

5/7/2009 10:29:54 AM
 ps:\021\files\020022\road\road-brIDGE\SN060-0310\060-0310EAButment.dgn

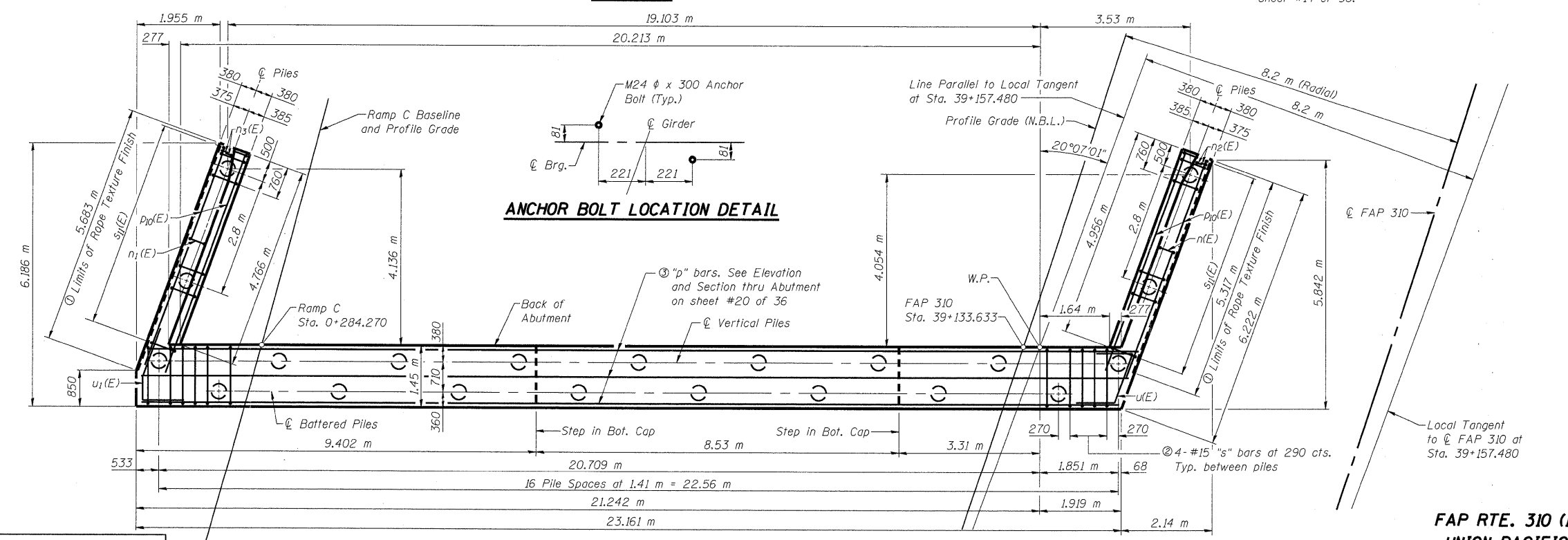
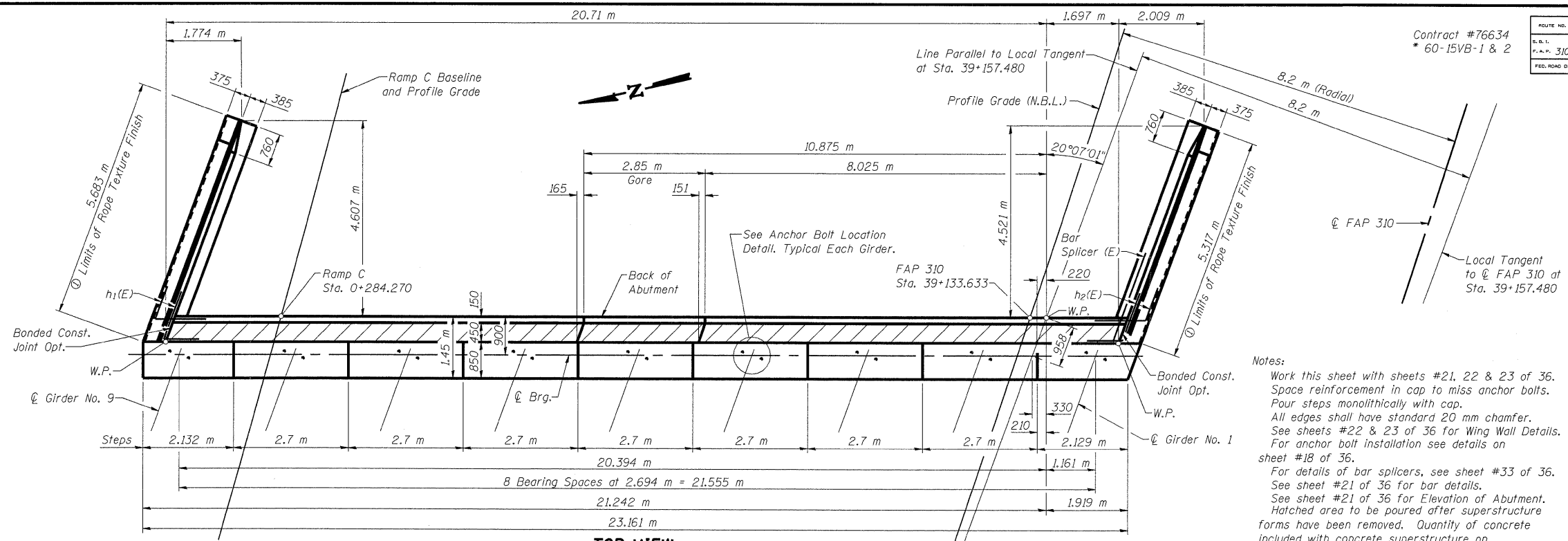
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
310	*	MADISON	149	51
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Contract #76634
* 60-15VB-1 & 2

EAST ABUT. BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h1(E)	14	#15	11.52	
h2(E)	10	#15	2.03	
h3(E)	10	#15	2.03	
h4(E)	12	#15	5.24	
h5(E)	8	#15	5.25	
h6(E)	11	#15	5.60	
h7(E)	7	#15	5.61	
h7(E)	8	#20	11.60	
n(E)	16	#20	4.38	
n1(E)	16	#20	3.58	
n2(E)	6	#20	2.20	
n3(E)	6	#20	1.80	
p(E)	3	#25	7.18	
p1(E)	3	#25	9.98	
p2(E)	2	#25	9.24	
p3(E)	1	#25	9.11	
p4(E)	12	#15	11.85	
p5(E)	1	#25	2.05	
p6(E)	1	#25	2.29	
p7(E)	1	#25	2.53	
p8(E)	21	#25	4.15	
p9(E)	3	#25	3.52	
p10(E)	12	#25	5.46	
s(E)	6	#15	5.78	
s1(E)	7	#15	5.48	
s2(E)	2	#15	5.18	
s3(E)	6	#15	5.78	
s4(E)	7	#15	5.46	
s5(E)	8	#15	5.22	
s6(E)	3	#15	5.02	
s7(E)	5	#15	5.86	
s8(E)	8	#15	5.56	
s9(E)	8	#15	5.26	
s10(E)	5	#15	4.98	
s11(E)	34	#15	2.90	
u(E)	5	#20	3.39	
u1(E)	5	#20	2.69	
v(E)	150	#15	1.70	
v1(E)	16	#20	2.11	
v2(E)	16	#20	2.06	
v3(E)	19	#20	2.06	
v4(E)	3	#20	2.07	
v5(E)	3	#20	2.02	
v6(E)	19	#20	2.01	
v7(E)	75	#15	1.10	
v8(E)	75	#15	0.68	
Concrete Structures		m ³	71.5	
Reinforcement Bars (Epoxy Coated)		kg	4,180	
Bar Splicers		each	75	
Structure Excavation		m ³	155	
Furnishing Metal Pile Shell 356mmX6.35mm		m	450.0	
Driving Piles		m	450.0	
Concrete Sealer		m ²	74	
Form Liner		m ²	31	
Textured Surface		m ²	31	
Test Pile Metal Shells		Each	1	
Concrete Encasement		m ³	6.8	

Notes:
 Work this sheet with sheets #21, 22 & 23 of 36.
 Space reinforcement in cap to miss anchor bolts.
 Four steps monolithically with cap.
 All edges shall have standard 20 mm chamfer.
 See sheets #22 & 23 of 36 for Wing Wall Details.
 For anchor bolt installation see details on sheet #18 of 36.
 For details of bar splicers, see sheet #33 of 36.
 See sheet #21 of 36 for bar details.
 See sheet #21 of 36 for Elevation of Abutment.
 Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with concrete superstructure on sheet #14 of 36.



DESIGNED	ADL
CHECKED	WLW
DRAWN	RLW/ADL
CHECKED	WLW

PILE DATA
 Type & Size: Metal Shell - 356 mm φ x 6.35 mm walls
 Nominal Required Bearing: 1500 kN
 Allowable Resistance Available: 500 kN
 Est. Length: 22.5 m
 No. Required: 20+1 Test Pile

- ① Patterned Rope Texture Concrete (See sheet #4 of 36 for details)
- ② "s" bars include s(E) thru s10(E). See Elevation on sheet #21 of 36.
- ③ "p" bars include p(E) thru p10(E).

EAST ABUTMENT
FAP RTE. 310 (IL RTE. 255) NB & RAMP C OVER
UNION PACIFIC & KANSAS CITY SOUTHERN R.R.
SECTION 60-15VB-1 & 2
MADISON COUNTY
STATION 39+160.297
STRUCTURE NUMBER 060-0310

Klingner & Assoc., P.C.