

SIDNEY

LYONS ROAD / I 95 SB BRIDGE #1463

LYONS RD / I-95 NB BRIDGE #5783

DRUMMOND ROAD / I-95 BRIDGE #5784

BRIDGE RAIL AND POST REPLACEMENT

WIN 026379.00

2020

Updated 05/15/2020

STATE PROJECT

MAINTENANCE & OPERATIONS

BIDDING INSTRUCTIONS

1. Use pen and ink to complete all paper Bids. Signatures shall be original. Stamped and copied signatures will not be accepted.
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 Agreement, Offer & Award form, e) a Bid Guaranty, f) the completed Contractor Information Sheet, and g) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

For an Electronic Bid:

NOTE: Not all projects accept Electronic Bids. Please review the Notice to Contractors and see if it specifically states that Electronic Bids will be accepted.

- a) a completed Bid using Expedite® software and submitted via the Bid Express™ web-based service, b) an electronic Bid Guaranty (if required) or a faxed copy of a Bid Bond (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 items in the Schedule of Items.
 4. Bid Guaranty 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 or
 - c) an electronic bid bond submitted with an electronic bid.
 5. All Bid Packages which are mailed or sent express, shall be provided in double (one envelope inside the other) envelopes, for security and other reasons. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

WIN:

Towns:

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

WIN:

Towns:

Date of Bid Opening:

Name of Contractor:

If a paper Bid is to be sent express, please take note that overnight services do not always arrive in time and that delivery may be affected by carrier volume, weather and other factors. Packages using express services should be sent to directly to the DOT Headquarters Building, Maine Department of Transportation, 24 Child Street, Augusta. "FedEx First Overnight" delivery is suggested as the package is delivered directly to the DOT Headquarters Building, Mailroom, 24 Child Street, Augusta. Allow extra days for U.S. Postal Service Express Mail which has proven not to be reliable and sometimes does not deliver directly to the DOT Headquarters Building but instead delivers to the State of Maine Mail Distribution Center.

If a paper bid is to be mailed, the mailing address is Maine Department of Transportation, 16 State House Station, Augusta, ME 04333-0016. Allow additional working days for this mail to pass through the state mail system in addition to the US Postal Service as this mail is not delivered directly to the Department of Transportation.

If a paper Bid is to be hand carried, deliver directly to the “Public Entrance” which is located on the Capitol Street side of the DOT Headquarters Building in Augusta. <http://www.maine.gov/mdot/contact>. Hand-carried Bids may be in one envelope, and should be marked with the following information:

Bid Enclosed: Do Not Open

WIN:

Towns:

Date of Bid Opening:

Name of Contractor:

Bids are not accepted by email or FAX.

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, March 2020 Edition.

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 an optional plan holders 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 fill out the on-line plan holder registration form and provide an email address to 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 Rebecca Snowden at rebecca.snowden@maine.gov or Diane Barnes at diane.barnes@maine.gov.

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 submitting questions concerning specific Contracts that have been advertised for Bid, include additional numbered pages as required. RFI’s may be faxed to 207-624-3431, submitted electronically through the Departments web page of advertised projects by selecting the RFI tab on the project details page or via e-mail to RFI-Contracts.MDOT@maine.gov.

These are the only allowable mechanisms 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.

When submitting RFIs by Email please follow the same guidelines as stated on the “Request for Information” form and include the word “RFI” along with the Project name and Identification number in the subject line.

State of Maine
Department of Transportation

RFI No: _____

REQUEST FOR INFORMATION

Date _____ Time _____

Information Requested for:

WIN(S): _____ Town(s): _____ Bid Date: _____

Question(s): _____

Request by:

Company Name: _____ Phone: (_____) _____

Email: _____ Fax: (_____) _____

Complete this form and fax to 207-624-3431, Attn: Project Manager (name listed on the "Notice to Contractors"), or Email questions to RFI-Contracts.MDOT@maine.gov, Please include the word "RFI" along with the Project Name and Identification Number in the Subject line, or electronically by using the RFI Tab located on the Individual Projects Detail page.

Vendor Registration

Prospective Bidders must register as a vendor with the Department of Administrative & Financial Services if the vendor is awarded a contract. Vendors will not be able to receive payment without first being registered. Vendors/Contractors will find information and register through the following link –

<http://www.maine.gov/purchases/venbid/index.shtml>

CONTRACTOR INFORMATION

Contractor Name: _____

Mailing Address: _____

Vendor Customer Number: _____

Contact Information (Primary Contact): _____

Phone: _____ **Cell Phone:** _____

Fax: _____

Email: _____

Mailing Address (if different from above): _____

The company has the following organizational structure:

Sole Proprietorship

Limited Liability Company

Partnership

Joint Venture

Corporation

Other: _____

(Date)

(Signature)

(Name and Title Printed)

**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 "Bids for **Bridge Rail and Post Replacement** in the town of **SIDNEY**" will be received from contractors at the Reception Desk, Maine DOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on July 29, 2020 and at that time and place publicly opened and read. Bids will be accepted from all bidders. **We now 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. Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.** The lowest responsive bidder must demonstrate successful completion of projects of similar size and scope to be considered for the award of this contract.

Description: WIN 26379.00

Location: In Kennebec County, project is located on the Lyons Road/I95 SB Bridge (#1463), Lyons Road/I-95 NB Bridge (#5783) and the Drummond Road/I-95 Bridge (#5784) in Sidney.

Outline of Work: Remove and replace Bridge Mounted Rail, Work Zone Traffic Control, and other incidental work.

For general information regarding Bidding and Contracting procedures, contact George Macdougall at (207) 624-3410. Our webpage at <http://www.maine.gov/mdot/contractors/> contains a copy of the Schedule of Items, Plan Holders List, written portions of bid amendments, drawings, bid results and an electronic form for RFI submittal. For Project-specific information fax all questions to **Gail Iler** at (207) 624-3431, use electronic RFI form or email questions to RFI-Contracts.MDOT@maine.gov, project name and identification number should be in the subject line. Questions received after 12:00 noon of Friday 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. TTY users call Maine Relay 711.

Bid Documents, plans, specifications and bid forms can be viewed and obtained digitally at no cost at <http://www.maine.gov/mdot/contractors/>. Plans, specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine and at the Department of Transportation's Regional Office in Augusta. 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. Bid Book \$10 (\$13 by mail), payment in advance, all non-refundable.

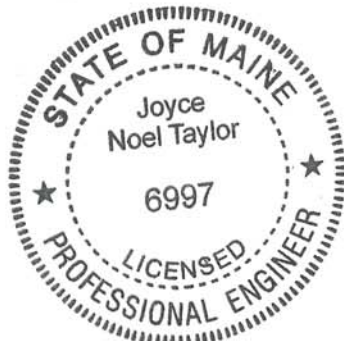
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$12,000 payable to Treasurer, State 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 State Laws.

All work shall be governed by *State of Maine, Department of Transportation, Standard Specifications, March 2020 Edition*, price \$10 [\$15 by mail], and *Standard Details, March 2020 Edition*, price \$10 [\$15 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. *Standard Detail* updates can be found at <http://www.maine.gov/mdot/contractors/publications/>.

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

Augusta, Maine
July 8, 2020



A handwritten signature in blue ink that reads "Joyce Noel Taylor".

JOYCE NOEL TAYLOR, P. E.
CHIEF ENGINEER

**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/contractors/> . 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)

6/25/2020

Maine Department of Transportation

Proposal Schedule of Items

Page 1 of 1

Proposal ID: 026379.00

Project(s): 026379.00

SECTION: 1 PROJECT ITEMS

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0010	202.134 REMOVING EXISTING RAILINGS (RETAINED BY DEPARTMENT)	LUMP SUM	LUMP SUM		_____	_____
0020	606.366 GUARDRAIL, REMOVE & RESET	300.000 LF	_____	_____	_____	_____
0030	606.70 TRANSITION SECTION THRIE BEAM	8.000 EA	_____	_____	_____	_____
0040	606.73 GUARDRAIL, THRIE BEAM, SINGLE RAIL, BRIDGE MOUNTED	1,246.000 LF	_____	_____	_____	_____
0050	652.39 WORK ZONE TRAFFIC CONTROL	LUMP SUM	LUMP SUM		_____	_____
0060	659.10 MOBILIZATION	LUMP SUM	LUMP SUM		_____	_____
Section: 1			Total:		_____	_____
			Total Bid:		_____	_____

Paper bids shall be signed in pen and ink. Stamped and copied signatures will not be accepted.

(Print Respondent's Name and Title)

Signature

Date

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

_____ (Contractor)
a corporation or other legal entity organized under the laws of the State of _____, 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, **WIN 026379.00** for the **Bridge Rail and Post Replacement** in the town of **Sidney**, County of **Kennebec**, 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 31, 2020**. 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, March 2020 Edition* 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 _____

\$ _____ 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, March 2020 Edition, Standard Details March 2020 Edition* 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 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 March 2020 Edition*, *Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

WIN 026379.00 for the Bridge Rail and Post Replacement in the town of Sidney, County of Kennebec,

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, March 2020 Edition*, 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 March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

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

Fifth: 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.
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: Bruce A. Van Note, 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

_____ (Contractor)
a corporation or other legal entity organized under the laws of the State of _____, 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, **WIN 026379.00** for the **Bridge Rail and Post Replacement** in the town of **Sidney**, County of **Kennebec**, 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 31, 2020**. 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, March 2020 Edition* 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 _____

\$ _____ 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, March 2020 Edition, Standard Details March 2020 Edition* 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 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 March 2020 Edition*, *Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

WIN 026379.00 for the Bridge Rail and Post Replacement in the town of Sidney, County of Kennebec,

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, March 2020 Edition*, 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 March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

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

Fifth: 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.
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: Bruce A. Van Note, 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)** **(Contractor)** 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)**

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A. The Work.

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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 31, 2020**. 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, March 2020 Edition* 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 (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, March 2020 Edition, Standard Details March 2020 Edition* 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 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.

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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.”

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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, March 2020 Edition*, 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 March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

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

Fifth: 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

(Print Date here)
Date

(Sign Here)
(Signature of Legally Authorized Representative of the Contractor)

(Witness Sign Here)
Witness

(Print Name Here)
(Name and Title Printed)

G. Award.

Your offer is hereby accepted.
documents referenced herein.

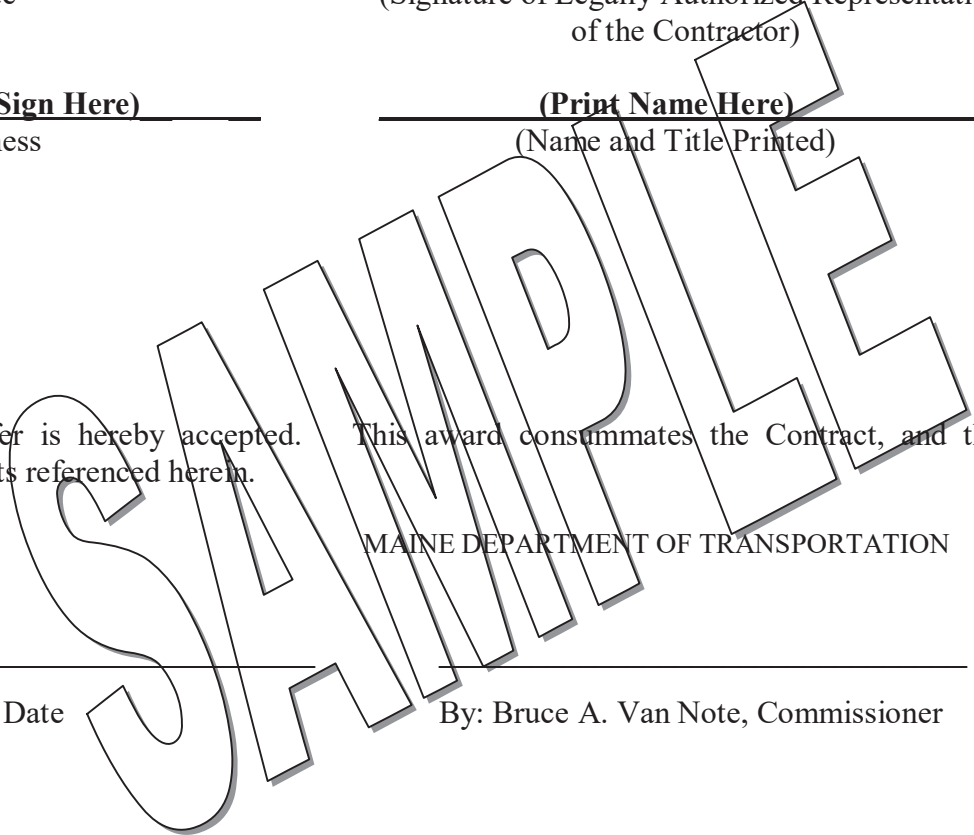
This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: Bruce A. Van Note, Commissioner

Witness



BOND # _____

CONTRACT PERFORMANCE BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ in 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 _____
_____ **in 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

.....

State of Maine
 Department of Labor
 Bureau of Labor Standards
 Augusta, Maine 04333-0045
 Telephone (207) 623-7906

Wage Determination - In accordance with 26 MRS §1301 et. seq., this is a determination by the Bureau of Labor Standards, of the fair minimum wage rate to be paid to laborers and workers employed on the below titled project.

**2020 Fair Minimum Wage Rates
 Heavy & Bridge Kennebec County**

Occupation Title	Minimum	Minimum	Total	Occupation Title	Minimum	Minimum	Total
	Wage	Benefit			Wage	Benefit	
Asphalt Raker	\$16.00	\$0.00	\$16.00	Laborers (Helpers & Tenders)	\$17.00	\$3.33	\$20.33
Backhoe Loader Operator	\$26.00	\$8.61	\$34.61	Laborer - Skilled	\$21.50	\$3.99	\$25.49
Boom Truck (Truck Crane) Operator	\$27.97	\$7.25	\$35.22	Line Erector Power/Cable Splicer	\$22.55	\$8.86	\$31.41
Bricklayer	\$24.50	\$4.47	\$28.97	Loader Operator - Front-End	\$23.00	\$3.76	\$26.76
Bulldozer Operator	\$22.00	\$4.70	\$26.70	Mechanic- Maintenance	\$23.69	\$5.16	\$28.85
Carpenter	\$25.95	\$5.10	\$31.05	Mechanic- Refrigeration	\$27.00	\$4.21	\$31.21
Carpenter - Rough	\$22.29	\$4.14	\$26.43	Millwright	\$31.38	\$5.62	\$37.00
Cement Mason/Finisher	\$18.00	\$0.72	\$18.72	Painter	\$22.00	\$0.00	\$22.00
Communication Equip Installer	\$24.50	\$0.44	\$24.94	Pipe/Steam/Sprinkler Fitter	\$32.32	\$17.36	\$49.68
Comm Trans Microwave & Cell	\$21.00	\$0.00	\$21.00	Pipelayer	\$26.78	\$6.25	\$33.03
Cran Operator =>15 Tons)	\$32.00	\$8.59	\$40.59	Plumber (Licnsed)	\$26.00	\$4.50	\$30.50
Diver	\$24.00	\$3.12	\$27.12	Plumber Helper/Trainee	\$19.00	\$2.98	\$21.98
Earth Auger Operator	\$26.65	\$6.12	\$32.77	Propane/Natural Gas Serv/Install	\$32.00	\$9.23	\$41.23
Electrician - Licensed	\$32.50	\$8.38	\$40.88	Rigger	\$23.00	\$7.10	\$30.10
Electrician Helper/Cable Puller	\$17.75	\$4.83	\$22.58	Roller Operator - Earth	\$16.43	\$2.69	\$19.12
Excavator Operator	\$25.00	\$0.00	\$25.00	Roller Operator - Pavement	\$20.25	\$3.56	\$23.81
Fence Setter	\$18.00	\$1.30	\$19.30	Screed/Wheelman	\$18.50	\$2.45	\$20.95
Flagger	\$13.00	\$0.00	\$13.00	Sheet Metal Worker	\$26.56	\$6.03	\$32.59
Grader/Scraper Operator	\$22.00	\$2.16	\$24.16	Truck Driver - Light	\$16.00	\$0.44	\$16.44
Industrial Truck (Forklift) Operator	\$29.07	\$6.63	\$35.70	Truck Driver - Medium	\$19.00	\$1.97	\$20.97
Ironworker - Ornamental	\$22.30	\$22.37	\$44.67	Truck Driver - Heavy	\$19.00	\$0.00	\$19.00
Ironworker - Reinforcing	\$25.00	\$6.00	\$31.00	Truck Driver - Tractor Trailer	\$26.78	\$6.42	\$33.20
Ironworker - Structural	\$20.00	\$4.55	\$24.55				

The Laborer classifications include a wide range of work duties. Therefore, if any specific occupation to be employed on this project is not listed in this determination, call the Bureau of Labor Standards at the above number for further clarification.

Welders are classified in the trade to which the welding is incidental.

Apprentices – The minimum wage rate for registered apprentices are those set forth in the standards and policies of the Maine State Apprenticeship and Training Council for approved apprenticeship programs.

Title 26 §1310 requires that a clearly legible statement of all fair minimum wage and benefits rates to be paid the several classes of laborers, workers and mechanics employed on the construction on the public work must be kept posted in a prominent and easily accessible place at the site by each contractor and subcontractor subject to sections 1304 to 1313.

Appeal – Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates.

A true copy

Attest: Scott R. Cotnoir
 Scott R. Cotnoir
 Wage & Hour Director
 Bureau of Labor Standards

Expiration Date: 12-31-2020

**STATE OF MAINE
DEPARTMENT OF TRANSPORTATION**



SPECIFICATIONS

2020 MaineDOT Standard Specifications with Updates, the 2014 MaineDOT Standard Details with Updates, and the MaineDOT Maintenance Manual.

TRAFFIC DATA

Current (2019) AADT BR#1463 & #5783 1,421
Current (2019) AADT BR#5784 309

MATERIALS

Structural Steel:
Rail Posts ASTM A 500, Grade C
All Material (except as noted) ASTM A 709, Grade 50
High Strength Bolts, Unless Noted Otherwise ASTM A325 or A449
Galvanized, ASTM 153
Hex Nuts and Heavy Hex Nuts Galvanized, ASTM A153

BASIC DESIGN STRESSES

Structural Steel:
ASTM A 709, Grade 50 F_y = 50,000 psi
ASTM A 709, Grade 36 F_y = 36,000 psi
ASTM A449 or A325 F_u = 120,000 psi

LIST OF DRAWINGS

Title Sheet 1
Bridge Rail Layout Plans 2
Elevations and Notes 3
Sections and Steel Details 4
Parts Schedules and Estimated Quantities 5

**BRIDGE RAIL AND POST REPLACEMENT
KENNEBEC COUNTY
LYONS ROAD BRIDGES (BR#1463 & BR#5783)
and
DRUMMOND ROAD BRIDGE (BR#5784)
OVER
INTERSTATE 95
WR#39865
WIN 26379.00
PROJECT LENGTH - Approximately 0.11 mi. Total**



MAINTENANCE OF TRAFFIC

Maintain one 11'-0" minimum wide lane of alternating one - way traffic per MaineDOT Section 652 - Maintenance of Traffic specification.

PROJECT LOCATION	On the Lyons Road and the Drummond Road over I-95 in Sidney BR#1463 & BR#5783 (Lyons Road) - Lat./Long. 44°27'11.1" N 69°42'58.3" W BR#5784 (Drummond Road) - Lat./Long. 44°28'17.7" N 69°42'25.2" W
PROGRAM AREA	Bridge Maintenance
OUTLINE OF WORK	Replace existing Bridge Rail with new Steel tube and Thrie Beam system.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER		
CHIEF ENGINEER		

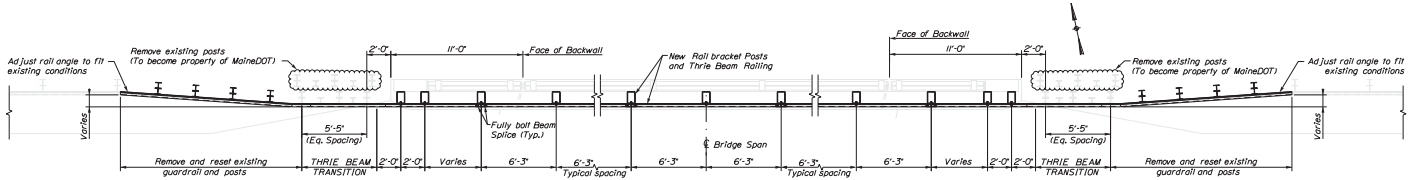


PROJECT INFORMATION	PROJECT NUMBER	WIN 26379.00
PROJECT MANAGER	DATE	
DESIGNER	DATE	
CONSULTANT	DATE	
CONTRACTOR	DATE	
PROJECT COMPLETION DATE		

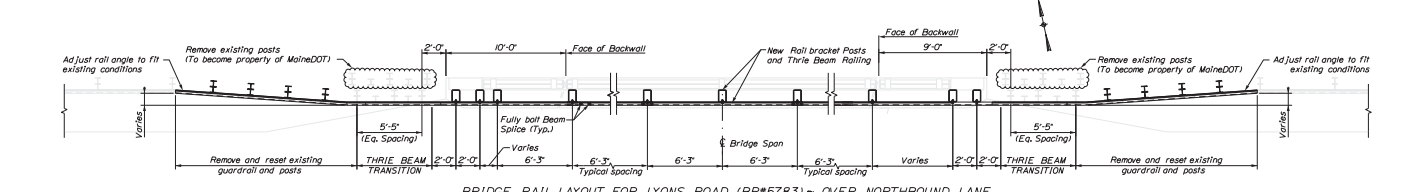
26379.00	SIDNEY	Lyons Road & Drummond Road	TITLE SHEET
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SHEET NUMBER	1
OF 5	

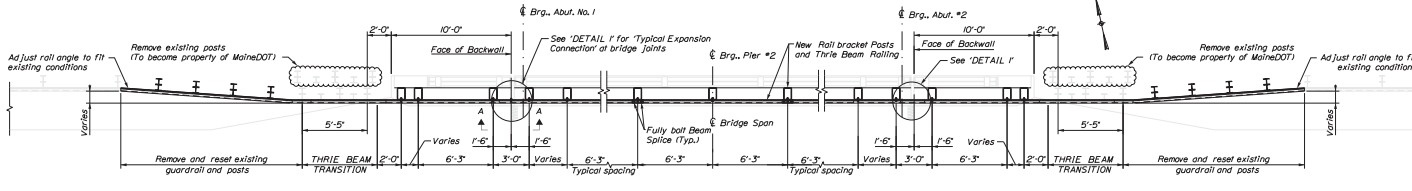
Date: 1/12/2020
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 Division: HIGHWAY
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BRIDGE RAIL LAYOUT FOR LYONS ROAD (BR#1463) ~ OVER SOUTHBOUND LANE
 (North Side As Detailed; South Side ~ Opposite Hand)
 NOTES:
 1. See "THIRIE BEAM ELEVATION AT CURB FOR BRIDGE #1463" for more information.
 2. Refer to "BRIDGE INFORMATION CHART" for bridge skew, number and location of joints, parapet height and width, and bridge length.
 3. Thrie Beam splices shall be bolted with 12 - 7/8" ϕ x 3/4" Long Galvanized Bolts as recommended by the manufacturer and as directed by the Project Manager.



BRIDGE RAIL LAYOUT FOR LYONS ROAD (BR#5783) ~ OVER NORTHBOUND LANE
 (North Side As Detailed; South Side ~ Opposite Hand)
 NOTES:
 1. See "THIRIE BEAM ELEVATION AT CURB FOR BRIDGE #5783" for more information.
 2. Refer to "BRIDGE INFORMATION CHART" for bridge skew, number and location of joints, parapet height and width, and bridge length.
 3. Thrie Beam splices shall be bolted with 12 - 7/8" ϕ x 3/4" Long Galvanized Bolts as recommended by the manufacturer and as directed by the Project Manager.



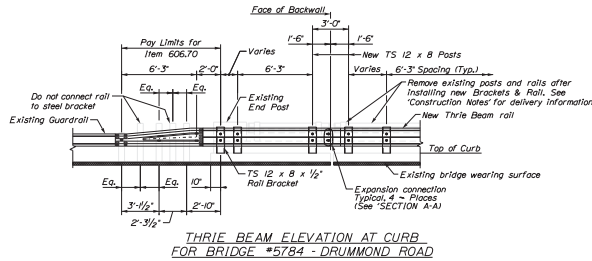
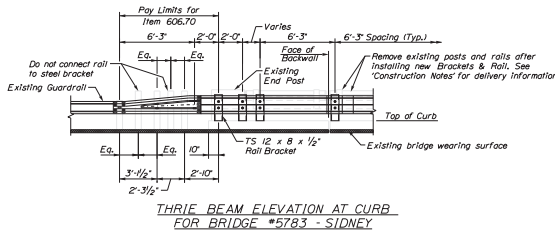
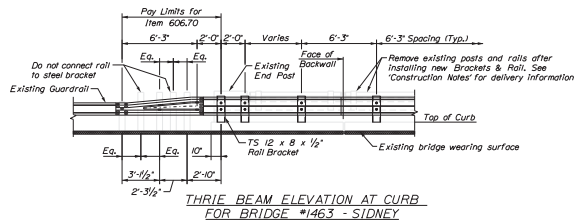
BRIDGE RAIL LAYOUT FOR DRUMMOND ROAD (BR#5784)
 NOTES:
 1. See "THIRIE BEAM ELEVATION AT CURB FOR BRIDGE #5784" for more information.
 2. Refer to "BRIDGE INFORMATION CHART" for bridge skew, number and location of joints, parapet height and width, and bridge length.
 3. Thrie Beam splices shall be bolted with 12 - 7/8" ϕ x 3/4" Long Galvanized Bolts as recommended by the manufacturer and as directed by the Project Manager.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		BRIDGE RAIL REPLACEMENT	
BRIDGES		PLANS	
#BASE: 8013 & 8014		WIN: 2017R00	
DATE	BY	SCALE	SHEET NUMBER
PROJECT NUMBER	CY NUMBER	REVISION 1	DATE
LYONS ROAD and DRUMMOND ROAD over I-95 SIDNEY KENNEBEC			
BRIDGE RAIL LAYOUT PLANS			
SHEET NUMBER			
2			
OF 5			

Date: 1/12/2020

User name: common

Division: ... 1003_Plans_Elev..._Database



BRIDGE INFORMATION CHART							
BRIDGE #	TOWN	SKW	EXP. INTS	LOCATION	PARAPET HT.	PARAPET WTH.	LENGTH (w/ of Brg. & Abutment)
1463	SIDNEY	13° 16' 15"	2	2 - MS	1'-0"	1'-0"	153'-6"
5783	SIDNEY	15° 17'	2	2 - MS	1'-0"	1'-0"	161'-6"
5784	SIDNEY	No Skew	2	2 - AB	1'-0"	1'-0"	244'-10"

Notes:
 ~ MS = Midspan
 ~ AB = Abutments

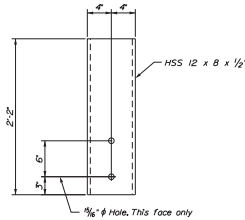
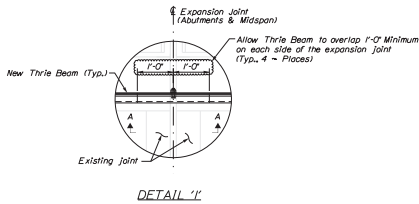
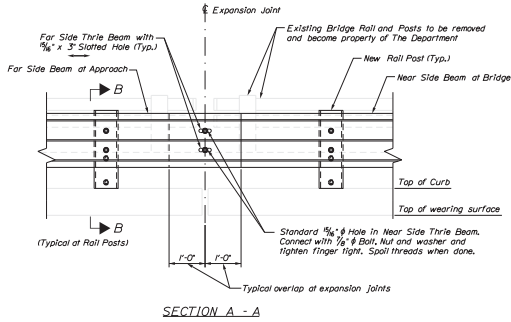
- CONSTRUCTION NOTES:**
- Additional holes in the Thrie Beam and the Type 3 Guardrail panels may be made by drilling, punching or any other method that produces a neat, clean hole of the desired size. Burning of these holes will not be allowed. Paint the cut ends of the cut panels and all new holes with an approved Galvanizing Repair Paint from the MaineDOT OPL. All labor, materials, and incidentals needed to complete guardrail modifications shall be considered incidental to guardrail pay items.
 - The Contractor shall verify all field dimensions required for fabrication of guardrail items.
 - Modifications to new or existing Type 3 Guardrail shall include adding holes as required for conformance to standard details and providing panels of 10 gage thickness. These modifications shall be incidental to Item 606.70 - Transition Section Thrie Beam.
 - Threaded rod shall be ASTM A449 or approved equal.
 - Hardware for threaded rod connections shall be:
 - ~ ASTM A563 for 7/8" Heavy Hex nuts
 - ~ ASTM F436 for 7/8" Hardware washers
 - ~ ASTM A36 for 3" x 3" Pipe washers
 - All associated hardware, including bolts, threaded rods, washers, nuts and plates shall be Hot Dipped Galvanized after fabrication. Galvanizing shall conform to the requirements as ASTM A153.
 - Holes through existing concrete parapet walls for 7/8" threaded rods are to be cored. No drilling of holes will be permitted.
 - Once installation of Thrie Beam is complete, upset threads of all 7/8" rods on each end and paint with a Galvanizing Repair Paint from the MaineDOT OPL.
 - All labor, equipment and material necessary to install the Thrie Beam Guardrail shall be incidental to Item 606.73.
 - Drilling and anchoring of new anchor bolts for the Thrie Beam rail installation on the bridge shall be done in accordance with Special Provision Section 606 - Thrie Beam - Single Rail Bridge Mounted.
 - All existing Bridge Roll shall be removed after installation of new Thrie Beam guardrail and become the property of the Maine Department of Transportation. All removed Bridge Roll and posts shall be placed on pallets and wrapped as directed by the Inspector on site. All salvaged posts and rails shall be delivered to MaineDOT Maintenance Comp at 131 Stonebegan Ave., Fairfield, Maine 04937. Attn: Cy Adams, Region 2 Bridge Transportation Operations Manager (TOM) per Item 202.134 - Removing Existing Rolling (Retained by the Department).
 - All materials and listed pay item quantities, including lump sum quantities are provided by MaineDOT for informational purposes only.

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 BRIDGE RAIL REPLACEMENT

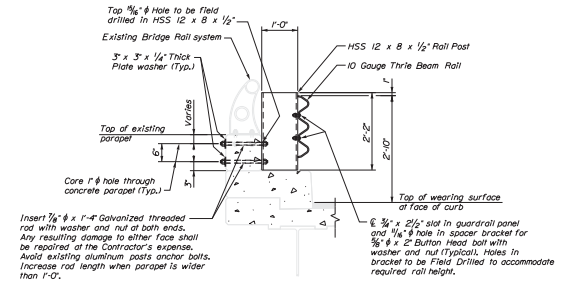
LYONS ROAD and DRUMMOND ROAD
 over I-95
 SIDNEY KENNEBEC
 ELEVATIONS and NOTES

SHEET NUMBER
 3
 OF 5

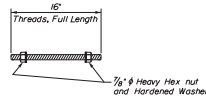
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 CHECKED BY: [blank]
 IN CHARGE: [blank]
 PROJECT NO: 2019-001
 CONTRACT NO: [blank]
 SHEET NO: 3
 TOTAL SHEETS: 3



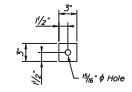
DETAIL OF RAIL BRACKET
 Note:
 - Galvanize to ASTM A153



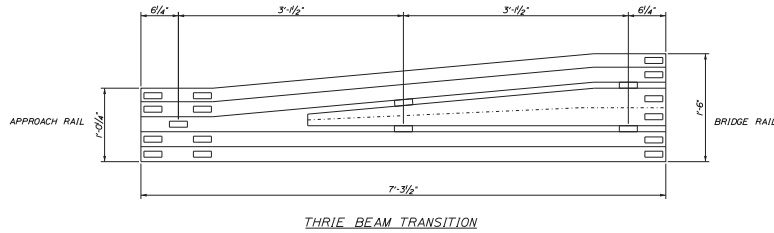
SECTION B - B
 Note:
 - All hardware to be Galvanized
 - Curb reveal is 9" at ALL bridges. Verify in field prior to fabricating Rail Brackets.



DETAIL OF THREADED ROD
 Notes:
 - Rods to be cut in field according to existing conditions
 - All hardware to be Galvanized to ASTM A153
 - $\frac{1}{2}$ " ϕ Rod - ASTM A449
 - $\frac{1}{2}$ " ϕ Heavy Hex nuts - A563
 - $\frac{1}{2}$ " ϕ Hardened Washer - F436



DETAIL OF PLATE WASHER
 Note:
 - Galvanize to ASTM A153



DATE	BY	SCALE
1/12/2020	COMMON	AS SHOWN
PROJECT NUMBER	BY	SCALE
2019004	COMMON	AS SHOWN
DESIGNED BY	CHECKED BY	DATE
COMMON	COMMON	1/12/2020
IN CHARGE	DATE	
COMMON		
PROJECT	DATE	
2019004		
BRIDGE		
313 B		
PLAN		
104		

PARTS SCHEDULE for BR-1463 (SIDNEY)			
QUANTITY	DESCRIPTION	LENGTH	REMARKS
62	HSS 12 x 8 x 1/2"	2'-2"	Guardrail Brackets - ASTM A500, Galvanized
125	7/8" ϕ Threaded Rod	1'-4"	Thread, Full Length - ASTM A449, Galvanized
250	7/8" ϕ Heavy Hex nut	NA	ASTM A563, Galvanized
250	7/8" ϕ Hardened Washer	NA	ASTM F436, Galvanized
125	3" x 3" x 1/4" Plate Washer	NA	ASTM A36, Galvanized
125	5/8" ϕ Button Head Bolts	2"	1- Hex Nut (A563) and 1- Hardened Washer (A436), Galvanized

Notes:
 1) All hardware and materials shall be Galvanized to ASTM A153.
 2) Guardrail Brackets and Threaded Rods to be cut in field to match existing conditions.

PARTS SCHEDULE for BR-5783 (SIDNEY)			
QUANTITY	DESCRIPTION	LENGTH	REMARKS
64	HSS 12 x 8 x 1/2"	2'-2"	Guardrail Brackets - ASTM A500, Galvanized
130	7/8" ϕ Threaded Rod	1'-4"	Thread, Full Length - ASTM A449, Galvanized
260	7/8" ϕ Heavy Hex nut	NA	ASTM A563, Galvanized
260	7/8" ϕ Hardened Washer	NA	ASTM F436, Galvanized
130	3" x 3" x 1/4" Plate Washer	NA	ASTM A36, Galvanized
130	5/8" ϕ Button Head Bolts	2"	1- Hex Nut (A563) and 1- Hardened Washer (A436), Galvanized

Notes:
 1) All hardware and materials shall be Galvanized to ASTM A153.
 2) Guardrail Brackets and Threaded Rods to be cut in field to match existing conditions.

PARTS SCHEDULE for BR-5784 (SIDNEY)			
QUANTITY	DESCRIPTION	LENGTH	REMARKS
94	HSS 12 x 8 x 1/2"	2'-2"	Guardrail Brackets - ASTM A500, Galvanized
190	7/8" ϕ Threaded Rod	1'-4"	Thread, Full Length - ASTM A449, Galvanized
380	7/8" ϕ Heavy Hex nut	NA	ASTM A563, Galvanized
380	7/8" ϕ Hardened Washer	NA	ASTM F436, Galvanized
190	3" x 3" x 1/4" Plate Washer	NA	ASTM A36, Galvanized
8	5/8" ϕ Button Head Bolts	1 3/4"	For Expansion Joints 1- Hex Nut (A563) and 1- Hardened Washer (A436), Galvanized
190	5/8" ϕ Button Head Bolts	2"	1- Hex Nut (A563) and 1- Hardened Washer (A436), Galvanized

Notes:
 1) All hardware and materials shall be Galvanized to ASTM A153.
 2) Guardrail Brackets and Threaded Rods to be cut in field to match existing conditions.

ESTIMATED QUANTITIES						
ITEM NO.	DESCRIPTION	QUANTITY BR-1463	QUANTITY BR-5783	QUANTITY BR-5784	TOTAL	UNIT
202.134	Remove Existing Railing (Retained by Department) (12/18 LF)	1	1	1	1	LF
606.366	Guardrail, Removed and Reset, Type 3c	100	100	100	300	LF
606.70	Transition Section - Triple Beam	4	4	4	12	EA
606.73	Guardrail Triple Beam - Single Rail Bridge Mounted	35.2	36.2	53.2	1246	LF
652.39	Work Zone Traffic Control	1	1	1	1	LS
659.10	Mobilization	1	1	1	1	LS

NOTES:
 1. All materials and listed pay item quantities, including lump sum quantities, are provided by MaineDOT for informational purposes only.
 2. All quantities are estimated from existing plans. Dimensions and actual quantities shall be determined from field verifications.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE RAIL REPLACEMENT

#A563, #A563.3, #A563.4

WV
#563, #563.3, #563.4

PLANS

28379.00

DATE: _____
BY: _____
CHECKED: _____
DESIGNED: _____
DRAWN: _____
SCALE: _____
PROJECT NO.: _____
SHEET NO.: _____

P.E. NUMBER: _____
DATE: _____

PROJECT MANAGER: _____
SUPERVISOR: _____
INSPECTOR: _____
CONTRACT NO.: _____
CONTRACT DATE: _____
CONTRACT VALUE: _____
CONTRACT TYPE: _____

LYONS ROAD and DRUMMOND ROAD
over 1-95
SIDNEY KENNEBEC

PARTS SCHEDULES and ESTIMATED QUANTITIES

SHEET NUMBER

5

OF 5

NOTICE TO CONTRACTORS - PREFERRED EMPLOYEES

Sec. 1303. Public Works; minimum wage

In the employment of laborers in the construction of public works, including state highways, by the State or by persons contracting for the construction, preference must first be given to citizens of the State who are qualified to perform the work to which the employment relates and, if they can not be obtained in sufficient numbers, then to citizens of the United States. Every contract for public works construction must contain a provision for employing citizens of this State or the United States. The hourly wage and benefit rate paid to laborers employed in the construction of public works, including state highways, may not be less than the fair minimum rate as determined in accordance with section 1308. Any contractor who knowingly and willfully violates this section is subject to a fine of not less than \$250 per employee violation. Each day that any contractor employs a laborer at less than the wage and benefit minimum stipulated in this section constitutes a separate violation of this section. [1997, c. 757, §1 (amd).]

SPECIAL PROVISION
SECTION 103
AWARD AND CONTRACTING
(Post-Bid, Pre-Award Qualifications)

Standard Specification Section 103.3 Post-Bid Qualification Delete the entire section and replace with the following:

After Bid Opening and as a condition for Award of the Contract, the lowest responsive bidder must either be prequalified for the Highway Construction or the Bridge Construction category by the Maine Department of Transportation or the Department may require an Apparent Successful Bidder that is not prequalified to demonstrate to the Department's satisfaction that the bidder is responsible, meets the Contractor Requirements set forth in this contract, and is qualified to perform the Work.

If such qualification is required, the Department will provide the Bidder with a written Notice of Post-Bid Qualifications requiring the Bidder to provide written documentation presenting evidence of qualifications.

Contractor Requirements

In order to be considered for the award of this contract, the Bidder and key employees that will be assigned to the Work in this Contract shall have successfully completed projects of similar size and scope and have sufficient experience in guardrail and/or bridge rail installation. Said experience shall include, at a minimum, at least three (3) projects of equal or greater complexity than the work required by this Contract completed by the Bidder in the last five (5) years.

Areas of experience shall include, but are not limited to:

- Installation of guardrail
- Work performed in live traffic in accordance to the Manual on Uniform Traffic Control Devices (MUTCD)

The Contractor shall maintain current licenses, authorizations, ratings and registrations for the duration of the contract.

The Bidder shall be able to comply with the Contract Requirements, be able to deliver according to the contract schedule, and have a history of satisfactory performance.

The Bidder must have a current, applicable Safety Plan on file with the Department or must submit, prior to Contract award, an acceptable, current Safety Plan or Project and Site Specific Safety Plan to the Department which identifies and addresses job hazards of the expected contract work and complies with all applicable federal, State, and local laws

governing safety including all applicable laws and regulations of Occupational Safety and Health Administration (OSHA).

The Bidder may be required to provide any information requested in the “Contractor’s Prequalification Application” form adopted by the Department.

Post-bid Qualification Submittals

The Department will notify the Apparent Successful Bidder of the requirements for post-bid, pre-award qualifications and the Bidder shall provide all of the items within seven (7) days of the notice. The Contractor shall submit two copies or an electronic copy of all required submittals to the Department.

The Bidder may be required to submit evidence of compliance with all Contractor Requirements set forth in this Contract.

If the Bidder does not have a history of satisfactory performance performing similar Work under contracts with the Department that meets the Contractor Requirements regarding experience, the Bidder may be required to submit written documentation setting forth the experience of the Bidder and subcontractor(s) who will be performing the Work specified in the contract documents, including a description of similar construction projects completed in the last five (5) years that highlight the Bidder’s and subcontractors’ related experience. Such information shall include:

1. the Company’s history and experience of work related specifically to the Scope of Work in this contract;
2. the name of the owner for whom the work was performed;
3. the name and telephone number of a contact person;
4. a description of the work performed by the Bidder or their subcontractor; and
5. the total construction cost of each project, and the value of work performed by the Bidder or their subcontractor.

The Bidder may be required to submit the relevant experience of the key personnel and supervisors who will be performing Work under this contract, their experience and number of years performing work related specifically to the Scope of Work in this contract.

The Bidder’s submittal may be required to include a statement describing the personnel and equipment available for the Work and demonstrating that the Bidder is able to deliver according to the contract schedule.

If a Bidder has not previously submitted Traffic Control Plans (TCP) for other Department projects, the Contractor must submit, prior to Contract award, a substantially complete, acceptable, project specific Traffic Control Plan.

If the Bidder is to provide any information requested in the “Contractor’s Prequalification Application” form adopted by the Department, the Notice of Post-Bid Qualifications shall so state.

If a current, applicable copy of the Contractor’s Safety Plan is not on file with the Department, the Contractor must submit, an acceptable, current Contractor’s Safety Plan or Project and Site Specific Safety Plan to the Department in accordance with Special Provision Section 105 Safety Plan. The plan shall identify and addresses job hazards of the expected contract work and comply with all applicable federal, State, and local laws governing safety including all applicable laws and regulations of Occupational Safety and Health Administration (OSHA).

The Bidder may be required to provide its OSHA 300 Log and its Experience Modification Rate provided by applicable insurance carrier.

Upon receipt of the pre-award submittals, the Department will review the submissions and determine if the submitted evidence or information satisfies the Department requirement that the bidder is qualified to properly carry out the terms of the Contract.

The qualifications submitted will be checked for general conformance with the concept of the project and compliance with the requirements set out in the Contract Documents. This review does not modify the Contractor’s duty to comply with the Contract documents.

Bidders shall ensure that all information required herein is submitted. Provision of inaccurate information or failure to provide all completed and required information may result in the Bidder being determined to be “Not Qualified” or disqualified as non-responsive. Within 14 days, the Department will review the required submittals for completeness, conformity with Federal and State requirements, Contract provisions, applicable laws and regulations of Occupational Safety and Health Administration (OSHA), the current edition of the MUTCD, and Department policy and procedures. The Department reserves the right to communicate in writing with Bidders, if needed, to obtain additions to and/or clarification of information contained in the submittals received. Review by the Department, comments by the Department, or any failure to review or comment, shall not absolve the Contractor of its responsibility to develop and implement the Contractor’s Safety Plan or the Project and Site-Specific Safety Plan, or the TCP in accordance with the Contract, or to shift any responsibility to the Department. The Bidder shall have 3 days to submit additions and clarifications. The Bidder will have

no additional opportunity to submit or clarify information. The Department will not provide an opportunity for the Bidder to meet to present evidence.

A Bidder may be determined to be Qualified in accordance with this Special Provision, and still may need to make minor adjustments to the one or more of the plans submitted in order to meet specifications and/or address Department comments. The determination of qualified does absolve the Contractor of the responsibility to submit plans which comply with applicable specifications.

Based on these submissions, the Department will make one of the following determinations:

1. Qualified - The Contractor has satisfied the post-bid, pre-award qualification requirements and demonstrated to the Department's satisfaction that it is responsible, can meet the Contractor Requirements set forth in this contract, and is qualified to perform this type of work. The Contractor may still be required to make minor revisions to one or more of the plans submitted prior to starting on site work.
2. Not Qualified - Bidder is not qualified to properly carry out the terms of the Contract and/or the submission does not meet specifications and accepted standards and is not acceptable, as determined by the Department.

There is no Appeal process and the determination of "Not Qualified" is final. The Department will reject the bid as non-responsive, and the Award process will proceed without the unqualified Bidder.

The Department will notify the Bidder of its determination in writing. If a determination of "Not Qualified" is rendered, the notice will set forth reasons to the extent practical. Such reasons may include the following:

- A. Not meeting contract Contractor Requirements
- B. Insufficient experience
- C. No Safety Plan or Project and Site-Specific Safety Plan or an unacceptable Safety Plan or Project and Site-Specific Safety Plan
- D. Default(s) or termination(s) on past or current Contracts.
- E. Failure to pay or settle all bills for labor, Materials or services on past or current Contracts.
- F. Failure to provide Closeout Documentation on past or current Contracts.
- G. Failure to fulfill warranty obligations on past or current Contracts.

- H. Failure to comply with directives of the Department on past or current Contracts.
- I. "Below Standard" performance as determined from the Department's Contractor's Performance Rating process.
- J. Inability of the Contractor to obtain or retain performance or Payment Bonds meeting MDOT requirements.
- K. Failure to accept an Award of a Contract made by the Department to the Contractor.
- L. Making materially false, deceptive, or misleading Statements or omissions, whether or not under oath, regarding a claim on prior Contracts or on the Contractor's Prequalification Application or the Post-Bid Qualifications submittals.
- M. Failure to provide information requested by the Department pursuant to this Special Provision.
- N. Any of the reasons contained in Section 102.02 of the "Rules Regarding Debarment of Contractors", Maine Department of Transportation Register 17-229, Chapter 102 (October 2, 1985).
- O. Debarment or suspension by any federal, State, or local governmental procurement agency or the Contractor's Agreement to refrain from Bidding as part of the settlement with any such agencies.
- P. Other serious misconduct that the Department reasonably determines will substantially and adversely affect the cost, quality or timeliness of Work, or the safety of Workers or the public.

SPECIAL PROVISION
SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES
(Wage Rates)

104.3.8A. Federal Wage Rates and Labor Laws Delete the entire section 104.3.8A.

104.3.8B State Wage Rates and Labor Laws The State Wage Rates enclosed apply to this work. Federal Wage Rates do not apply to this work.

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Safety Plan)

In order to be awarded a construction contract, the Bidder must have a current, applicable Safety Plan on file with the Department or must submit to the Department's Bureau of Maintenance & Operations, an acceptable, current Contractor's Safety Plan or Project and Site Specific Safety Plan to the Department which identifies and addresses job hazards of the expected contract work and complies with all applicable federal, State, and local laws governing safety including all applicable laws and regulations of Occupational Safety and Health Administration (OSHA).

The Bidder's Project and Site-Specific Safety Plan shall address the specific activities or tasks that require protection and establish the procedures that are to be followed to minimize the hazard. Specific statements which describe both what action is to be taken and how it is to be performed are preferable. The plan shall address the following items which include, but are not limited to:

1. Personal Protective Equipment
2. Materials Handling
3. Work Zone Safety and Traffic Control
4. Work Area Set Up & Control/Traffic, Parking & Visibility
5. Fall Prevention/Fall Protection

If a submittal is required, the Department will notify the Apparent Successful Bidder of the required submittal of the Contractor's Safety Plan or the Project and Site-Specific Safety Plan and the Bidder shall submit two copies or an electronic copy to the Department within seven (7) days of the notice or the Department will reject the bid as non-responsive.

Within 14 days, the Department will review the Apparent Low Bidder's Safety Plan. The Department will review a Project and Site Specific Safety Plan to evaluate if the Bidder has a reasonable understanding of job hazards of the expected contract work, has determined preventive measures to overcome these hazards and understands that the work is to be conducted in compliance with this special provision, Contract requirements and all applicable Federal, State, and local laws governing safety including all applicable laws and regulations of OSHA. The Department reserves the right to communicate in writing with Bidders, if needed, to obtain additions to and/or clarification of information contained in the submittals received. Review by the Department, comments by the Department, or any failure to review or comment, shall not absolve the Contractor of its responsibility to develop and implement a Safety Plan in accordance with the Contract, or to shift any responsibility to the Department. The Bidder shall have 3 days to submit additions, changes and clarifications. Following this 3 (three) day period, the Bidder will have no additional opportunity to submit, modify or clarify information. The Department will not provide an opportunity for the Bidder to meet. If the

Department and the Apparent Successful Bidder agree, an extension beyond the 3 days may occur and, in such case, there shall also be an equivalent or greater extension beyond the 30 days of the Bid and Bid Prices specified in the Standard Specification Section 103.4 Notice of Intent to Award and the Bid remains viable. In no case shall these extensions change the specified Contract Completion Date.

Based on these submissions, the Department will make one of the following determinations:

1. Qualified - The Contractor has satisfied the post-bid, pre-award Safety Plan requirements, however, the Contractor may still be required to make minor revisions to the Safety Plan prior to starting on site work.
2. Not Qualified - Bidder is not qualified to properly carry out the terms of the Contract and/or the submission does not meet specifications and accepted standards and is not acceptable, as determined by the Department.

There is no Appeal process and the determination of "Not Qualified" is final. The Department will reject the bid as non-responsive, and the Award process will proceed without the unqualified Bidder.

Failure by the Contractor to perform the Work in compliance with their submitted Safety Plan, Federal and State requirements, Contract provisions, applicable laws and regulations of OSHA when required or to substantially meet other contractual requirements will be considered a violation and may result in the following actions:

All Incidents: The Contractor will immediately eliminate all unsafe conditions brought to the Contractor's attention by the Department or any other representative of the Department. 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.

1st Incident: If the Contractor has previously received a verbal warning for the same or similar unsafe conditions or does not take corrective action immediately upon receipt of verbal warning, the Department will issue a written warning.

2nd Incident: The Department may (A) give written Notice of Default to the Contractor and immediately terminate the Contract by written Notice of Termination, or (B) take prosecution of the Work away from the Contractor without violating the Contract. Such Contractor will be prohibited from submitting a Bid for the Work in the event that the Work is re-advertised. Further, the Department may refuse to accept any Bid from the Contractor on any Project for a period of two years from the date of such refusal. The Department may then take any action that the Department determines is in the best interest of the Department including re-advertising the Work.

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Limitations of Operations)

1. The Contractor's traffic control plan must be operationally effective, complete and in conformity with Federal requirements, Contract provisions, the current edition of the MUTCD, and Department policy and procedures as determined by the Department prior to beginning work.
2. The Contractor's traffic control plan shall address how work will be performed while preventing all falling debris hazards to the lanes of traffic below.
3. The Contractor shall maintain a 11 ft (minimum) alternating one-way traffic lane, at each bridge location, at all times controlled by flaggers at all entry points of access that will be impacted with stacked traffic.
4. All work schedule changes must be submitted to the Department a minimum of two (2) calendar days prior to the request change.
5. No work will be allowed on Saturday without 48-hour notice and/or prior approval of the Resident.
6. A 48-hour notice will be required for any changes in the work schedule.

SPECIAL PROVISION
SECTION 107
TIME
(Contract Time)

1. The Contractor shall be allowed to commence Work on this project provided that all plans/submittals as required under this contract have been received and approved by the MaineDOT.
2. The specified Contract Completion Date for this Project is **December 31, 2020**.
3. Completion of Physical Work occurs when the Work is complete and has undergone a successful final inspection. Liquidated Damages will cease upon the physical completion of the Work. Completion occurs when the Contractor has finished all Work pursuant to the Contract, the Work is complete and has undergone a successful final inspection and delivered documentation is complete and accepted. Completion does not mean substantial Completion.
4. The Contractor will stop Work and shall have all lanes open to traffic on Friday, **July 3, 2020 at 2:00 PM** and shall not resume work until **July 6, 2020** due to the 4th of July holiday weekend.
5. The Contractor will stop Work and shall have all lanes open to traffic on Friday, **September 4, 2020 at 2:00 PM** and shall not resume work until **September 8, 2020** due to the Labor Day weekend.
6. The Contractor is allowed to commence work and end work daily according to the Sunrise/Sunset Table at <http://www.sunrisesunset.com/usa/Maine.asp>. If the project town is not listed, the closest town on the list will be used as agreed.
7. Night work will not be allowed on this project. This must be addressed in the Contractor's Traffic Control Plan and violations are subject to reduction in payment as such.

SPECIAL PROVISION
SECTION 202
(Removing Existing Railing)

The following shall be added to Standard Specifications Section 202, Removing Structures and Obstructions:

Description This work consists of carefully salvaging the existing metal bridge rail components deemed in good condition as directed by the Resident. This work shall also include stacking and packing of the salvaged metal bridge rail components and transportation to a designated location.

Construction Requirements The bridge rail components shall be removed by the Contractor and transported without damage from the project site to the following locations:

MaineDOT - Fairfield Maintenance Camp
131 Skowhegan Ave.
Fairfield, ME 04937

The Contractor shall inform the Region Bridge TOM **Cy Adams at (207) 215-3128** a minimum of 72 hours in advance of delivery.

The bridge rails and posts shall be adequately secured to wooden pallets before being returned to the Department. Base plates, rail caps, splice bars, clamp bars and miscellaneous associated hardware shall be placed in wooden boxes on wooden pallets. The wooden boxes shall have wooden covers attached with two hinges and a clasp. The clasp shall be secured in the closed position by a method approved by the Resident. The size of the pallets and boxes shall be approved by the Resident. The weight limit on the pallets shall be such that no damage will occur to the pallets or the materials stored on the pallets. MaineDOT is responsible for unloading the bridge rail.

Upon removal of the existing bridge rail, the existing anchor bolts shall be cut off flush with the top of the existing concrete. Flame or thermal cutting shall not be permitted.

Method of Measurement Removing existing bridge railings, as described herein, will be measured by the lump sum.

Basis of Payment The accepted quantity of removing existing railings will be paid for at the contract lump sum price, which price shall be full compensation for removing, salvaging, preserving, storing, securing, packaging, and transporting the railing as provided herein and as directed by the Resident.

<u>Pay Item</u>		<u>Unit</u>
202.134	Removing Existing Railings (Retained by Department)	Lump Sum

SPECIAL PROVISION
SECTION 606
GUARDRAIL
(Thrie Beam Single Rail Bridge Mounted)

Description

This work shall consist of furnishing and installing thrie beam single rail bridge mounted guardrail in accordance with the Plans, Specifications, and these Special Provisions.

Materials

The top of the thrie beam rail height from finished grade at face of curb shall be 34 inches.

The length/height of the steel rectangular structural tubing (HSS 12" x 8" x 1/2") shall allow mounting of the thrie beam guardrail (1" below top of structural tubing) so that the final height of the thrie beam rail meets the height requirement stated in the paragraph above. It is the Contractor's responsibility to verify this dimension on the existing bridge structures.

The 1 inch diameter holes that are required in the concrete barrier for attachment of the steel rectangular structural tubing **shall be cored** through the concrete barrier **not drilled**.

The length of the threaded rod that connects the steel rectangular structural tubing to the concrete barrier will be at least 4 inches greater than the width of the concrete barrier that it is connected to. It is the Contractor's responsibility to verify this dimension on the existing bridge structures.

Steel hardware shall be hot-dip galvanized. Weathering steel is not acceptable.

Construction

The thrie beam guardrail posts shall be set back from the edge of shoulder further than the regular guardrail type 3c in order to achieve a consistent face of guardrail as shown on the Plans.

Method of Measurement

Guardrail Thrie Beam – Single Rail Bridge Mounted will be measured by the linear foot from center to center of end posts along the slope of the rail, except where end connections are made to concrete structures, in which case, measurement will be made to the face of the structure.

Basis of Payment

The accepted quantity of Guardrail Thrie Beam – Single Rail Bridge Mounted will be paid for at the contract unit price per linear foot. Such payment will be full compensation for furnishing and installing beam, offset brackets, backup plates, all modifications as shown and all incidentals necessary to complete the guardrail installation.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
606.73	Guardrail Thrie Beam - Single Rail Bridge Mounted	Linear Foot

SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC
(Traffic Control)

652.7 Method of Measurement. This entire Subsection is revised to read:

Traffic Control Supervisor, furnishing, installation, and maintenance of all traffic control devices **including flaggers** will be measured as one **lump sum** for all work authorized and performed.

652.8 Basis of Payment. This entire Subsection is revised to read:

Traffic Control will be paid for at the contract **lump sum** price. Payment will be full compensation for the Traffic Control Supervisor, flaggers, approach signs, work area signs, drums, cones, panel markers, barricades, arrow boards etc. and maintenance thereof including the setting up and taking down of lane closures as many times as necessary shall be considered part of the lump sum price.

Maintenance of signs includes: replacing devices damaged, lost, or stolen, and cleaning and moving as many times as necessary throughout the life of the contract, regardless whether the work areas or projects are geographically separated or not separated.

The Lump Sum will be payable in installments as follows: 5% of the Lump Sum once the approach signing is complete and approved, with the 95% balance to be paid as the work progresses at a rate proportional to the percentage completion of the Contract.

Failure by the contractor to follow the Contracts 652 Special Provisions and/or The Manual on Uniform Traffic Control Devices (MUTCD) and/or The Contractors own Traffic Control Plan will result in a reduction in payment, computed by reducing The Lump Sum Total by 5% per occurrence. 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.

All other requirements under the Standard Specifications Section 652 will be a part of the lump sum item.

There will be no extra payment for this pay item after the expiration of contract time.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
652.39 Work Zone Traffic Control	Lump Sum

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 xxxx ¹
One Lane Road Ahead
Flagger Sign

Other typical signs include:

Be Prepared to Stop
Low Shoulder
Bump
Pavement Ends

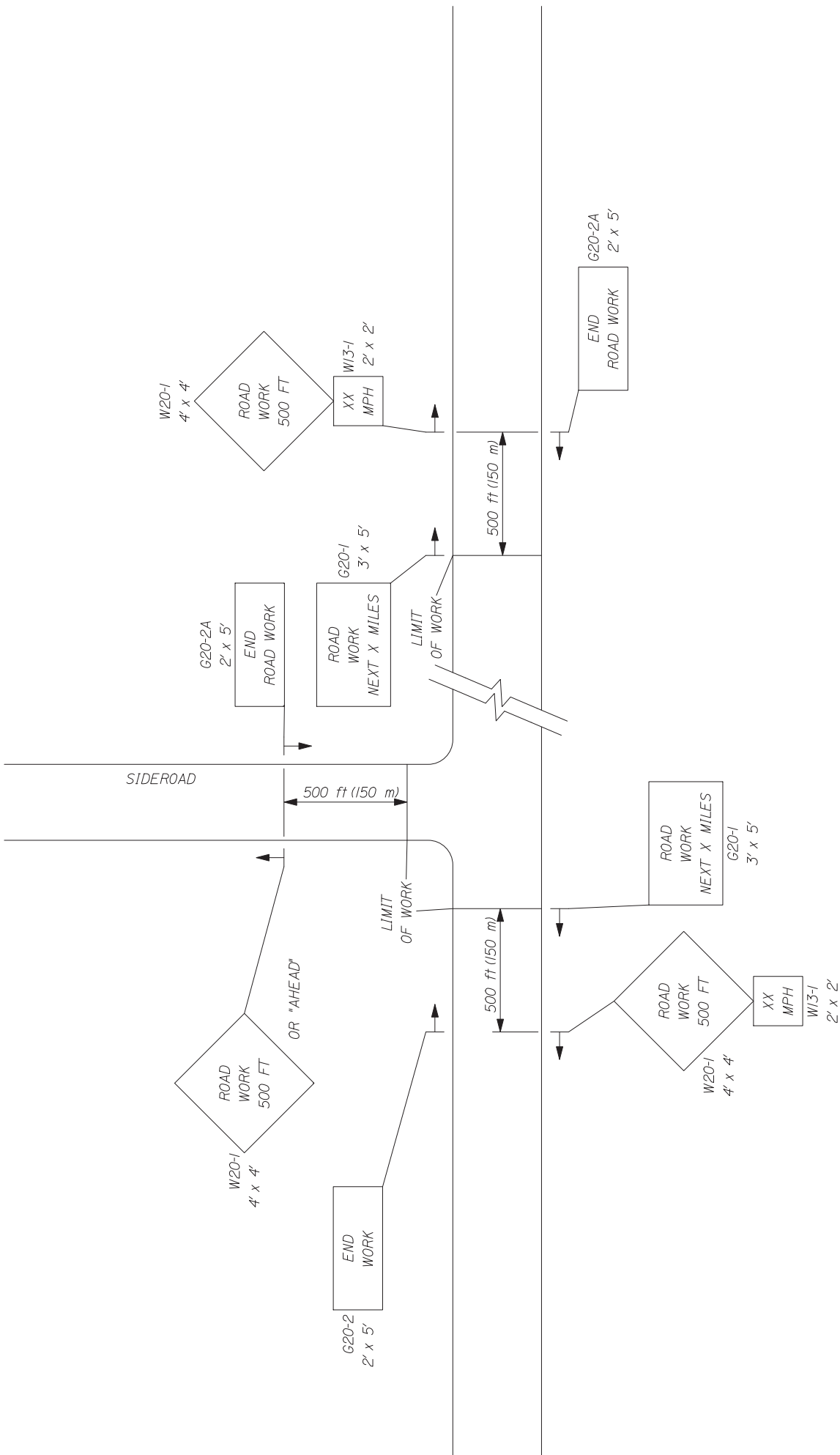
The above lists of Approach signs and Work Area signs are representative of the contract Requirements. Other sign legends may be required.

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. To encourage quality paving in warm-weather conditions, the length can be extended to 4,000 ft depending on the traffic impacts. 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.

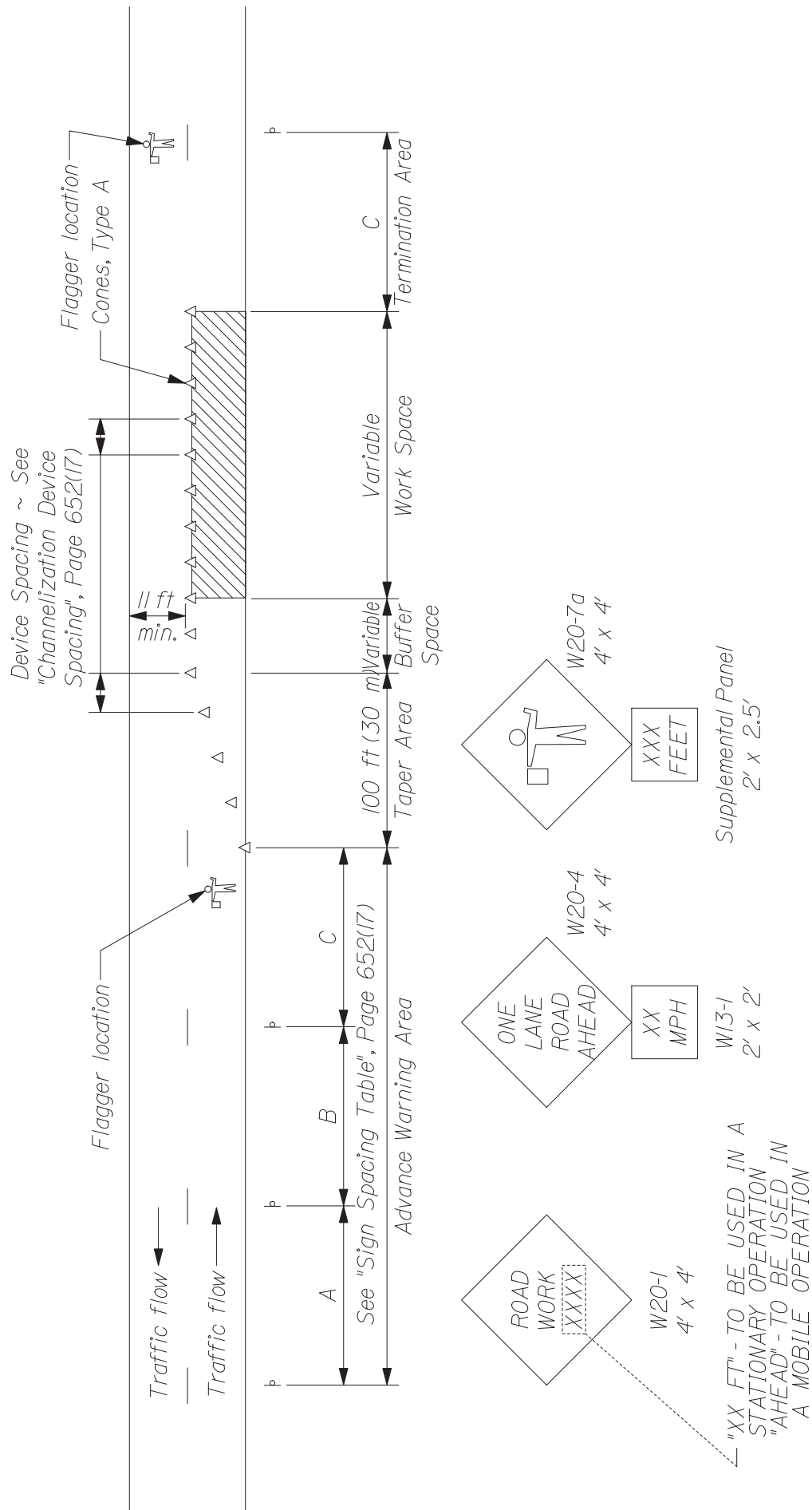
Temporary Centerline A temporary centerline shall be placed each day on all new pavement to be used by traffic. The temporary centerline, when specified of reflectorized traffic paint, shall conform to the standard marking patterns used for permanent markings.

Failure to apply a temporary centerline daily will result in a Traffic Control Violation and suspension of paving operations 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.



-- 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	SIGN SPACING TABLE		
	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 PROVISIONS
ADDITIONS AND REVISIONS TO STANDARD SPECIFICATIONS

SPECIAL PROVISION SECTION 101
CONTRACT INTERPRETATION

101.2 Definitions Add the following:

“MaineDOT The Department of Transportation of the State of Maine, as established by 23 MRSA §4205 et seq. for the administration of Highway, Bridge, and other public Works; acting through the Commissioner and his/her duly authorized representatives.”

SPECIAL PROVISION SECTION 102
BIDDING

102.11.1 Non-curable Bid Defects Revise this subsection by removing the words “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.” and replacing it with the following:

“The unit price and bid amount is not provided if (1) the item quantity is not one or lump sum or, (2) the lump sum contract price is not provided or, (3) the unit price, bid amount or lump sum price is illegible as determined by the Department.”

102.11.2 Curable Bid Defects Revise this section by adding the following:

“The Bidder only signs one of the Contract forms or the Bidder does not sign the Contract form but does sign the Schedule of Items.” and “If a submitted bid contains any additional conditions or alternate bidding language, the Bidder may cure the defect by removing all conditions and alternate language or the Department will reject the bid as non-responsive.”

SPECIAL PROVISION SECTION 103
AWARD AND CONTRACTING

103.1.1 Unit Prices Govern Add the following at the end of the paragraph:

“If the item quantity is one and either a unit price or bid amount is not provided, the unit price or bid amount omitted shall be determined mathematically by the Department.”

103.5 Award Conditions Replace the first paragraph with the following:

“The Apparent Successful Bidder must provide and/or perform all of the items listed in this Section 103.5 within 14 Days of Receipt of the Notice of Intent to Award. Unless indicated otherwise, all items must be Delivered to the Department’s Bureau of Maintenance & Operations.”

103.5.4 Execution of Contract By Bidder Delete the entire section and replace with the following:

“The properly completed and signed Contract form provided with the Bid constitutes the Bidder’s offer. Once the Department has received the insurance, and any other pre-award items required, the Department will sign and execute the Contract. The point of Contract execution is when the Contractor receives written notice that the contract has been signed by the Department and executed.”

SUPPLEMENTAL SPECIFICATIONS
(Corrections, Additions, & Revisions to Standard Specifications – March 2020)

SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES

104.2.1 Furnishing of Right-of-Way Revise the last sentence in the first paragraph by removing “105.4.5 – Special Detours” and replacing it with “**105.4.5 – Maintenance of Existing Structures.**”.

SECTION 502
STRUCTURAL CONCRETE

502.09 Forms and Falsework Amend this subsection by adding the subsection title “**502.10 Placing Concrete**” after section “D” Removal of Forms and False work” and after the paragraph beginning with “2. Forms and False work, including blocking...”. So that a new subsection starts and reads:

502.10 Placing Concrete

A. **General Concrete shall not be placed until forms”**

SECTION 606
GUARDRAIL

Amend this section by replacing it with the following:

606.01 Description This work shall consist of furnishing and installing guardrail components in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans or as established. Guardrail is designated as:

31” W-Beam Guardrail - Mid-Way Splice

Galvanized steel w-beam, 8” wood or composite offset blocks, galvanized steel posts

Thrie Beam

Galvanized steel thrie beam, 8” wood or composite offset blocks, galvanized steel posts

Median guardrail shall consist of two beams of the above types, mounted on single posts.

Bridge mounted guardrail shall consist of furnishing all labor, materials, and equipment necessary to install guardrail as shown on the plans. This work shall also include drilling for and installation of offset blocks if specified, and incidental hardware necessary for satisfactory completion of the work.

Remove and Reset and Remove, Modify, and Reset guardrail shall consist of removing the existing designated guardrail and resetting in a new location as shown on the plans or directed by the Resident. Remove, Modify, and Reset guardrail and Modify guardrail include the following guardrail modifications: Removing plate washers at all posts, except at anchorage assemblies as

noted on the Standard Details, adding offset blocks, and other modifications as listed in the Construction Notes or General Notes. Modifications shall conform to the guardrail Standard Details.

Bridge Connection shall consist of the installation and attachment of beam guardrail to the existing bridge. This work shall consist of constructing a concrete end post or modifying an existing end post as required, furnishing, and installing a terminal connector, necessary hardware, and incidentals required to complete the work as shown on the plans. Bridge Transition shall consist of a bridge connection and furnishing and installing guardrail components as shown in the Standard Details.

606.02 Materials Materials shall meet the requirements specified in the following Sections of Division 700 - Materials:

Timber Preservative	708.05
Metal Beam Rail	710.04
Guardrail Posts	710.07
Guardrail Hardware	710.08

Guardrail components shall meet the applicable standards of "A Guide to Standardized Highway Barrier Hardware" prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Task Force 13 Report.

Posts for underdrain delineators shall be "U" channel steel, 8 ft long, 2 ½ lb/ft minimum and have 3/8-inch round holes, 1-inch center to center for a minimum distance of 2 ft from the top of the post.

Reflectorized Flexible Guardrail Markers shall be mounted on all guardrails. A marker shall be mounted onto guardrail posts at the flared guardrail terminal end point and tangent point, both at the leading and trailing ends of each run of guardrail. The marker's flexible posts shall be gray with either silver-white or yellow reflectors (to match the edge line striping) at the tangents, red at leading ends, and green at trailing ends. Whenever the guardrail terminal is not flared, markers will only be required at the terminal end point. These shall be red or green as appropriate. Markers shall be installed on the protected side of guardrail posts unless otherwise approved by the Resident. Reflectorized flexible guardrail markers shall be from the Department's Qualified Products List of Delineators. The marker shall be gray, flexible, durable, and of a non-discoloring material to which 3-inch by 9-inch reflectors shall be applied, and capable of recovering from repeated impacts and meeting MASH 16 requirements. Reflective material shall meet the requirements of Section 719.01 for ASTM D 4956 Type III reflective sheeting. The marker shall be secured to the guardrail post with two fasteners, as shown in the Standard Details.

Reflectorized beam guardrail ("butterfly"-type) delineators shall be mounted on all "w"-beam guardrail. The delineators shall be mounted within the guardrail beam at guardrail posts. Delineators shall be fabricated from high-impact, ultraviolet & weather resistant thermoplastic. Reflectorized beam guardrail delineators shall be placed at approximately 62.5 ft intervals or every tenth post on tangents and at approximately 31.25 ft intervals or every fifth post on curves. Exact locations of the delineators shall be as directed by the Resident. On divided highways, the left-hand delineators shall

be yellow, and the right-hand delineators shall be silver/white. On two directional highways, the right-hand side shall be silver/white, and no reflectorized delineator used on the left. All reflectors shall have reflective sheeting applied to only one side of the delineator facing the direction of traffic as shown in the Standard Details. Reflectorized sheeting for guardrail delineators shall meet the requirements of Section 719.01.

Single wood post shall be of cedar, white oak, or tamarack, well-seasoned, straight, and sound and have been cut from live trees. The outer and inner bark shall be removed, and all knots trimmed flush with the surface of the post. Posts shall be uniform taper and free of kinks and bends.

Single steel post shall conform to the requirements of Section 710.07 b.

Single steel pipe post shall be galvanized, seamless steel pipe conforming to the requirements of ASTM A120, Schedule No. 40, Standard Weight.

Acceptable multiple mailbox assemblies shall be listed on the Department's Qualified Products List and shall be MASH 16 tested and approved.

Flared and Tangent w-beam guardrail terminals and guardrail offset blocks shall be from the Department's Qualified Products List. Flared terminals shall be installed with a 4 ft offset as shown in the Manufacturer's installation instructions.

Anchorage assemblies used to anchor trailing ends, radius guardrail, or other ends not exposed to traffic shall meet the applicable standards of "A Guide to Standardized Highway Barrier Hardware" prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Task Force 13 Report, Drawing SEW02a.

Existing materials damaged or lost during adjusting, removing and resetting, or removing, modifying, and resetting, shall be replaced by the Contractor without additional compensation. Existing guardrail posts and guardrail beams found to be unfit for reuse shall be replaced when directed by the Resident.

606.03 Posts Posts for guardrail shall be set plumb in holes or they may be driven if suitable driving equipment is used to prevent battering and distorting the post. When posts are driven through pavement, the damaged area around the post shall be repaired with approved bituminous patching. Damage to lighting and signal conduit and conductors shall be repaired by the Contractor.

When set in holes, posts shall be on a stable foundation and the space around the posts, backfilled in layers with suitable material, thoroughly tamped.

The reflectorized flexible guardrail markers shall be set plumb with the reflective surface facing the oncoming traffic. Markers shall be installed on the protected side of guardrail posts. Markers, which become bent or otherwise damaged, shall be removed and replaced with new markers.

Single wood posts shall be set plumb in holes and backfilled in layers with suitable material, thoroughly tamped. The Resident will designate the elevation and shape of the top. The posts, that are not pressure treated, shall be painted two coats of good quality oil base exterior house paint.

Single steel posts shall be set plumb in holes as specified for single wood posts or they may be driven if suitable driving equipment is used to prevent battering and distorting the post.

Additional bolt holes required in existing posts shall be drilled or punched, but the size of the holes shall not exceed the dimensions given in the Standard Details. Metal around the holes shall be thoroughly cleaned and painted with two coats of approved aluminum rust resistant paint. Holes shall not be burned.

606.04 Rails Brackets and fittings shall be placed and fastened as shown on the plans. Rail beams shall be erected and aligned to provide a smooth, continuous barrier. Beams shall be lapped with the exposed end away from approaching traffic.

End assemblies shall be installed as shown on the plans and shall be securely attached to the rail section and end post.

All bolts shall be of sufficient length to extend beyond the nuts but not more than ½ inch. Nuts shall be drawn tight.

Additional bolt holes required in existing beams shall be drilled or punched, but the size of the holes shall not exceed the dimensions given in the Standard Details. Metal around the holes shall be thoroughly cleaned and painted with two coats of approved aluminum rust resistant paint. Holes shall not be burned.

606.045 Offset Blocks The same offset block material is to be provided for the entire project unless otherwise specified.

606.05 Shoulder Widening At designated locations the existing shoulder of the roadway shall be widened as shown on the plans. All grading, paving, seeding, and other necessary work shall be in accordance with the Specifications for the type work being done.

606.06 Mail Box Post Single wood post shall be installed at the designated location for the support of the mailbox. The multiple mailbox assemblies shall be installed at the designated location in accordance with the Standard Details and as recommended by the Manufacturer. Attachment of the mailbox to the post will be the responsibility of the home or business owner.

606.07 Abraded Surfaces All galvanized surfaces of new guardrail and posts, which have been abraded so that the base metal is exposed, and the threaded portions of all fittings and fasteners and cut ends of bolts shall be cleaned and painted with two coats of approved rust resistant paint.

606.08 Method of Measurement Guardrail will be measured by the linear foot from center to center of end posts along the gradient of the rail except where end connections are made to masonry or steel

structures, in which case measurement will be as shown on the plans. When connected to radius rail, measurement will be to the end of the last tangent beam.

Guardrail terminal, reflectorized flexible guardrail marker, terminal end, anchorage assembly, bridge transition, bridge connection, multiple mailbox post, and single post will be measured by each unit of the kind specified and installed.

Widened shoulder will be measured as a unit of grading within the limits shown on the plans.

Excavation in solid rock for placement of posts will be paid under force account unless otherwise indicated in the Bid Documents.

606.09 Basis of Payment The accepted quantities of guardrail will be paid for at the contract unit price per linear foot for the type specified, complete in place. Reflectorized beam guardrail ("butterfly"-type) delineators will not be paid for directly but will be considered incidental to guardrail items. Reflectorized flexible guardrail marker, terminal end, anchorage assembly, bridge transition, bridge connection, multiple mailbox post, and single post will be paid for at the contract unit price each for the kind specified complete in place.

Guardrail terminals will be paid for at the contract price each, complete in place which price shall be full payment for furnishing and installing all components including the terminal section, posts, offset blocks, "w" beam, cable foundation posts, plates and for all incidentals necessary to complete the installation within the limits as shown on the Standard Details or the Manufacturer's installation instructions. Pay limits for a flared terminal will be 37.5 feet. Pay limits for a tangent terminal will be 50 feet. Each guardrail terminal will be clearly marked with the Manufacturer's name and model number to facilitate any future needed repair. Such payment shall also be full compensation for furnishing all material, excavating, backfilling holes, assembling, and all incidentals necessary to complete the work, except that for excavation for posts or anchorages in solid ledge rock, payment will be made under 109.7.5 – Force Account. Type III Retroreflective Adhesive Sheeting shall be applied to the approach buffer end sections and sized to substantially cover the end section. On all roadways, the ends shall be marked with alternating black and retroreflective yellow stripes. The stripes shall be 3 in wide and sloped down at an angle of 45 degrees toward the side on which traffic is to pass the end section. Guardrail terminals shall also include a set of installation drawings supplied to the Resident.

Anchorage to bridge end posts will be part of the bridge work. Connections thereto will be considered included in the unit bid price for guardrail.

Guardrail to be placed on a radius of curvature of 150 ft or less will be paid for under the designated radius pay item for the type guardrail being placed.

Widened shoulder will be paid for at the contract unit price each complete in place and will be full compensation for furnishing and placing, grading and compaction of aggregate subbase and any required fill material.

Adjust guardrail will be paid for at the contract unit price per linear foot and will be full compensation for adjusting to grade. Payment shall also include adjusting guardrail terminals where required.

Modify guardrail will be paid for at the contract unit price per linear foot and will be full compensation for furnishing and installing offset blocks, additional posts, and other specified modifications; removing, modifying, installing, and adjusting to grade existing posts and beams; removing plate washers and backup plates, and all incidentals necessary to complete the work. Payment shall also include removing and resetting guardrail terminals where required.

Remove and Reset guardrail will be paid for at the contract unit price per linear foot and will be full compensation for removing, transporting, storing, reassembling all parts, necessary cutting, furnishing new parts when necessary, reinstalling at the new location, and all other incidentals necessary to complete the work. Payment shall also include removing and resetting guardrail terminals when required.

Remove, Modify, and Reset guardrail will be paid for at the contract unit price per foot and will be full compensation for the requirements listed in Modify guardrail and Remove and Reset guardrail.

Bridge Connections will be paid for at the contract unit price each. Payment shall include, attaching the connection to the endpost including furnishing and placing concrete and reinforcing steel necessary to construct new endposts if required, furnishing and installing the terminal connector, and all miscellaneous hardware, labor, equipment, and incidentals necessary to complete the work.

Bridge Transitions will be paid for at the contract unit price each. Payment shall include furnishing and installing the thrie beam or “w”-beam terminal connector, doubled beam section, and transition section, where called for, posts, hardware, precast concrete transition curb, and any other necessary materials and labor, including the bridge connection as stated in the previous paragraph.

No payment will be made for guardrail removed, but not reset and all costs for such removal shall be considered incidental to the various contract pay items.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
606.1301 31” W-Beam Guardrail - Mid-Way Splice – Single Faced	Linear Foot
606.1302 31” W-Beam Guardrail - Mid-Way Splice – Double Faced	Linear Foot
606.1303 31” W-Beam Guardrail - Mid-Way Splice, 15’ Radius and Less	Linear Foot
606.1304 31” W-Beam Guardrail - Mid-Way Splice, Over 15’ Radius	Linear Foot
606.1305 31” W-Beam Guardrail - Mid-Way Splice Flared Terminal	Each
606.1306 31” W-Beam Guardrail - Mid-Way Splice Tangent Terminal	Each
606.1307 Bridge Transition (Asymmetrical) – Type IA	Each
606.1721 Bridge Transition - Type I	Each

606.1722	Bridge Transition - Type II	Each
606.1731	Bridge Connection - Type I	Each
606.1732	Bridge Connection - Type II	Each
606.178	Guardrail Beam	Linear Foot
606.25	Terminal Connector	Each
606.257	Terminal Connector - Thrie Beam	Each
606.259	Anchorage Assembly	Each
606.265	Terminal End-Single Rail - Galvanized Steel	Each
606.266	Terminal End-Single Rail - Corrosion Resistant Steel	Each
606.275	Terminal End-Double Rail - Galvanized Steel	Each
606.276	Terminal End-Double Rail - Corrosion Resistant Steel	Each
606.353	Reflectorized Flexible Guardrail Marker	Each
606.354	Remove and Reset Reflectorized Flexible Guardrail Marker	Each
606.356	Underdrain Delineator Post	Each
606.358	Guardrail, Modify	Linear Foot
606.362	Guardrail, Adjust	Linear
	Foot	
606.365	Guardrail, Remove, Modify, and Reset	Linear Foot
606.366	Guardrail, Remove and Reset	Linear Foot
606.367	Replace Unusable Existing Guardrail Posts	Each
606.47	Single Wood Post	Each
606.48	Single Galvanized Steel Post	Each
606.50	Single Steel Pipe Post	Each
606.51	Multiple Mailbox Support	Each
606.568	Guardrail, Modify - Double Rail	Linear Foot
606.63	Thrie Beam Rail Beam	Linear Foot
606.64	Guardrail Thrie Beam - Double Rail	Linear Foot
606.65	Guardrail Thrie Beam - Single Rail	Linear Foot
606.66	Terminal End Thrie Beam	Each
606.70	Transition Section - Thrie Beam	Each
606.71	Guardrail Thrie Beam - 15 ft radius and less	Linear Foot
606.72	Guardrail Thrie Beam - over 15 ft radius	Linear Foot
606.73	Guardrail Thrie Beam - Single Rail Bridge Mounted	Linear
	Foot	
606.74	Guardrail - Single Rail Bridge Mounted	Linear Foot
606.753	Widen Shoulder for Low Volume Guardrail End	Each
606.754	Widen Shoulder for Flared Guardrail Terminal	Each
606.78	Low Volume Guardrail End	Each
606.80	Buried-in-Slope Guardrail End	Each

SECTION 626
**FOUNDATIONS, CONDUIT, AND JUNCTION BOXES FOR HIGHWAY
SIGNING, LIGHTING, AND SIGNALS**

626.034 Concrete Foundations Revise this Section by changing ‘626.037’ to ‘**626.036**’ in the Second Paragraph which begins with “Foundations shall consist of cast-in-place...”.

Revise the 10th paragraph beginning with “Before placing concrete, the required elbows...” by removing “...in accordance with **Standard Specification 633.**”

SECTION 645
HIGHWAY SIGNING

Section 645.023 Sign Support Structures. Under letter “c.”, revise the fifth paragraph beginning with “In addition to the required details...” by removing the words ”**and foundation**” from the 5th sentence.

Section 645.08 Method of Measurement. Revise the second paragraph beginning with “Bridge-type, cantilever and...” by removing the words ”**including the foundation**” .

Section 645.09 Basis of Payment. Revise the third paragraph beginning with “The accepted bridge-type, cantilever and...” by removing the word ”**foundation**” from the second sentence. Add the following sentence to the end of the paragraph “**Conduits, Junction Boxes, and Foundations will be paid for under Section 626.**”

SECTION 703
AGGREGATES

Add the following to the beginning of Section 703 - Aggregates

703.01 Fine Aggregate for Concrete Fine aggregate for concrete shall consist of natural sand or, when approved by the Resident, other inert materials with similar characteristics or combinations thereof, having strong, durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of construction or mix without permission of the Resident.

All fine aggregate shall be free from injurious amounts of organic impurities. Should the fine aggregate, when subjected to the colorimetric test for organic impurities, AASHTO T 21, produce a

color darker than the reference standard color solution (laboratory designation Plate III), the fine aggregate shall be rejected.

Fine aggregate shall have a sand equivalent value of not less than 75 when tested in accordance with AASHTO T 176.

Fine aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

The fineness modulus shall not be less than 2.26 or more than 3.14. If this value is exceeded, the fine aggregate will be rejected unless suitable adjustments are made in proportions of coarse and fine aggregate. The fineness modulus of fine aggregate shall be determined by adding the cumulative percentages of material by weight retained on the following sieves: Nos. 4, 8, 16, 30, 50, 100 and dividing by 100.

Fine aggregate, from an individual source when tested for absorption as specified in AASHTO T 84, shall show an absorption of not more than 2.3 percent.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
$\frac{3}{8}$ inch	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	10-30
No. 100	2-10
No. 200	0-5.0

703.02 Coarse Aggregate for Concrete Coarse aggregate for concrete shall consist of crushed stone or gravel having hard, strong, durable pieces, free from adherent coatings and of which the composite blend retained on the $\frac{3}{8}$ inch sieve shall contain no more than 15 percent, by weight of flat and elongated particles when performed in accordance with test method ASTM D 4791, Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate, using a dimensional ratio of 1:5.

The coarse aggregate from an individual source shall have an absorption no greater than 2.0 percent by weight determined in accordance with AASHTO T 85 modified for weight of sample.

The composite blend shall have a Micro-Deval value of 18.0 percent or less as determined by AASHTO T 327 or not exceed 40 percent loss as determined by AASHTO T 96.

Coarse aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

Coarse aggregate shall conform to the requirements of the following table for the size or sizes designated and shall be well graded between the limits specified.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves			
	A	AA	S	LATEX
Grading	A	AA	S	LATEX
Aggregate Size	1 inch	$\frac{3}{4}$ inch	$1\frac{1}{2}$ inch	$\frac{1}{2}$ inch
2 inch			100	
$1\frac{1}{2}$ inch	100		95-100	
1 inch	95-100	100	-	
$\frac{3}{4}$ inch	-	90-100	35-70	100
$\frac{1}{2}$ inch	25-60	-	-	90-100
$\frac{3}{8}$ inch	-	20-55	10-30	40-70
No. 4	0-10	0-10	0-5	0-15
No. 8	0-5	0-5	-	0-5
No. 16	-	-	-	-
No. 50	-	-	-	-
No. 200	0 - 1.5	0 - 1.5	0 - 1.5	0 - 1.5

703.0201 Alkali Silica Reactive Aggregates. All coarse and fine aggregates proposed for use in concrete shall be tested for Alkali Silica Reactivity (ASR) potential under AASHTO T 303 (ASTM C 1260), Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, prior to being accepted for use. Acceptance will be based on testing performed by the Department. Sampling will be performed by the Department from stockpiles located at the Contractor's/supplier's ready mixed concrete plants. Aggregate approvals will be performed on a 3-year cycle, unless the source or character of the aggregate in question has changed within 3 years from the last test date.

A list of pre-approved coarse aggregate and aggregate-cement/pozzolan blends is maintained by the Department and will determine the acceptability of concrete mix designs proposed for use.

As per AASHTO T 303 (ASTM C 1260): Use of a particular coarse or fine aggregate will be allowed with no restrictions when the mortar bars made with this aggregate expand less than or equal to 0.10 percent at 30 days from casting. Use of a particular coarse or fine aggregate will be classified as potentially reactive when the mortar bars made with this aggregate expand greater than 0.10 percent at 30 days from casting. Use of this aggregate will only be allowed with the use of cement-

pozzolan blends and/or chemical admixtures that result in mortar bar expansion of less than 0.10 percent at 30 days from casting.

Acceptable pozzolans and chemical admixtures that may be used when an aggregate is classified as potentially reactive include the following:

- a. Class F Coal Fly Ash meeting the requirements of AASHTO M 295.
- b. Ground Granulated Blast Furnace Slag (Grade 100 or 120) meeting the requirements of AASHTO M 302.
- c. Densified Silica Fume meeting the requirements of AASHTO M 307.
- d. Lithium Hydroxide Monohydrate (LiOH-H₂O).

Pozzolans or chemical admixtures required to offset the effects of potentially reactive aggregates will be incorporated into the concrete at no additional cost to the Department.

Aggregates classified as potentially reactive by the requirements of this specification may be used if certified test results from an accredited independent laboratory utilizing the current AASHTO T 303 (ASTM C 1260) Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, indicating an acceptable alkali-aggregate combination, are submitted to the Department.

703.05 Aggregate for Sand Leveling Aggregate for sand leveling shall be sand of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The aggregate shall meet the grading requirements of the following table.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
3/8 inch	85-100
No. 200	0-5.0

703.06 Aggregate for Base and Subbase The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval...” and replace with “The material shall have a minimum degradation value of 25.0 or less15 as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0, the Washington State Degradation DOT Test Method T 113T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed), except that the test shall be performed on the reported degradation value will be the result of testing a single specimen from that portion of the sample that passes the 1/2 in sieve and is retained on the No. 10 sieve. If the material has a Washington Degradation value of less than 15, the material shall be rejected.

The material, minus any reclaimed asphalt pavement used in Section (b.) below shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0 the material may be used if it does not exceed 25 percent loss on AASHTO T 96, Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine. If AASHTO T 96 is used for acceptance of the material, the material shall be retested at intervals of 25%, 50% and 75% completion of the course.

Recycled Asphalt Pavement (RAP) shall not be used for or blended with aggregate base or subbase.

- a. Aggregate for base, Type A and B shall be crushed ledge or crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3 inch sieve shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Type A	Type B
½ inch	45-70	35-75
¼ inch	30-55	25-60
No. 40	0-20	0-25
No. 200	0-6.0	0-6.0

At least 50 percent by weight of the material retained on the No. 4 sieve shall have at least one fractured face as tested by AASHTO T 335.

Type A aggregate for base shall only contain particles of rock that will pass the 2 inch square mesh sieve.

Type B aggregate for base shall only contain particles of rock that will pass the 4 inch square mesh sieve.

- b. Aggregate for base, Type C shall be crushed ledge or crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The material shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
	Type C
4 inches	100
3 inches	90-100
2 inches	75-100
1 inch	50-80
½ inch	30-60
No. 4	15-40
No. 200	0-6.0

At least 50 percent by weight of the material coarser than the No. 4 sieve shall have at least one fractured face as tested by AASHTO T 335.

c. Aggregate for subbase shall be sand or gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3 inch sieve shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Type D	Type E
½ in	35-80	
¼ inch	25-65	25-100
No. 40	0-30	0-50
No. 200	0-7.0	0-7.0

Type D aggregate for subbase gravel may contain up to 50 percent by weight Recycled Concrete Aggregate (RCA). When RCA is used, the portion of the resulting blend of gravel and RCA retained on a ½” square mesh sieve shall contain a total of no more than 5 percent by weight of other recycled materials such as brick, concrete masonry block, or asphalt pavement as determined by visual inspection.

RCA shall be substantially free of wood, metal, plaster, and gypsum board as defined in Note 9 in Section 7.4 of AASHTO M 319. RCA shall also be free of all substances that fall under the category of solid waste or hazardous materials.

Aggregate for subbase shall not contain particles of rock which will not pass the 6 inch square mesh sieve.