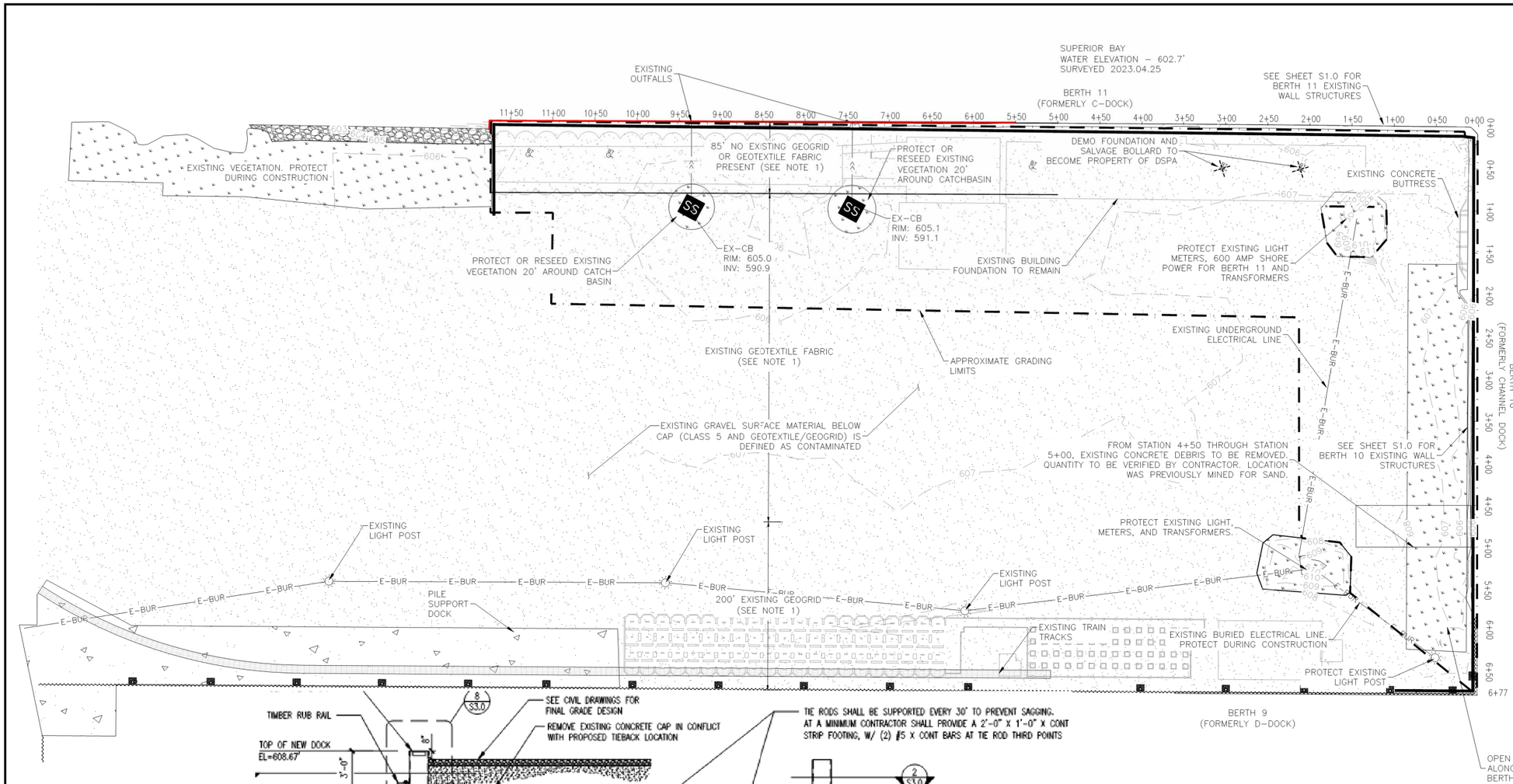
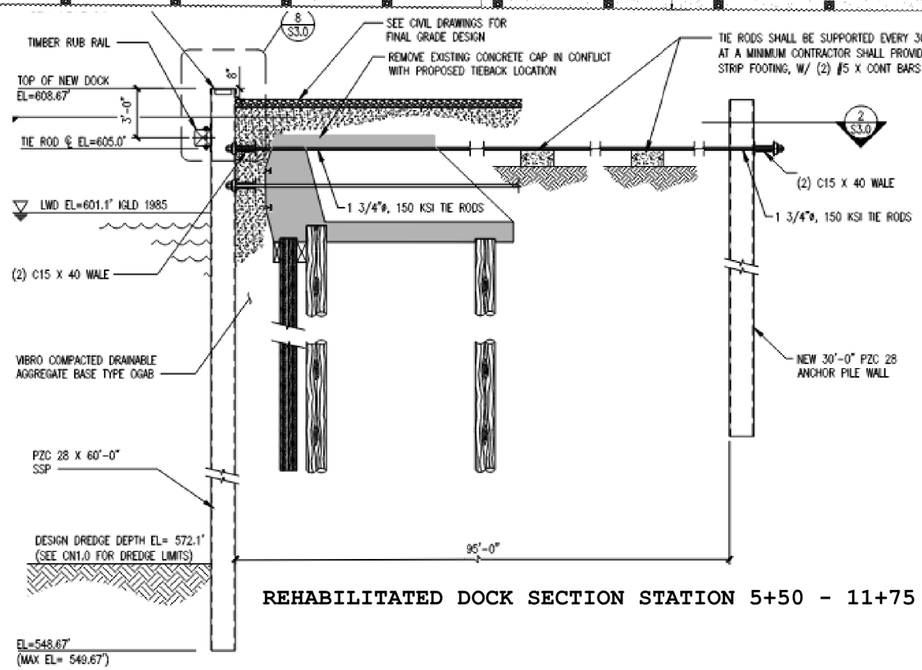




REHABILITATED DOCK SECTION STATION 5+50 - 11+75

70 140
SCALE IN FEET

EXISTING CONDITIONS LEGEND:

- CONSTRUCTION/GRADING LIMITS
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- UNDERGROUND ELECTRICAL LINE
- STORM SEWER
- STORM SEWER CATCH BASIN
- LIGHT POLE
- BOLLARD
- GRAVEL PAVEMENT
- CONCRETE PAVEMENT
- RIPRAP
- VEGETATED BUFFER
- CONSTRUCTION/GRADING LIMITS

NOTES:

1. AS PART OF PREVIOUS PROJECT AT THE SITE GEOGRID IS EXPECTED TO HAVE BEEN INSTALLED 200FT FROM THE FACE OF BERTH 8 AND 9 (FORMERLY REFERRED TO AS D–DOCK). GEOTEXTILE FABRIC EXPECTED TO EXTEND FROM EDGE OF EXISTING GEOGRID TO APPROXIMATELY 85 FT FROM BERTH 11 (FORMERLY C–DOCK). GEOTEXTILE FABRIC OR GEOGRID ARE NOT EXPECTED TO BE BELOW EXISTING VEGETATED SPACES OR PILE SUPPORTED DOCK
2. REFER TO CONSTRUCTION DRAWINGS "DULUTH SEAWAY PORT AUTHORITY – GARFIELD DOCKS C AND D REHABILITATION" DATED 12/15/14 AND CITY OF DULUTH RECORD DRAWINGS "DULUTH SEAWAY PORT AUTHORITY – GARFIELD DOCKS C AND D DOCK REHABILITATION" DATED 12/28/16 FOR ADDITIONAL INFO ON EXISTING SITE CONDITIONS.
3. GEOTEXTILE FABORIC ℄ DOCK TO 250 LEFT OF ℄ ENTIRE DOCK. APPROXIMATELY 330' SO APPROXIMATELY 80' SHORT OF BERTH 11

Know what's below. Call before you dig.

STATE LAW: 48 HOURS BEFORE EXCAVATING OR DEMOLISHING BUILDINGS, CALL 811 FOR FIELD LOCATION OF UNDERGROUND UTILITY LINES. THIS SERVICE LOCATES UTILITY OWNED LINES BUT NOT PRIVATE LINES.

THE LOCATIONS OF UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE EXACT LOCATION OF ALL UTILITIES (PUBLIC AND PRIVATE) MUST BE DETERMINED BEFORE COMMENCING WORK.

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.
NOT FOR CONSTRUCTION
NAME
SIGNATURE
DATE
LIC. NO. XXXXX

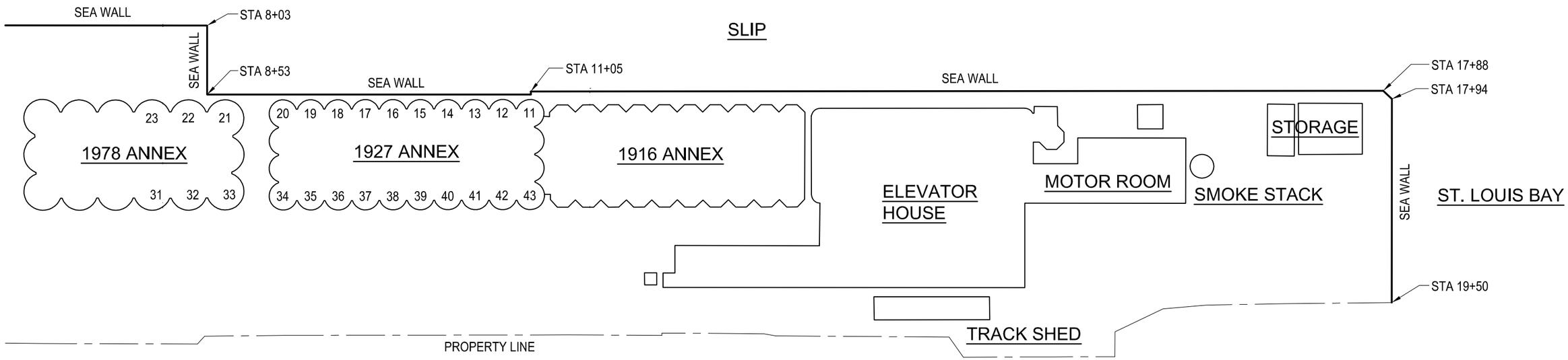
REV:	DATE:	DESCRIPTION	REV. BY:
1	02/04/2024	20% DESIGN REVIEW	NPT

DULUTH SEAWAY PORT AUTHORITY
802 HELBERG DRIVE
DULUTH, MINNESOTA

BERTH 11 STA 5+50 - 11+75
PRELIMINARY DESIGN

JOB No: 231019
DATE: ---
DRAWN BY: ---
DESIGNED BY: NPT

SHEET:
C1.0



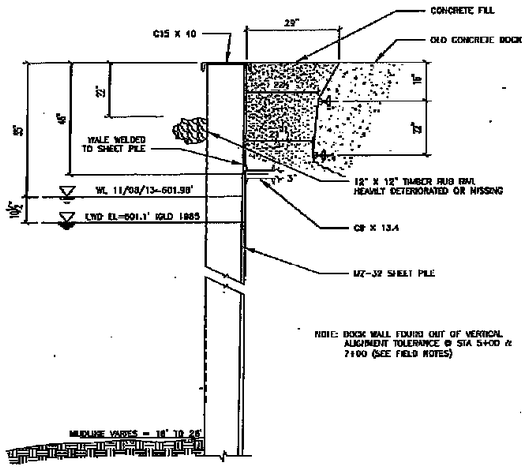
1
S1

OVERALL SITE / STATION LOCATIONS

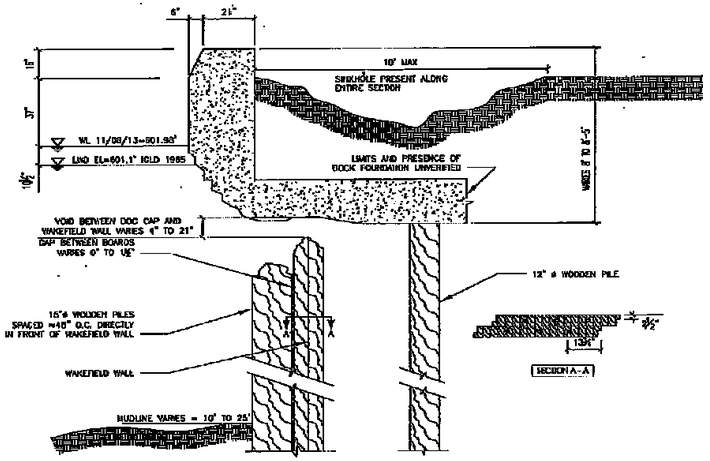
1"=80'-0"

NORTH

	Project Name: DULUTH SEAWAY PORT AUTHORITY DULUTH LAKEPORT DOCK RECONSTRUCTION Duluth, MN	NCE Project # Date: 02.16.2024 Drawn By: DWS Checked By: JEA	Revisions: REV.1 20% DESIGN REVIEW	sheet title: REFERENCE PLAN sheet number: C1.0



1 S1.1 'AGP' DOCK SECTION
STA. 0+00 TO 8+03
SCALE 1/2"=1'-0"



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STA. 8+03 TO 8+53
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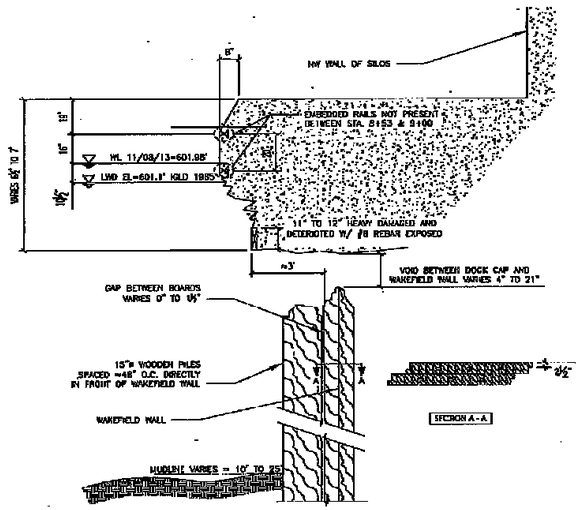

3 S1.1 'AGP' DOCK SECTION
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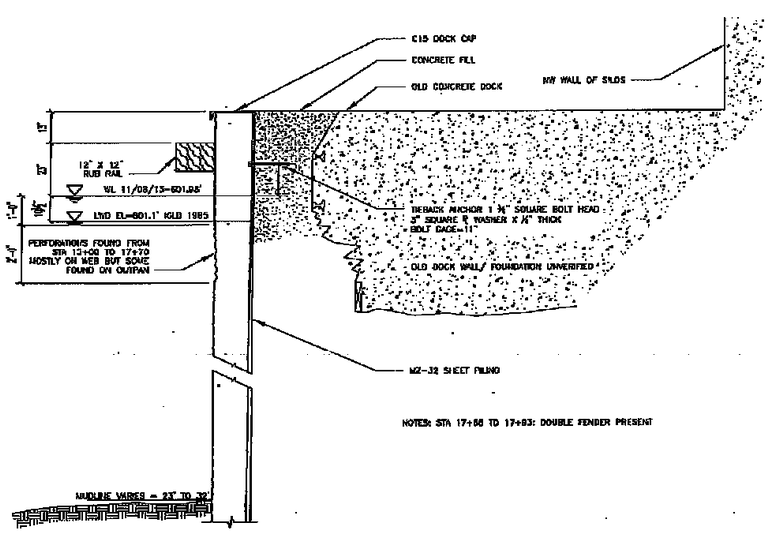

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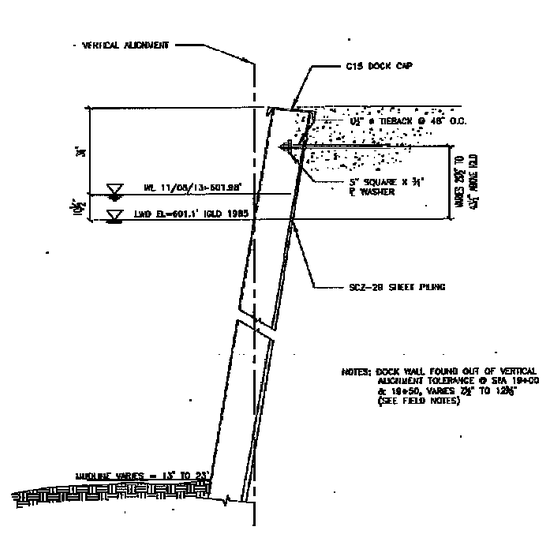


5 S1.1 'AGP' DOCK SECTION
STA. 17+94 TO 19+50
SCALE 1/2"=1'-0"

Project Name: DULUTH SEAWAY PORT AUTHORITY
DULUTH LAKEPORT DOCK
RECONSTRUCTION

Duluth, MN

NCE Project #

Date: 02.16.2024

Drawn By: DWS

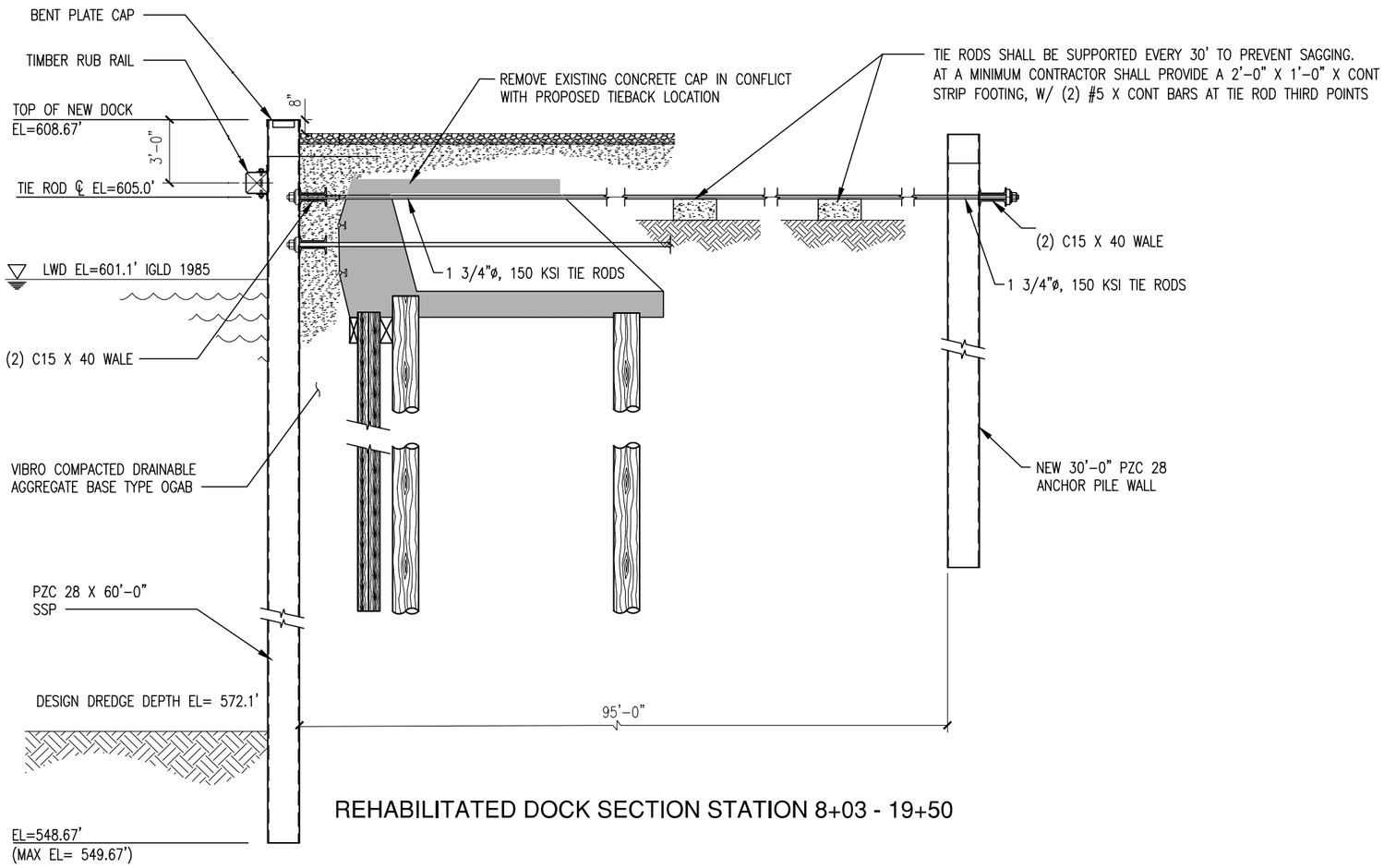
Checked By: JEA

Revisions:

REV.1 20% DESIGN REVIEW

sheet title: EXISTING DOCK SECTIONS

sheet number: C1.1



REHABILITATED DOCK SECTION STATION 8+03 - 19+50

Project Name: DULUTH SEAWAY PORT AUTHORITY
DULUTH LAKEPORT DOCK
RECONSTRUCTION

Duluth, MN

NCE Project #

Date: 02.16.2024

Drawn By: DWS

Checked By: JEA

Revisions:

REV.1 20% DESIGN REVIEW

sheet title: PROPOSED DOCK SECTION

sheet number: C1.2

KRAUS-ANDERSON®

Kraus-Anderson Construction Company
3716 Oneota Street, Duluth, MN 55807

March 27, 2023

Ms. Deborah DeLuca
Executive Director
Duluth Seaway Port Authority
802 Garfield Avenue
Duluth, MN 55802

Re: Duluth Lake Port Dock Silo and Reconstruction Estimate

Dear Ms. DeLuca:

Per our Agreement dated May 17, 2022, Kraus-Anderson is pleased to present this estimate of total cost for the Duluth Lake Port Dock Silo and Reconstruction (the "Project"). In our capacity as Consultant as described in the Agreement, we engaged and coordinated with a team of qualified professional service providers to provide estimates of total cost associated with, but not limited to, the following:

- Identification and Appraisal of Potential Salvage
- Environmental Remediation
- Demolition of Existing Structures
- Repair and Reconstruction of Seawall
- Dredging of Adjacent Slip
- Utility Upgrades

To provide these cost estimating services, Kraus-Anderson engaged Barr Engineering, Veit and Hunt Electric. The full scope of work included in the respective estimates is explained in their reports, which are included herein as exhibits. The estimates are summarized as follows:

SERVICE PROVIDER	WORK SCOPE	ESTIMATED COST LOW	BEST	HIGH
Barr Engineering[1]	Environmental Support Services		$357,000	
	Civil Support Services		223,500	
	Dock Wall Design Support Svcs.		184,000	
	Subtotals	$611,600	$764,500	$1,070,300
Veit	Silo demolition, sea wall construction, waterline construction, install gravel base		$40,348,811	
	Universal waste removal, asbestos removal, miscellaneous removals		$1,300,000	
	Subtotal		$41,648,811	
Hunt Electric	De-energizing main power		$2,000	
Totals		**$42,262,411**	**$42,415,311**	**$42,721,111**

[1] Estimates are based on 2022 costs and may change due to inflation and other factors. Please refer to the attached estimate for a full explanation.

Thank you for the opportunity to provide these services for the Duluth Seaway Port Authority. We are prepared to facilitate a meeting with you and our partners to explain the estimates and answer any questions you may have. Please let us know how you'd like to proceed.

Sincerely,

Todd Erickson
Senior Project Manager
Kraus-Anderson Construction Company

Enclosures

CC: Dean Lembke

resourceful. naturally.
engineering and environmental consultants

BARR

June 30, 2022

Todd Erickson
Kraus-Anderson Construction Company
3716 Oneota Street
Duluth, MN 55807

Re: Estimate for Engineering Services
Lake Port Dock - 600 Garfield Avenue, Duluth, MN
Structure Demolition and Dock Rehabilitation

Dear Mr. Erickson:

Barr Engineering Co. (Barr) is providing this estimate for engineering support services for structure demolition and dock rehabilitation at the Lake Port Dock property located in Duluth, Minnesota. Our estimate includes engineering design support services for demolition of the grain elevator and associated outbuildings, installation of a new dock wall, and dredging of the adjacent slip. Following structure demolition, the entire parcel will be resurfaced and upgraded city water lines will be installed for future fire protection needs.

Our estimate is divided into three categories: environmental support services, civil design, and dock wall design. In addition, we subcontracted a hazardous material building survey to provide additional data for design and construction estimating purposes. It is assumed project bidding and/or contracting will be handled by the owner and/or general contractor. Details regarding the scope of work for each of these cost categories is provided below and is followed by cost estimate tables summarizing each of the major cost components of each category.

Environmental Support Services

This project includes the removal of regulated materials and contaminated soil and groundwater prior to and during demolition, dock wall rehabilitation, and site improvement activities. Our environmental support scope of work includes tasks related to structure demolition, dock wall rehabilitation and civil improvements. Environmental assessment and investigation work will be integrated with the site design phases to support each aspect of planning and development. The environmental support work scope is divided into the four main task categories as described below.

E1 Project Management and Project Administration

This task includes administrative tasks related to planning, grant funding assistance, safety, and demolition permit notifications. This task also includes up to four local in-person project planning meetings with the contractor and property owner, and one local Voluntary Investigation and Cleanup (VIC) kick-off meeting with the MPCA and subsequent interactions with the MPCA and coordination of environmental submittals for where MPCA approval is required.

E2 Desktop Assessment

This task includes preparing a Phase I Environmental Site Assessment (ESA) which is required for enrolling the site into the MPCA VIC program. This task also includes preparing a revised Quality Assurance Project Plan (QAPP) which will be required if federal grant dollars are used to fund subsequent environmental investigation work.

E3 Site Investigation

This task includes completing a supplemental Phase II investigation, environmental sampling during geotechnical investigations, and contaminated dredge material investigation; performing response action planning; preparing an Analysis of Brownfield Cleanup Alternative (ABCA), if federal grant dollars are used; and coordinating hazardous material removal.

The Phase II investigation will include up to 10 soil borings to a depth of 20 feet below ground surface (bgs), and up to 10 test pits to a depth of 15 feet bgs. Up to two soil samples will be collected from each soil boring, test pit, and geotechnical boring and analyzed for one or more of the following: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, diesel range organic compounds (DRO), gasoline range compounds (GRO), pesticides, herbicides, and polychlorinated biphenyls (PCBs). One groundwater sample will be collected from each soil boring (up to 10 samples) and analyzed for the same compounds listed above. Field sampling will also be coordinated with the drilling of geotechnical borings as described below. The dredge investigation assumes up to 10 sediment borings will be completed using a drill rig and a barge. It is assumed the depth to the sediment is approximately 25 feet below the water surface and the total depth of sediment borings will be another 15 feet beyond that, for a total depth of 40 feet from the water surface. Dredge samples will be collected from each dredge boring (up to 20 samples) for PCBs, metals, PAHs, hexavalent chromium, and nutrients (phosphorus, nitrate + nitrite, total kjeldahl nitrogen and total organic carbon).

A water well investigation may be required to assess the need for well sealing (assuming a 4-inch diameter well 75 feet deep). It is assumed this assessment will be completed in a single day. An investigation report will be completed that provides a summary of the results and parameters for remedial action planning. A response action plan and construction contingency plan (RAP/CCP) along with an ABCA will be prepared, as needed.

Subcontractor cost related to drilling, excavation, and laboratory analysis of samples collected are included in this estimate. An estimate of $12,000 was included for drilling, $12,000 for test pit excavation, $85,000 for barge rental and drilling, $12,000 for water well excavation and drill rig and $55,000 for laboratory services across all phases of work.

E4 Remediation and Construction Oversight

This task includes the environmental support services that will be required during demolition, dredging, new dock wall construction, and civil site improvements. Our scope of work includes the following: preparing a hazardous material abatement plan (subcontracted to Legend) and integrating environmental plans and specifications with the civil and dock wall design tasks outlined below; attending the pre-bid and pre-construction meetings; performing soil remediation oversight (up to 8,000 cubic yards), contaminated dredge material oversight (up to 1,000 cubic yards), water supply well sealing oversight (one 4-inch diameter well 75 feet deep), contingency response actions; and preparing a response action implementation report.

The environmental field support during constructions is estimated as follows: two weeks for contaminated soil removal, one week for contaminated dredge material removal, and two days for water well sealing. Three additional days have been added for contingency support tasks.

Civil Design Support Services

This project consists of reviewing historical data, obtaining additional information to develop the plans and specifications, and supporting the permitting required for the demolition activities and final plans for the development of the site. The civil design support scope of work includes tasks related to reviewing historical data, surveying the site and slip, dredge characterization sampling, developing the demolition plans and the design for the Site after demolition and performing the permitting to support the development of the project plans and specifications for the structure demolition and final site grading. The civil design support work scope is divided into the four main task categories as described below.

C1 Project Management and Project Administration

This task includes general project administrative duties including supervision and coordination of the project team, review of project costs and billings, preparation of invoices using Consultant's standard forms, preparation of monthly status reports, and general administrative activities.

C2 Survey

Barr will perform a bathymetric survey of the adjacent Lake Port Dock slip.

- Bathymetric survey will consist of a 50-foot grid with locations at 1-15 points per second on grid lines and will collect data at water's edge or top of sea wall including the locations of watercraft or docks in the slip.

Barr will perform a topographic survey of the former AGP Grain Elevator / Lake Port Dock site.

- Topographic survey will collect data on one-foot ground surface contours, and include above ground site features such as trees, fences, structures/buildings, railroad tracks, signs, poles, curbs, obstructions, and other fixed objects.
- Above ground utilities will be identified.
- Survey will be to fence lines and center of Helberg Drive

This survey information will be processed into Civil 3D software and point files.

C3 Permitting

Barr will perform permitting associated with a number of requirements by local, state, and federal entities.

Phase I Cultural Resource Investigation

Barr understands that the Project will require federal and state approval under the USACE's Section 404 and the Rules of the Minnesota Environmental Quality Board (EQB); therefore, the Project must comply with state and federal regulations such as the Minnesota Historic Sites Act, the Minnesota Field Archaeology Act, and Section 106 of the National Historic Preservation Act. A preliminary review of the Project area indicates that it has been utilized for heavy industry for more than 50 years. As a result, Project area soils are assumed to be entirely disturbed. The Project area also contains a grain elevator and

other extant buildings. To remain in compliance with state and federal regulations, Barr will complete the following tasks.

Cultural Resources Literature Review

Barr will conduct a Cultural Resources Literature Review for the Project area as well as a one-mile area around Project area. The literature review will focus on identifying previously recorded archaeological sites, historic structures, and other cultural resources relevant to the Project area. Barr will also access county records, historic maps, historic aerials, and other informed sources for supporting data. Research will be conducted through a request for data from the Minnesota State Historic Preservation Office (SHPO) and a review of the online Portal maintained by the Office of the State Archaeologist (OSA). Barr will focus on previously recorded resources within one mile of the Project area, but also examine the larger region where appropriate. A literature review report will be prepared and can be used to initiate coordination with the USACE and SHPO if necessary. The literature review report will also include justification regarding disturbed soils and lack of need for archaeological investigation.

Historic Architectural Reconnaissance

A historic structure inventory and assessment will be completed to identify historic structures and other aboveground cultural resources located in the determined area of potential effects (APE) for the Project.

Fieldwork will follow the guidelines of the Minnesota *Historic and Architectural Survey Manual* and the *Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation*. Above-ground reconnaissance fieldwork will incorporate data obtained from the literature review as appropriate. Specific survey methods include examination of buildings within the APE, field notes describing the buildings and their integrity, digital image documentation, and research at local repositories to develop contexts as necessary. Digital images will be taken from as unobstructed a perspective as possible, with a three-quarter view (two elevations of the subject) of the building. Minnesota Individual Property Inventory Forms will be completed for properties over 45 years in age. Other structures will be recorded in tabular format.

After fieldwork is complete, information gathered during historical and archival research together with field recordation data will be used to assess the significance of each building and structure in terms of National Register criteria as presented in the National Park Service Bulletin *How to Apply the National Register Criteria for Evaluation*.

The results of the Phase I historic architectural survey will be detailed in a technical report. The report will include sections, as appropriate, outlining the purpose of the survey, a description of the environmental setting, a historic context for the Project area (if necessary), results of the background research, details of methods used, and survey results including descriptions of identified resources. The report will also include recommendations for project clearance or additional work that may be needed.

This task assumes the following:

- Due to previously disturbed soils, a Phase I archaeological reconnaissance is not required.
- An underwater inventory is not included as part of the investigation. If the literature review indicates the potential presence of archaeological deposits beneath the water elevation, and/or at the request of USACE and SHPO, an underwater survey may be required. If these services are required, the scope and cost will be determined at a later date.

- One combined meeting with the USACE and SHPO/THPO is included.
- The scope does not include suggested mitigation measures for historic properties that may be affected by the Project. If these services are required, the scope and cost will be determined at a later date.
- A ½-mile buffer around the Project limits will be utilized for the APE.
- Up to 5 properties over 45 years in age will be identified and inventoried within the APE. If additional properties over 45 years in age are recorded, then a change order may be requested.
- No NRHP-eligible properties (neither archaeological nor historic architectural) will be identified within the APE.
- Barr will submit the draft literature review and historic architectural reconnaissance reports to the Client and no more than one round of revisions will be required per report.
- The final reports will be submitted to the Client. Following their approval, the reports will be used in federal/state permitting and agency coordination activities.

Endangered Species Review

A desktop review of federal and state listed species will be conducted using the Minnesota Department of Natural Resources (MNDNR) Natural Historic Inventory (NHI) via Barr's license agreement and the U.S. Fish and Wildlife Service (USFWS) Information, Planning and Consultation System (IPaC). Staff will review the database findings against potential habitat in the area using aerial imagery and will draft a memo describing the potential for listed species to be present in the project area. The findings of this memo will be incorporated into the Environmental Assessment Worksheet (EAW) and used in USACE permitting. This task assumes that field surveys for threatened or endangered species, will not be required.

Wetland Delineation and Ordinary High-Water level (OHWL) Review

A desktop delineation of wetlands will be conducted in accordance with the USACE wetland delineation manual. Staff will review multiple years of aerial imagery in addition to USFWS National Wetland Inventory, hydric soils, and topography to determine if wetlands are located within the Project area. Barr will also contact the MNDNR to identify the OHWL of the harbor at the Project. The desktop wetland delineation and OHWL determination will be used to inform the EAW, USACE, and MNDNR permitting.

Environmental Assessment Worksheet

Prepare and Submit EAW. Since the Duluth Harbor is a MNDNR Public Water and the project proposes modifications may be greater than 1 acre within the harbor, we are assuming an EAW is required (Minnesota Rules 4410.4300 subp. 27A). It is anticipated that the City of Duluth will serve as the responsible governmental unit (RGU) leading the EAW effort.

Barr will develop a Draft EAW per requirements established by the Minnesota Environmental Quality Board (EQB). The Draft EAW will incorporate findings of the Phase I cultural resources inventory, threatened and endangered species review, and desktop wetland delineation. Additional field investigations are not anticipated for Draft EAW completion. Barr will prepare a Draft EAW package for applicant review and comment and will update the document based on applicant comments. Once the applicant has approved the Draft EAW, Barr will submit the document to the RGU for review and a completeness determination.

Final EAW/RGU Coordination. Upon the applicant's approval, Barr will submit the Draft EAW to the RGU for review and comment. It is anticipated that one conference call may be needed to review the RGU's comments on the Draft EAW. Barr will revise the documents per RGU comments and generate a Final EAW for the RGU's submittal to the EQB and distribution for public review.

EAW Finding of Fact and Record of Decision. Barr will draft a Finding of Fact (FoF) and Record of Decision (ROD) of behalf of the RGU. This document will include a summary of environmental impacts, as well as responses to all comments received during the EAW review and comment period. The RGU can use this document as the basis for its Environmental Impact Statement (EIS) need determination.

MNDNR Permitting

A MNDNR Work in Public Waters permit will be required for all work occurring below the OHWL of the Harbor. In addition, a Water Appropriation Permit would be required for projects that withdraw more than 10,000 gallons of water per day or 1 million gallons per year. All MNDNR permits will be applied for collectively in the agency's online permitting portal, MPARS. Barr will compile and submit all materials for the Work in Public Waters Permit and the Water Appropriations Permit if required.

Joint Permit Application (USACE Section 404 and MN Wetland Conservation Act)

Project-related impacts on aquatic resources will require permitting from the USACE and RGU. Barr will submit a Minnesota Joint Permit Application, which covers USACE Section 404 permitting and permitting under the Minnesota Wetland Conservation Act (WCA). The Joint Permit Application submittal will include a copy of the MPARS permit submittal to inform the USACE of overlapping permitting processes underway.

City of Duluth Permits

The project is located within the City of Duluth and will require the following applications:

- Filling and Grading Permit Application; required for projects that require more than 10 cubic yards of fill.
- Shoreland and Floodplain Application and Worksheet; required for project located within the Shoreland Management Zones.
- Erosion and Sediment Control Application; required as part of the Shoreland and Floodplain Application.

Construction Stormwater Pollution Prevention Plan (SWPPP)

This task includes development of a project-specific construction stormwater pollution prevention plan (SWPPP) prepared in accordance with the requirements detailed in the General Construction Stormwater Permit MNR100001. The SWPPP will include the following required components presented as a combination of narrative, plan sheets, standard details. Describe the construction activity and potential for sediment and other potential pollutant discharges from site.

- Provide stormwater design specifications and calculations for stormwater management systems, including the number of acres of existing and new impervious surfaces.
- Identify location and type of BMPs to be utilized at the site along with procedures to establish additional BMPs as necessary.

- Provide standard specifications and plans for BMPs.
- Provide a site map showing both the existing and final grades, including direction of flow and pre- and post-drainage area divides. The site map must also include locations of steep slopes, impervious surfaces, soil types, and potential pollutant-generating activities (such as building products, pesticides, herbicides, fertilizer, treatment chemicals, hazardous materials, solid waste, portable toilets, etc.).
- Provide maps showing the locations of surface waters, including wetlands, stormwater ponds or basins within one mile of the site. A map must also show areas of the site that will drain to a public water the MNDNR has promulgated "work in water restrictions" for fish spawning timeframes.
- Provide locations of areas to be phased to minimize duration of exposed soils.
- Provide the following factors in design of BMPs:
    - Amount, frequency, intensity and duration of precipitation.
    - Stormwater runoff and run-on, including expected flow from impervious surfaces, slopes and site drainage features.
    - How flow rate and volume of channelized flow will be managed to minimize erosion at outlets and downstream erosion.
    - Range of soil particles expected at the site

The final deliverables include a construction SWPPP, sent via email, and a draft general construction stormwater permit application, shared via MPCA e-Services. Assumption is that the Duluth Seaway Port Authority will finalize the permit application and submit payment to the MPCA via e-Services.

C5 Dredge Characterization

This task includes preparing and implementing an investigation of the sediment in the slip to characterize for permitting the disposal of the materials. This scope of work assumes up to four borings will be installed from the edge of the dock wall and the collection of up to three samples per borings. An estimate of $20,000 was included for a drilling firm and $3,000 was included for a laboratory testing.

C6 Plans and Specifications

This task includes preparing the civil and site plans and specifications specifically addressing the general site layout, dewatering plan, demolition plans, grading and coordination with environmental to develop the dredge characterization sampling (assumes four borings from edge of dock wall) and dredge disposal plans, coordination with the dock wall design for soil and structure removals and final site utilities and grading plans. Other site plans are assumed covered under the environmental and dock wall design work scope. It is estimated that 16 plan sheets will be developed: cover sheet, general overview, demolition, excavation and dredging, site utilities and final grading, section and detail sheets. Specifications will be developed for the civil portion of this work.

C7 Demolition and Construction Oversight

This task includes the civil support services, including construction oversite, required during demolition, dredging, new dock wall construction, and civil site improvements. Our scope of work includes the following: supporting work associated with the hazardous material abatement, plan and civil plans, and

specifications integrated with the environmental and dock wall design tasks outlined in this document; attending the pre-bid and pre-construction meetings; supporting soil remediation oversight, contaminated dredge material support, utilities and water installation oversight, contingency response actions and assembling a set of final as-built drawings of the Site.

Dock Wall Design Support Services

The project consists of constructing a new dock wall suitable for use in berthing up to 1,000-foot vessels in the slip as well as a new dock wall along the main channel of the harbor. Although a dock wall exists for a portion of the facility, it has degraded over time and requires substantial improvement to serve as both an earth retention system and mooring facility for large vessels. The dock wall will measure approximately 250 feet long along the channel and over 1,000 feet long in the slip. Construction of the new slip wall will require excavation about 100 feet of land along the existing slip "bump out" creating a location suitable for berthing the large vessels.

D1 Project Management/Contractor Constructability Review

This task includes administrative tasks related to planning meetings with the property owner and general contractor. The tasks also includes time for early contractor involvement on the design and construction feasibility of the dock wall due to the complicated existing foundation conditions of the grain elevator and existing dock walls.

D2 Geotechnical Investigation and Analysis

This task includes developing a geotechnical investigation program consisting of soil borings, laboratory testing, site review, field engineering, and aiding the Barr structural engineering team during design. The investigation will consist of six soil borings to a depth of 75 feet below the current ground surface. A geotechnical report will provide soil types and ground conditions, water levels, and parameters for design of the dock wall, and deep foundations for the bollards. We have assumed the existing sheet pile dock wall would remain in place and the new dock wall will be constructed in the water in front of the existing dock wall.

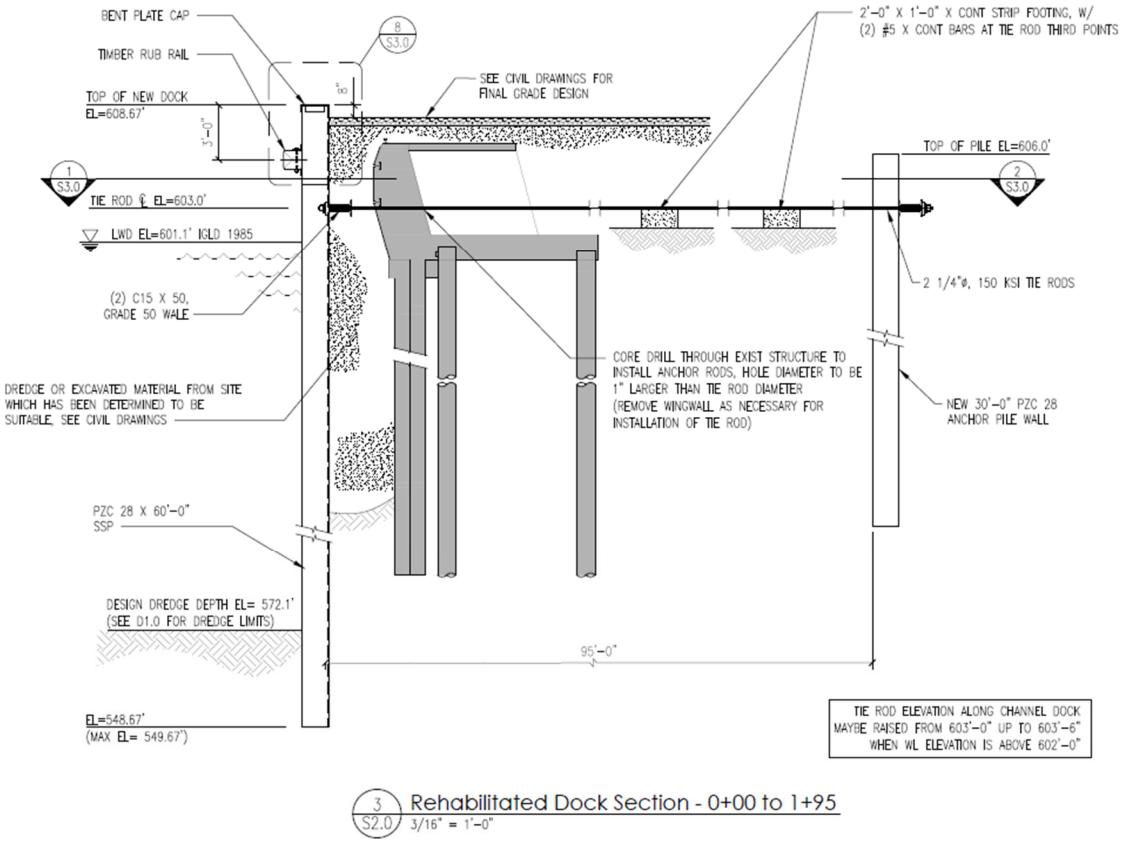
An estimate of $20,000 was included for a geotechnical drilling firm and $10,000 was included for a geotechnical laboratory testing firm.

D3 Structural Design

This task includes evaluating approximately eight different dock wall sections. We have assumed the sheet pile length will be about 60 feet long. Up to eight analysis sections are required due to the current configuration of the wall and the support provided by the existing grain elevator, the new section of dock wall required for 1,000-foot vessels, and available space along the slip entrance and channel wall. The existing wall consists of a complex anchoring system tied to the existing grain elevator structure. Upon demolition of the grain elevator, the anchors may be affected and loss of support for the wall could occur. In order to maintain the existing wall until the new wall can be constructed, a structural review will be required to evaluate stability of portions of the wall as the foundations are removed.

This evaluation will assess the required support conditions, surcharge loads, anchoring types, and dead man walls required to support a new dock wall. The design includes assessing the walers, tie bars, sheet pile type and length, bollards, and foundations. For this cost assessment we assumed the following typical

cross section (developed for a similar project) for the new wall design will be similar to that provided in the final design.



3 S2.0 Rehabilitated Dock Section - 0+00 to 1+95
3/16" = 1'-0"

D4 Plans and Specifications

This task includes preparing the structural and site plans and specifications specifically addressing the dock wall. Other site plans are assumed covered under the Civil and Environmental work scope. The following 18 plansheets will be developed: cover sheet, general overview, four detailed plan sheets, two section sheets, four detail sheets including bollards, and six soil boring sheets. Specifications will be developed for the sheet pile and structural steel.

D5 Construction/Demolition Support

This task includes providing support time to the contractor during development of a demolition plan and during construction. It is anticipated that due to the existing dock wall using the grain elevator foundations for anchorage, some structural engineering will be required to facilitate demolition and provide temporary support for the dock wall until the new dock wall has been constructed.

During construction of the new dock wall, it is anticipated that field engineering support will be required to observe sheet pile driving, tieback installation, construction of walers, etc. The time for wall construction is assumed to be four months and field engineering support would be required at 8 hours

per week for that duration. Other engineering and environmental staff would provide support for the remaining time period including but not limited to demolition, civil site work, and dredging.

Hazardous Material Building Survey

Legend Technical Services (Legend) is completing a Hazardous Material Building Survey for the Site. Field activities were performed on June 14 and 15, 2022. The purpose of the survey is to identify and sample materials suspect of containing asbestos throughout the interior and exterior of the structures, inventory regulated materials (e.g. thermostats, switches, bulbs, ballast, transformers, etc.), and identify suspect hazardous materials (oils, debris, etc.). The survey was limited to areas that could be safely accessed. Equipment and/or materials located in portions of the flooded basement were not evaluated. Roofing material was evaluated in areas that could be safely accessed through available entry points (e.g. stairways). The asbestos analytical results were complete on June 27, 2022; Legend will issue their draft report on or before July 15, 2022.

Project Estimate

Barr's design project estimate summarized in the table below is based on the scope of work identified above and as detailed in our proposal dated March 4, 2022.

Environmental Support Services	Cost Estimate
E1 - Project Management and Project Administration	$22,000
E2 - Desktop Assessment	$15,000
E3 - Site Investigation	$230,000
E4 – Remediation and Construction Oversight	$90,000
Total Estimate	**$357,000[1,2]**

Civil Support Services	Cost Estimate
C1 - Project Management and Project Administration	$10,500
C2 - Survey	$20,000
C3 - Permitting	$78,000
C4 – SWPPP	$12,500
C5 – Dredge Material Characterization	$30,000
C5 – Plans and Specifications	$47,500
C6 – Construction Demolition Support	$25,000
Total Estimate	**$223,500[1,2]**

Dock Wall Design Support Services	Cost Estimate
D1 – Project Management/Contractor Constructability Review	$14,500
D2 – Geotechnical Investigation and Analysis	$46,000
D3 – Structural Design	$63,500
D4 – Plans and Specifications	$21,000
D5 – Construction/Demolition Support	$39,000
Total Estimate	**$184,000[1,2]**

Combined Total	Cost Estimate
E – Environmental Support	$357,000
C – Civil Design	$223,500
D – Dock Wall Design	$184,000
Total Project Estimate (based on 2022 rates)	**$764,500[1,2]**
Estimated Total Cost (-20%)	$611,600[1,2]
Estimated Total Cost (+40%)	$1,070,300[1,2]

[1] If this work is completed in 2023 or 2024 pending receipt of grant funding, fees will likely increase by at least 5% each year to account for inflation and costs associated with direct labor and subcontractor estimate. These costs are based on estimates based on 2022 costs and may change due to inflation and other factors in the next one to two years. For example, chemical analysis charges from some subcontractor laboratories have indicated that their fees are evaluated on a quarterly basis and currently reflect an 8% inflation increase from January 2022. While not all fees and services may change on a quarterly basis, the future volatility of subcontractor fees (i.e., drillers, barge rental, chemical analysis, etc.) are unknown.

[2] This cost estimate is considered a Class 3 estimate (-20% / +40%) with a project definition of 10% to 40% in general accordance with the American Association of Cost Estimators (AACE) International Practice No. 17R-97 (revised November 29, 2011). This classification is based on the level of design that has been completed, the uncertainties regarding the outcomes of future investigations, contaminants found, our current understanding of the site conditions, scope of the project, available background information, site reconnaissance knowledge, and experience. The cost opinion is based on project-related information available to Barr at this time and includes a 100% design of the project. The opinion of cost may change as more information becomes available.

We appreciate the opportunity to provide this engineering estimate for the Lake Port Dock project. If you have any questions, please call me at (218) 529-7141 or lcarney@barr.com.

Sincerely,

Lynette Carney, P.G.
Senior Geologist

Mary Sands
Principal-In-Charge

LAKE PORT DOCK

Budget

Location: Duluth, MN
Date: July 1, 2022

Kraus Anderson
ATTN: Todd Erickson

Purpose/Introduction

Veit was retained by Kraus Anderson to provide detailed budgets for the development of the DSPA Lake Port Dock site. In brief summary, our budgeted scopes of service includes demolition of the existing silos, construction of new sea wall, construction of new waterline, and installing gravel base to create a site ready for new development by the DSPA.

Basis of Estimate

To develop our budget, we used the following documents and information:

1. Various historical drawings provided by DSPA for the demolition of buildings and construction of new sea walls.
2. Bathymetric survey created by Marine Tech dated 10/20/2017 for determining dredging volumes.
3. Site survey created by Northland Consultant Engineers dated 8/4/2016 for determining site grading volumes and site removals.
4. Berth 10 plans created by AMI Consulting Engineers dated 4/2/2020 as a schematic design for new seawall.
5. Various site visits for determining quantities and means and methods for demolition of silos and buildings on the site as well as new sea wall construction.
6. Our own prior experience in the area and in similar construction projects for making reasonable assumptions on any remaining information.

Limitations/Key Assumptions

The following items were either excluded from our budget or had assumptions made due to lack of information available:

1. Contaminated Soil.
    a. Without a detailed survey and soil analysis, quantity of contaminated soil and level of contamination is not able to be determined.

Veit & Company, Inc. | Andy Dammer, Project Manager | M: (218) 341.1843 | ADammer@VeitUSA.com | 1100 W. Gary St, Duluth, MN 55808

b. We assumed an allowance quantity 500 tons of contaminated soil to be removed and replaced with granular soil. The contamination was assumed to be at a level that is acceptable at Vonco 5 landfill in Duluth without an abnormal disposal fee or pretreatment of the soil.

2. Asbestos, Universal/Hazardous Waste, Municipal Solid Waste (MSW)
    a. Without a detailed predemolition survey, we are unable to get an accurate budget to abate/remove any asbestos, hazardous waste, or MSW in the buildings.
    b. Our building demolition budget assumes building is abated of all items that would be identified in a predemolition survey.
3. Foundation Demolition
    a. Due to the complex nature of the existing foundation (piles, tie in to wall, and water level), we assumed the existing foundations will only be partially removed and then buried in place. The basement mat slabs that covers all wood pile and the wood pile themselves will remain in place, except where removed to allow deadman wall installation. Existing seawalls will remain in place and be encapsulated by new seawall. Any below grade concrete that is integral to the support of existing seawall will be left in place.
    b. Assumes a single penetration or core through the existing system will be sufficient to allow for tie rod installation (Single Core < 3' Length).
4. Crushing Onsite
    a. We assumed crushing concrete onsite to be used for new aggregate surfacing and backfilling any voids that are above water table. Leftover crushed material is assumed to be left onsite and become property of DSPA.
    b. In our budget pricing we gave various options for importing material in lieu of recycled materials.
5. Contaminated Dredging
    a. Without a detailed survey and soil analysis, quantity of contaminated dredging and level of contamination is not able to be determined.
    b. We assumed no contaminated dredging is required.
6. Dredge Depth
    a. We assumed a target depth of 29 feet for half of the slip, and a stable slope to tie in to existing depths based on the provided bathymetric survey.
    b. Dredged material assumed to be placed on the land in geobags to dry. Once dried it assumed to be clean material and hauled away for disposal at a fill site.
7. Seawall Alignment
    a. Alignment of new seawall is assumed to be on the water side of existing walls, so as to encapsulate existing walls and not require the removal of them.

b. Assumes straight alignment and no existing obstructions below the waterline. Assumes the wall will be offset far enough to allow for vertical sheet pile installation without modifications to the existing seawall.

8. Driving Obstructions
    a. We have included time to clear drivelines of surficial obstructions that might impede sheet pile installation. In past experience we have hit obstructions in the Duluth/Superior Harbor. These have had to be dealt with by extra dredging, dive work, or adjusting sheet pile depth over the obstructions. Each adds extra costs that should be accounted for with contingency.
    b. May require modification of the alignment or predrilling or additional measures to avoid existing subsurface obstructions.
9. Dewatering
    a. Dewatering is assumed to be unfeasable due to the proximity to the open water and the porous nature of the existing voids and soil. As such, all assumptions for construction methods were that designs would keep elements such as welding and bolting above water elevation, and that any work that can be adjusted to be above the water is adjusted that way.
    b. Assumes that all tiebacks and bolted connections in the future design are done in the DRY and intentionally designed to be 1' or greater above the water level at time of installation.
10. Design Development/Site Exploration
    a. No time or costs were included to design the project or perform any site explorations.
11. Testing/Oversite/Survey
    a. No costs for testing, construction oversite, or surveying were included in the budget.
12. Permitting
    a. No permit costs were included in the budget.
13. Escalation/Market Volatility
    a. Budget pricing is assumed for 2023 constructions start. However there has been unprecedented market volatility and pricing could change.
    b. Steel sheets have been priced with current market pricing and valid for only 30 days due to the volatility of the market.
14. Coatings
    a. Assumes all sheet pile are coated with 16 mil coal tar epoxy.
    b. All tie backs are epoxy coated.
    c. All walers are designed with bolted connections and sacrificial steel for corrosion protection.
15. Contingencies

a. No explicit contingencies were made in the budget with the exception of called out allowance/assumed quantities. Any other contingencies shall be accounted for by Kraus Anderson or DSPA.

16. Payment and Performance Bonds
    a. We have included the costs for bonds in our budget.

Sequence of Construction

The sequence of construction that we deemed most economical is the following.

1. Selective demolition of existing steel structures on silos that overhang the water.
2. Demolish all out buildings completely and demolish silos down to grade.
3. Install new sheetpile wall, beginning on harbor side and working way into slip.
4. Remove a swath of existing mat slab and wood piling to allow deadman wall installation.
5. Install deadman wall.
6. Install tie back system and complete seawall installation.
7. Backfill.
8. Dredge slip into geobags onsite for drying. Exporting once dried.
9. Install Water line
10. Grade site and install aggregate surface.

We have estimated durations of 10 months for demolition, 5 months of sheetpile work, and 4 months of dredging and earthwork.

Budget Pricing

On the following page (exhibit A) is the itemized budget assembled for this project. Each item contains description, quantities, unit price, extension, and any specific notes about the item.

Respectfully,

Andy Dammer

Veit & Company, Inc. | Andy Dammer, Project Manager | M: (218) 341.1843 | ADammer@VeitUSA.com | 1100 W. Gary St, Duluth, MN 55808

LAKE PORT DOCK

Budget Revision

Location: Duluth, MN
Date: March 22, 2023

Kraus Anderson
ATTN: Todd Erickson

Purpose/Introduction

This is a revision to the budget provided on July 1, 2022. This revision is for increased length of dock wall, associated items of dock wall, and adding contaminated dredging.

Basis of Estimate

The following items were added or revised.

1. Length of dock wall increased from 1,200 LF to 1,900 LF. Associated items that increased were bollards, rub rails, ladders, clearing drive lanes, sheetpile wall, deadman wall, tiebacks, waler, and cap.
2. Dredging area increased and added a portion of contaminated dredging. The area of slip that was assumed to be dredge was increased to match the longer 1,900 LF of dock wall, thus increasing the volume. A portion of the dredging was assumed to be contaminated, creating a new line item.

All other original assumptions from the July 1, 2022 budget remain.

Budget Pricing

See attached revised exhibit A for updated budget pricing.

Respectfully,

Andy Dammer

Veit & Company, Inc. | Andy Dammer, Project Manager | M: (218) 341.1843 | ADammer@VeitUSA.com | 1100 W. Gary St, Duluth, MN 55808

Biditem	Description	Notes/Assumptions	Quantity	Unit	Unit Price	Extension
1	Mobilization/General Conditions		1	LS	$ 980,394.00	$ 980,394.00
2	Rock Construction Entrance		1	EA	$ 2,900.00	$ 2,900.00
3	Bioroll	Around perimeter of project.	4050	LF	$ 4.60	$ 18,630.00
4	Silt Curtain	Wrapped around perimeter of seawall work. Only standard depth curtain, not full length.	1500	LF	$ 23.00	$ 34,500.00
5	Sawcut		50	LF	$ 2.75	$ 137.50
6	Bituminous Removal		9616	SY	$ 2.80	$ 26,924.80
7	Contaminated Soil Removal/Backfill w/ Sand	Allowance quantity. Assumed acceptable contaminant levels at Vonco 5 without pretreatment.	500	TON	$ 55.00	$ 27,500.00
8	3/4" Rock Void Fill Below Water (unknown qty)	Unknown quantity. Includes vibro compacting below water to fill voids. Between new and old walls, under broken slabs, etc.	15000	TON	$ 41.00	$ 615,000.00
9	3/4" Rock Backfill Foundations Below Water	Backfilling basement areas that are below water.	10000	TON	$ 36.00	$ 360,000.00
10	Recycle Concrete Backfill Above Water/below subgra	Backfilling portions of basement that are above water table. Up to subgrade elevation.	6250	CYCV	$ 5.50	$ 34,375.00
10A	*Option - Backfill Sand Above Water/below subgrade*	*Backfilling portions of basement that are above water table. Up to subgrade elevation.*	*6250*	*CYCV*	*$ 30.50*	*$ 190,625.00*
11	Cut/Fill Onsite Common	Assumed finish grade of approximately 608. 1.5% grades to tie in to existing.	3458	CY	$ 10.00	$ 34,580.00
12	Recycle Concrete Surfacing 10"		11800	CYCV	$ 8.00	$ 94,400.00
12A	*Option - Import Class 5 Surfacing 10"*		*11800*	*CYCV*	*$ 45.00*	*$ 531,000.00*
13	Geogrid 200' wide around new wall section	TX130S TriAx	26667	SY	$ 3.00	$ 80,001.00
14	Geotextile Fabric	Mirafi 180N Non Woven	42635	SY	$ 2.25	$ 95,928.75
15	Connect to Existing Watermain		1	EA	$ 6,000.00	$ 6,000.00
16	Watermain - 6" DIP	Assumed installing to water table depth. No dewatering.	850	LF	$ 95.00	$ 80,750.00
17	Watermain Insulation (2" thick. 40 psi)	Insulating entire water length since only being installed to water level.	3400	SF	$ 3.80	$ 12,920.00
18	Hydrant w/ valve		1	EA	$ 10,500.00	$ 10,500.00
19	Bollard and Concrete Foundation		19	EA	$ 45,500.00	$ 864,500.00
20	Rub Rail		1900	LF	$ 303.00	$ 575,700.00
21	Safety Ladder		9	EA	$ 2,750.00	$ 24,750.00
22	Clear Drive Line sea wall		1900	LF	$ 145.00	$ 275,500.00
23	Clear Drive Line deadman wall		1900	LF	$ 13.00	$ 24,700.00
24	Dredging Slip - Clean Material	Dewatered onsite in geotubes, exported assuming clean once dried. 29' depth.	65000	CY	$ 65.50	$ 4,257,500.00
24A	Dredging Slip - Contaminated Material	Assumed acceptable contaminant levels at Vonco 5 without pretreatment.	17000	CY	$ 98.50	$ 1,674,500.00
25	Demo Silos	Assumes all slip form framing was removed during building of these structures. Assumes all organics are removed.	1	LS	$ 3,451,920.00	$ 3,451,920.00
26	Demo Workhouse	Assumes all slip form framing was removed during building of these structures. Assumes all organics are removed.	1	LS	$ 2,029,575.00	$ 2,029,575.00
27	Demo Outbuildings		1	LS	$ 161,775.00	$ 161,775.00
28	Demo Railroad Tracks		4750	LF	$ 6.58	$ 31,250.00
29	Demo Salvage Credit	Assumes June 2022 Market Pricing	1	LS	$ (225,000.00)	$ (225,000.00)
30	Sheetpile Wall	PZC28 Sheets 60' in total length (coated in pricing below)	1900	LF	$ 5,450.00	$ 10,355,000.00
31	Sheetpile Coating	16 mil Coal Tar Epoxy	1900	LF	$ 1,700.00	$ 3,230,000.00
32	Deadman Wall	PZC28 Sheets 30' in total length (coated in pricing below)	1900	LF	$ 1,740.00	$ 3,306,000.00
33	Tiebacks	#8 Epoxy Coated All Thread Rods	475	EA	$ 1,350.00	$ 641,250.00
34	Waler	Bolted Reverse Waler	1900	LF	$ 3,500.00	$ 6,650,000.00
35	Cap	Steel Cap - Double Angle with 3/8" Plate	1900	LF	$ 265.50	$ 504,450.00
						$ 40,348,811.05

LAKE PORT DOCK

Universal Waste & Asbestos Abatement Addendum

Location: Duluth, MN
Date: August 23, 2022

Kraus Anderson
ATTN: Todd Erickson

Purpose/Introduction

This is an addendum to the budget provided on July 1, 2022. This addendum is a budget for the universal waste and asbestos abatement.

Basis of Estimate

To develop our budget, we used the following documents and information:

1. Legend Technical Service report dated 8/3/2022.

Budget Pricing

Lump Sum Budget is $1,300,000.

Universal Waste removal includes:

- Fluorescent lamps, ballasts, mercury switches, electronics, exit signs, emergency lights, fire extinguishers, HID Lights, HID ballasts, LED lights, smoke detectors, oil from gear boxes and reservoirs, chemicals, PCB capacitors, door closers, batteries, appliances, and CFCs from A/C Units.

Asbestos removal includes:

- Removal of identified asbestos containing items identified in Legend's Regulated Hazardous Materials survey dated August 3rd, 2022.

Miscallaneous removals includes:

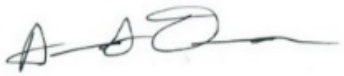
- Elevator Abandonment, Tanks, Oil/Water Seperator, MSW, and lead paint disposal.

Excludes the following

- PCB Oils and Basement Items (no access to investigate).

Veit & Company, Inc. | Andy Dammer, Project Manager | M: (218) 341.1843 | ADammer@VeitUSA.com | 1100 W. Gary St, Duluth, MN 55808

Respectfully,



Andy Dammer

Veit & Company, Inc. | Andy Dammer, Project Manager | M: (218) 341.1843 | ADammer@VeitUSA.com | 1100 W. Gary St, Duluth, MN 55808

4330 West 1st Street, Suite B
Duluth, MN 55807
218-628-3323

July 1, 2022

E-mail: todd.erickson@krausanderson.com
Phone:218.624.8626

RE: Duluth Lake Port Dock

Todd Erickson
Senior Project Manager
Kraus-Anderson Construction Company
3716 Oneota Street
Duluth, MN 55807

Hunt Electric is pleased to provide you with the following pricing for the demolition of the Duluth Lake Port Dock.
Proposal includes deenergizing power to the existing site at the main power source adjacent to the entrance.

BASE BID: $ 2,000.00

CLARIFICATIONS AND EXCLUSIONS:

- This proposal is based on work occurring during normal working hours 7:00 A.M. – 3:30 P.M.
- This proposal includes a standard 1-year warranty.

We acknowledge (0) addendums.

Please, contact me with any questions you may have at (218) 310-2543.

Sincerely,

HUNT ELECTRIC CORPORATION

Jeffrey D. Tyllia
Executive Vice President
Hunt Electric – North Division

JT/aa