
30-DAY PUBLIC NOTICE



**US Army Corps
of Engineers**®
New England District
696 Virginia Road
Concord, MA 01742-2751

Comment Period Begins: June 8, 2010
Comment Period Ends: July 8, 2010
File Number: NAE-2010-0049
In Reply Refer To: Michael Riccio
Phone: (978) 318-8685
E-mail: Michael.S.Riccio@usace.army.mil

The District Engineer has received a permit application from the applicant below to **conduct work in waters of the United States** as described below.

APPLICANT Rhode Island Recycled Metals

ACTIVITY

The applicant proposes to install a new steel bulkhead along the property's waterfront, conduct improvement dredging waterward of the new bulkhead, and install dolphin pile clusters.

WATERWAY AND LOCATION OF THE PROPOSED WORK

This work is proposed in the Providence River at 434 & 444 Allens Avenue, Providence, Rhode Island. The proposed location on the USGS Providence quadrangle sheet is at UTM coordinates 41° 45' 00" N 71° 22' 30" W.

AUTHORITY

Permits are required pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899
- Section 404 of the Clean Water Act
- Section 103 of the Marine Protection, Research and Sanctuaries Act).

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are

also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The dredging portion of this project will impact approximately 213,000 SF of Essential Fish Habitat (EFH) for the species listed on the attached EFH table. The proposed dredging and installation of piles may adversely affect these species due to potential loss of habitat. However the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

SECTION 106 COORDINATION

Based on his initial review, the District Engineer has determined that the proposed work may impact properties listed in, or eligible for listing in, the National Register of Historic Places. Additional review and consultation to fulfil requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

ENDANGERED SPECIES CONSULTATION

The New England District, Army Corps of Engineers has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the project site. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect any Federally listed endangered or threatened species or their designated critical habitat. By this Public Notice, we are requesting that the appropriate Federal Agency concur with our determination.

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved **Coastal Zone Management Programs**. Where applicable the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- (X) Permit, License or Assent from State.
- () Permit from Local Wetland Agency or Conservation Commission.
- (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by the above date.** If you have any questions, please contact Mike Riccio at (978) 318-8685, or (800) 343-4789.

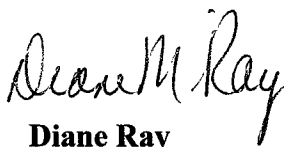
CENAE-R
FILE NO. NAE-2010-0049

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

In accordance with 33 CFR 325.2(a)(8), we publish monthly a list of permits issued or denied during the previous month at www.nae.usace.army.mil/reg, under the heading "Monthly General and Individual Permit Authorizations." Relevant environmental documents and the SOFs or RODs are available upon written request and, where applicable, upon the payment of administrative fees. Also visit www.nae.usace.army.mil for more information on the New England District Corps of Engineers programs.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.



Diane Ray
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here () and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____

PROPOSED WORK AND PURPOSE

The work includes the construction of 355 linear feet of new steel bulkhead, the removal of approximately 4,000 square feet of rip rap, the dredging of 48,000 cubic yards of material from an area of approximately 213,000 square feet, and the installation of three (3) dolphin pile clusters.

The applicant wishes to develop this vacant lot into a scrap metal transfer facility. This operation will require the installation of a new steel bulkhead along the property shoreline, improvement dredging to create deep-water access and berthing, and the installation of dolphin pile clusters. The property is located at 434 & 444 Allens Avenue, Providence, Rhode Island on the shore of Providence Harbor near the mouth of the Thurbers Avenue Creek. The property has historically been used for industrial purposes, but has remained largely undeveloped for many years. The inactivity of the property is evident as the site is comprised of derelict bulkheads, pier, and ripraps stabilization along the shoreline.

The work is described on the enclosed plans entitled “ACR Realty, LLC Rhode Island Recycled Metals 434 & 444 Allens Ave Providence, Rhode Island” on 14 sheets dated “February 10, 2010.”

MITIGATION

The shoreline at the project site is stabilized with rip rap and therefore has no tidal vegetation in the immediate project footprint. There is however, tidal vegetation in close proximity to the project area. These tidal wetland areas were located and identified, and the project was then specifically designed to avoid impacts to them. Therefore mitigation is not expected to be required.

Summary of Essential Fish Habitat (EFH) Designations

Name of Estuary/ Bay/ River: Narragansett Bay, Rhode Island

10' x 10' latitude and longitude squares included in this bay or estuary or river (southeast corner boundaries):

4140 7100; 4140/7110; 4140/7120; 4130/7110; 4130/7120; 4120/7110; 4120/7120

Species	Eggs	Larvae	Juveniles	Adults	Spawning Adults
Atlantic salmon (<i>Salmo salar</i>)					
Atlantic cod (<i>Gadus morhua</i>)					
haddock (<i>Melanogrammus aeglefinus</i>)		S			
pollock (<i>Pollachius virens</i>)					
whiting (<i>Merluccius bilinearis</i>)					
offshore hake (<i>Merluccius albidus</i>)					
red hake (<i>Urophycis chuss</i>)		S	S	S	S
white hake (<i>Urophycis tenuis</i>)					
redfish (<i>Sebastes fasciatus</i>)	n/a				
witch flounder (<i>Glyptocephalus cynoglossus</i>)					
winter flounder (<i>Pleuronectes americanus</i>)	M,S	M,S	M,S	M,S	M,S
yellowtail flounder (<i>Pleuronectes ferruginea</i>)					
windowpane flounder (<i>Scopthalmus aquosus</i>)	M,S	M,S	M,S	M,S	M,S
American plaice (<i>Hippoglossoides platessoides</i>)		S	M,S	M,S	
ocean pout (<i>Macrozoarces americanus</i>)					
Atlantic halibut (<i>Hippoglossus hippoglossus</i>)					
Atlantic sea scallop (<i>Placopecten magellanicus</i>)					
Atlantic sea herring (<i>Clupea harengus</i>)		S	M,S	M,S	

monkfish (<i>Lophius americanus</i>)					
bluefish (<i>Pomatomus saltatrix</i>)			M,S	M,S	
long finned squid (<i>Loligo pealei</i>)	n/a	n/a			
short finned squid (<i>Illex illecebrosus</i>)	n/a	n/a			
Atlantic butterfish (<i>Peprilus triacanthus</i>)					
Atlantic mackerel (<i>Scomber scombrus</i>)	S	S	S	S	
summer flounder (<i>Paralichthys dentatus</i>)		F,M,S	M,S	S	
scup (<i>Stenotomus chrysops</i>)	S	S	M,S	M,S	
black sea bass (<i>Centropristus striata</i>)			S	S	
surf clam (<i>Spisula solidissima</i>)	n/a	n/a			
ocean quahog (<i>Artica islandica</i>)	n/a	n/a			
spiny dogfish (<i>Squalus acanthias</i>)	n/a	n/a			
tilefish (<i>Lopholatilus chamaeleonticeps</i>)					
king mackerel (<i>Scomberomorus cavalla</i>)	X	X	X	X	
Spanish mackerel (<i>Scomberomorus maculatus</i>)	X	X	X	X	
cobia (<i>Rachycentron canadum</i>)	X	X	X	X	



NICOLANGELO CUOCO

No.  8337

REGISTERED
PROFESSIONAL ENGINEER
CIVIL

NOTE: MAP TAKEN FROM 7.5 MINUTE USGS TOPOGRAPHIC MAPS OF THE PROVIDENCE, RHODE ISLAND QUADRANGLE, 1960 (PHOTOINSPECTED 1976, PHOTOREVISED 1984).

Coastline Consulting & Development
5-B Old Post Road, Madison CT 06443
(203) 245-8138

FIGURE 1 OF 14
SITE LOCATION MAP

ACR REALTY, LLC
RHODE ISLAND RECYCLED METALS
434 & 444 ALLENS AVE
PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010

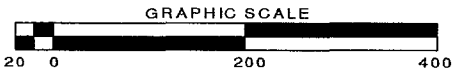
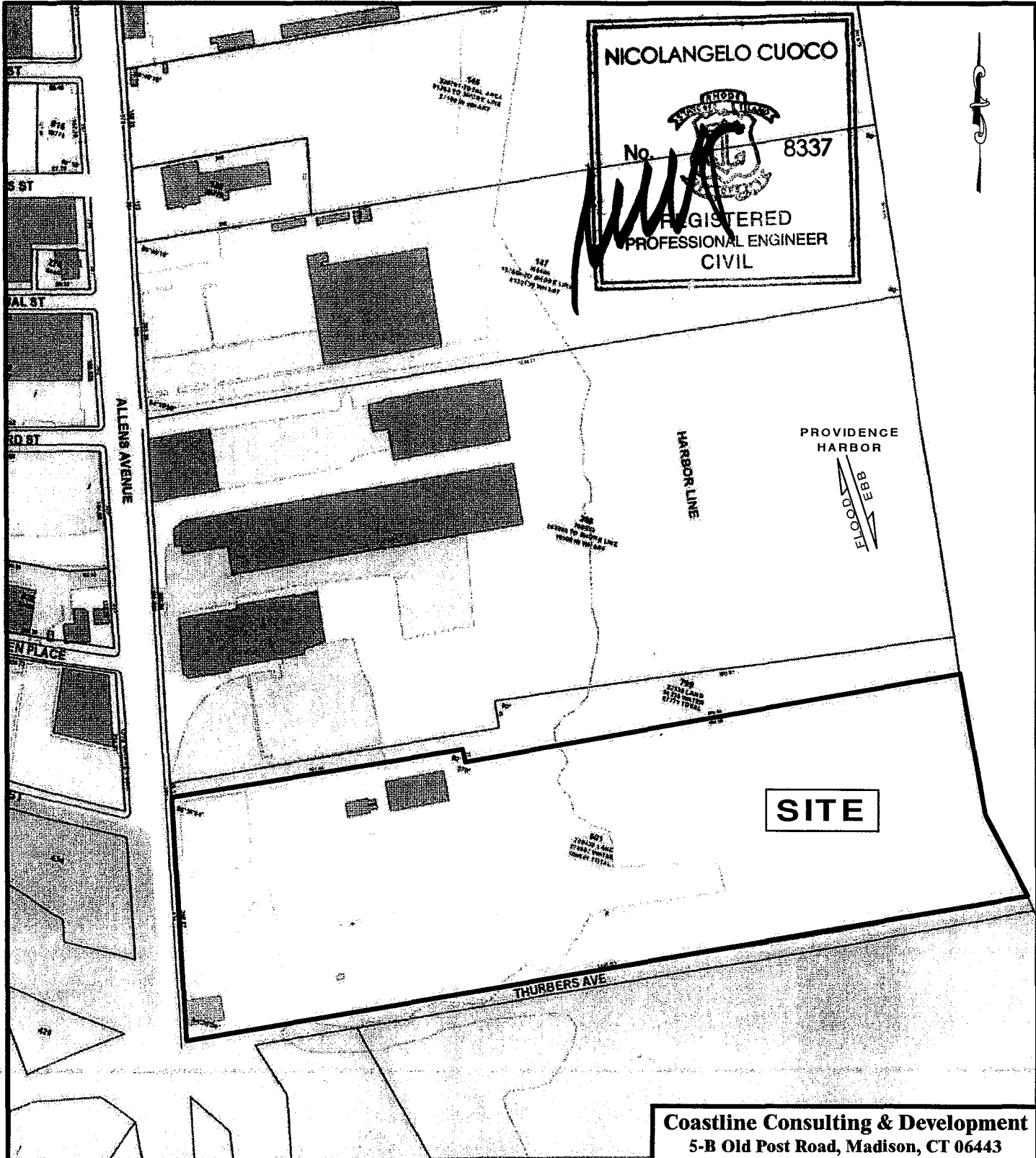
SCALE: 1 = 12,000

NICOLANGELO CUOCO



No. *NICOLANGELO* 8337

**REGISTERED
PROFESSIONAL ENGINEER
CIVIL**



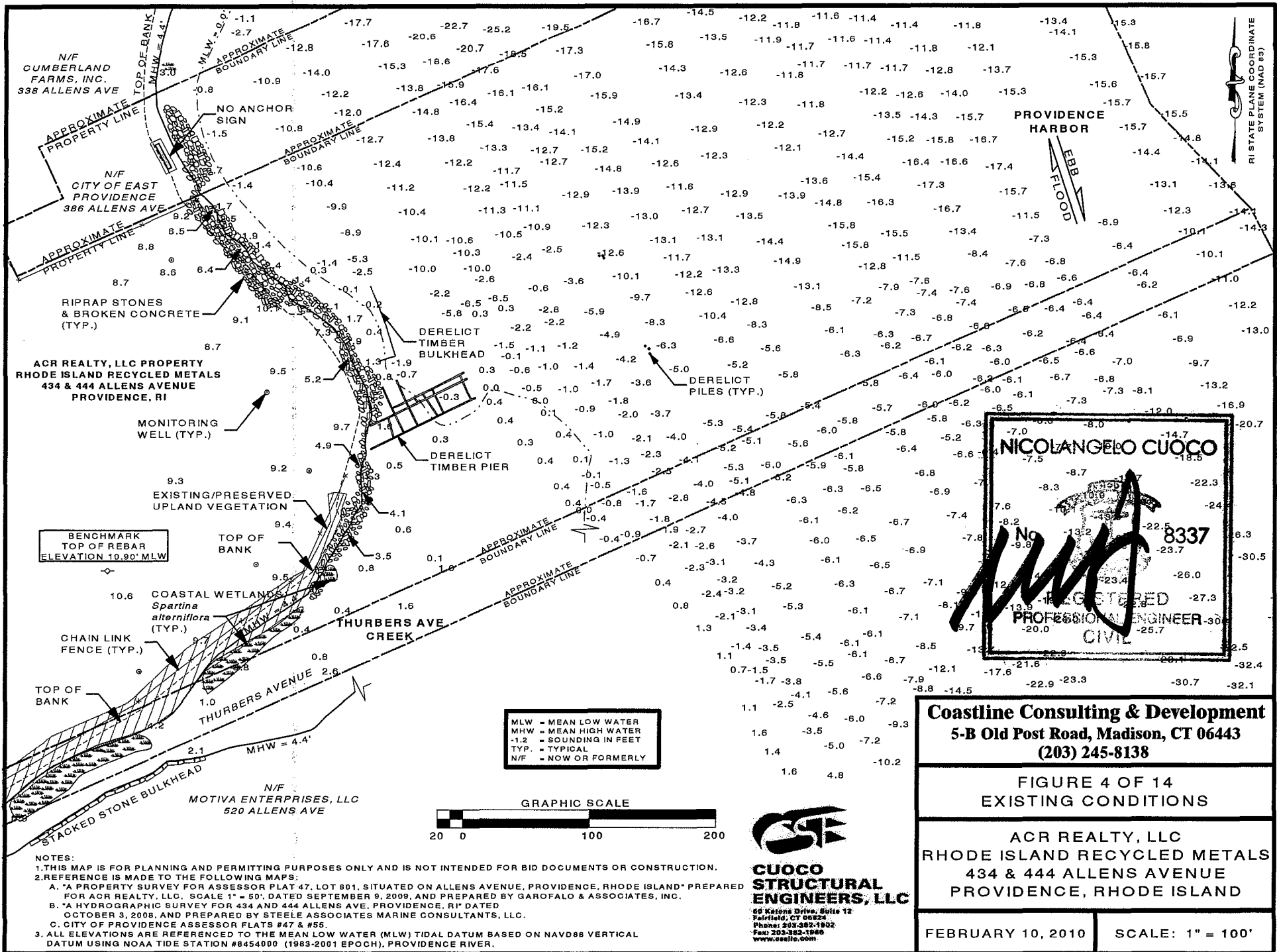
NOTES:
 1. THIS MAP IS FOR PLANNING AND PERMITTING PURPOSES ONLY AND IS NOT INTENDED FOR BID DOCUMENTS OR CONSTRUCTION.
 2. REFERENCE IS MADE TO CITY OF PROVIDENCE ASSESSOR PLAT #47.

Coastline Consulting & Development
 5-B Old Post Road, Madison, CT 06443
 (203) 245-8138

FIGURE 2 OF 14
 SITE PLAN VIEW

ACR REALTY, LLC
 RHODE ISLAND RECYCLED METALS
 434 & 444 ALLENS AVENUE
 PROVIDENCE, RHODE ISLAND

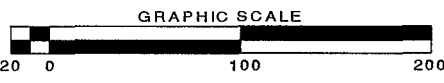
FEBRUARY 10, 2010 SCALE: 1" = 200'



RI STATE PLANE COORDINATE SYSTEM (NAD 83)

NICOLANGELO CUOCO
 No. 8337
 REGISTERED
 PROFESSIONAL ENGINEER
 CIVIL

MLW = MEAN LOW WATER
 MHW = MEAN HIGH WATER
 -1.2 = SOUNDING IN FEET
 TYP. = TYPICAL
 N/F = NOW OR FORMERLY



CUOCO STRUCTURAL ENGINEERS, LLC
 60 Katona Drive, Suite 12
 Fairfield, CT 06424
 Phone: 203-352-1902
 Fax: 203-352-1906
 www.cuoco.com

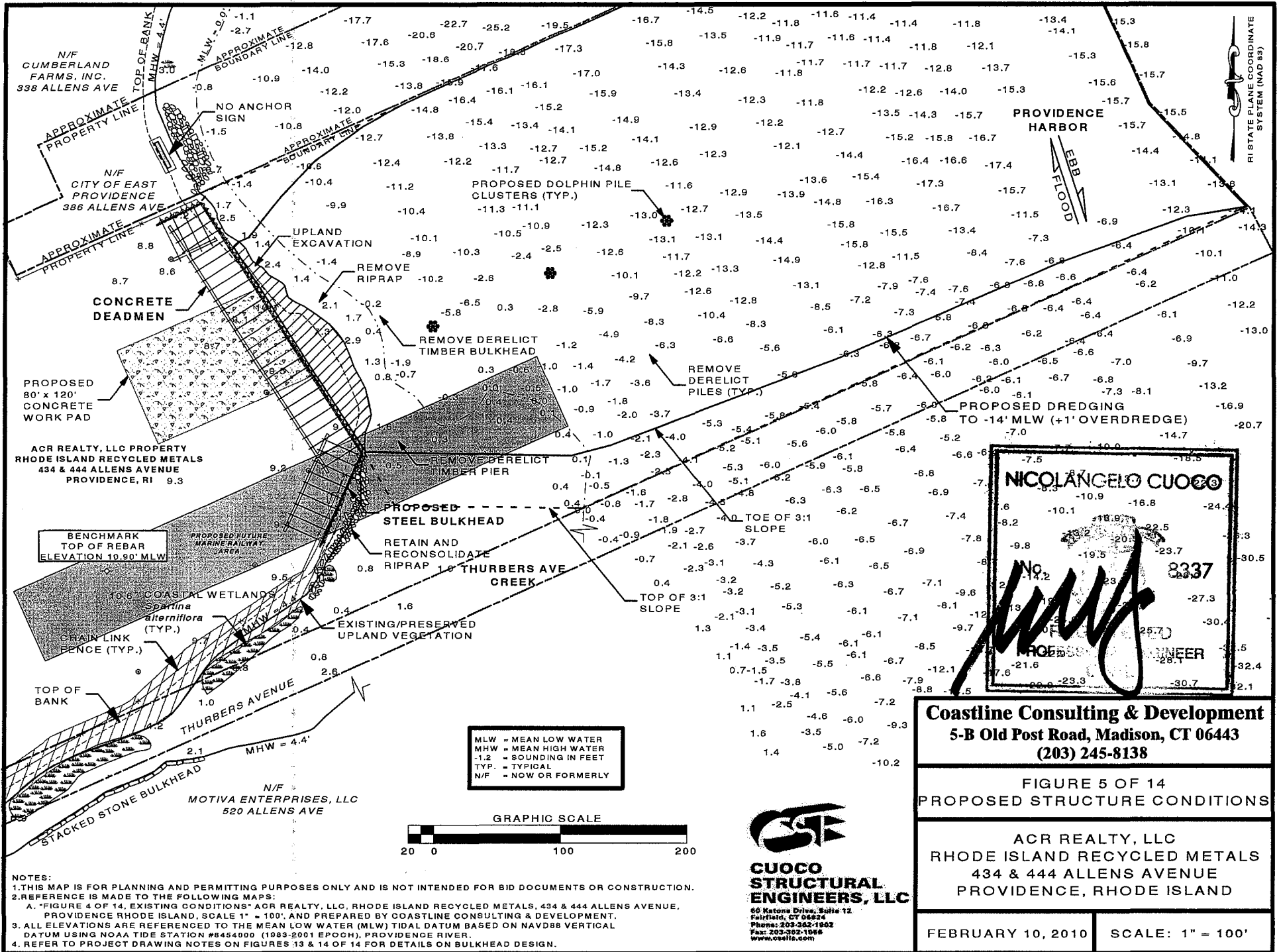
Coastline Consulting & Development
 5-B Old Post Road, Madison, CT 06443
 (203) 245-8138

FIGURE 4 OF 14
 EXISTING CONDITIONS

ACR REALTY, LLC
 RHODE ISLAND RECYCLED METALS
 434 & 444 ALLENS AVENUE
 PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010 SCALE: 1" = 100'

- NOTES:
 1. THIS MAP IS FOR PLANNING AND PERMITTING PURPOSES ONLY AND IS NOT INTENDED FOR BID DOCUMENTS OR CONSTRUCTION.
 2. REFERENCE IS MADE TO THE FOLLOWING MAPS:
 A. "A PROPERTY SURVEY FOR ASSESSOR PLAT #47, LOT #801, SITUATED ON ALLENS AVENUE, PROVIDENCE, RHODE ISLAND" PREPARED FOR ACR REALTY, LLC, SCALE 1" = 50', DATED SEPTEMBER 9, 2009, AND PREPARED BY GAROFALO & ASSOCIATES, INC.
 B. "A HYDROGRAPHIC SURVEY FOR 434 AND 444 ALLENS AVE, PROVIDENCE, RI" DATED OCTOBER 3, 2008, AND PREPARED BY STEELE ASSOCIATES MARINE CONSULTANTS, LLC.
 C. CITY OF PROVIDENCE ASSESSOR FLATS #47 & #55.
 3. ALL ELEVATIONS ARE REFERENCED TO THE MEAN LOW WATER (MLW) TIDAL DATUM BASED ON NAVD88 VERTICAL DATUM USING NOAA TIDE STATION #8454000 (1983-2001 EPOCH), PROVIDENCE RIVER.



MLW = MEAN LOW WATER
 MHW = MEAN HIGH WATER
 -1.2 = SOUNDING IN FEET
 TYP. = TYPICAL
 N/F = NOW OR FORMERLY



- NOTES:
1. THIS MAP IS FOR PLANNING AND PERMITTING PURPOSES ONLY AND IS NOT INTENDED FOR BID DOCUMENTS OR CONSTRUCTION.
 2. REFERENCE IS MADE TO THE FOLLOWING MAPS:
 - A. "FIGURE 4 OF 14, EXISTING CONDITIONS" ACR REALTY, LLC, RHODE ISLAND RECYCLED METALS, 434 & 444 ALLENS AVENUE, PROVIDENCE RHODE ISLAND, SCALE 1" = 100', AND PREPARED BY COASTLINE CONSULTING & DEVELOPMENT.
 3. ALL ELEVATIONS ARE REFERENCED TO THE MEAN LOW WATER (MLW) TIDAL DATUM BASED ON NAVD88 VERTICAL DATUM USING NOAA TIDE STATION #8454000 (1983-2001 EPOCH), PROVIDENCE RIVER.
 4. REFER TO PROJECT DRAWING NOTES ON FIGURES 13 & 14 OF 14 FOR DETAILS ON BULKHEAD DESIGN.

CUOCO STRUCTURAL ENGINEERS, LLC
 60 Katona Drive, Suite 12
 Fairfield, CT 06424
 Phone: 203-362-1902
 Fax: 203-362-1906
 www.cuoco.com

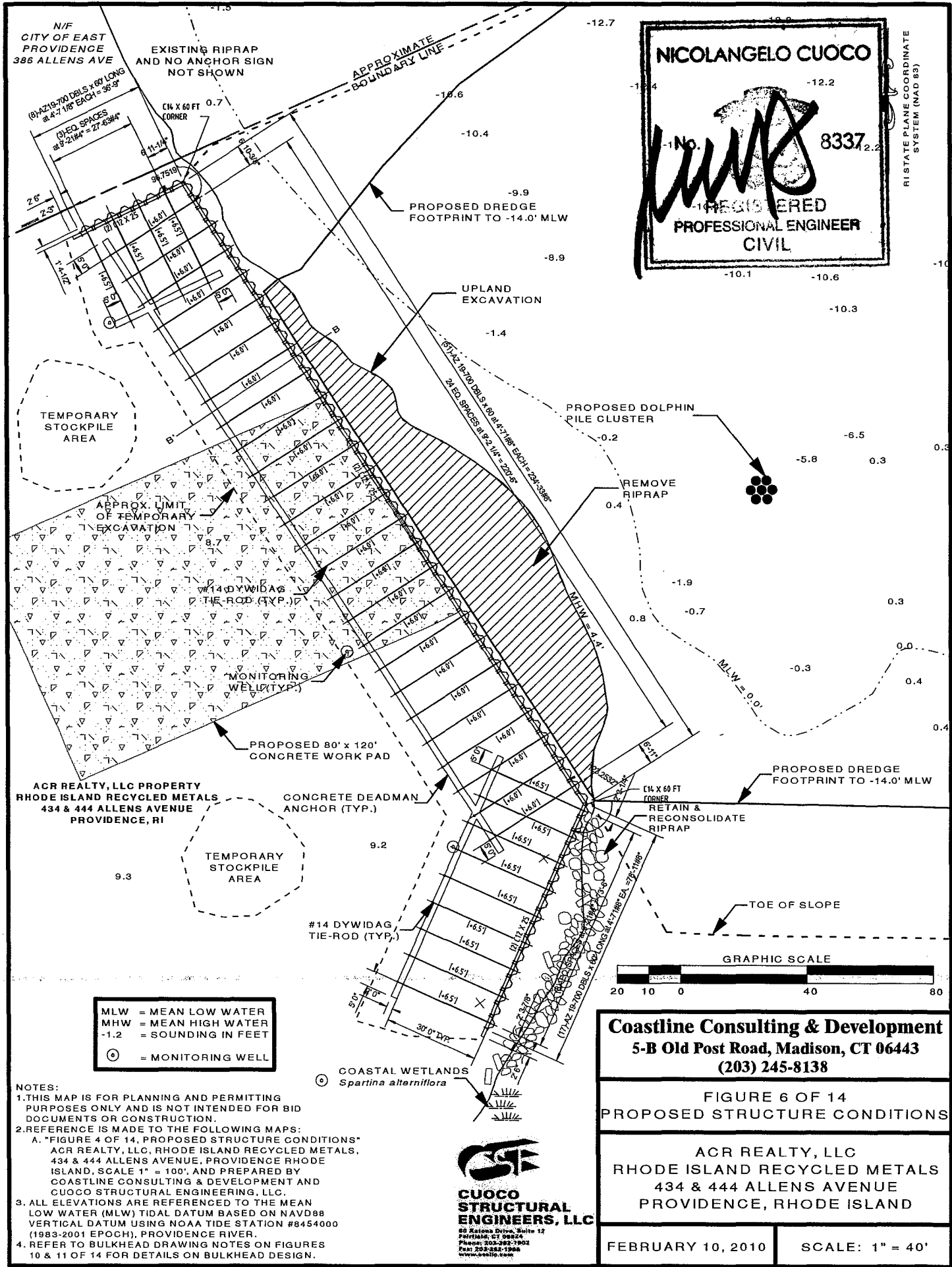
NICOLANGELO CUOCO
 No. 8337
 REGISTERED PROFESSIONAL ENGINEER

Coastline Consulting & Development
 5-B Old Post Road, Madison, CT 06443
 (203) 245-8138

FIGURE 5 OF 14
 PROPOSED STRUCTURE CONDITIONS

ACR REALTY, LLC
 RHODE ISLAND RECYCLED METALS
 434 & 444 ALLENS AVENUE
 PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010 SCALE: 1" = 100'



NICOLANGELO CUOCO

No. **8337**

REGISTERED
PROFESSIONAL ENGINEER
CIVIL

RI STATE PLANE COORDINATE SYSTEM (NAD 83)

MLW = MEAN LOW WATER
MHW = MEAN HIGH WATER
-1.2 = SOUNDING IN FEET

⊙ = MONITORING WELL

- NOTES:**
- THIS MAP IS FOR PLANNING AND PERMITTING PURPOSES ONLY AND IS NOT INTENDED FOR BID DOCUMENTS OR CONSTRUCTION.
 - REFERENCE IS MADE TO THE FOLLOWING MAPS:
 - FIGURE 4 OF 14, PROPOSED STRUCTURE CONDITIONS" ACR REALTY, LLC, RHODE ISLAND RECYCLED METALS, 434 & 444 ALLENS AVENUE, PROVIDENCE RHODE ISLAND, SCALE 1" = 100', AND PREPARED BY COASTLINE CONSULTING & DEVELOPMENT AND CUOCO STRUCTURAL ENGINEERING, LLC.
 - ALL ELEVATIONS ARE REFERENCED TO THE MEAN LOW WATER (MLW) TIDAL DATUM BASED ON NAVD88 VERTICAL DATUM USING NOAA TIDE STATION #8454000 (1983-2001 EPOCH), PROVIDENCE RIVER.
 - REFER TO BULKHEAD DRAWING NOTES ON FIGURES 10 & 11 OF 14 FOR DETAILS ON BULKHEAD DESIGN.

CUOCO STRUCTURAL ENGINEERS, LLC

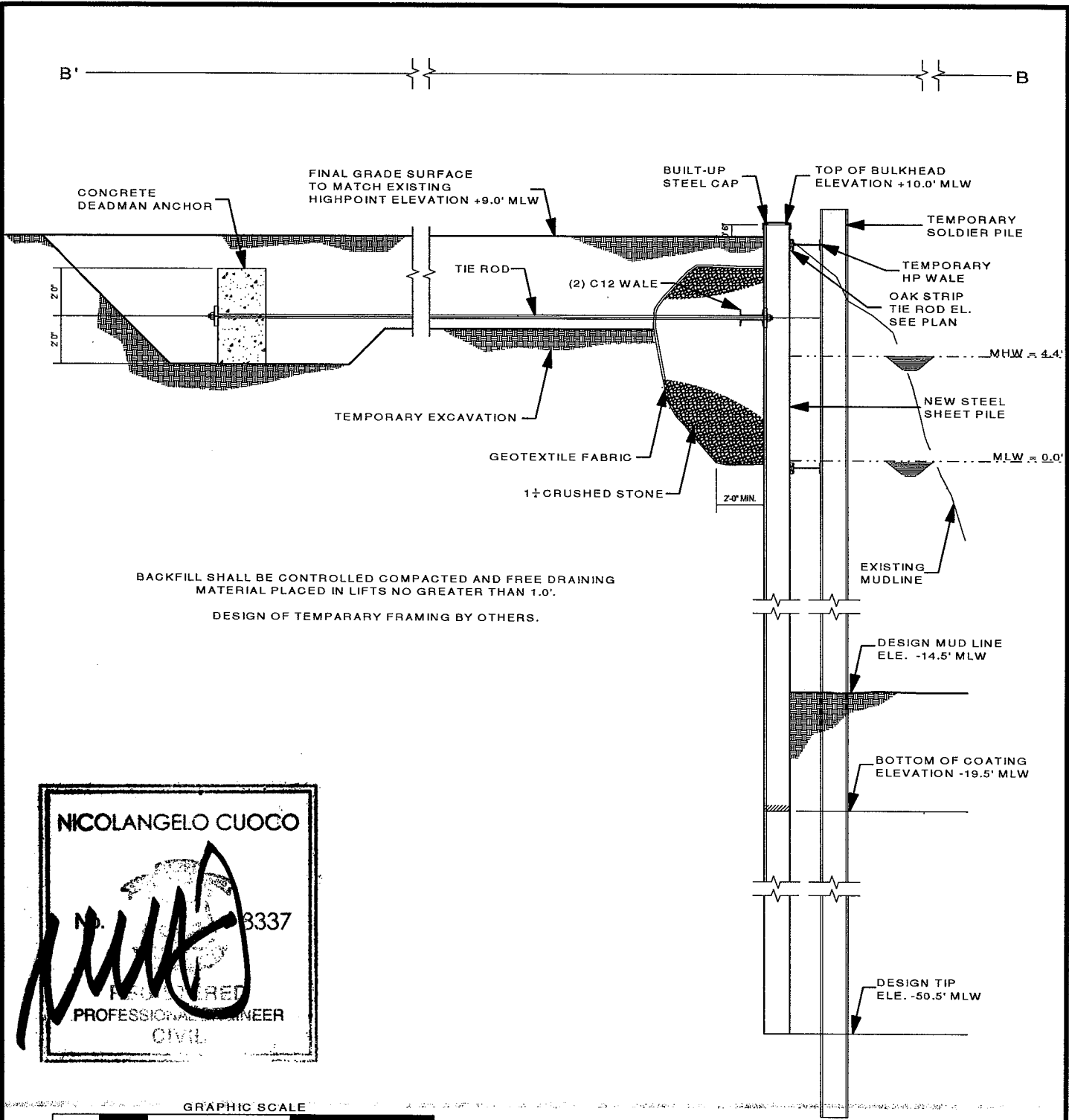
80 Katana Drive, Suite 12
Pawtucket, RI 02862
Phone: 402-382-7902
Fax: 402-382-1998
www.cuoco.com

Coastline Consulting & Development
5-B Old Post Road, Madison, CT 06443
(203) 245-8138

FIGURE 6 OF 14
PROPOSED STRUCTURE CONDITIONS

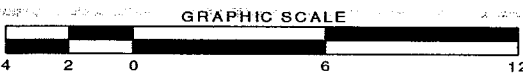
ACR REALTY, LLC
RHODE ISLAND RECYCLED METALS
434 & 444 ALLENS AVENUE
PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010 SCALE: 1" = 40'



BACKFILL SHALL BE CONTROLLED COMPACTED AND FREE DRAINING MATERIAL PLACED IN LIFTS NO GREATER THAN 1.0'.
 DESIGN OF TEMPARY FRAMING BY OTHERS.

NICOLANGELO CUOCO
 No. 3337
 REGISTERED
 PROFESSIONAL ENGINEER
 CIVIL



- NOTES:
1. THIS APPLICATION DRAWING IS FOR PLANNING AND PERMITTING PURPOSES ONLY AND IS NOT INTENDED FOR BID DOCUMENTS OR CONSTRUCTION.
 2. REFERENCE IS MADE TO THE FOLLOWING MAPS:
 - A. "FIGURE 6 OF 14, PROPOSED STRUCTURE CONDITIONS" ACR REALTY, LLC, RHODE ISLAND RECYCLED METALS, 434 & 444 ALLENS AVENUE, PROVIDENCE RHODE ISLAND, SCALE 1" = 40', AND PREPARED BY COASTLINE CONSULTING & DEVELOPMENT AND CUOCO STRUCTURAL ENGINEERING, LLC.
 3. ALL ELEVATIONS ARE REFERENCED TO THE MEAN LOW WATER (MLW) TIDAL DATUM BASED ON NAVD88 VERTICAL DATUM USING NOAA TIDE STATION #8454000 (1983-2001 EPOCH), PROVIDENCE RIVER.
 4. REFER TO BULKHEAD DRAWING NOTES ON FIGURES 10 & 11 OF 14 FOR DETAILS ON BULKHEAD DESIGN.

CUOCO STRUCTURAL ENGINEERS, LLC
 90 Katona Drive, Suite 12
 Fairfield, CT 06424
 Phone: 203-352-1902
 Fax: 203-352-1966
 www.caallic.com

Coastline Consulting & Development
 5-B Old Post Road, Madison, CT 06443
 (203) 245-8138

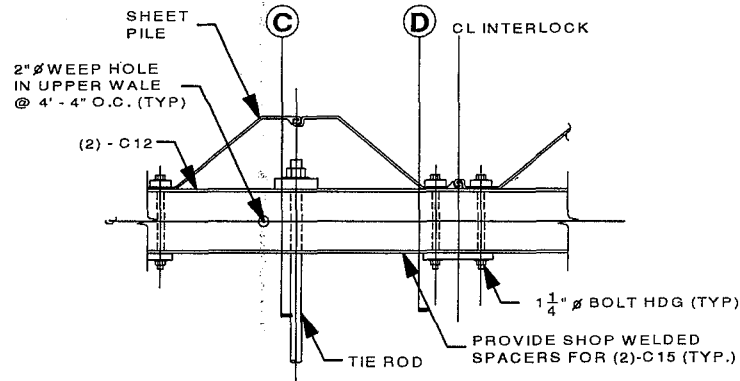
FIGURE 7 OF 14
 PROPOSED BULKHEAD
 CROSS-SECTION DETAIL 1

ACR REALTY, LLC
 RHODE ISLAND RECYCLED METALS
 434 & 444 ALLENS AVENUE
 PROVIDENCE, RHODE ISLAND

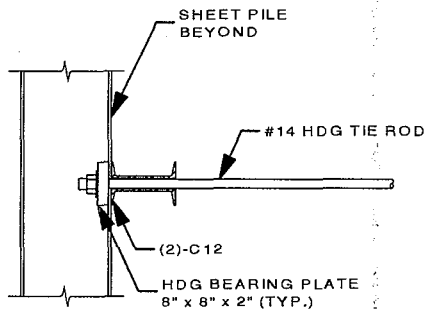
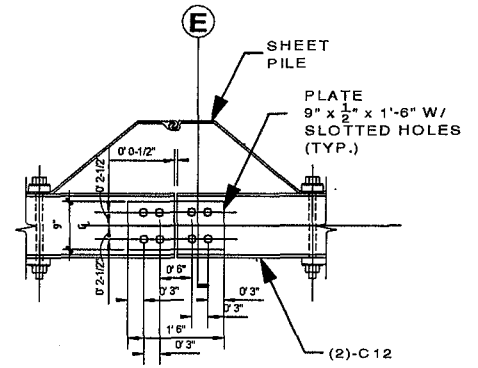
FEBRUARY 10, 2010

SCALE: 1" = 6'

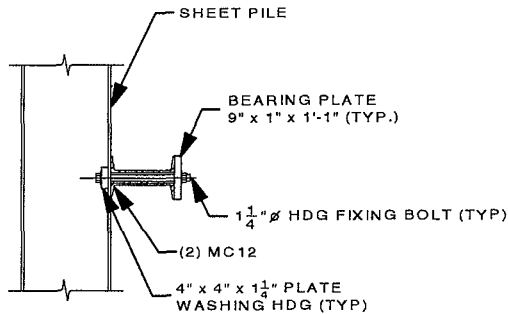
WALE CONNECTION DETAIL



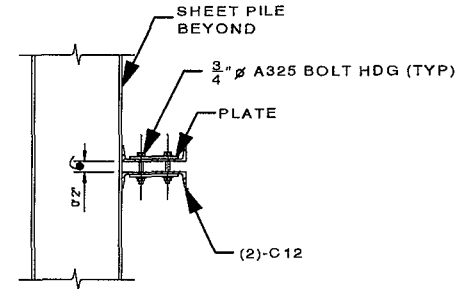
WALE SPLICE DETAIL



SECTION C



SECTION D



SECTION E



- NOTES:**
1. THIS APPLICATION DRAWING IS FOR PLANNING AND PERMITTING PURPOSES ONLY AND IS NOT INTENDED FOR BID DOCUMENTS OR CONSTRUCTION;
 2. REFERENCE IS MADE TO THE FOLLOWING MAPS:
 - A. "FIGURE 6 OF 14, PROPOSED STRUCTURE CONDITIONS" ACR REALTY, LLC, RHODE ISLAND RECYCLED METALS, 434 & 444 ALLENS AVENUE, PROVIDENCE RHODE ISLAND, SCALE 1" = 100', AND PREPARED BY COASTLINE CONSULTING & DEVELOPMENT AND CUOCO STRUCTURAL ENGINEERING, LLC.
 3. ALL ELEVATIONS ARE REFERENCED TO THE MEAN LOW WATER (MLW) TIDAL DATUM BASED ON NAVD88 VERTICAL DATUM USING NOAA TIDE STATION #8454000 (1983-2001 EPOCH), PROVIDENCE RIVER.
 4. REFER TO BULKHEAD DRAWING NOTES ON FIGURES 10 & 11 OF 14 FOR DETAILS ON BULKHEAD DESIGN.

CUOCO STRUCTURAL ENGINEERS, LLC
 50 Katona Drive, Suite 12
 Fairfield, CT 06424
 Phone: 203-882-1902
 Fax: 203-382-1998
 www.cselc.com

Coastline Consulting & Development
 5-B Old Post Road, Madison, CT 06443
 (203) 245-8138

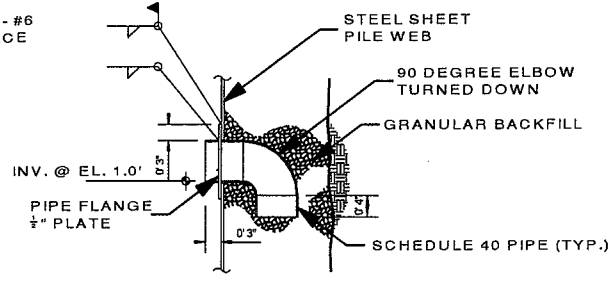
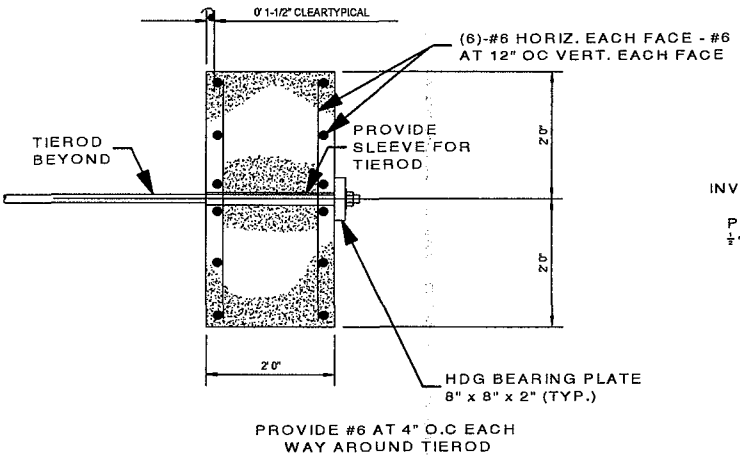
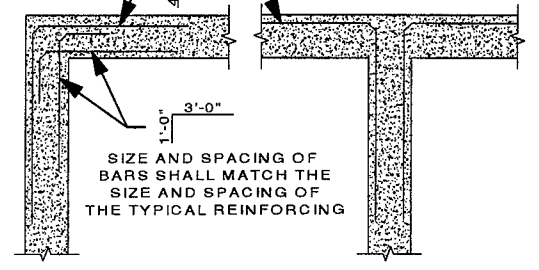
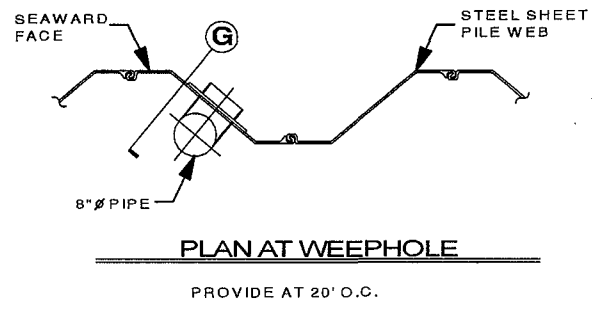
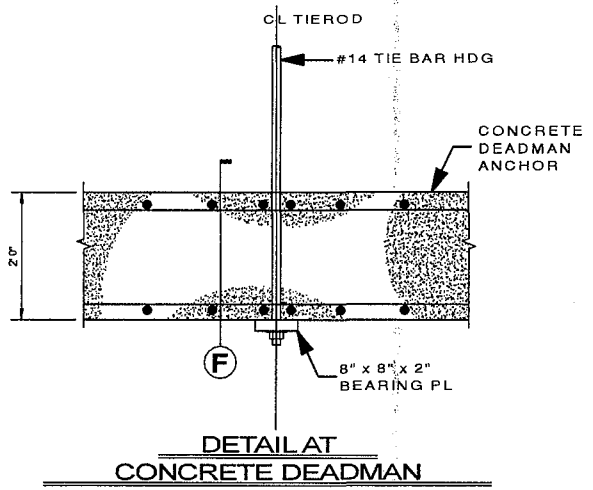
FIGURE 8 OF 14
 PROPOSED BULKHEAD
 CROSS-SECTION DETAIL 2

ACR REALTY, LLC
 RHODE ISLAND RECYCLED METALS
 434 & 444 ALLENS AVENUE
 PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010

SCALE: 1" = 3'

NICOLANGLO CUOCO
 No. 8337
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL



CONCRETE REINFORCING DETAIL
 SEE CONCRETE DEADMAN DETAILS FOR TYPICAL REINFORCING SIZE AND SPACING



Coastline Consulting & Development
 5-B Old Post Road, Madison, CT 06443
 (203) 245-8138

FIGURE 9 OF 14
 PROPOSED BULKHEAD
 CROSS-SECTION DETAIL 3

ACR REALTY, LLC
 RHODE ISLAND RECYCLED METALS
 434 & 444 ALLENS AVENUE
 PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010 SCALE: 1" = 3'

- NOTES:
1. THIS APPLICATION DRAWING IS FOR PLANNING AND PERMITTING PURPOSES ONLY AND IS NOT INTENDED FOR BID DOCUMENTS OR CONSTRUCTION.
 2. REFERENCE IS MADE TO THE FOLLOWING MAPS:
 A. "FIGURE 6 OF 14, PROPOSED STRUCTURE CONDITIONS" ACR REALTY, LLC, RHODE ISLAND RECYCLED METALS, 434 & 444 ALLENS AVENUE, PROVIDENCE RHODE ISLAND, SCALE 1" = 100', AND PREPARED BY COASTLINE CONSULTING & DEVELOPMENT AND CUOCO STRUCTURAL ENGINEERING, LLC.
 3. ALL ELEVATIONS ARE REFERENCED TO THE MEAN LOW WATER (MLW) TIDAL DATUM BASED ON NAVD88 VERTICAL DATUM USING NOAA TIDE STATION #8454000 (1983-2001 EPOCH), PROVIDENCE RIVER.
 4. REFER TO BULKHEAD DRAWING NOTES ON FIGURES 13 & 14 OF 14 FOR DETAILS ON BULKHEAD DESIGN.

**CUOCO
 STRUCTURAL
 ENGINEERS, LLC**
 60 Katona Drive, Suite 12
 Fairfield, CT 06424
 Phone: 203-362-1902
 Fax: 203-362-1986
 www.csellic.com

BULKHEAD DRAWING NOTES

GENERAL NOTES:

1. THE COMPLETED STRUCTURE HAS BEEN DESIGNED TO WITHSTAND THE FOLLOWING DESIGN LIVE LOADS APPLIED IN CONJUNCTION WITH DESIGN DREDGE/MUDLINE ELEVATIONS INDICATED ON THE CONTRACT DRAWINGS.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND STATE BUILDING CODE, NINTH EDITION WITH AN EFFECTIVE DATE OF AUGUST 1, 2007.
3. LIVE LOADS: 250 PSF UNIFORM LOAD
8,000 LB CONCENTRATED LOAD
4. SITE INFORMATION TAKEN FROM "PROPERTY SURVEY FOR ASSESSOR PLAT 47, LOT 601" PREPARED BY GAROFALO & ASSOCIATES, INC. DATED SEPTEMBER 9, 2009.
5. SUBSURFACE SOIL INFORMATION TAKEN FROM SOIL TEST BORING LOGS PREPARED BY NEW ENGLAND BORING CONTRACTORS OF CT, INC., GLASTONBURY, CT.
6. ELEVATIONS REFERENCE LOCAL MEAN LOW WATER, UNLESS NOTED OTHERWISE.
7. THE PARCEL IS LOCATED IN FEMA FLOOD ZONES VE (EL 18) AND AE (EL 15) BASED ON FLOOD INSURANCE RATE MAP FOR THE CITY OF PROVIDENCE, RHODE ISLAND, PROVIDENCE COUNTY, COMMUNITY PANEL NUMBER 445406-0317 G, MAP NUMBER 44007C0317G WITH AN EFFECTIVE DATE OF MARCH 2, 2009.
8. ALL DETAILS SHALL BE CONSIDERED TYPICAL AND SHALL APPLY AT SAME AND SIMILAR CONDITIONS.
9. PILES SHALL BE DRIVEN STRAIGHT AND TRUE AT INDICATED LOCATIONS, WITH DEVIATION FROM THE LONGITUDINAL AXIS OF NOT MORE THAN 1/4 INCH PER FOOT. LOCATE THE PILES WITHIN 3 INCHES OF THE POSITIONS INDICATED ON THE DRAWINGS.
10. TO DETERMINE ACCURATE DIMENSIONS, DO NOT SCALE DRAWINGS. DIMENSIONS SHALL BE READ OR CALCULATED.
11. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES, SEWERS, AND FUEL STORAGE TANKS TO AVOID ANY DAMAGE TO THESE. CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" PRIOR TO ANY EXCAVATION.

SELECTIVE DEMOLITION AND DISPOSAL:

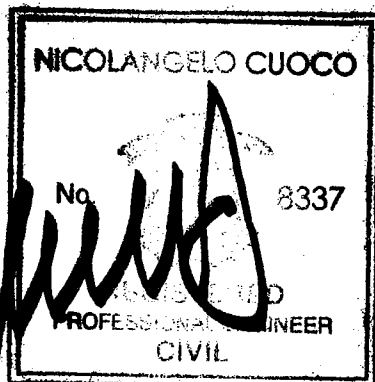
1. SELECTIVE DEMOLITION AND DISPOSAL SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL PERMIT AND BUILDING CODE REQUIREMENTS.
2. THE CONTRACTOR SHALL REMOVE AND DISPOSE THOSE STRUCTURES AND DERELICT COMPONENTS REQUIRED TO PERFORM THE WORK. THIS WORK INCLUDES BUT IS NOT LIMITED TO THE EXISTING BULKHEAD, PIER, AND PILES.
3. SELECTIVE DEMOLITION INCLUDES BUT IS NOT LIMITED TO REMOVAL OF EXISTING MATERIALS, UTILITIES, AND OTHER COMPONENTS ESSENTIAL FOR A COMPLETE PROJECT.
4. THE CONTRACTOR SHALL TAKE REASONABLE CARE IN REMOVING ELEMENTS SELECTED TO BE DEMOLISHED.
5. PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONTRACTOR SHALL CLEARLY MARK THE LIMITS OF THE DEMOLITION.
6. COMPLETELY REMOVE ITEMS DESIGNATED LEAVING SURFACES CLEAN, SOUND, AND READY TO RECEIVE NEW MATERIALS.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING THE COURSE OF DEMOLITION.

EROSION AND SEDIMENTATION CONTROLS:

1. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED AS PER REGULATORY AUTHORIZATIONS.
2. DURING EXECUTION OF THE WORK, THE CONTRACTOR IS REQUIRED TO INSTALL AND MAINTAIN REQUIRED SEDIMENTATION AND EROSION CONTROL MEASURES TO PROTECT ADJACENT WATERWAYS, STREETS, AND PROPERTIES. MEASURES INCLUDE BUT ARE NOT LIMITED TO TEMPORARY BERMS, HAY BALES, SILT FENCES, CONTAINMENT BOOMS, AND TURBIDITY CURTAINS.
3. EROSION AND SEDIMENTATION CONTROL DEVICES AND PROVISIONS SHALL BE MAINTAINED IN OPERATIONAL CONDITION BY THE CONTRACTOR AND SHALL BE REMOVED AND LEGALLY DISPOSED AT THE COMPLETION OF THE PROJECT.

PILE DRIVING:

1. DRIVE THE PILES STRAIGHT AND TRUE AT INDICATED LOCATIONS, WITH DEVIATION FROM THE LONGITUDINAL AXIS OF NOT MORE THAN 1/4 INCH PER FOOT.
2. LOCATE THE PILES WITHIN 3 INCHES OF THE POSITIONS INDICATED ON THE DRAWINGS.
3. CONTINUOUSLY DRIVE EACH PILE TO REACH THE CAPACITY AND/OR FULL EMBEDDED LENGTH CALLED FOR ON THE DRAWINGS.
4. WITHDRAW PILES THAT ENCOUNTER UNDERGROUND OBSTRUCTIONS SUFFICIENT TO IMPEDE PILE DRIVING. REDRIVE AS CLOSE AS POSSIBLE TO ORIGINAL POSITION, SUBJECT TO REVIEW OF THE OWNER. REMOVE PILES WHICH SPLIT, BROOM, BREAK OR DRIVE OUT OF LINE. DRIVE ANOTHER PILE IN ITS PLACE. PROVIDE AND MAINTAIN NECESSARY LIGHTING AND BARRIERS TO ADEQUATELY ASSURE PUBLIC SAFETY. PROVIDE ADEQUATE SAFEGUARDS TO PROTECT FROM DAMAGE IMPROVEMENTS ON THE WORK SITE AND ON ADJACENT PROPERTIES.



**CUOCO
STRUCTURAL
ENGINEERS, LLC**

60 Katona Drive, Suite 12
Fairfield, CT 06424
Phone: 203-362-1902
Fax: 203-362-1966
www.cseinc.com

Coastline Consulting & Development

5-B Old Post Road, Madison CT 06443
(203) 245-8138

FIGURE 10 OF 14
BULKHEAD DRAWING NOTES 1 OF 2

ACR REALTY, LLC
RHODE ISLAND RECYCLED METALS
434 & 444 ALLENS AVENUE
PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010

FILE NO.: 09-059

BULKHEAD DRAWING NOTES CONTINUED

STRUCTURAL STEEL:

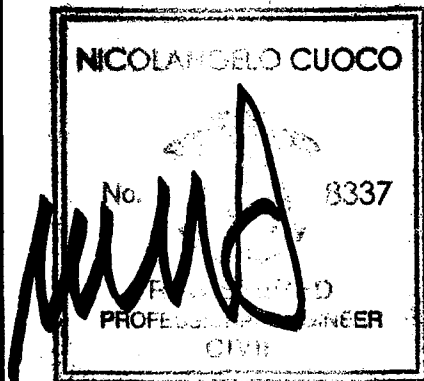
1. THE DESIGN COMPLIES WITH THE AISC, "MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN", NINTH EDITION.
2. STEEL WORK SHALL BE IN ACCORDANCE WITH AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
3. WELDING SHALL CONFORM TO THE 'STRUCTURAL WELDING CODE - STEEL', AS ADOPTED BY THE AMERICAN WELDING SOCIETY (AWS D1.1). A WELDER CERTIFIED IN ACCORDANCE WITH AWS STANDARDS SHALL PERFORM WELDING.
4. WELDING ELECTRODES SHALL BE E70XX-X AND COMPLY WITH AWS A5.1 AND AWS A5.5.
5. STRUCTURAL STEEL WIDE-FLANGE SHAPES SHALL CONFORM TO ASTM A992 OR ASTM A572, GRADE 50. OTHER STRUCTURAL STEEL SHAPES AND MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36, UNLESS OTHERWISE NOTED. STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE B. STEEL PIPES SHALL CONFORM TO ASTM A53, GRADE B OR ASTM A500, GRADE B. STEEL PLATES SHALL CONFORM TO ASTM A588 FY = 50 KSI.
6. STEEL SHEET PILE SHALL BE ARBED AZ19-700, ASTM A328 MATERIAL AND COATED WITH TWO COATS OF BAR-RUST 235 FOR A TOTAL DRY FILM THICKNESS OF 15 MILS. COATING SHALL BE APPLIED TO BOTH SIDE OF THE STEEL AND TO THE LIMITS AS SHOWN ON THE DRAWINGS.

STEEL HARDWARE PIPE: ASTM A53 GRADE B, SCHEDULE 40
ANCHOR BOLTS: ASTM F1554
CARRIAGE BOLTS: ASTM A307
HIGH STRENGTH
STRUCTURAL BOLTS: ASTM A325, W/ HEXAGONAL HEADS
NUTS: ASTM A563
WASHERS: ASTM F436

7. STEEL HARDWARE LISTED ABOVE SHALL BE HOT DIPPED GALVANIZED.
8. TIE ROD ASSEMBLIES CONSISTING OF TIE ROD, STEEL COUPLERS, AND NUTS, SHALL BE DYWIDAG THREADBAR REINFORCING SYSTEM AS MANUFACTURED BY DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THREADBAR SHALL BE GRADE-75 CONFORMING TO ASTM A615 (EXCEPT FOR MARKINGS). TIE ROD ASSEMBLIES SHALL BE HOT DIPPED GALVANIZED.

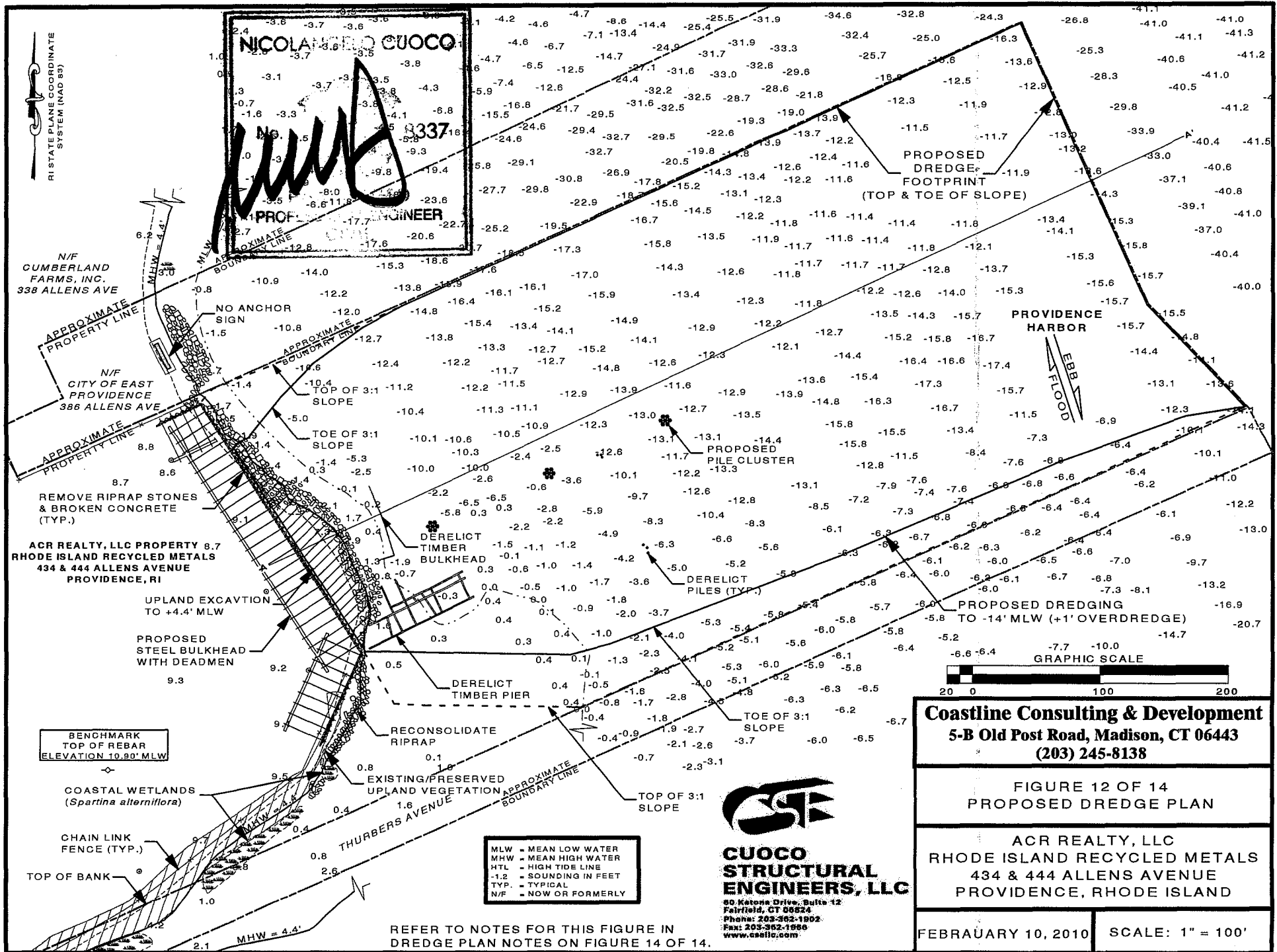
CAST-IN-PLACE CONCRETE:

1. CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI-318-LATEST EDITION 'BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE' AS ADOPTED BY THE AMERICAN CONCRETE INSTITUTE.
2. DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ACI-318 AND ACI-315-LATEST EDITION 'DETAILS AND DETAILING OF CONCRETE REINFORCEMENT'.
3. CONCRETE SHALL BE NORMAL WEIGHT WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. PORTLAND CEMENT SHALL BE TYPE II. CONCRETE SHALL CONTAIN 4% TO 6% ENTRAINED AIR AND HAVE A MAXIMUM WATER TO CEMENT RATIO OF 0.45.
4. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60.



**CUOCO
STRUCTURAL
ENGINEERS, LLC**
60 Katona Drive, Suite 12
Fairfield, CT 06824
Phone: 203-382-1902
Fax: 203-382-1986
www.cseilc.com

Coastline Consulting & Development 5-B Old Post Road, Madison CT 06443 (203) 245-8138	
FIGURE 11 OF 14 BULKHEAD DRAWING NOTES 2 OF 2	
ACR REALTY, LLC RHODE ISLAND RECYCLED METALS 434 & 444 ALLENS AVENUE PROVIDENCE, RHODE ISLAND	
FEBRUARY 10, 2010	FILE NO.: 09-059

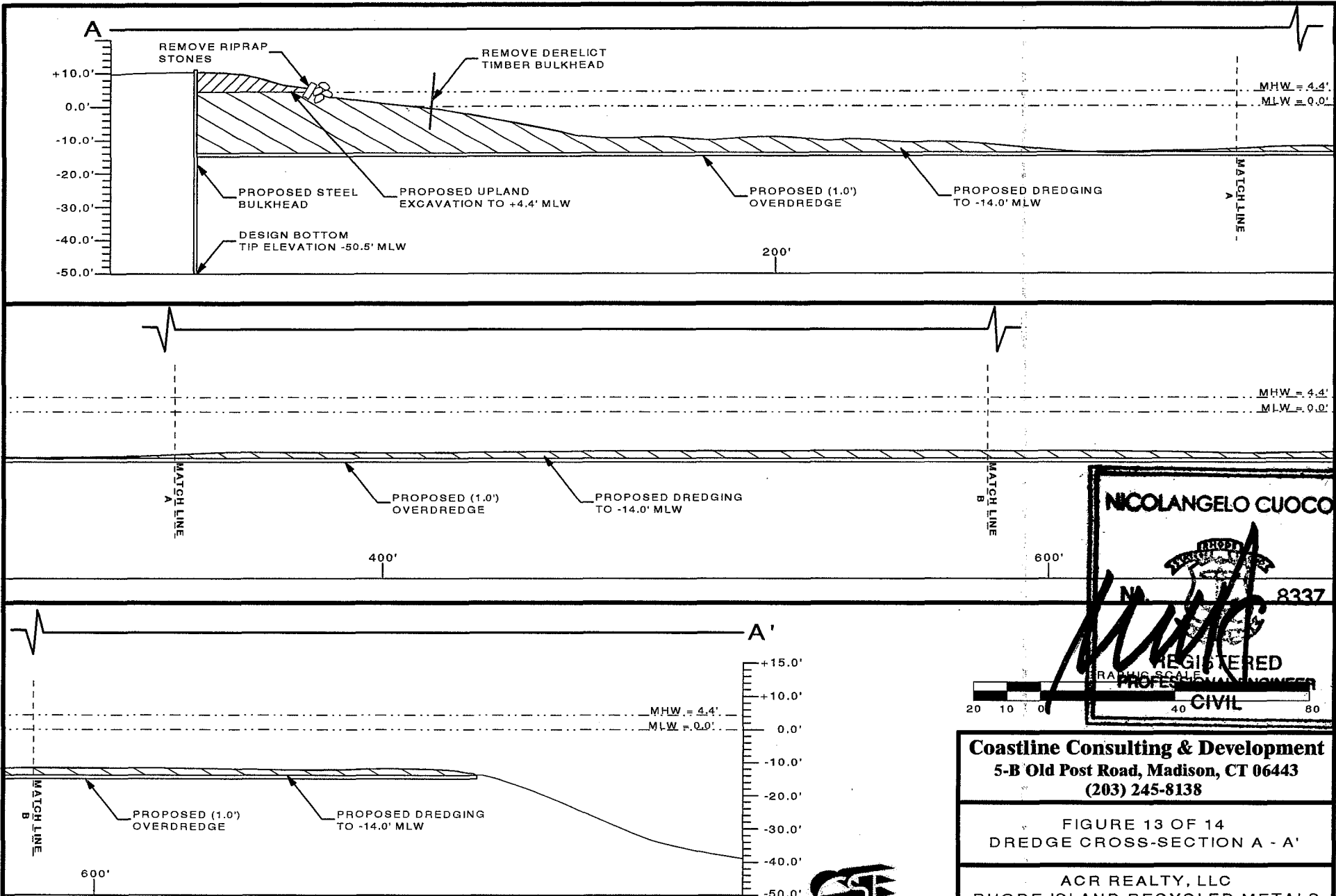


Coastline Consulting & Development
 5-B Old Post Road, Madison, CT 06443
 (203) 245-8138

FIGURE 12 OF 14
 PROPOSED DREDGE PLAN

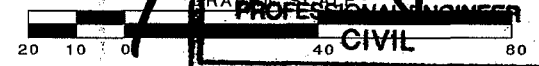
ACR REALTY, LLC
 RHODE ISLAND RECYCLED METALS
 434 & 444 ALLENS AVENUE
 PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010 SCALE: 1" = 100'



REFER TO NOTES FOR THIS FIGURE IN DREDGE PLAN NOTES ON FIGURE 14 OF 14.

NICOLANGELO CUOCO
 N. 8337
 REGISTERED
 GRADING SCALE
 PROFESSIONAL ENGINEER
 CIVIL



CUOCO STRUCTURAL ENGINEERS, LLC
 50 Horton Drive, Suite 12
 Eastford, CT 06424
 Phone: 203-282-1802
 Fax: 203-282-1988
 www.cuoco.com

Coastline Consulting & Development
 5-B Old Post Road, Madison, CT 06443
 (203) 245-8138

FIGURE 13 OF 14
 DREDGE CROSS-SECTION A - A'

ACR REALTY, LLC
 RHODE ISLAND RECYCLED METALS
 434 & 444 ALLENS AVENUE
 PROVIDENCE, RHODE ISLAND

FEBRUARY 10, 2010 SCALE: 1" = 40'

DREDGE PLAN NOTES

**FIGURES 12 & 13 OF 14
PROPOSED DREDGE PLAN &
DREDGE CROSS-SECTION**

1. THESE APPLICATION DRAWINGS WERE PREPARED FROM RECORDED RESEARCH, OTHER MAPS, LIMITED FIELD MEASUREMENTS COLLECTED ON AUGUST 26, 2009, AND OTHER SOURCES. THEY ARE NOT TO BE CONSTRUED AS PROPERTY/BOUNDARY OR LIMITED PROPERTY/BOUNDARY SURVEYS.
2. REFERENCE IS MADE TO:
 - a. "FIGURE 4 OF 14, EXISTING CONDITIONS, ACR REALTY, LLC; RHODE ISLAND RECYCLED METALS, 434 & 444 ALLENS AVENUE, PROVIDENCE, RHODE ISLAND" PREPARED BY COASTLINE CONSULTING & DEVELOPMENT, LLC.
 - b. "FIGURE 12 OF 14, PROPOSED DREDGE PLAN, ACR REALTY, LLC, RHODE ISLAND RECYCLED METALS, 434 & 444 ALLENS AVENUE, PROVIDENCE, RHODE ISLAND" PREPARED BY COASTLINE CONSULTING & DEVELOPMENT, LLC.
3. SOUNDINGS AND UPLAND ELEVATIONS ARE IN FEET AND REFERENCED TO THE MEAN LOW WATER (MLW) TIDAL DATUM BASED ON NAVD88.
4. THESE APPLICATION DRAWINGS ARE FOR PLANNING & PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR BID DOCUMENTS, STRUCTURAL DESIGN, OR CONSTRUCTION. NOT ALL IMPROVEMENTS AND FEATURES HAVE BEEN DEPICTED.
5. ANY UNDERGROUND AND/OR UNDERWATER UTILITY, STRUCTURE, AND FACILITY LOCATIONS DEPICTED AND/OR NOTED HEREON MAY HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE LOCATIONS OF WHICH ARE UNKNOWN TO COASTLINE CONSULTING AND DEVELOPMENT, LLC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION. CALL BEFORE YOU DIG: 1-800-922-4455.



**CUOCO
STRUCTURAL
ENGINEERS, LLC**
60 Katona Drive, Suite 12
Fairfield, CT 06624
Phone: 203-362-1902
Fax: 203-362-1966
www.cselc.com

Coastline Consulting & Development 5-B Old Post Road, Madison CT 06443 (203) 245-8138	
FIGURE 14 OF 14 DREDGE PLAN NOTES	
ACR REALTY, LLC RHODE ISLAND RECYCLED METALS 434 & 444 ALLENS AVENUE PROVIDENCE, RHODE ISLAND	
FEBRUARY 10, 2010	FILE NO.: 09-059