



CITY OF DULUTH INVITATION TO BID

Timber Harvesting Sale

BID NUMBER: 22-AA10

BID OPENING: June 22, 2022 at 2:00 pm

The City of Duluth is accepting bids for the purchase of timber to be harvested from designated areas within the Amity Creek, Hawk Ridge, Hartley Park, Enger Park and Lake Superior Zoo areas. Bidders may submit a bid for any or all of the designated areas.

Bidders will be responsible for the additional 8.875% sales tax at time of payment.

Areas to be harvested include (also see map): multiple pine plantations and adjoining aspen forests. Hartley Park trees and Enger white pine are not marked in the field, but estimated volumes are included in this bid package. The City Forester will work with the successful bidder(s) on the specific harvesting details.

This sale can be harvested in the summer or fall under stable and dry soil conditions. Any designated trout streams will require a permit if a crossing is necessary. Harvesting can begin once the agreement is executed (anticipated dated July 6, 2022), and all timber must be cut and removed by June 30, 2024 a one-year contract extension may be available if required.

Please see General Sale Information for additional detail.

A sample of the proposed Timber Sale Contract and Harvesting Specifications & Map are attached. Please read the draft contract carefully. Any objections or requested changes must be noted by submitting a red-lined copy with your bid.

Please submit any questions regarding this project via e-mail to purchasing@duluthmn.gov. Responses will be provided to all interested bidders as an addendum to this solicitation.

The selected contractor(s) will be issued a contract (draft attached). Notice to Proceed will be issued once the agreement is fully executed.

The following documents are included in this solicitation:

1. GENERAL SALE INFORMATION
2. INSTRUCTIONS TO BIDDERS
3. BID FORM
4. TOTAL VOLUME ESTIMATE
5. GENERAL HARVESTING SPECIFICATIONS & MAP
6. DECLARATION OF NON-COLLUSION
7. EQUAL EMPLOYMENT OPPORTUNITY (EEO) AFFIRMATIVE ACTION POLICY STATEMENT & COMPLIANCE CERTIFICATE
8. DRAFT CONTRACT

GENERAL SALE & HARVESTING INFORMATION

1. Approximate Sale Acres: ~85; includes ~50 acres of pine thinning and ~35 total acres of Aspen thinning.
2. Total Volume Estimate (not guaranteed) is identified in the attached list.
3. Species to be harvested: mainly red pine and aspen, along with some jack pine, spruce, birch, and miscellaneous species as needed for access.
4. Time of Year: flexible; summer or fall harvest must be on dry, stable soil conditions. DNR guidelines regarding bark beetles in pine will apply.
5. Access, Skid Trails & Landing Area(s): With this bid, submit a proposal of your preferred and alternative (if any) initial access(es), skid trails, and landing locations. Note: Access road(s) and recreational trails must be left in existing condition upon completion of this harvest unless otherwise designated by the City.
6. Stump treatment: Stumps must be left no higher than the tree's diameter.
7. Terms: timber is sold on appraised volume estimate.
8. Best management practices, as defined in the Minnesota Forest Resources Council "Minnesota's Forest Management Guidelines; Quick Reference Field Guide", will be followed by the buyer.
9. All stumps will be cut at a height to not exceed the diameter of the stump. Stumps higher than this are allowed to avoid damaging nearby trees.
10. All slash, unless piled near the landing, will be cut so that no portion of it extends more than 2' above ground level.
11. Aspen will be cut between September 1st and the following March 31st.
12. Painted boundary trees will not be cut.
13. No stems greater than 2" diameter will be left standing in clearcut areas.
14. Utilize all tops to a 4" or smaller diameter.
15. No leaning, hanging or bent trees will be left.
16. No debris or stumps will be pushed against live trees.
17. Slash, fill or corduroy may be required to prevent excessive rutting on roads or skid trails, as determined by the Seller.
18. All areas of exposed soil must be sloped to 3:1 or flatter unless approved by the Seller.
19. All logging roads must be shaped to allow for proper drainage and erosion control at all times.
20. Water control measures must be constructed and maintained as needed or determined by the seller.
21. Purchaser shall cease operations if ruts greater than 6" deep are created on a skid trail(s) while harvesting timber. Operations can resume when soil moisture decreases to the point that ruts will not exceed 6" deep.

22. Prior to leaving the site, all access roads on seller's land will be returned to the condition they were found in.
23. Any wood that has been cut and left for more than one year from when cut will become the property of the seller.
24. The Buyer will notify the Seller of their intention to store cut products, including residues to be chipped, prior to starting any piles. The location of piles must be approved the seller.

INSTRUCTIONS TO BIDDERS

All bids must be complete, signed, and transmitted in a sealed envelope plainly marked with the bid number, subject matter, and opening date. The City of Duluth reserves the right to reject any and all bids. Bids must be firm for a minimum of 60 days.

Bids must be received in Purchasing by the bid deadline. The City Purchasing Agent or her designee will conduct a public bid opening immediately following receipt of the bids, Bidders who wish to view the bid opening should visit <https://www.duluthmn.gov/purchasing/bids-request-for-proposals/> and select the appropriate link.

Bidders must complete all parts of the bid form. Price may not be the only consideration for award.

Please note that the following requirements apply to this project, and any additional required documents must be submitted prior to award/contract execution. Submitting these documents with your bid will assist in expediting the process.

1. **Insurance** – Contractor must provide proof of Public Liability and Automobile Liability Insurance with limits not less than \$1,500,000 Single Limit prior to the commencement of work. The City of Duluth must be named as an additional insured. Please refer to Section 18 of the attached draft contract for more information.
2. **Declaration of Non-Collusion** – The successful bidder shall be required to execute the attached affidavit stating that he/she has not entered into a collusive agreement with any other person, firm, or corporation in regard to any bid submitted.
3. **Affirmative Action/EEO** - The contractor must take affirmative action to ensure that the employees and applicants for employment are not discriminated against because of their race, color, creed, sex or national origin, and must meet the affirmative action goals. Contractors are encouraged to subcontract with Disadvantaged Business Enterprises (DBEs) when possible. A current list of certified DBEs is available on the Minnesota Unified Certification website at <http://mnucp.metc.state.mn.us> . Contractor will comply with all applicable Equal Employment Opportunity laws and regulations. Awarded contractor will submit the attached Equal Employment Opportunity (EEO) Affirmative Action Policy Statement & Compliance Certificate.

The City of Duluth is an Equal Opportunity Employer. Contractor shall comply with all applicable Equal Employment Opportunity laws and regulations.

CITY OF DULUTH

Patrice Stalvig
Purchasing Agent

**22-AA10 CITY OF DULUTH TIMBER HARVESTING
BID FORM**

Bidder's may submit a price for any or all of the designated areas. If you do not wish to submit a bid for a particular location, please enter a \$0.

**** all quantities are estimated**

ITEM	EST QTY	TOTAL PRICE
Amity Creek	151 cds	\$
Hawk Ridge	184 cds	\$
Hartley	250 cds	\$
Enger Park	114 cds	\$
Enger Golf Course	104 cds	\$
Zoo	240 cds	\$

PLEASE WRITE LEGIBLY. ANY BIDS THAT CANNOT BE READ MAY BE REJECTED.

ACKNOWLEDGMENT OF ADDENDA

ADDENDUM # INITIAL/DATE

ADDENDUM # INITIAL/DATE

ADDENDUM # INITIAL/DATE

ADDITIONAL INFORMATION REQUIRED FOR BID

Due to the nature of this sale and the types of additional services that may need to be provided, price may not be the only consideration for award. The following information must be submitted with your bid. Failure to include this information will result in your bid being rejected:

1) Two references. Please include name, title, address, phone #

3) Provide the number of years of professional logging experience in thinning pine stands _____

5) Provide maps with your proposed preferred and any alternative access routes, skid trails and landing areas.

6) If you are a procurement forester or wood broker, list logger(s) who will harvest this sale.

BIDS MUST BE SIGNED BY AN OFFICIAL AUTHORIZED TO BIND THE COMPANY TO THE BID PROVISIONS:

Signature _____ Date _____

Name/Title _____

Company Name _____

Address _____

City, State, Zip _____

Tel. _____

Email address _____

**TIMBER SALE AGREEMENT
BY AND BETWEEN**

**Enter Purchaser's Company Name
AND
CITY OF DULUTH**

THIS AGREEMENT, effective _____ (the "Effective Date"), by and between the City of Duluth, hereinafter referred to as Seller, and Purchaser located at address, hereinafter referred to as Purchaser.

WHEREAS, the Seller has the need for cutting and removal of timber within Hartley Nature Center; and

WHEREAS, Purchaser has represented itself as qualified and willing to cut and purchase the timber; and

WHEREAS, Purchaser has submitted a qualified bid for the timber; and

WHEREAS, Seller has decided to accept Purchaser's bid;

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter contained, the parties hereto agree as follows:

1. DEFINITIONS

"Purchaser" shall mean the corporation, company, partnership, firm, or individual named and designated as a party to this Contract for the performance of the work.

"Seller" shall mean City of Duluth.

"Amendment" shall mean the process to change or modify the Contract in anyway.

"Addendum" shall mean the process of something that is added or is to be added to the Contract.

"Timber" shall mean trees that will produce forest products of value whether standing or down, and including but not limited to logs, posts, poles, bolts, pulpwood, cordwood, lumber and decorative material.

"Cord" shall be defined as 128 cubic feet of wood, air, and bark with careful piling. "Scribner Decimal C Log Scale" shall mean the scale measurement for saw timber.

"Sold On Appraised Volume Estimate (SOAV)" shall mean or referred to as a lump sum sale in which the Seller may sell timber based on appraisal without scaling.

"Informal Sales" shall mean a small amount of timber not exceeding \$3,000 in appraised value, and not sold for less than full appraised value at a private sale.

"The work" shall mean the equipment, supplies, materials, labor and services to be furnished under the contract and the carrying out of all obligations imposed by the contract documents.

"State Approved Consumer" is determined by Minnesota Department of Natural Resources (MN DNR).

The words "approved", "reasonable", "suitable", "acceptable", "proper", "satisfactory", or words of like effect and significance, unless otherwise particularly specified herein, shall mean approved, reasonable, suitable, acceptable, proper, or satisfactory in the judgment of the Seller.

Whenever in this contract document the expression "it is understood and agreed" or an expression of like significance is used, such expression shall mean the mutual understanding and agreement of the parties executing the Contract Agreement.

2. GOVERNING LAWS

This contract shall be governed by and interpreted according to the laws of the State of Minnesota. The Purchaser shall at all times comply with all applicable laws, regulations, ordinances, and park rules in effect during the contract period.

3. SCOPE AND INTENT OF CONTRACT DOCUMENTS

The following shall be deemed to be part of this contract:

- a. The bid request and specifications, including general sale information, maps, volume summary and any addenda issued.
- b. The bid by Contractor, as modified by irreconcilable language in this written contract.

Should anything necessary for a clear understanding of the work be omitted from the Contract Documents, or should the requirements appear to be in conflict, the Purchaser shall secure written instructions from the Seller before proceeding with the work affected thereby.

4. COMMENCEMENT OF CONTRACT

Cutting and removal of timber in conformance with this Contract may commence and continue only after the signing of this Contract by both parties, the required certificate of insurance is submitted to Seller, and a Notice to Proceed has been issued.

5. TERMINATION

If Purchaser terminates with or without cause, upon written notice, the Purchaser shall cease all operations on and immediately leave, and not return to, the Seller's property unless otherwise approved by the Seller. If Seller terminates without cause, any payment for which timber is not harvested or removed will be returned to the Purchaser.

6. FORCE MAJEURE

Neither party will incur any liability to the other if its performance of any obligation under this Contract is prevented or delayed by causes beyond its reasonable control and without the fault or negligence of either party. Causes beyond a party's reasonable control may include, but are not limited to, acts of God or war, court orders, changes in controlling law or regulations, or mandatory orders or obligations imposed by any separate judicial or governmental entity.

7. COMMUNICATION

Two weeks prior to moving into any site, Purchaser shall contact the City Forester at (218) 730-4328 or cchristenson@duluthmn.gov.

7. PAYMENTS

The balance of the contract will be paid in full prior to any timber harvesting.

All payments will be made out to the Seller and all payments/checks and any other information pertaining to said sale will be sent to:

**City of Duluth
Treasurer's Office – Room 120
411 West 1st Street
Duluth, MN 55802**

Failure to complete the requirements of this Contract within the time allotted will result in the Buyer's/Purchaser's forfeiture of all payments and the contract.

8. REMEDIES

If timber or other forest products not specifically sold in this Contract or designated by the Seller for cutting are cut, unreasonably damaged or removed by the Purchaser, the Seller may pursue any and all remedies for the unlawful cutting, unreasonable damage or removal of property without consent, including the seeking of criminal or civil charges for theft, timber theft or criminal damage to property, in addition to any Contract remedies for breach. If Purchaser fails to pay or perform any obligations under the Contract, any other contracts between these parties will be denied until all pending obligations are satisfied.

9. PRODUCTS TO BE REMOVED

Title to timber and any forest products sold under this Contract shall remain with the Seller until full or block payment for timber is received. All cut products, buildings, and equipment not removed from the sale tract within 90 days after Contract expiration or at the end of the storage period granted by the Seller shall become property of the Seller.

10. SCALING PROCEDURE: This project has an alternative for scaling. The species and products involved are sold-on-appraised-volume (SOAV). All species and timber products involved in this contract are SOAV. No additional scaling of timber or harvested wood will be required. Processing and utilization of the harvested wood products is left to the Buyer's/Purchaser's discretion.

11. IDENTIFICATION OF TIMBER

All loads of timber in transit shall be identified with City of Duluth file number “**22-AA10.**” The hauler, as an agent of Purchaser, shall accurately identify the load (use of dark paint, ink or crayon to mark each side of the load at least (4) inches in height) as such at consumer scaling points and in response to any inquiries by public officials. Failure to comply with this provision may result in criminal charges being filed under Minnesota Statute 609.52 (theft) or a monetary penalty as approved by the Seller.

12. HARVEST COMPLETION

The Purchaser agrees to complete all operations by June 30, 2024. A one-year contract extension may be available if required.

13. FOREST FIRE PREVENTION OR SITE PROTECTION

The Purchaser agrees to take reasonable precautions to prevent the starting and spreading of fires.

If a fire occurs, the Purchaser agrees to promptly report the fire and cooperate in the control and suppression of the fire.

The Purchaser shall comply with requests regarding forest fire prevention and suppression made by the Seller and takes all reasonable precautions to prevent, suppress and report forest fires. Those requests may include ceasing or modifying operations.

The Purchaser may be responsible for damage and forest fire suppression costs caused by their operation under this Contract.

Logging operations must have a main spill kit available on the landing as well as spill cleanup materials in all pieces of equipment on site. The **Main Landing Spill** kit that must be on site at all times should include:

- Absorbent material and pads;
- Assorted plugs or putty.

- No smoking Sign;
- Duct Tape;
- Water Boom;
- Wooden plugs or putty; and
- Easy access on the site to a shovel, screwdriver and tools, and pail or pails to contain spill contaminated materials.

14. CLEAN UP AND USE OF SALE AREA

The Purchaser shall remove equipment, tools, solid waste and trash remaining on the sale area or Seller's property or adjoining land used in conjunction with the harvest upon completion of performance under this Contract, termination of this Contract by the Purchaser or when requested by the Seller.

No residence, dwelling, permanent structure, or improvement may be established or constructed on the sale area or other property of the Seller.

15. HAZARDOUS MATERIALS

The Purchaser agrees to properly use and dispose of all petroleum, synthetic and hazardous products, including but not limited to oil, oil filters, grease cartridges, hydraulic fuel and diesel fuel. Purchaser shall notify the Seller and the MPCA of all releases of reportable spilled quantities of hazardous substances on or in the vicinity of the sale area that are caused by Purchaser's employees, agents, contractors, sub-contractors or its employees or agents, directly or indirectly as a result of Purchaser's operations.

Purchaser will take whatever initial action to contain all spills or releases. Removal and clean up will be the responsibility of the Purchaser in accordance with applicable statutes and rules of the State of Minnesota.

16. TITLE AND BOUNDARY LINES

The Seller guarantees title to the timber and to defend it against any and all claims and to have the boundaries marked with paint or other suitable means before any timber is harvested.

17. ACCESS

The Purchaser is responsible for repairs for any and all damages to roads and trails used to access the site. All roads and trails must be returned to their original condition.

18. INDEMNIFICATION

The Purchaser will defend, indemnify and save the City harmless from all costs, charges, damages, and loss of any kind that may grow out of the matters covered by this contract. Said obligation does not include indemnification of the City for claims of liability arising out of the sole negligent or intentional acts or omissions of City but shall include but not be limited to the obligation to defend, indemnify and save harmless the City in all cases where claims of liability against the City arise out of acts or omissions of City which are derivative of the negligence or intentional acts or omissions of Contractor such as, and including but not limited to, the failure to supervise, the failure to warn, the failure to prevent such act or omission by Contractor and any other such source of liability. In addition Purchaser will comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done and things to be supplied hereunder.

19. INSURANCE

A. Purchaser shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota, which insurance shall indemnify Purchaser and City from all liability described in Paragraph 6 above, subject to provisions below.

- (1) Workers' compensation insurance in accordance with the laws of the State of Minnesota.

(2) Public Liability and Automobile Liability Insurance with limits not less than **\$1,500,000** Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.

(3) City of Duluth shall be named as **Additional Insured** under the Public Liability, Excess/Umbrella Liability* and Automobile Liability, or as an alternate, Purchaser may provide Owners-Contractors Protective policy, naming itself and the City of Duluth. Purchaser shall also provide evidence of Statutory Minnesota Workers Compensation Insurance. Purchaser to provide Certificate of Insurance evidencing such coverage with 30 days' notice of cancellation, and 10 days' notice of non-renewal or material change provisions included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor's interests and liabilities.

**An umbrella policy with a "following form" provision is acceptable if written verification is provided that the underlying policy names the City of Duluth as an additional insured.*

(4) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than 30 days prior to any cancellation, and 10 days prior to any non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverages ineffective as against the City.

B. The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Purchaser, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Contractor, its employees, agents and representatives in the negligent performance of work covered by this Agreement.

C. Certificates showing that Purchaser is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Contract and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Contract.

D. Purchaser shall be required to provide insurance meeting the requirements of this Section 18 unless Contractor successfully demonstrates to the satisfaction of the City Attorney, in the exercise of his or her discretion, that such insurance is not reasonably available in the market. If Purchaser demonstrates to the satisfaction of the City Attorney that such insurance is not reasonably available, the City Attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the City which is reasonably available.

20. GENERAL TERMS AND CONDITIONS

A. The Purchaser is an independent contractor for all purposes including Worker's Compensation and is not an employee or agent of the Seller. The Seller agrees that the undersigned Purchaser, except as otherwise specifically provided herein, shall have the sole control of the method, hours worked, time and manner of any timber cutting to be performed hereunder. The Seller reserves the right to inspect the job site for the purpose of ensuring compliance with the performance specifications established under this Contract. The Seller takes no responsibility for supervision or direction of the performance of any of the harvesting to be performed by the undersigned Purchaser or its employees. The Seller further agrees to exercise no control over the selection and dismissal of the Purchaser's employees.

B. This Contract may not be assigned without written approval from the Seller.

C. The Purchaser must inform the Seller of any subcontractor(s) performing work on this contract before subcontractor(s) begin work and the Purchaser shall be responsible for the performance of all subcontractor(s). Purchaser will ensure that:

- They, their employees and their sub-contractors have all necessary permits, approvals, or certifications required by law to conduct or support the work activities on site;
- Copies of City of Duluth work instructions, the timber sale contract and map(s) are available to employees at the work site at all times;
- Their employees and any sub-contractors working on the site, will be trained on City of Duluth work instructions that apply to their work activities;
- The timber sale contract and map(s) will be reviewed with Purchasers employees and any sub-contractors working on the site prior to commencement of work on the site; and
- Compliance with “Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines”.

D. This Contract, as well as reference to parts, exhibits, and attachments, shall constitute the entire agreement. Any amendments or addendums of the Contract shall be in writing, signed and dated by both parties.

E. During the term of the Contract, Purchaser shall bear risk of loss or injury, including liability for loss occurring from natural causes, acts of God, or human acts, including negligence, vandalism, trespass, or theft, for all timber products and species. Purchaser shall be responsible for obtaining insurance or self-insuring against risk of loss for the value of the sale.

F. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LOGGING REGULATIONS. Conduct of operations on this timber sale is subject to inspection for compliance with the logging operations regulations at 29 CFR 1910.266 by OSHA. This standard is applicable to the entire logging industry wherever logging operations occur. Information is available to assist Purchasers to ensure compliance with the logging operations regulations during conduct of this timber sale from the U.S. Department of Labor, Occupational Safety and Health Administration, OSHA, 525 S. Lake Ave., Ste 300 Duluth, MN 55802, 218-733-7830

SELLER

By: _____
Purchasing Agent

Date: _____

PURCHASER

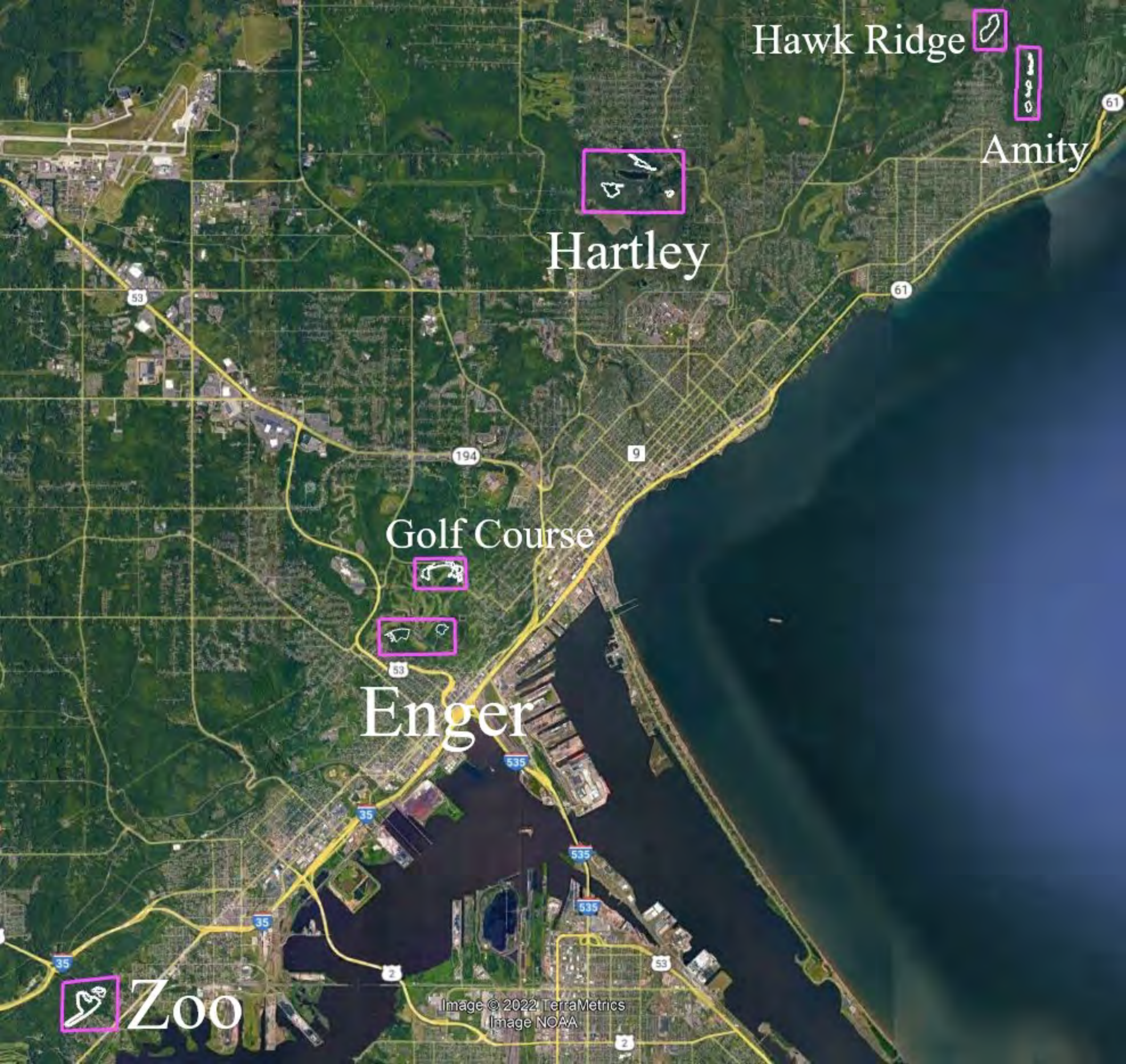
By: _____
Name

Company

Date: _____

Map	Stand	Species	Acres	V/Acre	Total Volume
Amity Creek Pine	Pine plantations	Red pine	6.3	21	132
		Aspen		3	19
		Total		24	151
Hawk Ridge Scots Pine		Scots pine	12	15.3	184
Hartley Pine Thinning	3 plantations	Red pine	9.6	26	250
Enger Pine and Aspen	Pine plantation	Red pine	1.3	7.1	9.2
		Jack pine		0.3	0.4
		Ash		0.3	0.4
		Spruce		0.8	1.0
		Sub-total		8.5	11
	Aspen & Ash	Ash	5.1	8.5	43
		Aspen		1	5
		Balsam poplar		1	5
		Sub-total		10.5	54
	White pine	White pine	4.1	6	25
		Aspen		4	16
		Scot's pine		2	8
		Sub-total		12	49
		Total			114
Golf Course Pine and Aspen	Aspen	Aspen	4.4	8.5	37
		Birch		0.55	2
		Sub-total		9.05	40
	Pine plantation	Red pine	4	5.6	22
		Jack pine		10.4	42
		Sub-total		16	64
		Total			104
Zoo Pine and Aspen	Pine plantation	Red pine	2.7	14.7	40
		Aspen		5	14
		Birch		1.4	4
		Sub-total		21.1	57
	Scrub aspen	Aspen	10.5	5	53
		Birch		0.3	3
		Maple		0.55	6
		Sub-total		5.85	61
	Better aspen	Aspen	9.1	9.15	83
		Balsam poplar		0.55	5
		Birch		0.7	6
		Sub-total		10.4	95
	White pine	White pine	1.7	14.25	24
		Aspen		1	2
		Ash		0.5	1
		Sub-total		15.75	27
		Total			240

Map	Species	Volume
Amity Creek Pine	Red pine	132
	Aspen	19
	Total	151
Hawk Ridge Scots Pine	Scots pine	184
Hartley Pine Thinning	Red pine	250
Enger Pine and Aspen	Red pine	9
	Jack pine	0.4
	White pine	25
	Aspen	21
	Ash	44
	Balsam poplar	5
	Spruce	1
	Total	105
Golf Course Pine and Aspen	Aspen	37
	Birch	2
	Jack pine	22
	Red pine	42
	Total	103
Zoo Pine and Aspen	Red pine	40
	Aspen	152
	Birch	13
	Maple	6
	Balsam poplar	5
	White pine	24
	Total	240
	Volume by Species Summary	
	Species	Volume
	Aspen	229
	Red pine	473
	Birch	15
	Ash	44
	Balsam poplar	10
	Spruce	1
	Maple	6
	Scot's pine	184
	Jack pine	22
	White pine	49
	Total	1033



Hawk Ridge

Amity

Hartley

Golf Course






Enger

Zoo

Image © 2022 TerraMetrics
Image NOAA

Amity Creek Pine

All stands have been marked for single-tree selection with orange paint. No stand boundaries have been marked. Access via ski trails, Seven Bridges Road and trail leading to 58th Ave E. Wood can be forwarded to Seven Bridges Road, field near the ski chalet and down the trail to 58th Ave W. Wood may not be piled on 58th Ave E.

-  Pine - Select, marked cut
-  Painted blue boundary - Operator select
-  Unpainted boundary - Operator select
-  Roads
-  Trails



Hawk Ridge Scots Pine



No boundaries marked. South boundary is Skyline Blvd. North boundary is Snively Trail. Both east and west boundaries are where the trees thin out and orange marks stop. All cut trees have been marked. Both Snively Trail and Skyline can be used to skid. Closure of Skyline Blvd is possible.

- Pine - Select, marked cut
- Painted blue boundary - Operator select
- Unpainted boundary - Operator select
- Roads
- Trails



Hartley Pine Thinning



Access will be through Woodland Ave and Hartley Road (Hartley Road Trail). None of the stands have been marked but will be individual-tree marked to remove the smallest and give space to the largest trees. Removal will total 1/3 of total volume. No stand boundaries will be marked.

- Pine - Select, marked cut
- Painted blue boundary - Operator select
- Unpainted boundary - Operator select
- Roads
- Trails

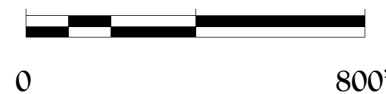


Enger Pine and Aspen



Pine plantation on west is marked, remove all marked stems. White pine on east is not marked but will be prior to cutting. Marked stems will include the smaller trees, those with serious defect and Scots pine. Cleared area under powerline can be used for skidding and landing. Aspen thinning includes significant ash. Remove 1/2 the volume by removing ash first then aspen. Remove all ash that could fall into Skyline Blvd. Leave as many healthy aspen as possible. Two paint lines define the aspen thinning area, they both end at a clearing on the south which defines the southern limit of the stand. Wood can be forwarded to the trail in pine plantation or across the road to golf course approach. Closure of Skyline Blvd is possible.

- Pine - Select, marked cut
- Painted blue boundary - Operator select
- Unpainted boundary - Operator select
- Roads
- Trails

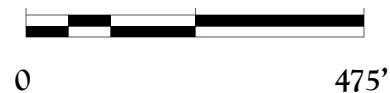
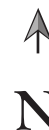


Golf Course Pine and Aspen



Blue boundaries painted adjacent to Observation Road end at a fairway or WDIO parking lot. Blue line from radio tower to the golf course fairway and driveway access marks southern boundary. No access across fairways, greens or other golf infrastructure. Pine is marked, remove all marked stems. Remove 1/2 of aspen stems taking any ash first, leaving trees that are healthiest.

- Pine - Select, marked cut
- Painted blue boundary - Operator select
- Unpainted boundary - Operator select
- Roads
- Trails



Zoo Pine and Aspen



DWP Trail forms southern border, Knowlton Creek Blvd and water line clearing the western and northern borders. None of those lines are marked. Blue paint line connects water line to DWP trail. Thin aspen by removing 1/2 of the stems, leaving the healthiest looking trees. Remove all marked trees in pine plantation and white pine stand. Northern painted line around aspen is marked in orange x's. Aspen between pine plantation and water line is the "Scrub aspen". The rest is under "Better aspen". Knowlton Creek Blvd, DWP trail north of Knowlton Creek and Old Thompson Hill Road can be used to skid.

- Pine - Select, marked cut
- Painted blue boundary - Operator select
- Unpainted boundary - Operator select
- Roads
- Trails

