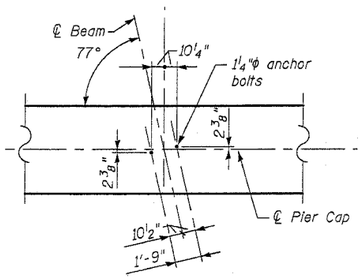
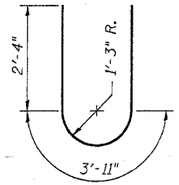
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 0575	14BR	WILL	143	86
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. S-22
S-30 SHEETS

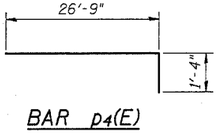
Contract No. 62098



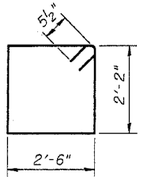
TYPICAL ANCHOR BOLT LAYOUT



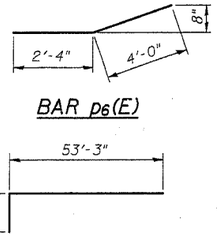
BAR u_1(E)



BAR p_4(E)

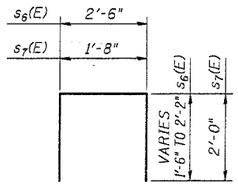


BAR s_5(E)

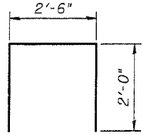


BAR p_6(E)

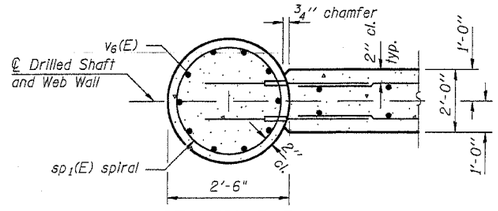
BAR p_8(E)



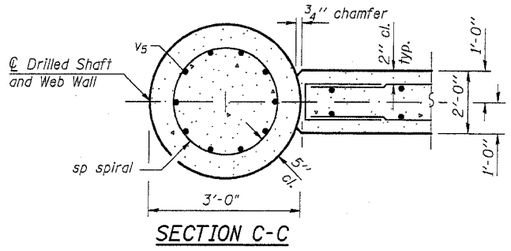
BARS s_6(E) & s_7(E)



BARS s_8(E)



SECTION B-B



SECTION C-C

Construction Sequence for Web Wall:

1. Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
2. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
3. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
4. Construct Columns.
5. Construct upper web walls.
6. The lower and upper web walls between the Stage 1 and Stage 2 shafts and columns shall be constructed during Stage 2. The upper web wall must be poured up under the cantilevered Stage 1 pier cap.

PIER 1 BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h_3(E)	4	6	30'-9"	
	h_4(E)	84	5	7'-6"	
	h_5(E)	126	5	7'-0"	
	h_6(E)	4	6	49'-3"	
	p_4(E)	5	8	28'-1"	
	p_5(E)	4	6	24'-4"	
	p_6(E)	8	6	6'-4"	
	p_7(E)	4	5	6'-2"	
	p_8(E)	5	8	54'-7"	
	p_9(E)	4	6	50'-10"	
	p_{10}(E)	4	5	32'-8"	
	s_5(E)	76	5	10'-3"	
	s_6(E)	24	5	6'-2"	
	s_7(E)	126	5	5'-8"	
	s_8(E)	43	5	6'-6"	
**	sp	8	3	23'-6"	
**	sp_1(E)	8	3	4'-4"	
	u_1(E)	6	6	8'-7"	
	v_5	80	9	23'-5"	
	v_6(E)	80	6	10'-8"	
	v_7(E)	112	5	4'-3"	
	v_8(E)	112	5	8'-2"	
	Underwater Structure Excavation Protection Location 1			Each	1
	Structure Excavation			Cu. Yd.	14.4
	Drilled Shaft in Soil 36" Dia.			Foot	91
	Drilled Shaft in Rock 30" Dia.			Foot	96
	Concrete Structures			Cu. Yd.	73.5
	Reinforcement Bars, Epoxy Coated			Pound	6350
	Reinforcement Bars			Pound	7395
	Bar Splicers			Each	185

**Length is height of spiral.

PIER 2 BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h_3(E)	4	6	30'-9"	
	h_4(E)	84	5	7'-6"	
	h_5(E)	126	5	7'-0"	
	h_6(E)	4	6	49'-3"	
	p_4(E)	5	8	28'-1"	
	p_5(E)	4	6	24'-4"	
	p_6(E)	8	6	6'-4"	
	p_7(E)	4	5	6'-2"	
	p_8(E)	5	8	54'-7"	
	p_9(E)	4	6	50'-10"	
	p_{10}(E)	4	5	32'-8"	
	s_5(E)	76	5	10'-3"	
	s_6(E)	24	5	6'-2"	
	s_7(E)	126	5	5'-8"	
	s_8(E)	43	5	6'-6"	
**	sp	8	3	23'-6"	
**	sp_1(E)	8	3	4'-4"	
	u_1(E)	6	6	8'-7"	
	v_5	80	9	23'-5"	
	v_6(E)	80	6	10'-8"	
	v_7(E)	112	5	4'-3"	
	v_8(E)	112	5	8'-2"	
	Underwater Structure Excavation Protection Location 2			Each	1
	Structure Excavation			Cu. Yd.	14.4
	Drilled Shaft in Soil 36" Dia.			Foot	91
	Drilled Shaft in Rock 30" Dia.			Foot	96
	Concrete Structures			Cu. Yd.	73.7
	Reinforcement Bars, Epoxy Coated			Pound	6350
	Reinforcement Bars			Pound	7395
	Bar Splicers			Each	185

**Length is height of spiral.

DESIGNED	MJM
CHECKED	WHE
DRAWN	EAB
CHECKED	WHE

REVISIONS NAME	DATE

LONCO, INC.
CONSULTING ENGINEERS 630 NORTH WASHINGTON ST., SUITE 205
NAPERVILLE, ILLINOIS 60563 (630) 577-9100

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER DETAILS

US ROUTE 30 (LINCOLN HIGHWAY)
OVER LILY CACHE CREEK
WILL COUNTY

F.A.P. ROUTE 0575 SEC. 14BR
STATION 28+22.14 NEW STRUCTURE NO. 099-4648
DATE 03/24/05