F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	1
	ILLINOIS	CONTRACT NO. 89811		

11-05-2021 LETTING ITEM 079

INDEX OF SHEETS

FOR HIGHWAY STANDARDS, SEE SHEET 2

UTILITIES

NONE.

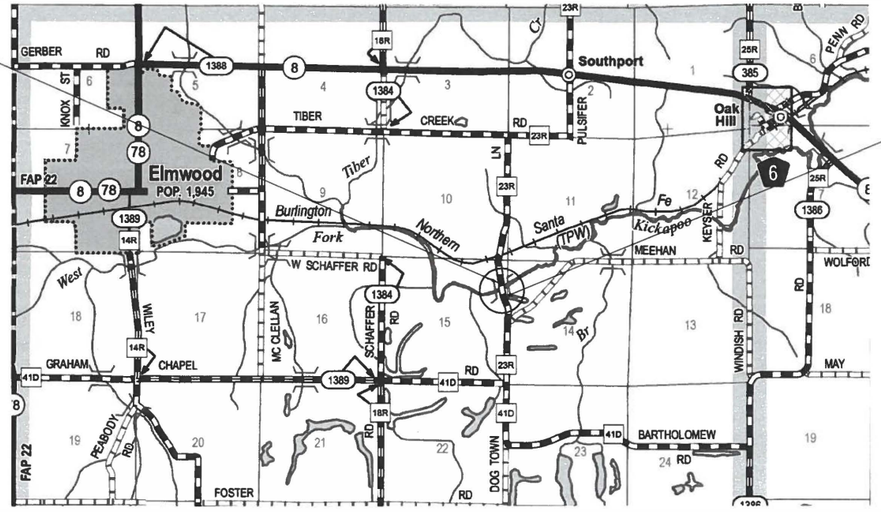
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

COUNTY ROAD 23R (DOGTOWN LANE)
SECTION 17-00132-00-BR
PROJECT 3P3M(067)
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK
BRIDGE REPLACEMENT
JOB C-94-045-21
PEORIA COUNTY

LOCATION OF SECTION INDICATED THUS: –

START PROJECT STA 115+89.88
EXISTING SN 072-3105
3-SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE WITH REINFORCED CONCRETE ABUTMENTS
PROPOSED SN 072-3161
SINGLE-SPAN SKEWED 16 PLATE GIRDER CONCRETE DECK BRIDGE WITH INTEGRAL ABUTMENTS, 114'-0" BK. TO BK. ABUTMENTS AND 32'-0" OUT TO OUT



LOCATION MAP
NOT TO SCALE

100' 200' 300' — 1" = 100'
10' 20' 30' — 1" = 10'
50' 100' — 1" = 50'
50' 100' — 1" = 40'
50' 100' — 1" = 30'
50' 100' — 1" = 20'

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 EXCAVATORS
1-800-892-0123
OR 811

COUNTY PROJECT ENGINEER: JEFFREY GILLES, PE (309-697-6400 x127)
TERRA ENGINEERING PROJECT MANAGER: ERIC THERKILDSEN, PE (309-999-0123)

CATALOG NO. 036159-00D
CONTRACT NO. 89811

TERRA ENGINEERING LTD.
401 Main Street, Suite 1560
Peoria, IL 61602
(309) 999-0123

GROSS LENGTH = 480.69 FT. = 0.09 MILE
NET LENGTH = 480.69 FT. = 0.09 MILE

LICENSED PROFESSIONAL ENGINEER
ERIC THERKILDSEN
062-044857
STATE OF ILLINOIS

8/23/21
ERIC THERKILDSEN, P.E. DATE
LICENSED PROFESSIONAL ENGINEER
ILLINOIS NO. 062.044857 EXPIRES 11-30-2021

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Approved August 23, 2021
PEORIA COUNTY, ENGINEER

Passed 08-24-2021
DISTRICT 4 ENGINEER OF LOCAL ROADS

Releasing for Bid based on Limited Review August 24, 2021.
REGION 3 ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-09	PAVEMENT JOINTS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-04	NAME PLATE FOR BRIDGES
542401-04	METAL FLARED END SECTION FOR PIPE CULVERTS
542531-04	INLET BOX TYPE 24 (600) G
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
631031-17	TRAFFIC BARRIER TERMINAL, TYPE 6
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
701901-08	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
728001-01	TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
BLR 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC; ROAD CLOSED TO THRU TRAFFIC)
BLR 23-4	TRAFFIC BARRIER TERMINAL TYPE 1

DISTRICT 4 STANDARD DETAILS

601401-D4	DETAILS OF SEEPAGE COLLARS FOR BURIED PIPES

GENERAL NOTES

1. THE CONTRACTOR SHALL FOLLOW THE MAINTENANCE OF TRAFFIC SPECIAL PROVISION FOR TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL PROVIDE A CLEAN SAW CUT EDGE AT THE BEGINNING AND END OF PAVEMENT IMPROVEMENT LIMITS IMMEDIATELY PRIOR TO THE PLACEMENT OF HMA.
3. IN STREAM WORK SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
4. TWENTY-FIVE FEET (25 FT.) TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
5. ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.
6. THE CONTRACTOR WILL SUBMIT TO THE ENGINEER A SATISFACTORY PROGRESS SCHEDULE AND CRITICAL PATH SCHEDULE WHICH SHALL SHOW THE PROPOSED SEQUENCE OF WORK AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.
7. AT LOCATIONS WHERE CLEARING IS INDICATED ON THE PLANS BEYOND THE LIMITS OF THE PROPOSED EXCAVATION OR EMBANKMENT, THE CONTRACTOR SHALL RESTORE THE DISTURBED EARTH BY BLADING AND SHAPING TO BLEND WITH THE ADJACENT GROUND. THE CLEARING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE EXCAVATION PAY ITEMS IN THE PLANS. PAYMENT FOR RESEEDING OR RESODDING WILL BE AS PROVIDED IN THE PLANS.

GENERAL NOTES, CONT.

8. CONCRETE WASHOUT SHALL BE IN DESIGNATED AREAS INTO LEAKPROOF BINS, BASINS, OR MANMADE CONTAINERS. WASHOUT AREAS SHOULD BE LOCATED AS FAR FROM KICKAPOO CREEK AS PRACTICAL. WATERS RELATED TO CONCRETE WASHOUT CONTAINERS SHALL NOT BE DISCHARGED INTO KICKAPOO CREEK.
9. ALL SITE WATERS DRAIN TO THE WEST FORK OF KICKAPOO CREEK. ANY WATER DISCHARGED FROM A PUMPING OR DEWATERING ACTIVITY SHALL REQUIRE FILTERING THROUGH AN APPROVED BEST MANAGEMENT PRACTICE BEFORE RELEASING ONTO THE SITE. WATER SHALL NOT BE DISCHARGED DIRECTLY INTO THE WEST FORK OF KICKAPOO CREEK.

IDOT DISTRICT 4 GENERAL NOTES

105.04 SOIL REPORT AVAILABILITY

THE SOILS REPORT AND ALL SOILS DATA COLLECTED AND PROCESSED IN CONJUNCTION WITH THE DESIGN OF THIS IMPROVEMENT IS ON FILE AT THE PEORIA COUNTY HIGHWAY DEPARTMENT OFFICE WHERE IT IS AVAILABLE FOR INSPECTION BY CONTRACTORS OR PROSPECTIVE BIDDERS. BY SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THAT THE SOILS REPORT AND DATA HAVE BEEN MADE AVAILABLE, THAT THE CONTRACTOR IS AWARE OF THE REPORT CONTENTS AND APPENDICES, AND THAT THE SOILS REPORT IS PART OF THE CONTRACT DOCUMENTS.

105.06 AVAILABILITY OF ELECTRONIC FILES

MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR AFTER CONTRACT AWARD. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

105.09A PLAN ELEVATIONS - U.S.G.S. MEAN SEA LEVEL DATUM

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

107.09a CONSECUTIVE SIDE STREET (ROAD CLOSURE - PROHIBITED)

ADJACENT SIDEROADS WILL NOT BE CLOSED SIMULTANEOUSLY. BLR STANDARD 21 SHALL BE USED FOR ALL LOCAL CLOSURES WITHOUT ANY ENTRANCES WITHIN THE CLOSED AREA.

204.00 ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

* BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS)
* BDE FORM 2290 (WASTE/USE AREA REVIEW)
* A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
* COLOR PHOTOGRAPHS DEPICTING THE USE AREA
* BORROW AREA ENTRY AGREEMENT FORM - D4 PI0101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

406.19 PAVING SURFACE COURSE

CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE HOT-MIX ASPHALT SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.

542.00 ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS.

701.01 ADDITIONAL SUPPLEMENTAL TRAFFIC CONTROL

THE DEPARTMENT RESERVES THE RIGHT AT ANY TIME TO ADD ADDITIONAL TRAFFIC CONTROL SYSTEMS OR DEVICES WITHIN THE ACTIVE CONTRACT LIMITS, BY MEANS OF AN ADDITIONAL CONTRACT. ALL TERMS OF ARTICLE 105.08 OF THE STANDARDS SPECIFICATIONS SHALL BE FOLLOWED BY EACH CONTRACTOR.

COMMITMENTS

TREES THREE (3) INCHES OR GREATER IN DIAMETER AT BREAST HEIGHT WILL NOT BE CLEARED FROM APRIL 1 THROUGH SEPTEMBER 30.

THE BRIDGE BAT ASSESSMENT EXPIRES 07/01/2022. A VALID ASSESSMENT IS REQUIRED PRIOR TO PERFORMING ANY WORK BELOW THE EXISTING BRIDGE DECK SURFACE.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

APPLY THE FOLLOWING MIX TO THE TRAVELED WAY AND TO HOT-MIX ASPHALT SHOULDERS, 6":

MIXTURE USE(S):	HMA SURFACE COURSE, MIX "C", N50	HMA BINDER COURSE, N50
AC/PC:	PG 58-28	PG 58-28
DESIGN AIR VOIDS:	4% @ NDES 50	4% @ NDES 50
MIXTURE COMPOSITION:	IL 9.5	IL 19.0
FRICTION AGGREGATE:	MIXTURE C	NA
MIXTURE WEIGHTS:	112 LB / SY / INCH	112 LB / SY / INCH
QUALITY MANAGEMENT:	QC/QA	QC/QA

NOTES: INDIVIDUAL LIFT THICKNESS OF EACH MIX TYPE WILL BE NO LESS THAN 3 TIMES NOMINAL MAXIMUM AGGREGATE SIZE AND NO MORE THAN 6 TIMES NOMINAL MAXIMUM AGGREGATE SIZE.

BITUMINOUS MATERIALS (TACK & PRIME COAT) RATES

	RESIDUAL RATE	
SURFACE TYPE:	PRIME COAT	TACK COAT
AGGREGATE:	0.25 LB / SQ FT	NA
FOG COAT (BETWEEN LIFTS):	NA	0.08 LB / SQ FT

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STANDARDS AND GENERAL NOTES
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: NTS | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	2
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

	SUMMARY OF QUANTITIES			
SP	ITEM NUMBER	ITEM	UNIT	QUANTITY
Δ	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	337
Δ	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	58
	20200100	EARTH EXCAVATION	CU YD	2470
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	5350
	25000300	SEEDING, CLASS 3	ACRE	1.25
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	110
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	110
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	110
	25100115	MULCH, METHOD 2	ACRE	1.25
	25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	5350
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	120
	28000305	TEMPORARY DITCH CHECKS	FOOT	735
	28000400	PERIMETER EROSION BARRIER	FOOT	850
	28000500	INLET AND PIPE PROTECTION	EACH	2
	28200200	FILTER FABRIC	SQ YD	1801
	28500400	ARTICULATED BLOCK REVETMENT MAT	SQ YD	1801
	35100100	AGGREGATE BASE COURSE, TYPE A	TON	609

	SUMMARY OF QUANTITIES			
SP	ITEM NUMBER	ITEM	UNIT	QUANTITY
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	2370
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	760
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	153
	40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	77
	42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	96
	44000100	PAVEMENT REMOVAL	SQ YD	717
	44004000	PAVED DITCH REMOVAL	FOOT	144
	48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	278
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
	50104400	CONCRETE HEADWALL REMOVAL	EACH	1
	50104650	SLOPE WALL REMOVAL	SQ YD	1270
	50105220	PIPE CULVERT REMOVAL	FOOT	38
	50200100	STRUCTURE EXCAVATION	CU YD	265
	50300225	CONCRETE STRUCTURES	CU YD	70
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	169.6
	50300260	BRIDGE DECK GROOVING	SQ YD	535
	50300300	PROTECTIVE COAT	SQ YD	716

Δ SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: NTS | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	3
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS	FED. AID PROJECT		

	SP	ITEM NUMBER	ITEM	UNIT	QUANTITY
SUMMARY OF QUANTITIES					
		50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	89.3
		50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
		50500505	STUD SHEAR CONNECTORS	EACH	1065
		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	82160
		51100300	SLOPE WALL 6 INCH	SQ YD	735
		51201900	FURNISHING STEEL PILES HP14X89	FOOT	188
		51202305	DRIVING PILES	FOOT	188
		51203900	TEST PILE STEEL HP14X89	EACH	2
		51500100	NAME PLATES	EACH	1
		52100520	ANCHOR BOLTS, 1"	EACH	20
		58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	116
		59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	57
		60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	4
Δ		63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
Δ		63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
		63200310	GUARDRAIL REMOVAL	FOOT	259
	*	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	5

Δ SPECIALTY ITEMS

	SP	ITEM NUMBER	ITEM	UNIT	QUANTITY
SUMMARY OF QUANTITIES					
		67100100	MOBILIZATION	L SUM	1
Δ		72000100	SIGN PANEL - TYPE 1	SQ FT	6
Δ		72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1
Δ		72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
Δ		72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	16
Δ		78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	519
Δ		78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	4
Δ		78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	8
	*	X0325446	SHOULDER INLET WITH CURB (4 FT SHOULDER)	EACH	2
	*	X5120003	PRECORING	FOOT	50
	*	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
Δ	*	X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	519
	*	Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	33
	*	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	40
	*	Z0013798	CONSTRUCTION LAYOUT	L SUM	1
#		Z0076600	TRAINEES	HOUR	1,000
	*	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	138
#		Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1,000
	*	Z0064540	SEEPAGE COLLAR	EACH	2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: NTS | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	4
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

STEEL PLATE GUARDRAIL SCHEDULE

LOCATION			63100085	63100167	72501000	Z0001002
			TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL AGGREGATE EROSION CONTROL
BEGIN STATION	END STATION	OFFSET	EACH	EACH	EACH	TON
116+91.05	117+65.80	RT	1	1	1	8
116+81.95	117+57.20	LT	1	1	1	8
119+07.80	119+82.80	RT	1	1	1	8
118+99.20	119+74.20	LT	1	1	1	8
TOTAL			4	4	4	32

GUARDRAIL REFLECTORS

LOCATION		78200005	78200011
		GUARDRAIL REFLECTORS, TYPE A	BARRIER WALL REFLECTORS, TYPE C
STATION	OFFSET	EACH	EACH
117+51.05	RT	1	
118+24.05	RT		2
118+97.05	RT		2
119+70.05	RT	1	
117+41.95	LT	1	
118+01.95	LT		2
118+61.95	LT		2
119+21.95	LT	1	
TOTAL		4	8

PAVEMENT MARKINGS AND SIGINING SCHEDULE

LOCATION			78009004	X7830070	72000100	72800100
			MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	GROOVING FOR RECESSED PAVEMENT MARKING 5"	SIGN PANEL - TYPE 1	TELESCOPING STEEL SIGN SUPPORT
BEGIN STATION	END STATION	OFFSET	FOOT	FOOT	SQ FT	FOOT
115+89.88	116+72.60	CL	21	21		
115+89.88	117+57.20	LT			6	16
116+72.60	120+70.57	CL	498	498		
TOTAL			519	519	6	16

EROSION CONTROL SCHEDULE

LOCATION			28000400	28000305	28000250	25100115	28500400	28200200
			PERIMETER EROSION BARRIER	TEMPORARY DITCH CHECKS	TEMPORARY EROSION CONTROL SEEDING	MULCH, METHOD 2	ARTICULATED BLOCK REVETMENT MAT	FILTER FABRIC
BEGIN STATION	END STATION	OFFSET	FOOT	FOOT	POUND	ACRE	SQ YD	SQ YD
115+89.88	118+05.51	RT	219	95	26	0.25	233	233
115+89.88	117+81.67	LT	182	95	25	0.25	102	102
118+70.22	120+70.57	RT	211	252	21	0.21	632	632
118+36.23	120+70.57	LT	238	294	40	0.40	834	834
TOTAL			850	735	120	1.25	1801	1801

DRAINAGE SCHEDULE

LOCATION		X0325446	50300300	28000500	Z0064540
		SHOULDER INLET WITH CURB (4 FT SHOULDER)	PROTECTIVE COAT	INLET AND PIPE PROTECTION	SEEPAGE COLLAR
STATION	RT/LT	EACH	SQ YD	EACH	EACH
117+44.64	RT	1	5	1	1
117+30.54	LT	1	5	1	1
TOTAL		2	10	2	2
NOTE: SEE STRUCTURE SHEETS FOR ADDITIONAL PROTECTIVE COAT LOCATIONS.					

PAVING SCHEDULE

LOCATION		35100100	40603080	40604050	48203021	42000070	40600290	40600275	44000100
		AGGREGATE BASE COURSE, TYPE A	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	HOT-MIX ASPHALT SHOULDERS, 6"	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	BITUMINOUS MATERIALS (TACK COAT)	BITUMINOUS MATERIALS (PRIME COAT)	PAVEMENT REMOVAL
BEGIN STATION	END STATION	TON	TON	TON	SQ YD	SQ YD	POUND	POUND	SQ YD
115+89.88	117+46.50	304	77	39	136	47.7	378	1180	357
119+18.50	120+70.57	305	76	38	142	47.7	379	1182	360
TOTAL		609	153	77	278	95.4	760	2370	717

LANDSCAPING SCHEDULE

LOCATION			21101615	25000300	25000400	25000500	25000600	25100635
			TOPSOIL FURNISH AND PLACE, 4"	SEEDING, CLASS 3	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	HEAVY DUTY EROSION CONTROL BLANKET
BEGIN STATION	END STATION	OFFSET	SQ YD	ACRE	POUND	POUND	POUND	SQ YD
118+70.22	120+70.57	RT	993	0.21	19	19	19	993
115+89.88	118+05.51	RT	1231	0.25	23	23	23	1231
118+36.23	120+70.57	LT	1924	0.40	36	36	36	1924
115+89.88	117+81.67	LT	1202	0.25	23	23	23	1202
TOTAL			5350	1.25	110	110	110	5350

MOBILIZATION

LOCATION		67100100
		MOBILIZATION
BEGIN STATION	END STATION	LSUM
115+89.88	120+70.57	1
TOTAL		1

TREE REMOVAL SCHEDULE

LOCATION	TREE SIZE (DIAMETER)	20100110	20100210
		TREE REMOVAL (6 TO 15 UNITS DIAMETER)	TREE REMOVAL (OVER 15 UNITS DIAMETER)
QUADRANT		UNIT	UNIT
NORTHWEST	12 DBL	24	
NORTHWEST	13	13	
NORTHWEST	11	11	
NORTHWEST	9 DBL	18	
NORTHWEST	11	11	
SOUTHWEST	9	9	
SOUTHWEST	9	9	
NORTHEAST	9	9	
NORTHEAST	24		24
NORTHEAST	6	6	
NORTHEAST	8	8	
NORTHEAST	13	13	
NORTHEAST	11	11	
NORTHEAST	11	11	
NORTHEAST	11	11	
NORTHEAST	9 DBL	18	
NORTHEAST	6	6	
NORTHEAST	7	7	
NORTHEAST	12	12	
NORTHEAST	11	11	
SOUTHEAST	18		18
SOUTHEAST	16		16
SOUTHEAST	8 TRPL	24	
SOUTHEAST	10 TRPL	30	
SOUTHEAST	11	11	
SOUTHEAST	12	12	
SOUTHEAST	11	11	
SOUTHEAST	11	11	
SOUTHEAST	10	10	
SOUTHEAST	10	10	
TOTAL		337	58

EARTHWORK SCHEDULE

LOCATION			20200100			
			EARTH EXCAVATION	SUITABLE EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	EARTH BALANCE WASTE (+) OR SHORTAGE (-)
STATION	TO	STATION	CU YD	CU YD	CU YD	CU YD
115+89.88	TO	117+50.00	425	320	275	45
North Near Abutment			925	695	220	475
BRIDGE OMISSION (SEE STRUCTURAL PLANS)						
South Near Abutment			1445	1085	80	1005
119+50.00	TO	120+70.57	490	370	35	335
TOTAL			3285	2470	610	1860

CONSTRUCTION LAYOUT SCHEDULE

LOCATION		Z0013798
		CONSTRUCTION LAYOUT
BEGIN STATION	END STATION	LSUM
115+89.88	120+70.57	1
TOTAL		1

TRAFFIC CONTROL SCHEDULE

LOCATION		X7010216
		TRAFFIC CONTROL AND PROTECTION, (SPECIAL)
BEGIN STATION	END STATION	LSUM
115+89.88	120+70.57	1
TOTAL		1

REMOVALS SCHEDULE

LOCATION			44004000	63200310	50104400	50105220	72400100
			PAVED DITCH REMOVAL	GUARDRAIL REMOVAL	CONCRETE HEADWALL REMOVAL	PIPE CULVERT REMOVAL	REMOVE SIGN PANEL ASSEMBLY - TYPE A
BEGIN STATION	END STATION	OFFSET	FOOT	FOOT	EACH	FOOT	EACH
115+89.88	117+65.80	RT	0	56			
115+89.88	117+57.20	LT	0	52			1
119+07.80	120+70.57	RT	0	75	1		
118+88.00	120+70.57	LT	144	76		38	
TOTAL			144	259	1	38	1

PIPE UNDERDRAINS

LOCATION	60100060
	CONCRETE HEADWALLS FOR PIPE DRAINS
	EACH
BACK OF NORTH ABUTMENT	2
BACK OF SOUTH ABUTMENT	2
TOTAL	4

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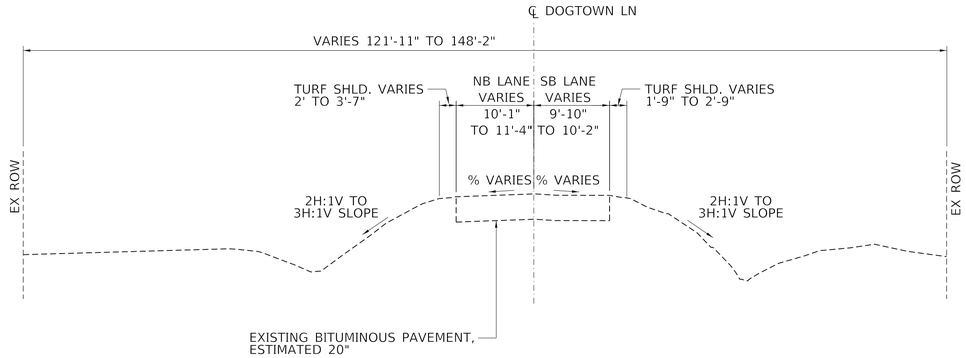
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES OF QUANTITIES
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

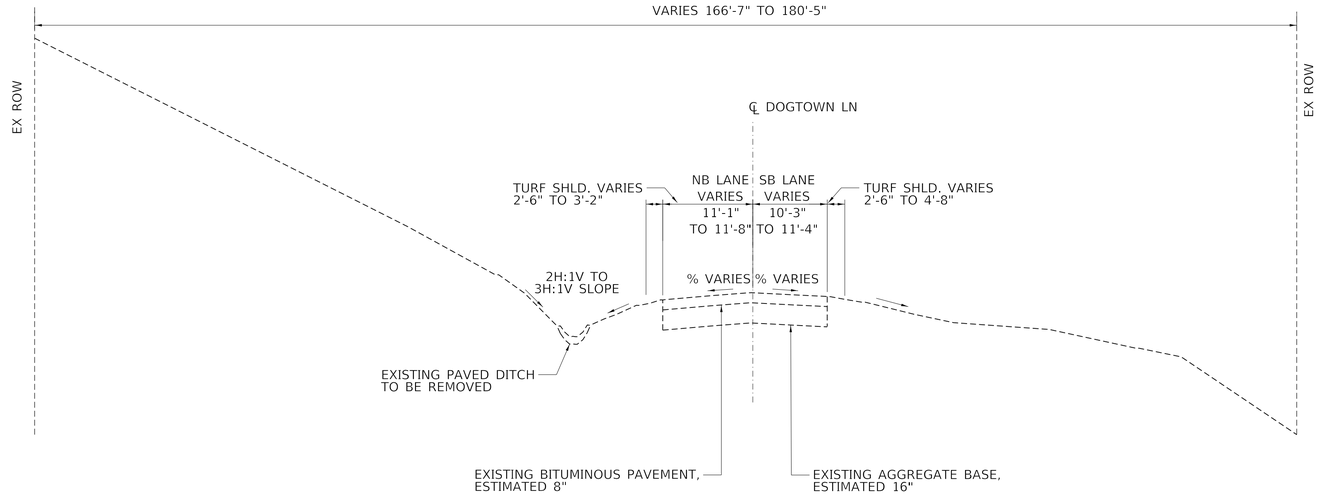
SCALE: NTS | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	5
	DOGTOWN LN BRIDGE	CONTRACT NO.	89811	
	ILLINOIS FED. AID PROJECT			



EXISTING TYPICAL SECTION
STA. 115+89.88 TO 117+68.77
BRIDGE OMISSION STA. 117+68.77 TO 118+93.95

NOTE: AT THE NORTH PROJECT LIMIT, STA. 115+89.88, THE NORTHBOUND LANE CROSS SLOPE IS 1.80% AND THE SOUTHBOUND LANE CROSS SLOPE IS 0.10%, BOTH SLOPING AWAY FROM THE CENTERLINE.



EXISTING TYPICAL SECTION
STA. 118+93.95 TO 120+70.57

NOTE: THE ROADWAY IS SUPERELEVATED ON THE HORIZONTAL CURVE AT THE SOUTH PROJECT LIMIT. AT STA. 120+70.57, THE NORTHBOUND LANE CROSS SLOPE IS 4.14% AND THE SOUTHBOUND LANE CROSS SLOPE IS 2.34%, BOTH SLOPING AWAY FROM THE CENTERLINE.

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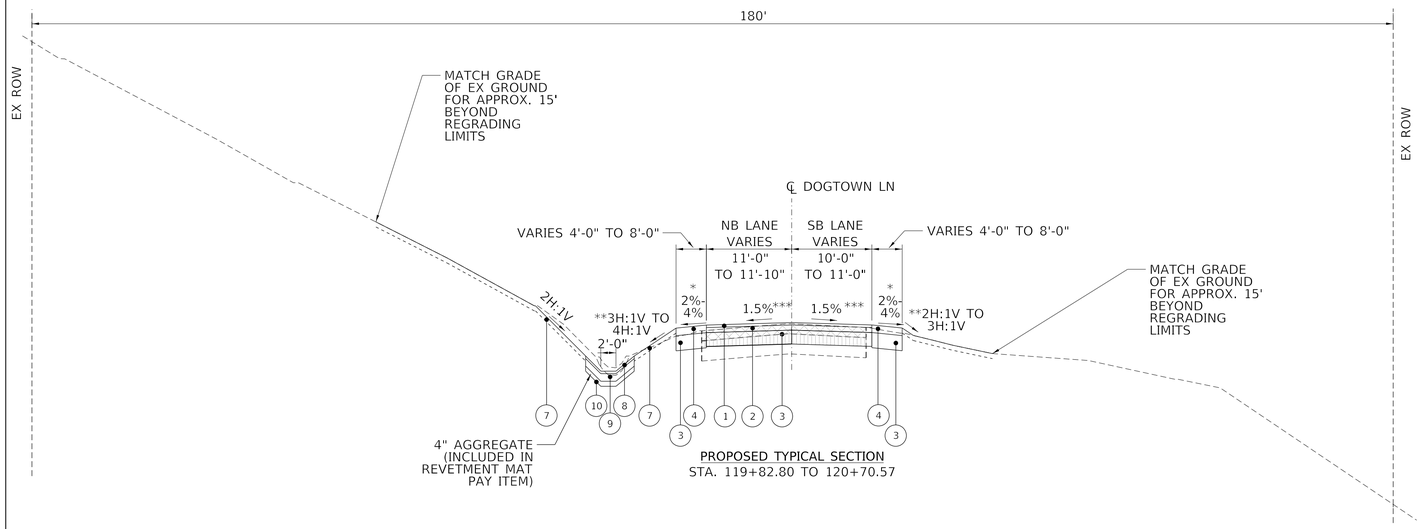
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: NTS | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	6
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS FED. AID PROJECT			



*SHOULDER CROSS SLOPE TRANSITIONS

STATION	SHOULDER CROSS SLOPE
115+89.88	MATCH EX.
116+47.62 LT 116+47.77 RT	4%
117+12.20	4%
117+32.20	2%
BRIDGE OMISSION	
119+32.80	2%
119+52.80	4%
120+25.57	4%
120+70.57	MATCH EX.

**EMBANKMENT SIDE SLOPE TRANSITIONS

NORTHEAST QUADRANT (LT SIDE)

STATION	FORE SLOPE
115+89.88	3H:1V
116+50.00	3H:1V
117+50.00	2H:1V
117+62.45	25H:1V

NORTHWEST QUADRANT (RT SIDE)

STATION	FORE SLOPE
115+89.88	3H:1V
116+34.00	3H:1V
117+75.00	2H:1V

SOUTHEAST QUADRANT (LT SIDE)

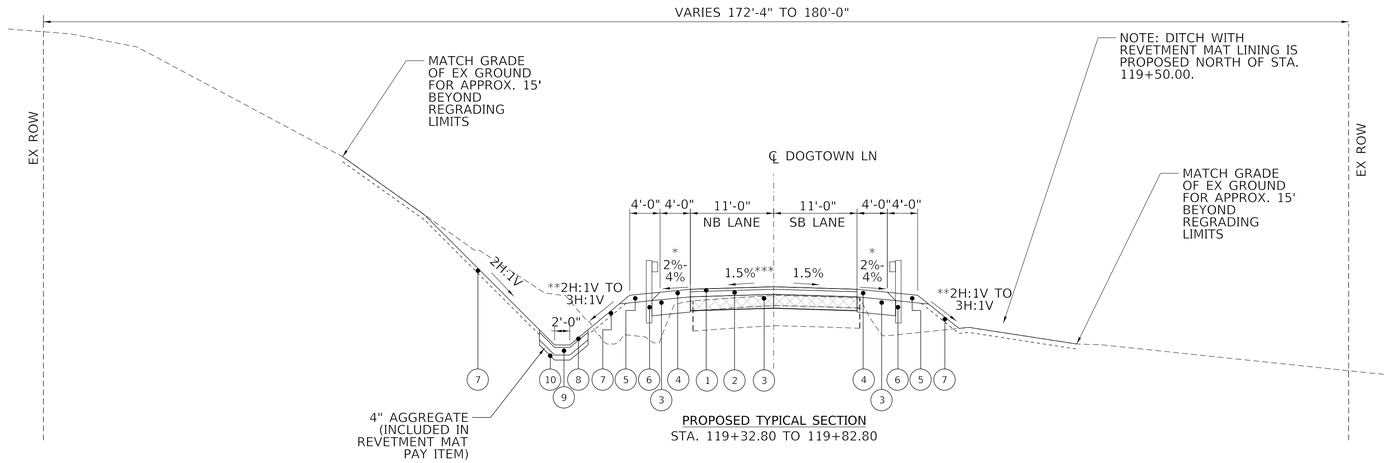
STATION	FORE SLOPE
118+52.00	2H:1V
118+84.00	2H:1V
119+88.00	3H:1V
120+40.00	4H:1V
END	4H:1V

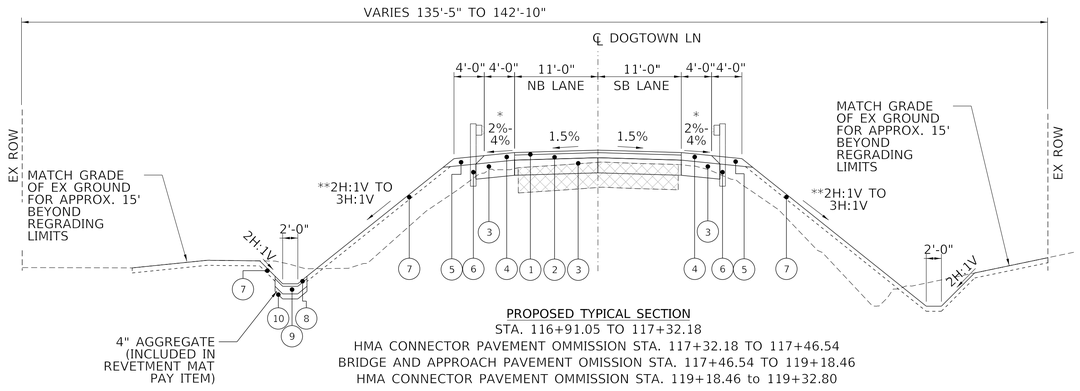
SOUTHWEST QUADRANT (RT SIDE)

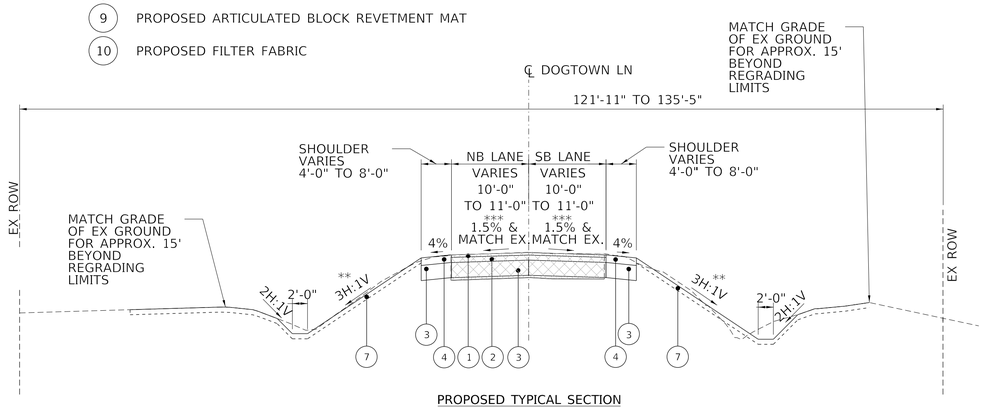
STATION	FORE SLOPE
118+67.00	4H:1V
118+76.00	3H:1V
118+92.00	2H:1V
119+30.00	2H:1V
119+50.00	3H:1V
END	3H:1V

***LANE CROSS SLOPE TRANSITIONS

STATION	NORTHBOUND LANE CROSS SLOPE	SOUTHBOUND LANE CROSS SLOPE	NOTES
115+89.88	MATCH EX. 1.80%	MATCH EX. 0.10%	MATCH INTO EXISTING ROADWAY
116+23.05	1.50%	1.50%	
BRIDGE FROM STA. 117+32.18 TO 119+32.80			SEE STRUCTURE PLANS
119+59.31	1.50%	1.50%	BEGIN NB LANE SUPERELEVATION TRANSITION, 62' TOTAL TRANSITION LENGTH, 25% ON CURVE
120+21.31	4.14%	1.50%	END NB LANE SUPERELVATION TRANSITION
120+50.57	4.14%	1.50%	BEGIN SB LANE CROSS SLOPE TRANSITION, 20' TOTAL TRANSITION LENGTH
120+70.57	MATCH EX. 4.14%	MATCH EX. 2.34%	MATCH INTO EXISTING ROADWAY







LEGEND

- EXISTING PAVEMENT REMOVAL
- EARTH EXCAVATION
- (1) PROPOSED HMA SURFACE COURSE, IL-9.5, MIX "C", N50, 2 INCH
- (2) PROPOSED HMA BINDER COURSE, IL-19.0, N50, 4 INCH
- (3) PROPOSED AGGREGATE BASE COURSE, TYPE A, 12 INCH (TONS) (SEE NOTE 2)
- (4) PROPOSED HMA SHOULDER, FULL-DEPTH, 6 INCH
- (5) PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL, 6 INCH
- (6) PROPOSED GUARDRAIL
- (7) PROPOSED TOPSOIL FURNISH AND PLACE, 4"
- (8) PROPOSED TOPSOIL FURNISH AND PLACE, 2"
- (9) PROPOSED ARTICULATED BLOCK REVETMENT MAT
- (10) PROPOSED FILTER FABRIC

NOTES

1. STATIONING PROCEEDS UPWARD TO THE SOUTH.
2. ALL EXISTING BITUMINOUS PAVEMENT MATERIAL SHALL BE REMOVED. THICKNESS MAY VARY FROM THAT SHOWN IN THE EXISTING TYPICAL SECTION. ADDITIONAL GRANULAR MATERIAL REQUIRED WILL BE PAID FOR AS AGGREGATE BASE COURSE, TYPE A, 12 INCH (TONS).
3. SEE DRAINAGE PLANS FOR ADDITIONAL DITCH SECTION DETAILS.

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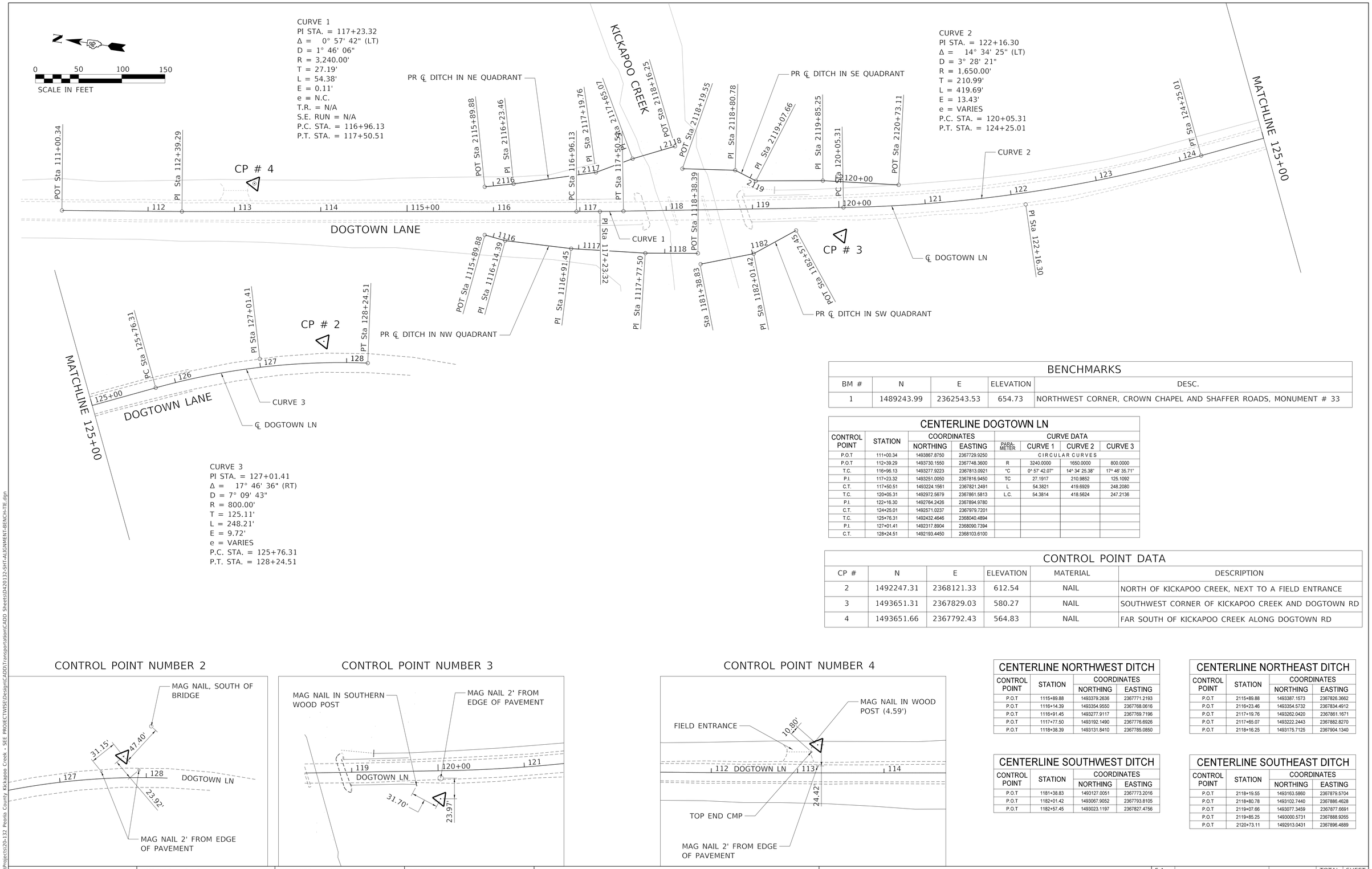
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: NTS | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	7
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS FED. AID PROJECT			



BENCHMARKS				
BM #	N	E	ELEVATION	DESC.
1	1489243.99	2362543.53	654.73	NORTHWEST CORNER, CROWN CHAPEL AND SHAFFER ROADS, MONUMENT # 33

CENTERLINE DOGTOWN LN							
CONTROL POINT	STATION	COORDINATES		CURVE DATA			
		NORTHING	EASTING	PARA-METER	CURVE 1	CURVE 2	CURVE 3
				CIRCULAR CURVES			
P.O.T	111+00.34	1493867.8750	2367729.9250				
P.O.T	112+39.29	1493730.1550	2367748.3600	R	3240.0000	1650.0000	800.0000
T.C.	116+96.13	1493277.9223	2367813.0921	°C	0° 57' 42.07"	14° 34' 25.38"	17° 46' 35.71"
P.I.	117+23.32	1493251.0050	2367816.9450	TC	27.1917	210.9852	125.1092
C.T.	117+50.51	1493224.1561	2367821.2491	L	54.3821	419.6929	248.2080
T.C.	120+05.31	1492972.5679	2367861.5813	LC.	54.3814	418.5624	247.2136
P.I.	122+16.30	1492764.2426	2367894.9780				
C.T.	124+25.01	1492571.0237	2367979.7201				
T.C.	125+76.31	1492432.4646	2368040.4894				
P.I.	127+01.41	1492317.8904	2368090.7394				
C.T.	128+24.51	1492193.4450	2368103.6100				

CONTROL POINT DATA					
CP #	N	E	ELEVATION	MATERIAL	DESCRIPTION
2	1492247.31	2368121.33	612.54	NAIL	NORTH OF KICKAPOO CREEK, NEXT TO A FIELD ENTRANCE
3	1493651.31	2367829.03	580.27	NAIL	SOUTHWEST CORNER OF KICKAPOO CREEK AND DOGTOWN RD
4	1493651.66	2367792.43	564.83	NAIL	FAR SOUTH OF KICKAPOO CREEK ALONG DOGTOWN RD

CONTROL POINT NUMBER 2

CONTROL POINT NUMBER 3

CONTROL POINT NUMBER 4

CENTERLINE NORTHWEST DITCH			
CONTROL POINT	STATION	COORDINATES	
		NORTHING	EASTING
P.O.T	1115+89.88	1493379.2636	2367771.2193
P.O.T	1116+14.39	1493354.9550	2367768.0616
P.O.T	1116+91.45	1493277.9117	2367769.7196
P.O.T	1117+77.50	1493192.1490	2367776.6926
P.O.T	1118+38.39	1493131.8410	2367785.0850

CENTERLINE NORTHEAST DITCH			
CONTROL POINT	STATION	COORDINATES	
		NORTHING	EASTING
P.O.T	2115+89.88	1493387.1573	2367826.3662
P.O.T	2116+23.46	1493354.5732	2367834.4912
P.O.T	2117+19.76	1493262.0420	2367861.1671
P.O.T	2117+65.07	1493222.2443	2367882.8270
P.O.T	2118+16.25	1493175.7125	2367904.1340

CENTERLINE SOUTHWEST DITCH			
CONTROL POINT	STATION	COORDINATES	
		NORTHING	EASTING
P.O.T	1181+38.83	1493127.0051	2367773.2016
P.O.T	1182+01.42	1493067.9052	2367793.8105
P.O.T	1182+57.45	1493023.1197	2367827.4756

CENTERLINE SOUTHEAST DITCH			
CONTROL POINT	STATION	COORDINATES	
		NORTHING	EASTING
P.O.T	2118+19.55	1493163.5860	2367879.5704
P.O.T	2118+80.78	1493102.7440	2367886.4628
P.O.T	2119+07.66	1493077.3459	2367877.6691
P.O.T	2119+85.25	1493000.5731	2367888.9265
P.O.T	2120+73.11	1492913.0431	2367896.4889

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, BENCHMARK, AND TIES
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	8
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

N

0 20 40 60

SCALE IN FEET

LIMIT OF CONSTRUCTION

TILLABLE FIELD BOUNDARY

EX DITCH

115+90.05
10.01' LT

REMOVE SIGN PANEL ASSEMBLY - TYPE A
"NO PASSING ZONE"

GUARDRAIL REMOVAL

117+65.25
10.53' LT

115+00

DOGTOWN LN

10'

10'

116

117

118

115+90.05
10.03' RT

EX DITCH

GUARDRAIL REMOVAL

117+71.54
11.14' RT

LIMIT OF CONSTRUCTION

TILLABLE FIELD BOUNDARY

DBL 12"

DBL 9"

13"

11"

10"

QUAD 26"

20"

WEST FORK OF
KICKAPOO CREEK

12"
11"
7"
6"

DBL 9"
11"
11"
13"
11"
8"

24"
6"
9"

16"
TRPL 10"
TRPL 8"
18"
11"
12"

EX ROW

LIMIT OF CONSTRUCTION

PIPE CULVERT REMOVAL

GUARDRAIL REMOVAL

CONCRETE HEADWALL REMOVAL

BEGIN PAVED
DITCH REMOVAL

118+88.02
25.77' LT

118+89.95
10.45' LT

18"

119+26.19
21.49' LT

119+26.51
21.34' LT

PAVED DITCH REMOVAL

END PAVED
DITCH REMOVAL
120+70.57
23.79' LT

120+70.57
11.83' LT

119

120+00

121

18'

10'

DOGTOWN LN

118+97.59
12.26' RT

GUARDRAIL REMOVAL

120+70.32
9.98' RT

REMOVAL OF EXISTING STRUCTURES
(SEE STRUCTURAL PLAN SHEETS)

LIMIT OF CONSTRUCTION

EX ROW

LEGEND

PAVEMENT REMOVAL

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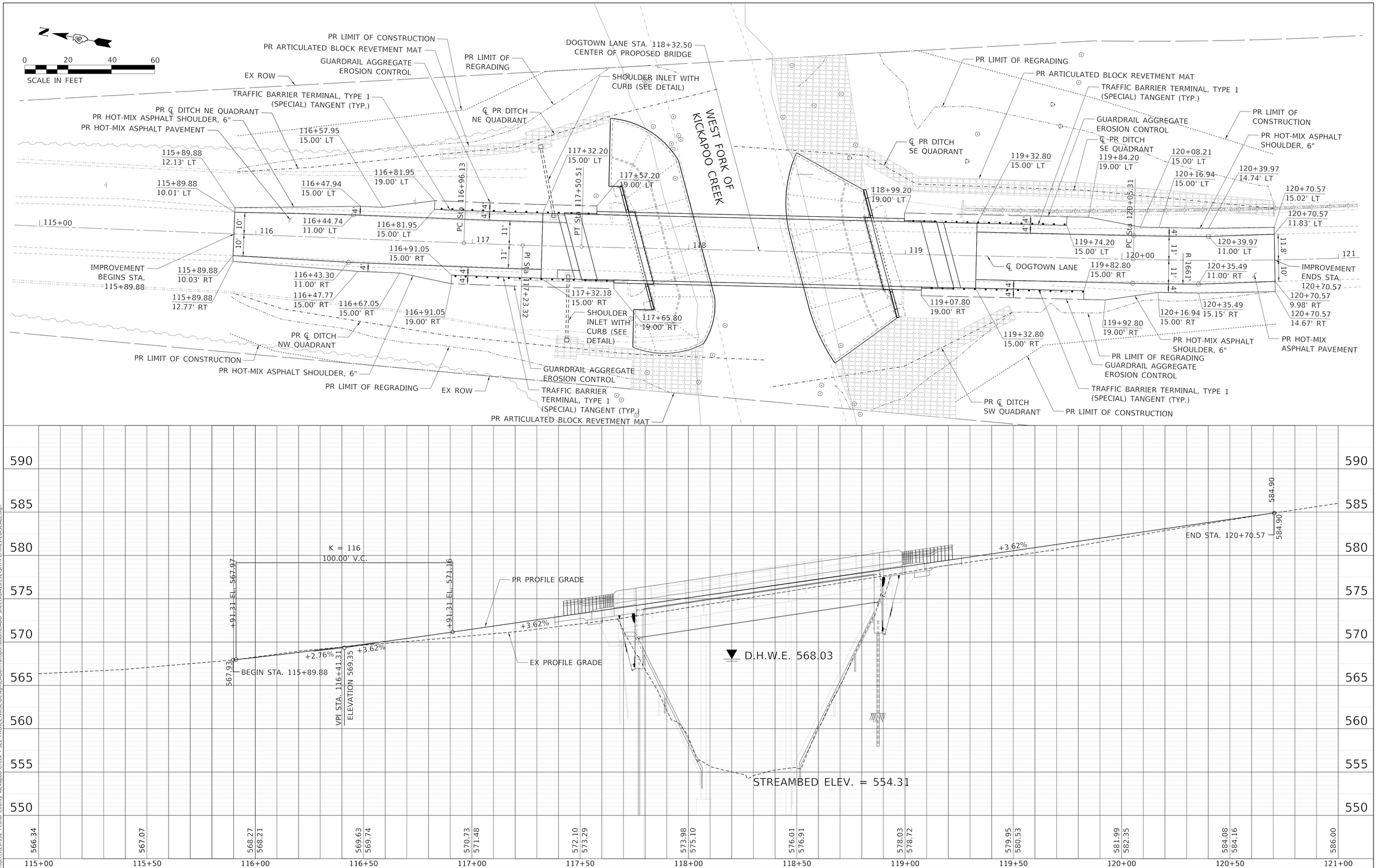
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	9
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS FED. AID PROJECT			



PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
DRAWN
CHECKED
NOTE BOOK
B.M. NOTED
NO.
STRUCTURE NO
TAT'NS
CHK'D

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

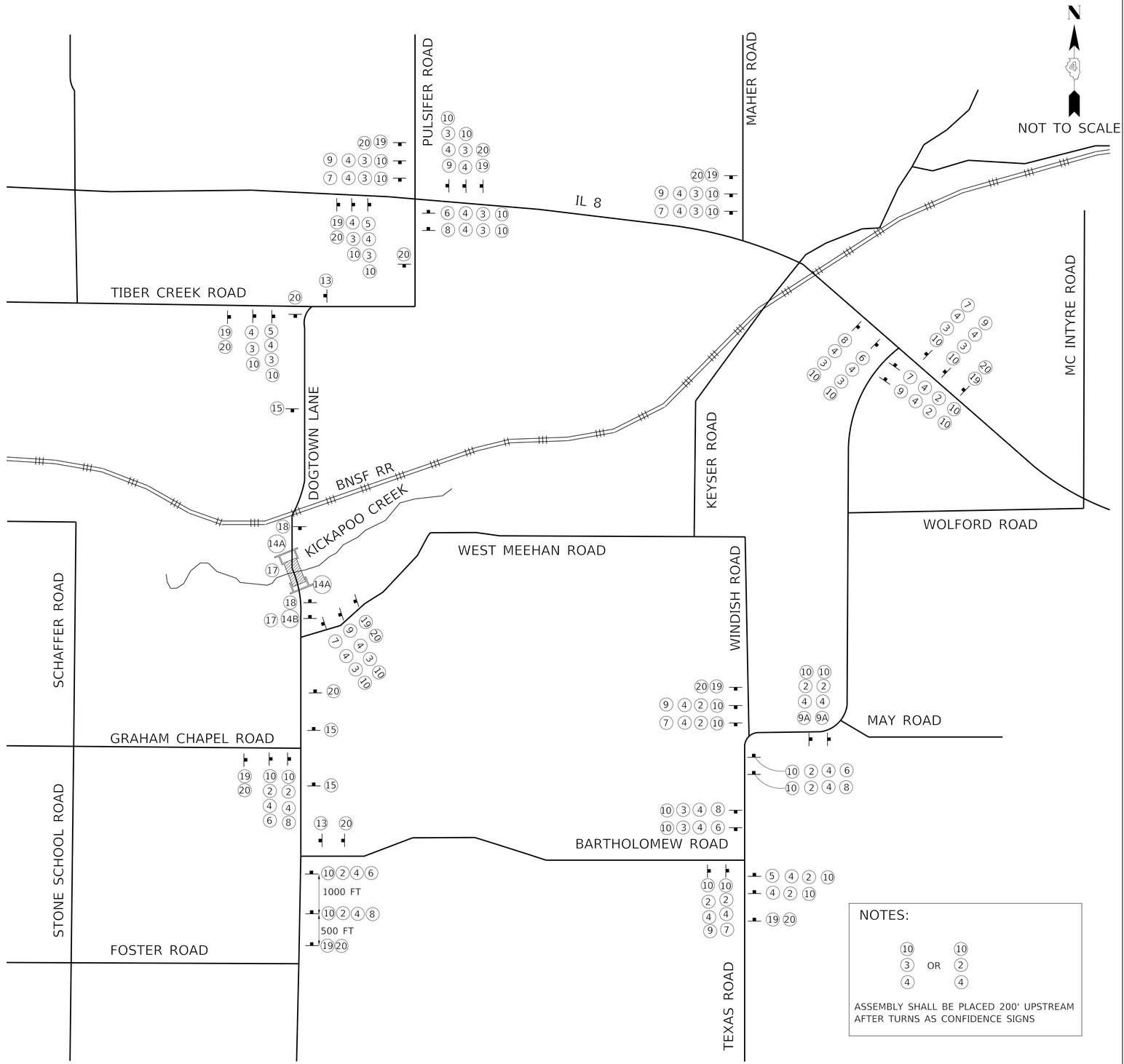
PLAN AND PROFILE
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	10
	WESTERN AVE RECONSTRUCTION	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

LEGEND

1. BARRICADE TYPE III
2. M3-2 NORTH — NORTH
3. M3-4 SOUTH — SOUTH
4. DOGTOWN LN — 30X34
5. M6-3 0 deg DIRECTION ARROW
6. M6-1 90 deg DIRECTION ARROW
7. M6-1 90 deg DIRECTION ARROW
8. M5-1 ADVANCE 90 deg TURN ARROW
9. M5-1 ADVANCE 90 deg TURN ARROW
9A. M5-3 ADVANCED CURVED TURN ARROW
10. M4-8 DETOUR — DETOUR
11. M4-10L DETOUR ARROW, LEFT — DETOUR
12. M4-10R DETOUR ARROW, RIGHT — DETOUR
13. M4-8a END DETOUR — END DETOUR
14A. R11-2 ROAD CLOSED — ROAD CLOSED
14B. R11-4 ROAD CLOSE TO THRU TRAFFIC — ROAD CLOSED TO THRU TRAFFIC
15. R11-3a ROAD CLOSED X FEET AHEAD, LOCAL TRAFFIC ONLY — ROAD CLOSED 1 MILES AHEAD LOCAL TRAFFIC ONLY
16. W20-3-A ROAD CLOSED AHEAD — ROAD CLOSED AHEAD
17. W20-3-C ROAD CLOSED AHEAD — ROAD CLOSED 1000 FT
18. W20-3-B ROAD CLOSED AHEAD — ROAD CLOSED 500 FT
19. W20-2 DETOUR AHEAD — DETOUR 1500 FT
20. DOGTOWN LN CLOSED AT BRIDGE



NOTES:

1. DETOUR PLAN BASED ON FIGURE 6H-8 OF THE MUTCD, ROAD CLOSURE WITH AN OFF-SITE DETOUR (TA-8)
2. EXACT LOCATION OF THE SIGNS SHALL BE AT THE DISCRETION OF THE ENGINEER.

NOTES:

10 / 3 / 4 OR 10 / 2 / 4

ASSEMBLY SHALL BE PLACED 200' UPSTREAM AFTER TURNS AS CONFIDENCE SIGNS

MODEL: Default
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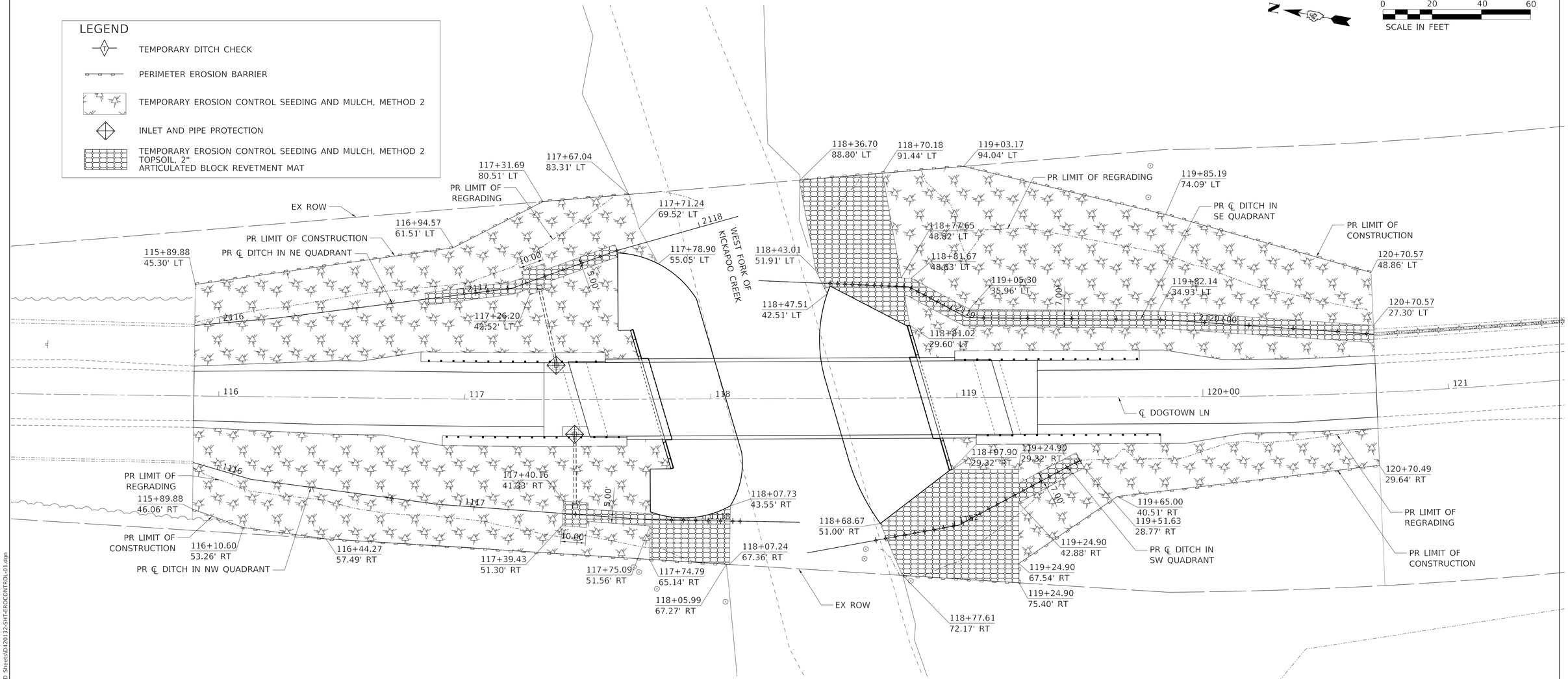
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR PLAN
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: NTS | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	11
	DOGTOWN LN BRIDGE	CONTRACT NO.	89811	
	ILLINOIS FED. AID PROJECT			



TEMPORARY EROSION CONTROL NOTES

1. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL PRIOR TO DISTURBING ANY ESTABLISHED SURFACE, DEVICES SHALL REMAIN IN GOOD WARKING ORDER UNTIL SITE HAS BEEN RESTORED, OR AS DIRECTED BY THE ENGINEER.

2. STOCK PILES OF CONSTRUCTION MATERIAL OR EXCAVATED EARTH SHALL NOT BE STORED DIRECTLY UPSTREAM OF IN-PLACE RIPRAP, IN-PLACE RIPRAP SHALL BE PROTECTED FROM SEDIMENT CAUSED BY CONSTRUCTION-RELATED ACTIVITIES, IF SEDIMENT IS DESPOSITED INTO IN-PLACE RIPRAP, CONTRACTOR SHALL CLEAN RIPRAP AS DIRECTED BY THE ENGINEER.

3. CONCRETE WASH-OUT WILL NOT BE PERMITTED INTO THE STREAM OR INTO EXISTING VEGETATION. CONCRETE WASH-OUT SHALL BE INTO A DESIGNATED WATERTIGHT CONTAINER TO AVOID RUNOFF.

4. PERIMETER EROSION BARRIER MUST BE REMOVED AFTER SITE HAS BEEN RESTORED.

5. MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS SHALL BE IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS.

REVETMENT MAT NOTES

1. ARTICULATED BLOCK REVETMENT MAT IS TO BE OPEN CELLED WITH 2" TOPSOIL COVER FOR ALL REVETMENT MAT PLACED ABOVE THE TYPICAL WATER SURFACE ELEVATION (E.W.S.E.=556.33) AND CLOSED CELLED BELOW THE TYPICAL WATER SURFACE ELEVATION.

2. REVETMENT MAT PANELS SHALL BE TOED INTO THE GROUND PER MANUFACTURER SPECIFICATIONS.

NOTE

1. SEE DRAINAGE PLANS FOR SECTION DETAILS OF REVETMENT MAT LINED DITCHES.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL AND SEDIMENT PLAN
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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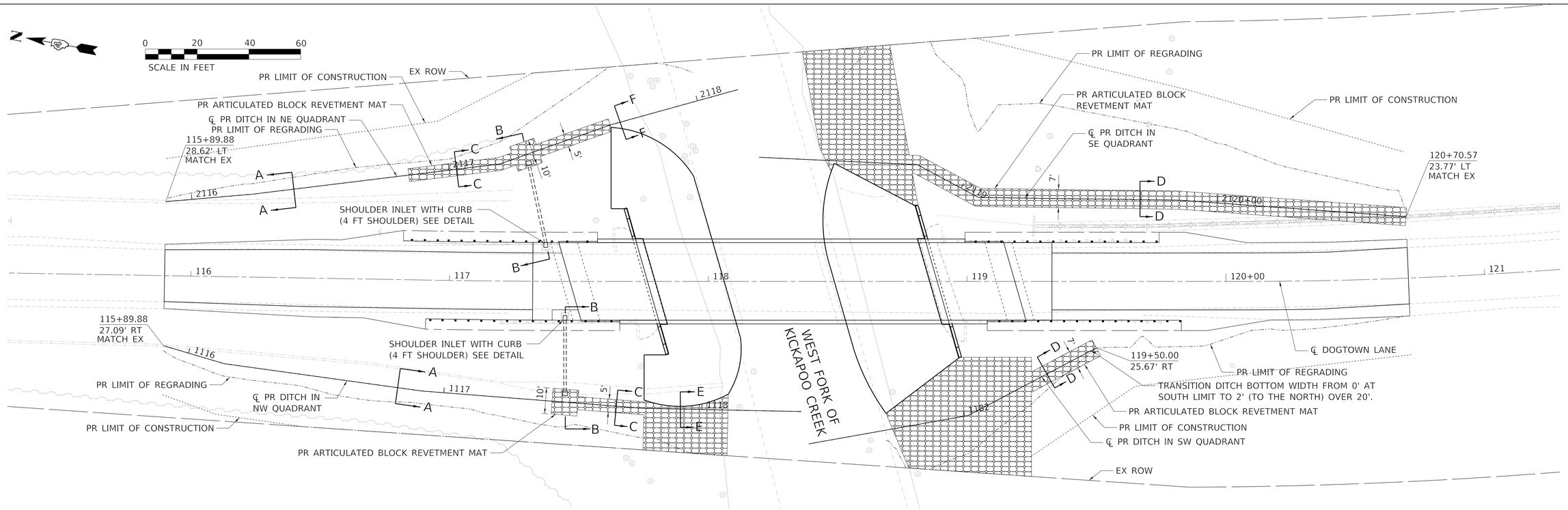
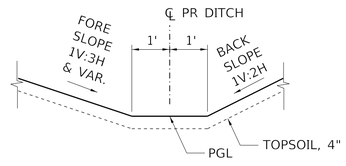
	DOGTOWN LN BRIDGE	CONTRACT NO.	89811	
	ILLINOIS FED. AID PROJECT			





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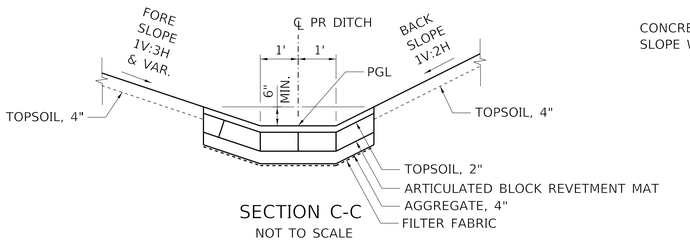

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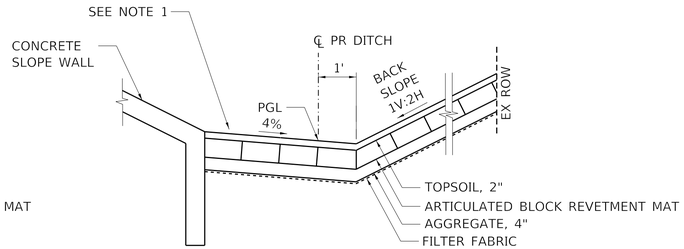

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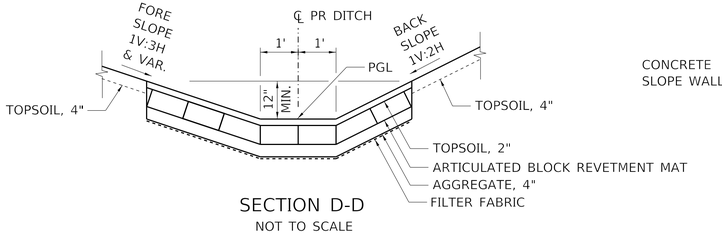

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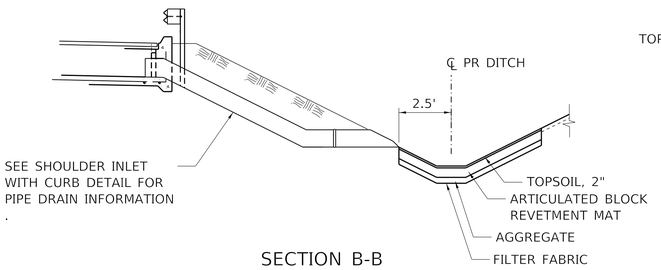

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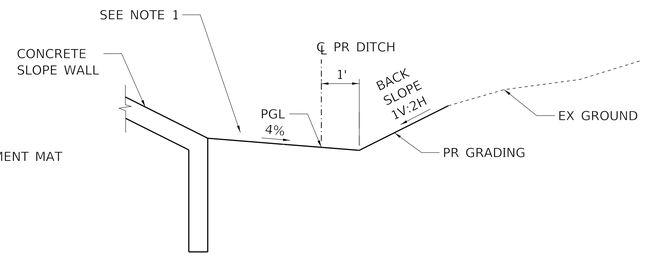

SECTION F-F
NOT TO SCALE

DRAINAGE STRUCTURE SCHEDULE:
SHOULDER INLET WITH CURB

NW INLET		
INLET	STATION	117+44.67
	OFFSET	15' RT
	RIM ELEV.	572.77
	INVERT ELEV.	570.77
OUTLET	INVERT ELEV.	561.09
PIPE	LENGTH	APPROX. 31'

NE INLET		
INLET	STATION	117+37.15
	OFFSET	15' LT
	RIM ELEV.	558.68
	INVERT ELEV.	556.68
OUTLET	INVERT ELEV.	559.18
PIPE	LENGTH	APPROX. 34'

NOTE

1. DITCH BOTTOMS ADJACENT TO CONCRETE SLOPE WALL SHALL BE SLOPED AWAY FROM THE CONCRETE SLOPE WALL.
2. SEE FOLLOWING SHEETS FOR PROPOSED DITCH PROFILES.

MODEL: Default
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

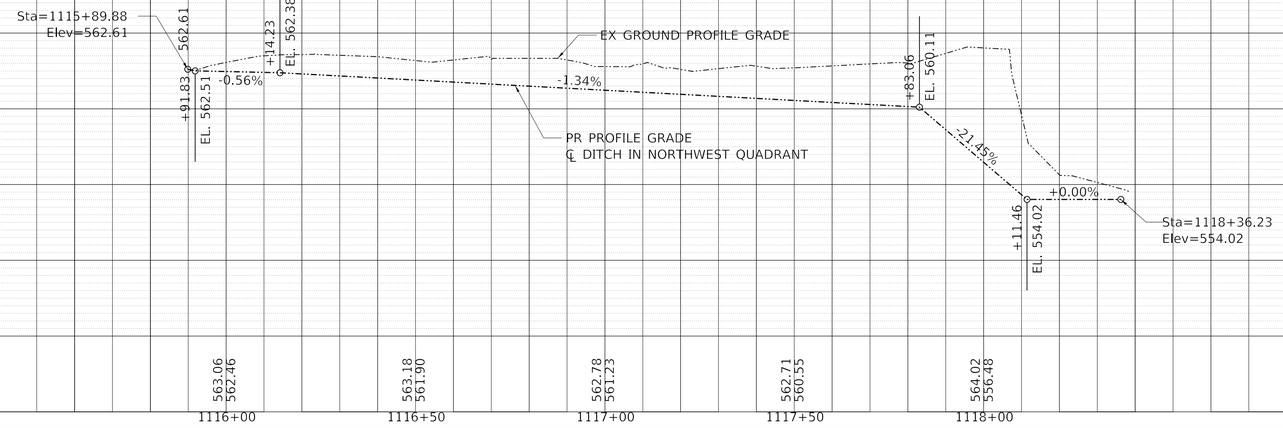
DRAINAGE PLAN
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1"=20' | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	13
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

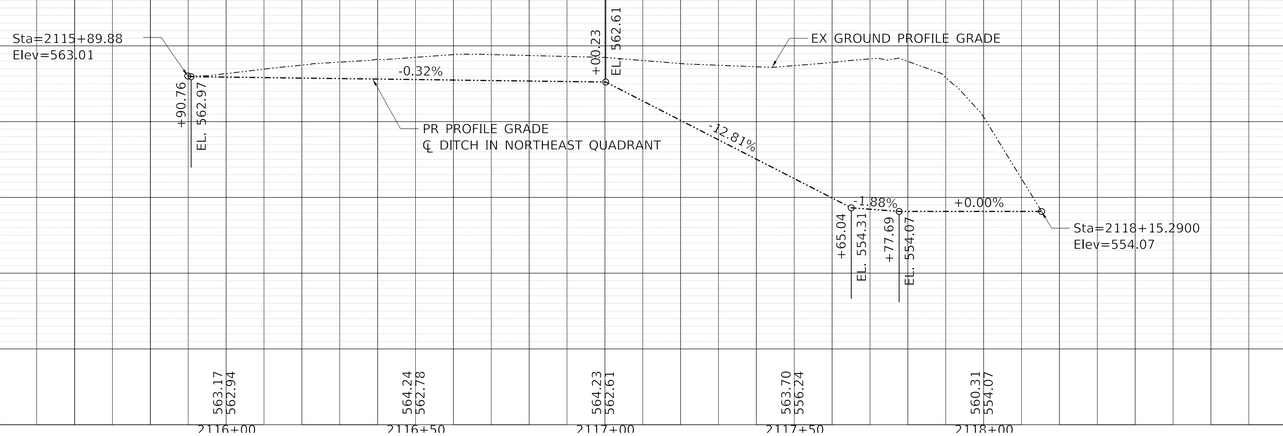
PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

DITCH PROFILE: NORTHWEST QUADRANT



PROFILE
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

DITCH PROFILE: NORTHEAST QUADRANT



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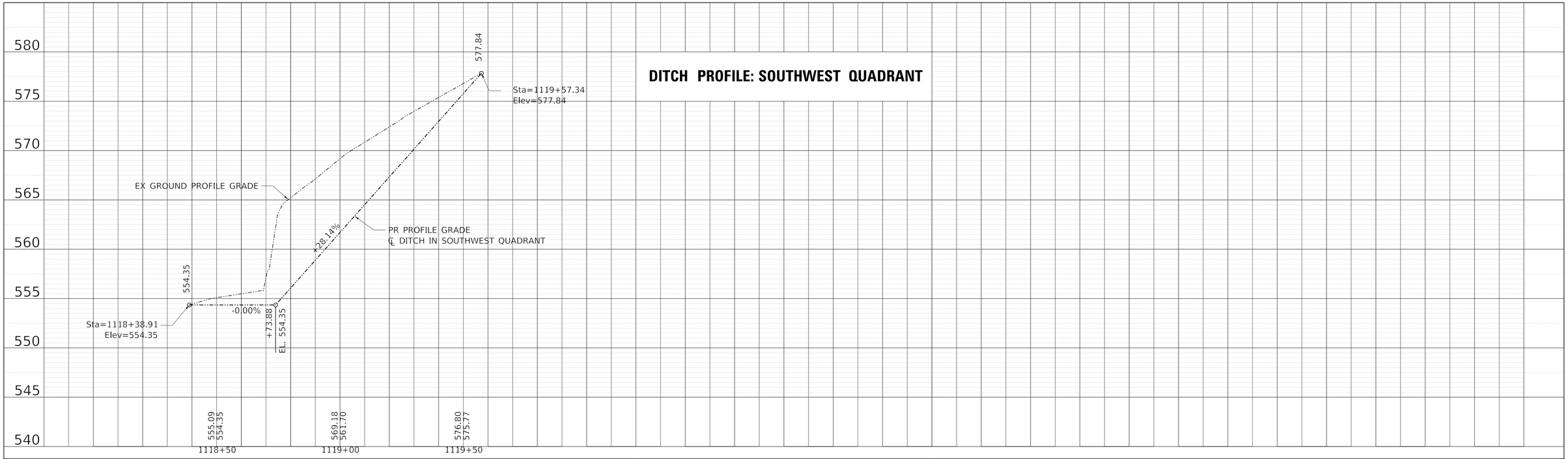
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN: DITCH PROFILES
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

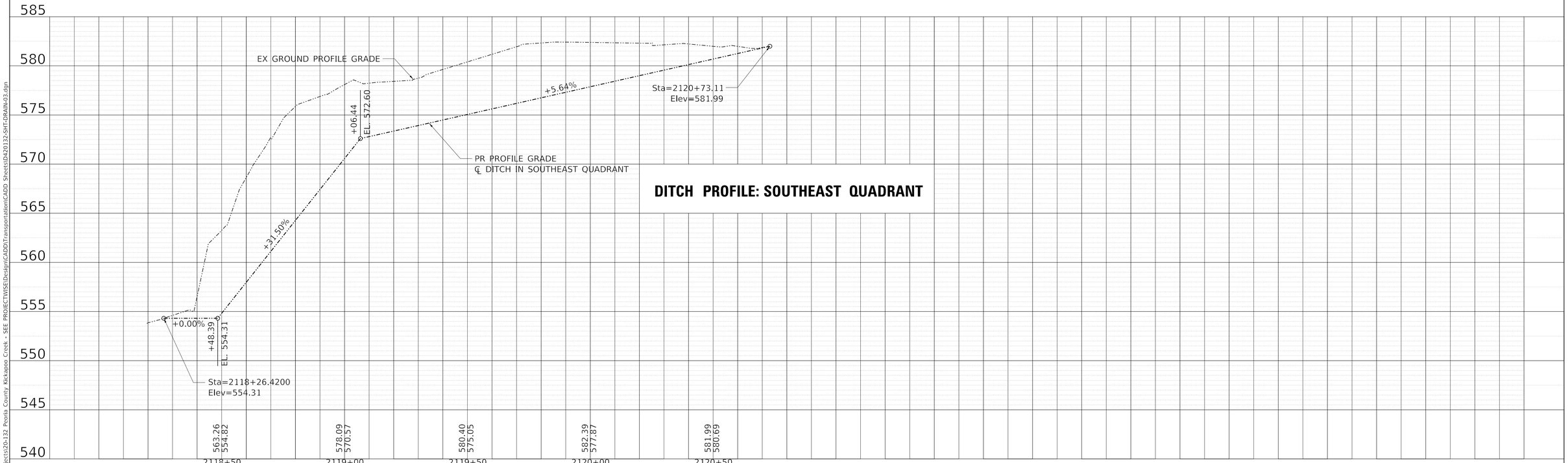
SCALE: 1"=20' | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	14
	WESTERN AVE RECONSTRUCTION	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

DITCH PROFILE: SOUTHWEST QUADRANT



DITCH PROFILE: SOUTHEAST QUADRANT



PLAN
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NOTE BOOK
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ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
BY
DATE

PROFILE
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STRUCTURE NO'S CHK'D
BY
DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN: DITCH PROFILES
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1"=20' | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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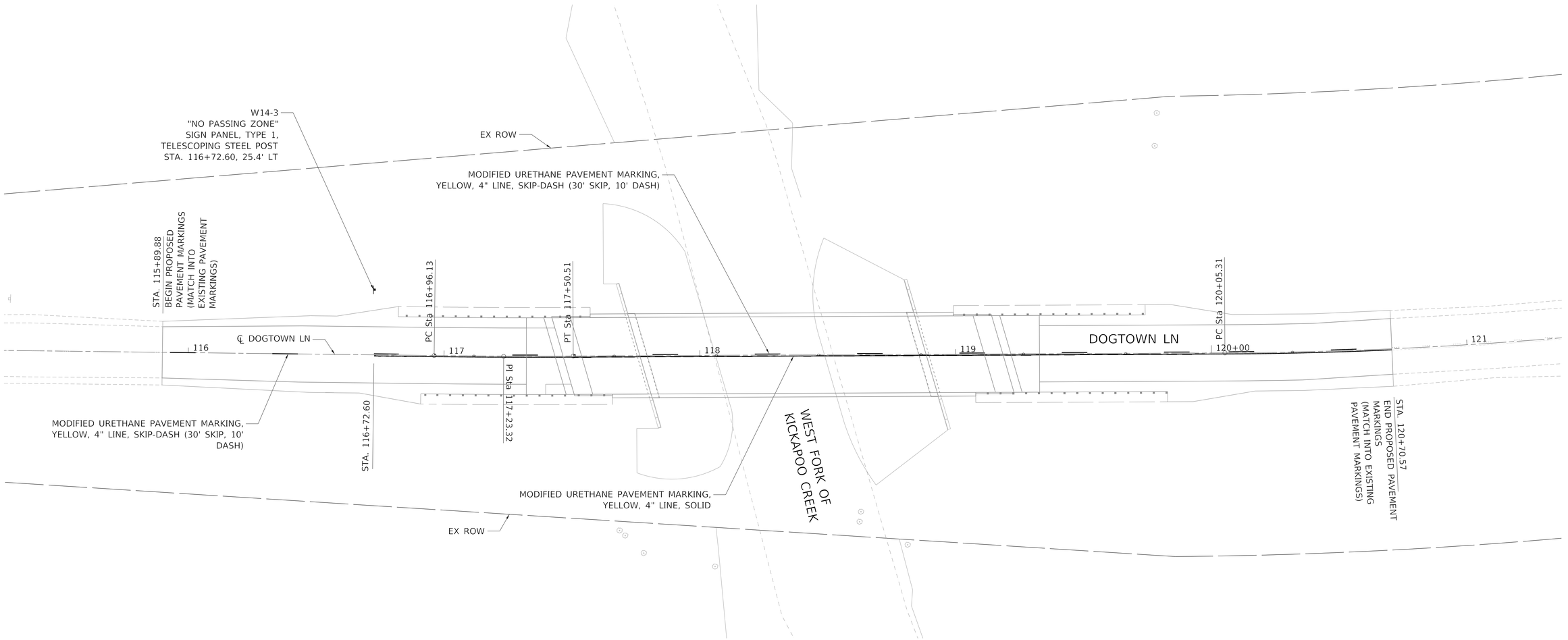
	WESTERN AVE RECONSTRUCTION	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			



NOTE

1. PROPOSED PAVEMENT MARKINGS ALIGN WITH THE CENTERLINE.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS AND SIGNING PLAN
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	16
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

N

0 20 40 60

SCALE IN FEET

115+89.88
45.30' LT

116+94.57
61.51' LT

117+31.69
80.51' LT

117+67.05
83.31' LT

118+36.70
88.80' LT

119+03.17
94.04' LT

119+84.46
100.45' LT

120+70.57
101.81' LT

EX ROW

WEST FORK OF KICKAPOO CREEK

119+85.19
74.09' LT

120+70.57
48.86' LT

116

117

118

119

120+00

121

℄ DOGTOWN LN

115+89.88
46.06' RT

116+10.60
53.26' RT

116+44.15
57.48' RT

118+05.99
67.27' RT

EX ROW

118+77.60
72.17' RT

119+24.90
67.54' RT

119+24.90
75.40' RT

119+65.00
40.51' RT

119+85.56
79.55' RT

120+70.57
29.63' RT

120+70.57
78.59' RT

LEGEND

SEEDING, CLASS 3 AND HEAVY DUTY EROSION CONTROL BLANKET

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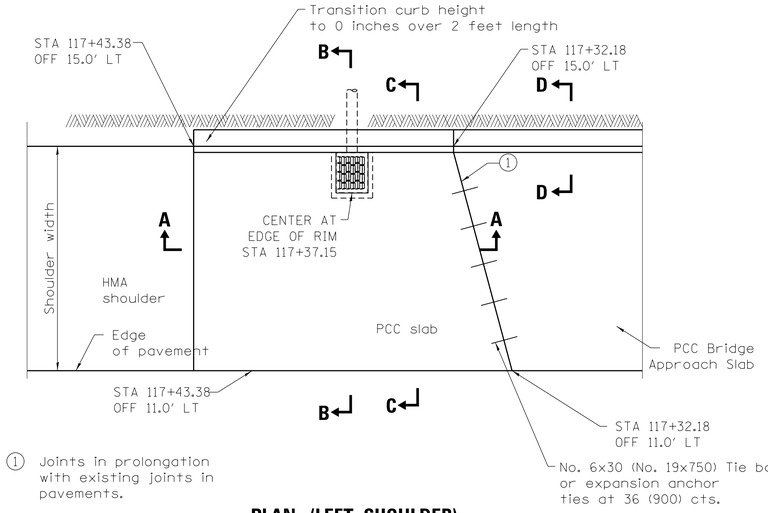
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPING PLAN
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	17
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS FED. AID PROJECT			



PLAN (LEFT SHOULDER)

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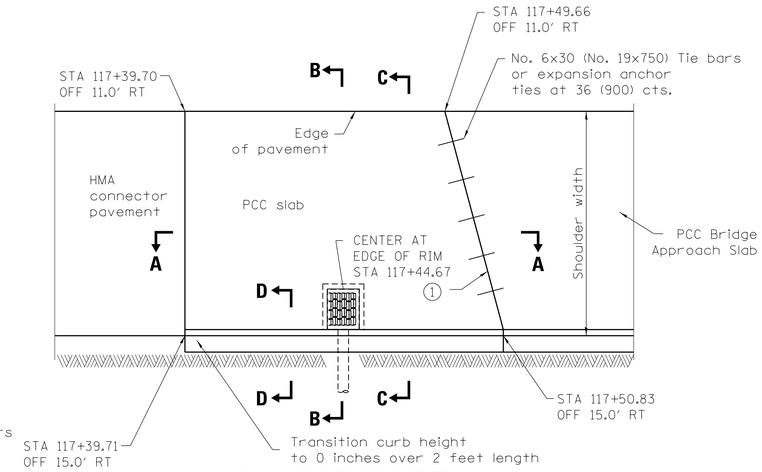

PLAN (RIGHT SHOULDER)

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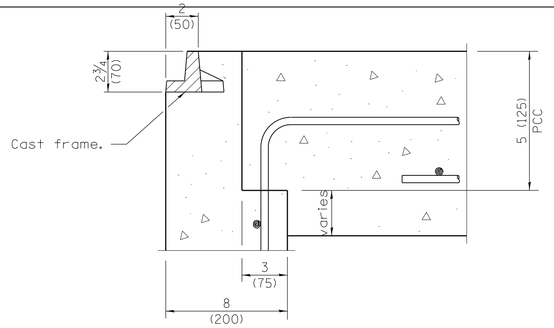
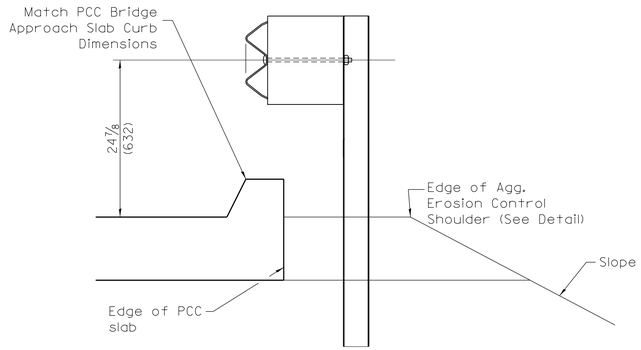
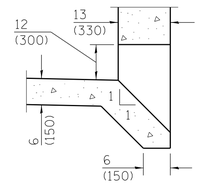


DETAIL A



DETAIL B



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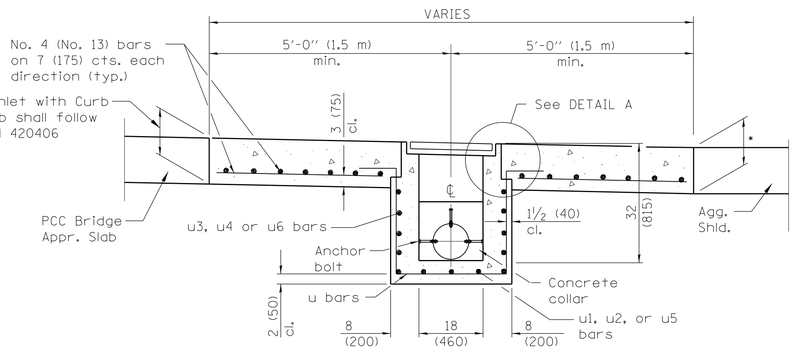
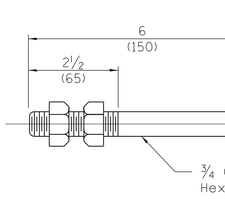


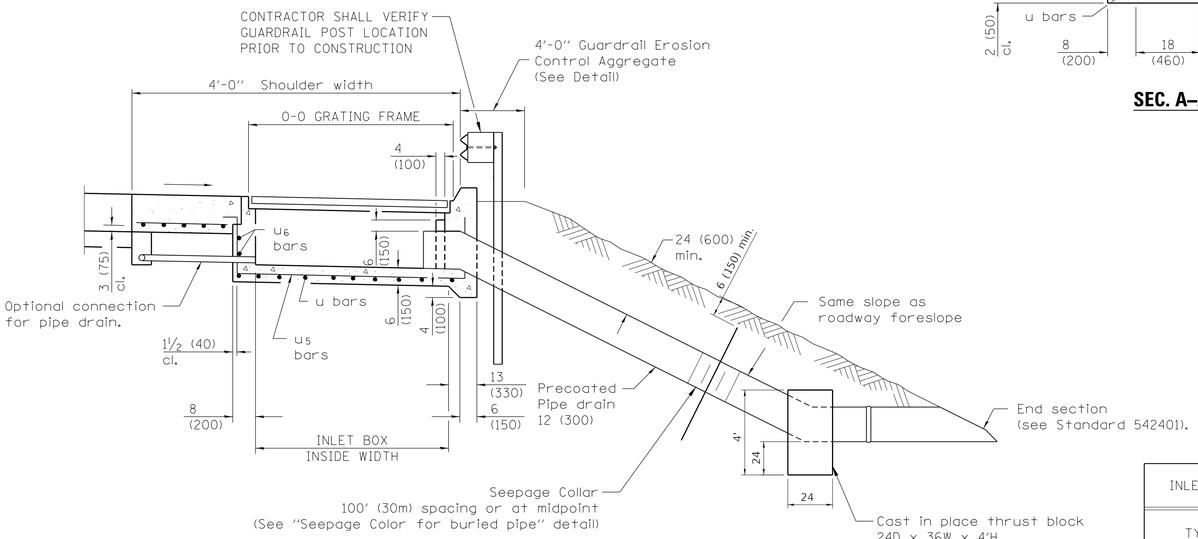
SEC. A–A

*PCC slab thickness same as adjacent shoulder.



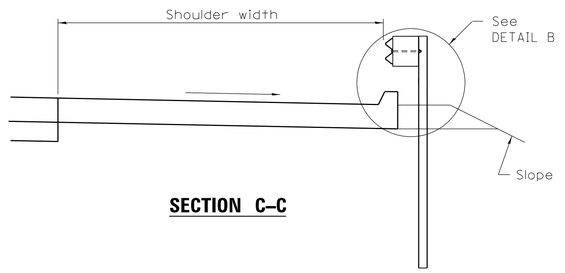
ANCHOR BOLT

(Used to tie pipe to concrete collar)



NOT TO SCALE

SEC. B–B



SECTION C–C

INLET TYPE	SHOULDER WIDTH	O-O GRATING FRAME	INLET BOX INSIDE WIDTH	INLET BOX INSIDE LENGTH
TYPE G	4′ (1.219 m)	27 (690)	22 (560)	18 (460)

GENERAL NOTES

See Standard 420001 for joint details not shown.

See Standard 630301 and 631031 for details of guardrail not shown.

All exposed edges of the inlet, except the upper perimeter, shall be beveled ¾ (20).

For placement of drainage elements on existing construction with existing rigid pavement, substitute expansion anchor ties for tie bars. For nonrigid pavements or monolithic construction of PCC slab and shoulder, omit tie bars.

Place inlet to miss PCC Approach Slab Footing.

All dimensions are in inches (millimeters) unless otherwise shown.

The material for Pipe Drains shall be bituminous coated galvanized corrugated steel culvert pipe or bituminous coated corrugated aluminum alloy pipe in accordance with Article 601.02(b) or 601.02(e) or Polyvinyl Chloride (PVC) pipe in accordance with Article 601.02(s).

An approved mastic material (Article 1055.01) shall be applied to the inside of the connecting bands.

•Pavement Connector (HMA) for Bridge Approach Slab shall be paid for as shown in Highway Standard 420406, except that PCC slab as shown in Shoulder Inlet with Curb detail shall be included in the pay item SHOULDER INLET WITH CURB (4 FT SHOULDER).

MODEL: Default
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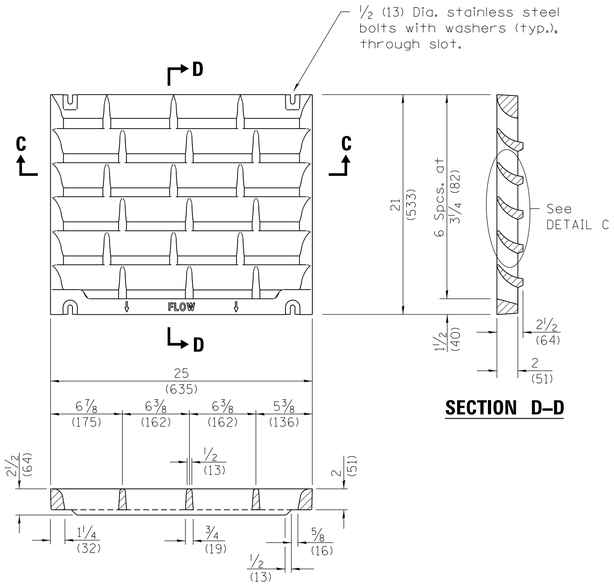
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS – SHOULDER INLET WITH CURB
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK
SCALE: NTS | SHEET 1 OF 3 SHEETS | STA. | TO STA.

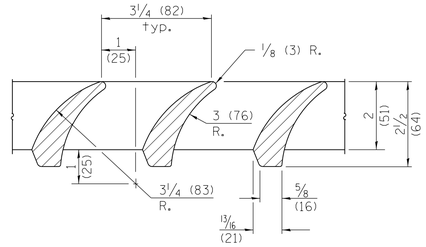
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	18
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			



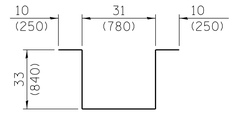
SECTION D–D

SECTION C–C

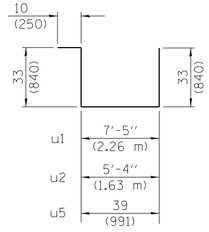
TYPE G requires 1 grate



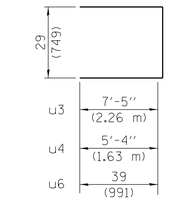
DETAIL C



BAR u



BAR u1, u2, & u5



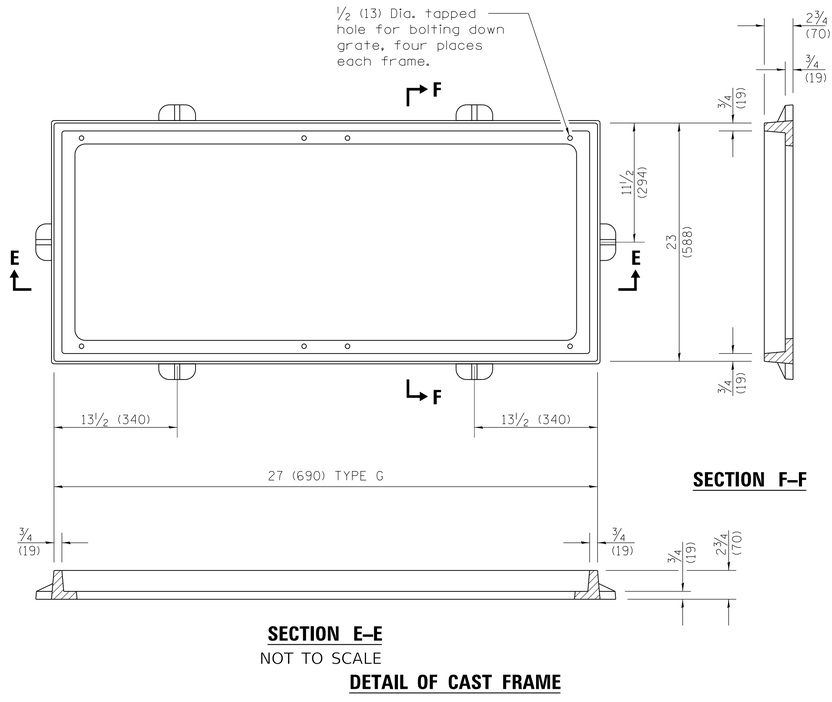
BAR u3, u4 & u6

INLET BOX

REQUIRED MATERIAL			
TYPE G			
Bar	Qty.	Size	Length
u	4	No. 4 (No.13)	9′-9″ (2.69 m)
u_5	3	No. 4 (No.13)	9′-7″ (2.92 m)
u_6	4	No. 4 (No.13)	8′-11½″ (2.73 m)
Concrete		cu. yds. (m^3)	0.5 (0.4)
Reinf. bars		lbs. (kg)	70 (31.8)
Grating		sq. ft. (m^2)	3.6 (0.34)

NOTE

Welded wire reinforcement (WWR) may be used in lieu of reinforcement bars. Only one layer of WWR is permitted to avoid congestion.



SECTION F–F

SECTION E–E

NOT TO SCALE

DETAIL OF CAST FRAME

TERRA ENGINEERING LTD.

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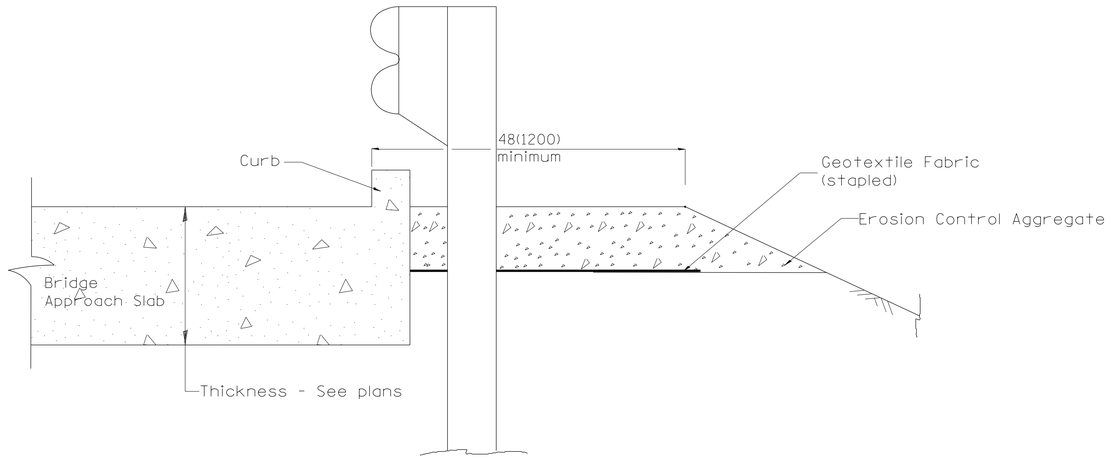
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS – SHOULDER INLET WITH CURB
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: NTS | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	19
	DOGTOWN LN BRIDGE	CONTRACT NO.	89811	
	ILLINOIS FED. AID PROJECT			



TYPICAL SECTION WITH BRIDGE APPROACH CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

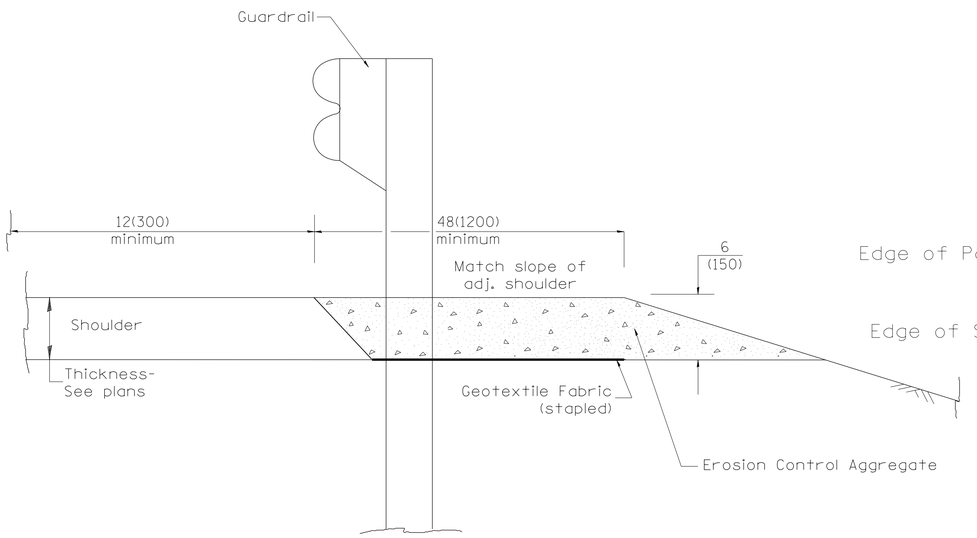
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

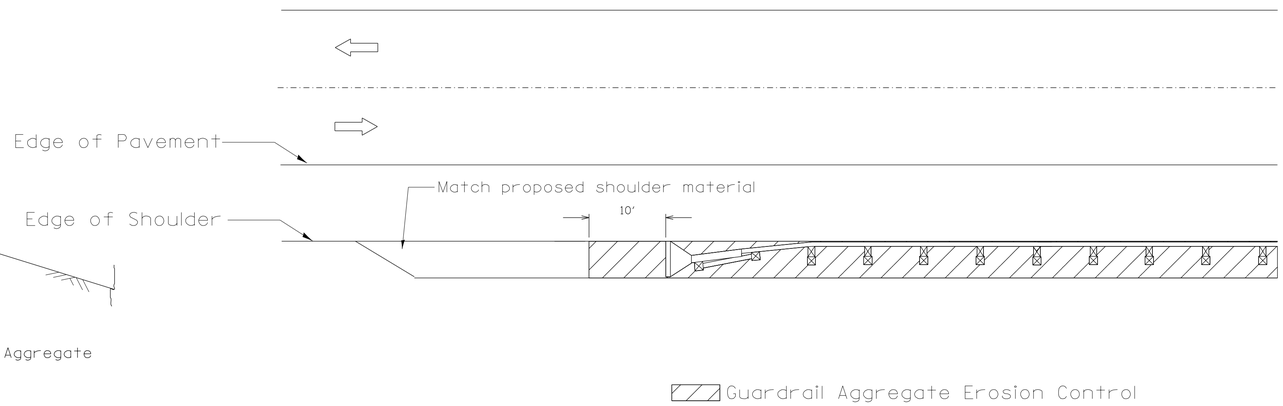
6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



TYPICAL SECTION WITHOUT CURB



All dimensions are in inches (millimeters) unless otherwise noted.

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TERRA ENGINEERING LTD.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS – GUARDRAIL AGGREGATE EROSION CONTROL
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: NTS | SHEET 3 OF 3 SHEETS | STA. | TO STA.

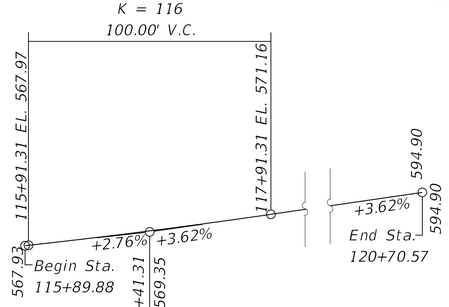
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	20
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

B.M. : Chiseled square on top of S.E. Wingwall – 118+90.43 16.1' LT. El. 577.17

Existing Structure: S.N. 072–3105 Built originally as CH R23, Section 77–00132–00–BR as a 3–Span Precast Prestressed Concrete Deck Beam bridge 127'–11" Bk. to Bk. Abutments and 30'–7¼" Out to Out.

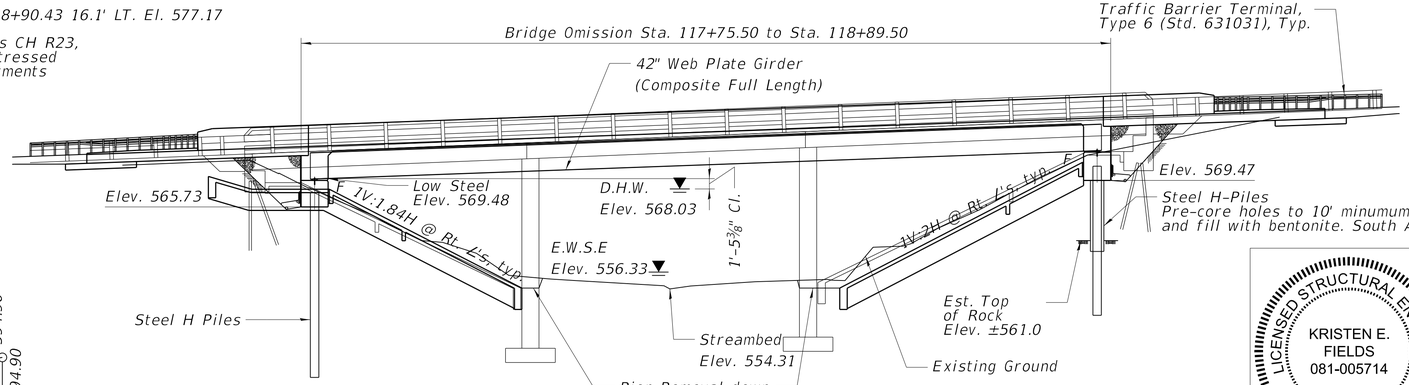
Structure to be removed and replaced with road closure.

No salvage.



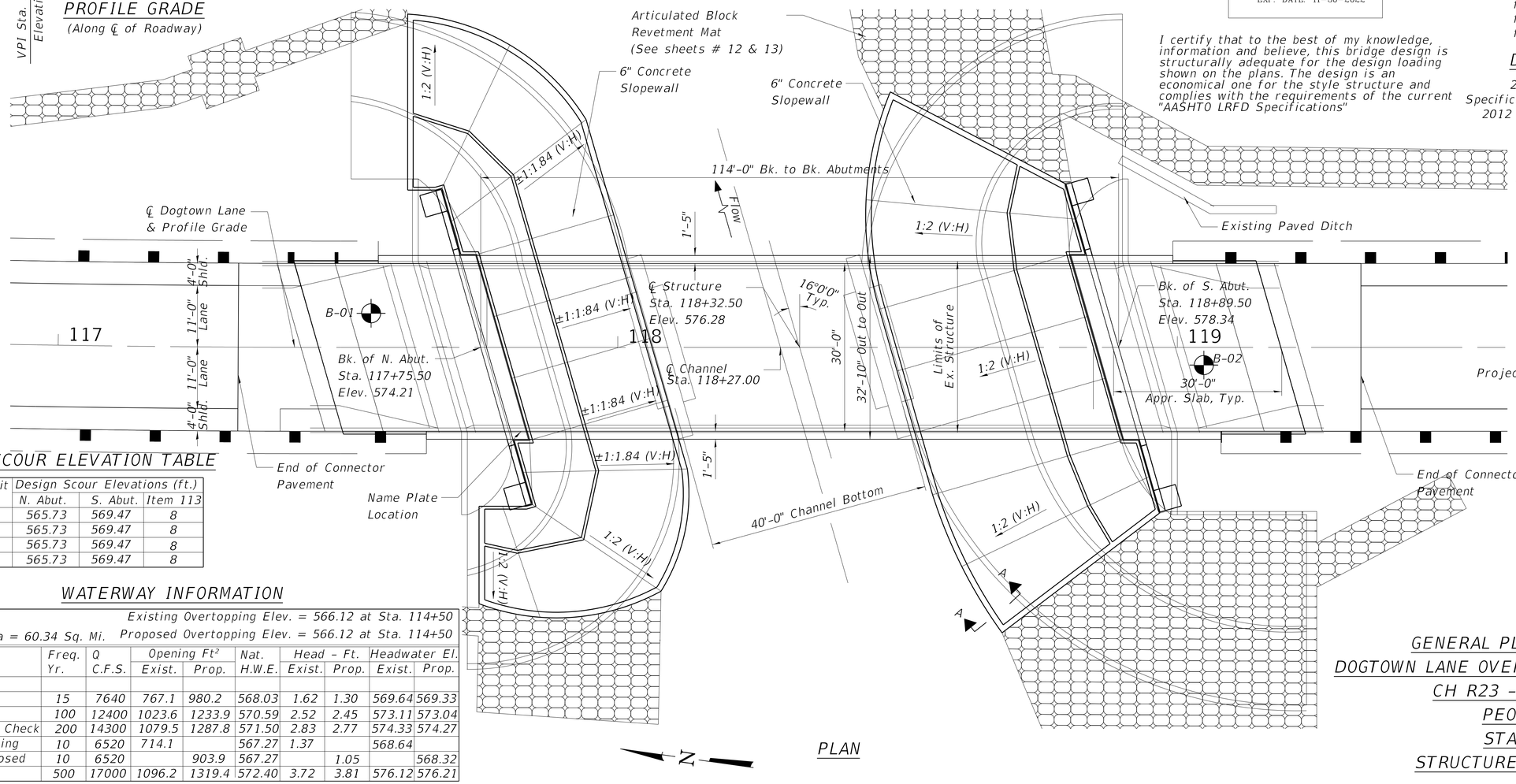
PROFILE GRADE

(Along ℄ of Roadway)



ELEVATION

CURVE DATA



PLAN

INDEX OF SHEETS

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.076
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.130
Soil Site Class = C

LOADING HL–93

Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi (Substructure)
f'c = 4,000 psi (Superstructure)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 9th Edition
2012 Illinois Department of Transportation Bridge Manual

LICENSED STRUCTURAL ENGINEER
KRISTEN E. FIELDS
081-005714
STATE OF ILLINOIS
4/6/21
EXP. DATE: 11–30–2022

I certify that to the best of my knowledge, information and believe, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style structure and complies with the requirements of the current "AASHTO LRFD Specifications"

HIGHWAY CLASSIFICATION

CH R23 – Dogtown Lane
Functional Class: Local Road
ADT: 200 (2017); 220 (2037)
ADTT: 20 (2017); 22 (2037)
DHV: 22
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.
Two-Way Traffic
Directional Distribution: 50:50

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)		
	N. Abut.	S. Abut.	Item 113
Q100	565.73	569.47	8
Q200	565.73	569.47	8
Design	565.73	569.47	8
Check	565.73	569.47	8

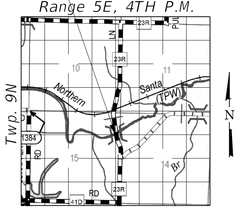
WATERWAY INFORMATION

Drainage Area = 60.34 Sq. Mi.
Existing Overtopping Elev. = 566.12 at Sta. 114+50
Proposed Overtopping Elev. = 566.12 at Sta. 114+50

Flood	Freq. Yr.	Q C.F.S.	Opening Ft² Exist.	Opening Ft² Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	15	7640	767.1	980.2	568.03	1.62	1.30	569.64	569.33
Base	100	12400	1023.6	1233.9	570.59	2.52	2.45	573.11	573.04
Scour Design Check	200	14300	1079.5	1287.8	571.50	2.83	2.77	574.33	574.27
Overtop Existing	10	6520	714.1		567.27	1.37		568.64	
Overtop Proposed	10	6520		903.9	567.27		1.05		568.32
Max. Calc.	500	17000	1096.2	1319.4	572.40	3.72	3.81	576.12	576.21

Project Location

Range 5E, 4TH P.M.



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
DOGTOWN LANE OVER W. FORK KICKAPOO CREEK
CH R23 – 17–00132–00–BR
PEORIA COUNTY
STA. 118+32.50
STRUCTURE NUMBER 072–3161

TERRA ENGINEERING LTD.

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	DRAWN - MS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 072–3161
SHEET NO. 1 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	45	21
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

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GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts (in painted areas and ASTM A325 Type 3 in unpainted areas). Bolts ¾ in. Ø, holes $^{15}/_{16}$ in. Ø, unless otherwise noted.

Calculated weight of Structural Steel = 141,420 lbs

All structural steel shall be AASHTO M 270 Grade 50W.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

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

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ⅛ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

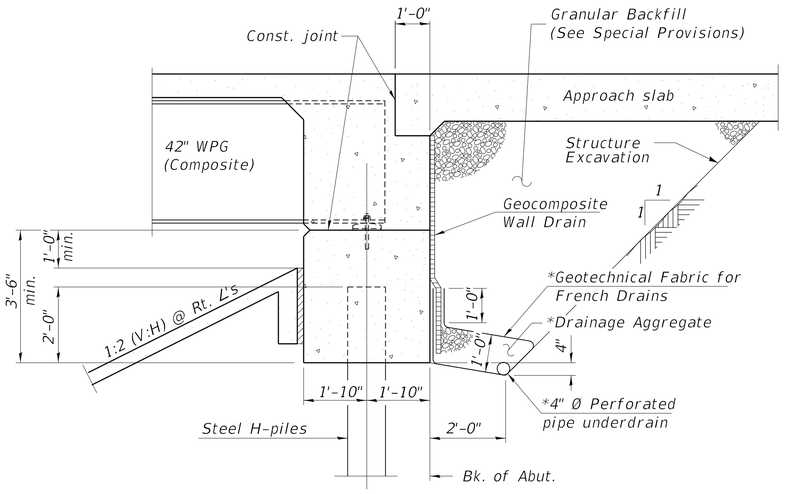
W. FORK KICKAPOO CREEK
STATION 118+32.50
BUILT 20 BY
PEORIA COUNTY
CH R23 – 17-00132-00-BR
LOADING HL-93
STRUCTURE NO. 072-3161

NAME PLATE

See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Slope Wall 6 inch	Sq. Yd.		752	752
Removal of Existing Structures	Each			1
Slopewall Removal	Sq. Yd.		1,270	1,270
Structure Excavation	Cu. Yd.		265	265
Concrete Structures	Cu. Yd.		70.0	70.0
Concrete Superstructure	Cu. Yd.	169.6		169.6
Bridge Deck Grooving	Sq. Yd.	535		535
Protective Coat	Sq. Yd.	706		706
Concrete Superstructure (Approach Slab)	Cu. Yd.	89.3		89.3
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1,065		1,065
Reinforced Bars, Epoxy Coated	Pound	69,260	12,900	82,160
Furnishing Steel Piles HP 14 x 89	Foot		188	188
Driving Piles	Foot		188	188
Test Pile HP 14 x 89	Each		2	2
Name Plates	Each	1		1
Anchor Bolts, 1"	Each	20		20
Geocomposite Wall Drain	Sq. Yd.		57	57
Granular Backfill for Structures	Cu. Ft.		116	116
Pipe Underdrains for Structures 4"	Foot		137	137
Asbestos Bearing Pad Removal	Each	40		40
Precoring	Foot		50	50



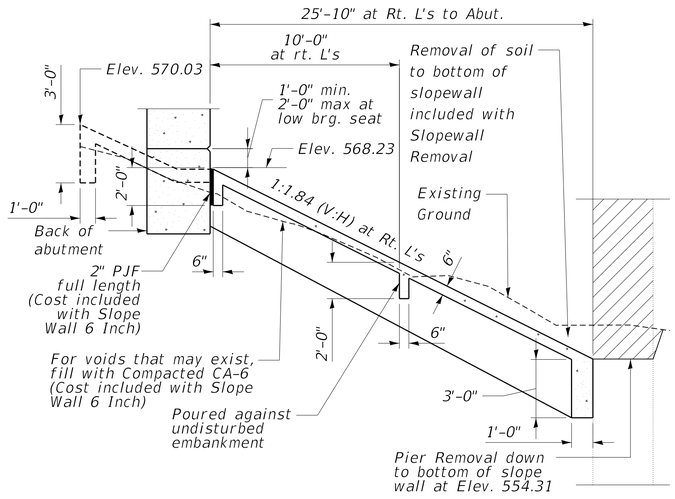
SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. ℄'s)

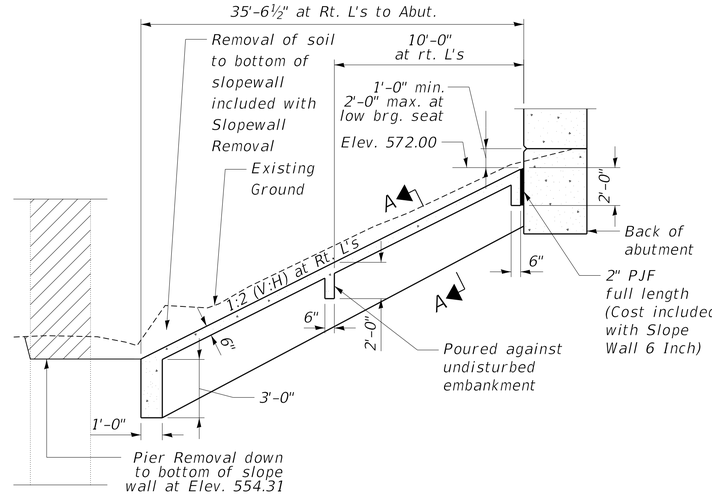
* Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

Note:

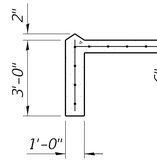
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls (See Article 601.05 of the Standard Specifications and Highway Standards 601101).



SECTION THRU NORTH CONCRETE SLOPEWALL



SECTION THRU SOUTH CONCRETE SLOPEWALL



SECTION A-A

Pier Removal

Slope walls shall be reinforced with welded wire fabric, 6 in. x 6 in. – W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

GENERAL DATA
DOGTOWN LANE OVER W. FORK KICKAPOO CREEK
CH R23 – 17-00132-00-BR
PEORIA COUNTY
STA. 118+32.50
STRUCTURE NUMBER 072-3161

TERRA ENGINEERING LTD.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 072-3161
SHEET NO. 2 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	22
		CONTRACT NO. 89811		
		ILLINOIS FED. AID PROJECT		

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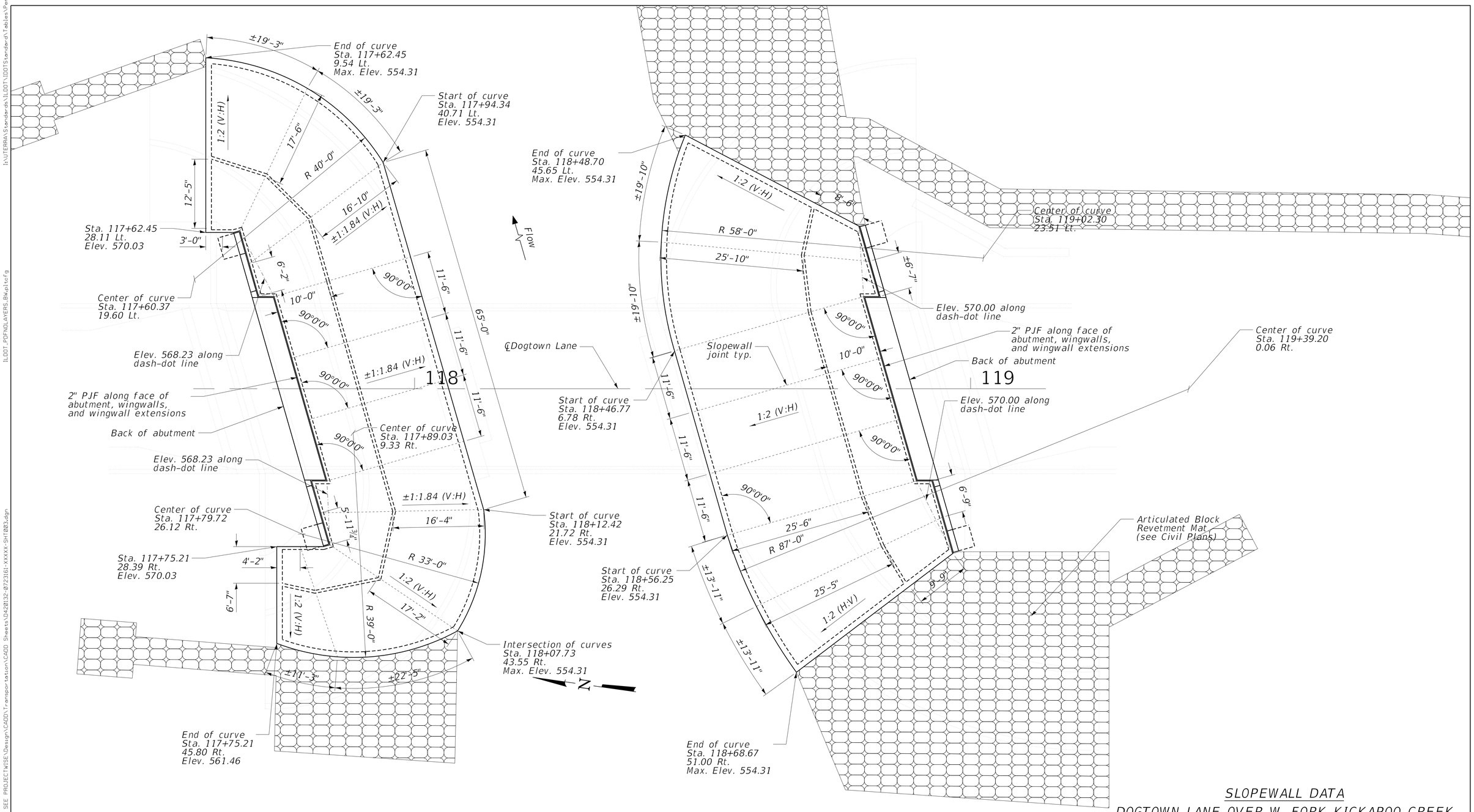

SLOPEWALL DATA
DOGTOWN LANE OVER W. FORK KICKAPOO CREEK
CH R23 - 17-00132-00-BR
PEORIA COUNTY
STA. 118+32.50
STRUCTURE NUMBER 072-3161

TERRA ENGINEERING LTD.	USER NAME = ColinC	DESIGNED - KF	REVISED -
		DRAWN - MS	REVISED -
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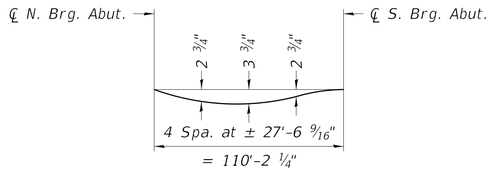
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SLOPEWALL DATA
STRUCTURE NO. 072-3161
SHEET NO. 3 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	23
		CONTRACT NO. 89811		
		ILLINOIS FED. AID PROJECT		



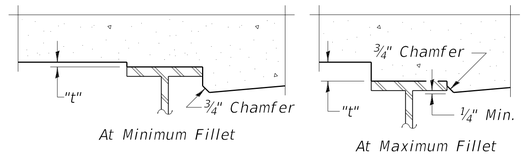
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

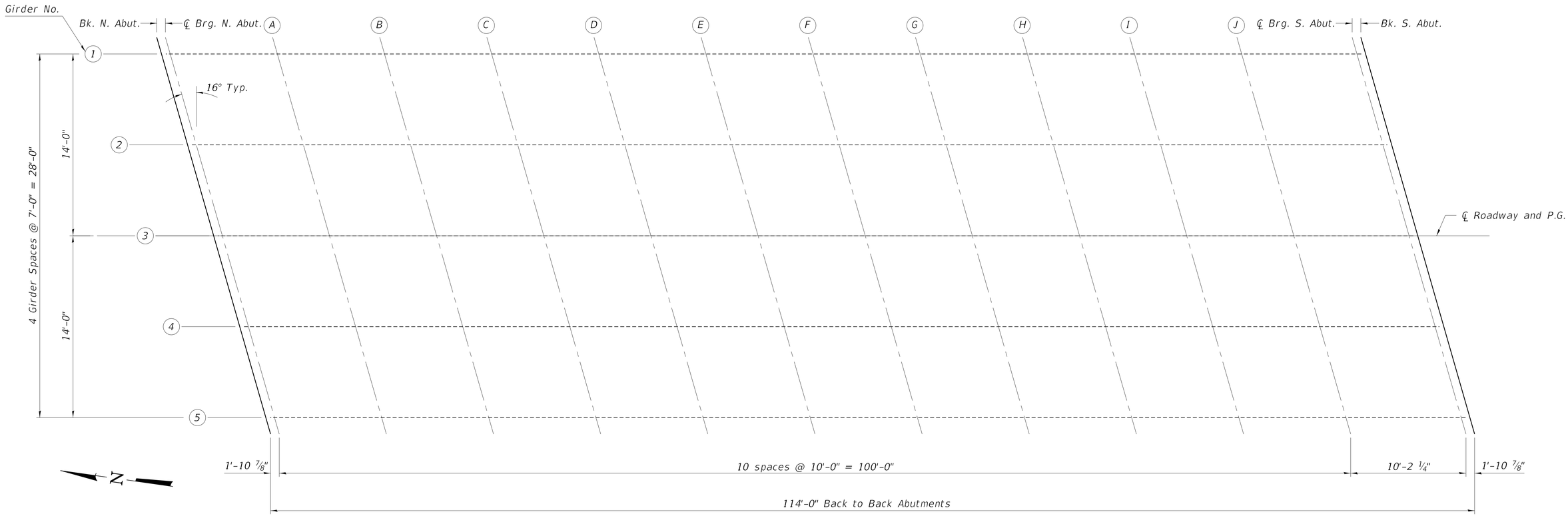
GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of North Abut.	117+71.49	-14.00	573.83	573.83
℄ Brg. N. Abut.	117+73.39	-14.00	573.90	573.90
A	117+83.39	-14.00	574.26	574.36
B	117+93.39	-14.00	574.63	574.79
C	118+03.39	-14.00	574.99	575.22
D	118+13.39	-14.00	575.35	575.62
E	118+23.39	-14.00	575.71	576.01
F	118+33.39	-14.00	576.07	576.37
G	118+43.39	-14.00	576.44	576.71
H	118+53.39	-14.00	576.80	577.03
I	118+63.39	-14.00	577.16	577.33
J	118+73.39	-14.00	577.52	577.61
℄ Brg. S. Abut.	118+83.58	-14.00	577.89	577.89
Back of South Abut.	118+85.49	-14.00	577.96	577.96



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

(sheet 1 of 2)

TERRA ENGINEERING LTD.	USER NAME = ColinC	DESIGNED - KF	REVISED -
		DRAWN - MS	REVISED -
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	PLOT DATE = 9/1/2021 7:48:49 AM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 072-3161
SHEET NO. 4 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	24
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of North Abut.	117+73.49	-7.00	574.03	574.03
℄ Brg. N. Abut.	117+75.40	-7.00	574.10	574.10
A	117+85.40	-7.00	574.46	574.55
B	117+95.40	-7.00	574.82	575.00
C	118+05.40	-7.00	575.19	575.43
D	118+15.40	-7.00	575.55	575.84
E	118+25.40	-7.00	575.91	576.22
F	118+35.40	-7.00	576.27	576.58
G	118+45.40	-7.00	576.63	576.92
H	118+55.40	-7.00	577.00	577.24
I	118+65.40	-7.00	577.36	577.53
J	118+75.40	-7.00	577.72	577.81
℄ Brg. S. Abut.	118+85.59	-7.00	578.09	578.09
Back of South Abut.	118+87.49	-7.00	578.16	578.16

GIRDER 3 (℄ Roadway & P.G.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of North Abut.	117+75.50	0.00	574.21	574.21
℄ Brg. N. Abut.	117+77.41	0.00	574.28	574.28
A	117+87.41	0.00	574.64	574.73
B	117+97.41	0.00	575.01	575.18
C	118+07.41	0.00	575.37	575.61
D	118+17.41	0.00	575.73	576.02
E	118+27.41	0.00	576.09	576.40
F	118+37.41	0.00	576.45	576.77
G	118+47.41	0.00	576.82	577.10
H	118+57.41	0.00	577.18	577.42
I	118+67.41	0.00	577.54	577.71
J	118+77.41	0.00	577.90	577.99
℄ Brg. S. Abut.	118+87.59	0.00	578.27	578.27
Back of South Abut.	118+89.50	0.00	578.34	578.34

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of North Abut.	117+77.51	7.00	574.18	574.18
℄ Brg. N. Abut.	117+79.41	7.00	574.25	574.25
A	117+89.41	7.00	574.61	574.70
B	117+99.41	7.00	574.97	575.14
C	118+09.41	7.00	575.33	575.57
D	118+19.41	7.00	575.69	575.98
E	118+29.41	7.00	576.06	576.37
F	118+39.41	7.00	576.42	576.73
G	118+49.41	7.00	576.78	577.07
H	118+59.41	7.00	577.14	577.38
I	118+69.41	7.00	577.50	577.68
J	118+79.41	7.00	577.87	577.96
℄ Brg. S. Abut.	118+89.60	7.00	578.23	578.23
Back of South Abut.	118+91.51	7.00	578.30	578.30

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of North Abut.	117+79.51	14.00	574.12	574.12
℄ Brg. N. Abut.	117+81.42	14.00	574.19	574.19
A	117+91.42	14.00	574.55	574.65
B	118+01.42	14.00	574.92	575.08
C	118+11.42	14.00	575.28	575.51
D	118+21.42	14.00	575.64	575.91
E	118+31.42	14.00	576.00	576.30
F	118+41.42	14.00	576.36	576.66
G	118+51.42	14.00	576.73	577.00
H	118+61.42	14.00	577.09	577.32
I	118+71.42	14.00	577.45	577.62
J	118+81.42	14.00	577.81	577.90
℄ Brg. S. Abut.	118+91.61	14.00	578.18	578.18
Back of South Abut.	118+93.51	14.00	578.25	578.25

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 072-3161
SHEET NO. 5 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	25
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

East Edge of Shoulder

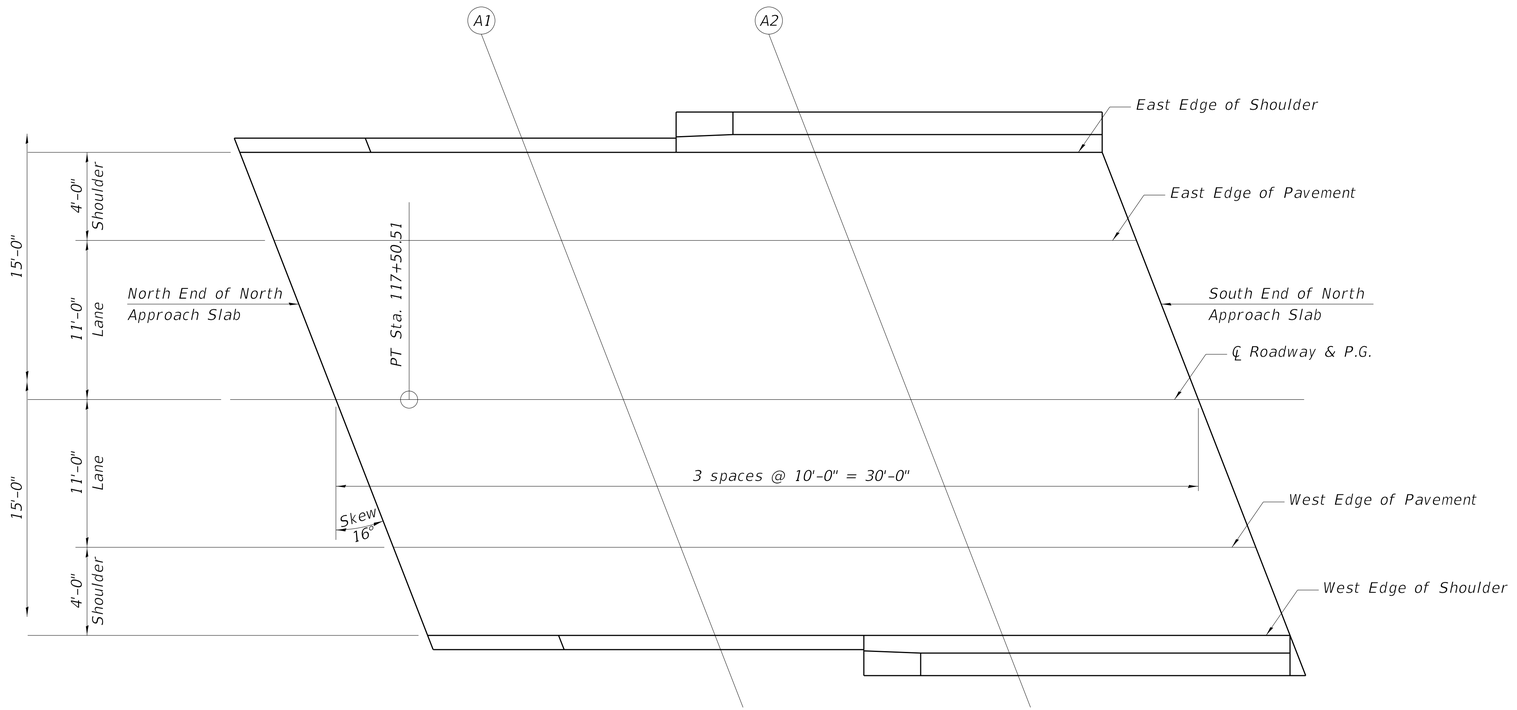
Location	Station	Offset	Theoretical Grade Elevations
N. End N. Appr. Pavt.	117+42.22	-15.00	572.75
A1	117+52.24	-15.00	573.11
A2	117+62.24	-15.00	573.48
S. End of N. Appr.	117+72.24	-15.00	573.84

East Edge of Pavement

Location	Station	Offset	Theoretical Grade Elevations
N. End. N. Appr. Pavt.	117+43.38	-11.00	572.88
A1	117+53.39	-11.00	573.24
A2	117+63.39	-11.00	573.60
S. End of N. Appr.	117+73.39	-11.00	573.96

℄ Roadway & P.G.

Location	Station	Offset	Theoretical Grade Elevations
N. End N. Appr. Pavt.	117+46.54	0.00	573.16
A1	117+56.54	0.00	573.52
A2	117+66.54	0.00	573.89
S. End of N. Appr.	117+76.54	0.00	574.25



PLAN

West Edge of Pavement

Location	Station	Offset	Theoretical Grade Elevations
N. End N. Appr. Pavt.	117+49.69	11.00	573.10
A1	117+59.70	11.00	573.47
A2	117+69.70	11.00	573.83
S. End of N. Appr.	117+79.70	11.00	574.19

West Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
N. End N. Appr. Pavt.	117+50.83	15.00	573.06
A1	117+60.84	15.00	573.43
A2	117+70.84	15.00	573.79
S. End of N. Appr.	117+80.84	15.00	574.15

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF N APPROACH SLAB ELEVATIONS
STRUCTURE NO. 072-3161
SHEET NO. 6 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	26
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

East Edge of Shoulder

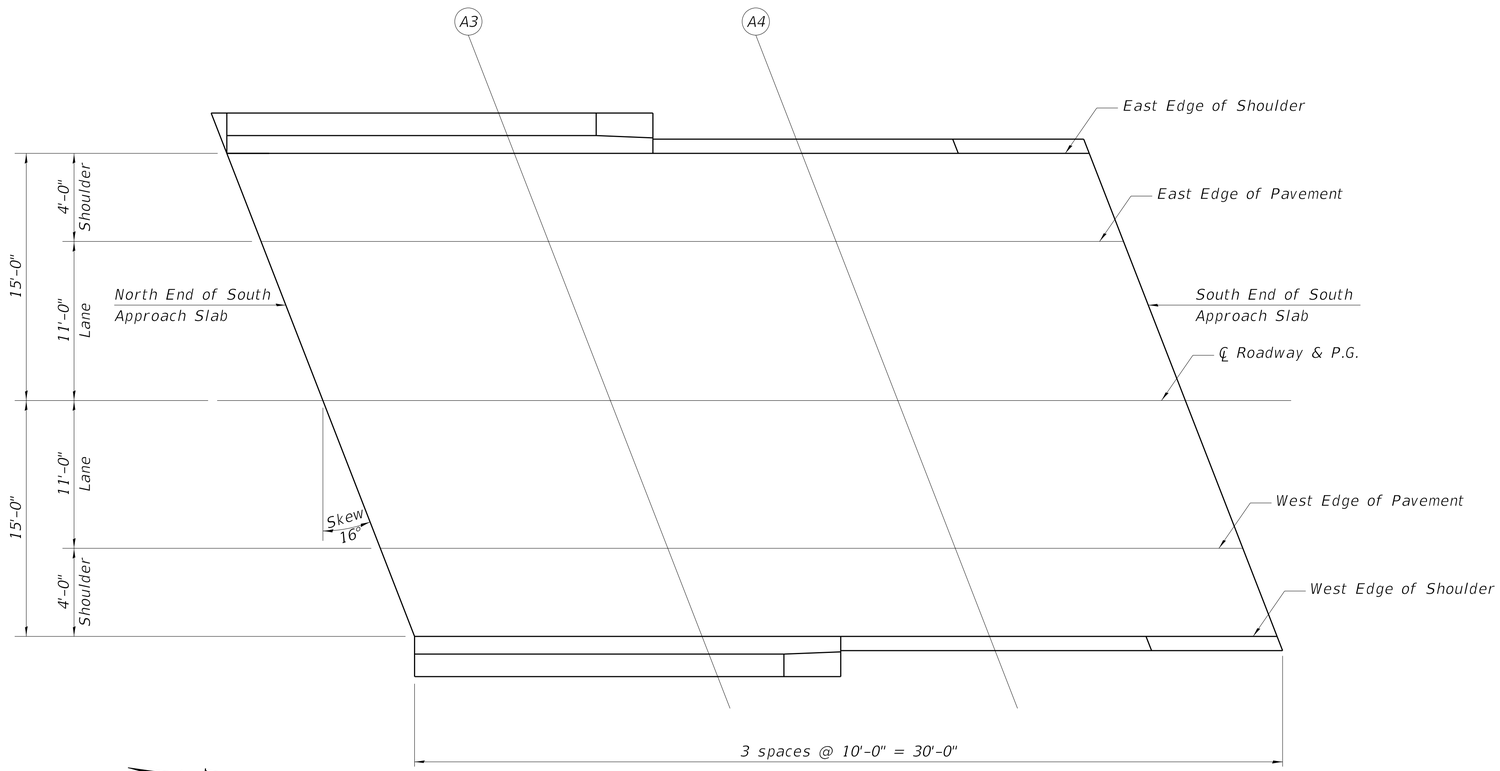
Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	118+84.16	-15.00	577.89
A3	118+94.16	-15.00	578.25
A4	119+04.16	-15.00	578.61
S. End S. Appr. Pavt.	119+14.16	-15.00	578.98

East Edge of Pavement

Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	118+85.31	-11.00	578.02
A3	118+95.31	-11.00	578.38
A4	119+05.31	-11.00	578.74
S. End S. Appr. Pavt.	119+15.31	-11.00	579.10

℄ Roadway & P.G.

Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	118+88.46	0.00	578.30
A3	118+98.46	0.00	578.66
A4	119+08.46	0.00	579.03
S. End S. Appr. Pavt.	119+18.46	0.00	579.39



PLAN

West Edge of Pavement

Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	118+91.61	11.00	578.24
A3	119+01.61	11.00	578.61
A4	119+11.61	11.00	578.97
S. End S. Appr. Pavt.	119+21.61	11.00	579.33

West Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	118+92.76	15.00	578.20
A3	119+02.76	15.00	578.56
A4	119+12.76	15.00	578.93
S. End S. Appr. Pavt.	119+22.76	15.00	579.29

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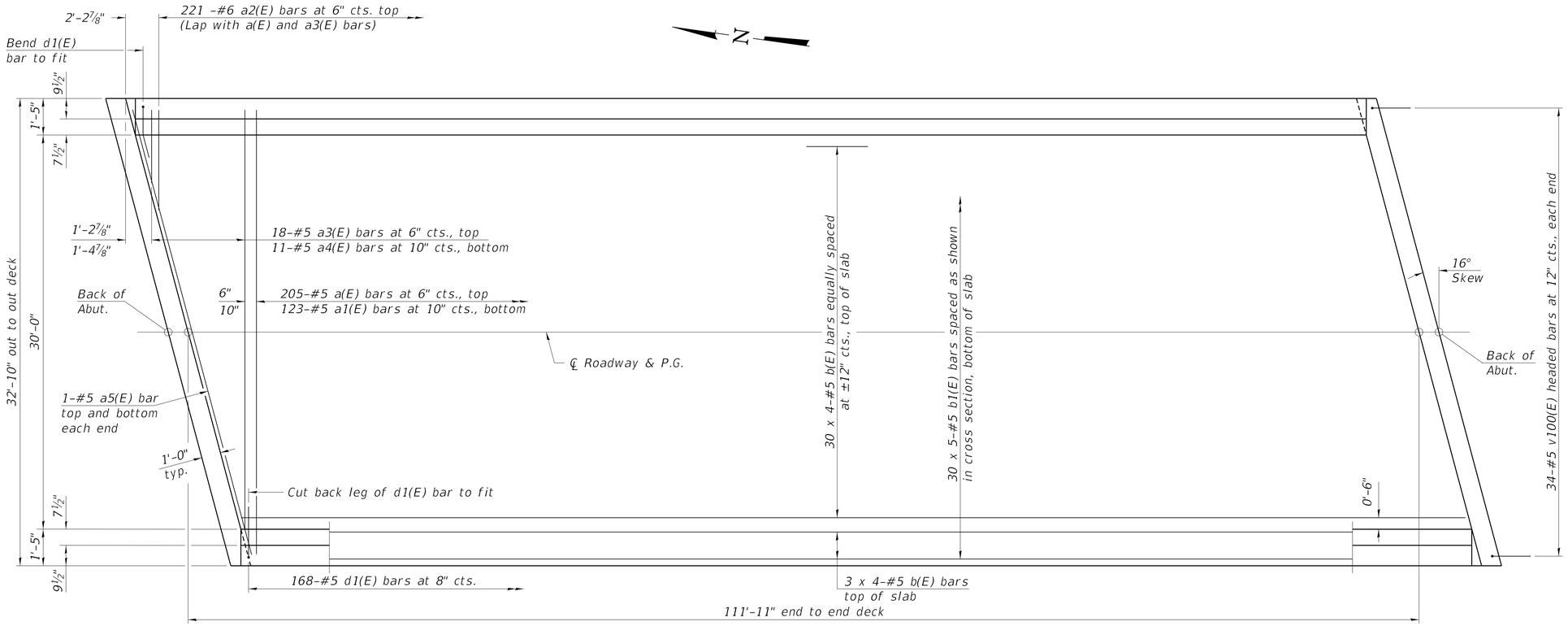
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF S APPROACH SLAB ELEVATIONS
STRUCTURE NO. 072-3161
SHEET NO. 7 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	27
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			



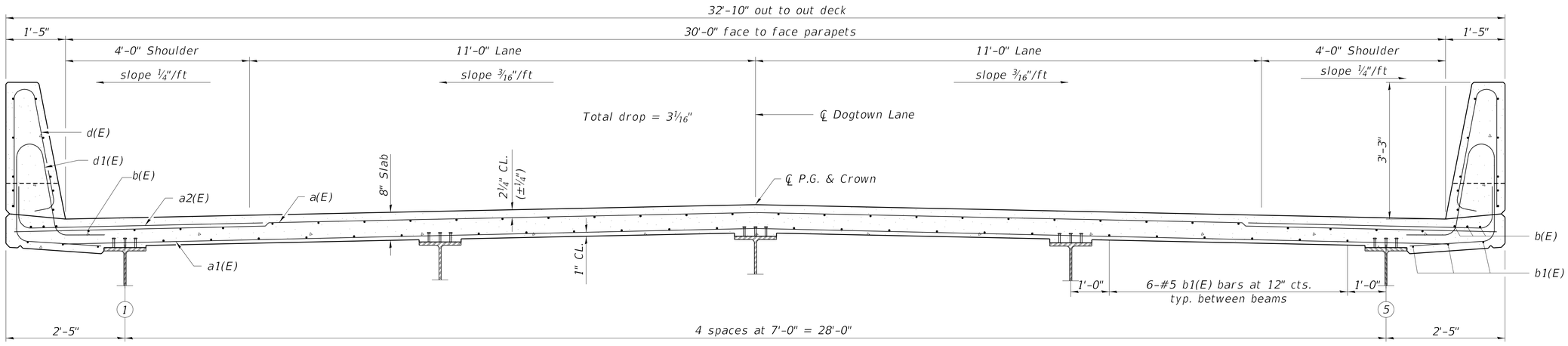
MINIMUM BAR LAP

#5 bar = 3'-6"

* See Field Cutting Diagram on sheet 9 of 20.

PLAN

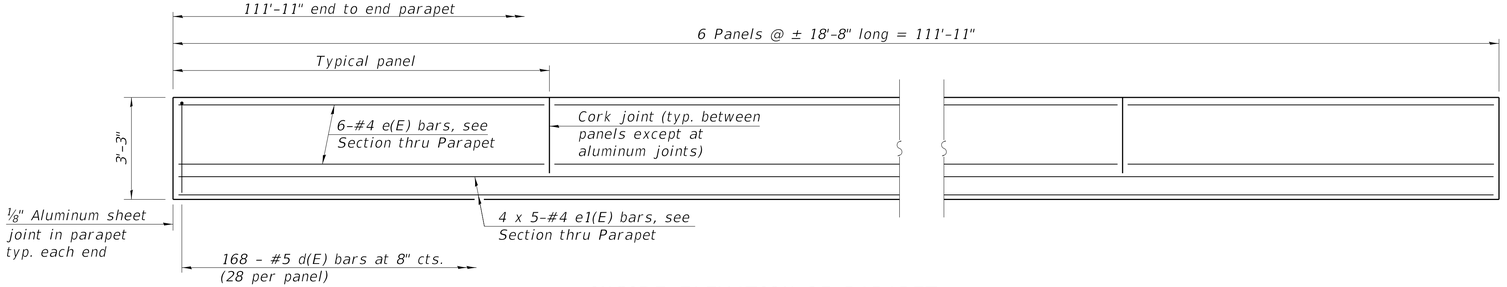
Notes:
See sheet 9 of 20 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



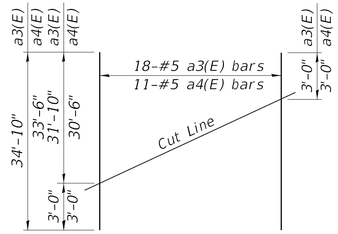
CROSS SECTION

(Looking South)

TERRA ENGINEERING LTD.	USER NAME = ColinC	DESIGNED - KF	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE STRUCTURE NO. 072-3161	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - MS	REVISED -			CH R23	17-00132-00-BR	PEORIA	46	28
	PLOT SCALE = 0.0833 ' / in.	CHECKED - DB	REVISED -					CONTRACT NO. 89811		
	PLOT DATE = 9/1/2021 7:49:05 AM	DATE -	REVISED -		SHEET NO. 8 OF 20 SHEETS			ILLINOIS FED. AID PROJECT		



INSIDE ELEVATION OF PARAPET

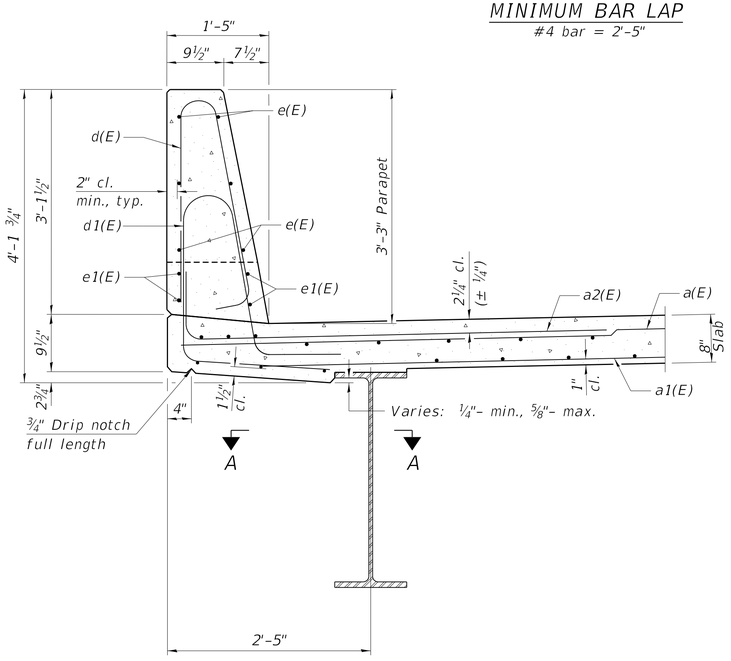


FIELD CUTTING DIAGRAM

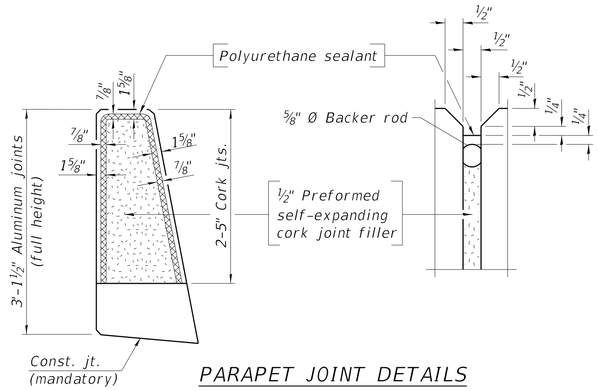
Order a3(E) and a4(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.

MINIMUM BAR LAP

#4 bar = 2'-5"



SECTION THRU PARAPET



PARAPET JOINT DETAILS

Notes:

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.

The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.

The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

The ⅛" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

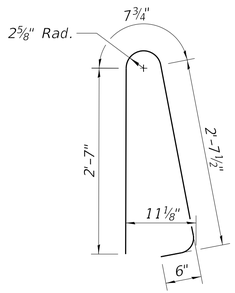
The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

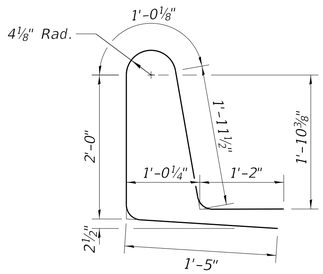
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	205	#5	32'-2"	
a1(E)	123	#5	30'-10"	
a2(E)	442	#6	8'-4"	
a3(E)	18	#5	34'-10"	
a4(E)	11	#5	33'-6"	
a5(E)	4	#5	33'-6"	
b(E)	144	#5	30'-7"	
b1(E)	150	#5	25'-2"	
d(E)	336	#5	6'-5"	
d1(E)	336	#5	7'-9"	
e(E)	72	#4	18'-4"	
e1(E)	40	#4	24'-4"	
m10(E)	10	#6	33'-10"	
m11(E)	32	#6	6'-11"	
m12(E)	16	#6	2'-2"	
s10(E)	68	#5	7'-11"	
s11(E)	68	#5	11'-9"	
v100(E)	68	#5	3'-1"	
Reinforcement Bars, Epoxy Coated		Lbs.	35,080	
Concrete Superstructure		Cu. Yds.	161.8	

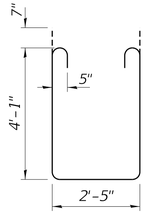
Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.



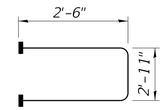
BAR d(E)



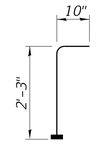
BAR d1(E)



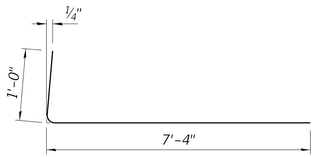
BAR s11(E)



BAR s10(E)
(Headed)



BAR v100(E)
(Headed)



BAR a2(E)

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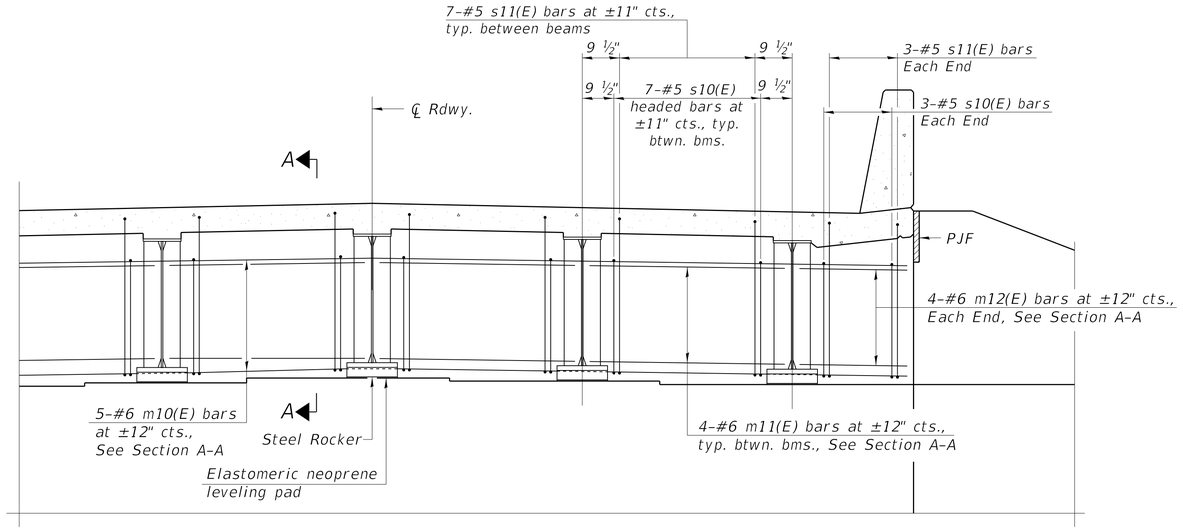
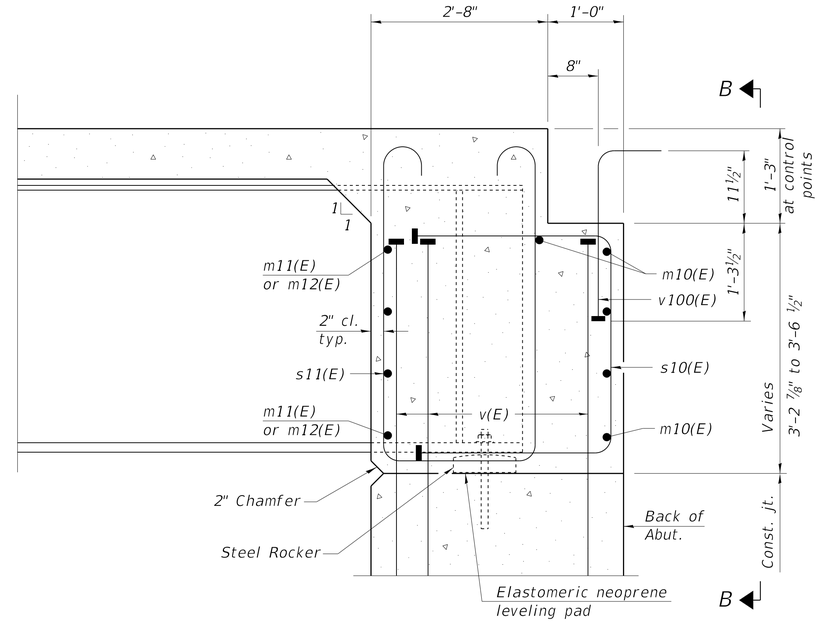
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 072-3161
SHEET NO. 9 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	29
		CONTRACT NO. 89811		
		ILLINOIS FED. AID PROJECT		

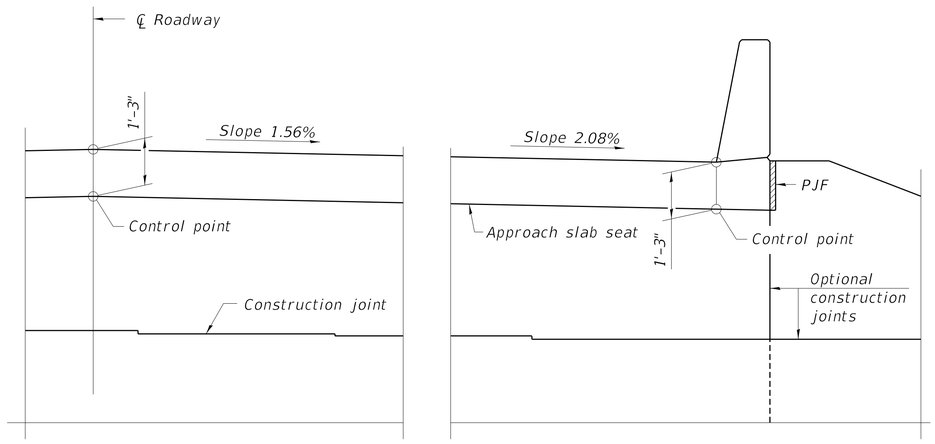


DIAPHRAGM AT ABUTMENT

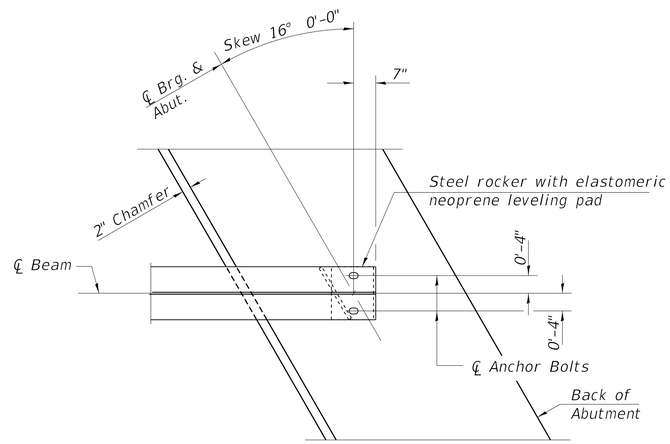


SECTION A–A

(at Rt. ℄'s)



VIEW B-B



PLAN AT ABUTMENT

(Showing bottom flange of beam)

Notes:

See sheet 9 of 20 for superstructure details and Bill of Material.

See sheet 11 of 20 for PJF details.

The s10(E) and s11(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

The approach slab seat shall have a constant slope determined from the control points shown.

TERRA ENGINEERING LTD.

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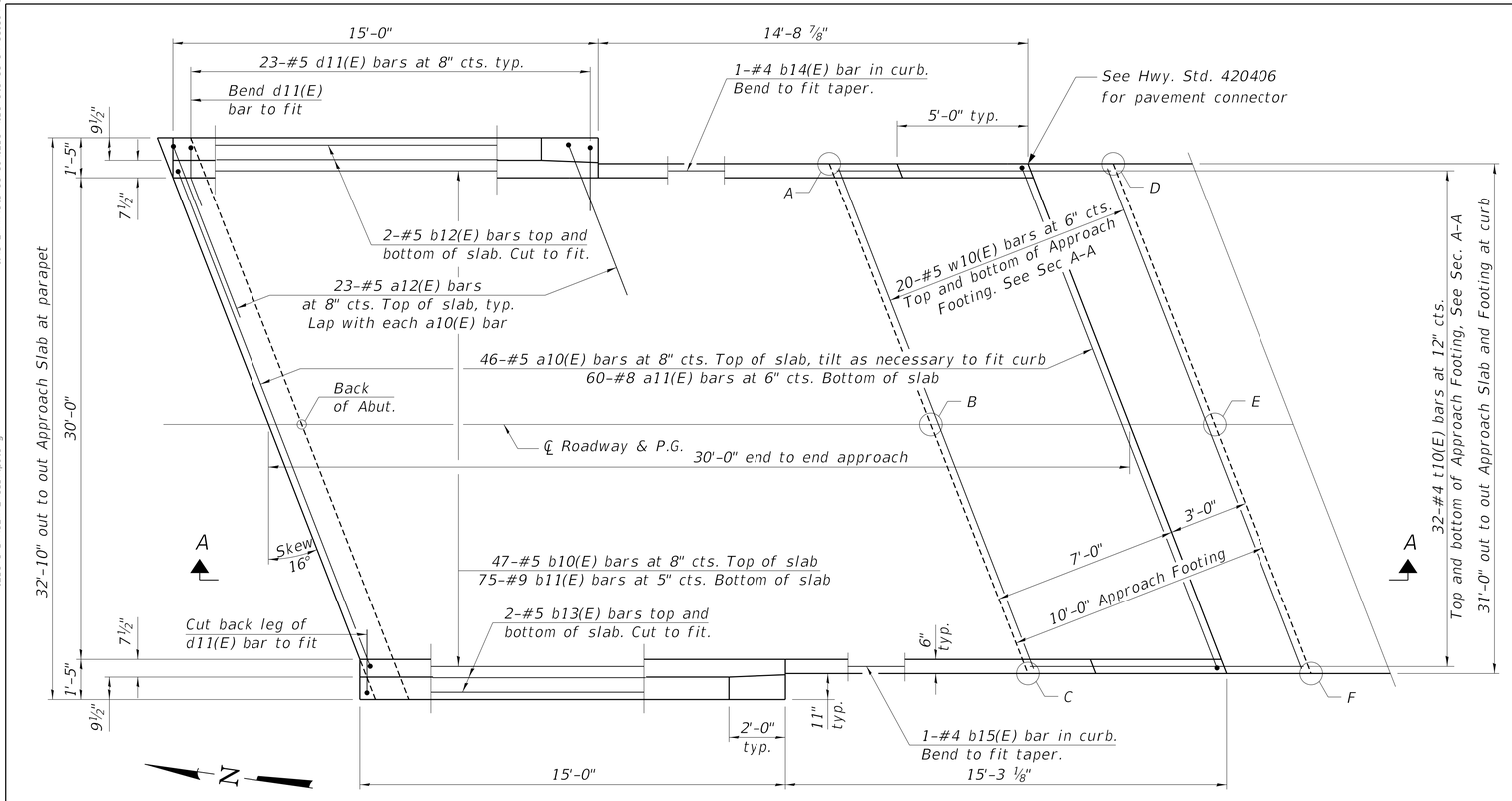
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTEGRAL ABUTMENT DIAPHRAGM DETAILS
STRUCTURE NO. 072–3161
SHEET NO. 10 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	30
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

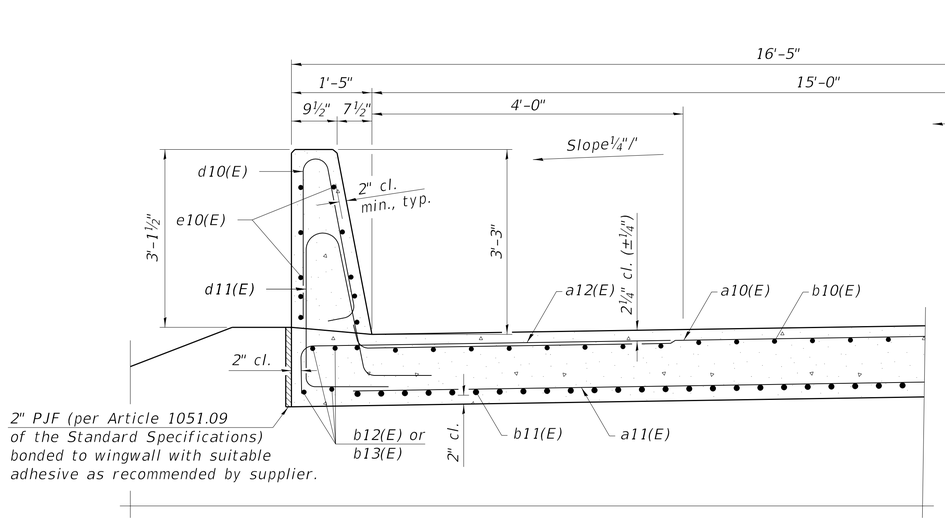


PLAN

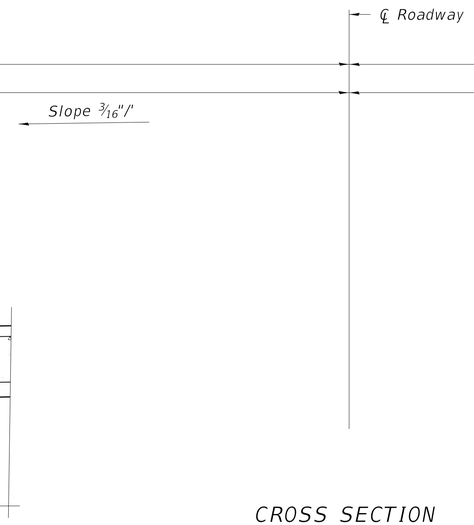
(South approach span shown. North approach similar by 180° rotation except as noted)

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	North Approach		South Approach	
Point	Top	Bottom	Top	Bottom
A	572.07	571.24	577.45	576.61
B	572.18	571.35	577.87	577.04
C	571.75	570.92	577.77	576.94
D	571.70	570.87	577.82	576.99
E	571.81	570.98	578.25	577.42
F	571.38	570.55	578.15	577.31

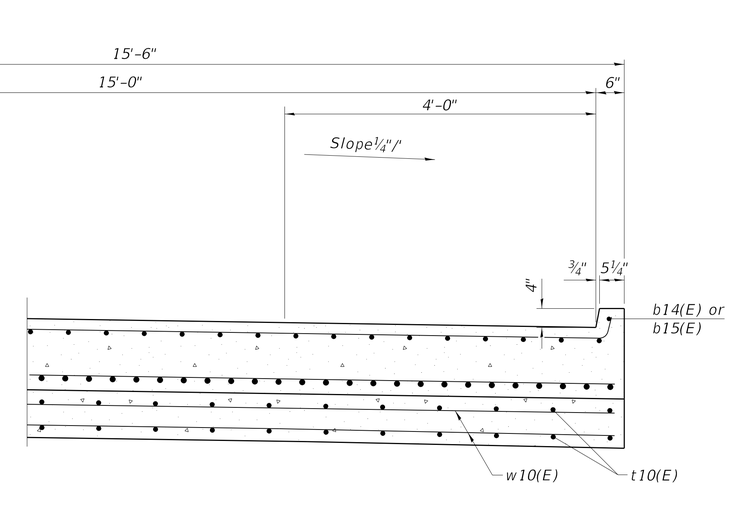


NEAR ABUTMENT



CROSS SECTION

(Looking South)



AT APPROACH FOOTING

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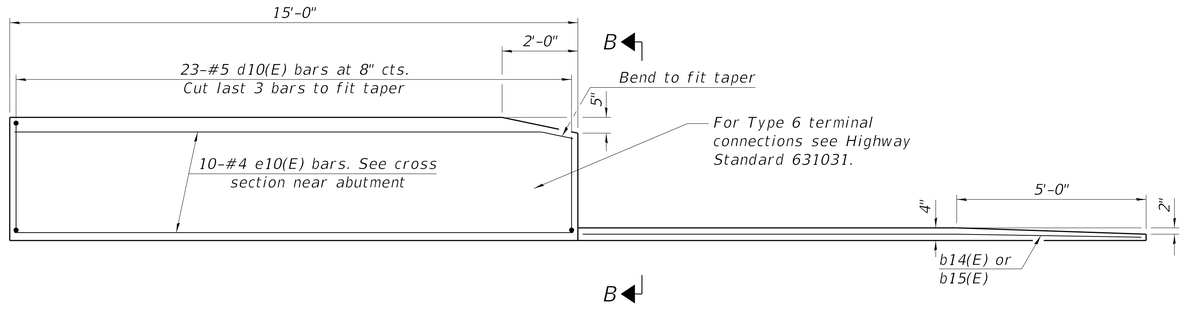
DEPARTMENT OF TRANSPORTATION

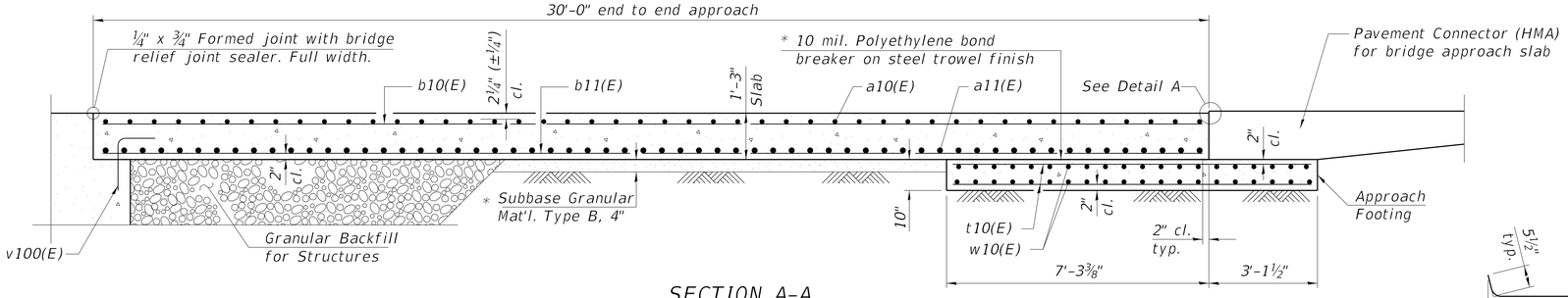
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 072-3161
SHEET NO. 11 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	31
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

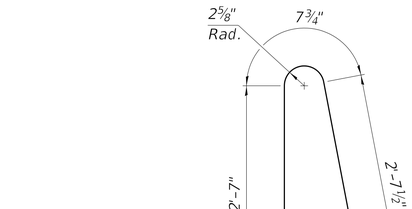


INSIDE ELEVATION OF PARAPET AND CURB

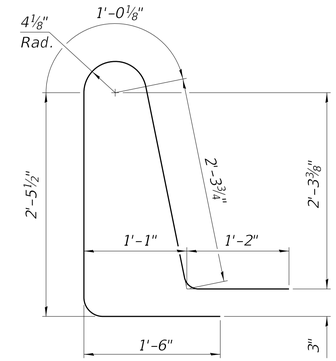
Notes:
Parapet concrete shall be paid for as Concrete Superstructure.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 20.



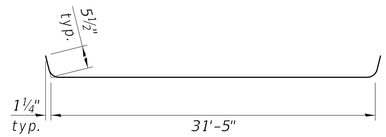
SECTION A-A



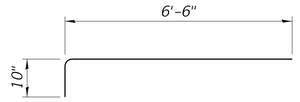
BAR d10(E)



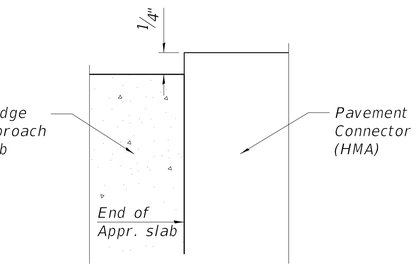
BAR d11(E)



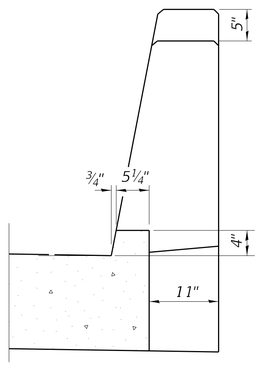
BAR a10(E)



BAR a12(E)



DETAIL A
(@ Rt. ℄'s)



VIEW B-B

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	92	#5	32'-4"	
a11(E)	120	#8	31'-11"	
a12(E)	92	#5	7'-4"	
b10(E)	94	#5	29'-8"	
b11(E)	150	#9	29'-8"	
b12(E)	8	#5	14'-8"	
b13(E)	8	#5	14'-8"	
b14(E)	2	#4	14'-5"	
b15(E)	2	#4	14'-11"	
d10(E)	92	#5	6'-5"	
d11(E)	92	#5	8'-6"	
e10(E)	40	#4	14'-8"	
t10(E)	128	#4	9'-8"	
w10(E)	80	#5	31'-11"	
Concrete Superstructure		Cu. Yd.	7.8	
Concrete Superstructure (Approach Slab)		Cu. Yd.	89.3	
Concrete Structures		Cu. Yd.	20.0	
Reinforcement Bars, Epoxy Coated		Pound	37,670	

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

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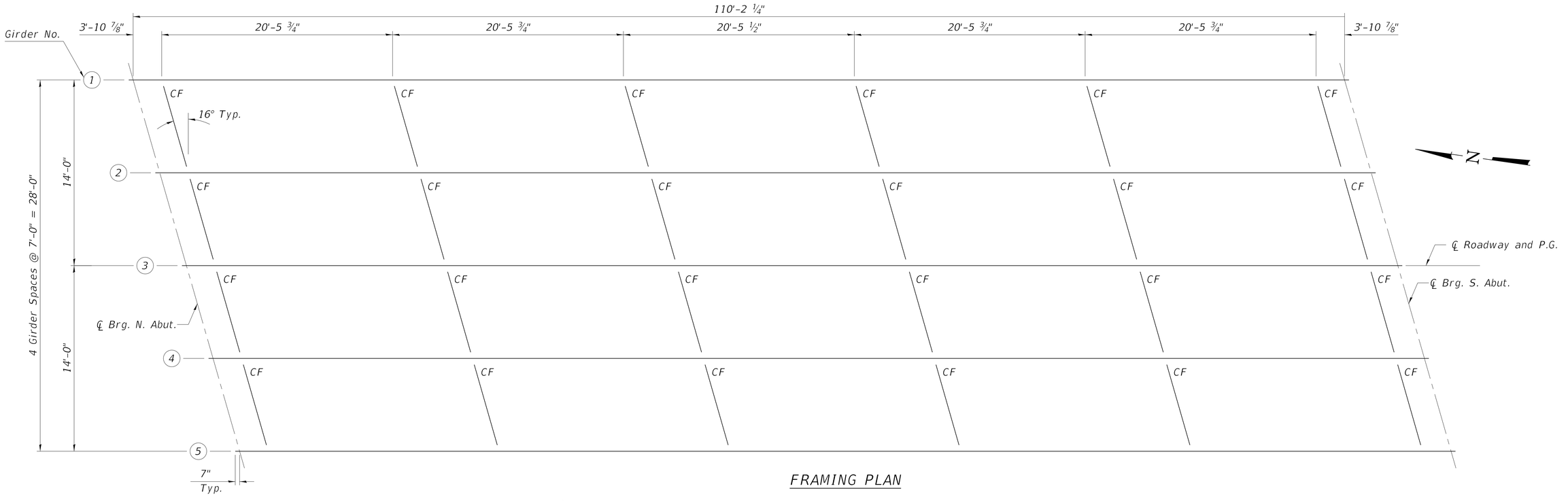
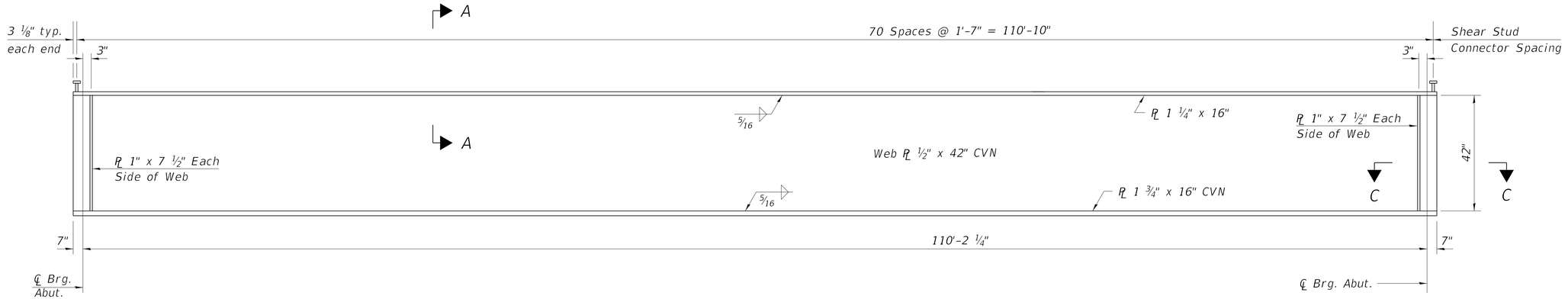
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 072-3161
SHEET NO. 12 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	32
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

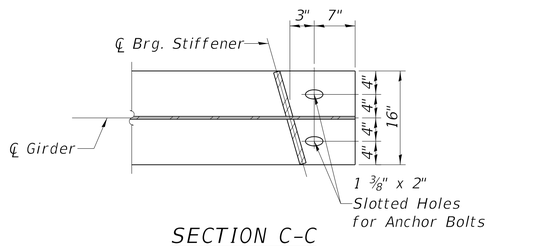


FRAMING PLAN

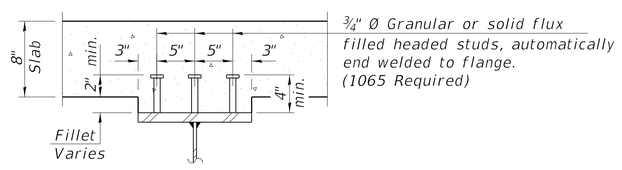


GIRDER ELEVATION

"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.

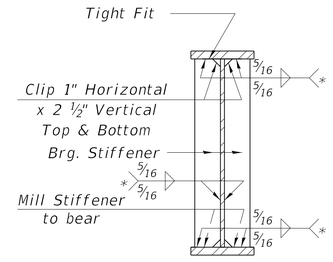


SECTION C-C



¾" Ø Granular or solid flux filled headed studs, automatically end welded to flange. (1065 Required)

SECTION A-A



* Terminate ¼" (±⅛") from the end of plate intersects.

SECTION AT ABUTMENT

TERRA ENGINEERING LTD.	USER NAME = ColinC	DESIGNED - KF	REVISED -
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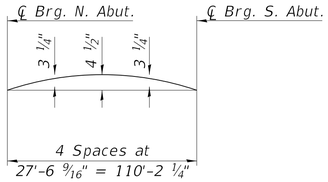
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN AND GIRDER ELEVATION
STRUCTURE NO. 072-3161
SHEET NO. 13 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	33
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			



CAMBER DIAGRAM

*TOP OF WEB ELEVATIONS

Location	℄ Brg. N. Abut.	℄ Brg. S. Abut.
Girder 1	573.06	577.04
Girder 2	573.25	577.24
Girder 3	573.43	577.42
Girder 4	573.40	577.39
Girder 5	573.35	577.33

*For fabrication only

INTERIOR GIRDER MOMENT TABLE		
		0.5 Span
Is	(in^4)	25378
Ic(n)	(in^4)	60507
Ic(3n)	(in^4)	44215
Ss	(in^3)	1260
Sc(n)	(in^3)	1631
Sc(3n)	(in^3)	1510
DC1	(k/')	0.995
MDC1	('k)	1510.0
DC2	(k/')	0.21
MDC2	('k)	318.7
DW	(k/')	0.35
MDW	('k)	531.2
LLDF		0.564
M_{L+IM}	('k)	1828.7
Mu (Strength I)	('k)	6283
Øf Mn	('k)	7587
fs DC1	(ksi)	14.38
fs DC2	(ksi)	2.53
fs DW	(ksi)	4.22
fs (L+IM)	(ksi)	13.45
fs (Service II)	(ksi)	38.6
0.95Rh Fyf	(ksi)	47.5
fs (Total)(Strength I)	(ksi)	———
Øf Fn	(ksi)	———
Vf	(k)	28.25

INTERIOR GIRDER REACTION TABLE			
		Int. @ Abut.	Ext. @ Abut.
LLDF		0.7847	0.5493
OCF			1.0556
RDC1	(k)	54.8	52.3
RDC2	(k)	11.6	11.6
RDW	(k)	19.3	19.3
RL	(k)	79.4	55.6
R IM	(k)	17.0	11.9
RTotal	(k)	182.1	150.7

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

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

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(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.).

MDC1: 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.).

MDC2: 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.).

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

M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

Mu (Strength I): Factored design moment (kip-ft.).
1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 M_{L+IM}

Øf Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

fs DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
MDC1 / Snc

fs DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
MDC2 / Sc(3n).

fs DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
MDW / Sc(3n).

f_s (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
M_{L+IM} / Sc(n).

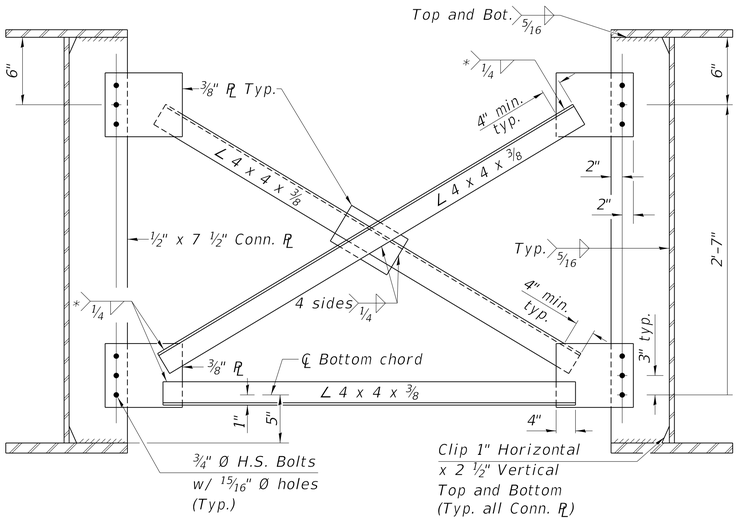
fs (Service II): Sum of stresses as computed below (ksi).
fsDC1 + fsDC2 + fsDW + 1.3 fs_{L+IM}

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

fs (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs_{L+IM}

Øf Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

Vf: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.



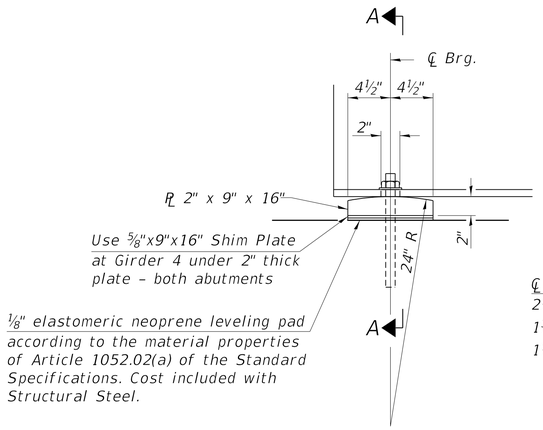
INTERIOR CROSS FRAME CF

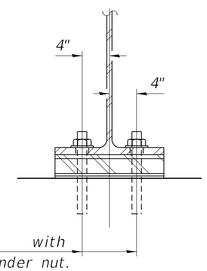
(No. Required = 24)

* Fillet weld angles along 3 sides of one face gusset plate

Notes:
Detail 15/16" Ø holes for all 3/4" Ø bolts.
Two hardened washers required for each set of oversized holes.
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
All structural steel in Cross Frames shall conform to the requirements of AASHTO M270, Grade 50W.

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. 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 structural steel bearing plates shall conform to the requirements of AASHTO M270 Grade 50W.
Two 1/8" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after members are in place.





℄ 1" Ø x 12" anchor bolts with 2 1/4"x 2 1/4"x 5/16" PL washer under nut.
1 3/8"x 2" slotted hole in flange.
1 1/2" Ø holes in bearing plate.

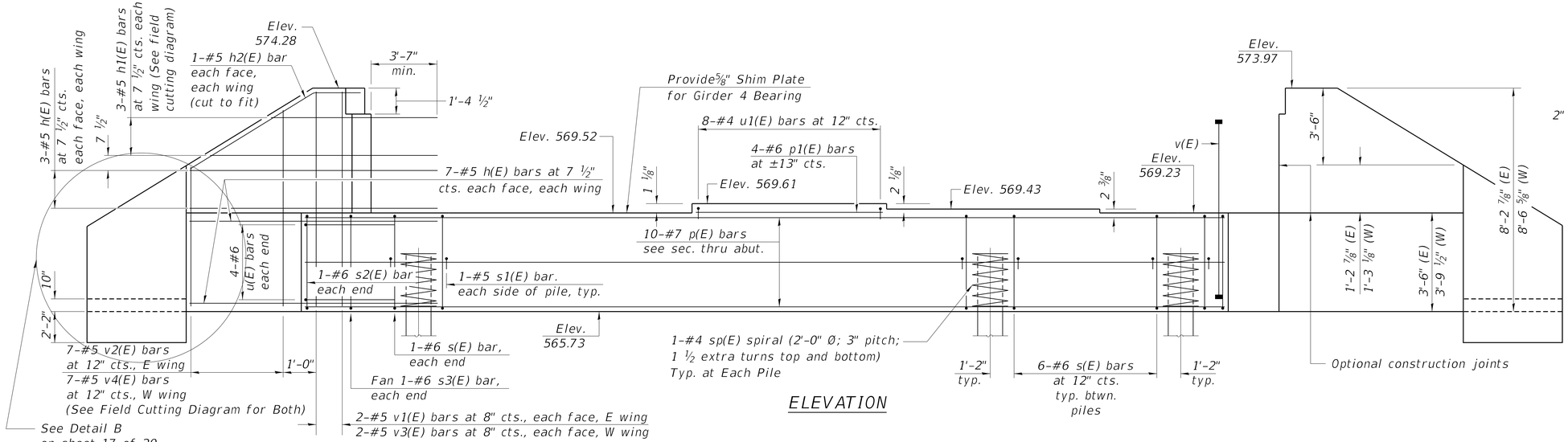
ELEVATION AT ABUTMENT

FIXED BEARING

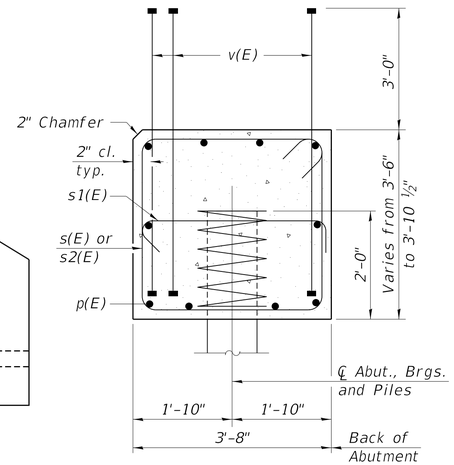
Notes:
Anchor bolts shall be according to Article 521.06 of the Standard Specifications.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Anchor Bolts, 1"	Each	20

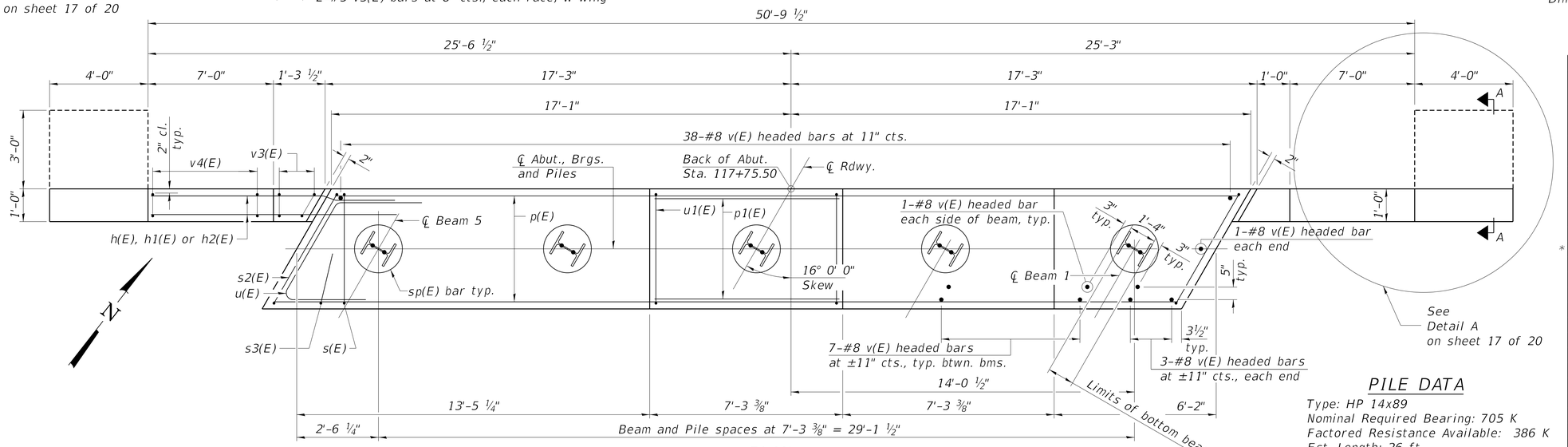


ELEVATION



SEC. THRU ABUT.

Dimensions at right angles to abutment.



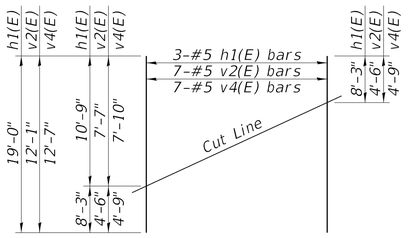
PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	40	#5	11'-9"	
h1(E)	6	#5	19'-0"	
h2(E)	4	#5	8'-8"	
h3(E)	28	#5	3'-9"	
p(E)	10	#7	33'-10"	
p1(E)	4	#6	7'-0"	
s(E)	26	#6	14'-4"	
s1(E)	10	#5	4'-4"	
s2(E)	2	#6	14'-7"	
s3(E)	2	#6	9'-0"	
* sp(E)	5	#4	2'-0"	
u(E)	8	#6	12'-0"	
u1(E)	8	#4	8'-2"	
v(E)	84	#8	6'-3"	
v1(E)	4	#5	8'-0"	
v2(E)	7	#5	12'-1"	
v3(E)	4	#5	8'-3"	
v4(E)	7	#5	12'-7"	
v5(E)	5	#5	6'-6"	
v6(E)	5	#5	6'-10"	
z(E)	10	#5	6'-3"	
Structure Excavation	Cu. Yd.		76	
Concrete Structures	Cu. Yd.		24.1	
Reinforcement Bars, Epoxy Coated	Pound		4570	
Furnishing Steel Piles, HP 14x89	Foot		104	
Driving Piles	Foot		104	
Test Pile, Steel HP 14x89	Each		1	

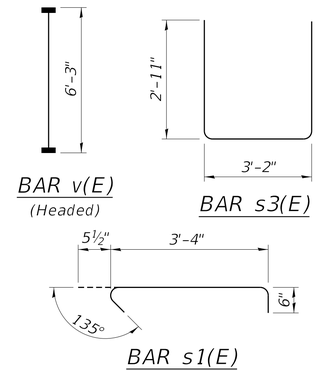
PILE DATA

Type: HP 14x89
Nominal Required Bearing: 705 K
Factored Resistance Available: 386 K
Est. Length: 26 ft
No. Production Piles: 4
No. Test Piles: 1



FIELD CUTTING DIAGRAM

Order h1(E), v2(E), and v4(E) full length. Cut as shown and use remainder of bars in opposite face.



Notes:

Pour steps monolithically with cap.

Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

For details of piles see sheet 18 of 20.

For section A-A and Anchor Bolt Layout, see sheet 17 of 20.

**Length provided is height of spiral.*

TERRA ENGINEERING LTD.

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STATE OF ILLINOIS
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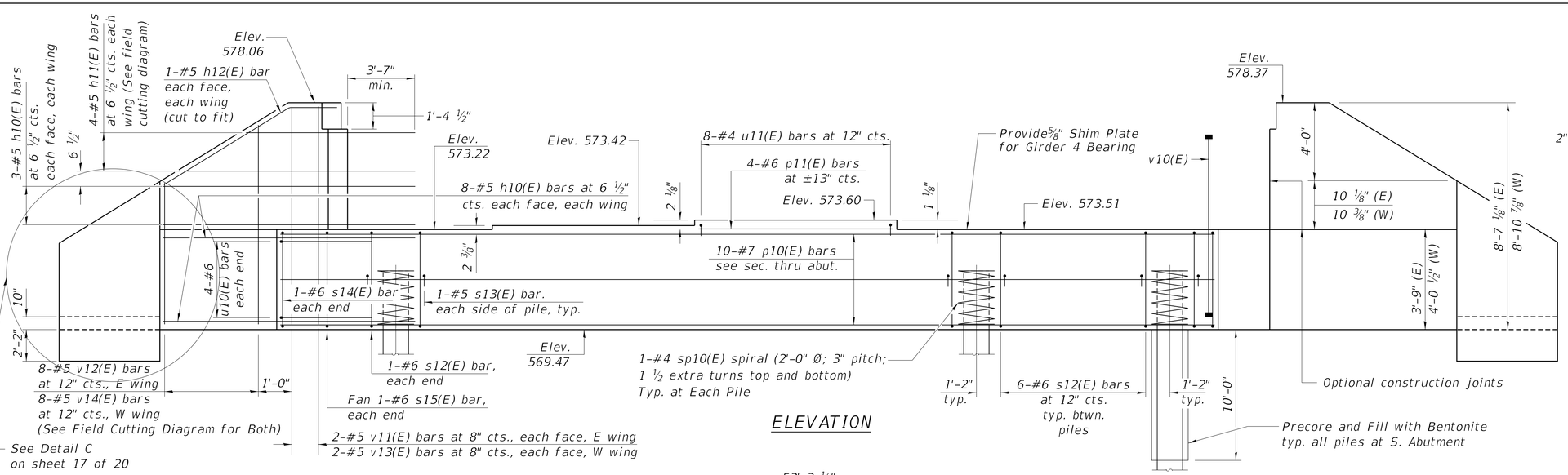
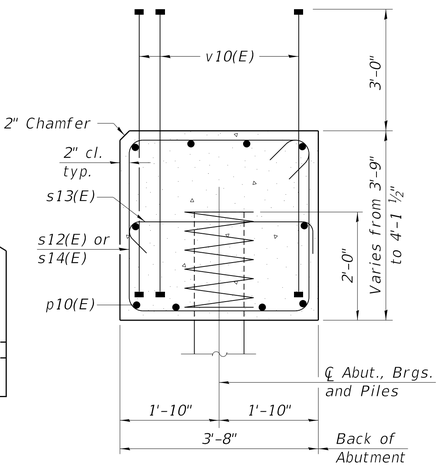
NORTH ABUTMENT
STRUCTURE NO. 072–3161
SHEET NO. 15 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	35
		CONTRACT NO. 89811		
		ILLINOIS FED. AID PROJECT		

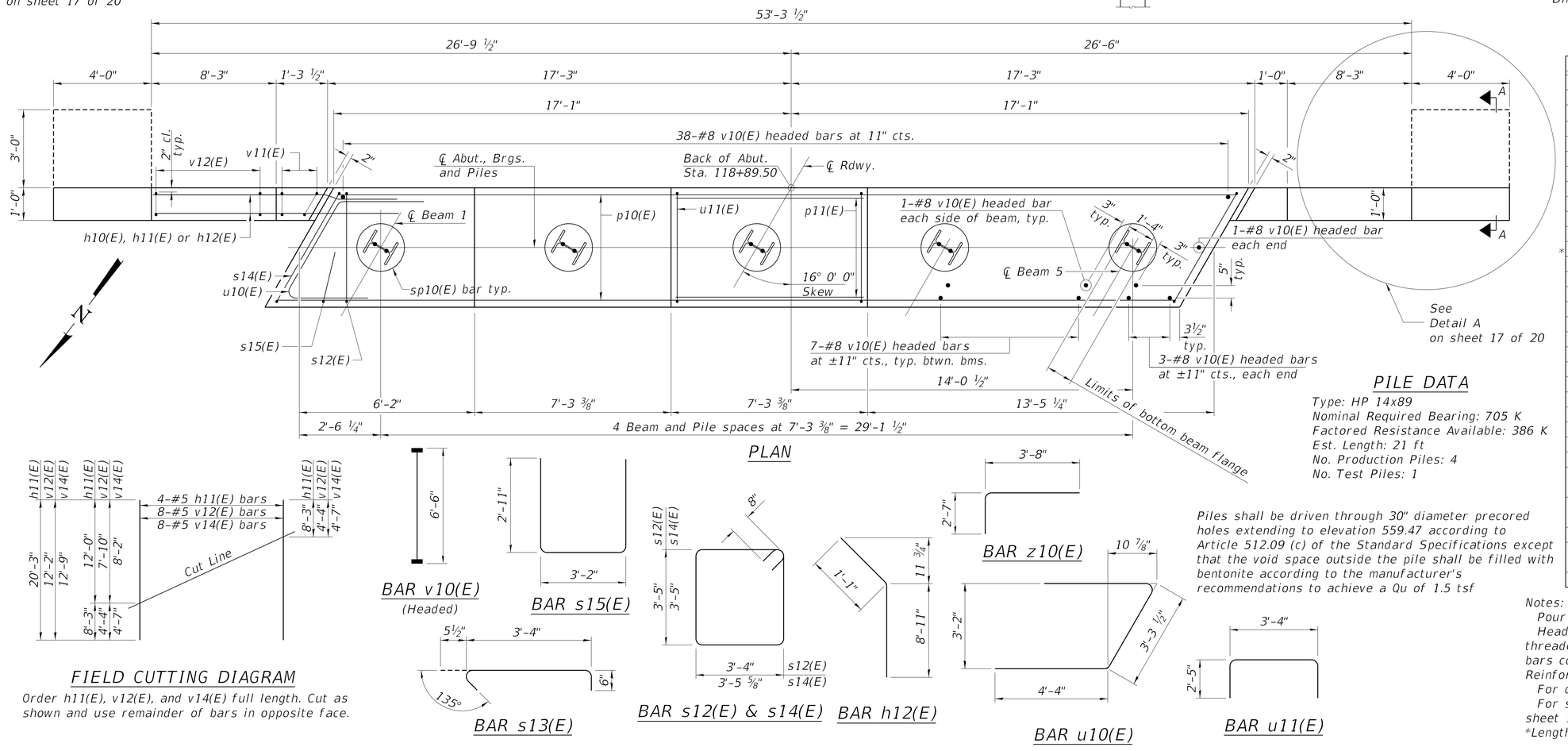


ELEVATION



SEC. THRU ABUT.

Dimensions at right angles to abutment.



PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h10(E)	44	#5	13'-0"	
h11(E)	8	#5	20'-3"	
h12(E)	4	#5	10'-0"	
h13(E)	28	#5	3'-9"	
p10(E)	10	#7	33'-10"	
p11(E)	4	#6	7'-0"	
s12(E)	26	#6	14'-10"	
s13(E)	10	#5	4'-4"	
s14(E)	2	#6	15'-1"	
s15(E)	2	#6	9'-0"	
*sp10(E)	5	#4	2'-0"	
u10(E)	8	#6	12'-0"	
u11(E)	8	#4	8'-2"	
v10(E)	84	#8	6'-6"	
v11(E)	4	#5	8'-3"	
v12(E)	8	#5	12'-2"	
v13(E)	4	#5	8'-7"	
v14(E)	8	#5	12'-9"	
v15(E)	5	#5	6'-5"	
v16(E)	5	#5	6'-8"	
z10(E)	10	#5	6'-3"	
Structure Excavation	Cu. Yd.		73	
Concrete Structures	Cu. Yd.		25.9	
Reinforcement Bars, Epoxy Coated	Pound		4840	
Furnishing Steel Piles, HP 14x89	Foot		84	
Driving Piles	Foot		84	
Test Pile, Steel HP 14x89	Each		1	
Precoring	Foot		50	

PILE DATA

Type: HP 14x89
Nominal Required Bearing: 705 K
Factored Resistance Available: 386 K
Est. Length: 21 ft
No. Production Piles: 4
No. Test Piles: 1

Piles shall be driven through 30" diameter precored holes extending to elevation 559.47 according to Article 512.09 (c) of the Standard Specifications except that the void space outside the pile shall be filled with bentonite according to the manufacturer's recommendations to achieve a Qu of 1.5 tsf

FIELD CUTTING DIAGRAM

Order h11(E), v12(E), and v14(E) full length. Cut as shown and use remainder of bars in opposite face.

Notes:

Pour steps monolithically with cap.

Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

For details of piles see sheet 18 of 20.

For section A-A and Anchor Bolt Layout, see sheet 17 of 20

**Length provided is height of spirals*

TERRA ENGINEERING LTD.

USER NAME = ColinC	DESIGNED - KF	REVISED -
	DRAWN - MS	REVISED -
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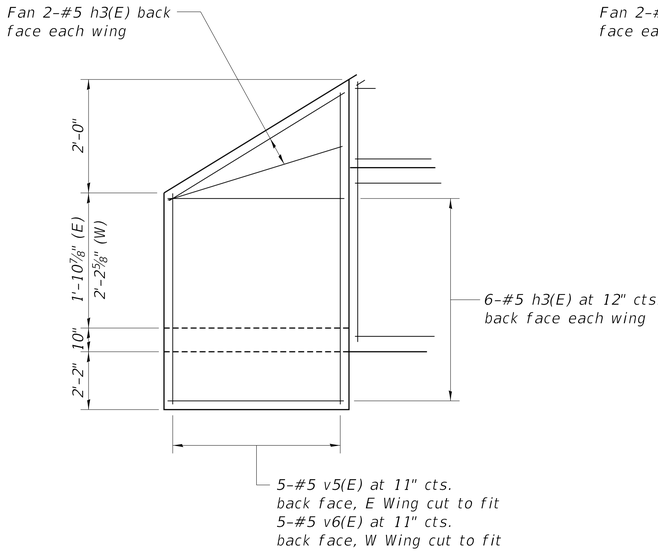
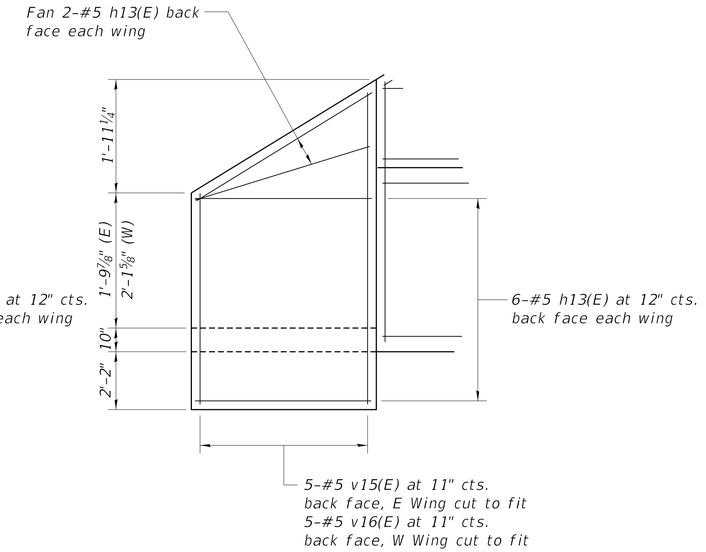
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT
STRUCTURE NO. 072-3161
SHEET NO. 16 OF 20 SHEETS

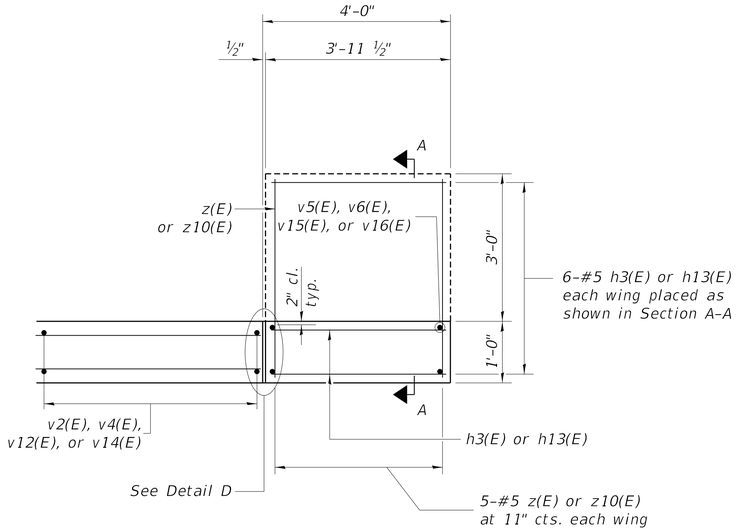
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	36
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			



DETAIL B



DETAIL C



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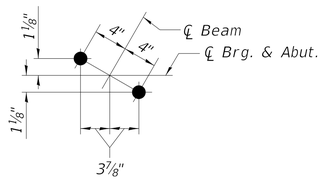
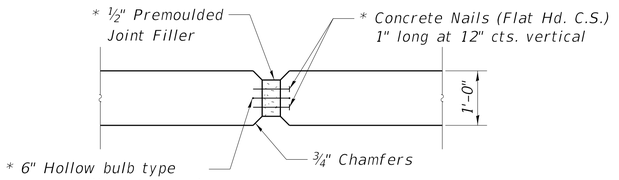
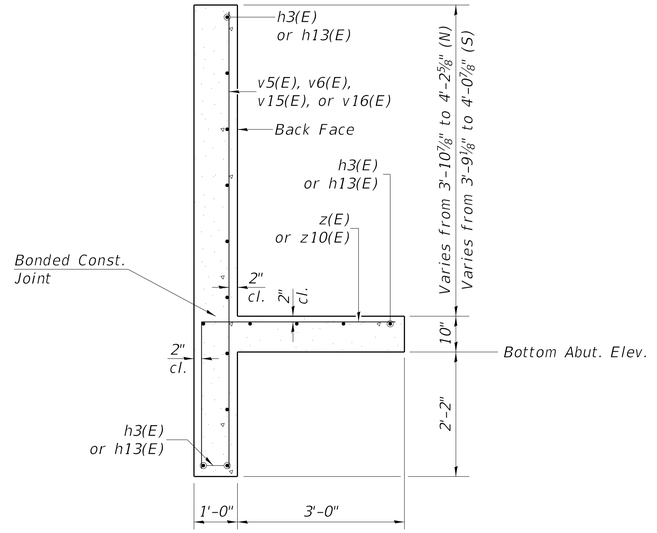


ANCHOR BOLT LAYOUT



DETAIL D

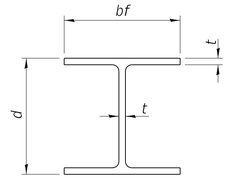
* Cost is included in Concrete Structures



SECTION A-A

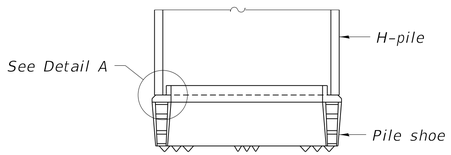
Locations of Section A-A are shown on sheets 15 and 16 of 20

TERRA ENGINEERING LTD.	USER NAME = ColinC	DESIGNED - KF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**ABUTMENT DETAILS**	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - MS	REVISED -		**STRUCTURE NO. 072-3161**	CH R23	17-00132-00-BR	PEORIA	46	37
	PLOT SCALE = 0.0833 ' / in.	CHECKED - DB	REVISED -		SHEET NO. 17 OF 20 SHEETS			CONTRACT NO. 89811		
	PLOT DATE = 9/1/2021 7:49:45 AM	DATE -	REVISED -					ILLINOIS FED. AID PROJECT		

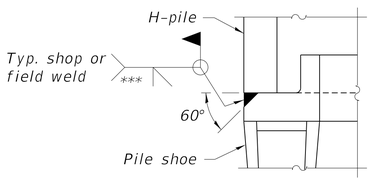


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	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"	11/16"	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"



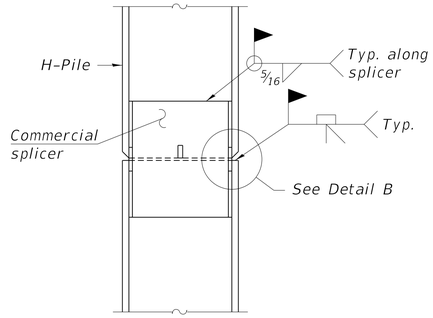
ELEVATION



DETAIL A

SHOE ATTACHMENT

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



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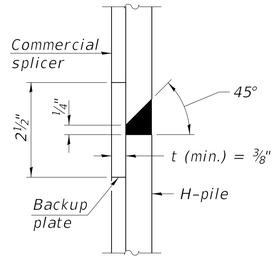
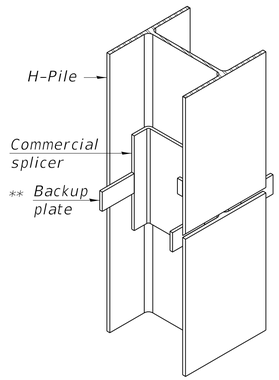
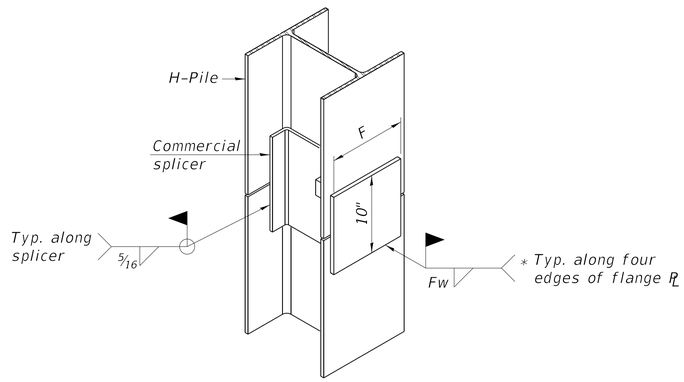


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



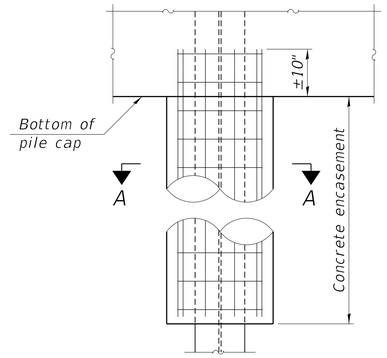
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



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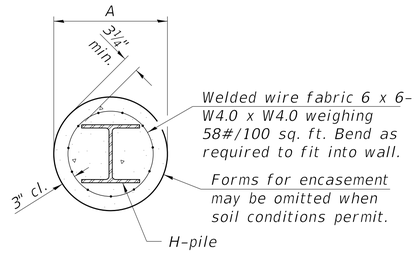
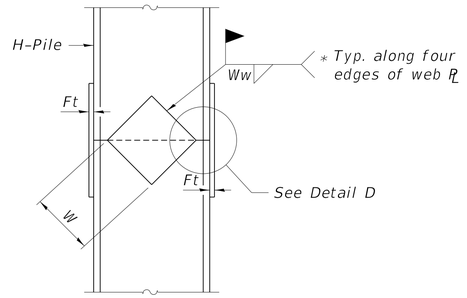


SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT

(when specified)



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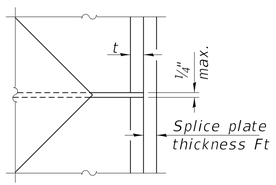
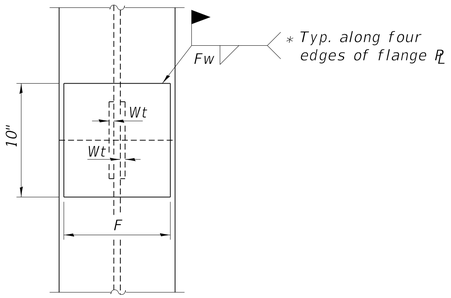


DETAIL D



END VIEW

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	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"

WELDED PLATE FIELD SPLICE

Illinois Department of Transportation
Division of Highways
Whitney & Associates

SOIL BORING LOG

Date 4/17/20

ROUTE _____ DESCRIPTION Dogtown Lane Over Kickapoo Creek LOGGED BY Krusemark

SECTION 17-00132-00-BR LOCATION Elmwood Township, SEC. 15, TWP. T9N, RNG. R5E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD Hollow Stem Auger HAMMER TYPE D-50 Auto Hammer

STRUCT. NO. 072-3161
Station _____

BORING NO. B-01
Station 117+59
Offset 6.0 ft _ Left
Ground Surface Elev. 572.15 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 551.7 ft ▼
Upon Completion None ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
571.48				BITUMINOUS CONCRETE (8.0")
570.85				Brown SAND and GRAVEL (16.0")
	1			Medium, Dark Gray and Gray-Brown SILTY CLAY LOAM With Some Fine Gravel (Fill)
	2 2	0.9 B	18	
568.15	DD = 102 PCF			
-5	2			Stiff, Light Brown, Gray and Gray-Brown SILTY CLAY LOAM (Fill)
	3 3	1.1 B	24	
565.15	DD = 98 PCF			
	3			Stiff, Dark Brown SILTY CLAY LOAM With Trace of Organic Matter (Possible Fill)
	4 3	1.7 B	27	
	DD = 92 PCF			
-10	2			
	3 4	1.4 B	30	
560.15	DD = 89 PCF			
	1			Medium, Dark Brown SILTY CLAY LOAM With Trace of Organic Matter
	1 2	0.6 B	35	
557.65	DD = 84 PCF			
-15	1			Soft, Dark Brown SILTY CLAY LOAM With Trace of Organic Matter
	2 1	0.4 B	37	
555.15	DD = 80 PCF			
	8			Very Stiff, Gray CLAY SHALE
	14 19	4.0 P	13	
552.65				
-20				Hard, Gray SHALE

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
▼	18			Hard, Gray SHALE *(continued)*
	16 20	4.5 P	8	
	81/6"	4.5 P	10	
-25				
	92/6"	4.5 P	12	
	101/6"	4.5 P	9	
-30				
	101/6"	4.5 P	10	
-35				
	103/5"	4.5 P	9	
-40				

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, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Whitney & Associates

SOIL BORING LOG

Date 4/17/20

ROUTE _____ DESCRIPTION Dogtown Lane Over Kickapoo Creek LOGGED BY Krusemark

SECTION 17-00132-00-BR LOCATION Elmwood Township, SEC. 15, TWP. T9N, RNG. R5E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD Hollow Stem Auger HAMMER TYPE D-50 Auto Hammer

STRUCT. NO. 072-3161
Station _____

BORING NO. B-01
Station 117+59
Offset 6.0 ft _ Left
Ground Surface Elev. 572.15 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 551.7 ft ▼
Upon Completion None ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
531.15	98/4	4.5 P	9	Hard, Gray SHALE *(continued)*
				End of Boring
-45				
-50				
-55				
-60				

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, form 137 (Rev. 8-99)

TERRA ENGINEERING LTD.

USER NAME = ColinC	DESIGNED - KF	REVISED -	
	DRAWN - MS	REVISED -	
PLOT SCALE = 0.0833 ' / in.	CHECKED - DB	REVISED -	
PLOT DATE = 9/1/2021 7:49:54 AM	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 072-3161
SHEET NO. 19 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	39
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
Whitney & Associates

SOIL BORING LOG

Date 4/17/20

ROUTE _____ DESCRIPTION Dogtown Lane Over Kickapoo Creek LOGGED BY Krusemark

SECTION 17-00132-00-BR LOCATION Elmwood Township, SEC. 15, TWP. T9N, RNG. R5E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD Hollow Stem Auger HAMMER TYPE D-50 Auto Hammer

STRUCT. NO. 072-3161
Station _____

BORING NO. B-02
Station 119+03
Offset 7' Right
Ground Surface Elev. 578.06 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter None ft
Upon Completion None ft
After - Hrs. None ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
OIL AND CHIPS AND BITUMINOUS CONCRETE (20.0")			
576.39			
Very Stiff, Light Brown and Gray SILTY CLAY LOAM	3		
	4 7	2.4 B	17
	DD = 104 PCF		
573.56			
-5 Hard, Light Brown and Gray CLAY SHALE	17		
	19 30	4.7 B	13
	DD = 118 PCF		
571.06			
Hard, Light Brown and Gray SHALE	10		
	21 29	4.5 P	13
568.56			
-10 Very Stiff, Light Brown and Gray SHALE	4		
	8 10	4.0 P	15
566.06			
Hard, Light Brown and Gray SHALE	10		
	27 31	4.5 P	10
564.06			
Very Dense, Brown, Fine-Grained SILTY SAND			
-15	15		
	28 38	4.5 P	10
561.06			
Hard, Gray SHALE			
	91/4"	4.5 P	9
-20			
Hard, Gray SHALE *(continued)*			
	97/4"	4.5 P	7
	98/4"	4.5 P	8
-25			
	98/4"	4.5 P	8
	106/5"	4.5 P	9
-30			
	101/5"	4.5 P	9
-35			
	98/5"	4.5 P	8
-40			

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, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Whitney & Associates

SOIL BORING LOG

Date 4/17/20

ROUTE _____ DESCRIPTION Dogtown Lane Over Kickapoo Creek LOGGED BY Krusemark

SECTION 17-00132-00-BR LOCATION Elmwood Township, SEC. 15, TWP. T9N, RNG. R5E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD Hollow Stem Auger HAMMER TYPE D-50 Auto Hammer

STRUCT. NO. 072-3161
Station _____

BORING NO. B-02
Station 119+03
Offset 7' Right
Ground Surface Elev. 578.06 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter None ft
Upon Completion None ft
After - Hrs. None ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, Gray SHALE *(continued)*			
537.06	92/4"	4.5 P	8
End of Boring			
-45			
-50			
-55			
-60			

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, form 137 (Rev. 8-99)

TERRA ENGINEERING LTD.

USER NAME = ColinC	DESIGNED - KF	REVISED -	
	DRAWN - MS	REVISED -	
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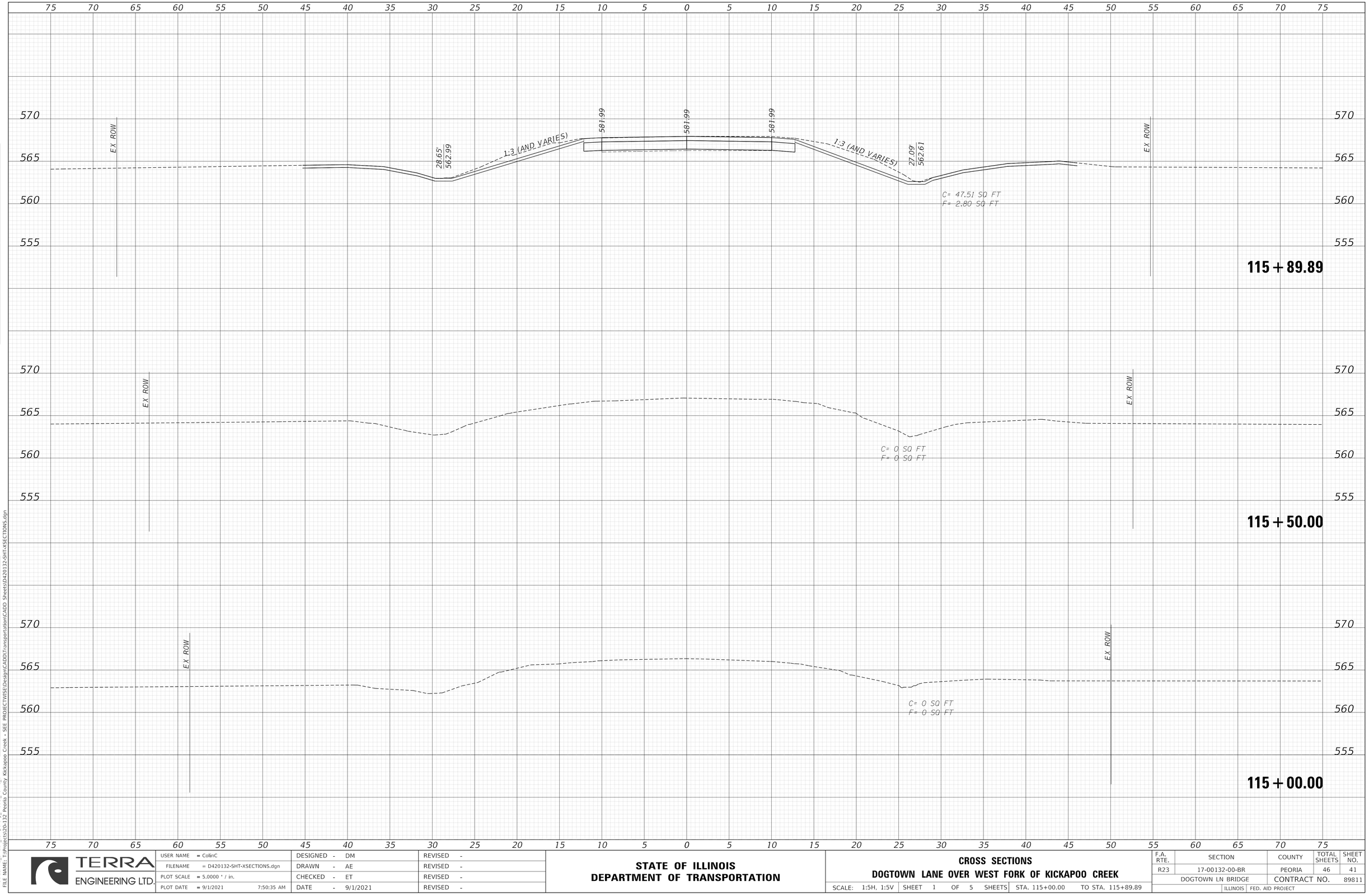
PLOT DATE = 9/1/2021 7:50:14 AM	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 072-3161
SHEET NO. 20 OF 20 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH R23	17-00132-00-BR	PEORIA	46	40
		CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			



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

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

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TERRA ENGINEERING LTD.

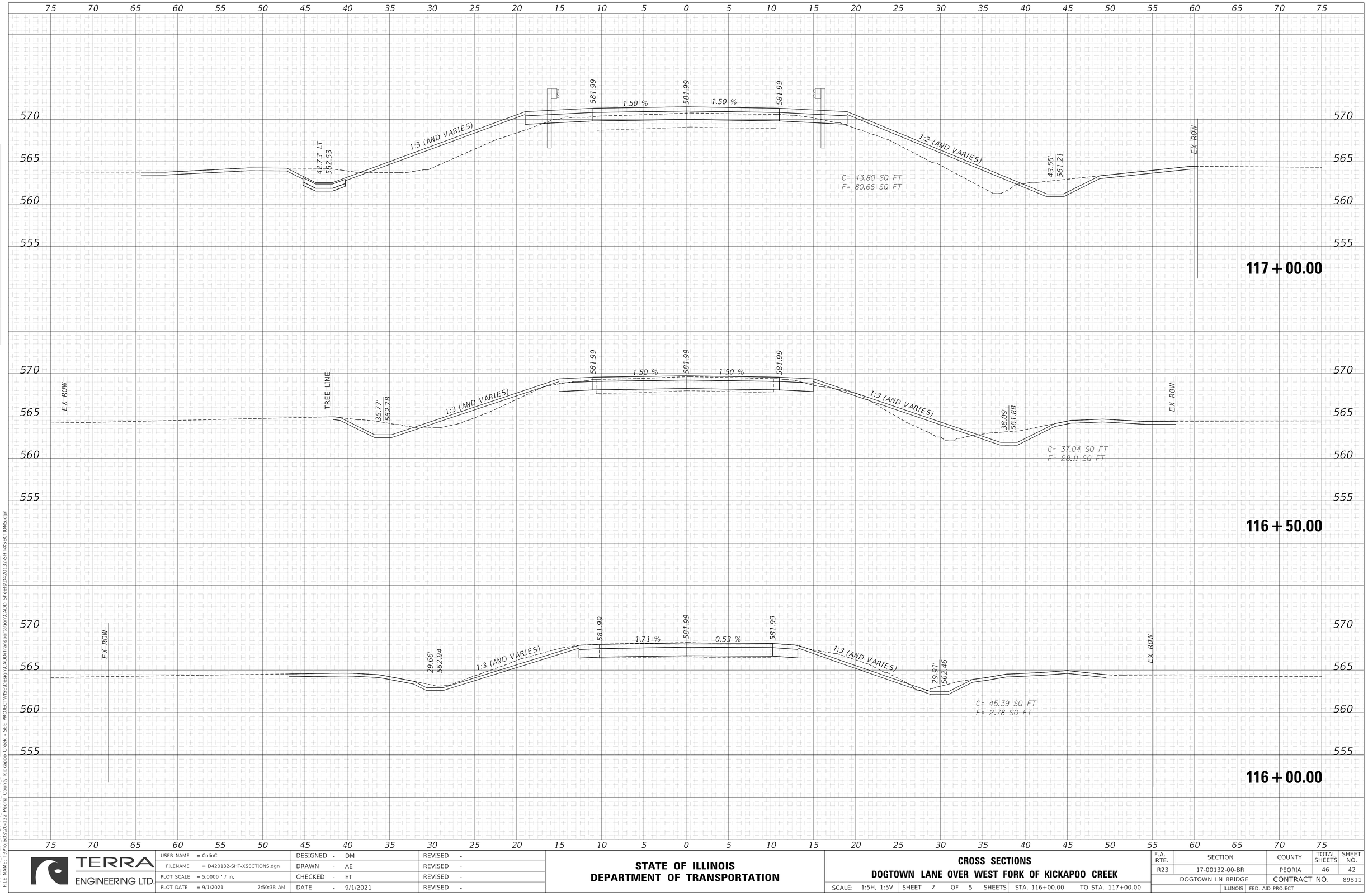
USER NAME = ColinC		DESIGNED - DM		REVISED -	
FILENAME = D420132-SHT-XSECTIONS.dgn		DRAWN - AE		REVISED -	
PLOT SCALE = 5.0000 ' / in.		CHECKED - ET		REVISED -	
PLOT DATE = 9/1/2021	7:50:35 AM	DATE - 9/1/2021		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1:5H, 1:5V | SHEET 1 OF 5 SHEETS | STA. 115+00.00 | TO STA. 115+89.89

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	41
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

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TERRA ENGINEERING LTD.

USER NAME	= ColinC	DESIGNED	- DM	REVISED	-
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PLOT DATE	= 9/1/2021 7:50:38 AM	DATE	- 9/1/2021	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1:5H, 1:5V | SHEET 2 OF 5 SHEETS | STA. 116+00.00 | TO STA. 117+00.00

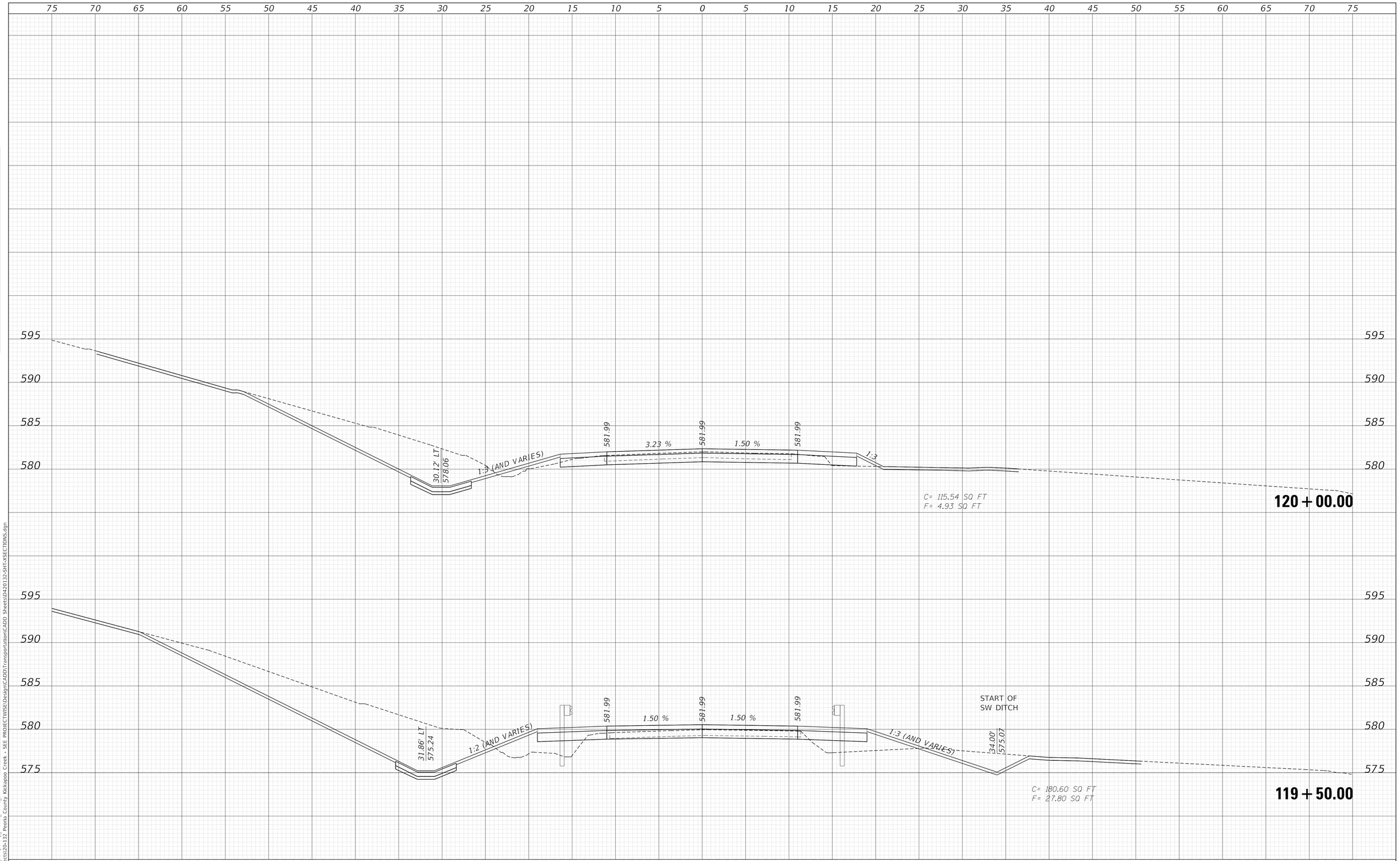
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	42
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



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TERRA ENGINEERING LTD.

USER NAME	= ColinC	DESIGNED	- DM	REVISED	-
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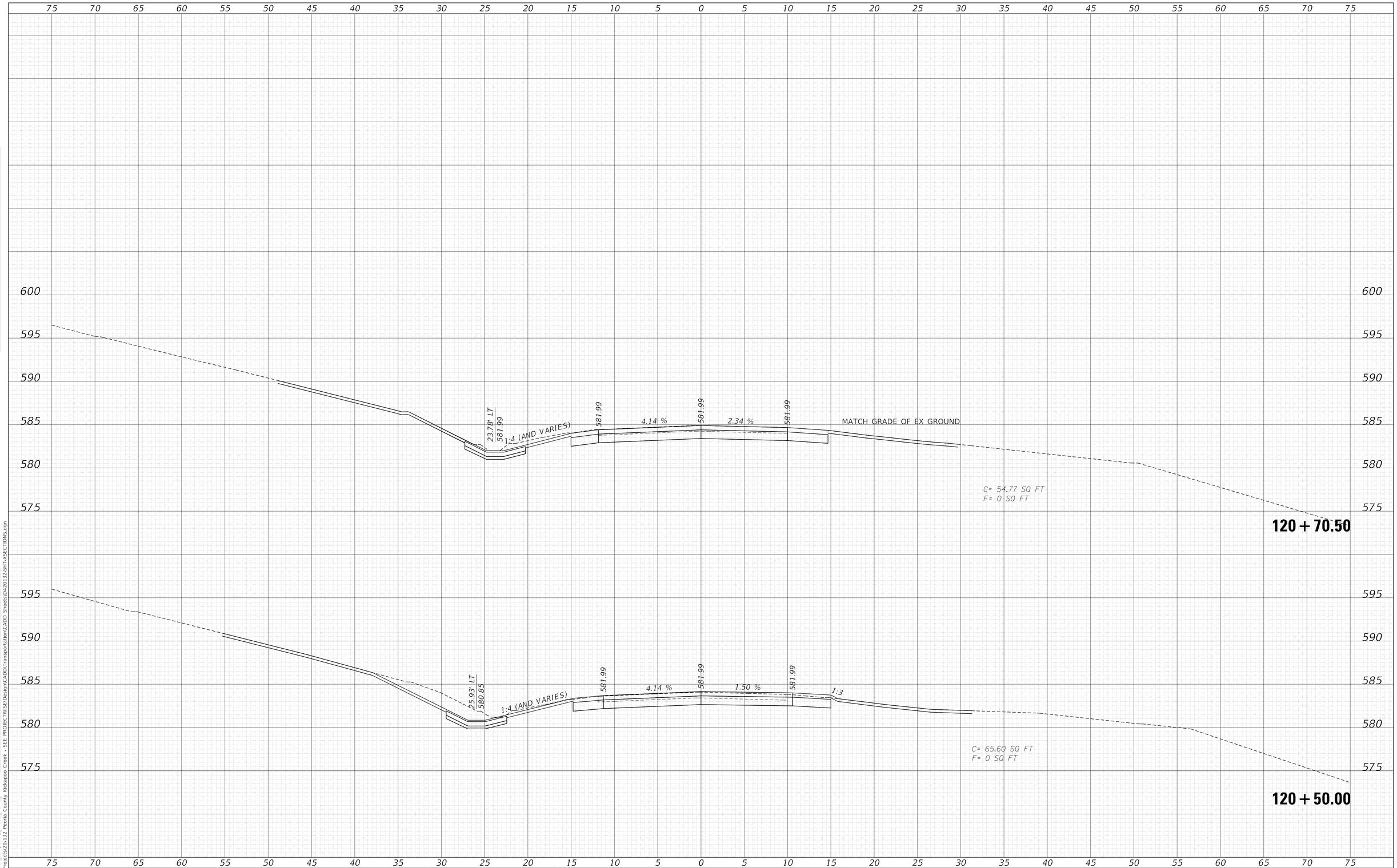
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1:5H, 1:5V | SHEET 3 OF 5 SHEETS | STA. 119+50.00 TO STA. 120+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	43
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS FED. AID PROJECT			



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PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
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TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

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TERRA ENGINEERING LTD.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1:5H, 1:5V | SHEET 4 OF 5 SHEETS | STA. 120+50.00 TO STA. 120+70.50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	44
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS FED. AID PROJECT			

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

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
DOGTOWN LANE OVER WEST FORK OF KICKAPOO CREEK

SCALE: 1:5H, 1:5V | SHEET 5 OF 5 SHEETS | STA. 121+00.00 | TO STA. 121+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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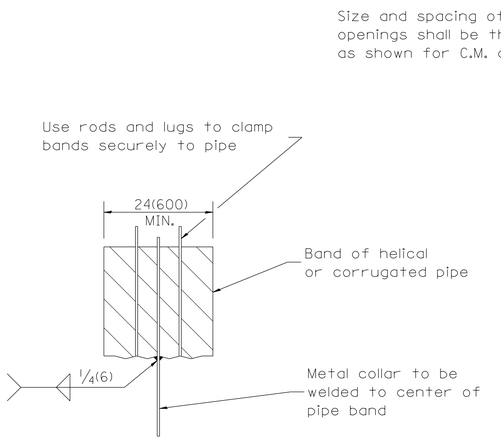
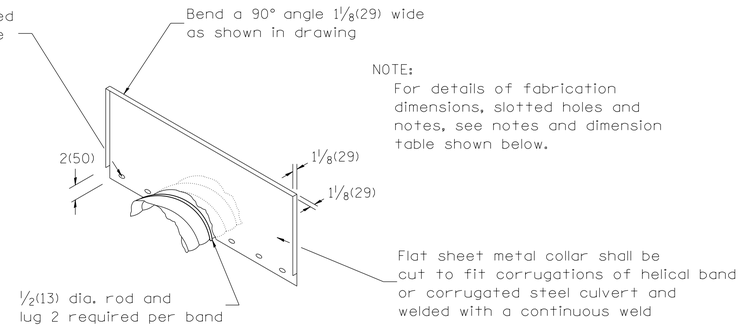
	DOGTOWN LN BRIDGE	CONTRACT NO. 89811		
	ILLINOIS FED. AID PROJECT			



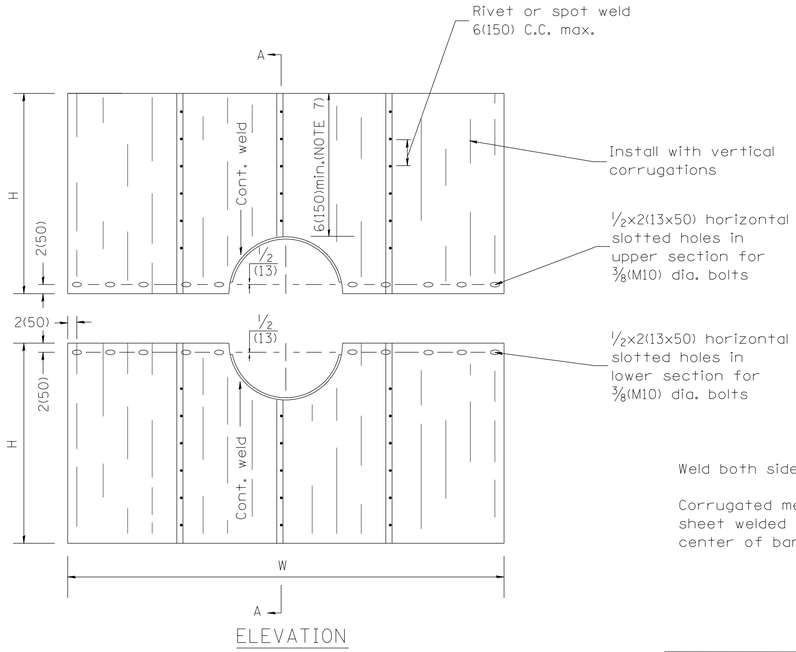
PARTIAL ELEVATION



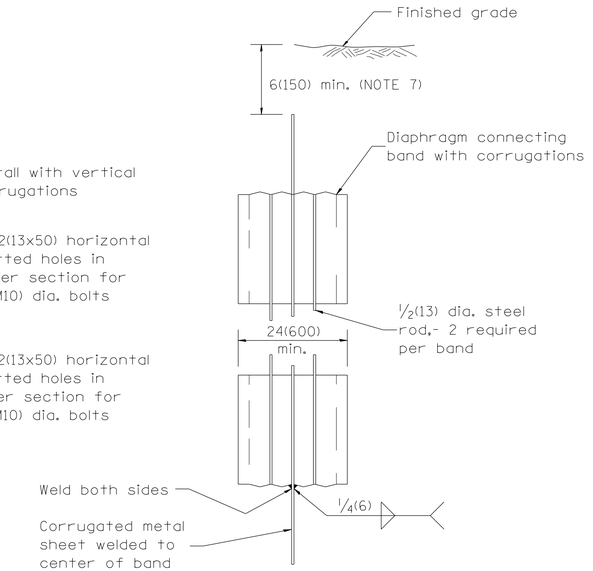
ISOMETRIC VIEW

NOTE:
For details of fabrication dimensions, slotted holes and notes, see notes and dimension table shown below.

DETAILS OF CORRUGATED PIPE COLLAR



ELEVATION



SECTION A-A

DETAILS OF SEEPAGE COLLAR

SEEPAGE COLLAR SPACING
Less than 24(600) pipe: 100' (30m) spacing or midpoint
Equal to or greater than 24(600) pipe: 80' (24m) spacing or midpoint

NOTES FOR COLLARS:

1. Materials and coatings for all collars shall be the same as that specified for the pipe, except that bituminous coated steel or aluminum collars may be used with PVC pipe.
2. Collars shall be shop fabricated, assembled and marked by painting to identify matching half sections of each collar.
3. The laps between the half sections and between the pipe and connecting bands shall be caulked with fiberized asphalt mastic at the time of installation.
4. All tank lugs, rods, and nuts shall be galvanized steel. Where aluminum collars are used, The rods and lugs shall be separated from the aluminum bands. By at least two (2) layers of 2(50) wide plastic tape with a total thickness of 2 1/4 mils or more.
5. The collars shall be welded to the connecting bands as shown on the drawings, all welds shall be treated as specified for class I, II, and III welds, miscellaneous. (Refer to AWS Standard Specifications)
6. Bands shall be fabricated from material having the same class of corrugations as the pipe to which it is to be attached.
7. Upper half of sheet may be cut shorter to provide 6(150) min. earth cover.

SEEPAGE COLLAR DIMENSION TABLE

PIPE DIAMETER	NOMINAL COLLAR SIZE	FABRICATIONS DIMENSIONS	
		W(WIDTH)	H(HEIGHT)
12(300) 15(375), 18(450) 21(525), 24(600)	8'x6' (2.4m x 1.8m)	8'-0" (2.44m)	38(966)
27(675) 30(750)	8'x7' (2.4m x 2.1m)	8'-0" (2.44m)	3'-8" (1.12m)
36(900), 42(1050) 48(1200)	10'x7' (3.0m x 2.1m)	10'-0" (3.05m)	3'-8" (1.12m)

Collar dimensions shown may be increased to allow fabrication from standard size sheets.

DESIGNER NOTES:
1. USE WITH DISTRICT CADD STANDARD: "SLOPE DRAIN FOR BURIED PIPES"
2. ADD DISTRICT SPECIAL PROVISION.

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. J-10.02, NEW REVISION BOX, REVISED	T.P.	
	TITLE BOX, REVISED DESIGNER NOTES		
10-16-06	REVISED TO 2007 SPEC.	M.A.	
7-15-15	REVISED NOTE 1 FOR PVC PIPE	R.D.	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS OF SEEPAGE COLLARS FOR BURIED PIPES

NOT TO SCALE — CADD STD. 601401-D4

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

MODEL: Default
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARD DETAIL
DETAILS OF SEEPAGE COLLARS FOR BURIED PIPES

SCALE: NTS | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R23	17-00132-00-BR	PEORIA	46	46
	DOGTOWN LN BRIDGE	CONTRACT NO.		89811
	ILLINOIS	FED. AID PROJECT		