



Addendum 2
Solicitation 26-99547
Lakewalk and Coastal Improvement Project

This addendum serves to notify all bidders of the following changes to the solicitation documents:

1. A pay item for 2575.505 WEED SPRAYING has been added to the bid form.

The following questions asked are answered below in *italics*:

1. Do the boulevard topsoil borrow and sandy clay loam topsoil borrow items cover all the topsoil requirements for the project or are there bid items within the SEQ that have topsoil incidental to the pay item? *All soil bed preparation, topsoil, fertilizer and rolled erosion prevention is included in the applicable pay items and is NOT incidental to any pay items. See revised DIV LA special provisions for planting zones.*
2. In areas where the ornamental fence is removed as part of the construction, will a temporary fence be required to be installed along the railroad or any other part of the project? If so, will orange fencing be acceptable and how will this cost be covered? *The contractor is responsible for securing the site and for site safety. The contractor shall provide chain link fence panels to protect against any hazardous conditions. On past Lakewalk and coastal projects, temporary orange snow fence has been cut and trampled leading to unsafe conditions and public trespass. Temporary orange snow fence may be acceptable along the railroad to clearly delineate the work zone. All fencing required to provide a safe and secure site is incidental.*
3. What bid item should the cap for the modifying sheet pile wall go to? *The C channel cap shown in detail 4/CH13 should be included for payment in the REMOVE SHEET PILING RETAINING WALL.*
4. Is there an as-built of bridge foundation to be shored at station 219+00 available? *Available bridge plans were provided in Addendum 1.*
5. Can you add a class 5 item instead of being incidental? *No.*
6. Near station 100+00 what bid item does the existing knee wall removal go to? *Wall removal should be included in the adjacent concrete removal at this location.*
7. I am not seeing elevations on the plans to determine the amount of erosion control blanket within the project area. Could you provide quantities for the erosion control within the Pollinator, Restoration, Raingarden, and Slope stabilization zones? *See item #1 above.*
8. The specifications state Coir or Netless mat, however the materials say Cat 20. Could you clarify the type needed? *See item #1 above.*

9. Are live stakes required within all areas of the Restoration planting and Slope stabilization zones? *Yes.*
10. It notes on the statement of estimated quantities to furnish and install 4,212' of fence design special. Is that fence to match the 100' of fence design special that is to be removed & reinstalled? *Fence Design Special is meant to match the 100 LF of Salvage and Install fence at Community Connector 4 and the fence on the recently completed section of the Lakewalk between Veteran's Memorial and Fitgers. Special provisions section SP-70 provides additional requirements.*
11. What is the height of the proposed 457' of woven wire fence? *Woven Wire fence shall be 8 ft high per special provisions section LA-37.*
12. The layout on this woven wire fence (sheet LA12 & LA13) does not show any gates for access for any maintenance of plants/shrubs. Are any required? *Assume one gate per enclosed area will be required for maintenance access.*
13. Is railroad protective insurance required for the project considering the work being done is in close proximity to the existing railroad? *Yes, railroad protective insurance will be required to work within the railroad right-of-way which is 50 feet either side of the rail centerline at this location.*
14. Will railroad flaggers be required? *Flagging will be required when working within 25feet of the rail centerline and shall be included in the TRAFFIC CONTROL pay item.*
15. Note 8 SEQ – What bid item is this note associated with? *SEQ note 8 refers to 2575.602 SITE RESTORATION instead of SEQ note 7. See revised SEQ sheets.*
16. Is there a specification for the Random Rip Rap Class Special? *Meet the specifications of Class III riprap per MnDOT standard spec 2511 and 2601.*
17. Can all stages be worked simultaneously with full closures for each stage shown in the plans throughout the entire construction season. *Any or all stages can be worked simultaneously as long as 1) there is a viable detour for the trail, 2) the section identified in Addendum 1 remains operational until after September 26, 2026, and 3) at the end of each construction season, we have a functional trail that is not blocked for the winter season. It needs to be plowable and usable.*
18. For the boardwalk bid item, can you clarify the area that gets measured and paid? On the detail on page 48, would it be the 6'6" width of actual decking board that is measured, or does the 8" exposed concrete beam that is incidental also get measured in the square footage? *The square footage of boardwalk is the area of the top boards excluding the 8" exposed concrete beam.*
19. How is the IPE boardwalk dealt with to meet BABA requirements? *The proposed boardwalk shall use IPE boardwalk salvaged on-site and from City stockpile. The contractor should assume no new IPE boardwalk will be required for the project. See revised special provisions.*
20. What is the granular bedding (200 Ton) called out on plan sheet CH02 being used for as it is not shown in any of the details within this section? *The granular bedding is shown under and behind the proposed concrete retaining wall in section 1/CH03.*

21. Do you have a timetable on when the retaining walls will be starting for this project? *The schedule will be determined by the contractor and shall meet the dates provided in the special provision and addendum.*
22. How is the concrete wall extension being paid for a Brewery Creek where the timber railing is being replaced? *No modification to the existing concrete wall was intended at this location, only replacement of the railing.*

Please acknowledge receipt of this Addendum by checking the acknowledgement box within the solicitation at www.bidexpress.com.

Posted: **July 8, 2026**

Attachments:

1. Revised Division SP special provisions sections
2. Revised Division LA special provisions sections
3. Revised SEQ sheets 6-10
4. Revised Typical Sections Sheet 29

SP-46 (2104) SALVAGE BOARDWALK

- SP-46.1 DESCRIPTION
This Work consists of salvaging the in-place IPE wooden boardwalk panels were shown on the Plans for reuse on the project, in accordance with MnDOT 2104.
- SP-46.2 MATERIALS
In-Place IPE wooden boardwalk panels and underlying IPE supports.
- SP-46.3 CONSTRUCTION
Salvage IPE wooden boardwalk and IPE underlying supports where shown in the Plans. Remove individual IPE top boards from underlying support system. Remove all nails and screws used to attach to underlying support system. Contractor shall stockpile IPE boards on site for reuse. Protect the boards from damage during the salvage, transport and stockpiling operation.

Remove and dispose of all non IPE material used for underlying boardwalk support system and all nails and screws in accordance with MnDOT 2104.
- SP-46.4 METHOD OF MEASUREMENT
The Engineer will measure the area of boardwalk for salvage by the square foot of top boards.
- SP-46.5 BASIS OF PAYMENT
The Contract Unit Price for Salvage Boardwalk is compensation in full for Equipment, Materials and labor required to complete the Work, including disposal of non-IPE material used for underlying support system and hardware.

The Department will pay for Salvage Boardwalk on the basis of the following schedule:

Item No.	Item	Unit
2104.618	Salvage Board Walk.....	square foot

SP-67 (2540) BOARDWALK

SP-67.1 DESCRIPTION

This Work consists of constructing a boardwalk in accordance with the detail on Plan Sheet 48 and MnDOT 2540.

SP-67.2 MATERIALS

Boardwalk consists of 2"x6" Kiln dried IPE wood decking boards salvaged from on site and from City stockpile.

2"x6" nominal treated timber nailers

#8 x 3.5" decking screws

5/8" x 6-1/2" galvanized anchor bolts

Cast-in-place reinforced concrete beams.

SP-67.3 CONSTRUCTION

IPE top boards shall be salvaged from on site and from City stockpile. Boards from City stockpile are clean, have been removed from under cribbing and are free of nails and fasteners. Contractor shall be responsible for transporting top boards from City stockpile sites located at Lake Superior College and 110 N 42nd Ave W to project site.

Furnish and install boardwalk in accordance with the Plan details. Attach salvaged IPE top boards to concrete footing with galvanized threaded rod and anchor with epoxy or acrylic tie material. Includes excavation, concrete support beams, reinforcing nailers, and fasteners required to install Boardwalk.

SP-67.4 METHOD OF MEASUREMENT

The Engineer will measure the area of acceptably installed Boardwalk installed by the square foot of top boards, excluding the 8" exposed concrete beam.

SP-67.5 BASIS OF PAYMENT

The Contract Unit Price for Boardwalk is compensation in full for Equipment, Materials and labor required to complete the Work, including transport of IPE top boards from City stockpile.

The Department will pay for Boardwalk on the basis of the following schedule:

Item No.	Item	Unit
2540.618	Boardwalk.....	square foot

LA-48 (2575) POLLINATOR PLANTING ZONE

LA-48.1 DESCRIPTION

This Work consists of placing native seed and planting plugs to establish permanent vegetative cover for Pollinator Planting Zones as shown on the Plans. Work includes subsoiling, soil amendments, seeding, plug planting, watering, mulch, and protection to establish vegetation growth. In accordance to MNDOT 2571 and 3876.

LA-48.2 MATERIALS

- A. Seed: Provide Minnesota State Seed Mix: Pollinator Plot NE 28-341. Seed at a rate of 19.25 lbs per acre.
B. Plugs: Provide 4" plants, species selected from plant list table below, no one species shall equal 20% or greater of total planted plugs. Plans as shown on LA21 and in accordance to MNDOT 2571.

i.

Scientific Name	Common Name
<i>Carex pensylvanica</i>	Pennsylvania sedge
<i>Antennaria neglecta</i>	Pussytoes
<i>Aquilegia canadensis</i>	Wild columbine
<i>Campanula rotundiflora</i>	Harebell
<i>Castilleja coccinea</i>	Indian paintbrush
<i>Cirsium flodmanii</i>	Flodman's Thistle
<i>Claytonia virginica</i>	spring beauty
<i>Dicentra cucullaria</i>	Dutchmen's breeches
<i>Fragaria virginiana</i>	Wild strawberry
<i>Geum triflorum</i>	Prairie smoke
<i>Heuchera richardsonii</i>	Alumroot
<i>Liatris ligulistylis</i>	Meadow blazingstar
<i>Lithospermum canescens</i>	Hoary puccoon
<i>Rosa arkansana</i>	Prairie rose
<i>Sanguinaria canadensis</i>	Bloodroot
<i>Sisyrinchium campestre</i>	Blue-eyed grass
<i>Viola spp.</i>	Violets

- C. Water: Water for the execution of this work and maintenance shall be clean, fresh, and free of deleterious substances. Contractor shall furnish a hose and hose connection from hydrant and/or outlet where the water will be furnished. It is the responsibility of the Contractor to verify source of water and its availability prior to its use. in accordance to MNDOT 2571,
D. Mulching Material: Provide oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.

- E. Submit product data from seed and plant source for engineer approval.

LA-48.3 CONSTRUCTION– See Standard Specifications for Construction

LA-48.4 METHODS OF MEASUREMENT

The Engineer will measure by the square foot to include; all subsoiling, soil amendments, seeding, plugs, watering, mulch, and protections shall be included in the price for Pollinator Planting Zone. Measure seeding by the area seeded and compute area directly to pounds using set application rate of 19.25 lbs/acre, regardless of the seed mixture or quantity of seed used. Measure planting area for plugs to be placed at 18" on center within entire restoration zone square footage. Soil bed preparation, topsoil, fertilizer and rolled erosion prevention are paid for separately with applicable bid items.

LA-48.5 BASIS OF PAYMENT

The Contract Unit Price for Pollinator Planting Zone is compensation in full for equipment, materials, and labor required to complete the Work.

The Department will pay for Pollinator Planting Zone on the basis of the following schedule:

Item No.	Item	Unit
2575.618	Pollinator Planting Zone	Square Foot

LA-49 **(2575) RESTORATION PLANTING ZONE 1**

LA-49.1 DESCRIPTION

This Work consists of placing native seed and planting plugs, seedlings, and live stakes to establish permanent vegetative cover for Restoration Planting Zone 1 as shown on the Plans. Work includes subsoiling, soil amendments, seeding, plug planting, seedling planting, watering, live stakes, mulch, and protection to establish vegetation growth. In accordance to MNDOT 2571 and 3876.

LA-49.2 MATERIALS

- A. Seed: Provide seed as shown on sheet LA22.
- B. Plugs and Seedlings: Species selected from Sheet LA22. In accordance to MNDOT 2571.
- C. Water: Water for the execution of this work and maintenance shall be clean, fresh, and free of deleterious substances. Contractor shall furnish a hose and hose connection from hydrant and/or outlet where the water will be furnished. It is the responsibility of the Contractor to verify source of water and its availability prior to its use. In accordance to MNDOT 2571.
- D. Mulching Material: Provide oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.
- E. Erosion Control: Provide live stakes as shown on sheet LA21 to secure rolled erosion mat.
- F. Submit product data from seed and plant source for engineer approval.

LA-49.3 CONSTRUCTION

As shown on sheets LA21 and LA22, and in accordance to MNDOT 2571 and 3876.

LA-49.4 METHODS OF MEASUREMENT

The Engineer will measure by the square foot to include; all subsoiling, soil amendments, seeding, plugs, seedlings, watering, live stakes, mulch, and protections shall be included in the price for Restoration Planting Zone 1. Measure seeding by the area seeded and compute area directly to pounds using set application rate specified by seed mix on sheet LA22. Measure planting area for plugs to be placed at 18” on center within entire restoration zone square footage. Soil bed preparation, topsoil, fertilizer and rolled erosion prevention are paid for separately with applicable bid items.

LA-49.5 BASIS OF PAYMENT

The Contract Unit Price for Restoration Planting Zone 1 is compensation in full for equipment, materials, and labor required to complete the Work.

The Department will pay for Restoration Planting Zone 1 on the basis of the following schedule:

Item No.	Item	Unit
2575.618	Restoration Planting Zone 1	Square Foot

LA-50 (2575) RAINGARDEN PLANTING ZONE

LA-50.1 DESCRIPTION

This Work consists of placing native seed and planting plugs to establish permanent vegetative cover for Raingarden Planting Zone as shown on the Plans. Work includes subsoiling, soil amendments, seeding, plug planting, seedling planting, watering, mulch, and protection to establish vegetation growth. In accordance to MNDOT 2571 and 3876.

LA-50.2 MATERIALS

- A. Seed: Provide seed as shown on sheet LA22.
- B. Plugs: Species selected from Sheet LA22. In accordance to MNDOT 2571.
- C. Water: Water for the execution of this work and maintenance shall be clean, fresh, and free of deleterious substances. Contractor shall furnish a hose and hose connection from hydrant and/or outlet where the water will be furnished. It is the responsibility of the Contractor to verify source of water and its availability prior to its use. In accordance to MNDOT 2571.
- D. Mulching Material: Provide oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.
- E. Submit product data from seed and plant source for engineer approval.

LA-50.3 CONSTRUCTION

As shown on sheets LA21 and LA22, and in accordance to MNDOT 2571 and 3876.

LA-50.4 METHODS OF MEASUREMENT

The Engineer will measure by the square foot to include; all subsoiling, soil amendments, seeding, plugs, watering, mulch, and protections shall be included in the price for Raingarden Planting Zone. Measure seeding by the area seeded and compute area directly to pounds using set application rate specified by

seed mix on sheet LA22. Measure planting area for plugs to be placed at 18" on center within entire restoration zone square footage. Soil bed preparation, topsoil, fertilizer and rolled erosion prevention are paid for separately with applicable bid items.

LA-50.5 BASIS OF PAYMENT

The Contract Unit Price for Raingarden Planting Zone is compensation in full for equipment, materials, and labor required to complete the Work.

The Department will pay for Raingarden Planting Zone on the basis of the following schedule:

Item No.	Item	Unit
2575.618	Raingarden Planting Zone	Square Foot

LA-51 (2575) SLOPE STABILIZATION ZONE

LA-51.1 DESCRIPTION

This Work consists of placing native seed and planting plugs, seedlings, and live stakes to establish permanent vegetative cover for Slope Stabilization Zone as shown on the Plans. Work includes subsoiling, soil amendments, seeding, plug planting, seedling planting, watering, live stakes, mulch, and protection to establish vegetation growth. In accordance to MNDOT 2571 and 3876.

LA-51.2 MATERIALS

- A. Seed: Provide seed as noted on sheet LA22.
- B. Plugs and Seedlings: Species selected from Sheet LA22. In accordance to MNDOT 2571.
- C. Water: Water for the execution of this work and maintenance shall be clean, fresh, and free of deleterious substances. Contractor shall furnish a hose and hose connection from hydrant and/or outlet where the water will be furnished. It is the responsibility of the Contractor to verify source of water and its availability prior to its use. in accordance to MNDOT 2571.
- D. Mulching Material: Provide oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.
- E. Erosion Control: Provide live stakes as shown on sheet LA21 to secure rolled erosion mat.
- F. Submit product data from seed and plant source for engineer approval.

LA-51.3 CONSTRUCTION

As shown on sheets LA21 and LA22, and in accordance to MNDOT 2571 and 3876.

LA-51.4 METHODS OF MEASUREMENT

The Engineer will measure by the square foot to include; all subsoiling, soil amendments, seeding, plugs, seedlings, watering, live stakes, mulch, and protections shall be included in the price for Slope Stabilization Zone. Measure seeding by the area seeded and compute area directly to pounds using set application rate specified by seed mix on sheet LA22. Measure planting area for plugs to be placed at 18" on center within entire restoration zone square footage. Soil bed preparation, topsoil, fertilizer and rolled erosion prevention are paid for separately with applicable bid items.

LA-51.5 BASIS OF PAYMENT

The Contract Unit Price for Slope Stabilization Zone is compensation in full for equipment, materials, and labor required to complete the Work.

The Department will pay for Restoration Slope Stabilization Zone on the basis of the following schedule:

Item No.	Item	Unit
2575.618	Slope Stabilization Zone	Square Foot

LA-52.1 (2575) WEED SPRAYING

The provisions of MnDOT 2571 are replaced with the following:

LA-52.2 DESCRIPTION

- A. This section covers the furnishing of all labor, materials, tools, equipment and performances of all work and services necessary or incidental to invasive/weedy vegetation removal and control prior to installation of native seed as well as following restoration seeding and planting as indicated on the drawings or as specified herein.
- B. The area of invasive/weedy vegetation removal and control (Management Area) includes areas outside of the grading limits between the Lakewalk Trail and the lake shore and within the Lakewalk easement or City right-of-way. Steep slopes/cliff areas are excluded from the management area.
- C. This section covers the furnishing of all labor, materials, tools, equipment and performances of all work and services necessary or incidental to invasive/weedy vegetation removal during the 2 year Plant Establishment Period
- D. This section must be executed by the Ecological Restoration Contractor (also referred to as Contractor in this Section); see Section LA-52.4A below for requirements.

LA-52.3 METHODS OF MEASUREMENT

Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:

- 1. All measurements for payments for invasive/weedy vegetation removal and control items shall be based on the Unit Price bid per item.
- 2. WEED SPRAYING shall be paid by acre (ACRE), and include all costs of labor, materials (including herbicide), and equipment required to complete the work, as specified.
- 3. The ACRES presented in the Statement of Estimated Quantities account for anticipated tasks in graded and non-graded areas, as well as the anticipated number of trips.

LA-52.4 SUBMITTALS

A. Qualification Data: Prior to starting work, Ecological Restoration Contractor shall provide at least three (3) client references for at least five (5) projects in Minnesota over the past five (5) years that entailed conducting the ecological restoration and vegetation management tasks described in this section and specification package. In addition, the Ecological Restoration Contractor shall provide a resume or other documentation indicating that the on-site field supervisor(s) overseeing project implementation has a minimum of five (5) years' experience conducting the ecological restoration and vegetation management tasks described in this section and specification package.

B. Product Data: For each type of product indicated.

- 1. Pesticides and Herbicides: Include product label and manufacturer's application instructions specific to this Project.
- 2. 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) must submit a copy of the Commercial Applicator License with list of herbicides to be used. The Owner's Representative must approve herbicides used on property prior to use.

C. Licenses: Prior to any herbicide use the Contractor shall submit to the Owner a current copy of the State of Minnesota commercial pesticide applicator's license for each person who will be applying

regulated herbicide at the project site. A copy of each commercial pesticide applicator's license must be maintained on site at all times during completion of the work.

D. Equipment: Prior to commencement of any work, submit to the Owner a written description of all wheeled, tracked, and mechanical equipment that will be present in the construction area, and describe its intended use during the execution of the work. Description shall include the weight of vehicles, including pounds per square inch (psi) exerted by tires or tracks under the vehicle's loaded/operational conditions.

E. Schedule: Schedule for site preparation and application activities.

F. After the work is complete, submit to the Owner "as-built" plans. As-builts shall: delineate areas where species were treated or removed; provide a listing of all species and quantities treated or removed; and identify herbicide type, dilution rate, and quantity used. Any field changes or deviations from the original plans shall be marked clearly on the as-builts.

LA-52.5 QUALITY ASSURANCE

A. Contractor must be experienced per the required submittals outlined in Section LA-52.4A above.

B. Contractor shall perform all work under the direct supervision and control of a superintendent conforming to the minimum qualifications (Section LA-52.4A above), including demonstrated experience in site preparation, native plant identification, and identification and control of target invasive/weedy woody and herbaceous vegetation (see table in Section LA-52.7D).

C. Pesticide Applicator: State licensed, commercial per MnDOT standard specification 2571.

LA-52.6 PRODUCTS

- A. Herbicide to be used for basal bark or cut stump applications for all woody species shall be Triclopyr (butoxyethyl ester), trade name Garlon 4 or equivalent, following the instructions on the herbicide label. Care should be taken when working near open water or saturated soils to prevent herbicide from contacting the water or soil. Any substitutions must be approved in writing by the Owner.
- B. Herbicide to be used for foliar applications for all woody species shall be Triclopyr (triethylamine salt), trade name Garlon 3A or equivalent, following instructions on the herbicide label. Any substitutions must be approved in writing by the Owner.
- C. Herbaceous species to be removed in areas without nearby standing water or saturated soils shall be treated with Glyphosate, Triclopyr, Aminopyralid, or Clopyralid, as deemed appropriate by the Contractor, following the instructions on the herbicide label. Any substitutions must be approved in writing by Owner.
- D. Herbaceous species to be removed in areas near standing water or saturated soils shall be treated with Glyphosate or Triclopyr in a form approved for aquatic applications, such as Rodeo (or equivalent) or Garlon 3A (or equivalent), following the instructions on the herbicide label. Any substitutions must be approved in writing by Owner.
- E. A non-toxic, inert, marking dye shall be used in herbicide applications.
- F. Selective grass herbicides and other specialty herbicides may also be used in appropriate locations with written approval by Owner.

LA-52.7 EXECUTION

A. Protection of desirable existing vegetation shall be the responsibility of the Contractor during target woody and herbaceous plant removal. The Contractor shall be liable for remedying damage to existing desirable vegetation.

B. All treatments shall occur during times laid out in the project schedule. Any changes to the schedule must be approved by the Owner in writing.

C. Tree removals must be conducted per U.S. Fish and Wildlife Service guidelines for the protection and conservation of species protected under the Endangered Species Act and as outlined in the project special provisions.

D. Invasive/weedy species designated for removal/control (i.e., target woody and herbaceous species) are:

SCIENTIFIC NAME	COMMON NAME	DISPOSITION
WOODY SPECIES		
<i>Acer ginnala</i> *	Amur maple	Remove/control all
<i>Acer planatoides</i>	Norway maple	Remove/control all
<i>Berberis thunbergii</i>	Japanese barberry	Remove/control all
<i>Berberis vulgaris</i>	Common barberry	Remove/control all
<i>Caragana arborescens</i>	Siberian peashrub	Remove/control all
<i>Celastrus orbiculatus</i>	Oriental bittersweet	Remove/control all
<i>Eleagnus angustifolia</i>	Russian olive	Remove/control all
<i>Euonymus alatus</i>	Burning bush	Remove/control all
<i>Frangula alnus</i> *	Glossy buckthorn	Remove/control all
<i>Lonicera</i> spp.*	Non-native honeysuckles	Remove/control all
<i>Morus alba</i>	White mulberry	Remove/control all
<i>Phellodendron amurense</i>	Amur cork tree	Remove/control all
<i>Populus alba</i>	White poplar	Remove/control all

SCIENTIFIC NAME	COMMON NAME	DISPOSITION
<i>Rhamnus cathartica</i> *	Common buckthorn	Remove/control all
<i>Robinia pseudoacacia</i> *	Black locust	Remove/control all
<i>Rosa multiflora</i>	Multiflora rose	Remove/control all
<i>Salix x fragilis</i> *	Crack willow	Per Owner's direction
<i>Tamarix ramosissima</i>	Saltcedar	Remove/control all
<i>Toxicodendron radicans</i>	Eastern poison ivy	Remove/control all
<i>Toxicodendron rydbergii</i>	Western poison ivy	Remove/control all
<i>Ulmus pumila</i>	Siberian elm	Remove/control all
HERBACEOUS SPECIES		
<i>Alliaria petiolata</i>	Garlic mustard	Remove/control all
<i>Amaranthus palmeri</i>	Palmer amaranth	Remove/control all
<i>Arctium spp</i> *	Burdocks	Remove/control all
<i>Brassica nigra</i>	Black mustard	Remove/control all
<i>Bromus inermis</i> *	Smooth brome grass	Remove/control all
<i>Cardamine impatiens</i>	Narrowleaf bittercress	Remove/control all
<i>Carduus acanthoides</i>	Plumeless thistle	Remove/control all
<i>Carduus nutans</i>	Musk thistle	Remove/control all
<i>Centaurea spp.</i>	Knapweeds	Remove/control all
<i>Cirsium arvense</i> *	Canada thistle	Remove/control all
<i>Conium maculatum</i>	Poison hemlock	Remove/control all
<i>Cynanchum louiseae</i>	Black swallow-wort	Remove/control all
<i>Cyperus esculentus</i>	Yellow nutsedge	Remove/control all
<i>Dactylis glomerata</i> *	Orchard grass	Remove/control all
<i>Daucus carota</i>	Queen Anne's lace	Remove/control all
<i>Digitalis lanata</i>	Grecian foxglove	Remove/control all
<i>Digitaria sanguinalis</i> *	Crabgrass	Remove/control all
<i>Dipsacus fullonum</i>	Common teasel	Remove/control all
<i>Dipsacus laciniatus</i>	Cutleaf teasel	Remove/control all
<i>Elymus repens</i> *	Quack grass	Remove/control all
<i>Euphorbia esula</i> *	Leafy spurge	Remove/control all
<i>Glechoma hederacea</i> *	Creeping Charlie	Remove/control all
<i>Heimerocallis spp.</i>	Ornamental lilies	Remove/control all
<i>Heracleum mantegazzianum</i>	Giant hogweed	Remove/control all
<i>Hesperis matronalis</i>	Dame's rocket	Remove/control all
<i>Hieracium aurantiacum</i> *	Orange hawkweed	Remove/control all
<i>Humulus japonicus</i>	Japanese hops	Remove/control all
<i>Iris pseudacorus</i>	Yellow iris	Remove/control all
<i>Leonurus cardiaca</i>	Motherwort	Remove/control all
<i>Leucanthemum vulgare</i>	Oxeye daisy	Remove/control all
<i>Linaria dalmatica</i>	Dalmatian toadflax	Remove/control all
<i>Linaria vulgaris</i>	Butter and eggs	Remove/control all
<i>Lotus corniculatus</i> *	Birdsfoot trefoil	Remove/control all
<i>Lythrum salicaria</i> , <i>L. virgatum</i>	Purple loosestrife	Remove/control all
<i>Medicago sativa</i>	Alfalfa	Remove/control all
<i>Melilotus alba</i>	White sweet clover	Remove/control all
<i>Melilotus officinalis</i>	Yellow sweet clover	Remove/control all
<i>Miscanthus spp.</i>	Silver grasses	Remove/control all
<i>Pastinaca sativa</i>	Wild parsnip	Remove/control all
<i>Phalaris arundinacea</i> *	Reed canary grass	Remove/control all

SCIENTIFIC NAME	COMMON NAME	DISPOSITION
<i>Phleum pretense</i> *	Timothy	Remove/control all
<i>Phragmites australis</i>	Giant reed grass (non-native)	Remove/control all
<i>Plantago major</i>	Common plantain	Remove/control all
<i>Poa pratensis</i> *	Kentucky bluegrass	Remove/control all
<i>Polygonum cuspidatum</i> , <i>P. x bohemicum</i> , <i>P. sachalinense</i>	Non-native knotweeds	Remove/control all
<i>Rumex crispus</i>	Curly dock	Remove/control all
<i>Scilla siberica</i>	Siberian squill	Remove/control all
<i>Securigera varia</i>	Crown vetch	Remove/control all
<i>Setaria</i> spp.	Foxtail grasses	Remove/control all
<i>Solanum dulcamara</i>	Bittersweet nightshade	Remove/control all
<i>Sonchus arvensis</i>	Field sowthistle	Remove/control all
<i>Tanacetum vulgare</i> *	Common tansy	Remove/control all
<i>Taraxacum officinale</i>	Dandelion	Remove/control all
<i>Torilis japonica</i>	Japanese hedge parsley	Remove/control all
<i>Trifolium pratense</i>	Red clover	Remove/control all
<i>Trifolium repens</i>	White clover	Remove/control all
<i>Typha angustifolia</i>	Narrow-leaf cattail	Remove/control all
<i>Typha x glauca</i>	Hybrid cattail	Remove/control all
<i>Verbascum thapsus</i> *	Mullein	Remove/control all
<i>Vicia cracca</i> and <i>V. villosa</i>	Cow vetch and Hairy vetch	Remove/control all

* Known or likely to exist onsite.

E. Woody Vegetation Removal and Control Methods

1. Cut and Herbicide method and follow-up Foliar Herbicide (methods described below) will be used on resprouting stumps and seedlings in all restoration areas as warranted following clearing and grubbing work by Contractor within the grading limits, and following brush removal work outside the grading limits (i.e., management areas). Use of other methods (e.g., forestry mowing) may be allowed if approved in writing by Owner.

2. Cut and Herbicide: For bidding purposes, the Contractor should assume all invasive shrubs outside the grading limits to be removed using hand tools including, but not necessarily limited to, gas-powered chainsaws, gas-powered clearing saws, bow saws, and loppers. Stumps will be left in the ground and not removed. All stumps shall be treated with an approved herbicide mixed with a marking dye. All stumps shall be cut flat with no sharp points, within 2 inches of surrounding grade. If snow cover is present, then stumps shall be cut only if snow depth $\leq$ 16 inches. In this case, stumps shall not exceed 5 inches. Herbicide will be applied to the surface of cut stems immediately after cutting by others. Herbicide shall be applied using a paintbrush, a wick applicator, a low-pressure hand sprayer, or a spray bottle. Herbicide shall be applied to the top of the cut stem, the bark on the sides of the cut stem and any exposed root flares. Within the grading limits (i.e., areas that will be cleared and grubbed), it is assumed that cutting and stump herbiciding will not be required by the Contractor.

3. Foliar Herbicide: This method is used as a follow-up to Cut and Herbicide, or on its own. Each fall during the contract period, herbicide will be selectively applied to the foliage of the woody vegetation to be controlled, including seedlings, resprouts, and saplings. Herbicide can be applied using a wick applicator, low-pressure hand sprayer, or spray bottle. Foliar herbicide will primarily be conducted outside the grading limits (little if any target woody vegetation should exist inside the grading area).

G. Herbaceous Vegetation Removal and Control Methods

1. Management Herbicide will be used in all management areas as warranted to control target invasive/weedy vegetation and enable the establishment of native plant communities.

2. Herbicide:

- (a) Contractor will treat species designated for removal/control (see table above) within the project area (including areas inside and outside the grading limits) with an approved herbicide. Herbicide application instructions given on the label will be followed at all times.
- (b) Unless directed otherwise by Owner's Representative, all graded and newly seeded restoration areas will be spot treated with herbicide at least one time before Winter 2027-28, at least one time during the first growing season of native seeding (2028), and at least two times each subsequent growing season until the end of the contract, and as necessary to achieve performance standards, or as approved by the Owner.
- (c) In most non-graded (i.e., management areas), spot herbicide treatments will occur at least two times during the first year of the project (2027) and at least two times each subsequent growing season until the end of the contract, and as necessary to achieve performance standards, or as approved by the Owner.
- (d) All treatments will occur during times laid out in the project schedule. Any changes to the schedule must be approved by the Owner in writing.
- (e) Protection of desirable existing vegetation (e.g., native species appropriate for restored communities) will be the responsibility of the Contractor during herbaceous species removal. The Contractor will be liable for remedying damage to existing desirable vegetation.
- (f) Herbicide may be applied using a backpack sprayer, a hand-held wick applicator, or a vehicle mounted low-pressure spray unit. Any other method must be approved in writing by the Owner.

H. When herbicides are used, a supply of chemical absorbent will be maintained at the project site. Any chemical spills will be properly cleaned up and reported to the Owner within 24 hours.

I. The Contractor will maintain copies at the project site of all current pesticide applicator's licenses and the herbicide label and MSDS (Material Safety Data Sheet) for each chemical utilized during completion of the work.

LA-52.8 CLEAN-UP, REMOVAL, AND REPAIR

A. Clean-Up: The Contractor will keep the work area free of debris. At no time will empty herbicide containers, trash, or other material be allowed to accumulate at the project site. All tools will be kept in appropriate carrying cases, toolboxes, etc. Parking areas, roads, sidewalks, paths and paved areas will be kept free of mud and dirt.

B. Removal: After work has been completed, remove tools, empty containers, and all other debris generated by the Contractor.

C. Repair: Repair any damages caused by the Contractor during completion of the work described in this Section. Said damages may include, but are not limited to, tire ruts in the ground, damage to lawn areas, damage to trails, etc. In the event any vegetation designated to be preserved is damaged, notify the Owner within 24 hours. The Contractor will be liable for remedying said damages.

LA-52.9 INSPECTION

A. After completion of initial invasive/weedy vegetation removal and control work (assumed to be approximately September 2027), the Contractor will schedule with the Owner a provisional acceptance inspection of the work.

B. Near the end of each subsequent growing season through the end of the contract, the Contractor will conduct an inspection of work areas. Within five business days of the inspection, the Contractor will notify the Owner by email of the results of the inspection, noting woody specimens missed, relative

number and location of stumps that have re-sprouted, and relative effectiveness of management of woody and herbaceous species designated for removal/control (see table above). Contractor will prepare and provide to Owner maps summarizing their findings.

C. Near the end of the contract's final growing season, the Contractor will schedule with the Owner a final acceptance inspection of the work.

LA-52.10 ACCEPTANCE AND GUARANTEE

A. Provisional Acceptance: The work shall be provisionally accepted by the Owner after vegetation removal/control is completed per the plans and specifications, and the Contractor has completed all clean up, removal, and repair as described in 3.2 of this Section, and has met the following performance standards:

1. Woody Vegetation Removal and Control

a. Any invasive/weedy woody vegetation designated for removal/control (see table above) should be cut by the Contractor (trees larger than 3" in diameter at breast height should be cut between November 15 to March 31). Cutting should preferentially be done using hand tools including, but not necessarily limited to, gas-powered chainsaws, gas-powered clearing saws, bow saws, and loppers; other equipment must be approved in advance by Owner. Removal of undesirable woody plant species shall occur preferably when the ground is frozen. Stumps should be left in the ground and not removed. All stumps should be treated with an approved herbicide mixed with a marking dye. All stumps should be cut flat with no sharp points, within 2 inches of surrounding grade. If snow cover is present, then stumps should be cut only if snow depth $\leq$ 16 inches. In this case, stumps should not exceed 5 inches. If snow depth is greater than 16 inches, stump cutting methods must be approved in writing by Owner. Herbicide should be applied to the surface of cut stems immediately after cutting. Herbicide should be applied using a paintbrush, a wick applicator, a low-pressure hand sprayer, or a spray bottle. Herbicide should be applied to the top of the cut stem, the bark on the sides of the cut stem and any exposed root flares. All cut material should be removed from the site by Contractor. Within the grading limits (i.e., areas that will be cleared and grubbed), it is assumed that cutting and stump herbiciding will not be required by the Contractor. Brushing will be considered complete after execution per the plans, specifications, and project schedule and following Owner approval.

b. Foliar herbicide of woody vegetation (responsibility of Contractor) will consist of treating species designated for removal/control (see table above) and using marking dye, with each treatment covering at least 95% of living leaf surfaces. After execution per the plans, specifications, and project schedule and following Owner approval, foliar herbicide shall be considered 25% complete after the first treatment, 50% complete after the second treatment, 75% complete after the third treatment, and 100% complete after the fourth/final treatment.

2. Herbaceous Vegetation Removal and Control

a. Herbicide Application: After execution per the plans, specifications, and project schedule, herbicide application shall be considered 30% complete following Owner approval of initial invasives management in non-graded areas and initial control of invasives in native seeding areas (late 2027, $\leq$ 10% vegetative cover by the species designated for removal/control (see table above)), anticipated in late 2027. This item shall be considered 60% complete after execution per the plans, specifications, and following Owner approval of the end of first growing season after seed installation (late 2028, $\leq$ 8% vegetative cover by the species designated for removal/control (see table above)). This item shall be considered 80% complete after execution per the plans, specifications, and following Owner approval of the end of second growing season after seed installation (late 2029, $\leq$ 5% vegetative cover by the species designated for removal/control (see table above)).

B. Final Acceptance: This Section shall be considered 100% complete after the Contractor has complied with all provisions of the Guarantee described in 3.4.C of this Section, and completed all required clean up, removal, and repair as described in 3.2 of this Section.

C. Guarantee: The Contractor guarantees not more than 5% of the cut stumps shall be re-sprouting at any time, and species designated for removal (see table above) shall represent <5% vegetative cover (assuming leaf-on conditions) in any 10 ft by 10 ft area until conclusion of the contract.

LA-52.11 BASIS OF PAYMENT

The Contract Unit Price for WEED SPRAYING is compensation in full for equipment, materials, and labor required to complete the Work.

The Department will pay WEED SPRAYING on the basis of the following schedule:

Item No.	Item	Unit
2575.505	WEED SPRAYING.....	Acre

SEQ NOTES

1. BITUMINOUS MATERIAL FOR TACK COAT (SPEC. 2357) SHALL BE PLACED AT A RATE OF 0.03–0.05 GAL/SQ YD BETWEEN LIFTS.
2. BITUMINOUS TONNAGE COMPUTED AT 115 LBS/SQ YD/INCH OF THICKNESS.
3. INCLUDES UNDISTRIBUTED QUANTITY OF 50 EACH TO BE USED AS DIRECTED BY THE ENGINEER.
4. INCLUDES SYSTEM CONDUIT AND WIRING.
5. INCLUDES TEMPORARY CONSTRUCTION ACCESS AND TURN AROUND REQUIRED TO COMPLETE THE WORK. CONTRACTOR SHALL COORDINATE PROPOSED CONSTRUCTION STAGING WITH THE ENGINEER.
6. INCLUDES REMOVAL AND DISPOSAL OF EXISTING DIRECTIONAL SIGNAGE, SUPPORT, AND FOOTING.
7. ASSUMES REUSE OF EXISTING FRAME AND RING CASTING. INCLUDES ADJUSTMENT TO FINISHED GRADE.
8. TO BE USED FOR CLOSURE OF SOCIAL TRAIL. WORK AREA ASSUMES 4 FT WIDE TRAIL AND 20 FT LENGTH.
9. THICKNESS OF THE CONCRETE MAY VARY. NO ADDITIONAL COSTS FOR VARYING DEPTHS WILL OCCUR.
10. AREA IS APPROXIMATELY 2.1 ACRES. CONTRACTOR SHALL PERFORM FIELD REVIEW WITH CITY PRIOR TO BEGINNING CLEARING AND GRUBBING OPERATIONS. CONTRACTOR SHALL PROTECT ALL TREES AND VEGETATION NOT DESIGNATED FOR REMOVAL.
11. INCLUDES REMOVAL OF BENCH AND PICNIC PADS IN PAUSE AREAS.
12. INCLUDES AGGREGATE BASE AND EXCAVATION – COMMON.
13. INCLUDES THE REMOVAL OF TIMBER STEPS.
14. INCLUDES SAWCUTTING CONCRETE WALL.
15. INCLUDES EXCAVATION, CONNECTION TO EXISTING WATER MAIN, AND BACKFILL.
16. INCLUDE TOP AND BOTTOM RAIL AS REQUIRED TO MATCH EXISTING FENCE.
17. INCLUDES STOOP, EXCAVATION, AGGREGATE BASE CLASS 5, AND BACKFILL.
18. INCLUDES ENTIRE FLIGHT OF STEPS.
19. INCLUDES REMOVAL OF METAL SIGN SUPPORT FOR INFORMATION SIGN AND CONCRETE FOUNDATION.
20. INCLUDES REMOVAL AND DISPOSAL OF EXISTING "WATERFRONT EAST" SIGN, SUPPORT, AND FOOTING.
21. INCLUDES REINFORCING BAR.
22. SALVAGE INFORMATION SIGN PANEL TO THE CITY.
23. ITEMS ARE FOR EXPLORATORY EXCAVATION AND MISCELLANEOUS WORK AT THE DIRECTION OF THE ENGINEER. DISPOSAL OF EXCAVATED MATERIALS SHALL BE CONSIDERED INCIDENTAL.
24. INCLUDES EXCAVATION, SURFACING, UNDERDRAIN, AND EDGER.
25. EACH WASTE RECEPTACLE UNIT INCLUDES A DOUBLE TRASH HUB, ONE RECYCLING AND ONE TRASH. REFER TO LANDSCAPE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
26. INCLUDES POWDER COATING BLACK AND REINSTALLING THE EXISTING RAILING ON THE EXISTING SHEET PILE.
27. INCLUDES MODIFYING THE EXISTING RAILING, POWDER COATING BLACK, AND REINSTALLING ON THE NEW RETAINING WALL.
28. INCLUDES EXCAVATION, CONCRETE SUPPORT BEAMS, REINFORCING, NAILERS, AND FASTENERS REQUIRED TO INSTALL BOARDWALK. ALL IPE BOARDWALK WILL BE SALVAGED FROM ON SITE OR SUPPLIED FROM CITY STOCKPILE.
29. CONCRETE WALK OR PAVEMENT INCLUDED IN SEPARATE BID ITEM.
30. ANTICIPATED PRUNING AT COMMUNITY CONNECTOR 4 AND PAUSE AREA 3. COORDINATE EXACT LOCATIONS WITH THE ENGINEER.
31. CONTRACTOR TO REUSE ON SITE FOR PROPOSED SLOPE STABILIZATION AND CLOSURE OF SOCIAL TRAILS AT DIRECTION OF ENGINEER IN THE FIELD.
32. ASSUMES EXISTING FENCE POSTS ARE CAST IN CONCRETE FOOTINGS.
33. UNDISTRIBUTED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER WHEN SHALLOW BEDROCK IS ENCOUNTERED DURING EXCAVATION.
34. ALL BOARDWALK REMOVED FROM THE PROJECT SHALL BE SALVAGED FOR REUSE ON THE PROJECT.
35. ITEM USED FOR DEER BROWSE FENCING. INCLUDE ONE GATE FOR MAINTENANCE ACCESS. SEE LA SHEETS LA12–LA13.
36. INCLUDES EXCAVATION FOR BITUMINOUS TRAIL ENGINEERED SECTION.
37. INCLUDES CONCRETE PADS FOR AMENITIES.
38. INCLUDES C CHANNEL CAP INSTALLATION.
39. INCLUDES REMOVAL OF 33 LIN FT OF CONCRETE KNEE WALL NEAR STA. 100+00.
40. CLASS III

FUNDING NOTE

- (A) 80% RAISE GRANT FUNDS, 20% IJA MATCH FUNDS
- (B) LOCAL CITY FUNDS

STATEMENT OF ESTIMATED QUANTITIES

NOTES	CHART	SHEET NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	S.P. 118–090–029 ESTIMATED QUANTITY (A)	CP 2193 ESTIMATED QUANTITY (B)
5			2021.501	MOBILIZATION	LUMP SUM	1	1	
			2041.610	TRAINEES	HOURL	700	700	
10	A	11	2101.501	CLEARING AND GRUBBING	LUMP SUM	1	1	
	N	18	2104.502	REMOVE LIGHTING UNIT	EACH	11	6	5
18	Q	20	2104.502	REMOVE CONCRETE STEPS	EACH	1	1	
	F	13	2104.502	REMOVE CASTING	EACH	2	2	
	E	13	2104.502	REMOVE DRAINAGE STRUCTURE	EACH	1	1	
	A,J	11, 15 16	2104.502	REMOVE SIGN	EACH	6	5	1
6	J	15, 16	2104.502	REMOVE SIGN SPECIAL 1	EACH	3	3	
20	J	15, 16	2104.502	REMOVE SIGN SPECIAL 2	EACH	1	1	
	N	18	2104.502	REMOVE HANDHOLE	EACH	1	1	
	N	18	2104.502	REMOVE LIGHT FOUNDATION	EACH	19	19	
	N	18	2104.502	REMOVE SERVICE CABINET	EACH	1	1	
	Q	20	2104.502	REMOVE PICNIC TABLE	EACH	10	10	
	Q	20	2104.502	REMOVE BENCH	EACH	38	38	
	A	11	2104.502	SALVAGE VEHICULAR GATE	EACH	1	1	
	Q	20	2104.502	REMOVE BICYCLE RACK	EACH	5	5	
	F	13	2104.502	SALVAGE CASTING	EACH	8	8	
	Q	20	2104.502	SALVAGE BOULDER	EACH	1	1	
	N	18	2104.502	SALVAGE LIGHTING UNIT	EACH	14	14	
	J	15, 16	2104.502	SALVAGE SIGN	EACH	19	19	
22	J	15, 16	2104.502	SALVAGE SIGN SPECIAL 1	EACH	5	5	
19	J	15, 16	2104.502	REMOVE SIGN SUPPORT	EACH	2	2	
	Q	20	2104.502	SALVAGE PICNIC TABLE	EACH	1	1	
	Q	20	2104.502	SALVAGE BENCH	EACH	4	4	
	Q	20	2104.502	SALVAGE BICYCLE RACK	EACH	4	4	
	A	11	2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	193	193	
	A	11	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	411	411	
	E	13	2104.503	REMOVE PIPE SEWERS	LIN FT	42	42	
	A	11	2104.503	REMOVE CONCRETE CURB AND GUTTER	LIN FT	307	307	
	A	11	2104.503	REMOVE CONCRETE RETAINING WALL	LIN FT	50	50	
	A	11	2104.503	REMOVE FENCE	LIN FT	4 192	4 192	
	RW	RW01	2104.503	REMOVE ORNAMENTAL RAILING	LIN FT	204	204	
	Q	20	2104.503	SALVAGE FENCE DESIGN SPECIAL	LIN FT	100	100	
32	A	11	2104.503	SALVAGE FENCE DESIGN SPECIAL 2	LIN FT	1 579	1 579	
	CH	CH02–CH04	2104.503	SALVAGE METAL RAILING	LIN FT	612	612	
	A	11	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	60	60	
31	A	11	2104.507	SALVAGE RIPRAP	CU YD	331	331	
14	Q	20	2104.507	REMOVE CONCRETE STRUCTURE	CU YD	13	13	
	A	11	2104.518	REMOVE BITUMINOUS WALK	SQ FT	128 131	128 131	
9, 11, 39	A	11	2104.518	REMOVE CONCRETE WALK	SQ FT	11 912	11 912	
13	Q	20	2104.518	REMOVE TIMBER DECK	SQ FT	1 585	1 585	
			2104.601	REMOVE CONDUIT SYSTEM	LUMP SUM	1	1	
	Q	20	2104.602	SALVAGE BICYCLE REPAIR STATION	EACH	1	1	
	Q	20	2104.603	REMOVE TIMBER RAILING	LIN FT	71	71	
38	CH	CH02–CH04	2104.603	REMOVE SHEET PILING RETAINING WALL	LIN FT	108	108	
	A	11	2104.618	SALVAGE BRICK PAVERS	SQ FT	67	67	
34	B	11	2104.618	SALVAGE BOARDWALK	SQ FT	4 029	4 029	
36	H	14	2106.507	EXCAVATION – COMMON (P)	CU YD	14 030	14 030	
33			2106.507	EXCAVATION – ROCK	CU YD	700	700	
	RW	RW01	2106.507	SELECT GRANULAR EMBANKMENT MOD 7% (CV) (P)	CU YD	2 930	2 930	
	H	14	2106.507	COMMON EMBANKMENT (CV) (P)	CU YD	2 269	2 269	
	R	21	2108.504	GEOTEXTILE FABRIC TYPE 3	SQ YD	820	820	

(P) DENOTES PLAN QUANTITY

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

MEGAN GOPLIN
PRINTED NAME

Megan Goplin
SIGNATURE

04/03/2025
DATE
53018
LIC. NO.

S.P. 118–090–029
DULUTH LAKEWALK

REVISION
7–7–2026

STATEMENT OF ESTIMATED QUANTITIES
SHEET NO. 6 OF 142 SHEETS

PLOT DATE: 7/8/2026 8:54:09 AM FILE: G:\244Pro\240252\500 Drawings\Civil\240252 - 021 SEQ.dwg LHB PROJECT NO. 240252

SEQ NOTES

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NOTES	CHART	SHEET NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	S.P. 118–090–029 ESTIMATED QUANTITY (A)	CP 2193 ESTIMATED QUANTITY (B)
	CH	CH05–CH08	2112.603	SUBGRADE PREPARATION 6"–12"	LIN FT	500	500	
23			2123.510	COMMON LABORERS	HOURL	20	20	
23			2123.510	0.5 CU YD SHOVEL	HOURL	20	20	
23			2123.510	12 CU YD TRUCK	HOURL	20	20	
	CH	CH02,CH05	2123.612	BARGE MOBILIZATION	WEEK	6	6	
12, 31	C	12	2301.504	CONCRETE PAVEMENT 8.0"	SQ YD	468	468	
1	C	12	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	649	649	
2	C	12	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	4 657	4 657	
	RW	RW01	2411.507	STRUCTURAL CONCRETE (3G52)	CU YD	3	3	
	RW	RW01	2411.507	STRUCTURE EXCAVATION CLASS E (P)	CU YD	5 740	5 740	
	RW	RW01	2411.601	DRAINAGE SYSTEM	LUMP SUM	1	1	
	D	12	2411.604	CONCRETE WALL	SQ YD	13	13	
	CH	CH02–CH04	2411.607	STRUCTURAL CONCRETE (3G52) (P)	CU YD	86	86	
	CH	CH02–CH04	2411.607	STRUCTURAL CONCRETE (3F52) (P)	CU YD	50	50	
	D	12	2411.607	CONCRETE STEPS	CU YD	8	8	
	RW	RW01	2411.618	PREFABRICATED MODULAR BLOCK WALL	SQ FT	3 936	3 936	
29	C	12	2411.618	ARCH. CONCRETE TEXTURE (SANDBLAST)	SQ FT	36	36	
	RW	RW01	2433.502	ANCH TYPE REINF BARS (TYPE L)	EACH	53	53	
	RW	RW01	2433.507	REMOVE CONCRETE	CU YD	36	36	
	B, CH	11, CH02–CH04	2451.507	COARSE AGGREGATE BEDDING (CV)	CU YD	221	221	
	CH	CH02–CH03	2451.609	GRANULAR BEDDING	TON	210	210	
	RW	RW01	2452.601	EARTH RETENTION SYSTEM (TEMPORARY)	LUMP SUM	1	1	
	R, RW	21, RW01	2475.503	ORNAMENTAL METAL RAILING (P)	LIN FT	1 059	1 059	
	D	12	2475.503	PIPE RAILING	LIN FT	109	109	
27	CH	CH02	2475.603	INSTALL METAL RAILING SPECIAL	LIN FT	108	108	
26	CH	CH02–CH04	2475.603	INSTALL METAL RAILING	LIN FT	504	504	
	T	23	2478.601	CLEAN AND PAINT STEEL TYPE 1	LUMP SUM	1	1	
	T	23	2478.601	CLEAN AND PAINT STEEL TYPE 2	LUMP SUM	1	1	
	E	13	2501.502	12" RC PIPE APRON	EACH	10	10	
	E	13	2501.503	12" RC PIPE CULVERT DESIGN 3006 CL V	LIN FT	149	149	
	E	13	2502.502	6" PRECAST CONCRETE HEADWALL	EACH	1	1	
	E	13	2502.503	6" TP PIPE DRAIN	LIN FT	73	73	
	E	13	2502.503	6" PERF TP PIPE DRAIN	LIN FT	452	452	
	E	13	2502.602	6" TP PIPE DRAIN CLEAN OUT	EACH	7	7	
	E	13	2506.602	CONNECT INTO EXISTING DRAINAGE STRUCTURE	EACH	2	2	
	F	13	2506.502	CASTING ASSEMBLY	EACH	2	2	
	F	13	2506.502	ADJUST FRAME AND RING CASTING	EACH	5	5	
7	F	13	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	8	8	
	F	13	2506.602	MANHOLE FRAME SEAL	EACH	1	1	
40	R	21	2511.507	RANDOM RIPRAP CLASS SPECIAL	CU YD	45	45	
	E	13	2511.507	RANDOM RIPRAP CLASS II	CU YD	19	19	
3	R	21	2511.602	LANDSCAPE BOULDERS	EACH	120	120	

(P) DENOTES PLAN QUANTITY

PLOT DATE: 7/8/2026 8:54:09 AM FILE: G:\24Pro\240252\500 Drawings\Civil\240252 - 02.1 SEQ.dwg

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

MEGAN GOPLIN
PRINTED NAME

Megan Goplin
SIGNATURE

04/03/2025
DATE
53018
LIC. NO.

S.P. 118–090–029
DULUTH LAKEWALK

REVISION
7-7-2026

STATEMENT OF ESTIMATED QUANTITIES
SHEET NO. 7 OF 142 SHEETS

SEQ NOTES

1. BITUMINOUS MATERIAL FOR TACK COAT (SPEC. 2357) SHALL BE PLACED AT A RATE OF 0.03–0.05 GAL/SQ YD BETWEEN LIFTS.
2. BITUMINOUS TONNAGE COMPUTED AT 115 LBS/SQ YD/INCH OF THICKNESS.
3. INCLUDES UNDISTRIBUTED QUANTITY OF 50 EACH TO BE USED AS DIRECTED BY THE ENGINEER.
4. INCLUDES SYSTEM CONDUIT AND WIRING.
5. INCLUDES TEMPORARY CONSTRUCTION ACCESS AND TURN AROUND REQUIRED TO COMPLETE THE WORK. CONTRACTOR SHALL COORDINATE PROPOSED CONSTRUCTION STAGING WITH THE ENGINEER.
6. INCLUDES REMOVAL AND DISPOSAL OF EXISTING DIRECTIONAL SIGNAGE, SUPPORT, AND FOOTING.
7. ASSUMES REUSE OF EXISTING FRAME AND RING CASTING. INCLUDES ADJUSTMENT TO FINISHED GRADE.
8. TO BE USED FOR CLOSURE OF SOCIAL TRAIL. WORK AREA ASSUMES 4 FT WIDE TRAIL AND 20 FT LENGTH.
9. THICKNESS OF THE CONCRETE MAY VARY. NO ADDITIONAL COSTS FOR VARYING DEPTHS WILL OCCUR.
10. AREA IS APPROXIMATELY 2.1 ACRES. CONTRACTOR SHALL PERFORM FIELD REVIEW WITH CITY PRIOR TO BEGINNING CLEARING AND GRUBBING OPERATIONS. CONTRACTOR SHALL PROTECT ALL TREES AND VEGETATION NOT DESIGNATED FOR REMOVAL.
11. INCLUDES REMOVAL OF BENCH AND PICNIC PADS IN PAUSE AREAS.
12. INCLUDES AGGREGATE BASE AND EXCAVATION – COMMON.
13. INCLUDES THE REMOVAL OF TIMBER STEPS.
14. INCLUDES SAWCUTTING CONCRETE WALL.
15. INCLUDES EXCAVATION, CONNECTION TO EXISTING WATER MAIN, AND BACKFILL.
16. INCLUDE TOP AND BOTTOM RAIL AS REQUIRED TO MATCH EXISTING FENCE.
17. INCLUDES STOOP, EXCAVATION, AGGREGATE BASE CLASS 5, AND BACKFILL.
18. INCLUDES ENTIRE FLIGHT OF STEPS.
19. INCLUDES REMOVAL OF METAL SIGN SUPPORT FOR INFORMATION SIGN AND CONCRETE FOUNDATION.
20. INCLUDES REMOVAL AND DISPOSAL OF EXISTING "WATERFRONT EAST" SIGN, SUPPORT, AND FOOTING.
21. INCLUDES REINFORCING BAR.
22. SALVAGE INFORMATION SIGN PANEL TO THE CITY.
23. ITEMS ARE FOR EXPLORATORY EXCAVATION AND MISCELLANEOUS WORK AT THE DIRECTION OF THE ENGINEER. DISPOSAL OF EXCAVATED MATERIALS SHALL BE CONSIDERED INCIDENTAL.
24. INCLUDES EXCAVATION, SURFACING, UNDERDRAIN, AND EDGER.
25. EACH WASTE RECEPTACLE UNIT INCLUDES A DOUBLE TRASH HUB, ONE RECYCLING AND ONE TRASH. REFER TO LANDSCAPE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
26. INCLUDES POWDER COATING BLACK AND REINSTALLING THE EXISTING RAILING ON THE EXISTING SHEET PILE.
27. INCLUDES MODIFYING THE EXISTING RAILING, POWDER COATING BLACK, AND REINSTALLING ON THE NEW RETAINING WALL.
28. INCLUDES EXCAVATION, CONCRETE SUPPORT BEAMS, REINFORCING, NAILERS, AND FASTENERS REQUIRED TO INSTALL BOARDWALK. ALL IPE BOARDWALK WILL BE SALVAGED FROM ON SITE OR SUPPLIED FROM CITY STOCKPILE.
29. CONCRETE WALK OR PAVEMENT INCLUDED IN SEPARATE BID ITEM.
30. ANTICIPATED PRUNING AT COMMUNITY CONNECTOR 4 AND PAUSE AREA 3. COORDINATE EXACT LOCATIONS WITH THE ENGINEER.
31. CONTRACTOR TO REUSE ON SITE FOR PROPOSED SLOPE STABILIZATION AND CLOSURE OF SOCIAL TRAILS AT DIRECTION OF ENGINEER IN THE FIELD.
32. ASSUMES EXISTING FENCE POSTS ARE CAST IN CONCRETE FOOTINGS.
33. UNDISTRIBUTED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER WHEN SHALLOW BEDROCK IS ENCOUNTERED DURING EXCAVATION.
34. ALL BOARDWALK REMOVED FROM THE PROJECT SHALL BE SALVAGED FOR REUSE ON THE PROJECT.
35. ITEM USED FOR DEER BROWSE FENCING. INCLUDE ONE GATE FOR MAINTENANCE ACCESS. SEE LA SHEETS LA12–LA13.
36. INCLUDES EXCAVATION FOR BITUMINOUS TRAIL ENGINEERED SECTION.
37. INCLUDES CONCRETE PADS FOR AMENITIES.
38. INCLUDES C CHANNEL CAP INSTALLATION.
39. INCLUDES REMOVAL OF 33 LIN FT OF CONCRETE KNEE WALL NEAR STA. 100+00.
40. CLASS III

FUNDING NOTE

- A 80% RAISE GRANT FUNDS, 20% IJA MATCH FUNDS
- B LOCAL CITY FUNDS

STATEMENT OF ESTIMATED QUANTITIES

NOTES	CHART	SHEET NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	S.P. 118–090–029 ESTIMATED QUANTITY A	CP 2193 ESTIMATED QUANTITY B
	R	21	2511.602	PLACE BOULDER	EACH	1	1	
	CH	CH08,CH12	2511.602	TOE STONE ANCHOR	EACH	82	82	
	CH	CH05,CH11	2511.602	HAND PLACED RIPRAP TYPE ARMOR STONE STEPS	EACH	13	13	
31			2511.607	INSTALL RIPRAP	CU YD	331	331	
	CH	CH05–CH08	2511.607	HAND PLACED RIPRAP TYPE FILTER STONE	CU YD	164	164	
	CH	CH05–CH08	2511.607	HAND PLACED RIPRAP TYPE ARMOR STONE	CU YD	1 312	1 312	
	CH	CH05–CH08, CH12	2511.607	HAND PLACED RIPRAP TYPE TOE STONE	CU YD	82	82	
	CH	CH05–CH08	2511.607	HAND PLACED RIPRAP TYPE CHINKING STONE	CU YD	82	82	
	CH	CH02,CH14	2511.607	HAND PLACED RIPRAP TYPE MNDOT ROCKS	CU YD	147	147	
	CH	CH05–CH08	2511.609	HAND PLACED RIPRAP TYPE FILTER STONE SPECIAL	TON	435	435	
	CH	CH05–CH08	2511.609	HAND PLACED RIPRAP TYPE ARMOR STONE SPECIAL	TON	2 460	2 460	
	CH	CH05–CH08	2511.609	HAND PLACED RIPRAP TYPE TOE STONE SPECIAL	TON	525	525	
12, 37	C	12	2521.518	4" CONCRETE WALK	SQ FT	16 321	16 321	
12	C	12	2521.518	6" CONCRETE WALK	SQ FT	742	742	
	RW	RW01	2521.518	8" CONCRETE WALK SPECIAL 1	SQ FT	4 833	4 833	
	RW	RW01	2521.518	8" CONCRETE WALK SPECIAL 2	SQ FT	2 539	2 539	
	G	14	2521.602	DRILL AND GROUT REINF BAR (EPOXY COATED)	EACH	43	43	
	R	21	2521.618	WALK SPECIAL	SQ FT	2 500	2 500	
12	C	12	2521.618	6" CONCRETE WALK SPECIAL	SQ FT	72	72	
12	C	12	2531.503	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	113	113	
12	C	12	2531.503	CONCRETE CURB AND GUTTER DESIGN S524	LIN FT	108	108	
12,21	I	14	2531.503	CONCRETE CURB DESIGN SPECIAL	LIN FT	5 104	5 104	
12,21	I	14	2531.503	CONCRETE CURB DESIGN SPECIAL (TYPE 2)	LIN FT	150	150	
12,21	I	14	2531.603	CONCRETE CURB DESIGN V	LIN FT	868	868	
	G	14	2531.618	TRUNCATED DOMES	SQ FT	119	119	
	S	22	2540.602	INSTALL BICYCLE RACK	EACH	4	4	
	S	22	2540.602	BICYCLE RACK	EACH	30	30	
25	S	22	2540.602	WASTE RECEPTACLE	EACH	12	12	
	S	22	2540.602	PET WASTE STATION	EACH	9	9	
	S	22	2540.602	BOLLARD	EACH	1	1	
	S	22	2540.602	PICNIC TABLE	EACH	9	9	
	S	22	2540.602	INSTALL PICNIC TABLE	EACH	1	1	
	S	22	2540.602	BENCH TYPE 01	EACH	30	30	
	S	22	2540.602	INSTALL BENCH	EACH	4	4	
	R	21	2540.602	TIMBER STEP	EACH	147	147	
	S	22	2540.602	INSTALL BICYCLE REPAIR STATION	EACH	1	1	
	R	21	2540.603	LANDSCAPE EDGER	LIN FT	1 226	1 226	
28	B	11	2540.618	BOARDWALK	SQ FT	5 433	5 433	
	C	12	2540.618	INSTALL BRICK PAVERS	SQ FT	67	67	
	R	21	2541.602	STONE STEP	EACH	23	23	
4		SL01–SL10	2545.501	CONDUIT SYSTEM TYPE 1	LUMP SUM	1	1	
4		SL01–SL10	2545.501	CONDUIT SYSTEM TYPE 2	LUMP SUM	1	1	
4		SL01–SL10	2545.501	CONDUIT SYSTEM TYPE 3	LUMP SUM	1	1	
4		SL01–SL10	2545.501	CONDUIT SYSTEM TYPE 4	LUMP SUM	1	1	
4		SL01–SL10	2545.501	CONDUIT SYSTEM TYPE 5	LUMP SUM	1	1	
4		SL01–SL10	2451.501	CONDUIT SYSTEM TYPE 6	LUMP SUM	1	1	
4		SL01–SL10	2451.501	CONDUIT SYSTEM TYPE 7	LUMP SUM	1	1	
4		SL01–SL10	2451.501	CONDUIT SYSTEM TYPE 8	LUMP SUM	1	1	
	P	19	2545.502	LIGHTING UNIT TYPE SPECIAL 1	EACH	1	1	
	P	19	2545.502	LIGHTING UNIT TYPE SPECIAL 2	EACH	6	6	
	P	19	2545.502	LIGHTING UNIT TYPE SPECIAL 3	EACH	22	22	
	P	19	2545.502	SERVICE CABINET – TYPE L1	EACH	1	1	

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

MEGAN GOPLIN
PRINTED NAME

Megan Goplin
SIGNATURE

04/03/2025
DATE
53018
LIC. NO.

S.P. 118–090–029
DULUTH LAKEWALK

REVISION
7–7–2026

STATEMENT OF ESTIMATED QUANTITIES
SHEET NO. 8 OF 142 SHEETS

PLOT DATE: 7/8/2026 8:54:18 AM FILE: Q:\24Pro\240252\500 Drawings\Civil\240252 - 021 SEQ.dwg LHB PROJECT NO. 240252

PLOT DATE: 7/8/2026 8:54:18 AM FILE: Q:\24Pro\240252\500 Drawings\Civil\240252 - 021 SEQ.dwg

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STATEMENT OF ESTIMATED QUANTITIES								
NOTES	CHART	SHEET NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	S.P. 118–090–029 ESTIMATED QUANTITY A	CP 2193 ESTIMATED QUANTITY B
	P	19	2545.502	HANDHOLE	EACH	3	3	
	P	19	2545.602	INSTALL LIGHTING UNIT	EACH	14	9	5
	P	19	2545.602	SERVICE CABINET TYPE SPECIAL	EACH	1	1	
	P	19	2545.602	GFCI RECEPTACLE	EACH	1	1	
	P	19	2545.602	LIGHT FOUNDATION DESIGN E (MODIFIED)	EACH	37	37	
	P	19	2545.602	POWER PEDESTAL	EACH	4	4	
	P	19	2550.602	DETECTION SYSTEM	EACH	1	1	
16	I	14	2557.503	WIRE FENCE DESIGN 48V–9322	LIN FT	129	129	
	C	12	2557.602	INSTALL VEHICULAR GATE	EACH	1	1	
	I	14	2557.603	FENCE DESIGN SPECIAL	LIN FT	4 212	4 212	
35	I	14	2557.603	WOVEN WIRE FENCE	LIN FT	457	457	
	R	21	2557.603	INSTALL FENCE DESIGN SPECIAL	LIN FT	100	100	
	I	14	2557.603	INSTALL FENCE DESIGN SPECIAL 2	LIN FT	1 379	1 379	
			2563.601	TRAFFIC CONTROL	LUMP SUM	1	1	
	J	15, 16	2564.502	INSTALL SIGN	EACH	18	18	
	J	15, 16	2564.518	SIGN	SQ FT	38.78	38.78	
	T	23	2564.602	SIGN SPECIAL (B–3.1)	EACH	1	1	
	T	23	2564.602	SIGN SPECIAL (B–5)	EACH	6	6	
	T	23	2564.602	SIGN SPECIAL (C–2)	EACH	5	5	
	T	23	2564.602	SIGN SPECIAL (D–1)	EACH	12	12	
	T	23	2564.602	SIGN SPECIAL 1	EACH	1	1	
	T	23	2564.602	SIGN SPECIAL 2	EACH	1	1	
	P	19	2565.616	PEDESTRIAN CROSSWALK FLASHER SYSTEM	SYSTEM	1	1	
	O	18	2571.502	CONIFEROUS TREE 6’ HT B&B	EACH	20	20	
	O	18	2571.502	DECIDUOUS TREE 1.5” CAL CONT	EACH	18	18	
	O	18	2571.502	ORNAMENTAL TREE 1” CAL CONT	EACH	14	14	
	O	18	2571.502	DECIDUOUS SHRUB 12” HT CONT	EACH	56	56	
	O	18	2571.502	DECIDUOUS SHRUB 2.5’ HT CONT	EACH	10	10	
	M	17	2571.602	TREE PROTECTION	EACH	30	30	
	K	16	2572.503	TEMPORARY FENCE	LIN FT	3 141	3 141	
		30	2572.510	PRUNE TREES	HOURL	20	20	
			2573.501	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1	1	
	M	17	2573.502	STORM DRAIN INLET PROTECTION	EACH	11	11	
	M	17	2573.502	CULVERT END CONTROLS	EACH	7	7	
	M	17	2573.503	SILT FENCE, TYPE HI	LIN FT	9 928	9 928	
	M	17	2573.503	FLOTATION SILT CURTAIN TYPE STILL WATER	LIN FT	450	450	
	M	17	2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	5 641	5 641	
	K	16	2574.505	SOIL BED PREPARATION	ACRE	4. 77	4. 77	
	K	16	2574.507	BOULEVARD TOPSOIL BORROW	CU YD	2 755	2 755	
	CH	CH09–CH10	2574.507	SANDY CLAY LOAM TOPSOIL BORROW	CU YD	230	230	
	K	16	2574.508	FERTILIZER TYPE 3	POUND	954	954	
	K	16	2575.504	SODDING TYPE LAWN	SQ YD	1 296	1 296	
	M	17	2575.504	ROLLED EROSION PREVENTION CATEGORY 30	SQ YD	25 749	25 749	
	K	16	2575.505	SEEDING	ACRE	4. 51	4. 51	
			2575.505	WEED SPRAYING	ACRE	12. 7	12. 7	
	K	16	2575.507	MULCH MATERIAL TYPE 6	CU YD	25	25	
8	K	16	2575.602	SITE RESTORATION	EACH	44	44	
	C	12	2575.603	ROOT BARRIER	LIN FT	400	400	
	K	16	2575.608	SEED NORTHERN BOULEVARD	POUND	107	107	
	K	16	2575.608	SEED TURFGRASS	POUND	278	278	

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

MEGAN GOPLIN
PRINTED NAME

Megan Goplin
SIGNATURE

04/03/2025
DATE
53018
LIC. NO.

S.P. 118–090–029
DULUTH LAKEWALK

REVISION
7–7–2026

STATEMENT OF ESTIMATED QUANTITIES
SHEET NO. 9 OF 142 SHEETS

SEQ NOTES

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27. INCLUDES MODIFYING THE EXISTING RAILING, POWDER COATING BLACK, AND REINSTALLING ON THE NEW RETAINING WALL.
28. INCLUDES EXCAVATION, CONCRETE SUPPORT BEAMS, REINFORCING, NAILERS, AND FASTENERS REQUIRED TO INSTALL BOARDWALK. ALL IPE BOARDWALK WILL BE SALVAGED FROM ON SITE OR SUPPLIED FROM CITY STOCKPILE.
29. CONCRETE WALK OR PAVEMENT INCLUDED IN SEPARATE BID ITEM.
30. ANTICIPATED PRUNING AT COMMUNITY CONNECTOR 4 AND PAUSE AREA 3. COORDINATE EXACT LOCATIONS WITH THE ENGINEER.
31. CONTRACTOR TO REUSE ON SITE FOR PROPOSED SLOPE STABILIZATION AND CLOSURE OF SOCIAL TRAILS AT DIRECTION OF ENGINEER IN THE FIELD.
32. ASSUMES EXISTING FENCE POSTS ARE CAST IN CONCRETE FOOTINGS.
33. UNDISTRIBUTED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER WHEN SHALLOW BEDROCK IS ENCOUNTERED DURING EXCAVATION.
34. ALL BOARDWALK REMOVED FROM THE PROJECT SHALL BE SALVAGED FOR REUSE ON THE PROJECT.
35. ITEM USED FOR DEER BROWSE FENCING. INCLUDE ONE GATE FOR MAINTENANCE ACCESS. SEE LA SHEETS LA12–LA13.
36. INCLUDES EXCAVATION FOR BITUMINOUS TRAIL ENGINEERED SECTION.
37. INCLUDES CONCRETE PADS FOR AMENITIES.
38. INCLUDES C CHANNEL CAP INSTALLATION.
39. INCLUDES REMOVAL OF 33 LIN FT OF CONCRETE KNEE WALL NEAR STA. 100+00.
40. CLASS III

FUNDING NOTE

- A

80% RAISE GRANT FUNDS, 20% IJA MATCH FUNDS
- B

LOCAL CITY FUNDS

STATEMENT OF ESTIMATED QUANTITIES

NOTES	CHART	SHEET NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	S.P. 118–090–029 ESTIMATED QUANTITY A	CP 2193 ESTIMATED QUANTITY B
	K	16	2575.608	SEED NORTHEAST ROADSIDE	POUND	22	22	
	K	16	2575.608	SEED POLLINATOR PLOT NE	POUND	8	8	
	K	16	2575.618	POLLINATOR PLANTING ZONE	SQ FT	186	186	
	K	16	2575.618	RESTORATION PLANTING ZONE 1	SQ FT	38 629	38 629	
	K	16	2575.618	RAINGARDEN PLANTING ZONE	SQ FT	1 258	1 258	
	K	16	2575.618	SLOPE STABILIZATION ZONE	SQ FT	23 920	23 920	
	C	12	2575.618	GRASS PAVER	SQ FT	265	265	
	L	17	2582.503	4" SOLID LINE MULTI COMP GR IN (WR)	LIN FT	17 256	17 256	
	L	17	2582.503	24" SOLID LINE MULTI COMP GR IN (WR)	LIN FT	24	24	
	L	17	2582.518	PAVT MSSG MULTI COMP GR IN	SQ FT	150	150	
	L	17	2582.518	CROSSWALK PREF THERMO GR IN	SQ FT	496	496	
	L	17	2582.518	CROSSWALK PREF THERMO GR IN CONT	SQ FT	80	80	
ADD ALT NO. 1								
	D	12	2411.604	CONCRETE WALL	SQ YD	10	10	
	D	12	2411.607	CONCRETE STEPS	CU YD	12	12	
	D	12	2475.503	PIPE RAILING	LIN FT	132	132	
12	C	12	2521.518	4" CONCRETE WALK	SQ FT	380	380	
4		SL01–SL10	2451.501	CONDUIT SYSTEM TYPE 7	LUMP SUM	1	1	
	P	19	2545.502	LIGHTING UNIT TYPE SPECIAL 3	EACH	1	1	
	P	19	2545.602	LIGHT FOUNDATION DESIGN E (MODIFIED)	EACH	1	1	
ADD ALT NO. 2								
17	S	22	2100.614	VAULT TOILET BUILDING	STRUCTURE	1	1	
	S	22	2100.614	PICNIC SHELTER	STRUCTURE	1	1	
	C	12	2521.518	4" CONCRETE WALK	SQ FT	1 061	1 061	
	S	22	2540.602	PICNIC TABLE	EACH	6	6	
15	S	22	2540.602	DRINKING FOUNTAIN	EACH	1	1	
ADD ALT NO. 3								
	A	11	2104.518	REMOVE BITUMINOUS WALK	SQ FT	7 388	7 388	
	C	12	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	32	32	
	C	12	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	140	140	
ADD ALT NO. 4								
	Q	20	2104.502	REMOVE BENCH	EACH	2	2	
	T	23	2104.502	SALVAGE SIGN SPECIAL 2	EACH	1	1	
	Q	20	2104.507	REMOVE CONCRETE STRUCTURE	CU YD	35	35	
	A	11	2104.518	REMOVE CONCRETE WALK	SQ FT	1 546	1 546	
	C	12	2521.518	4" CONCRETE WALK	SQ FT	1 003	1 003	
12	C	12	2521.618	4" CONCRETE WALK SPECIAL	SQ FT	231	231	
	S	22	2540.602	BENCH TYPE 02	EACH	2	2	
	T	23	2564.602	INSTALL SIGN SPECIAL 2	EACH	1	1	
	K	16	2574.505	SOIL BED PREPARATION	ACRE	0.06	0.06	
	K	16	2574.507	BOULEVARD TOPSOIL BORROW	CU YD	33	33	
	K	16	2574.508	FERTILIZER TYPE 3	POUND	12	12	
	M	17	2575.504	ROLLED EROSION PREVENTION CATEGORY 30	SQ YD	242	242	
	K	16	2575.505	SEEDING	ACRE	0.06	0.06	
	K	16	2575.608	SEED TURFGRASS	POUND	14	14	
ADD ALT NO. 5								
24	S	22	2540.601	FURNISH AND INSTALL PLAY AREA	LUMP SUM	1	1	
	I	14	2557.603	FENCE DESIGN SPECIAL	LIN FT	48	48	
ADD ALT NO. 6								
	N	18	2104.502	REMOVE LIGHT FOUNDATION	EACH	1		1
	Q	20	2104.507	REMOVE CONCRETE STRUCTURE	CU YD	3		3
	T	23	2478.601	CLEAN AND PAINT STEEL TYPE 2	EACH	1		1
	R	21	2511.602	LANDSCAPE BOULDERS	EACH	8		8
	R	21	2541.618	RESTORE HISTORIC WALL	SQ FT	216		216
	K	16	2575.507	BOULEVARD TOPSOIL BORROW	CU YD	0.28		0.28
	K	16	2574.508	FERTILIZER TYPE 3	POUND	0.18		0.18
	K	16	2575.608	SEED TURFGRASS	POUND	1		1

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

MEGAN GOPLIN
PRINTED NAME

Megan Goplin
SIGNATURE

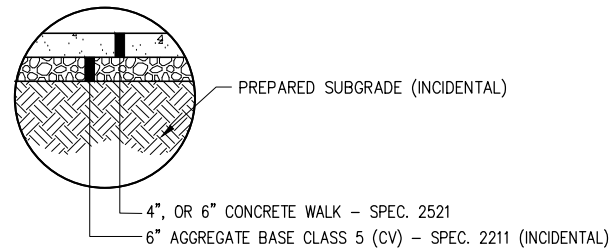
04/03/2025
DATE
53018
LIC. NO.

S.P. 118–090–029
DULUTH LAKEWALK

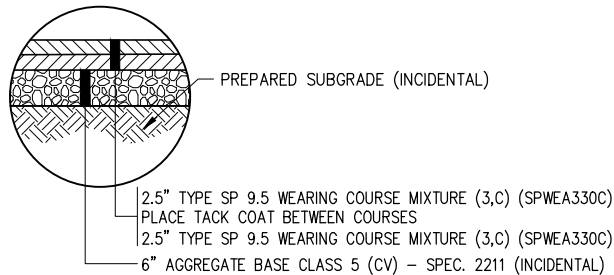
REVISION
7–7–2026

STATEMENT OF ESTIMATED QUANTITIES
SHEET NO. 10 OF 142 SHEETS

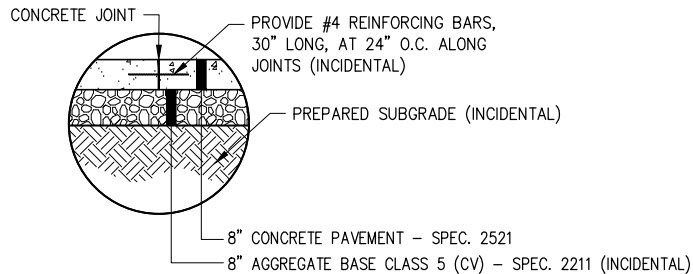
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CONCRETE WALK
NOT TO SCALE



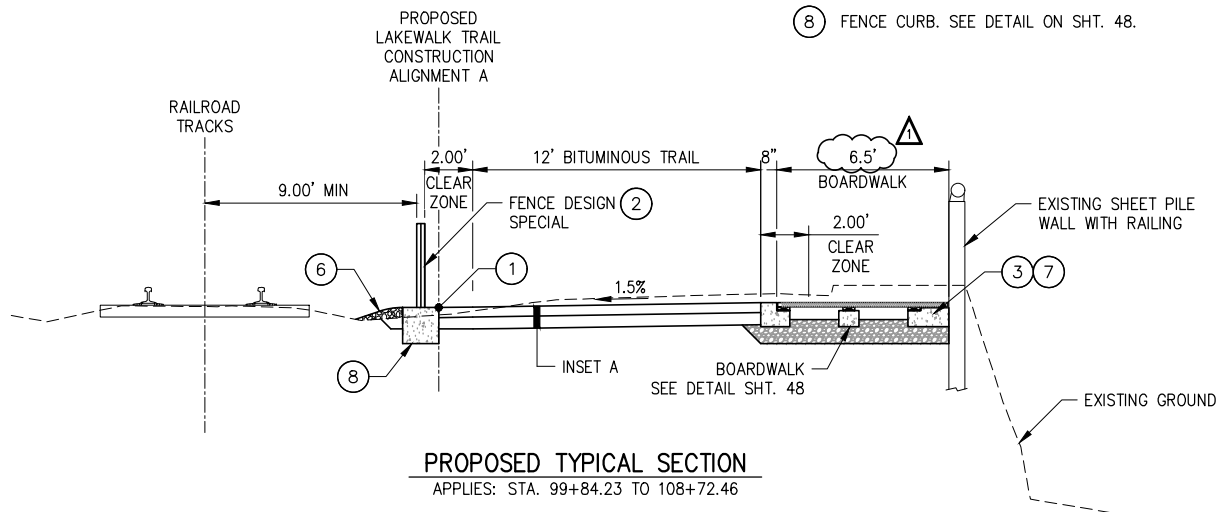
INSET A
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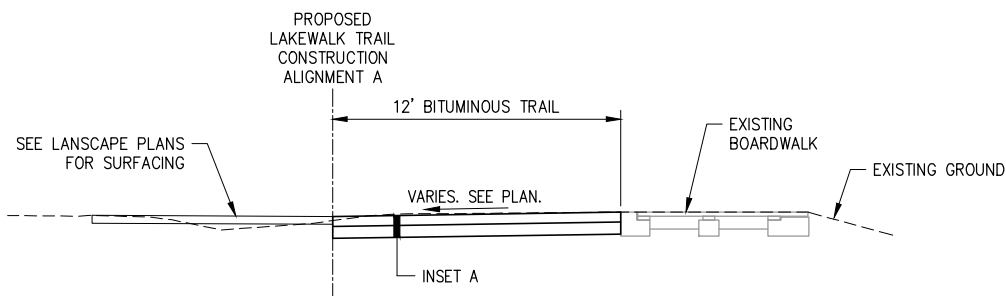
CONCRETE PAVEMENT
NOT TO SCALE

KEY NOTES:

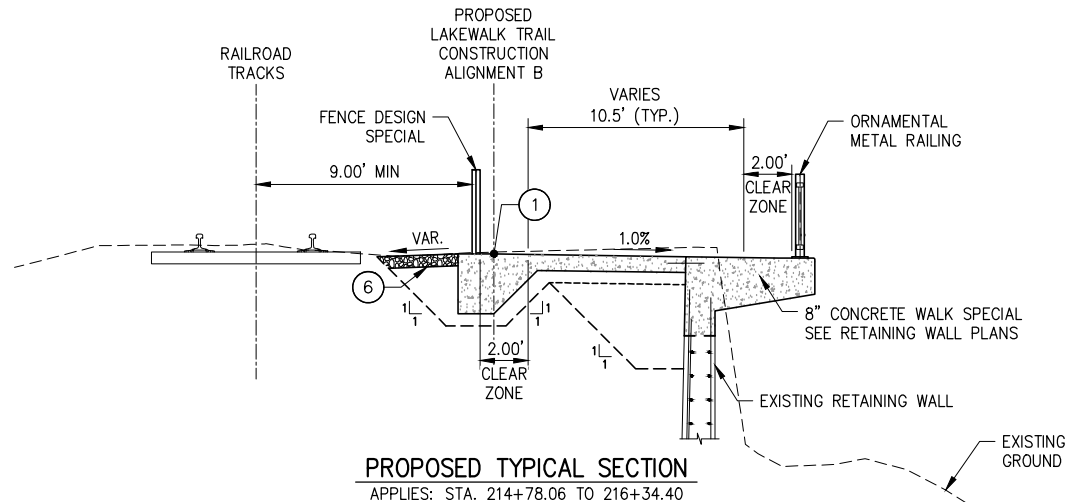
- ① PROPOSED PROFILE GRADE ELEVATION
- ② REFER TO CONSTRUCTION PLANS FOR FENCE LOCATIONS.
- ③ CONCRETE SHALL EXTEND TO FILL GAP BETWEEN SHEET PILE WALL AND BOARDWALK. SEE BOARDWALK BEAM DETAIL. (INCIDENTAL)
- ④ 4" TOPSOIL (TYP.)
- ⑤ CLEAR ZONE SLOPE SHALL NOT EXCEED 1:6
- ⑥ REGRADE BALLAST ROCK TO MATCH NEW CURB. (INCIDENTAL)
- ⑦ INCREASE CONCRETE WIDTH TO 18" WHERE FENCE DESIGN SPECIAL IS MOUNTED ON TOP. SEE DETAIL SHT. 48.
- ⑧ FENCE CURB. SEE DETAIL ON SHT. 48.



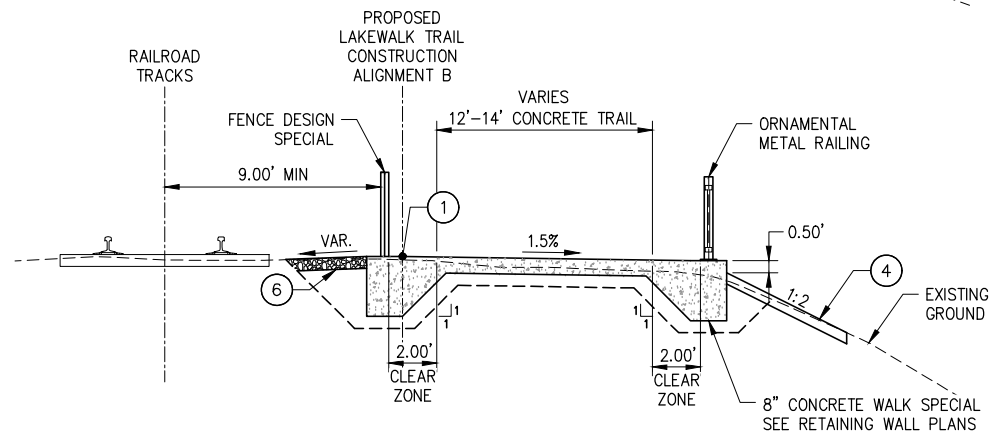
PROPOSED TYPICAL SECTION
APPLIES: STA. 99+84.23 TO 108+72.46



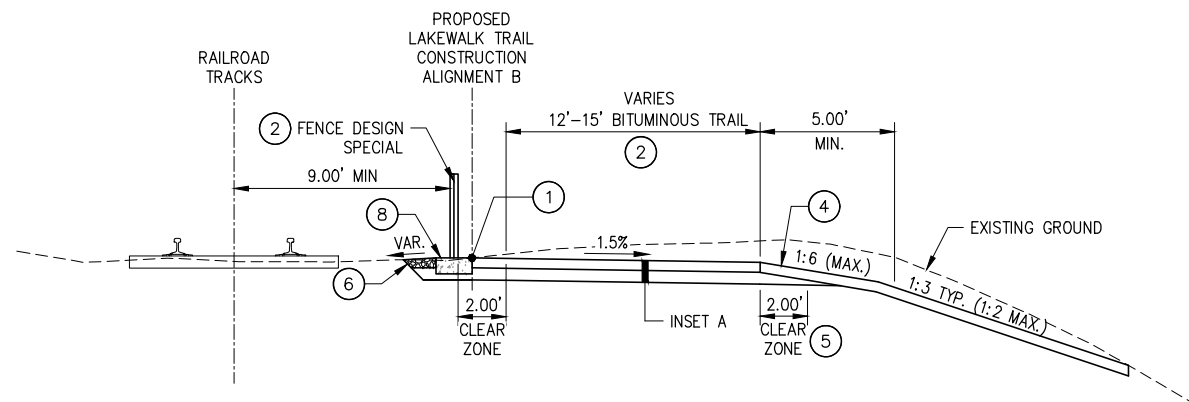
PROPOSED TYPICAL SECTION
APPLIES: STA. 95+08.07 TO 99+84.23



PROPOSED TYPICAL SECTION
APPLIES: STA. 214+78.06 TO 216+34.40



PROPOSED TYPICAL SECTION - AT STEEP SLOPE
APPLIES: STA. 213+06.89 TO 214+78.06
STA. 228+00.00 TO 229+30.00



PROPOSED TYPICAL SECTION
APPLIES: STA. 200+25.71 TO 213+06.89
STA. 229+30.00 TO 255+40.00
STA. 255+90.00 TO 267+56.22

PLOT DATE: 7/7/2026 4:38:10 PM FILE: Q:\24Pro\240252\500 Drawings\Civil\240252 - 03.0 Typical Sections.dwg

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

MEGAN GOPLIN
PRINTED NAME

Megan Goplin
SIGNATURE

04/03/2025
DATE
53018
LIC. NO.

S.P. 118-090-029
DULUTH LAKEWALK

REVISION
7-7-2026

TYPICAL SECTIONS
SHEET NO. 29 OF 142 SHEETS