ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8
F.A. 308	109BR-4	WHITESIDE	47	24	12 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:			

Contract #64B29

P.P.C. Dk. Bms.
₵ Beam & Span

1'-6"

8-12" x 12" x 1" Steel Plates at
3'-0" cts. Top and Bott. Each Span

PLAN

Stage Construction Line

3" x 3" x ¼" ℞ Washer
Top and Bottom

12" x 12" x 1" Steel Plate
(M-270 Grade 36) Top & Bottom

Grouted Key

Steel Shims, Top and
Bottom (If required)

1¼" φ Drilled
Hole

1" φ Stud Bolt threaded 6" Each
End with washers and nuts.
(Min. Fy=50 ksi)
Coat with a water soluble
lubricant.
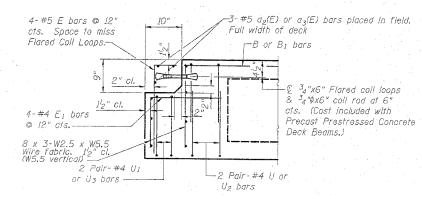
SECTION

1⅛" φ Hole

6"

6"

CLAMPING PLATE

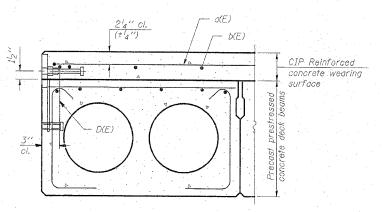## SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

See Special Provisions for Stage Construction of
Precast Prestressed Concrete Deck Beams.
Cost included with "Precast Prestressed Concrete
Deck Beams".
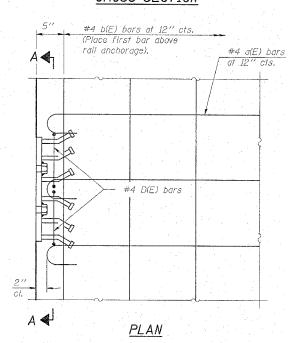See Stage Construction Details for traffic lanes.

4-#5 E bars @ 12"
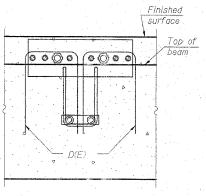cts. Space to miss
Flared Coil Loops.

10"

3-#5 a₂(E) or a₃(E) bars placed in field.
Full width of deck

B or B₁ bars

9"

2" cl.

₵ ¾"x6" Flared coil loops
& ¾"x6" coil rod at 6"
cts. (Cost included with
Precast Prestressed Concrete
Deck Beams.)

1½" cl.

4-#4 E₁ bars
@ 12" cts.

8 x 3-W2.5 x W5.5
Wire fabric. 1½" cl.
(W5.5 vertical)

2 Pair-#4 U₁
or U₃ bars

2 Pair-#4 U or
U₂ bars

END OF BEAM (EXPANSION END)
(Dimensions are at Rt. L's)

2½" cl.
(±¼")

a(E)
b(E)

1½"

3"
cl.

D(E)

CIP Reinforced
concrete wearing
surface

Precast prestressed
concrete deck beams

CROSS SECTION

5"

#4 b(E) bars at 12" cts.
(Place first bar above
rail anchorage).
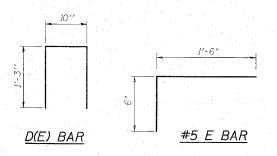
#4 a(E) bars
at 12" cts.

A

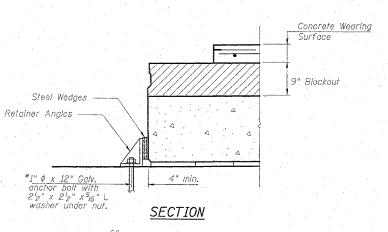#4 D(E) bars

2"
cl.

A

PLAN

Notes:
The rail anchorage shall be cast with the beam
and the wearing surface shall be cast in the field.
Formwork necessary for the wearing surface
may be secured utilizing the bottom rail
anchorage inserts and/or additional inserts cast
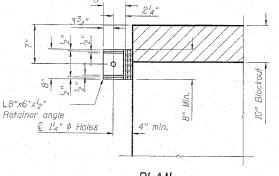into the beam. Drilling into the beam will not be
permitted.

Finished
surface

Top of
beam

D(E)

SECTION A-A

10"

1'-3"

D(E) BAR

1'-6"

6"

#5 E BAR

2'-6"

9"

#4 E₁ BAR

9"

2'-3"

#4 BAR U₁

9"

2'-9"

#4 BAR U₃

Concrete Wearing
Surface

9" Blockout

Steel Wedges

Retainer Angles

*1" φ x 12" Galv.
anchor bolt with
2½" x 2½" x⁵∕₁₆" L
washer under nut.

4" min.

SECTION

6"

2¼"

3¾"

7"

8"

L8"x6"x½"
Retainer angle
₵ 1¼" φ Holes

8" Min.

10" Blockout

4" min.

PLAN

SIDE RETAINER AT EXPANSION JOINT

* Anchor bolts shall be approved threaded rods and be placed in drilled holes and
grouted in place. Cost of retainer and accessories are included with Precast Prestressed
Concrete Deck Beams.
Note: After block-outs are poured and cured the retainer angles shall be removed. Anchor
bolts may be left in place.