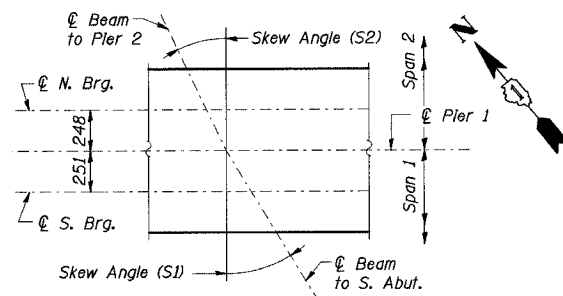


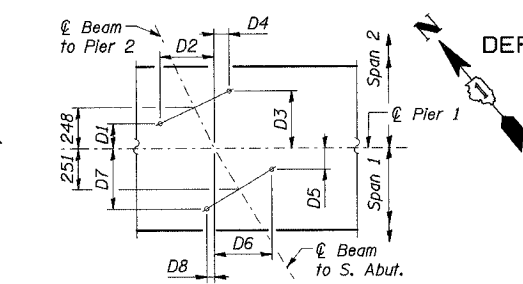
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 30
F.A.L. 80/94		COOK	870	503	37 SHEETS
SECTION (0203.1 & 0312-708W) R-3 CONTRACT # 62108					



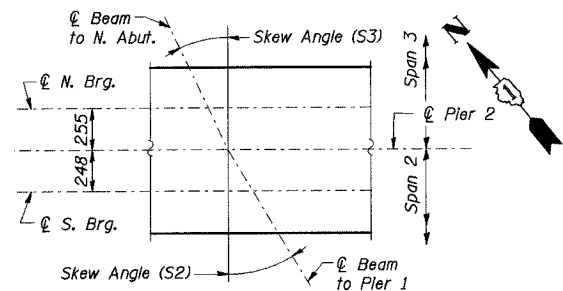
BEAM NO.	Skew Angle (S1)	Skew Angle (S2)
9	27°45'14"	26°26'30"
10	27°36'25"	26°17'32"
11	27°27'34"	26°08'33"
12	27°18'42"	25°59'33"
13	27°09'48"	25°50'31"
14	27°00'53"	25°41'28"
15	26°51'56"	25°32'23"
16	26°42'58"	25°23'18"

BEAM SKEW ANGLES
AT PIER 1



D1	D2	D3	D4	D5	D6	D7	D8
91	439	405	192	87	444	415	179
92	438	404	193	88	443	414	181
93	438	403	194	89	443	413	182
94	437	402	195	89	442	413	183
95	437	401	197	90	442	412	184
95	437	401	198	91	442	411	186
96	436	400	199	92	441	410	187
97	436	399	200	93	441	409	188

ANCHOR BOLT LOCATION DETAILS
AT PIER 1



BEAM NO.	Skew Angle (S2)	Skew Angle (S3)
9	26°26'30"	25°08'21"
10	26°17'32"	24°59'15"
11	26°08'33"	24°50'09"
12	25°59'33"	24°41'01"
13	25°50'31"	24°31'51"
14	25°41'28"	24°22'40"
15	25°32'23"	24°13'52"
16	25°23'18"	24°04'39"

BEAM SKEW ANGLES
AT PIER 2

BILL OF MATERIAL PIER 1

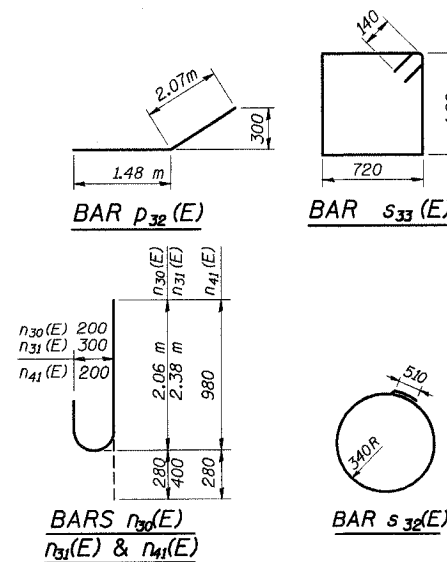
Bar	No.	Size	Length (m)	Shape
h30(E)	56	# 20	6.64	—
h31(E)	12	# 25	6.87	—
h32(E)	18	# 15	5.22	—
h33(E)	10	# 15	5.72	—
h34(E)	5	# 15	7.25	—
h35(E)	5	# 15	3.59	—
h36(E)	6	# 30	4.83	—
n30(E)	10	# 25	2.34	U
n31(E)	36	# 30	2.78	U
p30(E)	6	# 30	12.58	—
p31(E)	12	# 30	14.59	—
p32(E)	6	# 30	3.55	—
s30(E)	58	# 25	4.88	L
s31(E)	42	# 25	8.76	L
s32(E)	9	# 15	2.65	O
s33(E)	84	# 15	4.30	□
s34(E)	14	# 15	2.92	L
s35(E)	12	# 15	2.46	L
s36(E)	12	# 15	2.78	L
s37(E)	12	# 15	3.12	L
sp30(E)	3	# 15	160.74	~
t30(E)	52	# 30	2.94	—
u30(E)	30	# 15	1.78]
u31(E)	5	# 20	2.40]
v30(E)	5	# 25	3.98	—
v31(E)	36	# 30	6.46	—
v32(E)	5	# 15	1.57	—
w30(E)	22	# 20	9.16	—
ITEM UNIT QUANTITY				
Concrete Structures	m ³	138.5		
Reinforcement Bars, Epoxy Coated	kg	10,710		
Structure Excavation	m ³	329		
Furnishing Steel Piles HP310X79	m	800		
Driving Steel Piles	m	800		
Test Pile Steel HP310X79	Each	1		
Controlled Low-Strength Material	m ³	4.7		

BILL OF MATERIAL PIER 2

Bar	No.	Size	Length (m)	Shape
h40(E)	56	# 20	6.96	—
h41(E)	12	# 25	7.19	—
h42(E)	18	# 15	5.44	—
h43(E)	10	# 15	5.98	—
h44(E)	5	# 15	7.63	—
h45(E)	5	# 15	3.79	—
h46(E)	6	# 30	5.11	—
n30(E)	10	# 25	2.34	U
n31(E)	48	# 30	2.78	U
n41(E)	45	# 25	1.26	U
p40(E)	6	# 30	13.21	—
p41(E)	24	# 30	8.38	—
p32(E)	6	# 30	3.55	—
s30(E)	61	# 25	4.88	L
s41(E)	44	# 25	9.12	L
s32(E)	9	# 15	2.65	O
s33(E)	88	# 15	4.30	□
s34(E)	14	# 15	2.92	L
s35(E)	13	# 15	2.46	L
s36(E)	13	# 15	2.78	L
s37(E)	13	# 15	3.12	L
sp40(E)	3	# 15	165.07	~
t40(E)	82	# 30	3.24	—
u30(E)	30	# 15	1.78]
u31(E)	5	# 20	2.40]
v40(E)	5	# 25	4.18	—
v41(E)	48	# 30	6.61	—
v32(E)	5	# 15	1.57	—
w40(E)	24	# 20	10.05	—
ITEM UNIT QUANTITY				
Concrete Structures	m ³	154.1		
Reinforcement Bars, Epoxy Coated	kg	12,790		
Structure Excavation	m ³	460		
Furnishing Steel Piles HP310X79	m	735		
Driving Steel Piles	m	735		
Test Pile Steel HP310X79	Each	1		
Controlled Low-Strength Material	m ³	5.2		

Bar	A	B
s30(E)	760	2.06 m
s31(E)	760	4.00 m
s34(E)	1.12 m	900
s35(E)	1.12 m	670
s36(E)	1.12 m	830
s37(E)	1.12 m	1,000
s41(E)	760	4.18 m
u30(E)	760	510
u31(E)	1.12 m	640

BARS s30(E), s31(E),
s34(E) thru s37(E) & s41(E)
u30(E) & u31(E)



DESIGNED	M.R./ H.T.
CHECKED	H.T.
DRAWN	J.B./ J.S.
CHECKED	H.T./ M.R.

- Notes:
1. Work this sheet with Sheet No. 27 & 28 of 37 Sheets.

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94/IL 394 SOUTH BOUND
PIER DETAILS
SB IL. ROUTE 394 OVER CANADIAN NATIONAL RR
F.A.P. 332 SECTION (0203.1 & 0312-708W) R-3
COOK COUNTY
STA. 39+752.246 S.N. 016-2798 (INSIDE LANES)
DATE: July 18, 2005
SCALE: NONE
Soodan & Associates, Inc.
100 North LaSalle Street, Suite 1800
Chicago, Illinois 60602