INVITATION TO QUOTE

DULUTH SEAWAY PORT AUTHORITY MATERIAL SALE FROM ERIE PIER

ARTICLE I INVITATION FOR QUOTATIONS

The Duluth Seaway Port Authority ("Authority") will receive quotations for a contract to remove dredged sand ("Material") from Erie Pier.

All quotations must be based upon a review of this Document.

All quotations must contain information required by and must be submitted on the Quote Proposal Form (<u>Exhibit A</u>).

Quotations will be received through 10:00 a.m. CST, April 16, 2024, at which time they will be opened and read aloud in the board room of the Duluth Seaway Port Authority, 802 Garfield Avenue in Duluth, Minnesota.

For inspection of job site, call Dean Lembke at 218-740-5450.

ARTICLE II INSTRUCTIONS TO QUOTERS

Each Quoter, also referred to herein as "Contractor", by making a quotation represents that:

- 2.1. They have read and understand this Document, Quote Proposal Form (<u>Exhibit A</u>), Contract to Remove Dredged Sand from Erie Pier (<u>Exhibit B</u>), Earthwork Report (<u>Exhibit C</u>), Sieve Analysis (<u>Exhibits D</u>) and Stockpile Location (<u>Exhibit E</u>) (collectively "Quote Documents").
- 2.2. The guote is based upon the Quote Documents without exception.
- 2.3. Quoter will send all quotes or other communications only to Dean Lembke, Director of Building and Facilities, Duluth Seaway Port Authority, 802 Garfield Ave, Duluth, MN 55802.
- 2.4. The Contract to Purchase Material that provides that Contractor is responsible for loading and transporting the Material at Contractor's expense shall be executed by the successful Quoter prior to commencement of work.
- 2.5. No Commissioner, officer, director, or employee of the Authority can modify, amend or waive any quote conditions prior to the opening of quotes.

ARTICLE III CONDITIONS OF CONTRACT

- 3.1. **Conditions**. The following conditions shall be part of any contract awarded to the successful Quoter, and the submission of any quote constitutes an acknowledgement of an agreement to such terms:
 - 3.1.1. The Executive Director of the Duluth Seaway Port Authority will enter into the Contract to Purchase Material after the Port Authority approves the quotation and approves an award of the Contract.
 - 3.1.2. All work will be performed in a safe, workmanlike manner without damage to Authority property.
 - 3.1.3. The period during which the Contractor will have access to the site will be at the discretion of the Authority.
 - 3.1.4. The Contractor agrees to pre-pay for the material prior to commencement of work. The amount prepaid will be a Lump Sum value, plus 6.875% State of Minnesota, 1.5% City of Duluth and 0.50% St. Louis County sales tax. Sales tax may be waived if the Material will be re-sold or if the Contractor furnishes the Authority a valid sales tax exemption letter from the State of Minnesota.
 - 3.1.5. If the Contractor fails to remove the Material from the dredged material removal pile on Erie Pier by **October 11, 2024** ("Removal Deadline"), the Contractor will forfeit all rights to remove any more Material and Authority will retain the amount paid by the Contractor for the Material.
- 3.2. Contractor's and Subcontractor's Insurance. The Contractor shall not commence work under this contract until Contractor has obtained all of the insurance required under this Section and proof of such insurance has been approved by the Authority, nor shall the Contractor allow any subcontractor to commence work on Contractor's subcontract until the insurance required of the subcontractor has been so obtained and approved.
 - 3.2.1. **Workers Compensation Insurance**. The Contractor shall procure and shall maintain during the life of this contract Worker's Compensation Insurance as required by applicable state or territorial law for all of Contractor's employees to be engaged in work at the site under this contract and, in case of any such work sublet, the Contractor shall require the subcontractor similarly to provide such Worker's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workers Compensation Insurance. In case any class of employees engaged in hazardous work on the site is not protected under the Worker's Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protection of such of Contractor's employees as are not otherwise protected.

- 3.2.2. Contractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance. The Contractor shall procure and shall maintain during the life of this contract Contractor's Property Damage Insurance and Vehicle Liability Insurance and Contractor's Property Damage Insurance and Vehicle Liability Insurance and Contractor's Public Liability Insurance in the amounts specified in Section 3.2.7 below, or as otherwise specified by the Authority.
- 3.2.3. **Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance**. The Contractor shall either (1) require each of Contractor's subcontractors to procure and to maintain during the life of Contractor's subcontract, Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified in Section 3.2.7 below, specified in Section 3.2.2 hereof, or (2) insure the activities of Contractor's subcontractors in Contractor's policy, specified in Section 3.2.2 hereof.
- 3.2.4. **Scope of Insurance and Special Hazards**. The insurance required under Section 3.2.2 and Section 3.2.3 hereof provide adequate protection for the Contractor and Contractor's subcontractors, respectively against damage claims which may arise from operations under this contract, whether such operations be by the insured or by any one directly or indirectly employed by him and also against any of the special hazards which may be encountered in the performance of this contract as enumerated in Section 3.2.7 below.
- 3.2.5. **Indemnification**. The Contractor shall indemnify and save harmless the Authority from all claims and actions of any kind arising from, or incidental to the performance of the contract and expenses incidental to such claims and actions, including attorneys' fees, and shall assume without expense to the Authority, the defense of any such claims or actions. Except to the extent prohibited by law, this indemnity applies regardless of any strict liability or negligence attributable to the Authority (including sole negligence) and regardless of the extent to which the underlying occurrence (i.e., the event giving rise to a claim which would have been covered by the specified insurance) is attributable to the negligent or otherwise wrongful act or omission (including breach of contract) of Contractor, or its subcontractors, agents, employees or delegates. Contractor agrees that this indemnity shall be construed and applied in favor of indemnification. Contractor also agrees that if applicable law limits or precludes any aspect of this indemnity, then the indemnity will be considered limited only to the extent necessary to comply with that applicable law. The stated indemnity continues until all applicable statutes of limitation have run.

If a claim arises within the scope of the stated indemnity, the Authority may require Contractor to:

- 3.2.5.1. Furnish and pay for a surety bond, satisfactory to the Authority, guaranteeing performance of the indemnity obligation; or
- 3.2.5.2. Furnish a written acceptance of tender of defense and indemnity from Contractor's insurance company.

Contractor will take the action required by the Authority within fifteen (15) days of receiving notice from the Authority.

3.2.6. **Proof of Insurance**. The Contractor shall furnish the Authority with a certificate showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. Such certificates shall contain substantially the following statement: "The insurance covered by this certificate will not be canceled, materially altered, or not renewed, except after thirty (30) days written notice or ten (10 days) for non-payment of premium, has been received by the Authority." Authority is to be named an additional insured on such Certificate and not merely as a Certificate holder. Contractor must provide Authority with appropriate endorsements to its policy(ies) of insurance reflecting the status of Authority as an additional insured and requiring that the foregoing notice of cancellation, material alteration or nonrenewal be provided to Authority by the insurance company providing such insurance policy(ies) to Contractor. In addition, all policies shall contain a waiver of subrogation in favor of Authority. All policies shall apply on a "per project" basis. Contractor agrees to maintain all coverage required herein throughout the term of the Contract and for a minimum of two (2) years following Authority's written acceptance of the Contract.

3.2.7. Limits of Insurance.

Worker's Compensation:

As required by Minnesota law with an "all states" endorsement

Employer's Liability Per Occurrence \$2,000,000.00

Independent Contractor's protective

coverage liability:

Bodily Injury: Per Occurrence \$2,000,000.00

Property Damage Per Occurrence \$2,000,000.00

Products and completed operations coverage to be kept in place for the duration of any contract guarantee period:

Bodily Injury Per Occurrence \$2,000,000.00

Property Damage Per Occurrence \$2,000,000.00

Comprehensive General Liability,

Premises and Operations:

Bodily Injury Per Occurrence \$2,000,000.00

Comprehensive General Liability,

Property Damage and Bodily Injury: Per Occurrence \$2,000,000.00

Products – Completed Operations Per Occurrence \$2,000,000.00
Fire Legal Liability Each Occurrence \$100,000.00
Medical Expense: \$5,000.00

Contractual Liability covering customary Construction Contract and subcontract indemnity provisions:

Bodily Injury Per Occurrence \$2,000,000.00

Contractual Liability covering customary Construction Contract and subcontract indemnity provisions:

Property Damage Per Occurrence \$2,000,000.00

Comprehensive Automobile

Liability \$2,000,000.00

Combined single limit each accident

(shall include coverage for all owned, hired and

non-owed vehicles).

Property Damage Per Occurrence \$2,000,000.00

- 3.2.8. Public Liability Insurance. Public Liability Insurance written on an "occurrence" basis under Comprehensive General Liability Form with "Broad Form" property damage liability coverage, with the XCU exclusion removed, in limits specified in Section 3.2.7 above. Contractor shall require such liability coverage from all subcontractors unless they are insured under Contractor's policies. Certificates evidencing such coverage obtained by any subcontractor shall be provided to Authority.
- 3.2.9. Commercial General Liability. The Commercial General Liability Policy shall be on ISO form CG 00 01 12 07 or CG 00 01 04 13, or the equivalent. Such insurance shall cover liability arising from premises, operations, independent contractors, products completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract). There shall be no endorsement or modification of the Commercial General Liability form arising from pollution, explosion, collapse, underground property damage or work performed by subcontractors.

- 3.2.10. **Claim Form**. Contractor shall obtain and provide to Authority, with the Certificate of Insurance, a Claim Form for use by parties with claims against Contractor arising out of the performance of work by Contractor under the Contract with Authority.
- 3.2.11. **Policy(ies)**. All policies shall be primary and non-contributory.
- 3.2.12. **Deductible**. It shall be Contractor's responsibility to pay any retention or deductible for the coverage required herein.
- 3.2.13. Insurance Rating. Contractor shall maintain in effect all insurance coverages required under this section at Contractor's sole expense and with insurance companies licensed to do business in the state in Minnesota and having a current A.M. Best rating of no less than A-, unless specifically accepted by Authority in writing.
- 3.2.14. Liability and Indemnity. It is agreed that the employees and officers of the Authority shall not be personally liable or responsible in any manner to the Contractor, sub-contractors suppliers, laborers, or to any other person or persons for any claim, demand, damages, action or causes of action of any kind or character arising out of or by reason of this contract.

ARTICLE IV SPECIFICATIONS

The successful Quoter agrees to:

- 4.1. Disclose the use and final placement location of the Material to the Authority and take appropriate samples and perform any testing that is required by applicable law. The Material is purchased "as-is where-is" and Quoter shall supply test results to the Authority. The Authority will provide test results performed by the U.S. Army Corps of Engineers on the Material, see Exhibit D.
- 4.2. Obtain a Prohibited Invasive Species Permit from the Minnesota DNR for transport, and placement of the Material, due to the likelihood of the Material containing viable purple loosestrife seeds. The permit will include required procedures for assuring that purple loosestrife will not establish a new invasion.
- 4.3. If placement is intended in Wisconsin, Contractor must also follow and adhere to Wisconsin DNR requirements and procedures for placement.
- 4.4. The Quoter shall be responsible for security of the Material and all costs connected with loading and transport of the Material.

- 4.5. The Quoter shall be responsible for maintaining the gravel road into Erie Pier stockpile area from which the Material is to be removed.
- 4.6. The Authority will designate the areas from which the Material may be removed.
- 4.7. The Quoter will be required to restore the location of the stockpiled dredged sand to the Authority's satisfaction at the Quoter's sole cost before the Removal Deadline.
- 4.8. If dredging is being accomplished during the period of removal of the Material, the Quoter must comply with any additional requirements made by the U.S. Army Corps of Engineers and by the dredging contractor regarding access to the site and times of work.
- 4.9. **Payment of Contract Sum**. The Authority will be paid in full at execution of contract.
- 4.10. **Compliance with Applicable Law**. The Quoter shall conform to all rules and regulations of MSHA, OSHA and state and local authorities as they apply to contractors. Quoter covenants and agrees to also comply with all applicable laws and regulations in performing the contract, including but not limited to applicable equal opportunity of employment provisions.

ARTICLE V INDEPENDENT INVESTIGATION

The execution of the Contract to Purchase Material shall constitute Contractor's acknowledgment that Contractor has independently inspected and investigated the Material and has made and entered into the Contract based upon such inspection and investigation and its own examination of the condition of the Material. Upon execution of the Contract, Contractor shall assume the risk that adverse matters, including adverse physical and environmental conditions and the suitability or unsuitability of the Material for Contractor's intended uses, may not have been revealed by Contractor's investigations. Contractor, upon execution of the Contract, shall be deemed to have waived, relinquished and released DSPA and its employees, agents and attorneys (collectively, the "DSPA-Related Parties") from and against, and covenanted not to sue any of the foregoing with regard to, any and all claims, demands, causes of action (including causes of action in tort or under any environmental law), losses, damages, liabilities (whether based on strict liability or otherwise), losses, damages, liabilities, costs and expenses (including attorneys' fees and court costs) of any and every kind or character, known or unknown, which Contractor might have asserted or alleged against DSPA and/or DSPA-Related Parties at any time (including without limitation to the extent covered by or that would be covered by [as opposed to paid] by insurance) by reason of or arising out of any latent or patent defects or physical conditions, violations of any applicable laws (including, without limitation, any environmental laws), the suitability of the Material for any purposes contemplated by Contractor and any and all other acts, omissions, events, circumstances or matters regarding the Material.

ARTICLE V AS IS PROVISIONS

Contractor is accepting the Material "AS IS" and "WHERE IS", and with all faults, the Authority makes no representations or warranties, whether express or implied, by operation of law or otherwise, with respect to the quality, physical condition or value of the Material and the compliance of the Material with applicable laws or regulations. Contractor agrees that the Authority is not liable or bound by any guarantees, promises, statements, representations or information pertaining to the Material made or furnished by the Authority or any agent, officer, director, employee or other person representing or purporting to represent the Authority.

EXHIBIT A

CONTRACTOR'S QUOTE PROPOSAL FORM DULUTH SEAWAY PORT AUTHORITY MATERIAL SALE FROM ERIE PIER

In compliance with and subject to the Invitation to Quote, Conditions of Contract, the Specifications and this Quote Proposal Form (Exhibit A), the undersigned offers and agrees to purchase at the price set opposite the description. (Form must be filled out and signed.) Lump Sum quoted price is for Material "as-is" and "where-is". The Authority makes no warranty regarding quality or quantity of the Material. Material removal must be complete by October 11, 2024. **LUMP SUM LUMP SUM DESCRIPTION** Plus sales tax, if applicable Material (Dredged Sand): All dollar amounts are subject to Minnesota State, City of Duluth and St. Louis County Sales taxes, unless for re-sale or unless the Contractor furnishes a State of Minnesota Sales tax exemption letter applicable to the purchase. COMPANY: _____ Address:_____ Signature: By_____ Its _____

Dated: _____

EXHIBIT B CONTRACT TO PURCHASE MATERIAL

	THIS AGREEM	IENT, ma	de this	day of _		, 202	24 by and betwe	en the
Duluth	Seaway	Port	Authority, (the "Co	of ontractor")	Minnesota	(the	"Authority"),	and
1.	The Quote Pro as though full Is" within the	y set for	th herein. T				a part of this Co ial "As Is" and "	
			Awa	ard – Octo	ber 11, 2024	!.		
2.	the commission or responsible any other per causes of acti	oners, en e in any r son or p on of an	nployees and manner to th persons who y kind or cha	d officers o e Contract msoever fo aracter ari	of the Author cor, subcontror any claim sing out of c	rity shall nactors, su demand or by reas	notwithstanding ot be personally ppliers, laborers , damages, action on of the execu the Material pr	y liable s, or to ions or ition of
3.	its commission claim or action sustained, and property incur subcontractor	ners, offin, including from a tred by the supplication of the supp	cers and eming all expening and all liance Authority ers, agents the same sha	ployees from ses incident ability for in by reason or employ all be soleli	om and again ntal to such on njury to any of any act o ees, in conn y due to the	nst any ar claim or a persons a or omission ection wit	armless the Aut of all losses, dar ction, and/or pe and/or damage n of the Contrac th the performa ce of the Author	mages, enalties to any ctor, its ence of
4.	•	be remov	ved or transf	erred by t	he date liste	d above o	on of this contra r the ownership r.	
5.	regulations ar	nd codes s and ar	s. The Cont ny violation	ractor is p terminate	orohibited to s this Contr	enter Eri act and t	al, state and locate e Pier other the he Contractor	an the
6.	bound by and	agrees to	o all of the te	erms and p	• .	ntained in	s and agrees th the Invitation to	

[SIGNATURES APPEAR ON NEXT PAGE]

IN WITNESS WHEREOF, the parties here their duly authorized agents as of the date first a	to have caused this Contract to be executed by above written.
DU	ULUTH SEAWAY PORT AUTHORITY

By ______ Deborah DeLuca, Executive Director

By_______
Its______

EXHIBIT C

Dean Lembke

From: Jeff Stollenwerk

Sent: Monday, January 08, 2024 4:23 PM

To: Dean Lembke

 Cc:
 Kevin Beardsley; Deborah DeLuca

 Subject:
 FW: Erie Pier Granular Stockpile

Attachments: Earthwork Report.pdf

Sand stockpile from 2023 dredging = 24,000 CY. See message from Brossart.

From: Brossart, Steven J CIV USARMY CELRE (USA) <Steven.J.Brossart@usace.army.mil>

Sent: Monday, January 8, 2024 3:56 PM

To: Jeff Stollenwerk < jstollenwerk@duluthport.com>

Subject: Erie Pier Granular Stockpile

Jeff,

Attached is the earthwork report showing that there is about 24,000 CY in the stock pile at Erie Pier. This is from a combination of GPS and Lidar point clouds to get the best accurate surface of existing conditions out there. Our survey crew created a "base" surface from only the "Toe" shots around the stock pile since they didn't have a survey of the existing conditions before the stockpile was started. The volume is a comparison between the "base" surface and our survey of the actual stock pile.

Steve B

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EXHIBIT C

12/8/23, 7:28 AM Earthwork Report

Project File Data Coordinate System S:_SURVEY\Special Projects\Erie Name: Name:

Pier\2023\2023-12-07 Stock Pile\2023-12-07

Stock Pile.vce

Size: 99 KB

12/7/2023 2:07:08 PM (UTC:-6) Modified:

Time zone: Central Standard Time

Reference number: Description: Comment 1:

Comment 2: Comment 3:

Zone:

Datum: Global reference datum: Global reference epoch:

Scale Only

Geoid:

Vertical datum: Calibrated site:

Earthwork Volume Report

Unclassified surface compared to Unclassified surface

Surfaces	
Base	Classification: Unclassified
2023-12-07 Stock Pile	Classification: Unclassified

Bank Volumes Based on Surface Geometry Alone	
Cut material Fill material	1.1 yd³ 24,064.0 yd³
Deficit	24,062.9 yd³

Bank Areas Based on Surface Geometry Alone	
Cut area	169.0 ft²
Fill area	43,133.6 ft ²
Zero volume area	0.0 ft ²
Total	43,302.6 ft ²

Depth summary	
Maximum depth of cut material	7.119 ft
Maximum depth of fill material	39.316 ft

Note: 'Cut Material' is defined as material where [2023-12-07 Stock Pile] is lower than [Base]. 'Fill Material' is defined as the volume of material where [2023-12-07 Stock Pile] is higher than [Base].

EXHIBIT C

12/8/23, 7:28 AM Earthwork Report

Note: The above volumes are calculated solely from the geometries of the selected surfaces. No material properties are applied to the above numbers.

Date: 12/7/2023 2:39:28 PM	Project: S:_SURVEY\Special Projects\Erie Pier\2023\2023-12-07	Trimble Business Center
	Stock Pile\2023-12-07 Stock Pile.vce	

Dean Lembke

From: Brossart, Steven J CIV USARMY CELRE (USA) <Steven.J.Brossart@usace.army.mil>

Sent: Friday, February 09, 2024 8:06 AM

To: Jeff Stollenwerk

Cc: Dean Lembke; Jeff Udd

Subject: RE: Erie Pier Granular Stockpile

Attachments: 35 20 23-7.2 Sieve Analysis Results.pdf

Jeff,

Attached are the gradation retest results you requested. The material that failed gradation was removed and rewashed/tested to ensure compliance.

Steve B

From: Jeff Stollenwerk < jstollenwerk@duluthport.com>

Sent: Thursday, February 8, 2024 10:10 AM

To: Brossart, Steven J CIV USARMY CELRE (USA) <Steven.J.Brossart@usace.army.mil> Cc: Dean Lembke <dlembke@duluthport.com>; Jeff Udd <judd@duluthport.com>

Subject: [Non-DoD Source] RE: Erie Pier Granular Stockpile

Hi Steve,

Could you please forward the gradation reports for the granular stockpile at Erie Pier from the 2023 O&M project? My apologies if you sent them to me - I can't seem to find them. Dean is working on the sale of this material.

Thanks, Jeff

From: Brossart, Steven J CIV USARMY CELRE (USA) < Steven-J.Brossart@usace.army.mil

Sent: Monday, January 8, 2024 3:56 PM

To: Jeff Stollenwerk < jstollenwerk@duluthport.com>

Subject: Erie Pier Granular Stockpile

Jeff,

Attached is the earthwork report showing that there is about 24,000 CY in the stock pile at Erie Pier. This is from a combination of GPS and Lidar point clouds to get the best accurate surface of existing conditions out there. Our survey crew created a "base" surface from only the "Toe" shots around the stock pile since they didn't have a survey of the existing conditions before the stockpile was started. The volume is a comparison between the "base" surface and our survey of the actual stock pile.

Steve B

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American Engineering Testing, Inc. Duluth 4431 W Michigan St Duluth, MN 55807 (218) 628-1518 www.teamAET.com

Material Test Report

Report No: MAT:AET-134175-S1

Client: J.F. Brennan Company, Inc.

CC: Rick Neva Sam Marshall

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Project: FY23 Duluth-Superior Harbor Dredging

Oneota Street (Erie Pier)

Duluth MN P-0026600

Date of Issue: Reviewed By:

10/6/2023 Taryn Erickson Staff Engineer

Issue No: 1

Sample Details

Job No:

Sample ID Field Sample ID AET-134175-S1

23-1 9/29/2023 **Date Sampled** Onsite, Stockpile Source Sand with Silt (SP-SM) Material Specification Erie Pier Dredged Material

Sampling Method Field

General Location Dredging stockpile

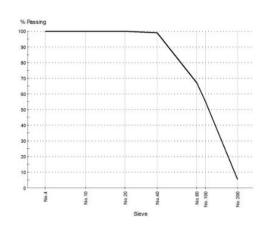
Dredging stockpile South corner of pier 9/29/2023 Location

Date Submitted

Other Test Results

Description Method Result Limits

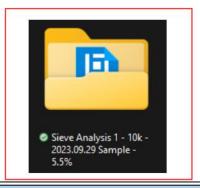
Particle Size Distribution



ASTM C 136, ASTM C 117 Method:

Drying By: Oven Date Tested: 10/2/2023 Tested By: Doug Klun

Sieve Size	% Passing	Limits
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	100	
No.40 (425µm)	99	
No.80 (180µm)	67	
No.100 (150µm)	55	
No.200 (75µm)	5.5	≤7.0



Comments



American Engineering Testing, Inc. Duluth 4431 W Michigan St Duluth, MN 55807 (218) 628-1518 www.teamAET.com

Material Test Report

Report No: MAT:AET-136424-S1 Issue No: 1

Client: J.F. Brennan Company, Inc.

Rick Neva CC: Sam Marshall

Project: FY23 Duluth-Superior Harbor Dredging

Oneota Street (Erie Pier) Duluth MN

Job No: P-0026600 This document shall not be reproduced, except in full, without written approval from American Engineering Testing, Inc.

Date of Issue: Reviewed By:

10/13/2023 Taryn Erickson Staff Engineer

Result Limits

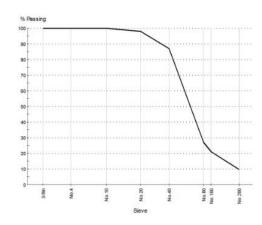
Other Test Results Sample Details Description

AET-136424-S1 Sample ID Field Sample ID 23-3 Date Sampled 10/11/2023 Erie Pier Source

Sand with Silt (SP-SM) Material Specification Erie Pier Dredged Material

Sampling Method Field Location Erie Pier **Date Submitted** 10/11/2023

Particle Size Distribution

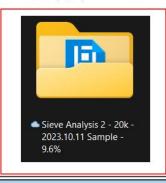


ASTM C 136, ASTM C 117 Method:

Drying By: Oven Date Tested: 10/12/2023 Tested By: Doug Klun

Method

Sieve Size	% Passing	Limits
3/8in (9.5mm)	100	
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	98	
No.40 (425µm)	87	
No.80 (180µm)	27	
No.100 (150µm)	21	
No.200 (75µm)	9.6*	≤7.0



Comments

* = Result does not meet the specification
The material does not meet the FY23 Duluth Superior Harbor Maintenance Dredging, Division 35, Section 35 20 23, 3.3.6.7.5, gradation requirement.



American Engineering Testing, Inc. Duluth 4431 W Michigan St Duluth, MN 55807 (218) 628-1518 www.teamAET.com

Material Test Report

Issue No: 1

Report No: MAT:AET-137494-S1

Client: J.F. Brennan Company, Inc.

CC: Rick Neva Sam Marshall

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reproduced, except in full, without written approval from American Engineering Testing, Inc.

Date of Issue: Reviewed By:

10/24/2023 Taryn Erickson Staff Engineer

Job No: P-0026600 **Sample Details**

Duluth MN

AET-137494-S1

Project: FY23 Duluth-Superior Harbor Dredging Oneota Street (Erie Pier)

Sample ID Field Sample ID 23-4 **Date Sampled** 10/19/2023 Source Erie Pier Material Silty Sand

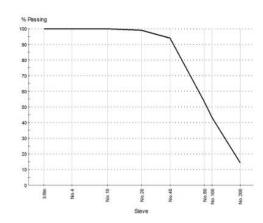
Specification Erie Pier Dredged Material

Sampling Method Field Location Erie Pier **Date Submitted** 10/19/2023

Other Test Results

Description	Method	Result	Limits
Granular Ratio	MnDOT 1202, MnDOT 1203		

Particle Size Distribution



Method: MnDOT 1202, MnDOT 1203 Drying By:

Oven Date Tested: 10/19/2023 Tested By: Doug Klun

Sieve Size	% Passing	Limits
3/8in (9.5mm)	100	
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	99	
No.40 (425µm)	94	
No.80 (180µm)	53	
No.100 (150µm)	43	
No.200 (75µm)	14.2*	≤7.0



Comments

* = Result does not meet the specification



American Engineering Testing, Inc. Duluth 4431 W Michigan St Duluth, MN 55807 (218) 628-1518 www.teamAET.com

Material Test Report

Client: J.F. Brennan Company, Inc.

CC: Rick Neva

Sam Marshall

Project: FY23 Duluth-Superior Harbor Dredging

Oneota Street (Erie Pier)

Duluth MN Job No: P-0026600

Report No: MAT:AET-139210-S1

Issue No: 1

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Date of Issue: Reviewed By:

11/5/2023 Taryn Erickson Staff Engineer

Sample Details

Sample ID Field Sample ID AET-139210-S1

23-5 **Date Sampled** 10/31/2023 Source Erie Pier Material Sand (SP)

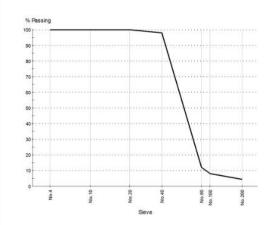
Specification Erie Pier Dredged Material

Sampling Method Field Location Dredge Pile **Date Submitted** 10/31/2023

Other Test Results

Description Method Result Limits

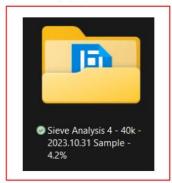
Particle Size Distribution



Method: ASTM C 136, ASTM C 117

Drying By: Oven Date Tested: 10/31/2023 Tested By: Doug Klun

Sieve Size	% Passing	Limits
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	100	
No.40 (425µm)	98	
No.80 (180µm)	12	
No.100 (150µm)	8	
No.200 (75µm)	4.2	≤7.0



Comments



American Engineering Testing, Inc. Duluth 4431 W Michigan St Duluth, MN 55807 (218) 628-1518 www.teamAET.com

Material Test Report

Client: J.F. Brennan Company, Inc.

CC: Rick Neva

Sam Marshall

Project: FY23 Duluth-Superior Harbor Dredging

Oneota Street (Erie Pier)

Duluth MN Job No: P-0026600

Report No: MAT:AET-139676-S1

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Date of Issue: Reviewed By:

11/5/2023 Taryn Erickson Staff Engineer

Issue No: 1

Other Test Results

Description

Method Result Limits

Sample Details

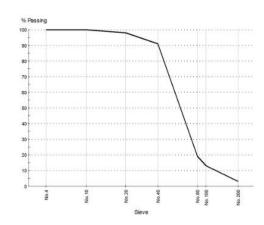
Sample ID Field Sample ID AET-139676-S1 23-6 **Date Sampled** 11/2/2023

Source Erie Pier Material Sand (SP) Specification

Erie Pier Dredged Material

Sampling Method Field Location Erie Pier **Date Submitted** 11/2/2023

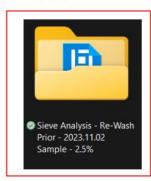
Particle Size Distribution



Method: ASTM C 136, ASTM C 117

Drying By: Oven Date Tested: 11/2/2023 Tested By: Doug Klun

Sieve Size	% Passing	Limits
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	98	
No.40 (425µm)	91	
No.80 (180µm)	19	
No.100 (150µm)	13	
No.200 (75um)	2.9	<7.0



Comments



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Date of Issue:

Reviewed By:

Material Test Report

Client: J.F. Brennan Company, Inc.

CC: Rick Neva Sam Marshall

Project: FY23 Duluth-Superior Harbor Dredging

Oneota Street (Erie Pier)

Duluth MN Job No: P-0026600

Other Test Results

Description

Method

Taryn Erickson Staff Engineer

11/17/2023

Issue No: 1

Report No: MAT:AET-140515-S1

Result Limits

Sample Details

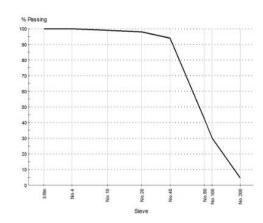
Sample ID Field Sample ID AET-140515-S1 23-7

Date Sampled 11/8/2023 Source Erie Pier Material Sand (SP)

Specification Erie Pier Dredged Material

Sampling Method Field Location Erie Pier **Date Submitted** 11/8/2023

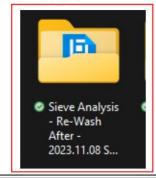
Particle Size Distribution



Method: ASTM C 136, ASTM C 117

Drying By: Oven Date Tested: 11/8/2023 Tested By: Doug Klun

Sieve Size	% Passing	Limits
3/8in (9.5mm)	100	
No.4 (4.75mm)	100	
No.10 (2.0mm)	99	
No.20 (850µm)	98	
No.40 (425µm)	94	
No.80 (180µm)	42	
No.100 (150µm)	30	
No.200 (75µm)	4.7	≤7.0



Comments



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Material Test Report

Client: J.F. Brennan Company, Inc.

CC: Rick Neva Sam Marshall

Project: FY23 Duluth-Superior Harbor Dredging

Oneota Street (Erie Pier)

Duluth MN

Job No: P-0026600

Report No: MAT:AET-141286-S1

Issue No: 1

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Date of Issue: Reviewed By: 11/17/2023

Other Test Results Description

Taryn Erickson Staff Engineer

Result Limits

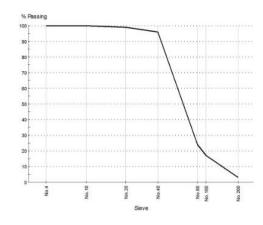
Sample Details

Sample ID Field Sample ID AET-141286-S1 23-8 **Date Sampled** 11/14/2023 Source Erie Pier

Material Sand (SP) Specification Erie Pier Dredged Material

Sampling Method Field Location Erie Pier **Date Submitted** 11/14/2023

Particle Size Distribution

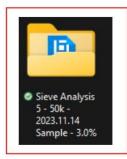


Method: ASTM C 136, ASTM C 117

Drying By: Oven Date Tested: 11/14/2023 Tested By: Doug Klun

Method

Sieve Size	% Passing	Limits
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	99	
No.40 (425µm)	96	
No.80 (180µm)	24	
No.100 (150µm)) 17	
No.200 (75um)	3.0	<7.0



Comments



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Material Test Report

Rick Neva This document shall not be

Issue No: 1

Client: J.F. Brennan Company, Inc.

CC: Rick Neva Sam Marshall

Project: FY23 Duluth-Superior Harbor Dredging

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yw 16

Oneota Street (Erie Pier)

Date of Issue: Reviewed By: 11/17/2023 Taryn Erickson Staff Engineer

Duluth MN

Other Test Results

Sample Details

AET-141548-S1 Description

Method Result Limits

Report No: MAT:AET-141548-S1

 Sample ID
 AET-141548

 Field Sample ID
 23-9

 Date Sampled
 11/16/2023

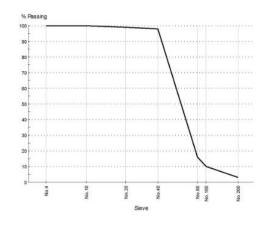
 Source
 Erie Pier

 Material
 Sand (SP)

Specification Sand (SP)
Specification Erice Pier Dredged Material

Sampling Method Field Location Erie Pier Date Submitted 11/16/2023

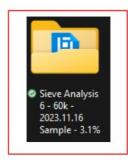
Particle Size Distribution



Method: ASTM C 136, ASTM C 117

Drying By: Oven
Date Tested: 11/16/2023
Tested By: Doug Klun

Sieve Size	% Passing	Limits
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	99	
No.40 (425µm)	98	
No.80 (180µm)	16	
No.100 (150µm)	10	
No.200 (75um)	3.1	<7.0



Comments



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Date of Issue:

Reviewed By:

Material Test Report

Client: J.F. Brennan Company, Inc. CC: Rick Neva

Sam Marshall

Project: FY23 Duluth-Superior Harbor Dredging

Oneota Street (Erie Pier)

Job No: P-0026600

Sample Details

Duluth MN

Other Test Results

Description

Issue No: 1

11/27/2023

Taryn Erickson Staff Engineer

Method Result Limits

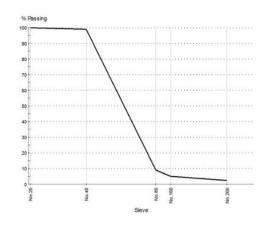
Report No: MAT:AET-142059-S1

Sample ID Field Sample ID AET-142059-S1 23-10 **Date Sampled** 11/21/2023 Source Erie Pier Material Sand (SP)

Specification Erie Pier Dredged Material

Sampling Method Auger/shovel Erie Pier General Location Location North **Date Submitted** 11/21/2023

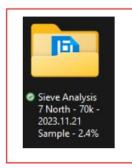
Particle Size Distribution



Method: ASTM C 136, ASTM C 117

Drying By: Oven Date Tested: 11/21/2023 Tested By: Doug Klun

Sieve Size	% Passing	Limits
No.20 (850µm)	100	
No.40 (425µm)	99	
No.80 (180µm)	9	
No.100 (150µm)	5	
No.200 (75µm)	2.4	≤7.0



Comments



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Material Test Report

Client: J.F. Brennan Company, Inc.

CC: Rick Neva Sam Marshall

Project: FY23 Duluth-Superior Harbor Dredging

Oneota Street (Erie Pier)

Duluth MN Job No: P-0026600 **Sample Details**

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Date of Issue: 11/27/2023 Reviewed By: Taryn Erickson Staff Engineer

Report No: MAT:AET-142059-S2

Issue No: 1

Other Test Results

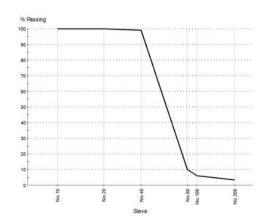
Description Method Result Limits

Sample ID Field Sample ID AET-142059-S2 23-11 **Date Sampled** 11/21/2023 Source Erie Pier Material Sand (SP)

Specification Erie Pier Dredged Material

Sampling Method Auger/shovel General Location Erie Pier Location **Fast Date Submitted** 11/21/2023

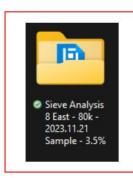
Particle Size Distribution



Method: ASTM C 136, ASTM C 117

Drying By: Oven Date Tested: 11/21/2023 Tested By: Doug Klun

Sieve Size	% Passing	Limits
No.10 (2.0mm)	100	
No.20 (850µm)	100	
No.40 (425µm)	99	
No.80 (180µm)	10	
No.100 (150µm)	6	
No.200 (75µm)	3.5	≤7.0



Comments



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Material Test Report

Issue No: 1

Client: J.F. Brennan Company, Inc.

CC: Rick Neva Sam Marshall

Report No: MAT:AET-142911-S1

Project: FY23 Duluth-Superior Harbor Dredging

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W10

Oneota Street (Erie Pier)

Date of Issue: Reviewed By: 12/12/2023 Taryn Erickson Staff Engineer

Duluth MN Job No: P-0026600

Other Test Results
Description

Result Limits

Sample Details

 Sample ID
 AET-142911-S1

 Field Sample ID
 23-13

 Date Sampled
 11/30/2023

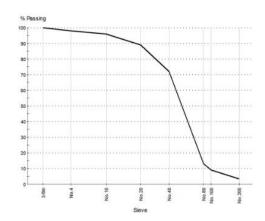
 Source
 Erie Pier

 Material
 Sand (SP)

Specification Erie Pier Dredged Material

Sampling Method Field Erie Pier on-site 11/30/2023

Particle Size Distribution



Method: ASTM C 136
Drying By: Oven
Date Tested: 11/30/2023
Tested By: Doug Klun

Method

% Passing Sieve Size Limits 3/8in (9.5mm) 100 No.4 (4.75mm) 98 No.10 (2.0mm) 96 No.20 (850µm) 89 No.40 (425µm) 72 No.80 (180µm) 13 No.100 (150µm) No.200 (75µm) 3.3 ≤7.0

Comments

EXHIBIT E

