

ORIGINATION FORM

Proposed Revisions to a Standard Plans Index
(Please provide all information – Incomplete forms will be returned)

Contact Information:

Date: June 19, 2019
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Standard Plans:

Index Number: 450-120
Sheet Number (s): 2 & 3
Index Title: AASHTO Type II Beam

Summary of the changes:

Deleted Intermediate Diaphragm Inserts

Commentary / Background:

Diaphragms not required; therefore Inserts not required.

Other Affected Offices / Documents: (Provide name of responsible personnel)

- | Yes | No | |
|--------------------------|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Standard Plans – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | FDOT Design Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Basis of Estimates Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Standard Specifications – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Approved Product List – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Construction – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Maintenance – |

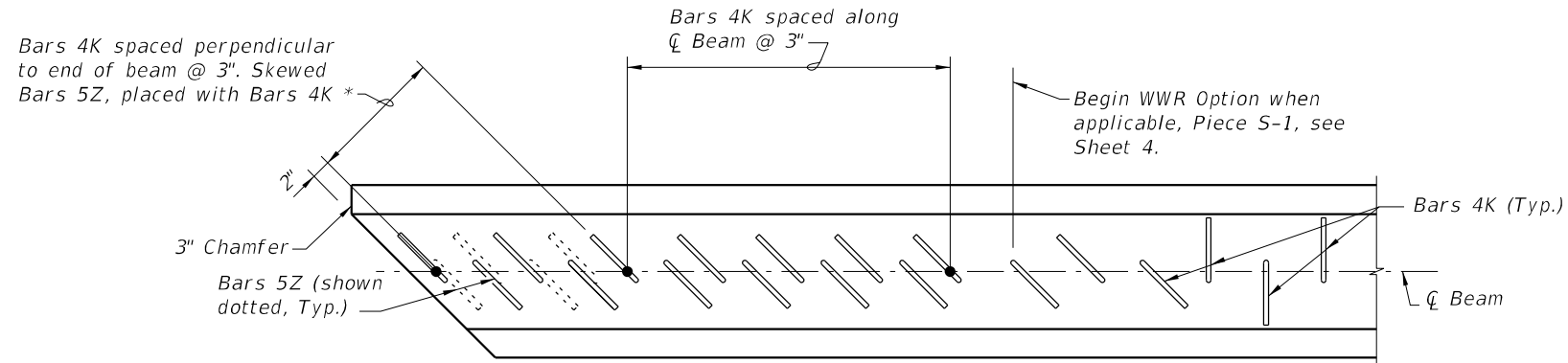
Origination Package Includes: (Email or hand deliver package to Derwood Sheppard)

- | Yes | N/A | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input type="checkbox"/> | Proposed Standard Plan Instructions (SPI) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Revised SPI |
| <input type="checkbox"/> | <input type="checkbox"/> | Other Support Documents |

Implementation:

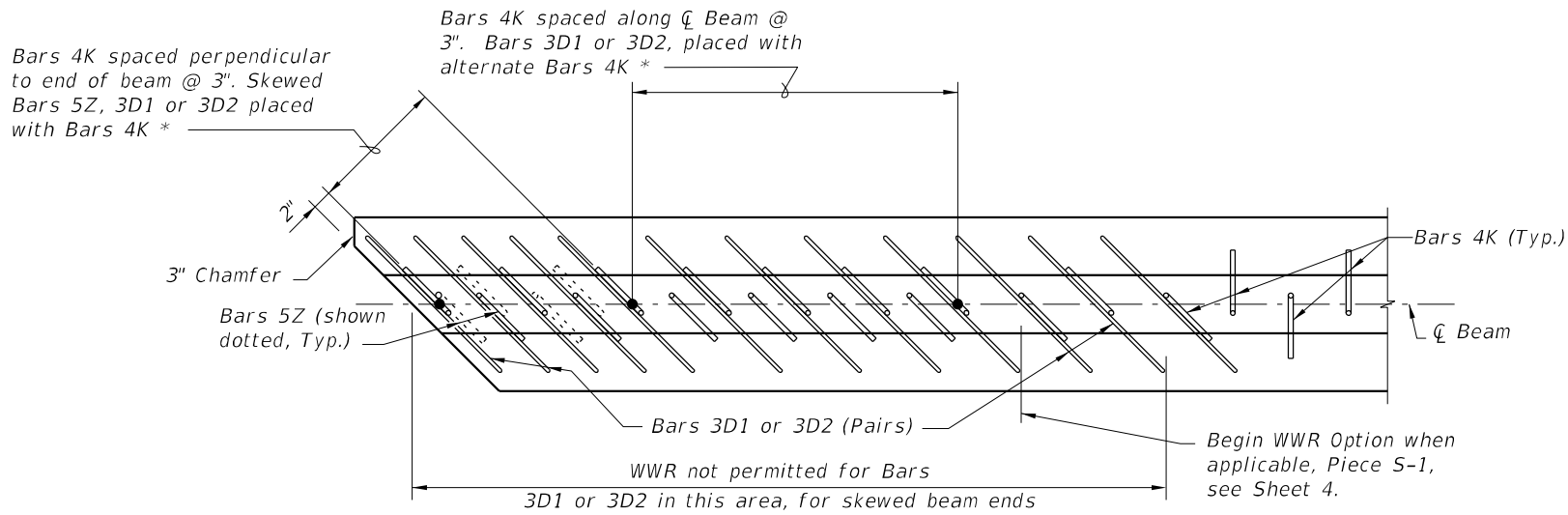
- Design Bulletin (Interim) DCE Memo Program Mgmt. Bulletin FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form



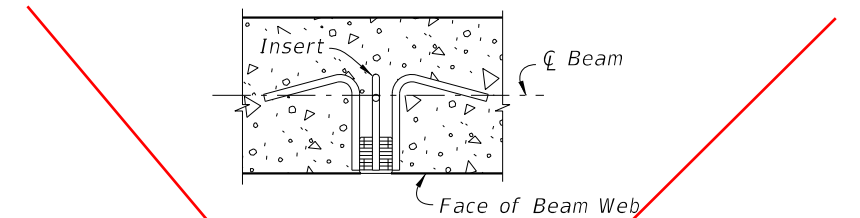
PARTIAL PLAN VIEW (SHOWING TOP FLANGE)
 (End 1 Shown, End 2 Similar)
 (Bars 5A, 4Y & Strands N not shown for clarity)

* For number of Bars, spacing and placement details see Sheet 3. See Sheet 3 for Conventional Reinforcement, Sheet 4 for WWR.



PARTIAL SECTION THRU WEB (SHOWING BOTTOM FLANGE)
 (End 1 Shown, End 2 Similar)
 (Bars 4Y & Strands not shown for clarity)

===== **SKewed BEAM END DETAILS FOR WIDENING EXISTING BRIDGES** =====

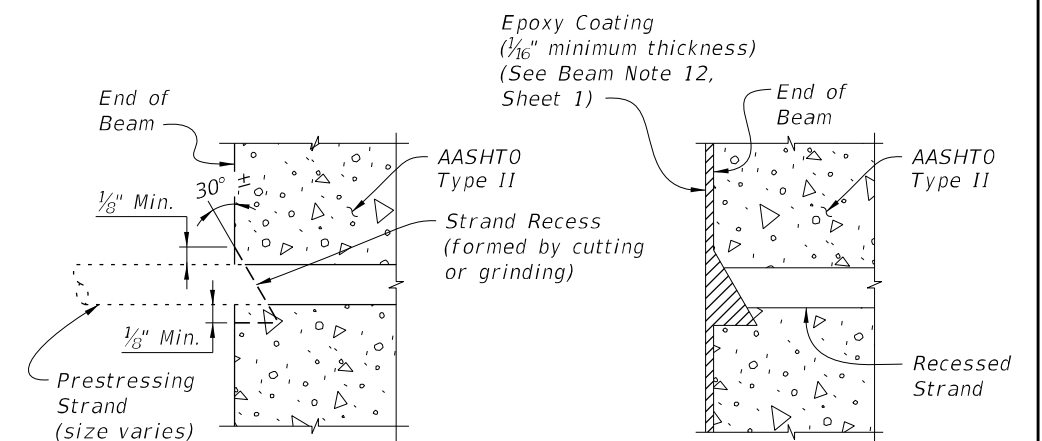


PLAN SECTION THRU BEAM WEB AT INSERT FOR DIAPHRAGM REINFORCING
 (When Intermediate Diaphragms are Required by Design)

INSERT NOTES

1. Provide 1" \varnothing , zinc-electroplated, ferrule wing nut or coil inserts, UNC threads, 1/0 minimum gage wire, not more than 4" in depth with a minimum ultimate tensile strength of 11,400 lbs. in 4,000 psi concrete.
2. If inserts are needed on both sides (faces) of beam webs, an assembly as long as the thickness of the beam web, consisting of two (2) ferrule or coil inserts attached by two (2) or more struts may be utilized. The connecting struts shall have a minimum ultimate tensile strength of 11,400 lbs.
3. Inserts for diaphragm reinforcing are required at each end of each intermediate diaphragm shown on the Beam Framing Plan and may be required at the end of the beams when end diaphragms are shown. See Superstructure and Beam Framing Plans for longitudinal location of inserts for each face of beam.

===== **INSERT DETAIL** =====




TYPICAL SECTION SHOWING CUT STRAND RECESS LIMITS

TYPICAL SECTION AFTER PROTECTING

===== **STRAND CUTTING AND PROTECTING DETAIL** =====

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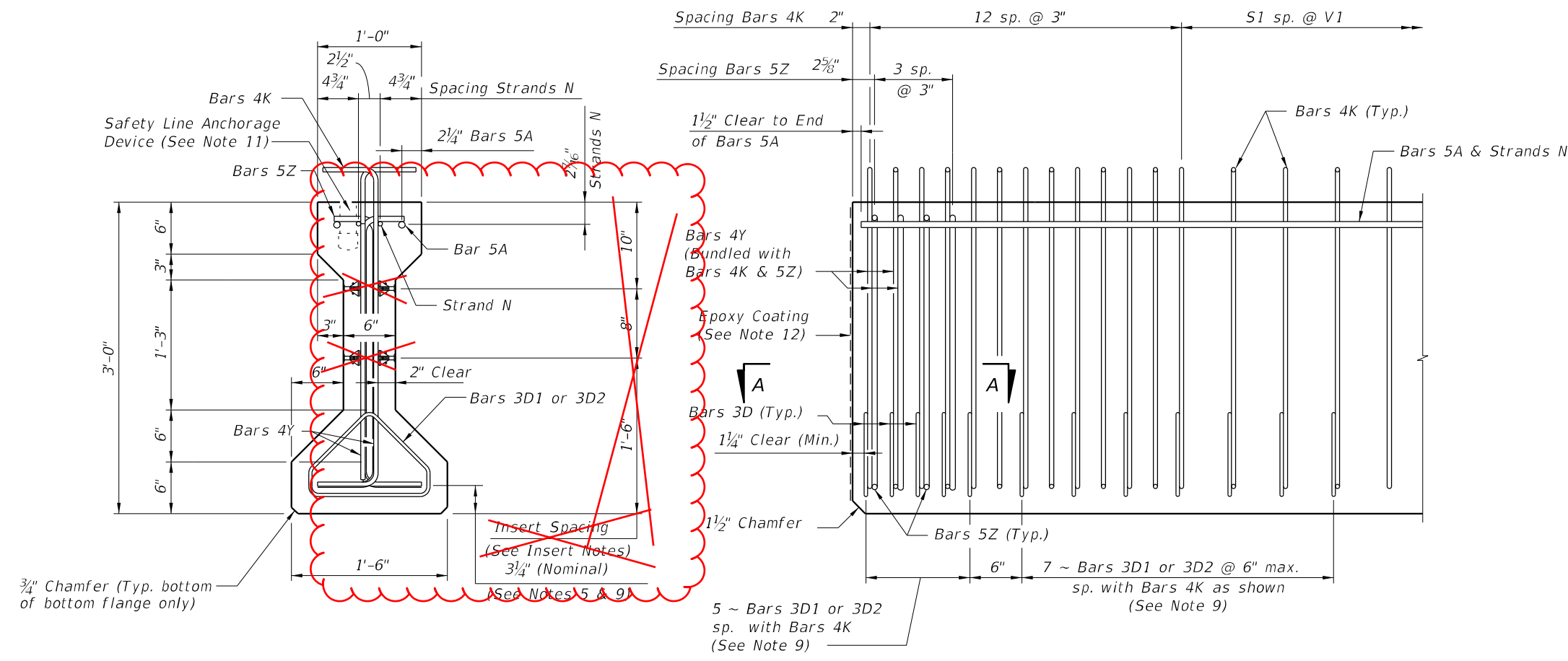
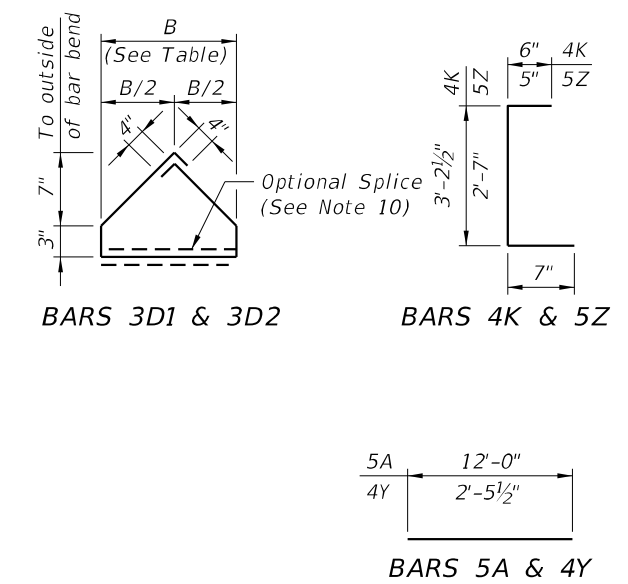
LAST REVISION 11/01/16	REVISION	DESCRIPTION:	 FY 2019-20 STANDARD PLANS	AASHTO TYPE II BEAM	INDEX 450-120	SHEET 2 of 4
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DETAILS AND NOTES

**BILL OF REINFORCING STEEL
FOR ONE BEAM ONLY**

MARK	NOTE NUMBERS	SIZE	NUMBER REQUIRED	LENGTH (NOTE 1)
A	—	5	4	12'-0"
D1	8, 9 & 10	3	12	See Table
D2	8, 9 & 10	3	12	See Table
K	5, 6, 8, 9 & 10	4	See Table	4'-4"
N	4 & 12	$\frac{3}{8}$ " \emptyset Strand	2	DIM L+5"
Y	8 & 9	4	8	2'-6"
Z	5, 6, 8, 9 & 10	5	8	3'-7"

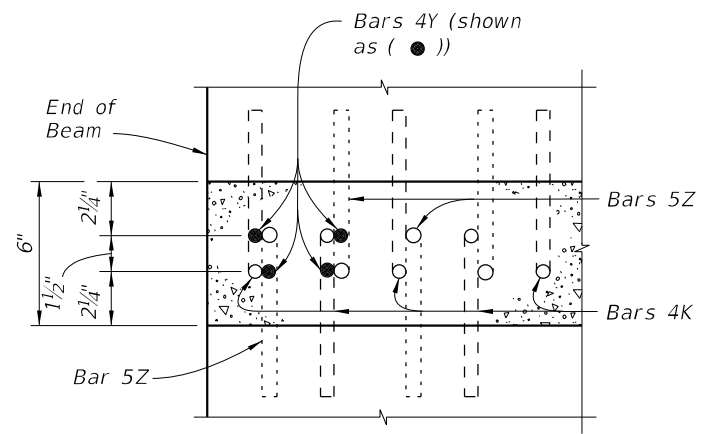
BENDING DIAGRAMS (See Note 1)



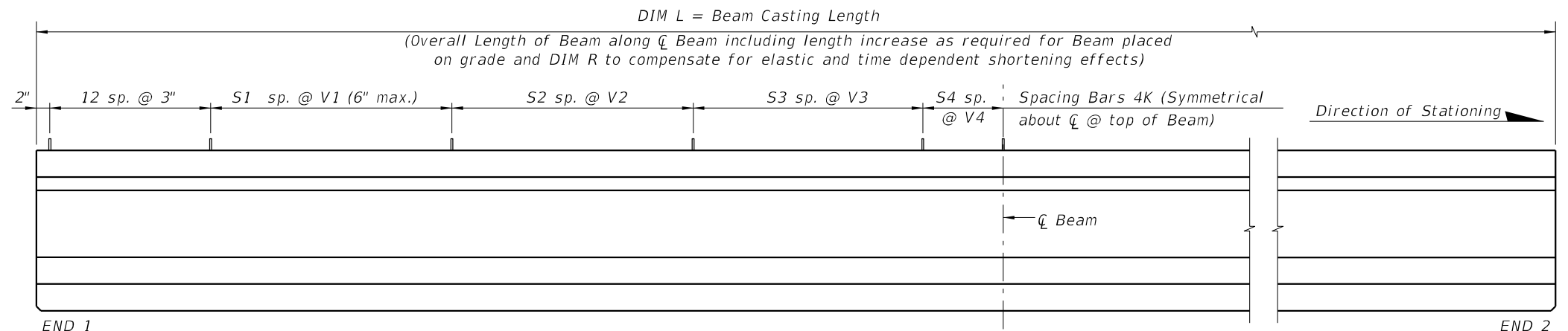
END VIEW

ELEVATION AT END OF BEAM
(Flanges Not Shown For Clarity)

NOTES:
Work this Index with the AASHTO Type II Beam - Table of Beam Variables in Structures Plans.
For referenced notes, see Sheet 1.
For Dimensions L, R, V1 thru V4 and number of spaces S1 thru S4, see AASHTO Type II Beam - Table of Beam Variables.



SECTION A-A
(Showing Bars 4K, 4Y & 5Z Only)

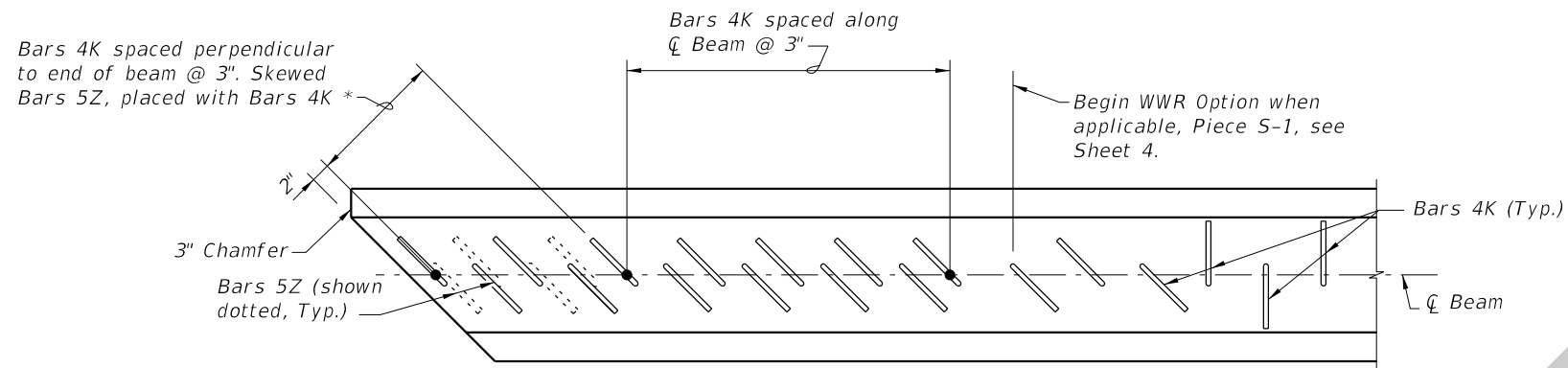


ELEVATION

STANDARD DETAILS

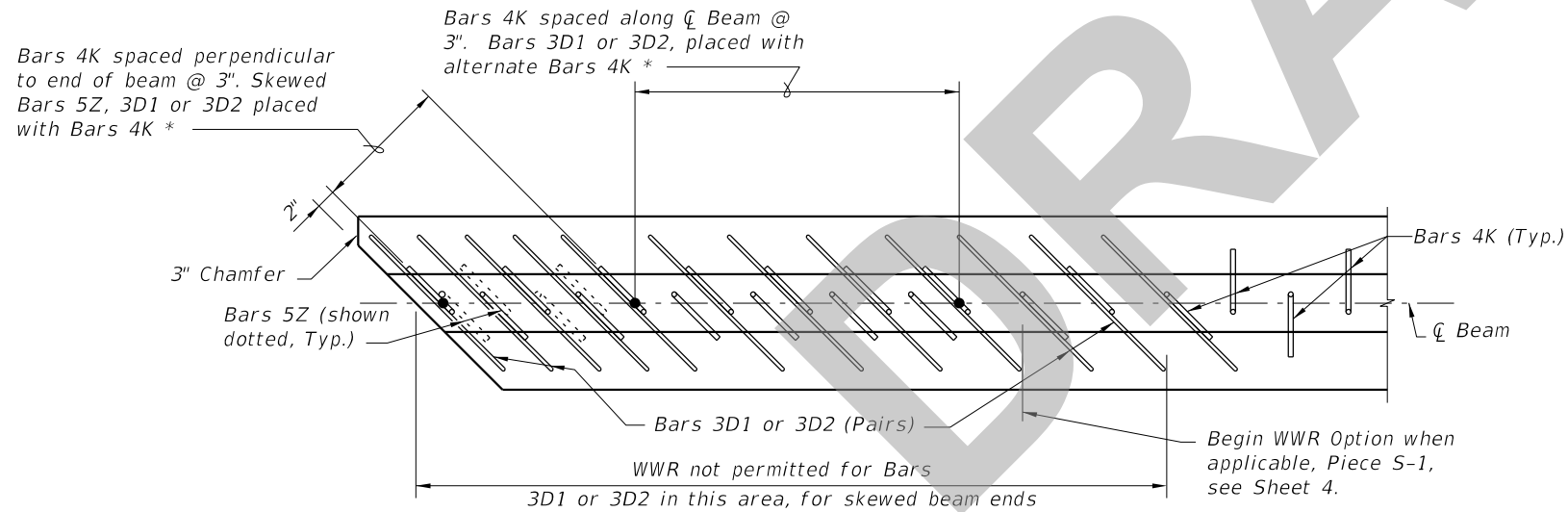
LAST REVISION 11/01/16	REVISION	DESCRIPTION:	FDOT	FY 2019-20 STANDARD PLANS	AASHTO TYPE II BEAM	INDEX	SHEET
		19				450-120	3 of 4

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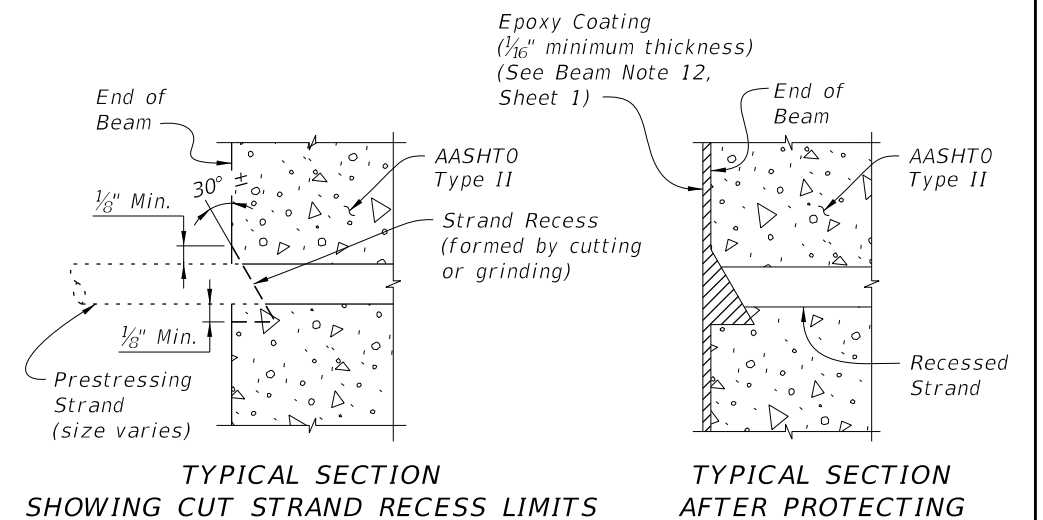


PARTIAL PLAN VIEW (SHOWING TOP FLANGE)
 (End 1 Shown, End 2 Similar)
 (Bars 5A, 4Y & Strands N not shown for clarity)

* For number of Bars, spacing and placement details see Sheet 3. See Sheet 3 for Conventional Reinforcement, Sheet 4 for WWR.



PARTIAL SECTION THRU WEB (SHOWING BOTTOM FLANGE)
 (End 1 Shown, End 2 Similar)
 (Bars 4Y & Strands not shown for clarity)



TYPICAL SECTION SHOWING CUT STRAND RECESS LIMITS

TYPICAL SECTION AFTER PROTECTING

SKewed Beam End Details for Widening Existing Bridges

Strand Cutting and Protecting Detail

SDATES STIMES

LAST REVISION 11/01/19	DESCRIPTION:
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**FY 2020-21
STANDARD PLANS**

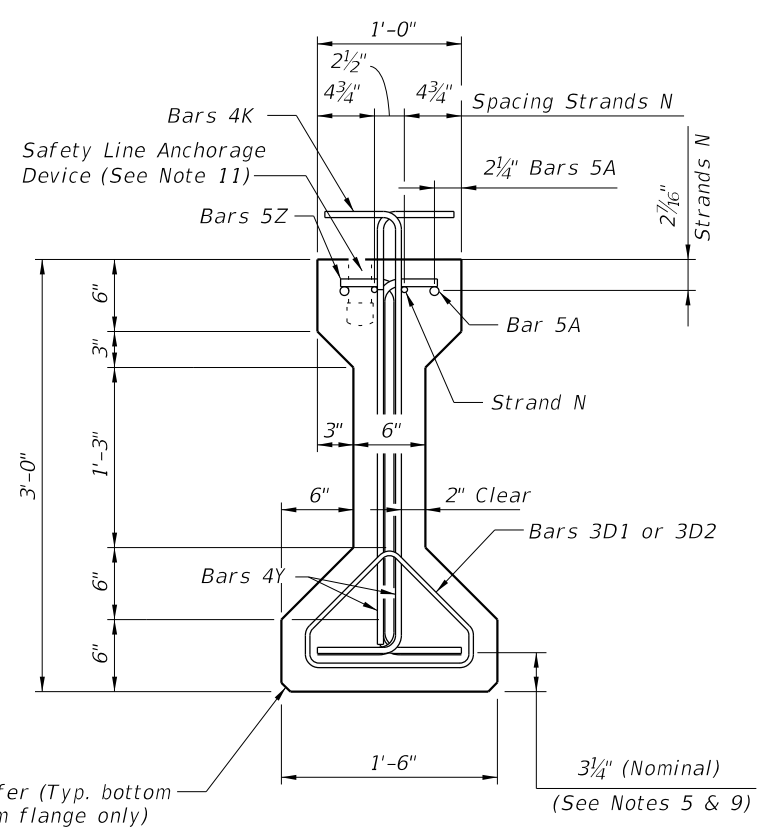
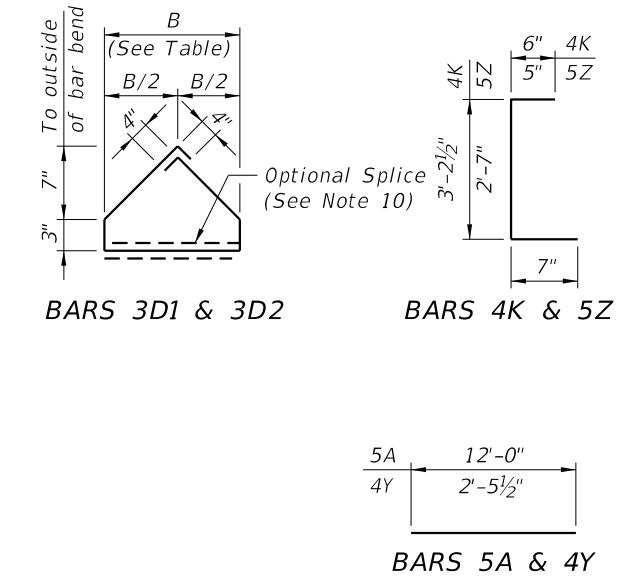
AASHTO TYPE II BEAM

DETAILS AND NOTES	
INDEX 450-120	SHEET 2 of 4

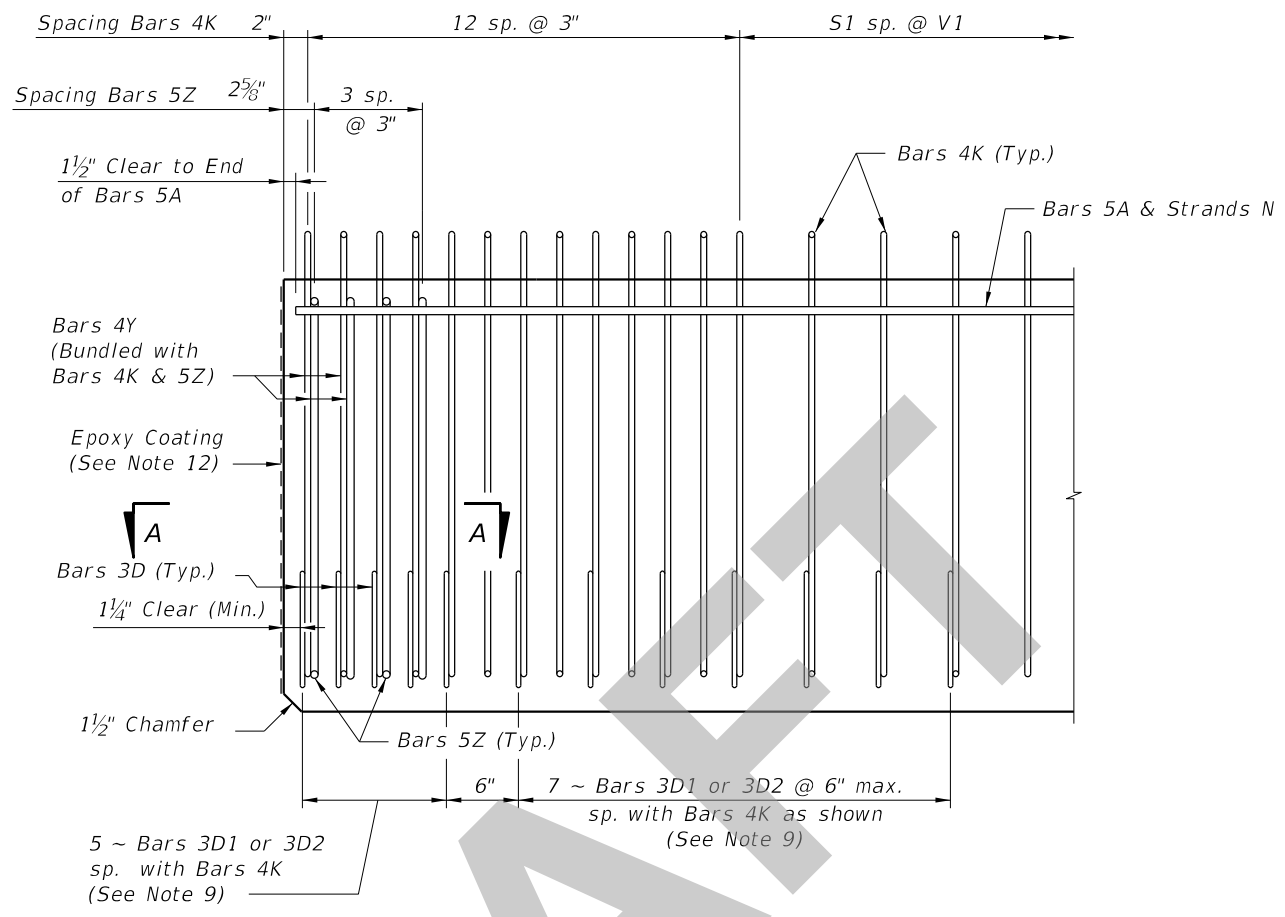
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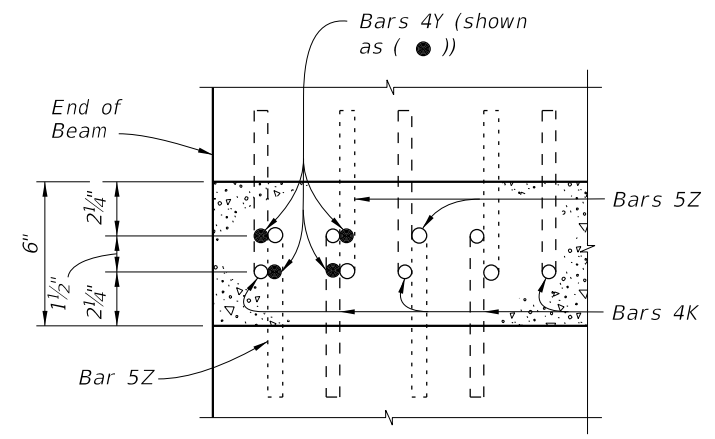
BENDING DIAGRAMS (See Note 1)



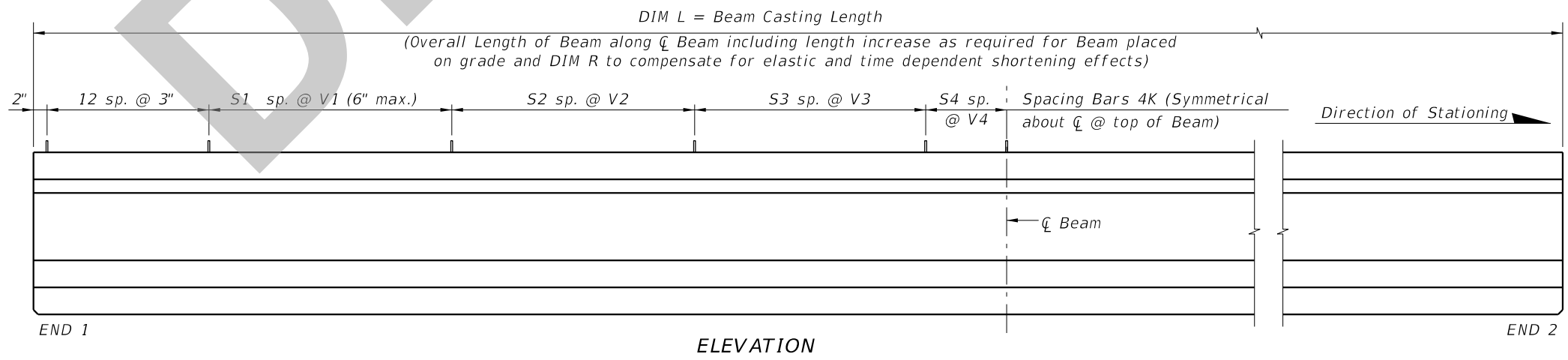
END VIEW



ELEVATION AT END OF BEAM (Flanges Not Shown For Clarity)



SECTION A-A (Showing Bars 4K, 4Y & 5Z Only)



ELEVATION

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SDATES STIMES

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FDOT FY 2020-21 STANDARD PLANS

AASHTO TYPE II BEAM

STANDARD DETAILS
 INDEX 450-120 SHEET 3 of 4