

C O N T R A C T D O C U M E N T S

TOWN OF PELHAM

1980 PELHAM CULVERT REPLACEMENTS
(Sixteen Road Bridge No. 0004)
(Chantler Road Culvert No. 2037)

PROJECT
E.O. 80414

August 1980

THE PROCTOR AND REDFERN GROUP
Consulting Engineers and Planners
110 James Street, St. Catharines
L2R 7E8

GKS:MD
:tp

PROCTOR & REDFERN LIMITED
TENDERER'S CHECK LIST

Before submitting your tender, check the following points:

1. Has your tender been signed, sealed and witnessed? ☐
2. Have you enclosed the Tender Deposit, i.e. certified cheque or bid bond? (whichever is required by the Contract Documents) ☐
3. Have you enclosed the Agreement to Bond, signed and sealed by your proposed Surety? ☐
4. Have you completed all schedules and prices in the Form of Tender? ☐
5. Have you indicated and included the Contingency Allowance in the Form of Tender? (if you are required to do so) ☐
6. Have you indicated the number of addenda included in the tender price? ☐
7. Have you shown the time for completion of the work? (if applicable) ☐
8. Have you listed your Sub-Contractors? (if applicable) ☐
9. Have you listed your Experience in Similar Work? (if applicable) ☐
10. Have you listed your Senior Staff? (if applicable) ☐
11. Have you listed the Tenderer's Plant? (if applicable) ☐
12. Are the documents complete? ☐

Note: Items 13 and 14 are for Ministry of Transportation and Communication projects only.

13. Have you completed the Qualification Rating and forwarded to the Ministry of the Transportation and Communications? (if applicable) ☐
14. Have you enclosed the Form of Tender stamped "For Tendering Purposes Only" (if applicable) ☐

Note: 1. Your tender will be informal and may be disqualified if ANY of the foregoing points (if applicable) have not been complied with.

MAKE SURE THAT YOU SEAL THE TENDER IN AN ENVELOPE AND MARK THEREON THE CONTRACT NAME AND E.O. NUMBER.

Proctor and Redfern Limited
Form CD-30 - February 1973

LIST OF CONTRACT DOCUMENTS

The following shall form the Contract Documents:

	<u>Paper Colour</u>	<u>Pages</u>
Addenda Numbered <u>Ø</u> to <u>Ø</u>	Green	
Tenderer's Check List	Bright Pink	1
List of Contract Documents	Pink	1
Tendering Information	Blue	3
Form of Tender	Yellow	4
Agreement	White	1
Agreement to Bond (CD-22)	White	1
Bid Bond (CCA Document (S)20)	White	1
Performance Bond (CCA Document (S)21)	White	1
Labour and Materials Payment Bond (CCA Document (S)22)	White	2
Tenderer's Experience (CD-4)	White	1
Tenderer's Senior Staff (CD-5)	White	1
Tenderer's Plant (CD-6)	White	1
Supplementary General Conditions	Blue	2
General Conditions of the Contract	Blue	8
Project Specifications		
Section 01010 - General	White	4
Section 02590 - Culverts, Road and Surface Works	White	5

LIST OF DRAWINGS

Al-80414-P1	1980 Road Reconstruction, Chantler Road Culvert No. 2037
Al-80414-P2	1980 Road Reconstruction, Sixteen Road Bridge No. 0004

SECTION 00100 - TENDERING INFORMATION

TI.01 DELIVERY AND OPENING OF TENDERS

- A. Sealed tenders, marked with the name of the project, will be received by -
Mr. M. Hackett, Clerk Town of Pelham, 43 South Pelham Street Fonthill,
Ontario. L0S 1E0
up to 3:00 p.m., local time -
Wednesday, September 3rd, 1980.
- B. The tenders will be opened publicly as soon after the closing time as possible.
- C. Tenders shall be completed on the detachable Form of Tender included in the Contract Documents.

TI 02 DISCREPANCIES

- A. If a Tenderer finds discrepancies in, or omissions from the Contract Documents, or if he is in doubt as to their meaning, he shall notify the Engineer who may issue a written addendum. Neither the Owner nor the Engineer will make oral interpretations of the meaning of the Contract Documents
- B. Should the Tenderer not agree that the materials and methods specified, or designed on the Drawings, will provide an installation to meet the requirements of the project, he shall notify the Engineer in writing, stating his reason for objection and may submit a suggested alternative. In such an event, the Engineer may choose to issue an addendum.
- C. Addenda issued during the tendering period shall be allowed for by the Tenderer.

TI 03 EXAMINATION OF SITE

- A. The Tenderer shall visit the site of the Work before submitting his tender and shall by personal examination satisfy himself as to the local conditions that may be encountered during construction of the Work. He shall make his own estimate of the facilities and difficulties that may be encountered and the nature of the subsurface materials and conditions.
- B. He shall not claim at any time after submission of his tender that there was any misunderstanding of the terms and conditions of the Contract relating to site conditions.

TI 04 SALES TAX

- A. The Tenderer shall include or exclude sales tax in accordance with current sales tax legislation taking into account any changes that have been made known by the Government and that will occur during the life of the Contract
- B. If sales taxes are increased or decreased, or other amendments are made in the legislation, during the course of the Contract, that alter tax amounts carried in the Contract price an adjustment will be made accordingly.
- C. The Contractor shall keep records and invoices of accounts subject to Federal and Provincial Sales Tax for the purpose of establishing taxes paid and for substantiation in the event of changes to the tax legislation during the course of the Contract.

TI.04 SALES TAX (Cont d)

- D. The Tenderer shall contact the Sales Tax authorities and determine what the applicable taxes are and the procedures for tax exemption and/or refunding and include related administrative costs in the tender

TI 05 PROOF OF ABILITY

- A. The Tenderer shall be competent and capable of performing the various items of Work. The Tenderer shall complete the following statement sheets, which shall form a part of the Contract Documents
- 1 Tenderer's Experience on Similar Work (CD-4) with list of specific examples completed within the last 5 yrs , with appropriate references
 2. Tenderer s Senior Staff to be employed (CD 5)
 3. Tenderer s Plant to be used (CD-6)
- B The Tenderer may be required to furnish additional statements covering other matters, including financial resources.

TI 06 TENDER DEPOSIT

- A. Every tender shall be accompanied by a Bid Bond in an amount equal to \$3,500.00.

C.C.A Document (S)20 shall be used for the Bid Bond.

The Tenderer shall keep his tender open for acceptance for 60 days after the closing date. Withdrawal during this period will result in forfeiture or enforcement of the Bid Bond

Upon being notified that his tender has been accepted, the Contractor shall execute copies of the Agreement, supply bonds and insurance documents as specified, and start Work as specified

Failure to execute the copies of the Agreement or to supply bonds and insurance documents, all within 2 weeks of the date of acceptance of the tender, or to start Work as specified, will automatically mean the forfeiture or enforcement of the Bid Bond.

Bid Bonds of unsuccessful Tenderers will be returned not later than 2 weeks following Contract award.

The Bid Bond of the successful Tenderer will be returned with the first progress certificate.

TI.07 AGREEMENT TO BOND

- A. Every tender shall be accompanied by an 'Agreement to Bond' in the form attached, and shall be completed by a surety company lawfully doing business in the Province

TI.08 ACCEPTANCE OF TENDERS

- A. The lowest or any tender need not necessarily be accepted by the Owner

TI 09 EQUIVALENTS

- A. When an article is specified by its trade or other name (whether such name is followed by the phrase 'or approved equal' or not), the Tenderer shall base his tender price on the supply of the named article and no other.

FORM OF TENDER

FT.01 TENDER PRICE

1 Offer by - Name - Frazer Zwierschke Construction and Trenching

Address - 1397 Station Street, Fonthill, Ontario

Date - September 3rd, 1980

2. To The Corporation of the Town of Pelham

A. We, the undersigned having examined the site of the Work, having carefully investigated the conditions pertaining to the Work and having secured all the information necessary to enable us to submit a bona fide tender, and having inspected all the Contract Documents, hereby agree to enter into a contract and to perform all the Work in a good and Workmanlike manner in accordance with the Contract Documents to the satisfaction of the Engineer for the total tender price of

dollars (\$ 25,456.00)

FT.02 CONTINGENCIES AND ALLOWANCES

A. We agree that the tender price includes the contingency sum of \$3,500.00 and that no part of this sum shall be expended without the written direction of the Engineer, and any part not so expended shall be deducted from the tender price

FT.03 QUANTITIES

A. The tender price is compiled from the Schedule Of Tender Prices included hereinafter. The quantities in the schedule being approximate, we agree that the final valuation will be made on the basis of actual quantities measured during and on completion of the Work at the prices in the schedule.

FT.04 ADDITIONS AND DEDUCTIONS

A. We agree that the valuation of additions to, and deductions from, the Contract shall be made as follows -

1. The prices in the Schedule Of Tender Prices shall apply where appropriate
2. If the prices in subsection 1 are not appropriate, valuation will be made by one of the following methods
 - (A) The Engineer may ask the Contractor for a quotation for the proposed Work.
 - (B) If the quotation referred to in (A) above is not accepted by the Engineer the actual cost of the Work will be determined as the total of only the following -
 - (1) Actual cost of labour, including such items as Workmen's Compensation and Unemployment Insurance.
 - (2) Actual cost of materials to be incorporated into the Work, including such items as freight and taxes.
 - (3) For Work done by the Contractor, an amount equal to 15 percent of the totals from subsections (1) and (2) above, which shall constitute overhead and profit of the Contractor.

FT.04 ADDITIONS AND DEDUCTIONS (Cont'd)

A. (Cont'd)

2. (B) (Cont'd)

- (4) For Work done by Sub-contractors, an amount equal to 20 percent of the totals from subsections (1) and (2) above which shall constitute overhead and profit of the Contractor and Sub-contractors.
 - (5) Rental of equipment and plant having a new value greater than \$300 Rental rates shall be as set out in the current edition of MTC form 527.
3. Whenever extra Work is being performed under subsection 2(B) above, we agree to submit daily reports in writing, indicating the total chargeable costs incurred for the day. Valuation of the extra Work being so performed will be made only on the basis of the approved daily reports.

FT.05 ADDENDA

- A We agree that we have received addenda 0 to 0 inclusive, and the tender price includes the provisions set out in such addenda.

FT.06 COMPLETION

- A. We agree to commence Work as specified, to proceed continuously to the completion and to complete all Work within ...* weeks from the date of issue of the written order to start Work.

*Contractor to indicate "Time for Completion".

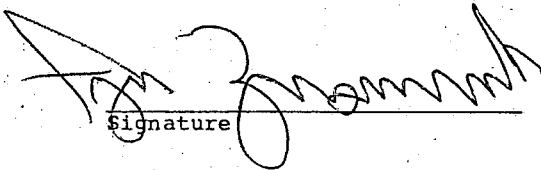
FT.07 SCHEDULE OF TENDER PRICES

Item No.	Description	Estimated Quantity	Unit	Contract Unit Price	Estimated Total Price
<u>SECTION A - Sixteen Road Bridge No. 0004 (Drawing No. A1-80414-P2)</u>					
A.001	Removal and disposal of existing concrete culvert			Lump Sum	\$ 1,400.00
A.002	Installation of twin 2290 mm rise x 3720 mm span x 21.95 m long each C.S.P. arches - 12 gauge culverts including excavation			Lump Sum	\$ 1,400.00
A.003	Supply, place and compact granular 'B' backfill for culverts	700	tonne	\$ 8.00	\$ 5,600.00
A.004	Supply, place and compact granular 'A' road base to 300 mm depth	180	tonne	\$ 8.17	\$ 1,470.00
A.005	Channel improvements	28	m	\$ 32.14	\$ 900.00
A.006	Supply and place hand laid rip-rap	70	m ²	\$ 20.00	\$ 1,400.00
TOTAL SECTION A - Sixteen Road Bridge No. 0004					\$ 12,170.00
<u>SECTION B - Chantler Road Culvert No. 2037 (Drawing No. A1-80414-P1)</u>					
B.001	Removal and disposal of existing concrete culvert			Lump Sum	\$ 1,500.00
B.002	Installation of twin 1880 mm rise x 2590 mm span x 16.46 mm long each C.S.P. arches - 12 gauge culverts including excavation			Lump Sum	\$ 1,500.00
B.003	Supply, place and compact granular 'B' backfill for culverts	400	tonne	\$ 7.70	\$ 3,080.00
B.004	Supply, place and compact granular 'A' road base to 300 mm depth	90	tonne	\$ 7.84	\$ 706.00
B.005	Channel improvements	59	m	\$ 27.11	\$ 1,600.00
B.006	Supply and place hand laid rip-rap	50	m ²	\$ 24.00	\$ 1,200.00
B.007	Removal and disposal of willow tree			Lump Sum	\$ 200.00
TOTAL SECTION B - Chantler Road Culvert No. 2037					\$ 9,786.00
SECTION C - Contingency Allowance				Lump Sum	\$ 3,500.00

SUMMARY

SECTION A - Sixteen Road Bridge No. 0004	\$ 12,170.00
SECTION B - Chantler Road Culvert No. 2037	\$ 9,786.00
SECTION C - Contingency Allowance	\$ 3,500.00
	<u>\$ 25,456.00</u>

OFFERED ON BEHALF
OF THE CONTRACTOR


Signature

Signature

Company Seal

Frazer Zwierschke Construction
and Trenching

Company Name

Witness

1397 Station Street
Fonthill, Ontario

Address

September 3rd, 1980

Date

AGREEMENT

This Agreement made in triplicate this 4th day of September 19 80 , between Frazer Zwierschke Construction and hereinafter called "The Contractor", Trenching AND

The Town of Pelham hereinafter called "The Owner".

WITNESSETH, that the Contractor agrees with the Owner to perform all the Work in accordance with the Contract Documents referred to in the tender of the Contractor dated the 3rd day of September , 19 80 , (which shall be deemed to form part of this Contract) to the satisfaction of the Engineer for the total contract price of \$ 25,456.00 which Contract Documents are attached hereto and which are hereby expressly made part of this Contract.

The Owner hereby agrees with the Contractor, that in consideration of the Work being performed by the Contractor as specified, the Owner shall pay the Contractor for said Work in accordance with the prices set out in the Form of Tender attached hereto, and in accordance with the provisions set out in the attached Contract Documents.

Time shall be deemed the essence of this Contract.

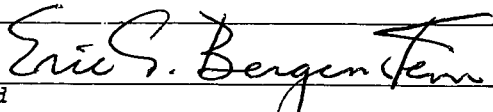
IN WITNESS WHEREOF the parties hereto have executed this Agreement under their respective corporate seals and by the hands of their proper officers thereunto duly authorized.

SIGNED, SEALED AND DELIVERED in the presence of:

OWNER

The Town of Pelham

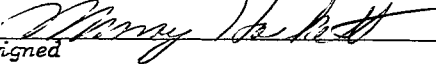
Name



Signed

ERIC BERGENSTEIN - MAYOR

Name and Title



Signed

MURRAY HACKETT - CLERK

Name and Title

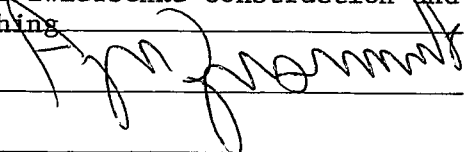
Witness

Name and Title

CONTRACTOR

Frazer Zwierschke Construction and Trenching

Name



Signed

Name and Title

Signed

Name and Title

Witness

Name and Title

N.B. Where legal jurisdiction, local practice or Owner or Contractor 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, parties to this Agreement, should be attached.

AGREEMENT TO BOND

Date _____ 1980

Proctor and Redfern Limited

Project E.O. 80414, Pkg. 02, 03

*

Gentlemen:

Installation of Structural Plate C.S.P. Arches and
Related Roadwork in the Town of Pelham, Ontario

In consideration of the Owner accepting the tender of and
executing an Agreement with _____

(hereinafter referred to as "the Tenderer") for the installation of structural plate C.S.P. arches and related roadwork in the Town of Pelham, Ontario subject to the express condition that the Owner receive the Performance Bond and the Payment Bond in accordance with the said tender, we the undersigned hereby agree with the Owner, to become bound to the Owner as surety for the Tenderer in a performance bond and a payment bond each in an amount equal to 100 percent of the tender price, in the standard forms of the Canadian Construction Association and in accordance with the said tender, and we agree to furnish the Owner with the said bonds within 7 days after notification of the acceptance of the tender has been mailed to us.

Yours very truly

Note: This Agreement must be executed on behalf of the surety company by its authorized officers under the company's corporate seal.

*Enter the name and address of surety company at the top of the page.

Form CD-22
Revised August, 1977

TENDERER'S EXPERIENCE IN SIMILAR WORK

YEAR COMPLETED	DESCRIPTION OF CONTRACT	FOR WHOM WORK PERFORMED	NAME OF CONSULTANT ENGINEER	VALUE
<p>Note to Tenderer - Refer to article TI.05 of Tendering Information</p>				

Proctor & Redfern Limited
Consulting Engineers
November, 1977

TENDERER'S SENIOR STAFF

NAME	APPOINTMENT	QUALIFICATIONS AND EXPERIENCE
<u>Office</u> Frazer Zwierschke	President	20 years
<u>Field</u>		

Proctor & Redfern Limited
Consulting Engineers
November, 1977

TENDERER'S PLANT

The Tenderer shall list the plant, machinery and equipment he proposes to use on the work.

PLANT OWNED:

4 backhoes
1 JSW excavator
2 tandem dump
5 pick up truck
2 single axle dump
bore machine
1 dozer
1 loader
1 hydraulic backhoe
1 air compressor and tools
Several trucks and trailers

PLANT TO BE RENTED OR LEASED:

PLANT TO BE PURCHASED:

BID BOND

No. _____ \$ _____

KNOW ALL MEN BY THESE PRESENTS THAT _____

_____ as Principal

hereinafter called the Principal, and _____

a corporation created and existing under the laws of _____

and duly authorized to transact the business of Suretyship in _____

as Surety, hereinafter called the Surety, are held and firmly bound unto _____

_____ as Obligee

hereinafter called the Obligee, in the amount of _____

_____ Dollars (\$ _____)

lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a written tender to the Obligee, dated the _____

day of _____ 19 _____, for _____

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the aforesaid Principal shall have the tender accepted within sixty (60) days from the closing date of tender and the said Principal will, within the time required, enter into a formal contract and give the specified security to secure the performance of the terms and conditions of the Contract, then his obligation shall be null and void; otherwise the Principal and the Surety will pay unto the Obligee the difference in money between the amount of the bid of the said Principal and the amount for which the Obligee legally contracts with another party to perform the work if the latter amount be in excess of the former.

The Principal and the Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of six months from the date of this Bond.

IN WITNESS WHEREOF, the Principal and the Surety have Signed and Sealed this Bond this _____

_____ day of _____ 19 _____.

SIGNED and SEALED
In the presence of

(
(
(
(_____ (Seal)
(Principal
(
(
(_____ (Seal)
Surety

No. _____ \$ _____

KNOW ALL MEN BY THESE PRESENTS THAT _____

_____ as Principal,
hereinafter called the Principal, and _____

a corporation created and existing under the laws of _____

and duly authorized to transact the business of Suretyship in _____

as Surety, hereinafter called the Surety, are held and firmly bound unto _____

_____ as Obligee,

hereinafter called the Obligee, in the amount of _____

_____ Dollars (\$ _____)

lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a written contract with the Obligee, dated the _____

day of _____ 19 _____, for _____

In accordance with the Specifications and Drawings submitted therefor which contract, Specifications and Drawings, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal shall promptly and faithfully perform the Contract then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Whenever the Principal shall be, and declared by the Obligee to be, in default under the Contract, the Obligee having performed the Obligee's obligations thereunder, the Surety may promptly remedy the default, or shall promptly

- (1) complete the Contract in accordance with its terms and conditions or
- (2) obtain a bid or bids for submission to the Obligee for completing the Contract in accordance with its terms and conditions, and upon determination by the Obligee and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Obligee and make available as work progresses (even though there should be a default, or a succession of defaults, under the contract or contracts of completion, arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable by the Obligee to the Principal under the Contract, less the amount properly paid by the Obligee to the Principal.

Any suit under this Bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

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

IN WITNESS WHEREOF, the Principal and the Surety have Signed and Sealed this Bond this _____

day of _____ 19 _____

SIGNED and SEALED
In the presence of:

(
(
(
(_____ (Seal)
(Principal
(
(
(_____ (Seal)
(Surety

LABOUR AND MATERIAL PAYMENT BOND
(TRUSTEE FORM)

No. _____ \$ _____

Note: This Bond is issued simultaneously with another Bond in favour of the Obligeé conditioned for the full and faithful performance of the Contract.

KNOW ALL MEN BY THESE PRESENTS THAT _____

_____ as Principal,

hereinafter called the Principal, and _____

a corporation created and existing under the laws of _____

and duly authorized to transact the business of Suretyship in _____

as Surety, hereinafter called the Surety are, subject to the conditions hereinafter contained, held and firmly bound unto

_____ as Trustee,

hereinafter called the Obligeé, for the use and benefit of the Claimants, their and each of their heirs, executors,

administrators, successors and assigns, in the amount of _____

_____ Dollars (\$ _____)

of lawful money of Canada for the payment of which sum well and truly to be made the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a written contract with the Obligeé, dated the _____

day of _____ 19 _____, for _____

which contract, Specifications & Drawings are by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall make payment to all Claimants for all labour and material used or reasonably required for use in the performance of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A Claimant for the purpose of this Bond is defined as one having a direct contract with the Principal for labour, material, or both, used or reasonably required for use in the performance of the Contract, labour and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment directly applicable to the Contract provided that a person, firm or corporation who rents equipment to the Principal to be used in the performance of the Contract under a contract which provides that all or any part of the rent is to be applied towards the purchase price thereof, shall only be a Claimant to the extent of the prevailing industrial rental value of such equipment for the period during which the equipment was used in the performance of the Contract. The prevailing industrial value of equipment shall be determined, insofar as it is practical to do so, in accordance with and in the manner provided for in the latest revised edition of the publication of the Canadian Construction Association titled "Rental Rates on Contractors Equipment" published prior to the period during which the equipment was used in the performance of the Contract.

2. The Principal and the Surety, hereby jointly and severally agree with the Oblige, as Trustee, that every Claimant who has not been paid as provided for under the terms of his contract with the Principal, before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's work or labour was done or performed or materials were furnished by such Claimant, may as a beneficiary of the trust herein provided for, sue on this Bond, prosecute the suit to final judgment for such sum or sums as may be justly due to such Claimant under the terms of his contract with the Principal and have execution thereon. Provided that the Oblige is not obliged to do or take any act, action or proceeding against the Surety on behalf of the Claimants; or any of them, to enforce the provisions of this Bond. If any act, action or proceeding is taken either in the name of the Oblige or by joining the Oblige as a party to such proceeding, then such act, action or proceeding, shall be taken on the understanding and basis that the Claimants; or any of them, who take such act, action or proceeding shall indemnify and save harmless the Oblige against all costs, charges and expenses or liabilities incurred thereon and any loss or damage resulting to the Oblige by reason thereof. Provided still further that, subject to the foregoing terms and conditions, the Claimants, or any of them, may use the name of the Oblige to sue on and enforce the provisions of this Bond.
3. No suit or action shall be commenced hereunder by any Claimant:
- (a) unless such Claimant shall have given written notice within the time limits hereinafter set forth to each of the Principal, the Surety and the Oblige, stating with substantial accuracy the amount claimed. Such notice shall be served by mailing the same by registered mail to the Principal, the Surety and the Oblige, at any place where an office is regularly maintained for the transaction of business by such persons or served in any manner in which legal process may be served in the Province or other part of Canada in which the subject matter of the Contract is located. Such notice shall be given
 - (1) in respect of any claim for the amount or any portion thereof, required to be held back from the Claimant by the Principal, under either the terms of the Claimant's contract with the Principal, or under the Mechanics' Liens Legislation applicable to the Claimant's contract with the Principal, whichever is the greater, within one hundred and twenty (120) days after such Claimant should have been paid in full under the Claimant's contract with the Principal;
 - (2) in respect of any claim other than for the holdback, or portion thereof, referred to above, within one hundred and twenty (120) days after the date upon which such Claimant did, or performed, the last of the work or labour or furnished the last of the materials for which such claim is made, under the Claimant's contract with the Principal;
 - (b) after the expiration of one (1) year following the date on which the Principal ceased work on the Contract, including work performed under the guarantees provided in the Contract;
 - (c) other than in a Court of competent jurisdiction in the Province or District of Canada in which the subject matter of the Contract, or any part thereof, is situated and not elsewhere, and the parties hereto agree to submit to the jurisdiction of such Court.
4. The Surety agrees not to take advantage of Article 1959 of the Civil Code of the Province of Quebec in the event that, by an act or an omission of a Claimant, the Surety can no longer be subrogated in the rights, hypothecs and privileges of Said Claimant.
5. The amount of this Bond shall be reduced by, and to the extent of any payment or payments made in good faith, and in accordance with the provisions hereof, inclusive of the payment by the Surety of Mechanics' Liens which may be filed of record against the subject matter of the Contract, whether or not claim for the amount of such lien be presented under and against this Bond.
6. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

IN WITNESS WHEREOF, the Principal and the Surety have Signed and Sealed this Bond this
day of 19

SIGNED and SEALED
In the presence of

(
(
(
(..... (Seal)
Principal
(
(
(..... (Seal)
Surety

Endorsed by: R.A.I.C., A.C.E.C., C.C.A., E.I.C., S.W.A.C.

Approved by: INSURANCE BUREAU OF CANADA

SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

SC.01 GUARANTEE PERIOD

- A. The guarantee period for the Contract shall be twelve months, unless an extended guarantee period is called for in any specific Section.

SC.02 DEFINITION

- A. Department of Highways' and 'DHO' means 'The Ministry of Transportation and Communications' and MTC .
- B. The Department of Transportation and Communications' and DTC means 'The Ministry of Transportation and Communications' and MTC
- C. The word 'provide shall mean supply labour, materials equipment, handling and cartage required for complete installation of the item concerned.
- D. The words 'work or 'works' have the same meaning as for Work' as defined in the General Conditions.

SC.03 INSURANCE

- A. Damage insurance
1. Notwithstanding the provisions of clause 28 of the General Conditions, no 'Damage Insurance' will be required on this Contract.

SC.04 LIQUIDATED DAMAGES

- A. Should the Contractor fail to complete the Work in accordance with the Contract and to the satisfaction of the Engineer, within the time specified in the Form of Tender, or as amended on the written authority of the Engineer the Contractor shall pay to the Owner the sum of \$100 00 for each calendar day that the Work shall remain unfinished after such time
- B. Such payments are agreed upon and fixed as liquidated damages that the Owner will suffer by reason of delay and default, and not as a penalty. The Owner may deduct and retain the amounts of such liquidated damages out of the monies which may be due or become due to the Contractor, under the Contract.

SC.05 HOLDBACK FOR RECTIFICATION AFTER ACCEPTANCE OF THE WORK

- A. To cover rectification costs during the guarantee period, the Owner will retain 5 percent of the value of Work done, such amount being held back in each progress certificate. This holdback will be retained for a period of 1 year from the Acceptance Date which is described in article 35 of the General Conditions. Additional monies will be held back as required by provincial statutes.

SC 06 PAYMENT BOND

- A. The Contractor, together with a surety company approved by the Owner and authorized by law to carry on business in the Province shall furnish an 100 percent labour and materials payment bond to the Owner using C.C A. Document (S) 22. The bond shall remain in effect until the issue by the Engineer of the final payment certificate.

SC.07 PERFORMANCE BOND

- A. The provisions of the General Conditions shall apply except that C.C A. Document (S) 21 shall be used.

GENERAL CONDITIONS OF THE CONTRACT

SUBJECT INDEX

	CLAUSE		CLAUSE
ASSIGNMENT	41	MATERIALS, REJECTION OF	19
AUTOMOBILE INSURANCE	25	MATERIALS, SUPPLY OF	16
BOND, PERFORMANCE	40	MATERIALS AND WORKMANSHIP	13
CERTIFICATES, TOTAL COMPLETION	35	NOTICES	4
CERTIFICATES, FINAL	37	OPERATIONAL RISKS	12
CERTIFICATES, INSURANCE POLICIES AND, ..	29	OWNERSHIP OF DOCUMENTS	22
CERTIFICATES, PROGRESS	33	OWNERSHIP OF PLANT AND MATERIALS	15
CHANGES IN THE WORK	18	PAYMENTS	36
CLAIMS, INSURANCE	30	PERFORMANCE BOND	40
COLD WEATHER	14	PLANT AND MATERIALS, OWNERSHIP OF	15
COMMENCEMENT & COMPLETION	5	POLICIES AND CERTIFICATES, INSURANCE ..	29
COMPENSATION, WORKMEN'S	26	PREMISES, USE OF	6
COMPLETION, SUBSTANTIAL	34	PROGRESS CERTIFICATES	33
COMPLETION & COMMENCEMENT	5	PROSECUTION OF THE WORK	11
CONTRACTORS, SUB.	3	PUBLIC SAFETY	10
CONTRACTOR, TERMINATE EMPLOYMENT OF	39	REJECTION OF WORK AND MATERIALS	19
DAMAGE INSURANCE	28	RELEASE OF HOLDBACK	34
DAMAGE, LOSS OR	27	RESTORATION	7
DEFINITIONS	1	RISKS, OPERATIONAL	12
DETAILS AND INSTRUCTIONS	17	SAFETY, PUBLIC	10
DOCUMENTS	2	SHOP DRAWINGS	21
DOCUMENTS, OWNERSHIP OF	22	STATUTES	9
DRAWINGS, SHOP	21	SUBCONTRACTORS	3
ENGINEER	20	SUBSTANTIAL COMPLETION	34
FINAL CERTIFICATE	37	SUPERINTENDENCE	42
GUARANTEE	38	SUPPLY OF MATERIAL	16
HOLDBACK RELEASE	34	TERMINATE EMPLOYMENT OF CONTRACTOR.	39
HOURS OF WORK	31	TOTAL COMPLETION CERTIFICATE	35
INSTRUCTIONS, DETAILS AND	17	USE OF PREMISES	6
INSURANCE CLAIMS	30	UTILITIES	8
INSURANCE, AUTOMOBILE	25	VALUATION	32
INSURANCE, DAMAGE	28	WEATHER, COLD	14
INSURANCE, LIABILITY	24	WORK, CHANGES IN	18
INSURANCE, POLICIES & CERTIFICATES	29	WORK, HOURS OF	31
LIABILITY	23	WORK AND MATERIALS, REJECTION OF	19
LIABILITY INSURANCE	24	WORK, PROSECUTION OF	11
LOSS OR DAMAGE	27	WORKMANSHIP AND MATERIALS	13
MATERIALS, OWNERSHIP OF	15	WORKMEN'S COMPENSATION	26

PROCTOR & REDFERN LIMITED
CONSULTING ENGINEERS
75 EGLINTON AVENUE EAST, TORONTO, ONT. M4P 1H3

GENERAL CONDITIONS OF THE CONTRACT

1. Wherever used in the Contract Documents, or other documents forming part of the Contract:

- (a) the word "Contract" means: the Contract to do the Work, the Bonds or Securities, the Addenda (if any), the Specifications, the General and Supplementary General Conditions, the Tendering Information, the List of Contract Documents, the Drawings, and other documents referred to or connected with the Agreement.
- (b) the word "Owner" means the person or corporation accepting the Tender.
- (c) the word "Contractor" means the person or corporation to whom the Contract for the Work has been awarded.
- (d) the word "Subcontractor" means the person or corporation having a contract with the Contractor (or with another subcontractor) for the execution of a part or parts of the Work included in the Contract, or for the supplying of material for the Contract and worked to a special design according to the Drawings and Specifications.
- (e) the word "Engineer" means Proctor & Redfern Limited, Consulting Engineers, and their duly authorized agents.
- (f) the word "Work" means labour, materials and other things required to be done, that are shown, described or implied in the Contract Documents, and includes extra and additional Work that may be ordered by the Engineer.

1. DEFINITIONS

2. (a) The Contract Documents shall be signed and sealed, in triplicate, by the Owner and the Contractor.

- (b) The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all. The intention of the Documents is to include plant, labour and materials (except as specifically excepted) necessary for the complete and proper execution of the Work.

- (c) Drawings and Specifications shall be read and interpreted together. Work not specifically described, but obviously necessary for the satisfactory completion of the Work for the purpose intended shall be supplied and performed by the Contractor as though it had been described and shown in the Drawings and Specifications.

- (d) Reference to published standard specifications shall be to the edition current at the time of the signing of the Contract Documents.

2. DOCUMENTS

3. (a) Without the written approval of the Engineer, the Contractor shall not change the Subcontractors named in the Contract.

- (b) The Contractor shall be held as fully responsible to the Owner for the acts and omissions of his Subcontractors (and of persons directly and indirectly employed by them) as for the acts and omissions of persons directly employed by the Contractor.

- (c) The Contractor shall bind every Subcontractor to the terms of the Contract Documents, as far as applicable to the Subcontractor's Work.

- (d) Nothing in the Contract Documents shall create any contractual relation between Subcontractors and the Owner.

- (e) Division of the Specifications into sections or subsections shall be only for clarity of reading and reference, and shall not be taken to be a division into trades, subtrades or sections of Work of any kind.

3. SUB-CONTRACTORS

4. (a) Any notice or communication to the Contractor shall be deemed to be legally well and sufficiently given and served, if:

- (i) handed to the Contractor or his authorized representatives, or
- (ii) posted or sent to the address given in the Tender, or,
- (iii) posted or sent to the Contractor's domicile or usual place of business, or
- (iv) posted or sent to the place where the Work is, or is to be, carried on, or
- (v) posted to or left at his last known address.

4. NOTICES

- (b) If the Work is closed, suspended or stopped for the winter (or for other approved reasons), the Contractor shall remove material from streets, sidewalks, boulevards and other public property.
- (c) The Contractor shall ensure that the charges of explosives used, and the time at which they are exploded, shall be such as not to cause suffering, inconvenience or injury to persons nor damage to property.
- (d) Explosives shall be properly housed and protected, and no explosives that have deteriorated shall be used. Approved methods of handling and thawing frozen explosives shall be followed. In blasting operations, the Contractor shall exercise the greatest care at all times.
- (e) The Contractor shall provide, erect and maintain necessary barriers, fences and other proper protection, and shall provide and maintain watchmen and lights as may be necessary to ensure the safety of the public and others. Unless otherwise specified, the Contractor shall keep streets and sidewalks open for use by the public. The Contractor shall provide, erect and maintain a sufficient number of detour signs, and other proper notices, wherever the use of streets or sidewalks is dangerous due to the Contractor's operations.
- (f) When Work is carried on at night, the Contractor shall provide, erect and operate a sufficient number of lights to enable the Work to be performed satisfactorily.

11. (a) The Contractor shall complete the Work in accordance with a schedule set down in co-operation with the Engineer at the time of the award of the Contract. Amendments to this schedule may be made by the Engineer, on application by the Contractor.

**11.
PROSECUTION
OF THE WORK**

- (b) Should the Engineer be of the opinion that the quantity or quality of labour or plant supplied by the Contractor is not sufficient, or that the methods being employed are not such as will ensure that the Work will be completed within the specified time, the Contractor shall forthwith improve the quality and increase the number of men employed, shall make revisions to the plant, and shall employ Work methods satisfactory to the Engineer.

12. (a) Damage, loss, expense and delay incurred or experienced by the Contractor in the prosecution of the Work, by reason of unanticipated difficulties, bad weather, strikes, wars, acts of God, or other mischances, shall be borne by the Contractor and shall not be the subject of a claim for additional compensation.

**12.
OPERATIONAL
RISKS**

- (b) The position of pole lines, conduits, watermains, sewers and other underground and over-ground utilities and structures is not necessarily shown on the Contract Drawings, and, where shown, the accuracy of the position of such utilities and structures is not guaranteed. Before starting Work, the Contractor shall inform himself of the exact location of such utilities and structures, and shall assume liability for damage to them. Unless otherwise specified, the Contractor shall support such utilities and structures, or temporarily remove them, and restore them, to the satisfaction of the owners of the utilities and structures.

13. (a) Workmanship shall be first-class and material new and of best quality. The Contractor shall pay due regard to the neat and attractive appearance of the finished Work.

**13.
WORKMANSHIP
AND
MATERIALS**

- (b) If ordered by the Engineer, the Contractor shall make such openings in the Work as are needed to re-examine the Work, and shall forthwith make the Work good again. Should the Engineer find the Work so opened up to be faulty, the whole of the expense of opening, checking and making good shall be borne by the Contractor. Should the Engineer find the Work opened up to be in an acceptable condition, such expense will be borne by the Owner.

- (c) The Contractor shall remove and make good defective Work, and the entire cost of such removal and making good shall be borne by the Contractor.

14. When Work is permitted or ordered by the Engineer to be done in cold weather, the Contractor shall provide suitable means for heating and protection, and the materials shall be heated and protected. All Work that may be injured by frost, and which cannot be satisfactorily completed, shall be put in a proper and satisfactory condition, and shall be protected from damage by frost. Unless otherwise specified, the cost of such protection shall be borne by the Contractor.

**14.
COLD
WEATHER**

The Engineer's decision as to matters referred to in this clause shall be binding upon the parties concerned.

- (b) When the Engineer makes a decision under this clause, the Contractor shall immediately proceed with Work affected by the decision. Additions to or deductions from the Contract price shall be made only as provided for in the Contract, and no revisions to the completion time shall be made, unless approved by the Engineer.
- (c) The Engineer may at reasonable times visit, enter and check at buildings, factories, workshops, works or sites wherever materials are being prepared, made or treated, or where other Work is being done in connection with the Contract. The Engineer may also take such samples as he may consider necessary.

21. (a) Shop Drawings will be reviewed only to check general arrangement and conformance with the design concept of the project and compliance with the Contract Documents.

**21.
SHOP
DRAWINGS**

- (b) Where the Engineer requires Shop and Setting Drawings, the Contractor shall submit them in sufficient time to allow for examination by the Engineer and for any corrections that he may require to be made. The Contractor shall not commence Work on items covered by Shop Drawings (where such drawings have been requested) before the Engineer's review.
- (c) The Contractor shall make changes in Shop and Setting Drawings as the Engineer requires consistent with the Contract and shall submit revised prints to the Engineer. When submitting Shop and Setting Drawings, the Contractor shall notify the Engineer of every change made from the Contract Documents.
- (d) Review of Shop Drawings by the Engineer shall not relieve the Contractor from compliance with requirements of the Contract Documents, nor relieve him of responsibility for errors made in the Shop Drawings.
- (e) The Contractor shall be responsible for confirming and correlating quantities and dimensions; selecting fabrication processes and techniques of construction; and coordinating the Work of Subcontractors.
- (f) Prior to submission to the Engineer the Contractor shall review Shop Drawings. By this review the Contractor represents that he has determined and verified field measurements, field construction criteria, materials, catalogue numbers and similar data or will do so and that he has checked and co-ordinated 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.
- (g) Shop Drawings shall be properly identified by the name of the project, the E.O. number, the item and the area in which the item is to be used. Where options occur on the Shop Drawing, the option proposed to be used shall be marked. If applicable, the related Specification Section shall be indicated.

22. Contract Documents, including Drawings, Specifications, models and similar items supplied by the Engineer are his property. Such Documents are not to be used on other work and, with the exception of the signed Contract Documents, shall be returned by the Contractor to the Engineer on the completion of the Work.

**22.
OWNERSHIP OF
DOCUMENTS**

23. The Contractor shall assume the defence of and shall indemnify and save harmless the Owner from claims:

**23.
LIABILITY**

- (a) resulting from the prosecution of the Work, or
- (b) resulting from any of the Contractor's operations, or
- (c) caused by reason of the existence, location or condition of the Work, or
- (d) caused by reason of any material, plant or labour used in the Work, or
- (e) arising from an act of commission or omission on the part of the Contractor, or
- (f) relating to inventions, copyrights, trademarks, patents (and rights to them) used in doing the Work, or in the use and operation of Work on completion, unless otherwise specified.

30. (a) Claims or alleged claims received by the Contractor shall be dealt with immediately by the Contractor. If a claim is settled to the satisfaction of the claimant, the Contractor shall submit to the Engineer a copy of the claimant's release.
- (b) If a claim or alleged claim is rejected by the Contractor and/or his insurance company, the Contractor shall report this fact in writing to the Engineer.
- (c) Should 30 days elapse after the claim or alleged claim has been received by the Contractor, and the Contractor is not able to report settlement or rejection of the claim, he shall report to the Engineer the steps being taken with respect to the claim.

30. INSURANCE CLAIMS

31. The Engineer may prohibit the Contractor from carrying on operations during hours of the day in which the Engineer, in his judgment, deems such operations to be a disturbance or nuisance to the public.

31. HOURS OF WORK

Such prohibition may be made notwithstanding prior consent, order, agreement or requirement in the Contract that stipulates maximum or minimum hours of Work.

32. (a) At monthly intervals, the Contractor and the Engineer shall make a valuation of the Work and materials supplied under the Contract. Should the Engineer wish to measure the Work or materials supplied, the Contractor shall assist in such measurements and furnish particulars required.
- (b) The monthly valuations described in subsection (a) above shall not bind the Owner, the Contractor or the Engineer to final valuation of the Work to be done under the Contract, but shall be construed as approximations only for the purpose of Progress Certificates.
- (c) The final valuation of the Work shall be prepared as soon as possible after the whole of the Work has been completed.

32. VALUATION

33. The Contractor shall be entitled to receive partial payments upon the certificate of the Engineer of the value of Work done and materials supplied.

33. PROGRESS CERTIFICATES

Unless otherwise specified, eighty-five per cent (85%) of the estimated value of the completed Work and material supplied will be certified, less amounts retained under Clause 36.

For Progress Certificates, the Engineer's decision as to the estimated value of completed Work and material supplied shall be final, but shall not be binding on him, the Contractor or the Owner in the establishing of the final value of the Work, nor shall it be taken as evidence as to ownership of, or payment for the Work.

34. Holdbacks held under the provision of the Mechanics' Lien Act will be released upon application by the Contractor, and will be subject to the requirements of the Act. The Contractor's applications shall be made in the forms included as Appendices 1 and 2 to these General Conditions. When the Engineer is satisfied that the Work meets the requirements of Substantial Completion in the Mechanics' Lien Act he will issue a Substantial Completion Certificate to establish a date for commencement of the holdback period.

34. SUBSTANTIAL COMPLETION AND HOLDBACK RELEASE

35. (a) When the Work required to be done under the Contract has been completed in every respect and is acceptable to the Engineer, a final valuation of the Contract will be prepared by the Contractor and the Engineer.
- (b) The Contractor shall submit to the Engineer a statement indicating the Contractor's valuation of the Work according to records available to the Contractor. The Engineer will review this statement and either approve it or submit detail reasons for revisions that, in his opinion, should be made.
- (c) Should the Engineer consider it advisable, the Engineer will prepare a final valuation of the Work and submit it to the Contractor who shall either approve it or submit detail reasons for revisions that, in his opinion, should be made.
- (d) When the Engineer and Contractor have reached agreement as to the final value of the Work, the Engineer will issue a Total Completion Certificate, detailing the valuation of the Contract, and certifying its acceptance at a certain specific date, referred to as the "acceptance date."
- (e) Should the Engineer and Contractor be unable to reach agreement as to the final value of the Work within a reasonable period, the Engineer will issue his Total Completion Certificate detailing his valuation of the Contract and certifying acceptance of the Work at a certain specific date, referred to as the "acceptance date."

35. TOTAL COMPLETION CERTIFICATE

41. The Contractor shall not assign the Contract, or any part of it without the written consent of the Owner, nor shall the Contractor assign monies due, or to become due, to him without the written consent of the Owner.

41.
ASSIGNMENT

42. The Contractor shall employ a competent supervisor and necessary assistants who shall at all times, be in attendance at the place of the Work while Work is being performed.

42.
SUPERINTENDENCE

The supervisor shall be satisfactory to the Engineer and shall not be changed except for good reason and only then after consultation with the Engineer.

The supervisor shall represent the Contractor at the place of the Work and directives given to him by the Engineer shall be held to have been given to the Contractor.

The Contractor shall provide the Engineer with the name, address and phone number of the supervisor and other responsible person(s) who may be contacted for emergency or other reasons.

APPENDIX 1 OF THE GENERAL CONDITIONS OF THE CONTRACT

APPLICATION FOR RELEASE OF SUBCONTRACTOR'S HOLDBACK

Owner:

Project:

EO:

Contractor:

Subcontract:

Subcontractor:

1. We, _____ the said Subcontractor
hereby confirm that the Work under the said subcontract was completed on
_____, that the subcontract price was \$ _____, and hereby
request the issue of a certificate that such subcontract Work has been completed.

Date: _____ Signature: _____

SEAL:

2. We, _____ the said Contractor
hereby confirm that Work of the above subcontract has been complete in accord-
dance with the Contract Documents and that the subcontract price was \$ _____
, and hereby apply for a reduction in holdback with respect to the
subcontract, in accordance with the provisions of the Mechanics' Lien Act.

Date: _____ Signature: _____

SEAL:

PROCTOR & REDFERN LIMITED
Consulting Engineers

May, 1978

APPENDIX 2 OF THE GENERAL CONDITIONS OF THE CONTRACT

APPLICATION FOR RELEASE OF CONTRACTOR'S HOLDBACK

Owner:

Project:

EO:

Contractor:

We,
hereby confirm:

the said Contractor,

- (i) that the Work under the above Contract is "substantially complete" as defined in the Mechanics' Lien Act, and
 - (ii) that there are no outstanding liens, garnishees, attachments or other charges affecting the Work, and
 - (iii) that the value of Work done to the date of substantial completion is \$
and
 - (iv) that the value of Work remaining to be done is \$
- and hereby apply for release of holdback monies in accordance with the provisions of the Mechanics' Lien Act.

Date: _____ Signature: _____

SEAL

PROCTOR & REDFERN LIMITED
Consulting Engineers

May, 1978

SECTION 01010 - GENERAL

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

- A. This Contract is for the installation of structural plate C.S P. arches and related roadwork in the Town of Pelham, Ontario.

1.02 LIMITS OF SITE

- A. The limits of the site are -

1. The road or street allowances on which Work is to be performed.
2. Such additional land as indicated in the Contract.
3. Such additional land designated as easements indicated in the Contract.
4. Such areas of private property adjacent to road or street allowances on which the Contractor is directed, in writing, to enter to carry out Work.

1.03 SETTING OUT OF THE WORK

- A. The Engineer will set such stakes as are necessary to mark the location, alignment, elevation and grade of the Work. Give adequate notice of the need for such setting out.

Carefully protect and preserve stakes, lot pins, marks and reference points and replace if destroyed or removed.

Provide grade stakes, masts scaffolds batter boards straight edges, templates and other equipment necessary for laying out and inspecting the Work.

Wherever necessary suspend Work temporarily to permit the Engineer to inspect and check the line and grade of any portion of the Work.

1.04 MEASUREMENT FOR PAYMENT

- A. Unless otherwise specified, measurements will be taken in the horizontal plane.

1.05 CONSTRUCTION SCHEDULE

- A. Within one week after being awarded the Contract, submit proposed construction schedule to the Engineer for approval. In the schedule show proposed progress in weekly stages for the main sections and subsections of the Work.

PART 2 PRODUCTS

2 01 TESTS

- A. Where required by the Engineer, supply certified copies of tests upon materials to be used in the construction of the Work, indicating that the materials comply with the Specifications. Have an approved testing laboratory make such tests at no expense to the Owner.

2.02 MATERIALS SUPPLIED BY OWNER

- A. Certain material will be supplied by the Owner. The Owner will endeavour to have the items available for use when required but failure to do so does not entitle the Contractor to compensation for delay other than extension to the time of completion, which will be determined by the Engineer.
- B. Take delivery where directed and load, haul, unload and assume responsibility for the handling, storage and protection of such material until it has been placed in the Work and tested satisfactorily. When required to convey Owner-supplied material from rail cars, do so as soon as the cars are available for unloading. Pay demurrage due to inattention.
- C. Examine material supplied by the Owner for loss or damage in transit, prior to accepting delivery, and notify the Owner of loss or damage. The Owner will be responsible for material so identified. Be responsible for repairs to or replacement of material provided by the Owner by failing to comply with the requirements of this clause

PART 3 EXECUTION

3 01 TRAFFIC

- A. Do not perform Work on public right-of-ways without approval of the road authorities.
- B. Perform traffic control on streets in accordance with the rules of the appropriate road authority. Ensure that flagmen wear fluorescent red or orange safety vests, arm bands and hats.
- C. Streets may be closed to through traffic only with the written permission of the Road Authority. Adequately mark detours on adjacent streets. Erect and maintain barricades on the closed streets and light at night. Inform the Road Authority when a road is re-opened to traffic.
- D. On streets that are not officially closed, always maintain one lane of traffic in each direction. Should temporary detours be constructed comply with the requirements of the road authority as to location, dimensions, strength, road markings, signing and other relevant details. Remove detours when no longer needed, and restore surfaces to the original condition.
- E. Whether streets are officially closed or not, maintain reasonable access to adjacent properties for pedestrians and vehicles.
- F. Maintain traffic signs in their original positions. Be sure that the signs are not obscured.

3.02 NOTIFICATIONS

- A. When streets are to be closed, or traffic restricted notify the appropriate fire and police departments, giving at least 7 days notice of the closing or restriction.

PART 3 EXECUTION (Cont'd)

3.02 NOTIFICATIONS (Cont'd)

- B. If bus routes are affected, notify the bus company, giving at least 7 days notice.
- C. When streets are to be re-opened or restrictions removed, notify the fire police and bus authorities.

3.03 MUNICIPAL INSPECTORS

- A. Municipal inspectors may be present during the construction of the Work. They have the power to order the Contractor to stop Work if the Work, in their opinion is not being done in accordance with the set lines and grades or to the Drawings and Specifications.

Unless otherwise specified, the cost of municipal inspectors will not be charged to the Contractor.

3.04 USE OF HYDRANTS

- A. Keep fire hydrants accessible and free of obstructions.
- B. Fire hydrants may be used as a source of water only with the approval of the water authority, and subject to its rules and conditions.

3.05 INCLEMENT WEATHER

- A. Make adequate protection and take precautions at times of inclement weather.
- B. Inclement weather or extra Work caused by such weather will not be accepted as reason for additional payment.

3.06 MUD AND DUST

- A. Keep streets and other construction areas clean. If it is necessary to haul wet material, use suitable watertight trucks.
- B. Control dust by the use of water or calcium chloride, or both.

3.07 OTHER CONSTRUCTION

- A. Other construction may be proceeding at the same time near the Work of this Contract. Extend cooperation and free access to other companies and employees who may be Working in the area.

3.08 ADJACENT STRUCTURES AND UTILITIES

- A. Perform temporary and permanent support and temporary relocation and replacement of underground or overhead utilities as detailed in the General Conditions
- B. Permanent relocation of underground or overhead utilities will be carried out by others if necessitated by coincidence of lines or grades, or both.

PART 3 EXECUTION (Cont'd)

3.09 TEMPORARY ACCESS

- A. Where necessary for access, provide and maintain suitable safe, temporary roads walkways and bridges. Remove temporary access facilities and restore disturbed areas, after the Work of the Contract has been completed.

3.10 CLEAN UP

- A. On a daily basis as the Work progresses and on completion of the Work, clean-up and remove the rubbish and debris from the site. Remove excess material that is not required to be left on the site by the conditions of the Contract

SECTION 02590 CULVERTS, ROAD AND SURFACE WORKS

PART 1 GENERAL

1.01 INTENT

- A. This Section covers the Work for roads and surface works including -
 - 1 Site clearing
 - 2. Excavation and grading
 - 3. Compaction
 - 4 Granular courses
 - 5. Existing utilities
 - 6. Existing drainage
 - 7. Culverts
 - 8. Rip rap
 - 9. Restoration
- B. Products installed under this Contract but furnished by others is as Pre-erected structural plate C.S.P. pipe arches.

1.02 TESTING

- A. Supply test certificates in accordance with the appropriate specification, for the following materials -
 - 1. Granular 'A', 'B'

1.03 EXISTING UTILITIES

- A. Utilities that require relocation will be the responsibility of the Owner, including costs. Co operate with the utility companies and always provide them with free access to their plant.

1.04 EXISTING DRAINAGE

- A. Maintain temporary and permanent flow in sewers, drains, gutters, ditches, watercourses house and inlet connections.

1.05 MEASUREMENT FOR PAYMENT

- A The Engineer will
 - 1. Measure tonnes of Granular 'A' and 'B' materials provided
 - 2. Measure lineal metres of channel improvements
 - 3. Measure square metres of rip-rap provided

PART 1 GENERAL (Cont d)

1.06 BASIS OF PAYMENT

A. Conditions

- 1 The Engineer will measure the Work when completed and the Contract price will be increased or decreased in accordance with the final measurements.
2. No additional payment will be allowed for difficulties resulting from relocating of utilities by others not being done until after road excavation placing of granular base, or paving.

B. Items

1. Culvert will be supplied by the Town of Pelham and be pre-erected by the manufacturer, either in-plant or on-site.
2. Include in the unit prices for items the associated Works as follows -
 - (A) Installation of culverts
 - (1) Excavation of trench for culvert installation and disposal of excess excavated material.
 - (2) Complete installation of culvert.
 - (B) Granular 'B' backfill for culverts.
 - (1) Supply, place and compact to 95 percent Standard Proctor Density
 - (C) Granular 'A' road base.
 - (1) Supply, place and compact to 100 percent Standard Proctor Density.
 - (D) Hand laid rip rap.
 - (1) Supply and place hand laid rip rap, 200 mm to 300 mm stone.
 - (E) Channel improvements
 - (1) Excavation of channel 2:1 side slope to proposed grades and to the proposed limits shown on the drawings.
 - (2) Match existing channel.
 - (3) Hauling and disposal of excess excavated materials

PART 2 PRODUCTS

2.01 GENERAL

Conform to latest edition of reference standards.

Where applicable comply with MTC supplements as well as MTC reference standard specifications.

A. Granular Materials

1. Granular 'A' 'B' in accordance with MTC Form 1010.
2. Crushed stone - Produce from bedded or massive rock formations or from boulders. Break into fragments to conform with following gradation requirements -

PART 2 PRODUCTS (Cont d)
2.01 GENERAL (Cont d)
A. 2. (Cont d)

(A) Sieve Size	Passing by Weight
63 mm	100 percent
38 mm	75 percent
19 mm	50 percent
No. 4 mesh	15 percent
No. 200 mesh	5 percent

3. Select subgrade material Produce from compactable, non-frost susceptible non plastic sand or gravel to conform with the following gradation requirements -

(A) Sieve Size	Passing by Weight
100 mm	100 percent
25 mm	50 to 100 percent
No. 4 mesh	20 to 100 percent
No.16 mesh	20 to 100 percent
No.50 mesh	5 to 95 percent
No.100 mesh	3 to 65 percent
No.200 mesh	3 to 25 percent
No.270 mesh	0 to 15 percent

PART 3 EXECUTION

3.01 CLEARING

- A. Carefully protect trees shrubs and other vegetation designated to be saved during construction. Carefully carry out designated 'spot' or selective clearing
- B. Cut and dispose of trees, brush, vegetation, windfalls, timber, fences and surface litter.
- C. Clear areas beyond the street lines or on easements only where specifically directed.

3.02 REMOVALS

- A. Remove existing culvert or bridge completely and as required for the new work. Dispose of removed materials off the site, or in an area designated by the Engineer, or at municipal landfill site .

3.03 EXCAVATION AND GRADING

- A. Make cuts and fills employing excavating compacting of subgrade, filling, loading, hauling and fine grading. Cross-sections on the Drawings show the limits of excavation, filling, sideslopes, toe of slope and limit of cut locations. Dispose of surplus excavated material off the site or in an area designated by the Engineer or at municipal landfill site .
- B. Soils on the site will be considered 'earth' except rock. Boulders and masonry exceeding .75 m³ in volume will be termed 'rock' . Bury rock and boulders up to .25 m³ in volume not less than 1.2 m³ below top of subgrade Dispose of rock and boulders between .25 m³ and .75 m³ as earth and rock and boulders which re-appear during grading.
- C. Excavate peat and marl and stockpile in trapezoidal sections in an area designated by the Engineer or dispose of at municipal landfill site .

PART 3 EXECUTION (Cont'd)

3.03 EXCAVATION AND GRADING (Cont'd)

- D. Complete ditches and swales before filling areas, prevent saturation of fill and cut areas, grade and crown on both fill and cut areas.
- E. Excavate soft spots in subgrade. Fill with Granular 'B' or select excavated material and compact to 95 percent Standard Proctor Density.
- F. Fine grade road subgrade to specified cross section and compact to 95 percent Standard Proctor Density.
- G. Maintain grading tolerance for subgrade at plus or minus 30 mm
- H. Grading may be performed only with permission of the Engineer. Do not use frozen fill in fill areas.

3.04 COMPACTION ON SUBGRADE AREAS

- A. During construction of the underground utilities, compact trenches to subgrade elevations at 95 percent Standard Proctor Density.
- B. Compact subgrade and fill areas on road allowances to 95 percent Standard Proctor Density.

3.05 GRANULAR COURSES

- A. Supply, weigh, place grade and compact to 95 percent and 100 percent Standard Proctor Density, the Granular 'B' and Granular 'A' courses respectively to the depths indicated on the Drawings. Granular 'B' course will be inspected prior to placement of the Granular 'A' course. Maintain optimum moisture content.
- B. Maintain grading tolerance for Granular "B" to plus or minus 30 mm
- C. Maintain grading tolerance for Granular "A" to plus or minus 6 mm
- D. Weigh granular materials in accordance with M.T.C. Form 502. Notwithstanding the above, base quantities on weigh tickets issued at the weigh scales located at the source of the material.

3.06 COMPACTION TESTS

- A. Where compaction of sub grade granular courses, granular base course and fill is called for the Engineer may order compaction tests by an independent testing company. Tests will be arranged for by the Engineer and paid for by the Owner.
 - 1. Where tests show that the compaction does not meet the specified requirement, pay the costs for further compaction in a manner dictated by the Engineer, and pay for further testing to establish proof of the specified compaction.
 - 2. For fill compaction, tests will be made at every 450 mm max. depth, after two 230 mm lifts have been placed. Granular courses will be tested at depths as directed by the Engineer.
 - 3. Co-operate with the Engineer and testing company by scheduling the placing and compaction of fill and granular courses so that tests can be progressively taken.

3.07 RESTORATION

- A. Provide restoration of Works to the same or better condition as existed previous to this Contract.

PART 3 EXECUTION (Cont'd)

3.08 CLEAN-UP

- A. On a daily basis, as the Work proceeds, and on completion remove rubbish and surplus material from the site.

3.09 HAULING OF MATERIALS

- A. The Contractor shall haul materials in accordance with local or any other weight regulations.