



South Nation River Conservation Authority (SNC)

Bid Document

Request for Quotation (RFQ)

Tree Removal: J. Henry Tweed Conservation Area

208 Forced Road, Russell, ON K4R 1A1



Closing Date

Date: Tuesday October 12th, 2021

Time: 10:00 a.m. local time

By email to cbickerdike@nation.on.ca

Attn: Carl Bickerdike – Team Lead Corporate Services

Late bids will not be accepted.

Mandatory site visit – Friday September 24th (1:00pm)

- 208 Forced Road, Russell, ON K4R 1A1

SNC reserves the right to accept or reject all or part of any Bid and also reserves the right to accept other than the lowest Bid and to cancel this Call for Bids at any time.



1. Purpose and Introduction

South Nation River Conservation Authority (SNC) is seeking quotes for the removal of 598 identified trees from the J. Henry Tweed Conservation Area in Russell, ON.

In this RFQ, the successful Bidder shall be referred to as the “**Vendor**”

1.1 Appendices

‘Appendix A’ – Acknowledgements

‘Appendix B’ – Specifications

‘Appendix C’ – Pricing

2. Closing Time

One copy of the RFQ Bid Document, properly signed and sealed is to be submitted to SNC, Reception, 38 Victoria Street, Finch, Ontario, **prior to 10:00 a.m. on Tuesday October 12th, 2021 the “Closing”**).

Time registered on SNC’s email system will be considered the official time to determine exact time of submission.

Submissions received after the Closing will not be accepted.

3. Opening

All Submissions received on time will be opened on **Tuesday October 12th, 2021 after 10:00 a.m.**



4. Contact Information and Questions

4.1. Contacts

Bidders may only contact Carl Bickerdike, Team Lead Corporate Services **in writing only**, by email to cbickerdike@nation.on.ca related to this Request for Quotations.

Carl Bickerdike is SNC's official contact person for this RFQ. All other SNC employees and Board Members are not permitted to discuss this RFQ process with a potential Bidder from the time the RFQ is issued until such time as an award report has been prepared and submitted to the appropriate approval authority.

Bidders are cautioned therefore, to deal exclusively with the SNC contact person referenced in this section.

4.2. Errors, Omissions and Questions

SNC accepts no legal liability for any errors or omissions in any part of this RFQ.

Bidders with questions related to this RFQ, finding errors in, or omissions from the Document, or having doubt as to the meaning or intent of any part of this Document, must contact the SNC contact listed in Section 4.1, **before 4:00 p.m. on September 28th, 2021**. [To allow sufficient time to respond to or prepare and distribute an addendum as necessary, and to allow time for Bidders to receive any new information.]

Bidders should accurately reference the item of the solicitation to which the enquiry relates. Care should be taken by the Bidders to explain each question in sufficient detail in order to enable SNC to provide an accurate answer. No questions will be accepted **after 4:00 p.m. on September 28th, 2021**.

There will be no consideration of any claim after submission of the Quotation, that there is any misunderstanding respecting conditions imposed by the RFQ.



5. Instructions to Bidders

5.1 Addenda

The RFQ may be amended only by an addendum in accordance with this section. If SNC, for any reason, determines that it is necessary to provide additional information relating to the Request for Quotations, such information will be communicated to all Bidders through the SNC Contact by addenda. Each addendum forms an integral part of the RFQ.

SNC will issue all written addenda to the RFQ by e-mail to each bidder who has provided an e-mail address.

Such addenda may contain important information, including significant changes to the RFQ. It is the Bidder's responsibility to ensure all addenda have been received and are reflected in their quotes submission.

5.2 Quotation Submission

The Submission shall be typed or written in ink. It shall contain original signatures where required; shall clearly be marked "**ORIGINAL**" and shall include all requirements of this RFQ, as set out in **Section 8.0 "To Include in Quotation"**. The Bidder should submit **one (1) copy** of all submission requirements.

Offers made in the Submission will be considered by SNC to be binding and irrevocable and shall remain open for acceptance by SNC for a period of thirty (30) days from the Quotation closing.

A Submission shall be considered only if emailed to cbickerdike@nation.on.ca. The subject line should be; "**Request for Quotations: Tree Removal: J. Henry Tweed Conservation Area**". A return email will be sent to confirm receipt.

Faxed or mailed submissions will not be accepted.



5.3 Adjustments to Submissions

Adjustments to submissions by telephone, mail, or fax will not be considered.

5.3.1 Request to Adjust a Submission Before Closing

A Bidder wishing to make adjustments to a Submission must supersede it with a later Submission, which must be received by the closing time.

5.3.2 Request to Withdraw a Submission Before Closing

A Bidder who has submitted a Quotation may request that their Submission be withdrawn before the closing time. The request must be provided in writing, and include contact information for verification. Authenticity of the request may be confirmed by SNC. Submissions withdrawn under this procedure cannot be reinstated.

5.3.3 Request to Withdraw a Submission During Quotes Opening

No request for withdrawal of a Submission shall be permitted during, or at any time after, the opening process.

5.4 Insurance

5.4.1 General Liability Insurance

The Vendor shall procure and maintain Comprehensive General Liability Insurance:

- a) Having a limit of liability of not less than **two million dollars (\$2,000,000)** inclusive for any one occurrence;
- b) Including insurance against liability for bodily injury and property damage caused by vehicles or equipment owned by the Vendor;
- c) Being endorsed to provide that the policies will not be altered, cancelled, or allowed to lapse without thirty (30) days prior written notice to SNC;
- d) Name SNC as an additional insured party; and
- e) Contain a cross-liability clause.

The Vendor shall pay for all premiums and expenses incurred for the insurance.

5.4.2 Proof of Insurance

The Bidder shall provide proof of insurance required in Items 5.4.1 and 5.4.2 with their Quotation.



In the event that satisfactory proof of insurance cannot be provided, a letter from the Bidder's insurance company confirming that the Bidder will be able to obtain the required insurance will suffice.

The insurance company must be satisfactory to SNC.

5.4.3 Certificate of Insurance

Within ten (10) working days of notification of award of this RFQ and prior to the start of any work, the Vendor shall file with SNC, together with the signed Contract, a Certificate of Insurance, clearly stating that all the insurance coverage required complies with all requirements listed in **Item 5.4.1 and 5.4.2.**

If the Vendor fails to file the Certificate of Insurance with SNC within ten (10) working days of notification of award of this RFQ, SNC reserves the right to cancel the award.

5.5 Workplace Safety and Insurance Act and Employment Insurance

The Bidder must submit with their Quotation a valid and current "Clearance Certificate" from the Workplace Safety and Insurance Board ("WSIB"), or a letter from the WSIB confirming their exemption. This information is available to the Bidder on-line at **wsib.on.ca.**

The Vendor, within ten (10) working days of notification of award of this RFQ and prior to the start of any work, shall provide SNC with a valid and current Clearance Certificate from the WSIB.

If the Vendor does not provide a valid and current Clearance Certificate as herein requested, or proof of exemption, or proof of application for exemption, SNC reserves the right to cancel the award.

The Vendor shall be responsible for providing Worker's Compensation coverage for their employees, and no extras will be allowed for such items.

The Vendor clearly understands and agrees that they are not, nor is anyone hired by them, covered by SNC under the **Workplace Safety Insurance Act, Employment Insurance Act**, or any other act, whether provincial or federal, in respect of themselves, their employees and operations, and shall, upon request, furnish SNC with satisfactory evidence that they have complied with the provisions of any such acts.

5.6 Contract

Once the RFQ is awarded, the vendor shall enter into and sign a formal Contract that is satisfactory to SNC, within ten (10) working days of notification of award of the RFQ. This



RFQ and all issued addenda shall constitute part of the terms and conditions of the contract award.

Failure to execute the Contract or to file any of the required documentation required in this RFQ, within the specified time period, shall be just cause for the cancellation of the award.

6. General Terms and Conditions

The following terms and conditions are deemed accepted by all Bidders in response to this RFQ and are deemed incorporated into every contract resulting from this RFQ:

6.1 Freedom of Information

All information obtained by the Bidder in connection with the preparation of this RFQ is the property of SNC and must be treated as confidential. It may not be used for any purpose other than for replying to this RFQ, and for fulfillment of any subsequent contract. Any Bidder who requires that the information in its Quotation be kept confidential must explicitly advise SNC of that fact.

The Bidder may declare confidentiality of their Quotation; however, SNC is required by law to adhere to the requirements of the Municipal Freedom of Information and Protection of Privacy Act, as amended from time to time.

6.2 The Occupational Health and Safety Act

The Vendor shall comply with all conditions and regulations of the Occupational Health and Safety Act 1990 and amendments thereto, any other Federal or Provincial statute or local bylaw concerning safety or any other phase of work on this contract.

6.3 Compliance with Codes, Regulations and By-Laws

The Vendor agrees to obey all government, municipal and underwriters codes and regulations, etcetera and perform all work in accordance with the requirements of bylaws in force in the area where the work is to be carried out. All permits or licenses are the responsibility of the bidder.



6.4 Required Warranties

Each Bidder expressly declares and warrants that;

- a) This quotation submission is in all respects fair and without collusion or fraud.
- b) There has been no violation of copyrights or patent rights in manufacturing, producing or selling the materials and/or services shipped or ordered as a result of this quotation, and the vendor agrees to hold SNC harmless from any and all liability, loss, expense, action or suit occasioned by any such violation.
- c) All materials and/or services proposed to be supplied to SNC conform in all respects to the standards set forth by Federal and Provincial agencies.
- d) The Bidder of the quotation is:
 - a) competent to perform the work described in this RFQ;
 - b) has the necessary qualifications, including knowledge, skill and experience to perform the services, together with the ability to use those qualifications effectively for that purpose;
 - c) shall supply everything necessary for the performance of the work;
 - d) shall carry out the work in a diligent and efficient manner;
 - e) ensure the work is of proper quality, material and workmanship; is in full conformity with the specifications; and meets all other requirements of this RFP and any subsequent contract.

6.5 No Obligation to Contract

The Bidder's RFQ submission does not constitute the acceptance of a contract with SNC. Submissions constitute offers which SNC may or may not accept in its sole discretion.

SNC further reserves the right to accept or reject any or all quotations or parts of quotations, or to accept any quotations considered in SNC's best interest, and to request re-submission on the required materials and/or services. SNC also reserves the right to waive irregularities and technicalities and to do so in its sole discretion.

SNC also reserves the right to cancel and reissue the RFQ as deemed necessary and in the best interest of SNC.

SNC reserves the right not to accept a Quotation from any person or corporation which includes all non arms length corporations who, or which, has a claim or legal proceeding against SNC or against whom SNC has a claim or legal proceeding with respect to any previous contracts, bid submissions, or business transactions who is listed as either the Bidder or sub-contractor within the submitted Quotation.



The Bidder's RFQ submission is deemed an irrevocable offer which may be accepted, at the sole option of SNC with or without negotiation, only by entering into a formal contract upon such acceptance the terms, responsibilities, and specifications as required by SNC including but not limited to those set out herein.

SNC reserves the right to reject an offer to supply goods and services presented in response to SNC's procurement processes where SNC determines that the person making the offer is in any way indebted to SNC and in its sole discretion is of the opinion that it is in SNC's best interests that the offer be rejected.

6.6 Assignment

The Vendor shall not assign the Contract or any portion thereof without prior written consent of SNC. Such consent shall not release or relieve the Vendor from any of their obligations or liabilities under this Contract.

6.7 Costs Incurred

SNC will not, under any circumstances, be responsible for any costs incurred by the Bidder in the preparation of the quotation submission, including, but not limited to: costs to prepare documentation; travel; attendance at any site meetings; or interviews (if required).

6.8 Pricing and Taxes

The quotation submission amount must include: all applicable excise taxes; customs, freight; exchange and all other charges. HST is extra.

6.9 Terms of Payment

Invoices will be paid net thirty (30) days from date of invoice and verification that goods/services listed have been provided to the satisfaction of SNC.



6.10 Rights of South Nation River Conservation Authority (SNC)

SNC retains the right to ensure that an acceptable standard of use, service, and operation is maintained. SNC also reserves the right to communicate with one or more Bidders (following the RFQ closing date) to clarify elements of the submission.

6.11 SNC's Right to Terminate Contract Under Certain Conditions

SNC has the right to terminate the Contract immediately and without penalty, with written notice to the Vendor, if:

- a) The Vendor makes an assignment for the benefit of creditors or becomes bankrupt or insolvent, or an order is made for the winding-up of the Vendor, or if a receiver is appointed on account of the Vendor's insolvency; or
- b) The Vendor refuses or fails to supply sufficient properly skilled employees or proper materials at all times to perform the Work in the manner and to the standards required under this Contract, or the vendor fails to observe and comply with any provisions of law, including, without limiting the generality of the foregoing, all requirements of all governmental authorities including federal, provincial, and municipal legislative enactments, by-laws and other regulations now or hereafter in force which pertain to or affect the services or the conduct of the Vendor's business; or
- c) The Vendor fails to institute appropriate corrective action within three (3) days after verbal notification by SNC (which will be confirmed subsequently in writing), of any failure on the part of the Vendor to comply with the terms and specifications of the Contract; or
- d) The Work performed is not satisfactory; or
- e) Delivery requirements are not met.

SNC reserves the right to terminate this contract at anytime without cause with thirty (30) days written notice.

Immediately following, the termination of the Contract, for any reason, the Vendor shall provide to SNC all of their financial records specific to this Contract, concerning the conduct of the operations and a statement of all outstanding accounts.



6.12 Remedies for Non-Performance

In the event that the Vendor fails to perform any obligations hereunder, SNC shall be entitled to exercise any one or more of the following remedies:

- a) SNC may with-hold any payment due hereunder until the Vendor has remedied their failure;
- b) SNC shall be entitled, in the event that the Vendor does not remedy their default within three (3) working days of a request, SNC be entitled to engage other vendors to complete the work of the Vendor and to deduct the cost of obtaining such other vendors from any amounts owing to the Vendor hereunder;
- c) SNC may terminate this Agreement if the Vendor does not remedy their default within three (3) working days of a request that they do so from SNC in writing; and,
- d) SNC may exercise any other right available to it in law or equity.

A failure of SNC to exercise any of the foregoing remedies, or the granting of any extension or indulgence, shall not be prejudicial to the right of SNC to subsequently obtain such remedies.

6.13 Failure to Execute Contract

Failure to execute the Contract or failure to file any of the required documentation required in this RFQ within the specified time period is cause for the cancellation of the award.

6.14 Indemnification

The Vendor shall indemnify and save harmless SNC, from and against all claims, actions, losses, expenses, costs or damages of every nature and whatsoever which SNC, its employees, officers or agents may suffer, to the extent the Vendor is legally liable as a result of the negligent acts of the Vendor, their employees, officers or agents in the performance of this Contract.

6.15 Ownership of Documents

All information and data developed and used by the Vendor in connection with this Contract will be wholly owned by SNC.



6.16 Governing Law

This RFQ and subsequent contract shall be governed by the law of the Province of Ontario.

6.17 Venue for Litigation

The Vendor and SNC agree that the venue for any litigation shall be Ottawa, Ontario.

6.18 Force Majeure

Neither party shall be held responsible for any remedy arising from delay or failure to perform obligations under this RFQ or the Services to be provided when such delay or failure is due to fires, strikes, floods, acts of God or the Queen's enemies, lawful acts of public authorities, or delays or defaults caused by common carriers, which cannot reasonably be foreseen or provided against.

6.19 Confidentiality

The Vendor recognizes that it will, by the nature of the goods and services being provided to SNC, have access to confidential information. It is understood and agreed that the Vendor, its employees, agents, representatives and officers, (the "Vendor") shall hold all information, whether confidential or not, in the strictest confidence. The Vendor shall not disclose, nor permit by any act or failure to act, the disclosure of any information to any third party at any time during or after the term of its contract with SNC. Nor will the Vendor use any information however obtained as a result of performing duties for SNC for its own commercial, financial, or personal advantage.

The Vendor also acknowledges that it may be held both criminally and civilly responsible for any breach of confidentiality.

6.20 Employees

In the performance of this contract, the Vendor shall be an independent Vendor. Neither the Vendor nor any of their employees shall be deemed to be employees of SNC.



7. Specifications

The Bidder will initial and submit each page of the Specifications (***Appendix B***) as part of the Quotation Submission.

8. To Include in RFQ

8.1 Acknowledgement

The Bidder shall complete and submit ***Appendix A***.

8.2 Specifications

The Bidder shall initial and submit each page of ***Appendix B***.

8.3 Pricing

The Bidder will complete and submit the Pricing Form (***Appendix C***)

8.4 Supporting Information

The Bidder will complete and submit the Supporting Information Form (***Appendix D***)

9. Award and Approval

This RFQ will be awarded based on the following:

- a) Proper Completion of all submission requirements (Section 8);
- b) Compliance to specifications;
- c) Ability to complete work based on outlined description; and
- d) Price (as a clarification, should all other evaluations appear equal, at the sole discretion of SNC, lowest Total Price shall govern award).



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SNC reserves the right to reject any Quotation if the evidence submitted by, or investigation of such Bidder, fails to satisfy SNC that the Bidder is qualified to carry out the obligations of the contract.

The decision of South Nation River Conservation shall be final.

The Bidder shall not make any claims for additional costs or expenses due to the delay in, or cancellation of the award of this RFQ, due to the approval process.



‘APPENDIX A’

ACKNOWLEDGEMENTS

I/WE ACKNOWLEDGE that this Quotation is made without any connection, knowledge, comparison of figures or arrangements with any other company, firm or person submitting a Quotation for the same goods/services and is in all respects fair and without collusion or fraud.

I/WE ACKNOWLEDGE that all matters stated in the said Quotation are, in all respects, true.

I/WE ACKNOWLEDGE that, having read and understood the Tree Removal: J. Henry Tweed Conservation Area Document, I/WE have satisfied ourselves as to the terms, conditions and specifications and do hereby submit a Quotation for the “Tree Removal: J. Henry Tweed Conservation Area” project.

I/WE ACKNOWLEDGE that it is the Bidder’s responsibility to ensure all addenda issued have been received.

I/WE ACKNOWLEDGE that acceptance of this Quotation and the execution of an Agreement be considered a binding Contract upon both parties. If specified at any time by SNC, it is agreed that the terms and conditions and the representations made in reference to this Request for Quotations shall be incorporated in the Contract to be executed by the parties once SNC has formally accepted the Quotation.

Dated at _____ this ____ day of _____ 2021.

Firm or Organization Name Signing Authority

Street Address Signature

City Postal Code Telephone and Fax Number

'APPENDIX B'

SPECIFICATIONS

South Nation Conservation is seeking quotes from qualified arboricultural contractors to provide tree removal services within the J. Henry Tweed Conservation Area. The J. Henry Tweed Conservation Area is a popular recreational woodland park located in the Village of Russell with developed recreational trails. The Park receives nearly ten thousand visitations annually. The successful contractor will supply all labor, supervision, equipment, materials, and supplies necessary for the execution of this work in a timely and efficient manner.

A mandatory site visit will be completed September 24th, 2021 at 1pm. Contractors shall examine the locations of the proposed work and determine each in their own way, the difficulties which may be encountered in the execution of the work. No additional claims for compensation will be considered due to unknown conditions, other than those specified in the following specifications.

General Description of Work:

The Work consists of the removal of marked trees in J. Henry Tweed Conservation Area adjacent to traveled roadways, parking areas and pedestrian trails. All trees have been numbered in the field with blue paint. The Conservation Area has been divided in to operational Zones for administrative purposes. A list of each tree designated for removal by species and diameter class within each Zone is provided in each. Figure 1 provides the general location of numbered trees by zone.

The effect of Emerald Ash Borer is evident with most tree removals in Ash species. Tree removals are concentrated in smaller diameter classes (10 - 30cm). As one of SNC's preferred destinations, the work is to be undertaken in a timely and efficient manner. The Park will be closed during the work. ·

General Removal Specifications:

1. Removals will include topping and other operations necessary to safely remove the assigned trees. Other operations necessary may include:

- Removing laterals branches along trails for access
- Removing broken and dead limbs from adjacent trees
- Removal of spring poles
- Removal of other unmarked defective trees with the written permission of SNC.

Method of removal for each tree to be completed in a manner that protects and enhances the surrounding trees, infrastructure, forest ecosystem, and riparian corridor.

2. Powered equipment will only be permitted to operate on the trail surface, limited access will be given to powered equipment operating off trail, at SNC's discretion.
3. Stumps are to be cut level and as close to grade as possible, and not to exceed 10 cm in height.
4. It shall be the responsibility of the Contractor to remove and dispose in a proper and acceptable manner all logs, brush, and debris resulting from the tree removal operations. The work site is to be left equal to or cleaner than pre-work conditions.
5. SNC will permit the parking lot to be used for staging of equipment, and to act as a landing to facilitate removal of stems, limbs, and woody debris.
6. Stockpiling of stems, limbs or woody debris will be permitted at the primary access locations off Forced Road (parking lot and west park entrance) during the scheduled work period. No stockpiling will be permitted along Church Street.
7. Any damage to trail will be repaired at contractor's expense. Contractor shall be responsible for re-grading, loosening of compacted soil, repair of access ways and any damage to turf /grounds within the work area of the park or by an intrusion that is outside the specified work area.
8. Tree parts dropped or lowered from trees are to be kept off private property.
9. The contractor shall be solely responsible for pedestrian and vehicular safety and control within the work site and shall provide the necessary warning devices, barricades, and personnel needed to give safety, protection, and warning to persons and vehicular traffic within the area
10. Blocking of public streets shall not be permitted unless prior arrangements have been made with the Township and is coordinated with the appropriate departments. The Contractor is responsible for any Municipal permits required for temporary road closures, access, etc.

Access:

1. J. Henry Tweed Conservation Area has four access locations, two off Forced Road, one off Parklands Avenue, and one off the New York Central Rail Trail with in the village of Russell. Vehicular access will be discussed during mandatory site visit.
2. SNC will allow equipment to access trail network. Limited access will be provided east of parking lot due to trail width.
3. SNC will permit the parking lot to be used as a staging area for equipment and vehicles.
4. Equipment will be permitted to stay on-site overnight. SNC will not be held responsible for any equipment stored on-site.
5. The trail and parking lot will be closed to the public to facilitate work.

Duration of Work:

1. The Contractor agrees to start the work no sooner than December 6, 2021.
2. Before commencement of work, the Contractor shall meet with the SNC representative to present a schedule of work dates 10 days in advance of start date.
3. The Contractor agrees to complete the work no later than December 23, 2021

ZONE A

Zone A is approximately 10 acres in the northeast portion of the J. Henry Tweed Conservation Area. Access within Zone A is good with a perimeter trail network providing access within proximity to most tree removals (see attached Map). The woodland is characterized by young upland mixed forest of tolerant hardwoods and mature Hemlock. The woodland has a high concentration of Ash infected with Emerald Ash Borer. There is a total of 165 tree removals in Zone A. Ash species represent 42% of tree removals with Red Maple at 30%. Approximately 79% of tree removals are less than 30 cm. at breast height (1.4 m.).

**Zone A
Tree Removal
Species Distribution**

Species	No. of Trees	%	Average Diameter (cm.)	Diameter Range (cm.)
Ash spp.	70	42	27.7	9-42
Red Maple	49	30	31.6	8-88
Hemlock	15	9	20.6	11-48
White Elm	9	6	25.7	9-21
Beech	6	4	17.8	16-66
Yellow Birch	5	3	29.3	16-40
Sugar Maple	5	3	18.8	20-77
White Cedar	3	2	20.0	19-23
Basswood	1	1	57.0	57
Butternut	1	1	49.0	49
Poplar	1	1	40.0	40

**Zone A
Tree Removal
Diameter Distribution**

Diameter Class (cm.)	Range (cm.)	Number of Trees
10	5.5 – 15.0	30
20	15.5 – 25.0	69
30	25.5 – 35.0	32
40	35.5 – 45.0	12
50	45.5 – 55.0	8
60	55.5 – 65.0	7
70	65.5 – 75.0	3
80	75.5 – 85.0	3
90	85.5 – 95.0	1

ZONE B

Zone B is approximately 3 acres in the northwest portion of the J. Henry Tweed Conservation Area. Access within Zone B is good with a perimeter trail network providing access within proximity to most tree removals. The woodland is characterized by young upland mixed forest of tolerant hardwoods and mature Hemlock. The woodland has a high concentration of Ash infected with Emerald Ash Borer. There is a total of 92 tree removals in Zone B. Ash species represent 72% of tree removals with Hemlock and Yellow Birch at 8% and 7% at respectively. Approximately 79% of tree removals are less than 30 cm. at breast height (1.4 m.).

Zone B Tree Removal Species Distribution

Species	No. of Trees	%	Average Diameter (cm.)	Diameter Range (cm.)
Ash spp.	66	72	19.4	10 - 66
Hemlock	7	8	44.8	14 - 28
Yellow Birch	6	7	36.8	15 - 48
Basswood	4	4	32.0	10 - 45
White Elm	4	4	41.5	11 - 23
Red Maple	3	3	52.7	15 - 55
Balsam Fir	1	1	13.0	13
Scots Pine	1	1	12.0	12

Zone B Tree Removal Diameter Distribution

Diameter Class (cm.)	Range (cm.)	Number of Trees
10	5.5 - 15.0	20
20	15.5 - 25.0	34
30	25.5 - 35.0	19
40	35.5 - 45.0	13
50	45.5 - 55.0	5
60	55.5 - 65.0	0
70	65.5 - 75.0	1

Zone C

Zone C is approximately 3 acres in the southeast portion of the J. Henry Tweed Conservation Area. Access within Zone C is good with a trail network providing access within proximity to most tree removals. The woodland is characterized by young riverine mixed forest of lowland hardwoods with mature White Pine and Hemlock. The woodland has a high concentration of Ash infected with Emerald Ash Borer. There is a total of 220 tree removals in Zone C. Ash species represent 85% of tree removals with large conifers accounting for approximately 5% of removals. Approximately 84% of tree removals are less than 30 cm. at breast height (1.4 m.).

**Zone C
Tree Removal
Species Distribution**

Species	No. of Trees	%	Average Diameter (cm.)	Diameter Range (cm.)
Ash spp.	186	85	22.1	6 – 60
White Pine	9	4	61.6	19 – 45
Poplar	7	3	45.4	20 – 40
Red Maple	5	2	40.5	10 – 44
White Cedar	3	1	37.7	19 – 31
White Elm	2	1	39.0	22 – 28
Butternut	2	1	36.5	35 – 42
Basswood	2	1	71.0	61 – 81
Sugar Maple	1	0.5	70.0	70
Hemlock	1	0.5	72.0	72
Other	2	1	10.5	7 - 14

**Zone C
Tree Removal
Diameter Distribution**

Diameter Class (cm.)	Range (cm.)	Number of Trees
10	5.5 – 15.0	38
20	15.5 – 25.0	84
30	25.5 – 35.0	62
40	35.5 – 45.0	25
50	45.5 – 55.0	6
60	55.5 – 65.0	2
70	65.5 – 75.0	2
80	75.5 – 85.0	1

Zone D

Zone D is approximately 2 acres in the southwest portion of the J. Henry Tweed Conservation Area. Access within Zone A is fair with trail access of Forced Road and limited by narrow stream corridor and steep slopes. The woodland is characterized by young mixed forest of lowland hardwoods and mature White Pine. The woodland has a high concentration of Ash infected with Emerald Ash Borer. There are a total of 121 tree removals in Zone D. Ash species represent 86% of tree removals with White Pine and Red Maple representing 4% and 3% of the removals respectively. Approximately 86% of tree removals are less than 30 cm. at breast height (1.4 m.).

Zone D Tree Removal Species Distribution

Species	No. of Trees	%	Average Diameter (cm.)	Diameter Range (cm.)
Ash spp.	104	86	22.6	8-52
White Pine	5	4	51.7	17-30
Red Maple	3	3	45.7	20-42
White Elm	3	3	43.5	14-30
Yellow Birch	2	2	38.0	15-38
Cherry spp.	2	2	41.0	9-37
Sugar Maple	1	0.5	18.0	18
Poplar spp.	1	0.5	34.0	34

Zone D Tree Removal Diameter Distribution

Diameter Class (cm.)	Range (cm.)	Number of Trees
10	5.5 – 15.0	19
20	15.5 – 25.0	47
30	25.5 – 35.0	36
40	35.5 – 45.0	11
50	45.5 – 55.0	7
60	55.5 – 65.0	1

Figure 1. J. Henry Tweed TRA 2021



'APPENDIX C'

PRICING FORM

a) Total Price:

Complete removal of identified trees \$ _____

HST \$ _____

Total \$ _____

b) Price by Zone (SNC may choose any combination):

Zone A \$ _____

HST \$ _____

Total \$ _____

Zone B \$ _____

HST \$ _____

Total \$ _____

Zone C \$ _____

HST \$ _____

Total \$ _____

Zone D	\$ _____
HST	\$ _____
Total	\$ _____

CONTRACTOR NAME: _____

ADDRESS: _____

TELEPHONE: _____

FAX: _____

SIGNATURE OF BIDDER: _____

PRINT NAME: _____

DATE SIGNED: _____

'APPENDIX D'

SUPPORTING INFORMATION

CONTRACTOR NAME: _____

Please use extra space and include attachments as necessary:

Qualifications and certifications of staff	
Equipment and Techniques (including vehicle models/class/approximate weight)	

Methods used to minimise damage to healthy trees and trails	
Expected work schedule	
Client name, date and details of similar contracts completed	