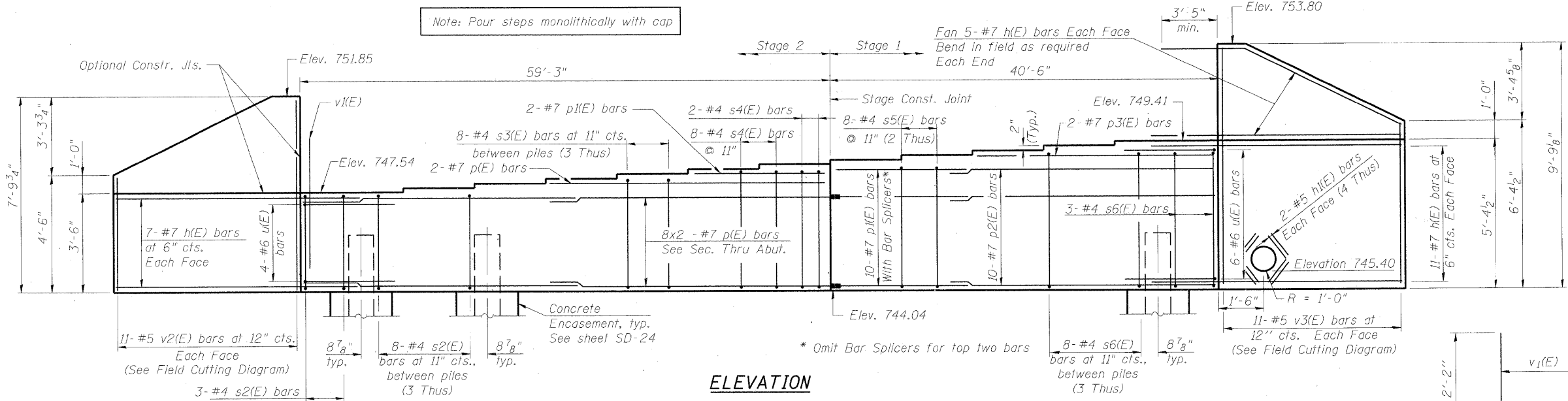


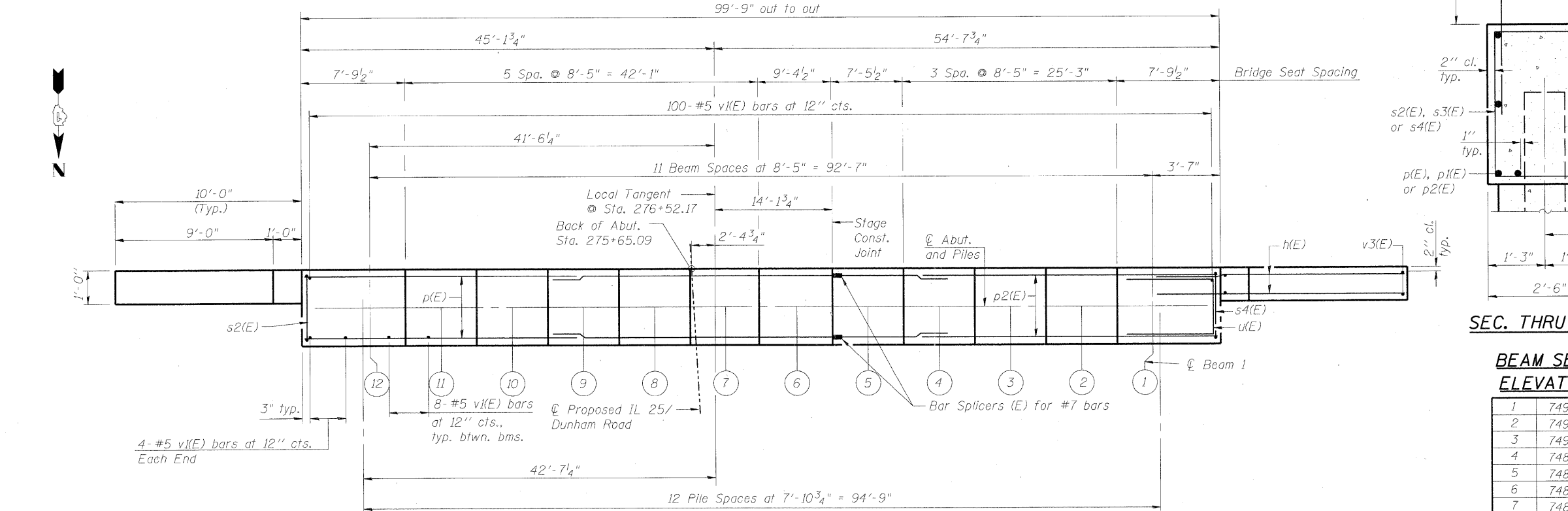
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET SD-20 OF 34 SHEETS
		KANE	545	335	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		Contract # 63074

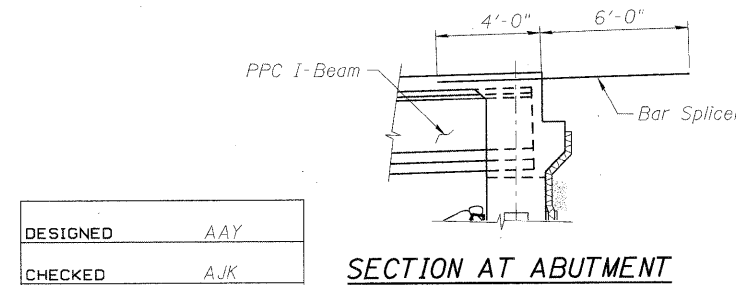
Note: Four steps monolithically with cap



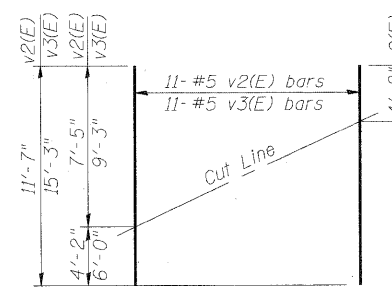
ELEVATION



PLAN

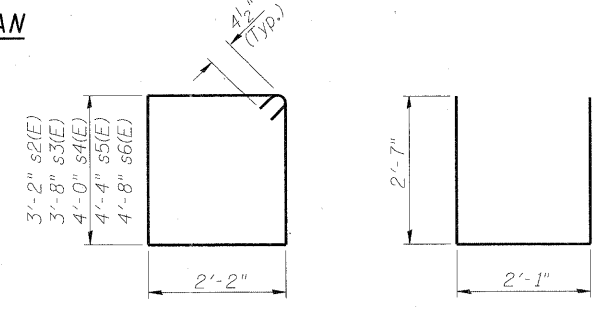


SECTION AT ABUTMENT



BARS v2(E) & v3(E)
FIELD CUTTING DIAGRAM

Order v2(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.



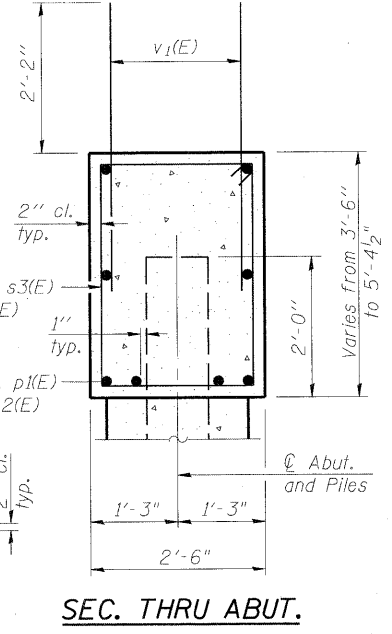
BARS s2(E) Thru s6(E) BAR u(E)

PILE DATA

Type: HP12x53
Nominal Required Bearing: 288 kips
Allowable Resistance Available: 96 kips
Est. Length: 72.0 Feet
No. Production Piles: 12
No. Test Piles: 1
Piles shall be driven through 1'-6" diameter precored holes extending to elevation 739.0 according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.

BEAM SEAT ELEVATION

Beam No.	Elevation
1	749.41
2	749.24
3	749.07
4	748.90
5	748.73
6	748.56
7	748.39
8	748.22
9	748.05
10	747.88
11	747.71
12	747.54



SEC. THRU ABUT.

BILL OF MATERIAL

(Stage 1)				
Bar	No.	Size	Length	Shape
h(E)	32	#7	14'-3"	—
h1(E)	16	#5	3'-0"	—
p1(E)	10	#7	16'-6"	—
p2(E)	10	#7	27'-3"	—
p3(E)	2	#7	24'-3"	—
s5(E)	16	#4	13'-9"	□
s6(E)	27	#4	14'-5"	□
u(E)	6	#6	7'-3"	—
v1(E)	80	#5	4'-4"	—
v3(E)	11	#5	15'-3"	—
Concrete Structures	Cu. Yd.		22.0	
Reinforcement Bars, Epoxy Coated	Pound		2,990	
Furnishing Steel Piles, HP12x53	Foot		288	
Driving Piles	Foot		288	
Test Pile Steel, HP12x53	Each		1	
Pile Shoes	Each		5	
Concrete Encasement	Cu. Yd.		1.8	
Bar Splicers	Each		8	

BILL OF MATERIAL

(Stage 2)				
Bar	No.	Size	Length	Shape
h(E)	24	#7	14'-3"	—
p(E)	18	#7	31'-3"	—
p1(E)	2	#7	16'-6"	—
s2(E)	27	#4	11'-5"	□
s3(E)	24	#4	12'-5"	□
s4(E)	10	#4	13'-1"	□
u(E)	4	#6	7'-3"	—
v1(E)	116	#5	4'-4"	—
v2(E)	11	#5	11'-7"	—
Concrete Structures	Cu. Yd.		24.4	
Reinforcement Bars, Epoxy Coated	Pound		3,110	
Furnishing Steel Piles, HP12x53	Foot		576	
Driving Piles	Foot		576	
Pile Shoes	Each		8	
Concrete Encasement	Cu. Yd.		2.8	

For details of Bar Splicers, see sheet SD-26.
For details of piles and Concrete Encasement, see sheet SD-24.

**SOUTH ABUTMENT-PLAN AND ELEVATION
IL 25/DUNHAM ROAD OVER THE
EAST BRANCH OF BREWSTER CREEK
F.A.P. 360 - SEC. 06-00214-15-BR
KANE COUNTY
STATION 276+36.96
STRUCTURE NO. 045-2032**

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450
Job # 3944

DESIGNED	AAY
CHECKED	AJK
DRAWN	VH
CHECKED	DMC

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