

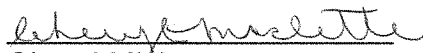
TOWN OF PELHAM
NOTICE OF COURT OF REVISION
ON THE
CYRUS NUNN MUNICIPAL DRAIN

NOTICE is hereby given that a Court of Revision will be held on December 17, 2007 at 6:30 p.m. in the Town of Pelham Council Chambers, 20 Pelham Town Square, Fonthill, Ontario with three (3) members of Council to act as members of the Court, to hear any complaints or concerns regarding the Cyrus Nunn Municipal Drain.

ANY owner of land assessed for the drainage works who complains that his/her or any other land or road has been assessed too high or too low or that any land that should have been assessed has not been assessed or that due consideration has not been given as to the type of use of land, may personally, or by his/her agent, appeal to the Court of Revision by giving notice, in writing, to the Clerk of the Town of Pelham at the address set out below setting out the grounds of his/her appeal, and the appeal shall be heard by the Court of Revision, and;

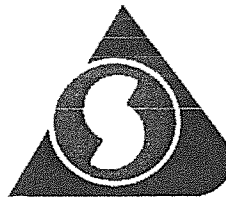
EVERY NOTICE of Appeal shall be given at least ten days before the first sitting of the Court, but the Court may, although Notice of Appeal has not been given, by resolution at its first sitting, allow an appeal to be heard on such conditions as to giving notice to all persons interested or otherwise as appear just. (Section 52, Subsection 1 and 2 of the Drainage Act, RSO 1990)

Dated at the Town of Pelham this 23rd day of November 2007.


Cheryl Milette
Town Clerk
Town of Pelham
20 Pelham Town Square
P.O. Box 400
Fonthill, Ontario
L0S 1E0

CYRUS NUNN DRAIN 2007

Town of Pelham



**SPRIET
ASSOCIATES**

ENGINEERS & ARCHITECTS

155 York Street
London, Ontario N6A 1A8
Tel. (519) 672-4100
Fax (519) 433-9351
E-mail MAIL@SPRIET.ON.CA

Job No. 207058

September 27, 2007

London, Ontario
September 27, 2007

CYRUS NUNN DRAIN 2007

Town of Pelham

To the Mayor and Council
of the Town of Pelham

Mayor and Council:

We are pleased to present our report on the relocation of a portion of the Cyrus Nunn Municipal Drain serving parts of Lots 14-20, Concessions 11-13 in the Town of Pelham.

AUTHORIZATION

This report was prepared pursuant to section 78 of the Drainage Act. Instructions were received from your Municipality with respect to a motion of Council in accordance with Section 8 of the Drainage Act. The work was initiated by a request signed by the affected landowner at 325 Church Street (Property Roll No. 010-018-11110) owned by Greenland Greenhouses Inc.

HISTORY

The Cyrus Nunn Drain was originally constructed pursuant to a report submitted by G.W. Ross, Engineer dated August 24, 1918. The drain consisted of an open ditch slightly less than 3.5 miles in length. The drain outlets at Big Creek and crosses through Concessions 13, 12 and 11 to its head at Regional Road No.24.

EXISTING DRAINAGE CONDITIONS

A site meeting was held with respect to the project at 325 Church Street. The owner of the property (Part Lot 15, Concession 13), through which the drain passes, indicated that a portion of the open ditch will need to be relocated in order to make room for the construction of a large green house on the property. The meeting was attended by a watershed resources engineer from the Niagara Peninsula Conservation Authority. It was pointed out that the N.P.C.A. would require a detailed plan in order to approve the proposed municipal drain relocation.

A field survey, by total station instrument, was made of the existing ditch as originally constructed. Details of the new building and water storage pond were also surveyed. The ditch survey commenced at the T.H. & B. Railway right-of-way and ended at Church Street, a distance of 450 meters. The ditch has an average depth of one meter but was found to be holding approximately 0.4 meters of water, because of a concrete floor in the T.H. & B. concrete box culvert under its track.

RECOMMENDATIONS

We are therefore recommending the following:

- that the existing ditch be relocated in two locations for a total length of 235 meters
- that the new ditch be constructed to conform to the typical ditch section shown on the plan
- that the excavated material be used to backfill the old ditch
- that the topsoil in the new locations be stripped from working space, stockpiled, and relevelled over excavated material and new ditch banks

PROPOSED WORK

The proposed work consists of approximately 235 lineal meters of open ditch reconstruction including bank seeding with a soil stabilization mixture.

SCHEDULES

Two schedules are attached hereto and form part of this report, being Schedule 'A' - Cost Estimate and Schedule 'B' - Assessment for Construction.

Schedule 'A' - Cost Estimate. This schedule provides for a cost estimate of the proposed work which is in the amount of \$7,600.00. This estimate includes engineering and administrative costs associated with this project.

Schedule 'B' - Assessment for Construction. This schedule outlines the distribution of the total estimated cost of construction over the lands which are involved.

Drawing No. 1, Job No. 207058 and specifications form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected.

ASSESSMENT

We assess the cost of this report to property Roll No. 010-018-11110 owned by Greenhland Greenhouses Inc. for the complete cost of the relocation of the drain.

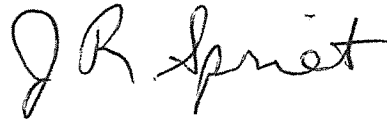
MAINTENANCE

Upon completion of construction, all owners are hereby made aware of Sections 80, 82 and 83 of the Drainage Act which forbid the obstruction of, damage or injury to, and pollution of a municipal drain.

After completion, the newly constructed portions, as well as the existing portions of the Cyrus Nunn Drain shall be maintained by the Town of Pelham at the expense of all upstream lands and roads assessed in the current maintenance by-law and in the same relative proportions, until such time as the assessment is changed under the Drainage Act.

Respectfully submitted,

SPRIET ASSOCIATES LONDON LIMITED

A handwritten signature in black ink, appearing to read "J R Spriet". The signature is fluid and cursive, with the first letters of each word being capitalized and prominent.

J. R. Spriet, P. Eng.

sjs

SCHEDULE 'A' - COST ESTIMATE

CYRUS NUNN DRAIN 2007

Town of Pelham

We have made an estimate of the cost of the proposed work which is outlined in detail as follows:

CONSTRUCTION

235 meters of new ditch construction including stripping, stockpiling and redistribution of topsoil, backfilling and grading of old ditch and seeding of new ditch	\$	4,070.00
--	----	----------

ADMINISTRATION

Survey, Plan and Report	\$	2,900.00
-------------------------	----	----------

Expenses	\$	380.00
----------	----	--------

Supervision and Final Inspection	\$	250.00
----------------------------------	----	--------

TOTAL ESTIMATED COST	\$	<u>7,600.00</u>
----------------------	----	-----------------

SCHEDULE 'B' - ASSESSMENT FOR CONSTRUCTION**CYRUS NUNN DRAIN 2007****Town of Pelham**

Job No. 207058

September 27, 2007

We assess the total cost of this report to property
Roll No. 010-018-11110 owned by Greenland Greenhouse Inc.
in the amount of

\$7,600.00
=====

**SPECIFICATIONS FOR CONSTRUCTION
OF
MUNICIPAL DRAINAGE WORKS**

GENERAL INDEX

SECTION A	General Conditions	Pages 1 to 8
SECTION B	Open Drain	Pages 9 to 11
SECTION C	Tile Drain	Pages 12 to 17
SECTION D	Municipal Drains Crossing County Roads	Pages 18 to 19
STANDARD DETAILED DRAWINGS		SDD-01 to SDD-05



SECTION A - GENERAL CONDITIONS

INDEX

<u>SECTION NUMBER</u>	<u>PAGE NO.</u>
A.1 SCOPE	1
A.2 TENDERS	1
A.3 DRAWINGS AND SPECIFICATIONS	1
A.4 PAYMENT	1
A.5 SUPERINTENDENT	1
A.6 COMMENCEMENT AND COMPLETION OF WORK	2
A.7 WORKING AREA AND ACCESS	2
A.8 SUPERVISION	2
A.9 INSPECTION	2
A.10 ALTERATIONS AND ADDITIONS.....	2
A.11 MAINTENANCE	3
A.12 INSURANCE	3
A.13 LIMITATIONS OF OPERATIONS	3
A.14 LOSSES	3
A.15 SUB-CONTRACTORS	3
A.16 PERMITS, NOTICES, LAWS AND RULES	3
A.17 ROAD CROSSINGS	4
A.18 JACKING AND BORING	4
A.19 FENCES	5
A.20 LIVESTOCK	5
A.21 STANDING CROPS	5
A.22 SURPLUS GRAVEL	5
A.23 RAILWAYS, HIGHWAYS, UTILITIES	6
A.24 LOCATION OF UTILITIES	6
A.25 TERMINATION OF CONTRACT BY THE MUNICIPALITY	6
A.26 ERRORS AND UNUSUAL CONDITIONS.....	6
A.27 IRON BARS	7
A.28 STAKES	7
A.29 RIP-RAP	7
A.30 GABION BASKETS	7
A.31 RESTORATION OF LAWNS	7
A.32 RESTORATION OF ROADS AND LANEWAYS	8

SECTION A
GENERAL CONDITIONS

A.1 SCOPE

The work to be done under this specification consists of supplying all labour, materials and equipment to construct the work as outlined on the drawing(s). In some Municipalities, the Contractor shall supply all materials while in other Municipalities, he shall supply only certain materials. The form of Tender and Agreement lists which materials are to be supplied by the Contractor.

A.2 TENDERS

Tenders are to be submitted on a lump sum basis for the complete works or a portion thereof, as set out in the Form of Tender and Agreement.

A.3 DRAWINGS AND SPECIFICATIONS

The tenderer must satisfy himself that he understands the meaning and intent of the drawings and specifications before submission of his tender. The standard specifications have been separated into sections for reference purpose only. They shall be considered complementary and, where a project is controlled under one of the sections, the remaining sections will still apply for miscellaneous works. In case of any inconsistency or conflict in the Tender Documents, the following order of precedence shall apply:

- Contract Drawings
- Form of Tender and Agreement
- General Conditions
- Standard Specifications (Open Drain, Tile Drain, Specifications for Municipal Drain Crossing County Roads)
- Standard Drawings

A.4 PAYMENT

Progress payments equal to 87±% of the value of the work done and materials incorporated in the work will be made to the Contractor on the written request of the Contractor to the Engineer. An additional 10±% will be paid 45 days after the final acceptance by the Engineer. Before this payment is released, the Contractor shall provide the Municipality with a Statutory Declaration that all material and/or labour incorporated in the work has been fully paid for, along with a Certificate of Clearance from the Workplace Safety and Insurance Board stating that all compensation has been paid. The Municipality will reserve 3%± of the Contract Price for one year as warranty. After the completion of the work, any part of this reserve may be used to correct defects which may develop within that time from faulty workmanship or material or loose backfill, provided that notice shall first be given to the Contractor and that he may promptly make good such defects, if he desires.

A.5 SUPERINTENDENT

The word "Superintendent", as used hereinafter in these specifications, shall refer to a Drainage Superintendent, appointed by the Municipality. The Superintendent will act as the Engineer's representative. The Superintendent shall have the power to direct the execution of the work and to make any necessary minor adjustments. Adjustments in tile sizes or gradients shall not be made without the approval of the Engineer. Any instructions given by the Superintendent, which changes considerably the proposed work or with which the Contractor does not agree, shall be referred to the Engineer for his decision.

A.11 MAINTENANCE

The Contractor shall repair and make good any damages or faults in the drain that may appear within one year after its completion (as dated on the final completion certificate) as the result of imperfect or defective work done or materials furnished by the Contractor. Nothing herein contained shall be construed as in any way restricting or limiting the liability of the Contractor under the laws of the Country, Province or Locality in which the work is being done.

A.12 INSURANCE

- 1) Bodily Injury Liability: The Contractor shall effect and maintain, a Comprehensive General Liability Policy or its equivalent, covering claims for bodily injury, including death arising from and during operations under his Contract whether performed by himself, by a sub-contractor or by anyone directly or indirectly employed by either of them in the sum of \$ 2,000,000.00.
- 2) Property Damage: The Contractor shall effect and maintain Property Damage Liability Insurance to cover his and the sub-contractor's operations in the sum of \$ 1,000,000.00.
- 3) Fire Insurance: The Contractor shall procure fire and extended coverage insurance on the work to 100% of the Contract Amount.
- 4) The following are to be named as co-insured:

Successful Contractor
Sub-Contractor
Municipality
Spriet Associates London Limited
- 5) Within 7 days of award of Contract and prior to commencing work, the successful Contractor shall file with the Municipality, a copy of each insurance policy and certificate required. All such insurance shall be maintained until final completion of the work including the making good of faulty work or materials; except that coverage of completed operations liability shall in any event be maintained for twelve (12) months from the date of final completion as certified by the Engineer.

A.13 LIMITATIONS OF OPERATIONS

Except for such work as may be required by the Engineer to maintain the works in a safe and satisfactory condition, the Contractor shall not carry on his operations under the contract on Sundays without permission in writing of the Municipality.

A.14 LOSSES

The Contractor shall take all risks from floods or casualties of any kind.

A.15 SUB-CONTRACTORS

The Contractor shall not sublet the whole or any part of the contract without the approval of the Engineer or Superintendent.

A.16 PERMITS, NOTICES, LAWS AND RULES

The Contractor shall ensure that all necessary permits or licences required for the execution of the work have been obtained (but this shall not include M.T.O. encroachment permits, permanent easements or rights of servitude). The Contractor shall give all necessary notices and pay all fees required by law and comply with all laws, ordinances, rules and regulations (including the Occupational Health and Safety Act) relating to the work and to the preservation of the public's health and safety and if the specifications and drawings are at variance therewith, any resulting additional expenses incurred by the Contractor shall constitute an addition to the contract price.

A.18 **JACKING AND BORING** (cont'd)

- .7 **Restoration:** The entire affected area shall be shaped and graded to original lines and grades, the topsoil replaced, and the area seeded down at the rate of 85 kg/per ha. unless otherwise specified or in accordance with the M.T.O. Encroachment Permit. Fences shall be restored to their original condition in accordance with the General Conditions.
- .8 **Acceptance:** All work undertaken by the Contractor shall be to the satisfaction of the Engineer.

A.19 **FENCES**

No earth shall be placed against fences and all fences removed by the Contractor are to be replaced by him in as good condition as found. In general, the Contractor will not be allowed to cut existing fences but shall disconnect existing fences at the nearest anchor post or other such fixed joint and shall carefully roll it back out of the way. Where the distance to the closest anchor post or fixed joint exceeds 50 meters, the Contractor will be allowed to cut and splice in accordance with accepted methods and to the satisfaction of the owner and the Engineer or Superintendent. Where existing fences are deteriorated to the extent that existing materials are not salvageable for replacement, the Contractor shall notify the Engineer or the Superintendent prior to dismantling. Fences damaged beyond salvaging by the Contractor's negligence shall be replaced with new materials, similar to those existing, at the Contractor's expense. The replacement of the fences shall be done to the satisfaction of the owner and the Engineer or Superintendent. The site examination should indicate to the Contractor such work, if any, and an allowance should be made in the tendered price.

The Contractor shall not leave any fence open when he is not at work in the immediate vicinity.

A.20 **LIVESTOCK**

The Contractor shall provide each property owner with 48 hours notice prior to removing any fences along fields which could possibly contain livestock. Thereafter, the property owner shall be responsible to keep all livestock clear of the construction areas until further notified. Where necessary, the Contractor will be directed to erect temporary fences. The Contractor shall be held responsible for loss or injury to livestock or damage caused by livestock, where the injury or damage is caused by his failure to notify the property owner or through negligence or carelessness on the part of the Contractor.

The Contractor constructing a tile drain shall not be held responsible for damages or injury to livestock occasioned by leaving trenches open for inspection by the Engineer if he notifies the owner at least 48 hours prior to commencement of the work on that portion. The Contractor will be held liable for such damages or injury if the backfilling of such trenches is delayed more than 1 day after acceptance by the Engineer.

A.21 **STANDING CROPS**

The Contractor shall not be held responsible for damages to standing crops within the working area available and the access route provided if he notifies the owner thereof at least 48 hours prior to commencement of the work on that portion.

A.22 **SURPLUS GRAVEL**

If as a result of any work, gravel or crushed stone is required and not all the gravel or crushed stone is used in the construction of the works, the Contractor shall haul away such surplus gravel or stone unless otherwise approved.

A.27 IRON BARS

The Contractor shall be held liable for the cost of an Ontario Land Surveyor to replace any iron bars destroyed during the course of construction.

A.28 STAKES

At the time of the survey, stakes are set along the course of the drain at intervals of 50 meters. The Contractor shall ensure that the stakes are not disturbed unless approval is obtained from the Engineer. Any stakes removed by the Contractor without the authority of the Engineer, shall be replaced at the expense of the Contractor. At the request of the Contractor, any stakes which are removed or disturbed by others or by livestock, shall be replaced at the expense of the drain.

A.29 RIP-RAP

Rip-rap shall be specified on the drawings and shall conform to the following:

- .1 **Quarry Stone**: shall range in size from 150mm to 300mm evenly distributed and shall be placed to a 300mm thickness on a filter blanket at a 1.5 : 1 slope unless otherwise noted. Filter blanket to be Mirafi 160N or approved equal.
- .2 **Broken Concrete**: may be used in areas outside of regular flows if first broken in maximum 450mm sized pieces and mixed to blend with quarry stone as above. No exposed reinforcing steel shall be permitted.
- .3 **Shot Rock**: shall range in size from 150mm to 600mm placed to a depth of 450mm thickness on a filter blanket at a 1.5:1 slope unless otherwise noted. Filter blanket to be Mirafi 160N or approved equal.

A.30 GABION BASKETS

Supply and install gabion basket rip-rap protection as shown on the drawings.

Gabion baskets shall be as manufactured by Maccaferri Gabions of Canada Ltd. or approved equal and shall be assembled and installed in strict accordance with the manufacturer's recommendations.

The gabion fill material shall consist solely of fractured field stone or gabion stone graded in size from 100mm to 200mm (4" to 8") and shall be free of undersized fragments and unsuitable material.

A.31 RESTORATION OF LAWNS

- .1 **General**: Areas noted on the drawings to be restored with seeding or sodding shall conform to this specification, and the contractor shall allow for all costs in his lump sum bid for the following works.
- .2 **Topsoil**: Prior to excavation, the working area shall be stripped of existing topsoil. The topsoil stockpile shall be located so as to prevent contamination with material excavated from the trench. Upon completion of backfilling operations, topsoil shall be spread over the working area to a depth equal to that which previously existed but not less than the following:

Seeding and sodding	-	minimum depth of 100mm
Gardens	-	minimum depth of 300mm

In all cases where a shortfall of topsoil occurs, whether due to lack of sufficient original depth or rejection of stockpiled material due to contractors operations, imported topsoil from acceptable sources shall be imported at the contractors expense to provide the specified depths. Topsoil shall be uniformly spread, graded and cultivated prior to seeding or sodding. All clods or lumps shall be pulverized and any roots or foreign matter shall be raked up and removed as directed.

SECTION B - OPEN DRAIN

I N D E X

SECTION NUMBER

PAGE NUMBER

B.1	PROFILE.....	9
B.2	ALIGNMENT.....	9
B.3	CLEARING AND GRUBBING.....	9
B.4	EXCAVATION.....	9
B.5	EXCAVATED MATERIAL.....	10
B.6	EXCAVATION THROUGH BRIDGES AND CULVERTS.....	10
B.7	PIPE CULVERT.....	10
B.8	MOVING DRAINS OFF ROADS.....	10
B.9	TRIBUTARY OUTLETS.....	11
B.10	SEDIMENT BASINS AND TRAPS.....	11
B.11	SEEDING.....	11

SECTION B

OPEN DRAIN

B.1 PROFILE

The profile drawing shows the depth of cuts from the ground beside the stake to the final invert of the ditch in meters and decimals of a meter and also the approximate depth of cuts from the existing bottom of the ditch to the elevation of the ditch bottom. These cuts are established for the convenience of the Contractor; however, bench marks will govern the final elevation of the drain. Bench marks have been established along the course of the drain and their locations and elevations are noted on the profile drawing. A uniform grade shall be maintained between stakes in accordance with the profile drawing.

B.2 ALIGNMENT

The drain shall be constructed in a straight line and shall follow the course of the present drain or water run unless otherwise noted on the drawings. Where it is necessary to straighten any bends or irregularities in alignment not noted on the drawings, the Contractor shall contact the Engineer or Superintendent before commencing the work.

B.3 CLEARING AND GRUBBING

Prior to commencement of work, all trees, scrub, fallen timber and debris shall be removed from the side slopes of the ditch and for such a distance on the working side so as to eliminate any interference with the construction of the drain or the spreading of the spoil. The side slopes shall be neatly cut and cleared flush with slope whether or not they are affected directly by the excavation. With the exception of large stumps causing damage to the drain, the sideslope shall not be grubbed. All other cleared areas shall be grubbed and the stumps put into piles for disposal by the owner.

All trees or limbs 150mm (6") or larger, that it is necessary to remove, shall be considered as logs and shall be cut and trimmed, and left in the working width separate from the brush, for use or disposal by the owner. Trees or limbs less than 150mm in diameter shall be cut in lengths not greater than 5 meters and placed in separate piles with stumps spaced not less than 75 meters apart in the working width, for the use or disposal of the owner. In all cases, these piles shall be placed clear of excavated materials, and not be piled against standing trees. No windrowing will be permitted. The clearing and grubbing and construction of the drain are to be carried out in two separate operations and not simultaneously at the same location.

B.4 EXCAVATION

The bottom width and the side slopes of the ditch shall be those shown on the profile drawing.

Unless otherwise specified on the drawings, only the existing ditch bottom is to be cleaned out and the side slopes are not to be disturbed. Where existing side slopes become unstable because of construction, the Contractor shall immediately contact the Engineer or Superintendent. Alternative methods of construction and/or methods of protection will then be determined, prior to continuing the work.

Where an existing drain is being relocated or where a new drain is being constructed, the Contractor shall, unless otherwise specified, strip the topsoil for the full width of the drain, including the location of the spoil pile. Upon completion of levelling, the topsoil shall be spread to an even depth across the full width of the spoil.