





Purchasing Division
Finance Department
Room 120
411 West First Street
Duluth, Minnesota 55802

 218-730-5340
 purchasing@duluthmn.gov

Addendum 1
Solicitation 23-99414
Brighton Beach Resiliency Plan – Landscape & Shoreline Restoration Work: Phase 2

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

Please see attached document for changes to the attached documents

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

Posted: **May 25, 2023**

Questions and Answers from Pre-bid Meeting

Q1. *Is a shoreline permit required from the City?*

A1. Yes, a shoreline permit is required from the City and will be the responsibility of the General Contractor to obtain. A sediment and erosion control/grading permit will also be required from the City and is the responsibility of the General Contractor to obtain. A DNR permit was already obtained during Phase 1 and is still valid. The DNR permit information will be provided to the awarded GC.

Q2. *Can excess materials remain on site?*

A2. No, the General Contractor is responsible for hauling all excess soil material off-site. See above clarification in the General section for more specifics on quantities.

Q3. *Regarding the available soil stockpiles on-site, how much is there?*

A3. Total estimated excess soil material is +/- 3,225 CY. See above clarification in the General section for more specifics on quantities.

Q4. *Regarding the available stone stockpiles on-site, how much is there and how much will Phase 2 work need?*

A3. Phase 2 will need approximately +/- 175 CY salvaged stones for the restoration boulder edger and for nature play elements. There will be approximately 175 CY of stockpiled stones on-site to be re-used for Phase 2 work. The rest of the stone stockpiles will be used up during the completion of Phase 1 State Disaster restoration work and prior to Phase 2.

Q4. *Is the General Contractor responsible for transport of Owner supplied stone from City Lot D?*

A4. See above. No stone will be needed from City Lot D for Phase 2 work.

Q5. *Can you clarify the tree removal work in Areas C & D?*

A5. All felled trees need to be removed by the General Contractor. In Areas C & D, cut stumps flush to ground but do not grub or disturb earth in the wooded areas. Stumps in all other designated lawn areas will need to be grubbed and removed in their entirety.

Q6. *Can you clarify roles if additional tree removal is required?*

A6. The General Contractor will be responsible for any additional tree(s) that need to be removed beyond what has already been felled by the City.

Q7. *In lieu of a haul road, could access to the site be from a barge?*

A7. The haul road will be required to complete Phase 1 work and for other access needs. However, if the General Contractor would like to use a barge, that may be an acceptable way to access the site. Please note that for barge work along Lake Superior, contractors must submit a Certificate of Documentation verifying that their company can use a barge on Lake Superior.

Q8. *Please clarify what the requirements are for the haul road removals?*

A8. Remove in-place haul road and any material brought in for haul road extension. Restore all areas disturbed by in-place haul road and haul road extension per surfacing, layout, and restoration plans.

Q10. *Please clarify what is the remaining landscaping work from Phase 1?*

A10. Restoration Areas C, D, G & H still need to be planted by the Phase 1 Landscape Subcontractor. Most of the planting installation *should* be complete prior to Phase 2 work, however, the General Contractor will be responsible for coordination with Phase 1 General Contractor and Landscape

Subcontractor for any site access, remaining planting work, and all ongoing maintenance of the restoration areas.

Changes to Specifications

4. Replace Section 01 1000 Summary in its entirety.
5. Add Section 01 2200 Unit Prices in its entirety.

Changes to Drawings

6. Replace Sheet C001 in its entirety.
7. Add Sheet C002 in its entirety.
8. Add Sheet C003 in its entirety.
9. Replace Sheet C004 in its entirety.
10. Replace Sheet C101 in its entirety.
11. Replace Sheet C301 in its entirety.
12. Replace Sheet C401 in its entirety.
13. Replace Sheet CH2.0.0 in its entirety.

END OF ADDENDUM NO. 01



PRE-BID MEETING AGENDA

Brighton Beach Resiliency Plan – Shoreline Restoration Work: Phase 2 City of Duluth

Wednesday, May 17, 2023 at 2:00 PM, Brighton Beach

1. Introductions
 - a. Pre-Bid Meeting, please sign in.
 - b. Owner
 - c. Design Team
2. Summary of Work
 - a. Project Scope
 - b. Phasing
 - c. Alternates
 - i. Fire Building Roof Restoration
 - ii. Additional Trees
 - iii. Refurbish Picnic Shelter
 - d. Owner provided materials or work.
 - e. Work by others
 - f. Owner occupancy during construction
 - i. Owner intends to keep the existing lakewalk trail open during the entire construction period. If required, the trail will be temporarily closed at necessary locations for construction crossing. Safety fencing will be required to keep trail users out of the construction limits, as indicated on Drawings.
 - g. Special project goals, requirements, or certifications
 - h. Permits secured and paid for by Owner
 - i. DNR and Federal Permits
 - i. Permits secured and paid for by Contractor
 - i. City grading/stormwater permits.
 - ii. State stormwater permits.
 - iii. SWPPP
 - j. Special Inspections and Testing
 - i. Secured by Owner
 - ii. Contracted with the Owner
 - iii. Paid by Owner
 - k. Hazardous Materials
3. Instructions to Bidders
 - a. Document Availability:
 - i. Documents are available to download for free at www.bidexpress.com and have been sent to the Minnesota and Wisconsin Builder's Exchanges.
 - b. Bid Date, Time, and Place
 - i. Bid Date and Time: Wednesday, May 31, 2023 at 2:00 PM CST
 - ii. Submit bids to:

- 1) All bids must be submitted electronically through www.bidexpress.com.
- iii. Bids will be publicly opened and read aloud. A link to the bid opening is available at <https://www.duluthmn.gov/purchasing/bids-request-for-proposals/>
- c. Insurance
 - i. Bid Bond or Surety
 - ii. Performance and Payment Bonds
 - iii. Insurance Requirements
- d. Prevailing wages are required and a project labor agreement will be required for projects over \$150k.
- e. Communications
 - i. Questions should be directed to purchasing@duluthmn.gov
 - 1) Email: purchasing@duluthmn.gov
 - 2) Phone calls are not acceptable.
 - 3) Last day for questions is **close of business Tuesday, May 23, 2023.**
 - ii. Substitution Requests must be submitted using the form provided in the spec with supporting information attached.
 - 1) Substitution Request forms are due Wednesday, May 24, 2023
 - iii. Response by Addendum: Acknowledge all addenda on the Bid Form provided.
4. Agreement Forms and Procedures
 - a. Applications for Payment
 - i. Partial lien release waivers
 - ii. Certified Payroll Reports
 - iii. Affidavits and Certificates of Insurance for off-site stored materials
5. Construction Schedule
 - a. Construction Start Date: Coordinate date with the Owner.
 - b. Substantial Completion Date: September 30, 2023
 - c. Final Completion Date: November 30, 2023
 - i. Liquidated Damages? No daily charge; will be charged actual damages
 - d. Contractor to establish a master schedule to be provided to Owner and Architect 30 days after letter of intent or Agreement with Owner.
 - e. Construction progress meetings held every other week.
6. Platform for Distribution of Project Information
 - a. Electronic form via Newforma Info Exchange or Owner preferred method.
7. Temporary Facilities
 - a. Security Barriers
 - b. Restrooms
 - c. Utilities
 - d. Staging
 - e. Access Control
 - f. Site Safety
 - g. Dumpsters
 - h. Parking
8. Closeout Procedures

- a. Forms
 - i. Consent of Surety
 - ii. Contractor's Affidavit
 - iii. IC-134
 - b. O&M Manuals
 - c. Warranties and Bonds
 - d. As-Built set of Documents
9. Other / Questions
10. Tour Existing Conditions

c: LHB Project No. 210260

q:\21proj\210260\200 communication\meetings\bb phase 2\bb phase 2 pre bid meeting\210260 20230517 ph2 pre-bid meeting agenda.docx



MEETING ATTENDANCE SHEET BRIGHTON BEACH RESILIENCY PLAN – SHORELINE RESTORATION WORK: PHASE 2

Pre-Bid Meeting: Wednesday, May 17, 2023 2:00 PM

NAME	ORGANIZATION	PHONE	EMAIL
RACHEL JOHNSON ✓	LHB	—	—
BRIAN RANKIN	WREN WORKS	218 721 6693	BRIAN@WRENWORKS4U.COM
Ryan D	ANT	—	—
Charles Belanger ✓	Rachel Contracting	218-355-0118	cbelanger@rachelcontracting.com
Ryan Surran	Surran Construction	763-420-2140	ryan@surranconstructioninc.com
Jon Bischoff	Michels Construction	920-344-9412	jbischoff@michels.us
AARON BROCKMAN	Northland Contractors	218-355-1363	aaron.brockman@northlandconstructors.us
Sims.	CITY OF DULUTH		
Lisa M.	CITY OF DULUTH		

SECTION 01 1000 SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: 210260 Brighton Beach Resiliency Plan - Landscape and Shoreline Restoration Work Phase 2
- B. Owner's Name: City of Duluth, Parks & Recreation Department.
- C. Landscape Architect & Engineer: Name: LHB, Inc.
- D. The Project consists of coastal shoreline restoration work with incidental removals, erosion control, stormwater management, vegetation re-establishment, as well as new park amenities and site furnishings. The shoreline work primarily includes earthwork modifications to regrade damaged/eroded areas and the placement of large on-site armored stone and vegetated riprap along the beach embankment for storm protection. Removal of existing vegetation, rock, bituminous and gravel surfacing will need to occur to accommodate the shoreline restoration, and will also require hauling excess soil material off-site. A series of beach access points and drainage ways intersect the shoreline restoration area and will include detailed grading for swales and greenspace areas, and installation of drainage rock, large stone steppers, surface aggregate and landscape boulders. New park amenities and site furnishings include the installation of two vault toilet buildings, two nature play areas, a swing set, as well as concrete walks and pads for benches, picnic tables, and trash containers. Vegetation restoration will consist of native seeding with erosion control blanket, coir matting, netting straw mat and protection fencing as well as the planting of trees, native plugs, live stakes and brush bundles.
- E. The project includes one Base Bid and three Alternates for shoreline restoration and park improvements work within the Gitchi Gammi Park limits and along Brighton Beach in Duluth, MN.

1.02 CONTRACT DESCRIPTION

- A. Contract Type: A single prime contract based on a Stipulated Price as described in Document 00 5200 - Agreement Form.

1.03 CONTRACT TIME

- A. The Work will be substantially completed by September 30th, 2023.
- B. The Work will be completed by November 30th, 2023.

1.04 CONSTRUCTION SCHEDULE

- A. All shoreline restoration and parks improvement work to be completed during the 2023 construction season. Final vegetation restoration work will need to occur in the spring of 2023.

1.05 OWNER OCCUPANCY

- A. Owner intends to keep the existing lakewalk trail open during the entire construction period. If required, the trail will be temporarily closed at necessary locations for construction crossing. Safety fencing will be required to keep trail users out of the construction limits, as indicated on Drawings.
- B. Owner intends to occupy the Project upon Substantial Completion.
- C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- D. Schedule the Work to accommodate Owner occupancy.

1.06 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
 - 1. Locate and conduct construction activities in ways that will limit disturbance to site.
- B. Arrange use of site and premises to allow:
 - 1. Use of trail by the public. Any significant damage to the trail will be the responsibility of the Contractor to restore.

PART 2 PRODUCTS - NOT USED
PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 2200
UNIT PRICES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. List of unit prices, for use in preparing Bids.
- B. Measurement and payment criteria applicable to Work performed under a unit price payment method.
- C. Defect assessment and non-payment for rejected work.

1.02 COSTS INCLUDED

- A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.
- B. Unit prices, when required, will be used to adjust the Contract Sum when actual site conditions differ from design conditions.

1.03 UNIT QUANTITIES SPECIFIED

- A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements of actual Work will determine the payment amount.

1.04 MEASUREMENT OF QUANTITIES

- A. Measurement methods delineated in the individual specification sections complement the criteria of this section.
- B. Assist by providing necessary equipment, workers, and survey personnel as required.

1.05 PAYMENT

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Landscape Architect, multiplied by the unit price.
- B. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products remaining on hand after completion of the Work.
 - 4. Loading, hauling, and disposing of rejected Products.

1.06 DEFECT ASSESSMENT

- A. Replace Work, or portions of the Work, not complying with specified requirements.
- B. If, in the opinion of Landscape Architect, it is not practical to remove and replace the Work, Landscape Architect will direct one of the following remedies:
 - 1. The defective Work may remain, but the unit price will be adjusted to a new unit price at the discretion of Landscape Architect.
 - 2. The defective Work will be partially repaired to the instructions of the Landscape Architect, and the unit price will be adjusted to a new unit price at the discretion of Landscape Architect.
- C. The authority of Architect to assess the defect and identify payment adjustment is final.

1.07 SCHEDULE OF UNIT PRICES

- A. Item: Unit Price No. 1 - Excess Soil Material Removal: In the event that additional excess soil material needs to be hauled off-site that is above (or below) the estimated quantity shown in Addendum 01, provide a price per cubic yard of soil material.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

THIS SQUARE APPEARS 1/2" x 1/2"
 ON FULL SIZE SHEETS.

NO	DATE	ISSUED FOR
05/25/2023		ADDENDUM 01
05/05/2023		BID ISSUE

NO	DATE	REVISION

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 Landscape Architect under the laws of the State of Minnesota.

SIGNATURE: *Heidi S. Bringman*

TYPED OR PRINTED NAME: HEIDI S. BRINGMAN

DATE: 05-05-2023 REG. NO.: 46914

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PROJECT NAME:
**BRIGHTON BEACH
 SHORELINE
 RESTORATION: PHASE 2
 BRIGHTON BEACH ROAD
 DULUTH, MN 55804**

DRAWING TITLE:
TITLE SHEET

DRAWN BY: RMJ
 CHECKED BY: HSB
 PROJ. NO: 210260
 DRAWING NO:

C000

BRIGHTON BEACH RESILIENCY PLAN

LANDSCAPE & SHORELINE RESTORATION WORK

PHASE 2

BRIGHTON BEACH ROAD

DULUTH, MN 55804

CONTACTS

CLIENT
 CITY OF DULUTH PARKS AND RECREATION
 411 WEST FIRST STREET
 DULUTH, MN 55802
 CONTACT: JIM SHOBERG
 EMAIL: JSHOBERG@DULUTHMN.GOV
 PHONE: (218) 730-4316

PROJECT MANAGER
 LHB, INC.
 21 WEST SUPERIOR STREET, SUITE 500
 DULUTH, MN 55802
 CONTACT: HEIDI BRINGMAN
 E-MAIL: HEIDI.BRINGMAN@LHBCORP.COM
 PHONE: (218) 279-2429

PROJECT LANDSCAPE ARCHITECT
 LHB, INC.
 21 WEST SUPERIOR STREET, SUITE 500
 DULUTH, MN 55802
 CONTACT: RACHEL JOHNSON
 E-MAIL: RACHEL.JOHNSON@LHBCORP.COM
 PHONE: (218) 249-7116

PROJECT CIVIL ENGINEER
 LHB, INC.
 CONTACT: MEGAN GOPLIN
 E-MAIL: MEGAN.GOPLIN@LHBCORP.COM
 PHONE: (218) 249-7152

PROJECT COASTAL ENGINEER
 AMI CONSULTING ENGINEERS, PA
 CONTACT: RYAN DAGGER
 E-MAIL: RYAN.DAGGER@AMIENGINEERS.COM
 PHONE: (715) 718-5722

SHEET INDEX

C000 TITLE SHEET
 C001 GENERAL NOTES
 C002 SWPPP NARRATIVE
 C003 SWPPP NARRATIVE
 C004 SITE INDEX PLAN

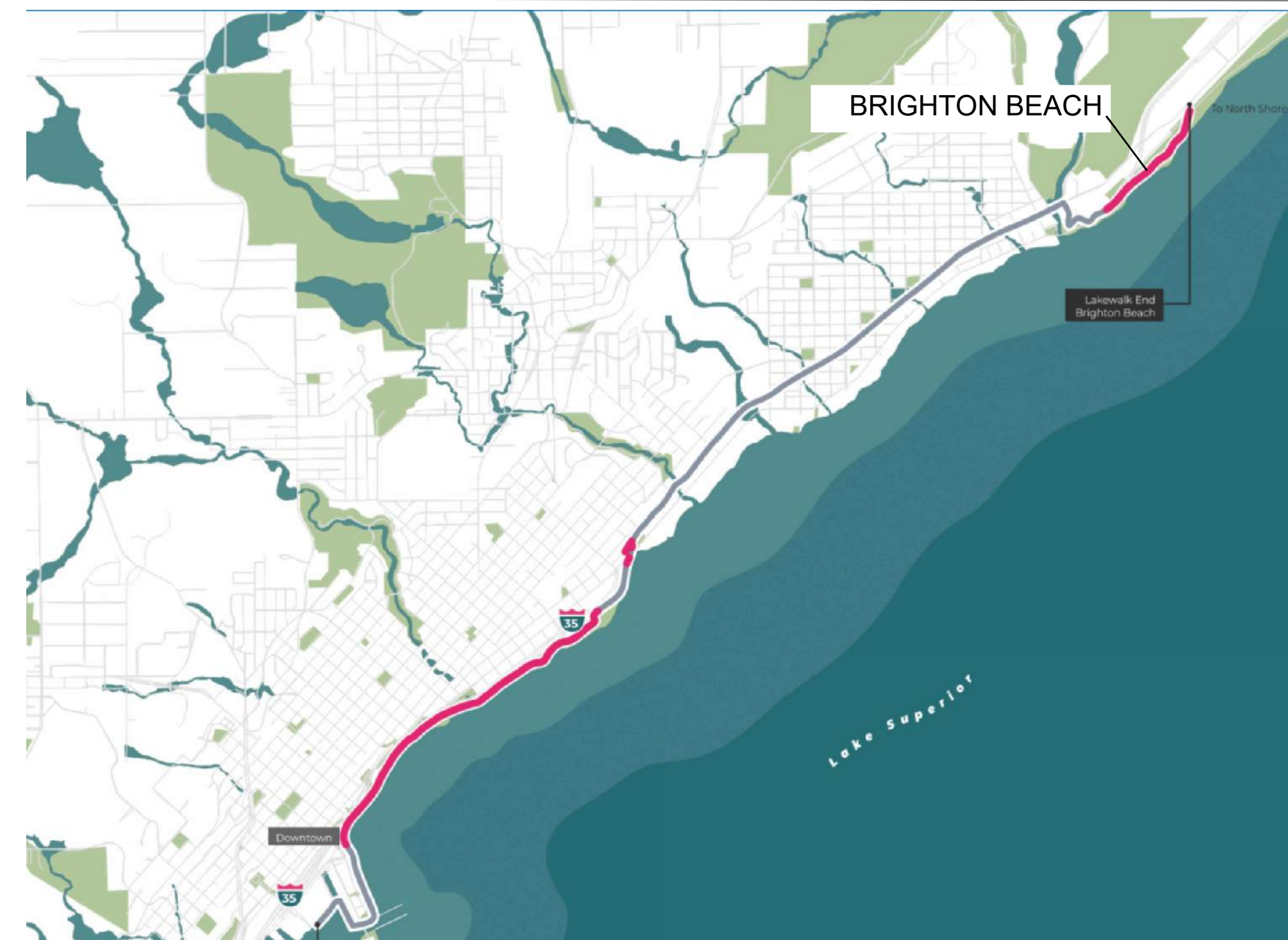
LANDSCAPE RESTORATION SHEETS

C101 REMOVALS AND EROSION CONTROL PLAN AREA A
 C102 REMOVALS AND EROSION CONTROL PLAN AREA B
 C103 REMOVALS AND EROSION CONTROL PLAN AREA C
 C104 REMOVALS AND EROSION CONTROL PLAN AREA D
 C105 REMOVALS AND EROSION CONTROL PLAN AREA E
 C106 REMOVALS AND EROSION CONTROL PLAN AREA F
 C107 REMOVALS AND EROSION CONTROL PLAN AREA G
 C108 REMOVALS AND EROSION CONTROL PLAN AREA H
 C109 REMOVALS AND EROSION CONTROL PLAN AREA I
 C301 GRADING AND DRAINAGE PLAN AREA A
 C302 GRADING AND DRAINAGE PLAN AREA B
 C303 GRADING AND DRAINAGE PLAN AREA C
 C304 GRADING AND DRAINAGE PLAN AREA D
 C305 GRADING AND DRAINAGE PLAN AREA E
 C306 GRADING AND DRAINAGE PLAN AREA F
 C307 GRADING AND DRAINAGE PLAN AREA G
 C308 GRADING AND DRAINAGE PLAN AREA H
 C309 GRADING AND DRAINAGE PLAN AREA I
 C401 SURFACING AND RESTORATION PLAN AREA A
 C402 SURFACING AND RESTORATION PLAN AREA B
 C403 SURFACING AND RESTORATION PLAN AREA C
 C404 SURFACING AND RESTORATION PLAN AREA D
 C405 SURFACING AND RESTORATION PLAN AREA E
 C406 SURFACING AND RESTORATION PLAN AREA F
 C407 SURFACING AND RESTORATION PLAN AREA G
 C408 SURFACING AND RESTORATION PLAN AREA H
 C409 SURFACING AND RESTORATION PLAN AREA I
 C500 DRAINAGE PROFILES
 C501 DRAINAGE PROFILES
 C502 DRAINAGE PROFILES
 C600 CONSTRUCTION DETAILS
 C601 CONSTRUCTION DETAILS
 C602 CONSTRUCTION DETAILS
 L501 LANDSCAPE DETAILS
 L502 LANDSCAPE DETAILS
 L503 LANDSCAPE DETAILS
 L504 LANDSCAPE DETAILS

SHORELINE RESTORATION SHEETS

CH0.0.0 GENERAL PROJECT NOTES
 CH2.0.0 PROPOSED PLAN AREA A
 CH2.0.1 PROPOSED CROSS SECTION AREA A
 CH2.1.0 PROPOSED PLAN AREA E
 CH2.1.1 PROPOSED CROSS SECTION D & E
 CH3.0.0 COASTAL DETAILS

PROJECT LOCATION MAP





21 W. Superior St., Ste. 500 | Duluth, MN 55802 | 218.727.8446

CONSULTANT #1:
AMI CONSULTING ENGINEERS
91 MAIN ST
SUPERIOR, WI 54880

CLIENT:
**CITY OF DULUTH
PARKS AND RECREATION**

**411 WEST FIRST ST
DULUTH, MN 55802**

THIS SQUARE APPEARS 1/2" x 1/2"
ON FULL SIZE SHEETS.

NO	DATE	ISSUED FOR
	05/25/2023	ADDENDUM 01
	05/05/2023	BID ISSUE

NO	DATE	REVISION
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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.

SIGNATURE: *Megan Goplin*

TYPED OR PRINTED NAME: MEGAN GOPLIN

DATE: 05-05-2023 REG. NO.: 53018

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PROJECT NAME:

**BRIGHTON BEACH
SHORELINE
RESTORATION: PHASE 2
BRIGHTON BEACH ROAD
DULUTH, MN 55804**

DRAWING TITLE:
**SWPPP
NARRATIVE**

DRAWN BY: RMJ
CHECKED BY: HSB
PROJ. NO.: 210260
DRAWING NO.:

C002

1. GENERAL

THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA) REGULATES STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY DISTURBING LAND EQUAL TO OR GREATER THAN ONE ACRE THROUGH A GENERAL PERMIT (PERMIT NO. MN R100001) AUTHORIZING THE DISCHARGE OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY TO WATERS OF THE STATE IN COMPLIANCE WITH THE CLEAN WATER ACT AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM/STATE DISPOSAL SYSTEM (NPDES/SDS) PROGRAM. THE GENERAL PERMIT (PERMIT) REQUIRES THE DEVELOPMENT AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP IS A COMBINATION OF NARRATIVE, PLANS SHEETS, AND STANDARD DETAIL SHEETS THAT ADDRESS THE FORESEEABLE CONDITIONS AT ANY STAGE IN THE CONSTRUCTION OR POST-CONSTRUCTION ACTIVITIES.

2. ADMINISTRATIVE REQUIREMENTS

- A. **RESPONSIBLE PARTIES:** THE OWNER AND GENERAL CONTRACTOR (CONTRACTOR) ARE CO-PERMITTEES OF THE PERMIT AND ARE JOINTLY RESPONSIBLE FOR COMPLIANCE WITH TERMS AND CONDITIONS OF THE PERMIT. OBTAIN A COPY OF THE PERMIT AND COMPLY WITH PARTS II.B, II.C, III.B-F, IV, V, AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A, PART C OF THE PERMIT. VERIFY THAT PERMIT REQUIREMENTS ARE SATISFIED AND COMPLETE THE BLANKS ON THIS SWPPP SHEET.
- B. **PERMIT APPLICATION:** THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING THE PERMIT APPLICATION ON-LINE AND PAYING THE APPLICATION FEE. OWNER AND CONTRACTOR MUST BOTH SIGN THE APPLICATION. OBTAIN A COPY OF THE PERMIT AND APPLY ON-LINE AT THE MPCA CONSTRUCTION STORM WATER WEBSITE: <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html>.
- C. **PERMIT COVERAGE:** PERMIT COVERAGE TYPICALLY BECOMES EFFECTIVE SEVEN (7) CALENDAR DAYS AFTER THE ELECTRONIC SUBMITTAL DATE. DO NOT BEGIN LAND DISTURBING CONSTRUCTION ACTIVITIES UNTIL PERMIT COVERAGE IS EFFECTIVE. THE START OF ANY LAND DISTURBING ACTIVITIES SIGNIFIES THAT THE CONTRACTOR IS ASSUMING RESPONSIBILITY FOR PERMIT COVERAGE AND HAS COMPLIED WITH PERMIT REQUIREMENTS.
- D. **NOTIFICATION OF COVERAGE:** THE CONTRACTOR WILL RECEIVE A NOTIFICATION OF COVERAGE FROM THE MPCA (E.G., VIA EMAIL, ONLINE NOTIFICATION, OR LETTER). KEEP OR POST A COPY OF THE NOTIFICATION OF COVERAGE WITH THE SWPPP AT THE PROJECT SITE. PROVIDE COPIES TO THE OWNER AND ENGINEER.
- E. **CHANGE OF COVERAGE FOR NEW OWNER OR NEW OPERATOR (CONTRACTOR):** FOR A NEW OWNER OR OPERATOR, THE CURRENT OWNER, AND NEW OWNER OR OPERATOR, MUST SUBMIT A PERMIT MODIFICATION FORM PRIOR TO THE NEW OWNER OR OPERATOR COMMENCING CONSTRUCTION ACTIVITY. CONTACT THE MPCA AT 800-657-3864 FOR THIS FORM. THE CURRENT OWNER MUST ALSO SUBMIT A NOTICE OF TERMINATION (NOT) FORM AS NOTED BELOW WHEN THE OWNERSHIP OF THE PROPERTY CHANGES, AS NOTED BELOW.
- F. **TERMINATION OF COVERAGE:** THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNER AND TERMINATING PERMIT COVERAGE BY COMPLETING AND SUBMITTING A NOTICE OF TERMINATION (NOT) FORM TO THE MPCA. A NOTICE OF TERMINATION MUST BE SUBMITTED WITHIN 30 DAYS AFTER FINAL STABILIZATION HAS BEEN ESTABLISHED FOR THE SITE AND CONSTRUCTION ACTIVITY IS COMPLETE, OR WHEN THE OWNER OR OPERATOR CHANGES. COMPLIANCE WITH PERMIT REQUIREMENTS IS REQUIRED UNTIL SUBMISSION OF A NOTICE OF TERMINATION.
- G. **RECORD RETENTION:** THE CONTRACTOR SHALL KEEP A COPY OF THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS ON SITE DURING CONSTRUCTION. THIS DOCUMENTATION MUST BE KEPT ON FILE FOR 3 YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION. COORDINATE TRANSFER OF THIS DOCUMENTATION TO THE OWNER AT PROJECT COMPLETION.
- H. **CHANGES (AMENDMENTS) TO SWPPP:** UPDATE AND DOCUMENT CHANGES TO THE SWPPP AS NECESSARY DURING CONSTRUCTION, AND AS REQUIRED BY THE PERMIT ACCORDING TO PART III.B OF THE PERMIT.

3. CONSTRUCTION ACTIVITY REQUIREMENTS

- A. **GENERAL:** COMPLY WITH PART IV.A OF THE PERMIT TO IMPLEMENT THE SWPPP AND THE REQUIREMENTS OF THE PERMIT. THE BEST MANAGEMENT PRACTICES (BMPs) IDENTIFIED IN THE SWPPP AND PERMIT MUST BE SELECTED, INSTALLED, AND MAINTAINED IN AN APPROPRIATE AND FUNCTIONAL MANNER IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, MANUFACTURER RECOMMENDATIONS, AND ACCEPTED ENGINEERING PRACTICES.
- B. **EROSION PREVENTION PRACTICES:** PLAN FOR AND IMPLEMENT CONSTRUCTION PRACTICES TO SATISFY PART IV.B OF THE PERMIT. STABILIZE EXPOSED SOIL AREAS AS SOON AS POSSIBLE, BUT IN NO CASE LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. AMEND SWPPP BY INDICATING THE LOCATION OF AREAS WHERE CONSTRUCTION WILL BE PHASED TO MINIMIZE DURATION OF EXPOSED SOIL AREAS.
- C. **SEDIMENT CONTROL PRACTICES:** PLAN FOR AND IMPLEMENT CONSTRUCTION PRACTICES THAT MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING BUT NOT LIMITED TO, CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS TO SATISFY PART IV.C OF THE PERMIT. PROVIDE TEMPORARY SEDIMENTATION BASINS WHERE 5 OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION AS APPROVED BY LHB (SEE PART III.C OF THE PERMIT FOR BASIN REQUIREMENTS).
- D. **DEWATERING AND BASIN DRAINING:** SITE HAS POTENTIAL FOR STORMWATER RUN-ON. CONTRACTOR SHALL TAKE MEASURES TO ENSURE DRAINAGE DURING CONSTRUCTION. COMPLY WITH PART IV.D OF THE PERMIT. ENSURE THAT ALL WATER FROM DEWATERING OR BASIN DRAINING ACTIVITIES IS DISCHARGED IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS, EROSION IN RECEIVING CHANNELS OR DOWNSLOPE PROPERTIES, OR INUNDATION IN WETLANDS CAUSING SIGNIFICANT ADVERSE IMPACTS TO THE WETLANDS. ANY TURBID OR SEDIMENT LADEN DISCHARGE WATER MUST BE ADEQUATELY TREATED BY DISCHARGING TO A SEDIMENTATION BASIN WHENEVER FEASIBLE, OR TREATED WITH APPROPRIATE BMPs IF THE WATER CANNOT BE DISCHARGED TO A SEDIMENT BASIN. THE CONTRACTOR MUST VISUALLY CHECK THE TREATED STORMWATER PRIOR TO DISCHARGING TO RECEIVING WATERS TO ENSURE ADEQUATE TREATMENT IS BEING MET AND THAT THE DISCHARGE POINTS ARE ADEQUATELY PROTECTED FROM EROSION AND SCOUR. BACKWASH WATER FROM FILTRATION MUST BE INCORPORATED INTO THE SITE IN A NON-EROSIVE MANNER, OR DISCHARGED TO THE SANITARY SEWER WITH PERMISSION FROM THE SANITARY SEWER AUTHORITY.
- E. **INSPECTIONS AND MAINTENANCE:** INSPECTION FREQUENCY BY TRAINED INDIVIDUAL SHALL OCCUR EVERY WEEK AND AFTER 0.5" RAINFALL OR GREATER. COMPLY WITH PART IV.E OF THE PERMIT.
- F. **POLLUTION PREVENTION MANAGEMENT MEASURES:** COMPLY WITH PART IV.F OF THE PERMIT. NOTE, PREPARE AND INCLUDE A FUELING OPERATION PLAN AND EMERGENCY SPILL PLAN WITH THE SWPPP AS REQUIRED BY THIS PART. AMEND SWPPP BY INDICATING THE LOCATION OF POTENTIAL POLLUTANT GENERATING ACTIVITIES ON SITE MAPS.
- G. **FINAL STABILIZATION:** ESTABLISH FINAL STABILIZATION FOR THE SITE AS DESCRIBED IN PART IV.G OF THE PERMIT. SPECIFIC CONDITIONS REQUIRED FOR FINAL STABILIZATION INCLUDE:
 - 1) SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND SOILS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE ENTIRE PVIOUS SURFACE AREA, OR OTHER EQUIVALENT MEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSION CONDITIONS.
 - 2) PERMANENT STORMWATER MANAGEMENT SYSTEMS ARE OPERATIONAL AND SEDIMENT IS REMOVED FROM TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND CONVEYANCE SYSTEMS, AND DITCHES ARE STABILIZED WITH FINAL COVER.
 - 3) ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPs ARE REMOVED. BMPs DESIGNED TO DECOMPOSE MAY BE LEFT IN PLACE.
 - 4) FOR RESIDENTIAL CONSTRUCTION, THE STRUCTURE(S) ARE FINISHED, TEMPORARY EROSION PROTECTION AND PERIMETER CONTROL IS COMPLETED, AND THE RESIDENCE SOLD TO THE HOMEOWNER WHO HAS BEEN GIVEN THE MPCA'S "HOMEOWNER FACT SHEET" REGARDING THE NEED FOR PERMANENT COVER.
 - 5) DISTURBED AGRICULTURAL LAND IS RETURNED TO ITS PRECONSTRUCTION AGRICULTURAL USE.

4. SWPPP RESPONSIBILITIES (THE OWNER IS RESPONSIBLE FOR PREPARING AND AMENDING THE SWPPP).

- A. ON BEHALF OF THE OWNER, THE FOLLOWING PERSON PREPARED THE SWPPP AND IS TRAINED IN SWPPP DESIGN:

NAME: MEGAN GOPLIN, PE-MN, LHB, INC.
 TRAINING DATE/INSTRUCTOR: CERTIFICATION 06-18-2021 (EXPIRES 2024)/STORMWATER ONE
 TRAINING CONTENT/HOURS: DESIGN OF CONSTRUCTION SWPPP/ 16 HOUR
 - B. ON BEHALF OF THE OWNER, THE CONTRACTOR WILL OVERSEE SWPPP IMPLEMENTATION, REVISE AND AMEND THE SWPPP, PERFORM INSPECTIONS, AND SUPERVISE THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPs BEFORE AND DURING CONSTRUCTION. THE FOLLOWING CONTRACTOR REPRESENTATIVE IS TRAINED TO PERFORM THESE DUTIES AND WILL ASSUME THESE RESPONSIBILITIES:

NAME: _____
 TRAINING DATE/INSTRUCTOR: _____
 TRAINING CONTENT/HOURS: _____
 - C. THE OWNER IS RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM. THE FOLLOWING PERSON IS DESIGNATED TO PERFORM THESE DUTIES:

NAME/TITLE: _____
 - D. **CHAIN OF RESPONSIBILITY:** THE GENERAL CONTRACTOR IS IN CHARGE OF ALL SWPPP IMPLEMENTATION ON THE CONSTRUCTION SITE AND IS ACCOUNTABLE FOR SUBCONTRACTORS AND OTHER CONTRACTORS WORKING ON SITE AND THEIR COMPLIANCE WITH GENERAL STORMWATER PERMIT AND SWPPP REQUIREMENTS. NOTIFY THE OWNER OF ANY AMENDMENT NEEDED TO THE SWPPP.
5. REGULATORY AGENCIES AND PERMITS
- A. COMPLY WITH REQUIREMENTS OF ALL REGULATORY AGENCIES AND PERMITS HAVING JURISDICTION DURING CONSTRUCTION ACTIVITIES. THE FOLLOWING ADDITIONAL REGULATORS AND PERMITS ARE KNOWN TO HAVE SITE JURISDICTION:
 - 1) CITY OF DULUTH
 - 2) MN DNR
6. DESCRIPTION OF THE CONSTRUCTION ACTIVITY / SWPPP COMPONENTS
- A. **NARRATIVE:**
 - 1) PROJECT SUMMARY: THE PROJECT INVOLVES SHORELINE RESTORATION AND PARK IMPROVEMENTS
 - 2) SPECIFIC WORK INCLUDES:
 - a. REMOVAL OF EXISTING BITUMINOUS AND GRAVEL SURFACING AND CULVERTS
 - b. SHORELINE GRADING AND REINFORCEMENT
 - c. PARK GRADING, INCLUDING DAYLIGHTING OF DRAINAGES
 - d. EXISTING CULVERT MODIFICATIONS
 - e. CONSTRUCTION OF CONCRETE PADS, SIDEWALKS AND OTHER PARK AMENITIES
 - f. TURF ESTABLISHMENT
 - 2) TIMING FOR INSTALLATION OF EROSION & SEDIMENTATION BMPs AND PERMANENT STORMWATER MANAGEMENT SYSTEMS, IN GENERAL SEQUENTIAL ORDER FROM FIRST TO LAST:
 - a. INLET PROTECTION FOR EXISTING INLETS / SILT FENCE / DELINEATION AREAS NOT TO BE DISTURBED: PROVIDE PRIOR TO CONSTRUCTION; MAINTAIN DURING CONSTRUCTION.
 - b. SILT FENCE AROUND STOCKPILES: DURING CONSTRUCTION.
 - c. PORTABLE SEDIMENT CONTAINMENT SYSTEMS FOR TREATING WATER FROM DEWATERING OPERATIONS : PROVIDE DURING CONSTRUCTION.
 - d. HARD SURFACING (E.G. PAVEMENTS)
 - e. VEGETATIVE COVER / EROSION CONTROL BLANKETS: AFTER FINAL TOPSOIL PLACEMENT AND FINISH GRADING.
 - f. REMOVAL OF TEMPORARY BMPs: AFTER FINAL STABILIZATION IS ESTABLISHED.
 - NOTE: REPAIR/REPLACEMENT OF TEMPORARY BMPs SHALL BE DONE BY END OF NEXT BUSINESS DAY UPON DISCOVERY WHEN 1/2 FULL OR NON-FUNCTIONAL. REMOVAL OF SEDIMENT FROM PAVED SURFACES WITHIN 24 HOURS UPON DISCOVERY. OUTFALLS MUST HAVE RIPRAP WITHIN 24 HOURS. LAST 200 FEET OF ANY TEMPORARY OR PERMANENT DITCH OR SWALE FROM SURFACE WATER OR PROPERTY EDGE MUST BE STABILIZED WITHIN 24 HOURS, REMAINDER WITHIN 7 DAYS (MULCH NOT ACCEPTABLE STABILIZATION PRACTICE WITHIN ANY SWALE OR DITCH).
 - 3) IMPERVIOUS SURFACE AREAS / WATER QUALITY VOLUME:
 - a. TOTAL DISTURBED AREA: 6.24 ACRES
 - b. PRE-CONSTRUCTION IMPERVIOUS: 2.57 ACRES
 - c. POST CONSTRUCTION IMPERVIOUS: 1.45 ACRES
 - d. NET NEW IMPERVIOUS: -1.12 ACRES
 - e. WATER QUALITY VOLUME: N/A
 - f. REASON WATER QUALITY VOLUME CANNOT BE INFILTRATED (PER PART III.D.1.): N/A
 - g. ACTUAL WATER QUALITY VOLUME RETAINED ON-SITE / METHOD OF RETENTION: N/A
 - h. REMAINDER OF WATER QUALITY VOLUME AND ALTERNATIVE TREATMENT METHOD: N/A
 - 4) CHEMICAL TREATMENT SYSTEMS FOR ENHANCING THE ON-SITE SEDIMENTATION PROCESS AND HOW COMPLIANCE WILL BE ACHIEVED PER PART IV.C.10 OF THE PERMIT: N/A
 - 5) DOCUMENTATION OF INFEASIBILITY FOR OBTAINING RIGHT-OF-WAY FOR PERMANENT STORMWATER MANAGEMENT SYSTEMS: N/A

THIS SQUARE APPEARS 1/2" x 1/2"
 ON FULL SIZE SHEETS.

NO	DATE	ISSUED FOR
05/25/2023		ADDENDUM 01
05/05/2023		BID ISSUE

NO	DATE	REVISION

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.

SIGNATURE: *Megan Goplin*

TYPED OR PRINTED NAME: MEGAN GOPLIN

DATE: 05-05-2023 REG. NO.: 53018

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PROJECT NAME:
**BRIGHTON BEACH
 SHORELINE
 RESTORATION: PHASE 2**
 BRIGHTON BEACH ROAD
 DULUTH, MN 55804

DRAWING TITLE:
**SWPPP
 NARRATIVE**

DRAWN BY: RMJ
 CHECKED BY: HSB
 PROJ. NO.: 210260
 DRAWING NO.:

C003

- 6) STORMWATER POLLUTION MITIGATION MEASURES IDENTIFIED IN ENVIRONMENTAL REVIEW OR OTHER REQUIRED REVIEW: N/A
- 7) MEASURES TO ASSURE COMPLIANCE WITH SURFACE AND GROUNDWATER STANDARDS IN KARST AREAS: N/A
- 8) PERMANENT STORMWATER MANAGEMENT BMPs MUST BE FUNCTIONING, FREE OF SEDIMENT, AND TEMPORARY SEDIMENT CONTROLS (E.G. SILT FENCE) MUST BE REMOVED PRIOR TO TERMINATING PERMIT COVERAGE.
- 9) INFILTRATION BASIN MUST NOT BE EXCAVATED TO FINAL GRADE OR WITHIN 3 FEET OF FINAL GRADE UNLESS SEDIMENT AND RUNOFF ARE KEPT COMPLETELY AWAY FROM INFILTRATION AREA VIA RIGOROUS EROSION AND SEDIMENT CONTROLS UNTIL ALL UP-GRADIENT AREAS ARE STABILIZED.
- 10) CONFIRM 50 FOOT BUFFER NOT TO BE DISTURBED BETWEEN SURFACE WATERS/WETLANDS. IF INFEASIBLE, PROVIDE REDUNDANT SEDIMENT CONTROLS BETWEEN SURFACE WATERS/WETLANDS.

B. PLAN SHEETS:

DESCRIPTION	LOCATION
TEMPORARY EROSION CONTROL MEASURES	SHEETS NO. C101-C109
PERMANENT EROSION CONTROL MEASURES	SHEETS NO. C401-C409
DIRECTION OF FLOW	SHEETS NO. C101-C109
FINAL STABILIZATION	SHEETS NO. C401-C409
SOILS AND CONSTRUCTION NOTES	SHEET NO. C001
DRAINAGE STRUCTURES	SHEETS NO. C301-C309 & C500-C502
EROSION AND SEDIMENT CONTROL DETAILS	SHEET NO. C600 & L502
EROSION CONTROL TABULATION	N/A
TURF ESTABLISHMENT TABULATION	N/A
SITE MAP	SHEET NO. C003

- 1) IDENTIFICATION OF SURFACE WATERS AND WETLANDS WITHIN 1 MILE OF SITE THAT RECEIVE RUNOFF FROM SITE: LAKE SUPERIOR IS WITHIN 1 MILE OF THE PROJECT SITE AND MAY RECEIVE THE SITE'S STORMWATER DISCHARGE. THIS PORTION OF LAKE SUPERIOR IS A "RESTRICTED WATER" AND REQUIRE ADDITIONAL BEST MANAGEMENT PRACTICES (BMPs) FOUND IN ITEMS 23.9, 23.10, AND 23.11 OF THE CONSTRUCTION STORMWATER PERMIT:

ITEM 23.9: PERMITTEES MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS, AS DESCRIBED IN ITEM 8.4, AND COMPLETE THE STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES.

ITEM 23.10: PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN AS DESCRIBED IN SECTION 14 FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME.

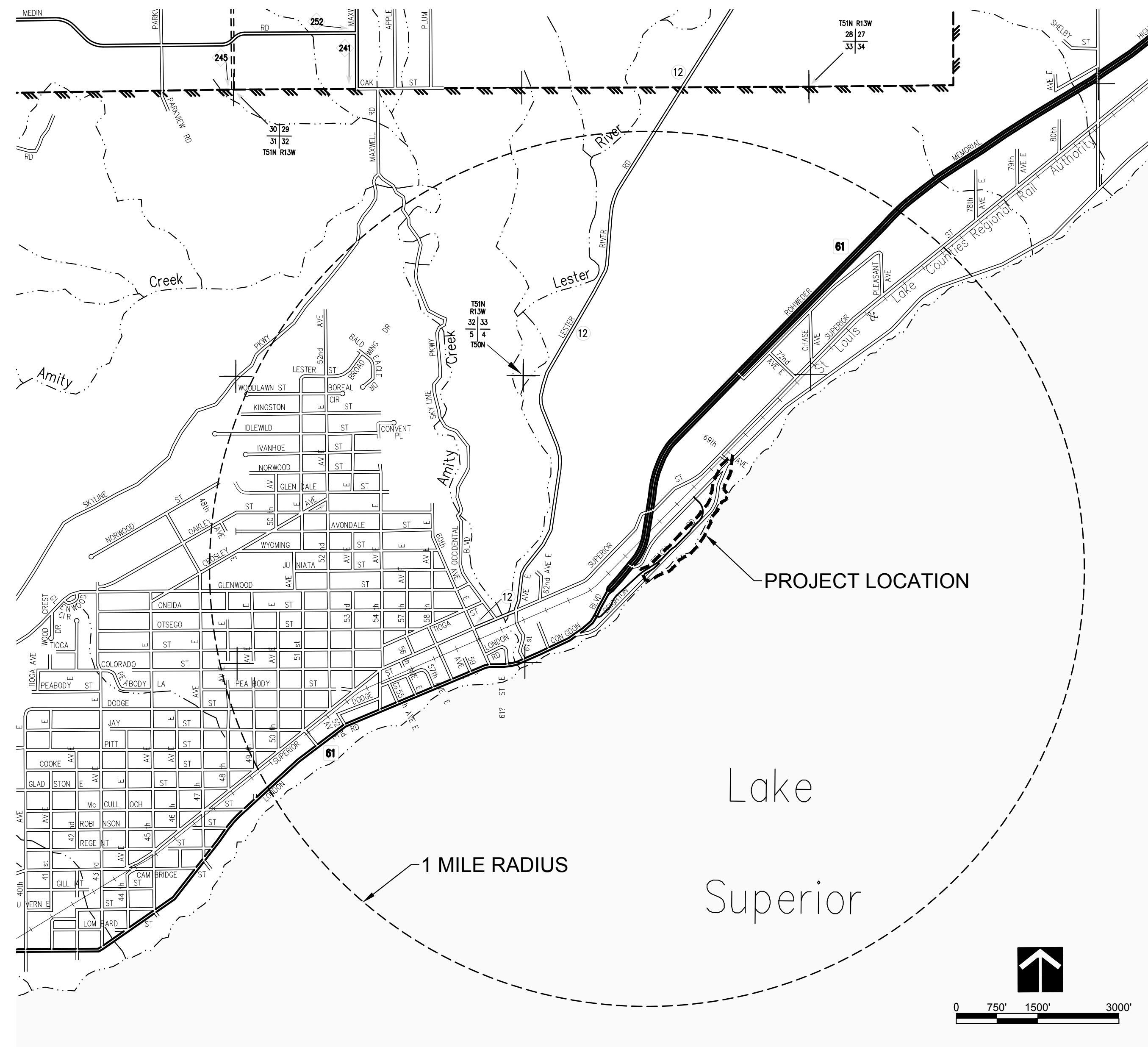
ITEM 23.11: PERMITTEES MUST INCLUDE AN UNDISTURBED BUFFER ZONE OF NOT LESS THAN 100 LINEAR FEET FROM A SPECIAL WATER (NOT INCLUDING TRIBUTARIES) AND MUST MAINTAIN THIS BUFFER ZONE AT ALL TIMES, BOTH DURING CONSTRUCTION AND AS A PERMANENT FEATURE POST CONSTRUCTION, EXCEPT WHERE A WATER CROSSING OR OTHER ENCROACHMENT IS NECESSARY TO COMPLETE THE PROJECT. PERMITTEES MUST FULLY DOCUMENT THE CIRCUMSTANCE AND REASONS THE BUFFER ENCROACHMENT IS NECESSARY IN THE SWPPP AND INCLUDE RESTORATION ACTIVITIES. THIS PERMIT ALLOWS REPLACEMENT OF EXISTING IMPERVIOUS SURFACE WITHIN THE BUFFER. PERMITTEES MUST MINIMIZE ALL POTENTIAL WATER QUALITY, SCENIC AND OTHER ENVIRONMENTAL IMPACTS OF THESE EXCEPTIONS BY THE USE OF ADDITIONAL OR REDUNDANT BMPs AND MUST DOCUMENT THIS IN THE SWPPP FOR THE PROJECT.

- 2) FOR THE ABOVE SURFACE WATERS, IDENTIFICATION OF SPECIAL OR IMPAIRED WATERS, INCLUDING ENVIRONMENTAL PROTECTION AGENCY (EPA) APPROVED TOTAL MAXIMUM DAILY LOAD (TMDL) AND WASTE LOAD ALLOCATION (WLA) FOR POLLUTANTS OR STRESSORS IDENTIFIED IN APPENDIX A, PART B.10 OF THE PERMIT: N/A.
- 3) FOR THE ABOVE SPECIAL OR IMPAIRED WATERS, DOCUMENTATION OF BMPs USED TO ADDRESS TMDL OR WLA REQUIREMENTS TO COMPLY WITH APPENDIX A OF THE PERMIT: N/A
- 4) CONSTRUCTION AREAS THAT ARE ADJACENT TO AND DRAIN TO MINNESOTA DEPARTMENT OF NATURAL RESOURCES (MDNR) PUBLIC WATERS PROMULGATED AS "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIMES: N/A
- 5) IDENTIFY DEPTH TO SEASONAL HIGH WATER TABLE ELEVATION AT INFILTRATION BASIN: N/A.
- 6) IDENTIFY HYDROLOGIC SOIL GROUP AND INFILTRATION RATE: N/A

C. MAINTENANCE PLAN: N/A.

7. STANDARDS SPECIFICATIONS FOR CONSTRUCTION:

UNLESS OTHERWISE NOTED IN CONTRACT DOCUMENTS, ALL MATERIAL AND CONSTRUCTION REQUIREMENTS FOR TEMPORARY SEDIMENT CONTROL AND EROSION PREVENTION SHALL BE IN ACCORDANCE WITH THE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION AND THE CITY OF DULUTH, MINNESOTA CONSTRUCTION STANDARDS, CURRENT ADDITION.



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05/05/2023	BID ISSUE	

NO	DATE	REVISION

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 Landscape Architect under the laws of the State of Minnesota.

SIGNATURE: *Heidi S. Bringman*

TYPED OR PRINTED NAME: HEIDI S. BRINGMAN

DATE: 05-05-2023 REG. NO.: 46914

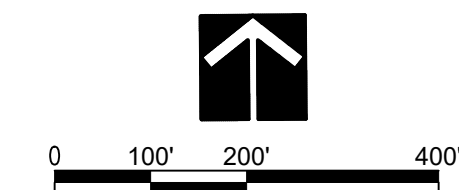
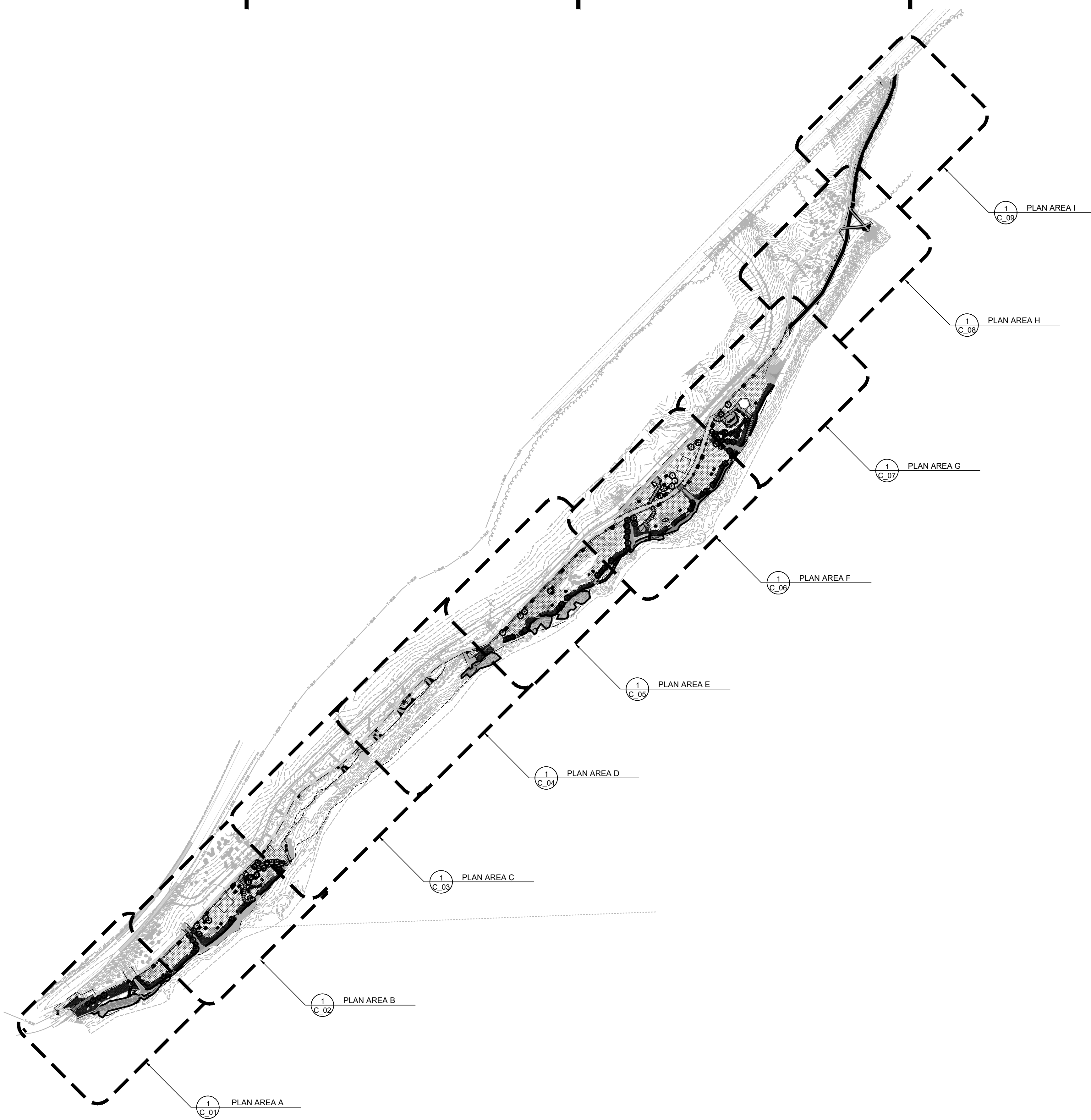
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PROJECT NAME:
**BRIGHTON BEACH
 SHORELINE
 RESTORATION: PHASE 2**
 BRIGHTON BEACH ROAD
 DULUTH, MN 55804

DRAWING TITLE:
SHEET INDEX

DRAWN BY: RMJ
 CHECKED BY: HSB
 PROJ. NO.: 210260
 DRAWING NO.:

C004



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SIGNATURE: *Megan Goplin*

TYPED OR PRINTED NAME: MEGAN GOPLIN

DATE: 05-05-2023 REG. NO.: 53018

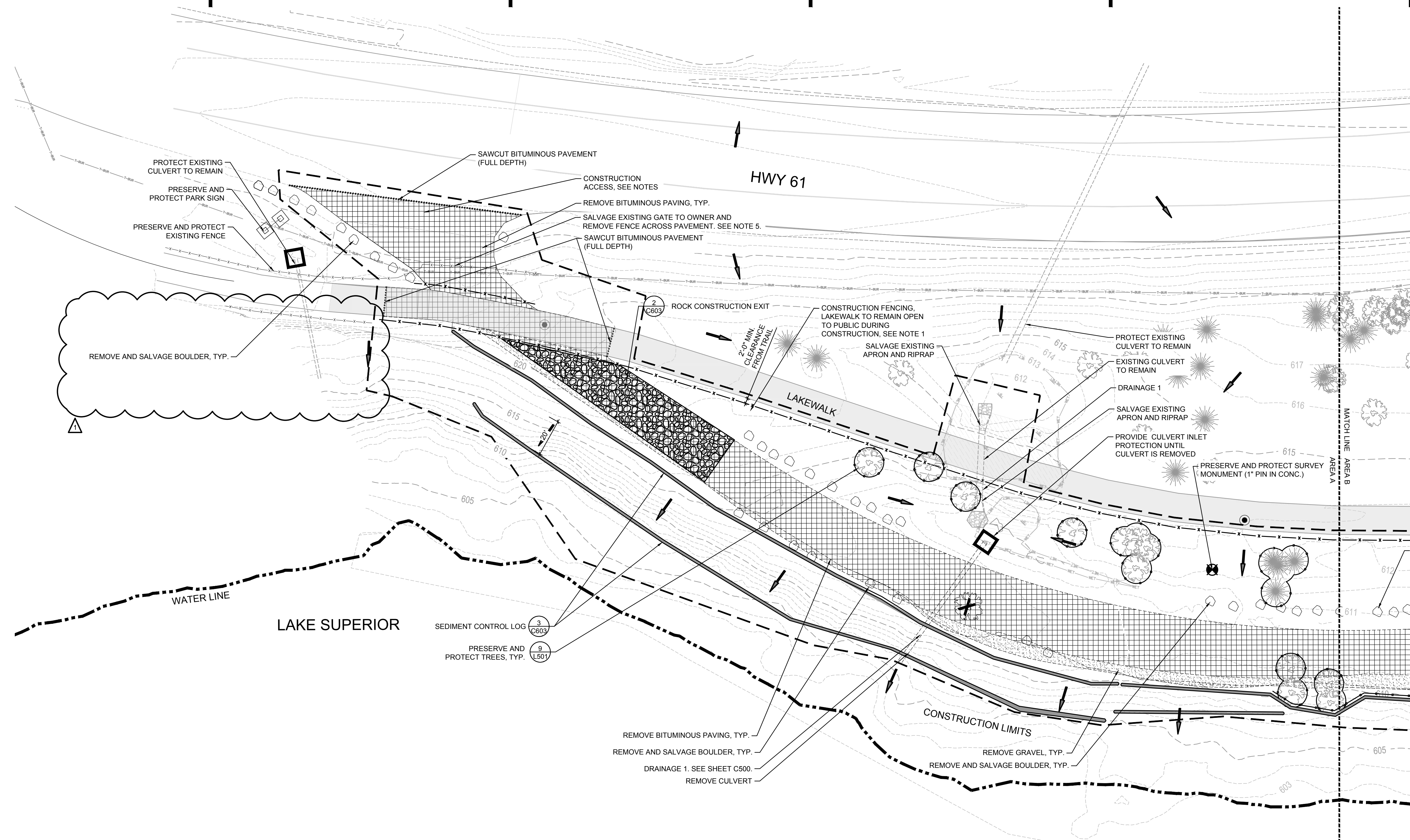
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PROJECT NAME:
**BRIGHTON BEACH
 SHORELINE
 RESTORATION: PHASE 2**
 BRIGHTON BEACH ROAD
 DULUTH, MN 55804

DRAWING TITLE:
**REMOVALS PLAN
 AREA A**

DRAWN BY: XXX
 CHECKED BY: XXX
 PROJ. NO.: 210260
 DRAWING NO.:

C101



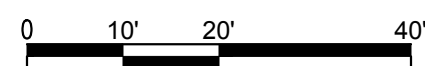
WARNING
 LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR. CALL BEFORE DIGGING.
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LEGEND

	REMOVE BITUMINOUS PAVING		CONSTRUCTION LIMITS
	REMOVE GRAVEL PAVING		REMOVE FELLED TREE, SEE NOTE 4
	ROCK CONSTRUCTION EXIT (SEE DETAIL 7/C600)		PROTECT TREE, SEE DETAIL 9/L501
	SEDIMENT CONTROL LOG (SEE DETAIL 5/C600)		DRAINAGE ARROW
	CONSTRUCTION FENCE		CULVERT INLET PROTECTION (SEE DETAIL 2/C600)
	SILT FENCE (SEE DETAIL 6/C600)		

- NOTES:**
1. IN PLACE LAKEWALK TRAIL TO REMAIN OPEN DURING CONSTRUCTION. COORDINATE ANY TEMPORARY CLOSURES WITH CITY.
 2. EXISTING PAVEMENT SHALL SERVE AS CONSTRUCTION ACCESS FOR PROJECT, PHASE PAVEMENT REMOVAL TO SERVE AS CONSTRUCTION ACCESS.
 3. CONTRACTOR MAY RECOMMEND ALTERNATIVE PERIMETER CONTROL AS LONG AS THERE IS REDUNDANCY ALONG THE LAKE SHORE.
 4. TREES MARKED TO BE REMOVED HAVE BEEN CUT AND FELLED BY OWNER. CONTRACTOR TO REMOVE FELLED TREES AND THEIR STUMPS FROM SITE.
 5. LEAVE GATE AND FENCE IN PLACE DURING CONSTRUCTION TO RESTRICT ACCESS TO SITE. REMOVE AT END OF CONSTRUCTION PRIOR TO FINAL PAVEMENT REMOVAL AND RESTORATION.

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SIGNATURE: *Megan Goplin*

TYPED OR PRINTED NAME: MEGAN GOPLIN

DATE: 05-05-2023 REG. NO.: 53018

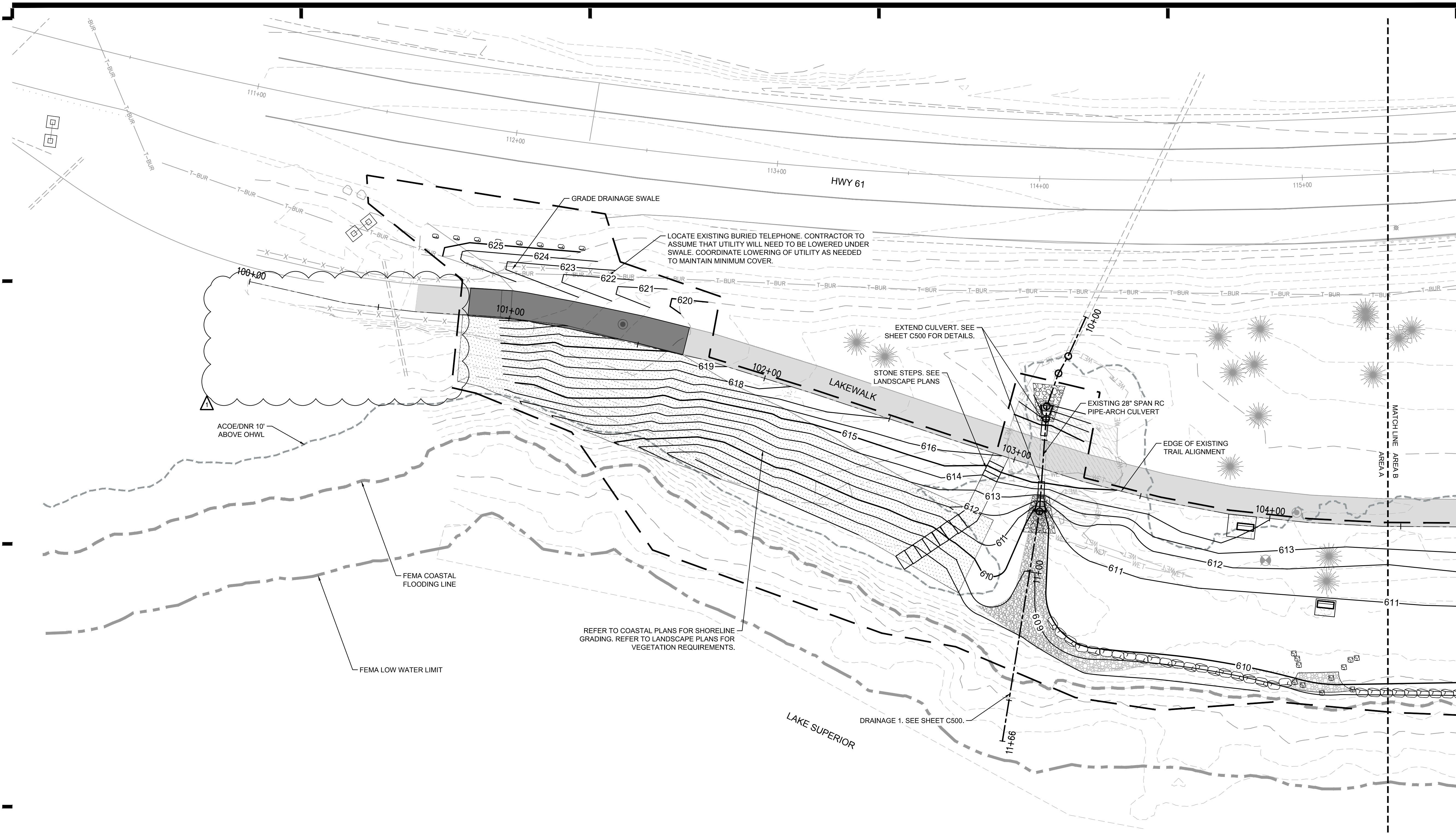
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PROJECT NAME:
**BRIGHTON BEACH
 SHORELINE
 RESTORATION: PHASE 2**
 BRIGHTON BEACH ROAD
 DULUTH, MN 55804

DRAWING TITLE:
**GRADING AND DRAINAGE
 AREA A**

DRAWN BY: MAG
 CHECKED BY: HSB
 PROJ. NO.: 210260
 DRAWING NO.:

C301

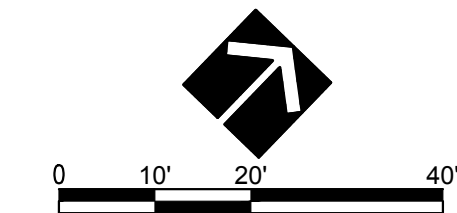


GRADING NOTES

ALL CONCRETE PADS SHALL BE SLOPED AT NO MORE THAT 2% IN ANY DIRECTION.

GRADING & DRAINAGE LEGEND

CONSTRUCTION LIMITS		FINISHED GROUND ELEVATION	
EXISTING CONTOUR		MATCH EXISTING ELEVATION	
PROPOSED CONTOUR		LANDING AREA - 4'x4' MIN. DIMENSIONS AND MAX. 2.0% SLOPE IN ALL DIRECTIONS	
EXISTING CULVERT		EXISTING BITUMINOUS TRAIL	
EXISTING PIPE APRON			
PROPOSED CULVERT			
PROPOSED PIPE APRON			
PROPOSED DRAINAGE STRUCTURE			



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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 Landscape Architect under the laws of the State of Minnesota.

SIGNATURE: *Rachel M. Johnson*
 TYPED OR PRINTED NAME: RACHEL M. JOHNSON

DATE: 05-05-2023 REG. NO.: 58568

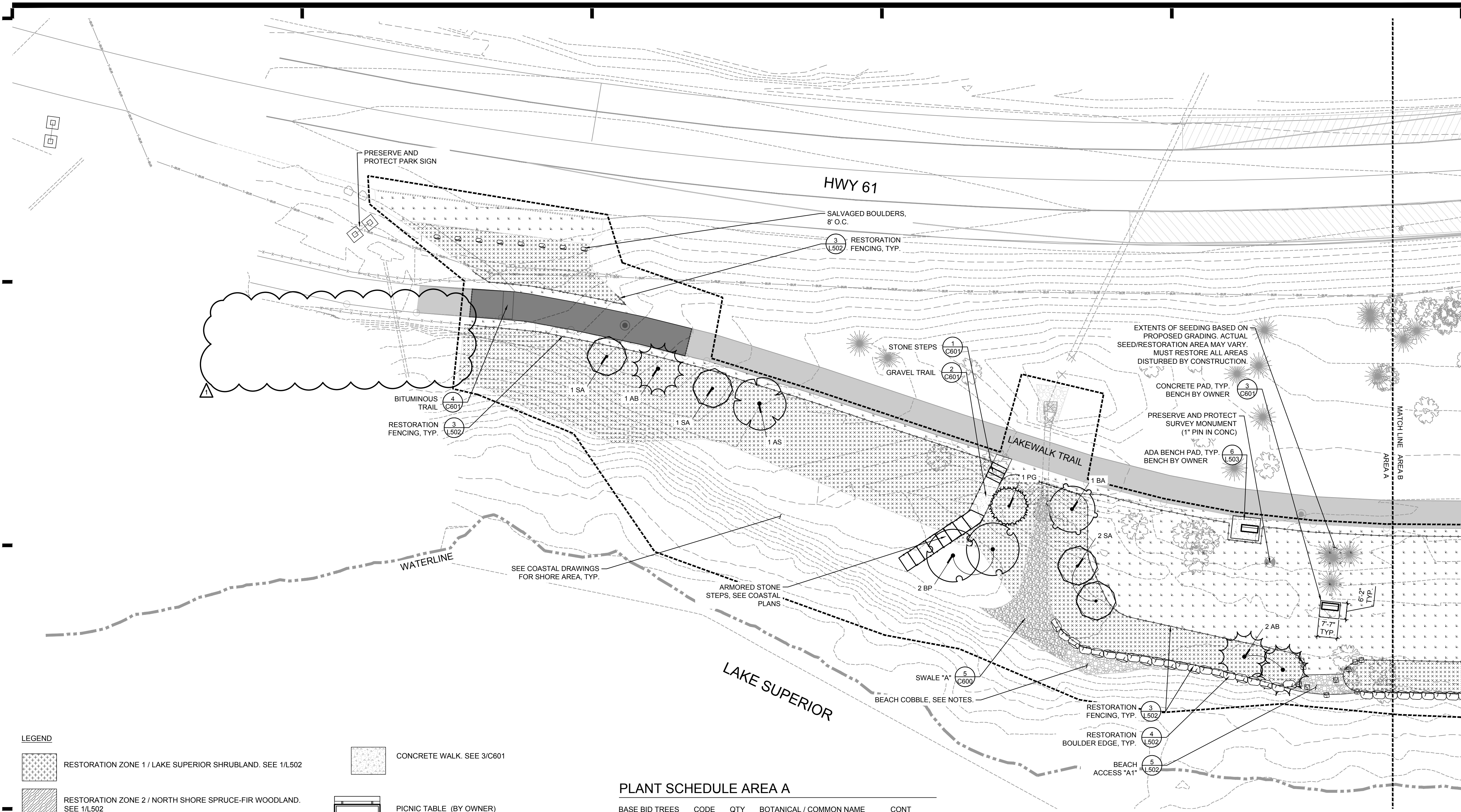
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PROJECT NAME:
**BRIGHTON BEACH
 SHORELINE
 RESTORATION: PHASE 2**
 BRIGHTON BEACH ROAD
 DULUTH, MN 55804

DRAWING TITLE:
**SURFACING, LAYOUT, AND
 RESTORATION PLAN AREA A**

DRAWN BY: RMJ
 CHECKED BY: HSB
 PROJ. NO.: 210260
 DRAWING NO.:

C401



- LEGEND**
- RESTORATION ZONE 1 / LAKE SUPERIOR SHRUBLAND. SEE 1/L502
 - RESTORATION ZONE 2 / NORTH SHORE SPRUCE-FIR WOODLAND. SEE 1/L502
 - RESTORATION ZONE 3 / UPLAND WHITE CEDAR FOREST. SEE 1/L502
 - SLOPE STABILIZATION ZONE. SEE 2/L502
 - NATURE PLAY AREA MIX
 - TURF SEED / ECONOMY MIX
 - BEACH COBBLE/BEACH ACCESS. SEE 5/L502
 - ROCK IN SWALES. SEE 5/600
 - GRAVEL TRAILS. SEE 3/C601
 - CONCRETE WALK. SEE 3/C601
 - PICNIC TABLE (BY OWNER)
 - BENCH (BY OWNER)
 - DOUBLE TRASH AND RECYCLING CONTAINERS WITH MUTT MITT RECEPTACLE
 - SALVAGED BOULDER
 - RESTORATION BOUNDARY FENCE. TEMPORARY THROUGHOUT ESTABLISHMENT PERIOD. SEE 3/L502
 - CONSTRUCTION LIMITS

PLANT SCHEDULE AREA A

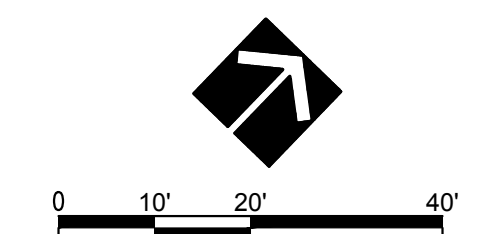
BASE BID TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	AB	3	Abies balsamea / Balsam Fir	6" B&B
	AS	1	Acer saccharum / Sugar Maple	1.5" CAL.
	BA	1	Betula alleghaniensis / Yellow Birch	1.5" CAL.
	BP	2	Betula papyrifera / Paper Birch	1.5" CAL.
	PG	1	Picea glauca / White Spruce	6" B&B
	SA	4	Sorbus americana / Mountain Ash	1.5" CAL.

- NOTES:**
- BLEND BEACH COBBLE OVER ALL DISTURBED BEACH GROUND FOR A MIN OF 6" DEPTH. ALL OF BEACH COBBLE RESTORATION BASED ON REMOVALS. ACTUAL BEACH COBBLE RESTORATION EXTENTS MAY VARY. MUST RESTORE ALL AREAS DISTURBED BY CONSTRUCTION.
 - MINIMIZE SITE DISTURBANCE AND SOIL COMPACTION FOR ACCESS AND INSTALLATION OF CONCRETE PADS WITHIN SEEDED AREAS.
 - TAKE PRECAUTION WHEN WORKING AROUND EXISTING TREES AND ASSOCIATED ROOTS THAT ARE TO REMAIN, WITHIN NEWLY SEEDED AREAS. MINIMIZE SOIL COMPACTION AND NO MORE THAN 4" TOPSOIL AND SEED SHALL BE APPLIED.
 - STONE STEPS SHALL BE FIELD LOCATED WHERE TRAIL GRADE IS STEEPEST. STAKE AND ADJUST LOCATION AS NECESSARY UPON LA APPROVAL.

WARNING

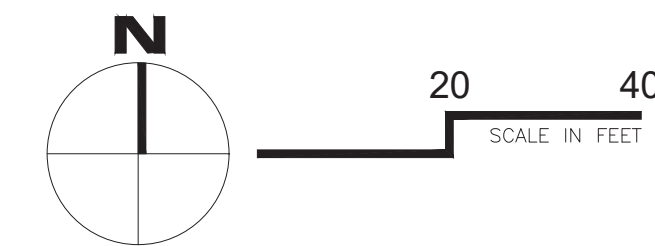
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PLAN AREA A



SITE LEGEND:

- FLOW ARROW AND GRADE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED SPOT ELEVATION
- WATERLINE
- SALVAGED AND REINSTALLED STONE
- NATURAL SWALE
- BEACH ENCOURAGEMENT ZONE
- SALVAGE RIPRAP STONES
- STONE STEPS PROTECTION

GENERAL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE BEFORE BEGINNING SITE GRADING ACTIVITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES OF CUT, FILL AND WASTE MATERIAL TO BE HANDLED, AND FOR THE AMOUNT OF GRADING TO BE DONE. ALL COSTS ASSOCIATED WITH IMPORTING SUITABLE MATERIAL AND EXPORTING UNSUITABLE/EXCESS/WASTE MATERIAL SHALL BE INCLUDED IN THE BID PRICE.
3. CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL UNLESS OTHERWISE DIRECTED.
4. MAINTAIN TEMPORARY PROTECTION MEASURES DURING CONSTRUCTION ACTIVITIES. PROVIDE ADDITIONAL PROTECTION AS NECESSARY AS WORK PROGRESSES.
5. PROPOSED CONTOURS AND SPOT ELEVATIONS ARE TO FINISHED SURFACE GRADE.
6. NO GRADED SLOPES SHALL EXCEED 3:1 (HORIZONTAL TO VERTICAL) UNLESS OTHERWISE NOTED.
7. UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
8. LIMIT THE DISTURBED AREA AS MUCH AS POSSIBLE AND CONDUCT GRADING OPERATIONS IN A MANNER TO MINIMIZE THE POTENTIAL FOR EROSION.
9. CONDUCT GRADING PER MNDOT SPECIFICATIONS 2101, 2105 AND 2112.
10. IF EXCESSIVE SEDIMENT PLUMES ARE CREATED, AS DETERMINED BY THE ENGINEER, DURING CONSTRUCTION THE CONTRACTOR SHALL INSTALL A SILT CURTAIN BEFORE PROCEEDING WITH CONSTRUCTION.
11. ALL CUT SOIL MUST BE PLACED IN APPROVED STOCKPILE LOCATIONS OR REUSED ON SITE IN APPROVED AREAS.

SHORELINE SUBGRADE CUT/FILL SUMMARY	
TOTAL CUT	1015 CY
TOTAL FILL	0 CY
NET CUT/FILL	1015 CY OF CUT

ESTIMATED CONSTRUCTION QUANTITIES BREAKDOWN	
SALVAGED STONE	50 CY
INSTALLED STONE	200 CY
TOE STONES	60 EA
SELECT ROCK STEP STONES	10 EA
STONE ANCHORS	60 EA

AMI Consulting Engineers P.A.
 91 MAIN STREET SUPERIOR, WI
 715-718-2193 - amiengeers.com
 TWIN CITIES - IRON RANGE

NAME: RYAN DAGGER
 SIGNATURE: *Ryan Dagger*
 DATE: 5/11/2023
 LIC. NO.: 95889

REV. BY:	DESCRIPTION
RRD	ISSUED FOR BID
RRD	ADDENDUM 01 - GRADING-ADJUSTMENT

DATE	REV.	DESCRIPTION
5/11/2023	0	ISSUED FOR BID
5/25/2023	01	ADDENDUM 01 - GRADING-ADJUSTMENT

STATE DISASTER REPAIRS
 BRIGHTON BEACH
 CITY OF DULUTH
 DULUTH, MN
 PROPOSED PLAN
 AREA A

JOB No: 231016
 DATE: 5/11/2023
 DRAWN BY: MTL
 DESIGNED BY: RRD

SHEET:
CH2.0.0