U.I.P. & REHABILITATE EXISTING (x', x') X SPANS

PART ELEVATION SHOWING CONCRETE REMOVAL

5'-0"±

Existing Reinforcement Embedded in Barrier (U.I.P.) (Typ.)

Removal Limits of Existing Barrier Concrete

Exist. Wing

Top of Slab

Exist. Jt. Filler

Existing Slab

End of Beam & Slab

Existing Reinforcement Embedded in Beam (U.I.P.)

Existing Beam

ELEVATION

5'-0"±

2'-9"   2'-3"±

20"   8"   5"

Match exist. top of barrier

Top of Existing Barrier

1"Ø Hole

2'-8" (Above finished surface of bridge)

17"

Varies

10"

Finished Surface of Bridge

1/4" Jt. Filler

Exist. Slab

End of Beam & Slab

Exist. Beam

SEC/SUR x	TWP x	RGE x

DATE PREPARED
4/19/2024

ROUTE	STATE
	MO

DISTRICT	SHEET NO.
BR	1

COUNTY

JOB NO.

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

Estimated Quantities

Item		Total
Barrier End Modification	each	4

PLAN (3)

5'-0"±

2"   5-#5-R3   7¾"   3-#5-R4   2"±

6"   8"   8"   11"   7⅞"   7⅝"

Exist. Wing

¼" Jt. Filler

5-#5-R5

Outside Edge of Existing Barrier and Beam

12"±

9"±

3"

3-#5-R5

2-#5-R5 (1)

3-#5-R6

#5-R1

12"

6-#5-R2

ELEVATION A-A

12"±

9"±   3"

#5-R3

5-#5-R5 (Each face)

#5-R1

Top of Wing

10" (Typ.)

1/4" Jt. Filler

(1) Bend in field.

(2) 2 Spa. @ 4½"

(3) Existing reinforcement not shown for clarity.

(4) Existing longitudinal reinforcement not shown for clarity.

(5) Existing reinforcement embedded in beam (U.I.P.) (Bend in field as needed) (Typ.)

General Notes:

Design Specifications:
2002 AASHTO LFD (17th Ed.) Standard Specifications

Design Unit Stresses:
Class B-1 Concrete f'c = 4,000 psi
Reinforcing Steel (Grade 60) fy = 60,000 psi

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

Miscellaneous:
One lane of traffic shall remain open during construction. See roadway plans for traffic control.

All exposed edges of barrier shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise shown.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

All reinforcement in barrier end modification shall be epoxy coated.

Bars bonded in existing concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for plain bars and 30 diameters for deformed bars, unless otherwise noted.

The area exposed by the removal of concrete and not covered with new concrete shall be coated with a qualified special mortar in accordance with Sec 704.

Cost of removing existing barrier concrete, and cost of furnishing and installing new concrete, new reinforcing steel, and any other work incidental to the barrier end modification, complete in place, will be considered completely covered by the contract unit price for Barrier End Modification.

ELEVATION SHOWING REINFORCEMENT (3)

A   B   C

5'-0"±

2"   5-#5-R3   7¾"   3-#5-R4   2"±

6"   8"   8"   11"   7⅞"   7⅝"

(1)

5¼"

5-#5-R5 (Each face)

7⅞"   7⅝"

(2)

3-#5-R6 (Rdwy. Face)

2½"

#5-R1

6-#5-R2

Top of Slab

Exist. Slab

Exist. Beam

A   B   C

SECTION B-B (4)

12"±

9"±   3"

#5-R3

5-#5-R5 (Each face)

5¼"

7⅞"   7⅝"

3⅜"

(2)

2½"

#5-R2

5-1"Ø Holes @ 3¼" cts.

Top of Slab

Exist. Slab

Exist. Beam

(5)

SECTION C-C (4)

Varies   Varies

#5-R4

5-#5-R5 (Each face)

3-#5-R6

2'-8" (Above finished surface of bridge)

#5-R2

(5)

BARRIER MODIFICATION FOR GUARDRAIL ATTACHMENT

DESCRIPTION

DATE

REPAIRS TO BRIDGE:
ROUTE _ OVER

ROUTE _ FROM ROUTE _ TO ROUTE _
ABOUT _ MILES _ OF ROUTE _
BEGINNING STATION x+x.x± (MATCH EXISTING)

5'-0"±

2"   5-#5-R3   7¾"   3-#5-R4   2"±

Exist.
Wing

6"   8"   8"   11"   7⅝"   7⅝"

Outside
Edge of
Existing
Barrier
and Beam

1/4" Jt.
Filler

5-#5-R5

3-#5-R5

12"±   9"±

3"

2-#5-R5
(1)   3-#5-R6

#5-R1   12"   6-#5-R2

Skewed Plan