

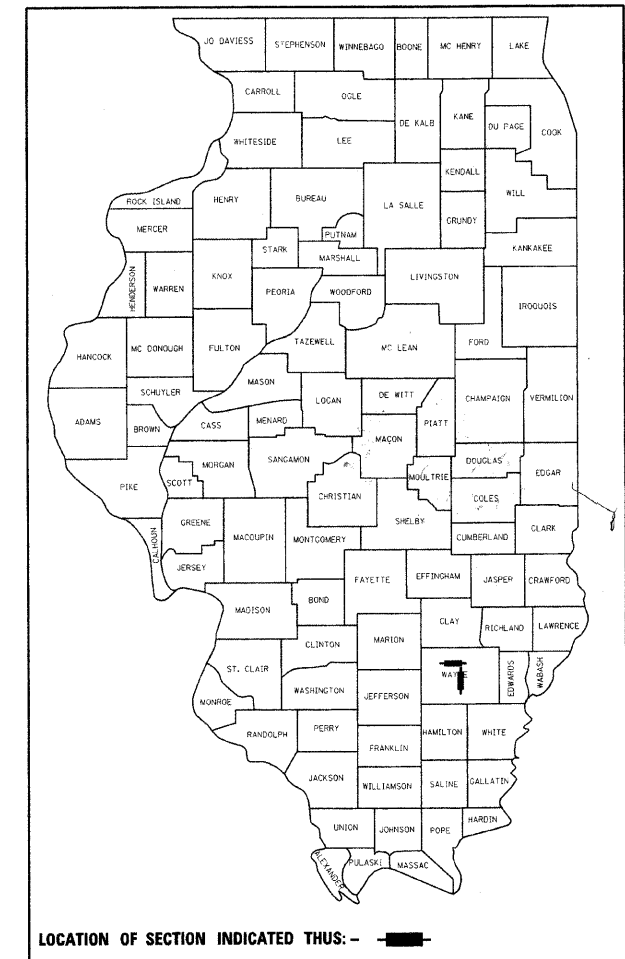
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1,10BR1)B-1	WAYNE	67	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 74214		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 328 (US 45)
SECTION (9BR1,10BR1)B-1
PROJECT: BRF-0328(026)
BRIDGE REPLACEMENTS
WAYNE COUNTY

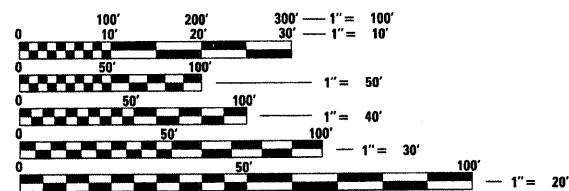
FOR INDEX OF SHEETS, SEE SHEET NO. 2

D-97-001-07



C-97-001-07

2005 ADT = 3500



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

PROJECT ENGINEER: MARK DAUGHERTY
PROJECT MANAGER: BRIAN LEWIS

CONTRACT NO. 74214

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED January 13, 2009

Ry - Rush
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27, 2009
Charles G. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2007; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" INDICATED ON THE CHECK SHEET, AND "THE SPECIAL PROVISIONS" INCLUDED IN THE PROPOSAL.

THE WORK INCLUDED IN THIS SECTION CONSISTS OF TOTAL REPLACEMENT OF THE EXISTING STRUCTURES ALONG WITH NEW FULL-DEPTH ASPHALT PAVEMENT ON A RAISED VERTICAL PROFILE AT THE MARTIN CREEK LOCATION, PCC PAVEMENT ON EXISTING PROFILE AT THE BRANCH OF ELM RIVER LOCATION, EARTHWORK, SHOULDERS, GUARDRAIL, PAVEMENT MARKINGS, ETC.

THE PROPOSED PROJECT IS LOCATED ON US45 1.3 MILES SOUTH OF GEFF AND 1.5 MILES EAST OF CISNE IN WAYNE COUNTY.

ALL ELEVATIONS SHOWN IN PLANS ARE BASED ON U. S. G. S. DATUM.

AGGREGATE SHOULDERS TYPE B SHALL BE CRUSHED STONE, CRUSHED CONCRETE, OR RAP.

CONSTRUCT SURFACE COURSE LIFT OF HMA STABILIZATION AROUND POSTS OF PROPOSED GUARDRAIL BEFORE ERECTING RAIL ELEMENTS.

RELOCATION OF EXISTING ELECTRICAL SERVICE FOR FLASHING BEACON EAST OF CISNE MUST BE PERFORMED IN COORDINATION WITH WAYNE-WHITE ELECTRIC COOPERATIVE'S RELOCATION OF THE POWER POLES AT THIS LOCATION. PROVIDE ONE WEEK OF ADVANCE NOTICE TO THE COOPERATIVE BEFORE PERFORMING THIS WORK.

NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 2 FOOT MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.

THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED WITH THE TRENCH AND BACKFILL FOR ELECTRICAL WORK PAY ITEM.

THE NUMBER OF CONDUCTORS FOR ELECTRIC CABLES AS SHOWN ON THE PLANS SHALL BE THE MINIMUM NUMBER OF CONDUCTORS FURNISHED FOR EACH LOCATION. THE CONTRACTOR MAY SUBSTITUTE AN ELECTRIC CABLE WITH MORE CONDUCTORS THAN SPECIFIED BUT NO ADDITIONAL COMPENSATION WILL BE MADE FOR THE EXTRA CONDUCTORS. ALL NEW SIGNAL WIRE SHALL EXTEND FROM THE CONTROLLER TO THE SIGNAL. SPLICES WILL NOT BE ALLOWED.

PROVIDE TEMPORARY BRIDGE TRAFFIC SIGNALS DURING STAGE 1 FOR THE PUBLIC ROAD APPROACH SOUTH OF MARTIN CREEK ON THE WEST SIDE. CLOSE THIS ROAD USING STANDARD BLR 22-5 DURING STAGE 2. COST SHALL BE INCLUDED IN OTHER CONTRACT ITEMS.

ALL WORK NECESSARY TO ATTACH THE PIPE DRAIN TO THE ABUTMENT DRAIN PIPE, LAYING THE PIPE DRAINS AND INSTALLING THE PIPE DRAINS INTO THE CONCRETE HEADWALLS SHALL BE INCLUDED IN THE BID PRICE FOR PIPE DRAINS 4".

THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE. FIELD MARKINGS OF FACILITIES IN CRITICAL AREAS MAY BE OBTAINED BY PROVIDING A MINIMUM OF 96 HOURS ADVANCE NOTICE THROUGH THE J.U.L.I.E. SYSTEM BY CALLING 800-892-0123.

RIGHT-OF-WAY MARKERS SHALL BE ERECTED WITH THE BACK FACE OF THE MARKER ON THE RIGHT-OF-WAY LINE UNLESS THE NEW RIGHT-OF-WAY LINE HAS BEEN SURVEYED AND PINNED, IN WHICH INSTANCE THE RIGHT-OF-WAY MARKER WILL BE ERECTED 12 INCHES INSIDE THE NEW RIGHT-OF-WAY LINE.

THE CONTRACTOR SHALL PROVIDE INTERNET ACCESS TO THE BITUMINOUS PLANT QUALITY CONTROL LAB SO THAT BITUMINOUS PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICES FOR OTHER ITEMS IN THE CONTRACT.

THE RESIDENT ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE CURING TIME FOR THE VARIOUS BITUMINOUS COURSES.

BITUMINOUS MATERIALS (PRIME COAT) SHALL BE EITHER RC-70 OR SS-1HP.

COST OF REMOVAL OF TEMPORARY RAMP SHALL BE INCLUDED IN THE UNIT PRICE FOR TEMPORARY RAMP.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

APPLICATION	AC/PG	DESIGN AIR VOIDS	MIXTURE COMPOSITION	FRICTION AGGREGATE
SURFACE COURSE	PG 64-22	4.0% @ N=70	IL - 9.5	MIXTURE C
BINDER COURSE	PG 64-22	4.0% @ N=70	IL - 19.0	N/A
LEVELING BINDER	PG 64-22	4.0% @ N=70	IL - 9.5	MIXTURE C
SHOULDER (BOTTOM LIFT)	PG 58-22	4.0% @ N=70	IL - 19.0	N/A
SHOULDER (TOP LIFT)	PG 58-22	4.0% @ N=50	IL - 9.5	MIXTURE C
INCIDENTAL SURFACING	PG 64-22	4.0% @ N=50	IL - 9.5	MIXTURE C
BASE COURSE WIDENING	PG 64-22	4.0% @ N=70	IL - 19.0	N/A

INDEX OF SHEETS

SHEET NO	TITLE
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10	QUANTITY SCHEDULES
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17-19	BRIDGE APPROACH PAVEMENT DETAILS
20-22	EROSION CONTROL PLAN
23	FLASHING BEACON DETAILS
24-40	STRUCTURE PLANS - MARTIN CREEK
41-49	STRUCTURE PLANS - BRANCH OF ELM RIVER
50-67	CROSS SECTIONS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLLOWING THE LAST NUMBERED SHEET OF THE PLANS.

000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420601-05	7.2 M (24') PCC PAVEMENT
420701-02	PAVEMENT FABRIC
515001-03	NAME PLATE FOR BRIDGES
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
630001-08	STEEL PLATE BEAM GUARDRAIL
630101-08	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630201-06	PCC/BIT STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 GUARDRAIL TERMINALS
631031-07	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT-OF-WAY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-02	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-10	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-03	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
704001-05	TEMPORARY CONCRETE BARRIER
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
BLR 22-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONST. ON RURAL LOCAL HWYS.

FILE NAME =	USER NAME = steffennk	DESIGNED - 08-03-99	REVISED - 03-13-07	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & INDEX OF SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISD -	CONTRACT NO. 74214							
PLOT DATE = 1/12/2009	DATE -	REVISD -	SCALE:			SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE			
				1000-2A	X071-2A	J000-2A	X028-2A
20100500	TREE REMOVAL, ACRES	ACRE	0.1			0.1	
20200100	EARTH EXCAVATION	CU YD	808	309		499	
20300100	CHANNEL EXCAVATION	CU YD	1127	1127			
20400800	FURNISHED EXCAVATION	CU YD	969	692		277	
20600110	GRANULAR EMBANKMENT, SPECIAL	TON	1140	1140			
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	138		138		
* 21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	466	305		161	
* 25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	1.5	1		0.5	
* 25100630	EROSION CONTROL BLANKET	SQ YD	1560	947		613	
* 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150	100		50	
28000300	TEMPORARY DITCH CHECKS	EACH	6	3		3	
28000400	PERIMETER EROSION BARRIER	FOOT	1110	860		250	
28100107	STONE RIPRAP, CLASS A4	SQ YD	1320		1155		165
28200200	FILTER FABRIC	SQ YD	1320		1155		165
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	371			371	
35650700	BASE COURSE WIDENING	SQ YD	371	276		95	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	585	585			
40600300	AGGREGATE (PRIME COAT)	TON	4	4			
40600645	LEVELING BINDER (MACHINE METHOD), N90	TON	191	191			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	204	204			
40600990	TEMPORARY RAMP	SQ YD	71	71			
40603345	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	51	51			
40701956	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"	SQ YD	958	958			
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	24	24			
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	332			332	
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	270	270			
42001200	PAVEMENT FABRIC	SQ YD	332			332	
44000100	PAVEMENT REMOVAL	SQ YD	403	180		223	
44004250	PAVED SHOULDER REMOVAL	SQ YD	276	276			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	10	10			
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	661	369		292	
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	816	453		363	
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	1136	773		363	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	15	15			
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	2		1		1
50200100	STRUCTURE EXCAVATION	CU YD	154		154		
50300100	FLOOR DRAINS	EACH	10		10		
50300225	CONCRETE STRUCTURES	CU YD	37.8		37.8		

* Specialty Items

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

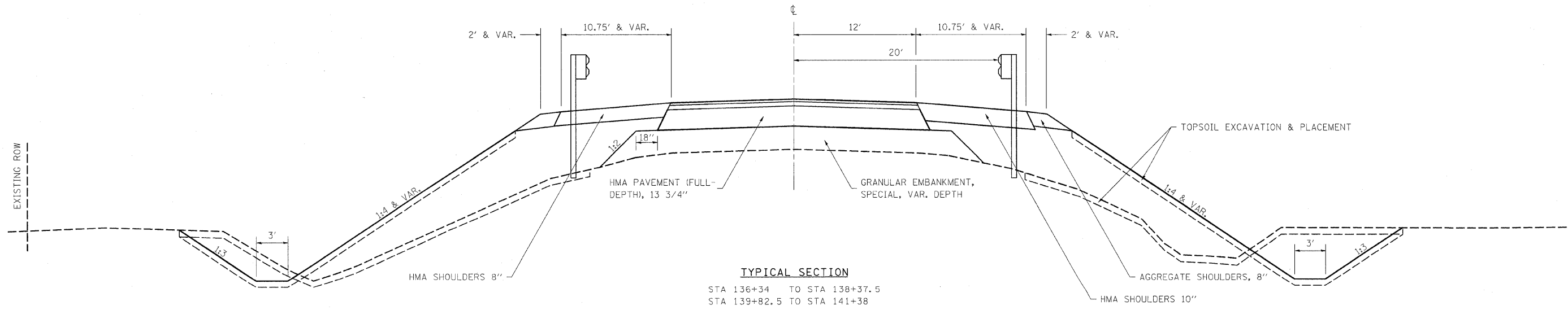
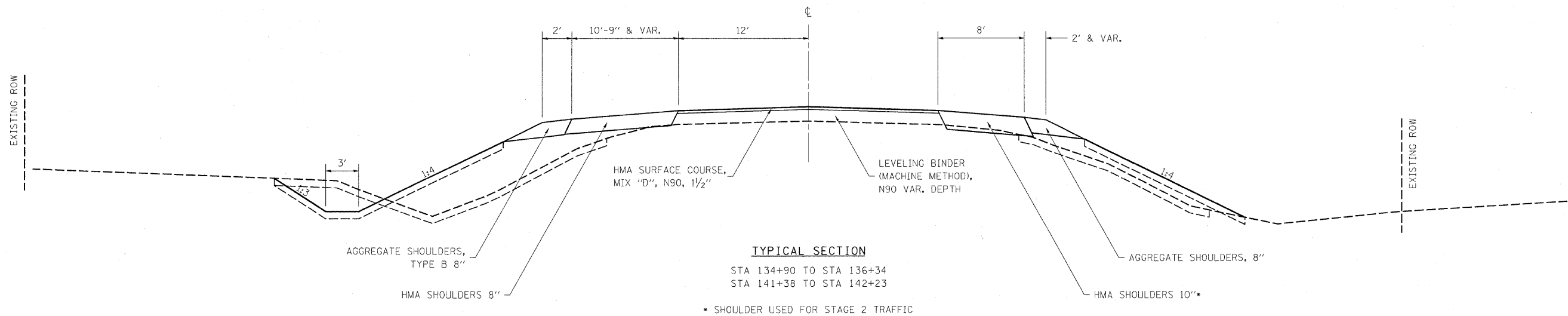
SUMMARY OF QUANTITIES

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

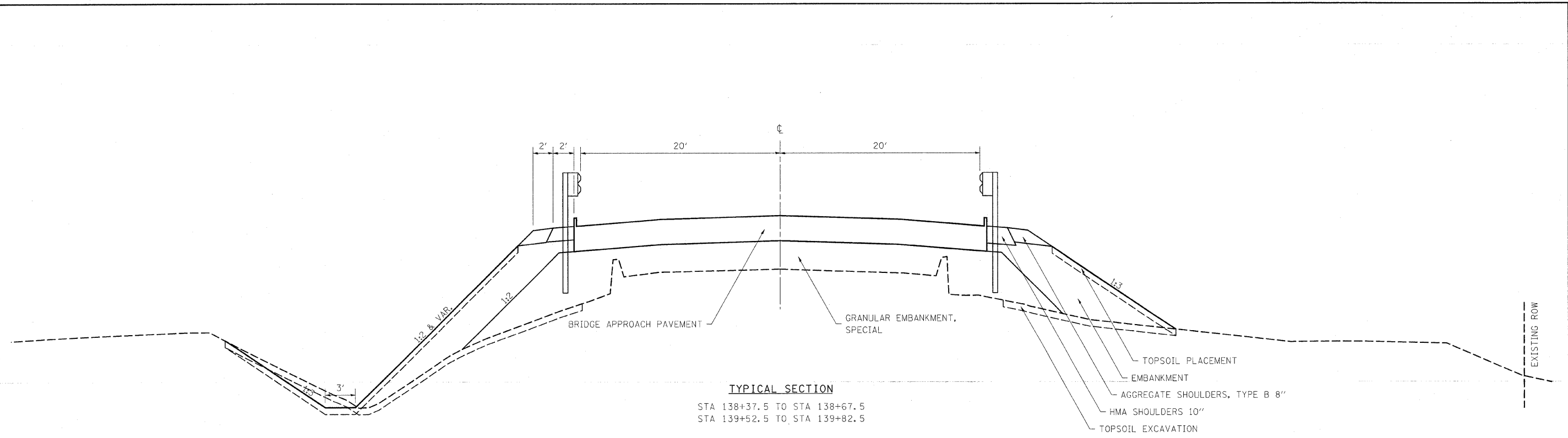
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BRI, 10BRI)B1	Wayne	67	3
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74214	

SUMMARY OF QUANTITIES			80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT		1000-2A	X071-2A	J000-2A	X028-2A
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	4567	2992		1575	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	12	10		2	
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	2	2			
* 78100300	REPLACEMENT REFLECTOR	EACH	18	10		8	
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	22	14		8	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	4		4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	964	470		494	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	10			
* 80500105	SERVICE INSTALLATION, TYPE A (MODIFIED)	EACH	1			1	
* 81012500	CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	35			35	
* 81100500	CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., GALVANIZED STEEL	FOOT	14			14	
* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	35			35	
* 85800100	FLASHER CONTROLLER	EACH	1			1	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	60			60	
* 88040030	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 1-SECTION, POST MOUNTED	EACH	1			1	
* 88200400	TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC	EACH	1			1	
* 89502400	REMOVE EXISTING FLASHING BEACON INSTALLATION COMPLETE	EACH	1			1	
* A2001016	TREE, ACER RUBRUM (RED MAPLE), 2" CALIPER, BALLED AND BURLAPPED	EACH	5	5			
* A2001716	TREE, ACER SACCHARUM (SUGAR MAPLE), 2" CALIPER, BALLED AND BURLAPPED	EACH	5	5			
* B2001116	TREE, CERCIS CANADENSIS (EASTERN REDBUD) 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	5	5			
* B2001316	TREE, CORNUS FLORIDA (FLOWERING DOGWOOD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	5	5			
X0322050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	18	10		8	
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	136		136		
20030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	4	2		2	
20030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	2		2	
*Specialty Hems							

Rev.



FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS S.N. 096-0024 (MARTIN CREEK)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 1/12/2009	DATE -	CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
								CONTRACT NO. 74214				

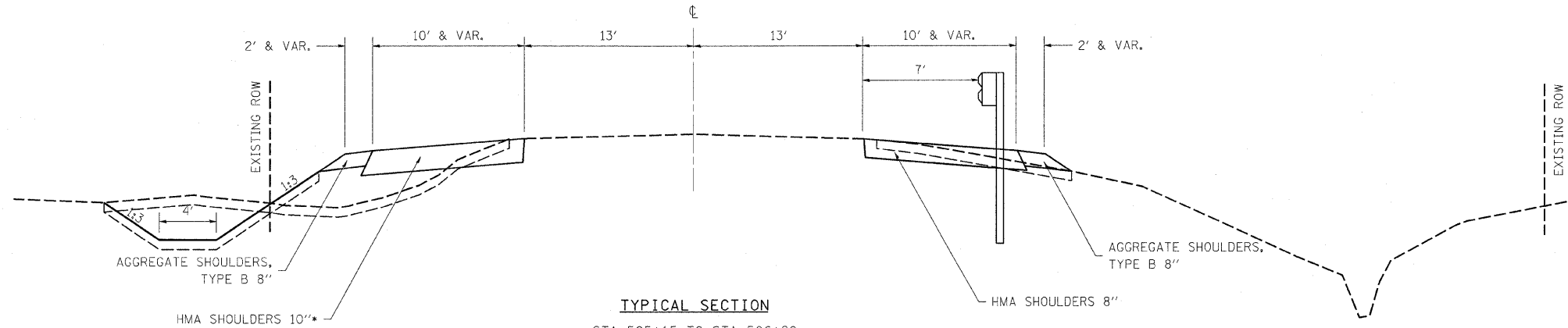


TYPICAL SECTION

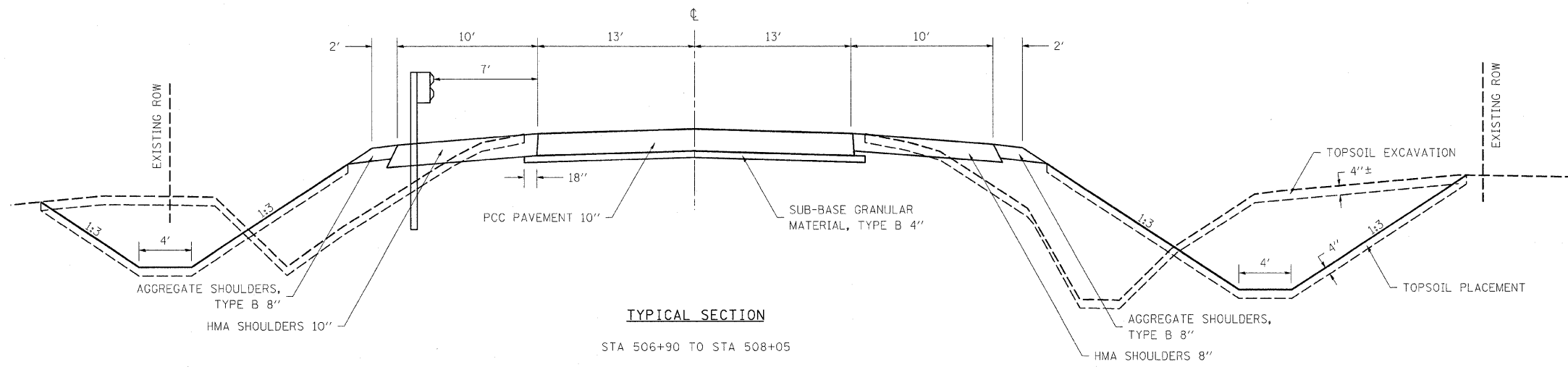
STA 138+37.5 TO STA 138+67.5
 STA 139+52.5 TO STA 139+82.5

- TOPSOIL PLACEMENT
- EMBANKMENT
- AGGREGATE SHOULDERS, TYPE B 8"
- HMA SHOULDERS 10"
- TOPSOIL EXCAVATION

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PLOT DATE = 1/12/2009	DATE -	REVISED -	SCALE:		SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
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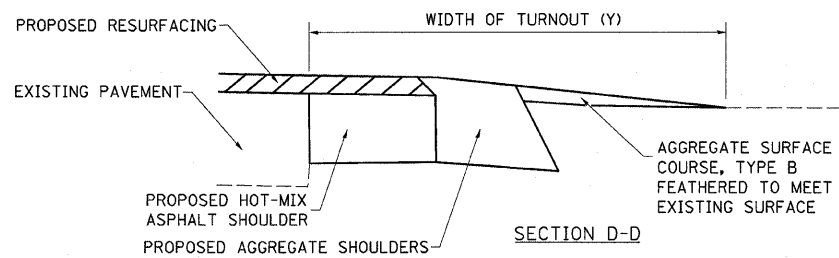
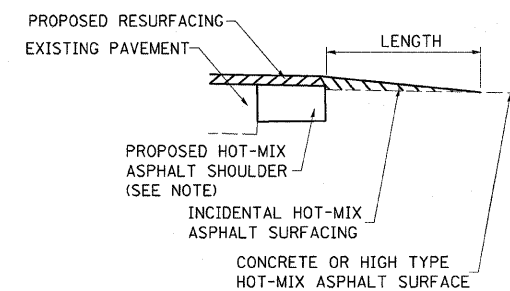
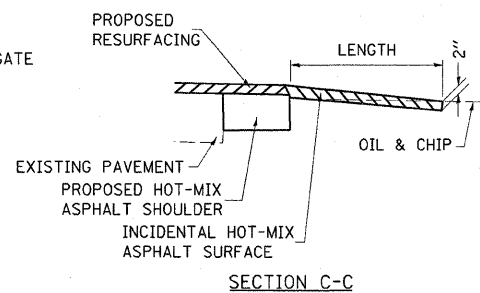
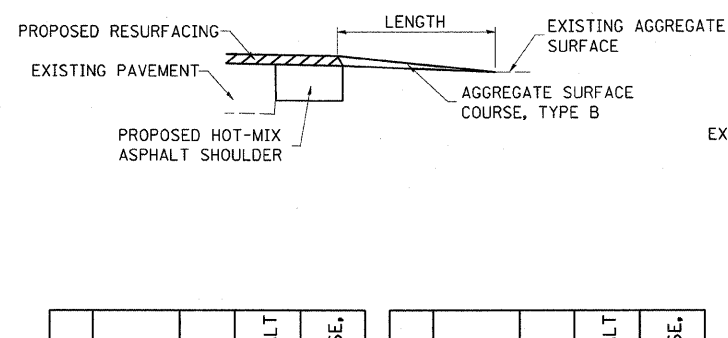
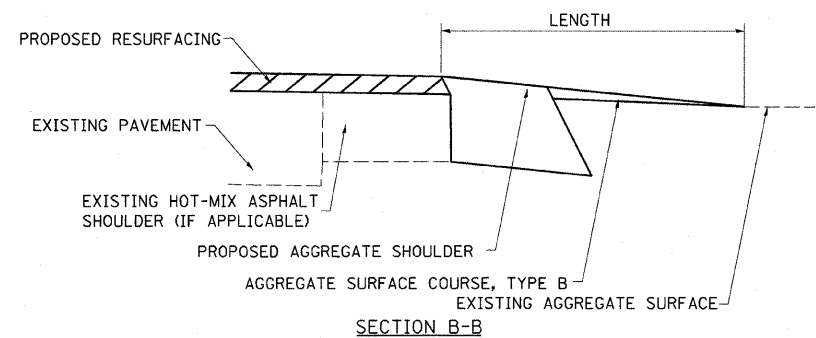
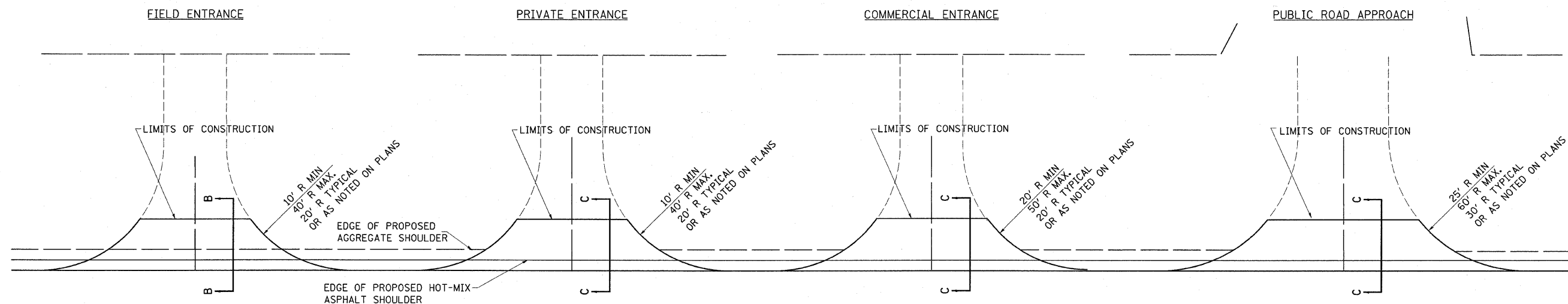


TYPICAL SECTION
 STA 505+15 TO STA 506+90
 STA 508+05 TO STA 509+85
 * USED FOR STAGE 2 TRAFFIC



TYPICAL SECTION
 STA 506+90 TO STA 508+05

FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS S.N. 096-0021 (BRANCH OF ELM RIVER)			F.A.P. RTE. 328	SECTION (9BR1, 10BR1)B1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 8
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	PLOT DATE = 1/12/2009	CHECKED -	REVISED -									
		DATE -	REVISED -									



TYPICAL SECTION AT MAILBOX TURNOUT
NOTE: SEE STANDARD 406201 FOR MAILBOX TURNOUT DETAILS

NOTES

LENGTH = 10' UNLESS OTHERWISE NOTED ON PLANS

THE THICKNESS OF THE HOT-MIX ASPHALT SHOULDERS THROUGH COMMERCIAL ENTRANCES (HOT-MIX ASPHALT) AND PUBLIC ROADS SHALL BE 10". THE COST OF THE EXTRA THICKNESS SHALL BE INCLUDED WITH THE HOT-MIX ASPHALT SHOULDERS PAY ITEM.

HOT-MIX ASPHALT SHOULDERS SHALL NOT BE CONSTRUCTED THROUGH A PCC ENTRANCE OR PCC PUBLIC ROAD APPROACH.

THE COST OF EXCAVATION IS INCLUDED IN THE PAY ITEM INCIDENTAL HOT-MIX ASPHALT SURFACING.

THE COST OF THE BITUMINOUS MATERIALS AND AGGREGATE (PRIME COAT) FOR ENTRANCES AND PUBLIC ROAD APPROACHES SHALL BE INCLUDED IN THE PAY ITEM INCIDENTAL HOT-MIX ASPHALT SURFACING.

SIDE	STATION	TYPE	INCIDENTAL HOT-MIX ASPHALT SURFACING	
			TON	TON
LT	136+12	PRA	24	
	TOTAL		24	TON

SIDE	STATION	TYPE	INCIDENTAL HOT-MIX ASPHALT SURFACING	
			TON	TON

SIDE	STATION	TYPE	INCIDENTAL HOT-MIX ASPHALT SURFACING	
			TON	TON

SIDE	STATION	TYPE	INCIDENTAL HOT-MIX ASPHALT SURFACING	
			TON	TON

FE=FIELD ENTRANCE PRA - PUBLIC ROAD APPROACH
PE=PRIVATE ENTRANCE MBT - MAILBOX TURNOUT
CE=COMMERCIAL ENTRANCE

FILE NAME =	USER NAME = steffennik	DESIGNED - 08-03-99	REVISED - 03-13-07
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	PLOT SCALE = 58.0000" / 1"	CHECKED -	REVISED -
	PLOT DATE = 1/12/2009	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

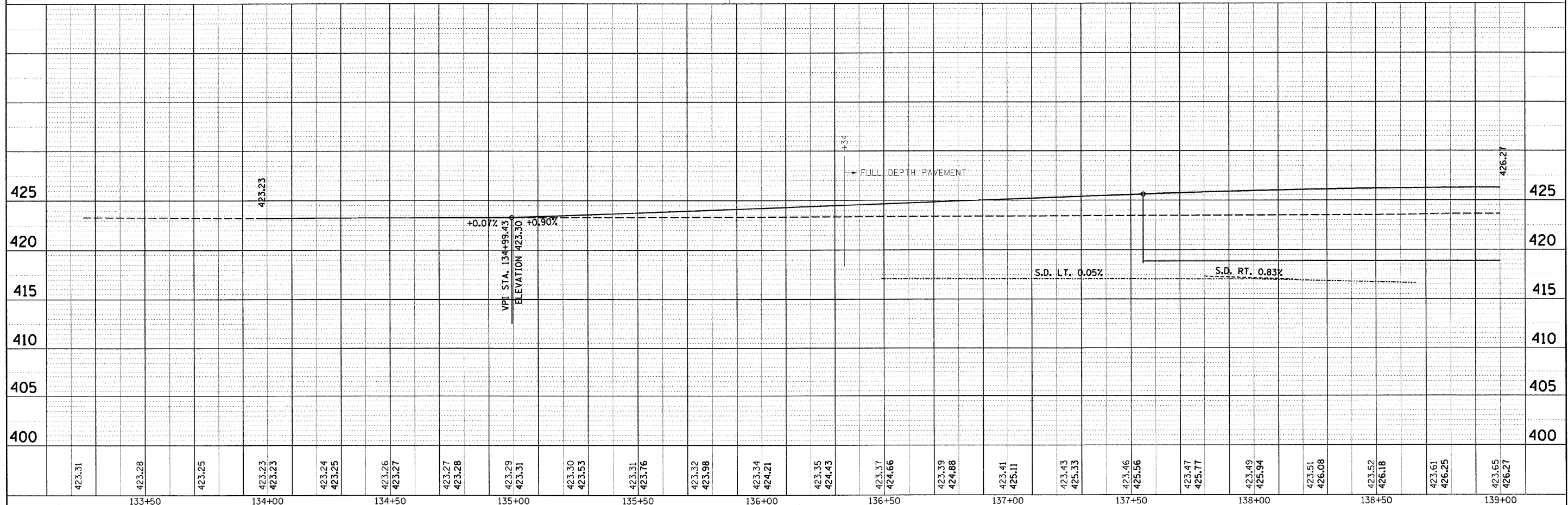
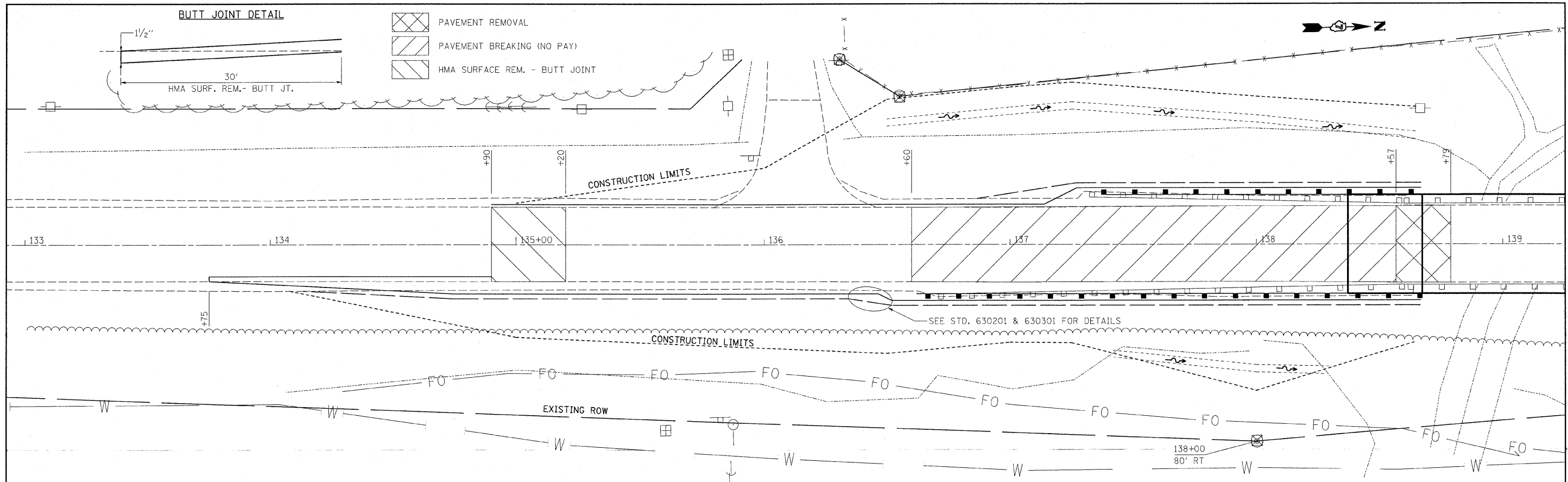
**ENTRANCE SCHEDULE AND MAILBOX TURNOUT DETAILS
SHOULDERS (PROPOSED)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1,10BR1)B-1	WAYNE	67	9
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74214	

PLAN SURVEYED BY DATE
 PLOTTED BY
 CHECKED BY
 NO. OF WAYS CHECKED
 CAD FILE NAME

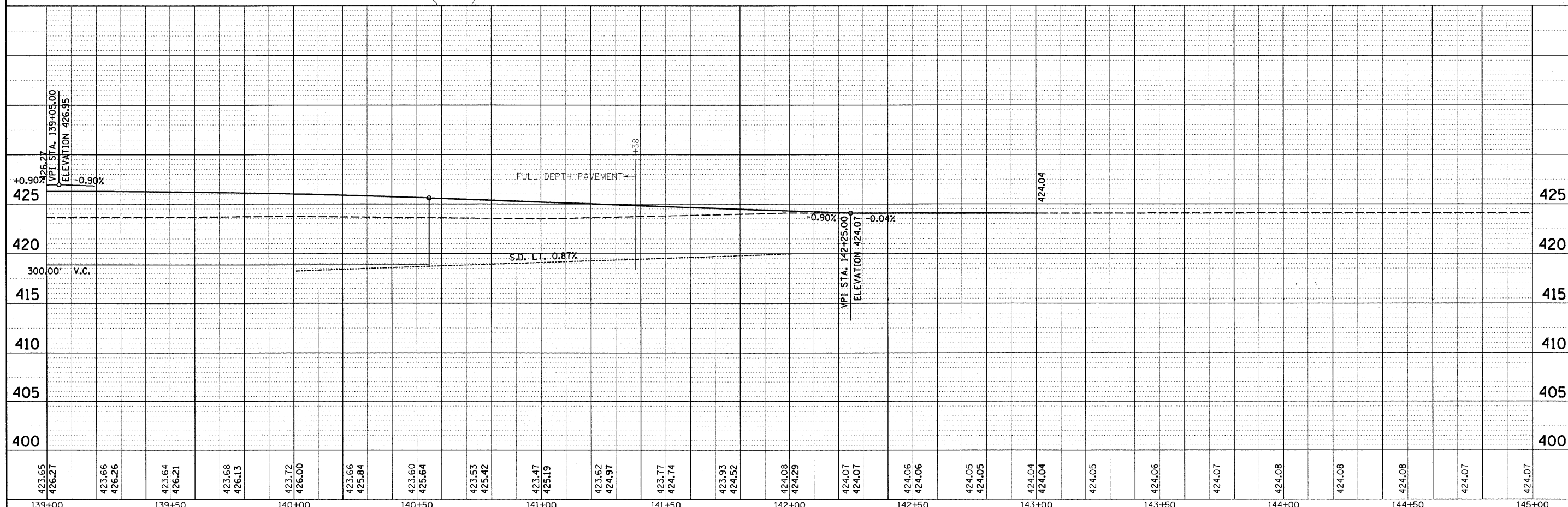
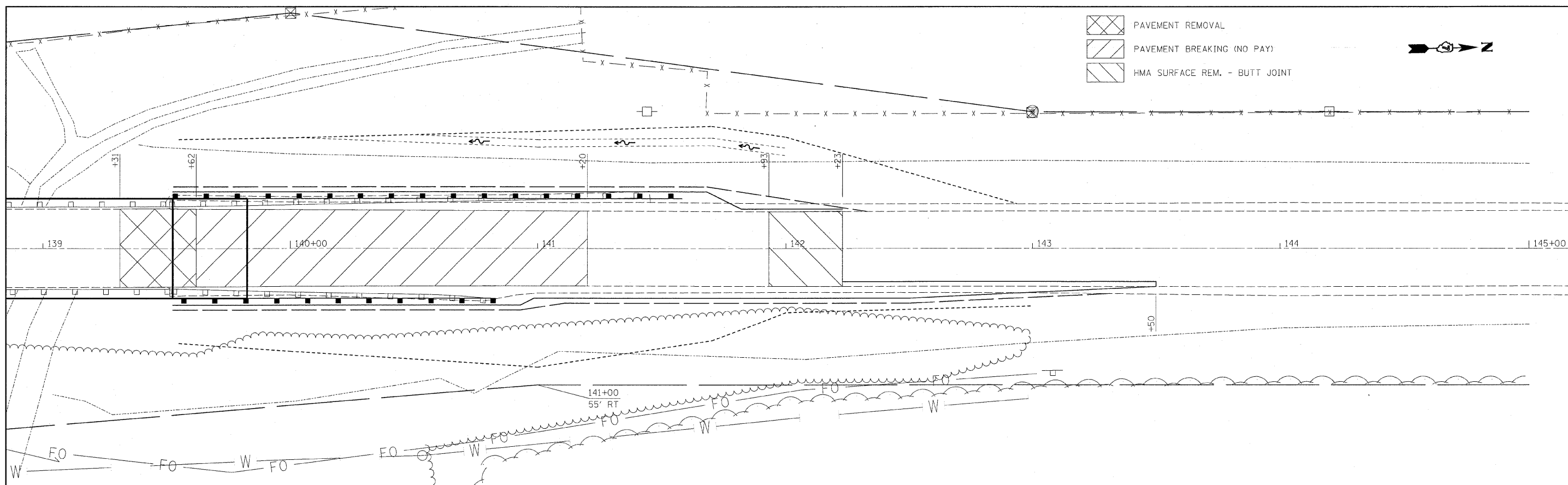
PROFILE SURVEYED BY DATE
 PLOTTED BY
 CHECKED BY
 NO. OF WAYS CHECKED
 STRUCTURE NOTATION OR NO.



FILE NAME =	USER NAME = staffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE - MARTIN CREEK		F.A.P. RT. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\staffennk\dms50690\shp	80024_74214.dgn	DRAWN -	REVISED -				328	(9BRI, 10BRI)B1	WAYNE	67	11
	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -				CONTRACT NO. 74214				
	PLOT DATE = 1/12/2009	DATE -	REVISED -				SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

PLAN SURVEYED BY DATE
 PLOTTED BY
 CHECKED BY
 RT. OF WAY CHECKED
 NO. CAD FILE NAME

PROFILE SURVEYED BY DATE
 PLOTTED BY
 CHECKED BY
 BAL. NOTED
 STRUCTURE NOTATIONS OK'D



423.65 426.27	423.66 426.26	423.64 426.21	423.68 426.13	423.72 426.00	423.66 425.84	423.60 425.64	423.53 425.42	423.47 425.19	423.62 424.97	423.77 424.74	423.93 424.52	424.08 424.29	424.07 424.07	424.06 424.06	424.05 424.05	424.04 424.04	424.05	424.06	424.07	424.08	424.08	424.08	424.07	424.07
139+00	139+50	140+00	140+50	141+00	141+50	142+00	142+50	143+00	143+50	144+00	144+50	145+00												

FILE NAME = USER NAME = steffennk
 c:\pw_work\pwwork\stefennk\dms50690\shp0224_74214.dgn
 PLOT SCALE = 20.0000' / 1" IN.
 PLOT DATE = 1/12/2009

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

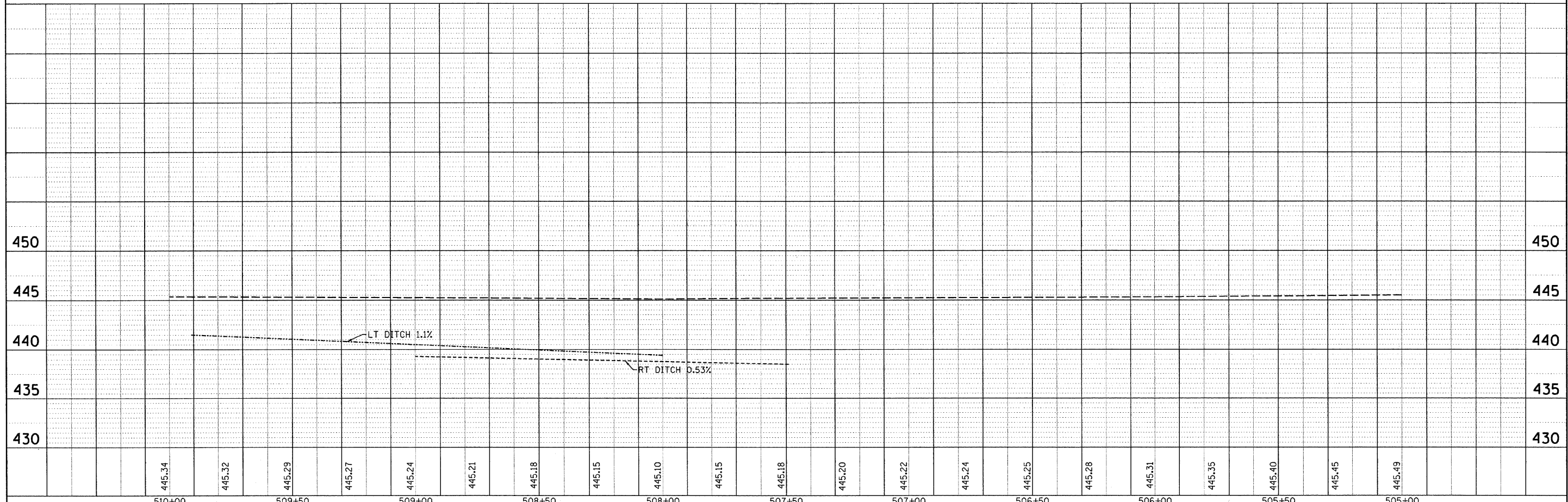
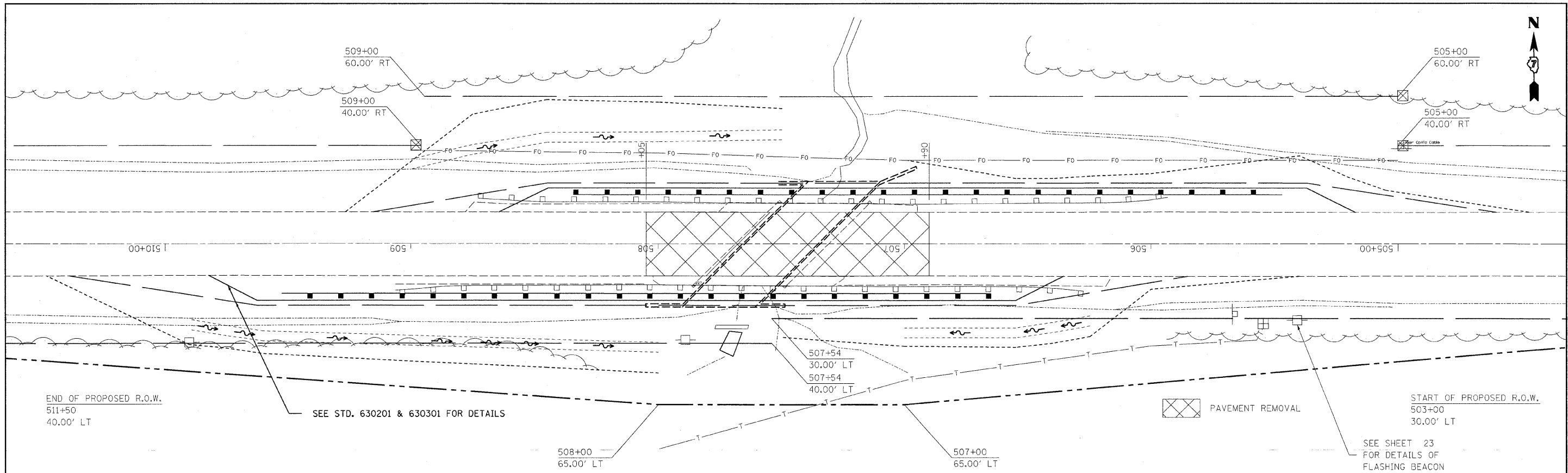
PLAN & PROFILE - MARTIN CREEK

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

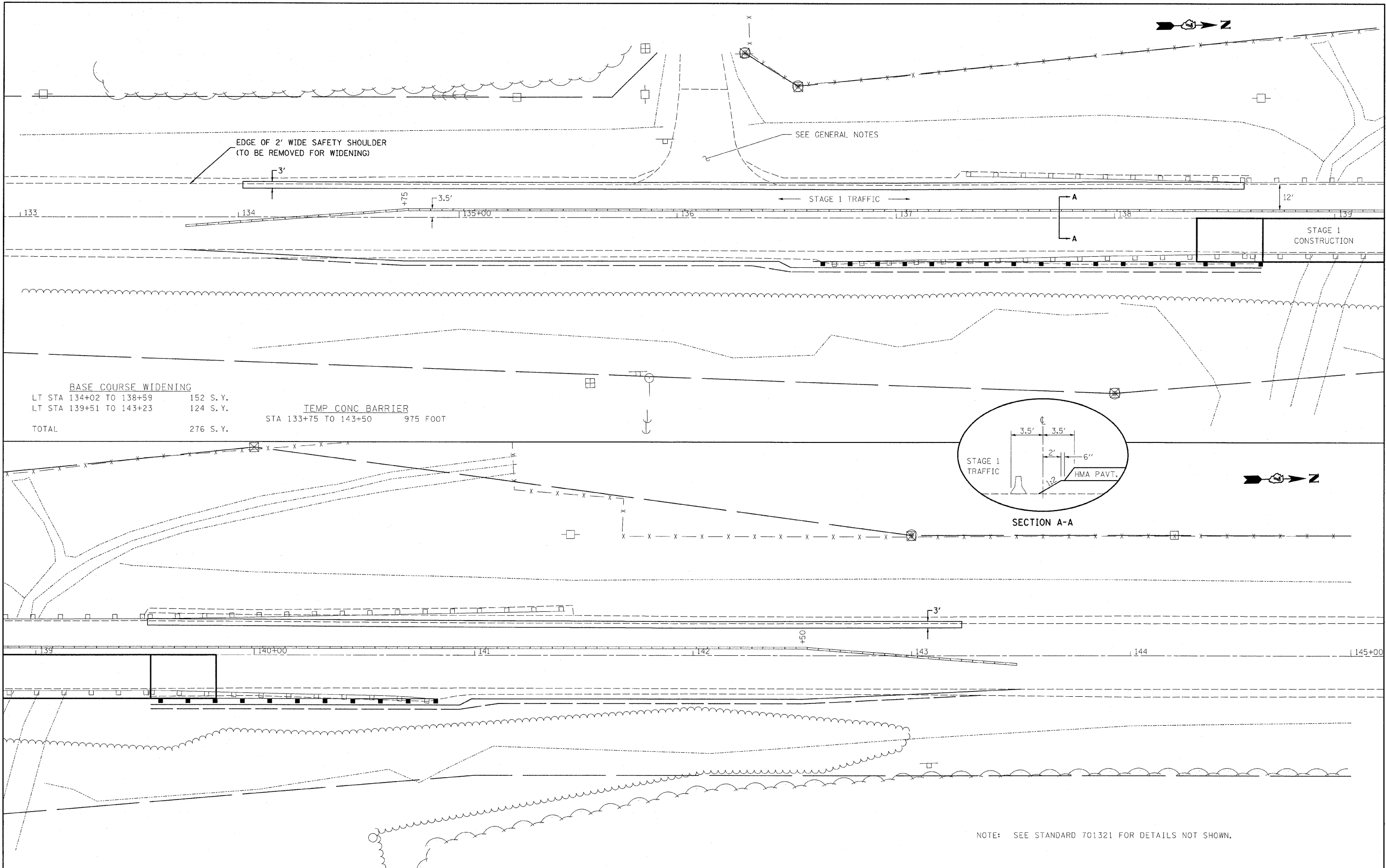
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BRI, 10BRI)B1	WAYNE	67	12
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 74214	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

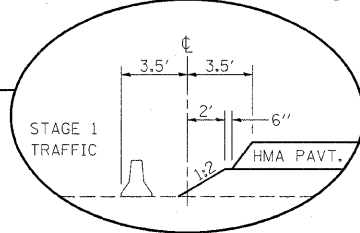


FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE - BRANCH OF ELM RIVER	F.A.P. RTE. 328	SECTION (9BRI, 10BRI)B1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 13		
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	PLOT DATE = 1/12/2009	CHECKED -	REVISED -									
		DATE -	REVISED -									



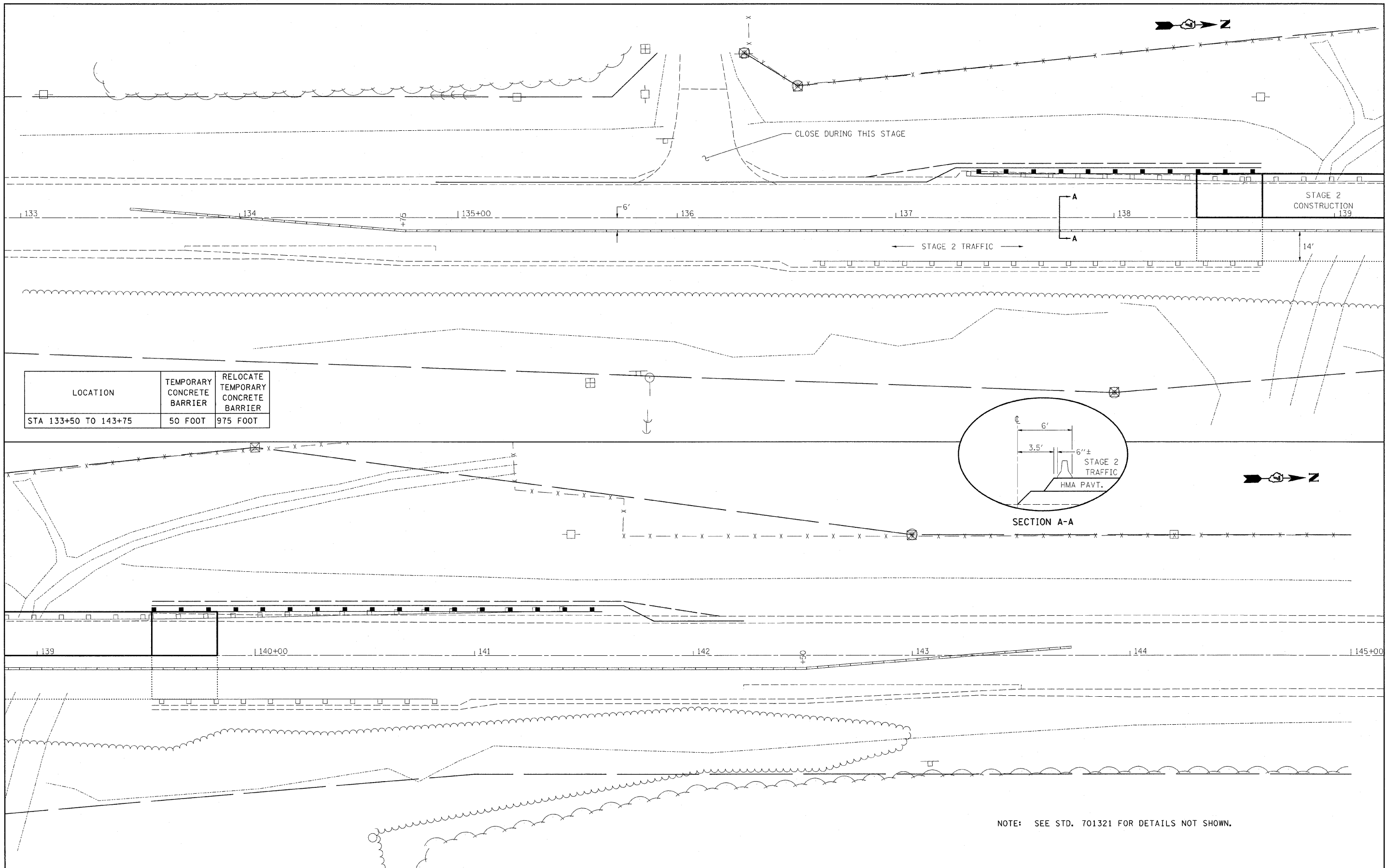
BASE COURSE WIDENING
 LT STA 134+02 TO 138+59 152 S. Y.
 LT STA 139+51 TO 143+23 124 S. Y.
TOTAL 276 S. Y.

TEMP CONC BARRIER
 STA 133+75 TO 143+50 975 FOOT

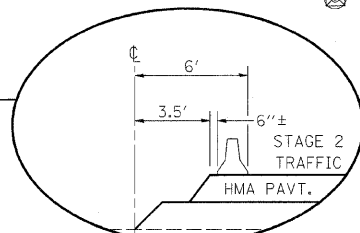


NOTE: SEE STANDARD 701321 FOR DETAILS NOT SHOWN.

FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE 1 CONSTRUCTION SN 096-0024 (MARTIN CREEK)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cd:\pw_work\PWIDOT\STEFFENK\dms50690\st-stage-0024_74214.dgn	PLOT SCALE = 28.0000' / IN.	DRAWN -	REVISED -		328	(9BR1, 10BR1)	WAYNE	67	14			
PLOT DATE = 1/12/2009	DATE -	CHECKED -	REVISED -		CONTRACT NO. 74214			ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.			



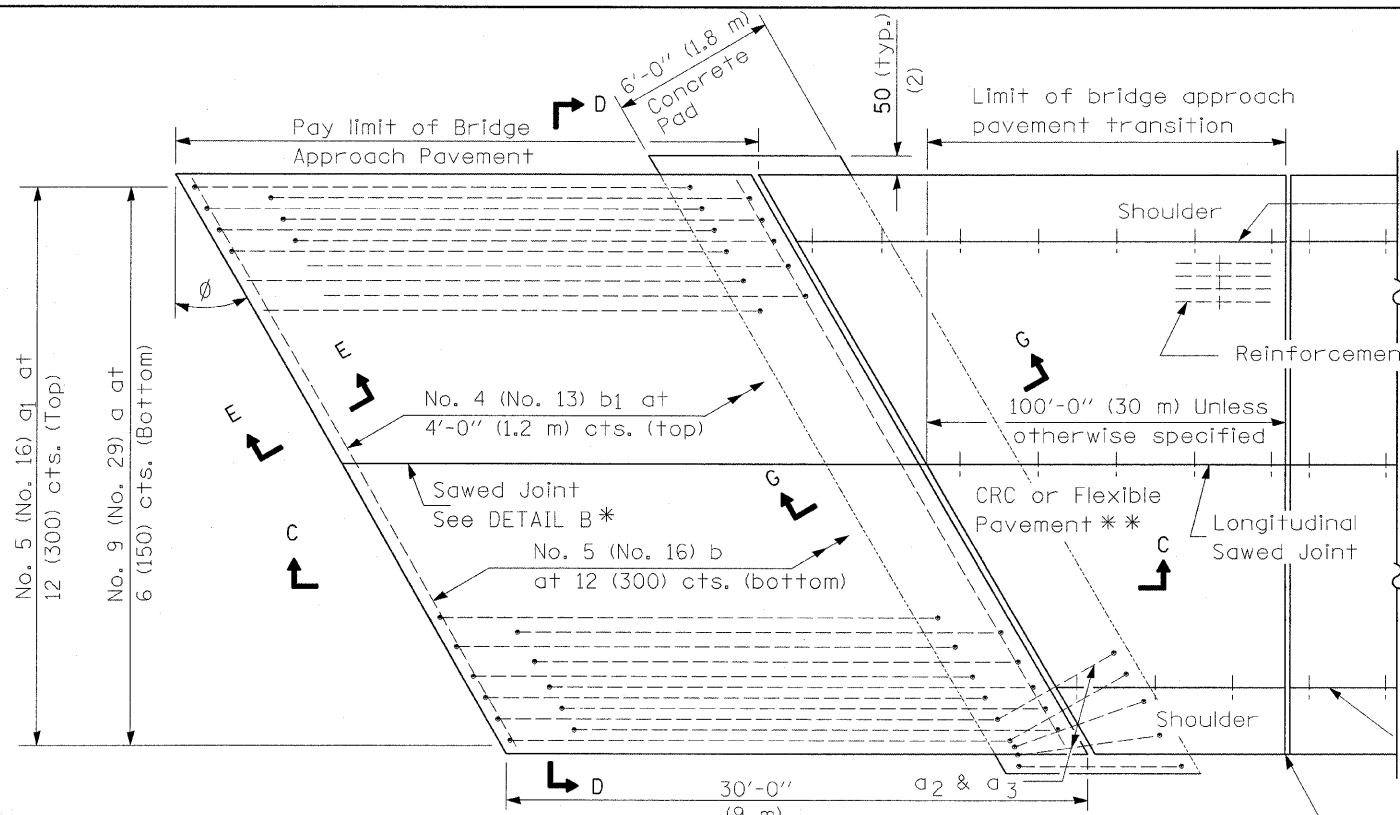
LOCATION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER
STA 133+50 TO 143+75	50 FOOT	975 FOOT



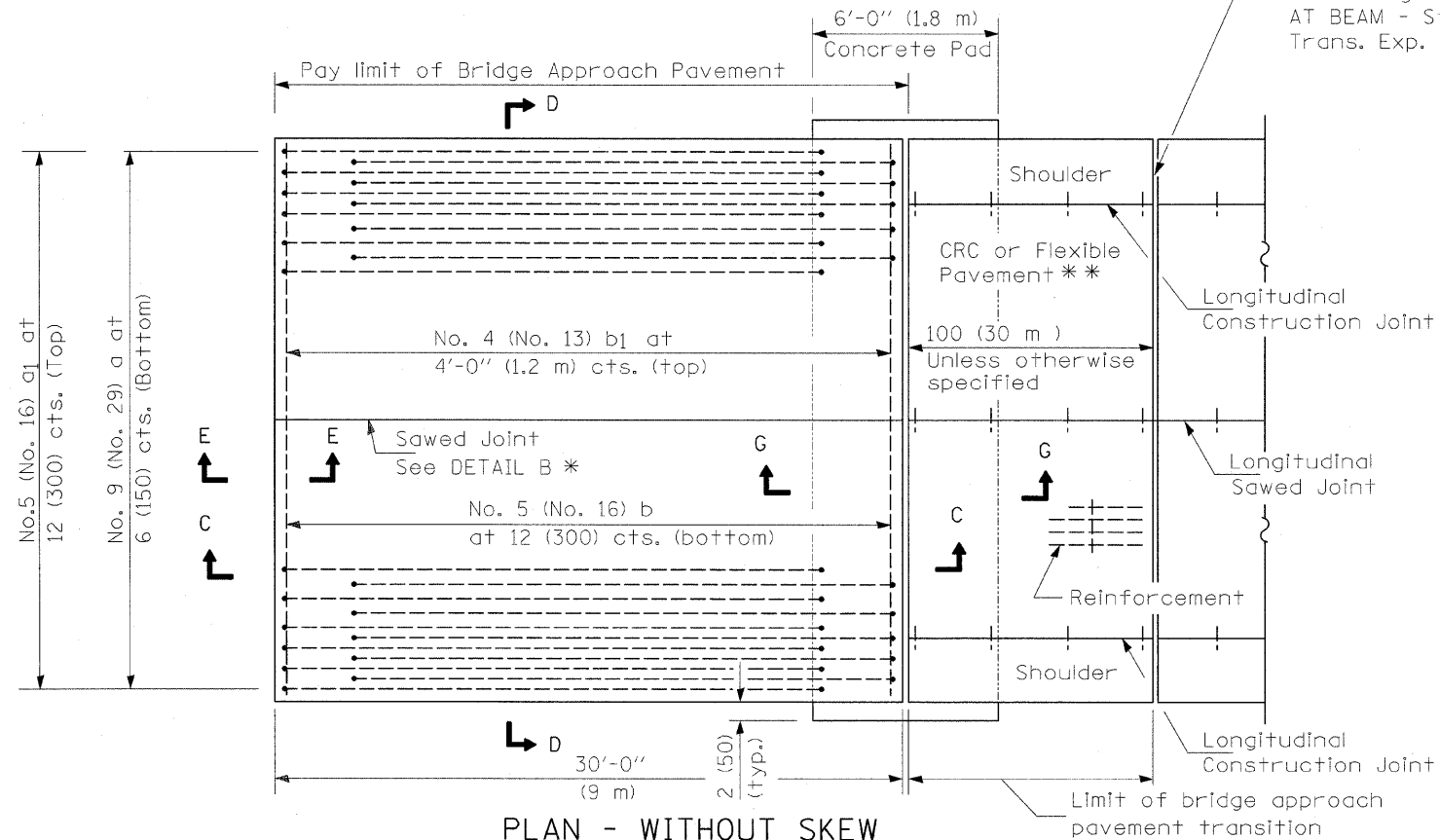
SECTION A-A

NOTE: SEE STD. 701321 FOR DETAILS NOT SHOWN.

FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE 2 CONSTRUCTION SN 096-0024 (MARTIN CREEK)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
c:\pwork\pwork\DOT\STEFFENK\dms50690\st	trstage-0024_74214.dgn	DRAWN -	REVISED -			328	(9B1, 10B1B1)	WAYNE	67 / 15
	PLOT SCALE = 20,0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 74214			
	PLOT DATE = 1/12/2009	DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
				SCALE:	SHEET NO. OF SHEETS	STA. TO STA.			



PLAN - WITH SKEW



PLAN - WITHOUT SKEW

* Saw \perp or lane edge if poured two or more lane widths at a time.
 ** Omit Reinforcement, tie bars and Long. sawed Jt. for Flexible Pavement.

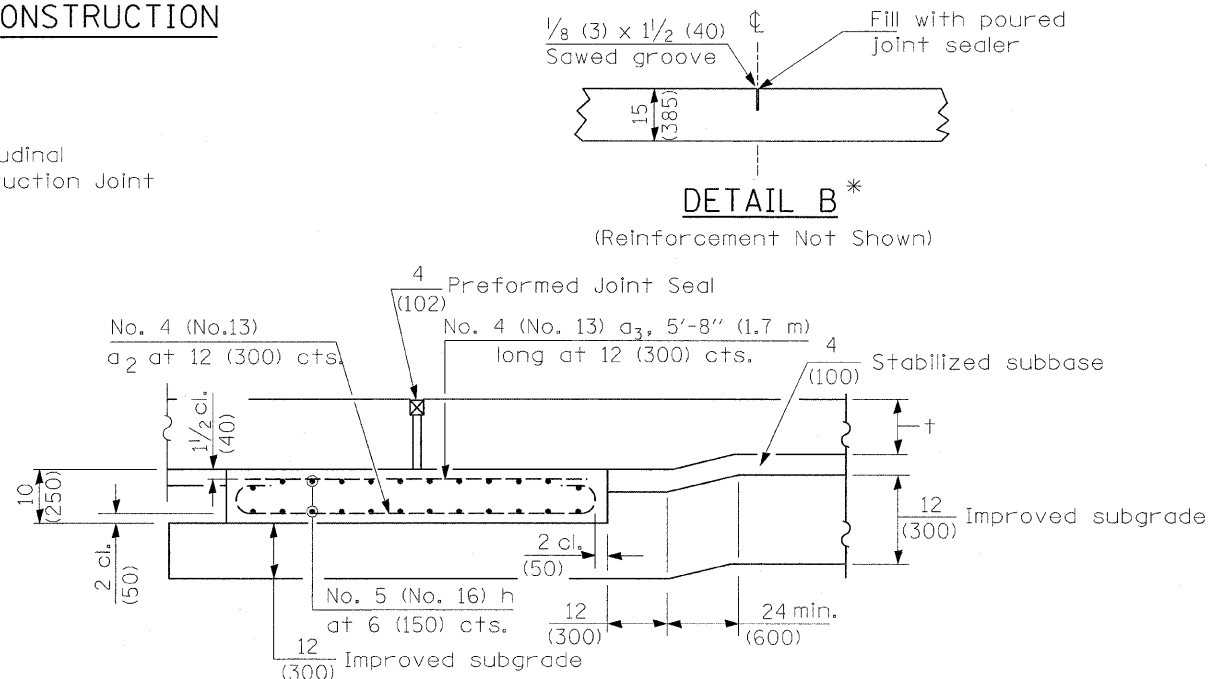
NEW CONSTRUCTION

Longitudinal Construction Joint

Longitudinal Construction Joint

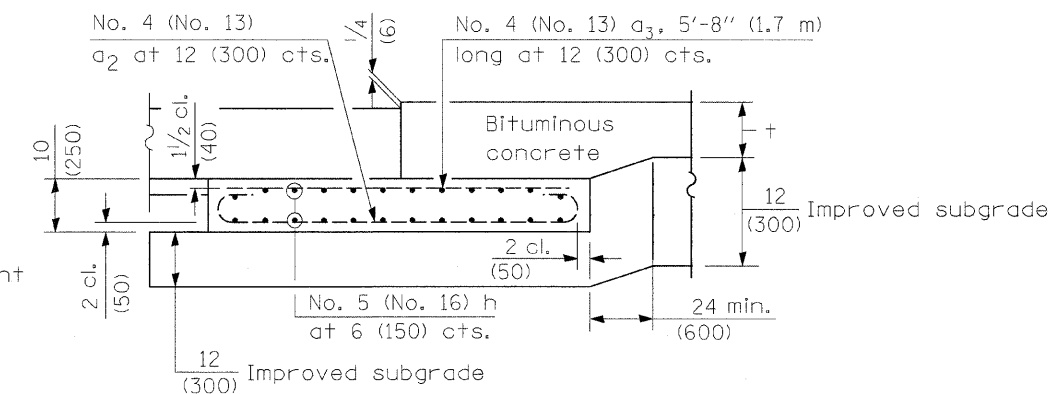
Rigid Pavement only:

Wide Flange Beam Terminal Joint (See DETAIL AT BEAM - Standard 421101 or 421106) or 2 (50) Trans. Exp. Joint as detailed on Standard 420001.



SECTION G-G - RIGID PAVEMENT

(Showing reinforcement)



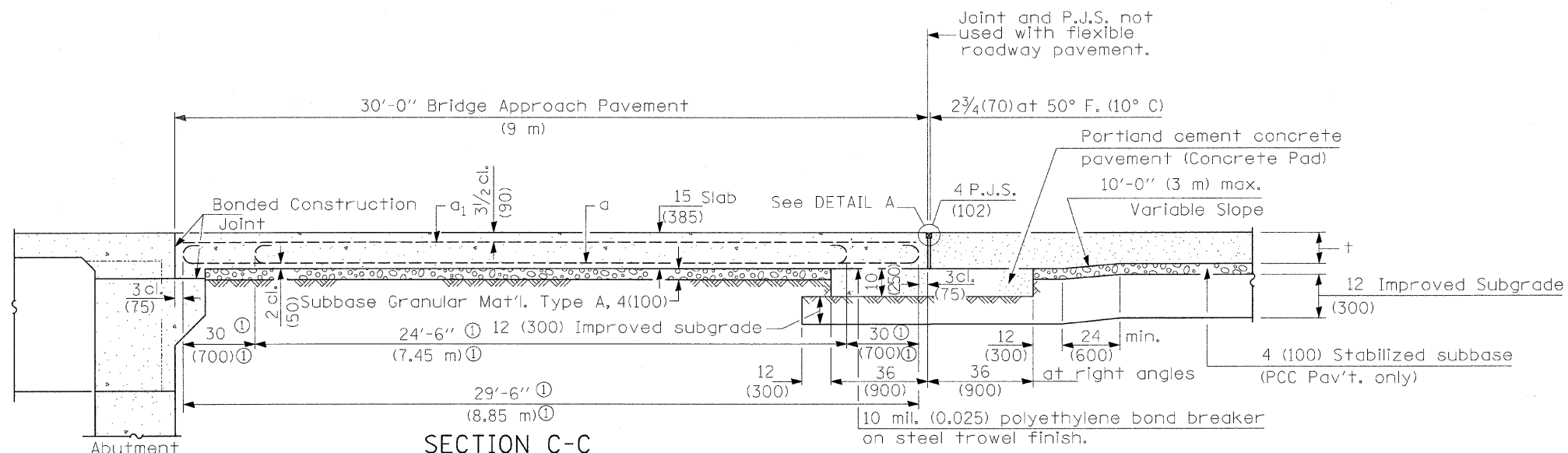
SECTION G-G - FLEXIBLE PAVEMENT

(Showing reinforcement)

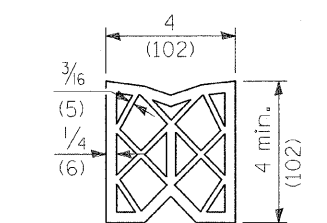
GENERAL NOTES

THICKNESS-"t"=Thickness of Pavement.
 See Standard 421001 for reinforcement details not shown.
 See Standard 420001 for joint details not shown.
 All dimensions are in inches (millimeters) unless otherwise shown.

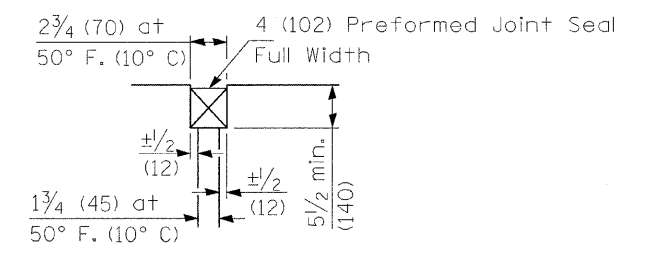
FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pw_work\FWIDOT\STEFFENMK\dms50698\74214-shr-detail.dgn		DRAWN -	REVISED -					328	(9BRI, 10BRI)B1	WAYNE	67	17
PLOT SCALE = 50.0000 "/ IN.		CHECKED -	REVISED -					CONTRACT NO. 74214				
PLOT DATE = 1/12/2009		DATE -	REVISED -					SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.



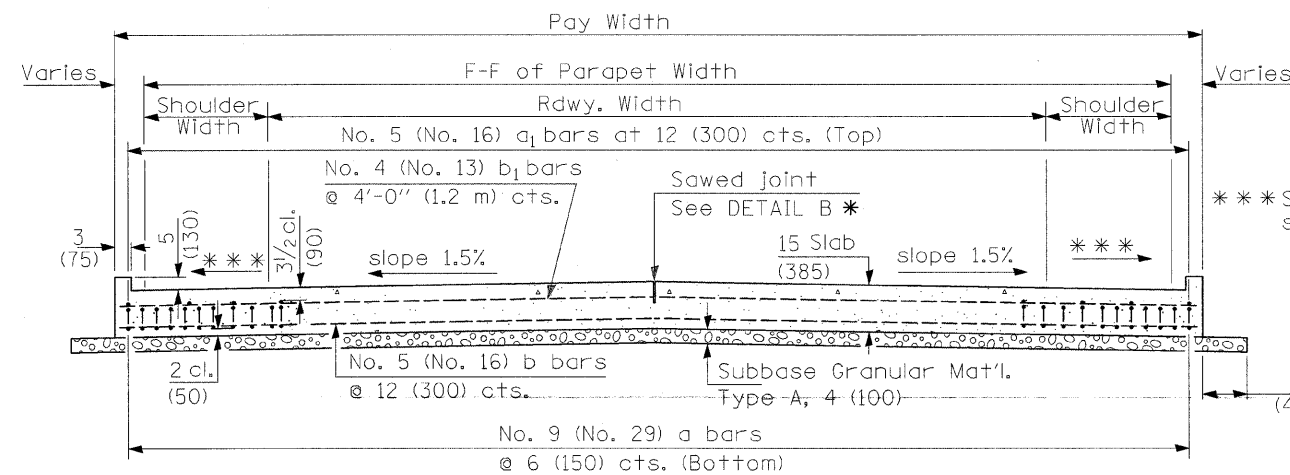
① Stagger No. 9 (No. 29) a bars as shown on plan - full width



PREFORMED JOINT SEAL



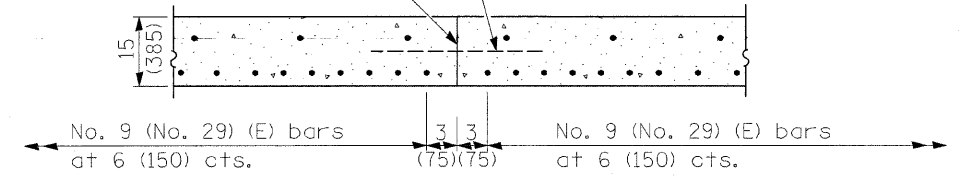
DETAIL A



SECTION D-D

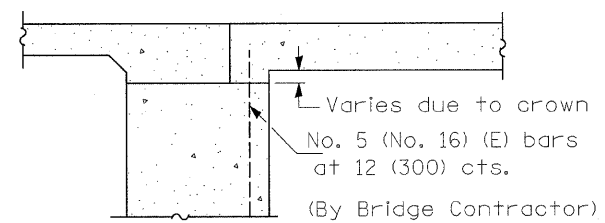
(See Plan for Dimensions not shown)

Longitudinal Construction Joint in accordance with details shown on Standard 420001.

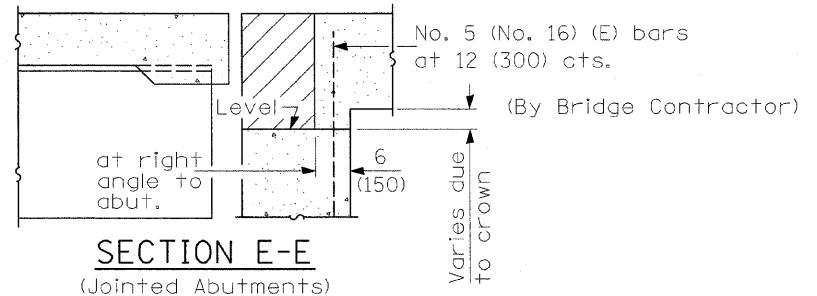


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

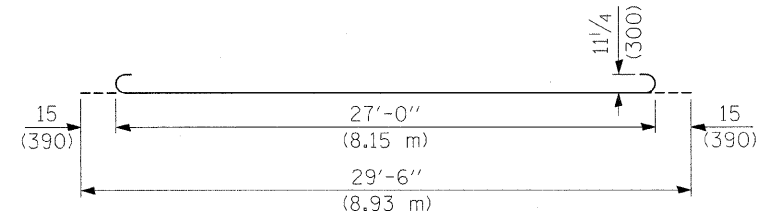
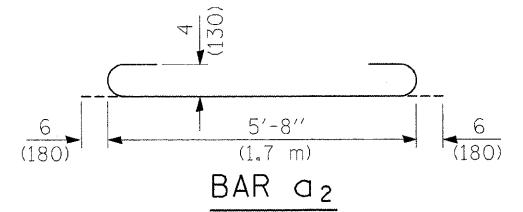
As approved by the Engineer, the Contractor may elect to reduce the widths of pour by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a traffic lane.



SECTION E-E (Integral Abutments)

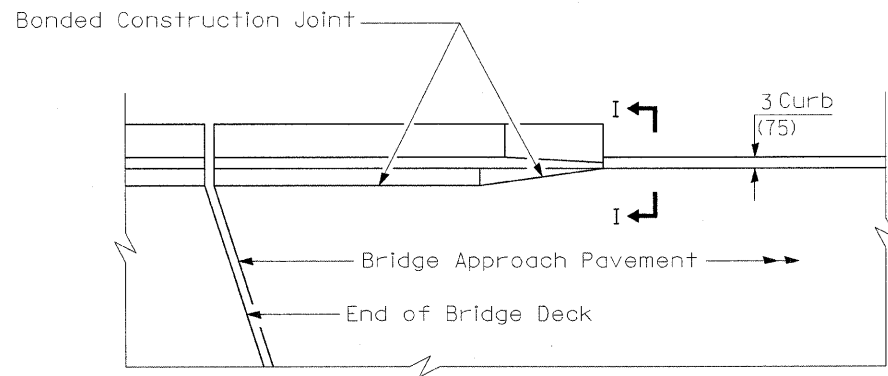


SECTION E-E (Jointed Abutments)

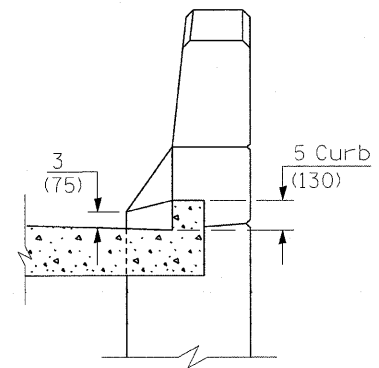


DESIGN STRESSES
 f_y = 60,000 p.s.i. (400 MPa)
 f'c = 3,500 p.s.i. (24 MPa)
 n = 8.5

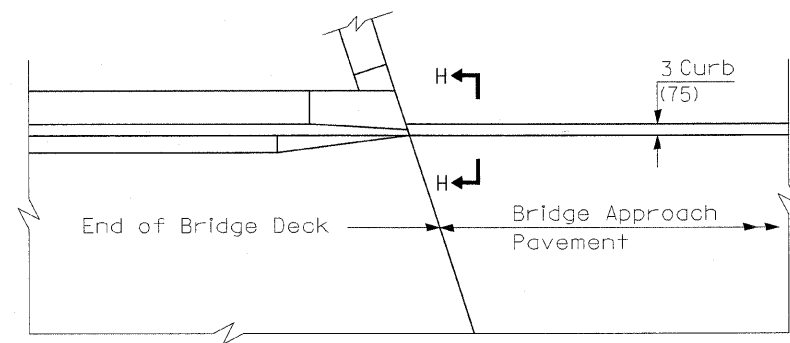
FILE NAME =	USER NAME = stoffmann	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT DETAILS	F.A.P. RTE. 328	SECTION (9BRI, 10BRI)B1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 18		
CONTRACT NO. 74214	PLOT SCALE = 50,000 / IN.	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 1/12/2009	CHECKED -	REVISED -									
		DATE -	REVISED -									



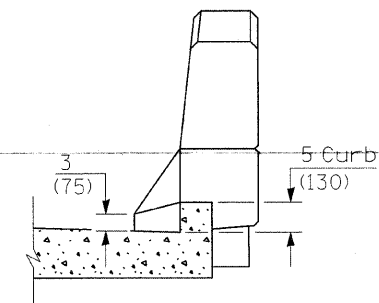
**PARAPET TO CURB TRANSITION
PILE BENT ABUTMENT**



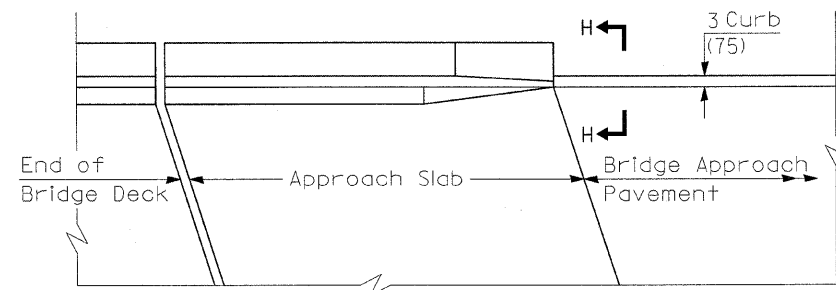
SECTION I - I



**PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT**

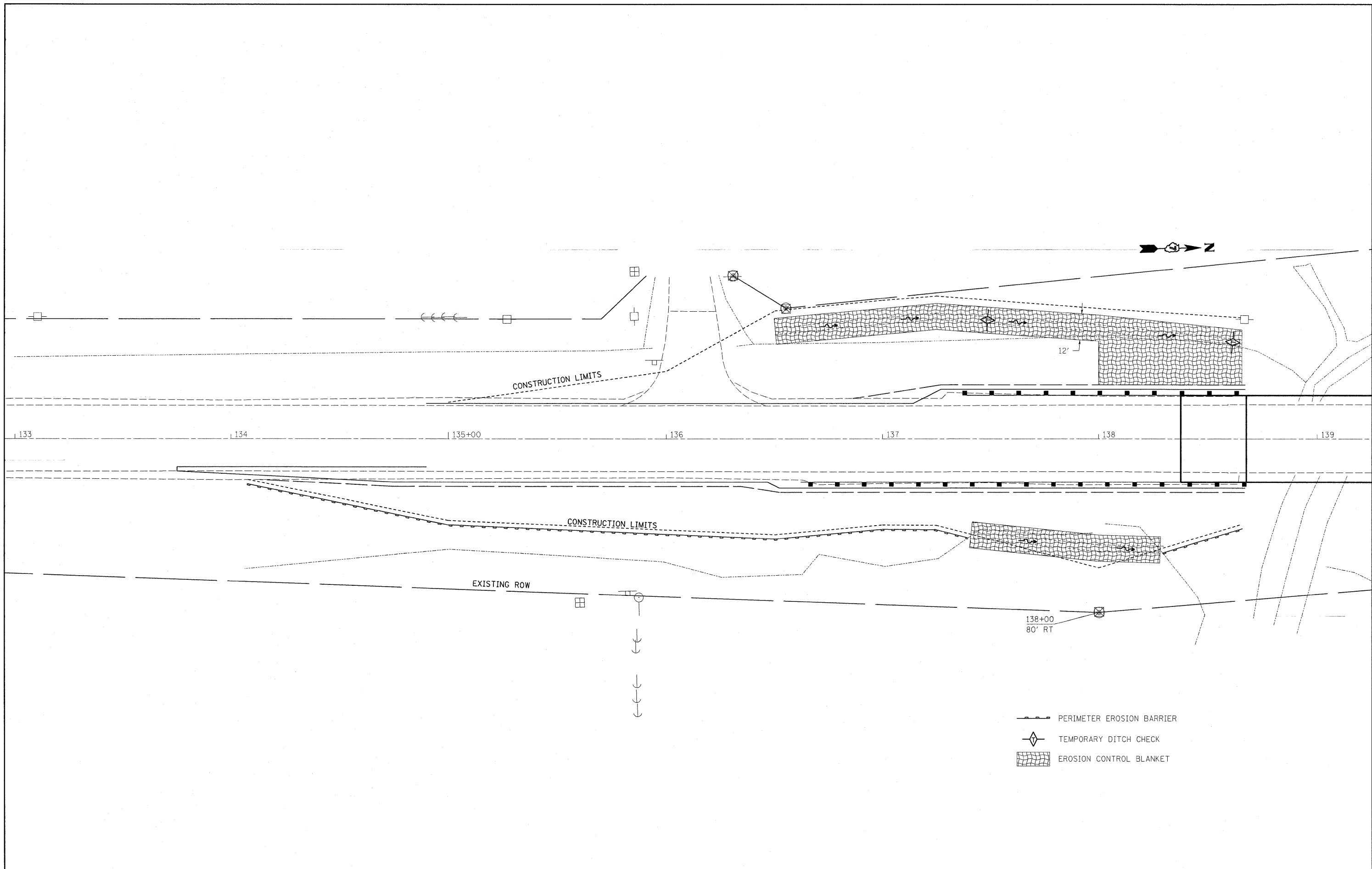


SECTION H - H



**PARAPET TO CURB TRANSITION
VAULTED ABUTMENT**

FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT DETAILS	F.A.P. RTE. 328	SECTION (9BR1, 10BR1)B1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 19	
es:\pwwork\pwwidott\STEFFENMK\dms50690\074214-shr-detail.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
	PLOT DATE = 1/12/2009	CHECKED -	REVISED -								
		DATE -	REVISED -								



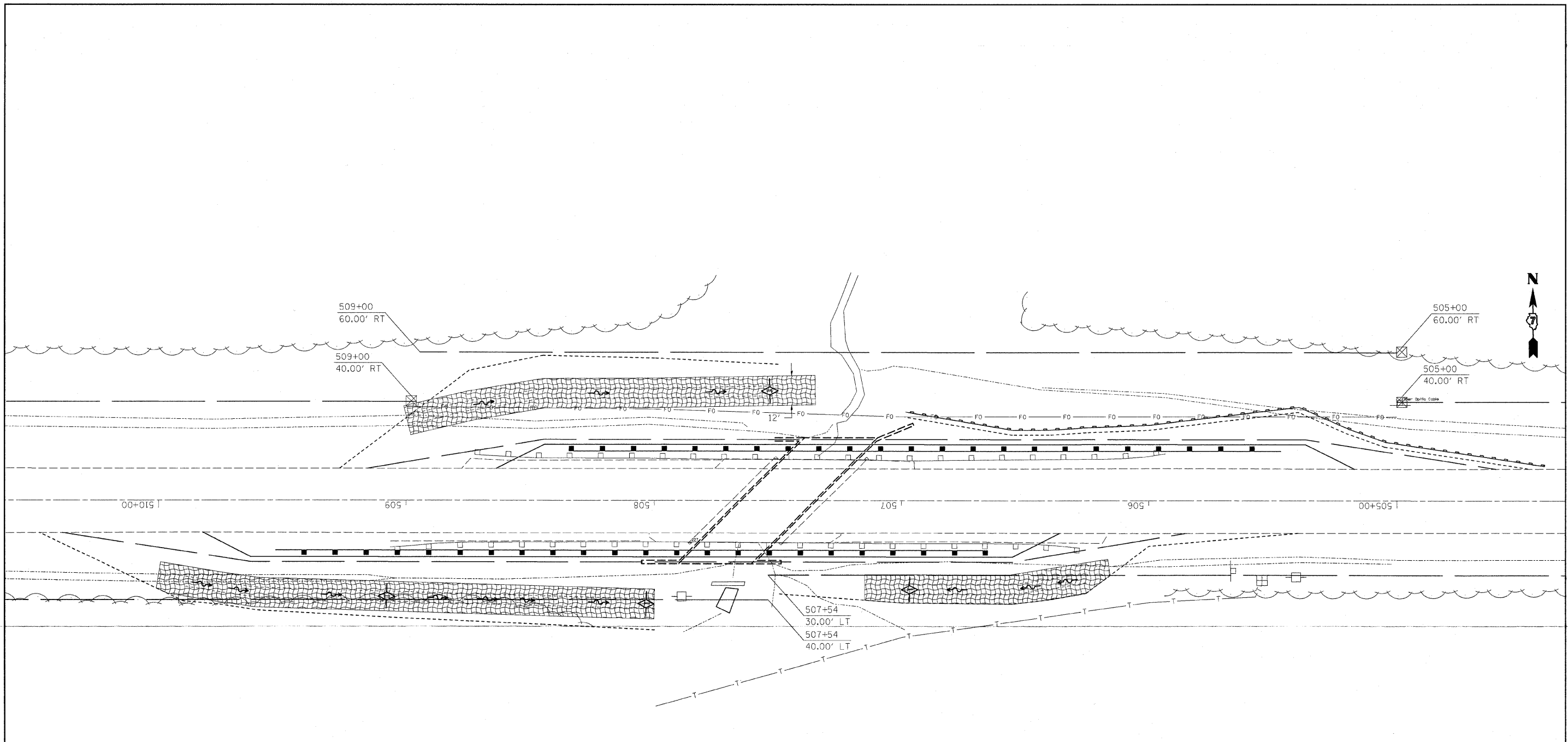
- PERIMETER EROSION BARRIER
- ◇ TEMPORARY DITCH CHECK
- ▨ EROSION CONTROL BLANKET




FILE NAME =	USER NAME = stefferink	DESIGNED - 08-03-99	REVISED - 03-13-07
at:\pw\work\PWIDOT\STEFFENK\dms50690\st...eros_0224_74214.dgn		DRAWN -	REVISED -
	PLOT SCALE = 20,0000 ' / IN.	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

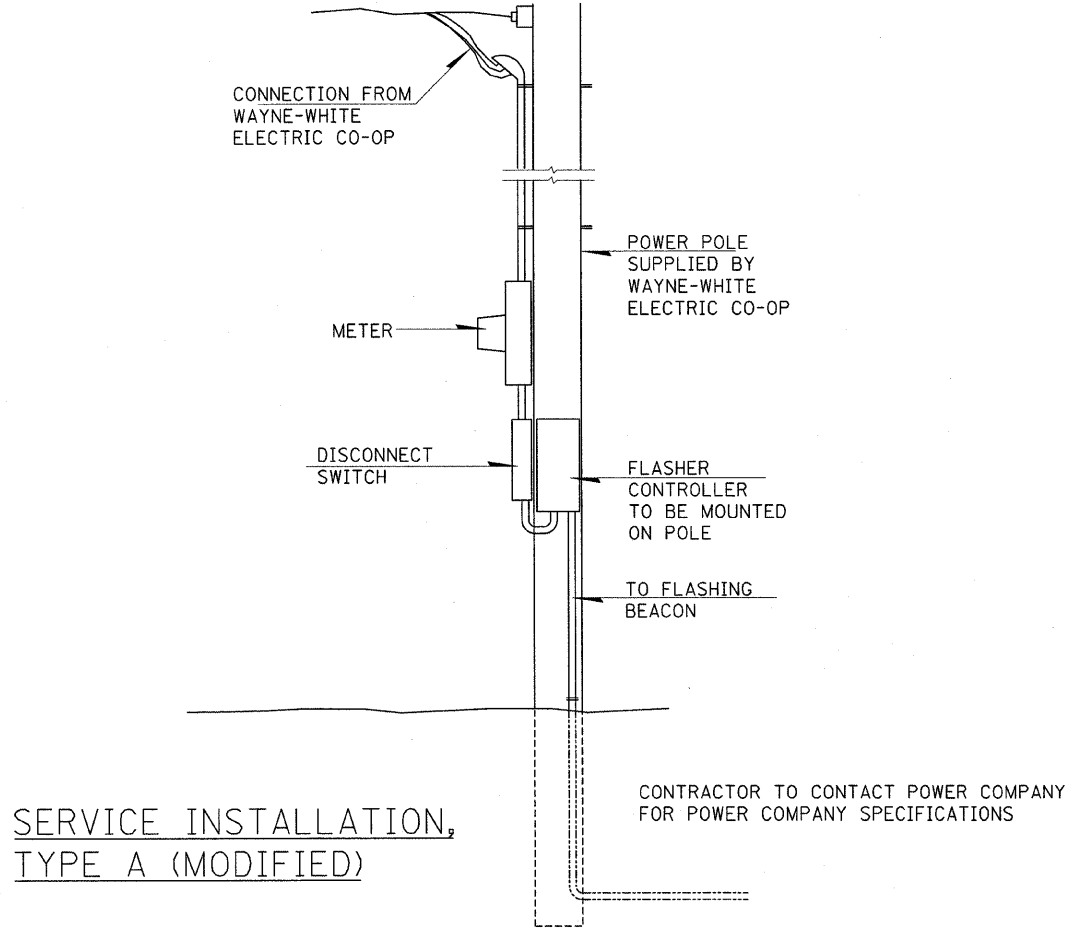
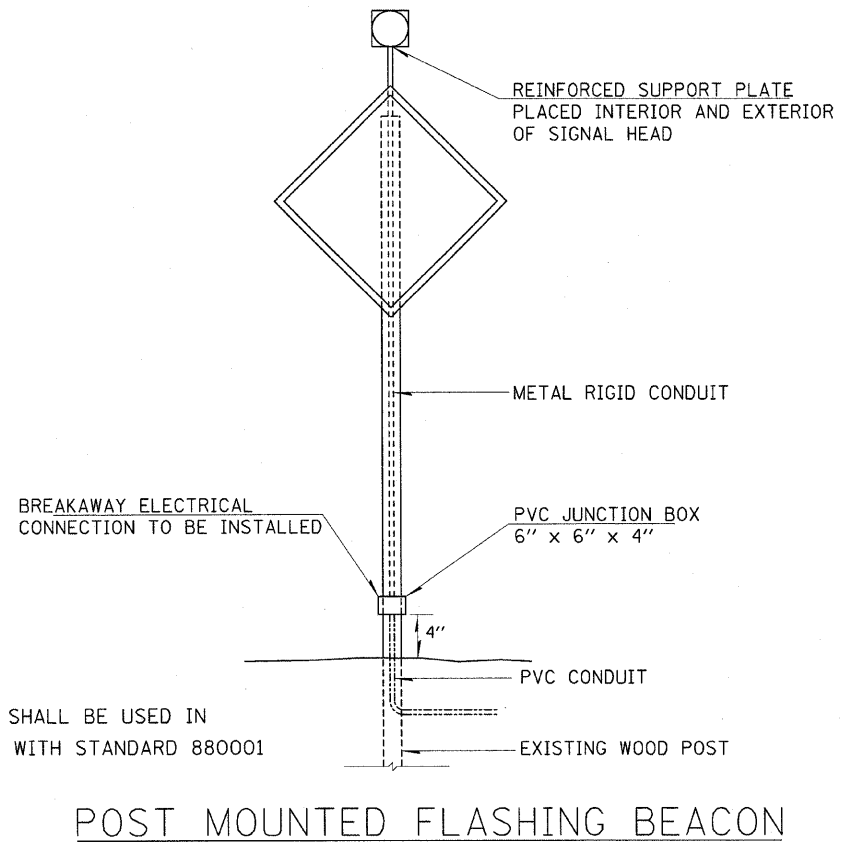
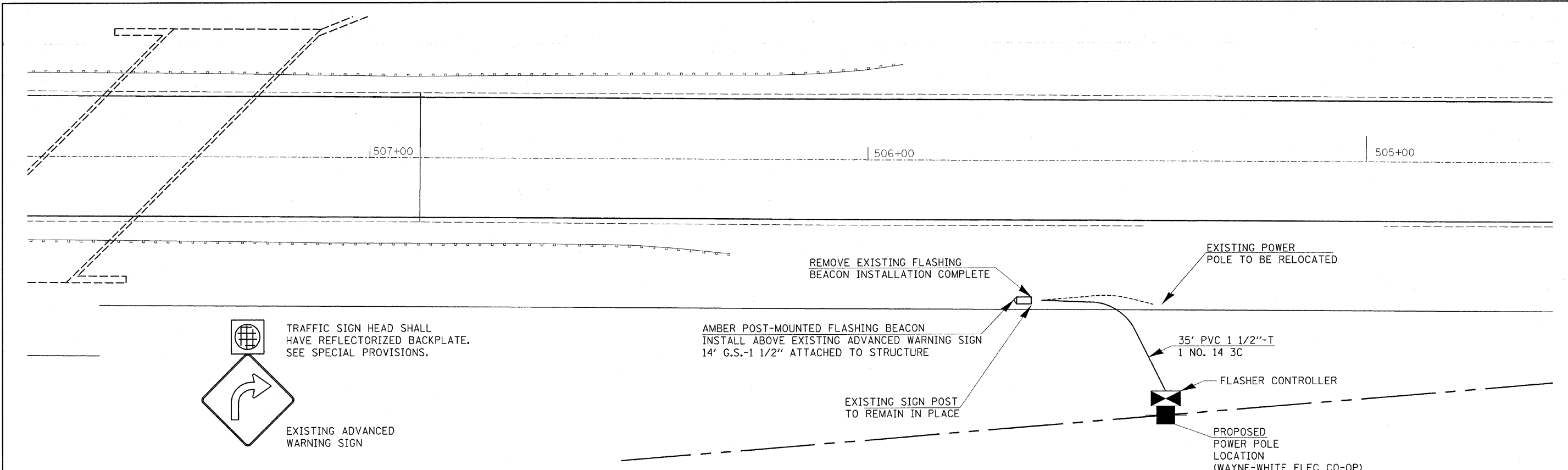
EROSION CONTROL MARTIN CREEK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1,10BR1)B-1	WAYNE	67	20
			CONTRACT NO. 74214	



-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK
-  EROSION CONTROL BLANKET

FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL BRANCH OF ELM RIVER	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
es:\pv_work\PWIDOT\STEFFENMK\dms50690\st	t_eros_0021.74214.dgn	DRAWN -	REVISED -			328	(9BRI,10BRI)B-1	WAYNE	67	22	
	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 74214					
	PLOT DATE = 1/12/2009	DATE -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

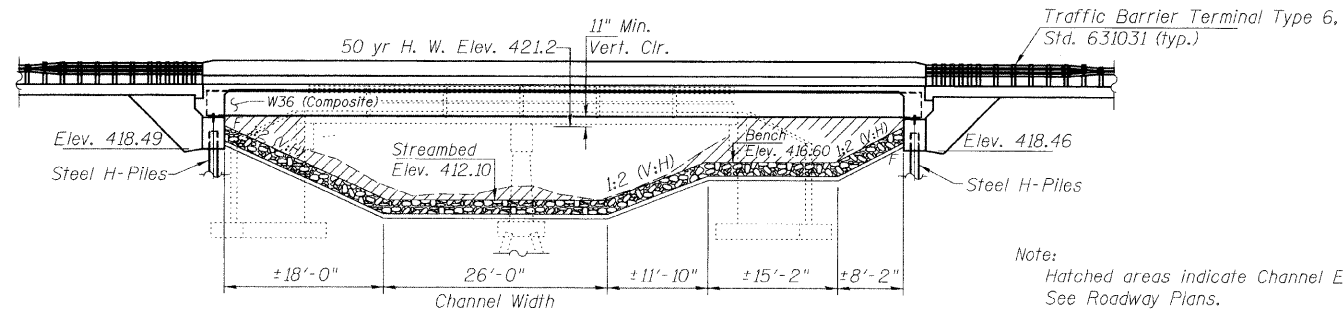


FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FLASHING BEACON LAYOUT AND DETAILS		F.A.P. RTE. 328	SECTION (9BRI,108R1)B-1	COUNTY Wayne	TOTAL SHEETS 67	SHEET NO. 23
ca:\pw_work\FWIDOT\STEFFENK\dms50698\	74214-shr-ts.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 74214	
	PLOT SCALE = 50,0000 // IN.	CHECKED -	REVISED -							ILLINOIS FED. AID PROJECT	
	PLOT DATE = 1/12/2009	DATE -	REVISED -								

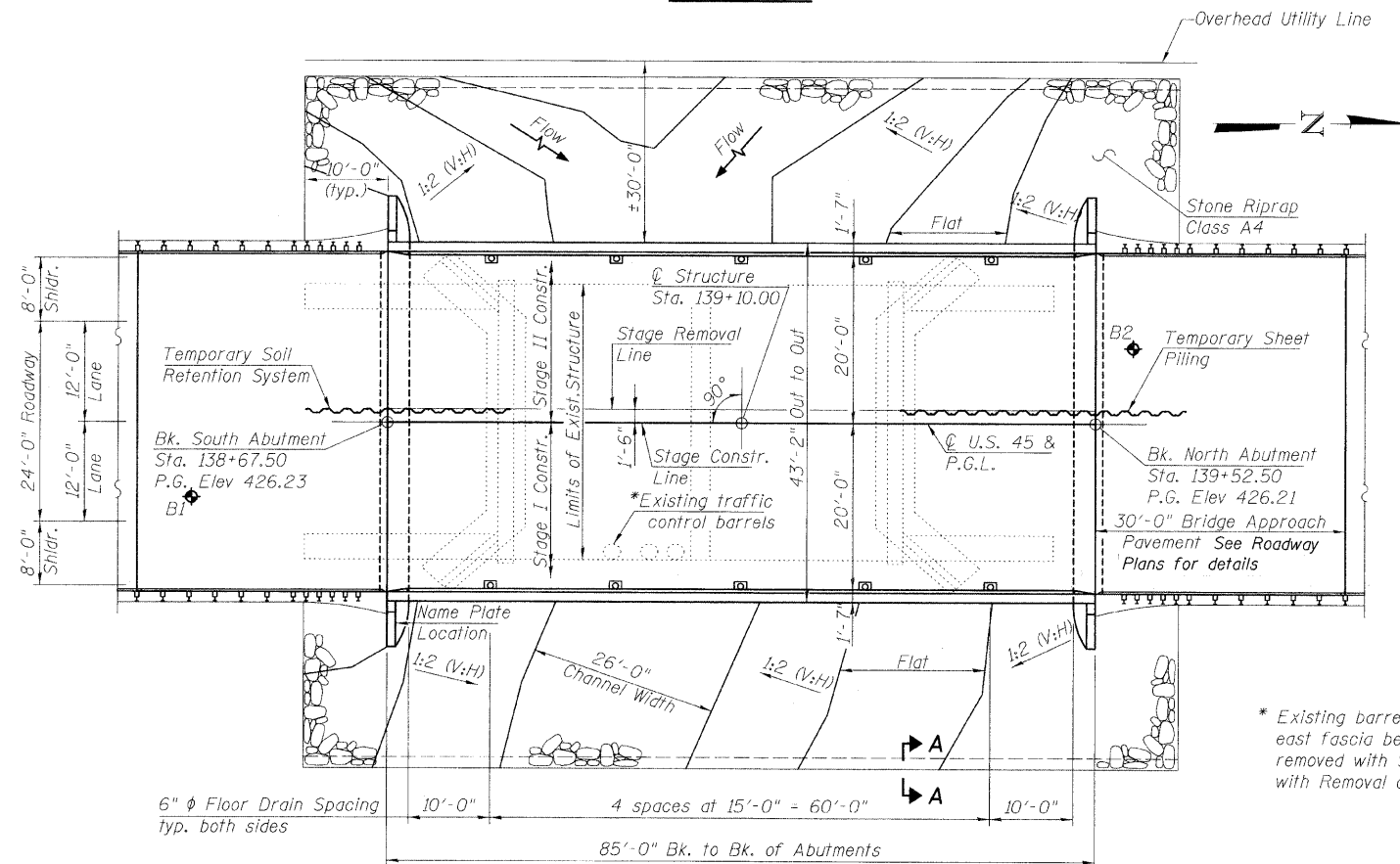
Bench Mark: BM No. 243, chiseled "□" on the South West corner of the existing bridge, Structure 096-0024, U.S. 45 over Martin Creek, Station 138+59, 16.5' Lt., Elevation 423.94.

Existing Structure: #096-0024 built in 1923 on Route 25 Section 10B was a 2 span reinforced concrete slab, 52'-0" Bk to Bk abutments. Supported on spread footing abutments and a pile bent pier. Superstructure replacement & widening in 1973 with PPC deck beams and a bituminous surface. The existing bridge is to be removed and replaced. Traffic shall be maintained using staged construction.

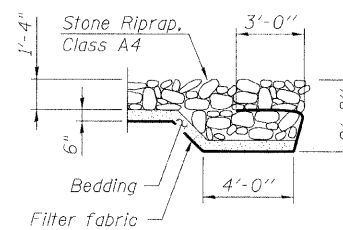
No salvage



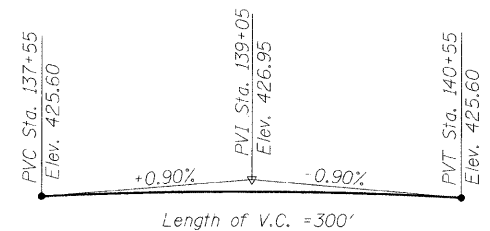
ELEVATION



PLAN



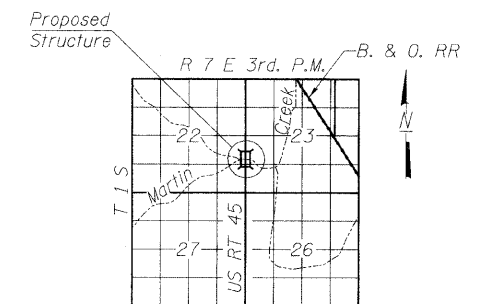
SECTION A-A



PROPOSED PROFILE GRADE
(Along C.F.A.P. Route 328)

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 General Notes and Total Bill of Material
- 3 Stage Construction Details
- 4 Temporary Concrete Barrier
- 5-7 Top of Slab Elevations
- 8 Superstructure
- 9 Superstructure Details
- 10 Diaphragm Details
- 11 Concrete Parapet Slipforming Option
- 12 Structural Steel
- 13 South Abutment
- 14 North Abutment
- 15 Bar Splicer Assembly Details
- 16 Steel H-Pile Base Sheet
- 17 Boring Logs



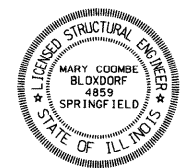
LOCATION SKETCH

GENERAL PLAN AND ELEVATION
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

* Existing barrels provided to prevent traffic on east fascia beam Span 1 only. Barrels to be removed with Stage I Removal. Cost included with Removal of Existing Structures.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



Mary Coombe Bloxdorf
Illinois Structure No. 4859
Expires: 11/30/08
Date: 8/06/08

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

PROJECT NO. 07053-B
SCALE
DATE 8/05/08
DRAWN BY TFG
CHECKED BY CME/RM/MCB

SHEET NO. 1
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1-10BR1) B-1	WAYNE	67	24
CONTRACT NO. 74214				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

WATERWAY INFORMATION

Drainage Area = 7.32 mi. ²		Low Grade Elev. = 423.23		Sta. 134+00.00				
Flood	Freq. Yr.	Q C.F.S.	Opening Exist. Prop.	Sq. Ft. Nat. H.W.E. Exist. Prop.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.		
Design	10	1461	301	452	420.7	1.0	421.7	421.4
Base	50	2357	324	491	421.2	2.0	423.2	422.6
Overtopping Exist.	100	2761	338	515	421.5	2.1	423.6	423.2
Overtopping Prop.	50	2357	324	491	421.2	2.0	423.2	423.2
Max. Calc.	500	3752	340	547	421.9	1.8	423.7	424.2

STA. 139+10.00
BUILT 20... BY
STATE OF ILLINOIS
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
LOADING HL-93
STRUCTURE NO. 096-0069

NAME PLATE
See Std. 515001

DESIGN SCOUR TABLE

Design Scour Elevation (ft.)	S. Abut.	N. Abut.
	418.49	418.46

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{3}{4}$ in. ϕ , holes $\frac{15}{16}$ in. ϕ , unless otherwise noted.

Calculated weight of Structural Steel = AASHTO M270, Grade 50, 97190 lbs.
AASHTO M270, Grade 36, 7380 lbs.

No field welding is permitted except as specified in the contract documents.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions

Reinforcement bars designated (E) shall be epoxy coated.
The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

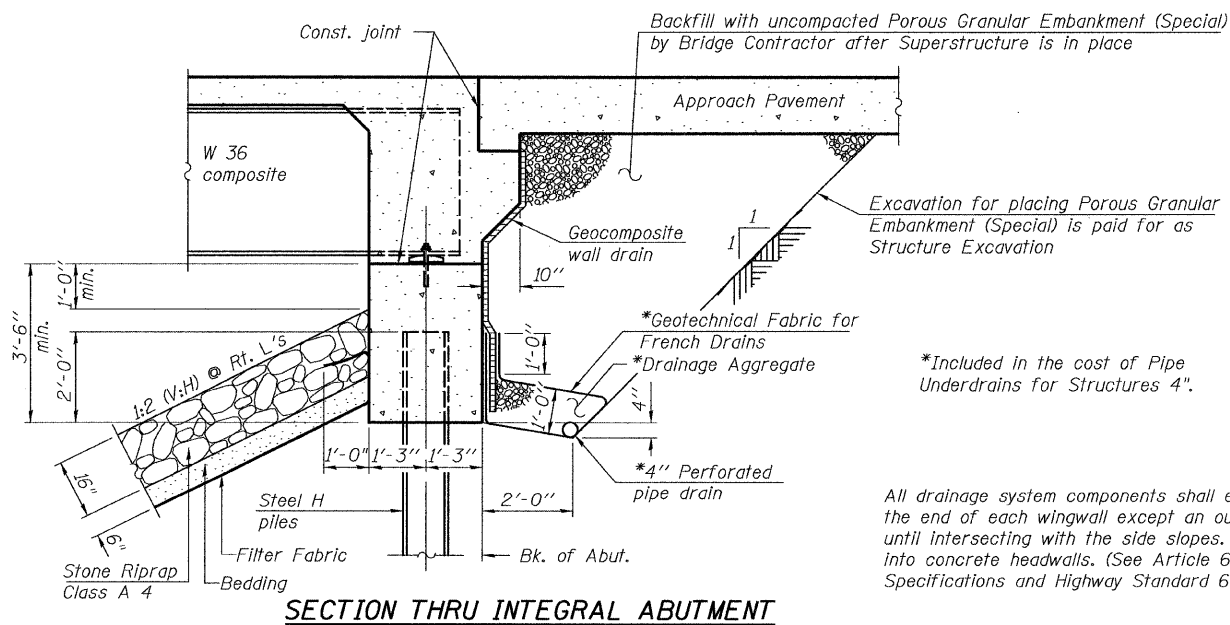
Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal of the superstructure. If the Contractor's procedures for existing beam removal involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Structures.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The contractor shall sawcut the upper portion of the existing abutment at the Stage Removal Line before Stage 1 removal to ensure the remaining portion will not be prematurely damaged.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		138	138
Stone Riprap Class A4	Sq. Yd.		1155	1155
Filter Fabric	Sq. Yd.		1155	1155
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		154	154
Concrete Structures	Cu. Yd.		37.8	37.8
Concrete Superstructure	Cu. Yd.	144.2		144.2
Bridge Deck Grooving	Sq. Yd.	359		359
Protective Coat	Sq. Yd.	449		449
Furnishing and Erecting Structural Steel	Lump Sum			1
Stud Shear Connectors	Each	1638		1638
Reinforcement Bars, Epoxy Coated	Pound	30590	5940	36530
Furnishing Steel Piles, HP12x63	Foot		396	396
Driving Piles	Foot		396	396
Name Plates	Each		1	1
Floor Drains	Each		10	10
Temporary Sheet Piling	Sq. Ft.		470	470
Temporary Soil Retention System	Sq. Ft.		136	136
Concrete Encasement	Cu. Yd.		4.2	4.2
Anchor Bolts, 1" ϕ	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		88	88
Pipe Underdrains for Structures, 4"	Foot		135	135
Bar Splicers	Each	396	20	416



All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

**GENERAL NOTES AND TOTAL
BILL OF MATERIAL
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069**

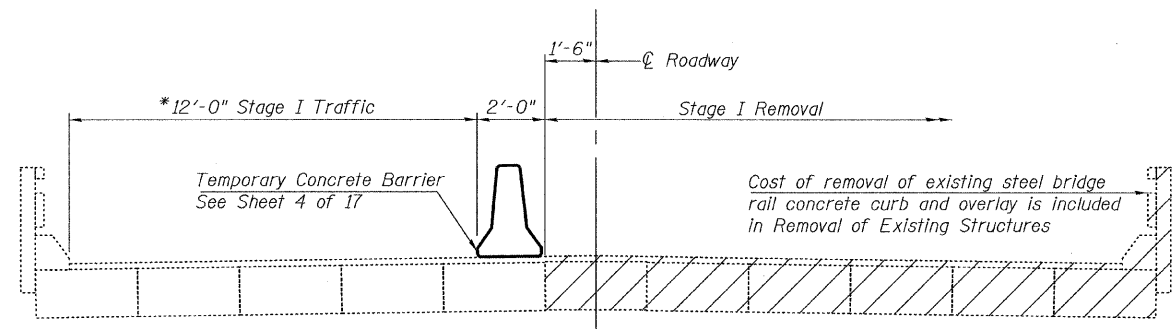
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COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

PROJECT NO. 07053-8
SCALE
DATE 10/14/08
DRAWN BY TFG
CHECKED BY CME/RM/MCB

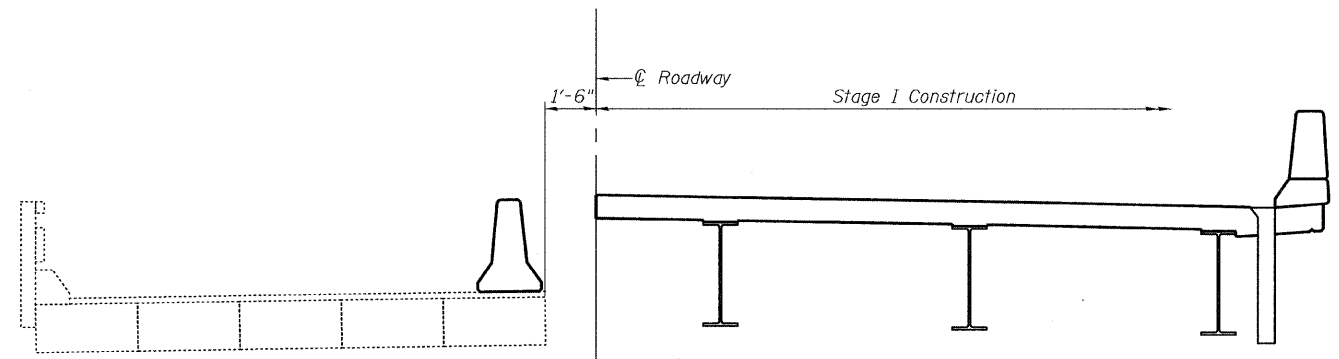
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17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 74214				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

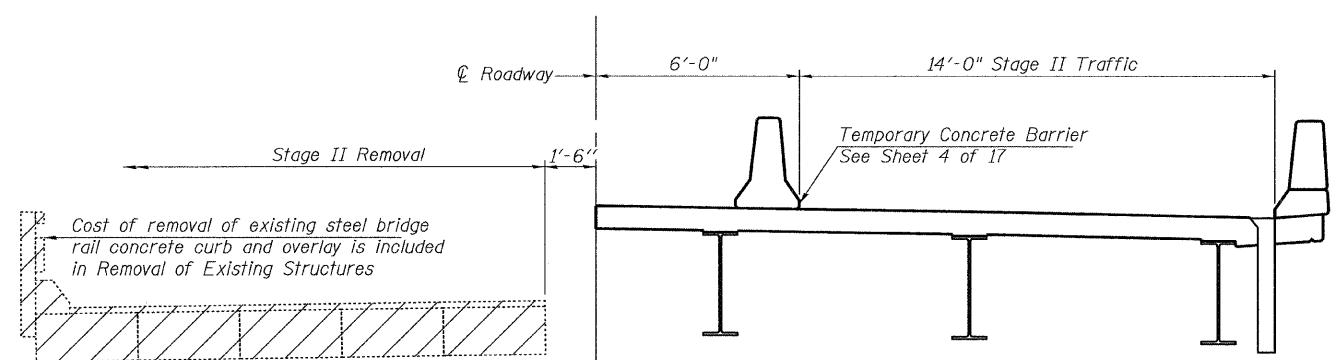


*Traffic restricted to legal loads only.

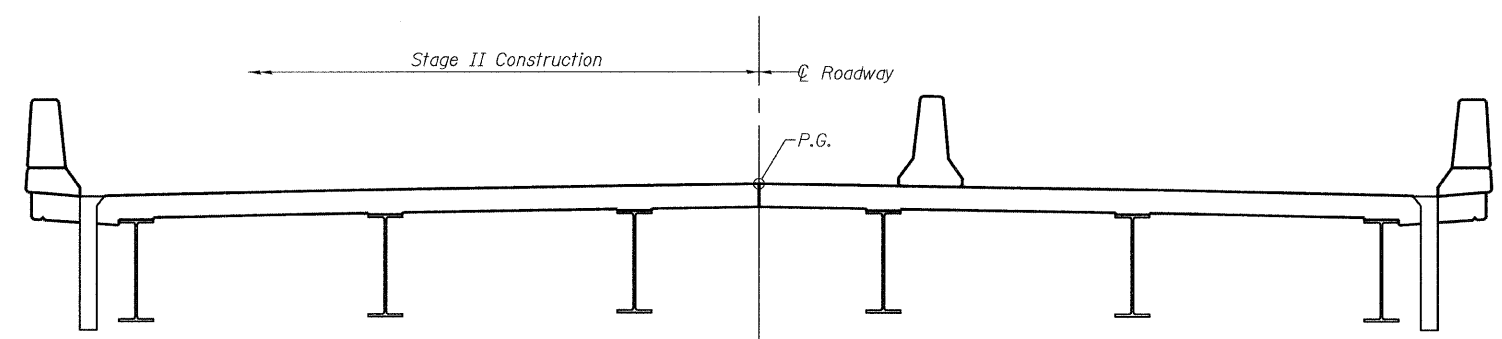
STAGE I REMOVAL



STAGE I CONSTRUCTION



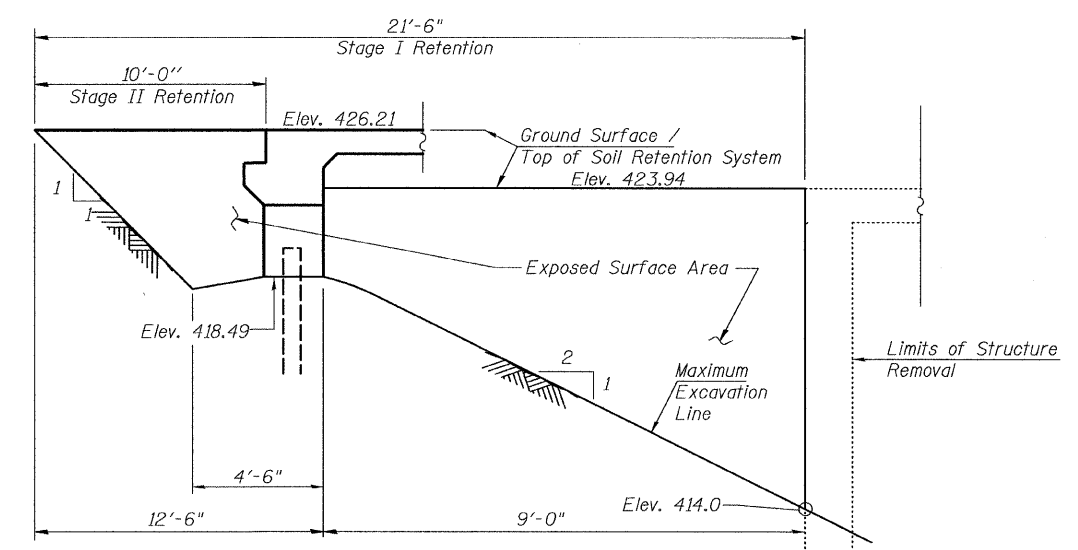
STAGE II REMOVAL



STAGE II CONSTRUCTION

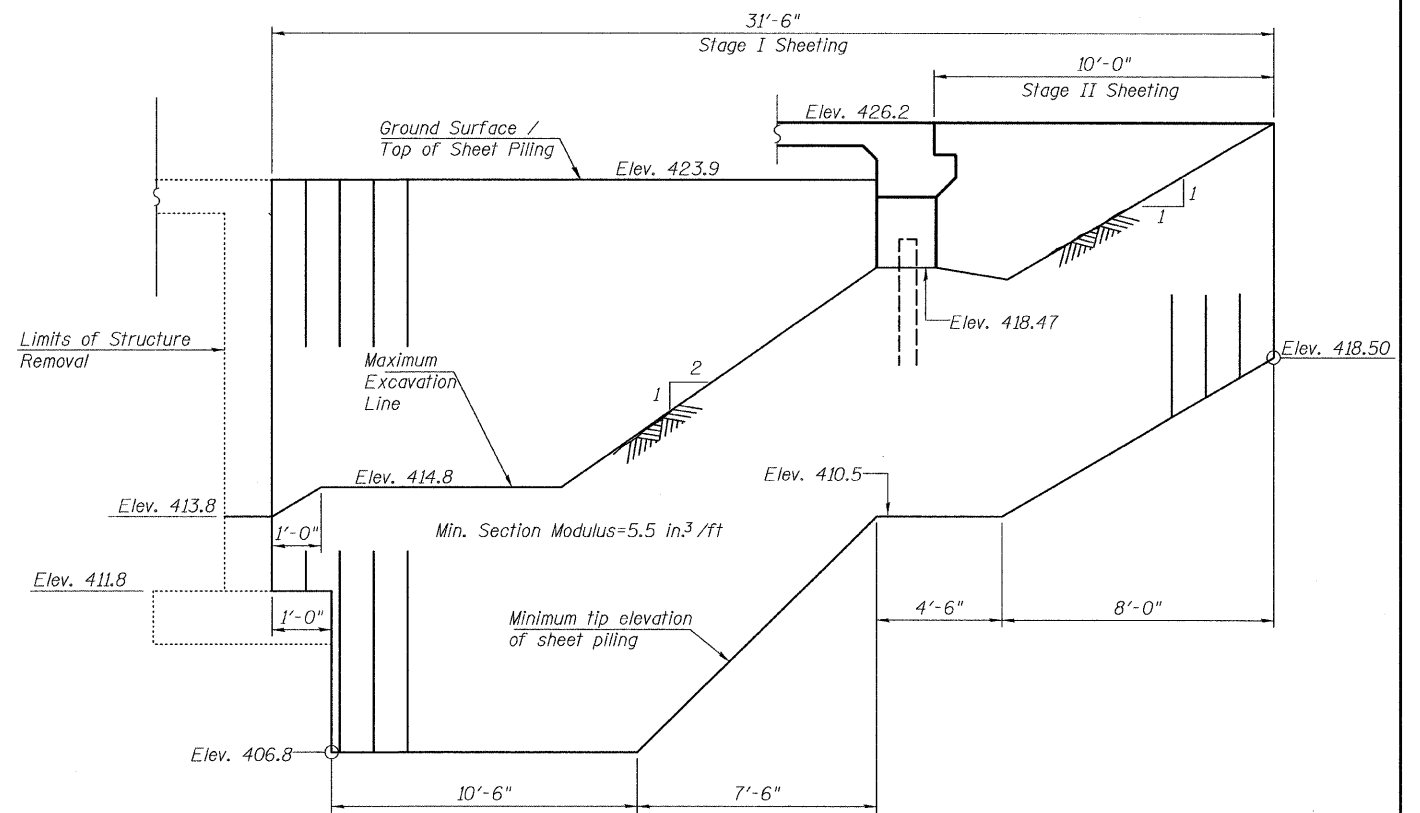
NOTES

All staging cross sections are looking north.
 Hatched areas indicates Removal of Existing Structures.
 For quantity of Temporary Concrete Barrier see roadway plans.
 Removal of existing precast concrete bridge slabs at each approach corner is included with Removal of Existing Structures.



Note: A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

TEMPORARY SOIL RETENTION SYSTEM AT S. ABUT.



TEMPORARY SHEET PILING AT N. ABUT.

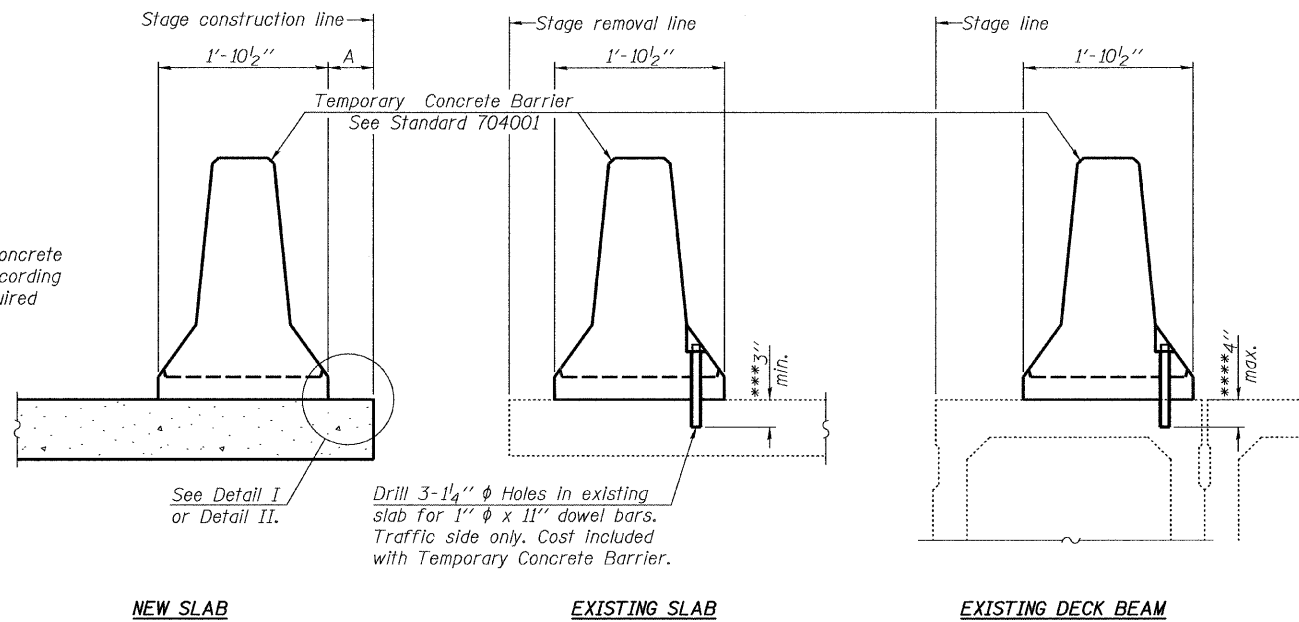
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
 The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

STAGE CONSTRUCTION DETAILS
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

PLOT DATE = 09/06/2008
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = TFC

COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8 SCALE DATE 8/05/08 DRAWN BY TFG CHECKED BY CME/RM/MCB	SHEET NO. 3 17 SHEETS	F.A.P. RTE. 328 SECTION (9BR1-10BR1) B-1 COUNTY WAYNE CONTRACT NO. 74214	TOTAL SHEETS 67 SHEET NO. 26
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

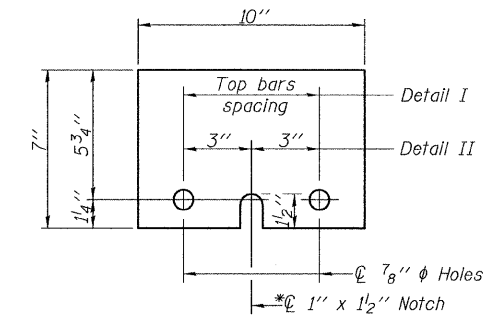
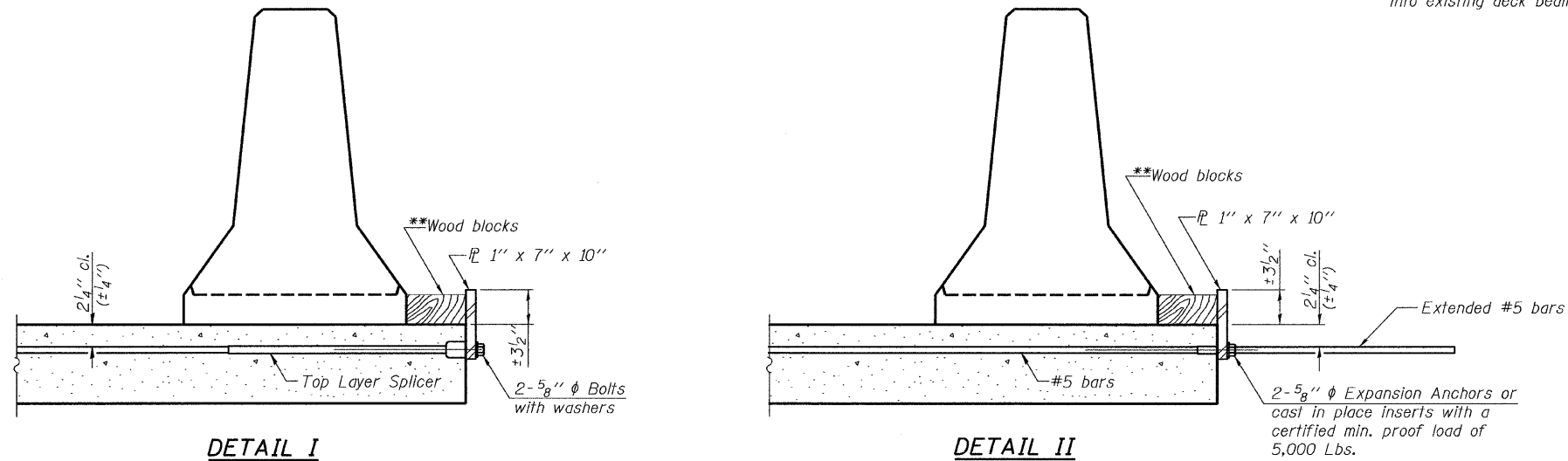
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{L} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



STEEL RETAINER \bar{L} 1" x 7" x 10"
*Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

**TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069**

PLOT DATE = 08/06/2008
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PLOT SCALE = 1/8" = 1'-0"
USER NAME = TFG

R-27 5-16-08

COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8 SCALE DATE 8/05/08 DRAWN BY TFG CHECKED BY CME/RM/MCB	SHEET NO. 4 17 SHEETS	F.A.P. RTE. 328 SECTION (9BR1-10BR1) B-1 COUNTY WAYNE CONTRACT NO. 74214	TOTAL SHEETS 67 SHEET NO. 27
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
End of S. Approach	138+37.50	-20.00	425.79
A	138+47.50	-20.00	425.82
B	138+57.50	-20.00	425.85
Bk of S. Abut	138+67.50	-20.00	425.88

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End of S. Approach	138+37.50	-12.00	425.95
A	138+47.50	-12.00	425.99
B	138+57.50	-12.00	426.02
Bk of S. Abut	138+67.50	-12.00	426.05

☉ ROADWAY, PGL & STAGE CONST. LINE

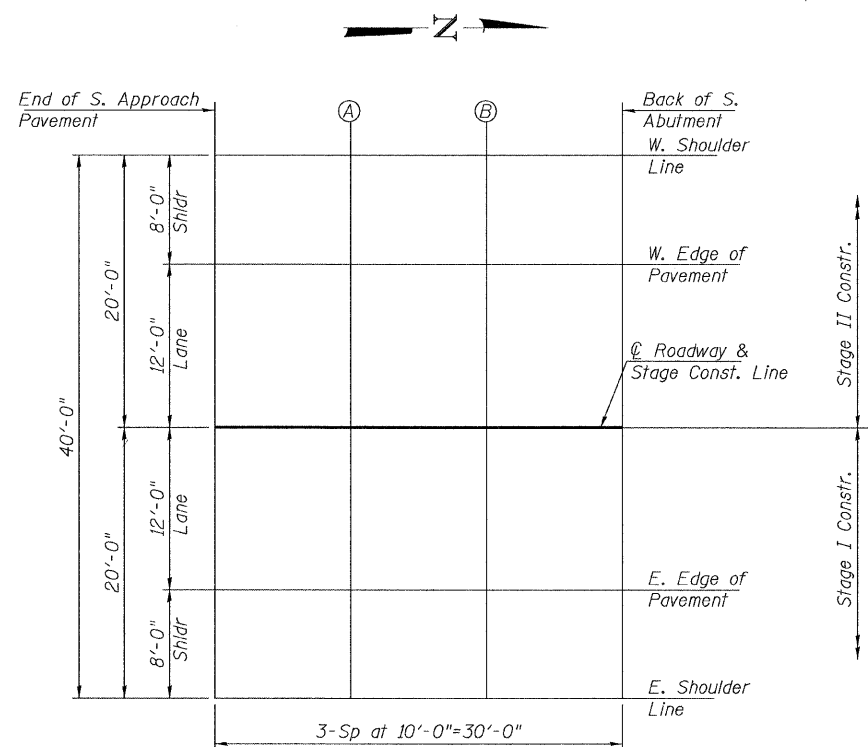
Location	Station	Offset	Theoretical Grade Elevations
End of S. Approach	138+37.50	0.00	426.14
A	138+47.50	0.00	426.18
B	138+57.50	0.00	426.21
Bk of S. Abut	138+67.50	0.00	426.23

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End of S. Approach	138+37.50	12.00	425.95
A	138+47.50	12.00	425.99
B	138+57.50	12.00	426.02
Bk of S. Abut	138+67.50	12.00	426.05

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
End of S. Approach	138+37.50	20.00	425.79
A	138+47.50	20.00	425.82
B	138+57.50	20.00	425.85
Bk of S. Abut	138+67.50	20.00	425.88



PLAN

**TOP OF SOUTH APPROACH
SLAB ELEVATIONS
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069**

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E-AS 9-3-07

COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8 SCALE DATE 8/05/08 DRAWN BY TFG CHECKED BY CME/RM/MCB	SHEET NO. 6 17 SHEETS	F.A.P. RTE. 328	SECTION (9BR1-10BR1) B-1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 29
	CONTRACT NO. 74214 FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT						

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Bk. Of N. Abut	139+52.50	-20.00	425.85
A	139+62.50	-20.00	425.82
B	139+72.50	-20.00	425.78
End Of N. Approach	139+82.50	-20.00	425.74

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. Of N. Abut	139+52.50	-12.00	426.02
A	139+62.50	-12.00	425.99
B	139+72.50	-12.00	425.95
End Of N. Approach	139+82.50	-12.00	425.91

☉ ROADWAY, PGL & STAGE CONST. LINE

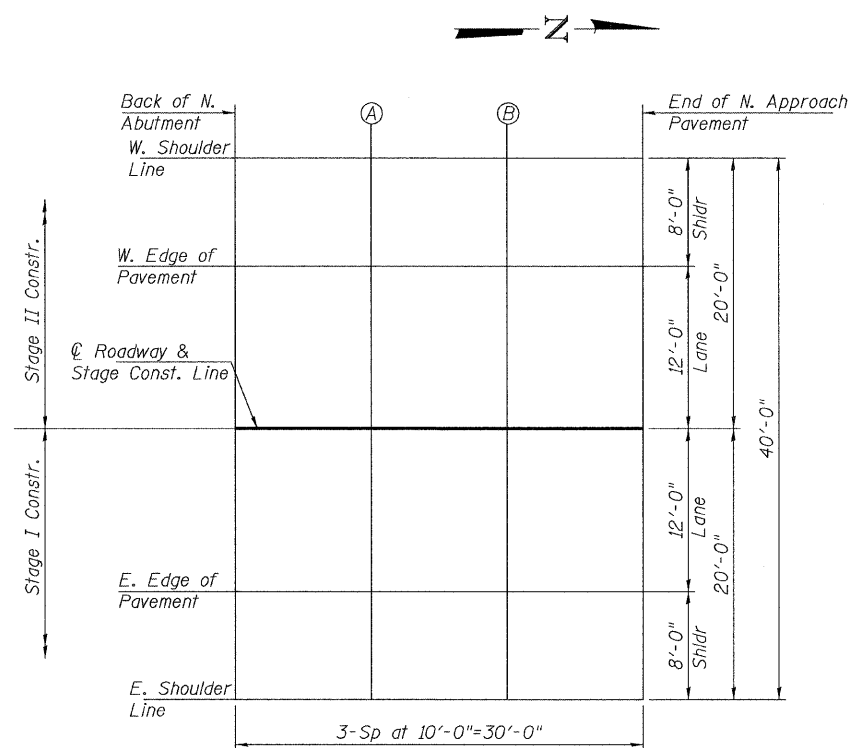
Location	Station	Offset	Theoretical Grade Elevations
Bk. Of N. Abut	139+52.50	0.00	426.21
A	139+62.50	0.00	426.18
B	139+72.50	0.00	426.14
End Of N. Approach	139+82.50	0.00	426.10

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. Of N. Abut	139+52.50	12.00	426.02
A	139+62.50	12.00	425.99
B	139+72.50	12.00	425.95
End Of N. Approach	139+82.50	12.00	425.91

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Bk. Of N. Abut	139+52.50	20.00	425.85
A	139+62.50	20.00	425.82
B	139+72.50	20.00	425.78
End Of N. Approach	139+82.50	20.00	425.74



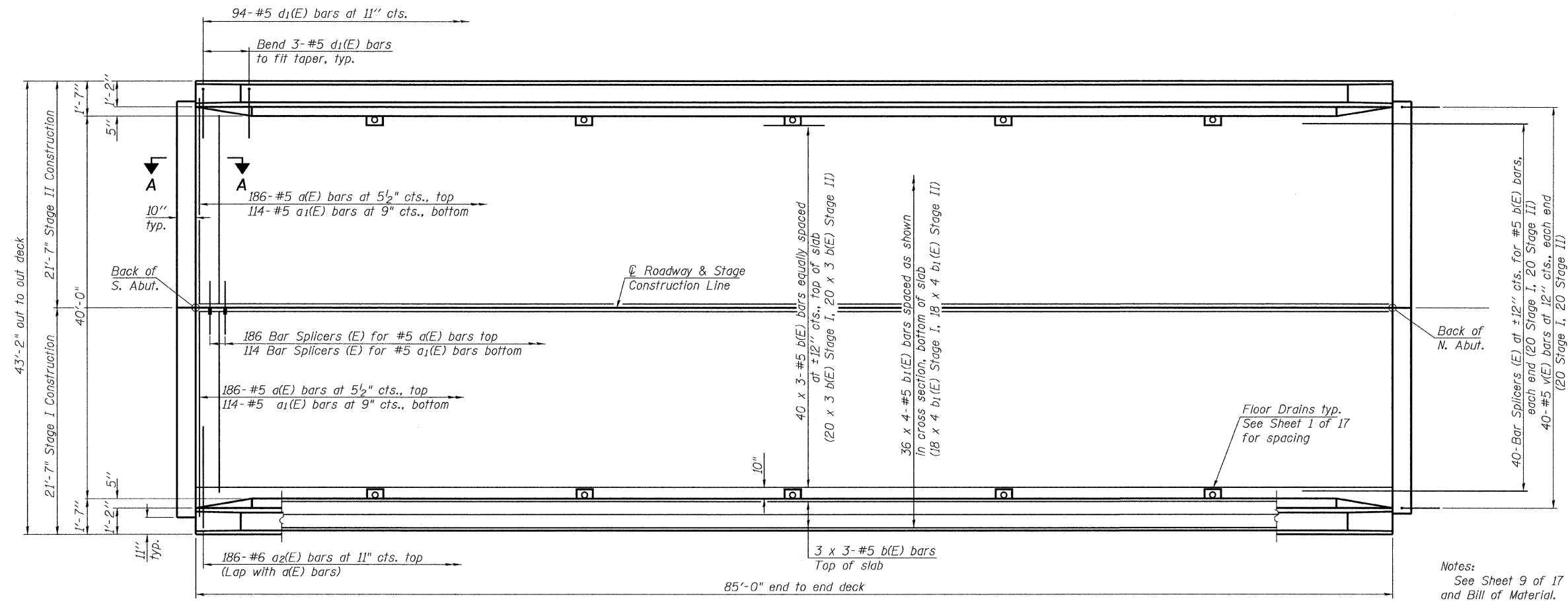
PLAN

**TOP OF NORTH APPROACH
SLAB ELEVATIONS
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069**

PLOT DATE = 08/06/2008
PLOT SCALE = 1"=100'-0"
USER NAME = TFG

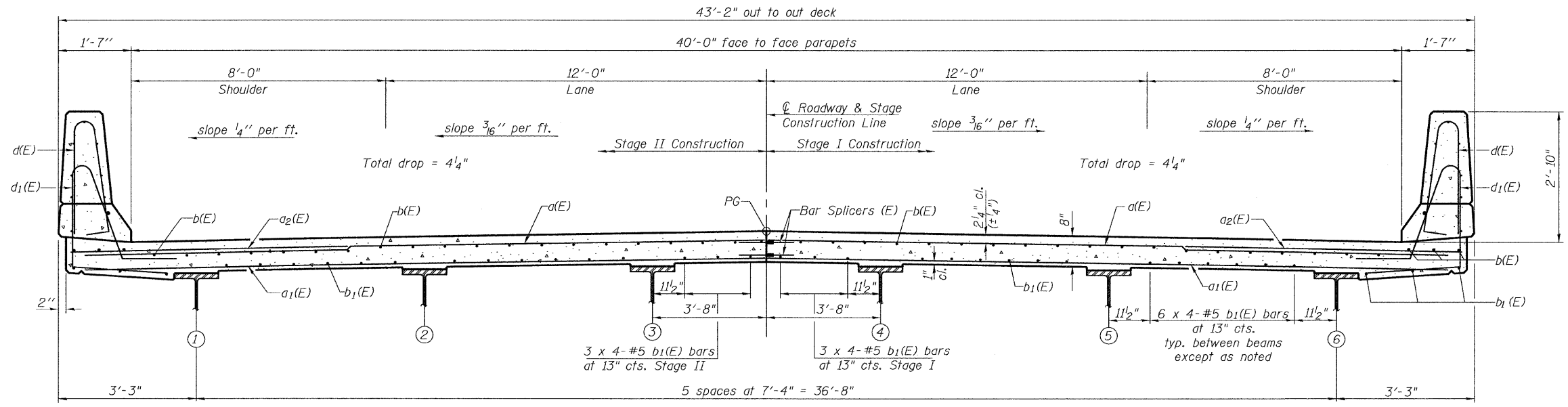
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COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8 SCALE DATE 8/05/08 DRAWN BY TFG CHECKED BY CME/RM/MCB	SHEET NO. 7 17 SHEETS	F.A.P. RTE. 328	SECTION (9BR1-10BR1) B-1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 30
				CONTRACT NO. 74214			
			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



PLAN

Notes:
 See Sheet 9 of 17 for superstructure details and Bill of Material.
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 See Sheet 9 of 17 for parapet reinforcement.



CROSS SECTION
 (Looking North)

MIN. BAR LAP
 #5 BARS = 1'-8"

SUPERSTRUCTURE
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

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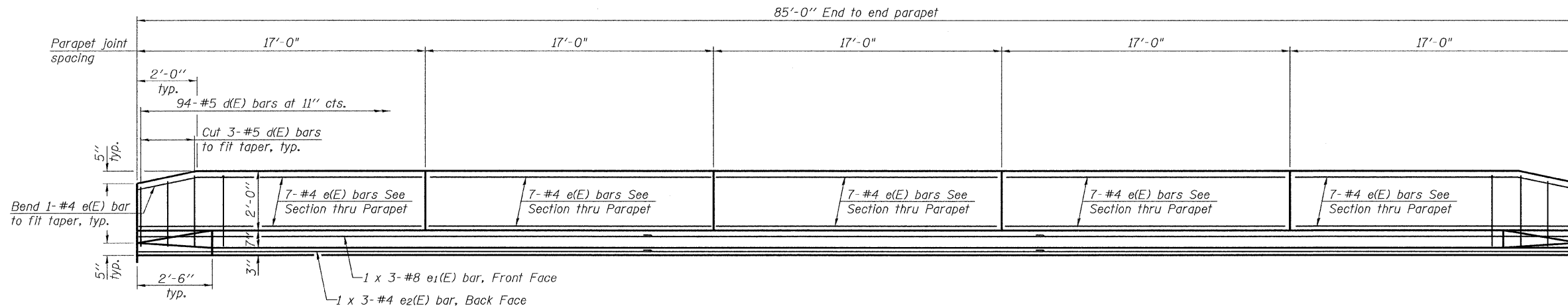
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COOMBE-BLOXDORF P.C.
 Engineers / Land Surveyors
 Springfield, Illinois
 Design Firm License No. 184-002703

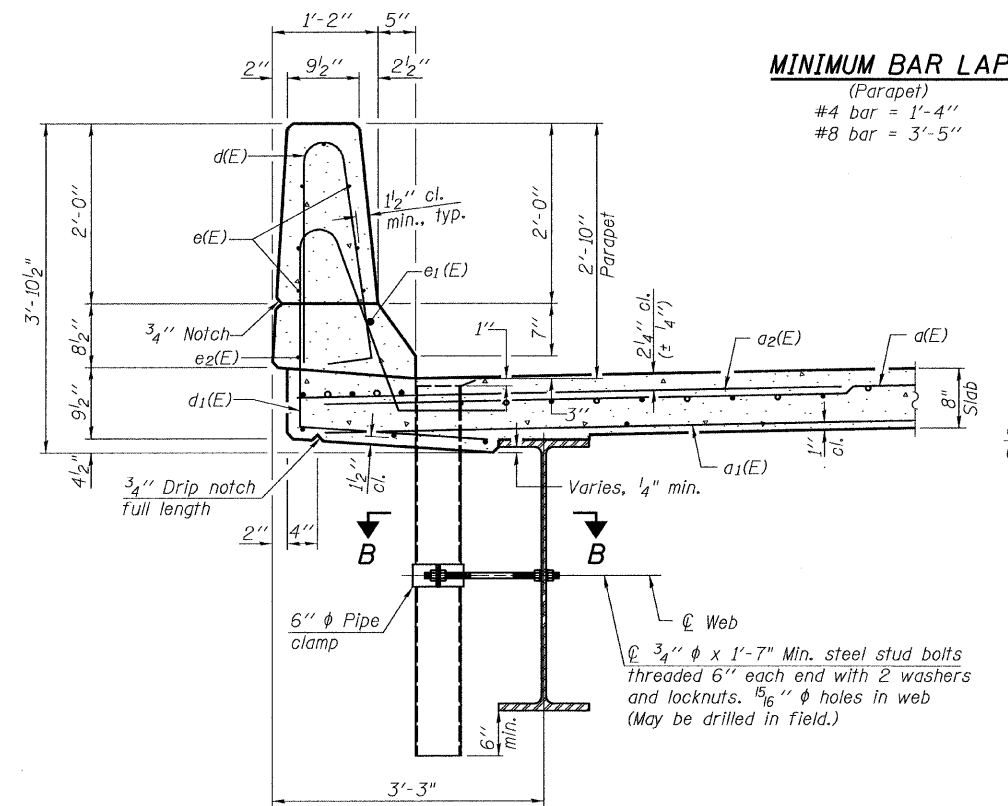
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 SCALE
 DATE 8/05/08
 DRAWN BY TFG
 CHECKED BY CME/RM/MCB

SHEET NO. 8
 17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1-10BR1) B-1	WAYNE	67	31
CONTRACT NO. 74214				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



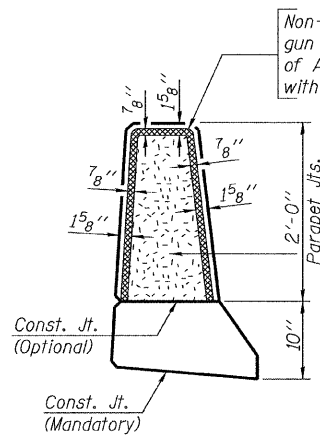
INSIDE ELEVATION OF PARAPET



SECTION THRU PARAPET

MINIMUM BAR LAP

(Parapet)
 #4 bar = 1'-4"
 #8 bar = 3'-5"



PARAPET JOINT DETAILS

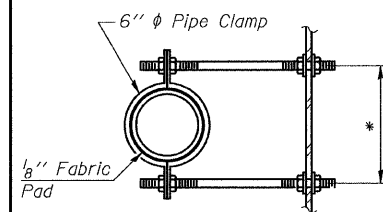
Notes:
 The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting. Floor drains shall be located clear of all diaphragms. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	372	#5	20'-11"	—
a1(E)	228	#5	20'-9"	—
a2(E)	372	#6	6'-0"	—
b(E)	138	#5	29'-6"	—
b1(E)	144	#5	22'-6"	—
d(E)	188	#5	5'-7"	⌋
d1(E)	188	#5	8'-0"	⌋
e(E)	70	#4	16'-9"	—
e1(E)	6	#8	30'-6"	—
e2(E)	6	#4	29'-3"	—
m(E)	8	#6	20'-4"	—
m1(E)	12	#6	21'-3"	—
m2(E)	24	#6	8'-11"	—
m3(E)	8	#6	7'-0"	—
m4(E)	4	#6	2'-11"	—
m5(E)	4	#6	3'-4"	—
s(E)	92	#5	6'-3"	⌋
s1(E)	84	#4	10'-0"	⌋
v(E)	80	#5	3'-4"	⌋
Reinforcement Bars, Epoxy Coated		Pound		30590
Concrete Superstructure		Cu. Yds.		144.2
Bar Splicers		Each		396

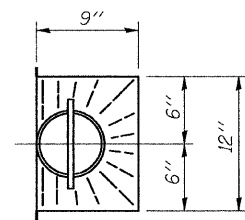
Bars indicated thus 1 x 3-#5 etc. indicates 1 line of bars with 3 lengths per line.

SUPERSTRUCTURE DETAILS
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

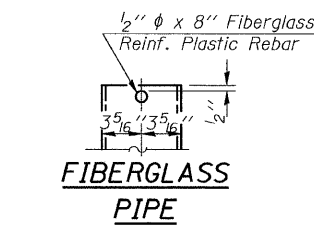


SECTION B-B

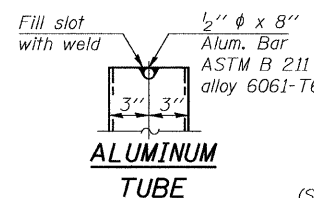
*Dimension as required by Pipe Clamp



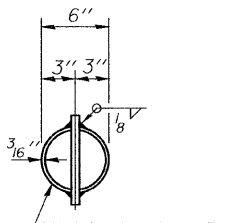
TOP PLAN



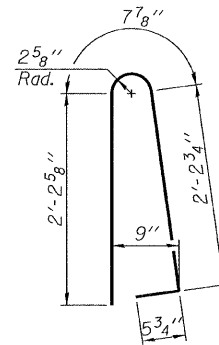
FIBERGLASS PIPE



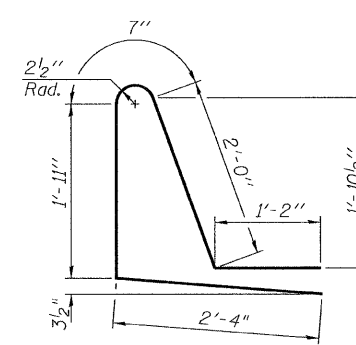
ALUMINUM TUBE



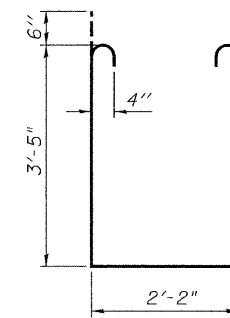
TOP PLAN
(Showing Aluminum Tube)



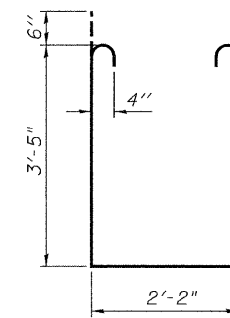
BAR d(E)



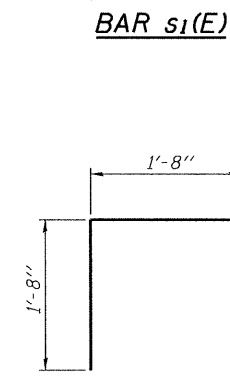
BAR d1(E)



BAR s(E)



BAR s1(E)

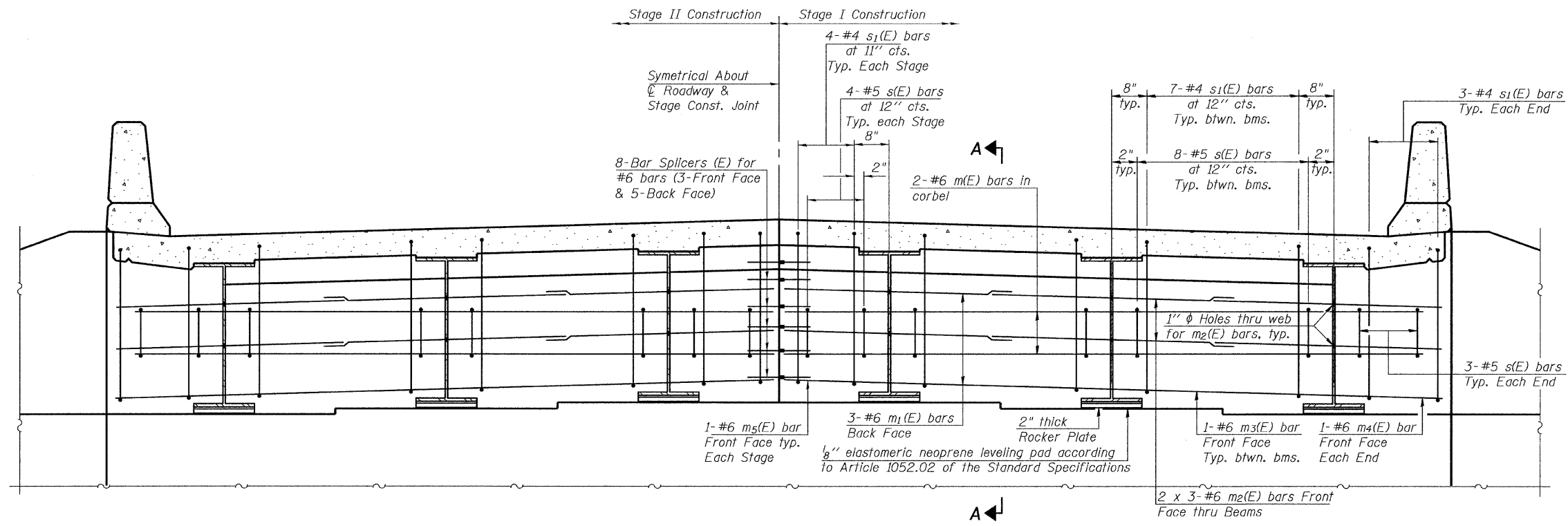


BAR v(E)

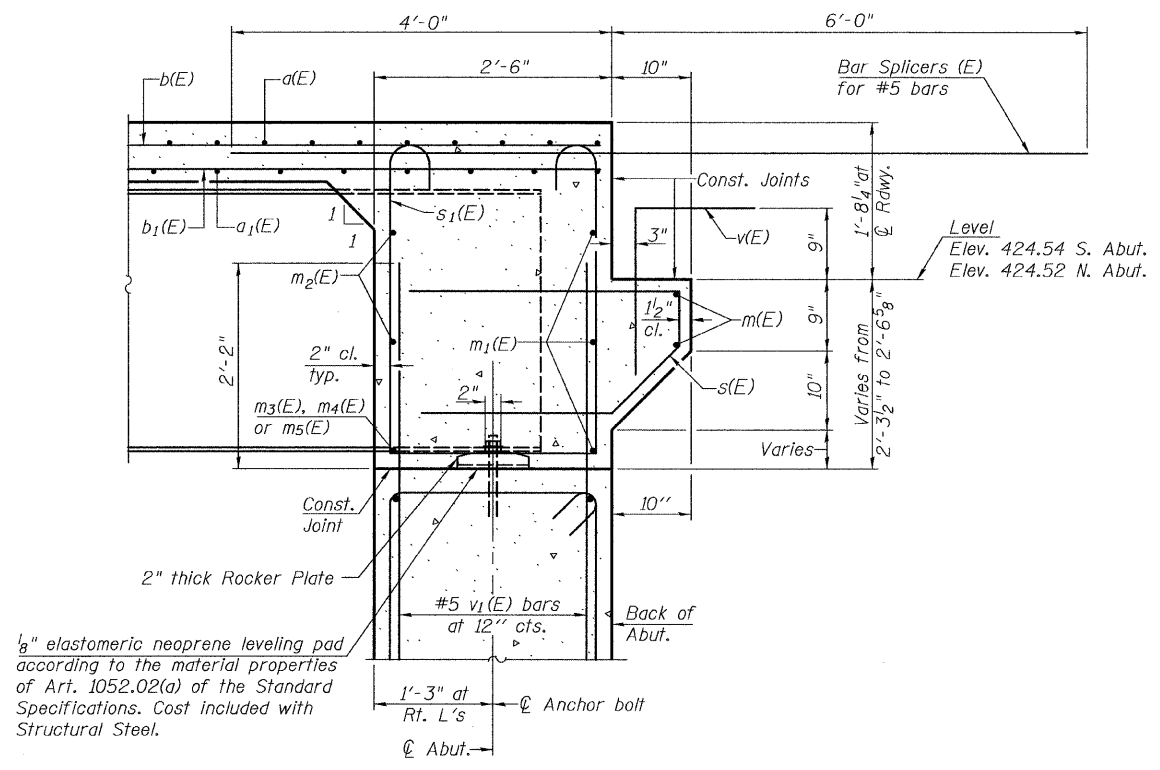
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 PLOT SCALE = ...
 USER NAME = TFC

S-I-D 9-3-07

COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8	SHEET NO. 9 17 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DATE 8/05/08 DRAWN BY TFC CHECKED BY CME/RM/MCB		328	(9BR1-10BR1) B-1	WAYNE	67	32
			CONTRACT NO. 74214				
			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



DIAPHRAGM ELEVATION AT NORTH ABUTMENT
(Looking North) (South Abutment Similar)



SECTION A-A

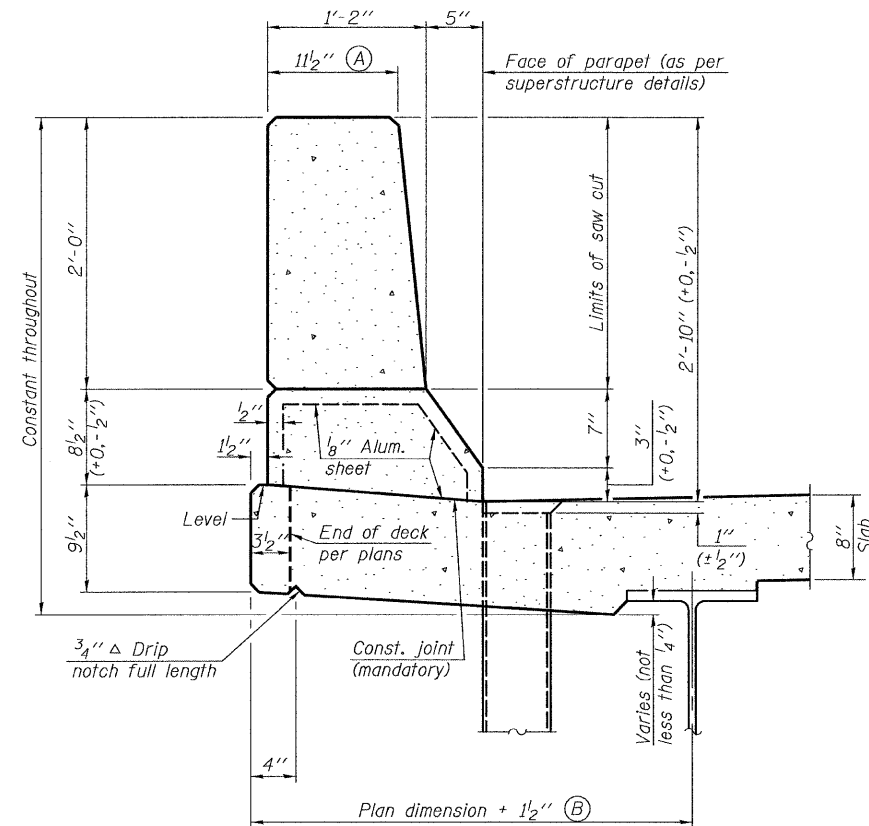
Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 17.
Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 17.
For details of bars $s(E)$ & $s_1(E)$ see sheet 9 of 17.
Bars indicated thus 2 x 3-#6 etc. indicates 2 lines of bars with 3 lengths per line.

MIN. BAR LAP
#6 bar = 2'-9"

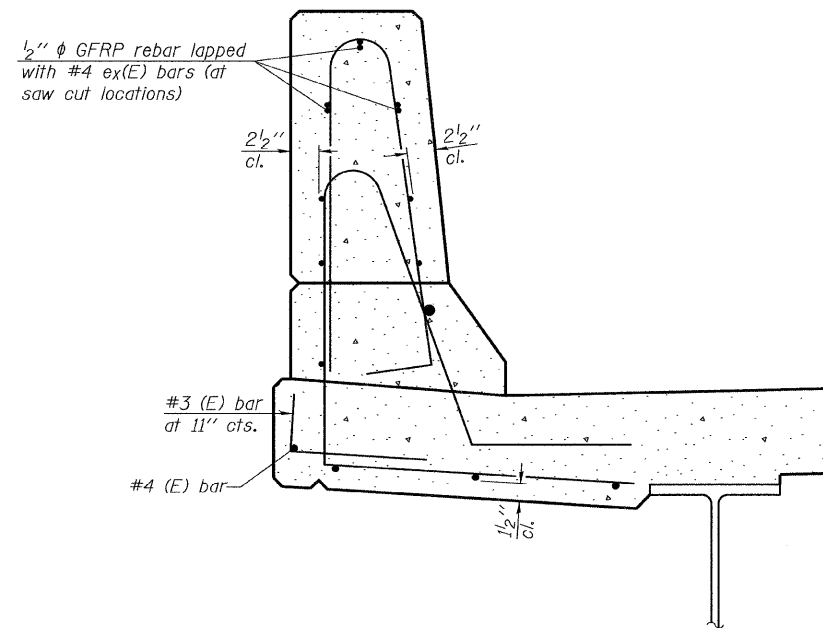
DIAPHRAGM DETAILS
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

PLOT DATE = 08/06/2008
PLOT NAME = 096-0069-10-51-051.dgn
PLOT SCALE = 1/8"=1'-0"
USER NAME = TFG

COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8 SCALE DATE 8/05/08 DRAWN BY TFG CHECKED BY CME/RM/MCB	SHEET NO. 10		TOTAL SHEETS		SHEET NO.	
		17 SHEETS		67		33	
F.A.P. RTE. 328		SECTION (9BR1-10BR1) B-1		COUNTY WAYNE		CONTRACT NO. 74214	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT							

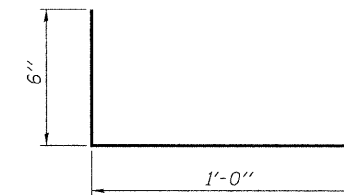


SECTION
(Showing dimensions)

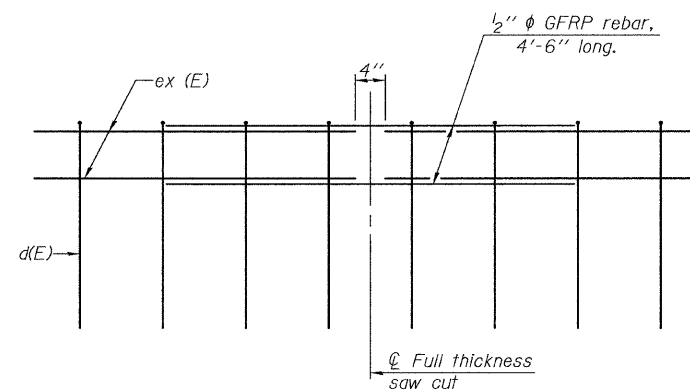


SECTION
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

GENERAL NOTES
All dimensions shall remain the same as shown on contract plans, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B= 0.0165 cu. yds./ft. of parapet.
Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

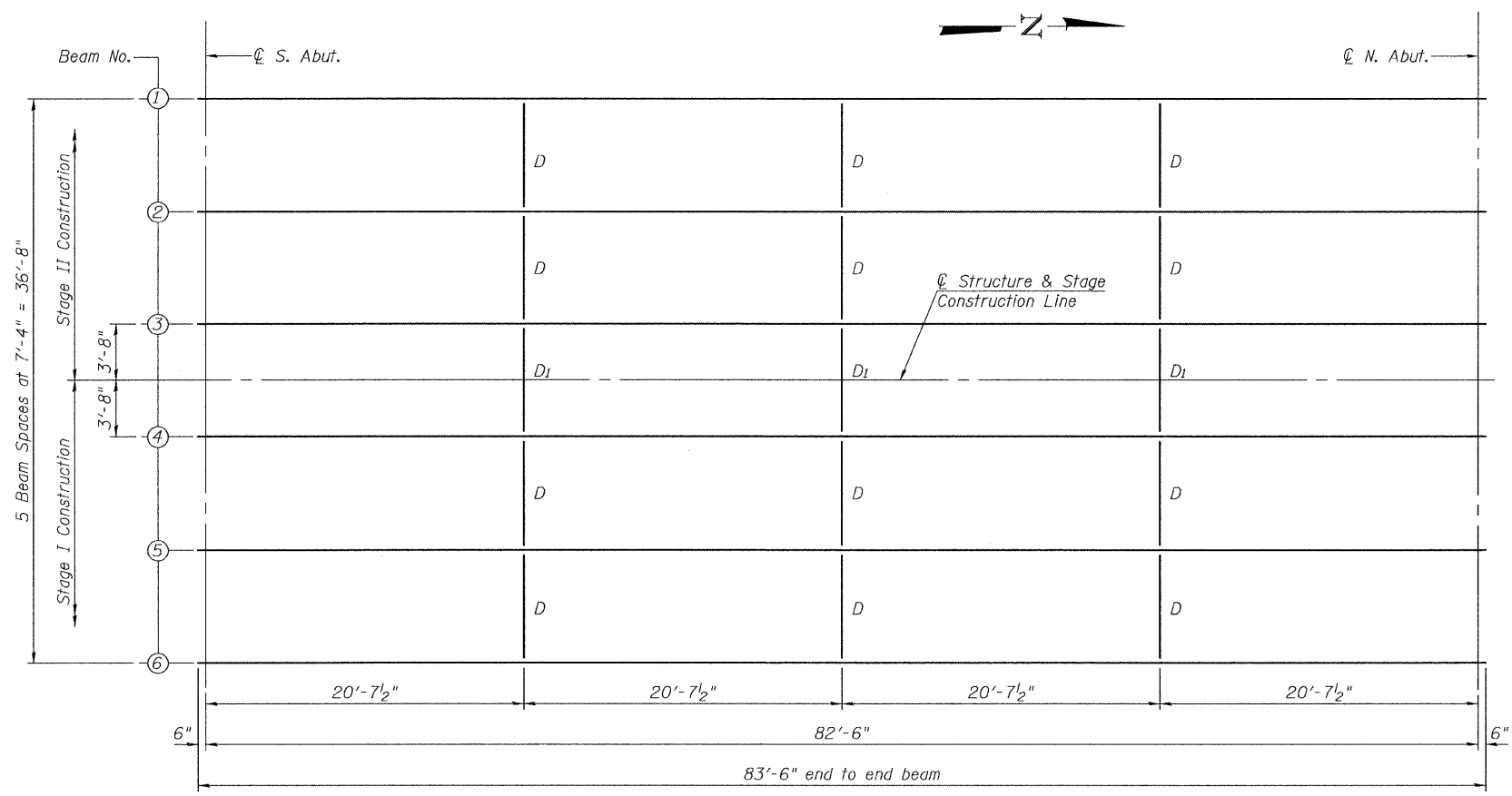
CONCRETE PARAPET SLIPFORMING OPTION
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

PROJECT NO. 07053-B
SCALE
DATE 8/05/08
DRAWN BY TFG
CHECKED BY RM/MCB

SHEET NO. 11
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1-10BR1) B-1	WAYNE	67	34
CONTRACT NO. 74214				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



INTERIOR GIRDER MOMENT TABLE		
0.472 Span		
I_s	(in ⁴)	12100
$I_c(n)$	(in ⁴)	28402
$I_c(3n)$	(in ⁴)	21100
S_s	(in ³)	664
$S_c(n)$	(in ³)	927
$S_c(3n)$	(in ³)	836
DC1	(k/')	0.99
M _{DC1}	(k)	844
DC2	(k/')	0.15
M _{DC2}	(k)	127
DW	(k/')	0.33
M _{DW}	(k)	282
$M_k + imp$	(k)	1316
M_u (Strength I)	(k)	3946
$\phi_r M_n$	(k)	4659
f_s DC1	(ksi)	15.3
f_s DC2	(ksi)	1.8
f_s DW	(ksi)	4.0
f_s 1.3(I+I)	(ksi)	22.1
f_s (Service II)	(ksi)	43.2
V_r	(k)	26.3

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in.⁴ and in.³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_k + imp$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).

$\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

f_s (Service II): Sum of stresses as computed from the moments below (ksi).

V_r : Factored shear range computed according to Article 6.10.10.

INTERIOR GIRDER REACTION TABLE		
HL93 Loading		
		Abut.
R _{DC1}	(k)	40.9
R _{DC2}	(k)	6.2
R _{DW}	(k)	13.5
$R_k + imp$	(k)	93.8
R _{Total}	(k)	154.4

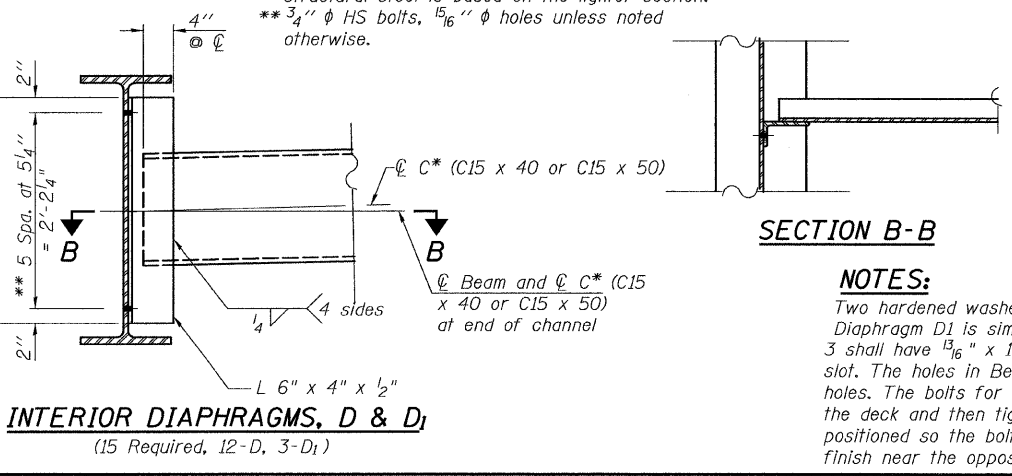
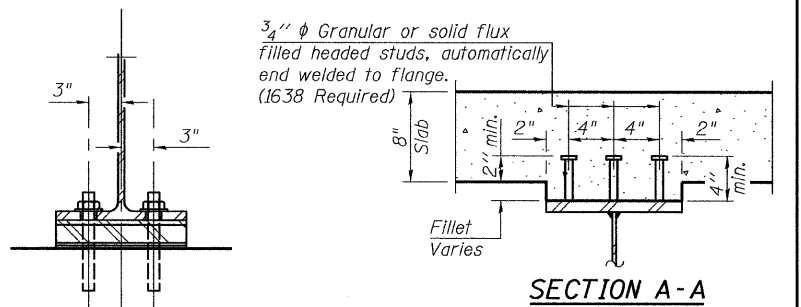
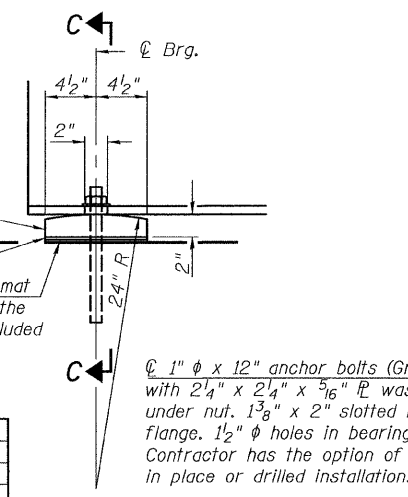
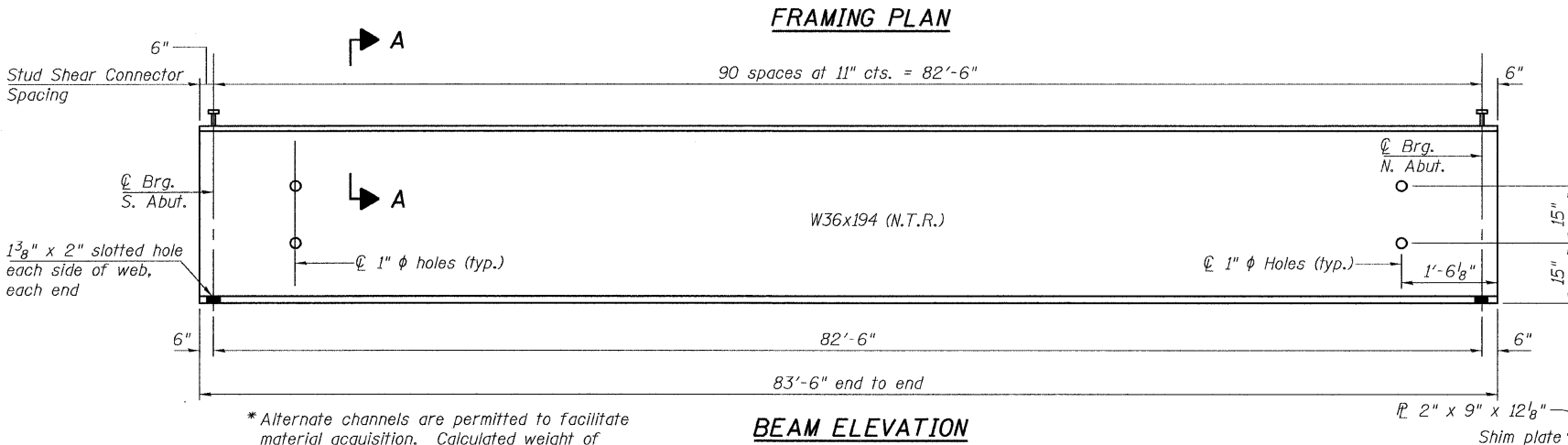
NOTES:

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

The steel beams shall be AASHTO M270 Grade 50. All other structural steel shall be AASHTO M270 Grade 36.



TOP OF BEAM ELEVATIONS						
Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
℄ Brg. S. Abut.	425.21	425.36	425.47	425.47	425.36	425.21
℄ Brg. N. Abut.	425.18	425.33	425.45	425.45	425.33	425.18

(for fabrication only)

NOTES:

Two hardened washers required for each set of oversized holes.

Diaphragm D1 is similar to D except the connecting angle attached to Beam 3 shall have 1 3/8" x 1 7/8" slotted holes with 1/4" plate washers covering the entire slot. The holes in Beam 3 at this connection shall also be 1 3/8" x 1 7/8" slotted holes. The bolts for the slotted holes shall only be finger tight prior to pouring the deck and then tightened after completion of the pour. The slots shall be positioned so the bolts start at one end of the slot with no concrete load and finish near the opposite end under deck load.

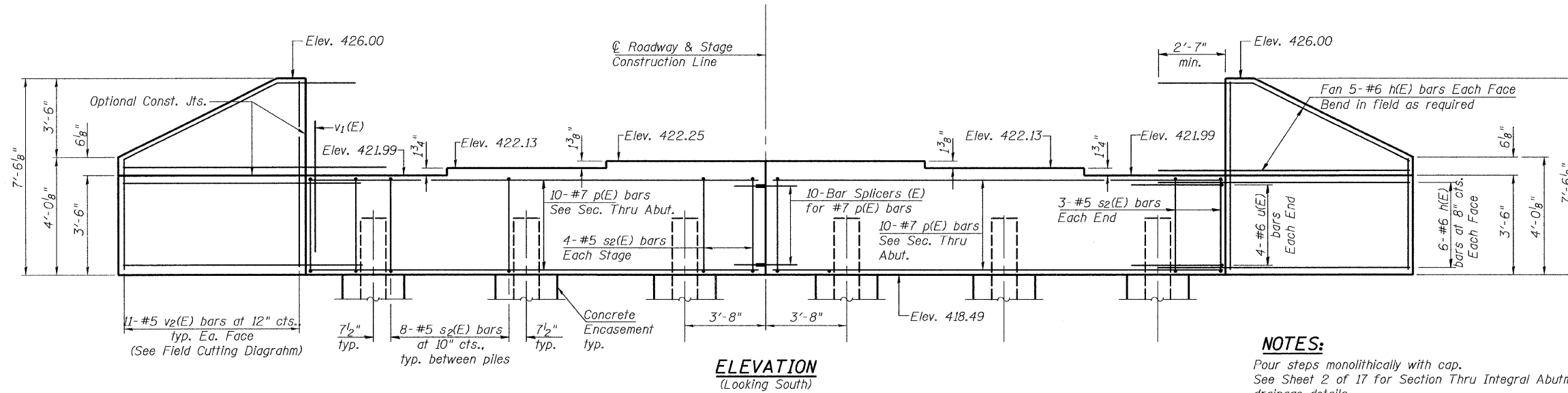
COOMBE-BLOXDORF P.C.
 Engineers / Land Surveyors
 Springfield, Illinois
 Design Firm License No. 184-002703

PROJECT NO. 07053-B
 SCALE
 DATE 8/05/08
 DRAWN BY TFG
 CHECKED BY CME/RM/MCB

SHEET NO. 12
 17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1-10BR1) B-1	WAYNE	67	35
CONTRACT NO. 74214				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

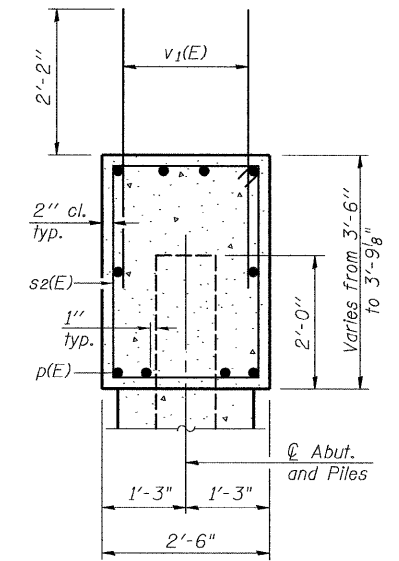
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 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = TFG



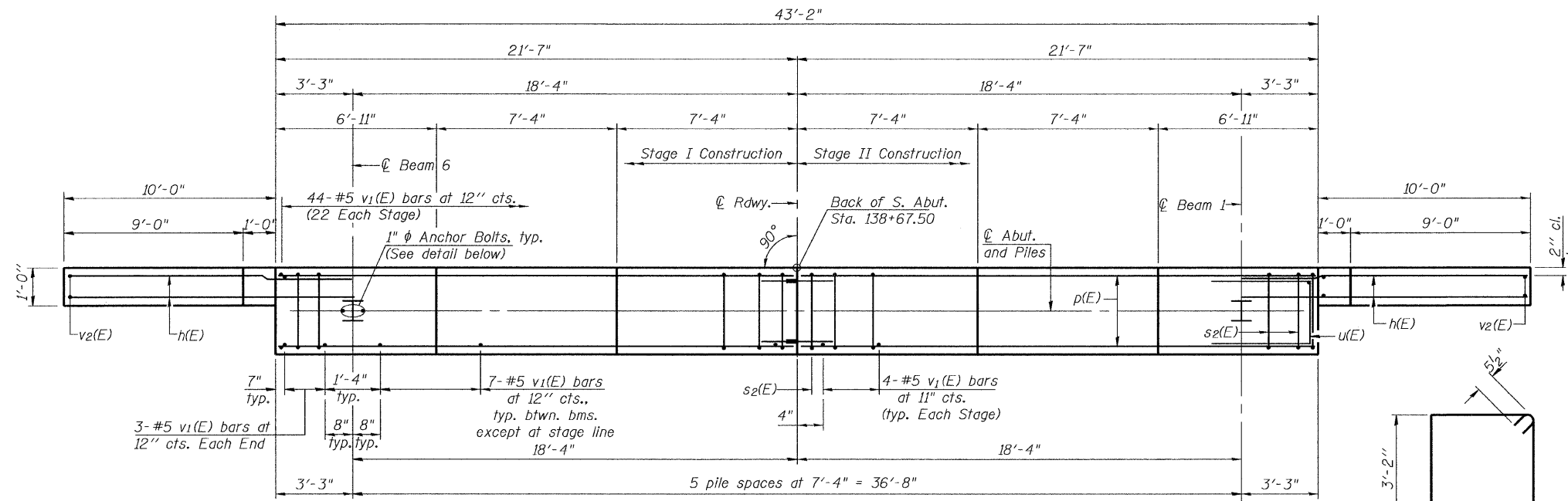
ELEVATION
(Looking South)

NOTES:

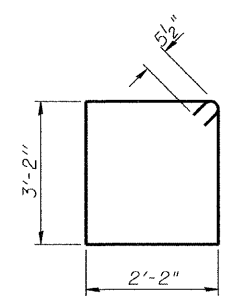
Pour steps monolithically with cap.
See Sheet 2 of 17 for Section Thru Integral Abutment showing drainage details.
For details of Bar Splicers, see sheet 15 of 17.
For details of piles and Concrete Encasement, see sheet 16 of 17.



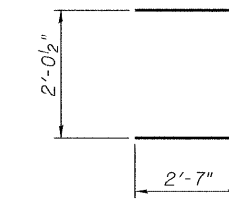
SEC. THRU ABUT.



PLAN



BAR s2(E)



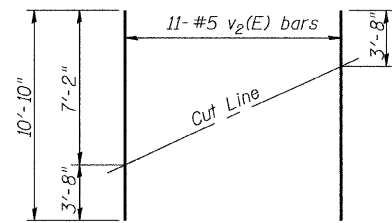
BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	44	#6	12'-5"	—
p(E)	20	#7	21'-3"	—
s2(E)	46	#5	11'-7"	□
u(E)	8	#6	7'-3"	□
v1(E)	86	#5	4'-4"	—
v2(E)	22	#5	10'-10"	—
Structure Excavation			Cu. Yd.	77
Concrete Structures			Cu. Yd.	18.9
Reinforcement Bars, Epoxy Coated			Pound	2970
Furnishing Steel Piles HP12X63			Foot	198
Driving Piles			Foot	198
Anchor Bolts, 1" φ			Each	12
Concrete Encasement			Cu. Yd.	2.1
Bar Splicers			Each	10

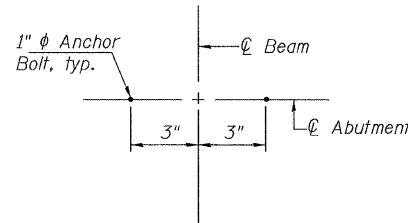
PILE DATA

Type: HP12x63
Maximum Nominal Required Bearing: 497 kips
Factored Resistance Available: 249 kips
Est. Length: 33 ft.
No. Production Piles: 6
No. Test Piles: None



FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



ANCHOR BOLT DETAIL

SOUTH ABUTMENT
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

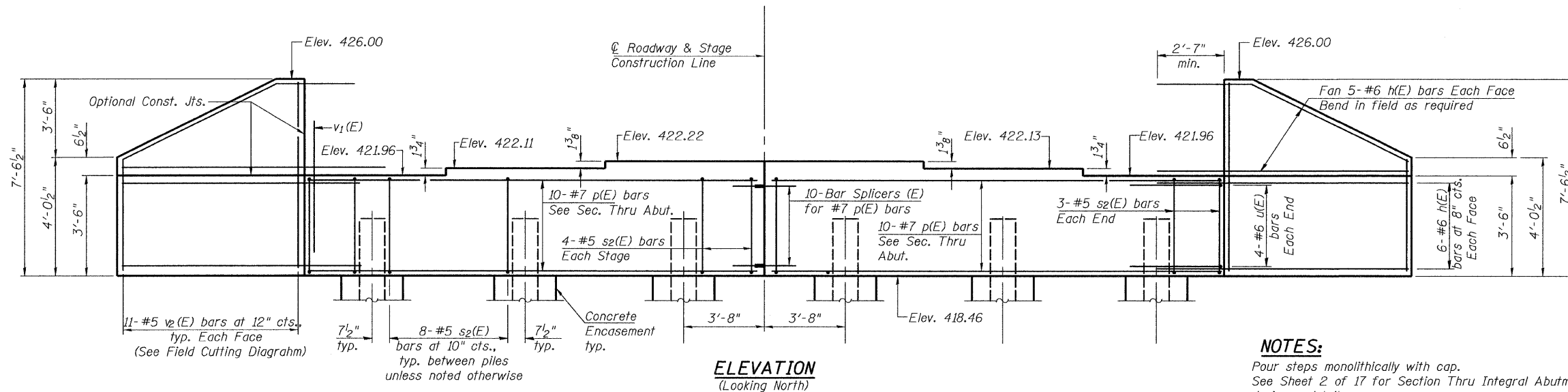
COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

PROJECT NO. 07053-8
SCALE
DATE 8/05/08
DRAWN BY TFG
CHECKED BY CME/RM/MCB

SHEET NO. 13
17 SHEETS

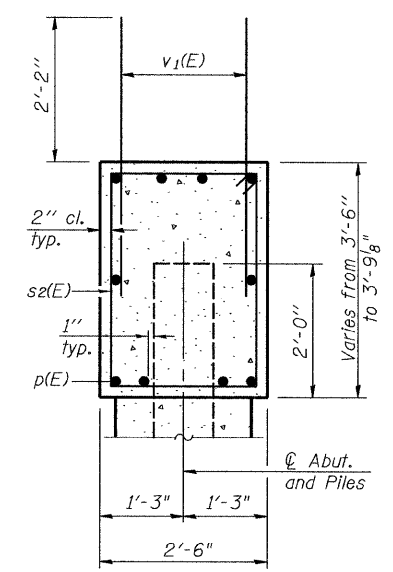
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1-10BR1) B-1	WAYNE	67	36
CONTRACT NO. 74214				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

PLOT DATE = 08/06/2008
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USER NAME = TFG

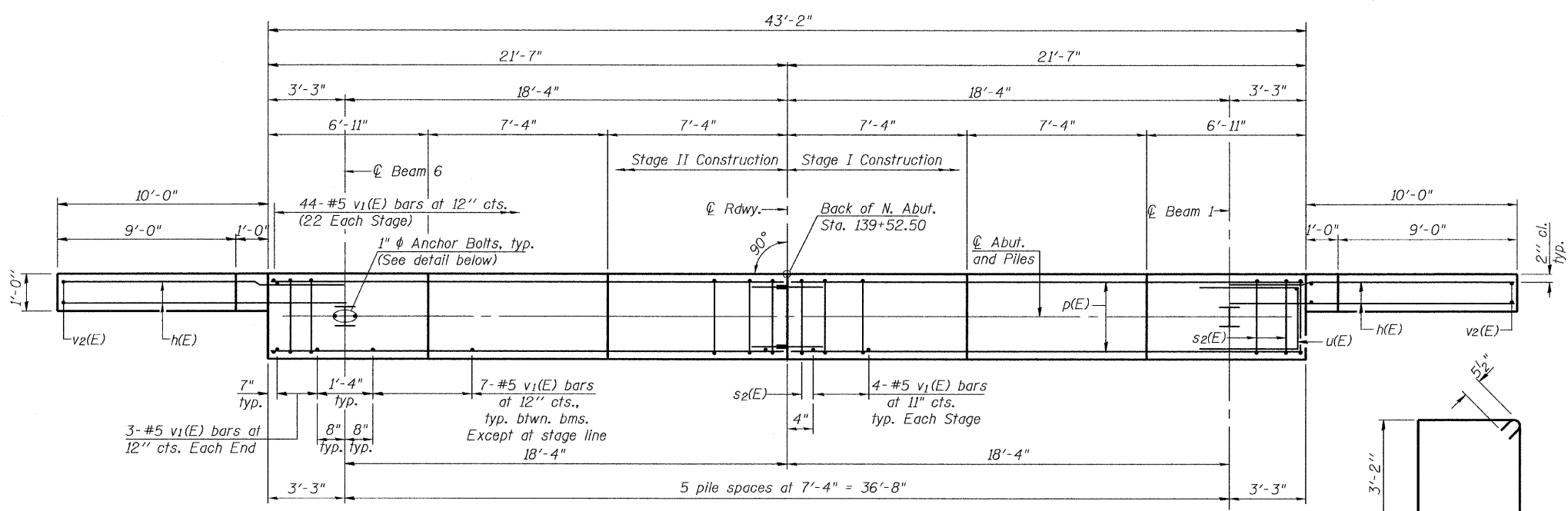


ELEVATION
(Looking North)

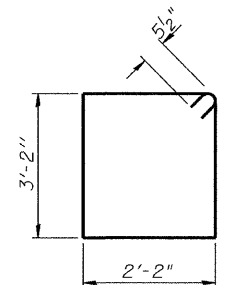
NOTES:
 Pour steps monolithically with cap.
 See Sheet 2 of 17 for Section Thru Integral Abutment showing drainage details.
 For details of Bar Splicers, see sheet 15 of 17.
 For details of piles and Concrete Encasement, see sheet 16 of 17.



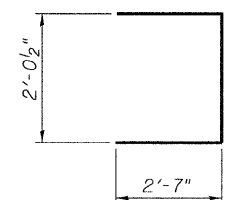
SEC. THRU ABUT.



PLAN



BAR s2(E)



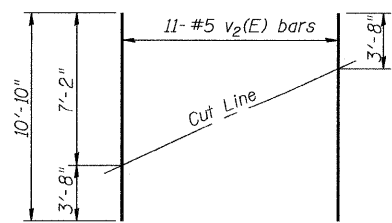
BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	44	#6	12'-5"	—
p(E)	20	#7	21'-3"	—
s2(E)	46	#5	11'-7"	□
u(E)	8	#6	7'-3"	□
v1(E)	86	#5	4'-4"	—
v2(E)	22	#5	10'-10"	—
Structure Excavation		Cu. Yd.	77	
Concrete Structures		Cu. Yd.	18.9	
Reinforcement Bars, Epoxy Coated		Pound	2970	
Furnishing Steel Piles HP12X63		Foot	198	
Driving Piles		Foot	198	
Anchor Bolts, 1" φ		Each	12	
Concrete Encasement		Cu. Yd.	2.1	
Bar Splicers		Each	10	

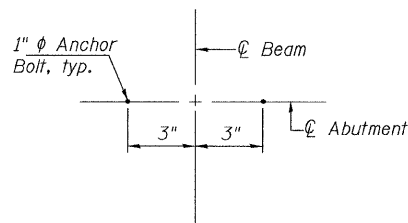
PILE DATA

Type: HP12x63
 Maximum Nominal Required Bearing: 497 kips
 Factored Resistance Available: 249 kips
 Est. Length: 33 ft.
 No. Production Piles: 6
 No. Test Piles: None



FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



ANCHOR BOLT DETAIL

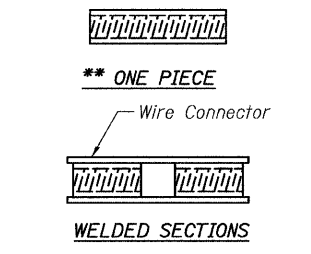
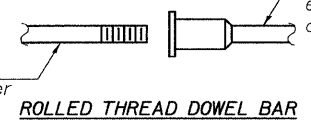
NORTH ABUTMENT
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8 SCALE:	SHEET NO. 14 17 SHEETS	F.A.P. RTE. 328	SECTION (9BR1-10BR1) B-1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 37
	DATE 10/14/08 DRAWN BY TFG CHECKED BY CME/RM/MCB		CONTRACT NO. 74214		FED. ROAD DIST. NO. 7 ILLINOIS	FED. AID PROJECT	

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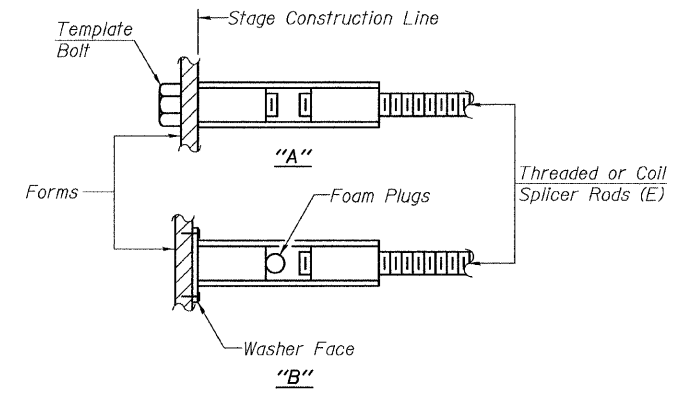
The diameter of this part is equal or larger than the diameter of bar spliced.

The diameter of this part is the same as the diameter of the bar spliced.



BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

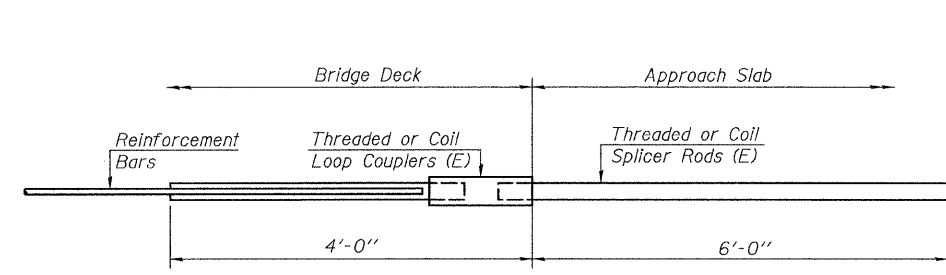
"A" :Set bar splicer assembly by means of a template bolt.
 "B" :Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

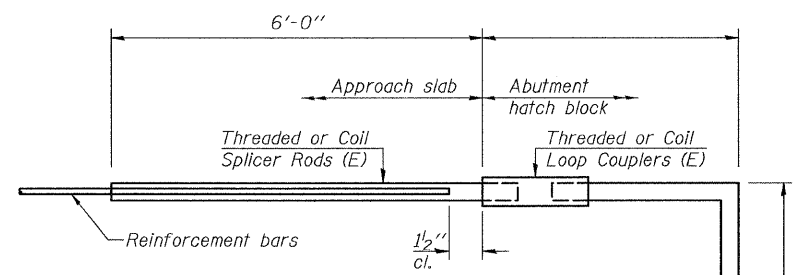
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



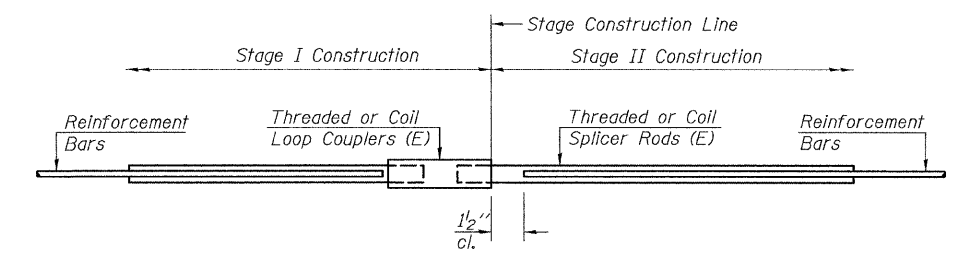
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	80



FOR STUB ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	



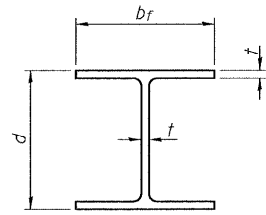
STANDARD

Bar Size	No. Assemblies Required	Location
#5	300	Deck
#6	16	Diaphragm
#7	20	Abutment

BAR SPLICER ASSEMBLY DETAILS
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

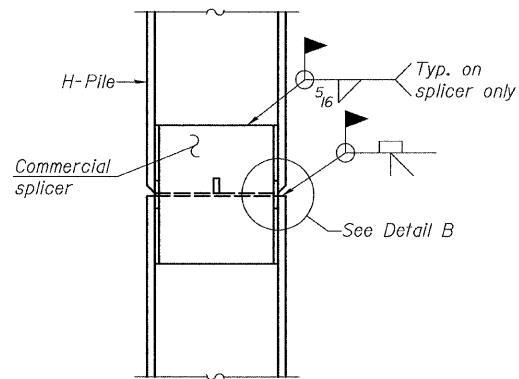
COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8 SCALE DATE 8/05/08 DRAWN BY TFG CHECKED BY CME/RM/MCB	SHEET NO. 15 17 SHEETS	F.A.P. RTE. 328 SECTION (9BR1-10BR1) B-1 COUNTY WAYNE CONTRACT NO. 74214	TOTAL SHEETS 67 SHEET NO. 38
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			

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 USER NAME = TFG

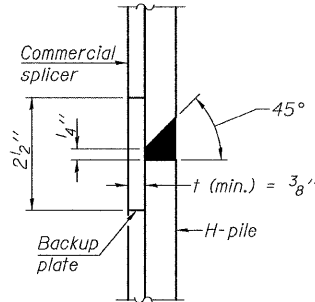


STEEL PILE TABLE

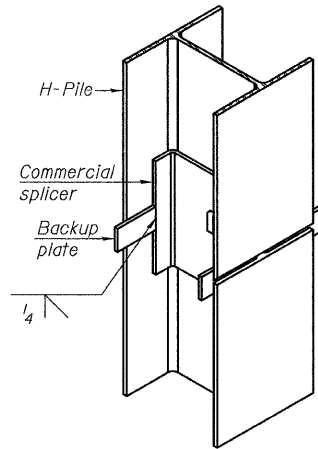
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



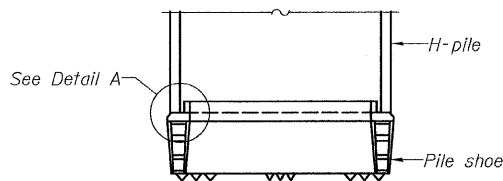
ELEVATION



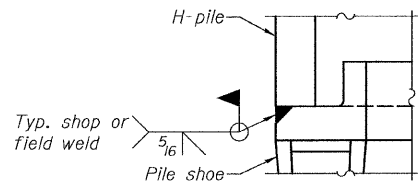
DETAIL "B"



ISOMETRIC VIEW

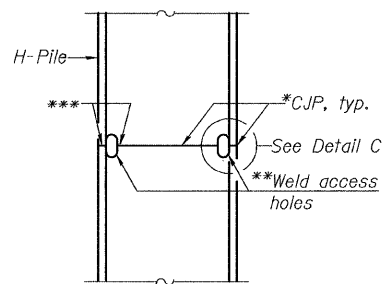


ELEVATION

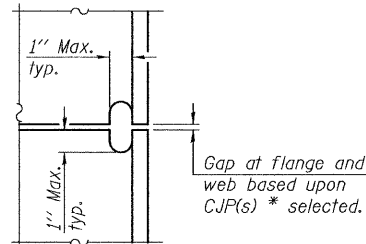


DETAIL A

H-PILE SHOE ATTACHMENT



ELEVATION



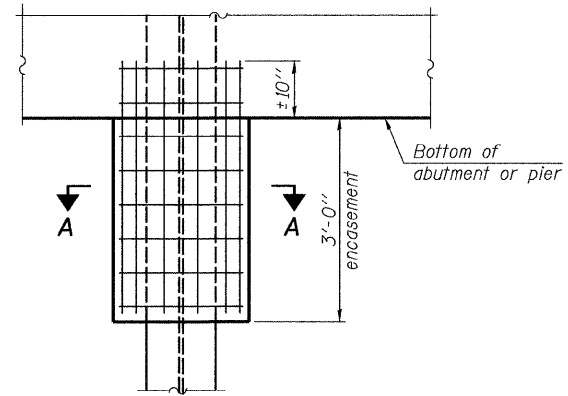
DETAIL C

COMPLETE PENETRATION WELD SPLICE

*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code-Steel.

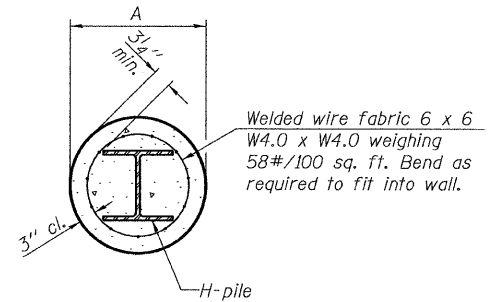
**Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code-Steel.

***Interrupt welds 1/4" from end of each pile.



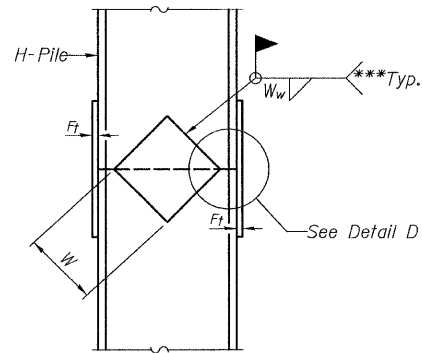
ELEVATION

PILE ENCASEMENT

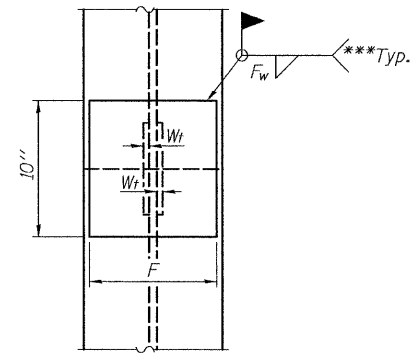


SECTION A-A

Note: Forms for encasement may be omitted when soil conditions permit.

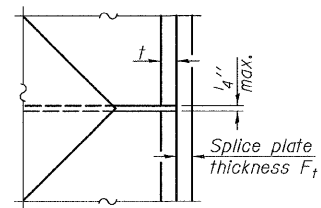


ELEVATION



END VIEW

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 1/2"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 1/2"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5 1/2"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 1/2"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5 1/2"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5 1/2"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"



DETAIL D

STEEL H-PILE BASE SHEET
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BRI-10BRI) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

Note: The steel H-piles shall be according to AASHTO M270 Grade 50.

COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	PROJECT NO. 07053-8 SCALE DATE 8/05/08 DRAWN BY IFG CHECKED BY CME/RM/MCB	SHEET NO. 16 17 SHEETS	F.A.P. RTE. 328 SECTION (9BRI-10BRI) B-1 COUNTY WAYNE CONTRACT NO. 74214	TOTAL SHEETS 67 SHEET NO. 39
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			

PLOT DATE = 08/06/2008
 FILE NAME = \\s08bri\bridge-plan\fig16-16.dgn
 USER NAME = TFL

SOIL BORING LOG

Date 5/31/07

ROUTE FAP 328 (US 45) DESCRIPTION Martin Creek LOGGED BY E. Sandschafer

SECTION (9BR1.10BR1)B-1 LOCATION Sec 22 - Se 1/4, Sec 23 - SW 1/4, SEC. , TWP. 1 S, RING. 7 E, 3 PM

COUNTY Wayne DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO.	STATION	DEPTH	BL	UCS	M O I S T	Surface Water Elev.	D E P T H	B L U E	U C S	M O I S T
		(ft)	(6")	(tsf)	(%)	ft	(ft)	(6")	(tsf)	(%)
096-0024	139+05					413.48				
1						412.24				
						406.3				
						415.1				
						N/A				
3 1/8" asphalt on 10" concrete pavement.										
Soil, brown, SILTY LOAM. 422.16										
Soil, brown, damp, SANDY LOAM. 421.26										
Soil, damp, gray, SILTY LOAM. 419.26										
Very soft, very damp, brown, SANDY LOAM. 413.78										
Stiff, damp, red marbled gray, SILTY CLAY LOAM TILL. 410.98										
Stiff, damp, red marbled gray, CLAY LOAM TILL. 408.76										
Medium, very damp, red, SANDY LOAM. 406.26										
403.26										

Latitude W 88 deg 21.379 min, Longitude N 89 deg 30.956 min, Map Datum NAD 83

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

ROCK CORE LOG

Date 5/31/07

ROUTE FAP 328 (US 45) DESCRIPTION Martin Creek LOGGED BY E. Sandschafer

SECTION (9BR1.10BR1)B-1 LOCATION Sec 22 - Se 1/4, Sec 23 - SW 1/4, SEC. , TWP. 1 S, RING. 7 E, 3 PM

COUNTY Wayne CORING METHOD Rotary, surf set diamond bit

STRUCT. NO.	STATION	BORING NO.	STATION	Offset	Ground Surface Elev.	CORING BARREL TYPE & SIZE	D E P T H	R E C O R D E D	C O R E	S T R E N G T H
				(ft)	(ft)		(ft)	(%)	(min/ft)	(tsf)
096-0024	139+05	1		9.00ft	423.26	NW, conv dbt btl, split inner				
Gray, moderately weathered, CLAY SHALE.										
Rock core B1A @ 33.9' to 34.4' depth, Qu = 7.8 tsf.										
Rock core B1B @ 39.3' to 39.8' depth, Qu = 9.2 tsf.										
Extent of exploration.										
Benchmark: BM 243 chiseled square on concrete curb in SW corner of existing bridge = 423.94' elevation. Provided by Program Development.										

Color pictures of the cores Available on request
Cores will be stored for examination until 05/31/08
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)

SOIL BORING LOG

Date 6/1/07

ROUTE FAP 328 (US 45) DESCRIPTION Martin Creek LOGGED BY E. Sandschafer

SECTION (9BR1.10BR1)B-1 LOCATION Sec 22 - Se 1/4, Sec 23 - SW 1/4, SEC. , TWP. 1 S, RING. 7 E, 3 PM

COUNTY Wayne DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO.	STATION	BORING NO.	STATION	Offset	Ground Surface Elev.	DEPTH	BL	UCS	M O I S T	Surface Water Elev.	D E P T H	B L U E	U C S	M O I S T
				(ft)	(ft)	(ft)	(6")	(tsf)	(%)	ft	(ft)	(6")	(tsf)	(%)
096-0024	139+05	2		9.00ft	423.43					413.48				
8 1/2" asphalt on 9 1/4" concrete pavement.														
Medium to very soft, very damp, gray, SILTY LOAM. 421.93														
Very stiff, damp, brown, CLAY LOAM TILL. (continued) 400.93														
Very stiff, damp, gray, SILTY CLAY SHALE. 400.93														
Stiff, damp, brown, LOAM. 413.43														
Soil, damp, brown, SANDY LOAM. 411.03														
Medium to stiff, red marbled gray, SANDY CLAY TILL. 408.93														
Soft, very damp, SILTY LOAM. 406.73														
403.93														

Latitude W 88 deg 21.379 min, Longitude N 89 deg 30.956 min, Map Datum NAD 83

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

BORING LOGS
U.S. ROUTE 45 OVER MARTIN CREEK
F.A.P. RT. 328 SEC. (9BR1-10BR1) B-1
WAYNE COUNTY
STATION 139+10.00
STRUCTURE NO. 096-0069

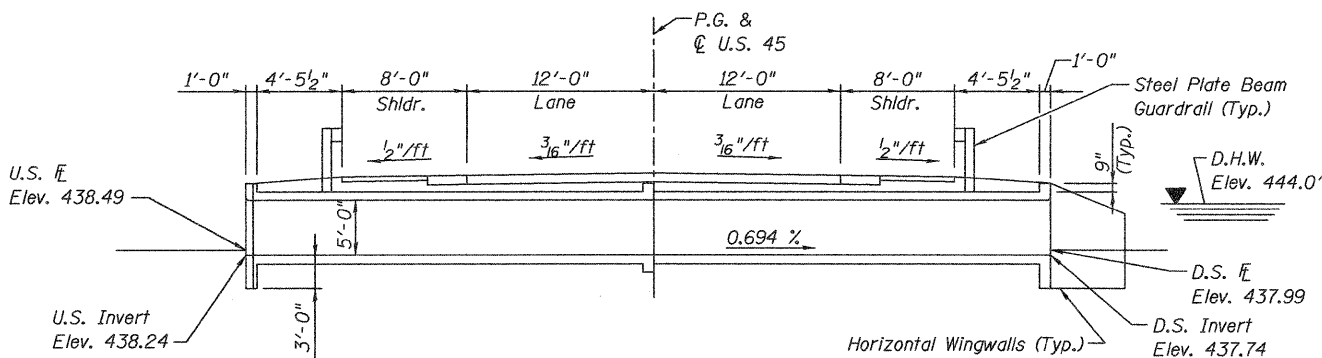
PROJECT NO. 07053-B	SCALE AS SHOWN	DATE 8/05/08	DRAWN BY TFC	CHECKED BY RM/MCB	SHEET NO. 17	F.A.P. RTE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						328	(9BR1-10BR1) B-1	WAYNE	67	40	
COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703						CONTRACT NO. 74214					
						FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

Bench Mark: Cut "□" on S.W. corner of existing bridge abutment, SN 096-0021 Sta. 507+83, 17.6' Lt. Elev. 443.09

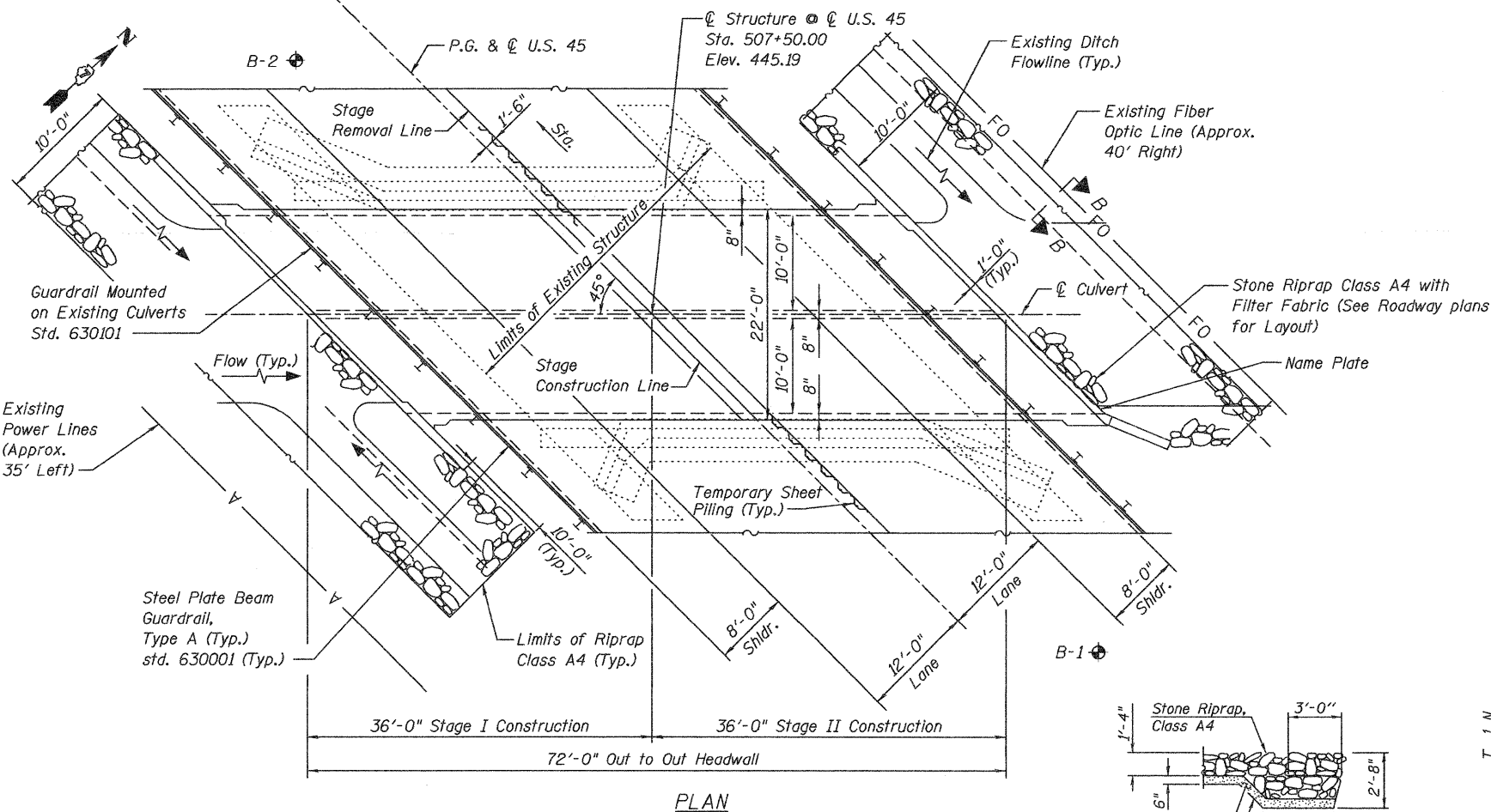
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Existing Structure: #096-0021 built in 1923 with reconstruction and widening in 1974 as FA Route 26 (S.B.I. Route 25) Section 9 BR-1 is a single span structure consisting of 17" PPC deck beams on closed abutments and wingwalls on spread footings. The deck width is 33'-0" and the length is 36'-9" Bk to Bk abutments. Traffic shall be maintained utilizing stage construction.

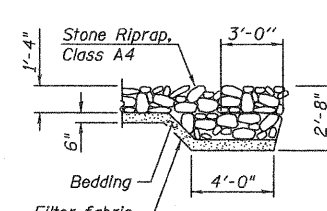
No salvage



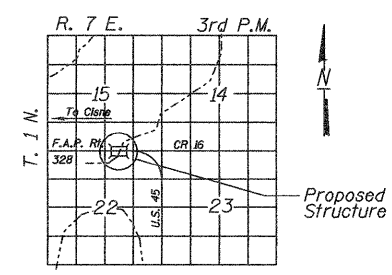
LONGITUDINAL SECTION
(Dimensions are at RT L's except as noted)



PLAN



SECTION B-B

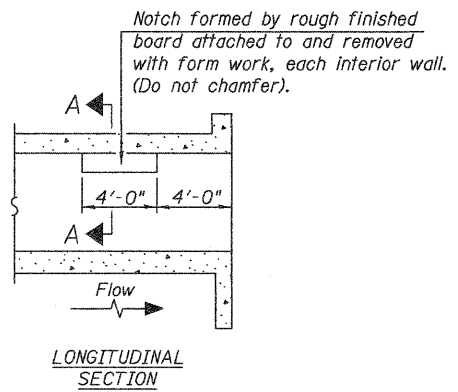


LOCATION SKETCH

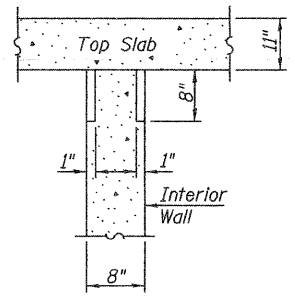
INDEX OF SHEETS

1. General Plan
2. Stage Construction Details
3. Temporary Concrete Barrier
4. Culvert Details-Top Slab
5. Culvert Details-Bottom Slab
6. Culvert Details-Wingwall
7. Culvert Details
8. Bar Splicer Assembly Details
9. Soil Borings

STATION 507+50.00
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. ROUTE 328
SEC. (9BR1,10BR1) B-1
LOADING HS 20-44
STR. NO 096-2012
NAME PLATE
(See Std. 515001)



LONGITUDINAL SECTION



SECTION A-A

**PHOEBE NESTING
SITE DETAILS**
(Downstream End Only)

PROFILE GRADE
(F.A.P. 328)

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)	U.S. Invert	D.S. Invert
	435.24	434.74

WATERWAY INFORMATION

Drainage Area = 0.24 mi.² Low Grade Elev. = 445.13 @ Sta. 508+15.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	10	140	79	90	443.5	0.1	0.1	443.6	443.6
Base	50	228	79	90	444.0	0.2	0.2	444.2	444.2
Overlapping	100	269	79	90	444.1	0.2	0.2	444.3	444.3
Max. Calc.	500	367	79	90	444.4	0.4	0.4	444.8	444.8

**GENERAL PLAN
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00**

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9 SHEETS	328	(9BR1,10BR1) B-1	WAYNE	67	41
SN 096-2012			CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
Precast alternate is not allowed.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
Staged removal of existing abutment shall be done perpendicular to the abutment face to ensure adequate reinforcement and stability in the abutment during Stage I Traffic.
A distance of half the length of the wing wall but not less than 6'-0" of the barrel shall be poured monolithically with the walls.
Hard driving may be encountered during sheet piling installation. The Contractor shall provide the appropriate driving equipment for the soil conditions indicated on the boring logs.
The Contractor is advised that the existing PPC deck beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.
If the Contractor's procedures for existing beam removal involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Structures.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Filter Fabric	SQ. YD.	165
Stone Rip Rap Class A4	SQ. YD.	165
Concrete Box Culverts	CU. YD.	170.4
Reinforcement Bars	Pound	48,870
Temporary Sheet Piling	SQ. FT.	323.9
Bar Splicers	Each	92
Name Plates	Each	1

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications for Highway Bridges

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

LOADING HS 20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGNED	C.J.F.
CHECKED	B.B.
DRAWN	J.G.
CHECKED	C.J.F., B.B.



APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

EXP. 11-30-2008
Christopher J. Fovity
8/1/06

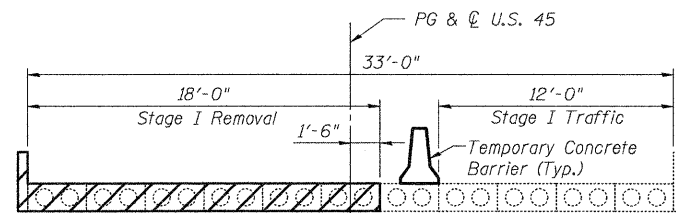
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Mareville, IL 62962-5635
Local (618) 288-4665
Fax 618-288-4666

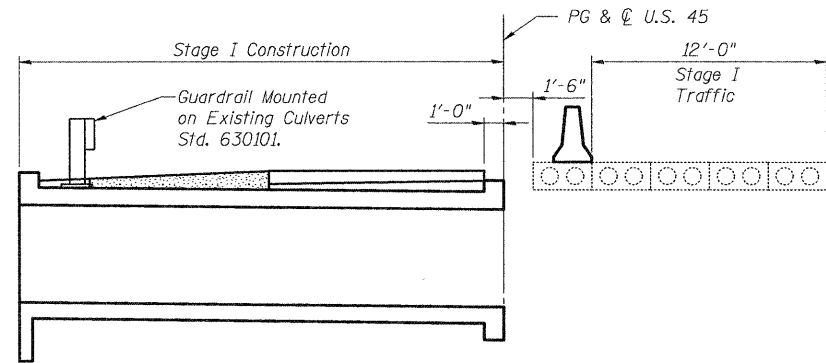
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9/5/09 AM 11/21/2008 \\s:\projects\0962012\74214.dwg

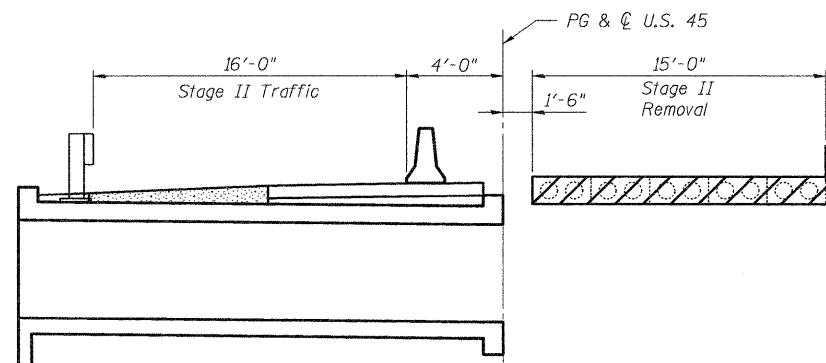
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



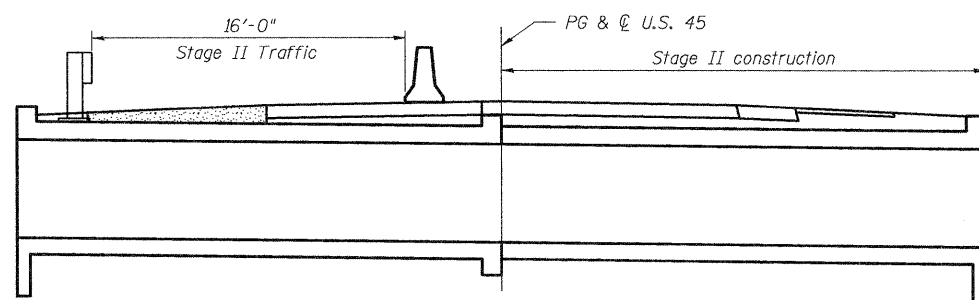
STAGE I REMOVAL



STAGE I CONSTRUCTION

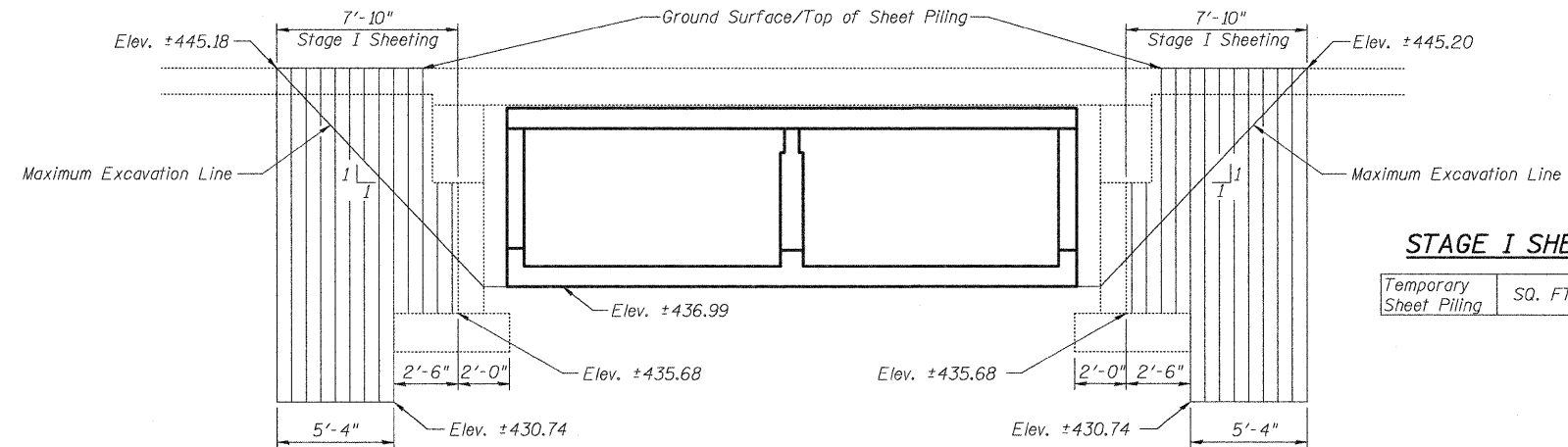


STAGE II REMOVAL



STAGE II CONSTRUCTION

Notes:
 Stage I Traffic is based on the 9/4/2007 Damage Inspection Report.
 All dimensions are at RT. L's except as noted.
 All sections shown are looking up station.
 For details of Temporary Barrier see Sheet 3 of 9.
 Hatched area indicates Removal of Existing Structures.
 For quantities of Temporary Concrete Barrier See Roadway Plans.
 Stage I Temporary Sheet piling is to be incorporated in Stage II construction.
 If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
 The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

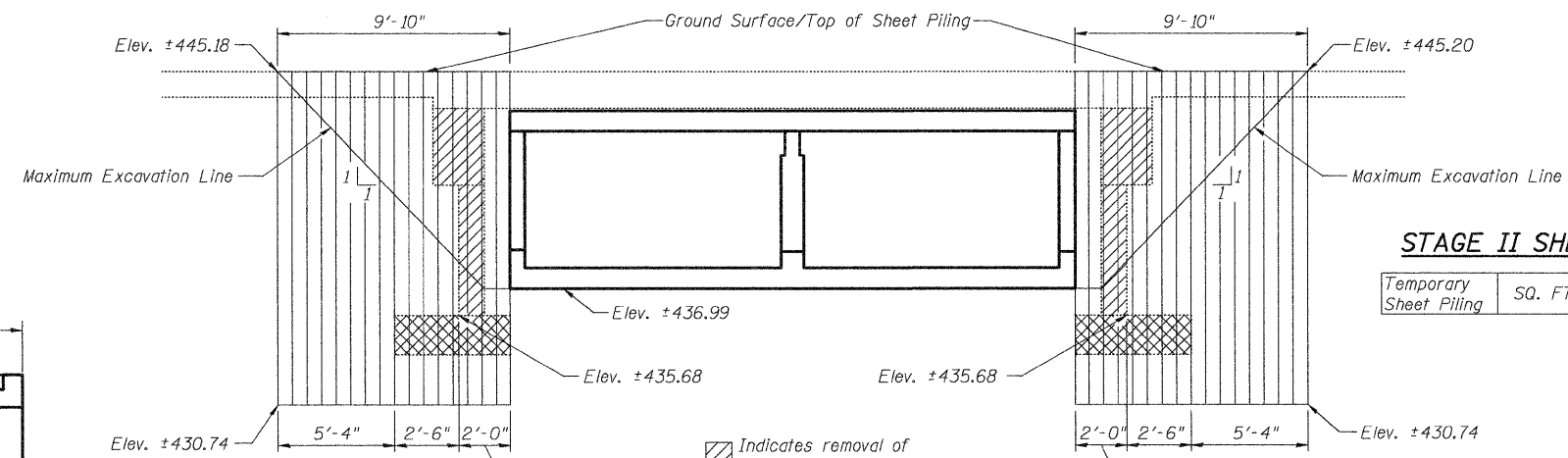


STAGE I TEMPORARY SHEET PILING DETAILS

Looking Downstream

STAGE I SHEETING

Temporary Sheet Piling	SQ. FT.	195.4
------------------------	---------	-------



STAGE II TEMPORARY SHEET PILING DETAILS

Looking Downstream

STAGE II SHEETING

Temporary Sheet Piling	SQ. FT.	128.5
------------------------	---------	-------

**STAGE CONSTRUCTION DETAILS
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00**

DESIGNED	C.J.F.
CHECKED	B.B.
DRAWN	J.G.
CHECKED	C.J.F., B.B.



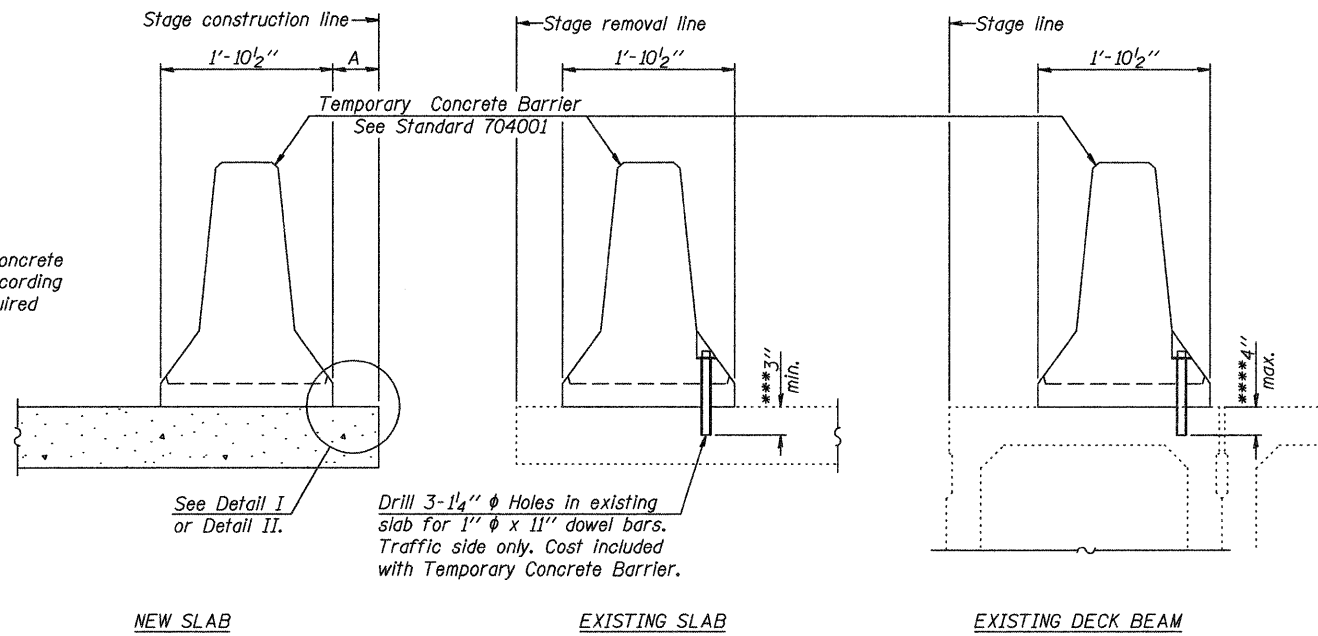
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 2	F.A.P. RTE. 328	SECTION (9BR1,10BR1) B-1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 42
9 SHEETS	SN 096-2012		CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



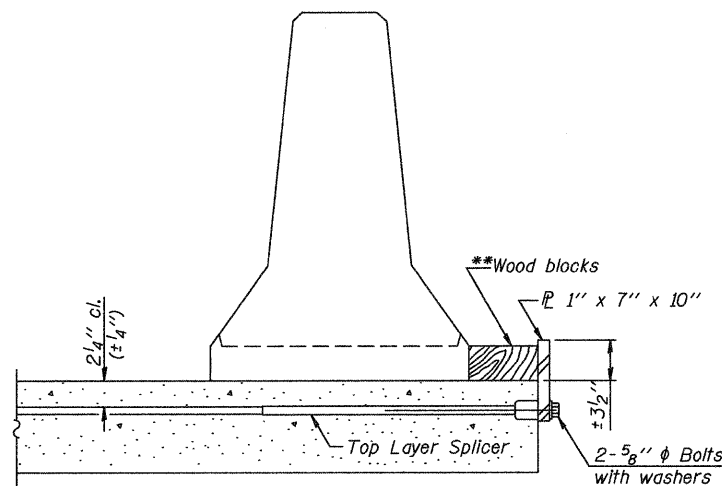
Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NOTES

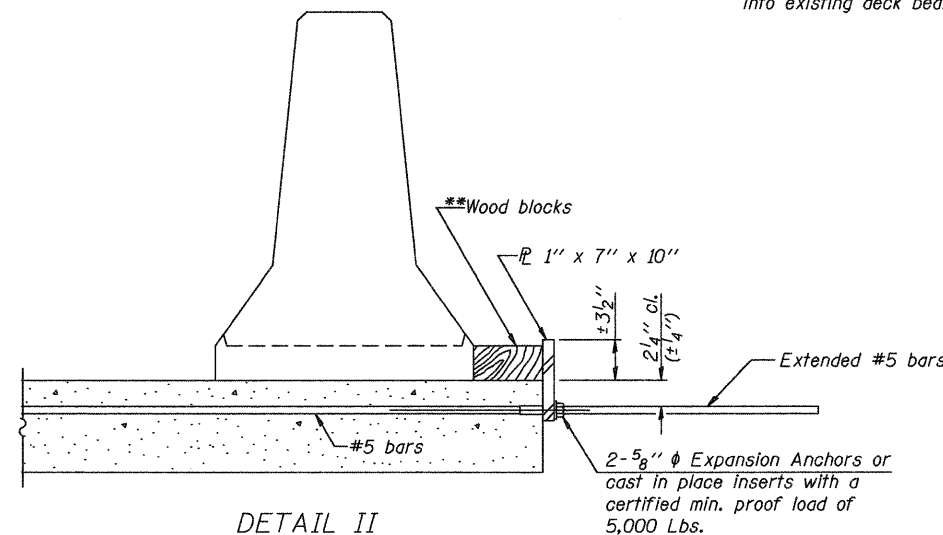
- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.
- Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

SECTIONS THRU SLAB OR DECK BEAM

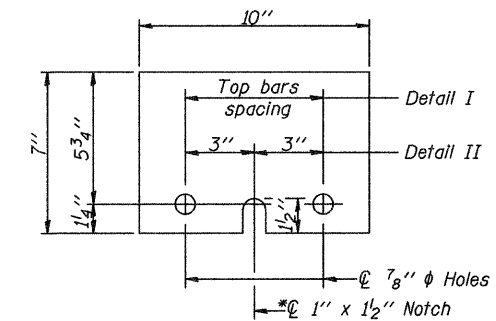
- ***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.
- ***If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{P} 1" x 7" x 10"

*Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00

DESIGNED	--
CHECKED	--
DRAWN	J.G.
CHECKED	C.J.F., B.B.

R-27

5-16-08

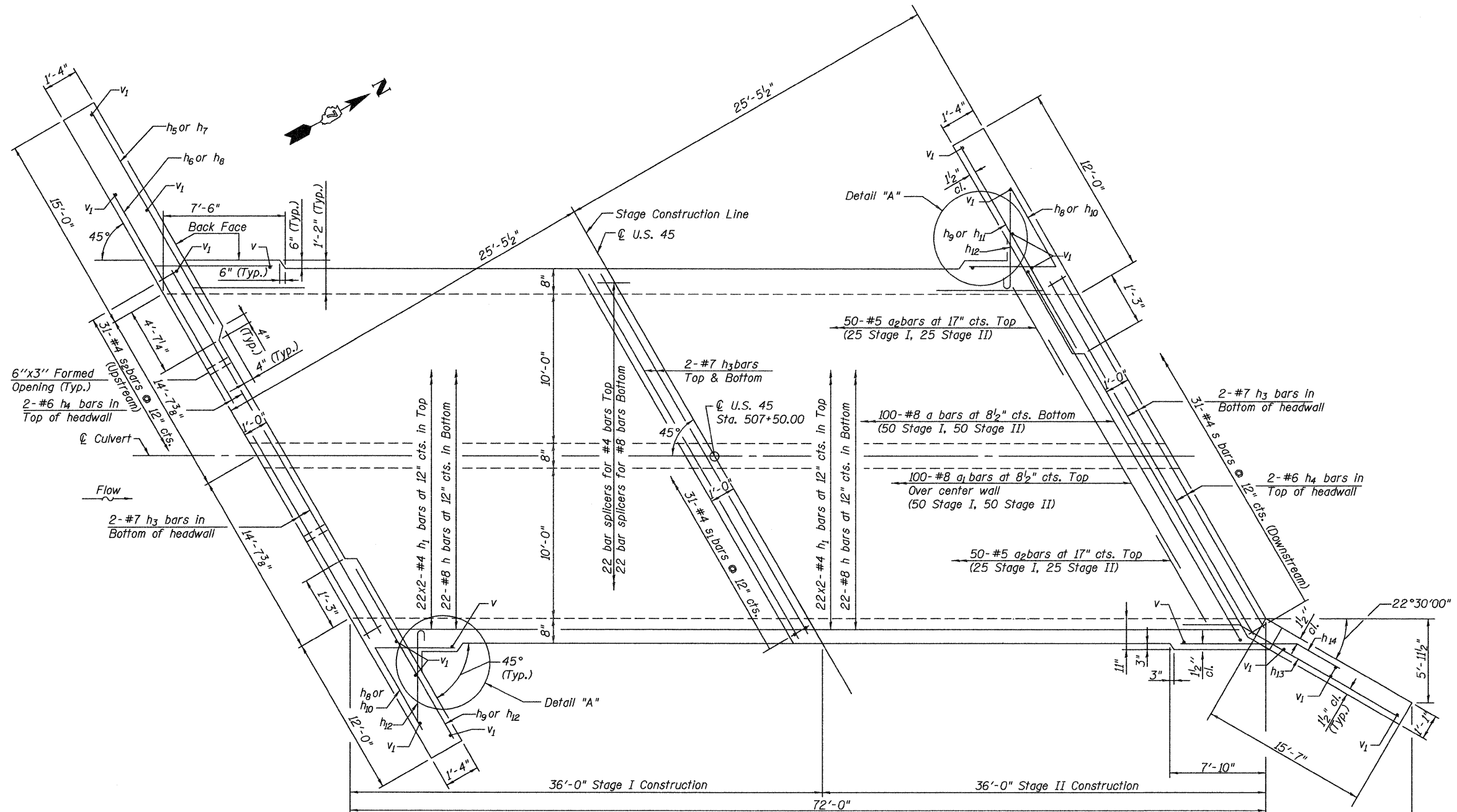


BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 236-4666
Fax 618-266-4666

SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	328	(9BR1,10BR1) B-1	WAYNE	67	43
9 SHEETS	SN 096-2012		CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



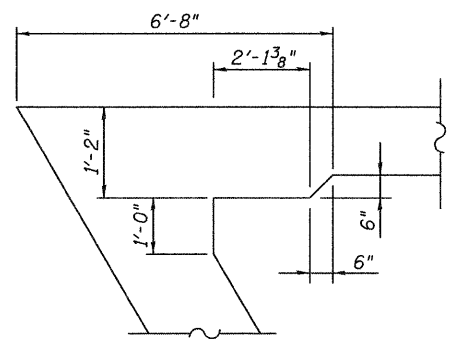
TOP SLAB PLAN

Notes:
For details of bar splicers see sheet 8 of 9.
22x2 indicates 22 lines of bars with 2 bars per line.
For wing wall details see sheet 6 of 9.

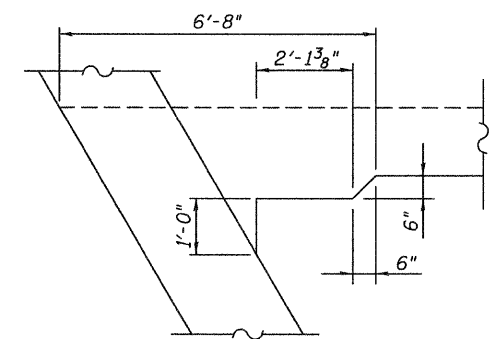
MIN. LAP
#4 bar=1'-0"

CULVERT DETAILS-TOP SLAB
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00

DESIGNED	C.J.F.
CHECKED	B.B.
DRAWN	J.G.
CHECKED	C.J.F., B.B.



Detail "A"
(through sidewall)



Detail "A"
(at headwall)

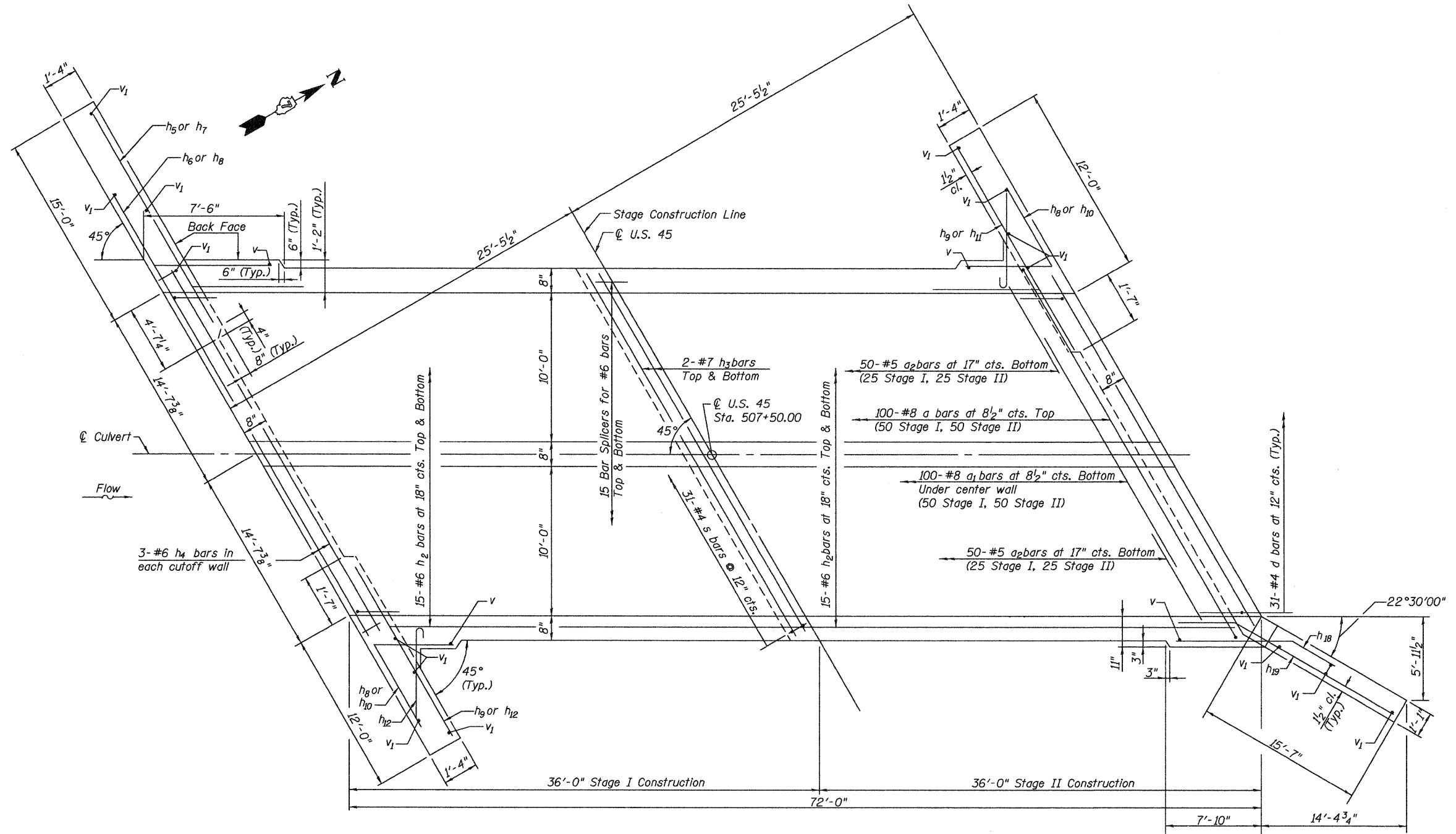


**BERNARDIN
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ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 286-4865
Fax 618-286-4868

SHEET NO. 4 9 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	328	(9BR1,10BR1) B-1	WAYNE	67	44
	SN 096-2012		CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BOTTOM SLAB PLAN

Note:
For details of bar splicers See Sheet 8 of 9.
For wingwall details See Sheet 6 of 9.

CULVERT DETAILS-BOTTOM SLAB
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00

DESIGNED	C.J.F.
CHECKED	B.B.
DRAWN	J.G.
CHECKED	C.J.F., B.B.



**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

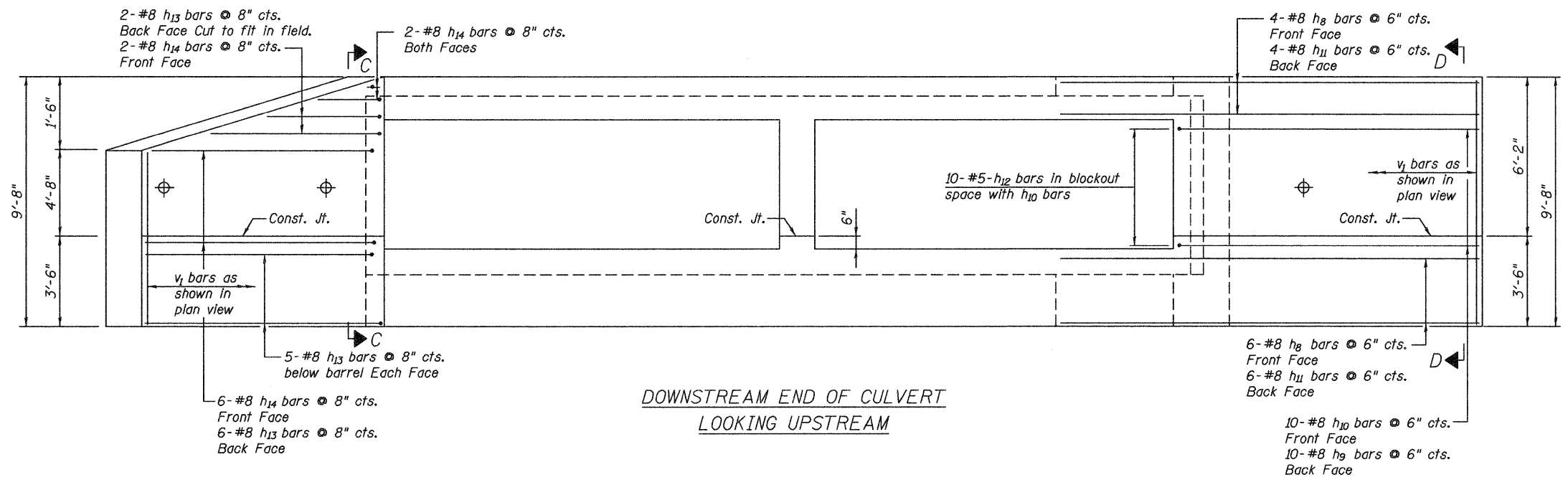
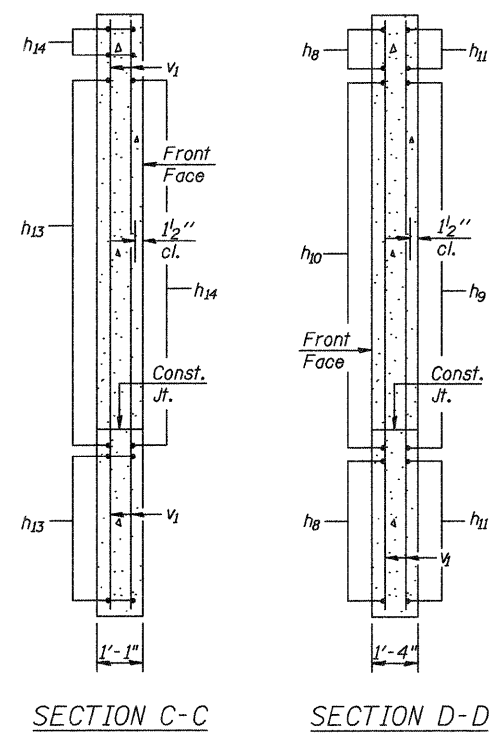
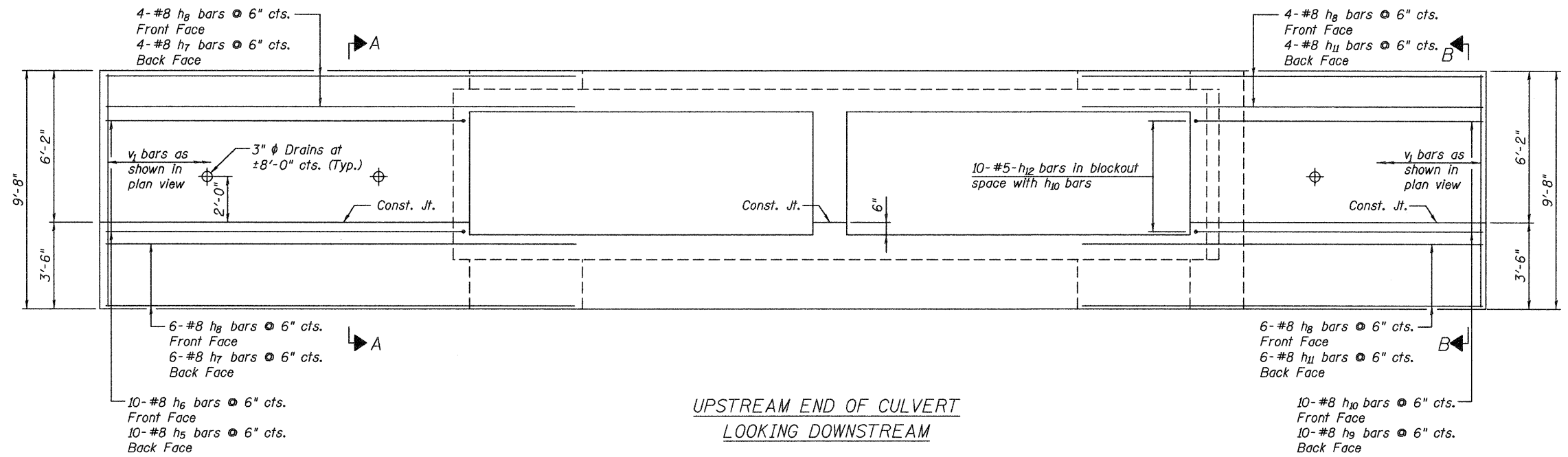
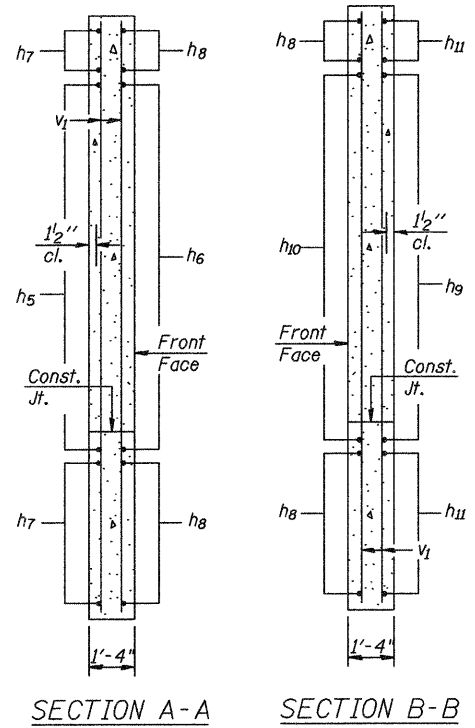
3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 5 9 SHEETS	F.A.P. RTE. 328	SECTION (9BR1,10BR1) B-1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 45
	SN 096-2012		CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Note:
For location of v1 bars See Sheet 4 of 9.

CULVERT DETAILS-WINGWALL
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00

DESIGNED	C.J.F.
CHECKED	B.B.
DRAWN	J.G.
CHECKED	C.J.F., B.B.

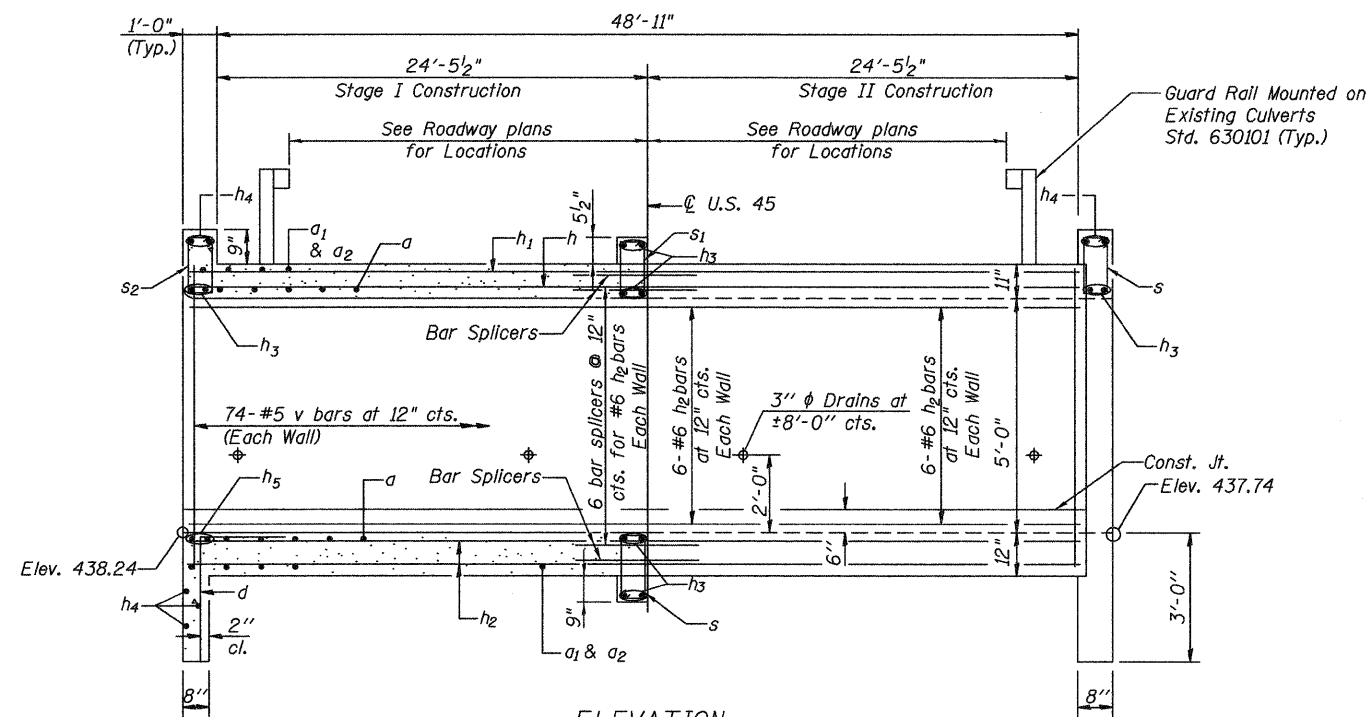
BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62062-3635
Local (618) 238-4655
Fax 618-288-4666

SHEET NO. 6 9 SHEETS	F.A.P. RTE. 328	SECTION (9BR1,10BR1) B-1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 46
	SN 096-2012		CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

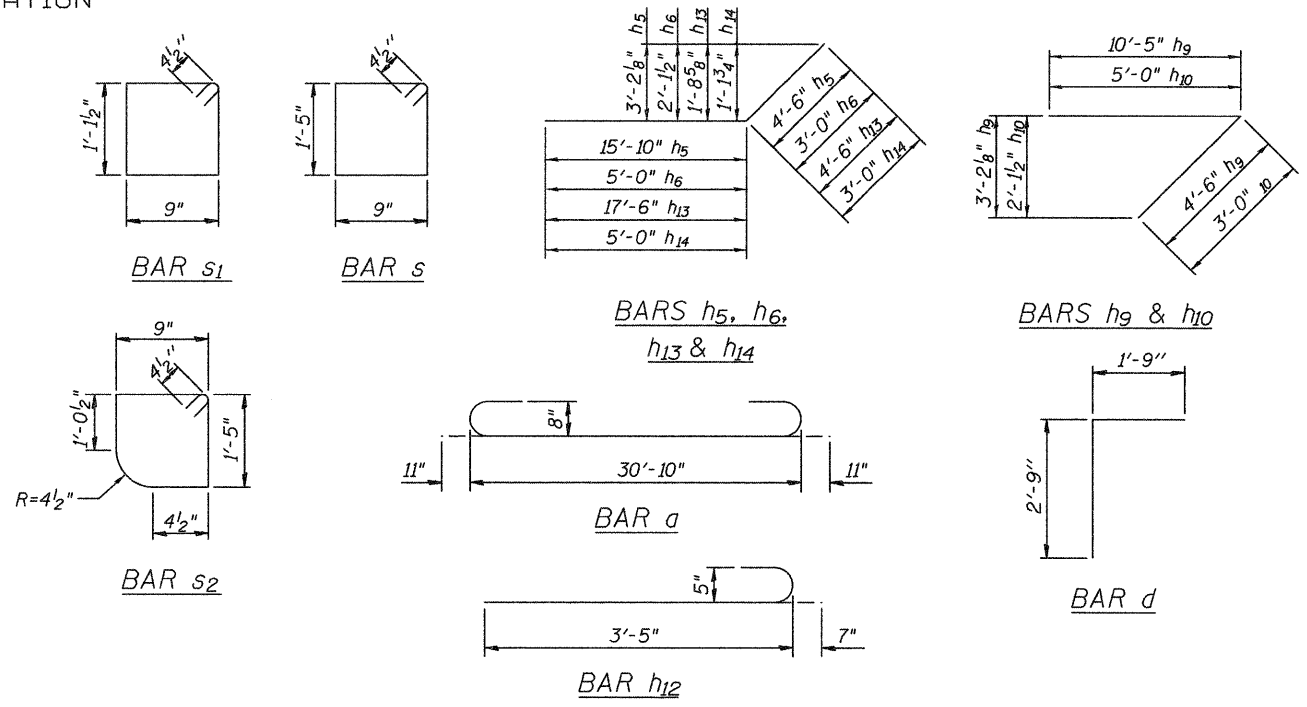
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

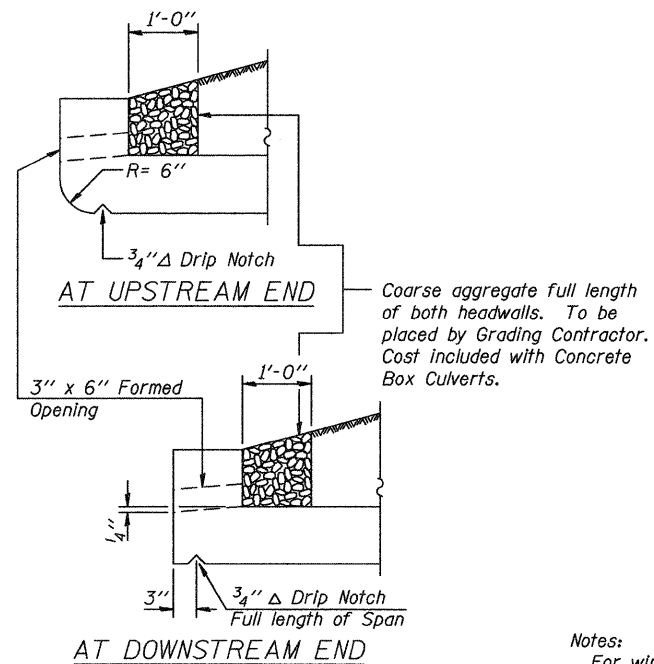


ELEVATION
Dimensions are at right angles to \varnothing Roadway
Wingwalls not shown for clarity.
(Looking West)

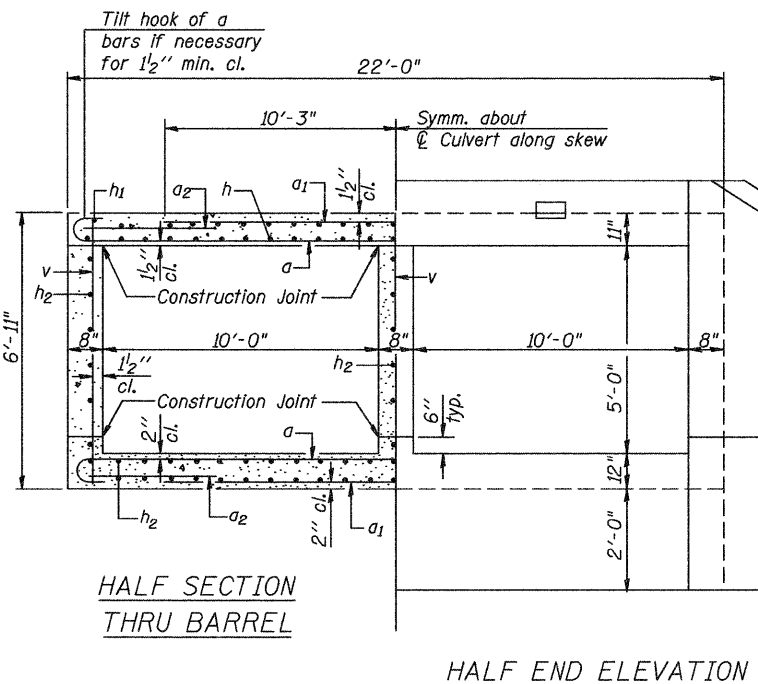


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	200	#8	32'-8"	C
a1	200	#8	20'-6"	—
a2	200	#5	7'-10"	—
d	62	#4	4'-6"	L
h	44	#8	35'-9"	—
h1	88	#4	18'-5"	—
h2	96	#6	35'-9"	—
h3	12	#7	29'-3"	—
h4	10	#6	29'-3"	—
h5	10	#8	20'-4"	—
h6	10	#8	8'-0"	—
h7	10	#8	18'-7"	—
h8	30	#8	9'-0"	—
h9	20	#8	14'-11"	—
h10	20	#8	8'-0"	—
h11	20	#8	12'-8"	—
h12	20	#5	4'-0"	—
h13	13	#8	22'-0"	—
h14	12	#8	8'-0"	—
s	62	#4	5'-1"	□
s1	31	#4	4'-6"	□
s2	31	#4	4'-11"	□
v	226	#5	6'-8"	—
v1	16	#4	9'-5"	—
Concrete Box Culverts			Cu. Yd.	170.4
Reinforcement Bars			Pound	48,870



DRAIN DETAIL



HALF SECTION THRU BARREL

HALF END ELEVATION

Notes:
For wingwall details see sheet 6 of 9.

DESIGNED	C.J.F.
CHECKED	B.B.
DRAWN	J.G.
CHECKED	C.J.F., B.B.



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Local (618) 298-4665
Fax 618-288-4666

SHEET NO. 7 9 SHEETS	F.A.P. RTE. 328	SECTION (9BR1,10BR1) B-1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 47
	SN 096-2012		CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

CULVERT DETAILS
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00

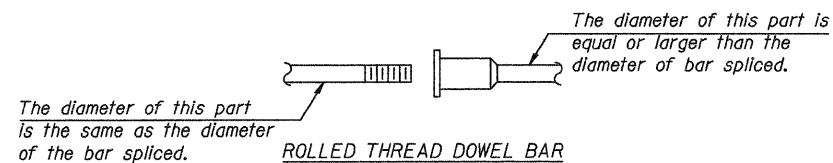
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

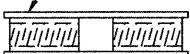
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



** ONE PIECE

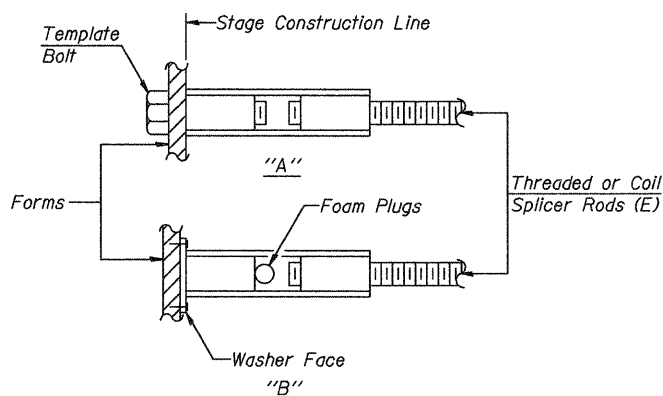
Wire Connector



WELDED SECTIONS

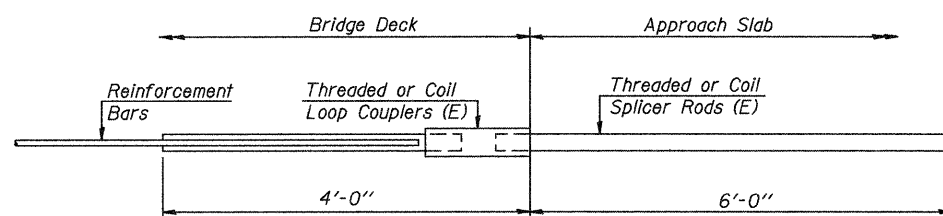
BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

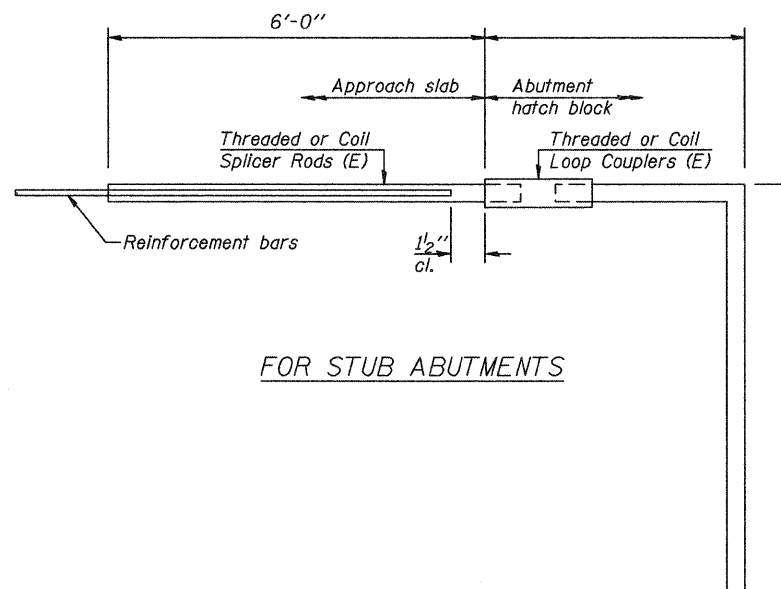


INSTALLATION AND SETTING METHODS

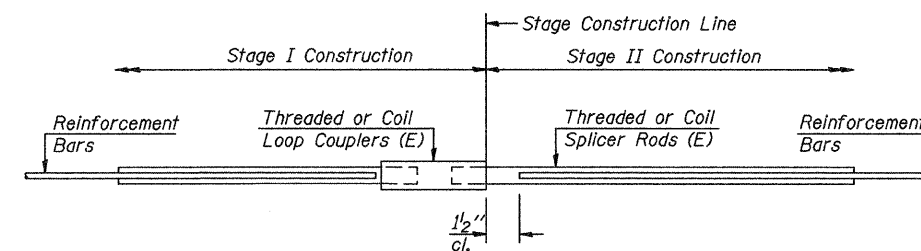
"A" :Set bar splicer assembly by means of a template bolt.
"B" :Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS



FOR STUB ABUTMENTS



STANDARD

Bar Size	No. Assemblies Required	Location
#4	22	Top Slab
#8	22	Top Slab
#6	18	Sidewalls
#6	30	Bottom Slab

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	

BAR SPLICER ASSEMBLY DETAILS
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00

DESIGNED	--
CHECKED	--
DRAWN	J.G.
CHECKED	C.J.F., B.B.

BSD-1 5-16-08



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SHEET NO. 8 9 SHEETS	F.A.P. RTE. 328	SECTION (9BR1,10BR1) B-1	COUNTY WAYNE	TOTAL SHEETS 67	SHEET NO. 48
	SN 096-2012		CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SOIL BORING LOG

Page 1 of 1

Date 6/29/07

ROUTE FAP 328 (US 45) DESCRIPTION Un-named Stream LOGGED BY E. Sandschafer

SECTION (9BR1, 10BR1)B-1 LOCATION Sec 15 - SE 1/4, Sec 22 - NE 1/4, SEC. TWP. 1 N, RNG. 7 E, 3 PM

COUNTY Wayne DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 096-0021
Station 507+50
BORING NO. 1
Station 506+93
Offset 9.50 ft Rt
Ground Surface Elev. 445.11 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 438.50 ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After Hrs. Filled ft

DEPTH	B	U	M	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:
H	L	C	O			First Encounter
(ft)	(ft)	(tsf)	(%)			Upon Completion
						After Hrs.
15.75" asphalt pavement.						
443.81						
Stiff, damp, gray, CLAY w/ trace Silt.						
4						
6	1.2	20				
7	B					
440.11						
Stiff, damp, red marbled gray, CLAY TILL.						
2						
4	2.0	24				
6	B					
2						
4	1.4	21				
5	B					
435.11						
Red, CLAY TILL.						
2						
5	1.8	18				
7	B					
432.61						
Very dense, moist, brown/gray/red, SANDY CLAY SHALE.						
11						
50		12				
50/1"						
429.71						
Extent of exploration.						
34		10				
50/4"						
50/1"						

Latitude W 88 deg 24.412 min, Longitude N 38 deg 30 916 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 6/29/07

ROUTE FAP 328 (US 45) DESCRIPTION Un-named Stream LOGGED BY E. Sandschafer

SECTION (9BR1, 10BR1)B-1 LOCATION Sec 15 - SE 1/4, Sec 22 - NE 1/4, SEC. TWP. 1 N, RNG. 7 E, 3 PM

COUNTY Wayne DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 096-0021
Station 507+50
BORING NO. 2
Station 508+06
Offset 11.00 ft Lt
Ground Surface Elev. 445.03 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 438.50 ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After Hrs. Filled ft

DEPTH	B	U	M	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:
H	L	C	O			First Encounter
(ft)	(ft)	(tsf)	(%)			Upon Completion
						After Hrs.
14.75" asphalt pavement.						
443.83						
Stiff, damp, gray, CLAY.						
2						
2	1.2	23				
3	PP					
440.53						
Soft, very damp, gray, SILTY LOAM.						
1						
1	0.3	25				
2	PP					
437.53						
Stiff, damp, red marbled gray, SANDY CLAY TILL.						
0						
2	1.2	23				
3	B					
-10						
3						
7	1.5	18				
9	B					
432.33						
Very stiff, damp, brown to gray, SANDY CLAY SHALE.						
6						
11	2.4	13				
23	BS					
11						
37	3.6	9				
50/3"	B					
44						
427.23						
Extent of exploration.						
50/2"		8				
50/1"						

Latitude W 88 deg 24.434 min, Longitude N 38 deg 30.939 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

DESIGNED	--
CHECKED	--
DRAWN	J.G.
CHECKED	C.J.F., B.B.

SOIL BORINGS
U.S. 45 OVER BRANCH OF ELM RIVER
STATION 507+50.00



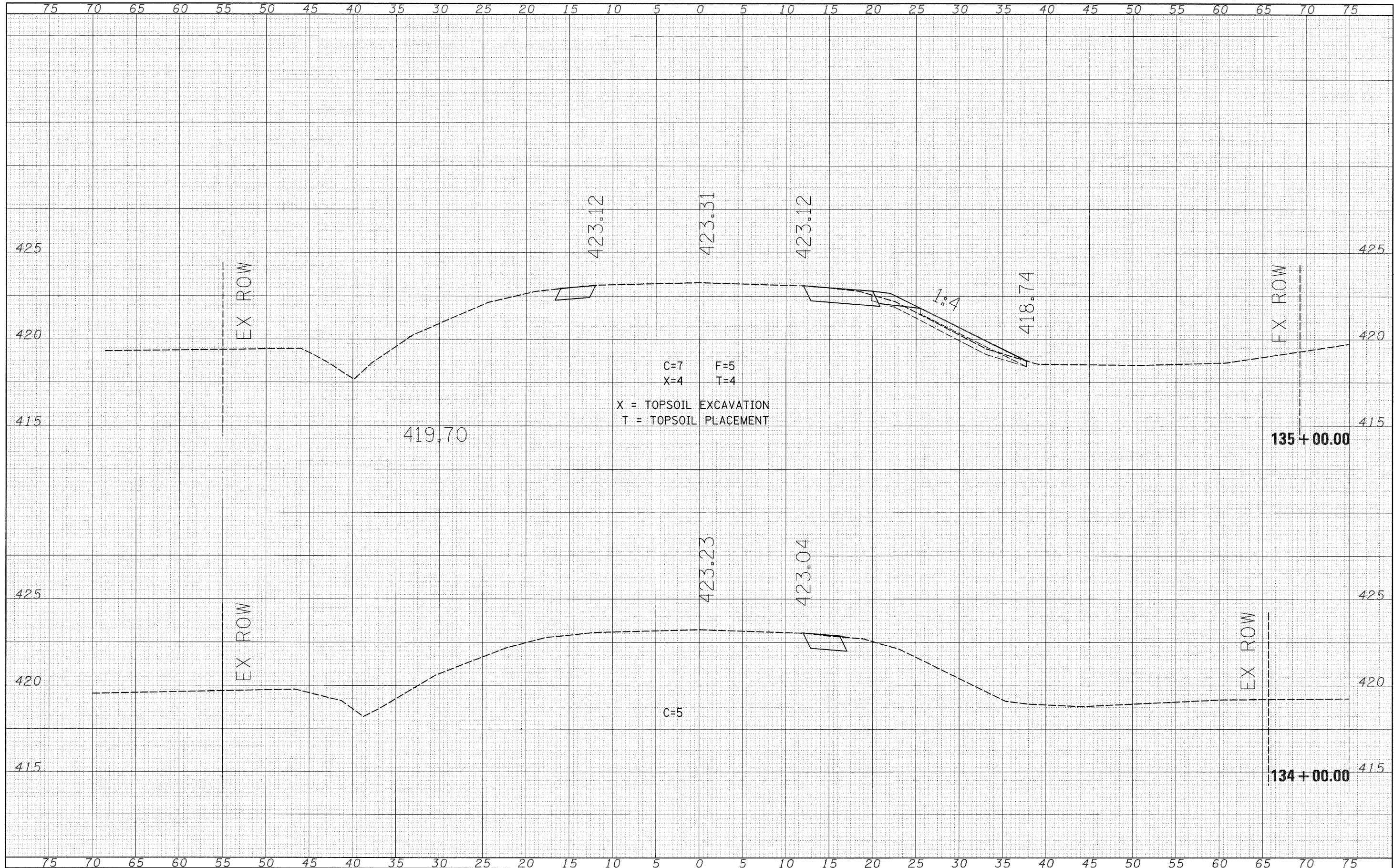
3 Oak Drive
Merrville, IL 62062-5635
Local-(618) 288-4665
Fax 618-288-4666

SHEET NO. 9	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	328	(9BR1,10BR1) B-1	WAYNE	67	49
9 SHEETS	SN 096-2012		CONTRACT NO. 74214		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

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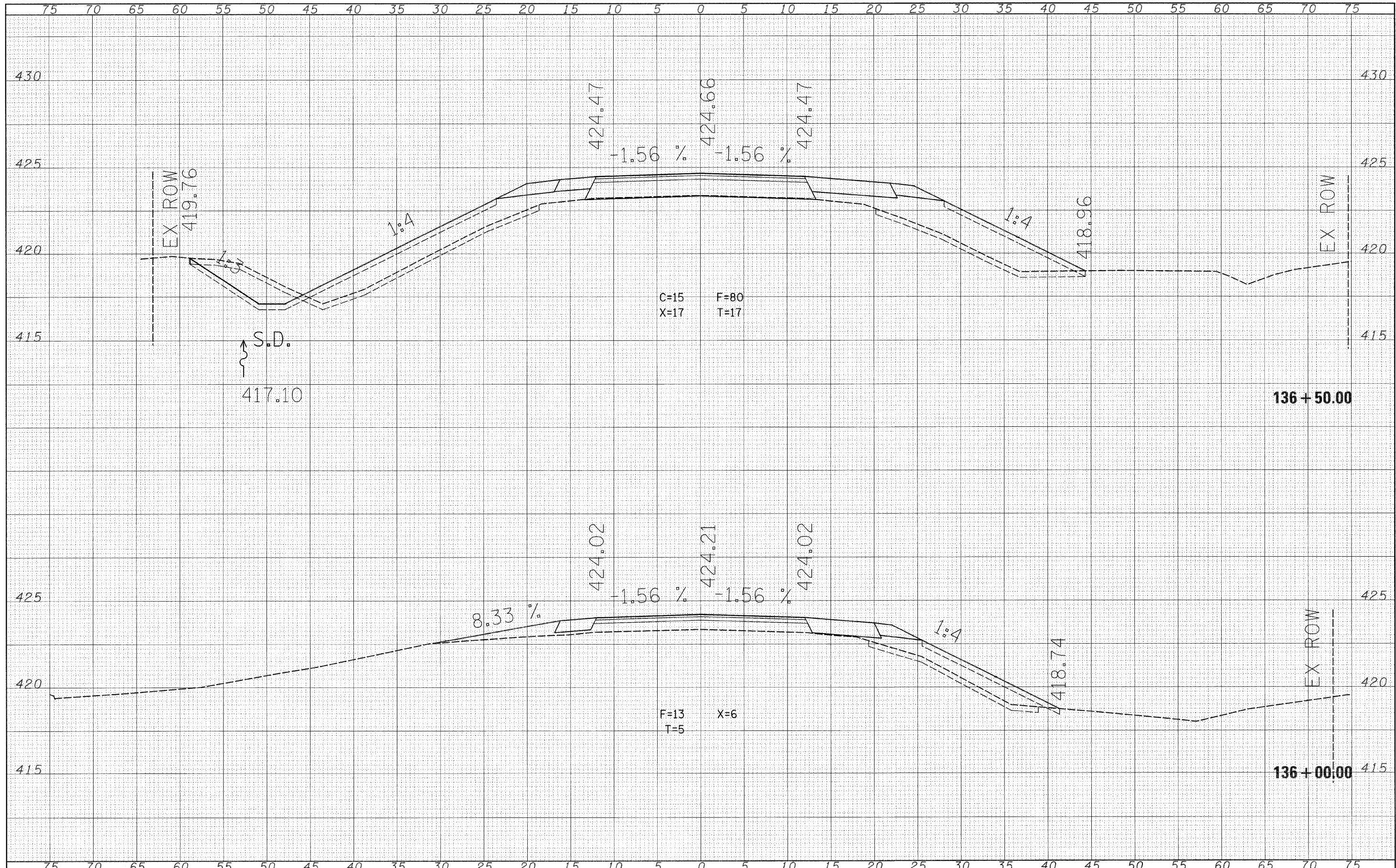
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PLOT DATE = 12/23/2008	DATE -	CHECKED -	REVISED -			CONTRACT NO. 74214				
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
SCALE: SHEET NO. OF SHEETS STA. 134+00.00 TO STA. 135+00.00										

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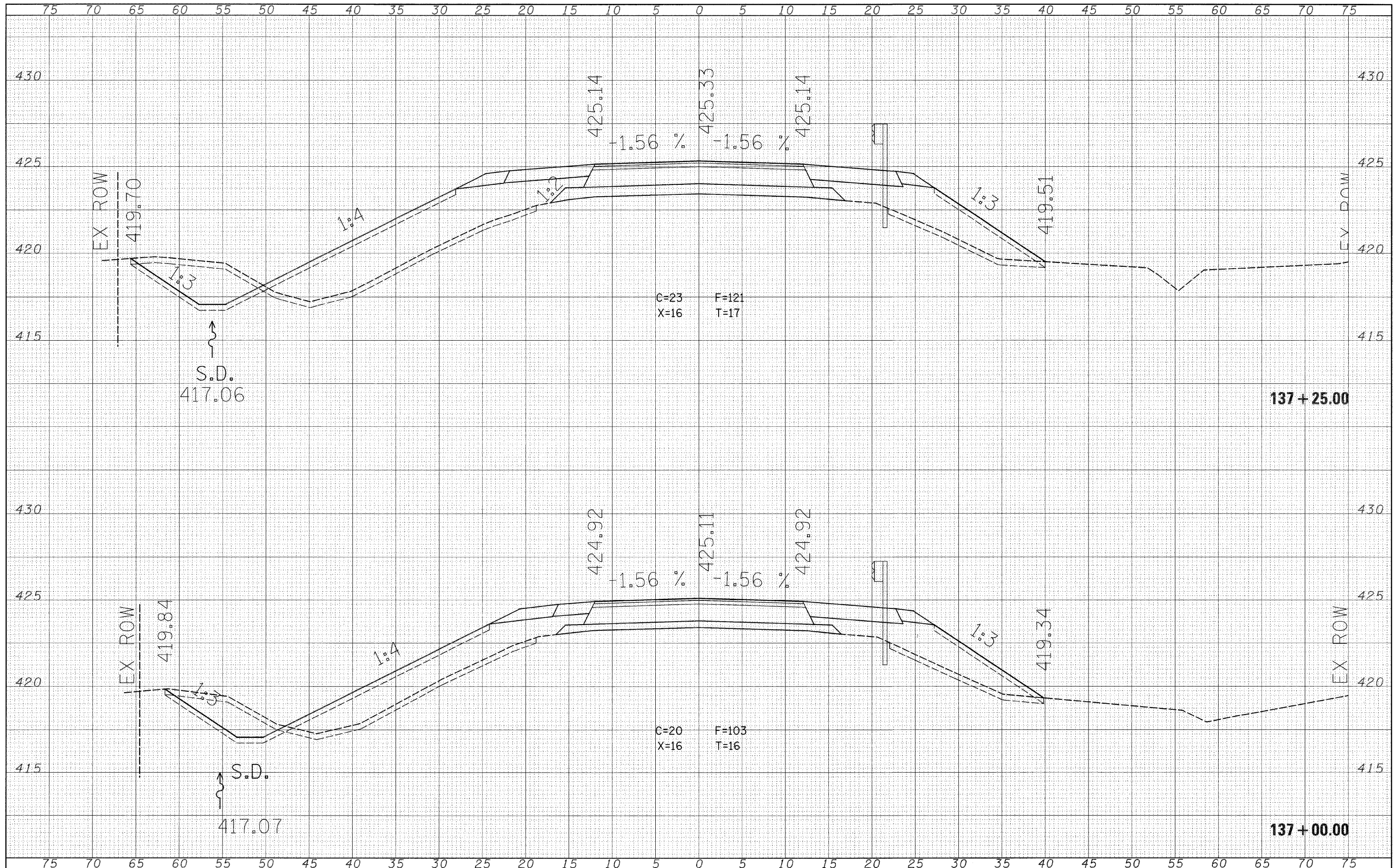
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BY	
SURVEYED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
TEMPLATE	
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ORIGINAL SURVEY	
NOTE BOOK	
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REVISIONS
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 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

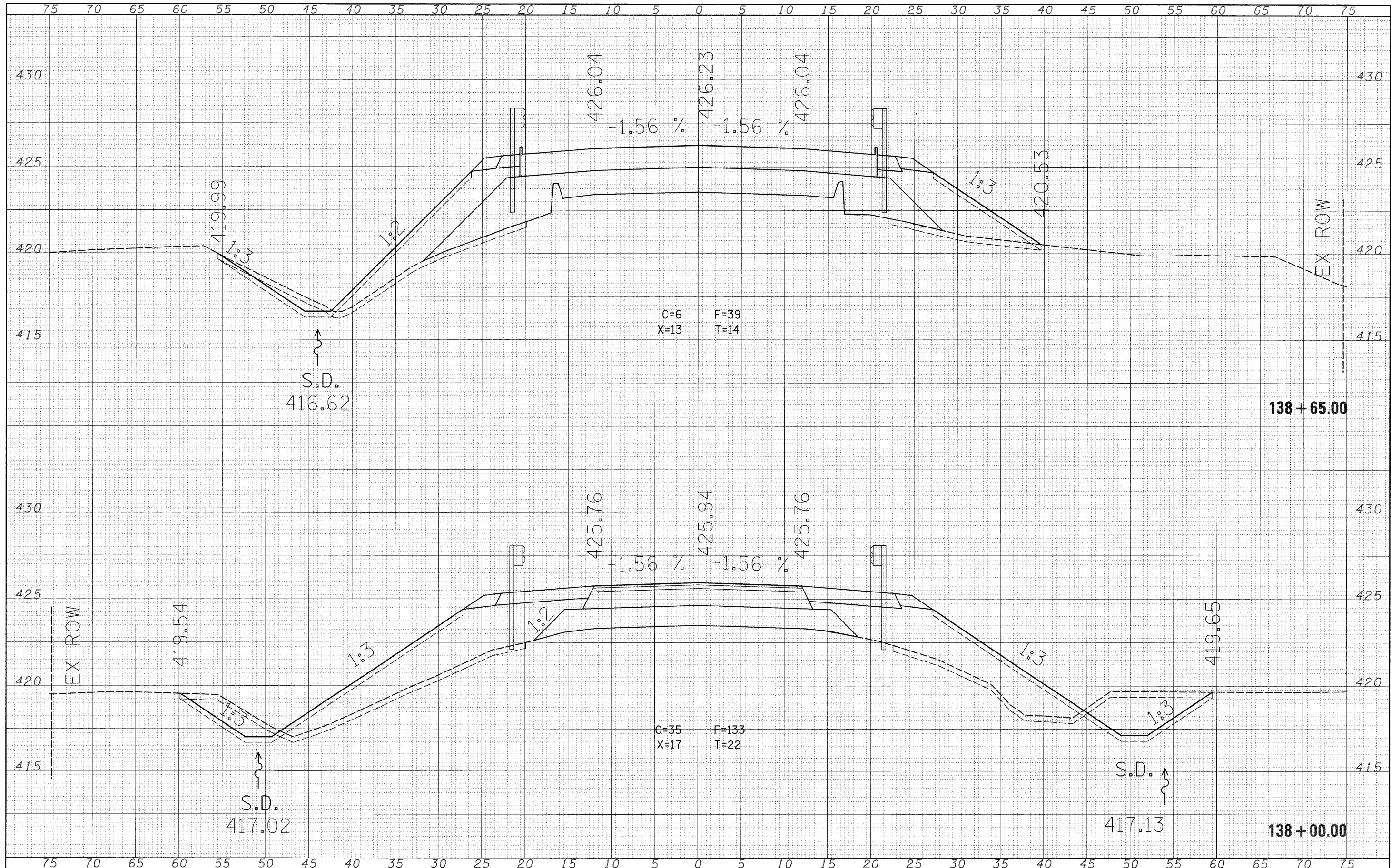
Martin Creek

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 74214			ILLINOIS FED. AID PROJECT	

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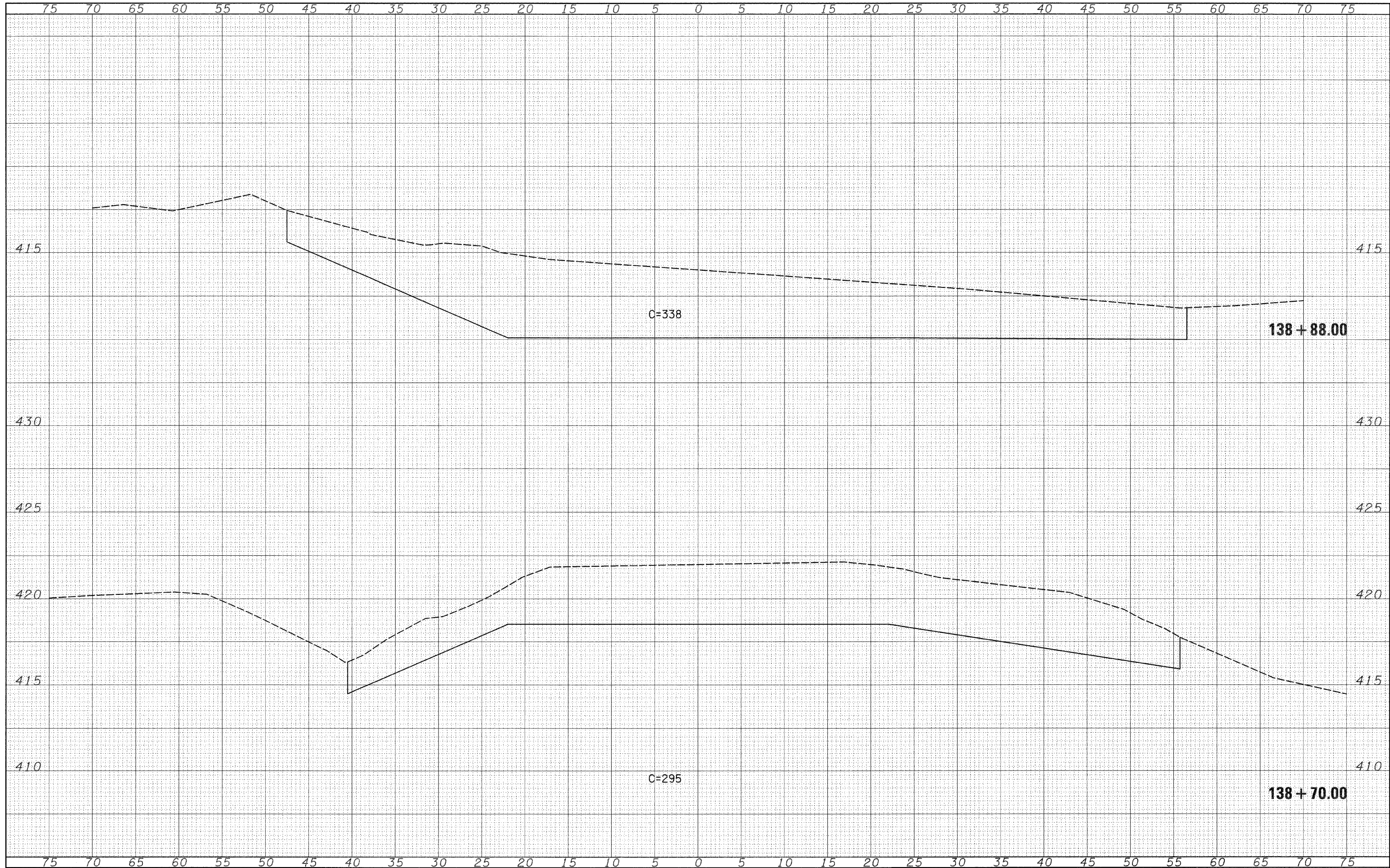
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SURVEYED	
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NOTE BOOK	
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AREAS CHECKED	



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PLOT DATE = 12/23/2008		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
SCALE:						SHEET NO. OF SHEETS STA. 138+00.00 TO STA. 138+65.00				

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BY	
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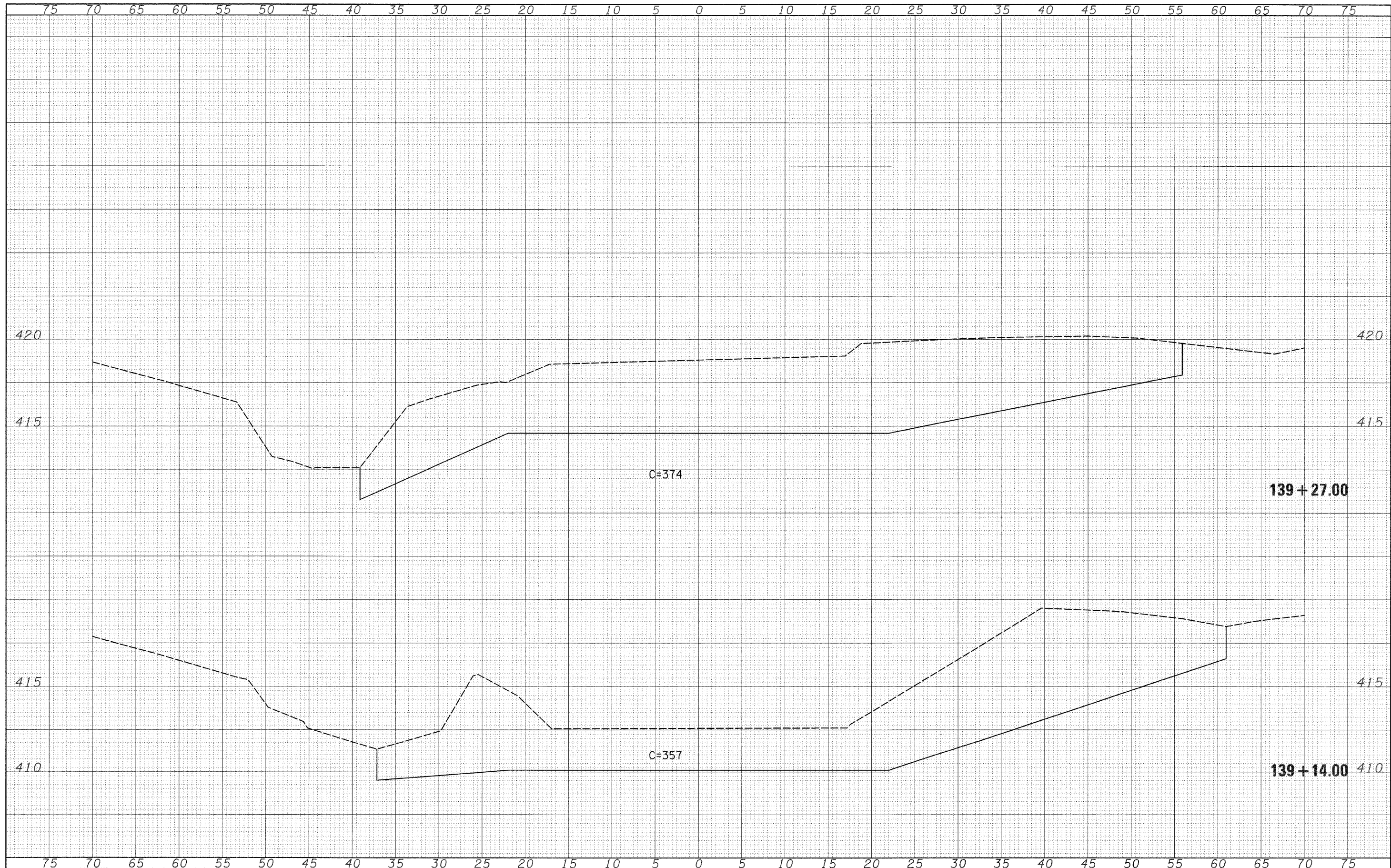
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NOTE BOOK	
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DRAWN	
CHECKED	
DATE	



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PLOT DATE = 12/23/2008		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
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AREAS CHECKED	

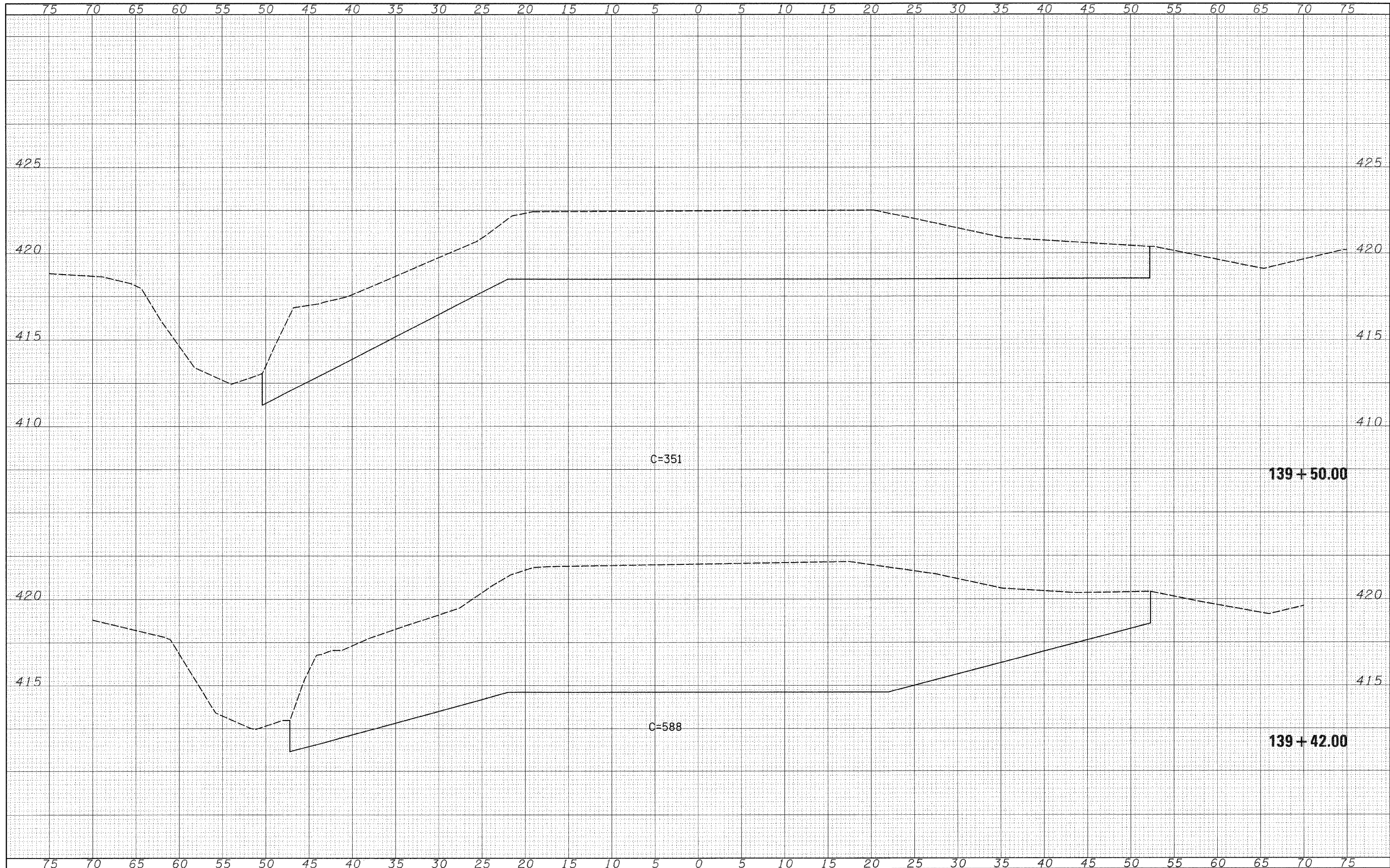
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TEMPLATE	
AREAS CHECKED	



FILE NAME =	USER NAME = lewisbl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	channel excavation Martin Creek	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		CHECKED -	REVISED -			CONTRACT NO. 74214					
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
PLOT SCALE = 5,0000' / IN.				SCALE:		SHEET NO. OF SHEETS STA. 139+14.00 TO STA. 139+27.00					
PLOT DATE = 12/23/2009											

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

DATE	
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SURVEYED	
NOTE BOOK	
NO.	
ORIGINAL SURVEY	
TEMPLATE	
AREAS CHECKED	



139 + 50.00

139 + 42.00

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USER NAME = lewisbl
 PLOT SCALE = 5.0000' / IN.
 PLOT DATE = 12/23/2008

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

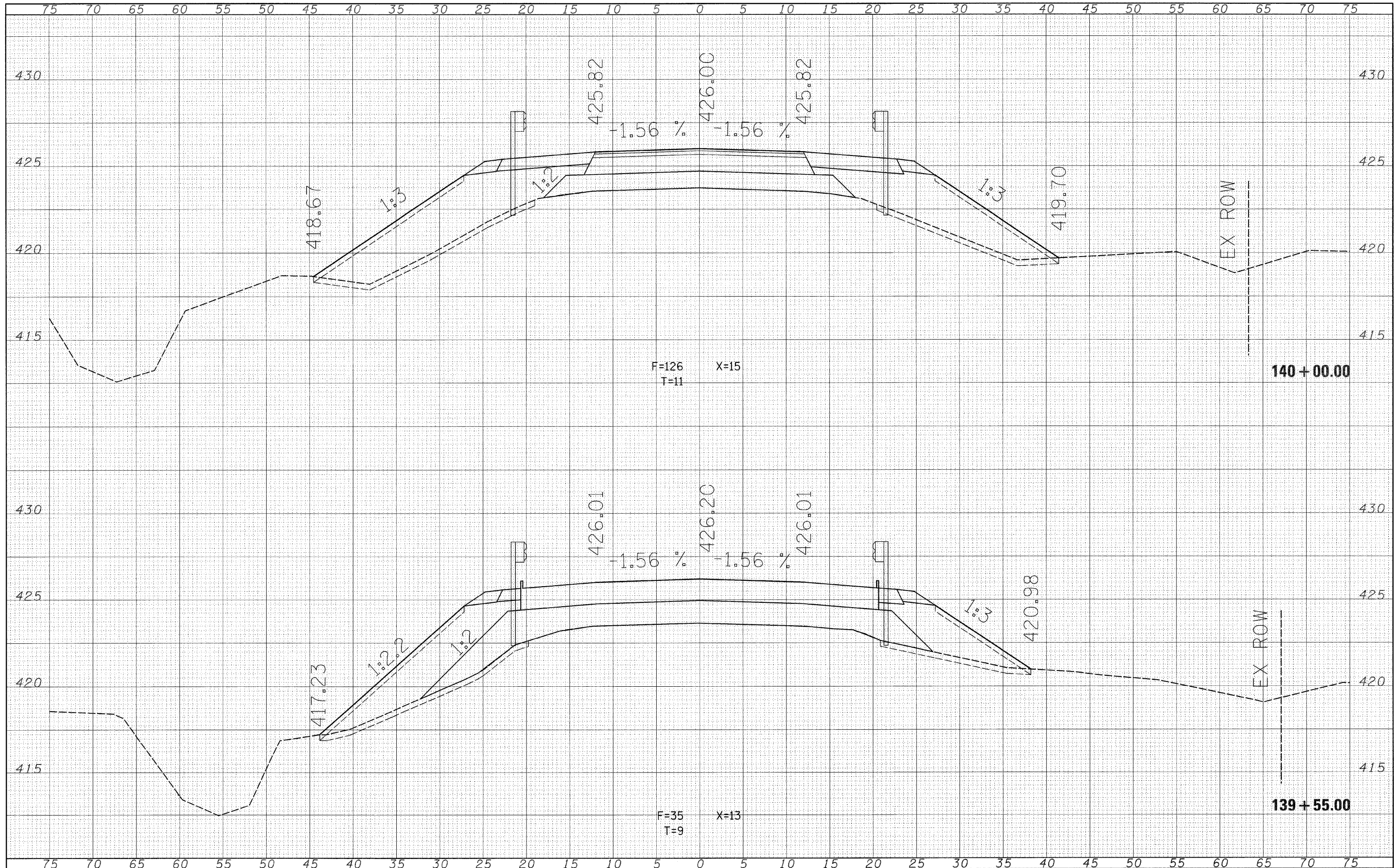
**channel excavation
 Martin Creek**

SCALE: SHEET NO. OF SHEETS STA. 139+42.00 TO STA. 139+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1,10BR)B-1	WAYNE	67	56
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74214	

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SURVEYED	
NOTE BOOK	
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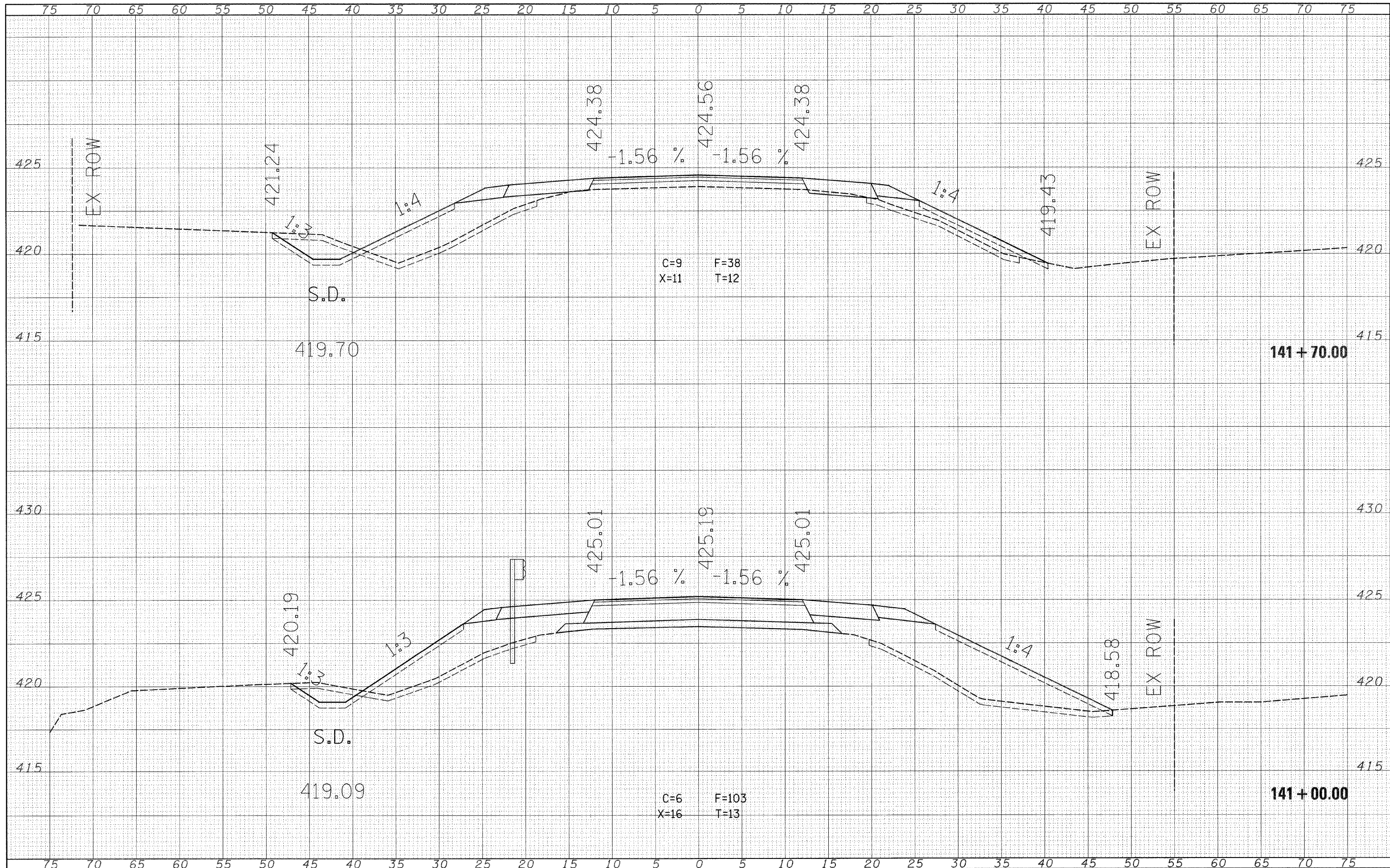
DATE	
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NOTE BOOK	
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TEMPLATES	
AREAS CHECKED	



FILE NAME =	USER NAME = lewisbl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Martin Creek	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\PWIDOT\LEWISBL\dms3553\14024ht.74214.dgn	DRAWN -	REVISED -	328			(9BRI,10BRI)B-1	WAYNE	67	57	
PLOT SCALE = 5.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 74214							
PLOT DATE = 12/23/2008	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
SCALE: SHEET NO. OF SHEETS STA. 139+55.00 TO STA. 140+00.00										

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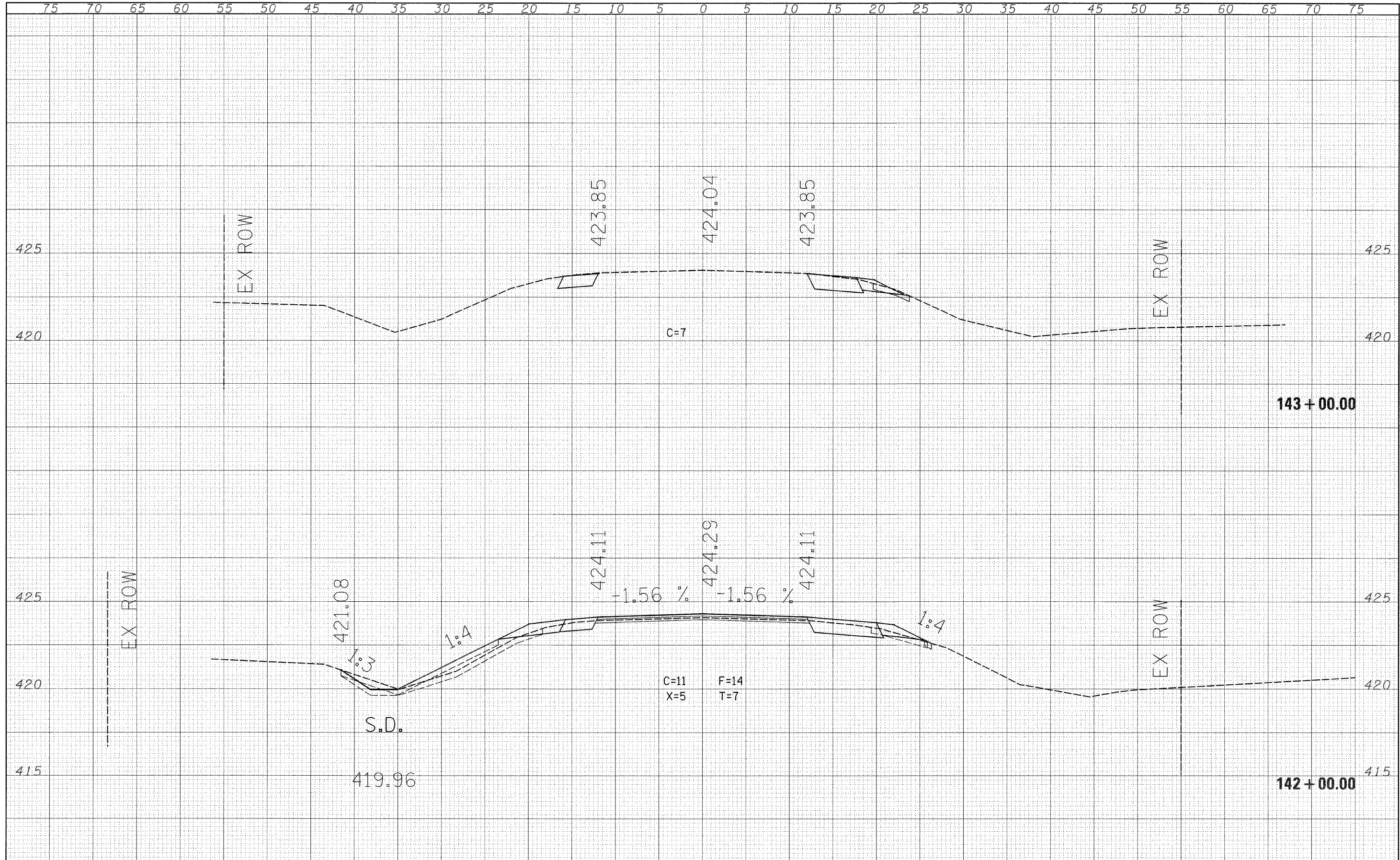
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TEMPLATE	
AREAS	
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ORIGINAL SURVEY	
NOTE BOOK	
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FILE NAME =	USER NAME = lewisbl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Martin Creek			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pe_work\PWIDOT\LEWISBL\dms35953\rs024sh.t	214.dgn	DRAWN -	REVISED -		328	(9BRI,10BRI)B-1	WAYNE	67	58			
PLOT SCALE = 5,00000 ' / IN.		CHECKED -	REVISED -		CONTRACT NO. 74214							
PLOT DATE = 12/23/2008		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET NO.	OF	SHEETS	STA. 141+00.00	TO STA. 141+70.00			

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

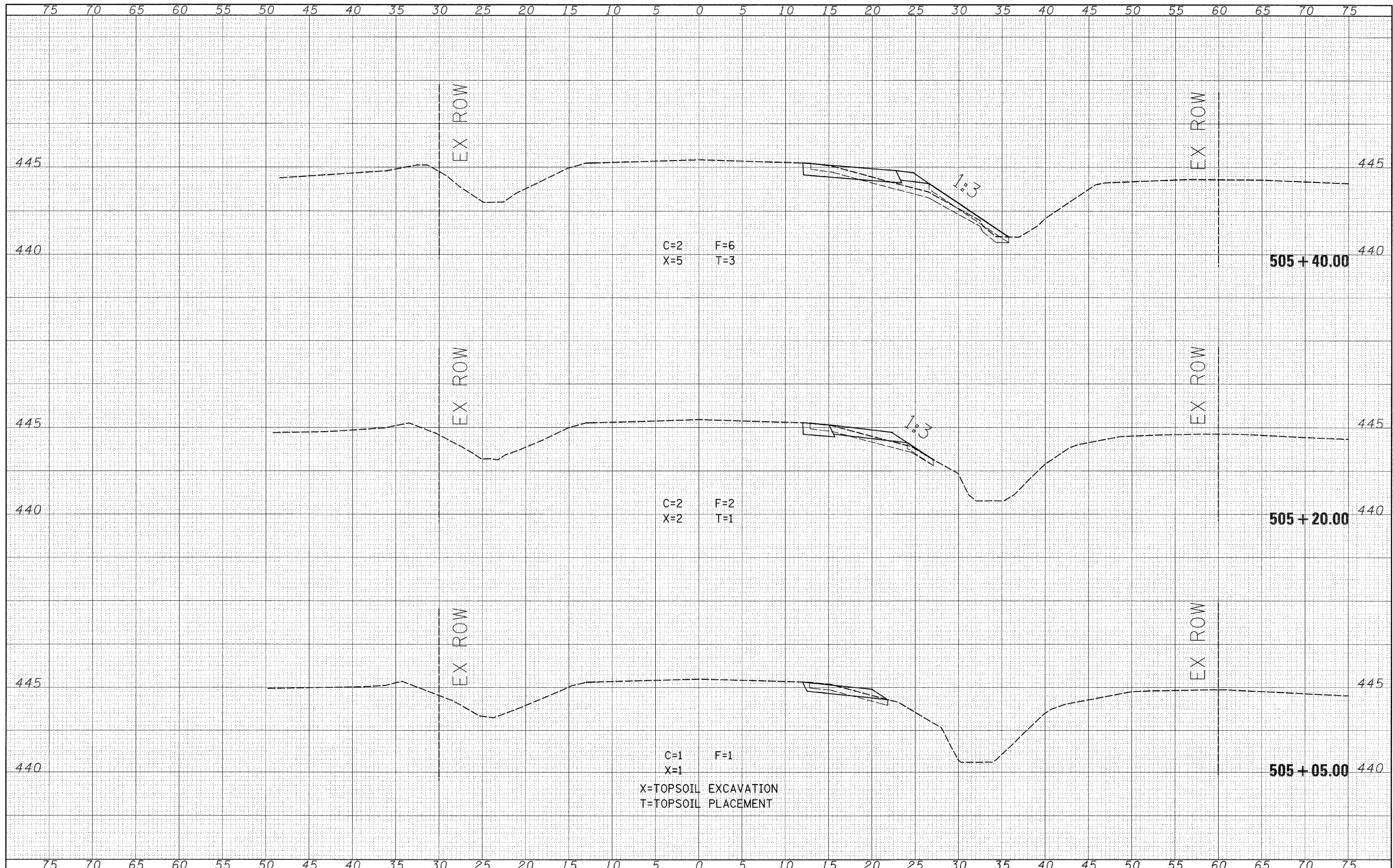
ORIGINAL SURVEY	DATE
NO. BOOK	BY
NOTE	SURVEYED
AREAS CHECKED	TEMPLATE
NO.	AREAS



FILE NAME =	USER NAME = lewisbl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Martin Creek	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\LEWISBL\dms35553\ss024sh.t.74214.dgn	PLOT SCALE = 5.0000' / IN.	DRAWN -	REVISED -			328	(9BR1,10BR1)B-1	WAYNE	67	59
PLOT DATE = 12/23/2008	DATE -	CHECKED -	REVISED -			CONTRACT NO. 74214				
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
SCALE: SHEET NO. OF SHEETS STA. 142+00.00 TO STA. 143+00.00										

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NOTE BOOK	
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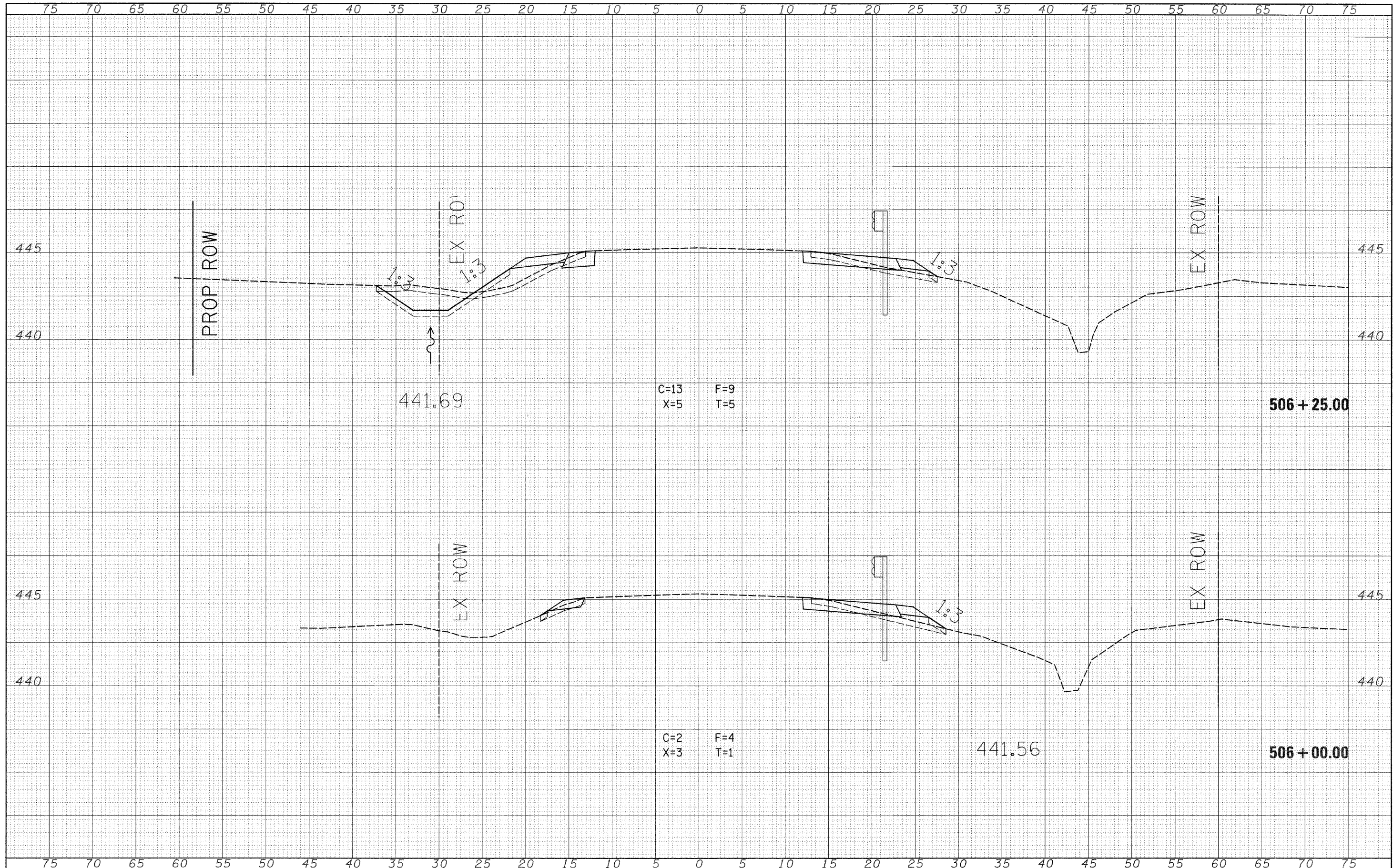


X=TOPSOIL EXCAVATION
T=TOPSOIL PLACEMENT

FILE NAME =	USER NAME = lewisbl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	branch of Elm River SECTION (9BRI10BRI)B-1 COUNTY WAYNE TOTAL SHEETS 67 SHEET NO. 60 CONTRACT NO. 74214
or:\pw_work\PIWIDOT\LEWISBL\dms35553\ss821shL74214.dgn		DRAWN -	REVISED -		
PLOT SCALE = 5,0000' / IN.		CHECKED -	REVISED -		
PLOT DATE = 12/23/2008		DATE -	REVISED -		
SCALE: SHEET NO. OF SHEETS STA. 505+05.00 TO STA. 505+40.00					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

DATE	
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FINAL SURVEY	
NOTE BOOK	
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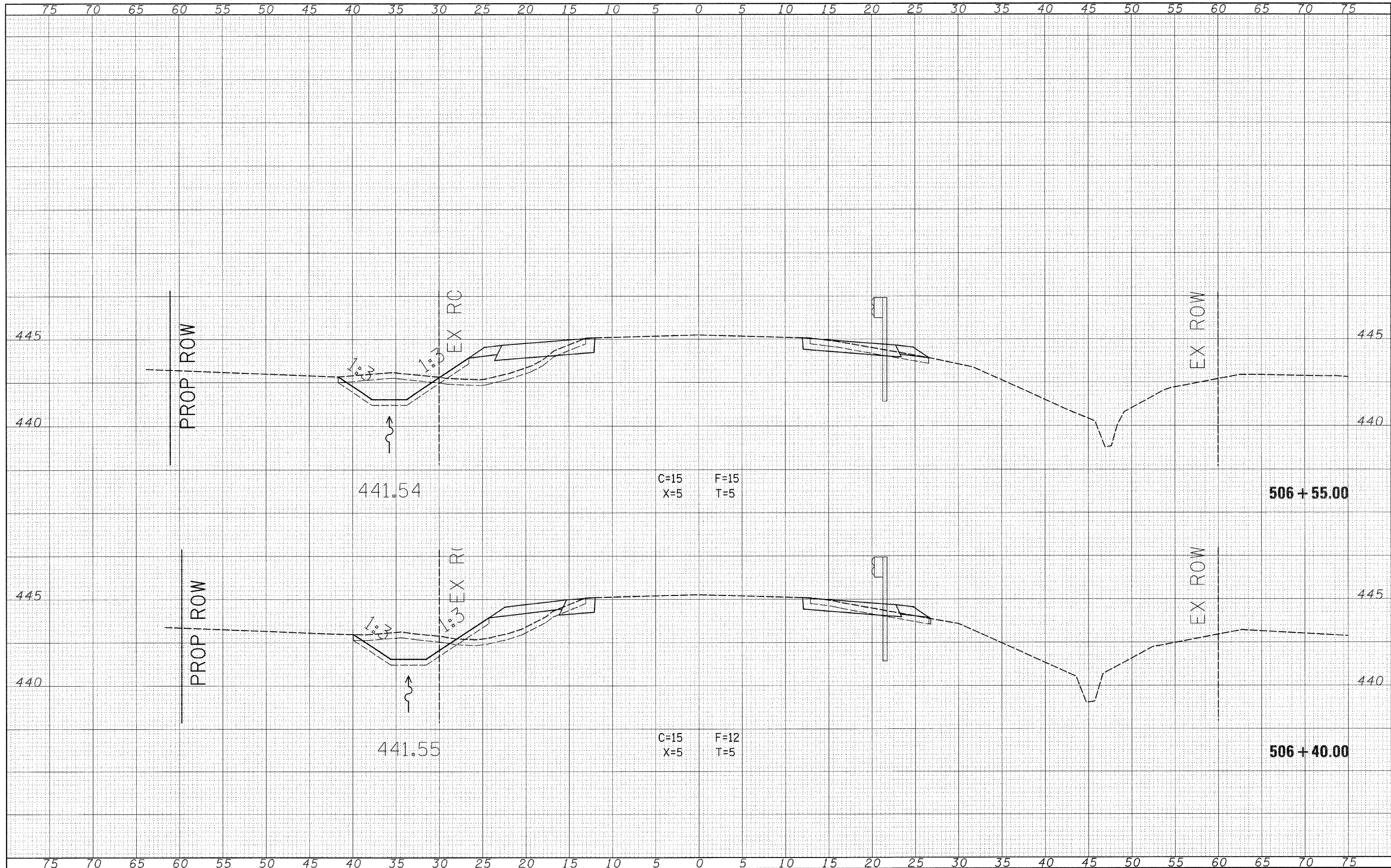
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FILE NAME =	USER NAME = lewisbl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	branch of Elm River	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cs:\pw\work\PIWIDG\LEWISBL\dms35583\ss021ht.74214.dgn		DRAWN -	REVISED -			328	(9BR1,10BR1)B-1	WAYNE	67	61
PLOT SCALE = 5.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 74214				
PLOT DATE = 12/23/2008		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
SCALE: SHEET NO. OF SHEETS STA. 506+00.00 TO STA. 506+25.00										

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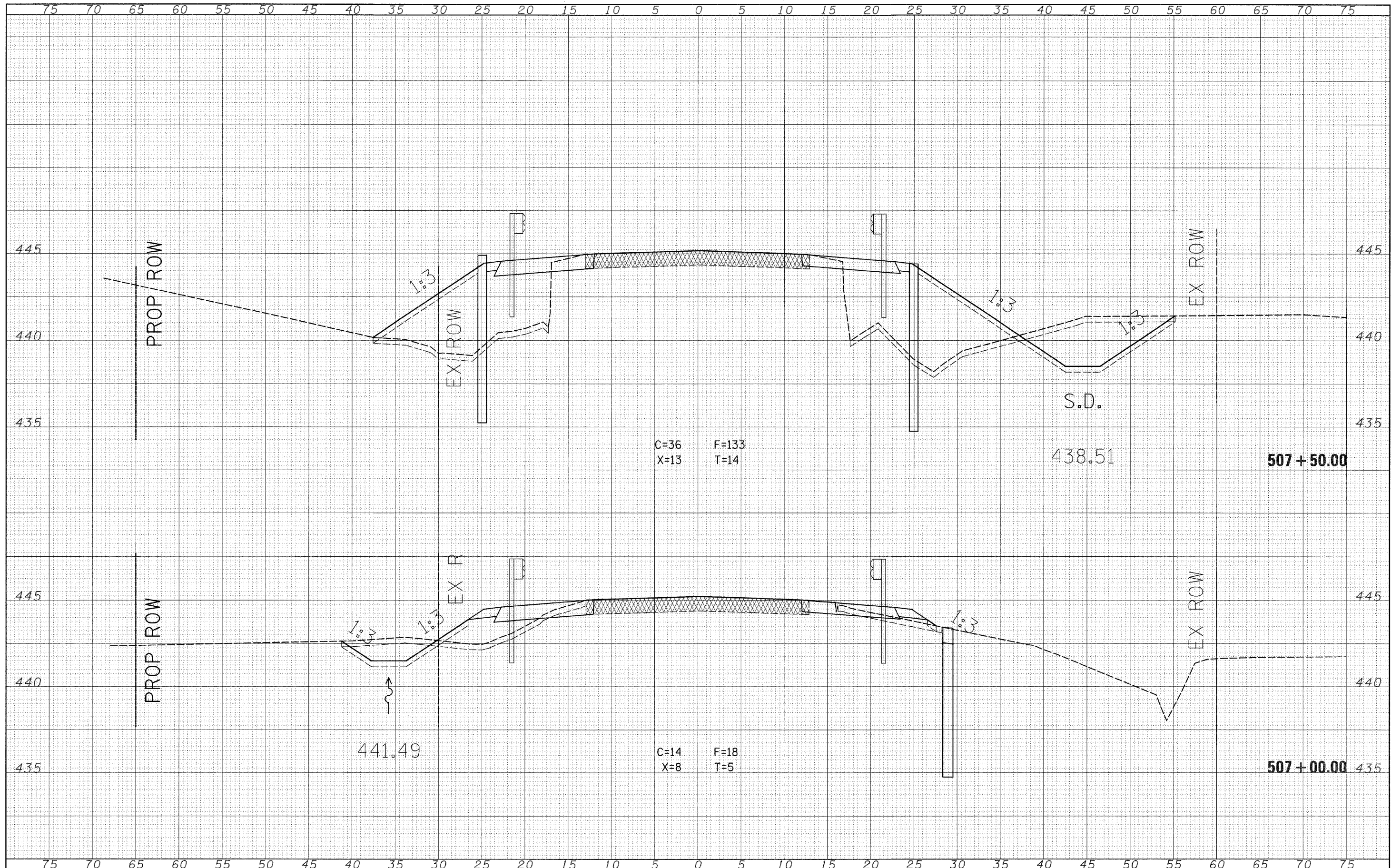
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FILE NAME =	USER NAME = lewisl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	branch of Elm River	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\PWIDOT\LEWISBL\dms35553\rs021sht.74214.dgn		DRAWN -	REVISED -			328	(9BRI,10BRI)B-1	WAYNE	67	62
PLOT SCALE = 5,0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 74214				
PLOT DATE = 12/23/2008		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

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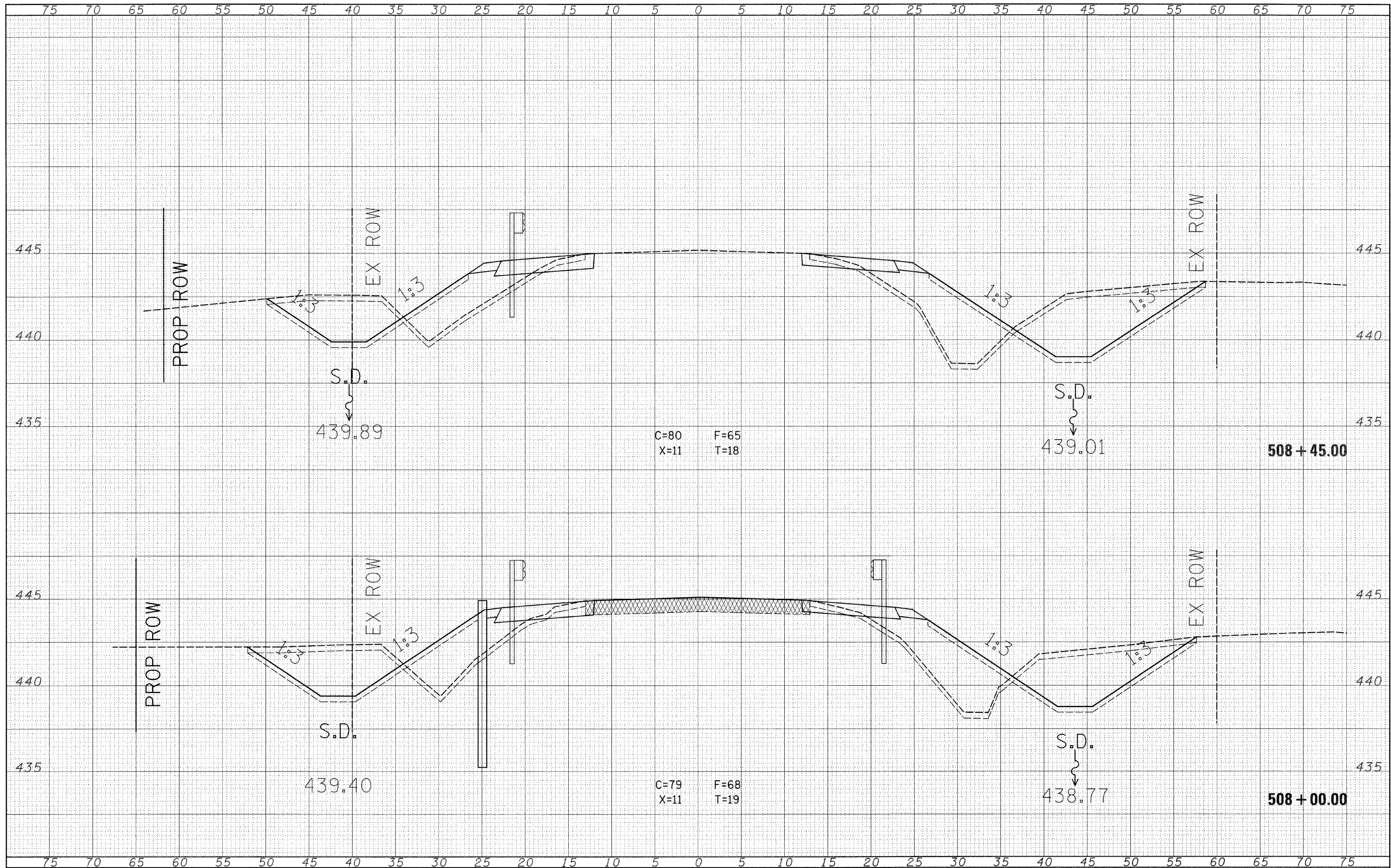
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FILE NAME =	USER NAME = lewisbl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	branch of Elm River SECTION (9BR1,10BR1)B-1 COUNTY WAYNE CONTRACT NO. 74214
cr:\pw\work\PIWIDOT\LEWISBL\dms35553\vs021sht.74214.dgn	PLOT SCALE = 5,0000 ' / IN.	DRAWN -	REVISED -		
PLOT DATE = 12/23/2008	DATE -	CHECKED -	REVISED -		
		DATE -	REVISED -		
SCALE:				SHEET NO. OF SHEETS	STA. 507+00.00 TO STA. 507+50.00

FINAL SURVEY	DATE
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 DEPARTMENT OF TRANSPORTATION

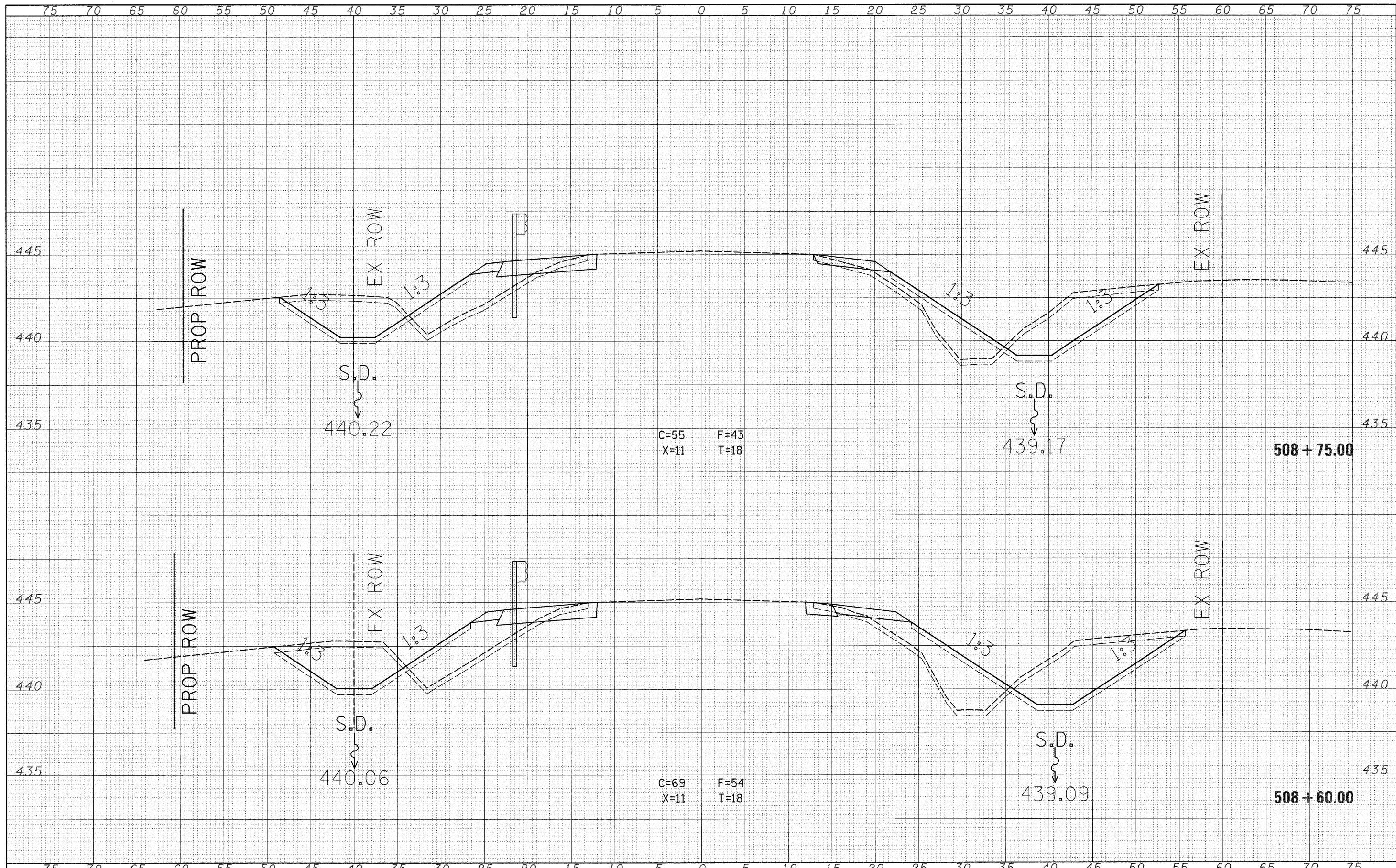
branch of Elm River

SCALE: SHEET NO. OF SHEETS STA. 508+00.00 TO STA. 508+45.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BRI,10BRI)B-1	WAYNE	67	64
CONTRACT NO. 74214			ILLINOIS FED. AID PROJECT	

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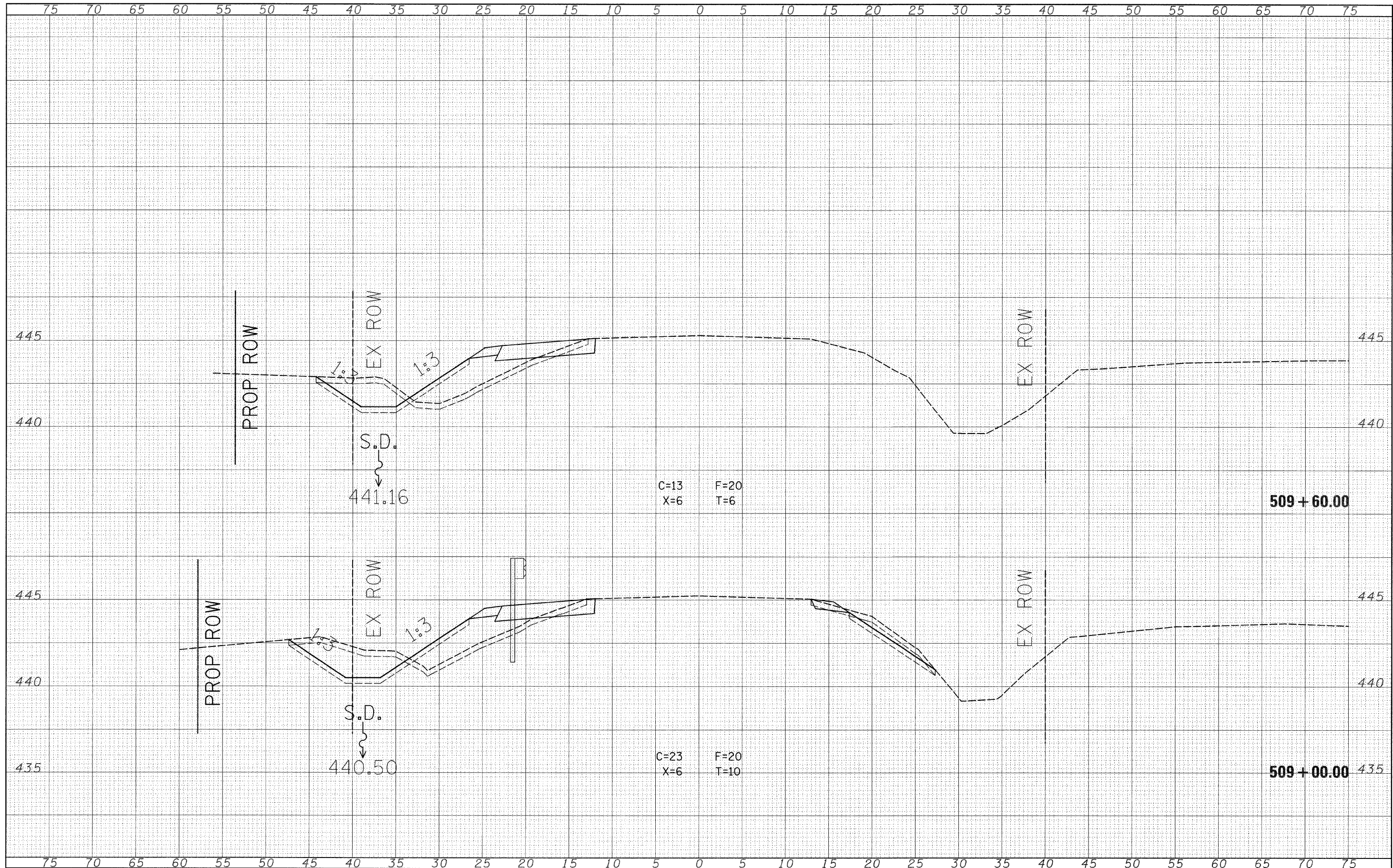
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NOTE BOOK	
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FILE NAME =	USER NAME = lewisbl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	branch of Elm River	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwidot\LEWISBL\dms3553\rs021sh.74214.dgn		DRAWN -	REVISED -			328	(9BR1,10BR1)B-1	WAYNE	67	65	
PLOT SCALE = 5.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 74214					
PLOT DATE = 12/23/2008		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

FINAL	SURVEYED	DATE
NOTE BOOK	BY	
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ORIGINAL	SURVEYED	DATE
NOTE BOOK	BY	
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DRAWN	-	REVISED	-
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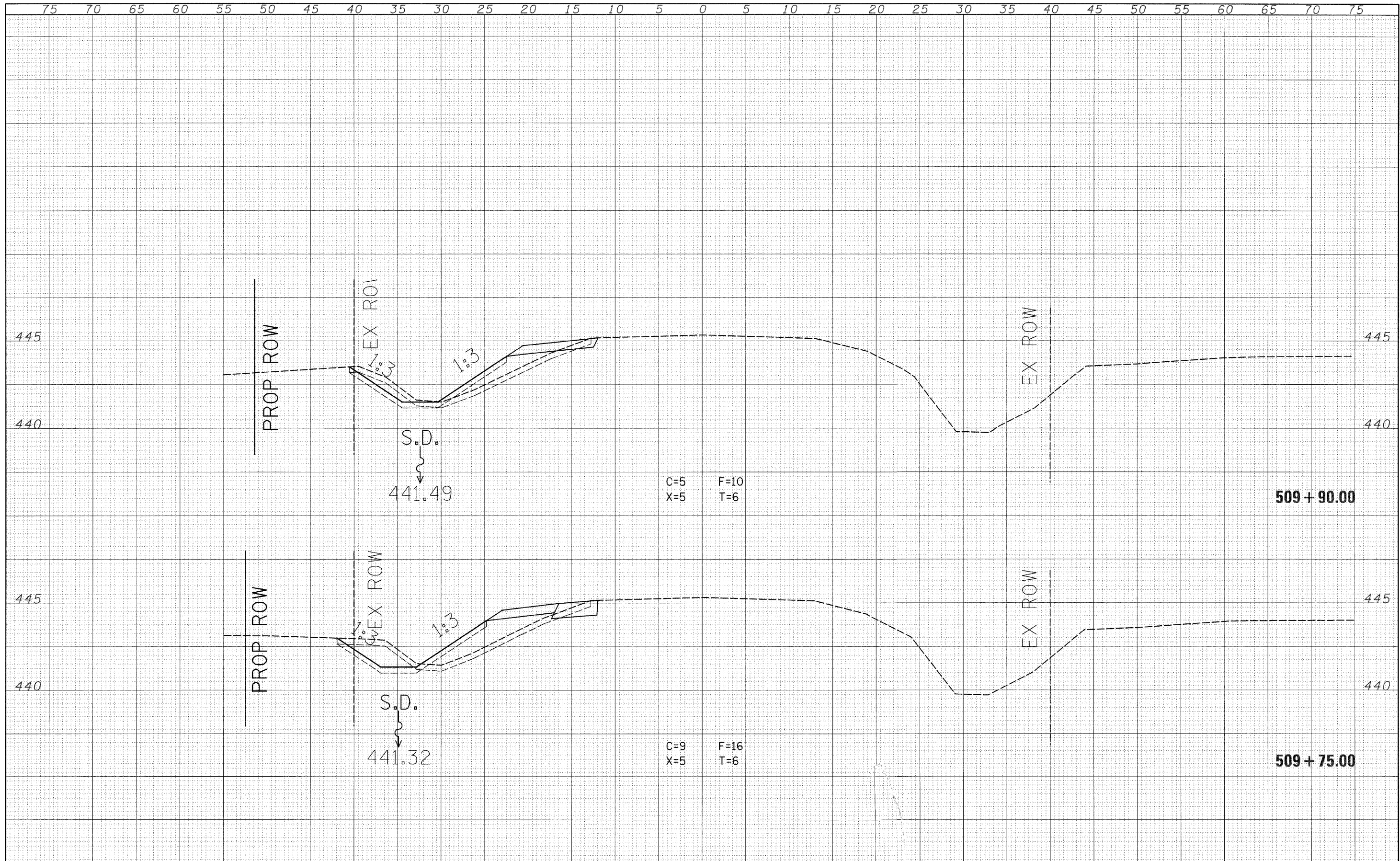
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET NO. OF SHEETS STA. 509+00.00 TO STA. 509+60.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(9BR1,10BR1)B-1	WAYNE	67	66
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74214	

FINAL	DATE
SURVEY	BY
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	
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ORIGINAL	DATE
SURVEY	BY
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	
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FILE NAME =	USER NAME = lewisbi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	branch of Elm River SCALE: SHEET NO. OF SHEETS STA. 509+75.00 TO STA. 509+90.00	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw\work\FWIDOT\LEWISBI\dms3553\ss02\stt.74214.dgn	DRAWN -	REVISED -	328			(9BR1,10BR1)B-1	WAYNE	67	67	
PLOT SCALE = 5,0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 74214							
PLOT DATE = 12/23/2008	DATE -	REVISED -	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT							