

**RESOLUTION NO. 24-057**  
**Riley-Purgatory-Bluff Creek Watershed District**  
**Board of Managers**

**Authorizing Administrator to enter into an agreement with Landbridge to perform three years of maintenance for St Hubert's Water Quality Improvement Project**

Manager \_\_\_\_\_ offered the following resolution and moved its adoption seconded by Manager \_\_\_\_\_:

**WHEREAS** Riley-Purgatory-Bluff Creek Watershed District developed and adopted a watershed management plan pursuant to Minnesota Statutes section 103B.251 which identifies potential projects including a water quality and stormwater abstraction project to improve water quality in Rice March Lake watershed;

**WHEREAS** at its October 2, 2019, meeting, the RPBCWD Board of Managers adopted a plan amendment to include water quality best management practices on the campus of St Hubert's Catholic School (the Project) in accordance Minnesota Statutes section 103B.314; and

**WHEREAS** at its February 2, 2020, meeting, the RPBCWD Board of Managers ordered the Project in accordance with Minnesota Statutes section 103B.251; and

**WHEREAS** at its May 10, 2021, meeting, the RPBCWD Board of Managers awarded the Project to Minger Construction; and

**WHEREAS** legal counsel for the RPBCWD Board of Managers drafted an agreement which was subsequently executed by the District Administrator; and

**WHEREAS** at its April 12, 2023, meeting, according to internal policy for substantially completed work, the RPBCWD Board of Managers authorized pay application #2 including retainage; and

**WHEREAS** the subcontractor, Traverse des Sioux failed to maintain the prairie that they had established which subsequently became dominated by Canada thistle and legumes; and

**WHEREAS** Minger Construction has agreed to, and has entered into, an agreement with Landbridge Ecological Services to eradicate the non-native and invasive species, prepare the planting surface, and replant the prairie in a manner consistent with the approved plans at their expense; and

**WHEREAS** prairie establishment requires intensive management during the initial establishment period; and

**WHEREAS** the RPBCWD Board of Managers have indicated it is a priority of theirs to convert land to native species or protect already native areas for multiple benefits.

**NOW THEREFORE BE IT RESOLVED** that the RPBCWD Board of Managers authorizes the RPBCWD Board of Managers authorizes the administrator to enter into an agreement, prepared by Smith Partners, legal counsel to the RPBCWD, for three years of maintenance at

a cost not to exceed \$34,155.

The question was on the adoption of the resolution and there were \_\_ yeas and \_\_ nays as follows:

	<u>Yea</u>	<u>Nay</u>	<u>Abstain</u>	<u>Absent</u>
<b>CRAFTON</b>				
<b>DUEVEL</b>				
<b>NELSON</b>				
<b>PEDERSEN</b>				
<b>ZEIGLER</b>				

Upon vote, the president declared the resolution \_\_\_\_\_.

Dated: September 11, 2024

\* \* \* \* \*

I, Tom Duevel, secretary of the Riley-Purgatory-Bluff Creek Watershed District, hereby certifies that I have compared the above resolution with the original thereof as the same appears of record and on file with RPBCWD and find the same to be a true and correct transcription thereof, and further that the resolution is in full force and effect on this date, and Resolution 23-023 has not been modified, amended or rescinded since its adoption.

IN TESTIMONY WHEREOF, I set my hand this \_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Tom Duevel, Secretary



**Agreement between  
Riley-Purgatory-Bluff Creek Watershed District and  
Landbridge Ecological**

**St. Hubert Water Quality Project – Vegetation Establishment & Maintenance**

This agreement is entered into by the Riley-Purgatory-Bluff Creek Watershed District, a public body with powers set forth at Minnesota Statutes chapters 103B and 103D (RPBCWD), and Landbridge Ecological LLC, a private Minnesota corporation (Landbridge). In consideration of the terms and conditions set forth herein and the mutual exchange of consideration, the sufficiency of which hereby is acknowledged, RPBCWD and Landbridge agree as follows:

1. Scope of Work

Landbridge will perform the three years of management of native seeding areas as described and shown in the [DATE], scope of work attached as Exhibit A (the Vegetation Work). Exhibit A is incorporated into this agreement and its terms and schedules are binding on Landbridge as a term hereof, except that in the event of any actual or perceived discrepancy, conflict or inconsistency between any term in Exhibit A and the terms of this agreement, the terms of this agreement will prevail. RPBCWD, at its discretion, in writing may at any time suspend work or amend Exhibit A to delete any task or portion thereof. Authorized work by Landbridge on a task deleted or modified by RPBCWD will be compensated in accordance with paragraphs 5 and 6. Time is of the essence in the performance of the Vegetation Work.

2. Independent Contractor

Landbridge is an independent contractor under this agreement. Landbridge will select the means, method and manner of performing the Vegetation Work. Nothing herein contained is intended or is to be construed to constitute Landbridge as the agent, representative or employee of RPBCWD in any manner. Personnel performing the Vegetation Work on behalf of Landbridge or a subcontractor will not be considered employees of RPBCWD and will not be entitled to any compensation, rights or benefits of any kind from RPBCWD.

3. Subcontract and Assignment

Landbridge will not assign, subcontract or transfer any additional obligation or interest in this agreement or any of the Vegetation Work without the written consent of RPBCWD and pursuant to any conditions included in that consent. RPBCWD consent to any subcontract does not relieve Landbridge of its responsibility to perform the Vegetation



Work or any part thereof, nor in any respect its duty of care, insurance obligations, or duty to hold harmless, defend and indemnify under this agreement.

#### 4. Duty of Care; Indemnification

Landbridge will perform the Vegetation Work with due care and in accordance with national standards of professional care. Landbridge will defend RPBCWD and the Church of Saint Hubert of Chanhassen, their officers, board members, employees and agents from any and all actions, costs, damages and liabilities of any nature arising from; and hold each such party harmless, and indemnify it, to the extent due to: (a) Landbridge's negligent or otherwise wrongful act or omission, or breach of a specific contractual duty; or (b) a subcontractor's negligent or otherwise wrongful act or omission, or breach of a specific contractual duty owed by Landbridge to RPBCWD. For any claim subject to this paragraph by an employee of Landbridge or a subcontractor, the indemnification obligation is not limited by a limitation on the amount or type of damages, compensation or benefits payable by or for Landbridge or a subcontractor under workers' compensation acts, disability acts or other employee benefit acts.

#### 5. Compensation

RPBCWD will compensate Landbridge for completed Vegetation Work on an annual lump-sum basis in accordance with Exhibit A. Payment for undisputed work will be due within 45 days of receipt of invoice. Direct costs not specified in Exhibit A will not be reimbursed except with prior written approval of the RPBCWD administrator. Subcontractor fees and subcontractor direct costs, as incurred by Landbridge, will be reimbursed by RPBCWD at the rate specified in RPBCWD's written approval of the subcontract.

The total payment for the Vegetation Work will not exceed **\$34,155**. Total payment in each respect means all sums to be paid whatsoever, including but not limited to fees and reimbursement of direct costs and subcontract costs, whether specified in this agreement or subsequently authorized by the administrator.

Landbridge will maintain all records pertaining to fees or costs incurred in connection with the Vegetation Work for six years from the date of completion of the Vegetation Work. Landbridge agrees that any authorized RPBCWD representative or the state auditor may have access to and the right to examine, audit and copy any such records during normal business hours.

#### 6. Termination; Continuation of Obligations

This agreement is effective when fully executed by the parties and will remain in force until December 31, 2027, unless earlier terminated as set forth herein. RPBCWD may terminate this agreement at its convenience by a written termination notice stating specifically what prior authorized or additional tasks or services it requires Landbridge

to complete. Landbridge will receive full compensation for all authorized work performed, except that Landbridge will not be compensated for any part performance of a specified task or service if termination is due to Landbridge's breach of this agreement.

Insurance obligations; duty of care; obligations to defend, indemnify and hold harmless; and document-retention requirements will survive the completion of the Vegetation Work and the term of this agreement.

#### 7. No Waiver

The failure of either party to insist on the strict performance by the other party of any provision or obligation under this agreement, or to exercise any option, remedy or right herein, will not waive or relinquish such party's rights in the future to insist on strict performance of any provision, condition or obligation, all of which will remain in full force and affect. The waiver of either party on one or more occasion of any provision or obligation of this agreement will not be construed as a waiver of any subsequent breach of the same provision or obligation, and the consent or approval by either party to or of any act by the other requiring consent or approval will not render unnecessary such party's consent or approval to any subsequent similar act by the other.

Notwithstanding any other term of this agreement, RPBCWD waives no immunity in tort. This agreement creates no right in and waives no immunity, defense or liability limit with respect to any third party.

#### 8. Insurance

At all times during the term of this Agreement, Landbridge will have and keep in force the following insurance coverages:

- A. General: \$1.5 million, each occurrence and aggregate, covering both Landbridge's work and completed operations on an occurrence basis and including contractual liability.
- B. Automobile liability: \$1.5 million combined single limit each occurrence coverage for bodily injury and property damage covering all vehicles on an occurrence basis.
- C. Workers' compensation: in accordance with legal requirements applicable to Landbridge.

Landbridge will not commence work until it has filed with RPBCWD a certificate of insurance clearly evidencing the required coverages and naming RPBCWD and the Church of Saint Hubert of Chanhassen as an additional insureds for general liability, along with a copy of the additional insured endorsement establishing coverage for the Vegetation Work as primary coverage on a noncontributory basis. The certificate will name RPBCWD as a holder and will state that RPBCWD will receive written notice before

cancellation, nonrenewal or a change in the limit of any described policy under the same terms as Landbridge.

9. Compliance With Laws

Landbridge will comply with the laws and requirements of all federal, state, local and other governmental units in connection with performing the Vegetation Work and will procure all licenses, permits and other approvals necessary to perform the Vegetation Work, including but not limited to necessary chemical-application requirements.

In performing the Vegetation Work, Landbridge will ensure that no person is excluded from full employment rights or participation in or the benefits of any program, service or activity on the ground of race, color, creed, religion, age, sex, disability, marital status, sexual orientation, public assistance status or national origin; and no person who is protected by applicable federal or state laws, rules or regulations against discrimination otherwise will be subjected to discrimination.

10. Data and Information

All data and information obtained or generated by Landbridge in performing the Vegetation Work, including documents in hard and electronic copy, software, and all other forms in which the data and information are contained, documented or memorialized, are the property of RPBCWD. Landbridge hereby assigns and transfers to RPBCWD all right, title and interest in: (a) its copyright, if any, in the materials; any registrations and copyright applications relating to the materials; and any copyright renewals and extensions; (b) all works based on, derived from or incorporating the materials; and (c) all income, royalties, damages, claims and payments now or hereafter due or payable with respect thereto, and all causes of action in law or equity for past, present or future infringement based on the copyrights. Landbridge agrees to execute all papers and to perform such other proper acts as RPBCWD may deem necessary to secure for RPBCWD or its assignee the rights herein assigned.

RPBCWD may immediately inspect, copy or take possession of any materials on written request to Landbridge. On termination of the agreement, Landbridge may maintain a copy of some or all of the materials except for any materials designated by RPBCWD as confidential or non-public under applicable law, a copy of which may be maintained by Landbridge only pursuant to written agreement with RPBCWD specifying terms.

11. Data Practices; Confidentiality

If Landbridge receives a request for data pursuant to the Data Practices Act, Minnesota Statutes chapter 13 (DPA), that may encompass data (as that term is defined in the DPA) Landbridge possesses or has created as a result of this agreement, it will inform RPBCWD immediately and transmit a copy of the request. If the request is addressed to RPBCWD, Landbridge will not provide any information or documents, but will direct the inquiry to

RPBCWD. If the request is addressed to Landbridge, Landbridge will be responsible to determine whether it is legally required to respond to the request and otherwise what its legal obligations are, but will notify and consult with RPBCWD and its legal counsel before replying. Nothing in the preceding sentence supersedes Landbridge's obligations under this agreement with respect to protection of RPBCWD data, property rights in data or confidentiality. Nothing in this section constitutes a determination that Landbridge is performing a governmental function within the meaning of Minnesota Statutes section 13.05, subdivision 11, or otherwise expands the applicability of the DPA beyond its scope under governing law.

Landbridge agrees that it will not disclose and will hold in confidence any and all proprietary materials owned or possessed by RPBCWD and so denominated by RPBCWD. Landbridge will not use any such materials for any purpose other than performance of the Vegetation Work without RPBCWD written consent. This restriction does not apply to materials already possessed by Landbridge or that Landbridge received on a non-confidential basis from RPBCWD or another party. Consistent with the terms of this section 11 regarding use and protection of confidential and proprietary information, Landbridge retains a nonexclusive license to use the materials and may publish or use the materials in its professional activities. Any Landbridge duty of care under this agreement does not extend to any party other than RPBCWD or to any use of the materials by RPBCWD other than for the purpose(s) for which Landbridge is compensated under this agreement.

## 12. RPBCWD Property

All property furnished to or for the use of Landbridge or a subcontractor by RPBCWD and not fully used in the performance of the Vegetation Work, including but not limited to equipment, supplies, materials and data, both hard copy and electronic, will remain the property of RPBCWD and returned to RPBCWD at the conclusion of the performance of the Vegetation Work, or sooner if requested by RPBCWD. Landbridge further agrees that any proprietary materials are the exclusive property of RPBCWD and will assert no right, title or interest in the materials. Landbridge will not disseminate, transfer or dispose of any proprietary materials to any other person or entity unless specifically authorized in writing by RPBCWD.

Any property including but not limited to materials supplied to Landbridge by RPBCWD or deriving from RPBCWD is supplied to and accepted by Landbridge as without representation or warranty including but not limited to a warranty of fitness, merchantability, accuracy or completeness. However, Landbridge's duty of professional care under paragraph 4, above, does not extend to materials provided to Landbridge by RPBCWD or any portion of the Vegetation Work that is inaccurate or incomplete as the result of Landbridge's reasonable reliance on those materials.

13. Notices

Any written communication required under this agreement to be provided in writing will be directed to the other party as follows:

To RPBCWD:

Administrator  
Riley-Purgatory-Bluff Creek Watershed District  
18681 Lake Drive East  
Chanhassen, MN 55317  
[tjeffery@rpbcwd.org](mailto:tjeffery@rpbcwd.org); 952-687-1107

To Landbridge:

[CONTACT INFO]

Either of the above individuals may in writing designate another individual to receive communications under this agreement.

14. Choice of Law; Venue

This agreement will be construed under and governed by the laws of the State of Minnesota. Venue for any action will lie in Hennepin County.

15. Whole Agreement

The entire agreement between the two parties is contained herein and this agreement supersedes all oral agreements and negotiations relating to the subject matter hereof. Any modification of this agreement is valid only when reduced to writing as an amendment to the agreement and signed by the parties hereto. RPBCWD may amend this agreement only by action of the board of managers acting as a body.

*{Signature page follows.}*

**In witness whereof**, intending to be legally bound, the parties hereto execute and deliver this agreement.

**Landbridge Ecological LLC**

\_\_\_\_\_  
By  
Its

Date: \_\_\_\_\_

*Approved as to form and execution*

\_\_\_\_\_  
RPBCWD counsel

**Riley-Purgatory-Bluff Creek Watershed District**

\_\_\_\_\_  
By Terry Jeffery  
Its Administrator


















Date: \_\_\_\_\_


**Exhibit A**

**Scope of Work – St Hubert Vegetation Establishment & Maintenance**

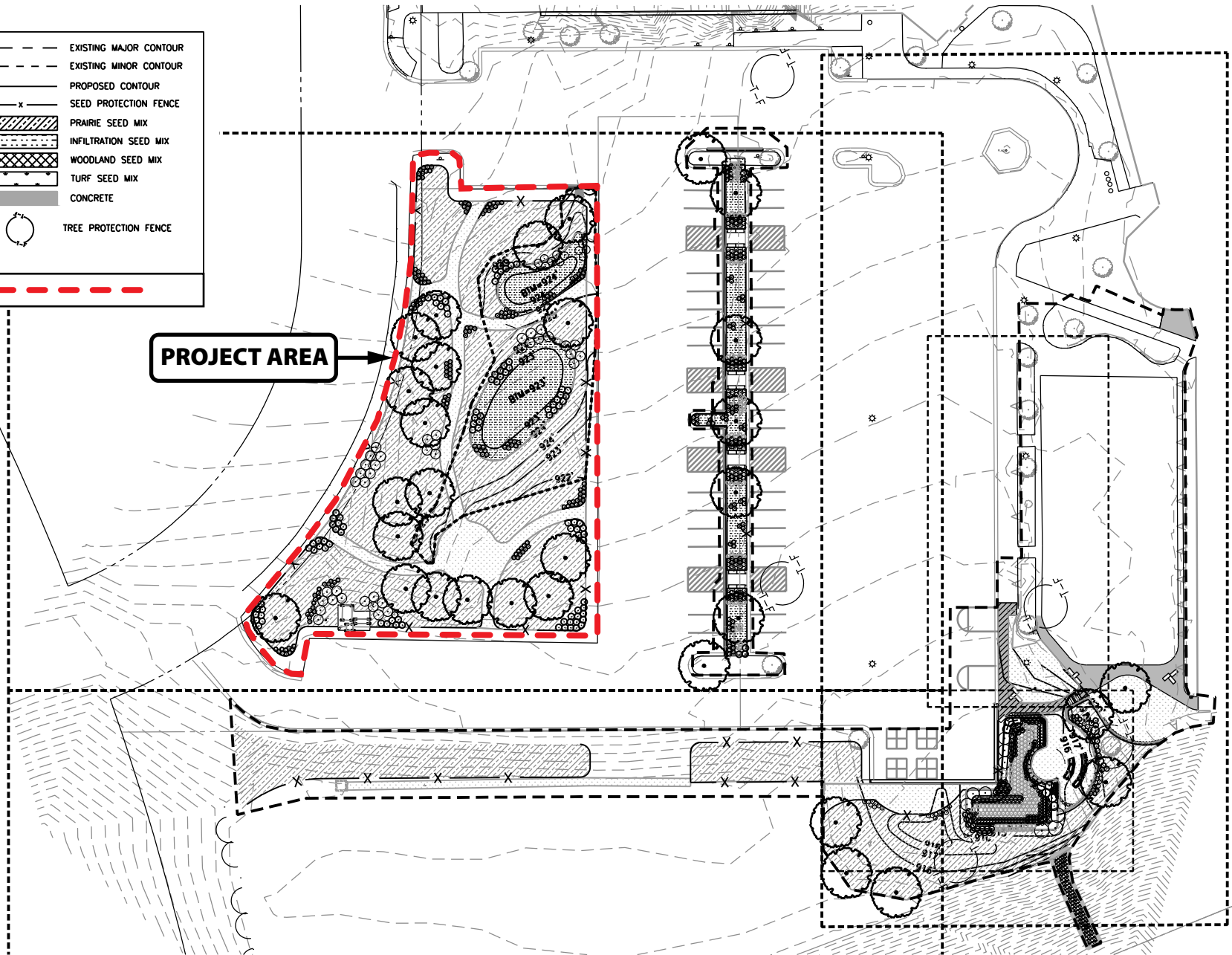
# Exhibit A: Project Area

**LEGEND**

	DECIDUOUS TREE		EXISTING MAJOR CONTOUR
	CONIFEROUS TREE		EXISTING MINOR CONTOUR
	ORNAMENTAL TREE		PROPOSED CONTOUR
	EXISTING TREE		SEED PROTECTION FENCE
	DECIDUOUS SHRUB		PRAIRIE SEED MIX
	PERENNIAL		INFILTRATION SEED MIX
	EXISTING LIGHT		WOODLAND SEED MIX
			TURF SEED MIX
			CONCRETE
			TREE PROTECTION FENCE

**PROJECT AREA** 

**PROJECT AREA** →





## SECTION 32 93 00 – LANDSCAPE PLANTINGS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract Documents, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Minnesota Department of Transportation Standard Specifications for Construction, 2018 Edition.
- C. Minnesota Department of Transportation Landscape Inspection Manual, 2018 Edition.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Plants.
  - 2. Planting soils.
  - 3. Tree stabilization.
- B. Related Sections:
  - 1. Section 312000 "Earth Moving" for grading ,topsoil stockpiling, spreading, and decompaction.
  - 2. Section 329200 "Turf and Grasses"
  - 3. Section 329220 "Native Vegetation Maintenance"

#### 1.3 UNIT PRICES

- A. Work of this Section is affected by unit prices specified in Division 01 Section "Unit Prices."
  - 1. Unit prices apply to authorized work covered by quantity allowances.
  - 2. Unit prices apply to additions to and deletions from Work as authorized by Change Orders.

#### 1.4 DEFINITIONS

- A. Backfill: The earth used to replace or the act of replacing earth in an excavation.
- B. Balled and Burlapped Stock: Plants dug with firm, natural balls of earth in which they were grown, with ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant required; wrapped with burlap, tied, rigidly supported, and drum laced with twine with the root flare visible at the surface of the ball as recommended by ANSI Z60.1.
- C. Balled and Potted Stock: Plants dug with firm, natural balls of earth in which they are grown and placed, unbroken, in a container. Ball size is not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant required.

## St. Hubert School Water Quality Project

- D. Bare-Root Stock: Plants with a well-branched, fibrous-root system developed by transplanting or root pruning, with soil or growing medium removed, and with not less than minimum root spread according to ANSI Z60.1 for type and size of plant required.
- E. Container-Grown Stock: Healthy, vigorous, well-rooted plants grown in a container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for type and size of plant required.
- F. Duff Layer: The surface layer of native topsoil that is composed of mostly decayed leaves, twigs, and detritus.
- G. Emergent Plants: Plants typically rooted in a lake or pond bottom, but their leaves and stems extend out of the water. They grow in wetlands and along the shore, where the water is typically 4 feet deep or less.
- H. Fabric Bag-Grown Stock: Healthy, vigorous, well-rooted plants established and grown in-ground in a porous fabric bag with well-established root system reaching sides of fabric bag. Fabric bag size is not less than diameter, depth, and volume required by ANSI Z60.1 for type and size of plant.
- I. Finish Grade: Elevation of finished surface of planting soil.
- J. Genetic Source Origin: The location (typically county and state) where a particular plant's genetic parent originated (e.g., location where remnant native seed was harvested or native remnant cutting was made). This does not refer to the location where a plant was grown, such as a nursery.
- K. Herbaceous Plug: Live plant with a minimum container size of 4".
- L. Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.
- M. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- N. Pests: Living organisms that occur where they are not desired, or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- O. Planting Area: Areas to be planted.
- P. Planting Soil: Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- Q. Plant; Plants; Plant Material: These terms refer to vegetation in general, including trees, shrubs, vines, ground covers, ornamental grasses, bulbs, corms, tubers, or herbaceous vegetation.
- R. Root Flare: Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.

- S. Stem Girdling Roots: Roots that encircle the stems (trunks) of trees below the soil surface.
- T. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- U. Subsoil: All soil beneath the topsoil layer of the soil profile and typified by the lack of organic matter and soil organisms.
- V. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.

#### 1.5 SUBMITTALS

- A. Product Data: For each type of product indicated, including soils, per MnDOT 2571.
  - 1. Plant Materials: Include quantities, sizes, quality, and sources for plant materials. For each native herbaceous species, include genetic source origin (county and state). Provide name and telephone number of native plant suppliers.
  - 2. Pesticides and Herbicides: Include product label and manufacturer's application instructions specific to the Project.
  - 3. Post-Emergent Herbicides (Selective and Non-Selective): Submit a plan for application of herbicide at pre-construction meeting. The Plan must include methods and sequence of work. Plans including the use of herbicide(s), submit a copy of the Commercial Applicator License with list of herbicides to be used.
- B. Samples for Verification: For each of the following:
  - 1. Shredded Hardwood Mulch: 1-quart volume of each organic mulch required; in sealed plastic bags labeled with composition of materials by percentage of weight and source of mulch. Each sample shall be typical of the lot of material to be furnished; provide an accurate representation of color, texture, and organic makeup.
  - 2. Grade 2 Compost: 1-quart volume of each organic compost is required; in sealed plastic bags labeled with composition of materials by percentage of weight and source of mulch. Each sample shall be typical of the lot of material to be furnished; provide an accurate representation of color, texture, and organic makeup.
- C. Schedule: Schedule for plant installation activities.
- D. Equipment: Proposed planting equipment specifications and literature.
- E. Preliminary MnDOT Certificate of Compliance for Plant Stock, Landscape Materials, and Equipment – completed and signed. Form is available in the Inspection and Contract Administration Manual for MnDOT Landscape Projects – Appendix B.
- F. Valid nursery stock, dealer, or grower certificate, registered with the Minnesota Department of Agriculture (MDA), a current nursery certificate or license from a state or provincial Department of Agriculture for each plant stock supplier, or both.
- G. Out of State nursery vendors: If plant material is shipped from out-of-state nursery vendors that are subject to quarantines (including but not limited to Gypsy Moth or Emerald Ash Borer), it must be accompanied by current documentation certifying that all plants shipped are free of regulated pests. To determine if Minnesota vendors are subject of quarantines, call the MDA Supervisor of Nursery Inspection and Export Certification at 651-201-6388.

- H. Upon Delivery of Plant Stock and materials to the project, the Contractor will provide the Engineer with Bills of Lading or shipping documents for plant stock and landscape materials delivered to the project.
- I. Product Certificates: For each type of manufactured product, from manufacturer, and complying with the following:
  - 1. Manufacturer's certified analysis of standard products.
  - 2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.
- J. Material Test Reports: For imported or manufactured topsoil.
- K. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of plants during a calendar year. Submit before start of required maintenance periods.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape Installer whose work has resulted in successful establishment of plants.
  - 1. Professional Membership: Installer shall be a member in good standing of either the Minnesota Nursery and Landscape Association or the American Nursery and Landscape Association.
  - 2. Experience: Five years' experience in native landscape installation and maintenance in addition to requirements in Division 01 Section "Quality Requirements."
  - 3. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on site (when work is in progress) who is a certified MnDOT Landscape Specialist, per MnDOT 2571.
  - 4. Pesticide Applicator: State licensed, commercial per MnDOT 2571.
- B. Provide quality, size, genus, species, variety, and genetic source origin of plants indicated, complying with applicable requirements in ANSI Z60.1.
- C. Codes: Plants shall comply with local, state and federal laws relating to inspection for diseases and insect infestation.
- D. Measurements: Measure according to ANSI Z60.1. Do not prune to obtain required sizes.
  - 1. Trees and Shrubs: Measure with branches and trunks or canes in their normal position. Take height measurements from or near the top of the root flare for field-grown stock and container grown stock. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip to tip. Take caliper measurements 6 inches above the root flare for trees up to 4-inch caliper size, and 12 inches above the root flare for larger sizes.
  - 2. Other Plants: Measure with stems, petioles, and foliage in their normal position.
  - 3. Emergent zone perennial plugs shall have a minimum container size of 4".
- E. Plant Material Observation: Owner or Engineer may observe plant material either at place of growth or at site before planting for compliance with requirements for genus, species, variety, cultivar, size, genetic source origin, and quality. Engineer retains right to observe trees and shrubs further for size and condition of balls and root systems, pests, disease symptoms, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.

1. Notify Engineer of sources of planting materials fourteen (14) days in advance of delivery to site.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws if applicable.
- B. Bulk Materials:
  1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
  2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
  3. Accompany each delivery of bulk fertilizers, lime, and soil amendments with appropriate certificates.
- C. All plant stock shall be delivered with intact identification labels on all individually shipped plants and on all bundles, bales, flats, or boxes of plants, for review and approval by the Engineer prior to planting. Plants shall be labeled by either a botanical or common name, size, and quantity contained in the bale, flat, box, etc.
- D. Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.
- E. Handle planting stock by root ball or container.
- F. Deliver plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.
  1. Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material.
  2. Do not remove container-grown stock from containers before time of planting.
  3. Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Water as often as necessary to maintain root systems in a moist, but not overly-wet condition.

#### 1.8 PROJECT CONDITIONS

- A. Field Measurements: Verify actual grade elevations, service and utility locations, irrigation system components, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.
- B. Interruption of Existing Services or Utilities: Do not interrupt services or utilities to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary services or utilities according to requirements indicated:

1. Notify Engineer no fewer than two days in advance of proposed interruption of each service or utility.
  2. Do not proceed with interruption of services or utilities without Engineer's written permission.
- C. Planting Restrictions: Landscape plantings shall occur at least one week prior to the date of Substantial Completion. Contractor shall coordinate with maintenance period requirements to ensure that plants remain watered, weeded, and kept in a healthy condition in the time between the date that plantings are installed and the start of the maintenance period.
- D. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.
- E. Coordination with Turf Areas: Plant trees, shrubs, and other plants after finish grades are established and before planting turf areas unless otherwise indicated.
- F. When planting trees, shrubs, and other plants after planting turf or seeding native restoration areas, protect turf and native seeding areas, and promptly repair damage caused by planting operations.
- 1.9 PLANT ESTABLISHMENT & WARRANTY
- A. Plant Establishment Period (PEP) begins on the date that initial planting operations on the project are completed and continues for **three years** after substantial completion. See 32 92 20 NATIVE VEGETATION MAINTENANCE for the requirements during the PEP.
- A. The warranty period begins on termination of the PEP and certification of plant establishment in accordance with the specifications, whichever occurs later, and Contractor warrants plantings and agrees to replace or repair any plantings failing to meet the plant-establishment specifications in the Contract Documents for a one-year warranty period after this date. Cost of the warranty will be considered to be included in the Contract Price and no additional compensation will be provided.

## PART 2 - PRODUCTS

### 2.1 PLANT MATERIAL

- A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant Schedule or Plant Legend shown on Drawings and complying with MnDOT 3861 and ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
1. Trees with damaged, crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs more than 3/4 inch in diameter; or with stem girdling roots will be rejected.

2. Trees with injured bark, stem injuries, or insect damage will not be accepted. Coniferous Trees with sheared branches or multiple leaders will not be accepted. The Engineer has the right to reject any plant with any of the above issues.
  3. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless otherwise indicated.
  4. Genetic source origin of all native herbaceous plants shall be from within a 200-mile radius of the project site and be native to Minnesota. Species shall be true to their scientific name as specified.
  5. Native "wild type" plant species must be used in all cases unless a specific horticultural variety is given in the plant schedule. No alternate horticultural varieties may be used unless approved in writing by the Engineer.
  6. The material shall be free of invasive species. The Owner shall inspect material prior to installation. If the surface vegetation is an invasive species, the Contractor shall remove and dispose at a location onsite determined by the Owner. If the material cannot be disposed of onsite, secure material prior to transport (sealed container, covered truck, or wrap with tarp) and legally dispose of offsite.
- B. Provide plants of sizes, grades, and ball or container sizes complying with ANSI Z60.1 for types and form of plants required. Plants of a larger size may be used if acceptable to Engineer, with a proportionate increase in size of roots or balls.
- C. Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which shall begin at root flare according to ANSI Z60.1. Root flare shall be visible before planting.
- D. Labeling: Label at least one plant of each variety, size, and caliper with a securely attached, waterproof tag bearing legible designation of common name and full scientific name, including genus and species. Include nomenclature for hybrid, variety, or cultivar, if applicable for the plant as shown on Drawings.
- E. Herbaceous Plugs: Plugs shall have a minimum container size of 4". Provide healthy, disease-free plants of species and variety shown or listed, with well-established root systems reaching to sides of the container to maintain a firm ball, but not with excessive root growth encircling the container. Provide only plants that are acclimated to outdoor conditions before delivery.
- F. If formal arrangements or consecutive order of plants is shown on Drawings, select stock for uniform height and spread, and number the labels to assure symmetry in planting.

## 2.2 ORGANIC SOIL AMENDMENTS

- A. Compost: Grade 2 compost meeting the requirements of MnDOT 3890. Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1/2-inch sieve; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:
1. Organic Matter Content: 50 to 60 percent of dry weight.
  2. Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source-separated or compostable mixed solid waste.
- B. Sphagnum Peat: Partially decomposed sphagnum peat moss, finely divided or granular texture, with a pH range of 3.4 to 4.8.
- C. Muck Peat: Partially decomposed moss peat, native peat, or reed-sedge peat, finely divided or of granular texture, with a pH range of 6 to 7.5, and having a water-absorbing capacity of 1100 to 2000 percent.

- D. Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, debris, and material harmful to plant growth.

**2.3 PLANTING SOILS**

- A. Planting Soil: Planting soil shall consist of Compost mixed with in situ topsoil per MnDOT 2571. Compost shall be in accordance with MnDOT 3890.

**2.4 MULCHES**

- A. Shredded Hardwood Mulch: Shall meet requirements of MNDOT 3882 Type 6: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings. Do not use wood material in an advanced state of decomposition. Provide wood material free of chipped-up manufactured boards or chemically treated wood, including wafer board, particle board, and Chromated Copper Arsenate (CCA) or treated wood.

**2.5 TREE STABILIZATION MATERIALS**

- A. Stakes and Guys:
  - 1. Tree staking shall be installed only if needed, per MNDOT 2571. Staking must be approved by the Engineer prior to installation.

**PART 3 - EXECUTION**

**3.1 NOTIFICATION**

- A. Notification. Contractor shall notify the Engineer at least 14 days before planned deliveries of initial and replacement planting stock to the project to allow for scheduling. Notify the Engineer at least 24 hours before the beginning or changing distinct operations. Include the following in the notice:
  - 1. The project name,
  - 2. The Engineer's name,
  - 3. The notification date,
  - 4. Intended dates and times for the operations, and
  - 5. The planned locations of the work.

**3.2 EXAMINATION**

- A. Examine areas to receive plants for compliance with requirements and conditions affecting installation and performance.
  - 1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.



2. Before installing live plants, ensure turf, weedy, and invasive plants (see Section 32 92 00 TURF AND GRASSES, Table 6) have been removed.
  3. Before installing live plants, ensure that herbicide manufacturer's waiting time has elapsed following last herbicide application.
  4. Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
  5. Suspend soil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
  6. Uniformly moisten excessively dry soil that is not workable and which is too dusty.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Engineer and replace with new planting soil.

### 3.3 PREPARATION

- A. Contractor shall complete native seeding and installation of any applicable erosion control measures prior to the start of all landscape planting operations unless otherwise noted. See Section 32 92 00 TURF AND GRASSES.
- B. Protect structures, utilities, sidewalks, pavements, and other facilities and turf establishment areas and existing plants from damage caused by planting operations.
- C. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- D. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations, outline areas, adjust locations when requested, and obtain Engineer's acceptance of layout before excavating or planting. Make minor adjustments as required.
- E. Lay out plants at locations indicated in the Drawings and as directed by Engineer. Stake locations of individual trees and shrubs and outline areas for perennial planting beds for approval by the Engineer prior to planting.
- F. Wrap trees and shrubs with burlap fabric over trunks, branches, stems, twigs, and foliage to protect from wind and other damage during digging, handling, and transportation.

### 3.4 EXCAVATION FOR TREES AND SHRUBS

- A. Planting Pits and Trenches: Excavate circular planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are not acceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.
1. Excavate oversized hole, as shown in the Drawings.
  2. Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball.
  3. If area under the plant was initially dug too deep, add soil to raise it to the correct level and thoroughly tamp the added soil to prevent settling.

4. Maintain required angles of repose of adjacent materials as shown on the Drawings. Do not excavate subgrades of adjacent paving, structures, hardscapes, or other new or existing improvements.
5. Maintain supervision of excavations during working hours.
6. Keep excavations covered or otherwise protected when unattended by Installer's personnel.
7. If drain tile is shown on Drawings or required under planting areas, excavate to top of porous backfill over tile.

- B. Subsoil removed from excavations may not be used as planting soil.
- C. Obstructions: Notify Engineer if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.
- D. Drainage: Notify Engineer if subsoil conditions evidence unexpected water seepage or retention in tree or shrub planting pits.
- E. Fill excavations with water and allow to percolate away before positioning trees and shrubs.

### 3.5 PRE-CONSTRUCTION WORK

- A. Notify the Engineer at least 24 hours prior to beginning work.
- B. Existing vegetation shall be protected in the project per the requirements of MnDOT 2572.
- C. Delivery and Storage of Plants.
  1. Before installation, the Engineer will provide for inspection and acceptance of plant stock delivered to the project in accordance with the current edition of the ICAMMLP and MnDOT 3861, "Plant Stock." If deciduous trees or shrubs are moved in full leaf, spray with antidesiccant at nursery before moving and again two weeks after planting.
  2. Install plant stock on the day of delivery to the project unless using temporary storage methods. Before installation, keep the roots of plants completely covered with a moisture-holding material consisting of wood chips, straw, sawdust, moss, or soil. Keep the moisture-holding material continuously moist and protect it from drying winds, direct sunlight, excessive heat, freezing, low humidity, inadequate ventilation, and animal or human harm. The Engineer will consider plants with damage that occurred or was discovered during temporary storage, unacceptable. Do not store plants from one planting season to the next.

### 3.6 TREE AND SHRUB PLANTING

- A. Contractor shall perform a competency test to the satisfaction of the Engineer prior to proceeding with plant installation work, to demonstrate acceptable plant installation methods (in accordance with the Drawings and specifications) for each plant container size and type applicable to the project. The test shall include handling plants, digging holes and beds, installing plants, initial watering, installing applicable protection materials, and mulching.
- B. Before planting trees, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.

- C. Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.
- D. Set stock plumb and in center of planting pit or trench with root flare 1 inch above adjacent finish grades.
  - 1. Use planting soil and compost as backfill.
  - 2. After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
  - 3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
  - 4. Place planting tablets in each planting pit when pit is approximately one-half filled; in amounts recommended in soil reports from soil-testing laboratory. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
  - 5. Continue backfilling process. Water again after placing and tamping final layer of soil.
  - 6. Add shredded hardwood mulch around trees and shrubs in accordance with MnDOT 2571 and the Drawings.
- E. When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

### 3.7 TREE AND SHRUB PRUNING

- A. Remove only dead, dying, or broken branches. Do not prune for shape.
- B. Prune, thin, and shape trees, shrubs, and vines as directed by Engineer.
- C. Prune, thin, and shape trees and shrubs according to standard professional horticultural and arboricultural practices. Unless otherwise indicated by Engineer, do not cut tree leaders; remove only injured, dying, or dead branches from trees and shrubs; and prune to retain natural character.
- D. Do not apply pruning paint to wounds.

### 3.8 TREE STABILIZATION

- A. Install trunk stabilization as follows unless otherwise indicated:
  - 1. Upright Staking and Tying: Stake trees only as required to prevent wind tip out. Install staking and guying per MNDOT 2571 and only after approval by the Engineer.

### 3.9 PERENNIAL PLANTING

- A. Herbaceous perennials (4" container or #1 container) in the native seeding areas shall be installed after the completion of native seeding, and erosion control blanket installation where applicable.

- B. Herbaceous perennials (4" container or #1 container) in the rain garden shall be installed after the completion of grading and permanent erosion control measures.
- C. Set out and space herbaceous perennial plants as indicated in Drawings. Arrange perennials in triangular spacing at the distances shown in the Drawings. See plant schedule for spacing and requirements for arrangement of like species.
- D. Excavate a hole at least 1.5 times the size of the perennial plant container. Backfill around plant with existing in situ soils, lightly tamping around base.
- E. Herbaceous native perennials shall be watered within 2 hours of planting, per the requirements of MnDOT 2571.

### 3.10 INSPECTION AND ACCEPTANCE

- 1. Preliminary Review
  - a. Upon completion of the landscape plantings, request a review by the Owner's Representative to determine whether the work conforms to the requirements of the Specifications.
  - b. If the Owner's Representative finds that the work does not conform to the requirements of the Specifications, the Contractor will receive written notification from the Owner's Representative of required corrections.
  - c. Perform corrective work within seven calendar days after the Preliminary Review.
  - d. Upon completion of the corrective work, request another Preliminary Review to determine whether work conforms to the requirements of the Specifications.
- 2. Preliminary Acceptance
  - a. When the Owner's Representative determines that the work conforms to the requirements of the Specifications the Contractor will receive a written notification of Preliminary Acceptance.
- 3. Final Review
  - a. Final review will occur at the end of the three-year plant establishment period. See Section 32 92 00 Native Vegetation Maintenance for requirements.

### 3.11 PLANT MAINTENANCE

- A. During the Plant Establishment Period, the Contractor shall maintain all perennial, shrub, and tree plantings according to MnDOT 2571 3.K.2.
- B. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
- C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.
- D. Upon substantial completion of the landscape plantings, **the three-year** Plant Establishment Period will begin.

- E. See SECTION 32 92 20 NATIVE VEGETATION MAINTENANCE for additional requirements during the Plant Establishment Period.

**3.12 PESTICIDE APPLICATION**

- A. If needed, apply pesticides and other chemical products and biological control agents in accordance with authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.

**3.13 CLEANUP AND PROTECTION**

- A. During planting, keep adjacent paving and construction clean and work area in an orderly condition.
- B. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
- C. After installation and before Substantial Completion, remove nursery tags, nursery stakes, tie tape, labels, wire, burlap, and other debris from plant material, planting areas, and Project site.

**3.14 DISPOSAL**

- A. Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off Owner's property.

**END OF SECTION 32 93 00**