of rigging and slinging equipment on site is marked and visible on the product.
- .4 At a minimum, ensure that rigging and slinging operations meet the requirements of the OHS Act and Regulations.
- .5 Ensure that rigging and slinging equipment identified in daily inspections or otherwise identified as damaged, worn or unacceptable to manufacturers' specifications, appropriate standards or OHS Regulations is immediately taken out of service and destroyed.

190.04.11 WORKPLACE VIOLENCE AND HARASSMENT

- .1 The Contractor shall develop a Workplace Violence and Harassment Prevention Plan for the project that complies with the latest edition of the OHS Regulations.

190.05 SAFETY OPERATIONS

The Department solely relies on the Contractor to know how to safely perform the Work and the Contractor is fully responsible for the safety of its operations. The following are minimum expectations and may not be all inclusive. The Contractor shall ensure that all work meets the latest safety requirements and that all work is performed safely irrespective of the stated following requirements. Should there be any conflicts in latest standards, Contractor safe work procedures/practices, or other recognized safety needs

the latest and most stringent safety requirements as deemed appropriate by the Contractor shall apply.

190.05.01 EXCAVATION OPERATIONS

The Contractor shall:

- .1 Protect excavations more than 1.22 metres deep against cave-ins or wall collapse by side wall sloping to the appropriate angle of repose, an engineered shoring/sheathing system or an approved trench box.
- .2 Provide a ladder where excavation is greater than 1.22 metres deep, extending from the bottom of the excavation to at least 0.91 metres above the top of the excavation.
- .3 Ensure that all excavations less than 1.22 metres deep are effectively protected when hazardous ground movement may be expected.
- .4 Ensure that trench boxes are designed and certified by a registered Professional Engineer. Ensure the manufacturer's Depth Certificate Statement is permanently affixed to the trench box. Use trench boxes in strict accordance with manufacturer's instructions and depth certification data.
- .5 For excavations deeper than five (5) metres, provide a certificate from a registered Professional Engineer stating that the protection methods proposed have been properly designed in accordance with accepted engineering practice. The Engineer's certificate shall verify that trench boxes, if used, are properly designed and constructed to suit the depth and soil conditions.
- .6 Ensure that the superintendent and every crew chief, foreperson and lead hand engaged in trenching operations or working in trenches have the appropriate training and have in their possession a copy of the OHS Regulations: PART XVIII EXCAVATION, UNDERGROUND WORK AND ROCK CRUSHING.

190.05.02 BLASTING OPERATIONS

Where blasting is required, the Contractor, at a minimum, must:

- .1 Ensure a valid Blaster's Certificate and Certificates of Qualification acceptable to the OHS Regulations 5/12 under Section 419 identifying the Level of Qualification for the project requirements (Journey Persons Blaster Certificate will still be accepted). An acceptable letter of extension of blasters certificate from the Apprenticeship and Trades Certification Division of the Department of Advanced Education, Skills and Labour is required where their certificate expires (5 years max.). Certificate numbers and names are required for all blasters proposed for the project.
- .2 Hold a Temporary Magazine License, when required, issued by Natural Resources Canada.

- .3 Hold an Explosives Vehicle Certificate, when required, issued by Transport Canada for transport of explosives regulated under the Transportation of Dangerous Goods Act.
- .4 Ensure that the Blaster's resume clearly states and demonstrates:
 - .1 Minimum five (5) years of experience in handling, storage and detonation of explosives.
 - .2 Training at a blaster's school which is acceptable to the Provincial Government.
- .5 Ensure blasting operations are carried out under the direct visual supervision of a certified Blaster either registered with the Apprenticeship and Trades Certification Division of the Department of Advanced Education, Skills and Labour or has been issued a certificate from completion of a program approved by the Department of Digital Government and Service NL. Ensure that the certificate level is appropriate for the blasting activities which will occur. Comply with the requirements of:
 - .1 Explosives Act.
 - .2 Explosives Regulations.
 - .3 Newfoundland Regulation 5/12, Occupational Health and Safety Regulations.
 - .4 Role of certified blaster set out in section 419 of the Occupational Health and Safety Regulations 5/12.
- .6 Store explosives in accordance with the "Explosives Act (Canada)" and transport, handle and use in the manner prescribed by the manufacturer of the substance and subject to specific regulations. An inventory of explosives shall be kept at all times.
- .7 Ensure that workers required to transport explosives have a valid Transportation of Dangerous Goods Training Certification in accordance with the Transportation of Dangerous Goods Act and the Explosives Act. Vehicle used to transport explosives on site shall be placarded and explosives shall be transported in containers lined with non-sparking materials (reference section 428 of the Occupational Health and Safety Regulations 5/12). Detonators shall not be placed in a magazine or daybox with other types of explosives or in a compartment of a vehicle with another type of explosive.
- .8 Ensure that the use of explosives on site complies with the Occupational Health and Safety Regulations 5/12 General Blasting requirements are set out in Part XIX of the Regulations. Loaded holes shall be clearly identified with barricades put in place to prevent access to the holes. Drilling shall not be done closer to a loaded bore hole than a distance half the total depth of the hole being drilled and in no case shall drilling be conducted at a distance closer than 6 metres from a loaded borehole. Drill cuttings shall not be used as stemming material.

- .9 Advise the public by suitable public notices, advertisements, house to house contacts etc. for blasting operations in close proximity to areas occupied by the public. Advise of the warning device to be sounded and the procedure to be used before detonation of individual blasts. Roads and approaches to the danger area are guarded or barricaded to prevent anyone from entering. Loaded holes which have not been fired by the end of the day shall not be left unattended.
- .10 Prior to detonation of a blast, give sufficient warning in every direction and ensure that all persons have reached a place of safety before the blast is fired.
- .11 File an Emergency Response Assistance Plan with the Explosives Branch, Natural Resources Canada.
- .12 Ensure that the Blaster:
 - .1 Is solely responsible for implementation of the Explosives Management Program.
 - .2 Has a valid blaster's safety certificate from the Apprenticeship and Trades Certification Division of the Provincial Department of Advanced Education, Skills and Labour and have a valid temporary Magazine License, when required, issued by Natural Resources Canada, for storage and explosives.
 - .3 Possess a thorough working knowledge of the Federal Explosives Act and Provincial Regulations.
 - .4 Possess a specialized training in handling storage and detonation of explosives.
 - .5 Keeps a field journal concerning all blast activities.

190.05.03 HEAVY EQUIPMENT OPERATIONS

The Contractor shall:

- .1 Ensure mobile equipment used on job site is fitted with a Roll Over Protective Structure (ROPS) and Falling Object Protective Structures (FOPS) as specified in OHS Act and Regulations (specific to sections 261-265).
- .2 Ensure that operators of mobile equipment have adequate instruction and are competent in the operation of mobile equipment.
- .3 Ensure that operators of heavy equipment are Power Line Hazards certified from WorkplaceNL.
- .4 Obtain written clearance from the power utility where equipment is used in close proximity to (within 5.5 metres) overhead or underground power lines.
- .5 Equip cranes with:
 - .1 A mechanism which will effectively prevent the hook assembly from running into the top boom pulley.
 - .2 A legible load chart.
 - .3 A maintenance log book.

- .6 Ensure that there is no overnight parking of heavy equipment on road shoulders, where exposure to the public may be present.

190.05.04 BRUSH CLEARING OPERATIONS

The Contractor shall:

- .1 Ensure workers using chain saws or brush saws are competent and wear the following safety equipment:
 - .1 CSA approved safety hat fitted with face screen or shield.
 - .2 Approved eye protection.
 - .3 Hearing protection, e.g. ear muffs.
 - .4 CSA approved chain saw pants.
 - .5 CSA approved chain saw boots.
 - .6 Cut resistant gloves.
- .2 Chain saws must be equipped with a chain brake.
- .3 A safe work practice (SWP) must be developed, implemented and all workers trained in the SWP prior to undertaking such tasks and utilizing tree and brush clearing equipment.

190.05.05 DIVING OPERATIONS

When diving operations are required, the Contractor shall ensure that the diving contractor, completes, at a minimum, the following:

- .1 Development of site specific diving safety plan.
- .2 Maintains records of the diver(s) and dive supervisor (s), including:
 - .1 Copy of valid Diving Certificate and Supervisor Certificate from the Diving Certification Board of Canada (or equivalent) for the required work on the project. (i.e. Restricted SCUBA Diver, Unrestricted SCUBA Diver, SCUBA Supervisor, Restricted Surface-Supplier Diver, Unrestricted Surface-Supplied Diver, etc.(See www.divercertification.com).
 - .2 Resume which clearly demonstrates years of experience for the specific type (SCUBA, Surface Supplied Air, etc.) of diving to be performed at the site and projects completed to achieve minimum number of logged bottom time hours.
 - .3 First Aid and CPR Training Certification.
- .3 Maintains the dive tender(s) resume which must clearly state relevant training (including first aid and CPR and experience for the specific task (i.e. dive tender log book).
- .4 Ensures current (less than one year) medical examination certificate(s) for all divers, from a licensed medical doctor in the Province of Newfoundland and Labrador who is knowledgeable and competent in diving and hyperbaric medicine for all dives.

- .5 Maintains Certificates of Analysis for quality/purity of breathing air to be used by diver(s).
- .6 Ensures documentation showing that diving life support equipment is in good working order and properly maintained.
- .7 Ensures copies of documentation to show:
 - .1 An up-to-date dive site listing of the contact Hyperbaric facility and phone numbers for each location.
 - .2 Written arrangements with standby physician(s) specializing in diving/hyperbaric medicine for contingent emergency response and post dive follow-up for 48 hours after dive is completed.
 - .3 Effective means of communication between the diving supervisor and physician are available.
 - .4 The name, location and telephone number of the hospital and emergency department nearest the dive site.
- .8 Develops emergency rescue procedures that include:
 - .1 Managing deteriorating environmental conditions.
 - .2 Managing unexpected weather or sea state condition.
 - .3 Evacuation of diver(s) under pressures greater than atmospheric pressure
 - .4 In water emergency transfers.
 - .5 Managing failing of equipment below the surface that impairs the ability of a diver to complete a dive.
 - .6 Managing failure of any major component of diving plant or equipment.
 - .7 Emergency signaling between divers involved in the diving program and between the diver(s) and the attendants using umbilical, tethers or other suitable methods.
 - .8 Mobilizing standby divers.
 - .9 Mobilizing crafts, standby boats and any other devices to be used for rescue.
 - .10 Contacting evacuation, rescue, treatment facilities and medical services that will be used in the diving program.
 - .11 Operation of emergency power and lighting facilities
- .9 Ensures diving operations conform to CSA Z275.2-04 Occupational Safety Code for Diving Operations and CSA Z275.4-02 Competency Standard for Diving Operations or later edition.
- .10 Ensures sampling:
 - .1 Prior to commencing diving activities, sample water and analyze sample(s) for:
 - i. Fecal Coliforms (*Escherichia coli*).
 - ii. Total Coliforms.

- iii. Any health hazard identified during the site specific hazard assessment.
 - iv. Any parameter as directed by the Department of Digital Government and Service NL.
- .2 Water will be designated a contaminant if the chemical concentration of a contaminant exceeds:
 - i. 200 fecal Coliforms (Escherichia coli) per 1000 milliliter of water.
 - ii. 100 times the guidelines concentration established in the most recent Guidelines of Canadian Drinking Water Quality.
 - iii. Any other criteria established by the Department of Digital Government and Service NL.
- .11 Ensures that sample analysis is to be completed by a laboratory that is accredited by the Canadian Associates of Environmental and Analytical Laboratories (CAEAL) or other national equivalent.
- .12 Ensures that dive personnel must meet the minimum competency requirements of CSA 275.4-02.
 - .1 The Dive supervisor(s) shall as a minimum:
 - i. Possess a Valid Diving Certificate, or equivalent, for a minimum of three (3) years for the type of diving to be performed.
 - ii. Have completed one hundred and fifty (150) hours of logged diving time for the type of diving to be performed.
 - iii. Have completed fifty (50) hours of dive supervision for the type of diving to be performed.
 - .2 Diver(s) shall as a minimum:
 - i. Possess a valid Diving Certificate or equivalent, for the type of diving to be performed.
 - ii. Have completed fifty (50) hours of logged dive time for the type of diving to be performed.
- .13 Ensures that a diving operation shall be interrupted or discontinued or not commenced when:
 - .1 Continuation of the diving operation would or is likely to compromise the safety of any person involved in the diving operation.
 - .2 The water currents at the underwater work site are likely to compromise the safety of any person involved in the diving operation.
 - .3 Combustible material is stored too close for safety to any diving plant and equipment used in the diving operation.
- .14 Ensures that a diving operation shall:
 - .1 Not be conducted in the vicinity for any other activity that might pose a danger to any person involved in the diving operation.

- .2 Not use any craft that has insufficient power or stability for the safe continuity of the diving operation.
- .3 Provide measures for making work area boundary and stopping unauthorized entry into the work area.
- .4 Provide adequate illumination of the dive site and the underwater work site of the diving operation.
- .15 Provides, at the work site while completing diving operations, a diving operations log book that is permanently bound and has numbered pages.
 - .1 Produce on request, any log books, records or other documentation associated with the diving operation, for inspection by the Owner's Representative.
 - .2 As a minimum, for each diving operation enter into the diving operation logbook:
 - i. date and time the diving operation commenced and terminated including any time the diving operation was interrupted.
 - ii. name of supervisor; names of all other persons involved.
 - iii. the procedures followed.
 - iv. the decompression table and the schedule in that the decompression table was used.
 - v. the maximum depth, bottom time, dive time and total dive time for each dive.
 - vi. the type of diving plant and equipment and the type of breathing mixture used.
 - vii. the type of discomfort, injury or illness including decompression sickness, suffered by any person involved
 - viii. any environmental conditions that affected or might have affected the diving operation.
 - ix. any other factors relevant to the safety to health of any person involved.
- .16 Ensures that diving in free swim mode is not permitted at the work site.
- .17 Provides separate first aid supplies for dive operation. All dive team personnel shall be trained in first aid and cardiopulmonary resuscitation (CPR).
- .18 Provides medical oxygen for emergency response at work site. The dive supervisor shall be trained in administering medical oxygen.

190.05.06 CONFINED SPACE OPERATIONS

When confined space entry is required, the Contractor, at a minimum, must:

- .1 Develop a site specific confined space entry plan that is specific to the nature of work performed and provide it to the Owner's Representative as a part of the

- SSSP. This shall include a CSE permit system, rescue plan, testing, equipment, communication considerations and safe work procedures.
- .2 Ensure confined space operations are carried out in accordance with the OHS Act and Regulations PART XXVII CONFINED SPACE ENTRY.
 - .3 The Contractor shall ensure that all appropriate policies, assessments, training, testing and rescue plans are in place, communicated to workers and utilized prior to confined space entry.
 - .4 All staff required to enter a confined space shall be trained in confined space entry through a program certified by WorkplaceNL.
 - .5 Provide approved air monitoring equipment when workers are working in confined spaces as appropriate. Ensure any testing equipment to be used is calibrated, in good working order and used by trained persons.
 - .6 Maintain 'entry permit' records for each entry into a confined space to ensure compliance with Provincial Legislation. Records shall be made available to Owner's Representative upon request.

190.05.07 CRANE OPERATIONS

The Contractor shall:

- .1 Ensure that training records and certifications for operators of cranes are kept on site and maintained. This training shall meet the requirements of the OHS Act and Regulations, CSA standards and identify the operators as competent.
- .2 Ensure that manufacturers' specifications for all lifting equipment is kept on site.
- .3 Inspect and maintain lifting equipment in accordance with the appropriate CSA standards and manufacturers' specifications by a competent and qualified individual.
- .4 Ensure that maintenance records for lifting equipment is maintained and available upon request.
- .5 Develop safe work practices for working around cranes and ensure that the information is reviewed with operators and staff.
- .6 Ensure that safe work practices for crane operations are developed and reviewed with all operators. Additional attention shall be provided for safe work practices related to operations for tandem crane lifts.
- .7 Complete a hazard assessment and develop a corresponding plan, when tandem crane lifts are required for the construction, maintenance and or repair of a structure, road or bridge.
- .8 Ensure that operators and signalers shall have radios or other suitable means of communications.
- .9 Ensure that where an apprentice crane operator will be operating a crane he/she is under the direct supervision of a journey person operator as required by the

Apprenticeship and Trades Certification Division of the Department of Advanced Education, Skills and Labour.

- .10 Ensure that the load capacity of the crane is clearly marked in a visible location.

190.05.08 PIT AND QUARRY OPERATIONS

- .1 The Contractor shall ensure that pits and quarry operations comply with OHS Regulations. The Contractor may be required to provide the following documents certified by the appropriate professionals in accordance with the regulations:
 - .1 Mine design plan, certified by a Professional Engineer (where three or more benches are to be mined) (OHS section 519).
 - .2 A plan for electrical energy at the mine, certified by a Professional Engineer (OHS section 679).
 - .3 Ground Control Log Book (OHS section 525).
 - .4 Ensure appropriate signage is utilized to prohibit unauthorized entry.
 - .5 Monitor conditions and utilize a dust suppression management program, particularly for drilling and crushing operations, if necessary.

190.06 OWNER'S STATEMENT

- .1 The Owner shall not be responsible for injury or damage occasioned by a failure of the Contractor to adhere to these provisions.



The report below is to be completed on a monthly basis by all Contractors
 Please attach information pertaining to items highlighted with an asterisk (*)

Contractor Information

Contractor/Company Name		
Report Prepared By		
Report for Period		Beginning: _____ Ending: _____
Project and Location		
Contact	Name	Contact Number
Contract Manager		
Contractor CSO		
Site Manager		

Monthly OHS Performance Indicators

Lagging Indicators		Leading Indicators		
<i>Indicate the total within reporting period above</i>	Monthly Total	<i>Indicate the total within reporting period above</i>	Monthly Total	Records available
Lost Time Injuries		Tool Box Talks (safety specific)*		
Working Days Lost		OHS Committee/Rep Meetings*		
Return to Work Plans		Bi-Weekly Project Meeting		
First Aid Incidents		Site Safety Orientations		
Medical Aid Incidents		Weekly Site Inspections*		
Total Hours Worked (site)		Hazard Reports Submitted		
Accident /Incident reports		Hazard Assessments Conducted*		
Accident Incident Investigations Conducted*		Traffic Control Signage Log Completed*		
		NLCSA Certificate of Recognition (COR)*		

OHS Division Activities

OHS Division Inspections		OHS Division Directives Issued*	
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Sub-Contractor Information

Name sub-contractors working on site	Description of work conducted by sub-contractors	Days on site	COR Certified (Y/N)

Training Information

Training conducted with staff	Brief description of training conducted with safety or work practice focus	Total staff trained	Records available (Y/N)

Equipment Maintenance

Annual equipment inspections conducted (Y/N)	All equipment passed inspection (Y/N)	Records Available (Y/N)	Non-Routine maintenance required? Identify equipment	List maintenance conducted

Report completed on:		Signature:	
-----------------------------	--	-------------------	--

Definitions

First Aid incident – An Occupational Injury/Illness that requires first aid treatment only and does not result in loss of time from work or Restricted Work.

Medical aid incident – A classification of Occupational Injury/Illness for Medical Treatment beyond First Aid Injury where there has been no Lost Days. i.e: Visit to a health care provider or hospital specific to the injury

Lost-Time Injury – An injury/illness resulting in Lost Days beyond the date of injury as a direct result of an Occupational Injury/Illness incident on the project.

Working Days Lost – The number of calendar days that the employee is unable to work beyond the day of injury specific to the project in which the injury occurred. Calculate total days for all employees working on the project.

Total Hours Worked – Total number of hours of employment (i.e., the actual worked hours) of all employees for each contractor and sub-contractor companies for the reporting period specific to the project.

Accident – An undesired event resulting in death, ill health, injury, damage or other loss.

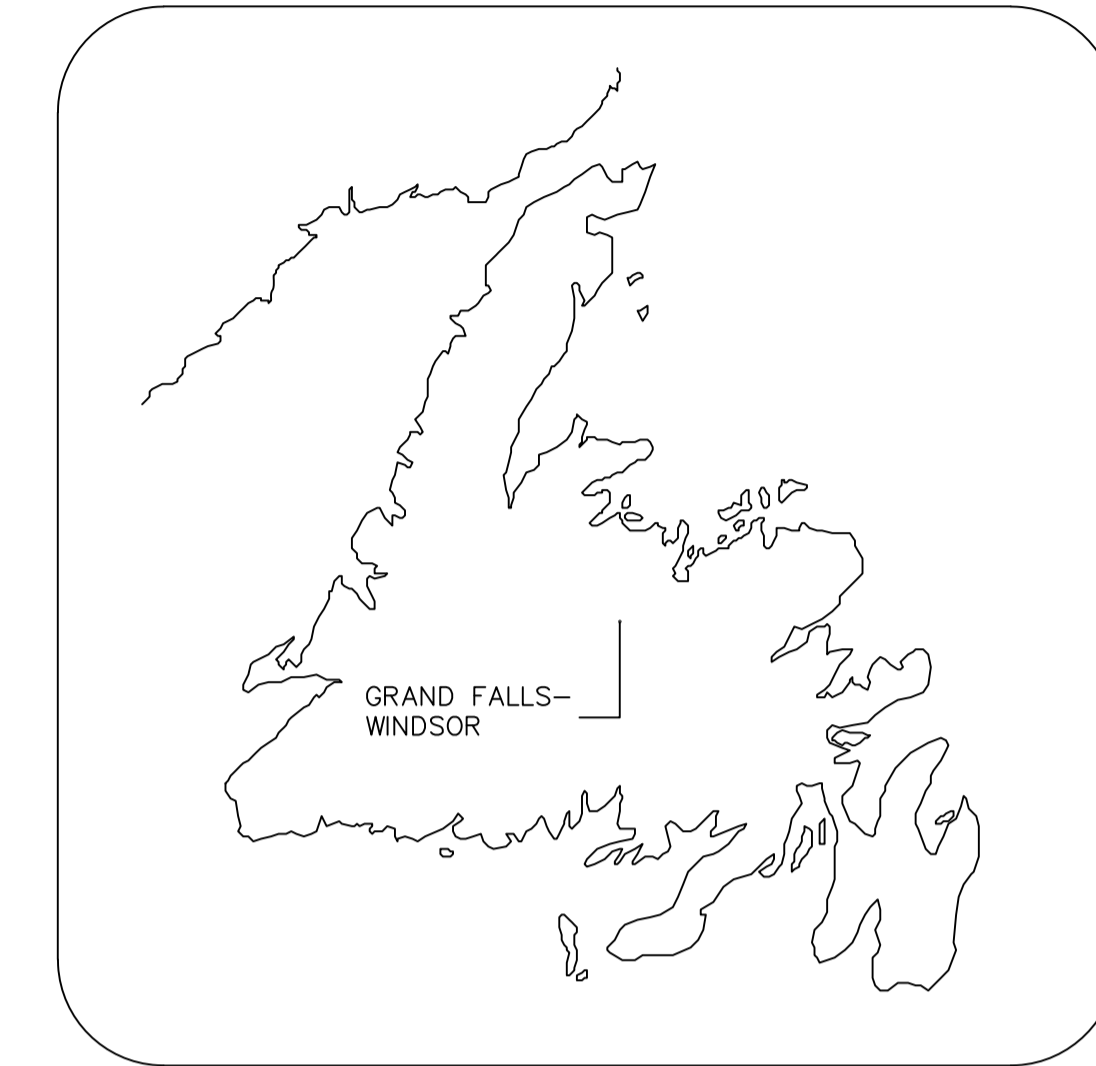
Incident -- An unplanned, undesired event that had the potential to cause injury or other damage.

Accident/Incident Report – all accidents and incidents must be reported, whether through an internal reporting structure or through the WHSCC employers form 7. All accidents of a serious nature must also be reported to the OHS Division within 24 hours (serious accidents re outlined in section 54(3) of the OHS Act)

Accident/Incident Investigation – is an investigation by the employer into the root cause of an accident or incident to identify hazards and prevent workplace accidents/incidents from recurring.

Part V

TOWN OF GRAND FALLS–WINDSOR
DEVELOPMENT DEPARTMENT



GRENFELL HEIGHTS EXTENSION

ROAD UPGRADES and
CULVERT REPLACEMENT



Issued For Tender

DEPT. of Transportation and Infrastructure, Municipal Infrastructure
PROJECT# 2024 – T2

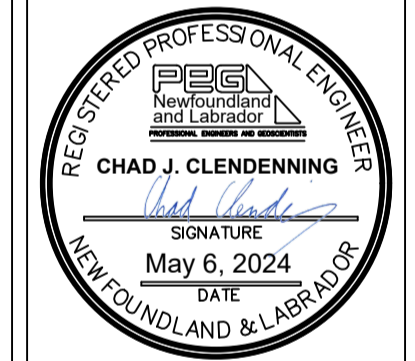


NOTES

LEGEND

REV.	DESCRIPTION	CHECKED BY	APP BY	DATE
2	Issued For Tender	CJC	CJC	5/6/24
1	Issued For Review	CJC	CJC	3/25/24

REVISIONS



TOWN OF GRAND FALLS-WINDSOR
PUBLIC WORKS AND DEVELOPMENT DEPARTMENT
 P.O. BOX 439
 GRAND FALLS-WINDSOR, NL
 A2A 2J8
 PHONE: (709) 489 0427 FAX: (709) 489 0465

PROJECT TITLE
GRENFELL HEIGHTS EXTENSION

DRAWING TITLE
LOCATION

TOWN OF GFW PROJECT NO. 2024 - T2	DEPARTMENT OF TLM PROJECT NO.	
DRAWN BY DH	HORIZONTAL SCALE 1:500	VERTICAL SCALE 1:50
DATE March 25, 2024	REVISION NO.	DRAWING NO. 1 of 6

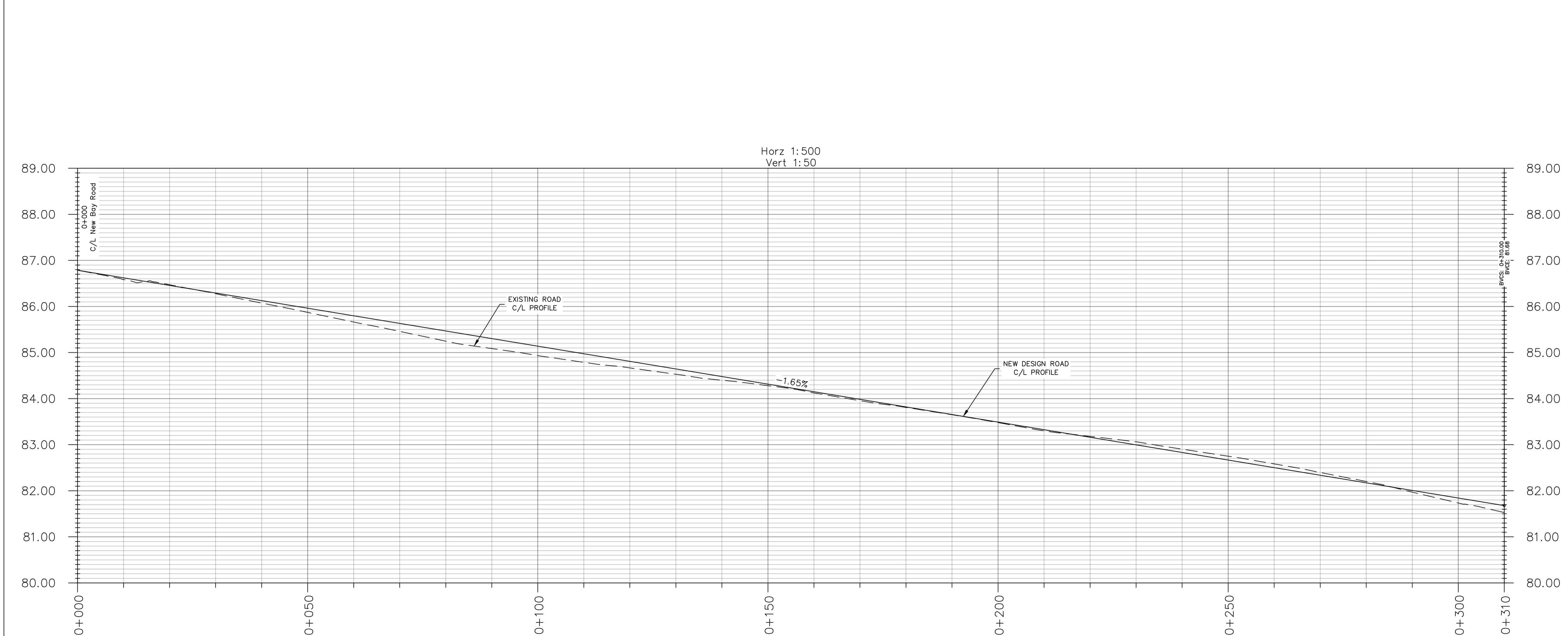


- NOTES**
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 - SEE GENERAL NOTES ON DETAILS SHEET.

LEGEND

Existing Center Line Profile	---
New Center Line Road Profile	—
New Ditch Line Profile	- - - -
Existing Storm Pipe	---
New Storm Pipe	---
Utility Pole	● UP/LP
Signal Pole Sign	□ SPS

REV.	DESCRIPTION	CHECKED BY	APP BY	DATE
2	Issued For Tender	CJC	CJC	5/6/24
1	Issued For Review	CJC	CJC	3/25/24



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| perfectly centered |

TOWN OF GRAND FALLS-WINDSOR
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PROJECT TITLE
GRENFELL HEIGHTS EXTENSION

DRAWING TITLE
PLAN and PROFILE
0+000 to 0+300

TOWN OF GFW PROJECT NO. 2024 - T2	DEPARTMENT OF TLM PROJECT NO.
DRAWN BY DH	HORIZONTAL SCALE 1:500
DATE March 25, 2024	REVISION NO.
VERTICAL SCALE 1:50	DRAWING NO. 2 of 6

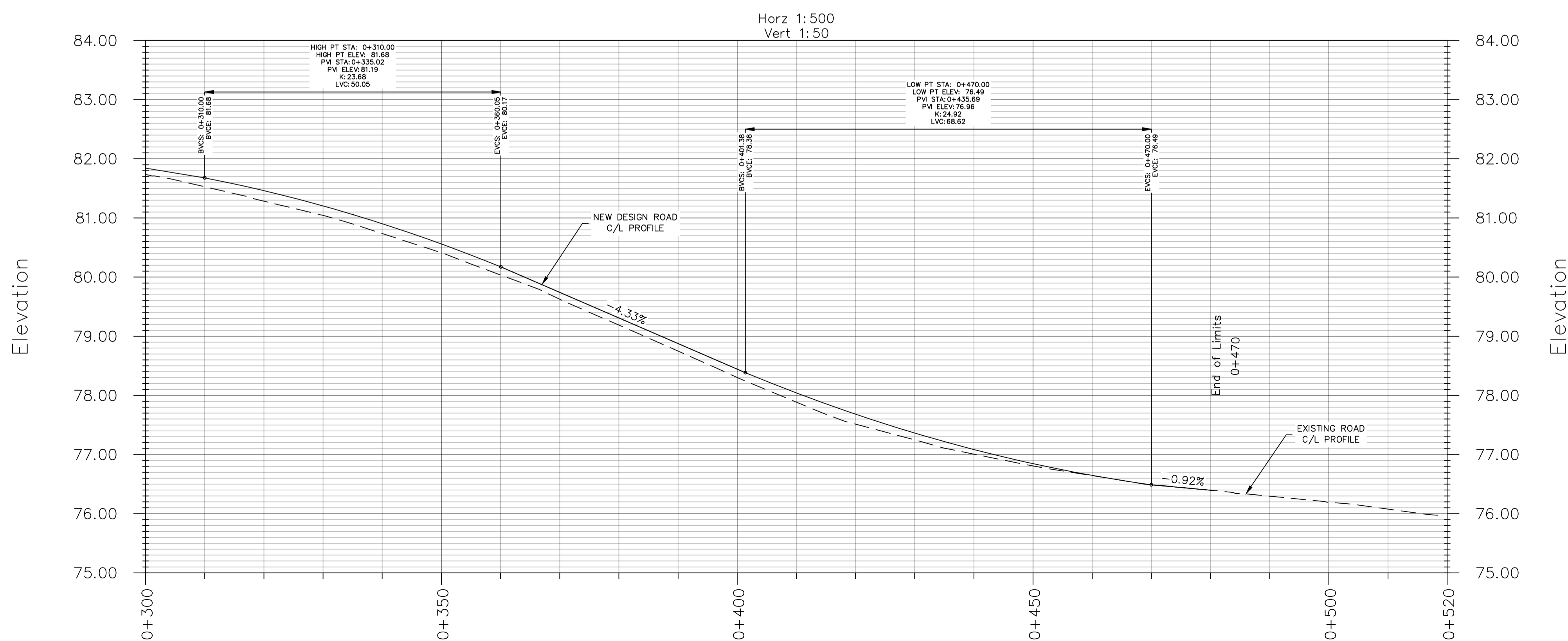


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LEGEND

Existing Center Line Profile	---
New Center Line Road Profile	—
New Ditch Line Profile	- - - -
Existing Storm Pipe	— · — · —
New Storm Pipe	— · — · —
Utility Pole	● UP/LP
Signal Pole Sign	□ SPS

REV.	DESCRIPTION	CHECKED BY	APP BY	DATE
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1	Issued For Review	CJC	CJC	3/25/24



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TOWN OF GRAND FALLS-WINDSOR
PUBLIC WORKS AND DEVELOPMENT DEPARTMENT

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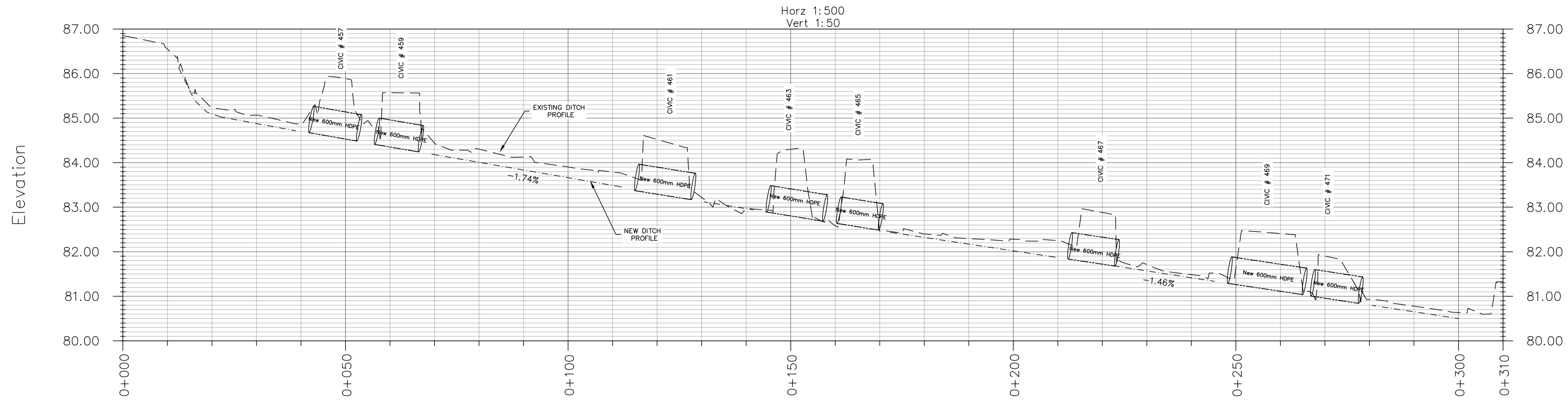
PROJECT TITLE

GRENFELL HEIGHTS EXTENSION

DRAWING TITLE

PLAN and PROFILE
0+300 to 0+520

TOWN OF GFW PROJECT NO. 2024 - T2	DEPARTMENT OF TLM PROJECT NO.
DRAWN BY DH	HORIZONTAL SCALE 1:500
DATE March 25, 2024	REVISION NO.
	VERTICAL SCALE 1:50
	DRAWING NO. 3 OF 6



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 - SEE GENERAL NOTES ON DETAILS SHEET.

LEGEND

- Existing Center Line Profile: - - - - -
- New Center Line Road Profile: ————
- New Ditch Line Profile: ————
- Existing Storm Pipe: - - - - -
- New Storm Pipe: ————
- Utility Pole: ● UP/LP
- Signal Pole Sign: □ SPS

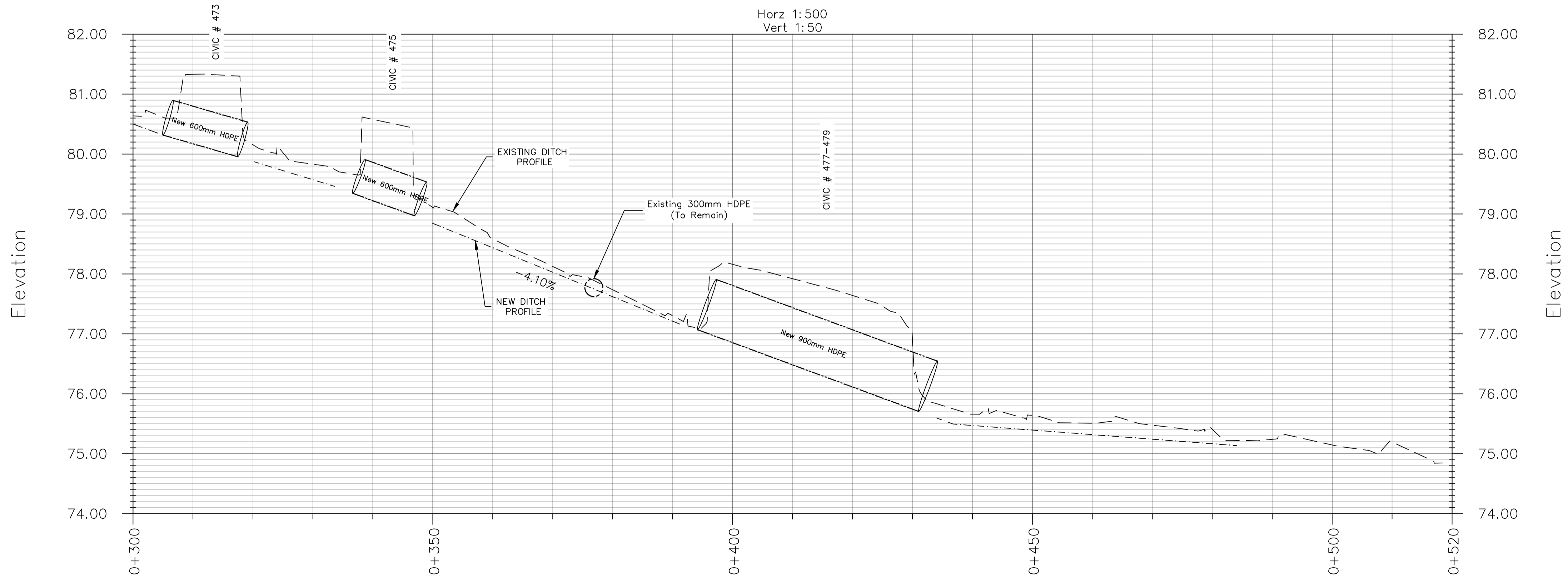
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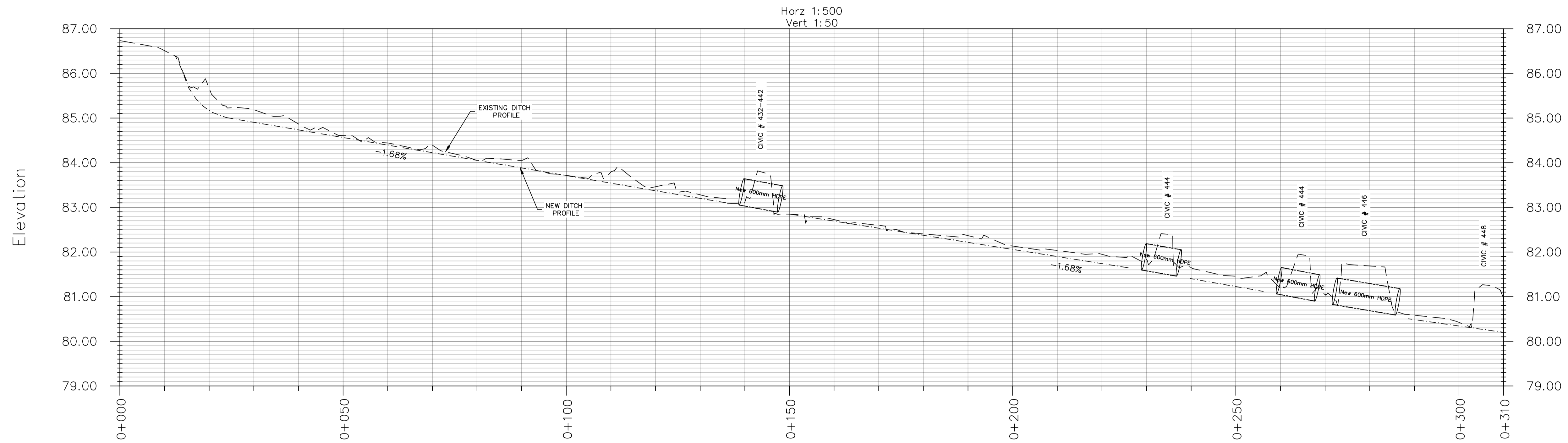
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PROJECT TITLE
GRENFELL HEIGHTS EXTENSION

DRAWING TITLE
**PROFILE VIEW
 NORTH DITCH LINE**

TOWN OF GFW PROJECT NO. 2024 -T2	DEPARTMENT OF TLM PROJECT NO.	
DRAWN BY DH	HORIZONTAL SCALE 1:500	VERTICAL SCALE 1:50
DATE March 25, 2024	REVISION NO.	DRAWING NO. 4 OF 6





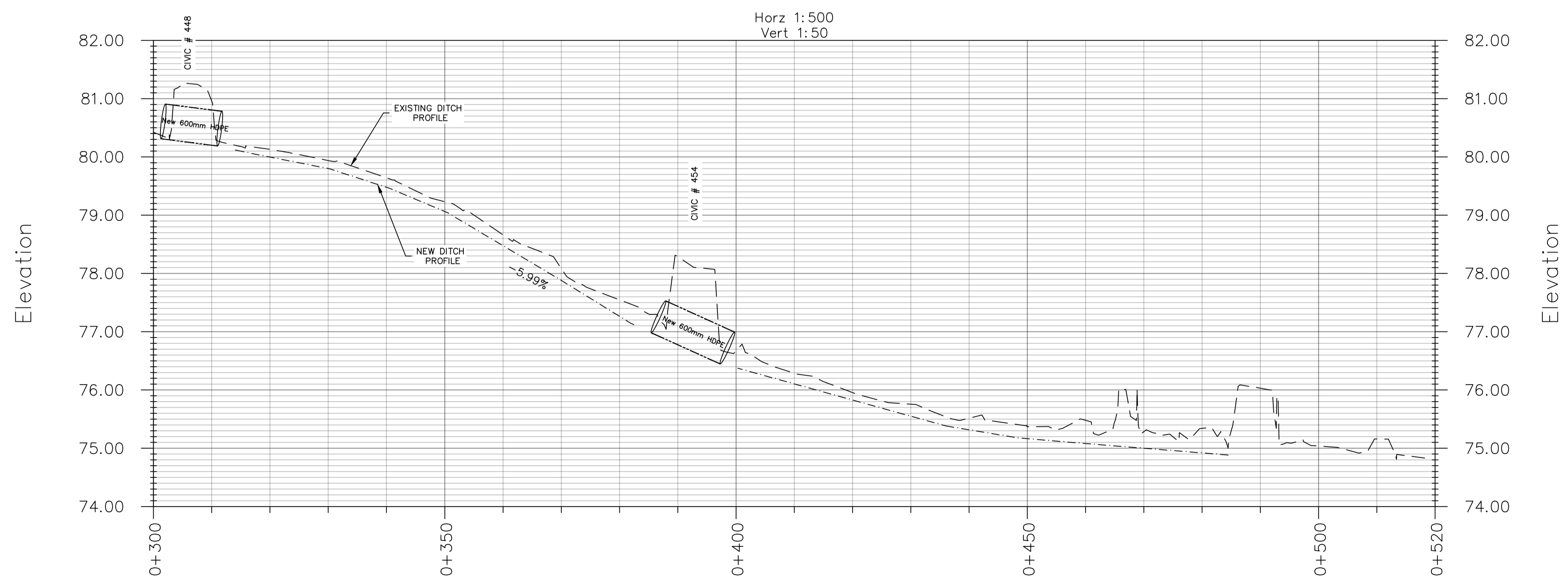
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 - SEE GENERAL NOTES ON DETAILS SHEET.

LEGEND

Existing Center Line Profile	---
New Center Line Road Profile	---
New Ditch Line Profile	---
Existing Storm Pipe	---
New Storm Pipe	---
Utility Pole	● UP/LP
Signal Pole Sign	SPS

REV.	DESCRIPTION	CHECKED BY	APP BY	DATE
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1	Issued For Review	CJC	CJC	3/25/24

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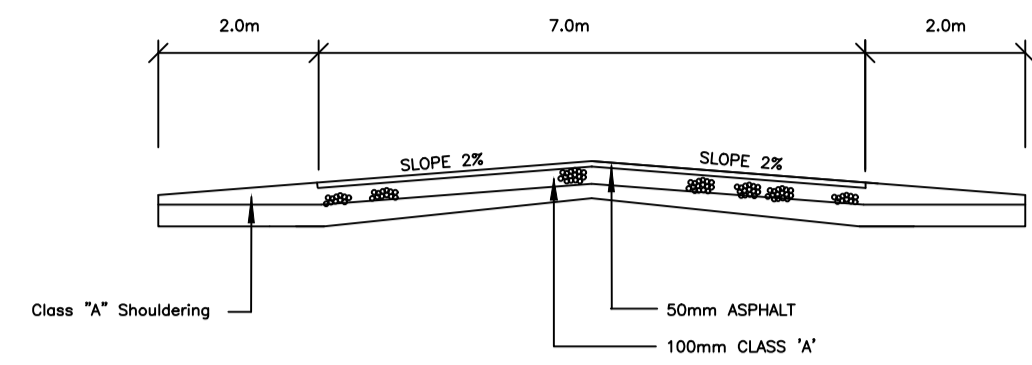
PROJECT TITLE
GRENFELL HEIGHTS EXTENSION

DRAWING TITLE
**PROFILE VIEW
 SOUTH DITCH LINE**

TOWN OF GFW PROJECT NO. 2024 - T2	DEPARTMENT OF TLM PROJECT NO.
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DATE March 25, 2024	VERTICAL SCALE 1:50
REVISION NO.	DRAWING NO. 5 OF 6

Detail #1

Typical Road Cross Section



N.T.S.

Detail #2

PIPE SCHEDULE TABLE					
CWIC #	STATION	EXISTING PIPE (To Be Removed)	LENGTH (M)	NEW PIPE	LENGTH (M)
NORTH SIDE					
457	0+048.62	600mm CMP	7.9	600mm HDPE	9.9
459	0+062.61	600mm CMP	9	600mm HDPE	11
461	0+122.31	600mm CMP	10.3	600mm HDPE	12.3
463	0+150.67	600mm HDPE	8.9	600mm HDPE	10.9
465	0+165.95	600mm CMP	9.4	600mm HDPE	11.4
467	0+219.45	600mm CMP	9.1	600mm HDPE	11.1
469	0+258.30	475mm HDPE	15.7	600mm HDPE	17.7
471	0+273.45	600mm CMP	9.9	600mm HDPE	11.9
473	0+313.8	600mm CMP	10.8	600mm HDPE	12.8
475	0+342.95	600mm CMP	8.6	600mm HDPE	10.6
477-479	0+414.00	1000mm CMP	34.9	900mm HDPE	36.9
SOUTH SIDE					
432-442	0+142.60	450 Concrete	6.3	600mm HDPE	8.3
444	0+233.15	450mm CMP	5.8	600mm HDPE	7.8
	0+263.25	450mm CMP	6.6	600mm HDPE	8.6
	0+278.65	600mm CMP	12.2	600mm HDPE	14.2
	0+307.40	600mm CMP	7.8	600mm HDPE	9.8
	0+393.00	600mm CMP	9.3	600mm HDPE	11.3

GENERAL NOTES

1. THE DECISION TO EITHER ABANDON, REMOVE OR REMOVE AND SALVAGE EXISTING INFRASTRUCTURE WILL BE MADE IN THE FIELD BY THE ENGINEER OR HIS/HER REPRESENTATIVE.
2. EXISTING CULVERTS TO BE REMOVED ARE LOCATED AT THE SAME LOCATION AS THE NEW CULVERTS SHOWN IN PLAN VIEW. SLIGHT VARIATIONS FROM THIS WILL BE ACCEPTABLE DURING INSTALLATION OF THE NEW CULVERT FOR PROPER ALIGNMENT WITH THE DITCHING.
3. ALL ATTEMPTS MUST BE MADE TO PROTECT EXISTING TREES AND SHRUBS. THE ENGINEER OR HIS/HER REPRESENTATIVE MUST BE CONTACTED PRIOR TO THE REMOVAL OF ANY TREES OR SHRUBS.
4. CONTRACTOR MUST ADVISE ALL HOMES OWNERS WHEN ACCESS TO THEIR PROPERTY WILL BE IMPACTED DUE TO CULVERT REPLACEMENT. THIS WORK IS TO BE SCHEDULED, CO-ORDINATED AND A TIME AGREED UPON WITH THE HOME OWNER TO MINIMIZE ACCESS. IF ACCESS MUST BE MAINTAINED FOR SOME VALID REASON, THEN ALL COSTS ASSOCIATED WITH THIS WORK AND / OR MATERIALS REQUIRED TO MAINTAIN ACCESS IS DEEMED TO BE INCLUDED IN THE UNIT PRICES QUOTED.
5. CONTRACTOR TO PROVIDE BONDS, INSURANCES, CERTIFICATE OF RECOGNITION, CONSTRUCTION SAFETY AUDIT MANUAL COMPLETE WITH CERTIFICATES, DETAILED CONSTRUCTION SCHEDULE AND MINIMUM OF 3 - 24 HOUR CONTACT PEOPLE AT INITIAL PRE-CONSTRUCTION MEETING TO BE SCHEDULED BY THE ENGINEER. A SITE SPECIFIC SAFETY PLAN MUST BE SUBMITTED AND APPROVED BEFORE WORK COMMENCES AS OUTLINED IN SECTION 190 OF THE SPECIFICATION.
6. THE CONTRACTOR WILL BE PERMITTED TO DISPOSE OF USM FROM DITCHING AT THE OLD TOWN WASTE SITE LOCATED APPROXIMATELY 12 KM (ONE WAY) WEST ALONG THE TRANS CANADA HIGHWAY.
7. REINSTATEMENT OF DRIVEWAYS AND SODDING TO BE AT THE DIRECTION OF THE ENGINEER.
8. THESE PROJECT DOCUMENTS HAVE BEEN PREPARED IN CONJUNCTION WITH THE STANDARD "MUNICIPAL WATER, SEWER AND ROAD SPECIFICATIONS" AS PUBLISHED BY THE GOVERNMENT OF NEWFOUNDLAND AND LABRADOR, DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE, MUNICIPAL INFRASTRUCTURE LATEST EDITION.

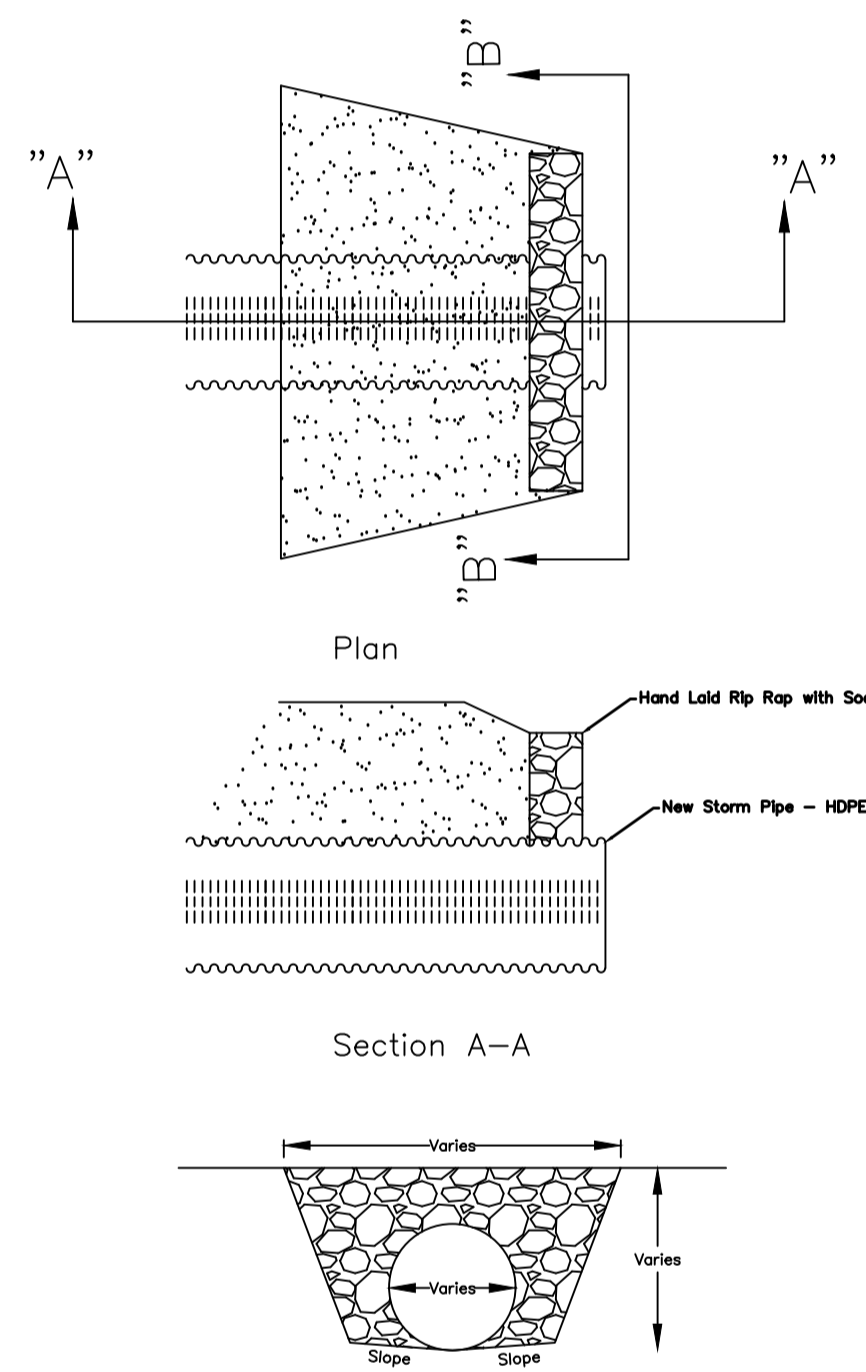
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4. SEE GENERAL NOTES ON DETAILS SHEET.

LEGEND

Detail #3

Hand Laid with Sod Rip Rap Treatment for Storm Pipe



N.T.S.

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2	Issued For Tender	CJC	CJC	5/6/24
1	Issued For Review	CJC	CJC	3/25/24

REVISIONS

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REGISTERED PROFESSIONAL ENGINEER
Newfoundland and Labrador
CHAD J. CLENDENNING
SIGNATURE
May 6, 2024
DATE
NEWFOUNDLAND & LABRADOR

TOWN OF GRAND FALLS-WINDSOR
PUBLIC WORKS AND DEVELOPMENT DEPARTMENT
P.O. BOX 439
GRAND FALLS-WINDSOR, NL
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PROJECT TITLE
GRINFELL HEIGHTS EXTENSION

DRAWING TITLE
DETAILS

TOWN OF GFW PROJECT NO. 2024 -T2	DEPARTMENT OF TLM PROJECT NO.
DRAWN BY DH	HORIZONTAL SCALE 1:500
DATE March 25, 2024	REVISION NO.
	VERTICAL SCALE 1:50
	DRAWING NO. 6 OF 6