

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 65
FAP Rte 614	144(B-1)	Cass & Mason	351	201	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

Contract #72A76

Diagram illustrating the Anchor Bolt Layout for a girder connection. The layout shows a girder (Typ.) and a bearing (Typ.) connected by anchor bolts. Key dimensions and components are labeled:

- Horizontal distance from the girder centerline to the first anchor bolt: $10\frac{5}{8}"$
- Vertical distance from the girder centerline to the first anchor bolt: $4\frac{15}{16}"$
- Angle between the girder centerline and the line to the first anchor bolt: $113\frac{1}{4}"$
- Angle between the girder centerline and the line to the second anchor bolt: $113\frac{1}{4}"$
- Anchor Bolt (Typ.) diameter: $1\frac{1}{2}" \phi$
- Components: Girder (Typ.), Bearing (Typ.), and Anchor Bolt (Typ.)

ANCHOR BOLT LAYOUT
(Typical all Girder Locations)

Diagram of a U-shaped bar with dimensions and labels:

- Top horizontal section: $u_1(E)$ (width), $u_2(E)$ (height)
- Left vertical section: $2'-2''$ (width), $2'-7''$ (height)
- Right vertical section: $3'-5''$ (width), $4'-1''$ (height)
- Bottom horizontal section: $u_1(E)$ (width), $u_2(E)$ (height)
- Radius labels: $u_1(E)$ Rad. $1'-1''$, $u_2(E)$ Rad. $1'-3\frac{1}{2}''$

BARS $u_1(E)$ & $u_2(E)$

Bar	No.	Size	Length	Shape
h8(E)	36	#5	39'-6"	—
p2(E)	7	#7	39'-6"	—
s2(E)	32	#5	10'-7"	□
u1(E)	36	#5	7'-9"	U
u2(E)	6	#6	9'-3"	U
v6(E)	88	#6	18'-6"	—
Structure Excavation			Cu. Yd.	19
Concrete Structures			Cu. Yd.	77.6
Reinforcement Bars, Epoxy Coated			Pound	5220
Furnishing Steel Piles, HP 14x89			Foot	1045
Driving Piles			Foot	1045
Concrete Encasement			Cu. Yd.	6.0
Pile Shoes			Each	11


HANSON
 Professional Services Inc.

Type:	HP 14x89
Nominal Required Bearing:	705 kips
Factored Resistance Available:	347 kips
Est. Length:	95 Ft.
No. Production Piles:	11
No. Test Piles:	None

Plan view of the bridge structure showing the layout of the piers, bents, and roadway. The diagram includes dimensions for the bridge width (21'-0"), pier spacing (10-Pile Spaces at 3'-10" = 38'-4"), and various offsets (1'-10", 1'-3", 1'-6"). It also shows the location of Pier No. 7 at Sta. 915+11.00 and the symmetry about the roadway centerline. The bridge is shown with a 1'-3" radius at the ends and a 25-degree angle at the pier location.