

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MARION	15	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 44977		

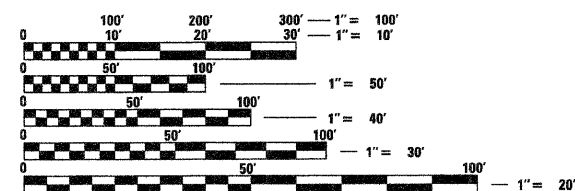
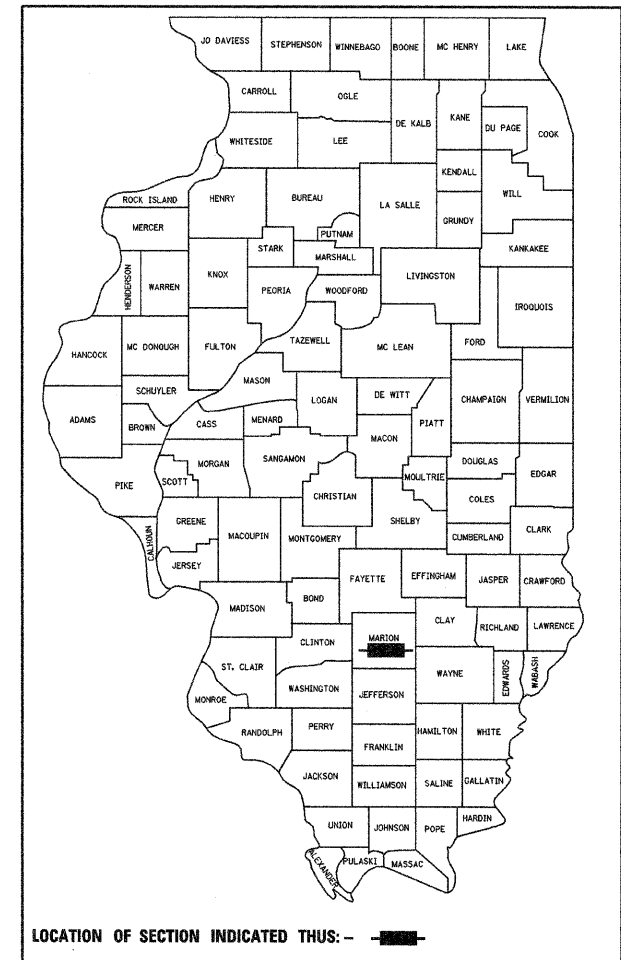
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

IDOT / IDNR STATEWIDE
STEPHEN FORBES STATE PARK
ROADWAY IMPROVEMENTS
MARION COUNTY

C-30-005-08

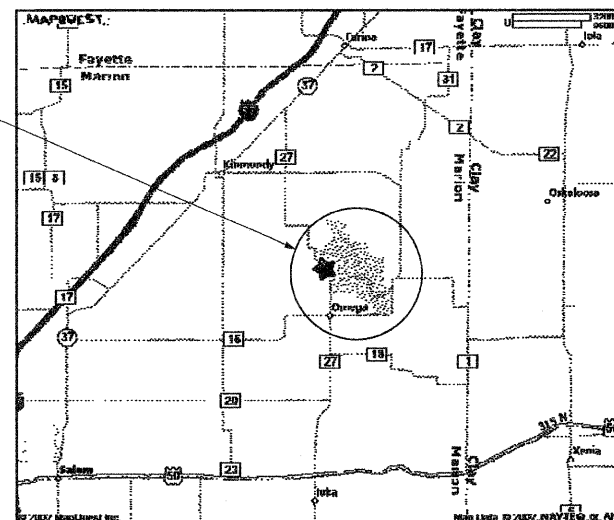
FOR INDEX OF SHEETS, SEE SHEET NO. 2



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROPOSED IMPROVEMENT
VARIOUS LOCATIONS



GROSS LENGTH OF PROJECT = 481.15 FT. = 0.09 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 3, 20 08
Eric E. Harrel
DEPUTY DIRECTOR OF HIGHWAYS

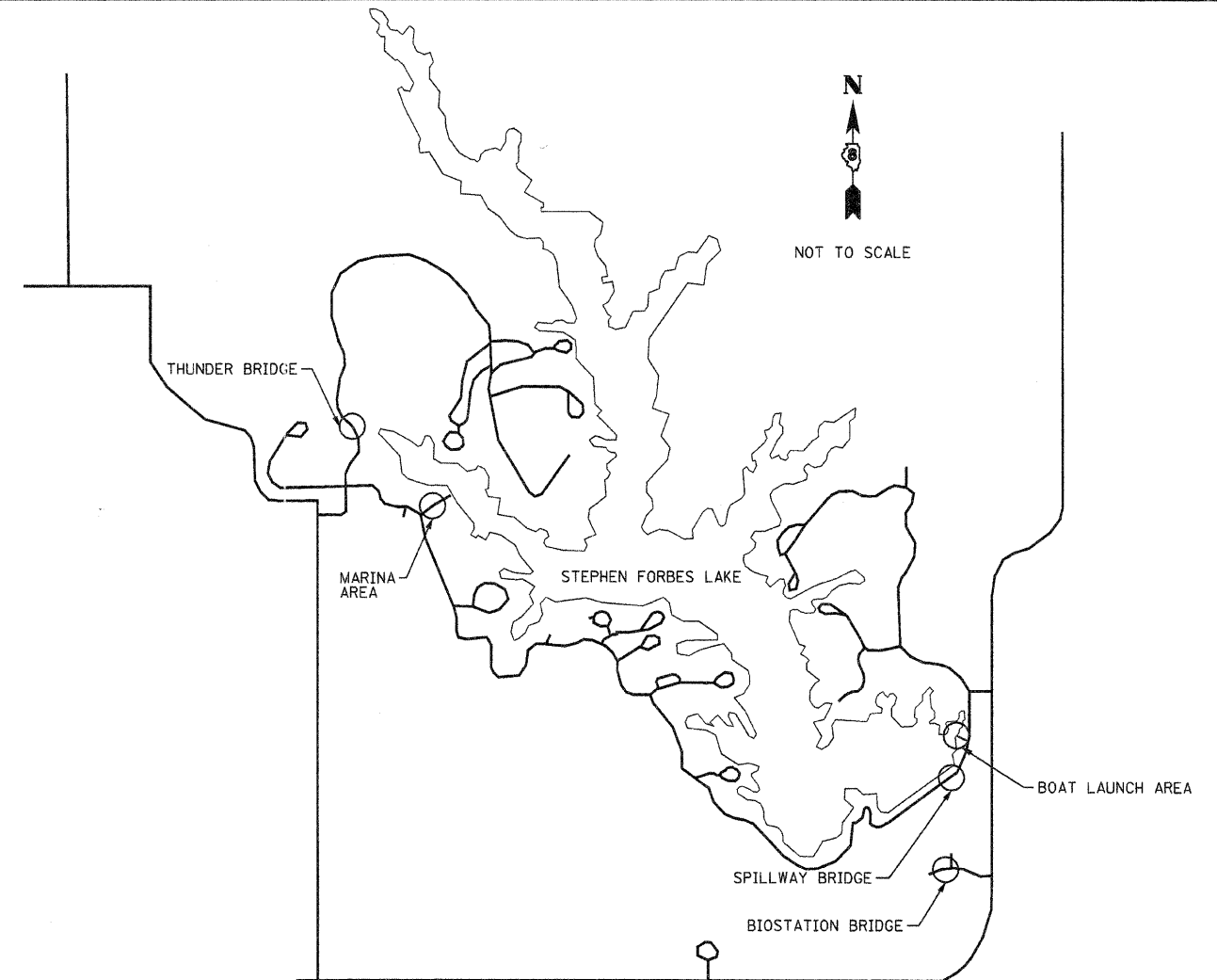
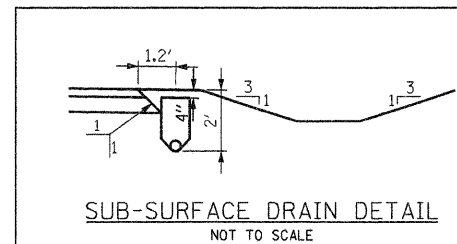
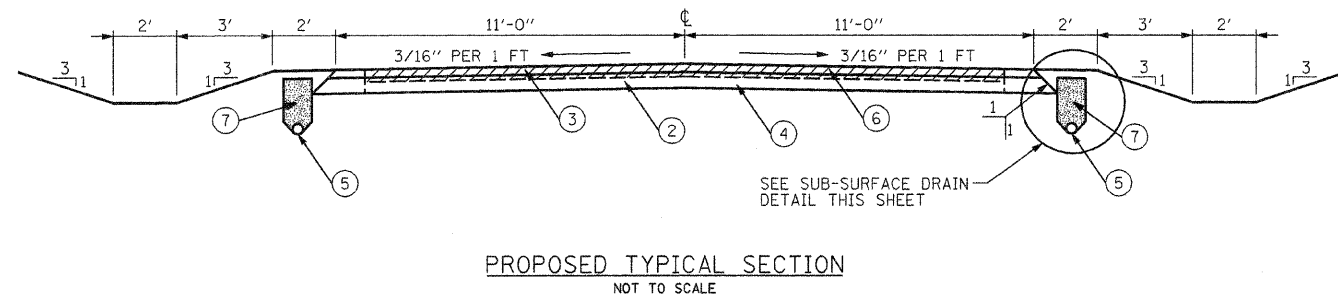
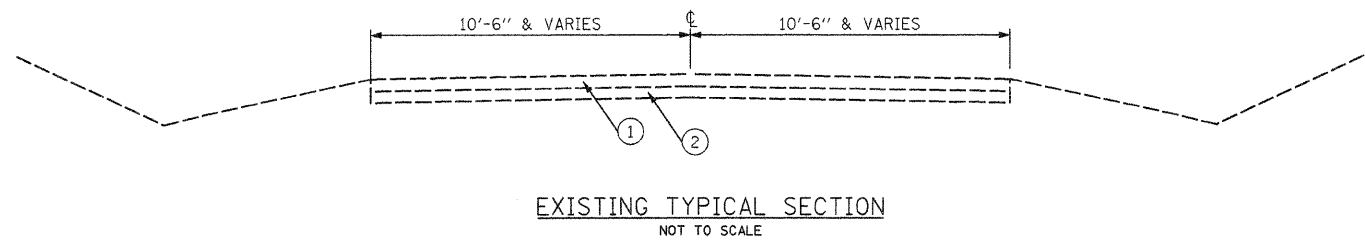
March 21, 20 08
Eric E. Harrel
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

March 21, 20 08
Christina M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

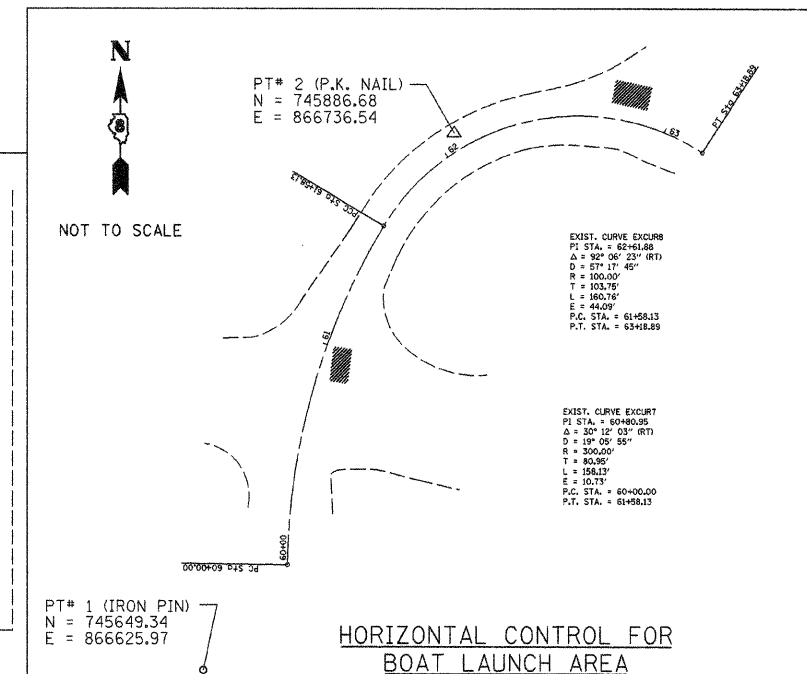
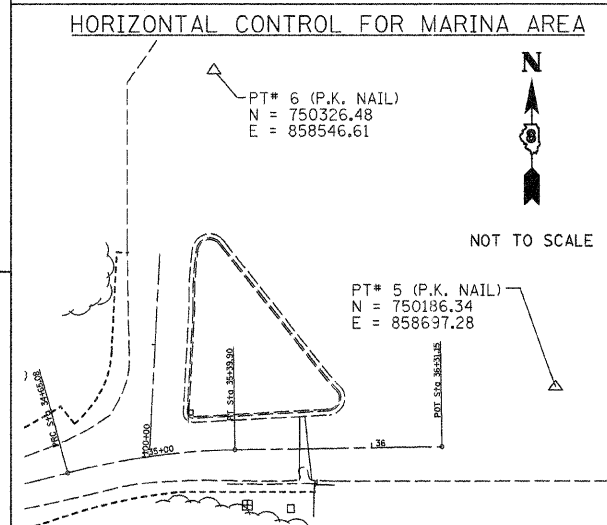
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OF THE STATE OF ILLINOIS**

JOB NO. 250-081-E VASCONCELLES ENGINEERING CORP. DESIGN FIRM REGISTRATION NUMBER 184-002107

- LEGEND**
- ① EXISTING HOT MIX ASPHALT, 5"
 - ② EXISTING AGGREGATE BASE COURSE (DEPTH UNKNOWN)
 - ③ PROPOSED HOT MIX ASPHALT SURFACE COURSE, MIX "C" N70, 3"
 - ④ PROPOSED AGGREGATE BASE COURSE, TYPE B, 6"
 - ⑤ PIPE UNDERDRAINS, 4"
 - ⑥ PROPOSED HOT MIX ASPHALT SURFACE REMOVAL, 5"
 - ⑦ TRENCH BACKFILL (FA 1 OR FA 2)



ALL COORDINATES ARE BASED ON VASCONCELLES ENGINEERING ASSUMED DATUM



FILE NAME =	USER NAME = #USER#	DESIGNED - T.T.P.	REVISED -
#FILE#		DRAWN - S.D.K.	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - R.H.D.	REVISED -
	PLOT DATE = #DATE#	DATE - 11/5/07	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS AND OVERALL LAYOUT
STEPHEN FORBES STATE PARK**

SCALE: SHEET NO. 3 OF 15 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MARION	15	3
CONTRACT NO. 44977				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TREE REMOVAL		
LOCATION	OFFSET	OVER 15
		UNIT
32+54.14	28.42 RT	19
33+48.38	27.53 RT	20
TOTAL =		39

EARTH EXCAVATION	
LOCATION (STATION TO STATION)	VOLUME (CU. YD.)
MARINIA ROAD 30+25 TO 35+85	180
TOTAL =	180

EROSION CONTROL	
LOCATION	TEMP DITCH CHECKS (EACH)
MARINA ROAD 32+25 RIGHT AND LEFT	2
33+75 RIGHT AND LEFT	2
34+70 RIGHT AND LEFT	2
35+75 RIGHT	1
TOTAL =	7

SEEDING SCHEDULE					
LOCATION (STATION TO STATION)	SEEDING CL 2 (ACRE)	NITROGEN FERT NUTR (LBS.)	PHOSPHORUS FERT NUTR (LBS.)	POTASSIUM FERT NUTR (LBS.)	AGR GROUND LIMESTONE (TON)
MARINA ROAD & THUNDER BRIDGE	0.3	27	27	27	0.6
TOTAL =	0.3	27	27	27	0.6

ROAD REHABILITATION SCHEDULE							
LOCATION	AGG BASE CSE B6 (SQ YD)	BIT MATLS PR CT (GALLONS)	AGG PR CT (TON)	HMA SC "C" N70 (TON)	HMA SURF REM 5" (SQ YD)	HMA RM OV PATCH 5" (SQ YD)	FULL DEPTH PVT PATCHING (SQ YD)
MARINA ROAD 30+45.00 TO 35+75.00	1350	506	4	115	1303		
100+11.24 TO 100+89.97	268	101	0.7	23	243		
PARK ROAD 60+85.00 TO 61+00.00						13	13
62+75.00 TO 62+90.00						18	18
THUNDER BRIDGE 9+80 TO 10+00	46	17	0.15	8	46		
11+16.50 TO 11+36.50	46	17	0.15	8	46		
TOTAL =	1710	641	5	154	1638	31	31

STRUCTURE EXCAVATION			
STRUCTURE NO.	FROM STATION	TO STATION	CU YD
061-9920 (THUNDER BRIDGE)	9+80	10+00	12
061-9920 (THUNDER BRIDGE)	11+16.50	11+36.50	12
TOTAL =			24

TREATED TIMBER	
STRUCTURE NO.	QUANTITY (F.B.M.)
061-9920 (THUNDER BRIDGE)	17595
061-9201 (BIO-STATION)	4838
TOTAL =	22433

HARDWARE	
STRUCTURE NO.	QUANTITY (POUND)
061-9920 (THUNDER BRIDGE)	1292
061-9201 (BIO-STATION)	303
TOTAL =	1595

FURNISHING STEEL PILES HP 10x42			
STRUCTURE NO.	STATION	FT LT/RT	QUANTITY (FOOT)
061-9920 (THUNDER BRIDGE)	10+00	RT	12
061-9920 (THUNDER BRIDGE)	10+00	LT	12
061-9920 (THUNDER BRIDGE)	11+16.50	RT	12
061-9920 (THUNDER BRIDGE)	11+16.50	LT	12
TOTAL =			48

DRIVING PILES			
STRUCTURE NO.	STATION	FT LT/RT	QUANTITY (FOOT)
061-9920 (THUNDER BRIDGE)	10+00	RT	12
061-9920 (THUNDER BRIDGE)	10+00	LT	12
061-9920 (THUNDER BRIDGE)	11+16.50	RT	12
061-9920 (THUNDER BRIDGE)	11+16.50	LT	12
TOTAL =			48

DRAINAGE SCHEDULE		
LOCATION	PIPE UNDERDRAINS 4" (FOOT)	CONC HDWL FOR P DRAIN (EACH)
MARINA ROAD 30+45 TO 34+66 LEFT 30+45 TO 34+58 RIGHT 34+58 34+66 LEFT	421 413 16	1
TOTAL =	850	1

REM. & REIN. OF EXISTING PLATE BEAM RAIL			
STRUCTURE NO.	STA. TO STA.	LT OR RT	QUANTITY (FOOT)
061-9920 (THUNDER BRIDGE)	10+00-11+16.5	RT	116.5
	10+00-11+16.5	LT	116.5
TOTAL =			233

MOBILIZATION	
LOCATION	QUANTITY (LSUM)
ENTIRE PROJECT	1 LSUM
TOTAL =	1 LSUM

TRAFFIC CONTROL		
LOCATION	TRAF CONT-PROT BLR 21 (LSUM)	TRAF CONT&PROT 701501 (LSUM)
ENTIRE PROJECT	1 LSUM	1 LSUM
TOTAL =	1 LSUM	1 LSUM

REMOVAL OF EXISTING BRIDGE DECK	
STRUCTURE NO.	QUANTITY (L SUM)
061-9920 (THUNDER BRIDGE)	1
TOTAL =	1

BRIDGE RAIL			
STRUCTURE NO.	STA. TO STA.	LT OR RT	QUANTITY (FOOT)
061-9920 (THUNDER BRIDGE)	10+00-11+16.5	RT	116.5
	10+00-11+16.5	LT	116.5
061-9201 (BIOSTATION BRIDGE)	80+00-81+20.5	RT	120.5
	80+00-81+20.5	LT	120.5
TOTAL =			474

ALUMINUM LADDER			
STRUCTURE NO.	STATION	FT LT/RT	QUANTITY (EACH)
061-9900 (SPILLWAY BRIDGE)	50+00	LT	1
TOTAL =			1

CONCRETE LANDING SLAB			
STRUCTURE NO.	STATION	FT LT/RT	QUANTITY (SQ FT)
061-9900 (SPILLWAY BRIDGE)	50+00	LT	25
TOTAL =			25

REMOVAL OF EXISTING RUNNERS	
STRUCTURE NO.	QUANTITY (FOOT)
061-9201 (BIOSTATION BRIDGE)	723
TOTAL =	723

REMOVAL OF EXISTING CURBS	
STRUCTURE NO.	QUANTITY (FOOT)
061-9201 (BIOSTATION BRIDGE)	241
TOTAL =	241

REMOVAL OF EXISTING DECK PLANKS	
STRUCTURE NO.	QUANTITY (SQ. FT.)
061-9201 (BIOSTATION BRIDGE)	504
TOTAL =	504

REMOVAL OF EXISTING BRIDGE RAIL	
STRUCTURE NO.	QUANTITY (FOOT)
061-9201 (BIOSTATION BRIDGE)	241
TOTAL =	241

REMOVAL OF EXISTING BACKWALLS AND WINGWALLS			
STRUCTURE NO.	STATION	FT LT/RT	QUANTITY (FOOT)
061-9920 (THUNDER BRIDGE)	10+00	RT	49
061-9920 (THUNDER BRIDGE)	10+00	LT	49
061-9920 (THUNDER BRIDGE)	11+16.50	RT	49
061-9920 (THUNDER BRIDGE)	11+16.50	LT	49
TOTAL =			196

SILICONE JOINT SEALER			
STRUCTURE NO.	STATION	FT LT/RT	QUANTITY (FOOT)
061-9900 (SPILLWAY BRIDGE)	50+00	13' LT & RT	26
061-9900 (SPILLWAY BRIDGE)	50+73.26	13' LT & RT	26
TOTAL =			52

CLEANING DECK	
STRUCTURE NO.	QUANTITY (SQ. FT.)
061-9201 (BIOSTATION BRIDGE)	1297
TOTAL =	1297

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
STEPHEN FORBES STATE PARK**

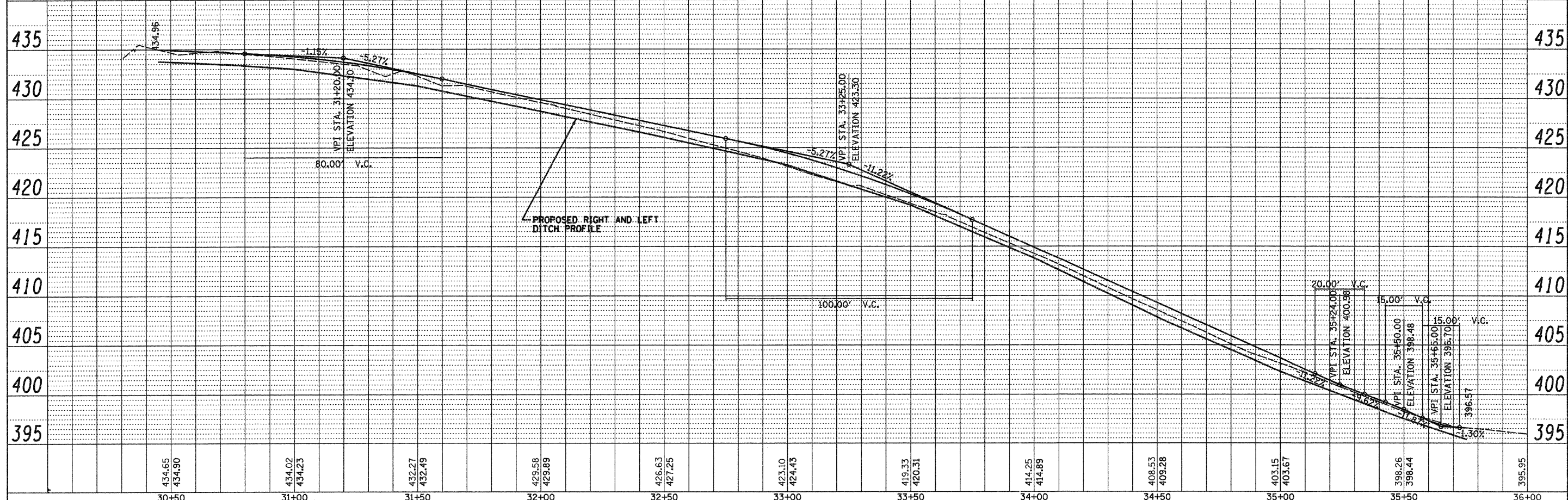
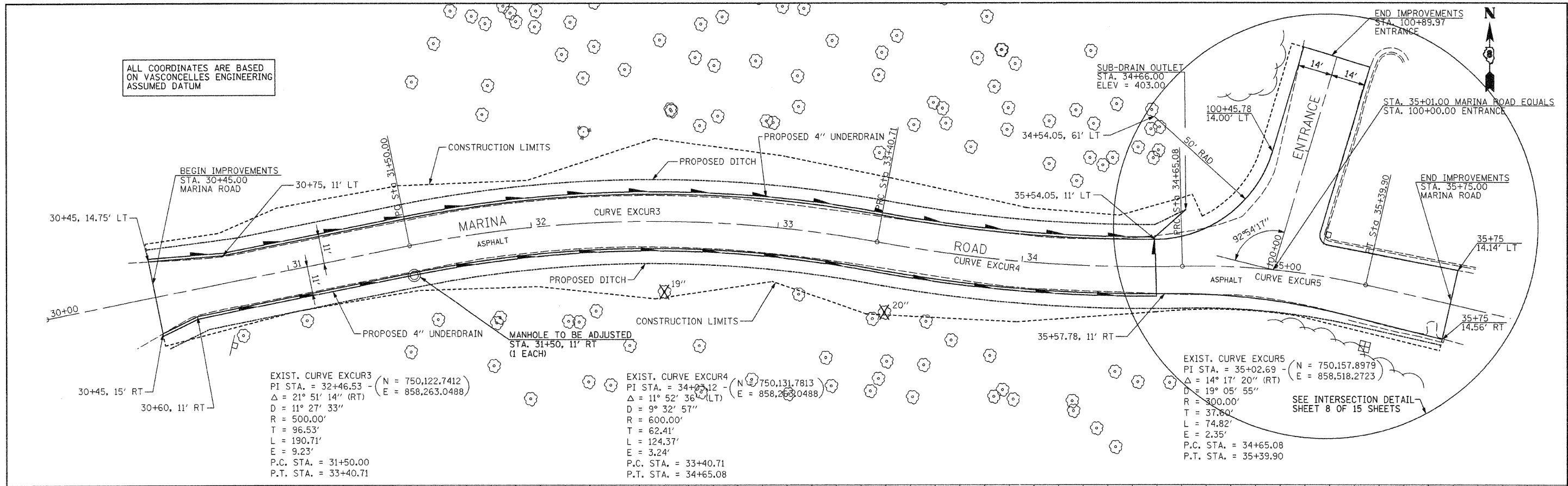
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					MARION	15	4
					CONTRACT NO. 44977		
				FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

JOB NO. 250-061-E VASCONCELLES ENGINEERING CORP. DESIGN FIRM REGISTRATION NUMBER 184-002107

ALL COORDINATES ARE BASED ON VASCONCELLES ENGINEERING ASSUMED DATUM

DATE	
BY	
DESIGNED	
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NO.	

DATE	
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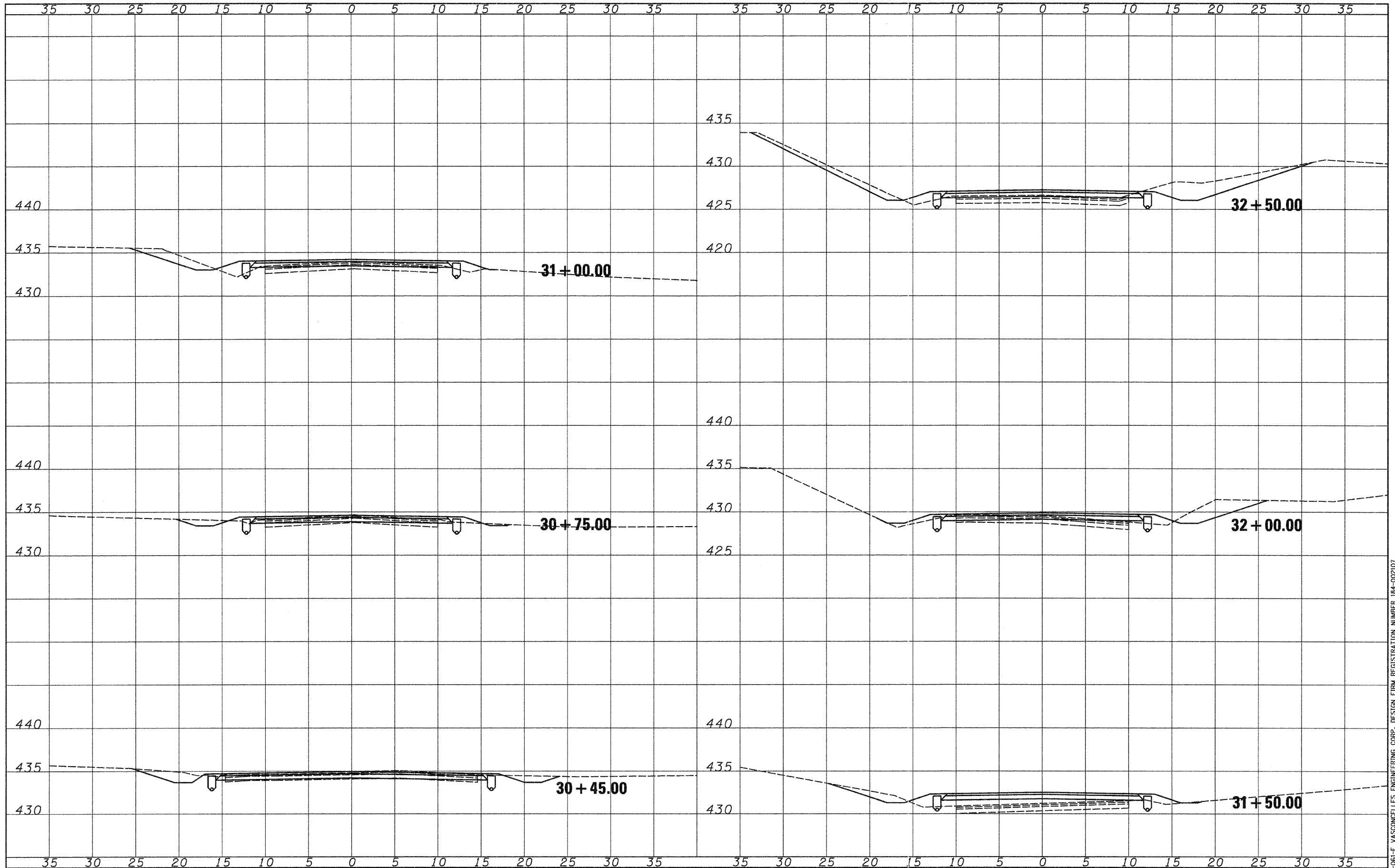


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PLOT DATE = #DATE#	CHECKED -	REVISED -	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT							

JOB NO. 250-061-E VASCONCELLES ENGINEERING CORP. DESIGN FIRM REGISTRATION NUMBER 184-002107

DATE	
BY	
FINAL SURVEY	
SURVEY	
NOTE BOOK	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
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NOTE BOOK	
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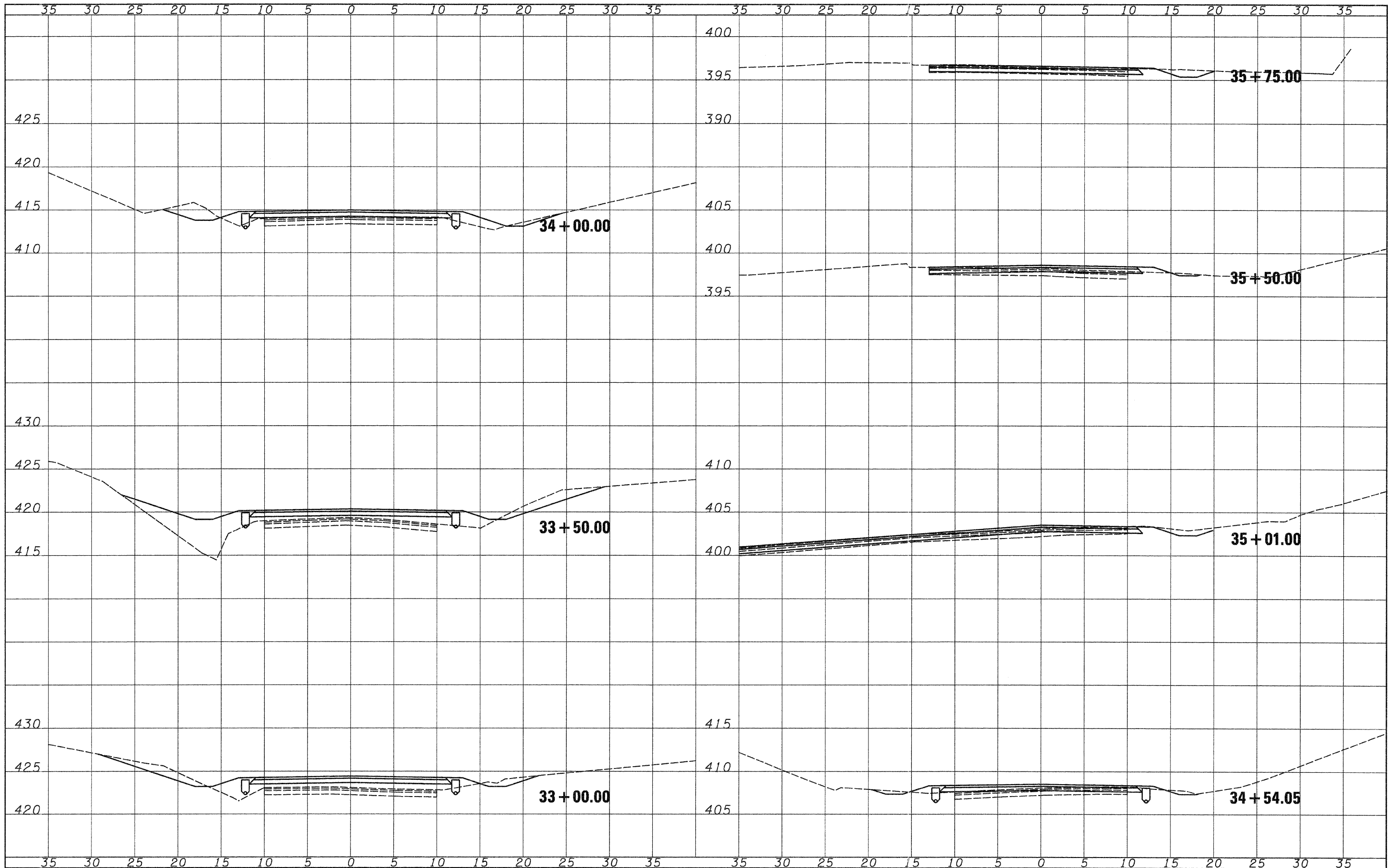


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		DRAWN - S.D.K.	REVISED -					CONTRACT NO. 44977			
		CHECKED -	REVISED -					FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			

JOB NO. 250-061-E VASCONCELLES ENGINEERING CORP. DESIGN FIRM REGISTRATION NUMBER 184-002107

DATE	
BY	
FINAL SURVEY	
NOTED SURVEY	
NOTE BOOK	
TEMPLATE	
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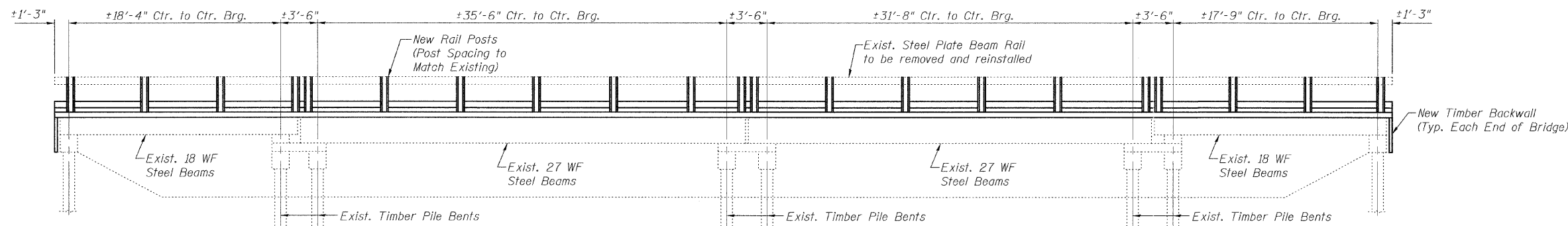


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		CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT						

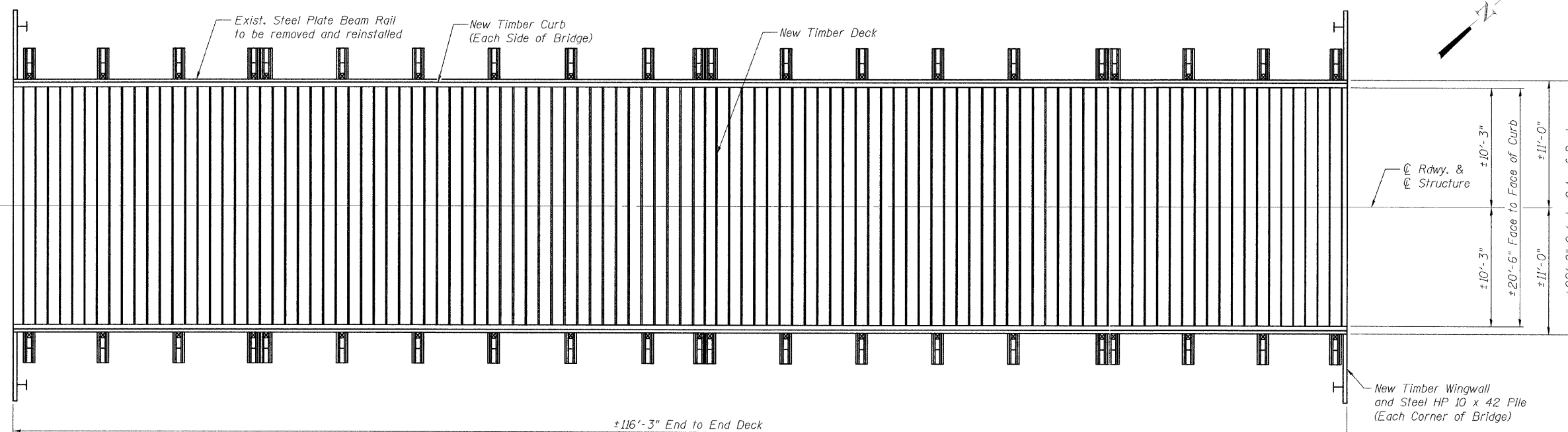
JOB NO. 250-081-E VASCONCELLES ENGINEERING CORP. DESIGN FIRM REGISTRATION NUMBER 184-002107

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MARION	15	9
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

Existing Structure: Four span bridge with steel stringers, timber deck, steel plate beam bridge rail, and timber curbs.
Proposed Improvement: Replace timber curb, timber deck planks, and guardrail.



ELEVATION



PLAN

GENERAL NOTES

All construction shall conform to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction adopted January 1, 2007.

Plan dimensions and details relative to existing structure have been taken from field measurements and are subject to nominal variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All timber shall be treated in accordance with Section 1007.12 of the Standard Specifications.

The Contractor shall predrill holes where required for driving nails. The cost of predrilling holes will be included with "Hardware".

All hardware shall be hot dip galvanized according to AASHTO M232, Class C.

STRESSES

Fb = 725 psi (Red Oak No. 2, 2" to 4" thick, 5" and wider)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Remove and Re-Erect Steel Plate Beam Guardrail, Single Rail	Foot	233
Removal of Existing Bridge Deck	Each	1
Removal of Existing Backwalls and Wingwalls	Sq. Ft.	196
Treated Timber	F.B.M.	17595
Bridge Rail	Foot	233
* Hardware	Pound	1292
Furnishing Steel Piles, HP 10x42	Foot	48
Driving Piles	Foot	48

* Includes bolts attaching curb to deck and rail posts, bolts attaching deck to steel beams, and fasteners connecting backwalls and wingwalls to new and existing piling.

DESIGNED	F.L.L.
CHECKED	M.A.H.
DRAWN	F.L.L.
CHECKED	M.A.H.



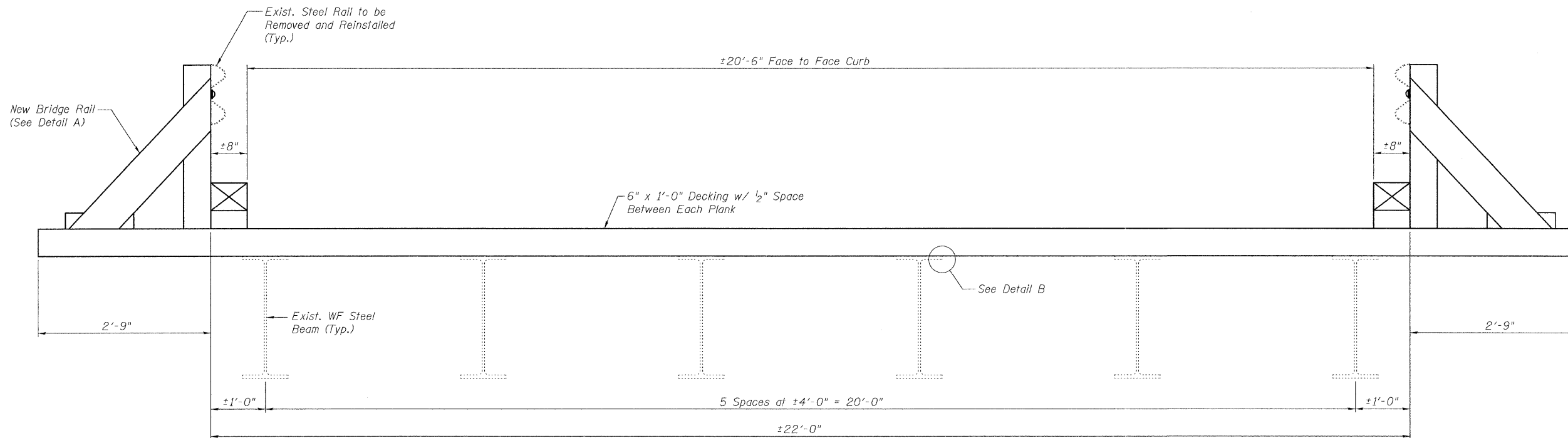
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Expiration Date: 11/30/2008

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FOR STRUCTURAL ADEQUACY ONLY

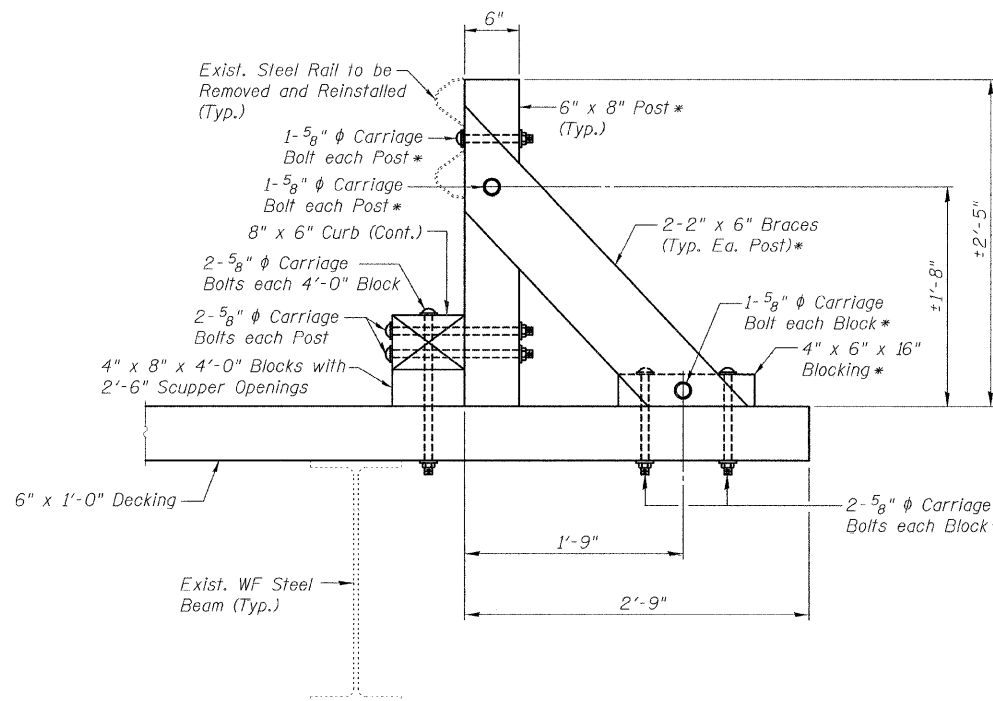
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN & ELEVATION
THUNDER BRIDGE
STEPHEN FORBES STATE PARK
MARION COUNTY
STRUCTURE NO. 061-9920

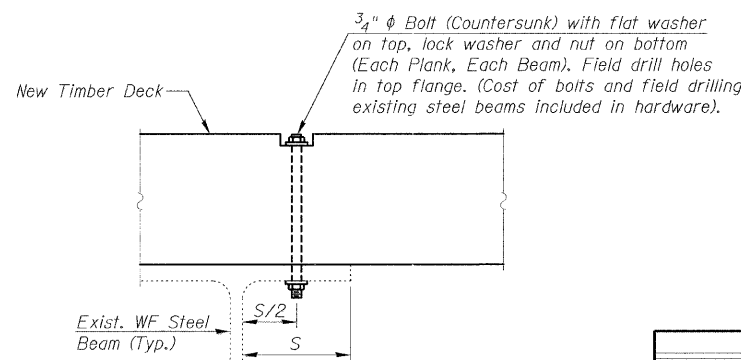
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MARION	15	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CROSS SECTION THRU BRIDGE



DETAIL A



DETAIL B

SUPERSTRUCTURE BILL OF MATERIAL

ITEM	UNIT	TOTAL
Treated Timber	F.B.M.	16795
Bridge Rail	Foot	233
Hardware	Pound	1212
Remove and Re-Erect Steel Plate Beam Guardrail, Single Rail	Foot	233

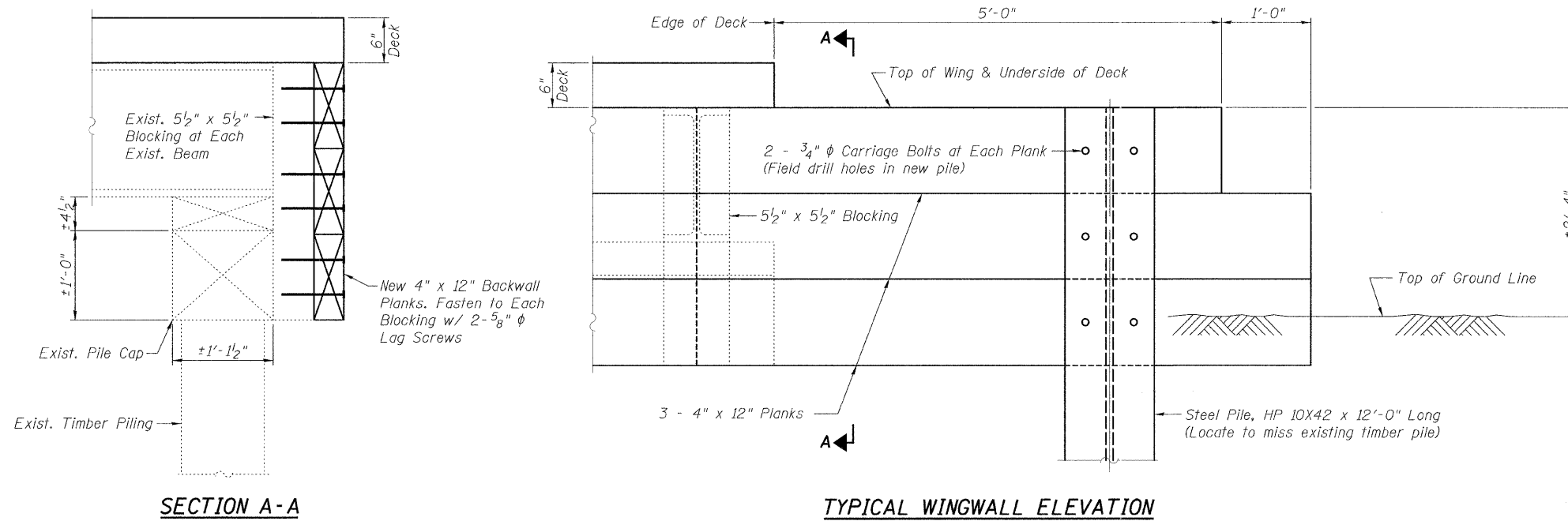
Note: The cost of the rail post, braces, blocking, and bridge rail hardware included with "Bridge Rail"

DESIGNED	F.L.L.
CHECKED	M.A.H.
DRAWN	F.L.L.
CHECKED	M.A.H.

* Included in the cost of "Bridge Rail".

SUPERSTRUCTURE DETAILS
THUNDER BRIDGE
STEPHEN FORBES STATE PARK
MARION COUNTY
STRUCTURE NO. 061-9920

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MARTON	15	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SUBSTRUCTURE BILL OF MATERIAL

ITEM	UNIT	TOTAL
Treated Timber	F.B.M.	800
Hardware	Pound	80
Furnishing Steel Piles, HP 10x42	Foot	48
Driving Piles	Foot	48
Removal of Existing Backwalls and Wingwalls	Sq. Ft.	196

Note: Steel H-Piles shall be in accordance with AASHTO M270 Grade 50.

DESIGNED	F.L.L.
CHECKED	M.A.H.
DRAWN	F.L.L.
CHECKED	M.A.H.

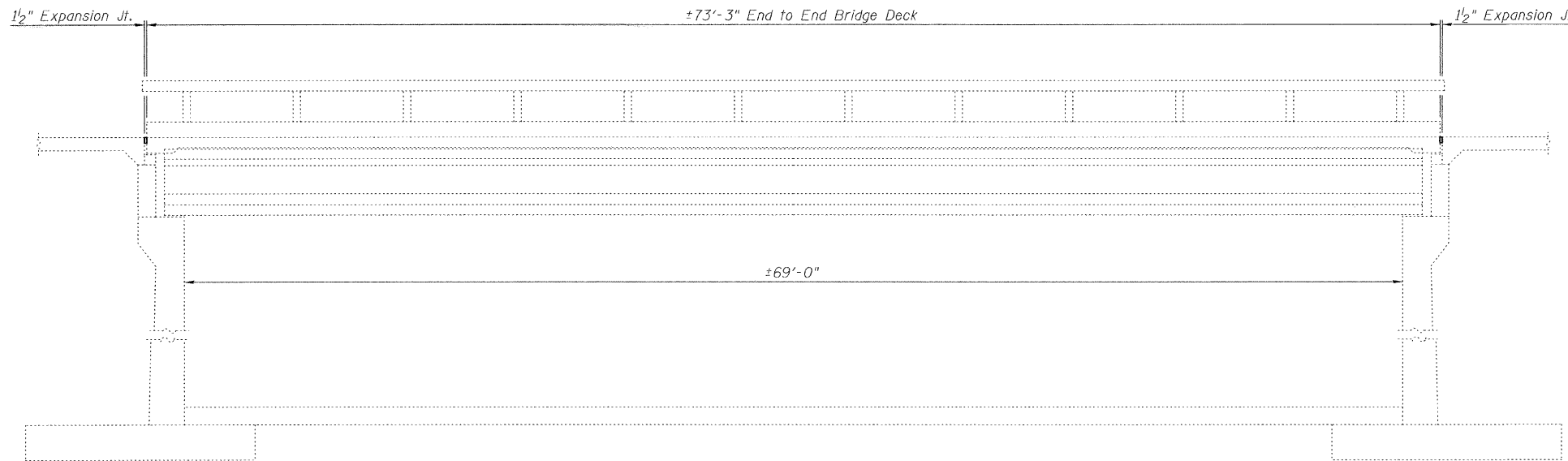
SUBSTRUCTURE DETAILS
THUNDER BRIDGE
STEPHEN FORBES STATE PARK
MARION COUNTY
STRUCTURE NO. 061-9920

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FILE NAME = #FILES#

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MARION	15	12
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Existing Structure: Single Span P.P.C. I-Beam Bridge with a R.C. Deck and Steel Plate and Beam Guardrail

Proposed Improvement: Repair existing expansion joints and add aluminum access ladder.

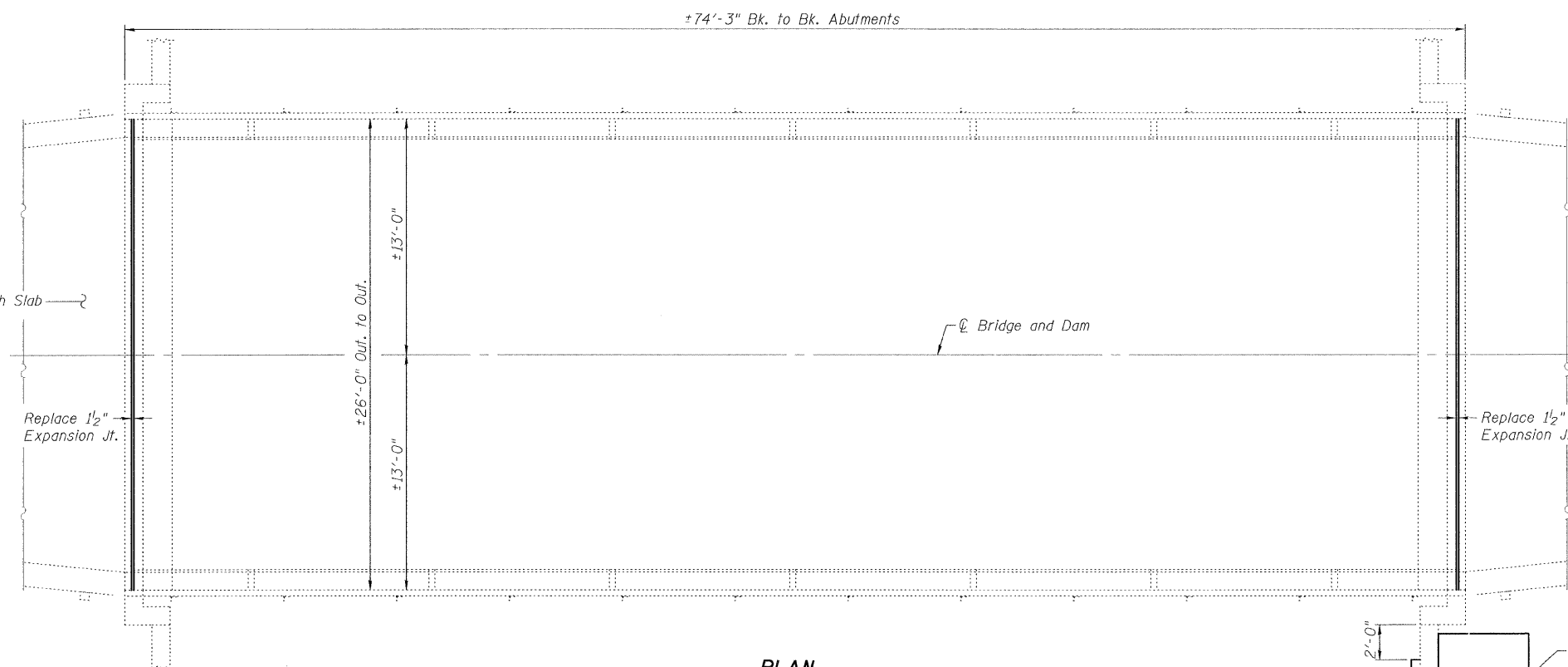


ELEVATION

GENERAL NOTES

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PLAN

TOTAL BILL OF MATERIAL

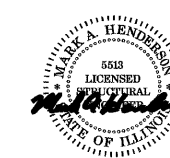
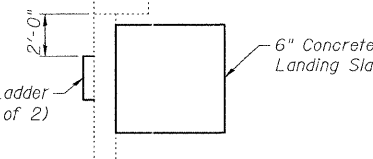
ITEM	UNIT	TOTAL
Silicone Joint Sealer	Foot	52
Access Ladder	Each	1
Concrete Landing Slab	Sq.Ft.	25

DESIGNED	F.L.L.
CHECKED	M.A.H.
DRAWN	F.L.L.
CHECKED	M.A.H.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

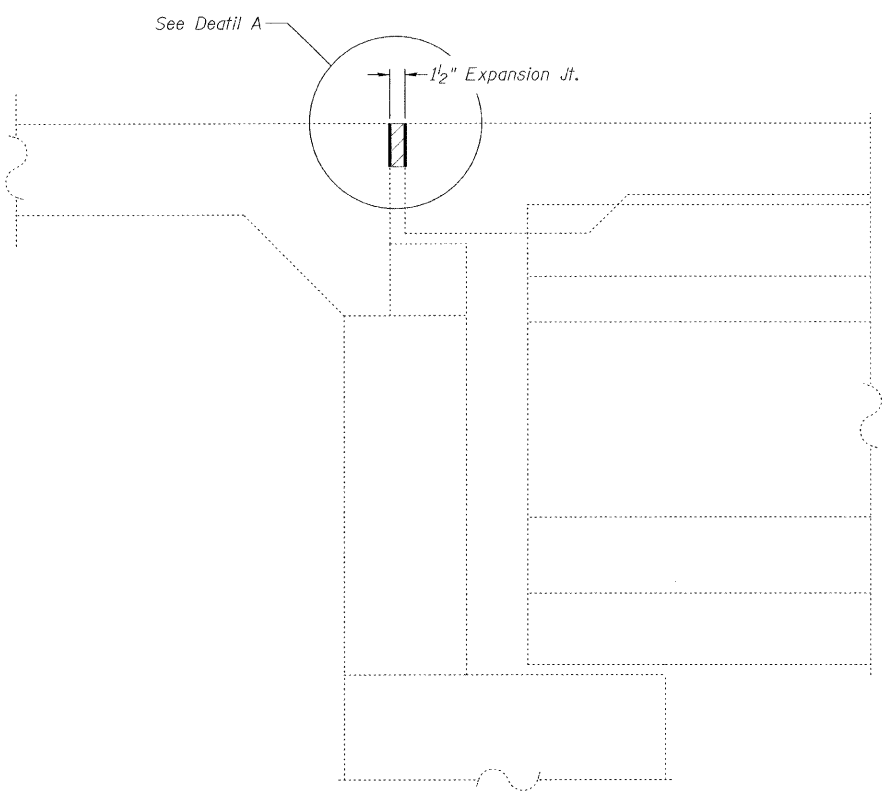
New Access Ladder
(See Sheet 2 of 2)



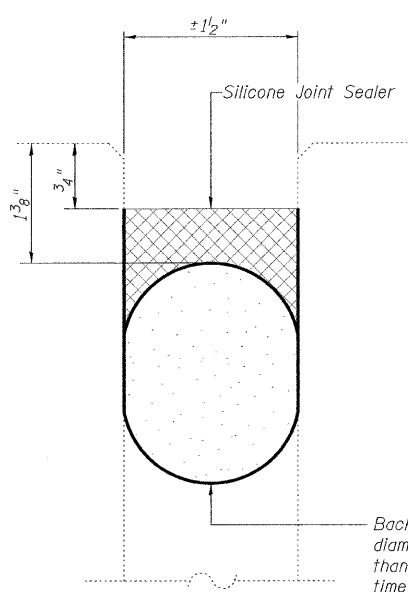
Date Signed: 2/11/2008
Expiration Date: 11/30/2008

**GENERAL PLAN & ELEVATION
SPILLWAY BRIDGE
STEPHEN FORBES STATE PARK
MARION COUNTY
STRUCTURE NO. 061-9900**

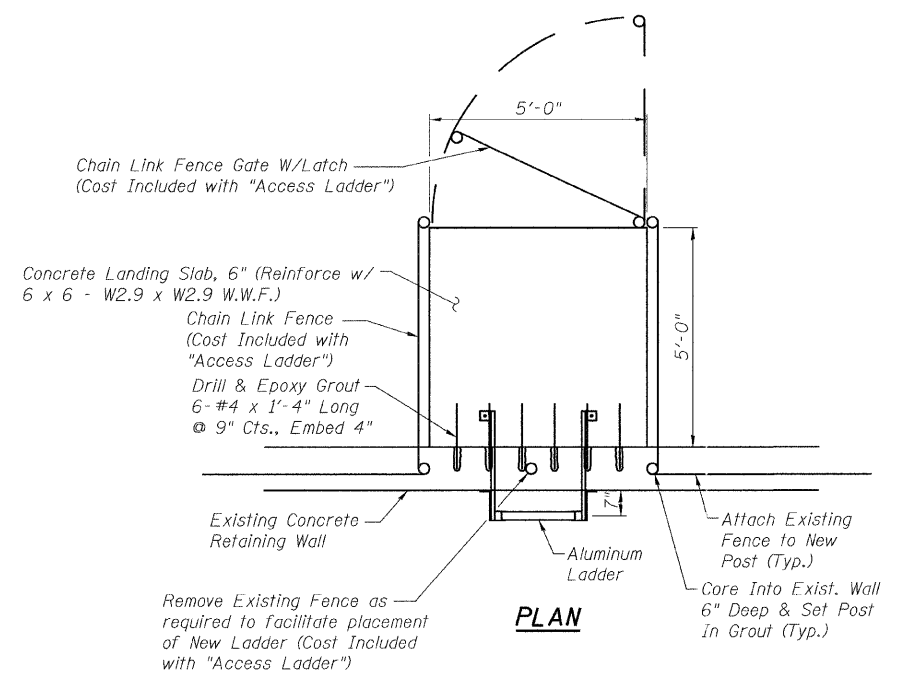
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FILE NAME = 041158



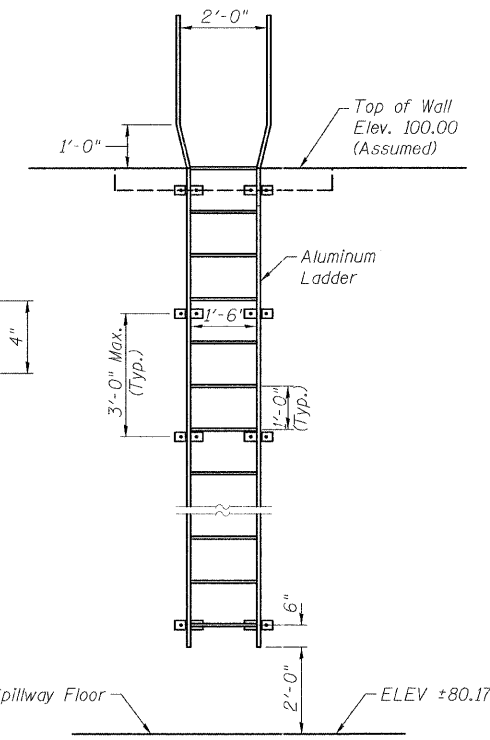
SILICONE BRIDGE JOINT SEALER DETAIL



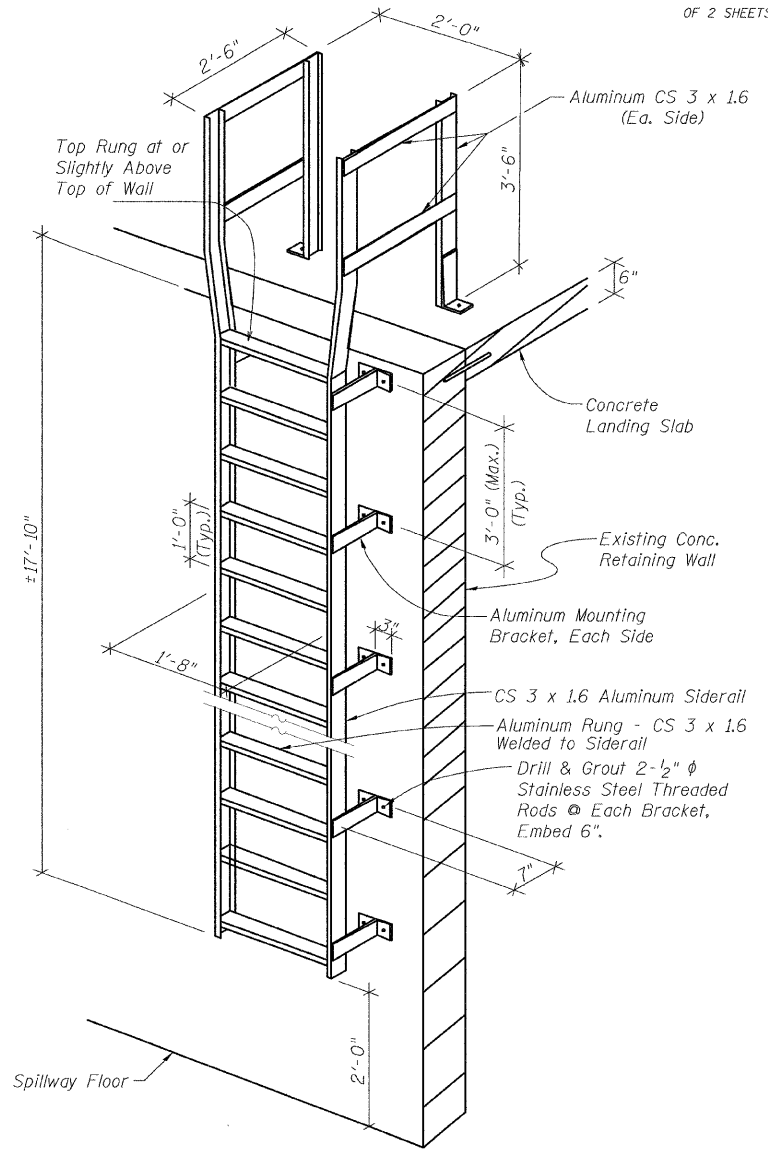
DETAIL A



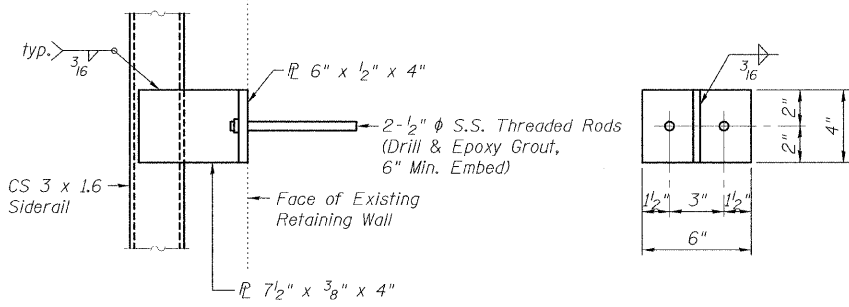
PLAN



ELEVATION



ALUMINUM LADDER DETAIL



ALUMINUM MOUNTING BRACKET

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Silicone Joint Sealer	Foot	52
Access Ladder	Each	1
Concrete Landing Slab	Sq.Ft.	25

* 6 x 6 - W2.9 x W2.9 W.W.F. and drilled and epoxy grouted reinforcement bars included with "Concrete Landing Slab"

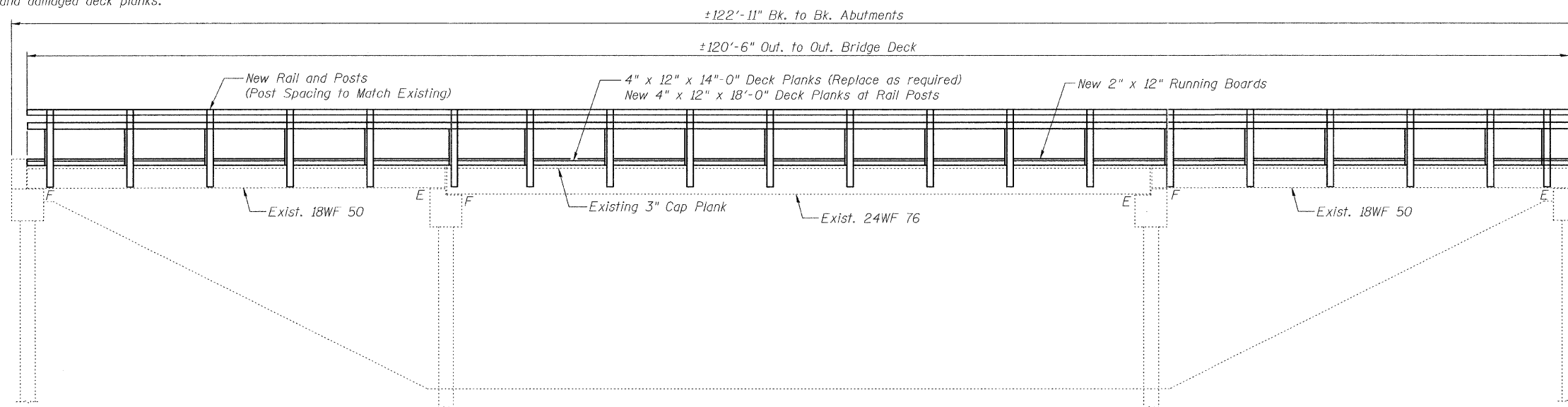
DESIGNED	F.L.L.
CHECKED	M.A.H.
DRAWN	F.L.L.
CHECKED	M.A.H.

**SUPERSTRUCTURE DETAILS
SPILLWAY BRIDGE
STEPHEN FORBES STATE PARK
MARION COUNTY
STRUCTURE NO. 061-9900**

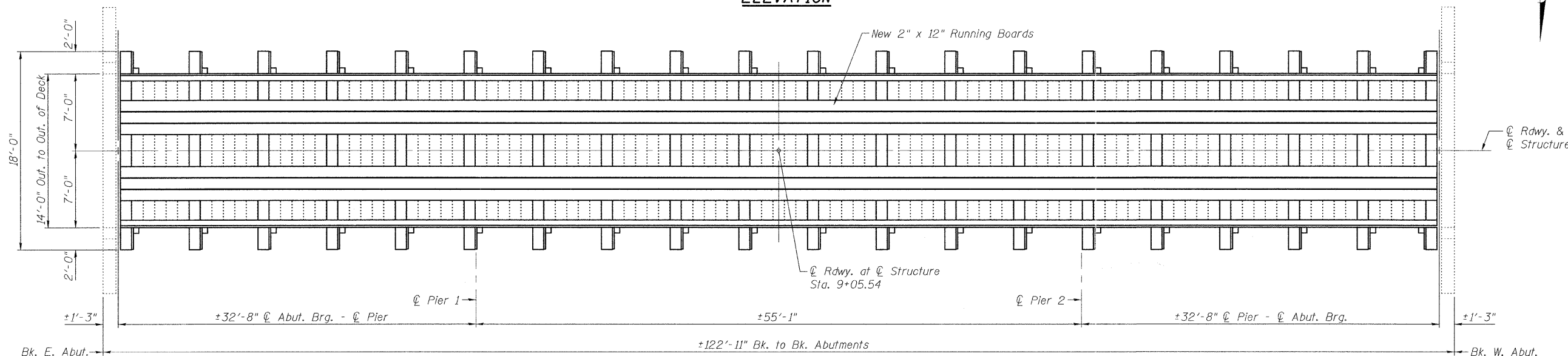
PLT DATE = 8/27/88
FILE NAME = 011553

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MARION	15	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

Existing Structure: Three span bridge with steel stringers, timber deck, timber running boards, and timber guardrail.
Proposed Improvement: Clean timber deck, remove and replace timber running boards, timber curb, timber guardrail, and damaged deck planks.



ELEVATION



PLAN

GENERAL NOTES

All construction shall conform to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction adopted January 1, 2007.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All timber shall be treated in accordance with Section 1007.12 of the Standard Specifications.

The Contractor shall predrill holes where required for driving nails. The cost of predrilling holes will be included with "Hardware".

All hardware shall be hot dip galvanized according to AASHTO M232, Class C.

DESIGNED	F.L.L.
CHECKED	M.A.H.
DRAWN	F.L.L.
CHECKED	M.A.H.

PLT DATE = #DATE#
FILE NAME = #FILES#

STRESSES

Fb = 1050 psi (Red Oak No. 2, 2" to 4" thick, 5" and wider)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal Of Existing Runners	Sq. Ft.	723
Removal Of Existing Curbs	Foot	241
Removal Of Existing Bridge Rail	Foot	241
* Removal Of Existing Deck Planks	Sq. Ft.	504
Cleaning Deck	Sq. Ft.	1297
Treated Timber	F.B.M.	4838
Bridge Rail	Foot	241
** Hardware	Pound	303

* Includes deck planks at rail posts and estimated 10% of remaining deck planks.

** Includes attachment of curb to deck and rail posts, deck to exist. cap plank, and runners to deck planks.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

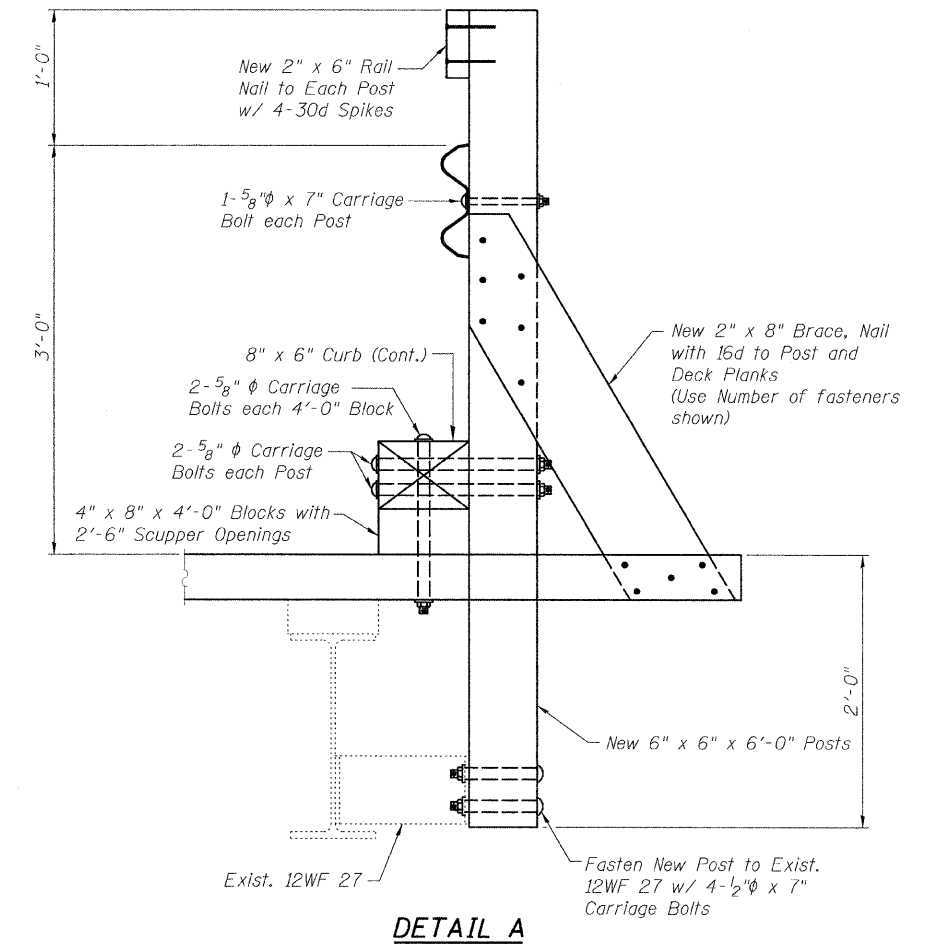
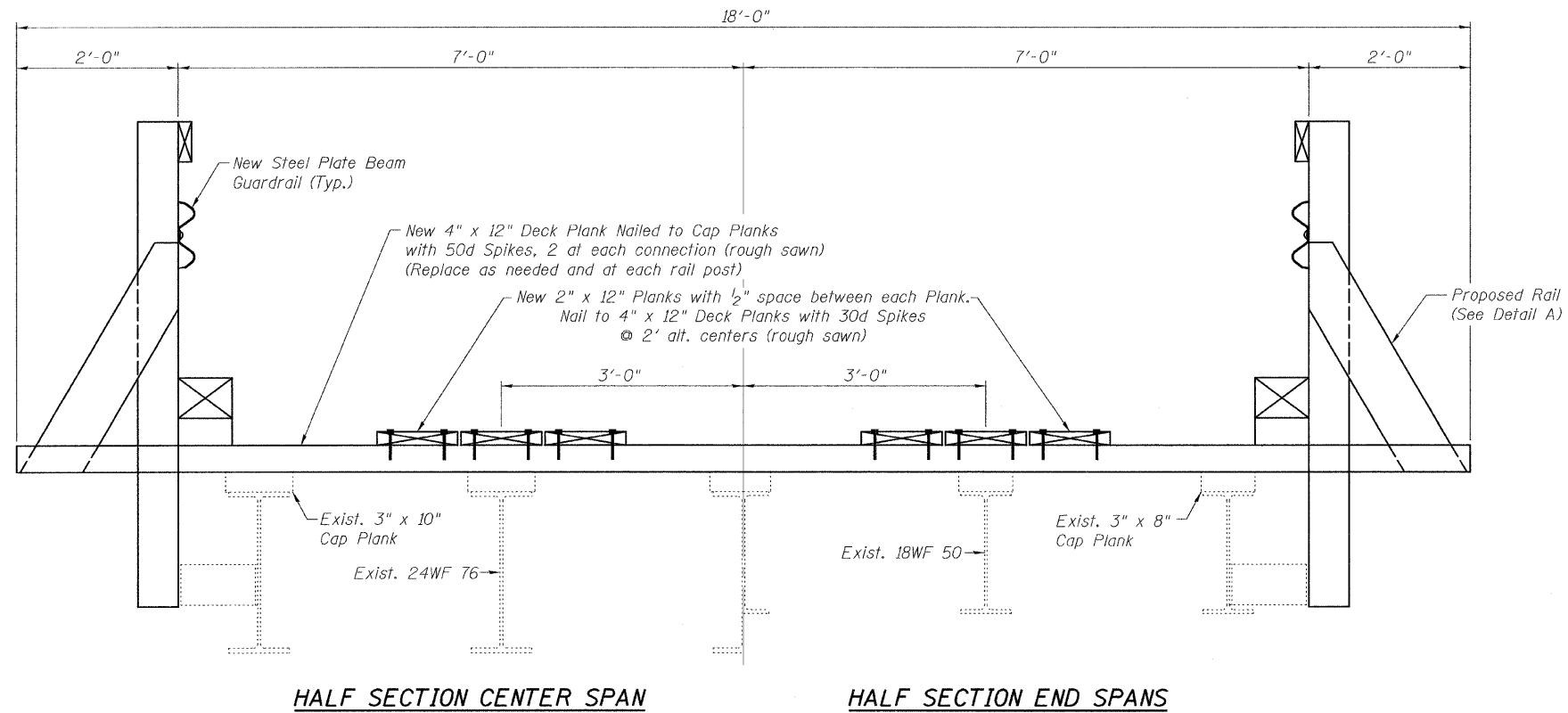
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRATION DATE: 11/30/08

GENERAL PLAN & ELEVATION
BIOSTATION BRIDGE
STEPHEN FORBES STATE PARK
MARION COUNTY
STRUCTURE NO. 061-9201

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MARION	15	15
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



Note: Cost of 2 x 8 brace, new post, steel plate beam section, 2 x 6 top rail, and bridge rail hardware included with "Bridge Rail".

DESIGNED	F.L.L.
CHECKED	M.A.H.
DRAWN	F.L.L.
CHECKED	M.A.H.

PLOT DATE = #DATE#
FILE NAME = #FILES#

SUPERSTRUCTURE DETAILS
BIOSTATION BRIDGE
STEPHEN FORBES STATE PARK
MARION COUNTY
STRUCTURE NO. 061-9201