F.A. ROUTE	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
75	12A 12B-1	PEORIA & TAZEWELL	58	1
FED. ROAD DIV. No. 4	ILLINOIS	PROJECT U-156 (19)		

P-94-114-71

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALES

PLAN	1 INCH =	50 FT.
PROFILE, HOR.	1 INCH =	50 FT.
PROFILE, VERT.	1 INCH =	10 FT.
CROSS-SECT. HOR.	1 INCH =	20 FT.
CROSS-SECT. VERT.	1 INCH =	10 FT.

F.A. ROUTE 75, SECTION 12 A, 12 B-1
PROJECT U-156-(19)
PEORIA COUNTY
TAZEWELL COUNTY

C - 94 - 106 - 75

INDEX OF SHEETS

STANDARD NO.

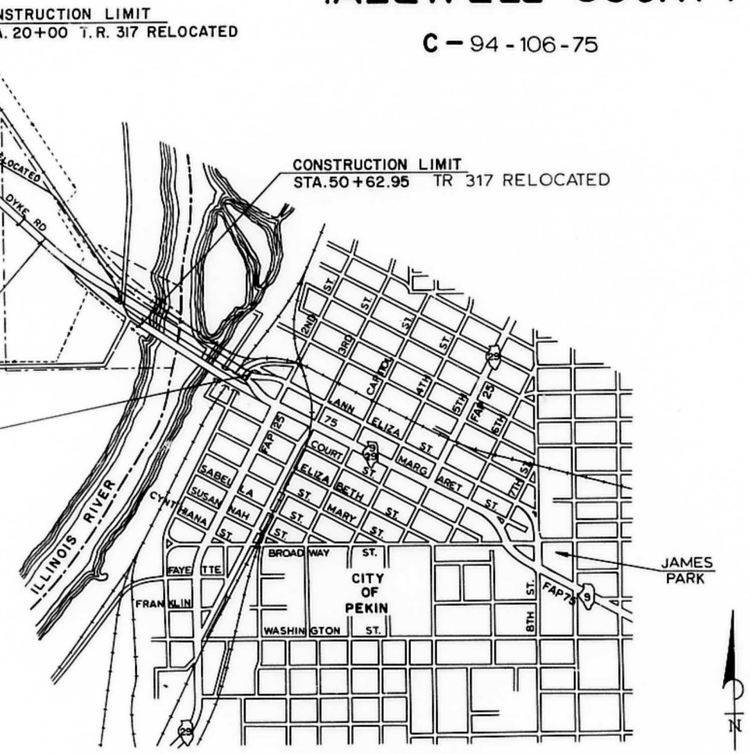
1527 - 7
1686 - 3
1744 - 4
2228 - 2
2230 - 10
2231 - 3, 2235 - 5
2298 - 4
2299 - 6
2300 - 1
2302 - 3
2303 - 4
2306 - 4
2213 - 4
2354 - 1

PROJECT BEGINS
STA. 47+56.44

PROPOSED IMPROVEMENT CONSISTS OF FURNISHING ALL MATERIALS, THE REMOVAL OF UNSUITABLE MATERIAL, REPLACEMENT WITH GRANULAR MATERIAL, THE CONSTRUCTION OF A TEMPORARY LEVEE, THE CONSTRUCTION OF THE RELOCATED TOWNSHIP ROAD 317, THE CONSTRUCTION OF EMBANKMENT, THE CONSTRUCTION DRAINAGE STRUCTURES. THIS CONTRACT ALSO INCLUDES THE CONSTRUCTION OF APPROACH PIERS & ABUTMENTS FOR CARRYING F.A. ROUTE 75 OVER THE ILLINOIS RIVER AND ALL APPURTENT & COLLATERAL WORK TO COMPLETE THE PROJECT AS SHOWN ON THE PLANS.

ROADWAY WORK ENDS
STA. 81+62.00

PROJECT ENDS
STA. 104+89.04



LAYOUT
SCALE 1" = 800'

LOCATION OF SECTION INDICATED THUS:—

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 5-20 19 75 — DISTRICT ENGINEER
EXAMINED Sept. 29 19 75 — BUREAU OF PLANS AND CONTRACTS
PASSED Sept. 29 19 75 — BUREAU OF DESIGN
APPROVED Sept. 29 19 75 — DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR | DATE

DESIGN DESIGNATION

1494 (94) AREA SERVICE 1.56 (PCC-20)

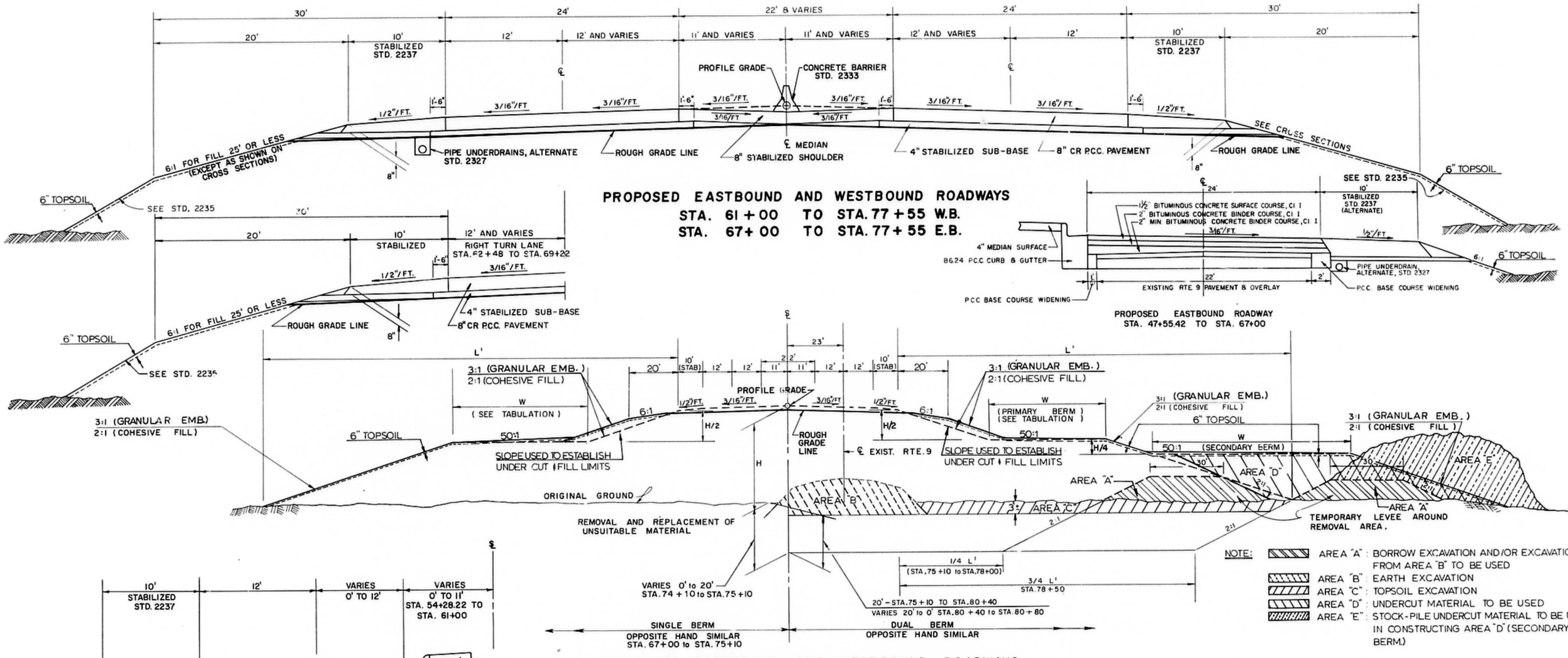
PROJECT LENGTH = 3,405.56 FT. = 0.645 MI.

CONTRACT NO. 30897

Revised 2/20/96, 6-26-

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA & TAZEWELL	58	2
FED. ROAD DIV. NO.		ILLINOIS	PROJECT	

THIS CONTRACT ROUGH GRADING ONLY



PROPOSED EASTBOUND AND WEST BOUND ROADWAYS
STA. 75+10 TO STA. 78+55
(FOR EMBANKEMENT HEIGHTS OVER 25')
SEE TYPICAL SECTION SHOWN ABOVE FOR PAVEMENT AND SHOULDER CONSTRUCTION

NOTE: PAVEMENT DETAILS ARE SHOWN FOR INFORMATION ONLY. FINE GRADING AND PAVING, UNLESS OTHERWISE SHOWN, IS TO BE DONE BY OTHERS.

NOTE:
- AREA "A": BORROW EXCAVATION AND/OR EXCAVATION FROM AREA "B" TO BE USED
- AREA "B": EARTH EXCAVATION
- AREA "C": TOPSOIL EXCAVATION
- AREA "D": UNDERCUT MATERIAL TO BE USED
- AREA "E": STOCK-PILE UNDERCUT MATERIAL TO BE USED IN CONSTRUCTING AREA "D" (SECONDARY BERM.)

SUBMITTED May 15, 1975 — DIST. DESIGN ENGR.
EXAMINED — DIST. CONST. ENGR.
EXAMINED May 1, 1975 — DIST. MAINT. ENGR.
EXAMINED May 1, 1975 — DIST. TRAFFIC ENGR.
Entire section inspected and approved as to policy.
DATE 5-20-75 — DISTRICT ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET OF

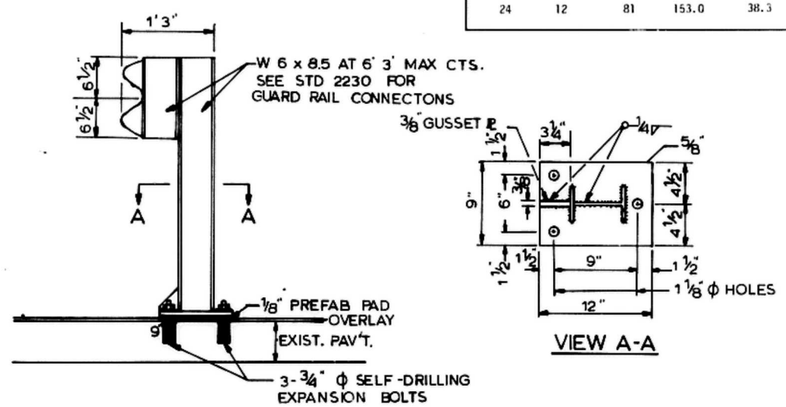
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	3
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		

BERM TABULATION

FILL HEIGHT		SINGLE BERM (GRANULAR EMBANKMENT)			SINGLE BERM (COHESIVE FILL)		
H(ft.)	H/2(ft.)	W(ft.)	L'(ft.)	1/4 L'(ft.)	W(ft.)	L'(ft.)	1/4 L'(ft.)
10	5	0	-	-	-	-	-
11	5.5	7	40.0	8.0	-	-	-
12	6	14	50.0	12.5	-	-	-
13	6.5	21	60.0	15.0	-	-	-
14	7	28	70.0	17.5	-	-	-
15	7.5	35	80.0	20.0	-	-	-
16	8	42	90.0	22.5	4	36	9
17	8.5	49	100.0	25.0	8	42	10.5
18	9	54	108.0	27.0	13	49	12.3
19	9.5	59	116.0	29.0	18	56	14
20	10	64	124.0	31.0	23	63	15.8
21	10.5	69	132.0	33.0	29	71	17.8
22	11	73	139.0	34.8	35	79	19.8
23	11.5	77	146.0	36.5	42	88	22
24	12	81	153.0	38.3	49	97	24.3

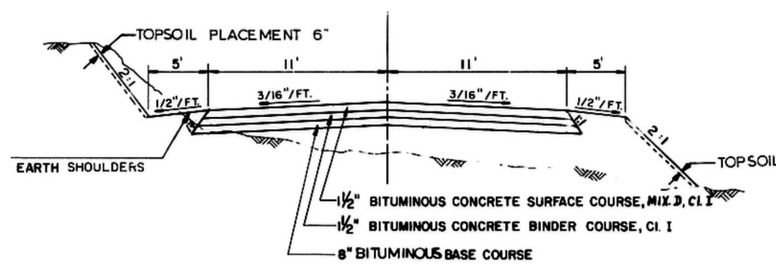
DUAL BERMS

FILL HEIGHT			BERM WIDTHS		GRANULAR EMBANKMENT			COHESIVE FILL		
H(ft.)	1/2 H(ft.)	1/4 H(ft.)	W(ft.)	W'(ft.)	L'(ft.)	1/4 L'(ft.)	3/4 L'(ft.)	L'(ft.)	1/4 L'(ft.)	3/4 L'(ft.)
25	12.5	6.3	50	38	125	31.3	93.8	100	25	75
26	13	6.5	55	40.2	133	33.3	99.8	107	26.8	80.3
27	13.5	6.8	60	42.4	141	35.3	105.8	114	28.5	85.5
28	14	7.0	65	44.6	149	37.3	111.8	121	30.3	90.8
29	14.5	7.3	70	46.8	157	39.3	117.8	128	32.0	96.0
30	15	7.5	75	49.0	165	41.3	123.8	135	33.8	101.3
31	15.5	7.8	80	51.2	173	43.3	129.8	142	35.5	106.5
32	16	8.0	85	53.4	181	45.3	135.8	149	37.3	111.8
33	16.5	8.3	90	55.6	189	47.3	141.8	156	39.0	117.0
34	17	8.5	95	57.8	197	49.3	147.8	163	40.8	122.3
35	17.5	8.8	100	60.0	205	51.3	153.8	170	42.5	127.5
36	18	9.0	105	62.2	213	53.3	159.8	177	44.3	132.8
37	18.5	9.3	110	64.4	221	55.3	165.8	184	46.0	138.0
38	19	9.5	115	66.6	229	57.3	171.8	191	47.8	143.3
39	19.5	9.8	120	68.8	237	59.3	177.8	198	49.5	148.5
40	20	10.0	125	71.0	245	61.3	183.8	205	51.3	153.8
41	20.5	10.3	128	73.0	251	62.8	188.3	210	52.5	157.5
42	21	10.5	130	75.0	256	64.0	192.0	214	53.5	160.5
43	21.5	10.8	132	77.0	261	65.3	195.8	218	54.5	163.5
44	22	11.0	133	79.0	265	66.3	198.8	221	55.3	166.0
45	22.5	11.3	134	80.0	269	67.3	201.8	224	56.0	[illegible]

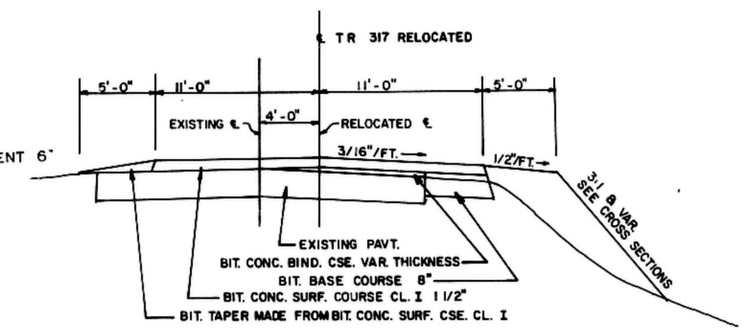


CROSS SECTION

DETAIL OF GUARD RAIL ATTACHED TO EXISTING PAVEMENT



TOWNSHIP ROAD 317 RELOCATED
AND
DETOUR PAVEMENT



NOTES

BOLTS, NUTS, WASHERS AND SELF-DRILLING EXPANSION BOLTS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A-307.

ALL OTHER STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHO M-183.

BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHO M-232.

THE POSTS, PLATES AND SELF-DRILLING EXPANSION BOLTS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHO M-111 AND ASTM A-385.

FIELD CUTTING OF POSTS. CARE SHALL BE TAKEN IN CUTTING THE LOWER PORTION OF THE POST (IF NECESSARY) TO HAVE A SMOOTH CUT WITH MINIMUM DAMAGE TO GALVANIZING. THE CUT AREAS SHALL BE PAINTED WITH ZINC RICH PAINT.

NOTES CONTINUED

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

COST OF SPECIAL POSTS AND ATTACHMENTS FOR CONNECTING GUARD RAIL TO EXISTING PAVEMENT SHALL BE INCLUDED IN COST OF STEEL PLATE BEAM GUARD RAIL.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
AND
BERM TABULATION

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET
OF

Rev. 2/24/76

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE 0010

CODE	ITEM	UNIT	TOTAL QUANTITIES	0010 PEORIA ROADWAY STA. 42+56.44 TO STA. 81+62.00	X931 PEORIA BRIDGE STA. 75+55 TO STA. 104+89.04	X931 TAZEWELL BRIDGE
* XZ1100	TRAINEES	HOUR	6,000	2,000	2,000	2,000
X30106	BITUMINOUS BASE COURSE 8"	SQ.YD	6,282	6,282	--	--
402004	AGGREGATE SURFACE COURSE TYPE B	TON	232	232	--	--
406007	BITUMINOUS CONCRETE BINDER COURSE	TON	754	754	--	--
X40615	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I	TON	666	666	--	--
501037	CONCRETE HEADWALL REMOVAL	CU.YD.	7.0	7	--	--
511108	PIPE CULVERT TYPE 2 24"	LIN.FT.	108	108	--	--
511209	PIPE CULVERT TYPE 3 RCCP 24"	LIN.FT.	204	204	--	--
511D23	PIPE CULVERT TYPE 2 CSCP 60"	LIN.FT.	180	180	--	--
511D30	PIPE CULVERT TYPE 3 CSCP 24"	LIN.FT.	92	92	--	--
511D49	PIPE CULVERT TYPE 4 CSCP 60"	LIN.FT.	325	325	--	--
601005	BROKEN CONCRETE RIPRAP	SQ.YD.	270	270	--	--
607125	PIPE DRAINS CLAY PIPE 12"	LIN.FT.	30	30	--	--
612359	MANHOLE SPECIAL 6' DIA., TYPE 1 FRAME & OPEN LID	EACH	1	1	--	--
X612J7	MANHOLE SPECIAL 7' DIA., TYPE 1 FRAME & OPEN LID	EACH	1	1	--	--
617001	PAVEMENT REMOVAL	SQ.YD.	2,762	2,762	--	--
628001	STEEL PLATE BEAM GUARD RAIL SINGLE RAIL	LIN.FT.	855	855	--	--
633003	STEEL PLATE BEAM GUARD RAIL REMOVAL	LIN.FT.	700	700	--	--
639001	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	25	25	--	--
504003	CLASS X CONCRETE	CU.YDS.	4175.6	--	3983.3	192.3
512001	REINFORCEMENT BARS	LBS.	470,000	--	429,790	40210
513010	FURNISHING METAL PILE SHELLS 14"	LIN.FT.	25413	--	25413	--
X51309	FURNISHING STEEL PILES HP 14X117	LIN.FT.	14272	--	10268	4004
513025	DRIVING AND FILLING SHELLS	LIN.FT.	25413	--	25413	--
513026	DRIVING STEEL PILES	LIN.FT.	14272	--	10268	4004
513031	TEST PILE METAL SHELLS	EACH	3	--	3	--
X51318	TEST PILE STEEL HP 14x117	EACH	3	--	2	1
618001	SLOPE WALL 4"	SQ.YDS.	328	--	--	328
X51157	END SECTION 24"	EACH	2	2	--	--
X51130	END SECTION 60"	EACH	1	1	--	--
X62801	TERMINAL SECTION SINGLE RAIL	EACH	6	6	--	--
X64701	PAVEMENT MARKING TAPE	LIN.FT.	126	126	--	--
X05257	BALES IN PLACE	EACH	60	60	--	--
X05258	AGGREGATE (EROSION CONTROL)	TON	20	20	--	--
632001	DELINEATORS	EACH	76	76	--	--
X50201	STRUCTURE EXCAVATION	CU.YDS.	2369	--	2369	--
646001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1	1	--	--
	ALTERNATE "A"					
202001	EARTH EXCAVATION	CU YD	35,217	35,217	--	--
202008	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	107,104	107104	--	--
207001	EMBANKMENT	CU YD	37,813	37,813	--	--
X05673	GRANULAR EMBANKMENT	CU YD	398,011	398011	--	--
642002	SEEDING, CLASS II	ACRE	27.5	27.5	--	--
642003	SEEDING, CLASS III	ACRE	2.1	2.1	--	--
642004	NITROGEN FERTILIZER NUTRIENTS	POUND	1,421	1,421	--	--
642005	PHOSPHORUS FERTILIZER NUTRIENTS	POUND	3,552	3,552	--	--
642006	POTASSIUM FERTILIZER NUTRIENTS	POUND	2,131	2,131	--	--
642007	AGRICULTURAL GROUND LIMESTONE	TON	59.2	59.2	--	--
643001	MULCH	TON	59.2	59.2	--	--
X21601	TOPSOIL EXCAVATION	CU YD	14,557	14,557	--	--
X21606	TOPSOIL PLACEMENT 6"	SQ YD	69,210	69,210	--	--
	ALTERNATE "B"					
202001	EARTH EXCAVATION	CU YD	35,671	35,671	--	--
202008	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	100,406	100406	--	--
207001	EMBANKMENT	CU YD	270,730	270,730	--	--
X05673	GRANULAR EMBANKMENT	CU YD	129,115	129115	--	--
642002	SEEDING, CLASS II	ACRE	26.1	26.1	--	--
642003	SEEDING, CLASS III	ACRE	3.7	3.7	--	--
642004	NITROGEN FERTILIZER NUTRIENTS	POUND	1,430	1,430	--	--
642005	PHOSPHORUS FERTILIZER NUTRIENTS	POUND	3,576	3,576	--	--
642006	POTASSIUM FERTILIZER NUTRIENTS	POUND	2,146	2,146	--	--
642007	AGRICULTURAL GROUND LIMESTONE	TON	59.6	59.6	--	--
643001	MULCH	TON	59.6	59.6	--	--
X21601	TOPSOIL EXCAVATION	CU YD	12,234	12,234	--	--
X21606	TOPSOIL PLACEMENT 6"	SQ YD	64,734	64,734	--	--

*CONSTRUCTION TYPE CODE: Y080

QUANTITIES NOT OTHERWISE SHOWN

SUMMARY OF SEEDING

LOCATION	ALTERNATE A CLASS II ACRES	ALTERNATE A CLASS III ACRES	ALTERNATE B CLASS II ACRES	ALTERNATE B CLASS III ACRES
DETOUR T.R. 317 62+60 TO 91+00	-	2.1	-.	2.1
MAINLINE 47+56.44 TO 91+00	27.5	-	26.1	1.6
TOTAL	27.5	2.1	26.1	3.7

SUMMARY OF NUTRIENTS

ITEMS	RATE PER ACRE	ALTERNATE A TOTAL SEEDING IN ACRES	ALTERNATE A QUANTITY	ALTERNATE B TOTAL SEEDING IN ACRES	ALTERNATE B QUANTITY
PHOSPHOROUS FERTILIZER NUTRIENT	120 LBS	29.6	3552 LBS.	29.8	3.576 LBS.
POTASSIUM FERTILIZER NUTRIENT	72 LBS	29.6	2131 LBS.	29.8	2.146 LBS.
NITROGEN FERTILIZER NUTRIENT	48 LBS	29.6	1421 LBS.	29.8	1.430 LBS.
AGRICULTURAL GROUND LIMESTONE	2 TON	29.6	59.2 TON	29.8	59.6 TON
MULCH	2 TON	29.6	59.2 TON	29.8	59.6 TON

TOPSOIL PLACEMENT 6"

LOCATION	ALT. A SQ.YDS.	ALT. B SQ.YDS.
DETOUR T.R. 317 62+60 TO 87+00	9,162	9,203
MAINLINE 47+56.44 TO 71+00	24,312	24,312
MAINLINE 71+00 TO 82+00	33,736	31,219
TOTAL	67,210	64,734

AGGREGATE (EROSION CONTROL) *

RT. STA. 64+38 = 2 TONS
102' LT. STA. 69+00 = 2 TONS
220' LT. STA. 69+00 = 2 TONS
RT. STA. 69+00 = 2 TONS

SUB-TOTAL = 8 TONS
ESTIMATED QUANTITY = 12 TONS

TOTAL = 20 TONS

* THE EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY ENGINEER.

BALES IN PLACE *

LT. & RT. STA. 52+00 = 6 EACH
LT. & RT. STA. 57+00 = 6 EACH
LT. & RT. STA. 62+00 = 6 EACH
LT. & RT. STA. 67+00 = 6 EACH
LT. & RT. STA. 72+00 = 9 EACH
LT. STA. 75+00 = 3 EACH
RT. STA. 76+00 = 3 EACH
LT. STA. 77+00 = 3 EACH
RT. STA. 80+00 = 3 EACH
RT. STA. 80+75 = 3 EACH
LT. STA. 81+00 = 3 EACH

SUB-TOTAL = 51 EACH
ESTIMATED QUANTITY = 9 EACH

TOTAL = 60 EACH

PAVEMENT REMOVAL

STA. 73+97 TO 86+60 = 2,762 SQ.YDS.

TOTAL = 2,762 SQ.YDS.

DELINEATORS (T.R. 317 RELOC.)

LT.&RT. STA.14+35 TO 55+97 = 76 EACH

ENGINEERS FIELD OFFICE TYPE A

1 EACH

GENERAL NOTES

WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

TREES ALONG THE EDGE OF THE RIGHT-OF-WAY SHALL BE SAVED IF, IN THE THE OPINION OF THE ENGINEER, THEY DO NOT INTERFERE WITH CONSTRUCTION OPERATIONS.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR THEIR MARKING OF THE EXACT LOCATION. HOWEVER, THE DEPARTMENT WILL MAKE AVAILABLE TO THE CONTRACTOR ALL INFORMATION OBTAINED FROM THE UTILITY COMPANIES PRIOR TO THE LETTING OF THIS CONTRACT.

ALL METAL CULVERT END SECTIONS WILL BE EQUIPPED WITH TOE PLATES AS SHOWN ON THE STANDARD 2228.

BEFORE ORDERING PIPE CULVERTS AND STORM SEWERS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

Revised: 11-25-75

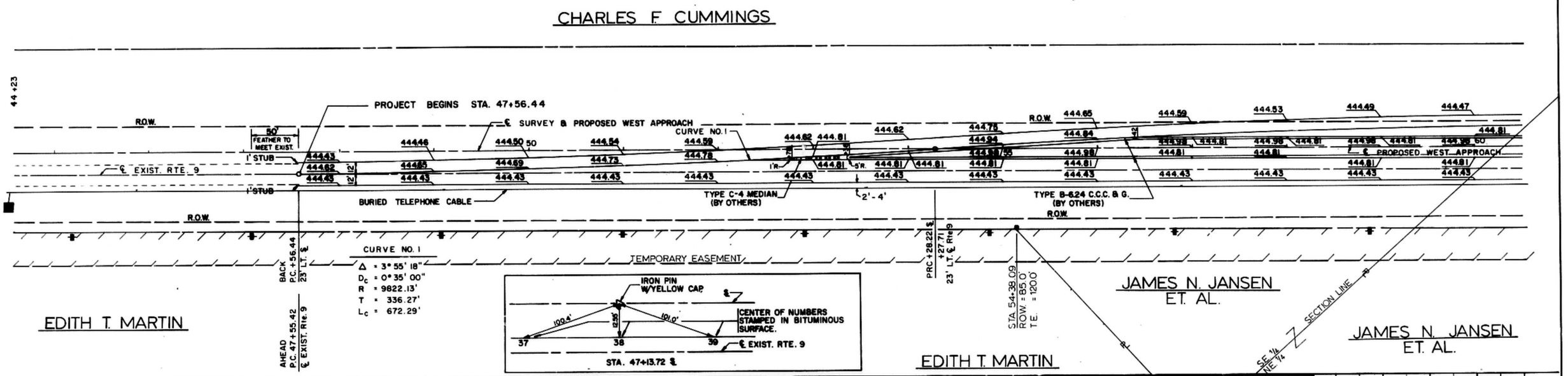
Rev. 2/29/76
Rev. 4-22-76 GLY

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

T7N R7E 4TH PM
SECTION 14

FURNISHING & ERECTING R.O.W. MARKERS
THIS SHEET = 1 EACH

SCALE: 1" = 50'



ALT. A
STA. 47+00 TO 90+00

① ② EARTH EXCAVATION = 35,217 C.Y.
② ③ EMBANKMENT = 67,658 C.Y.
⑤ GRANULAR EMBANKMENT = 398,011 C.Y.
④ REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL = 107,104 C.Y.
⑥ TOP SOIL EXCAVATION = 14,559 C.Y.

NOTES:

① TO BE USED TO CONSTRUCT 35,217 / 1.18 = 29,845 C.Y. OF EMBANKMENT
② 37,813 C.Y. TO BE PAID AS EMBANKMENT FOR WHICH THE CONTRACTOR IS TO PROVIDE BORROW. 29,845 C.Y. TO BE CONSTRUCTED OUT OF EARTH EXCAVATION.
③ INCLUDES QUANTITIES FOR FA 75 MAINLINE, TR 317, & TEMP. LEVEE.
④ A) 15,081 C.Y. TO BE USED TO CONSTRUCT EMBANKMENT RT. STA. 48+00 TO 70+00 (APPROX. QUAN.)
B) APPROXIMATELY 18,299 C.Y. TO BE USED TO CONSTRUCT SECONDARY BERMS FROM STA. 76+00 TO 78+50.
C) APPROXIMATELY 7,080 C.Y. TO BE USED FOR SITE GRADING FROM LT. STA. 81+00 TO 86+00.
D) APPROXIMATELY 66,644 C.Y. - WASTE
⑤ GRANULAR EMBANKMENT
⑥ APPROXIMATELY 2,780 C.Y. OF EXCESS TOPSOIL TO BE STOCKPILED AS DIRECTED BY THE ENGINEER.

ALT. B
STA. 47+00 TO 90+00

① ③ EARTH EXCAVATION = 35,671 C.Y.
② ③ EMBANKMENT = 300,960 C.Y.
⑤ GRAN. EMBANKMENT = 129,115 C.Y.
④ REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL = 100,406 C.Y.
⑥ TOP SOIL EXCAVATION = 12,234 C.Y.

NOTES:

① A) INCLUDES 830 C.Y. OF RE-EXCAVATION OF TEMP. LEVEE
B) TO BE USED TO CONSTRUCT 35,671 / 1.18 = 30,230 C.Y. OF EMBANKMENT.
② 270,730 C.Y. TO BE PAID AS EMBANKMENT FOR WHICH THE CONTRACTOR IS TO PROVIDE BORROW. 30,230 C.Y. TO BE CONSTRUCTED OUT OF EARTH EXCAVATION.
③ INCLUDES QUANTITIES FOR FA 75 MAINLINE, TR 317 & TEMP. LEVEE.
④ A) APPROX. 15,081 C.Y. TO BE USED TO CONSTRUCT EMBANKMENT RT. STA 48+00 TO 70+00.
B) APPROXIMATELY 16,902 C.Y. TO BE USED TO CONSTRUCT SECONDARY BERM FROM STA. 76+00 TO 78+50.
C) APPROXIMATELY 7,080 C.Y. TO BE USED FOR SITE GRADING FROM LT. STA. 81+00 TO 86+00.
D) APPROX. 61,343 C.Y. - WASTE
⑤ BORROW.
⑥ APPROXIMATELY 1,203 C.Y. OF EXCESS TOPSOIL TO BE STOCKPILED AS DIRECTED BY THE ENGINEER.

PLATE 1—PLAN—PROFILE
MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY

THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

Rev 11-3-75

WEST APPROACH

Rev. 2/24/76

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTE: R.O.W. FROM STA. 67+00 RT. TO STA. 82+35 RT. & R.O.W. FROM STA. 70+35.67 LT. TO STA. 82+35 LT. SHOWN ON SHEET NO. 14

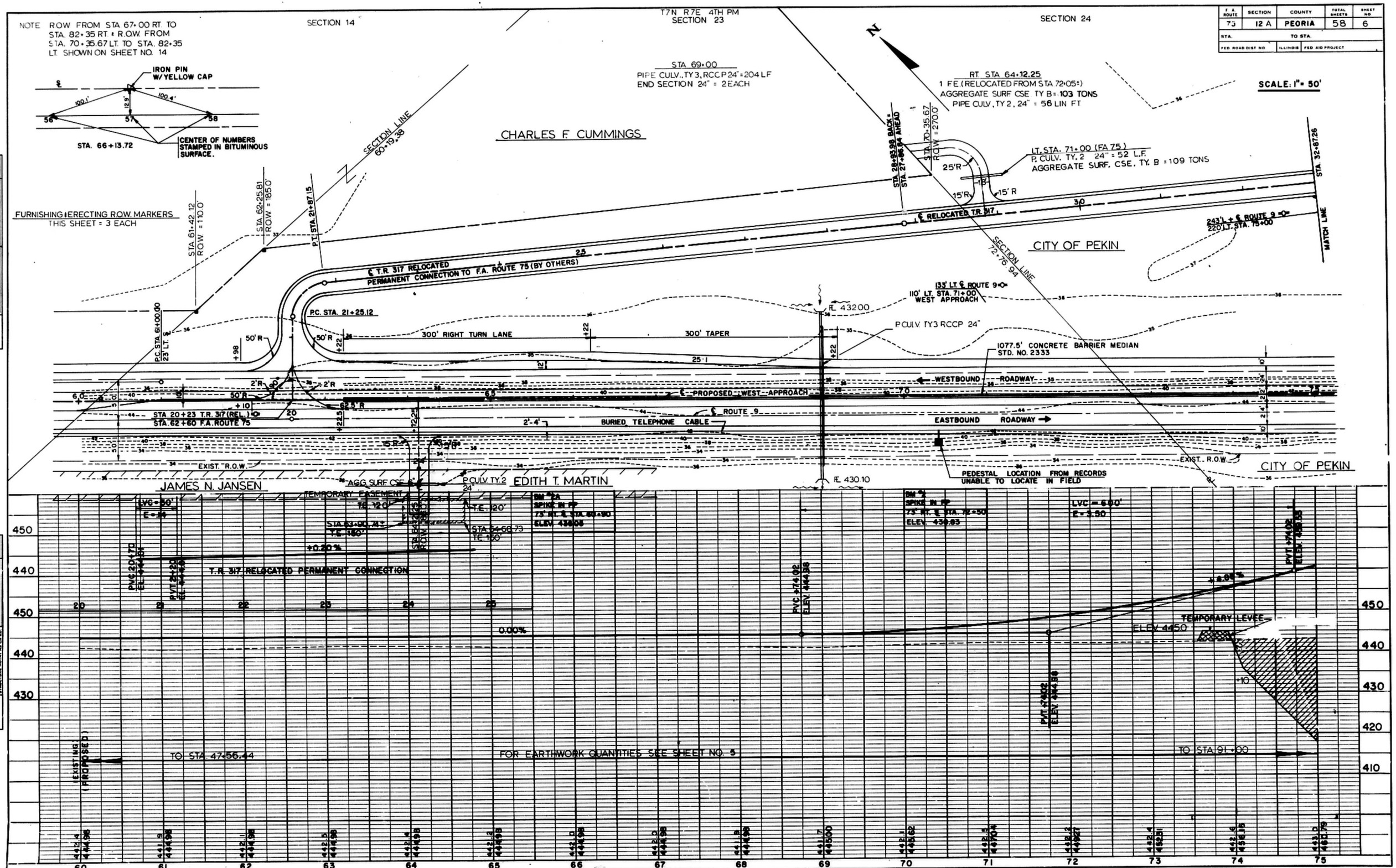


PLATE 1 — PLAN-PROFILE

THE ENGINEERS COLLABORATIVE - CHICAGO, ILLINOIS

Rev. 11-3-75

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	7
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

T7N R7E 4TH PM
SEC. 24

NOTE: FOR PROPOSED R.O.W. STA 75+00 TO STA 82+35 SEE SHEET NO 13

FURNISHING & ERECTING R.O.W. MARKERS
THIS SHEET = 5 EACH

BROKEN CONCRETE RIPRAP
ALTERNATE A
LT STA 74+50 - 76+25 = 126 S.F
ALTERNATE B
LT STA 75+50 - 77+25 = 126 S.F

CITY OF PEKIN

RT. STA. 81+64
END SECTION 60" = 1 EACH
BROKEN CONC RIPRAP = 144 SQ FT
PIPE DRAIN CLAYPIPE 12" = 30 L F
(SEE NOTE ON THIS SHEET)

CURVE DATA (FA 75 ℄)
Δ = 9° 49' 28.1"
D = 1° 00' 45"
R = 3274.04'
T = 281.39'
L = 561.40'
PC = STA. 82+60.12
PT = STA. 88+21.52
SE = 0.05'/FT.

SCALE: 1" = 50'

BRIDGE APPROACH PAVEMENT (BY OTHERS)
STA. 77 + 55 TO STA. 78 + 55 = 533 SQ. YD.
TOTAL THIS SHEET 533 SQ. YD.

CONCRETE BARRIER MEDIAN (BY OTHERS)
STA. 75 + 00 TO STA. 78 + 55 = 355 LIN. FT.
TOTAL THIS SHEET 355 LIN. FT.

STEEL PLATE BEAM GUARD RAIL, SINGLE BEAM (BY OTHERS)
STA. 75 + 00 TO STA. 78 + 30 WB = 330 LIN. FT.
STA. 75 + 00 TO STA. 78 + 30 EB = 330 LIN. FT.
TOTAL THIS SHEET 660 LIN. FT.

P.CULV TY.4 CSCP 60"
P.CULV TY.2 60"
℄ EXIST. DRAINAGE DITCH
℄ TR 317 (RELOCATED)
PEORIA TERMINAL CO.
℄ EXIST. LEVEE
PC STA 82+60.12
EXISTING OVERFLOW PIPES TO BE SALVAGED & STORED AS DIRECTED BY THE ENGINEER (NO PAY ITEM)
STA 85+51.6 R.O.W. = 19.26
STA 88+63.9 R.O.W. = 105.58
PT STA 88+21.52
CONC. SLAB
P.P.O.
O.P.P.
RR POWER & BOX
SIGNAL
BELL TEL. PEDESTAL

230'- STEEL PLATE BEAM GUARD RAIL, SINGLE BEAM STD. NO. 2230 (BY OTHERS)
230'- CONCRETE BARRIER MEDIAN STD. NO. 2333 (BY OTHERS)
CONSTRUCT BRIDGE APPROACH PAVEMENT STD. NO. 2353, STA. 77+55 TO STA. 78+55 (BY OTHERS)
WESTBOUND ROADWAY
℄ PROPOSED WEST ℄ APPROACH
℄ ROUTE 9 EASTBOUND ROADWAY
R.O.W.
25' TRANSITION TO BRIDGE MEDIAN
PROJECT ENDS STA. 81+62
℄ EXIST. 60" PIPE
BURIED TELEPHONE CABLE
14' TO 18' FROM ℄ EXISTING RD.
GUARD RAIL TO BE REMOVED
RIP RAP LIMITS
STA. 78+55 BACK W. ABUT.
STA. 80+74 ℄ PIER No. 2
RT. STA. 81+84± 12" CLAY FIELD DRAIN: 30'
DRAIN IN RIGHT DITCH WHERE EVER THE FIELD TILE IS INTERCEPTED WITH ADDITIONAL PIPE DRAIN PROVIDED
STA. 82+93 ℄ PIER No. 3
STA. 85+12 ℄ PIER No. 4
STA. 87+31 ℄ PIER No. 5
STA. 89+50 ℄ PIER No. 6
CITY OF PEKIN
DRAINAGE DITCH

TO STA 40+56.44
FOR EARTHWORK QUANTITIES SEE SHEET NO. 5
+4.05%
+4.55%
LVC 1800
E = 19.30
TO STA 91+00
PIER NO. 2
PIER NO. 3
PIER NO. 4
PIER NO. 5
PIER NO. 6
PC STA 80+60
ELEV 509.29
STA 85+51.6 ROW = 88.18
STA 88+63.9 ROW = 124.21
STA 89+95.60 ROW = 183.01
THIS CONTRACT
TOP ELEV 448.00
30'
50:1
TEMPORARY LEVEE AROUND REMOVAL AREA
REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL
(EXIST.) (PROPOSED)
416.00

DATA FOR USE OF THE CHART
DRAINAGE AREA
Drainage Area - 172 Acres
Design Discharge (50) - 79 CFS
Selection Opening (50)
(3.5' x 4.5' box culv.) - 15.75 Sq. Ft.
Required Opening (50) - 19.60 Sq. Ft.
Proposed Opening (50) - 19.60 Sq. Ft.
Crested Weir (50) - 0
100 Year Discharge - 88 CFS
Crested Weir (100) - 0
Design HW (50) - 433.3
100 Year HW - 433.3
All Year HW - Unknown

PLATE 1—PLAN—PROFILE
MADE AND PRINTED IN U.S.A. CHARLES BRUNING COMPANY

THE ENGINEERS COLLABORATIVE – CHICAGO, ILLINOIS

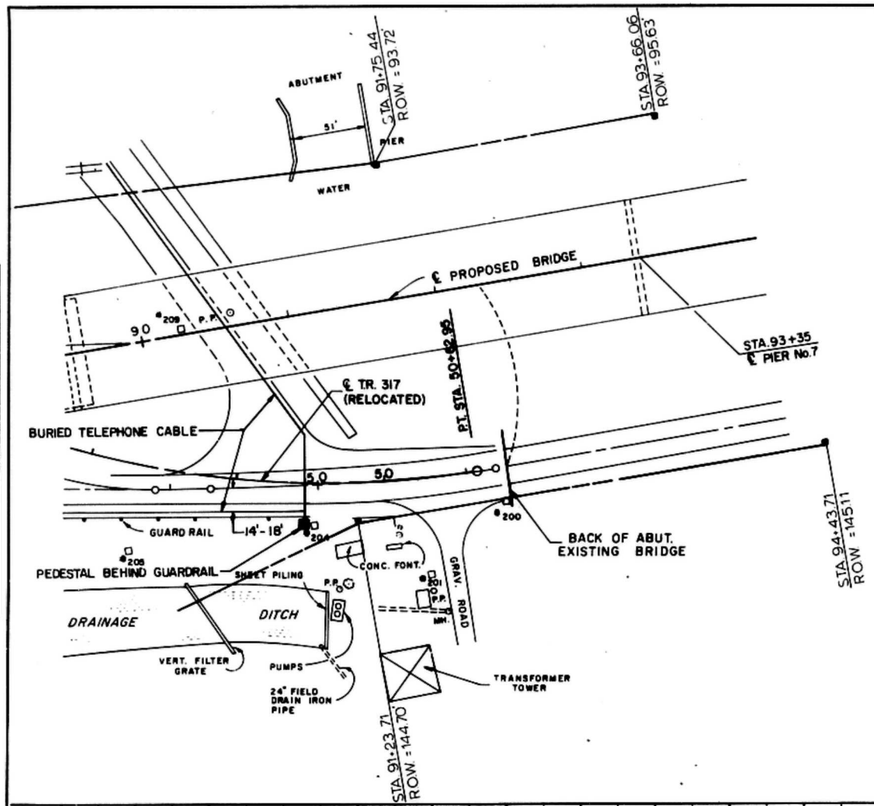
Rev. 11-3-75

WEST APPROACH

F. A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FURNISHING & ERECTING R.O.W. MARKERS
THIS SHEET = 4 EACH

SCALE: 1" = 50'



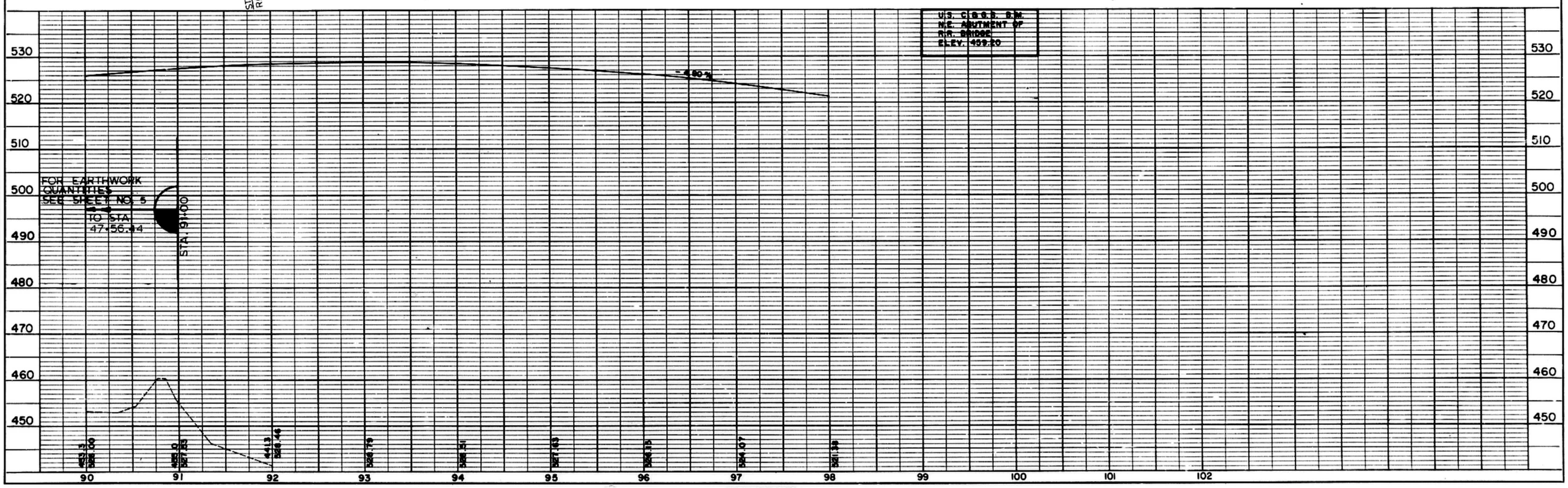


PLATE 1—PLAN—PROFILE O. P. R. B. F. E.
MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY

THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

Rev. 11-3-75

WEST APPROACH

NOTE BOOK | PLAN & PROFILE CHECKED
NO. | ALIGNMENT CHECKED
RT. OF WAY CHECKED

NOTE BOOK | GRADES CHECKED
NO. | B. M. NOTED
STRUCTURE NOTATIONS CHKD.

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	9
STA.		TO STA.		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

SEC. 14

T7N R7E 4TH. PM.

SEC. 23

SEC. 24

N

SCALE: 1" = 50'

TEMPORARY CONNECTION TO EXISTING ROUTE 9

(200)		(210)	
Δ	= 32° 28' 35"	Δ	= 27° 05' 59"
D	= 7° 30'	D	= 7° 39' 33"
R	= 763.94'	R	= 748.07'
T	= 222.50'	T	= 180.29'
L	= 433.02'	L	= 353.82'
E	= 31.74'	E	= 21.42'
P.C.	= 20+00.00	P.R.C.	= 24+33.02'
P.R.C.	= 24+33.02	P.T.	= 27+86.84'
S.E.	= 0.04'/FT.*	S.E.	= 0.04'/FT.

TRANSITION:

STA. 19+00 TO STA. 20+50 STA. 27+36.84 TO STA. 28+86.84

BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE "D" CL. I 1½"

Sta. 19 + 00 to Sta. 20 + 00 (Super) =	10.3 TONS
Sta. 20 + 00 to Sta. 27 + 86.84 (Temporary) =	162.5 TONS
Sta. 27 + 86.84 to Sta. 32 + 87.26 (Permanent) =	103.4 TONS
Total this sheet:	2762 TONS

BITUMINOUS CONCRETE BINDER COURSE, CL I, 1-1/2"

Sta. 19 + 00 to Sta. 22 + 22 (Super) =	152.1 TONS
Sta. 20 + 00 to Sta. 27 + 86.84 (Temporary) =	164.4 TONS
Sta. 27 + 86.84 to Sta. 32 + 87.26 (Permanent) =	104.5 TONS
Total this sheet:	421.0 TONS

BITUMINOUS BASE COURSE, 8"

Sta. 20 + 30 to Sta. 27 + 86.84 (Temporary) =	1698 SQ. YDS.
Sta. 27 + 86.84 to Sta. 32 + 87.26 (Permanent) =	1251 SQ. YDS.
Total this sheet:	2949 SQ. YDS.

NOTE: DELINEATORS MAY BE ATTACHED TO GUARD RAIL FROM STA 20+55 TO STA 22+30 AND STA. 45+00 TO STA. 47+50. (NO PAY ITEM)

STA. 26+90±
PCULV TY 3 C.S.C.P 24" = 92 LIN. FT.

PAVEMENT MARKING TAPE
STA 19+00 TO 50+50 = 126 L.F.
TOTAL = 126 L.F.

SINGLE PLATE BEAM GUARD RAIL, SINGLE RAIL
RT STA 20+80 TO 22+05 = 125 LIN. FT.
TOTAL (THIS SHEET) = 125 LIN. FT.

TERMINAL SECTION, SINGLE RAIL
RT STA 20+55 TO 20+80 = 1 EACH
RT STA 22+05 TO 22+30 = 1 EACH
TOTAL (THIS SHEET) = 2 EACH

*NOTE: SUPER BUILD UP ON THE EXISTING PAVEMENT FROM STA 19+00 TO 22+00 IS TO BE DONE WITH BIT CONC. BINDER CSE UNDER TRAFFIC (ON TR 317)

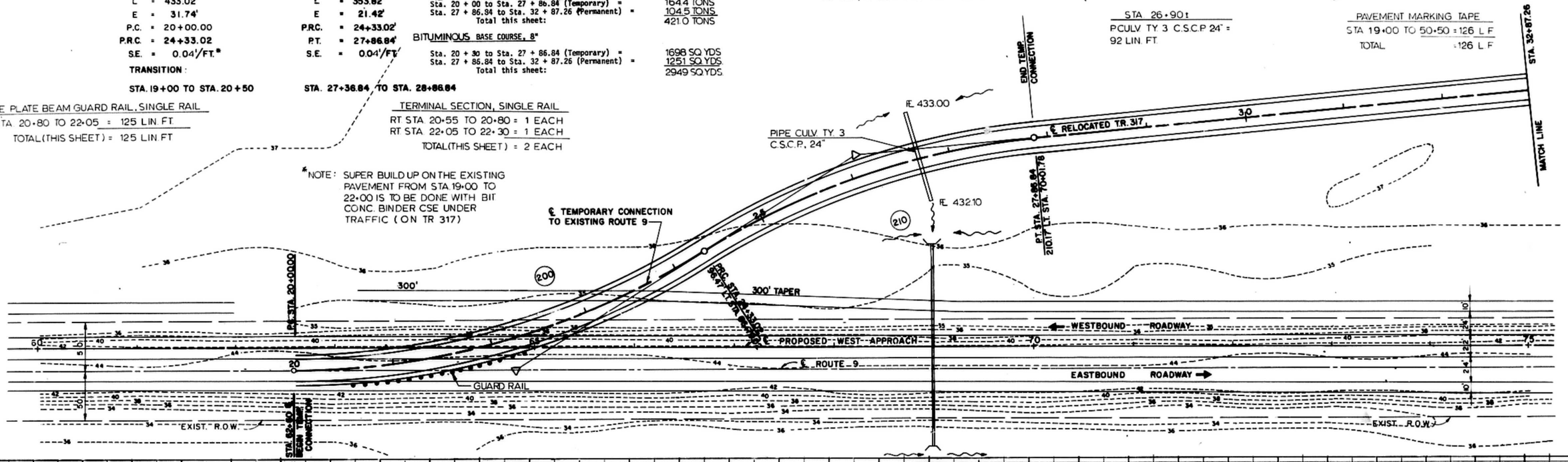


PLATE 1—PLAN—PROFILE O. P. B. B. R. E.
MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY

THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

TR 317 (RELOCATED)

DRAWING NO. 42151

RT. OF WAY CHECKED
NO.
B. M.s NOTED
STRUCTURE NOTATNS CH'KD.
NO.

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	10
STA.		TO STA.		
FED ROAD DIST NO.	ILLINOIS	FED AID PROJECT		

FOR PROPOSED R.O.W. SEE SHEET(S) NO. 13

T7N R7E 4TH PM
SEC. 24

TEMPORARY SHEET PILING
RT 43+90
LT 46+00
TOTAL = 1 LUMP SUM

STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL
RT 43+65 TO 50+20 655 LF
LT 45+75 TO 46+25 50 LF
TOTAL (THIS SHEET) = 705 L.F.

TERMINAL SECTION, SINGLE RAIL
RT 43+40 TO 43+65 = 1 EACH
LT 45+50 TO 45+75 = 1 EACH
LT 46+25 TO 46+50 = 1 EACH
TOTAL (THIS SHEET) = 3 EACH

SCALE: 1" = 50'

LT STA. 36+55±
MANHOLE SPECIAL 7' DIA.
TY.1 F1 OPEN LID = 1 EACH
TOP ELEV 441.75
INV ELEV 428.35
CONC. HDWL. REM. = 7 CU. YDS.
P CULV. TY4, CSCP 60" = 325 L.F.

EXIST. 3x5'x4.5' BOX CULV.
REM. EXIST. HDWL. & CONNECT
THE EXPOSED BOX TO THE
PROPOSED MANHOLE

MATCH LINE STA. 32+87.26

P.C. STA. 36+55.22

P.T. STA. 39+16.54

P CULV. TY 4 CSCP 60" 325 LF

℄ TR 317 (RELOCATED)

RR ROW

RT STA. 39+67±
MANHOLE SPECIAL 6' DIA.
TY.1 F4 OPEN LID = 1 EACH
TOP ELEV. 437.75
INV. ELEV. 427.25
P CULV. TY.2 CSCP, 60" = 180 L.F.
(CONNECT TO P CULV @ STA. 81+63± MAINLINE)

P.C. STA. 82+60.12

P CULV. TY.2 CSCP 60"
180 L.F.

MEET INV. OF
EXIST. CULVERT
426.75

EXISTING R.O.W.

CONC. SLAB

RR POWER & BOX

SIGNAL

BELL. TEL. PEDESTAL

SHEET PILING

METAL PLATE GUARD RAIL REMOVAL
(WITH WOODEN POSTS)

S.P.B.G.R. SINGLE RAIL

GUARD RAIL

RIP RAP LIMITS

DRAINAGE DITCH

WESTBOUND ROADWAY

℄ PROPOSED WEST APPROACH

℄ ROUTE 9

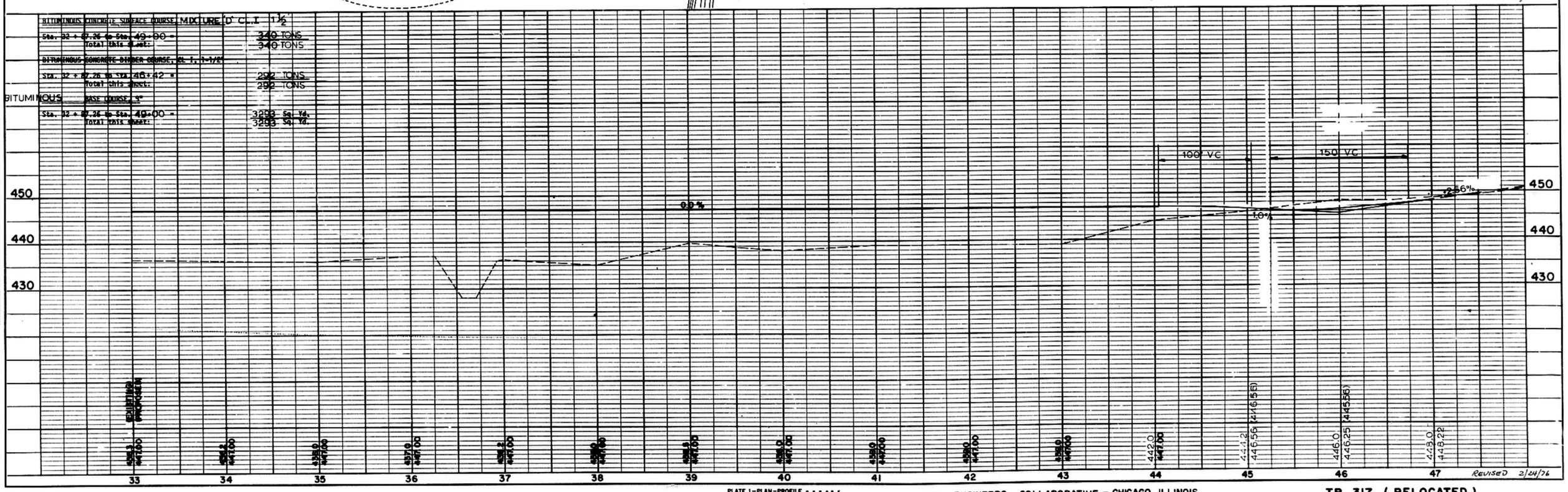
EASTBOUND ROADWAY

220	230	240
Δ = 19° 35' 56"	Δ = 28° 21' 45.21"	Δ = 42° 34' 45.21"
D = 7° 30'	D = 19° 00'	D = 19° 00'
R = 763.94'	R = 301.56'	R = 301.56'
T = 131.95'	T = 76.20'	T = 117.51'
L = 261.32'	L = 149.28'	L = 224.10'
E = 11.31'	E = 9.48'	E = 22.09'
P.C = 36+55.22	P.C = 41+23.80	P.C = 44+17.82
P.T = 39+16.54	P.T = 42+73.08	P.T = 46+41.92
S.E. = 0.04 FT./FT.	S.E. = 0.04 FT./FT.	S.E. = 0.04 FT./FT.
TRANSITION LENGTHS:	TRANSISTION LENGTH:	TRANSITION LENGTH:
STA. 35+55.22 TO STA. 37+05.22	SEE SHEET NO. 11	SEE SHEET NO. 11
STA. 38+66.54 TO STA. 40+16.54		

BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D CL. I 1½"
Sta. 32 + 87.26 to Sta. 49+00 = 340 TONS
Total this sheet: 340 TONS

~~BITUMINOUS CONCRETE BINDER COURSE, CL. I, 1-1/2"~~
Sta. 32 + 87.26 to Sta. 46+42 = 292 TONS
Total this sheet: 292 TONS

BITUMINOUS BASE COURSE, 9"
Sta. 32 + 87.26 to Sta. 49+00 = 3293 Sq. Yd.
Total this sheet: 3293 Sq. Yd.



REVISED 2/24/76

PLATE 1—PLAN-PROFILE C. F. R. & R. E.
MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY

THE ENGINEERS COLLABORATIVE – CHICAGO, ILLINOIS

TR 317 (RELOCATED)

BRUNING NO 42 151

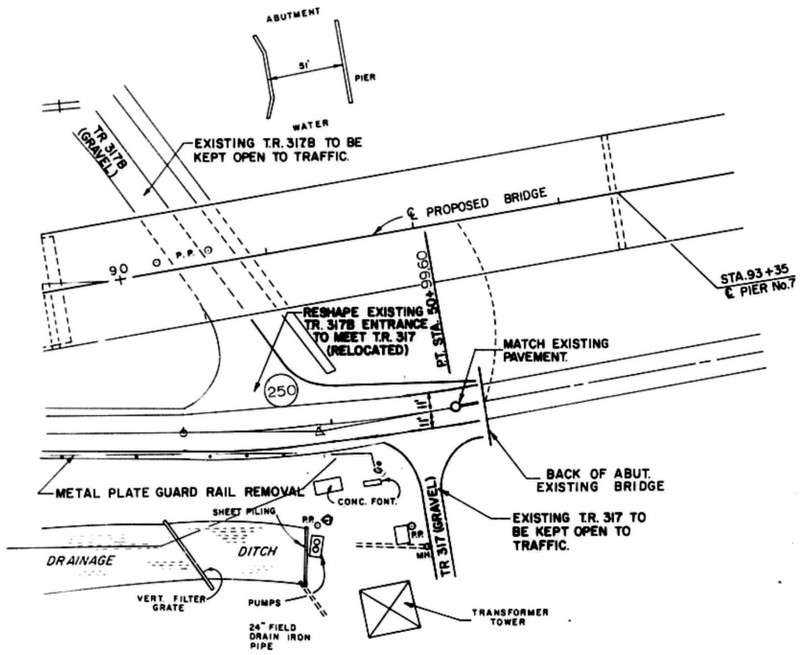
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NO.

GRADES CHECKED
R.R. CHECKED
STRUCTURE NOTATIONS CK'D.
NO.

T7N R7E 4TH. P.M.
SEC 24

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	11
STA.		TO STA.		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

TERMINAL SECTION, SINGLE
RT STA 50+20 TO 50+45± = 1 EACH
(CURVED SECTION)
TOTAL THIS SHEET = 1 EACH



FOR PROPOSED R.O.W. SEE SHEET NO. 13

AGGREGATE SURFACE COURSE, TY B

LT STA. 49+25±	= 10 TONS
RT. STA. 50+25±	= 10 TONS
TOTAL	= 20 TONS

STEEL PLATE BEAM GUARD RAIL REMOVAL, SINGLE RAIL

RT STA. 43+15 TO 50+20 =	700 LIN. FT
TOTAL	= 700 LIN. FT

BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE 'D' CL. I 1½"

Sta. 49+00 to Sta. 50+85 =	50 TONS
Total this sheet:	50 TONS

BITUMINOUS CONCRETE BINDER COURSE, CL. I, 1-1/2"

Sta. 45+50 to Sta. 49+90 (Super) =	40 TONS
Total this sheet:	40 TONS

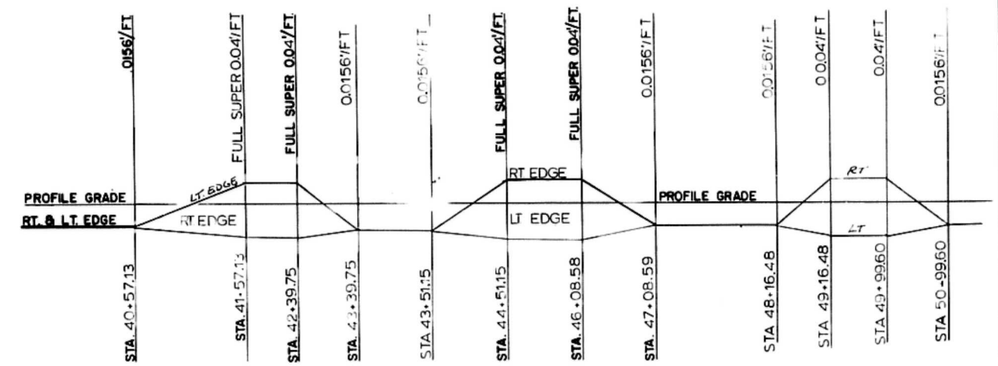
BITUMINOUS BASE COURSE, 8"

Sta. 49+00 to Sta. 49+90 (Mean) =	40 SQ. YDS.
Total this sheet:	40 SQ. YDS.

(250)

Δ = 9° 49' 52"
D = 4° 32' 30.89"
R = 1261.49'
T = 108.49'
L = 216.45'
E = 4.64'
PC = 48+83.15
PT = 50+99.60
SE = 0.04 FT/FT
TRANSITION LENGTH: SEE THIS SHEET

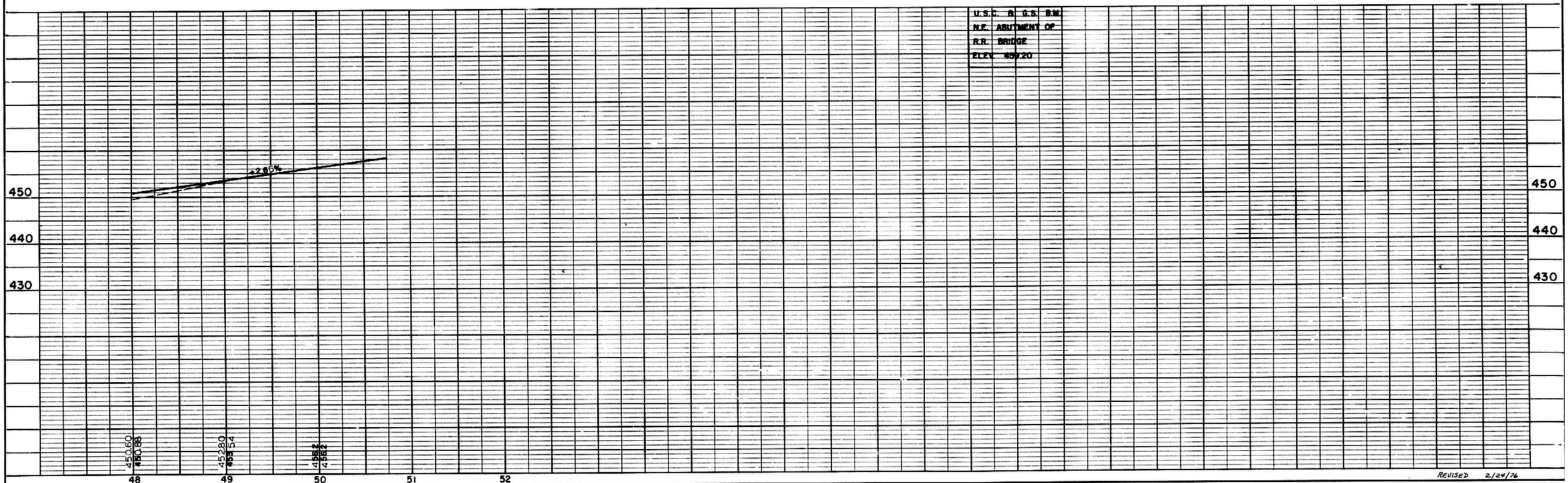
SCALE: 1" = 50'



SUPERELEVATION TRANSITION
CURVE NO. 230, 240 AND 250

NOTE: SUPER BUILD UP ON THE EXISTING PAVEMENT IS TO BE DONE WITH BIT. CONC. BINDER CSE UNDER TRAFFIC (ON TR. 317)

U.S.C. & G.S. B.M.
N.E. ABUTMENT OF
R.R. BRIDGE
ELEV. 459.20



REVISED 2/24/76

PLATE 1—PLAN-PROFILE
MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY

THE ENGINEERS COLLABORATIVE – CHICAGO, ILLINOIS

TR 317 (RELOCATED)

BRUNING NO. 42-151

NOTE BOOK NO. PLOTTED ALIGNMENT CHECKED RT. OF WAY CHECKED

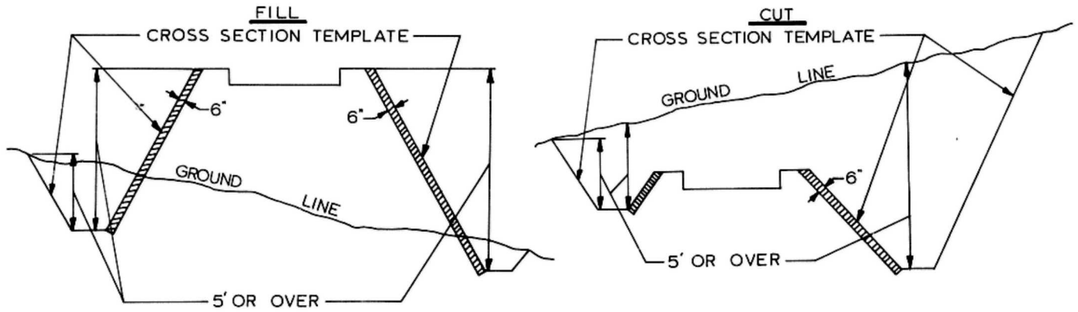
NOTE BOOK NO. PLOTTED BRIDGE CHECKED R.R. CHECKED STRUCTURE ROUT'NG CH'KD.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	12
FED. ROAD DIV. NO.		ILLINOIS	PROJECT	

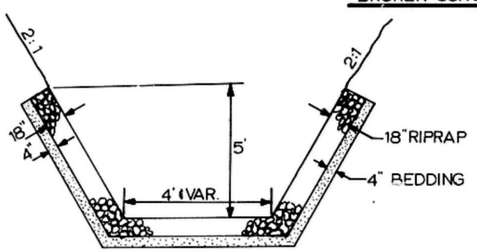
FOR GRAN. EMB. ONLY
FOR DETAILS & LIMITS SEE CROSS SECTIONS

FOR COHESIVE SOIL SEE CROSS SECTIONS

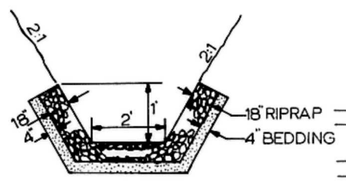
TOPSOIL PLACEMENT DETAIL



BROKEN CONCRETE RIPRAP DETAIL

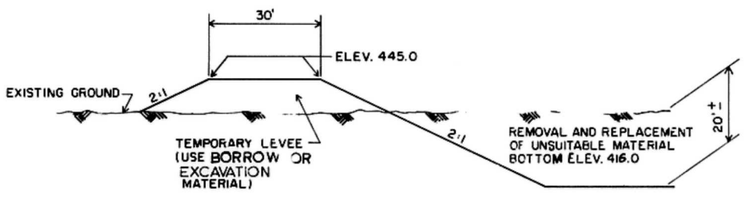


RT. STA. 81+64

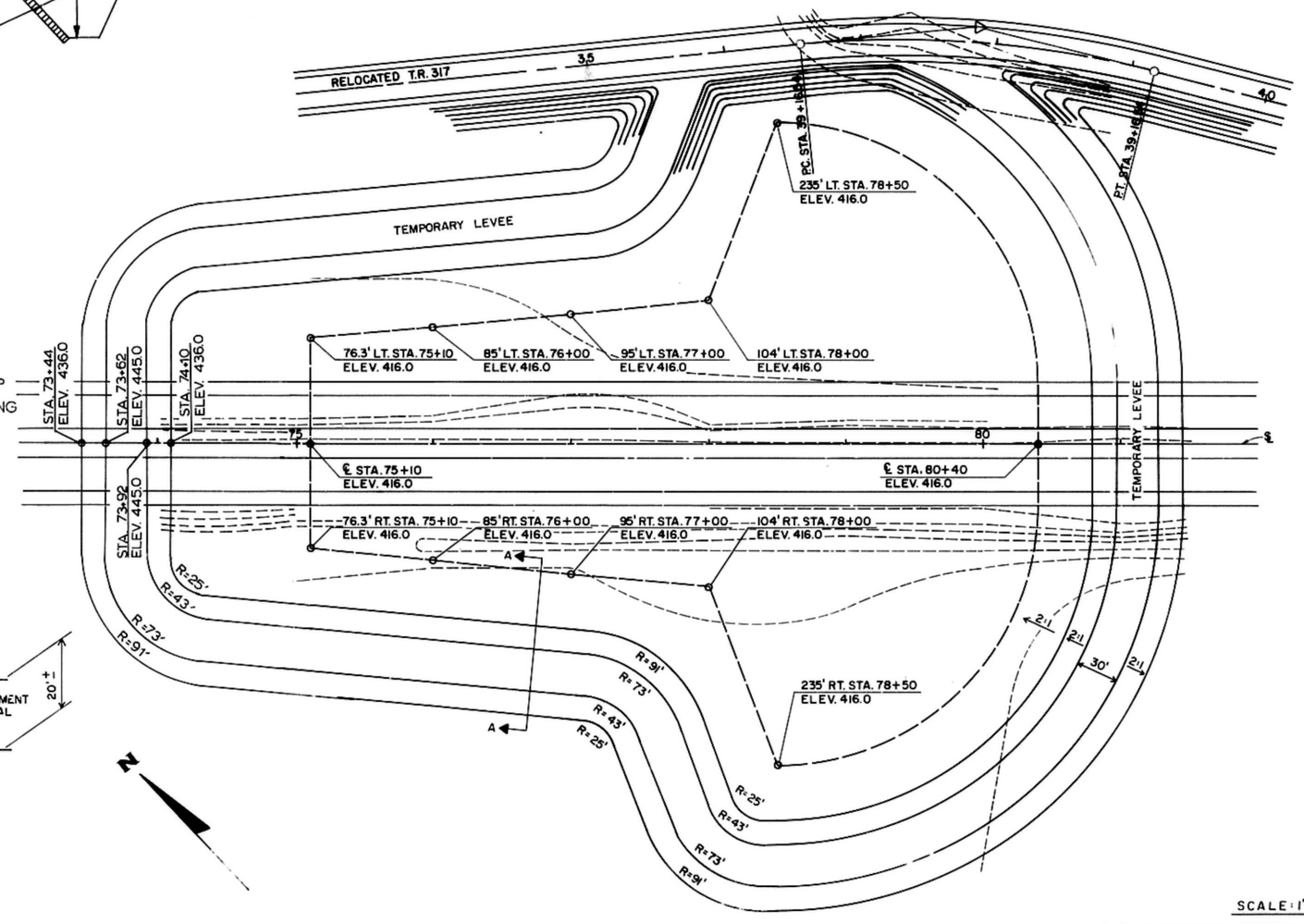


LT. STA. 74+50-76+25
ALTERNATE - A

LT. STA. 75+50-77+25
ALTERNATE - B



SECTION A-A



SCALE: 1" = 50'

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

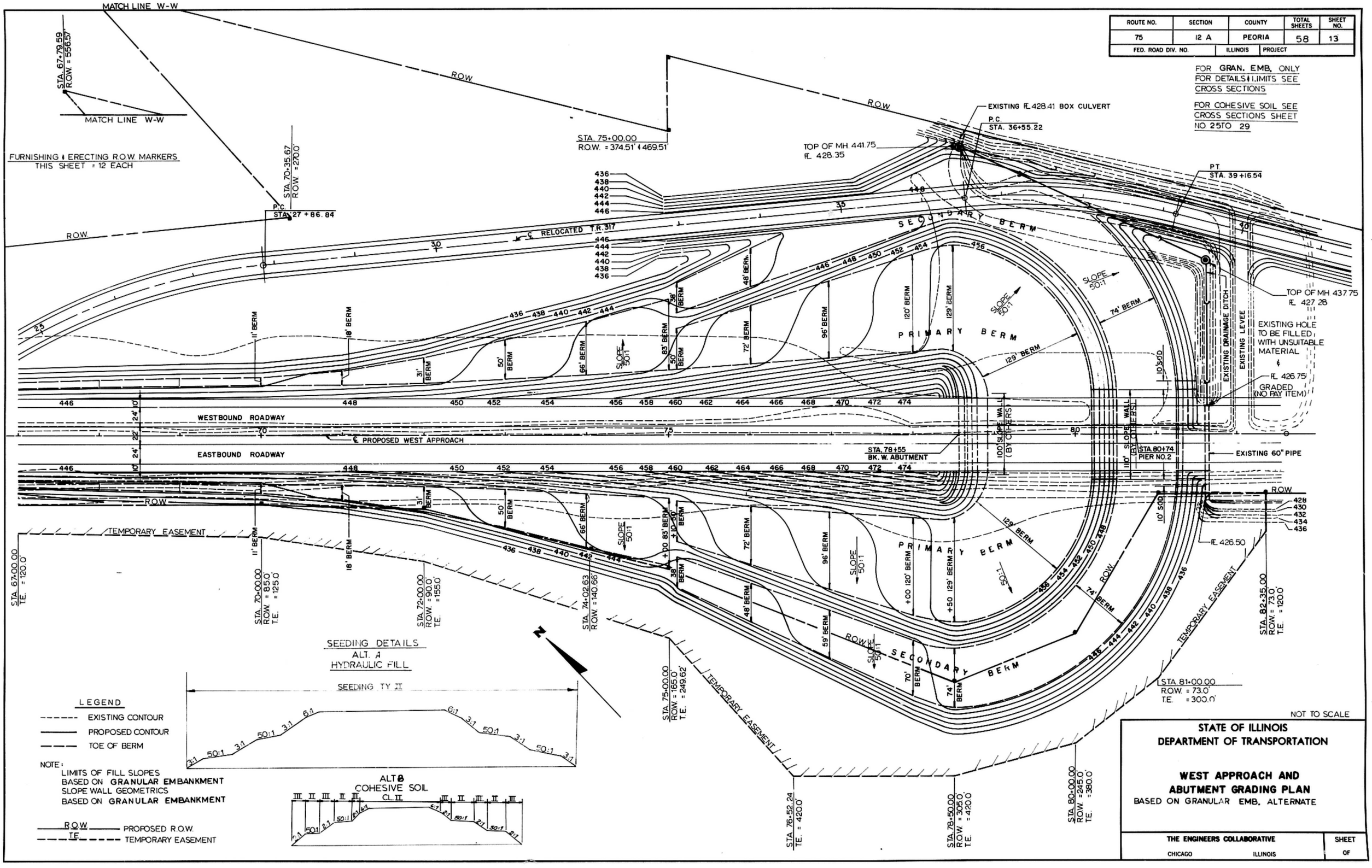
LIMITS OF REMOVAL AND TEMPORARY LEVEE

THE ENGINEERS COLLABORATIVE	SHEET
CHICAGO ILLINOIS	OF

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	13
FED. ROAD DIV. NO.		ILLINOIS	PROJECT	

FOR GRAN. EMB. ONLY
FOR DETAILS & LIMITS SEE CROSS SECTIONS

FOR COHESIVE SOIL SEE CROSS SECTIONS SHEET NO. 25 TO 29

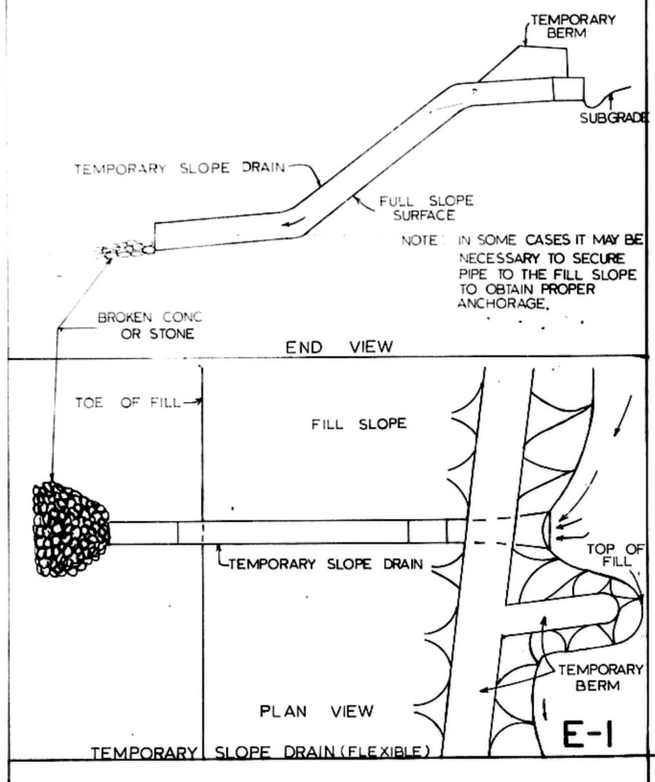


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

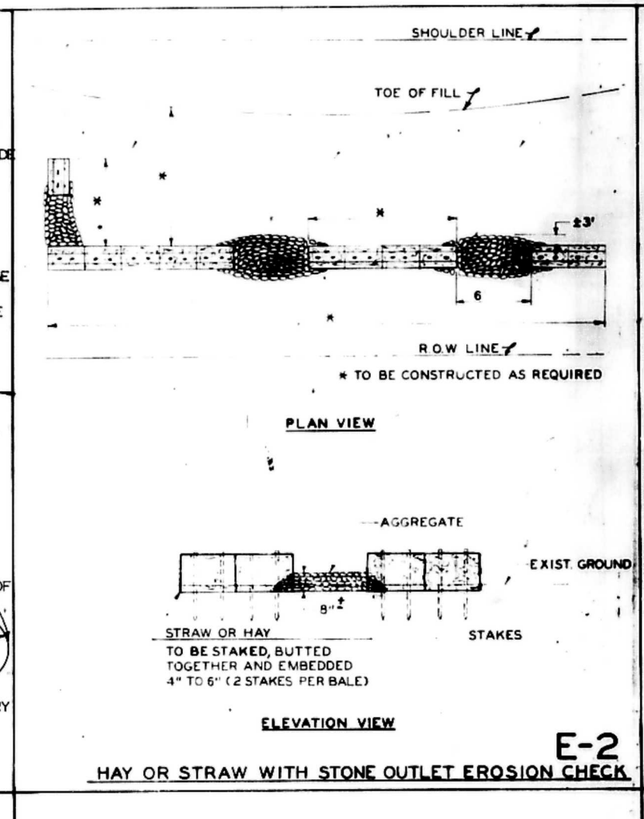
WEST APPROACH AND ABUTMENT GRADING PLAN
BASED ON GRANULAR EMB. ALTERNATE

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

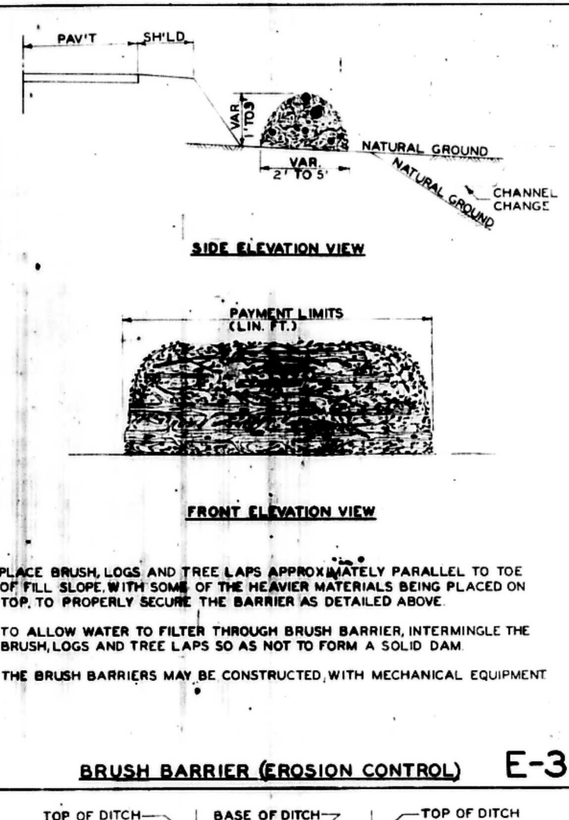
SHEET OF



TEMPORARY SLOPE DRAIN (FLEXIBLE) E-1



HAY OR STRAW WITH STONE OUTLET EROSION CHECK E-2



PLACE BRUSH, LOGS AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE, WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TOP, TO PROPERLY SECURE THE BARRIER AS DETAILED ABOVE.

TO ALLOW WATER TO FILTER THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOGS AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.

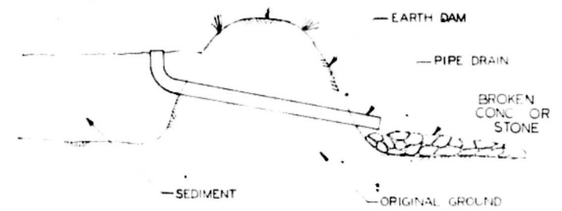
THE BRUSH BARRIERS MAY BE CONSTRUCTED, WITH MECHANICAL EQUIPMENT

BRUSH BARRIER (EROSION CONTROL) E-3

NOTE:
DAM AND SPILLWAY SIZE, SHALL BE AS DETERMINED IN THE FIELD FOR THE PARTICULAR SITE REQUIREMENTS.

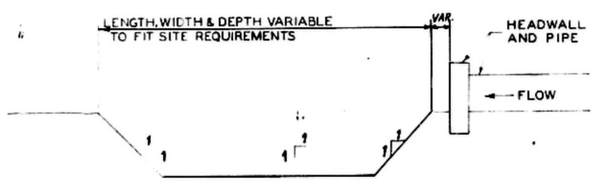
SIZE OF STONE SHOULD BE APPROXIMATELY 50 POUNDS MAXIMUM WEIGHT AS DETERMINED BY THE ENGINEER BY VISUAL INSPECTION.

TEMPORARY DAM E-4

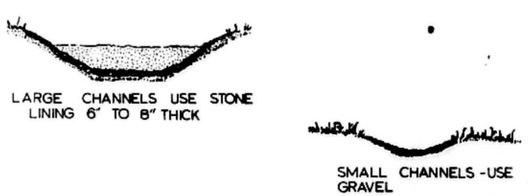


NOTE:
DAM AND PIPE SIZE VARIABLE TO FIT SITE REQUIREMENTS.

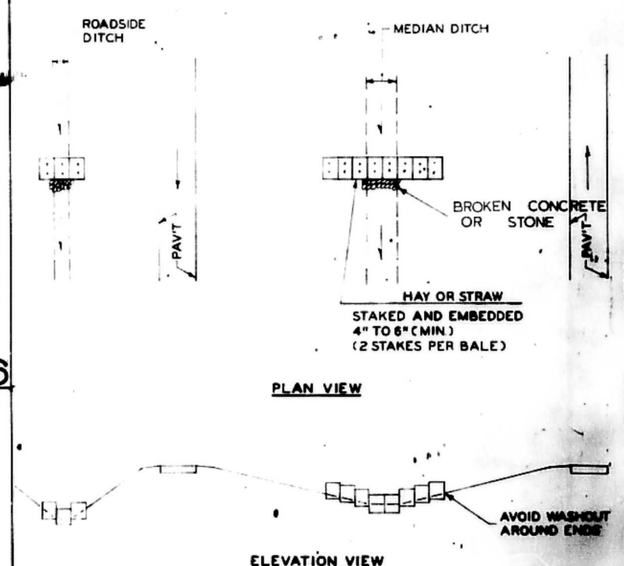
SMALL TEMPORARY SEDIMENT DAM E-5



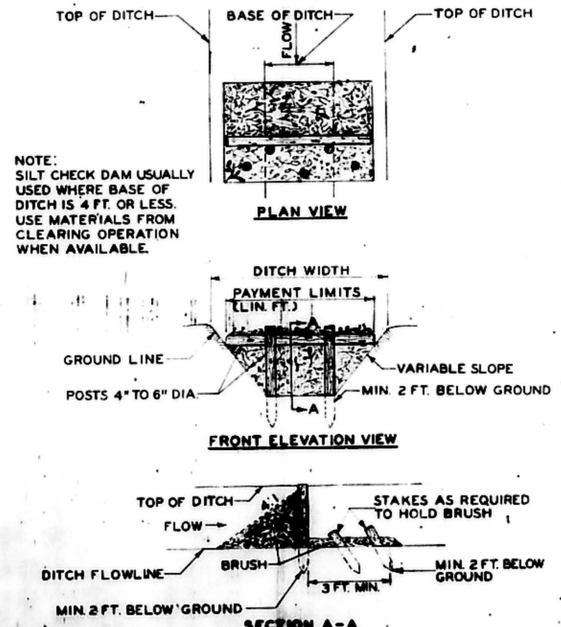
TEMPORARY EROSION CONTROL SEDIMENT BASIN E-6



DIVERSION CHANNELS E-7



HAY OR STRAW DITCH CHECKS E-8



NOTE:
SILT CHECK DAM USUALLY USED WHERE BASE OF DITCH IS 4 FT. OR LESS. USE MATERIALS FROM CLEARING OPERATION WHEN AVAILABLE.

WHERE LOGS ARE NOT AVAILABLE, WOVEN WIRE FENCE MAY BE USED TO RETAIN WOOD LITTER FOR BRANCH FILTER. IF WOVEN WIRE FENCE IS USED, THE WIRE SHALL BE ANCHORED SECURELY AND TO THE SATISFICATION OF THE ENGINEER PRIOR TO PLACING THE LITTER AND FOLIAGE FILTER MATERIALS.

SILT CHECK DAM E-9

GENERAL NOTES

1. THE TYPES OF TEMPORARY EROSION CONTROL METHODS SHOWN ARE TYPICAL ONLY AND MAY BE MODIFIED OR COMBINED TO PRODUCE AN EFFECTIVE METHOD OF CONTROLLING EROSION AND SILTATION.
2. STAKES USED TO SECURE THE HAY OR STRAW BALES MAY BE OF ANY MATERIAL AND SIZE CAPABLE OF HOLDING THE BALES IN PLACE.
3. IF THE ENGINEER DECIDES THE HAY OR STRAW BALES MAY REMAIN IN PLACE, ALL STAKES & BALE TIES SHALL BE REMOVED AND DISPOSED OF OUTSIDE THE ROW PRIOR TO THE COMPLETION OF THE CONTRACT UNLESS OTHERWISE DIRECTED.
4. PERIODIC INSPECTION AND MAINTENANCE WILL BE REQUIRED FOR ALL TEMPORARY EROSION CONTROL SYSTEMS.
5. ALL STONE USED FOR TEMPORARY EROSION CONTROL SHALL BE ANY COURSE AGGREGATE GRADATION APPROVED BY THE ENGINEER.
6. ALL BALES IN PLACE SHALL BE EITHER LOOSE OR BOUND AS DETERMINED BY THE ENGINEER.
7. SEE SPECIAL PROVISIONS FOR BASIS OF PAYMENT AND OTHER SPECIFICS CONCERNING ALL TEMPORARY EROSION CONTROL.

TYPICAL METHODS OF TEMPORARY EROSION CONTROL

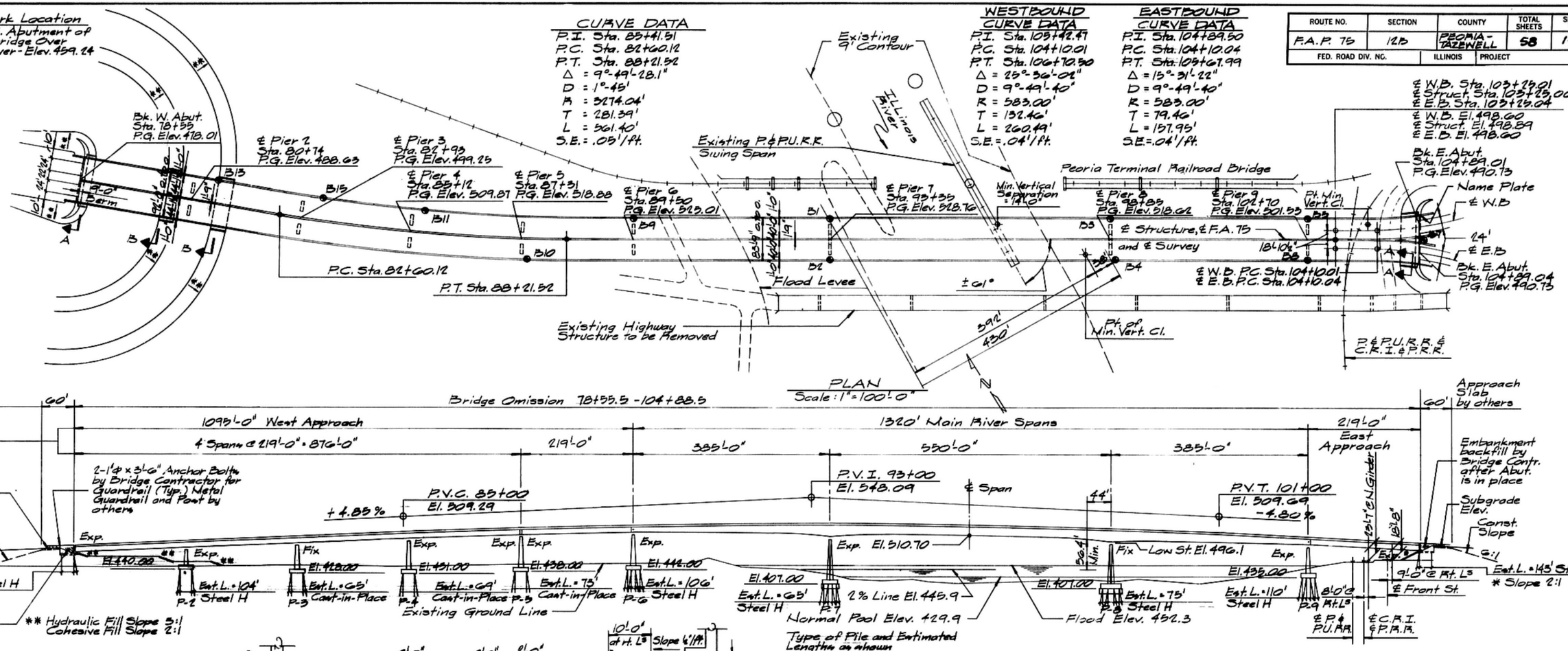
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 75	12B	PEORIA-TAZEWELL	58	16
FED. ROAD DIV. NO.		ILLINOIS	PROJECT	

Bench Mark Location
Top of NE. Abutment of Railroad Bridge Over Illinois River - Elev. 459.24

CURVE DATA
P.I. Sta. 85+41.51
P.C. Sta. 82+60.12
P.T. Sta. 88+21.52
Δ = 9°-49'-28.1"
D = 1°-45'
R = 3274.04'
T = 281.39'
L = 561.40'
S.E. = .05'/ft.

WESTBOUND CURVE DATA
P.I. Sta. 105+42.47
P.C. Sta. 104+10.01
P.T. Sta. 106+70.50
Δ = 23°-36'-02"
D = 9°-49'-40"
R = 583.00'
T = 132.46'
L = 260.49'
S.E. = .04'/ft.

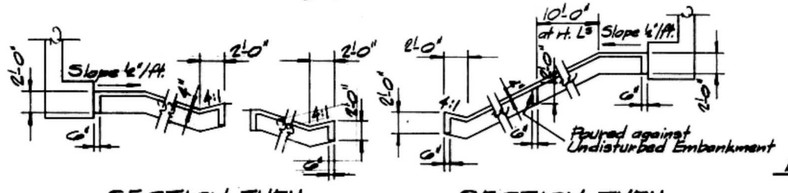
EASTBOUND CURVE DATA
P.I. Sta. 104+89.50
P.C. Sta. 104+10.04
P.T. Sta. 105+67.99
Δ = 15°-31'-22"
D = 9°-49'-40"
R = 583.00'
T = 79.46'
L = 157.95'
S.E. = .04'/ft.



PLAN
Scale: 1" = 100'-0"

Type of Pile and Estimated Lengths as shown
Steel H - HP14x117
Cast-in-Place - Metal Pile Shell 14"φ

PROFILE - ROUTE ILL-9



SECTION THRU WEST SLOPEWALL

SECTION THRU EAST SLOPEWALL

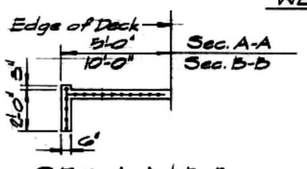
DESIGN LOADS
Live Load HS20-44
Future W.S. = 25 psf

DESIGN STRESSES
fc = 1200 psi (Deck Slab)
fc = 1400 psi (Curb, Parapet, Median)
fs = 20,000 psi (Reinforcement - Superstructure)
fy = 60,000 psi (Reinforcement - Substructure; Load Factor Design)
fs = 27,000 psi (Structural Steel M-222 - Unpainted)
fc = 3500 psi (Substructure)

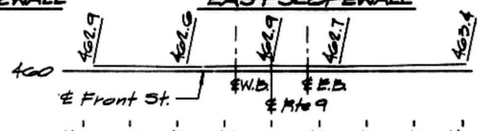
APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Chief Engineer Services & Traffic Structures

STATE OF ILLINOIS
EDWARD J. HOFFMAN
2005

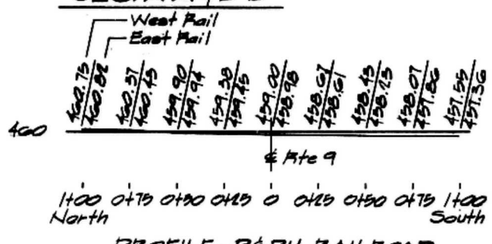
Edward J. Hoffman 10/1/75



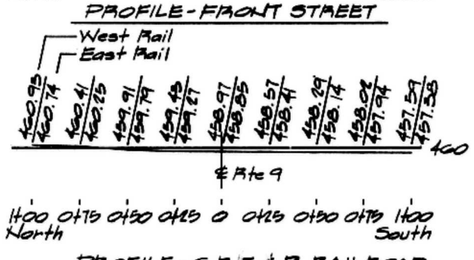
SEC. A-A & B-B



PROFILE - FRONT STREET



PROFILE - P.&P.U. RAILROAD



PROFILE - C.R.I. & P. RAILROAD

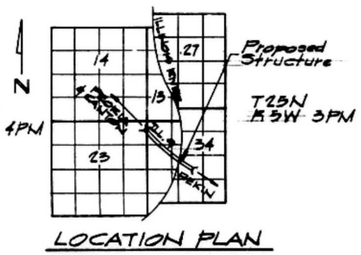
STATION 96+50
BUILT 19 BY
STATE OF ILLINOIS
S.B.I. RT. SEC. 12B
F.A. PROJ. U-156(19)
LOADING HS20

NAME PLATE
(See Std. 2113)

Waterway Information

Drainage Area	14,000 sq. mi.
Q (100)	87,000 cfs +
Opening (Req'd.)	22,300 sq. ft.
Opening (Proposed)	27,570 sq. ft. *
Q (50)	78,000 cfs +

* Controlled by other than hydraulic considerations.
+ Below H.W. Elev. 459.2



LOCATION PLAN

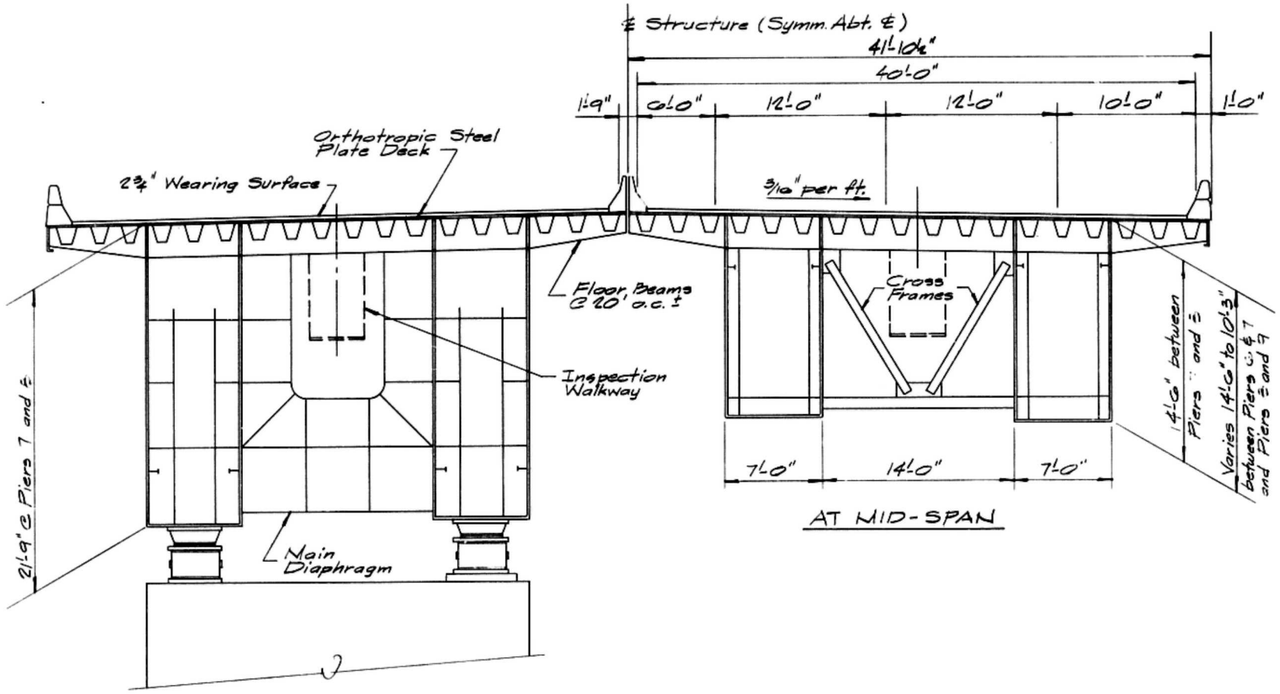
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
PROJECT: U-156(19)
ILL. 9 over ILLINOIS RIVER
F.A.P. 75 SECTION 12B
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 1 OF 17

Rev. 4-26-76

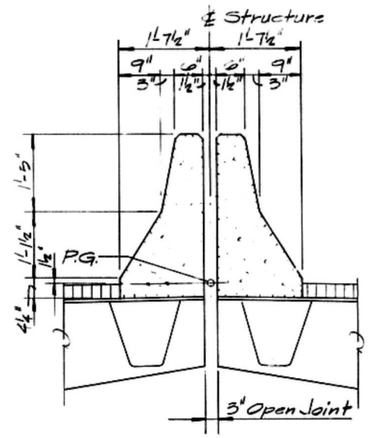
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	16
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		



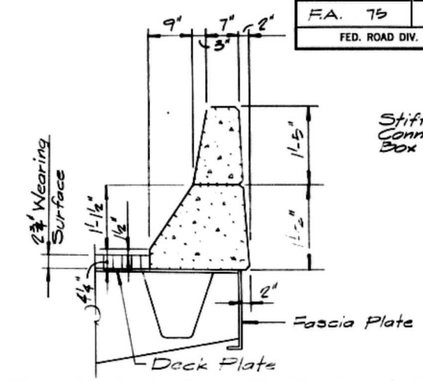
AT MID-SPAN

AT PIERS

TYPICAL SECTION THRU MAIN RIVER SPANS



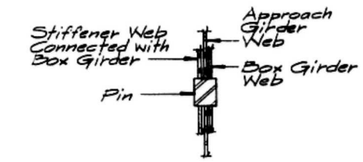
TYPICAL MEDIAN DETAIL



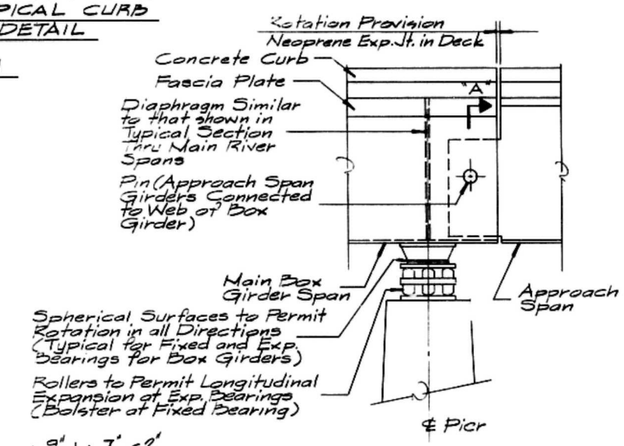
Deck Drain System will be Provided to Exclude Salt Water From Coming in Contact with the Superstructure. Drains Will be Omitted at Railroad and Front Street.

TYPICAL CURB DETAIL

MAIN RIVER SPAN

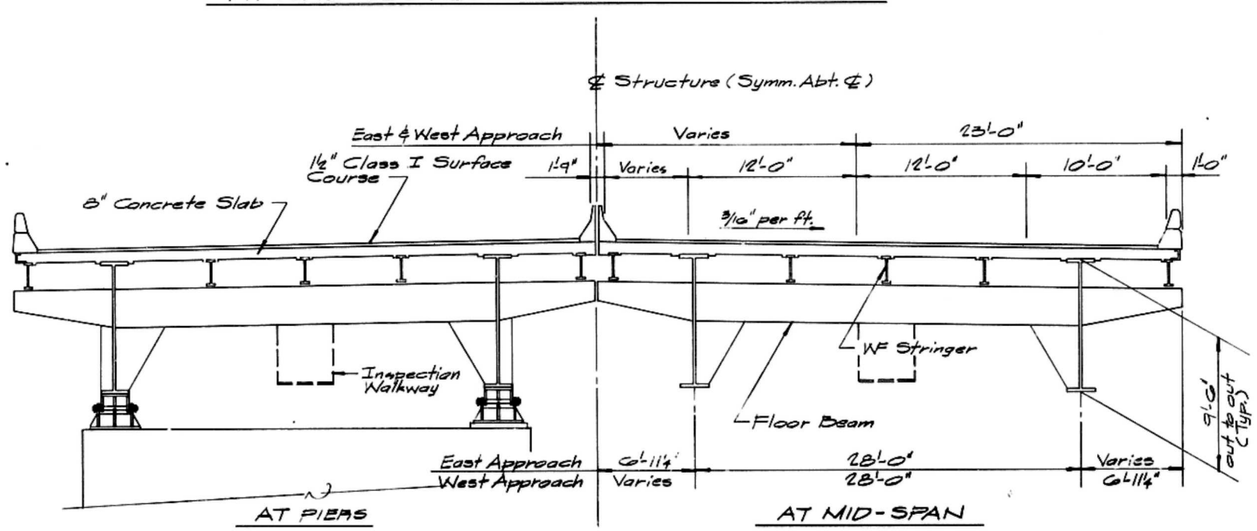


SECTION "A"
Scale: 3/8" = 1'-0"



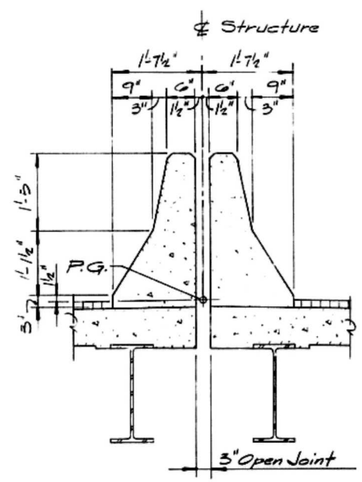
TYPICAL DETAIL AT PIERS 6 & 9

AT PIERS

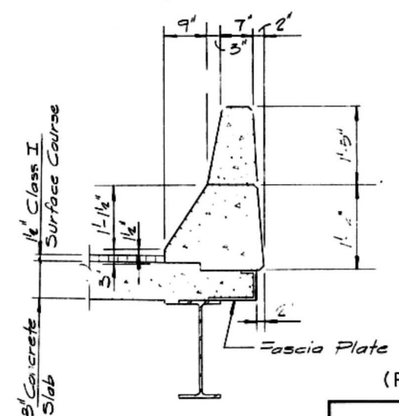


AT MID-SPAN

TYPICAL SECTION THRU APPROACH SPANS



TYPICAL MEDIAN DETAIL



TYPICAL CURB DETAIL

APPROACH SPAN

(FOR INFORMATION ONLY)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+30

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 2 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA - TAZEWELL	58	17
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		

GENERAL NOTES

1. THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.
2. LAYOUT OF SLOPEWALLS MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.
3. SLOPEWALLS SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" x 6" MESH, WEIGHING 58# PER 100 SQ. FT.
4. THE CONTRACTOR SHALL DRIVE ONE TEST PILE AT EACH PIER AND EACH ABUTMENT IN A PERMANENT LOCATION, AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.
5. ALL PIERS SHALL BE CONSTRUCTED OF MONOLITHICALLY PLACED CONCRETE, WITHOUT CONSTRUCTION JOINTS, FULL HEIGHT FROM TOP OF FOOTING.
6. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL BARS CONFORMING TO AASHTO M31 GRADE 60 (F_y = 60,000 psi).
7. ALL REINFORCING BARS #11 OR SMALLER SHALL BE LAPPED MINIMUM AS SHOWN IN TABLE A, UNLESS NOTED OTHERWISE.
8. ALL EDGES SHALL HAVE STANDARD 3/4" CHAMFERS EXCEPT AS NOTED.

TABLE A

Lap Dimension

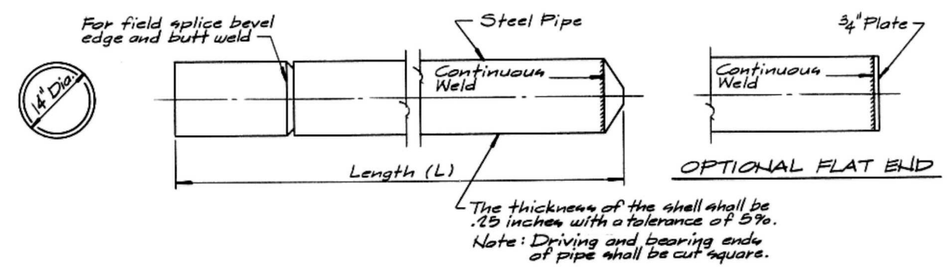
Bar Size *	Lap Dimension Vert. Bars	Lap Dimension Horiz. Bars
#4	15"	21"
#5	20"	27"
#6	25"	35"
#7	34"	48"
#8	44"	62"
#9	55"	83"
#10	71"	99"
#11	87"	122"

* Lap Dimension For Two Different Bar Sizes Shall Be Based On The Larger Bar

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu.Yd.	—	2369	2369
Class X Concrete	Cu.Yd.	—	4175.6	4175.6
Reinforcement Bars	Lbs.	—	470000	470000
Furnishing Metal Pile Shells 14"	Lin.Ft.	—	25413	25413
Furnishing Steel H Piles HP14x117	Lin.Ft.	—	14272	14272
Driving and Filling Shells	Lin.Ft.	—	25413	25413
Driving Steel Piles	Lin.Ft.	—	14272	14272
Test Piles Metal Shells	Each	—	3	3
Test Piles HP14x117	Each	—	3	3
Slopewall (4inch)	Sq.Yds.	—	328	328 *

* East Abutment Only



DETAIL OF CYLINDER STEEL SHELL FOR CAST IN PLACE CONCRETE PILES

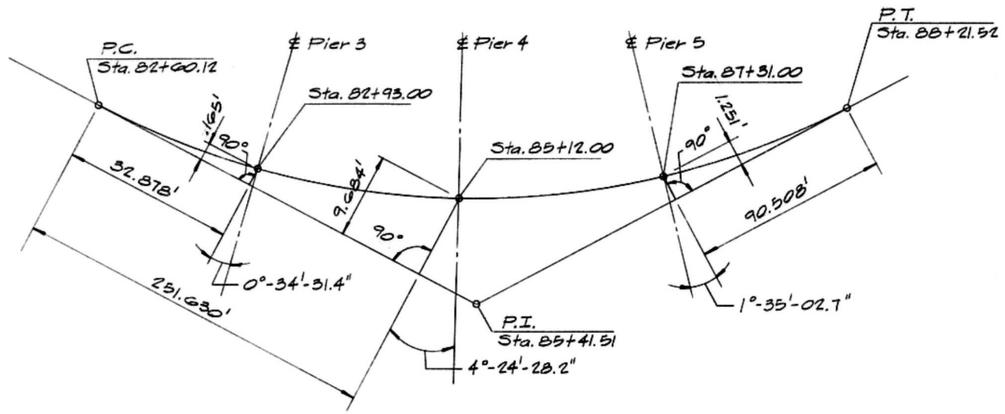
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
GENERAL NOTES
AND TOTAL BILL OF MATERIAL

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA - TAZEWELL COUNTIES
STA. 96+50

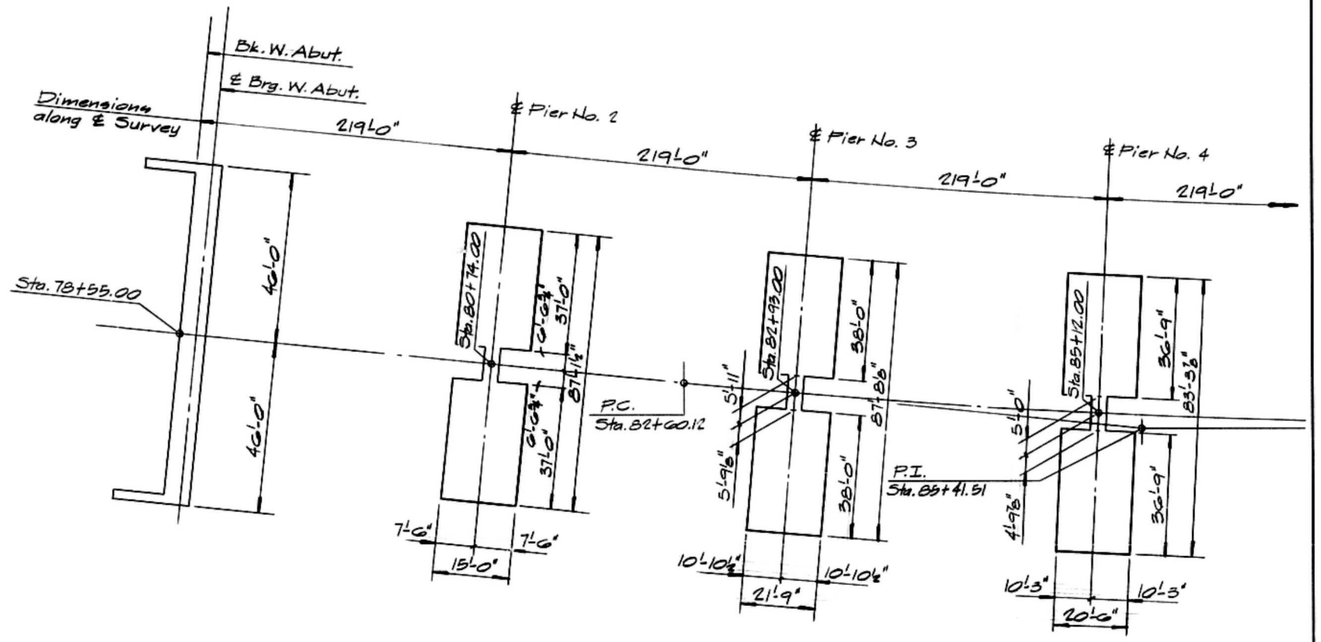
THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

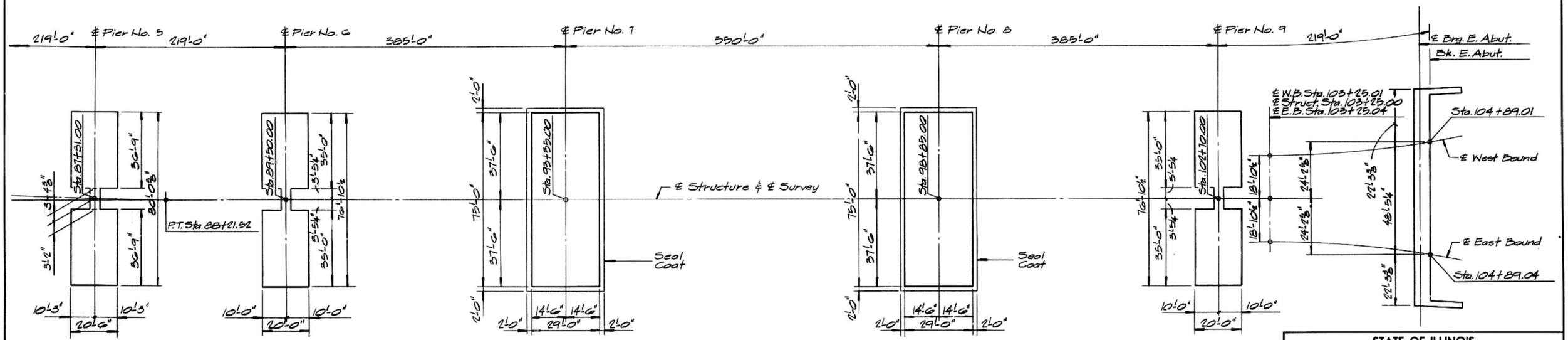
SHEET 3 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A 75	12B-1	PEORIA-TAZEWELL	58	18
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		



TANGENT OFFSETS - PIERS 3, 4 & 5





STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOOTING LOCATION

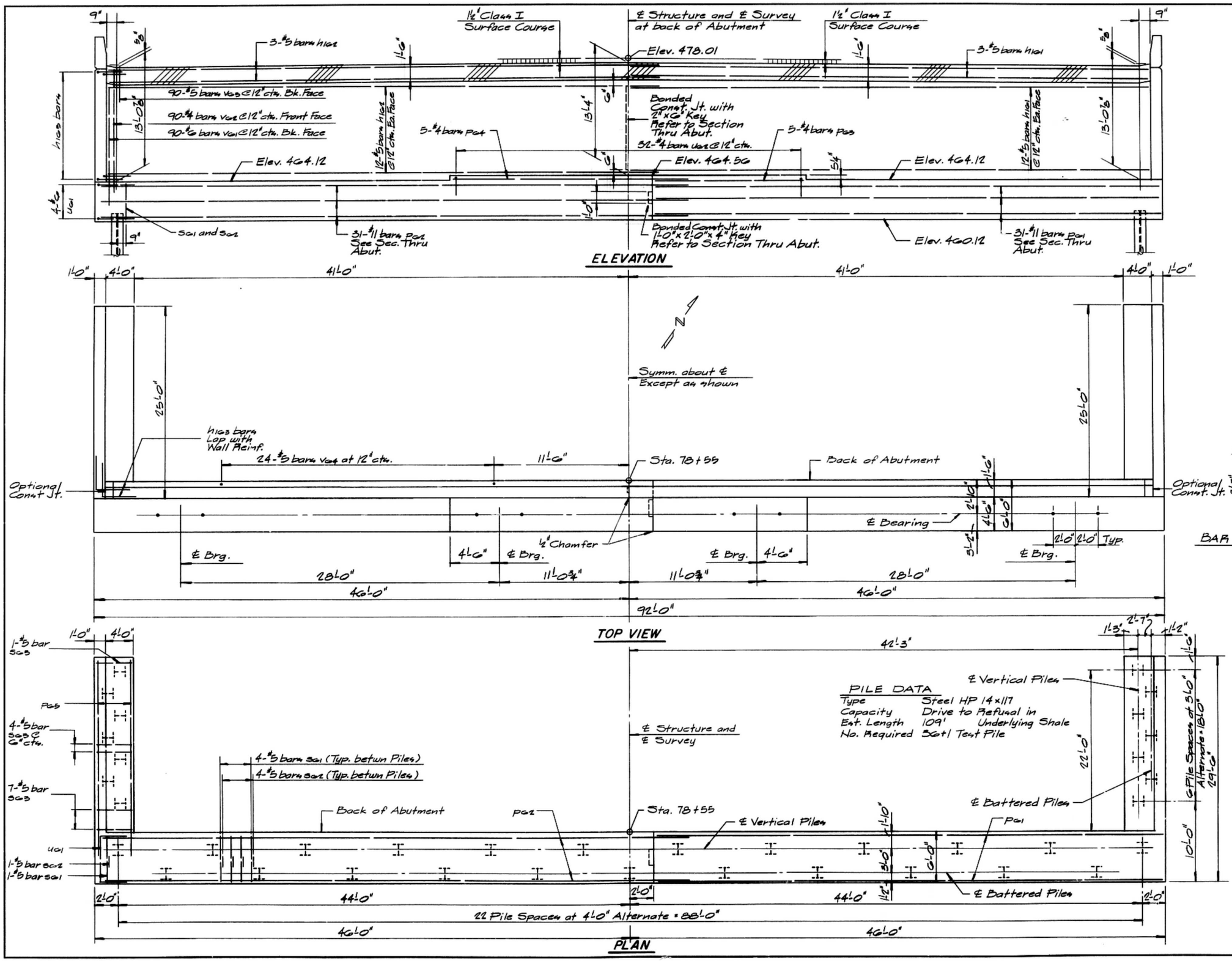
ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 4 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	19
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		

Notes: Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
hic1	27	#5	44'-6"	—
hic2	27	#5	47'-3"	—
hic3	54	#5	7'-6	⌋
hic4	72	#4	24'-6"	—
nc1	100	#7	10'-9"	⌋
nc2	50	#6	8'-2"	—
pa1	31	#11	43'-6"	—
pa2	31	#11	61'-5"	—
pa3	5	#4	13'-0"	—
pa4	5	#4	19'-9"	—
pa5	20	#7	26'-4"	—
sa1	90	#5	19'-5"	□
sa2	90	#5	11'-5"	□
sa3	64	#5	14'-7"	□
uc1	8	#6	11'-6"	⊔
uc2	32	#4	8'-6"	⊔
vac1	90	#6	13'-2"	—
vac2	90	#4	14'-1"	—
vac3	90	#5	3'-4½"	⌒
vac4	48	#5	2'-6"	—
vac5	50	#6	14'-2"	—
vac6	50	#6	14'-2"	⌒
Class X Concrete			Cu. Yds.	189.5
Reinforcement Bars			Lbs.	34880
Steel H Piles			Lin. Ft.	5924
Test Piles			Each	1

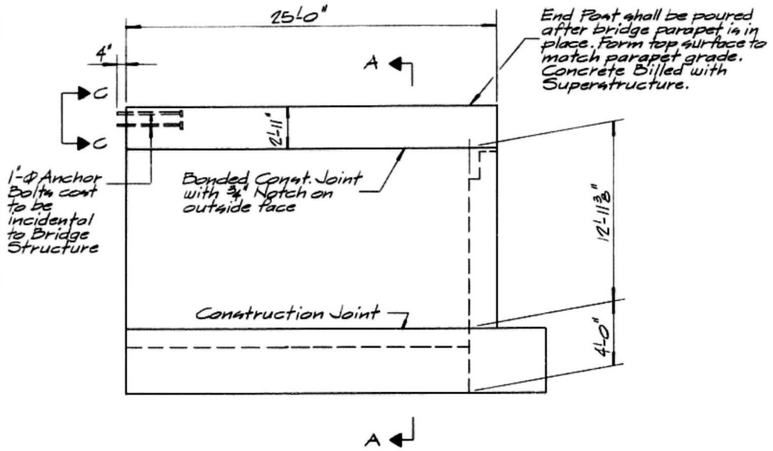
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
WEST ABUTMENT

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

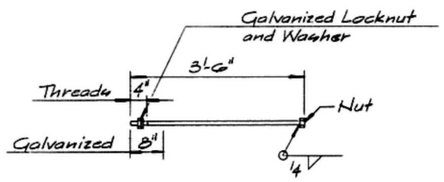
THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 5 OF 17

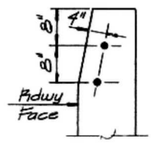
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	20
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		



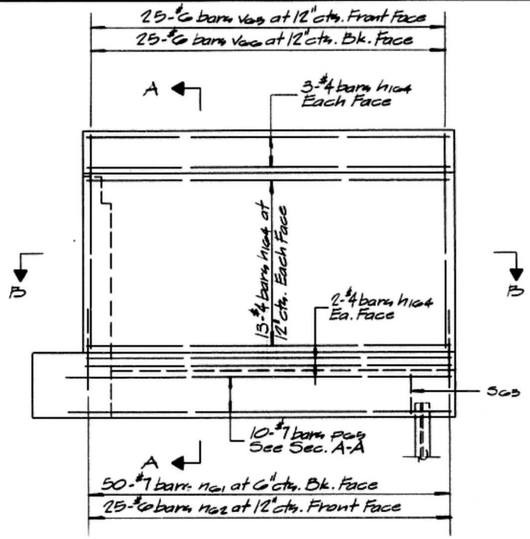
WING WALL ELEVATION



1"Φ ANCHOR BOLT

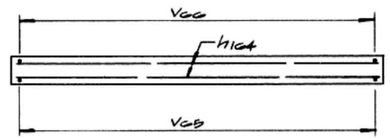


VIEW C-C

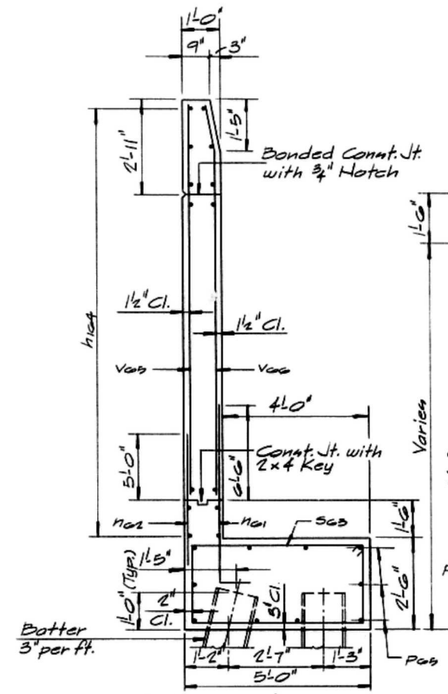


WING WALL ELEVATION

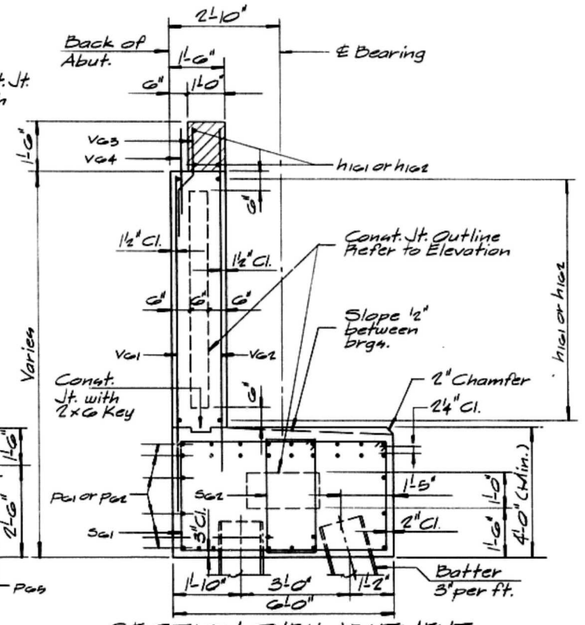
Reinforcement



SECTION B-B

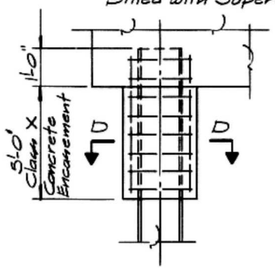


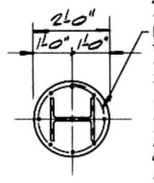
SECTION A-A



SECTION THRU ABUTMENT

Note: The Hatched portion shall be poured after the Superstructure is in place. Concrete Billed with Superstructure





Forms for encasement may be omitted when soil conditions will permit.

Welded wire fabric, 6"x6" mesh #4 wire - Wt. 58#/100 sq. ft.

The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles.

SECTION D-D

DETAIL OF CONCRETE ENCASEMENT FOR STEEL H PILES AT ABUTMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT

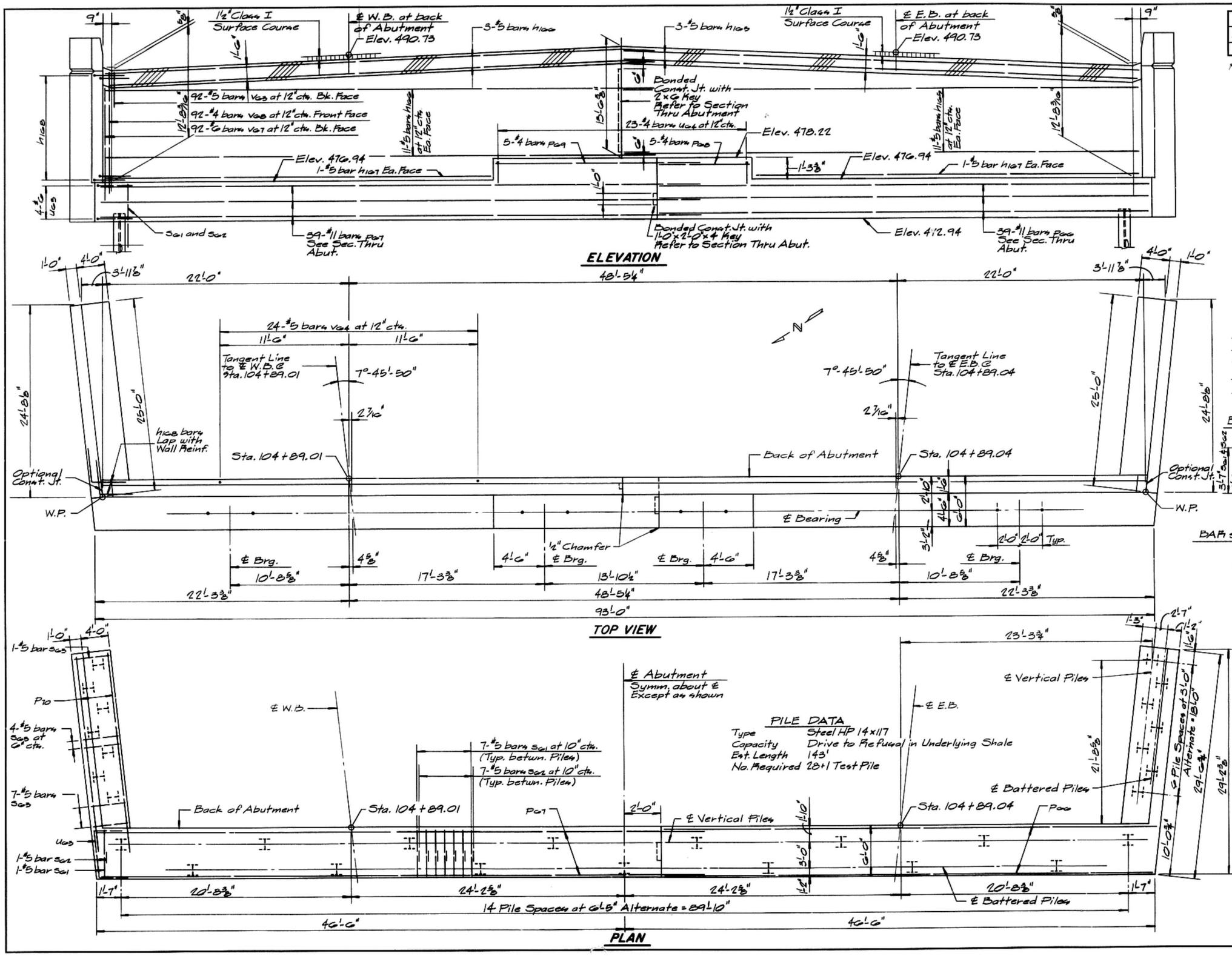
ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 6 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	21
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		

Notes: Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h165	25	#5	45'-9"	
h166	25	#5	48'-6"	
h167	4	#5	34'-3"	
h168	54	#5	8'-0"	
h169	72	#4	24'-6"	
Sa1	100	#7	10'-9"	
Sa2	50	#6	8'-2"	
P06	39	#11	44'-0"	
P07	39	#11	62'-0"	
P08	5	#4	8'-11"	
P09	5	#4	15'-4"	
P10	20	#7	26'-4"	
Sa1	100	#5	19'-5"	
Sa2	100	#5	11'-5"	
Sa3	64	#5	14'-7"	
U03	8	#6	12'-4½"	
U04	23	#4	10'-0"	
V03	92	#5	3'-4½"	
V04	48	#5	2'-6"	
V07	92	#6	14'-10"	
V08	92	#4	15'-7"	
V09	50	#6	13'-11"	
V10	50	#6	13'-11"	
Class X Concrete			Cu. Yds.	192.3
Reinforcement Bars			Lbs.	40210
Steel H Piles			Lin. Ft.	4004
Test Piles			Each	1

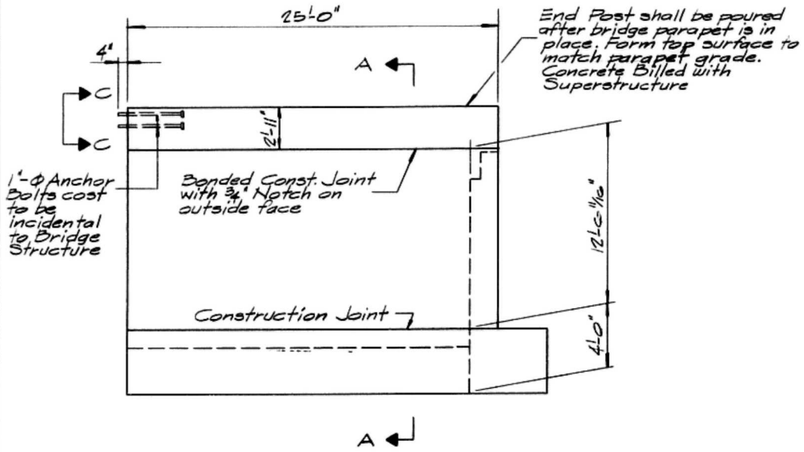
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
EAST ABUTMENT

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

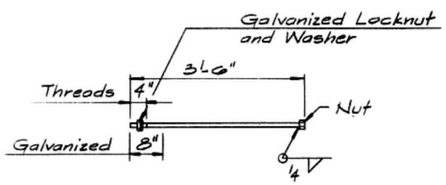
THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 7 OF 17

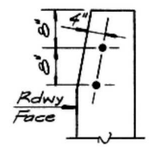
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	22
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		



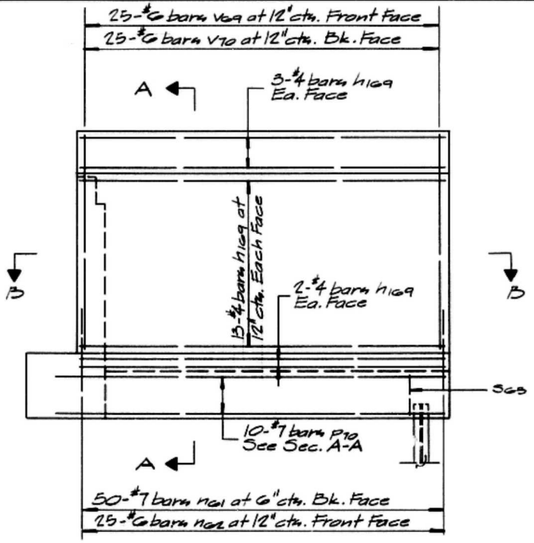
WING WALL ELEVATION



1"Φ ANCHOR BOLT

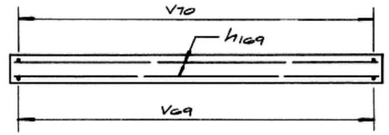


VIEW C-C

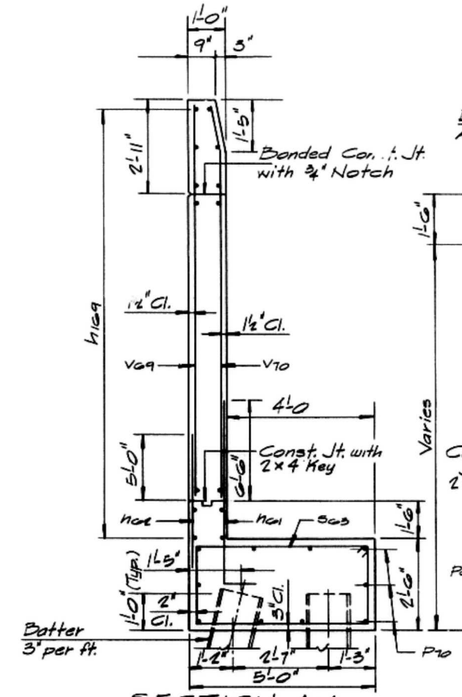


WING WALL ELEVATION

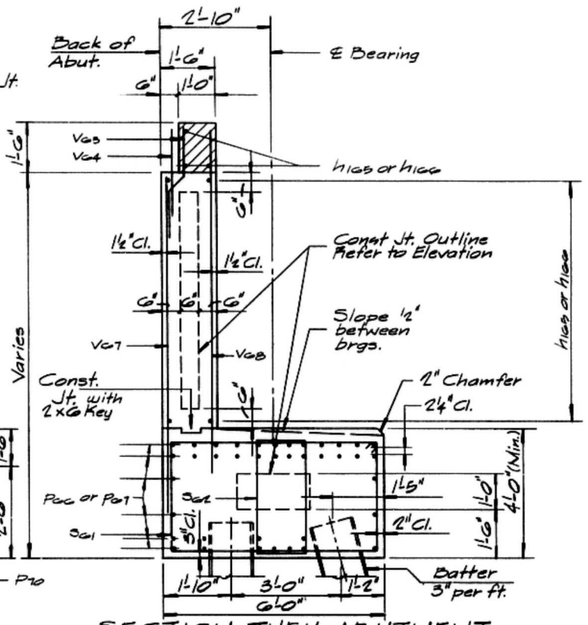
Reinforcement



SECTION B-B

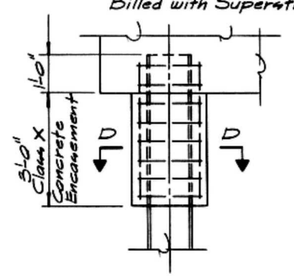


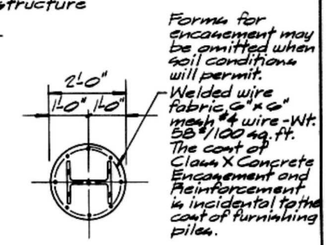
SECTION A-A



SECTION THRU ABUTMENT

Note: The Hatched portion shall be poured after the Superstructure is in place. Concrete Billed with Superstructure





SECTION D-D

DETAIL OF CONCRETE ENCASEMENT FOR STEEL H PILES AT ABUTMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

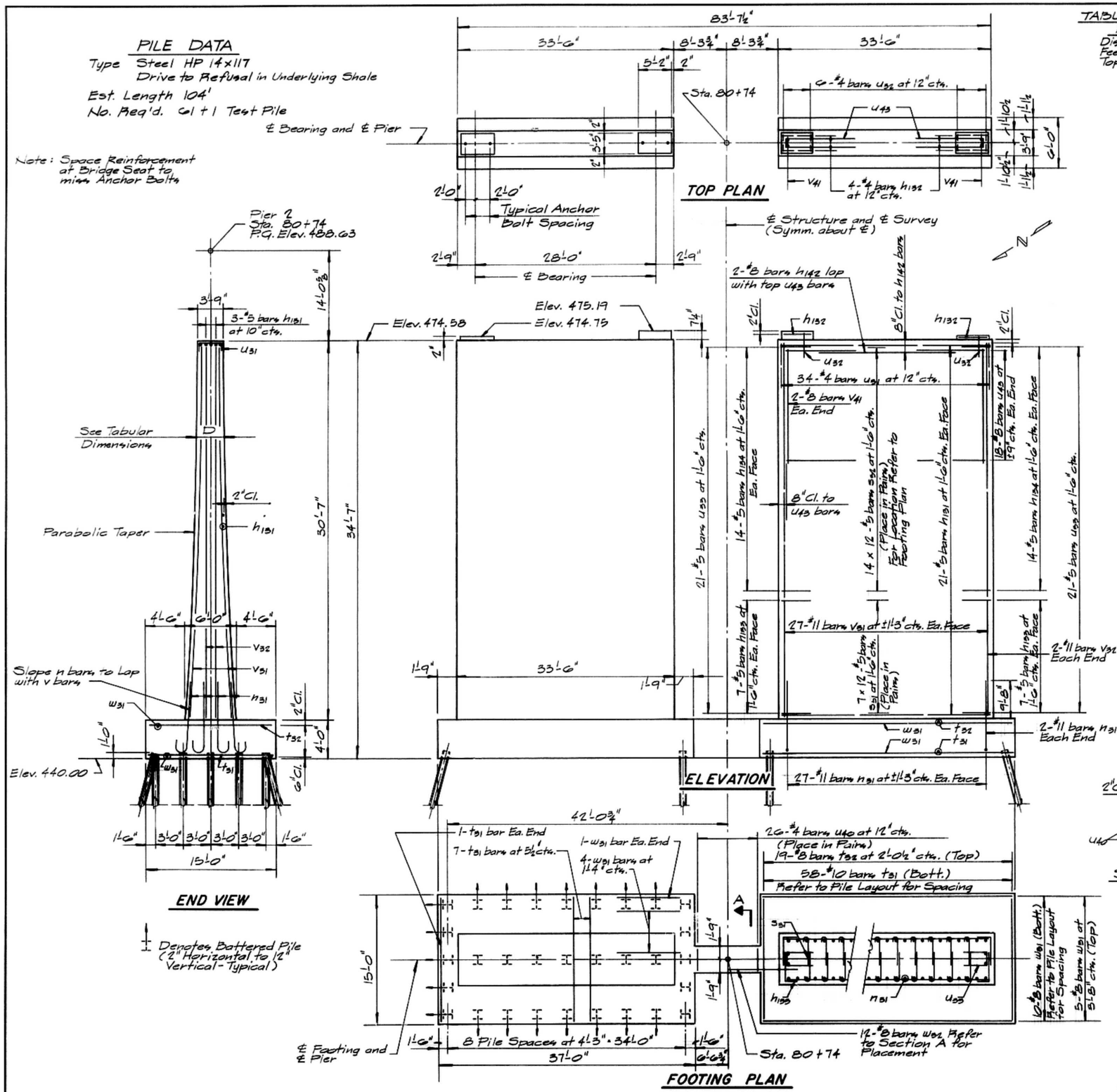
SHEET 8 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	23
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		

PILE DATA

Type Steel HP 14x117
Drive to Refusal in Underlying Shale
Est. Length 104'
No. Req'd. 61 + 1 Test Pile

Note: Space Reinforcement at Bridge Seat to miss Anchor Bolts



TABULAR DIMENSIONS FOR PIER

Distance in Feet From Top of Pier	D (Feet)
0.00	3.75
1.00	3.75
2.00	3.75
3.00	3.77
4.00	3.78
5.00	3.81
6.00	3.83
7.00	3.86
8.00	3.90
9.00	3.94
10.00	3.99
11.00	4.04
12.00	4.09
13.00	4.15
14.00	4.22
15.00	4.29
16.00	4.36
17.00	4.44
18.00	4.52
19.00	4.61
20.00	4.71
21.00	4.81
22.00	4.91
23.00	5.02
24.00	5.13
25.00	5.25
26.00	5.37
27.00	5.50
28.00	5.63
29.00	5.77
30.00	5.91
31.00	6.06

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h131	90	#5	33'-0"	
	h132	16	#4	4'-10"	
	h133	56	#5	6'-5"	
	h134	112	#5	5'-10"	
	h142	4	#8	23'-10"	
	n31	116	#11	14'-9"	
*	v31	108	#11	30'-4"	
	v32	8	#11	30'-4"	
	v41	8	#8	14'-0"	
	s31	336	#5	4'-7"	
	s32	672	#5	4'-0	
	u31	68	#4	6'-3"	
	u32	24	#4	6'-11"	
	u33	84	#5	7'-9"	
	u40	26	#4	8'-6"	
	u43	72	#8	22'-9"	
	t31	116	#10	14'-6	
	t32	38	#8	14'-6	
	w31	30	#8	36'-6"	
	w32	12	#8	24'-8"	
	Class X Concrete			Cu.Yds.	513.8
	Reinforcing Bars			Lbs.	54980
	Steel H Piles			Lin.Ft.	6344
	Test Piles			Ea.	1

* Reinforcing bars shall be shop bent to conform to the tabular pier dimensions shown

Bar	A	B
h133	4'-0	2'-5"
h134	3'-5"	2'-5"
n31	13'-2"	1'-7"
s31	4'-0"	7"
s32	3'-5"	7"
u31	3'-5"	1'-5"
u32	3'-1"	1'-11"
u33	1'-3"	3'-3"
u40	3'-2"	2'-8"
u43	1'-9"	10'-6"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PIER 2

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

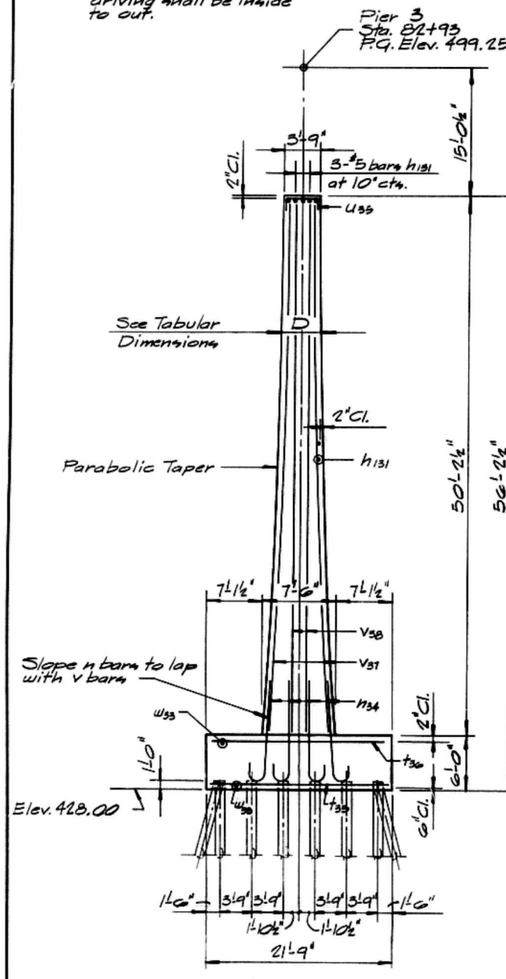
SHEET 9 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	24
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		

PILE DATA

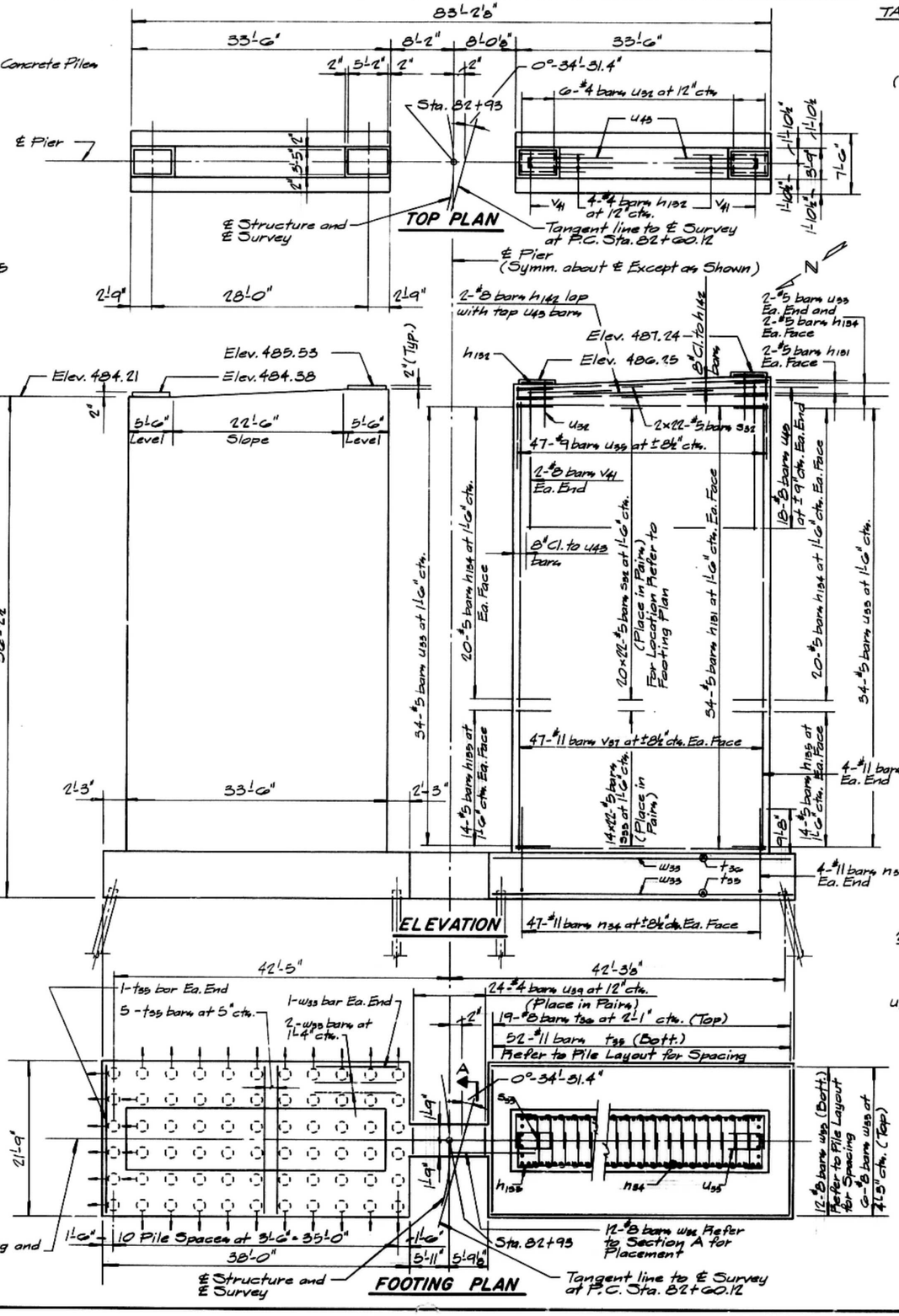
Type Metal Pile Shell 14"Φ Cast-in-Place Concrete Piles
Capacity 75 Ton per Pile
Est. Length 65'
No. Req'd. 131 + 1 Test Pile
For Pile Details Refer to Sheet 3

Note: Space Reinforcement at Bridge Seat to miss Anchor Bolts.
The Sequence of pile driving shall be inside to out.



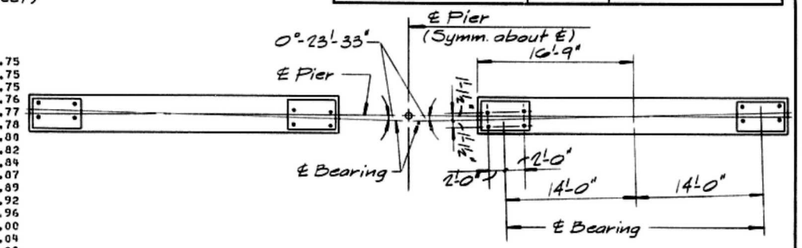
END VIEW

Denotes Battered Pile (2" Horizontal to 12" Vertical - Typical)

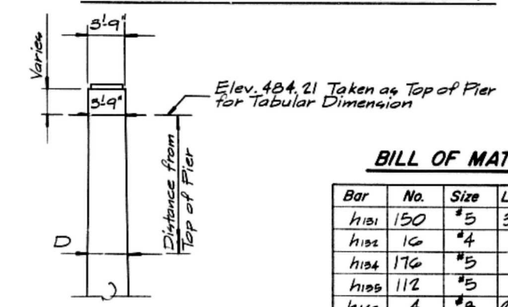


TABULAR DIMENSIONS FOR PIER

Distance in Feet From Top of Pier (Refer to Partial End View)	D (Feet)
0.00	3.75
1.00	3.75
2.00	3.75
3.00	3.76
4.00	3.77
5.00	3.78
6.00	3.80
7.00	3.82
8.00	3.84
9.00	3.87
10.00	3.89
11.00	3.92
12.00	3.96
13.00	4.00
14.00	4.04
15.00	4.08
16.00	4.13
17.00	4.17
18.00	4.23
19.00	4.28
20.00	4.34
21.00	4.40
22.00	4.46
23.00	4.53
24.00	4.60
25.00	4.67
26.00	4.75
27.00	4.83
28.00	4.91
29.00	5.00
30.00	5.08
31.00	5.17
32.00	5.27
33.00	5.36
34.00	5.46
35.00	5.57
36.00	5.67
37.00	5.78
38.00	5.89
39.00	6.01
40.00	6.12
41.00	6.25
42.00	6.37
43.00	6.50
44.00	6.62
45.00	6.76
46.00	6.89
47.00	7.03
48.00	7.17
49.00	7.32
50.00	7.46
51.00	7.61



TYPICAL ANCHOR BOLT LAYOUT

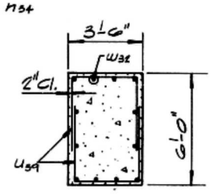


PARTIAL END VIEW

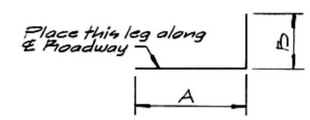
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h131	150	#5	33'-0"	
	h132	16	#4	4'-0"	
	h134	176	#5	5'-10"	
	h135	112	#5	7'-1"	
	h142	4	#8	23'-10"	
	n34	204	#11	16'-9"	C
*	v37	188	#11	50'-0"	
	v38	16	#11	50'-0"	
	v41	8	#8	14'-0"	
	s32	1936	#5	4'-0"	C
	s33	1232	#5	5'-3"	C
	u32	24	#4	6'-11"	
	u33	144	#5	7'-9"	
	u35	94	#9	20'-5"	
	u39	24	#4	10'-6"	
	u43	72	#8	22'-9"	
	t35	104	#11	21'-3"	
	t36	58	#8	21'-3"	
	w32	12	#8	24'-8"	
	w33	36	#8	37'-6"	
	Class X Concrete			Cu.Yds.	1013.5
	Reinforcing Bars			Lbs.	125480
	Metal Pile Shells 14"Φ			Lin.Ft.	8515
	Test Piles, Metal Shell			Ea.	1

* Reinforcing bars shall be shop bent to conform to the tabular pier dimensions shown

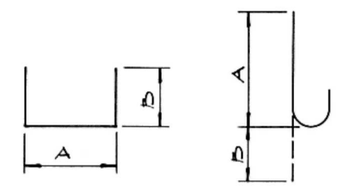


SECTION A



Bar h134 and h135

Bar	A	B
h134	3'-5"	2'-5"
h135	4'-8"	2'-5"
n34	15'-2"	1'-7"
s32	3'-5"	7"
s33	4'-8"	7"
u32	3'-1"	1'-11"
u33	1'-5"	3'-3"
u35	3'-5"	8'-6"
u39	3'-2"	5'-8"
u43	1'-9"	10'-6"



Bars u32, u33, u35, u39 & u43 Bars n34, s32 & s33

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

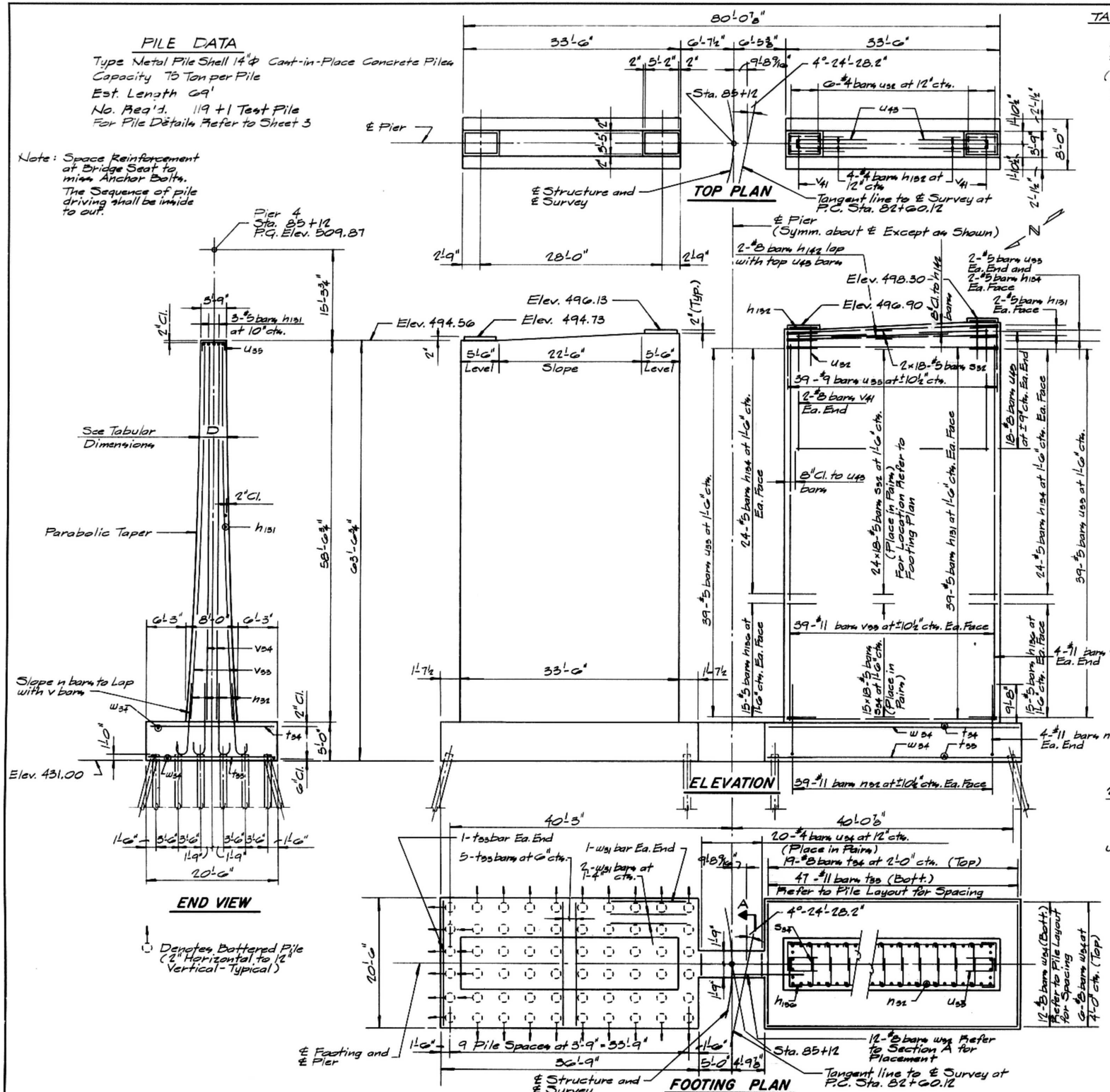
SHEET 10 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	25
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		

PILE DATA

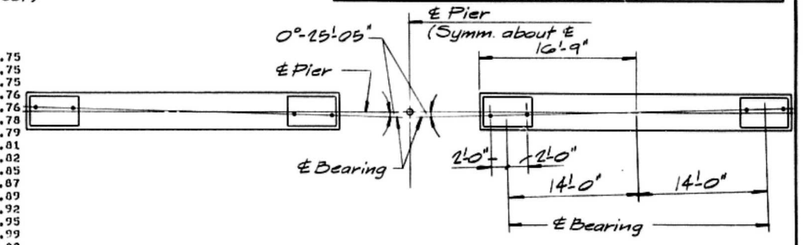
Type Metal Pile Shell 14"Φ Cast-in-Place Concrete Piles
Capacity 75 Ton per Pile
Est. Length 69'
No. Req'd. 119 + 1 Test Pile
For Pile Details Refer to Sheet 3

Note: Space Reinforcement at Bridge Seat to miss Anchor Bolts.
The Sequence of pile driving shall be inside to out.

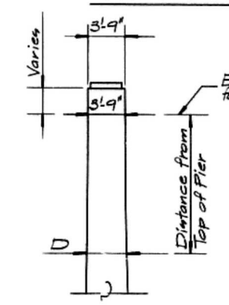


TABULAR DIMENSIONS FOR PIER

Distance in Feet From Top of Pier (Refer to Partial End View)	D (Feet)
0.00	3.75
1.00	3.75
2.00	3.75
3.00	3.76
4.00	3.76
5.00	3.78
6.00	3.79
7.00	3.81
8.00	3.82
9.00	3.85
10.00	3.87
11.00	3.89
12.00	3.92
13.00	3.95
14.00	3.99
15.00	4.02
16.00	4.06
17.00	4.10
18.00	4.15
19.00	4.19
20.00	4.24
21.00	4.29
22.00	4.34
23.00	4.40
24.00	4.46
25.00	4.52
26.00	4.58
27.00	4.65
28.00	4.72
29.00	4.79
30.00	4.86
31.00	4.94
32.00	5.01
33.00	5.09
34.00	5.18
35.00	5.26
36.00	5.35
37.00	5.44
38.00	5.53
39.00	5.63
40.00	5.73
41.00	5.83
42.00	5.93
43.00	6.04
44.00	6.14
45.00	6.25
46.00	6.37
47.00	6.48
48.00	6.60
49.00	6.72
50.00	6.84
51.00	6.97
52.00	7.10
53.00	7.23
54.00	7.36
55.00	7.49
56.00	7.63
57.00	7.77
58.00	7.91
59.00	8.06



TYPICAL ANCHOR BOLT LAYOUT

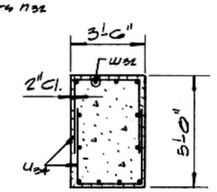


PARTIAL END VIEW

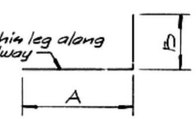
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h151	170	#5	33'-0"	—
h152	16	#4	4'-10"	—
h154	208	#5	5'-10"	⌋
h156	120	#5	7'-4"	⌋
h142	4	#8	25'-10"	—
n32	172	#11	15'-9"	C
* v33	156	#11	58'-4"	⌒
v34	16	#11	58'-4"	—
v41	8	#8	14'-0"	—
s32	1872	#5	4'-0"	C
s34	1080	#5	5'-6"	C
u32	24	#4	6'-11"	⌋
u33	164	#5	7'-9"	⌋
u34	20	#4	9'-6"	⌋
u38	78	#9	20'-5"	⌋
u43	72	#8	22'-9"	⌋
t33	94	#11	20'-0"	—
t34	38	#8	20'-0"	—
w34	36	#8	36'-3"	—
w32	12	#8	24'-8"	—
Class X Concrete			Cu.Yds.	1053.2
Reinforcing Bars			Lbs.	117750
Metal Pile Shells 14"Φ			Lin.Ft.	8211
Test Pile Metal Shell			Ea.	1

* Reinforcing bars shall be shop bent to conform to the tabular pier dimensions shown

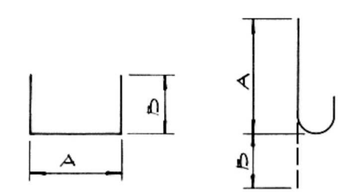


SECTION A



Bar h154 and h156

Bar	A	B
h154	3'-5"	2'-5"
h156	4'-11"	2'-5"
n32	14'-2"	1'-7"
s32	3'-5"	7"
s34	4'-11"	7"
u32	3'-1"	1'-11"
u33	1'-3"	3'-3"
u34	3'-2"	3'-2"
u35	3'-5"	8'-6"
u43	1'-9"	10'-6"



Bars u32, u33, u34, u35 & u43 Bars n32, s32 & s34

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

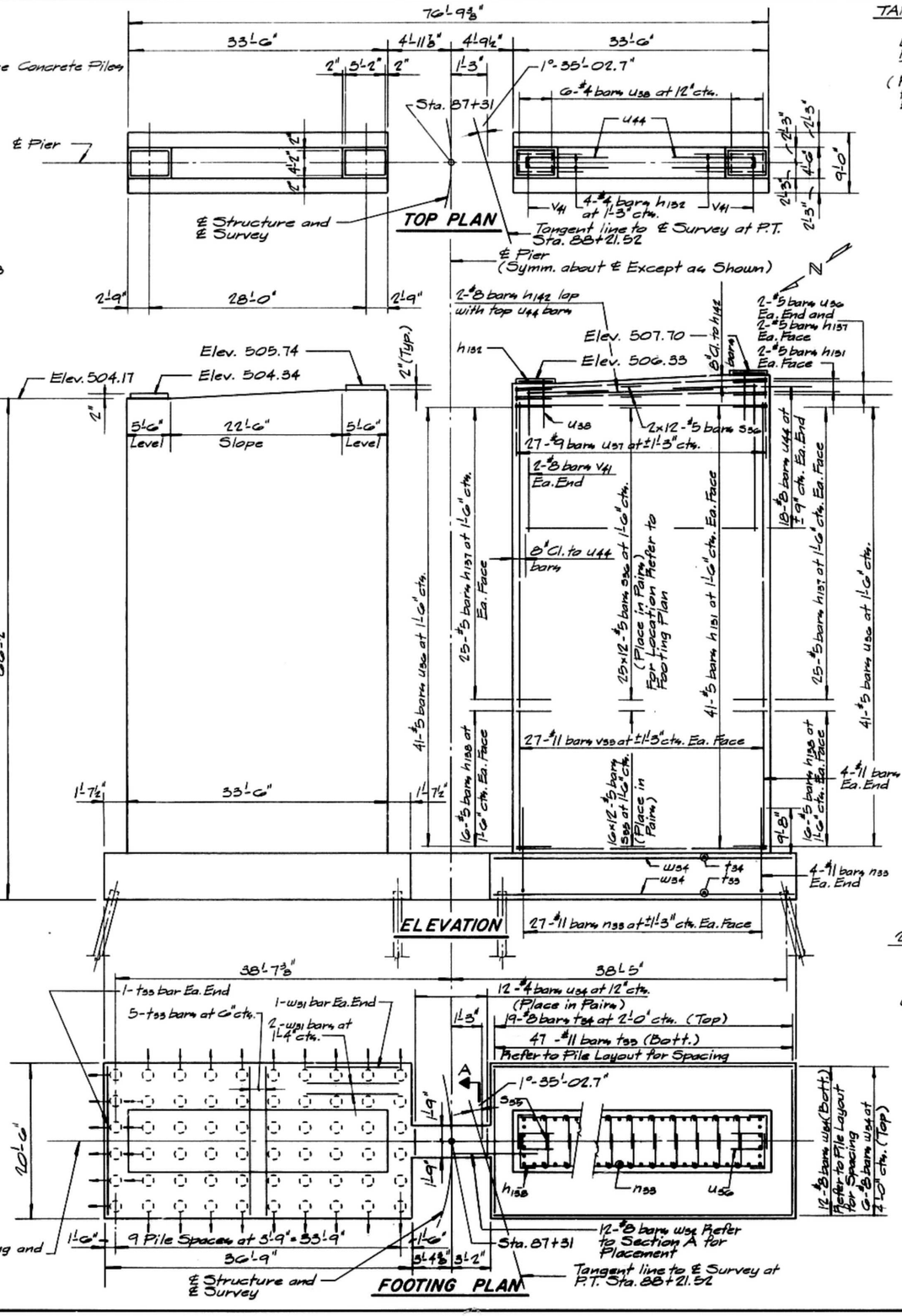
SHEET 11 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	26
FED. ROAD DIV. NO.		ILLINOIS	PROJECT	

PILE DATA

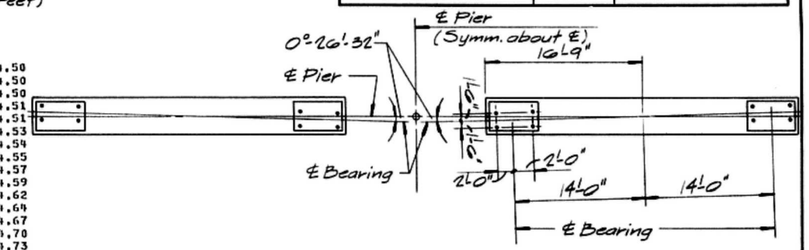
Type Metal Pile Shell 14"Φ Cast-in-Place Concrete Piles
Capacity 75 Ton per Pile
Est. Length 73'
No. Req'd. 119 +1 Test Pile
For Pile Details Refer to Sheet 3

Note: Space Reinforcement at Bridge Seat to miss Anchor Bolts.
The Sequence of pile driving shall be inside to out.

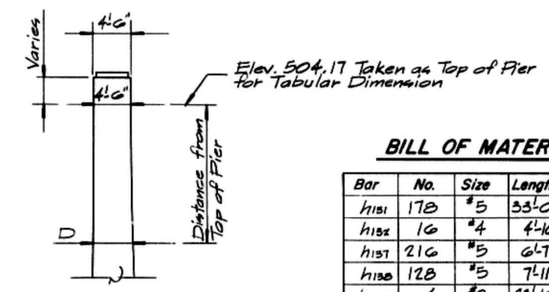


TABULAR DIMENSIONS FOR PIER

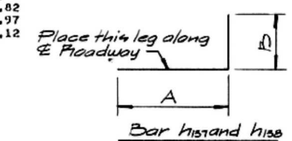
Distance in Feet From Top of Pier (Refer to Partial End View)	D (Feet)
0.00	4.50
1.00	4.50
2.00	4.50
3.00	4.51
4.00	4.51
5.00	4.53
6.00	4.54
7.00	4.55
8.00	4.57
9.00	4.59
10.00	4.62
11.00	4.64
12.00	4.67
13.00	4.70
14.00	4.73
15.00	4.77
16.00	4.80
17.00	4.84
18.00	4.88
19.00	4.93
20.00	4.98
21.00	5.03
22.00	5.08
23.00	5.13
24.00	5.19
25.00	5.25
26.00	5.31
27.00	5.37
28.00	5.44
29.00	5.51
30.00	5.58
31.00	5.65
32.00	5.73
33.00	5.80
34.00	5.89
35.00	5.97
36.00	6.05
37.00	6.14
38.00	6.23
39.00	6.32
40.00	6.42
41.00	6.52
42.00	6.62
43.00	6.72
44.00	6.82
45.00	6.93
46.00	7.04
47.00	7.15
48.00	7.27
49.00	7.38
50.00	7.50
51.00	7.62
52.00	7.75
53.00	7.87
54.00	8.00
55.00	8.13
56.00	8.27
57.00	8.40
58.00	8.54
59.00	8.68
60.00	8.82
61.00	8.97
62.00	9.12



TYPICAL ANCHOR BOLT LAYOUT

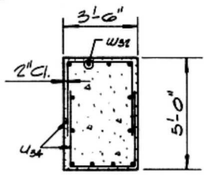


PARTIAL END VIEW

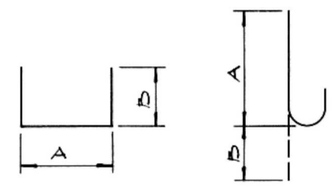


Bar h152 and h158

Bar	A	B
h157	4'-2"	2'-5"
h158	5'-6"	2'-5"
n55	14'-2"	1'-7"
s55	5'-6"	7"
s56	4'-2"	7"
u34	3'-2"	3'-2"
u36	1'-7"	3'-3"
u37	4'-2"	8'-6"
u38	3'-10"	1'-7"
u44	2'-6"	10'-6"



SECTION A



Bars u34, u36, u37, u38 & u44 Bars n55, s55 & s56

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h151	178	#5	33'-0"	—
h152	16	#4	4'-10"	—
h157	216	#5	6'-7"	⌋
h158	128	#5	7'-11"	⌋
h142	4	#8	23'-10"	—
n55	124	#11	15'-9"	C
* v55	108	#11	59'-11"	⌒
v56	16	#11	59'-11"	—
v41	8	#8	14'-0"	—
s55	768	#5	6'-1"	C
s56	1296	#5	4'-9"	C
u34	12	#4	9'-6"	⌋
u36	172	#5	8'-1"	⌋
u37	54	#9	21'-2"	⌋
u38	24	#4	7'-0"	⌋
u44	72	#8	23'-6"	⌋
t55	94	#11	20'-0"	—
t34	38	#8	20'-0"	—
w34	36	#8	36'-3"	—
w32	12	#8	24'-8"	—
Class X Concrete			Cu.Yds.	1213.3
Reinforcing Bars			Lbs.	96750
Metal Pile Shells 14"Φ			Lin.Ft.	8687
Test Pile Metal Shell			Ea.	1

* Reinforcing bars shall be shop bent to conform to the tabular pier dimensions shown

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PIER 5

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 12 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	27
FED. ROAD DIV. NO.	ILLINOIS	PROJECT		

GENERAL NOTES

1950 Chicago Building Code Soil Classifications are Used Except Where Noted

DRILLING & SAMPLING SYMBOLS

SS : Split-Spoon – 1⅜" I.D., 2" O.D., except where noted
ST : Shelby Tube – 2" O.D., except where noted
PA : Power Auger Sample
DB : Diamond Bit – NX, BX, AX
CB : Carbaloy Bit – NX, BX, AX
OS : Osterberg Sampler – 3" Shelby Tube
HS : Hand Sampler
WS : Wash Sample
FT : Fish Tail
RB : Rock Bit
WO : Wash Out

Standard "N" Penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2 inch OD split spoon, except where noted.

WATER LEVEL MEASUREMENT SYMBOLS

WL : Water Level
WCI : Wet Cave In
DCI : Dry Cave In
WS : While Sampling
WD : While Drilling
BCR : Before Casing Removal
ACR : After Casing Removal
AB : After Boring

Water levels indicated on the boring logs are the levels measured in the boring at the times indicated. In pervious soils, the indicated elevations are considered reliable ground water levels. In impervious soils, the accurate determination of ground water elevations is not possible in even several days observation, and additional confirmed on ground water elevations must be sought.

CLASSIFICATION

COHESIONLESS SOILS

"Trace"	:	1% to 10%
"Trace to some"	:	10% to 20%
"Some"	:	20% to 35%
"And"	:	35% to 50%
Loose	:	0 to 9 Blows
Medium Dense	:	10 to 29 Blows
Dense	:	30 to 59 Blows
Very Dense	:	≥ 60 Blows

or equivalent

COHESIVE SOILS

If clay content is sufficient so that clay dominates soil properties, then clay becomes the principle noun with the other major soil constituent as modifier; i.e., silty clay. Other minor soil constituents may be added according to classification breakdown for cohesionless soils; i.e., silty clay, trace to some sand, trace gravel.

Soft	:	0.00 — 0.99 tons/ft²
Stiff	:	0.60 — 0.99 tons/ft²
Tough	:	1.00 — 1.99 tons/ft²
Very tough	:	2.00 — 3.99 tons/ft²
Hard	:	≥ 4.00 tons/ft²

GENERAL NOTES — STS — SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS

OWNER: State of Illinois
LOG OF BORING NUMBER: B-1
PROJECT NAME: Proposed New Illinois Route 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

ELEVATION	DEPTH	SAMPLE NO	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
						SURFACE ELEVATION 432
		1	ST / RB			Clay, organic silt, trace sand & decayed wood - medium dark gray - stiff to tough (OL)
	10.0	2	ST / RB			
		3	ST / RB			Fine sand, some organic matter & shells - brown to dark gray (SP-OL)
	20.0	4	ST / RB			Silty clay, organic sand, trace shells - medium dark gray (OL-SM)
		5A	ST / RB			Fine to medium sand & silt - gray & brown - dense - wet (SP)
	30.0	6	SS / RB			
	40.0	7	SS / RB			Sand & gravel, trace silt with occasional cobbles and a boulder 237 1/2' to 30' - brown & gray - dense - wet (GP)
	50.0	8	SS / RB			Gravel & sand, trace silt - light gray & dark gray - dense - wet (SP-GP)
	60.0	9	SS / RB			Sand & gravel, trace silt - light brown & light gray - very dense - wet (GP)
						Boring Continued

UNIT DRY WT LBS/FT³ — UNCONFINED COMPRESSIVE STRENGTH TONS/FT² — PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % — STANDARD PENETRATION BLOWS/FT.

1 of 2

OWNER: State of Illinois
LOG OF BORING NUMBER: B-1 (Continued)
PROJECT NAME: Proposed New Illinois Route 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

ELEVATION	DEPTH	SAMPLE NO	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
						SURFACE ELEVATION
		9A	SS / RB			Shale & siltstone - appears to be boulder size layer or slab & not bedrock
	70.0		RB			Boulders, gravel & broken rock - no samples taken - classification based on drillers observation
	80.0		RB			
	90.0	Run 1	DB			Shale bedrock - dark gray - horizontally bedded
	95.0					End of Boring

*Calibrated Penetrometer

NOTE: Artesian water pressures cause water to rise 5' above river level after boring
Bore hole grouted after boring
25' of 4" Casing - 95' of NX Casing - 9 bags of drill mud used.

2 of 2

WL	WS or WD	BORING STARTED 10-8-74	SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062
WL	BCR	ACR	BORING COMPLETED 10-11-74
WL Elev. 437 on 10-11-74		RIG Rotary FOREMAN HM	APPROVED BY RGL STS JOB NO. 16858

OWNER: State of Illinois
LOG OF BORING NUMBER: B-2
PROJECT NAME: Proposed New Illinois Route 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

ELEVATION	DEPTH	SAMPLE NO	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
						SURFACE ELEVATION 431.5
		1	ST / RB			Sandy organic clay, trace shells - dark gray - soft (OL-OH)
	10.0	2	SS / RB			
		3	SS / RB			
		4	ST / RB			Fine to medium sand, trace clay, silt & shells with thin layers of organic silt - dark gray - loose to medium dense (SM-OL)
	20.0	5	SS / RB			Fine sand, trace silt - brown & medium dark gray - medium dense (SP)
		6	SS / RB			Organic clay, trace shells - medium dark gray - soft (OH)
	30.0	7	SS / RB			Gravelly sand, trace silt - light brown to gray - medium dense (SW)
		8	SS / RB			Fine sand, trace silt & shells - brown & light gray - loose to medium dense (SP)
	40.0	9	SS / RB			
		10	SS / RB			Sand & gravel with coal fragments and a boulder at 55' - light brown & black - dense (SW-GW)
	50.0	11	SS / RB			
	60.0		SS / RB			
	65.0					Boring Continued

UNIT DRY WT LBS/FT³ — UNCONFINED COMPRESSIVE STRENGTH TONS/FT² — PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % — STANDARD PENETRATION BLOWS/FT.

1 of 2

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES; IN SITU, THE TRANSITION MAY BE GRADUAL.

OWNER: State of Illinois
LOG OF BORING NUMBER: B-2 (Continued)
PROJECT NAME: Proposed New Illinois Route 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

ELEVATION	DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
						SURFACE ELEVATION
		14	RB / SS / RB			Silty, gravelly sand with a boulder at 75' - brown & dark gray - very dense (SM-GM)
	70.0	15	SS / RB			
		16	SS / RB			
	80.0	17	SS / RB			Fine to medium sand, trace silt - brown & light gray - very dense (SP)
	90.0	Run 1	DB			Shale bedrock - gray
	93.5					End of Boring

*Calibrated Penetrometer

NOTE: Artesian pressure observed at and below 43' level - 11 bags of drilling mud used below 43' to keep bore hole open while drilling

20' of 4" Casing Used
90' of NX Casing Used

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES; IN SITU, THE TRANSITION MAY BE GRADUAL.

WL	WS or WD	BORING STARTED 9-10-74	SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062
WL	BCR	ACR	BORING COMPLETED 9-13-74
WL 7" above grade A.B.		RIG Rotary FOREMAN HM	APPROVED BY RGL STS JOB NO. 16858

RL-1

OWNER: State of Illinois
LOG OF BORING NUMBER: B-3
PROJECT NAME: Proposed New Illinois Route 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

ELEVATION	DEPTH	SAMPLE NO	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
						SURFACE ELEVATION
						Barge to water surface - Elev. 432.5
	10.0					Water
		1	ST			"A"
		1A	RB			"B"
	20.0	2	SS / RB			Lost sample - silty clay, trace sand - driller's observation
		3	SS / RB			Clayey silt - gray - tough - medium dense (ML-CL)
	30.0	4	SS / RB			Clayey silt, slightly organic - gray - stiff to tough - loose - moist (ML-CL)
		5	SS / RB			Sandy fine to medium gravel, trace silt - brown to dark gray - medium dense (GP-SP)
	40.0	6	SS / RB			Gravelly fine to coarse sand, trace silt - light brown & sl. dark gray med. dense - moist to wet (SW) Artesian conditions 938'
		7	SS / RB			Fine to coarse sand & gravel, trace silt - light brown & medium dark gray - medium dense - wet (GP-SW)
	50.0	8	SS / RB			Gravelly coarse sand, trace silt - light brown, light gray & sl. dark gray - medium dense (SP)
		9	SS / RB			Gravelly fine to coarse sand, trace silt - light brown & medium dark gray - medium dense (SW) Boulder #58'
	60.0	10	SS / RB			Fine to medium sand, trace to some gravel, trace silt - pinkish brown to gray - very dense - wet to saturated (SP) mixed with boulders from 73' to 97'
						Boring Continued

UNIT DRY WT LBS/FT³ — UNCONFINED COMPRESSIVE STRENGTH TONS/FT² — PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % — STANDARD PENETRATION BLOWS/FT.

1 of 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
BORINGS

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 92+50

THE ENGINEERS COLLABORATIVE — CHICAGO ILLINOIS — SHEET 13 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 75	12B-1	PEORIA-TAZEWELL	58	28
FED. ROAD DIV. NO	ILLINOIS	PROJECT		

OWNER: State of Illinois
LOG OF BORING NUMBER: B-3 (Continued)
PROJECT NAME: Proposed New Illinois Route 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

Elevation	Depth	Sample No.	Sample Type	Sample Distance	Recovery	Description of Material
						SURFACE ELEVATION
		11	SS			
			RB			Fine to medium sand, trace to some gravel, trace silt - pinkish brown to gray - very dense - wet to saturated (SP) mixed with boulders from 73' to 97
70.0						
		12	SS			
			RB			
80.0						
						Fine to coarse sand, trace silt - light brown & light gray & reddish brown - very dense (SW)
		13	SS			
100.0			DB			Gray shale
			DB			dark gray shale
		Run	DB			gray shale
			DB			black coal
			DB			missing zone
			DB			gray underclay
111.5			DB			gray underclay
						End of Boring

*Calibrated Penetrometer

"A": Organic clay, trace sand & shells - dark gray - soft (OH)
"B": Silty fine sand, slightly to moderately organic, trace shells - tough (SM)

25' of 4" Casing Used - 9 Bags of Drilling Mud Used
95' of NX Casing Used
NOTE: Artesian pressures at & below 25' below base of river.

2 of 2

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES; IN-SITU, THE TRANSITION MAY BE GRADUAL.

WL 13' WS on WD | BORING STARTED 9-17-74
WL SCR ACR | BORING COMPLETED 9-22-74
WI Elev. 438.5 on 9-24-74 | RIG Rotary FOREMAN MM | APPROVED BY SS | STS JOB NO. 17350

SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062

OWNER: State of Illinois
LOG OF BORING NUMBER: B-4
PROJECT NAME: Proposed New Illinois Route 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

Elevation	Depth	Sample No.	Sample Type	Sample Distance	Recovery	Description of Material
						SURFACE ELEVATION
			RB			Top of barge to water surface Elev. 430.5
10.0						Water
		1A	ST			
			RB			Clayey silt - gray - tough - moist (ML-CL)
20.0						
30.0		2	ST			
		2A				Silty organic clay with thin layers of peat, trace sand - med. dk. brown to dark gray (OH-OL)
			RB			
		3	SS			
40.0			RB			Sandy fine to medium gravel with cobbles @47' - light gray & medium dark gray & slightly brown - medium dense - moist to wet (GP)
		4	SS			
			RB			
50.0						
		5	SS			Gravelly coarse sand, trace silt & fine sand - light brown, light gray & dark gray - medium dense (SP)
			RB			
60.0						
		6	SS			Gravelly fine to coarse sand, trace silt - light brown, light gray & slightly dark gray - dense (SW)
			RB			
						Boring Continued

1 of 2

OWNER: State of Illinois
LOG OF BORING NUMBER: B-4 (Continued)
PROJECT NAME: Proposed New Illinois Route 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

Elevation	Depth	Sample No.	Sample Type	Sample Distance	Recovery	Description of Material
						SURFACE ELEVATION
			RB			Gravelly fine to coarse sand, trace silt - light brown, light gray & slightly dark gray - dense (SW)
70.0						
		7	SS			
			RB			Fine sand, trace silt & gravel - pinkish brown - very dense (SP)
80.0						
		8	SS			
			RB			Fine to medium sand, trace silt & fine gravel - reddish brown to gray - dense - saturated (SP)
90.0						
100.0		Run 1	DB			Gray shale horizontally bedded with a coal seam at 104' to 108' and limey sandstone at 109' to 110' REC=82.5%
110.0						
						End of Boring

*Calibrated Penetrometer

NOTE: Artesian pressures cause water to rise 4' to 6' above river surface
40' of 4" Casing Used - 8 Bags of Drilling Mud Used

"A": Organic clay, trace of large shells with horizontal seams of sand (river muck) - dark brown & dark gray - soft (OH)
"B": Silty fine sand, slightly to moderately organic, trace shells - dark gray & slightly light gray (SM)

Bore hole grouted after drilling.

2 of 2

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES; IN-SITU, THE TRANSITION MAY BE GRADUAL.

WL WS on WD | BORING STARTED 9-30-74
WI SCR ACR | BORING COMPLETED 10-2-74
WI Elev. 436.5 on 10-1-74 | RIG Rotary FOREMAN MM | APPROVED BY SS | STS JOB NO. 16858

SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062

OWNER: State of Illinois
LOG OF BORING NUMBER: B-5
PROJECT NAME: Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

Elevation	Depth	Sample No.	Sample Type	Sample Distance	Recovery	Description of Material
						SURFACE ELEVATION 445.3
			RB			Asphalt over brown sand
			RB			Topsoil - black (Driller's observation)
		1	SS			
			RB			Clayey silt, trace to some sand - light brown & slightly gray - moist (ML-CL)
10.0		2	ST			Fine to medium sand, trace to some gravel, trace silt & coarse gravel - lt. brown & slightly gray (SP)
			RB			
		3	SS			Fine sand, with lenses of organic material, trace silt - light brown - loose - saturated (SP)
			RB			
20.0		4	SS			
			RB			
		5	SS			
			RB			
30.0		6	SS			Gravelly, fine to coarse sand, trace silt and clay - light brown and slightly gray - medium dense to dense - saturated (SW-GP)
			RB			
		7	SS			
			RB			
40.0		8	SS			
			RB			
		9	SS			
			RB			
50.0		10	SS			(Artesian water pressure noted at 55') Layer of cobbles from 50 to 55'
			RB			
60.0			RB			Gravelly, fine to coarse sand, trace silt - brown & slightly gray - dense (SW-GP)
		11	RB			
65.0			WS			

(Contd. on Sheet 2)

Sheet 1 of 2

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES; IN-SITU, THE TRANSITION MAY BE GRADUAL.

OWNER: State of Illinois
LOG OF BORING NUMBER: B-5 (Contd.)
PROJECT NAME: Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

Elevation	Depth	Sample No.	Sample Type	Sample Distance	Recovery	Description of Material
						SURFACE ELEVATION
						(Contd. from Sheet 1)
65.0						
		12	RB			Gravelly, fine to coarse sand, trace silt - brown and slightly gray - dense (SW-GP)
			WS			
70.0		13	RB			
			WS			
		14	RB			
			WS			
80.0		15	RB			(Wash samples obtained only due to artesian pressure, with a layer of cobbles at 72')
			WS			
		16	RB			
			WS			
90.0		17	RB			Sand, gravel and cobbles - brown and gray - saturated - dense to very dense - layer of cobbles @ 91' (Wash samples obtained due to artesian pressure - soil rose 20' in casing at 104'.
			WS			
100.0		18	RB			
			WS			
110.0		19	RB			
108.0			WS			
						End of Boring

*Calibrated Penetrometer

"A": Fine sand, trace silt, gravel and clay - med. dk. brown & gray - [illegible] - saturated (SP)

Casing used: 10' of 4", 104' of NX.
Bentonite drilling mud used below 80'.
Artesian pressure caused soil rise of about 8' inside of casing for each 5' increment of boring depth below 60'. Gradual mud loss throughout depth of the hole.

[illegible] indicates number of blows of a 300# hammer falling 30 in. to advance steel casing.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES; IN-SITU, THE TRANSITION MAY BE GRADUAL.

WL WS on WD | BORING STARTED 4-8-74
WL 3' SCR 3' ACR | BORING COMPLETED 4-10-74
WL | RIG Rotary FOREMAN DC | APPROVED BY CWP | STS JOB NO. 16858

SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062

Sheet 2 of 2

OWNER: State of Illinois
LOG OF BORING NUMBER: B-7
PROJECT NAME: Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT-ENGINEER: The Engineers Collaborative
SITE LOCATION: Pekin, Illinois

Elevation	Depth	Sample No.	Sample Type	Sample Distance	Recovery	Description of Material
						SURFACE ELEVATION 470.0
			PA			
		1	SS			
			PA			
10.0		2	SS			
			RB			Fine to medium sand, with occasional gravel layers, trace silt - light brown - moist changing to wet below 20' - medium dense to very dense (SP-SW)
		3	SS			
			RB			
20.0		4	SS			
			RB			
		5	SS			
			RB			
30.0		6	SS			
			RB			
		7	SS			
			RB			
40.0		8	SS			
			RB			
		9	SS			
			RB			
50.0		10	SS			Sandy, fine to medium gravel, trace silt - light brown and gray - medium dense - wet (GP)
			RB			
		11	SS			Fine to coarse sand, trace to some fine to coarse gravel, trace silt - brown & slightly gray - dense - wet (SW)
			RB			
60.0		12	SS			
			RB			
		13	SS			
68.0			RB			

(Contd. on Sheet 2)

Sheet 1 of 3

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES; IN-SITU, THE TRANSITION MAY BE GRADUAL.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
BORINGS

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 14 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	12B-1	PEORIA-TAZEWELL	58	29
FED. ROAD DIV. NO		ILLINOIS	PROJECT	

OWNER State of Illinois | LOG OF BORING NUMBER B-7 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River | ARCHITECT-ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

SURFACE ELEVATION

(Contd. from Sheet 1)

68.0
70.0 — 14 SS
75.0 — 15 SS
80.0 — 16 SS
Fine to medium sand with gravelly layers, trace silt - brown and slightly gray - dense to very dense - wet (SP)
90.0 — 18 SS
95.0 — 19 SS
100.0 — 20 SS
105.0 — 21 SS
110.0 — 22 SS
115.0 — 23 SS
120.0 — 24 SS
123.0

(Contd. on Sheet 3)

Sheet 2 of 3

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN SITU, THE TRANSITION MAY BE GRADUAL.

BL 2

OWNER State of Illinois | LOG OF BORING NUMBER B-7 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River | ARCHITECT-ENGINEER The Engineers Collaborative
LOCATION Pekin, Illinois

SURFACE ELEVATION

(Contd. from Sheet 2)

123.0
125.0 — 25 SS — Fine to coarse sand, trace to some gravel, trace silt - reddish brown, slightly gray & dark gray - very dense (SW)
130.0 — 26 SS
Fine to medium sand, trace to some gravel, trace silt and coarse sand - reddish brown & slightly gray - (SP) very dense - wet
135.0 — 27 SS
Sandy fine gravel, trace silt - brown, lt.gray, dk.gray & slightly red - very dense - wet (GP)
140.0 — 28 SS
Med.gray shale - horizontally bedded
Shaley limestone - gray
Gray claystone
Gray clay
145.0 — Run 1 DB
Shaley limestone - gray - with thin argillaceous partings
Medium gray shale - thin, horizontally bedded. Recovery = 90%; R.Q.D. = 49%.
End of Boring

Notes: 1) 15' of 4" casing used.
2) 144' of NX casing used.
3) Heavy bentonite & Portland Cement drilling mud used.
4) Artesian Pressure noted while drilling below 65'.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN SITU, THE TRANSITION MAY BE GRADUAL.

WL WS or WD | BORING STARTED 4-24-74 | SOIL TESTING SERVICES, INC
WL BCR ACR | BORING COMPLETED 4-27-74 | 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062
WL | RIG Rotary FOREMAN SA | APPROVED BY CWP | STS JOB NO 1685P

BL 1 — Sheet 3 of 3

OWNER State of Illinois | LOG OF BORING NUMBER B-8
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River | ARCHITECT-ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

SURFACE ELEVATION +445.8

1 SS — Cinder Fill, trace gravel & ashes - moist to wet - medium dense (Fill)
2 SS — Silty, fine to med. sand, trace silt & clay lumps - dk.brown & dk.gray - med.dense - wet (SM)
5.0 — Silty clay (Driller's observation)
4 SS — Fine to medium sand, trace silt - brown and slightly gray - loose - wet (SP)
20.0 — 5 SS
Sandy, fine to med.gravel, trace silt - lt.brown & slightly gray - loose - saturated (GP)
6 SS
Silty, gravelly, clayey sand - light brown & slightly gray - medium dense - saturated (SC)
30.0 — 7 SS
7A — Silty clay, trace sand - gray - stiff (CL)
8 SS — Clayey silt, trace to some gravel - lt.brown & slightly gray - medium dense - saturated (ML-MH)
40.0 — 9 SS
10 SS — Fine to coarse sand with some gravel between 70'-75', trace silt - brown & slightly gray and dark gray - medium dense to very dense - saturated (SP-SW)
50.0 — 11 SS
12 SS
60.0 — 13 SS
14 SS
70.0 — 15 SS
73.0

(Contd. on Sheet 2)

Sheet 1 of 2

OWNER State of Illinois | LOG OF BORING NUMBER B-8 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River | ARCHITECT-ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

SURFACE ELEVATION +452.8

Cinder, ash and miscellaneous Fill, trace glass, brick and tile - dark brown, dark gray and reddish brown - moist to saturated (Fill)
10.0 — 1 SS, 2 SS, 3 SS
20.0 — 4 SS
Silty clay, trace sand - dark brown and dark gray - stiff (CL - slightly organic) — 94
5 ST
Organic clay, trace shells, with layers of sand starting @ 32' - dark brown and dark gray - soft to tough (OH) — 94
6 ST
Silty, very fine sand - medium dark gray - moist to wet (SM - slightly organic) — 82
7A ST
30.0 — 8 ST
Silty, sandy, organic clay, trace shells, with horizontal thin layers of sand - dark brown and dark gray - stiff (OL-SM) — 93
9 ST — 96
9A ST — 100
Organic clay - dark brown and dark gray - stiff (OH) — 87
40.0 — 10 ST
Fine sand, trace silt - brown to light gray and greenish gray - wet (SP)
11 ST
Silty, fine to med.gravel - brown to lt.gray and dark gray - very dense wet (GM-SM)
50.0 — 12 SS
Cobbles (Driller's observation)
Sandy, fine to medium gravel, trace silt - light brown & light gray - dense to very dense - saturated (GP-SW)
60.0 — 13 SS
70.0
73.0

(Contd. on Sheet 2)

Sheet 1 of 2

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN SITU, THE TRANSITION MAY BE GRADUAL.

OWNER State of Illinois | LOG OF BORING NUMBER B-8 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River | ARCHITECT-ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

SURFACE ELEVATION

(Contd. from Sheet 1)

73.0
75.0 — 14 SS
Sandy, fine to medium gravel, trace silt - light brown and light gray - dense to very dense - saturated (GP-SW)
80.0 — 15 SS
90.0 — 16 SS
Fine to coarse sand, trace silt - light brown and light gray - dense - saturated - Layers of boulders 95' to 96.5' (SP-SW)
100.0 — 17 RB WS
(Artesian Pressure encountered at 95')
18 RB WS
19 RB WS
110.0 — 20 RB
Gray shale - clayey between 114'-114.5' and between 119'-120'.
Run 1 DB — Run #1: Recovery = 100% R.Q.D. = 77%
Shaley limestone - gray - with occasional fossils on top.
120.0 — Run 2 DB — Run #2: Recovery = 100%. RQD = 66%
125.0 — End of Boring
Bentonite Drilling mud used below 20'.
Casing used: 25' of 4" and 113' of NX.
Note: Artesian pressure encountered at 95'. Soil rising in casing 4'.

Calibrated Penetrometer: Indicates number of blows of a 300# hammer falling 30 in. to advance steel casing.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN SITU, THE TRANSITION MAY BE GRADUAL.

WL WS or WD | BORING STARTED 4-10-74 | SOIL TESTING SERVICES, INC
WL 12' BCR ACR | BORING COMPLETED 4-12-74 | 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062
WL Cave-in @ 60'-65'WS Cave in - 18' AR | RIG Rotary FOREMAN SA | APPROVED BY CWP | STS JOB NO 1685P

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
BORINGS

ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 5 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 78	12B-1	PEORIA-TAZEWELL	58	30
FED. ROAD DIV. NO	ILLINOIS	PROJECT		

OWNER State of Illinois
LOG OF BORING NUMBER B-10
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

Elevation	Depth	Sample No	Sample Type	Sample Distance	Recovery	Description of Material	Unit Dry Wt Lbs/Ft³	Unconfined Compressive Strength Tons/Ft²	Plastic Limit %	Water Content %	Liquid Limit %	Standard Penetration Blows/Ft
						SURFACE ELEVATION +446.5						
			RB			Miscellaneous Fill including sand, silt, cinders, brick and topsoil - light brown, red brown, black and dark gray (SP-OH-OL-Fill)						
		1	SS									
			RB									
		2	SS									
			RB									
		3	ST			Organic clay - dark brown and dark gray - stiff to soft (OH)						
			RB									
		4	ST									
			RB									
		5	ST									
			FT									
		6	ST			Organic clay and silt, trace decayed roots and wood - gray - stiff to tough (OL-OH)						
			FT									
		7	ST									
			FT									
		8	ST			Fine sand, trace shells, silt and clay - dark gray & slightly brown - moist to wet (SP)						
			RB									
		9	SS			Clayey silt - greenish gray - loose (ML-MH)						
			RB									
		10	SS			Sandy, fine to medium gravel - light brown, lt.gray & dark gray - dense - saturated (GP)						
			RB									
		11	SS			Fine to coarse sand & gravel - brown and dark gray (SW-GP)						
			RB									
		12	SS			Sandy, fine to medium gravel, trace silt - light brown & slightly gray - dense - wet (GP)						
63.0			RB									

(Contd. on Sheet 2)

Sheet 1 of 3

OWNER State of Illinois
LOG OF BORING NUMBER B-10 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

Elevation	Depth	Sample No	Sample Type	Sample Distance	Recovery	Description of Material	Unit Dry Wt Lbs/Ft³	Unconfined Compressive Strength Tons/Ft²	Plastic Limit %	Water Content %	Liquid Limit %	Standard Penetration Blows/Ft
						SURFACE ELEVATION						
						(Contd. from Sheet 1)						
63.0			RB			Gravelly, fine to coarse sand, trace silt - lt.brown & lt.gray and green - dense - wet (SW-GP)						
		13	SS									
			RB			Gravelly, fine to coarse sand, trace silt - lt.brown & slightly gray - dense - moist to wet (SW)						
70.0		14	SS									
			RB									
		15	SS			Sandy, fine to medium gravel, trace silt - light brown, light gray and dark gray - very dense to dense - wet (GP)						
			RB									
80.0		16	SS									
			RB			Fine to coarse sand & fine gravel, trace silt - brown & dark gray - dense - moist to wet (SW-GP)						
		17	SS									
			RD									
90.0		18	SS			Sandy, fine to medium gravel, trace silt - lt.brown, lt.gray and slightly dark gray - dense - wet (GP)						
			RB									
			RD			Cobbles and boulders (Driller's observation)						
100.0												
		19	SS			Sand and gravel, trace silt - dark gray - wet (GP-SP)						
			RB									
		20	WS									
110.0												
		Run 1	DB			Dark gray shale - thin, horizontally bedded with some coal-like seams - some washout due to drilling operations - also clayey seams. Run #1: Recovery = 25%, RQD = 0. Run #2: Recovery = 89%, RQD = 75%						
		Run 2	DB									
120.0						End of Boring						

Calibrated Penetrometer

(Contd. on Sheet 3)

Sheet 2 of 3

OWNER State of Illinois
LOG OF BORING NUMBER B-10 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

Elevation	Depth	Sample No	Sample Type	Sample Distance	Recovery	Description of Material	Unit Dry Wt Lbs/Ft³	Unconfined Compressive Strength Tons/Ft²	Plastic Limit %	Water Content %	Liquid Limit %	Standard Penetration Blows/Ft
						SURFACE ELEVATION						
						(Contd. from Sheet 2)						

Notes:
1) 75' of 4" casing used.
2) 110' of NX " "
3) Artesian Pressure noted while drilling below 55'. Heavy bentonite and Portland Cement drilling mud used. At 80' soil rose 25' in casing.
4) 90% water loss while drilling between 50' & 55'.

WL	WS or WD	BORING STARTED 4-19-74	SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062
WL 3' BCR	3' ACR	BORING COMPLETED 4-24-74	
WL		RIG Rotary FOREMAN DC	APPROVED BY CWT STS JOB NO 16858

Sheet 3 of 3

OWNER State of Illinois
LOG OF BORING NUMBER B-11
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

Elevation	Depth	Sample No	Sample Type	Sample Distance	Recovery	Description of Material	Unit Dry Wt Lbs/Ft³	Unconfined Compressive Strength Tons/Ft²	Plastic Limit %	Water Content %	Liquid Limit %	Standard Penetration Blows/Ft
						SURFACE ELEVATION +442.1						
			FT			Miscellaneous Fill including brick, glass, etc. - reddish brown and and dark gray (Fill)						
		1	ST									
			FT			Silty clay - dark brown and medium gray - tough (CL-CH)						
		2	ST									
			FT									
		3	ST			Organic clay - dark gray - stiff (OL-OH)						
			FT									
		4	ST									
			FT									
		5	ST			Silty and sandy clay, trace shells and decayed wood - slightly organic - greenish gray - soft (CL-ML)						
			FT									
		6	ST									
			FT									
		7	ST			Silty clay, slightly organic - gray - stiff (CL-CH)						
			FT			Clayey silt, trace shale - gray - tough (ML-CL)						
		8	ST									
			FT			Silty, very fine sand, trace shells slightly organic - gray - saturated (SM)						
		9	ST									
			RB			Gravelly, fine to coarse sand, trace silt - gray-brown - saturated (SW)						
		10	SS									
			RB			Fine to coarse sand and gravel, some cobbles - light brown and light gray - dense to very dense - saturated (SW-GW)						
		11	SS									
			RB									
		12	SS									
65.0			RB									

Calibrated Penetrometer

(Contd. on Sheet 2)

Sheet 1 of 3

OWNER State of Illinois
LOG OF BORING NUMBER B-11 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

Elevation	Depth	Sample No	Sample Type	Sample Distance	Recovery	Description of Material	Unit Dry Wt Lbs/Ft³	Unconfined Compressive Strength Tons/Ft²	Plastic Limit %	Water Content %	Liquid Limit %	Standard Penetration Blows/Ft
						SURFACE ELEVATION						
						(Contd. from Sheet 1)						
65.0		13	DB			(Same description contd. from 48'): Fine to coarse sand and gravel, some cobbles - light brown and light gray - dense to very dense - saturated (SW-GW)						
			DB									
			DB									
		14	RB									
80.0			DB									
			RB			Sand, gravel, cobbles and boulders - brown and gray - dense to very dense - saturated (SW-GW)						
		15	RB									
100.0												
		16	RB									
110.5		17	RB			Granite boulder						
		Run 1	DB			Sand and gravel (Run #1: Recovery = 76%, RQD = 100%)						
			RB			Shale - gray - large part washed out						
		Run 2	DB			Coal - black (Run #2: Recovery = 48%, R.Q.D. = 23%)						
120.0		Run 2	DB			Gray underclay						
124.0		3	DB			Sandstone - gray - with calcareous cementation						
						End of Boring						

B= Blows per foot of a conical 2-3/8" dia. drive point driven by 140# hammer falling 30 in.

(Contd. on Sheet 3)

Sheet 2 of 3

OWNER State of Illinois
LOG OF BORING NUMBER B-11 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

Elevation	Depth	Sample No	Sample Type	Sample Distance	Recovery	Description of Material	Unit Dry Wt Lbs/Ft³	Unconfined Compressive Strength Tons/Ft²	Plastic Limit %	Water Content %	Liquid Limit %	Standard Penetration Blows/Ft
						SURFACE ELEVATION						
						(Contd. from Sheet 2)						

Notes:
1) 80' of 4" casing used.
2) 111' of NX casing used.
3) Drilling mud used below 45'.
4) 5' of casing cave off at 85', causing 100% water loss and necessitating moving 12' North to extend the hole.

WL	WS or WD	BORING STARTED 4-15-74	SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062
WL 0.0' BCR	3.0' ACR	BORING COMPLETED 4-18-74	
WL		RIG Rotary FOREMAN DC	APPROVED BY CWT STS JOB NO 16858

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORINGS

ILL. 9 over ILLINOIS RIVER
F.A. 78 SECTION 12B-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

SHEET 16 OF 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 75	123-1	PEORIA-TAZEWELL	58	31
FED. ROAD DIV NO		ILLINOIS	PROJECT	

OWNER State of Illinois
LOG OF BORING NUMBER B-13
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

ELEVATION / DEPTH	SAMPLE NO	SAMPLE TYPE	DESCRIPTION OF MATERIAL	UNIT DRY WT LBS/FT³
			SURFACE ELEVATION +437.5	
		RB	Silty clay - light brown and gray - stiff (CL-ML)	
	1	ST		
		RB	Silty clay - light brown and gray - stiff (CL)	
10.0	2	ST		
		RB	Silty clay - greenish gray and slightly brown - stiff (CL-CH)	
	3	ST		
20.0		RB	Silty clay, moderately organic, trace shells - greenish gray and dark gray - stiff to soft (CL-OL)	
	4	ST		
		RB		
	5	ST		
30.0		RB	Organic clay - dark gray - tough (OH)	
	6	ST		
		RB	Silty fine sand, trace clay - dark gray - moist (SM)	
	7	ST		
40.0		RB		
	8	SS	Sandy, fine to medium gravel, trace silt - brown, gray and dark gray - medium dense to dense - wet (GP)	
		RB		
	9	SS		
50.0		RB		
	10	SS		
		RB		
	11	SS		
60.0		RB		
	12	SS		
		RB		
	13	SS	Boulders - (Driller's observation)	
70.0		RB	Sandy, fine to medium gravel, trace silt - brown, gray & dark gray - dense - wet (GP)	
	14	SS		
73.0		RB		

(Contd. on Sheet 2)

Sheet 1 of 2

OWNER State of Illinois
LOG OF BORING NUMBER B-13 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

ELEVATION / DEPTH	SAMPLE NO	SAMPLE TYPE	DESCRIPTION OF MATERIAL	UNIT DRY WT LBS/FT³
		RB	(Contd. from Sheet 1)	
73.0				
	15	SS	Gravelly, fine to coarse sand, with cobbles and boulders, trace silt - light brown and light gray - dense - wet (SW-GP)	
		RB		
80.0	16	SS		
		RB		
	17	SS		
		RB		
90.0	18	SS	Sandy, fine to medium gravel, with cobbles and boulders, trace silt - light brown & light gray - dense to very dense - wet (GP)	
		RB	Coal over underclay	
	Run 1	DB	Gray shale - horizontal thin bedded with clay seams	
100.0	Run 2	DB	Run #1: Recovery = 25%, RQD = 0	
	Run 3	DB	Run #2: Recovery = 100%, RQD = 47%	
			Run #3: Recovery = 81%, RQD = 46%	
107.0		DB	Coal - black	
			End of Boring — Calibrated Penetrometer	

Notes:
1) 80' of 4" casing used.
2) 90' of HX "
3) Artesian Pressure noted at 40' to end of boring; water running out of top of casing at 40'; flow rate = 25± gpm. With extra casing above ground, water rose 8' above ground. While coring water rising about 3 in. above ground.
4) Heavy bentonite and Portland Cement drilling mud used while drilling below 45'.
5) Hole backfilled with bentonite pellets, cave-in, surface mud, and bentonite grout.

WL — WS — WD — BORING STARTED 4-25-74
WL — DCP — ACR — BORING COMPLETED 4-28-74
WL — RIG Rotary FOREMAN "C" — APPROVED BY — STS JOB NO 16068
SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062

OWNER State of Illinois
LOG OF BORING NUMBER B-15
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

ELEVATION / DEPTH	SAMPLE NO	SAMPLE TYPE	DESCRIPTION OF MATERIAL	UNIT DRY WT LBS/FT³
			SURFACE ELEVATION +436.2	
		RB	Topsoil - black	
		RB	Silty clay - brown and gray - stiff (CL)	
	1	ST		
10.0		RB	Silty clay - light brown & greenish gray - tough (CL-CH)	
	2	ST		
		RB	Silty clay - greenish gray and slightly brown (CL-CH)	
	3	ST		
20.0		RB	Silty clay, moderately organic, trace roots and shells - tough to stiff (CL-CH)	
	4	ST		
		RB		
	5	ST		
30.0		RB		
	6	ST		
		RB		
	7	ST	Silty fine sand, trace to some clay - greenish gray (SM-SC)	
		RB		
40.0	8	SS	Fine to coarse sand, trace silt and gravel - dark gray and gray & slightly brown to brown - medium dense to very dense - saturated artesian water conditions noted (SW)	
		RB		
	9	SS		
50.0		RB		
	10	SS		
		RB		
	11	SS		
60.0		RB		
	12	SS	Fine to coarse sand and gravel, trace silt - brown and dark gray - medium dense to dense - saturated (GP-SW)	
		RB		
	13	SS		
70.0		RB		
	14	SS		
73.0		RB		

(Contd. on Sheet 2)

Sheet 1 of 2

OWNER State of Illinois
LOG OF BORING NUMBER B-15 (Contd.)
PROJECT NAME Proposed New Ill. Rte 9 Bridge over Illinois River
ARCHITECT ENGINEER The Engineers Collaborative
SITE LOCATION Pekin, Illinois

ELEVATION / DEPTH	SAMPLE NO	SAMPLE TYPE	DESCRIPTION OF MATERIAL	UNIT DRY WT LBS/FT³
			(Contd. from Sheet 1)	
73.0		RB	(Same description contd. from 60'): Fine to coarse sand and gravel, trace silt - brown and dark gray - medium dense to dense - saturated (GP-SW)	
	15	SS		
		RB		
80.0	16	SS	Fine to coarse sand, trace silt - brown and dark gray - very dense (SW)	
		RB		
	17	SS	Fine to coarse sand and gravel, trace silt - brown & light gray to dark gray - very dense - wet (GP-SW)	
		RB		
90.0	18	WS	Coarse gravel - gray - saturated (GP)	
	19	WS	Fine to coarse sand and gravel, trace silt - brown and dark gray to light gray - saturated (SW)	
100.0	20	WS		
	21	WS		
110.0		RB	Light gray clay (CH), changing to light gray claystone, changing to medium gray thin bedded limey shale.	
	Run 1	DB	Recovery = 33%	
120.0			R.Q.D. = 60%	
124.0			End of Boring — Calibrated Penetrometer	

Notes:
1) 80' of 4" and 110' of 3" casing used.
2) Heavy Bentonite and Portland Cement drilling mud used while drilling below 45'.
3) Artesian water pressure encountered at 40'. At 90', artesian pressure was strong enough to carry 3" gravel from bottom of the casing to surface.

WL — WS — WD — BORING STARTED 4-30-74
WL — DCP — ACR — BORING COMPLETED 5-3-74
WL Artesian at Surface — RIG Rotary FOREMAN "C" — APPROVED BY DVP — STS JOB NO 16068
SOIL TESTING SERVICES, INC. 111 PFINGSTEN ROAD NORTHBROOK ILLINOIS 60062

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
BORINGS

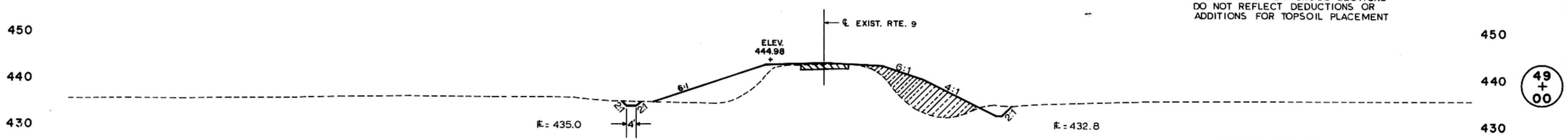
ILL. 9 over ILLINOIS RIVER
F.A. 75 SECTION 123-1
PEORIA-TAZEWELL COUNTIES
STA. 96+50

THE ENGINEERS COLLABORATIVE
CHICAGO ILLINOIS

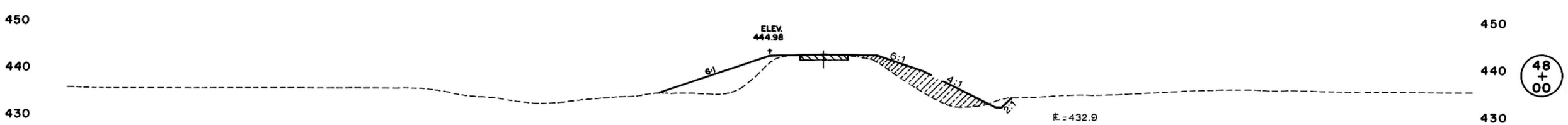
SHEET 7 of 7

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	32
STA. 47 + 00		TO STA. 49 + 00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

AREAS SHOWN ON CROSS SECTIONS DO NOT REFLECT DEDUCTIONS OR ADDITIONS FOR TOPSOIL PLACEMENT

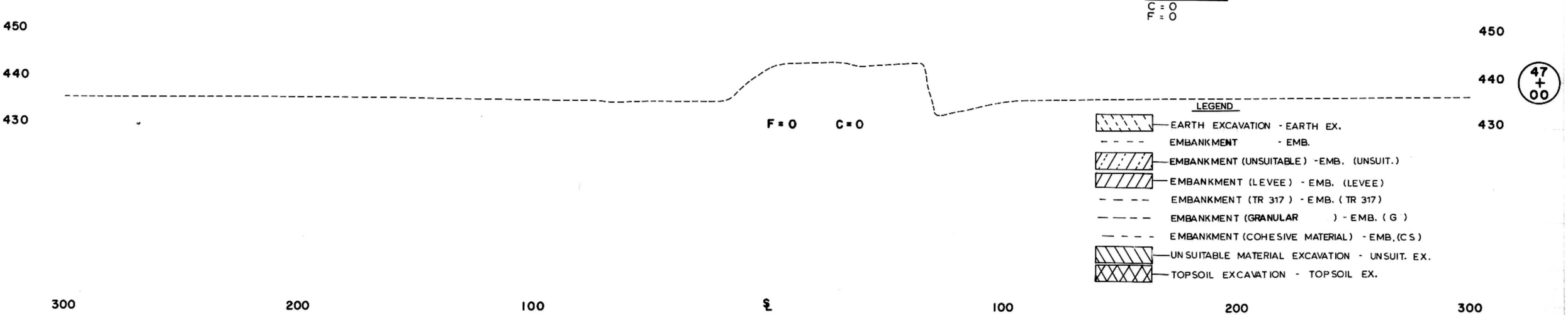


EARTH EX. = 28
EMB. = 176
EMB. (UNSUIT) = 206



EARTH EX. = 10
EMB. = 152
EMB. (UNSUIT) = 170

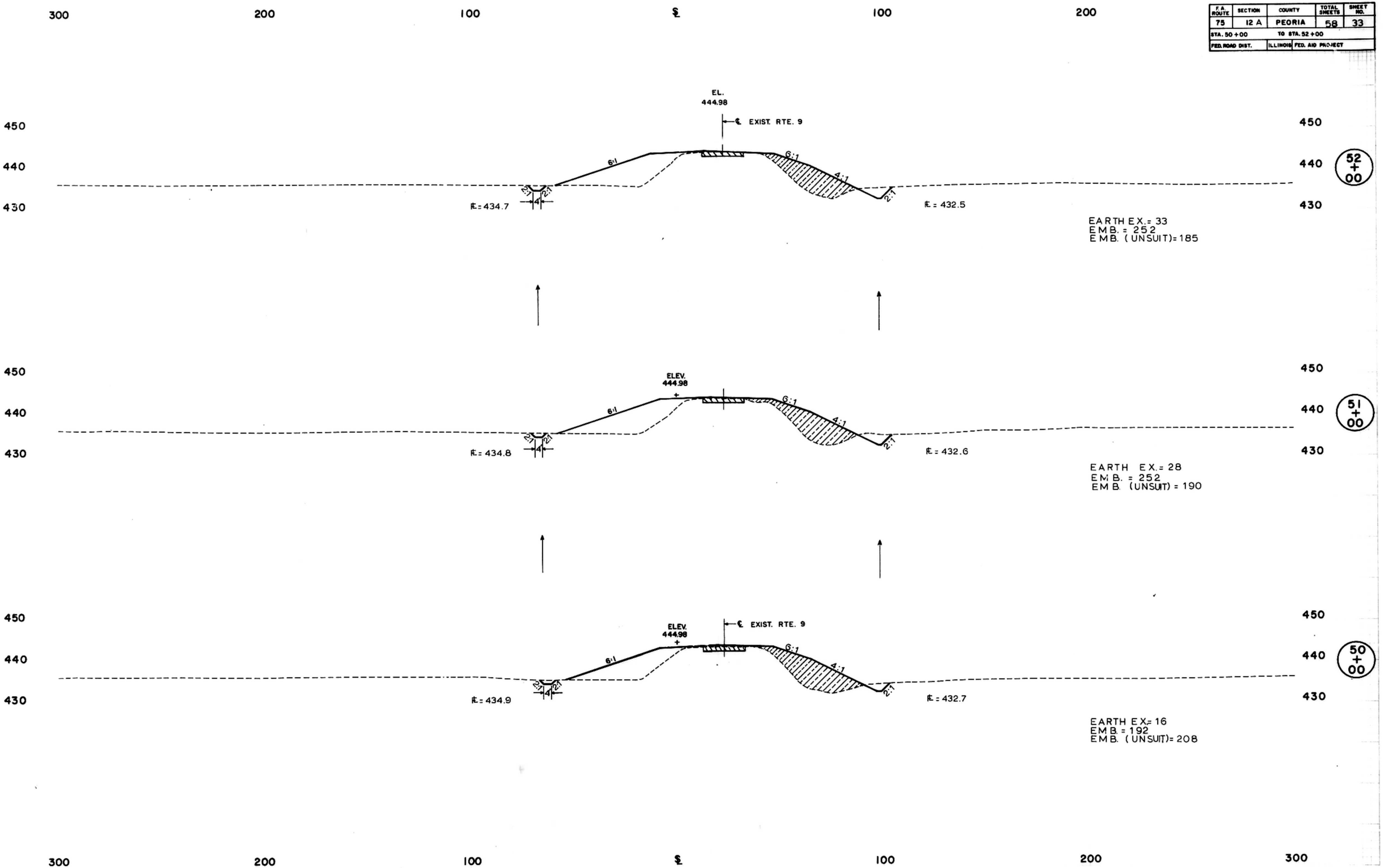
STA. 47+56.44
C = 0
F = 0



THE ENGINEERS COLLABORATIVE – CHICAGO, ILLINOIS

WEST APPROACH

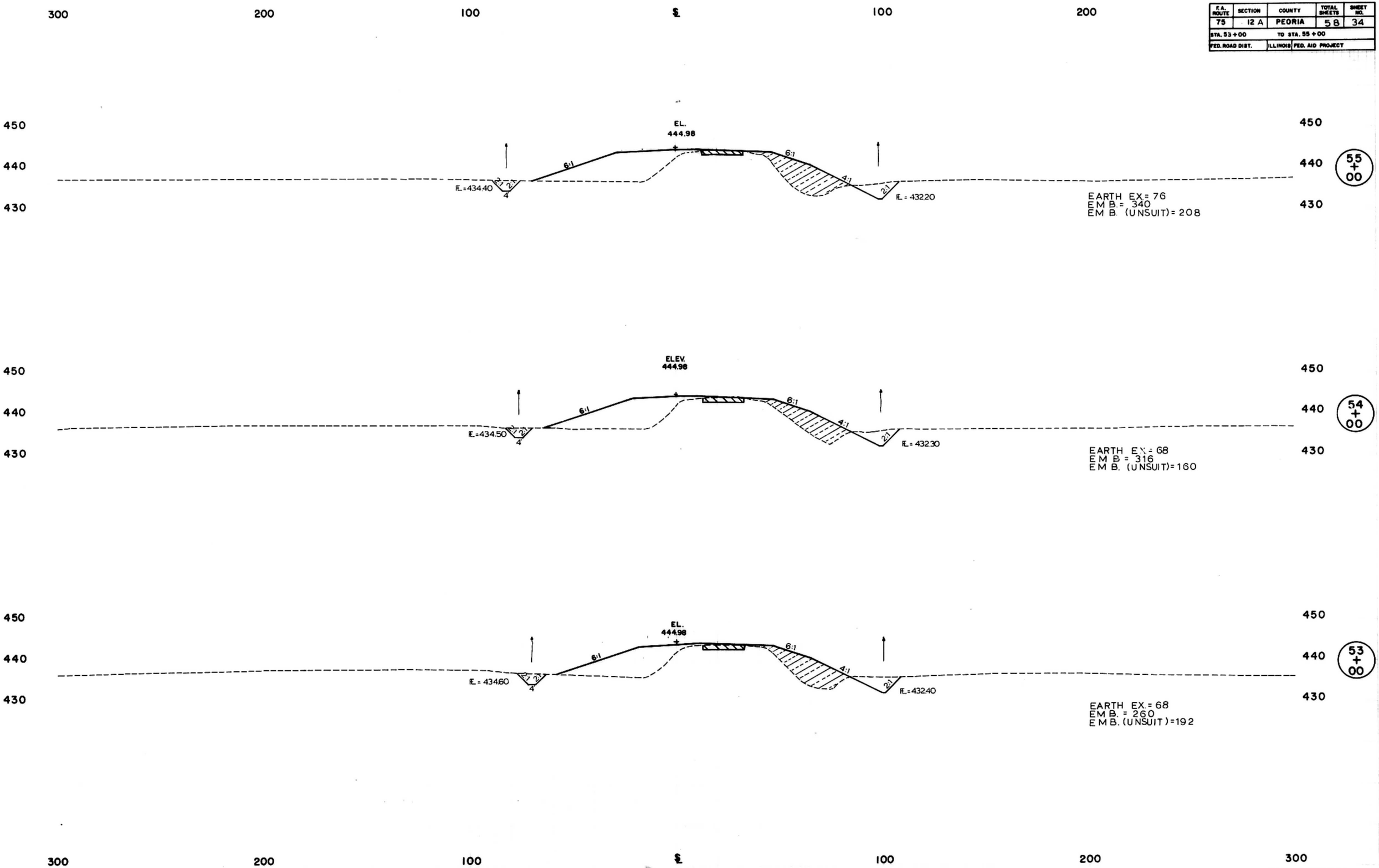
F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	33
STA. 50 + 00		TO STA. 52 + 00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		



THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

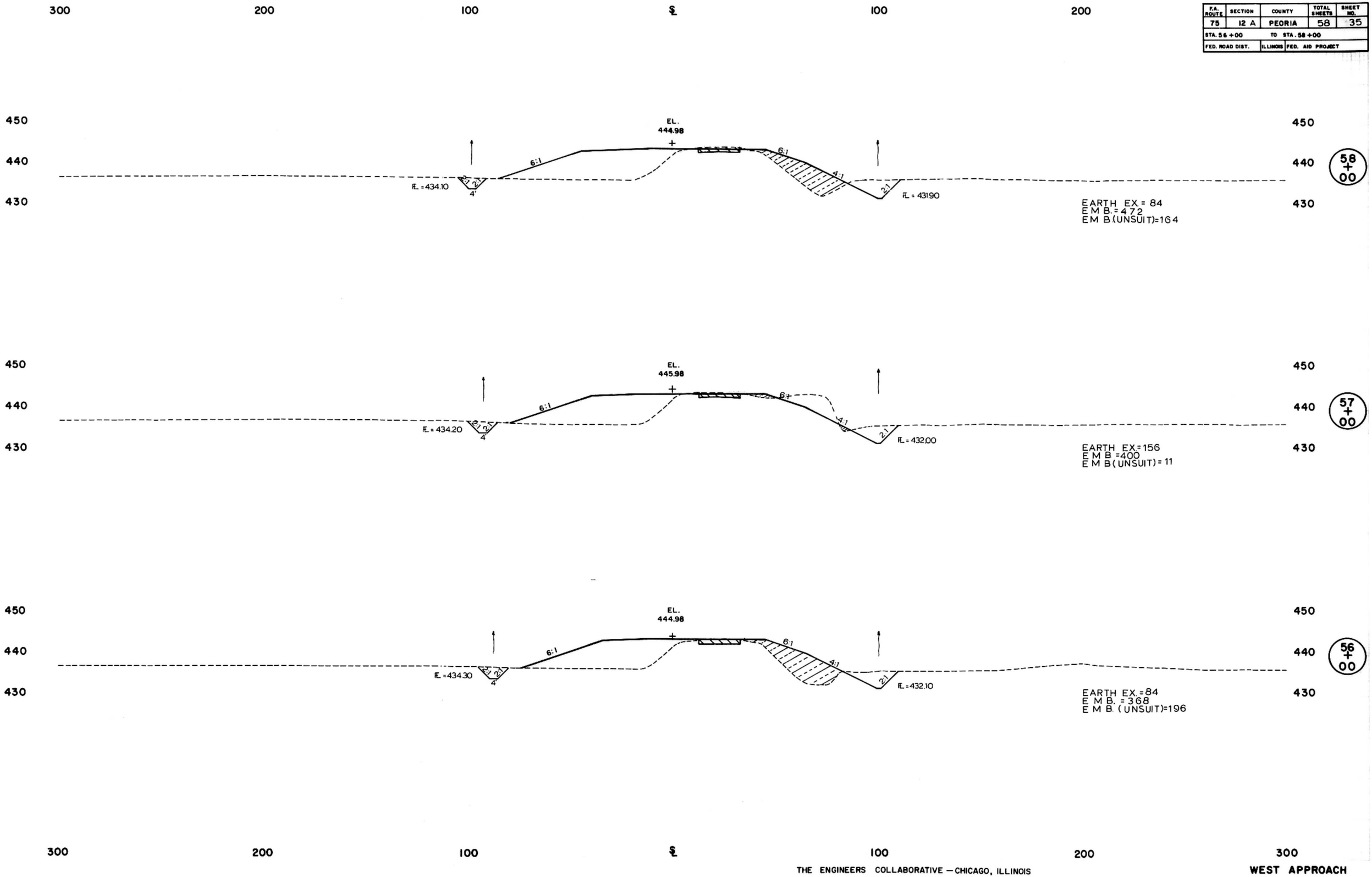
F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	34
STA. 53+00		TO STA. 55+00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		



THE ENGINEERS COLLABORATIVE – CHICAGO, ILLINOIS

WEST APPROACH

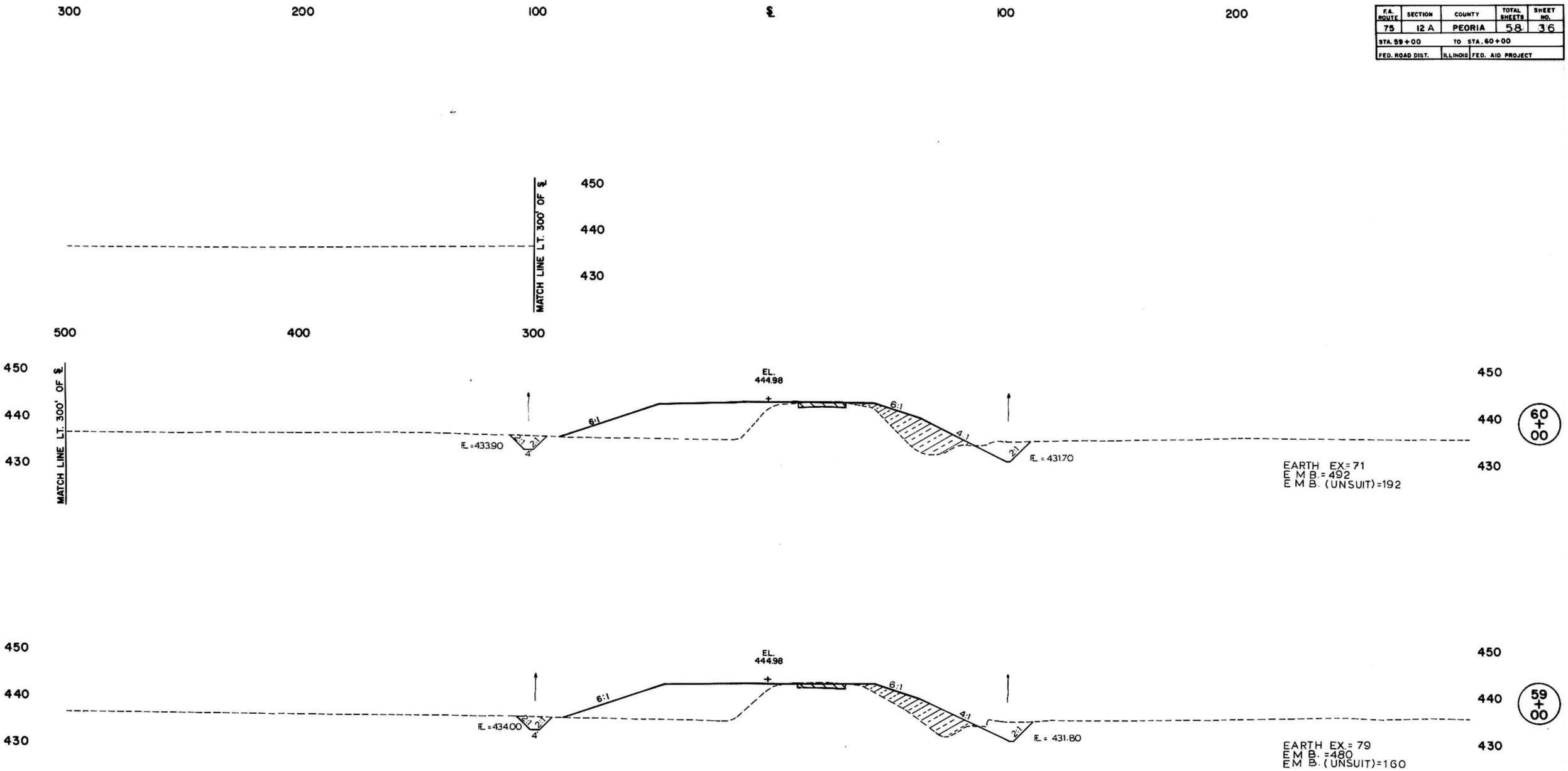
F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	35
STA. 56 +00		TO STA. 58 +00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		



THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

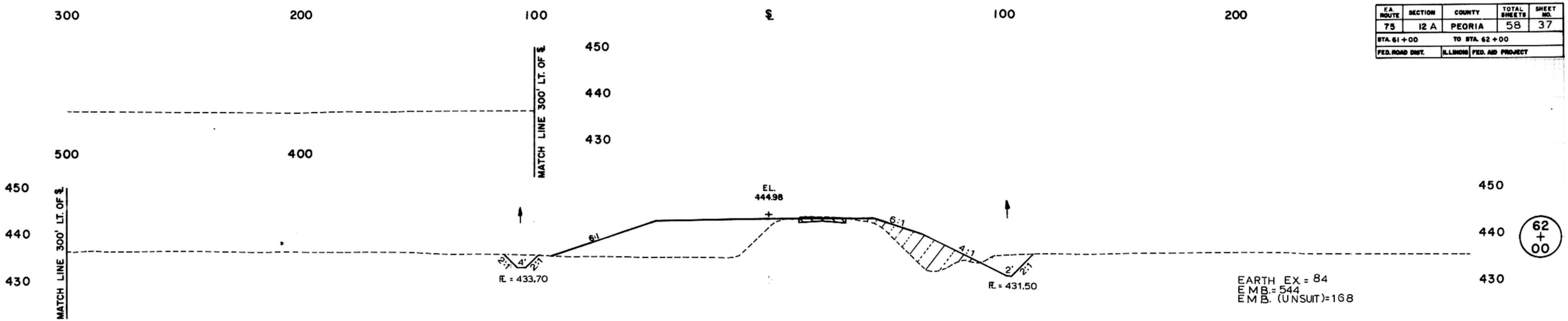
F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	36
STA. 59+00		TO STA. 60+00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

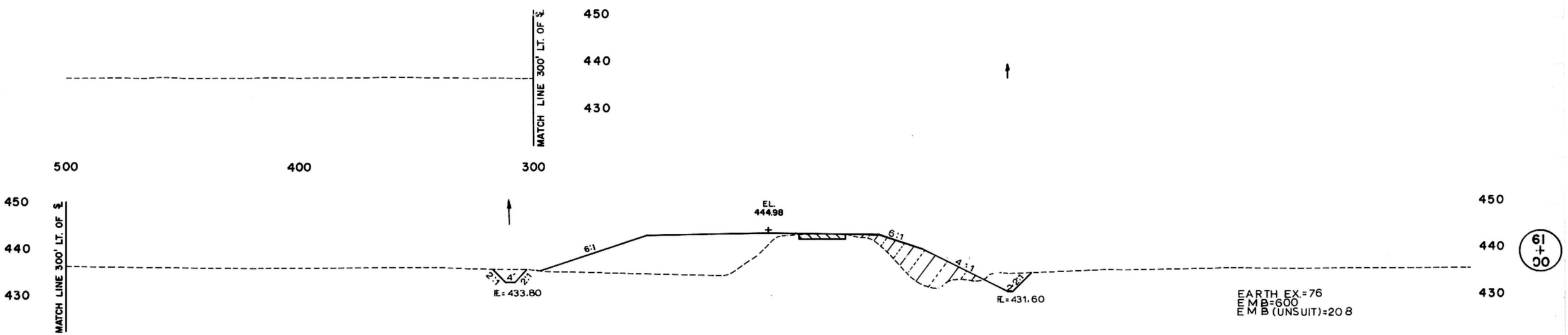


THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	37
STA. 61 + 00		TO STA. 62 + 00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

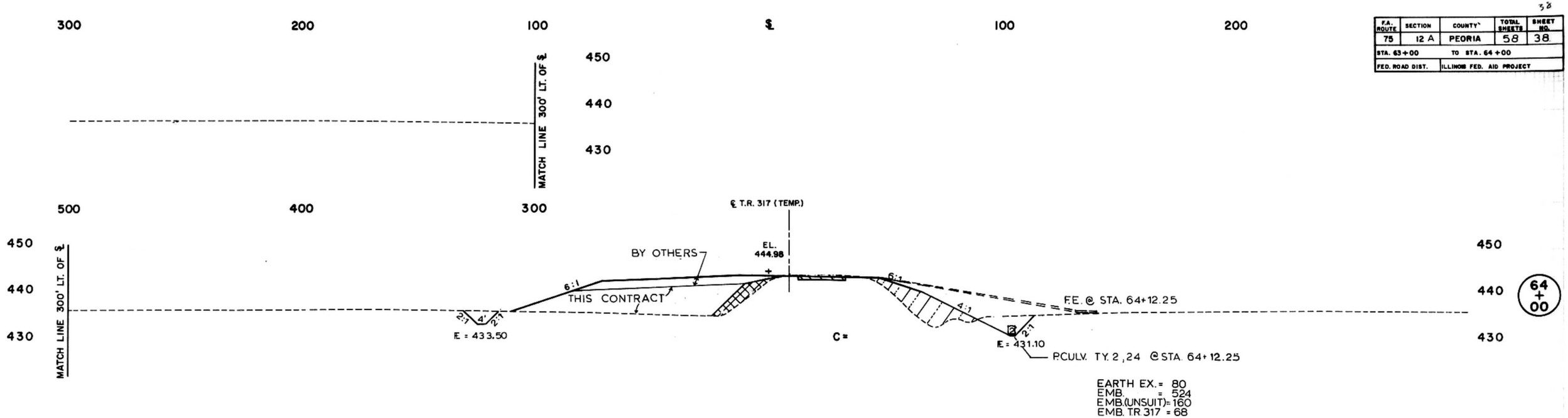


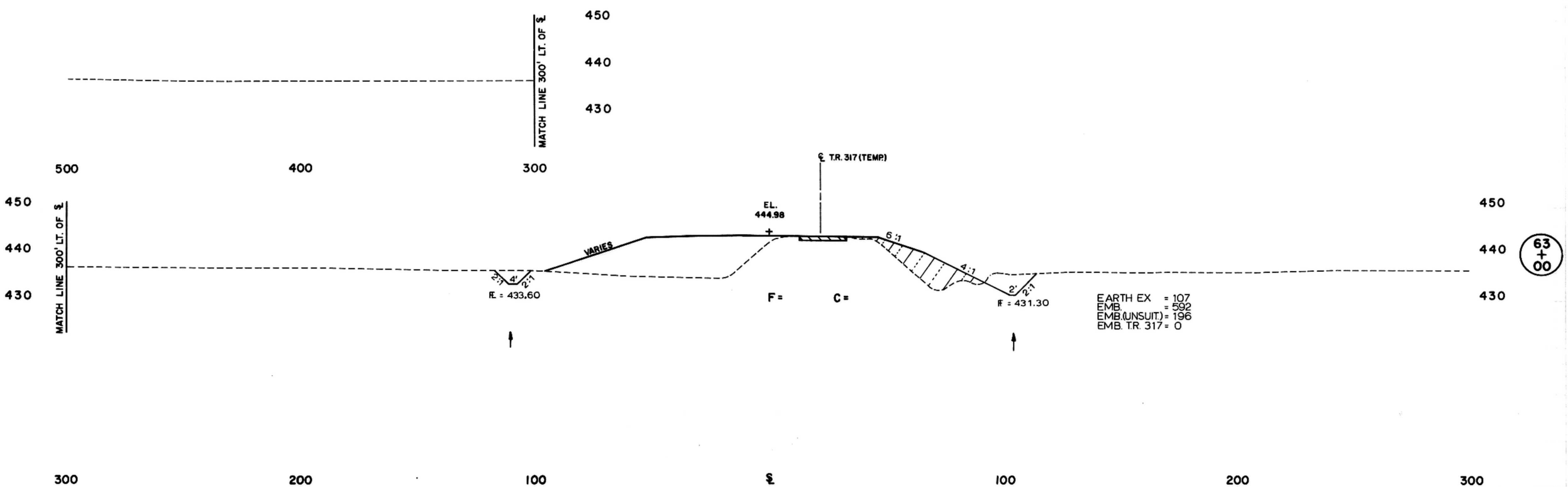


THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	38
STA. 63+00		TO STA. 64+00		
FED. ROAD DIST.		ILLINOIS FED. AID PROJECT		

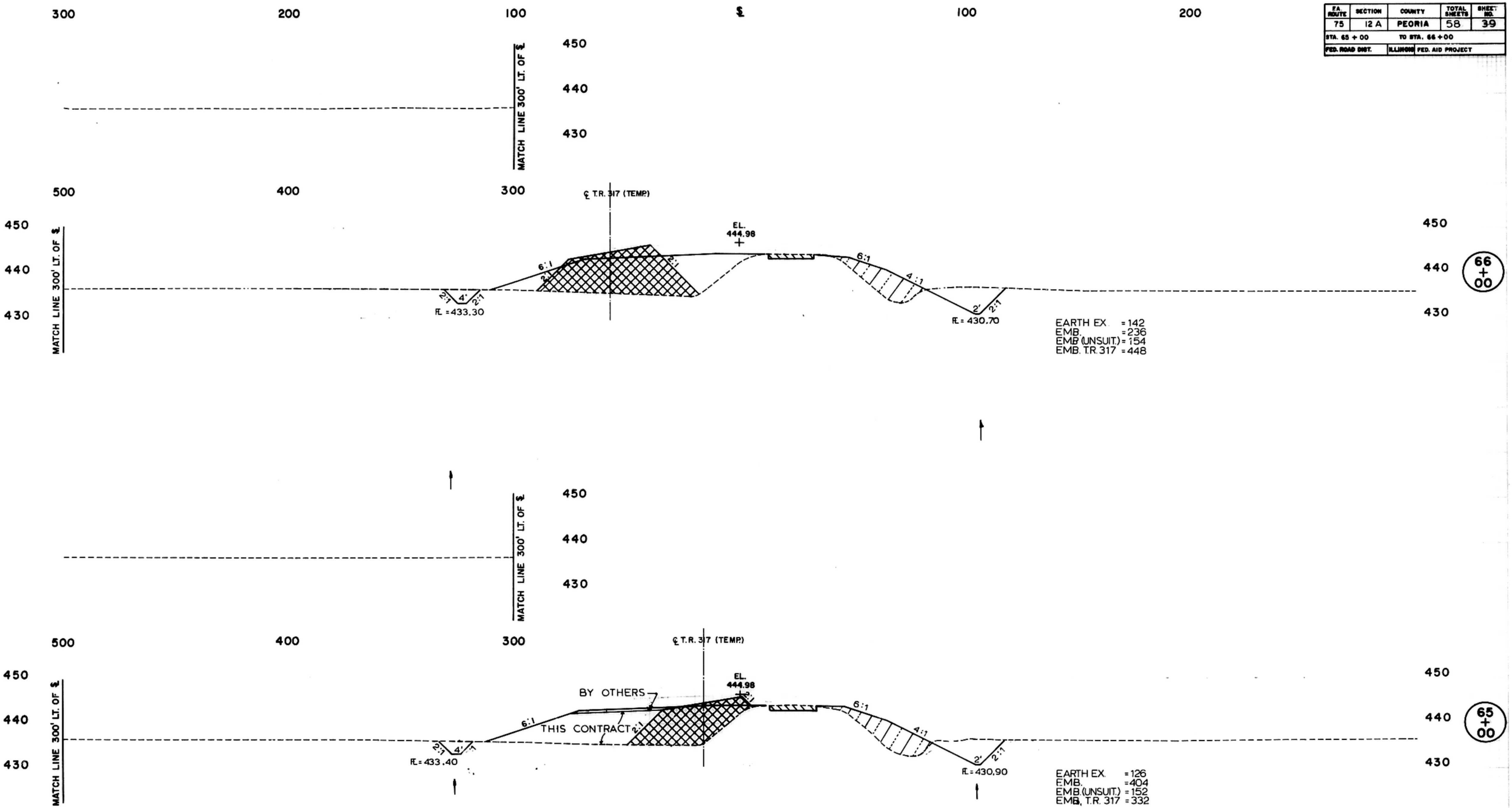




THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

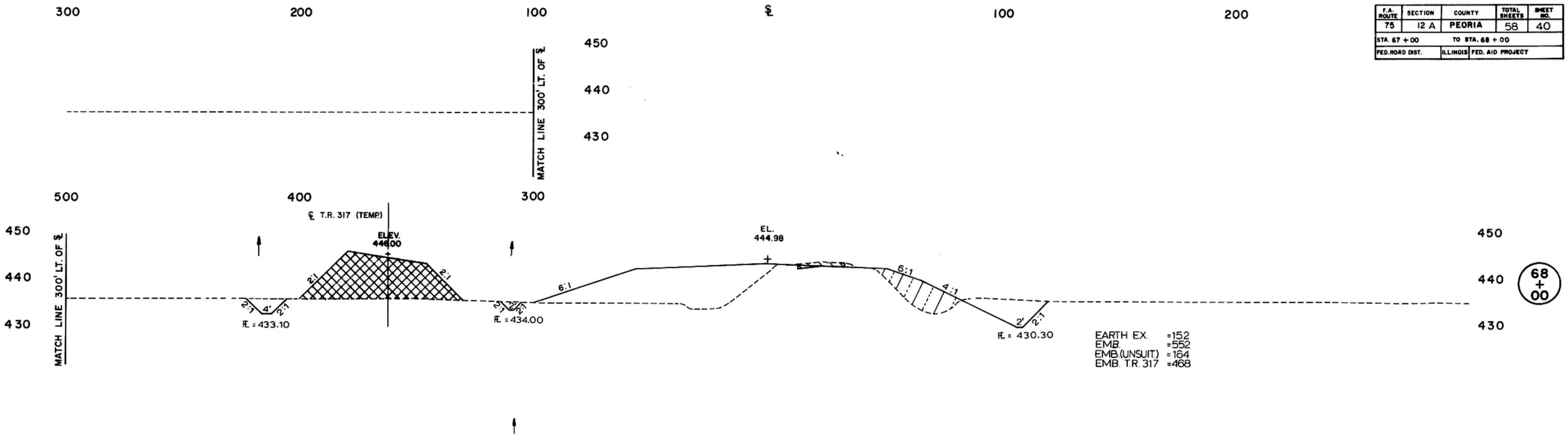
F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	39
STA. 65 + 00		TO STA. 66 + 00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

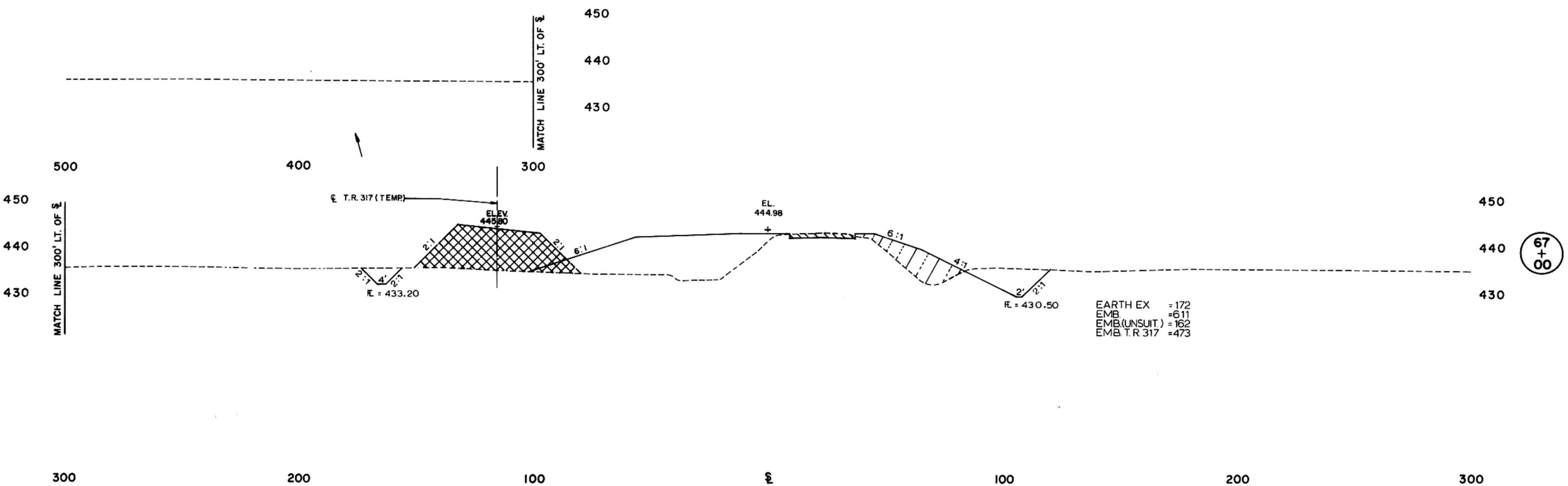


THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	40
STA. 67 + 00		TO STA. 68 + 00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

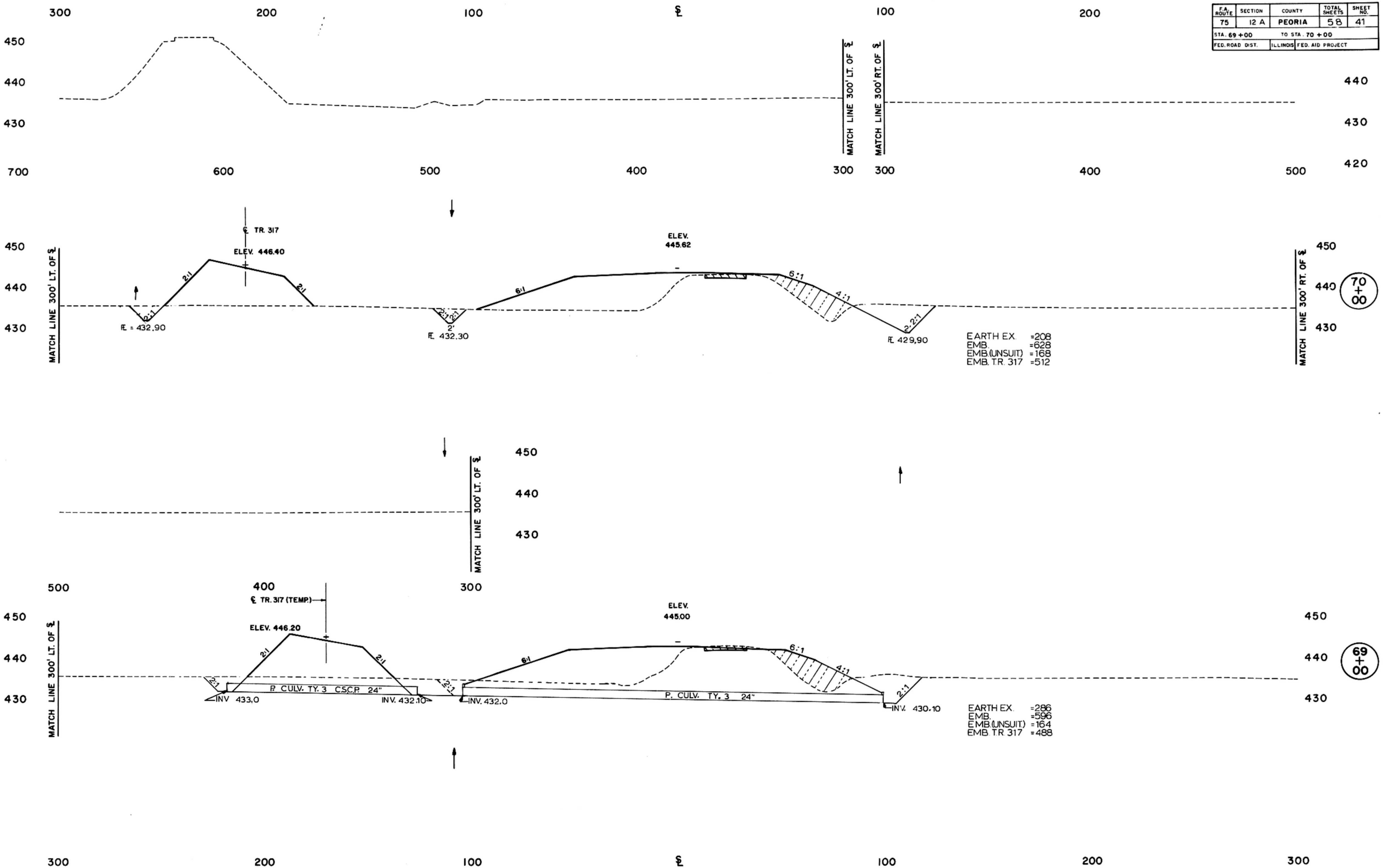




THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	41
STA. 69 + 00		TO STA. 70 + 00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

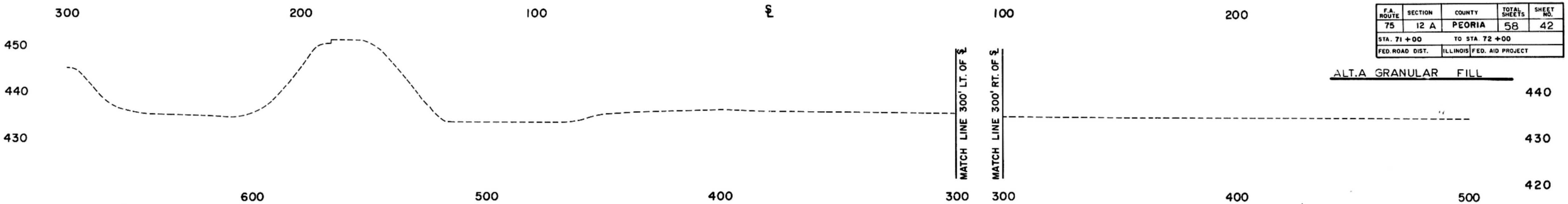


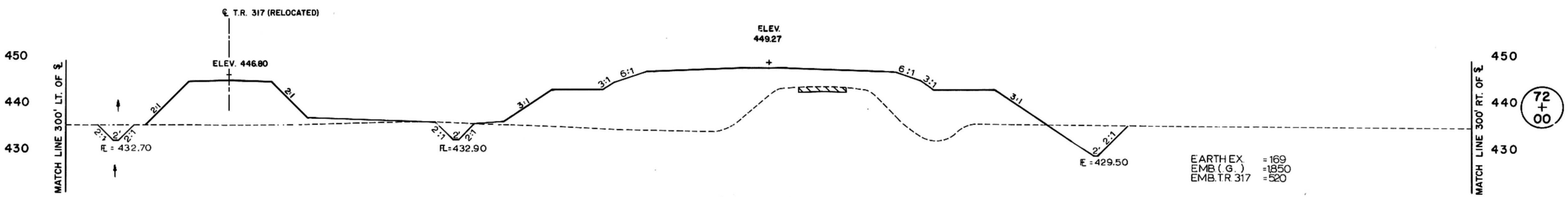
THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

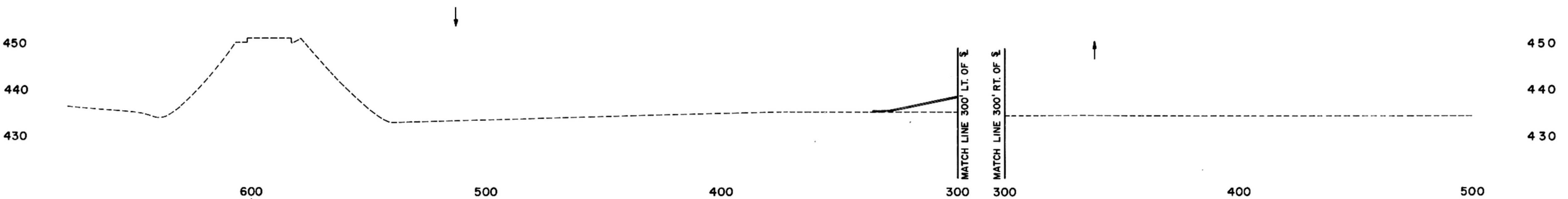
WEST APPROACH

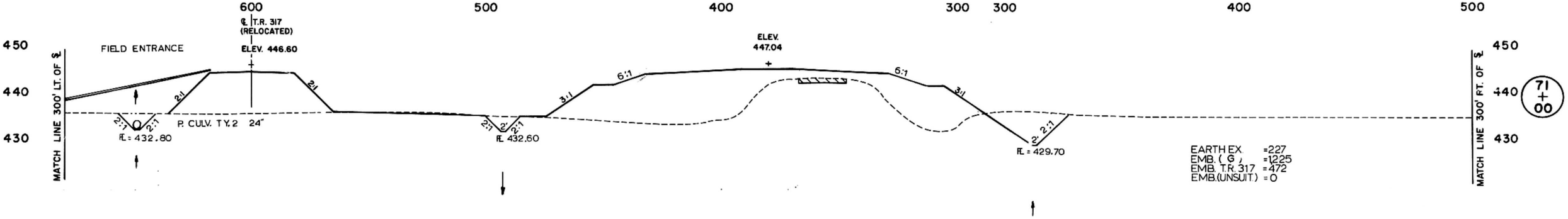
F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	42
STA. 71 + 00		TO STA. 72 + 00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

ALT.A GRANULAR FILL







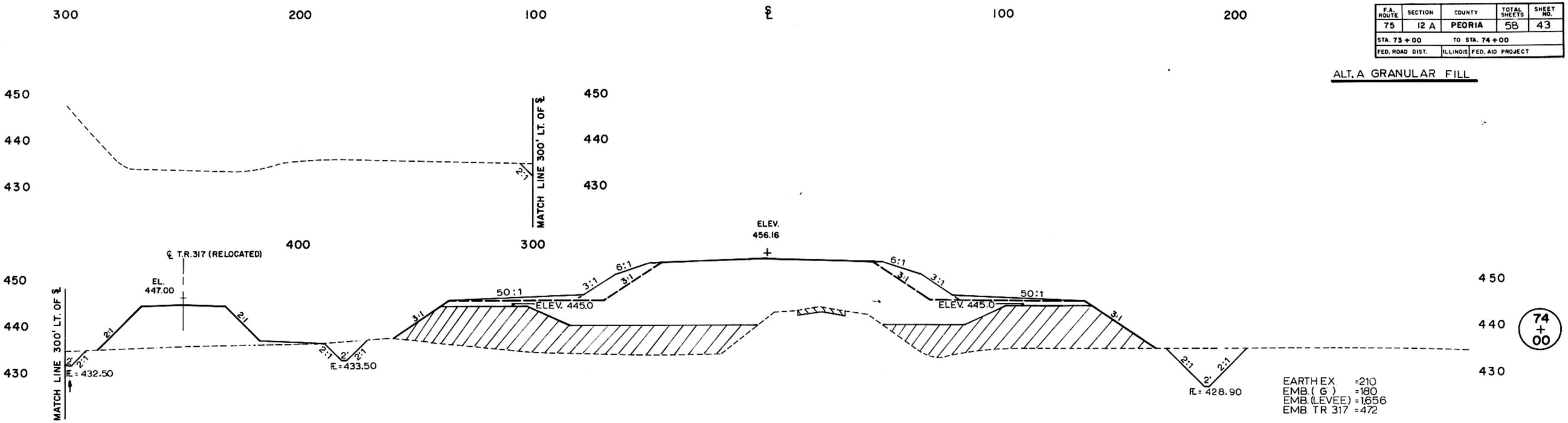


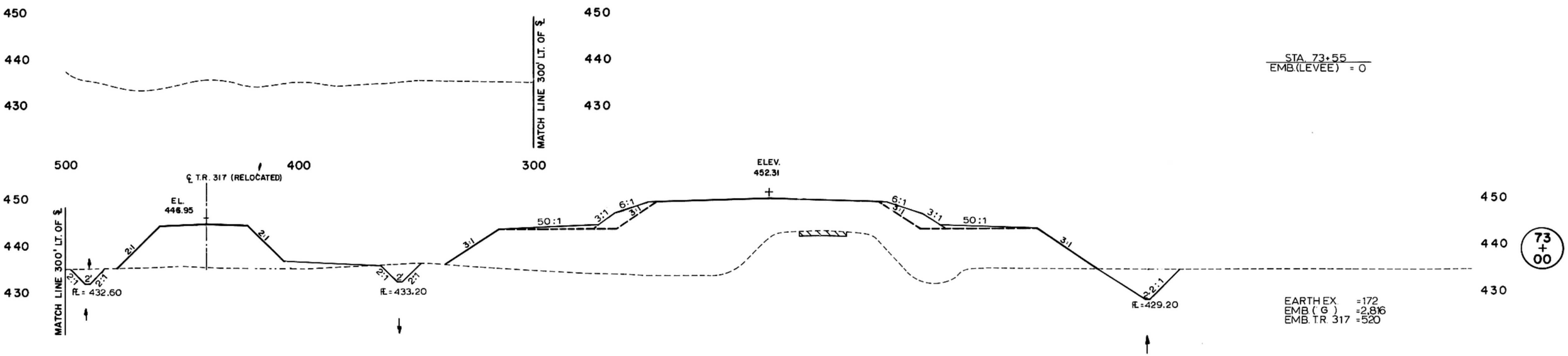
THE ENGINEERS COLLABORATIVE—CHICAGO, ILLINOIS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	43
STA. 73 + 00		TO STA. 74 + 00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

ALT. A GRANULAR FILL

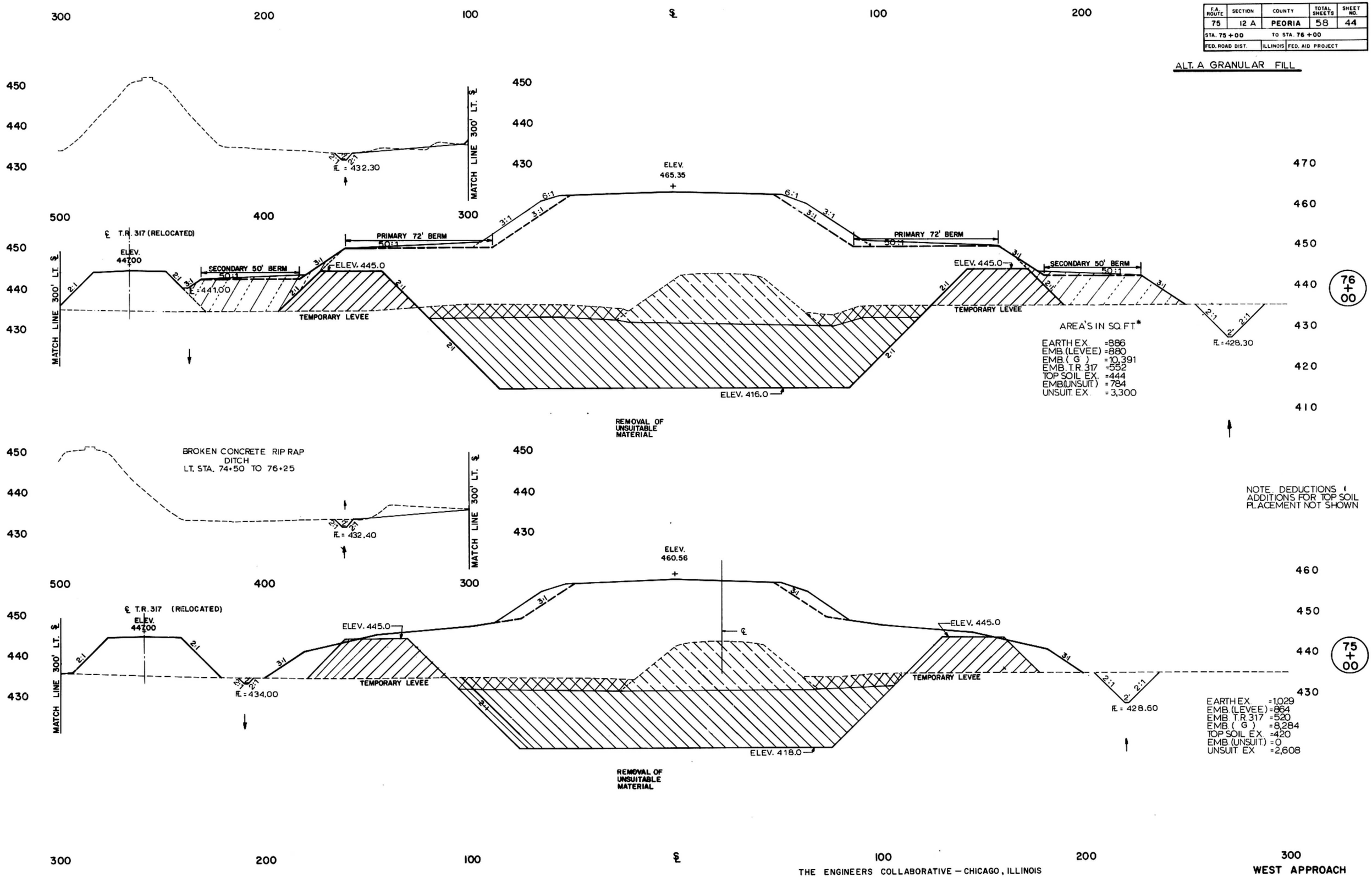




WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	44
STA. 75 + 00		TO STA. 76 + 00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

ALT. A GRANULAR FILL

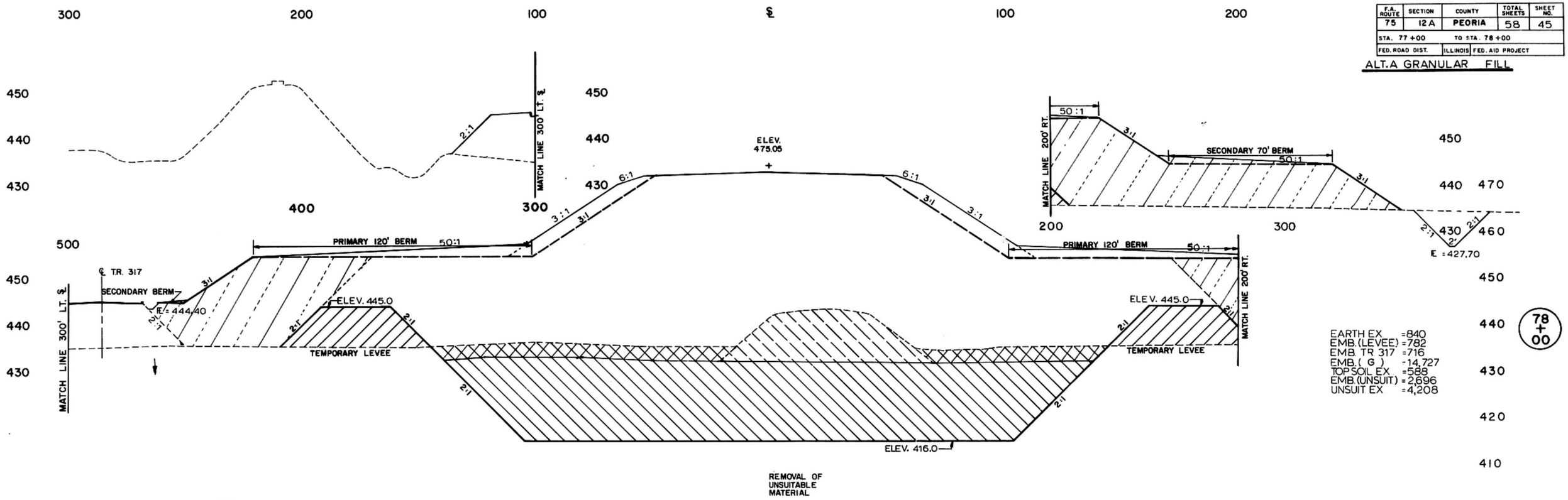


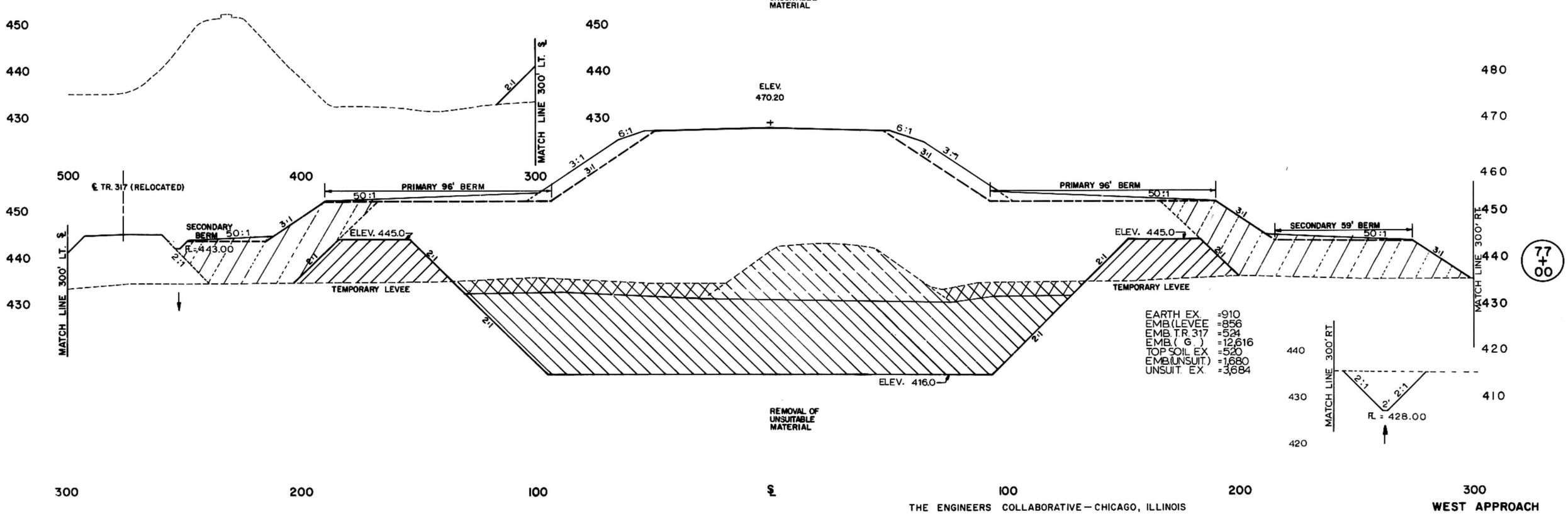
THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	45
STA. 77 +00		TO STA. 78 +00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

ALT. A GRANULAR FILL



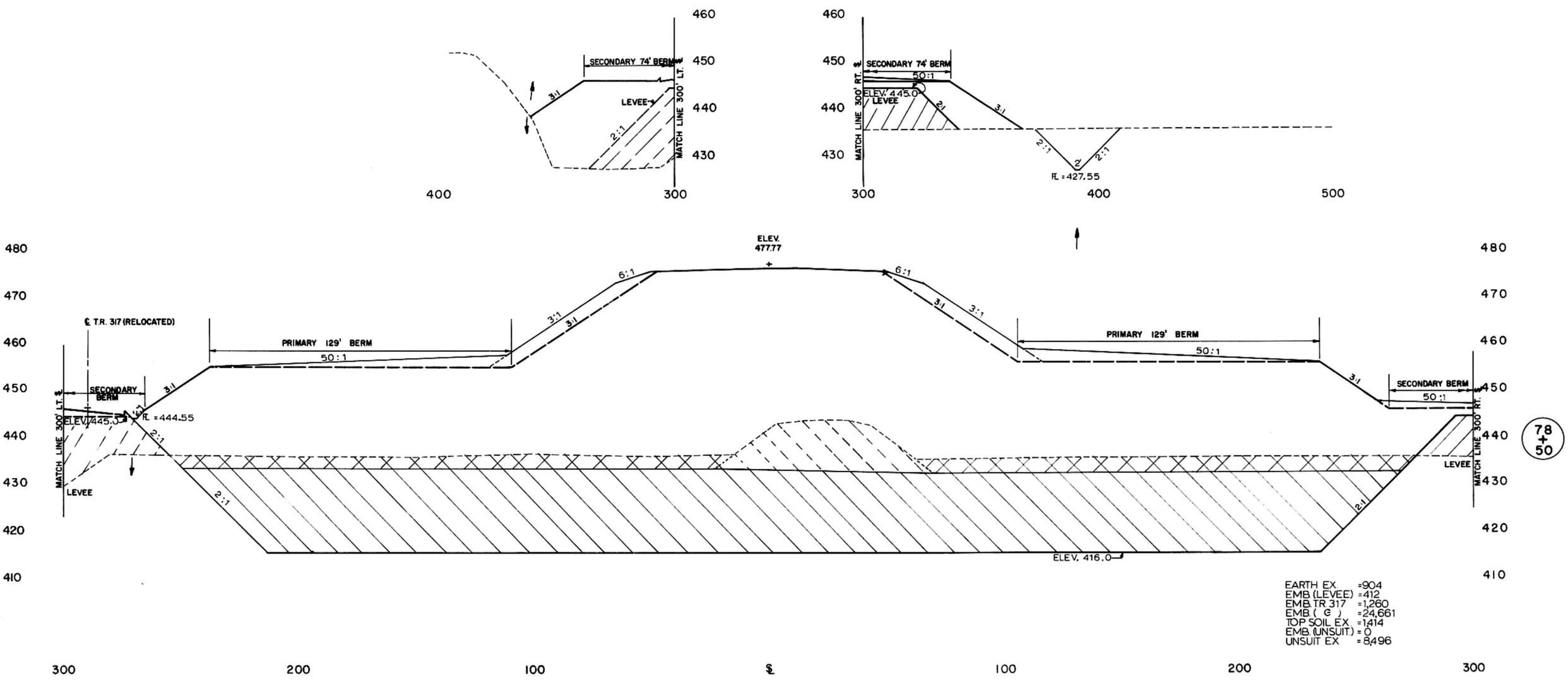


THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

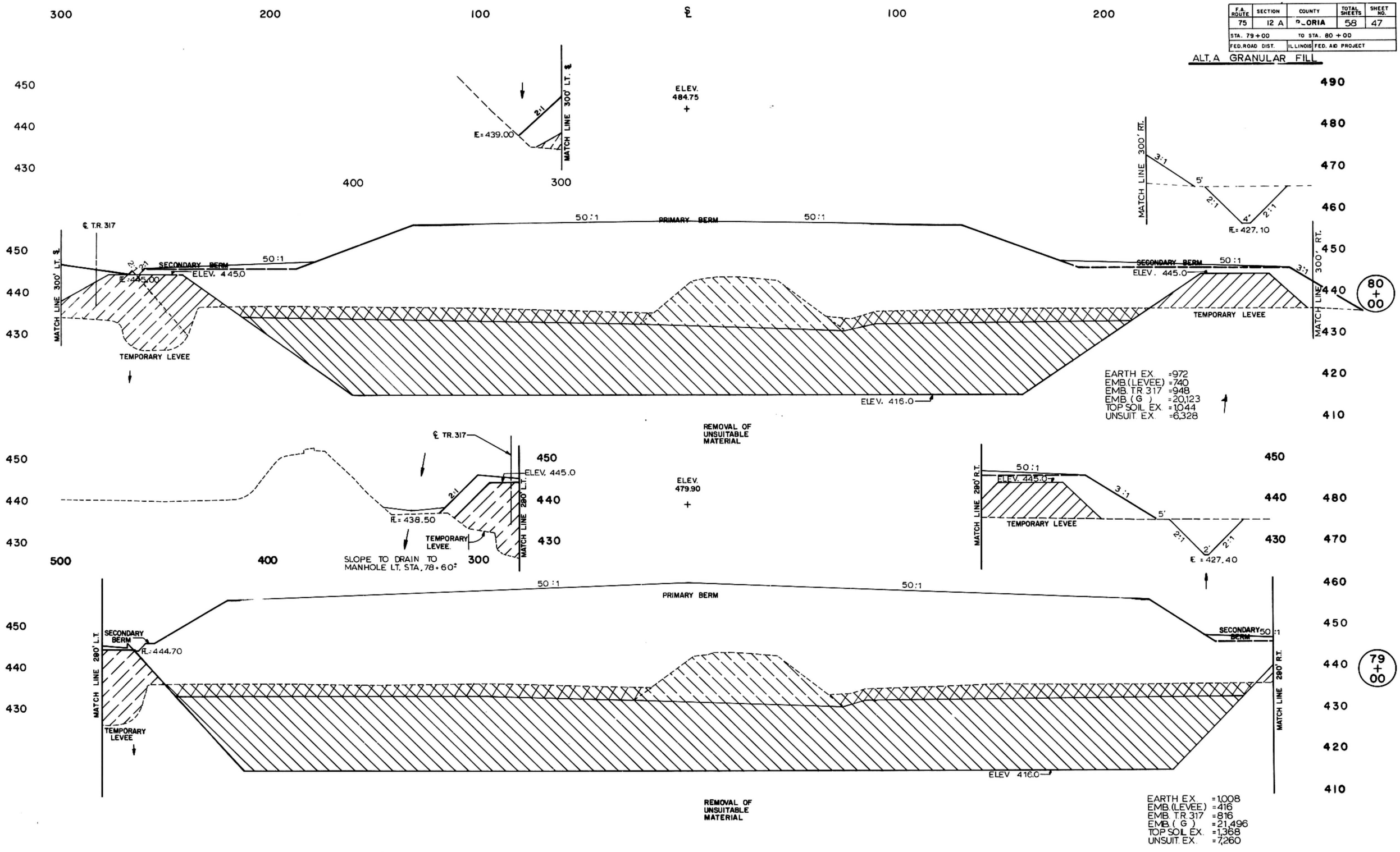
F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	46
STA. 78+50				
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

ALT. A GRANULAR FILL



F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	47
STA. 79+00		TO STA. 80+00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

ALT. A GRANULAR FILL

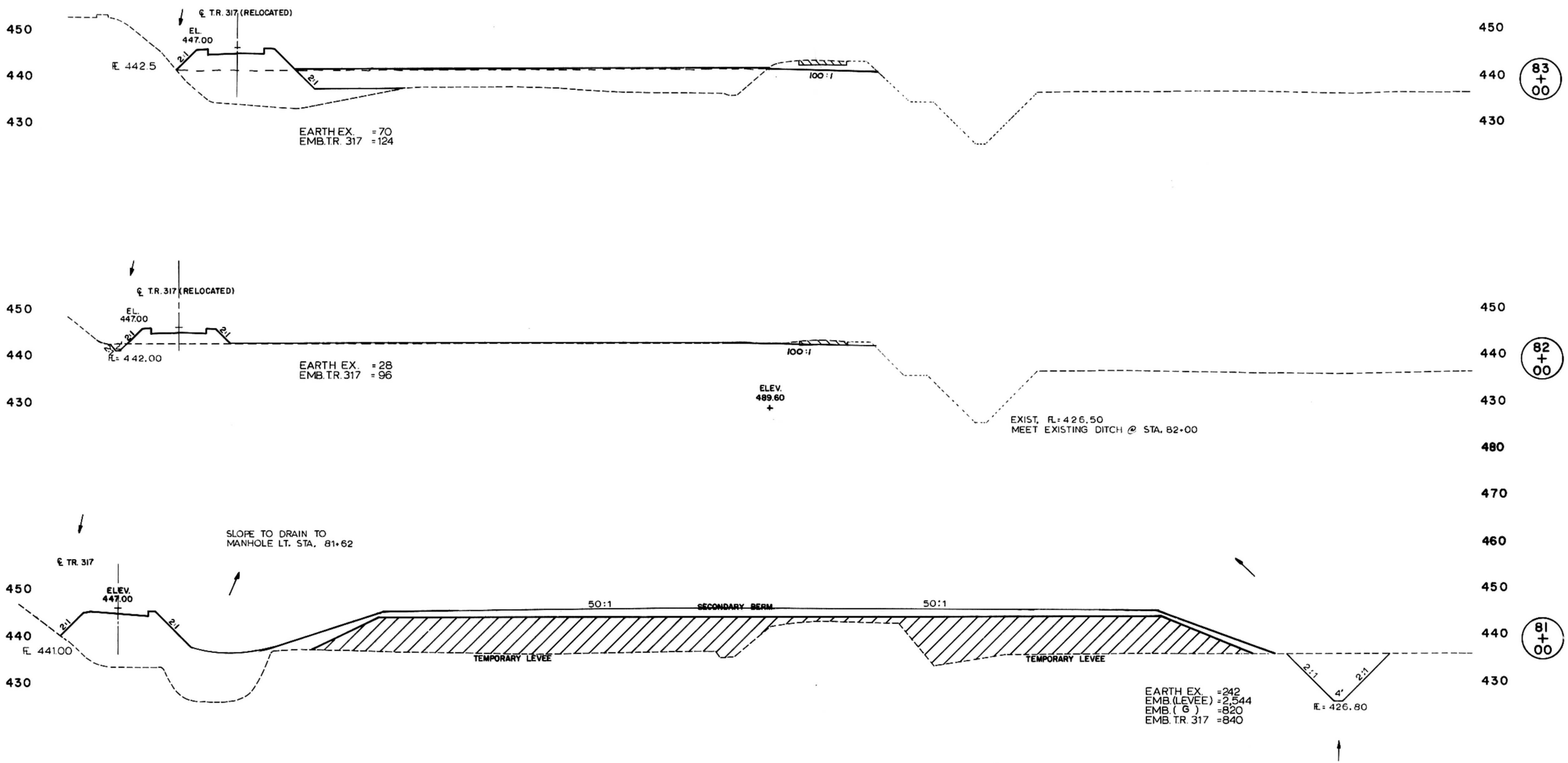


THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	48
STA. 81+00		TO STA. 83+00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

ALT. A GRANULAR FILL

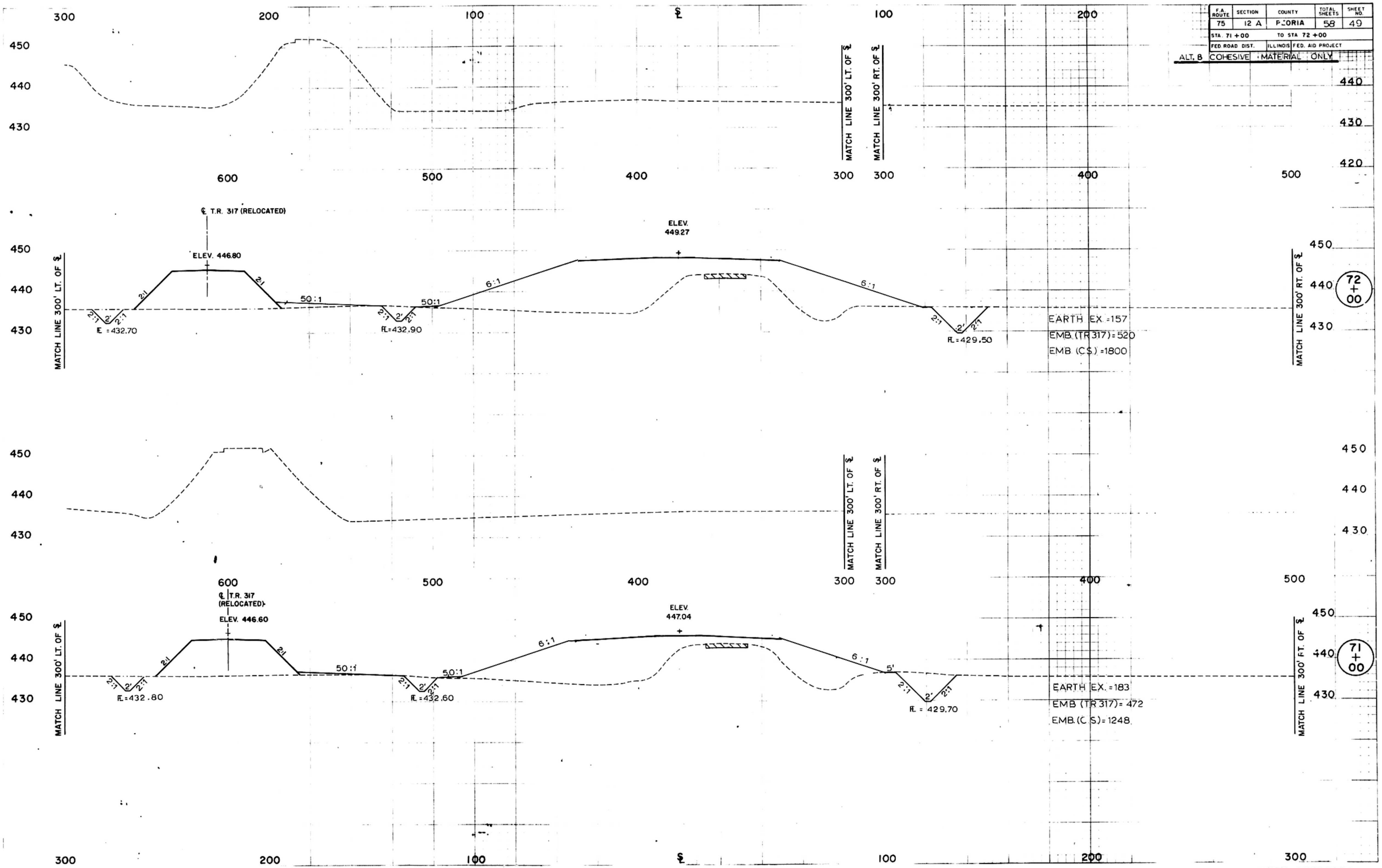


THE ENGINEERS COLLABORATIVE – CHICAGO, ILLINOS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	49
STA. 71 + 00		TO STA 72 + 00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

ALT. B COHESIVE MATERIAL ONLY

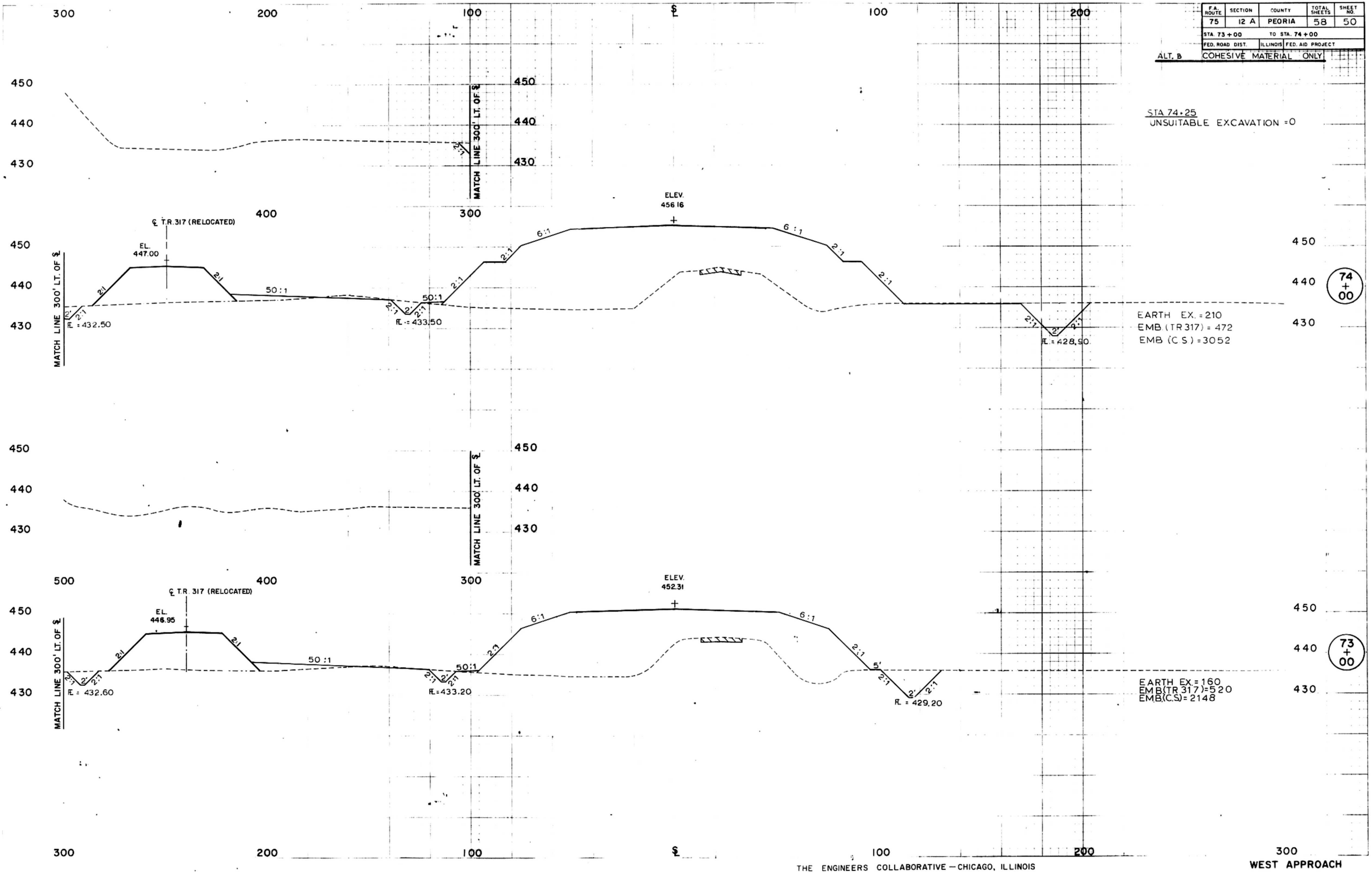


THE ENGINEERS COLLABORATIVE—CHICAGO, ILLINOIS

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	50
STA. 73 + 00		TO STA. 74 + 00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		

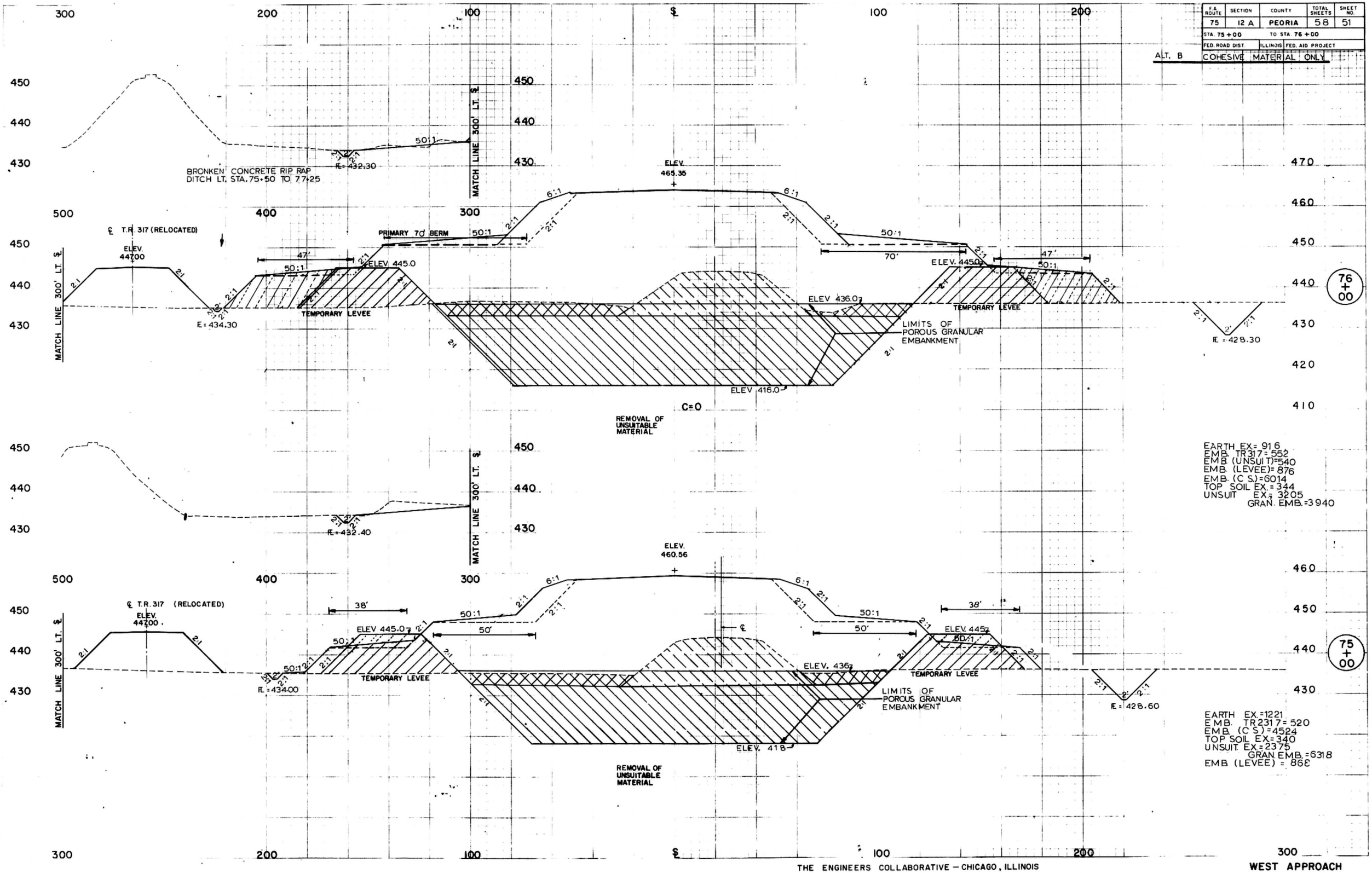
ALT. B COHESIVE MATERIAL ONLY

STA 74+25
UNSUITABLE EXCAVATION = 0



F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	51
STA. 75 + 00		TO STA. 76 + 00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

ALT. B COHESIVE MATERIAL ONLY



THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

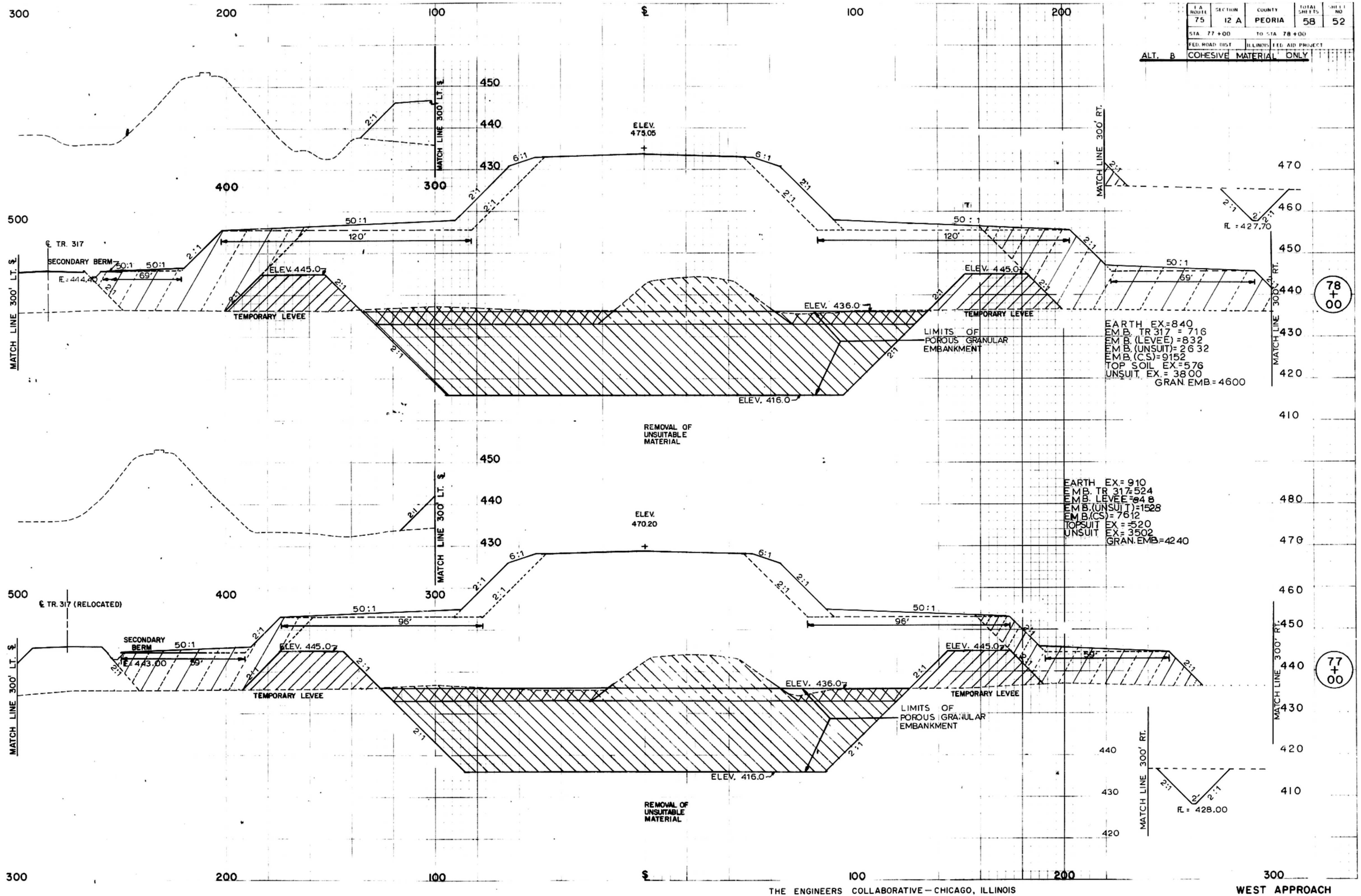
WEST APPROACH

I.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	52

STA. 77 +00 TO STA. 78 +00

FED. ROAD DIST. | ILLINOIS | FED. AID PROJECT

ALT. B COHESIVE MATERIAL ONLY



THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

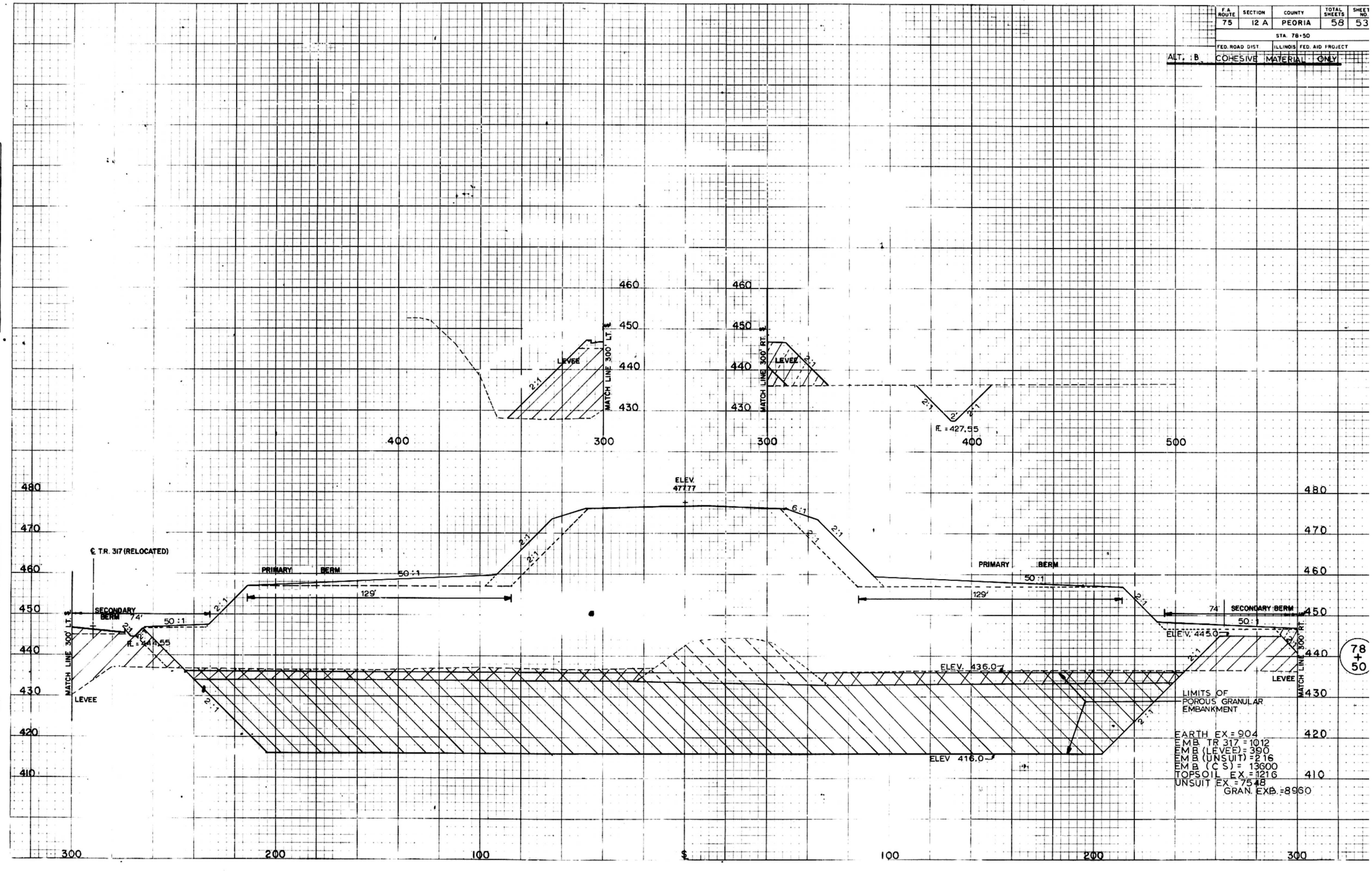
WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	53

STA. 78+50

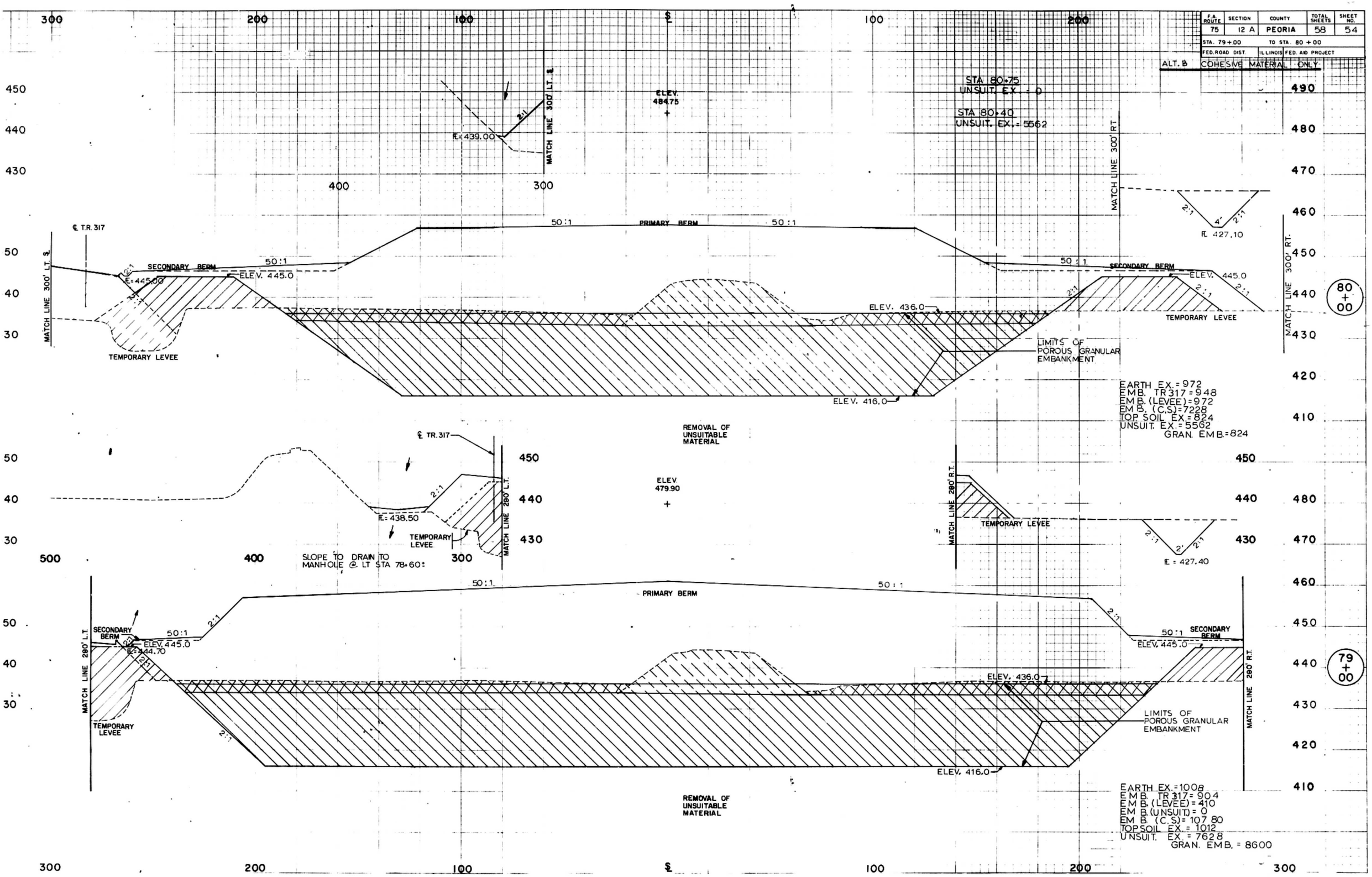
FED. ROAD DIST. | ILLINOIS | FED. AID PROJECT

ALT. B COHESIVE MATERIAL ONLY



F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	54
STA. 79+00		TO STA. 80+00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

ALT. B COHESIVE MATERIAL ONLY

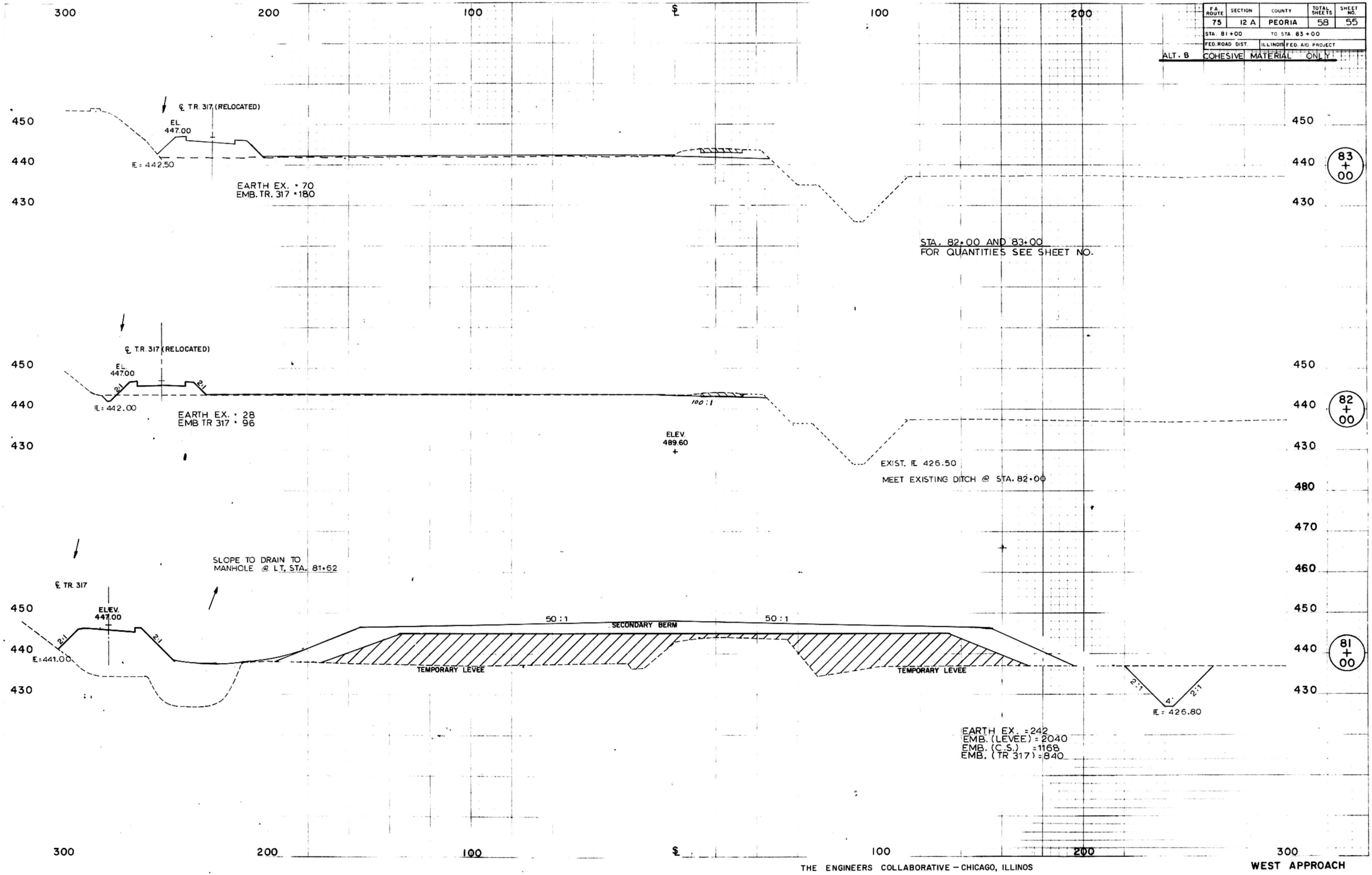


THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	55
STA. 81+00		TO STA. 83+00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

ALT. B COHESIVE MATERIAL ONLY

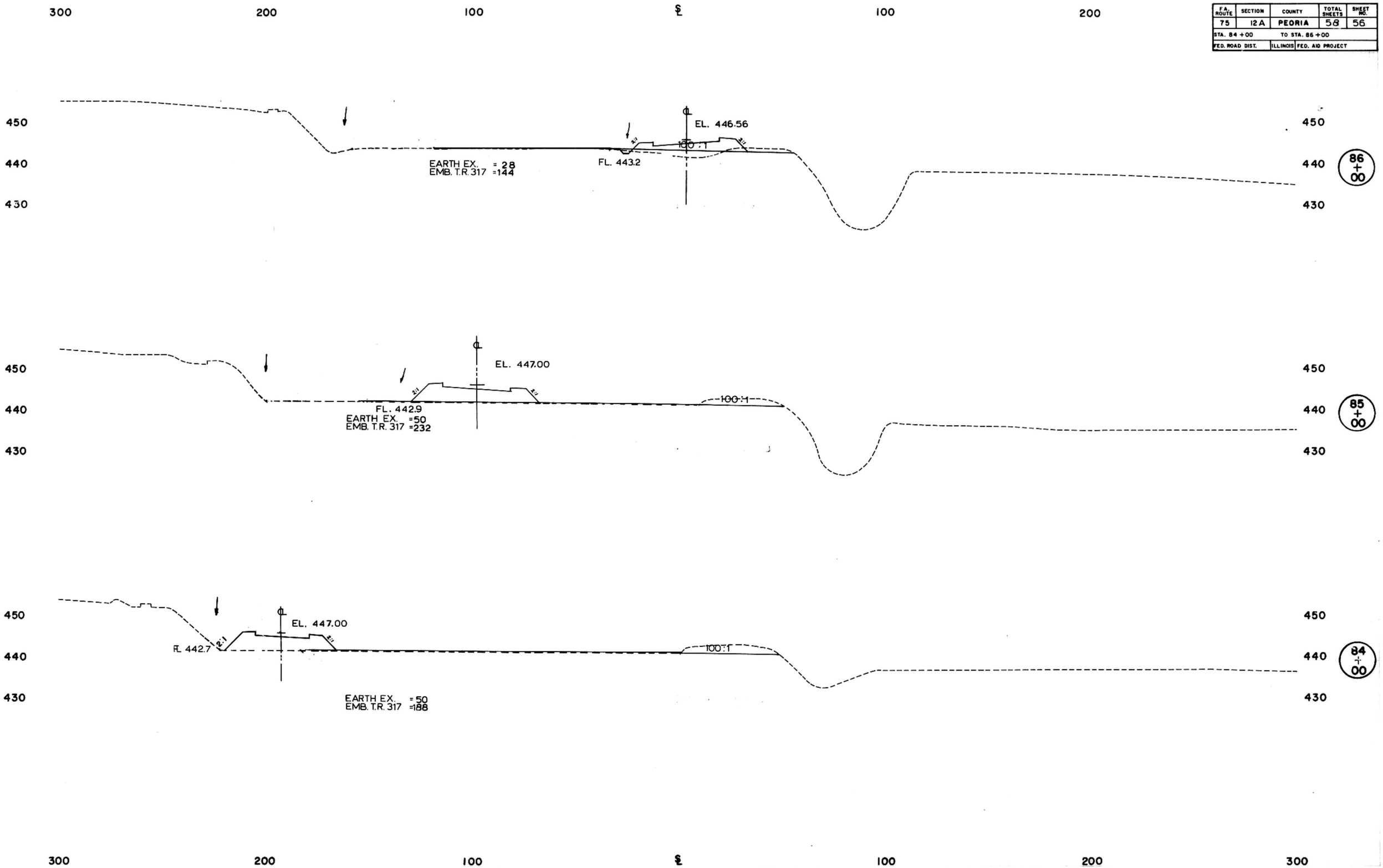


THE ENGINEERS COLLABORATIVE – CHICAGO, ILLINOS

WEST APPROACH

Rev. 2/24/76

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12A	PEORIA	58	56
STA. 84 +00		TO STA. 86 +00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	

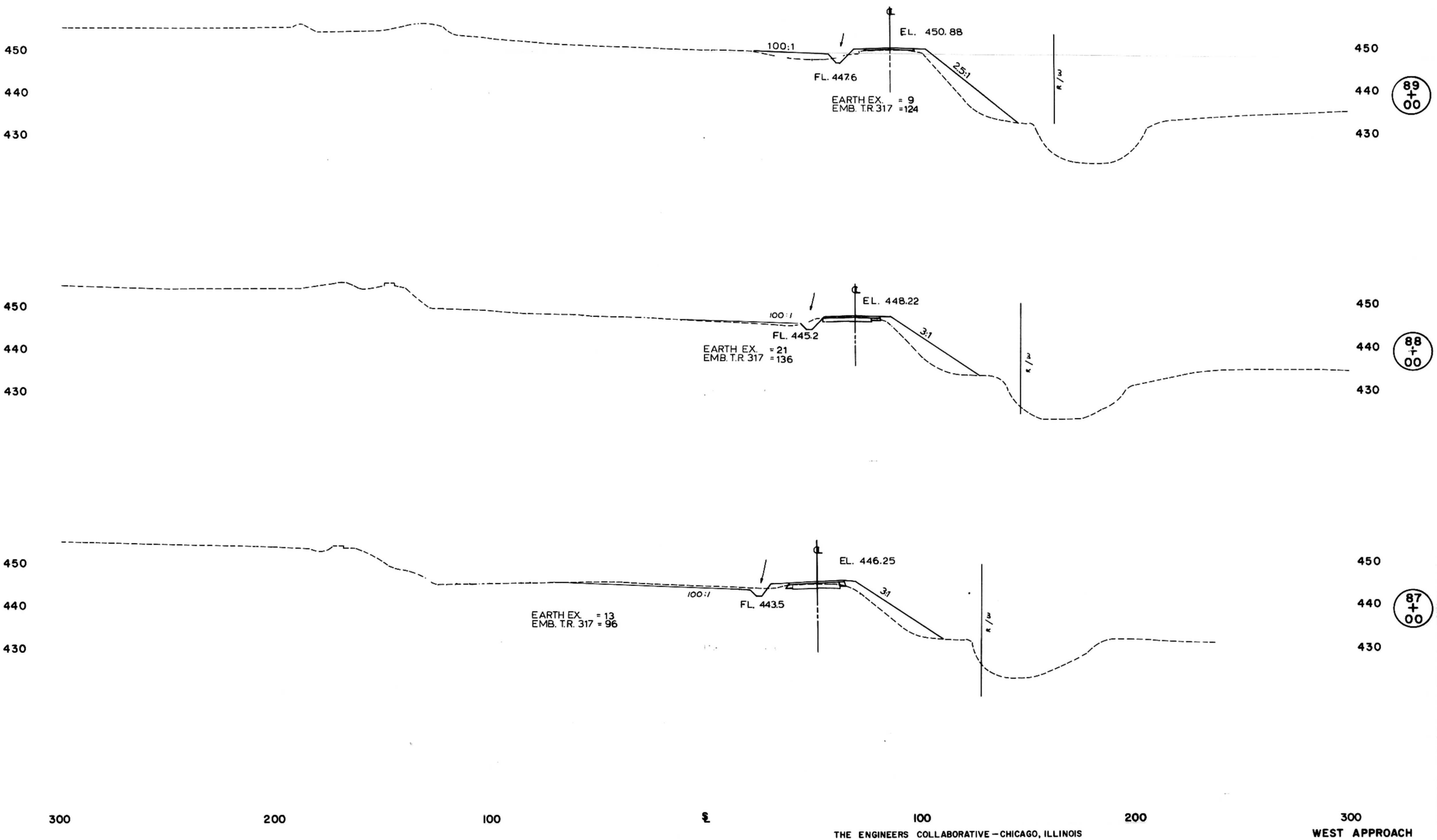


THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

Rev. 3/29/76

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	57
STA. 87 + 00		TO STA. 89 + 00		
FED. ROAD DIST.	ILLINOIS	FED. AID PROJECT		



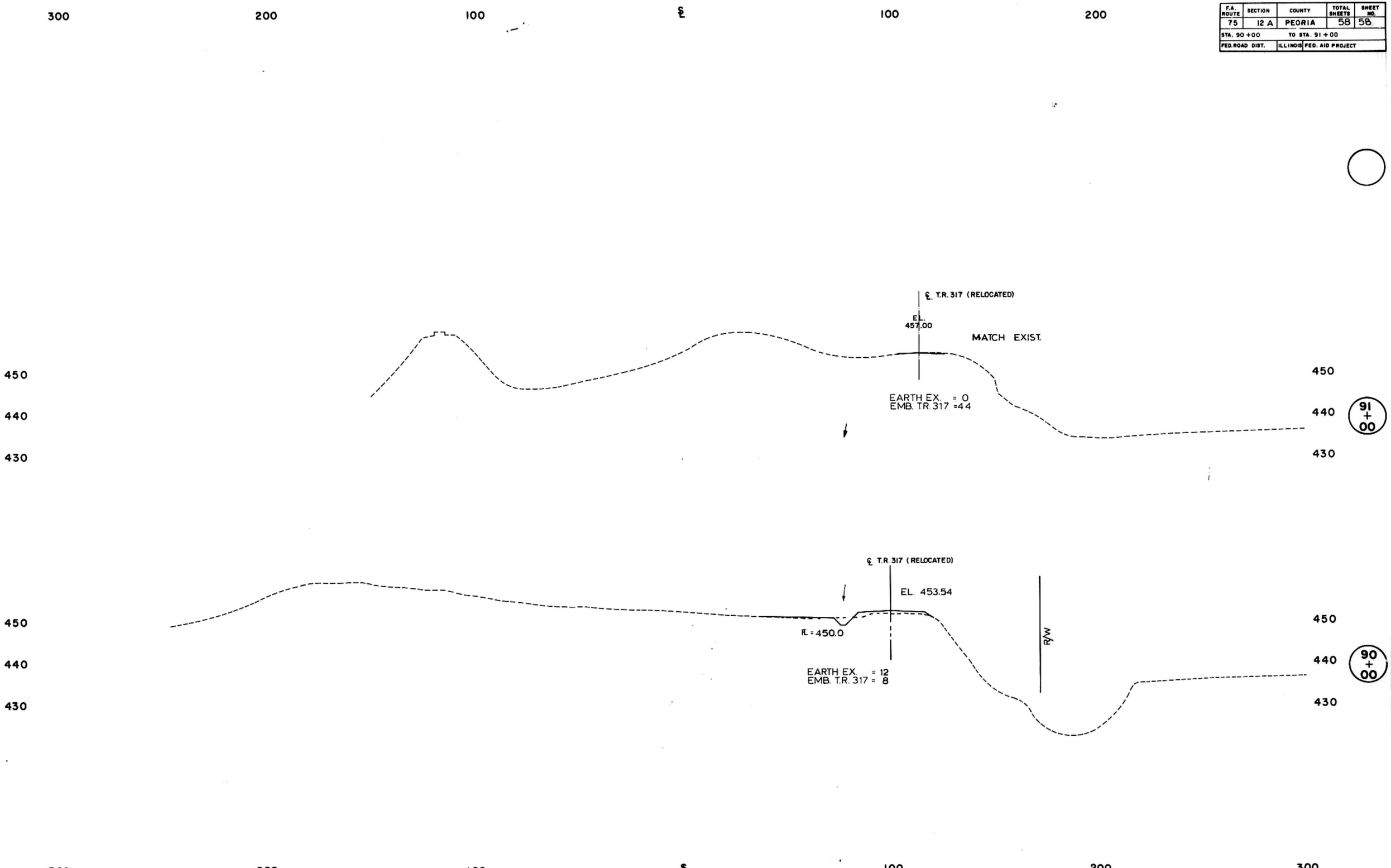
THE ENGINEERS COLLABORATIVE – CHICAGO, ILLINOIS

WEST APPROACH

Rev. 2/24/76

58

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	12 A	PEORIA	58	58
STA. 90 +00		TO STA. 91 + 00		
FED. ROAD DIST.		ILLINOIS	FED. AID PROJECT	



THE ENGINEERS COLLABORATIVE — CHICAGO, ILLINOIS

WEST APPROACH

Rev. 2/24/76