

CORPORATION OF THE TOWN OF AMHERSTBURG

BY-LAW NO. 2003-86

**Being a By-law to authorize the signing of a contract
between the Town of Amherstburg and Rivard Excavating Ltd.**

Whereas an owner of property, Roll # 580-00760, Concession 4, part lot 36 in the Drainage area of the 4th Concession Road Drain has requested work to be done on the Drain, and

Whereas Todgham and Case Associates Incorporated were authorized by the Town of Amherstburg to prepare a report on the request, and

Whereas the Report dated April 28, 2003 was accepted and a tender process was completed for the work, and

Whereas Council of the Town of Amherstburg accepted the tender from Rivard Excavating Ltd. and

Whereas the owner is responsible for 100% of the cost of the project;

**NOW THEREFORE THE COUNCIL OF THE
TOWN OF AMHERSTBURG ENACTS AS FOLLOWS:**

1. That the Mayor and Clerk be authorized to sign the contract with Rivard Excavating Ltd. dated August 28, 2003, attached hereto and forming part of this by-law for the work at the property of Rita & Paul Emile Cote at a cost of \$37,459.63 including G.S.T.
2. That this By-law come into effect on the final passing thereof.

Read a first, second and third time and finally passed this 14th day of October, 2003.



MAYOR



CLERK

Certified to be a true copy of
By-law No. 2003-86 passed on
October 14, 2003.

Clerk

AGREEMENT

THIS AGREEMENT made in triplicate this 28th day of August 2003,

BETWEEN THE CORPORATION OF THE TOWN OF AMHERSTBURG

(hereinafter called the Corporation) of the first part,

AND

Rivard Excavating Ltd.

(hereinafter called the Contractor) of the second part.

WHEREAS the Corporation is desirous that certain works should be constructed, viz., the construction of the:

**FOR THE REPAIR AND IMPROVEMENT OF THE
4th CONCESSION ROAD DRAIN IN THE
TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)**

in the Town of Amherstburg and has accepted a Tender by the Contractor for the construction, completion and maintenance of such works:

NOW THIS AGREEMENT WITNESSES AS FOLLOWS:

1. The Contractor hereby covenants and agrees to provide and supply at his expense, all and every kind of labour, machinery, equipment and materials for, and to undertake and complete in strict accordance with his Tender dated the

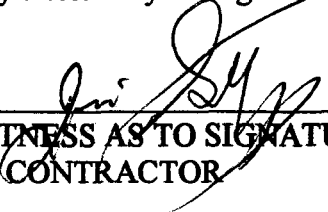
23rd day of July 2003,

and the Contract Documents (consisting of the General Conditions of Contract, Drawings, Specifications, Information to Tenderers, Special Provisions of Contract, if any, (including all modifications thereof and incorporated in the said documents before their execution) prepared by Todgham & Case Associates Inc., and all of which said documents are annexed hereto and form part of this Agreement to the same extent as if fully embodied herein, the construction of the above noted works for the sum of

Thirty-Seven Thousand, Four Hundred, Fifty-Nine .63 dollars (\$ 37,459.63)

2. The Contractor further covenants and agrees to undertake and complete the said work in a proper workmanlike manner under the supervision and direction and to the entire satisfaction of Todgham & Case Associates Inc., or the Drainage Superintendent of the Town of Amherstburg within the specified time in his Tender. Time shall be deemed the essence of the Contract.
3. The Contractor further covenants and agrees that he will at all times, indemnify and save harmless, the Corporation of the Town of Amherstburg and Todgham & Case Associates Inc., along with their respective officers, servants and agents, from and against all loss and damages whatsoever which may be made or brought against the above listed by reason or in consequence of the non-execution or negligent execution thereof by the Contractor, its servants, agents or employees.
4. The Corporation hereby covenants and agrees that if the said Work is duly and properly executed and materials are provided as aforesaid, and if the said Contractor carries out, performs and observes all of the requirements and conditions of this Agreement, the Corporation will pay to the Contractor, the price set forth in his Tender, such payment or payments to be made in accordance with the provisions of the General Conditions of the Contract referred to above.
5. This Agreement and everything herein contained shall endure to the benefit of and be binding upon the parties hereto, their heirs, executors, administrators, successors and assigns, respectively.

IN WITNESS WHEREOF the parties hereto have hereunto affixed their Corporate Seals, if any, duly attested by the signature of their proper officers in that behalf, respectively.



WITNESS AS TO SIGNATURE
OF CONTRACTOR



Contractor's Signature and Seal

Rivard Excavating Ltd.


Contractor's Name

2606 - 6th Concession, RR#3
Tilbury, Ontario NOP 2L0


Contractor's Address

**CORPORATION OF THE TOWN OF
AMHERSTBURG**

WITNESS AS TO SIGNATURE OF
CORPORATION



Mr. Tony DiBartolomeo, Mayor



Mr. David Mailloux, Clerk

**FORM OF TENDER
FOR THE REPAIR AND IMPROVEMENT
OF THE
4th CONCESSION ROAD DRAIN
IN THE
TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)**

Todgham and Case Associates Incorporated

Consulting Engineers

Chatham, Ontario

July 2003

CSIO CERTIFICATE OF INSURANCE

BROKER

Southland Insurance Service

98 Talbot St. W.
Leamington, ON

N8H 3W6

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies below.

COMPANIES AFFORDING COVERAGE

COMPANY A AXA Insurance (Canada)

COMPANY B

COMPANY C

COMPANY D

INSURED

Rivard Excavating Ltd.

R. #3
Tilbury, ON N0P 2L0

COVERAGES

This is to certify that the policies of insurance listed below have been issued to the insured named above for the policy period indicated, notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies. **LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.**

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (YY/MM/DD)	POLICY EXPIRATION DATE (YY/MM/DD)	LIMITS
A	GENERAL LIABILITY	5101987	03/07/23	04/07/23	EACH OCCURRENCE \$ 500000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY				GENERAL AGGREGATE \$ 500000
	<input type="checkbox"/> CLAIMS MADE OCCURRENCE				PRODUCTS - COMP/OP AGG \$
	<input type="checkbox"/> TENANT'S LEGAL LIABILITY				PERSONAL INJURY \$
	<input type="checkbox"/> NON-OWNED				TENANT'S LEGAL LIABILITY \$
	<input type="checkbox"/> HIRED				MED EXP (Any one person) \$
A	AUTOMOBILE LIABILITY	LAA5171710	03/07/23	04/07/23	BODILY INJURY & PROPERTY DAMAGE COMBINED \$ 2000000
	<input checked="" type="checkbox"/> DESCRIBED AUTOMOBILES				BODILY INJURY (Per person) \$ 2000000
	<input type="checkbox"/> ALL OWNED AUTOS				BODILY INJURY (Per accident) \$
	<input type="checkbox"/> LEASED AUTOMOBILES				PROPERTY DAMAGE \$
	EXCESS LIABILITY				EACH OCCURRENCE \$
	<input type="checkbox"/> UMBRELLA FORM				AGGREGATE \$
	<input type="checkbox"/> OTHER THAN UMBRELLA FORM				\$
	OTHER				

ADDITIONAL INSURED

Town of Amherstburg
& Bruce D. Crozier

DESCRIPTION OF OPERATIONS/LOCATIONS/AUTOMOBILES/SPECIAL ITEMS

OPERATIONS OF THE INSURED. - Cross Liability Clause applies.

CERTIFICATE HOLDER

Town of Amherstburg

271 Sandwich Street
Amherstburg, ON N9V 2Z3

CSIO CERT (6/94)

CANCELLATION

Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail 30 days written notice to the certificate holder named to the left, but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives.

AUTHORIZED REPRESENTATIVE

Robert E. Ferguson, S.A. / R



Workplace Safety & Insurance Board
Commission de la sécurité professionnelle et de l'assurance contre les accidents du travail

2485 OUELLETTE AVENUE
WINDSOR, ONTARIO
N8X 1L5 (519) 966-0660

Clearance Certificate Certificat de décharge

CONTRACTOR
L'ENTREPRENEUR

RIVARD EXCAVATING LTD
RR 3
TILBURY ON
N0P 2L0

The Workplace Safety and Insurance Board (WSIB) hereby waives its rights under Section 141 of the Workplace Safety and Insurance Act to hold the Principal, that is in a contractual agreement with the Contractor named, liable for any Section 141 liability of the Contractor for premiums and levies of the WSIB owing now or within 60 days from the date of this Certificate.

Par la présente, la Commission de la sécurité professionnelle et l'assurance contre les accidents du travail (CSPAAT) renonce aux droits qui lui sont conférés en vertu de l'article 141 de la Loi sur la sécurité professionnelle et l'assurance contre les accidents du travail et qui l'autorisent à tenir l'entrepreneur principal, qui a signé une entente contractuelle avec l'entrepreneur dont le nom figure sur le présent certificat, responsable du paiement de tout prime ou de toute somme que l'entrepreneur est tenu de verser à la CSPAAT immédiatement ou dans les 60 jours suivant la date indiquée sur ce certificat.

THIS CERTIFICATE IS VALID FOR ALL CONTRACTS OF THE NAMED CONTRACTOR DURING THE EFFECTIVE PERIOD

LE PRESENT CERTIFICAT EST VALIDE POUR TOUS LES CONTRATS PASSES PAR LEDIT ENTREPRENEUR PENDANT LA PERIODE D'APPLICATION DU CERTIFICAT

*Valid only when signed by an authorized Officer of the WSIB.
Nez valide que la signature d'un agent autorisé de la CSPAAT.*

Account No. / N° de compte 4470397	Firm No. / N° d'entreprise 210218EC	0988-0003
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Rate / Taux	Description	Rate / Taux	Description
2214000	EXCAVATING AND GRADY		

Contract Description / Description du contrat

Certificate No. / N° de certificat
201705267

5196821522

Contact the WSIB if you question the validity of this document.
Veuillez communiquer avec la CSPAAT si vous doutez de la validité du présent document.

GENERAL INDEX
FORM OF TENDER
FOR THE
REPAIR AND IMPROVEMENT OF THE
4th CONCESSION ROAD DRAIN
IN THE
TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)

- | | | |
|----|--------------------------------------|--------------|
| 1. | TENDER FORMS | T-1 to T-4 |
| 2. | AGREEMENT | A-1 to A-3 |
| 3. | INFORMATION TO TENDERERS | IT-1 to IT-5 |
| 4. | DRAIN REPORT & PLAN - April 28, 2003 | |

FORM OF TENDER
FOR THE
REPAIR AND IMPROVEMENT OF THE
4th CONCESSION ROAD DRAIN
IN THE
TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)

TO: Mayor and Municipal Council
 Corporation of the Town of Amherstburg
 Municipal Offices
 P.O. Box 159
 271 Sandwich Street South
 Amherstburg, Ontario
 N9V 2Z3

I the undersigned, having examined the locality and site of the Works, Drawings and Specifications as prepared by TODGHAM & CASE ASSOCIATES INC., 131 Heritage Road, P.O. Box 1326, Chatham, Ontario N7M 5W7 hereby offer to furnish all materials including all appropriate sales taxes and perform all the work necessary as described in the above documents and in accordance with the said documents under the supervision of the said Consulting Engineers, or the Drainage Superintendent of the Town of Amherstburg, for the sum of

Thirty SEVEN Thousand Four hundred and fifty
NINE ^{.63} DOLLARS (\$ 37,459.63) including G.S.T.

and made up as follows:

- (1) Tree Stump Removal
 Complete at Lump Sum

\$ 700.⁰⁰

(2)	Excavation, Load, Haul & Disposal	
	Approximately 197 m ³ at \$ <u>10.⁰⁰</u> per cubic metre.	\$ <u>1970.⁰⁰</u>
(3)	Gabion Baskets - Installed Complete	
	Approximately 186 m ³ at \$ <u>139.⁰⁰</u> per cubic metre.	\$ <u>25854.⁰⁰</u>
(4)	Geotextile	
	Approximately 300 m ² at \$ <u>2.⁰⁰</u> per square metre.	\$ <u>600.⁰⁰</u>
(5)	Granular Backfill.	
	Approximately 280 tonne at \$ <u>12.⁵⁰</u> per tonne.	\$ <u>3,500.⁰⁰</u>
(6)	Toe Protection.	
	Approximately 30 tonne at \$ <u>29.⁰⁰</u> per tonne	\$ <u>870.⁰⁰</u>
(7)	Top Soil.	
	Approximately 180 m ² at \$ <u>3.75</u> per square metre.	\$ <u>675.⁰⁰</u>
(8)	Seed & Mulch	
	Approximately 180 m ² at \$ <u>3.⁰⁰</u> per square metre.	\$ <u>540.⁰⁰</u>
(9)	Silt Control	
	Complete at Lump Sum	\$ <u>300.⁰⁰</u>
	TENDER PRICE	\$ <u>35,009.⁰⁰</u>
	7% G.S.T. PAYABLE (ON ABOVE)	\$ <u>2,450.63</u>
		=====
	TOTAL TENDER PRICE (INCLUDING G.S.T.)	\$ <u>37,459.63</u>

I declare that this Tender is made without any connection, knowledge, comparison of figures or arrangement with any other company, firm or person making a Tender for the same work and is in all respect, fair and without collusion or fraud.

I further agree to leave this Tender open for acceptance for a period of 90 calendar days from the closing date of Tenders.

I further agree to enter into a Contract with the CORPORATION OF THE TOWN OF AMHERSTBURG for the above work within 10 days after the Contract is awarded to ME.

It is understood that the CORPORATION OF THE TOWN OF AMHERSTBURG is not bound to accept the lowest, any or any particular bid. The criteria to be considered by the Municipality in awarding the contract will include a combination of price, scheduling, expertise, qualifications and such other conditions as may be determined by the Municipality to be in its own best interests. Additions, alterations, deletions or other irregularities in the bid form may, but will not necessarily, result in the Municipality's rejection of the bid. The bidder acknowledges that it shall have no claim against, or entitlement to damages from, the Municipality by reason of the Municipality's rejection of its bid or of all bids.

Proof of Liability Insurance will be required before commencement of the work.

A Certificate of Good Standing from the Workplace Safety & Insurance Board will be required before commencement of the work and before final payment is made.

The Tenderer agrees to have the required equipment and labour at the site and to work continuously on this project (weather conditions permitting) within 4 weeks from the date of the signing of the Contract.

The Tenderer agrees to complete the Works within the time to be known as the "Time of Completion" and that work will be completed on or before OCTOBER 1, 2003.

TENDERED BY Rivard Excavating Ltd.

ADDRESS 2606-6th conc RR#3

Tilbury Ont. N0P2L0

G.S.T. REGISTRATION NO. R104541099

DATED AT 8:10 AM THIS 23 DAY OF July 2003

Collette Rivard)
)
) MARC Rivard
)

Collette Rivard)
)
) Marc Rivard
)
 Signature of Witness) Signature of Tenderer

NOTE:

If the Tender is submitted by or on behalf of a Corporation, it must be duly signed in the name of such Corporation by the duly authorized officers and the seal of the Corporation must be affixed. If the Tender is submitted by or on behalf of an individual or a partnership, a seal must be affixed opposite the signature of the individual or partner.

Monthly progress orders for payment shall be furnished to the Contractor by the Drainage Superintendent in charge and such orders shall not be for more than 90% of the value of the work done and the materials furnished on the site. The paying of the full 90% does not imply that any portion of the work has been accepted. The remaining 10% will be paid 45 days after the final acceptance and completion of the work.

AGREEMENT

THIS AGREEMENT made in triplicate this 28th day of August 2003,

BETWEEN THE CORPORATION OF THE TOWN OF AMHERSTBURG

(hereinafter called the Corporation) of the first part,

AND

Rivard Excavating Ltd.
(hereinafter called the Contractor) of the second part.

WHEREAS the Corporation is desirous that certain works should be constructed, viz., the construction of the:

**FOR THE REPAIR AND IMPROVEMENT OF THE
4th CONCESSION ROAD DRAIN IN THE
TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)**

in the Town of Amherstburg and has accepted a Tender by the Contractor for the construction, completion and maintenance of such works:

NOW THIS AGREEMENT WITNESSES AS FOLLOWS:

1. The Contractor hereby covenants and agrees to provide and supply at his expense, all and every kind of labour, machinery, equipment and materials for, and to undertake and complete in strict accordance with his Tender dated the

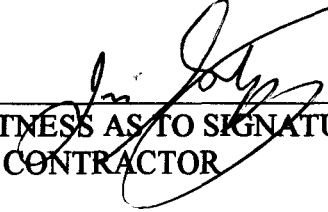
23rd day of July 2003,

and the Contract Documents (consisting of the General Conditions of Contract, Drawings, Specifications, Information to Tenderers, Special Provisions of Contract, if any, (including all modifications thereof and incorporated in the said documents before their execution) prepared by Todgham & Case Associates Inc., and all of which said documents are annexed hereto and form part of this Agreement to the same extent as if fully embodied herein, the construction of the above noted works for the sum of


Thirty-Seven Thousand, Four Hundred, Fifty-Nine .63 dollars (\$ 37,459.63)

2. The Contractor further covenants and agrees to undertake and complete the said work in a proper workmanlike manner under the supervision and direction and to the entire satisfaction of Todgham & Case Associates Inc., or the Drainage Superintendent of the Town of Amherstburg within the specified time in his Tender. Time shall be deemed the essence of the Contract.
3. The Contractor further covenants and agrees that he will at all times, indemnify and save harmless, the Corporation of the Town of Amherstburg and Todgham & Case Associates Inc., along with their respective officers, servants and agents, from and against all loss and damages whatsoever which may be made or brought against the above listed by reason or in consequence of the non-execution or negligent execution thereof by the Contractor, its servants, agents or employees.
4. The Corporation hereby covenants and agrees that if the said Work is duly and properly executed and materials are provided as aforesaid, and if the said Contractor carries out, performs and observes all of the requirements and conditions of this Agreement, the Corporation will pay to the Contractor, the price set forth in his Tender, such payment or payments to be made in accordance with the provisions of the General Conditions of the Contract referred to above.
5. This Agreement and everything herein contained shall endure to the benefit of and be binding upon the parties hereto, their heirs, executors, administrators, successors and assigns, respectively.

IN WITNESS WHEREOF the parties hereto have hereunto affixed their Corporate Seals, if any, duly attested by the signature of their proper officers in that behalf, respectively.



WITNESS AS TO SIGNATURE
OF CONTRACTOR




Contractor's Signature and Seal

Rivard Excavating Ltd.
Contractor's Name

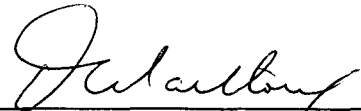
2606 – 6th Concession, RR#3
Tilbury, Ontario NOP 2L0
Contractor's Address

**CORPORATION OF THE TOWN OF
AMHERSTBURG**

WITNESS AS TO SIGNATURE OF
CORPORATION



Mr. Tony DiBartolomeo, Mayor



Mr. David Mailloux, Clerk

AGREEMENT

THIS AGREEMENT made in triplicate this 28th day of August 2003 ,

BETWEEN THE CORPORATION OF THE TOWN OF AMHERSTBURG

(hereinafter called the Corporation) of the first part,

AND

Rivard Excavating Ltd.
(hereinafter called the Contractor) of the second part.

WHEREAS the Corporation is desirous that certain works should be constructed, viz., the construction of the:

**FOR THE REPAIR AND IMPROVEMENT OF THE
4th CONCESSION ROAD DRAIN IN THE
TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)**

in the Town of Amherstburg and has accepted a Tender by the Contractor for the construction, completion and maintenance of such works:

NOW THIS AGREEMENT WITNESSES AS FOLLOWS:

1. The Contractor hereby covenants and agrees to provide and supply at his expense, all and every kind of labour, machinery, equipment and materials for, and to undertake and complete in strict accordance with his Tender dated the

23rd day of July 2003 ,

and the Contract Documents (consisting of the General Conditions of Contract, Drawings, Specifications, Information to Tenderers, Special Provisions of Contract, if any, (including all modifications thereof and incorporated in the said documents before their execution) prepared by Todgham & Case Associates Inc., and all of which said documents are annexed hereto and form part of this Agreement to the same extent as if fully embodied herein, the construction of the above noted works for the sum of

Thirty-Seven Thousand, Four Hundred, Fifty-Nine .63 dollars (\$ 37,459.63)

2. The Contractor further covenants and agrees to undertake and complete the said work in a proper workmanlike manner under the supervision and direction and to the entire satisfaction of Todgham & Case Associates Inc., or the Drainage Superintendent of the Town of Amherstburg within the specified time in his Tender. Time shall be deemed the essence of the Contract.
3. The Contractor further covenants and agrees that he will at all times, indemnify and save harmless, the Corporation of the Town of Amherstburg and Todgham & Case Associates Inc., along with their respective officers, servants and agents, from and against all loss and damages whatsoever which may be made or brought against the above listed by reason or in consequence of the non-execution or negligent execution thereof by the Contractor, its servants, agents or employees.
4. The Corporation hereby covenants and agrees that if the said Work is duly and properly executed and materials are provided as aforesaid, and if the said Contractor carries out, performs and observes all of the requirements and conditions of this Agreement, the Corporation will pay to the Contractor, the price set forth in his Tender, such payment or payments to be made in accordance with the provisions of the General Conditions of the Contract referred to above.
5. This Agreement and everything herein contained shall endure to the benefit of and be binding upon the parties hereto, their heirs, executors, administrators, successors and assigns, respectively.

IN WITNESS WHEREOF the parties hereto have hereunto affixed their Corporate Seals, if any, duly attested by the signature of their proper officers in that behalf, respectively.

WITNESS AS TO SIGNATURE
OF CONTRACTOR

Contractor's Signature and Seal

Rivard Excavating Ltd.
Contractor's Name

2606 – 6th Concession, RR#3
Tilbury, Ontario N0P 2L0
Contractor's Address

**CORPORATION OF THE TOWN OF
AMHERSTBURG**

WITNESS AS TO SIGNATURE OF
CORPORATION



Mr. Tony DiBartolomeo, Mayor



Mr. David Mailloux, Clerk

INFORMATION TO TENDERERS
FOR THE
REPAIR AND IMPROVEMENT OF THE
4th CONCESSION ROAD DRAIN
IN THE
TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)

1.0 TENDERS

Tenders will be received by:

The Corporation of the Town of Amherstburg
Municipal Offices
P.O. Box 159
271 Sandwich Street South
Amherstburg, Ontario
N9V 2Z3

up until the hour of: **11:00 o'clock a.m., WEDNESDAY, JULY 23, 2003**

2.0 DEPOSIT WITH TENDERS (NOT APPLICABLE)

3.0 PERFORMANCE AND LABOUR & MATERIAL BONDS (NOT APPLICABLE)

4.0 EXAMINATION OF SITE, PLANS AND SPECIFICATIONS

Each Tenderer must visit the site and review the plans and specifications before submitting his tender and must satisfy himself as to the extent of the work and local conditions to be met during the construction period. He is not to 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. The quantities shown as indicated on the drawings or in the report are estimates only and are for the sole purpose of indicating to the Tenderers the general magnitude of the work. The Tenderer is responsible for checking quantities for accuracy prior to submitting his tender.

5.0 AGREEMENT AND GENERAL CONDITIONS

Tenders will be received and contracts awarded only in the form of a lump sum contract unless otherwise provided, for the completion of the whole work or of specified sections thereof in accordance with the plan, profile and specification. The Contractor agrees to enter into a formal contract with the Municipality upon acceptance of the tender.

All work included in the contract must be completed on or before the date fixed in the contract and must, at the time of completion and final inspection, be in first class condition and comply fully with the specifications.

Final inspection will be made by the Engineer within 20 days after the Drainage Superintendent has received notice in writing from the Contractor that the work is completed, or as soon thereafter as weather conditions permit.

The Contractor will be held liable for any damage or expenses occasioned by his failure to complete the work on time and for any expenses of inspecting, superintending or reletting due to his neglect or failure to prosecute the work satisfactorily. Any such expense or damages may be deducted by the Drainage Superintendent from the amount of the Contract or may be recovered by the Municipality from the Contractor and his sureties.

6.0 INSURANCE

Within ten (10) days after the contract has been awarded to him, the Contractor shall furnish to the Clerk of the Municipality, satisfactory evidence that he has insurance to cover risk and liability in accordance with the General Conditions for the period of the execution of the work.

The Liability Insurance shall have a limit of liability of not less than 2 Million Dollars inclusive for any one occurrence. The Contractor shall note that where construction work is to be performed within the lands owned by a railway company or a road allowance owned by the Ministry of Transportation the liability insurance shall have a limit of liability of not less than 5 Million Dollars inclusive for any one occurrence. It shall be a comprehensive liability insurance covering all operations and liability assumed under the Contract and it shall name the Town of Amherstburg, County of Essex, their respective officials and the Consulting Engineer as equally insured under the policy and shall also contain a cross liability and save harmless clause for the said Town of Amherstburg, County of Essex and Consulting Engineer. The liability insurance shall not contain any exclusions or limitations in respect to shoring, underpinning, raising or demolition of any building or structure, pile driving, caisson work, collapse of any structure or subsidence of any property, structure or land from any cause. The liability insurance shall be endorsed to provide that the policy shall not be altered, cancelled or allowed to lapse without 30 days prior written notice to the Municipality. Such copy of this policy to be submitted to the Clerk of the Municipality prior to commencement of the work.

7.0 WORKPLACE SAFETY & INSURANCE

The Contractor will be required to submit to the Municipality, a Certificate of Good Standing from the Workplace Safety & Insurance Board prior to the commencement of the work and the Contractor will be required to submit to the Municipality, a Certificate of Clearance for the project from the Workplace Safety & Insurance Board before final payment is made to the Contractor.

The Contractor shall provide and maintain the necessary first aid items and equipment as called for under the First Aid Regulations of the Workplace Safety & Insurance Act.

8.0 CONSTRUCTION SAFETY ACT

The Contractor shall comply with all the requirements of the Occupational Health and Safety Act, 1990 and Regulations for Construction Projects and Amendments, as administered by the Ontario Ministry of Labour and all subsequent amendments of the said Act. In the event that the Contractor fails to comply with the requirements of the above mentioned Act, the Engineer may suspend the operation of the work forthwith and the suspension will remain in effect until the Contractor has taken whatever remedies are necessary to comply with the said Act. Suspension of the work by the Engineer on account of the provisions of this clause, shall not allow the Contractor any extension of the Time of completion and the Contractor may be liable for liquidated damages to the Municipality.

9.0 TRAFFIC PROTECTION PLAN

The Contractor is required to prepare and submit a traffic protection plan pursuant to the Ontario Traffic Manual Book 7 Temporary Conditions under the authority of the Ministry of Labour and road agency having jurisdiction, if requested by the Town.

10.0 CONTRACTORS LIABILITY

The Contractor, his agents and all workmen or persons under his control including sub-contractors, shall use due care that no person or property is injured and that no rights are infringed in the prosecution of the work. The Contractor shall be solely responsible for all damages, by whomsoever claimable, in respect to any injury to persons or property of whatever description and in respect of any infringement of any right, privilege or easement whatever, occasioned in the carrying on of the work, or by any neglect on the Contractor's part.

The Contractor, shall indemnify and hold harmless the Municipality and the Engineer, their agents and employees from and against claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of or attributable to the Contractor's performance of the contract.

11.0 ONTARIO PROVINCIAL SALES TAX

The suggestions noted below are for the Tenderer's information in the matter of Ontario Sales Taxes. The successful Tenderer will be completely responsible for complying with all requirements regarding Ontario Provincial Sales Tax and no subsequent claims will be allowed or payments made to the Tenderer by the Owner with respect to any rebates for Ontario Provincial Sales Tax.

- a) Ontario Provincial Sales Tax on materials that enter into and form part of the works shall be included in the tendered unit prices, including ready mix concrete and hot or cold mix asphalt materials.
- b) Labour charges remaining exempt are:
 - 1) Installation of goods that become real property upon installation.
 - 2) Repair and maintenance of real property.
 - 3) Repair and maintenance of goods where replacement parts are not subject to tax.
 - 4) Repair or reconditioning of goods purchased for resale by vendors.

At the request of the Municipality the Contractor shall provide receipts showing the amount of taxes paid for all materials used on this project. Ontario Provincial Sales Tax rebates (where applicable) will be applied for and retained by the Owner.

12.0 GOODS AND SERVICES TAX

The contractor should be aware of his responsibility for payment to Revenue Canada of the Goods and Services Tax, which came into effect on January 1, 1991. The Contractor will be required to calculate and include the following in his Tender:

- 1) Tender Price (not including G.S.T.)
- 2) Total Tender Price (including 7% G.S.T.)

For the purposes of evaluating Tenders, Item (2) **must** be the Tender Price plus 7%. If a percentage other than 7% is added, the Tender will be assumed to be in error and will be corrected accordingly.

13.0 LIQUIDATED DAMAGES

Liquidated damages, consisting of additional costs incurred by the engineer and/or the Municipality, may be charged to the Contractor if the work is not completed within the specified Time of Completion.

Additional costs incurred by the engineer and/or municipality to inspect or recheck corrective work, resulting from incorrect work by the Contractor or work not accepted by the engineer, may be charged to the Contractor.

14.0 GRADE CONTROL

The Contractor will be required to provide laser grade control to perform the drain excavation and wall construction work.

4th CONCESSION ROAD DRAIN

**TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)**

Todgham and Case Associates Incorporated

Consulting Engineers

Chatham, Ontario

April 28, 2003

TODGHAM & CASE ASSOCIATES INC.

Consulting Civil Engineers

1 Heritage Road, P.O. Box 1326
Chatham, Ontario N7M 5R9
Phone (519) 354-0400 Fax (519) 354-5650
E-mail: todcas@ciaccess.com

April 28, 2003

Mayor and Council of the
Town of Amherstburg

Re: 4th Concession Road Drain (Former Township of Malden)

Mayor and Members of Council:

Instructions:

In accordance with your instructions, we have made an examination and survey of a portion of the 4th Concession Road Drain in Lot 36, Con 4, in the Former Township of Malden. Instructions were initiated by a request from a property owner on the drain who has requested improvements to the west bank of the drain adjacent to the property in order to permit residential development.

Our appointment and the works of repair and improvement recommended under this report are in accordance with Section 78 of The Drainage Act.

Survey:

The survey was carried out on the westerly bank of the 4th Concession Road Drain adjacent to the Rita Cote property in Pt Lot 36, Con 4. This property is described as Roll No. 580-00760. Topographical information was gathered on the adjacent house lot as well as the full cross-section of the channel.

Watershed Description:

The 4th Concession Road Drain watershed is relatively long and narrow. The drain provides outlet to agricultural properties in Lot 32, Con 3 and Lots 36, 37, and 38, Con 4. A significant amount of residential development has occurred along the east bank of the drain in Lots 36 and 37, Con 4. The existing channel upstream of the Cote property has a reasonably good gradient (.40% average). The lower portion of the drain, adjacent to and downstream of the Cote property has a much flatter gradient (.12% average). The watershed area upstream of the site in question is in the order 56 hectares (138 acres).

Drainage History:

A review of the records indicates that the 4th Concession Road Drain is an existing open municipal drain that has been repaired and improved on a number of previous occasions under the provisions of The Drainage Act. The last major works of repair and improvement appear to have been completed in accordance with a report prepared by W.J. Setterington dated July 7, 1980. At that time, the drain was repaired and improvement throughout its entire length by means of deepening and widening. The work also included the installation of a number of access culverts throughout the length of the drain. Specific erosion protection works were also carried out on the west bank of the drain downstream from the current site.

Existing Conditions:

The Rita Cote property fronts onto the 4th Concession Road. The 4th Concession Road Drain, which is along the east side of the 4th Concession Road for much of its length, turns southeasterly, away from the road, just upstream of this property. The drain angles across the rear of the property as it continues to the southeast. The cross-section of the drain changes from a reasonably well defined cross-section along the road to a wide channel with very low banks within a distinct valley formation.

A new residence has been constructed on the Cote property. The lands adjacent to the west bank of the drain on the property have been filled to an elevation that is approximately 2 m above the normal ground elevation on the top of the west bank of the channel. The fill extends, in most cases, very near to the west bank of the drain and terminates in a near vertical slope. Six large willow trees exist along the top of the west bank of the drain.

The drain itself, adjacent to this lot, has a bottom width of approximately 5 m and a depth of less than 1 m relative to the normal ground elevation on the east bank of the drain. At the time of our survey, the drain was dry.

Landowner's Request:

Rita Cote, the owner of the property described as Roll Number 580-00760, has requested that improvements be undertaken to the west bank of the 4th Concession Road Drain adjacent to her property. The improvements are intended to stabilize the west bank of the drain, retain the backfill that has been placed on the adjacent lot, and remove the willow trees from the bank of the drain. At the outset of this project it was made clear to this property owner that these works would have little impact on the operation of the 4th Concession Road Drain for drainage purposes, but would provide significant benefit to the residential lot.

Recommendations:

We recommend that the portion of the 4th Concession Road Drain immediately adjacent to the Rita Cote property be repaired and improved by means of the construction of a retaining wall along the west bank of the drain. This retaining wall would support the backfill

placed on the developed lands west of the west bank of the drain. The wall would also provide erosion protection to this bank of the drain.

The recommended works must be completed in a manner which does not encroach upon the drain so as to diminish its flow capacity. The retaining wall must also be near vertical in design in order to maximize the extent of backfill placement on the adjacent lot.

We recommend the installation of a retaining wall consisting of rock filled gabion stone baskets as shown on the detailed plans attached to this report. The work will necessitate the removal of six large willow trees along the westerly bank of the drain. The works shall also include the backfilling and regrading of the fill area between the retaining wall and the house.

Drawings and Specifications:

Attached to this report and labelled "Schedule C" is our Drawing No. 02091-1, which consists of a plan showing the location of the proposed work marked in a heavy solid line and the lands affected by the work outlined in a heavy dashed line. Also attached are our Drawings No. 02091-2, 02091-3, and 02091-4, which provide more detailed information for the retaining wall construction.

Attached and labelled "Schedule B" is a Specification showing the dimensions, grades, construction methods and other particulars of the work to be carried out.

Proposed Work:

In general terms, the proposed work on the drain involves the construction of a retaining wall consisting of stone filled gabion baskets along the west bank of the existing drain adjacent to a developed lot. The works will include the removal of the existing large willow trees along the top of the west bank and the backfilling and shaping of the lawn area west of the retaining wall.

These works will have no impact on the 4th Concession Road Drain. It is not anticipated that any significant modifications to the channel will be undertaken at this time.

Allowances:

Virtually all of the work will take place from the west bank of the drain on the property owned by Rita Cote. The backfilled area within which the construction shall take place is not currently in a landscaped condition. The works will not impact any agricultural properties nor damage any non-agricultural properties. Therefore, we have not included any damage allowance in this report.

Estimate of Cost:

We estimate the cost of the work that we recommend, together with the expenses incidental thereto, to be as follows:

Tree Stump Removal	\$ 1,000
Excavation, Load, Haul & Disposal (197m ³)	2,950
Gabion Baskets - Installed Complete (186 m ³)	26,040
Geotextile (300 m ²)	1,500
Granular Backfill (280 t)	4,480
Toe Protection (30 t)	1,350
Top Soil (180 m ²)	900
Seed & Mulch (180 m ²)	540
Silt Control	500
Net G.S.T. on Construction (3%)	1,210
Survey, Plans, Report & Inspection	6,700
Assistance & Expenses	300
Meeting to Consider Report	300
Preparation of Tender Documents	400
Net G.S.T. on Professional Fees (3%)	230
Interest	450
Incidentals & Contingencies	<u>250</u>
	\$ 46,100

Assessment Schedule:

We assess the above estimated cost against the affected land as shown in the attached Schedule of Assessment labelled, "Schedule A". Typically, all costs associated with the repair and improvement of a drainage works under the provisions of The Drainage Act are levied against the lands and roads that are directly affected by that work. In this particular case, the only property affected by this work is the property on which the work shall be undertaken. This work has been made necessary by the development of the lot on the west bank of the drain. No actual improvements to the channel will be undertaken as part of this work. Therefore, we have levied the entire cost of this work as a Benefit Assessment against the property on which the work shall take place.

Maintenance:

After completion, the retaining wall constructed under this report shall be maintained by the Town of Amherstburg at the sole expense of the adjacent lot. The remainder of the 4th Concession Road Drain shall continue to be maintained by the Town of Amherstburg

in accordance with the current governing bylaw, which is based on the Settingington Report dated July 7, 1980.

Grants:

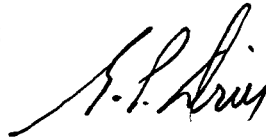
In accordance with the provisions of Section 85, 86, and 87 of The Drainage Act, a grant in the amount of 33-1/3 % of the assessment eligible for a grant may be made in respect of the assessment made under this report upon privately owned lands used for agricultural purposes. The assessment levied under this report is against non-agriculture property. No grants are available from the Ministry of Agriculture and Food in this instance.

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Respectfully submitted,

TODGHAM & CASE ASSOCIATES
INCORPORATED

Per:



E.P. Dries,
B.A.Sc., P.Eng.



“SCHEDULE B”
SPECIFICATION FOR THE
REPAIR AND IMPROVEMENT
OF THE 4th CONCESSION ROAD DRAIN
IN THE TOWN OF AMHERSTBURG
(FORMER TOWNSHIP OF MALDEN)

DESCRIPTION OF WORK

This specification, plan, details, and cross-sections bearing the same date, apply to and govern the repair and improvement of approximately 35 m of open drain by the construction of 43 m of gabion basket retaining wall along the west bank of the drain.

GENERAL SPECIFICATIONS

The General Specification for Open Drains attached hereto is part of "Schedule B." It also forms part of this specification and is to be read with it, but where there is a difference between the requirements of the General Specification and those of the Special Provisions which follow, the Special Provisions shall govern. The section numbers shown in the Special Provisions which follow refer to the sections having the same numbers contained in the General Specification.

SUPPLY OF MATERIALS

The contractor will supply all materials, labour and equipment necessary for the proper completion of the work, unless stated otherwise.

SPECIAL PROVISIONS

SECTION 4 - STAKES

No reference stakes were placed on-site. The layout for this work shall be established from a baseline that is set along the line, which is the projection of the easterly wall of the house on the lot adjacent to the west bank of the drain as shown in the drawings. The drawings reference Station 0 as the southerly limit of the lot. The cross-sections shown are perpendicular to the base line and the chainages are measured northerly from Station 0.

SECTION 5 - ALIGNMENT

The Drainage Superintendent, in consultation with the contractor, shall establish the final alignment of the retaining wall to be constructed. The plans identify the location of the wall to approximately match top of the west bank of the existing open drain. The final alignment of the easterly face of the gabion retaining wall shall be established and marked in the field prior to commencement of excavation.

SECTION 6 - PROFILE

It is not intended that these works will include the excavation of any portion of the bottom of the 4th Concession Road Drain adjacent to the work site. However, in the event that any construction materials are placed in the bottom of the channel, they shall be removed and the channel bottom shall be restored in order to provide a clear, unobstructed channel to convey flows from the upstream portion of the drain. Any works of maintenance required on this portion of the drain shall be governed by the gradeline set out in the current governing bylaw.

SECTION 7 - BOTTOM WIDTH AND SIDE SLOPES

The 4th Concession Road Drain, adjacent to the site, shall be maintained to the bottom width identified in the governing bylaw. The side slope of the west bank will not conform to that bylaw, as it will be reconstructed to a near vertical slope as defined herein.

SECTION 9 - BRUSH AND TREES

It will be necessary to remove 6 large willow trees from the west bank of the drain adjacent to the site. The trees shall be cut and removed by the property owner. The contractor shall grub out the remainder stumps and dispose of this material off-site. All costs associated with the removal and disposal of the stumps shall be included in the cost bid for this item.

A few small decorative cedar trees exist along the southerly property line, east of Station 0. Every effort shall be made to protect these trees where possible. In the event that they may be damaged by the construction activities, they shall carefully be removed and replanted elsewhere on the lot as directed by the property owner. This cost shall also be included in the item bid for tree stump removal.

SECTION 24 - MATERIAL SPECIFICATIONS

24.1 - Gabion Baskets:

The gabion basket material shall conform to OPSS 1430. The baskets shall be manufactured from galvanized steel wire mesh. The cost of supplying this material shall be included in the lump sum cost for the gabion basket installation.

24.2 - Gabion Stone:

The gabion stone shall conform to OPSS 1004. The gabion stone shall be well graded in sizes ranging from 100 mm to 200 mm. No stone shall have a minimum dimension less than 100 mm.

24.3 - Geotextile:

The geotextile shall meet the Class 2 requirements of OPSS 1860. The geotextile shall be Amoco 4551 or approved equal. The lump sum cost bid for this item shall include the supply and installation of the geotextile.

SECTION 25 - CONSTRUCTION SPECIFICATION

25.1 - General:

All aspects of the installation of the gabion baskets and geotextile shall conform to OPSS 512.

25.2 - Excavation:

The excavation shall be true to line and grade as shown on the cross-sections and as specified in OPSS 512.07.04.

25.3 - Foundation Preparation:

At finish grade elevation for the placement of the gabion baskets, the contractor shall compact the foundation to at least 95% Standard Proctor Density. All soft and unsuitable materials shall be removed and replaced with select compactible fill to the satisfaction of the Drainage Superintendent.

25.4 - Field Assembly:

All adjoining empty gabion units must be connected by wire tied lacing along the perimeter of their contact surfaces in order to obtain a monolithic structure. Lacing of adjoining basket units shall be accomplished by continuous stitching with alternating single and double loops at intervals of not more than 125 mm. All lacing wire terminals shall be securely fastened. After adjoining empty basket units are set to line and grade and common sides with adjacent units thoroughly laced, they shall be placed in tension and stretched to remove any kinks from the mesh and to a uniform alignment. The stretching of the empty basket units shall be accomplished in such a manner so as to prevent any possible unravelling and distortion.

Stone filling operations shall carefully proceed with placement by hand or machine so as not to damage galvanized wire coating, to assure a minimum of voids between the stones, to prevent damage to the underlying geotextile, and to ensure the maintenance of alignment throughout the filling process. The maximum height from which the stone may be

dropped into the basket units shall be 900 mm. Along all exposed faces, the outer layer of stone shall be carefully placed and arranged by hand to ensure a neat and compact appearance. The last layer of stone shall be levelled with the top of the gabions to allow for the proper closing of the lid and to provide an even surface that is uniform in appearance.

Lids shall be stretched tight over the stone fill using crowbars or lid closing tools until the lid meets the perimeter edges of the front and end panels. The lid shall be tightly laced with tie wire along all edges, ends, and internal cell diaphragms by continuous stitching with alternating single and double loops at intervals of not more than 125 mm.

25.5 - Backfill:

Backfilling of the gabion walls shall follow erection as close as possible and in no case should the height of the wall be greater than 2 m above the backfill. The backfill shall consist of Granular "B", or any alternative suitable coarse granular material to ensure proper drainage. All backfill materials must be approved by the Drainage Superintendent. After placement, the backfill shall be compacted to at least 95% Standard Proctor Density. All backfill operations must be undertaken in the dry. Backfill shall be placed to within 100 mm of the finished grade elevation as shown in the cross- sections.

25.6 - Tolerances:

The overall vertical tolerance of the wall (plumbness from top to bottom) shall not deviate more than 25 mm over the full wall height.

25.7 - Operation of Equipment:

The contractor must recognize the restricted area for the operation of equipment. The works must be done in a manner that minimizes the operation of heavy equipment in close proximity to the house. The contractor must develop a work program which minimizes the impact of vibration on the house.

SECTION 26 - TOPSOIL AND GRADING

After completion of the installation of the gabion baskets and the backfill, the contractor shall supply and install a 100 mm layer of topsoil over the entire area disturbed by the construction activities. The topsoil materials shall be satisfactory to the Drainage Superintendent. The area shall be levelled, shaped, fine graded and prepared for seeding. All of these works shall be included in the item bid for topsoil.

SECTION 27 - SEED AND MULCH

The entire lawn area disturbed by the work shall be restored upon completion of construction. The contractor shall level and fine grade the area to be seeded and supply and apply the specified lawn grass seed mixture, fertilizer, and straw mulch.

At the time of seeding, the topsoil shall be scarified to a depth of 50 mm. Stones larger than 50 mm in diameter and all other surface litter shall be removed and disposed of off-site. The scarification shall be carried out by disking, harrowing, hand raking or any other means acceptable to the Engineer.

The grass seed mixture for the lawn and roadside shall be MTO Standard Canada No. 1 lawn grass seed unless otherwise specified by the Drainage Superintendent. The fertilizer shall be standard 5-20-20 analysis in granular form. It shall be dry, free flowing and free from lumps. The seeded area shall be mulched with oat or wheat straw. The contractor may also use other similar vegetative materials on approval. The nurse crop shall be rye grain, Canada No. 1 seed.

Seed and fertilizer shall be uniformly distributed over the surface areas to be seeded. Either conventional or hydraulic seeding methods may be used as approved by the Drainage Superintendent. The rates of application per hectare shall be as indicated below:

Grass Seed Mixture	83 kg
Nurse Crop Seed	30 kg
Fertilizer	150 kg

Mulch material shall be applied following seeding on the same day. The mulch shall be evenly distributed over the spread area to a depth of approximately 25 mm. Mulch material shall be applied by an approved mulch blower.

Work under this specification shall proceed only in calm weather and on ground free from frost, ice, snow, or standing water, and when, in the opinion of the Drainage Superintendent, weather and seasonal conditions are suitable.

SECTION 28 - TEMPORARY SILT FENCE

Although no specific works are required within the waterway of the 4th Concession Road Drain, the contractor shall supply, install, maintain and remove a temporary water permeable filter fence (silt fence) to remove suspended particles from the water passing through it. At the commencement of construction, at a convenient location downstream of Station 0, the contractor shall install a silt fence across the full width of the existing channel. The silt fence shall be constructed of a minimum 1.0 m wide geotextile securely fastened to steel posts. The geotextile shall be attached to the up-gradient side of the posts. Where required, wire or any other type of support may be constructed between the geotextile and the posts in order to improve the load carrying capacity of the silt fence. The geotextile may be a woven or non-woven material that has a minimum tensile strength of 100 lbs., permittivity of at least 90 gal/min/sq. ft. and an apparent opening size of U.S. Sieve No. 30.

Steel posts, of sufficient length to support the silt fence, shall be used. The maximum post spacing shall be approximately 2 m. Every effort shall be made to ensure that the bottom edge of the silt fence is in continuous contact with the bottom of the channel.

The silt fence shall remain in place until the project is complete. The contractor shall maintain the silt fence until its removal. Upon removal, the silt accumulation upstream of the silt fence shall be removed and disposed of off-site. The cost of the supply, installation, maintenance and removal of the silt fence shall be included in the lump sum price bid for this item.

SECTION 29 - WORKING CORRIDOR

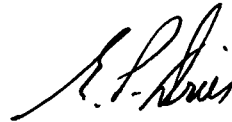
The contractor shall gain access to the property on which the work is to be undertaken directly from the 4th Concession Road. Access to the drain can be achieved around the north end of the existing house. The designated working area shall extend from the established base line which is a projection of the east side of the house, easterly, to the east bank of the 4th Concession Drain.

Should the contractor elect to make use of any other private lands outside the designated area, he will be responsible to negotiate any terms for use of these lands with the property owner and be responsible for any damages that may occur. It is understood that this working corridor, or any other suitable access to the work site must be made available by the property owner for future works of maintenance on this retaining wall.

Chatham, Ontario
April 28, 2003.

TODGHAM & CASE ASSOCIATES
INCORPORATED

Per:



E.P. Dries,
B.A.Sc., P.Eng.



GENERAL SPECIFICATION FOR OPEN DRAINS

(Revised 1999 03 01)

SECTION 1 - AGREEMENT AND GENERAL CONDITIONS

- (1) Tenders will be received and contracts awarded only in the form of a lump sum contract for the completion of the whole work or of specified sections thereof in accordance with the plan, profile and specification. The Contractor agrees to enter into a formal contract with the Municipality upon acceptance of the tender. The General Conditions of the contract shall be those of the Stipulated Price Contract CCDC2-Engineers, 1994 or the most recent revision of this document. The form of agreement between Owner and Contractor shall be that of the previously stated document or a form of agreement specifically prepared by the Municipality for this purpose.
- (2) All work included in the contract must be completed on or before the date fixed in the contract and must, at the time of completion and final inspection, be in first class condition and comply fully with the specifications.
- (3) Final inspection will be made by the Engineer within 20 days after the Drainage Superintendent has received notice in writing from the Contractor that the work is completed, or as soon thereafter as weather conditions permit.
- (4) The Contractor will be held liable for any damage or expenses occasioned by his failure to complete the work on time and for any expenses of inspecting, superintending or reletting due to his neglect or failure to prosecute the work satisfactorily. Any such expenses or damages may be deducted by the Drainage Superintendent from the amount of the contract or may be recovered by the Municipality from the Contractor and his sureties.

SECTION 2 - EXAMINATION OF SITE, PLANS AND SPECIFICATIONS

- (1) Each tenderer must visit the site and review the plans and specifications before submitting his tender and must satisfy himself as to the extent of the work and local conditions to be met during the construction. He is not to 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. The Contractor will be at liberty, before bidding, to examine any data in the possession of the Municipality or of the Engineer.
- (2) The quantities shown or indicated on the drawings or in the report are estimates only and are for the sole purpose of indicating to the tenderers the general magnitude of the work. The tenderer is responsible for checking the quantities for accuracy prior to submitting his tender.

SECTION 3 - CONTRACTOR'S LIABILITY

- (1) The Contractor, his agents and all workmen or persons under his control including sub-contractors, shall use due care that no person or property is injured and that no rights are infringed in the prosecution of the work. The Contractor shall be solely responsible for all damages, by whomsoever claimable, in respect to any injury to persons or property of whatever description and in respect of any infringement of any right, privilege or easement whatever, occasioned in the carrying on of the work, or by any neglect on the Contractor's part.
- (2) The Contractor, shall indemnify and hold harmless the Municipality and the Engineer, their agents and employees from and against claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of or attributable to the Contractor's performance of the contract.

SECTION 4 - STAKES

- (1) Stakes are set at 25 m intervals along the course of the work, numbered consecutively, 0, 25, 50, 75, etc. The depths to which the drain is to be dug, as shown on the Profile, are measured from the surface of the ground beside the stakes.
- (2) The Contractor will be held responsible during the progress of the work for the preservation of all stakes, bench marks and survey markers which fall within the limits of the work. The cost of replacing any bench mark or survey marker defaced or destroyed by the Contractor as a result of his work will be deducted from any monies due the Contractor.

SECTION 5 - ALIGNMENT

- (1) Except where specified otherwise, the excavation will follow as nearly as possible the course of the existing drain with sloping and widening carried out on each bank as required to produce the specified cross-section. Wherever sharp or irregular bends occur, all sloping and widening is to be done on that side of the drain that will tend to reduce the curve and improve the alignment of the channel.
- (2) Where one drain bank adjoins the travelled part of any roadway or laneway, all sloping and widening is to be done on that side of the drain farthest from the roadway unless otherwise directed by the Engineer.
- (3) Where the drain bank adjoins an existing fence which is not specified for removal or relocation all required sloping and widening shall be carried out on that side of the drain farthest from the fence.
- (4) Where a drain is to be moved off a road allowance and onto adjoining lands, the top edge of the nearest finished drain bank is to be not closer than 1 metre to the limit of the road allowance or top edge of the abandoned channel. The centreline of the new channel is to be as straight as possible even though this 1 metre dimension is exceeded in places.
- (5) Where a new drain is constructed, its centre line will be as straight as possible and any changes in direction shall be in the form of smooth, regular bends.
- (6) Where a new drain is to be constructed adjoining an existing fence line, the Contractor shall lay out a suitable centre line such that the top edge of the adjacent drain bank, at its widest point, will not be closer than 1 metre to the fence and the Contractor shall use this centre line to establish the drain location.
- (7) The Contractor must lay out the proposed centre line in the field for approval by the Drainage Superintendent prior to construction.

SECTION 6 - PROFILE

- (1) The excavation of the drain must be at least to the depth intended by the grade line shown on the Profile, which grade line is governed by the bench marks. The Profile shows, for the convenience of the Contractors and others, the approximate depth of cut from the surface of the ground at the points where the numbered stakes are set to the final invert of the channel in metres and decimals of a metre and also the approximate depth of cut from the bottom of the existing channel to the final invert of the channel. Bench marks, which have been established along the course of the drain, shall govern the final elevation of the drain. The location and elevation of the bench marks are shown on the Profile.

SECTION 7 - BOTTOM WIDTH AND SIDE SLOPES

- (1) The bottom widths and the side slopes of the various sections of the finished drain are to be true to line and grade as shown on the Profile.
- (2) Contractors will not be restricted to the exact dimensions specified but must excavate clear of the specified cross-sections and may excavate such additional depth or width as may be required to accommodate the use of suitable excavating equipment or to allow for minor sedimentation prior to final inspection provided that at no place are the side slopes of the excavation to be cut steeper than the slope specified on the Profile. The Contractor is not to excavate the drain bottom so much deeper than the grade line as to result in the formation of pockets in the drain bottom that will cause water to stand in pools along the drain. The Contractor will be required to refill any area of ponding to provide a consistent grade line at his own expense.

SECTION 8 - OBSTRUCTIONS

- (1) All brush, timber, logs, stumps, stones, or other obstructions encountered within the limits of the channel along the course of the drain are to be removed by the Contractor. Timber, logs and stumps are to be dealt with in the same manner as specified for brush and trees. Large stones and other similar materials are to be piled near the limit of the spread area so as not to interfere with the spreading of the excavated material. The disposal of this material shall be the owner's responsibility.

SECTION 9 - BRUSH AND TREES

- (1) Where the existing bottom widths and side slopes of the drain are sufficient to permit the specified deepening of the drain without disturbing the existing banks above the present drain bottom, the Contractor will be required to cut the brush and trees on the sloping banks flush with the surface of the banks but he will not be required to remove their roots and stumps unless they will obviously create obstructions to the flow of water in the drain.
- (2) Where it is necessary to widen the drain and excavate material from the sloping banks, all brush and trees within the limits of the channel and within 1 metre of the top of the drain banks and within the spread area are to be cut and those roots and stumps in the drain bottom and on the banks where the widening takes place shall be completely removed unless the Drainage Superintendent permits the Contractor to cut the roots and stumps flush with the surface of the finished banks.
- (3) Where there is a fence adjoining the drain, he will be required to cut the brush in the fence line and on the side of the fence opposite the drain only if the excavating equipment will be operated from this side or excavated material is to be placed and levelled on this side.
- (4) The Contractor shall cut off flush with the ground all brush and trees having a diameter of 150 mm or less from the disposal area. Should the Contractor find it necessary to remove trees having a diameter of 150 mm or larger from the disposal area in order to permit the efficient excavation of the drain or spreading of excavated material, he will be at liberty to do so only on permission of the Drainage Superintendent in charge of the work.
- (5) All trees over 200 mm in diameter that are cut are to be trimmed of branches, and the trunks, along with branches over 200 mm in diameter are to be cut up into log lengths and piled for the use of the adjoining owner unless the owner advises the Drainage Superintendent he does not want them, in which case they are to be disposed of by the Contractor along with the other brush. Small branches and limbs are to be disposed of by the Contractor along with the other brush. Tree stumps may be burned by the Contractor where permitted; otherwise, they shall be disposed of by him away from the site of the work.
- (6) Following completion of the work, the Contractor is to trim up any broken or damaged limbs on trees which remain standing, disposing of the branches cut off along with other brush and leaving the trees in a neat and tidy condition.
- (7) Brush and trees removed from the drain and banks thereof and from the disposal area are to be put into piles by the Contractor, in locations where they can be safely burned, and are to be burned by him. If, in the opinion of the Drainage Superintendent, any of the piles are too wet to be burned, he will so advise the Contractor who may then arrange, to the Drainage Superintendent's satisfaction, an agreement in writing, with the owners where the piles are located, for them to burn the material when dry enough.
- (8) Prior to and during the course of burning operations the Contractor shall comply with the guidelines prepared by the Air Quality Branch of the Ontario Ministry of the Environment and shall ensure that the Environmental Protection Act is not violated.
- (9) In no case will brush or trees be buried in the spoil bank or within the excavated material.
- (10) The Contractor will be required to brush rake the excavated material to remove brush and trees from the spoil if so instructed by the Drainage Superintendent.

SECTION 10 - DISPOSAL OF MATERIAL

- (1) Where a part of the drain is being relocated, the Contractor shall strip the topsoil from the alignment of the new course and stockpile it for re-use following the completion of the subsoil operations. Subsoil excavated from the new course is to be used first to fill the existing course which is to be abandoned. Where the Contractor can conveniently do so, he may deposit the material in the old course as he excavates it from the new course but where the distance separating the new course from the old course is too great to permit this the excavated material must be loaded onto trucks, hauled to the abandoned drain and placed in the old channel. The material shall be placed in the abandoned channel in layers not greater than 300 mm in thickness. Each layer shall be thoroughly compacted with the levelling equipment available at the site prior to the placement of the subsequent layers. The abandoned channel shall be filled to an elevation at least 300 mm higher than the adjacent natural ground elevation to allow for settlement. If insufficient material is available to fill the old course, the surface of the material shall be graded so as to eliminate any low areas that would collect water.
- (2) Excess excavated material not required for the filling of an abandoned channel or material excavated from the drain under normal construction, repair, or improvement shall be deposited and spread on the immediately adjoining farm lands in the locations set out in the Special Specifications. The material shall be deposited and spread no closer than 2 metres from the top edge of the adjacent drain bank and at least 1 metre clear of all fences.
- (3) Where the excavated material is deposited in bush land, it is to be spread and levelled in the form of a spoil bank over at least the full width of the strip that has been cleared to permit the passage of excavating equipment but in no case is the top surface to be left more than 600 mm above the natural ground level even though this may require additional clearing to produce a sufficient disposal area. On completion, the spoil bank is to be left so that it is smooth enough to drive an ordinary farm vehicle along it.
- (4) Where the adjoining land is sufficiently clear to permit cultivation, the Contractor shall deposit the excavated material on the property and spread the material over a width that, after spreading, the excavated material will generally have a thickness of approximately 150 mm. The Contractor shall utilize a minimum spread width of 6 metres and a maximum spread width of 20 metres even though this results in a depth of material in excess of 150 mm. The material shall be thoroughly spread and levelled with suitable equipment and left in a condition which permits cultivation with ordinary farm equipment without causing undue hardship on farm machinery and personnel.
- (5) After the excavated material has been spread and levelled, any stockpiled topsoil is to be spread over it to a depth of no more than 100 mm.
- (6) No excavated material is to be placed on lawns or ornamental shrubbery but is to be deposited on either or both sides of the lawn on the farm lands immediately adjacent to the lawn.
- (7) In no case is the topsoil or any excavated material to be deposited in ditches, tiles, or depressions intended to conduct water into the drain.
- (8) The Drainage Superintendent in charge will be the sole judge as to the proper disposal of material under the contract and this specification.

SECTION 11 - FENCES

- (1) Where it is necessary to remove any fences which parallel the course of the drain in order to permit the excavation of the drain or the disposal of excavated material the Contractor shall remove the fence. An allowance will be made to the owners of the properties to compensate them for damages to fences which are considered capable of restraining cattle. The Contractor shall notify the owner of his intentions to remove the fence at least 7 days prior to doing so. Any owner has the option to salvage his fencing materials but must do so sufficiently in advance of the Contractor's operations so as to cause no unnecessary delays to him. If the owner does not remove his fences, the Contractor shall carefully take down the fence and leave the materials neatly placed beyond the limit of the spread area for disposal or reconstruction by the owner. The owner will be responsible to construct and maintain any temporary fencing during the progress of the work. The landowners and not the Contractor will be responsible for the control of livestock in the adjoining field during the period of construction. Unless otherwise specified, the Contractor will not be required to reconstruct the fences following the completion of the work of excavation and levelling.
- (2) No permanent fencing shall be constructed or reconstructed without the approval of the Drainage Superintendent. Any fences that are constructed or reconstructed along the course of the drain are to be kept at least 1 metre clear of the top edge of the adjacent drain bank.

- (3) Where the Contractor finds it necessary to remove any fences which cross the drain, he shall remove the fencing materials in a careful, workmanlike manner. Unless otherwise directed the Contractor shall reconstruct the cross fences in as good a condition as the old material permits.

SECTION 12 - ROAD CROSSINGS

- (1) Where the drain crosses the travelled part of a road through a bridge, the Contractor shall excavate the drain to its specified dimensions through the bridge opening, using care to avoid damaging it. If after the drain has been excavated at any bridge structure it appears to the Drainage Superintendent that repairs or replacement may be required, he shall so advise the Road Authority having jurisdiction over the particular bridge.
- (2) Where a new bridge is required or where any underpinning, strengthening or repairs is rendered necessary by the work, it is to be carried out by the Road Authority at its own expense.
- (3) Where the drain crosses the travelled part of a road through a pipe that does not have to be replaced or lowered, the Contractor shall clean the pipe to its full cross-sectional area using care to avoid damaging it.
- (4) Where the existing pipe is of sufficient size and is in a good state of repair but requires to be lowered, the Contractor shall carefully remove it, clean it to its full cross-sectional area and replace it in the drain as specified herein.
- (5) Where the existing pipe must be replaced, the Contractor shall carefully remove it from the drain, clean it to its full cross-sectional area, and leave it beside the drain for removal by the Road Authority. Unless otherwise instructed he shall install the new road culvert as supplied by the Road Authority. All backfill material shall be compacted granular material supplied by the Road Authority, unless otherwise specified.
- (6) The Contractor shall notify the Road Authority having jurisdiction over the structure under construction at least 72 hours in advance of any construction activities.

SECTION 13 - FARM AND ACCESS CULVERTS

- (1) Where a farm or access culvert or bridge does not have to be replaced or lowered, the Contractor shall clean it to its full cross-sectional area using care to avoid causing damage to it in the process.
- (2) Where a pipe culvert is to be lowered, the Contractor shall carefully remove it, clean it to its full cross-sectional area and replace it in the drain with its invert 100 mm below the grade line.
- (3) Where a culvert is to be replaced, the Contractor shall carefully remove it from the drain, clean it to its full cross-sectional area and leave it on the drain bank. If the pipe was originally supplied and installed by the property owner, it shall be left for disposal by the owner. If the pipe was installed under the provisions of The Drainage Act, it shall be disposed of as directed by the Drainage Superintendent and any salvage value from the sale of the pipe shall be credited to the drain. Wooden or concrete farm or access bridges which must be removed from the drain shall be disposed of in the same manner.
- (4) Where a pipe culvert is to be installed in the drain, all materials shall be supplied by the Drainage Superintendent as an expense to the drain. The Contractor shall install the pipe in the location directed by the Drainage Superintendent in accordance with the specifications governing the installation.
- (5) Where a new culvert is to be installed, the owner may request the Drainage Superintendent to have it placed in a different location from the existing one and this will be permitted so long as the relocation does not result in an increase in the area draining through the culvert. Adequate notice of the change must be given to the Contractor. In no case may the existing culvert be left in the drain when it has been specified that it is to be removed.

SECTION 14 - FARM AND ACCESS PIPE CULVERT INSTALLATION

- (1) Culvert Pipe shall be the size specified in the report. If the exact size of pipe specified is not available, the next larger size shall be supplied and installed.
- (2) Unless otherwise specified the Drainage Superintendent shall supply to the Contractor all corrugated pipe materials in lengths of approximately 6 metres (with couplers where required) in a prefabricated condition. Any further fabrication or connecting will be the Contractor's responsibility. Structural plate structures shall be supplied in a "plant fabricated" condition unless specified in a "knocked down" condition in which case the Contractor will be responsible for the field fabrication of the structure. The off-loading of the culvert materials from the delivery trucks shall be part of the Contractor's work.
- (3) The excavation for placing the culvert, the type and class of bedding and backfill, and culvert end treatment shall be carried out to the width, depths and alignment as specified in the report.
- (4) The surface on which the culvert is to be laid shall be true to grade and alignment and shaped to accept the materials to be placed. The pipe shall be laid to the alignment and grade shown in the report but may not be placed on a bed containing frozen materials.
- (5) Rivetted corrugated steel pipe shall be laid with the inside circumferential laps pointing in the direction of the flow. The longitudinal laps shall be located in the upper half of the pipe.
- (6) Helical corrugated steel pipe shall be installed so that the helix angle is constant for the total length of the installation and each pipe section shall be installed next to the previous section such that the lock-seam forms a continuous helix.
- (7) Corrugated steel pipe sections shall be joined together by means of plant manufactured steel couplers. The couplers shall be installed to lap approximately equal portions of the pipe sections being connected, such that the corrugations or projections of the coupler properly engage the pipe corrugations.
- (8) Where fabrication of structural plate structures by the Contractor is specified, they must be assembled in the trench or at the side of the excavation. If the assembled structure has to be moved to its final position, it shall be moved in such a manner that no damage or distortion is caused to the structure.
- (9) When the structural plate culvert has been placed to the specified alignment and grade, the Contractor shall retighten all assembly bolts with a torque wrench to a minimum of:
 - a) 200 N.M. for 3.0 mm and 3.5 mm wall thickness
 - b) 340 N.M. for heavier than 3.5 mm wall thickness
- (10) The Drainage Superintendent shall supply all backfill materials for placement by the Contractor. If approved by the Drainage Superintendent the Contractor may use select earth backfill from the surplus material excavated from the drain at or near the culvert site. If local fill material is unacceptable, the Drainage Superintendent will supply compatible granular backfill as an expense to the drain. Frozen material or earth fill containing boulders larger than 150 mm or other deleterious material is not acceptable.
- (11) Backfill and cover material shall be carefully placed so that damage to or movement of the pipe culvert is avoided. Backfill and cover materials shall be placed in layers not exceeding 200 mm in thickness loose measurement. Each layer shall be thoroughly compacted before the next layer is placed. Backfill on each side of the culvert pipe shall be placed simultaneously. At no time shall the levels on each side differ by more than the 200 mm uncompacted layer.

SECTION 15 - CULVERT END WALLS

- (1) The Drainage Superintendent shall make arrangements for the construction of end walls on those pipe culvert installations so specified in the Special Provisions. All costs associated with the supply and installation of end walls shall be charged as part of the cost of the work on the drain.
- (2) Material for the end walls shall consist of jute bags filled with 20 MPa concrete, select, compactible fill covered with geotextile and graded stone rip-rap, or such other materials acceptable to the Drainage Superintendent.

- (3) The installation of the end wall materials shall be governed by the respective standard drawing. The end wall treatment shall extend to the same elevation as the finished travelled surface and fit to the top of bank elevation on both banks and in any event be 300 mm above the crown of the pipe.
- (4) Sacked concrete end walls that exceed 1.8 m in height shall be constructed of double rows of sacked concrete keyed together at every third tile by interlocking the sacks.

SECTION 16 - TILE OUTLET PIPES AND ROAD DRAINS

- (1) Where existing tile outlet pipes of cast iron, asbestos cement, corrugated steel or other rigid material are encountered along the course of the drain, and where they will be removed or rendered useless by the work, the Contractor, as part of his work, shall reinstall the outlet pipes in the re-graded bank.
- (2) Where, in the course of the grading operation tile drains having no outlet pipe are encountered or the existing outlet pipe is not suitable for re-installation, the Contractor shall install an outlet pipe manufactured for that purpose. The outlet pipe shall be one size larger than the diameter of the tile, 3 metres in length, and supplied by the Drainage Superintendent as an expense to the drain.
- (3) All outlet pipes installed shall be at least 3 metres long and shall be embedded 2.5 metres into the bank of the drain and shall protrude .5 metres beyond its face. The outlet end shall be fitted with a removable wire rodent guard.
- (4) Where a drain adjoining a road is relocated, the Drainage Superintendent shall arrange to have all existing private and road drains which cross beneath the road extended across the old course of the drain to the drain in its new location. The cost of all pipe materials to extend these drains together with the installation costs will be borne by the Road Authority having jurisdiction over the road.

SECTION 17 - LAWN RESTORATION

- (1) Where the construction works cross a lawn, the Contractor shall take extreme care to avoid damaging the lawn, shrubs and trees encountered. Upon completion of the work, the Contractor shall completely restore the area by the placement and fine grading of topsoil and seeding or sodding the area as specified by the Engineer or Drainage Superintendent.

SECTION 18 - PROVISION FOR TRAFFIC

- (1) The Contractor shall not perform excavation operations from the travelled portion of the roadway nor close a road or reduce the width or number of traffic lanes available for traffic except as specified in the contract documents or approved by the Engineer.
- (2) Where it is the Contractor's responsibility to maintain a road through the work, traffic within, entering or leaving the construction zone shall be controlled by and at the expense of the Contractor, by the erection and maintenance of such signs, delineators, barricades, lanterns and flashing lights as are required for the proper notification and protection of the public.

SECTION 19 - CLEAN UP

- (1) Upon completion of the work the Contractor shall thoroughly clear and clean the work site. All debris and waste materials specified for disposal by others shall be left in a neat condition. All materials to be disposed of under this contract shall be removed by the Contractor and the site left in a neat and tidy condition.

SECTION 20 - UTILITIES, RAILWAYS, ETC.

- (1) Before commencing work, the Contractor will investigate the location of any and all railways, utility lines, wires, pipes, poles, towers or cables which may interfere with the excavation of the drain. He will take all necessary steps to avoid damaging these and should any damage result from them from his operations, he will be completely responsible for these damages and will save harmless the Township and the Engineer from any legal actions which may arise as a result of such damage.
- (2) If permits are required to allow the work to be carried out on or adjacent to any utilities, pipelines, railways, etc., the Contractor shall obtain these at his own expense.
- (3) All work on or adjacent to any utility, pipeline, railway, etc., is to be carried out in accordance with the requirements of the utility, pipeline, railway or other, as the case may be, and its specifications for such work are to be followed as if they were part of this specification.

SECTION 21 - MAINTENANCE

- (1) The Contractor shall repair and make good at his expense any damages or faults in the work that may appear within one year after its completion (as evidenced by the final inspection report) as the result of imperfect or defective work done or materials furnished. Nothing herein contained shall be construed as in any way restricting or limiting the liability of the Contractor under the appropriate laws under which the work is being done.

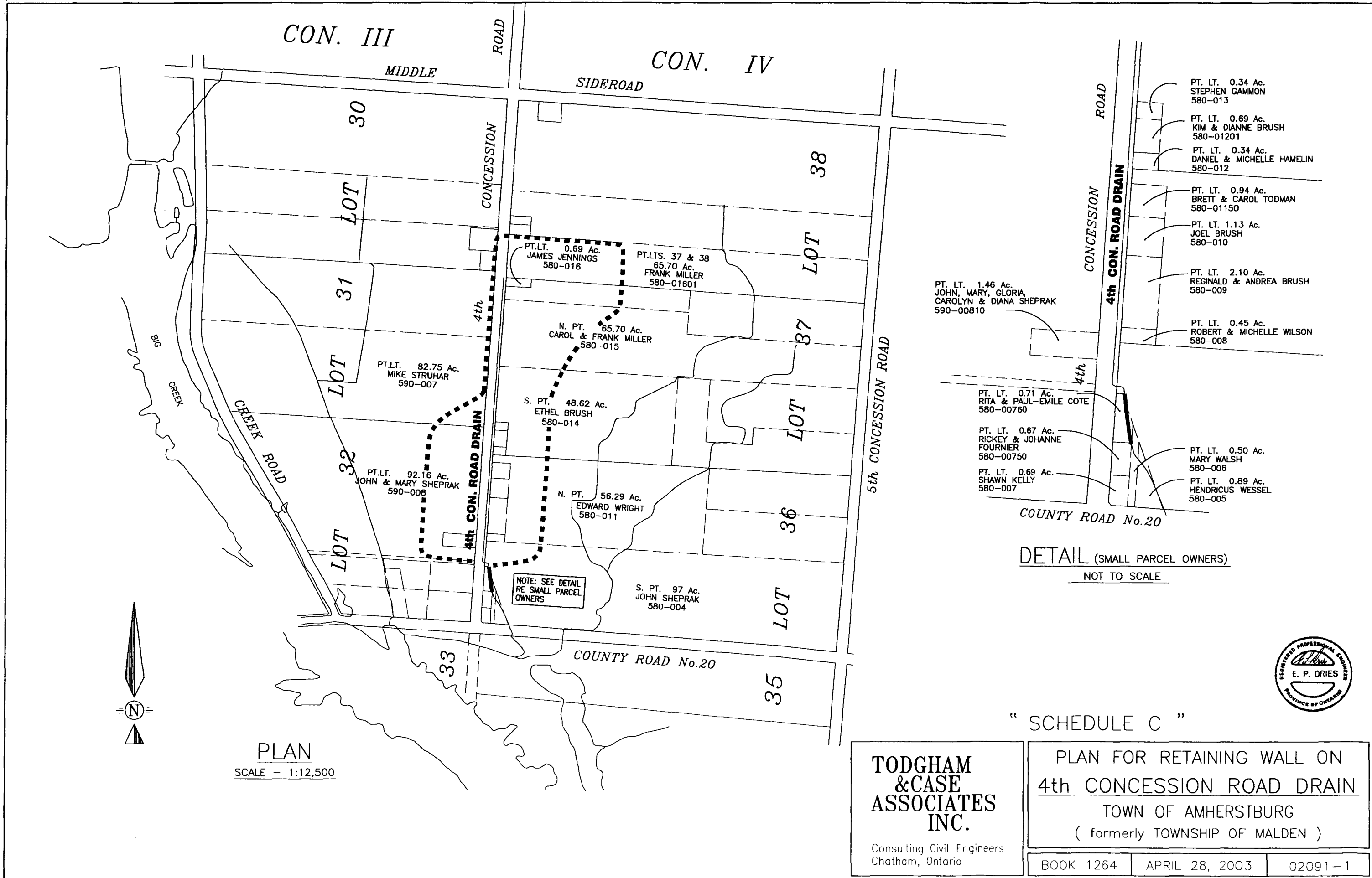
SECTION 22 - DRAINAGE SUPERINTENDENT

- (1) Where the word "Drainage Superintendent" is used in this specification, it shall mean the person or persons appointed by the Council of the Municipality having jurisdiction, to superintend the work.
- (2) The Drainage Superintendent will be permitted to make minor variations in the work so long as these variations will result in either a more satisfactory drain or a more economical one. These variations, however, must not be such as to change the intent of the work performed nor are they to reduce the standard of quality.

SECTION 23 - SPECIAL PROVISIONS

- (1) The Part of the Specifications headed "Special Provisions" which is attached hereto forms part of this Specification and is to be read with it. Where there is any difference between the requirements of this General Specification and those of the Special Provisions, the Special Provisions shall govern.

TODGHAM AND CASE ASSOCIATES INCORPORATED
CHATHAM, ONTARIO



DETAIL (SMALL PARCEL OWNERS)
NOT TO SCALE



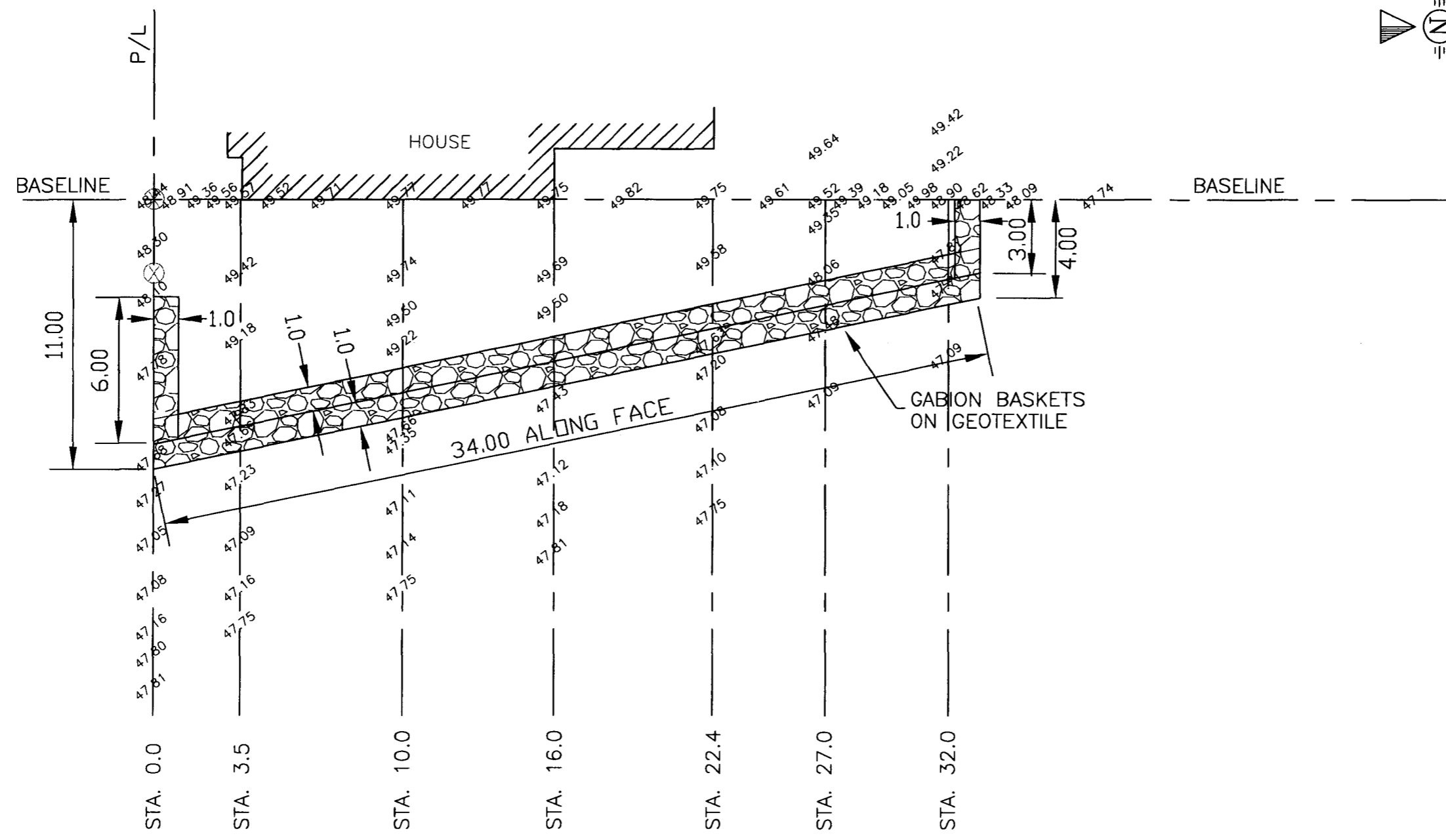
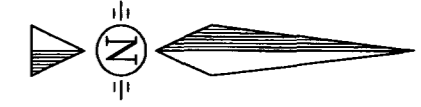
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TODGHAM & CASE ASSOCIATES INC.
Consulting Civil Engineers
Chatham, Ontario

PLAN FOR RETAINING WALL ON
4th CONCESSION ROAD DRAIN
TOWN OF AMHERSTBURG
(formerly TOWNSHIP OF MALDEN)

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PLAN
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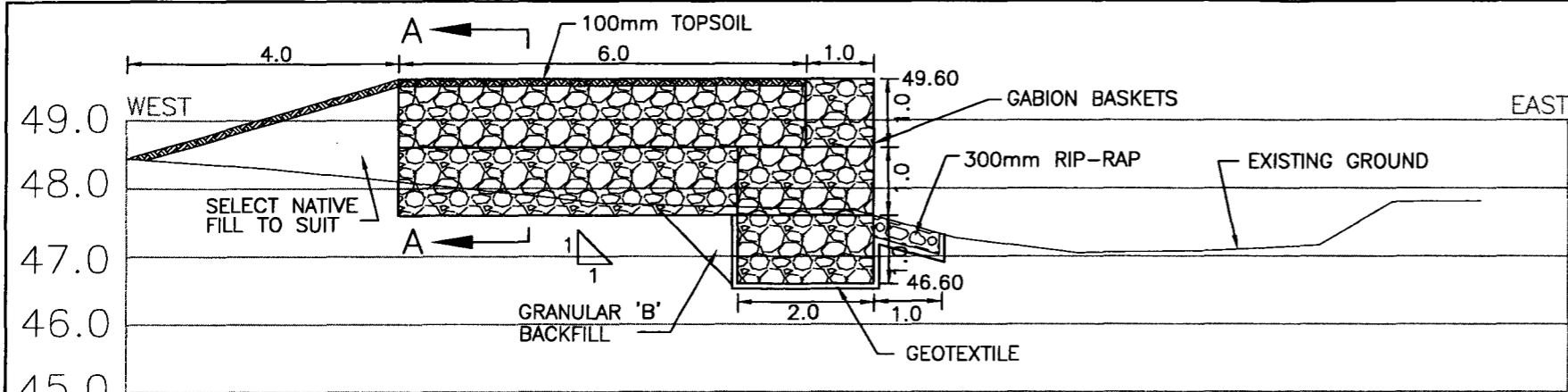
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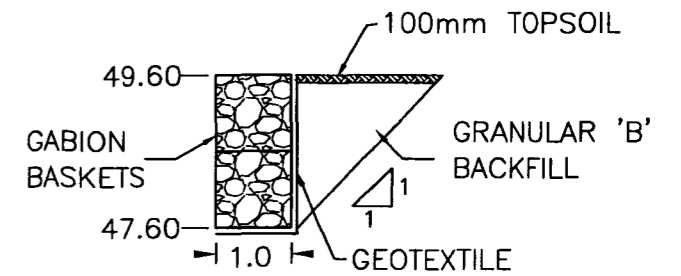
**TODGHAM
& CASE
ASSOCIATES
INC.**
Consulting Civil Engineers
Chatham, Ontario

PLAN SHOWING THE
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4th CONCESSION ROAD DRAIN
IN THE
TOWN OF AMHERSTBURG

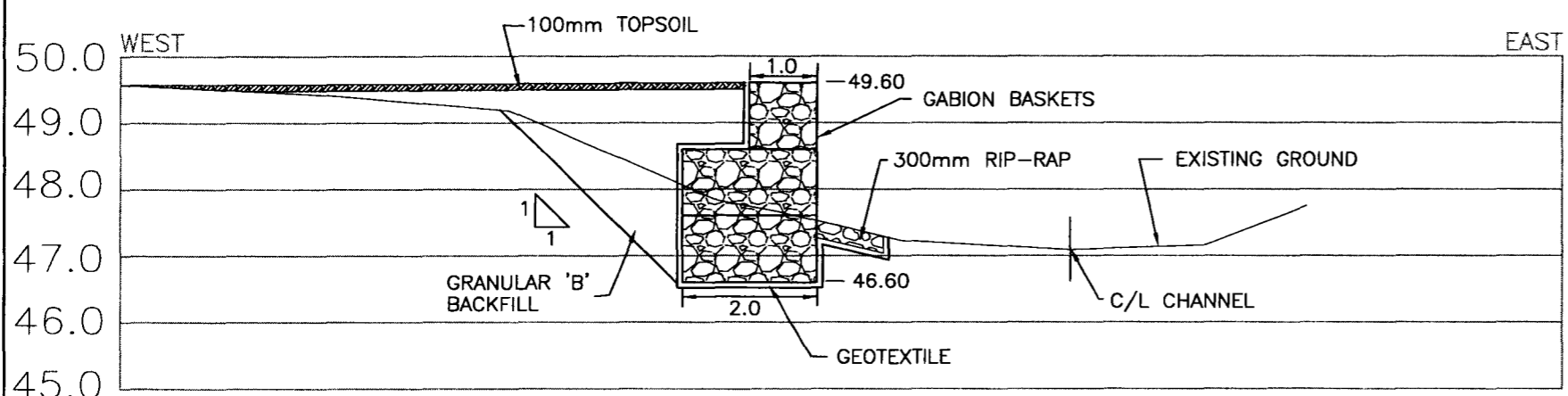
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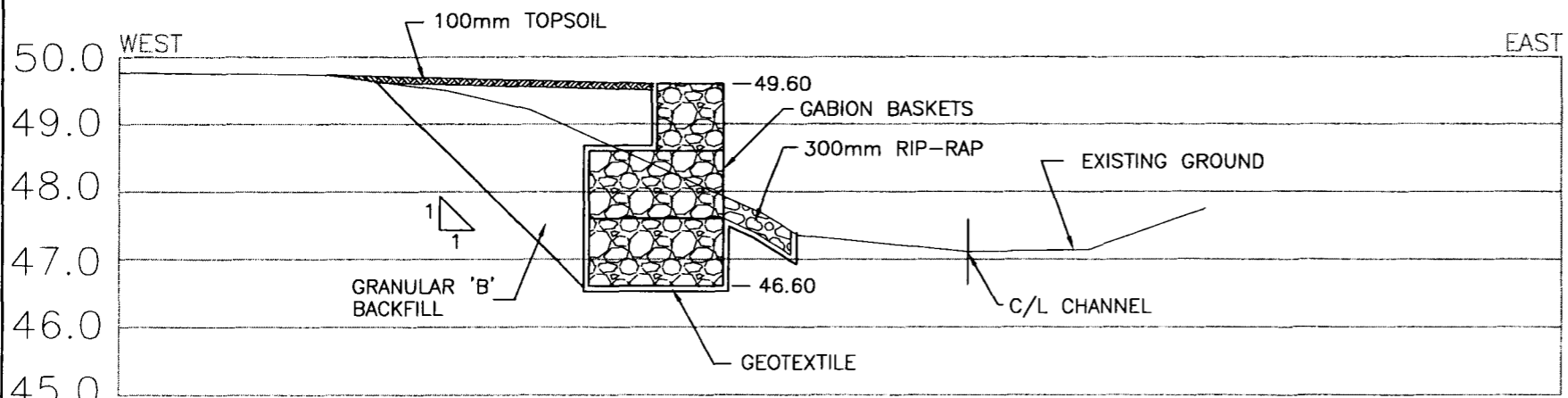
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SECTION A - A



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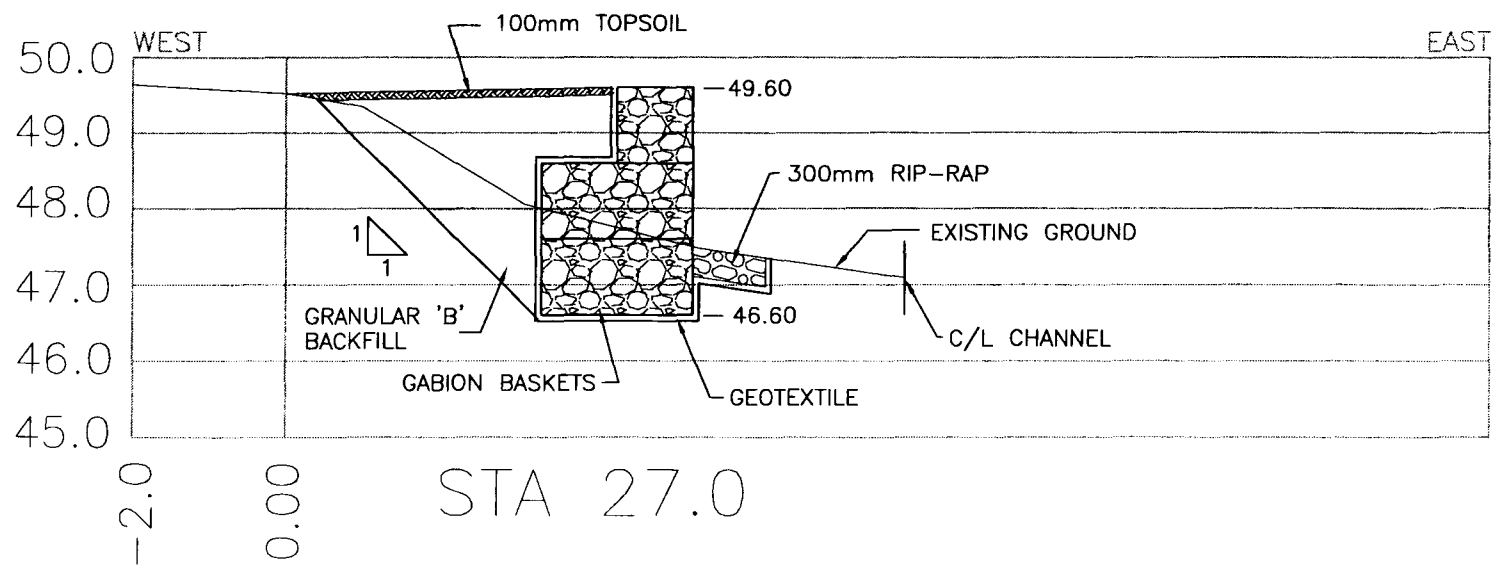
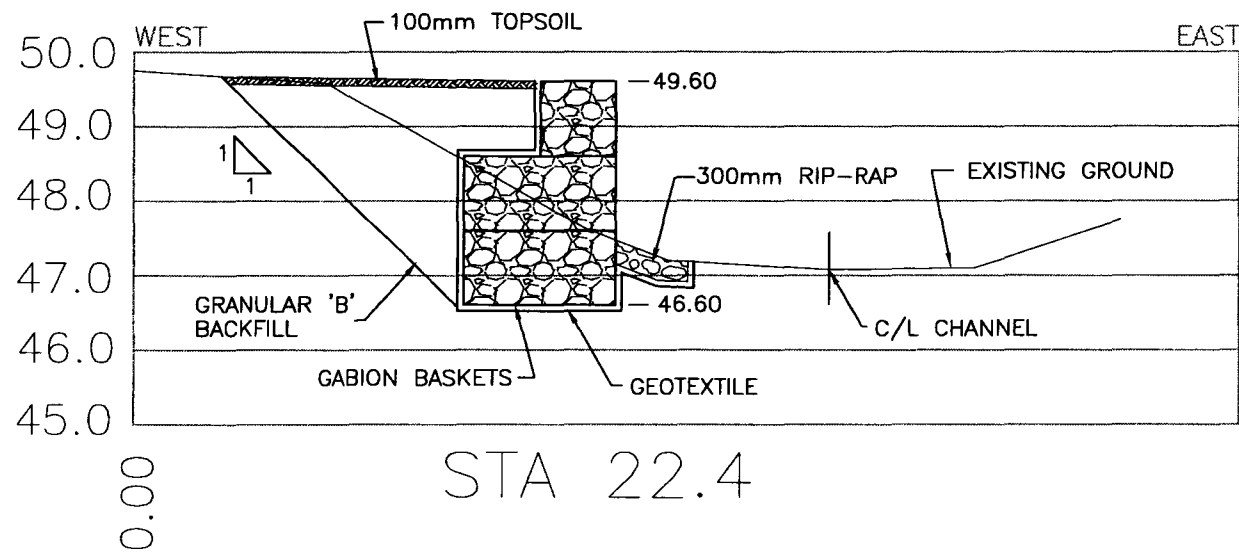
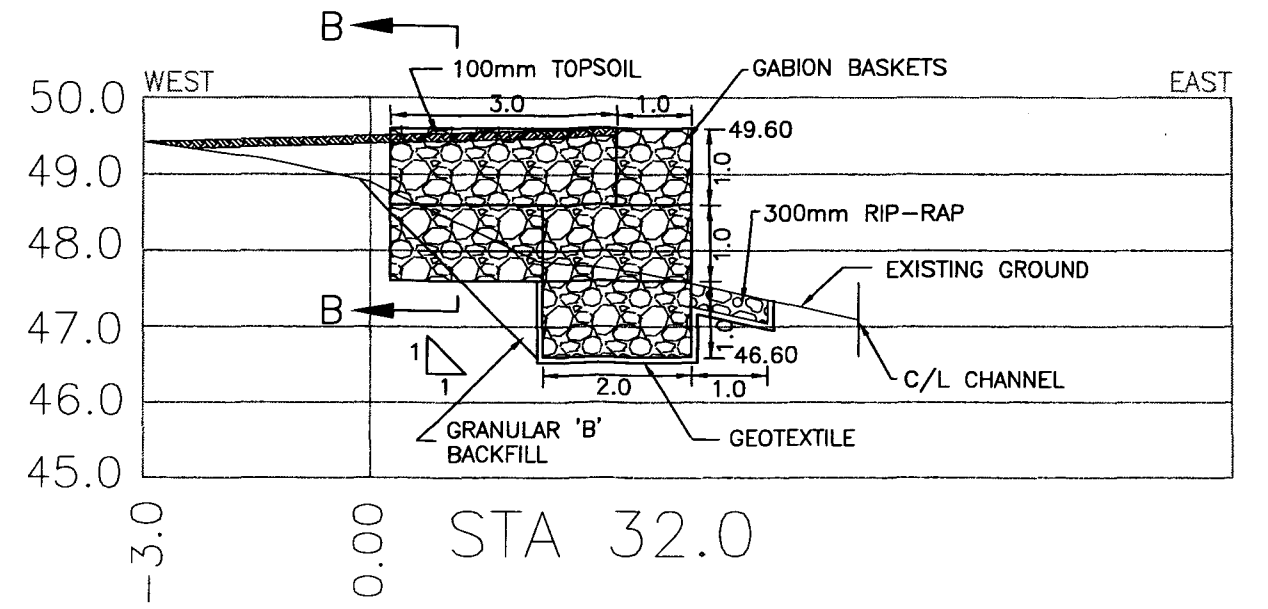
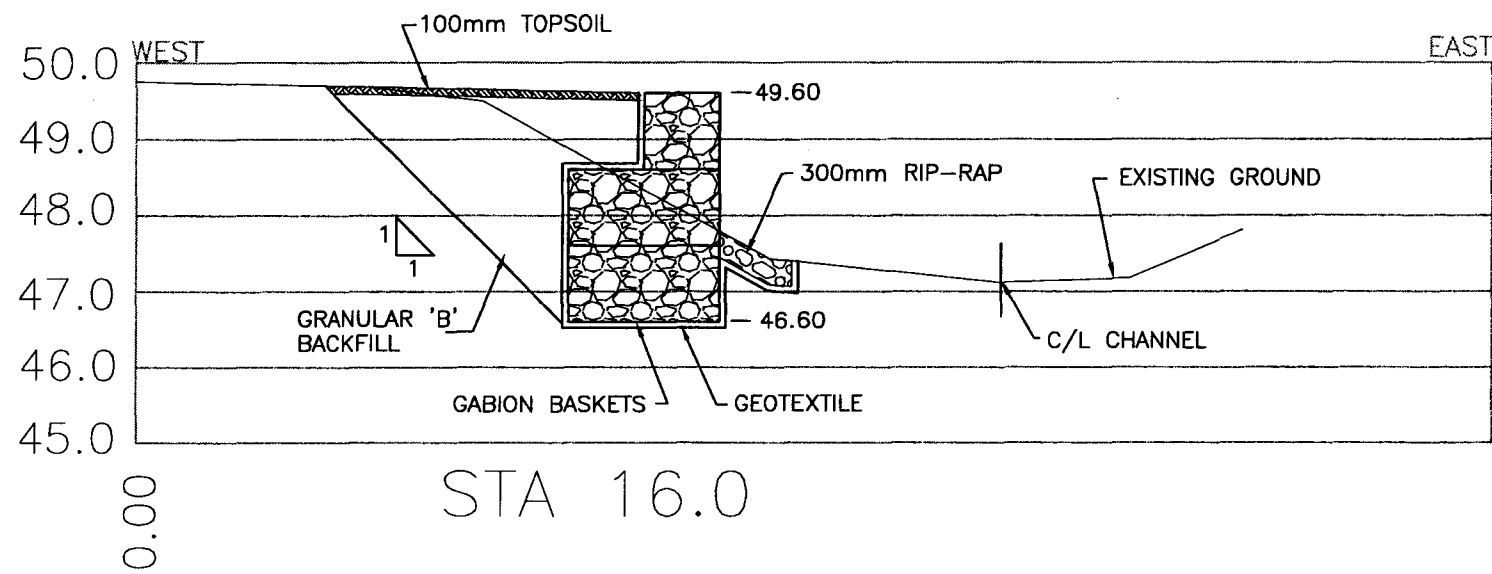
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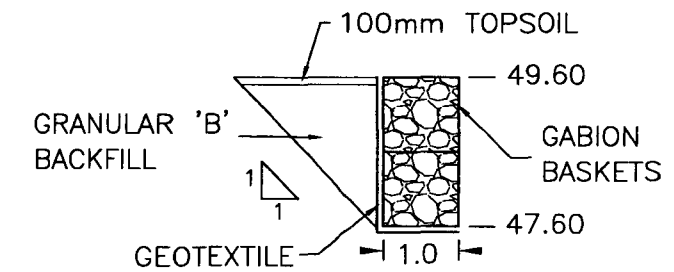
CROSS SECTIONS ON THE
RETAINING WALL ON THE
4th CONCESSION ROAD DRAIN
IN THE
TOWN OF AMHERSTBURG

BOOK 1264 | APRIL 28, 2003 | 02091-3



CROSS SECTIONS

SCALE - VERTICAL 1:100
HORIZONTAL 1:100



SECTION B - B



SCHEDULE " C "

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Chatham, Ontario

CROSS SECTIONS ON THE
RETAINING WALL ON THE
4th CONCESSION ROAD DRAIN
IN THE
TOWN OF AMHERSTBURG

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APRIL 28, 2003

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