

CONSTRUCTION PLAN

PRACTICE(S) 580 STREAMBANK & SHORELINE PROTECTION
 LANDOWNER ROBERT COOLEY JR.
 ADDRESS N11908 E. DEER LAKE RD. TOMAHAWK, WI 54487 (SITE ADDRESS)
 LANDOWNER PHONE NO. 608-208-5129 COUNTY LINCOLN
 TOWNSHIP BRADLEY T 35 N, R 6 E, Sec. 01
 FIELD OFFICE LINCOLN COUNTY LAND SERV. TELEPHONE NO. 715-539-1054

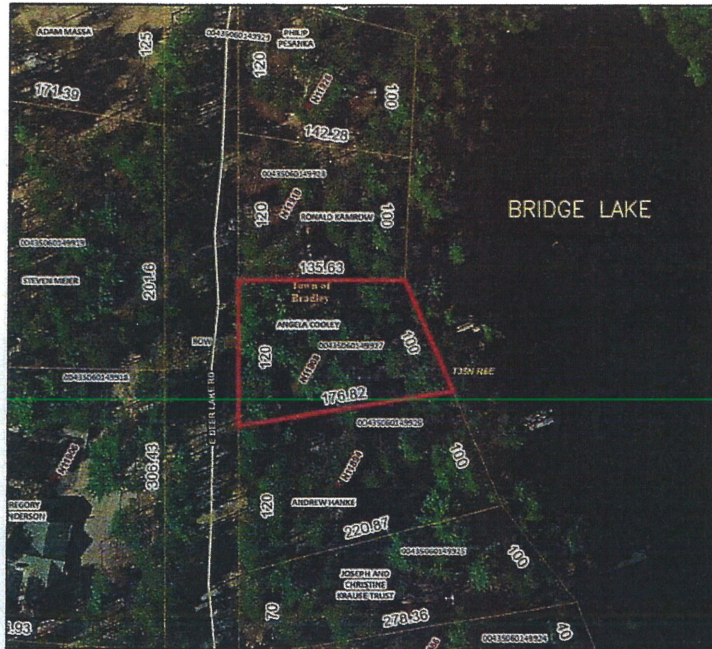
DIGGERS HOTLINE
Call 3 Work Days
Before You Dig!

Nationwide
811

Toll Free
1-800-242-8511

TDD
1-800-542-2289

Website
www.diggershotline.com



LOCATION MAP

NOTICE TO LANDOWNERS AND EXCAVATORS

Any representation made by the USDA, Natural Resources Conservation Service, or the LINCOLN County LCD, as to the approximate location or nonexistence of above or under ground hazards does not relieve the owner of the property or the excavator that is hired to complete construction, from notifying Diggers Hotline of the pending construction. You will be liable for damages resulting from construction activities.
 Call Diggers Hotline! Ticket Number _____

CONSTRUCTION DRAWINGS AND SPECIFICATIONS ACCEPTANCE

I have reviewed and understand the construction plans and specifications and agree to complete the work accordingly. Failure to meet these plans and specifications may jeopardize any continued NRCS technical assistance or program cost sharing applied for. I understand that it is my responsibility to secure all necessary permits and licenses, and to complete the work in accordance with all local, state, and federal laws. Modification of these construction plans or specifications must be approved by the NRCS before installation. I assume all responsibility for negotiations and contract agreements with the construction contractors.

Landowner Signature: Robert Cooley Date: 1-5-22 / 1/24/2022
 Designed by: THOIMAS J. BOISVERT Date: NOVEMBER, 2021
 Checked by: Stacy D. Dehne Date: 12-10-21
 Approved by: Stacy D. Dehne Date: 1-3-22

The installed practices comply with applicable NRCS technical standards and specifications. The "redlined" construction plans (as-built drawings) reflect changes made during construction.

Construction Approved by: _____ Date: _____

CONSTRUCTION NOTES

1. It is the landowner's and contractor's responsibility to notify the owners of any utility, such as buried cable or pipelines, that may be present in the construction area, before the start of construction so that they may locate and stake such utilities. Contact diggers hotline 3 working days before digging.
2. A pre-construction meeting with DATCP, WVIC, Lincoln County, contractor, and landowner must occur before construction begins. The contractor must notify Lincoln County at least five (5) working days in advance of starting the project. No work will be performed prior to the contract and the operation and maintenance agreement being signed.
3. Follow Wisconsin construction specifications 2 (Excavation), 3 (Earthfill), 5 (Site Pollution Control), 7 (Mobilization and Demobilization), 9 (Rock RipRap), 13 (Geotextiles), 710 (Seeding Establishment), and WI Biology Technical Note 1 attached for related aspects of the project.
4. Remove existing seawall which includes boards, pilings, bricks, cinder blocks, and plastic backing. Existing rock can be saved and used in new riprapping. Earthwork shall also consist of removal of any garbage (i.e. bottles, glass, metals, etc.) encountered. Debris shall be removed from site.
5. Rock to be placed will have a D50 rock size of eight (8) inches to comply with Wisconsin Department of Natural Resources (WDNR) permit standards and Natural Resources Conservation Service (NRCS) design standards. The rip rap will be placed on top of Class 1 non woven geotextile fabric. Rock and geotextile shall meet WI Construction Specifications 9 and 13 attached to this plan.
6. The riprapping shall have a 2:1 slope (horizontal:vertical) or shallower on the face of the rock, and extend no further than 8 feet waterward. Area of protection should be along the 100 feet of owned frontage – 0+00 to 0+100 as shown on plan view.
7. Riprap will be limited to an elevation above the ordinary high water mark (OHWM) as allowed by the WDNR. Top of rock will be at elevation 1464.5. Bottom of rock will be at approximately 1461 when the project is completed.
8. Lakebed will be excavated the entire length to create a 1'x1' trench to be filled with rock. Taper ends to shore. Double the thickness of rock for a distance of 4 feet at the upstream and downstream ends of the riprapping.
9. Access to the shoreline shall be done in the least damaging way possible to preserve existing vegetation. Any bare ground caused during construction shall be seeded and protected with 100% biodegradable erosion control blanket. Blanket shall be staked according to manufacturer's recommendations.
10. Vegetated planting shall be installed as shown on seeding Area 1 (Sheet 10 of 16).
11. All heavy equipment used within the construction site shall be clean to prevent the spread of invasive species and well maintained. All equipment lines and fittings shall be checked on a daily basis to ensure they are in good working order. The contractor is responsible for all aspects of cleanup from accidental spills. Refer to WI Construction Specifications 5 (attached) for details on Construction Site Pollution Control.
12. If a significant archaeological or historical site is found, cease construction immediately and contact Lincoln County staff at 715-539-1054 or WVIC staff at 715-848-2976. Redesign, relocation, or deletion of a cost-share practice may be needed to preserve an archaeological or historical site.



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CONSTRUCTION NOTES

CLIENT: COOLEY, ROBERT

COUNTY: LINCOLN

	Date	
Designed <u>TJB AND SDD</u>	<u>11/2021</u>	
Drawn <u>TJB AND SDD</u>	<u>11/2021</u>	
Checked _____		
Approved _____		

File Name

Date
08/14

Sheet 3 of 16

Don't Give Invasive Species A Free Ride



INVASIVE SPECIES are threatening our forests and grasslands, dramatically decreasing their value and the benefits these resources provide.

Equipment operators play a critical role in slowing the spread of invasive species.

WHAT YOU NEED TO KNOW ABOUT INVASIVES

- Invasive species are nonnative plants, animals, and diseases that cause harm to the economy, environment, and human health.
- Invasive plants reproduce and grow quickly, easily invading natural areas. They reduce native plants and impact the animals that depend on these natives for food and shelter. *Invasive shrubs can increase erosion by shading out ground layer plants that hold the soil.*
- Invasive insects and diseases can kill trees. Invasive earthworms contribute to bare and eroding soils and diminish mineral content.
- Invasive species pose a threat to Wisconsin's properties, which provide important environmental, social, and economic values such as recreation, reduced storm water run-off and less erosion.

WHAT DOES THIS HAVE TO DO WITH YOU?

- Mud on equipment can move invasive plant seeds, insects, and diseases.
- Invasive seeds can also be moved on clothing and boots.
- Invasive species can have the following impacts: displace, weaken, or kill desirable plants resulting in loss of diversity; degrade wildlife habitat; interfere with recreational activities; disrupt ecosystems; and divert millions of dollars for their control.
- Concerns about spreading invasive species may impact project management.

WHAT YOU CAN DO

- Learn to identify invasive species.
- Scout for invasive species and plan activities to limit their introduction and spread.
- Clean soil and plant parts from equipment before moving off site.
- Avoid the movement of invasives to non-infested areas during activities.
- Avoid invasive species during activities.
- Minimize soil disturbance.
- Stabilize disturbed soils as soon as possible.
- Properly dispose of materials containing invasive species.

More information on these voluntary Best Management Practices can be found on the back side of this document.



Important Details About Best Practices

Considerations for Cleaning Equipment

- Prior to moving equipment from an infested area clean soils, seeds, plant parts, or invertebrates from exterior surfaces to minimize the risk of transporting invasive species.
- Use the most effective method of cleaning that is practical. Effective tools include: brushes, brooms or other hand tools; car washes; high pressure air; steam cleaning; or portable wash stations.
- Do not clean equipment in or near waterways as this may promote the spread of invasives downstream.

Considerations for Stabilizing Disturbed Soil

- For detailed information on this subject, please refer to the *Best Management Practices for Transportation and Utility Rights-of-Way Manual* sections on Soil Disturbance, Revegetation and Landscaping, and Appendix G: Species Recommended for Revegetation.

<http://council.wisconsinforestry.org/invasives/transportation/pdf/ROW-Manual.pdf>

Considerations for Invasive Plant Control and Management

- Invasive Species Control, including chemical and mechanical methods: <http://dnr.wi.gov/invasives/control.htm>
- Invasive Plant Identification: <http://dnr.wi.gov> and search for “terrestrial plants”

What Is the Invasive Species Rule?

Introduction

The Invasive Species Identification, Classification, and Control Rule (Wis. Adm. Code Chapter NR 40) went into effect on September 1, 2009. The rule establishes a comprehensive, science-based way to classify and regulate invasive species in Wisconsin. The rule divides species into 2 categories, “Prohibited” and “Restricted,” with different regulations and control requirements. The rule also establishes “Preventative Measures” to show what actions we can take to slow the spread of invasive species. Chapter NR 40 covers over 128 species, including plants, animals, and microorganisms. The rule affects everyone in Wisconsin.

Prohibited Invasive Species*

- Not yet in the state or only in a few places
- Likely to cause environmental and/or economic harm
- Eradication and prevention is feasible

Regulations: Cannot transport, possess, transfer, or introduce without a permit.** Control is required. DNR may order or conduct a control effort.

Restricted Invasive Species*

- Already widely established in the state
- High environmental and/or economic impacts
- Complete eradication is unlikely





Regulations: Cannot transport, transfer, or introduce without a permit.** Possession is allowed except for fish or crayfish. Control is encouraged but not required.

Preventative Measures

- Certain preventative measures are required under NR 40. These include actions such as removing plants and draining water from boats, complying with pest quarantines, and others.
- Best Management Practices will also aid in rule compliance.

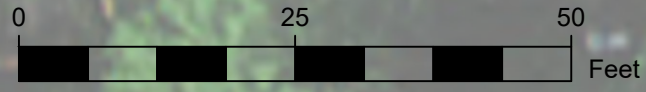
*Any viable part of the species is covered by these regulations.


** Certain exemptions do exist with these regulations. Please consult with the website or staff for clarifications.

LEGEND	
	CONTOUR LINE
	CROSS SECTION
	TEMPORARY BENCHMARK
	RIP RAP

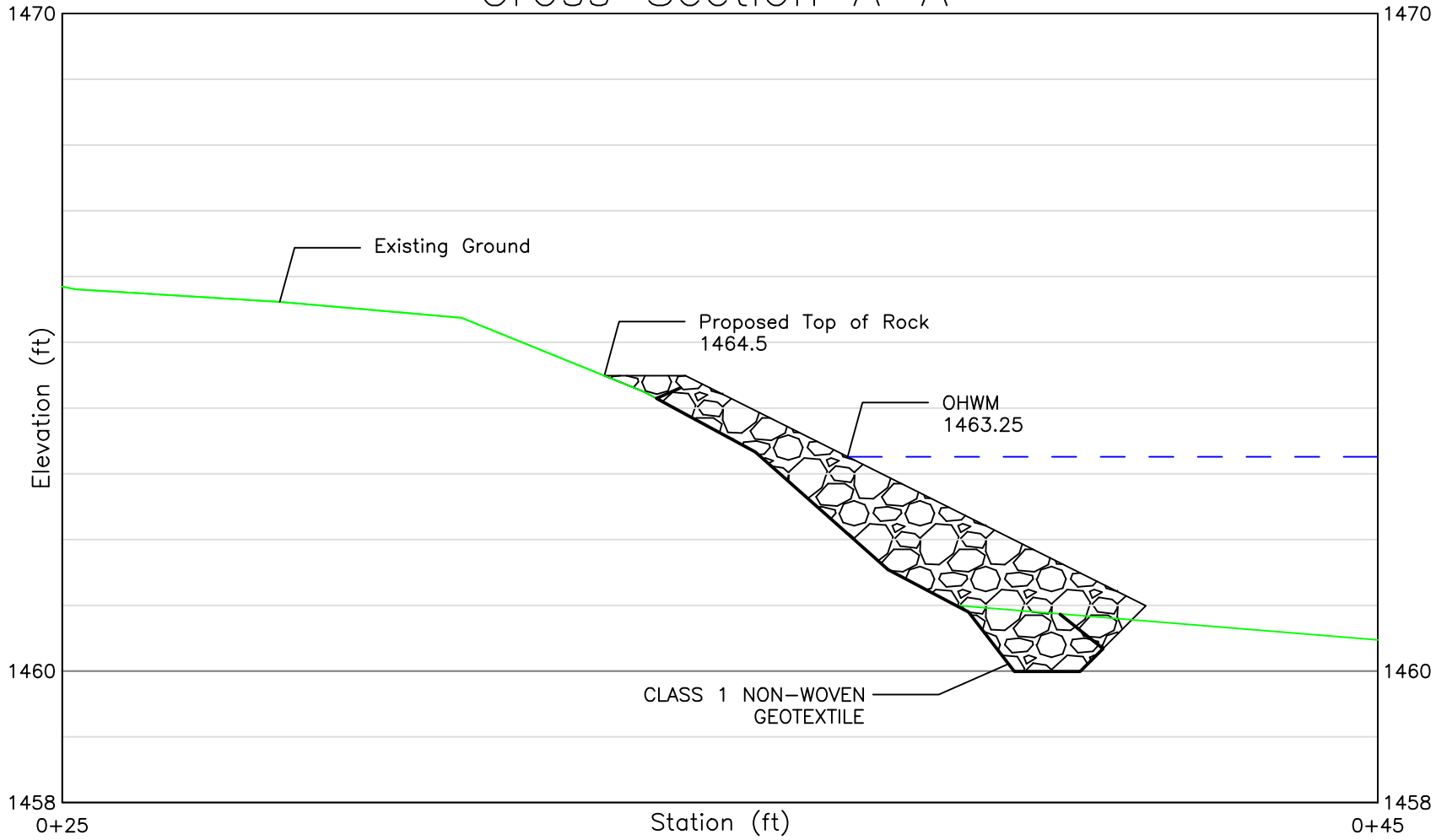
TEMPORARY BENCHMARK
 Top of Concrete Riser
 256439.54
 392148.76
 1478.66

APPROXIMATE HOUSE
 LOCATION



 United States Department of Agriculture Natural Resources Conservation Service	PLAN VIEW		File Name WI-007
	CLIENT: COOLEY, ROBERT COUNTY: LINCOLN	Date 08/14	Date 08/14
Designed TJB AND SDD 11/2021 Drawn TJB AND SDD 11/2021 Checked _____ Approved _____			

Cross Section A-A'



File Name	WI-007
Date	08/14
Sheet	7 of 16

Designed	TJB AND SDD	Date	11/2021
Drawn	TJB AND SDD	Date	11/2021
Checked		Approved	

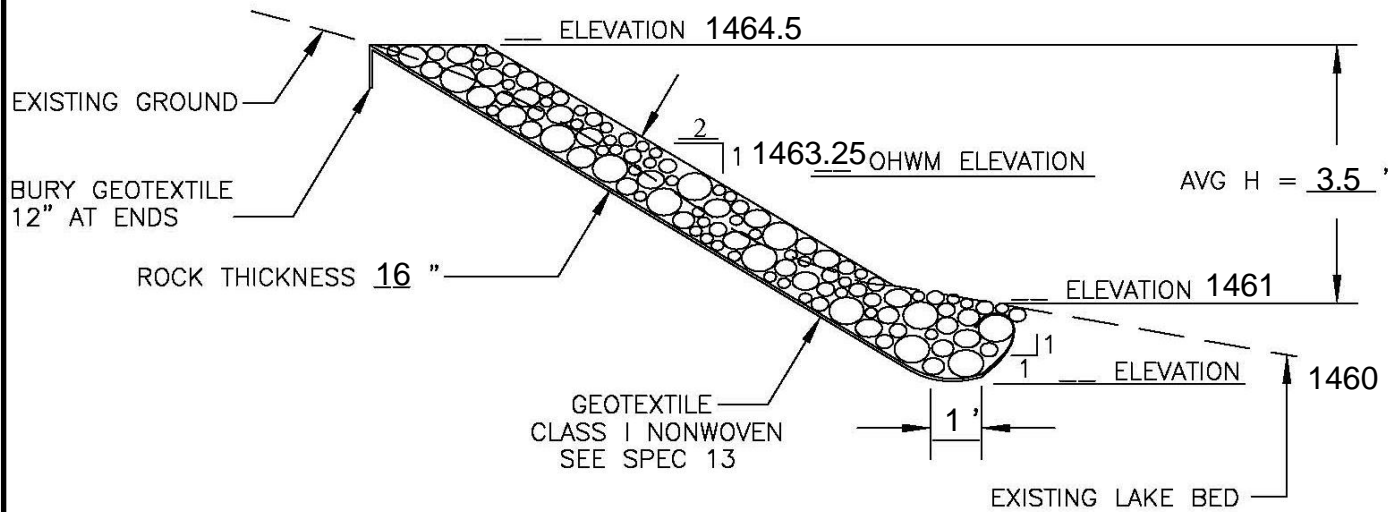
PLAN VIEW

CLIENT: COOLEY, ROBERT
 COUNTY: LINCOLN



United States
Department of
Agriculture

**Natural Resources
Conservation Service**



TYPICAL CROSS SECTION

GRADATION OF ROCK		QUANTITY ESTIMATE *	
PERCENT PASSING BY WEIGHT	SIZE (INCHES)	SITE PREPARATION	
100	<u>16</u>	CLEARING	<u>1</u> JOB
60-85	<u>12</u>	ROCK FOR RIPRAP (WI CONST. SPEC. 9)	<u>N/A</u> JOB
25-50	<u>8</u>	GEOTEXTILE (WI CONST. SPEC. 13)	<u>50</u> CU. YD.
5-20	<u>6</u>	CLASS <u>1</u> (WOVEN) (NONWOVEN)	<u>140</u> SQ. YD.
0-5	<u>N/A</u>	PLANT MATERIALS	<u>various</u> EA

*ESTIMATED TO THE NEAT LINES AND GRADE

NOTES:

1. DOUBLE THE ROCK THICKNESS FOR A DISTANCE OF 2 FEET AT THE ENDS OF THE RIPRAP. BLEND THE ROCK SURFACE TO MATCH THE EXISTING GRADE.

- Riprap shall follow existing contour of shoreline.
- Wrap geotextile fabric at the toe of riprap.
- Riprap shall not extend further than 8 feet waterward.

THIS STANDARDIZED DESIGN MUST BE ADAPTED TO THE SPECIFIC SITE.

RIPRAP PROTECTION WITH GEOTEXTILE (ABOVE OHWM WITH TOE-IN) CLIENT: <u>Robert Cooley</u> COUNTY: <u>Lincoln County, WI</u>	Date	Drawing No.
	Designed by: <u>NAME</u> 05/2001	WI-XXX
	Drawn by: <u>NAME</u> 05/2001	Date:
	Checked by: _____	10/2005
Approved by: _____		Sheet:
		8 of XX



File Name
WI-007

Date
08/14

Sheet 9 of 16

Date
11/2021

Designed TJB AND SDD

Drawn TJB AND SDD

Checked

Approved

PLAN VIEW

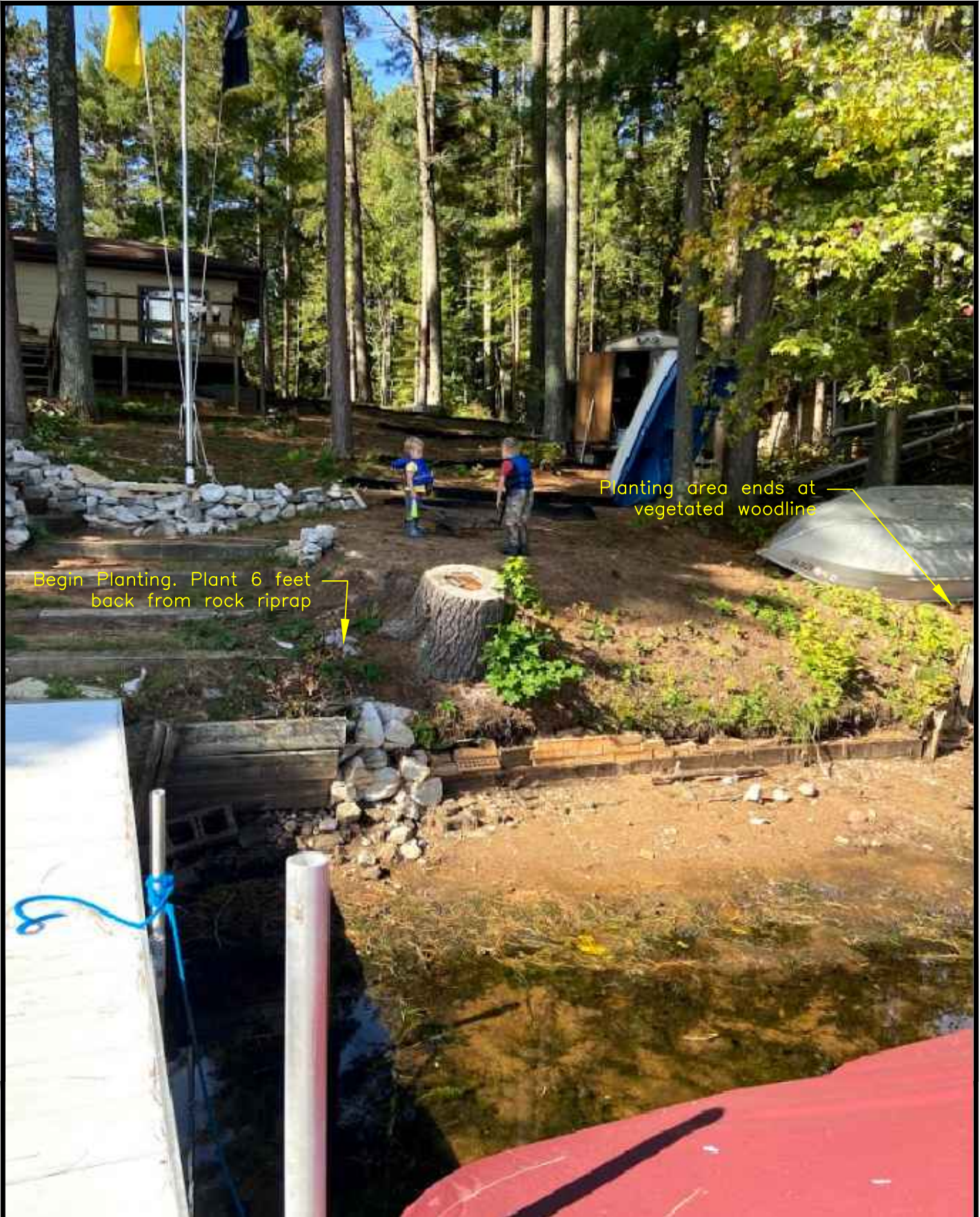
CLIENT: COOLEY, ROBERT

COUNTY: LINCOLN

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Natural Resources
Conservation Service



SEEDING AREA 1


CLIENT: COOLEY, ROBERT
 COUNTY: LINCOLN

Date 11/2021
 Designed TJB AND SDD
 Drawn TJB AND SDD
 Checked _____
 Approved _____

File Name WI-007
 Date 08/14
 Sheet 10 of 16

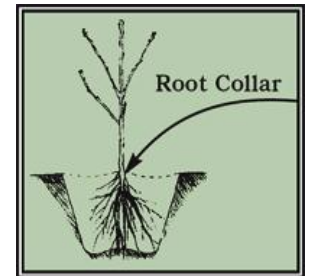
PLANTING PLAN NOTES

1. Wisconsin Biology Technical Note 1 is enclosed. This booklet includes information you and/or your landscaper will need to prepare your site and complete plantings.
2. You must choose plants from the Native Vegetation List provided in this plan on page 8. This list is approved by the Wisconsin Valley Improvement Company (WVIC). Use scientific names when purchasing plants.
3. No substitutions to the approved plant list may be made without prior approval from Lincoln County and WVIC.
4. Lincoln County must receive a list of species and quantities planted before cost-share funds are distributed.
5. Location of vegetation will be 6 feet behind the rock riprap in seeding area 1.
6. Plant one (1) plant per hole. Depth of the hole should be deep and wide enough as to not bunch roots.
7. Plants shall be evenly distributed in the areas designated for plantings, and the correct plants placed in the correct habitat (sun, shade, etc.).
8. All plants shall be in good condition at the time of the planting, and planting shall be done at an optimal time during the year.
9. Cover newly planted areas with a 100% biodegradable erosion control blanket, unless otherwise noted.
10. Annual rye grass for nurse crop not to be seeded after September 15th.
11. Water the newly planted vegetation on a regular basis.
12. Remember, this is a restoration of a shoreland area and the goal is for it to look natural, not landscaped.

 <p>United States Department of Agriculture</p> <p>Natural Resources Conservation Service</p>	<p>PLANTING PLAN NOTES</p> <p>CLIENT: <u>COOLEY, ROBERT</u></p> <p>COUNTY: <u>LINCOLN</u></p>	<p style="text-align: right; font-size: small;">Date</p> <p>Designed <u>TJB AND SDD 11/2021</u></p> <p>Drawn <u>TJB AND SDD 11/2021</u></p> <p>Checked _____</p> <p>Approved _____</p>	<p>File Name</p> <hr/> <p>Date</p> <p>08/14</p> <hr/> <p>Sheet 11 of 16</p>
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Planting Suggestions for Successful Shoreland Buffer Restorations

- **Landowners are responsible for maintaining restoration plantings and ensuring their survival.** If shrubs or trees die due to wildlife, weather, neglect, etc., additional replacement plantings will be required.
- **Deciduous trees should be at least 5 feet tall and conifers (evergreens) should be at least 3 feet tall when planted. Shrubs should be at least 1-2 feet tall and/or purchased in at least a 3 gallon pot.** Exceptions can be made if purchasing shrubs and trees in “bare-root” form. Shrubs should be planted 2-5 feet apart. Trees distances vary, read the directions on tags.
- **Planting holes should be dug 3 times wider than the container or root ball** and just deep enough so the top of the root ball is at ground level. The majority of tree/shrub roots grow outwards not downwards.
- **Soil amendments such as compost should be mixed thoroughly with the existing soil on the property.** First, dig the hole and place the removed soil in a pile. Then mix the compost thoroughly with the pile of soil (1/3 compost to 2/3 soil for sandy soils). Do not simply add a soil amendment to the hole you are planting in as this can lead to poor root development. All soil amendments need to be mixed completely into the existing soil to be effective.
- Before planting potted trees and shrubs, **the root ball needs to be loosened.** This can be done by cutting into the root ball vertically from the top to the bottom with a knife and then loosening the root ball with your fingers. If there are roots encircling the plant, they should be pulled apart so the roots extend outward in all directions.
- **Make sure trees and shrubs are not planted too deep.** Keep the root collar at or above the soil surface. The root collar is the highest point on the trunk or stem where a root is attached. If trees and shrubs are planted too deep, they will likely die. See figure.
- **Mulching 3-4 inches deep around trees and shrubs is highly recommended to help retain soil moisture and limit weed growth.** This is especially important for seasonal landowners who are unable to water frequently throughout the growing season. Be sure not to put an excessive amount of mulch around new plants as this will smother them.
- **Shrubs, trees, and groundcovers need to be watered often and thoroughly during the first few growing seasons.** Additional watering in subsequent years is recommended during dry periods when there is inadequate rainfall. Newly planted trees and shrubs need at least 1 inch of rain/water a week. Occasional deep watering that fully saturates the top 12 inches of the soil is ideal for good root development. Frequent and brief watering that only soaks the first few inches of soil can lead to shallow rooting of the tree/shrub which makes it more prone to drought stress in subsequent years. In other words, a couple of long and deep soakings each week are better than a little water each day.
- If a lot of deer are coming into your yard, **it is strongly recommended to fence around trees and shrubs during the first couple growing seasons to reduce any deer damage.** This can be done using metal wire mesh or a similar material. Deer and rabbit repellent are also effective if applied correctly.



Robert Cooley Plant List

Vilas-Sayner Soil (loamy sand), Pine dominated canopy, partial to full sunlight area

Minimum planting for this site is 30 ground cover and 4 shrubs

Area to be planted is approximately 180 square feet

Shrubs (Plant 4)

Common Name	Scientific Name (Use this name when purchasing)
Beaked Hazelnut	<i>Corylus cornuta</i>
Gray Dogwood	<i>Cornus racemosa</i>
Low-bush Blueberry	<i>Vaccinium angustifolium</i>
Low-bush Honeysuckle	<i>Diervilla lonicera</i>
Serviceberry	<i>Amelanchier spp.</i>
Snowberry	<i>Symphoricarpos alba</i>
Sweet Fern	<i>Comptonia peregrinea</i>

Ground Cover (Plant 30)

Common Name	Scientific Name (Use this name when purchasing)
Barren Strawberry	<i>Waldsteinia fragarioides</i>
Black Eyed Susan	<i>Rudbeckia hirta</i>
Canada Goldenrod	<i>Solidago canadensis</i>
Canada Mayflower	<i>Maianthemum canadense</i>
Common Milkweed	<i>Asclepias syriaca</i>
Indian Grass	<i>Sorghastrum nutans</i>
Lanceleaf Coreopsis	<i>Coreopsis lanceolata</i>
Large Leaf Aster	<i>Eurybia macrophylla</i>
Partridgeberry	<i>Mitchella repens</i>
Prairie Dropseed	<i>Sporobolus heterolepsis</i>
Pussytoes	<i>Antennaria spp.</i>
Switchgrass	<i>Panicum virgatum</i>
Wild Lupine	<i>Lupinus perennis</i>
Wild Strawberry	<i>Fragaria virginiana</i>
Yarrow	<i>Achillea millefolium</i>

Planting should have a variety of plants. Plant several different species.

Operation and Maintenance Plan Shoreline Protection (Riprap)

Cooperator: ROBERT COOLEY

Date: NOVEMBER, 2021

By: THOMAS J. BOISVERT

Title: CONSERVATION PROGRAM MANAGER

Project Location: N11908 E. DEER LAKE RD. TOMAHAWK, WI 54487

The owner or sponsor of this project is responsible for the rock riprap shoreline protection. It must be recognized that any project needs to be properly operated and maintained including periodic inspection. The following guidelines have been prepared for the operation and maintenance of this protection measure.

1. Inspect the project regularly, especially following strong winds and spring break-up of the ice, for erosion or displacement of rocks. Repair damage immediately by replacing any dislodged rock, removing debris, and filling and/or reseeding as necessary. Be especially careful to cover all exposed filter material (geotextile).
2. Check for sloughing, erosion, or damage to the installed practice. Damaged areas shall be repaired immediately in accordance with the original plan.
3. Equipment used on the lakeshore (for dock removal, boat launching, yard maintenance, etc.) must be kept away from the project to avoid damage to the project and the soil it is protecting.
4. Maintain vegetated areas in adequate cover to reduce the potential for erosive velocities of water moving on bare soils – particularly on the slope towards the lake. Maintenance of vegetation includes regular watering installed plants until fully established, and during drought. At the end of the growing season, allow dead vegetation to remain in place as it becomes a valuable seed source for next years growth.
5. Vegetation Removal:
 - a.) Weeding: Weeds may be pulled for the first three (3) years to promote native plant establishment.
 - b.) Trees and Shrubs – remove dead or windblown trees only if they pose a safety hazard, otherwise leave this debris for fish and wildlife habitat.
 - c.) Monitor for exotic/invasive species, and remove them from the vegetated area if they arise.
6. Protect against deer and other animals browsing in the "no-mow" zone and planted area with the use of fencing and/or landscape products available to spray on plants to deter them (such as red pepper spray).
7. Notify Lincoln County within two (2) weeks if issues arise.

I have read the guidelines for the maintenance of the lakeshore stabilization project and agree to follow the guidelines for ten (10) years.

Cooperator's signature: Robert Cooley Date: 1/24/2022

I have discussed the maintenance guidelines with the above cooperator.

Conservationist's signature: _____ Date: _____



United States
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Natural Resources
Conservation Service

OPERATIONS & MAINTENANCE PLAN

CLIENT: COOLEY, ROBERT

COUNTY: LINCOLN

Designed TJB AND SDD 11/2021

Drawn TJB AND SDD 11/2021

Checked _____

Approved _____

File Name

Date
08/14

Sheet 14 of 16

Construction Quality Assurance Plan Shoreline Protection

(page 1 of 2)

LANDOWNER: ROBERT COOLEY

LOCATION OF PRACTICE OR PLAN ID: N11908 E. DEER LAKE RD. TOMAHAWK, WI 54487

INSPECTOR: THOMAS J. BOISVERT APPROVER: _____ Date: _____

ENGINEERING JOB CLASS: _____

Initial and date items as completed. Date all additional documentation and keep in construction file.

PRE-CONSTRUCTION

- Verify that the landowner or contractor notified all utilities prior to construction. Document DIGGERS HOTLINE Ticket Number
_____.
- Obtain copies of PERMITS, or documentation that they aren't needed.
- Inspect EROSION CONTROL PRACTICES (silt fence, etc.) Document proper installation with photographs or diary notation.

MATERIALS

- ROCK RIPRAP MATERIAL. Verify that the material meets the soundness requirements in Wisconsin Construction Specification 9; obtain a document for the case file or record observations in writing. Verify the gradation using the Wisconsin Engineering Spreadsheets and Wisconsin Construction Specification 9 and the Wisconsin Supplement to the USDA Engineering Field Handbook Chapter 17. Print the spreadsheet for documentation.
- GEOTEXTILE MATERIALS. Verify that the material meets the requirements in Wisconsin Construction Specification 13, Table 2, geotextile. Attach a copy of the manufacturer's material specifications. Record observations in the job diary and take photographs of the material tag.
- SEED. Document species, quantities of pure live seed, and date seeded. Verify that it meets requirements of WI-710 drawing. Place seed tag in construction documentation file.
- EROSION CONTROL blanket material. Obtain a tag from the material or an invoice or product brochure from the supplier.
- MULCH. Document type used and quantity.

CONSTRUCTION

- STAKE the location of the stream bank protection at each end.



United States
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QUALITY ASSURANCE PLAN

CLIENT: COOLEY, ROBERT

COUNTY: LINCOLN

	Date
Designed	TJB AND SDD 11/2021
Drawn	TJB AND SDD 11/2021
Checked	_____
Approved	_____

File Name

Date
08/14

Sheet 15 of 16

Construction Quality Assurance Plan Shoreline Protection

(page 2 of 2)

- Verify that EXCAVATED MATERIALS are used/disposed of according to sections 2 and 3 of Wisconsin Construction Specification 2. Document the observation in the job diary.
- STAKE STREAM BANK. STAKE the location and sub-grades of the slope. Record the staking notes in the engineering field book.
- SURVEY CROSS-SECTIONS of completed streambank excavation PRIOR TO RIP RAP placement. Minimum is one cross-section for each 300'. Verify:
 ----- Slopes -Planned slopes are 2:1
 ----- Final Length -Planned length is 100'
- OBSERVE THE GEOTEXTILE PLACEMENT. Verify correct overlap and anchorage per plans and Wisconsin Construction Specification 13. Obtain photographs and record observations in the job diary.
- OBSERVE THE ROCK RIPRAP PLACEMENT. Verify that geotextile material is not damaged or displaced during riprap placement. Note height of rock drop onto geotextile. Obtain photographs and record observations in the job diary.
- OBSERVE THE INSTALLATION OF THE EROSION CONTROL blanket material; verify that installation follows the construction specification, record observations in the job diary.


FINAL INSPECTION

- SURVEY FINAL CROSS-SECTIONS of completed stream bank AFTER RIPRAP placement. Minimum is one cross-section for each 300'. Verify:
 ----- Slopes -Planned slopes are 2:1
 ----- Riprap thickness -Compare with sub-grade survey. Planned riprap thickness is 16"
 ----- Final Length -Planned length is 100'
- Verify that all disturbed areas are seeded, and vegetated according to plan.
- Document installed quantities (payment units) of the practices. Note: Financial assistance programs may have payment units different than the e-FOTG conservation practice standards reporting units.

Document all of the above with photographs, data in engineering field book and job diary.

I have reviewed this plan and understand my responsibilities in the quality assurance needed for my project.

Landowner's Signature: Robert Cooley Date: 1/24/2022

 <p>United States Department of Agriculture Natural Resources Conservation Service</p>	<p>QUALITY ASSURANCE PLAN</p>	<p>Designed <u>TJB AND SDD</u> Date <u>11/2021</u></p>	<p>File Name</p>
	<p>CLIENT: <u>COOLEY, ROBERT</u></p>	<p>Drawn <u>TJB AND SDD</u> Date <u>11/2021</u></p>	<p>Date</p>
	<p>COUNTY: <u>LINCOLN</u></p>	<p>Checked _____</p>	<p><u>08/14</u></p>
	<p>Approved _____</p>	<p>Sheet 16 of 16</p>	