

BIDDING INSTRUCTIONS

FOR ALL PROJECTS:

1. Use pen and ink to complete all paper Bids.
2. As a minimum, the following must be received prior to the time of Bid opening:

For a Paper Bid:

a) a copy of the Notice to Contractors, b) the completed Acknowledgement of Bid Amendments form, c) the completed Schedule of Items, d) two copies of the completed and signed Contract Offer, Agreement & Award form, e) a Bid Guaranty if required, and f) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

For an Electronic Bid:

a) a completed Bid using Expedite® software and submitted via the Bid Express™ web-based service, b) a Bid Guaranty (as described below) or a faxed copy of a Bid Bond if required (with original to be delivered within 72 hours), and c) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

3. Include prices for all required items in the Schedule of Items. (“Zero is not considered a Bid price.”)
4. Include a Bid Guaranty (If Required). Acceptable forms are:
 - a. a properly completed and signed Bid Bond on the Department’s prescribed form (or on a form that does not contain any significant variations from the Department’s form as determined by the Department) for 5% of the Bid Amount or
 - b. an Official Bank Check, Cashier’s Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors.
5. If a paper Bid is to be sent, Federal Express overnight delivery is suggested as the package is delivered directly to the DOT Headquarters Building in Augusta. Other means, such as U.S. Postal Service’s Express Mail has proven not to be reliable.

IN ADDITION, FOR FEDERAL AID PROJECTS:

6. Complete the DBE Proposed Utilization form in the proper amounts, and deliver to the Contracts section by 4:30 PM on bid opening day

If you need further information regarding Bid preparation, call the DOT Contracts Section at (207)624-3410.

For complete bidding requirements, refer to Section 102 of the Maine Department of Transportation, Standard Specifications, Revision of December 2002.

NOTICE

The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain a planholders list.

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments, must provide an email address to Diane Barnes or Mike Babb at the MDOT Contracts mailbox at: MDOT.contracts@maine.gov. Each bid package will require a separate request.

Additionally, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment Form.

The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via <http://www.BIDX.com>. For information on electronic bidding contact Larry Childs at Larry.Childs@maine.gov.

NOTICE

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

PIN:

Town:

Date of Bid Opening:

Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed

PIN:

Town:

Date of Bid Opening:

Name of Contractor:

This should not be much of a change for those of you who use Federal Express or similar services.

Hand-carried Bids may be in one envelope as before, and should be marked with the following information:

Bid Enclosed: Do Not Open

PIN:

Town:

Name of Contractor:

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
Bid Guaranty-Bid Bond Form

KNOW ALL MEN BY THESE PRESENTS THAT _____

_____, of the City/Town of _____ and State of _____

as Principal, and _____ as Surety, a

Corporation duly organized under the laws of the State of _____ and having a usual place of

Business in _____ and hereby held and firmly bound unto the Treasurer of

the State of Maine in the sum of _____ for payment which Principal and Surety bind

themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

The condition of this obligation is that the Principal has submitted to the Maine Department of

Transportation, hereafter Department, a certain bid, attached hereto and incorporated as a

part herein, to enter into a written contract for the construction of _____

_____ and if the Department shall accept said bid

and the Principal shall execute and deliver a contract in the form attached hereto (properly

completed in accordance with said bid) and shall furnish bonds for this faithful performance of

said contract, and for the payment of all persons performing labor or furnishing material in

connection therewith, and shall in all other respects perform the agreement created by the

acceptance of said bid, then this obligation shall be null and void; otherwise it shall remain in full

force, and effect.

Signed and sealed this _____ day of _____ 20____

WITNESS:

WITNESS

PRINCIPAL:

By _____

By: _____

By: _____

SURETY:

By _____

By: _____

Name of Local Agency: _____

NOTICE

Bidders:

Please use the attached “Request for Information” form when faxing questions and comments concerning specific Contracts that have been Advertised for Bid. Include additional numbered pages as required. Questions are to be faxed to the number listed in the Notice to Contractors. This is the only allowable mechanism for answering Project specific questions. Maine DOT will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

NOTICE

Disadvantaged Business Enterprise Proposed Utilization

The Apparent Low Bidder must submit the Disadvantaged Business Enterprise Proposed Utilization form by close of Business (4:30 P.M.) on Bid day.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form contains additional information that is required by USDOT.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form must be used.

A copy of the new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact the Civil Rights Office at (207) 624-3066.

MDOT's DBE Directory of Certified firms can also be obtained at www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php

INSTRUCTIONS FOR PREPARING THE CONTRACTOR'S DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION PLAN

The Contractor Shall:

1. Submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan to the Contract's Engineer by 4:30 P.M. on the Bid day.
2. Extend equal opportunity to MDOT certified DBE firms (as listed in MDOT's DBE Directory of Certified Businesses) in the selection and utilization of Subcontractors and Suppliers.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone and fax number.

Provide total Bid price, Federal Project Identification Number, and location of the Project work.

In the columns, name each DBE firm to be used, provide the Unit or Item cost of the Work/Product to be provided by the DBE firm, give a brief description of the Work, and the dollar value of the Work.

If no DBE firm is to be utilized, the Contractor must document the reason(s) why no DBE firms are being used. Specific supporting evidence of good faith efforts taken by Contractors to solicit DBE Bidders must be attached. This evidence, as a minimum, includes phone logs, e-mail and/or mail DBE solicitation records, and the documented results of these solicitations.

NOTICE
Maine Department of Transportation
Disadvantaged Business Enterprise Program

Notice is hereby given that in accordance with US DOT regulation 49 CFR Part 26, the Maine Department of Transportation has established a DBE Program for disadvantaged business participation in the federal-aid construction program; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2007 (October 1, 2006 through September 30, 2007), MaineDOT has established a DBE participation goal of 6% as follows: 5% to be achieved through race/gender neutral means, with an additional 1% to be achieved through race/gender conscious contract goals.

Interested parties may view MaineDOT's DBE goal setting methodology for the next 30 days during normal business hours (8-4, M-F) at the Maine Department of Transportation, Office of Civil Rights, 16 State House Station, Augusta ME 04333-0016. Appointments may be scheduled by telephone at (207) 624-3066. The goal setting methodology is also available for viewing on the MaineDOT website: <http://www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php>.

Comments on the goal will be accepted for 45 days from the date of this notice. Written comments should be addressed to Holly Anderson, Maine Department of Transportation, Civil Rights Office, 16 State House Station, Augusta, Maine 04333-0016 or by e-mail at: holly.anderson@maine.gov.

**MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR
PROPOSED UTILIZATION FORM**

Low Bidder must furnish this form to Contracts Section Bid Opening day.

Contractor: _____ Telephone: _____ Ext. _____

Prepared by: _____ Fax: _____

BID PRICE: \$ _____ BID DATE: ____/____/____

FEDERAL PROJECT PIN # _____ PROJECT LOCATION: _____

TOTAL DBE _____ % PARTICIPATION FOR THIS SUBMISSION

W B E•	D B E•	Non DBE	Firm Name	Unit/Item Cost	Unit #	Description of Work & Item Number	Actual \$ Value
Total >							

Contractors must make a good faith effort to include Certified DBE firms in all aspects of the project. If no DBE firms are to be part of this project, a detailed explanation is required. Attach supporting evidence to the maximum participation of DBEs on this project. This is a requirement. This evidence must include name of firm(s) contacted, date contacted, and outcome of solicitation.

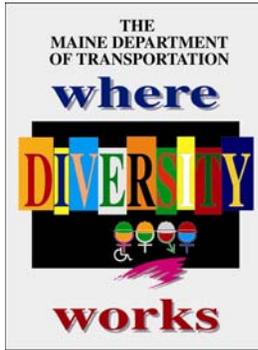
Equal Opportunity Use:

Form received: ____/____/____ Verified by: _____

____ Accepted ____ Rejected _____

cc: Contracts Other _____

- WBEs are non-minority women owned firms certified by MaineDOT
 - DBEs are male and minority owned firms certified by MaineDOT
- For a complete list of certified firms go to <http://www.maine.gov/mdot>



MaineDOT's CIVIL RIGHTS OFFICE

To search for a specific work item, click on the binoculars, type in the word you want to search for and click on find. To go to the next selected item, click on the binoculars with the arrow.

MAINE DEPARTMENT OF TRANSPORTATION

CERTIFIED DISADVANTAGED AND WOMEN BUSINESS ENTERPRISE

DECEMBER 2005

Information is updated on an ongoing basis and
can be retrieved by visiting our Website:

www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php

State of Maine
VENDOR FORM

For New Vendors & for Updates on Current Vendors

Special Instructions:

PLEASE PRINT CLEARLY

Return this form to:

*** = MUST BE COMPLETED TO PROCESS**

ONLY ONE NAME/VENDOR PER FORM

New Vendor	Address Change	Multi Address	Name Change	Contact Update	ID # Change
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Social Security Number*
Individual or Sole Proprietor

Federal Taxpayer ID Number*
Corporation

OR

Please fill in ONE.

S

Business name in "DBA" field below.

E

Business name in "Name" field below.

This form will affect all transactions with ALL state agencies.

NEW:*

Remit to Address: Individual or Business Name.

Name*
DBA or C/O
Address*
Tel #*

OLD:

Old number:

Name
DBA or C/O
Address
Tel #

<input type="checkbox"/> Is this the same name on your Social Security card?	Acct #
<input type="checkbox"/> If not, have you told Social Security about your name change?	Provider #

Signature* _____

Contact Name _____

Print Name or Title _____

Accounts Receivable Contact Name _____

Date* _____ (within 3 months)

Phone # if Different or for Contact Info _____

Vendor Indicators: Enter Y (Yes) For All Categories Listed Below That Apply To This Vendor

Dealer: <input type="checkbox"/>	Manufacturer: <input type="checkbox"/>	Factory Rep: <input type="checkbox"/>
Jobber: <input type="checkbox"/>	Retailer: <input type="checkbox"/>	Commodity: <input type="checkbox"/>
Individual: <input type="checkbox"/>	Partnership: <input type="checkbox"/>	Incorporated: <input type="checkbox"/>
Minority: <input type="checkbox"/>	Small Business: <input type="checkbox"/>	In-State: <input type="checkbox"/>

Information on State Agency Submitting Vendor Form

State Agency* & SHS #	Contact Person Name & Title*	Telephone #*
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Send to: Maine Department of Transportation/ Contracts 16 SHS, Augusta, ME 04333-0014 Attn: Pat Brown

INSTRUCTIONS FOR COMPLETING VENDOR FORM

1. **Print Clearly**
2. **All sections marked with an * must be completed for processing**
3. **Send completed form to requesting State agency OR remit to address at bottom of form.**
4. **Do NOT send by Fax. Only originals will be accepted.**

<u>FIELDS</u>	<u>INFORMATION NEEDED FOR FIELD</u>
<i>Special Instructions</i>	<i>Instructions to Vendor from Agency requesting information.</i>
<i>Return to</i>	<i>The location of agency where the form is to be mailed back to. If none use address at bottom of form.</i>
Boxes above SSN/EIN Fields	Please check mark all that apply to the vendor. If other, please specify. If it's a new vendor only one will apply: "New Vendor"
Social Security Number	Individuals, individuals "doing business as", and individuals without a Federal Taxpayer ID #. Use if not using EIN
Federal Taxpayer ID Number*	Businesses or professionals providing services. (ID # needs to be use for REMITTANCE purposes.) Use if not using SSN
New	Current Information
Old	Old information (If another ID# had been used please put it next to "OLD")
Name	Individual's Name or Business Name. ONLY ONE name per a form.
DBA or C/O	"Doing business as" or "In Care Of"
Address	REMITTANCE ADDRESS - Street Address OR PO Box (one or the other)
Tel #	Phone Number of individual or business
Signature	Individual or authorized representative of individual or authorized representative of the business
Date	Current Date (no more than 3 months old)
Contact Name	Contact person at business
Accounts Receivable Contact Name	Contact person at business for accounts receivables.
Phone #	Phone for Act Rec Contact
Vendor Indicators	Indicate all that apply for the vendor, as needed
Agency Info	For Agency personnel submitting the form. Contact info incase of questions.

**STATE OF MAINE DEPARTMENT OF TRANSPORTATION
NOTICE TO CONTRACTORS**

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bid for a Shoreline Stabilization project in the city of BREWER" will be received from contractors at the Reception Desk, Maine DOT Building, Child Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on May 16, 2007 , and at that time and place publicly opened and read. Bids will be accepted from contractors prequalified by the Department of Transportation for Highway and Bridge projects. All other Bids may be rejected. MDOT provides the option of electronic bidding. We accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening. During this transition, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.

Description: Maine Federal Aid Project No. FBD-9840(100)X, PIN 009840.10

Location: In Penobscot County, the project is located in the City of Brewer along the Penobscot River from just upstream of the Interstate Route 395 Bridge to approximately 1000 feet upstream of the State Route 15 Bridge.

Outline of Work: Riprap and Steel Sheet Pile shoreline stabilization, landscaping and other incidental work.

The basis of award will be Section 0001

For general information regarding Bidding and Contracting procedures, contact Scott Bickford at (207)624-3410. Our webpage at http://www.maine.gov/mdot/contractor-consultant-information/contractor_cons.php contains a copy of the schedule of items, Plan Holders List, written portions of bid amendments (not drawings), and bid results. For Project-specific information fax all questions to Peggy Duval **Project Manager** at (207)624-3431. Questions received after 12:00 noon of Monday prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. Hearing impaired persons may call the Telecommunication Device for the Deaf at (207) 624-3007.

Plans, specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207)624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Full size plans \$56.00 (\$61.50 by mail). Half size plans \$28.00 (\$31.25 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$65,000 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002", price \$10 [\$13 by mail], and Standard Details, Revision of December 2002, price \$20 [\$25 by mail]. Standard Detail updates found at http://www.maine.gov/mdot/contractor-consultant-information/contractor_cons.php

The right is hereby reserved to the MDOT to reject any or all bids.

Augusta, Maine
April 25, 2007



JOHN E. DORITY
CHIEF ENGINEER

CHIEF ENGINEER APR 23 2007

**SPECIAL PROVISION 102.7.3
ACKNOWLEDGMENT OF BID AMENDMENTS**

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at <http://www.maine.gov/mdot/comprehensive-list-projects/project-information.php> It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, to incorporate them into their Bid Package, and to reference the Amendment number and the date on the form below. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening without individually notifying all the planholders.

Amendment Number	Date

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package.

CONTRACTOR

Date

Signature of authorized representative

(Name and Title Printed)

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
SECTION 0001 PROJECT ITEMS						
0010	202.07 REMOVAL AND DISPOSAL OF CRIB WORK	850.000 T				
0020	202.19 REMOVING EXISTING BRIDGE	LUMP	LUMP			
0030	203.20 COMMON EXCAVATION	750.000 CY				
0040	203.2318 DISPOSAL OF SPECIAL WASTE	850.000 T				
0050	203.36 CRUSHED STONE FILL (TRUCK MEASURE)	300.000 CY				
0060	501.92 PILE DRIVING EQUIPMENT MOBILIZATION	LUMP	LUMP			
0070	502.219 STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	LUMP	LUMP			
0080	507.0841 STEEL PIPE HAND RAILING	LUMP	LUMP			
0090	542.93 STEEL SHEET PILE BULKHEAD	LUMP	LUMP			
0100	603.04 4" PVC DRAIN SERVICE	10.000 LF				

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	603.05 6 INCH PVC PIPE	20.000 LF				
0120	603.165 15 INCH REINFORCED CONCRETE PIPE CLASS III	42.000 LF				
0130	603.179 18 INCH CULVERT PIPE OPTION III	10.000 LF				
0140	603.44 42 INCH REINFORCED CONCRETE PIPE CLASS IV	6.000 LF				
0150	604.09 CATCH BASIN TYPE B1	1.000 EA				
0160	604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	6.000 EA				
0170	610.08 PLAIN RIPRAP	50.000 CY				
0180	610.162 HEAVY RIPRAP - PLAN QUANTITY	8520.000 CY				
0190	615.07 LOAM	1704.000 CY				
0200	618.1301 SEEDING METHOD NUMBER 1 - PLAN QUANTITY	52.000 UN				
0210	619.1201 MULCH - PLAN QUANTITY	54.000 UN				

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0220	620.54 STABILIZATION GEOTEXTILE	600.000 SY				
0230	621.037 EVERGREEN TREES (5 FOOT - 6 FOOT) GROUP A	11.000 EA				
0240	621.195 MEDIUM DECIDUOUS TREE (1.75 INCH - 2 INCH CALIPER) GROUP A	72.000 EA				
0250	621.531 DECIDUOUS SHRUBS (12"-18"CAL.) GROUP A	146.000 EA				
0260	621.54 DECIDUOUS SHRUBS (18 INCH - 24 INCH) GROUP A	79.000 EA				
0270	621.546 DECIDUOUS SHRUBS (2 FOOT - 3 FOOT) GROUP A	115.000 EA				
0280	621.71 HERBACEOUS PERENNIALS GROUP A	1082.000 EA				
0290	621.80 ESTABLISHMENT PERIOD	LUMP	LUMP			
0300	629.05 HAND LABOR, STRAIGHT TIME	40.000 HR				
0310	631.10 AIR COMPRESSOR (INCLUDING OPERATOR)	16.000 HR				
0320	631.11 AIR TOOL (INCLUDING OPERATOR)	16.000 HR				

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0330	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	16.000 HR				
0340	631.13 BULLDOZER (INCLUDING OPERATOR)	16.000 HR				
0350	631.171 TRUCK - SMALL (INCLUDING OPERATOR)	16.000 HR				
0360	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	10.000 HR				
0370	631.22 FRONT END LOADER (INCLUDING OPERATOR)	16.000 HR				
0380	631.28 BRUSH CHIPPER (INCLUDING OPERATOR)	20.000 HR				
0390	639.18 FIELD OFFICE TYPE A	1.000 EA				
0400	652.31 TYPE I BARRICADE	4.000 EA				
0410	652.33 DRUM	15.000 EA				
0420	652.34 CONE	20.000 EA				
0430	652.35 CONSTRUCTION SIGNS	20.000 SF				

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0440	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	90.000 CD				
0450	652.38 FLAGGER	20.000 HR				
0460	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			
0470	659.10 MOBILIZATION	LUMP	LUMP			
0480	660.21 ON-THE-JOB TRAINING (BID)	1000.000 HR				
SECTION 0001 TOTAL						.

SECTION 0002 OPTION 1
ALT GROUP OP1

0490	202.07 REMOVAL AND DISPOSAL OF CRIB WORK	100.000 T				
0500	203.20 COMMON EXCAVATION	60.000 CY				
0510	203.2318 DISPOSAL OF SPECIAL WASTE	600.000 T				
0520	610.162 HEAVY RIPRAP - PLAN QUANTITY	1740.000 CY				

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0530	615.07 LOAM	50.000 CY				
0540	618.1301 SEEDING METHOD NUMBER 1 - PLAN QUANTITY	5.000 UN				
0550	619.1201 MULCH - PLAN QUANTITY	5.000 UN				
0560	620.54 STABILIZATION GEOTEXTILE	100.000 SY				
0570	652.35 CONSTRUCTION SIGNS	10.000 SF				
0580	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	10.000 CD				
0590	652.38 FLAGGER	8.000 HR				
0600	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			
0610	659.10 MOBILIZATION	LUMP	LUMP			
0620	660.21 ON-THE-JOB TRAINING (BID)	80.000 HR				
SECTION 0002 TOTAL						.

SECTION 0003 OPTION 2
ALT GROUP OP2

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0630	202.07 REMOVAL AND DISPOSAL OF CRIB WORK	100.000 T				
0640	203.2318 DISPOSAL OF SPECIAL WASTE	1200.000 T				
0650	610.162 HEAVY RIPRAP - PLAN QUANTITY	617.000 CY				
0660	615.07 LOAM	50.000 CY				
0670	618.1301 SEEDING METHOD NUMBER 1 - PLAN QUANTITY	5.000 UN				
0680	619.1201 MULCH - PLAN QUANTITY	5.000 UN				
0690	620.54 STABILIZATION GEOTEXTILE	100.000 SY				
0700	652.35 CONSTRUCTION SIGNS	10.000 SF				
0710	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	10.000 CD				
0720	652.38 FLAGGER	8.000 HR				
0730	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0740	659.10 MOBILIZATION	LUMP	LUMP			
0750	660.21 ON-THE-JOB TRAINING (BID)	80.000 HR				
SECTION 0003 TOTAL						
SECTION 0004 OPTION 3 ALT GROUP OP3						
0760	202.07 REMOVAL AND DISPOSAL OF CRIB WORK	100.000 T				
0770	203.2318 DISPOSAL OF SPECIAL WASTE	1000.000 T				
0780	610.162 HEAVY RIPRAP - PLAN QUANTITY	4113.000 CY				
0790	615.07 LOAM	40.000 CY				
0800	618.1301 SEEDING METHOD NUMBER 1 - PLAN QUANTITY	4.000 UN				
0810	619.1201 MULCH - PLAN QUANTITY	4.000 UN				
0820	620.54 STABILIZATION GEOTEXTILE	100.000 SY				

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 009840.10

PROJECT(S): FBD-9840(100)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0830	652.35 CONSTRUCTION SIGNS	10.000 SF				
0840	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	20.000 CD				
0850	652.38 FLAGGER	8.000 HR				
0860	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			
0870	659.10 MOBILIZATION	LUMP	LUMP			
0880	660.21 ON-THE-JOB TRAINING (BID)	200.000 HR				
	SECTION 0004 TOTAL					
	TOTAL BID INCLUDING ALL OPTIONS					

STEEL PIPE HAND RAIL CONTRACT COST BREAKDOWN
STAINLESS STEEL ARC

The Contractor shall provide a contract cost breakdown for the optional stainless steel arc shown on the plans. This cost shall include all shipping, material, equipment, tools and labor to provide and install the stainless steel arc.

Stainless Steel Arc

Cost per each Arc _____

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

_____ with its principal place of business located at _____

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. **009840.10**, for **Penobscot River Shoreline Stabilization** in the City of **Brewer**, County of **Penobscot**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **December 7, 2008**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002 and related Special Provisions.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is

Section 0001 \$ _____

Section 0002 \$ _____

Section 0003 \$ _____

Section 0004 \$ _____

Performance Bond and Payment Bond each being 100% of the amount awarded under this Contract (see award amount in Section G below).

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **PIN 9840.10 Penobscot River Shoreline Stabilization in the City of Brewer,** State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier’s check, certificate of deposit or U. S. Postal Money Order in the amount given in the “Notice to Contractors”, payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor’s Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

Date

(Signature of Legally Authorized Representative
of the Contractor)

Witness

(Name and Title Printed)

G. Award.

Your offer is hereby accepted for (see checked boxes):

- Section 0001
- Section 0002
- Section 0003
- Section 0004

Contract Amount: _____

This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David A. Cole, Commissioner

Witness

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

_____ with its principal place of business located at _____

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. **009840.10**, for **Penobscot River Shoreline Stabilization** in the City of **Brewer**, County of **Penobscot**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **December 7, 2008**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002 and related Special Provisions.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is

Section 0001 \$ _____

Section 0002 \$ _____

Section 0003 \$ _____

Section 0004 \$ _____

Performance Bond and Payment Bond each being 100% of the amount awarded under this Contract (see award amount in Section G below).

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **PIN 9840.10 Penobscot River Shoreline Stabilization in the City of Brewer,** State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier’s check, certificate of deposit or U. S. Postal Money Order in the amount given in the “Notice to Contractors”, payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor’s Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

Date

(Signature of Legally Authorized Representative
of the Contractor)

Witness

(Name and Title Printed)

G. Award.

Your offer is hereby accepted for (see checked boxes):

- Section 0001
- Section 0002
- Section 0003
- Section 0004

Contract Amount: _____

This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David A. Cole, Commissioner

Witness

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and (Name of the firm bidding the job) a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at (address of the firm bidding the job)

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. 1224.00, for the Hot Mix Asphalt Overlay in the town/city of West Eastport, County of Washington, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before November 15, 2003. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is (Place bid here in alphabetical form such as One Hundred and Two dollars and 10 cents)
\$ (repeat bid here in numerical terms, such as \$102.10) Performance Bond and Payment Bond each being 100% of the amount of this Contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 1234.00 West Eastport, Hot Mix Asphalt Overlay

State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier’s check, certificate of deposit or U. S. Postal Money Order in the amount given in the “Notice to Contractors”, payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer’s “Notice to Commence Work” as stated in Section 107.2 of the Standard Specifications Revision of 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor’s Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR
(Sign Here)

(Signature of Legally Authorized Representative of the Contractor)
(Print Name Here)

(Name and Title Printed)

Date _____
(Witness Sign Here)

Witness _____

G. Award.

Your offer is hereby accepted. documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David A. Cole, Commissioner

(Witness)

BOND # _____

CONTRACT PERFORMANCE BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ **and the State of** _____, as principal,
and _____,
a corporation duly organized under the laws of the State of _____ and having a
usual place of business _____,
as Surety, are held and firmly bound unto the Treasurer of the State of Maine in the sum
of _____ **and 00/100 Dollars (\$** _____ **)**,
to be paid said Treasurer of the State of Maine or his successors in office, for which
payment well and truly to be made, Principal and Surety bind themselves, their heirs,
executors and administrators, successors and assigns, jointly and severally by these
presents.

The condition of this obligation is such that if the Principal designated as Contractor in
the Contract to construct Project Number _____ in the Municipality of
_____ promptly and faithfully performs the Contract, then this
obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the State
of Maine.

Signed and sealed this _____ day of _____, 20.....

WITNESSES:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY:

Signature

.....

Print Name Legibly

Print Name Legibly

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

ADDRESS

.....

.....

.....

.....

TELEPHONE.....

.....

BOND # _____

CONTRACT PAYMENT BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ **and the State of** _____, as principal,
and _____
a corporation duly organized under the laws of the State of _____ and having a
usual place of business in _____,
as Surety, are held and firmly bound unto the Treasurer of the State of Maine for the use
and benefit of claimants as herein below defined, in the sum of
_____ **and 00/100 Dollars (\$** _____ **)**
for the payment whereof Principal and Surety bind themselves, their heirs, executors and
administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in
the Contract to construct Project Number _____ in the Municipality of
_____ promptly satisfies all claims and demands incurred for all
labor and material, used or required by him in connection with the work contemplated by
said Contract, and fully reimburses the obligee for all outlay and expense which the
obligee may incur in making good any default of said Principal, then this obligation shall
be null and void; otherwise it shall remain in full force and effect.

A claimant is defined as one having a direct contract with the Principal or with a
Subcontractor of the Principal for labor, material or both, used or reasonably required for
use in the performance of the contract.

Signed and sealed this _____ day of _____, 20 .. .

WITNESS:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....

ADDRESS

.....

.....

TELEPHONE

.....

SPECIAL PROVISION

SECTION 102.3

**EXAMINATION OF DOCUMENTS, SITE AND OTHER INFORMATION
(Geotechnical Information)**

Geotechnical Information pertaining to this project has been collected and assembled. Bidders and Contractors are obligated to examine and, if necessary, obtain geotechnical information. Geotechnical Information is available at the Maine Department of Transportation office on Child Street, Augusta, Maine. Geotechnical Information will be provided to interested parties who request this information. Requests for this information should be directed to the Project Manager as outlined in the "Notice to Contractors".

The Department shall not be responsible for Bidder's and Contractor's interpretations of, or estimates or conclusions drawn from, the Geotechnical Information. Data provided may not be representative of the subsurface conditions between the boring locations.

This section does not diminish the duties imposed upon parties in Section 102 or in any other sections.

GENERAL DECISION: **ME20070007** 02/09/2007 ME7

Date: February 9, 2007

General Decision Number: **ME20070007** 02/09/2007

Superseded General Decision Number: ME20030007

State: Maine

Construction Type: Heavy

County: Penobscot County in Maine.

HEAVY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	02/09/2007

* ENGI0004-014 04/01/2006

	Rates	Fringes
Power equipment operators:		
Graders.....	\$ 17.33	7.80
Pavers.....	\$ 17.33	7.80

SUME2000-006 10/24/2000

	Rates	Fringes
Cement Mason/Finisher.....	\$ 12.09	.50
Laborers:		
Fence Erectors.....	\$ 16.77	.33
Rakers.....	\$ 13.11	2.25
Unskilled.....	\$ 11.07	1.38
Power equipment operators:		
Backhoes.....	\$ 14.59	3.33
Excavators.....	\$ 12.24	.88
Loaders.....	\$ 12.49	1.93
Rollers.....	\$ 15.10	3.15
Truck drivers:		
Dump.....	\$ 8.97	1.18
Tri axle.....	\$ 10.05	.56

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

Town: **Brewer**
Shoreline Stabilization
 Project: **FBD-9840(100)X, 9840.10**
 Date: **April 24, 2007**

SPECIAL PROVISIONS
SECTION 104
Utilities

MEETING

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications is hereby called for.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with this project. The following list identifies all known utilities or railroads having facilities presently located within the limits of this project or intending to install facilities during project construction

Overview:

Utility/Railroad	Aerial	Underground	Railroad
City of Brewer		X	
Bangor Hydro-Electric Company	X		

City of Brewer, Municipal Engineer: Frank Higgins (207) 989-7800 c- 852-7674
fhiggins@brewerme.org
Bangor Hydro-Electric Co.: Contact person is Bob Peasley (207) 973-2518, 299-5834
bpeasley@bhe.com

AERIAL

Bangor Hydro-Electric Co. is located in the immediate area, but temporary utility adjustments are not anticipated.

UNDERGROUND

City of Brewer

The Contractor shall notify the City of Brewer and the MDOT Resident 48 hours prior to construction in the area of storm water outfalls. The contractor shall be responsible for outfall extensions and the extension of all other drainage extending from the bank.

****Special care should be taken around the existing sewer and manholes close to the project. Any damage will be at the contractor's expense. All damage shall be reported to the City of Brewer immediately.**

Prior to construction in these areas the exact location of all outfalls and manholes will be marked, by the contractor.

Penobscot Landing Children's Garden

There is underground electric and waterlines in the park area. The contractor shall take special care in this area with heavy equipment. All questions about location of lines shall be directed to the City of Brewer. Fencing shall be installed before construction begins in the park area. See note on plan sheet C-02.

Town: **Brewer**
Shoreline Stabilization
Project: **FBD-9840(100)X, 9840.10**
Date: **April 24, 2007**

Unless otherwise specified, any underground utility facilities shown in the project documents represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data.

Utilities have been notified and will be furnished a project specification book. If utility relocations, though unexpected, become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the utilities in conjunction with the work by the Contractor.

SAFE PRACTICES AROUND UTILITY FACILITIES

The Contractor shall be responsible for complying with M.R.S.A. Title 35-A, Chapter 7-A Sections 751 - 761 Overhead High-Voltage Line Safety Act. Prior to commencing any work that may come within ten (10) feet of any aerial electrical line; the Contractor shall notify the aerial utilities as per Section 757 of the above act.

DIG SAFE

The contractor will be responsible for determining the presence of underground utility facilities prior to commencing any excavation work and shall notify utilities of proposed excavation in accordance with **M.R.S.A.** Title & 3360-A, Maine Dig Safe System. **Call 1-888-344-7233.**

THE CONTRACTOR SHALL PLAN AND CONDUCT HIS WORK ACCORDINGLY

SPECIAL PROVISIONS

SECTION 104.4.3

COMMUNICATION AND COORDINATION

(Progress Meetings)

Replace the first sentence of paragraph one with the following:

Progress meetings shall be held bi-weekly on site and more frequently as necessary in the Engineer's field office throughout the duration of the Contract. A time shall be determined for the meetings, this time shall be agreeable to all parties; the Owner, and the Contractor. The City of Brewer Engineer has the option of attending the Progress Meetings and shall be notified in advance of the meeting dates and times.

SPECIAL PROVISIONS
SECTION 105
GENERAL SCOPE OF WORK
(Environmental Requirements)

Due to the potential hazard of an oil spill along the project, the Contractor shall have immediately available 200 feet of containment boom for ocean use and shall demonstrate to the Department that he has access to bales of 9 inch absorbent boom pads, pumps, and all associated apparatus to clean up a spill.

Payment for this work and materials will be considered incidental.

Town: Brewer
PIN #: 9840.10
Date: 12/6/06

SPECIAL PROVISION
SECTION 105
General Scope of Work
(Environmental Requirements)

Instream Work is allowed at any time of year with special conditions, noted below.

Stream Name(s) with Station #s: Penobscot River;

Special Conditions: All work within the intertidal area shall be conducted while the work area is dry (between tidal cycles). No equipment shall be operated from below the low water line at any time. Equipment may reach beyond mean low water only at the specific locations noted in the MaineDOT/City of Brewer permit applications dated April 2005.

Instream work consists of any activity conducted below the normal high water mark.

All activities are prohibited (including placement and removal of cofferdams) below the normal high water mark and non low flow conditions during the instream work window restriction, except for the following:

- Work within a sealed and dewatered cofferdam. Maintenance pumping within a sealed cofferdam is also allowed.

No construction activity, whether temporary or permanent, is allowed that completely blocks a river, stream, or brook without providing downstream flow.

The contractor and all subcontractors shall abide by all permits and conditions.

SPECIAL PROVISION

SECTION 107

TIME

(Scheduling of Work – Projected Payment Schedule)

Description The Contractor shall also provide the Department with a Quarterly Projected Payment Schedule that estimates the value of the Work as scheduled, including requests for payment of Delivered Materials. The Projected Payment Schedule must be in accordance with the Contractor's Schedule of Work and prices submitted by the Contractor's Bid. The Contractor shall submit the Projected Payment Schedule as a condition of Award.

SPECIAL PROVISIONS
SECTION 107.4
SCHEDULING OF WORK
(Schedule of Work Required)

Section 107.4.2 – Schedule of Work Required

Add the following paragraph after paragraph 4 -

Along with the Schedule of Work, the Contractor will provide a written day by day summary of construction activities that will occur for the upcoming two (2) week period.

Section 107.4.5 – Modify the first sentence of paragraph one with the following:

After Schedule of Work, add **written day by day summary of construction activities that will occur for the upcoming two (2) week period**

SPECIAL PROVISIONS

SECTION 107.9

TIME

(Project Closeout)

The following is in addition to the requirements of Section 107.9.

The Contractor shall maintain, at the site, a set of Drawings, on which shall be recorded accurately as the work progresses, the actual dimensions and grades of all his work, indicating thereon all variations from the Contract Drawings. The record shall include the work of all Subcontractors. Record drawings shall be reviewed by the Resident, and the Contractor shall make all necessary changes according to the Resident's review.

Prior to final acceptance of the Work, all recorded data shall be transferred by the Contractor, to a complete set of reproducible record drawings, in ink or photolitho reproductions of the original of the Contract Drawings showing "As-Built" conditions. Reproductions shall be 3 mil mylar, single matted, as approved by the Department.

PIN 9840.10
BREWER
April 18, 2007

SPECIAL PROVISIONS
SECTION 107
TIME
(Contract Time)

All work shall be completed by December 7, 2008.

SPECIAL PROVISIONS
SECTION 202
REMOVING STRUCTURES AND OBSTRUCTIONS
(LOG CRIB)

202.02 Removing Buildings: Remove this section in its entirety and replace with the following:

202.02 Removal & Disposal of Log Crib Work.

The Contractor shall remove and dispose of timber crib work as designated on the plans. All debris shall be removed to an approved dump or waste site and buried. No material shall be disposed of by burning. For a related provision, see Code of Maine Regulations 401.

202.07 Method of Measurement: Add the following sentence to the end of the section: The removal and disposal of the existing log crib work will be measured by the Ton complete and accepted.

202.08 Basis of Payment: Add the following at the end of the last sentence of the first Paragraph:

The accepted quantity of log crib work removed and disposed of will be paid for at the respective contract unit price per Ton which shall include a work, labor, materials, equipment, transporting and disposal fees.

<u>Pay Item</u>	<u>Pay Unit</u>
202.07 Removal & Disposal of Existing Log Crib Work	Ton

SPECIAL PROVISION
SECTION 203
EXCAVATION AND EMBANKMENT
(Dredge Materials)

Description: Dredge Material (See MDOT Standard Specifications § 101.2) is regulated as a Special Waste.

CONSTRUCTION REQUIREMENTS

Management and Disposal: In accordance with Maine Department of Environmental Protection regulations, Dredge Material excavated from below normal high water (this could be dry at the time of excavation) is a regulated special waste. Relevant regulations state that select Dredge Materials are exempt from regulation if they meet defined physical characteristics and are utilized/managed on the site of generation. Data associated with this project indicates that the Dredge Material meets the specified physical requirements for the regulatory exemption. In light of this data, the excavated Dredge Material shall be used on the project site. The Contractor shall ensure that all Dredge Material is placed into the fill areas specified by MaineDOT.

Any Dredge Material from the project that is not used on the site must be handled as a Special Waste. Management of this Dredge Material must be at a landfill licensed by the Maine Department of Environmental Protection for the disposal of Special Waste. The Contractor shall be responsible for making all necessary arrangements for dewatering and proper disposal of the Dredge Material, including any additional laboratory testing, in accordance with the landfill's license. The Contractor shall provide documentation to the Resident that the Dredge Material was disposed of as specified. The submitted documentation shall consist of truck manifests, waybills, or such documentation as may be acceptable to the Resident and shall clearly document the disposal site location and the quantity of Dredge Material.

Method of Measurement: Dredge Material will be measured by the cubic yard of material removed.

Basis of Payment: Payment for the onsite use of Dredge Material will be incidental to the Contract Pay Items; payment shall be full compensation for excavation, dewatering, managing, transporting, and placement.

The accepted quantity of Dredge Material properly disposed of, as Special Waste, will be paid for at the contract unit price bid for Disposal of Special Waste; payment shall be full compensation for excavation, dewatering, testing, managing, transporting, disposal or placement, and all associated fees.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
203.2318	Disposal of Special Waste	Ton

SPECIAL PROVISION

SECTION 203

(Crushed Stone Fill)

Description This work shall consist of providing crushed stone in accordance with these specifications and in reasonable close conformity with the width, grade and thickness shown on the plans or established by the Resident.

MATERIALS

Aggregate Crushed stone material shall meet the requirements of ASTM standard specification C33, Standard Specification for Concrete Aggregates.

The aggregate shall meet the following gradation requirements:

<u>Sieve Size</u>	<u>Max % Passing by Weight</u>
2"	95-100
1"	0-30
¾"	0-5

Construction Requirements The crushed stone fill shall be placed and graded as shown on the plans or as directed by the Resident. The crushed stone shall be compacted as required to insure that all voids in the stone fill are filled, as approved by the Resident.

Method of Measurement Aggregate for crushed stone material will be measured by the cubic meter [cubic yard] measured in vehicles at the point of delivery.

Basis of Payment The accepted quantity of crushed stone material will be paid for at the contract unit price per cubic meter [cubic yard] of aggregate measured in vehicles at the point of delivery.

Payment will be paid under:

<u>Pay Item</u>	<u>Pay Unit</u>
203.35 Crushed Stone Fill	Cubic Meter[Cubic Yard]

SPECIAL PROVISION
SECTION 502
STRUCTURAL CONCRETE
(QC/QA Acceptance Methods)

CLASS OF CONCRETE	ITEM NUMBER	DESCRIPTION	P	METHOD
A	502.219	Structural Concrete Abut & Retaining Walls	-	C

SPECIAL PROVISION
SECTION 502
STRUCTURAL CONCRETE
(Quality Level Analysis)

502.01 Description In second sentence, replace "...METHOD B Small Quantity Product Verification..." with "...METHOD B Statistical Acceptance..."

502.05 Composition and Proportioning Delete Table 1 and replace with the following;

TABLE 1- Methods A and B

Concrete CLASS	Compressive Strength (PSI)		Permeability (COULOMBS)		Entrained Air (%)		Notes
	LSL	USL	LSL	USL	LSL	USL	
S	2,900	N/A	N/A	N/A	6.0	8.5	1, 5
A	4,350	-----	-----	2,400	6.0	8.5	1,2,5,6
P	-----	-----	-----	-----	5 ½	7 ½	1,2,3,4,5
LP	5,075	-----	-----	2,000	6.0	8.5	1,2,5,6
Fill	2,900	N/A	N/A	N/A	N/A	N/A	6

502.503 Delete and replace with the following;

“502.0503 Quality Assurance METHOD B The Department will determine the acceptability of the concrete through a quality assurance program.

The Department will take Quality Assurance samples a minimum of once per subplot on a statistically random basis. Quality Assurance tests will include compressive strength, air content and permeability.

Concrete sampling for quality assurance tests will be taken at the discharge point, with pumped concrete sampling taken at the discharge end of the pump line.

Lot Size A lot size shall consist of the total quantity represented by each class of concrete in the Contract, except in the case when the same class of concrete is paid for under both lump sum items and unit price items in the Contract; in this case, the lump sum item quantities shall comprise 1 lot and the unit price item quantities shall comprise a separate lot. A lot shall consist of a minimum of 3 and a maximum of 10 sublots. If a lot is comprised of more than 10 sublots, sized in accordance with Table #3, then this quantity shall be divided equally into 2, or more, lots such that there is a minimum of 3 and a maximum of 10 sublots per lot. If there is insufficient quantity in a lot to meet the recommended minimum subplot size, then the lot shall be divided into 3 equal sublots.

Sublot Size, General The size of each subplot shall be determined in accordance with Table #3. The Resident may vary subplot sizes based on placement sizes and sequence.

Sublot Size, Unit Price Items Sublot sizes will initially be determined from estimated quantities. When the actual final quantity of concrete is determined: If there is less than one-half the estimated subplot quantity in the remaining quantity, then this quantity shall be combined with the previous subplot, and no further Acceptance testing will be performed; if there is more than one-half the estimated subplot quantity in the remaining quantity, then this quantity shall constitute the last subplot and shall be represented by Acceptance test results. If it becomes apparent part way through a lot that, due to an underrun in quantity, there will be an insufficient quantity of concrete to comprise three sublots, then the Resident may adjust the sizes of the remaining sublots and select new sample locations based on the revised estimated quantity of concrete remaining in the lot.

Sublot Size, Lump Sum Items Each lot shall be divided into sublots of equal size, based on the estimated quantity of concrete.

TABLE 3

Quantity m ³ [cy]	Recommended Sublot Size m ³ [cy]
0-400 [0-500]	40 [50]
401-800 [501-1000]	60 [75]
801-1600 [1001-2000]	80 [100]
1601 [2001] or greater	200 [250]

Determination of the concrete cover over reinforcing steel for structural concrete shall be made prior to concrete being placed in the forms. Bar supports, chairs, slab bolsters, and side form spacers shall meet the requirements of Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice, Chapter 3 Section 2.5 Class 1, Section 2.6 Class 1A, or Section 4. All supports shall meet the requirements for type and spacing as stated in the CRSI Manual of Standard Practice, Chapter 3. Concrete will not be placed until the placing of the reinforcing steel and supports have been approved by the Resident. If the Contractor fails to secure Department approval prior to placement, the Contractor's failure shall be cause for removal and replacement at the Contractor's expense. The Contractor shall notify the Resident, at least 48 hours prior to the placement, when the reinforcing steel will be ready for checking. Sufficient time must be allowed for the checking process and any needed repairs.

Evaluation of materials will be made using the specification limits in Table 1.

Compressive strength tests will be completed by the Department in accordance with AASHTO-T22 at ≥ 28 days, except that no slump will be taken. The average of two concrete cylinders per subplot will constitute a test result and this average will be used to determine the compressive strength for pay adjustment computations.

Testing for Entrained Air in concrete, at the rate of one test per subplot, shall be in accordance with AASHTO T152.

Rapid Chloride Permeability test specimens will be completed by the Resident in accordance with AASHTO T-277 at an age ≥ 56 days. Two 100 mm x 200 mm [4 in x 8 in] cylinders will be taken per subplot placed.

Surface Tolerance, Alignment and Trueness, Plumb and Batter, and Finish will be measured as described in Section 502.0502.

Rejection by Resident For an individual subplot with a calculated pay factor of less than 0.80, the Department will, at its sole discretion:

A. Require the Contractor to remove and replace the entire affected placement with concrete meeting the Contract requirements at no additional expense to the Department, or

B. Accept the material, at a reduced payment as determined by the Department. (See also Section 502.191)

For a lot in progress, the Contractor shall discontinue operations whenever one or more of the following occurs:

A. The pay factor for any property drops below 1.00 and the Contractor is taking no corrective action

B. The pay factor for any property is less than 0.90

C. The Contractor fails to follow the QC Plan”

502.18 Method of Measurement Under Section E. make the following change from “...Method A, and under Section 502.19...” to “...Method A, Section 502.0503- Quality Assurance Method B, and under Section 502.19...”

502.19 Basis of Payment Modify the first sentence of the seventh paragraph from “...accepted under Method A.” to “...accepted under Method A and Method B.”

502.191 Pay Adjustment for Compressive Strength Add the following as the second sentence to the first paragraph; “Pay factors (PF) for pay adjustments for compressive strength will be determined using the Quality Level Analysis as specified in Section 106.”

502.192 Pay Adjustment for Chloride Permeability Delete and replace with the following;

“Pay factors (PF) for pay adjustments for Chloride Permeability will be determined using the Quality Level Analysis as specified in Section 106.

Values greater than 4000 coulombs shall be subject to rejection and replacement at no additional cost to the Department.”

502.193 Pay Adjustment for Air Content Delete and replace with the following;

“Pay factors (PF) for pay adjustments for air content will be determined using the Quality Level Analysis as specified in Section 106.”

Add the following Section;

“502.195 Pay Adjustments for Compressive Strength, Chloride Permeability and Air Content The Composite Pay Factor (CPF) for each lot of concrete shall be computed as follows:

$$\text{CPF} = [(\text{Compressive Strength PF}-1)(0.20)] + [(\text{Air Content PF}-1)(0.40)] \\ + [(\text{Chloride Permeability PF}-1)(0.40)]$$

The pay adjustment for each lot of concrete shall be computed as follows:

$$\text{Lot Pay Adjustment} = P \times \text{CPF} \times \text{Lot Size}$$

There will be no positive pay adjustments for Method B Concrete.”

SPECIAL PROVISIONS
SECTION 503
REINFORCING STEEL
(Basis of Payment)

503.11 Basis of Payment Remove the first and second paragraphs in their entirety and replace with the following:

503.11 Basis of Payment The accepted quantity of reinforcing steel will **not** be paid for directly for each item involved, completed, and accepted but will be considered incidental to Item 502.219 Structural Concrete.

The accepted quantity of epoxy coated reinforcing steel will **not** be paid for directly for each item involved, completed, and accepted and all additional expenses that may be incurred by the Contractor or their suppliers as a result of the requirements in these specifications but will be considered incidental to Item 502.219 Structural Concrete.

SPECIAL PROVISION
SECTION 515
PROTECTIVE COATING FOR CONCRETE SURFACES

This Section is revised by the following:

515.05 Method of Measurement Protective coating for concrete surfaces will not be measured for payment.

515.06 Basis of Payment Costs for all required protective coating for concrete structures will be considered incidental to the various contract items and no separate payment will be made.

SPECIAL PROVISIONS - TECHNICAL

SECTION 542
STEEL SHEET PILING

542.01 Description. The work under this section consists of furnishing and installing the steel sheet pile bulkhead and deadman as shown on the plans and specified herein. Work under this item shall also include excavation, sheet pile coatings, cathodic protection, anchorage rods and hardware, connecting walls, and any pile testing as specified by the project contract plans and described in these specifications.

542.02 Submittals.

- A. Shop Drawings: Submit drawings for approval prior to start of the work or ordering materials. Include details of top protection, splices, fabricated additions to plain piles. Include method of installation, type and size of pile hammer, cut-off method, and corrosion protection. Drawings for sheet piling including fabricated sections shall show complete dimensions including details of sheet piling and the driving schedule, sequence and location of sheet piling. Include details and dimensions of templates and other temporary guide structures for installing the piling. Provide details of the method of handling sheet piling to prevent permanent deflection, distortion or damage to interlocks.
- B. Records:
 - 1. Sheet pile driving records
- C. Certificates:
 - 1. Material certificates including chemical and physical test results.
- D. Performance Monitoring:
 - 1. A surveying program to monitor the alignment and horizontal offset of the sheet piles during construction.
 - 2. Provide a plan to implement the monitoring of the performance of the new sheet-pile bulkhead as described in Paragraph 542.04 C3.

542.03 Materials.

- A. Sheet Piles shall be structural steel and shall meet the requirements of ASTM A 690/A 690M (2000a) High-Strength Low-Alloy Steel H-Piles and Sheet Piling for Use in Marine Environments. Mill test reports will be required. Notch toughness tests will not be required. The interlocks of sheet piling shall be free-sliding, provide a swing angle suitable for the intended installation but not less than 5 degrees when interlocked, and maintain continuous interlocking when installed.
- B. Sheet Pile Connectors - Where sheet pile changes direction, connectors shall be equivalent to those manufactured by PilePro LLC. Connectors shall be of the same material and coated the same as sheet pile.
- C. Pile Tips - Provide cast steel sheet pile protectors, in one piece Z configuration, at the bottom of each pile.
- D. Concrete for Sheet Pile Caps and Thrust Block anchors shall be Class S and shall meet the requirements of Section 502 - Structural Concrete.
- E. Reinforcing Steel for Sheet Pile Caps and Thrust Block anchors shall meet the requirements of Section 503 - Reinforcing Steel.
- F. Horizontal Tie Rods shall be structural steel and shall meet the requirements of ASTM A572, Grade 50. Nuts and Washers shall meet the requirements of ASTM A572, Grade 50 or equal. Tie Rods, Nuts and Washers shall be galvanized in accordance with ASTM A123 and ASTM A153 as applicable.
- G. Steel Shapes and Plates shall be structural steel and shall meet the requirements of ASTM A572, Grade 50. Bolts, Nuts and Washers shall meet the requirements of ASTM A325.
- H. Coating System for Sheet Pile, Wales, and miscellaneous steel shapes shall consist of a 10 – 14 mil base coat thickness of 3M Scotchkote 6233 fusion bonded epoxy. An additional 20 – 25 mil top coat thickness of 3M Scotchkote 6352 fusion bonded epoxy, dark brown in color, shall be applied to the river side of the Sheet Piles.
 - 1. Coating Application: Follow the latest version of ASTM A 950/A 950M Standard Specification For Fusion Bonded Epoxy-Coated Structural H-Piles and Sheet Piles. Coating shall be applied by an applicator certified by the coating manufacturer. The cured coating shall be uniform in color, all piles shall be the same color) and shall be free of defects such as blisters, fish eyes, pinholes, runs and sags. The applicator shall be responsible for visual inspection, thickness measurement, holiday testing, and record keeping of inspection results.
 - 2. Coating of bare steel where weep holes are drilled or punched, or piles cut, shall be in accordance with the drawings. Coating around weep hole shall be limited to a 4 inch

square template area for a neat appearance. Edges of holes and pile cuts shall be radiused in accordance with coating manufacturer's guidelines.

542.04 Construction Methods.

A. Earthwork

1. Excavation and backfill shall be performed in accordance with Section 206 "Structural Excavation".
2. Obstructions encountered in pile locations shall be dealt with as follows:
 - a. All rocks, timbers or other obstructions, within 5 feet below the sheeting cut off elevation (either above or under water) which interfere with driving of sheet piling shall be removed at no additional cost to Owner.
 - b. In the case of an apparent obstruction below the level in (a), but above anticipated full depth, which prevents appreciable penetration of a pile (s), the abnormal condition will receive further consideration by the Engineer. Depending on depth and resistance of the obstruction, the Engineer will decide whether to consider the pile (s) acceptable or order the obstruction removed. The decision may be deferred until the driving of adjacent piles indicates the obstruction to be isolated or extending over the area of several piles.

B. Installation

1. Pile Hammer

Both vibratory hammer and an impact shall be available to the Contractor to install steel sheet piling. Use a pile hammer having a delivered force or energy suitable for the total weight of the pile and the character of subsurface material to be encountered. Operate hammer at the rate (s) recommended by the manufacturer throughout the entire driving period. Repair damage to piling caused by use of a pile hammer with excess delivered force or energy.

2. Pile Protection

Use a protective cap during driving to prevent damage to the top of the sheet piling.

3. Templates

Prior to driving, provide template or driving frame suitable for aligning, supporting, and maintaining sheet piling in the correct position during setting and driving. Use a system of structural framing sufficiently rigid to resist lateral and driving forces and to adequately support the sheet piling until design tip elevation is achieved. Provide at least two levels of support, at third points. Templates shall not move when supporting sheet piling. Fit templates with wood blocking to bear against the web of each alternate sheet pile and hold the sheet pile at the design location alignment. Provide outer template straps or other restraints as necessary to prevent the sheets from warping or wandering from the alignment. Mark template for the location of the leading edge of each alternate sheet pile. If in view, also mark the second level to assure to that the piles are vertical and in position. If two guide marks cannot be seen, other means must be used to keep the sheet pile vertical along its leading edge.

4. Pile Driving

Drive sheet pile to the indicated tip elevations. Maintain piling vertical during driving. Drive piles in such a manner as to prevent damage to the piles and to provide a continuous closure. Where possible, drive Z-pile with the ball end leading. If an open socket is leading, a bolt or similar object placed in the bottom of the interlock will minimize packing material into it and ease driving for the next sheet. Incrementally sequence driving of individual piles such that the tip of any sheet pile shall not be more than 4 feet below that of any adjacent sheet pile.

5. Jetting of Piles

Jetting will not be permitted except as may be necessary to remove or bypass obstructions. Jetting must be approved by the Engineer.

6. Pre-Augering or Spudding of Piles

Pre-augering or spudding of piles may be used at no additional cost upon approval of the Engineer. Discontinue pre-augering or spudding at least 5 feet above the indicated pile tip elevation. Drive the pile the final 5 feet of penetration.

7. Cutting and Splicing

Piles driven to refusal or the point where additional penetration cannot be attained and are extending above the required top elevation in excess of the specified

tolerance shall be cut off to the required elevation. Piles driven below the required top elevation and piles damaged by driving and cut off to permit further driving shall be extended as required to reach the top elevation by splicing when directed by the Engineer. One splice per pile will be permitted. Piles adjoining spliced piles shall be full length unless otherwise approved. Welding of splices shall conform to the requirements of Section 504, Structural Steel. Ends of piles to be spliced shall be squared before splicing to eliminate dips or camber. Splice piles with concentric alignment of the interlocks so that there are no discontinuities, dips or camber at the abutting interlocks. Spliced piles shall be free sliding and able to obtain the maximum swing with contiguous piles. Trim the tops of piles excessively battered during driving, when directed at no cost. Pile cut-offs shall become the property of the Contractor and shall be removed from the site. Use a straight edge in cutting by burning to avoid abrupt nicks. Bolt holes shall be drilled or may be burned and reamed by approved methods which will not damage the surrounding metal. Holes other than bolt holes shall be smooth and the proper size for rods or other items to be inserted. Do not use explosives for cutting.

8. Welding

Shop and field welding, qualifications of welding procedures, welders, and welding operators shall be in accordance with AWS D1.1.

9. Tolerances in Driving

Drive all piles with a variation from vertical of not more than $\frac{1}{4}$ inch per foot. Place the pile so the face will not be more than 6 inches from vertical alignment at any point over the entire length of the bulkhead. Top of pile at elevation of cut-off shall be within $\frac{1}{2}$ in. horizontally and 2 in. vertically of the location indicated. Manipulation of piles to force them into position will not be permitted. Check all piles for heave. Redrive all heaved piles to the required tip elevation.

C. Inspection

Perform continuous inspection during driving of steel sheet piling by frequent optical surveying of the sheet piling alignment relative to an established reference base line. Inspect all piles for compliance with tolerance requirements regarding horizontal and vertical alignment. Bring any unusual problems which may occur to the attention of the Engineer.

1. Inspection of Driven Piling

The Contractor shall inspect the interlocks of the portion of driven piles that extend above ground. Remove and replace piles found to be out of interlock.

2. Pulling and Redriving

The Contractor may be required to pull selected piles after driving to determine the condition of the underground portions of piles. The pile pulling method must be approved by the Engineer. Remove and replace at the Contractor's expense any pile pulled and found to be damaged to the extent that its usefulness in the structure is impaired. Redrive piles pulled and found to be in satisfactory condition.

3. Performance Monitoring Set-Up

Before installation of any sheet piling and at no charge to the owner, the Contractor shall retain a registered surveyor to establish an optical baseline relative to the proposed bulkhead alignment. During installation of the sheet piling and subsequent installation of the foundation bearing piles including removal of the existing timber piles, the horizontal off-set of the top of the sheet piling from the baseline and vertical elevation shall be monitored by the surveyor daily. Surveyor shall provide markings at the top of the sheet piling driven at intervals of 15 feet in plan for making optical horizontal off-set measurements.

4. Installation Records

Maintain a pile driving record for each sheet pile. Indicate on the installation record installation dates and times, type and size of hammer, rate of operation, total driving time, dimensions of driving helmet and cap used, blows or time required per foot for each foot of penetration, driving resistance in blows for final 6 in. of penetration, pile locations, tip elevations, ground elevations, and cut-off elevations. Record any unusual pile driving problems. Submit complete records to the Engineer.

5. Performance Records

The Contractor shall promptly provide the results of the surveys of the horizontal and vertical alignment to the Engineer. The data collected shall be presented in a format to depict the daily and the cumulative performance.

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Brewer
April 28, 2007

542.05 Method of Measurement. Unless otherwise specified, the sheet piling bulk head will be measured as one lump sum complete and accepted as shown on the plans or as directed by the resident.

542.06 Basis of Payment. The accepted quantity of sheet piling bulk head will be paid for at the contract lump sum price, complete in place. The price shall be full compensation for furnishing, transporting, handling, placing or erecting the material specified, including all hardware, deadman, sheet pile coating, cathodic protection, excavation, anchorage rods, connecting walls, removal and disposal of any obstructions, and any pile testing as specified by the plans and described in these specifications.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
542.93 Bulkhead	Lump Sum

SPECIAL PROVISIONS
SECTION 603
PIPE CULVERTS AND STORM DRAINS

603.12 Basis of Payment add the following to the list of Pay Items:

<u>Pay Item</u>		<u>Pay Unit</u>
603.04	4" PVC Drain Service	LF

SPECIAL PROVISIONS
SECTION 610
STONE FILL, RIPRAP, STONE BLANKET
AND STONE DITCH PROTECTION

610.02 Material Add the following after the first paragraph:

In addition to meeting the requirements in Section 703.28, Heavy Riprap shall also have a D50 equal to 30" and a maximum size of 42". All Heavy Riprap materials shall be of similar color. This consistency shall be maintained throughout the project area.

610.06 Basis of Payment Add the following after the second paragraph and before the Payment description chart.

Stone fill for bedding and stabilization geotextile underneath Heavy Riprap shall be considered incidental to Heavy Riprap installation. No separate payment shall be made.

SPECIAL PROVISIONS
SECTION 639
Engineering Facilities
(Field Office Type A)

639.04 Field Offices

The following is in addition to the requirements for a Field Office Type B:

The field office shall include an office and conference area combined in the minimum required area. The office and conference area shall have no direct connection to the office space of the Contractor, without approval from the Engineer. Additional minimum requirements:

- The Office Desk shall have a lock and key.
- The four draw metal filing cabinet shall have a lock and key.
- One (1) accurate outside mercury thermometer
- One (1) current wall calendar.
- One (1) current tide table.
- One (1) folding conference table (approx. 2ft. x 8ft.) with 4 folding chairs in addition to the desk chairs.
- The Contractor shall provide janitorial services to the field office.
- Plain Paper Fax Machine with a separate independent phone line.
- Where trailers are used, they shall be anchored to resist wind and uplift forces.

639.09 Telephone

Paragraph 1 is amended as follows:

The Contractor shall provide **two** telephone lines and **two** telephones.....

Add-

In addition the contractor will supply one computer broadband connection and modem lease. The type of connection supplied will be contingent upon the availability of services (i.e. DSL or Cable Broadband). It shall be the contractor's option to provide dynamic or static IP addresses through the service. **The selected service will have a minimum downstream connection of 1.5 Mbps and 384 Kbps upstream.** The contractor shall be responsible for the installation charges and all reinstallation charges following suspended periods. Monthly service and maintenance charges shall be billed by the Internet Service Provider (ISP) directly to the contractor.

639.11 Basis of Payment:

The additional field office requirements, including maintenance shall be considered incidental to Item 639.18, Field Office Type A. No separate compensation will be made.

SPECIAL PROVISIONS
SECTION 647
SPECIAL WORK CONTROL REQUIREMENTS
(Staging Areas, Access, Hoisting, Lighting, Silt Curtains)

Use of Grounds:

Due to limited space along the project, the Department cannot provide staging areas for the Contractor. The Contractor may contact the Frank Higgins, the City Engineer to discuss the potential of the contractor using City owned property adjacent to the project for staging. Should the Contractor desire additional staging areas near the work site, then the Contractor will need to make arrangements with the municipal officials, or private landowners.

The Contractor shall be especially careful not to allow timbers, debris or other matter to go adrift and shall promptly retrieve and remove such items as may accidentally go adrift.

The Contractor shall be careful not to discharge or spill any oil, grout, concrete or other contaminants in or onto the waters adjacent to the work.

Staging, Hoisting and Floating Equipment:

- A. All staging and floating equipment required shall be erected or furnished by the General Contractor and maintained in safe condition by him for use of all trades. The Contractor shall submit his proposed method of staging and floating equipment to the Resident for approval prior to start up of operations.
- B. All necessary hoisting equipment and machinery will be installed, operated and maintained in safe condition by the Contractor.
- C. All hoists, scaffolds, rigging and floating equipment shall be of approved design; erected, maintained and removed by experienced tradesman; and comply with the requirement of all applicable federal, (including OSHA), state and local laws, rules and regulations including those applicable requirements of "American Standard Safety Code for Building Construction" published by ANSI.
- D. Contractor shall keep proper lights each night between sunset and sunrise upon all floating plan and equipment and any other obstructions connected with the work in accordance with CG169, Rules of the road, and Code of Federal Regulations, Title 33. Chapter 1, Subchapter C and Chapter 11, Part 207. Contractor shall be required to install and maintain for the duration of the Contract, standard obstruction lights upon all stakes, piles, dolphins, or upon any other obstructions connected with the work that are located in navigable waters. The obstruction

- light shall consist of a quick flashing white light which shows not less than sixty flashes per minute when viewed from any direction. The light shall have a luminous intensity that can be seen from not less than two miles.
- E. Contractor will be required to conduct the work in such a manner as to not obstruct navigation of any vessels outside the construction area identified on the Drawings. In case the Contractor's plant so obstructs local vessels, it shall be promptly moved on the approach of the local vessels to such an extent as may be necessary to afford a safe, practicable passage. Upon completion of the Work, Contractor shall promptly remove all plant, buoys and other markers placed by him under the Contract.
 - F. Should the Contractor, during the progress of the Work lose, dump, throw overboard, sink or misplace any materials, plant machinery, or appliance, the Contractor shall recover and remove the same with the utmost dispatch. Should the Contractor refuse, neglect or delay compliance with the above, such obstructions may be removed by the Owner, and the cost of such removal shall be deducted from money due the Contractor.

Silt Curtains:

- A. The Contractor shall be required to contain his water operations at all times with a floating boom equipped with an 8' (2.4 m) minimum silt curtain. The boom and curtain shall be anchored at both ends to the shore, at or above the extreme high tide mark to ensure that all debris is contained within the water operational area.
- B. Silt curtains shall be equal to those manufactured by one of the following companies:
 - a. American Boom and Barrier Corporation, Port Canaveral, Florida;
 - b. American Marine, Incorporated, Cocoa, Florida; and
 - c. Brockton Equipment Corporation, Brockton, Massachusetts.
- C. Silt curtains shall be inspected and repaired at least weekly or when required to ensure that they are properly functioning.

SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC
(Traffic Control)

Failure by the contractor to follow the Contracts 652 Special Provisions and Standard Specification and/or The Manual on Uniform Traffic Control Devices (MUTCD) and/or The Contractors own Traffic Control Plan will result in a violation letter and result in a reduction in payment as shown in the schedule below. The Departments Resident or any other representative of The Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item. Any reduction in payment under this Special Provision will be in addition to forfeiting payment of maintenance of traffic control devices for that day.

ORIGINAL CONTRACT AMOUNT

from	Up to and	Amount of Penalty
<u>More Than</u>	<u>Including</u>	<u>Damages per Violation</u>
\$0	\$100,000	\$250
\$100,000	\$300,000	\$500
\$300,000	\$500,000	\$750
\$500,000	\$1,000,000	\$1,500
\$1,000,000	\$2,000,000	\$2,500
\$2,000,000	\$4,000,000	\$5,000
\$4,000,000	and more	\$10,000

SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC
Construction Sign Sheeting Material

Super high intensity fluorescent retroreflective sheeting, ASTM D 4956 - Type VII, Type VIII, or Type IX (prismatic), is required for all construction signs.

SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC

Approaches Approach signing shall include the following signs as a minimum. Field conditions may warrant the use of additional signs as determined by the Resident.

Road Work Next x Miles
Road Work 500 Feet
End Road Work

Work Area At each work site, signs and channelizing devices shall be used as directed by the Resident. Signs include:

Road Work xxxx¹
One Lane Road Ahead
Flagger Sign

Other typical signs include:

Be Prepared to Stop
Low Shoulder
Bump
Pavement Ends

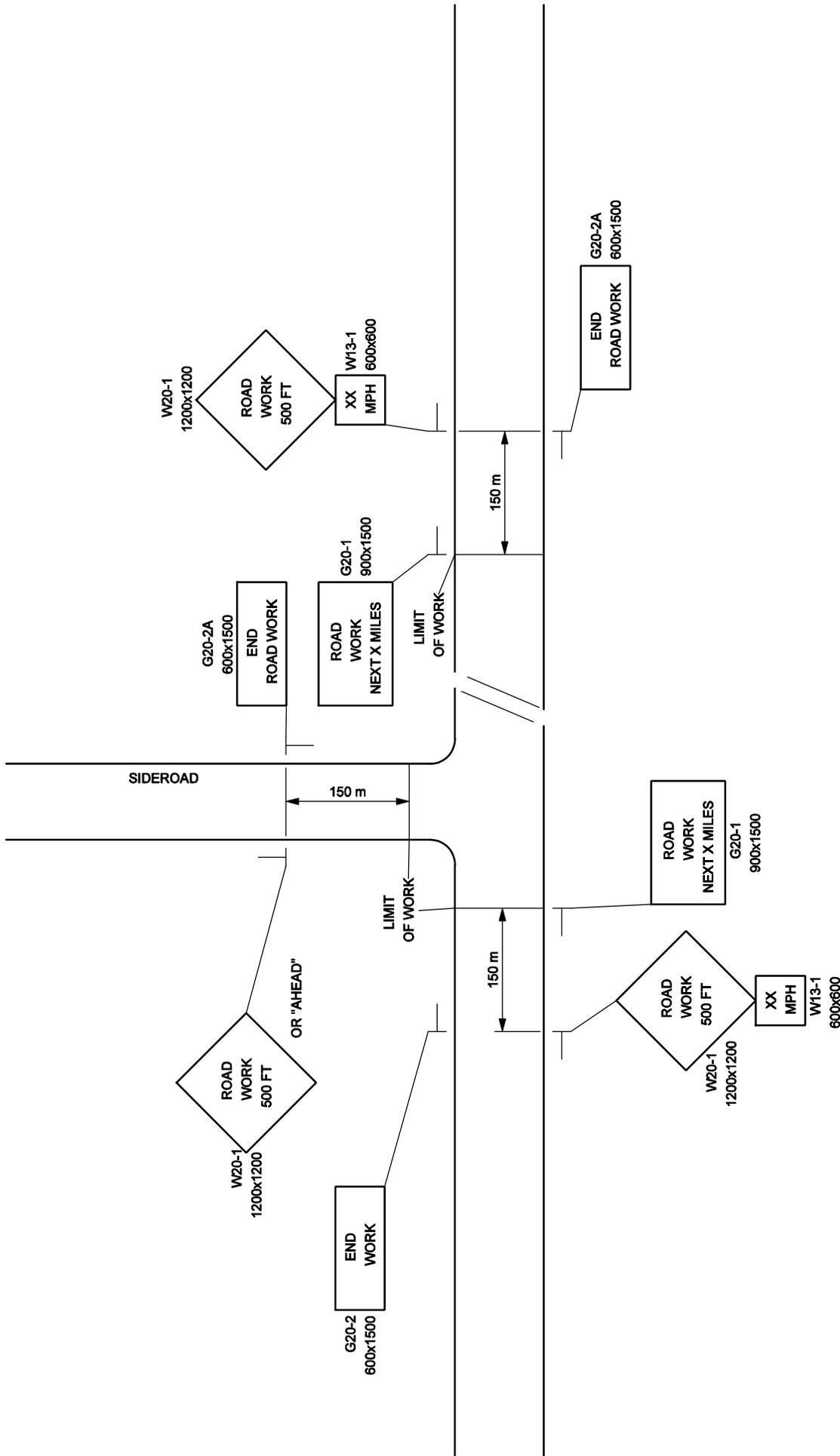
The above lists of Approach signs and Work Area signs are representative of the contract requirements. Other sign legends may be required.

The Contractor shall conduct their operations in such a manner that the roadway will not be restricted to one lane for more than 800 m [2,500 ft] at each work area. Where more than one work area restricts traffic to one lane operation, these work areas shall be separated by at least 1.6 km [1 mile] of two way operation.

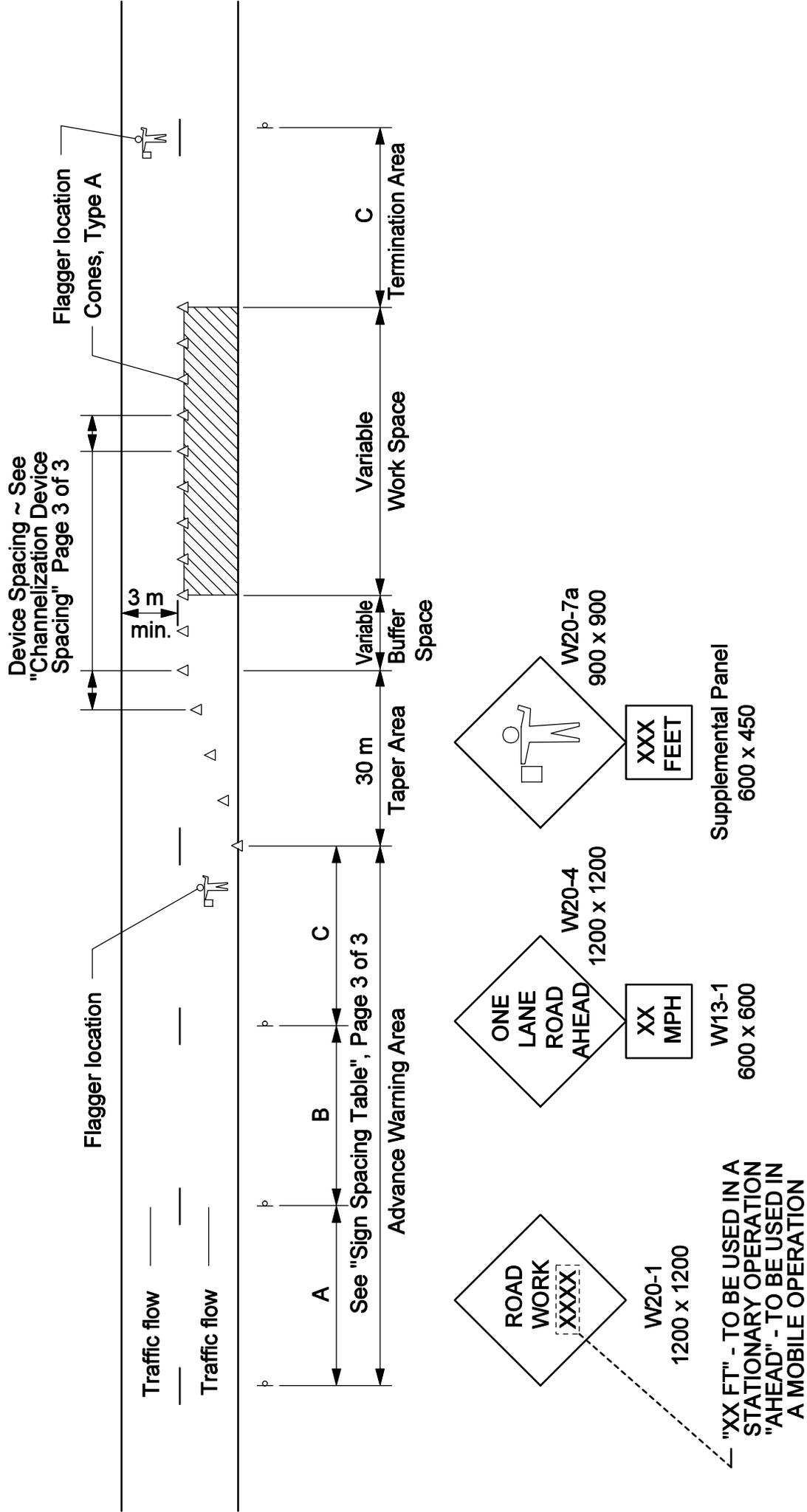
Temporary Centerline A temporary centerline shall be placed each day on all new pavement to be used by traffic. The temporary centerline, when specified of reflectorized traffic paint, shall conform to the standard marking patterns used for permanent markings.

Failure to apply a temporary centerline daily will result in suspension of paving until temporary markers are applied to all previously placed pavement.

¹ “Road Work Ahead” to be used in mobile operations and “Road Work xx ft” to be used in stationary operations as directed by the Resident.



TYPICAL -- PROJECT APPROACH SIGNING -- TWO WAY TRAFFIC



"XX FT" - TO BE USED IN A STATIONARY OPERATION
 "AHEAD" - TO BE USED IN A MOBILE OPERATION

TYPICAL APPLICATION: TWO - WAY, TWO LANE ROADWAY, CLOSING ONE LANE USING FLAGGERS

* Formulas for L are as follows:

For speed limits of 40 mph (60 km/h) or less:

$$L = \frac{WS^2}{60} \quad (L = \frac{WS^2}{155})$$

For speed limits of 45 mph (70 km/h) or greater:

$$L = WS \quad (L = \frac{WS}{1.6})$$

* Formulas for L are as follows:

A minimum of 5 channelization devices shall be used in the taper.

TYPE OF TAPER	TAPER LENGTH (L)*
Merging Taper	at least L
Shifting Taper	at least 0.5L
Shoulder Taper	at least 0.33L
One-Lane, Two-Way Traffic Taper	100 ft (30 m) maximum
Downstream Taper	100 ft (30 m) per lane

CHANNELIZATION DEVICE SPACING

The spacing of channelization devices shall not exceed a distance equal to 1.0 times the speed limit in mph when used for taper channelization, and a distance in feet of 2.0 times the speed limit in mph when used for tangent channelization.

GENERAL NOTES;

1. Final placement of signs and devices may be changed to fit field conditions as approved by the Resident.

Road Type	Distance Between Signs**		
	A	B	C
Urban 30 mph (50 km/h) or less	100 (30)	100 (30)	100 (30)
Urban 35 mph (55 km/h) and greater	350 (100)	350 (100)	350 (100)
Rural	500 (150)	500 (150)	500 (150)
Expressway / Urban Parkway	2,640 (800)	1,500 (450)	1000 (300)

**Distances are shown in feet (meters).

SUGGESTED BUFFER ZONE LENGTHS

Speed (mph)	Length (feet)	Speed (mph)	Length (feet)
20	115	40	325
25	155	45	360
30	200	50	425
35	250	55	495

**SPECIAL PROVISION
SECTION 656**

Temporary Soil Erosion and Water Pollution Control

The following is added to Section 656 regarding Project Specific Information and Requirements. All references to the Maine Department of Transportation Best Management Practices for Erosion and Sediment Control (a.k.a. Best Management Practices manual or BMP Manual) are a reference to the latest revision of said manual. The "Table of Contents" of the latest version is dated "1/19/00" (available at <http://www.state.me.us/mdot/mainhtml/bmp/bmpjan2000.pdf>.)

Procedures specified shall be according to the BMP Manual unless stated otherwise.

Any and all references to "bark mulch" or "composted bark mix" shall be a reference to "Erosion Control Mix" in accordance with *Standard Specification, Section 619 - Mulch*.

Project Specific Information and Requirements

The following information and requirements apply specifically to this Project. The temporary soil erosion and water pollution control measures associated with this work shall be addressed in the SEWPCP.

1. This project is in the close proximity to an outstanding river segment of the Penobscot River and is considered **SENSITIVE** in accordance with the BMP Manual. The Contractor's SEWPCP shall comply with Section II.B., Guidelines for Sensitive Waterbodies in the BMP Manual.
2. The SEWPCP shall describe how sedimentation will be minimized while Work is performed within the inter-tidal zone. This includes scheduling and sequencing.
3. Newly disturbed earth shall be mulched by the end of each workday. Mulch shall be maintained on a daily basis.
4. Permanent slope stabilization measures shall be applied within one week of the last soil disturbance.
5. Permanent seeding shall be done in accordance with *Standard Specification, Section 618 - Seeding* unless the Contract states otherwise.
6. After November 1 the Contractor shall use winter stabilization methods, such as Erosion Control Mix as specified in *Standard Specification, Section 619 - Mulch*. If required, spring procedures for permanent stabilization shall also be described in the plan. Use of this product for over-winter temporary erosion control will be incidental to the contract and be paid for as part of Pay Item 656.75.
7. Due to the project sensitivity, the Contractor's SEWPCP shall include specific provisions for sequencing work. Sequencing of any construction phases shall be in the Contractor's SEWPCP to minimize the potential of adverse impacts to resources. The Contractor's SEWPCP shall address the maintenance of temporary stabilization measures of all sections.

**SPECIAL PROVISION
SECTION 656**

Temporary Soil Erosion and Water Pollution Control

8. Due to the project sensitivity, the Contractor's SEWPCP shall include specific provisions for sequencing work. Sequencing of any construction phases shall be in the Contractor's SEWPCP to minimize the potential of adverse impacts to resources. The Contractor's SEWPCP shall address the maintenance of temporary stabilization measures of all sections.
9. Dust control items other than those under *Standard Specification, Section 637 – Dust Control*, if applicable, shall be included in the plan.
10. **CLEARING LIMIT LINES SHALL BE MINIMIZED.** Clearing shall be minimized as shown on the design plans. Areas to be cleared shall be discussed at the preconstruction field review.

SPECIAL PROVISIONS
SECTION 703
AGGREGATES
(Maximum Aggregate Size)

703.25 Stone Fill add the following sentence to the end of the paragraph:

The maximum size of aggregate shall be 4" with 95 percent of aggregate being larger than 1".

STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at:

http://www.maine.gov/mdot/contractor-consultant-information/ss_standard_details_updates.php

<u>Detail #</u>	<u>Description</u>	<u>Revision Date</u>
504(15)	Diaphragms	12/30/02
507(04)	Steel Bridge Railing	2/05/03
526(33)	Concrete Transition Barrier	8/18/03
645(06)	H-Beam Posts – Highway Signing	7/21/04
645(09)	Installation of Type II Signs	7/21/04
626(09)	Electrical Junction Box for Traffic Signals and Lighting	2/25/05
604(01)	Catch Basins	11/16/05
604(05)	Type “A” & “B” Catch Basin Tops	11/16/05
604(06)	Type “C” Catch Basin Tops	11/16/05
604(07)	Manhole Top “D”	11/16/05
604(09)	Catch Basin Type “E”	11/16/05
606(02)	Multiple Mailbox Support	11/16/05
606(07)	Reflectorized Beam Guardrail Delineator Details	11/16/05
609(06)	Vertical Bridge Curb	11/16/05
504(23)	Hand-Hold Details	12/08/05
609(03)	Curb Type 3	6/27/06
609(07)	Curb Type 1	6/27/06
535(01)	Precast Superstructure - Shear Key	10/12/06
535(02)	Precast Superstructure - Curb Key & Drip Notch	10/12/06

535(03)	Precast Superstructure - Shear Key	10/12/06
535(04)	Precast Superstructure - Shear Key	10/12/06
535(05)	Precast Superstructure - Post Tensioning	10/12/06
535(06)	Precast Superstructure - Sections	10/12/06
535(07)	Precast Superstructure - Precast Slab & Box	10/12/06
535(08)	Precast Superstructure - Sections	10/12/06
535(09)	Precast Superstructure - Sections	10/12/06
535(10)	Precast Superstructure - Sections	10/12/06
535(11)	Precast Superstructure - Sections	10/12/06
535(12)	Precast Superstructure - Sections	10/12/06
535(13)	Precast Superstructure - Sections	10/12/06
535(14)	Precast Superstructure - Stirrups	10/12/06
535(15)	Precast Superstructure - Plan	10/12/06
535(16)	Precast Superstructure - Reinforcing	10/12/06
535(17)	Precast Superstructure - Notes	10/12/06
801(01)	Drives on Sidewalk Sections	2/06/07
801(02)	Drives on Non-Sidewalk Sections	2/06/07

SUPPLEMENTAL SPECIFICATION

(Corrections, Additions, & Revisions to Standard Specifications - Revision of December 2002)

SECTION 101

CONTRACT INTERPRETATION

101.2 Definitions

Closeout Documentation Replace the sentence “A letter stating the amount..... DBE goals.” with “DBE Goal Attainment Verification Form”

Add “Environmental Information Hazardous waste assessments, dredge material test results, boring logs, geophysical studies, and other records and reports of the environmental conditions. For a related provision, see Section 104.3.14 - Interpretation and Interpolation.”

Add “Fabrication Engineer The Department’s representative responsible for Quality Assurance of pre-fabricated products that are produced off-site.”

Geotechnical Information Replace with the following: “Boring logs, soil reports, geotechnical design reports, ground penetrating radar evaluations, seismic refraction studies, and other records of subsurface conditions. For a related provision, see Section 104.3.14 - Interpretation and Interpolation.”

SECTION 102

DELIVERY OF BIDS

102.7.1 Location and Time Add the following sentence “As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book.”

102.11.1 Non-curable Bid Defects Replace E. with “E. The unit price and bid amount is not provided or a lump sum price is not provided or is illegible as determined by the Department.”

SECTION 103

AWARD AND CONTRACTING

103.3.1 Notice and Information Gathering Change the first paragraph to read as follows: “After Bid Opening and as a condition for Award of a Contract, the Department may require an Apparent Successful Bidder to demonstrate to the Department’s satisfaction that the Bidder is responsible and qualified to perform the Work.”

SECTION 104

GENERAL RIGHTS AND RESPONSIBILITIES

104.3.14 Interpretation and Interpolation In the first sentence, change “...and Geotechnical Information.” to “...Environmental Information, and Geotechnical Information.”

Delete the entire Section 104.5.9 and replace with the following:

104.5.9 Landscape Subcontractors The Contractor shall retain only Landscape Subcontractors that are certified by the Department's Environmental Office Landscape Unit.

SECTION 105 GENERAL SCOPE OF WORK

Delete the entire Section 105.6 and replace with the following:

105.6.1 Department Provided Services The Department will provide the Contractor with the description and coordinates of vertical and horizontal control points, set by the Department, within the Project Limits, for full construction Projects and other Projects where survey control is necessary. For Projects of 1,500 feet in length, or less: The Department will provide three points. For Projects between 1,500 and 5,000 feet in length: The Department will provide one set of two points at each end of the Project. For Projects in excess of 5,000 feet in length, the Department will provide one set of two points at each end of the Project, plus one additional set of two points for each mile of Project length. For non-full construction Projects and other Projects where survey control is not necessary, the Department will not set any control points and, therefore, will not provide description and coordinates of any control points. Upon request of the Contractor, the Department will provide the Department's survey data management software and Survey Manual to the Contractor, or its survey Subcontractor, for the exclusive use on the Department's Projects.

105.6.2 Contractor Provided Services Utilizing the survey information and points provided by the Department, described in Subsection 105.6.1, Department Provided Services, the Contractor shall provide all additional survey layout necessary to complete the Work. This may include, but not be limited to, reestablishing all points provided by the Department, establishing additional control points, running axis lines, providing layout and maintenance of all other lines, grades, or points, and survey quality control to ensure conformance with the Contract. The Contractor is also responsible for providing construction centerline, or close reference points, for all Utility Facilities relocations and adjustments as necessary to complete the Work. When the Work is to connect with existing Structures, the Contractor shall verify all dimensions before proceeding with the Work. The Contractor shall employ or retain competent engineering and/or surveying personnel to fulfill these responsibilities.

The Contractor must notify the Department of any errors or inconsistencies regarding the data and layout provided by the Department as provided by Section 104.3.3 - Duty to Notify Department If Ambiguities Discovered.

105.6.2.1 Survey Quality Control The Contractor is responsible for all construction survey quality control. Construction survey quality control is generally defined as, first, performing initial field survey layout of the Work and, second, performing an independent check of the initial layout using independent survey data to assure the accuracy of the initial layout; additional iterations of checks may be required if significant discrepancies are discovered in this process. Construction survey layout quality control also requires written documentation of

the layout process such that the process can be followed and repeated, if necessary, by an independent survey crew.

105.6.3 Survey Quality Assurance It is the Department's prerogative to perform construction survey quality assurance. Construction survey quality assurance may, or may not, be performed by the Department. Construction survey quality assurance is generally defined as an independent check of the construction survey quality control. The construction survey quality assurance process may involve physically checking the Contractor's construction survey layout using independent survey data, or may simply involve reviewing the construction survey quality control written documentation. If the Department elects to physically check the Contractor's survey layout, the Contractor's designated surveyor may be required to be present. The Department will provide a minimum notice of 48 hours to the Contractor, whenever possible, if the Contractor's designated surveyor's presence is required. Any errors discovered through the quality assurance process shall be corrected by the Contractor, at no additional cost to the Department.

105.6.4 Boundary Markers The Contractor shall preserve and protect from damage all monuments or other points that mark the boundaries of the Right-of-Way or abutting parcels that are outside the area that must be disturbed to perform the Work. The Contractor indemnifies and holds harmless the Department from all claims to reestablish the former location of all such monuments or points including claims arising from 14 MRSA § 7554-A. For a related provision, see Section 104.3.11 - Responsibility for Property of Others.

SECTION 106 QUALITY

106.4.3 Testing Change the first sentence in paragraph three from "...maintain records of all inspections and tests." to "...maintain original documentation of all inspections, tests, and calculations used to generate reports."

106.6 Acceptance Add the following to paragraph 1 of A: "This includes Sections 401 - Hot Mix Asphalt, 402 - Pavement Smoothness, and 502 - Structural Concrete - Method A - Air Content."

Add the following to the beginning of paragraph 3 of A: "For pay factors based on Quality Level Analysis, and"

106.7.1 Standard Deviation Method Add the following to F: "Note: In cases where the mean of the values is equal to either the USL or the LSL, then the PWL will be 50 regardless of the computed value of s."

Add the following to H: "Method C Hot Mix Asphalt: $PF = [55 + (\text{Quality Level} * 0.5)] * 0.01$ "

SECTION 107 TIME

107.3.1 General Add the following: "If a Holiday occurs on a Sunday, the following Monday shall be considered a Holiday. Sunday or Holiday work must be approved by the Department,

except that the Contractor may work on Martin Luther King Day, President's Day, Patriot's Day, the Friday after Thanksgiving, and Columbus Day without the Department's approval."

107.7.2 Schedule of Liquidated Damages Replace the table of Liquidated Damages as follows:

<u>From More Than</u>	<u>Up to and Including</u>	<u>Amount of Liquidated Damages per Calendar Day</u>
\$0	\$100,000	\$100
\$100,000	\$300,000	\$200
\$300,000	\$500,000	\$400
\$500,000	\$1,000,000	\$575
\$1,000,000	\$2,000,000	\$750
\$2,000,000	\$4,000,000	\$900
\$4,000,000	and more	\$1,875

SECTION 108 PAYMENT

108.4 Payment for Materials Obtained and Stored First paragraph, second sentence, delete the words "...Delivered on or near the Work site at acceptable storage places."

SECTION 109 CHANGES

109.1.1 Changes Permitted Add the following to the end of the paragraph: "There will be no adjustment to Contract Time due to an increase or decrease in quantities, compared to those estimated, except as addressed through Contract Modification(s)."

109.1.2 Substantial Changes to Major Items Add the following to the end of the paragraph: "Contract Time adjustments may be made for substantial changes to Major Items when the change affects the Critical Path, as determined by the Department"

109.4.4 Investigation / Adjustment Third sentence, delete the words "subsections (A) - (E)"

109.5.1 Definitions - Types of Delays

B. Compensable Delay Replace (1) with the following; "a weather related Uncontrollable Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an Equitable Adjustment if the Project falls within the geographic boundaries prescribed under the disaster declaration."

109.7.2 Basis of Payment Replace with the following: "Equitable Adjustments will be established by mutual Agreement for compensable items listed in Section 109.7.3- Compensable Items, based upon Unit or Lump Sum Prices. If Agreement cannot be reached, the Contractor shall accept payment on a Force Account basis as provided in Section 109.7.5 - Force Account Work, as full and complete compensation for all Work relating to the Equitable Adjustment."

109.7.3 Compensable Items Replace with the following: “The Contractor is entitled to compensation for the following items, with respect to agreed upon Unit or Lump Sum Prices:

1. Labor expenses for non-salaried Workers and salaried foremen.
2. Costs for Materials.
3. A 15 % markup on the totals of Items 1 and 2 of this subsection 109.7.3 for home office overhead and profit of the Contractor, its Subcontractors and suppliers, and any lower tier Subcontractors or suppliers, with no mark-ups on mark-ups.
4. Cost for Equipment, based on Blue Book Rates or leased rates, as set forth in Section 109.7.5(C), or the Contractor’s Actual Costs if determined by the Department to be lower.
5. Costs for extended job-site overhead.
6. Time.
7. Subcontractor quoted Work, as set forth below in Section 109.7.5 (F).”

109.7.5 Force Account Work

C. Equipment

Paragraph 2, delete sentence 1 which starts; “Equipment leased....”

Paragraph 6, change sentence 2 from “The Contractor may furnish...” to read “If requested by the Department, the Contractor will produce cost data to assist the Department in the establishment of such rental rate, including all records that are relevant to the Actual Costs including rental Receipts, acquisition costs, financing documents, lease Agreements, and maintenance and operational cost records.”

Add the following paragraph; “Equipment leased by the Contractor for Force Account Work and actually used on the Project will be paid for at the actual invoice amount plus 10% markup for administrative costs.”

Add the following section;

“F. Subcontractor Quoted Work When accomplishing Force Account Work that utilizes Subcontractors, the Contractor will be allowed a maximum markup of 5% for profit and overhead on the Subcontractor’s portion of the Force Account Work.”

SECTION 110
INDEMNIFICATION, BONDING, AND INSURANCE

Delete the entire Section 110.2.3 and replace with the following:

110.2.3 Bonding for Landscape Establishment Period The Contractor shall provide a signed, valid, and enforceable Performance, Warranty, or Maintenance Bond complying with the Contract, to the Department at Final Acceptance.

The bond shall be in the full amount for all Pay Items for work pursuant to Sec 621, Landscape, payable to the “Treasurer - State of Maine,” and on the Department’s forms, on exact copies thereof, or on forms that do not contain any significant variations from the Department’s forms as solely determined by the Department.

The Contractor shall pay all premiums and take all other actions necessary to keep said bond in effect for the duration of the Landscape Establishment Period described in Special Provision 621.0036 - Establishment Period. If the Surety becomes financially insolvent, ceases to be licensed or approved to do business in the State of Maine, or stops operating in the United States, the Contractor shall file new bonds complying with this Section within 10 Days of the date the Contractor is notified or becomes aware of such change.

All Bonds shall be procured from a company organized and operating in the United States, licensed or approved to do business in the State of Maine by the State of Maine Department of Business Regulation, Bureau of Insurance, and listed on the latest Federal Department of the Treasury listing for “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies.”

By issuing a bond, the Surety agrees to be bound by all terms of the Contract, including those related to payment, time for performance, quality, warranties, and the Department’s self-help remedy provided in Section 112.1 - Default to the same extent as if all terms of the Contract are contained in the bond(s).

Regarding claims related to any obligations covered by the bond, the Surety shall provide, within 60 Days of Receipt of written notice thereof, full payment of the entire claim or written notice of all bases upon which it is denying or contesting payment. Failure of the Surety to provide such notice within the 60-day period constitutes the Surety’s waiver of any right to deny or contest payment and the Surety’s acknowledgment that the claim is valid and undisputed.

SECTION 202 REMOVING STRUCTURES AND OBSTRUCTIONS

202.02 Removing Buildings Make the following change to the last sentence in the final paragraph, change “...Code of Maine Regulations 401.” to “...Department of Environmental Protection Maine Solid Waste Management Rules, 06-096 CMR Ch. 401, Landfill Siting, Design and Operation.”

SECTION 203 EXCAVATION AND EMBANKMENT

203.01 Description Under b. Rock Excavation; add the following sentence: “The use of perchlorate is not allowed in blasting operations.”

SECTION 502
STRUCTURAL CONCRETE

502.05 Composition and Proportioning; TABLE #1; NOTE #2; third sentence; Change "...alcohol based saline sealer..." to "alcohol based silane sealer...". Add NOTE #6 to Class S Concrete.

502.0502 Quality Assurance Method A - Rejection by Resident Change the first sentence to read: "For an individual subplot with test results failing to meet the criteria in Table #1, or if the calculated pay factor for Air Content is less than 0.80....."

502.0503 Quality Assurance Method B - Rejection by Resident Change the first sentence to read: "For material represented by a verification test with test results failing to meet the criteria in Table #1, the Department will....."

502.0505 Resolution of Disputed Acceptance Test Results Combine the second and third sentence to read: "Circumstances may arise, however, where the Department may"

502.10 Forms and False work

D. Removal of Forms and False work 1., First paragraph; first, second, and third sentence; replace "forms" with "forms and false work"

502.11 Placing Concrete

G. Concrete Wearing Surface and Structural Slabs on Precast Superstructures Last paragraph; third sentence; replace "The temperature of the concrete shall not exceed 24° C [75° F] at the time of placement." with "The temperature of the concrete shall not exceed 24° C [75° F] at the time the concrete is placed in its final position."

502.15 Curing Concrete First paragraph; replace the first sentence with the following; "All concrete surfaces shall be kept wet with clean, fresh water for a curing period of at least 7 days after concrete placing, with the exception of vertical surfaces as provided for in Section 502.10 (D) - Removal of Forms and False work."

Second paragraph; delete the first two sentences.

Third paragraph; delete the entire paragraph which starts "When the ambient temperature...."

Fourth paragraph; delete "approved" to now read "...continuously wet for the entire curing period..."

Fifth paragraph; second sentence; change "...as soon as it is possible to do so without damaging the concrete surface." to "...as soon as possible."

Seventh paragraph; first sentence; change "...until the end of the curing period." to "...until the end of the curing period, except as provided for in Section 502.10(D) - Removal of Forms and False work."

502.19 Basis of Payment First paragraph, second sentence; add "pier nose armor" to the list of items included in the contract price for concrete.

SECTION 503 REINFORCING STEEL

503.06 Placing and Fastening Change the second paragraph, first sentence from: "All tack welding shall be done in accordance with Section 504, Structural Steel." to "All tack welding shall be done in accordance with AWS D1.4 Structural Welding Code - Reinforcing Steel."

SECTION 504 STRUCTURAL STEEL

504.09 Facilities for Inspection Add the follow as the last paragraph: "Failure to comply with the above requirements will be consider to be a denial to allow access to work by the Contractor. The Department will reject any work done when access for inspection is denied."

504.18 Plates for Fabricated Members Change the second paragraph, first sentence from: "...ASTM A 898/A 898 M..." to "...ASTM A 898/A 898 M or ASTM A 435/A 435 M as applicable and..."

504.31 Shop Assembly Add the following as the last sentence: "The minimum assembly length shall include bearing centerlines of at least two substructure units."

504.64 Non Destructive Testing-Ancillary Bridge Products and Support Structures Change the third paragraph, first sentence from "One hundred percent..." to "Twenty five percent..."

SECTION 535 PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

535.02 Materials Change "Steel Strand for Concrete Reinforcement" to "Steel Strand." Add the following to the beginning of the third paragraph; "Concrete shall be Class P conforming to the requirements in this section. 28 day compressive strength shall be as stated on the plans. Coarse aggregate...."

535.05 Inspection Facilities Add the follow as the last paragraph: "If the above requirements are not met, the Contractor shall be considered to be in violation of Standard Specification 104.2.5 – Right to Inspect Work. All work occurring during a violation of this specification will be rejected."

535.26 Lateral Post-Tensioning Replace the first paragraph; "A final tension..." with "Overstressing strands for setting losses cannot be accomplished for chuck to chuck lengths of 7.6 m [25 ft] and less. In such instances, refer to the Plans for all materials and methods. Otherwise, post-tensioning shall be in accordance with PCI standards and shall provide the anchorage force noted in the Plans. The applied jacking force shall be no less than 100% of the design jacking force."

SECTION 603
PIPE CULVERTS AND STORM DRAINS

603.0311 Corrugated Polyethylene Pipe for Option III Replace the Minimum Mandrel Diameter Table with the following:

Nominal Size US Customary (in)	Minimum Mandrel Diameter (in)	Nominal Size Metric (mm)	Minimum Mandrel Diameter (mm)
12	11.23	300	280.73
15	14.04	375	350.91
18	16.84	450	421.09
24	22.46	600	561.45
30	28.07	750	701.81
36	33.69	900	842.18
42	39.30	1050	982.54
48	44.92	1200	1122.90

SECTION 604
MANHOLES, INLETS, AND CATCH BASINS

604.02 Materials Add the following:

“Tops and Traps	712.07
Corrugated Metal Units	712.08
Catch Basin and Manhole Steps	712.09”

SECTION 605
UNDERDRAINS

605.05 Underdrain Outlets Make the following change:

In the first paragraph, second sentence, delete the words “metal pipe”.

SECTION 606
GUARDRAIL

606.02 Materials Delete the entire paragraph which reads “The sole patented supplier of multiple mailbox...” and replace with “Acceptable multiple mailbox assemblies shall be listed on the Department’s Approved Products List and shall be NCHRP 350 tested and approved.” Delete the entire paragraph which reads “Retroreflective beam guardrail delineators...” and replace with “Reflectorized sheeting for Guardrail Delineators shall meet the requirements of Section 719.01 - Reflective Sheeting. Delineators shall be fabricated from high-impact, ultraviolet and weather resistant thermoplastic.

606.09 Basis of Payment First paragraph; delete the second and third sentence in their entirety and replace with “Butterfly-type guardrail reflectorized delineators shall be mounted on all W-beam guardrail at an interval of every 10 posts [62.5 ft] on tangents sections and every 5 posts [31.25 ft] on curved sections as directed by the Resident. On divided highways, the delineators shall be yellow on the left hand side and silver/white on the right hand side. On two-way

roadways, the delineators shall be silver/white on the right hand side. All delineators shall have retroreflective sheeting applied to only the traffic facing side. Reflectorized guardrail delineators will not be paid for directly, but will be considered incidental to the guardrail items.”

SECTION 609 CURB

609.04 Bituminous Curb f., Delete the requirement “Color Natural (White)”

SECTION 615 LOAM

615.02 Materials Make the following change:

<u>Organic Content</u>	<u>Percent by Volume</u>
Humus	“5% - 10%”, as determined by Ignition Test

SECTION 618 SEEDING

618.01 Description Change the first sentence to read as follows: “This work shall consist of furnishing and applying seed” Also remove “,and cellulose fiber mulch” from 618.01(a).

618.03 Rates of Application In 618.03(a), remove the last sentence and replace with the following: “These rates shall apply to Seeding Method 2, 3, and Crown Vetch.”

In 618.03(c) “1.8 kg [4 lb]/unit.” to “1.95 kg [4 lb]/unit.”

618.09 Construction Method In 618.09(a) 1, sentence two, replace “100 mm [4 in]” with “25 mm [1 in] (Method 1 areas) and 50 mm [2 in] (Method 2 areas)”

618.15 Temporary Seeding Change the Pay Unit from Unit to Kg [lb].

SECTION 620 GEOTEXTILES

620.03 Placement Section (c)

Title: Replace “Non-woven” in title with “Erosion Control”.

First Paragraph: Replace first word “Non-woven” with “Woven monofilament”.

Second Paragraph: Replace second word “Non-woven” with “Erosion Control”.

620.07 Shipment, Storage, Protection and Repair of Fabric Section (a)

Replace the second sentence with the following: “Damaged geotextiles, as identified by the Resident, shall be repaired immediately.”

620.09 Basis of Payment

Pay Item 620.58: Replace “Non-woven” with “Erosion Control”

Pay Item 620.59: Replace “Non-woven” with “Erosion Control”

SECTION 621 LANDSCAPING

621.0036 Establishment Period In paragraph 4 and 5, change “time of Final Acceptance” to “end of the period of establishment”. In Paragraph 7, change “Final Acceptance date” to “end of the period of establishment” and change “date of Final Acceptance” to “end of the period of establishment”.

SECTION 626 HIGHWAY SIGNING

626.034 Concrete Foundations Add to the following to the end of the second paragraph: “Pre-cast and cast-in-place foundations shall be warranted against leaning and corrosion for two years after the project is completed. If the lean is greater than 2 degrees from normal or the foundation is spalling within the first two years, the Contractor shall replace the foundation at no extra cost.”

SECTION 627 PAVEMENT MARKINGS

627.10 Basis of Payment Add to the following to the end of the third paragraph: “If allowed by Special Provision, the Contractor may utilize Temporary Bi-Directional Yellow and White(As required) Delineators as temporary pavement marking lines and paid for at the contract lump sum price. Such payment will include as many applications as required and removal.”

SECTION 637 DUST CONTROL

637.06 Basis of Payment Add the following after the second sentence of the third paragraph: “Failure by the Contractor to follow Standard Specification or Special Provision - Section 637 and/or the Contractor’s own Soil Erosion and Pollution Control Plan concerning Dust Control and/or the Contractor’s own Traffic Control Plan concerning Dust Control and/or visible evidence of excessive dust problems, as determined by the Resident, will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department’s Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item. Additional penalties may also be assessed in accordance with Special Provision 652 - Work Zone Traffic Control and Standard Specification 656 - Temporary Soil Erosion and Water Pollution Control.”

SECTION 639 ENGINEERING FACILITIES

639.04 Field Offices Change the forth to last paragraph from: “The Contractor shall provide a fully functional desktop copier...” to “...desktop copier/scanner...”

SECTION 652

MAINTENANCE OF TRAFFIC

652.2.3 Flashing Arrow Board Delete the existing 5 paragraphs and replace with the following: Flashing Arrow Panels (FAP) must be of a type that has been submitted to AASHTO's National Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of Transportation's Approved Products List of Portable Changeable Message Signs & Flashing Arrow Panels.

FAP units shall meet requirements of the current Manual on Uniform Traffic Control Devices (MUTCD) for Type "C" panels as described in Section 6F.56 - Temporary Traffic Control Devices. An FAP shall have matrix of a minimum of 15 low-glare, sealed beam, Par 46 elements capable of either flashing or sequential displays as well as the various operating modes as described in the MUTCD, Chapter 6-F. If an FAP consisting of a bulb matrix is used, each element should be recess-mounted or equipped with an upper hood of not less than 180 degrees. The color presented by the elements shall be yellow.

FAP elements shall be capable of at least a 50 percent dimming from full brilliance. Full brilliance should be used for daytime operation and the dimmed mode shall be used for nighttime operation. FAP shall be at least 2.4 M x 1.2 M [96" x 48"] and finished in non-reflective black. The FAP shall be interpretable for a distance not less than 1.6 km [1 mile].

Operating modes shall include, flashing arrow, sequential arrow, sequential chevron, flashing double arrow, and flashing caution. In the three arrow signals, the second light from the arrow point shall not operate.

The minimum element on-time shall be 50 percent for the flashing mode, with equal intervals of 25 percent for each sequential phase. The flashing rate shall be not less than 25 nor more than 40 flashes per minute. All on-board circuitry shall be solid state.

Primary power source shall be 12 volt solar with a battery back-up to provide continuous operation when failure of the primary power source occurs, up to 30 days with fully charged batteries. Batteries must be capable of being charged from an onboard 110 volt AC power source and the unit shall be equipped with a cable for this purpose.

Controller and battery compartments shall be enclosed in lockable, weather-tight boxes. The FAP shall be mounted on a pneumatic-tired trailer or other suitable support for hauling to various locations, as directed. The minimum mounting height of an arrow panel should be 2.1 M [7 feet] from the roadway to the bottom of the panel.

The face of the trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers.

A portable changeable message sign may be used to simulate an arrow panel display."

652.2.4 Other Devices Delete the last paragraph and add the following:
"652.2.5 Portable Changeable Message Sign Trailer mounted Portable Changeable Message Signs (PCMS) must be of a type that has been submitted to AASHTO's National

Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of Transportations' Approved Products List of Portable Changeable Message Signs & Flashing Arrow Panels. The PCMS unit shall meet or exceed the current specifications of the Manual on Uniform Traffic Control Devices (MUTCD), 6F.55.

The front face of the sign should be covered with a low-glare protective material. The color of the LED elements shall be amber on a black background. The PCMS should be visible from a distance of 0.8 km [0.5 mile] day and night and have a minimum 15° viewing angle. Characters must be legible from a distance of at least 200 M [650 feet].

The message panel should have adjustable display rates (minimum of 3 seconds per phase), so that the entire message can be read at least twice at the posted speed, the off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed. Each message shall consist of either one or two phases. A phase shall consist of up to eight characters per line. The unit must be capable of displaying at least three lines of text with eight characters per line. Each character shall be 457 mm [18"] high. Each character module shall use at least a five wide and seven high pixel matrix. The text of the messages shall not scroll or travel horizontally or vertically across the face of the sign.

Units shall automatically adjust their brightness under varying light conditions to maintain legibility.

The control system shall include a display screen upon which messages can be reviewed before being displayed on the message sign. The control system shall be capable of maintaining memory when power is unavailable. Message must be changeable with either a notebook computer or an on-board keypad. The controller shall have the capability to store a minimum of 200 user-defined and 200 pre-programmed messages. Controller and battery compartments shall be enclosed in lockable, weather-tight boxes.

PCMS units shall have the capability of being made programmable by means of wireless communications. PCMS units shall also be fully capable of having an on-board radar system installed if required for a particular application.

PCMS' primary power source shall be solar with a battery back-up to provide continuous operation when failure of the primary power source occurs. Batteries must be capable of being charged from a 110 volt AC power source. The unit must also be capable of being operated solely from a 110 volt AC power source and be equipped with a cable for this purpose.

The PCMS shall be mounted on a trailer in such a way that the bottom of the message sign panel shall be a minimum of 2.1 M [7 ft] above the roadway in urban areas and 1.5 M [5 ft] above the roadway in rural areas when it is in the operating mode. PCMS trailers should be of a heavy duty type with a 51 mm [2"] ball hitch and a minimum of four leveling jacks (at each corner). The sign shall be capable of being rotated 360° relative to the trailer. The face of the trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers."

652.3.3 Submittal of Traffic Control Plan In item e. change "A list of all certified flaggers..." to "A list of all the Contractor's certified flaggers..."

In the last paragraph add the following as the second sentence: “The Department will review and provide comments to the Contractor within 14 days of receipt of the TCP.”

652.3.5 Installation of Traffic Control Devices In the first paragraph, first sentence; change “Signs shall be erected...” to “Portable signs shall be erected..” In the third sentence; change “Signs must be erected so that the sign face...” to “Post-mounted signs must also be erected so that the sign face...”

652.4 Flaggers Replace the first paragraph with the following; “The Contractor shall furnish flaggers as required by the TCP or as otherwise specified by the Resident. All flaggers must have successfully completed a flagger test approved by the Department and administered by a Department-approved Flagger-Certifier who is employing that flagger. All flaggers must carry an official certification card with them while flagging that has been issued by their employer. Flaggers shall wear safety apparel meeting ANSI 107-1999 Class 2 risk exposure and clearly identify the wearer as a person, shall be visible at a minimum distance of 300 m [1000 ft], and shall wear a hardhat with retroreflectivity. For nighttime conditions, Class 3 apparel should be considered, retroreflective or flashing SLOW/STOP paddles shall be used, and except in emergency situations the flagger station shall be illuminated to assure visibility.”

Second paragraph, first sentence; change “...have sufficient distance to stop before entering the workspace.” to “...have sufficient distance to stop at the intended stopping point.” Third sentence; change “At a spot obstruction...” to “At a spot obstruction with adequate sight distance,...”

Fourth paragraph, delete and replace with “Flaggers shall be provided as a minimum, a 10 minute break, every 2 hours and a 30 minute or longer lunch period away from the work station. Flaggers may only receive 1 unpaid break per day; all other breaks must be paid. Sufficient certified flaggers shall be available onsite to provide for continuous flagging operations during break periods. Breaker flaggers will not be paid for separately, but shall be considered incidental to the appropriate pay item.”

652.8.2 Other Items Replace the last paragraph with the following: “There will be no payment made under any 652 pay items after the expiration of the adjusted total contract time.”

SECTION 653 POLYSTYRENE PLASTIC INSULATION

653.05 Placing Backfill In the second sentence; change “...shall be not less than 150 mm [6 in] loose measure.” to “...shall be not less than 250 mm [10 in] loose measure.” In the third sentence; change “...crawler type bulldozer of not more than 390 kg/m² [80 lb/ft²] ground contact pressure...” to “...crawler type bulldozer of not more than 4875 kg/m² [2000 lb/ft²] ground contact pressure...”

653.06 Compaction In the last sentence; change “...not more than 390 kg/m² [80 lb/ft²] ground contact...” to “...not more than 4875 kg/m² [2000 lb/ft²] ground contact...”

SECTION 656

TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

656.5.1 If Pay Item 656.75 Provided Replace the second paragraph with the following: "Failure by the Contractor to follow Standard Specification or Special Provision - Section 656 and/or the Contractor's own Soil Erosion and Pollution Control Plan will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department's Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item."

SECTION 701

STRUCTURAL CONCRETE RELATED MATERIALS

701.10 Fly Ash - Chemical Requirements Change all references from "ASTM C311" to "ASTM C114".

SECTION 703

AGGREGATES

703.05 Aggregate for Sand Leveling Change the percent passing the 9.5 mm [3/8 in] sieve from "85 - 10" to "85 - 100"

703.06 Aggregate for Base and Subbase Delete the first paragraph: "The material shall have..." and replace with "The material shall have a minimum degradation value of 15 as determined by Washington State DOT Test Method T113, Method of Test for Determination of Degradation Value (March 2002 version), except that the reported degradation value will be the result of testing a single specimen from that portion of a sample that passes the 12.5 mm [½ in] sieve and is retained on the 2.00 mm [No. 10] sieve, minus any reclaimed asphalt pavement used."

703.07 Aggregates for HMA Pavements Delete the forth paragraph: "The composite blend shall have..." and replace with "The composite blend, minus any reclaimed asphalt pavement used, shall have a Micro-Deval value of 18.0 or less as determined by AASHTO T 327. In the event the material exceeds the Micro Deval limit, a Washington Degradation test shall be performed. The material shall be acceptable if it has a value of 30 or more as determined by Washington State DOT Test Method T 113, Method of Test for Determination of Degradation Value (March 2002 version) except that the reported degradation value will be the result of testing a single composite specimen from that portion of the sample that passes the 12.5mm [1/2 inch] sieve and is retained on the 2.00mm [No 10] sieve, minus any reclaimed asphalt pavement used."

703.18 Common Borrow Replace the first paragraph with the following: "Common borrow shall consist of earth, suitable for embankment construction. It shall be free from frozen material, perishable rubbish, peat, and other unsuitable material including material currently or

previously contaminated by chemical, radiological, or biological agents unless the material is from a DOT project and authorized by DEP for use.”

703.22 Underdrain Backfill Material Change the first paragraph from “...for Underdrain Type B...” to “...for Underdrain Type B and C...”

SECTION 706 NON-METALLIC PIPE

706.06 Corrugated Polyethylene Pipe for Underdrain, Option I and Option III Culvert Pipe Change the first sentence from “...300 mm diameters to 900 mm” to “...300 mm diameters to 1200 mm” Delete, in it’s entirety, the last sentence which begins “This pipe and resins...” and replace with the following; “The manufacturing plants of polyethylene pipe shall be certified by the Eastern States Consortium. Polyethylene pipe shall be accepted based on third party certification by the AASHTO’s National Transportation Product Evaluation Program.”

SECTION 709 REINFORCING STEEL AND WELDED STEEL WIRE FABIC

709.03 Steel Strand Change the second paragraph from “...shall be 12mm [½ inch] AASHTO M203M/M203 (ASTM A416/A416M)...” to “...shall be 15.24 mm [0.600 inch] diameter AASHTO M203 (ASTM A416)...”

SECTION 710 FENCE AND GUARDRAIL

710.03 Chain Link Fabric Add the following sentence: “Chain Link fabric for PVC coated shall conform to the requirements of AASHTO M181, Type IV-Class B.”

710.07 Guardrail Posts Section b. change “...AASHTO M183/M183M...” to “...AASHTO M 270M/M 270 Grade 250 (36)...”

SECTION 712 MISCELLANEOUS HIGHWAY MATERIALS

712.06 Precast Concrete Units In the first paragraph, change “...ASTM C478M...” to “...AASHTO M199...” Delete the second paragraph and replace with the following; “Approved structural fibers may be used as a replacement of 6 x 6 #10 gauge welded wire fabric when used at an approved dosage rate for the construction of manhole and catch basin units. The material used shall be one of the products listed on the Maine Department of Transportation’s Approved Product List of Structural Fiber Reinforcement.” Delete the fifth paragraph and replace with the following; “The concrete mix design shall be approved by the Department. Concrete shall contain 6% air content, plus or minus 1½% tolerance when tested according to AASHTO T152. All concrete shall develop a minimum compressive strength of 28 MPa [4000 psi] in 28 days when tested according to AASHTO T22. The absorption of a specimen, when tested according to AASHTO T280, Test Method “A”, shall not exceed nine percent of the dry mass.”

Add the following:

“712.07 Tops, and Traps These metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials.

Gray iron or ductile iron castings shall conform to the requirements of AASHTO M306 unless otherwise designated.

712.08 Corrugated Metal Units The units shall conform to plan dimensions and the metal to AASHTO M36/M36M. Bituminous coating, when specified, shall conform to AASHTO M190 Type A.

712.09 Catch Basin and Manhole Steps Steps for catch basins and for manholes shall conform to ASTM C478M [ASTM C478], Section 13 for either of the following material:

- (a) Aluminum steps-ASTM B221M, [ASTM B211] Alloy 6061-T6 or 6005-T5.
- (b) Reinforced plastic steps Steel reinforcing bar with injection molded plastic coating copolymer polypropylene. Polypropylene shall conform to ASTM D 4101.

712.23 Flashing Lights Flashing Lights shall be power operated or battery operated as specified.

- (a) Power operated flashing lights shall consist of housing, adapters, lamps, sockets, reflectors, lens, hoods and other necessary equipment designed to give clearly visible signal indications within an angle of at least 45 degrees and from 3 to 90 m [10 to 300 ft] under all light and atmospheric conditions.

Two circuit flasher controllers with a two-circuit filter capable of providing alternate flashing operations at the rate of not less than 50 nor more than 60 flashes per minute shall be provided.

The lamps shall be 650 lumens, 120 volt traffic signal lamps with sockets constructed to properly focus and hold the lamp firmly in position.

The housing shall have a rotatable sun visor not less than 175 mm [7 in] in length designed to shield the lens.

Reflectors shall be of such design that light from a properly focused lamp will reflect the light rays parallel. Reflectors shall have a maximum diameter at the point of contact with the lens of approximately 200 mm [8 in].

The lens shall consist of a round one-piece convex amber material which, when mounted, shall have a visible diameter of approximately 200 mm [8 in]. They shall distribute light and not diffuse it. The distribution of the light shall be asymmetrical in a downward direction. The light distribution of the lens shall not be uniform, but shall consist of a small high intensity portion with narrow distribution for long distance throw and a larger low intensity portion with wide distribution for short distance throw. Lenses shall be marked to indicate the top and bottom of the lens.

(b) Battery operated flashing lights shall be self-illuminated by an electric lamp behind the lens. These lights shall also be externally illuminated by reflex-reflective elements built into the lens to enable it to be seen by reflex-reflection of the light from the headlights of oncoming traffic. The batteries must be entirely enclosed in a case. A locking device must secure the case. The light shall have a flash rate of not less than 50 nor more than 60 flashes per minute from minus 30 °C [minus 20 °F] to plus 65 °C [plus 150 °F]. The light shall have an on time of not less than 10 percent of the flash cycle. The light beam projected upon a surface perpendicular to the axis of the light beam shall produce a lighted rectangular projection whose minimum horizontal dimension shall be 5 degrees each side of the horizontal axis. The effective intensity shall not have an initial value greater than 15.0 candelas or drop below 4.0 candelas during the first 336 hours of continuous flashing. The illuminated lens shall appear to be uniformly bright over its entire illuminated surface when viewed from any point within an angle of 9 degrees each side of the vertical axis and 5 degrees each side of the horizontal axis. The lens shall not be less than 175 mm [7 in] in diameter including a reflex-reflector ring of 13 mm [½ in] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be one-piece construction. The lens material shall be plastic and meet the luminous transmission requirements of this specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20 foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall be provided to the Resident upon request without cost to the Department. All such samples shall be returned to the Contractor upon completion of the tests.

712.32 Copper Tubing Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.

712.33 Non-metallic Pipe, Flexible Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.

712.34 Non-metallic Pipe, Rigid Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D1785. Fittings shall be of the same material.

712.341 Metallic Pipe Metallic pipe shall be ANSI, Standard B36.10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

712.35 Epoxy Resin Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.

712.36 Bituminous Curb The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01 Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture.

Bituminous material for curb shall meet the requirements of Section 403 - Hot Bituminous Pavement.

712.37 Precast Concrete Slab Portland cement concrete for precast slabs shall meet the requirements of Section 502 - Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the plans and cross section and in accordance with the Standard Detail plans for Concrete Sidewalk Slab. The surface shall be finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

712.38 Stone Slab Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [½ in] under a 600 mm [2 ft] straightedge or over 25 mm [1 in] under a 1200 mm [4 ft] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [¾ in] shall show in the joint for the full exposed height.

Liftpin holes in all sides will be allowed except on the exposed face.

SECTION 717
ROADSIDE IMPROVEMENT MATERIAL

717.03 C. Method #3 - Roadside Mixture #3 Change the seed proportions to the following:

Crown Vetch	25%
Perennial Lupine	25%
Red Clover	12.5%
Annual Rye	37.5%

717.05 Mulch Binder Change the third sentence to read as follows:

“Paper fiber mulch may be used as a binder at the rate of 2.3 kg/unit [5 lb/unit].”

SECTION 720
STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND
TRAFFIC SIGNALS

720.08 U-Channel Posts Change the first sentence from “..., U-Channel posts...” to “..., Rib Back U-Channel posts...”

SECTION 722
GEOTEXTILES

722.01 Stabilization/Reinforcement Geotextile Add the following to note #3; “The strengths specified in the columns labeled”<50%” and “≥ 50%” refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the “<50%” column. Submittals must include the percent elongation at which the material was tested.”

722.02 Drainage Geotextile Add the following to note #3; “The strengths specified in the columns labeled”<50%” and “≥ 50%” refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the “<50%” column. Submittals must include the percent elongation at which the material was tested.”

722.01 Erosion Control Geotextile Add the following note to Elongation in the Mechanical Property Table; “The strengths specified in the columns labeled”<50%” and “≥ 50%” refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the “<50%” column. Submittals must include the percent elongation at which the material was tested.”

APPENDIX A TO DIVISION 100

SECTION 1 - BIDDING PROVISIONS

A. Federally Required Certifications By signing and delivering a Bid, the Bidder certifies as provided in all certifications set forth in this Appendix A - Federal Contract Provisions Supplement including:

- Certification Regarding No Kickbacks to Procure Contract as provided on this page 1 below.
- Certification Regarding Non-collusion as provided on page 1 below.
- Certification Regarding Non-segregated Facilities as provided by FHWA Form 1273, section III set forth on page 21 below.
- "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion" as provided by FHWA Form 1273, section XI set forth on page 32 below.
- "Certification Regarding Use of Contract Funds for Lobbying" as provided by FHWA Form 1273, section XII set forth on page 35 below.

Unless otherwise provided below, the term "Bidder", for the purposes of these certifications, includes the Bidder, its principals, and the person(s) signing the Bid. Upon execution of the Contract, the Bidder (then called the Contractor) will again make all the certifications indicated in this paragraph above. Upon execution of the Contract, the Bidder (then called the Contractor) will again make all the certifications indicated in this paragraph above.

CERTIFICATION REGARDING NO KICKBACKS TO PROCURE CONTRACT Except expressly stated by the Bidder on sheets submitted with the Bid (if any), the Bidder hereby certifies, to the best of its knowledge and belief, that it has not:

(A) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me) to solicit or secure this contract;

(B) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract, or;

(C) paid, or agreed to pay, to any firm, organization, or person (other than a bona fide employee working solely for me) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the contract;

By signing and submitting a Bid, the Bidder acknowledges that this certification is to be furnished to the Maine Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation in connection with this contract in anticipation of federal aid highway funds and is subject to applicable state and federal laws, both criminal and civil.

CERTIFICATION REGARDING NONCOLLUSION Under penalty of perjury as provided by federal law (28 U.S.C. §1746), the Bidder hereby certifies, to the best of its knowledge and belief, that:

the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with the Contract.

For a related provisions, see Section 102.7.2 (C) of the Standard Specifications - "Effects of Signing and Delivery of Bids" - "Certifications", Section 3 of this Appendix A entitled "Other Federal Requirements" including section XI - "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion" and section XII. - "Certification Regarding Use of Contract Funds for Lobbying."

B. Bid Rigging Hotline To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SECTION 2 - FEDERAL EEO AND CIVIL RIGHTS REQUIREMENTS

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 2 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Nondiscrimination & Civil Rights - Title VI The Contractor and its subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Department deems appropriate. The Contractor and subcontractors shall comply with Title VI of the Civil Rights Act of 1964, as amended, and with all State of Maine and other Federal Civil Rights laws.

For related provisions, see Subsection B - "Nondiscrimination and Affirmative Action - Executive Order 11246" of this Section 2 and Section 3 - Other Federal Requirements of this "Federal Contract Provisions Supplement" including section II - "Nondiscrimination" of the "Required Contract Provisions, Federal Aid Construction Contracts", FHWA-1273.

B. Nondiscrimination and Affirmative Action - Executive Order 11246 Pursuant to Executive Order 11246, which was issued by President Johnson in 1965 and amended in 1967 and 1978, this Contract provides as follows.

The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its efforts to achieve maximum results from its actions. The Contractor shall

document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

1. Ensure and maintain a working environment free of harassment, intimidations, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all forepersons, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
2. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and to maintain a record of the organization's responses.
3. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
4. Provide immediate written notification to the Department's Civil Rights Office when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Design-Builder's efforts to meet its obligations.
5. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under B above.
6. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligation; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
7. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review

of these items with on-site supervisory personnel such as Superintendents, General Forepersons, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

8. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractor's and Subcontractors with whom the Contractor does or anticipates doing business.
9. Direct its recruitment efforts, both orally and written to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above describing the openings, screenings, procedures, and test to be used in the selection process.
10. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth, both on the site and in other areas of a Contractor's workforce.
11. Validate all tests and other selection requirements.
12. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
13. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
14. Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
15. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractor's and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.
16. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

C. Goals for Employment of Women and Minorities Per Executive Order 11246, craft tradesperson goals are 6.9% women and .5% minorities employed. However, goals may be adjusted upward at the mutual agreement of the Contractor and the Department. Calculation of these percentages shall not include On-the-Job Training Program trainees, and shall not include clerical or field clerk position employees.

For a more complete presentation of requirements for such Goals, see the federally required document "Goals for Employment of Females and Minorities" set forth in the next 6 pages below.

Start of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES
Federally Required Contract Document

§60-4.2 Solicitations

(d) The following notice shall be included in, and shall be part of, all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to §60-4.6 of this part (see 41 CFR 60-4.2(a)):

Notice of Requirement for Affirmative Action to Ensure Equal Opportunity (Executive Order 11246)

1. The Offeror's or bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals for female participation in each trade 6.9%

Goals for minority participation for each trade

Maine

001 Bangor, ME 0.8%

Non-SMSA Counties (Aroostook, Hancock, Penobscot, Piscataquis, Waldo, Washington)

002 Portland-Lewiston, ME

SMSA Counties: 4243 Lewiston-Auburn, ME 0.5%
(Androscoggin)

6403 Portland, ME 0.6%
(Cumberland, Sagadahoc)

Non-SMSA Counties: 0.5%
(Franklin, Kennebec, Knox, Lincoln, Oxford, Somerset, York)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non federally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be in violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated started and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the Contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, county and city, if any).

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department form 941;
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

- (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of the North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
 3. If the contractor, is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors for Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a. through p. of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical areas where the work is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specific.
 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant, thereto.
 6. In order for the non working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the

apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as expensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, when possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment sources or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific

review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment, efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing prior to the date for the acceptance of applications for apprenticeship or the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on site and in other areas of a Contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of

solicitation to minority and female contractor associations and other business associations.

- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7 a through p.). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7 a through p. of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program and reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions take on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, specific minority group of women is underutilized.)
 10. The Contractor shall not use the goals and timetables or affirmative action even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementation regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the

requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.6.

- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

End of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES
Federally Required Contract Document

D. Disadvantaged Business Enterprise (DBE) Requirements The Department has established an annual Disadvantaged Business Enterprise goal to be achieved through race neutral means. This goal will adjusted periodically and will be provided by Supplemental Provision. The Contractor shall comply with all provisions of this section regarding DBE participation and the Department’s latest version of the Disadvantaged Business Enterprise Program Manual, said Manual being incorporated herein by reference. In the case of conflict between this Contract and said Manual, this Contract shall control. The Department reserves the right to adjust DBE goals on a project-by-project basis by addendum.

Policy. It is the Department’s policy that DBEs as defined in 23 CFR Part 26 and referenced in the Transportation Equity Act for 21st Century of 1998, as amended from the Surface Transportation Uniform Relocation Assistance Act of 1987, and the Intermeddle Surface Transportation Efficiency Act of 1991. The intent hereto remains to provide the maximum opportunity for DBEs to participate in the performance of contracts financed in whole or in part with federal funds.

The Department and its Contractors shall not discriminate on the basis of race, color, national origin, ancestry, sex, age, or disability in the award and performance of DOT assisted contracts.

Disadvantaged Business Enterprises are those so certified by the Maine Department of Transportation Civil Rights Office prior to bid opening date.

The Department has determined that elements of a good faith effort to meet the contract goal include but are not limited to the following:

1. Whether the Contractor advertised in general circulation, trade association, and minority/women's-focus media concerning the subcontracting opportunities;
2. Whether the Contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract is being solicited;
3. Whether the Contractor followed up on initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested;
4. Whether the Contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goals;
5. Whether the Contractor provided interested DBEs with adequate information about the plans, specification and requirements of the contract;
6. Whether the Contractor negotiated in good faith with interested DBEs, not rejecting the DBE as unqualified without sound reasons based on a thorough investigation of their capabilities;
7. Whether the Contractor made efforts to assist interested DBEs with other appropriate technical/financial assistance required by the Department or Contractor;
8. Whether the Contractor effectively used the services of available minority/women's community organizations, minority/women's business assistance offices; and other organizations that provide assistance in the recruitment and placement of DBEs.

Substitutions of DBEs. The following may be acceptable reasons for Civil Rights Office approval of such a change order:

- The DBE defaults, voluntarily removes itself or is over-extended;
- The Department deletes portions of the work to be performed by the DBE.

It is not intended that the ability to negotiate a more advantageous contract with another certified DBE be considered a valid basis for such a change in DBE utilization once the DBE Bid Submission review has been passed. Any requests to alter the DBE commitment must be in writing and included with the change order.

Failure to carry out terms of this Standard Specification shall be treated as a violation of this contract and will result in contract sanctions which may include withholding of partial payments totaling the creditable dollars amount which would have been paid for said DBE participation, termination of this contract or other measures which may affect the ability of the Contractor to obtain Department contracts.

Copies of the Maine Department of Transportation's DBE Program may be obtained from:

Maine Department of Transportation
Civil Rights Office
#16 State House Station
Augusta, Maine 04333-0016
tel. (207) 624-3519

Quarterly Reporting Requirement. The Contractor must submit Semi-annual reports of actual dollars paid to Disadvantaged Business Enterprises (DBE's) on this Project to the MDOT Civil Rights Office by the end of the third week of April and October for the period covering the preceding six months considered Federal Fiscal Year periods. The reports will be submitted directly to the Civil Rights Office on the form provided in the latest version of the DBE Program Manual. Failure to submit the report by the deadline may result in a withholding of approval of partial payment estimates by the Department.

SECTION 3 - OTHER FEDERAL REQUIREMENTS

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 3 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Buy America

If the cost of products purchased for permanent use in this project which are manufactured of steel, iron or the application of any coating to products of these materials exceeds 0.1 percent of the contract amount, or \$2,500.00, whichever is greater, the products shall have been manufactured and the coating applied in the United States. The coating materials are not subject to this clause, only the application of the coating. In computing that amount, only the cost of the product and coating application cost will be included.

Ore, for the manufacture of steel or iron, may be from outside the United States; however, all other manufacturing processes of steel or iron must be in the United States to qualify as having been manufactured in the United States.

United States includes the 50 United States and any place subject to the jurisdiction thereof.

Products of steel include, but are not limited to, such products as structural steel, piles, guardrail, steel culverts, reinforcing steel, structural plate and steel supports for signs, luminaries and signals.

Products of iron include, but are not limited to, such products as cast iron grates.

Application of coatings include, but are not limited to, such applications as epoxy, galvanized and paint.

To assure compliance with this section, the Contractor shall submit a certification letter on its letterhead to the Department stating the following:

“This is to certify that products made of steel, iron or the application of any coating to products of these materials whose costs are in excess of \$2,500.00 or 0.1 percent of the original contract amount, whichever is greater, were manufactured and the coating, if one was required, was applied in the United States.”

B. Materials

a. Convict Produced Materials References: 23 U.S.C. 114(b)(2), 23 CFR 635.417

Applicability: FHWA's prohibition against the use of convict material only applies to Federal-aid highways. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if: 1) such materials have been produced by convicts who are on parole, supervised release, or probation from a prison; or 2) such material has been produced in a qualified prison facility, e.g., prison industry, with the amount produced during any 12-month period, for use in Federal-aid projects, not exceeding the amount produced, for such use, during the 12-month period ending July 1, 1987.

Materials obtained from prison facilities (e.g., prison industries) are subject to the same requirements for Federal-aid participation that are imposed upon materials acquired from other sources. Materials manufactured or produced by convict labor will be given no preferential treatment.

The preferred method of obtaining materials for a project is through normal contracting procedures which require the contractor to furnish all materials to be incorporated in the work. The contractor selects the source, public or private, from which the materials are to be obtained (23 CFR 635.407). Prison industries are prohibited from bidding on projects directly (23 CFR 635.112e), but may act as material supplier to construction contractors.

Prison materials may also be approved as State-furnished material. However, since public agencies may not bid in competition with private firms, direct acquisition of materials from a prison industry for use as State-furnished material is subject to a public interest finding with the Division Administrator's concurrence (23 CFR 635.407d). Selection of materials produced by convict labor as State-furnished materials for mandatory use should be cleared prior to the submittal of the Plans Specifications & Estimates (PS&E).

b. Patented/Proprietary Products References: 23 U.S.C. 112, 23 CFR 635.411

FHWA will not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

- the item is purchased or obtained through competitive bidding with equally suitable unpatented items,
- the STA certifies either that the proprietary or patented item is essential for synchronization with the existing highway facilities or that no equally suitable alternative exists, or
- the item is used for research or for a special type of construction on relatively short sections of road for experimental purposes. States should follow FHWA's procedures for "Construction Projects Incorporating Experimental Features" ([expermnt.htm](#)) for the submittal of work plans and evaluations.

The primary purpose of the policy is to have competition in selection of materials and allow for development of new materials and products. The policy further permits materials and products that are judged equal may be bid under generic specifications. If only patented or proprietary products are acceptable, they shall be bid as alternatives with all, or at least a

reasonable number of, acceptable materials or products listed; and the Division Administrator may approve a single source if it can be found that its utilization is in the public interest.

Trade names are generally the key to identifying patented or proprietary materials. Trade name examples include 3M, Corten, etc. Generally, products identified by their brand or trade name are not to be specified without an "or equal" phrase, and, if trade names are used, all, or at least a reasonable number of acceptable "equal" materials or products should be listed. The licensing of several suppliers to produce a product does not change the fact that it is a single product and should not be specified to the exclusion of other equally suitable products.

c. State Preference References: 23 U.S.C. 112, 23 CFR 635.409

Materials produced within Maine shall not be favored to the exclusion of comparable materials produced outside of Maine. State preference clauses give particular advantage to the designated source and thus restrict competition. Therefore, State preference provisions shall not be used on any Federal-aid construction projects.

This policy also applies to State preference actions against materials of foreign origin, except as otherwise permitted by Federal law. Thus, States cannot give preference to in-State material sources over foreign material sources. Under the Buy America provisions, the States are permitted to expand the Buy America restrictions provided that the STA is legally authorized under State law to impose more stringent requirements.

d. State Owned/Furnished/Designated Materials References: 23 U.S.C. 112, 23 CFR 635.407

Current FHWA policy requires that the contractor must furnish all materials to be incorporated in the work, and the contractor shall be permitted to select the sources from which the materials are to be obtained. Exceptions to this requirement may be made when there is a definite finding, by MDOT and concurred in by Federal Highway Administration's (FHWA) Division Administrator, that it is in the public interest to require the contractor to use materials furnished by the MDOT or from sources designated by MDOT. The exception policy can best be understood by separating State-furnished materials into the categories of manufactured materials and local natural materials.

Manufactured Materials When the use of State-furnished manufactured materials is approved based on a public interest finding, such use must be made mandatory. The optional use of State-furnished manufactured materials is in violation of our policy prohibiting public agencies from competing with private firms. Manufactured materials to be furnished by MDOT must be acquired through competitive bidding, unless there is a public interest finding for another method, and concurred in by FHWA's Division Administrator.

Local Natural Materials When MDOT owns or controls a local natural materials source such as a borrow pit or a stockpile of salvaged pavement material, etc., the materials may be designated for either optional or mandatory use; however, mandatory use will require a public interest finding (PIF) and FHWA's Division Administrator's concurrence.

In order to permit prospective bidders to properly prepare their bids, the location, cost, and any conditions to be met for obtaining materials that are made available to the contractor shall be stated in the bidding documents.

Mandatory Disposal Sites Normally, the disposal site for surplus excavated materials is to be of the contractor's choosing; although, an optional site(s) may be shown in the contract provisions. A mandatory site shall be specified when there is a finding by MDOT, with the concurrence of the Division Administrator, that such placement is the most economical or that the environment would be substantially enhanced without excessive cost. Discussion of the mandatory use of a disposal site in the environmental document may serve as the basis for the public interest finding.

Summarizing FHWA policy for the mandatory use of borrow or disposal sites:

- mandatory use of either requires a public interest finding and FHWA's Division Administrator's concurrence,
- mandatory use of either may be based on environmental consideration where the environment will be substantially enhanced without excessive additional cost, and
- where the use is based on environmental considerations, the discussion in the environmental document may be used as the basis for the public interest finding.

Factors to justify a public interest finding should include such items as cost effectiveness, system integrity, and local shortages of material.

C. Standard FHWA Contract Provisions - FHWA 1273

Unless expressly otherwise provided in the Bid Documents, the following "Required Contract Provisions, Federal Aid Construction Contracts", FHWA-1273, are hereby incorporated into the Bid Documents and Contract.

Start of FHWA 1273 REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS(As revised through March 10, 1994)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4, and 7;
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.
6. Selection of Labor: During the performance of this contract, the contractor shall not:
 - a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
 - b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION (Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
 - b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment,

upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. EEO Officer. The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
3. Dissemination of Policy. All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
 - c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
 - d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
4. Recruitment. When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
 - a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
 - c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
5. Personnel Actions. Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
 - b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
 - c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
 - d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.
6. Training and Promotion.
- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
 - b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision

for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
 - d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
7. Unions. If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
- a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.
 - d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment. The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

- a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
 - b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
 - c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
9. Records and Reports. The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
- a. The records kept by the contractor shall document the following:
 - (1) The number of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
 - (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
 - b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the MDOT and the Federal Highway Administration.

The Contractor will submit to the MDOT a report for the month of July, indicating the total hours worked by minority, women and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form PR-1391. If on-the-job training is being required by "Training Special Provision," the Contractor will be required to furnish Form FHWA-1409. The report is required for week ending July 15 and can be obtained from MDOT, is due by week ending August 20th. This report is to be furnished directly to MDOT - Civil Rights Office.

III. NONSEGREGATED FACILITIES (Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE (Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

- a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the

provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

- b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

- a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
 - (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
 - (2) the additional classification is utilized in the area by the construction industry;
 - (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
 - (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary
- e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

- a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

- (1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor

as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

- (3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
- (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

- (1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.
 - (4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- c. **Helpers.** Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.
5. **Apprentices and Trainees (Programs of the U.S. DOT).** Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.
6. **Withholding.** The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
7. **Overtime Requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4

and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation. Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.
9. Withholding for Unpaid Wages and Liquidated Damages. The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS (Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3). The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.
2. Payrolls and Payroll Records:
 - a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
 - b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in

Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.
- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
 - (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
 - (3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
 - a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
 - b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
 - c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor,

with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).
3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health

standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 *et seq.*, as amended by Pub.L. 92-500), Executive Order 11738, and regulations

in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:
(Applicable to all Federal-aid contracts - 49 CFR 29)
 - a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
 - b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
 - c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
 - d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
 - e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out

in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--
Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or

local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions: (Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--
Lower Tier Covered Transactions:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a

Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

End of FHWA 1273

Permits & Cultural Resources Unit

PIN #: 9840.10 Location: Brewer Permit Member: Rhonda Poirier
 Photographs Database/Projex Package to ENV Coordinator: 12/6/06

HISTORIC AND CULTURAL RESOURCES

MHPC Historic Resources	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>	Approved <input checked="" type="checkbox"/>
MHPC Archeological Resources	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>	Approved <input checked="" type="checkbox"/> conditional
Tribal Consultation	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>	Approved <input checked="" type="checkbox"/>

4(f) and 6(f)

Section 4(f)	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>	Approved <input type="checkbox"/>
LAWCON 6(f)	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>	Approved <input type="checkbox"/>

Maine Department of Environmental Protection (MDEP) Site Location of Development

N/A Applicable Approved

Local Zoning, Title 30-A, Section 4325-6.

Is the project something other than the highway and bridge system, such as a maintenance lot, building/parking facility? Yes No . If no, the project is exempt.

If yes, continue. Does the town in which the project is located have a comprehensive plan consistent with the Growth Management Program? Yes not confirmed if it is consistent w/Growth Mgt. Plan No If no, the project is exempt.

If yes, local zoning ordinances and/or permits are needed. Approved

Maine Department of Inland Fisheries and Wildlife (MDIFW) Essential Habitat

Eagle Nest	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>	Approved <input type="checkbox"/>
Piping Plover	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>	Approved <input type="checkbox"/>
Roseate Tern	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>	Approved <input type="checkbox"/>

United States Fish and Wildlife Service (USFWS), Migratory Bird Act

N/A Applicable

Maine Department of Conservation/ Public Lands, Submerged Land Lease

N/A Applicable

Land Use Regulation Commission (LURC) Not Applicable

No permit	<input type="checkbox"/>	
Notice	<input type="checkbox"/>	Approved <input type="checkbox"/>
Permit	<input type="checkbox"/>	Approved <input type="checkbox"/>

Maine Department of Environmental Protection (MDEP), Natural Resource Protection Act

No permit required
 Exempt (Must use erosion and sediment control and not block fish passage.)
 PBR Approved
 Tier 1 Approved
 Tier 2 Approved
 Tier 3 Approved

Army Corps of Engineers (ACOE), Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.

No permit required
 Category 1-NR Approved
 Category 2 Approved
 Category 3 Approved

IN-WATER TIMING RESTRICTIONS: 105 Special Provision n/a

during low tide and as further proposed in MaineDOT/City of Brewer applications to regulatory agencies

Special Provision 656, Erosion Control Plan

* Boxes marked in red indicate items that are attached and need to be placed in the contract by the Project Manager.

(Special Conditions continued from Page 2)

If the permit is issued after the construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract as a change order. The term "entire permit" includes permit amendments. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

2. Adequate sedimentation and erosion control devices, such as geo-textile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize adverse impacts on waters and wetlands during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.

3. All bank preparation, trenching & backfilling or placement of riprap shall occur when the tide is below the work area. When the tide is above the work area no work is authorized unless further consultation with the National Marine Fisheries Service (NMFS) has occurred. Point of contact with NMFS for Atlantic salmon is Jeff Murphy (Jeff.Murphy@noaa.gov) at 207-866-7379. Point of contact with NMFS for shortnose sturgeon is Julie Crocker (Julie.Crocker@noaa.gov) at 978-281-9328 ext 6530.

4. No additional filling, clearing or other disturbance of waters of the United States (wetlands or waterways) is authorized without written approval from the Corps.

5. Mitigation shall be performed in accordance with a final mitigation plan which shall be submitted within 90 days of permit issuance and which shall not be implemented until the Corps of Engineers approves it in writing. The final mitigation plan shall be based on the draft mitigation plan entitled, "Preliminary Wetland Mitigation Plan for the MDOT and the City of Brewer Proposed Penobscot River Shoreline Improvement Project in Brewer, Maine." and dated "September 15, 2005" and shall be in accordance with the attached guidance.

L-20551-4D-D-N

plantings were considered early in the mitigation design process, none are being proposed. This is because it is anticipated that the forces of river ice would damage or remove plantings. In addition, plants with deeper roots would damage the filter fabric under the riprap, thereby compromising the integrity of the stabilization structure on those portions of the project. Listed in Table 1 of the proposed wetland Compensation plan is a summary of on-site wetland compensation for a total 17,305 S.F.

Off-Site Mitigation

Off-site mitigation is proposed at the site of an existing dam on Sedgeunkedunk Stream in Brewer, located approximately 1.5 miles from the Penobscot River project area. The Mill Street Dam, as it is referred to by the Corps and DEP, was constructed in the late 1930s to provide a source of processing water for the former Eastern Fine Paper mill located along the river near the mouth of Sedgeunkedunk Stream. The mill is currently closed and the dam is not being used. The 240-foot long concrete and earthen dam has a structural height of 15 feet and a hydraulic height of 12 feet. Data from the Maine Office of Geographical Information Systems compiled by DEP and the Corps indicate the dam has a significant hazard potential classification 2. There is a remnant section of a previous dam just upstream of the current spillway within the impoundment. This concrete structure, which was visible just below the water surface during an August 11, 2005, site visit by Woodlot Alternatives, Inc. (Woodlot), is attached to the west wall of the intake bay of the current dam. Observations suggest that a portion of the old dam was previously removed when the current dam was constructed. The Mill Street Dam is the first (i.e., most downstream) obstruction on Sedgeunkedunk Stream and is located approximately 3,000 linear feet upstream of the confluence with the Penobscot River. As such, the dam is relatively low in the stream's watershed, but it is located in a topographic ravine rather than a broad plain. The dam currently impounds an area of approximately 1.5 to 2 acres, with influence extending upstream approximately 1,500 to 1,600 linear (river) feet, directly adjacent to Mill Street and a few residential properties. The next dam, called the East Orrington Dam or the Fields Pond Dam, is located approximately 2.5 miles upstream of the Mill Street Dam.

MDOT and the City propose to breach the Mill Street Dam to restore natural flows to this portion of Sedgeunkedunk Stream and provide unobstructed upstream and downstream fish passage. Breaching will be accomplished by removal of the concrete face of the dam, including the spillway and the gate structure (shown in Photo 8). A natural sediment management approach will be implemented, allowing sediment that has accumulated above the dam to be scoured over time.

The primary objectives of the dam breaching are to:

1. Improve water quality (e.g., temperatures, dissolved oxygen, and nutrient concentrations) within and downstream of the impoundment area;
2. Restore natural stream flows, in-stream habitats, channel morphology, and natural communities (e.g., flora and fauna) to the current impoundment; and

DEPARTMENT OF THE ARMY PERMIT

Maine DOT, 16 State House Station Augusta, ME 04333-0016

Permittee City of Brewer, 80 North Main Street, Brewer, ME 04412

Permit No. NAE-2005-3165

Issuing Office New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

1. Fill approximately 104,070SF (2.389 acres) of the Penobscot River in conjunction with construction of a 5,520 linear foot shoreline protection project. Sheet pile bulkhead will be used along 1,930 feet of the project and the remaining 3,590 feet will be ripped.
2. Fill approximately 2,755SF (0.062 acres) of the Penobscot River in conjunction with the upgrade of an unimproved boat ramp used by emergency response units.

This work is shown on the attached plans entitled, "MAINE DEPARTMENT OF TRANSPORTATION, AUGUSTA, MAINE/CITY OF BREWER, RIVER BANK STABILIZATION PROJECT", on 53 sheets, and dated "July 2005."

Project Location:

In the Penobscot River at Brewer, Maine

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on MAR 3 2011. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

CITY OF BREWER/MDOT) NATURAL RESOURCES PROTECTION ACT
Brewer, Penobscot County) SHORELINE STABILIZATION
PENOBSCOT RIVER STABILIZATION PROJECT) WATER QUALITY CERTIFICATION
L-20551-4D-D-N (approval)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of CITY OF BREWER/MDOT with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. History of Project: The shoreline of the Penobscot River has been eroding and timber cribbing and other forms of shoreline protection have been failing for many years. The loss of property and potential for damage to structures along the shore increased to the point that individuals along the waterfront considered making improvements to the shoreline and, in conjunction with the City of Brewer, prepared Permit-by-Rule Notifications for the work on each of their properties. However, the Department required that the project be permitted as a whole and the notifications were withdrawn. Around that same time, the U. S. Army Corps of Engineers also considered a project to stabilize particularly vulnerable sections of the shoreline but ceased moving forward with their studies when the City and the Maine Department of Transportation expressed desire to take responsibility for the project.

B. Summary: The applicant now proposes to stabilize the eroding shoreline and construct a multi-use trail along the bank of the Penobscot River. The system that will be affected is a riverine wetland system, predominately a freshwater system, influenced by the tide.

The goal of the proposed project is to further the efforts of the City of Brewer to maintain its shoreline and meet the goals included in the City's Comprehensive Plan, which includes an Open Space and Trails Plan. The Comprehensive Plan, Open Space and Trails Plan, states that the Penobscot River is the preeminent focal point and natural feature of the City and that the City's waterfront is an asset to be retained and enhanced.

The proposed project comprises approximately 5,520 feet of riverbank stabilization, including around a manmade island, a 4,100-foot multi-use trail, and improvement of a boat launch, on the east bank of the Penobscot River in Brewer, Maine at the location

Post-it® Fax Note	7671	Date	1-4-06	# of pages	9
To	Wendy Coffin	From	Robin Clukey		
Co./Dept.		Co.	DEP		
Phon		Phone #	1-207-941-4570		
Fax #	1-207-271-7959	Fax #	1-207-941-4581		

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provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist. The applicant submitted an alternative analysis for the proposed project completed by Woodlot Alternatives, Inc and dated March 2005. The applicant has altered the project to stabilize just those area that are eroding into the River

b. Minimal Alteration. The amount of wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. Wetland impacts resulting from the shoreline stabilization project have been avoided and minimized to the extent practicable in the design process. As currently designed, the proposed shoreline work will result in approximately 2.4 acres of wetland impact, including approximately 106,825 square feet of freshwater intertidal habitat and 1,000 square feet of freshwater subtidal habitat..

c. Compensation. Compensation is required to achieve the goal of no net loss of wetland functions and values. The principal wetland functions and values that occur within the riverine wetland system of the project area are groundwater interchange, flood flow alteration, fish and shellfish habitat, sediment/toxicant retention, nutrient removal, production export, wildlife habitat, recreation, and endangered species habitat. Of these, fish and shellfish habitat, flood flow alteration, wildlife habitat, and endangered species habitat will be altered by the proposed shoreline stabilization. Options for compensatory mitigation to offset the unavoidable wetland impacts were discussed during an April 1, 2005, meeting between MDOT, the City, the Maine Department of Environmental Protection (DEP), and the Corps. Those discussions focused on the need to maximize the amount of on-site, in-kind wetland restoration and to make up the remainder through off-site mitigation. A search by the applicants of the project area identified the existing, so-called Mill Street Dam on Sedgeunkedunk Stream in Brewer as a viable mitigation opportunity. During the April 1, 2005, pre-application meeting, the DEP and Corps agreed in concept that the Mill Street Dam site offered the opportunity to restore stream flows, habitats, and fish passage, and along with the on-site restoration, these measures would provide appropriate compensation to offset the wetland functions and values being impacted by the shoreline stabilization work along the Penobscot River.

On-Site Mitigation

Figures 2-A through 2-F show the locations of 7 individual areas where the removal of existing fill and structures from the proposed shoreline stabilization reaches will allow for in-kind restoration of intertidal freshwater riverine habitat. Table 1 provides a summary of these restoration opportunities, and Photos 1 through 7 show the existing conditions at each location. Restoration will consist of removing fill or cribwork structures and re-grading the substrates to match the elevation of the adjacent, undisturbed intertidal habitats. Restoration work will be concurrent with the stabilization work, and removal and regrading will be done in-the-dry (i.e., between tide cycles) to minimize sedimentation and siltation of river water. Because the restoration areas are within the regularly-flooded, intertidal zone of the river, it is expected that substrates will stabilize and the vegetation and benthic fauna will establish naturally over time. Though intertidal

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3. Restore upstream and downstream fish passage to allow anadromous and catadromous (i.e., diadromous) species access to the 2.5 miles of free-flowing stream habitat above the dam. Species that could potentially benefit from the dam breaching include Atlantic salmon (*Salmo salar*), alewife (*Alosa pseudoharengus*), and American eel (*Anguilla rostrata*).

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project.

5. OTHER CONSIDERATIONS:

The Department did not identify any other issues involving existing scenic, aesthetic, or navigational uses, soil erosion, habitat or fisheries, the natural transfer of soil, natural flow of water, water quality, or flooding.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A. Section 480-P.

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THEREFORE, the Department APPROVES the above noted application of the CITY of BREWER/MDOT to stabilize portions of the Brewer shoreline on the Penobscot River, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. Standard Conditions of Approval, a copy attached.
2. The applicant shall take all necessary measures to ensure that their activities or those of their agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.
3. By September 1st of the year following the completion of the construction is completed, the applicant shall map the location of the rare plant species, and compare the post construction findings with the pre-construction findings and submit the results to the Department.
4. Within 3 months of project completion, the applicant shall submit to the Department, an evaluation of the wetland compensation measures proposed in Finding 4 of this Order.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED AT AUGUSTA, MAINE, THIS 13TH DAY OF December, 2005.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

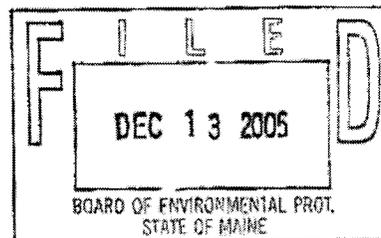
By:

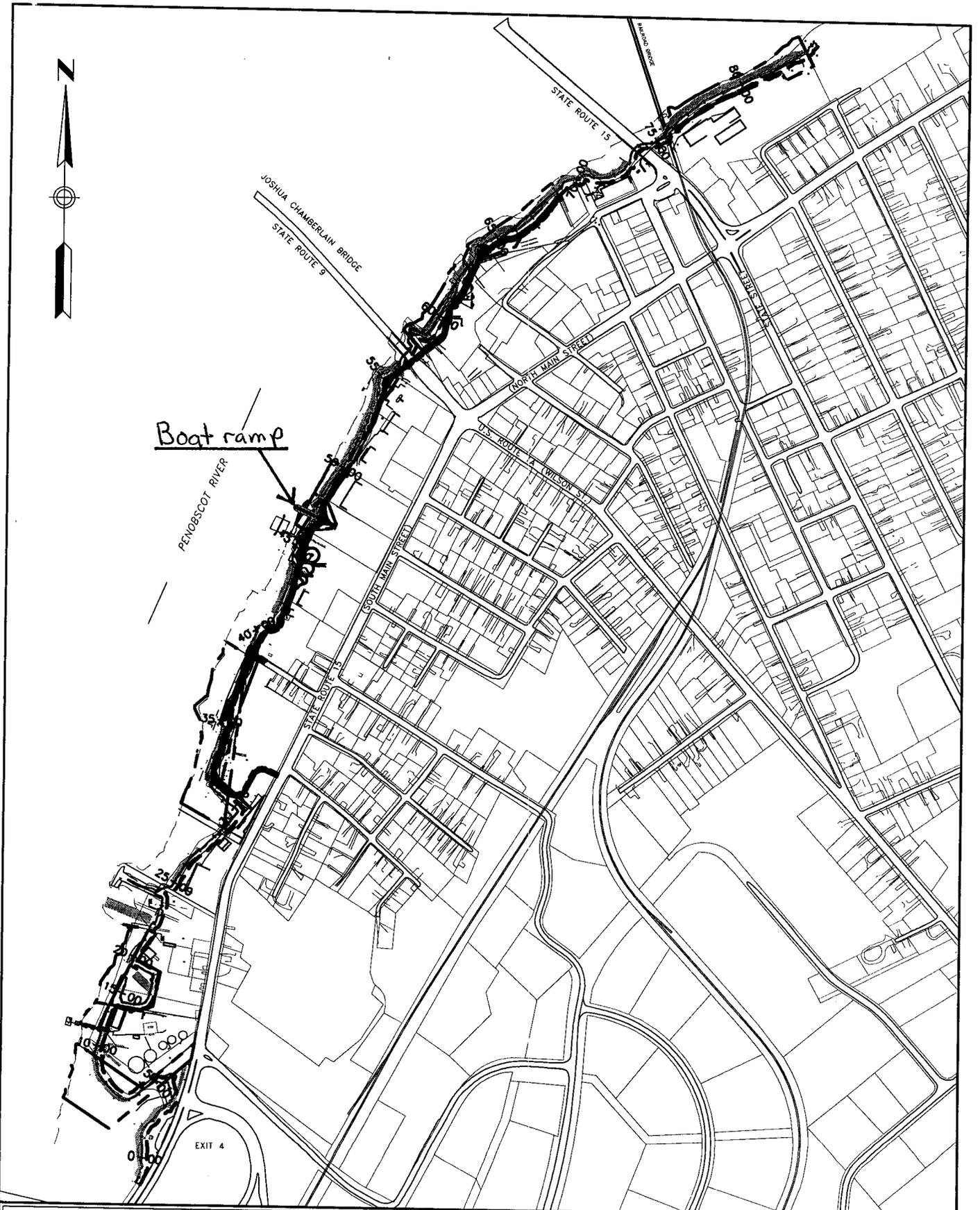

DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

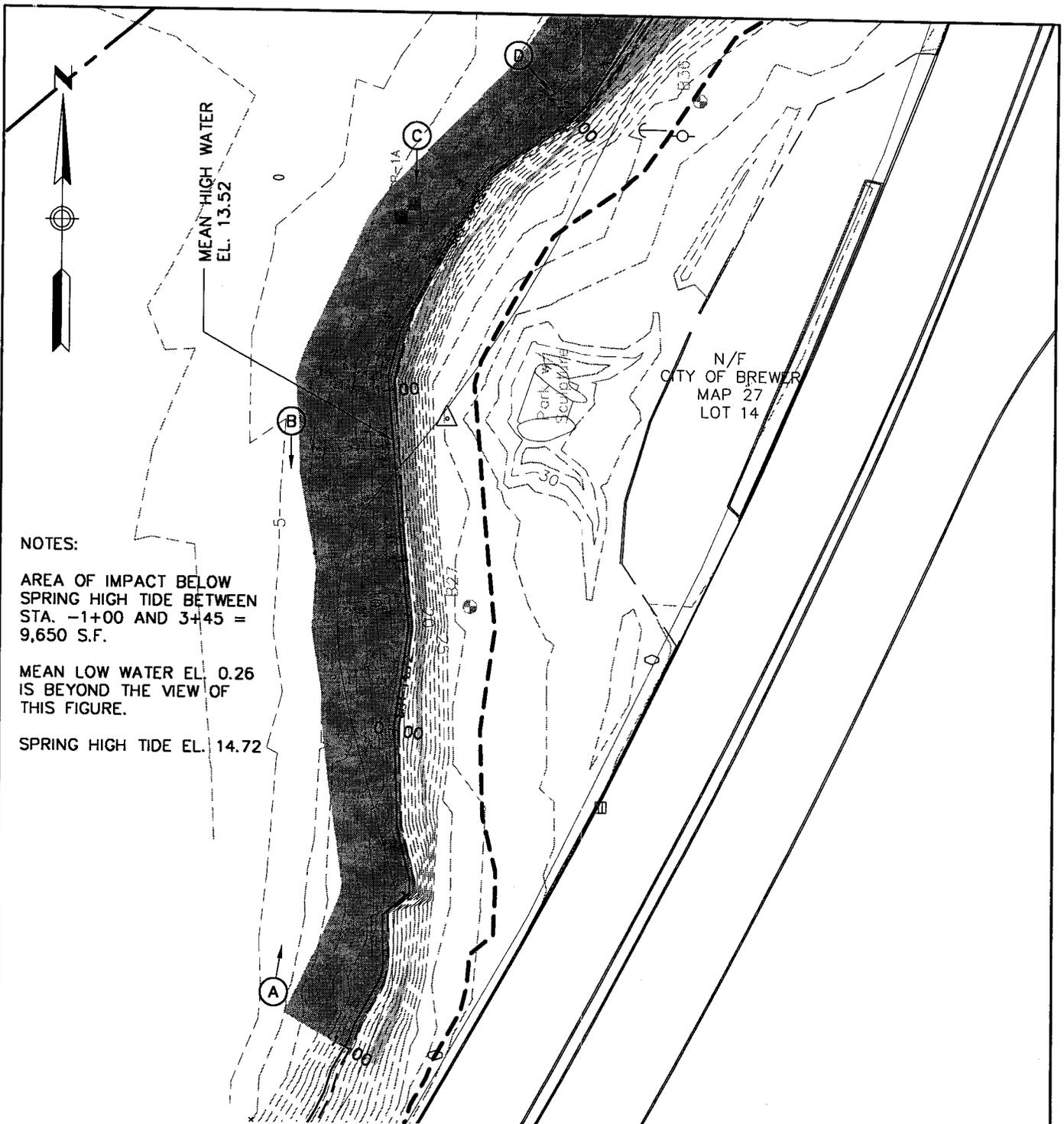
Date of initial receipt of application August 1, 2005
Date of application acceptance August 16, 2005

Date filed with Board of Environmental Protection
RC/55952/20551.DN





 WOODARD & CURRAN Engineering • Science • Operations BANGOR, MAINE 800-564-2333	LOCATION PLAN		MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	JOB NO: 20343106 DATE: JULY, 2005 SCALE: 1"=600'
	DESIGNED BY: WHC DRAWN BY: JOE	CHECKED BY: MSR FILE: 203143106-05-1_23-RPT	CITY OF BREWER RIVERBANK STABILIZATION PROJECT	



MEAN-HIGH WATER
EL. 13.52

N/F
CITY OF BREWER
MAP 27
LOT 14

NOTES:

AREA OF IMPACT BELOW
SPRING HIGH TIDE BETWEEN
STA. -1+00 AND 3+45 =
9,650 S.F.

MEAN LOW WATER EL. 0.26
IS BEYOND THE VIEW OF
THIS FIGURE.

SPRING HIGH TIDE EL. 14.72

LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
STA. -1+00 TO STA. 2+00

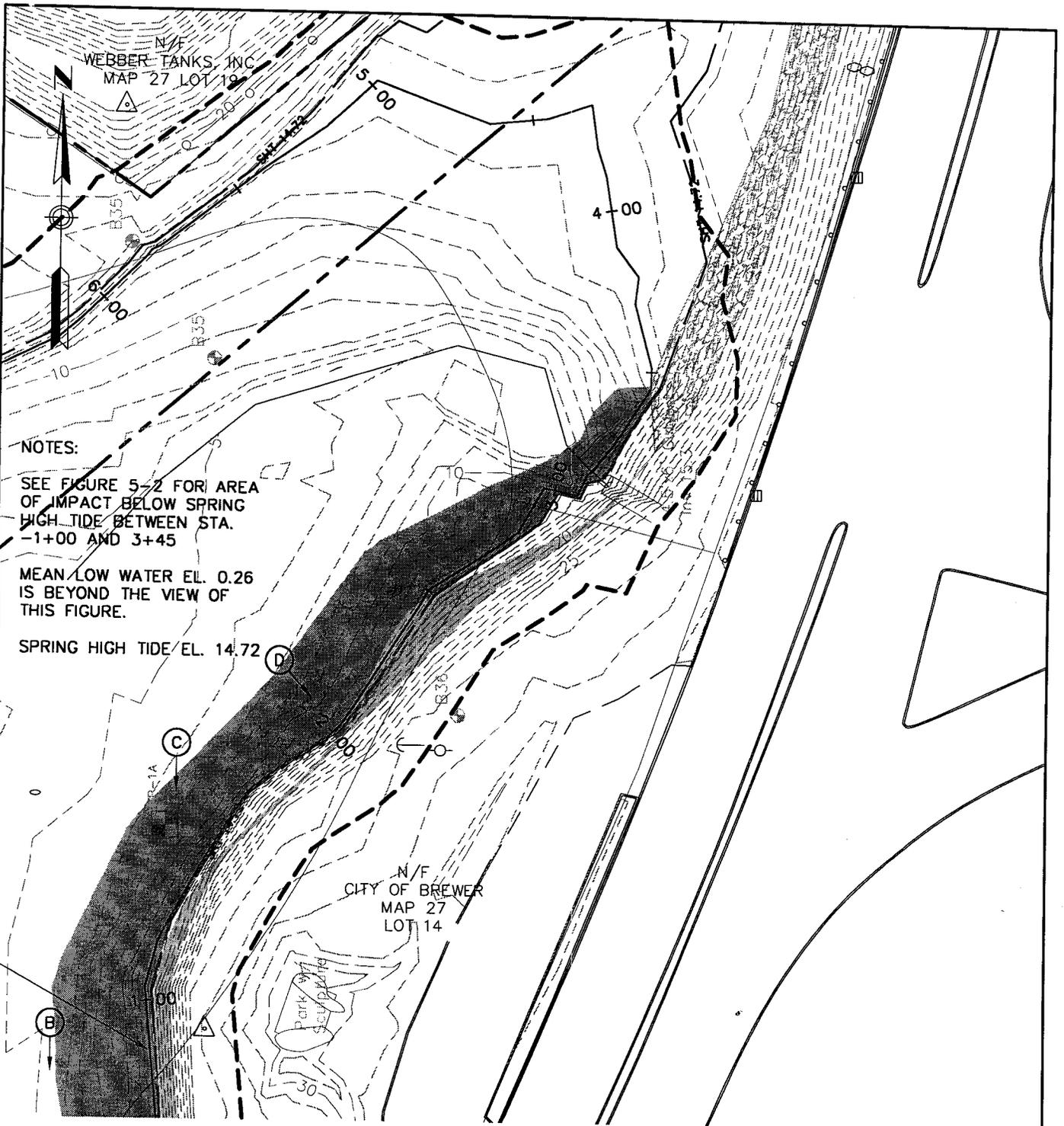
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MAINE
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AUGUSTA, MAINE

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-2



NOTES:

SEE FIGURE 5-2 FOR AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA. -1+00 AND 3+45

MEAN LOW WATER EL. 0.26 IS BEYOND THE VIEW OF THIS FIGURE.

SPRING HIGH TIDE EL. 14.72

LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
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SITE PLAN
STA. 1+00 TO STA. 6+00

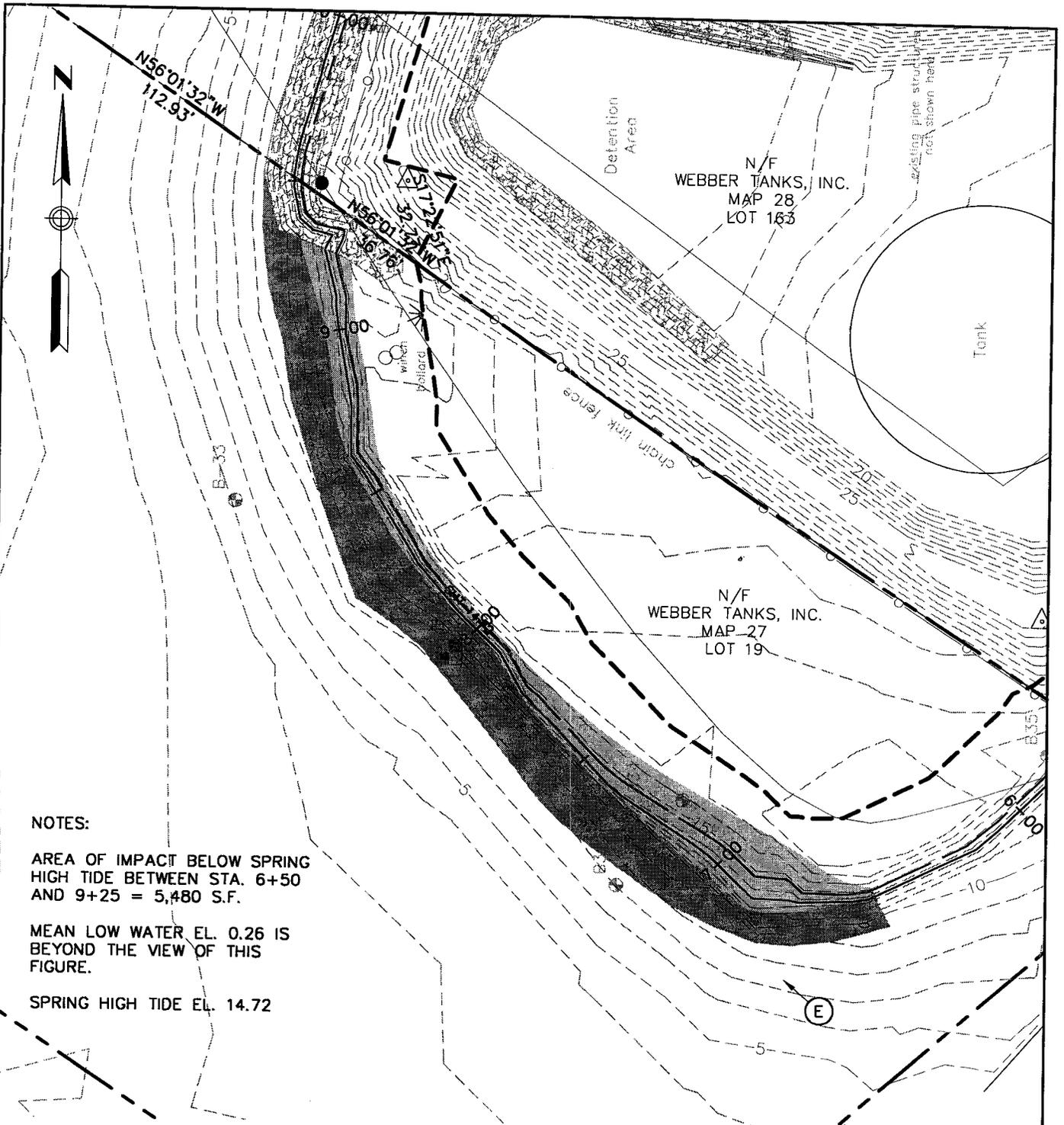
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AUGUSTA, MAINE

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-3



NOTES:

AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA. 6+50 AND 9+25 = 5,480 S.F.

MEAN LOW WATER EL. 0.26 IS BEYOND THE VIEW OF THIS FIGURE.

SPRING HIGH TIDE EL. 14.72

LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
STA. 6+50 TO STA. 10+00

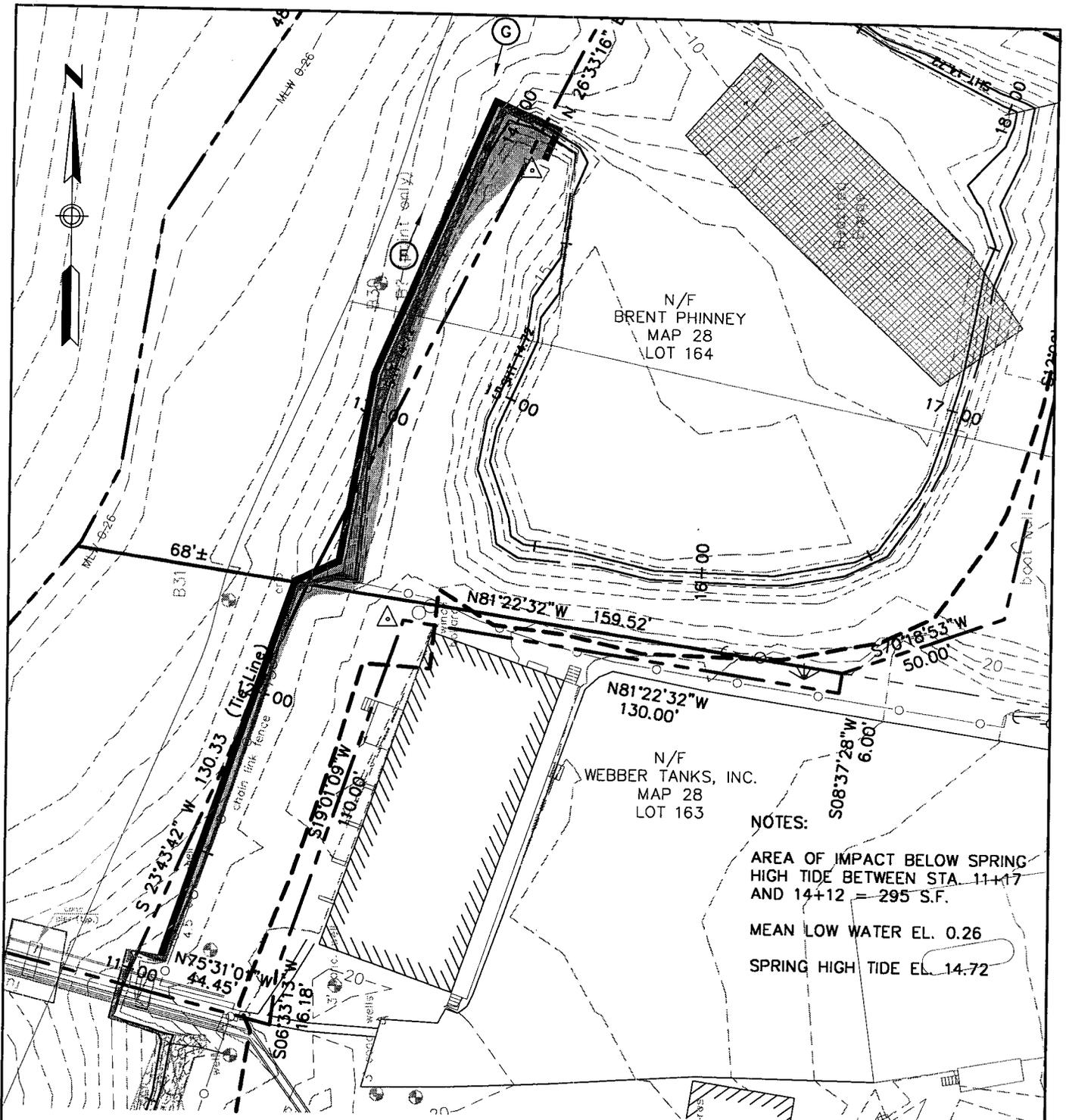
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AUGUSTA, MAINE

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-4



NOTES:
 AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA. 11+17 AND 14+12 = 295 S.F.
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72

LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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**SITE PLAN
 STA. 11+00 TO STA. 18+00**

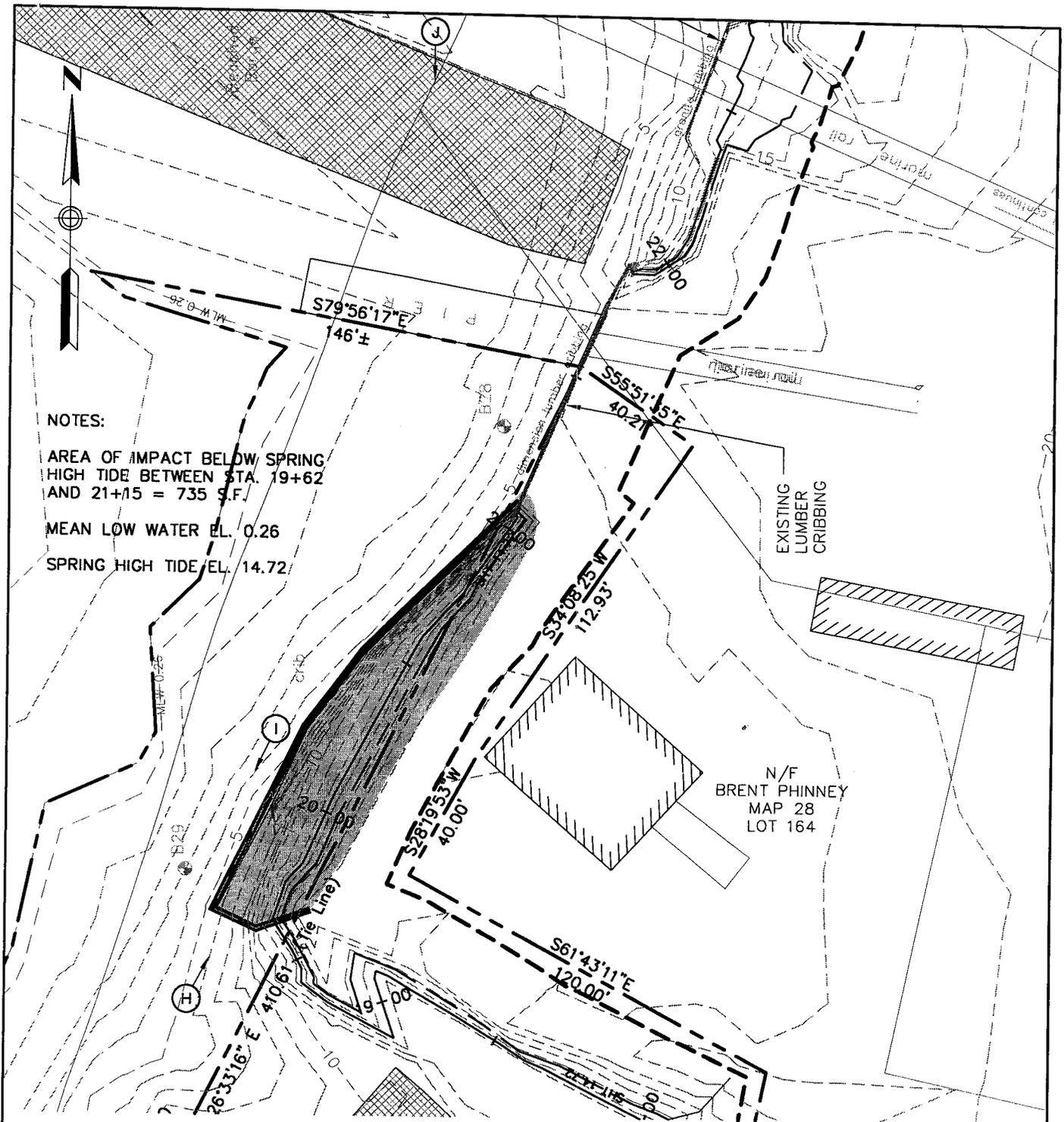
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 AUGUSTA, MAINE

CITY OF BREWER
 RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
 DATE: JULY, 2005
 SCALE: 1"=40'

FIGURE 5-5



NOTES:

AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA. 19+62 AND 21+15 = 735 S.F.

MEAN LOW WATER EL. 0.26

SPRING HIGH TIDE EL. 14.72

LEGEND:

IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)

PROPOSED LOAM AND VEGETATED AREAS

PROPOSED VERTICAL BULKHEAD

MEAN LOW TIDE

SPRING HIGH TIDE

25' OFFSET FROM MEAN HIGH WATER

FUTURE MULTI-USE TRAIL

PHOTO

PROPOSED EASEMENT

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.

TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)

PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
STA. 19+50 TO STA. 22+50

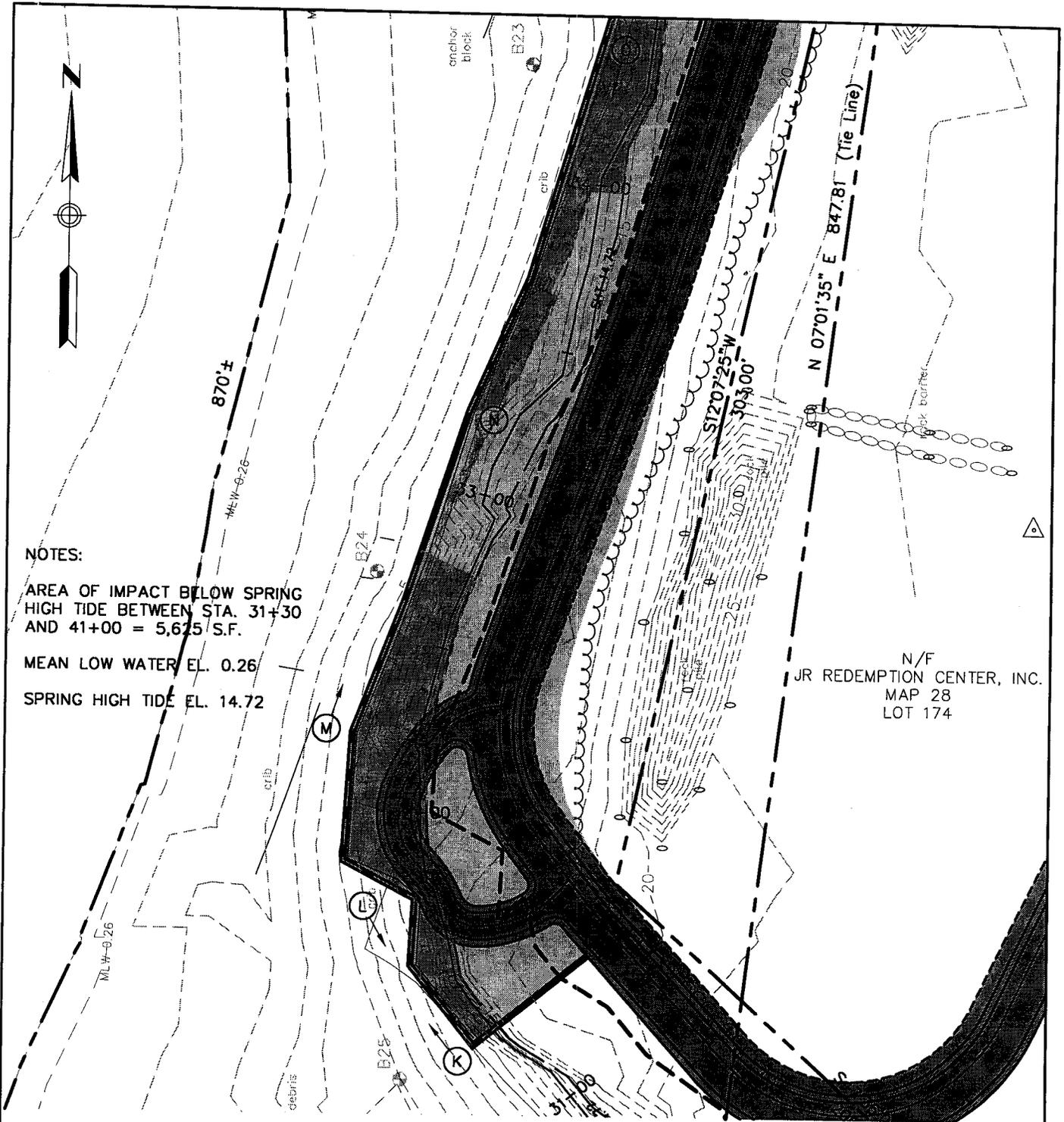
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AUGUSTA, MAINE

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-6



NOTES:

AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA. 31+30 AND 41+00 = 5,625 S.F.
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72

N/F
 JR REDEMPTION CENTER, INC.
 MAP 28
 LOT 174

LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
 STA. 31+00 TO STA. 34+50

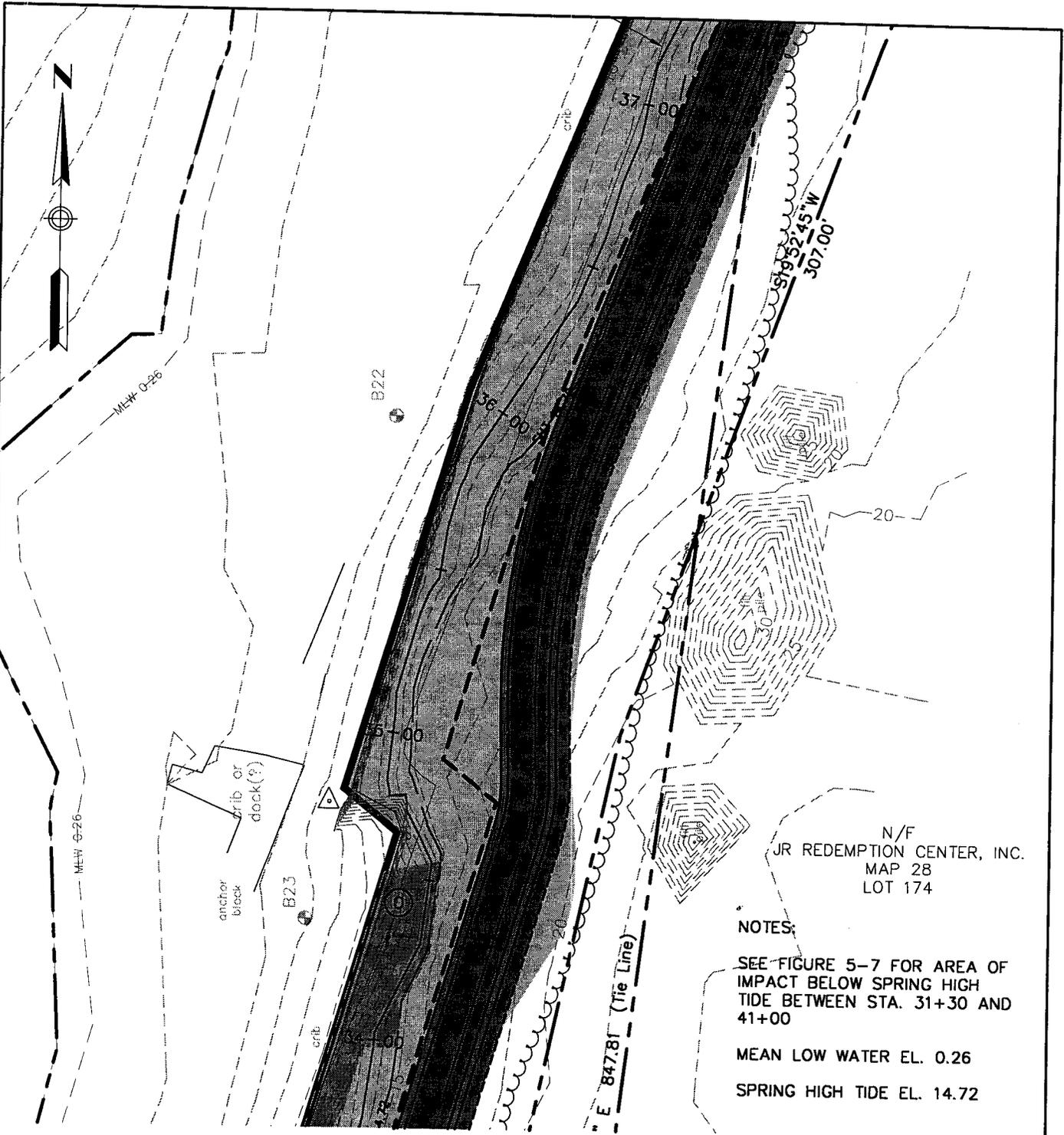
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MAINE
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 AUGUSTA, MAINE

CITY OF BREWER
 RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
 DATE: JULY, 2005
 SCALE: 1"=40'

FIGURE 5-7



N/F
 JR REDEMPTION CENTER, INC.
 MAP 28
 LOT 174

NOTES:
 SEE FIGURE 5-7 FOR AREA OF
 IMPACT BELOW SPRING HIGH
 TIDE BETWEEN STA. 31+30 AND
 41+00
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72

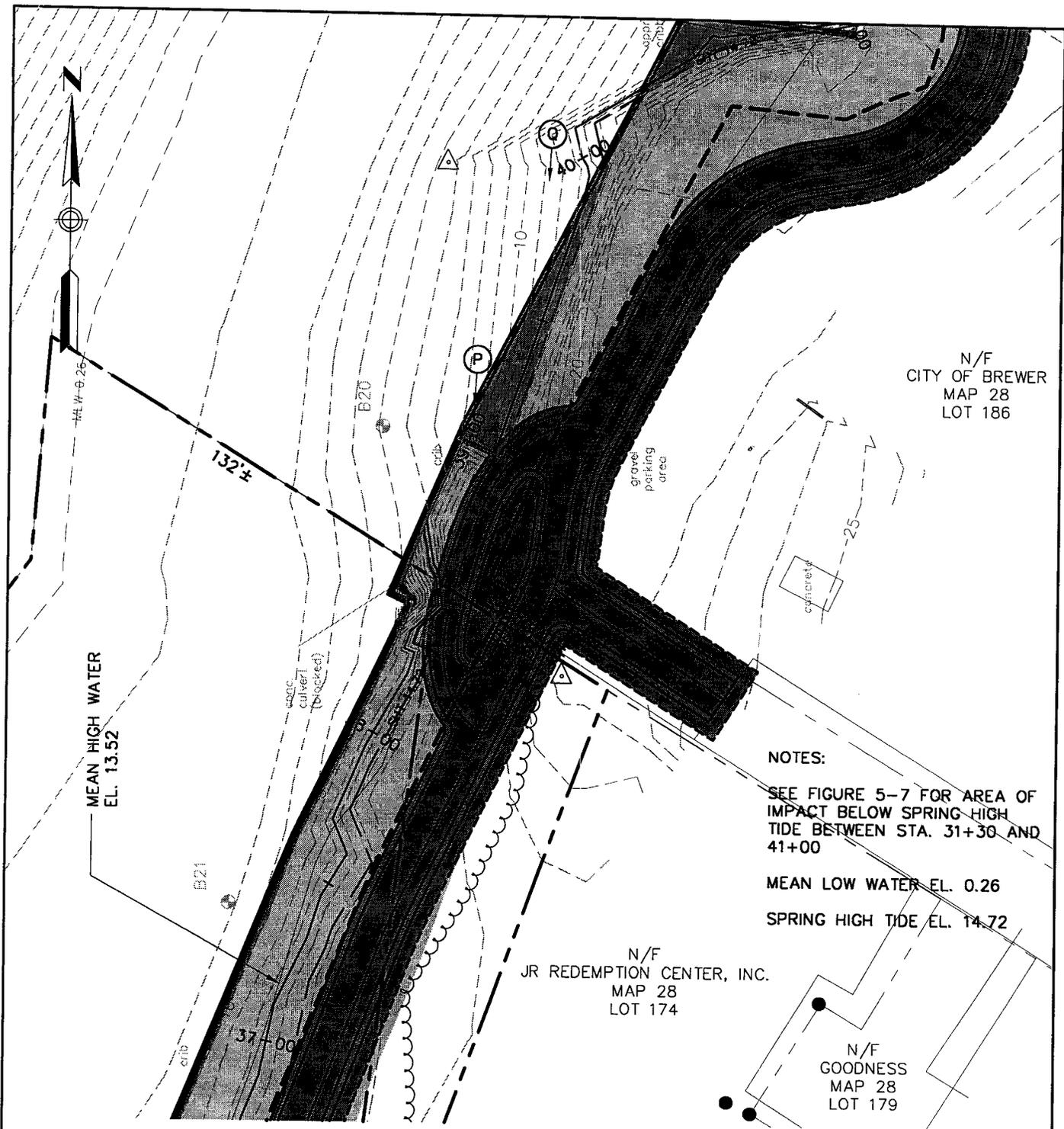
LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:
 PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

<p> WOODARD & CURRAN Engineering • Science • Operations BANGOR, MAINE 800-564-2333 </p>	SITE PLAN STA. 34+00 TO STA. 37+00		MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE CITY OF BREWER RIVERBANK STABILIZATION PROJECT	JOB NO: 203431.06 DATE: JULY, 2005 SCALE: 1"=40'
	DESIGNED BY: WHC DRAWN BY: JOE	CHECKED BY: MSR FILE: 203143105-U5-1_23-RPT		FIGURE 5-8

N/F
CITY OF BREWER
MAP 28
LOT 186



MEAN HIGH WATER
EL. 13.52

NOTES:

SEE FIGURE 5-7 FOR AREA OF
IMPACT BELOW SPRING HIGH
TIDE BETWEEN STA. 31+30 AND
41+00

MEAN LOW WATER EL. 0.26
SPRING HIGH TIDE EL. 14.72

N/F
JR REDEMPTION CENTER, INC.
MAP 28
LOT 174

N/F
GOODNESS
MAP 28
LOT 179

LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE
(RIP-RAP EXCEPT IN AREAS BEHIND
VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
TOPOGRAPHICAL INFORMATION FROM SURVEY BY
SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
STA. 37+00 TO STA. 40+50

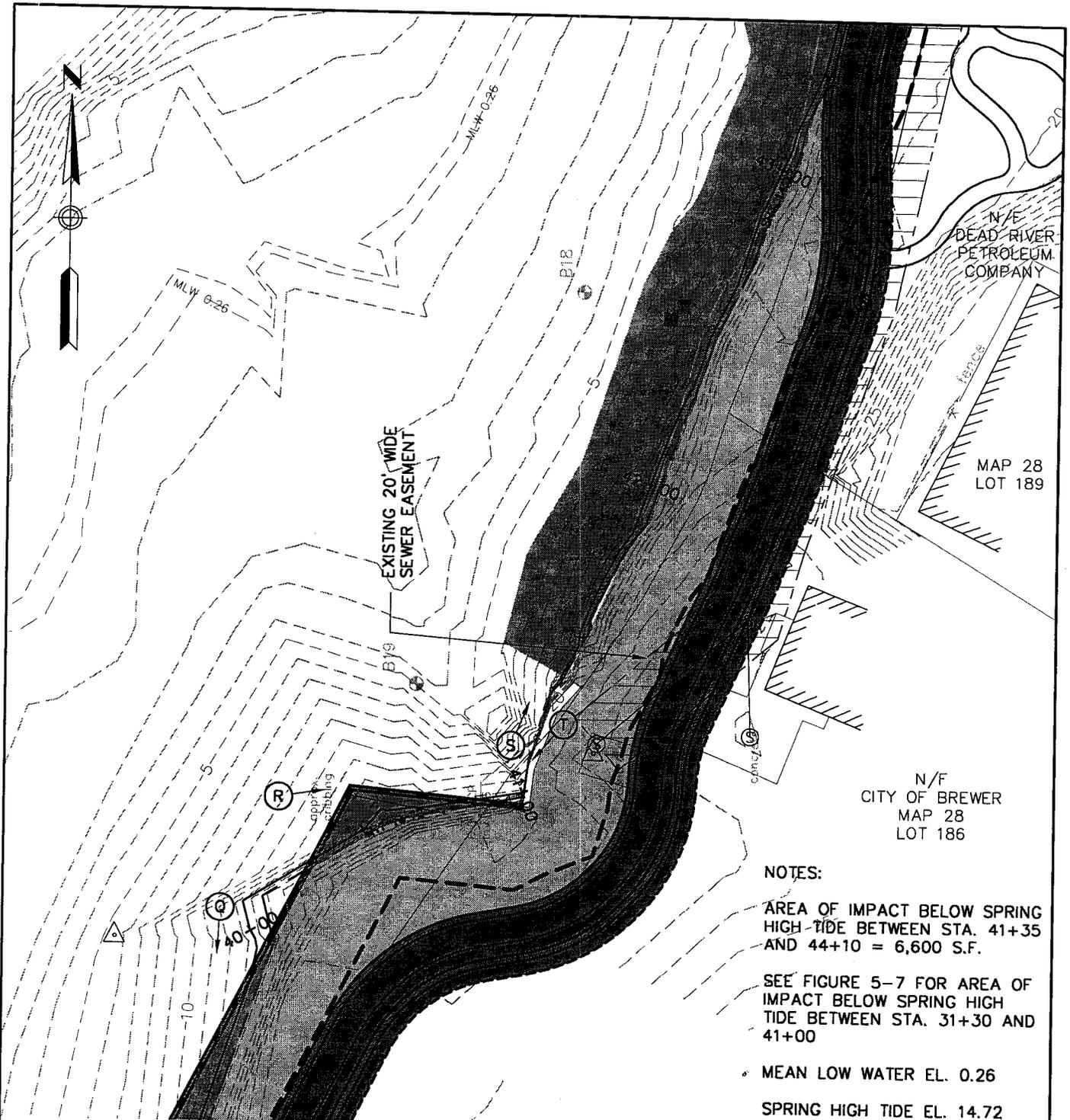
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MAINE
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AUGUSTA, MAINE

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-9



NOTES:

- AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA. 41+35 AND 44+10 = 6,600 S.F.
- SEE FIGURE 5-7 FOR AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA. 31+30 AND 41+00
- MEAN LOW WATER EL. 0.26
- SPRING HIGH TIDE EL. 14.72

LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
 STA. 39+50 TO STA. 43+50

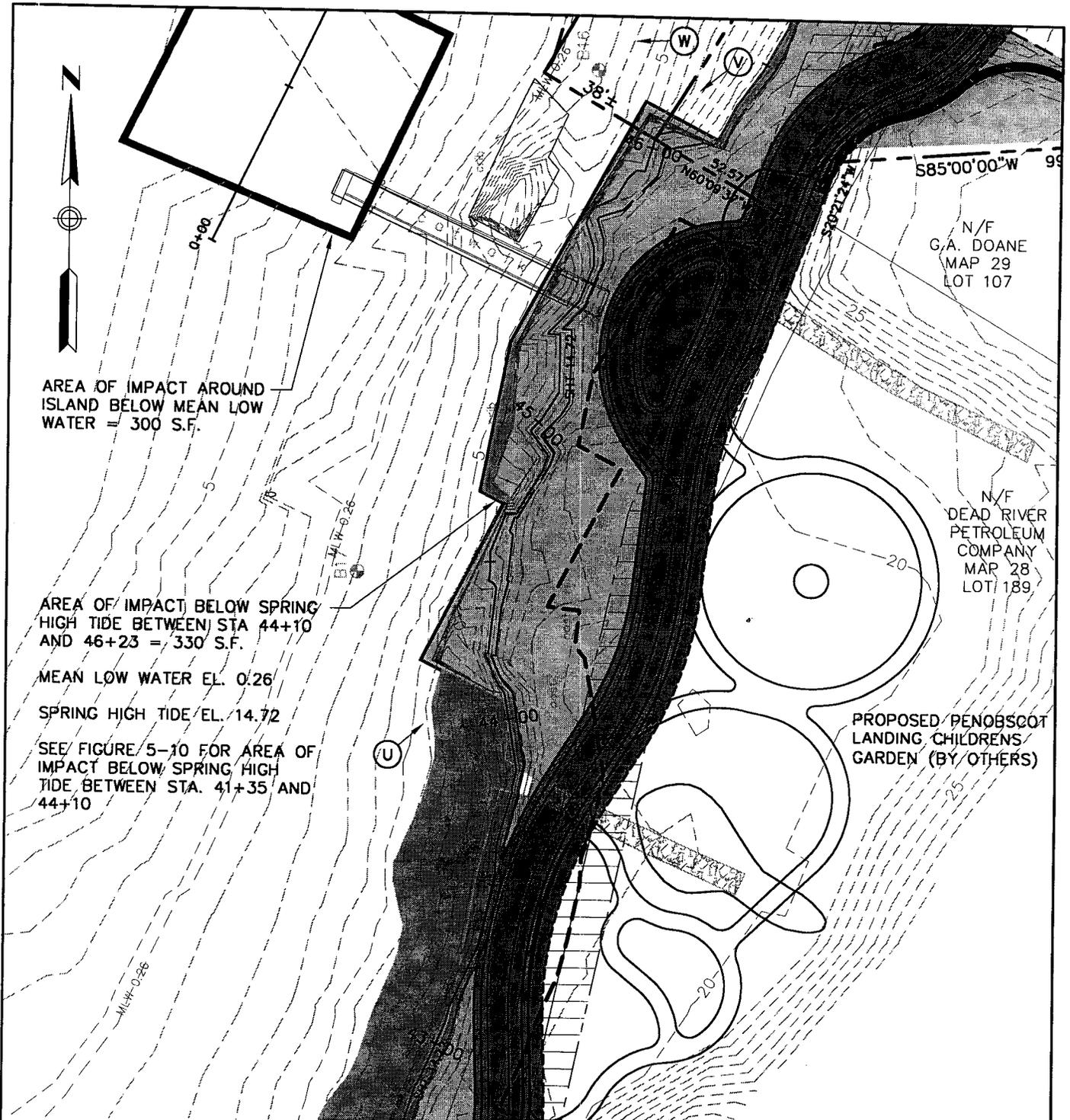
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MAINE
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 AUGUSTA, MAINE

CITY OF BREWER
 RIVERBANK STABILIZATION PROJECT

JOB NO: 2031431.06
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-10



AREA OF IMPACT AROUND ISLAND BELOW MEAN LOW WATER = 300 S.F.

AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA 44+10 AND 46+23 = 330 S.F.

MEAN LOW WATER EL. 0.26

SPRING HIGH TIDE EL. 14.72

SEE FIGURE 5-10 FOR AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA. 41+35 AND 44+10

PROPOSED PENOBSCOT LANDING CHILDRENS GARDEN (BY OTHERS)

LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

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 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

 BANGOR, MAINE 800-564-2333	SITE PLAN STA. 43+00 TO STA. 46+50		MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	JOB NO: 203431.06 DATE: JULY, 2005 SCALE: 1"=40'
	DESIGNED BY: WHC DRAWN BY: JDE	CHECKED BY: MSR FILE: 203143106-US-1_23-RPT	CITY OF BREWER RIVERBANK STABILIZATION PROJECT	



NOTES:

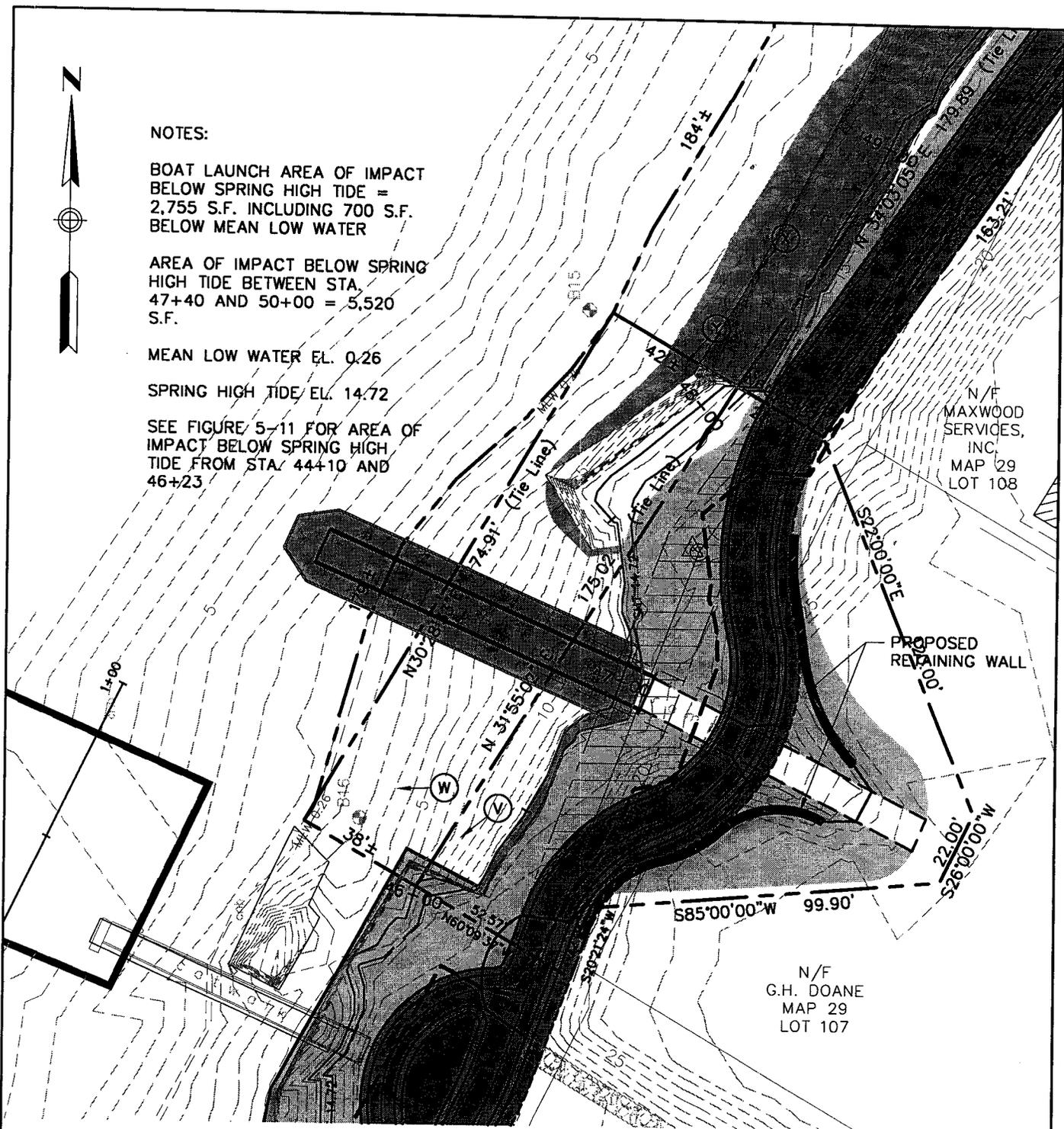
BOAT LAUNCH AREA OF IMPACT
BELOW SPRING HIGH TIDE =
2,755 S.F. INCLUDING 700 S.F.
BELOW MEAN LOW WATER

AREA OF IMPACT BELOW SPRING
HIGH TIDE BETWEEN STA.
47+40 AND 50+00 = 5,520
S.F.

MEAN LOW WATER EL. 0.26

SPRING HIGH TIDE EL. 14.72

SEE FIGURE 5-11 FOR AREA OF
IMPACT BELOW SPRING HIGH
TIDE FROM STA. 44+10 AND
46+23



LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE
(RIP-RAP EXCEPT IN AREAS BEHIND
VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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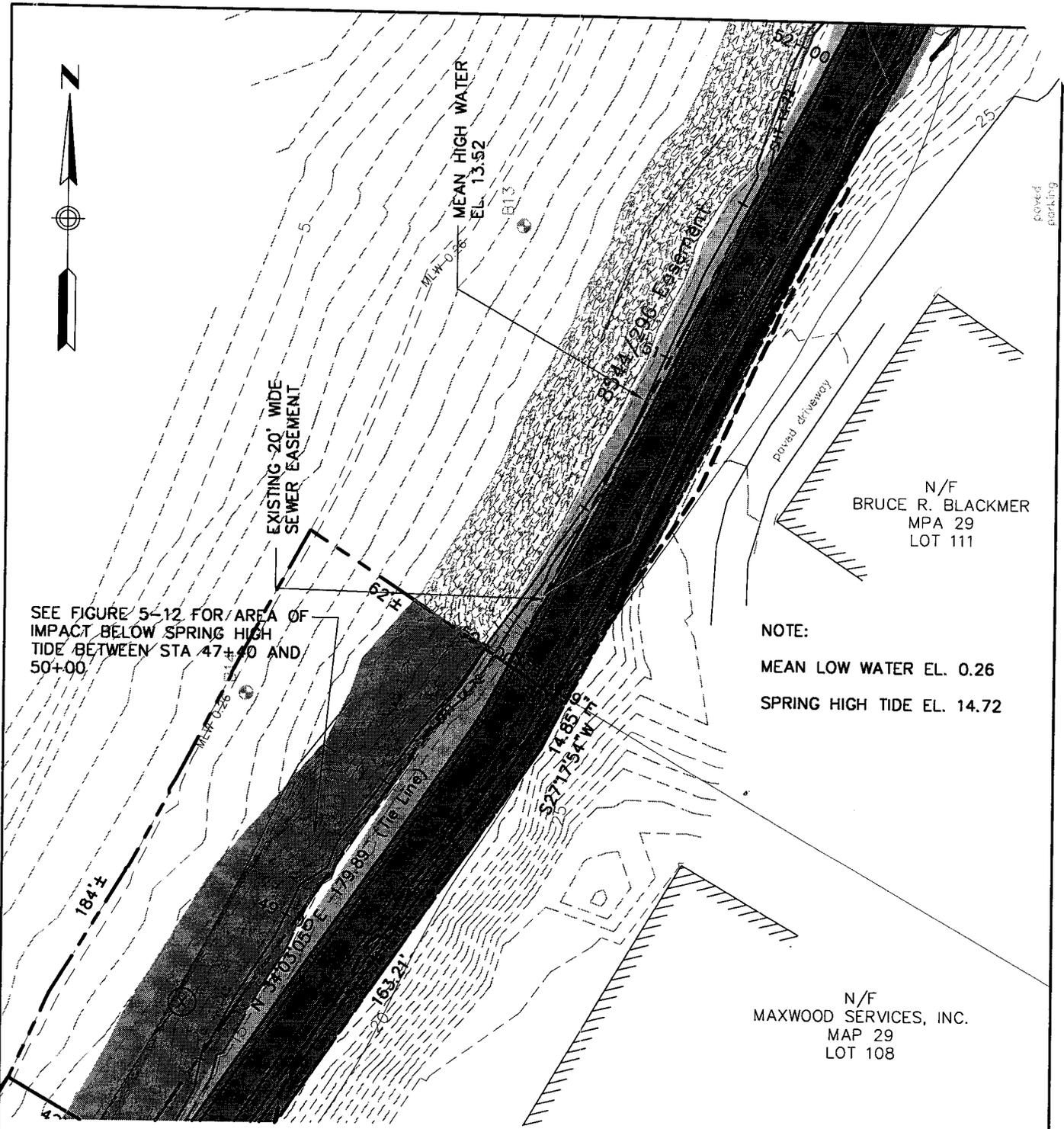
SITE PLAN
STA. 45+50 TO STA. 49+00

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JOB NO: 2031431.06
DATE: JULY, 2005
SCALE: 1"=40'
FIGURE 5-12



SEE FIGURE 5-12 FOR AREA OF IMPACT BELOW SPRING HIGH TIDE BETWEEN STA 47+40 AND 50+00.

NOTE:
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72

LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

SOURCES:
 PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
 STA. 48+50 TO STA. 52+00

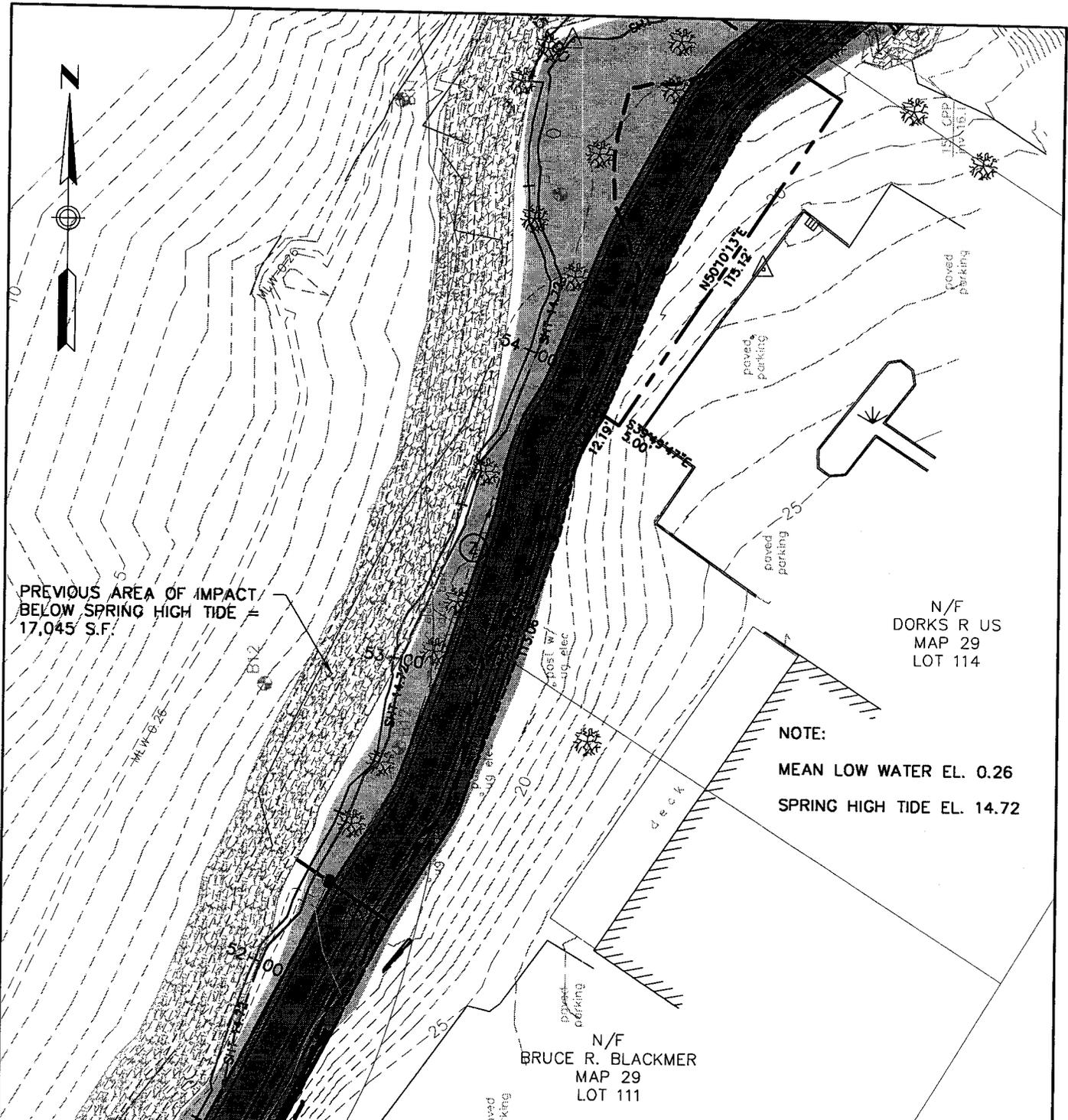
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JOB NO: 203143106
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-13



PREVIOUS AREA OF IMPACT
BELOW SPRING HIGH TIDE =
17,045 S.F.

N/F
DORKS R US
MAP 29
LOT 114

N/F
BRUCE R. BLACKMER
MAP 29
LOT 111

NOTE:
MEAN LOW WATER EL. 0.26
SPRING HIGH TIDE EL. 14.72

LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
STA. 51+50 TO STA. 55+00

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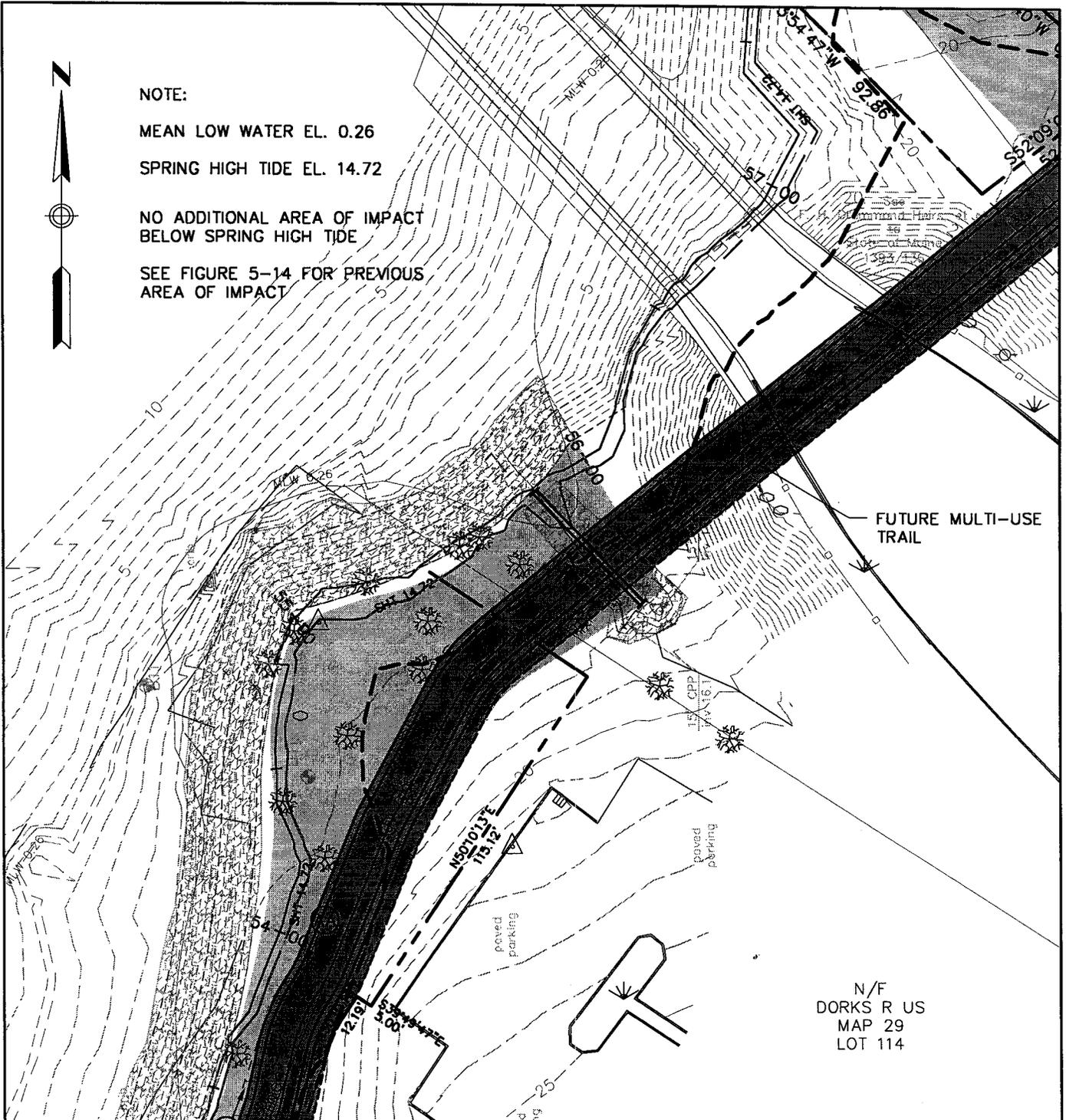
CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-14



NOTE:
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72
 NO ADDITIONAL AREA OF IMPACT
 BELOW SPRING HIGH TIDE
 SEE FIGURE 5-14 FOR PREVIOUS
 AREA OF IMPACT



LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
 STA. 53+50 TO STA. 57+70

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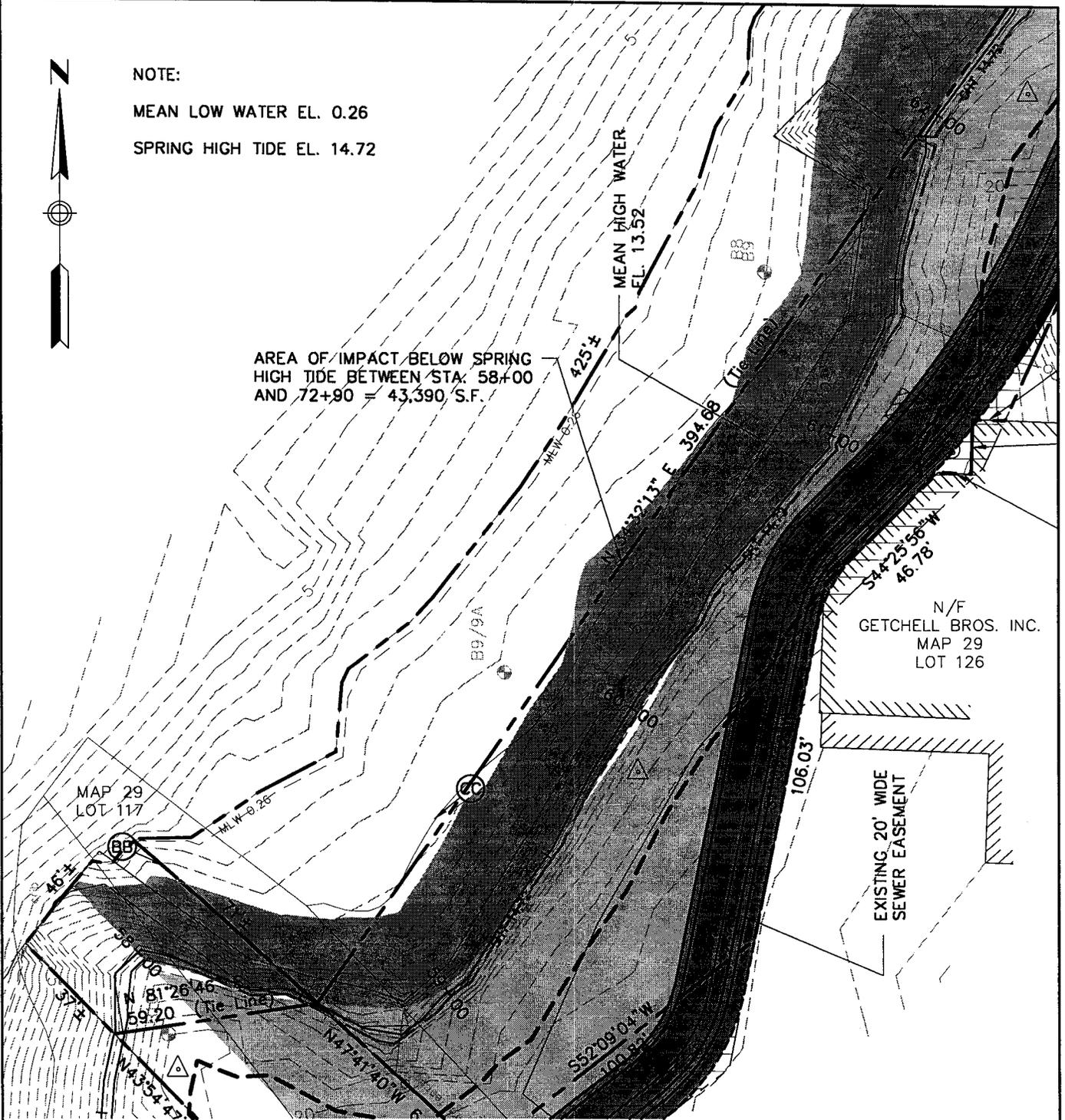
JOB NO: 203431.06
 DATE: JULY, 2005
 SCALE: 1"=40'

FIGURE 5-15



NOTE:
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72

AREA OF IMPACT BELOW SPRING
 HIGH TIDE BETWEEN STA. 58+00
 AND 72+90 = 43,390 S.F.



LEGEND:

IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)		SPRING HIGH TIDE	
PROPOSED LOAM AND VEGETATED AREAS		25' OFFSET FROM MEAN HIGH WATER	
PROPOSED VERTICAL BULKHEAD		FUTURE MULTI-USE TRAIL	
MEAN LOW TIDE		PHOTO	
		PROPOSED EASEMENT	

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG



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SITE PLAN
 STA. 58+00 TO STA. 62+00

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JOB NO: 203431.06
 DATE: JULY, 2005
 SCALE: 1"=40'

FIGURE 5-16



EXISTING CRIBBING
TO BE REMOVED

N/E
BONTON TOWERS
MAP 30
LOT 1C

S68°27'31"W
180.00

SEE FIGURE 5-16 FOR AREA OF
IMPACT BELOW SPRING HIGH TIDE
BETWEEN STA. 58+00 TO 72+90

NOTE:

MEAN LOW WATER EL. 0.26
SPRING HIGH TIDE EL. 14.72

FUTURE MULTI-USE
TRAIL

N/F
MCKENNEY
MAP 30
LOT 1A

N/F
GETCHELL BROS. INC.
MAP 29
LOT 126

LEGEND:

IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)		SPRING HIGH TIDE	
PROPOSED LOAM AND VEGETATED AREAS		25' OFFSET FROM MEAN HIGH WATER	
PROPOSED VERTICAL BULKHEAD		FUTURE MULTI-USE TRAIL	
MEAN LOW TIDE		PHOTO	
		PROPOSED EASEMENT	

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
STA. 61+50 TO STA. 65+50

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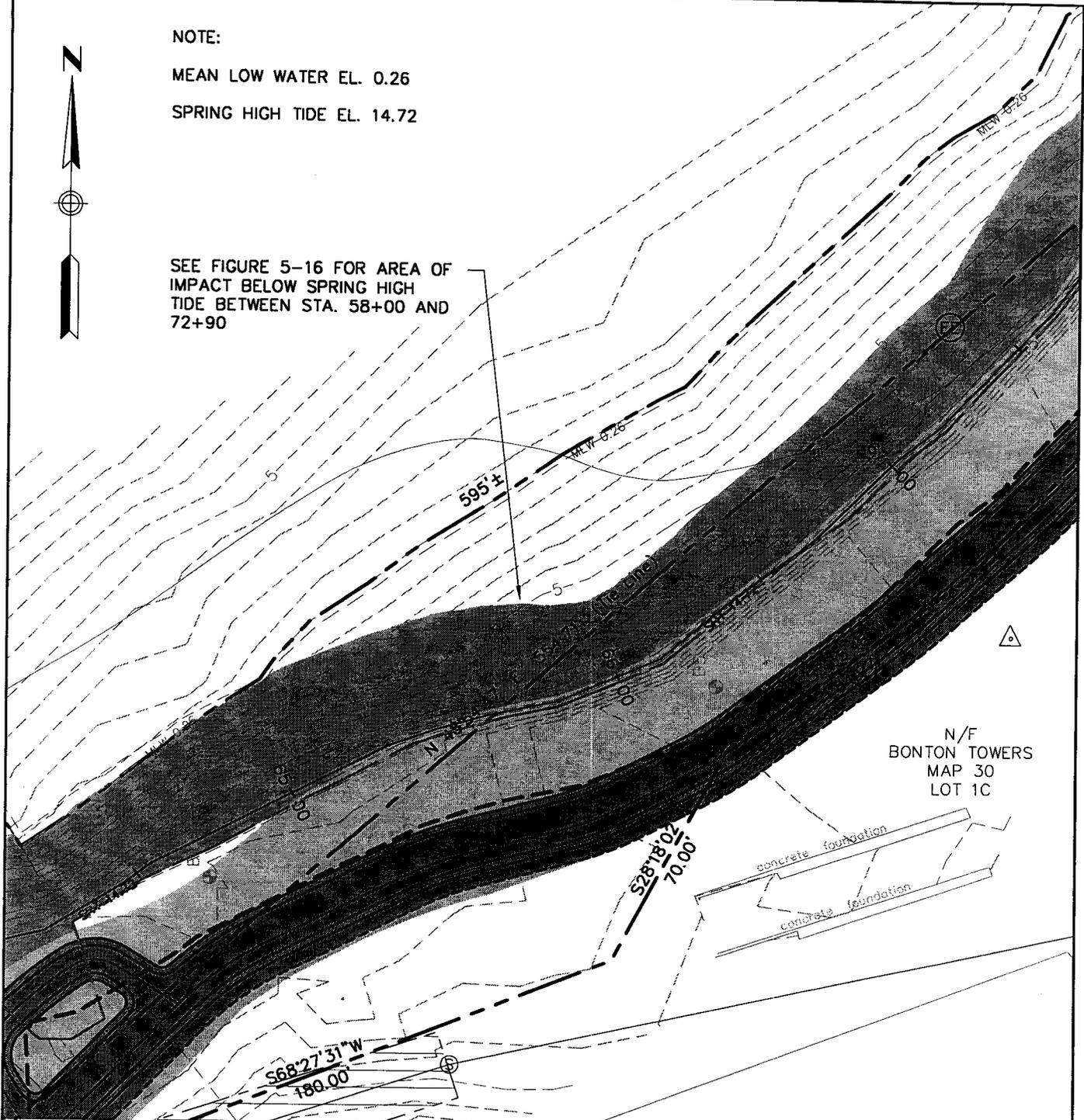
JOB NO: 203431.06
DATE: JULY, 2005
SCALE: 1"=40'

FIGURE 5-17

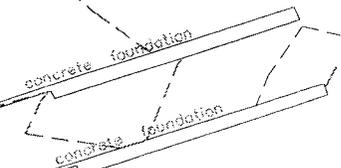


NOTE:
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72

SEE FIGURE 5-16 FOR AREA OF
 IMPACT BELOW SPRING HIGH
 TIDE BETWEEN STA. 58+00 AND
 72+90



N/F
 BONTON TOWERS
 MAP 30
 LOT 1C



LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
 STA. 64+50 TO STA. 67+50

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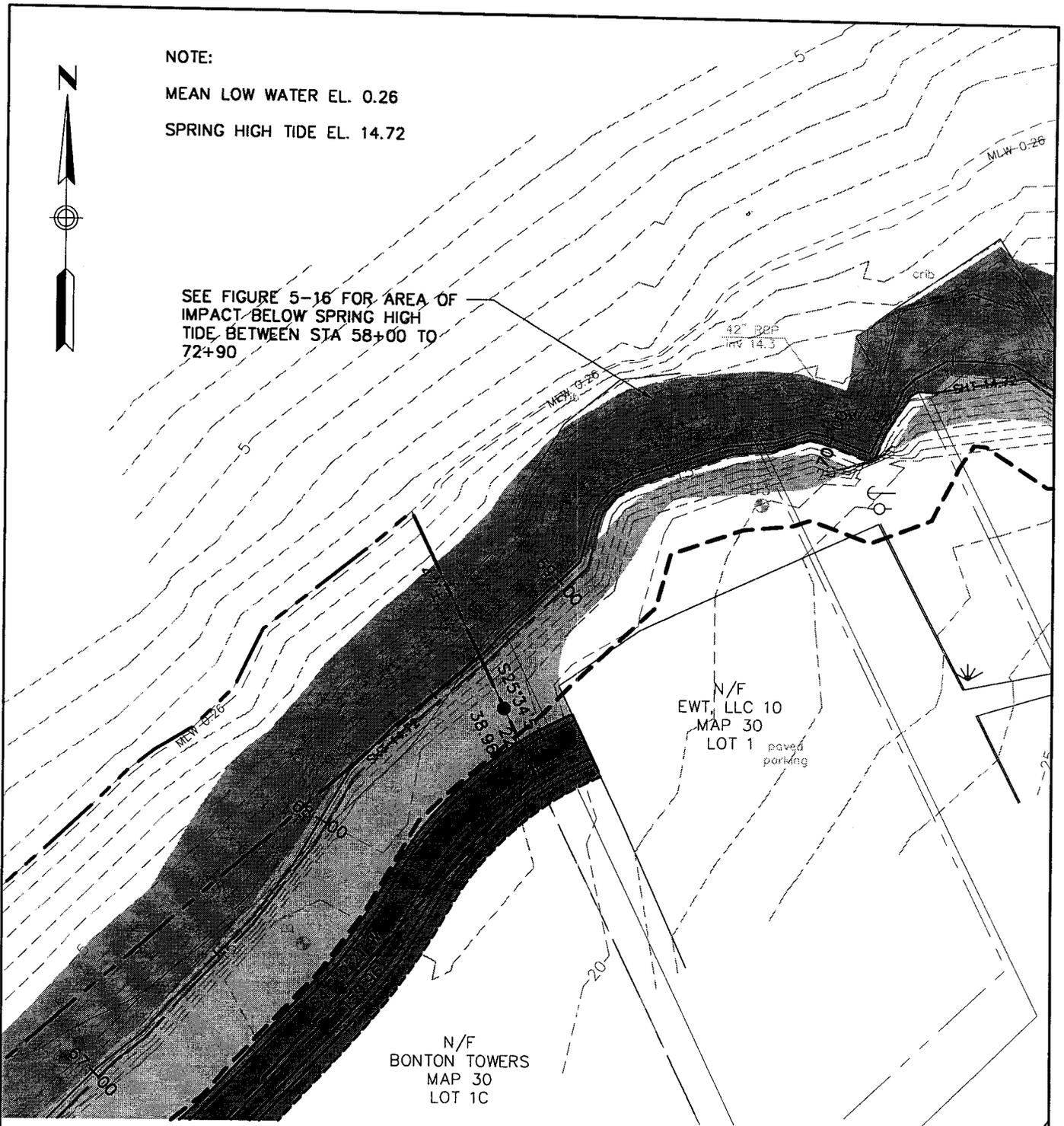
JOB NO: 203431.06
 DATE: JULY, 2005
 SCALE: 1"=40'

FIGURE 5-18



NOTE:
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72

SEE FIGURE 5-16 FOR AREA OF
 IMPACT BELOW SPRING HIGH
 TIDE BETWEEN STA 58+00 TO
 72+90



LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
 STA. 67+00 TO STA. 70+50

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 DATE: JULY, 2005
 SCALE: 1"=40'

FIGURE 5-19

NOTE:
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72



SEE FIGURE 5-16 FOR AREA OF
 IMPACT BELOW SPRING HIGH
 TIDE FROM STA. 58+00 AND
 72+90

MEAN HIGH WATER
 EL. 13.52

N/F
 EWT, LLC 10
 MAP 30
 LOT 105

LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE
(RIP-RAP EXCEPT IN AREAS BEHIND
VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY
 SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
 STA. 70+00 TO STA. 74+00

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JOB NO: 203431.06
 DATE: JULY, 2005
 SCALE: 1"=40'

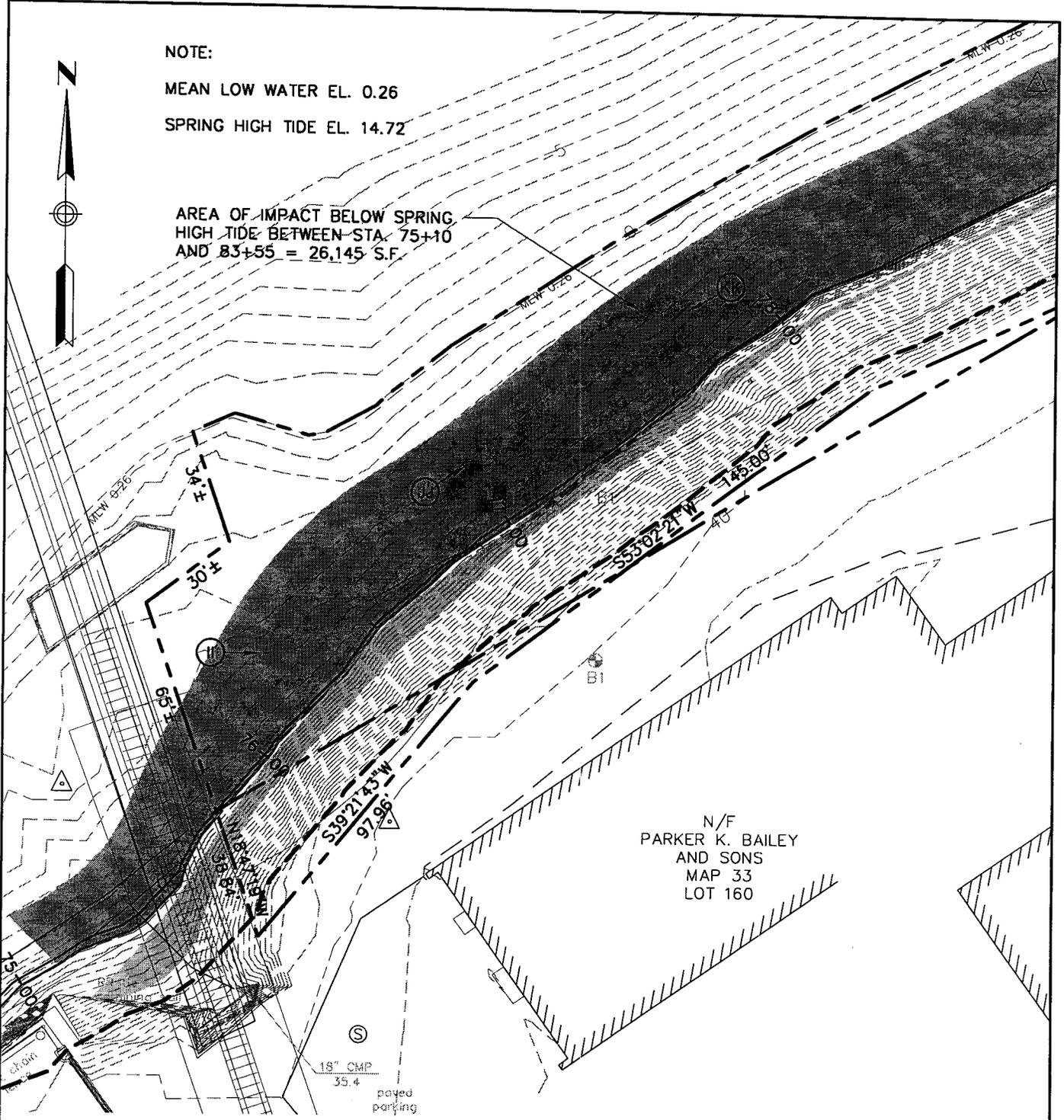
FIGURE 5-20

NOTE:

MEAN LOW WATER EL. 0.26

SPRING HIGH TIDE EL. 14.72

AREA OF IMPACT BELOW SPRING
HIGH TIDE BETWEEN STA. 75+10
AND 83+55 = 26,145 S.F.



N/F
PARKER K. BAILEY
AND SONS
MAP 33
LOT 160

LEGEND:

- | | | | |
|---|--|---------------------------------|--|
| IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD) | | SPRING HIGH TIDE | |
| PROPOSED LOAM AND VEGETATED AREAS | | 25' OFFSET FROM MEAN HIGH WATER | |
| PROPOSED VERTICAL BULKHEAD | | FUTURE MULTI-USE TRAIL | |
| MEAN LOW TIDE | | PHOTO | |
| | | PROPOSED EASEMENT | |

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
STA. 75+00 TO STA. 78+50

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CITY OF BREWER
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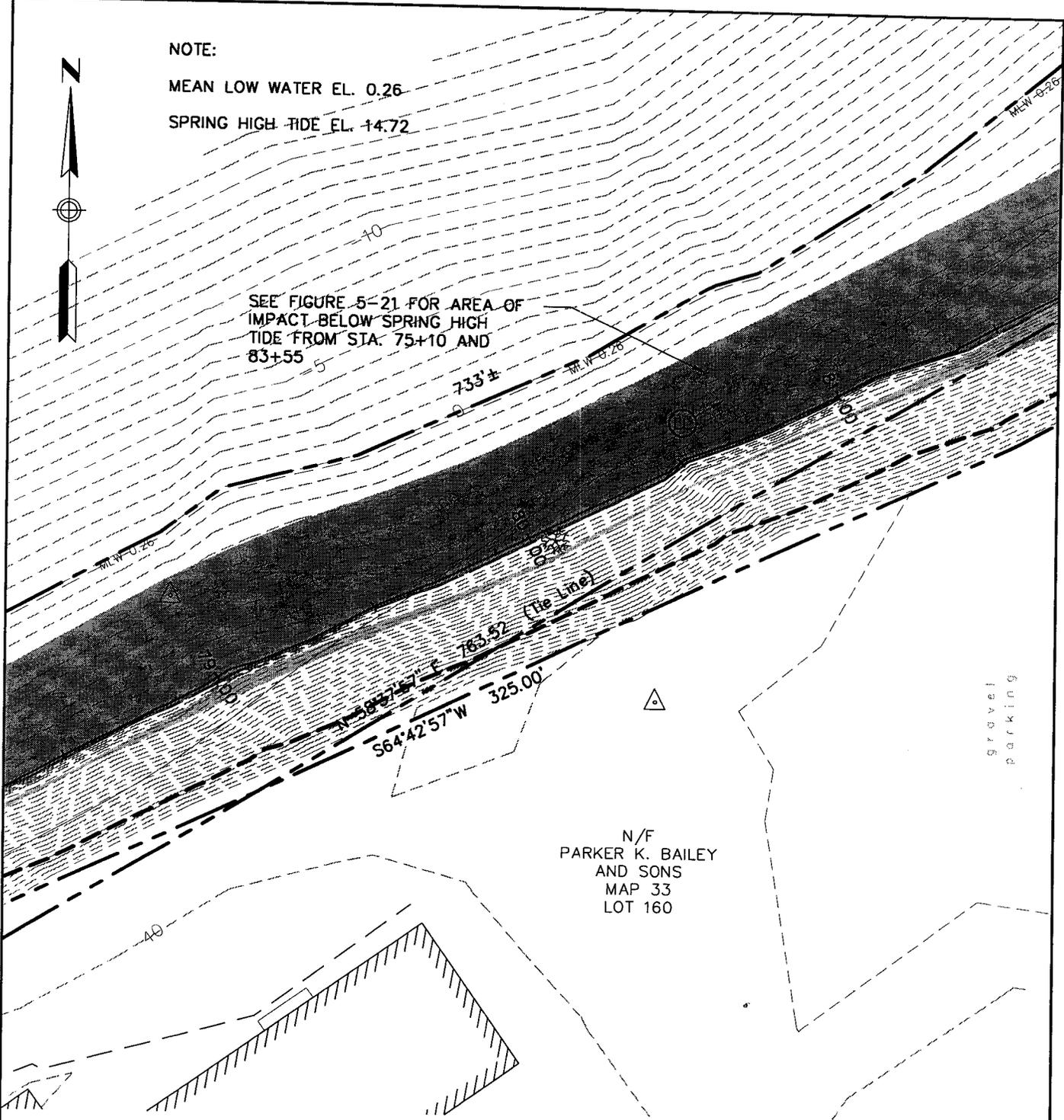
JOB NO: 203431.06
DATE: JULY 2005
SCALE: 1"=40'

FIGURE 5-21



NOTE:
 MEAN LOW WATER EL. 0.26
 SPRING HIGH TIDE EL. 14.72

SEE FIGURE 5-21 FOR AREA OF
 IMPACT BELOW SPRING HIGH
 TIDE FROM STA. 75+10 AND
 83+55



LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
 TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
 PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

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SITE PLAN
 STA. 78+50 TO STA. 81+50

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 DATE: JULY, 2005
 SCALE: 1"=40'

FIGURE 5-22

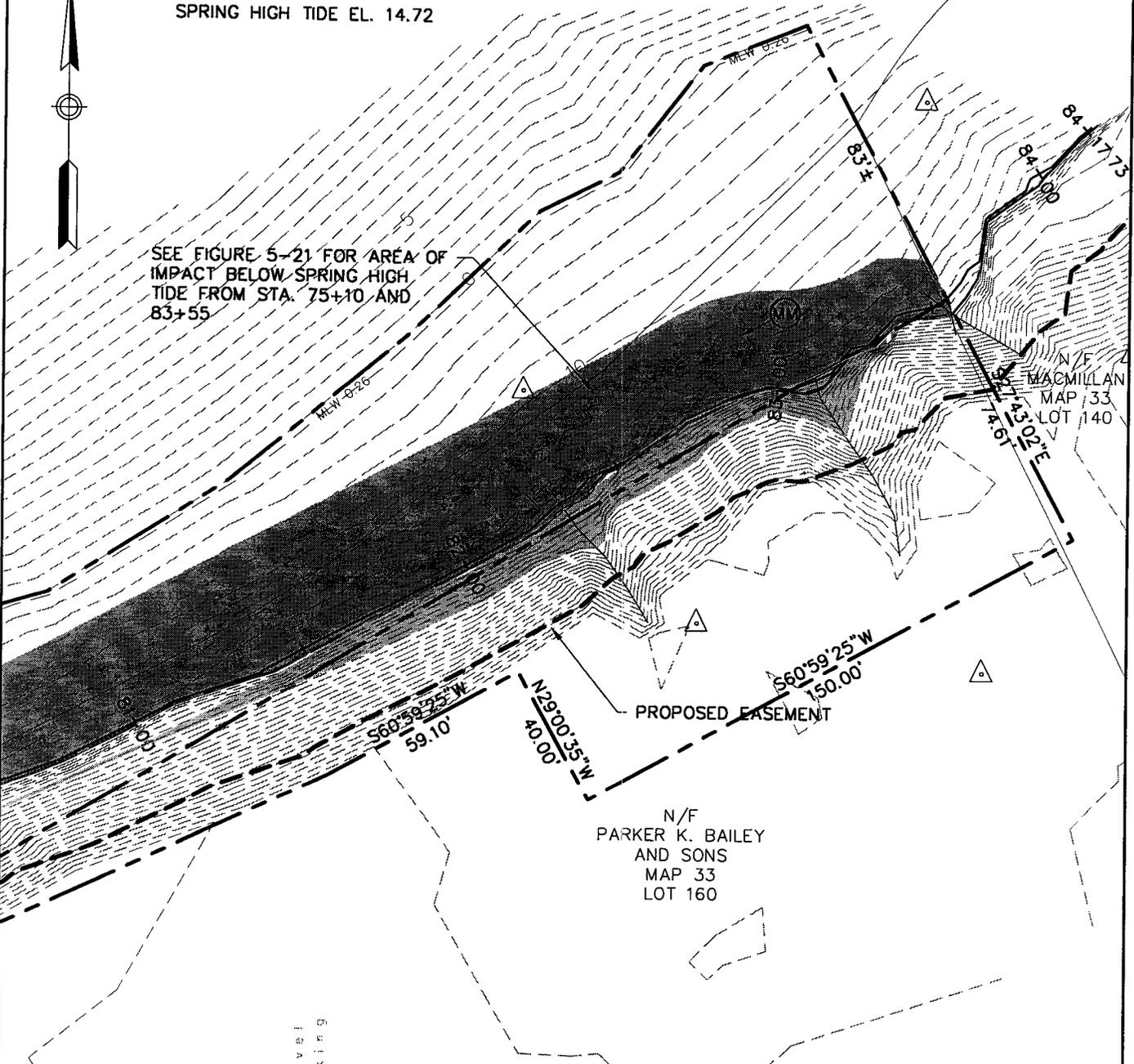
NOTE:

MEAN LOW WATER EL. 0.26

SPRING HIGH TIDE EL. 14.72



SEE FIGURE 5-21 FOR AREA OF
IMPACT BELOW SPRING HIGH
TIDE FROM STA. 75+10 AND
83+55



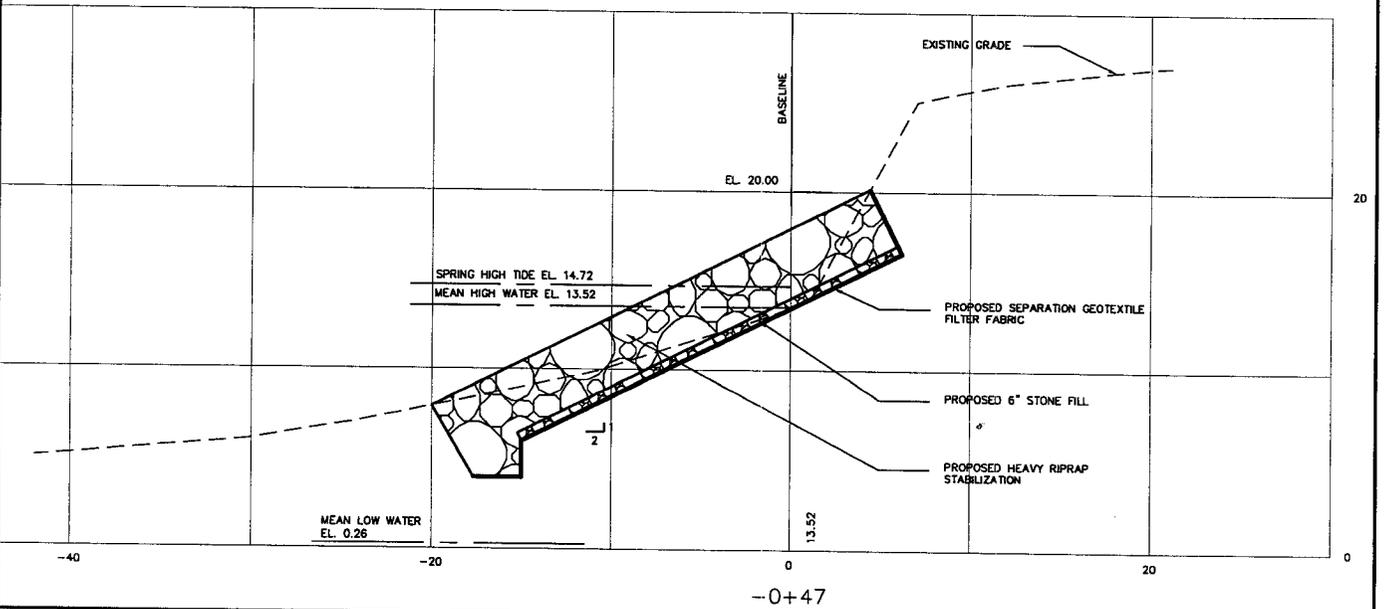
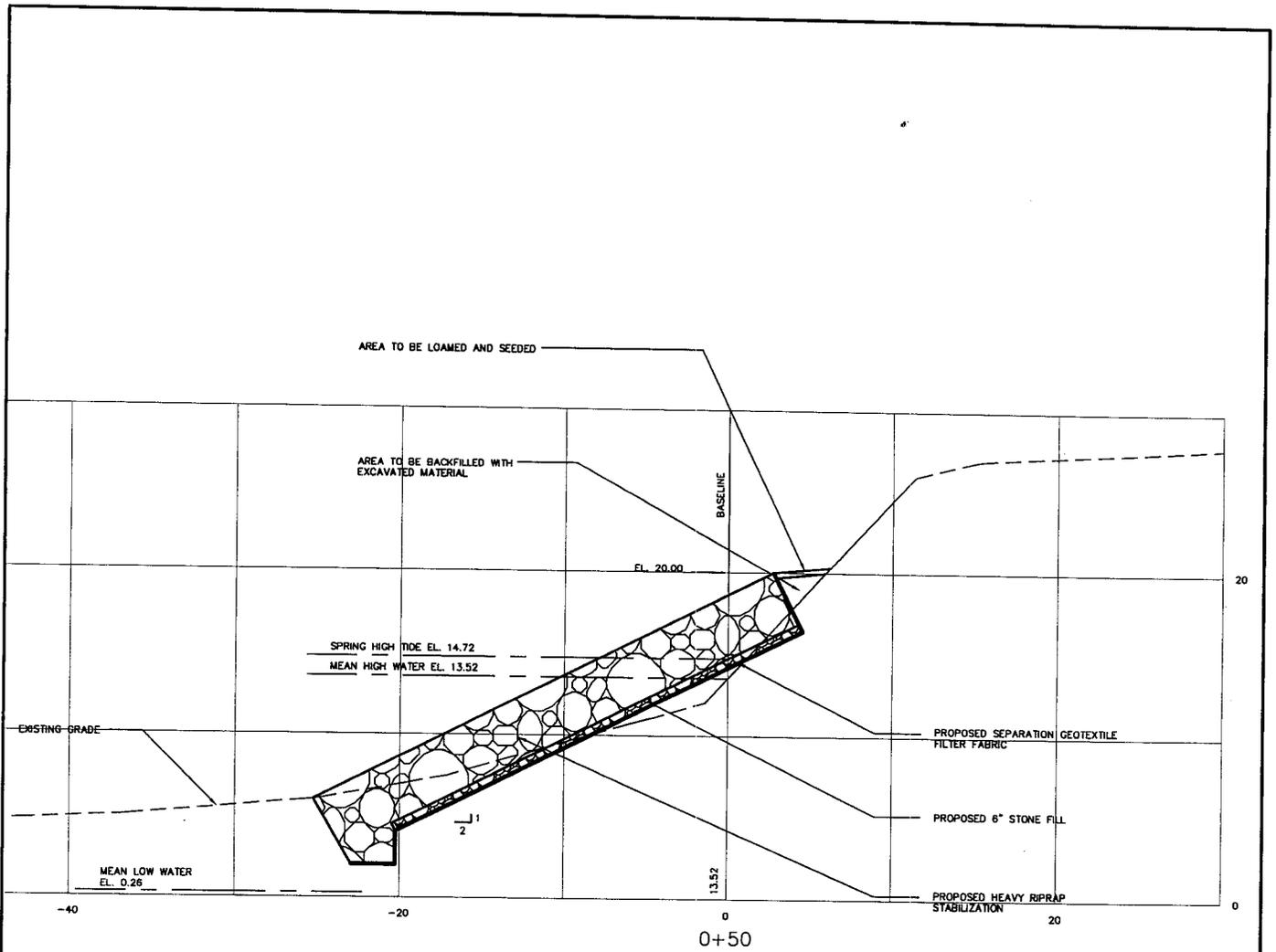
LEGEND:

- IMPACT AREA BELOW SPRING HIGH TIDE (RIP-RAP EXCEPT IN AREAS BEHIND VERTICAL BULKHEAD)
- PROPOSED LOAM AND VEGETATED AREAS
- PROPOSED VERTICAL BULKHEAD
- MEAN LOW TIDE
- SPRING HIGH TIDE
- 25' OFFSET FROM MEAN HIGH WATER
- FUTURE MULTI-USE TRAIL
- PHOTO
- PROPOSED EASEMENT

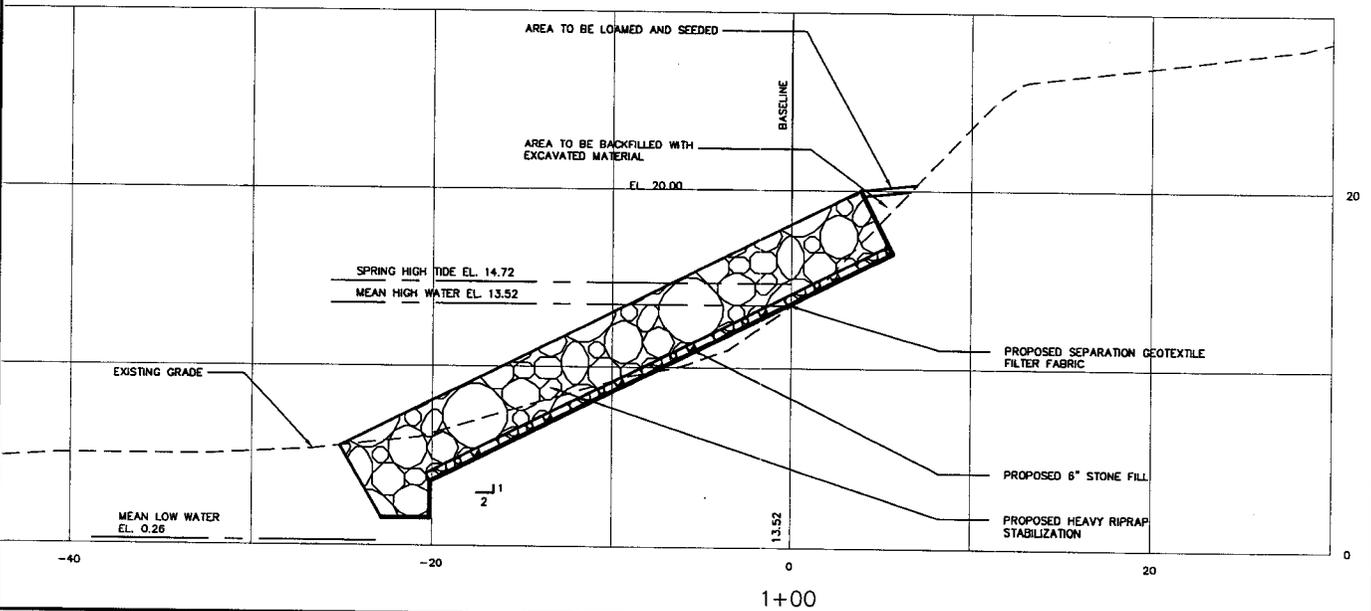
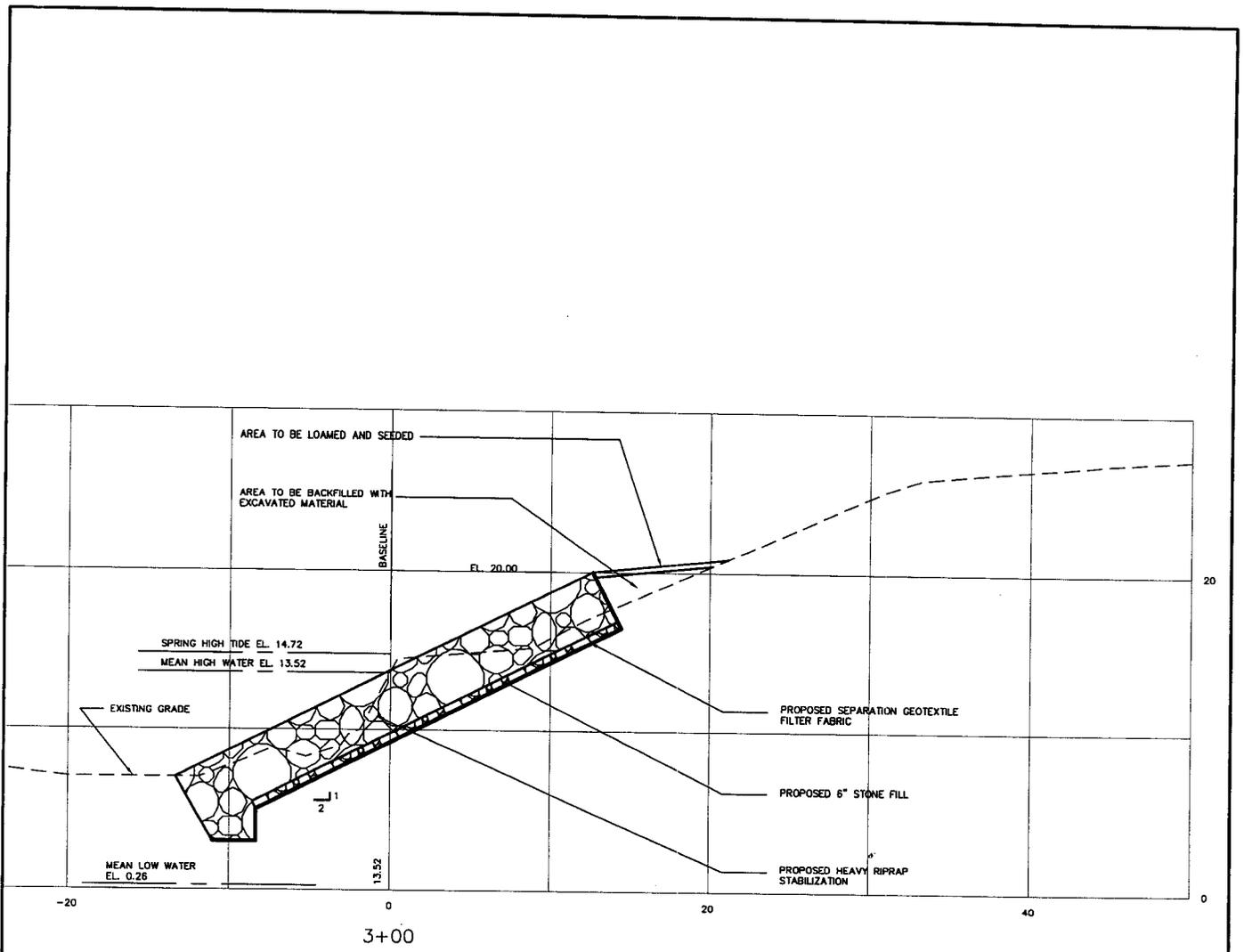
SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

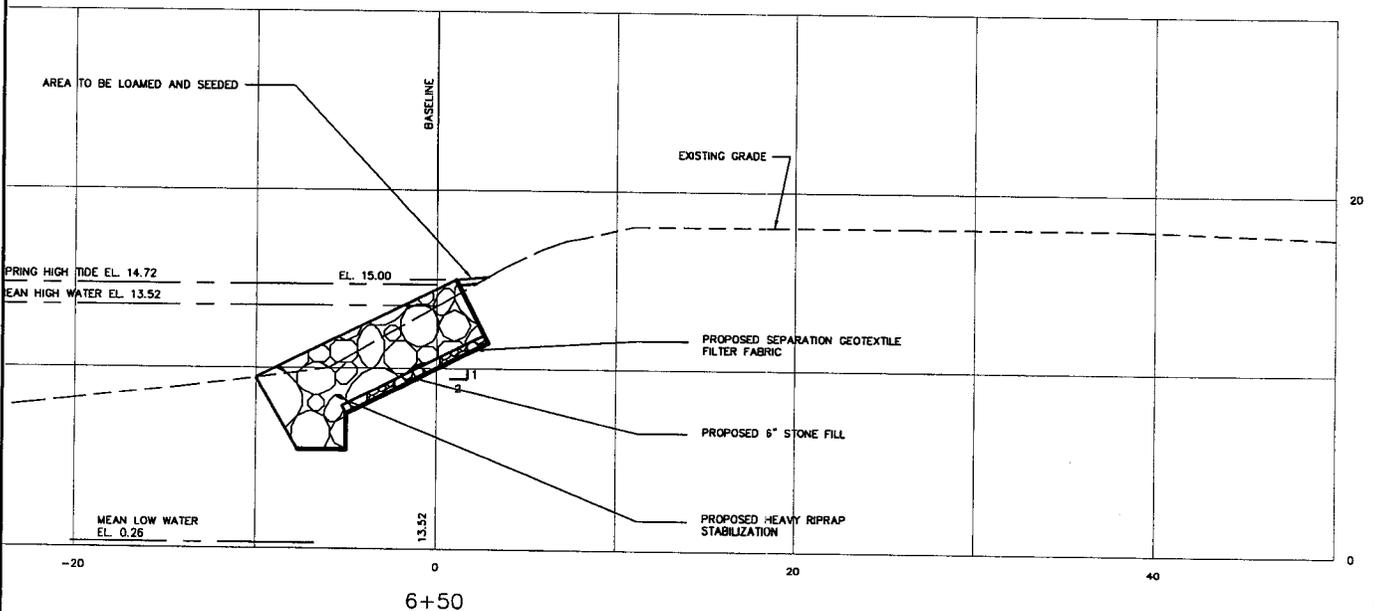
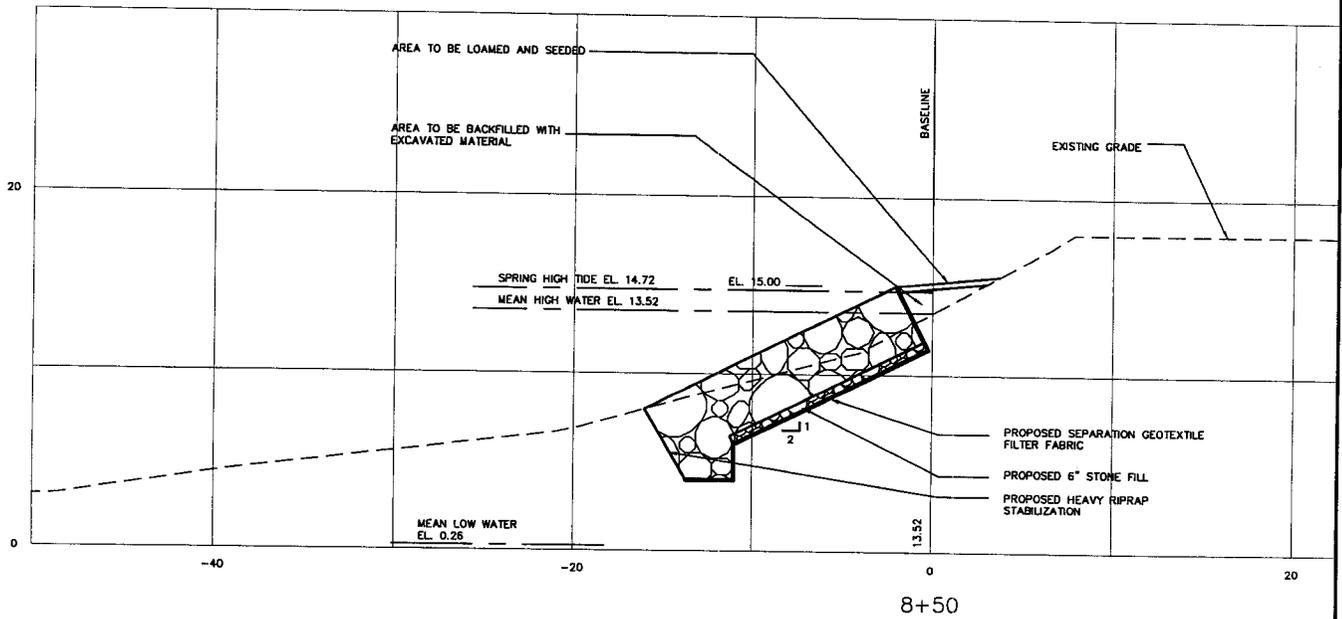
WOODARD & CURRAN Engineering · Science · Operations BANGOR, MAINE 800-564-2333	SITE PLAN STA. 81+00 TO STA. 84+00	MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	JOB NO: 203431.06 DATE: JULY, 2005 SCALE: 1"=40'
	DESIGNED BY: WHC CHECKED BY: VSR DRAWN BY: JDE FILE: 203143106-US-1_23-RPT	CITY OF BREWER RIVERBANK STABILIZATION PROJECT	FIGURE 5-23



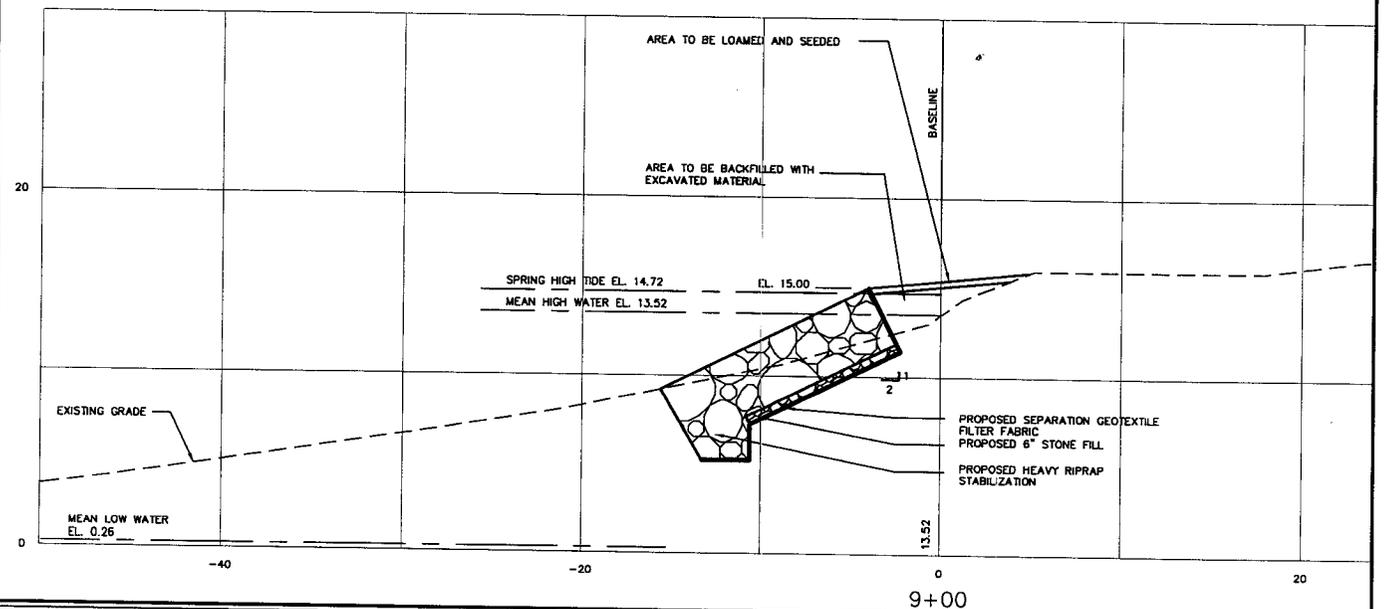
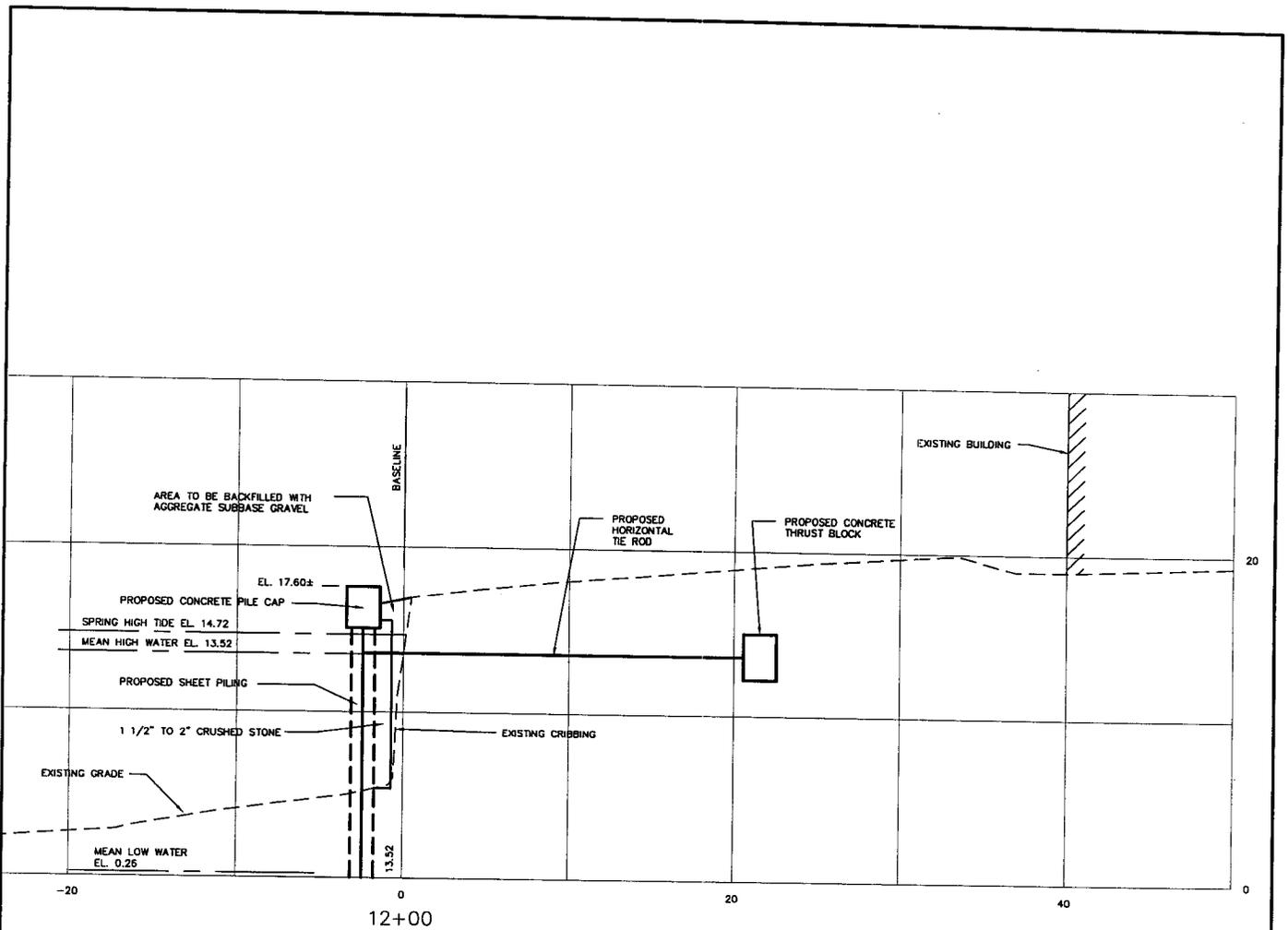
 WOODARD & CURRAN Engineering • Science • Operations BANGOR, MAINE 800-564-2333	CROSS SECTIONS STA. -0+47 & STA. 0+50		MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	JOB NO: 203431.06 DATE: JULY, 2005 SCALE: 1"=10'
	DESIGNED BY: WHC DRAWN BY: JDE	CHECKED BY: MSR FILE: 203143105-NRPA-CS	CITY OF BREWER RIVERBANK STABILIZATION PROJECT	



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	DESIGNED BY: WHC DRAWN BY: JOE	CHECKED BY: MSR FILE: 203143105-NRPA-CS	MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE CITY OF BREWER RIVERBANK STABILIZATION PROJECT



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	<p>DESIGNED BY: WHC DRAWN BY: JDE</p>	<p>CHECKED BY: MSR FILE: 203143105-NRPA-CS</p>	<p>CITY OF BREWER RIVERBANK STABILIZATION PROJECT</p>	<p>FIGURE 5-26</p>

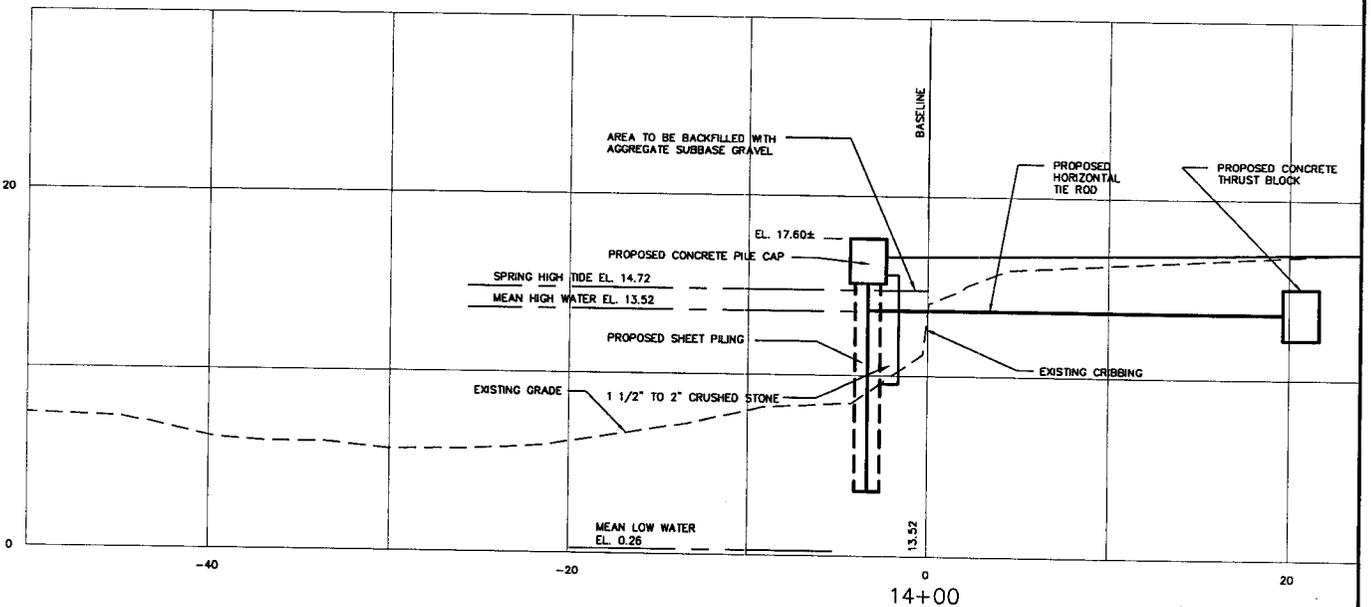
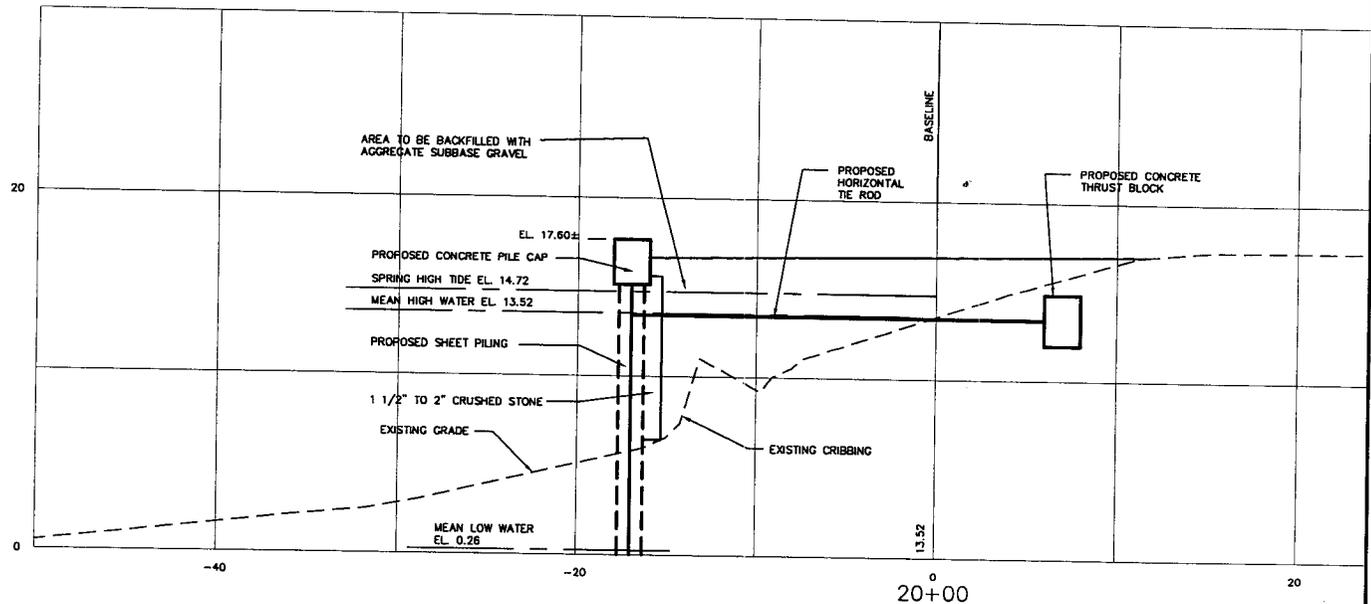



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FIGURE 5-27




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CROSS SECTIONS
STA. 14+00 & STA. 20+00

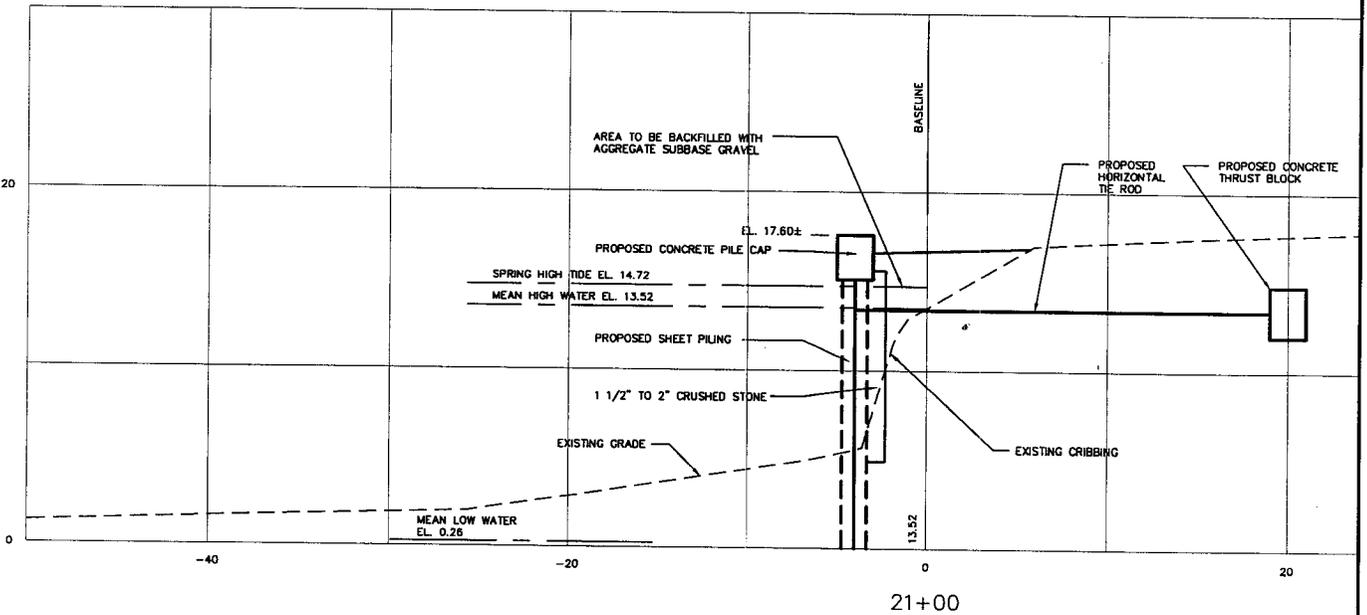
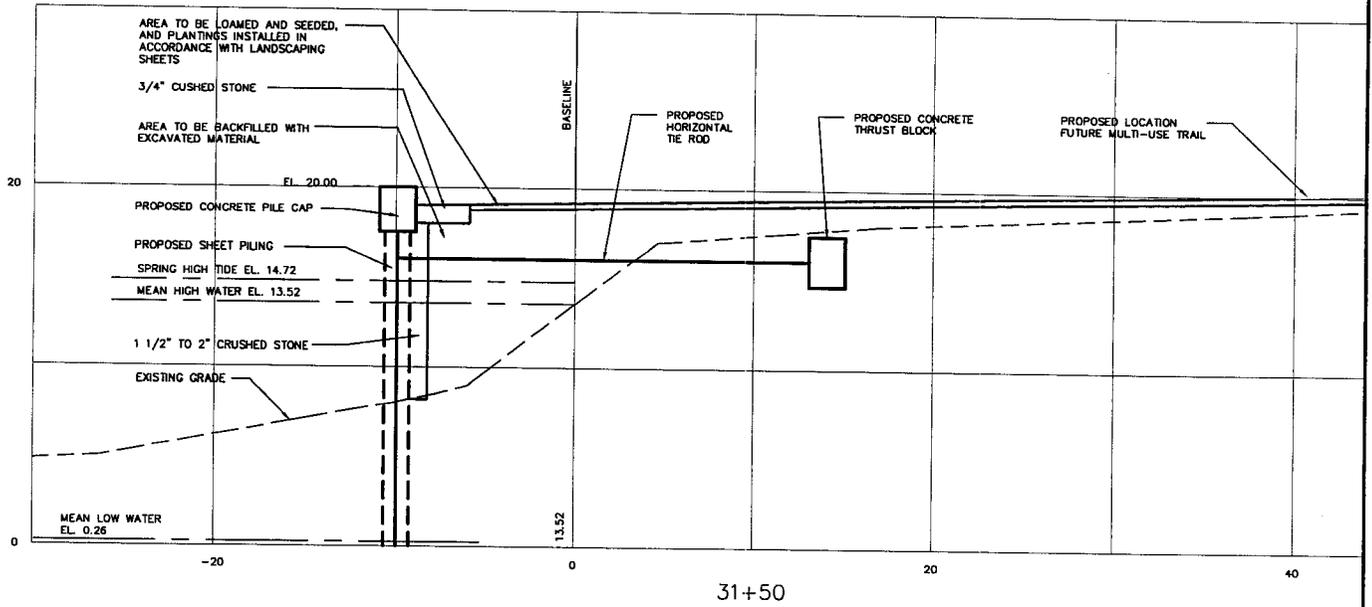
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FIGURE 5-28




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CROSS SECTIONS
STA. 21+00 & STA. 31+50

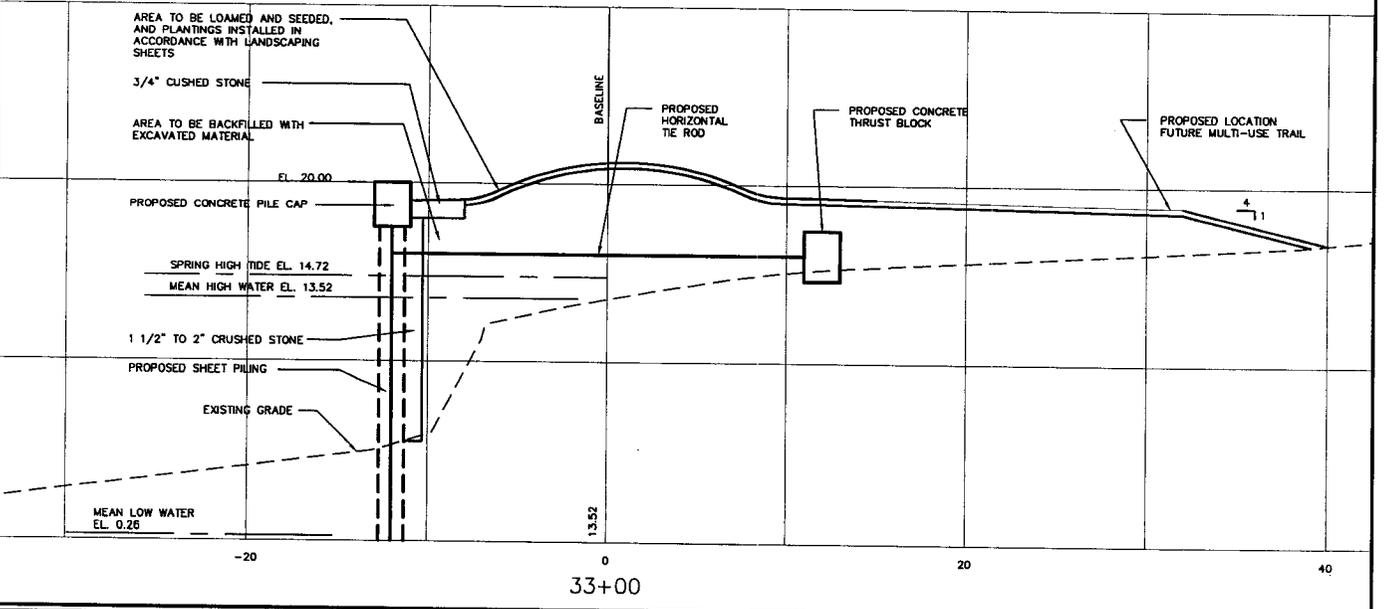
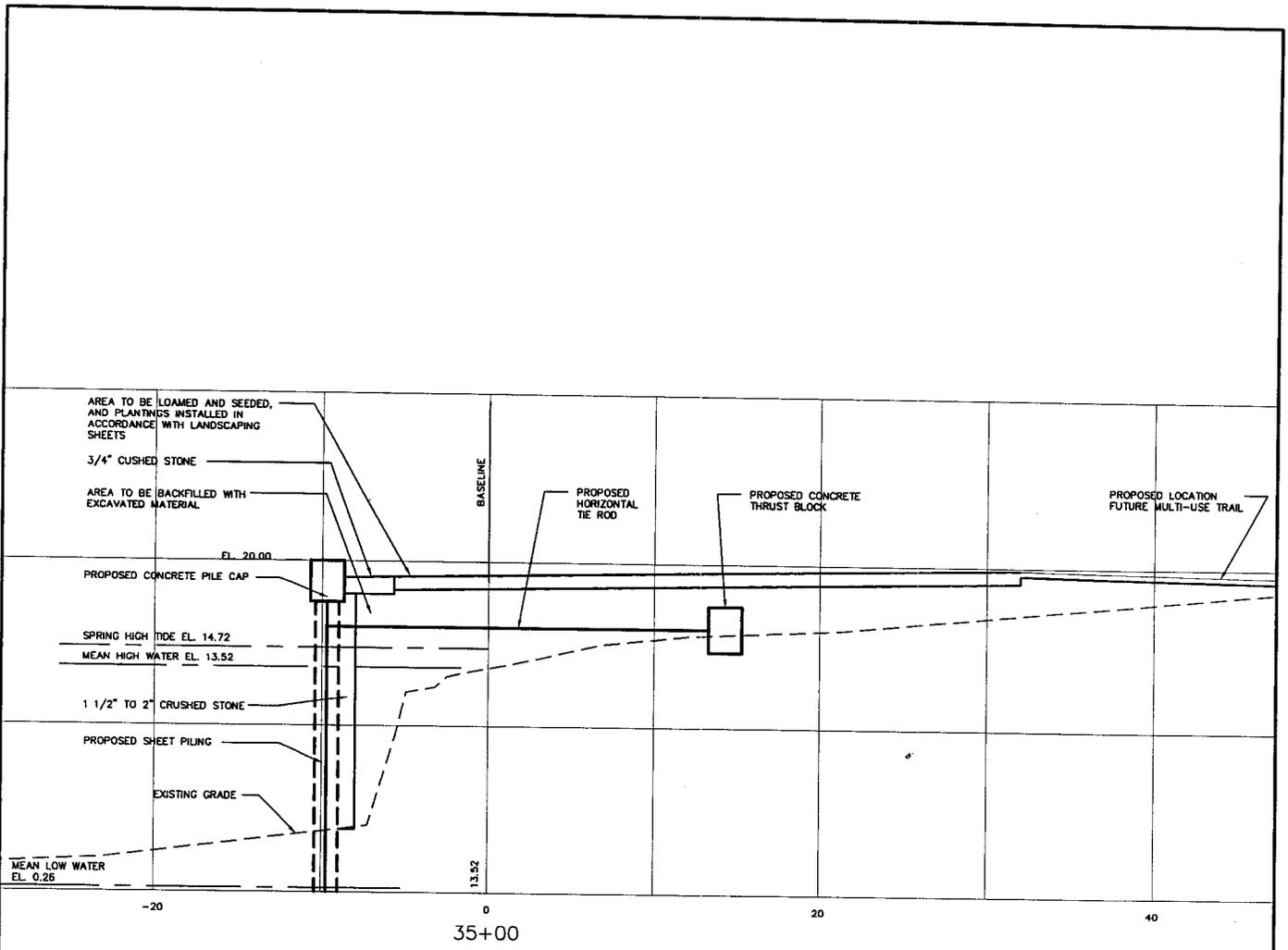
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 DRAWN BY: JDE FILE: 203143105-NRPA-CS

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FIGURE 5-29



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**CROSS SECTIONS
 STA. 33+00 & STA. 35+00**

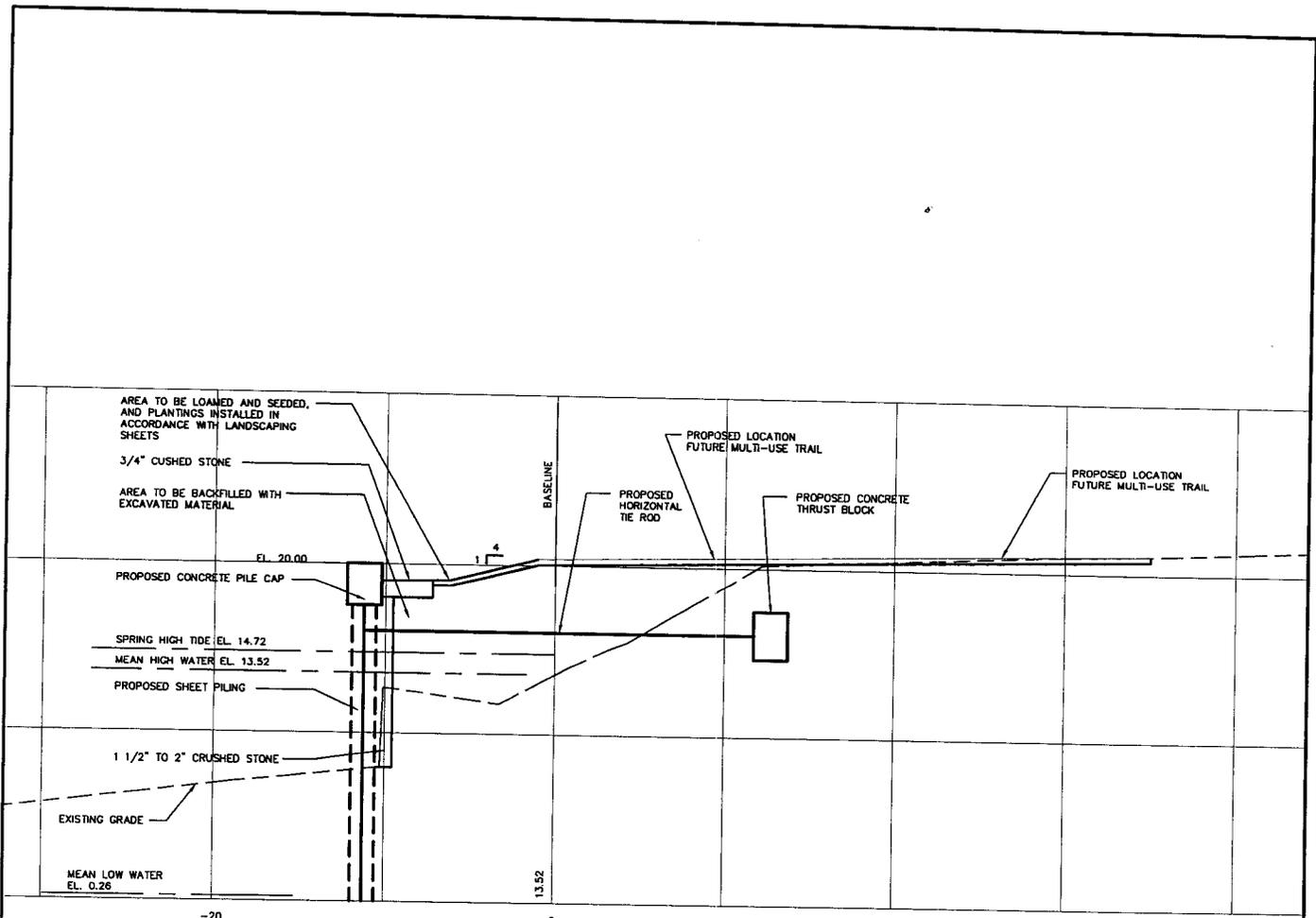
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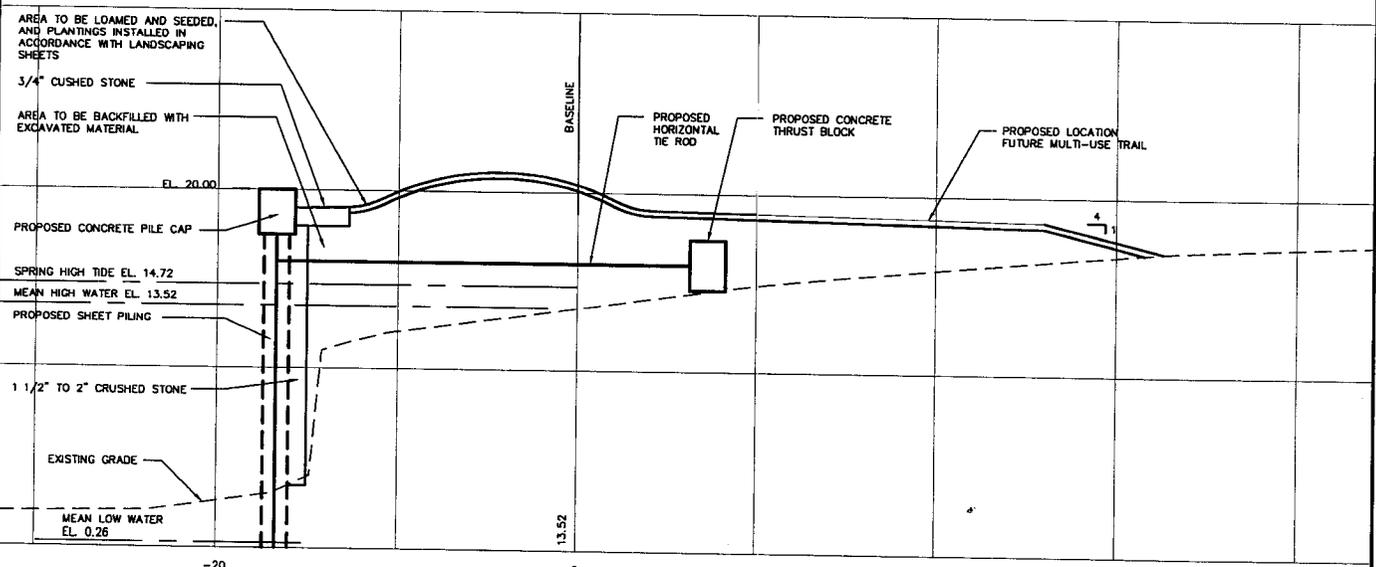
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FIGURE 5-30



39+10



37+00

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CROSS SECTIONS
STA. 37+00 & STA. 39+10

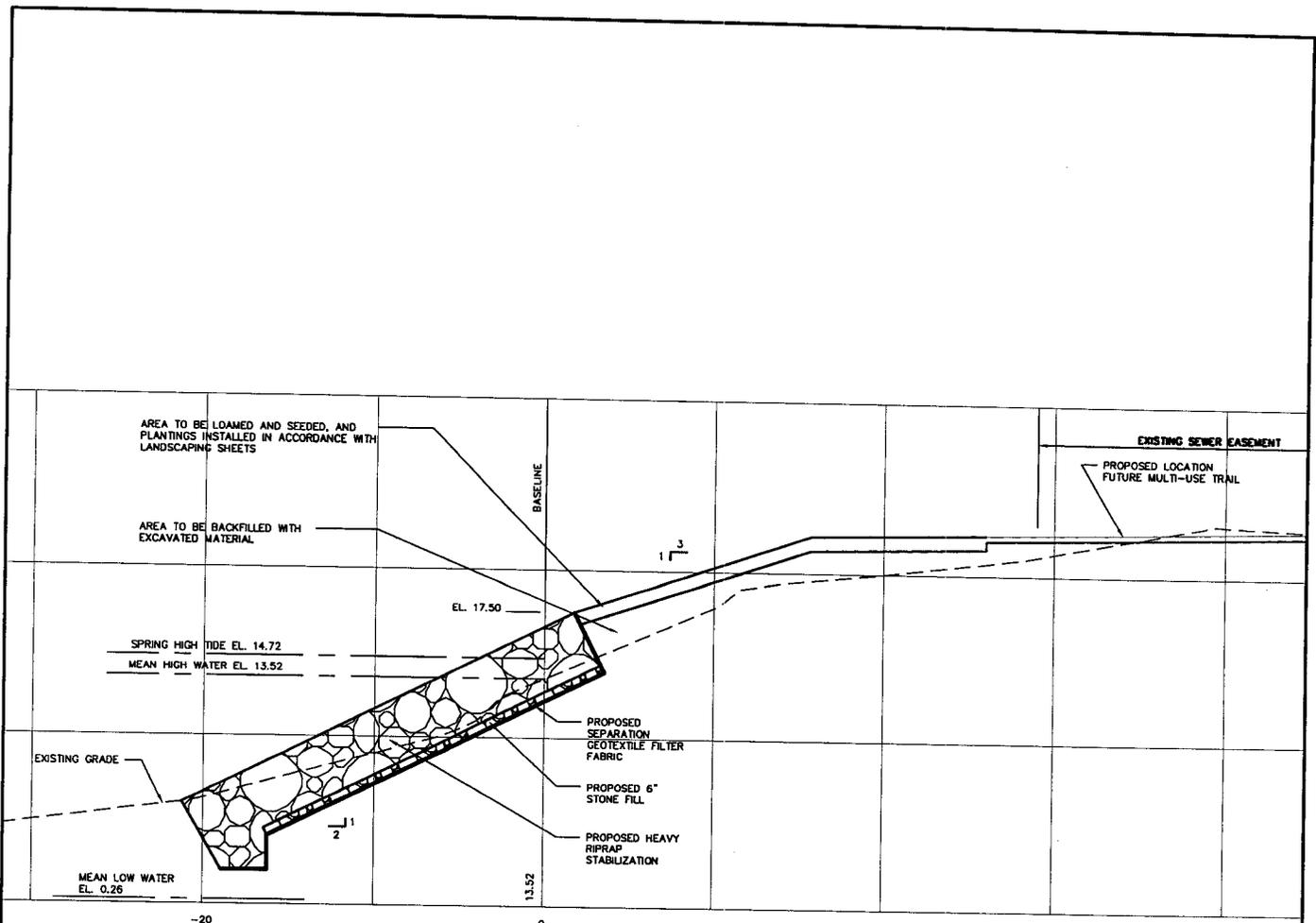
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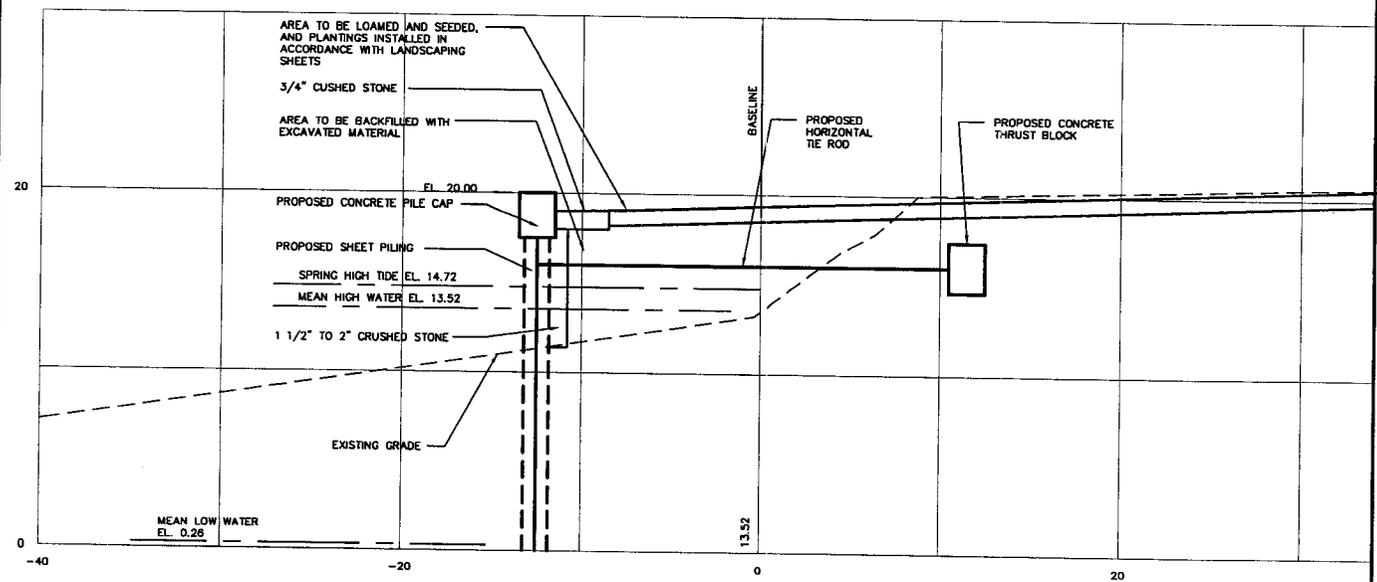
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FIGURE 5-31



42+00



40+50

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**CROSS SECTIONS
 STA. 40+50 & STA. 42+00**

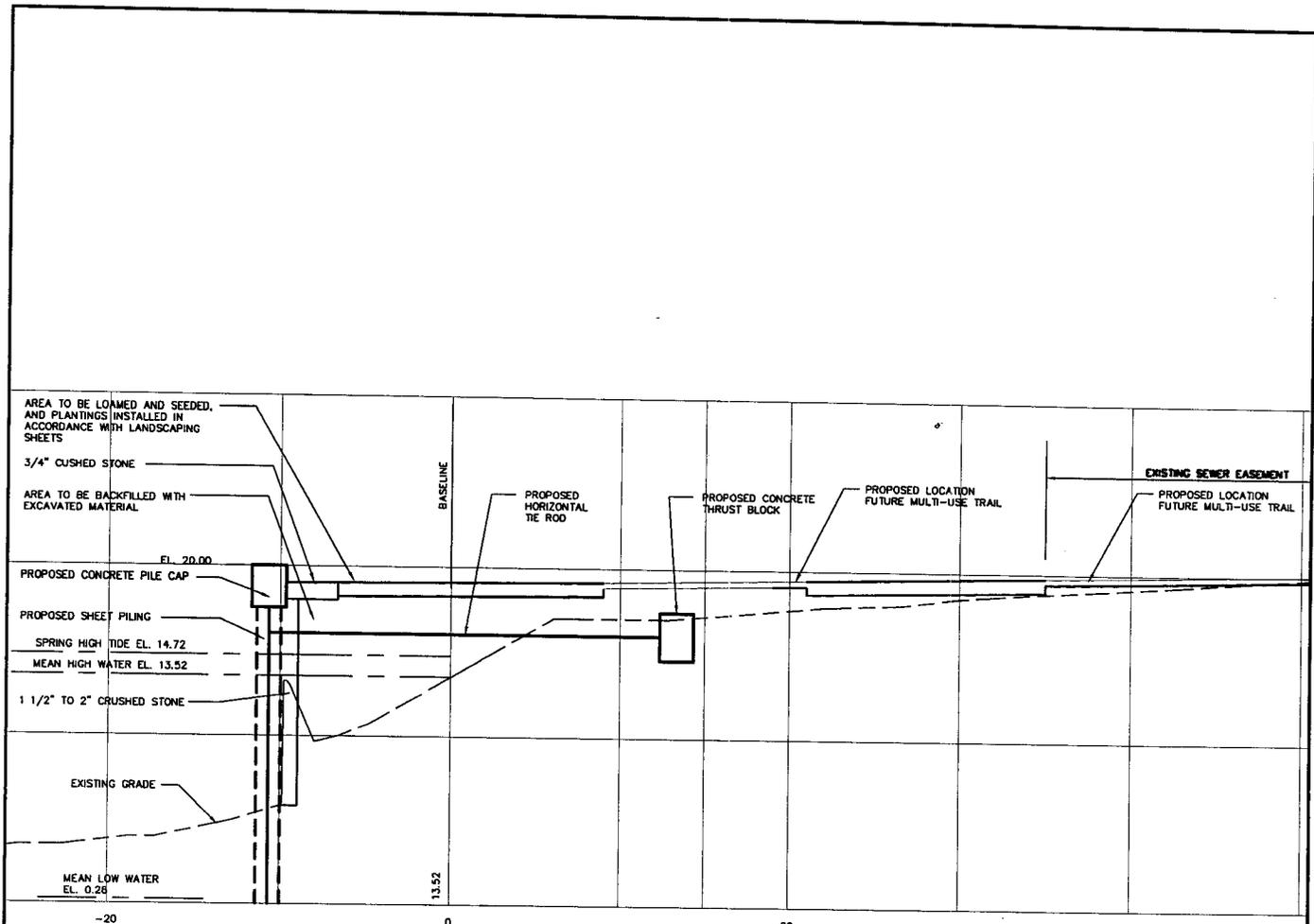
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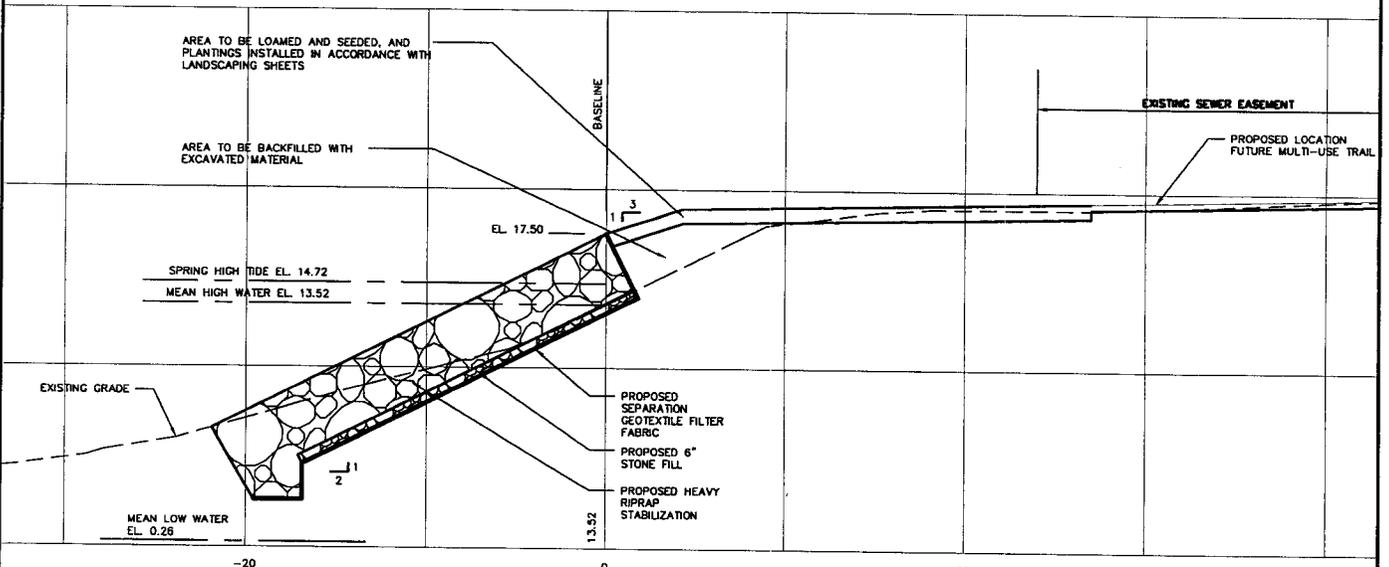
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FIGURE 5-32



45+50 RT.



44+00

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CROSS SECTIONS
 STA. 44+00 & STA. 45+50 RT.

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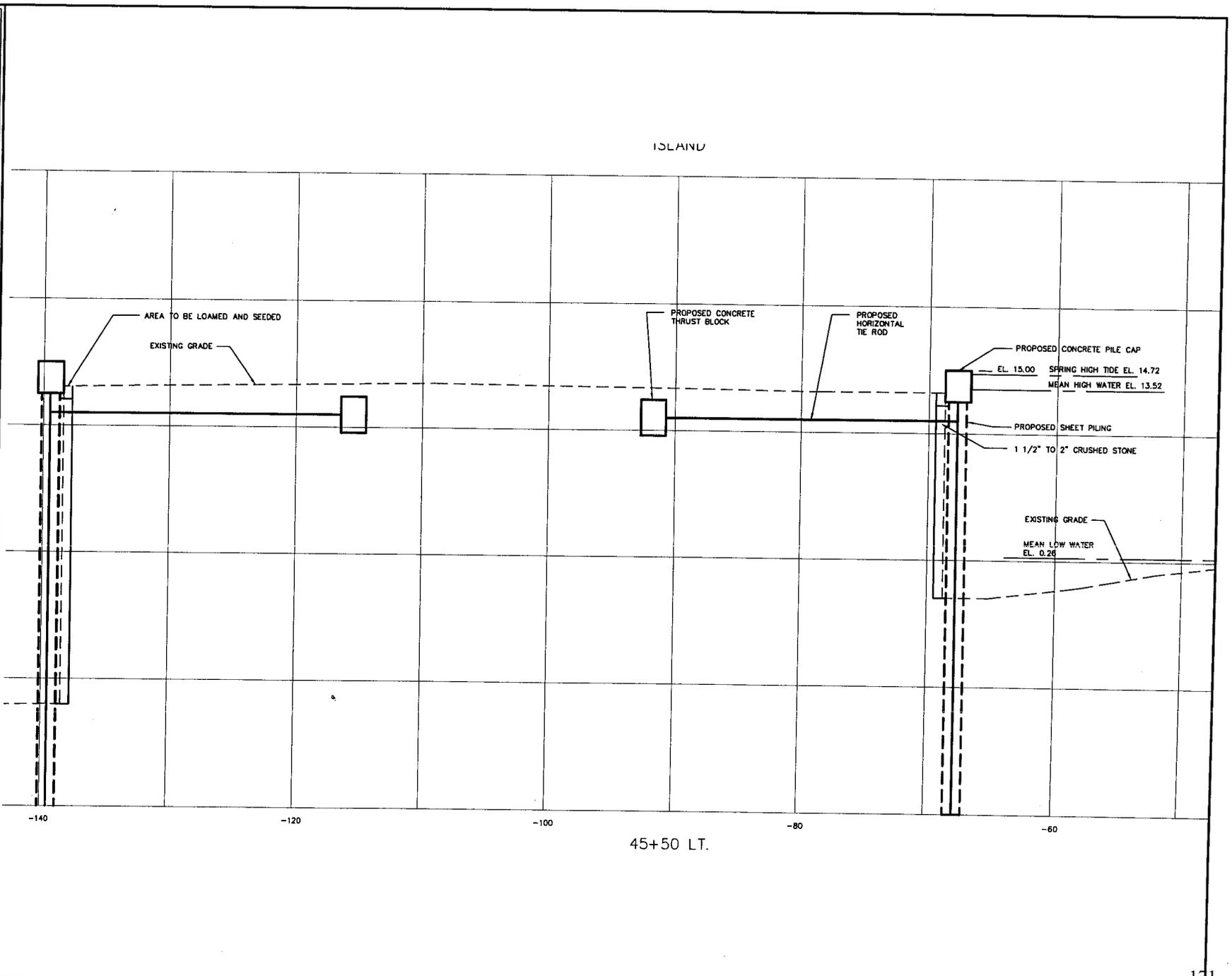
JOB NO: 203431.06
DATE: JULY, 2005
SCALE: 1"=10'

FIGURE 5-33

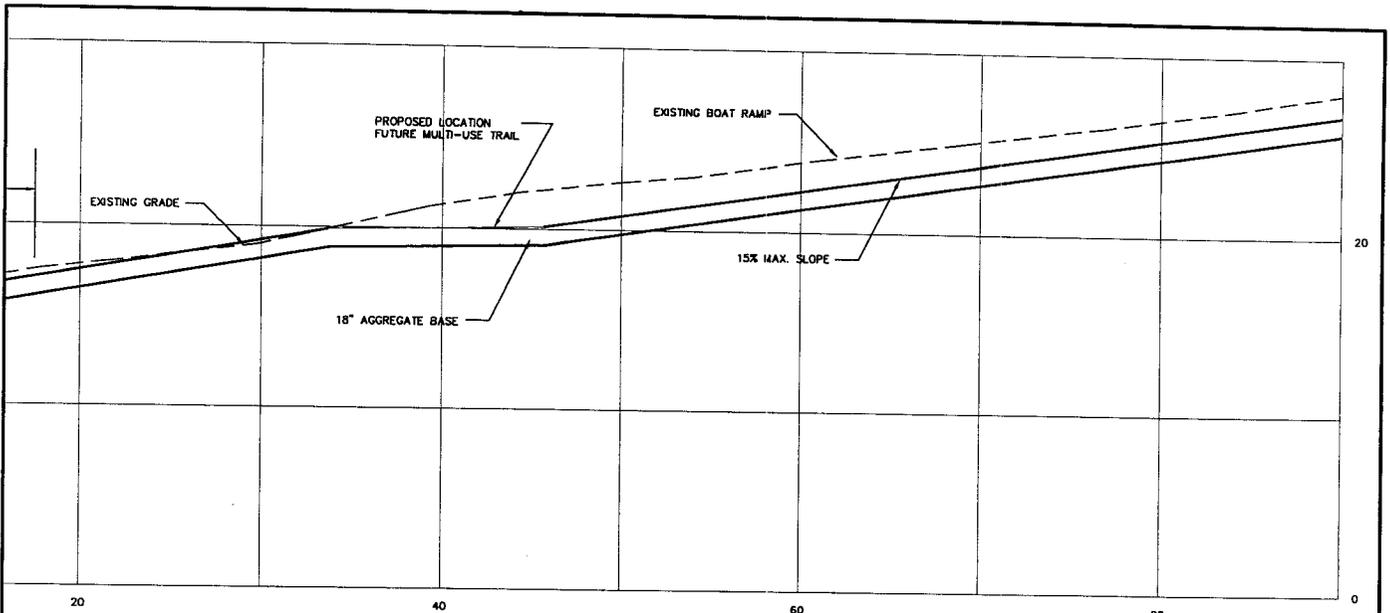
CROSS SECTIONS
STA. 45+50 LT.
 DESIGNED BY: JMC
 DRAWN BY: JDE
 CHECKED BY: MSR
 FILE: 203143105-NRPA-GS

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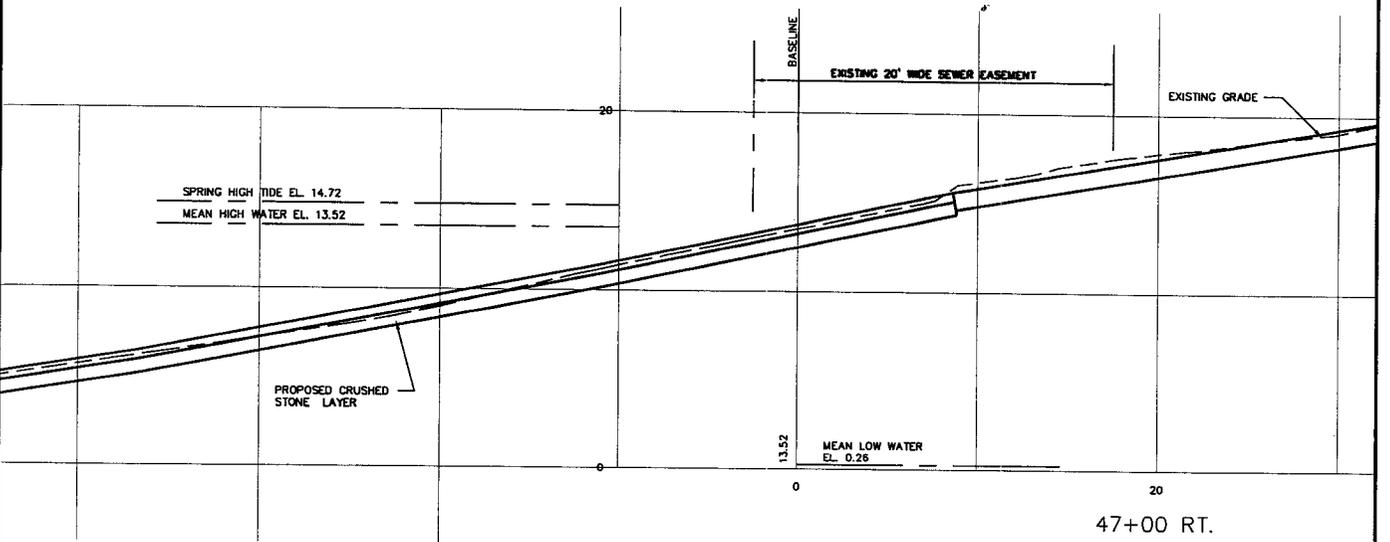
JOB NO. 203143106
 DATE: JULY 2005
 SCALE: 1"=10'
FIGURE 5-34



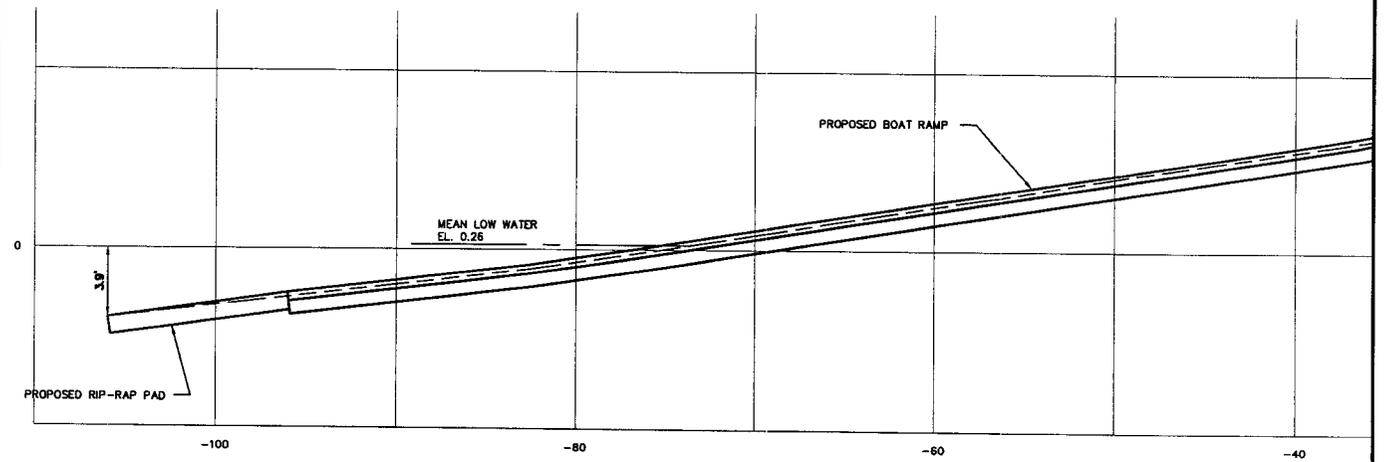
45+50 LT.



47+00 RT.

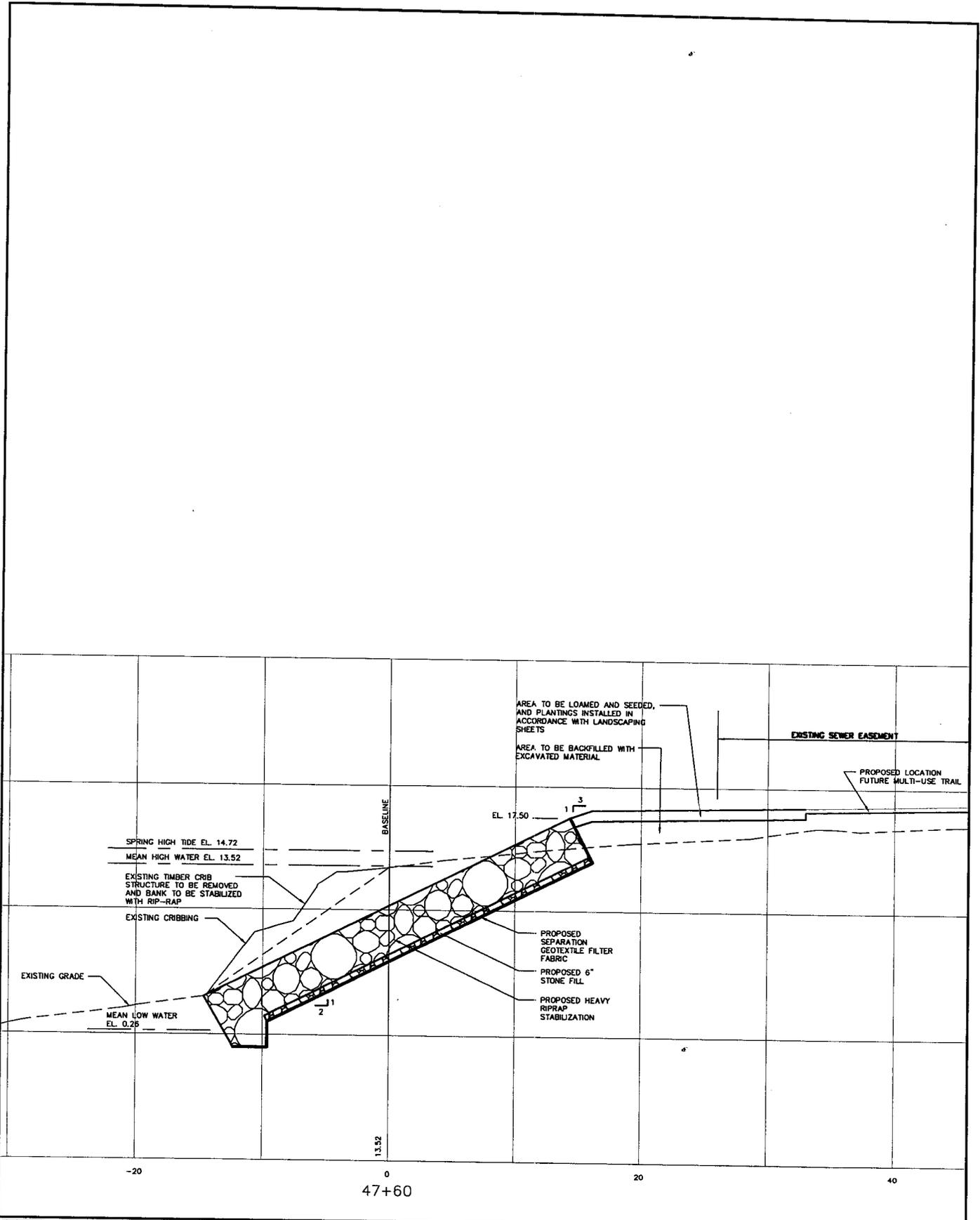


47+00 RT.



47+00 LT.

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**CROSS SECTIONS
 STA. 47+60**

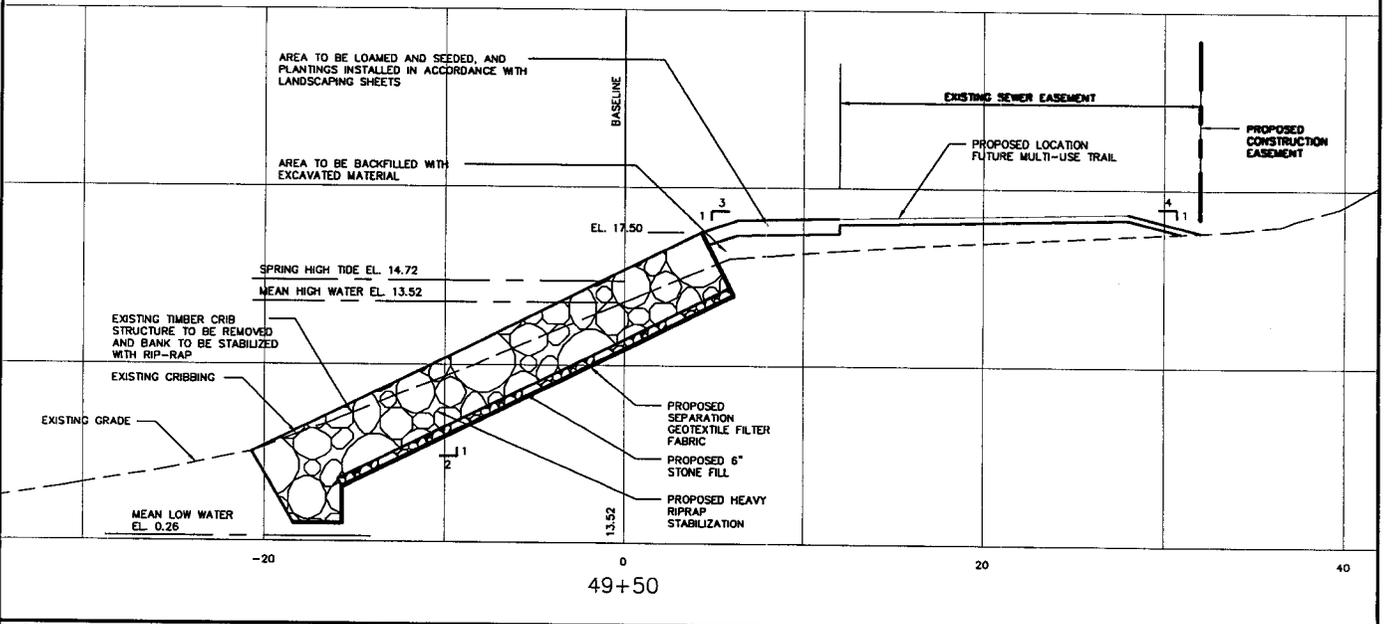
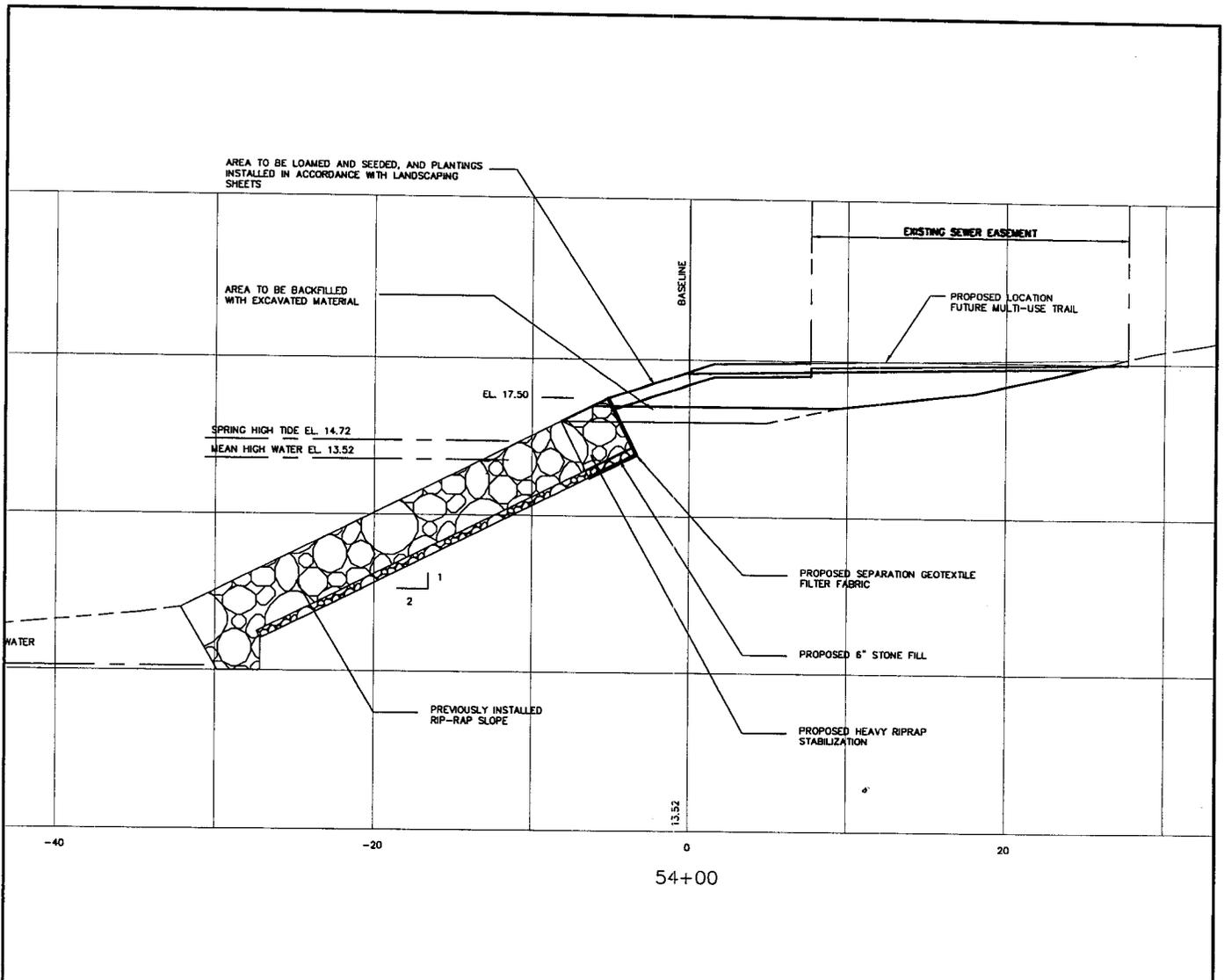
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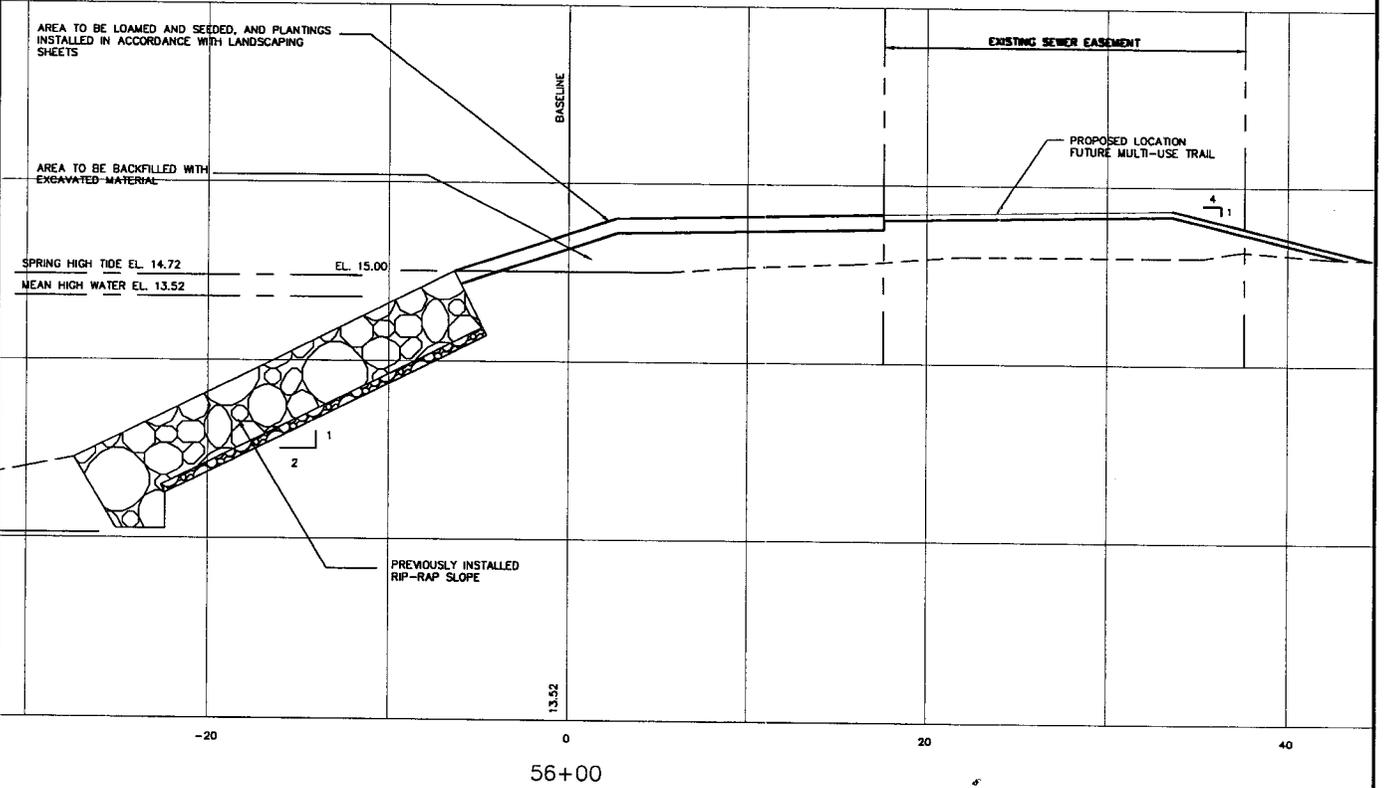
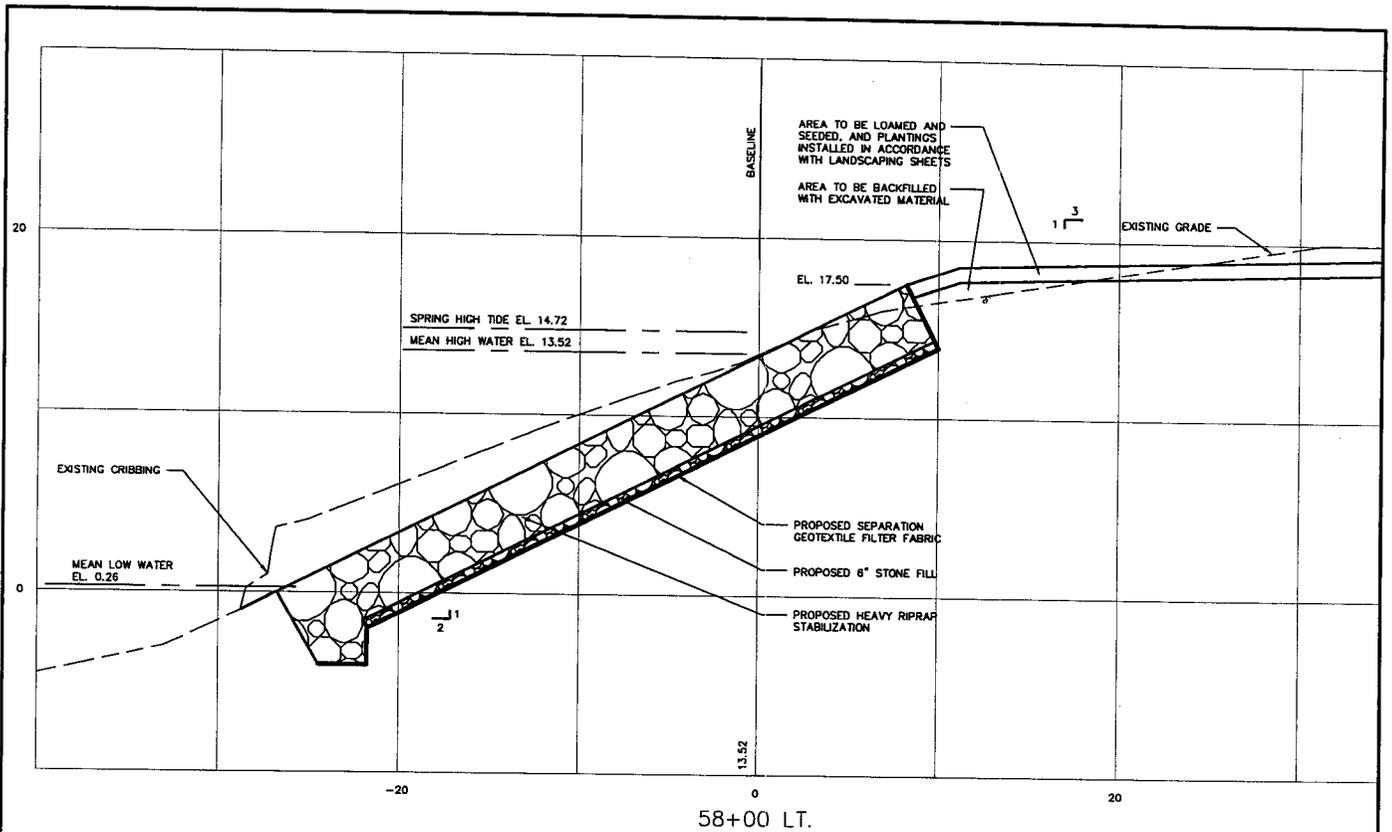
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FIGURE 5-36



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**CROSS SECTIONS
STA. 56+00 & STA. 58+00**

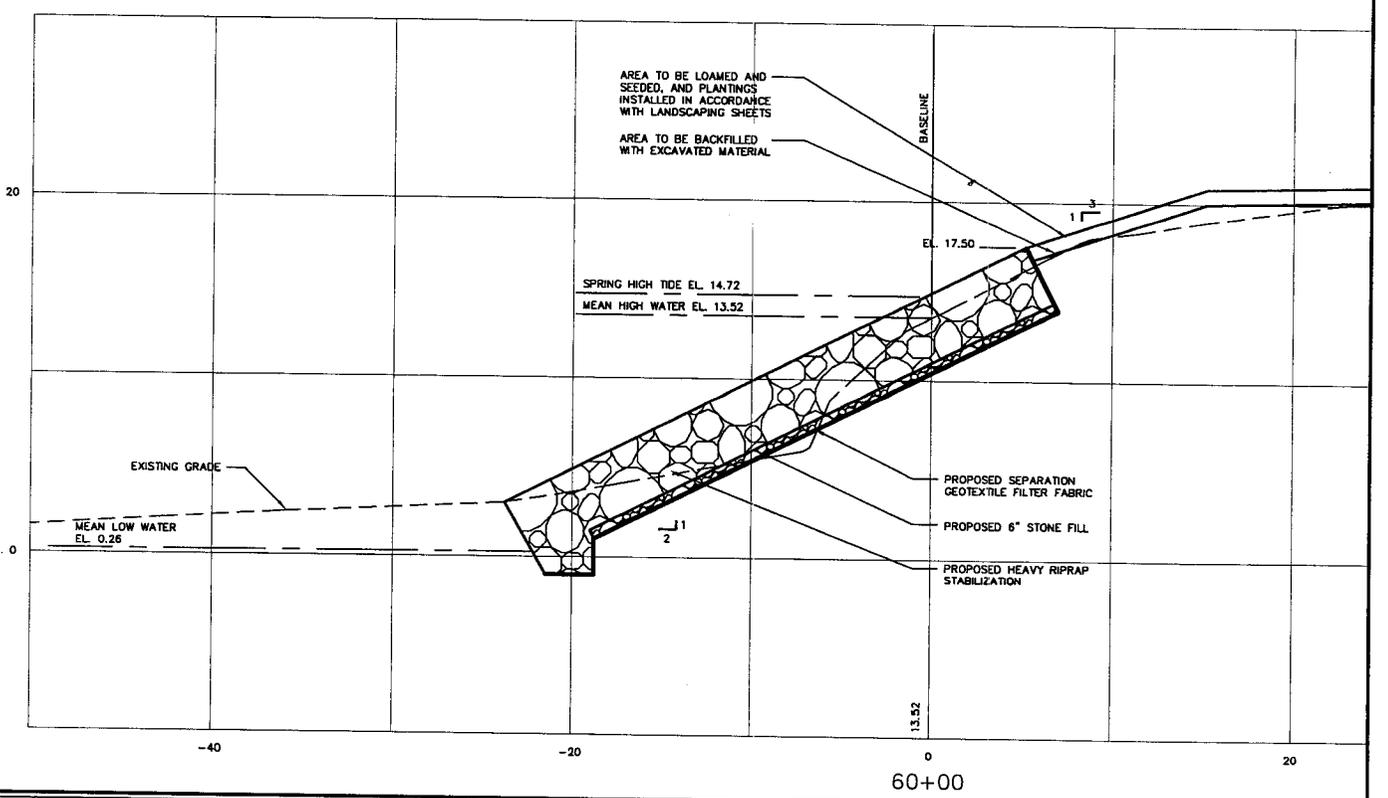
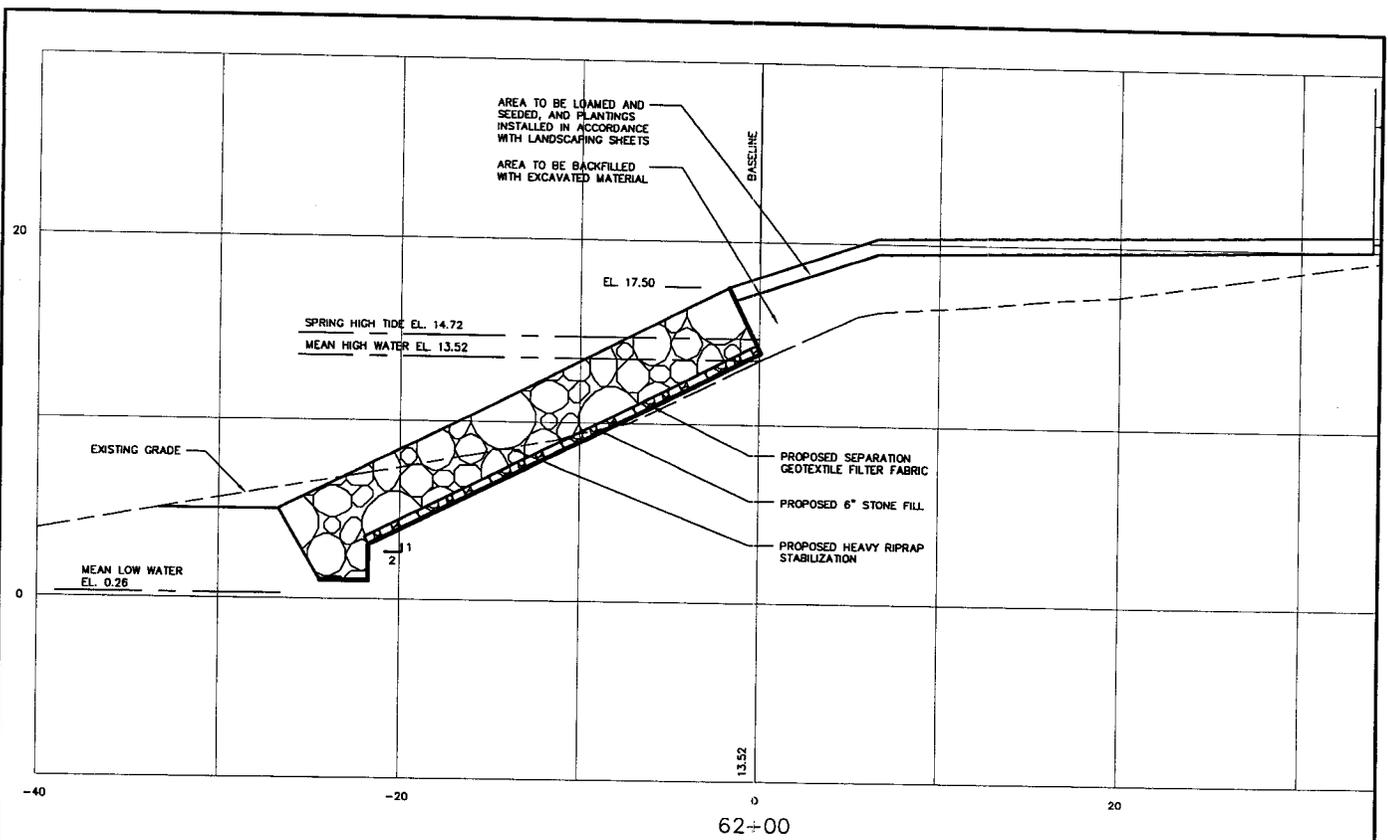
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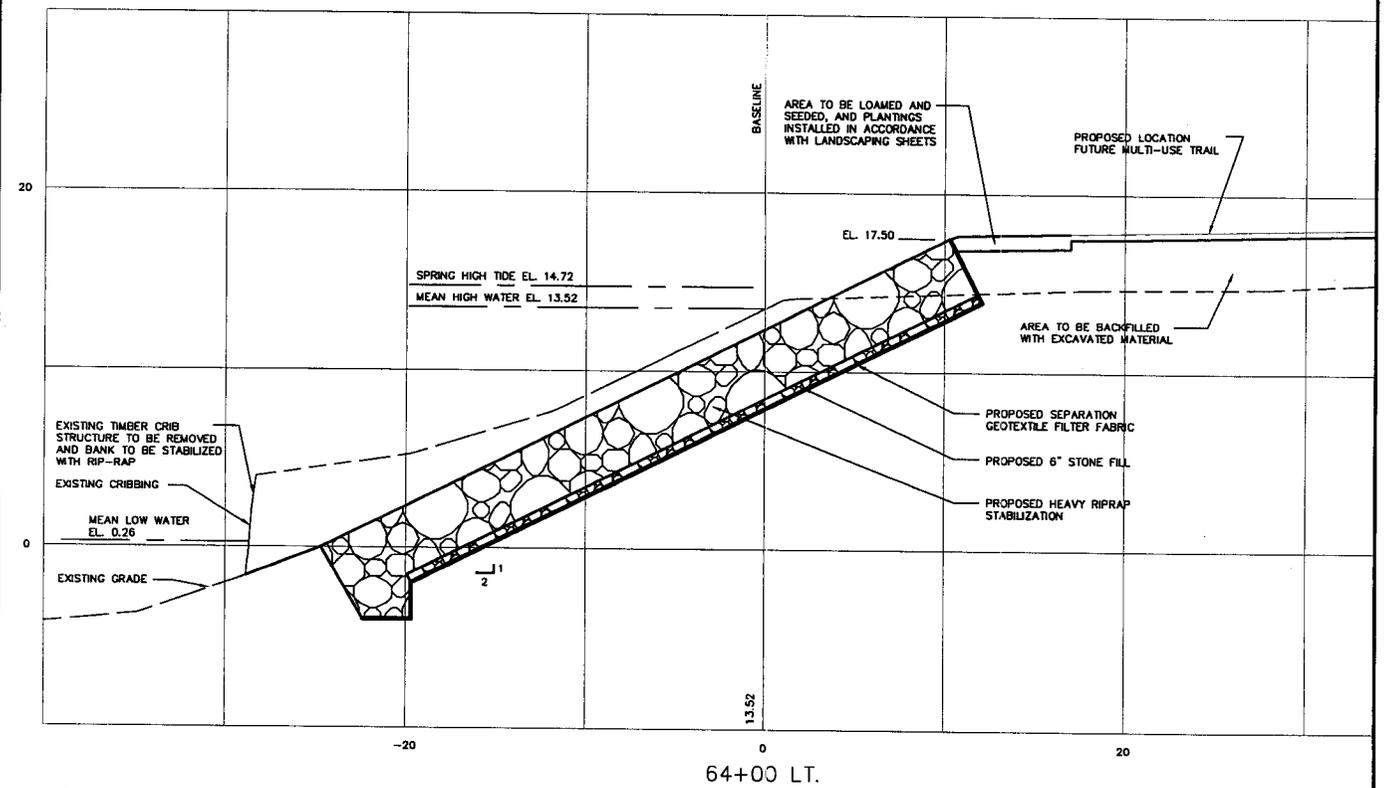
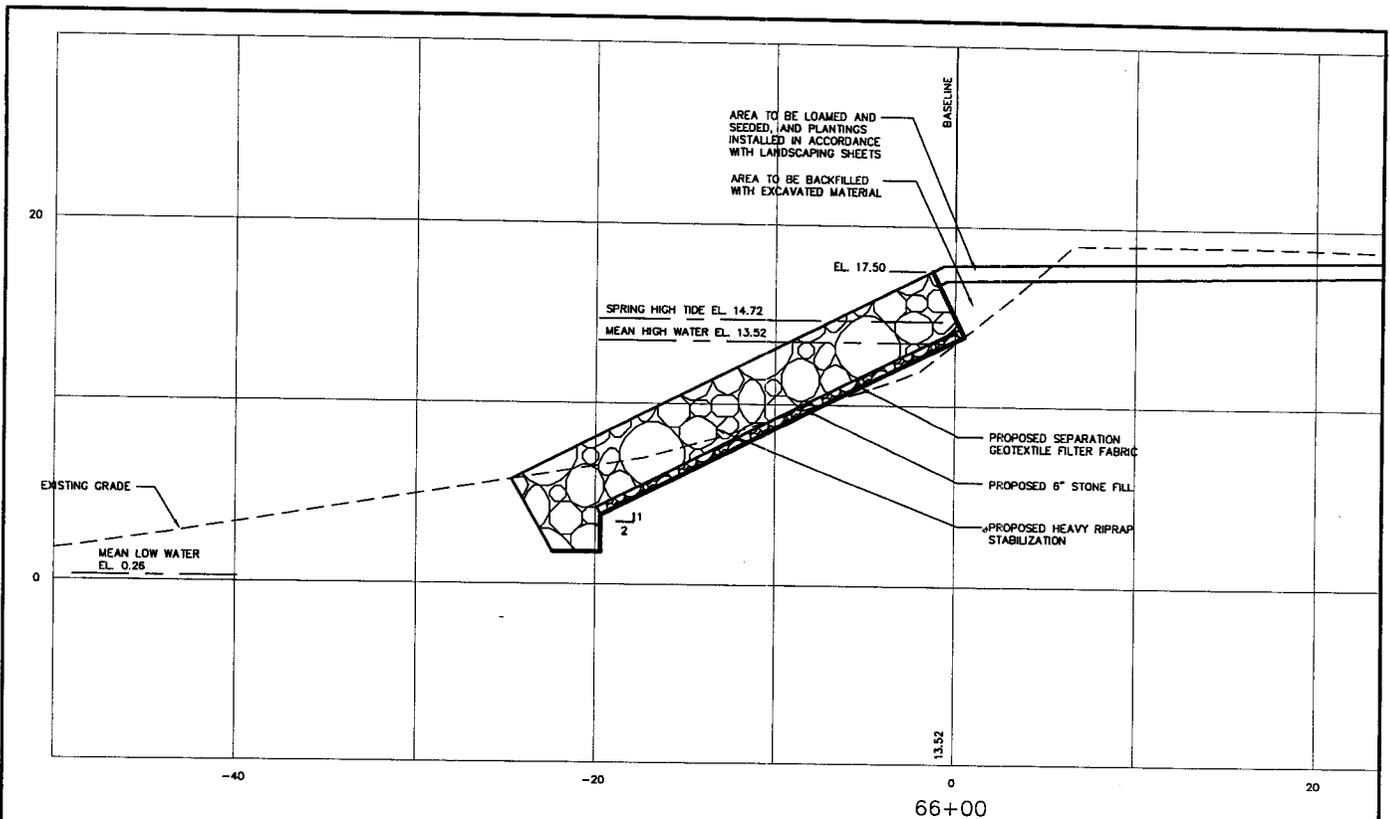
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FIGURE 5-38



<p> WOODARD & CURRAN Engineering • Science • Operations BANGOR, MAINE 800-564-2333 </p>	CROSS SECTIONS STA. 60+00 & STA. 62+00		MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	JOB NO: 203431.06 DATE: JULY, 2005 SCALE: 1"=10'
	DESIGNED BY: WHC DRAWN BY: JOE	CHECKED BY: MSR FILE: 203143105-NRPA-CS	CITY OF BREWER RIVERBANK STABILIZATION PROJECT	FIGURE 5-39

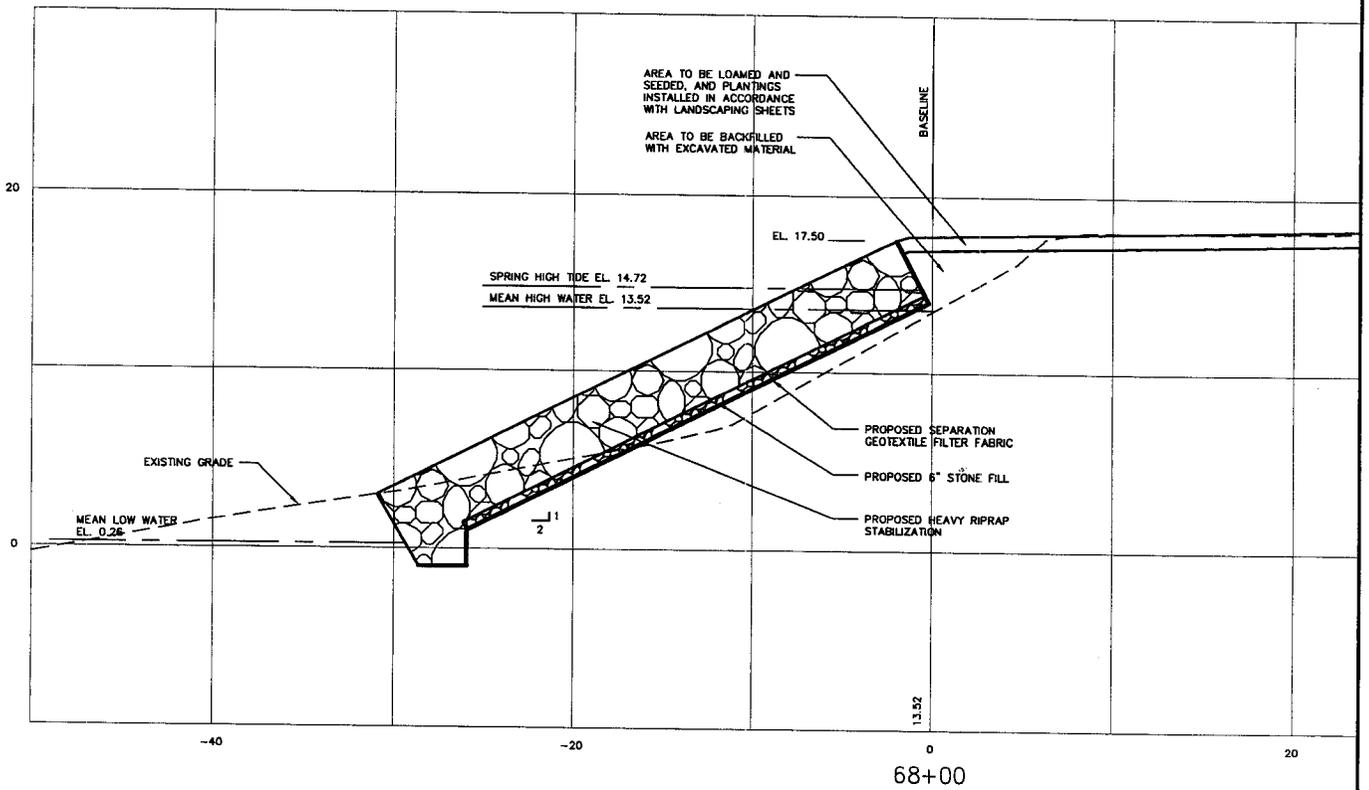
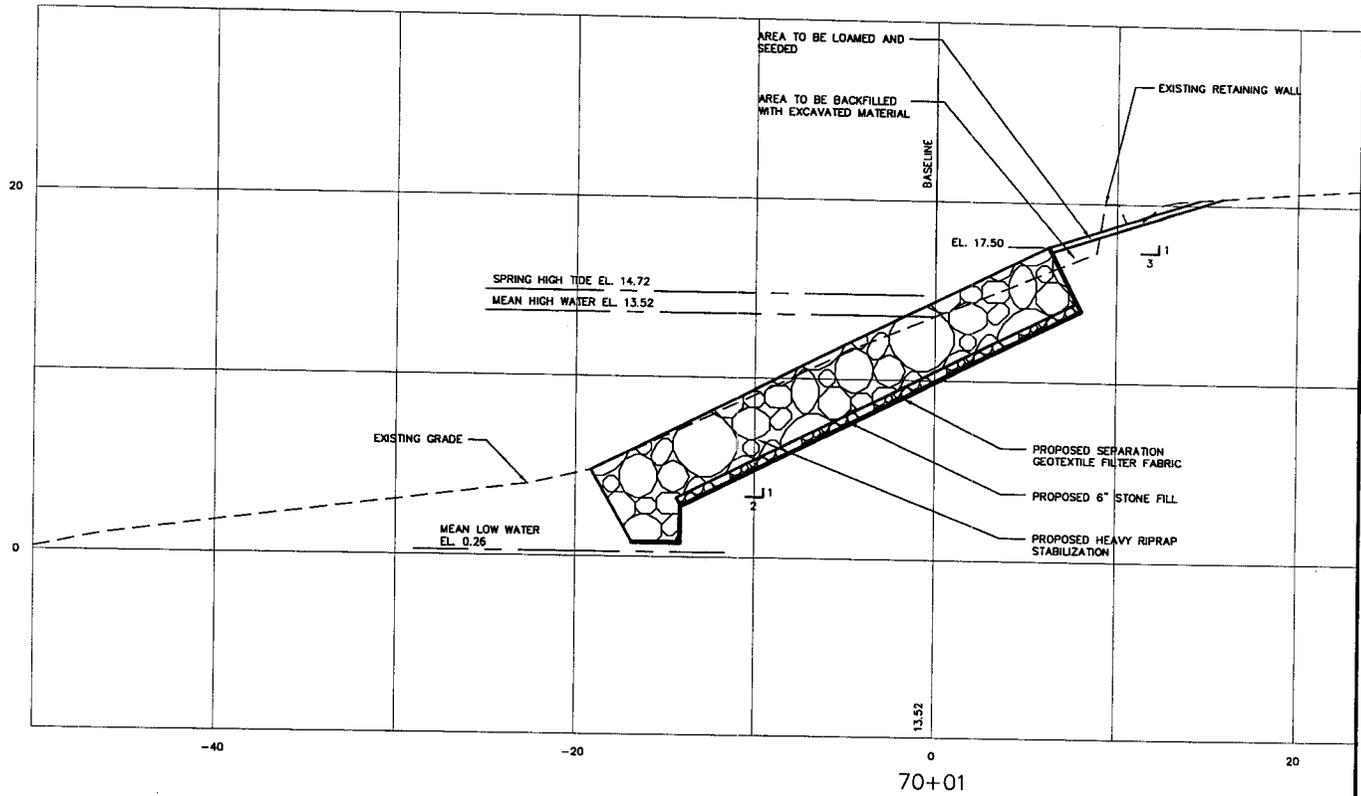



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CROSS SECTIONS
STA. 64+00 & STA. 66+00
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FIGURE 5-40




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CROSS SECTIONS
STA. 68+00 & STA. 70+01

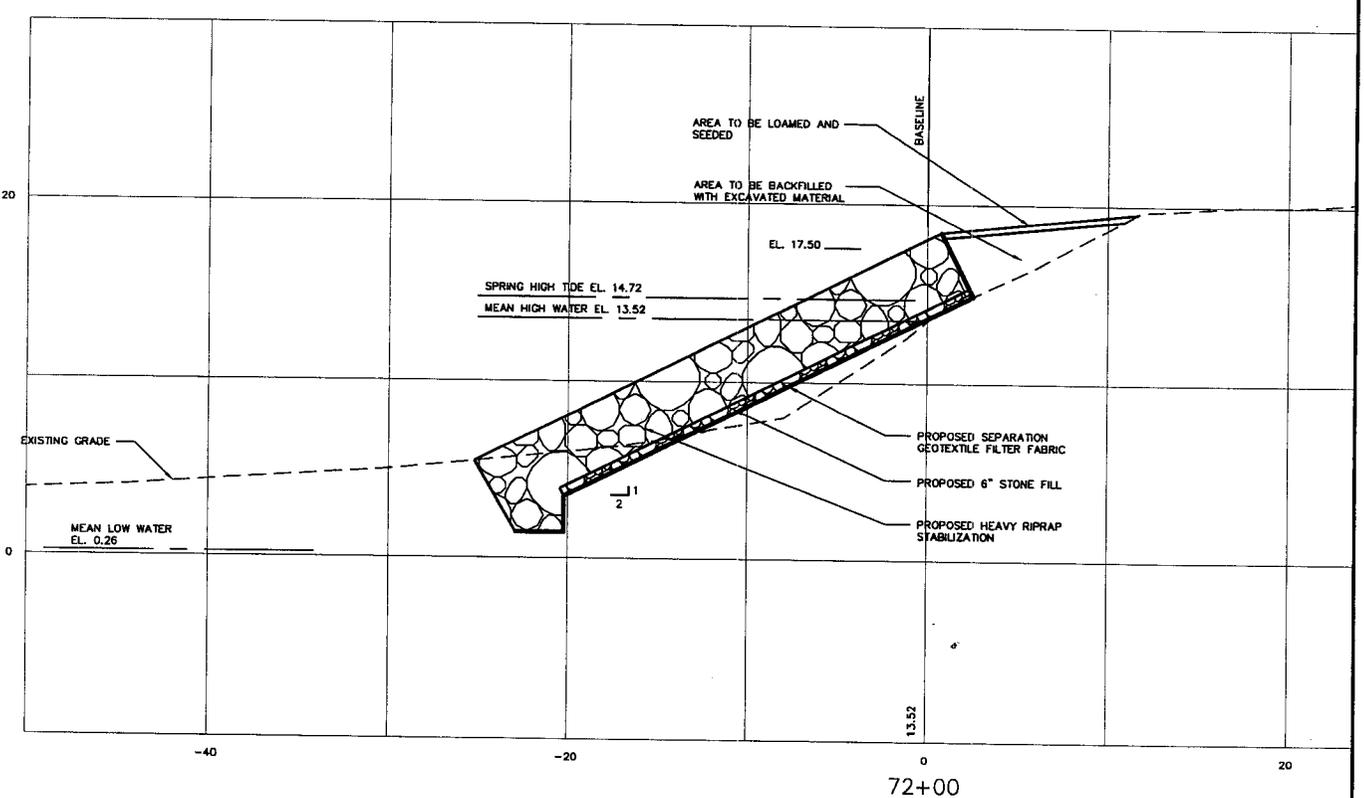
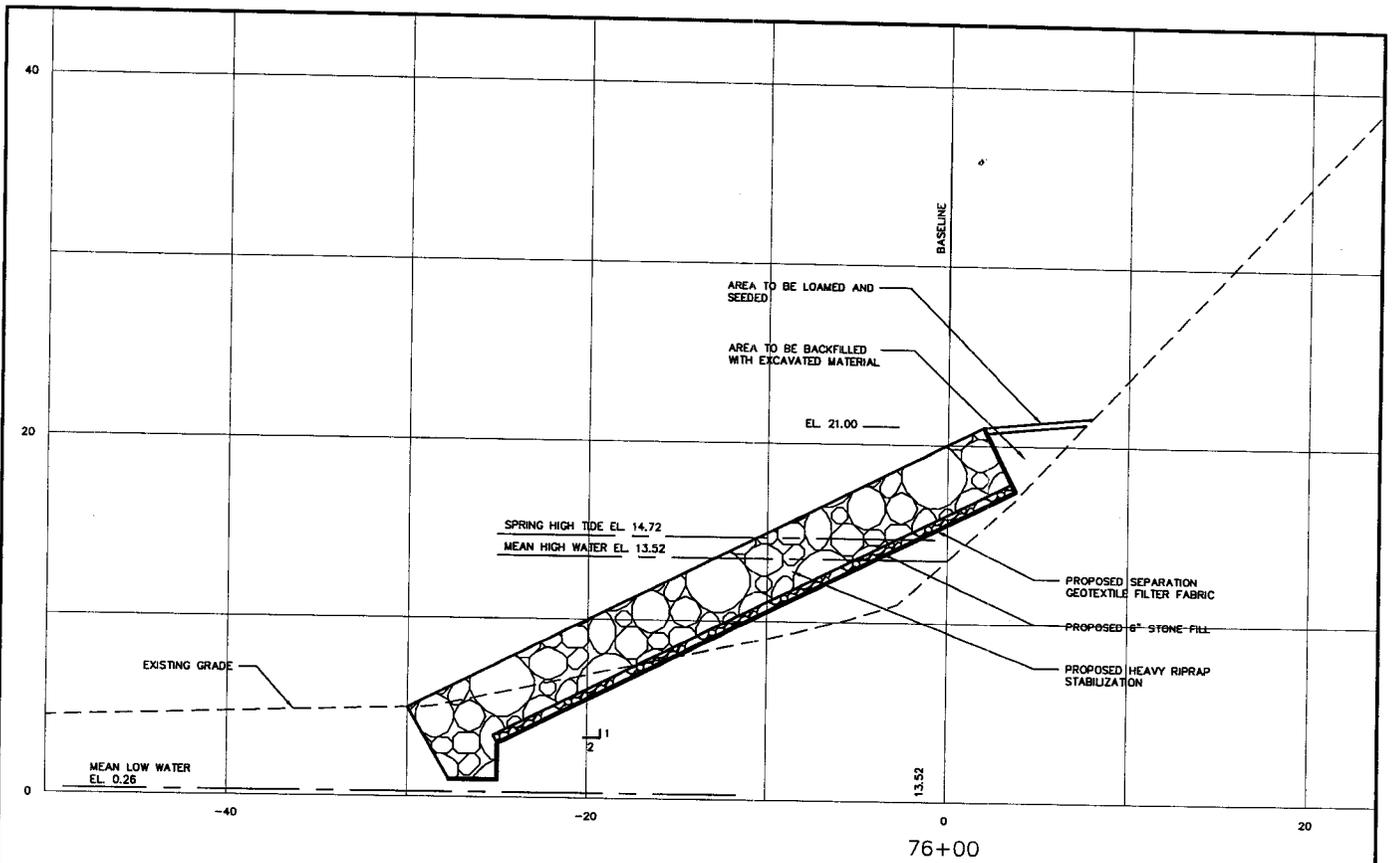
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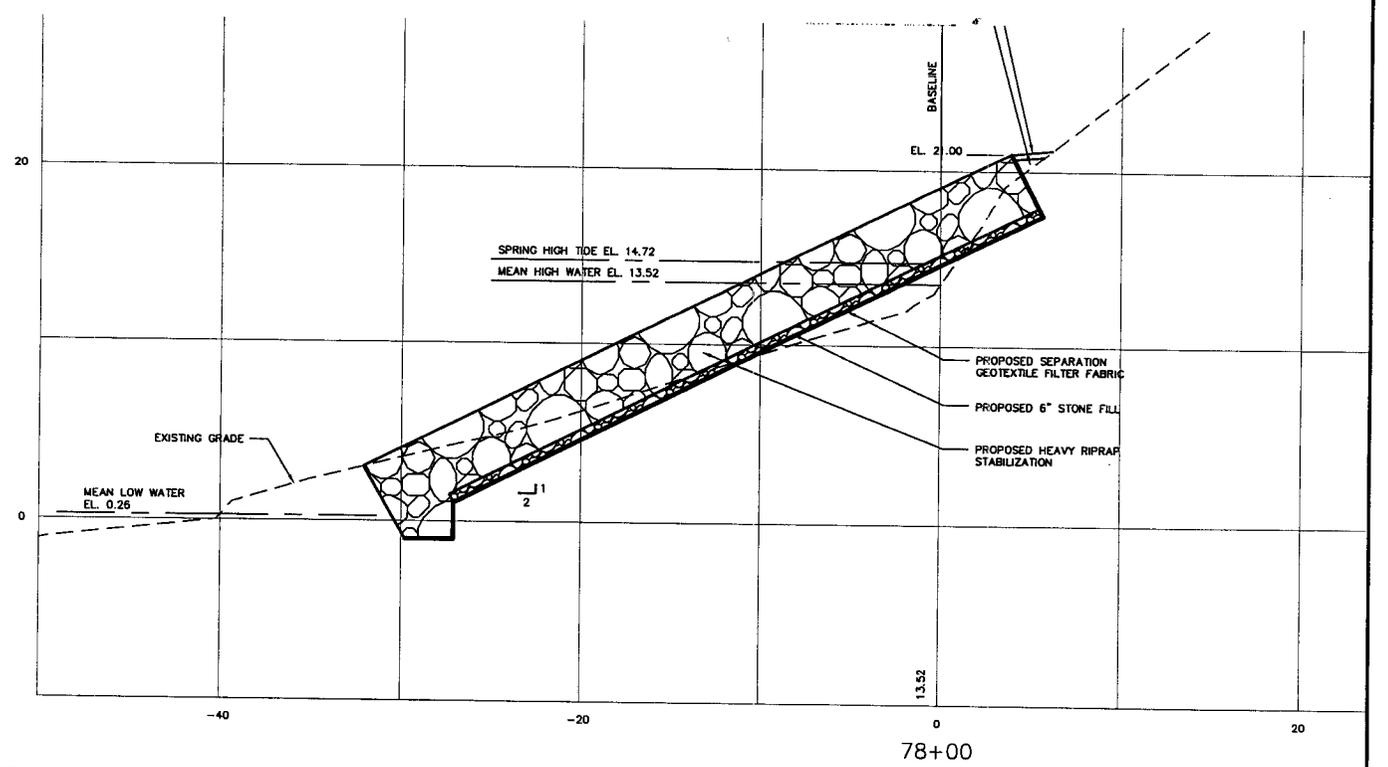
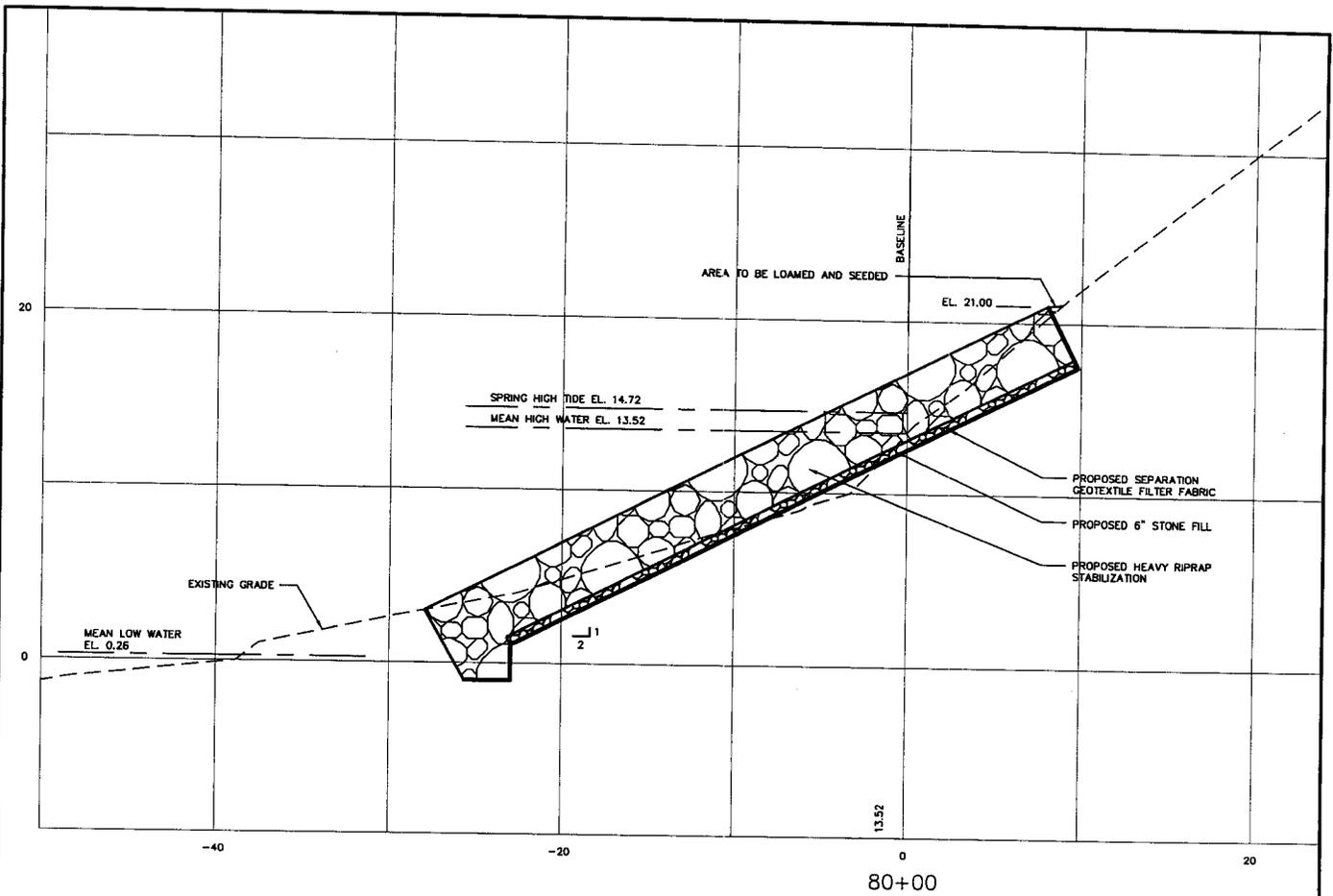
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JOB NO: 203431.06
 DATE: JULY, 2005
 SCALE: 1"=10'

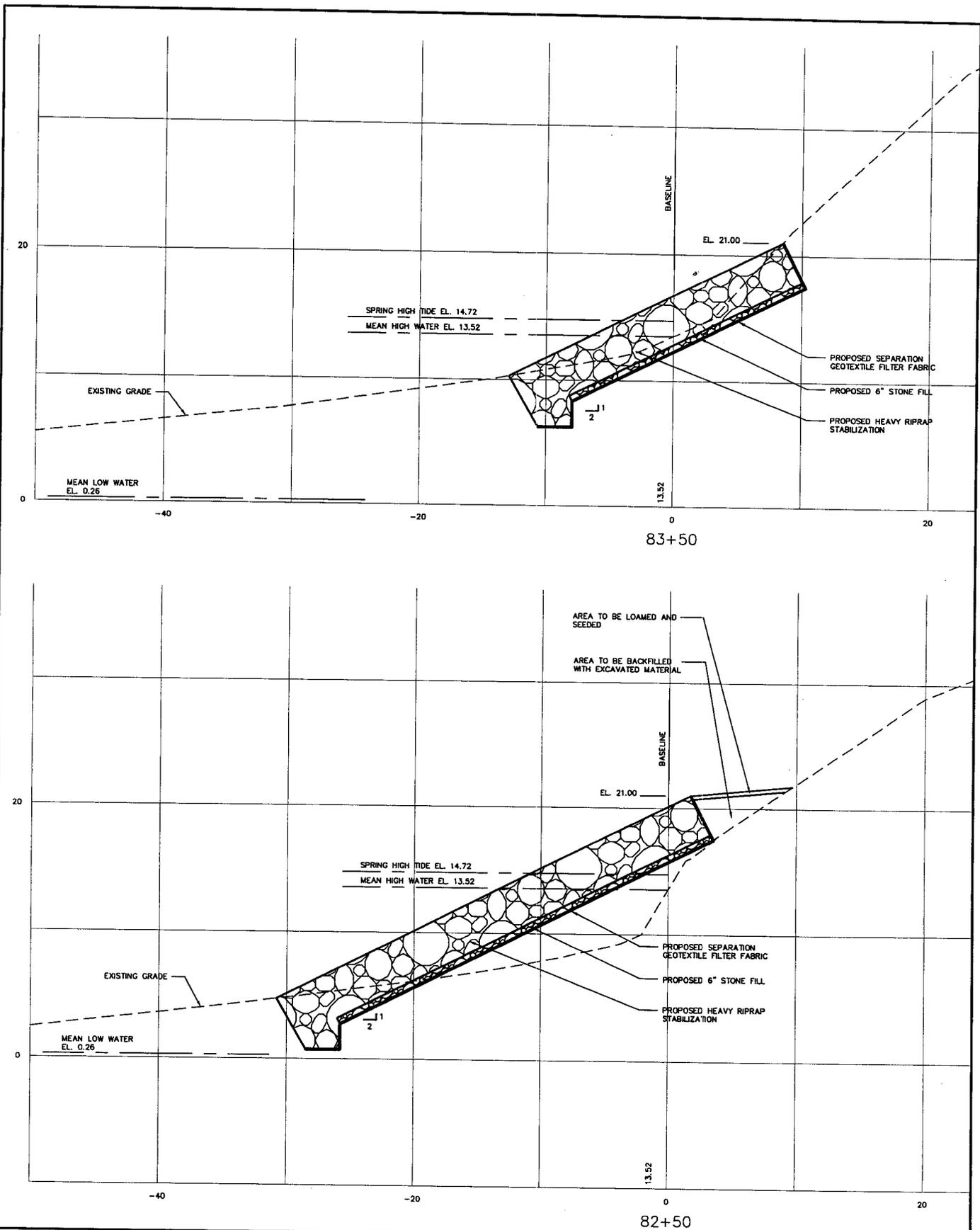
FIGURE 5-41



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**CROSS SECTIONS
 STA. 82+50 & STA. 83+50**

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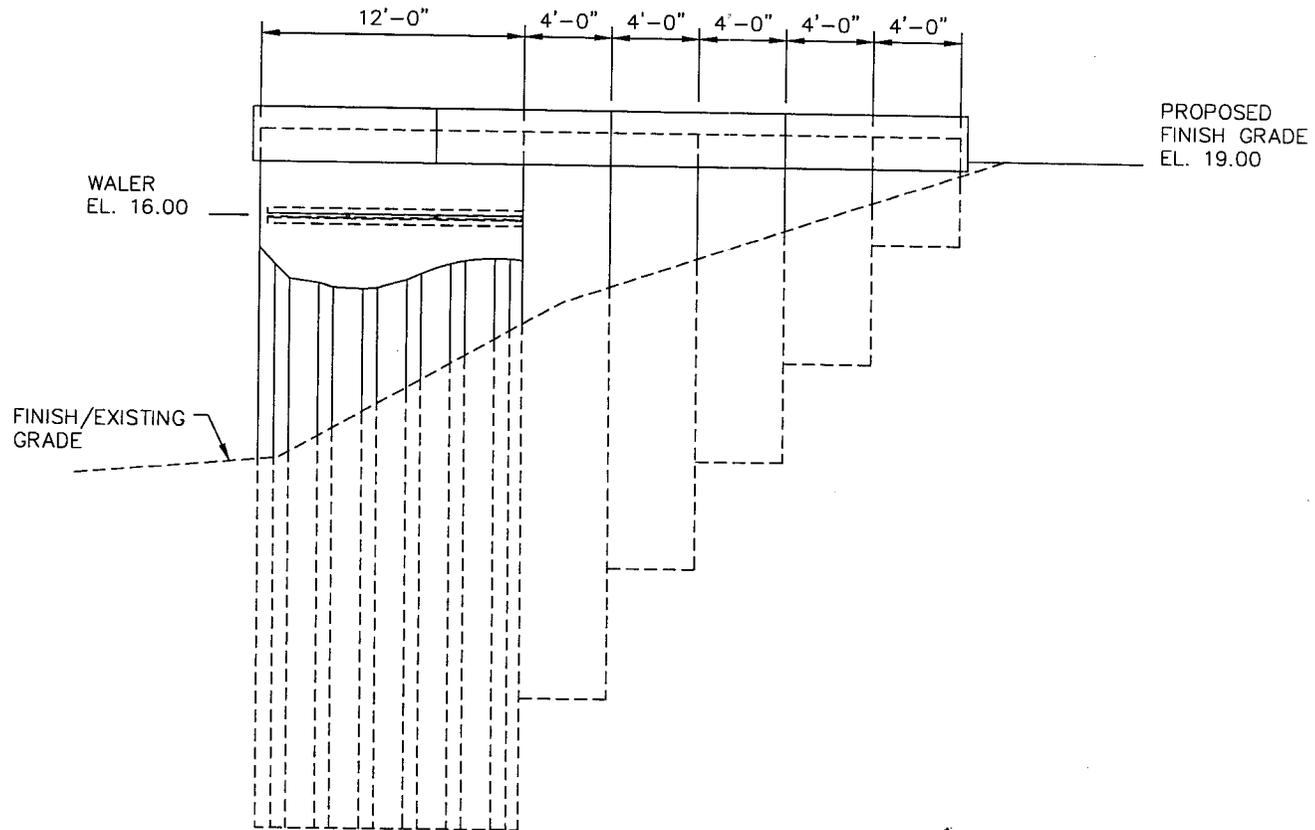
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FIGURE 5-44



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**SHEET PILE
 RETURN WALL DETAIL**

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 SCALE: 1/8"=1'-0"

FIGURE 6-1

PLANTING NOTES:

1. INSTALL PLANT MATERIAL AS PER MDOT SPECS. SECTION 621 AND STANDARD DETAILS, AND TYPICAL DETAIL 1/L-03.
2. EXCAVATE 10" EXISTING MATERIAL.
3. REPLACE WITH 10" OF LOAM.-MDOT SPEC.-615.02
4. COMPACT PLANTER BED 80-85% PER PROCTOR TEST.
5. SPREAD 4" DEEP SHREDDED BARK MULCH OVER PLANTING BED, REFER TO DETAIL 3/L-03.
6. INSTALL EROSION CONTROL MATTING PER MANUFACTURERS DIRECTION. REFER TO DETAIL 3/L-03.
7. GRASS SEED SHALL BE A COMMERCIAL PRODUCT FROM A REPUTABLE MANUFACTURER AND SHALL BE CERTIFIED TO BE NOT MORE THAN ONE(1) YEAR OLD AND OF THE GENERAL PROPORTIONS BY WEIGHT OF THE FOLLOWING SEED TYPE:

 MDOT #1 MIX- 4LBS/1000SQ/FT
8. ALL DISTURBED AREAS TO RECEIVE 4" LOAM AND SEED UNLESS OTHER WISE NOTED.
9. INSTALLATION OF PLANT MATERIAL: AS SHOWN IN DETAILS. PLANTS SHALL BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY STOCK - 1996 SPECIFICATIONS".
10. THE CONTRACTOR SHALL USE APPLIED WATER TO AID IN THE ESTABLISHMENT OF NEWLY PLANTED SHRUBS, TREES, SEEDLINGS, AND SOD DURING AN ABNORMAL DROUGHT THAT REQUIRES EXCESSIVE WATERING BEYOND WHAT IS EXPECTED WITH EACH PLANTING IN ACCORDANCE WITH MDOT SPEC-621.0024 AND 616.05. APPLIED WATER FROM APPROVED SOURCES IN A MANNER TO ALLOW THE SOIL TO ABSORB THE WATER WITHOUT RUNOFF.
11. BAREROOT STOCK - THE SEEDING SHALL BE PLANTED WITH ROOTS IN A NEAR NATURAL ARRANGEMENT AT A DEPTH THAT, AFTER FILLING, PACKING, AND LEVELING, THE COTYLEDON SCAR IS EVEN WITH OR SLIGHTLY BELOW THE FIRMED SOIL LEVEL. NO PORTION OF THE ROOTS SHALL BE EXPOSED.
12. THE LANDSCAPE ARCHITECT SHALL APPROVE PLANT SPACING AND LAYOUT PRIOR TO PLANTING.

 WOODARD & CURRAN Engineering · Science · Operations BANGOR, MAINE 800-564-2333	PLANTING NOTES		MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	JOB NO: 203431.06 DATE: JULY, 2005 SCALE: N.T.S.
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GUYS SECURED TO SINGLE RING OF 12" GA. TWISTED ANNEALED GALV. WIRE ENCASED IN 2 PLY REINFORCED RUBBER HOSE. (1 1/2" INSIDE DIAMETER)

2" GALV. TURNBUCKLE - 3 GUYS PER TREE CLAMP FOR GUY REMOVAL TO METAL DEADMAN ANCHORS DRIVEN INTO SUBGRADE. REMOVE AFTER 1 YEAR. GUY TREES ONLY 1.5" CALIPER.

TRUNK FLARE JUNCTION LEVEL WITH OR 1-2" ABOVE EXISTING GRADE

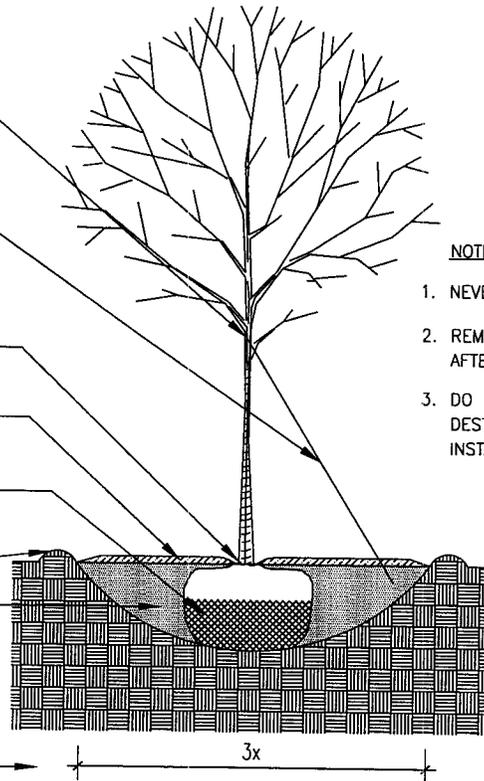
3" FINE DARK BARK MULCH KEEP MULCH 2"-3' FROM TRUNK.

REMOVE BURLAP FROM TOP 1/3 OF BALL. REMOVE ALL IF MADE OF SYNTHETIC MATERIAL.

4-6" TEMPORARY SAUCER.

FOR DECIDUOUS TREES USE 4 PARTS OF TOPSOIL, ONE PART MANURE.

PLANTING HOLE SHALL BE 3 TIMES DIAMETER OF ROOT BALL



NOTE:

1. NEVER CUT A LEADER.
2. REMOVE TREE RING AND STAKE AFTER FIRST WINTER.
3. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.

1

DECIDUOUS TREE PLANTING DETAIL

nts



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FIGURE 6-3

IF TREE IS 8' OR TALLER, THEN LOCATE 2 ANCHOR STAKES 18" AWAY FROM TREE TRUNK ON SIDE OF PREVAILING WIND. T-RAIL IRON STAKE OR ACCEPTABLE WOODEN SUBSTITUTE. ANCHOR FIRMLY. FASTEN TRUNK TO STAKE WITH TREE RING.

TRUNK FLARE JUNCTION LEVEL WITH OR 1-2" ABOVE EXISTING GRADE

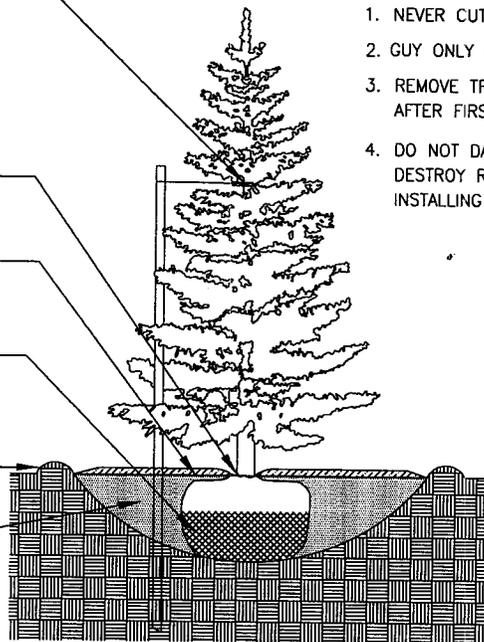
3" FINE DARK BARK MULCH KEEP MULCH 2"-3' FROM TRUNK.

REMOVE ALL METAL OR ROPE BINDING & WRAP FROM TOP 1/3 OF ROOT BALL. REMOVE ALL IF MADE OF SYNTHETIC MATERIAL

CREATE 4-6" HIGH SOIL SAUCER WITH TOPSOIL

TOPSOIL MIXTURE WITH 1/3 PEATMOSS AND EVERGREEN SLOW RELEASE PLANT FOOD AS RECOMENDED BY MANUF.

PLANTING HOLE SHALL BE 3 TIMES DIAMETER OF ROOT BALL



NOTE:

1. NEVER CUT A LEADER.
2. GUY ONLY EVERGREENS OVER 7' TALL.
3. REMOVE TREE RING AND STAKE AFTER FIRST WINTER.
4. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.

2

EVERGREEN TREE PLANTING DETAIL

nts



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PLANTING DETAIL

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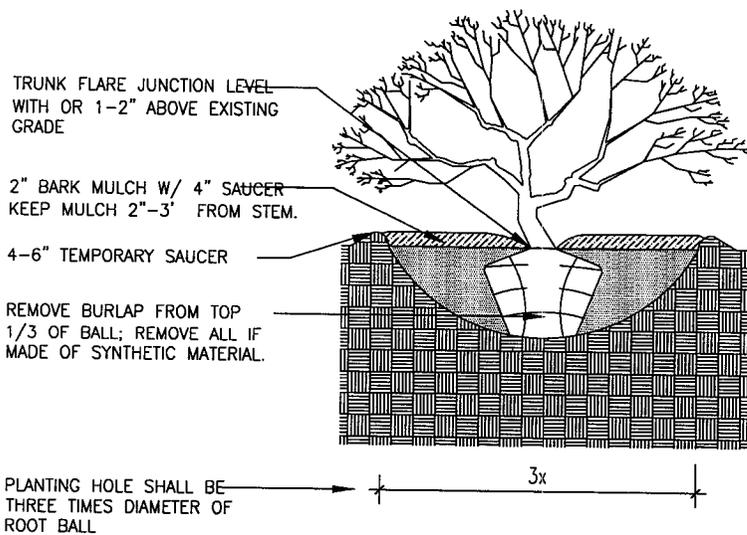
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FIGURE 6-4



3

SHRUB PLANTING DETAIL

nts



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MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 203431.06
DATE: JULY, 2005
SCALE: N.T.S.

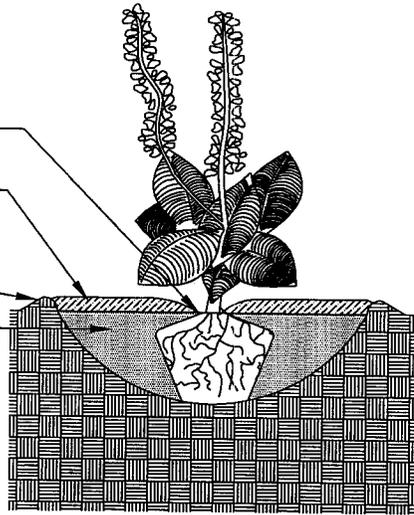
FIGURE 6-5

SET TOP OF ROOT BALL LEVEL WITH SURROUNDING SOIL

2" OF BARK MULCH - KEEP MULCH 2"-3" FROM BASE OF PLANT

4-6" TEMPORARY SAUCER

WELL LOOSENED RICH TOPSOIL MIX. (SEE NOTE ON PLAN). ADD A BALANCED 5-10-10 FERTILIZER. DO NOT COMPACT UNNECESSARILY AFTER PLANTING



PLANTING HOLE SHALL BE THREE TIMES DIAMETER OF ROOT BALL 3x

4

PERENNIAL PLANTING DETAIL

nts

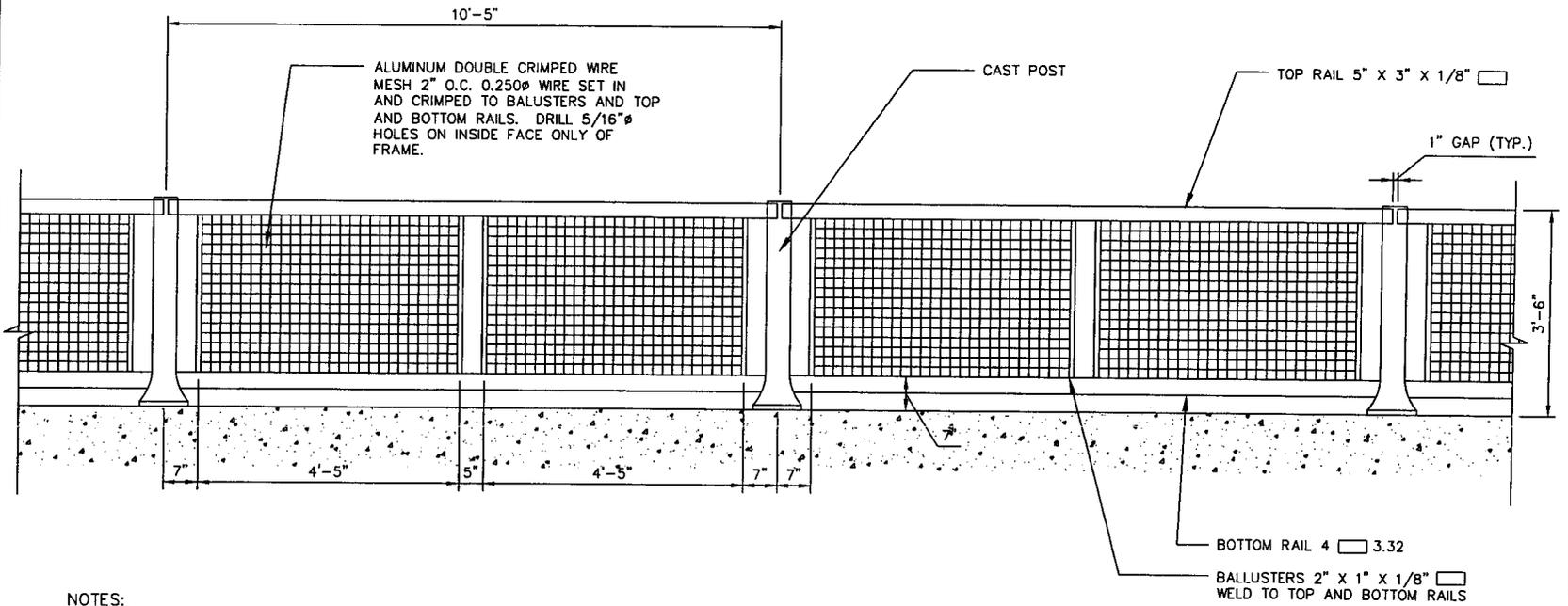
 WOODARD & CURRAN Engineering • Science • Operations BANGOR, MAINE 800-564-2333	PLANTING DETAIL		MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	JOB NO: 203431.06 DATE: JULY, 2005 SCALE: N.T.S.
	DESIGNED BY: WMC DRAWN BY: JOE	CHECKED BY: MSR FILE: 203143105-NRPA-DTL	CITY OF BREWER RIVERBANK STABILIZATION PROJECT	

DESIGNED BY: WHC
 DRAWN BY: JOE
 CHECKED BY: MSB
 FILE: 203143105-NRPA-07L

RAILING DETAIL

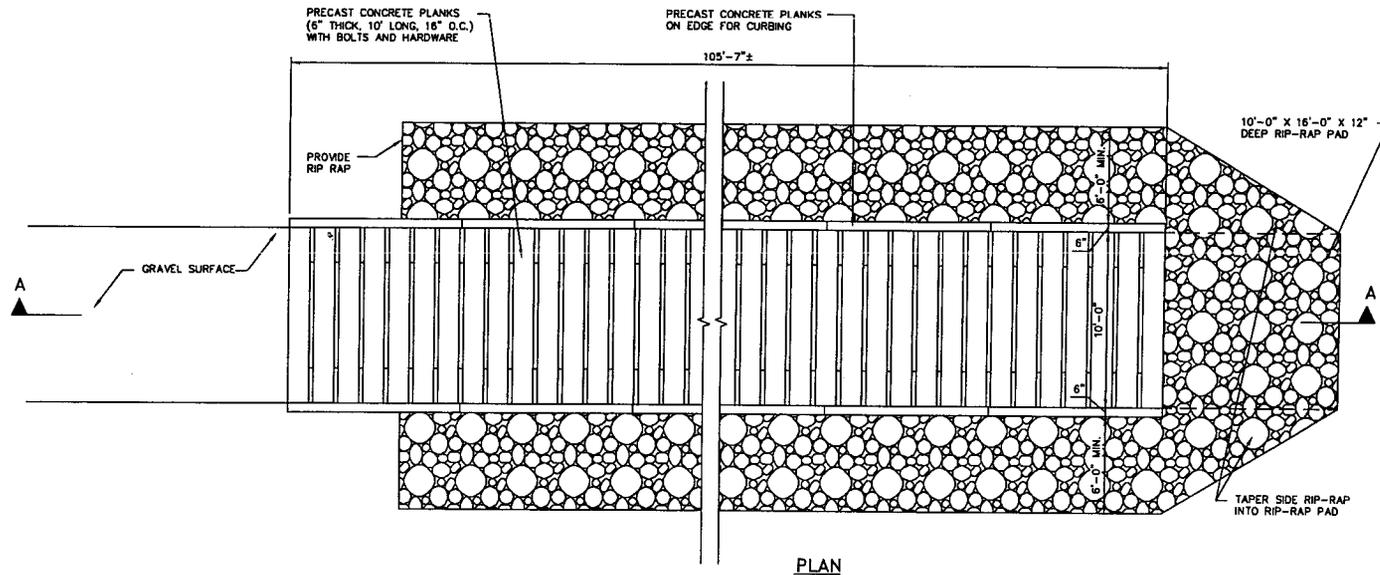
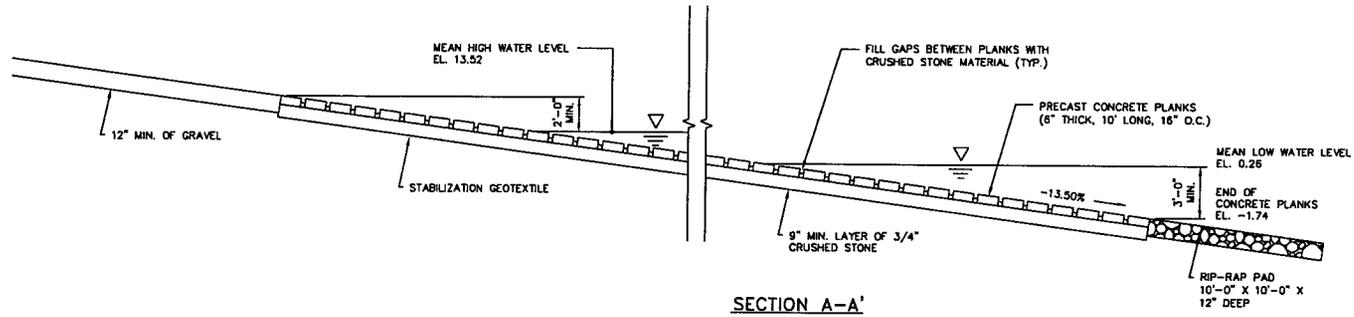
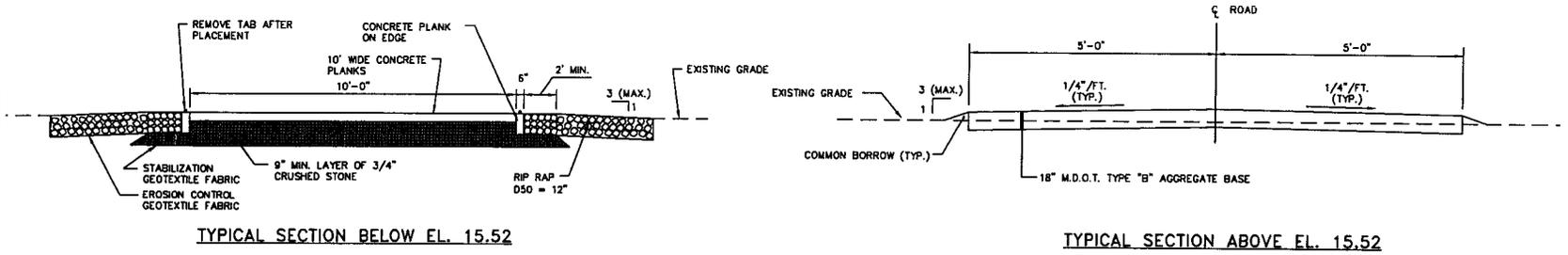
MAINE
 DEPARTMENT OF TRANSPORTATION
 AUGUSTA, MAINE
 CITY OF BREWER
 RIVERBANK STABILIZATION PROJECT

JOB NO. 203143106
 DATE: JULY 2005
 SCALE: N.T.S.
 FIGURE 6-7



NOTES:

1. CONTRACTOR SHALL COORDINATE AND VERIFY ALL ATTACHMENT AND EMBEDMENT POINTS PRIOR TO THE RAIL FABRICATION
2. ALL STEEL SHALL BE ALUMINUM





September 15, 2005

Shawn Mahaney
US Army Corps of Engineers
Maine Project Office
675 Western Avenue #3
Manchester, ME 04351

Robin Clukey, Project Manger
Bureau of Land and Water Quality Control
Maine Department of Environmental Protection
106 Hogan Road
Bangor, ME 04401

**Subject: Preliminary Wetland Mitigation Plan for the MDOT and the City of Brewer
Proposed Penobscot River Shoreline Improvement Project in Brewer, Maine**

Dear Shawn and Robin:

The following information is presented as the preliminary compensatory wetland mitigation plan for the Multi-Use Trail and Shoreline Stabilization Project located in Brewer, Maine (Figure 1). On August 1, 2005, Woodard and Curran submitted an application on behalf of the Maine Department of Transportation (MDOT) and the City of Brewer (City) for a joint Maine Natural Resources Protection Act (NRPA) and U.S. Army Corps of Engineers (Corps) permit for this project. Project plans and details are contained in that application. Detailed information relevant to existing wetland conditions and proposed wetland impacts are presented in the Coastal Wetland Characterization Report (NRPA Attachment 9) and the Wetland Functions and Values Assessment Report (NRPA Attachment 12).

Wetland impacts resulting from the shoreline stabilization project have been avoided and minimized to the extent practicable in the design process. As currently designed, the proposed shoreline work will result in approximately 2.4 acres of wetland impact, including approximately 106,825 square feet of freshwater intertidal habitat and 1,000 square feet of freshwater subtidal habitat. The principal wetland functions and values that occur within the riverine wetland system of the project area are groundwater interchange, floodflow alteration, fish and shellfish habitat, sediment/toxicant retention, nutrient removal, production export, wildlife habitat, recreation, and endangered species habitat. Of these, fish and shellfish habitat, floodflow alteration, wildlife habitat, and endangered species habitat will be altered by the proposed shoreline stabilization.

Options for compensatory mitigation to offset the unavoidable wetland impacts were discussed during an April 1, 2005, meeting between MDOT, the City, the Maine Department of Environmental Protection (DEP), and the Corps. Those discussions focused on the need to maximize the amount of on-site, in-kind wetland restoration and to make up the remainder through off-site mitigation. A search by the applicants

in the general vicinity of the project area identified the existing, so-called Mill Street Dam on Sedgeunkedunk Stream in Brewer as a viable mitigation opportunity. During the April 1, 2005, pre-application meeting, the DEP and Corps agreed in concept that the Mill Street Dam site offered the opportunity to restore stream flows, habitats, and fish passage, and along with the on-site restoration, these measures would provide appropriate compensation to offset the wetland functions and values being impacted by the shoreline stabilization work along the Penobscot River. The proposed wetland mitigation measures are described in more detail below.

On-Site Mitigation

Figures 2-A through 2-F show the locations of 7 individual areas where the removal of existing fill and structures from the proposed shoreline stabilization reaches will allow for in-kind restoration of intertidal freshwater riverine habitat. Table 1 provides a summary of these restoration opportunities, and Photos 1 through 7 show the existing conditions at each location. Restoration will consist of removing fill or cribwork structures and re-grading the substrates to match the elevation of the adjacent, undisturbed intertidal habitats. Restoration work will be concurrent with the stabilization work, and removal and re-grading will be done in-the-dry (i.e., between tide cycles) to minimize sedimentation and siltation of river water. Because the restoration areas are within the regularly-flooded, intertidal zone of the river, it is expected that substrates will stabilize and the vegetation and benthic fauna will establish naturally over time. Though intertidal plantings were considered early in the mitigation design process, none are being proposed. This is because it is anticipated that the forces of river ice would damage or remove plantings. In addition, plants with deeper roots would damage the filter fabric under the riprap, thereby compromising the integrity of the stabilization structure on those portions of the project.

Table 1. Summary of On-site Wetland Compensation

Area #	Station	Size (S.F.)	Restoration Activity
1	34+70	80	Remove cribbing and fill
2	40+00	14,877	Remove sand/gravel fill
3	45+80	677	Remove small island and fill
4	55+00	695	Cribbing previously removed (at Muddy Rudder)
5	58+00	105	Remove cribbing and fill
6	61+90	131	Remove cribbing and fill
7	63+80	740	Remove cribbing and fill
	Total	17,305 S.F.	

Off-Site Mitigation

Existing Conditions: Off-site mitigation is proposed at the site of an existing dam on Sedgeunkedunk Stream in Brewer, located approximately 1.5 miles from the Penobscot River project area (Figure 1). The Mill Street Dam, as it is referred to by the Corps and DEP¹, was constructed in the late 1930s to provide a source of processing water for the former Eastern Fine Paper mill located along the river near the mouth of Sedgeunkedunk Stream. The mill is currently closed and the dam is not being used. The 240-foot long concrete and earthen dam has a structural height of 15 feet and a hydraulic height of 12 feet (Photos 8 and 9). Data from the Maine Office of Geographical Information Systems (i.e., the “impounds”

¹ Data compiled from the Corps and DEP sources are contained in a GIS database named “IMPOUNDS”, posted on the Maine GIS Data Catalog. IMPOUNDS refers to the dam as the Mill Street Dam.



coverage) compiled by DEP and the Corps indicate the dam has a significant hazard potential classification².

There is a remnant section of a previous dam just upstream of the current spillway within the impoundment. This concrete structure, which was visible just below the water surface during an August 11, 2005, site visit by Woodlot Alternatives, Inc. (Woodlot), is attached to the west wall of the intake bay of the current dam (Photo 10). Observations suggest that a portion of the old dam was previously removed when the current dam was constructed.

The Mill Street Dam is the first (i.e., most downstream) obstruction on Sedgeunkedunk Stream and is located approximately 3,000 linear feet upstream of the confluence with the Penobscot River. As such, the dam is relatively low in the stream's watershed, but it is located in a topographic ravine rather than a broad plain. The dam currently impounds an area of approximately 1.5 to 2 acres, with influence extending upstream approximately 1,500 to 1,600 linear (river) feet, directly adjacent to Mill Street and a few residential properties (Figure 3). The next dam, called the East Orrington Dam or the Fields Pond Dam, is located approximately 2.5 miles upstream of the Mill Street Dam.

Conditions within the impoundment vary somewhat from downstream to upstream ends. Within the lower 400 feet, the impoundment width at estimated normal high water ranges from about 40 to 85 feet, including open water and bordering aquatic/emergent vegetation. During a survey by Woodlot on August 11 and 23, 2005, water depths in the lower impoundment were found to range from approximately 1.5 to 4.5 feet, with an estimated average of 3.5 feet³. The substrate is composed of sandy/silty sediment of unknown depth, presumably the result of years of accumulations behind the dam. Small, submerged aquatic beds containing pondweed (*Potamogeton ephedrus*) and mare's tail (*Hippuris vulgaris*) are found in this lower portion of the impoundment, which is also bordered by beds of deep and shallow emergent vegetation ranging from 20 to 40 feet in width (Photo 11). The emergent community is dominated by pickerel weed (*Pondetaria cordata*), common arrowhead (*Sagittaria latifolia*), common cattail (*Typha latifolia*), and sedges (*Carex spp.*). Shoreward of the emergent community is either a steep upland bank, particularly on the Mill Street side, or a low floodplain terrace containing primarily speckled alder (*Alnus incana*) with scattered red maple (*Acer rubrum*), winterberry (*Ilex verticillata*), sweet gale (*Myrica gale*) and willow (*Salix sp.*) also present. The adjacent upland forests consist primarily of white pine (*Pinus strobus*), red maple, and gray birch (*Betula populifolia*). The invasive Japanese knotweed (*Fallopia japonica*) was found growing adjacent to the impoundment along a section of disturbed bank behind one of the houses, as were scattered purple loosestrife (*Lythrum salicaria*) plants.

The upper 1,100 to 1,200 feet of the impoundment narrows to 25 to 30 feet in width, and it is bordered by the steep banks adjacent to Mill Street to the east and a more gradual but well-defined bank that transitions to upland forest on the west side. Lower portions of this section still contain a border of emergent vegetation, although at 10 to 15 feet wide it is much narrower than the lower impoundment (Photo 12). Submerged aquatics are absent from the upper impoundment, and the substrate is more firm and gravelly, similar to substrate conditions in free-flowing sections of the stream observed below the dam. Scattered downed branches and tree trunks are present here. Maximum water depths in this section range from 1.5 to 2.5 feet. Silt-covered cobble, small boulders, and outcroppings of exposed ledge are found in the upper impoundment. The current becomes detectable at the extreme upper end where the channel is composed mostly of gravel and cobble (Photo 13). A small floodplain terrace located on an

² Hazard potential classifications are based on the likelihood of loss of life and/or impacts to downstream structures in the event of a dam failure. The structural condition of a dam has no bearings on its hazard potential classification.

³ Note that water depths between the current spillway and the old dam structure reach up to 8 to 9 feet in places, but otherwise the impoundment just above the dam appears to be much shallower.

inside bend of the stream is vegetated with alder, arrowwood (*Viburnum dentatum*), sensitive fern (*Onoclea sensibilis*), cinnamon fern (*Osmunda cinnamomea*), jewelweed (*Impatiens capensis*), and various grasses. Bank vegetation on the Mill Street side includes primarily speckled alder and red maple, as well as the invasive Morrow's honeysuckle (*Lonicera morrowii*).

Typical conditions in Sedgeunkedunk Stream below the Mill Street dam are illustrated in Photos 14, 15, and 16. The stream below the dam is relatively shallow in depth and quick-moving in most places, with more riffle habitat than pool habitat due to the moderate gradient. Based on observations by Woodlot in August 2005, it appears that this reach of the stream does not contain any physical barriers to fish passage.

Proposed Mitigation Measures: MDOT and the City propose to breach the Mill Street Dam to restore natural flows to this portion of Sedgeunkedunk Stream and provide unobstructed upstream and downstream fish passage. Breaching will be accomplished by removal of the concrete face of the dam, including the spillway and the gate structure (shown in Photo 8). A natural sediment management approach will be implemented, allowing sediment that has accumulated above the dam to be scoured over time. Eastern Fine Paper removed some of the accumulated sediment from the area above the dam approximately 15 years ago. At that time, testing revealed that the sediment did not contain any contaminants of concern.

The primary objectives of the dam breaching are to:

1. improve water quality (e.g., temperatures, dissolved oxygen, and nutrient concentrations) within and downstream of the impoundment area;
2. restore natural stream flows, in-stream habitats, channel morphology, and natural communities (e.g., flora and fauna) to the current impoundment; and
3. restore upstream and downstream fish passage to allow anadromous and catadromous (i.e., diadromous) species access to the 2.5 miles of free-flowing stream habitat above the dam. Species that could potentially benefit from the dam breaching include Atlantic salmon (*Salmo salar*), alewife (*Alosa pseudoharengus*), and American eel (*Anguilla rostrata*).

It is expected that the existing stream-associated wetland plant communities would change to some degree once the dam is breached and free-flowing conditions are restored. The extent of aquatic and emergent plant species would be significantly reduced in the lower and mid-impoundment areas due to the loss of still water conditions. These habitats would likely be replaced over time with wetland shrub, wetland forest, and upland forest habitats depending on local hydrology and the elevation above the natural stream channel. Effects in the upper one-third of the impoundment would be less noticeable.

Based on observations by Woodlot, it is proposed that the dam breaching component of the mitigation be implemented in such a way as to address the following issues:

- A natural approach to sediment management should be implemented. Therefore, a gradual (i.e., over a number of days or even weeks) drawdown of the impoundment is proposed, as opposed to a rapid drawdown. A gradual drawdown could be accomplished through the measured removal of boards from the stoplog bay. This will reduce the likelihood of mobilizing large quantities of unconsolidated sediment. There is an unknown quantity of unconsolidated sediment located in the lowermost portion of the impoundment. A rapid drawdown could result in unacceptably high levels of turbidity, which may exceed the downstream channel sediment transport capacity and result in excessive deposition of fine sediment within the downstream channel reach. A gradual drawdown will enable consolidation of this sediment and, if conducted during the growing season, would allow for active and natural re-vegetation of exposed soils, further reducing the transport of sediment to the downstream reach.

- Implementing a planned, natural approach to sediment management will assist in the full attainment of project objectives.
- As noted above, an old remnant dam was observed within the impoundment immediately upstream of the Mill Street Dam. This dam appears to be constructed of concrete. The right (i.e., easterly) end of the former dam is attached to the left (i.e., westerly) wall of the powerhouse intake structure. Observations suggest that a portion of the dam within the impoundment was previously removed. It is proposed that this former dam be completely removed as part of the Mill Street Dam removal project to assist in the full attainment of project objectives.
- The spillway of the Mill Street Dam is apparently founded on a concrete apron. It is proposed that this apron be removed to streambed elevation as part of the project. Retaining the apron across the channel could adversely impact channel morphology and create a hydraulic barrier to fish passage under certain flow conditions, thus preventing the full attainment of project objectives.
- A utility pipe crosses the streambed approximately 75 feet downstream of the Mill Street Dam. The pipe is partially buried and is visible on the right side of attached Photo 14. The pipe is broken in several places, and therefore appears to be non-functional. Further investigation regarding its functionality is recommended. If the pipe is no longer functional, it may be appropriate to remove it from the streambed as part of the dam removal action so as to avoid future adverse impacts to stream morphology.
- It is proposed that the dam removal construction sequence address the need to retrieve and remove demolition debris from the stream channel. This would include the removal of fractured concrete, rebar, and other debris generated through the dam removal action. Restoration of free-flowing conditions may allow for new recreational uses in this portion of the river, including recreational boating and angling opportunities, and actions would be taken to reduce the potential for creating hazardous conditions for future recreational uses of the free-flowing river.

Please contact me if you have any questions regarding the enclosed information.

Sincerely,
Woodlot Alternatives, Inc.

Fred J. DiBello

Fred J. DiBello
Senior Project Scientist

Cc: Frank Higgins, Brewer Public Works Director
Josh Saucier, Assistant City Engineer, Brewer
Margaret Duval and Rhonda Poirier, MDOT
Wendy Coffin and Michael Riley, Woodard and Curran
Stephanie Lindloff, Woodlot

Attachments: Photographs 1 through 16
Figures 1, 2-A through 2-F, 3, and 4

WAI PN 103068.07





Photo 1. Restoration Area #1 - Station 34+70, looking upriver. Wooden rails and corner cribbing in center of photo to be removed. Woodlot Alternatives, Inc. August 8, 2005.



Photo 2. Restoration Area #2 - Station 40, looking downriver. Gravelly fill shown in left of photo will be removed to restore pre-fill contours. Woodlot Alternatives, Inc. August 8, 2005.

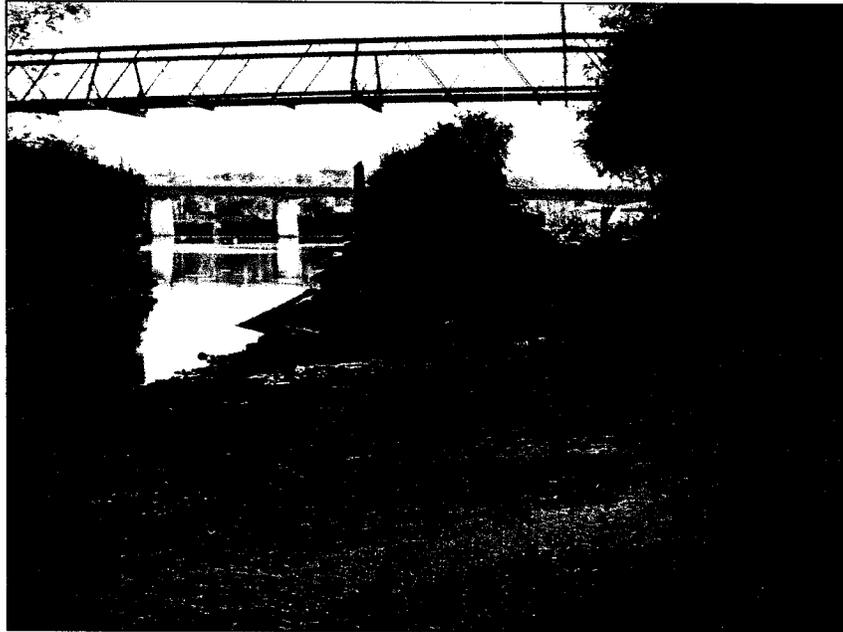


Photo 3. Restoration Area #3 - Station 45+80, looking upriver. Cribwork island in center of photo to be removed. Woodlot Alternatives, Inc. August 8, 2005.

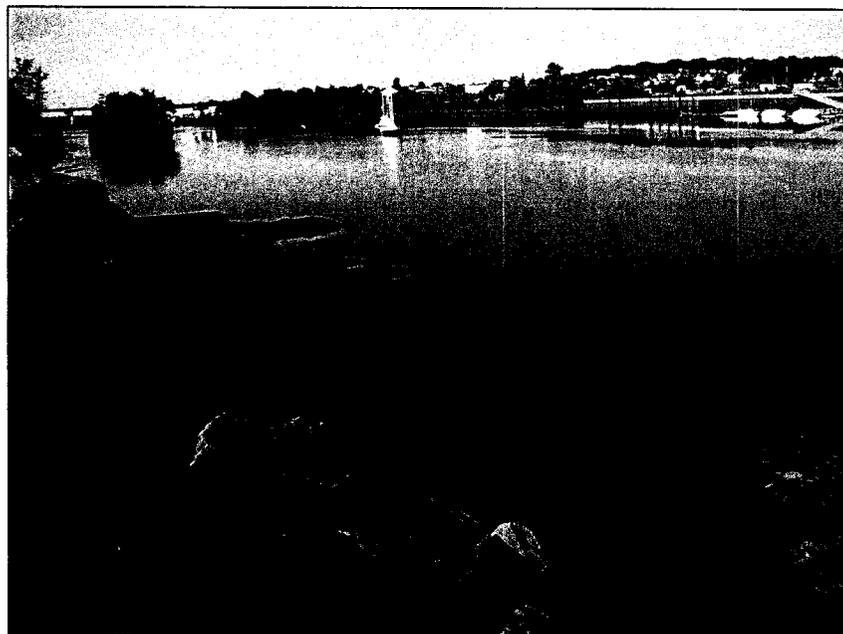


Photo 4. Restoration Area #4 - Station 55, looking downriver. This area at the Muddy Rudder property was restored previously. Photo shows restored conditions. Woodlot Alternatives, Inc. August 8, 2005.



Photo 5. Restoration Area #5 - Station 58+00, looking downriver. Cribwork and fill in center of photo to be removed and intertidal area restored. Woodlot Alternatives, Inc. August 8, 2005.



Photo 6. Restoration Area #6 - Station 61+90, looking downriver. Cribwork, downed trees, and debris to be removed from intertidal area. Woodlot Alternatives, Inc. August 8, 2005.



Photo 7. Restoration Area #7 - Station 63+80, looking downriver. Cribwork to be removed and intertidal area restored. Woodlot Alternatives, Inc. August 8, 2005.



Photo 8. Mill Street Dam spillway, looking upstream, showing spillway on right and gate on left. Woodard and Curran. 2004.

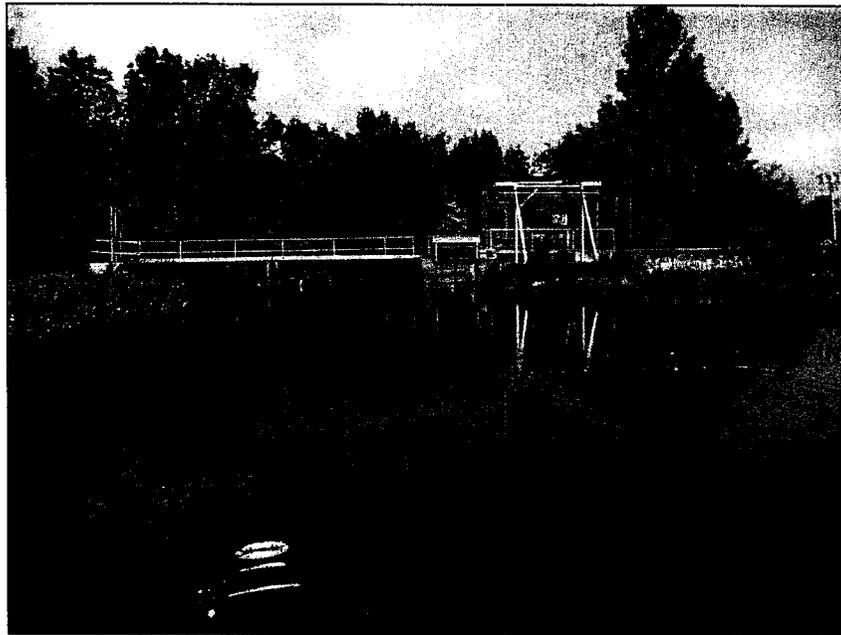


Photo 9. Mill Street Dam spillway, looking downstream from lower impoundment. Brick building houses a pump station. Woodlot Alternatives, Inc. August 11, 2005.

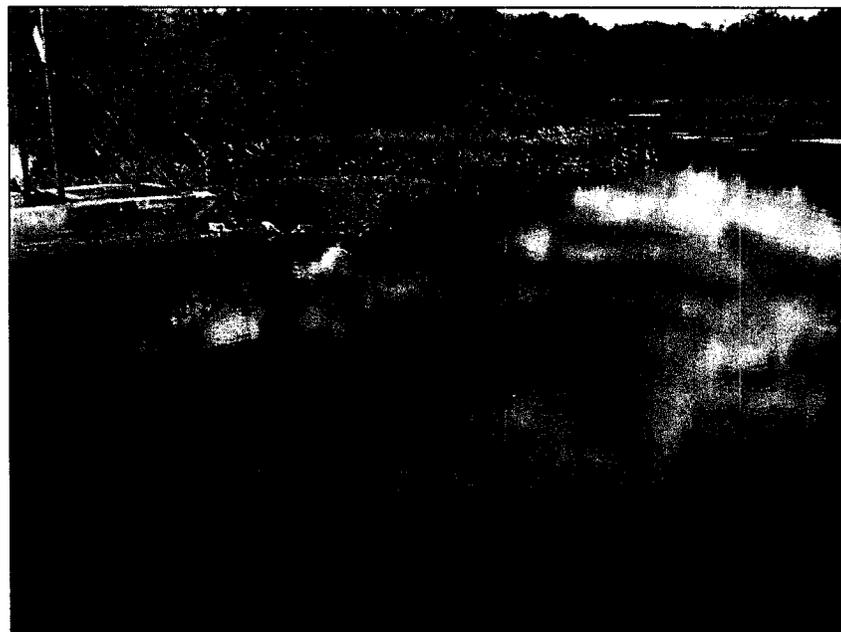


Photo 10. Remnant of old concrete dam structure (under water in center of photo), looking upstream from current dam face. Woodlot Alternatives, Inc. August 23, 2005.



Photo 11. Typical conditions within the lower portion of the impoundment, looking upstream and east towards Mill Street. Woodlot Alternatives, Inc. August 11, 2005.



Photo 12. Typical conditions within the middle portion of the impoundment, looking downstream. Woodlot Alternatives, Inc. August 11, 2005.



Photo 13. Typical conditions at the uppermost end of the impoundment, looking downstream.
Woodlot Alternatives, Inc. August 11, 2005.



Photo 14. Sedgeunkedunk Stream about 75 feet below the Mill Street Dam, looking downstream. Woodlot Alternatives, Inc. August 11, 2005.



Photo 15. Sedgeunkedunk Stream looking downstream from the Mill Street bridge.
Woodlot Alternatives, Inc. August 11, 2005.

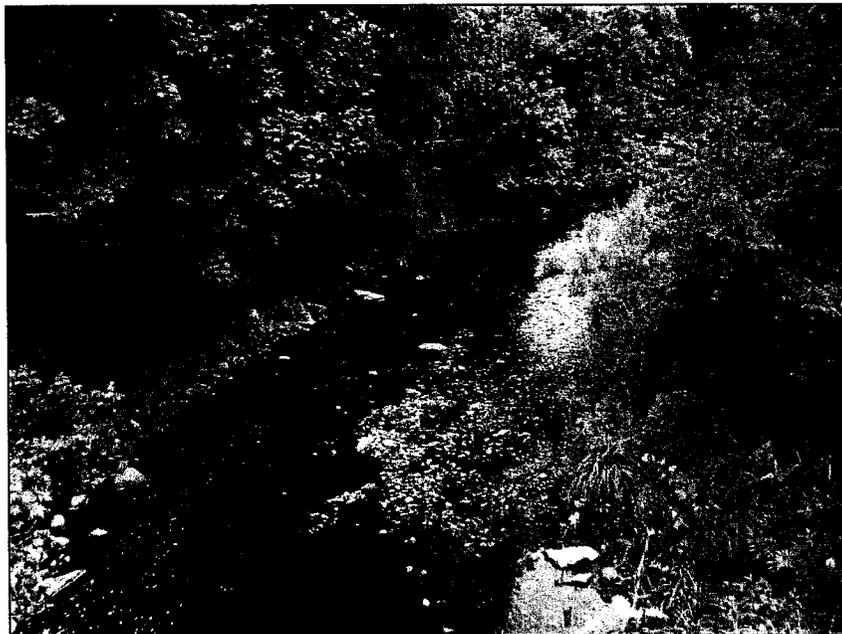
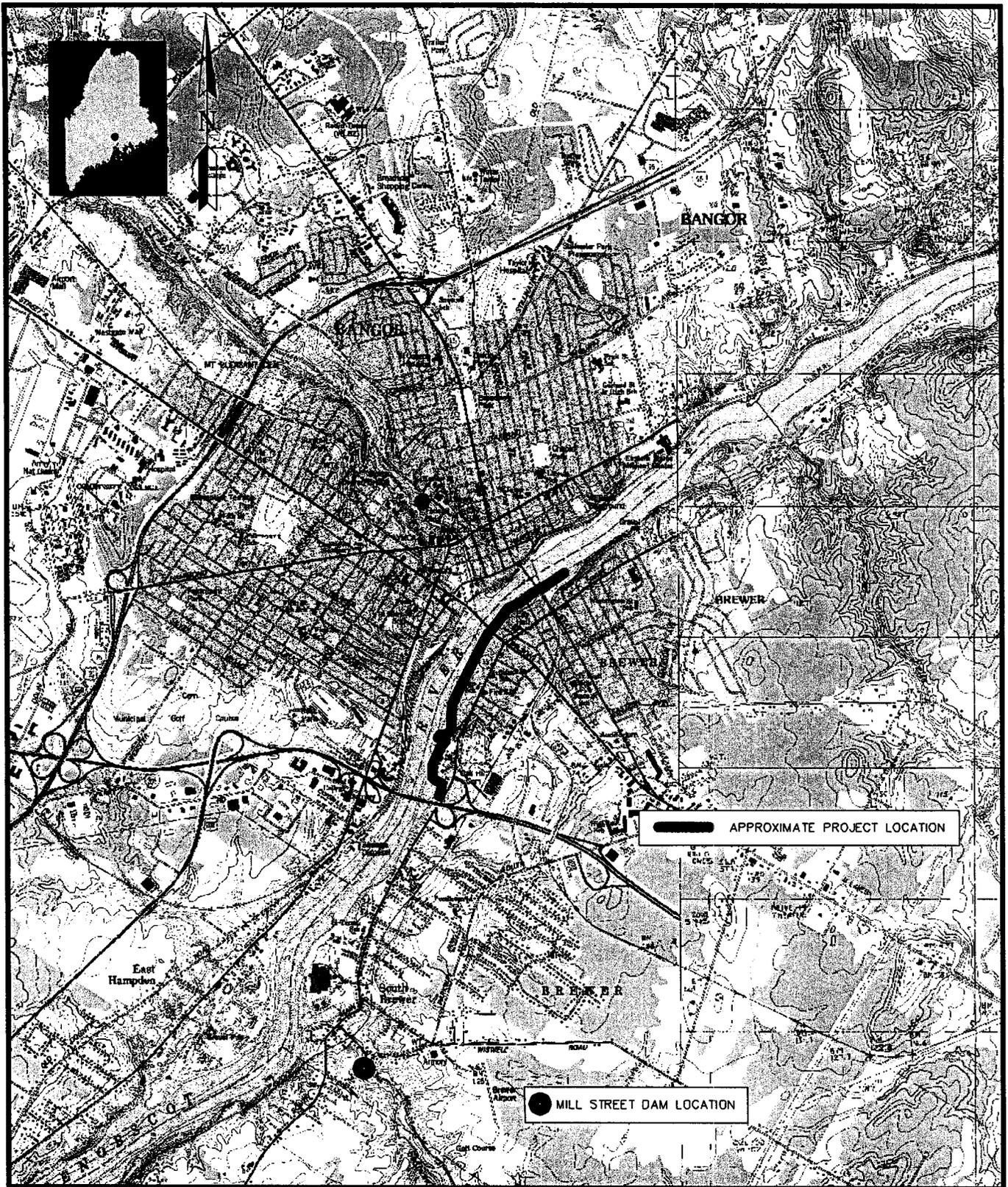


Photo 16. Sedgeunkedunk Stream looking upstream from the Route 15/Main Street bridge.
Woodlot Alternatives, Inc. August 11, 2005.



PREPARED BY:



WOODLOT
ALTERNATIVES, INC.
ENVIRONMENTAL CONSULTANTS

DATE: September 2005

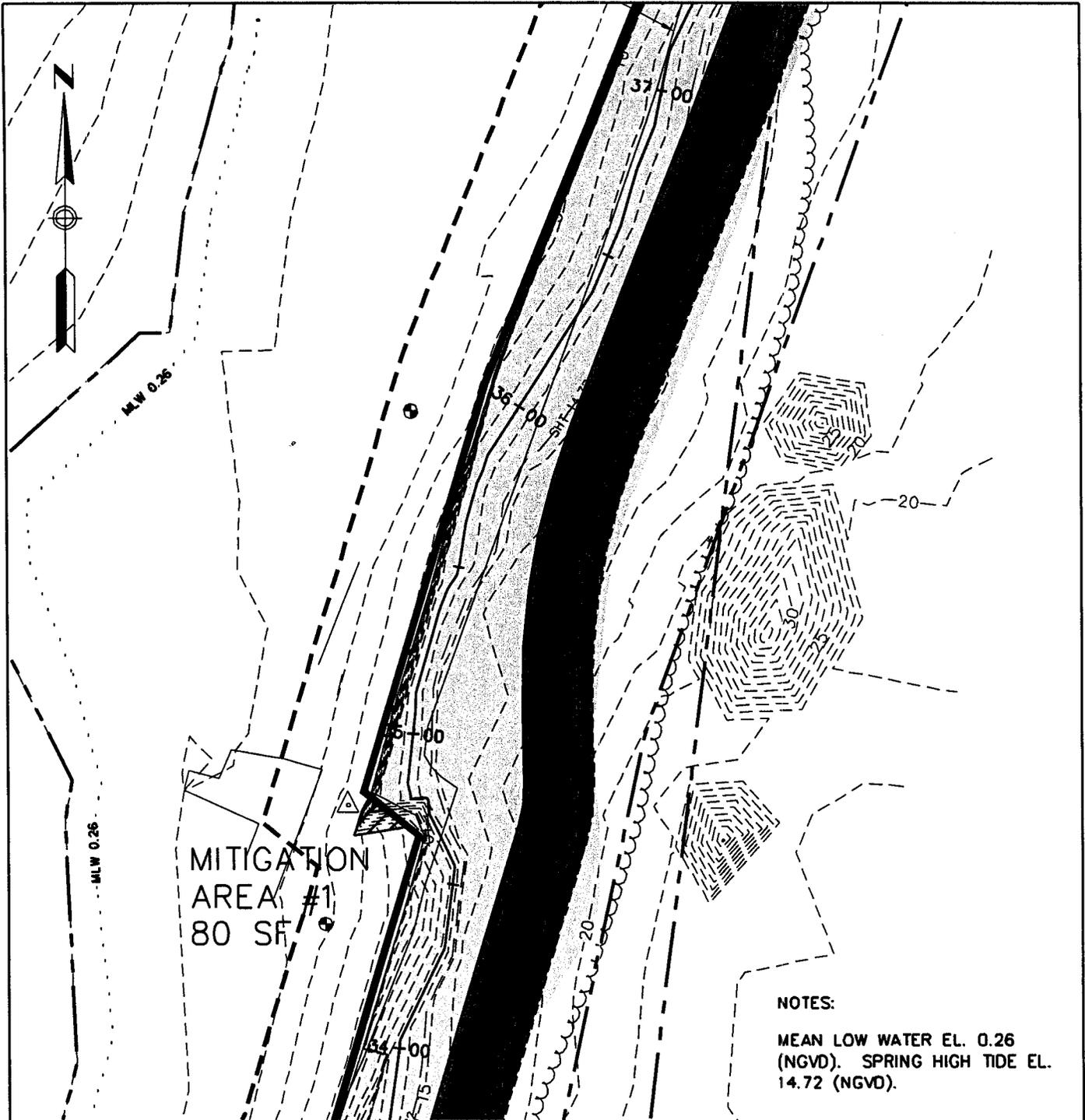
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JOB NO. 103068.07

FILE: 103068-0001-LOCATION.dwg

*Project Area and Off-Site Mitigation Location Map
Penobscot River Riverbank Stabilization
Brewer, Maine*

REV.



NOTES:

MEAN LOW WATER EL. 0.26 (NGVD). SPRING HIGH TIDE EL. 14.72 (NGVD).

LEGEND:

- PROPOSED RIP RAP STABILIZATION
- PROPOSED FILL
- PROPOSED VERTICAL BULKHEAD
- FUTURE MULTI-USE TRAIL
- PROPOSED MITIGATION/RESTORATION AREA

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSC



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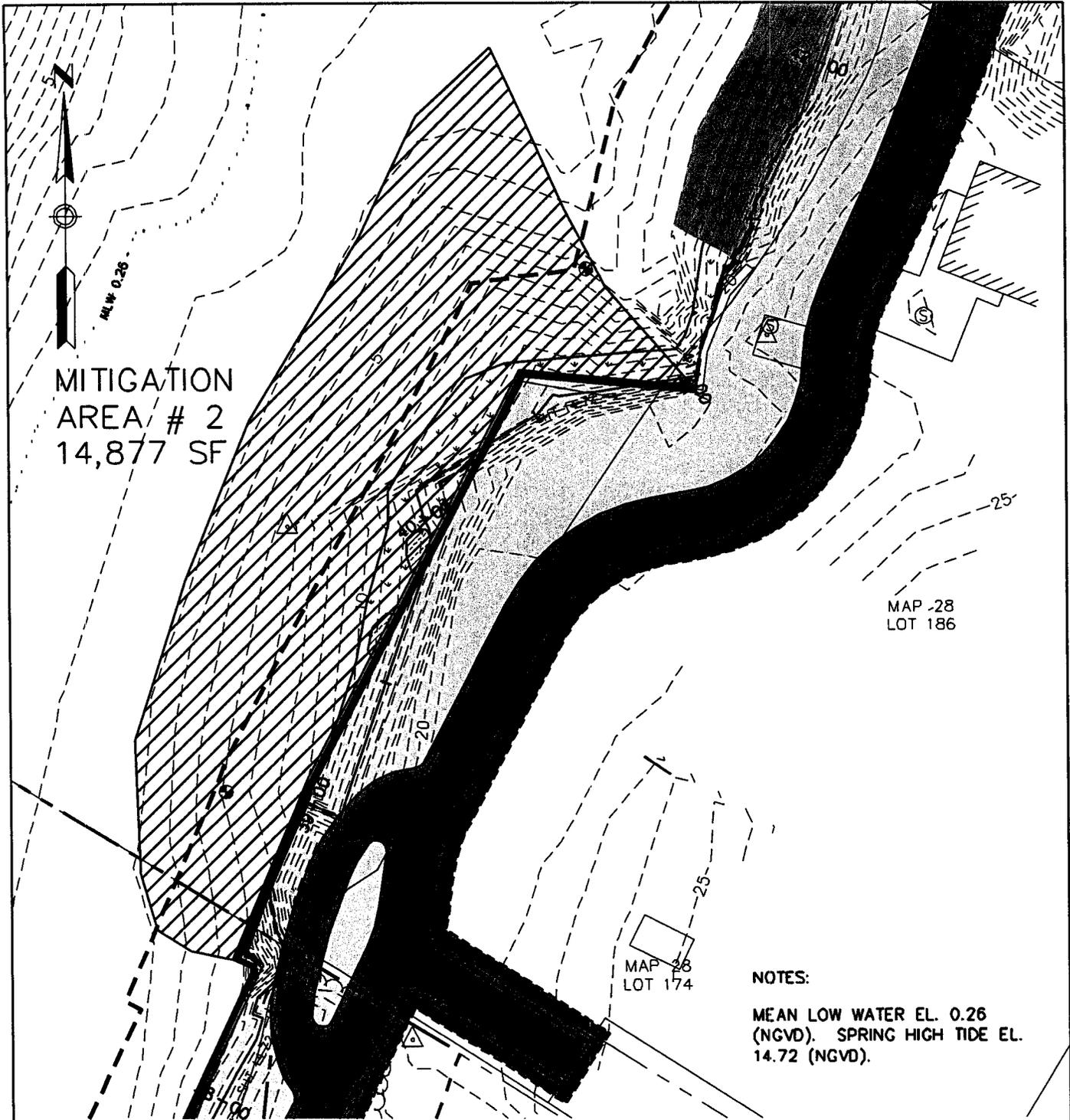
ON-SITE WETLAND MITIGATION AREA #1

DESIGNED BY:	CHECKED BY:
DRAWN BY:	FILE: 103068-MITIGATION

MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 103068.07
DATE: 9/1/2005
SCALE: 1"=40'
FIGURE 2-A



LEGEND:

- PROPOSED RIP RAP STABILIZATION
- PROPOSED FILL
- PROPOSED VERTICAL BULKHEAD
- FUTURE MULTI-USE TRAIL
- PROPOSED MITIGATION/RESTORATION AREA

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG

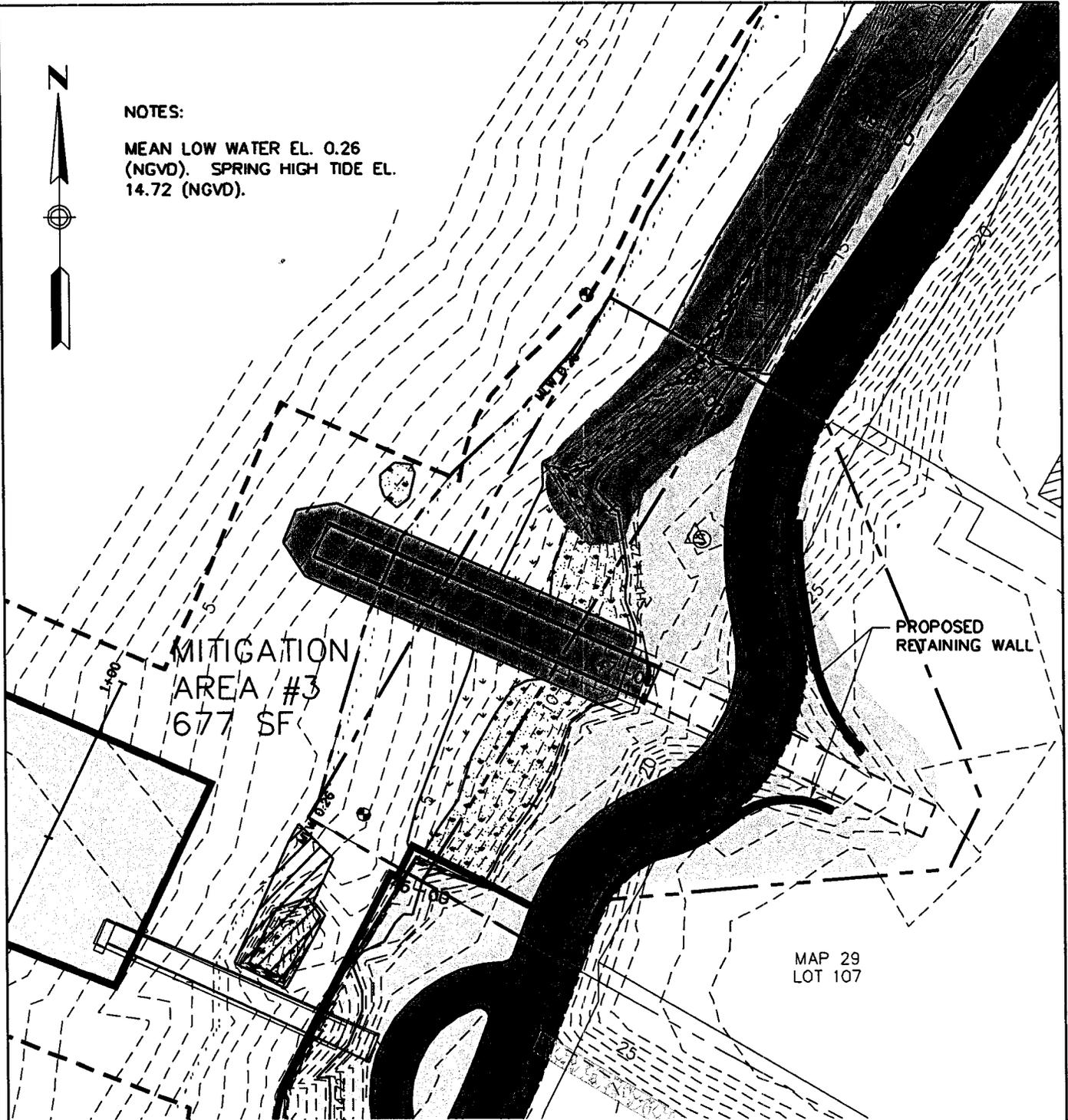


<p>WOODARD & CURRAN Engineering · Science · Operations</p> <p>MAINE 11111 800 564 2323</p>	<p>ON-SITE WETLAND MITIGATION AREA #2</p>	<p>MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE</p>	<p>JOB NO: 103068.07 DATE: 9/1/2005 SCALE: 1"=40'</p>
	<p>DESIGNED BY: _____ CHECKED BY: _____ DRAWN BY: _____ FILE: 103068-MITIGATION</p>	<p>CITY OF BREWER RIVERBANK STABILIZATION PROJECT</p>	<p>FIGURE 2-B</p>



NOTES:

MEAN LOW WATER EL. 0.26
(NGVD). SPRING HIGH TIDE EL.
14.72 (NGVD).



LEGEND:

- PROPOSED RIP RAP STABILIZATION
- PROPOSED FILL
- PROPOSED VERTICAL BULKHEAD
- FUTURE MULTI-USE TRAIL



PROPOSED MITIGATION/
RESTORATION AREA



SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG



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BANGOR, MAINE 800 534 2333

**ON-SITE WETLAND MITIGATION
AREA #3**

DESIGNED BY:	CHECKED BY:
DRAWN BY:	FILE: 103068-MITIGATION

MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

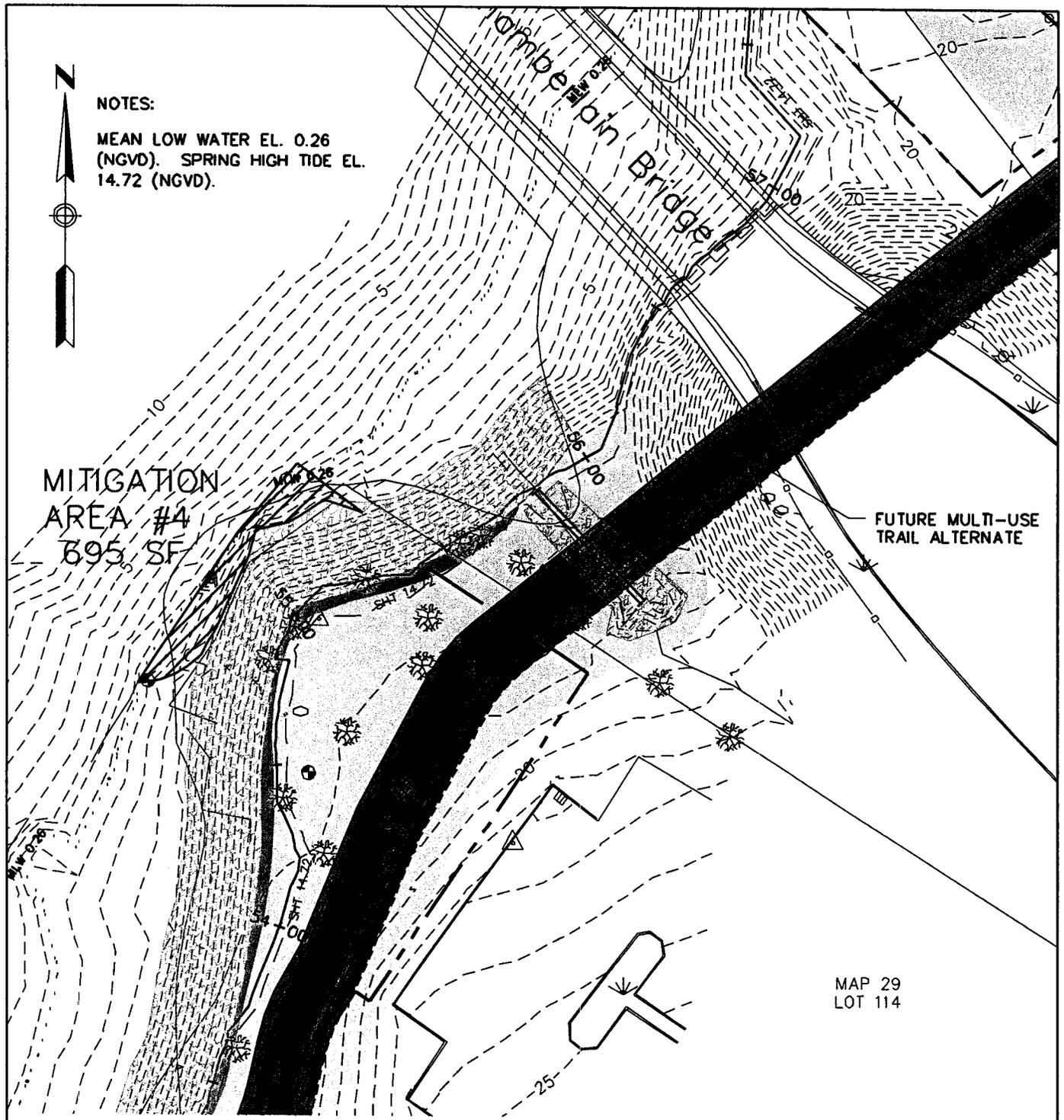
CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 103068.07
DATE: 9/1/2005
SCALE: 1"=40'

FIGURE 2-C



NOTES:
 MEAN LOW WATER EL. 0.26 (NGVD). SPRING HIGH TIDE EL. 14.72 (NGVD).



MITIGATION AREA #4
 395, SF

FUTURE MULTI-USE TRAIL ALTERNATE

MAP 29
 LOT 114

LEGEND:

- PROPOSED RIP RAP STABILIZATION
- PROPOSED FILL
- PROPOSED VERTICAL BULKHEAD
- FUTURE MULTI-USE TRAIL
- PROPOSED MITIGATION/RESTORATION AREA

SOURCES:

- PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
- TOPOGRAPHICAL INFORMATION FROM SURVEY BY SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
- PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG



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 Engineering · Science · Operations
 WASHINGTON, D.C. 20004 800 584 2333

ON-SITE WETLAND MITIGATION AREA #4 (MUDDY RUDDER)

DESIGNED BY:	CHECKED BY:
DRAWN BY:	FILE: 103068-MITIGATION

MAINE
 DEPARTMENT OF TRANSPORTATION
 AUGUSTA, MAINE

CITY OF BREWER
 RIVERBANK STABILIZATION PROJECT

JOB NO: 103068.07
DATE: 9/1/2005
SCALE: 1"=40'
FIGURE 2-D



NOTES:

MEAN LOW WATER EL. 0.26
(NGVD). SPRING HIGH TIDE EL.
14.72 (NGVD).

MITIGATION
AREA #6
131 SF

MEAN HIGH WATER
EL. 13.52

MITIGATION
AREA #5
105 SF

MAP 29
LOT 117

MAP 29
LOT 126

FUTURE MULTI-USE
TRAIL ALTERNATE

LEGEND:

PROPOSED RIP RAP STABILIZATION



PROPOSED MITIGATION/
RESTORATION AREA



PROPOSED FILL



PROPOSED VERTICAL BULKHEAD



FUTURE MULTI-USE TRAIL



SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.

TOPOGRAPHICAL INFORMATION FROM SURVEY BY
SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)

PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG



**ON-SITE WETLAND MITIGATION
AREA #'S 5 AND 6**

MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

JOB NO: 103068.07
DATE: 9/1/2005
SCALE: 1"=40'

DESIGNED BY: _____ CHECKED BY: _____
DRAWN BY: _____ FILE: 103068-MITIGATION

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

FIGURE 2-E



MITIGATION
AREA #7
740 SF

FUTURE MULTI-USE
TRAIL ALTERNATE

MAP 29
181-126

NOTES:

MEAN LOW WATER EL. 0.26
(NGVD). SPRING HIGH TIDE EL.
14.72 (NGVD).

LEGEND:

PROPOSED RIP RAP STABILIZATION



PROPOSED MITIGATION/
RESTORATION AREA



PROPOSED FILL



PROPOSED VERTICAL BULKHEAD



FUTURE MULTI-USE TRAIL



SOURCES:

PROPERTY LINE INFORMATION FROM CITY OF BREWER TAX MAPS.
TOPOGRAPHICAL INFORMATION FROM SURVEY BY
SHYKA, SHEPPARD, AND GARSTER LAND SURVEYORS (SSG)
PROPOSED EASEMENT LINES BASED ON FIELD SURVEY BY SSG



WOODARD & CURRAN
Engineering · Science · Operations

BANGOR, MAINE

800.534.2500

**ON-SITE WETLAND MITIGATION
AREA #7**

DESIGNED BY:
DRAWN BY:

CHECKED BY:
FILE: 103068-MITIGATION

MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

CITY OF BREWER
RIVERBANK STABILIZATION PROJECT

JOB NO: 103068.07
DATE: 9/1/2005
SCALE: 1" = 40'

FIGURE 2-F

PROJECT: Riverbank Stabilization Project MDO/City of Brewer - Mill-Use Trail & Existing Conditions		ADDRESS: Brewer, Maine		PROJECT: Sedgeunkedunk Stream	
SCALE: 1"=120'		DATE: September 1, 2005		PROJECT NO. 03.0068.07	
NO.:		REVISED:		FIGURE NO. 3	
DATE:				WOODLOT ALTERNATIVES, INC. ENVIRONMENTAL CONSULTANTS 10366-071, 887-87-7222, 7222 S. 134th Ave.	

