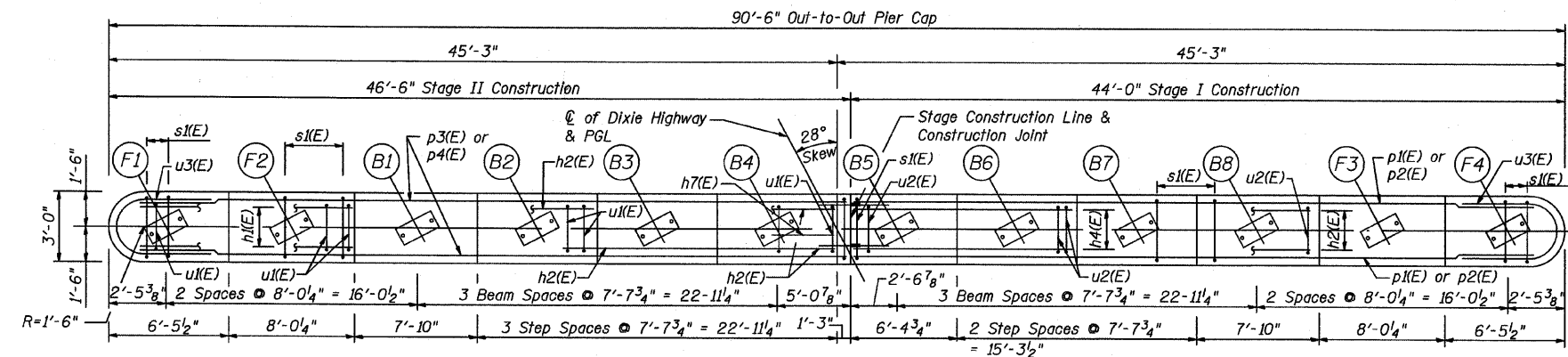


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	41

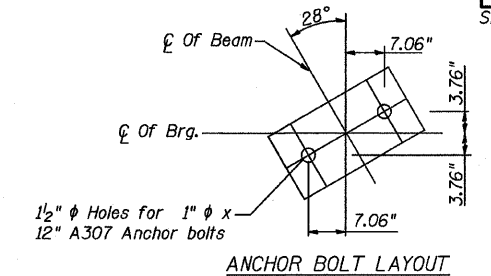
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT-
Sheet 17 of 22 Contract No. 62539

#PENTBS\$
#PLTDVBS\$

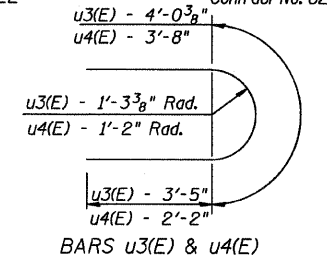


PLAN

Notes:
Space Reinforcement in Cap to Miss Anchor Bolts.
Four steps Monolithically With Cap.
Bars Indicated Thus 4 x 2-#5 etc. Indicates 4 Lines of Bars With 2 Lengths Per Line
All Edges Shall Have Standard 3/4" Chamfers.
Apply Concrete Sealer to all exposed concrete surfaces of Pier located to the outside of Beams B1 & B8.



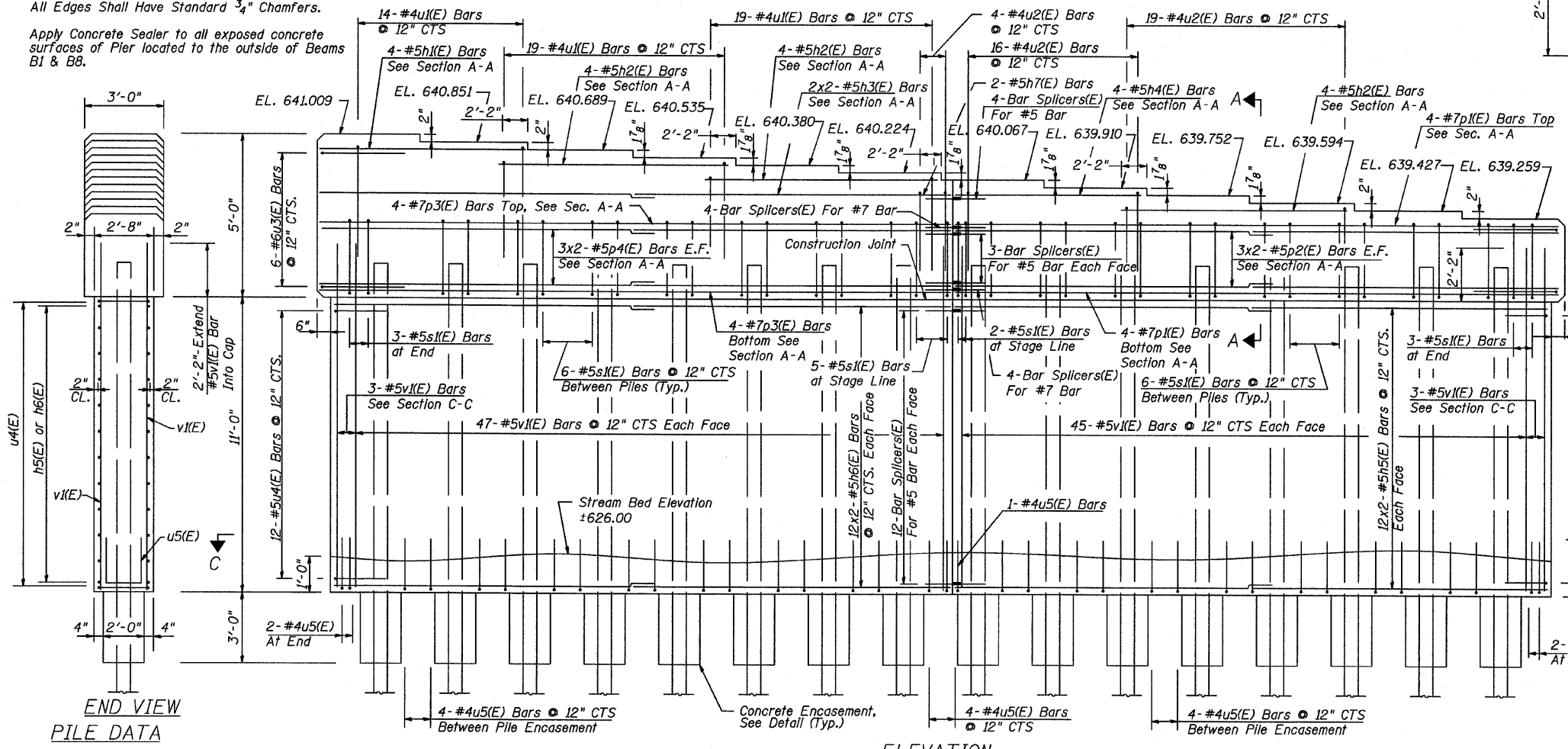
ANCHOR BOLT LAYOUT



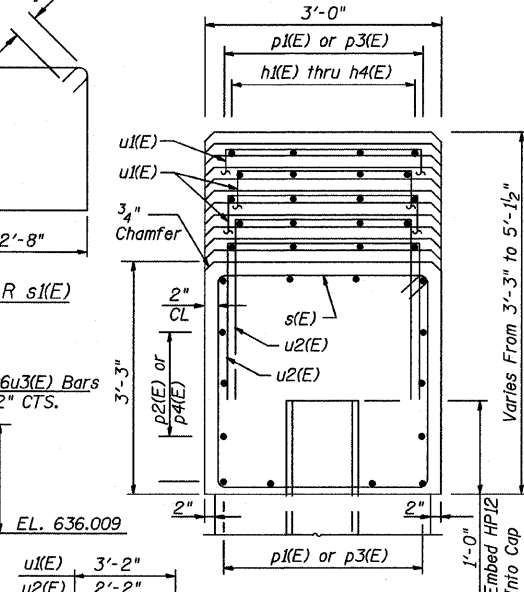
BARS u3(E) & u4(E)
NORTH PIER
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	4	#5	12'-10"	
h2(E)	12	#5	17'-9"	
h3(E)	4	#5	23'-7"	
h4(E)	4	#5	13'-10"	
h5(E)	48	#5	22'-9"	
h6(E)	48	#5	24'-0"	
h7(E)	2	#5	4'-0"	
p1(E)	8	#7	42'-5"	
p2(E)	12	#5	22'-4"	
p3(E)	8	#7	44'-11"	
p4(E)	12	#5	23'-7"	
s1(E)	97	#5	12'-1"	
u1(E)	52	#4	8'-11"	
u2(E)	39	#4	6'-11"	
u3(E)	10	#6	10'-10"	
u4(E)	24	#5	8'-0"	
u5(E)	65	#4	5'-7"	
v1(E)	190	#5	13'-2"	

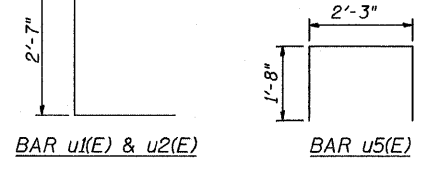
Reinforcement Bars, Epoxy Coated	Pound	9,720
Concrete Structures	Cu. Yd.	140
Bar Splicers	Each	42
Furnishing Steel Piles HP12x74	Foot	680
Driving Piles	Foot	680
Test Pile Steel, HP12x74	Each	1
Pile Shoes	Each	15
Structure Excavation	Cu. Yd.	25
Concrete Encasement	Cu. Yd.	5
Concrete Sealer	Sq. Ft.	1,240



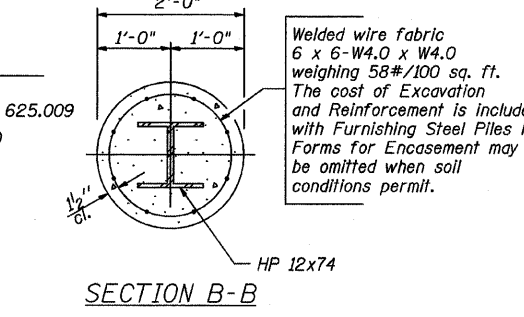
ELEVATION



SECTION A-A



SECTION B-B

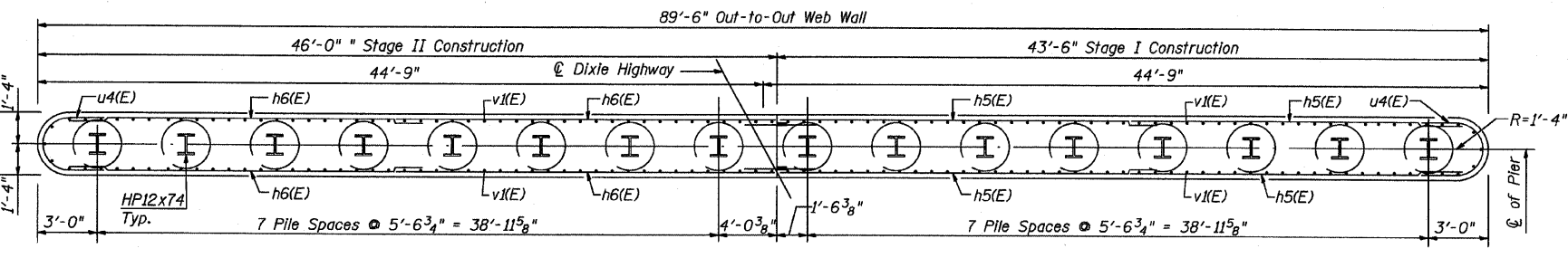


PILE ENCASEMENT DETAIL

END VIEW
PILE DATA

Type: HP12x74
Nominal Required Bearing: 589 Kips
Allowable Resistance Available: 196 Kips
Est. Total Length: 45'-0"
No. Required: 15 + 1 Test Pile
Negative Skin Friction: 30 Kips/Pile
Provide Pile Shoes for all Piles

Note:
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



SECTION C-C

RME Rubinos & Mesa Engineers, Inc.

REVISIONS	
NAME	DATE

NORTH PIER

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-30-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK

#FILES\$
#DATE\$
#TIMES\$