STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-F	COOK	22	17
FED.ROAD DIST.NO.	ILLINOIS	FED.AID PROJECT-		

Sheet 15 of 22 Contract No.60119

Notes:

Pour Steps Monolithically With Cap.

Space Reinforcement in Cap to Miss Anchor Bolts.

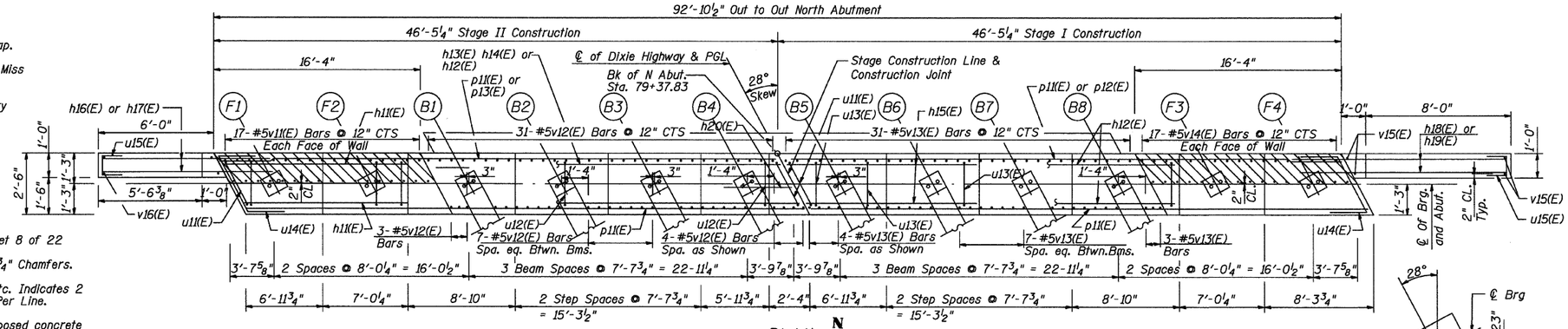
Hatched Area Denotes Temporary Concrete Wall

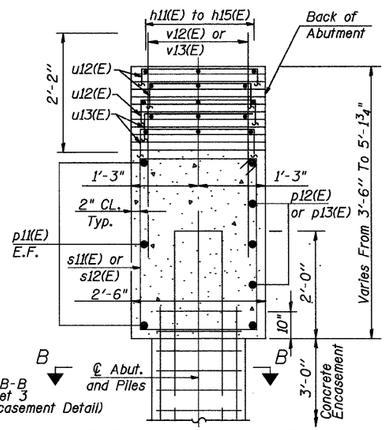
For Diaphragm Details, See Sheet 8 of 22

All Edges Shall Have Standard $\frac{3}{4}$" Chamfers.

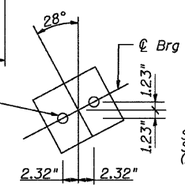
Bars Indicated Thus 2x2-#5 etc. Indicates 2 Lines of Bars With 2 Lengths Per Line.

Apply Concrete Sealer to all exposed concrete surfaces of abutment located to the outside of Beams B1 & B8.

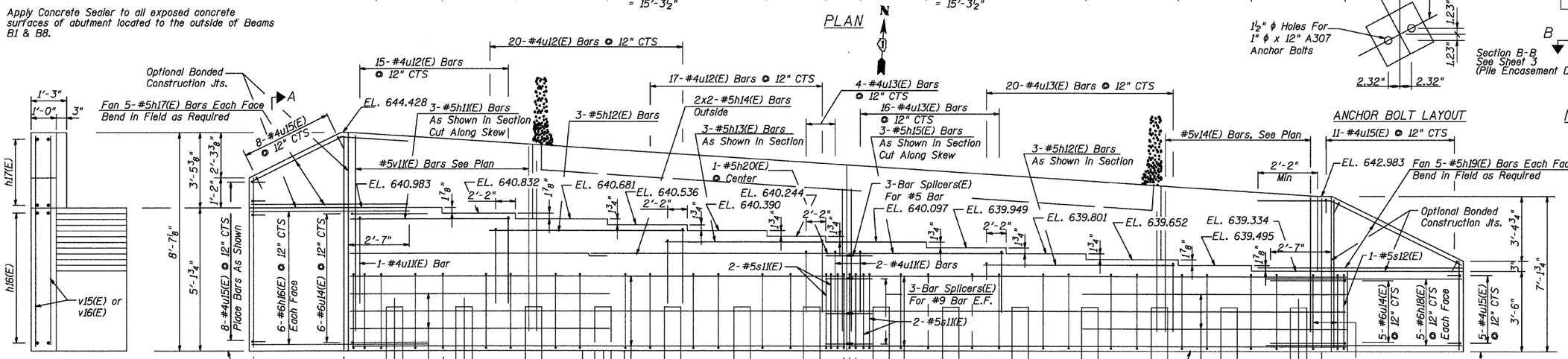




SECTION THRU N. ABUT.



PLAN



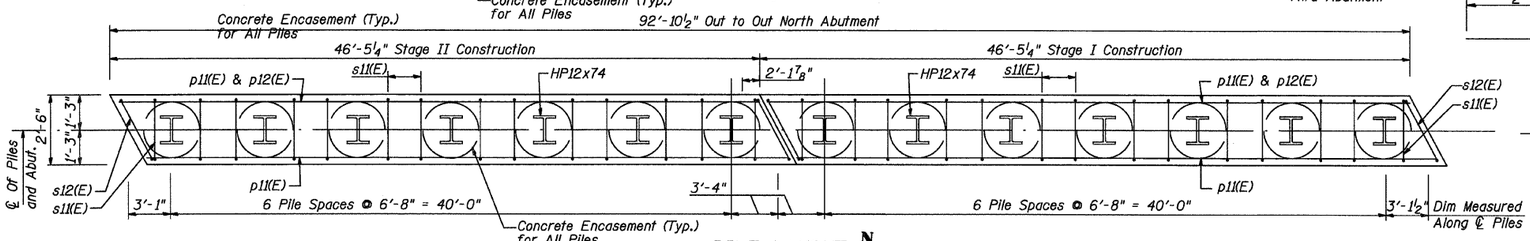
ANCHOR BOLT LAYOUT

BAR u14(E)

SECTION A-A

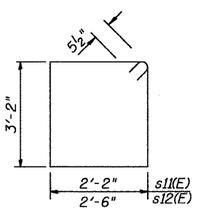
ELEVATION (Looking North)

PILE LAYOUT

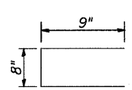


PILE DATA

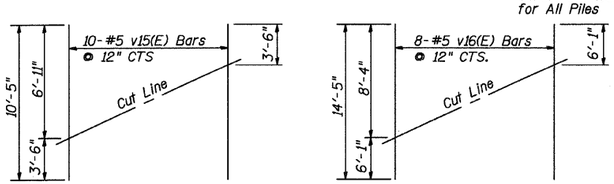
Type: HP12x74
Nominal Required Bearing: 589 Kips
Allowable Resistance Available: 196 Kips
Est. Total Length: 45'-0"
No. Required: 13 + 1 Test Pile
Negative Skin Friction: 30 Kips/Pile
Provide Pile Shoes for all Piles



BARS s11(E) & s12(E)



BAR u15(E)



FIELD CUTTING DIAGRAM
Order v15(E) Full Length. Cut as Shown and Use Remainder of Bars in Opposite Face.

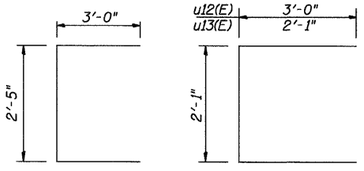
FIELD CUTTING DIAGRAM
Order v16(E) Full Length. Cut as Shown and Use Remainder of Bars in Opposite Face.

LEGEND

Indicates Temporary Wall

B.F. Indicates Back Face of Abutment

E.F. Indicates Each Face of Abutment



BAR u11(E) BARS u12(E) & u13(E)

N. ABUT. BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h11(E)	3	#5	15'-1"	
h12(E)	6	#5	18'-8"	
h13(E)	3	#5	15'-10"	
h14(E)	4	#5	24'-4"	
h15(E)	3	#5	9'-9"	
h16(E)	12	#6	9'-1"	
h17(E)	10	#5	9'-1"	
h18(E)	10	#6	11'-7"	
h19(E)	10	#5	11'-10"	
h20(E)	1	#5	4'-6"	
p11(E)	12	#9	46'-3"	
p12(E)	2	#9	25'-1"	
p13(E)	2	#10	26'-7"	
s11(E)	80	#5	11'-7"	
s12(E)	6	#5	12'-3"	
u11(E)	3	#4	8'-5"	
u12(E)	52	#4	8'-1"	
u13(E)	40	#4	6'-3"	
u14(E)	11	#6	7'-8"	
u15(E)	32	#4	2'-2"	
v11(E)	34	#5	7'-4"	
v12(E)	59	#5	6'-0"	
v13(E)	59	#5	5'-1"	
v14(E)	34	#5	6'-0"	
v15(E)	10	#5	10'-5"	
v16(E)	8	#5	14'-5"	

Reinforcement Bars, Epoxy Coated	Pound	6,300
Concrete Structures	Cu. Yds.	42
Bar Splicers	Each	9
Furnishing Steel Piles HP12x74	Foot	590
Driving Piles	Foot	590
Test Pile Steel, HP12x74	Each	1
Pile Shoes	Each	13
Structure Excavation	Cu. Yd.	15
Concrete Sealer	Sq. Ft.	520
Concrete Encasement	Cu. Yds.	5

REVISIONS	
NAME	DATE

RME Rubinos & Mesia Engineers, Inc.

NORTH ABUTMENT

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-F
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946 - PROPOSED
016-0775 - EXISTING

SCALE: NOT-TO-SCALE
DATE 4-27-09

DRAWN BY TH
DESIGNED BY TH
CHECKED BY MF

FOR INFORMATION ONLY

$PENTRILS$
$PLTDRVS$

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