

COMMITTEE ON CITY PROPERTY - June 19, 2018

MEETING AT 7:00 PM, 133 William Street, New Bedford, MA, City Council Chambers, Rm 214
AGENDA

1. WRITTEN MOTION, Councillor Carney, requesting, that Mary Rapoza, Director of Parks, Recreation and Beaches and the Board of Park Commissioners, develop a fee schedule that charges non-residents, out of town organizations, groups, etc., for the use of all City parks. (To be Referred to the Committee on City Property, and that Director Rapoza and Members of the Park Board be invited to said meeting.) (Ref'd 8/18/16) (2/26/18-tabled; ask Mary Rapoza to provide a breakdown of revenue generated on fees charged by the Park) (5/14/18-tabled; ask Mary Rapoza to provide a breakdown of revenue generated on fees charged by the Park) (5/23/18-letter sent to Mary Rapoza requesting information)

1a. COMMUNICATION, Mary Rapoza, to City Property Committee, submitting an Information Sheet relative to Park Use Fees. (Ref'd 2/12/18) (5/14/18-tabled; ask Mary Rapoza to provide a breakdown of revenue generated on fees charged by the Park) (5/23/18-letter sent to Mary Rapoza requesting information)

INVITEES: Mary Rapoza, Director, Parks, Recreation and Beaches

2. COMMUNICATION, Mayor Mitchell, to City Council, submitting a RFP and Proposal for the Sale of Real Property at 14 Hervey Tichon Avenue, Assessor's Map 66, Lots 135, 137, 145, 147 and 148. (Ref'd 4/12/18)

2a. AN ORDER, that pursuant to M.G.L. Chapter 40, Section 15A, the real property located in New Bedford, MA and being shown on New Bedford Assessor's Map 66, Lots 135, 137, 145, 147 and 148 be declared surplus property, no longer needed for the municipal property for which the property was acquired or for any other municipal purpose, and further be hereby placed under the custody and control of the Committee on City Property for the purpose of sale. (Ref'd 4/12/18)

2b. AN ORDER, that pursuant to M.G.L. Chapter 40, Section 3, the real property located in New Bedford, MA and being shown on New Bedford Assessor's Map 66, Lots 135, 137, 145, 147 and 148 be sold to Nordic Fisheries, Inc. in accordance with Massachusetts General Laws Chapter 30B and New Bedford Code of Ordinances Section 2-65, et. seq. and the terms of a purchase and sale agreement and deed to be drafted by the City Solicitor and executed by the Mayor. (Ref'd 4/12/18)

INVITEES: Edward Anthes-Washburn, Executive Director, Harbor Development Commission; Blair S. Bailey, Tax Title Attorney, City Solicitor's Office; Susan Bruce, Director, Purchasing; Roy Enoksen, President, Nordic Fisheries, Inc.; David Gerwatowski, Legal Counsel Attorney; Mikaela McDermott, City Solicitor; Ari J. Sky, Chief Financial Officer; Representative, Mayor's Office

3. COMMUNICATION, Mayor Mitchell, to City Council, submitting a RFP and Proposal

for the Sale of Real Property at 22 Antonio L. Costa Boulevard, Assessor's Map 66, Lots 128 and 136. (Ref'd 4/12/18)

3a. AN ORDER, that pursuant to M.G.L. Chapter 40, Section 15A, the real property located in New Bedford, MA and being shown on New Bedford Assessor's Map 66, Lots 128 and 136 be declared surplus property, no longer needed for the municipal property for which the property was acquired or for any other municipal purpose, and further be hereby placed under the custody and control of the Committee on City Property for the purpose of sale. (Ref'd 4/12/18)

3b. AN ORDER, that pursuant to M.G.L. Chapter 40, Section 3, the real property located in New Bedford, MA and being shown on New Bedford Assessor's Map 66, Lots 128 and 136 be sold to Nordic Fisheries, Inc. in accordance with Massachusetts General Laws Chapter 30B and New Bedford Code of Ordinances Section 2-65, et. seq. and the terms of a purchase and sale agreement and deed to be drafted by the City Solicitor and executed by the Mayor. (Ref'd 4/12/18)

INVITEES: Edward Anthes-Washburn, Executive Director, Harbor Development Commission; Blair S. Bailey, Tax Title Attorney, City Solicitor's Office; Susan Bruce, Director, Purchasing; Roy Enoksen, President, Nordic Fisheries, Inc.; David Gerwatowski, Legal Counsel Attorney; Mikaela McDermott, City Solicitor; Ari J. Sky, Chief Financial Officer; Representative, Mayor's Office

Chair Suggests 'No Further Action' and 'Report Out to the Full City Council'

4. City of New Bedford's Request for Proposals for the Purchase of Real Property, (Ref'd 2/8/18) (3/26/18-tabled) (5/14/18-rft and rpf)

5. PROPOSAL – John E. Williams, Manager, Clark's Cove Development Co., LLC, submitting a proposal for parcels of land the ES Bolton Street and WS Orchard Street – Map 19, Lot 1 and Map 23, Lots 295, 158 and 294. (Ref'd 2/8/18) (3/26/18-tabled) (5/14/18-rft and rpf)

6. COMMUNICATION/EMAIL, Council President Morad, submitting copy of a letter received from John E. Williams, from the law firm of Sullivan, Williams and Quintin, relative to Clarks' Cove Development, owners of the Goodyear site, in response to the City of New Bedford's Request for Proposal (RFP) for a proposed New Public Safety Building. (Ref'd 3/8/18) (5/14/18- rpf)

In accordance with the Americans with Disabilities Act (ADA), if any accommodations are needed, please contact the Clerk of Committees Office at 508-979-1482. Requests should be made as soon as possible but at least 48 hours prior to the scheduled meeting.



Item Title:

WRITTEN MOTION re City Parks / Park Use Fees

Item Detail:

1. WRITTEN MOTION, Councillor Carney, requesting, that Mary Rapoza, Director of Parks, Recreation and Beaches and the Board of Park Commissioners, develop a fee schedule that charges non-residents, out of town organizations, groups, etc., for the use of all City parks. (To be Referred to the Committee on City Property, and that Director Rapoza and Members of the Park Board be invited to said meeting.) (Ref'd 8/18/16) (2/26/18-tabled; ask Mary Rapoza to provide a breakdown of revenue generated on fees charged by the Park) (5/14/18-tabled; ask Mary Rapoza to provide a breakdown of revenue generated on fees charged by the Park) (5/23/18-letter sent to Mary Rapoza requesting information)

1a. COMMUNICATION, Mary Rapoza, to City Property Committee, submitting an Information Sheet relative to Park Use Fees. (Ref'd 2/12/18) (5/14/18-tabled; ask Mary Rapoza to provide a breakdown of revenue generated on fees charged by the Park) (5/23/18-letter sent to Mary Rapoza requesting information)

Additional Information:

ATTACHMENTS:

Description	Type
1a. COMM re Park Use Fees	Cover Memo



CITY OF NEW BEDFORD

JONATHAN F. MITCHELL, MAYOR



Park Use Fees Information Sheet

Park Use Fees

Effective Jan. 1, 2017

Park per area*	Resident (personal)	Non-Resident (personal)	Not for Profit	For Profit
Fort Taber Park 4 park areas avail.	\$60/hr	\$90/hr	\$90/hr	\$120/hr
Brooklawn Park 1 park area avail.	\$50/hr	\$80/hr	\$80/hr	\$120/hr
Buttonwood Park 4 park areas avail.	\$50/hr	\$80/hr	\$80/hr	\$120/hr
All other Per park area	\$50/hr	\$80/hr	\$80/hr	\$120/hr

There is a two hour minimum for park use permitting. Rate does not include additional set-up and breakdown time and costs. You must pay for all time that you will be using the area. Please contact the Parks, Recreation, & Beaches office with any questions, requests, or special adjustments on a case by case basis.

Phase in Fees

- Resident & NOT for Profit Events
 - Events in 2017 20% of total fee
 - Events in 2018 20% of total fee
 - Events in 2019 TBD by Park Board
- Non Resident & For Profit Events
 - Events in 2017 100%

Event Types

- Resident & Non Resident Events w/Special Permits
 - Personal Use
 - Weddings
 - Family Reunions
- Not for Profit vs For Profit Event
 - Event charging for admission?
 - Where is the money going?
 - 501 c3 organization
- Park Fee would stop any other competing event in the same park on the same day
- **Free, public events that partner with the Dept. of Parks Recreation & Beaches will not be charged for park use.**



Item Title:

COMMUNICATION re 14 Hervey Tichon RFP and Proposal

Item Detail:

2. COMMUNICATION, Mayor Mitchell, to City Council, submitting a RFP and Proposal for the Sale of Real Property at 14 Hervey Tichon Avenue, Assessor's Map 66, Lots 135, 137, 145, 147 and 148. (Ref'd 4/12/18)

2a. AN ORDER, that pursuant to M.G.L. Chapter 40, Section 15A, the real property located in New Bedford, MA and being shown on New Bedford Assessor's Map 66, Lots 135, 137, 145, 147 and 148 be declared surplus property, no longer needed for the municipal property for which the property was acquired or for any other municipal purpose, and further be hereby placed under the custody and control of the Committee on City Property for the purpose of sale. (Ref'd 4/12/18)

2b. AN ORDER, that pursuant to M.G.L. Chapter 40, Section 3, the real property located in New Bedford, MA and being shown on New Bedford Assessor's Map 66, Lots 135, 137, 145, 147 and 148 be sold to Nordic Fisheries, Inc. in accordance with Massachusetts General Laws Chapter 30B and New Bedford Code of Ordinances Section 2-65, et. seq. and the terms of a purchase and sale agreement and deed to be drafted by the City Solicitor and executed by the Mayor. (Ref'd 4/12/18)

Additional Information:

ATTACHMENTS:

Description	Type
2. COMM re RFP for 14 Hervey Tichon Ave	Cover Memo
2a. ORDER re Sale of 14 Hervey Tichon Ave	Cover Memo
2b. ORDER re Sale of 14 Hervey Tichon Ave	Cover Memo



CITY OF NEW BEDFORD
JONATHAN F. MITCHELL, MAYOR

CITY CLERK
2018 APR -5 P 3:39
CITY CLERK'S OFFICE
NEW BEDFORD, MA

April 5, 2018

Linda Morad, President
and Members of the New Bedford City Council
New Bedford City Hall
133 William Street
New Bedford, MA 02740

Re: RFP and Proposal: Sale of Real Property at 14 Hervey Tichon Ave; Assessor's Map 66, Lots 135, 137, 145, 147 and 148 ✓

Re: RFP and Proposal: Sale of Real Property at 22 Antonio L. Costa Blvd; Assessor's Map 66, Lots 128 and 136

Dear President Morad and Members of the City Council,

Last year the New Bedford Port Authority undertook the first-ever comprehensive assessment of the physical condition of all piers under Port Authority management in New Bedford Harbor. That assessment found serious structural deficiencies at 14 Hervey Tichon Avenue and 22 Antonio Costa Boulevard which would require several million dollars to correct.

As a consequence, the Port Authority, in consultation with the City, concluded it would be prudent to determine if there were private-sector interest in acquisition of the properties in their current condition. A disposition of the properties to private parties would ensure that the new owners would bear the cost of making repairs, and create an opportunity for significant new private investment in an important area of the working waterfront.

The Port Authority also commissioned independent appraisals of both properties. The appraisals were used to establish minimum bid amounts in subsequent Request for Proposals issued for the possible sale of the properties. The appraiser took into account that both properties are presently encumbered by 99-year leases; but the appraiser did not devalue the properties on the basis of their current state of disrepair (properties were appraised based on their "as is" condition).

Two responsive proposals were received from Nordic Fisheries, Inc.: one for 14 Hervey Tichon Ave. being in the amount of \$1,000,100.00 and the other for 22 Antonio L. Costa Blvd. for \$1,100,100.00. Both amounts are consistent with the respective values calculated by the independent appraiser and included as a requirement of the RFP. Nordic is the lessee on both properties.

Given the quality of the two proposals, the New Bedford Port Authority voted pursuant to M.G.L. Ch. 40, § 15A on April 3, 2018 to notify the City Council that the properties were no longer required by the Port Authority and were available for disposition by the Committee on City Property in accordance with Chapter 30B.

Accordingly, I ask that the Council: (i) by simple majority, vote to ratify issuance of the RFP's, and (2) by 2/3 majority, vote to declare the two properties surplus and no longer needed for the municipal purposes for which the property was acquired or for any other municipal purpose, and that the properties be placed under the custody and control of the Committee on City Property for the purpose of sale. I have enclosed a proposed vote for the April 12, 2018 meeting setting forth the foregoing as well as an undated proposed vote for sale of the properties by the Committee on City Property.

Finally, it is important to note that the sale of the two properties will have a modest negative impact on Port Authority operating budget due to the loss of approximately \$40,000 in annual rental income presently being collected by the Port Authority from the two properties. That income loss notwithstanding, the Port Authority believes that the long-term benefits justify the decision to relinquish ownership and forego this revenue: First, the responsibility for multi-million dollar repair projects (and for any future repairs) are placed on the new owners. Second, holding title to the properties will give the new owners an incentive to modernize and upgrade this key area of the waterfront.

In addition, the availability of sale proceeds would make possible the retirement of a legacy liability of approximately \$850,000 owed the City by the Port Authority. The Port Authority presently makes an annual payment of \$50,000 toward this debt, so the present rate of retirement is nominal given the outstanding balance. The presence of this legacy debt on the balance sheets of the City and Port Authority hampers both City and Port Authority finances, and its final resolution would strengthen the financial position of both.

Toward that end, the Commissioners of the Port Authority recently voted to express their support for this approach, and I concur in their view. (By law, the proceeds from the sale will be deposited in the City's General Fund, and any appropriation from the General Fund for the purpose of retiring the Port Authority debt will require a future vote of the City Council. No City Council action on this matter is being sought at this time.)

I am enclosing the Requests for Proposals and the proposals received from Nordic Fisheries, Inc. for each property, along with proposed votes of the Council, and the vote taken by the Port Authority. In the interest of transparency and safety, it was decided to previously make public the condition surveys and the independent appraisals. These are also included herein for the benefit of the Council.

Thank you for your consideration in this matter.

Sincerely,

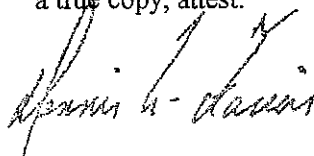

Jon Mitchell
Mayor

Enc: RFP and response for sale of 14 Hervey Tichon Ave. (includes condition survey)
RFP and response for sale of 22 Antonio L. Costa Blvd. (includes condition survey)
Proposed votes for City Council and Committee on City Property
NBPA vote notifying City Council that parcels are no longer needed
Appraisal for 14 Hervey Tichon Ave.
Appraisal for 22 Antonio L. Costa Blvd.

IN CITY COUNCIL, April 12, 2018
Dennis W. Farias, City Clerk

Referred to the Committee on City Property.

a true copy, attest:


Dennis W. Farias
City Clerk



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue
#HDC-FY18-001**

ADDENDUM #5

The City of New Bedford issues the following Addendum #5 for

**Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue**

RFP # HDC-FY18-001

March 2, 2018

To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

Attached is the breakdown for ~~14 Hervey Tichon Avenue~~

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford

Here is the final breakdown for all three:

22 Antonio Costa:

Map 66 Lot 128 (inclusive of Lot 136 as merged by the Assessors)

14 Hervey Tichon:

Map 66 Lot 137 (inclusive of Lot 135 as merged by the Assessors)

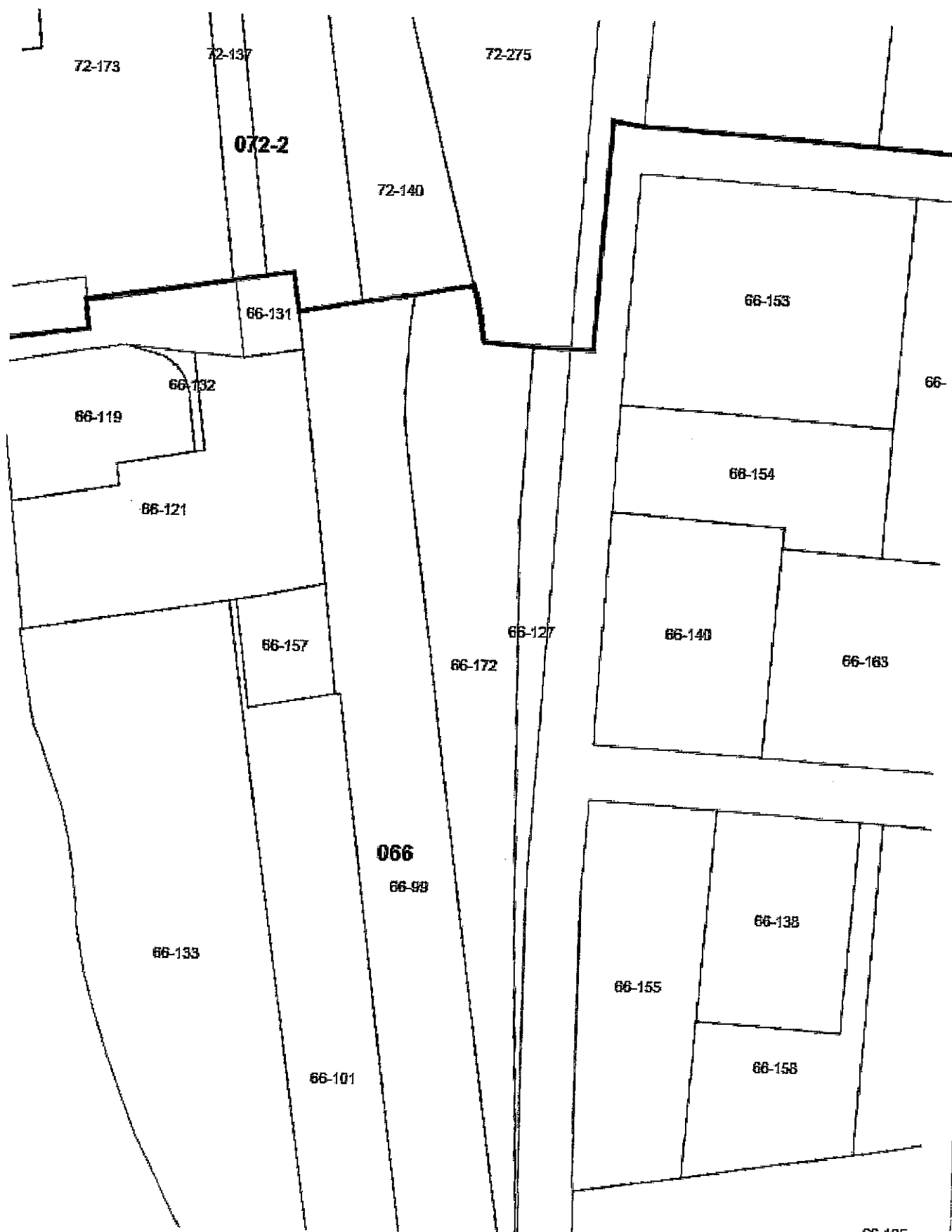
Map 66 Lot 147 (inclusive of Lots 145 and 148 as merged by the Assessors)

15 Antonio Costa:

Map 66 Lot 125 (inclusive of Lot 142 as merged by the Assessors)

Map 66 Lot 163

Here is a map showing the boundaries without the merged lot numbers.



72-173

72-137

72-275

072-2

72-140

66-131

66-132

66-119

66-121

66-157

66-127

66-172

66-140

66-163

66-153

66-154

66-

066

66-99

66-133

66-101

66-138

66-155

66-158

66-165



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue
#HDC-FY18-001**

ADDENDUM #4

The City of New Bedford issues the following Addendum # for

**Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue**

RFP # HDC-FY18-001

March 1, 2018

To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

14 Hervey Tichon Avenue consists of lots 147, 148 and 145 as pictured in Section 1.02, Property and Area Description, the City of New Bedford Assessor's Map.

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue
#HDC-FY18-001**

ADDENDUM #3

The City of New Bedford issues the following Addendum # for

**Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue**

RFP # HDC-FY18-001

February 16, 2018

To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

1. The site visit for 14 Hervey Tichon Boulevard has been re-scheduled until Wednesday, February 28, 2018 at 10:00 am. All interested parties should meet at 15 Antonio Costa Boulevard.
2. The due date for proposals has been extended to Friday, March 9, 2018 at 11:00 am. Request for Proposals are due at New Bedford City Hall, Room 208, New Bedford, MA.

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue
#HDC-FY18-001**

ADDENDUM #2

The City of New Bedford issues the following Addendum #2 for

**Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue**

RFP # HDC-FY18-001

February 15, 2018

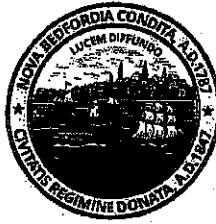
To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

The site visit for 14 Hervey Tichon Boulevard has been re-scheduled until Tuesday, February 20, 2018 at 10:00 am. All interested parties should meet at 15 Antonio Costa Boulevard.

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue
#HDC-FY18-001**

ADDENDUM #1

The City of New Bedford issues the following Addendum #1 for

**Purchase of North Terminal Bulkhead Area
14 Hervey Tichon Avenue**

RFP # HDC-FY18-001

February 14, 2018

To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

1. The due date and time for proposals is: Friday, March 2, 2018 at 11:00 am at the Office of Purchasing, New Bedford City Hall, 133 William Street, Room 208, New Bedford, MA 02740.
2. A walkthrough of the site is scheduled for Thursday, February 15, 2018 at 10:00 am.
3. To clarify the parcel of property, lot 137 includes lot 135, and lot 147 includes lot 148.

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford

CITY OF NEW BEDFORD

Jonathan F. Mitchell, Mayor



New Bedford Harbor Development Commission

REQUEST FOR PROPOSALS # HDC-FY18-001

**Purchase of
North Terminal Bulkhead Area
14 Hervey Tichon Avenue
New Bedford, Massachusetts 02740**

RFP Issued: Wednesday, January 31, 2018
Proposal Deadline: Friday, March 2, 2018 at 11:00 am

Issued by:
City of New Bedford, Harbor Development Commission

Request for Proposals for the Purchase of:

North Terminal Bulkhead Area
14 Hervey Tichon Avenue
New Bedford, Massachusetts 02740
New Bedford Assessors Plat 66, Lots 137 and 147

For questions regarding this RFP, contact:

Harbor Development Commission
Edward Anthes-Washburn, Executive Director
(508) 961-3000



**REQUEST FOR PROPOSAL ADVERTISEMENT
CITY OF NEW BEDFORD MASSACHUSETTS**

REQUEST FOR PROPOSAL #HDC-FY18-003

The City of New Bedford, acting through its Harbor Development Commission is soliciting proposals from qualified developers for the disposition of the following real property:

North Terminal Bulkhead Area
14 Hervey Tichon Avenue
New Bedford, Massachusetts 02740
New Bedford Assessors Plat 66, Lots 137 and 147 (Currently leased and shown as Lots 137A and 147A)

Sealed proposals will be received by the Harbor Development Commission, **in the office of the Purchasing Department, Room 208, City Hall, 133 William Street, New Bedford, Massachusetts, 02740**, during business hours, until the date and time that the proposals are due.

PROPOSALS RECEIVED:

**Proposals shall be received until Friday, March 2, 2018 at
11:00 am. Prevailing Time**

Contract Documents, including the Information for Bidders, Form of Bid, Form of Contract, Specifications, and other Contract Documents, **may be obtained and/or examined on or after Wednesday, January 31, 2018, in the office of :**

**City of New Bedford
Purchasing Department
133 William Street, Room 208
New Bedford, MA 02740
(Monday thru Friday – 8:30 AM – 4:00 PM)
Or email to: Purchasing @newbedford-ma.gov**

A bid deposit of at least 5% of the bid amount must be included with price proposal

The contract may be awarded within thirty (30) days after the bid opening. **The consummation of any agreement with a successful bidder and the sale of the property is subject approval of the Mayor, a vote of the Harbor Development commission and the New Bedford City Council approving the sale and the terms thereof.**

No Bidder may withdraw his/her bid for a period of ninety (90) days, excluding Saturdays, Sundays, and legal holidays, after the actual date of the opening thereof.

Proposer must furnish a Non-Collusion Form and Statement of Taxes with their bid.

AWARDING AUTHORITY
CITY OF NEW BEDFORD
PURCHASING DEPARTMENT

TABLE OF CONTENTS

Section I

<i>Advertisement -</i>	3
<i>Introduction -</i>	5
Property Description	5 - 7
Evaluation Guidelines	8 - 9
Submission Requirements	10 - 12
Evaluation Criteria	12 - 14

Section II

<i>Attachments</i>	15
Attachment A – Price Proposal Form	
Attachment B – Certificate of Tax Compliance - Individual	
Attachment C – Certificate of tax Compliance - Corporate	
Attachment D – Beneficial Interest Statement	
Attachment E – Certificate of Non-Collusion	
Attachment F – Site Access Agreement	
Attachment G – Leases	
Attachment H – Marine Survey	

INTRODUCTION AND DESCRIPTION

1.01 Introduction

The City of New Bedford Harbor Development Commission seeks competitive proposals from developers agreeing to purchase properties in accordance with the terms of this proposal. The properties are owned by the City of New Bedford. All proposals must include an offered acquisition price for the property.

1.02 Property and Area Description

The subject property is in a Commonwealth Designated Port area and is subject to the use restrictions for such areas under Massachusetts law. Use of the property may also be subject to licensing under Massachusetts General Laws Chapter 91.

Utilities: Public water, sewer, natural gas and electricity are available at the property.

Lot area: Total area is 2.870 Acres; 125,049 SF

Current Use: The properties are currently used by a tenant for fishing industry uses including fish processing.

Current Tenants: 1

Current Condition: The subject property is a land parcel that has been assembled from two adjacent lots. Each lot of the subject is encumbered by a long term, 99-year, ground lease. (copies of the leases are attached hereto as Exhibit G") The remaining terms of the leases are 64 years and 66 years respectively. Article III of the lease establishes the annual rent amount, the effective number of years for the rent amount, and method and number of years for adjustment of the rent amount. The combined current rent is \$42,864. The rent and terms for future adjustments are agreed or arbitrated according to the terms of the lease.

In accordance with the terms of the leases, the buildings on the properties remain the property of the tenants.

SIGNIFICANCE

The waterfront area accounts for about 7% of business establishments, 8% of employment, and 20% of business sales within the overall economy of New Bedford. Fishing and seafood and related industries are estimated to account for over half (54%) of the employment and over 90% of the business sales within the waterfront area.

Payrolls for the estimated 4,159 employees in the waterfront area totaled about \$238 million in 2014. Average annual wages are estimated at \$57,000. This average annual wage for all employees within waterfront area industries compares favorably to the \$44,500 average annual wage for all industries in New Bedford in 2014, with the higher average wage largely accounted for by wages in fishing and seafood and related businesses. The fishing, seafood, and related industries accounted for 7% of all payrolls within the waterfront area in 2014, at an average annual wage of \$82,500.

The fishing and seafood industries remain the dominant economic activity within the waterfront district. They represent a classic business "cluster" unrivaled by any other single related economic activity in New Bedford. They depend upon the skills and expertise of facilitative functions – labor force, packaging companies, marine services/boat repair, legal, financial, promotional, and so forth. Much of the labor force they use for direct operations is predominantly located within the city, and in some instance near the waterfront. They are also a significant symbol of the city and draw visitors to the waterfront and downtown as well as well customers for their direct sales.

While the processing, wholesale storage, and distribution segments of the industry are not literally water-dependent, proximity to vessel off-loadings as well as proximity to other dealer processors is advantageous. These related businesses, while competitive, share product on a daily basis as needed to fill specific orders. The trend toward vertical integration – in which the processing, storage, and distribution, and fishing activities share a common corporate identity – blurs the distinction between water-dependent and non-water dependent business identities in this industry.

For the foreseeable future, the seafood industry is predicted to continue to be the dominant waterfront area economic “cluster,” providing a majority of jobs, payrolls, and business expenditures within the waterfront area economy.

1.03 Conditions of Property:

The property available for disposition is available “AS IS” and the City of New Bedford will not make improvements or changes to the property as a condition of the sale. Conveyance to the successful Proposer shall be subject to all restrictions and conditions of record, insofar as they may be in force and applicable to said parcel(s), and to any contamination as defined in Massachusetts General Laws, Chapter 21E as set forth below.

1.04 MGL, Chapter 21E

The City of New Bedford does not warrant that the land parcel available for disposition is free and clear of any contamination as defined by MGL 21E. The successful Proposer will assume all costs and responsibilities for any testing and/or removal of any contamination that may be present on the property, and will hold the City harmless for any costs to clean the property of any contamination.

1.05 Subdivision/Permits/Approvals

All costs and responsibilities for obtaining site plan approval and releases or any easements, covenants, or any other restrictions that may be present on the property will be the responsibility of the buyer. All engineering and environmental studies will also be the responsibility of the buyer.

2.00 Project Guidelines

2.01 Minimum Bid

The minimum acceptable bid on the property offered herein shall be \$1.1 Million dollars (\$1,100,000.00).

2.02 Use

- A. The Subject Property will be conveyed to the successful respondent of this RFP at closing. The disposition of this property is subject to the Uniform Procurement Act of Massachusetts General Laws, Chapter 30B, Section 16 as well as Massachusetts General Law Chapter 60,

Section 77B, such provisions which are incorporated in this Request for Proposals by reference.

- B. The use of this property will be controlled by current lease, zoning and any other governing regulations. Sufficient parking for the proposed use must be provided according to zoning requirements.

Preferred uses: Preferred uses include the current use and other water related industrial uses.

2.03 Evaluation of Applications

An Evaluation Committee consisting of City representatives will review all non-price Technical Proposals submitted in response to this RFP. The Technical Proposals will be screened to ensure that all required submittals have been submitted by the proposer and that the proposal meets the Minimum Evaluation Criteria set forth below. For proposals that are deemed by the Evaluation Committee to be complete and to have met the Minimum Evaluation Criteria, the Evaluation Committee shall assign a rating of highly advantageous, advantageous, not advantageous, or unresponsive for each of the Comparative Evaluation Criteria set forth below.

After a composite rating has been assigned for each proposal, the Evaluation Committee will then make its recommendation to the Chief Procurement Officer. The Chief Procurement Officer shall review, in conjunction with the Evaluation Committee, the price proposals and determine the most advantageous proposal, taking into consideration the non-price proposal ratings and the price. Additional meetings with the top rated proposers may be held to further discuss specifics of the proposal in more detail. If other than the highest priced proposal is selected, the Chief Procurement Officer, with the Evaluation Committee, shall explain in writing why the added benefits of the proposal justify the lower price. The City may cancel this RFP, or reject in whole or in part any and all proposals, if the City determines that cancellation or rejection serves the best interests of the City.

The Proposer shall provide sufficient detail to enable the evaluation Committee to evaluate the non-price proposal in each of the Evaluation Criteria categories listed below:

Upon City of New Bedford awarding of the Proposal, all proposers must submit a certified bank check payable to the "City of New Bedford" in the amount of five percent (5%) of the proposer's proposed purchase price. Deposits will be returned to the unsuccessful proposers. In the event that the successful proposer fails, through no fault of the City of New Bedford, to consummate the purchase, meet all requirements of the RFP or enter into a Purchase and Sales Agreement for the subject property, the City of New Bedford will retain the proposal deposit.

3.00 Submission Requirements

The Request for Proposal may be obtained and/or examined on or after **Wednesday January 31, 2018** during normal business hours (Monday through Friday 8:30 a.m. – 4:00 p.m.) in the Purchasing Office, or by email to purchasing@newbedford-ma.gov

**City of New Bedford
Purchasing Department
133 William Street, Room 208
New Bedford, MA 02740**

All proposals will be received by the Purchasing Department, in the office of the Purchasing Agent, Room 208, City Hall, 133 William Street, New Bedford, Massachusetts, 02740.
Proposals will be received: Friday, March 2, 2018 at 11:00 am Prevailing Time.

Site Tour

Interested RFP Respondents are highly recommended to have a representative attend a site tour on Thursday, February 15, 2018 at 11:00 a.m..

Questions on RFP

The Purchasing Agent will accept questions between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday. Questions must be submitted via email no later than **Wednesday, February 21, 2018, at 3:00 p.m. to:**

City of New Bedford
Purchasing Department
133 William Street, Room 208
New Bedford, MA 02740
Attention: Susan Bruce
(508)979-1433 telephone
(508)991-6148 facsimile
Susan.bruce@newbedford-ma.gov

All responses shall be provided to all parties who are on record as having obtained copies of this RFP.

The City of New Bedford assumes no responsibility and no liability for costs incurred related to the preparation of responses to this RFP. The City shall bear no responsibility or liability due to copies of revisions lost in mailing or not delivered to a prospective proposer due to unforeseen circumstances. Prospective proposers must acknowledge receipt of all addenda within their responses to this solicitation.

Written modifications to proposals may be submitted prior to date and time specified for the receipt of proposals.

Upon review, if any items are missing and/or incomplete, the City of New Bedford at its discretion, may notify the applicant to provide such items. Additionally, submission of proposals shall be deemed to be permission by the applicant to make any inquiries concerning the applicant as considered necessary to fully review qualifications.

A proposal may be withdrawn by written request, providing that such a request is received prior

to time established herein for the opening of proposals. The City will not consider any requests for withdrawal not received before the proposal opening deadline. No proposer may withdraw his/her proposal after the actual date of the opening thereof.

SUBMISSION:

Proposals are to be in writing and presented on the attached application. Respondents are to address all questions asked and provide a sufficient level of detail to enable evaluation of the proposal.

In order to be considered for selection, proposers shall submit a complete response to the RFP. ONE ORIGINAL AND SEVEN COPIES of each response must be submitted to the Purchasing Agent.

To be eligible for consideration, proposers must submit a completed Proposal Packet by complying with all of the following documentation, except as may otherwise be specifically noted:

- ❑ **City of New Bedford Price Proposal Form:** Proposals must include a completed Price Proposal Form for the property offered for sale to the City, in response to this RFP. (Price Proposal Form is **Attachment A** of this RFP.) **The Price Proposal Form must be submitted in a separate, clearly marked, sealed envelope marked "Price Proposal, 14 Hervey Tichon Avenue, RFP # HDC-FY18-003" and identify the developer's name, address, telephone number.**
- ❑ **Authorization to Submit Proposal:** If the proposal is being submitted by an individual, it must be signed by that individual. If the proposal is being submitted on behalf of an entity, the proposal must include written evidence of the proposer's authority to submit the proposal in the form of legally binding documentation.
- ❑ **Certificate of Tax Compliance:** The proposal shall include, as applicable, either the individual or corporate Certificate of Tax Compliance Form attached as **Attachment B** and **Attachment C** to this RFP demonstrating payment of all taxes.
- ❑ **Disclosure Statement of Beneficial Interest:** The Proposal Packet must include a completed Disclosure Statement of Beneficial Interest, as required by MGL, Chapter 7C, Section 38 attached as **Attachment D** to this RFP.
- ❑ **Certificate of Non-Collusion:** The Proposal Packet must include a completed Certificate of Non-Collusion, attached as **Attachment E** to this RFP.
- ❑ **Management Plan:** Provide a management plan for the property. Identify the method of management to be employed and, if available, the identities of the individuals and/or firms to be responsible for each element of the management plan.

3.01 Freedom of Information Act

Proposals will be available for public inspection after the award announcement, except to the extent that a proposer designates proprietary data to be confidential. Material designated as confidential must be readily separable from the remainder of the proposal to facilitate public inspection of the non-confidential portion of the proposal.

3.02 Unexpected Closure

If, at the time of the scheduled bid opening, City Hall is closed due to uncontrolled events such as fire, snow, ice, wind, or building evacuation, the bid opening will be postponed until 3:00pm on the next normal business day. Proposals will be accepted until that date and time.

3.03 Corrections and Modifications

A proposer may correct, modify, or withdraw a proposal by written notice received by the City, prior to the time and date set for the opening. Proposal modifications must be submitted in a sealed envelope, clearly labeled "Modification No. ____." Each modification must be numbered in sequence, and must reference the original RFP.

After the opening, a proposer may not change any provision of the proposal in a manner prejudicial to the interests of the City or fair competition. Minor informalities will be waived or the proposer will be allowed to correct them. If a mistake and the intended proposal are clearly evident on the face of the document, the mistake will be corrected to reflect the intended correct proposal, and the proposer will be notified in writing; the proposer may not withdraw the proposal. A proposer may withdraw a proposal if a mistake is clearly evident on the face of the document, but the intended correct proposal is not similarly evident.

The City of New Bedford assumes no responsibility and no liability for costs incurred relevant to the preparation of responses to this RFP. The City shall bear no responsibility or liability due to copies of revisions lost in mailing or not delivered to a prospective proposer due to unforeseen circumstances. Prospective proposers must acknowledge receipt of all addenda within their responses to this solicitation.

The City will undertake a review of the Respondent to ensure that all taxes and municipal fees are current on any and all property that is owned by the Respondent in the City of New Bedford.

3.04 Withdrawals

A proposal may be withdrawn by written request, providing that such a request is received prior to time established herein for the opening of proposals. The City will not consider any requests for withdrawal received after the proposal opening deadline. No proposer may withdraw his/her proposal after the actual date of the opening of proposals.

3.05 Right to cancel

The City may cancel this RFP, or reject in whole or in part any and all bids, if the City determines that cancellation or rejection serves the best interests of the City.

4.00 Evaluation Criteria

Rule for Award: The most advantageous proposal from a responsive and responsible proposer, taking into consideration price and all other evaluation criteria set for in this RFP, will be selected.

Only responsive proposals will be evaluated by the Selection Committee. The Selection Committee will rank the proposals according to the following categories: highly advantageous, advantageous, not advantageous, and unacceptable in each category and the committee will then forward a final recommendation to the Purchasing Agent.

The City of New Bedford is the Awarding Authority and reserves the right to waive any minor informality. The Awarding Authority also reserves the right to reject any or all proposals, or to accept any other than the highest priced proposal should it be deemed to be in the best interest of the City of New Bedford, Massachusetts, to do so.

Overall Score and Ranking

After evaluating a proposal on the foregoing factors, the evaluators will provide an overall ranking for the proposal as compared to other proposals.

5.0 Award Process

A. Eligibility for Award

If the Selection Committee determines that it has received one or more proposals that are deemed feasible, and the Purchasing Agent accepts the committee's recommendation, an award for the property will be made under the terms of this RFP. In this event, the selected Respondent may be awarded the opportunity to enter into a Developer Agreement with the City of New Bedford. In order to be eligible for such an award, the proposal must be responsive to the RFP.

B. Notification

Official notice of an award will be sent by U.S. Mail to the address and Applicant listed on the Applicant Information section of this RFP. Respondents who are not selected will be similarly notified by U.S. Mail after a selected Respondent has been offered and accepted.

THE CONSUMMATION OF ANY AGREEMENT WITH A SUCCESSFUL BIDDER AND THE SALE OF THE PROPERTY IS SUBJECT TO APPROVAL OF THE MAYOR, AND A VOTE OF THE HARBOR DEVELOPMENT COMMISSION AND THE NEW BEDFORD CITY COUNCIL APPROVING THE SALE AND THE TERMS THEREOF.

Comparative Evaluation Criteria:

HA = Highly Advantageous, A = Advantageous, NA = Not Advantageous, U = Unacceptable

	Highly Advantageous	Advantageous	Not Advantageous	Unacceptable
Management Team				
1. Experience with management of similar properties.	Includes three or more examples of management of similar properties.	Includes at least one example of management of similar properties.	Does not include examples of management of similar properties.	Does not include any examples of past projects.
2. Financial capacity to purchase and maintain property	Purchase price is realistic and identified financial sources clearly illustrate the proposer's capacity.	Purchase price is somewhat realistic and financial sources are not clearly identified to illustrate the proposer's capacity.	Purchase price is not based on market conditions and financial sources are not clearly identified to illustrate the proposer's capacity.	Information provided is not sufficient to make a determination.
3. Prior experience in working with municipalities	Proposal includes at least three letters of reference from municipal officials in communities where the management team has previously worked.	Proposal includes at least two strong letters of reference from municipal officials in communities where the management team has previously worked.	Narrative and other written material assert this prior experience in working with municipalities but without corroboration from municipal partners.	Information provided is not sufficient to make a determination.

ATTACHMENT A

City of New Bedford Price Proposal Form

ATTACHMENT B

Commonwealth of Massachusetts Individual Certificate of Tax Compliance

ATTACHMENT C

Commonwealth of Massachusetts Corporate Certificate of Tax Compliance

ATTACHMENT D

Beneficial Interest Disclosure Statement

ATTACHMENT E

Certificate of Non-Collusion

ATTACHMENT F

Site Access Agreement

ATTACHMENT G

Leases

ATTACHMENT H

Marine Survey

Attachment "A"
PRICE PROPOSAL FORM

The undersigned hereby submits the attached proposal for the sale of property to the City of New Bedford in response to the Request for Proposals (RFP) for the acquisition of the designated property in the City of New Bedford.

Proposer's Name:

Owner's Name (if different from proposer):

Owner Entity and State of Incorporation:

Proposer's Address:

Proposer's Telephone:

Proposer's E-Mail:

Proposer's Fax Number:

Parcel Location: Street Address or Location of Property:

Proposed Purchase Price:

Signature of Proposer

Date

Name (Print): _____

Attachment "B"
COMMONWEALTH OF MASSACHUSETTS
INDIVIDUAL CERTIFICATE OF TAX COMPLIANCE

Pursuant to the requirements of G.L. c. 62C, s. 49A, the undersigned does hereby state the following:

I, _____, certify that I have filed all state tax returns, have paid all state taxes required under law, and have no outstanding obligation or unpaid debt to the Massachusetts Department of Revenue.

Signed under the penalties of perjury:

Date Signature

Social Security Number Typed or Printed Name

COMMONWEALTH OF MASSACHUSETTS

On this _____ day of _____, 2018, before me, the undersigned notary public, _____ personally appeared _____, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she signed it voluntarily for its stated purpose.

NAME:

Notary Public

My commission expires: _____

Attachment "C"
COMMONWEALTH OF MASSACHUSETTS
CORPORATE CERTIFICATE OF TAX COMPLIANCE

Pursuant to the requirements of G.L. c. 62C, s. 49A, the undersigned does hereby state the following:

I, _____, as the _____ of _____, whose principal place of business is located at _____ do hereby certify that the above named firm has complied with all laws of the Commonwealth of Massachusetts relating to taxes and has no outstanding obligation to the Massachusetts Department of Revenue.

Signed under the penalties of perjury:

Federal Identification Number Name of Corporation/
Unincorporated Association

Date Signature of President

Date Signature of Treasurer

COMMONWEALTH OF MASSACHUSETTS

On this _____ day of _____, 2018, before me, the undersigned notary public, personally appeared _____, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she signed it as _____ for _____, a corporation, voluntarily for its stated purpose.

NAME:

Notary Public My commission

expires: _____

Attachment "D"

DISCLOSURE OF BENEFICIAL INTERESTS IN REAL PROPERTY TRANSACTION

This form contains a disclosure of the names and addresses of all persons with a direct or indirect beneficial interest in the real estate transaction described below. This form must be filed with the Massachusetts Division of Capital Asset Management, as required by M.G.L. c. 7C, §38, prior to the conveyance of or execution of a lease for the real property described below. Attach additional sheets if necessary.

1. Public agency involved in this transaction: _____
(Name of jurisdiction)
2. Complete legal description of the property:
3. Type of transaction: ☐ Sale ☐ Lease or rental for _____ (term):
4. Seller (s) or Lessor (s): _____
Purchaser(s) or Lessee(s): _____

5. Names and addresses of all persons who have or will have a direct or indirect beneficial interest in the real property described above. *Note: If a corporation has, or will have a direct or indirect beneficial interest in the real property, the names of all stockholders must also be listed except that, if the stock of the corporation is listed for sale to the general public, the name of any person holding less than ten percent of the outstanding voting shares need not be disclosed.*

Name

Address

_____	_____
_____	_____
_____	_____
_____	_____

(Continued on next page)

5. Continued

None of the persons listed in this section is an official elected to public office in the Commonwealth of Massachusetts except as noted below:

Name

Title or Position

6. This section must be signed by the individual(s) or organization(s) entering into this real property transaction with the public agency named in item 1. If this form is signed on behalf of a corporation, it must be a duly authorized officer of that corporation.

The undersigned acknowledges that any changes or additions to item 4 of this form during the term of any lease or rental will require filing a new disclosure with the Division of Capital Asset Management within 30 days following the change or addition.

The undersigned swears under the pains and penalties of perjury that this form is complete and accurate in all respects.

Signature:

Printed Name:

Title:

Date:

Attachment "E"

CERTIFICATE OF NON-COLLUSION

City of New Bedford
133 William Street
New Bedford, MA 02740

The undersigned certified under penalties of perjury that this bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals.

Signature of individual submitting bid

Name of business/organization

Attachment "F"

SITE ACCESS AGREEMENT

This Site Access Agreement (the "Agreement") is entered into this ____ day of _____ 2018, by and between _____ (the "Proposer"), having an address at _____ and the City of New Bedford, Massachusetts (the "City").

WHEREAS, the City is the current owner of Lots _____ on New Bedford Assessor's Map _____ (the "Property");

WHEREAS, the Proposer seeks access to the Property to perform certain due diligence activities;

WHEREAS, due diligence activities may involve the installation of borings, monitoring wells, test pits, and collection of soil and/or groundwater samples

NOW, THEREFORE, in order to enable the Proposer to perform due diligence, City agrees to provide Proposer access to the Property, subject to the following conditions and understandings:

1. The right of access shall include the right to enter the land with personnel, equipment, tools and other items necessary to perform the tasks described in Part 7.
2. The right of access shall be limited to the following day(s) (**Proposer inserts scheduled day(s)**):

3. City shall provide all available information related to location of subsurface utilities and other subsurface features that could be damaged as a result of activities to be performed under this Agreement.
4. Proposer shall be responsible for contacting Dig Safe in advance of any subsurface drilling or excavation.
5. Proposer acknowledges that the fire damaged building located on the Property is of questionable structural integrity and assumes all responsibilities and risks to its employees, agents and Contractors for any and all activities on the Property.
6. All activities performed by the Proposer, its employees, agents and/or contractors pursuant to this Agreement shall be performed in accordance with all applicable environmental, health and safety statutes and regulations currently in effect, and in such a way as to minimize interference with the normal operations on the Property.
7. The activities shall consist of **(Proposer inserts description here)**
8. The Proposer shall promptly repair any physical damage to the Property, including any structures affected by the work, and return the Property to substantially the same condition it was prior to the fence installation.
9. The Proposer shall provide the City with a complete copy of any reports prepared for the Property, including any analytical data for soil, groundwater, surface water or building materials samples. The Proposer shall promptly notify the City of any condition identified during the performance of due diligence that requires notification to the Massachusetts Department of Environmental Protection in accordance with the Massachusetts Contingency Plan.
10. The Proposer, its subcontractors, agents or contractors shall provide the City with proof of compliance with the Commonwealth of Massachusetts Worker's Compensation Law. The

Proposer, or the party or parties performing due diligence on behalf of the Proposer shall provide the City with proof of Environmental Insurance, in the amount of one million dollars (\$1,000,000) combined single limit. The Proposer, its subcontractors, agents or contractors shall provide the City with proof of General Liability Insurance for bodily injury and property damage in the amount of one million dollars (\$1,000,000) combined single limit and shall provide the City with a certificate of insurance naming the City of New Bedford as an "additional insured" on their general liability policy.

11. The Proposer will defend, indemnify and hold harmless the City for injury to persons or property incurred during and resulting from the Proposer's presence on the Property.
12. The City recognizes that the proposed work may involve minor disruption or damage to the Property. The Proposer and its Contractor agree to make reasonable efforts to minimize the disruption or damage to the Property.
13. Any disputes arising pursuant to this Agreement shall be resolved, if feasible, by good faith consultation between the Parties and their authorized agents.
14. The City, by this written Agreement, has granted the Proposer certain rights of access pursuant to the conditions set forth herein and the City hereby releases and indemnifies the Proposer from any and all claims alleging invalid access, when said access was made pursuant to and in accordance with this Agreement.
15. Except as otherwise provided herein, the City hereby reserves and does not in any manner waive any rights or causes of action against the Proposer or any other party.
16. This document constitutes the entire agreement between the Parties relating to access to the Property in connection with the activities described herein, and shall be governed by and construed in accordance with the laws of the United States and the Commonwealth of Massachusetts.

17. All notices or other submissions required or appropriate under this Agreement shall be sent by first class mail, facsimile, nationally recognized overnight delivery service or certified mail, return receipt requested. Such notices or submissions shall be sent, unless written notice has been given of a change by either Party, to the following persons:

If to City:

If to Proposer:

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as a sealed instrument as of the dates set forth below their respective signatures.

City of New Bedford

Proposer

Name: _____

Name: _____

Jon Mitchell, Mayor

Date: _____

Date: _____

Attachment "G"

LEASES

LEASE AGREEMENT

AGREEMENT made and entered into this 9th day of September 1982, by and between the CITY OF NEW BEDFORD, a municipal corporation established under the laws of the Commonwealth of Massachusetts, by and through its HARBOR DEVELOPMENT COMMISSION, hereinafter referred to as the "LESSOR", and WHALER REALTY CO., INC., a Massachusetts corporation, having its usual place of business at 54 Wright Street, New Bedford, Massachusetts, hereinafter referred to as the "LESSEE";

WHEREAS, the LESSOR has available for occupancy and development a certain parcel of land in New Bedford, Massachusetts, commonly referred to as the North Terminal Bulkhead Area, and

WHEREAS, the LESSEE is desirous of leasing and developing a portion of said North Terminal Bulkhead Area, and

WHEREAS, the LESSOR is aware of the desire of the LESSEE to occupy and develop said portion of the North Terminal Bulkhead Area parcel for the primary purpose of unloading, processing and distributing products of the sea, for manufacture of ice and gear for fishing vessels and ship repair, and items incidental thereto,

NOW, THEREFORE, in consideration of their mutual promises, covenants and agreements herein contained, the parties hereto agree as follows:

ARTICLE I

The LESSOR does hereby let, lease, and demise unto the LESSEE for its exclusive use and that of its successors and assignees, a certain parcel of land consisting of 56,949 square feet, more or less, as more fully described in Schedule "A" attached hereto and incorporated herein by reference including the

exclusive use of 251.25 feet of Bulkhead space on the easterly side of said parcel and 55 feet of Bulkhead space on the northerly side of said parcel, until such time as said northerly boundary is extended by LESSOR or its designated representative.

ARTICLE II

To have and to hold the demised premises unto the LESSEE for the term of ninety-nine (99) years commencing on the first day of the month next succeeding final approval by any governmental authority or any subdivision thereof of all permits or licenses required by any said authority for the commencement of construction or occupancy of the LESSEE'S building to be built on the demised premises and the completion by the LESSORS of their responsibility under ARTICLE V of this agreement. The term of this lease is subject to the right of the LESSEE (together with the consent in writing of the leasehold mortgagee, if any) to terminate this agreement at the end of the first or any succeeding twenty-five (25) year term. In the event that the LESSEE elects to so terminate, it shall notify the LESSOR in writing at least twelve months prior to the end of that term. In the event that the LESSEE does not notify the LESSOR of its intent to terminate lease, the parties hereto shall be bound each to the other for the next succeeding term of twenty-five (25) years except for the last term which shall be twenty-four (24) years.

ARTICLE III

RENT

The LESSEE covenants and agrees to pay to the LESSOR at City Hall in New Bedford, Massachusetts or at such other place as the LESSOR shall designate in writing, rent as hereinafter set forth:

(a) For the first twenty (20) years of the term hereof Fourteen Thousand Twenty and 00/100 Dollars (\$14,020.00) per year in equal monthly installments of One Thousand One Hundred Sixty-eight and 33/100 Dollars (\$1,168.33).

(b) For the next succeeding five (5) years of the term hereof, the sum of Fourteen Thousand Twenty and 00/100 Dollars (\$14,020.00) per year payable in equal monthly installments of One Thousand One Hundred Sixty-eight and 33/100 Dollars (\$1,168.33).

(c) For the succeeding fifteen (15) years of the term hereof, the parties shall use their best efforts to agree to the annual rental applicable thereto at least eighteen (18) months prior to the commencement of said term. In the event that the parties cannot agree to the rental, the LESSOR shall select one arbitrator and the LESSEE shall select one arbitrator at least seventeen (17) months prior to the commencement of the instant term and shall so notify the other of their respective choice. The two arbitrators so selected shall determine a third arbitrator within thirty (30) days of their selection. In the event that the arbitrators selected by the parties cannot agree to a third arbitrator, the arbitrators shall select a third arbitrator from a panel of three disinterested nominees to be selected by the American Arbitration Association. If at the end of one week after the designation of such panel there remains a disagreement as to which of said nominees shall serve, the LESSOR'S and LESSEE'S arbitrators, in that order, shall each strike the name of one of the nominees and the remaining nominee shall be the third arbitrator. The rental that shall be determined by a majority of the arbitrators in a decision of the arbitrators made at least fourteen (14) months prior to the commencement of the instant fifteen (15) year term shall be binding on all parties except that the rental so determined shall not exceed that of comparable land of the LESSOR leased for waterfront purposes at the North Terminal Bulkhead Area and in no event shall the rent for said term

exceed Twenty-one Thousand Thirty and 00/100 Dollars (\$21,030.00) per annum. The arbitration proceedings shall be conducted under the rules of the American Arbitration Association.

(d) For the succeeding twenty (20) years of the term hereof, the parties shall use their best efforts to agree to the annual rental applicable thereto at least eighteen (18) months prior to the commencement of said term. In the event that the parties cannot agree to the rental, then the same procedure as set out in (c) of this ARTICLE III shall be applicable, except that in no event shall the rental for said term exceed Twenty-one Thousand Thirty and 00/100 Dollars (\$21,030.00) for the first ten (10) years of said twenty (20) year term.

(e) For the succeeding twenty (20) year and nineteen (19) year rental periods, the rental shall be determined in the same manner as set forth in paragraphs (c) and (d) of this ARTICLE III, except that the arbitrators shall not be limited to the maximum of Twenty-one Thousand Thirty and 00/100 Dollars (\$21,030.00) per annum set forth therein.

(f) It is specifically understood that said rental is exclusive of taxes on the structure on the demised premises which shall be treated as realty for taxation purposes, which taxes shall be assessed by the City of New Bedford.

ARTICLE IV

LESSEE'S USE OF PREMISES

The LESSEE shall have unrestricted right to build and install on the demised premises such structures, improvements, machinery and equipment as it may desire, and use same for any purpose in conformance with all zoning and building regulations applicable thereto, all of which at all times remain the property of the LESSEE. In the event that this Agreement is terminated for any reason, said

structures, improvements, machinery, and equipment may be removed by the LESSEE, provided the premises are put back in the same condition as they were at the time of the execution of the lease and provided all taxes and monies due the City of New Bedford, the LESSOR, have been paid.

ARTICLE V

LESSOR'S REPRESENTATION AS TO THE DEMISED PREMISES

Section 1. The LESSOR hereby warrants and represents that:

(a) It has a good, clear, and merchantable title to the demised premises and has at the execution of this Agreement delivered to the LESSEE a complete physical property survey of the demised premises prepared and certified by a land surveyor registered by the Commonwealth of Massachusetts.

(b) The demised premises are free and clear of all encumbrances and liens and that upon notice by the LESSEE at any time of any undisclosed liens or defects the LESSOR will cause said liens or defects to be removed or cleared.

(c) Water, electricity, gas, telephone, and sewerage are in place and subject to the LESSEE'S use, all charges for the installation of the same having been paid to the appropriate supplier or utility company as the case may be and no charge for the installation thereof is to be borne by LESSEE, except that LESSEE shall pay all required charges for installation from property line to present installation area.

(d) It has been apprised that the LESSEE will commence construction of a building on the demised premises within six months from the date of this lease and represents and warrants that it has no knowledge of any circumstances which would prohibit such construction, support, or utilization of the demised

premises or any portion thereof, and that there are no structural or engineering defects on or about the demised premises that would in any way interfere with the construction of or sustain said building.

(e) The LESSEE agrees that in the event that construction of a building for the principal purpose stated in this lease is not commenced within 180 days from the date of execution of this lease, LESSOR may, (subject to the rights of the Leasehold Mortgagee as more particularly set forth hereir) forthwith terminate this Agreement, and have the right to reenter and repossess the premises and to dispossess and remove therefrom any and all occupants and their effects without being liable to any prosecution therefore, and to hold premises as if this lease had not been made. LESSEE expressly waives, in behalf of itself and all persons claiming under it, all rights of notice to quit or intention to reenter under provisions of any statute or of this lease, in case of such failure to commence construction.

(f) The LESSOR has good and proper power and authority to enter into and perform its warranties, representations and undertakings, all as set forth in this Agreement and will execute and deliver to the LESSEE any further written certificates and authorizations reasonably required by counsel for the LESSEE at any time so as to further evidence its power and authority.

ARTICLE VI

LESSEE'S RIGHT TO ASSIGN OR SUBLEASE

Section 1. Notwithstanding any provisions of this Agreement, the LESSEE shall at all times have the right, in its sole discretion to sublease or to assign the leasehold estate in the demised premises except that in the event of such sublease or assignment, the LESSEE shall at all times be responsible for the

payment of the rentals due hereunder.

Section 2. In the event that the LESSEE does sublease or assign all or any part of the demised premises, the LESSEE hereby represents and agrees that the rent to be received by it for the demised premises shall not exceed 110% of the rental then being paid by the LESSEE to the LESSOR for that portion so subleased.

ARTICLE VII

LESSEE'S RIGHT TO MORTGAGE

LESSEE shall at all times have the right to mortgage the leasehold estate created herein, under one or more leasehold mortgages, and may assign this Agreement as security for such mortgage or mortgages.

The term "Leasehold Mortgage" when used throughout this Agreement shall mean and refer to a mortgage, assignment, or other security interest by which LESSEE'S leasehold estate is mortgaged, conveyed, assigned or otherwise transferred to secure a debt or other obligation. The term "Leasehold Mortgagee" when used throughout this Agreement shall mean and refer to a holder of a leasehold mortgage, whether by grant, assignment or otherwise.

Any Leasehold Mortgagee shall not be liable for any obligations under this Agreement until it becomes the owner of the leasehold estate by foreclosure, assignment in lieu of foreclosure, or otherwise, and shall remain liable for such obligations only so long as it retains ownership. Any assign or successor of the LESSEE shall not be liable for any obligations of the LESSEE under this Agreement until it becomes the owner of the leasehold estate and thereupon shall be liable for all rent accrued and unpaid prior thereto, and shall remain liable for said rent and other obligations only so long as it retains such ownership.

ARTICLE VIII

INDEMNITY AND PUBLIC LIABILITY INSURANCE

Section 1. The LESSEE agrees to indemnify and hold harmless the LESSOR from and against all claims of whatever nature arising from any act, omission, or negligence of the LESSEE or LESSEE'S sublessee or their respective contractors, licensees, agents, or employees, or arising from any accident, injury or damage caused by the negligence of any of the above to any person or to the property of any person occurring during the term hereof or upon the LESSEE'S demised premises or any improvements thereon except to the extent that such claim results from LESSOR'S negligence or fault.

Section 2. The LESSEE agrees to maintain in full force, during the term hereof, policies of public liability and property damage insurance under which the LESSOR (and such other persons as are in priority of estate with LESSOR as may be set out from time to time) and the LESSEE are named as assureds and under which the insurer agrees to indemnify and hold harmless the LESSOR from any liability arising out of or based upon any and all claims, accidents, injuries and damages set forth in Section 1. of this ARTICLE VIII. Each such policy shall be non-cancellable with respect to the LESSOR and the LESSOR'S designees without ten (10) days prior notice to LESSOR, and a duplicate original or certificate thereof shall be delivered to LESSOR. The minimum limits shall be One Million Dollars (\$1,000,000.00) combined single limit covering personal injury liability and property damage. Certificates of such insurance coverage shall be delivered to LESSOR not later than ten (10) days after LESSEE has first taken possession of demised premises. Nothing contained herein shall prevent the LESSEE from including any Leasehold Mortgagee as an additional insured and loss payee under any insurance policy obtained pursuant to this ARTICLE and further, LESSEE may deposit the

original or duplicate of such policy with any such Leasehold Mortgagee as such Leasehold Mortgagee may require.

ARTICLE IX

ADDITIONAL RENTAL AND PURCHASE PROVISIONS

Notwithstanding anything contained herein, the LESSOR hereby agrees that in the event it leases any further portion of land in the "North Terminal Bulkhead Area", or any extension of said Area northerly consisting of bulkheads, streets, and utilities and previously existing in the North Terminal Bulkhead Area, having a rental per square foot less than that which is being paid by the LESSEE hereunder, the LESSOR shall forthwith notify the LESSEE of said rental and the rent being paid by the LESSEE hereunder shall automatically be reduced to the same per square foot rental being required under the terms of said third party's lease agreement with the LESSOR.

In the event that the LESSOR sells any portion of the "North Terminal Bulkhead Area" (or extension as forth above) it shall forthwith so notify the LESSEE of the terms and conditions of said sale and such notice shall automatically grant the LESSEE the right to purchase the demised premises for the same cost per square foot as required of said third party purchaser. "North Terminal Bulkhead Area" for purposes of this paragraph shall mean that area of land of which the demised premises are part and commonly referred to as the "North Terminal Bulkhead". The LESSEE shall have thirty (30) days from the date of the receipt of said notice to exercise its right to purchase, by sending written notice to the LESSOR. In the event of the LESSEE'S decision to purchase, the LESSOR and the LESSEE will use their best efforts to complete the sale and purchase in a proper and orderly fashion.

Notwithstanding anything to the contrary contained herein, unless and until all Leasehold Mortgagees shall so consent in writing, the fee title to the demised premises and the leasehold estate created hereby shall not merge but shall remain separate and distinct, notwithstanding the acquisition of the fee title to the demised premises by the LESSEE or its successors or assigns by purchase or otherwise.

ARTICLE X

DEFAULT

In the event of failure by the LESSEE to perform, fulfill or observe any of the terms, covenants, agreements and conditions of this Agreement continuing for a period of 120 days after written notice from the LESSOR to the LESSEE specifying such failure, without such failure being waived, or its effect cured, or the cure thereof commenced and diligently prosecuted thereafter, the LESSOR may, by written notice to the LESSEE terminate this Agreement, whereupon all of the LESSEE'S obligations and liabilities under this Agreement shall cease except that the LESSEE shall continue to be liable to the LESSOR for the obligations of the LESSEE which arose prior to such termination;

PROVIDED, however, that the rights of the LESSOR under this article shall be subordinate and subject to:

- (1) Any and all mortgages, deeds of trust, and other instruments in the nature of a mortgage, or security agreement which is now, or at any time hereafter granted by the LESSEE;
- (2) Any rights of the holders of bonds or other obligations issued by the City of New Bedford, acting by and through its Industrial Development

Financing Authority or otherwise, to finance facilities or equipment for use by the LESSEE on the demised premises;

(3) The rights of any Leasehold Mortgagee pursuant to this Agreement.

LESSOR, upon providing LESSEE with any notice of default hereunder shall at the same time provide a copy of such notice to each Leasehold Mortgagee. From and after the time such notice has been given to a Leasehold Mortgagee, such Leasehold Mortgagee shall have the same period after receiving such notice as is given the LESSEE after notice, to remedy, cause to be remedied, or commence to remedy the default or defaults specified in such notice. LESSOR agrees to accept such performance or commencement of performance by or caused by a Leasehold Mortgagee as if performed by LESSEE hereunder. LESSOR and LESSEE hereby authorize entry upon the demised premises by a Leasehold Mortgagee for the purpose of remedying any default hereunder.

Anything contained in this lease to the contrary notwithstanding, LESSOR shall have no right to terminate this Agreement unless, LESSOR shall notify each Leasehold Mortgagee of its intention to terminate at least sixty (60) days in advance of the proposed effective date of such termination. If, during such sixty (60) days termination notice period, any Leasehold Mortgagee shall;

(i) pay or cause to be paid all rent, additional rent, and other payments due and in arrears as specified in such termination notice; or (ii) comply or commence to comply with all nonmonetary provisions of this Agreement then in default by LESSEE; or (iii) commence proceedings to foreclose its leasehold mortgage, the LESSOR shall not terminate this Agreement, and the time for completion by any Leasehold Mortgagee of its proceedings to cure specified defaults shall continue for so long as such Leasehold Mortgagee proceeds to complete the cure of defaults under this Agreement or to sell LESSEE'S interest in this Agreement by foreclosure

of its Leasehold Mortgagee or otherwise.

Provided, however, that any provisions contained herein shall not obligate any Leasehold Mortgagee to cure any default or defaults of LESSEE hereunder or to continue any foreclosure proceedings once a default has been cured.

The purchaser at any sale of this lease in any proceedings for the foreclosure of any leasehold mortgage, or the assignee or transferee of this lease under any instrument of assignment or transfer in lieu of foreclosure of any Leasehold Mortgagee shall be deemed to be assignee or transferee within the meaning of this Agreement, and shall be deemed to have agreed to perform all of the terms, covenants and conditions to be performed on the part of the LESSEE hereunder from and after the date of such purchase and assignment, but only for so long as such purchaser or assignee is the owner of the leasehold estate.

ARTICLE XI

MISCELLANEOUS PROVISIONS

Section 1. LESSEE, subject to the terms and provisions of this Agreement on payment of rent and keeping and performing all of the terms and provisions of this Agreement on its part to be observed, kept, and performed, shall lawfully, peaceably, and quietly hold occupancy and enjoy the demised premises during the term hereof without hindrance or ejection by any persons or entities claiming under the LESSOR.

Section 2. LESSEE agrees to make every reasonable effort to discharge any mechanics, materialman or other liens against the demised premises and/or the LESSOR'S interest therein, which may arise out of any payment due for or purported to be due for any labor, services, materials, supplies or equipment alleged to have been furnished for the LESSEE in, upon, or about the demised premises.

Section 3. The LESSEE hereby agrees that during the course of its occupancy hereunder, that it will maintain the "fendering" system located along the easterly boundary of the demised premises and LESSOR agrees to maintain the Bulkhead, except that the LESSEE shall be responsible for any damage to the Bulkhead caused by the LESSEE'S negligence or that of its agents, servants, employees, or invitees.

Section 4. In addition to the rents and covenants contained herein to be paid and performed by the LESSEE, the LESSEE agrees to pay, when due, all real estate taxes on the demised premises and any improvements thereto and any utility charges pertaining thereto in accordance with ARTICLE V, Section 1 (c).

Section 5. Except as herein otherwise expressly provided, the terms hereof shall be binding upon and inure to the benefit of the successors and assigns respective of the LESSOR and LESSEE.

Section 6. This Lease Agreement shall be governed exclusively by the provisions hereof and by the laws of the Commonwealth of Massachusetts.

Section 7. The parties hereto agree, upon request of the other, to execute a notice of lease or short form lease in recordable form and complying with applicable local laws.

Section 8. In the event that the use of or access to the demised premises or the waterside of the Bulkhead by the LESSEE or those claiming under it is hindered, interfered with, impeded, regulated, modified or the like, due to the conduct of the LESSOR, then the rent reserved hereunder shall be abated during such period.

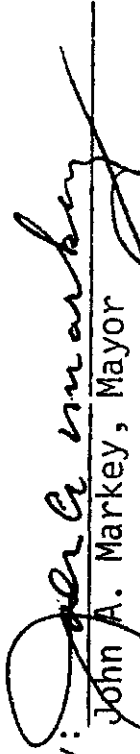
Section 9. Whenever, by the terms of this Agreement notice shall or may be given, whether to the LESSOR, LESSEE, or Leasehold Mortgagee, such notice shall be in writing and shall be sent by registered or certified mail, postage prepaid,

IN WITNESS WHEREOF, the parties have hereunto caused these presents to be executed by their duly authorized officers and their seals to be affixed, duly attested as of the day and year first above written. This Agreement and execution thereof being duly authorized by Order of the City Council of the City of New Bedford, Massachusetts and approval of the Mayor, and Resolution of the Harbor Development Commission of the City of New Bedford, Massachusetts, certified copies of such Order of approval and Resolution being attached hereto and made a part hereof.

APPROVED as to form
and legality


Assistant City Solicitor

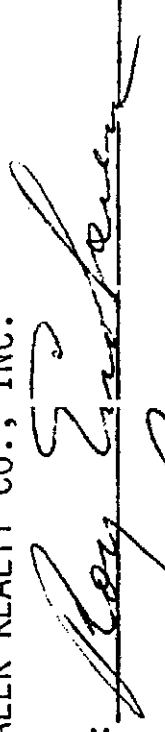
CITY OF NEW BEDFORD

By: 
John A. Markey, Mayor

NEW BEDFORD HARBOR DEVELOPMENT COMMISSION

By: 
Vice-Chairman

WHALER REALTY CO., INC.

By: 
Title

SCHEDULE A

Boundary Description

Certain parcels of land situated in the City of New Bedford, County of Bristol and the Commonwealth of Massachusetts being particularly bounded and described as follows:

Parcel "F"

Beginning at a point in the southerly line of Hervey Tichon Avenue, said point being 674.59 feet easterly of the intersection forming the southeasterly corner of Herman Melville Boulevard and Hervey Tichon Avenue;

Thence north $03^{\circ}46'50''$ east in a line parallel with the Combined Pierhead and Bulkhead Line shown on plan herein mentioned, 61.25 feet to a point;

Thence south $86^{\circ}13'10''$ east in a line parallel with said Hervey Tichon Avenue, 23.00 feet to a point;

Thence south $03^{\circ}46'50''$ west in a line parallel with said Combined Pierhead and Bulkhead Line, 251.25 feet to a point;

Thence north $86^{\circ}13'10''$ west in the northerly line of Parcel G as shown on said last named plan, 250.00 feet to a point;

Thence north $03^{\circ}46'50''$ east in a line parallel to said Combined Pierhead and Bulkhead Line, 190.00 feet to a point in the southerly line of said Hervey Tichon Avenue;

Thence south $86^{\circ}13'10''$ east in the southerly line of said Hervey Tichon Avenue, 227.00 feet to the point of beginning, containing 48,909 square feet or 1.12 acres.

Parcel "F-1" (Apron Area)

Beginning at a point in the Combined Pierhead and Bulkhead Line 430.00 feet north of the easterly extension of the northerly side line of Antonio L. Costa Avenue, said easterly extension being south $86^{\circ}13'10''$ east, 719.35 feet from the northeasterly corner of Herman Melville Boulevard and said Antonio L. Costa Avenue;

Thence north $03^{\circ}46'50''$ east in the easterly line of the Combined Pierhead and Bulkhead Line, 190.00 feet to a point;

Thence north $86^{\circ}13'10''$ west in a line parallel with Hervey Tichon Avenue, 32.00 feet to a point;

Thence south $03^{\circ}46'50''$ west in a line parallel with the Combined Pierhead and Bulkhead Line, 190.00 feet to a point;

Thence south 03°46'50" west in a line parallel with the Combined Pierhead and Bulkhead Line, 61.25 feet to apoint;

Thence south 86°13'10" east in a line parallel to said Hervey Tichon Avenue, 32.00 feet to the point of beginning, containing 1,960 square feet.

Said Parcels "F", "F-1" and "F-2" are described as shown on plan entitled, "City of New Bedford, North Terminal Bulkhead Parcels "C", "C-1", "D", "F", "F-1", "F-2", "G", "G-1", "H" and "J", as drawn by the New Bedford Harbor Development Commission, dated June, 1982".

Subject also to Grant of Easements from the City of New Bedford to the New Bedford Gas & Edison Light Company, dated July 28, 1980, and recorded with the Bristol County (S.D.) Registry of Deeds, Book 1807, Page 1046 and Plan Book 85, Page 55.



CITY OF NEW BEDFORD

IN CITY COUNCIL

June 24, 1982

Ordered, that the Mayor and the Vice-Chairman of the Harbor Development Commission be and hereby are authorized to enter into a lease agreement with WHALER REALTY CO., INC. for the use of 56,949 square feet more or less of land at the North Terminal Bulkhead Area, for a term of ninety-nine (99) years, a copy of which lease agreement is attached hereto and made a part hereof.

IN CITY COUNCIL, June 24, 1982

Adopted-Yeas 9, Nays 0

Janice A. Davidian, City Clerk

Rule 40 Waived-Yeas 9, Nays 0

Janice A. Davidian, City Clerk

Presented to the Mayor for approval June 25, 1982

Janice A. Davidian, City Clerk

Approved by the Mayor June 25, 1982 John A. Markey, Mayor

A true copy, attest:

J. A. Davidian
City Clerk

VOTE OF HARBOR DEVELOPMENT COMMISSION GRANTING

Henry Z. Horn
Director

A LEASE TO WHALER REALTY CO., INC.

At a meeting of the Harbor Development Commission of the City of New Bedford duly called and held on December 3, 1981 at which time a quorum was present and acting throughout, the following Vote was duly adopted:

VOTED: to grant Whaler Realty Co., Inc. a ninety-nine (99) year lease for 1.12 acres and two parcels containing 6,080 square feet and 1,960 square feet, on the apron, of the fifteen (15) acres of the North Terminal Bulkhead for the purpose of building a marine-related plant. Said lease shall be in accordance with terms and conditions attached hereto.

A true copy

ATTESTED:

J. Clinton Rimmer
J. Clinton Rimmer, Clerk

Attachment "H"

MARINE SURVEY

Structural Inspection North Terminal, New Bedford, MA Report of Findings

Prepared for:



New Bedford Harbor Development Commission
52 Fisherman's Wharf, New Bedford, MA

DRAFT COPY

Prepared by:

cleengineering

15 Creek Road, Marion, MA 02738
PH: 508-748-0937 FAX: 508-748-1363
www.cleengineering.com

Table of Contents

Engineer/Firm Assigned	1
1. Introduction.....	1
2. Summary of Findings	3
2.1 Maritime International Terminal (Parcel 1).....	3
2.1.1 Description of Structure	3
2.1.2 Structural Assessment /Recommendations	4
2.2 Sand and Gravel Parcel (Parcel 2).....	5
2.2.1 Description of Structure	5
2.2.2 Observed Conditions	5
2.2.3 Structural Assessment/Recommendations	6
2.3 North Terminal Pier (Parcels 5, 7, and 10)	6
2.3.1 Description of Structure	6
2.3.2 Observed Conditions	8
2.3.3 Structural Assessment/Recommendations	12

List of Attachments

Attachment A	Inspection Plan
Attachment B	Capacity Calculations

DRAFT COPY

Engineer/Firm Assigned

CLE Engineering, Inc. (CLE) was contracted by the New Bedford Harbor Development Commission (HDC) to perform an underwater and topside structural inspection of the marine infrastructure of North Terminal. CLE teamed with Fathom Diving (Fathom) to perform the underwater portion of the inspection. The scope of work included the piers and bulkheads of five leased parcels (including the terminus of Antonio Costa Ave). The piers at North Terminal were constructed using three different designs and are of varying ages. This report reflects the conditions of the property which were present and visible at the time of the inspection. Questions regarding this report, its scope and/or content should be addressed to Susan Nilson, P.E. at (508) 748-0937.

1. Introduction

The structures which were within the scope of this inspection are those along parcels 1, 2, 5, 7, and 10 as labeled on the figure below. Three separate designs exist at the North Terminal site;

- Parcel 1 - Concrete encased timber piles supporting a concrete deck
- Parcel 2 - Steel sheet pile cells supporting a concrete deck
- Parcels 5, 7, and 10 - Steel H-Piles supporting concrete deck

Historic aerial photographs indicate that all of North Terminal's waterfront infrastructure was constructed before 1971 with the exception of Parcel 2. Given the design and condition of the bulkhead along Parcel 2 it is likely that the structure was constructed before 1985. No construction plans were located of the pier and bulkheads along any of the parcels within North Terminal. These sites do not have previous inspection reports to serve as a comparison or to determine rate of corrosion/deterioration.

All of the subject parcels are heavily used for both vessel berthing and maintenance in addition to serving as loading and unloading areas for the parcel tenants. In the years following construction, some of the buildings on site have encroached over the pier deck.

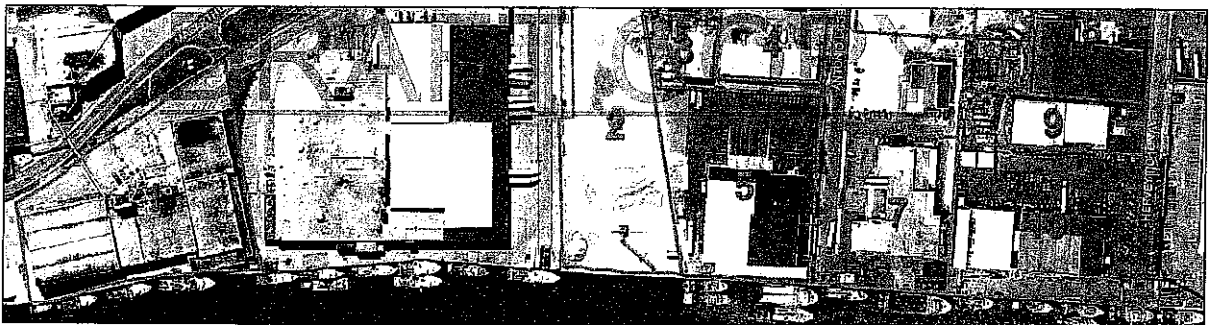


Figure 1: North Terminal Layout

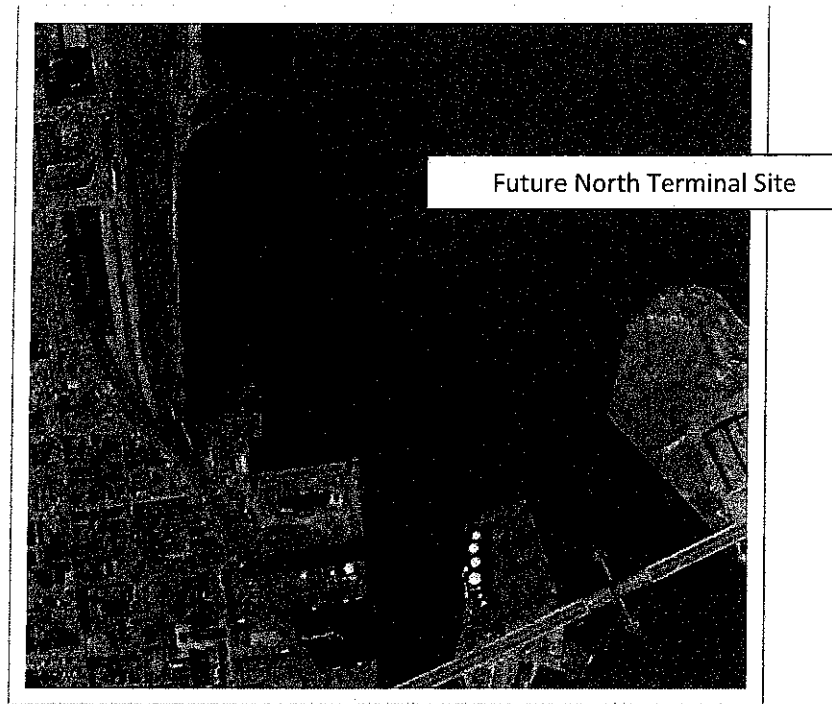


Figure 2: Aerial photograph dated 1961

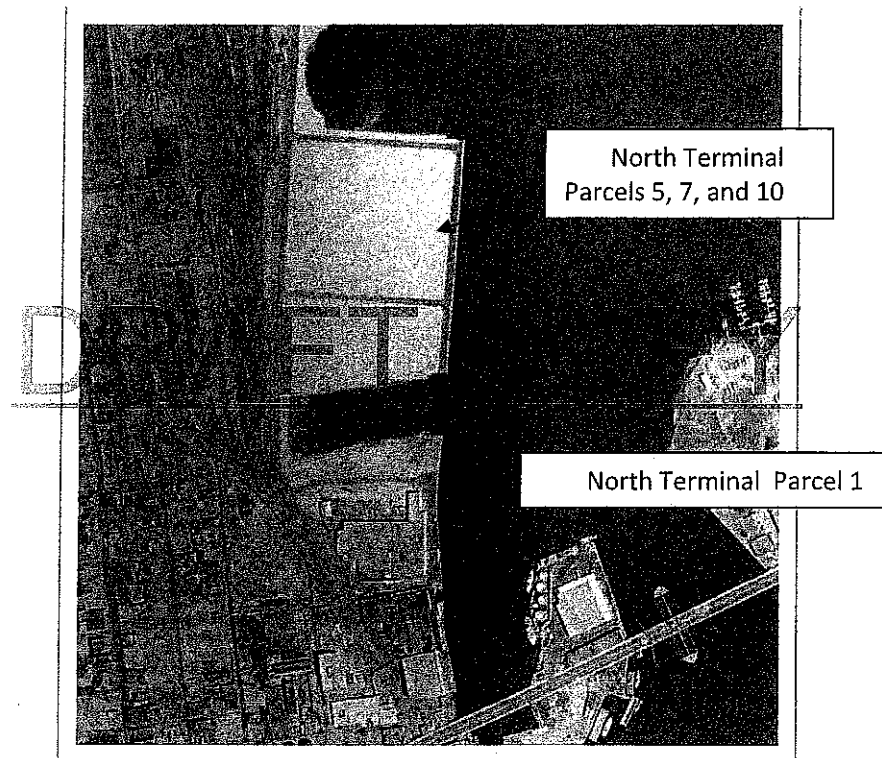


Figure 3: Aerial photograph dated 1971

2. Summary of Findings

2.1 Maritime International Terminal (Parcel 1)

2.1.1 Description of Structure

The Maritime International Terminal (Pier) is approximately 478 linear feet and is used for access to fishing vessel berths, for support of the buildings on site, and general storage. No record plans or plans indicating date of construction were located (aerials indicated pre-1971 construction date). The structure consists of a large concrete deck supported by concrete encased timber piles. The piles are driven along a grid line only along the seaward face, piles behind the face are located in an almost random arrangement. Due to the non linear arrangement of the piles and the very close spacing (only 18 to 24 inches clear space is typical), inspection of this site was not possible. The few piles inspected exhibited signs of reduced section area due to marine borer damage.



Photograph 1: Typical pile layout along fender line



Photograph 2: Typical close spacing of piles

2.1.2 Structural Assessment /Recommendations

The pier along Parcel 1 likely contains hundreds of piles supporting both the concrete cap and the terminal buildings above. These piles comprised of concrete encased timber are susceptible at or near the mudline to marine borer attack. Assuming this condition has existed for nearly 50-years an inspection focused just on this Parcel should be completed immediately.

An inspection of this site should begin with the preparation of a pile plan indicating the location (approximate) of each pile and assigning a pile designation. This designation could then be used by the dive team to reference pile condition in a format which is directly transferable to its location on the concrete deck.

Given that the concrete jackets at this site extend almost the full length of the piles it may be possible to extend the service life of the structure significantly by extending the jackets into the mudline. The efficacy of this repair cannot be determined until an inspection is completed.

Parcel 1: Short Term Recommendations 0-2 Years

- Underwater and topside structural inspection

Parcel 1: 3-5 Year Recommendations

- TBD following inspection report

2.2 Cape Cod Aggregates (Parcel 2)

2.2.1 Description of Structure

Parcel 2 is a 250 linear foot steel cellular bulkhead with a reinforced concrete cap. The bulkhead provides support for vessel berthing and for the offloading and bulk storage of sand and aggregates. The fender system consists of timber piles and a continuous timber wale which are supplemented by large diameter tires hung from the back side of the concrete cap. Photograph 3 below provides a view of the critical components.



Photograph 3: Typical bulkhead/fender construction

2.2.2 Observed Conditions

The steel sheet pile cells are of varying diameters and extend from the mud line directly into the concrete cap. The flat steel sheets which comprise the cells exhibit signs of heavy corrosion with pitting of the steel and no evidence of a previous coating. However, relatively few holes were located during the underwater inspection (two - 24 in² at Cell 3, and one 300 in² at Cell 8). Conduit located at various locations along the steel cells may indicate that an impressed current system was once installed at the site but no such system is currently in operation.

The timber fender system is in fair condition with the piles still showing evidence of their preservative treatment. The bolting hardware retains a crisp profile with minor deterioration and the bolting holes have not been expanded beyond their original size (through friction or marine borers). The tire fenders are typical for an industrial site of this type and although not an engineered solution, they appear to perform adequately as contact of the timber system with a vessel appears to be infrequent. A galvanized channel protects the concrete cap from friction damage from the tire anchor cables.

2.2.3 Structural Assessment/Recommendations

Overall the bulkhead is in *Fair* condition with no load restrictions but significant deterioration. The presence of heavy deterioration and holes in the sheet pile cells indicate that the bulkhead is approaching the end of its service life. However in the near term (beyond the next inspection interval) should the parcel's use remain as it is today, patching of the three located holes is the only structural repair which is recommended at this time. It may be possible to extend the life of the system with the installation of a cathodic protection system. An analysis of the current condition and connectivity of the structure should be performed to assess the cost/benefit.

Parcel 2: Short Term Recommendations 0-2 Years

- Cathodic protection analysis
- Design of bulkhead patching repairs

Parcel 2: 3-5 Year Recommendations

- Perform bulkhead patching repairs
- Routine inspection in 2021

2.3 North Terminal Pier (Parcels 5, 7, and 10)

2.3.1 Description of Structure

The North Terminal Pier along Parcels 5, 7, and 10 extends 1,000 linear feet from the northern end of Parcel 2. This structure is 55 feet in width and is comprised of concrete encased steel H-piles supporting cast in place concrete pile caps and precast concrete deck panels. A steel sheet pile AZ-sheet bulkhead extends along the entire length supported by steel H-pile batter piles. A timber fender system extends along the entire length.

The pier serves as an offloading area for product, vessel maintenance area, as well as to provide access for deliveries to the parcel tenants. Vehicular traffic has access to the entire site via Antonio Costa Ave and Hervey Tichon Ave. Navigational charts of the area indicate depths of 24-30 ft (MLLW) immediately along the fender line.

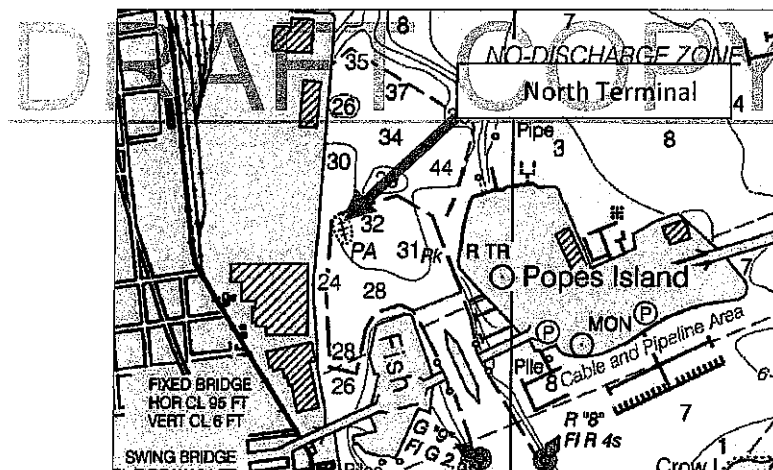
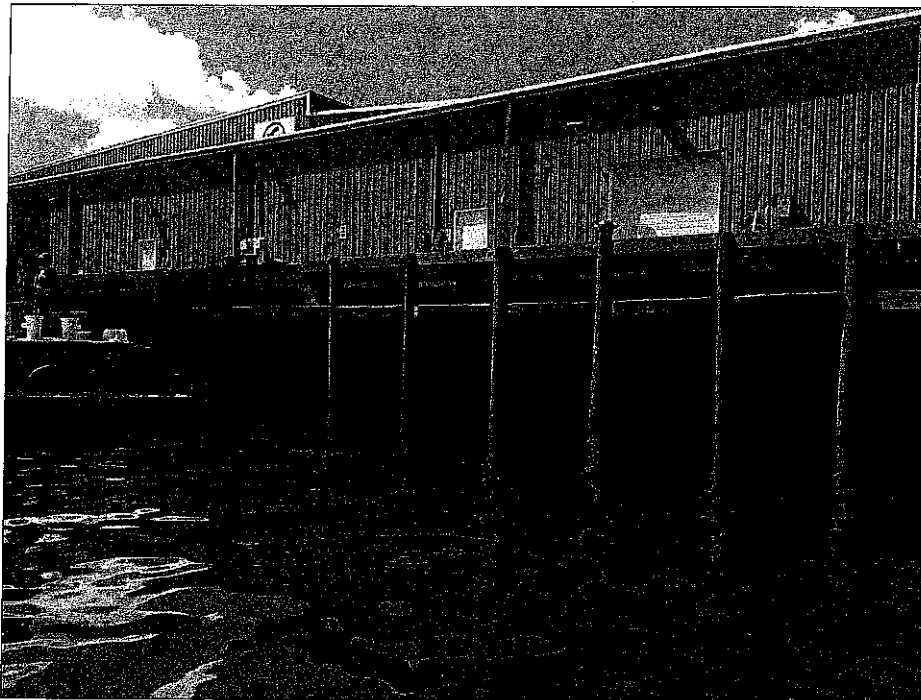


Figure 4: Navigational Chart



Photograph 4: Replaced timber fender along Seawatch parcel



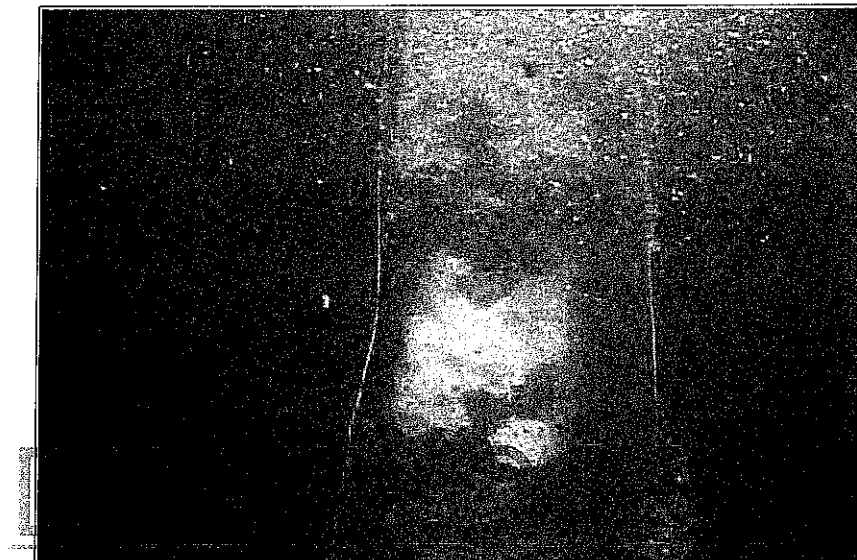
Photograph 5: Typical below deck view of pier construction/condition

2.3.2 Observed Conditions

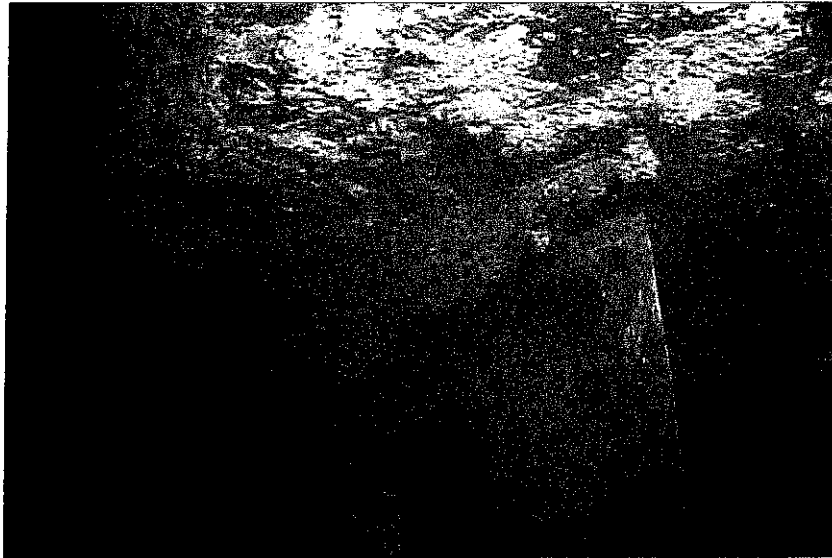
Inspection of the piles found that the concrete jackets do not extend far below Mean Low Water (MLW) leaving the H-piles exposed for 20-30ft. CLE inspected approximately 45% of the steel piles to a Level II condition by removing the growth on at least a portion of the steel faces. The flanges were found to be extremely thin as shown in Photograph 6. UTM measurements indicate that the original flanges would have been near 0.5 inches thick. Current readings found many piles under 0.2 inches in thickness; observations of the flanges appear consistent these readings throughout the site. Several piles were found to be completely failed with total loss of the flanges.

The concrete deck and pile caps have localized areas of spalling and corrosion of the steel reinforcement consistent with the age of the structure. Spalling or loss of concrete was not extensive enough to determine reinforcement diameter or spacing.

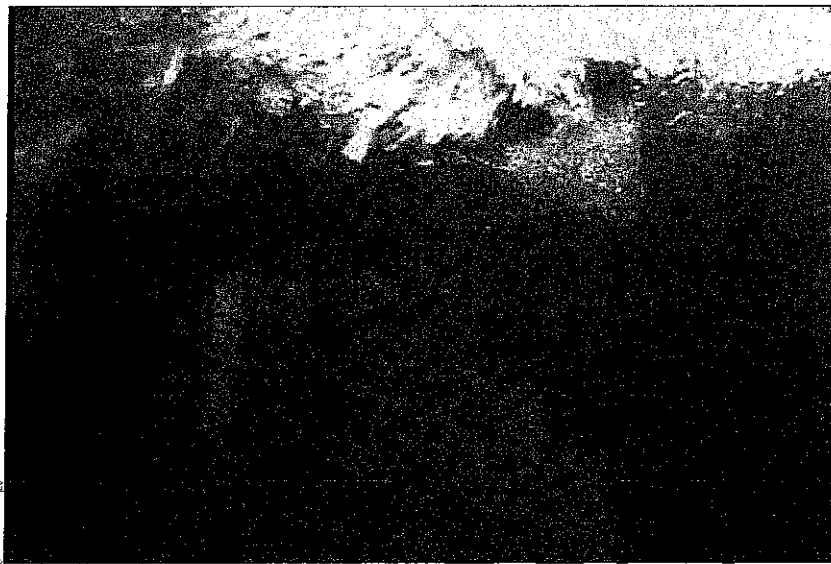
The steel bulkhead was found to be deteriorated especially at the northern end of the project site (see Photograph 11). Large holes (6 ft x 2 ft and 6 ft x 4 ft) were observed at the northern end of Parcel 10. Evidence of a tie back anchor system were found intermittently along the entire length (see Photograph 12). It is not clear if these anchor systems are original or were retrofitted at a later date.



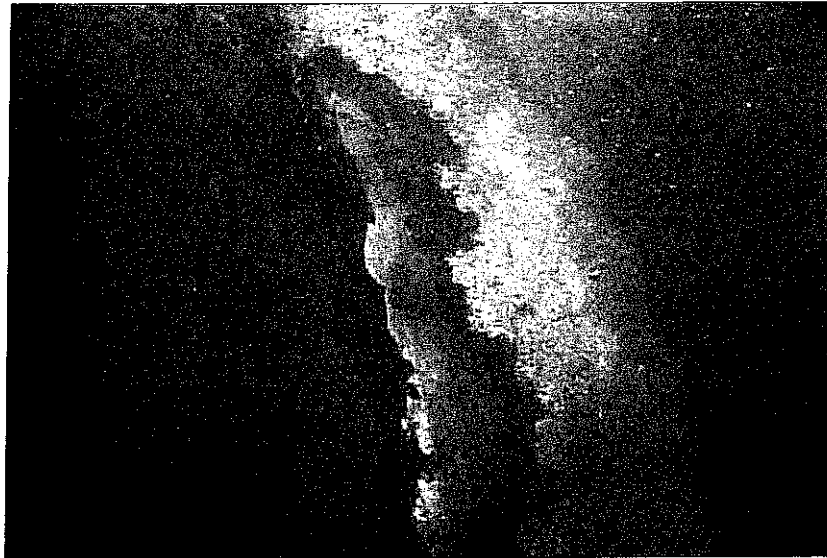
Photograph 6: Pile 18.3.2 (typical)



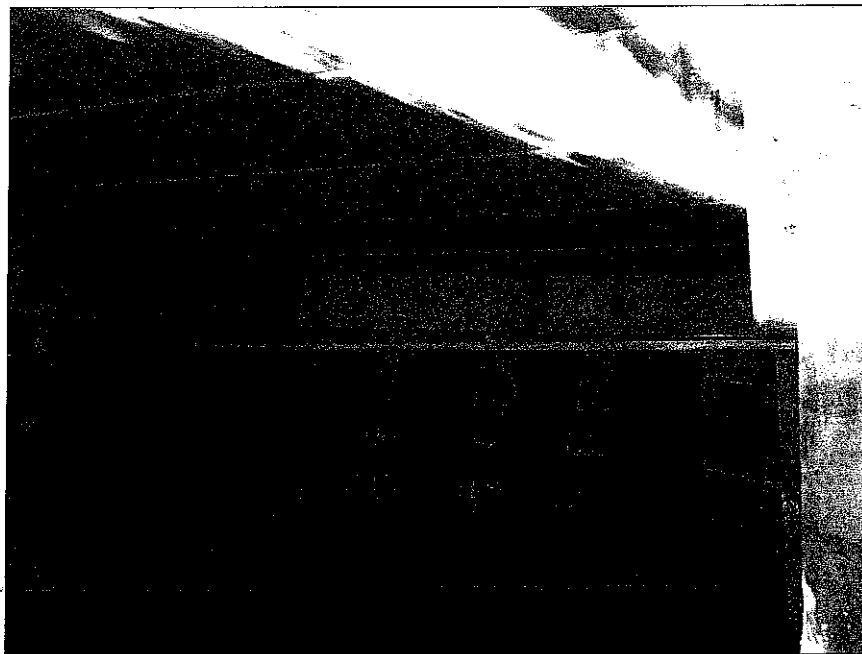
Photograph 7: Bent 16 Pile C2 - Bottom of concrete jacket visible



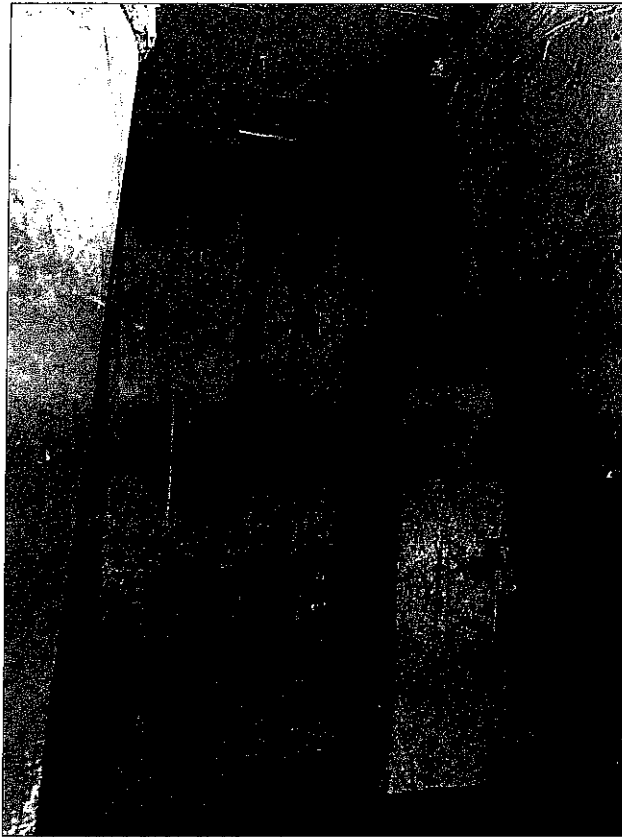
Photograph 8: Bent 15 Pile C2 - complete loss of flanges



Photograph 9: Bent 16 Pile 16.3 2 - flange edge



Photograph 10: Typical batter pile construction against bulkhead



Photograph 11: Typical Sheet Pile Condition



Photograph 12: Tieback bolts through bulkhead

Table 1.1 – Underwater Readings

Pile Location	Elevation	UT East Flange	UT Web	UT West Flange
1-A	Mud	0.425	0.425	0.420
	Mid	0.330	0.460	0.355
	MLW	0.305	0.395	0.335
10-A	Mud	0.370	0.435	0.135
	Mid	0.320	0.200	0.355
	MLW	0.410	0.435	0.380
13-A	Mud			
	Mid			
	MLW	0.435	0.435	0.435
13-C	Mud			
	Mid			
	MLW	0.25	0.230	0.130
36.4	Mud	0.245	0.325	0.120
	Mid	0.215	0.180	0.135
	MLW	0.140	0.280	0.210
Bent 4	Mud	0.295	0.255	0.290
	Mid	0.300	0.295	0.280
	MLW	0.300	0.215	0.245
Bent 27	Mud	0.280	0.285	0.275
	Mid	0.270	0.275	0.290
	MLW	0.325	0.265	0.245

Figure 5: Ultrasonic Thickness Measurements

2.3.3 Structural Assessment/Recommendations

CLE performed structural calculations using estimates of original pile thicknesses and lengths to determine the approximate capacity of the structure at the time of construction. As shown in Attachment B it is estimated that the pier began its service life with an approximately 400 psf deck load capacity. Given that some piles were observed to be completely deteriorated and most were found to have only 50% or less of their original section remaining, the structure is considered to be in *Poor* condition. In its current condition the allowable loading must be significantly reduced from the original 400 psf. Based on a structural analysis of the piles, all piles which are below 0.217 inches in web/flange thickness have an allowable capacity less than 100 psf. Piles with thickness less than 0.153 may fail due to overstressing and have no remaining live load capacity. The pile condition plan provided in Attachment A indicates that the vast majority of the piles in which the marine growth was removed were found to be in severe condition with significant section loss. Those piles not assigned a color were not cleaned of marine growth, and can be assumed to be of similar condition to those which were cleaned. Until further inspections can be conducted, the capacity of the pier must be limited to 100 psf.

It is recommended that an inspection of 100% of the plumb piles be performed as soon as possible to determine if areas of pier may have additional or less capacity than 100 psf.

The large holes in the bulkhead at the northern end of the project site are permitting loss of fill through the bulkhead possibly undermining the area immediately landward of the pier. Continued loss of fill presents the possibility of a collapse due to loading by vehicles, product, etc.

New Bedford HDC North Terminal Pile Capacity Summary

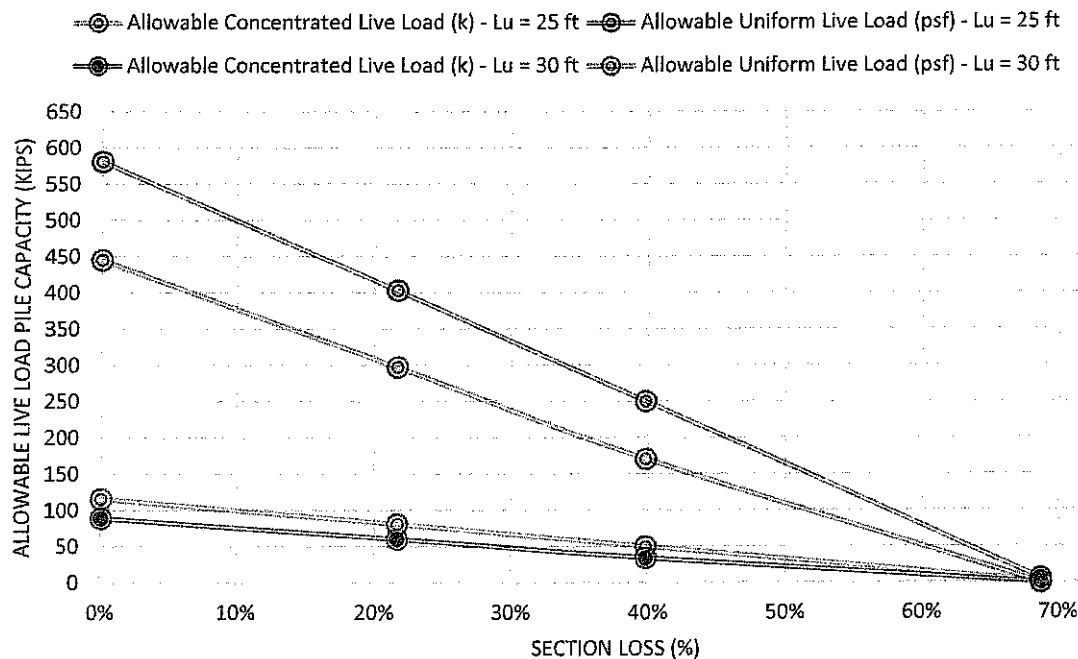


Figure 6: Section loss vs. Allowable Live Load

Parcel 5, 7, and 10: Short Term Recommendations 0-2 Years

- (Immediately) Limit pier capacity to 100 psf
- Perform underwater inspection/cleaning 100% of the piles to determine section loss
- Prepare allowable deck loading diagram
- Design pile repairs/repair completely failed piles

Parcel 5, 7, and 10: 3-5 Year Recommendations

- TBD following 100% pile inspection

3. Cost Estimates

Table 1 below provides a cost summary of the short term recommendations which are known at this time. Following the additional inspections of Parcels 1, 5, 7, and 10 actual repair costs will be to be added to these.

Table 1 - Short Term Recommendation Cost Estimates

Short Term Recommendations 0-2 Years	Estimated Cost
<u>Parcel 1</u>	
Full Inspection UW/Topside	\$60,000
<u>Parcel 2</u>	
Cathodic Protection Analysis	\$10,000
Design of Patching Repairs	\$5,000
<u>Parcels 5, 7, and 10</u>	
100% Underwater Inspection (axial piles)	\$50,000
Structural Analysis of Deck Loading	\$8,000
Design Pile Repairs	\$10,000
Subtotal	\$143,000

DRAFT COPY

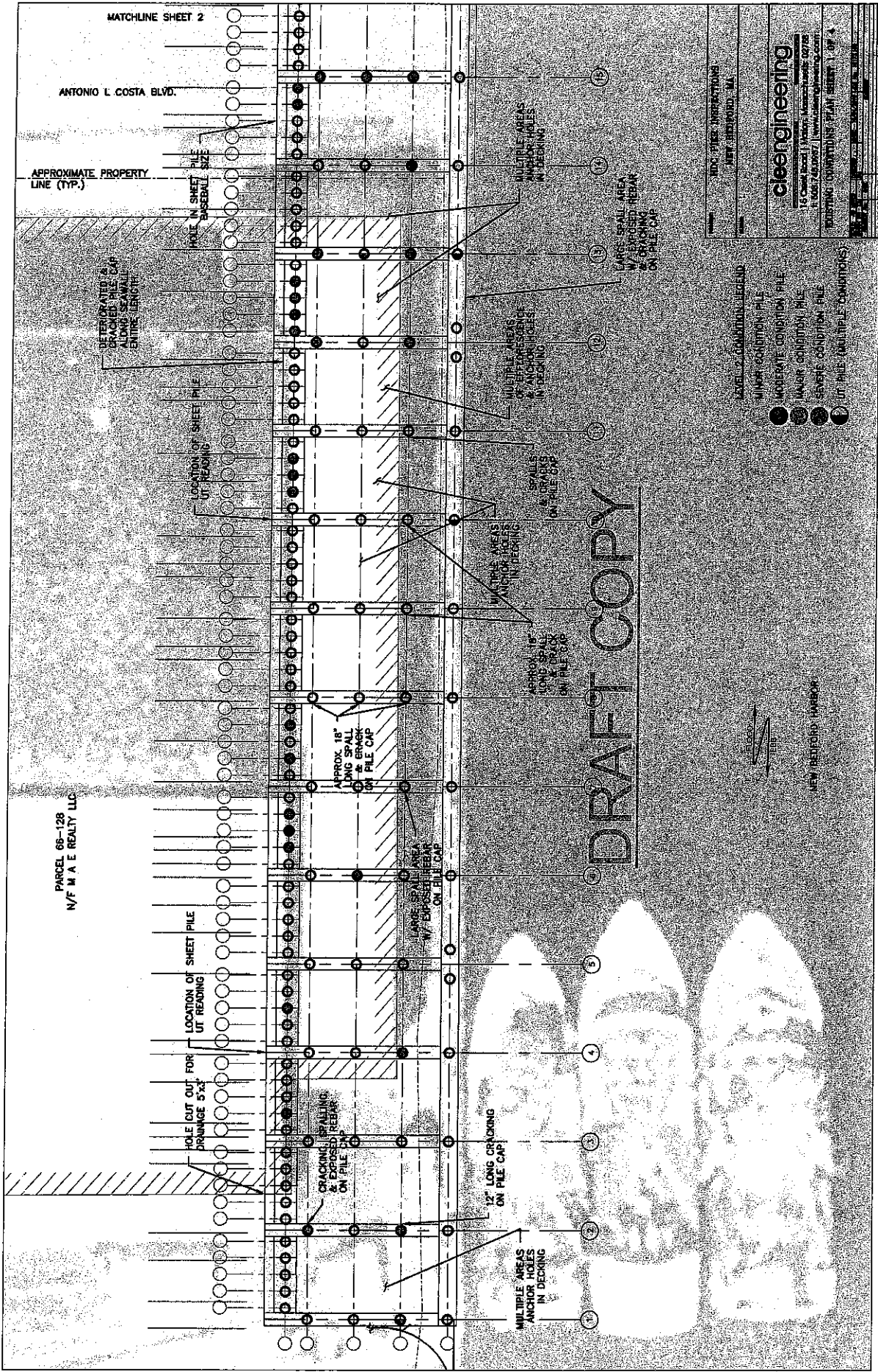
Attachment A – Inspection Plans

DRAFT COPY

Attachment B - Capacity Calculations

DRAFT

DRAFT COPY



DRAFT COPY

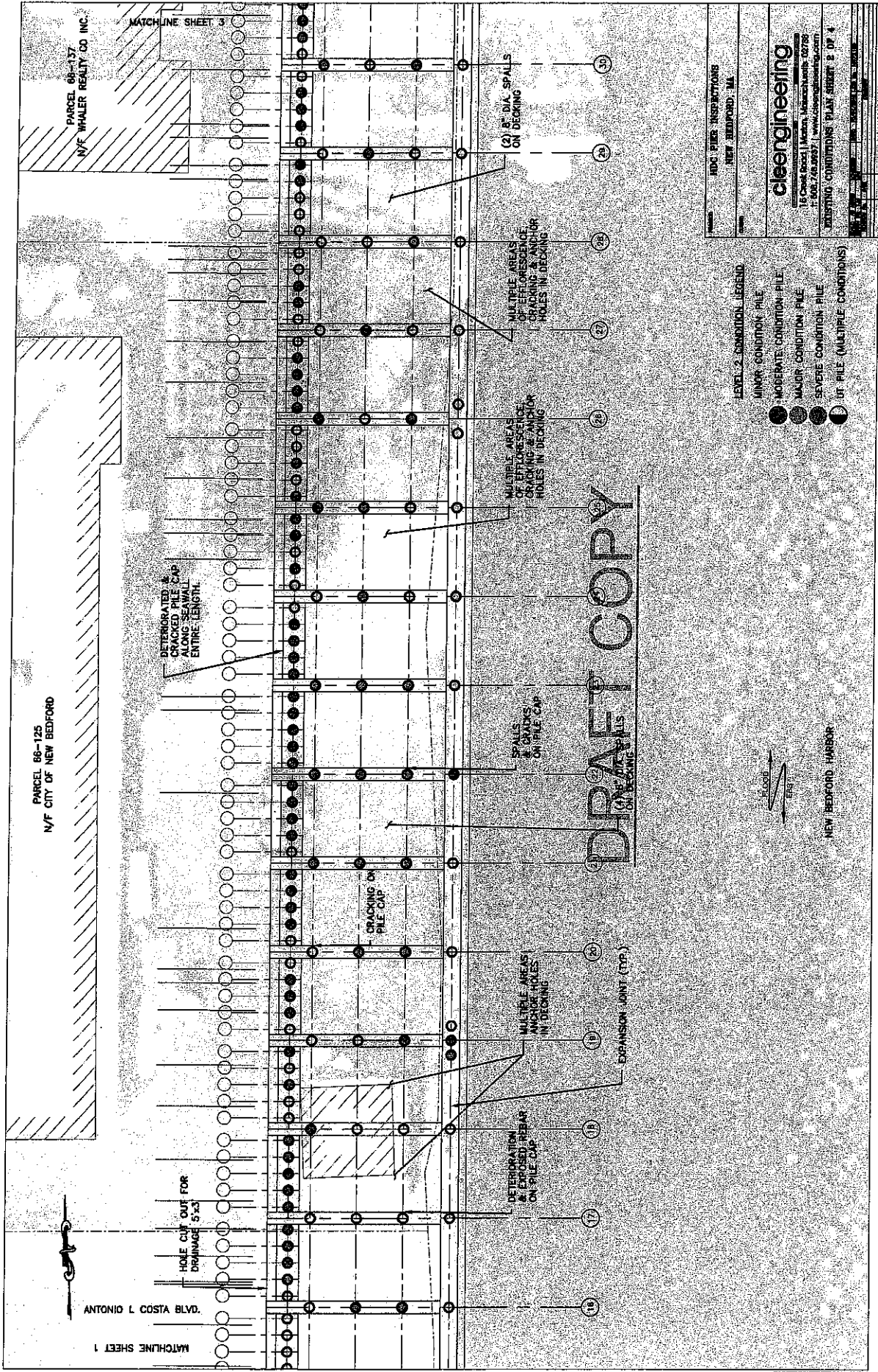
IND. PILES INFORMATION
NEW BEDFORD, MA

cleengineering
15 Canal Street, 1st Floor, New Bedford, MA 01908
Tel: 508.451.1007 / Fax: 508.451.1008
www.cleengineering.com

EXISTING CONDITIONS PLAN SHEET 1 OF 4

- LEVEL 2 CONDITION LEGEND
- MINOR CONDITION PILE
 - MODERATE CONDITION PILE
 - MAJOR CONDITION PILE
 - SEVERE CONDITION PILE
 - UT PILE (MULTIPLE CONDITIONS)

NEW BEDFORD HARBOUR



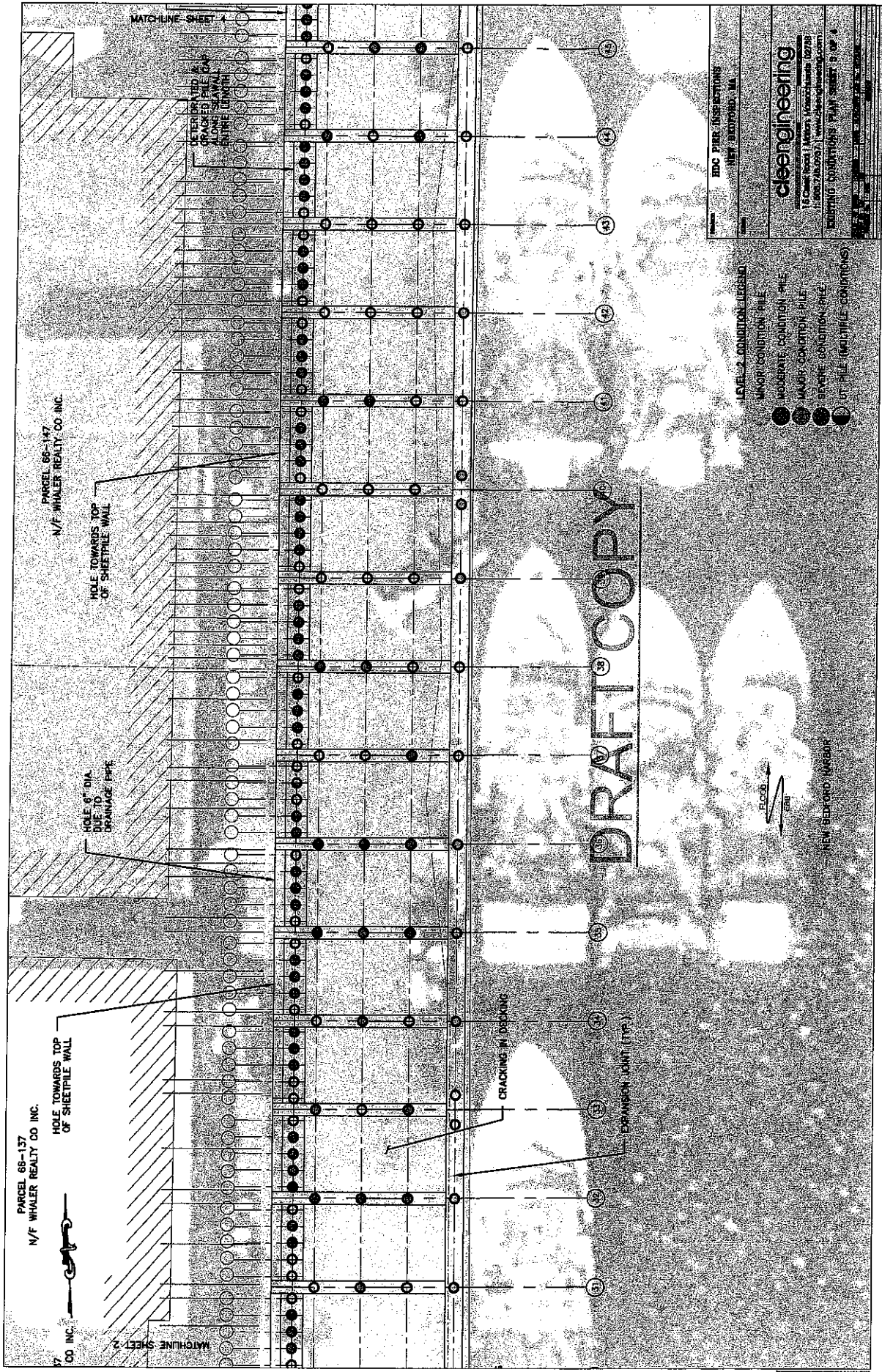
HDC PIER INSPECTIONS
 NEW BEDFORD, MA
cleengineering
 15 CHASE STREET | NEW BEDFORD, MA 01909
 T: 508.748.9937 | www.cleengineering.com
 EXISTING CONDITIONS PLAN SHEET 2 OF 4

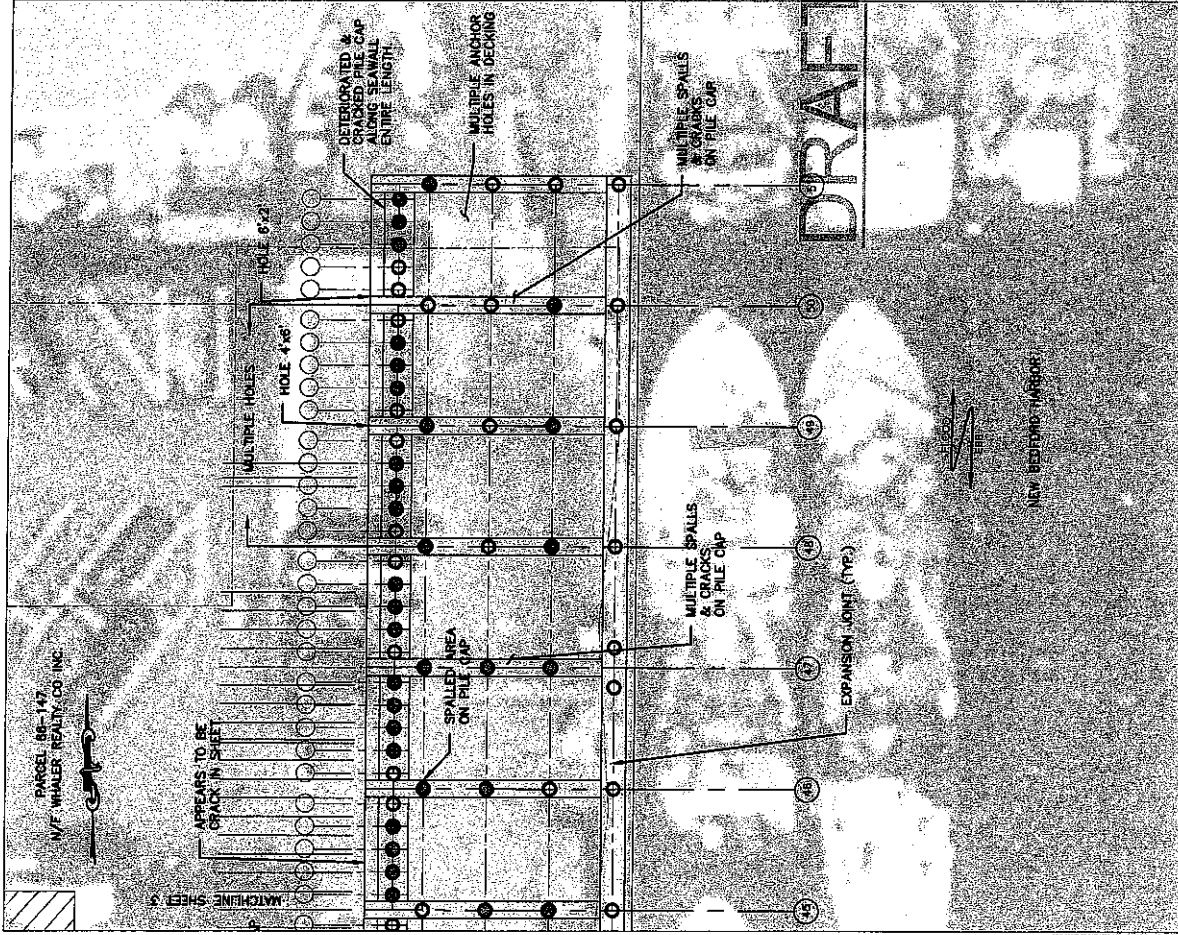
- LEVEL 2 CONDITION LEGEND**
- MINOR CONDITION PILE
 - MODERATE CONDITION PILE
 - MAJOR CONDITION PILE
 - SEVERE CONDITION PILE
 - UT PILE (MULTIPLE CONDITIONS)



NEW BEDFORD HARBOR

DRAFT COPY





DRAFT COPY

- LEVEL 2 CONDITION LEGEND**
- MINOR CONDITION PILE
 - MODERATE CONDITION PILE
 - MAJOR CONDITION PILE
 - SEVERE CONDITION PILE
 - UT PILE (MULTIPLE CONDITIONS)

HDC PIER INSPECTIONS NEW BEDFORD, MA	
cleengineering 16 Coastal Road Boston, Massachusetts 02134 t: 603.748.0932 www.cleengineering.com	
EXISTING CONDITIONS PLAN SHEET 4 OF 4	

Attachment C - Inspection Notes

DRAFT
DRAFT COPY



15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | 800.668.3220 | f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 1:

- **Lu = 25feet**
- **Flange Thickness = 0.325 in (21.6% Section Loss)**
- **Uniform Section Loss Assumed to Webs and Flanges
Based on Flange Section Loss**
- **Based on a Steel Yield Strength of 36 ksi**

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 21.6\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.325 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \cdot \text{in} \cdot (1 - SL) = 0.329 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 9.049 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 9.766 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 38.552 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 169.501 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.166 \text{ in}$

DRAFT COPY

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 25 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ **REF. AISC TABLE C-A-7.1**

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 86.413$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ **REF. AISC E3-1**

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 38.33 \text{ ksi}$ **REF. AISC E3-4**

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 24.3 \text{ ksi}$ **REF. AISC E3-2**

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 214 \text{ kip}$ **REF. AISC E3-1**

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 81 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 404 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 2:

- **Lu = 25 feet**
- **Flange/Web Thickness = 0.250in (39.8% Section Loss)**
- **Uniform Section Loss Assumed to Webs and Flanges**
- **Based on a Steel Yield Strength of 36 ksi**

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss $SL := 39.8\%$

Top / Bottom Flange Width $b_f := 10.1 \text{ in}$

Top / Bottom Flange Thickness $t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.25 \text{ in}$

Web Depth $d := 9.70 \text{ in}$

Web Thickness $t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.253 \text{ in}$

Distance Between Flanges $d_1 := d - 2 \cdot t_f = 9.2 \text{ in}$

Gross Area $A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 7.499 \text{ in}^2$

Plastic Major Axis Section Modulus $Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 29.793 \text{ in}^3$

Moment of Inertia $I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 131.928 \text{ in}^4$

Radius of Gyration

$$r_x := \sqrt{\frac{I_x}{A_g}} = 4.194 \text{ in}$$

DRAFT COPY

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 25 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 85.83$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 38.85 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 24.43 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 165 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 50 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 251 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY



15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | 800.668.3220 | f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 3:

- **Lu = 25 feet**
- **Flange/Web Thickness = 0.130 in (68.7% Section Loss)**
- **Uniform Section Loss Assumed to Webs and Flanges**
- **Based on a Steel Yield Strength of 36 ksi**

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 68.7\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.13 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.131 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 9.44 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 3.899 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 15.648 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 70.08 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.24 \text{ in}$

DRAFT COPY

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 25 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 84.915$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 39.69 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 24.63 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 86 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 1 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 6 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY



15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | 800.668.3220 | f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 1:

- **Lu = 30 feet**
- **Flange Thickness = 0.325 in (21.6% Section Loss)**
- **Uniform Section Loss Assumed to Webs and Flanges
Based on Flange Section Loss**
- **Based on a Steel Yield Strength of 36 ksi**

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 21.6\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.325 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.329 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 9.049 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 9.766 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 38.552 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 169.501 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.166 \text{ in}$

DRAFT COPY

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 30 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DLF} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 103.696$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 26.62 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 20.44 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 180 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 60 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 298 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 2:

- **Lu = 30 feet**
- **Flange/Web Thickness = 0.250in (39.8% Section Loss)**
- **Uniform Section Loss Assumed to Webs and Flanges**
- **Based on a Steel Yield Strength of 36 ksi**

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 39.8\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.25 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \cdot \text{in} \cdot (1 - SL) = 0.253 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 9.2 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 7.499 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 29.793 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 131.928 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.194 \text{ in}$

DRAFT COPY

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 30 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 102.996$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 26.98 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 20.6 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 139 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 34 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 171 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY



15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | 800.668.3220 | f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 3:

- **Lu = 30 feet**
- **Flange/Web Thickness = 0.130 in (68.7% Section Loss)**
- **Uniform Section Loss Assumed to Webs and Flanges**
- **Based on a Steel Yield Strength of 36 ksi**

DRAFT COPY

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 68.7\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.13 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.131 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 9.44 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 3.899 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 15.648 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 70.08 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.24 \text{ in}$

DRAFT COPY

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 30 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DD} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 101.898$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 27.57 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 20.84 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 73 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = -7 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = -35 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY



15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | 800.668.3220 | f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 1:

- **Lu = 25 feet**
- **Full Section**
- **Based on a Steel Yield Strength of 36 ksi**

DRAFT COPY

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 0\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.415 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.42 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 8.87 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 12.457 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 48.798 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 212.741 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.133 \text{ in}$

DRAFT COPY

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 25 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ **REF. AISC TABLE C-A-7.1**

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 87.113$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ **REF. AISC E3-1**

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 37.72 \text{ ksi}$ **REF. AISC E3-4**

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 24.14 \text{ ksi}$ **REF. AISC E3-2**

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 271 \text{ kip}$ **REF. AISC E3-1**

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 116 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 582 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY



15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | 800.668.3220 | f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 1:

- **Lu = 30 feet**
- **Full Section**
- **Based on a Steel Yield Strength of 36 ksi**

DRAFT COPY

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss $SL := 0\%$

Top / Bottom Flange Width $b_f := 10.1 \text{ in}$

Top / Bottom Flange Thickness $t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.415 \text{ in}$

Web Depth $d := 9.70 \text{ in}$

Web Thickness $t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.42 \text{ in}$

Distance Between Flanges $d_1 := d - 2 \cdot t_f = 8.87 \text{ in}$

Gross Area $A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 12.457 \text{ in}^2$

Plastic Major Axis Section Modulus $Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 48.798 \text{ in}^3$

Moment of Inertia $I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 212.741 \text{ in}^4$

Radius of Gyration

$$r_x := \sqrt{\frac{I_x}{A_g}} = 4.133 \text{ in}$$

DRAFT COPY

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 30 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 104.536$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 26.19 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 20.25 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 227 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 89 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 446 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY

MEMORANDUM

TO:	Ronnie Enoksen, Nordic Fisheries Roy Enoksen, Nordic Fisheries Peter Anthony, Nordic Fisheries Michael Livingstone, Nordic Fisheries	DATE:	August 30, 2017 Updated November 8, 2017
		CLE#	16032.100
		RE:	14 Hervey Tichon Ave. and 22 Antonio Costa Ave.
FROM:	Susan Nilson, P.E. Scott Skuncik, P.E	SUBJ.:	Bulkhead Condition Assessment and Proposed Remedial Actions

Ref:

- o North Terminal Report of Findings – Prepared by CLE Engineering, dated December 2016
- o Excerpts from plans prepared by Tibbetts Engineering, “North Terminal Bulkhead Project”, dated December 1, 1970

SUMMARY:

CLE is providing this memorandum to summarize CLE’s assessment and recommendations for the bulkhead at the subject properties. CLE initially inspected the piles, bulkhead, and concrete pile caps/deck at the subject properties as part of a below deck assessment performed for the New Bedford Harbor Development Commission (HDC).

Following the issuance of the North Terminal report, CLE was informed by Nordic Fisheries (Nordic) of cracking in the asphalt pavement outside of the concrete pier deck limits. The cracking extended parallel to the berth over long portions of the parcels. CLE monitored the cracking limits and observed noticeable increases to crack widths between March 3, 2017 to April 7, 2017.

Exploratory landside excavation performed by Nordic revealed a rotated concrete cap (rotated towards shore). CLE requested and received original construction plans for the site from the HDC which confirmed that there was never a physical connection between the steel bulkhead and the concrete caps other than direct bearing.

CLE performed an additional below deck inspection and found that portions of the tops of the steel bulkhead have shifted below the concrete cap as it continues to deteriorate. This shift is slight ($1 - 1\frac{1}{2}''$ +/-); however, once a sheet pile has moved beneath the cap it is completely unsupported. This condition was observed at locations along both Nordic lease parcels, the SeaWatch lease parcel, and at the terminus of both Hervey Tichon and Antonio Costa Avenues. As the deterioration continues, catastrophic failure of the bulkhead is possible. This failure will occur when a significant area of the sheets continues to slip below the concrete cap which would allow for shifting of the backfill and may lead to building collapse.

CLE has been contracted by Nordic to prepare a replacement bulkhead design for each of their leased parcels. These preliminary designs are included as attachments to this memo.

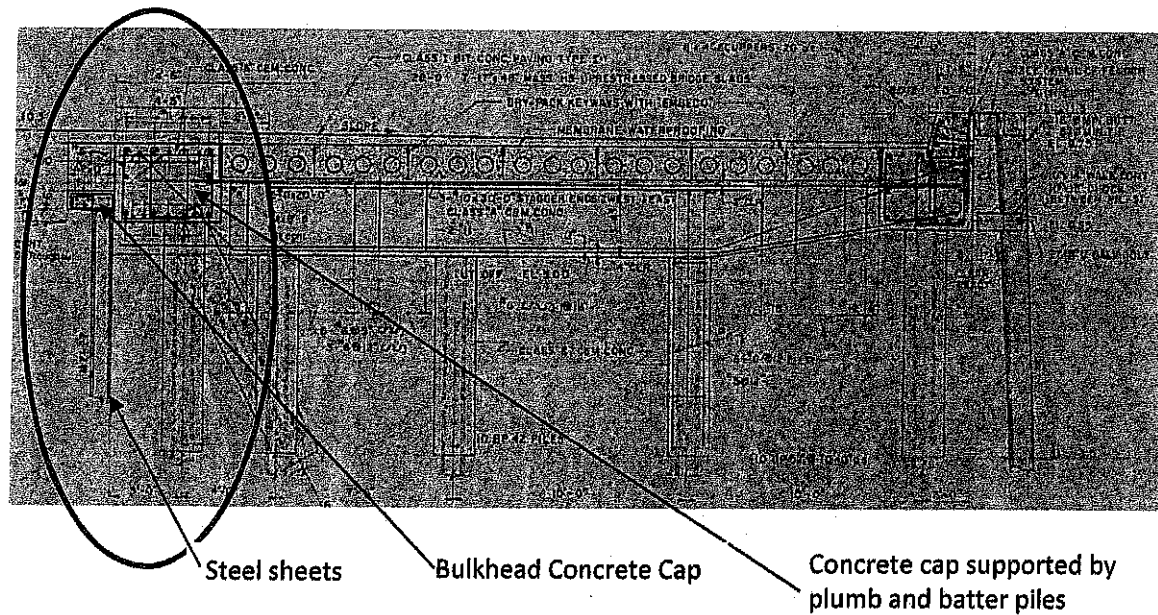


Figure 1: Typical Cross Section from 1970 Tibbets Engineering Plan

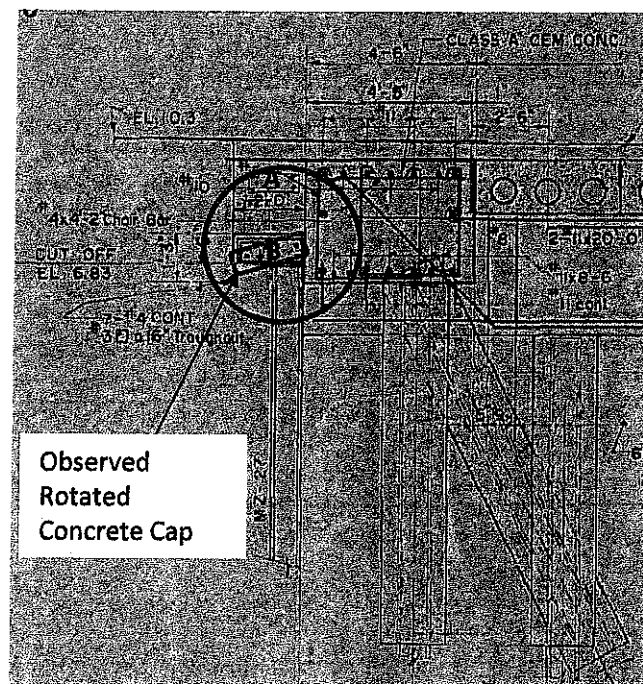


Figure 2: Typical Cross Section from 1970 Tibbets Engineering Plan with Observed Rotated Cap Condition



Photograph 1: Landside excavation of bulkhead concrete caps.

Note: A and B correspond to concrete depicted in Figure 2



Photograph 2: Steel sheet piles slipping below the batter pile supported concrete cap

Note: In the original design, 3 to 4 inches at the top of steel sheet pile would have been in direct contact with the back of the battered concrete cap.

Recommendations:

The existing bulkhead at both parcels has deteriorated to the point where it can no longer be repaired. CLE considered several alternatives to address both the deteriorated pile conditions¹, as well as the bulkhead. Alternatives included cellular cofferdams, anchored bulkhead system at seaward face of pier, and rock socketed king pile wall system with solid fill. Considerations for any repairs include site conditions (ex. structures, dredge depth, rock elevations, etc.), constructability, impact to Nordic's operations, capital and maintenance costs, and feasibility of obtaining required permits. A summary of the evaluation of conceptual designs is provided below:

Table 1: Alternatives Analysis of Conceptual Designs

Remedial Design Alternative	14 Hervey Tichon	22 Antonio Costa
1. Complete demolition and replacement of pier and support piles	Without removal of existing building, tie back options are limited to grouted tendon rock anchors as there is insufficient width for a tie back / deadman system	Not practical; would require removal of existing building with major impact on business operations
a. Replace with cellular cofferdams	Available area has insufficient width to install cellular cofferdams	Available area has insufficient width to install cellular cofferdams
b. Stone Revetment	Existing stone revetment doesn't prevent failure of sheeting; additional stone will not stabilize top of sheeting	Existing stone revetment doesn't prevent failure of sheeting; additional stone will not stabilize top of sheeting
2. Repair only sections of bulkhead where top of sheet has slipped below the cap;	Areas of failed sheets are dispersed throughout the length of the property; it is not practicable to replace isolated areas as failure is likely imminent of adjacent areas. Access is limited and transitions between repairs is not feasible with condition of remaining sheeting.	Areas of failed sheets are dispersed throughout the length of the property; it is not practicable to replace isolated areas as failure is likely imminent of adjacent areas. Access is limited and transitions between repairs is not feasible with condition of remaining sheeting.
3. Existing sheeting to remain; undersheeting with grouted tendon rock anchors and solid fill. Pile jackets to restore load capacity of deck.	Preferred alternative; site constraints allow for construction; relatively simple regulatory process and lowest cost alternative	Not practicable to install new sheeting within existing building without major impact on business operations. Associated costs for building removal and reconstruction result in higher total costs compared to other options.

¹ Reference "North Terminal Report of Findings – Prepared by CLE Engineering, dated December 2016"

Remedial Design Alternative	14 Hervey Tichon	22 Antonio Costa
4. Existing sheeting to remain; oversheeting as close as practicable with grouted tendon rock anchors and solid fill. Pile jackets to restore load capacity of deck.	Higher costs than undersheeting as requires cutting of existing batter piles and removal and replacement of deck sections.	Not practicable to install new sheeting within existing building without major impact on business operations. Associated costs for building removal and reconstruction result in higher total costs compared to other options.
5. Existing sheeting to remain; oversheeting between pile rows A and B (outside all buildings), with grouted tendon rock anchors and solid fill. Pile jackets to restore load capacity of deck.	Higher costs than undersheeting as requires cutting of existing batter piles, removal and replacement of deck sections, may require socketed piles for sheeting system, and a significant amount of additional fill materials.	Preferred alternative; site constraints allow for construction; however, it is a complex regulatory process for amount of solid fill required.

14 Hervey Tichon – Undersheeting Repair and Pile Jackets: CLE's initial evaluation of alternatives found that a pile jacket system and an undersheeting bulkhead replacement at 14 Hervey Tichon is the preferable option based on costs and available access to the area. There is sufficient space between the existing building structures and the existing steel sheeting to drive new steel sheeting landward of the existing sheeting at Nordic's northern parcel (14 Hervey Tichon). The new structure would be anchored by a new concrete cap and a rock/soil anchor. The existing sheeting would remain in place but would no longer be a structural component. The plumb piles would be jacketed with a fiberglass shell filled with steel reinforced concrete. Required regulatory approvals are anticipated to include the following:

Table 2: Regulatory Approvals for 14 Hervey Tichon: Undersheeting and Pile Jackets

Permit	Issuing Agency
Order of Conditions	Conservation Commission
Minor Modification	DEP Waterways
Self-Verification	USACE

22 Antonio Costa Ave. - Oversheeting Repair and Pile Jackets: At the southern leased parcel, 22 Antonio Costa Ave., the existing building structures are located directly over the steel sheeting. Therefore, it is not possible to drive sheeting landward of the existing sheets as proposed for 14 Hervey Tichon. CLE evaluated several remedial options for this bulkhead.

Option 1 includes steel sheeting seaward of the existing sheets just outboard of the pile cap, which is within the existing building. Grouted tendon rock anchors would extend from the new pile cap at a 45 degree angle to underlying rock below the building. The existing sheeting would remain in place but would no longer be a structural component; fill would be placed between the existing and new sheets. The plumb piles would be jacketed with a fiberglass shell filled with steel reinforced concrete. Costs associated with this option are detailed in Exhibit D; however, it is not considered a practicable option as it would require the removal of a portion of the building which would have significant impacts to business operations and associated costs, which are not included in the cost estimate.

The portion of the building that would require removal to gain construction access is the hallway to the controlled environment rooms. The subject facility is run in accordance with strict FDA food safety standards. It is an FDA approved food facility and must pass strict BRC Food audits for the food production to be allowed to continue. There are well over 100 people presently working in this structure. The business is processing of fresh scallops on a daily, full time basis. Because this is a consumer food product, the highest degree of operational standards must be maintained at all times to avoid contamination of this food product sold nationally and internationally.

Table 3: Regulatory Approvals for 22 Antonio Costa: Oversheeting within Building and Pile Jackets

Permit	Issuing Agency
Certificate from Secretary on Environmental Notification Form (assumes Environmental Impact Report is not required)	Executive Office of Energy and Environmental Affairs
Order of Conditions	Conservation Commission
Chapter 91 License	DEP Waterways
Preconstruction Notification	USACE
401 Water Quality Certification	DEP – 401 Water Quality Certificate
Individual Consistency Statement	Coastal Zone Management

Option 2 includes steel structure seaward of the existing buildings, between existing pile rows A and B. This would be a Socketed Pipe and Sheetpile Kingpile Wall section in consideration of the relatively high bedrock (-43' mlw), which is approximately 10' below the documented dredge limit (-33' mlw). The structure would be anchored with grouted tendon rock anchors that would go from the new pile cap at an angle thru precut holes in the sheeting to underlying rock below the building. The existing sheeting would remain in place but would no longer be a structural component; fill would be placed between the existing and new sheets. This fill may be a combination of flowable fill and granular materials; however, placement will be challenging, especially under the building. Because the fill cannot be relied on as support for the deck, the plumb piles would remain as the structural support and each pile will be jacketed with a fiberglass shell filled with steel reinforced concrete.

Table 4: Regulatory Approvals for 22 Antonio Costa: Oversheeting Seaward of Building and Pile Jackets

Permit	Issuing Agency
Certificate from Secretary on Environmental Notification Form (assumes Environmental Impact Report is not required)	Executive Office of Energy and Environmental Affairs
Order of Conditions	Conservation Commission
Chapter 91 License	DEP Waterways
Preconstruction Notification	USACE
401 Water Quality Certification	DEP – 401 Water Quality Certificate
Individual Consistency Statement	Coastal Zone Management

Cost Estimates

CLE developed cost estimates for each of the above repair conceptual plan options, which are included in Exhibit D. Unit pricing for these estimates is based on contractor pricing as well as CLE's database of contractor bids for similar items. Cost information may vary based on final design and contractor bids.

Table 5: Summary of Cost Estimates

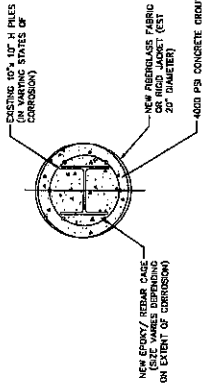
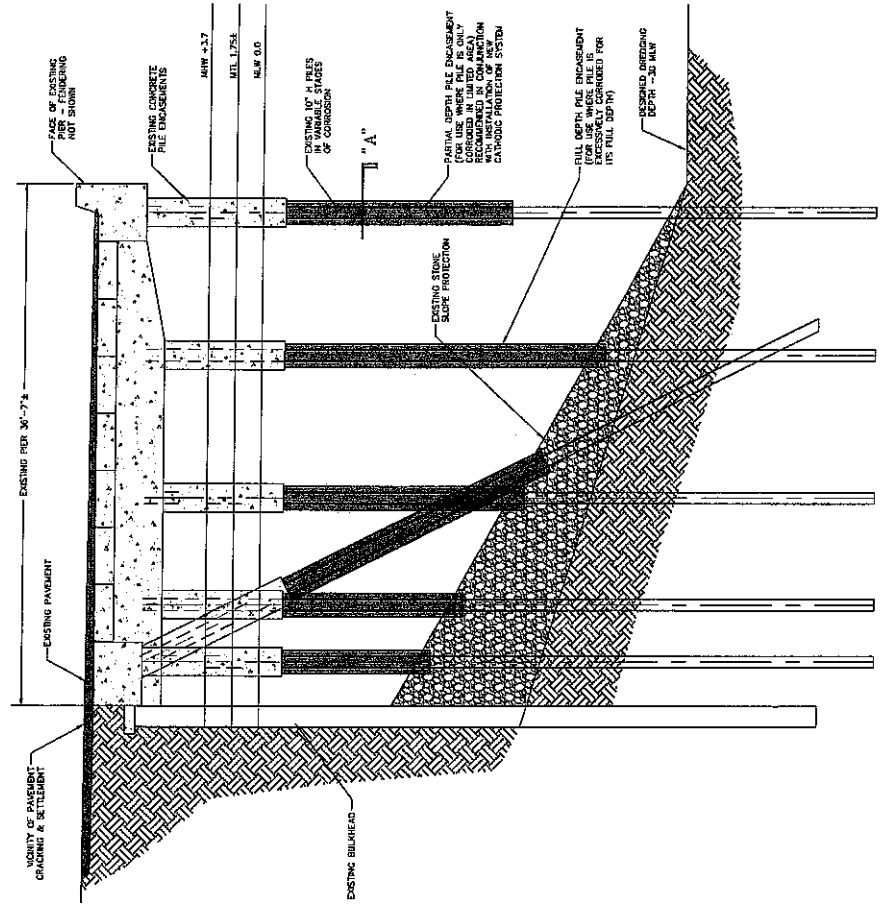
Location	Total Cost Estimate	Cost Estimate without Pile Jackets
14 Hervey Tichon	\$5.6 Million	\$3.8 Million
22 Antonio Costa	\$7.6 Million	\$6.3 Million



Memorandum: 14 Hervey Tichon Ave. and 22 Antonio Costa Ave
Bulkhead Condition Assessment and Proposed Remedial Actions
August 30, 2017 *Updated November 8, 2017*

Exhibit A:
14 Hervey Tichon Ave.
Undersheeting Repair with Pile Jackets

DRAFT
NOT TO BE USED FOR CONSTRUCTION



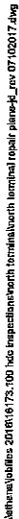
SECTION "A" - TYPICAL PILE REPAIR
SCALE 1" = 1'-0"

TYPICAL PILE SECTION TO BE REPAIRED/JACKETED
SCALE 1/4" = 1'-0"

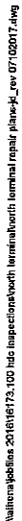
NOTE: PILE JACKETS TO EXTEND BELOW MUDLINE; ASSUMED TO BE WITHIN RIP RAP.
PARTIAL DEPTH ONLY ALLOWED IN PILE LOCATIONS OF LIMITED CORROSION.

- NOTES:
1. REINFORCEMENT SHALL BE NO. 8 EPOXY COATED GR60 WITH NO. 3 TIES.
 2. NO MORE THAN TWO PILES CAN BE REPAIRED PER BAY AT THE SAME TIME. PILES CANNOT BE ADJACENT TO EACH OTHER.

PROJECT	NORTH TERMINAL REPAIRS NEW BEDFORD, MA
CLIENT	EASTERN FISHERIES 141 NEWTON AVENUE NEW BEDFORD, MA 02740
DESIGNED BY	cleangineering 16 Court Road Natick, Massachusetts 02738 t: 508.748.0937 www.cleangineering.com
CHECKED BY	
DATE	
SCALE	
SHEET	SHEET 1 OF 1



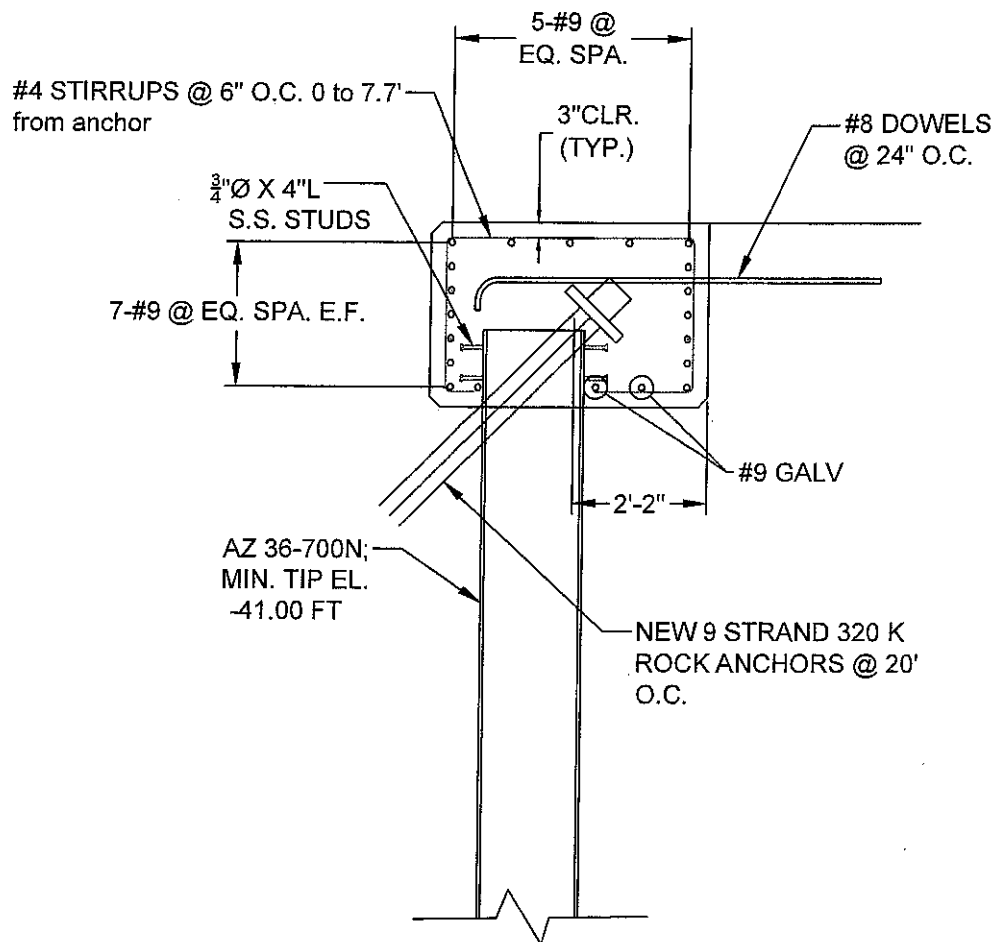
15 Creek Road | Marlon, Massachusetts 02738
t: 508.748.0937 | www.cleengineering.com



GRAPHIC SCALE



t: 508.748.0937 | www.cleengineering.com



NOTE: THE ELEVATIONS TAKEN FROM CITY OF NEW BEDFORD HARBOR DEVELOPMENT COMMISSION PLAN TITLED "NORTH TERMINAL BULKHEAD PROJECT: AS BUILT" DATED DECEMBER 1970, GIVEN IN MEAN SEA LEVEL AND ASSUMED TO BE EQUAL TO NGVD29. ELEVATIONS SHOWN ON PLAN ARE IN NAVD88.

GRAPHIC SCALE



(IN FEET)

1 INCH = 3 FEET

NORTH TERMINAL REPAIRS
SECTION VIEW

LOCATION

NEW BEDFORD, MA

CLIENT

NEW BEDFORD HDC

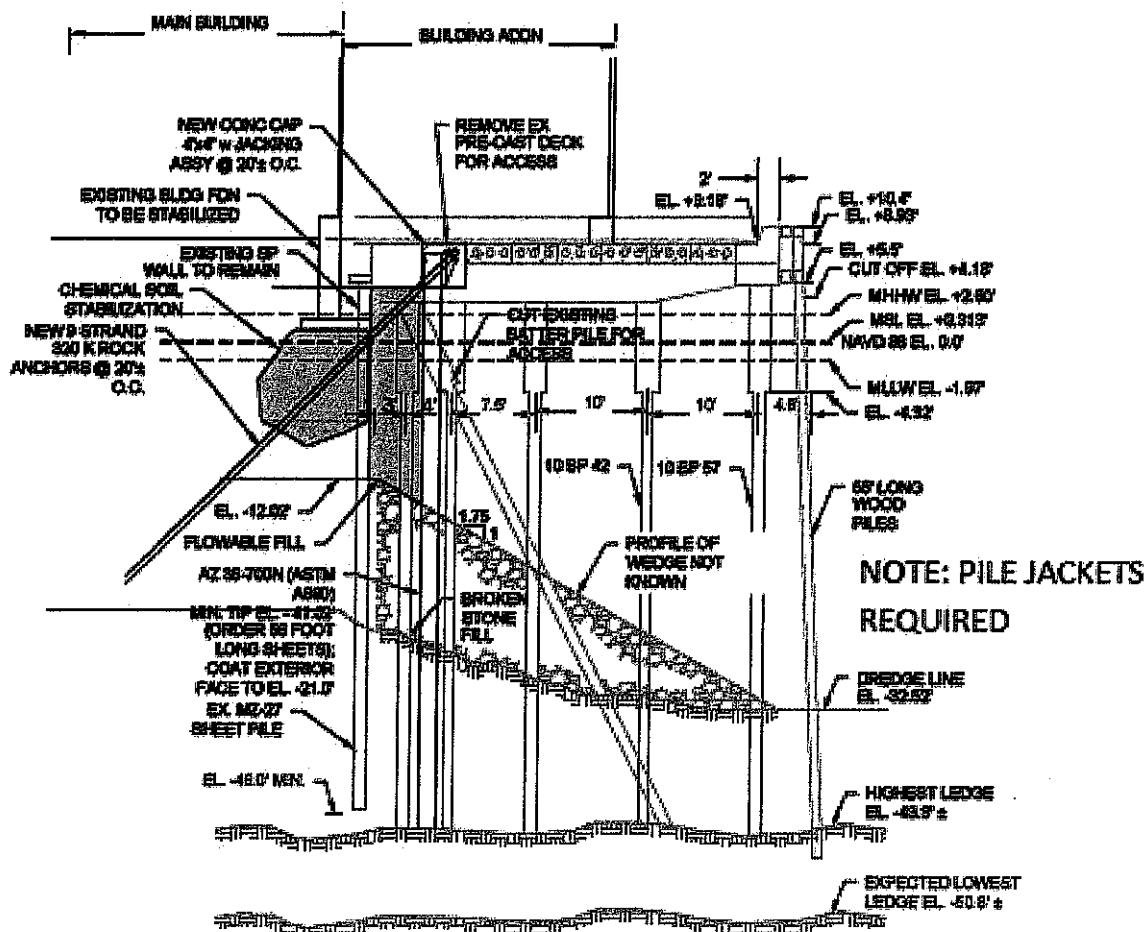
cleengineering

15 Creek Road | Marlon, Massachusetts 02738
t: 508.748.0937 | www.cleengineering.com

Exhibit B:
22 Antonio Costa Ave.
Option 1: Oversheeting Repair within Building and Pile Jackets

NOTES:

1. STEEL SHEET PILES TO BE A-690 CORROSION RESISTANT STEEL
3. MISC PLATES TO BE WELDED SECTION FROM $\frac{3}{4}$ " A-690 PLATE
4. ALL STEEL TO BE SHOP COATED WITH 2 PART MARINE EPOXY
5. FLOWABLE FILL TO BE LEAN CONCRETE/ SAND MIX PUMPED INTO PLACE
6. END WALLS FOR FILL AREA AND SHEET DRIVING WILL REQUIRE REMOVAL & REPLACEMENT OF ONE EXISTING DECK PANEL ALONG ENTIRE LENGTH OF REPAIR

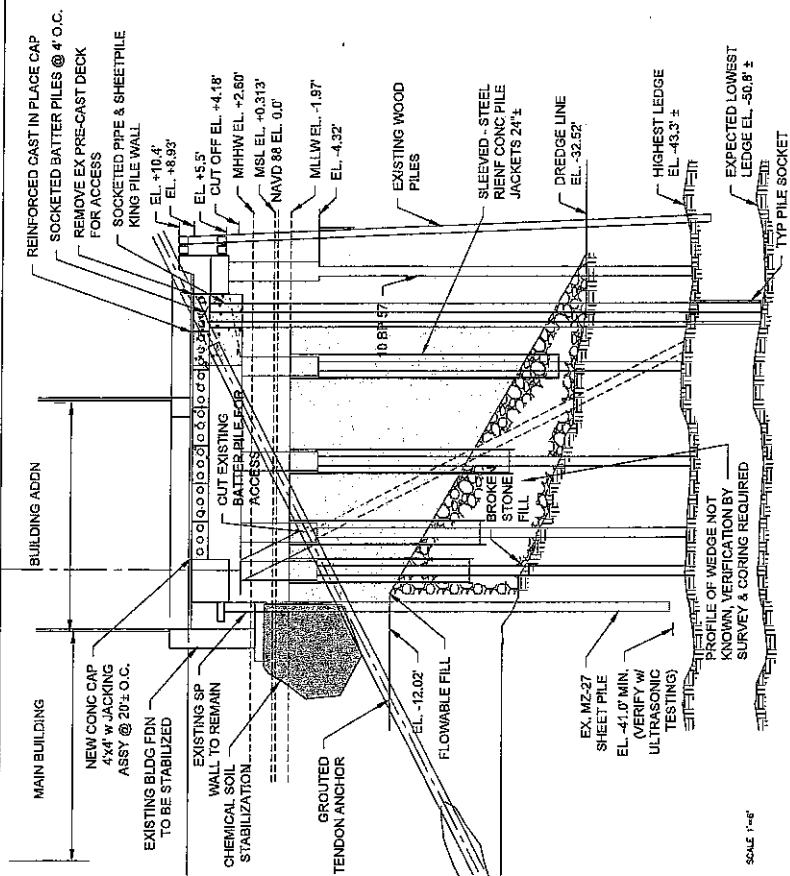
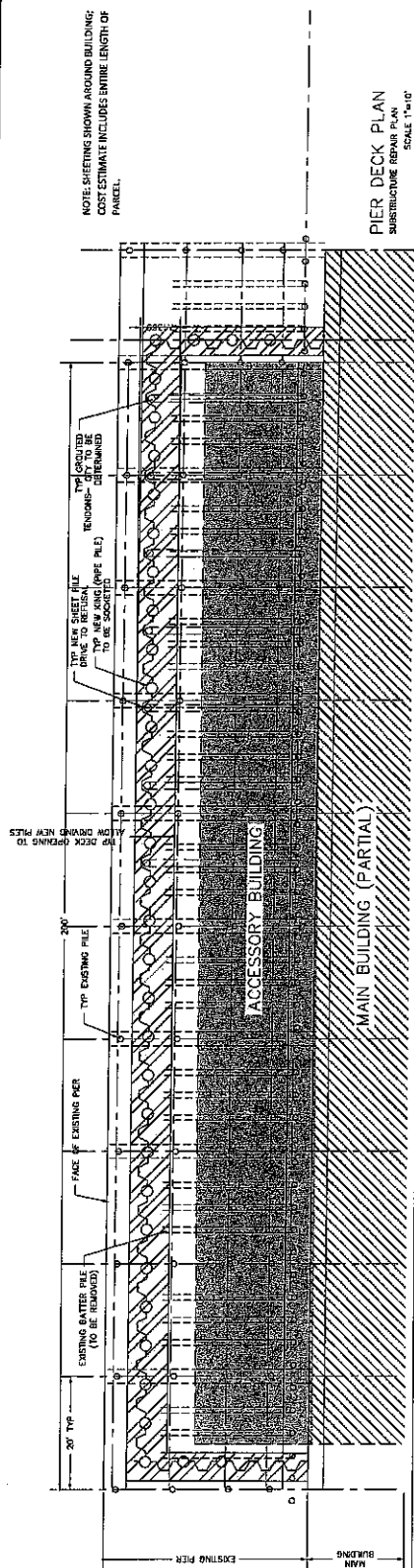


WORK WITHIN BUILDING

Exhibit C:
22 Antonio Costa Ave.
Option 2: Oversheeting Repair
Seaward of Building (between pile rows A and B) and Pile Jackets

DRAFT - NOT INTENDED
FOR CONSTRUCTION

SHEET 1 OF 1





Memorandum: 14 Hervey Tichon Ave. and 22 Antonio Costa Ave
Bulkhead Condition Assessment and Proposed Remedial Actions
August 30, 2017 *Updated November 8, 2017*

Exhibit D:
Cost Estimates

Project: Nordic Fisheries
Location: New Bedford, MA

Nordic Fisheries - Hervey Tichen Parcel
Number of Bents (#28 to 51): 24
Number of Bays: 23
Length (ft): 460

Bid Date: TBD
Project Number: 16032.1

Date: 11/08/17
Contract Number: N/A

Consultant:
Estimator:
CLE Engineering
SS / SEN

Structure	Item	Description	Height	Width	Depth	Length (ft)	Volume	Area (sq)	Number	Total	Unit	Unit Cost	Cost	Source
Site Preparation	Moab & Demob									1	LS	\$150,000.00	\$150,000.00	CLE estimate
Demo	Demo / Removal Existing Concrete Cap									460	LF	\$500.00	\$230,000.00	CLE estimate
Bulkhead	Sheet Pile Bulkhead (AZ36-700N)	Includes Concrete Cap Return Sections (assumes only at northern end and that seawatch parcel is also repaired)			56	460				460	LF	\$5,000.00	\$2,300,000.00	Prock
	Sheet Pile Bulkhead (AZ36-700N)	9 Strand 320K @ 20' Spacing			56	40			1	40	LF	\$5,000.00	\$200,000.00	Prock
	Rock Anchors								24	24	EA	\$6,000.00	\$144,000.00	AGM/CLE
Pile Jackets	Plumb Pile Jackets	Full length jacket repair				32			48	48	EA	\$10,200.00	\$489,600.00	AGM/Semper
	Plumb Pile Jackets Beneath Batter Cap	Full length jacket repair				32			49	49	EA	\$10,200.00	\$499,800.00	AGM/Semper
	Outboard Pile Jackets (rows A & B)					32			51	51	EA	\$10,200.00	\$520,200.00	AGM/Semper
Pavement	Asphalt Pavement		0.33	12		460			5520	613.3333	SY	\$70.00	\$42,933.33	CLE estimate
Site Work	Utilities	Includes City Drain (will need to pull existing return sheets in this area)								1	LS	\$100,000.00	\$100,000.00	CLE estimate
Engineering, Permitting, CM Services (assume 5%)													\$4,676,533.33	
Construction Contingency 15%													\$233,827	
Total =													\$701,480	
Pile Jackets:													\$5,611,840	
Total without Pile Jackets:													\$1,811,520	
\$3,800,320														

Project: Nordic Fisheries
Location: New Bedford, MA

Bid Date: TBD
Project Number: 16032.1

Date: 11/08/17
Contract Number: N/A
Consultant: CLE Engineering
Estimator: SS / SEN

Nordic Fisheries - Antonio Costa Parcel; Conceptual Outboard Sheet Pile/King Pile with Solid Fill; INCLUDES ANTONIO COSTA FRONTAGE*

Number of Bents (#1 to 17): 17

Number of Bays: 16

Length (ft): 340

Structure	Item	Description	Height	Width	Depth	Length (ft)	Volume	Area (sf)	Number	Total	Unit	Unit Cost	Cost	Source
Site Preparation	Mob & Demob									1	LS	\$150,000.00	\$150,000.00	CLE estimate
Demo	Remove & Replace Precast Deck Sections	For Return Sections	1.4167	4		20			32	32	EA	\$1,500.00	\$48,000.00	CLE estimate
	Remove & Replace Precast Deck Sections								14	14	EA	\$1,500.00	\$21,000.00	CLE estimate
Bulkhead	Socketed Pipe and Sheetpile Kingpile Wall	Includes Concrete Cap and (two return sections each @ 40 ft)			56	420			43	420	LF	\$8,000.00	\$3,360,000.00	CLE estimate
	Rock Anchors	9 Strand 320K @ 10' Spacing							43	43	EA	\$6,000.00	\$258,000.00	AGM/CLE
Pile Jackets	Plumb Pile Jackets	Full length jacket repair				32			34	34	EA	\$10,200.00	\$346,800.00	AGM/Semper
	Plumb Pile Jackets Beneath Batter Cap	Full length jacket repair				32			32	32	EA	\$10,200.00	\$326,400.00	AGM/Semper
	Outboard Pile Jackets (rows A & B)					32			36	36	EA	\$10,200.00	\$367,200.00	AGM/Semper
Building	N/A													
Pavement	Asphalt Pavement	Return sections	0.33	12		340		4080		453	SY	\$70.00	\$31,733.33	CLE estimate
	Asphalt Pavement		0.33	20		80		1600		178	SY	\$70.00	\$12,444.44	CLE estimate
Site Work	Utilities	To be determined								1	LS	\$100,000.00	\$100,000.00	CLE estimate
	Stabilization of Existing Building Foundation									1	LS	\$50,000.00	\$50,000.00	CLE estimate
	Chemical Soil Stabilization									1	LS	\$100,000.00	\$100,000.00	CLE estimate
	Fill (may be combination of flow fill and granular)		20	35		340	8814.815			8815	CY	\$100.00	\$881,500.00	CLE estimate
Mitigation Fee	USACE In Lieu Fee Mitigation Cost			35		340		11900		11900	SF	\$	\$169,694.00	USACE
												\$14.26	\$169,694.00	
												Subtotal	\$5,222,771.78	
												Engineering, Permitting, CM Services (assume 7%)	\$423,715	
												Construction Contingency 15%	\$907,962	
												Total =	\$7,554,449	
												Pile Jackets:	\$1,269,288	
												Total without Pile Jackets:	\$6,285,161	

* = Estimate assumes that Nordic repairs 100% of the street area; if SeaWatch assumes half, costs would be reduced accordingly

Project: Nordic Fisheries
Location: New Bedford, MA

Bid Date: TBD
Project Number: 16032.1

Date: 11/09/17
Contract Number:
N/A

Consultant:
Estimator:

CLE Engineering
SS / SEN

Nordic Fisheries - Antonio Costa Parcel; Conceptual Sheetpile within Building INCLUDES ANTONIO COSTA FRONTAGE*, NOT PRACTICABLE DUE TO OPERATIONAL IMPACTS/COSTS

Number of Bents (#1 to 17): 17

Number of Bays: 16

Length (ft): 340

Structure	Item	Description	Height	Width	Depth	Length (ft)	Volume	Area (sq)	Number	Total	Unit	Unit Cost	Cost	Source
Site Preparation	MoB & Demob									1	LS	\$150,000.00	\$150,000.00	CLE estimate
Demo	Demo / Removal Batter Piles								48	48	EA	\$3,000.00	\$144,000.00	CLE estimate
	Remove & Replace Precast Deck Sections		1.4167	4		20			16	16	EA	\$1,500.00	\$24,000.00	CLE estimate
Bulkhead	Remove & Replace Precast Deck Sections	For Return Sections; includes demo of pile cap for returns								2	EA	\$25,000.00	\$50,000.00	CLE estimate
	Sheet Pile Bulkhead (AZ36-700N)	Includes Concrete Cap			56	340				340	LF	\$5,000.00	\$1,700,000.00	Prock
	Sheet Pile Bulkhead (AZ36-700N)	Return Sections			56	40			2	80	LF	\$5,000.00	\$400,000.00	Prock
Pile Jackets	Rock Anchors	9 Strand 320K @ 20' Spacing							22	22	EA	\$6,000.00	\$132,000.00	AGM/CLE
	Plumb Pile Jackets	Full length jacket repair				32		3.14	34	34	EA	\$10,200.00	\$346,800.00	AGM/Semper
	Plumb Pile Jackets Beneath Batter Cap	Full length jacket repair				32		3.14	32	32	EA	\$10,201.00	\$326,432.00	AGM/Semper
Building	Outboard Pile Jackets (rows A & B)					32			36	36	EA	\$10,200.00	\$367,200.00	AGM/Semper
	Disassemble and Reassemble									1	LS	\$2,244,000.00	\$2,244,000.00	Cape Building Systems
Pavement	Asphalt Pavement		0.33	12		130			1560	173	SY	\$70.00	\$12,133.33	CLE estimate
Site Work	Utilities	To be determined								1	LS	\$100,000.00	\$100,000.00	CLE estimate
	Stabilization of Existing Building Foundation									1	LS	\$50,000.00	\$50,000.00	CLE estimate
	Chemical Soil Stabilization									1	LS	\$100,000.00	\$100,000.00	CLE estimate
Mitigation Fee	Fill (flow fill)		18	5		340	1133.333			1133	CY	\$100.00	\$113,333.33	CLE estimate
	USACE in Lieu Fee Mitigation Cost			5		340			1700	1700	SF	\$	\$24,242.00	USACE
												Subtotal	\$6,284,140.67	
Engineering, Permitting, CM Services (assume 7%)													\$438,195	
Construction Contingency 15%													\$938,985	
Total =													\$7,661,318	
Pile Jackets:													\$1,269,327	
Total without Pile Jackets:													\$6,391,991	

* = Estimate assumes that Nordic repairs 100% of the street area; if SeaWatch assumes half, costs would be reduced accordingly

Attachment "A"

Price Proposal Form

The undersigned hereby submits the attached proposal for the sale of property to the City of New Bedford in response to the Request for Proposals (RFP) for the acquisition of the designated property in the City of New Bedford.

Proposer's Name: Nordic Fisheries, Inc

Owner's Name: Same

Owner Entity and State of Incorporation: Domestic Profit Corporation Under G.L. Ch 156B-Massachusetts

Proposer's Address: 14 Hervey Tichon Ave New Bedford Massachusetts 02740

Proposer's Telephone: 508-993-6730

Proposer's E-Mail: roy@easternfisheries.com

Proposer's Fax Number: 508-992-0718

Parcel Location: Street Address or Location of Property: 14 Hervey Tichon Ave New Bedford, MA 02740
New Bedford Assessors Map 66, Lot 135,137,145,147,and 148

Proposed Purchase Price: \$1,100,100.00

Signature of proposer Roy Enoksen March 8, 2018

Name: Roy Enoksen, President

Attachment "B"

Commonwealth of Massachusetts

Individual Certificate of Tax Compliance

Pursuant to the requirements of G.L. c.62C, s 49A, the undersigned does hereby state the following:

I, Roy Enoksen, certify that I have filed all state tax returns, have paid all state taxes required under law, and have no outstanding obligations or unpaid debt to the Massachusetts Department of Revenue.

Signed under the penalties of perjury:

March 8, 2018

Signature Roy Enoksen

Social Security Number Typed or Printed Name

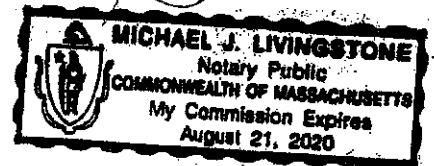
oy Enoksen

COMMONWEALTH OF MASSACHUSETTS

On this 8th day of March, 2018, before me, the undersigned notary public, personally appeared Roy Enoksen, proved to me through satisfactory evidence of identification which consisted of Massachusetts Driver Licence S95369580, to be the person whose name is signed on the preceding and acknowledged to me that he signed it voluntarily for its stated purpose.

Michael J. Livingstone

Notary Public My commission expires: August 21, 2020



Attachment "C"

Commonwealth of Massachusetts

Corporate Certificate of Tax Compliance

Pursuant to the requirements of G.L. c. 62C, s.49A, the undersigned does hereby state the following:

I, Roy Enoksen, as the President of Nordic Fisheries, Inc, whose principal place of business is located at 14 Hervey Tichon Ave, New Bedford, MA 02740 do hereby certify that the above named firm has complied with all laws of the Commonwealth of Massachusetts relating to taxes and has not outstanding obligation to the Massachusetts Department of Revenue.

Signed under the penalties of perjury: Roy Enoksen

March 8, 2018

Roy Enoksen, President and Treasurer

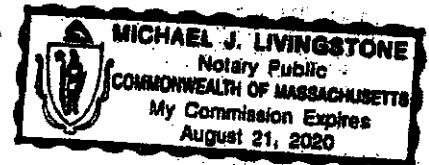
Federal Identification Number Name of Corporation: 04-2437493-Nordic Fisheries, Inc.

COMMONWEALTH OF MASSACHUSETTS

On this 2nd day of March, 2018, before me, the undersigned notary public, personally appeared Roy Enoksen, proved to me through satisfactory evidence of identification which consisted of Massachusetts Driver Licence S95369580, to be the person whose name is signed on the preceding and acknowledged to me that he signed it as President and Treasurer of Nordic Fisheries, Inc, a corporation, voluntarily for its stated purpose.

Michael J. Livingstone Livingstone

Notary Public My commission expires: August 21, 2020



Attachement "D"

DISCLOSURE OF BENEFICIAL INTERESTS IN REAL PROPERTY TRANSACTION

This form contains a disclosure of the names and addresses of all persons with a direct or indirect beneficial interest in the real estate transaction described below. This form must be filed with the Massachusetts Division of Capital Asset Management, as required by M.G.L. c 7C, sec. 38, prior to the conveyance of or execution of a lease for the real property described below.

1. Public agency involved in this transaction: City of New Bedford, Massachusetts
2. Complete legal description of the property: New Bedford Assessors Map 66, Lots 135, 137, 145, 147, and 148
3. Type of transaction: Sale
4. Seller(s) or Lessor(s) : City of New Bedford, Massachusetts

Purchaser(s) or Lessee(s): Nordic Fisheries, Inc.

5. Names and addresses of all persons who have or will have direct or indirect beneficial interest in the real property described above. Note: If a corporation has, or will have a direct or indirect beneficial interest in the real property the name of all stockholders must also be listed except that if the stock of the corporation is listed for sale to the general public, the name of any person holding less than ten percent of the outstanding voting shares need not be disclosed.

Name	Address
Roy Enoksen	3 Prince Snow Circle Mattapoisett, MA 02739
Ronald Enoksen	104 Brown St. Dartmouth, MA 02747
Sherri L. Enoksen	104 Brown St. Dartmouth, MA 02747
Peter Anthony	37 Alice St. Dartmouth, MA 02747
Cathy Anthony	37 Alice St. Dartmouth, MA 02747
Joseph Marshall	18 Abner Potter's Way Dartmouth, MA 02748
Patricia Marshall	18 Abner Potter's Way Dartmouth, MA 02748

None of the persons listed in this section is an official elected to public office in the Commonwealth of Massachusetts except as noted below:

Name

Title or Position

None _____

Not Applicable _____

6. This section must be signed by the individual(s) or organization(s) entering into this real property transaction with the public agency named in item 1. If this form is signed on behalf of a corporation, it must be a duly authorized officer of that corporation.

The undersigned acknowledges that any changes or additions to item 4 of this form during the term of any lease or rental will require filing a new disclosure with the Division of Capital Asset Management within 30 days following the change or addition.

The undersigned swears under the pains and penalties of perjury that this form is complete and accurate in all respects.

Signature: Roy Enoksen

Printed Name: Roy Enoksen

Title: President and Treasurer

Date: March 8, 2018

Attachement "E"

CERTIFICATE OF NON-COLLUSION

City of New Bedford

133 William Street

New Bedford, MA 02740

The undersigned certified under penalties of perjury that this bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals.

Signature of individual submitting bid: _____



Roy Enoksen, President

Name of business/organization: Nordic Fisheries, Inc

Attachement "F"

SITE ACCESS AGREEMENT

The Proposer does not seek access to the Property to perform due diligence.

MANAGEMENT PLAN

Nordic Fisheries, Inc. and its predecessor and related entities (hereinafter "Nordic") began its relationship with the City of New Bedford in 1982 by acquiring the leasehold rights in 14 Hervey Tichon Ave., New Bedford. One lease concerns City of New Bedford Assessor's Map 66, Lots 145, 147 and 148. The second lease concerns Map 66, Lots 135 and 137. At that time, these lots were empty. Nordic constructed the current buildings on the property and the main building covers a substantial portion of lots 137 and 147. Nordic has maintained and improved these properties and renovated and expanded its buildings over the years. Nordic presently oversees the fishing of 27 scallopers. A related entity to Nordic, Dockside Repairs Inc. (hereinafter "Dockside") services and maintains this fleet of scallopers and a number of other vessels, mostly scallopers.

There are at least 150 people employed as captains, mates and crew in the fleet. Another 25 are employed by Dockside.

Nordic also signed an agreement with the City of New Bedford and the Harbor Development Commission in 2002 regarding a certain triangle portion of the EPA dewatering facility (hereinafter "EPA triangle") adjacent to lot 145. Nordic's bid is premised on the understanding that the rights of Nordic in the EPA triangle will be recognized and the cost of the same resolved on a pro-rata basis if Nordic is successful in its attempt to acquire the properties covered by RFP #HDC-FY18-001 being Map 66, Lots 135, 137, 145, 147 and 148. That is, instead of the EPA triangle becoming a part of the Nordic lease (which will no longer exist if Nordic is the successful purchaser), the EPA triangle will be ascribed a value equal to the pro-rata values of the square footage thereof as against the sale value of the entire parcel, and that Nordic or its successor in title shall be able to purchase the EPA triangle for the city (or any subdivision thereof) as and when the City (or subdivision thereof) comes to own the same in the future once the EPA relinquishes the same in favor of the city (or any subdivision thereof) and that Nordic or its successor in title then pay the agreed upon price for the same as and when the same is conveyed to it (or any its successor in title) by the City (or any subdivision thereof).

In 2000 RCP Realty LLC a related entity to Nordic (Hereinafter "RCP") purchased 6 Hassey Street. This building was empty, completely run down and an eye sore in every sense. The roof was open to the elements with pigeons living inside and others had found access into the building making it a fire hazard as well. RCP rehabilitated this building and added value for tax and other purposes. It presently houses a marine based business engaged in crabbing.

In 2005 MAE Realty LLC a related entity to Nordic (hereinafter "MAE") purchased the balance of the lease for a vacant building at 22 Antonio Costa Blvd. The building was empty at that point. MAE and Eastern Fisheries, Inc., a related entity to Nordic (hereinafter Eastern) spent considerable sums to rehabilitate the building and grounds, build a cooler therein, and equip the same with the latest scallop processing and freezing equipment. Eastern operates both facilities located at 14 Hervey Tichon Ave. and 22 Antonio Costa Blvd. has 160 full time employees and handles and processes at least 30M pounds of seafood annually.

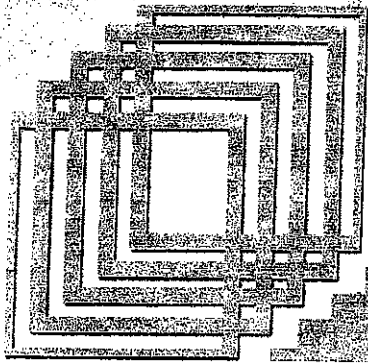
So, for nearly 35 years Nordic has paid its leases, caused meaningful fishing/marine related employment for many, paid substantial real estate taxes, excise taxes, payroll and other taxes and maintained a large skilled workforce in the center of the City of New Bedford. Nordic has managed these various properties and enterprises for almost 35 years without any issues or problems with the City of New Bedford or any of its political subdivisions including, but not limited to the Harbor Development Commission, the Harbormaster and others related to the fishing industry and the waterfront, and has been able to work cooperatively with other vessels and their owners and crews, the EPA, and our land neighbors.

Both Nordic and Eastern represent sophisticated fishing and processing entities and a fully vertically integrated operation for harvesting, processing, storing, selling and shipping scallops throughout the United States and the world. They have facilities in China, Japan and Europe to enable them to accomplish the same. They have had and continue to have the economic wherewithal to purchase and maintain the subject properties as they have demonstrated for the past 35 years.

In fact, RCP originally purchased commercial property in the waterfront district in the mid 70's known as 54 Wright Street which has and does house marine related businesses so Nordic and its related companies have actually been involved in the ownership, operation, and maintenance of fishing and marine related entities for over 40 years and is well positioned to acquire, maintain and operate 14 Hervey Tichon Ave and 22 Antonio Costa Blvd. In addition, since Nordic and its related companies, currently lease these parcels from the City, it would be in the best interest of the City for Nordic to acquire the same so as to be able to continue its various businesses without interruption and the possible loss or displacement of the numerous employees who currently work at these facilities and their families.

The bulkhead of the properties is currently in a serious state of disrepair as has been documented in the "Structural Inspection, North Terminal, New Bedford, MA Report of Findings prepared for the City of New Bedford by CLE Engineering . By acquiring a fee interest in the subject properties, Nordic intends to make such repairs as are necessary to the same in order to continue to service and maintain its fleet of scallop vessels and to enable it to continue to buy, process, and sell scallops and other seafood so as to continue to operate several successful, related businesses in these locations and maintain the jobs of all of those currently employed for those purposes. Nordic/Eastern and their related entities have the financial wherewithal to purchase, repair and maintain the properties in question and are prepared to do so if they are the successful bidder.

Nordic intends to work with the City regarding a resolution of the EPA triangle issue outlined herein as well as the necessary discontinuance and purchase of the eastern portion of Antonio Costa Blvd alone or in conjunction with the purchaser of the "Sea Watch Property", so as to be able to make the repairs necessary to the bulkhead at the end thereof in conjunction with repairs necessary on the bulkhead adjacent to the property known as 22 Antonio Costa Blvd.



Frederick M. Kalisz, Jr., LP.D.
233 Collette Street
New Bedford, MA 02746

508-994-4474
508-726-4200
Fkalisz@Umassd.edu

March 5, 2018

To whom it may concern – The City of New Bedford

As a former elected City official with over 20 years of government service, I am very familiar with the economic impact and contributions that Nordic/Eastern Fisheries have made to this community. A family run business with international business interests they have through the annual International Boston Seafood Show created interest among show's visitors to come to New Bedford - an outstanding example of the corporate relations they display in marketing New Bedford.

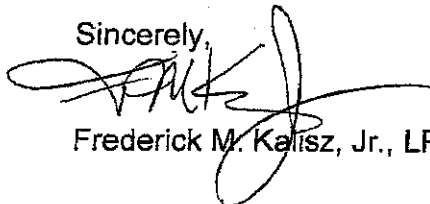
In my capacity as Mayor, I also had the responsibility of serving as the chair of the Harbor Development Commission (HDC) the local regulatory agency which implements rules, regulations, and policy controls in order to operate efficiently and safely to meet the needs of its users – industrial, commercial and recreational. During my tenure with the City and the HDC I witnessed the enormous support that Nordic and Eastern Fisheries gave to the City in planning and creating the Whale's Tooth Parking Lot, the refurbishment of the rails to the depot yards and extension to the waterside off loading capacity and to the development of the Environmental Protection Agencies (EPA's) dewatering facility.

As Mayor and chairperson of the HDC I was also signatory to an agreement between Nordic, the City, and the HDC regarding a small parcel needed by the EPA which is to revert to Nordic when the City is legally able to do so. I would expect that the City would be good on that commitment relied upon by Nordic for the past 15 years.

In my former executive positions, getting to the points outlined above was a true challenge and could not have happened without the strong management and operational assistance extended by Nordic and Eastern Fisheries.

As the planning moves forward that the Mitchell Administration is looking to accomplish, it is my sincere belief that every effort should be extended to Nordic and Eastern Fisheries to incorporate their planning in to the future vision of our City.

Sincerely,



Frederick M. Kalisz, Jr., LP.D

Mayor of the City of New Bedford (1998-2006)
Current Bristol County Register of Deeds – Southern District



City of New Bedford *Massachusetts*

ASSESSING DEPARTMENT

March 6, 2018

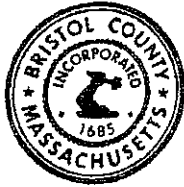
RE: RFP #HDC-FY18-001 & 002

To Whom It May Concern-City of New Bedford,

I am writing to support the response to the RFP #HDC-FY18-001 & 002 as submitted to the City of New Bedford by Nordic/Eastern Fisheries Inc. I am more than familiar with the operation and believe Nordic/Eastern Fisheries Inc. is a great asset to the City of New Bedford. Mr. Roy Enoksen and Mr. Joe Furtado have always worked cooperatively with city government, paid their real estate taxes on time and managed and improved their fishing related businesses on the waterfront. Nordic/Eastern Fisheries Inc. provides many good paying jobs to New Bedford residents and the immediate surrounding communities. Nordic/Eastern Fisheries Inc. is not only a leader in the industry locally and nationally but is also on the forefront of seafood processing and respected as one of the best in their field internationally. The quality of seafood is regarded as the finest produced, their commitment to safety in the workplace is paramount and their careful consideration regarding environmental concerns both on land and at sea exceed governmental standards. We are fortunate to have Nordic/Eastern Fisheries Inc. in New Bedford and should do what we can to keep them here and work with them so they can expand their operation. I am certain and confident that Nordic/Eastern has the financial capacity and management expertise to purchase and maintain the properties known as 14 Hervey Tichon Ave. and 22 Antonio Costa Blvd. and will continue to provide job opportunities for the working people of New Bedford.

Respectfully yours,

Peter E. Berthiaume
Assessor
City of New Bedford



MARC J. SANTOS, ESQUIRE
CLERK OF THE BOARD

The Commonwealth of Massachusetts
OFFICE OF THE
COUNTY COMMISSIONERS OF BRISTOL COUNTY
P.O. BOX 208
TAUNTON, MASSACHUSETTS 02780
TEL: (508) 824-9681
FAX: (508) 821-3101

COMMISSIONERS

CHAIRMAN
PAUL B. KITCHEN
FAIRHAVEN

JOHN R. MITCHELL
FALL RIVER

JOHN T. SAUNDERS
NEW BEDFORD

March 6, 2018

City of New Bedford
130 William Street
New Bedford, MA 02740

To Whom It May Concern-City of New Bedford:

This letter is in support of the proposals of Nordic Fisheries, Inc. to purchase properties now occupied by them known as 14 Hervey Tichon Avenue and 22 Antonio Costa Boulevard from the City of New Bedford in response to Requests For Proposals (RFP # HDC-FY18-001 and 002).

I am personally familiar with Nordic Fisheries, Inc., its president, Roy Enoksen and his family that own and operate the business and have had many dealings with them over the years. They own and maintain the largest fleet of scallopers in the country. Their sister company Eastern Fisheries, Inc. processes over 30 million pounds of scallops per year providing hundreds of good paying jobs to those in New Bedford and the surrounding area. Together, Nordic and Eastern combine to create a fully vertically integrated operation to harvest, process, store, sell and ship scallops locally and worldwide. But they are not just selling scallops. They run a fresh dog fish operation, purchasing, processing and shipping locally caught fish into the European market where they are highly sought after. In 2017 they expanded into a new seafood product opening a Cod Division to purchase, process and sell refreshed cod. This new division has been so successful that they have had to expand to a second shift to keep up with demand for the same. They expect to buy, process and sell 6 million pounds of cod in 2018. This is the kind of growing business needed in New Bedford. Nordic/Eastern have the knowledge, expertise, and financial resources to create jobs in New Bedford and are doing so.


I, myself have experience on the New Bedford waterfront as a fisherman as do two of my brothers and other members of my immediate family who earn their livelihood today as

scallopers. On another level as an elected member of the New Bedford City Council for 28 years including 5 terms as its President, I worked with Nordic and eastern on various issues concerning the industry and the waterfront including, but not limited to, the discontinuance of a portion of Hervey Tichon Avenue which they bought from the City. During that process and my other dealings with them, they evidenced a commitment to the city and the waterfront, provided the management expertise, engineering, financing and whatever was necessary to get the jobs done. They are truly a working partner with the City and its Harbormaster and Harbor Development Commission, actively assisting in overall improvements for the waterfront. I have attended many of their meetings over the years and Nordic/Eastern representatives are often present with ideas and resources to assist.

I am also personally familiar and have made observations of the deteriorated condition of the bulkhead areas at both of these properties, the Seawatch property and at the end of Antonio Costa Boulevard. Left unattended, it is a disaster waiting to happen. Nordic/Eastern is willing to step up and resolve these issues which will be a major undertaking costing millions of dollars, rather than relocate their operation possibly taking hundreds of jobs with them to another host community. Companies move all the time for a better deal. Roy was the first marine business willing to move north of the bridge and take a chance in this area many years ago. Others followed. Most have since left, but Nordic/Eastern and their related companies are willing to stay, do what is needed and spend what is necessary to continue to operate there. The City is fortunate to have them and the jobs that stay with them, their taxes and related expenditures.

Nordic/Eastern have the expertise, management and financial resources to successfully purchase, operate and maintain the properties at 14 Hervey Tichon Avenue and 22 Antonio Costa Boulevard and allowing them to do so would be in the best interests of the City of New Bedford and would likely guarantee the retention of many good paying fishing and fishing related jobs in New Bedford for many years to come. I fully support their efforts to do so and hope that the City will cooperate and assist them in every way reasonably possible.

Very truly yours,


John T. Saunders
Bristol County Commissioner

**Integra Realty Resources
Hartford/Providence**

Appraisal of Real Property

North Terminal Bulkhead Area, Parcel #10
Industrial Ground Lease Property
14 Hervey Tichon Avenue
New Bedford, Bristol County, Massachusetts 02740

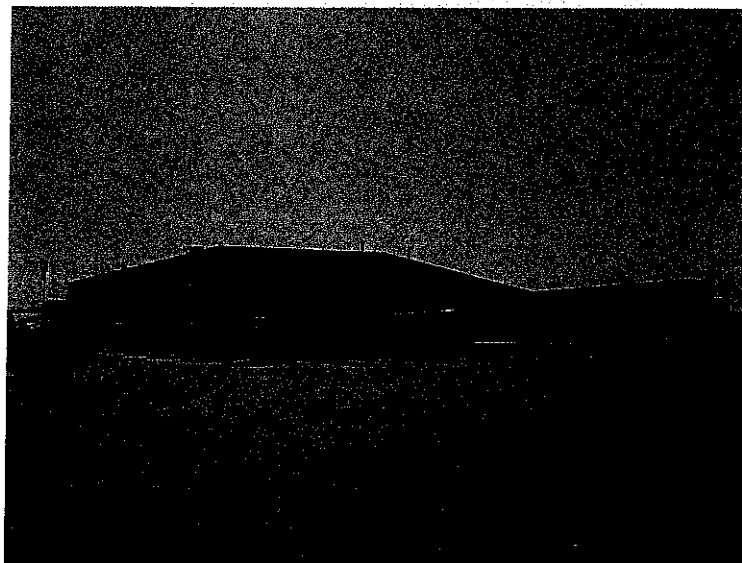
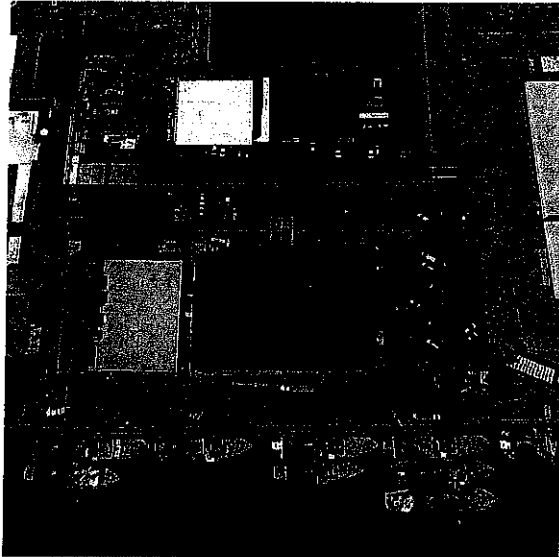
Prepared For:
City of New Bedford

Effective Date of the Appraisal:
May 12, 2017

Report Format:
Appraisal Report – Standard Format

IRR - Hartford/Providence
File Number: 150-2017-0120





North Terminal Bulkhead Area, Parcel #10
14 Hervey Tichon Avenue
New Bedford, Massachusetts



June 29, 2017

Mr. Edward C. Anthes-Washburn
Executive Director
Harbor Development Commission
City of New Bedford
52 Fisherman's Wharf
New Bedford, MA 02740

SUBJECT: Market Value Appraisal
 North Terminal Bulkhead Area, Parcel #10
 14 Hervey Tichon Avenue
 New Bedford, Bristol County, Massachusetts 02740
 IRR - Hartford/Providence File No. 150-2017-0120

Dear Mr. Anthes-Washburn:

Integra Realty Resources – Hartford/Providence is pleased to submit the accompanying appraisal of the referenced property. The purpose of the appraisal is to develop an opinion of the market value of the leased fee interest in the property based on the existing lease. As requested, we also estimate the market value of the fee simple interest based on market rent. The client for the assignment is the City of New Bedford, and the intended use is for portfolio valuation purposes.

The subject is an existing industrial ground lease property with a site area of 2.870 acres or 125,049 square feet. The appraisal considers only the ground lease, although it should be noted that the subject has been improved with a fish processing facility containing 42,300 square feet of gross building area. The improvements were constructed in 1982 and are 100% owner-occupied as of the effective appraisal date.

The appraisal is intended to conform with the Uniform Standards of Professional Appraisal Practice (USPAP), the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, applicable state appraisal regulations, and the appraisal guidelines of the City of New Bedford. The appraisal is also prepared in accordance with the

appraisal regulations issued in connection with the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA).

To report the assignment results, we use the Appraisal Report option of Standards Rule 2-2(a) of USPAP. As USPAP gives appraisers the flexibility to vary the level of information in an Appraisal Report depending on the intended use and intended users of the appraisal, we adhere to the Integra Realty Resources internal standards for an Appraisal Report – Standard Format. This format summarizes the information analyzed, the appraisal methods employed, and the reasoning that supports the analyses, opinions, and conclusions.

Based on the valuation analysis in the accompanying report, and subject to the definitions, assumptions, and limiting conditions expressed in the report, our opinion of value is as follows:

Value Conclusions			
Appraisal Premise	Interest Appraised	Date of Value	Value Conclusion
Market Value - Based on Existing Lease	Leased Fee	May 12, 2017	\$1,100,000
Market Value - Market Rent Equal to Fee Simple Interest	Fee Simple	May 12, 2017	\$1,400,000

Extraordinary Assumptions and Hypothetical Conditions

The value conclusions are subject to the following extraordinary assumptions that may affect the assignment results. An extraordinary assumption is uncertain information accepted as fact. If the assumption is found to be false as of the effective date of the appraisal, we reserve the right to modify our value conclusions.

1. The cash flow analysis assumes that the annual rent will be established at the current market rent on a square foot basis and adjusted for inflation based on the CPI.
2. The estimated market values presented in this report do not reflect the cost to cure deferred maintenance or repairs to the bulkhead improvements.

The opinions of value expressed in this report are based on estimates and forecasts that are prospective in nature and subject to considerable risk and uncertainty. Events may occur that could cause the performance of the property to differ materially from our estimates, such as changes in the economy, interest rates, capitalization rates, financial strength of tenants, and behavior of investors, lenders, and consumers. Additionally, our opinions and forecasts are based partly on data obtained from interviews and third-party sources, which are not always completely reliable. Although we are of the opinion that our findings are reasonable based on available evidence, we are not responsible for the effects of future occurrences that cannot reasonably be foreseen at this time.

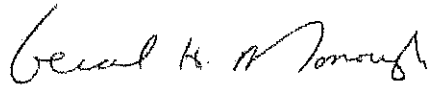


Mr. Edward C. Anthes-Washburn
City of New Bedford
June 29, 2017
Page 3

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

Integra Realty Resources - Hartford/Providence



Gerard H. McDonough, MAI, FRICS
Certified General Real Estate Appraiser
MA Certificate # 361
Telephone: 401-273-7710, ext. 15
Email: gmcdonough@irr.com



Table of Contents

Summary of Salient Facts and Conclusions	1	Discounted Cash Flow Analysis	29
General Information	2	Direct Capitalization Analysis	32
Identification of Subject	2	Stabilized Income and Expenses	32
Sale History	2	Capitalization Rate Selection	32
Pending Transactions	2	Reconciliation and Conclusion of Value	34
Purpose of the Appraisal	2	Exposure Time	34
Definition of Market Value	3	Marketing Period	35
Definition of Property Rights Appraised	3	Certification	36
Intended Use and User	3	Assumptions and Limiting Conditions	38
Applicable Requirements	4	Addenda	
Report Format	4	A. Appraiser Qualifications	
Prior Services	4	B. Financials and Property Information	
Scope of Work	4		
Economic Analysis	6		
Bristol County Area Analysis	6		
Surrounding Area Analysis	11		
Industrial Market Analysis	14		
Property Analysis	16		
Land Description and Analysis	16		
Improvements Description and Analysis	19		
Real Estate Taxes	21		
GIS Plat Map	21		
Highest and Best Use	22		
Valuation	24		
Valuation Methodology	24		
Income Capitalization Approach	25		
Leased Status of Property	25		
Market Rent Analysis	26		

Summary of Salient Facts and Conclusions

Property Name	North Terminal Bulkhead Area, Parcel #10
Address	14 Hervey Tichon Avenue New Bedford, Bristol County, Massachusetts 02740
Property Type	Industrial Ground Lease - Waterfront Industrial
Owner of Record	Whaler Realty Co., Inc.; Lessee
Tax ID	Plat 66, Lots 137A and 147A
Land Area	2.870 acres; 125,049 SF
Gross Building Area	42,300 SF
Year Built	1892
Zoning Designation	Waterfront Industrial
Highest and Best Use - As if Vacant	Industrial use
Highest and Best Use - As Improved	Continued industrial use
Exposure Time; Marketing Period	12 months; 12 months
Date of the Report	June 29, 2017

Value Conclusions

Appraisal Premise	Interest Appraised	Date of Value	Value Conclusion
Market Value - Based on Existing Lease	Leased Fee	May 12, 2017	\$1,100,000
Market Value - Market Rent Equal to Fee Simple Interest	Fee Simple	May 12, 2017	\$1,400,000

The values reported above are subject to the definitions, assumptions, and limiting conditions set forth in the accompanying report of which this summary is a part. No party other than City of New Bedford may use or rely on the information, opinions, and conclusions contained in the report. It is assumed that the users of the report have read the entire report, including all of the definitions, assumptions, and limiting conditions contained therein.

Extraordinary Assumptions and Hypothetical Conditions

The value conclusions are subject to the following extraordinary assumptions that may affect the assignment results. An extraordinary assumption is uncertain information accepted as fact. If the assumption is found to be false as of the effective date of the appraisal, we reserve the right to modify our value conclusions.

1. The cash flow analysis assumes that the annual rent will be established at the current market rent on a square foot basis and adjusted for inflation based on the CPI.
2. The estimated market values presented in this report do not reflect the cost to cure deferred maintenance or repairs to the bulkhead improvements.

General Information

Identification of Subject

The subject is an existing industrial ground lease property with a site area of 2.870 acres or 125,049 square feet. The appraisal considers only the ground lease, although it should be noted that the subject has been improved with a fish processing facility containing 42,300 square feet of gross building area. The improvements were constructed in 1982 and are 100% owner-occupied as of the effective appraisal date.

Property Identification

Property Name	North Terminal Bulkhead Area, Parcel #10
Address	14 Hervey Tichon Avenue New Bedford, Massachusetts 02740
Tax ID	Plat 66, Lots 137A and 147A
Owner of Record	Whaler Realty Co., Inc.; Lessee

Sale History

The subject property is a land parcel that has been assembled from two adjacent lots. Each lot of the subject is encumbered by a long-term, 99-year ground lease. The parcel has been improved with a light industrial warehouse and additional site improvements. Over the course of the lease, ownership of the improvements has been transferred to related business entities and the underlying ground lease parcels have been assigned to the current tenant/occupant. The most recent closed sale or transfer of these interests for the subject is summarized as follows:

Sale Date	September 9, 1982
Seller	City of New Bedford, Harbor Development Commission; Lessor
Buyer	Whaler Realty Co., Inc.; Lessee
Sale Price	N/A
Recording Instrument Number	Book 1847 Page 99; South Bristol Registry of Deeds
Expenditures Since Purchase	Unknown

Pending Transactions

To the best of our knowledge, the property is not subject to an agreement of sale or an option to buy, nor is it listed for sale, as of the effective appraisal date.

Purpose of the Appraisal

The purpose of the appraisal is to develop an opinion of the market value of the leased fee interest in the property as of the effective date of the appraisal, May 12, 2017. As requested, we also estimate the market value of the fee simple interest, as of May 12, 2017. The date of the report is June 29, 2017. The appraisal is valid only as of the stated effective date or dates.

Definition of Market Value

Market value is defined as:

"The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- Buyer and seller are typically motivated;
- Both parties are well informed or well advised, and acting in what they consider their own best interests;
- A reasonable time is allowed for exposure in the open market;
- Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."

(Source: Code of Federal Regulations, Title 12, Chapter I, Part 34.42[g]; also Interagency Appraisal and Evaluation Guidelines, Federal Register, 75 FR 77449, December 10, 2010, page 77472)

Definition of Property Rights Appraised

Fee simple estate is defined as, "Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat."

Leased fee interest is defined as, "A freehold (ownership interest) where the possessory interest has been granted to another party by creation of a contractual landlord-tenant relationship (i.e., a lease)."

Leasehold interest is defined as, "The tenant's possessory interest created by a lease."

Lease is defined as, "A contract in which rights to use and occupy land or structures are transferred by the owner to another for a specified period of time in return for a specified rent."

Source: Appraisal Institute, The Dictionary of Real Estate Appraisal, 6th ed. (Chicago: Appraisal Institute, 2015)

Intended Use and User

The intended use of the appraisal is for portfolio valuation purposes. The client and intended user is the City of New Bedford. The appraisal is not intended for any other use or user. No party or parties other than the City of New Bedford may use or rely on the information, opinions, and conclusions contained in this report.

Applicable Requirements

This appraisal is intended to conform to the requirements of the following:

- Uniform Standards of Professional Appraisal Practice (USPAP);
- Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute;
- Applicable state appraisal regulations;
- Appraisal requirements of Title XI of the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), revised June 7, 1994;
- Interagency Appraisal and Evaluation Guidelines issued December 10, 2010;
- Appraisal guidelines of the City of New Bedford.

Report Format

This report is prepared under the Appraisal Report option of Standards Rule 2-2(a) of USPAP. As USPAP gives appraisers the flexibility to vary the level of information in an Appraisal Report depending on the intended use and intended users of the appraisal, we adhere to the Integra Realty Resources internal standards for an Appraisal Report – Standard Format. This format summarizes the information analyzed, the appraisal methods employed, and the reasoning that supports the analyses, opinions, and conclusions.

Prior Services

USPAP requires appraisers to disclose to the client any other services they have provided in connection with the subject property in the prior three years, including valuation, consulting, property management, brokerage, or any other services. We have not performed any services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

Scope of Work

To determine the appropriate scope of work for the assignment, we considered the intended use of the appraisal, the needs of the user, the complexity of the property, and other pertinent factors. Our concluded scope of work is described below.

Valuation Methodology

Appraisers usually consider the use of three approaches to value when developing a market value opinion for real property. These are the cost approach, sales comparison approach, and income capitalization approach. Use of the approaches in this assignment is summarized as follows.

Approaches to Value

Approach	Applicability to Subject	Use in Assignment
Cost Approach	Not Applicable	Not Utilized
Sales Comparison Approach	Applicable	Utilized
Income Capitalization Approach	Applicable	Utilized

The **income capitalization** approach is the most reliable valuation method for the subject due to the following:

- The probable buyer of the subject would base a purchase price decision primarily on the income-generating potential of the property and an anticipated rate of return.
- Sufficient market data regarding income, expenses, and rates of return, is available for analysis.

The **sales comparison** approach is not applicable to the subject because:

- This approach does not reflect the primary analysis undertaken by a typical investor-purchaser.

The **cost approach** is not applicable to the subject considering the following:

- The age of the property makes estimates of accrued depreciation very subjective.
- There is a limited land market, making estimates of underlying land value subjective.
- This approach is not typically used by market participants, except for new properties.

Research and Analysis

The type and extent of our research and analysis is detailed in individual sections of the report.

Inspection

Gerard H. McDonough, MAI, FRICS, conducted an on-site inspection of the property on May 12, 2017.

Economic Analysis

Bristol County Area Analysis

Bristol County is located in southeastern Massachusetts approximately 60 miles south of Boston. It is 553 square miles in size and has a population density of 1,012 persons per square mile. Bristol County is part of the Providence-Warwick, RI-MA Metropolitan Statistical Area, hereinafter called the Providence MSA, as defined by the U.S. Office of Management and Budget.

Population

Bristol County has an estimated 2017 population of 559,805, which represents an average annual 0.3% increase over the 2010 census of 548,285. Bristol County added an average of 1,646 residents per year over the 2010-2017 period, but its annual growth rate lagged the State of Massachusetts rate of 0.7%.

Looking forward, Bristol County's population is projected to increase at a 0.5% annual rate from 2017-2022, equivalent to the addition of an average of 2,692 residents per year. Bristol County's growth rate is expected to lag that of Massachusetts, which is projected to be 0.7%.

Population Trends					
	Population			Compound Ann. % Chng	
	2010 Census	2017 Est.	2022 Est.	2010 - 2017	2017 - 2022
Massachusetts	6,547,629	6,861,490	7,103,376	0.7%	0.7%
Bristol County, MA	548,285	559,805	573,266	0.3%	0.5%

Source: The Nielsen Company

Employment

Total employment in Bristol County is currently estimated at 227,402 jobs. Between year-end 2006 and the present, employment rose by 3,154 jobs, equivalent to a 1.4% increase over the entire period. There were gains in employment in seven out of the past ten years despite the national economic downturn and slow recovery. Although Bristol County's employment rose over the last decade, it underperformed Massachusetts, which experienced an increase in employment of 8.9% or 290,137 jobs over this period.

A comparison of unemployment rates is another way of gauging an area's economic health. Over the past decade, the Bristol County unemployment rate has been consistently higher than that of Massachusetts, with an average unemployment rate of 7.8% in comparison to a 6.1% rate for Massachusetts. A higher unemployment rate is a negative indicator.

Recent data shows that the Bristol County unemployment rate is 5.2% in comparison to a 3.9% rate for Massachusetts, a negative sign that is consistent with the fact that Bristol County has underperformed Massachusetts in the rate of job growth over the past two years.

Employment Trends						
Year	Total Employment (Year End)				Unemployment Rate (Ann. Avg.)	
	Bristol County	% Change	Massachusetts	% Change	Bristol County	Massachusetts
2006	224,248		3,248,089		6.2%	4.9%
2007	222,007	-1.0%	3,276,591	0.9%	5.9%	4.6%
2008	215,118	-3.1%	3,239,142	-1.1%	7.3%	5.5%
2009	207,464	-3.6%	3,143,063	-3.0%	10.7%	8.1%
2010	211,210	1.8%	3,189,802	1.5%	10.5%	8.3%
2011	212,371	0.5%	3,235,764	1.4%	9.3%	7.3%
2012	213,619	0.6%	3,282,842	1.5%	8.6%	6.7%
2013	217,907	2.0%	3,341,787	1.8%	8.6%	6.7%
2014	223,288	2.5%	3,425,555	2.5%	7.3%	5.7%
2015	224,622	0.6%	3,483,900	1.7%	6.3%	5.0%
2016*	227,402	1.2%	3,538,226	1.6%	4.8%	3.8%
Overall Change 2006-2016	3,154	1.4%	290,137	8.9%		
Avg Unemp. Rate 2006-2016					7.8%	6.1%
Unemployment Rate - March 2017					5.2%	3.9%

*Total employment data is as of June 2016; unemployment rate data reflects the average of 12 months of 2016.

Source: Bureau of Labor Statistics and Economy.com. Employment figures are from the Quarterly Census of Employment and Wages (QCEW). Unemployment rates are from the Current Population Survey (CPS). The figures are not seasonally adjusted.

Major employers in Bristol County are shown in the following table.

Major Employers - Bristol County, MA		
	Name	Number of Employees
1	Bristol Community College	1,000-4,999
2	De Puy Spine Inc	1,000-4,999
3	General Dynamics Mission System	1,000-4,999
4	Hormel Foods	1,000-4,999
5	Medtronic Inc	1,000-4,999
6	Morton Hospital & Medical Center	1,000-4,999
7	Sensata Technologies Inc	1,000-4,999
8	Southcoast Hospitals Group	1,000-4,999
9	St Anne's Hospital	1,000-4,999
10	Taunton Civil Service	1,000-4,999

Source: Massachusetts Executive Office of Labor and Workforce Development

Gross Domestic Product

Gross Domestic Product (GDP) is a measure of economic activity based on the total value of goods and services produced in a defined geographic area. Although GDP figures are not available at the county level, data reported for the Providence MSA is considered meaningful when compared to the nation overall, as Bristol County is part of the MSA and subject to its influence.

Economic growth, as measured by annual changes in GDP, has been somewhat lower in the Providence MSA than the United States overall during the past eight years. The Providence MSA has grown at a 0.7% average annual rate while the United States has grown at a 1.3% rate. As the national

economy improves, the Providence MSA continues to underperform the United States. GDP for the Providence MSA rose by 1.3% in 2015 while the United States GDP rose by 2.5%.

The Providence MSA has a per capita GDP of \$43,744, which is 13% less than the United States GDP of \$50,054. This means that Providence MSA industries and employers are adding relatively less value to the economy than their counterparts in the United States overall.

Gross Domestic Product

Year	(\$ Mil) Providence MSA	% Change	(\$ Mil) United States	% Change
2008	67,032		14,718,301	
2009	65,785	-1.9%	14,320,114	-2.7%
2010	67,038	1.9%	14,628,165	2.2%
2011	67,302	0.4%	14,833,679	1.4%
2012	68,013	1.1%	15,126,281	2.0%
2013	68,194	0.3%	15,348,044	1.5%
2014	69,654	2.1%	15,691,181	2.2%
2015	70,561	1.3%	16,088,249	2.5%
Compound % Chg (2008-2015)		0.7%		1.3%
GDP Per Capita 2015	\$43,744		\$50,054	

Source: Bureau of Economic Analysis and Economy.com; data released September 2016. The release of state and local GDP data has a longer lag time than national data. The data represents inflation-adjusted "real" GDP stated in 2009 dollars.

Income, Education and Age

Bristol County has a considerably lower level of household income than Massachusetts. Median household income for Bristol County is \$61,523, which is 15.6% less than the corresponding figure for Massachusetts.

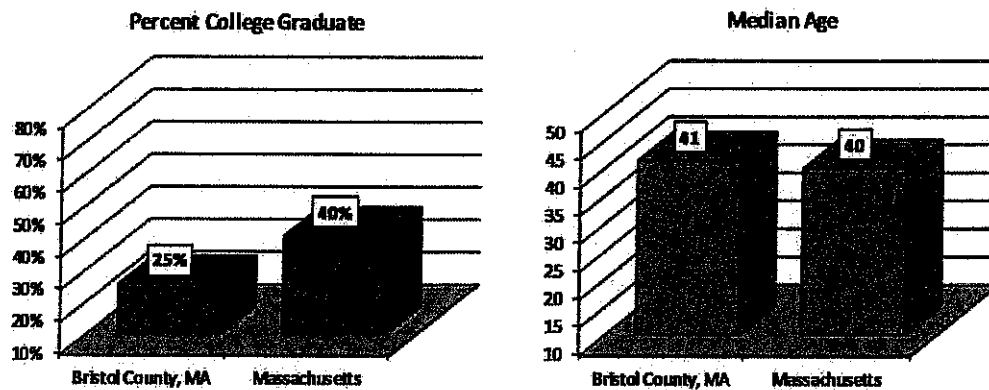
Median Household Income - 2017

	Median
Bristol County, MA	\$61,523
Massachusetts	\$72,859
Comparison of Bristol County, MA to Massachusetts	- 15.6%

Source: The Nielsen Company

Residents of Bristol County have a lower level of educational attainment than those of Massachusetts. An estimated 25% of Bristol County residents are college graduates with four-year degrees, versus 40% of Massachusetts residents. People in Bristol County are slightly older than their Massachusetts counterparts. The median age for Bristol County is 41 years, while the median age for Massachusetts is 40 years.

Education & Age - 2017

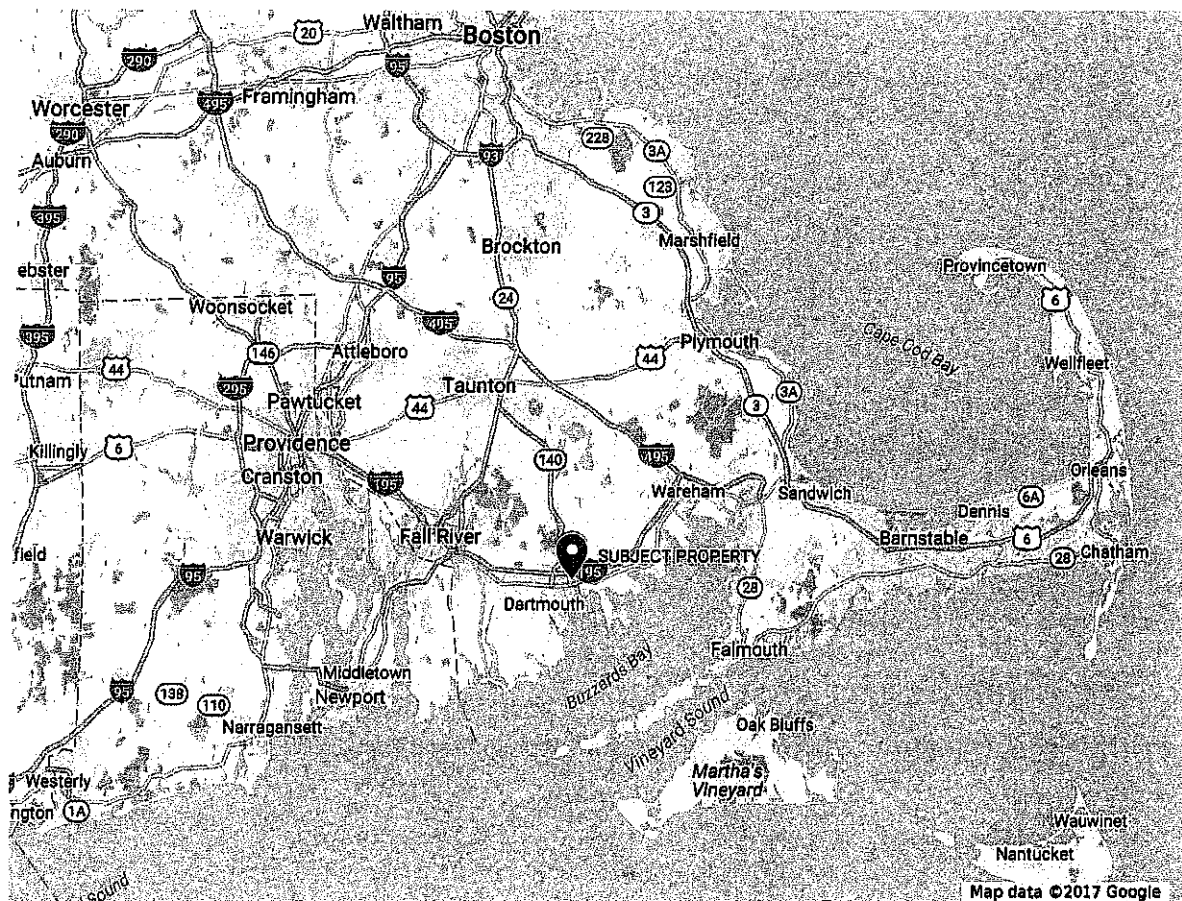


Source: The Nielsen Company

Conclusion

The Bristol County economy will be affected by a growing population base and lower income and education levels. Bristol County experienced growth in the number of jobs over the past decade, and it is reasonable to assume that employment growth will occur in the future. We anticipate that the Bristol County economy will improve and employment will grow, strengthening the demand for real estate.

Area Map



Surrounding Area Analysis

Location

The subject is located along the waterfront of the City of New Bedford, in an area known as the North Terminal. The area is urban in nature and is approximately 90% developed.

Access and Linkages

Primary highway access to the area is via I-195. Public transportation is provided by Southeastern Regional Transit Authority and provides access to southeastern Massachusetts. Overall, the primary mode of transportation in the area is the automobile.

Demand Generators

The three largest employers based in New Bedford are Southcoast Hospitals Group, Titleist, and Riverside Manufacturing. Tourism is a growing industry, as well. The New Bedford Industrial Park, located in the north end of New Bedford, is home to over 40 employers employing over 500 people.

Demographics

A demographic profile of the surrounding area, including population, households, and income data, is presented in the following table.

Surrounding Area Demographics					
2017 Estimates	1-Mile Radius	5-Mile Radius	10-Mile Radius	Bristol County, MA	Massachusetts
Population 2010	21,287	139,525	183,920	548,285	6,547,629
Population 2017	21,519	141,864	187,555	559,805	6,861,490
Population 2022	21,926	144,847	191,840	573,266	7,103,376
Compound % Change 2010-2017	0.2%	0.2%	0.3%	0.3%	0.7%
Compound % Change 2017-2022	0.4%	0.4%	0.5%	0.5%	0.7%
Households 2010	9,220	55,202	71,567	213,010	2,547,075
Households 2017	9,436	56,586	73,500	218,711	2,682,402
Households 2022	9,669	57,996	75,419	224,513	2,787,185
Compound % Change 2010-2017	0.3%	0.4%	0.4%	0.4%	0.7%
Compound % Change 2017-2022	0.5%	0.5%	0.5%	0.5%	0.8%
Median Household Income 2017	\$32,047	\$46,596	\$53,797	\$61,523	\$72,859
Average Household Size	2.2	2.4	2.4	2.5	2.5
College Graduate %	16%	19%	22%	25%	40%
Median Age	39	40	41	41	40
Owner Occupied %	30%	52%	59%	63%	62%
Renter Occupied %	70%	48%	41%	37%	38%
Median Owner Occupied Housing Value	\$215,758	\$262,744	\$289,943	\$306,895	\$371,475
Median Year Structure Built	1939	1951	1957	1962	1962
Avg. Travel Time to Work in Min.	25	26	26	29	32
Source: The Nielsen Company					

As shown above, the current population within a five-mile radius of the subject is 141,864, and the average household size is 2.4. Population in the area has grown since the 2010 census, and this trend is projected to continue over the next five years. Compared to Bristol County overall, the population within a five-mile radius is projected to grow at a slower rate.

Median household income is \$46,596, which is lower than the household income for Bristol County. Residents within a five-mile radius have a lower level of educational attainment than those of Bristol County, while median owner-occupied home values are considerably lower.

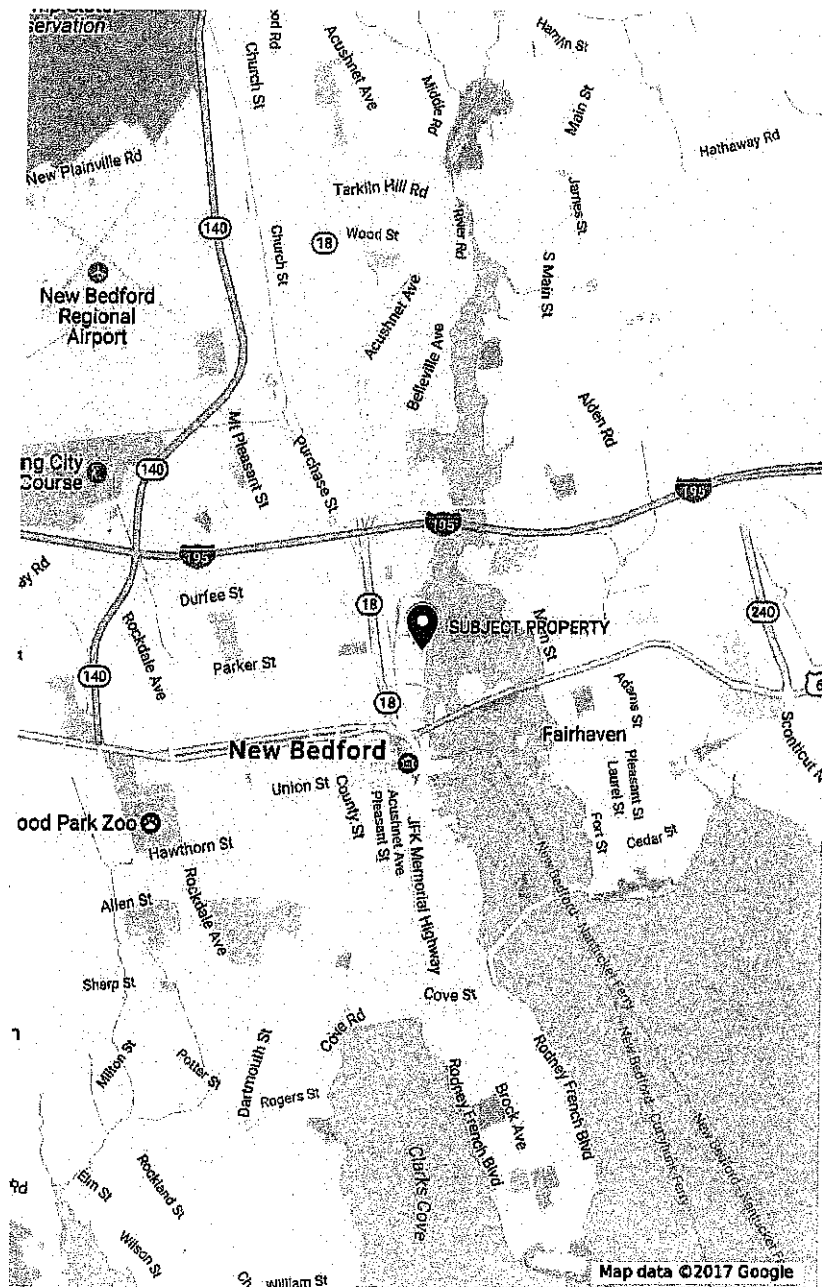
Land Use

The area is urban in character and approximately 95% developed. Land uses immediately surrounding the subject include a mix of industrial mill space and fish processing facilities, with typical ages of building improvements ranging from 15 to 100 years. Property types adjoining the subject include industrial uses.

Outlook and Conclusions

The area is in the revitalization stage of its life cycle. Recent re-development activity has been primarily of mill buildings along the waterfront. We anticipate that property values will remain stable in the near future.

Surrounding Area Map



Industrial Market Analysis

The City of New Bedford is a historic seaport city with 250 years of industry tied to the fishing industry. As the whaling era declined, city industries shifted to textiles and other manufacturing and business sectors that expanded in locations throughout the city. New Bedford maintains a strong maritime identity, being the richest “dollar value” fishing seaport in the United States along with shipping and development of offshore wind energy.

We reviewed a 2016 study, “New Bedford Waterfront: Draft Redevelopment Plan,” which was prepared by Sasaki Associates, The Cecil Group, UMass Donahue Institute, FXM Associates, and APEX Companies, LLC. The subject property is in the North Terminal area and identified in Subarea 4. This subarea of the study is designated as Waterfront Industrial, including an expanded new bulkhead area.

The following overview of the economic impact of the industries comprising the New Bedford Harbor waterfront was excerpted from the Redevelopment Plan:

The waterfront area accounts for about 7% of business establishments, 8% of employment, and 20% of business sales within the overall economy of New Bedford. Fishing and seafood and related industries are estimated to account for over half (54%) of the employment and over 90% of the business sales within the waterfront area.

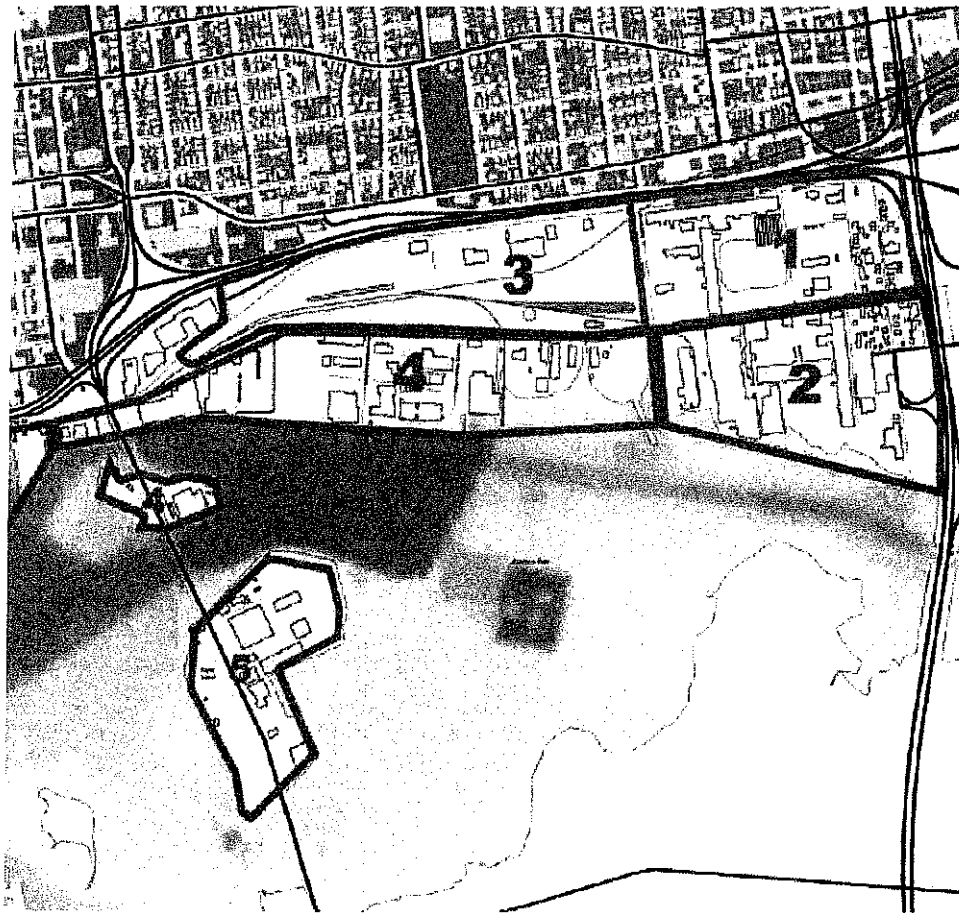
Payrolls for the estimated 4,159 employees in the waterfront area totaled about \$238 million in 2014. Average annual wages are estimated at \$57,000. This average annual wage for all employees within waterfront area industries compares favorably to the \$44,500 average annual wage for all industries in New Bedford in 2014, with the higher average wage largely accounted for by wages in fishing and seafood and related businesses. The fishing, seafood, and related industries accounted for 78% of all payrolls within the waterfront area in 2014, at an average annual wage of \$82,500.

The fishing and seafood industries remain the dominant economic activity within the waterfront district. They represent a classic business “cluster” unrivaled by any other single related economic activity in New Bedford. They depend upon the skills and expertise of facilitative functions – labor force, packaging companies, marine services/boat repair, legal, financial, promotional, and so forth. Much of the labor force they use for direct operations is predominantly located within the city, and in some instance near the waterfront. They are also a significant symbol of the city and draw visitors to the waterfront and downtown as well as well customers for their direct sales.

While the processing, wholesale storage, and distribution segments of the industry are not literally water-dependent, proximity to vessel off-loadings as well as proximity to other dealer processors is advantageous. These related businesses, while competitive, share product on a daily basis as needed to fill specific orders. The trend toward vertical integration – in which the processing, storage, and distribution, and fishing activities share a common corporate identity – blurs the distinction between water-dependent and non-water dependent business identities in this industry.

For the foreseeable future, the seafood industry is predicted to continue to be the dominant waterfront area economic "cluster," providing a majority of jobs, payrolls, and business expenditures within the waterfront area economy. Policy and other initiatives that are needed to retain and help expand this industry are likely to be a rational economic development investment. Additionally, policy incentives for expansion of other waterfront industries should consider the ongoing health of the seafood industry.

CONCEPT OF PROPOSED ORGANIZATION OF USES WITHIN THE WATERFRONT DISTRICT MASTER PLAN
(Partial Map Image of a Report Exhibit Prepared by Sasaki Associates)



SUBAREA 1: TRANSIT-ORIENTED (TOD) MIXED-USE

SUBAREA 2: NORTH TERMINAL, PUBLIC ACCESS #1

SUBAREA 3: TOD/WATERFRONT-INDUSTRIAL SUPPORT

SUBAREA 4: WATERFRONT INDUSTRIAL (INCLUDING NEW BULKHEAD)

Property Analysis

Land Description and Analysis

Land Description

Land Area	2.870 acres; 125,049 SF
Source of Land Area	Public Records
Primary Street Frontage	Hervey Tichon Avenue - 30 feet
Shape	Irregular
Corner	No
Rail Access	No
Topography	Generally level and at street grade
Drainage	No problems reported or observed
Environmental Hazards	None reported or observed
Ground Stability	No problems reported or observed

Flood Area Panel Number	25005C0393G
Date	July 16, 2014
Zone	X (Shaded)
Description	Within 500-year floodplain
Insurance Required?	No

Zoning; Other Regulations

Zoning Jurisdiction	City of New Bedford
Zoning Designation	Waterfront Industrial
Description	Maritime uses and industries related to the fishing industry
Legally Conforming?	Appears to be legally conforming
Zoning Change Likely?	No
Permitted Uses	Water freight terminal facilities, wholesaling, warehousing and storage requiring the waterfront location, fish processing and distribution, and listed other businesses requiring the waterfront or access location.
Minimum Lot Area	Not Specified
Maximum Floor Area Ratio	Not Specified
Parking Requirement	Not Specified
Other Land Use Regulations	Waterfront Industrial

Utilities

Service	Provider
Water	City of New Bedford
Sewer	City of New Bedford
Electricity	Eversource
Natural Gas	Eversource
Local Phone	Verizon or VOIP services

We are not experts in the interpretation of zoning ordinances. An appropriately qualified land use attorney should be engaged if a determination of compliance with zoning is required.

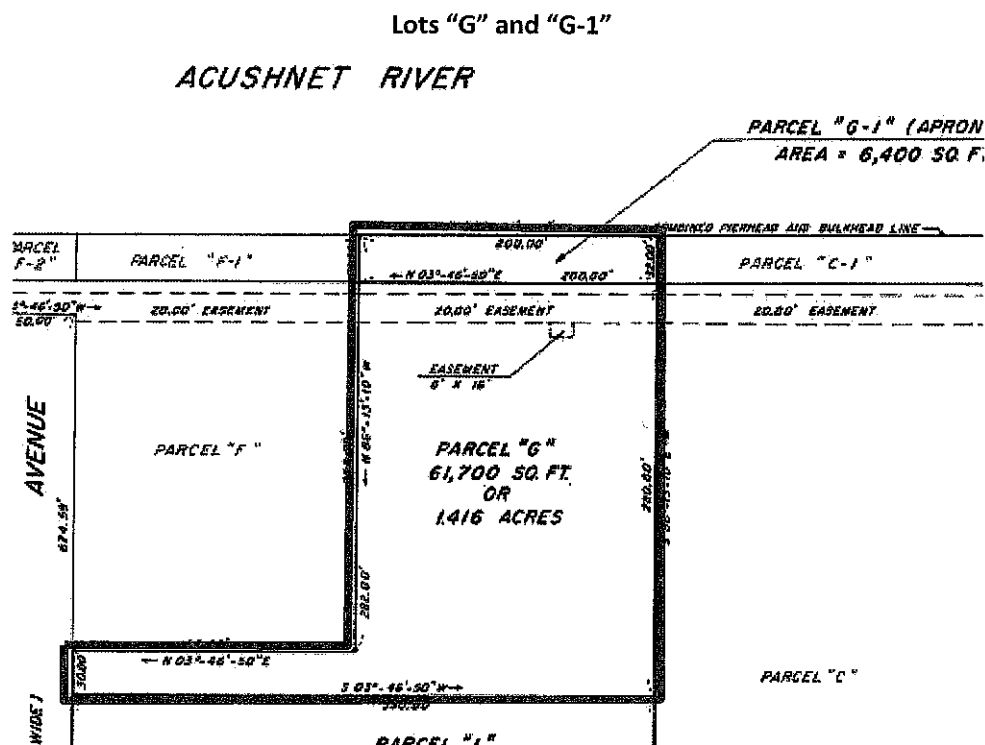
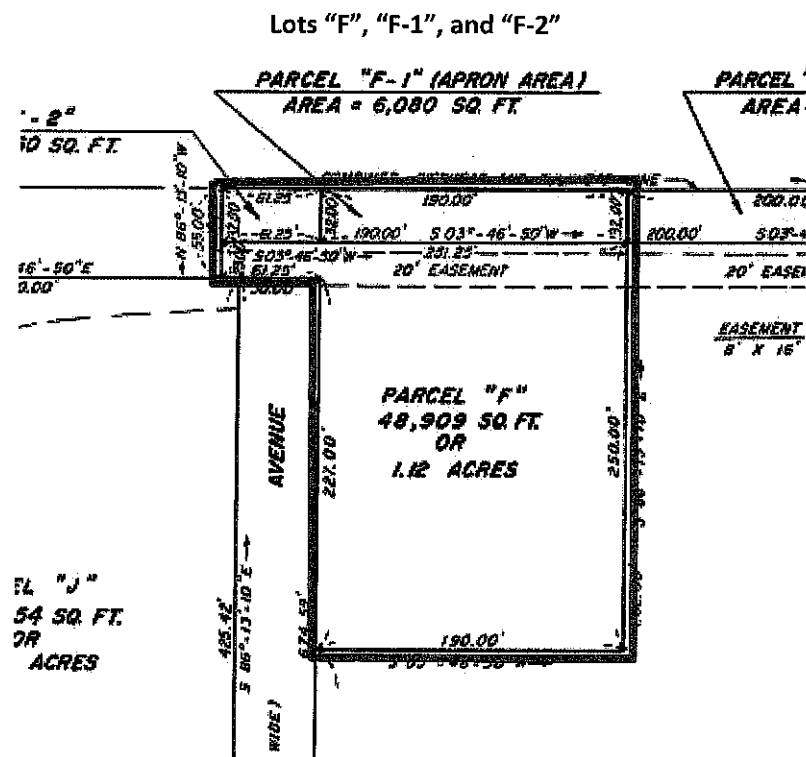
Easements, Encroachments, and Restrictions

Based upon a review of the deed and property survey, there do not appear to be any easements, encroachments, or restrictions that would adversely affect value. Our valuation assumes no adverse impacts from easements, encroachments, or restrictions, and further assumes that the subject has clear and marketable title.

Conclusion of Land Analysis

Overall, the physical characteristics of the site and the availability of utilities result in functional utility suitable for a variety of uses, including those permitted by zoning. We are not aware of any other particular restrictions on development.

Site Plan



Improvements Description and Analysis

The subject is an existing industrial ground lease property with a site area of 2.870 acres or 125,049 square feet. The appraisal considers only the ground lease, although it should be noted that the subject has been improved with a fish processing facility containing 42,300 square feet of gross building area. The improvements were constructed in 1982 and are 100% owner-occupied as of the effective appraisal date.

Improvements Description	
Name of Property	North Terminal Bulkhead Area, Parcel #10
General Property Type	Industrial Ground Lease
Property Sub Type	Waterfront Industrial
Competitive Property Class	C
Occupancy Type	Owner Occupied
Number of Buildings	1
Stories	1
Construction Class	S
Construction Type	Metal
Construction Quality	Average
Condition	Average
Gross Building Area (SF)	42,300
Percent Office Space	10%
Land Area (SF)	125,049
Floor Area Ratio (GBA/Land SF)	0.34
Building Area Source	Public Records
Year Built	1892
Actual Age (Yrs.)	125
Estimated Effective Age (Yrs.)	15
Estimated Economic Life (Yrs.)	40
Remaining Economic Life (Yrs.)	25
Number of Parking Spaces	Adequate
Parking Type	Surface

Improvements Analysis

Quality and Condition

The quality and condition of the subject are considered to be consistent with that of competing properties.

Functional Utility

The improvements appear to be adequately suited to their current use, and there do not appear to be any significant items of functional obsolescence.

Deferred Maintenance

It is our understanding that repairs to the bulkhead improvements are required. However, our values set forth do not include a deduction for the cost to cure any deficiencies.

ADA Compliance

Based on our inspection and information provided, we are not aware of any ADA issues. However, we are not expert in ADA matters, and further study by an appropriately qualified professional would be recommended to assess ADA compliance.

Hazardous Substances

An environmental assessment report was not provided for review and environmental issues are beyond our scope of expertise. No hazardous substances were observed during our inspection of the improvements; however, we are not qualified to detect such substances. Unless otherwise stated, we assume no hazardous conditions exist on or near the subject.

Personal Property

No personal property items were observed that would have any material contribution to market value.

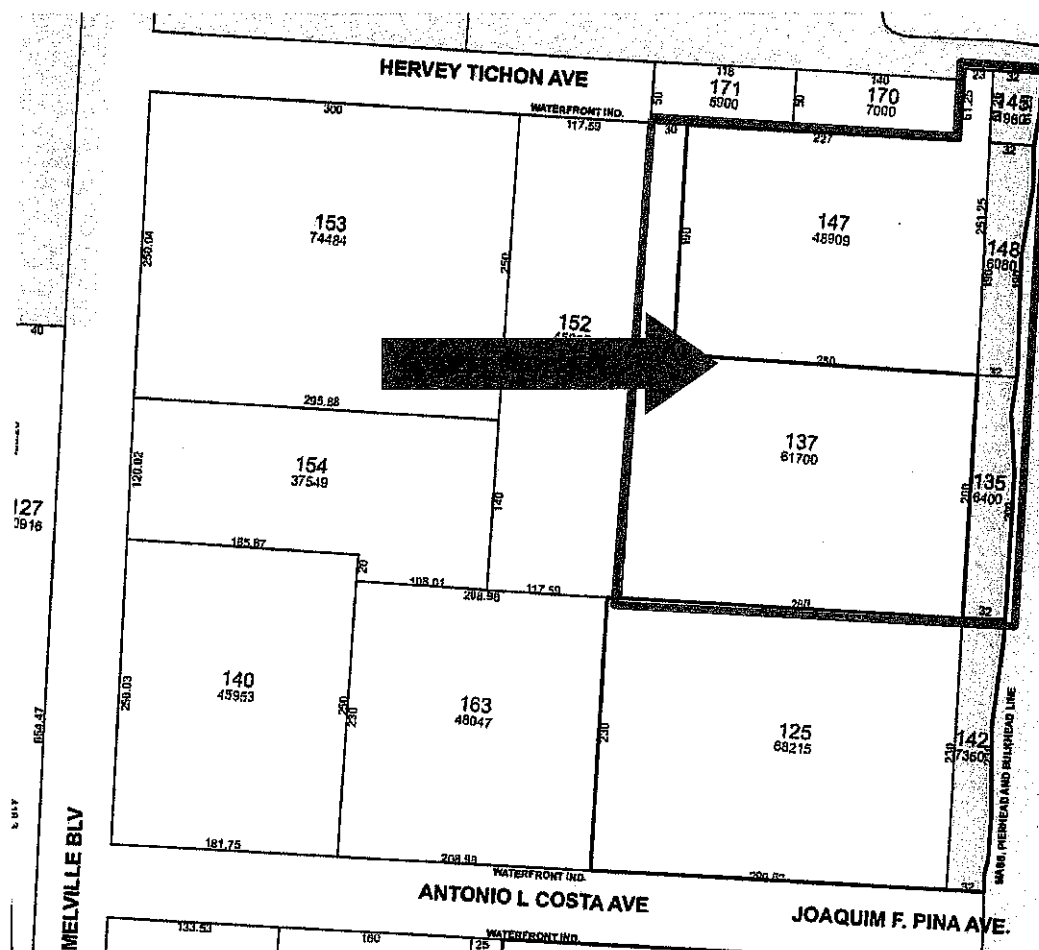
Real Estate Taxes

The real estate tax assessment of the subject is administered by the City of New Bedford. Assessed values are based on a current conversion ratio of 100% of assessor's market value. The property tax identification number and assessed value of the property for tax year 2017 are as follows:

Taxes and Assessments - 2017 (including leasehold improvements)							
Tax ID	Assessed Value			Tax Rate	Taxes and Assessments		
	Land	Improvements	Total		Ad Valorem Taxes	Direct Assessments	Total
Plat 66, Lot 147A	\$281,900	\$1,542,500	\$1,824,400	\$36.03	\$65,733	\$0	\$65,733
Plat 66, Lot 137A	\$269,700	\$89,900	\$359,600	\$36.03	\$12,956	\$0	\$12,956
	\$551,600	\$1,632,400	\$2,184,000		\$78,690	\$0	\$78,690

The property tax rate for the commercial and industrial properties in the City for the 2017 tax year is \$36.03 per thousand of assessed valuation. Application of this rate to the assessed value of the subject results in a real estate tax liability of \$78,690.

GIS Plat Map



Highest and Best Use

Process

Before a property can be valued, an opinion of highest and best use must be developed for the subject site, both as if vacant, and as improved or proposed. By definition, the highest and best use must be:

- Physically possible.
- Legally permissible under the zoning regulations and other restrictions that apply to the site.
- Financially feasible.
- Maximally productive, i.e., capable of producing the highest value from among the permissible, possible, and financially feasible uses.

As If Vacant

Physically Possible

The physical characteristics of the site do not appear to impose any unusual restrictions on development. Overall, the physical characteristics of the site and the availability of utilities result in functional utility suitable for a variety of uses.

Legally Permissible

The site is zoned Waterfront Industrial. Permitted uses include water freight terminal facilities, wholesaling, warehousing and storage requiring the waterfront location, fish processing and distribution, and listed other businesses requiring the waterfront or access location. To our knowledge, there are no legal restrictions, such as easements or deed restrictions, that would effectively limit the use of the property. Given prevailing land use patterns in the area, only industrial use is given further consideration in determining highest and best use of the site, as though vacant.

Financially Feasible

Based on our analysis of the market, there is currently adequate demand for industrial use in the subject's area. It appears that a newly developed industrial use on the site would have a value commensurate with its cost. Therefore, industrial use is considered to be financially feasible.

Maximally Productive

There does not appear to be any reasonably probable use of the site that would generate a higher residual land value than industrial use. Accordingly, it is our opinion that industrial use, developed to the normal market density level permitted by zoning, is the maximally productive use of the property.

Conclusion

Development of the site for industrial use is the only use that meets the four tests of highest and best use. Therefore, it is concluded to be the highest and best use of the property as if vacant.

As Improved

The subject site is developed with a fish processing facility, which is consistent with the highest and best use of the site as if it were vacant.

Based on our analysis, there does not appear to be any alternative use that could reasonably be expected to provide a higher present value than the current use, and the value of the existing improved property exceeds the value of the site, as if vacant. For these reasons, continued industrial use is concluded to be maximally productive and the highest and best use of the property as improved.

Most Probable Buyer

Taking into account the size and characteristics of the property and its owner-occupancy, the likely buyer is an owner-user or a local or regional investor, such as an individual or partnership.

Valuation

Valuation Methodology

Appraisers usually consider three approaches to estimating the market value of real property. These are the cost approach, sales comparison approach, and income capitalization approach.

The **cost approach** assumes that the informed purchaser would pay no more than the cost of producing a substitute property with the same utility. This approach is particularly applicable when the improvements being appraised are relatively new and represent the highest and best use of the land or when the property has unique or specialized improvements for which there is little or no sales data from comparable properties.

The **sales comparison approach** assumes that an informed purchaser would pay no more for a property than the cost of acquiring another existing property with the same utility. This approach is especially appropriate when an active market provides sufficient reliable data. The sales comparison approach is less reliable in an inactive market or when estimating the value of properties for which no directly comparable sales data is available. The sales comparison approach is often relied upon for owner-user properties.

The **income capitalization approach** reflects the market's perception of a relationship between a property's potential income and its market value. This approach converts the anticipated net income from ownership of a property into a value indication through capitalization. The primary methods are direct capitalization and discounted cash flow analysis, with one or both methods applied, as appropriate. This approach is widely used in appraising income-producing properties.

Reconciliation of the various indications into a conclusion of value is based on an evaluation of the quantity and quality of available data in each approach and the applicability of each approach to the property type.

The methodology employed in this assignment is summarized as follows:

The subject property is a land parcel that has been assembled from two adjacent lots. Each lot of the subject is encumbered by a long-term, 99-year, ground lease. Although the site has been improved with a fish processing facility and additional site improvements, the purpose of the appraisal is to determine the market value of the "leased fee" interest of the underlying ground lease. As such, only the income approach has been developed, taking into consideration the terms and conditions of the lease agreement and compatible market rent for the property as unencumbered.

Income Capitalization Approach

The income capitalization approach converts anticipated economic benefits of owning real property into a value estimate through capitalization. The steps taken to apply the income capitalization approach are:

- Analyze the revenue potential of the property.
- Consider appropriate allowances for vacancy, collection loss, and operating expenses.
- Calculate net operating income by deducting vacancy, collection loss, and operating expenses from potential income.
- Apply the most appropriate capitalization method to convert anticipated net income to an indication of value.

The two most common capitalization methods are direct capitalization and discounted cash flow analysis. In direct capitalization, a single year's expected income is divided by an appropriate capitalization rate to arrive at a value indication. In discounted cash flow analysis, anticipated future net income streams and a future resale value are discounted to a present value at an appropriate yield rate.

In this analysis, we use both direct capitalization and discounted cash flow analysis. For the "lease fee" interest, a discounted cash flow analysis has been developed to estimate the current value of the future income and resale value as encumbered by the subject lease. The direct capitalization analysis utilizes compatible market rent for the property as unencumbered.

Leased Status of Property

The subject property is a land parcel that has been assembled from two adjacent lots. Each lot of the subject is encumbered by a long term, 99-year, ground lease. Therefore, we considered the terms of the leases. Three key points directly impact the analysis:

- 1) The remaining terms of the leases are 64 years and 66 years.
- 2) The method of arbitration used to determine the annual rent amount increases over the term of the lease. Arbitration for the applicable rent is limited by the geographic area of the North Terminal Bulkhead Area, as per Article III, Section C, as shown below:

rental so determined shall not exceed that of comparable land of the LESSORS leased for waterfront purposes at the North Terminal Bulkhead Area

- 3) The effective year in which the annual rent is adjusted to agreed or arbitrated market-based annual rent.

Article III of the lease establishes the annual rent amount, the effective number of years for the rent amount, and method and number of years for adjustment of the rent amount.

The combined current rent of \$42,864 was set into effect in the third adjustment period, 15 years. Based on our review of the lease with representatives of the Harbor Development Commission, the next adjustment to the rent becomes effective in the 50-year point of the agreement.

The rent and terms for future adjustments are agreed or arbitrated according to the method described in Section D. At this point based on typical terms currently used for commercial ground lease properties, increases to the annual rent are based on the CPI.

Market Rent Analysis

As noted, the terms of the lease restrict the arbiters to considering comparable rentals in the "North Terminal Bulkhead Area." Based on the information provided by the Harbor Development Commission, the North Terminal Bulkhead ranges from \$0.04 to \$0.90 on a per square foot basis.

North Terminal Market						
Harbor Development Commission - North Terminal Properties						
Parcel #	Tenant	Address	Land Area (Sq Ft)**	Monthly Rent	Annual Rent	Annual Rent/SqFt LA
1	Maritime Terminal Inc.	276 MacArthur Drive	141,335	\$1,079.00	\$12,948.00	\$0.09
2	WILCA Holdings LLC & JFM Holdings LLC	110 Herman Melville Blvd	51,773	\$519.30	\$6,231.60	\$0.12
3	Marvin Dolinsky/Marder North	48 Antonio Costa Ave	32,414	\$837.65	\$10,051.80	\$0.31
4	Luzo Welding	42 Antonio Costa Ave	37,600	\$384.18	\$4,610.16	\$0.12
5	MAE Realty	22 Antonio Costa Avenue	125,915	\$1,939.38	\$23,272.56	\$0.18
6	SeaWatch L2, D1, D	150 Herman Melville Blvd	83,502	\$708.13	\$8,497.56	\$0.10
7	SeaWatch C, C1	15 Antonio Costa Ave	123,648	\$1,754.38	\$21,052.56	\$0.17
8	Packaging Products Corp	198 Herman Melville Blvd	74,484	\$748.50	\$8,982.00	\$0.12
9	Whaler Realty Co/ Nordic Fisheries	38 Hervey Tichon Ave	45,860	\$459.38	\$5,512.56	\$0.12
10	Nordic Fisheries	14 Hervey Tichon Ave	125,049	\$3,572.00	\$42,864.00	\$0.34
11	Wharf Tavern	216 Herman Melville Blvd	63,016	\$453.13	\$5,437.56	\$0.09
12	David Chambers	256 Herman Melville Blvd	86,500	\$535.76	\$6,429.12	\$0.07
13 / 14	Robert Cook	272 & 286 Herman Melville Blvd	129,200	\$536.38	\$6,436.56	\$0.05
15	Marvin Dolinsky/Shoreline Resources	300 Herman Melville Blvd	30,200	\$186.03	\$2,232.36	\$0.07
16	Acushnet River Shipyard & Evergreen Sheet Metal	302 Herman Melville Blvd	66,703	\$410.74	\$4,928.88	\$0.07
17	Tisbury Towing	352 Herman Melville Blvd,	151,560	\$504.64	\$6,055.68	\$0.04
*	EPA Bulkhead	NS Hervey Tichon Ave.	106,354	\$8,000.00	\$96,000.00	\$0.90
* Parcel # not provided						
** Based on assessment map data						
Source: City of New Bedford, Harbor Development Commission						

The parcels can be grouped into three zones, north, south, and central, generally based on access from area streets and bulkhead improvements. These are also indicative of the waterways licenses that permitted the development of the North Terminal area.

Comparable Rentals Map



North Terminal Bulkhead Area, Parcel #10



Analysis of Comparable Rentals

Reviewing the lease rates on a per square foot basis, the lower rates are in the north zone where there is limited or no bulkhead. There is essentially only one ground lease property in the south zone area, which pre-dates the development of the North Terminal area.

The subject is in the central zone of the North Terminal. Parcels located along the bulkhead line tend to be leased at a higher per square foot rate, while non-bulkhead parcels are generally 30% lower on a per square foot basis.

Based on our discussions with representatives of the Harbor Development Commission, the most recent ground lease rental is the parcel for the US EPA on the north side of Hervey Tichon Avenue. This parcel has an indicated per square foot rate of \$0.90.

The limited basis for comparative rental rates should increase during the remaining term of the subject's leases. Based on our discussions with representatives of the Harbor Development Commission, the City is actively pursuing expanding available parcels in the North Terminal area. The potential sites could become available by the redevelopment of City-owned parcels on the west side of Herman Melville Boulevard. An additional opportunity is the expansion of the bulkhead along the north zone parcels as indicated in a draft replacement study for the New Bedford/Fairhaven Bridge.

Market Rent Conclusion

Based on the preceding analysis of comparable rentals, we conclude market lease terms for the subject to be comparable to the US EPA parcel of \$0.90 on a per square foot basis.

Discounted Cash Flow Analysis

Cash Flow Income Projection

Contract / Current Rent

The combined current rent of \$42,864 was set into effect in the third adjustment period, 15 years.

Escalation to Market Rent

The next adjustment to the rents becomes effective in the 50-year point of the agreements. The current market rent of \$0.90 per square foot was applied to the square footage of the subject parcels F, F-1, and F2, with 56,949 square feet, and G and G-1, with 68,100 square feet, to establish annual rents of \$51,254 and \$61,290, respectively. The established market rents were then adjusted by 2.20%, a 20-year average of the CPI, for a period of 14 years for parcels F, F-1, and F2 and 17 years for parcels G and G-1, at which the point the arbitrated/market-based rents become effective.

Escalation Rate – CPI

A review of commercial and ground lease properties indicates that the method for projected increases to rents and some general expenses are adjusted based on inflation rates, commonly referred to as the Consumer Price Index. The following table shows the monthly and annual average for the Northeast Region CPI over the past 20 years.

CPI Index													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1996	2.70	2.70	2.80	2.90	2.90	2.80	3.00	2.90	3.00	3.00	3.30	3.30	3.00
1997	3.00	3.00	2.80	2.50	2.20	2.30	2.20	2.20	2.20	2.10	1.80	1.70	2.30
1998	1.60	1.40	1.40	1.40	1.70	1.70	1.70	1.60	1.50	1.50	1.50	1.60	1.60
1999	1.70	1.60	1.70	2.30	2.10	2.00	2.10	2.30	2.60	2.60	2.60	2.70	2.20
2000	2.70	3.20	3.80	3.10	3.20	3.70	3.70	3.40	3.50	3.40	3.40	3.40	3.40
2001	3.70	3.50	2.90	3.30	3.60	3.20	2.70	2.70	2.60	2.10	1.90	1.60	2.80
2002	1.10	1.10	1.50	1.60	1.20	1.10	1.50	1.80	1.50	2.00	2.20	2.40	1.60
2003	2.60	3.00	3.00	2.20	2.10	2.10	2.10	2.20	2.30	2.00	1.80	1.90	2.30
2004	1.90	1.70	1.70	2.30	3.10	3.30	3.00	2.70	2.50	3.20	3.50	3.30	2.70
2005	3.00	3.00	3.10	3.50	2.80	2.50	3.20	3.60	4.70	4.30	3.50	3.40	3.40
2006	4.00	3.60	3.40	3.50	4.20	4.30	4.10	3.80	2.10	1.30	2.00	2.50	3.20
2007	2.10	2.40	2.80	2.60	2.70	2.70	2.40	2.00	2.80	3.50	4.30	4.10	2.80
2008	4.30	4.00	4.00	3.90	4.20	5.00	5.60	5.40	4.90	3.70	1.10	0.10	3.80
2009	0.00	0.20	-0.40	-0.70	-1.30	-1.40	-2.10	-1.50	-1.30	-0.20	1.80	2.70	-0.40
2010	2.60	2.10	2.30	2.20	2.00	1.10	1.20	1.10	1.10	1.20	1.10	1.50	1.60
2011	1.60	2.10	2.70	3.20	3.60	3.60	3.60	3.80	3.90	3.50	3.40	3.00	3.20
2012	2.90	2.90	2.70	2.30	1.70	1.70	1.40	1.70	2.00	2.20	1.80	1.70	2.10
2013	1.60	2.00	1.50	1.10	1.40	1.80	2.00	1.50	1.20	1.00	1.20	1.50	1.50
2014	1.60	1.10	1.50	2.00	2.10	2.10	2.00	1.70	1.70	1.70	1.30	0.80	1.60
2015	-0.10	0.00	-0.10	-0.20	0.00	0.10	0.20	0.20	0.00	0.20	0.50	0.70	0.10
2016	1.40	1.00	0.90	1.10	1.00	1.00	0.80	1.10	1.50	1.60	1.70	2.10	1.30

CPI Index Average 1996 - 2016 2.20

Source: United States Department of Labor, Bureau of Labor Statistics

Our analysis assumes an annual increase of 2.20% to the arbitrated/market-based rent for the remaining term of the ground lease agreement.

Discount Rate and Reversion Capitalization Rate Selection

Discount and capitalization rates are used to convert net income into an indication of value. Selection of an appropriate capitalization rate considers the future income pattern of the property and investment risk associated with ownership. These rates vary for each property type and investment criteria of ownership. Data from national investor surveys that we consider in selecting discount and reversion capitalization rates is shown in the following exhibit.

Land Leases: Capitalization and Discount Rates

Property Type	Capitalization Rates			Discount Rates		
	Min.	Max.	Avg	Min.	Max.	Avg
Apartments	2.44%	11.27%	6.55%	5.04%	11.77%	7.55%
Golf	2.60%	16.30%	9.19%	5.20%	16.80%	10.19%
Health Care/Senior Housing	2.60%	12.64%	7.36%	5.20%	13.14%	8.36%
Industrial	2.60%	11.77%	6.99%	5.20%	12.27%	7.99%
Lodging	2.60%	15.93%	7.63%	5.20%	16.43%	8.63%
Mobile Home/RV Park/Camping	2.60%	13.15%	7.98%	5.20%	13.65%	8.98%
Office	2.60%	11.77%	7.49%	5.20%	12.27%	8.49%
Restaurants	3.70%	15.40%	8.74%	6.30%	15.90%	9.74%
Retail	2.49%	12.64%	7.13%	5.09%	13.14%	8.13%
Self-Storage	2.60%	11.77%	8.12%	5.20%	12.27%	9.12%
Special Purpose	3.55%	16.34%	8.82%	6.32%	18.72%	9.44%
All Properties	2.44%	16.34%	7.82%	5.04%	16.80%	8.72%

*4th Quarter 2016 Data

Source: RealtyRates.com Investor Survey Q1 - 2017

Discount Rate

The most current national survey data indicates that discount rates for land leased property type range from 5.04% to 16.80% and average 8.72%. Due to the long-term nature of the subject lease, we conclude that a discount rate of 8.72% is appropriate for the subject.

Reversion Capitalization Rate

Current survey data indicates a range of reversion capitalization rates of 2.44% to 16.34%, with an average of 7.82%, for land lease properties. Due to the long-term nature of the subject lease, we conclude a reversion capitalization rate of 7.82%.

Value Indication – Discounted Cash Flow Analysis

The value indications produced by the discounted cash flow analysis are as follows:

Value Based On Existing Lease *			
(Discounted Cash Flow Analysis)		F, F-1 & F-2	G & G-1
Effective Date	May 12, 2017	May 12, 2017	May 12, 2017
End of Lease	March 20, 2083	September 17, 2081	March 20, 2083
Remaining Term (Years)	66	64	66
Current Rent	\$42,864	\$21,030	\$21,834
Projected Market Rent			
Market Rent Start Year		August 21, 2031	March 20, 2034
Current Market Rent/Sq. Ft.	\$0.90	\$0.90	\$0.90
Subject Lease Area /Sq. Ft.	125,049	56,949	68,100
Est. Market Rent		\$51,254	\$61,290
C.P.I. Increase	2.20%	2.20%	2.20%
# Years to Market Rent		14	17
Projected Market Rent		\$69,509	\$88,727
Present Value of Projected Cash Flow			
Discount Rate	8.72%		
Net Present Value of Cash Flow	\$1,031,444	\$505,830	\$525,615
Reversion Value			
Reversion Rate	7.82%		
Estimated Reversion Value	\$6,051,675		
Holding Period	66		
Discounted Reversion Value	\$24,291		
Estimated Present Market Value			
Discounted Cash Flow + Discounted Reversion Value	\$1,055,736		
Rounded	\$1,100,000		
* Does not reflect the cost to cure deferred maintenance or repairs to bulkhead improvements.			

Direct Capitalization Analysis

As unencumbered, the subject is essentially owner-occupied, and the most probable purchaser is another owner-user. We use market rent as the basis of our income projection and apply the direct capitalization method. Our valuation assumes stabilized occupancy without a deduction for lease-up costs.

Stabilized Income and Expenses

Potential Gross Rent

As previously discussed, the market rental rate of \$0.90 is applied to the subject's land area of 125,049 square feet to arrive at Potential Gross Rent of \$112,544.

Expenses

According to the terms of the lease agreement, all associated property expenses are directly paid by the lease owner-user.

Capitalization Rate Selection

A capitalization rate is used to convert net income into an indication of value. Selection of an appropriate capitalization rate considers the future income pattern of the property and investment risk associated with ownership. We consider the following data in selecting a capitalization rate for the subject.

Land Leases: Capitalization and Discount Rates

Property Type	Capitalization Rates			Discount Rates		
	Min.	Max.	Avg	Min.	Max.	Avg
Apartments	2.44%	11.27%	6.55%	5.04%	11.77%	7.55%
Golf	2.60%	16.30%	9.19%	5.20%	16.80%	10.19%
Health Care/Senior Housing	2.60%	12.64%	7.36%	5.20%	13.14%	8.36%
Industrial	2.60%	11.77%	6.99%	5.20%	12.27%	7.99%
Lodging	2.60%	15.93%	7.63%	5.20%	16.43%	8.63%
Mobile Home/RV Park/Camping	2.60%	13.15%	7.98%	5.20%	13.65%	8.98%
Office	2.60%	11.77%	7.49%	5.20%	12.27%	8.49%
Restaurants	3.70%	15.40%	8.74%	6.30%	15.90%	9.74%
Retail	2.49%	12.64%	7.13%	5.09%	13.14%	8.13%
Self-Storage	2.60%	11.77%	8.12%	5.20%	12.27%	9.12%
Special Purpose	3.55%	16.34%	8.82%	6.32%	18.72%	9.44%
All Properties	2.44%	16.34%	7.82%	5.04%	16.80%	8.72%

*4th Quarter 2016 Data

Source: RealtyRates.com Investor Survey Q1 - 2017

Based on an analysis of the preceding data, a going-in capitalization rate for the subject is indicated within a range of 2.44% to 16.34%. To reach a capitalization rate conclusion, we consider each of the following investment risk factors to gauge its impact on the rate. The direction of each arrow in the following table indicates our judgment of an upward, downward, or neutral influence of each factor.

Risk Factor	Issues	Impact on Rate
Competitive Market Position	Construction quality, appeal, condition, effective age, functional utility.	↔
Location	Market area demographics and life cycle trends; proximity issues; access and support services.	↔
Market	Vacancy rates and trends; rental rate trends; supply and demand.	↔
Highest & Best Use	Upside potential from redevelopment, adaptation, expansion.	↔
Overall Impact		↔

Accordingly, we conclude a capitalization rate as follows:

Capitalization Rate Conclusion

Going-In Capitalization Rate	7.82%
------------------------------	-------

Net operating income is divided by the capitalization rate to arrive at a value indication by the income capitalization approach as follows:

Direct Capitalization Analysis

	SF	Space Type	Rent Applied	\$/SF	Annual
Income					
Base Rent					
Whaler Realty Co., Inc.	125,049	Ground Lease	Market	\$0.90	\$112,544
Potential Gross Rent					\$112,544
Vacancy & Collection Loss	0.00%				\$0
Effective Gross Income					\$112,544
Expenses					
Tenant assumes all related expenses					
Total Expenses					\$0
Net Operating Income					\$112,544
Capitalization Rate					7.82%
Indicated Value					\$1,439,182
Rounded					\$1,400,000

Reconciliation and Conclusion of Value

The values indicated by our analyses are as follows:

Summary of Value Indications

	Market Value - Based on Existing Lease	Market Value - Market Rent Equal to Fee Simple Interest
Cost Approach	Not Used	Not Used
Sales Comparison Approach	Not Used	Not Used
Income Capitalization Approach	\$1,100,000	\$1,400,000
Reconciled	\$1,100,000	\$1,400,000

Value Conclusions

Appraisal Premise	Interest Appraised	Date of Value	Value Conclusion
Market Value - Based on Existing Lease	Leased Fee	May 12, 2017	\$1,100,000
Market Value - Market Rent Equal to Fee Simple Interest	Fee Simple	May 12, 2017	\$1,400,000

Extraordinary Assumptions and Hypothetical Conditions

The value conclusions are subject to the following extraordinary assumptions that may affect the assignment results. An extraordinary assumption is uncertain information accepted as fact. If the assumption is found to be false as of the effective date of the appraisal, we reserve the right to modify our value conclusions.

1. The cash flow analysis assumes that the annual rent will be established at the current market rent on a square foot basis and adjusted for inflation based on the CPI.
2. The estimated market values presented in this report do not reflect the cost to cure deferred maintenance or repairs to the bulkhead improvements.

The opinions of value expressed in this report are based on estimates and forecasts that are prospective in nature and subject to considerable risk and uncertainty. Events may occur that could cause the performance of the property to differ materially from our estimates, such as changes in the economy, interest rates, capitalization rates, financial strength of tenants, and behavior of investors, lenders, and consumers. Additionally, our opinions and forecasts are based partly on data obtained from interviews and third party sources, which are not always completely reliable. Although we are of the opinion that our findings are reasonable based on available evidence, we are not responsible for the effects of future occurrences that cannot be reasonably foreseen at this time.

Exposure Time

Exposure time is the length of time the subject property would have been exposed for sale in the market had it sold on the effective valuation date at the concluded market value. Based on the concluded market values stated previously, it is our opinion that the probable exposure time is 12 months.

Marketing Period

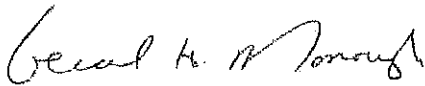
Marketing time is an estimate of the amount of time it might take to sell a property at the concluded market value immediately following the effective date of value. We estimate the subject's marketing period at 12 months.

Certification

We certify that, to the best of our knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. We have not performed any services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
8. Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice as well as applicable state appraisal regulations.
9. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
10. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
11. Gerard H. McDonough, MAI, FRICS, made a personal inspection of the property that is the subject of this report.
12. No one provided significant real property appraisal assistance to the person(s) signing this certification.
13. We have experience in appraising properties similar to the subject and are in compliance with the Competency Rule of USPAP.

14. As of the date of this report, Gerard H. McDonough, MAI, FRICS, has completed the continuing education program for Designated Members of the Appraisal Institute.



Gerard H. McDonough, MAI, FRICS
Certified General Real Estate Appraiser
MA Certificate # 361

Assumptions and Limiting Conditions

This appraisal and any other work product related to this engagement are limited by the following standard assumptions, except as otherwise noted in the report:

1. The title is marketable and free and clear of all liens, encumbrances, encroachments, easements and restrictions. The property is under responsible ownership and competent management and is available for its highest and best use.
2. There are no existing judgments or pending or threatened litigation that could affect the value of the property.
3. There are no hidden or undisclosed conditions of the land or of the improvements that would render the property more or less valuable. Furthermore, there is no asbestos in the property.
4. The revenue stamps placed on any deed referenced herein to indicate the sale price are in correct relation to the actual dollar amount of the transaction.
5. The property is in compliance with all applicable building, environmental, zoning, and other federal, state and local laws, regulations and codes.
6. The information furnished by others is believed to be reliable, but no warranty is given for its accuracy.

This appraisal and any other work product related to this engagement are subject to the following limiting conditions, except as otherwise noted in the report:

1. An appraisal is inherently subjective and represents our opinion as to the value of the property appraised.
2. The conclusions stated in our appraisal apply only as of the effective date of the appraisal, and no representation is made as to the effect of subsequent events.
3. No changes in any federal, state or local laws, regulations or codes (including, without limitation, the Internal Revenue Code) are anticipated.
4. No environmental impact studies were either requested or made in conjunction with this appraisal, and we reserve the right to revise or rescind any of the value opinions based upon any subsequent environmental impact studies. If any environmental impact statement is required by law, the appraisal assumes that such statement will be favorable and will be approved by the appropriate regulatory bodies.
5. Unless otherwise agreed to in writing, we are not required to give testimony, respond to any subpoena or attend any court, governmental or other hearing with reference to the property without compensation relative to such additional employment.
6. We have made no survey of the property and assume no responsibility in connection with such matters. Any sketch or survey of the property included in this report is for illustrative purposes only and should not be considered to be scaled accurately for size. The appraisal

covers the property as described in this report, and the areas and dimensions set forth are assumed to be correct.

7. No opinion is expressed as to the value of subsurface oil, gas or mineral rights, if any, and we have assumed that the property is not subject to surface entry for the exploration or removal of such materials, unless otherwise noted in our appraisal.
8. We accept no responsibility for considerations requiring expertise in other fields. Such considerations include, but are not limited to, legal descriptions and other legal matters such as legal title, geologic considerations such as soils and seismic stability; and civil, mechanical, electrical, structural and other engineering and environmental matters. Such considerations may also include determinations of compliance with zoning and other federal, state, and local laws, regulations and codes.
9. The distribution of the total valuation in the report between land and improvements applies only under the reported highest and best use of the property. The allocations of value for land and improvements must not be used in conjunction with any other appraisal and are invalid if so used. The appraisal report shall be considered only in its entirety. No part of the appraisal report shall be utilized separately or out of context.
10. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraisers, or any reference to the Appraisal Institute) shall be disseminated through advertising media, public relations media, news media or any other means of communication (including without limitation prospectuses, private offering memoranda and other offering material provided to prospective investors) without the prior written consent of the persons signing the report.
11. Information, estimates and opinions contained in the report and obtained from third-party sources are assumed to be reliable and have not been independently verified.
12. Any income and expense estimates contained in the appraisal report are used only for the purpose of estimating value and do not constitute predictions of future operating results.
13. If the property is subject to one or more leases, any estimate of residual value contained in the appraisal may be particularly affected by significant changes in the condition of the economy, of the real estate industry, or of the appraised property at the time these leases expire or otherwise terminate.
14. Unless otherwise stated in the report, no consideration has been given to personal property located on the premises or to the cost of moving or relocating such personal property; only the real property has been considered.
15. The current purchasing power of the dollar is the basis for the values stated in the appraisal; we have assumed that no extreme fluctuations in economic cycles will occur.
16. The values found herein are subject to these and to any other assumptions or conditions set forth in the body of this report but which may have been omitted from this list of Assumptions and Limiting Conditions.
17. The analyses contained in the report necessarily incorporate numerous estimates and assumptions regarding property performance, general and local business and economic

conditions, the absence of material changes in the competitive environment and other matters. Some estimates or assumptions, however, inevitably will not materialize, and unanticipated events and circumstances may occur; therefore, actual results achieved during the period covered by our analysis will vary from our estimates, and the variations may be material.

18. The Americans with Disabilities Act (ADA) became effective January 26, 1992. We have not made a specific survey or analysis of the property to determine whether the physical aspects of the improvements meet the ADA accessibility guidelines. We claim no expertise in ADA issues, and render no opinion regarding compliance of the subject with ADA regulations. Inasmuch as compliance matches each owner's financial ability with the cost to cure the non-conforming physical characteristics of a property, a specific study of both the owner's financial ability and the cost to cure any deficiencies would be needed for the Department of Justice to determine compliance.
19. The appraisal report is prepared for the exclusive benefit of the Client, its subsidiaries and/or affiliates. It may not be used or relied upon by any other party. All parties who use or rely upon any information in the report without our written consent do so at their own risk.
20. No studies have been provided to us indicating the presence or absence of hazardous materials on the subject property or in the improvements, and our valuation is predicated upon the assumption that the subject property is free and clear of any environment hazards including, without limitation, hazardous wastes, toxic substances and mold. No representations or warranties are made regarding the environmental condition of the subject property. Integra Realty Resources – Hartford/Providence, Integra Realty Resources, Inc., Integra Strategic Ventures, Inc. and/or any of their respective officers, owners, managers, directors, agents, subcontractors or employees (the "Integra Parties"), shall not be responsible for any such environmental conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because we are not experts in the field of environmental conditions, the appraisal report cannot be considered as an environmental assessment of the subject property.
21. The persons signing the report may have reviewed available flood maps and may have noted in the appraisal report whether the subject property is located in an identified Special Flood Hazard Area. We are not qualified to detect such areas and therefore do not guarantee such determinations. The presence of flood plain areas and/or wetlands may affect the value of the property, and the value conclusion is predicated on the assumption that wetlands are non-existent or minimal.
22. Integra Realty Resources – Hartford/Providence is not a building or environmental inspector. Integra Hartford/Providence does not guarantee that the subject property is free of defects or environmental problems. Mold may be present in the subject property and a professional inspection is recommended.
23. The appraisal report and value conclusions for an appraisal assume the satisfactory completion of construction, repairs or alterations in a workmanlike manner.
24. It is expressly acknowledged that in any action which may be brought against any of the Integra Parties, arising out of, relating to, or in any way pertaining to this engagement, the

appraisal reports, and/or any other related work product, the Integra Parties shall not be responsible or liable for any incidental or consequential damages or losses, unless the appraisal was fraudulent or prepared with intentional misconduct. It is further acknowledged that the collective liability of the Integra Parties in any such action shall not exceed the fees paid for the preparation of the appraisal report unless the appraisal was fraudulent or prepared with intentional misconduct. Finally, it is acknowledged that the fees charged herein are in reliance upon the foregoing limitations of liability.

25. Integra Realty Resources – Hartford/Providence, an independently owned and operated company, has prepared the appraisal for the specific intended use stated elsewhere in the report. The use of the appraisal report by anyone other than the Client is prohibited except as otherwise provided. Accordingly, the appraisal report is addressed to and shall be solely for the Client's use and benefit unless we provide our prior written consent. We expressly reserve the unrestricted right to withhold our consent to your disclosure of the appraisal report or any other work product related to the engagement (or any part thereof including, without limitation, conclusions of value and our identity), to any third parties. Stated again for clarification, unless our prior written consent is obtained, no third party may rely on the appraisal report (even if their reliance was foreseeable).
26. The conclusions of this report are estimates based on known current trends and reasonably foreseeable future occurrences. These estimates are based partly on property information, data obtained in public records, interviews, existing trends, buyer-seller decision criteria in the current market, and research conducted by third parties, and such data are not always completely reliable. The Integra Parties are not responsible for these and other future occurrences that could not have reasonably been foreseen on the effective date of this assignment. Furthermore, it is inevitable that some assumptions will not materialize and that unanticipated events may occur that will likely affect actual performance. While we are of the opinion that our findings are reasonable based on current market conditions, we do not represent that these estimates will actually be achieved, as they are subject to considerable risk and uncertainty. Moreover, we assume competent and effective management and marketing for the duration of the projected holding period of this property.
27. All prospective value opinions presented in this report are estimates and forecasts which are prospective in nature and are subject to considerable risk and uncertainty. In addition to the contingencies noted in the preceding paragraph, several events may occur that could substantially alter the outcome of our estimates such as, but not limited to changes in the economy, interest rates, and capitalization rates, behavior of consumers, investors and lenders, fire and other physical destruction, changes in title or conveyances of easements and deed restrictions, etc. It is assumed that conditions reasonably foreseeable at the present time are consistent or similar with the future.

28. The appraisal is also subject to the following:

Extraordinary Assumptions and Hypothetical Conditions

The value conclusions are subject to the following extraordinary assumptions that may affect the assignment results. An extraordinary assumption is uncertain information accepted as fact. If the assumption is found to be false as of the effective date of the appraisal, we reserve the right to modify our value conclusions.

1. The cash flow analysis assumes that the annual rent will be established at the current market rent on a square foot basis and adjusted for inflation based on the CPI.
 2. The estimated market values presented in this report do not reflect the cost to cure deferred maintenance or repairs to the bulkhead improvements.
-

Addendum A

Appraiser Qualifications



Gerard H. McDonough, MAI, FRICS

Experience

Senior Managing Director for Integra Realty Resources - Hartford/Providence. Specializes in advisory and valuation services for marine-oriented properties; recreational marinas, boat yards, and ship yards. Recent assignments have been completed in the following locations: ME, NH, MA, CO, CT, RI, NY, NJ, MD, VA, NC, SC, GA, FL, IL, KY, TN, AL, MS, TX, KS, IA, MO, OK, MI, ND, Mexico, Costa Rica, Panama, and the Caribbean.

Professional Activities & Affiliations

Past President, Rhode Island Chapter of the Appraisal Institute
Committee: Association of Marina Industries Legislative Committee
Committee: Association of Marina Industries Data and Statistics Committee of The Water Access Alliance

President: Marinevest www.marinevest.com
Member: National Marine Manufacturers Association (NMMA)
Member: Association of Marina Industries www.marinaassociation.org
Member: American Boat Builders & Repairers Association (ABBRA) www.abbra.org
Member: Rhode Island Marine Trade Association
Member: Connecticut Marine Trade Association
Member: Maryland Marine Trade Association
Member: National Association of Realtors
Member: Maine Marine Trades Association
Appraisal Institute, Member (MAI) Appraisal Institute, July 1987
Royal Institute of Chartered Surveyors, Fellow (FRICS)

Licenses

Connecticut, Certified General Appraiser, RCG771, Expires April 2018
Georgia, Certified General Appraiser, 260004, Expires August 2017
Maine, Certified General Appraiser, CG1040, Expires December 2017
Massachusetts, Certified General Appraiser, 361, Expires August 2017
New Hampshire, Certified General Appraiser, CG897, Expires August 2017
New York, Certified General Appraiser, 43666, Expires May 2018
Rhode Island, Certified General Appraiser, CGA.0A00127, Expires December 2017
Wyoming, Certified General Appraiser, AP-1405, Expires March 2019
Iowa, Certified General Appraiser, CG03436, Expires June 2017
Vermont, Certified General Appraiser, 080.0000228, Expires May 2018

Education

Bachelor of Science - Boston College - 1973

Articles and Publications

How to value your marina - Marina World - November/December 2007
Marina Valuation Overview - Appraisal Institute Webinar - 2013
US marinas set to become an asset class - Marina World September/October 2016

Qualified Before Courts & Administrative Bodies

Rhode Island Superior Court

Integra Realty Resources
Hartford/Providence

365 Eddy Street
Providence, RI 02903

T 401.273.7710
F 401.273.7410

irr.com

gmcdonough@irr.com - 401.273.7710 x15



Gerard H. McDonough, MAI, FRICS

Qualified Before Courts & Administrative Bodies (Cont'd)

Rhode Island Family Court
Connecticut Superior Court
Massachusetts Superior Court
United State District Court
United State Federal Bankruptcy Court

Integra Realty Resources
Hartford/Providence

365 Eddy Street
Providence, RI 02903

T 401.273.7710
F 401.273.7410

irr.com

gmcdonough@irr.com - 401.273.7710 x15



Fold, Then Detach Along All Perforations

**COMMONWEALTH OF MASSACHUSETTS
DIVISION OF PROFESSIONAL LICENSURE**

BOARD OF

REAL ESTATE APPRAISERS

ISSUES THE FOLLOWING LICENSE AS A
CERT. GEN. REAL ESTATE APPRAISER

GERARD H. McDONOUGH

77 BLUEBERRY LANE

JAMESTOWN

RI 02835-2901



LICENSE SIGNATURE

361
LICENSE NUMBER

08/19/17
EXPIRATION DATE

469128
SERIAL NUMBER

Integra Realty Resources, Inc.

Corporate Profile

Integra Realty Resources, Inc. offers the most comprehensive property valuation and counseling coverage in North America with 58 independently owned and operated offices located throughout the United States and the Caribbean. Integra was created for the purpose of combining the intimate knowledge of well-established local firms with the powerful resources and capabilities of a national company. Integra offers integrated technology, national data and information systems, as well as standardized valuation models and report formats for ease of client review and analysis. Integra's local offices have an average of 25 years of service in the local market, and virtually all are headed by a Senior Managing Director who is an MAI member of the Appraisal Institute.

A listing of IRR's local offices and their Senior Managing Directors follows:

ATLANTA, GA - Sherry L. Watkins, MAI, FRICS
AUSTIN, TX - Randy A. Williams, MAI, SR/WA, FRICS
BALTIMORE, MD - G. Edward Kerr, MAI, MRICS
BIRMINGHAM, AL - Rusty Rich, MAI, MRICS
BOISE, ID - Bradford T. Knipe, MAI, ARA, CCIM, CRE, FRICS
BOSTON, MA - David L. Cary, Jr., MAI, MRICS
CHARLESTON, SC - Cleveland "Bud" Wright, Jr., MAI
CHARLOTTE, NC - Fitzhugh L. Stout, MAI, CRE, FRICS
CHICAGO, IL - Eric L. Enloe, MAI, FRICS
CINCINNATI/DAYTON, OH - Gary S. Wright, MAI, FRICS, SRA
CLEVELAND, OH - Douglas P. Sloan, MAI
COLUMBIA, SC - Michael B. Dodds, MAI, CCIM
COLUMBUS, OH - Bruce A. Daubner, MAI, FRICS
DALLAS, TX - Mark R. Lamb, MAI, CPA, FRICS
DENVER, CO - Brad A. Weiman, MAI, FRICS
DETROIT, MI - Anthony Sanna, MAI, CRE, FRICS
FORT WORTH, TX - Gregory B. Cook, MAI, SR/WA
GREENSBORO, NC - Nancy Tritt, MAI, SRA, FRICS
HARTFORD, CT - Mark F. Bates, MAI, CRE, FRICS
HOUSTON, TX - David R. Dominy, MAI, CRE, FRICS
INDIANAPOLIS, IN - Michael C. Lady, MAI, SRA, CCIM, FRICS
JACKSON, MS - John R. Praytor, MAI
JACKSONVILLE, FL - Robert Crenshaw, MAI, FRICS
KANSAS CITY, MO/KS - Kenneth Jagers, MAI, FRICS
LAS VEGAS, NV - Charles E. Jack IV, MAI
LOS ANGELES, CA - John G. Ellis, MAI, CRE, FRICS
LOS ANGELES, CA - Matthew J. Swanson, MAI
LOUISVILLE, KY - Stacey Nicholas, MAI, MRICS
MEMPHIS, TN - J. Walter Allen, MAI, FRICS

MIAMI/PALM BEACH, FL - Anthony M. Graziano, MAI, CRE, FRICS
MINNEAPOLIS, MN - Michael F. Amundson, MAI, CCIM, FRICS
NAPLES, FL - Carlton J. Lloyd, MAI, FRICS
NASHVILLE, TN - R. Paul Perutelli, MAI, SRA, FRICS
NEW JERSEY COASTAL - Halvor J. Egeland, MAI
NEW JERSEY NORTHERN - Matthew S. Krauser, CRE, FRICS
NEW YORK, NY - Raymond T. Cirz, MAI, CRE, FRICS
ORANGE COUNTY, CA - Steve Calandra, MAI
ORLANDO, FL - Christopher Starkey, MAI, MRICS
PHILADELPHIA, PA - Joseph D. Pasquarella, MAI, CRE, FRICS
PHOENIX, AZ - Walter 'Tres' Winus III, MAI, FRICS
PITTSBURGH, PA - Paul D. Griffith, MAI, CRE, FRICS
PORTLAND, OR - Brian A. Glanville, MAI, CRE, FRICS
PROVIDENCE, RI - Gerard H. McDonough, MAI, FRICS
RALEIGH, NC - Chris R. Morris, MAI, FRICS
RICHMOND, VA - Kenneth L. Brown, MAI, CCIM, FRICS
SACRAMENTO, CA - Scott Beebe, MAI, FRICS
ST. LOUIS, MO - P. Ryan McDonald, MAI, FRICS
SALT LAKE CITY, UT - Darrin W. Liddell, MAI, FRICS, CCIM
SAN DIEGO, CA - Jeff A. Greenwald, MAI, SRA, FRICS
SAN FRANCISCO, CA - Jan Kleczewski, MAI, FRICS
SARASOTA, FL - Carlton J. Lloyd, MAI, FRICS
SEATTLE, WA - Allen N. Safer, MAI, MRICS
SYRACUSE, NY - William J. Kimball, MAI, FRICS
TAMPA, FL - Bradford L. Johnson, MAI, MRICS
TULSA, OK - Owen S. Ard, MAI
WASHINGTON, DC - Patrick C. Kerr, MAI, FRICS, SRA
WILMINGTON, DE - Douglas L. Nickel, MAI, FRICS
CARIBBEAN/CAYMAN ISLANDS - James Andrews, MAI, FRICS



Addendum B

Financials and Property Information

SUMMARY OF PROPERTY LEASE

Nordic Fisheries Inc
DBA Whaler Realty
14 Hervey Tichon Ave
New Bedford MA 02740

14 Hervey Tichon Ave

Link to Assessors

Ground Lease: Whaler Realty Co.

Date of Lease Agreement: September 9, 1982

Lessor: Harbor Development Commission

Lessee: Whaler Realty Co. Inc.

Term of Lease: 99 Years

Rent: \$14,020 yr / 1,168.33 mo

Status: Is currently Nordic Fisheries

Merger: Nordic Fisheries

Date of Merge: April 1, 2011

Lessor: Harbor Development Commission

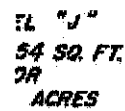
Lessee: Nordic Fisheries

Term of Lease: Continuation of 99 years

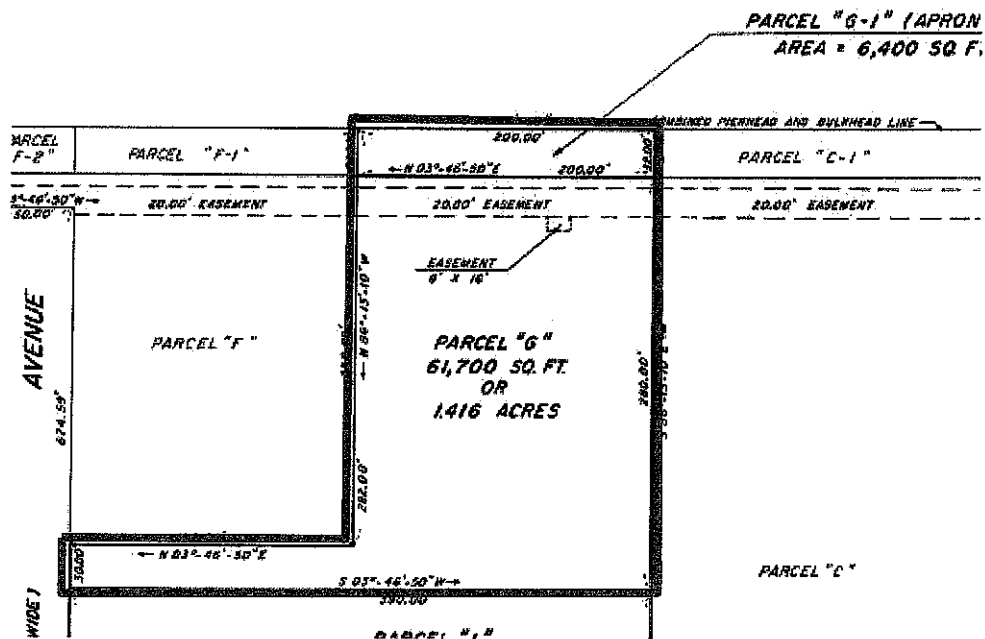
Rent Currently Being Paid: As of October 1, 2007: \$1,752.50 mo

Status: Current: Nordic Fisheries is Surviving Corporation (Parcels F, F-1, F-2)

Lots "F"; "F-1" and "F-2"



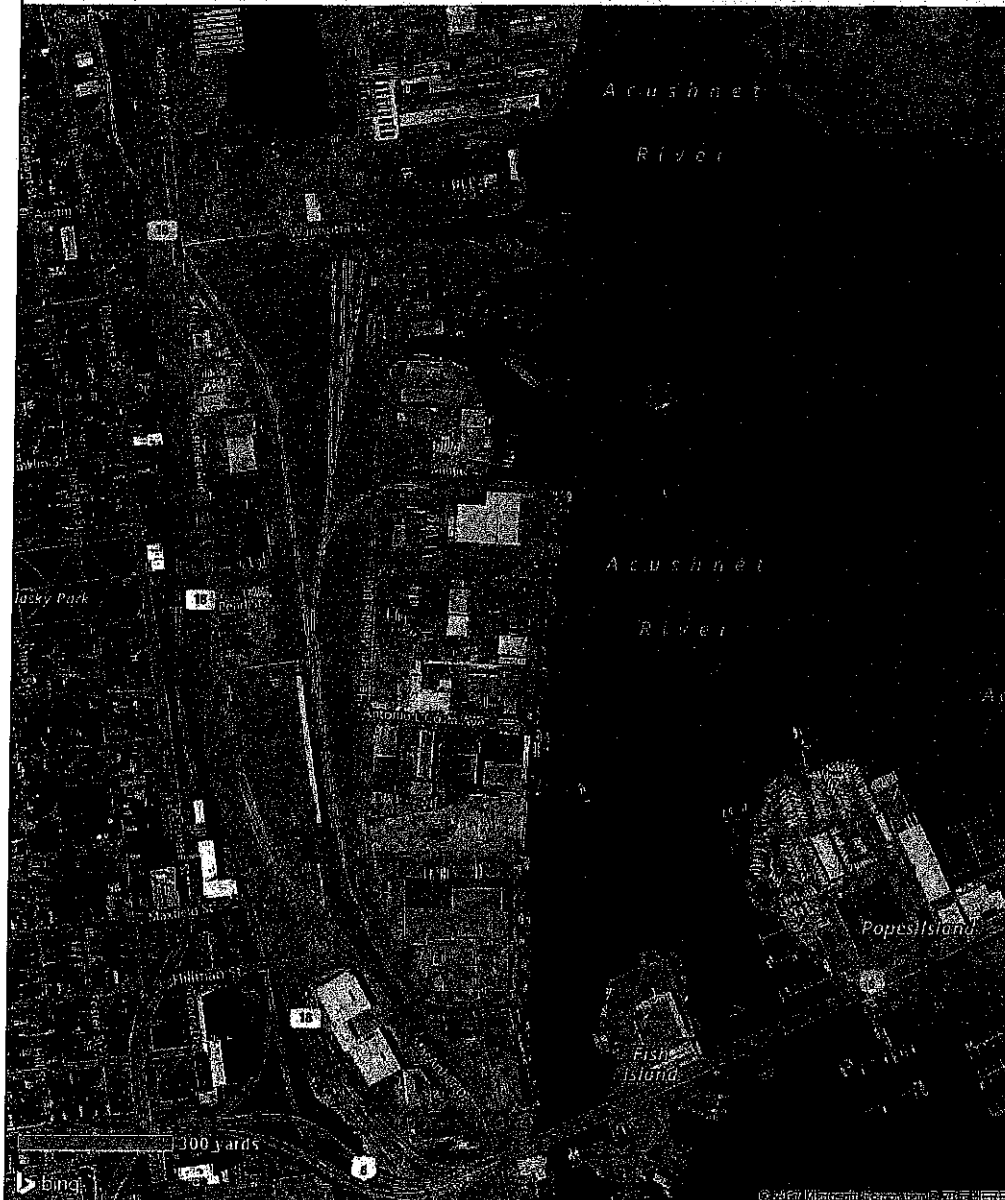
ACUSHNET RIVER



FLOOD MAP

InterFlood by a la mode

Prepared for: Integra Realty Resources
14 Hervey Tichon Ave
New Bedford, MA 02740-7348



MAP DATA

FEMA Special Flood Hazard Area: No
Map Number: 2500SC0383G
Zone: X500
Map Date: July 16, 2014
FIPS: 25005

MAP LEGEND

- Areas inundated by 500-year flooding
- Areas inundated by 100-year flooding
- Velocity Hazard

- Protected Areas
- Floodway
- Subject Area

Powered by CoreLogic

NBPA VOTE

Vote: To advise the City Council property committee that the New Bedford Port Authority no longer has a need for the real estate located at 14 Hervey Tichon Avenue, New Bedford, MA and 22 Antonio Costa Blvd. New Bedford, MA which are subject to real estate leases. As such the same can be declared surplus property. In addition, should the real estate be sold, the New Bedford Port Authority anticipates that a portion of the proceeds would be used to retire debt owed by the NBPA to the City of New Bedford.

Davis Hall

Sec. NBPA 4/3/18



CITY OF NEW BEDFORD

CITY COUNCIL

April 12, 2018

31

Ordered, that, pursuant to M.G.L. Ch. 40, Sec. 15A, the real property located in New Bedford, Massachusetts and being shown on New Bedford Assessor's Map 66, Lots 135, 137, 145, 147 and 148 be declared surplus property, no longer needed for the municipal purposes for which the property was acquired or for any other municipal purpose, and further, be hereby placed under the custody and control of the Committee on City Property for the purpose of sale.

Referred to the Committee on City Property.

IN CITY COUNCIL, April 12, 2018

Dennis W. Farias, City Clerk

a true copy, attest:

City Clerk



CITY OF NEW BEDFORD

CITY COUNCIL

April 12, 2018

31

Ordered, that, pursuant to M.G.L. Ch. 40, Sec. 3, the real property located in New Bedford, Massachusetts and being shown on New Bedford Assessor's Map 66, Lots 135, 137, 145, 147 and 148 be sold to Nordic Fisheries, Inc. in accordance with Massachusetts General Laws Chapter 30B and New Bedford Code of Ordinances Section 2-65, et. seq. and the terms of a purchase and sale agreement and deed to be drafted by the City Solicitor and executed by the Mayor.

Referred to the Committee on City Property.

IN CITY COUNCIL, April 12, 2018

Dennis W. Farias, City Clerk

a true copy, attest:

City Clerk



Item Title:

COMMUNICATION re 22 Antonio L. Costa Boulevard RFP and Proposal

Item Detail:

3. COMMUNICATION, Mayor Mitchell, to City Council, submitting a RFP and Proposal for the Sale of Real Property at 22 Antonio L. Costa Boulevard, Assessor's Map 66, Lots 128 and 136. (Ref'd 4/12/18)

3a. AN ORDER, that pursuant to M.G.L. Chapter 40, Section 15A, the real property located in New Bedford, MA and being shown on New Bedford Assessor's Map 66, Lots 128 and 136 be declared surplus property, no longer needed for the municipal property for which the property was acquired or for any other municipal purpose, and further be hereby placed under the custody and control of the Committee on City Property for the purpose of sale. (Ref'd 4/12/18)

3b. AN ORDER, that pursuant to M.G.L. Chapter 40, Section 3, the real property located in New Bedford, MA and being shown on New Bedford Assessor's Map 66, Lots 128 and 136 be sold to Nordic Fisheries, Inc. in accordance with Massachusetts General Laws Chapter 30B and New Bedford Code of Ordinances Section 2-65, et. seq. and the terms of a purchase and sale agreement and deed to be drafted by the City Solicitor and executed by the Mayor. (Ref'd 4/12/18)

Additional Information:

ATTACHMENTS:

Description	Type
3. COMM re RFP for 22 Antonio L. Costa Blvd	Cover Memo
3a. ORDER re Sale of 22 Antonio L. Costa Blvd	Cover Memo
3b. ORDER re Sale of 22 Antonio L. Costa Blvd	Cover Memo



CITY OF NEW BEDFORD
JONATHAN F. MITCHELL, MAYOR

2018 APR -5 PM 3:40
CITY CLERK
CITY OF NEW BEDFORD, MA

April 5, 2018

Linda Morad, President
and Members of the New Bedford City Council
New Bedford City Hall
133 William Street
New Bedford, MA 02740

Re: RFP and Proposal: Sale of Real Property at 14 Hervey Tichon Ave; Assessor's Map 66,
Lots 135, 137, 145, 147 and 148

Re: RFP and Proposal: Sale of Real Property at 22 Antonio L. Costa Blvd; Assessor's Map 66, Lots 128 and 136 ✓

Dear President Morad and Members of the City Council,

Last year the New Bedford Port Authority undertook the first-ever comprehensive assessment of the physical condition of all piers under Port Authority management in New Bedford Harbor. That assessment found serious structural deficiencies at 14 Hervey Tichon Avenue and 22 Antonio Costa Boulevard which would require several million dollars to correct.

As a consequence, the Port Authority, in consultation with the City, concluded it would be prudent to determine if there were private-sector interest in acquisition of the properties in their current condition. A disposition of the properties to private parties would ensure that the new owners would bear the cost of making repairs, and create an opportunity for significant new private investment in an important area of the working waterfront.

The Port Authority also commissioned independent appraisals of both properties. The appraisals were used to establish minimum bid amounts in subsequent Request for Proposals issued for the possible sale of the properties. The appraiser took into account that both properties are presently encumbered by 99-year leases; but the appraiser did not devalue the properties on the basis of their current state of disrepair (properties were appraised based on their "as is" condition).

Two responsive proposals were received from Nordic Fisheries, Inc.: one for 14 Hervey Tichon Ave. being in the amount of \$1,000,100.00 and the other for 22 Antonio L. Costa Blvd. for \$1,100,100.00. Both amounts are consistent with the respective values calculated by the independent appraiser and included as a requirement of the RFP. Nordic is the lessee on both properties.

Given the quality of the two proposals, the New Bedford Port Authority voted pursuant to M.G.L. Ch. 40, § 15A on April 3, 2018 to notify the City Council that the properties were no longer required by the Port Authority and were available for disposition by the Committee on City Property in accordance with Chapter 30B.

Accordingly, I ask that the Council: (i) by simple majority, vote to ratify issuance of the RFP's, and (2) by 2/3 majority, vote to declare the two properties surplus and no longer needed for the municipal purposes for which the property was acquired or for any other municipal purpose, and that the properties be placed under the custody and control of the Committee on City Property for the purpose of sale. I have enclosed a proposed vote for the April 12, 2018 meeting setting forth the foregoing as well as an undated proposed vote for sale of the properties by the Committee on City Property.

Finally, it is important to note that the sale of the two properties will have a modest negative impact on Port Authority operating budget due to the loss of approximately \$40,000 in annual rental income presently being collected by the Port Authority from the two properties. That income loss notwithstanding, the Port Authority believes that the long-term benefits justify the decision to relinquish ownership and forego this revenue: First, the responsibility for multi-million dollar repair projects (and for any future repairs) are placed on the new owners. Second, holding title to the properties will give the new owners an incentive to modernize and upgrade this key area of the waterfront.

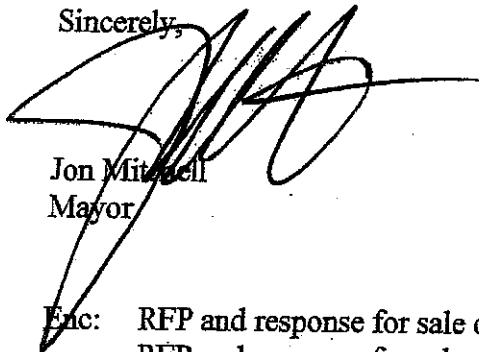
In addition, the availability of sale proceeds would make possible the retirement of a legacy liability of approximately \$850,000 owed the City by the Port Authority. The Port Authority presently makes an annual payment of \$50,000 toward this debt, so the present rate of retirement is nominal given the outstanding balance. The presence of this legacy debt on the balance sheets of the City and Port Authority hampers both City and Port Authority finances, and its final resolution would strengthen the financial position of both.

Toward that end, the Commissioners of the Port Authority recently voted to express their support for this approach, and I concur in their view. (By law, the proceeds from the sale will be deposited in the City's General Fund, and any appropriation from the General Fund for the purpose of retiring the Port Authority debt will require a future vote of the City Council. No City Council action on this matter is being sought at this time.)

I am enclosing the Requests for Proposals and the proposals received from Nordic Fisheries, Inc. for each property, along with proposed votes of the Council, and the vote taken by the Port Authority. In the interest of transparency and safety, it was decided to previously make public the condition surveys and the independent appraisals. These are also included herein for the benefit of the Council.

Thank you for your consideration in this matter.

Sincerely,



Jon Mitchell
Mayor

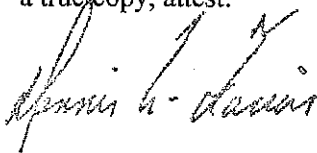
Enc: RFP and response for sale of 14 Hervey Tichon Ave. (includes condition survey)
RFP and response for sale of 22 Antonio L. Costa Blvd. (includes condition survey)
Proposed votes for City Council and Committee on City Property
NBPA vote notifying City Council that parcels are no longer needed
Appraisal for 14 Hervey Tichon Ave.
Appraisal for 22 Antonio L. Costa Blvd.

Referred to the Committee on City Property.

IN CITY COUNCIL, April 12, 2018

Dennis W. Farias, City Clerk

a true copy, attest:



City Clerk



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
22 Antonio Costa Boulevard
#HDC-FY18-002**

ADDENDUM #4

The City of New Bedford issues the following Addendum #4 for

**Purchase of North Terminal Bulkhead Area
22 Antonio Costa Boulevard**

RFP # HDC-FY18-002

March 2, 2018

To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

Attached is the breakdown of 22 Antonio Costa Boulevard.

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford

Here is the final breakdown for all three:

22 Antonio Costa:

Map 66 Lot 128 (inclusive of Lot 136 as merged by the Assessors)

14 Hervey Tichon:

Map 66 Lot 137 (inclusive of Lot 135 as merged by the Assessors)

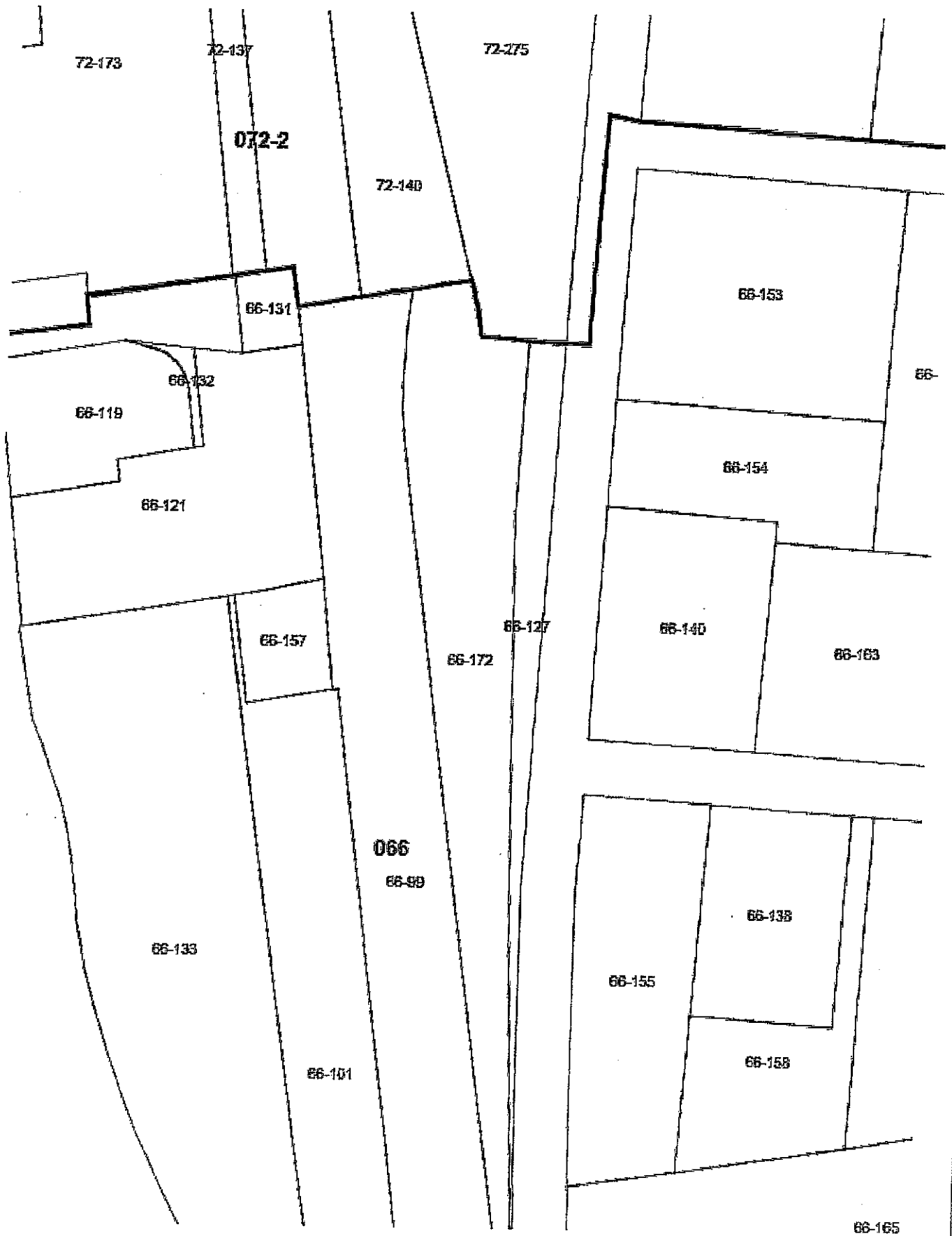
Map 66 Lot 147 (inclusive of Lots 145 and 148 as merged by the Assessors)

15 Antonio Costa:

Map 66 Lot 125 (inclusive of Lot 142 as merged by the Assessors)

Map 66 Lot 163

Here is a map showing the boundaries without the merged lot numbers.



72-173

72-137

72-275

072-2

72-140

66-131

66-132

66-119

66-121

66-157

66-133

66-101

066
66-99

66-172

66-127

66-153

66-154

66-140

66-163

66-138

66-155

66-158

66-165



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
22 Antonio Costa Boulevard
#HDC-FY18-002**

ADDENDUM #3

The City of New Bedford issues the following Addendum #3 for

**Purchase of North Terminal Bulkhead Area
22 Antonio Costa Boulevard**

RFP # HDC-FY18-002

February 16, 2018

To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

1. The site visit for 22 Antonio Costa Boulevard has been re-scheduled until Wednesday, February 28, 2018 at 10:00 am. All interested parties should meet at 15 Antonio Costa Boulevard.
2. The due date for proposals has been extended to Friday, March 9, 2018 at 11:00 am. Request for Proposals are due at New Bedford City Hall, Room 208 , New Bedford, MA.

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
22 Antonio Costa Boulevard
#HDC-FY18-002**

ADDENDUM #2

The City of New Bedford issues the following Addendum #2 for

**Purchase of North Terminal Bulkhead Area
22 Antonio Costa Boulevard**

RFP # HDC-FY18-002

February 15, 2018

To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

The site visit for 22 Antonio Costa Boulevard has been re-scheduled until Tuesday, February 10, 2018 at 10:00 am. All interested parties should meet at 15 Antonio Costa Boulevard.

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford



**CITY OF NEW BEDFORD
HARBOR DEVELOPMENT COMMISSION
Purchase of North Terminal Bulkhead Area
22 Antonio Costa Boulevard
#HDC-FY18-002**

ADDENDUM #1

The City of New Bedford issues the following Addendum #1 for

**Purchase of North Terminal Bulkhead Area
22 Antonio Costa Boulevard**

RFP # HDC-FY18-002

February 14, 2018

To: All Bidders of Record

This addendum is issued to advise Bidders of the following:

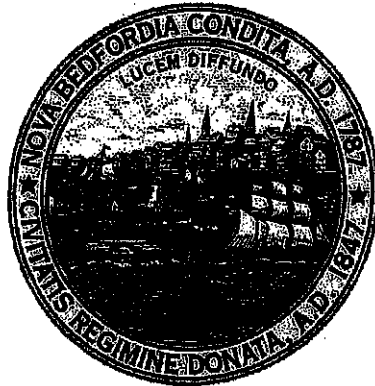
1. The due date and time for proposals is: Friday, March 2, 2018 at 11:00 am at the Office of Purchasing, New Bedford City Hall, 133 William Street, Room 208, New Bedford, MA 02740.
2. A walkthrough of the site is scheduled for Thursday, February 15, 2018 at 10:00 am.
3. To clarify the parcel of property, it includes Lot 136 as well.

End of Addendum

By: Susan Bruce
Director of Purchasing
City of New Bedford

CITY OF NEW BEDFORD

Jonathan F. Mitchell, Mayor



New Bedford Harbor Development Commission

REQUEST FOR PROPOSALS # HDC-FY18-002

**Purchase of
North Terminal Bulkhead Area
22 Antonio Costa Boulevard
New Bedford, Massachusetts 02740**

RFP Issued: Wednesday, January 31, 2018

Proposal Deadline: Friday, March 2, 2018 at 11:00 am

Issued by:

City of New Bedford, Harbor Development Commission

Request for Proposals for the Purchase of:

North Terminal Bulkhead Area
22 Antonio Costa Boulevard
New Bedford, Massachusetts 02740
New Bedford Assessors Plat 66, Lot 128

For questions regarding this RFP, contact:

Harbor Development Commission
Edward Anthes-Washburn, Executive Director
(508) 961-3000



REQUEST FOR PROPOSAL ADVERTISEMENT CITY OF NEW BEDFORD MASSACHUSETTS

REQUEST FOR PROPOSAL #HDC-FY18-001

The City of New Bedford, acting through its Harbor Development Commission is soliciting proposals from qualified developers for the disposition of the following real property:

North Terminal Bulkhead Area
22 Antonio Costa Boulevard
New Bedford, Massachusetts 02740
New Bedford Assessors Plat 66, Lot 128 (Currently leased and shown as Lot 128A)

Sealed proposals will be received by the Harbor Development Commission, in the office of the Purchasing Department, Room 208, City Hall, 133 William Street, New Bedford, Massachusetts, 02740, during business hours, until the date and time of the bid opening.

PROPOSALS RECEIVED

Proposals shall be received until Friday, March 2, 2018 at 11:00 a.m. Prevailing Time.

Contract Documents, including the Information for Bidders, Form of Bid, Form of Contract, Specifications, and other Contract Documents, may be obtained and/or examined on or after January 31, 2018 in the office of

City of New Bedford
Purchasing Department
133 William Street, Room 208
New Bedford, MA 02740
(Monday thru Friday – 8:30 AM – 4:00 PM)
Or Email to: purchasing@newbedford-ma.gov

A bid deposit of at least 5% of the bid amount must be included with price proposal

The contract may be awarded within thirty (30) days after the bid opening. The consummation of any agreement with a successful bidder and the sale of the property is subject approval of the Mayor, a vote of the Harbor Development commission and the New Bedford City Council approving the sale and the terms thereof.

No Bidder may withdraw his/her bid for a period of ninety (90) days, excluding Saturdays, Sundays, and legal holidays, after the actual date of the opening thereof.

Proposer must furnish a Non-Collusion Form and Statement of Taxes with their bid.

AWARDING AUTHORITY
CITY OF NEW BEDFORD
PURCHASING DEPARTMENT

TABLE OF CONTENTS

Section I

<i>Advertisement -</i>	3
<i>Introduction -</i>	5
Property Description	5 - 7
Evaluation Guidelines	8 - 9
Submission Requirements	10 - 12
Evaluation Criteria	12 - 13

Section II

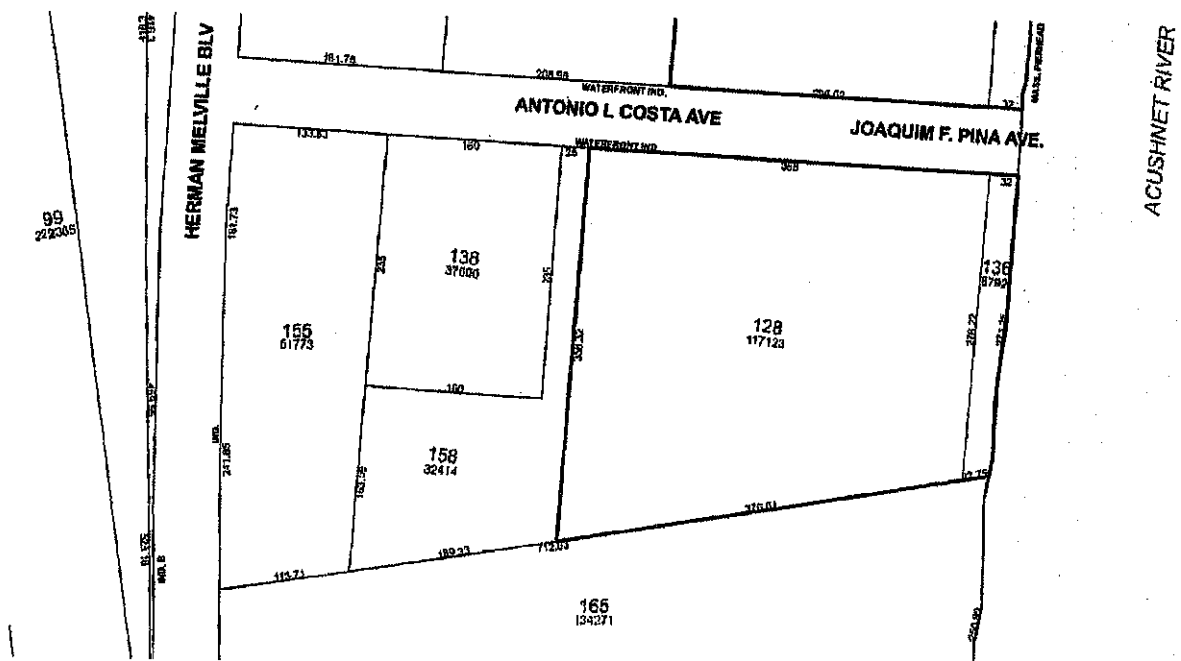
<i>Attachments</i>	14
Attachment A – Price Proposal Form	
Attachment B – Certificate of Tax Compliance - Individual	
Attachment C – Certificate of tax Compliance - Corporate	
Attachment D – Beneficial Interest Statement	
Attachment E – Certificate of Non-Collusion	
Attachment F – Site Access Agreement	
Attachment G – Leases	
Attachment H – Marine Survey	

INTRODUCTION AND DESCRIPTION

1.01 Introduction

The City of New Bedford Harbor Development Commission seeks competitive proposals from developers agreeing to purchase property in accordance with the terms of this proposal. The property is owned by the City of New Bedford. All proposals must include an offered acquisition price for the property.

1.02 Property and Area Description



This property is shown on the City of New Bedford Assessor's Map 66, Lot 128. The lot is currently leased to a third party and shown as Lot 128A on the Assessors' list.

2018 Assessed Value (Land Only): \$598,000.00

Zoning: (WI) Current zoning is Waterfront Industrial and allows various water related commercial and industrial uses as a matter of right. A listing of allowed uses and uses by special permit can be accessed on the City Website @ www.ci.new-bedford.ma.us

City Home page access: Municipal Code of Ordinances
Chapter 9-Comprehensive Zoning
Page 191. Table of Principle Use Regulation

The subject property is in a Commonwealth Designated Port area and is subject to the use restrictions for such areas under Massachusetts law. Use of the property may also be subject to licensing under Massachusetts General Laws Chapter 91.

Utilities: Public water, sewer, natural gas and electricity are available at the property.

Lot area: Total area is 2.89 Acres; 125,915 SF

Current Use: The property is currently used by a tenant for fishing industry uses including fish processing.

Current Tenants: 1

Current Condition: The subject property is a land parcel that is encumbered by a long term, 99-year, ground lease. (a copy of the lease is attached hereto as Exhibit G") The remaining term of the lease is 63 years. Article III of the lease establishes the annual rent amount, the effective number of years for the rent amount, and method and number of years for adjustment of the rent amount. The current rent is \$23,273.00. The rent and terms for future adjustments are agreed or arbitrated according to the terms of the lease.

In accordance with the terms of the leases, the buildings on the properties remain the property of the tenants.

SIGNIFICANCE

The waterfront area accounts for about 7% of business establishments, 8% of employment, and 20% of business sales within the overall economy of New Bedford. Fishing and seafood and related industries are estimated to account for over half (54%) of the employment and over 90% of the business sales within the waterfront area.

Payrolls for the estimated 4,159 employees in the waterfront area totaled about \$238 million in 2014. Average annual wages are estimated at \$57,000. This average annual wage for all employees within waterfront area industries compares favorably to the \$44,500 average annual wage for all industries in New Bedford in 2014, with the higher average wage largely accounted for by wages in fishing and seafood and related businesses. The fishing, seafood, and related industries accounted for 7% of all payrolls within the waterfront area in 2014, at an average annual wage of \$82,500.

The fishing and seafood industries remain the dominant economic activity within the waterfront district. They represent a classic business "cluster" unrivaled by any other single related economic activity in New Bedford. They depend upon the skills and expertise of facilitative

functions – labor force, packaging companies, marine services/boat repair, legal, financial, promotional, and so forth. Much of the labor force they use for direct operations is predominantly located within the city, and in some instance near the waterfront. They are also a significant symbol of the city and draw visitors to the waterfront and downtown as well as well customers for their direct sales.

While the processing, wholesale storage, and distribution segments of the industry are not literally water-dependent, proximity to vessel off-loadings as well as proximity to other dealer processors is advantageous. These related businesses, while competitive, share product on a daily basis as needed to fill specific orders. The trend toward vertical integration – in which the processing, storage, and distribution, and fishing activities share a common corporate identity – blurs the distinction between water-dependent and non-water dependent business identities in this industry.

For the foreseeable future, the seafood industry is predicted to continue to be the dominant waterfront area economic “cluster,” providing a majority of jobs, payrolls, and business expenditures within the waterfront area economy.

1.03 Conditions of Property:

The property available for disposition is available “AS IS” and the City of New Bedford will not make improvements or changes to the property as a condition of the sale. Conveyance to the successful Proposer shall be subject to all restrictions and conditions of record, insofar as they may be in force and applicable to said parcel(s), and to any contamination as defined in Massachusetts General Laws, Chapter 21E as set forth below.

1.04 MGL, Chapter 21E

The City of New Bedford does not warrant that the land parcel available for disposition is free and clear of any contamination as defined by MGL 21E. The successful Proposer will assume all costs and responsibilities for any testing and/or removal of any contamination that may be present on the property, and will hold the City harmless for any costs to clean the property of any contamination.

1.05 Subdivision/Permits/Approvals

All costs and responsibilities for obtaining site plan approval and releases or any easements, covenants, or any other restrictions that may be present on the property will be the responsibility of the buyer. All engineering and environmental studies will also be the responsibility of the buyer.

2.00 Project Guidelines

2.01 Minimum Bid

The minimum acceptable bid on the property offered herein shall be \$1 Million dollars (\$1,000,000.00).

2.02 Use

- A. The Subject Property will be conveyed to the successful respondent of this RFP at closing. The disposition of this property is subject to the Uniform Procurement Act of Massachusetts General Laws, Chapter 30B, Section 16 as well as Massachusetts General Law Chapter 60, Section 77B, such provisions which are incorporated in this Request for Proposals by reference.
- B. The use of this property will be controlled by current lease, zoning and any other governing regulations. Sufficient parking for the proposed use must be provided according to zoning requirements.

Preferred uses: Preferred uses include the current use and other water related industrial uses.

2.03 Evaluation of Applications

An Evaluation Committee consisting of City representatives will review all non-price Technical Proposals submitted in response to this RFP. The Technical Proposals will be screened to ensure that all required submittals have been submitted by the proposer and that the proposal meets the Minimum Evaluation Criteria set forth below. For proposals that are deemed by the Evaluation Committee to be complete and to have met the Minimum Evaluation Criteria, the Evaluation Committee shall assign a rating of highly advantageous, advantageous, not advantageous, or unresponsive for each of the Comparative Evaluation Criteria set forth below.

After a composite rating has been assigned for each proposal, the Evaluation Committee will then make its recommendation to the Chief Procurement Officer. The Chief Procurement Officer shall review, in conjunction with the Evaluation Committee, the price proposals and determine the most advantageous proposal, taking into consideration the non-price proposal ratings and the price. Additional meetings with the top rated proposers may be held to further discuss specifics of the proposal in more detail. If other than the highest priced proposal is selected, the Chief Procurement Officer, with the Evaluation Committee, shall explain in writing why the added benefits of the proposal justify the lower price. The City may cancel this RFP, or reject in whole or in part any and all proposals, if the City determines that cancellation or rejection serves the best interests of the City.

The Proposer shall provide sufficient detail to enable the evaluation Committee to evaluate the non-price proposal in each of the Evaluation Criteria categories listed below:

Upon City of New Bedford awarding of the Proposal, all proposers must submit a certified bank check payable to the "City of New Bedford" in the amount of five percent (5%) of the proposer's proposed purchase price. Deposits will be returned to the unsuccessful proposers. In the event that the successful proposer fails, through no fault of the City of New Bedford, to consummate the purchase, meet all requirements of the RFP or enter into a Purchase and Sales Agreement for the subject property, the City of New Bedford will retain the proposal deposit.

3.00 Submission Requirements

The Request for Proposal may be obtained and/or examined on or after Wednesday, January 31, 2018 during normal business hours (Monday through Friday 8:30 a.m. – 4:00 p.m.) in the office of the:

**City of New Bedford
Purchasing Department
133 William Street, Room 208
New Bedford, MA 02740
Or by email to: [purchasing @newbedford-ma.gov](mailto:purchasing@newbedford-ma.gov)**

All proposals will be received by the Purchasing Department, in the office of the Purchasing Agent, Room 208, City Hall, 133 William Street, New Bedford, Massachusetts, 02740.

Proposals will be received: Friday, March 2, 2018 at 11:00 am Prevailing Time.

Site Tour

Interested RFP Respondents are highly recommended to have a representative attend a site tour on Thursday, February 15, 2018 at 10:00 a.m..

Questions on RFP

The Purchasing Agent will accept questions between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday. Questions must be submitted in writing via email no later than Wednesday, February 21, 2018, at 3:00 p.m. to:

**City of New Bedford
Purchasing Department
133 William Street, Room 208
New Bedford, MA 02740
Attention: Susan Bruce
(508)979-1433 telephone
(508)991-6148 facsimile
Susan.bruce@newbedford-ma.gov**

All responses shall be provided, by written addenda, to all parties who are on record as having obtained copies of this RFP.

The City of New Bedford assumes no responsibility and no liability for costs incurred related to the preparation of responses to this RFP. The City shall bear no responsibility or liability due to copies of revisions lost in mailing or not delivered to a prospective proposer due to unforeseen circumstances. Prospective proposers must acknowledge receipt of all addenda within their responses to this solicitation.

Written modifications to proposals may be submitted prior to date and time specified for the

receipt of proposals.

Upon review, if any items are missing and/or incomplete, the City of New Bedford at its discretion, may notify the applicant to provide such items. Additionally, submission of proposals shall be deemed to be permission by the applicant to make any inquiries concerning the applicant as considered necessary to fully review qualifications.

A proposal may be withdrawn by written request, providing that such a request is received prior to time established herein for the opening of proposals. The City will not consider any requests for withdrawal not received before the proposal opening deadline. No proposer may withdraw his/her proposal after the actual date of the opening thereof.

SUBMISSION:

Proposals are to be in writing and presented on the attached application. Respondents are to address all questions asked and provide a sufficient level of detail to enable evaluation of the proposal.

In order to be considered for selection, proposers shall submit a complete response to the RFP. ONE ORIGINAL AND SEVEN COPIES of each response must be submitted to the Purchasing Agent.

To be eligible for consideration, proposers must submit a completed Proposal Packet by complying with all of the following documentation, except as may otherwise be specifically noted:

- ❑ **City of New Bedford Price Proposal Form:** Proposals must include a completed Price Proposal Form for the property offered for sale to the City, in response to this RFP. (Price Proposal Form is **Attachment A** of this RFP.) The Price Proposal Form must be submitted in a separate, clearly marked, sealed envelope marked "**Price Proposal, 22 Antonio Costa Boulevard RFP # HDC-FY18-001**" and identify the developer's name, address, telephone number.
- ❑ **Authorization to Submit Proposal:** If the proposal is being submitted by an individual, it must be signed by that individual. If the proposal is being submitted on behalf of an entity, the proposal must include written evidence of the proposer's authority to submit the proposal in the form of legally binding documentation.
- ❑ **Certificate of Tax Compliance:** The proposal shall include, as applicable, either the individual or corporate Certificate of Tax Compliance Form attached as **Attachment B** and **Attachment C** to this RFP demonstrating payment of all taxes.
- ❑ **Disclosure Statement of Beneficial Interest:** The Proposal Packet must include a completed Disclosure Statement of Beneficial Interest, as required by MGL, Chapter 7C, Section 38 attached as **Attachment D** to this RFP.

- ❑ **Certificate of Non-Collusion:** The Proposal Packet must include a completed Certificate of Non-Collusion, attached as **Attachment E** to this RFP.
- ❑ **Management Plan:** Provide a management plan for the property. Identify the method of management to be employed and, if available, the identities of the individuals and/or firms to be responsible for each element of the management plan.

3.01 Freedom of Information Act

Proposals will be available for public inspection after the award announcement, except to the extent that a proposer designates proprietary data to be confidential. Material designated as confidential must be readily separable from the remainder of the proposal to facilitate public inspection of the non-confidential portion of the proposal.

3.02 Unexpected Closure

If, at the time of the scheduled bid opening, City Hall is closed due to uncontrolled events such as fire, snow, ice, wind, or building evacuation, the bid opening will be postponed until 3:00pm on the next normal business day. Proposals will be accepted until that date and time.

3.03 Corrections and Modifications

A proposer may correct, modify, or withdraw a proposal by written notice received by the City, prior to the time and date set for the opening. Proposal modifications must be submitted in a sealed envelope, clearly labeled "Modification No. ____." Each modification must be numbered in sequence, and must reference the original RFP.

After the opening, a proposer may not change any provision of the proposal in a manner prejudicial to the interests of the City or fair competition. Minor informalities will be waived or the proposer will be allowed to correct them. If a mistake and the intended proposal are clearly evident on the face of the document, the mistake will be corrected to reflect the intended correct proposal, and the proposer will be notified in writing; the proposer may not withdraw the proposal. A proposer may withdraw a proposal if a mistake is clearly evident on the face of the document, but the intended correct proposal is not similarly evident.

The City of New Bedford assumes no responsibility and no liability for costs incurred relevant to the preparation of responses to this RFP. The City shall bear no responsibility or liability due to copies of revisions lost in mailing or not delivered to a prospective proposer due to unforeseen circumstances. Prospective proposers must acknowledge receipt of all addenda within their responses to this solicitation.

The City will undertake a review of the Respondent to ensure that all taxes and municipal fees are current on any and all property that is owned by the Respondent in the City of New Bedford.

3.04 Withdrawals

A proposal may be withdrawn by written request, providing that such a request is received prior to time established herein for the opening of proposals. The City will not consider any requests for withdrawal received after the proposal opening deadline. No proposer may withdraw his/her

proposal after the actual date of the opening of proposals.

3.05 Right to cancel

The City may cancel this RFP, or reject in whole or in part any and all bids, if the City determines that cancellation or rejection serves the best interests of the City.

4.00 Evaluation Criteria

Rule for Award: The most advantageous proposal from a responsive and responsible proposer, taking into consideration price and all other evaluation criteria set for in this RFP, will be selected.

Only responsive proposals will be evaluated by the Selection Committee. The Selection Committee will rank the proposals according to the following categories: highly advantageous, advantageous, not advantageous, and unacceptable in each category and the committee will then forward a final recommendation to the Purchasing Agent.

The City of New Bedford is the Awarding Authority and reserves the right to waive any minor informality. The Awarding Authority also reserves the right to reject any or all proposals, or to accept any other than the highest priced proposal should it be deemed to be in the best interest of the City of New Bedford, Massachusetts, to do so.

Overall Score and Ranking

After evaluating a proposal on the foregoing factors, the evaluators will provide an overall ranking for the proposal as compared to other proposals.

5.0 Award Process

A. Eligibility for Award

If the Selection Committee determines that it has received one or more proposals that are deemed feasible, and the Purchasing Agent accepts the committee's recommendation, an award for the property will be made under the terms of this RFP. In this event, the selected Respondent may be awarded the opportunity to enter into a Developer Agreement with the City of New Bedford. In order to be eligible for such an award, the proposal must be responsive to the RFP.

B. Notification

Official notice of an award will be sent by U.S. Mail to the address and Applicant listed on the Applicant Information section of this RFP. Respondents who are not selected will be similarly notified by U.S. Mail after a selected Respondent has been offered and accepted.

THE CONSUMMATION OF ANY AGREEMENT WITH A SUCCESSFUL BIDDER AND THE SALE OF THE PROPERTY IS SUBJECT TO APPROVAL OF THE MAYOR, AND A VOTE OF THE HARBOR DEVELOPMENT COMMISSION AND THE NEW BEDFORD CITY COUNCIL APPROVING THE SALE AND THE TERMS THEREOF.

Comparative Evaluation Criteria:

HA = Highly Advantageous, A = Advantageous, NA = Not Advantageous, U = Unacceptable

	Highly Advantageous	Advantageous	Not Advantageous	Unacceptable
<u>Management Team</u>				
1. Experience with management of similar properties.	Includes three or more examples of management of similar properties.	Includes at least one example of management of similar properties.	Does not include examples of management of similar properties.	Does not include any examples of past projects.
2. Financial capacity to purchase and maintain property	Purchase price is realistic and identified financial sources clearly illustrate the proposer's capacity.	Purchase price is somewhat realistic and financial sources are not clearly identified to illustrate the proposer's capacity.	Purchase price is not based on market conditions and financial sources are not clearly identified to illustrate the proposer's capacity.	Information provided is not sufficient to make a determination.
3. Prior experience in working with municipalities	Proposal includes at least three letters of reference from municipal officials in communities where the management team has previously worked.	Proposal includes at least two strong letters of reference from municipal officials in communities where the management team has previously worked.	Narrative and other written material assert this prior experience in working with municipalities but without corroboration from municipal partners.	Information provided is not sufficient to make a determination.

ATTACHMENT A

City of New Bedford Price Proposal Form

ATTACHMENT B

Commonwealth of Massachusetts Individual Certificate of Tax Compliance

ATTACHMENT C

Commonwealth of Massachusetts Corporate Certificate of Tax Compliance

ATTACHMENT D

Beneficial Interest Disclosure Statement

ATTACHMENT E

Certificate of Non-Collusion

ATTACHMENT F

Site Access Agreement

ATTACHMENT G

Leases

ATTACHMENT H

MarineSurvey

Attachment "A"
PRICE PROPOSAL FORM

The undersigned hereby submits the attached proposal for the sale of property to the City of New Bedford in response to the Request for Proposals (RFP) for the acquisition of the designated property in the City of New Bedford.

Proposer's Name:

Owner's Name (if different from proposer):

Owner Entity and State of Incorporation:

Proposer's Address:

Proposer's Telephone:

Proposer's E-Mail:

Proposer's Fax Number:

Parcel Location: Street Address or Location of Property:

Proposed Purchase Price:

Signature of Proposer

Date

Name (Print): _____

Attachment "B"
COMMONWEALTH OF MASSACHUSETTS
INDIVIDUAL CERTIFICATE OF TAX COMPLIANCE

Pursuant to the requirements of G.L. c. 62C, s. 49A, the undersigned does hereby state the following:

I, _____, certify that I have filed all state tax returns, have paid all state taxes required under law, and have no outstanding obligation or unpaid debt to the Massachusetts Department of Revenue.

Signed under the penalties of perjury:

Date Signature

Social Security Number Typed or Printed Name

COMMONWEALTH OF MASSACHUSETTS

On this _____ day of _____, 2018, before me, the undersigned notary public, _____ personally appeared _____, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she signed it voluntarily for its stated purpose.

NAME:

Notary Public

My commission expires: _____

Attachment "C"
COMMONWEALTH OF MASSACHUSETTS
CORPORATE CERTIFICATE OF TAX COMPLIANCE

Pursuant to the requirements of G.L. c. 62C, s. 49A, the undersigned does hereby state the following:

I, _____, as the _____ of _____, whose principal place of business is located at _____ do hereby certify that the above named firm has complied with all laws of the Commonwealth of Massachusetts relating to taxes and has no outstanding obligation to the Massachusetts Department of Revenue.

Signed under the penalties of perjury:

Federal Identification Number Name of Corporation/

Unincorporated Association

Date Signature of President

Date Signature of Treasurer

COMMONWEALTH OF MASSACHUSETTS

On this _____ day of _____, 2018, before me, the undersigned notary public, personally appeared _____, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she signed it as _____ for _____, a corporation, voluntarily for its stated purpose.

NAME:

Notary Public My commission

expires: _____

Attachment "D"

DISCLOSURE OF BENEFICIAL INTERESTS IN REAL PROPERTY TRANSACTION

This form contains a disclosure of the names and addresses of all persons with a direct or indirect beneficial interest in the real estate transaction described below. This form must be filed with the Massachusetts Division of Capital Asset Management, as required by M.G.L. c. 7C, §38, prior to the conveyance of or execution of a lease for the real property described below. Attach additional sheets if necessary.

1. Public agency involved in this transaction: _____
(Name of jurisdiction)
2. Complete legal description of the property:
3. Type of transaction: ☐ Sale ☐ Lease or rental for _____ (term):
4. Seller (s) or Lessor (s): _____
Purchaser(s) or Lessee(s): _____

5. Names and addresses of all persons who have or will have a direct or indirect beneficial interest in the real property described above. *Note: If a corporation has, or will have a direct or indirect beneficial interest in the real property, the names of all stockholders must also be listed except that, if the stock of the corporation is listed for sale to the general public, the name of any person holding less than ten percent of the outstanding voting shares need not be disclosed.*

Name

Address

_____	_____
_____	_____
_____	_____
_____	_____

(Continued on next page)

5. Continued

None of the persons listed in this section is an official elected to public office in the Commonwealth of Massachusetts except as noted below:

Name

Title or Position

_____	_____
_____	_____

6. This section must be signed by the individual(s) or organization(s) entering into this real property transaction with the public agency named in item 1. If this form is signed on behalf of a corporation, it must be a duly authorized officer of that corporation.

The undersigned acknowledges that any changes or additions to item 4 of this form during the term of any lease or rental will require filing a new disclosure with the Division of Capital Asset Management within 30 days following the change or addition.

The undersigned swears under the pains and penalties of perjury that this form is complete and accurate in all respects.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Attachment "E"

CERTIFICATE OF NON-COLLUSION

City of New Bedford
133 William Street
New Bedford, MA 02740

The undersigned certified under penalties of perjury that this bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals.

Signature of individual submitting bid

Name of business/organization

Attachment "F"

SITE ACCESS AGREEMENT

This Site Access Agreement (the "Agreement") is entered into this ____ day of _____ 2018, by and between _____ (the "Proposer"), having an address at _____ and the City of New Bedford, Massachusetts (the "City").

WHEREAS, the City is the current owner of Lots ____ on New Bedford Assessor's Map ____ (the "Property");

WHEREAS, the Proposer seeks access to the Property to perform certain due diligence activities;

WHEREAS, due diligence activities may involve the installation of borings, monitoring wells, test pits, and collection of soil and/or groundwater samples

NOW, THEREFORE, in order to enable the Proposer to perform due diligence, City agrees to provide Proposer access to the Property, subject to the following conditions and understandings:

1. The right of access shall include the right to enter the land with personnel, equipment, tools and other items necessary to perform the tasks described in Part 7.
2. The right of access shall be limited to the following day(s) (**Proposer inserts scheduled day(s)**):

3. City shall provide all available information related to location of subsurface utilities and other subsurface features that could be damaged as a result of activities to be performed under this Agreement.
4. Proposer shall be responsible for contacting Dig Safe in advance of any subsurface drilling or excavation.
5. Proposer acknowledges that the fire damaged building located on the Property is of questionable structural integrity and assumes all responsibilities and risks to its employees, agents and Contractors for any and all activities on the Property.
6. All activities performed by the Proposer, its employees, agents and/or contractors pursuant to this Agreement shall be performed in accordance with all applicable environmental, health and safety statutes and regulations currently in effect, and in such a way as to minimize interference with the normal operations on the Property.
7. The activities shall consist of **(Proposer inserts description here)**
8. The Proposer shall promptly repair any physical damage to the Property, including any structures affected by the work, and return the Property to substantially the same condition it was prior to the fence installation.
9. The Proposer shall provide the City with a complete copy of any reports prepared for the Property, including any analytical data for soil, groundwater, surface water or building materials samples. The Proposer shall promptly notify the City of any condition identified during the performance of due diligence that requires notification to the Massachusetts Department of Environmental Protection in accordance with the Massachusetts Contingency Plan.
10. The Proposer, its subcontractors, agents or contractors shall provide the City with proof of compliance with the Commonwealth of Massachusetts Worker's Compensation Law. The

Proposer, or the party or parties performing due diligence on behalf of the Proposer shall provide the City with proof of Environmental Insurance, in the amount of one million dollars (\$1,000,000) combined single limit. The Proposer, its subcontractors, agents or contractors shall provide the City with proof of General Liability Insurance for bodily injury and property damage in the amount of one million dollars (\$1,000,000) combined single limit and shall provide the City with a certificate of insurance naming the City of New Bedford as an "additional insured" on their general liability policy.

11. The Proposer will defend, indemnify and hold harmless the City for injury to persons or property incurred during and resulting from the Proposer's presence on the Property.
12. The City recognizes that the proposed work may involve minor disruption or damage to the Property. The Proposer and its Contractor agree to make reasonable efforts to minimize the disruption or damage to the Property.
13. Any disputes arising pursuant to this Agreement shall be resolved, if feasible, by good faith consultation between the Parties and their authorized agents.
14. The City, by this written Agreement, has granted the Proposer certain rights of access pursuant to the conditions set forth herein and the City hereby releases and indemnifies the Proposer from any and all claims alleging invalid access, when said access was made pursuant to and in accordance with this Agreement.
15. Except as otherwise provided herein, the City hereby reserves and does not in any manner waive any rights or causes of action against the Proposer or any other party.
16. This document constitutes the entire agreement between the Parties relating to access to the Property in connection with the activities described herein, and shall be governed by and construed in accordance with the laws of the United States and the Commonwealth of Massachusetts.

17. All notices or other submissions required or appropriate under this Agreement shall be sent by first class mail, facsimile, nationally recognized overnight delivery service or certified mail, return receipt requested. Such notices or submissions shall be sent, unless written notice has been given of a change by either Party, to the following persons:

If to City:

If to Proposer:

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as a sealed instrument as of the dates set forth below their respective signatures.

City of New Bedford

Proposer

Name: _____

Name: _____

Jon Mitchell, Mayor

Date: _____

Date: _____

Attachment "G"

LEASES

LEASE AGREEMENT

Roy ~~Enck~~ Enck

AGREEMENT entered into this 5th day of August, 1981, by and between the City of New Bedford, Massachusetts, the Harbor Development Commission of the City of New Bedford, Massachusetts, sometimes jointly referred to as the "LESSORS", and Sea-Lect Foods Ltd., having its usual place of business in New Bedford, Massachusetts, hereafter sometimes referred to as the "LESSEE".

WHEREAS, the LESSORS have available for occupancy and development a certain parcel of land in New Bedford, Massachusetts, commonly referred to as the North Terminal, and

WHEREAS, the LESSEE is desirous of leasing and developing a portion of said North Terminal, and

WHEREAS, the LESSORS are aware of the desire of the LESSEE to occupy and develop said portion of the North Terminal Bulkhead parcel for the primary purpose of unloading, processing and distributing products of the sea.

Therefore, in consideration of One (\$1.00) Dollar and other valuable consideration, the receipt of which is hereby acknowledged by each party hereto, -

IT IS AGREED:

ARTICLE I

PREMISES

The LESSORS do hereby let, lease and demise unto the LESSEE for its exclusive use and that of its successors and assignees a certain parcel of land as fully described in Schedule A attached hereto and hereby incorporated into this Agreement.

ARTICLE II

TERM OF LEASE

To have and to hold the demised premises unto the LESSEE for the term of Ninety-nine (99) years commencing on the first day of August, 1981. The term of this Lease is subject to the right of the LESSEE to terminate this Agreement at the end of the first or any succeeding Twenty-five (25) year term. In the event that the LESSEE elects to so terminate, it shall notify the LESSORS in writing at least twelve months prior to the end of the respective term. In the event that the LESSEE does not notify the LESSORS of termination, the parties hereto shall be bound each to the other for the next succeeding term of Twenty-five (25) years except for the last term which shall be Twenty-four (24) years.

ARTICLE III

RENT

The LESSEE covenants and agrees to pay to the LESSORS at City Hall in New Bedford, Massachusetts or at such other place as the LESSORS shall designate in writing, rent as hereinafter set forth:

a) For the first Twenty (20) years of the term hereof Fifteen Thousand Five Hundred Fifteen and no/100 (\$15,515.00) Dollars per year in equal monthly installments of One Thousand Two Hundred Ninety-three and no/100 (\$1,293.00) Dollars;

b) For the next succeeding Five (5) years of the term hereof, the sum of Fifteen Thousand Five Hundred Fifteen and no/100 (\$15,515.00) Dollars per annum payable in equal monthly installments of One Thousand Two Hundred Ninety-three and no/100 (\$1,293.00) Dollars;

- 3 -

c) For the succeeding fifteen (15) years of the term hereof, the parties shall use their best efforts to agree to the annual rental applicable thereto at least eighteen (18) months prior to the commencement of said term. In the event that the parties cannot agree to the rental, the LESSORS shall select one arbitrator and the LESSEE shall select one arbitrator at least seventeen (17) months prior to the commencement of the instant term and shall so notify the other of their respective choice. The two arbitrators so selected shall determine a third arbitrator within thirty (30) days of their selection. In the event that the arbitrators selected by the parties cannot agree to a third arbitrator, the arbitrators shall select a third arbitrator from a panel of three disinterested nominees to be selected by the American Arbitration Association. If at the end of one week after the designation of such panel there remains disagreement as to which of said nominees shall serve, the LESSOR'S and LESSEE'S arbitrators, in that order, shall each strike the name of one of the nominees and the remaining nominee shall be the third arbitrator. The rental that shall be determined by a majority of the arbitrators in a decision of the arbitrators made at least fourteen (14) months prior to the commencement of the instant fifteen (15) year term shall be binding on all parties except that the rental so determined shall not exceed that of comparable land of the LESSORS leased for waterfront purposes at the North Terminal Bulkhead Area and in no event shall the rent for said term exceed Twenty-three Thousand Two Hundred Seventy-two and 50/100 (\$23,272.50) Dollars per annum. The arbitration proceeding shall be conducted under the rules of the American Arbitration Association.

d) For the succeeding Twenty (20) years of the term hereof, the parties shall use their best efforts to agree to the annual rental applicable thereto at least Eighteen (18) months prior to the commencement of said term. In the event that the parties cannot agree to the rental,

then the same procedure as set out in (c) of this ARTICLE III shall be applicable, except that in no event shall the rental for said term exceed Twenty-three Thousand Two Hundred Seventy-two and 50/100 (\$23,272.50) Dollars, for the first ten (10) years of said twenty (20) year term.

e) For the succeeding twenty (20) year and nineteen (19) year rental periods, the rental shall be determined in the same manner as set forth in paragraphs (c) and (d) of this ARTICLE III, except that the arbitrators shall not be limited to the maximum of Twenty-three Thousand Two Hundred Seventy-two and 50/100 (\$23,272.50) Dollars per annum set forth therein.

f) It is specifically understood that said rental is exclusive of taxes on the structure on the demised premises which shall be treated as realty for taxation purposes, which taxes shall be assessed by the City of New Bedford.

ARTICLE IV

LESSEE'S USE OF PREMISES

The LESSEE shall have unrestricted right to build and install on the demised premises such structures, improvements, machinery and equipment as it may desire, and use same for any purpose in conformance with all zoning and building regulations applicable thereto, all of which shall at all times remain the property of the LESSEE. In the event that this Agreement is terminated for any reason, said structures, improvements, machinery and equipment may be removed by the LESSEE, provided the premises are put back in the same condition as they were at the time of the execution of the Lease and provided all taxes and monies due the City of New Bedford, the LESSOR, have been paid.

ARTICLE V

LESSORS' REPRESENTATION AS TO THE DEMISED PREMISES

Section 1. The LESSORS hereby jointly and severally warrant and represent that:

a) They have a good, clear and merchantable title to the demised premises and have at the execution of this Agreement delivered to the LESSEE a complete physical property survey of the demised premises prepared and certified by a land surveyor registered by the Commonwealth of Massachusetts.

b) The demised premises are free and clear of all encumbrances and liens and that upon notice by the LESSEE at any time of any undisclosed liens or defects the LESSORS will cause said liens or defects to be removed or cleared.

c) They have been apprised that the LESSEE will commence construction of a building on the demised premises within six months from the date of this lease and represent and warrant that they have no knowledge of any circumstances which would prohibit such construction, support, or utilization of the demised premises or any portion thereof, and that there are no structural or engineering defects on or about the demised premises that would in any way interfere with the construction of or sustain said building.

d) They have good and proper power and authority to enter into and perform their warranties, representations and undertakings, all as set forth in this Agreement and will execute and deliver to the LESSEE any further written certificates and authorizations reasonably required by counsel for the LESSEE at any time so as to further evidence their power and authority.

ARTICLE VI

LESSEE'S RIGHT TO ASSIGN OR SUBLEASE

Section 1. Notwithstanding any provisions of this Agreement, the LESSEE shall at all times have the right, in its sole discretion, to sublease the demised premises except that in the event of such sublease or assignment, the LESSEE shall at all times be responsible for the payment of the rentals due hereunder.

the rent to be received by it for the demised premises, shall not exceed one hundred ten (110%) percent of the rental then being paid by the LESSEE to the LESSORS for that portion so subleased.

ARTICLE VII

INDEMNITY AND PUBLIC LIABILITY INSURANCE

Section 1. The LESSEE agrees to indemnify and hold harmless the LESSORS from and against all claims of whatever nature arising from any act, omission, or negligence of the LESSEE or LESSEE'S sublessee or sublessee's contractors, licensees, agents or employees, or arising from any accident, injury or damage whatsoever caused to any person, or to the property of any person occurring during the term hereof in or about the LESSEE'S demised premises or any improvements thereon except to the extent that such claim results from LESSORS' negligence or fault. In the event that a final adjudication of any such legal proceeding of such claim shall establish that the LESSEE or sublessee was not liable, the LESSEE shall not be required to indemnify LESSORS for any such loss, cost or judgment.

Section 2. The LESSEE agrees to maintain in full force, during the term hereof, policies of public liability and property damage insurance under which the LESSORS (and such other persons are in priority of estate with LESSORS as may be set out from time to time) and the LESSEE are named as assureds and under which the insurer agrees to indemnify and hold harmless the LESSORS from any liability arising out of or based upon any and all claims, accidents, injuries and damages set forth in Section 1 of this ARTICLE VII. Each such policy shall be non-cancellable with respect to the LESSORS and the LESSORS' designees without ten (10) days prior notice to LESSORS, and a duplicate original or certificate thereof

shall be delivered to LESSORS. The minimum limits shall be One Million (\$1,000,000.00) Dollars combined single limit covering personal injury liability and property damage. Certificates of such insurance coverage shall be delivered to LESSORS not later than ten (10) days after LESSEE has first taken possession of demised premises.

ARTICLE VIII

ADDITIONAL RENTAL AND PURCHASE PROVISIONS

Notwithstanding anything contained herein, the LESSORS hereby agree that in the event they lease any further portion of land in the "North Terminal Bulkhead Area" for a rental per square foot less than that which is being paid by the LESSEE hereunder, the LESSORS shall forthwith notify the LESSEE of said rental and the rent being paid by the LESSEE hereunder shall automatically be reduced to the same per square foot rental being required under the terms of said third party's lease agreement with the LESSORS.

In the event that the LESSORS sell any portion of the "North Terminal Bulkhead Area", they shall forthwith so notify the LESSEE of the terms and conditions of said sale and such notice shall automatically grant the LESSEE the right to purchase the demised premises for the same cost per square foot as required of said third party purchaser. "North Terminal Bulkhead Area" for purposes of this paragraph shall mean that area of land of which the demised premises are part and commonly referred to as the "North Terminal Bulkhead". The LESSEE shall have thirty (30) days from the date of the receipt of said notice to so exercise its right to purchase by sending written notice to the LESSORS. In the event of the LESSEE'S decision to so purchase, the LESSORS and the LESSEE will use their best efforts to complete the sale and purchase in a proper and orderly fashion.

ARTICLE IX

DEFAULT

In the event of failure by the LESSEE to perform, fulfill or observe any of the terms, covenants, agreements and conditions of this Agreement continuing for a period of 120 days after written notice from the LESSORS to the LESSEE specifying such failure without such failure being waived or its effect cured or the cure thereof commenced and diligently prosecuted thereafter, the LESSORS may by written notice to the LESSEE terminate this Agreement whereupon all of the LESSEE'S obligations and liabilities under this Agreement shall cease except that the LESSEE shall continue to be liable to the LESSORS for the obligations of the LESSEE which arose prior to such termination; provided, however, that the rights of the LESSORS under this article shall be subordinate and subject to any and all mortgages, deeds of trust and other instruments in the nature of a mortgage or security agreement, now or at any time hereafter granted by the LESSEE, including any rights of the holders of bonds or other obligations issued by the City of New Bedford, acting by and through its Industrial Development Financing Authority or otherwise, to finance facilities or equipment for use by the LESSEE on the demised premises, including the right of any such holders to cure any default by the LESSEE within 30 days after the receipt by such holders of notice by the LESSORS of such default; and provided further that the LESSORS will permit any purchaser at a foreclosure or other sale or disposition of the demised premises or any of the facilities or equipment used or made a part of the demised premises by or on behalf of any such holders to fully perform, fulfill, and observe all of the terms, covenants, agreements and conditions of the LESSEE under this Agreement and in such case such purchaser shall be entitled to all the rights of the LESSEE under this Agreement.

ARTICLE X

MISCELLANEOUS PROVISIONS

Section 1. LESSEE, subject to the terms and provisions of this Agreement on payment of rent and keeping and performing all of the terms and provisions of this Agreement on its part to be observed, kept, and performed, shall lawfully, peaceably, and quietly hold occupancy and enjoy the demised premises during the term hereof without hindrance or ejection by any persons or entities claiming under the LESSORS.

Section 2. LESSEE agrees to make every reasonable effort to discharge any mechanics, materialman or other liens against the demised premises and/or the LESSORS' interest therein, which may arise out of any payment due for or purported to be due for any labor, services, materials, supplies or equipment alleged to have been furnished for the LESSEE in, upon, or about the demised premises.

Section 3. The LESSEE hereby agrees that during the course of its occupancy hereunder, that it will maintain the "fendering" system located along the easterly boundary of the demised premises and LESSORS agree to maintain the bulkhead, except that the LESSEE shall be responsible for any damage to the bulkhead caused by the LESSEE'S negligence or that of its agents, servants, employees or invitees.

Section 4. In addition to the rents and covenants contained herein to be paid and performed by the LESSEE, the LESSEE agrees to pay, when due, all real estate taxes on the demised premises and any improvements thereto and any utility charges pertaining thereto.

Section 5. Except as herein otherwise expressly provided, the terms hereof shall be binding upon and inure to the benefit of the successors and assigns respectively of the LESSORS and LESSEE.

Section 6. This Lease Agreement shall be governed exclusively by the provisions hereof and by the laws of the Commonwealth of Massachusetts.

complying with applicable local laws.

Section 9. Whenever the terms of this Agreement, notice shall or may be given whether to the LESSORS or LESSEE, such notice shall be in writing and shall be sent by registered or certified mail, postage prepaid, and if to the LESSORS,

Harbor Development Commission of New Bedford
1204 Purchase Street
New Bedford, MA 02740

and if to the LESSEE,

Sea-Lect Foods Ltd.
414 County Street
New Bedford, MA 02740

ARTICLE XI

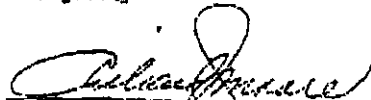
CONSTRUCTION

The LESSEE agrees that in the event that construction of building for the principal purpose stated in this Lease is not commenced within 180-days from the date of the execution of this Lease, LESSORS may forthwith terminate this Lease, and have the right to reenter and repossess the premises and to dispossess or remove therefrom any and all occupants and their effects, without being liable to any prosecution therefor, and to hold premises as if this Lease had not been made. LESSEE expressly waives, in behalf of itself and all persons claiming under it, all rights of notice to quit or intention to reenter under provisions of any statute or of this Lease, in case of such failure to commence construction.


IN WITNESS WHEREOF, the parties have hereunto caused these presents to be executed by their duly authorized officers and their seals to be affixed, duly attested as of the day and year first above written, this Agreement and execution thereof being duly authorized by order of City

Council of the City of New Bedford, Massachusetts and approval of the Mayor and resolution of the Harbor Development Commission of the City of New Bedford, Massachusetts, certified copies of such order of approval and resolution being attached hereto and made a part hereof.

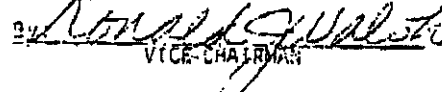
APPROVED as to form
& legality


Asst. City Solicitor


CITY OF NEW BEDFORD,
MASSACHUSETTS

By: 
MAYOR

HARBOR DEVELOPMENT COMMISSION OF
CITY OF NEW BEDFORD, MASSACHUSETTS

By: 
VICE-CHAIRMAN

SEA-LECT FOODS LTD.

By: 

... recorded in Book 1831, Page 115 and as affected by Estoppel Certificate and Agreement dated September 1, 1981 and recorded in Book 1831, Page 117.

6. Terms and provisions of License No. 4699 issued by the Commonwealth of Massachusetts to the City of New Bedford by its Harbor Development Commission dated June 11, 1963 and recorded in Book 1426, Page 191.

7. Terms and provisions of License No. 5129 issued by the Commonwealth of Massachusetts to the City of New Bedford by its Harbor Development Commission dated September 21, 1966 and recorded in Book 1542, Page 626.

8. Title of and rights of the United States of America and the Commonwealth of Massachusetts into those portions of the premises above described, if any, lying below the mean high water mark of Acushnet River.

C:\...\\frionor\\Printse.RTB

Received & Recorded *May 20, 1991* at *12* hrs. *38* min. *P.* M.

Attest: *John E. Smith* Register

Attachment "H"

MARINE SURVEY

Structural Inspection North Terminal, New Bedford, MA Report of Findings

Prepared for:



New Bedford Harbor Development Commission
52 Fisherman's Wharf, New Bedford, MA

DRAFT COPY

Prepared by:

cleengineering

15 Creek Road, Marion, MA 02738
PH: 508-748-0937 FAX: 508-748-1363
www.cleengineering.com

Table of Contents

Engineer/Firm Assigned	1
1. Introduction.....	1
2. Summary of Findings	3
2.1 Maritime International Terminal (Parcel 1).....	3
2.1.1 Description of Structure	3
2.1.2 Structural Assessment /Recommendations	4
2.2 Sand and Gravel Parcel (Parcel 2).....	5
2.2.1 Description of Structure	5
2.2.2 Observed Conditions	5
2.2.3 Structural Assessment/Recommendations	6
2.3 North Terminal Pier (Parcels 5, 7, and 10)	6
2.3.1 Description of Structure	6
2.3.2 Observed Conditions	8
2.3.3 Structural Assessment/Recommendations	12

List of Attachments

Attachment A	Inspection Plan
Attachment B	Capacity Calculations

DRAFT COPY

Engineer/Firm Assigned

CLE Engineering, Inc. (CLE) was contracted by the New Bedford Harbor Development Commission (HDC) to perform an underwater and topside structural inspection of the marine infrastructure of North Terminal. CLE teamed with Fathom Diving (Fathom) to perform the underwater portion of the inspection. The scope of work included the piers and bulkheads of five leased parcels (including the terminus of Antonio Costa Ave). The piers at North Terminal were constructed using three different designs and are of varying ages. This report reflects the conditions of the property which were present and visible at the time of the inspection. Questions regarding this report, its scope and/or content should be addressed to Susan Nilson, P.E. at (508) 748-0937.

1. Introduction

The structures which were within the scope of this inspection are those along parcels 1, 2, 5, 7, and 10 as labeled on the figure below. Three separate designs exist at the North Terminal site;

- Parcel 1 - Concrete encased timber piles supporting a concrete deck
- Parcel 2 - Steel sheet pile cells supporting a concrete deck
- Parcels 5, 7, and 10 - Steel H-Piles supporting concrete deck

Historic aerial photographs indicate that all of North Terminal's waterfront infrastructure was constructed before 1971 with the exception of Parcel 2. Given the design and condition of the bulkhead along Parcel 2 it is likely that the structure was constructed before 1985. No construction plans were located of the pier and bulkheads along any of the parcels within North Terminal. These sites do not have previous inspection reports to serve as a comparison or to determine rate of corrosion/deterioration.

All of the subject parcels are heavily used for both vessel berthing and maintenance in addition to serving as loading and unloading areas for the parcel tenants. In the years following construction, some of the buildings on site have encroached over the pier deck.

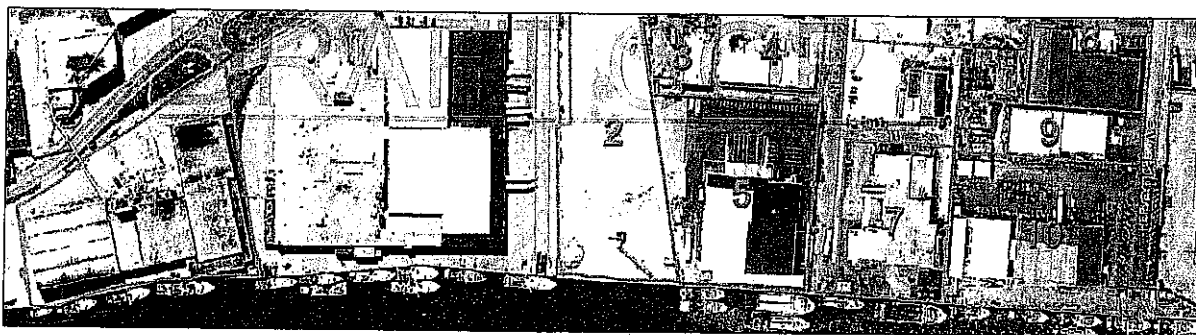


Figure 1: North Terminal Layout

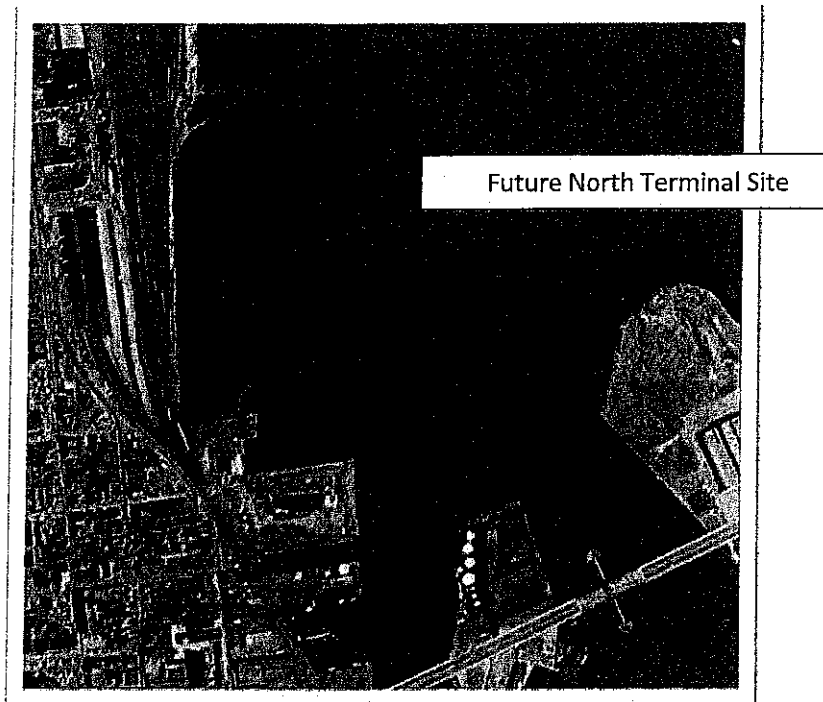


Figure 2: Aerial photograph dated 1961

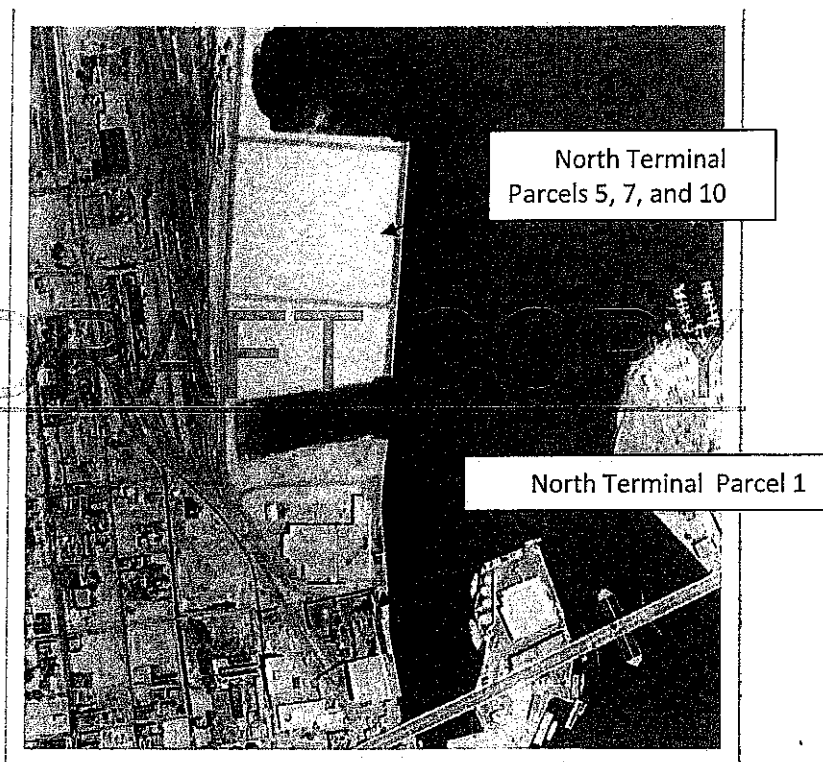


Figure 3: Aerial photograph dated 1971

2. Summary of Findings

2.1 Maritime International Terminal (Parcel 1)

2.1.1 Description of Structure

The Maritime International Terminal (Pier) is approximately 478 linear feet and is used for access to fishing vessel berths, for support of the buildings on site, and general storage. No record plans or plans indicating date of construction were located (aerials indicated pre-1971 construction date). The structure consists of a large concrete deck supported by concrete encased timber piles. The piles are driven along a grid line only along the seaward face, piles behind the face are located in an almost random arrangement. Due to the non linear arrangement of the piles and the very close spacing (only 18 to 24 inches clear space is typical), inspection of this site was not possible. The few piles inspected exhibited signs of reduced section area due to marine borer damage.



Photograph 1: Typical pile layout along fender line



Photograph 2: Typical close spacing of piles

2.1.2 Structural Assessment /Recommendations

The pier along Parcel 1 likely contains hundreds of piles supporting both the concrete cap and the terminal buildings above. These piles comprised of concrete encased timber are susceptible at or near the mudline to marine borer attack. Assuming this condition has existed for nearly 50-years an inspection focused just on this Parcel should be completed immediately.

An inspection of this site should begin with the preparation of a pile plan indicating the location (approximate) of each pile and assigning a pile designation. This designation could then be used by the dive team to reference pile condition in a format which is directly transferable to its location on the concrete deck.

Given that the concrete jackets at this site extend almost the full length of the piles it may be possible to extend the service life of the structure significantly by extending the jackets into the mudline. The efficacy of this repair cannot be determined until an inspection is completed.

Parcel 1: Short Term Recommendations 0-2 Years

- Underwater and topside structural inspection

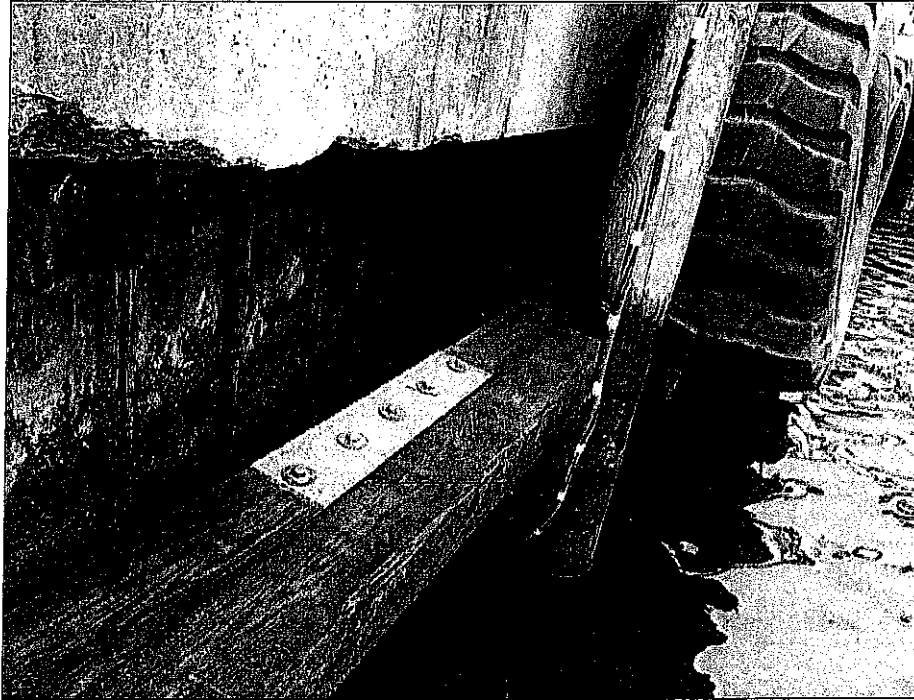
Parcel 1: 3-5 Year Recommendations

- TBD following inspection report

2.2 Cape Cod Aggregates (Parcel 2)

2.2.1 Description of Structure

Parcel 2 is a 250 linear foot steel cellular bulkhead with a reinforced concrete cap. The bulkhead provides support for vessel berthing and for the offloading and bulk storage of sand and aggregates. The fender system consists of timber piles and a continuous timber wale which are supplemented by large diameter tires hung from the back side of the concrete cap. Photograph 3 below provides a view of the critical components.



Photograph 3: Typical bulkhead/fender construction

2.2.2 Observed Conditions

The steel sheet pile cells are of varying diameters and extend from the mud line directly into the concrete cap. The flat steel sheets which comprise the cells exhibit signs of heavy corrosion with pitting of the steel and no evidence of a previous coating. However, relatively few holes were located during the underwater inspection (two - 24 in² at Cell 3, and one 300 in² at Cell 8). Conduit located at various locations along the steel cells may indicate that an impressed current system was once installed at the site but no such system is currently in operation.

The timber fender system is in fair condition with the piles still showing evidence of their preservative treatment. The bolting hardware retains a crisp profile with minor deterioration and the bolting holes have not been expanded beyond their original size (through friction or marine borers). The tire fenders are typical for an industrial site of this type and although not an engineered solution, they appear to perform adequately as contact of the timber system with a vessel appears to be infrequent. A galvanized channel protects the concrete cap from friction damage from the tire anchor cables.

Overall the bulkhead is in *Fair* condition with no load restrictions but significant deterioration. The presence of heavy deterioration and holes in the sheet pile cells indicate that the bulkhead is approaching the end of its service life. However in the near term (beyond the next inspection interval) should the parcel's use remain as it is today, patching of the three located holes is the only structural repair which is recommended at this time. It may be possible to extend the life of the system with the installation of a cathodic protection system. An analysis of the current condition and connectivity of the structure should be performed to assess the cost/benefit.

Parcel 2: Short Term Recommendations 0-2 Years

- Cathodic protection analysis
- Design of bulkhead patching repairs

Parcel 2: 3-5 Year Recommendations

- Perform bulkhead patching repairs
- Routine inspection in 2021

2.3 North Terminal Pier (Parcels 5, 7, and 10)

2.3.1 Description of Structure

The North Terminal Pier along Parcels 5, 7, and 10 extends 1,000 linear feet from the northern end of Parcel 2. This structure is 55 feet in width and is comprised of concrete encased steel H-piles supporting cast in place concrete pile caps and precast concrete deck panels. A steel sheet pile AZ-sheet bulkhead extends along the entire length supported by steel H-pile batter piles. A timber fender system extends along the entire length.

The pier serves as an offloading area for product, vessel maintenance area, as well as to provide access for deliveries to the parcel tenants. Vehicular traffic has access to the entire site via Antonio Costa Ave and Hervey Tichon Ave. Navigational charts of the area indicate depths of 24-30 ft (MLLW) immediately along the fender line.

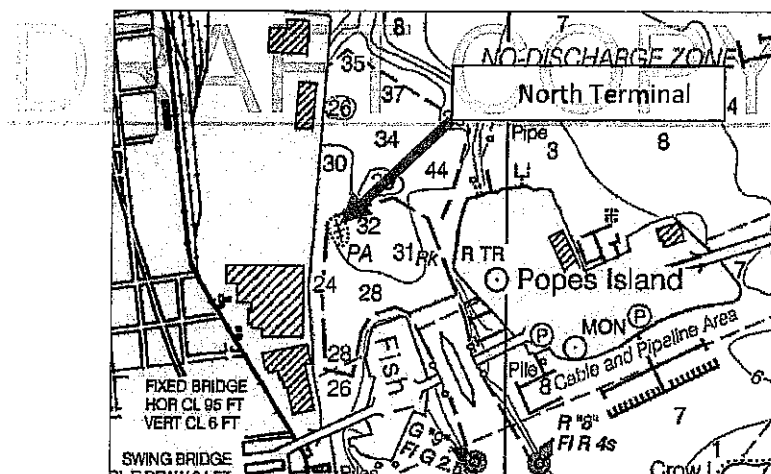
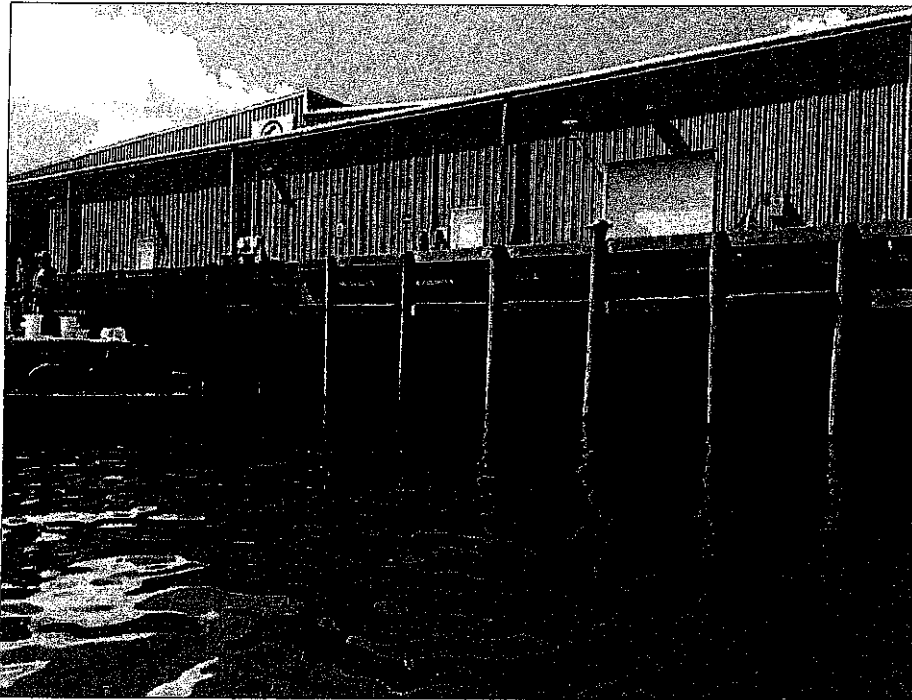
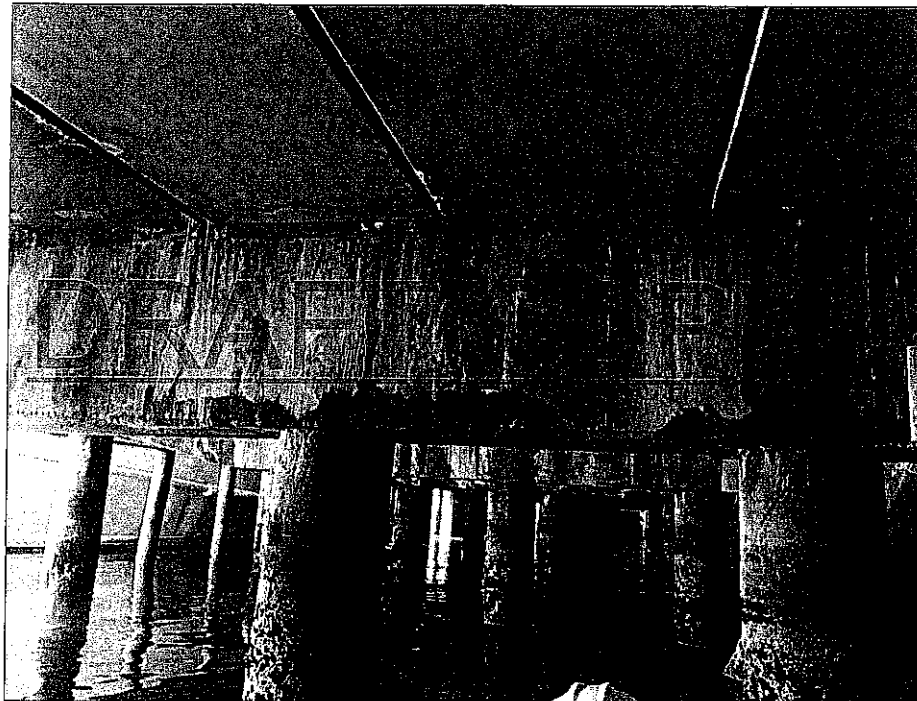


Figure 4: Navigational Chart



Photograph 4: Replaced timber fender along Seawatch parcel



Photograph 5: Typical below deck view of pier construction/condition

2.3.2 Observed Conditions

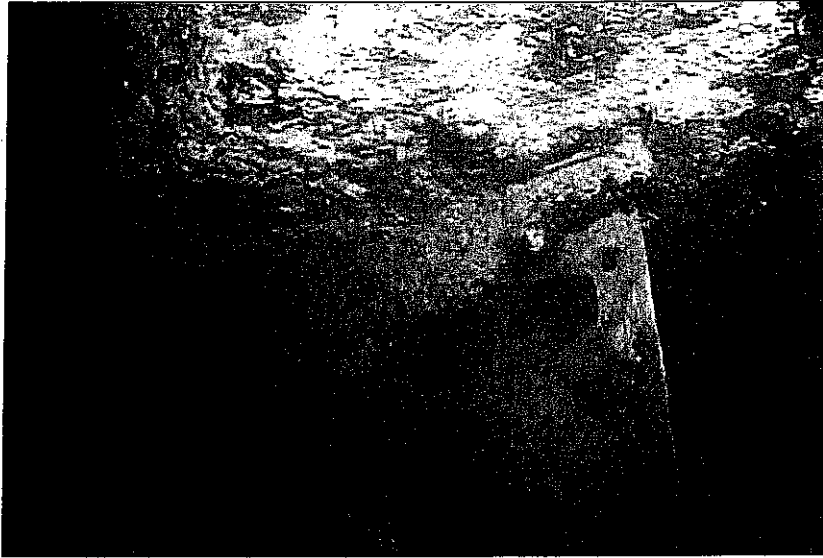
Inspection of the piles found that the concrete jackets do not extend far below Mean Low Water (MLW) leaving the H-piles exposed for 20-30ft. CLE inspected approximately 45% of the steel piles to a Level II condition by removing the growth on at least a portion of the steel faces. The flanges were found to be extremely thin as shown in Photograph 6. UTM measurements indicate that the original flanges would have been near 0.5 inches thick. Current readings found many piles under 0.2 inches in thickness; observations of the flanges appear consistent these readings throughout the site. Several piles were found to be completely failed with total loss of the flanges.

The concrete deck and pile caps have localized areas of spalling and corrosion of the steel reinforcement consistent with the age of the structure. Spalling or loss of concrete was not extensive enough to determine reinforcement diameter or spacing.

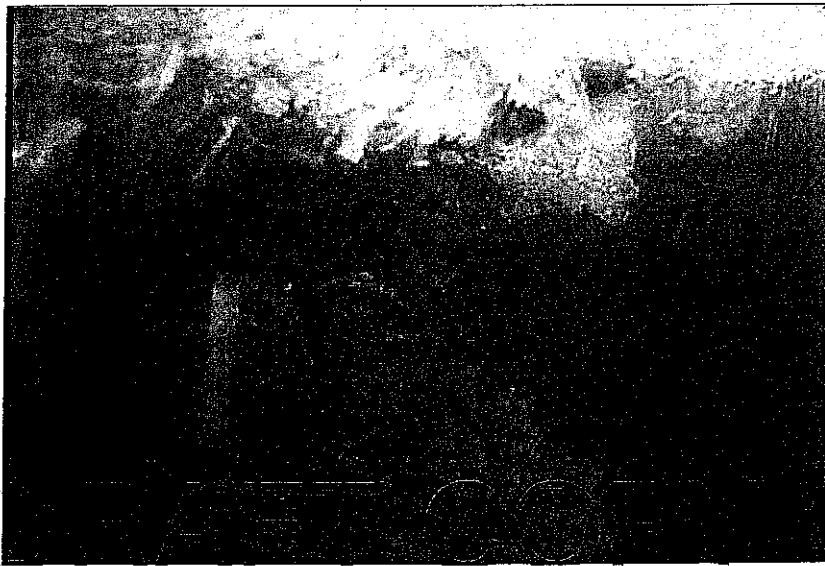
The steel bulkhead was found to be deteriorated especially at the northern end of the project site (see Photograph 11). Large holes (6 ft x 2 ft and 6 ft x 4 ft) were observed at the northern end of Parcel 10. Evidence of a tie back anchor system were found intermittently along the entire length (see Photograph 12). It is not clear if these anchor systems are original or were retrofitted at a later date.



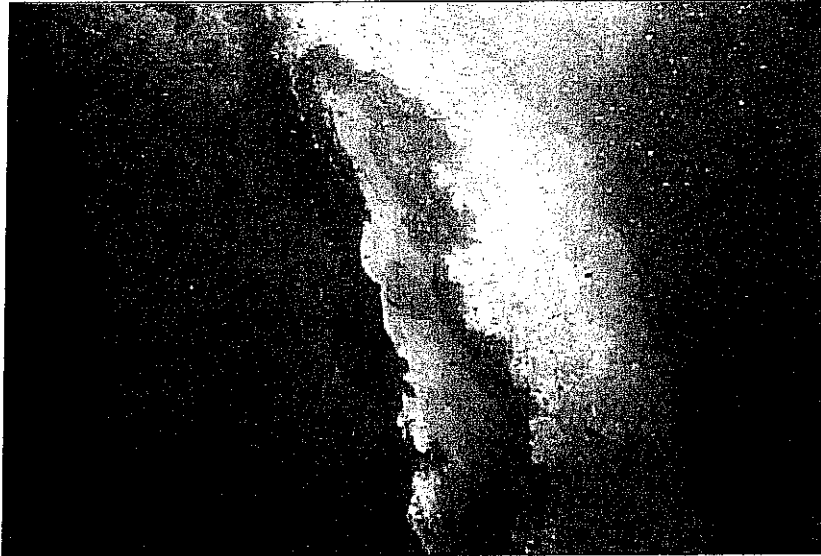
Photograph 6: Pile 18.3.2 (typical)



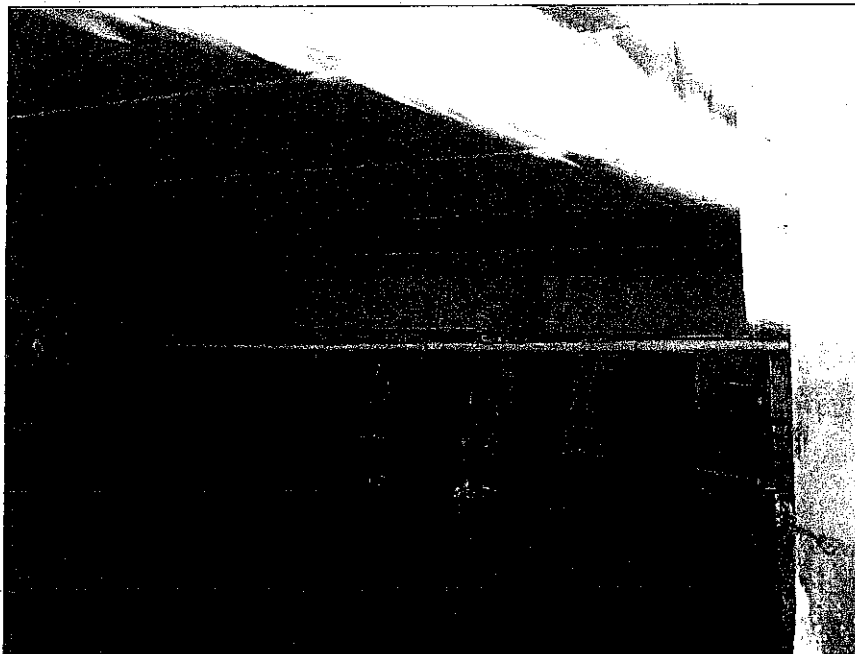
Photograph 7: Bent 16 Pile C2 - Bottom of concrete jacket visible



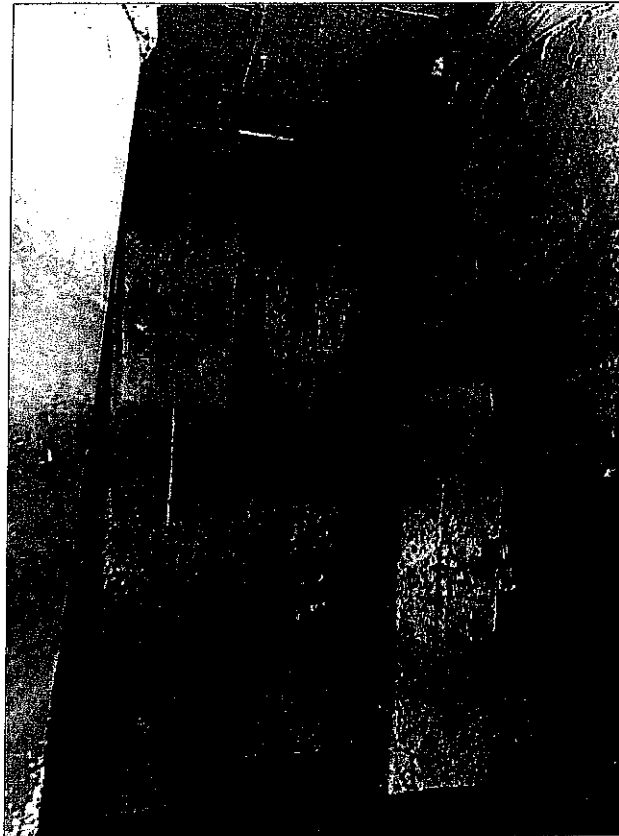
Photograph 8: Bent 15 Pile C2 - complete loss of flanges



Photograph 9: Bent 16 Pile 16.3 2 - flange edge



Photograph 10: Typical batter pile construction against bulkhead



Photograph 11: Typical Sheet Pile Condition



Photograph 12: Tieback bolts through bulkhead

Table 1.1 – Underwater Readings

Pile Location	Elevation	UT East Flange	UT Web	UT West Flange
1-A	Mud	0.425	0.425	0.420
	Mid	0.330	0.460	0.355
	MLW	0.305	0.395	0.335
10-A	Mud	0.370	0.435	0.135
	Mid	0.320	0.200	0.355
	MLW	0.410	0.435	0.380
13-A	Mud			
	Mid			
	MLW	0.435	0.435	0.435
13-C	Mud			
	Mid			
	MLW	0.25	0.230	0.130
36.4	Mud	0.245	0.325	0.120
	Mid	0.215	0.180	0.135
	MLW	0.140	0.280	0.210
Bent 4	Mud	0.295	0.255	0.290
	Mid	0.300	0.295	0.280
	MLW	0.300	0.215	0.245
Bent 27	Mud	0.280	0.285	0.275
	Mid	0.270	0.275	0.290
	MLW	0.325	0.265	0.245

Figure 5: Ultrasonic Thickness Measurements

2.3.3 Structural Assessment/Recommendations

CLE performed structural calculations using estimates of original pile thicknesses and lengths to determine the approximate capacity of the structure at the time of construction. As shown in Attachment B it is estimated that the pier began its service life with an approximately 400 psf deck load capacity. Given that some piles were observed to be completely deteriorated and most were found to have only 50% or less of their original section remaining, the structure is considered to be in *Poor* condition. In its current condition the allowable loading must be significantly reduced from the original 400 psf. Based on a structural analysis of the piles, all piles which are below 0.217 inches in web/flange thickness have an allowable capacity less than 100 psf. Piles with thickness less than 0.153 may fail due to overstressing and have no remaining live load capacity. The pile condition plan provided in Attachment A indicates that the vast majority of the piles in which the marine growth was removed were found to be in severe condition with significant section loss. Those piles not assigned a color were not cleaned of marine growth, and can be assumed to be of similar condition to those which were cleaned. Until further inspections can be conducted, the capacity of the pier must be limited to 100 psf.

It is recommended that an inspection of 100% of the plumb piles be performed as soon as possible to determine if areas of pier may have additional or less capacity than 100 psf.

The large holes in the bulkhead at the northern end of the project site are permitting loss of fill through the bulkhead possibly undermining the area immediately landward of the pier. Continued loss of fill presents the possibility of a collapse due to loading by vehicles, product, etc.

New Bedford HDC North Terminal Pile Capacity Summary

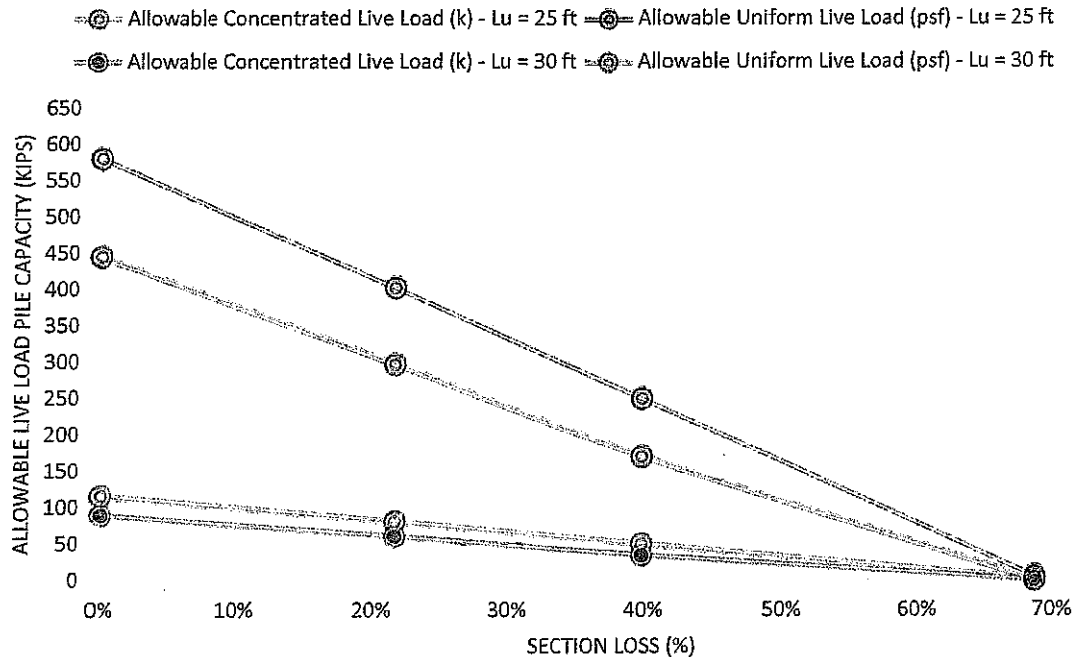


Figure 6: Section loss vs. Allowable Live Load

Parcel 5, 7, and 10: Short Term Recommendations 0-2 Years

- (Immediately) Limit pier capacity to 100 psf
- Perform underwater inspection cleaning 100% of the piles to determine section loss
- Prepare allowable deck loading diagram
- Design pile repairs/repair completely failed piles

Parcel 5, 7, and 10: 3-5 Year Recommendations

- TBD following 100% pile inspection

3. Cost Estimates

Table 1 below provides a cost summary of the short term recommendations which are known at this time. Following the additional inspections of Parcels 1, 5, 7, and 10 actual repair costs will be to be added to these.

Table 1 - Short Term Recommendation Cost Estimates

Short Term Recommendations 0-2 Years	Estimated Cost
<u>Parcel 1</u>	
Full Inspection UW/Topside	\$60,000
<u>Parcel 2</u>	
Cathodic Protection Analysis	\$10,000
Design of Patching Repairs	\$5,000
<u>Parcels 5, 7, and 10</u>	
100% Underwater Inspection (axial piles)	\$50,000
Structural Analysis of Deck Loading	\$8,000
Design Pile Repairs	\$10,000
Subtotal	\$143,000

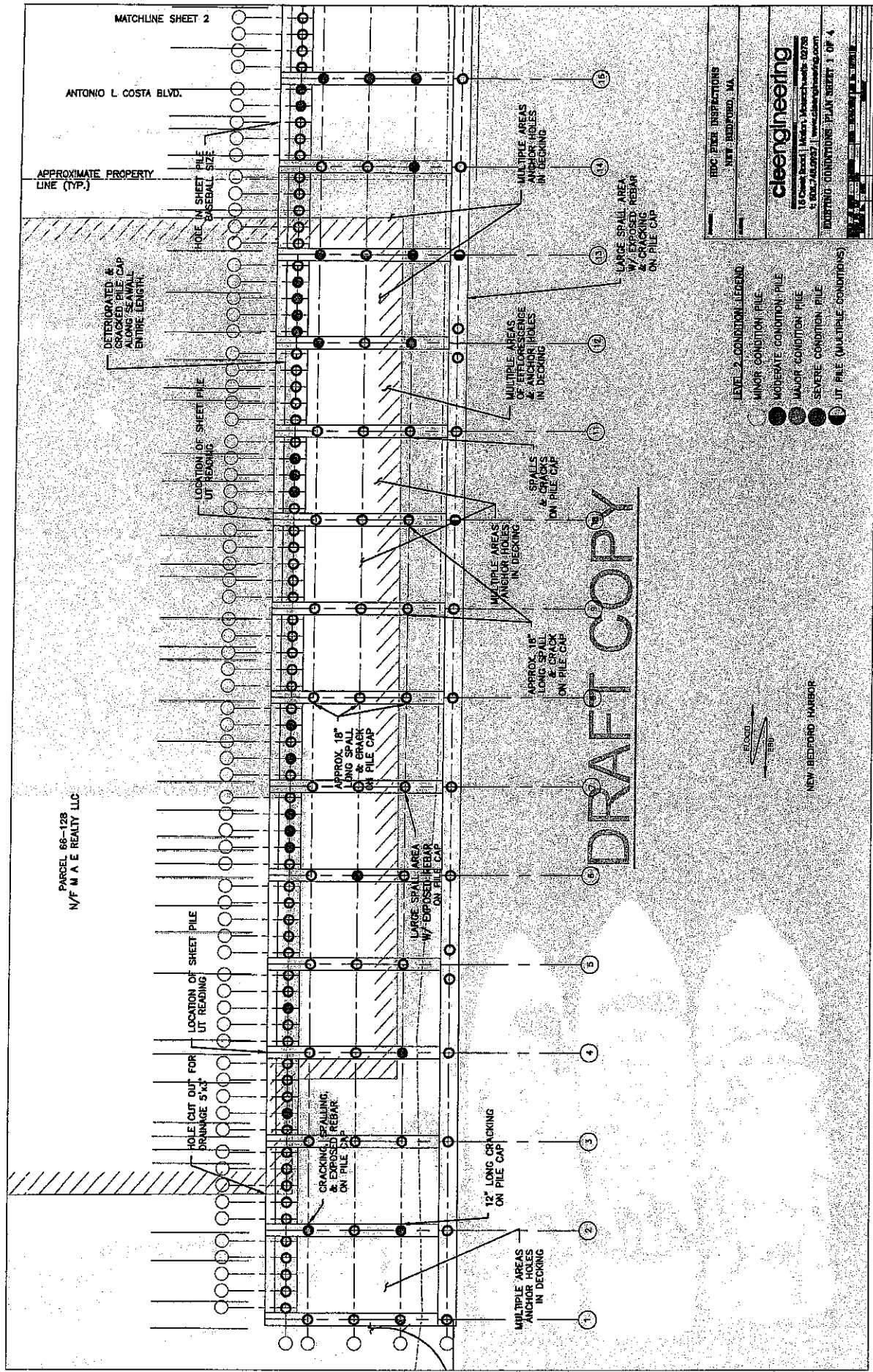
DRAFT COPY

Attachment A – Inspection Plans

DRAFT COPY

Attachment B - Capacity Calculations

DRAFT COPY



PARCEL 88-128
N/F M A E REALTY LLC

MATCHLINE SHEET 2

ANTONIO L. COSTA BLVD.

APPROXIMATE PROPERTY
LINE (TYP.)

HOLE IN SHEET PILE
BASEBALL SIZE

DETERIORATED &
CRACKED PILE CAP
ALONG SEAWALL
ENTIRE LENGTH

LOCATION OF SHEET PILE
UT READING

LOCATION OF SHEET PILE
UT READING

HOLE CUT OUT FOR
DRAINAGE 5'x5'

CRACKING, SPALLING,
& EXPOSED REBAR
ON PILE CAP

12' LONG CRACKING
ON PILE CAP

MULTIPLE AREAS
ANCHOR HOLES
IN DECKING

APPROX. 18"
LONG SPALL
& CRACK
ON PILE CAP

LARGE SPALL AREA
W/ EXPOSED REBAR
ON PILE CAP

MULTIPLE AREAS
ANCHOR HOLES
IN DECKING

APPROX. 18"
LONG SPALL
& CRACK
ON PILE CAP

MULTIPLE AREAS
ANCHOR HOLES
IN DECKING

LARGE SPALL AREA
W/ EXPOSED REBAR
& CRACKING
ON PILE CAP

MULTIPLE AREAS
ANCHOR HOLES
IN DECKING

HDC PIER INSPECTIONS
NEW BEDFORD, MA

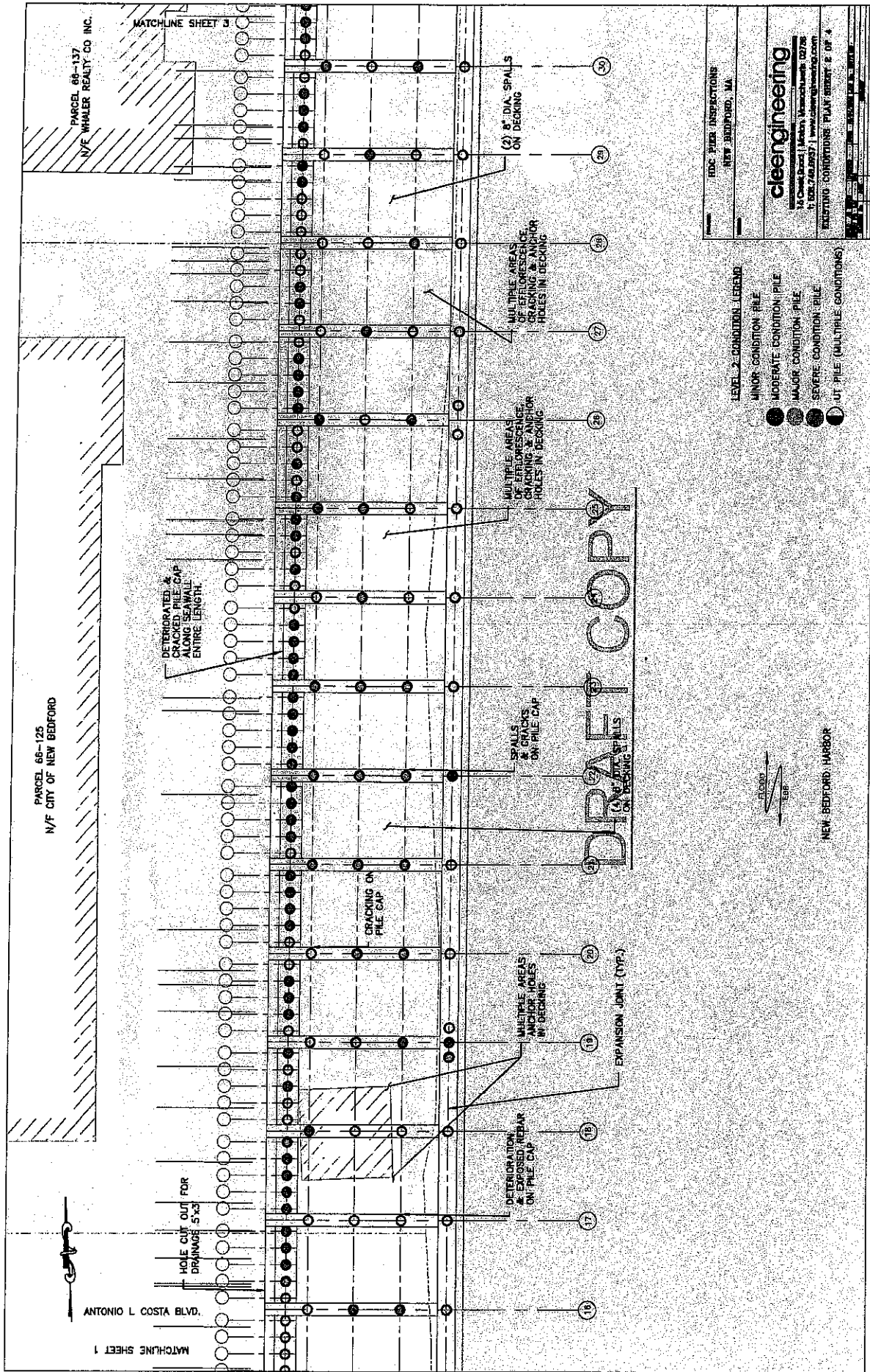
10 Clarendon Street | Boston, Massachusetts 02178
T: 617-743-0707 | www.cleengineering.com

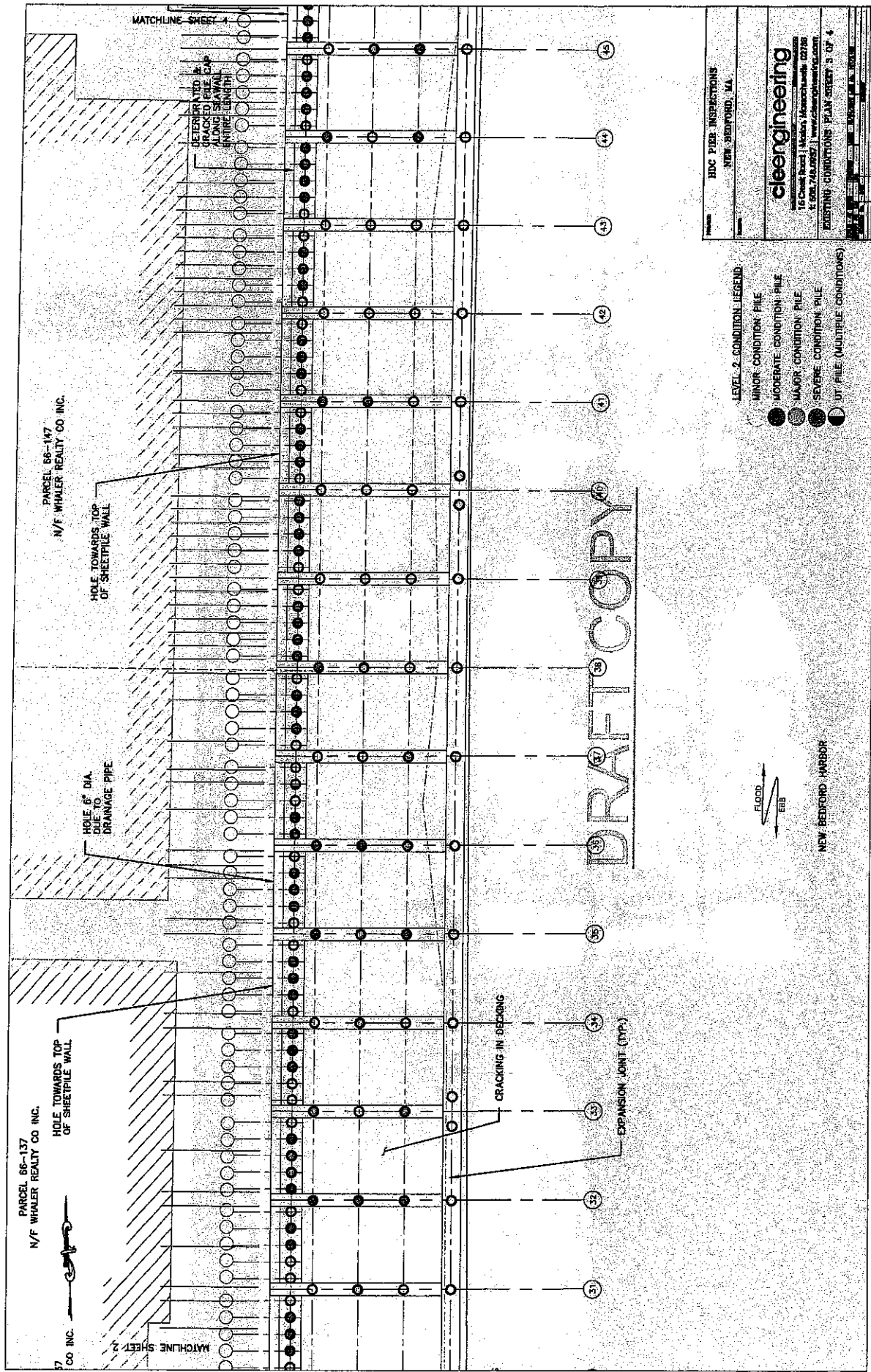
EXISTING CONDITIONS: PIER SHEET 1 OF 4

- LEVEL 2 CONDITION LEGEND
- MINOR CONDITION: PILE
 - MODERATE CONDITION: PILE
 - MAJOR CONDITION: PILE
 - SEVERE CONDITION: PILE
 - UT PILE (MULTIPLE CONDITIONS)

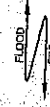


NEW BEDFORD HARBOR





- LEVEL 2 CONDITION LEGEND**
- UNIFORM CONDITION PILE
 - MODERATE CONDITION PILE
 - MAJOR CONDITION PILE
 - SEVERE CONDITION PILE
 - UT PILE (MULTIPLE CONDITIONS)



NEW BEDFORD HARBOR

BOC PIER INSPECTIONS
NEW BEDFORD, MA

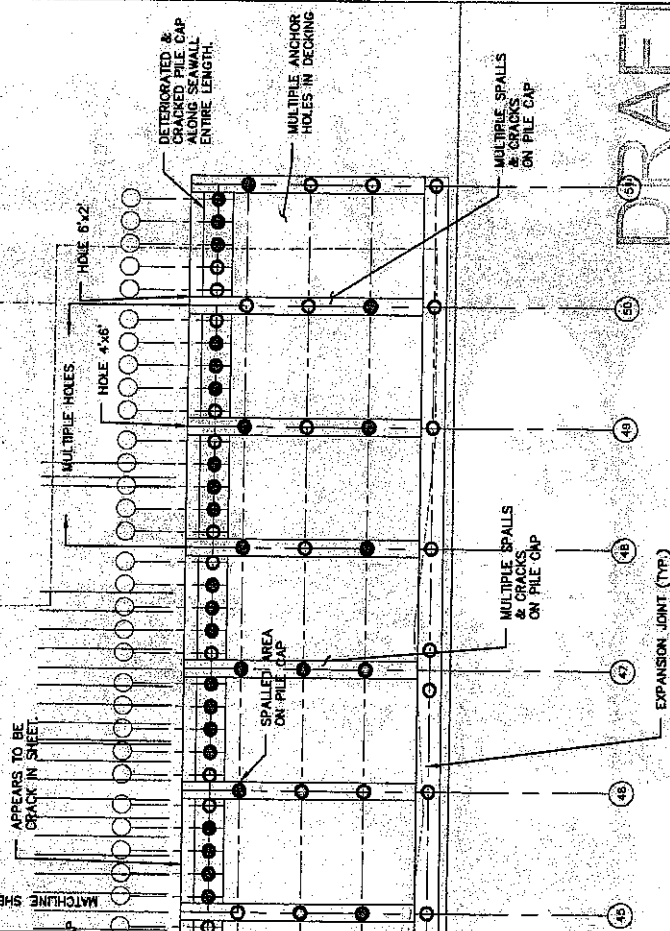
cleengineering
16 Church Street | Boston, Massachusetts 02108
T: 617.748.0002 | www.cleengineering.com

EXISTING CONDITIONS PLAN SHEET 3 OF 4

PARCEL 86-147
N/F WHALER REALTY CO. INC.

[Signature]

MATCHLINE SHEET 3



DRAFT COPY



NEW BEDFORD HARBOR

- LEVEL 2 CONDITION LEGEND
- MINOR CONDITION PILE
 - MODERATE CONDITION PILE
 - MAJOR CONDITION PILE
 - SEVERE CONDITION PILE
 - UT PILE (MULTIPLE CONDITIONS)

HDC PIER INSPECTIONS NEW BEDFORD, MA	
cleengineering	
18 Court Street Middleboro, MA 02746 T: 508-748-0937 www.cleengineering.com	
EXISTING CONDITIONS PLAN SHEET 4 OF 4	
DATE: 10/1/2018	BY: J. B. BROWN
SCALE: 1" = 10'-0"	PROJECT: NEW BEDFORD HARBOR

Attachment C - Inspection Notes



New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 1:

- $L_u = 25\text{feet}$
- Flange Thickness = 0.325 in (21.6% Section Loss)
- Uniform Section Loss Assumed to Webs and Flanges
Based on Flange Section Loss
- Based on a Steel Yield Strength of 36 ksi

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss $SL := 21.6\%$

Top / Bottom Flange Width $b_f := 10.1 \text{ in}$

Top / Bottom Flange Thickness $t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.325 \text{ in}$

Web Depth $d := 9.70 \text{ in}$

Web Thickness $t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.329 \text{ in}$

Distance Between Flanges $d_1 := d - 2 \cdot t_f = 9.049 \text{ in}$

Gross Area $A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 9.766 \text{ in}^2$

Plastic Major Axis Section Modulus $Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 38.552 \text{ in}^3$

Moment of Inertia $I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 169.501 \text{ in}^4$

Radius of Gyration $r_x := \sqrt{\frac{I_x}{A_g}} = 4.166 \text{ in}$

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 25 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot T \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} := 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 86.413$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 38.33 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 24.3 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 214 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 81 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 404 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 2:

- $L_u = 25$ feet
- Flange/Web Thickness = 0.250in (39.8% Section Loss)
- Uniform Section Loss Assumed to Webs and Flanges
- Based on a Steel Yield Strength of 36 ksi

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 39.8\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.25 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.253 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 9.2 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 7.499 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 29.793 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 131.928 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.194 \text{ in}$

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 25 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot T \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 85.83$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 38.85 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 24.43 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 165 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 50 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 251 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 3:

- **Lu = 25 feet**
- **Flange/Web Thickness = 0.130 in (68.7% Section Loss)**
- **Uniform Section Loss Assumed to Webs and Flanges**
- **Based on a Steel Yield Strength of 36 ksi**

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss $SL := 68.7\%$

Top / Bottom Flange Width $b_f := 10.1 \text{ in}$

Top / Bottom Flange Thickness $t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.13 \text{ in}$

Web Depth $d := 9.70 \text{ in}$

Web Thickness $t_w := 0.420 \cdot \text{in} \cdot (1 - SL) = 0.131 \text{ in}$

Distance Between Flanges $d_1 := d - 2 \cdot t_f = 9.44 \text{ in}$

Gross Area $A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 3.899 \text{ in}^2$

Plastic Major Axis Section Modulus $Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 15.648 \text{ in}^3$

Moment of Inertia $I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 70.08 \text{ in}^4$

Radius of Gyration $r_x := \sqrt{\frac{I_x}{A_g}} = 4.24 \text{ in}$

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 25 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} := 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 84.915$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 39.69 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 24.63 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 86 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 1 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 6 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 1:

- $L_u = 30$ feet
- Flange Thickness = 0.325 in (21.6% Section Loss)
- Uniform Section Loss Assumed to Webs and Flanges
Based on Flange Section Loss
- Based on a Steel Yield Strength of 36 ksi

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 21.6\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.325 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \cdot \text{in} \cdot (1 - SL) = 0.329 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 9.049 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 9.766 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 38.552 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 169.501 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.166 \text{ in}$

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 30 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$Tw := 20 \text{ ft}$
Trib Length	$Tl := 10 \text{ ft}$
Trib Area	$T := Tw \cdot Tl = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ **REF. AISC TABLE C-A-7.1**

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 103.696$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ **REF. AISC E3-1**

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 26.62 \text{ ksi}$ **REF. AISC E3-4**

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 20.44 \text{ ksi}$ **REF. AISC E3-2**

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 180 \text{ kip}$ **REF. AISC E3-1**

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 60 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 298 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY



15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | 800.668.3220 | f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 2:

- $L_u = 30$ feet
- Flange/Web Thickness = 0.250in (39.8% Section Loss)
- Uniform Section Loss Assumed to Webs and Flanges
- Based on a Steel Yield Strength of 36 ksi

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss $SL := 39.8\%$

Top / Bottom Flange Width $b_f := 10.1 \text{ in}$

Top / Bottom Flange Thickness $t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.25 \text{ in}$

Web Depth $d := 9.70 \text{ in}$

Web Thickness $t_w := 0.420 \cdot \text{in} \cdot (1 - SL) = 0.253 \text{ in}$

Distance Between Flanges $d_1 := d - 2 \cdot t_f = 9.2 \text{ in}$

Gross Area $A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 7.499 \text{ in}^2$

Plastic Major Axis Section Modulus $Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 29.793 \text{ in}^3$

Moment of Inertia $I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 131.928 \text{ in}^4$

Radius of Gyration $r_x := \sqrt{\frac{I_x}{A_g}} = 4.194 \text{ in}$

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 30 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} := 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 102.996$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 26.98 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 20.6 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 139 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 34 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 171 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 3:

- **Lu = 30 feet**
- **Flange/Web Thickness = 0.130 in (68.7% Section Loss)**
- **Uniform Section Loss Assumed to Webs and Flanges**
- **Based on a Steel Yield Strength of 36 ksi**

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 68.7\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.13 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.131 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 9.44 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 3.899 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 15.648 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 70.08 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.24 \text{ in}$

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 30 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot T \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 101.898$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 27.57 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 20.84 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 73 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = -7 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = -35 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY



15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 800.668.3220 f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 1:

- **Lu = 25 feet**
- **Full Section**
- **Based on a Steel Yield Strength of 36 ksi**

DRAFT COPY

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss

$$SL := 0\%$$

Top / Bottom Flange Width

$$b_f := 10.1 \text{ in}$$

Top / Bottom Flange Thickness

$$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.415 \text{ in}$$

Web Depth

$$d := 9.70 \text{ in}$$

Web Thickness

$$t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.42 \text{ in}$$

Distance Between Flanges

$$d_1 := d - 2 \cdot t_f = 8.87 \text{ in}$$

Gross Area

$$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 12.457 \text{ in}^2$$

Plastic Major Axis Section
Modulus

$$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 48.798 \text{ in}^3$$

Moment of Inertia

$$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 212.741 \text{ in}^4$$

Radius of Gyration

$$r_x := \sqrt{\frac{I_x}{A_g}} = 4.133 \text{ in}$$

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 25 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot Tl \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 87.113$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 37.72 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 24.14 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 271 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 116 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 582 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY



15 Creek Road : Marion, Massachusetts 02738
t: 508.748.0937 800.668.3220 f: 508.748.1363

New Bedford HDC North Terminal

Pile Capacity Analysis

PROJECT NO. 16173.1

CASE 1:

- **Lu = 30 feet**
- **Full Section**
- **Based on a Steel Yield Strength of 36 ksi**

DRAFT COPY

December 6, 2016

BY: J.G.
CHECKED:
REV:

SECTION PROPERTIES:

HP10 x 42

Section Loss	$SL := 0\%$
Top / Bottom Flange Width	$b_f := 10.1 \text{ in}$
Top / Bottom Flange Thickness	$t_f := 0.415 \text{ in} \cdot (1 - SL) = 0.415 \text{ in}$
Web Depth	$d := 9.70 \text{ in}$
Web Thickness	$t_w := 0.420 \text{ in} \cdot (1 - SL) = 0.42 \text{ in}$
Distance Between Flanges	$d_1 := d - 2 \cdot t_f = 8.87 \text{ in}$
Gross Area	$A_g := (b_f \cdot t_f) + (d \cdot t_w) + (b_f \cdot t_f) = 12.457 \text{ in}^2$
Plastic Major Axis Section Modulus	$Z_x := \frac{(t_w \cdot d^2)}{4} + \frac{b_f \cdot (d^2 - d_1^2)}{4} = 48.798 \text{ in}^3$
Moment of Inertia	$I_x := \frac{(t_w \cdot d^3)}{12} + \frac{b_f \cdot (d^3 - d_1^3)}{12} = 212.741 \text{ in}^4$
Radius of Gyration	$r_x := \sqrt{\frac{I_x}{A_g}} = 4.133 \text{ in}$

DESIGN PARAMETERS:

Yield Stress	$F_y := 36 \text{ ksi}$
Modulus of Elasticity	$E := 29000 \text{ ksi}$
Unbraced Pile Length	$L_u := 30 \text{ ft}$
Unit Weight Concrete	$\gamma_c := 145 \text{ pcf}$
Unit Weight Steel	$\gamma_s := 490 \text{ pcf}$
Trib Width	$T_w := 20 \text{ ft}$
Trib Length	$T_l := 10 \text{ ft}$
Trib Area	$T := T_w \cdot T_l = 200 \text{ ft}^2$

DRAFT COPY

DEAD LOADS:

PRECAST PLANK:

Precast Plank Thickness
Thickness of Precast Plank
Unknown, 18" Assumed)

$$t_{plank} := 18 \text{ in}$$

Dead Load Plank

$$DL_{plank} := t_{plank} \cdot \gamma_c \cdot T = 43.5 \text{ kip}$$

PILE CAP:

Pile Cap Width

$$b_{pc} := 4 \text{ ft}$$

Pile Cap Thickness

$$h_{pc} := 4 \text{ ft}$$

Dead Load Pile Cap

$$DL_{pc} := b_{pc} \cdot h_{pc} \cdot T \cdot \gamma_c = 23.2 \text{ kip}$$

PILE JACKET / ENCASEMENT

Pile Jacket Diameter

$$d := 24 \text{ in}$$

Pile Jacket Length

$$l := 8.0 \text{ ft}$$

Dead Load Pile Jacket

$$DL_j := \frac{\pi \cdot d^2}{4} \cdot l \cdot \gamma_c = 3.644 \text{ kip}$$

Total Factored Dead Load

$$P_{DL} = 1.2 \cdot (DL_{plank} + DL_{pc} + DL_j) = 84.413 \text{ kip}$$

PILE CAPACITY:

Check Effective Length - effective slenderness ratio KL/r shall not exceed 200

Effective Length Factor $K := 1.2$ REF. AISC TABLE C-A-7.1

Effective Length Ratio $R := \frac{K \cdot Lu}{r_x} = 104.536$

Slenderness Limit $limit := 4.71 \cdot \sqrt{\frac{E}{F_y}} = 133.681$ REF. AISC E3-1

Since $KL/r < 4.71 \cdot \sqrt{E/F_y}$, Pile is Not Slender

Elastic Buckling Stress $F_e := \frac{\pi^2 \cdot E}{\left(\frac{K \cdot Lu}{r_x}\right)^2} = 26.19 \text{ ksi}$ REF. AISC E3-4

Critical Stress $F_{cr} := \left(0.658^{\frac{F_y}{F_e}}\right) \cdot F_y = 20.25 \text{ ksi}$ REF. AISC E3-2

AISC Strength Reduction Factor $\phi_c := 0.90$

Nominal Compressive Strength $\phi P_n := \phi_c \cdot F_{cr} \cdot A_g = 227 \text{ kip}$ REF. AISC E3-1

DRAFT COPY

ALLOWABLE UNIFORM LIVE LOAD:

$$P_{LL} := \frac{\phi P_n - P_{DL}}{1.6} = 89 \text{ kip}$$

Allowable Concentrated Live Load

ALLOWABLE CONCENTRATED LIVE LOAD:

$$P_{LL} := \frac{\frac{\phi P_n - P_{DL}}{1.6}}{T} = 446 \text{ psf}$$

Allowable Uniform Live Load

DRAFT COPY

MEMORANDUM

TO:	Ronnie Enoksen, Nordic Fisheries Roy Enoksen, Nordic Fisheries Peter Anthony, Nordic Fisheries Michael Livingstone, Nordic Fisheries	DATE:	August 30, 2017 Updated November 8, 2017
		CLE#	16032.100
		RE:	14 Hervey Tichon Ave. and 22 Antonio Costa Ave.
FROM:	Susan Nilson, P.E. Scott Skuncik, P.E.	SUBJ.:	Bulkhead Condition Assessment and Proposed Remedial Actions

Ref:

- o North Terminal Report of Findings – Prepared by CLE Engineering, dated December 2016
- o Excerpts from plans prepared by Tibbetts Engineering, “North Terminal Bulkhead Project”, dated December 1, 1970

SUMMARY:

CLE is providing this memorandum to summarize CLE’s assessment and recommendations for the bulkhead at the subject properties. CLE initially inspected the piles, bulkhead, and concrete pile caps/deck at the subject properties as part of a below deck assessment performed for the New Bedford Harbor Development Commission (HDC).

Following the issuance of the North Terminal report, CLE was informed by Nordic Fisheries (Nordic) of cracking in the asphalt pavement outside of the concrete pier deck limits. The cracking extended parallel to the berth over long portions of the parcels. CLE monitored the cracking limits and observed noticeable increases to crack widths between March 3, 2017 to April 7, 2017.

Exploratory landside excavation performed by Nordic revealed a rotated concrete cap (rotated towards shore). CLE requested and received original construction plans for the site from the HDC which confirmed that there was never a physical connection between the steel bulkhead and the concrete caps other than direct bearing.

CLE performed an additional below deck inspection and found that portions of the tops of the steel bulkhead have shifted below the concrete cap as it continues to deteriorate. This shift is slight ($1 - 1\frac{1}{2}''$ +/-); however, once a sheet pile has moved beneath the cap it is completely unsupported. This condition was observed at locations along both Nordic lease parcels, the SeaWatch lease parcel, and at the terminus of both Hervey Tichon and Antonio Costa Avenues. As the deterioration continues, catastrophic failure of the bulkhead is possible. This failure will occur when a significant area of the sheets continues to slip below the concrete cap which would allow for shifting of the backfill and may lead to building collapse.

CLE has been contracted by Nordic to prepare a replacement bulkhead design for each of their leased parcels. These preliminary designs are included as attachments to this memo.

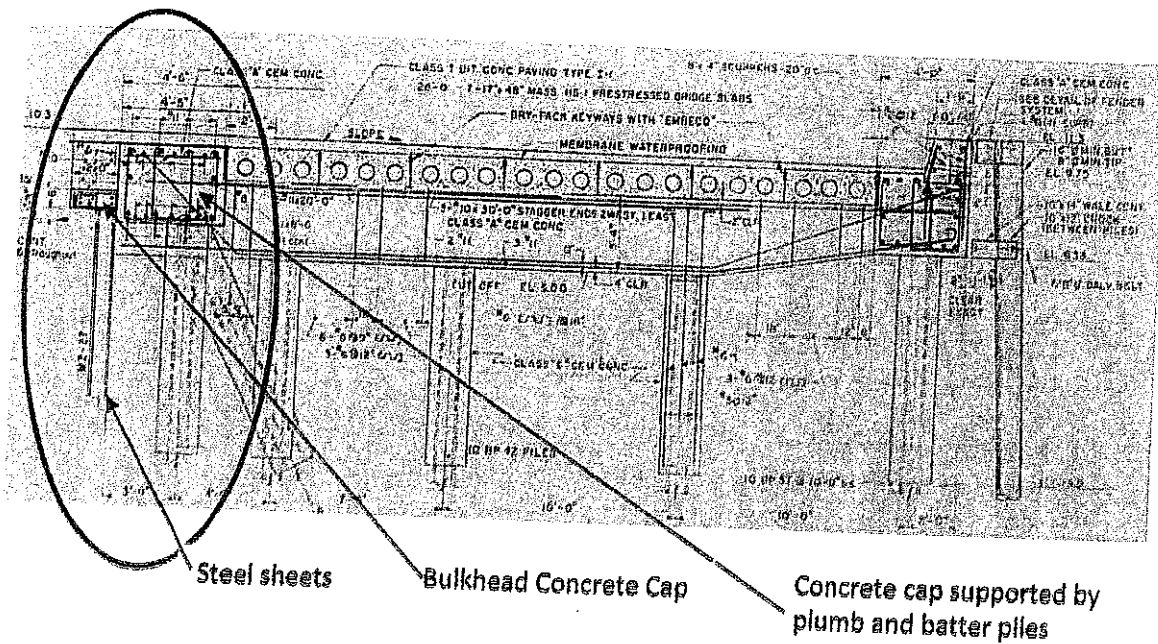


Figure 1: Typical Cross Section from 1970 Tibbets Engineering Plan

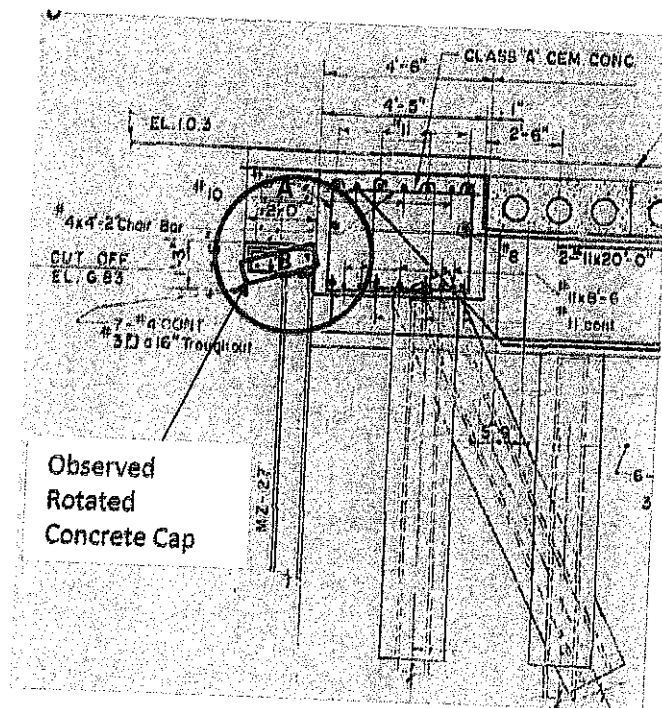
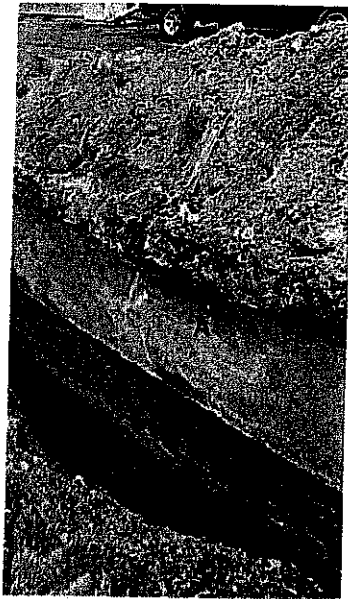
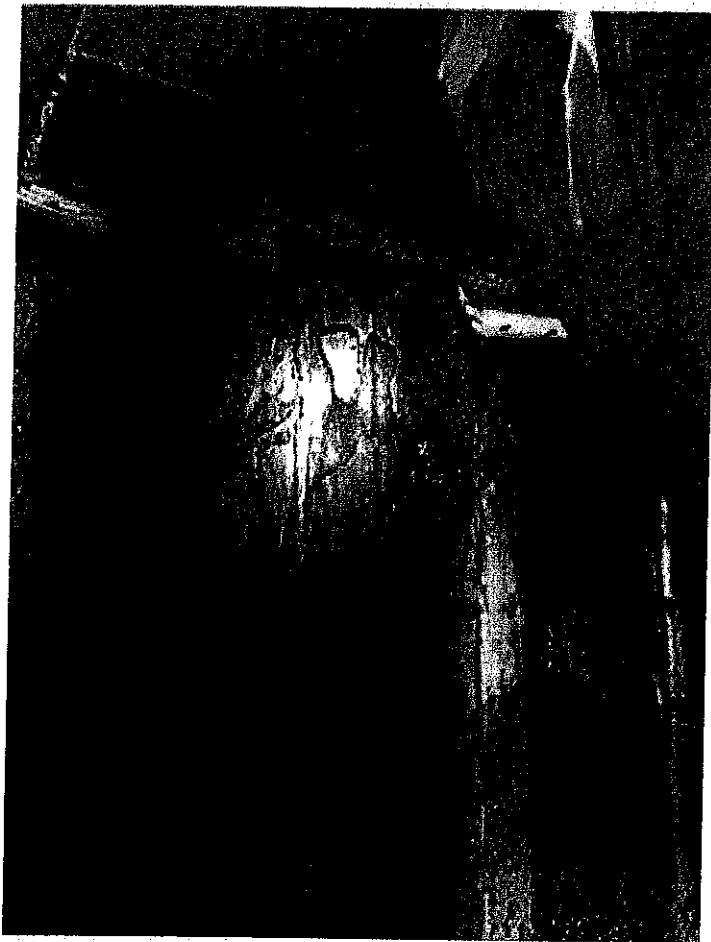


Figure 2: Typical Cross Section from 1970 Tibbets Engineering Plan with Observed Rotated Cap Condition



Photograph 1: Landside excavation of bulkhead concrete caps.

Note: A and B correspond to concrete depicted in Figure 2



Photograph 2: Steel sheet piles slipping below the batter pile supported concrete cap

Note: In the original design, 3 to 4 inches at the top of steel sheet pile would have been in direct contact with the back of the battered concrete cap.

Recommendations:

The existing bulkhead at both parcels has deteriorated to the point where it can no longer be repaired. CLE considered several alternatives to address both the deteriorated pile conditions¹, as well as the bulkhead. Alternatives included cellular cofferdams, anchored bulkhead system at seaward face of pier, and rock socketed king pile wall system with solid fill. Considerations for any repairs include site conditions (ex. structures, dredge depth, rock elevations, etc.), constructability, impact to Nordic's operations, capital and maintenance costs, and feasibility of obtaining required permits. A summary of the evaluation of conceptual designs is provided below:

Table 1: Alternatives Analysis of Conceptual Designs

Remedial Design Alternative	14 Hervey Tichon	22 Antonio Costa
1. Complete demolition and replacement of pier and support piles	Without removal of existing building, tie back options are limited to grouted tendon rock anchors as there is insufficient width for a tie back / deadman system	Not practical; would require removal of existing building with major impact on business operations
a. Replace with cellular cofferdams	Available area has insufficient width to install cellular cofferdams	Available area has insufficient width to install cellular cofferdams
b. Stone Revetment	Existing stone revetment doesn't prevent failure of sheeting; additional stone will not stabilize top of sheeting	Existing stone revetment doesn't prevent failure of sheeting; additional stone will not stabilize top of sheeting
2. Repair only sections of bulkhead where top of sheet has slipped below the cap;	Areas of failed sheets are dispersed throughout the length of the property; it is not practicable to replace isolated areas as failure is likely imminent of adjacent areas. Access is limited and transitions between repairs is not feasible with condition of remaining sheeting.	Areas of failed sheets are dispersed throughout the length of the property; it is not practicable to replace isolated areas as failure is likely imminent of adjacent areas. Access is limited and transitions between repairs is not feasible with condition of remaining sheeting.
3. Existing sheeting to remain; undersheeting with grouted tendon rock anchors and solid fill. Pile jackets to restore load capacity of deck.	Preferred alternative; site constraints allow for construction; relatively simple regulatory process and lowest cost alternative	Not practicable to install new sheeting within existing building without major impact on business operations. Associated costs for building removal and reconstruction result in higher total costs compared to other options.

¹ Reference "North Terminal Report of Findings – Prepared by CLE Engineering, dated December 2016"

Remedial Design Alternative	14 Hervey Tichon	22 Antonio Costa
4. Existing sheeting to remain; oversheeting as close as practicable with grouted tendon rock anchors and solid fill. Pile jackets to restore load capacity of deck.	Higher costs than undersheeting as requires cutting of existing batter piles and removal and replacement of deck sections.	Not practicable to install new sheeting within existing building without major impact on business operations. Associated costs for building removal and reconstruction result in higher total costs compared to other options.
5. Existing sheeting to remain; oversheeting between pile rows A and B (outside all buildings), with grouted tendon rock anchors and solid fill. Pile jackets to restore load capacity of deck.	Higher costs than undersheeting as requires cutting of existing batter piles, removal and replacement of deck sections, may require socketed piles for sheeting system, and a significant amount of additional fill materials.	Preferred alternative; site constraints allow for construction; however, it is a complex regulatory process for amount of solid fill required.

14 Hervey Tichon – Undersheeting Repair and Pile Jackets: CLE's initial evaluation of alternatives found that a pile jacket system and an undersheeting bulkhead replacement at 14 Hervey Tichon is the preferable option based on costs and available access to the area. There is sufficient space between the existing building structures and the existing steel sheeting to drive new steel sheeting landward of the existing sheeting at Nordic's northern parcel (14 Hervey Tichon). The new structure would be anchored by a new concrete cap and a rock/soil anchor. The existing sheeting would remain in place but would no longer be a structural component. The plumb piles would be jacketed with a fiberglass shell filled with steel reinforced concrete. Required regulatory approvals are anticipated to include the following:

Table 2: Regulatory Approvals for 14 Hervey Tichon: Undersheeting and Pile Jackets

Permit	Issuing Agency
Order of Conditions	Conservation Commission
Minor Modification	DEP Waterways
Self-Verification	USACE

22 Antonio Costa Ave. - Oversheeting Repair and Pile Jackets: At the southern leased parcel, 22 Antonio Costa Ave., the existing building structures are located directly over the steel sheeting. Therefore, it is not possible to drive sheeting landward of the existing sheets as proposed for 14 Hervey Tichon. CLE evaluated several remedial options for this bulkhead.

Option 1 includes steel sheeting seaward of the existing sheets just outboard of the pile cap, which is within the existing building. Grouted tendon rock anchors would extend from the new pile cap at a 45 degree angle to underlying rock below the building. The existing sheeting would remain in place but would no longer be a structural component; fill would be placed between the existing and new sheets. The plumb piles would be jacketed with a fiberglass shell filled with steel reinforced concrete. Costs associated with this option are detailed in Exhibit D; however, it is not considered a practicable option as it would require the removal of a portion of the building which would have significant impacts to business operations and associated costs, which are not included in the cost estimate.

The portion of the building that would require removal to gain construction access is the hallway to the controlled environment rooms. The subject facility is run in accordance with strict FDA food safety standards. It is an FDA approved food facility and must pass strict BRC Food audits for the food production to be allowed to continue. There are well over 100 people presently working in this structure. The business is processing of fresh scallops on a daily, full time basis. Because this is a consumer food product, the highest degree of operational standards must be maintained at all times to avoid contamination of this food product sold nationally and internationally.

Table 3: Regulatory Approvals for 22 Antonio Costa: Oversheeting within Building and Pile Jackets

Permit	Issuing Agency
Certificate from Secretary on Environmental Notification Form (assumes Environmental Impact Report is not required)	Executive Office of Energy and Environmental Affairs
Order of Conditions	Conservation Commission
Chapter 91 License	DEP Waterways
Preconstruction Notification	USACE
401 Water Quality Certification	DEP – 401 Water Quality Certificate
Individual Consistency Statement	Coastal Zone Management

Option 2 includes steel structure seaward of the existing buildings, between existing pile rows A and B. This would be a Socketed Pipe and Sheetpile Kingpile Wall section in consideration of the relatively high bedrock (-43' mlw), which is approximately 10' below the documented dredge limit (-33' mlw). The structure would be anchored with grouted tendon rock anchors that would go from the new pile cap at an angle thru precast holes in the sheeting to underlying rock below the building. The existing sheeting would remain in place but would no longer be a structural component; fill would be placed between the existing and new sheets. This fill may be a combination of flowable fill and granular materials; however, placement will be challenging, especially under the building. Because the fill cannot be relied on as support for the deck, the plumb piles would remain as the structural support and each pile will be jacketed with a fiberglass shell filled with steel reinforced concrete.

Table 4: Regulatory Approvals for 22 Antonio Costa: Oversheeting Seaward of Building and Pile Jackets

Permit	Issuing Agency
Certificate from Secretary on Environmental Notification Form (assumes Environmental Impact Report is not required)	Executive Office of Energy and Environmental Affairs
Order of Conditions	Conservation Commission
Chapter 91 License	DEP Waterways
Preconstruction Notification	USACE
401 Water Quality Certification	DEP – 401 Water Quality Certificate
Individual Consistency Statement	Coastal Zone Management

Cost Estimates

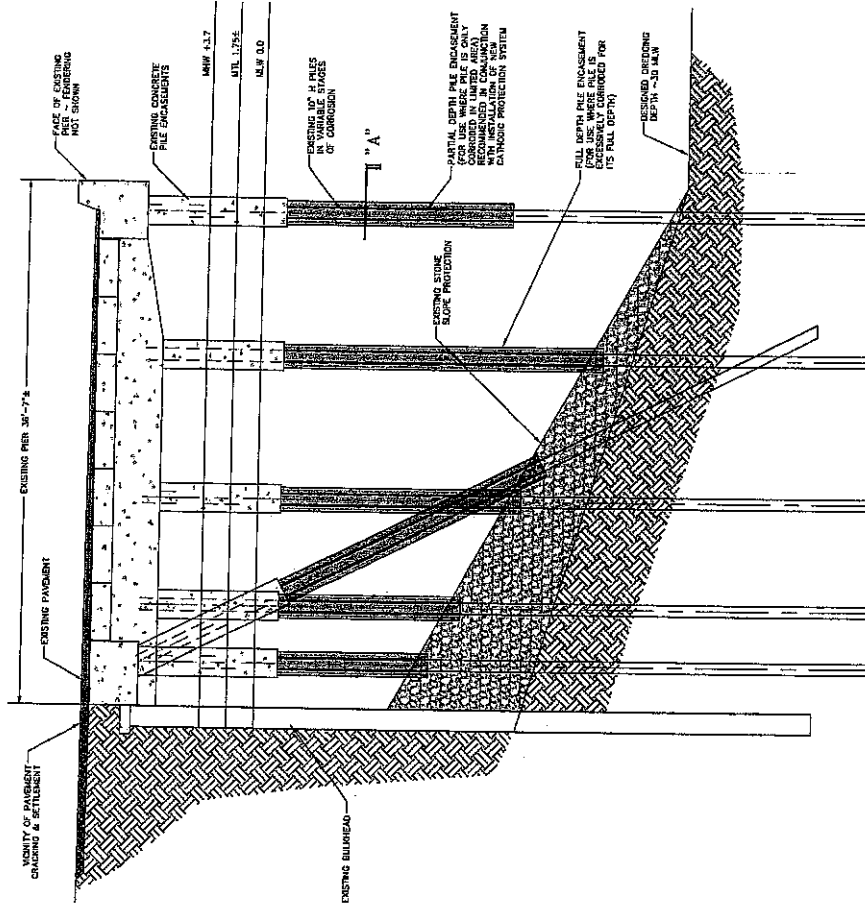
CLE developed cost estimates for each of the above repair conceptual plan options, which are included in Exhibit D. Unit pricing for these estimates is based on contractor pricing as well as CLE's database of contractor bids for similar items. Cost information may vary based on final design and contractor bids.

Table 5: Summary of Cost Estimates

Location	Total Cost Estimate	Cost Estimate without Pile Jackets
14 Hervey Tichon	\$5.6 Million	\$3.8 Million
22 Antonio Costa	\$7.6 Million	\$6.3 Million

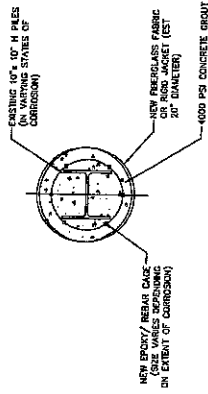
Exhibit A:
14 Hervey Tichon Ave.
Undersheeting Repair with Pile Jackets

DRAFT
NOT TO BE USED FOR CONSTRUCTION



TYPICAL PILE SECTION TO BE REPAIRED/JACKETED
SCALE 1/4" = 1'-0"

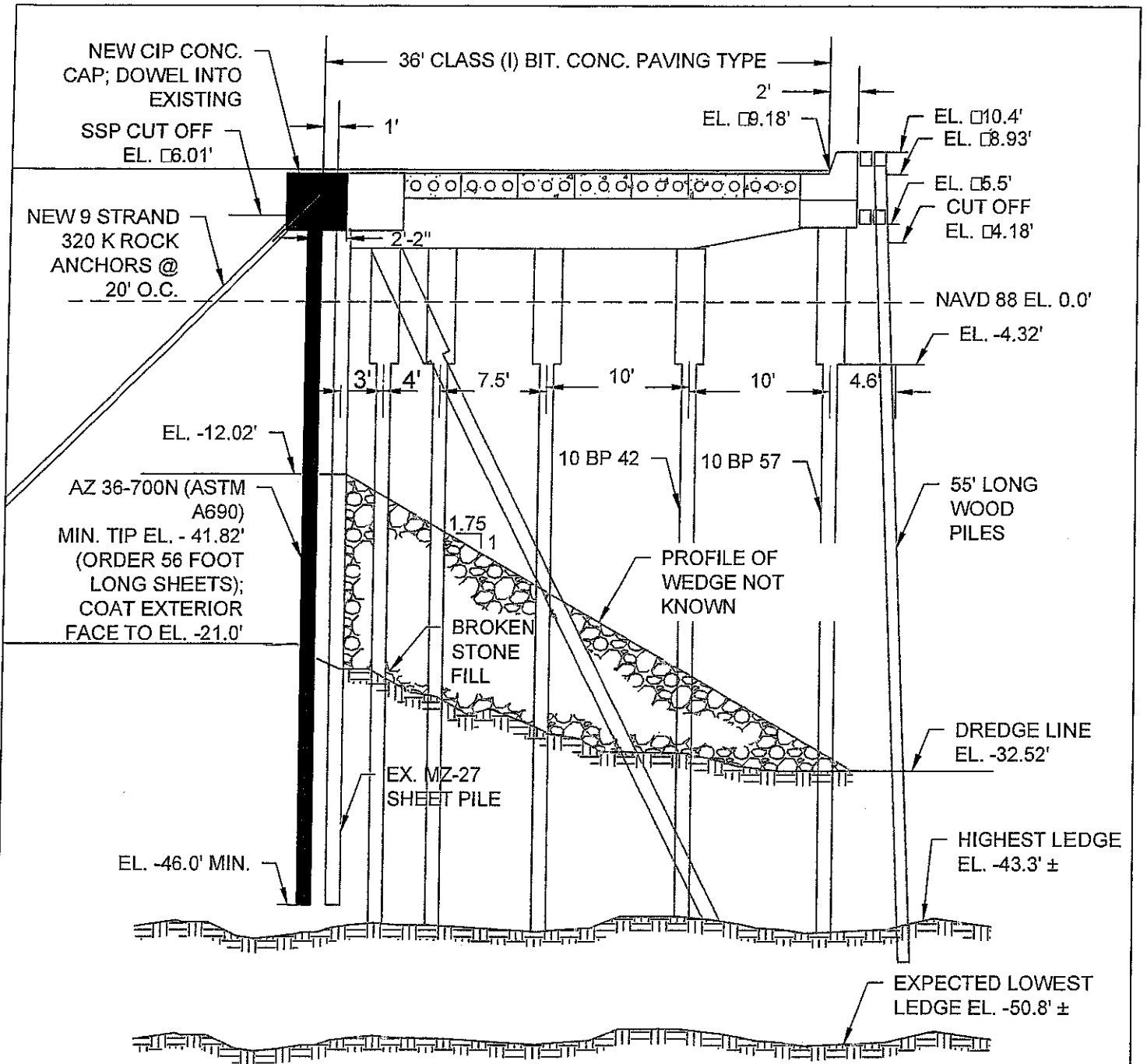
NOTE: PILE JACKETS TO EXTEND BELOW MUDLINE; ASSUMED TO BE WITHIN RIP RAP.
PARTIAL DEPTH ONLY ALLOWED IN PILE LOCATIONS OF LIMITED CORROSION.



SECTION "A" - TYPICAL PILE REPAIR
SCALE 1" = 1'-0"

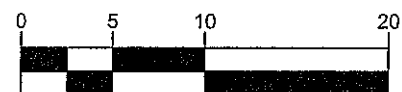
- NOTES:
1. REINFORCEMENT SHALL BE NO. 6 EPOXY COATED GR60 WITH NO. 3 TIES.
 2. NO MORE THAN TWO PILES CAN BE REPAIRED PER BAY AT THE SAME TIME. PILES CANNOT BE ADJACENT TO EACH OTHER.

PROJECT	NORTH TERMINAL REPAIRS NEW BEDFORD, MA
OWNER	EASTERN FISHERIES 14 HERVEY TICHON AVE. NEW BEDFORD, MA 02740
DESIGNER	cleengineering 16 Oak Road Matta, Massachusetts 02718 t: 508.745.0937 www.cleengineering.com
SHEET	SHEET 1 OF 1
DATE	10/1/2019
BY	JD
CHECKED	JD
APPROVED	JD



NOTE: THE ELEVATIONS TAKEN FROM CITY OF NEW BEDFORD HARBOR DEVELOPMENT COMMISSION PLAN TITLED "NORTH TERMINAL BULKHEAD PROJECT: AS BUILT" DATED DECEMBER 1970, GIVEN IN MEAN SEA LEVEL AND ASSUMED TO BE EQUAL TO NGVD29. ELEVATIONS SHOWN ON PLAN ARE IN NAVD88.

GRAPHIC SCALE



(IN FEET)

1 INCH = 10 FEET

NORTH TERMINAL REPAIRS SECTION VIEW

LOCATION

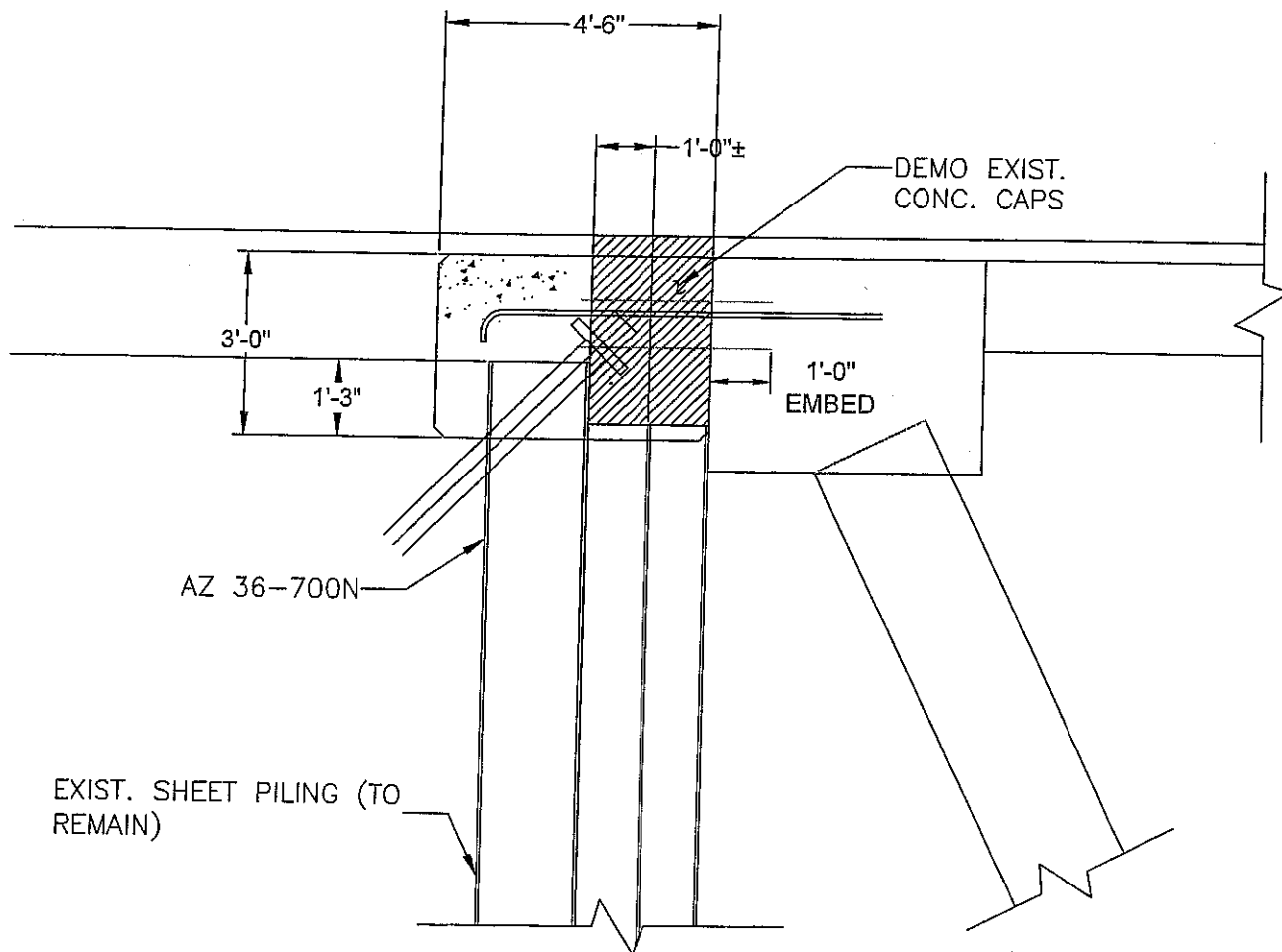
NEW BEDFORD, MA

CLIENT

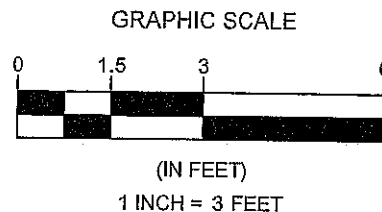
NEW BEDFORD HDC

cleengineering

15 Creek Road | Marlon, Massachusetts 02738
t: 508.748.0937 | www.cleengineering.com



NOTE: THE ELEVATIONS TAKEN FROM CITY OF NEW BEDFORD HARBOR DEVELOPMENT COMMISSION PLAN TITLED "NORTH TERMINAL BULKHEAD PROJECT: AS BUILT" DATED DECEMBER 1970, GIVEN IN MEAN SEA LEVEL AND ASSUMED TO BE EQUAL TO NGVD29. ELEVATIONS SHOWN ON PLAN ARE IN NAVD88.



NORTH TERMINAL REPAIRS
SECTION VIEW

LOCATION

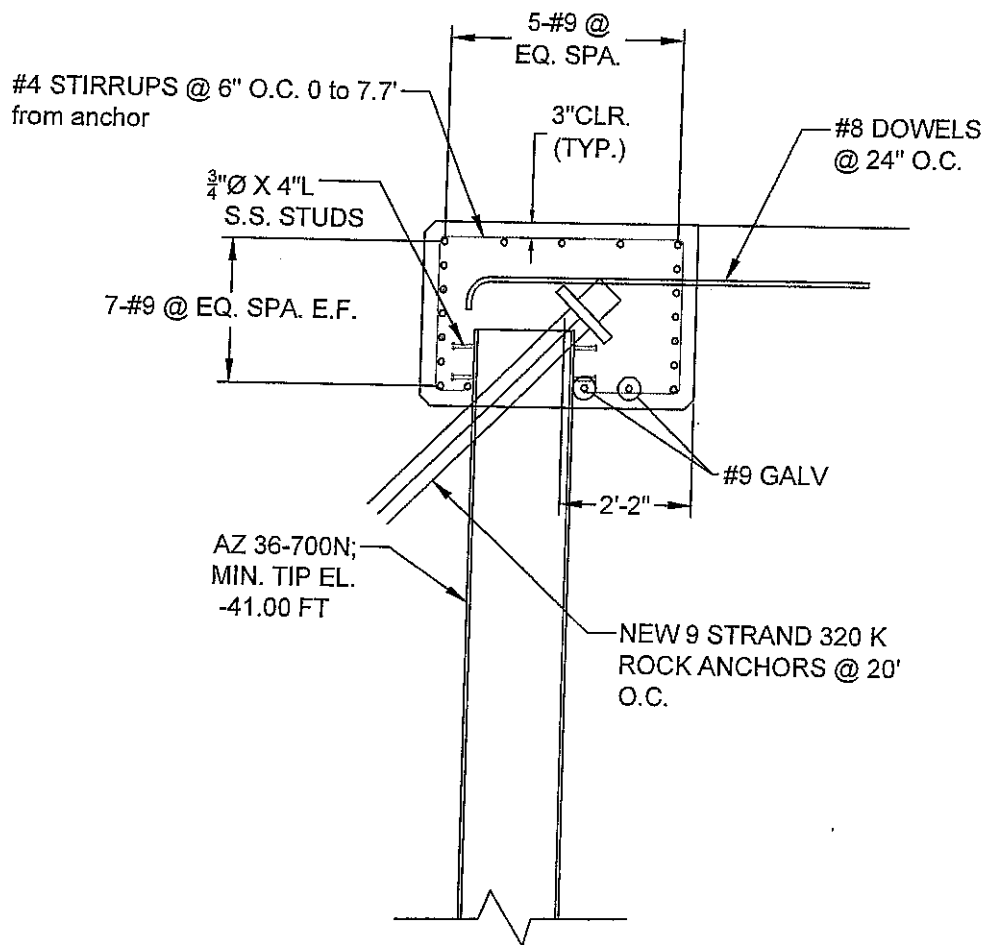
NEW BEDFORD, MA

CLIENT

NEW BEDFORD HDC

cleengineering

15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | www.cleengineering.com



NOTE: THE ELEVATIONS TAKEN FROM CITY OF NEW BEDFORD HARBOR DEVELOPMENT COMMISSION PLAN TITLED "NORTH TERMINAL BULKHEAD PROJECT: AS BUILT" DATED DECEMBER 1970, GIVEN IN MEAN SEA LEVEL AND ASSUMED TO BE EQUAL TO NGVD29. ELEVATIONS SHOWN ON PLAN ARE IN NAVD88.

GRAPHIC SCALE



(IN FEET)

1 INCH = 3 FEET

NORTH TERMINAL REPAIRS SECTION VIEW

LOCATION

NEW BEDFORD, MA

CLIENT

NEW BEDFORD HDC

cleengineering

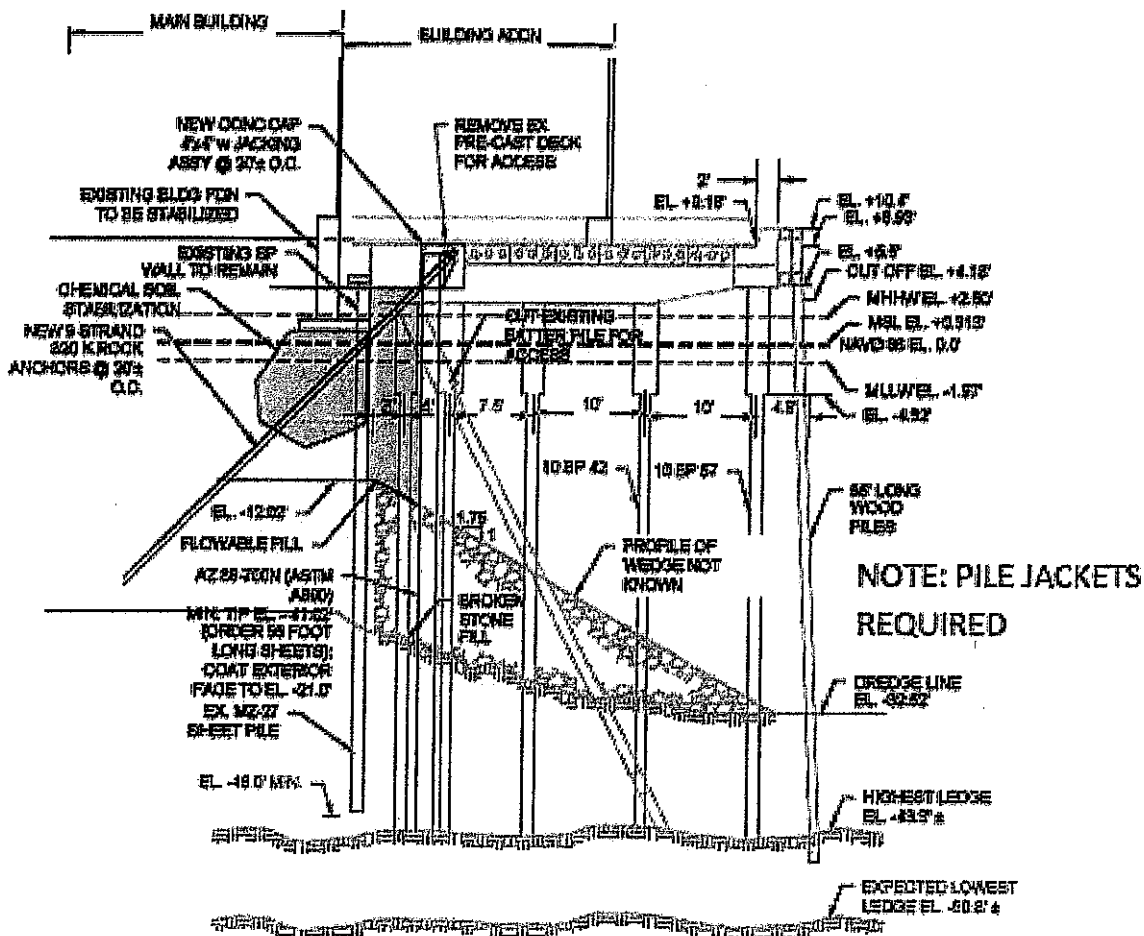
15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | www.cleengineering.com

C:\Users\jgordon\OneDrive\Documents\New Bedford Harbor Development Commission\North Terminal Bulkhead Project\AS BUILT\North Terminal Bulkhead Project Section View.dwg, 07/10/2017, jgordon

Exhibit B:
22 Antonio Costa Ave.
Option 1: Oversheeting Repair within Building and Pile Jackets

NOTES:

1. STEEL SHEET PILES TO BE A-690 CORROSION RESISTANT STEEL
3. MISC PLATES TO BE WELDED SECTION FROM $\frac{3}{4}$ " A-690 PLATE
4. ALL STEEL TO BE SHOP COATED WITH 2 PART MARINE EPOXY
5. FLOWABLE FILL TO BE LEAN CONCRETE/ SAND MIX PUMPED INTO PLACE
6. END WALLS FOR FILL AREA AND SHEET DRIVING WILL REQUIRE REMOVAL & REPLACEMENT OF ONE EXISTING DECK PANEL ALONG ENTIRE LENGTH OF REPAIR



WORK WITHIN BUILDING

Exhibit C:
22 Antonio Costa Ave.
Option 2: Oversheeting Repair
Seaward of Building (between pile rows A and B) and Pile Jackets

cle

cleengineering
15 Corbett Road | Boston, MA 02108
Tel: 617-452-1000 | www.cleengineering.com

**EASTERN FISHERIES
NORTH TERMINAL
UNDERMINING & PIER REPAIR**

NEW BEDFORD, MA

DATE: 11/7/23

REVISIONS

DATE: 11/7/23

SITE PLAN

DATE: 11/7/23

DATE: 11/7/23

DATE: 11/7/23

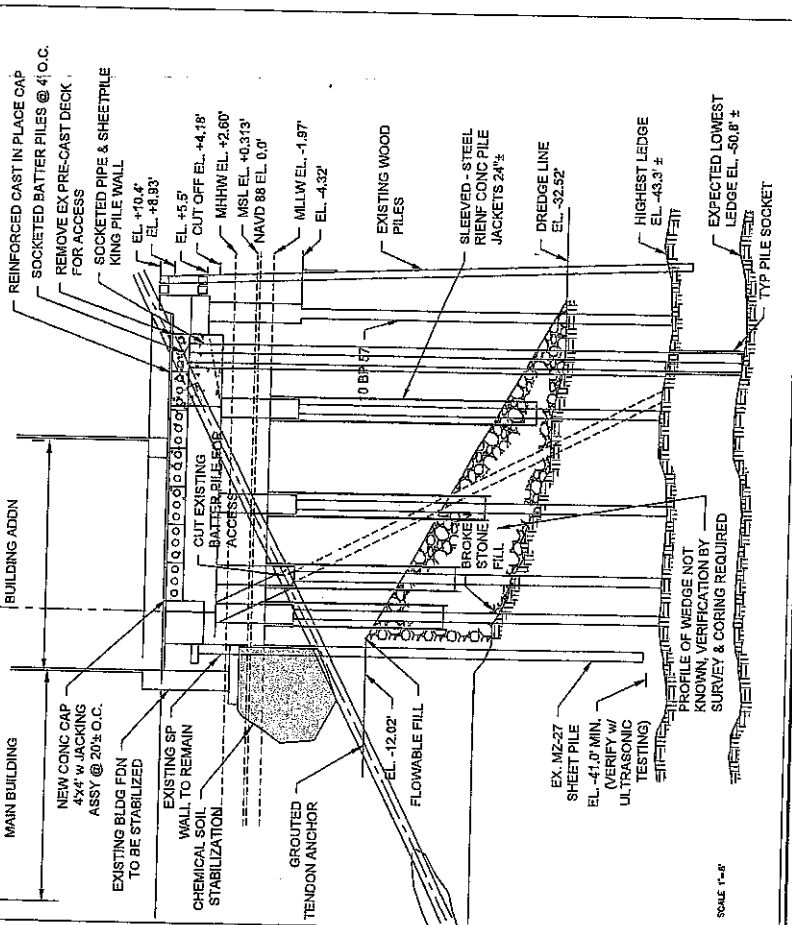
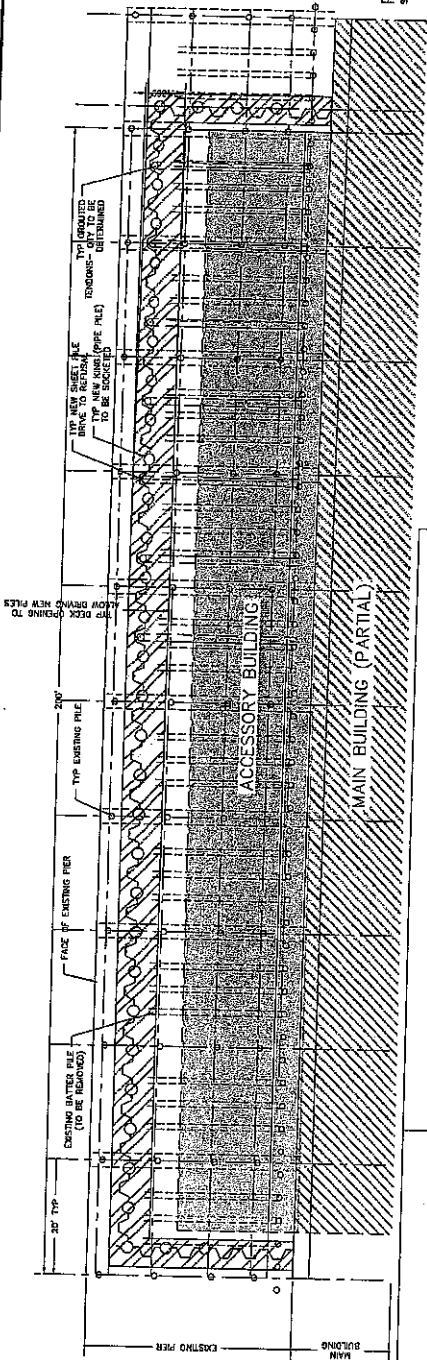
DATE: 11/7/23

SHEET 1 OF 1

NOTE: SHEETING SHOWN AROUND BUILDING
COST ESTIMATE INCLUDES ENTIRE LENGTH OF
PARCEL.

PIER DECK PLAN
SUBSTRUCTURE REPAIR PLAN
SCALE 1"=10'

DRAFT - NOT INTENDED
FOR CONSTRUCTION



SCALE 1"=8'

**Exhibit D:
Cost Estimates**

Project: Nordic Fisheries
Location: New Bedford, MA

Nordic Fisheries - Hervey Tichon Parcel
Number of Bents (#28 to 51): 24
Number of Bays: 23
Length (ft): 460

Bid Date: TBD
Project Number: 18032.1

Date: 11/08/17
Contract Number: N/A
Consultant: CLE Engineering
Estimator: SS / SEN

Structure	Item	Height	Width	Depth	Length (ft)	Volume	Area (sq)	Number	Total	Unit	Unit Cost	Cost	Source
Site Preparation	Demolition								1	LS	\$150,000.00	\$150,000.00	CLE estimate
Demolition	Demo / Removal Existing Concrete Cap				460				460	LF	\$500.00	\$230,000.00	CLE estimate
Bulkhead	Sheet Pile Bulkhead (AZ36-700N)			56	460				460	LF	\$5,000.00	\$2,300,000.00	Prock
	Sheet Pile Bulkhead (AZ36-700N)			56	40			1	40	LF	\$5,000.00	\$200,000.00	Prock
	Rock Anchors							24	24	EA	\$6,000.00	\$144,000.00	AGM/CLE
Pile Jackets	Plumb Pile Jackets				32			48	48	EA	\$10,200.00	\$489,600.00	AGM/Semper
	Plumb Pile Jackets Beneath Barrier Cap				32			49	49	EA	\$10,200.00	\$499,800.00	AGM/Semper
	Outboard Pile Jackets (rows A & B)				32			51	51	EA	\$10,200.00	\$520,200.00	AGM/Semper
Pavement	Asphalt Pavement				460				613.3333	SY	\$70.00	\$42,933.33	CLE estimate
Site Work	Utilities	0.33	12										CLE estimate
	Includes City Drain (will need to pull existing return sheets in this area)								1	LS	\$100,000.00	\$100,000.00	CLE estimate
											Subtotal	\$4,676,533.33	
											Engineering, Permitting, CM Services (assume 5%)	\$233,827	
											Construction Contingency 15%	\$701,480	
											Total =	\$5,611,840	
											Pile Jackets:	\$1,811,520	
											Total without Pile Jackets:	\$3,800,320	

Project: Nordic Fisheries
Location: New Bedford, MA

Bid Date: TBD
Project Number: 16032.1

Date: 11/08/17
Contract Number: N/A
Consultant: CLE Engineering
Estimator: SS / SEN

Nordic Fisheries - Antonio Costa Parcel; Conceptual Outboard Sheet Pile/King Pile with Solid Fill; INCLUDES ANTONIO COSTA FRONTAGE*

Number of Bents (#1 to 17): 17

Number of Bays: 16

Length (ft): 340

Structure	Item	Description	Height	Width	Depth	Length (ft)	Volume	Area (sq)	Number	Total	Unit	Unit Cost	Cost	Source
Site Preparation	Mob & Demob									1	LS	\$150,000.00	\$150,000.00	CLE estimate
Demo	Remove & Replace Precast Deck Sections	For Return Sections	1.4167	4		20			32	32	EA	\$1,500.00	\$48,000.00	CLE estimate
	Remove & replace Precast Deck Sections								14	14	EA	\$1,500.00	\$21,000.00	CLE estimate
Bulkhead	Socketed Pipe and Sheetpile Kingpile Wall	Includes Concrete Cap and (two return sections each @ 40 lf)			56	420			43	43	LF	\$8,000.00	\$3,360,000.00	CLE estimate
	Rock Anchors	9 Strand 320K @ 10' Spacing								43	EA	\$6,000.00	\$258,000.00	AGM/CLE
Pile Jackets	Plumb Pile Jackets	Full length jacket repair				32			34	34	EA	\$10,200.00	\$346,800.00	AGM/Semper
	Plumb Pile Jackets Beneath Batter Cap	Full length jacket repair				32			32	32	EA	\$10,200.00	\$326,400.00	AGM/Semper
	Outboard Pile Jackets (rows A & B)					32			36	36	EA	\$10,200.00	\$367,200.00	AGM/Semper
Building	N/A													
Pavement	Asphalt Pavement	Return sections	0.33	12		340		4080		453	SY	\$70.00	\$31,733.33	CLE estimate
	Asphalt Pavement		0.33	20		80		1600		178	SY	\$70.00	\$12,444.44	CLE estimate
Site Work	Utilities	To be determined								1	LS	\$100,000.00	\$100,000.00	CLE estimate
	Stabilization of Existing Building Foundation									1	LS	\$50,000.00	\$50,000.00	CLE estimate
	Chemical Soil Stabilization									1	LS	\$100,000.00	\$100,000.00	CLE estimate
	Fill (may be combination of flow fill and granular)		20	35		340	8814.815			8815	CY	\$100.00	\$881,500.00	CLE estimate
Mitigation Fee	USACE In Lieu Fee Mitigation Cost			35		340		11900		11900	SF	\$ 14.26	\$169,694.00	USACE
												Subtotal	\$6,222,771.78	
												Engineering, Permitting, CM Services (assume 7%)	\$423,715	
												Construction Contingency 15%	\$907,962	
												Total =	\$7,554,449	
												Pile Jackets:	\$1,269,288	
												Total without Pile Jackets:	\$6,285,161	

* = Estimate assumes that Nordic repairs 100% of the street area; If SeaWatch assumes half, costs would be reduced accordingly

CLE Engineering

Number of Bays: 16
Length (ft): 340

- * = Estimate assumes that Nordic repairs 100% of the street area; if SeaWatch assumes half, costs would be reduced accordingly

Attachment "A"
Price Proposal Form

The undersigned hereby submits the attached proposal for the sale of property to the City of New Bedford in response to the Request for Proposals (RFP) for the acquisition of the designated property in the City of New Bedford.

Proposer's Name: Nordic Fisheries, Inc

Owner's Name: Same

Owner Entity and State of Incorporation: Domestic Profit Corporation Under G.L. Ch 156B-Massachusetts

Proposer's Address: 14 Hervey Tichon Ave New Bedford Massachusetts 02740

Proposer's Telephone: 508-993-6730

Proposer's E-Mail: roy@easternfisheries.com

Proposer's Fax Number: 508-992-0718

Parcel Location: Street Address or Location of Property: 22 Antonio Costa Blvd., New Bedford, MA 02740
New Bedford Assessors Map 66, Lots 128 and 136

Proposed Purchase Price: \$1,000,100.00

Signature of proposer  March 8, 2018

Name: Roy Enoksen, President

Attachment "B"

Commonwealth of Massachusetts

Individual Certificate of Tax Compliance

Pursuant to the requirements of G.L. c.62C, s 49A, the undersigned does hereby state the following:

I, Roy Enoksen, certify that I have filed all state tax returns, have paid all state taxes required under law, and have no outstanding obligations or unpaid debt to the Massachusetts Department of Revenue.

Signed under the penalties of perjury:

March 8, 2018

Signature Roy Enoksen

Social Security Number Typed or Printed Name

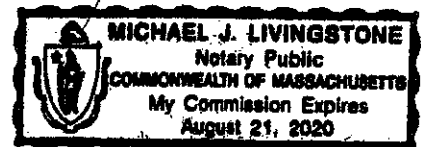
Roy Enoksen

COMMONWEALTH OF MASSACHUSETTS

On this 8th day of March, 2018, before me, the undersigned notary public, personally appeared Roy Enoksen, proved to me through satisfactory evidence of identification which consisted of Massachusetts Driver Licence S95369580, to be the person whose name is signed on the preceding and acknowledged to me that he signed it voluntarily for its stated purpose.

Michael J. Livingstone

Notary Public My commission expires: August 21, 2020



Attachment "C"

Commonwealth of Massachusetts

Corporate Certificate of Tax Compliance

Pursuant to the requirements of G.L. c. 62C, s.49A, the undersigned does hereby state the following:

I, Roy Enoksen, as the President of Nordic Fisheries, Inc, whose principal place of business is located at 14 Hervey Tichon Ave, New Bedford, MA 02740 do hereby certify that the above named firm has complied with all laws of the Commonwealth of Massachusetts relating to taxes and has not outstanding obligation to the Massachusetts Department of Revenue.

Signed under the penalties of perjury: Roy Enoksen

March 8, 2018 Roy Enoksen, President and Treasurer

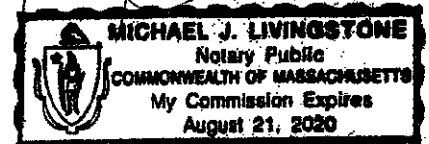
Federal Identification Number Name of Corporation: 04-2437493-Nordic Fisheries, Inc.

COMMONWEALTH OF MASSACHUSETTS

On this 8th day of March, 2018, before me, the undersigned notary public, personally appeared Roy Enoksen, proved to me through satisfactory evidence of identification which consisted of Massachussetts Driver Licence S95369580, to be the person whose name is signed on the preceding and acknowledged to me that he signed it as President and Treasurer of Nordic Fisheries, Inc, a corporation, voluntarily for its stated purpose.

Michael J. Livingstone

Notary Public My commission expires: August 21, 2020



Attachement "D"

DISCLOSURE OF BENEFICIAL INTERESTS IN REAL PROPERTY TRANSACTION

This form contains a disclosure of the names and addresses of all persons with a direct or indirect beneficial interest in the real estate transaction described below. This form must be filed with the Massachusetts Division of Capital Asset Management, as required by M.G.L. c 7C, sec. 38, prior to the conveyance of or execution of a lease for the real property described below.

1. Public agency involved in this transaction: City of New Bedford, Massachusetts
2. Complete legal description of the property: New Bedford Assessors Map 66, Lots 128 and 136.
3. Type of transaction: Sale
4. Seller(s) or Lessor(s) : City of New Bedford, Massachusetts

Purchaser(s) or Lessee(s): Nordic Fisheries, Inc.

5. Names and addresses of all persons who have or will have direct or indirect beneficial interest in the real property described above. Note: If a corporation has, or will have a direct or indirect beneficial interest in the real property the name of all stockholders must also be listed except that if the stock of the corporation is listed for sale to the general public, the name of any person holding less than ten percent of the outstanding voting shares need not be disclosed.

Name	Address
Roy Enoksen	3 Prince Snow Circle Mattapoisett, MA 02739
Ronald Enoksen	104 Brown St. Dartmouth, MA 02747
Sherri L. Enoksen	104 Brown St. Dartmouth, MA 02747
Peter Anthony	37 Alice St. Dartmouth, MA 02747
Cathy Anthony	37 Alice St. Dartmouth, MA 02747
Joseph Marshall	18 Abner Potter's Way Dartmouth, MA 02748
Patricia Marshall	18 Abner Potter's Way Dartmouth, MA 02748

None of the persons listed in this section is an official elected to public office in the Commonwealth of Massachusetts except as noted below:

Name	Title or Position
------	-------------------

None_____

Not Applicable_____

6. This section must be signed by the individual(s) or organization(s) entering into this real property transaction with the public agency named in item 1. If this form is signed on behalf of a corporation, it must be a duly authorized officer of that corporation.

The undersigned acknowledges that any changes or additions to item 4 of this form during the term of any lease or rental will require filing a new disclosure with the Division of Capital Asset Management within 30 days following the change or addition.

The undersigned swears under the pains and penalties of perjury that this form is complete and accurate in all respects.

Signature: Roy Enoksen

Printed Name: Roy Enoksen

Title: President and Treasurer

Date: March 8, 2018

Attachement "E"

CERTIFICATE OF NON-COLLUSION

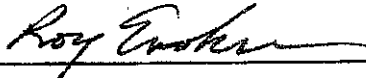
City of New Bedford

133 William Street

New Bedford, MA 02740

The undersigned certified under penalties of perjury that this bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals.

Signature of individual submitting bid:



Roy Enoksen, President

Name of business/organization: Nordic Fisheries, Inc

Attachement "F"
SITE ACCESS AGREEMENT

The Proposer does not seek access to the Property to perform due diligence.

MANAGEMENT PLAN

Nordic Fisheries, Inc. and its predecessor and related entities (hereinafter "Nordic") began its relationship with the City of New Bedford in 1982 by acquiring the leasehold rights in 14 Hervey Tichon Ave., New Bedford. One lease concerns City of New Bedford Assessor's Map 66, Lots 145, 147 and 148. The second lease concerns Map 66, Lots 135 and 137. At that time, these lots were empty. Nordic constructed the current buildings on the property and the main building covers a substantial portion of lots 137 and 147. Nordic has maintained and improved these properties and renovated and expanded its buildings over the years. Nordic presently oversees the fishing of 27 scallopers. A related entity to Nordic, Dockside Repairs Inc. (hereinafter "Dockside") services and maintains this fleet of scallopers and a number of other vessels, mostly scallopers.

There are at least 150 people employed as captains, mates and crew in the fleet. Another 25 are employed by Dockside.

Nordic also signed an agreement with the City of New Bedford and the Harbor Development Commission in 2002 regarding a certain triangle portion of the EPA dewatering facility (hereinafter "EPA triangle") adjacent to lot 145. Nordic's bid is premised on the understanding that the rights of Nordic in the EPA triangle will be recognized and the cost of the same resolved on a pro-rata basis if Nordic is successful in its attempt to acquire the properties covered by **RFP #HDC-FY18-001** being Map 66, Lots 135, 137, 145, 147 and 148. That is, instead of the EPA triangle becoming a part of the Nordic lease (which will no longer exist if Nordic is the successful purchaser), the EPA triangle will be ascribed a value equal to the pro-rata values of the square footage thereof as against the sale value of the entire parcel, and that Nordic or its successor in title shall be able to purchase the EPA triangle for the city (or any subdivision thereof) as and when the City (or subdivision thereof) comes to own the same in the future once the EPA relinquishes the same in favor of the city (or any subdivision thereof) and that Nordic or its successor in title then pay the agreed upon price for the same as and when the same is conveyed to it (or any its successor in title) by the City (or any subdivision thereof).

In 2000 RCP Realty LLC a related entity to Nordic (Hereinafter "RCP") purchased 6 Hassey Street. This building was empty, completely run down and an eye sore in every sense. The roof was open to the elements with pigeons living inside and others had found access into the building making it a fire hazard as well. RCP rehabilitated this building and added value for tax and other purposes. It presently houses a marine based business engaged in crabbing.

In 2005 MAE Realty LLC a related entity to Nordic (hereinafter "MAE") purchased the balance of the lease for a vacant building at 22 Antonio Costa Blvd. The building was empty at that point. MAE and Eastern Fisheries, Inc., a related entity to Nordic (hereinafter Eastern) spent considerable sums to rehabilitate the building and grounds, build a cooler therein, and equip the same with the latest scallop processing and freezing equipment. 22 Antonio Costa Blvd is the subject of **RFP #HDC-FY18-002** being Map 66 Lots 128 and 136. Eastern operates both facilities located at 14 Hervey Tichon Ave. and 22 Antonio Costa Blvd. has 160 full time employees and handles and processes at least 30M pounds of seafood annually.

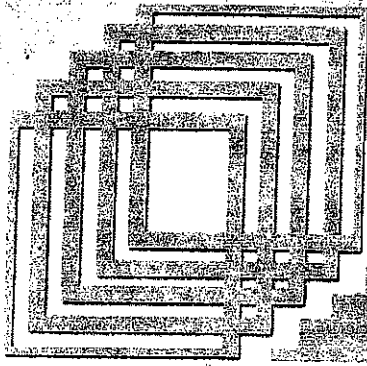
So, for nearly 35 years Nordic has paid its leases, caused meaningful fishing/marine related employment for many, paid substantial real estate taxes, excise taxes, payroll and other taxes and maintained a large skilled workforce in the center of the City of New Bedford. Nordic has managed these various properties and enterprises for almost 35 years without any issues or problems with the City of New Bedford or any of its political subdivisions including, but not limited to the Harbor Development Commission, the Harbormaster and others related to the fishing industry and the waterfront, and has been able to work cooperatively with other vessels and their owners and crews, the EPA, and our land neighbors.

Both Nordic and Eastern represent sophisticated fishing and processing entities and a fully vertically integrated operation for harvesting, processing, storing, selling and shipping scallops throughout the United States and the world. They have facilities in China, Japan and Europe to enable them to accomplish the same. They have had and continue to have the economic wherewithal to purchase and maintain the subject properties as they have demonstrated for the past 35 years.

In fact, RCP originally purchased commercial property in the waterfront district in the mid 70's known as 54 Wright Street which has and does house marine related businesses so Nordic and its related companies have actually been involved in the ownership, operation, and maintenance of fishing and marine related entities for over 40 years and is well positioned to acquire, maintain and operate 14 Hervey Tichon Ave and 22 Antonio Costa Blvd. In addition, since Nordic and its related companies, currently lease these parcels from the City, it would be in the best interest of the City for Nordic to acquire the same so as to be able to continue its various businesses without interruption and the possible loss or displacement of the numerous employees who currently work at these facilities and their families.

The bulkhead of the properties is currently in a serious state of disrepair as has been documented in the "Structural Inspection, North Terminal, New Bedford, MA Report of Findings prepared for the City of New Bedford by CLE Engineering . By acquiring a fee interest in the subject properties, Nordic intends to make such repairs as are necessary to the same in order to continue to service and maintain its fleet of scallop vessels and to enable it to continue to buy, process, and sell scallops and other seafood so as to continue to operate several successful, related businesses in these locations and maintain the jobs of all of those currently employed for those purposes. Nordic/Eastern and their related entities have the financial wherewithal to purchase, repair and maintain the properties in question and are prepared to do so if they are the successful bidder.

Nordic intends to work with the City regarding a resolution of the EPA triangle issue outlined herein as well as the necessary discontinuance and purchase of the eastern portion of Antonio Costa Blvd alone or in conjunction with the purchaser of the "Sea Watch Property", so as to be able to make the repairs necessary to the bulkhead at the end thereof in conjunction with repairs necessary on the bulkhead adjacent to the property known as 22 Antonio Costa Blvd.



Frederick M. Kalisz, Jr., LP.D.
233 Collette Street
New Bedford, MA 02746

508-994-4474
508-726-4200
Fkalisz@Umassd.edu

March 5, 2018

To whom it may concern – The City of New Bedford

As a former elected City official with over 20 years of government service, I am very familiar with the economic impact and contributions that Nordic/Eastern Fisheries have made to this community. A family run business with international business interests they have through the annual International Boston Seafood Show created interest among show's visitors to come to New Bedford - an outstanding example of the corporate relations they display in marketing New Bedford.

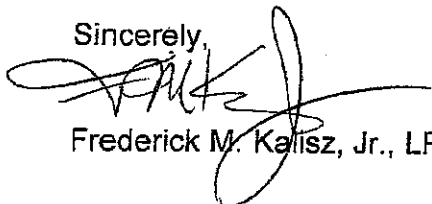
In my capacity as Mayor, I also had the responsibility of serving as the chair of the Harbor Development Commission (HDC) the local regulatory agency which implements rules, regulations, and policy controls in order to operate efficiently and safely to meet the needs of its users – industrial, commercial and recreational. During my tenure with the City and the HDC I witnessed the enormous support that Nordic and Eastern Fisheries gave to the City in planning and creating the Whale's Tooth Parking Lot, the refurbishment of the rails to the depot yards and extension to the waterside off loading capacity and to the development of the Environmental Protection Agencies (EPA's) dewatering facility.

As Mayor and chairperson of the HDC I was also signatory to an agreement between Nordic, the City, and the HDC regarding a small parcel needed by the EPA which is to revert to Nordic when the City is legally able to do so. I would expect that the City would be good on that commitment relied upon by Nordic for the past 15 years.

In my former executive positions, getting to the points outlined above was a true challenge and could not have happened without the strong management and operational assistance extended by Nordic and Eastern Fisheries.

As the planning moves forward that the Mitchell Administration is looking to accomplish, it is my sincere belief that every effort should be extended to Nordic and Eastern Fisheries to incorporate their planning in to the future vision of our City.

Sincerely,



Frederick M. Kalisz, Jr., LP.D

Mayor of the City of New Bedford (1998-2006)
Current Bristol County Register of Deeds – Southern District



City of New Bedford
Massachusetts

ASSESSING DEPARTMENT

March 6, 2018

RE: RFP #HDC-FY18-001 & 002

To Whom It May Concern-City of New Bedford,

I am writing to support the response to the RFP #HDC-FY18-001 & 002 as submitted to the City of New Bedford by Nordic/Eastern Fisheries Inc. I am more than familiar with the operation and believe Nordic/Eastern Fisheries Inc. is a great asset to the City of New Bedford. Mr. Roy Enoksen and Mr. Joe Furtado have always worked cooperatively with city government, paid their real estate taxes on time and managed and improved their fishing related businesses on the waterfront. Nordic/Eastern Fisheries Inc. provides many good paying jobs to New Bedford residents and the immediate surrounding communities. Nordic/Eastern Fisheries Inc. is not only a leader in the industry locally and nationally but is also on the forefront of seafood processing and respected as one of the best in their field internationally. The quality of seafood is regarded as the finest produced, their commitment to safety in the workplace is paramount and their careful consideration regarding environmental concerns both on land and at sea exceed governmental standards. We are fortunate to have Nordic /Eastern Fisheries Inc. in New Bedford and should do what we can to keep them here and work with them so they can expand their operation. I am certain and confident that Nordic/Eastern has the financial capacity and management expertise to purchase and maintain the properties known as 14 Hervey Tichon Ave. and 22 Antonio Costa Blvd. and will continue to provide job opportunities for the working people of New Bedford.

Respectfully yours,

Peter E. Berthiaume
Assessor
City of New Bedford



MARC J. SANTOS, ESQUIRE
CLERK OF THE BOARD

The Commonwealth of Massachusetts
OFFICE OF THE
COUNTY COMMISSIONERS OF BRISTOL COUNTY
P.O. BOX 208
TAUNTON, MASSACHUSETTS 02780
TEL: (508) 824-9681
FAX: (508) 821-3101

COMMISSIONERS

CHAIRMAN
PAUL B. KITCHEN
FAIRHAVEN

JOHN R. MITCHELL
FALL RIVER

JOHN T. SAUNDERS
NEW BEDFORD

March 6, 2018

City of New Bedford
130 William Street
New Bedford, MA 02740

To Whom It May Concern-City of New Bedford:

This letter is in support of the proposals of Nordic Fisheries, Inc. to purchase properties now occupied by them known as 14 Hervey Tichon Avenue and 22 Antonio Costa Boulevard from the City of New Bedford in response to Requests For Proposals (RFP # HDC-FY18-001 and 002).

I am personally familiar with Nordic Fisheries, Inc., its president, Roy Enoksen and his family that own and operate the business and have had many dealings with them over the years. They own and maintain the largest fleet of scallopers in the country. Their sister company Eastern Fisheries, Inc. processes over 30 million pounds of scallops per year providing hundreds of good paying jobs to those in New Bedford and the surrounding area. Together, Nordic and Eastern combine to create a fully vertically integrated operation to harvest, process, store, sell and ship scallops locally and worldwide. But they are not just selling scallops. They run a fresh dog fish operation, purchasing, processing and shipping locally caught fish into the European market where they are highly sought after. In 2017 they expanded into a new seafood product opening a Cod Division to purchase, process and sell refreshed cod. This new division has been so successful that they have had to expand to a second shift to keep up with demand for the same. They expect to buy, process and sell 6 million pounds of cod in 2018. This is the kind of growing business needed in New Bedford. Nordic/Eastern have the knowledge, expertise, and financial resources to create jobs in New Bedford and are doing so.

I, myself have experience on the New Bedford waterfront as a fisherman as do two of my brothers and other members of my immediate family who earn their livelihood today as

scallopers. On another level as an elected member of the New Bedford City Council for 28 years including 5 terms as its President, I worked with Nordic and eastern on various issues concerning the industry and the waterfront including, but not limited to, the discontinuance of a portion of Hervey Tichon Avenue which they bought from the City. During that process and my other dealings with them, they evidenced a commitment to the city and the waterfront, provided the management expertise, engineering, financing and whatever was necessary to get the jobs done. They are truly a working partner with the City and its Harbormaster and Harbor Development Commission, actively assisting in overall improvements for the waterfront. I have attended many of their meetings over the years and Nordic/Eastern representatives are often present with ideas and resources to assist.

I am also personally familiar and have made observations of the deteriorated condition of the bulkhead areas at both of these properties, the Seawatch property and at the end of Antonio Costa Boulevard. Left unattended, it is a disaster waiting to happen. Nordic/Eastern is willing to step up and resolve these issues which will be a major undertaking costing millions of dollars, rather than relocate their operation possibly taking hundreds of jobs with them to another host community. Companies move all the time for a better deal. Roy was the first marine business willing to move north of the bridge and take a chance in this area many years ago. Others followed. Most have since left, but Nordic/Eastern and their related companies are willing to stay, do what is needed and spend what is necessary to continue to operate there. The City is fortunate to have them and the jobs that stay with them, their taxes and related expenditures.

Nordic/Eastern have the expertise, management and financial resources to successfully purchase, operate and maintain the properties at 14 Hervey Tichon Avenue and 22 Antonio Costa Boulevard and allowing them to do so would be in the best interests of the City of New Bedford and would likely guarantee the retention of many good paying fishing and fishing related jobs in New Bedford for many years to come. I fully support their efforts to do so and hope that the City will cooperate and assist them in every way reasonably possible.

Very truly yours,

A handwritten signature in cursive script, appearing to read "John T. Saunders", written over a horizontal line.

John T. Saunders
Bristol County Commissioner

Integra Realty Resources
Hartford/Providence

Appraisal of Real Property

North Terminal Bulkhead Area, Parcel #5
Industrial Ground Lease Property
22 Antonio L. Costa Avenue
New Bedford, Bristol County, Massachusetts 02740

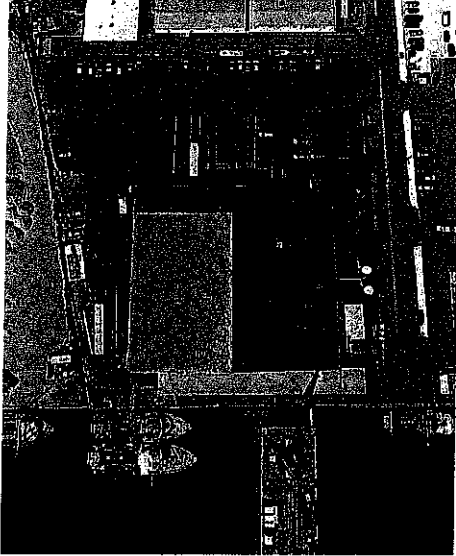
Prepared For:
City of New Bedford

Effective Date of the Appraisal:
May 12, 2017

Report Format:
Appraisal Report – Standard Format

IRR - Hartford/Providence
File Number: 150-2017-0120





North Terminal Bulkhead Area, Parcel #5
22 Antonio L. Costa Avenue
New Bedford, Massachusetts



June 27, 2017

Mr. Edward C. Anthes-Washburn
Executive Director
Harbor Development Commission
City of New Bedford
52 Fisherman's Wharf
New Bedford, MA 02740

SUBJECT: Market Value Appraisal
 North Terminal Bulkhead Area, Parcel #5
 22 Antonio L. Costa Avenue
 New Bedford, Bristol County, Massachusetts 02740
 IRR - Hartford/Providence File No. 150-2017-0120

Dear Mr. Anthes-Washburn:

Integra Realty Resources – Hartford/Providence is pleased to submit the accompanying appraisal of the referenced property. The purpose of the appraisal is to develop an opinion of the market value of the leased fee interest in the property based on the existing lease. As requested, we also estimate the market value of the fee simple interest based on market rent. The client for the assignment is the City of New Bedford, and the intended use is for portfolio valuation purposes.

The subject is an existing industrial ground lease property with a site area of 2.891 acres or 125,915 square feet. The appraisal considers only the ground lease, although it should be noted that the subject has been improved with a fish processing facility containing 44,713 square feet of gross building area. The improvements were constructed in 1982 and are 100% owner-occupied as of the effective appraisal date.

The appraisal is intended to conform with the Uniform Standards of Professional Appraisal Practice (USPAP), the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, applicable state appraisal regulations, and the appraisal guidelines of the City of New Bedford. The appraisal is also prepared in accordance with the

appraisal regulations issued in connection with the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA).

To report the assignment results, we use the Appraisal Report option of Standards Rule 2-2(a) of USPAP. As USPAP gives appraisers the flexibility to vary the level of information in an Appraisal Report depending on the intended use and intended users of the appraisal, we adhere to the Integra Realty Resources internal standards for an Appraisal Report – Standard Format. This format summarizes the information analyzed, the appraisal methods employed, and the reasoning that supports the analyses, opinions, and conclusions.

Based on the valuation analysis in the accompanying report, and subject to the definitions, assumptions, and limiting conditions expressed in the report, our opinion of value is as follows:

Value Conclusions			
Appraisal Premise	Interest Appraised	Date of Value	Value Conclusion
Market Value - Based on Existing Lease	Leased Fee	May 12, 2017	\$1,000,000
Market Value - Market Rent Equal to Fee Simple Interest	Fee Simple	May 12, 2017	\$1,400,000

Extraordinary Assumptions and Hypothetical Conditions

The value conclusions are subject to the following extraordinary assumptions that may affect the assignment results. An extraordinary assumption is uncertain information accepted as fact. If the assumption is found to be false as of the effective date of the appraisal, we reserve the right to modify our value conclusions.

1. The cash flow analysis assumes that the annual rent will be established at the current market rent on a square foot basis and adjusted for inflation based on the CPI index.
2. The estimated market values presented in this report do not reflect the cost to cure deferred maintenance or repairs to the bulkhead improvements.

The opinions of value expressed in this report are based on estimates and forecasts that are prospective in nature and subject to considerable risk and uncertainty. Events may occur that could cause the performance of the property to differ materially from our estimates, such as changes in the economy, interest rates, capitalization rates, financial strength of tenants, and behavior of investors, lenders, and consumers. Additionally, our opinions and forecasts are based partly on data obtained from interviews and third-party sources, which are not always completely reliable. Although we are of the opinion that our findings are reasonable based on available evidence, we are not responsible for the effects of future occurrences that cannot reasonably be foreseen at this time.

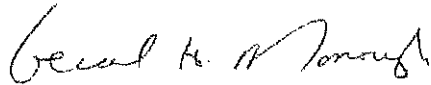


Mr. Edward C. Anthes-Washburn
City of New Bedford
June 27, 2017
Page 3

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

Integra Realty Resources - Hartford/Providence



Gerard H. McDonough, MAI, FRICS
Certified General Real Estate Appraiser
MA Certificate # 361
Telephone: 401-273-7710, ext. 15
Email: gmcdonough@irr.com



Table of Contents

Summary of Salient Facts and Conclusions	1	Discounted Cash Flow Analysis	29
General Information	2	Direct Capitalization Analysis	32
Identification of Subject	2	Stabilized Income and Expenses	32
Sale History	2	Capitalization Rate Selection	32
Pending Transactions	2	Reconciliation and Conclusion of Value	34
Purpose of the Appraisal	2	Exposure Time	34
Definition of Market Value	3	Marketing Period	35
Definition of Property Rights Appraised	3	Certification	36
Intended Use and User	3	Assumptions and Limiting Conditions	38
Applicable Requirements	4	Addenda	
Report Format	4	A. Appraiser Qualifications	
Prior Services	4	B. Property Information	
Scope of Work	4		
Economic Analysis	6		
Bristol County Area Analysis	6		
Surrounding Area Analysis	11		
Industrial Market Analysis	14		
Property Analysis	16		
Land Description and Analysis	16		
Improvements Description and Analysis	19		
Real Estate Taxes	21		
GIS Plat Map	21		
Highest and Best Use	22		
Valuation	24		
Valuation Methodology	24		
Income Capitalization Approach	25		
Leased Status of Property	25		
Market Rent Analysis	26		

Summary of Salient Facts and Conclusions

Property Name	North Terminal Bulkhead Area, Parcel #5
Address	22 Antonio L. Costa Avenue New Bedford, Bristol County, Massachusetts
Property Type	Industrial Ground Lease - Waterfront
Owner of Record	M A E Realty, LLC; Lessee
Tax ID	Plat 66 Lot 128A
Land Area	2.89 acres; 125,915 SF
Gross Building Area	44,713 SF
Year Built	1982
Zoning Designation	Waterfront Industrial
Highest and Best Use - As if Vacant	Industrial use
Highest and Best Use - As Improved	Continued industrial use
Exposure Time; Marketing Period	12 months; 12 months
Date of the Report	June 27, 2017

Value Conclusions

Appraisal Premise	Interest Appraised	Date of Value	Value Conclusion
Market Value - Based on Existing Lease	Leased Fee	May 12, 2017	\$1,000,000
Market Value - Market Rent Equal to Fee Simple Interest	Fee Simple	May 12, 2017	\$1,400,000

The values reported above are subject to the definitions, assumptions, and limiting conditions set forth in the accompanying report of which this summary is a part. No party other than City of New Bedford may use or rely on the information, opinions, and conclusions contained in the report. It is assumed that the users of the report have read the entire report, including all of the definitions, assumptions, and limiting conditions.

Extraordinary Assumptions and Hypothetical Conditions

The value conclusions are subject to the following extraordinary assumptions that may affect the assignment results. An extraordinary assumption is uncertain information accepted as fact. If the assumption is found to be false as of the effective date of the appraisal, we reserve the right to modify our value conclusions.

1. The cash flow analysis assumes that the annual rent will be established at the current market rent on a square foot basis and adjusted for inflation based on the CPI index.
2. The estimated market values presented in this report do not reflect the cost to cure deferred maintenance or repairs to the bulkhead improvements.

General Information

Identification of Subject

The subject is an existing industrial ground lease property with a site area of 2.891 acres or 125,915 square feet. The appraisal considers only the ground lease, although it should be noted that the subject has been improved with a fish processing facility containing 44,713 square feet of gross building area. The improvements were constructed in 1982 and are 100% owner-occupied as of the effective appraisal date.

Property Identification

Property Name	North Terminal Bulkhead Area, Parcel #5
Address	22 Antonio L. Costa Avenue New Bedford, Massachusetts 02740
Tax ID	Plat 66 Lot 128A
Owner of Record	M A E Realty, LLC; Lessee

Sale History

The subject property is a land parcel that is encumbered by a long-term, 99-year ground lease. The parcel has been improved with a fish processing facility and additional site improvements. Over the course of the lease, ownership of the improvements has been transferred and the underlying ground lease parcel has been assigned to the current tenant/occupant. The most recent closed sale or transfer of these interests for the subject is summarized as follows:

Sale Date	June 28, 2005
Seller	Atlantic Coast Fisheries Corp., Assignor
Buyer	M A E Realty, LLC; Lessee
Sale Price	Undisclosed
Recording Instrument Number	Book 7626, Page 127; South Bristol Registry of Deeds
Expenditures Since Purchase	Unknown

Pending Transactions

To the best of our knowledge, the property is not subject to an agreement of sale or an option to buy, nor is it listed for sale, as of the effective appraisal date.

Purpose of the Appraisal

The purpose of the appraisal is to develop an opinion of the market value of the leased fee interest in the property as of the effective date of the appraisal, May 12, 2017. As requested, we also estimate the market value of the fee simple interest, as of May 12, 2017. The date of the report is June 27, 2017. The appraisal is valid only as of the stated effective date or dates.

Definition of Market Value

Market value is defined as:

"The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- Buyer and seller are typically motivated;
- Both parties are well informed or well advised, and acting in what they consider their own best interests;
- A reasonable time is allowed for exposure in the open market;
- Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."

(Source: Code of Federal Regulations, Title 12, Chapter I, Part 34.42[g]; also Interagency Appraisal and Evaluation Guidelines, Federal Register, 75 FR 77449, December 10, 2010, page 77472)

Definition of Property Rights Appraised

Fee simple estate is defined as, "Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat."

Leased fee interest is defined as, "A freehold (ownership interest) where the possessory interest has been granted to another party by creation of a contractual landlord-tenant relationship (i.e., a lease)."

Leasehold interest is defined as, "The tenant's possessory interest created by a lease."

Lease is defined as, "A contract in which rights to use and occupy land or structures are transferred by the owner to another for a specified period of time in return for a specified rent."

Source: Appraisal Institute, The Dictionary of Real Estate Appraisal, 6th ed. (Chicago: Appraisal Institute, 2015)

Intended Use and User

The intended use of the appraisal is for portfolio valuation purposes. The client and intended user is the City of New Bedford. The appraisal is not intended for any other use or user. No party or parties other than the City of New Bedford may use or rely on the information, opinions, and conclusions contained in this report.

Applicable Requirements

This appraisal is intended to conform to the requirements of the following:

- Uniform Standards of Professional Appraisal Practice (USPAP);
- Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute;
- Applicable state appraisal regulations;
- Appraisal requirements of Title XI of the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), revised June 7, 1994;
- Interagency Appraisal and Evaluation Guidelines issued December 10, 2010;
- Appraisal guidelines of the City of New Bedford.

Report Format

This report is prepared under the Appraisal Report option of Standards Rule 2-2(a) of USPAP. As USPAP gives appraisers the flexibility to vary the level of information in an Appraisal Report depending on the intended use and intended users of the appraisal, we adhere to the Integra Realty Resources internal standards for an Appraisal Report – Standard Format. This format summarizes the information analyzed, the appraisal methods employed, and the reasoning that supports the analyses, opinions, and conclusions.

Prior Services

USPAP requires appraisers to disclose to the client any other services they have provided in connection with the subject property in the prior three years, including valuation, consulting, property management, brokerage, or any other services. We have not performed any services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

Scope of Work

To determine the appropriate scope of work for the assignment, we considered the intended use of the appraisal, the needs of the user, the complexity of the property, and other pertinent factors. Our concluded scope of work is described below.

Valuation Methodology

Appraisers usually consider the use of three approaches to value when developing a market value opinion for real property. These are the cost approach, sales comparison approach, and income capitalization approach. Use of the approaches in this assignment is summarized as follows.

Approaches to Value		
Approach	Applicability to Subject	Use in Assignment
Cost Approach	Not Applicable	Not Utilized
Sales Comparison Approach	Not Applicable	Not Utilized
Income Capitalization Approach	Applicable	Utilized

The **income capitalization** approach is the most reliable valuation method for the subject due to the following:

- The probable buyer of the subject would base a purchase price decision primarily on the income generating potential of the property and an anticipated rate of return.
- Sufficient market data regarding income, expenses, and rates of return, is available for analysis.

The **sales comparison** approach is not applicable to the subject because:

- This approach does not reflect the primary analysis undertaken by a typical investor-purchaser.

The **cost approach** is not applicable to the subject considering the following:

- The age of the property makes estimates of accrued depreciation very subjective.
- There is a limited land market, making estimates of underlying land value subjective.
- This approach is not typically used by market participants, except for new properties.

Research and Analysis

The type and extent of our research and analysis is detailed in individual sections of the report.

Inspection

Gerard H. McDonough, MAI, FRICS, conducted an on-site inspection of the property on May 12, 2017.

Economic Analysis

Bristol County Area Analysis

Bristol County is located in southeastern Massachusetts, approximately 60 miles south of Boston. It is 553 square miles in size and has a population density of 1,012 persons per square mile. Bristol County is part of the Providence-Warwick, RI-MA Metropolitan Statistical Area, hereinafter called the Providence MSA, as defined by the U.S. Office of Management and Budget.

Population

Bristol County has an estimated 2017 population of 559,805, which represents an average annual 0.3% increase over the 2010 census of 548,285. Bristol County added an average of 1,646 residents per year over the 2010-2017 period, but its annual growth rate lagged the State of Massachusetts rate of 0.7%.

Looking forward, Bristol County's population is projected to increase at a 0.5% annual rate from 2017-2022, equivalent to the addition of an average of 2,692 residents per year. Bristol County's growth rate is expected to lag that of Massachusetts, which is projected to be 0.7%.

Population Trends					
	Population			Compound Ann. % Chng	
	2010 Census	2017 Est.	2022 Est.	2010 - 2017	2017 - 2022
Massachusetts	6,547,629	6,861,490	7,103,376	0.7%	0.7%
Bristol County, MA	548,285	559,805	573,266	0.3%	0.5%

Source: The Nielsen Company

Employment

Total employment in Bristol County is currently estimated at 227,402 jobs. Between year-end 2006 and the present, employment rose by 3,154 jobs, equivalent to a 1.4% increase over the entire period. There were gains in employment in seven out of the past ten years despite the national economic downturn and slow recovery. Although Bristol County's employment rose over the last decade, it underperformed Massachusetts, which experienced an increase in employment of 8.9% or 290,137 jobs over this period.

A comparison of unemployment rates is another way of gauging an area's economic health. Over the past decade, the Bristol County unemployment rate has been consistently higher than that of Massachusetts, with an average unemployment rate of 7.8% in comparison to a 6.1% rate for Massachusetts. A higher unemployment rate is a negative indicator.

Recent data shows that the Bristol County unemployment rate is 5.2% in comparison to a 3.9% rate for Massachusetts, a negative sign that is consistent with the fact that Bristol County has underperformed Massachusetts in the rate of job growth over the past two years.

Employment Trends						
Year	Total Employment (Year End)				Unemployment Rate (Ann. Avg.)	
	Bristol County	% Change	Massachusetts	% Change	Bristol County	Massachusetts
2006	224,248		3,248,089		6.2%	4.9%
2007	222,007	-1.0%	3,276,591	0.9%	5.9%	4.6%
2008	215,118	-3.1%	3,239,142	-1.1%	7.3%	5.5%
2009	207,464	-3.6%	3,143,063	-3.0%	10.7%	8.1%
2010	211,210	1.8%	3,189,802	1.5%	10.5%	8.3%
2011	212,371	0.5%	3,235,764	1.4%	9.3%	7.3%
2012	213,619	0.6%	3,282,842	1.5%	8.6%	6.7%
2013	217,907	2.0%	3,341,787	1.8%	8.6%	6.7%
2014	223,288	2.5%	3,425,555	2.5%	7.3%	5.7%
2015	224,622	0.6%	3,483,900	1.7%	6.3%	5.0%
2016*	227,402	1.2%	3,538,226	1.6%	4.8%	3.8%
Overall Change 2006-2016	3,154	1.4%	290,137	8.9%		
Avg Unemp. Rate 2006-2016					7.8%	6.1%
Unemployment Rate - March 2017					5.2%	3.9%

*Total employment data is as of June 2016; unemployment rate data reflects the average of 12 months of 2016.

Source: Bureau of Labor Statistics and Economy.com. Employment figures are from the Quarterly Census of Employment and Wages (QCEW).

Unemployment rates are from the Current Population Survey (CPS). The figures are not seasonally adjusted.

Major employers in Bristol County are shown in the following table.

Major Employers - Bristol County, MA		
	Name	Number of Employees
1	Bristol Community College	1,000-4,999
2	De Puy Spine Inc	1,000-4,999
3	General Dynamics Mission System	1,000-4,999
4	Hormel Foods	1,000-4,999
5	Medtronic Inc	1,000-4,999
6	Morton Hospital & Medical Center	1,000-4,999
7	Sensata Technologies Inc	1,000-4,999
8	Southcoast Hospitals Group	1,000-4,999
9	St Anne's Hospital	1,000-4,999
10	Taunton Civil Service	1,000-4,999

Source: Massachusetts Executive Office of Labor and Workforce Development

Gross Domestic Product

Gross Domestic Product (GDP) is a measure of economic activity based on the total value of goods and services produced in a defined geographic area. Although GDP figures are not available at the county level, data reported for the Providence MSA is considered meaningful when compared to the nation overall, as Bristol County is part of the MSA and subject to its influence.

Economic growth, as measured by annual changes in GDP, has been somewhat lower in the Providence MSA than the United States overall during the past eight years. The Providence MSA has grown at a 0.7% average annual rate while the United States has grown at a 1.3% rate. As the national

economy improves, the Providence MSA continues to underperform the United States. GDP for the Providence MSA rose by 1.3% in 2015 while the United States GDP rose by 2.5%.

The Providence MSA has a per capita GDP of \$43,744, which is 13% less than the United States GDP of \$50,054. This means that Providence MSA industries and employers are adding relatively less value to the economy than their counterparts in the United States overall.

Gross Domestic Product				
	(\$ Mil)		(\$ Mil)	
Year	Providence MSA	% Change	United States	% Change
2008	67,032		14,718,301	
2009	65,785	-1.9%	14,320,114	-2.7%
2010	67,038	1.9%	14,628,165	2.2%
2011	67,302	0.4%	14,833,679	1.4%
2012	68,013	1.1%	15,126,281	2.0%
2013	68,194	0.3%	15,348,044	1.5%
2014	69,654	2.1%	15,691,181	2.2%
2015	70,561	1.3%	16,088,249	2.5%
Compound % Chg (2008-2015)		0.7%		1.3%
GDP Per Capita 2015	\$43,744		\$50,054	

Source: Bureau of Economic Analysis and Economy.com; data released September 2016. The release of state and local GDP data has a longer lag time than national data. The data represents inflation-adjusted "real" GDP stated in 2009 dollars.

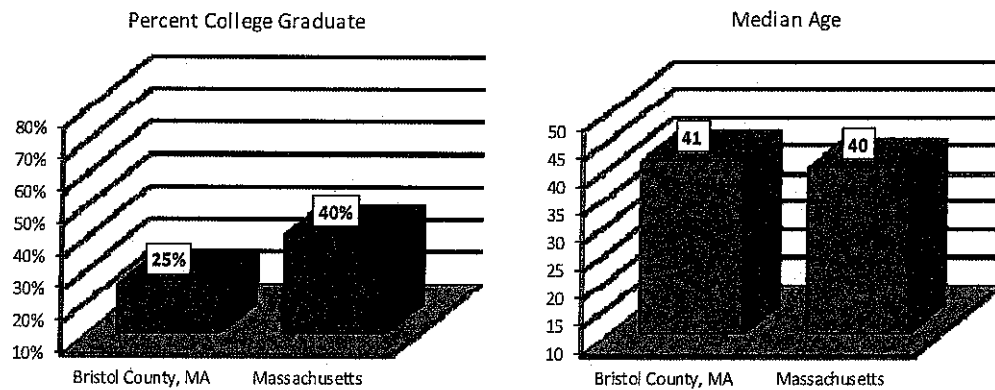
Income, Education and Age

Bristol County has a considerably lower level of household income than Massachusetts. Median household income for Bristol County is \$61,523, which is 15.6% less than the corresponding figure for Massachusetts.

Median Household Income - 2017	
	Median
Bristol County, MA	\$61,523
Massachusetts	\$72,859
Comparison of Bristol County, MA to Massachusetts	- 15.6%
Source: The Nielsen Company	

Residents of Bristol County have a lower level of educational attainment than those of Massachusetts. An estimated 25% of Bristol County residents are college graduates with four-year degrees, versus 40% of Massachusetts residents. People in Bristol County are slightly older than their Massachusetts counterparts. The median age for Bristol County is 41 years, while the median age for Massachusetts is 40 years.

Education & Age - 2017

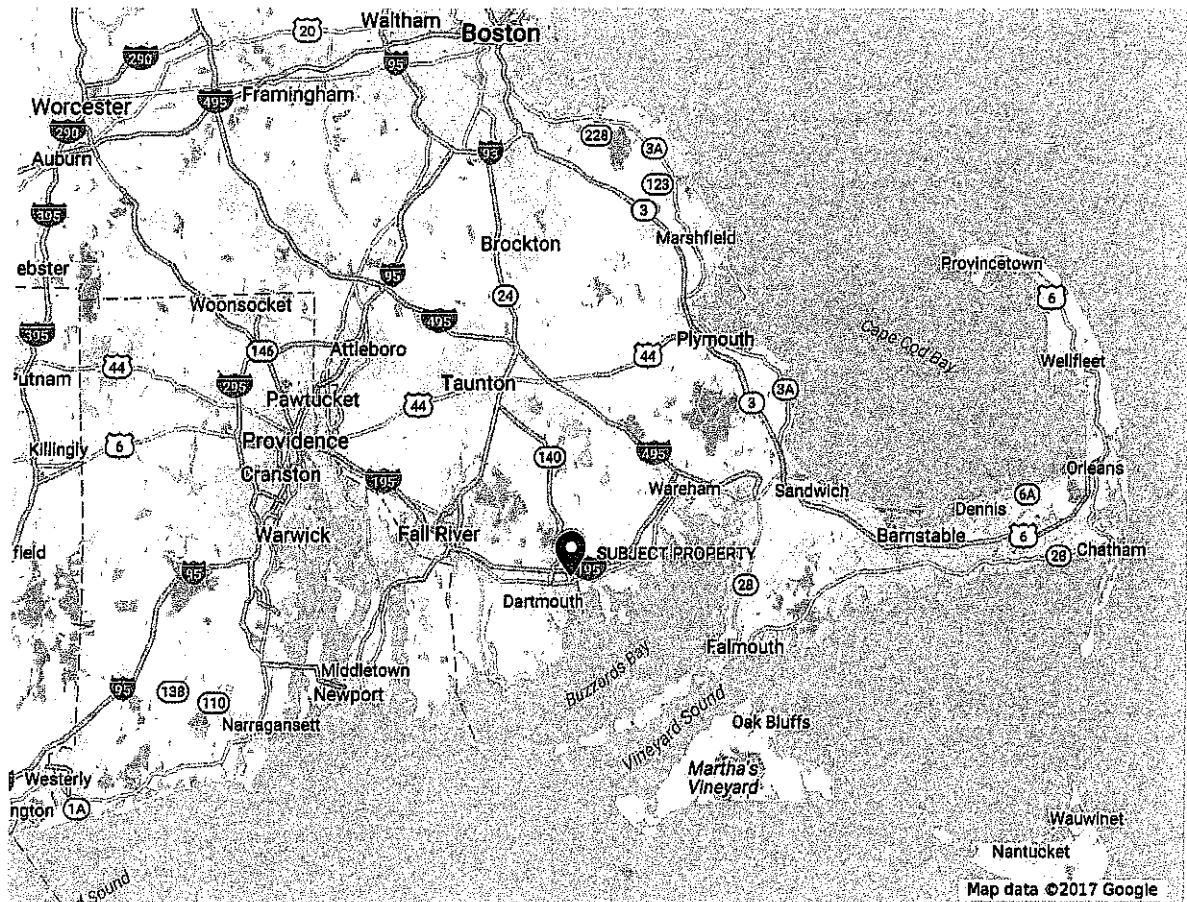


Source: The Nielsen Company

Conclusion

The Bristol County economy will be affected by a growing population base and lower income and education levels. Bristol County experienced growth in the number of jobs over the past decade, and it is reasonable to assume that employment growth will occur in the future. We anticipate that the Bristol County economy will improve and employment will grow, strengthening the demand for real estate.

Area Map



Surrounding Area Analysis

Location

The subject is located along the waterfront of the City of New Bedford, in an area known as the North Terminal. The area is urban in nature and is approximately 90% developed.

Access and Linkages

Primary highway access to the area is via I-195. Public transportation is provided by Southeastern Regional Transit Authority and provides access to southeastern Massachusetts. Overall, the primary mode of transportation in the area is the automobile.

Demand Generators

The three largest employers based in New Bedford are Southcoast Hospitals Group, Titleist, and Riverside Manufacturing. Tourism is a growing industry, as well. The New Bedford Industrial Park, located in the north end of New Bedford, is home to over 40 employers employing over 500 people.

Demographics

A demographic profile of the surrounding area, including population, households, and income data, is presented in the following table.

Surrounding Area Demographics					
2017 Estimates	1-Mile Radius	5-Mile Radius	10-Mile Radius	Bristol County, MA	Massachusetts
Population 2010	21,287	139,525	183,920	548,285	6,547,629
Population 2017	21,519	141,864	187,555	559,805	6,861,490
Population 2022	21,926	144,847	191,840	573,266	7,103,376
Compound % Change 2010-2017	0.2%	0.2%	0.3%	0.3%	0.7%
Compound % Change 2017-2022	0.4%	0.4%	0.5%	0.5%	0.7%
Households 2010	9,220	55,202	71,567	213,010	2,547,075
Households 2017	9,436	56,586	73,500	218,711	2,682,402
Households 2022	9,669	57,996	75,419	224,513	2,787,185
Compound % Change 2010-2017	0.3%	0.4%	0.4%	0.4%	0.7%
Compound % Change 2017-2022	0.5%	0.5%	0.5%	0.5%	0.8%
Median Household Income 2017	\$32,047	\$46,596	\$53,797	\$61,523	\$72,859
Average Household Size	2.2	2.4	2.4	2.5	2.5
College Graduate %	16%	19%	22%	25%	40%
Median Age	39	40	41	41	40
Owner Occupied %	30%	52%	59%	63%	62%
Renter Occupied %	70%	48%	41%	37%	38%
Median Owner Occupied Housing Value	\$215,758	\$262,744	\$289,943	\$306,895	\$371,475
Median Year Structure Built	1939	1951	1957	1962	1962
Avg. Travel Time to Work in Min.	25	26	26	29	32
Source: The Nielsen Company					

As shown above, the current population within a five-mile radius of the subject is 141,864, and the average household size is 2.4. Population in the area has grown since the 2010 census, and this trend is projected to continue over the next five years. Compared to Bristol County overall, the population within a five-mile radius is projected to grow at a slower rate.

Median household income is \$46,596, which is lower than the household income for Bristol County. Residents within a five-mile radius have a lower level of educational attainment than those of Bristol County, while median owner-occupied home values are considerably lower.

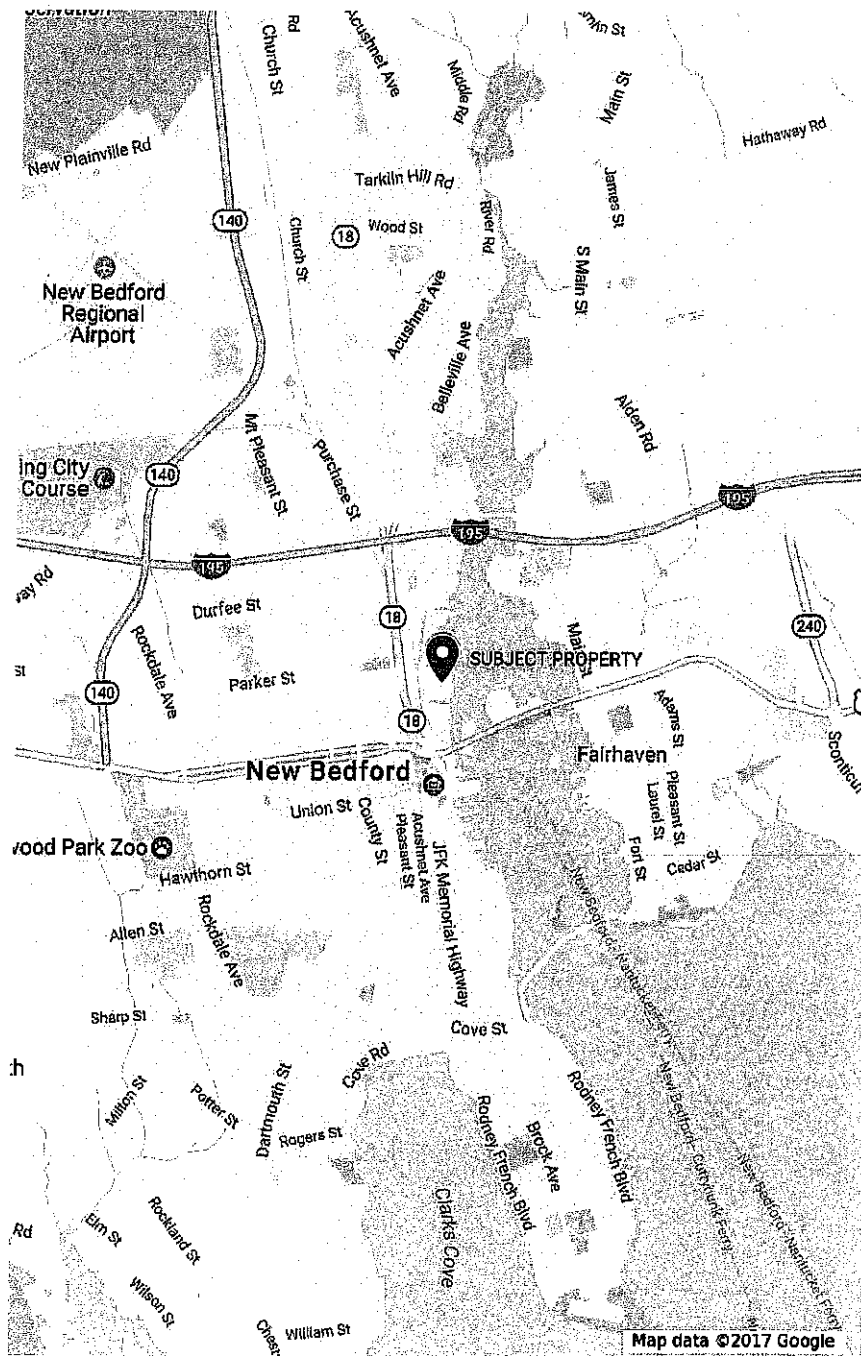
Land Use

The area is urban in character and approximately 95% developed. Land uses immediately surrounding the subject include a mix of industrial mill space and fish processing facilities, with typical ages of building improvements ranging from 15 to 100 years. Property types adjoining the subject include industrial uses.

Outlook and Conclusions

The area is in the revitalization stage of its life cycle. Recent redevelopment activity has been primarily of mill buildings along the waterfront. We anticipate that property values will remain stable in the near future.

Surrounding Area Map



Industrial Market Analysis

The City of New Bedford is a historic seaport city with 250 years of industry tied to the fishing industry. As the whaling era declined, city industries shifted to textiles and other manufacturing and business sectors that expanded in locations throughout the city. New Bedford maintains a strong maritime identity, being the richest “dollar value” fishing seaport in the United States along with shipping and development of offshore wind energy.

We reviewed a 2016 study, “New Bedford Waterfront: Draft Redevelopment Plan,” which was prepared by Sasaki Associates, The Cecil Group, UMass Donahue Institute, FXM Associates, and APEX Companies, LLC. The subject property is in the North Terminal area and identified in Subarea 4. This subarea of the study is designated as Waterfront Industrial, including an expanded new bulkhead area.

The following overview of the economic impact of the industries comprising the New Bedford Harbor waterfront was excerpted from the Redevelopment Plan:

The waterfront area accounts for about 7% of business establishments, 8% of employment, and 20% of business sales within the overall economy of New Bedford. Fishing and seafood and related industries are estimated to account for over half (54%) of the employment and over 90% of the business sales within the waterfront area.

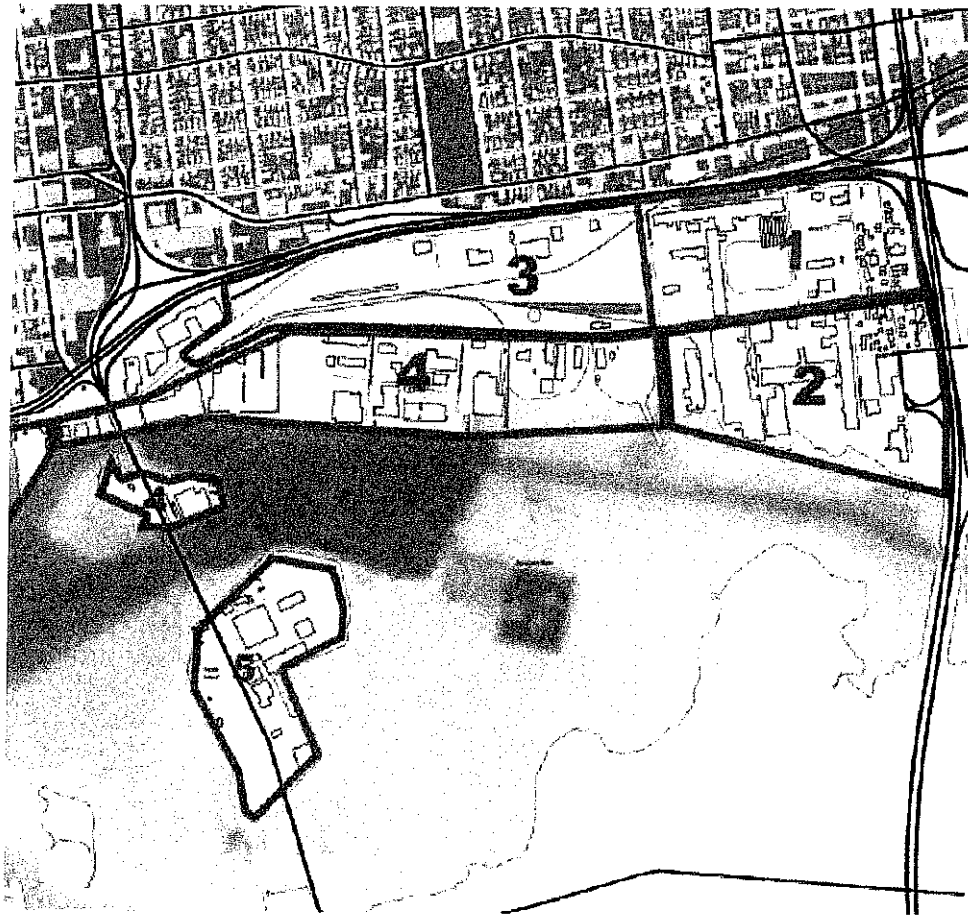
Payrolls for the estimated 4,159 employees in the waterfront area totaled about \$238 million in 2014. Average annual wages are estimated at \$57,000. This average annual wage for all employees within waterfront area industries compares favorably to the \$44,500 average annual wage for all industries in New Bedford in 2014, with the higher average wage largely accounted for by wages in fishing and seafood and related businesses. The fishing, seafood, and related industries accounted for 78% of all payrolls within the waterfront area in 2014, at an average annual wage of \$82,500.

The fishing and seafood industries remain the dominant economic activity within the waterfront district. They represent a classic business “cluster” unrivaled by any other single related economic activity in New Bedford. They depend upon the skills and expertise of facilitative functions – labor force, packaging companies, marine services/boat repair, legal, financial, promotional, and so forth. Much of the labor force they use for direct operations is predominantly located within the city, and in some instance near the waterfront. They are also a significant symbol of the city and draw visitors to the waterfront and downtown as well as well customers for their direct sales.

While the processing, wholesale storage, and distribution segments of the industry are not literally water-dependent, proximity to vessel off-loadings as well as proximity to other dealer processors is advantageous. These related businesses, while competitive, share product on a daily basis as needed to fill specific orders. The trend toward vertical integration – in which the processing, storage, and distribution, and fishing activities share a common corporate identity – blurs the distinction between water-dependent and non-water dependent business identities in this industry.

For the foreseeable future, the seafood industry is predicted to continue to be the dominant waterfront area economic "cluster," providing a majority of jobs, payrolls, and business expenditures within the waterfront area economy. Policy and other initiatives that are needed to retain and help expand this industry are likely to be a rational economic development investment. Additionally, policy incentives for expansion of other waterfront industries should consider the ongoing health of the seafood industry.

CONCEPT OF PROPOSED ORGANIZATION OF USES WITHIN THE WATERFRONT DISTRICT MASTER PLAN
(Partial Map Image of a Report Exhibit Prepared by Sasaki Associates)



SUBAREA 1: TRANSIT-ORIENTED (TOD) MIXED-USE

SUBAREA 2: NORTH TERMINAL, PUBLIC ACCESS #1

SUBAREA 3: TOD/WATERFRONT-INDUSTRIAL SUPPORT

SUBAREA 4: WATERFRONT INDUSTRIAL (INCLUDING NEW BULKHEAD)

Property Analysis

Land Description and Analysis

Land Description

Land Area	2.89 acres; 125,915 SF
Source of Land Area	Public Records
Primary Street Frontage	Antonio L. Costa Avenue - 368 feet
Shape	Trapezoidal
Corner	No
Rail Access	No
Topography	Generally level and at street grade
Drainage	No problems reported or observed
Environmental Hazards	None reported or observed
Ground Stability	No problems reported or observed

Flood Area Panel Number	25005C0393G
Date	July 16, 2014
Zone	X (Shaded)
Description	Within 500-year floodplain
Insurance Required?	No

Zoning; Other Regulations

Zoning Jurisdiction	City of New Bedford
Zoning Designation	Waterfront Industrial
Description	Maritime uses and industries related to the fishing industry
Legally Conforming?	Appears to be legally conforming
Zoning Change Likely?	No
Permitted Uses	Water freight terminal facilities, wholesaling, warehousing and storage requiring the waterfront location, fish processing and distribution, and listed other businesses requiring the waterfront or access location.
Minimum Lot Area	Not Specified
Maximum Floor Area Ratio	Not Specified
Parking Requirement	Not Specified
Other Land Use Regulations	Waterfront Industrial

Utilities

Service	Provider
Water	City of New Bedford
Sewer	City of New Bedford
Electricity	Eversource
Natural Gas	Eversource
Local Phone	Verizon or VOIP services

We are not experts in the interpretation of zoning ordinances. An appropriately qualified land use attorney should be engaged if a determination of compliance with zoning is required.

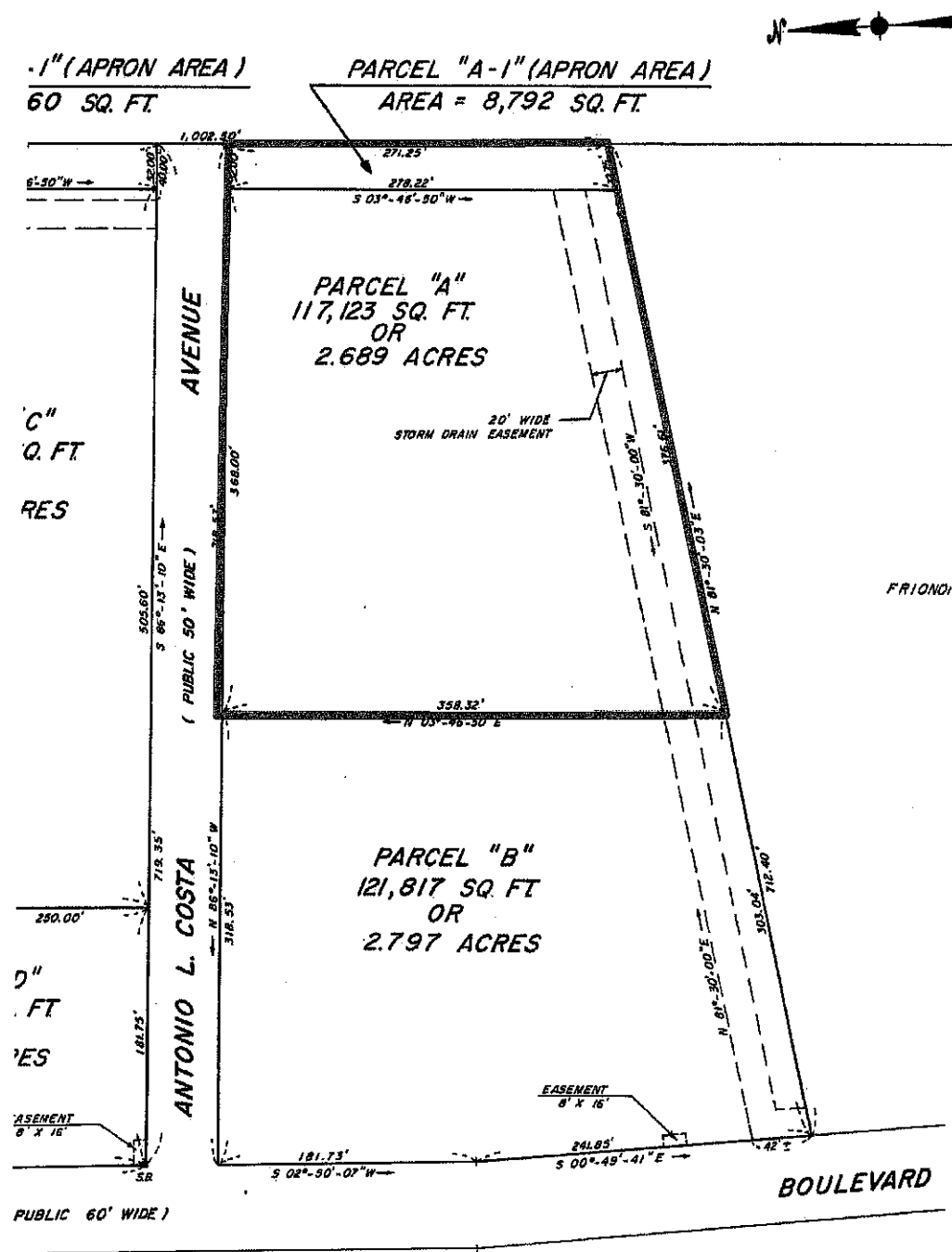
Easements, Encroachments, and Restrictions

Based upon a review of the deed and property survey, there do not appear to be any easements, encroachments, or restrictions that would adversely affect value. Our valuation assumes no adverse impacts from easements, encroachments, or restrictions, and further assumes that the subject has clear and marketable title.

Conclusion of Land Analysis

Overall, the physical characteristics of the site and the availability of utilities result in functional utility suitable for a variety of uses, including those permitted by zoning. We are not aware of any other particular restrictions on development.

Site Plan



Improvements Description and Analysis

The subject is an existing industrial ground lease property with a site area of 2.891 acres or 125,915 square feet. The appraisal considers only the ground lease, although it should be noted that the subject has been improved with a fish processing facility containing 44,713 square feet of gross building area. The improvements were constructed in 1982 and are 100% owner-occupied as of the effective appraisal date.

Improvements Description

Name of Property	North Terminal Bulkhead Area, Parcel #5
General Property Type	Industrial Ground Lease
Property Sub Type	Waterfront Industrial
Competitive Property Class	C
Occupancy Type	Owner Occupied
Number of Buildings	1
Stories	1 and 2
Construction Class	S
Construction Type	Metal
Construction Quality	Average
Condition	Average
Gross Building Area (SF)	44,713
Percent Office Space	10%
Land Area (SF)	125,915
Floor Area Ratio (GBA/Land SF)	0.36
Building Area Source	Public Records
Year Built	1982
Actual Age (Yrs.)	35
Estimated Effective Age (Yrs.)	15
Estimated Economic Life (Yrs.)	40
Remaining Economic Life (Yrs.)	25
Number of Parking Spaces	Adequate
Parking Type	Surface

Improvements Analysis

Quality and Condition

The quality and condition of the subject are considered to be consistent with that of competing properties.

Functional Utility

The improvements appear to be adequately suited to their current use, and there do not appear to be any significant items of functional obsolescence.

Deferred Maintenance

It is our understanding that repairs to the bulkhead improvements are required. However, our values set forth do not include a deduction for the cost to cure any deficiencies.

ADA Compliance

Based on our inspection and information provided, we are not aware of any ADA issues. However, we are not expert in ADA matters, and further study by an appropriately qualified professional would be recommended to assess ADA compliance.

Hazardous Substances

An environmental assessment report was not provided for review and environmental issues are beyond our scope of expertise. No hazardous substances were observed during our inspection of the improvements; however, we are not qualified to detect such substances. Unless otherwise stated, we assume no hazardous conditions exist on or near the subject.

Personal Property

No personal property items were observed that would have any material contribution to market value.

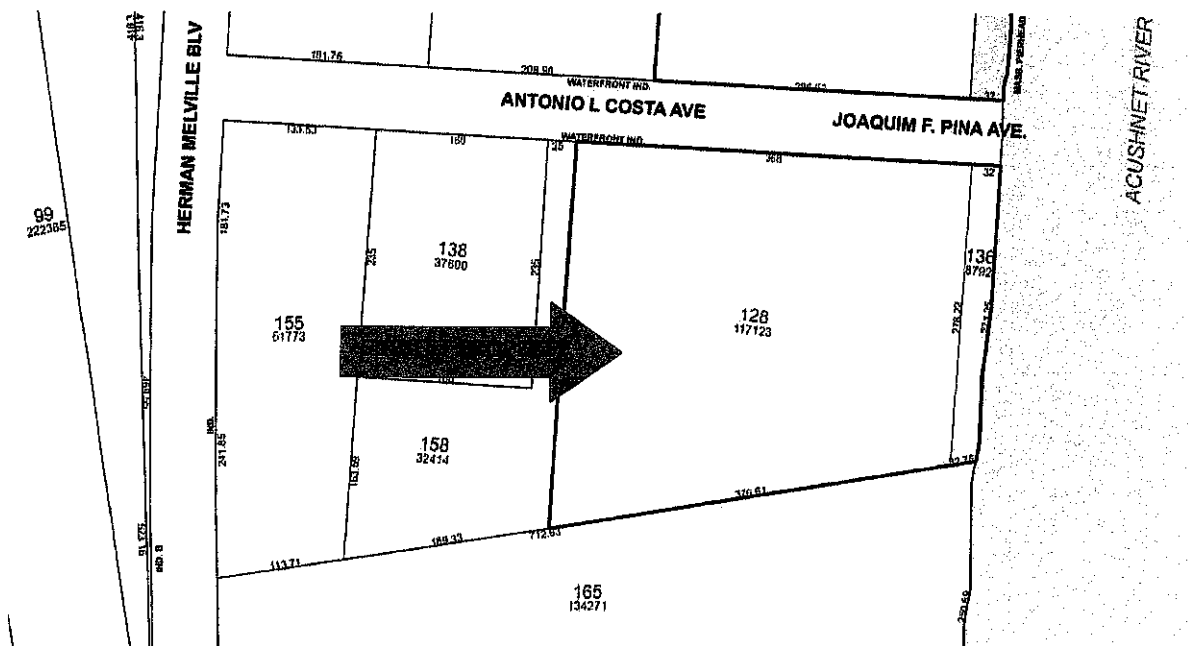
Real Estate Taxes

The real estate tax assessment of the subject is administered by the City of New Bedford. Assessed values are based on a current conversion ratio of 100% of assessor's market value. The property tax identification number and assessed value of the property for tax year 2017 are as follows:

Taxes and Assessments - 2017 (including leasehold improvements)							
Tax ID	Assessed Value			Taxes and Assessments			
	Land	Improvements	Total	Ad Valorem Tax Rate	Taxes	Direct Assessments	Total
Plat 66 Lot 128A	\$598,000	\$2,074,300	\$2,672,300	\$36.03	\$96,283	\$0	\$96,283

The property tax rate for commercial and industrial properties in the City for the 2017 tax year is \$36.03 per thousand of assessed valuation. Application of this rate to the assessed value of the subject results in a real estate tax liability of \$96,283.

GIS Plat Map



Highest and Best Use

Process

Before a property can be valued, an opinion of highest and best use must be developed for the subject site, both as if vacant, and as improved or proposed. By definition, the highest and best use must be:

- Physically possible.
- Legally permissible under the zoning regulations and other restrictions that apply to the site.
- Financially feasible.
- Maximally productive, i.e., capable of producing the highest value from among the permissible, possible, and financially feasible uses.

As If Vacant

Physically Possible

The physical characteristics of the site do not appear to impose any unusual restrictions on development. Overall, the physical characteristics of the site and the availability of utilities result in functional utility suitable for a variety of uses.

Legally Permissible

The site is zoned Waterfront Industrial. Permitted uses include water freight terminal facilities, wholesaling, warehousing and storage requiring the waterfront location, fish processing and distribution and listed other businesses requiring the waterfront or access location. To our knowledge, there are no legal restrictions, such as easements or deed restrictions, that would effectively limit the use of the property. Given prevailing land use patterns in the area, only industrial use is given further consideration in determining highest and best use of the site, as though vacant.

Financially Feasible

Based on our analysis of the market, there is currently adequate demand for industrial use in the subject's area. It appears that a newly developed industrial use on the site would have a value commensurate with its cost. Therefore, industrial use is considered to be financially feasible.

Maximally Productive

There does not appear to be any reasonably probable use of the site that would generate a higher residual land value than industrial use. Accordingly, it is our opinion that industrial use, developed to the normal market density level permitted by zoning, is the maximally productive use of the property.

Conclusion

Development of the site for industrial use is the only use that meets the four tests of highest and best use. Therefore, it is concluded to be the highest and best use of the property as if vacant.

As Improved

The subject site is developed with a fish processing facility, which is consistent with the highest and best use of the site as if it were vacant.

Based on our analysis, there does not appear to be any alternative use that could reasonably be expected to provide a higher present value than the current use, and the value of the existing improved property exceeds the value of the site, as if vacant. For these reasons, continued industrial use is concluded to be maximally productive and the highest and best use of the property as improved.

Most Probable Buyer

Taking into account the size and characteristics of the property and its owner-occupancy, the likely buyer is an owner-user or a local or regional investor, such as an individual or partnership.

Valuation

Valuation Methodology

Appraisers usually consider three approaches to estimating the market value of real property. These are the cost approach, sales comparison approach, and income capitalization approach.

The **cost approach** assumes that the informed purchaser would pay no more than the cost of producing a substitute property with the same utility. This approach is particularly applicable when the improvements being appraised are relatively new and represent the highest and best use of the land or when the property has unique or specialized improvements for which there is little or no sales data from comparable properties.

The **sales comparison approach** assumes that an informed purchaser would pay no more for a property than the cost of acquiring another existing property with the same utility. This approach is especially appropriate when an active market provides sufficient reliable data. The sales comparison approach is less reliable in an inactive market or when estimating the value of properties for which no directly comparable sales data is available. The sales comparison approach is often relied upon for owner-user properties.

The **income capitalization approach** reflects the market's perception of a relationship between a property's potential income and its market value. This approach converts the anticipated net income from ownership of a property into a value indication through capitalization. The primary methods are direct capitalization and discounted cash flow analysis, with one or both methods applied, as appropriate. This approach is widely used in appraising income-producing properties.

Reconciliation of the various indications into a conclusion of value is based on an evaluation of the quantity and quality of available data in each approach and the applicability of each approach to the property type.

The methodology employed in this assignment is summarized as follows:

The subject of the appraisal is a long-term, 99-year ground lease property. Although the parcel has been improved with a fish processing facility and additional site improvements, the purpose of the appraisal is to determine the market value of the "leased fee" interest of the underlying ground lease. As such, only the income approach has been developed, taking into consideration the terms and conditions of the lease agreement and compatible market rent for the property as unencumbered.

Income Capitalization Approach

The income capitalization approach converts anticipated economic benefits of owning real property into a value estimate through capitalization. The steps taken to apply the income capitalization approach are:

- Analyze the revenue potential of the property.
- Consider appropriate allowances for vacancy, collection loss, and operating expenses.
- Calculate net operating income by deducting vacancy, collection loss, and operating expenses from potential income.
- Apply the most appropriate capitalization method to convert anticipated net income to an indication of value.

The two most common capitalization methods are direct capitalization and discounted cash flow analysis. In direct capitalization, a single year's expected income is divided by an appropriate capitalization rate to arrive at a value indication. In discounted cash flow analysis, anticipated future net income streams and a future resale value are discounted to a present value at an appropriate yield rate.

In this analysis, we use both direct capitalization and discounted cash flow analysis. The direct capitalization analysis utilizes compatible market rent for the property as unencumbered. As encumbered, for the "lease fee" interest, a discounted cash flow analysis has been developed to estimate the current value of the future income and resale value as encumbered by the subject lease.

Leased Status of Property

The subject of the appraisal is a long-term, 99-year ground lease property. Therefore, we considered the terms of the lease. Three key points directly impact the analysis:

- 1) The remaining term of the lease, 63 years.
- 2) The method of arbitration used to determine the annual rent amount increases over the term of the lease. Arbitration for the applicable rent is limited by the geographic area of the North Terminal Bulkhead Area, as per Article III, Section C, as shown below:

rental so determined shall not exceed that of comparable land of the LESSORS leased for waterfront purposes at the North Terminal Bulkhead Area

- 3) The effective year in which the annual rent is adjusted to agreed or arbitrated market-based annual rent.

Article III of the lease establishes the annual rent amount, the effective number of years for the rent amount, and the method and number of years for adjustment of the rent amount.

The current rent of \$23,273 was set into effect in the third adjustment period, 15 years. Based on our review of the lease with representatives of the Harbor Development Commission, the next adjustment to the rent becomes effective in the 50-year point of the agreement.

The rent and terms for future adjustments are agreed or arbitrated according to the method described in Section D. At this point based on typical terms currently used for commercial ground lease properties, increases to the annual rent are based on the CPI.

Market Rent Analysis

As noted, the terms of the lease restrict the arbiters to considering comparable rentals in the "North Terminal Bulkhead Area." Based on the information provided by the Harbor Development Commission, the North Terminal Bulkhead ranges from \$0.04 to \$0.90 on a per square foot basis.

North Terminal Market						
Harbor Development Commission - North Terminal Properties						
Parcel #	Tenant	Address	Land Area (Sq Ft)**	Monthly Rent	Annual Rent	Annual Rent/SqFt LA
1	Maritime Terminal Inc.	276 MacArthur Drive	141,335	\$1,079.00	\$12,948.00	\$0.09
2	WILCA Holdings LLC & JFMHoldings LLC	110 Herman Melville Blvd	51,773	\$519.30	\$6,231.60	\$0.12
3	Marvin Dolinsky/Marder North	48 Antonio Costa Ave	32,414	\$837.65	\$10,051.80	\$0.31
4	Luzo Welding	42 Antonio Costa Ave	37,600	\$384.18	\$4,610.16	\$0.12
5	MAE Realty	22 Antonio Costa Avenue	125,915	\$1,939.38	\$23,272.56	\$0.18
6	SeaWatch L2, D1, D	150 Herman Melville Blvd	83,502	\$708.13	\$8,497.56	\$0.10
7	SeaWatch C, C1	15 Antonio Costa Ave	123,648	\$1,754.38	\$21,052.56	\$0.17
8	Packaging Products Corp	198 Herman Melville Blvd	74,484	\$748.50	\$8,982.00	\$0.12
9	Whaler Realty Co/ Nordic Fisheries	38 Hervey Tichon Ave	45,860	\$459.38	\$5,512.56	\$0.12
10	Nordic Fisheries	14 Hervey Tichon Ave	125,049	\$3,572.00	\$42,864.00	\$0.34
11	Wharf Tavern	216 Herman Melville Blvd	63,016	\$453.13	\$5,437.56	\$0.09
12	David Chambers	256 Herman Melville Blvd	86,500	\$535.76	\$6,429.12	\$0.07
13 / 14	Robert Cook	272 & 286 Herman Melville Blvd	129,200	\$536.38	\$6,436.56	\$0.05
15	Marvin Dolinsky/Shoreline Resources	300 Herman Melville Blvd	30,200	\$186.03	\$2,232.36	\$0.07
16	Acushnet River Shipyard & Evergreen Sheet Metal	302 Herman Melville Blvd	66,703	\$410.74	\$4,928.88	\$0.07
17	Tisbury Towing	352 Herman Melville Blvd,	151,560	\$504.64	\$6,055.68	\$0.04
*	EPA Bulkhead	NS Hervey Tichon Ave.	106,354	\$8,000.00	\$96,000.00	\$0.90
* Parcel #not provided						
** Based on assessment map data						
Source: City of New Bedford, Harbor Development Commission						

The parcels can be grouped into three zones, north, south, and central, which are generally based on access from area streets and bulkhead improvements. These are also indicative of the waterways licenses that permitted the development of the North Terminal area.

Analysis of Comparable Rentals

Reviewing the lease rates on a per square foot basis, the lower rates are in the north zone where there is limited or no bulkhead. There is essentially only one ground lease property in the south zone area, which pre-dates the development of the North Terminal area.

The subject is in the central zone of the North Terminal. Parcels located along the bulkhead line tend to be leased at a higher per square foot rate, while non-bulkhead parcels are generally 30% lower on a per square foot basis.

Based on our discussions with representatives of the Harbor Development Commission, the most recent ground lease rental is the parcel for the US EPA on the north side of Hervey Tichon Avenue. This parcel has an indicated per square foot rate of \$0.90.

The limited basis for comparative rental rates should increase during the remaining term of the subject's lease. Based on our discussions with representatives of the Harbor Development Commission, the City is actively pursuing expanding available parcels in the North Terminal area. The potential sites could become available by the redevelopment of City-owned parcels on the west side of Herman Melville Boulevard. An additional opportunity is the expansion of the bulkhead along the north zone parcels as indicated in a draft replacement study for the New Bedford/Fairhaven Bridge.

Market Rent Conclusion

Based on the preceding analysis of comparable rentals, we conclude market lease terms for the subject to be comparable to the US EPA parcel of \$0.90 on a per square foot basis.

Discounted Cash Flow Analysis

Cash Flow Income Projection

Contract/Current Rent

The current rent of \$23,273 was set into effect in the third adjustment period, 15 years.

Escalation to Market Rent

The next adjustment to the rent becomes effective in the 50-year point of the agreement, August 1, 2031. The current market rent of \$0.90 per square foot was applied to the subject land area of 125,915 square feet to establish an annual rent of \$113,324. The established market rent was then adjusted by 2.20%, a 20-year average of the CPI, for a period of 14 years, at which the point the arbitrated/market-based rent becomes effective.

Escalation Rate – CPI

A review of commercial and ground lease properties indicates that the method for projected increases to rents and some general expenses are adjusted based on inflation rates, commonly referred to as the Consumer Price Index. The following table shows the monthly and annual average for the Northeast Region CPI over the past 20 years.

CPI Index													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1996	2.70	2.70	2.80	2.90	2.90	2.80	3.00	2.90	3.00	3.00	3.30	3.30	3.00
1997	3.00	3.00	2.80	2.50	2.20	2.30	2.20	2.20	2.20	2.10	1.80	1.70	2.30
1998	1.60	1.40	1.40	1.40	1.70	1.70	1.70	1.60	1.50	1.50	1.50	1.60	1.60
1999	1.70	1.60	1.70	2.30	2.10	2.00	2.10	2.30	2.60	2.60	2.60	2.70	2.20
2000	2.70	3.20	3.80	3.10	3.20	3.70	3.70	3.40	3.50	3.40	3.40	3.40	3.40
2001	3.70	3.50	2.90	3.30	3.60	3.20	2.70	2.70	2.60	2.10	1.90	1.60	2.80
2002	1.10	1.10	1.50	1.60	1.20	1.10	1.50	1.80	1.50	2.00	2.20	2.40	1.60
2003	2.60	3.00	3.00	2.20	2.10	2.10	2.10	2.20	2.30	2.00	1.80	1.90	2.30
2004	1.90	1.70	1.70	2.30	3.10	3.30	3.00	2.70	2.50	3.20	3.50	3.30	2.70
2005	3.00	3.00	3.10	3.50	2.80	2.50	3.20	3.60	4.70	4.30	3.50	3.40	3.40
2006	4.00	3.60	3.40	3.50	4.20	4.30	4.10	3.80	2.10	1.30	2.00	2.50	3.20
2007	2.10	2.40	2.80	2.60	2.70	2.70	2.40	2.00	2.80	3.50	4.30	4.10	2.80
2008	4.30	4.00	4.00	3.90	4.20	5.00	5.60	5.40	4.90	3.70	1.10	0.10	3.80
2009	0.00	0.20	-0.40	-0.70	-1.30	-1.40	-2.10	-1.50	-1.30	-0.20	1.80	2.70	-0.40
2010	2.60	2.10	2.30	2.20	2.00	1.10	1.20	1.10	1.10	1.20	1.10	1.50	1.60
2011	1.60	2.10	2.70	3.20	3.60	3.60	3.60	3.80	3.90	3.50	3.40	3.00	3.20
2012	2.90	2.90	2.70	2.30	1.70	1.70	1.40	1.70	2.00	2.20	1.80	1.70	2.10
2013	1.60	2.00	1.50	1.10	1.40	1.80	2.00	1.50	1.20	1.00	1.20	1.50	1.50
2014	1.60	1.10	1.50	2.00	2.10	2.10	2.00	1.70	1.70	1.70	1.30	0.80	1.60
2015	-0.10	0.00	-0.10	-0.20	0.00	0.10	0.20	0.20	0.00	0.20	0.50	0.70	0.10
2016	1.40	1.00	0.90	1.10	1.00	1.00	0.80	1.10	1.50	1.60	1.70	2.10	1.30

CPI Index Average 1996 - 2016 2.20

Source: United States Department of Labor, Bureau of Labor Statistics

Our analysis assumes an annual increase of 2.20% to the arbitrated/market-based rent for the remaining term of the ground lease agreement.

Discount Rate and Reversion Capitalization Rate Selection

Discount and capitalization rates are used to convert net income into an indication of value. Selection of an appropriate capitalization rate considers the future income pattern of the property and investment risk associated with ownership. These rates vary for each property type and investment criteria of ownership. Data from national investor surveys that we consider in selecting discount and reversion capitalization rates is shown in the following exhibit.

Land Leases: Capitalization and Discount Rates

Property Type	Capitalization Rates			Discount Rates		
	Min.	Max.	Avg	Min.	Max.	Avg
Apartments	2.44%	11.27%	6.55%	5.04%	11.77%	7.55%
Golf	2.60%	16.30%	9.19%	5.20%	16.80%	10.19%
Health Care/Senior Housing	2.60%	12.64%	7.36%	5.20%	13.14%	8.36%
Industrial	2.60%	11.77%	6.99%	5.20%	12.27%	7.99%
Lodging	2.60%	15.93%	7.63%	5.20%	16.43%	8.63%
Mobile Home/RV Park/Camping	2.60%	13.15%	7.98%	5.20%	13.65%	8.98%
Office	2.60%	11.77%	7.49%	5.20%	12.27%	8.49%
Restaurants	3.70%	15.40%	8.74%	6.30%	15.90%	9.74%
Retail	2.49%	12.64%	7.13%	5.09%	13.14%	8.13%
Self-Storage	2.60%	11.77%	8.12%	5.20%	12.27%	9.12%
Special Purpose	3.55%	16.34%	8.82%	6.32%	18.72%	9.44%
All Properties	2.44%	16.34%	7.82%	5.04%	16.80%	8.72%

*4th Quarter 2016 Data

Source: RealtyRates.com Investor Survey Q1 - 2017

Discount Rate

The most current national survey data indicates that discount rates range from 5.04% to 16.80% and average 8.72%, for land lease property types. Due to the long-term nature of the subject lease, we conclude that a discount rate of 8.72% is appropriate for the subject.

Reversion Capitalization Rate

Current survey data indicates a range of reversion capitalization rates of 2.44% to 16.34%, with an average of 7.82%, for land lease properties. Due to the long-term nature of the subject lease, we conclude a reversion capitalization rate of 7.82%.

Value Indication – Discounted Cash Flow Analysis

The value indications produced by the discounted cash flow analysis are as follows:

Value Based On Existing Lease *	
(Discounted Cash Flow Analysis)	
Effective Date	May 12, 2017
End of Lease	August 1, 2080
Remaining Term (Years)	63
Current Rent	\$23,273
Projected Market Rent	
Market Rent Start Year	August 1, 2031
Current Market Rent/Sq. Ft.	\$0.90
Subject Lease Area /Sq. Ft.	125,915
Est. Market Rent	\$113,324
C.P.I. Increase	2.20%
# Years to Market Rent	14
Projected Market Rent	\$153,685
Present Value of Projected Cash Flow	
Discount Rate	8.72%
Net Present Value of Cash Flow	\$935,774
Reversion Value	
Reversion Rate	7.82%
Estimated Reversion Value	\$5,708,469
Holding Period	63
Discounted Reversion Value	\$29,446
Estimated Present Market Value	
Discounted Cash Flow + Discounted Reversion Value	\$965,220
Rounded	\$1,000,000
* Does not reflect the cost to cure deferred maintenance or repairs to bulkhead improvements.	

Direct Capitalization Analysis

As unencumbered, the subject is essentially owner-occupied, and the most probable purchaser is another owner-user. We use market rent as the basis of our income projection and apply the direct capitalization method. Our valuation assumes stabilized occupancy without a deduction for lease-up costs.

Stabilized Income and Expenses

Potential Gross Rent

As previously discussed, the market rental rate of \$0.90 is applied to the subject's land area of 125,915 square feet to arrive at Potential Gross Rent of \$113,324.

Expenses

According to the terms of the lease agreement, all associated property expenses are directly paid by the lease owner-user.

Capitalization Rate Selection

A capitalization rate is used to convert net income into an indication of value. Selection of an appropriate capitalization rate considers the future income pattern of the property and investment risk associated with ownership. We consider the following data in selecting a capitalization rate for the subject.

Land Leases: Capitalization and Discount Rates

Property Type	Capitalization Rates			Discount Rates		
	Min.	Max.	Avg	Min.	Max.	Avg
Apartments	2.44%	11.27%	6.55%	5.04%	11.77%	7.55%
Golf	2.60%	16.30%	9.19%	5.20%	16.80%	10.19%
Health Care/Senior Housing	2.60%	12.64%	7.36%	5.20%	13.14%	8.36%
Industrial	2.60%	11.77%	6.99%	5.20%	12.27%	7.99%
Lodging	2.60%	15.93%	7.63%	5.20%	16.43%	8.63%
Mobile Home/RV Park/Camping	2.60%	13.15%	7.98%	5.20%	13.65%	8.98%
Office	2.60%	11.77%	7.49%	5.20%	12.27%	8.49%
Restaurants	3.70%	15.40%	8.74%	6.30%	15.90%	9.74%
Retail	2.49%	12.64%	7.13%	5.09%	13.14%	8.13%
Self-Storage	2.60%	11.77%	8.12%	5.20%	12.27%	9.12%
Special Purpose	3.55%	16.34%	8.82%	6.32%	18.72%	9.44%
All Properties	2.44%	16.34%	7.82%	5.04%	16.80%	8.72%

*4th Quarter 2016 Data

Source: RealtyRates.com Investor Survey Q1 - 2017

Based on an analysis of the preceding data, a going-in capitalization rate for the subject is indicated within a range of 2.44% to 16.34%. To reach a capitalization rate conclusion, we consider each of the following investment risk factors to gauge its impact on the rate. The direction of each arrow in the following table indicates our judgment of an upward, downward, or neutral influence of each factor.

Risk Factor	Issues	Impact on Rate
Competitive Market Position	Construction quality, appeal, condition, effective age, functional utility.	↔
Location	Market area demographics and life cycle trends; proximity issues; access and support services.	↔
Market	Vacancy rates and trends; rental rate trends; supply and demand.	↔
Highest & Best Use	Upside potential from redevelopment, adaptation, expansion.	↔
Overall Impact		↔

Accordingly, we conclude a capitalization rate as follows:

Capitalization Rate Conclusion

Going-In Capitalization Rate	7.82%
------------------------------	-------

Net operating income is divided by the capitalization rate to arrive at a value indication by the income capitalization approach as follows:

Direct Capitalization Analysis

	SF	Space Type	Rent Applied	\$/SF	Annual
Income					
Base Rent					
MAE Realty, LLC	125,915	Ground Lease	Market	\$0.90	\$113,324
Potential Gross Rent	125,915				\$113,324
Vacancy & Collection Loss	0.00%	N/A			\$0
Effective Gross Income					\$113,324
Expenses					
Tenant assumes all related expenses					
Total Expenses					\$0
Net Operating Income					\$113,324
Capitalization Rate					7.82%
Indicated Value					\$1,449,156
Rounded					\$1,400,000

Reconciliation and Conclusion of Value

The values indicated by our analyses are as follows:

Summary of Value Indications		
	Market Value - Based on Existing Lease	Market Value - Market Rent Equal to Fee Simple Interest
Cost Approach	Not Used	Not Used
Sales Comparison Approach	Not Used	Not Used
Income Capitalization Approach	\$1,000,000	\$1,400,000
Reconciled	\$1,000,000	\$1,400,000

Value Conclusions			
Appraisal Premise	Interest Appraised	Date of Value	Value Conclusion
Market Value - Based on Existing Lease	Leased Fee	May 12, 2017	\$1,000,000
Market Value - Market Rent Equal to Fee Simple Interest	Fee Simple	May 12, 2017	\$1,400,000

Extraordinary Assumptions and Hypothetical Conditions

The value conclusions are subject to the following extraordinary assumptions that may affect the assignment results. An extraordinary assumption is uncertain information accepted as fact. If the assumption is found to be false as of the effective date of the appraisal, we reserve the right to modify our value conclusions.

1. The cash flow analysis assumes that the annual rent will be established at the current market rent on a square foot basis and adjusted for inflation based on the CPI index.
2. The estimated market values presented in this report do not reflect the cost to cure deferred maintenance or repairs to the bulkhead improvements.

The opinions of value expressed in this report are based on estimates and forecasts that are prospective in nature and subject to considerable risk and uncertainty. Events may occur that could cause the performance of the property to differ materially from our estimates, such as changes in the economy, interest rates, capitalization rates, financial strength of tenants, and behavior of investors, lenders, and consumers. Additionally, our opinions and forecasts are based partly on data obtained from interviews and third party sources, which are not always completely reliable. Although we are of the opinion that our findings are reasonable based on available evidence, we are not responsible for the effects of future occurrences that cannot be reasonably foreseen at this time.

Exposure Time

Exposure time is the length of time the subject property would have been exposed for sale in the market had it sold on the effective valuation date at the concluded market value. Based on the concluded market values stated previously, it is our opinion that the probable exposure time is 12 months.

Marketing Period

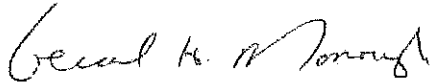
Marketing time is an estimate of the amount of time it might take to sell a property at the concluded market value immediately following the effective date of value. We estimate the subject's marketing period at 12 months.

Certification

We certify that, to the best of our knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. We have not performed any services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
8. Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice as well as applicable state appraisal regulations.
9. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
10. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
11. Gerard H. McDonough, MAI, FRICS, made a personal inspection of the property that is the subject of this report.
12. No one provided significant real property appraisal assistance to the person(s) signing this certification.
13. We have experience in appraising properties similar to the subject and are in compliance with the Competency Rule of USPAP.

14. As of the date of this report, Gerard H. McDonough, MAI, FRICS, has completed the continuing education program for Designated Members of the Appraisal Institute.



Gerard H. McDonough, MAI, FRICS
Certified General Real Estate Appraiser
MA Certificate # 361

Assumptions and Limiting Conditions

This appraisal and any other work product related to this engagement are limited by the following standard assumptions, except as otherwise noted in the report:

1. The title is marketable and free and clear of all liens, encumbrances, encroachments, easements and restrictions. The property is under responsible ownership and competent management and is available for its highest and best use.
2. There are no existing judgments or pending or threatened litigation that could affect the value of the property.
3. There are no hidden or undisclosed conditions of the land or of the improvements that would render the property more or less valuable. Furthermore, there is no asbestos in the property.
4. The revenue stamps placed on any deed referenced herein to indicate the sale price are in correct relation to the actual dollar amount of the transaction.
5. The property is in compliance with all applicable building, environmental, zoning, and other federal, state and local laws, regulations and codes.
6. The information furnished by others is believed to be reliable, but no warranty is given for its accuracy.

This appraisal and any other work product related to this engagement are subject to the following limiting conditions, except as otherwise noted in the report:

1. An appraisal is inherently subjective and represents our opinion as to the value of the property appraised.
2. The conclusions stated in our appraisal apply only as of the effective date of the appraisal, and no representation is made as to the effect of subsequent events.
3. No changes in any federal, state or local laws, regulations or codes (including, without limitation, the Internal Revenue Code) are anticipated.
4. No environmental impact studies were either requested or made in conjunction with this appraisal, and we reserve the right to revise or rescind any of the value opinions based upon any subsequent environmental impact studies. If any environmental impact statement is required by law, the appraisal assumes that such statement will be favorable and will be approved by the appropriate regulatory bodies.
5. Unless otherwise agreed to in writing, we are not required to give testimony, respond to any subpoena or attend any court, governmental or other hearing with reference to the property without compensation relative to such additional employment.
6. We have made no survey of the property and assume no responsibility in connection with such matters. Any sketch or survey of the property included in this report is for illustrative purposes only and should not be considered to be scaled accurately for size. The appraisal

covers the property as described in this report, and the areas and dimensions set forth are assumed to be correct.

7. No opinion is expressed as to the value of subsurface oil, gas or mineral rights, if any, and we have assumed that the property is not subject to surface entry for the exploration or removal of such materials, unless otherwise noted in our appraisal.
8. We accept no responsibility for considerations requiring expertise in other fields. Such considerations include, but are not limited to, legal descriptions and other legal matters such as legal title, geologic considerations such as soils and seismic stability; and civil, mechanical, electrical, structural and other engineering and environmental matters. Such considerations may also include determinations of compliance with zoning and other federal, state, and local laws, regulations and codes.
9. The distribution of the total valuation in the report between land and improvements applies only under the reported highest and best use of the property. The allocations of value for land and improvements must not be used in conjunction with any other appraisal and are invalid if so used. The appraisal report shall be considered only in its entirety. No part of the appraisal report shall be utilized separately or out of context.
10. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraisers, or any reference to the Appraisal Institute) shall be disseminated through advertising media, public relations media, news media or any other means of communication (including without limitation prospectuses, private offering memoranda and other offering material provided to prospective investors) without the prior written consent of the persons signing the report.
11. Information, estimates and opinions contained in the report and obtained from third-party sources are assumed to be reliable and have not been independently verified.
12. Any income and expense estimates contained in the appraisal report are used only for the purpose of estimating value and do not constitute predictions of future operating results.
13. If the property is subject to one or more leases, any estimate of residual value contained in the appraisal may be particularly affected by significant changes in the condition of the economy, of the real estate industry, or of the appraised property at the time these leases expire or otherwise terminate.
14. Unless otherwise stated in the report, no consideration has been given to personal property located on the premises or to the cost of moving or relocating such personal property; only the real property has been considered.
15. The current purchasing power of the dollar is the basis for the values stated in the appraisal; we have assumed that no extreme fluctuations in economic cycles will occur.
16. The values found herein are subject to these and to any other assumptions or conditions set forth in the body of this report but which may have been omitted from this list of Assumptions and Limiting Conditions.
17. The analyses contained in the report necessarily incorporate numerous estimates and assumptions regarding property performance, general and local business and economic

conditions, the absence of material changes in the competitive environment and other matters. Some estimates or assumptions, however, inevitably will not materialize, and unanticipated events and circumstances may occur; therefore, actual results achieved during the period covered by our analysis will vary from our estimates, and the variations may be material.

18. The Americans with Disabilities Act (ADA) became effective January 26, 1992. We have not made a specific survey or analysis of the property to determine whether the physical aspects of the improvements meet the ADA accessibility guidelines. We claim no expertise in ADA issues, and render no opinion regarding compliance of the subject with ADA regulations. Inasmuch as compliance matches each owner's financial ability with the cost to cure the non-conforming physical characteristics of a property, a specific study of both the owner's financial ability and the cost to cure any deficiencies would be needed for the Department of Justice to determine compliance.
19. The appraisal report is prepared for the exclusive benefit of the Client, its subsidiaries and/or affiliates. It may not be used or relied upon by any other party. All parties who use or rely upon any information in the report without our written consent do so at their own risk.
20. No studies have been provided to us indicating the presence or absence of hazardous materials on the subject property or in the improvements, and our valuation is predicated upon the assumption that the subject property is free and clear of any environment hazards including, without limitation, hazardous wastes, toxic substances and mold. No representations or warranties are made regarding the environmental condition of the subject property. Integra Realty Resources – Hartford/Providence, Integra Realty Resources, Inc., Integra Strategic Ventures, Inc. and/or any of their respective officers, owners, managers, directors, agents, subcontractors or employees (the "Integra Parties"), shall not be responsible for any such environmental conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because we are not experts in the field of environmental conditions, the appraisal report cannot be considered as an environmental assessment of the subject property.
21. The persons signing the report may have reviewed available flood maps and may have noted in the appraisal report whether the subject property is located in an identified Special Flood Hazard Area. We are not qualified to detect such areas and therefore do not guarantee such determinations. The presence of flood plain areas and/or wetlands may affect the value of the property, and the value conclusion is predicated on the assumption that wetlands are non-existent or minimal.
22. Integra Realty Resources – Hartford/Providence is not a building or environmental inspector. Integra Hartford/Providence does not guarantee that the subject property is free of defects or environmental problems. Mold may be present in the subject property and a professional inspection is recommended.
23. The appraisal report and value conclusions for an appraisal assume the satisfactory completion of construction, repairs or alterations in a workmanlike manner.
24. It is expressly acknowledged that in any action which may be brought against any of the Integra Parties, arising out of, relating to, or in any way pertaining to this engagement, the

appraisal reports, and/or any other related work product, the Integra Parties shall not be responsible or liable for any incidental or consequential damages or losses, unless the appraisal was fraudulent or prepared with intentional misconduct. It is further acknowledged that the collective liability of the Integra Parties in any such action shall not exceed the fees paid for the preparation of the appraisal report unless the appraisal was fraudulent or prepared with intentional misconduct. Finally, it is acknowledged that the fees charged herein are in reliance upon the foregoing limitations of liability.

25. Integra Realty Resources – Hartford/Providence, an independently owned and operated company, has prepared the appraisal for the specific intended use stated elsewhere in the report. The use of the appraisal report by anyone other than the Client is prohibited except as otherwise provided. Accordingly, the appraisal report is addressed to and shall be solely for the Client's use and benefit unless we provide our prior written consent. We expressly reserve the unrestricted right to withhold our consent to your disclosure of the appraisal report or any other work product related to the engagement (or any part thereof including, without limitation, conclusions of value and our identity), to any third parties. Stated again for clarification, unless our prior written consent is obtained, no third party may rely on the appraisal report (even if their reliance was foreseeable).
26. The conclusions of this report are estimates based on known current trends and reasonably foreseeable future occurrences. These estimates are based partly on property information, data obtained in public records, interviews, existing trends, buyer-seller decision criteria in the current market, and research conducted by third parties, and such data are not always completely reliable. The Integra Parties are not responsible for these and other future occurrences that could not have reasonably been foreseen on the effective date of this assignment. Furthermore, it is inevitable that some assumptions will not materialize and that unanticipated events may occur that will likely affect actual performance. While we are of the opinion that our findings are reasonable based on current market conditions, we do not represent that these estimates will actually be achieved, as they are subject to considerable risk and uncertainty. Moreover, we assume competent and effective management and marketing for the duration of the projected holding period of this property.
27. All prospective value opinions presented in this report are estimates and forecasts which are prospective in nature and are subject to considerable risk and uncertainty. In addition to the contingencies noted in the preceding paragraph, several events may occur that could substantially alter the outcome of our estimates such as, but not limited to changes in the economy, interest rates, and capitalization rates, behavior of consumers, investors and lenders, fire and other physical destruction, changes in title or conveyances of easements and deed restrictions, etc. It is assumed that conditions reasonably foreseeable at the present time are consistent or similar with the future.

28. The appraisal is also subject to the following:

Extraordinary Assumptions and Hypothetical Conditions

The value conclusions are subject to the following extraordinary assumptions that may affect the assignment results. An extraordinary assumption is uncertain information accepted as fact. If the assumption is found to be false as of the effective date of the appraisal, we reserve the right to modify our value conclusions.

1. The cash flow analysis assumes that the annual rent will be established at the current market rent on a square foot basis and adjusted for inflation based on the CPI index.
 2. The estimated market values presented in this report do not reflect the cost to cure deferred maintenance or repairs to the bulkhead improvements.
-

Addendum A

Appraiser Qualifications

Gerard H. McDonough, MAI, FRICS

Experience

Senior Managing Director for Integra Realty Resources - Hartford/Providence. Specializes in advisory and valuation services for marine-oriented properties; recreational marinas, boat yards, and ship yards. Recent assignments have been completed in the following locations: ME, NH, MA, CO, CT, RI, NY, NJ, MD, VA, NC, SC, GA, FL, IL, KY, TN, AL, MS, TX, KS, IA, MO, OK, MI, ND, Mexico, Costa Rica, Panama, and the Caribbean.

Professional Activities & Affiliations

Past President, Rhode Island Chapter of the Appraisal Institute
Committee: Association of Marina Industries Legislative Committee
Committee: Association of Marina Industries Data and Statistics Committee of The Water Access Alliance

President: Marinevest www.marinevest.com

Member: National Marine Manufacturers Association (NMMA)

Member: Association of Marina Industries www.marinaassociation.org

Member: American Boat Builders & Repairers Association (ABBRA) www.abbra.org

Member: Rhode Island Marine Trade Association

Member: Connecticut Marine Trade Association

Member: Maryland Marine Trade Association

Member: National Association of Realtors

Member: Maine Marine Trades Association

Appraisal Institute, Member (MAI) Appraisal Institute, July 1987

Royal Institute of Chartered Surveyors, Fellow (FRICS)

Licenses

Connecticut, Certified General Appraiser, RCG771, Expires April 2018
Georgia, Certified General Appraiser, 260004, Expires August 2017
Maine, Certified General Appraiser, CG1040, Expires December 2017
Massachusetts, Certified General Appraiser, 361, Expires August 2017
New Hampshire, Certified General Appraiser, CG897, Expires August 2017
New York, Certified General Appraiser, 43666, Expires May 2018
Rhode Island, Certified General Appraiser, CGA.0A00127, Expires December 2017
Wyoming, Certified General Appraiser, AP-1405, Expires March 2019
Iowa, Certified General Appraiser, CG03436, Expires June 2017
Vermont, Certified General Appraiser, 080.0000228, Expires May 2018

Education

Bachelor of Science - Boston College - 1973

Articles and Publications

How to value your marina - Marina World - November/December 2007
Marina Valuation Overview - Appraisal Institute Webinar - 2013
US marinas set to become an asset class - Marina World September/October 2016

Qualified Before Courts & Administrative Bodies

Rhode Island Superior Court

Integra Realty Resources
Hartford/Providence

365 Eddy Street
Providence, RI 02903

T 401.273.7710
F 401.273.7410

irr.com

gmcdonough@irr.com - 401.273.7710 x15



Gerard H. McDonough, MAI, FRICS

Qualified Before Courts & Administrative Bodies (Cont'd)

Rhode Island Family Court
Connecticut Superior Court
Massachusetts Superior Court
United State District Court
United State Federal Bankruptcy Court

Integra Realty Resources
Hartford/Providence

365 Eddy Street
Providence, RI 02903

T 401.273.7710
F 401.273.7410

irr.com

gmcDonough@irr.com - 401.273.7710 x15



Fold, Then Detach Along All Perforations

**COMMONWEALTH OF MASSACHUSETTS
DIVISION OF PROFESSIONAL LICENSURE**

BOARD OF

REAL ESTATE APPRAISERS

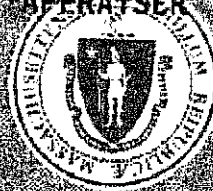
ISSUES THE FOLLOWING LICENSE AS A
CERT GEN. REAL ESTATE APPRAISER

GERARD H. McDONOUGH

77 BLUEBERRY LANE

JAMESTOWN

RI 02835-2901



LICENSE SIGNATURE

361	08/19/17	469128
LICENSE NUMBER	EXPIRATION DATE	SERIAL NUMBER

Integra Realty Resources, Inc.

Corporate Profile

Integra Realty Resources, Inc. offers the most comprehensive property valuation and counseling coverage in North America with 58 independently owned and operated offices located throughout the United States and the Caribbean. Integra was created for the purpose of combining the intimate knowledge of well-established local firms with the powerful resources and capabilities of a national company. Integra offers integrated technology, national data and information systems, as well as standardized valuation models and report formats for ease of client review and analysis. Integra's local offices have an average of 25 years of service in the local market, and virtually all are headed by a Senior Managing Director who is an MAI member of the Appraisal Institute.

A listing of IRR's local offices and their Senior Managing Directors follows:

ATLANTA, GA - Sherry L. Watkins, MAI, FRICS	MIAMI/PALM BEACH, FL - Anthony M. Graziano, MAI, CRE, FRICS
AUSTIN, TX - Randy A. Williams, MAI, SR/WA, FRICS	MINNEAPOLIS, MN - Michael F. Amundson, MAI, CCIM, FRICS
BALTIMORE, MD - G. Edward Kerr, MAI, MRICS	NAPLES, FL - Carlton J. Lloyd, MAI, FRICS
BIRMINGHAM, AL - Rusty Rich, MAI, MRICS	NASHVILLE, TN - R. Paul Perutelli, MAI, SRA, FRICS
BOISE, ID - Bradford T. Knipe, MAI, ARA, CCIM, CRE, FRICS	NEW JERSEY COASTAL - Halvor J. Egeland, MAI
BOSTON, MA - David L. Cary, Jr., MAI, MRICS	NEW JERSEY NORTHERN - Matthew S. Krauser, CRE, FRICS
CHARLESTON, SC - Cleveland "Bud" Wright, Jr., MAI	NEW YORK, NY - Raymond T. Cirz, MAI, CRE, FRICS
CHARLOTTE, NC - Fitzhugh L. Stout, MAI, CRE, FRICS	ORANGE COUNTY, CA - Steve Calandra, MAI
CHICAGO, IL - Eric L. Enloe, MAI, FRICS	ORLANDO, FL - Christopher Starkey, MAI, MRICS
CINCINNATI/DAYTON, OH - Gary S. Wright, MAI, FRICS, SRA	PHILADELPHIA, PA - Joseph D. Pasquarella, MAI, CRE, FRICS
CLEVELAND, OH - Douglas P. Sloan, MAI	PHOENIX, AZ - Walter 'Tres' Winus III, MAI, FRICS
COLUMBIA, SC - Michael B. Dodds, MAI, CCIM	PITTSBURGH, PA - Paul D. Griffith, MAI, CRE, FRICS
COLUMBUS, OH - Bruce A. Daubner, MAI, FRICS	PORTLAND, OR - Brian A. Glanville, MAI, CRE, FRICS
DALLAS, TX - Mark R. Lamb, MAI, CPA, FRICS	PROVIDENCE, RI - Gerard H. McDonough, MAI, FRICS
DENVER, CO - Brad A. Weiman, MAI, FRICS	RALEIGH, NC - Chris R. Morris, MAI, FRICS
DETROIT, MI - Anthony Sanna, MAI, CRE, FRICS	RICHMOND, VA - Kenneth L. Brown, MAI, CCIM, FRICS
FORT WORTH, TX - Gregory B. Cook, MAI, SR/WA	SACRAMENTO, CA - Scott Beebe, MAI, FRICS
GREENSBORO, NC - Nancy Tritt, MAI, SRA, FRICS	ST. LOUIS, MO - P. Ryan McDonald, MAI, FRICS
HARTFORD, CT - Mark F. Bates, MAI, CRE, FRICS	SALT LAKE CITY, UT - Darrin W. Liddell, MAI, FRICS, CCIM
HOUSTON, TX - David R. Dominy, MAI, CRE, FRICS	SAN DIEGO, CA - Jeff A. Greenwald, MAI, SRA, FRICS
INDIANAPOLIS, IN - Michael C. Lady, MAI, SRA, CCIM, FRICS	SAN FRANCISCO, CA - Jan Kleczewski, MAI, FRICS
JACKSON, MS - John R. Praytor, MAI	SARASOTA, FL - Carlton J. Lloyd, MAI, FRICS
JACKSONVILLE, FL - Robert Crenshaw, MAI, FRICS	SEATTLE, WA - Allen N. Safer, MAI, MRICS
KANSAS CITY, MO/KS - Kenneth Jagers, MAI, FRICS	SYRACUSE, NY - William J. Kimball, MAI, FRICS
LAS VEGAS, NV - Charles E. Jack IV, MAI	TAMPA, FL - Bradford L. Johnson, MAI, MRICS
LOS ANGELES, CA - John G. Ellis, MAI, CRE, FRICS	TULSA, OK - Owen S. Ard, MAI
LOS ANGELES, CA - Matthew J. Swanson, MAI	WASHINGTON, DC - Patrick C. Kerr, MAI, FRICS, SRA
LOUISVILLE, KY - Stacey Nicholas, MAI, MRICS	WILMINGTON, DE - Douglas L. Nickel, MAI, FRICS
MEMPHIS, TN - J. Walter Allen, MAI, FRICS	CARIBBEAN/CAYMAN ISLANDS - James Andrews, MAI, FRICS



Addendum B

Property Information



SUMMARY OF PROPERTY LEASE

xBilling Information:
M.A.E. Realty, LLC.
200 R. Herman Melville Boulevard
New Bedford MA 02740

22 Antonio Costa Avenue (Otherwise known as 200 R. Herman Melville Boulevard)

Assessors Link

Ground Lease: Sea-Lect Foods Ltd. Merged to Safe Harbor

Date of Lease Agreement: August 6, 1981

Lessor: Harbor Development Commission

Lessee: Sea-Lect Foods Ltd.

Term of Lease: 99 Years

Rent: First 20 Years \$15,515.00 yr/ \$1,293.00 mo. Next succeeding 5 Years \$15,515.00 yr / \$1,293.00 mo. Next succeeding 15 Years parties shall use best efforts to agree to annual rental applicable thereto at least 18 months prior to commencement of said term. In event parties cannot agree to rental, lessor and lessee shall use arbitrators pursuant to arbitration clause. Next succeeding 20 Years parties shall use best efforts to agree to annual rental applicable thereto at least 18 months prior to commencement of said term. In event parties cannot agree to rental, the same procedure set out in arbitration clause except that in no event shall the rental for said term exceed \$23,272.50 for first 10 years of said 20 year term. Next succeeding 20 year and 19 year rental periods, the rental shall be determined in same manner as set forth in arbitration clause except that the arbitrators shall not be limited to the maximum of \$23,272.50/ yr.

Status: Assignment to Frionor U.S.A., Inc.

Assignment: Safe Harbor to Frionor U.S.A., Inc.

Date of Assignment: December 29, 1989

Assignor: Sea-Lect Foods Ltd.

Lessee: Frionor U.S.A., Inc.

Term of Assignment: Remainder of 99 Years

Rent: \$15,515.00 yr/ \$1,293.00 mo.

Status: Assignment and Assumption to Harvey B. Mickelson and Jay L. Horowitz, Trustees of the Two Tower Real Estate Trust

Assignment and Assumption: Frionor U.S.A., Inc. to Harvey B. Mickelson and Jay L. Horowitz, Trustees of the Two Tower Real Estate Trust

Date of Assignment: May 16, 1991

Assignor: Frionor U.S.A., Inc.

Assignee: Harvey B. Mickelson and Jay L. Horowitz, Trustees of the Two Tower Real Estate Trust

Term of Assignment: Remainder of 99 Years

Rent: \$15,515.00 yr/ \$1,293.00 mo.

Status: Assignment and Assumption to ACF Acquisition Corp. (Otherwise known as Atlantic Coast Fisheries Corporation)



Assignment and Assumption: Harvey B. Mickelson and Jay L. Horowitz, Trustees of the Two Tower Real Estate Trust to ACF Acquisition Corp. (Otherwise known as Atlantic Coast Fisheries Corporation)

Date of Assignment: March 18, 1998

Assignor: Harvey B. Mickelson and Jay L. Horowitz, Trustees of the Two Tower Real Estate Trust

Lessee: ACF Acquisition Corp. (Now Atlantic Coast Fisheries Corporation)

Term of Assignment: Remainder of 99 Years

Rent: \$15,515.00 yr/ \$1,293.00 mo.

Status: Assignment and Assumption to M.A.E. Realty, LLC.

Assignment and Assumption: ACF Acquisition Corp. (Otherwise known as Atlantic Coast Fisheries Corporation) to M.A.E. Realty, LLC.

Date of Assignment: June 22, 2005

Assignor: ACF Acquisition Corp.

Assignee: M.A.E. Realty, LLC.

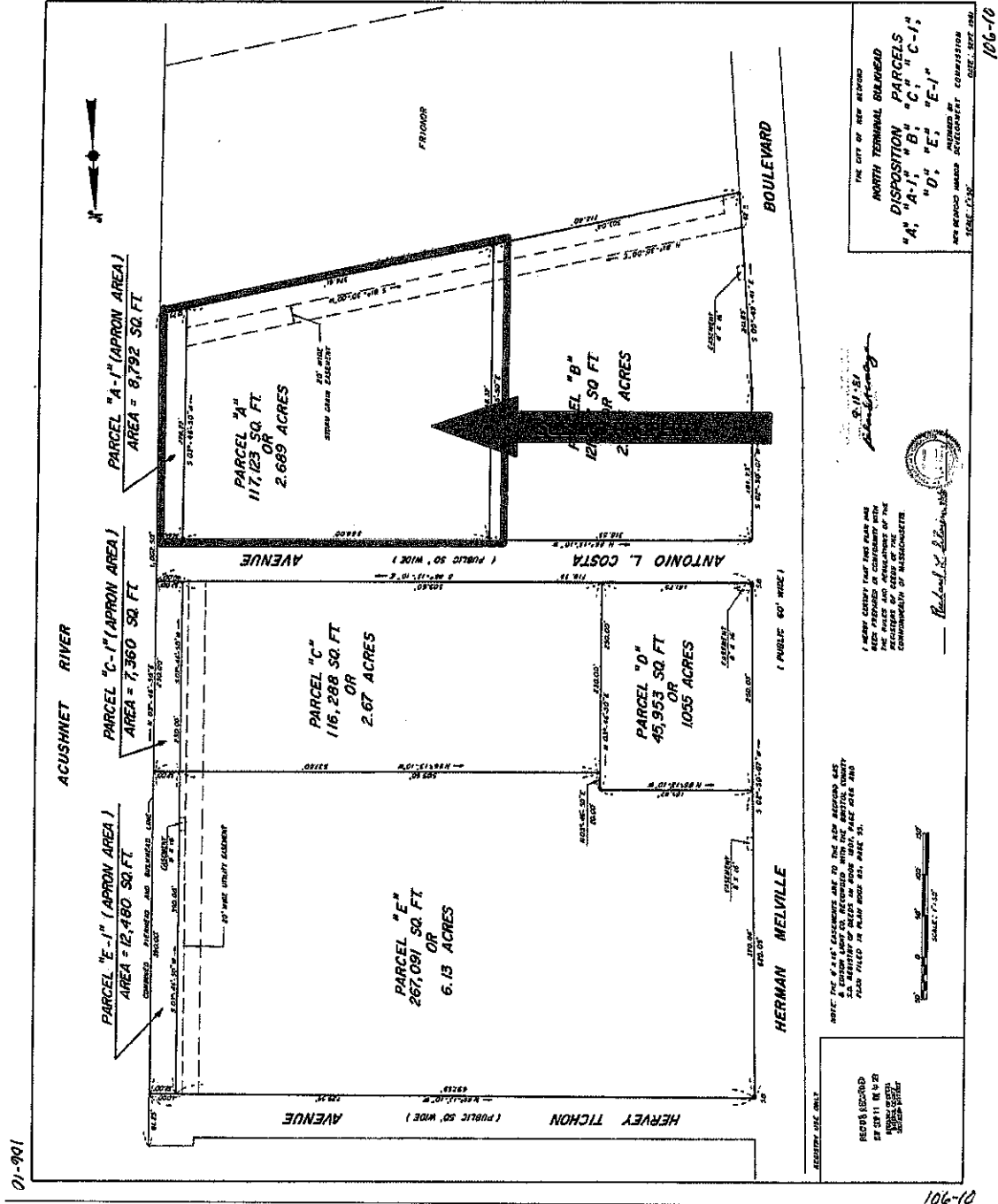
Term of Assignment: Remainder of 99 Years

Rent: \$23,272.56 yr / \$1,939.38 mo.

Status: Currently M.A.E. Realty, LLC.

RECORDED PLAN OF LAND

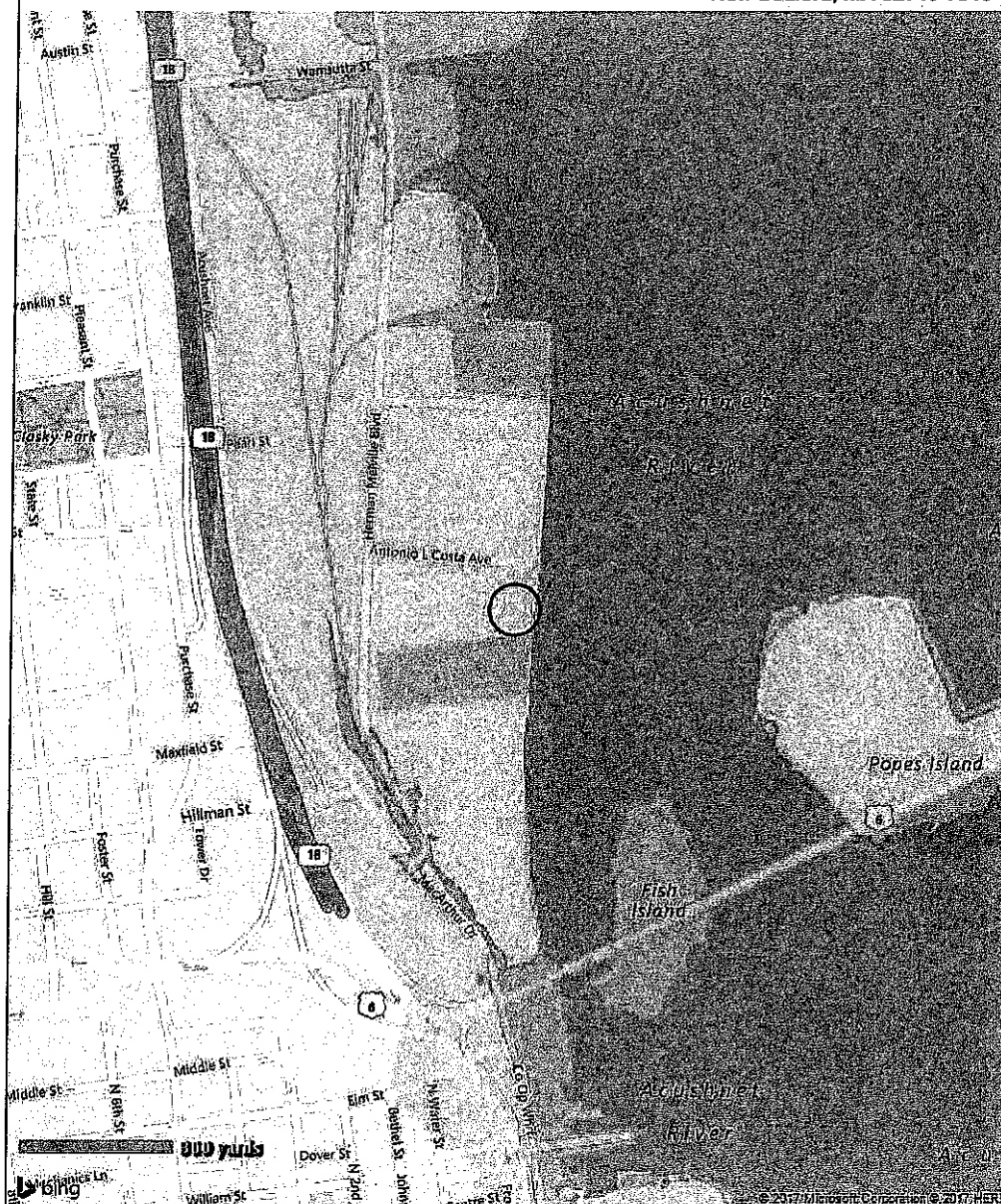
01-901



FLOOD MAP

InterFlood by a la mode

Prepared for: Integra Realty Resources
22 Antonio Costa Ave
New Bedford, MA 02740-7346



MAP DATA

FEMA Special Flood Hazard Area: No
Map Number: 25005C0393G
Zone: X500
Map Date: July 16, 2014
FIPS: 25005

MAP LEGEND

- | | |
|--------------------------------------|-----------------|
| Areas inundated by 500-year flooding | Protected Areas |
| Areas inundated by 100-year flooding | Floodway |
| Velocity Hazard | Subject Area |

Powered by CoreLogic®



NBPA VOTE

Vote: To advise the City Council property committee that the New Bedford Port Authority no longer has a need for the real estate located at 14 Hervey Tichon Avenue, New Bedford, MA and 22 Antonio Costa Blvd. New Bedford, MA which are subject to real estate leases. As such the same can be declared surplus property. In addition, should the real estate be sold, the New Bedford Port Authority anticipates that a portion of the proceeds would be used to retire debt owed by the NBPA to the City of New Bedford.

Davis Jall

Sec. NBPA 4/3/18



CITY OF NEW BEDFORD

CITY COUNCIL

April 12, 2018

31

Ordered, that, pursuant to M.G.L. Ch. 40, Sec. 15A, the real property located in New Bedford, Massachusetts and being shown on New Bedford Assessor's Map 66, Lots 128 and 136 be declared surplus property, no longer needed for the municipal purposes for which the property was acquired or for any other municipal purpose, and further, be hereby placed under the custody and control of the Committee on City Property for the purpose of sale.

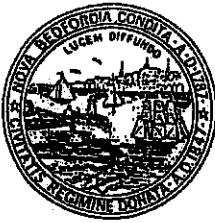
IN CITY COUNCIL, April 12, 2018

Referred to the Committee on City Property.

Dennis W. Farias, City Clerk

a true copy, attest:

City Clerk



CITY OF NEW BEDFORD

CITY COUNCIL

April 12, 2018

31

Ordered, that, pursuant to M.G.L. Ch. 40, Sec. 3, the real property located in New Bedford, Massachusetts and being shown on New Bedford Assessor's Map 66, Lots 128 and 136 be sold to Nordic Fisheries, Inc. in accordance with Massachusetts General Laws Chapter 30B and New Bedford Code of Ordinances Section 2-65, et. seq. and the terms of a purchase and sale agreement and deed to be drafted by the City Solicitor and executed by the Mayor.

IN CITY COUNCIL, April 12, 2018

Referred to the Committee on City Property.

Dennis W. Farias, City Clerk

a true copy, attest:

City Clerk



Item Title:

RFP / South Public Safety Center

Item Detail:

4. City of New Bedford's Request for Proposals for the Purchase of Real Property, (Ref'd 2/8/18) (3/26/18-tabled) (5/14/18-rft and rpf)

Additional Information:



Item Title:

PROPOSAL - Bolton & Orchard St

Item Detail:

5. PROPOSAL – John E. Williams, Manager, Clark’s Cove Development Co., LLC, submitting a proposal for parcels of land the ES Bolton Street and WS Orchard Street – Map 19, Lot 1 and Map 23, Lots 295, 158 and 294. (Ref’d 2/8/18) (3/26/18-tabled) (5/14/18-rft and rpf)

Additional Information:



Item Title:

COMMUNICATION / John E. Williams / Goodyear Site

Item Detail:

6. COMMUNICATION/EMAIL, Council President Morad, submitting copy of a letter received from John E. Williams, from the law firm of Sullivan, Williams and Quintin, relative to Clarks' Cove Development, owners of the Goodyear site, in response to the City of New Bedford's Request for Proposal (RFP) for a proposed New Public Safety Building. (Ref'd 3/8/18) (5/14/18- rpf)

Additional Information:



Item Title:
Accessibility Statement

Item Detail:

In accordance with the Americans with Disabilities Act (ADA), if any accommodations are needed, please contact the Clerk of Committees Office at 508-979-1482. Requests should be made as soon as possible but at least 48 hours prior to the scheduled meeting.

Additional Information: