

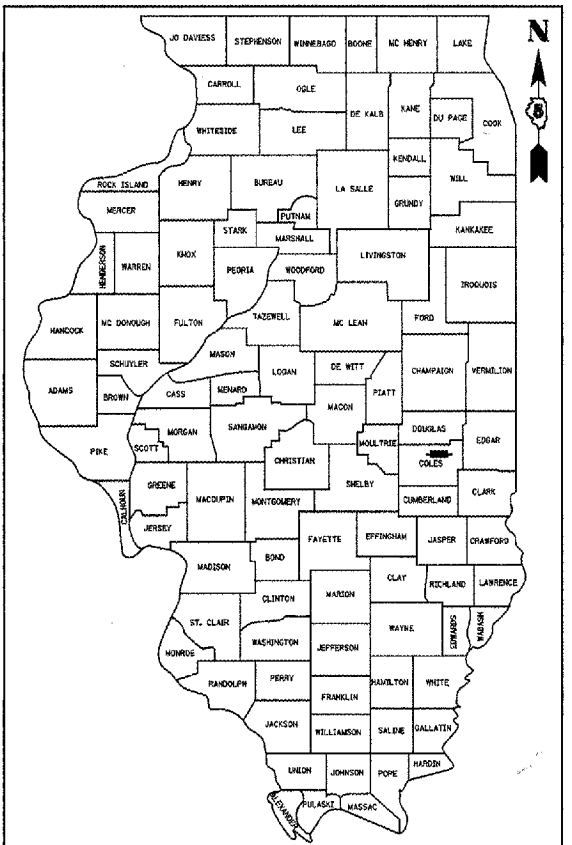
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	1

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

F.A.P. ROUTE 749 (IL. ROUTE 133)
SECTION (122BR)BR
PROJ. NO. ACBRF 0749 (020)
BRIDGE REPLACEMENT
COLES COUNTY
C-97-039-06

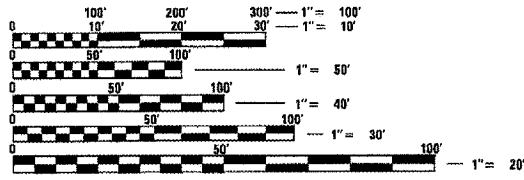
FOR INDEX OF SHEETS, SEE SHEET NO. 2

D95-013-03



LOCATION OF SECTION INDICATED THUS: -

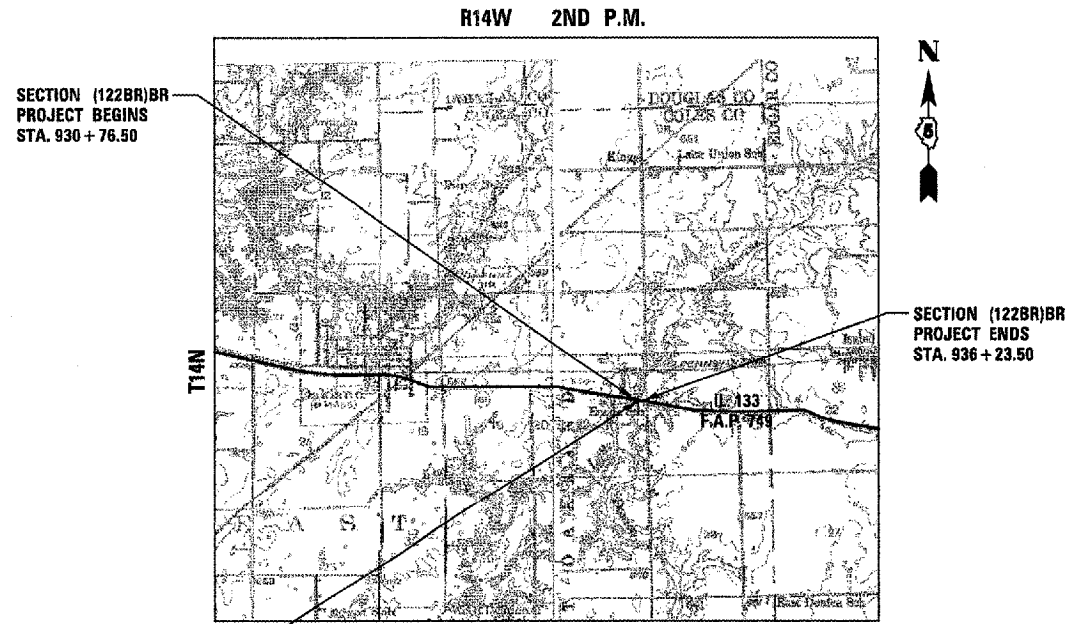
PROJECT ENGINEER: KENSIL GARNETT (217) 465-4181
CONSULTANT LIAISON: NANCY FASIG



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

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

CONTRACT NO. 74146



EXISTING S.N. 015-0031
PROPOSED S.N. 015-0074
STA. 933+50.00
247'-0" BK. TO BK. ABUT.
35'-2" OUT TO OUT
0° SKEW

LOCATION MAP
GROSS LENGTH OF PROJECT = 547 FEET = 0.104 MILES
NET LENGTH OF PROJECT = 547 FEET = 0.104 MILES
ADT = 1600 (2004)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED *June 20 06*
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 13, 2006
Mike Hine
ENGINEER OF DESIGN AND ENVIRONMENT
October 13, 2006
Milton R. Sees P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS
BLANK, WESSELINK, COOK & ASSOCIATES
ENGINEERS - CONSULTANTS
DECATUR, ILLINOIS



Charles W. Guthrie, Jr.
CHARLES W. GUTHRIE, JR., P.E.
DATE *July 20 20 06*
EXPIRES NOVEMBER 30, 2007

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

HIGHWAY STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
001001	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
420001-06	PAVEMENT JOINTS
420401-05	BRIDGE APPROACH PAVEMENT
421001-01	BAR REINFORCEMENT FOR CRC PAVEMENT
482011-01	BIT. SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-02	NAME PLATE FOR BRIDGES
542401	METAL END SECTION FOR PIPE CULVERTS
609001-02	BRIDGE APPROACH SHOULDER PAVEMENT AND DRAIN
630001-06	STEEL PLATE BEAM GUARDRAIL
630301-03	SHOULDER WIDENING FOR TYPE 1 GUARDRAIL TERMINALS
631031-05	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
667101	PERMANENT SURVEY MARKERS
701006-02	OFF-ROAD OPERATIONS 2L, 2W 4.5(15') TO 600mm(24") FROM PAVEMENT EDGE
701011-01	OFF-ROAD MOVING OPERATIONS 2L, 2W DAY ONLY
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-02	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701321-08	LANE CLOSURE 2L, 2W BRIDGE REPAIR WITH BARRIER
702001-06	TRAFFIC CONTROL DEVICES
704001-02	TEMPORARY CONCRETE BARRIER
780001-01	TYPICAL PAVEMENT MARKINGS
781001-02	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUT FOR DETECTION LOOPS

INDEX OF SHEETS

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

HIGHWAY STANDARDS AND INDEX OF SHEETS

DATE 01/06
DRAWN BY MLD
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PLOT DATE = 7/24/2006
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PLOT SCALE = 28.000 / IN.
USER NAME = jhicks

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

- G.N.100
ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.
- G.N.105.09A
ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN DATUM OF 1988 (NAVD 88).
- G.N.107.31
UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED (QUALITY LEVEL C &/OR QUALITY LEVEL D) AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800) 892-0123.
- G.N.201
TREES THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER. ANY TREE DUE TO ITS LOCATION AND DEEMED SUITABLE FOR SAVING BY THE ENGINEER SHALL BE PROTECTED DURING CLEARING AND SUBSEQUENT CONSTRUCTION OPERATIONS.
- G.N. 250C
SEEDING, CLASS 7 AND MULCH, METHOD 2 IS INCLUDED IN THIS CONTRACT TO SEED NEW EARTH SHOULDERS DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE CLASS 7 SEEDING AND MULCH WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH SHOULDERS AT THE TIME OF THEIR COMPLETION.
- G.N. 406
THE QUANTITIES INCLUDED IN THE PLANS FOR BITUMINOUS CONCRETE RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE BITUMINOUS MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.
- G.N. 406D
ALL LEVELING BINDER OR BINDER SHALL BE GIVEN A FOG COAT OF PRIME BEFORE THE SURFACE COURSE IS PLACED WHEN DIRECTED BY THE ENGINEER.

THE FOG COAT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER GALLON FOR BITUMINOUS MATERIAL (PRIME COAT) AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- G.N. 406F
THIS JOB INCLUDED LEVELING BINDER OF 1-1/4 INCHES OR GREATER THICKNESS. LOCATIONS OF LEVELING BINDER EQUAL TO OR GREATER THAN 1-1/4 INCHES IN THICKNESS ARE SHOWN ON THE TYPICAL SECTIONS. THE THICKNESS LISTED MAY NOT BE ALL INCLUSIVE DUE TO CONSTRUCTION VARIATIONS, VARIATIONS BETWEEN PLOTTED CROSS-SECTIONS, OR OTHER REASONS. ALL APPLICABLE REQUIREMENTS OF SECTION 406 OF THE STANDARD SPECIFICATIONS WILL BE ENFORCED FOR ALL LEVELING BINDER CONSTRUCTED 1-1/4 INCHES OR THICKER.
- G.N. 406H
THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

LOCATION(S):	MAINLINE PAVEMENT
MIXTURE USE(S):	SURFACE COURSE, LEVELING BINDER
AC/PG:	PG 64-22
RAP %: (MAX)	15%
DESIGN AIR VOIDS:	4.0% @ NDES = 50
MIX COMP: (GRADATION)	IL 9.5
FRICTION AGGREGATE:	MIX "C"

LOCATION(S):	MAINLINE SHOULDERS
MIXTURE USE(S):	BITUMINOUS BASE COURSE OPTION & FLEXIBLE CONNECTOR
AC/PG:	PG 64-22
RAP %: (MAX)	25%
DESIGN AIR VOIDS:	4.0% @ NDES = 50
MIX COMP: (GRADATION)	IL 19.0
FRICTION AGGREGATE:	N/A

- G.N. 609
PRIOR TO ROUTING TRAFFIC ONTO THE SHOULDERS AS SHOWN IN THE STAGING PLANS, THE CONTRACTOR SHALL SECURE THE GRATINGS ON SHOULDER INLETS AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR ACCORDING TO ARTICLE 109.04.
- G.N. 631
IF THE CONTRACTOR ELECTS TO USE THE ALTERNATE MOUNTING METHOD OF THRU DRILLING THE MOUNTING HOLES FOR THE TRAFFIC BARRIER TERMINALS, TYPE 6, THE HOLES SHALL BE DRILLED USING A CORE DRILL. A HAMMER DRILL WILL NOT BE ALLOWED.
- G.N. 703A
SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (PRIME COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE, SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).
- G.N. 781
RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH STANDARD 781001, AND THE DETAILS SHOWN IN THE PLANS. IF THERE IS ANY DISCREPENCY BETWEEN THE STANDARD AND THE DETAILS IN THE PLANS, THE DETAILS IN THE PLANS SHALL GOVERN. THE FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING THE RAISED REFLECTIVE PAVEMENT MARKERS AND THE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED MIDWAY IN THE 30 FOOT (9 m) SPACE BETWEEN THE DASHED CENTERLINE STRIPES (WHEN APPLICABLE).
- G.N. Z003B
AN ALUMINUM TABLET OF THE TYPE SHOWN ON STANDARD 667101 SHALL BE PLACED ON THE PROPOSED STRUCTURE AS DIRECTED BY THE ENGINEER. THE BENCH MARK ELEVATION WILL BE ESTABLISHED AND MARKED BY THE DEPARTMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR PERMANENT BENCH MARKS.
- UPON COMPLETION OF WORK, THE TEMPORARY EASEMENT FOR CONTRACTOR'S ACCESS SHALL BE GRADED TO MEET THE REQUIREMENTS OF SECTION 212. THE AREA SHALL BE PREPARED, FERTILIZED, AND SEEDDED IN ACCORDANCE WITH SECTION 250. THE AREA SHALL BE MULCHED IN ACCORDANCE WITH SECTION 251. THE AREA SHALL BE TEMPORARILY SEEDDED IN ACCORDANCE WITH SECTION 280 AS REQUIRED.
- THERE ARE NO COMMITMENTS FOR THIS PROJECT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

DATE 1/06
DRAWN BY MLO
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PLOT DATE = 7/24/2006
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PAY CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY HBBRP TWO-LANE RURAL ROADWAY 80% FEDERAL 20% STATE X081-2A
2010010	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	498
2010020	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	229
2020010	EARTH EXCAVATION	CU YD	125
2030010	CHANNEL EXCAVATION	CU YD	1429
2040080	FURNISHED EXCAVATION	CU YD	12
2070040	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	163
2500020	SEEDING, CLASS 2	ACRE	1
2500035	SEEDING, CLASS 7	ACRE	1
2500040	NITROGEN FERTILIZER NUTRIENT	POUND	90
2500050	PHOSPHORUS FERTILIZER NUTRIENT	POUND	90
2500060	POTASSIUM FERTILIZER NUTRIENT	POUND	90
2510015	MULCH, METHOD 2	ACRE	1
2800025	TEMPORARY EROSION CONTROL SEEDING	POUND	100
2800030	TEMPORARY DITCH CHECKS	EACH	2
2800040	PERIMETER EROSION BARRIER	FOOT	422
2810010	STONE RIPRAP, CLASS A4	SO YD	1911
2820020	FILTER FABRIC	SO YD	1911
4060010	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	132
4060030	AGGREGATE (PRIME COAT)	TON	4
4060098	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SO YD	192
4060099	TEMPORARY RAMP	SO YD	135
4200165	BRIDGE APPROACH PAVEMENT	SO YD	222
4200130	PROTECTIVE COAT	SO YD	228
4200143	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SO YD	44
4400010	PAVEMENT REMOVAL	SO YD	222
4400070	APPROACH SLAB REMOVAL	SO YD	126
4400143	BITUMINOUS SHOULDER REMOVAL	SO YD	64
4810200	AGGREGATE SHOULDERS, TYPE B	TON	84
5010010	REMOVAL OF EXISTING STRUCTURES	EACH	1
5010521	REMOVE EXISTING CULVERTS	FOOT	136
5020010	STRUCTURE EXCAVATION	CU YD	374
5030010	FLOOR DRAINS	EACH	30
50300225	CONCRETE STRUCTURES	CU YD	135.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	316.0
50300260	BRIDGE DECK GROOVING	SO YD	823

PAY CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY HBBRP TWO-LANE RURAL ROADWAY 80% FEDERAL 20% STATE X081-2A
50300300	PROTECTIVE COAT	SO YD	1086
50400905	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 42 IN.	FOOT	1708
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	7810
51201400	FURNISHING STEEL PILES HPI0X42	FOOT	462
51201600	FURNISHING STEEL PILES HPI2X53	FOOT	891
51202700	DRIVING STEEL PILES	FOOT	1353
51500100	NAME PLATES	EACH	1
54213447	END SECTIONS 12"	EACH	2
59100100	GEOCOMPOSITE WALL DRAIN	SO YD	87
60100945	PIPE DRAINS 12"	FOOT	62
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	152
60600305	CONCRETE CURB (DOWELLED)	FOOT	12
60900130	TYPE B INLET BOX, STANDARD 609001(SPECIAL)	EACH	2
60900515	CONCRETE THRUST BLOCKS	EACH	2
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	237.5
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
63100167	TRAFFIC BARRIER TERMINAL TYPE I, SPECIAL (TANGENT)	EACH	2
63100169	TRAFFIC BARRIER TERMINAL TYPE I, SPECIAL (FLARED)	EACH	2
63200310	GUARDRAIL REMOVAL	FOOT	605
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	7
67100100	MOBILIZATION	L SUM	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70106700	TEMPORARY RUMBLE STRIP	EACH	6
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1441
70300200	TEMPORARY PAVEMENT MARKING	FOOT	1514
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	985
70400100	TEMPORARY CONCRETE BARRIER	FOOT	525

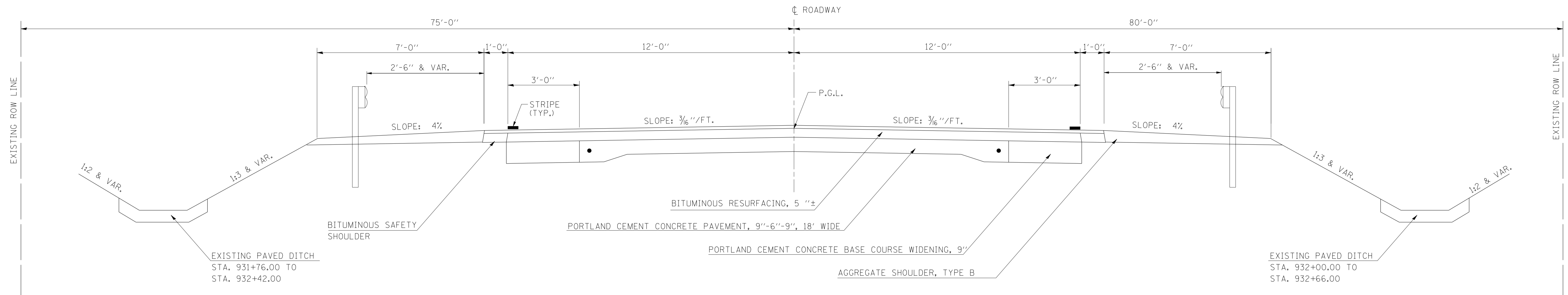
* DENOTES SPECIALTY ITEM

REVISIONS	
NAME	DATE

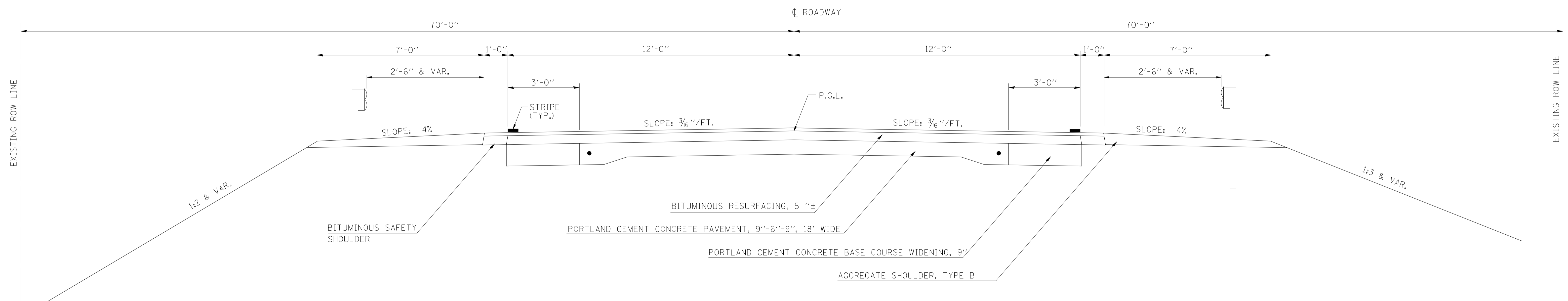
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
SHEET 1 OF 2
 DATE 1/06
 DRAWN BY MLO
 CHECKED BY PBB

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 USER NAME = erange

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



EXISTING TYPICAL SECTION
STATION 930 + 76.50 TO STATION 932 + 24.00 (BRIDGE OMISSION)

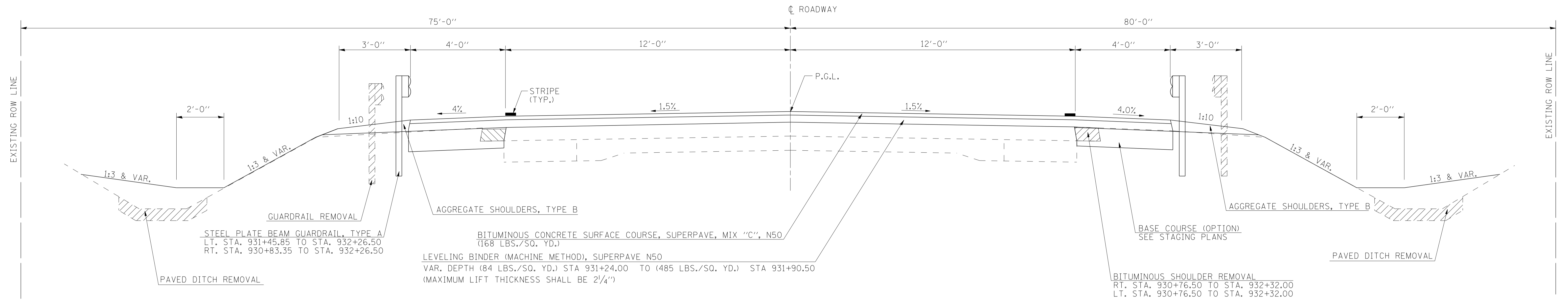


EXISTING TYPICAL SECTION
(BRIDGE OMISSION) STATION 934 + 76.00 TO STATION 936 + 23.50

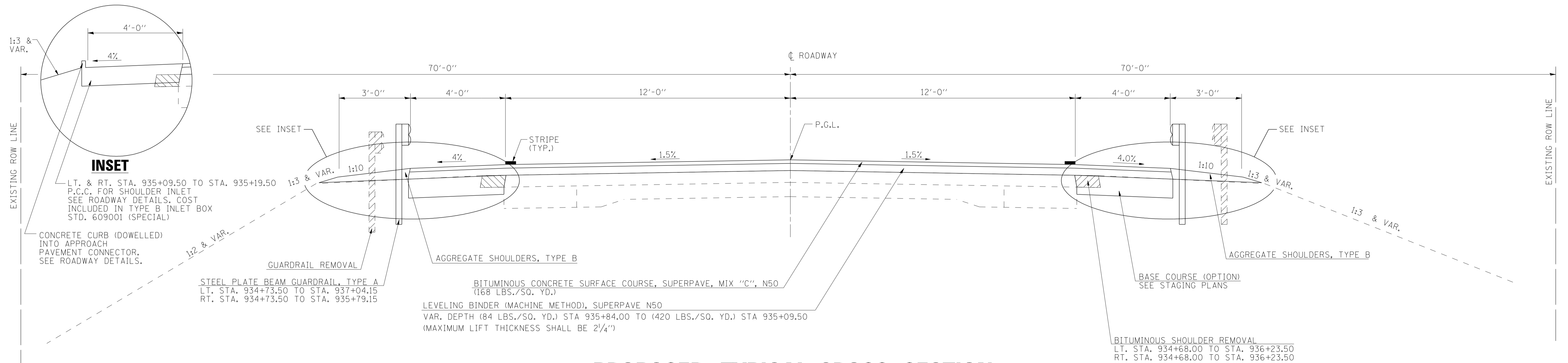
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING TYPICAL SECTIONS
 DRAWN BY MLO
 CHECKED BY PBB
 DATE: 1/06

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



PROPOSED TYPICAL CROSS SECTION
STATION 930 + 76.50 TO STATION 931 + 90.50 (BRIDGE OMISSION)



PROPOSED TYPICAL CROSS SECTION
(BRIDGE OMISSION) STATION 935 + 09.50 TO STATION 936 + 23.50

LEVELING BINDER THICKNESSES

STATION	PROPOSED GRADE LINE	EXISTING GRADE LINE	BINDER THICKNESS (IN.)
931+24.00	637.01	636.82	0.75"
931+90.50	637.00	636.52	4.25"
935+09.50	635.72	635.29	3.66"
935+84.00	635.16	634.97	0.75"

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

DATE 1/06

DRAWN BY MLO
 CHECKED BY PBB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

EARTH EXCAVATION AND FURNISHED EXCAVATION

STAGE	LOCATION	EARTH EXCAVATION	EARTH EXCAV. ADJUSTED FOR SHRINKAGE *	EMBANKMENT (FILL)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	
		(CU YD)	(CU YD)		BY QUADRANT	BY STAGE
I	WEST LEFT	25	19	35	-16	-12
	EAST LEFT	25	19	15	4	
II	WEST RIGHT	55	41	25	16	21
	EAST RIGHT	20	15	10	5	
TOTALS		125	94	85		

* An earth-shrinkage factor of 0.25 is applied

CHANNEL EXCAVATION

LOCATION	CHANNEL EXCAVATION (CU YD)
WEST ABUTMENT	554
EAST CHANNEL	54
EAST ABUTMENT	821
TOTAL	1429

TEMPORARY DITCH CHECKS

STATION	OFFSET	EACH
932+12.00	LT	1
932+12.00	RT	1
TOTAL		2

PERIMETER EROSION BARRIER

STATION TO	STATION	OFFSET	FOOT
934+75.00	937+37.50	LT	262
934+75.00	936+35.00	RT	160
TOTAL			422

SEEDING, FERTILIZERS AND MULCH

STATION TO	STATION	OFFSET	SEEDING CLASS 2 (ACRE)	SEEDING CLASS 7 (ACRE)	NITROGEN FERTILIZER (POUND)	PHOSPHORUS FERTILIZER (POUND)	POTASSIUM FERTILIZER (POUND)	MULCH, METHOD 2 (ACRE)	TEMPORARY EROSION CONTROL SEEDING (POUND)
930+76.50	937+37.30	LT	0.25	0.25	22.5	22.5	22.5	0.25	25.0
930+48.00	936+23.50	RT	0.25	0.25	22.5	22.5	22.5	0.25	25.0
934+00.00	938+20.00	RT	0.50	0.50	45.0	45.0	45.0	0.50	50.0
TOTAL			1.0	1.0	90	90	90	1.0	100

BITUMINOUS MATERIALS (PRIME COAT)

STATION TO	STATION	GALLONS
930+76.50	931+90.50	41
935+09.50	936+23.50	41
931+24.00	931+90.50	24
935+09.50	935+84.00	26
TOTAL		132

AGGREGATE (PRIME COAT)

STATION TO	STATION	TONS
930+76.50	931+90.50	1
935+09.50	936+23.50	1
931+24.00	931+90.50	1
935+09.50	935+84.00	1
TOTAL		4

TREE REMOVAL (6 TO 15 UNITS DIAMETER)

STATION	OFFSET	UNIT
932+38	36' RT	10
932+42	35' RT	12
932+50	37' RT	12
932+56	37' RT	11
932+68	44' RT	7
932+36	39' LT	7
932+39	46' LT	9
932+93	35' LT	11
932+95	34' LT	9
932+97	33' LT	7
932+97	34' LT	7
934+37	51' RT	11
934+40	45' RT	11
934+55	51' RT	9
934+60	49' RT	14
934+64	51' RT	9
934+75	50' RT	7
935+60	49' RT	12
935+71	47' RT	10
934+40 TO 934+90, WITHIN 60' LT:	LT	7
	LT	9
	LT	10
	LT	12
	LT	10
	LT	12
	LT	6
	LT	14
	LT	7
	LT	6
	LT	6
	LT	15
	LT	6
	LT	12
	LT	10
	LT	6
	LT	9
	LT	6
	LT	7
	LT	7
	LT	10
	LT	8
	LT	9
	LT	6
	LT	6
	LT	9
	LT	8
	LT	8
	LT	8
	LT	12
	LT	9
	LT	11
TOTAL		498

TREE REMOVAL (OVER 15 UNITS DIAMETER)

STATION	OFFSET	UNIT
934+21	45' RT	26
934+78	51' RT	17
934+78	51' RT	20
934+78	46' RT	20
934+78	52' RT	22
935+53	49' RT	18
935+76	47' RT	34
931+33.35	LT	20
934+73.50	LT	16
936+23.50	LT	36
TOTAL		229

BITUMINOUS SURFACE REMOVAL - BUTT JOINT

STATION TO	STATION	SO YD
930+76.50	931+10.00	119
936+03.00	936+23.50	73
TOTAL		192

TEMPORARY RAMP

STATION TO	STATION	SO YD
931+70.50	931+90.50	71
935+09.50	935+27.50	64
TOTAL		135

BRIDGE APPROACH PAVEMENT

STATION TO	STATION	SO YD
931+96.50	932+26.50	111
934+73.50	935+03.50	111
TOTAL		222

PROTECTIVE COAT

STATION TO	STATION	OFFSET	SO YD
931+96.50	932+26.50	LT&RT	114
934+73.50	935+03.50	LT&RT	114
TOTAL			228

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

STATION TO	STATION	SO YD
931+90.50	931+96.50	22
935+03.50	935+09.50	22
TOTAL		44

PAVEMENT REMOVAL

STATION TO	STATION	OFFSET	SO YD
931+90.50	932+24.00	LT&RT	89
934+76.00	935+09.50	LT&RT	89
931+90.50	932+15.00	RT	11
932+15.00	932+32.00	RT	6
934+68.00	934+94.00	RT	12
934+94.00	935+09.50	RT	7
935+09.50	935+19.50	RT	4
935+09.50	935+19.50	LT	4
TOTAL			222

APPROACH SLAB REMOVAL

STATION TO	STATION	OFFSET	SO YD
932+24.00	932+32.00	LT&RT	23
932+32.00	932+44.00	LT&RT	40
934+56.00	934+68.00	LT&RT	40
934+68.00	934+76.00	LT&RT	23
TOTAL			126

BITUMINOUS SHOULDER REMOVAL

STATION TO	STATION	OFFSET	SO YD
930+76.50	932+32.00	RT	16
934+68.00	936+23.50	RT	16
930+76.50	932+32.00	LT	16
934+68.00	936+23.50	LT	16
TOTAL			64

AGGREGATE SHOULDERS, TYPE B

STATION TO	STATION	OFFSET	TONS
931+03.67	931+35.85	LT	4
931+35.85	931+69.85	LT	9
931+69.85	931+95.85	LT	4
931+95.85	932+26.50	LT	2
930+48.35	930+76.50	RT	5
930+76.50	931+08.35	RT	8
931+08.35	931+33.35	RT	4
931+33.35	932+26.50	RT	7
934+73.50	936+23.50	LT	11
936+23.50	937+37.30	LT	19
934+73.50	935+29.15	RT	4
935+29.15	936+13.15	RT	7
TOTAL			84

REMOVE EXISTING CULVERTS

STATION TO	STATION	OFFSET	FOOT
932+35.00		LT	17
932+36.00		RT	18
932+41.45	932+92.82	LT	51
932+65.95	933+16.14	RT	50
TOTAL			136

END SECTIONS 12"

STATION	OFFSET	EACH
935+14.50	RT	1
935+14.50	LT	1
TOTAL		2

PIPE DRAINS, 12"

STATION	OFFSET	FOOT
935+14.50	RT	30
935+14.50	LT	32
TOTAL		62

CONCRETE CURB (DOWELLED)

STATION TO	STATION	OFFSET	FOOT
935+03.50	935+09.50	LT	6
935+03.50	935+09.50	RT	6
TOTAL			12

TYPE B INLET BOX, STD. 609001 (SPECIAL)

STATION	OFFSET	EACH
935+14.50	RT	1
935+14.50	LT	1
TOTAL		2

CONCRETE THRUST BLOCKS

STATION	OFFSET	EACH
935+14.50	RT	1
935+14.50	LT	1
TOTAL		2

STEEL PLATE BEAM GUARD RAIL, TYPE A

STATION TO	STATION	OFFSET	FOOT
931+33.35	931+95.85	RT	62.5
935+04.15	936+54.15	LT	150.0
935+04.15	935+29.15	RT	25.0
TOTAL			237.5

TRAFFIC BARRIER TERMINAL, TYPE 6

STATION TO	STATION	OFFSET	EACH
931+95.85	932+26.50	LT	1
931+95.85	932+26.50	RT	1
934+73.50	935+04.15	LT	1
934+73.50	935+04.15	RT	1
TOTAL			4

TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)

STATION TO	STATION	OFFSET	EACH
936+54.15	937+04.15	LT	1
935+29.15	935+79.15	RT	1
TOTAL			2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SHEET 1 OF 2

DATE 1/06

DRAWN BY MLO
CHECKED BY PBB

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 USER NAME = crengre

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	9
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC BARRIER TERMINAL, TYPE I, SPECIAL (FLARED)

STATION TO	STATION	OFFSET	EACH
931+45.85	931+95.85	LT	1
930+83.35	931+33.35	RT	1
TOTAL			2

GUARDRAIL REMOVAL

STATION TO	STATION	OFFSET	FOOT
930+68.70	932+44.27	LT	176
931+17.75	932+44.27	RT	127
934+56.07	935+81.82	LT	126
934+56.07	936+32.50	RT	176
TOTAL			605

TEMPORARY RUMBLE STRIP

STATION	OFFSET	EACH
912+07.00	RT	1
917+07.00	RT	1
922+07.00	RT	1
944+93.00	LT	1
949+93.00	LT	1
954+93.00	LT	1
TOTAL		6

SHORT-TERM PAVEMENT MARKING

STATION TO	STATION	FOOT
930+76.50	936+23.50	165
931+90.50	935+09.50	1276
TOTAL		1441

TEMPORARY PAVEMENT MARKING

STATION TO	STATION	FOOT
931+56.80	935+43.20	772
930+76.50	931+90.50	257
935+09.50	936+23.50	257
931+21.50	931+90.50	69
931+47.60	931+90.50	43
935+09.50	935+78.60	69
935+09.50	935+56.50	47
TOTAL		1514

WORK ZONE PAVEMENT MARKING REMOVAL

LOCATION	SO FT
SHORT-TERM PAVEMENT MARKING	480
TEMPORARY PAVEMENT MARKING	505
TOTAL	985

TEMPORARY CONCRETE BARRIER

STATION TO	STATION	FOOT
930+87.50	931+75.00	87.5
931+75.00	935+25.00	350.0
935+25.00	936+12.50	87.5
TOTAL		525

RELOCATE TEMPORARY CONCRETE BARRIER

STATION TO	STATION	FOOT
930+87.50	931+75.00	87.5
931+75.00	935+25.00	350.0
935+25.00	936+23.50	87.5
TOTAL		525

PAINT PAVEMENT MARKING - LINE 4"

STATION TO	STATION	FOOT
931+76.50	936+23.50	1006

RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)

STATION TO	STATION	EACH
932+26.50	934+73.50	4

GUARDRAIL MARKERS & BARRIER WALL MARKERS

STATION TO	OFFSET	GUARDRAIL MARKERS	BARRIER WALL MARKERS
BEGIN STA. 937+04.15	LT		
936+24.15	LT	1	
935+44.15	LT	1	
934+64.15	LT		1
933+84.15	LT		1
933+04.15	LT		1
932+24.15	LT	1	
END STA. 931+45.85	LT		
BEGIN STA. 930+83.35	RT		
931+63.35	RT	1	
932+43.35	RT		1
933+23.35	RT		1
934+03.35	RT		1
934+83.35	RT	1	
935+63.35	RT	1	
END STA. 935+79.15	RT		
TOTAL		6	6

TERMINAL MARKER - DIRECT APPLIED

STATION	OFFSET	EACH
931+45.85	LT	1
930+83.35	RT	1
937+04.15	LT	1
935+79.15	RT	1
TOTAL		4

BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50

STATION TO	STATION	TONS
930+76.50	931+90.50	34
935+09.50	936+23.50	34
TOTAL		68

LEVELING BINDER (MACHINE METHOD), SUPERPAVE, N50

STATION TO	STATION	TONS
931+24.00	931+90.50	34
935+09.50	935+84.00	33
TOTAL		67

PAVED DITCH REMOVAL

STATION TO	STATION	OFFSET	SO YD
931+76.87	932+41.52	LT	42
931+98.98	932+65.71	RT	36
TOTAL			78

BASE COURSE (OPTION)

STATION TO	STATION	OFFSET	SO YD
930+76.50	932+15.00	RT	62
932+15.00	932+32.00	RT	6
934+68.00	934+94.00	RT	9
934+94.00	936+23.50	RT	58
930+76.50	931+90.50	LT	51
935+09.50	936+23.50	LT	51
TOTAL			237

IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3

STATION	OFFSET	EACH
930+67.00	LT	1
936+33.00	LT	1
TOTAL		2

IMPACT ATTENUATOR, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3

STATION	OFFSET	EACH
930+67.00	LT	1
936+33.00	LT	1
TOTAL		2

PAVEMENT GROOVING

STATION TO	STATION	SO YD
931+96.50	932+26.50	103
934+73.50	935+03.50	103
TOTAL		206

PERMANENT BENCH MARKS

LOCATION	EACH
SN 015-0074	1

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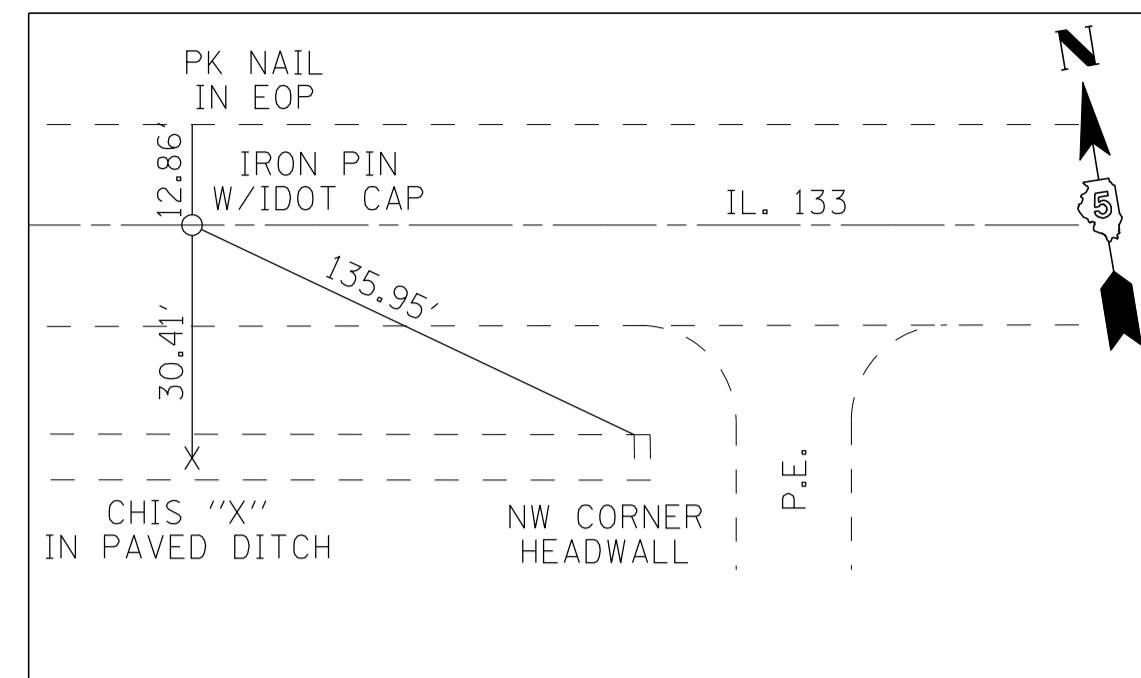
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

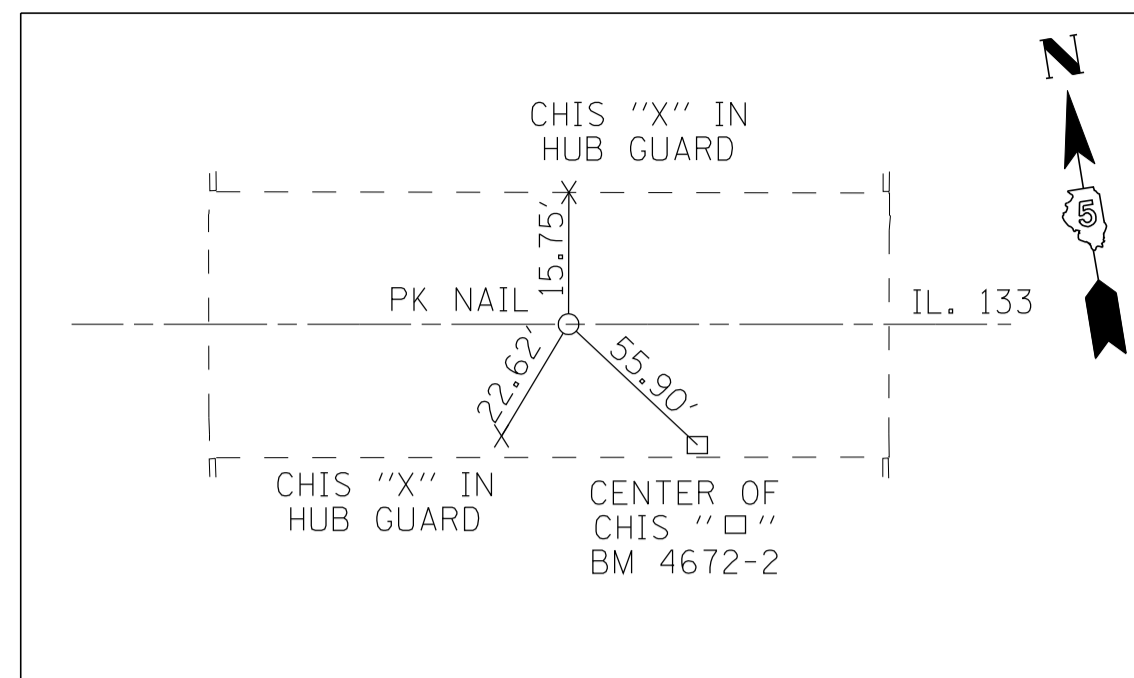
**SCHEDULE OF QUANTITIES
SHEET 2 OF 2**

DATE 1/06
DRAWN BY MLO
CHECKED BY PBB

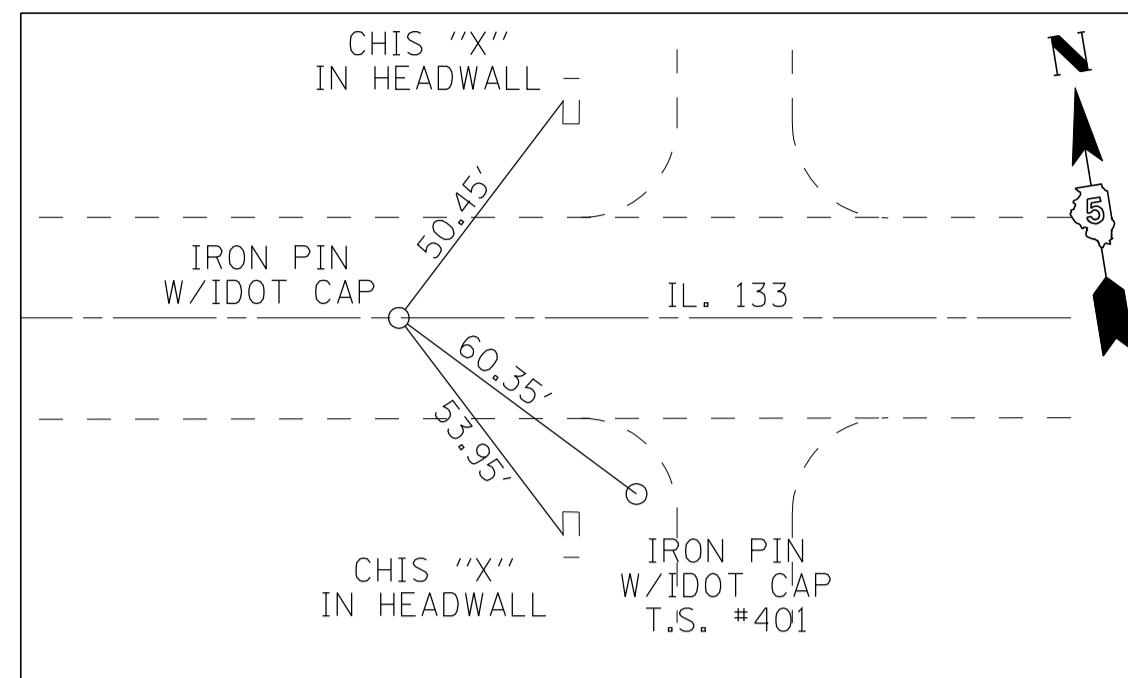
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	10
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



P.O.T. STA. 922+33.24



P.O.T. STA. 933+50.00



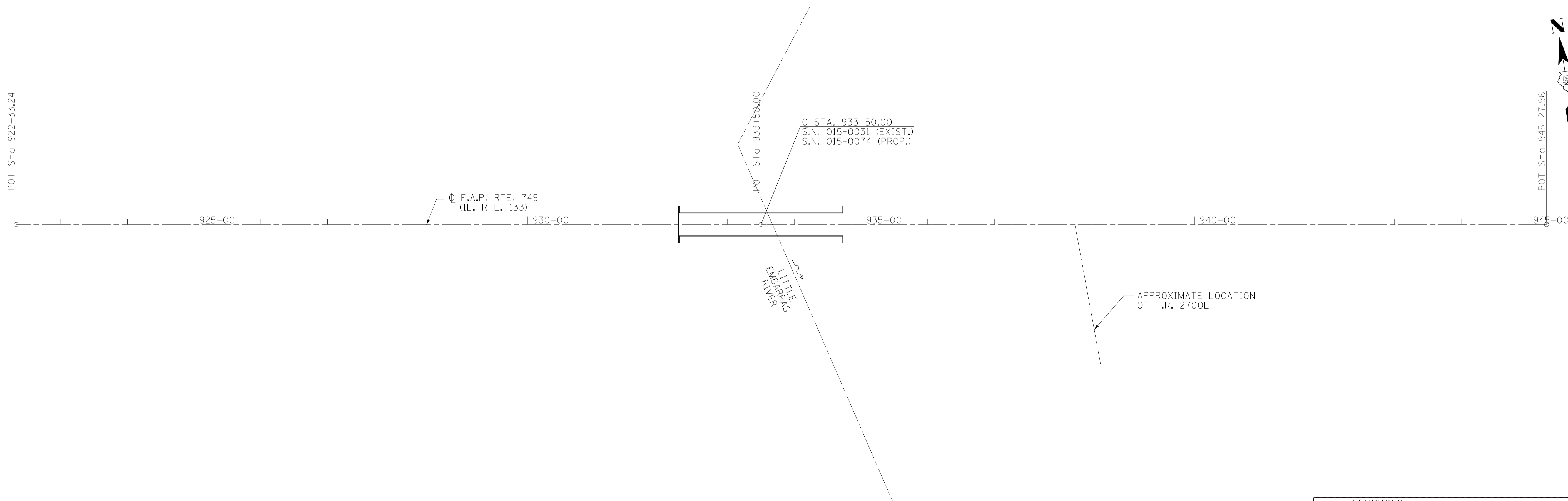
P.O.T. STA. 945+27.96

BENCHMARKS

BM 4672-1
CHISLED SQUARE ON TOP OF SOUTHWEST WINGWALL OF BRIDGE. STA. 932+44.28, 18.27' RT, ELEV. 636.85

BM 4672-2
CHISLED SQUARE ON TOP OF BRIDGE CURB. STA. 934+03.55, 15.91' RT, ELEV. 636.26

BM 4672-3
CHISLED SQUARE ON TOP OF SOUTHEAST WINGWALL OF BRIDGE. STA. 934+55.52, 17.91' RT, ELEV. 636.17



PLOT DATE = 7/24/2006
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PLOT SCALE = 20.000 / IN.
USER NAME = Trucks

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**CONTROL TIES,
HORIZONTAL ALIGNMENT
AND BENCHMARKS**

SCALE NONE
DATE 1/06

DRAWN BY MLO
CHECKED BY PBB

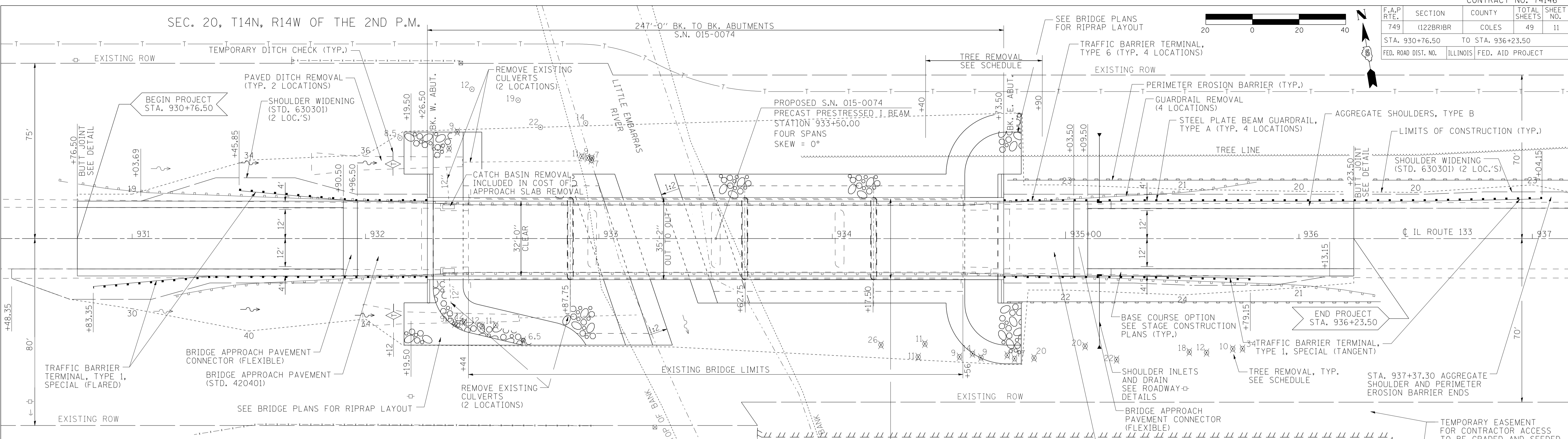
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	11
STA. 930+76.50		TO STA. 936+23.50		
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT

SEC. 20, T14N, R14W OF THE 2ND P.M.

DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY

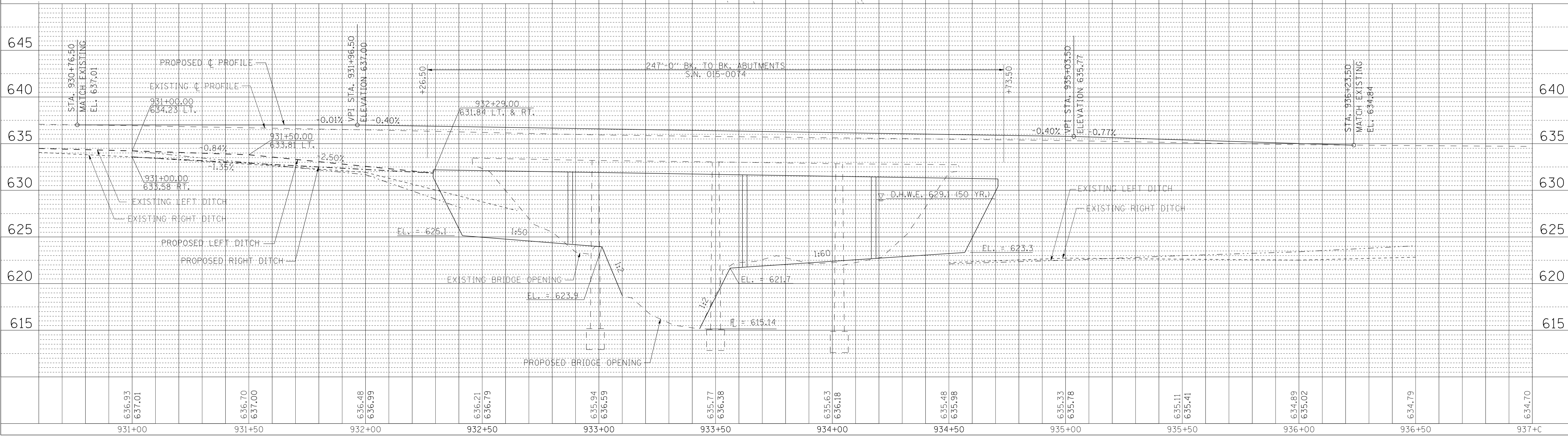
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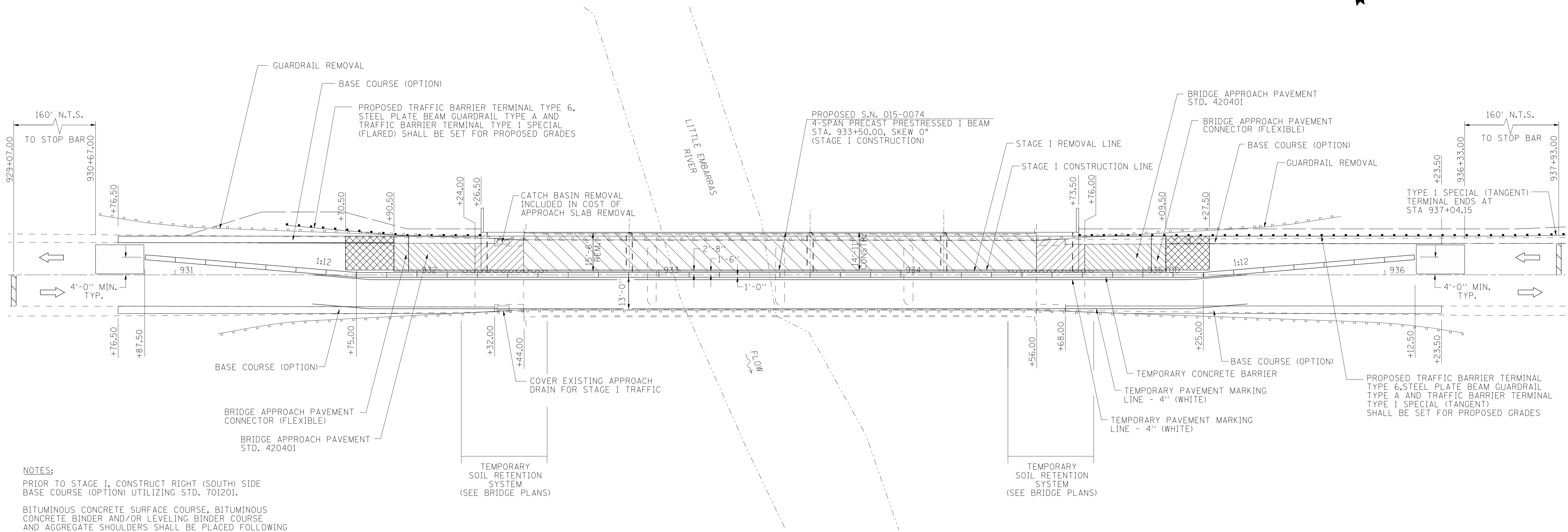
LOCATION	TYPE B INLET BOX STD. 609001 (SPCL)	PIPE DRAINS 12"	END SECTIONS 12"	CONC. THRUST BLOCKS
LT. 935+14.50	1	32	1	1
RT. 935+14.50	1	30	1	1
TOTAL	2 EACH	62 L.F.	2 EACH	2 EACH

SHEET NOTES:
 SEE STAGING PLANS FOR REMOVALS.

SEE ROADWAY DETAILS FOR MORE INFORMATION.
 P.C.C. SLAB AT INLET SHALL BE INCLUDED IN THE COST OF TYPE B INLET BOX STD. 609001 (SPECIAL).



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:
 PRIOR TO STAGE I, CONSTRUCT RIGHT (SOUTH) SIDE BASE COURSE (OPTION) UTILIZING STD. 701201.
 BITUMINOUS CONCRETE SURFACE COURSE, BITUMINOUS CONCRETE BINDER AND/OR LEVELING BINDER COURSE AND AGGREGATE SHOULDERS SHALL BE PLACED FOLLOWING STAGE I AND STAGE II CONSTRUCTION UNDER STD. 701201
 SEE BRIDGE PLANS FOR ADDITIONAL INFORMATION ON STAGE CONSTRUCTION
 UNLESS NOTED, BASE COURSE (OPTION) TO REMAIN IN PLACE AFTER BRIDGE CONSTRUCTION IS COMPLETE
 ALL DETAILS NOT SHOWN ARE TO BE PER THE REQUIREMENTS OF STD. 701321.
 FOR ADDITIONAL DETAILS ON LANE CLOSURES WITH BARRIERS, SEE SPECIAL PROVISION FOR TRAFFIC CONTROL AND PROTECTION AND STD. 701321

LEGEND

- PAVEMENT REMOVAL
- APPROACH SLAB REMOVAL
- BRIDGE REMOVAL
- TEMPORARY RAMP
- IMPACT ATTENUATOR (NON-REDIRECTIVE), TEST LEVEL 3
- STOP BAR

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

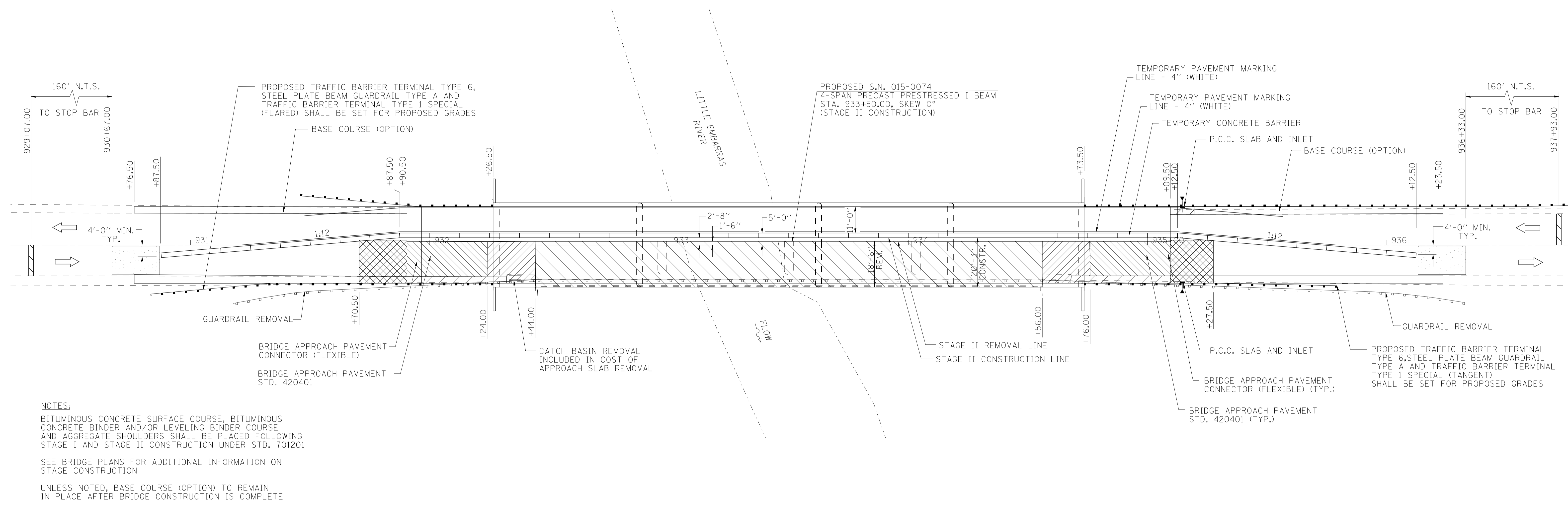
**TRAFFIC CONTROL PLAN
STAGE I CONSTRUCTION**

DATE 1/06

DRAWN BY MLO
CHECKED BY PBB

PLOT DATE = 7/24/2006
 FILE NAME = F:\03\0301\05\Drawings\StageConstruction.dgn
 PLOT SCALE = 20.000 / IN.
 USER NAME = Inrcks

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	13
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:
 BITUMINOUS CONCRETE SURFACE COURSE, BITUMINOUS CONCRETE BINDER AND/OR LEVELING BINDER COURSE AND AGGREGATE SHOULDERS SHALL BE PLACED FOLLOWING STAGE I AND STAGE II CONSTRUCTION UNDER STD. 701201
 SEE BRIDGE PLANS FOR ADDITIONAL INFORMATION ON STAGE CONSTRUCTION
 UNLESS NOTED, BASE COURSE (OPTION) TO REMAIN IN PLACE AFTER BRIDGE CONSTRUCTION IS COMPLETE
 ALL DETAILS NOT SHOWN ARE TO BE PER THE REQUIREMENTS OF STD. 701201.
 FOR ADDITIONAL DETAILS ON LANE CLOSURES WITH BARRIERS, SEE SPECIAL PROVISION FOR TRAFFIC CONTROL AND PROTECTION AND STD. 701321
 CONSTRUCT P.C.C. SLAB AND INLET AT LT. SHOULDER FOLLOWING STAGE II CONSTRUCTION UTILIZING STD. 701201.

LEGEND

- BASE COURSE (OPTION) REMOVAL (PAID FOR AS PAVEMENT REMOVAL)
- PAVEMENT REMOVAL
- APPROACH SLAB REMOVAL
- BRIDGE REMOVAL
- TEMPORARY RAMP
- IMPACT ATTENUATOR (NON-REDIRECTIVE), TEST LEVEL 3
- STOP BAR

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL PLAN
 STAGE II CONSTRUCTION**
 DRAWN BY MLO
 CHECKED BY PBB
 DATE 1/06

PLOT DATE = 7/24/2006
 FILE NAME = F:\03\0301\05\Drawings\StageConstruction.dgn
 PLOT SCALE = 20.000 / IN.
 USER NAME = Trucks

Benchmarks: 4672-1 Chisled square on top of southwest wingwall of bridge. Sta 932+44.28, 18.27' RT, Elev. 636.85
 4672-2 Chisled square on top of bridge curb. Sta 934+03.55, 15.91' RT, Elev. 636.26
 4672-3 Chisled square on top of southeast wingwall of bridge. Sta 934+55.52, 17.91' RT, Elev. 636.17

Existing structure: Structure number 015-0031 was built in 1931 as Section 122-B IL 133 over the Little Embarras River at Sta. 933+50.00. The superstructure was replaced and substructure was widened in 1964 as Section 122-BR. The existing structure is 34'-0" Out to Out of Deck, 212'-0" Back to Back of Abutments. It has 4-spans at 53'-0" each, with 27" Precast Concrete Deck Beams with spill thru counterfort abutments on timber piling and solid piers on timber pile supported footings. The existing structure shall be removed and replaced using staged construction. No Salvage.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
749	(122BR) BR	COLES	49	14	24 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. ROAD PROJECT		Contract #74146

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		163	163
Pipe Underdrain for Structures, 4"	Foot		152	152
Geocomposite Wall Drain	Sq. Yd.		87	87
Stone Riprap, Class A4	Sq. Yd.		1911	1911
Filter Fabric	Sq. Yd.		1911	1911
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		374	374
Concrete Structures	Cu. Yd.		135.0	135.0
Concrete Superstructure	Cu. Yd.	316.0		316.0
Bridge Deck Grooving	Sq. Yd.	823		823
Floor Drains	Each	30		30
Drainage Scuppers, DS-11	Each	4		4
Protective Coat	Sq. Yd.	1086		1086
Furnishing and Erecting Precast Prestressed Concrete I-Beams 42"	Foot	1708		1708
Reinforcement Bars, Epoxy Coated	Pound	64,500	13,610	78,110
Furnishing Steel Piles HP 10 x 42	Foot		462	462
Furnishing Steel Piles HP 12 x 53	Foot		891	891
Driving Steel Piles	Foot		1353	1353
Name Plates	Each	1		1
Bar Splicers	Each	789	96	885
Temporary Soil Retention System	Sq. Ft.		502	502
*Underwater Structure Excavation Protection Location 1	Each		1	1

*Excavation protection applies to Pier 2.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.
 Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 All construction joints shall be bonded.
 Removal of existing bridge rails included in the cost of Removal of Existing Structures.

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

INDEX OF SHEETS

- 1 General Plan
- 2 Stage Construction Details
- 3 Temporary Concrete Barrier
- 4-6 Top of Slab Elevations
- 7 Superstructure
- 8 Superstructure Details
- 9 Diaphragm Details
- 10 Scupper Details
- 11 Framing Plan and Pier Seat Details
- 12-15 42" PPC I-Beam
- 16 Abutments
- 17-19 Piers 1-3
- 20 Bar Splicer Assembly Details
- 21 Anchor Bolt Details
- 22-24 Boring Logs

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.051g
 Site Coefficient (S) = 1.0

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)

PRECAST PRESTRESSED UNITS

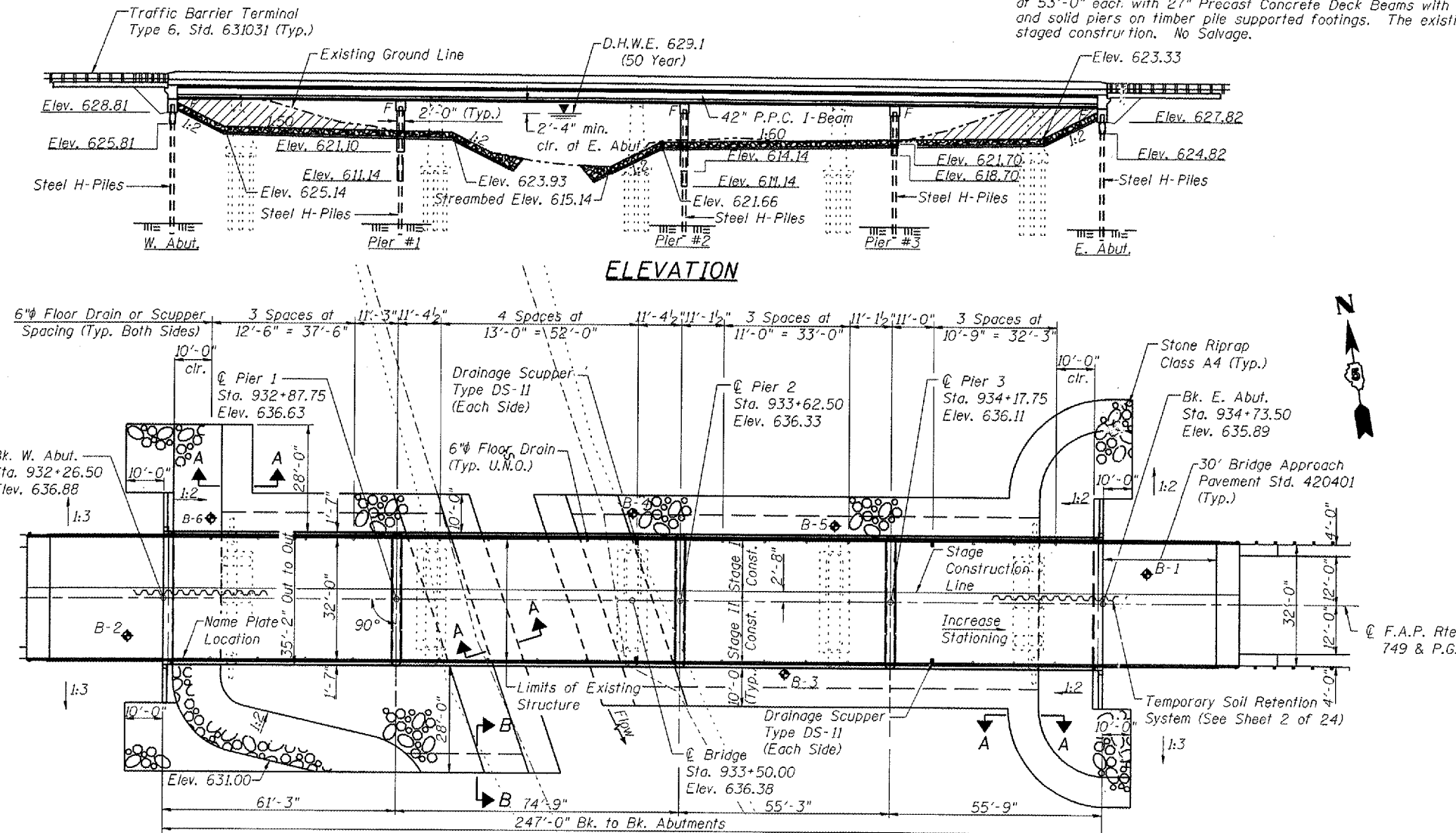
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 $f'_{ci} = 5,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " ϕ Low Relax. Strands)
 $f_{si} = 201,960$ psi ($\frac{1}{2}$ " ϕ Low Relax. Strands)

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN

IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (122BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074

DATE: MARCH 2006

DRAWN BY: MLO
 CHECKED BY: PBB



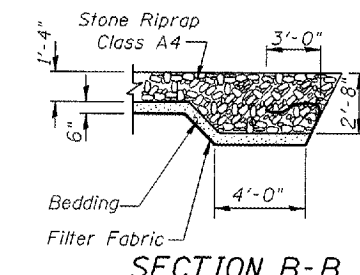
ELEVATION

PLAN

APPROVED
 For Structural Adequacy Only

Ralph E. Anderson (T.S.D.)
 Engineer of Bridges & Structures

	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
Design Scour Elevation	625.81	611.14	611.14	618.70	624.82

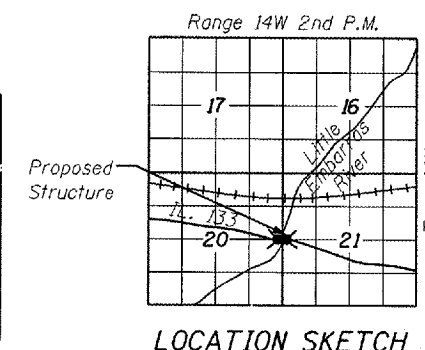


SECTION B-B

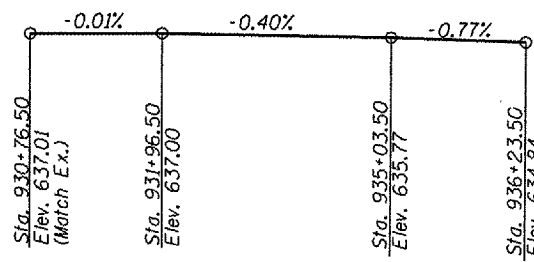
WATERWAY INFORMATION

Drainage Area = 75.95 sq.mi. Low Grade Elev. = 634.22 @ Sta. 938+99.94

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E. Ft.		Head-Ft.		Headwater Elev. - Ft.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	3469	1042	1033	628.2	0.5	0.5	628.7	628.7	
Base	100	5046	1192	1299	629.1	0.8	0.7	629.9	629.8	
Overtopping	-	-	-	-	-	-	-	-	-	-
Max. Calc.	500	7178	1347	1569	630.0	1.2	1.1	631.2	631.1	



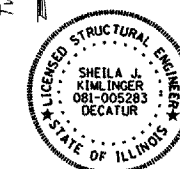
LOCATION SKETCH



PROFILE GRADE

F.A.P. Rte. 749 (IL. Rte. 133)

(Along ϕ Roadway)

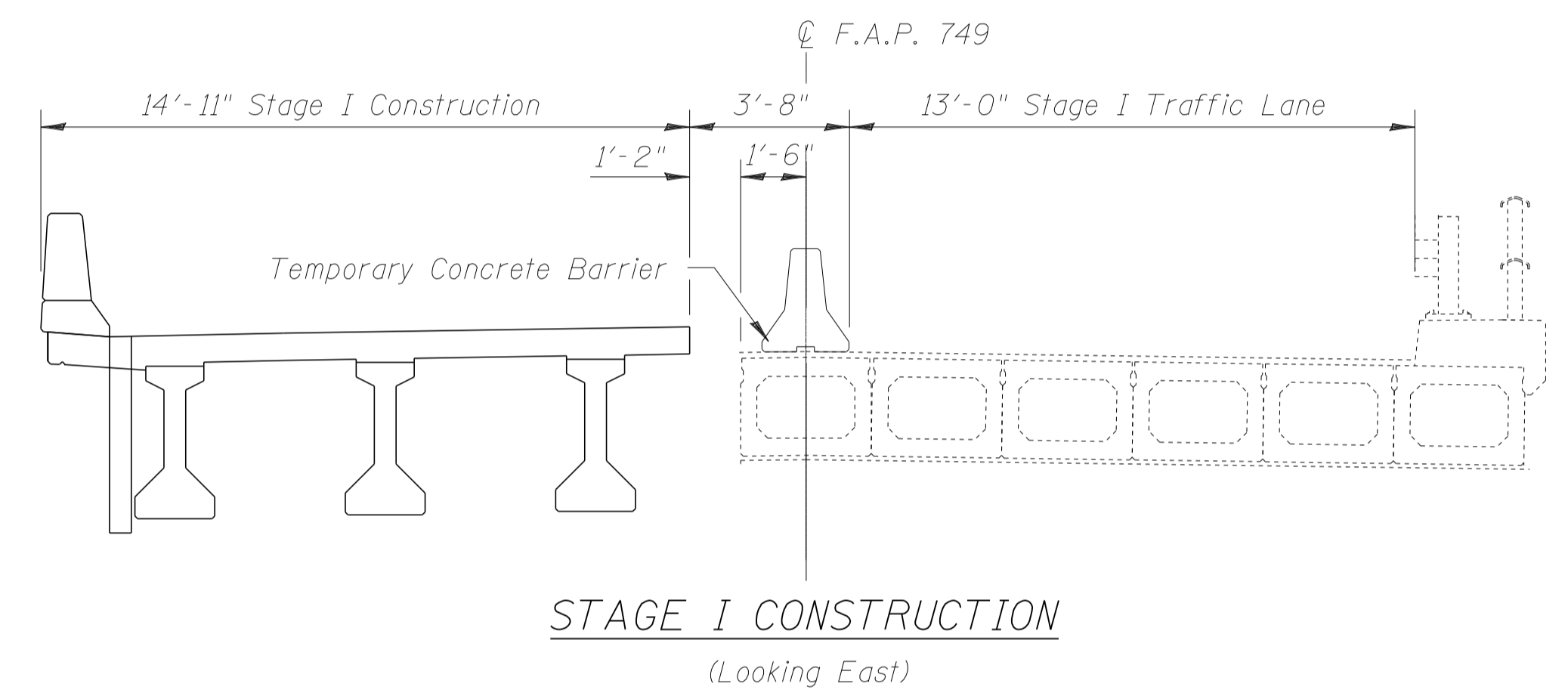
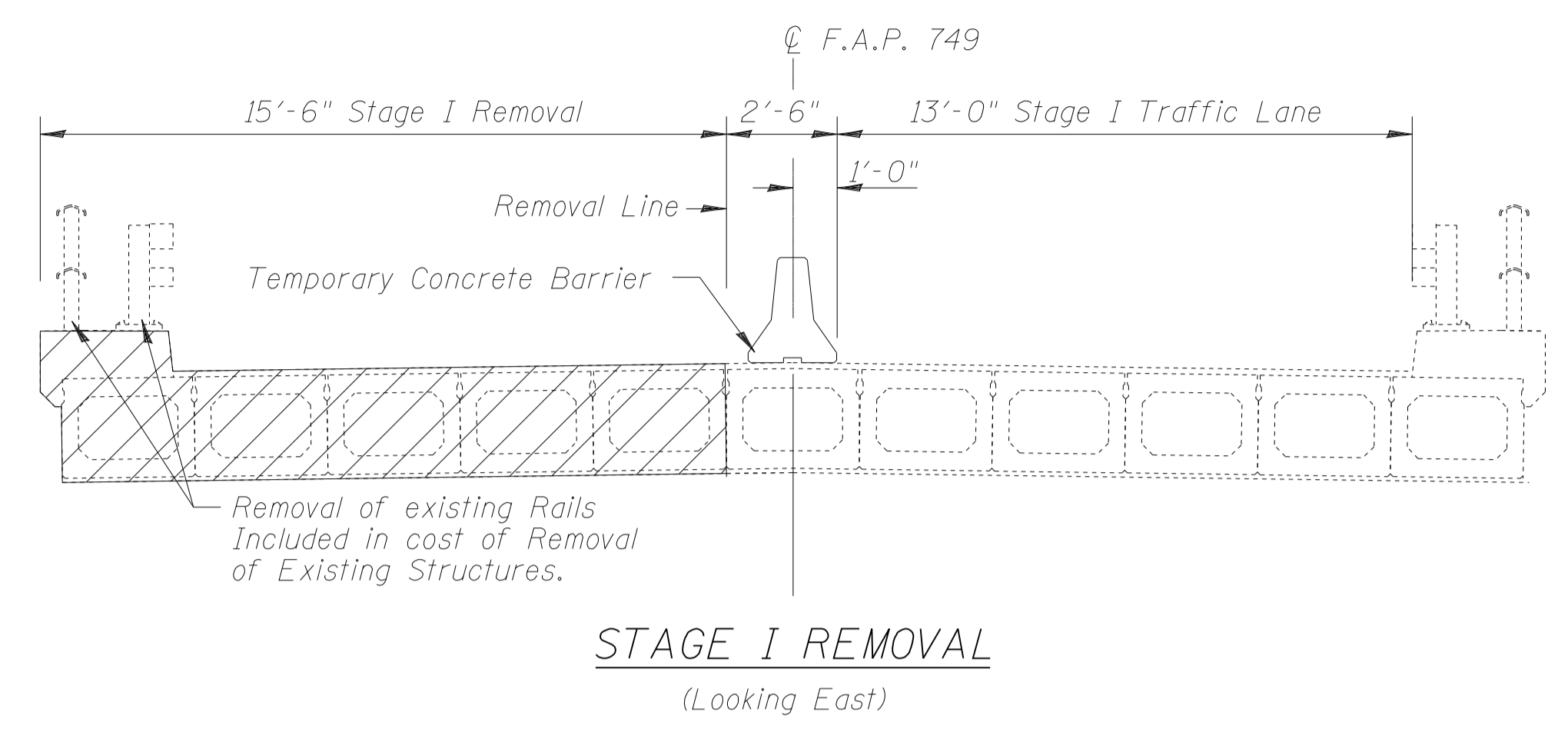


STATION 933+50.00
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.P. RTE. 749
 SECTION (122BR)BR
 LOADING HS20
 STR. NO. 015-0074

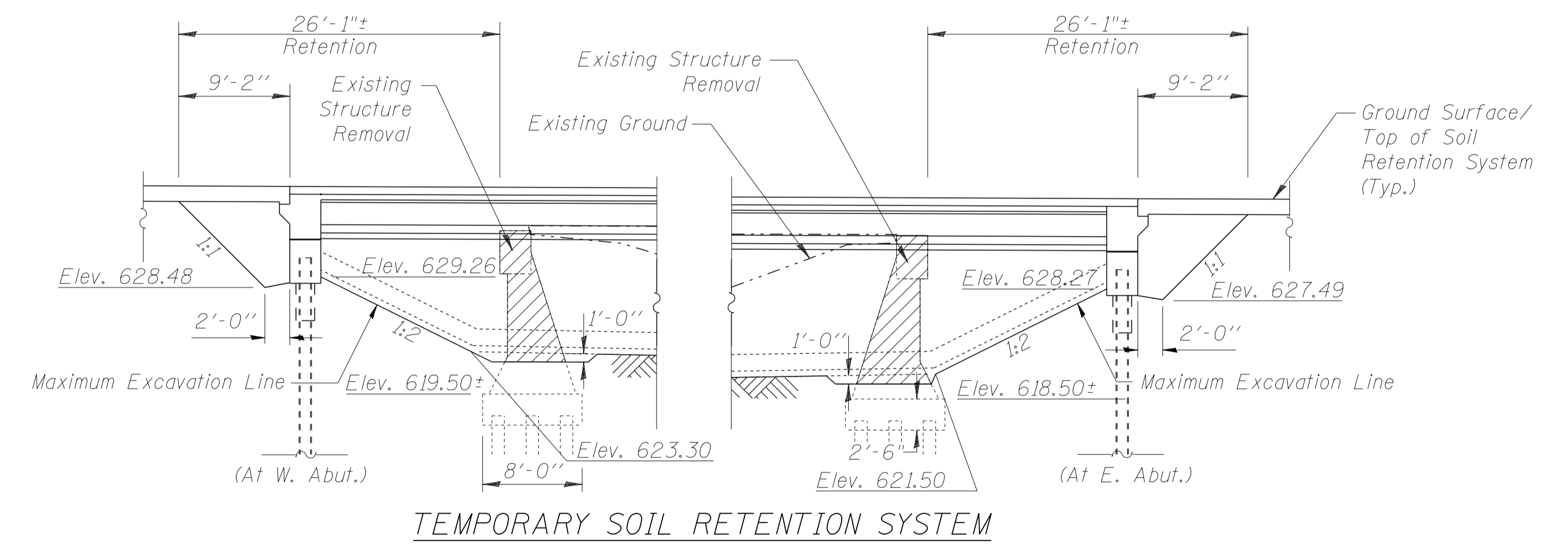
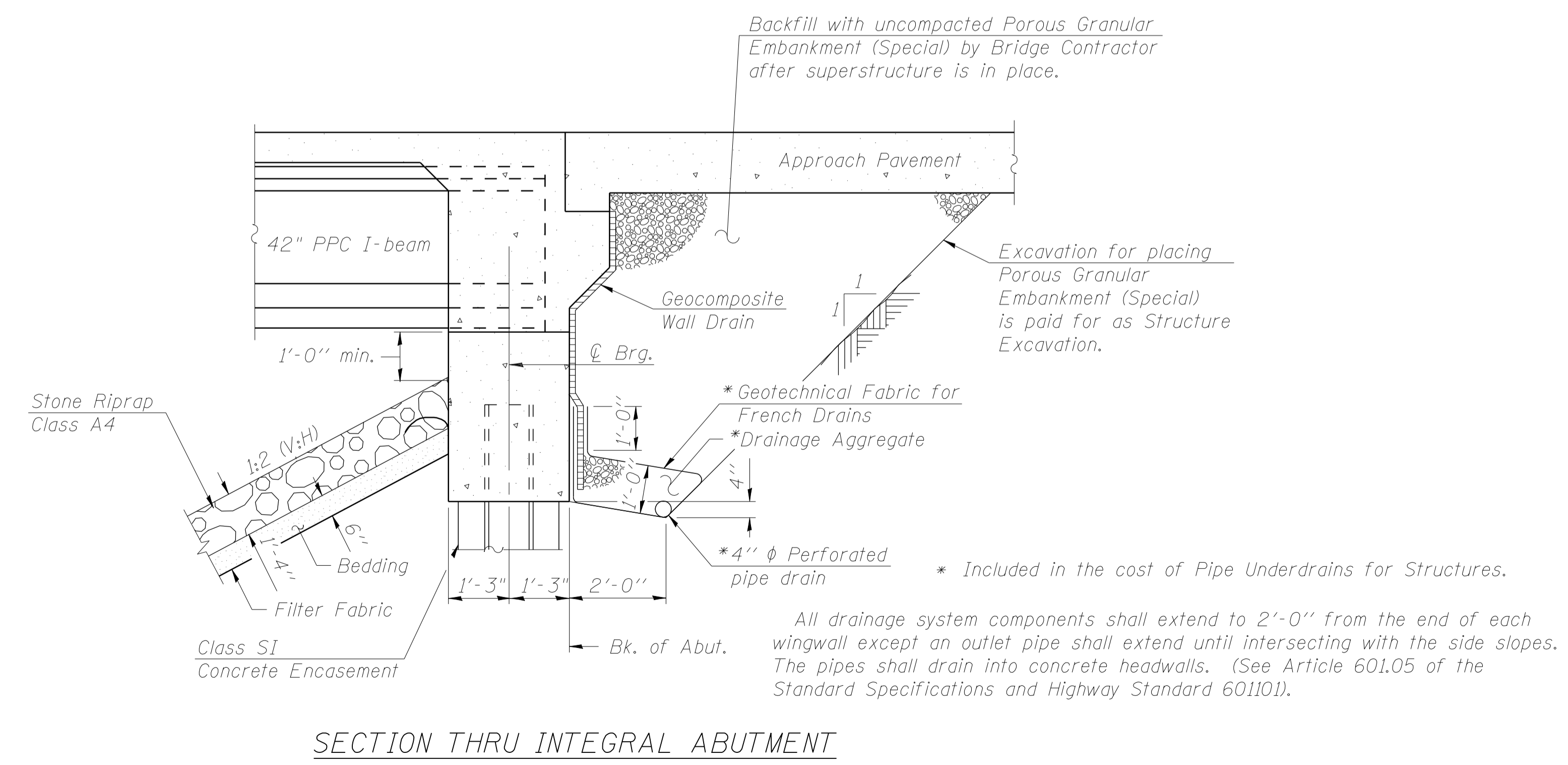
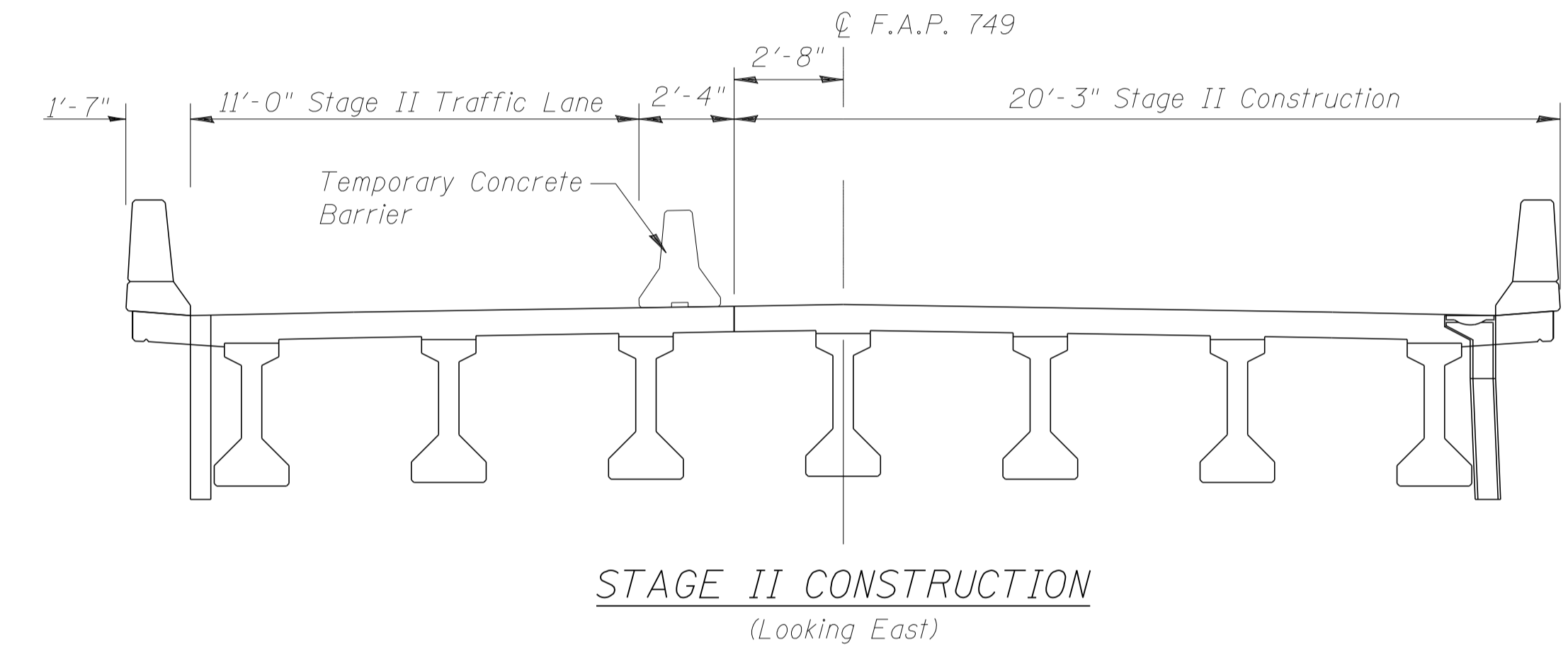
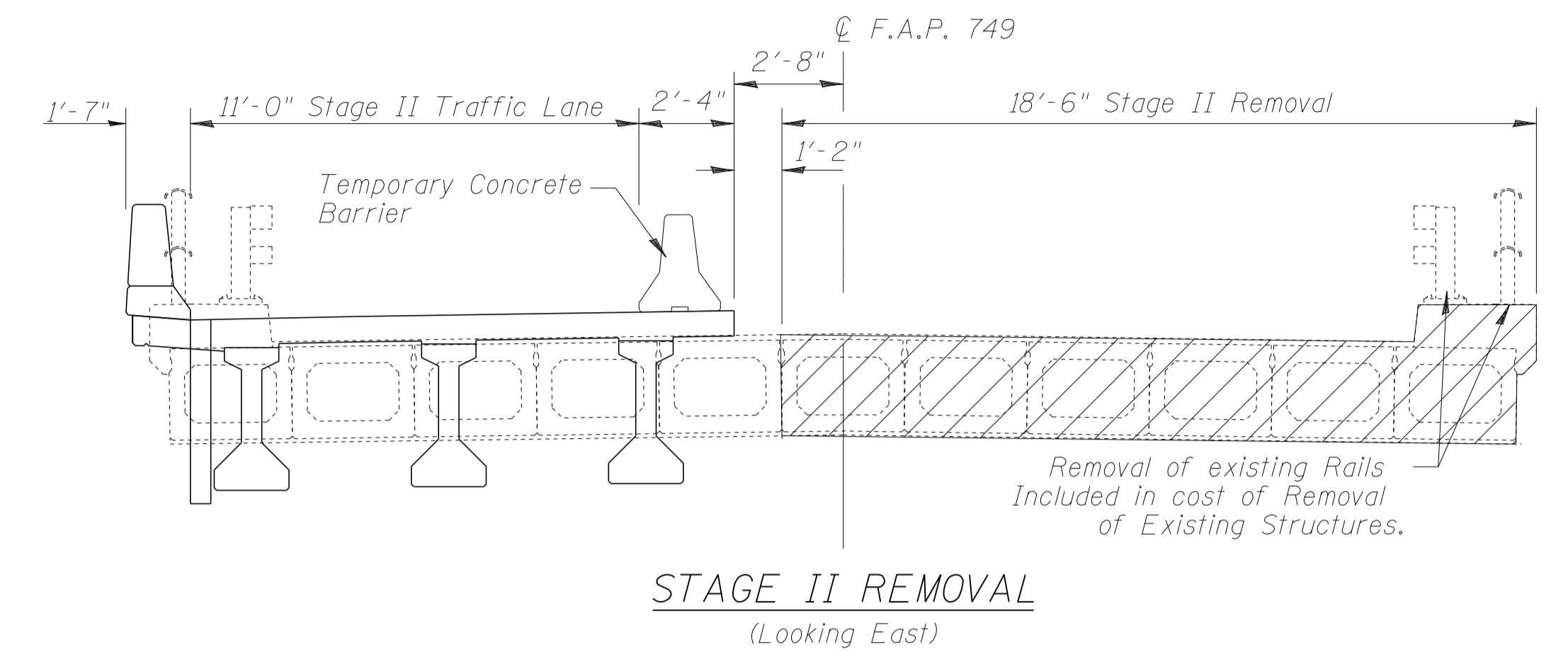
NAME PLATE

See Std. 515001

Sheila J. Kimlinger
 Sheila J. Kimlinger, S.E.
 Structural Engineer License No. 081-005283
 Expiration Date: 11/30/2006



Note: See Roadway Plans for the Quantity of Temporary Concrete Barrier.



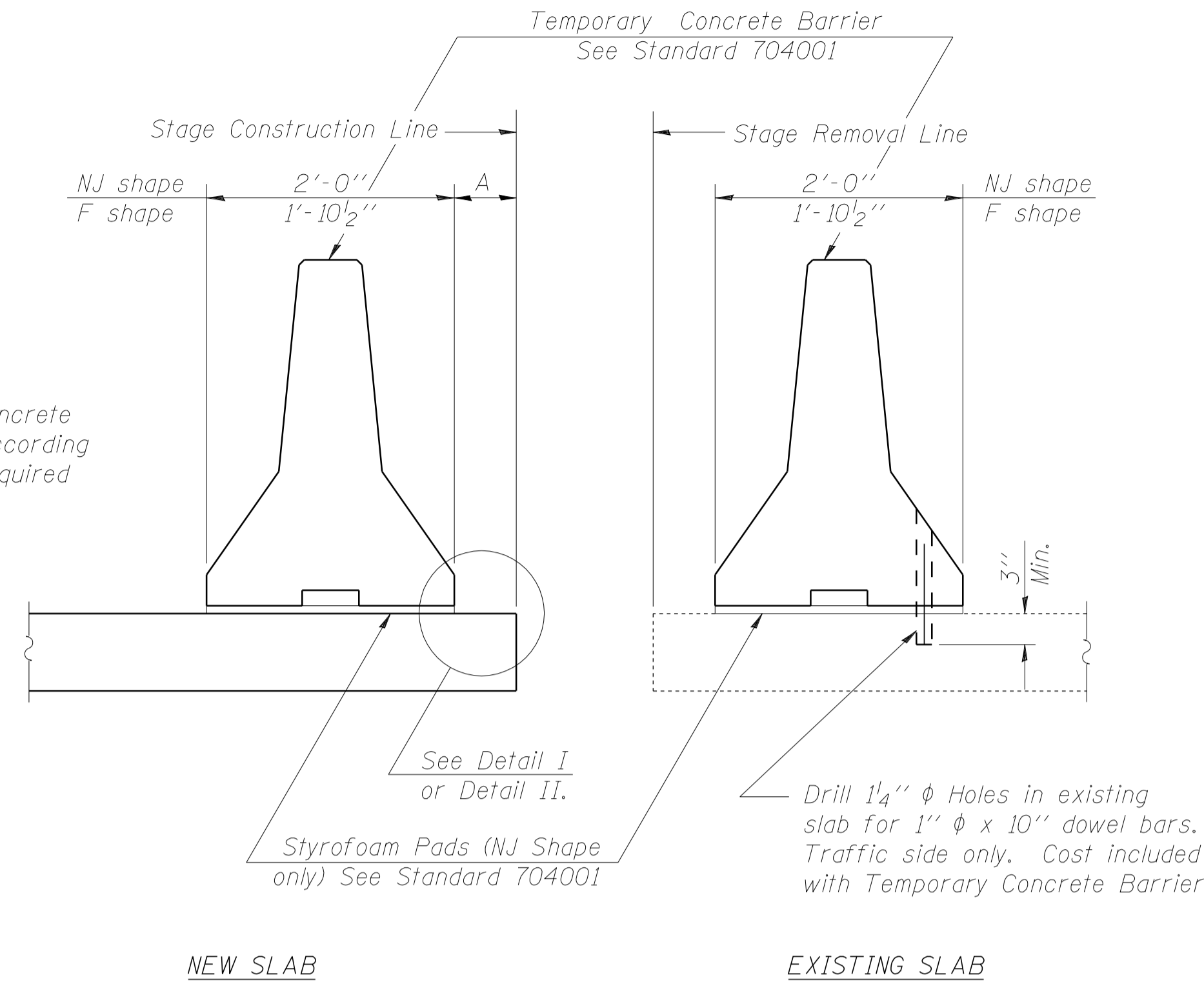
NOTES:
A cantilevered sheet piling does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention design including plan details and calculations for review and acceptance by the Engineer.
Contractor's design to include provisions for retaining soil below the existing abutment cap between the counterforts, and behind the existing abutment cap above the footing.

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS

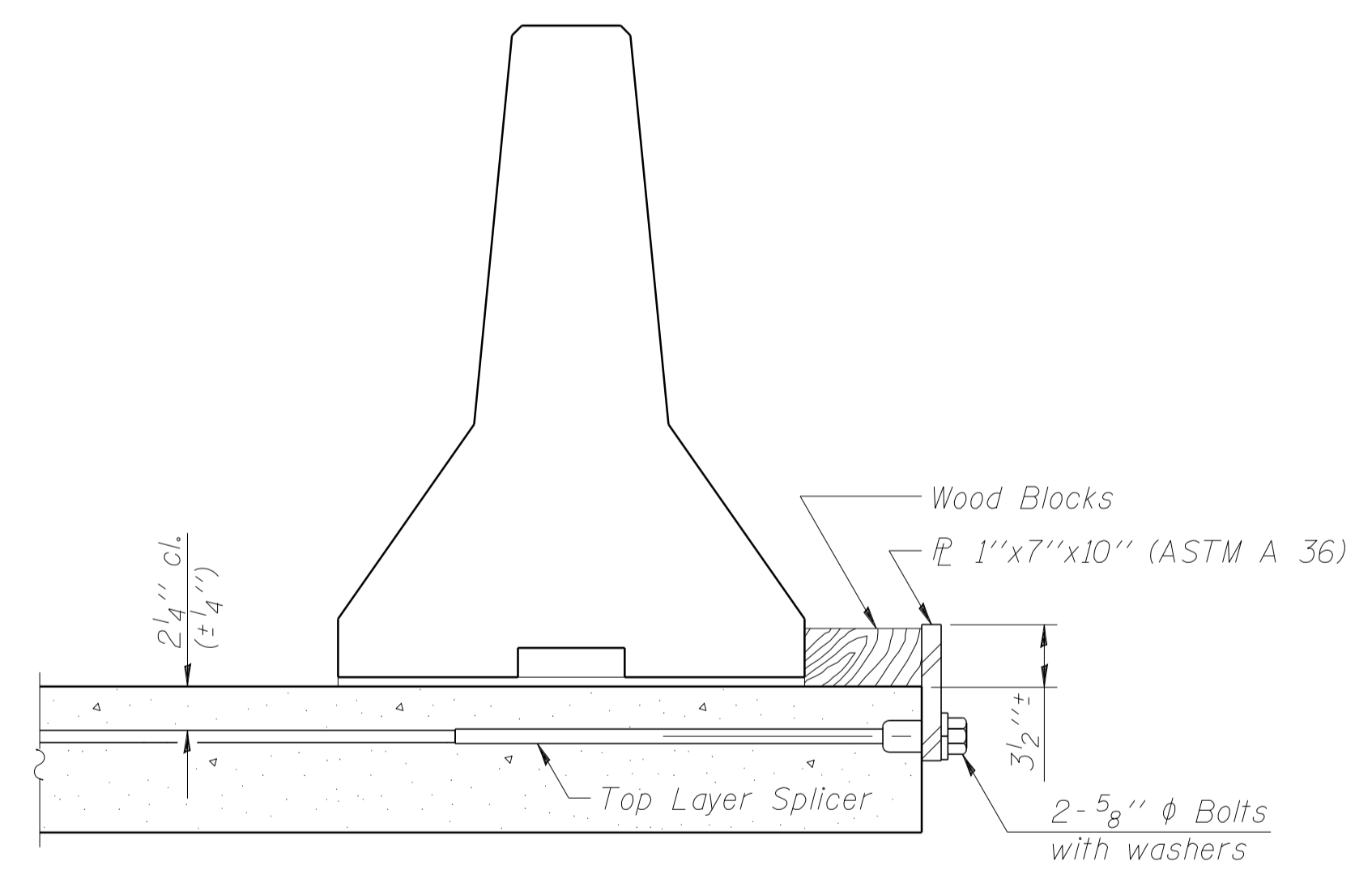
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (122BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074

DATE: MARCH 2006
DRAWN BY: MLO
CHECKED BY: PBB



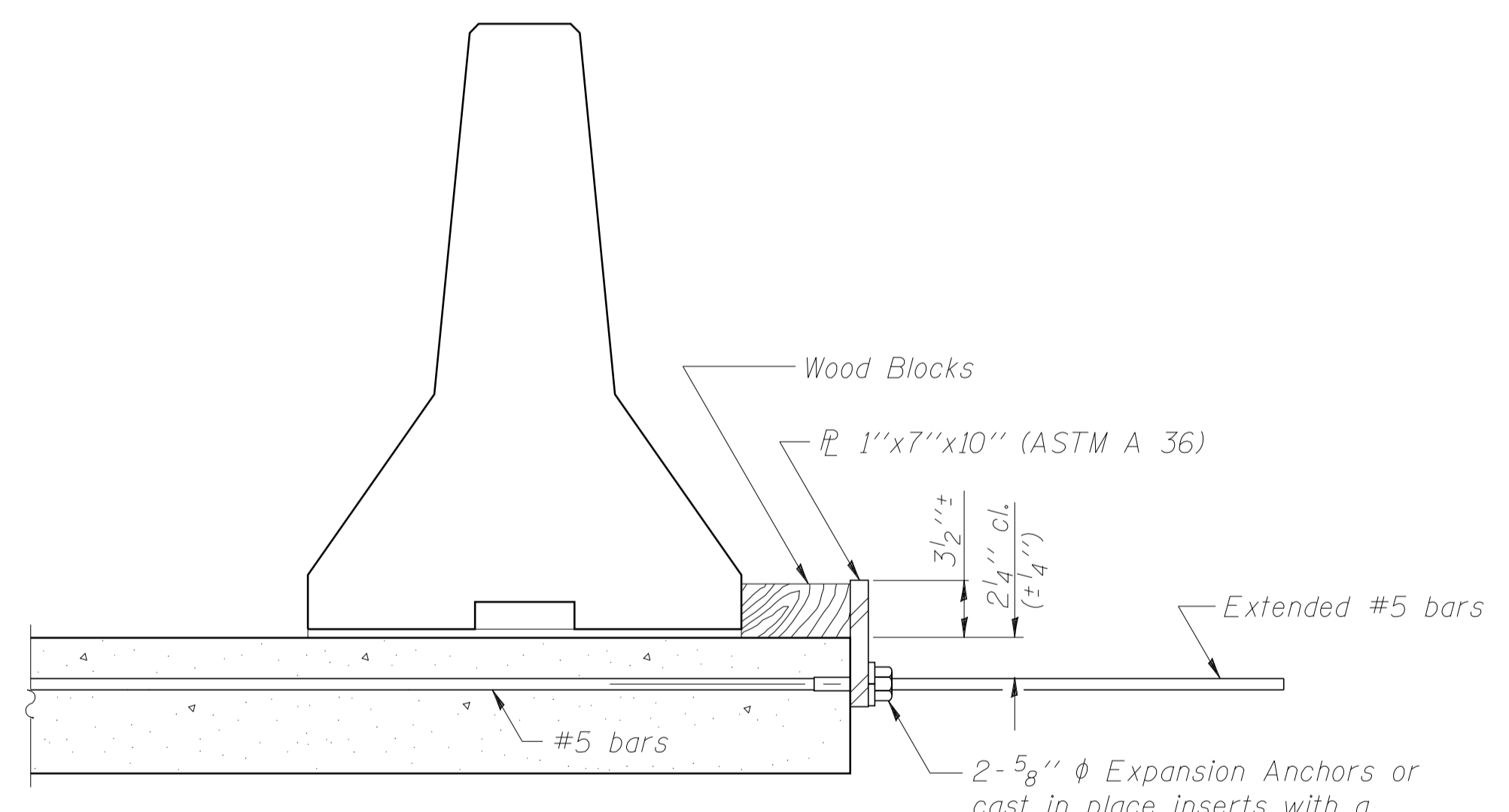
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

SECTIONS THRU SLAB



DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.

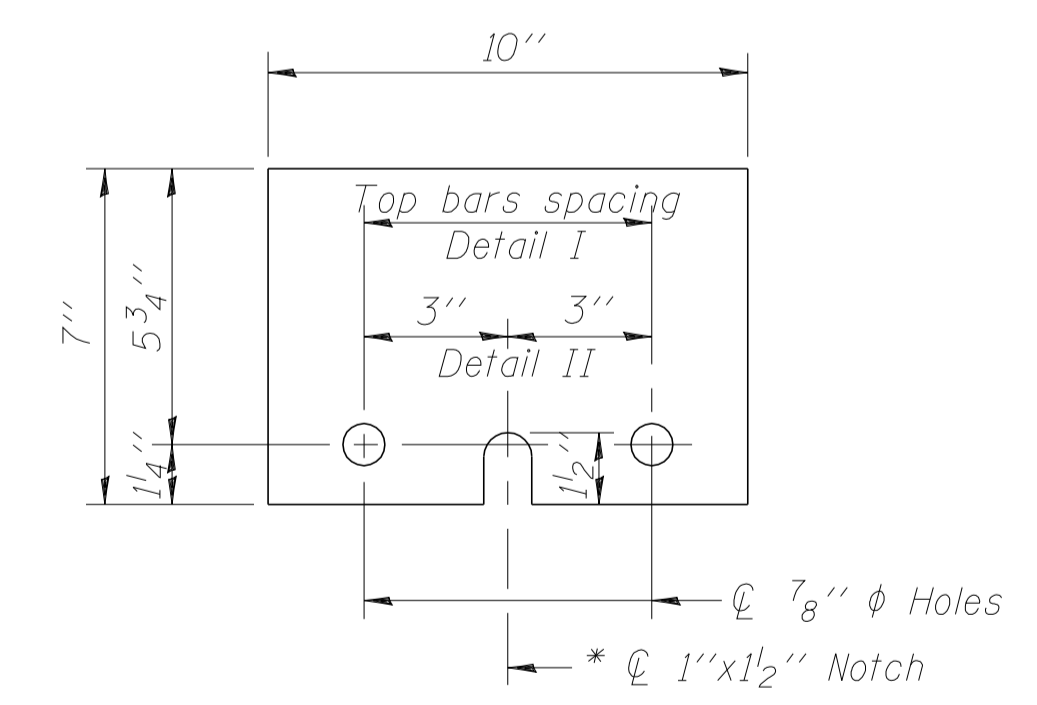


DETAIL II

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

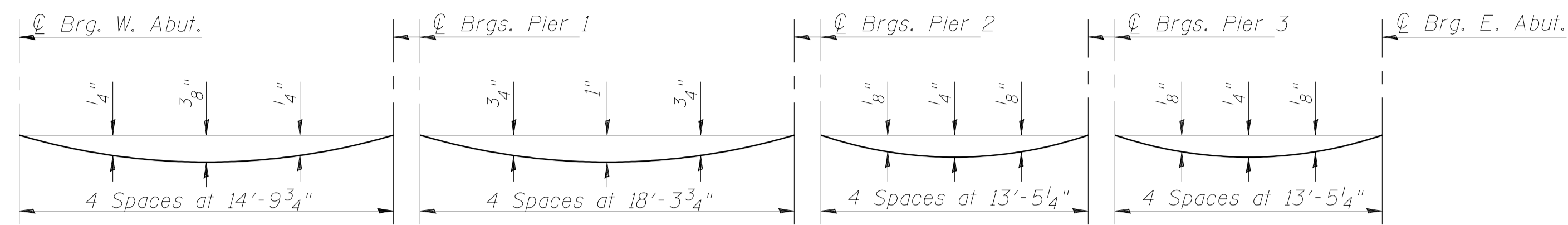
NOTES:

- Detail I - With Bar Splicer or Couplers: Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" diameter bolts screwed to coupler at approximate center of each barrier panel.
 - Detail II - With Extended Reinforcement Bars: Connect one (1) 1"x7"x10" steel PL to the concrete slab with 2-5/8" diameter Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate center of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier.



PL 1"x7"x10"
* Required only with Detail II

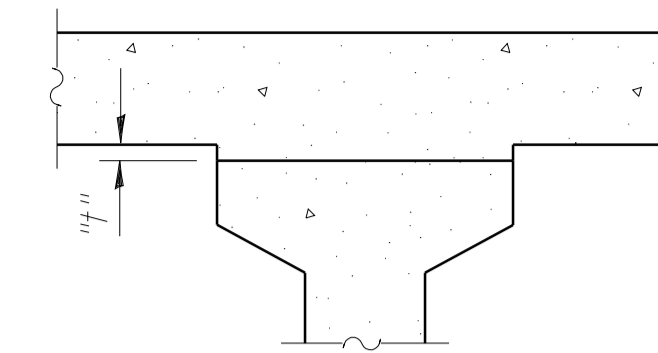
ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY CONCRETE BARRIER
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (I22BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074



DEAD LOAD DEFLECTION DIAGRAM

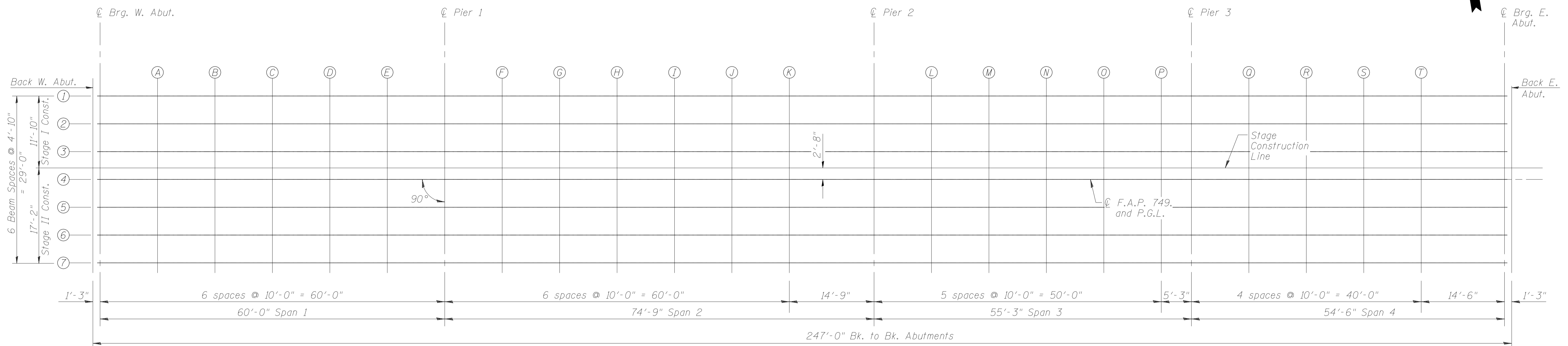
(Includes weight of concrete, excluding beams).

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 on sheets 5 and 6 of 24.



To determine "t": After all precast prestressed beams have 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 Deflections" shown on sheets 5 and 6 of 24, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS



PLAN

NOTES:
Work this sheet with sheets 5 and 6 of 24.

ILLINOIS DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS 1 OF 3
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (I22BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074
DRAWN BY: MLO
CHECKED BY: PBB

BEAM 1 & 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk.W.Abut.	932+26.50	14.50	636.64	636.64
Cl.W.Abut.	932+27.75	14.50	636.63	636.63
A	932+37.75	14.50	636.59	636.61
B	932+47.75	14.50	636.55	636.58
C	932+57.75	14.50	636.51	636.55
D	932+67.75	14.50	636.47	636.50
E	932+77.75	14.50	636.43	636.45
Cl Pier1	932+87.75	14.50	636.39	636.39
F	932+97.75	14.50	636.35	636.39
G	933+07.75	14.50	636.31	636.37
H	933+17.75	14.50	636.27	636.35
I	933+27.75	14.50	636.23	636.32
J	933+37.75	14.50	636.19	636.27
K	933+47.75	14.50	636.15	636.20
Cl Pier2	933+62.50	14.50	636.09	636.09
L	933+72.50	14.50	636.05	636.06
M	933+82.50	14.50	636.01	636.03
N	933+92.50	14.50	635.97	635.99
O	934+02.50	14.50	635.93	635.95
P	934+12.50	14.50	635.89	635.90
Cl Pier3	934+17.75	14.50	635.87	635.87
Q	934+27.75	14.50	635.83	635.84
R	934+37.75	14.50	635.79	635.81
S	934+47.75	14.50	635.75	635.77
T	934+57.75	14.50	635.71	635.73
Cl.E.Abut.	934+72.25	14.50	635.66	635.66
Bk.E.Abut.	934+73.50	14.50	635.65	635.65

BEAM 2 & 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk.W.Abut.	932+26.50	9.67	636.73	636.73
Cl.W.Abut.	932+27.75	9.67	636.72	636.72
A	932+37.75	9.67	636.68	636.70
B	932+47.75	9.67	636.64	636.67
C	932+57.75	9.67	636.60	636.64
D	932+67.75	9.67	636.56	636.59
E	932+77.75	9.67	636.52	636.54
Cl Pier1	932+87.75	9.67	636.48	636.48
F	932+97.75	9.67	636.44	636.48
G	933+07.75	9.67	636.40	636.46
H	933+17.75	9.67	636.36	636.44
I	933+27.75	9.67	636.32	636.41
J	933+37.75	9.67	636.28	636.36
K	933+47.75	9.67	636.24	636.29
Cl Pier2	933+62.50	9.67	636.18	636.18
L	933+72.50	9.67	636.14	636.15
M	933+82.50	9.67	636.10	636.12
N	933+92.50	9.67	636.06	636.08
O	934+02.50	9.67	636.02	636.04
P	934+12.50	9.67	635.98	635.99
Cl Pier3	934+17.75	9.67	635.96	635.96
Q	934+27.75	9.67	635.92	635.93
R	934+37.75	9.67	635.88	635.90
S	934+47.75	9.67	635.84	635.86
T	934+57.75	9.67	635.80	635.82
Cl.E.Abut.	934+72.25	9.67	635.75	635.75
Bk.E.Abut.	934+73.50	9.67	635.74	635.74

BEAM 3 & 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk.W.Abut.	932+26.50	4.83	636.80	636.80
Cl.W.Abut.	932+27.75	4.83	636.79	636.79
A	932+37.75	4.83	636.75	636.77
B	932+47.75	4.83	636.71	636.74
C	932+57.75	4.83	636.67	636.71
D	932+67.75	4.83	636.63	636.66
E	932+77.75	4.83	636.59	636.61
Cl Pier1	932+87.75	4.83	636.55	636.55
F	932+97.75	4.83	636.51	636.55
G	933+07.75	4.83	636.47	636.53
H	933+17.75	4.83	636.43	636.51
I	933+27.75	4.83	636.39	636.48
J	933+37.75	4.83	636.35	636.43
K	933+47.75	4.83	636.31	636.36
Cl Pier2	933+62.50	4.83	636.25	636.25
L	933+72.50	4.83	636.21	636.22
M	933+82.50	4.83	636.17	636.19
N	933+92.50	4.83	636.13	636.15
O	934+02.50	4.83	636.09	636.11
P	934+12.50	4.83	636.05	636.06
Cl Pier3	934+17.75	4.83	636.03	636.03
Q	934+27.75	4.83	635.99	636.00
R	934+37.75	4.83	635.95	635.97
S	934+47.75	4.83	635.91	635.93
T	934+57.75	4.83	635.87	635.89
Cl.E.Abut.	934+72.25	4.83	635.82	635.82
Bk.E.Abut.	934+73.50	4.83	635.81	635.81

NOTES:

Work this sheet with sheets 4 and 6 of 24.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TOP OF SLAB ELEVATIONS 2 OF 3
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (122BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074
 DATE: MARCH 2006
 DRAWN BY: MLO
 CHECKED BY: PBB

☉ F.A.P. 749 PROFILE GRADE LINE & BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk.W.Abut.	932+26.50	0.00	636.88	636.88
Cl.W.Abut.	932+27.75	0.00	636.87	636.87
A	932+37.75	0.00	636.83	636.85
B	932+47.75	0.00	636.79	636.82
C	932+57.75	0.00	636.75	636.79
D	932+67.75	0.00	636.71	636.74
E	932+77.75	0.00	636.67	636.69
Cl Pier1	932+87.75	0.00	636.63	636.63
F	932+97.75	0.00	636.59	636.63
G	933+07.75	0.00	636.55	636.61
H	933+17.75	0.00	636.51	636.59
I	933+27.75	0.00	636.47	636.56
J	933+37.75	0.00	636.43	636.51
K	933+47.75	0.00	636.39	636.44
Cl Pier2	933+62.50	0.00	636.33	636.33
L	933+72.50	0.00	636.29	636.30
M	933+82.50	0.00	636.25	636.27
N	933+92.50	0.00	636.21	636.23
O	934+02.50	0.00	636.17	636.19
P	934+12.50	0.00	636.13	636.14
Cl Pier3	934+17.75	0.00	636.11	636.11
Q	934+27.75	0.00	636.07	636.08
R	934+37.75	0.00	636.03	636.05
S	934+47.75	0.00	635.99	636.01
T	934+57.75	0.00	635.95	635.97
Cl.E.Abut.	934+72.25	0.00	635.90	635.90
Bk.E.Abut.	934+73.50	0.00	635.89	635.89

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk.W.Abut.	932+26.50	2.67 LT	636.84	636.84
Cl.W.Abut.	932+27.75	2.67 LT	636.83	636.83
A	932+37.75	2.67 LT	636.79	636.81
B	932+47.75	2.67 LT	636.75	636.78
C	932+57.75	2.67 LT	636.71	636.75
D	932+67.75	2.67 LT	636.67	636.70
E	932+77.75	2.67 LT	636.63	636.65
Cl Pier1	932+87.75	2.67 LT	636.59	636.59
F	932+97.75	2.67 LT	636.55	636.59
G	933+07.75	2.67 LT	636.51	636.57
H	933+17.75	2.67 LT	636.47	636.55
I	933+27.75	2.67 LT	636.43	636.52
J	933+37.75	2.67 LT	636.39	636.47
K	933+47.75	2.67 LT	636.35	636.40
Cl Pier2	933+62.50	2.67 LT	636.29	636.29
L	933+72.50	2.67 LT	636.25	636.26
M	933+82.50	2.67 LT	636.21	636.23
N	933+92.50	2.67 LT	636.17	636.19
O	934+02.50	2.67 LT	636.13	636.15
P	934+12.50	2.67 LT	636.09	636.10
Cl Pier3	934+17.75	2.67 LT	636.07	636.07
Q	934+27.75	2.67 LT	636.03	636.04
R	934+37.75	2.67 LT	635.99	636.01
S	934+47.75	2.67 LT	635.95	635.97
T	934+57.75	2.67 LT	635.91	635.93
Cl.E.Abut.	934+72.25	2.67 LT	635.86	635.86
Bk.E.Abut.	934+73.50	2.67 LT	635.85	635.85

NOTES:

Work this sheet with sheets 4 and 5 of 24.

ILLINOIS DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS 3 OF 3
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (122BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074
DRAWN BY: MLO
CHECKED BY: PBB
DATE: MARCH 2006

3- #5 d₄(E) bars at 11" cts.
Inside Face (Typ. Ea. Corner)

270- #4 d₃(E) bars at 11" cts. Outside Face

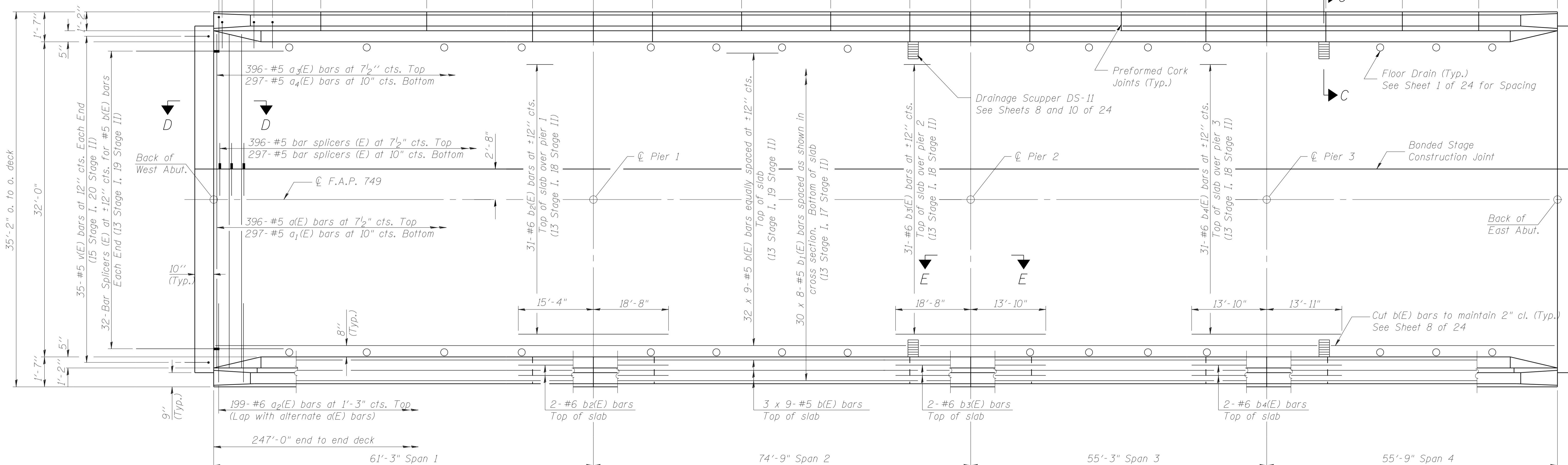
11" 264- #5 d₁(E) bars at 11" cts. Inside Face

Aluminum sheeted construction joints in base of parapet

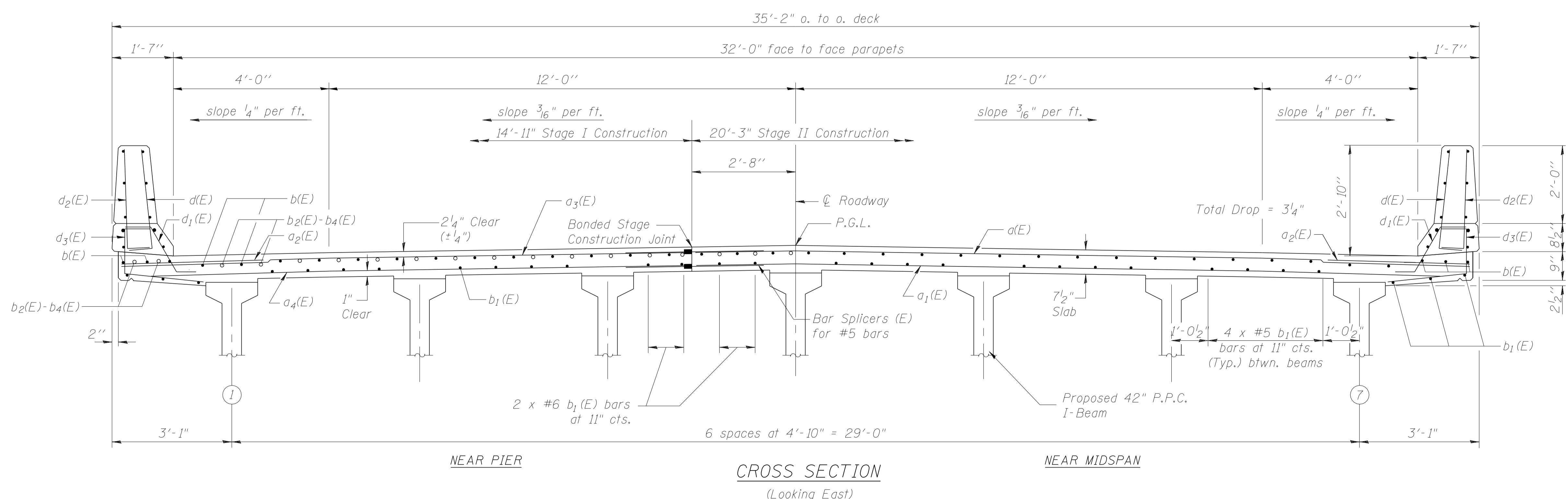
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
749	(I22BR) BR	COLES	49	20
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 7
24 SHEETS

Contract #74146



PLAN



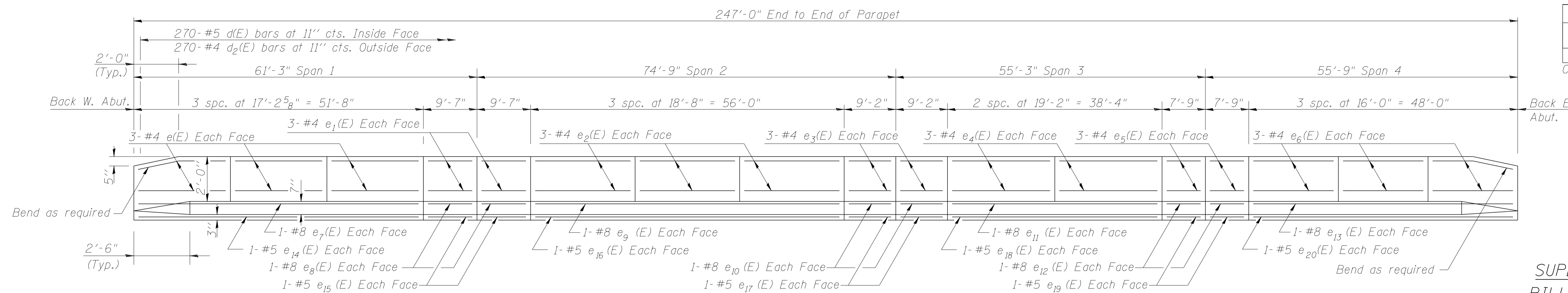
CROSS SECTION
(Looking East)

NOTES:
See Sheet 8 of 24 for Section C-C.
See Sheet 9 of 24 for Section D-D and E-E.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 32 x 9- #5 etc. indicates 32 lines of bars with 9 lengths per line.
See Sheet 8 of 24 for superstructure details and Bill of Material.
See Sheet 8 of 24 for parapet reinforcement.
Work this sheet with sheets 8 and 9 of 24.
See Sheet 20 of 24 for Bar Splicer details.

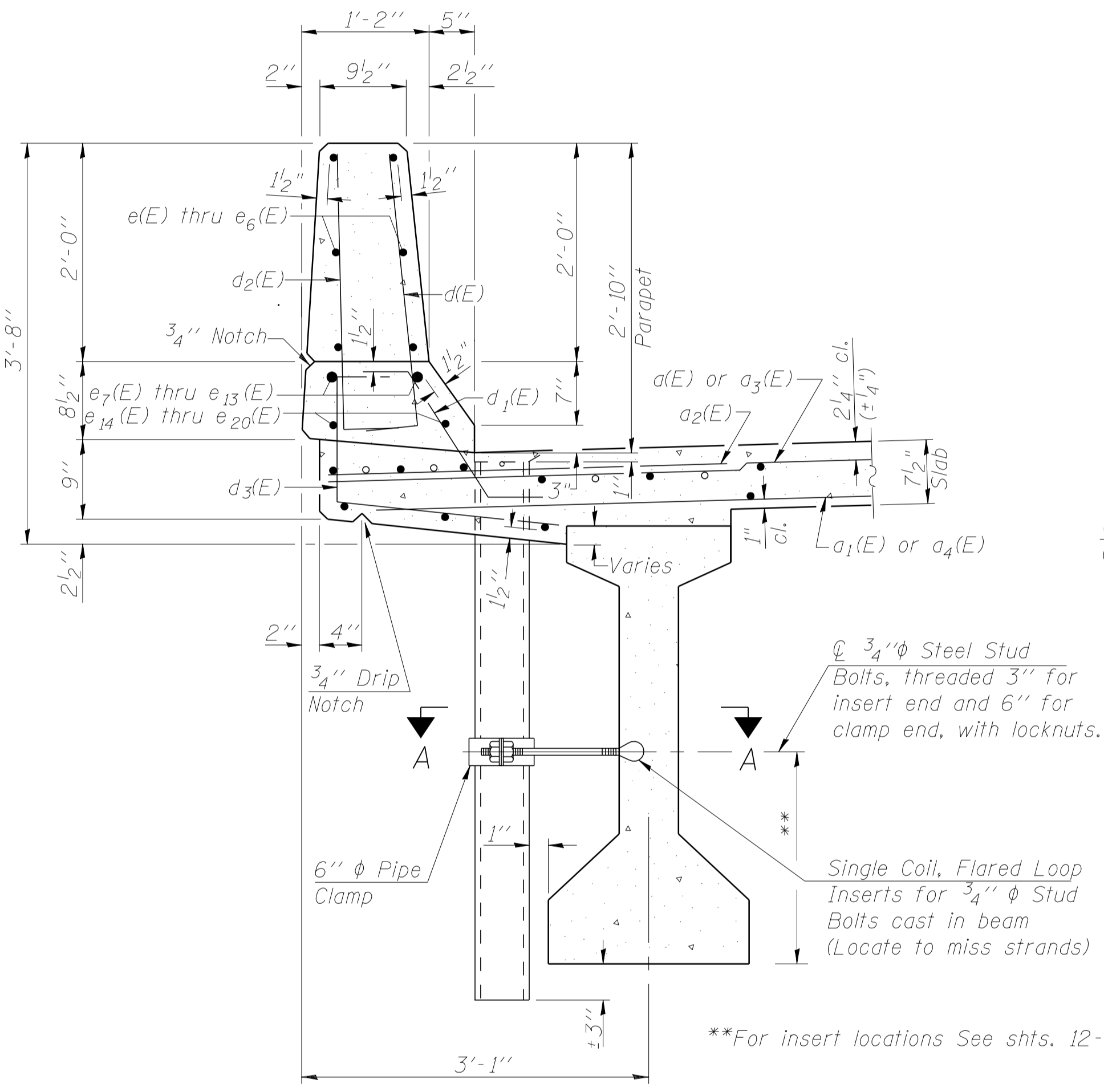
MIN BAR LAPS
#5 bars = 1'-8"

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (I22BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074
DRAWN BY: MLO
CHECKED BY: PBB
DATE: MARCH 2006

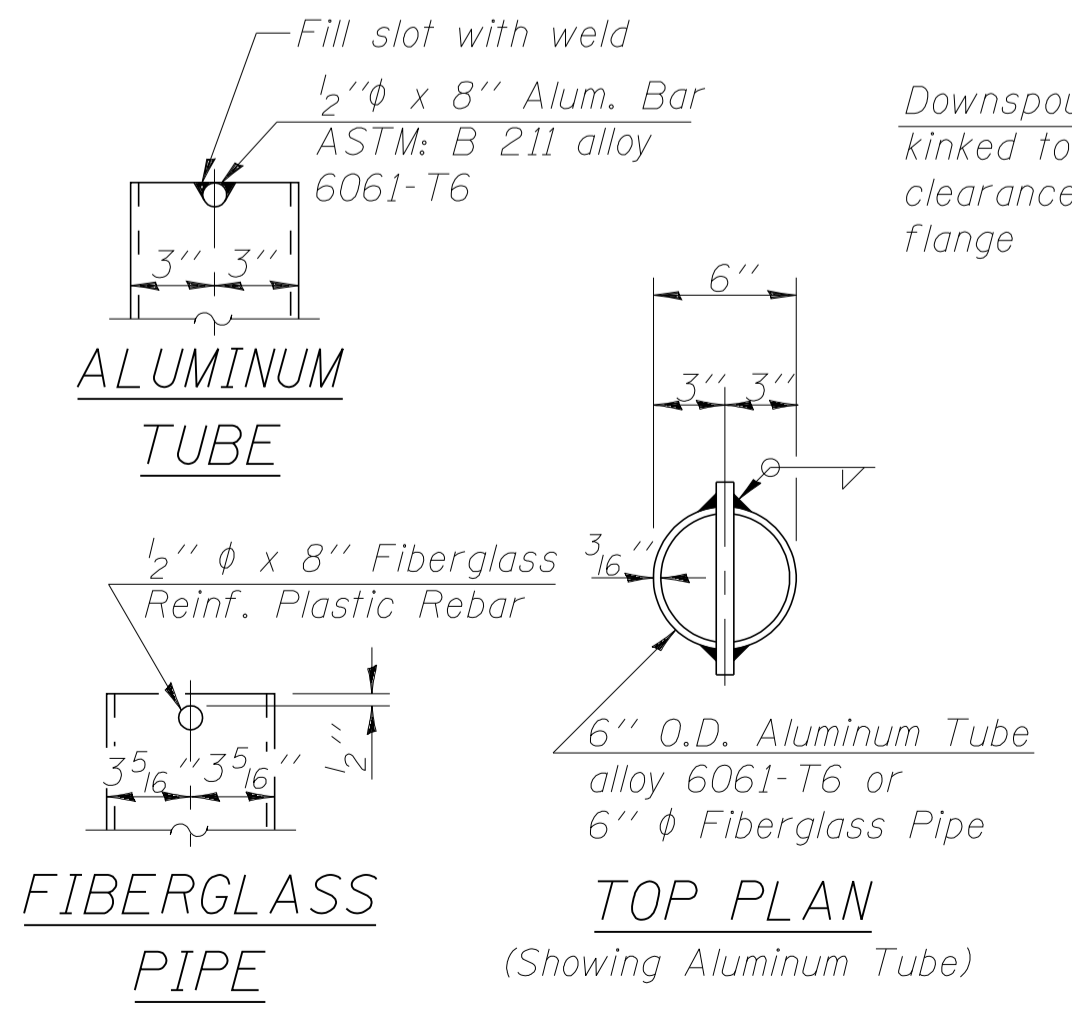
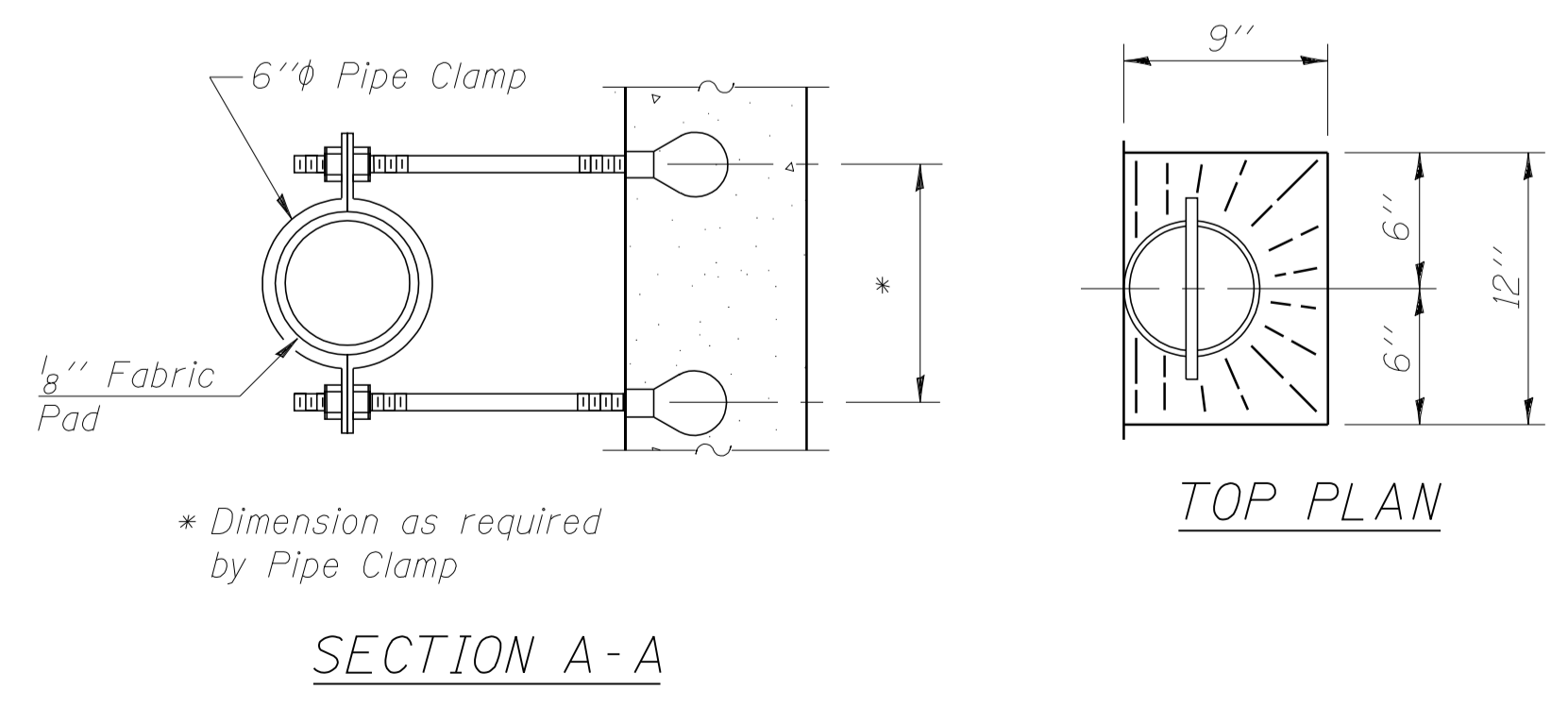
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 8
749	(I22BR) BR	COLES	49	21	24 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	Contract #74146		



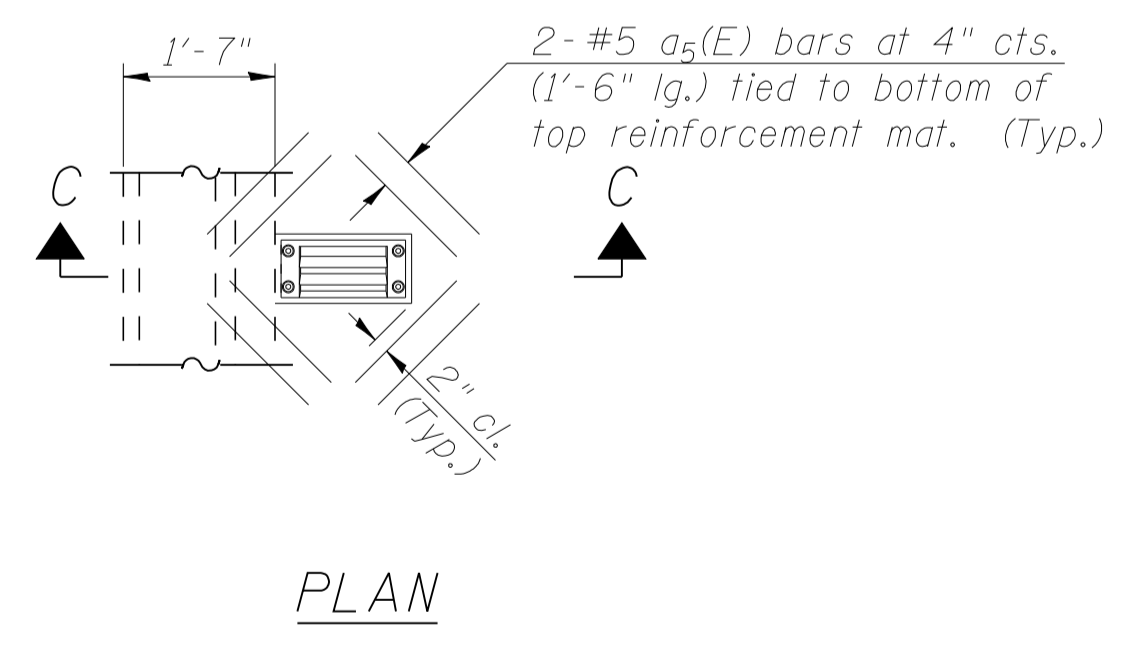
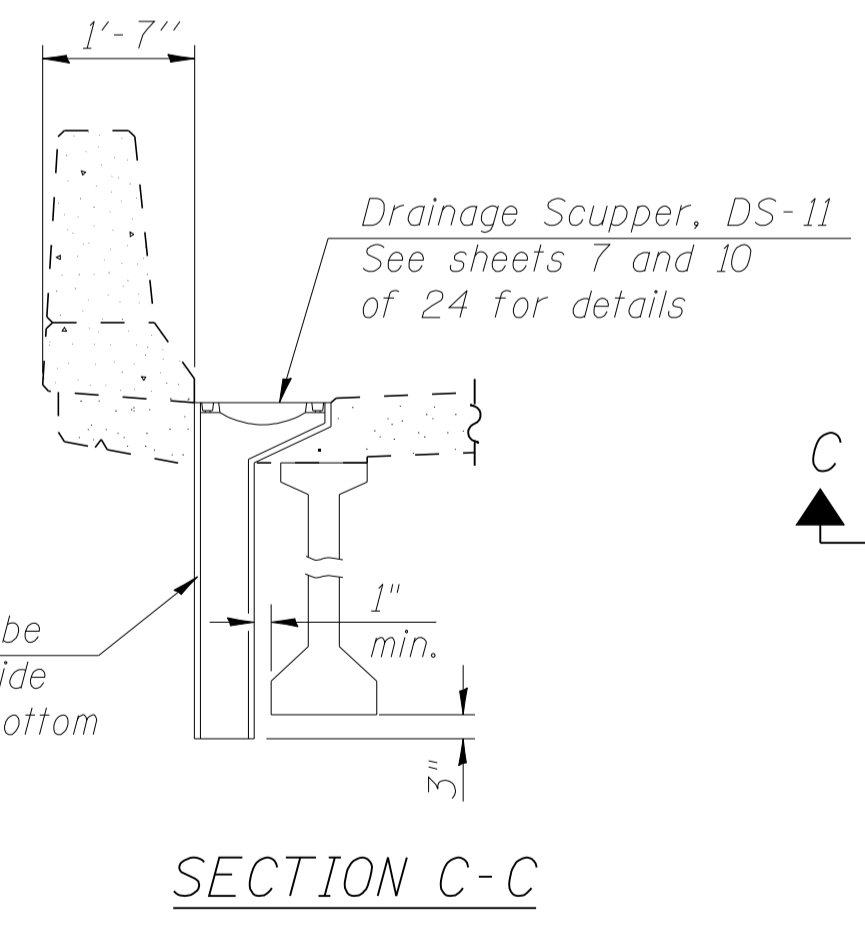
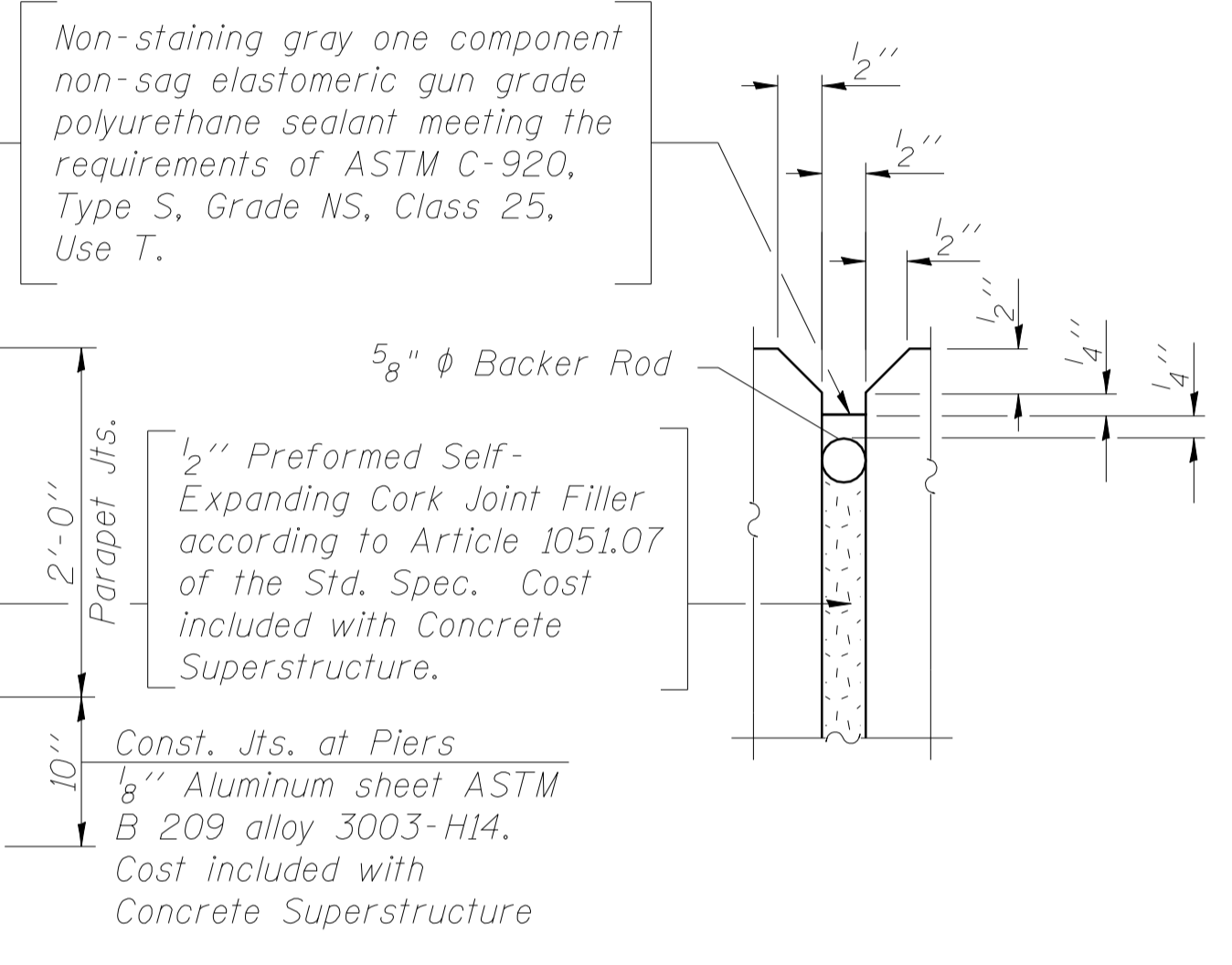
INSIDE ELEVATION OF PARAPET



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 coated or pigmented by the manufacturer with a color that matches the concrete. The clamping device and inserts shall be galvanized according to AASHTO M 232.

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
m(E)	4	#6	13'-10"	
m1(E)	4	#6	19'-2"	
m2(E)	6	#6	14'-7"	
m3(E)	6	#6	19'-11"	
m4(E)	12	#6	6'-7"	
m5(E)	16	#6	7'-0"	
m6(E)	40	#6	2'-8"	
m7(E)	4	#6	1'-10"	
m8(E)	8	#6	1'-0"	
m9(E)	8	#6	1'-6"	
m10(E)	60	#4	4'-0"	
m11(E)	12	#4	2'-1"	
m12(E)	21	#8	5'-10"	
s(E)	72	#5	5'-7"	
s1(E)	60	#4	10'-10"	
s2(E)	72	#4	10'-5"	
v(E)	70	#5	3'-4"	
Item		Unit	Quantity	
Reinforcement Bars, Epoxy Coated		Lbs.	64,500	
Concrete Superstructure		Cu. Yds.	316.0	
Drainage Scuppers, DS-11		Each	4	
Bridge Deck Grooving		Sq. Yds.	823	
Protective Coat		Sq. Yds.	1086	
Floor Drains		Each	30	

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	396	#5	19'-9"	
a1(E)	297	#5	19'-1"	
a2(E)	398	#6	4'-6"	
a3(E)	396	#5	14'-5"	
a4(E)	297	#5	13'-9"	
a5(E)	32	#5	1'-6"	
b(E)	342	#5	28'-11"	
b1(E)	240	#5	32'-4"	
b2(E)	35	#6	34'-0"	
b3(E)	35	#6	32'-6"	
b4(E)	35	#6	27'-9"	
d(E)	540	#5	3'-0"	
d1(E)	528	#5	2'-5"	
d2(E)	540	#4	3'-0"	
d3(E)	540	#4	3'-8"	
d4(E)	12	#5	2'-7"	
e(E)	36	#4	16'-10"	
e1(E)	24	#4	9'-3"	
e2(E)	36	#4	18'-4"	
e3(E)	24	#4	8'-10"	
e4(E)	24	#4	18'-10"	
e5(E)	24	#4	7'-5"	
e6(E)	36	#4	15'-8"	
e7(E)	4	#8	51'-4"	
e8(E)	8	#8	9'-3"	
e9(E)	4	#8	55'-8"	
e10(E)	8	#8	8'-10"	
e11(E)	4	#8	38'-0"	
e12(E)	8	#8	7'-5"	
e13(E)	4	#8	47'-8"	
e14(E)	4	#5	51'-4"	
e15(E)	8	#5	9'-3"	
e16(E)	4	#5	55'-8"	
e17(E)	8	#5	8'-10"	
e18(E)	4	#5	38'-0"	
e19(E)	8	#5	7'-5"	
e20(E)	4	#5	47'-8"	

NOTES:

Reinforcement bars designated (E) shall be epoxy coated.

Work this sheet with sheets 7 and 9 of 24. Concrete in diaphragm is included with Concrete Superstructure.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

IL ROUTE 133 OVER THE LITTLE EMBARRAS RIVER

F.A.P. ROUTE 749 SECTION (I22BR)BR

COLES COUNTY

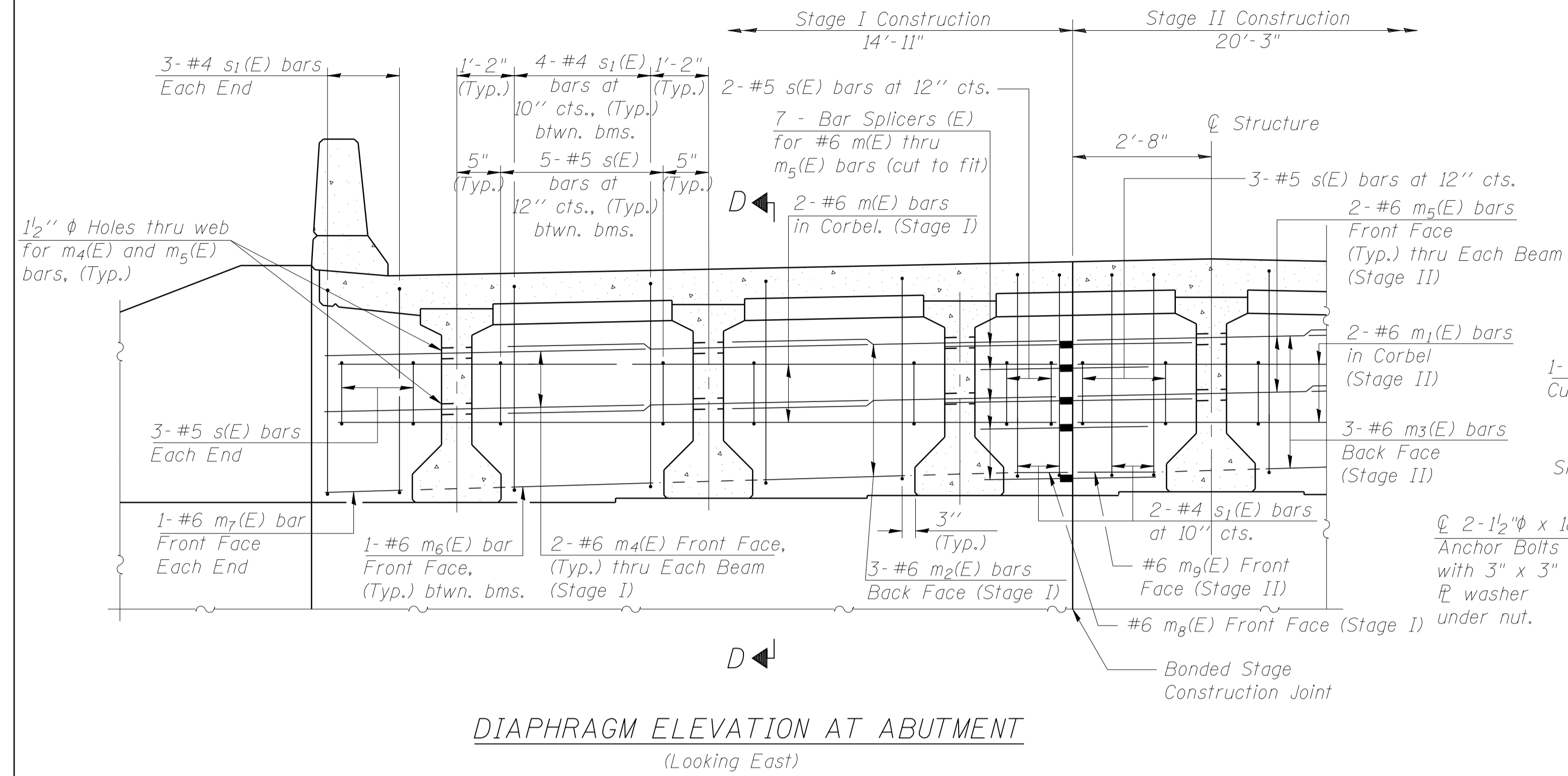
STATION 933+50.00

STRUCTURE NO. 015-0074

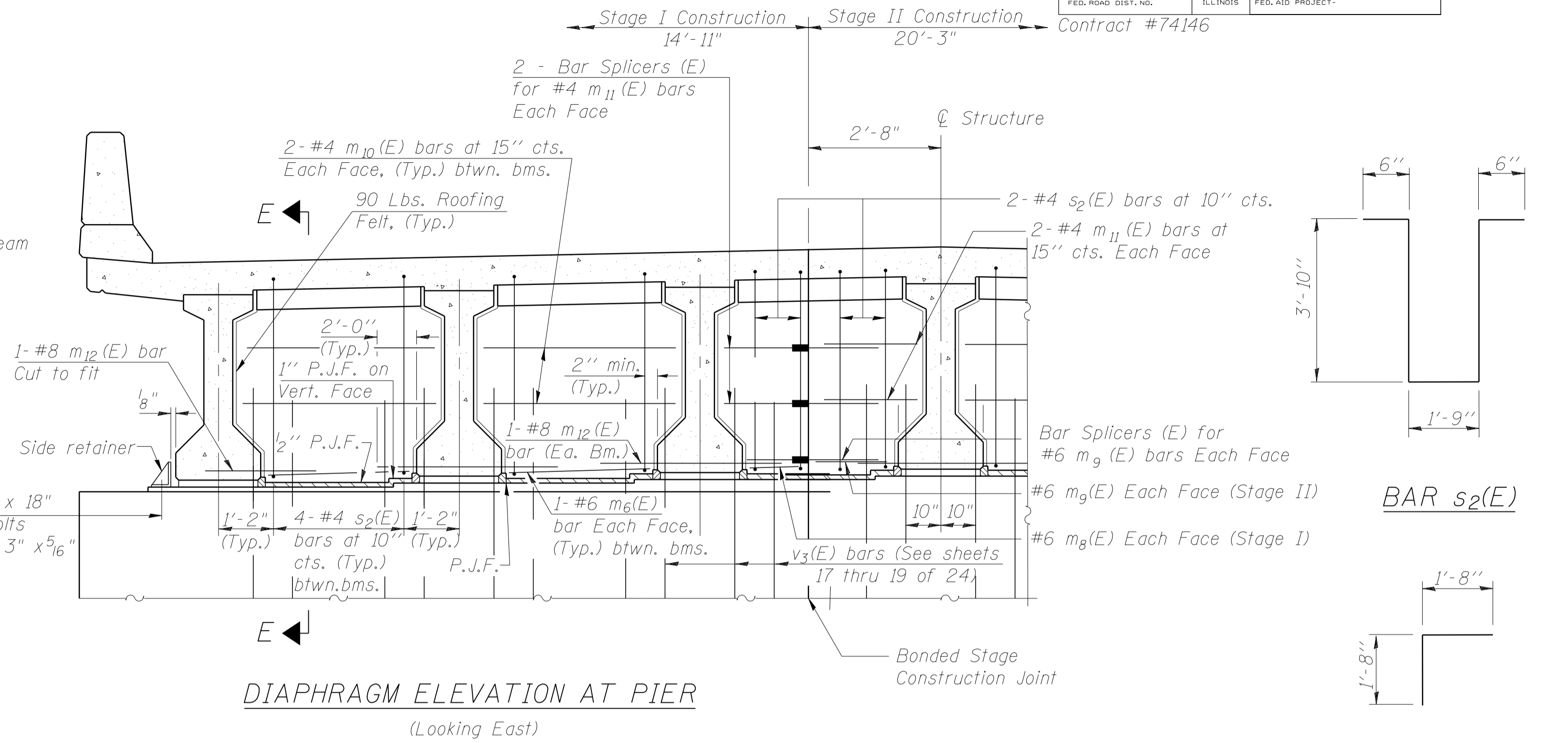
DATE: MARCH 2006

DRAWN BY: MLO

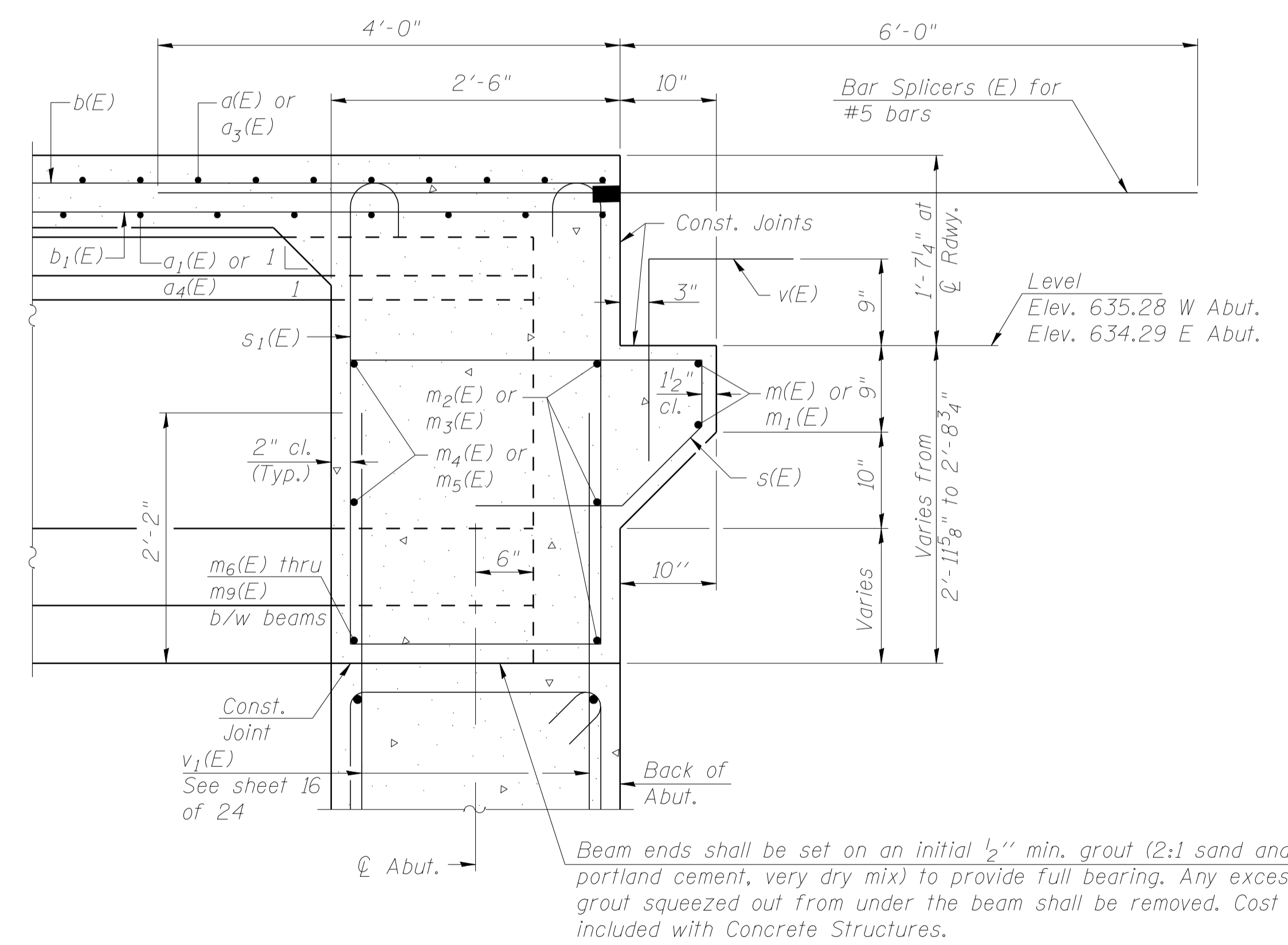
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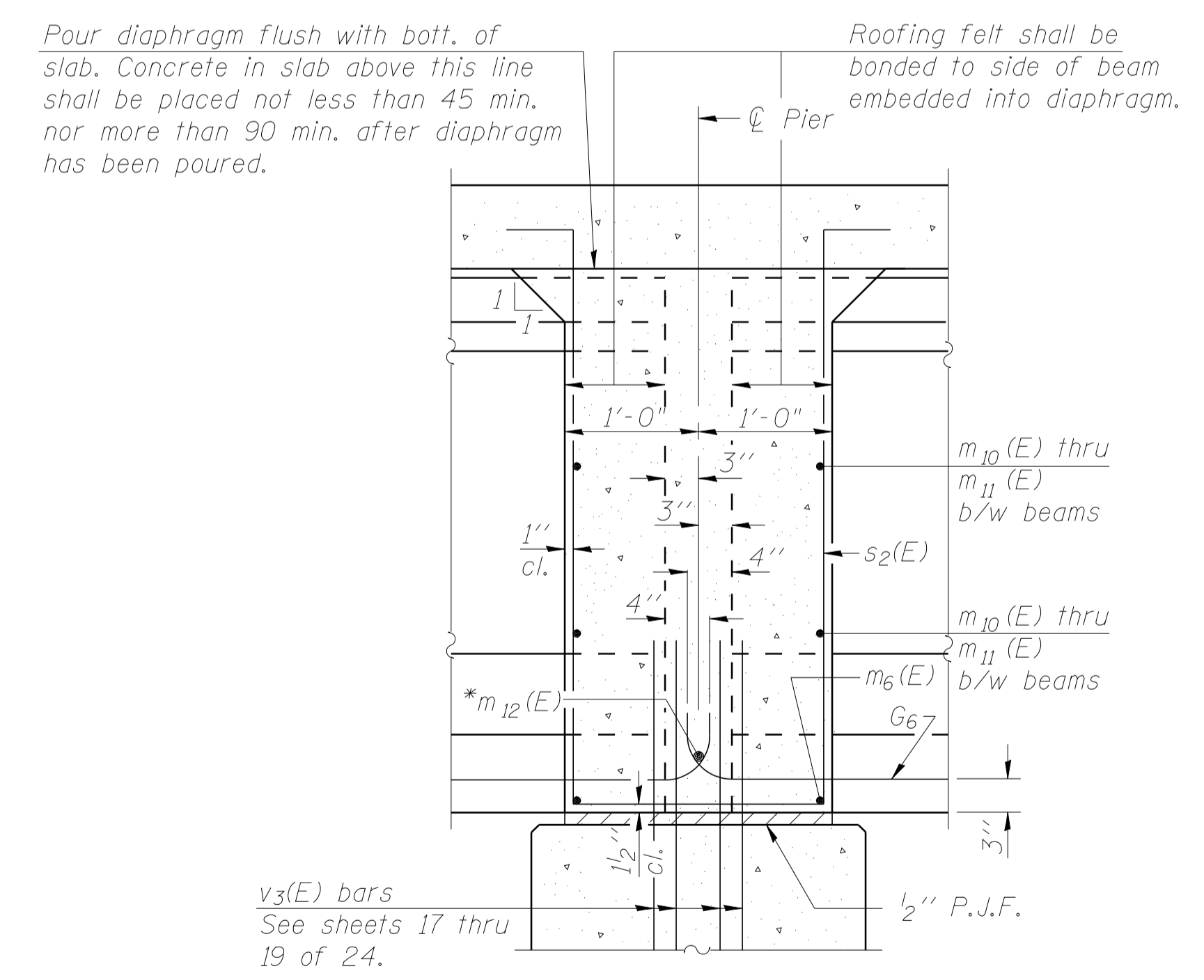
DIAPHRAGM ELEVATION AT ABUTMENT
(Looking East)



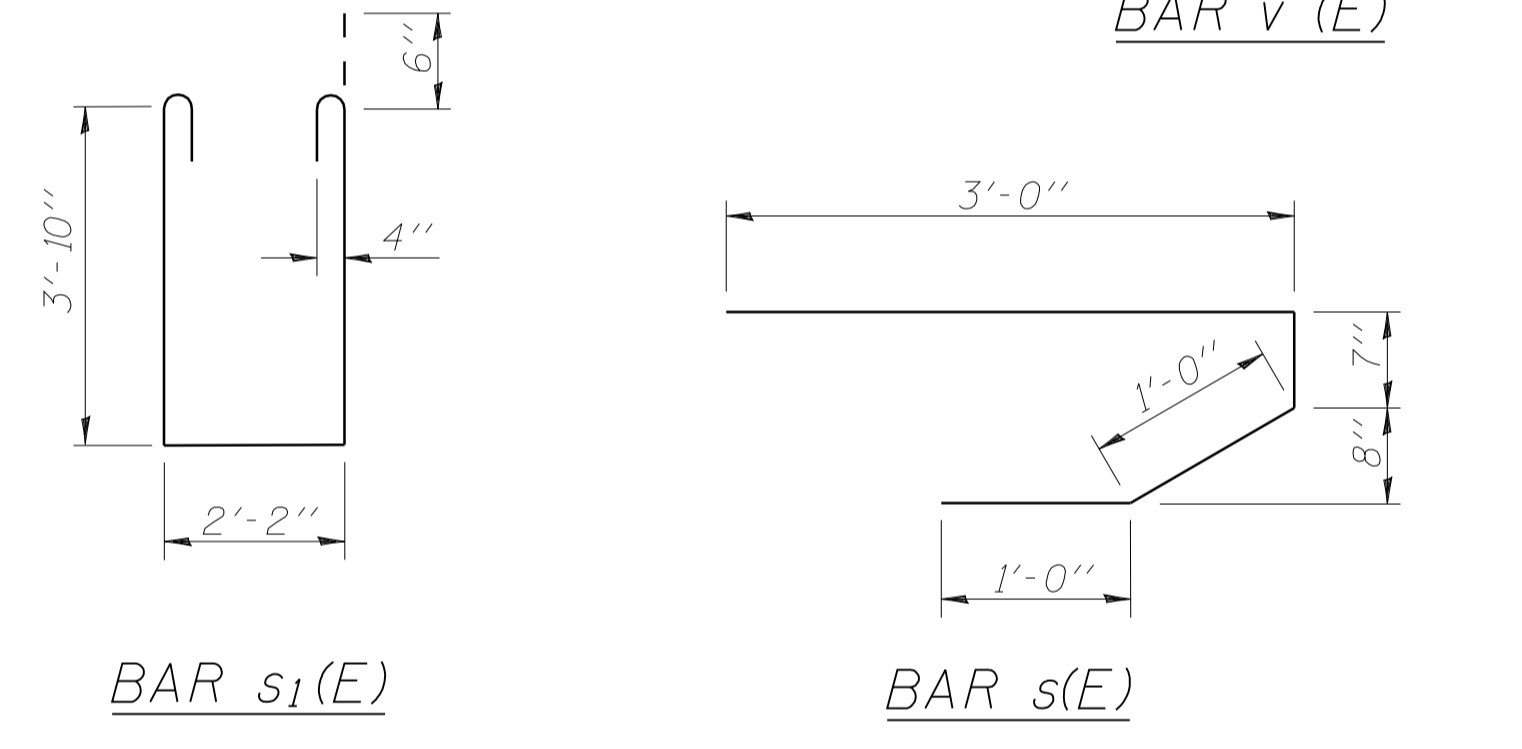
DIAPHRAGM ELEVATION AT PIER
(Looking East)



SECTION D-D AT ABUTMENT



SECTION E-E AT PIER

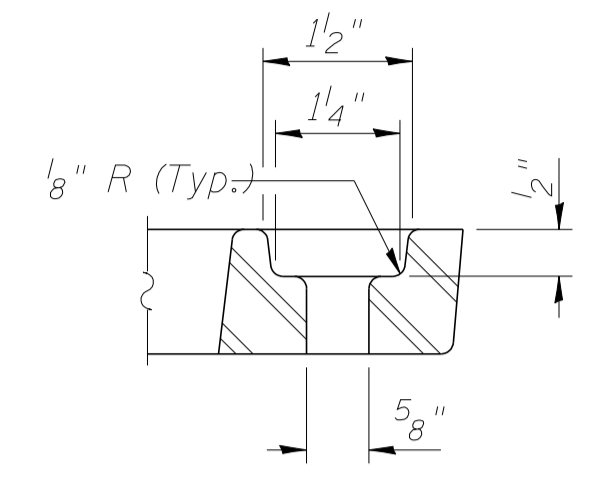
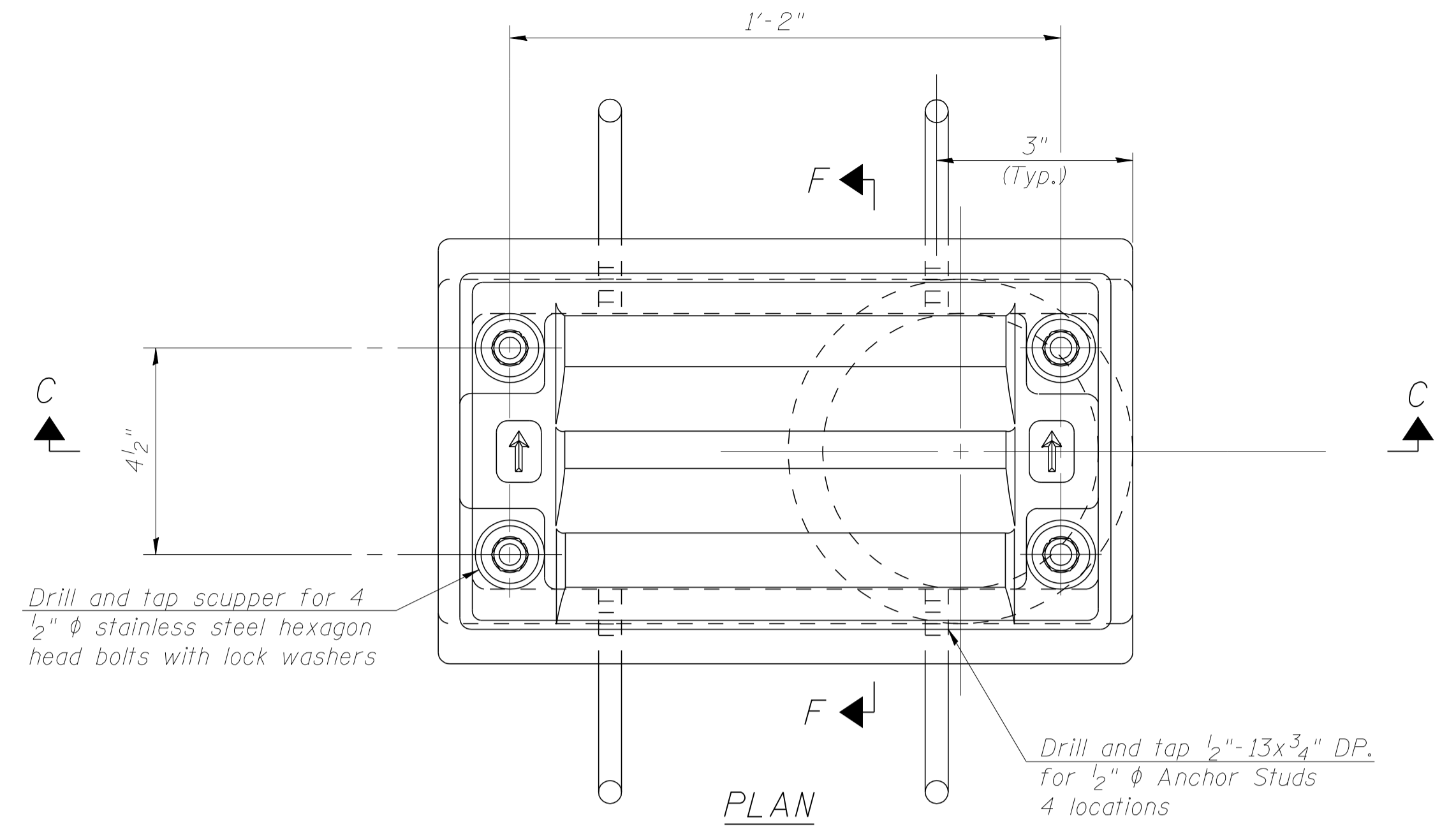


NOTES:
 Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 24.
 Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 24.
 Cost of 90 Lb. roofing felt is included with Concrete Superstructure. See sheet 21 of 24 for Anchor Bolt Details.
 Work this sheet with sheets 7 and 8 of 24.
 Reinforcement bars designated (E) shall be epoxy coated. See sheet 11 of 24 for Side Retainer details and P.J.F. layout at Piers. See sheet 20 of 24 for Bar Splicer details.

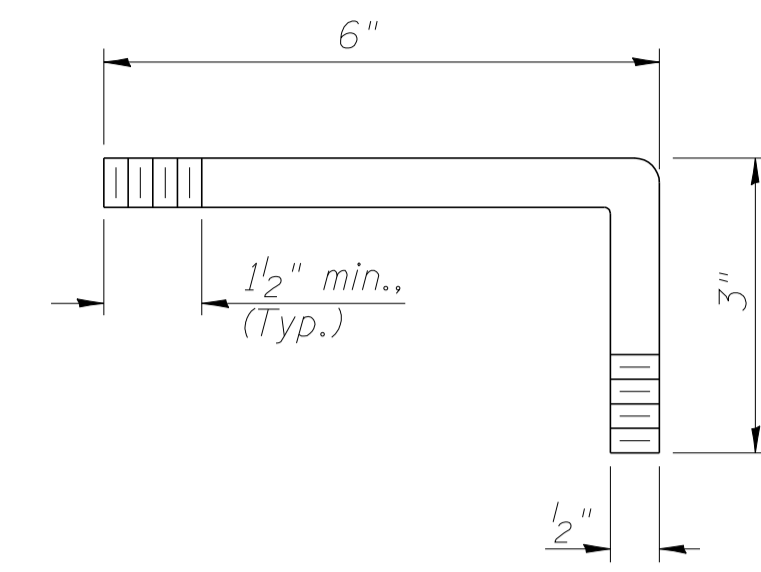
MIN. BAR LAP
#6 bar = 2'-9"

* Tightly fasten the #8 bars together with No. 9 wire ties.

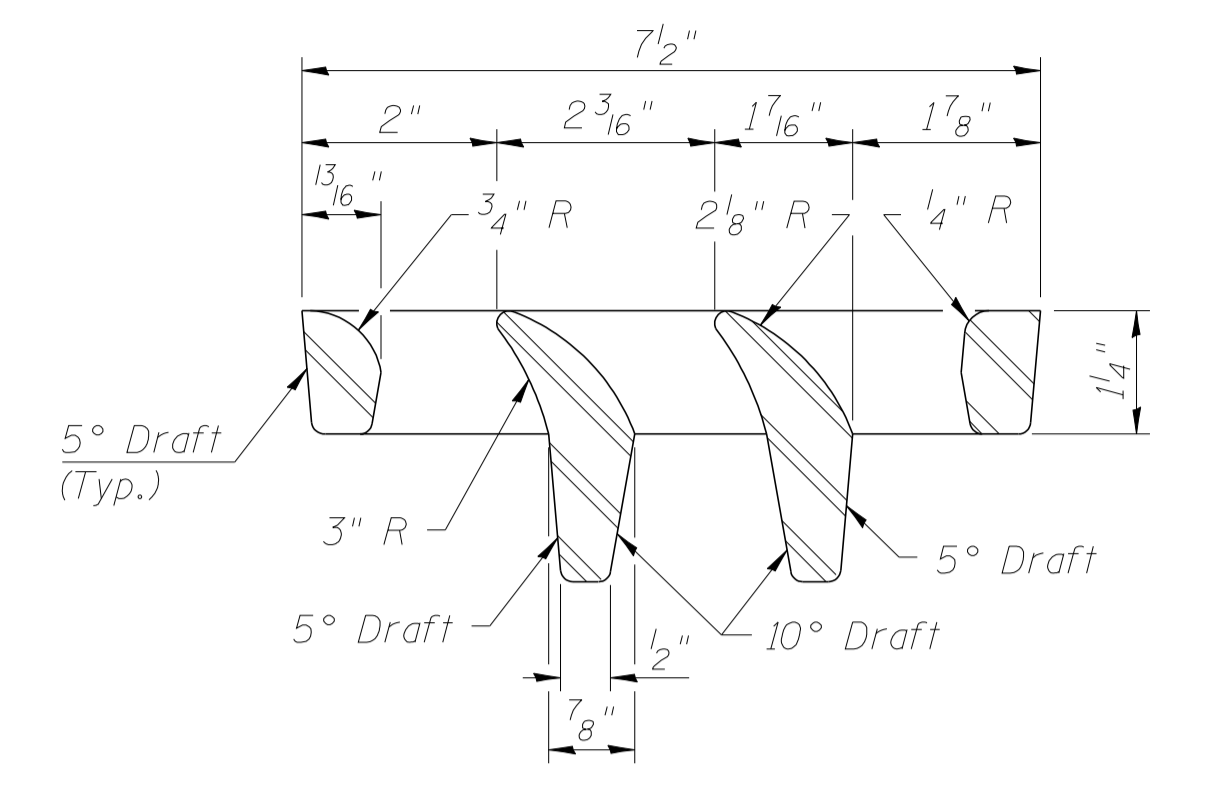
ILLINOIS DEPARTMENT OF TRANSPORTATION
DIAPHRAGM DETAILS
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (I22BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074
 DRAWN BY: MLO
 CHECKED BY: PBB



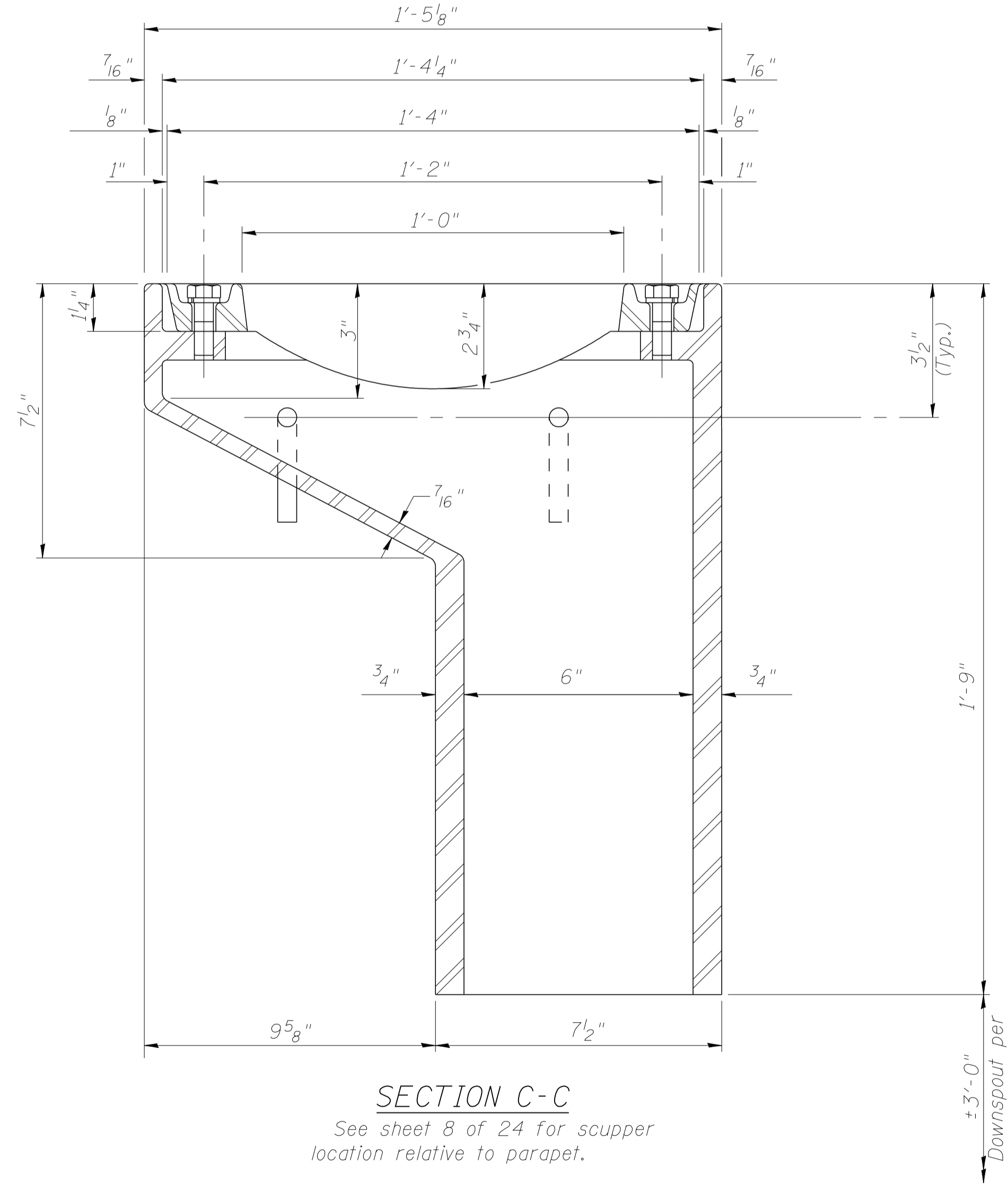
BOLT HOLE DETAIL



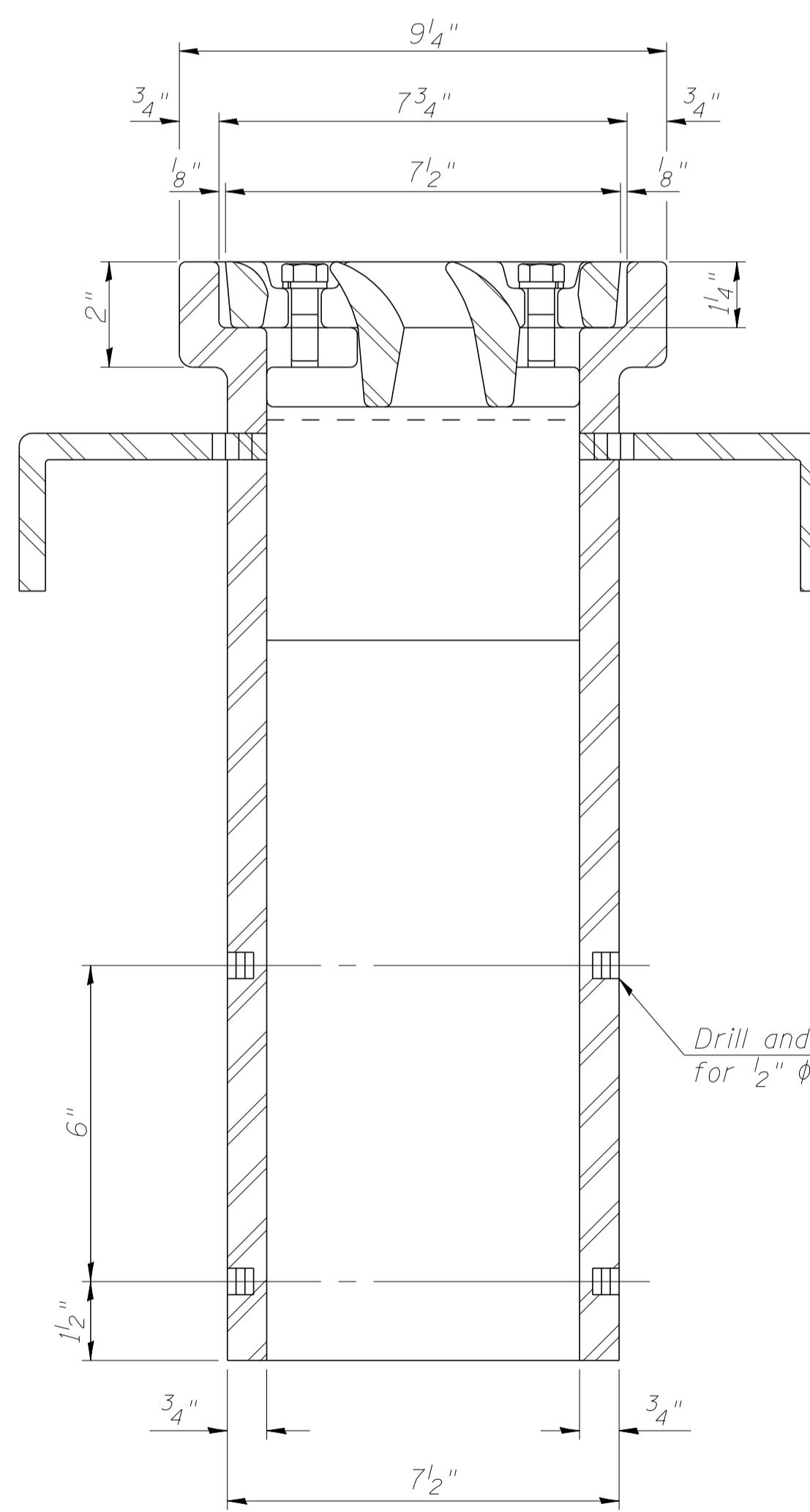
ANCHOR STUD DETAIL



VANE GRATE DETAIL



SECTION C-C
See sheet 8 of 24 for scupper location relative to parapet.



SECTION F-F

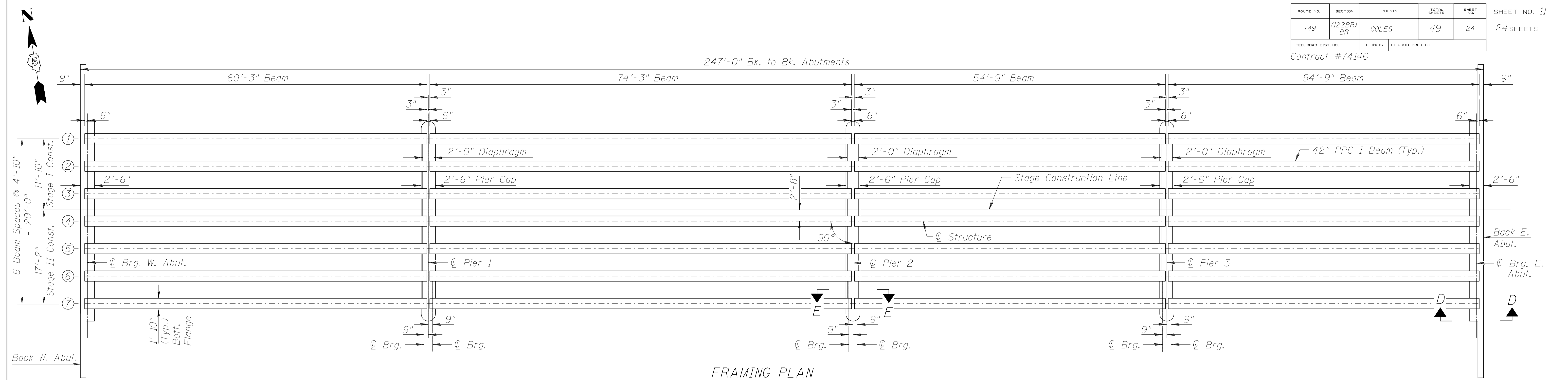
NOTES:

- All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
- Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
- The grate, frame and downspout shall be galvanized according to AASHTO M 111 and ASTM A 385. Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
- As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
- Structural steel weldments of equal sections and of the same configuration may be substituted for cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.
- The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
- Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	4

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCUPPER DETAILS
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (122BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074
DATE: MARCH 2006
DRAWN BY: MLO
CHECKED BY: PBB



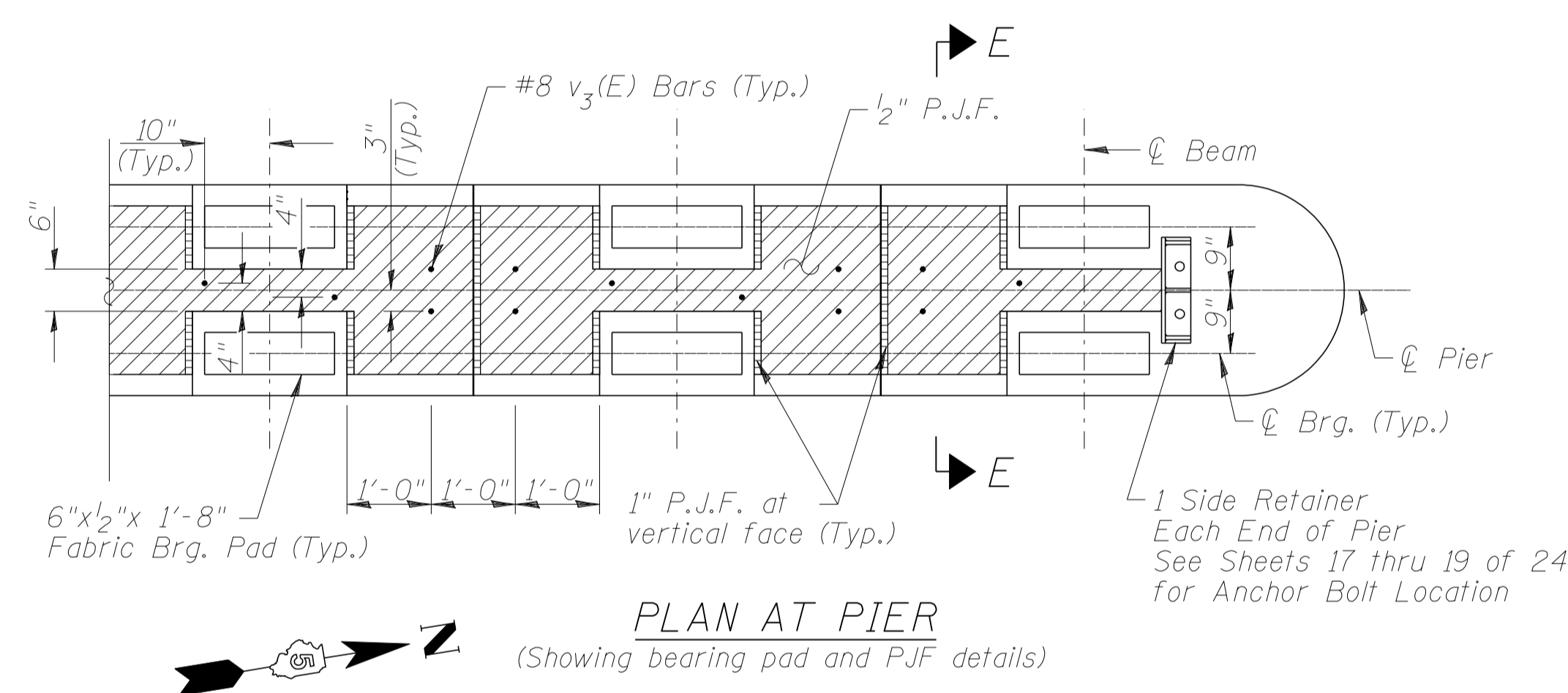
FRAMING PLAN

	0.4 Sp. #1	Pier 1	0.5 Sp. #2	Pier 2	0.5 Sp. #3	Pier 3	0.6 Sp. #4								
Strand Pattern	12-A		16-A		12-A		12-A								
I	(in ⁴) 90,956		90,956		90,956		90,956								
I'	(in ⁴) 251,900		251,900		251,900		251,900								
S_b	(in ³) 5,153		5,153		5,153		5,153								
S_b'	(in ³) 8,489		8,489		8,489		8,489								
S_t	(in ³) 3,736		3,736		3,736		3,736								
S_t'	(in ³) 20,436		20,436		20,436		20,436								
Beam Location	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	
M_D	(k') 1.059	0.971			1.059	0.971			1.059	0.971			1.059	0.971	
M_{sD}	(k) 477	437			740	679			405	371			394	361	
s_D	(k/')	0.357	0.357	0.357	0.357	0.357	0.357	0.357	0.357	0.357	0.357	0.357	0.357	0.357	
M_L	(k)	86	86	173	173	100	100	129	129	22	22	101	101	87	87
$M_{L'}$	(k)	292	286	246	241	291	285	226	221	210	206	186	183	251	246
$M_{(Imp)}$	(k)	78	77	64	63	73	71	59	59	58	57	52	50	70	68

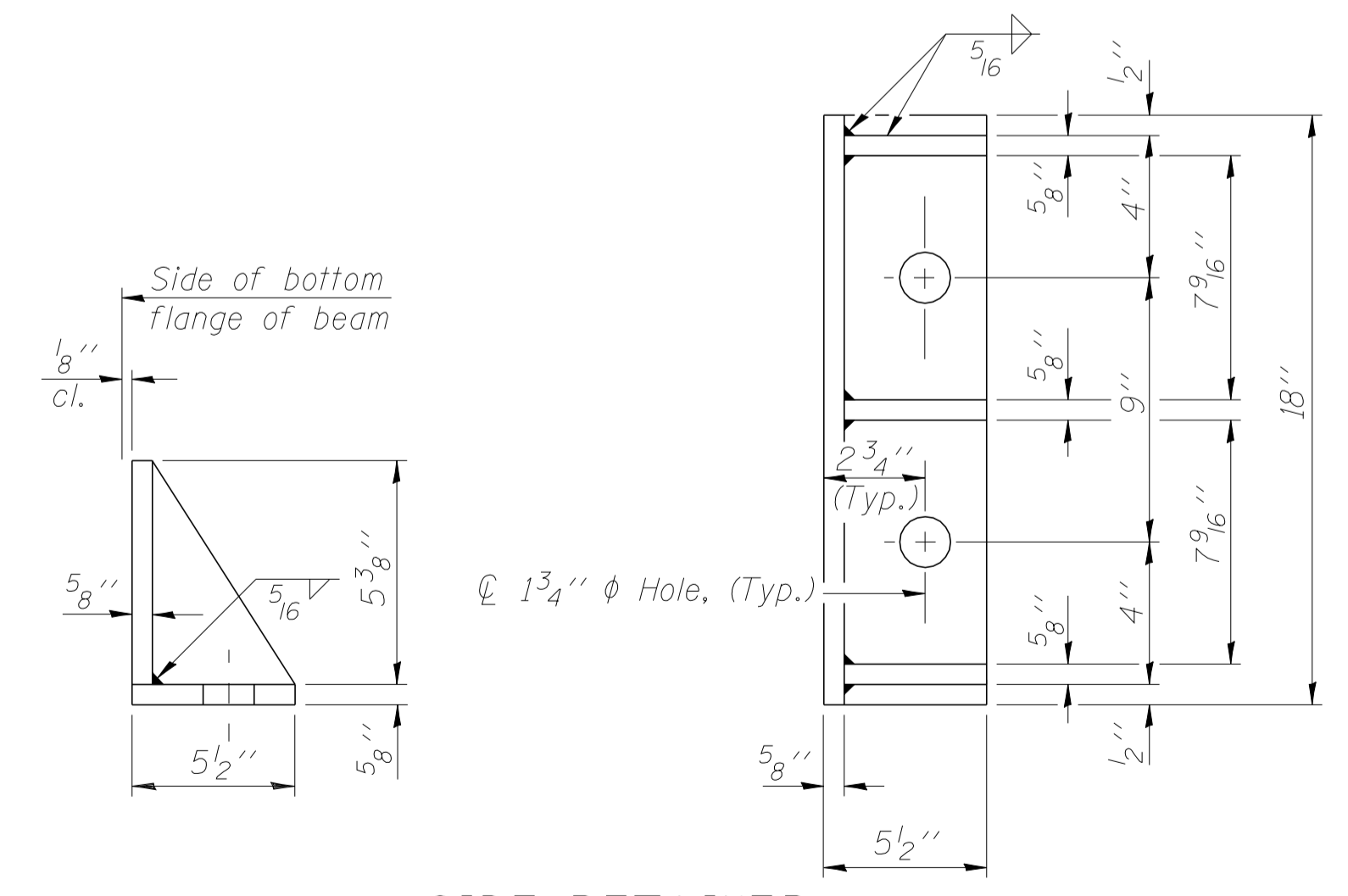
	W. Abut.	Pier 1 Span 1	Pier 1 Span 2	Pier 2 Span 2	Pier 2 Span 3	Pier 3 Span 3	Pier 3 Span 4	E. Abut.							
Beam Location	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	
R_D	(k)	31.8	29.1	31.8	29.1	39.6	36.3	39.6	36.3	29.3	26.8	29.3	26.8	28.9	26.5
R_{sD}	(k)	7.8	7.8	13.6	13.6	13.9	13.9	12.8	12.8	10.4	10.4	9.4	9.4	11.6	11.6
R_L	(k)	26.2	25.6	34.6	33.9	34.6	33.9	33.2	32.5	33.2	32.5	31.1	30.4	31.1	30.4
$Imp.$	(k)	7.9	7.7	6.7	6.5	6.7	6.5	6.5	6.4	6.5	6.4	6.6	6.5	6.6	6.5
$R_{(Total)}$	(k)	73.7	70.2	86.7	83.1	94.8	90.6	92.1	88.0	79.4	76.1	76.4	73.1	78.2	75.0

I and I' are the moment of inertia and composite moment of inertia of the beam section.
 S_b and S_b' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.
 S_t and S_t' are the non-composite and composite section modulus for the top fiber of the prestressed beam.

M_D is the moment due to dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.
 M_{sD} is the moment due to dead loads on the composite section.
 M_L is the moment due to live load on the composite section.
 $M_{(Imp)}$ is the moment due to live load impact on the composite section.



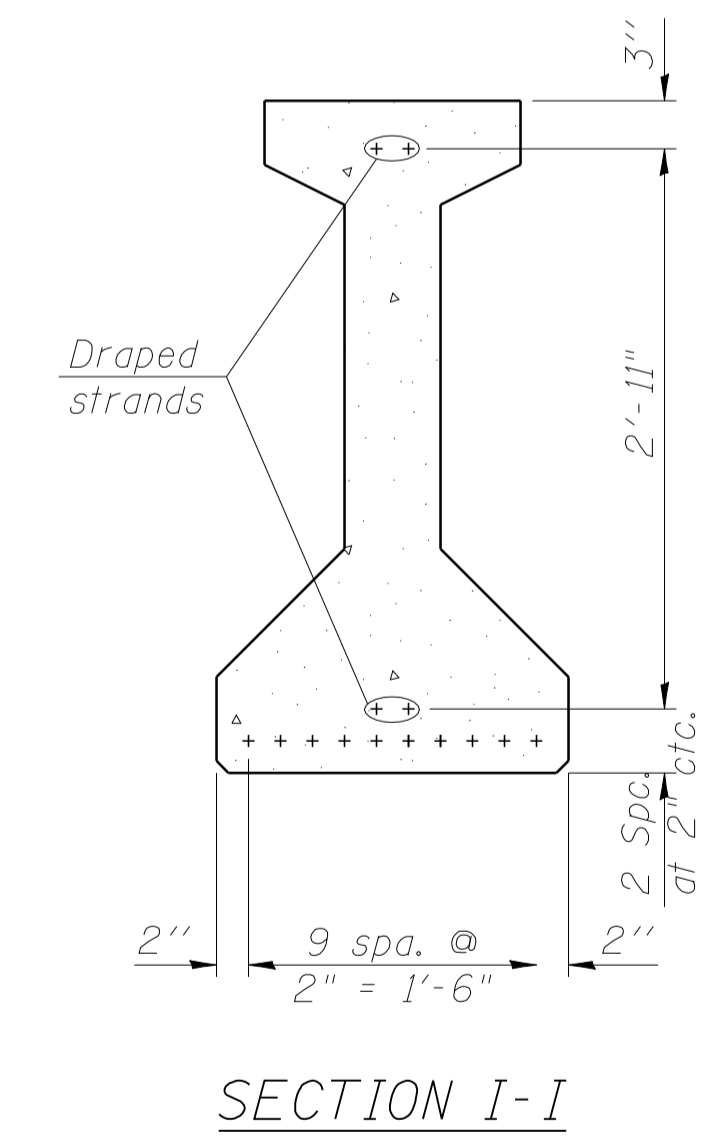
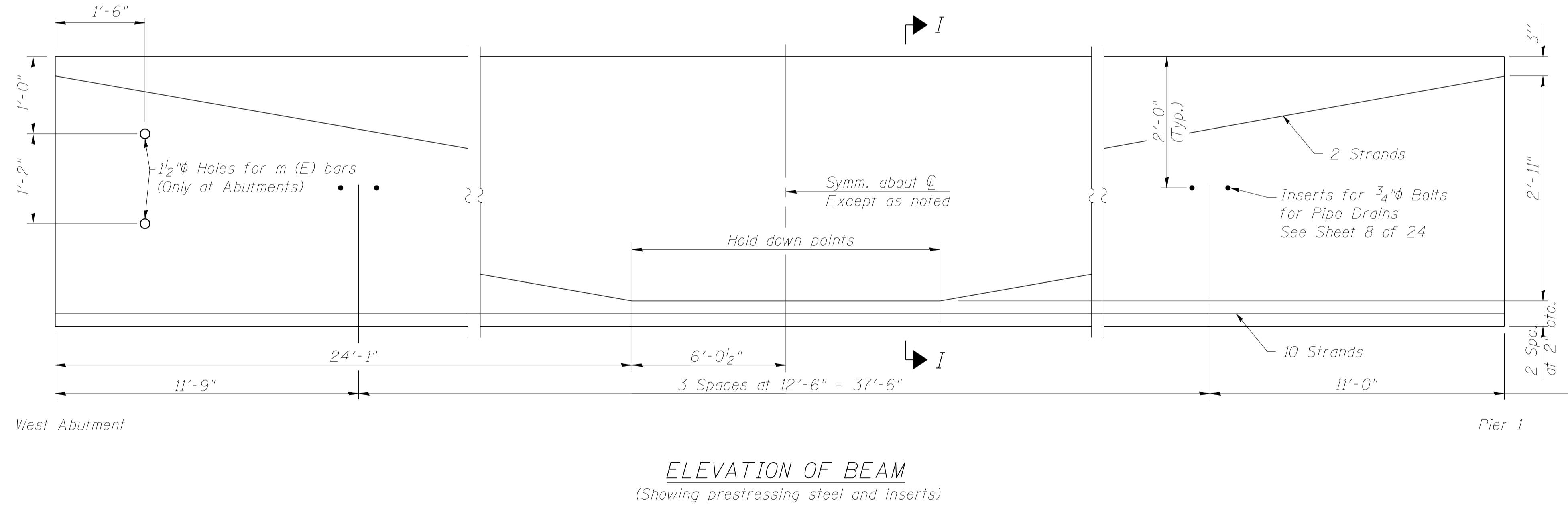
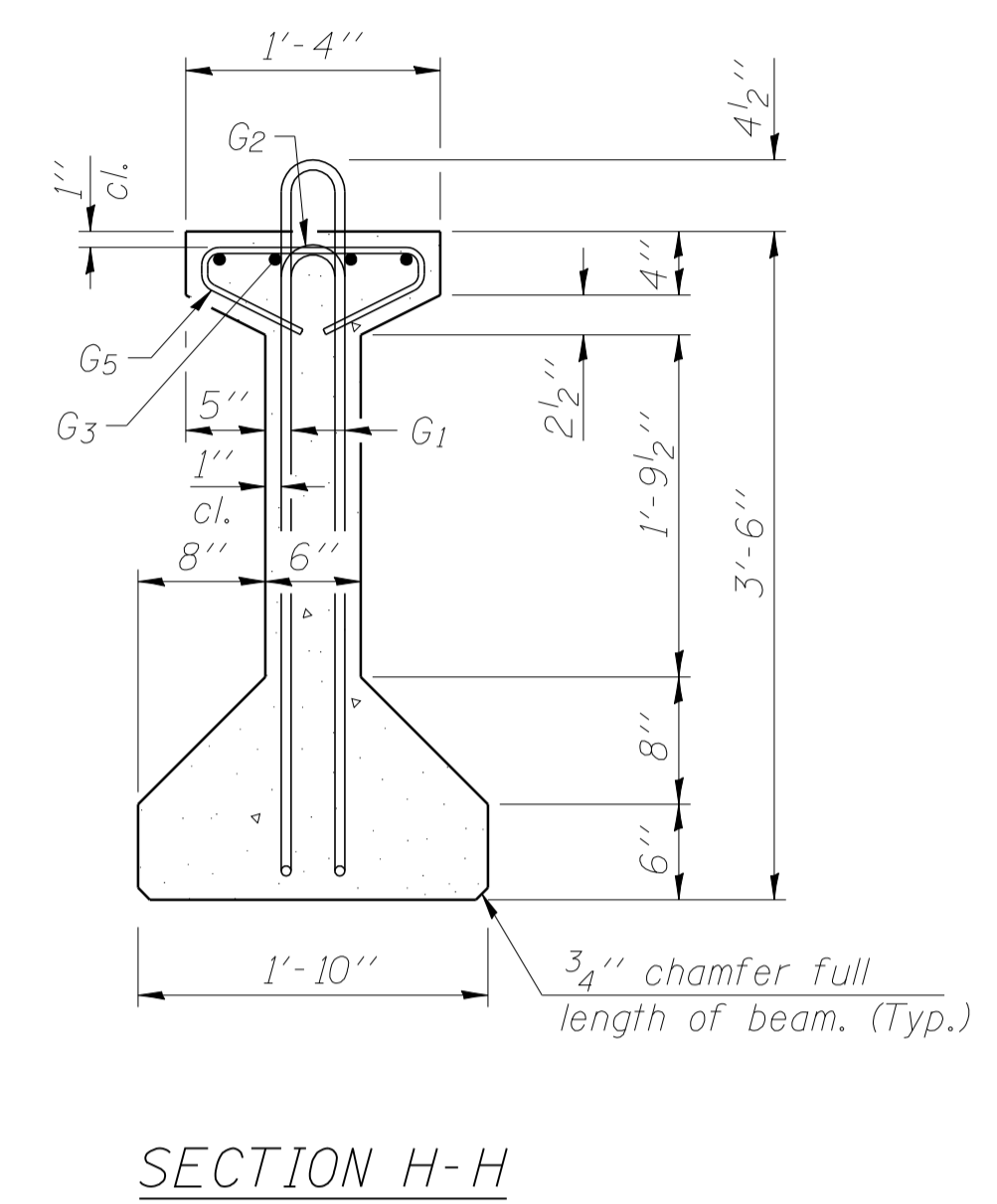
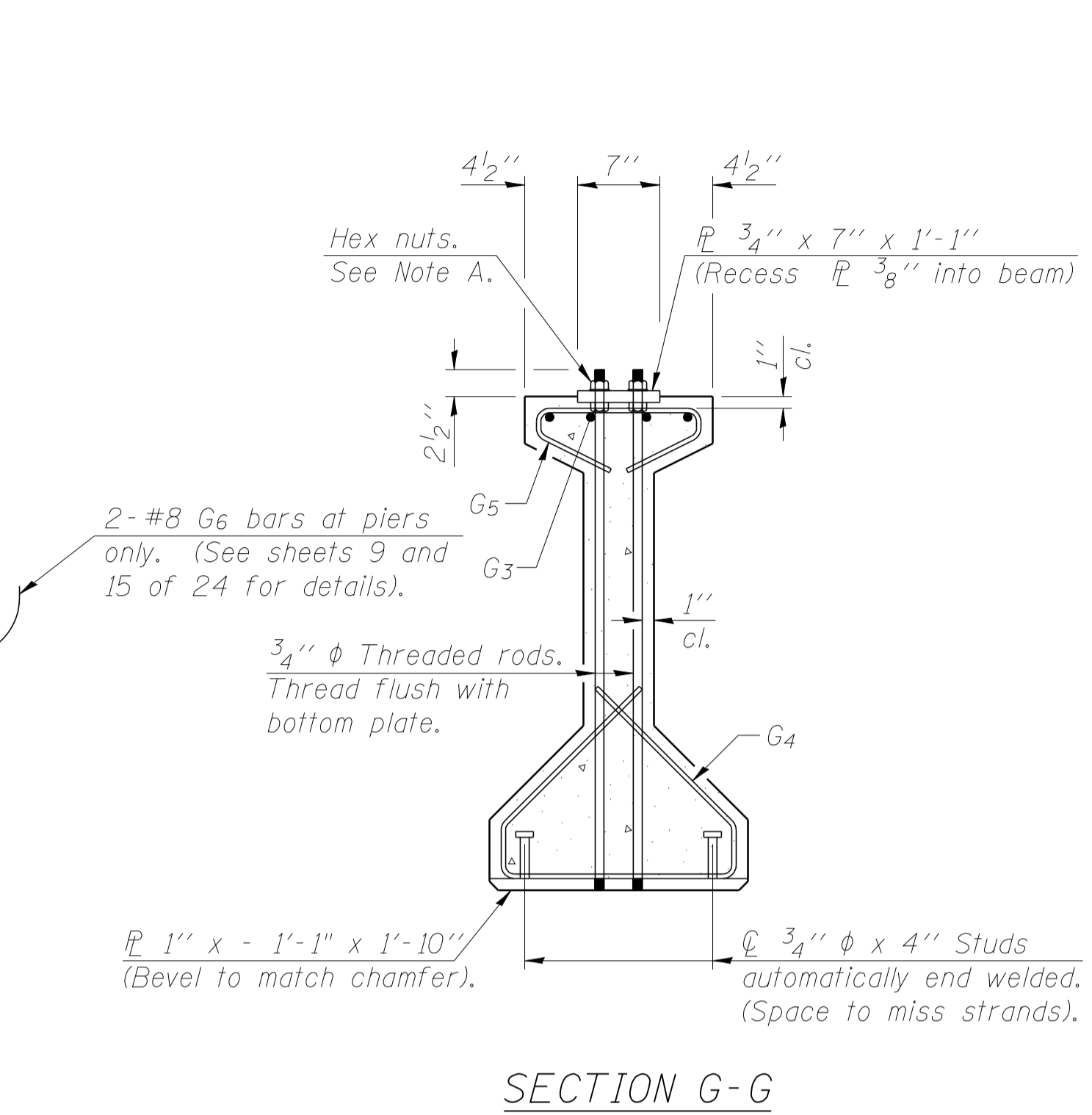
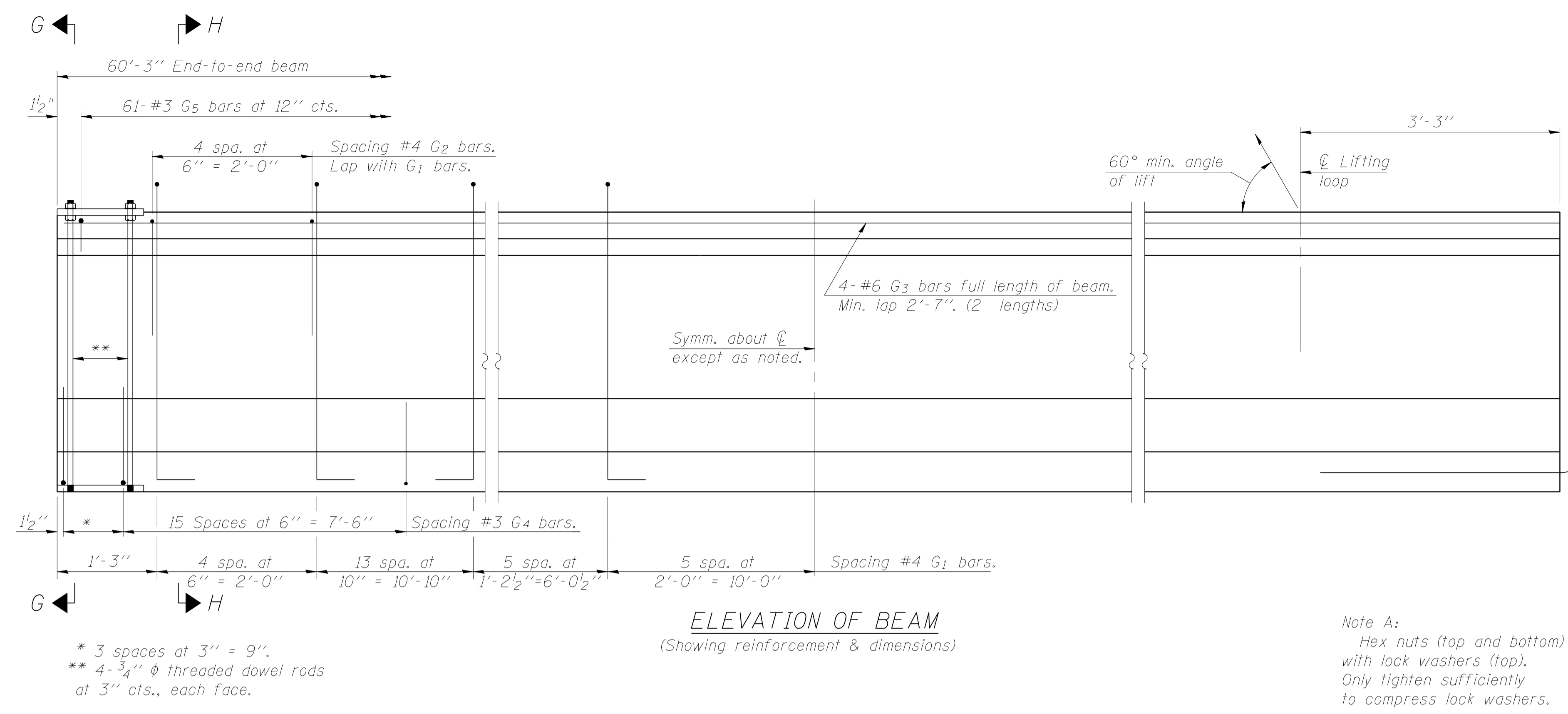
PLAN AT PIER
(Showing bearing pad and P.J.F. details)



SIDE RETAINER
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

NOTES:
 After beams have been erected, holes at fixed piers and anchor bolts shall be grouted in place.
 See sheet 21 of 24 for anchor bolt installation.
 See sheets 17 thru 19 of 24 for $v_3(E)$ bar Bill of Materials.
 See sheet 9 of 24 for sections E-E and D-D.
 The cost of P.J.F. and Fabric Bearing Pad included in Concrete Superstructure.
 Structural Steel for side retainers shall be in accordance with Section 505 of the Standard Specifications.
 The side retainers shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM 385.
 The cost of Side Retainers and anchor bolts shall be included in the unit bid price for Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42".

ILLINOIS DEPARTMENT OF TRANSPORTATION
FRAMING PLAN AND PIER SEAT DETAILS
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (I22BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074
 DRAWN BY: MLO
 CHECKED BY: PBB
 DATE: MARCH 2006



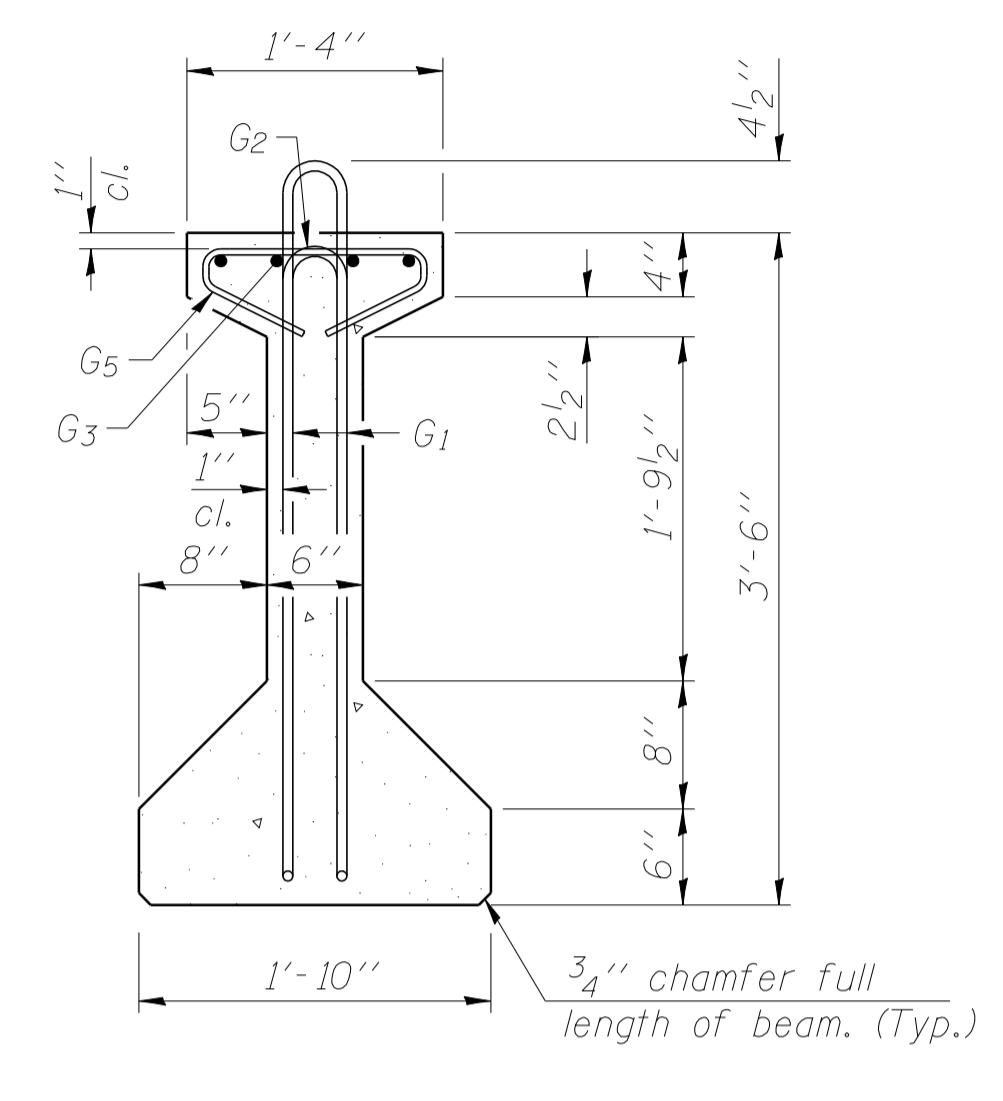
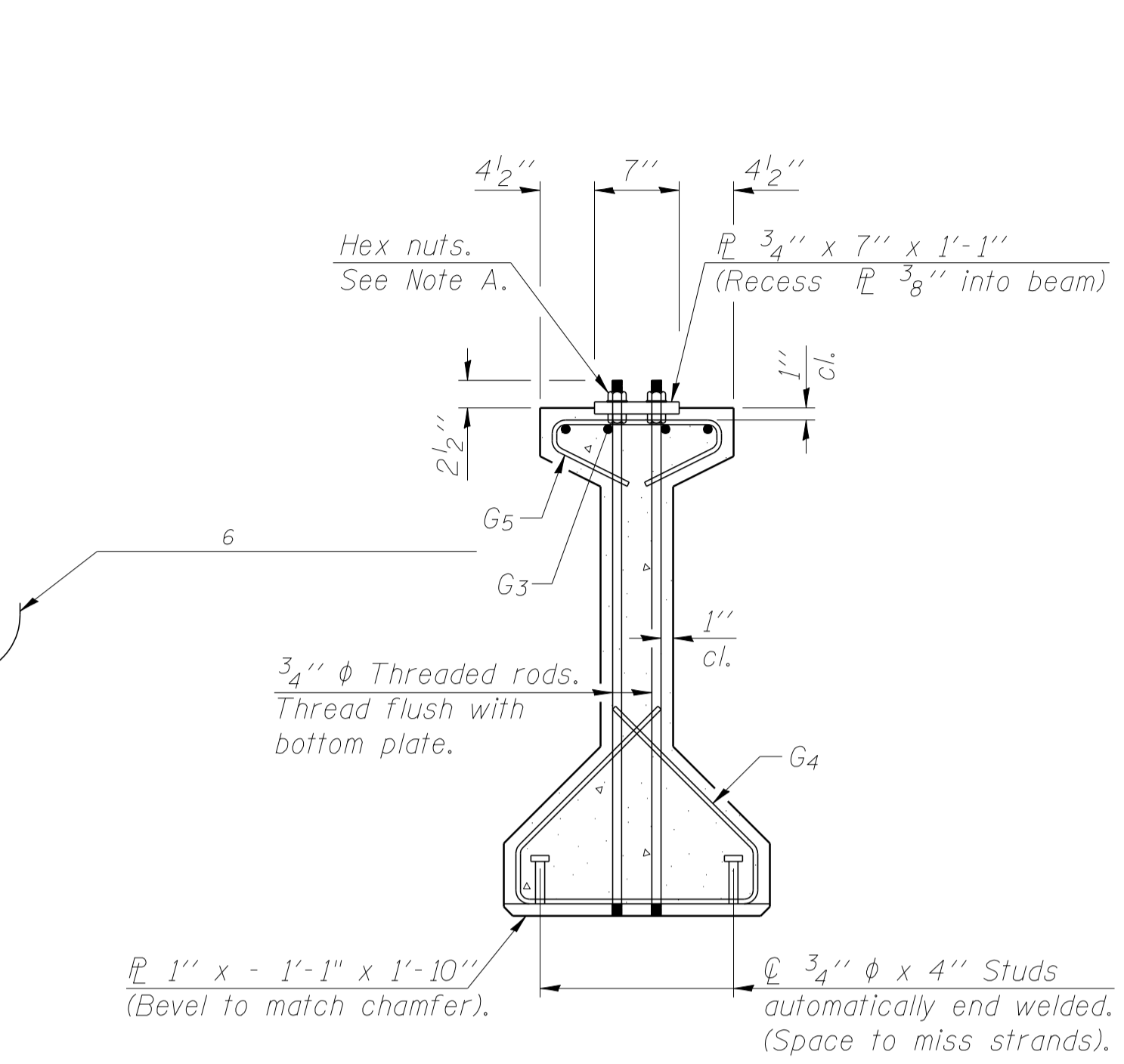
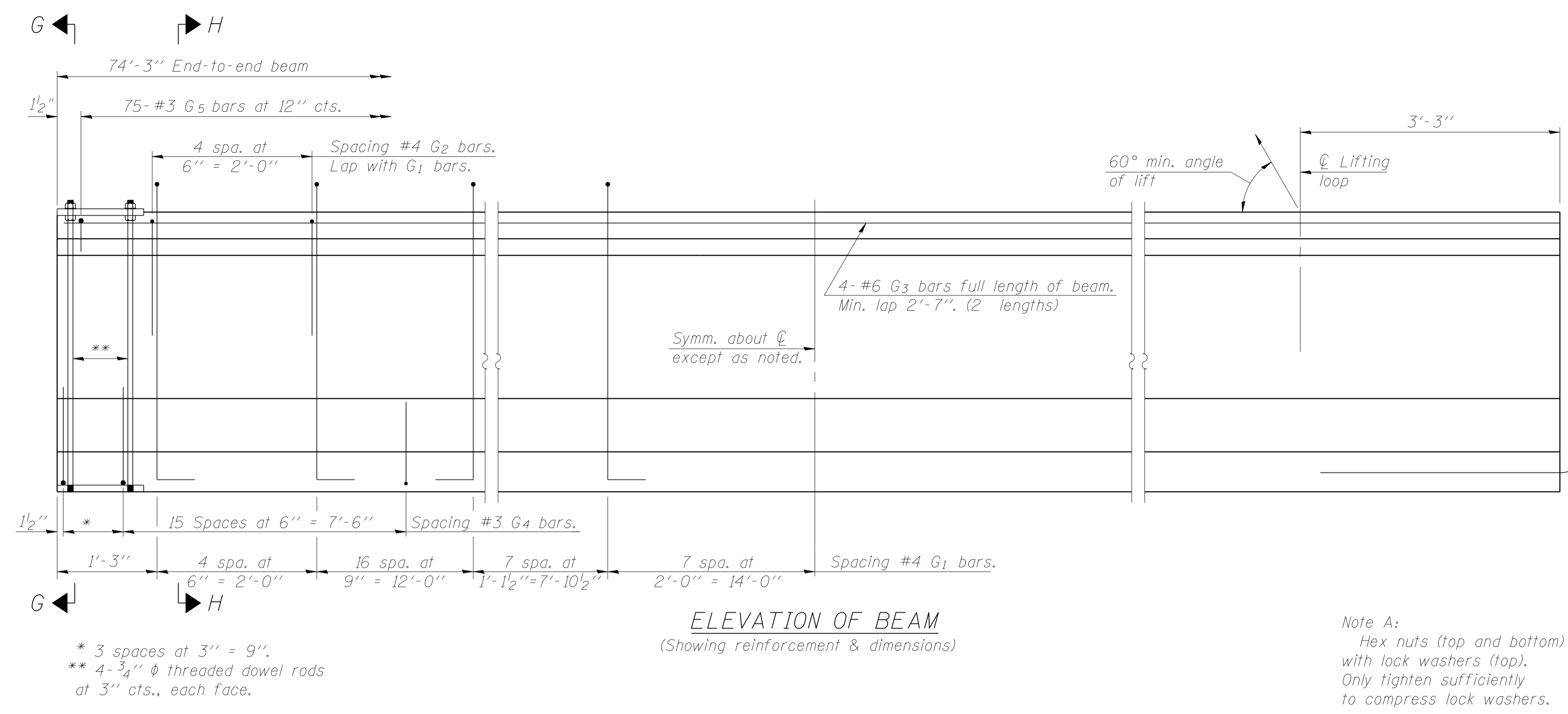
BAR LIST
ONE BEAM ONLY

Bar	No.	Size	Length	Shape
G ₁	55	#4	8'-5"	∩ L
G ₂	55	#4	4'-4"	∩
G ₃	8	#6	31'-3"	—
G ₄	38	#3	4'-11"	∩
G ₅	61	#3	2'-6"	∩
G ₆	2	#8	3'-9"	U

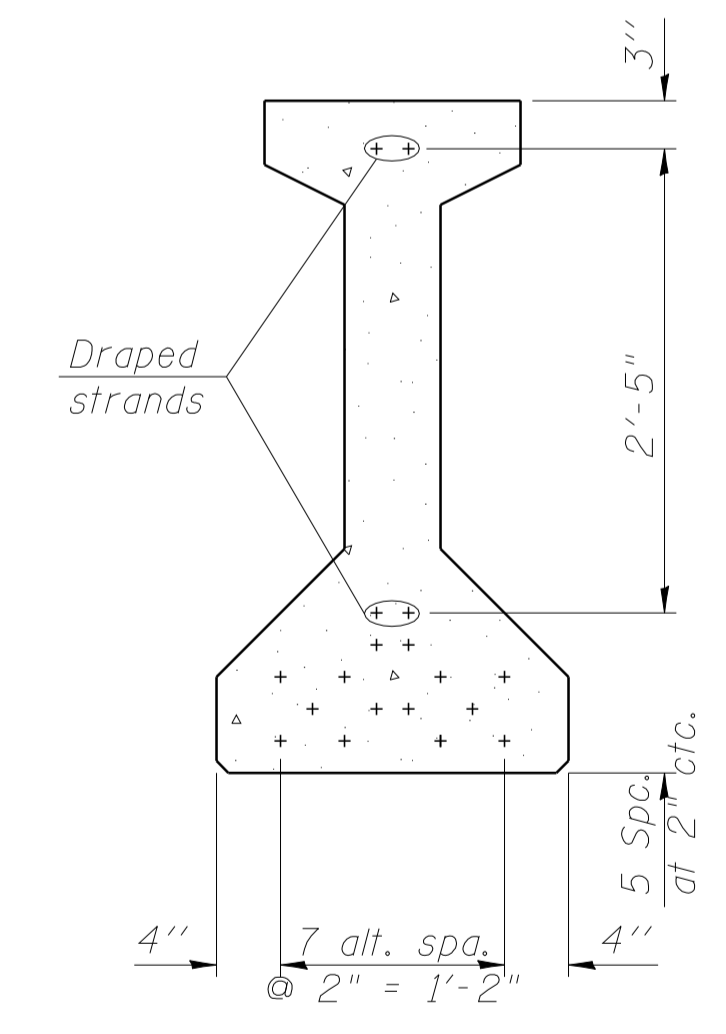
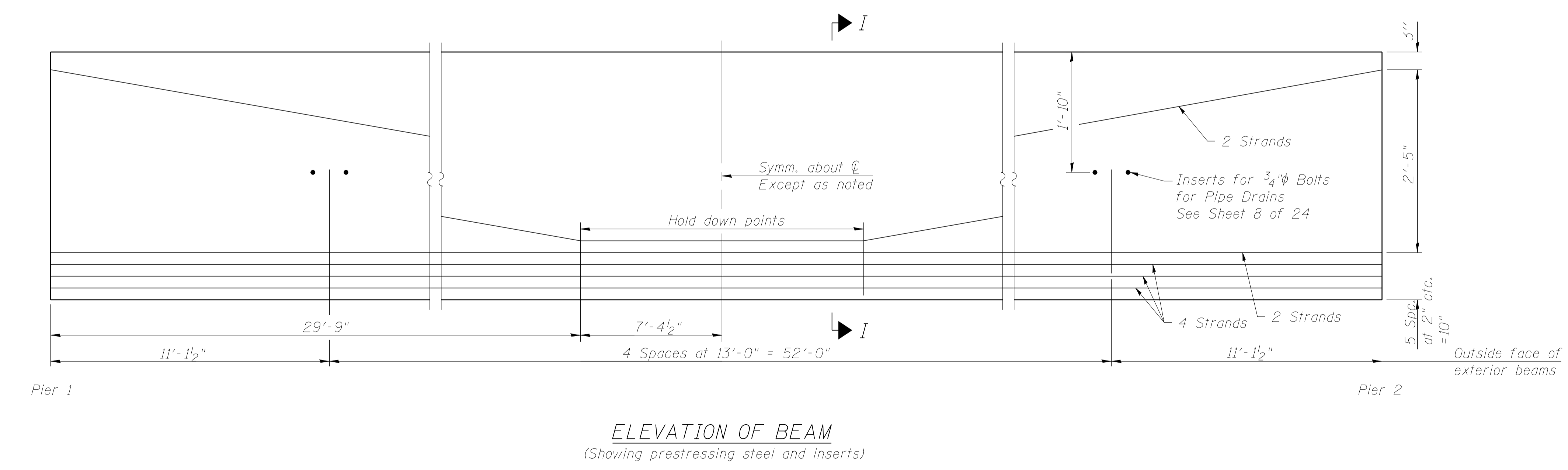
NOTES:
See sheet 15 of 24 for additional details, notes and Bill of Material.
Required release strength, f'ci, shall be 5,000 psi.

ILLINOIS DEPARTMENT OF TRANSPORTATION
42" PPC I-BEAM SPAN 1
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (122BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074
DRAWN BY: MLO
CHECKED BY: PBB
DATE: MARCH 2006

PI-4-42 7-15-05



Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



BAR LIST
ONE BEAM ONLY

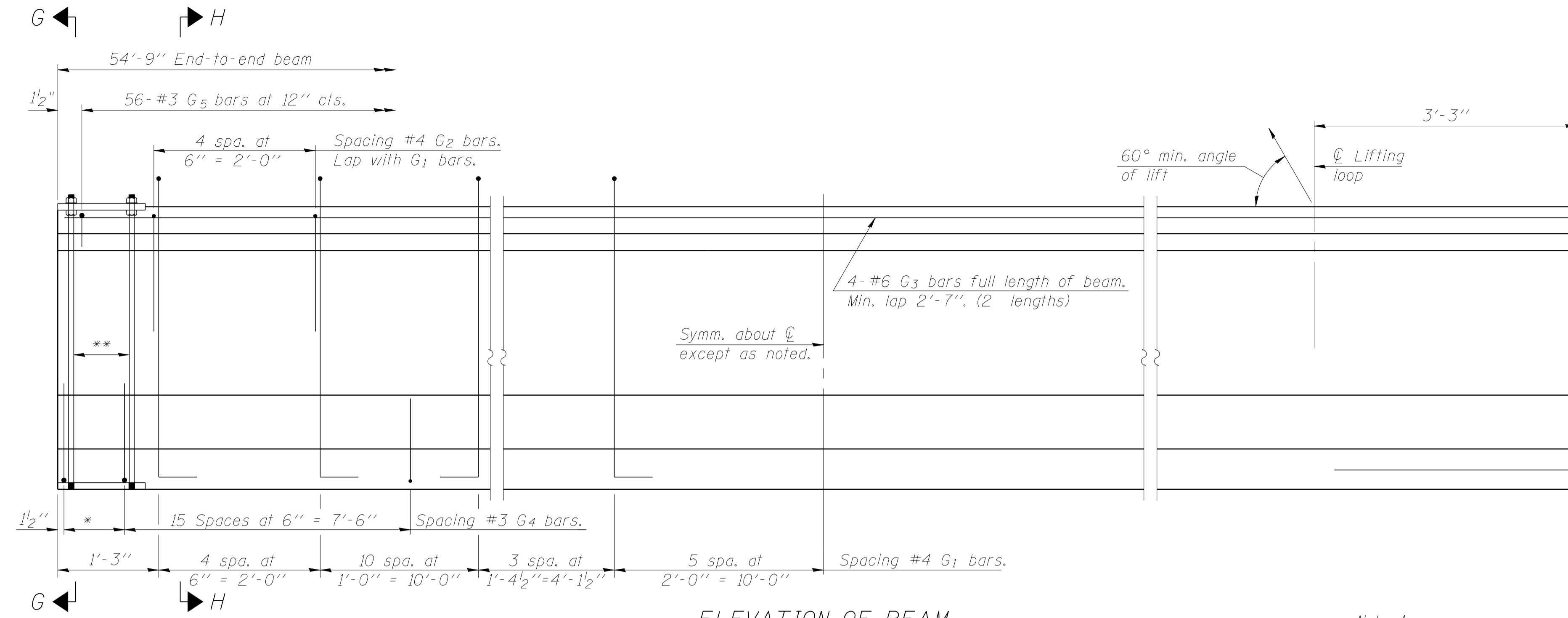
Bar	No.	Size	Length	Shape
G ₁	69	#4	8'-5"	∩ L
G ₂	69	#4	4'-4"	∩
G ₃	8	#6	38'-4"	—
G ₄	38	#3	4'-11"	∩
G ₅	75	#3	2'-6"	∩
G ₆	4	#8	3'-9"	U

NOTES:
See sheet 15 of 24 for additional details, notes and Bill of Material.
Required release strength, f'ci, shall be 5,000 psi.

PI-4-42

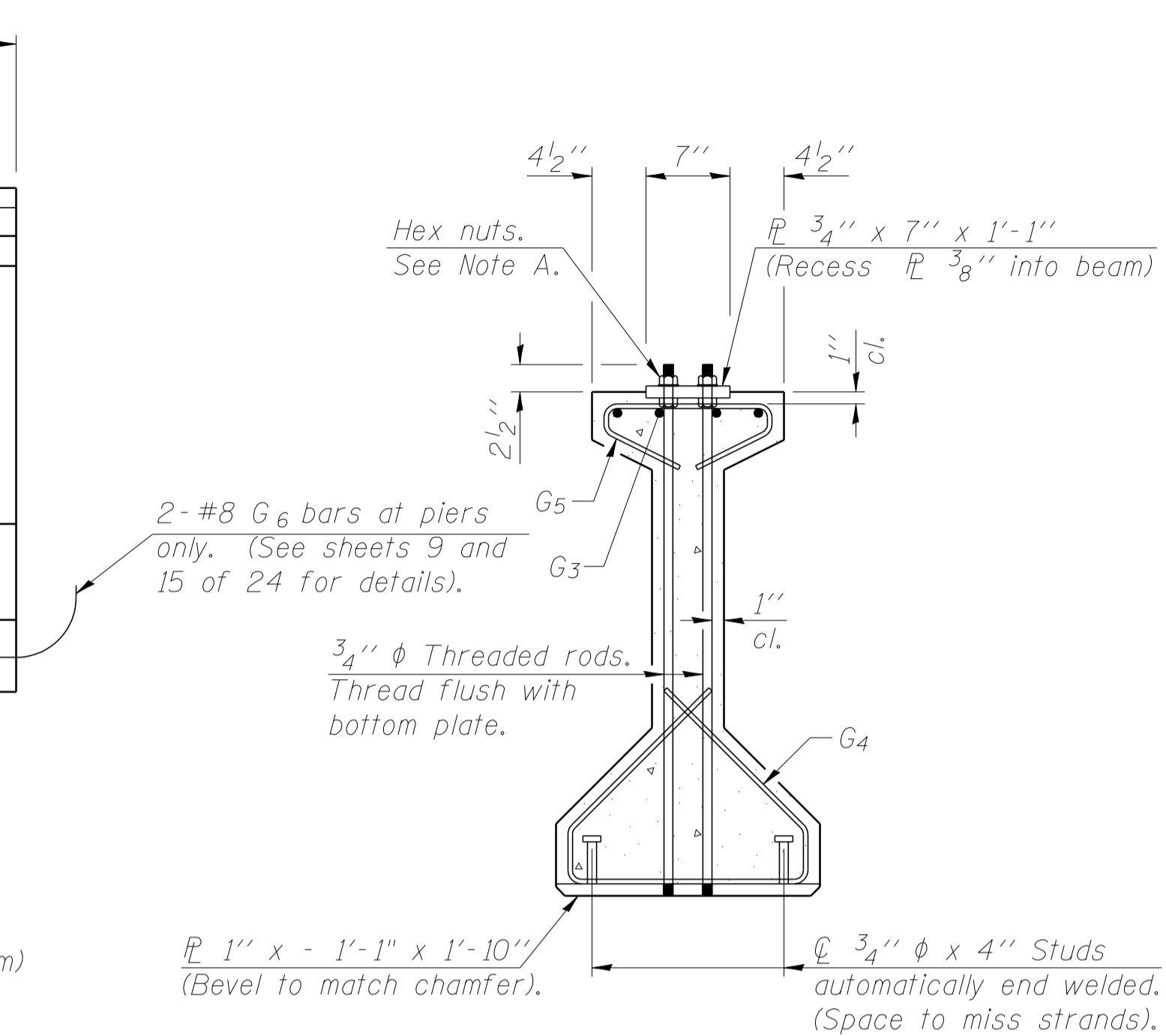
7-15-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
42" PPC I-BEAM SPAN 2
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (I22BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074
DATE: MARCH 2006
DRAWN BY: MLO
CHECKED BY: PBB

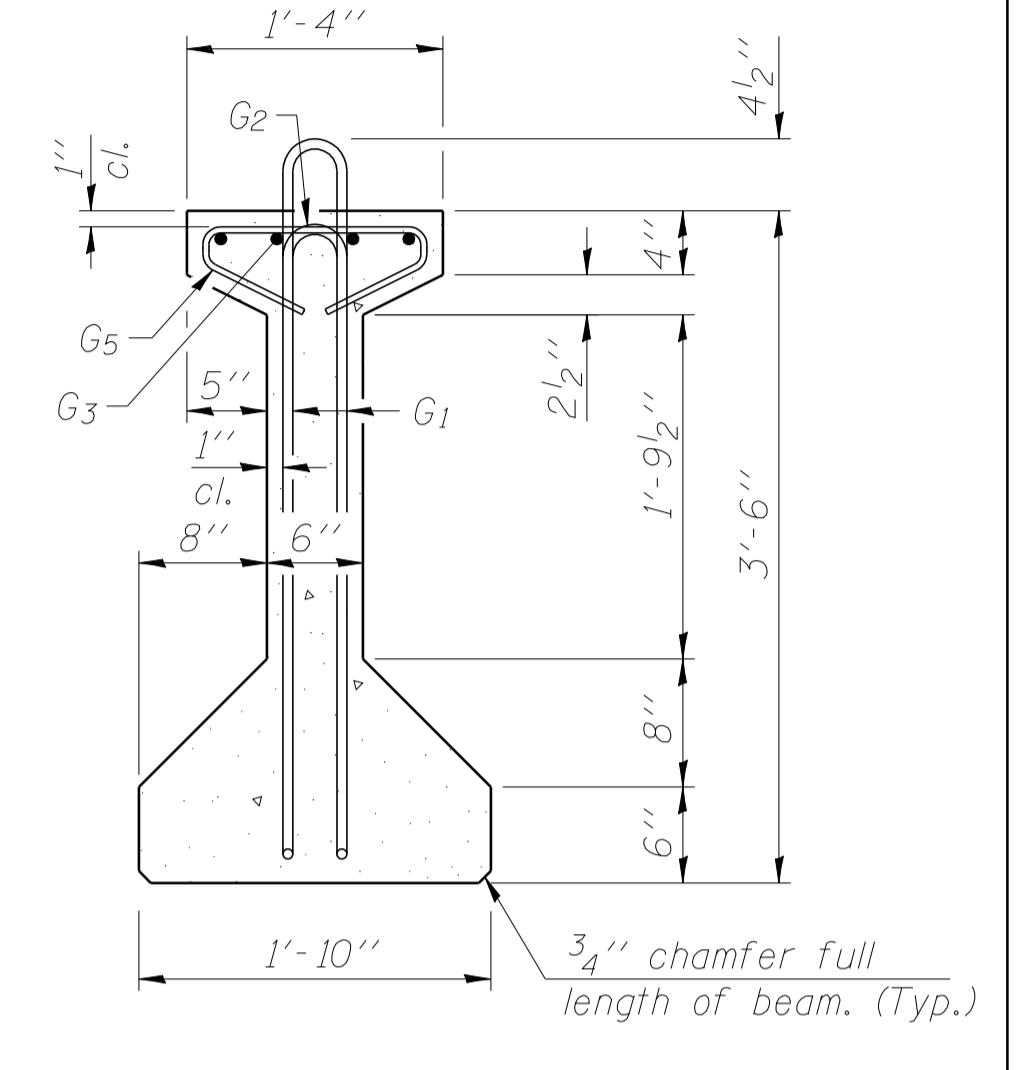


ELEVATION OF BEAM
(Showing reinforcement & dimensions)

* 3 spaces at 3" = 9".
** 4- $\frac{3}{4}$ " ϕ threaded dowel rods at 3" cts., each face.

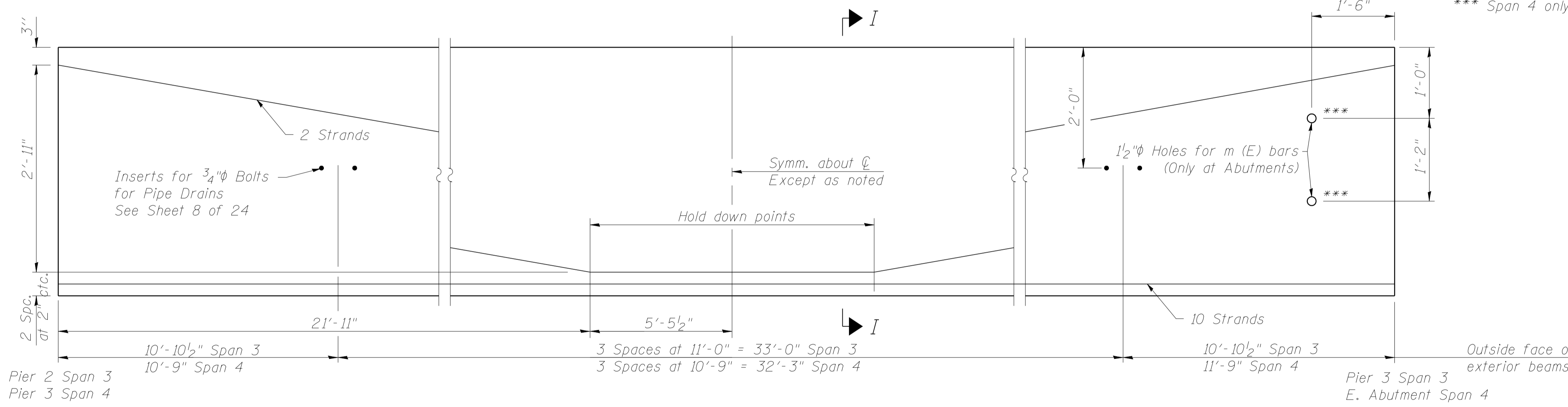


SECTION G-G

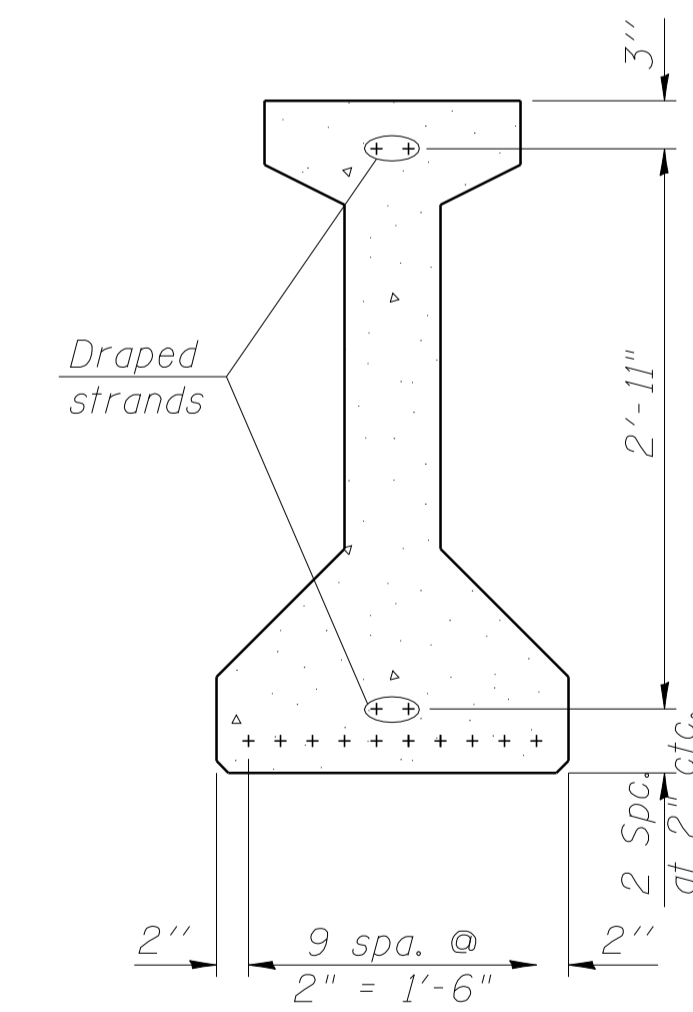


SECTION H-H

Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



ELEVATION OF BEAM
(Showing prestressing steel and inserts)



SECTION I-I

BAR LIST
ONE BEAM ONLY

Bar	No.	Size	Length	Shape
G1	45	#4	8'-5"	∩L
G2	45	#4	4'-4"	∩
G3	8	#6	28'-7"	—
G4	38	#3	4'-11"	∩
G5	56	#3	2'-6"	∩
G6	****4	#8	3'-9"	U

****Span 3 = 4, Span 4 = 2

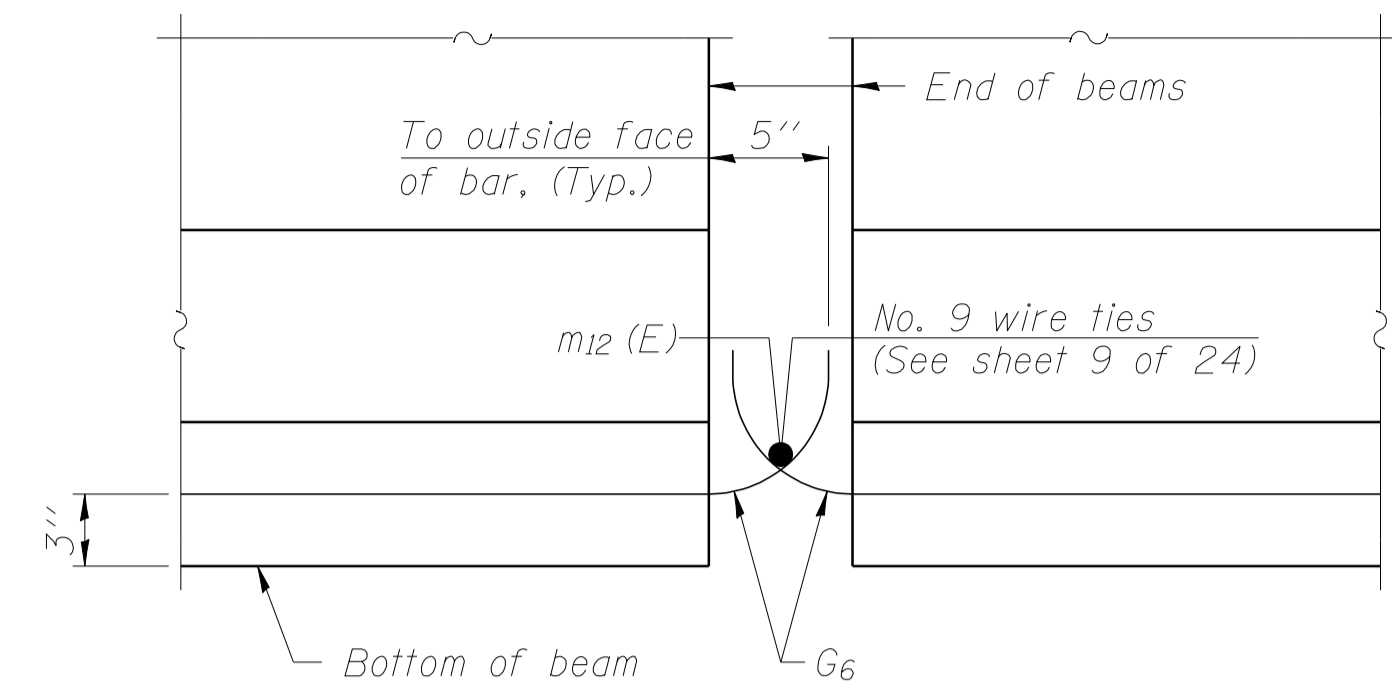
NOTES:

See sheet 15 of 24 for additional details, notes and Bill of Material.
Required release strength, f'ci, shall be 5,000 psi.

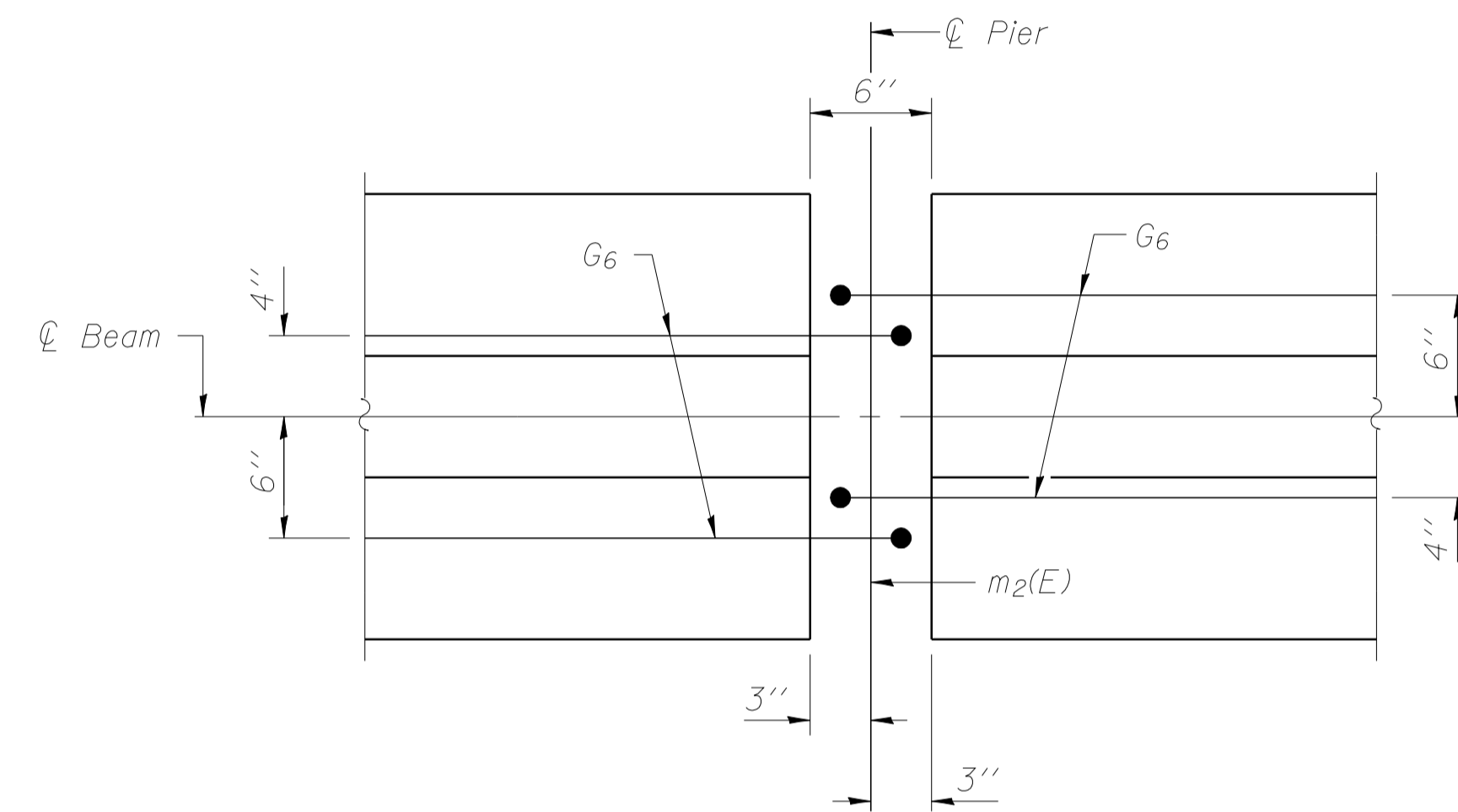
ILLINOIS DEPARTMENT OF TRANSPORTATION
42" PPC I-BEAM SPANS 3 AND 4
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (I22BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074

DATE: MARCH 2006
DRAWN BY: MLO
CHECKED BY: PBB

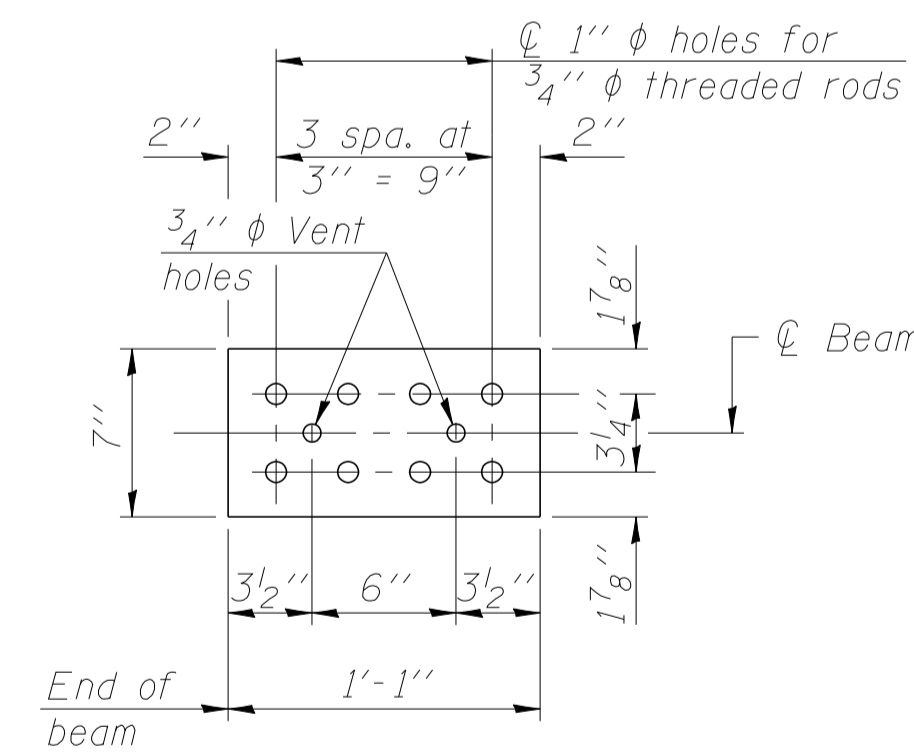
PI-4-42 7-15-05



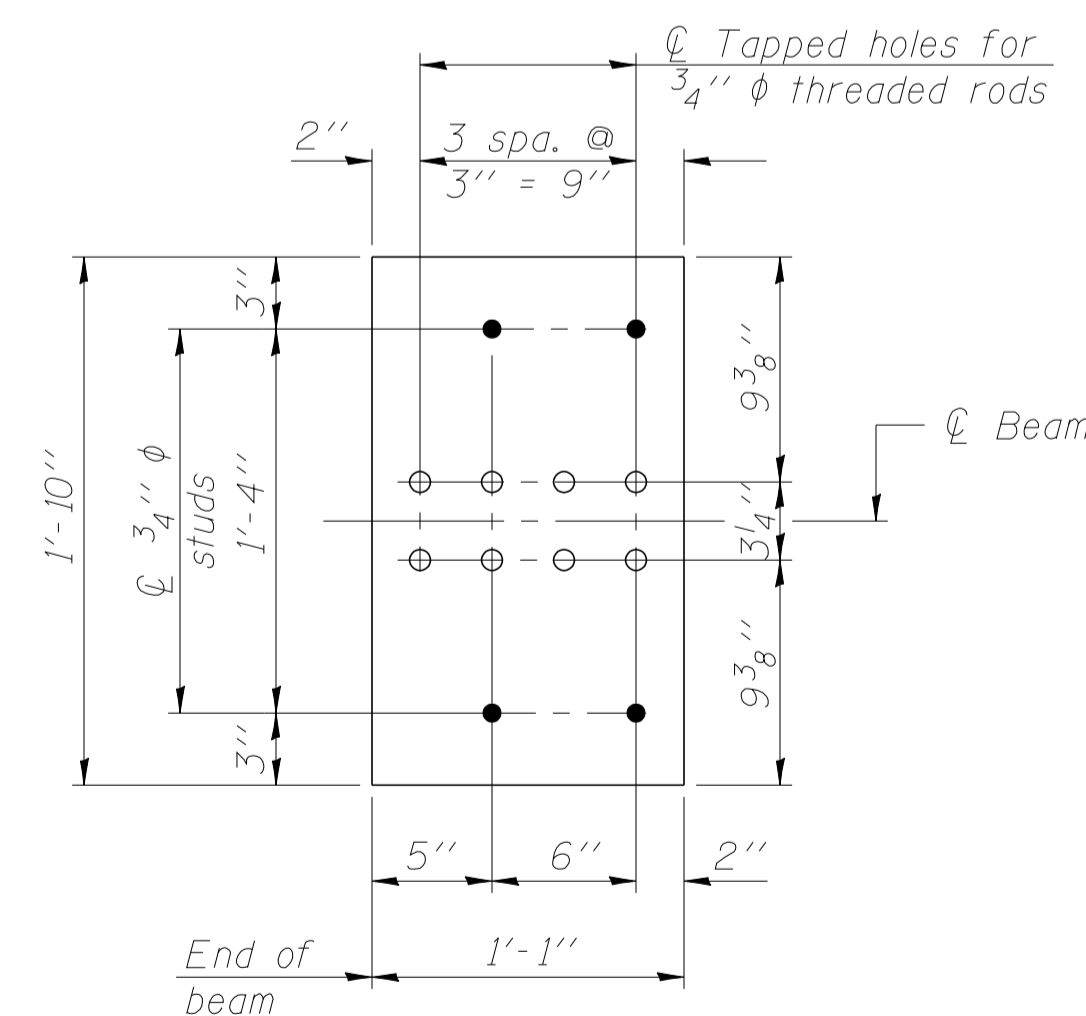
ELEVATION OF BEAMS AT PIER



PLAN OF BEAMS AT PIER

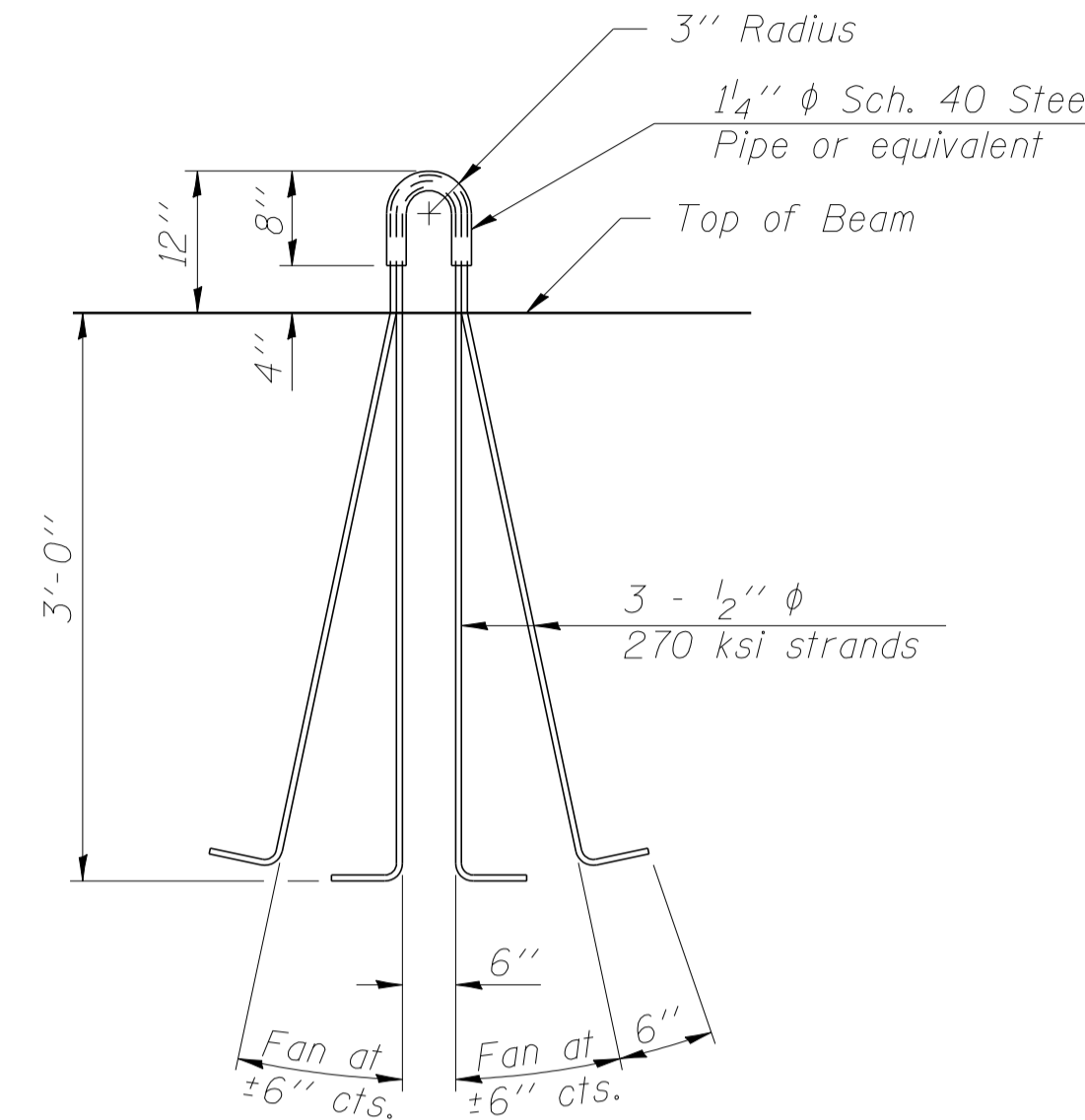


TOP PLATE

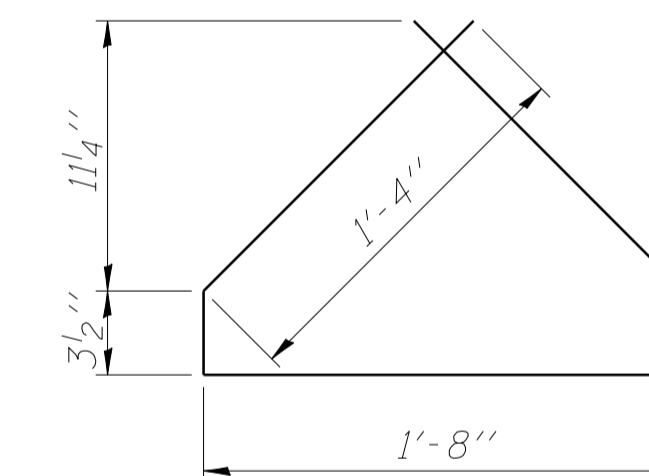


BOTTOM PLATE

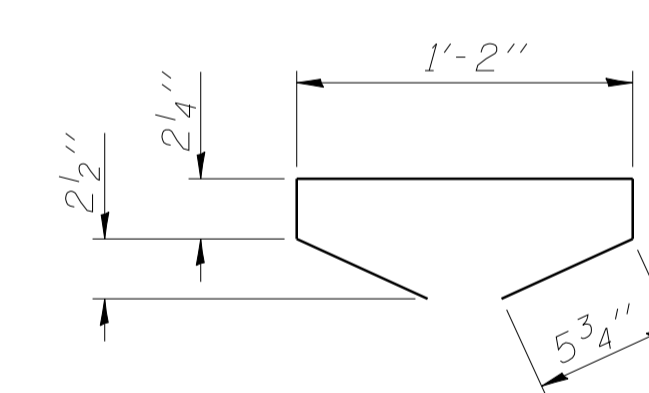
See bearing details for pintle hole locations when required.



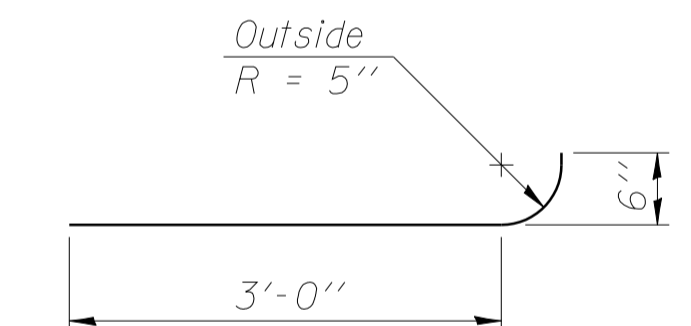
LIFTING LOOP DETAIL



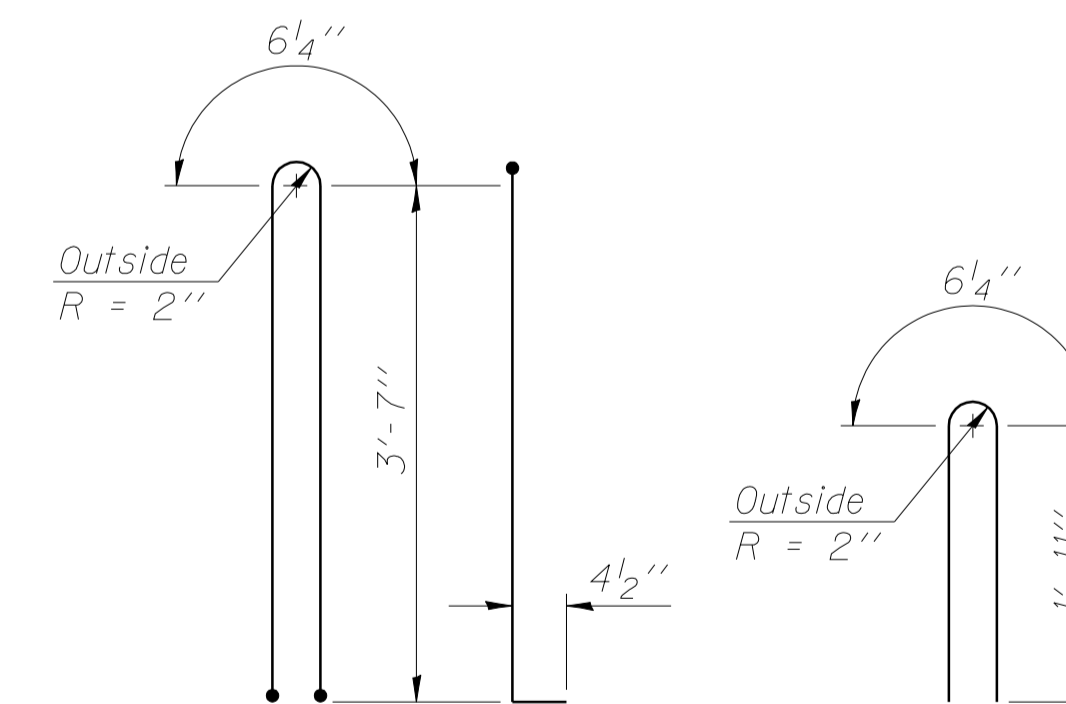
BAR G4



BAR G5



BAR G6



BAR G1

BAR G2

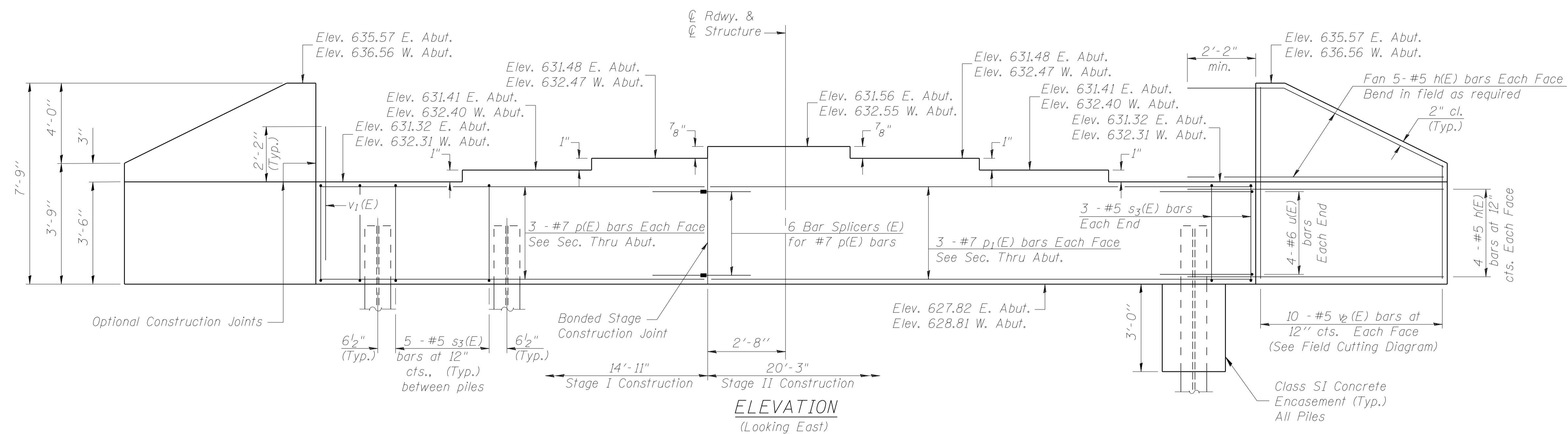
NOTES:

- Inserts for 3/4" ϕ threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, flared loop type for exterior beams.
- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
- The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- Non-prestressing steel shall conform to AASHTO designation M-31 or M 322, Grade 60.
- A minimum 2 1/2" ϕ lifting pin shall be used to engage the lifting loops during handling.
- Reinforcement bars designated (E) shall be epoxy coated.
- Cut G6 bars when necessary to maintain 1 1/2" clearance.
- The bottom plates and studs shall be galvanized according to AASHTO M111 and ASTM A385.
- Threaded rods shall be ASTM F 1554 Grade 55.
- The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to all portions of the I-beam or Bulb-T beam, except the top surface of the top flange and the bottom surface of the bottom flange, starting at each beam end and extending out a distance of 42 inches. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

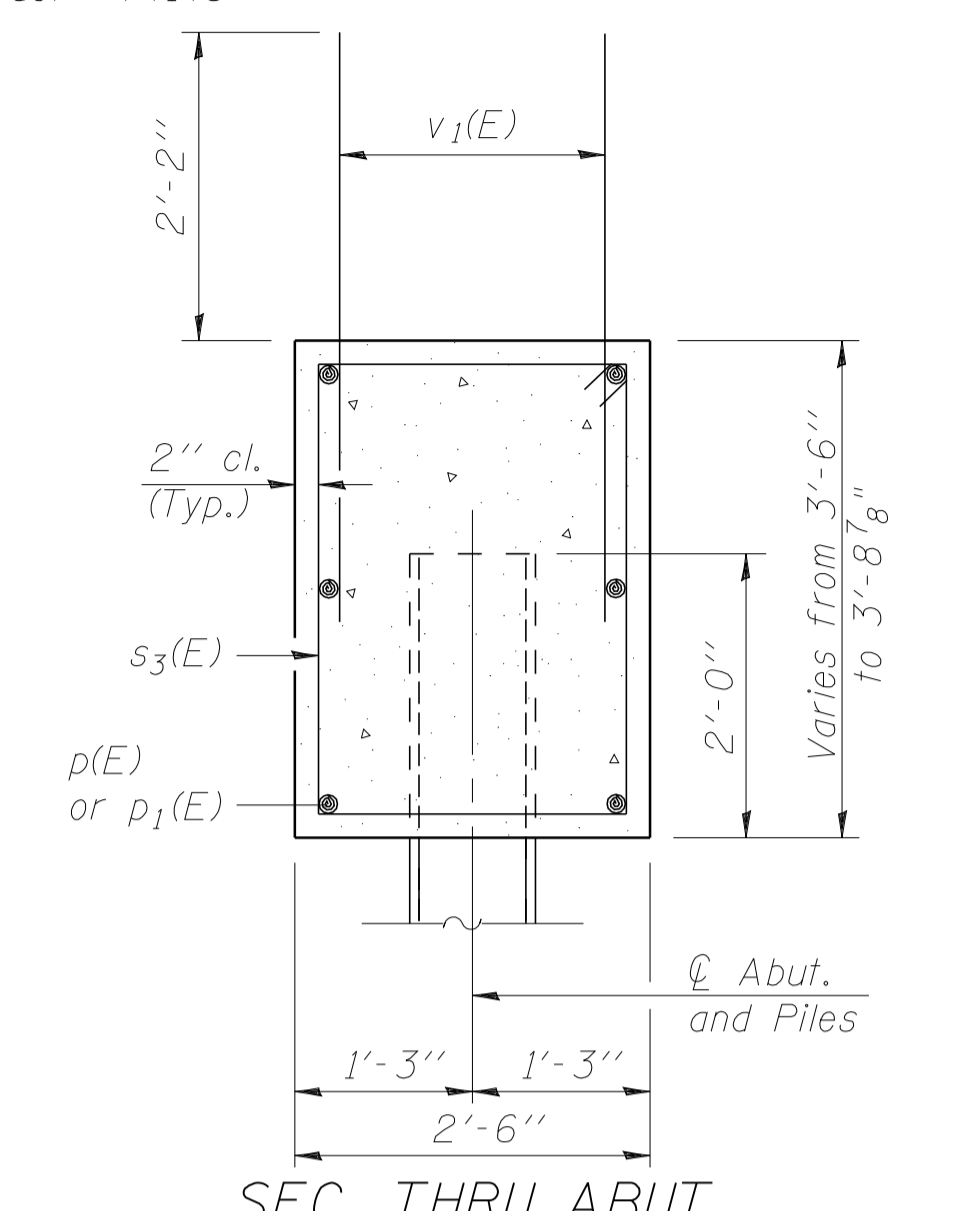
BILL OF MATERIAL

Item	Unit	Quantity
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42"	Ft.	1708

ILLINOIS DEPARTMENT OF TRANSPORTATION
 42" PPC I-BEAM SPANS 1 THRU 4
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (I22BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074



ELEVATION
(Looking East)
(East Abutment Shown/West Abutment Similar)



SEC. THRU ABUT.

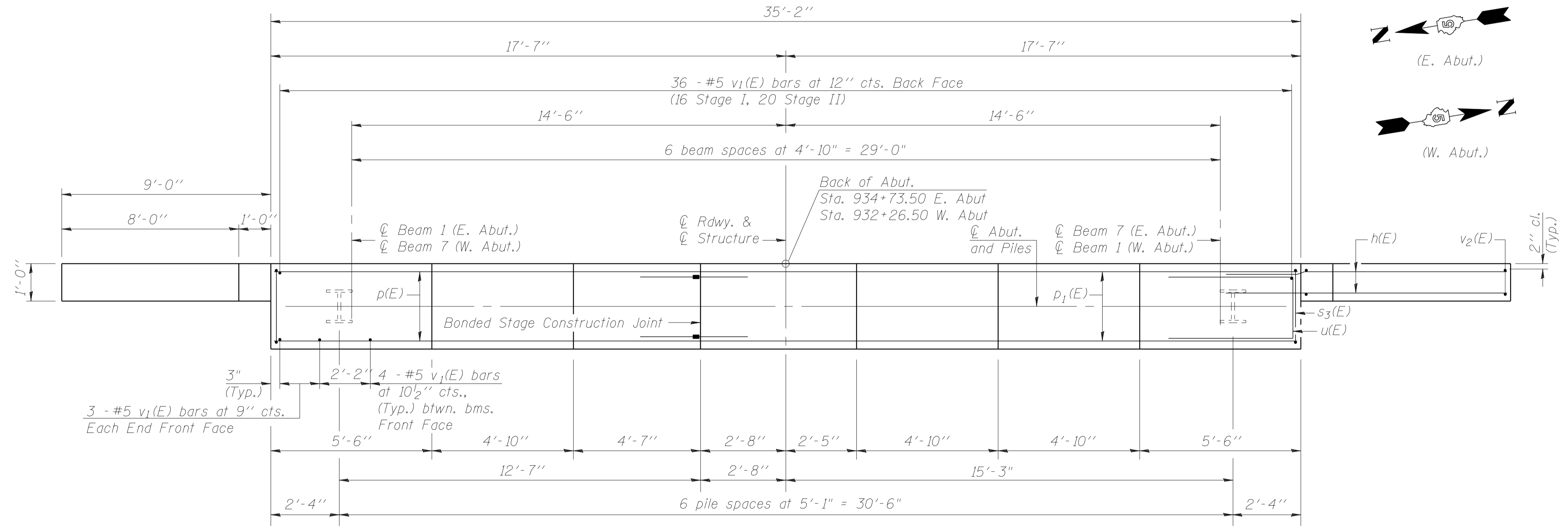
BILL OF MATERIAL
(Both Abutments)

Bar	No.	Size	Length	Shape
h(E)	72	#5	12'-0"	—
p(E)	12	#7	14'-7"	—
p1(E)	12	#7	19'-11"	—
s3(E)	72	#5	11'-7"	□
u(E)	16	#6	12'-1"	—
v1(E)	132	#5	4'-4"	—
v2(E)	40	#5	10'-10"	—
Item		Unit	Quantity	
Furnishing Steel Piles HP 10x42		Foot	462	
Driving Steel Piles		Foot	462	
Concrete Structures		Cu. Yd.	31.5	
Reinforcement Bars, Epoxy Coated		Pound	4350	
Structure Excavation		Cu. Yd.	271.2	

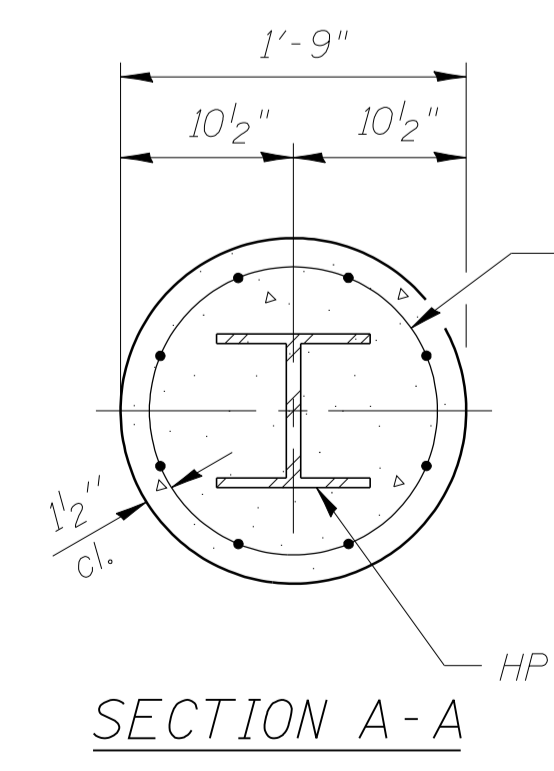
NOTES
 * E. Abutment = 135.6 Cu. Yd.
 W. Abutment = 135.6 Cu. Yd.
 Pour steps monolithically with cap.
 Reinforcement bars designated (E) shall be epoxy coated.
 See sheet 9 of 24 for diaphragm details.
 All edges shall have standard 3/4" chamfers except as noted.

PILE DATA
 Type: HP 10 x 42
 Driven to: Refusal
 Est. Length: 33' each Abutment
 No. Required: 14

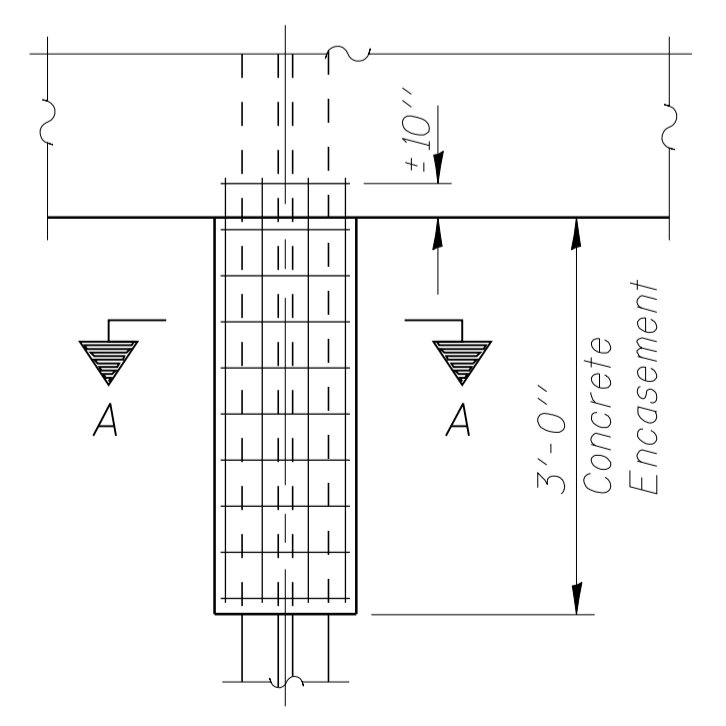
ILLINOIS DEPARTMENT OF TRANSPORTATION
ABUTMENTS
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (122BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074
 DATE: MARCH 2006
 DRAWN BY: MLO
 CHECKED BY: PBB



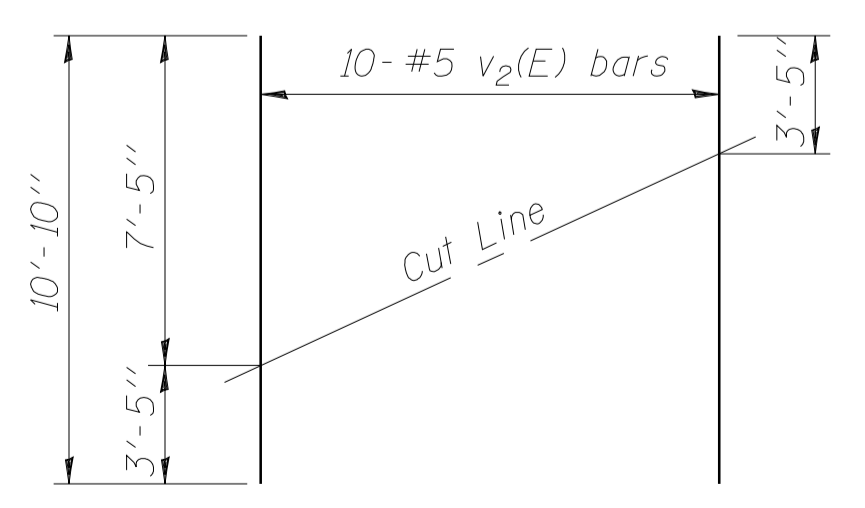
PLAN
(E. Abut. Shown)
(W. Abut. Similar)



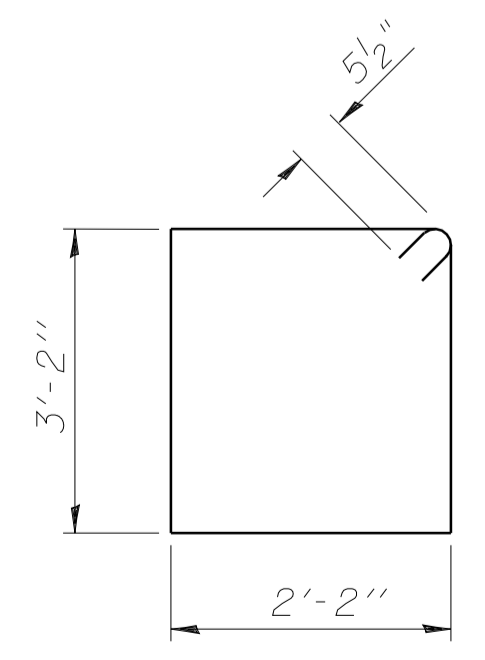
Welded wire fabric
 6 x 6-W4.0 x W4.0
 weighing 58#/100 sq. ft.
 The cost of Excavation,
 Concrete Encasement
 and Reinforcement is included
 with Furnishing Piles.
 Forms for Encasement may
 be omitted when soil
 conditions permit.



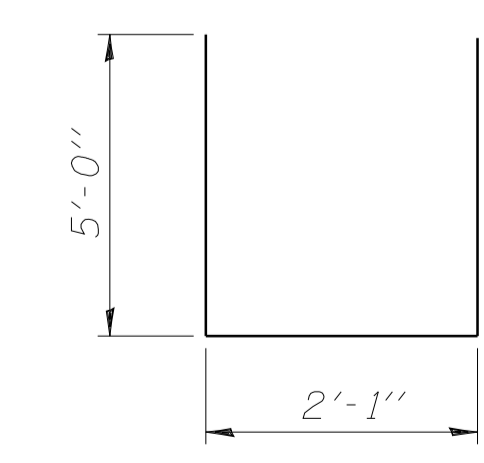
PILE ENCASEMENT DETAIL



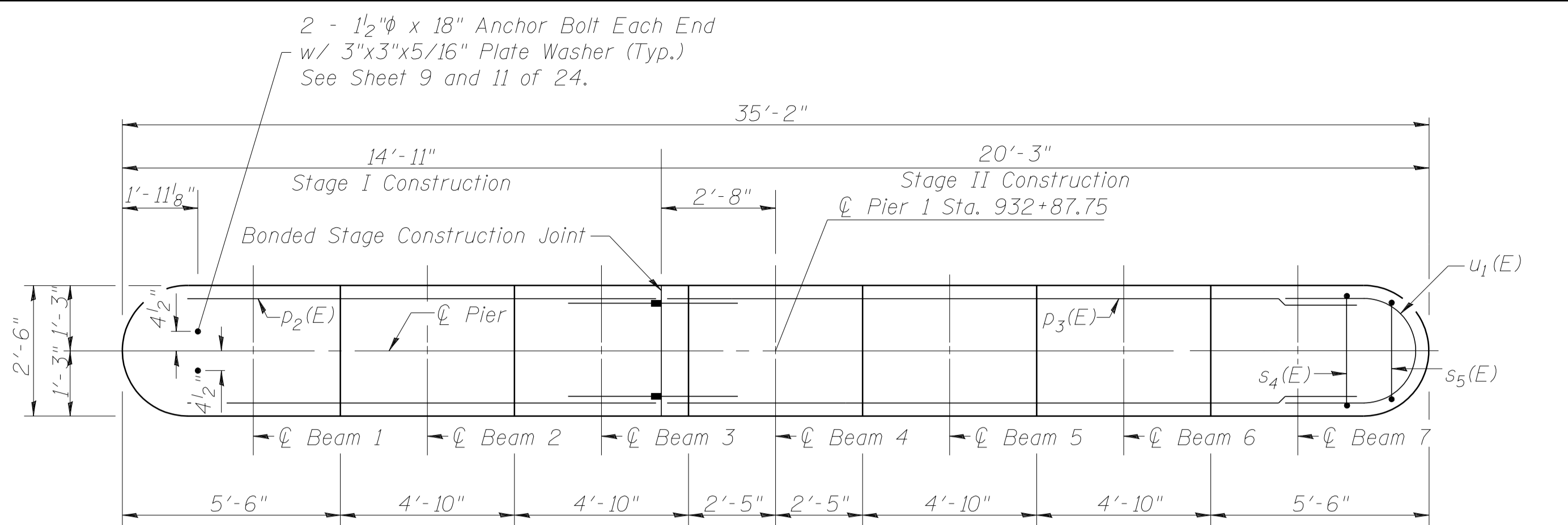
FIELD CUTTING DIAGRAM
 Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



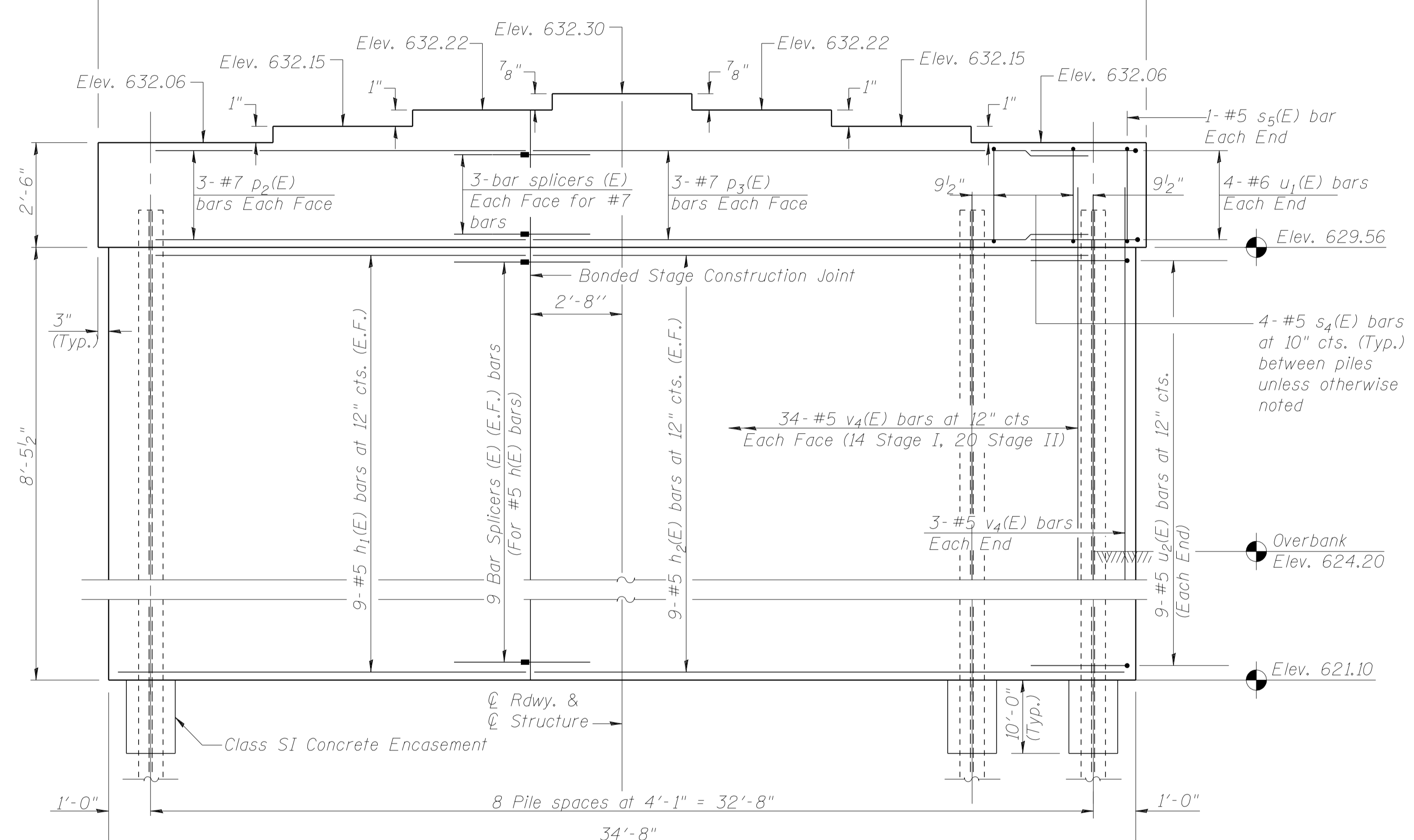
BAR s2(E)



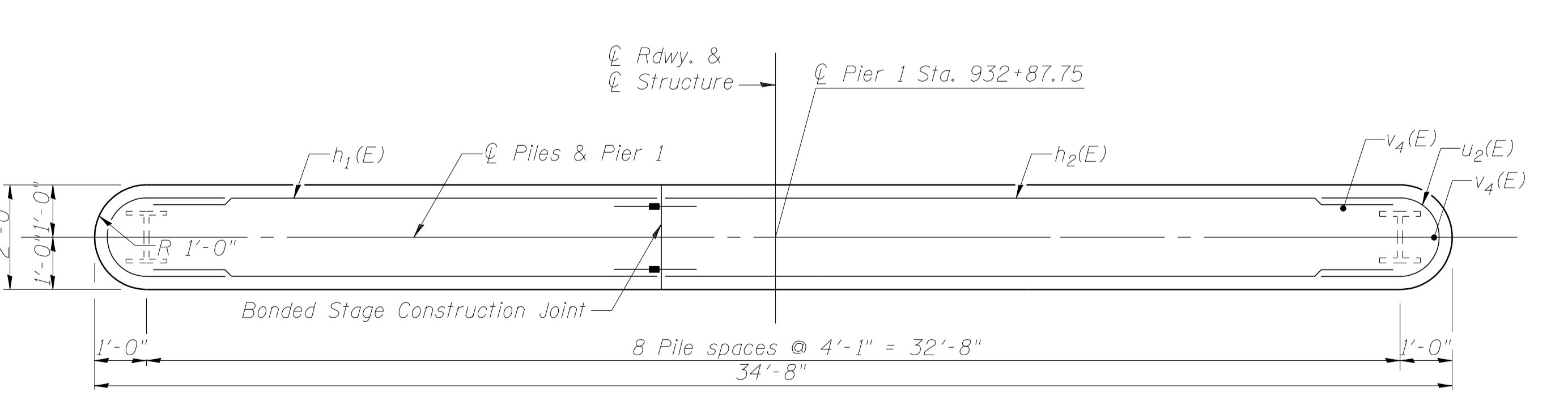
BAR u(E)



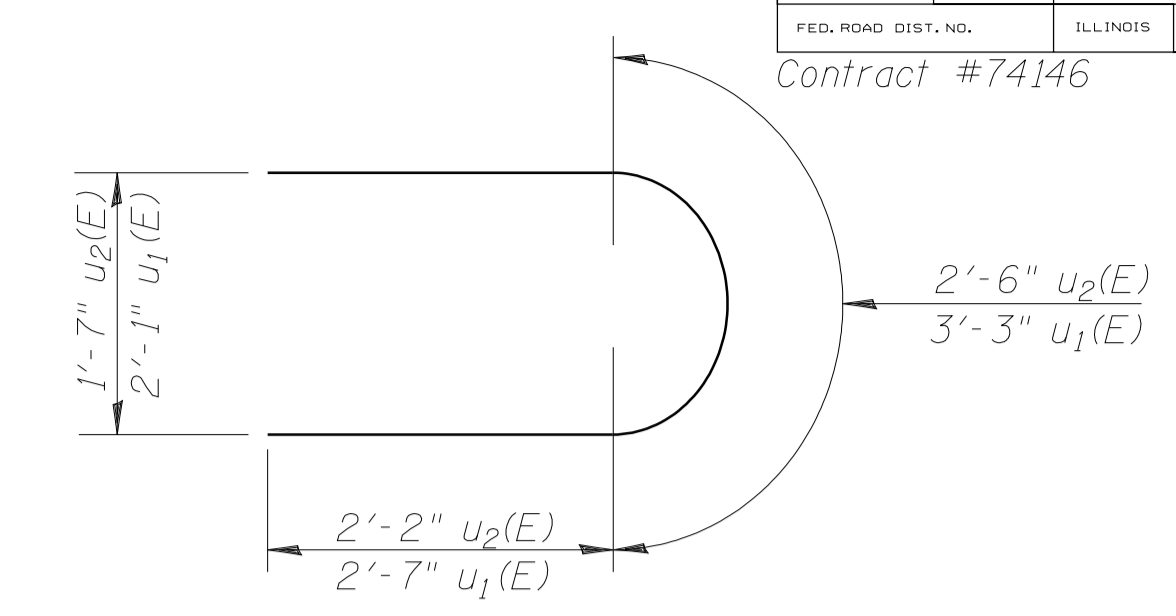
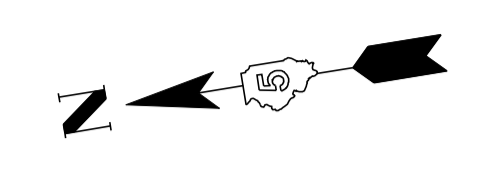
TOP PLAN



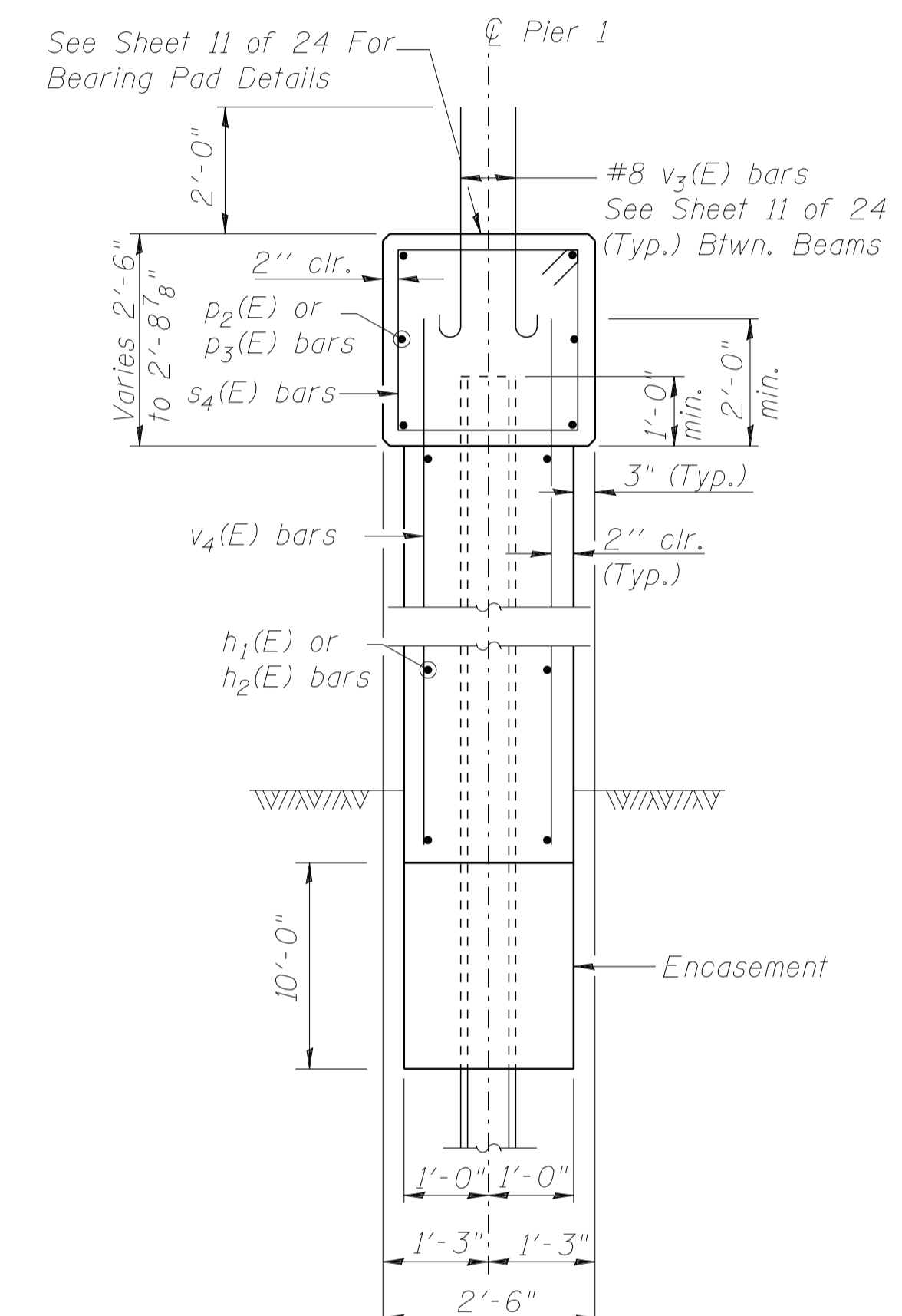
ELEVATION
(Looking East)



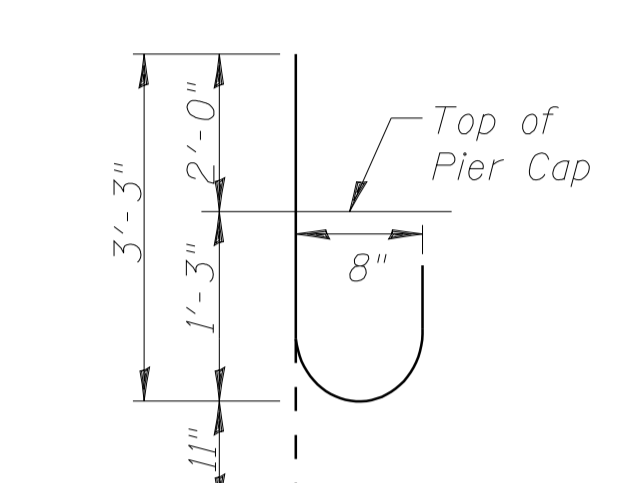
PILE LAYOUT



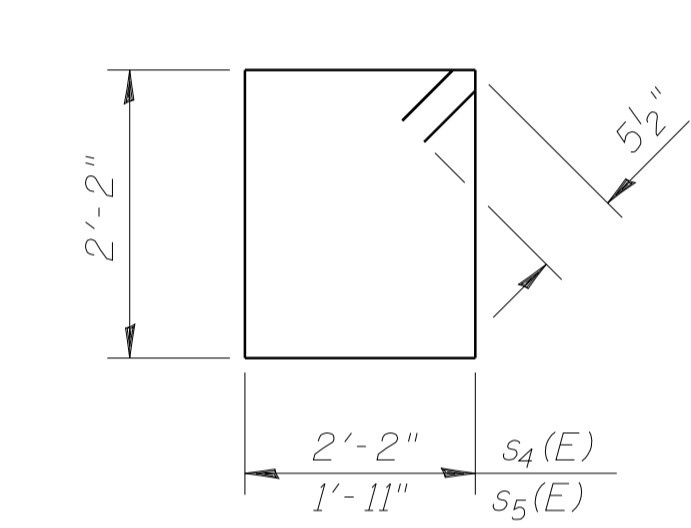
BARS u₁(E) & u₂(E)



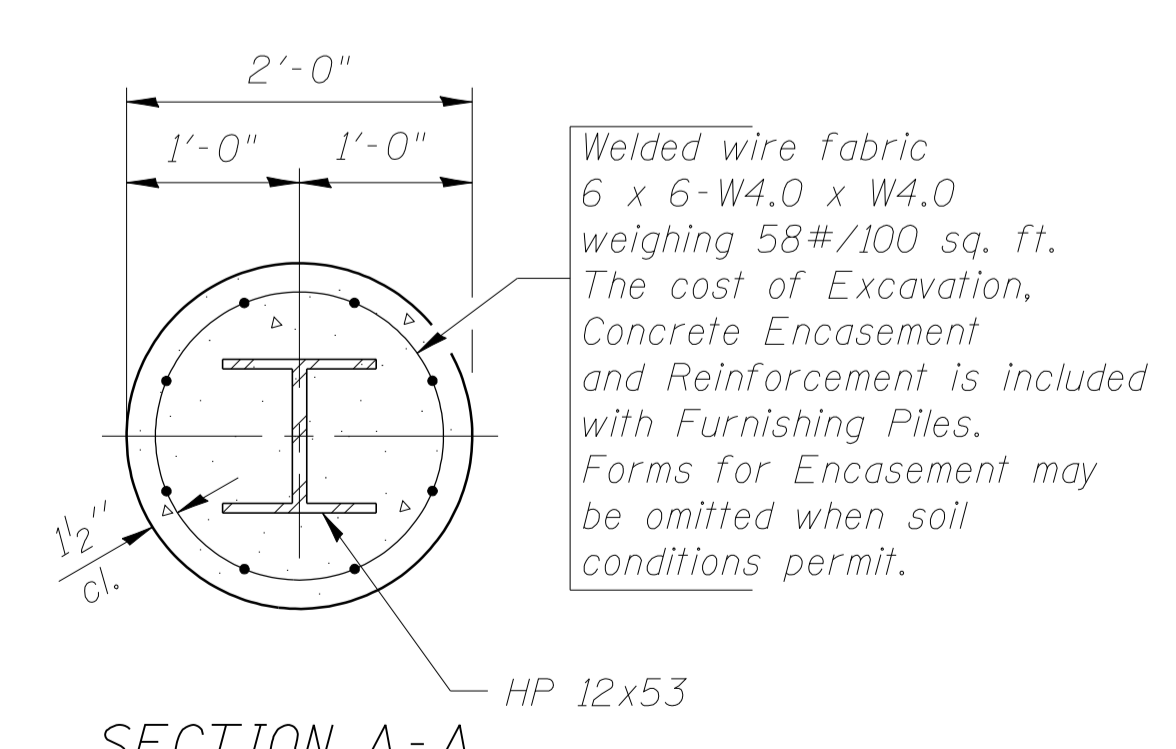
PIER SECTION



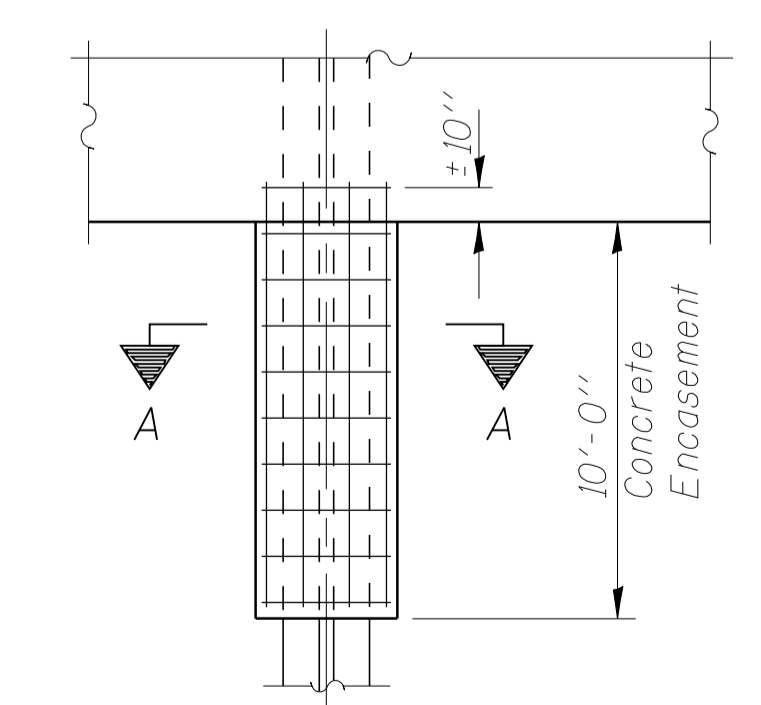
BAR v₃(E)



BAR s₄(E) & s₅(E)



SECTION A-A



PILE ENCASEMENT DETAIL

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	18	#5	13'-7"	—
h ₂ (E)	18	#5	18'-11"	—
p ₂ (E)	6	#7	13'-7"	—
p ₃ (E)	6	#7	18'-11"	—
s ₄ (E)	32	#5	9'-7"	□
s ₅ (E)	2	#5	9'-1"	□
u ₁ (E)	8	#6	8'-5"	U
u ₂ (E)	18	#5	6'-10"	U
v ₃ (E)	36	#8	4'-2"	U
v ₄ (E)	74	#5	10'-4"	—
Item		Unit	Quantity	
Furnishing Steel Piles HP 12x53		Foot	297	
Driving Steel Piles		Foot	297	
Concrete Structures		Cu. Yd.	29.8	
Reinforcement Bars, Epoxy Coated		Pound	2780	
Structure Excavation		Cu. Yd.	25.8	

NOTES

Four steps monolithically with cap. Reinforcement bars designated (E) shall be epoxy coated. For anchor bolt installation see sheet 21 of 24. Space reinforcement in cap to miss anchor bolts. All edges shall have standard 3/4" chamfers except as noted.

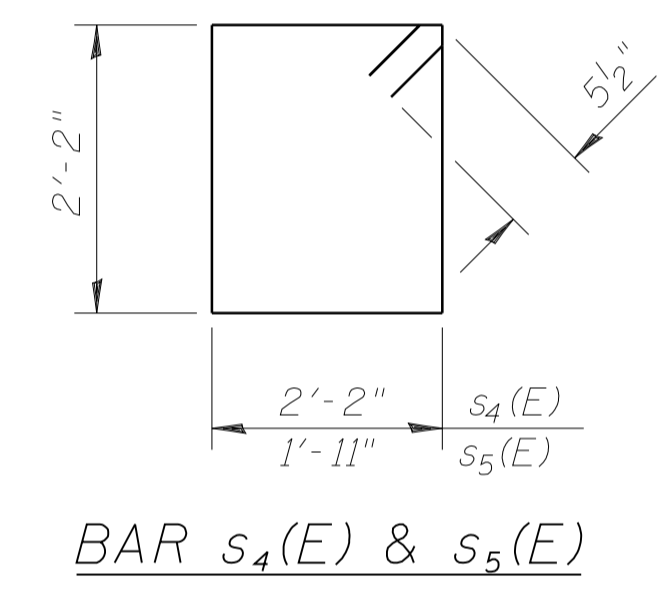
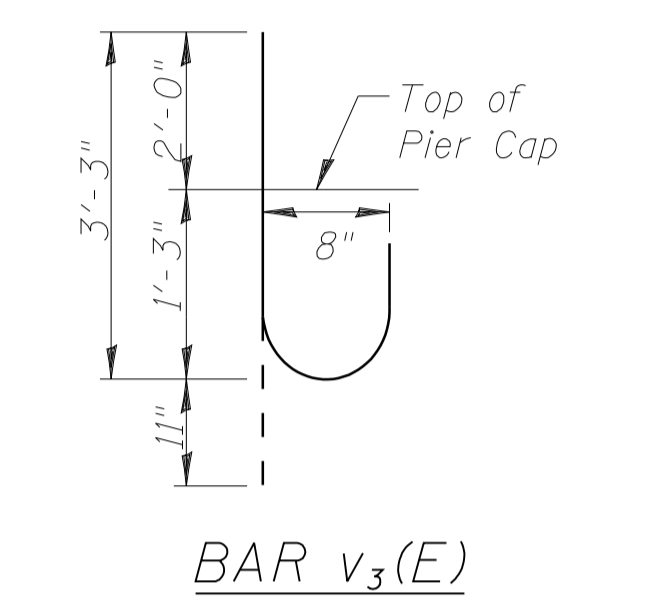
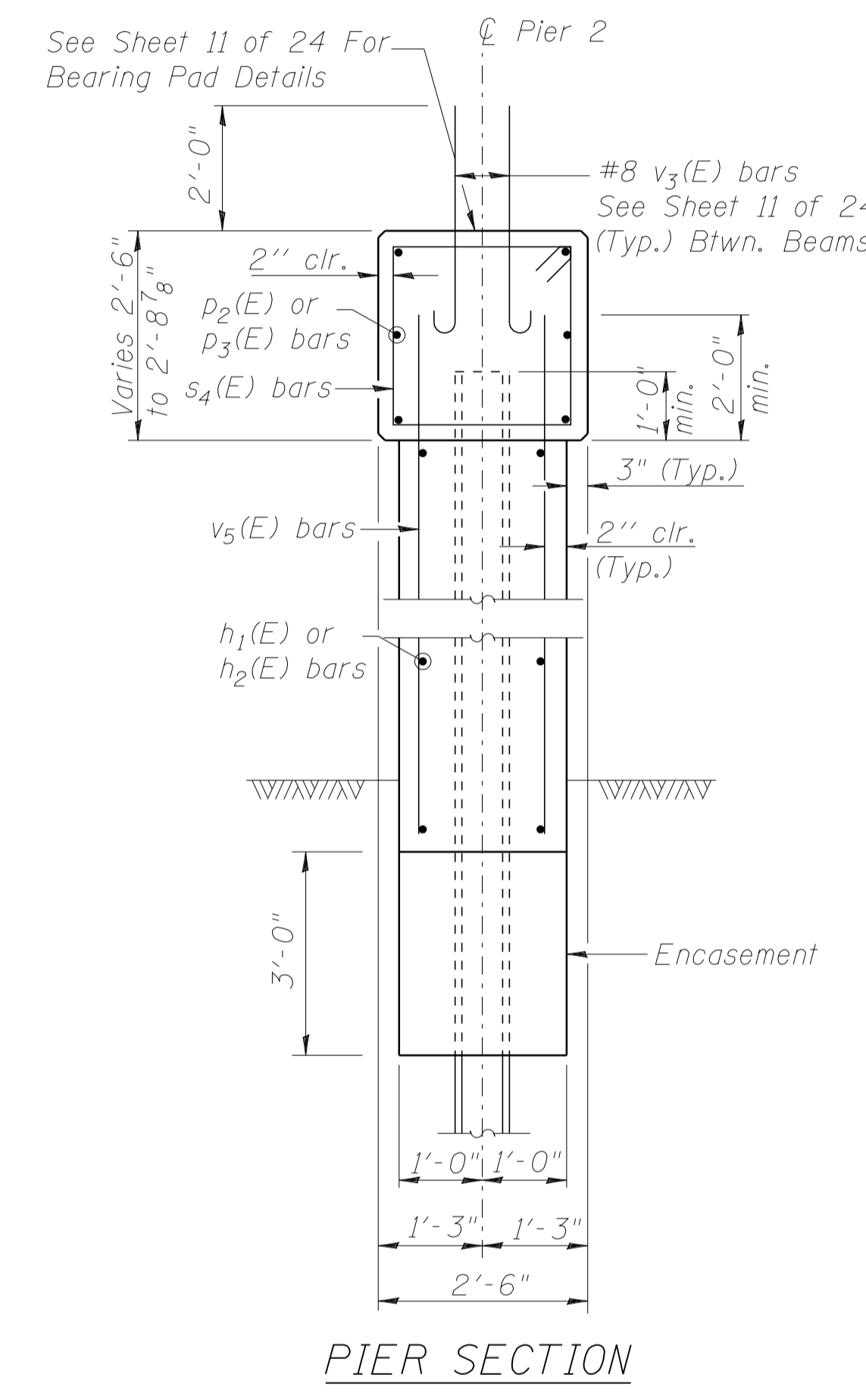
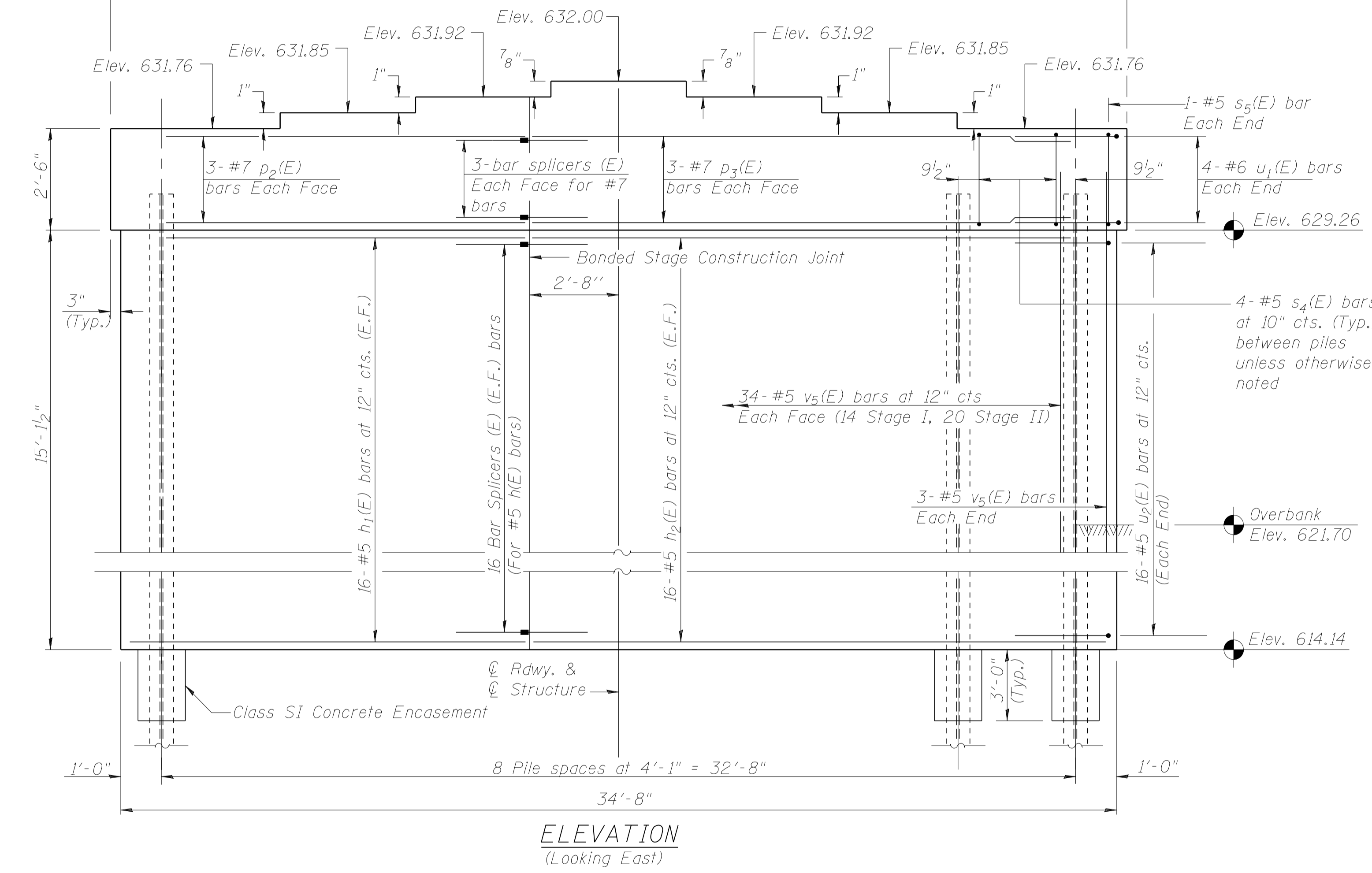
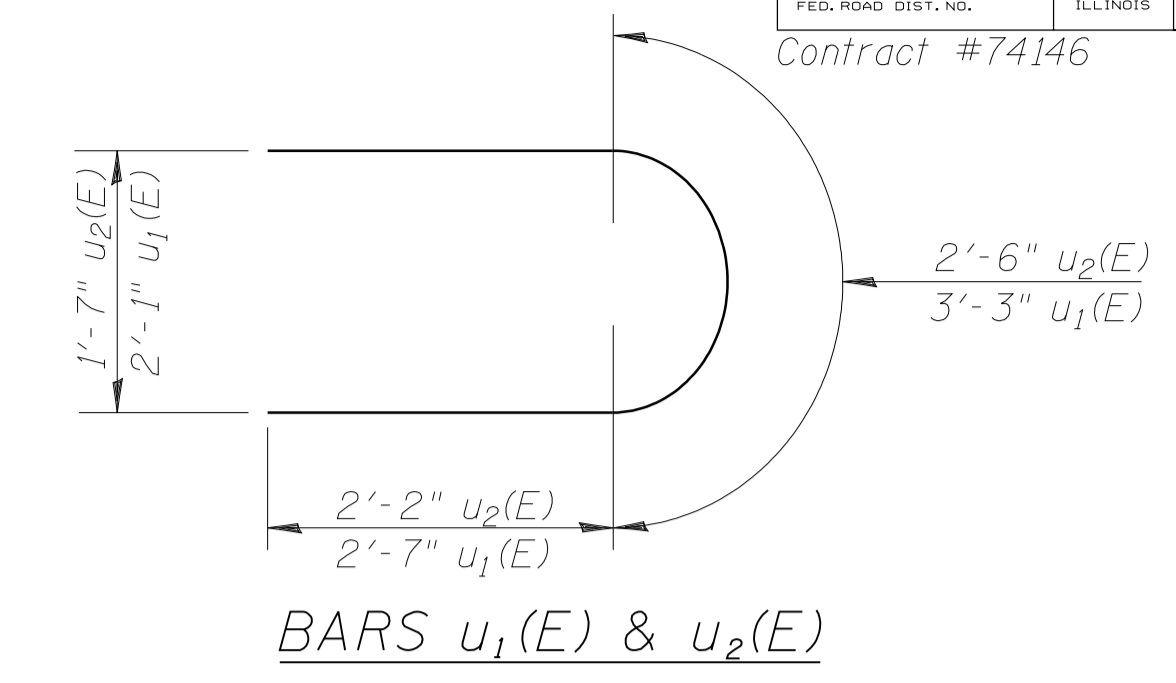
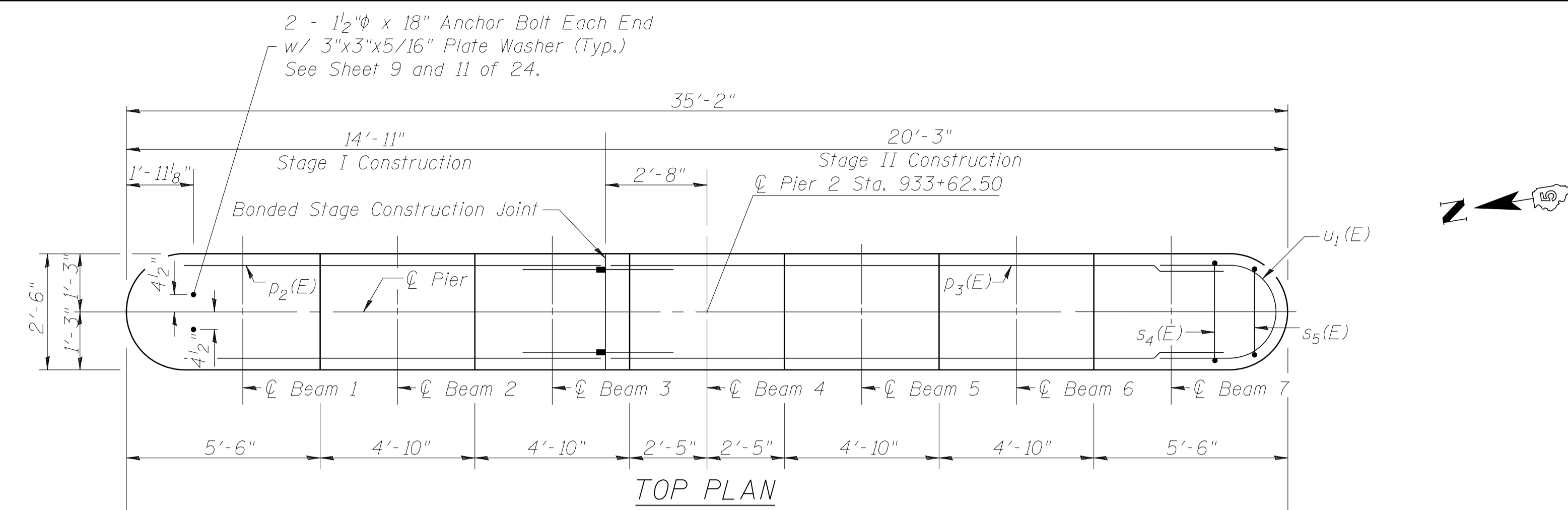
PILE DATA

Type: HP 12x53
Driven to: Refusal
Est. Length: 33'
No. Req'd: 9

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 1

IL ROUTE 133 OVER THE LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (I22BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	32	#5	13'-7"	—
h ₂ (E)	32	#5	18'-11"	—
p ₂ (E)	6	#7	13'-7"	—
p ₃ (E)	6	#7	18'-11"	—
s ₄ (E)	32	#5	9'-7"	□
s ₅ (E)	2	#5	9'-1"	□
u ₁ (E)	8	#6	8'-5"	U
u ₂ (E)	32	#5	6'-10"	U
v ₃ (E)	36	#8	4'-2"	U
v ₅ (E)	74	#5	17'-0"	—

Item	Unit	Quantity
Furnishing Steel Piles HP 12x53	Foot	297
Driving Steel Piles	Foot	297
Concrete Structures	Cu. Yd.	46.7
Reinforcement Bars, Epoxy Coated	Pound	3870
Structure Excavation	Cu. Yd.	68.7

NOTES

Four steps monolithically with cap. Reinforcement bars designated (E) shall be epoxy coated.

For anchor bolt installation see sheet 21 of 24.

Space reinforcement in cap to miss anchor bolts.

All edges shall have standard 3/4" chamfers except as noted.

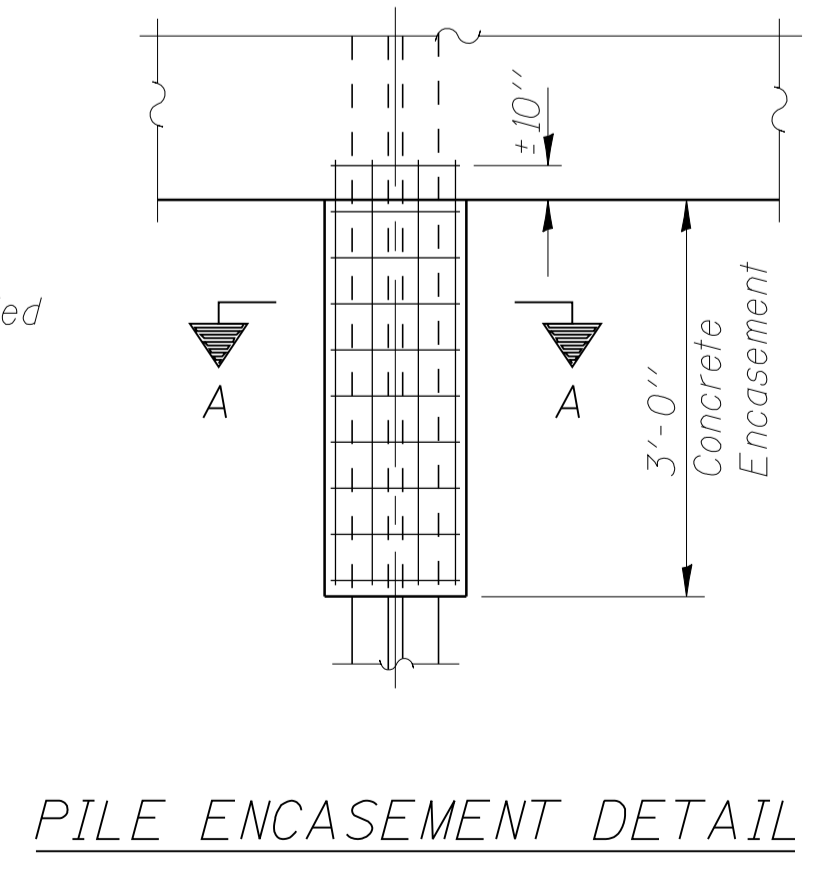
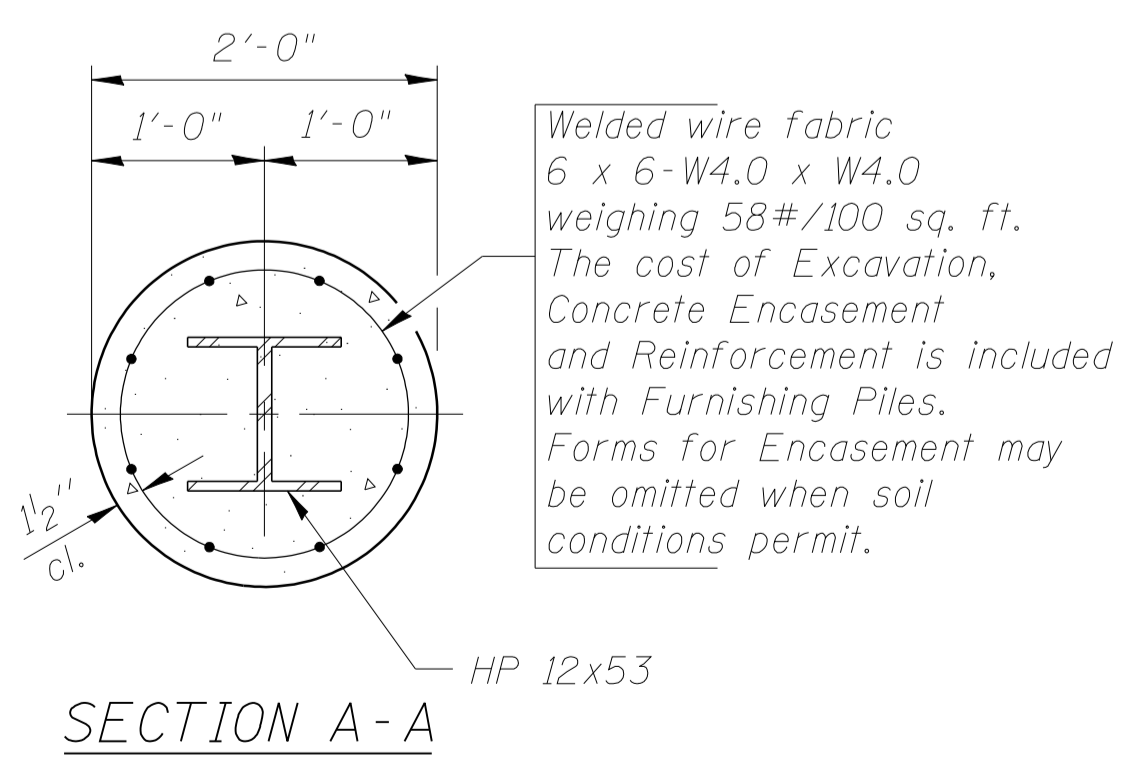
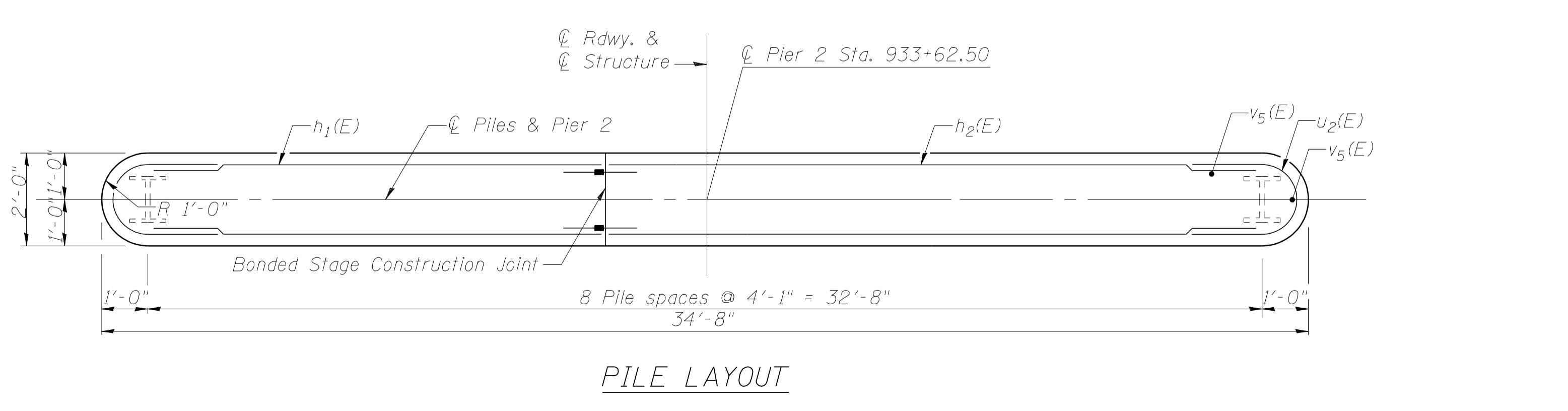
PILE DATA

Type: HP 12x53

Driven to: Refusal

Est. Length: 33'

No. Req'd: 9



ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 2

IL ROUTE 133 OVER THE LITTLE EMBARRAS RIVER

F.A.P. ROUTE 749 SECTION (I22BR)BR

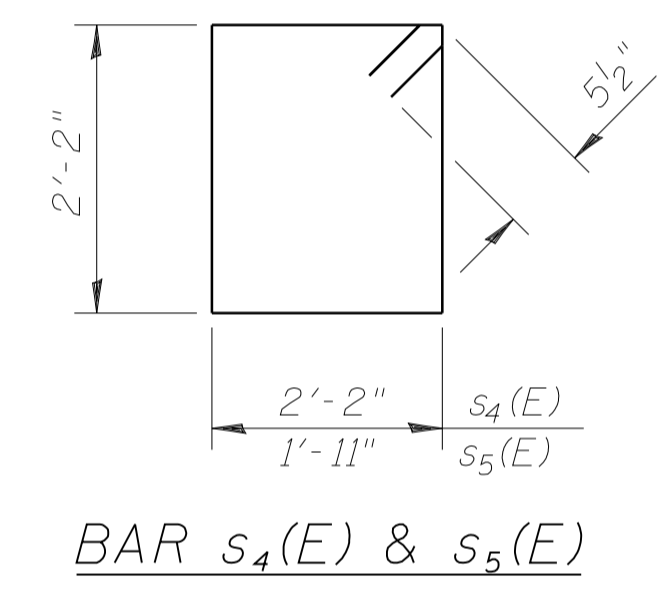
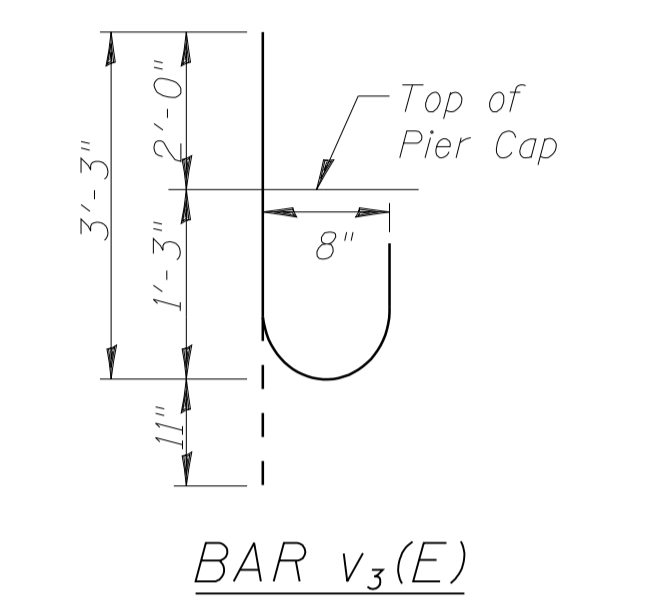
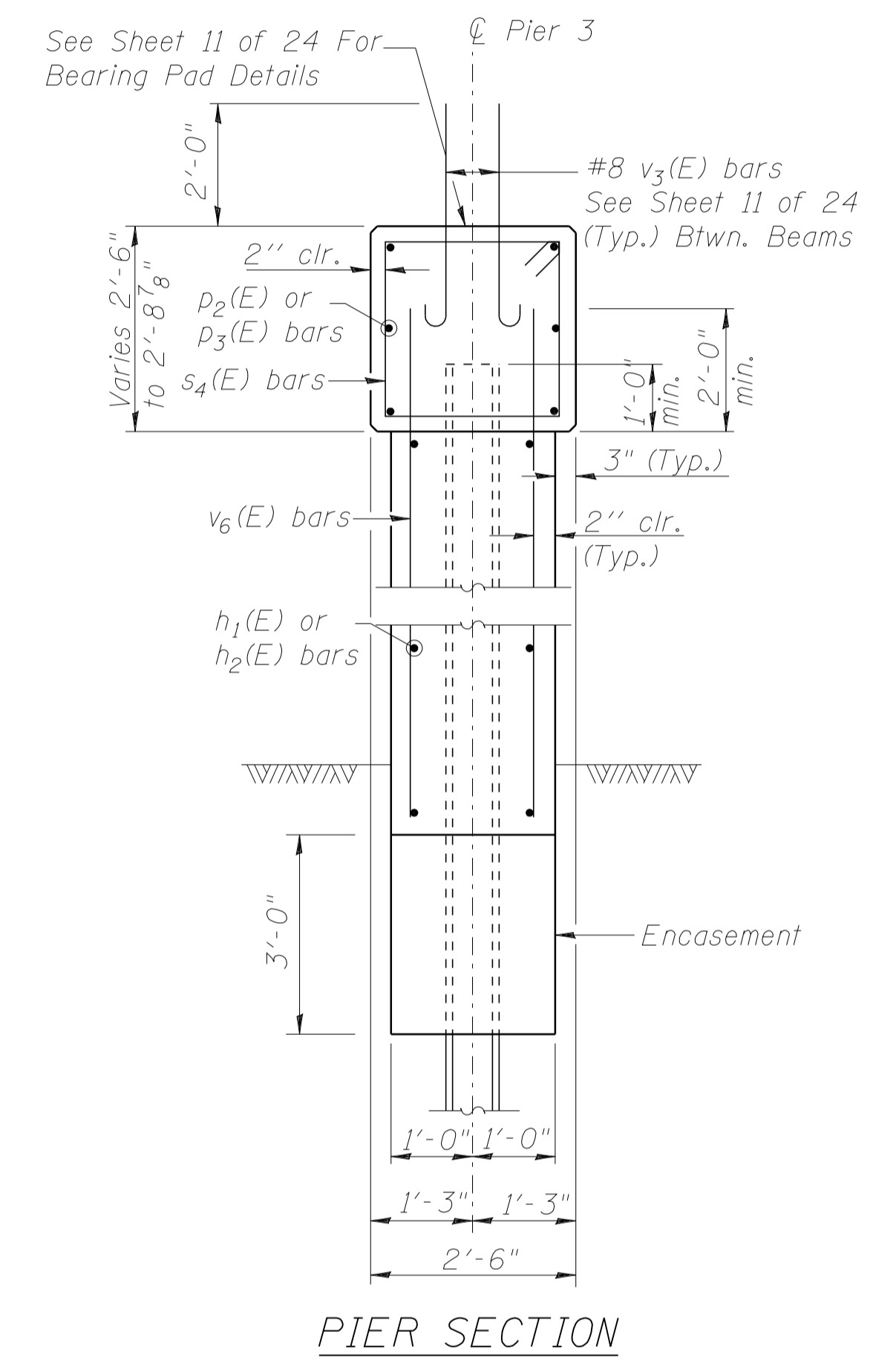
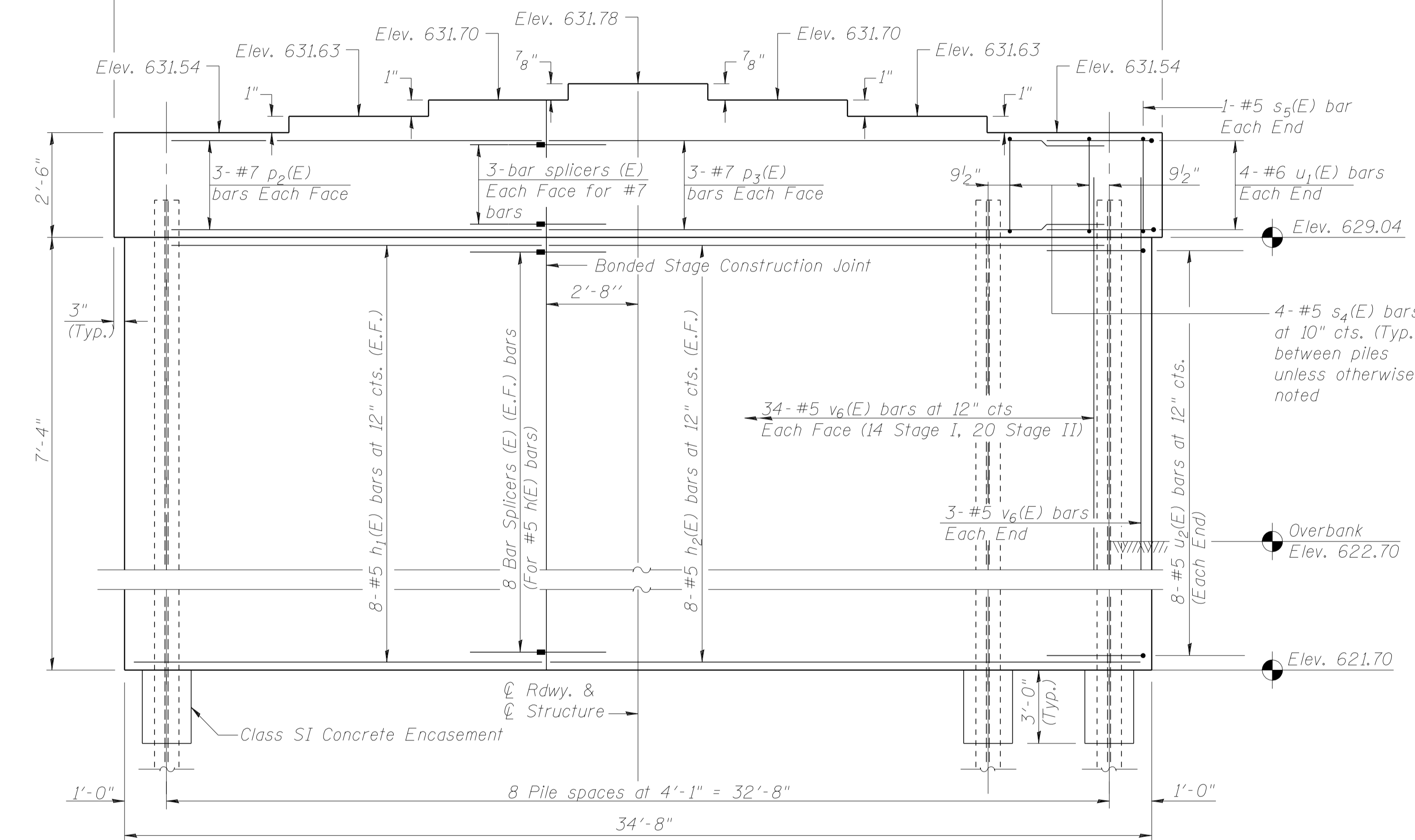
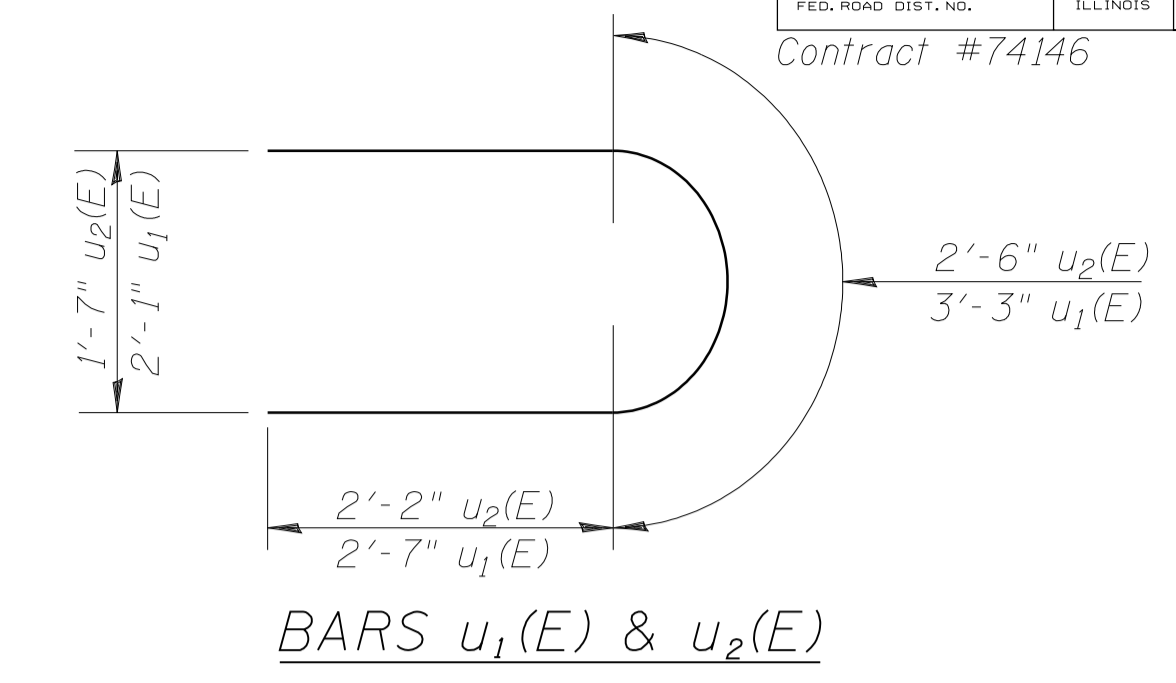
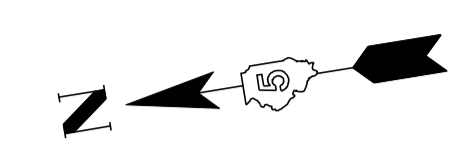
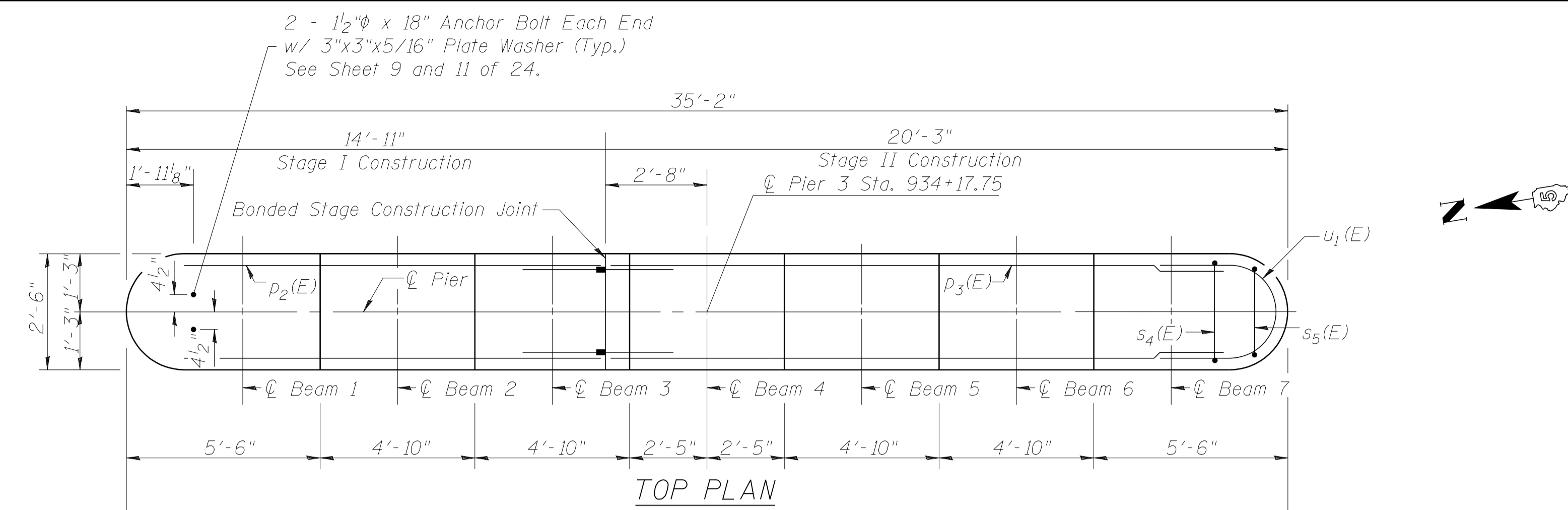
COLES COUNTY

STATION 933+50.00

STRUCTURE NO. 015-0074

DATE: MARCH 2006

DRAWN BY: MLO
CHECKED BY: PBB



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	16	#5	13'-7"	—
h ₂ (E)	16	#5	18'-11"	—
p ₂ (E)	6	#7	13'-7"	—
p ₃ (E)	6	#7	18'-11"	—
s ₄ (E)	32	#5	9'-7"	□
s ₅ (E)	2	#5	9'-1"	□
u ₁ (E)	8	#6	8'-5"	U
u ₂ (E)	16	#5	6'-10"	U
v ₃ (E)	36	#8	4'-2"	U
v ₆ (E)	74	#5	9'-2"	—
Item				
Unit				
Quantity				
Furnishing Steel Piles HP 12x53	Foot	297		
Driving Steel Piles	Foot	297		
Concrete Structures	Cu. Yd.	27.0		
Reinforcement Bars, Epoxy Coated	Pound	2610		
Structure Excavation	Cu. Yd.	8.6		

NOTES

Four steps monolithically with cap. Reinforcement bars designated (E) shall be epoxy coated.

For anchor bolt installation see sheet 21 of 24.

Space reinforcement in cap to miss anchor bolts.

All edges shall have standard 3/4" chamfers except as noted.

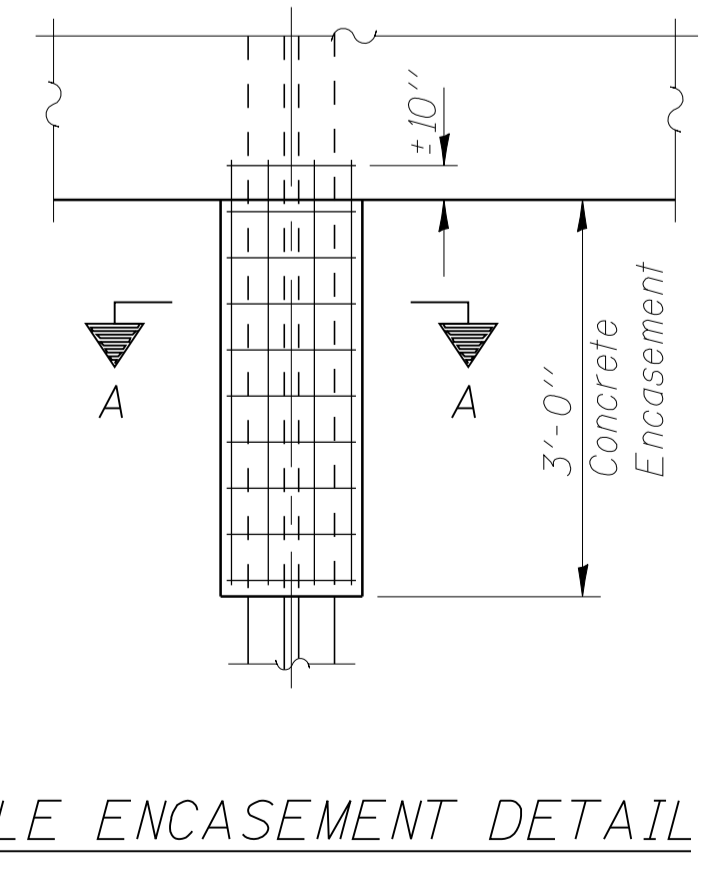
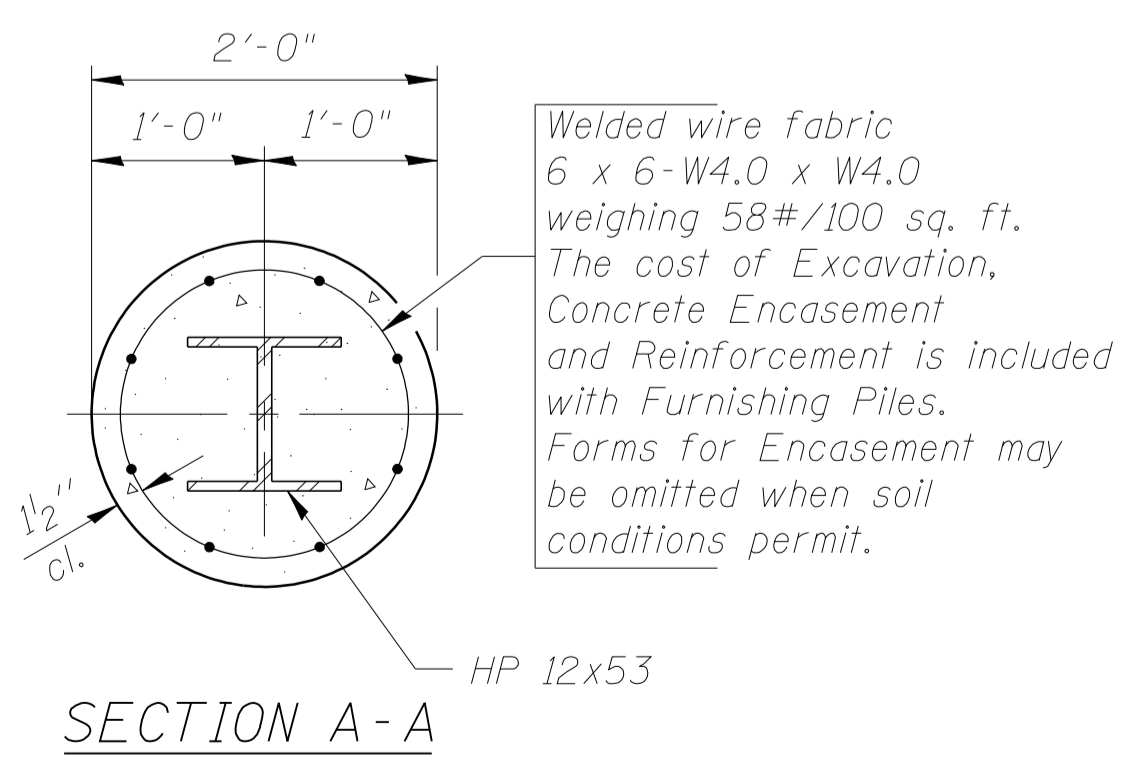
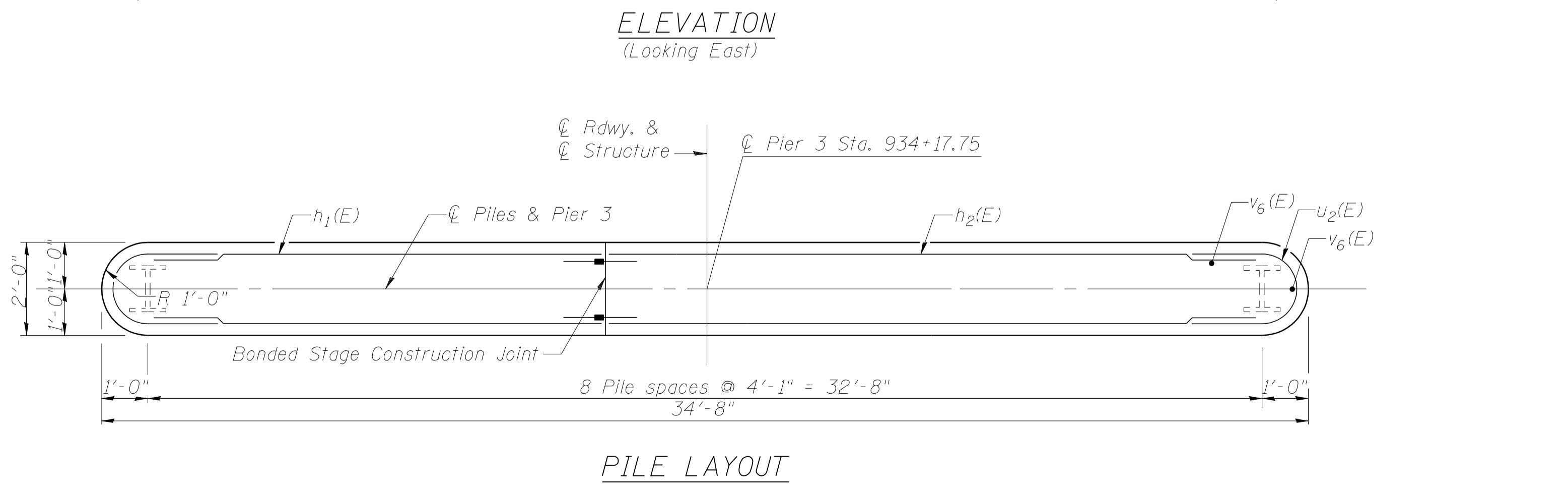
PILE DATA

Type: HP 12x53

Driven to: Refusal

Est. Length: 33'

No. Req'd: 9



ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 3

IL ROUTE 133 OVER THE LITTLE EMBARRAS RIVER

F.A.P. ROUTE 749 SECTION (I22BR)BR

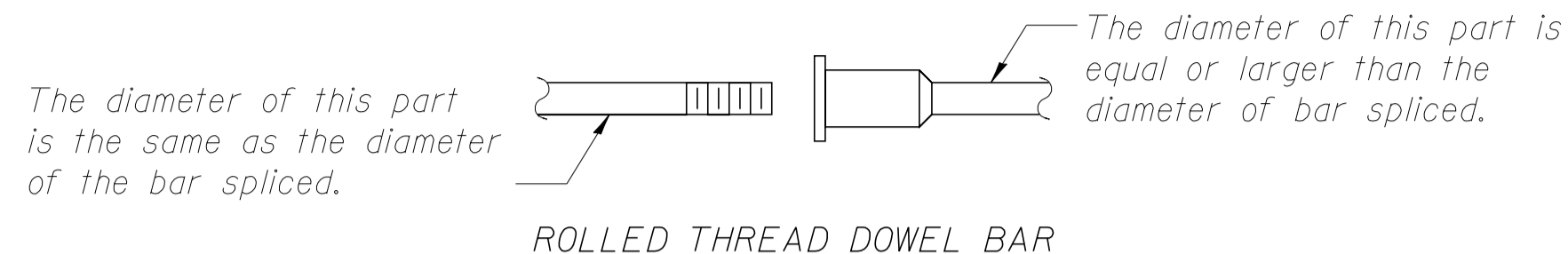
COLES COUNTY

STATION 933+50.00

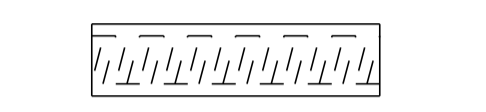
STRUCTURE NO. 015-0074

DATE: MARCH 2006

DRAWN BY: MLO
CHECKED BY: PBB

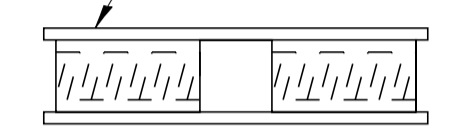


ROLLED THREAD DOWEL BAR



** ONE PIECE

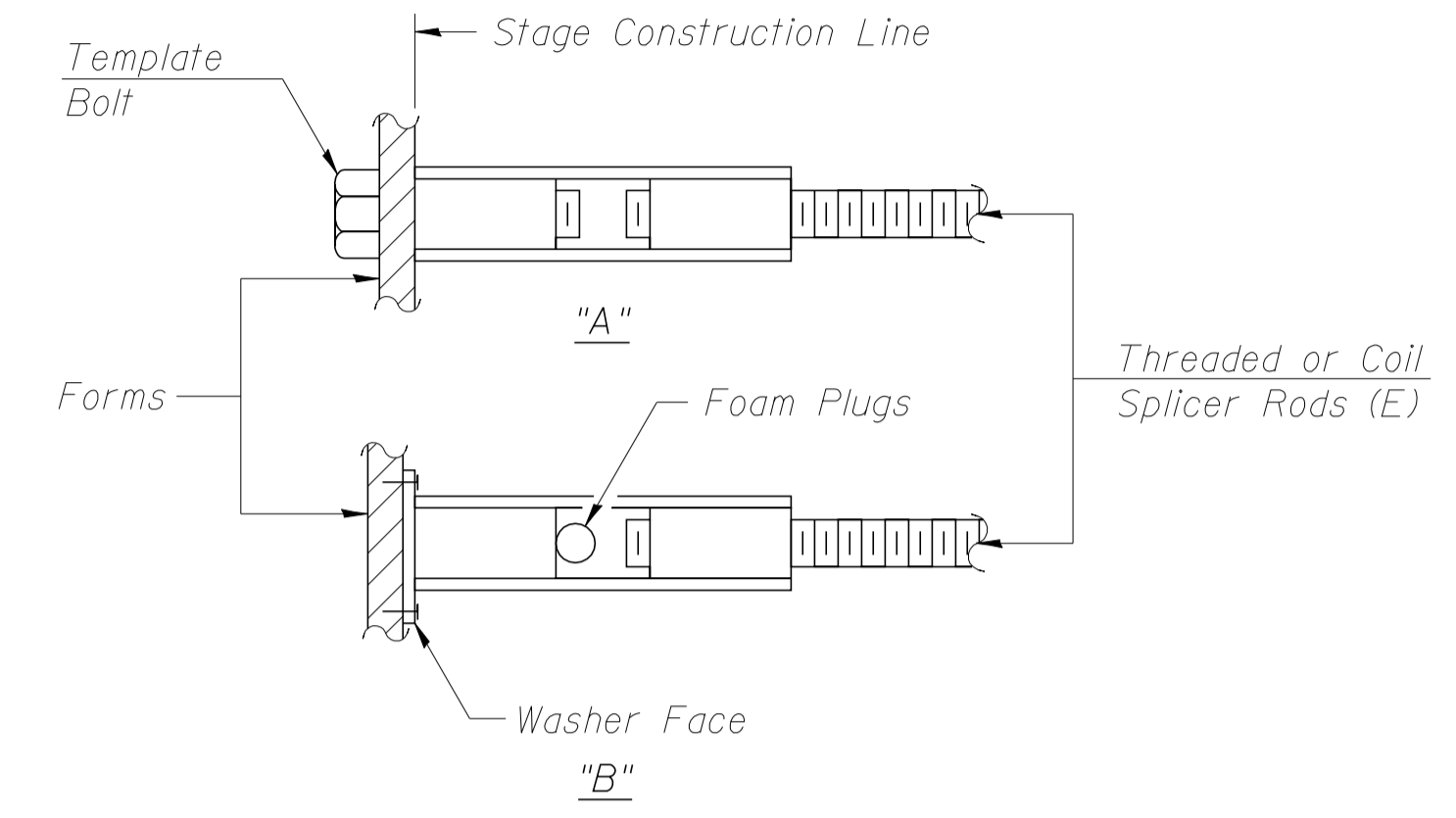
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES:

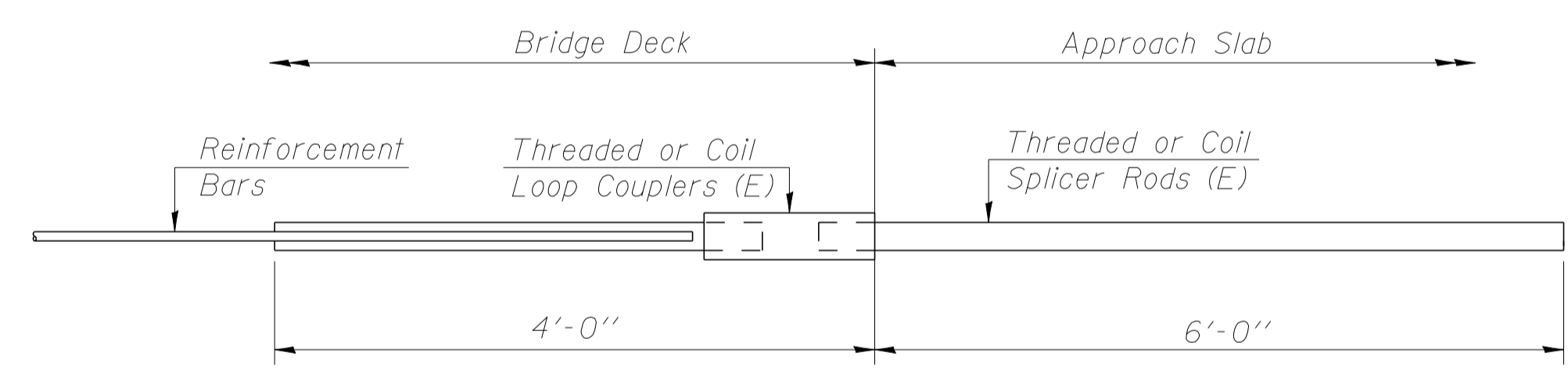
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the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

- ① Minimum Capacity = $1.25 \times f_y \times A_t$
 (Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_t$
 (Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

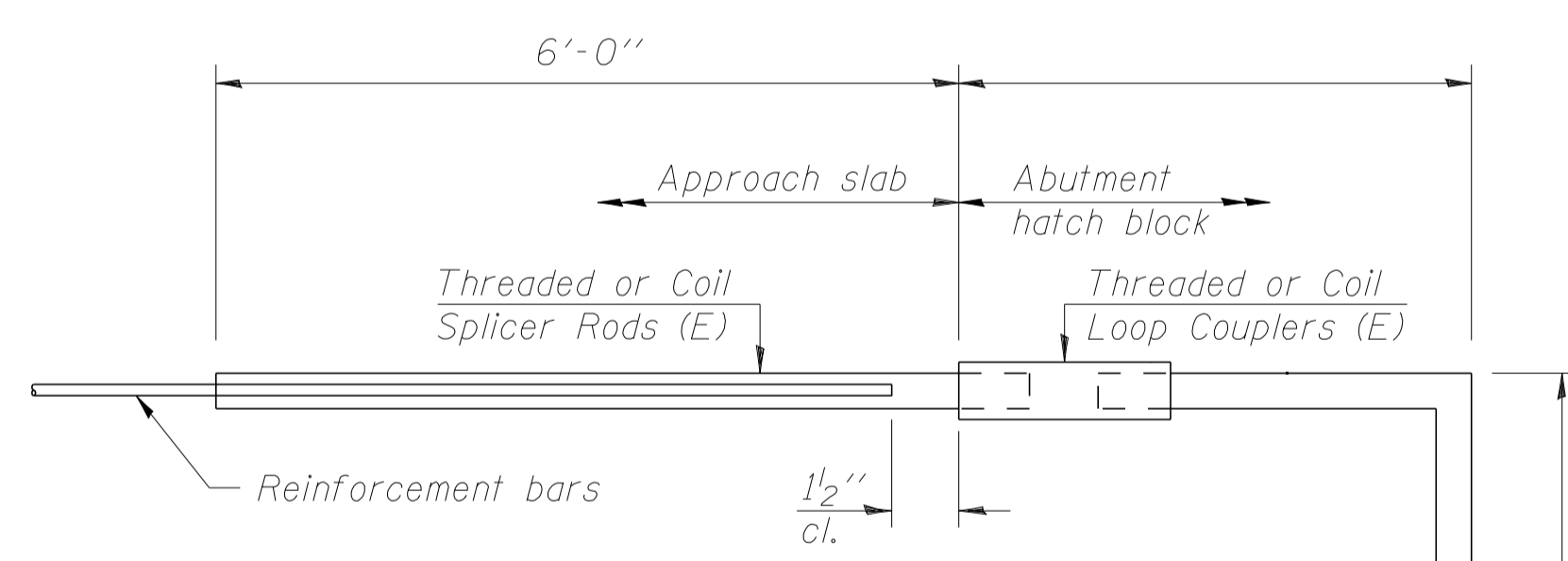
BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



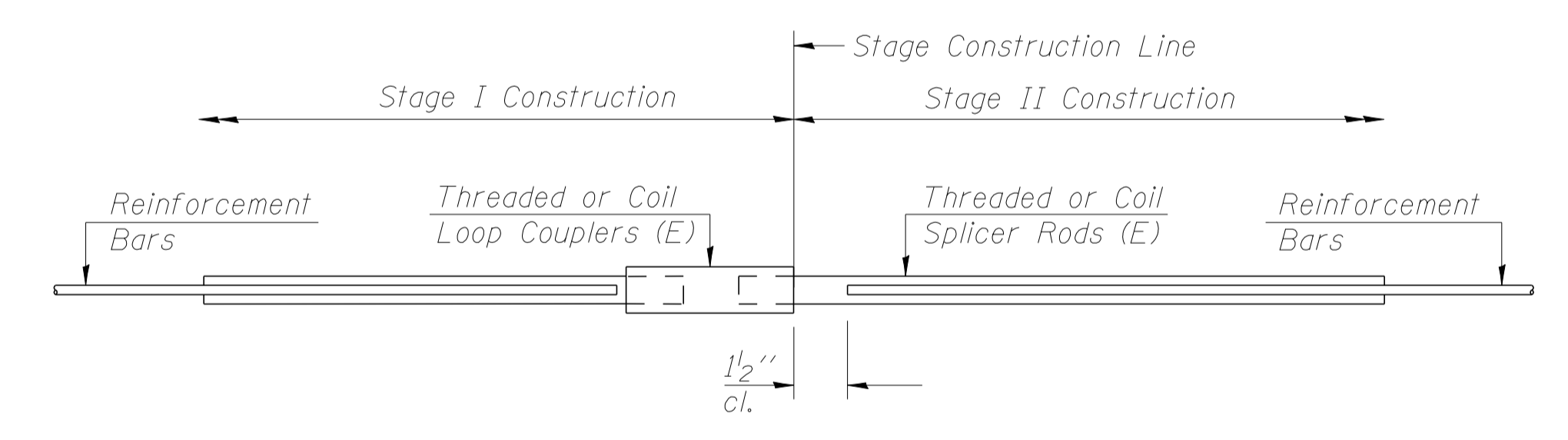
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 64



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =



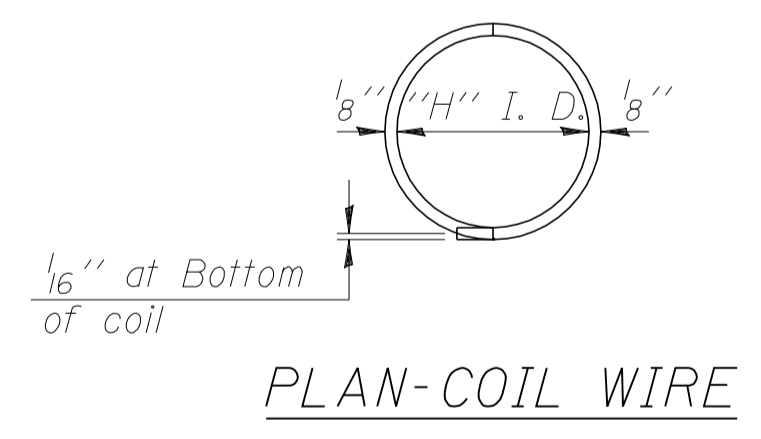
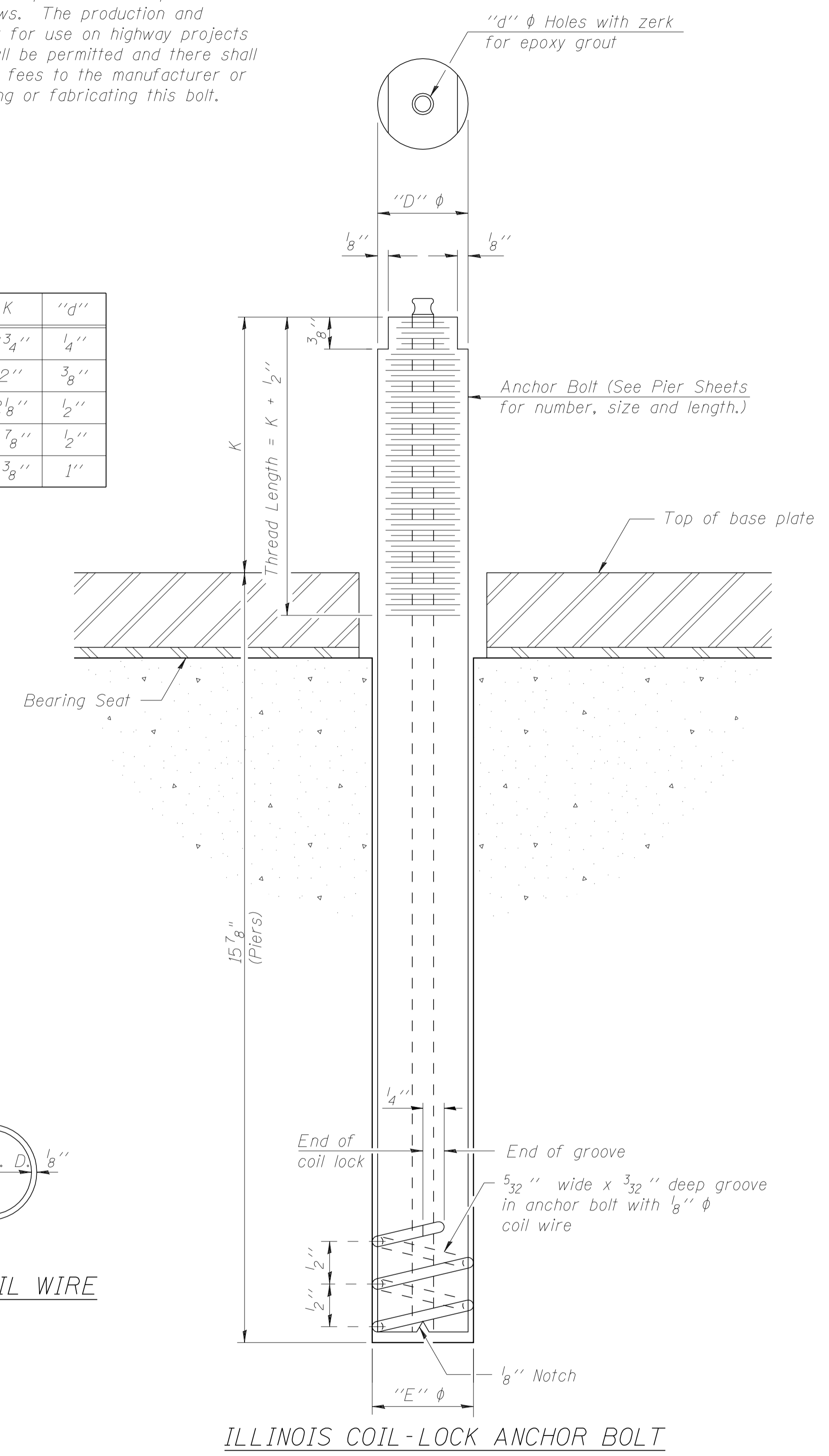
STANDARD

Bar Size	No. Assemblies Required	Location
#5	64	Approach Slabs
#5	693	Deck
#6	14	Abut. Diaphragms
#4	12	Pier Diaphragms
#6	6	Pier Diaphragms
#7	12	Abutments
#7	6	Pier 1
#5	18	Pier 1
#7	6	Pier 2
#5	32	Pier 2
#7	6	Pier 3
#5	16	Pier 3

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAILS
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (I22BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/6"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 3/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
 The coil wire shall be made of any suitable soft steel wire.
 The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
 The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.
 The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
 1. A threaded rod stud with nut and washer of the type specified.
 2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
Piers	A325

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.
 Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
 The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Precast Prestressed Concrete I-Beams 42".

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ANCHOR BOLT DETAILS
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (I22BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074
 DATE: MARCH 2006
 DRAWN BY: MLO
 CHECKED BY: PBB



Illinois Department of Transportation
Division of Highway
1007 - 01st S

SOIL BORING LOG

Page 1 of 1

Date 1/13/03

ROUTE FAP 749 (IL 133) DESCRIPTION Little Embarras River on IL 133 LOGGED BY CNA
SECTION (122BR)BR LOCATION NE SEC. 20, TWP. 14N, RNG. 14W, 3rd PM
COUNTY Coles DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	STATION	BORING NO.	STATION	OFFSET	GROUND SURFACE ELEV.	DEPTH	DIAMETER	UNIFORMITY	MOISTURE	DESCRIPTION	DEPTH	DIAMETER	UNIFORMITY	MOISTURE
015-0031	933+50	1 East Abut	934+85	8.0 ft L	635.50	ft	(ft)	(%)	(tsf)		ft	(ft)	(%)	(tsf)
										Surface Water Elev. 617.10 ft				
										Stream Bed Elev. 615.10 ft				
										Groundwater Elev.: 619.5 ft				
										First Encounter				
										Upon Completion				
										After Hrs.				
										Gray Poorly Sorted Coarse Sand with Small Gravel (Alluvium) (continued)				
										Brown Clay Loam Till				
										Gray to Gray/Brown Mottled Clay Till to Clay Loam Till				
										Brown/Gray Mottled Sandy Clay Loam				
										Brown Fine to Medium Sand (Alluvium)				
										Brown Mottled Sand Loam to Loam (Alluvium)				
										Gray Fine to Medium Sand (Alluvium)				
										Green/Gray Micaceous Siltstone (Bedrock) (Drilled Rough)				
										(Auger Refusal)				
										End of Boring				

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, E-Estimate)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highway
1007 - 01st S

SOIL BORING LOG

Page 1 of 1


Date 1/13/03

ROUTE FAP 749 (IL 133) DESCRIPTION Little Embarras River on IL 133 LOGGED BY CNA
SECTION (122BR)BR LOCATION NE SEC. 20, TWP. 14N, RNG. 14W, 3rd PM
COUNTY Coles DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic


STRUCT. NO.	STATION	BORING NO.	STATION	OFFSET	GROUND SURFACE ELEV.	DEPTH	DIAMETER	UNIFORMITY	MOISTURE	DESCRIPTION	DEPTH	DIAMETER	UNIFORMITY	MOISTURE
015-0031	933+50	2 West Abut	932+17	10.0 ft R	838.10	ft	(ft)	(%)	(tsf)		ft	(ft)	(%)	(tsf)
										Surface Water Elev. 617.10 ft				
										Stream Bed Elev. 615.10 ft				
										Groundwater Elev.: 616.1 ft				
										First Encounter				
										Upon Completion				
										After Hrs.				
										Gray Sandy Clay Loam Till with Interbedded Sand Seams (continued)				
										Gray Coarse Seam				
										Gray sandy Clay Loam Till				
										(Drilled Rough/Hard)				
										Brown Varved Silt				
										Gray Varved Silt				
										Gray Sandy Clay Loam Till with Interbedded Sand Seams				
										Gray/Green to Brown Sandy Clay Loam Till				
										Green/Gray Micaceous Siltstone (Bedrock) (Drilled Rough)				
										(Auger Refusal)				
										End of Boring				

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BBS, from 137 (Rev. 8-99)

ILLINOIS DEPARTMENT OF TRANSPORTATION
BORING LOGS SHEET 1 OF 3
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (122BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074
DATE: MARCH 2006
DRAWN BY: MLO
CHECKED BY: PFB

	Illinois Department of Transportation Division of Highways 1007 - Dist 5	SOIL BORING LOG	Page 1 of 1 Date 1/13/03																																																																																																																																																																																																																																																																																	
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STRUCT. NO. 015-0031 Station 933+50 BORING NO. 3 Pier Station 933+90 Offset 19.0 ft Rt. Ground Surface Elev. 622.20 ft	<table border="1"> <thead> <tr> <th rowspan="2">DEPTH</th> <th colspan="2">SOIL</th> <th rowspan="2">M</th> <th rowspan="2">S</th> <th rowspan="2">T</th> <th colspan="4">TESTS</th> </tr> <tr> <th>HT</th> <th>WS</th> <th>Qu</th> <th>(ft)</th> <th>(/ft)</th> <th>(tsf)</th> <th>(%)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>0.8</td> <td></td> <td>25</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12</td> <td>5.9</td> <td></td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>15</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>16</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>28</td> <td>8.2</td> <td></td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>41</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>43</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>4.4</td> <td></td> <td>19</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	DEPTH	SOIL		M	S	T	TESTS				HT	WS	Qu	(ft)	(/ft)	(tsf)	(%)	0													1													2	0.8		25										3													12	5.9		8										15													16													28	8.2		7										41													43													50													4													6	4.4		19										12													<table border="1"> <thead> <tr> <th colspan="2">Elevations</th> <th colspan="4">Soil Description</th> <th rowspan="2">D</th> <th rowspan="2">B</th> <th rowspan="2">U</th> <th rowspan="2">M</th> </tr> <tr> <th>Surface Water</th> <th>Stream Bed</th> <th colspan="4"></th> <th>EP</th> <th>LO</th> <th>CS</th> <th>OS</th> </tr> </thead> <tbody> <tr> <td>617.10</td> <td>615.10</td> <td colspan="4">Green/Brown Mottled Clay Loam Till (continued)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="4">Brown Micaceous Siltstone (Bedrock)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="4">Gray Sandy Clay Loam Till with Interbedded Sand Seams Trace of Free Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="4">Gray Coe Sand Seam</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="4">Green/Brown Mottled Clay Loam Till</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Elevations		Soil Description				D	B	U	M	Surface Water	Stream Bed					EP	LO	CS	OS	617.10	615.10	Green/Brown Mottled Clay Loam Till (continued)											Brown Micaceous Siltstone (Bedrock)											Gray Sandy Clay Loam Till with Interbedded Sand Seams Trace of Free Water											Gray Coe Sand Seam											Green/Brown Mottled Clay Loam Till								
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Note that blow counts shown above are for 12" penetration in lieu of the typical 6" shown on borings 1, 2, & 3.

ILLINOIS DEPARTMENT OF TRANSPORTATION
BORING LOGS SHEET 2 OF 3
 IL ROUTE 133 OVER THE
 LITTLE EMBARRAS RIVER
 F.A.P. ROUTE 749 SECTION (122BR)BR
 COLES COUNTY
 STATION 933+50.00
 STRUCTURE NO. 015-0074

DATE: MARCH 2006 DRAWN BY: MLO CHECKED BY: PBB



Illinois Department of Transportation
Division of Highways
IDOT - Dist 5

SOIL BORING LOG

Page 1 of 1

Date 8/9/61

ROUTE FAP 749 (IL 133) DESCRIPTION Little Embarras River on IL 133 LOGGED BY Hough
SECTION (122BR)BR LOCATION NE. SEC. 20, TWP. 14N, RNG. 14W, 3rd PM
COUNTY Coles DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 015-0031
Station 933+50
BORING NO. 5 Widening
Station 934+03
Offset 20.0 R.L.L.
Ground Surface Elev. 621.40 ft (ft) ((12") (tsf) (%)

DEPTH (ft)	DEPTH ((12")	TSF	BLOWS	DESCRIPTION	DEPTH (ft)	DEPTH ((12")	TSF	BLOWS	DESCRIPTION
				Surface Water Elev. _____ ft					
				Stream Bed Elev. _____ ft					
				Groundwater Elev.: _____ ft					
				First Encounter _____ ft					
				Upon Completion _____ ft					
				After _____ Hrs. _____ ft					
				Hard Brown Gray Mottled Sand Loam Till (continued)	75			11	
				Glacial Boulder 599.4					
				Hard Brown Gray Mottled Sand Loam Till (No Penetration in 15 Blows - Spoon Bounced)	592.4				
				End of Boring					
618.4				Medium Brown Sand					
				Medium Dark Gray Brown Mottled Sand Loam Interlayered w/Fine Dark Gray Sand					
				Cobble Layer					
613.8			19	Very Stiff Brown & Gray Mottled Clay Till			2.8	14	
			28	Very Stiff Brown Gray Mottled Clay Loam Till			2.4	18	
610.7				Very Stiff Brown Gray Mottled Clay Till					
608.9			45	Hard Brown Mottled Clay Loam Till			2.7	18	
608.4									
			32	Very Stiff Gray Brown Mottled Clay Till			4.9	9	
605.4									
			18	Hard Brown Gray Mottled Sand Loam Till			3.1	21	
602.9									

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BBS, from 137 (Rev. 8-69)

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Illinois Department of Transportation
Division of Highways
IDOT - Dist 5

SOIL BORING LOG

Page 1 of 1

Date 8/10/61

ROUTE FAP 749 (IL 133) DESCRIPTION Little Embarras River on IL 133 LOGGED BY Hough
SECTION (122BR)BR LOCATION NE. SEC. 20, TWP. 14N, RNG. 14W, 3rd PM
COUNTY Coles DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 015-0031
Station 933+50
BORING NO. 6 Widening
Station 932+39
Offset 21.0 R.L.L.
Ground Surface Elev. 636.00 ft (ft) ((12") (tsf) (%)

DEPTH (ft)	DEPTH ((12")	TSF	BLOWS	DESCRIPTION	DEPTH (ft)	DEPTH ((12")	TSF	BLOWS	DESCRIPTION
				Surface Water Elev. _____ ft					
				Stream Bed Elev. _____ ft					
				Groundwater Elev.: _____ ft					
				First Encounter _____ ft					
				Upon Completion _____ ft					
				After _____ Hrs. _____ ft					
				Medium Brown Clay Loam (Partly Calcareous Backfill)	615.5			28	4.9
				Hard Gray Clay Loam Till					
				Very Dense Fine Gray Sand	614.0			79	10.2
				Hard Gray Clay Loam Till Interlayered w/Fine Gray Sand Lenses	613.0				
			47	End of Boring				12.1	10
610.5									
			8	Stiff Brown Gray Mottled Sand Loam			0.5	14	
607.5									
			12	Free Water					
605.5				Stiff Brown Gray Mottled Sand Loam				21	
604.5				Stiff Gray Brown Mottled Silty Clay Till			2.2	21	
			10						
			14	Stiff Green Gray Mottled & Dark Gray to Black Sand Loam Till			2.8	18	
619.5									
			16					15	

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The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-69)

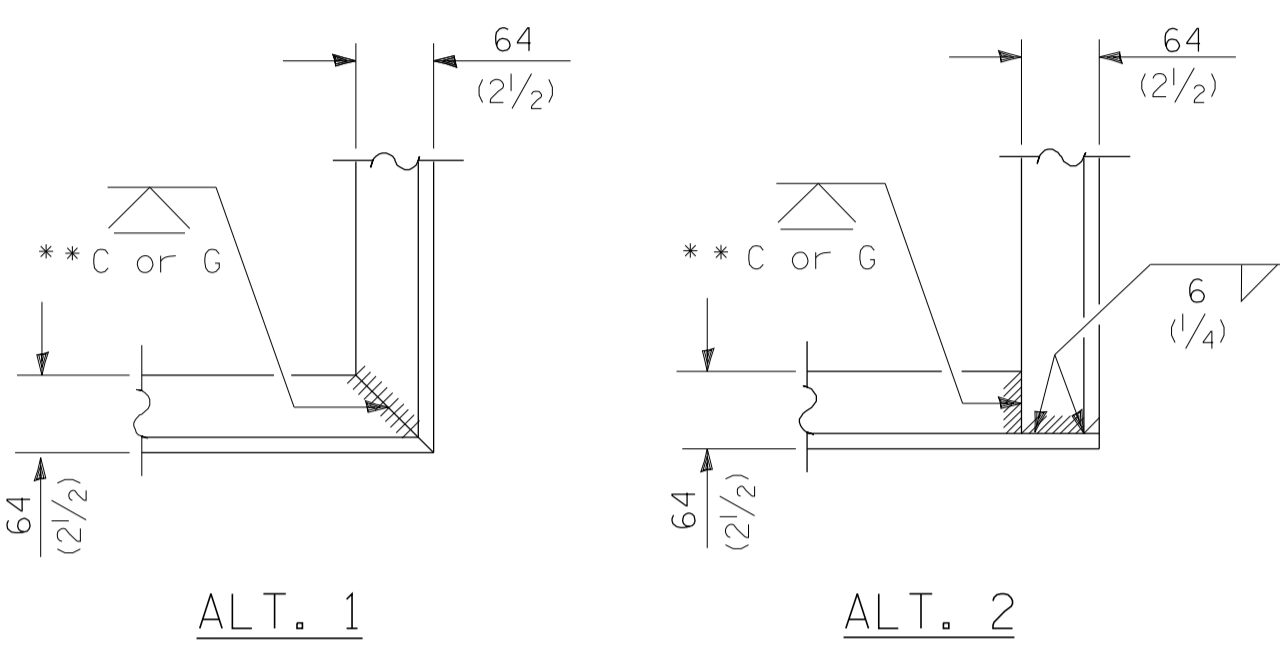
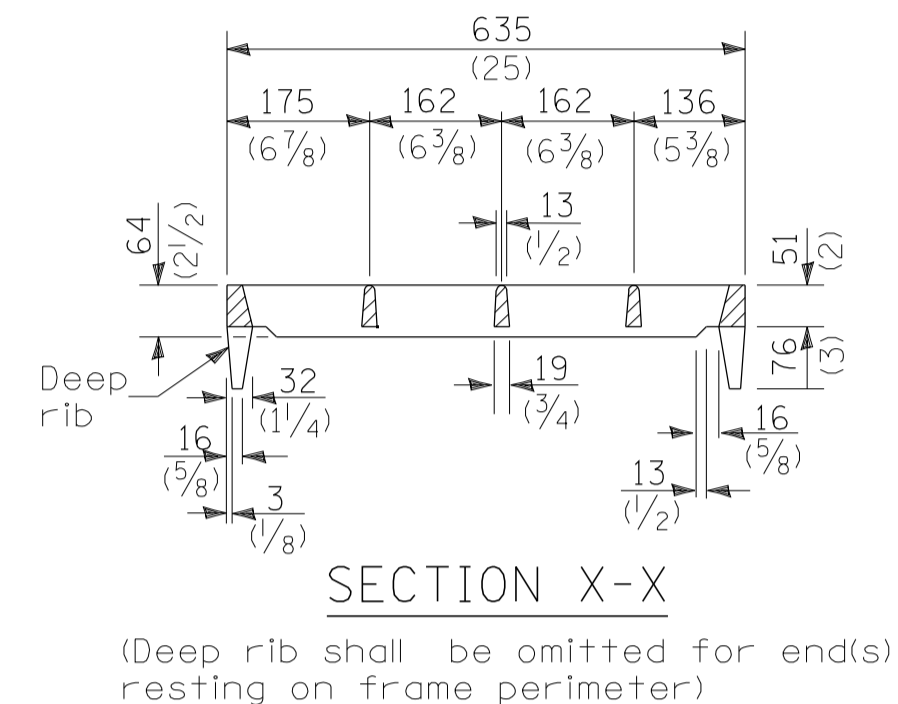
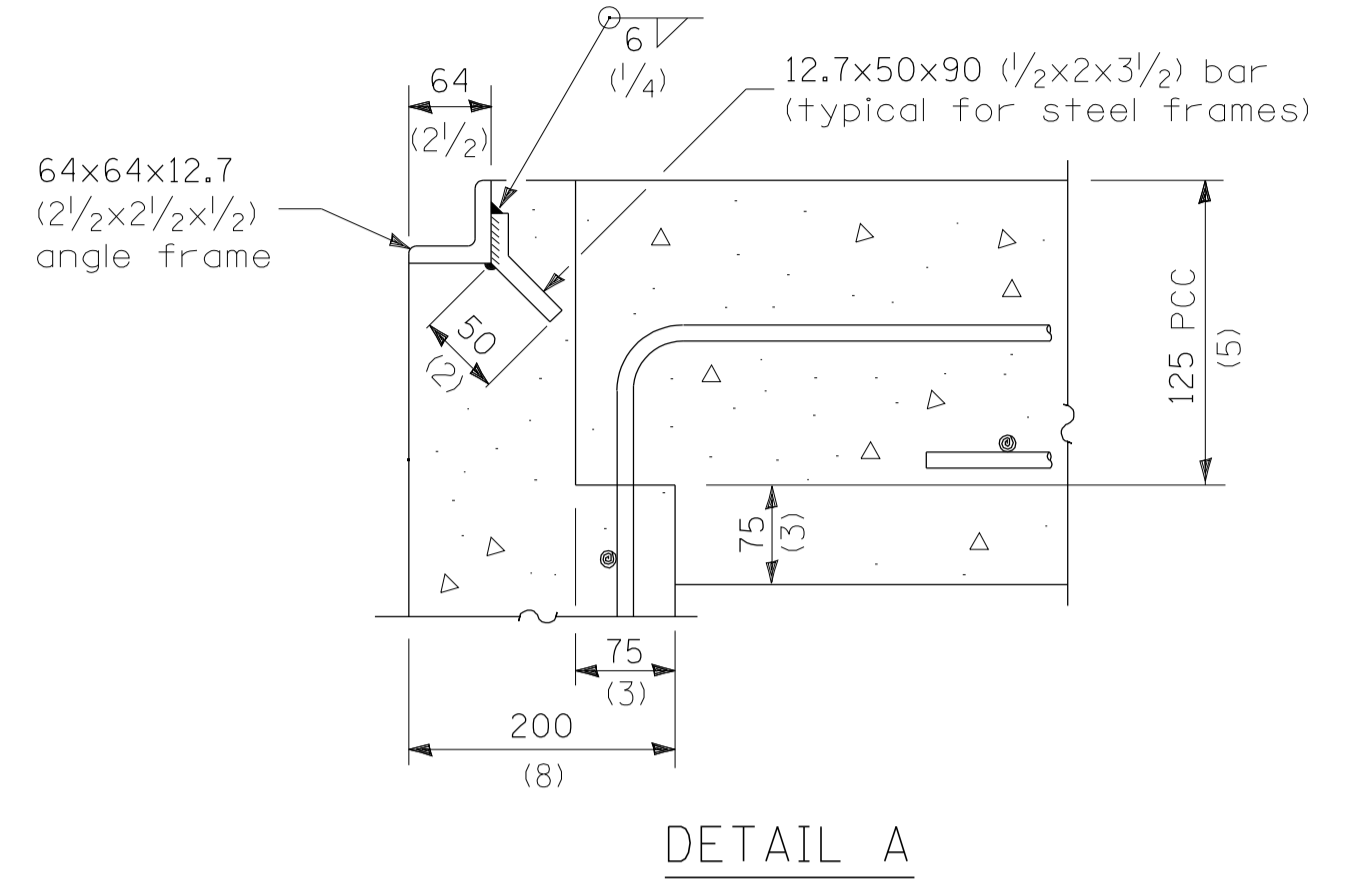
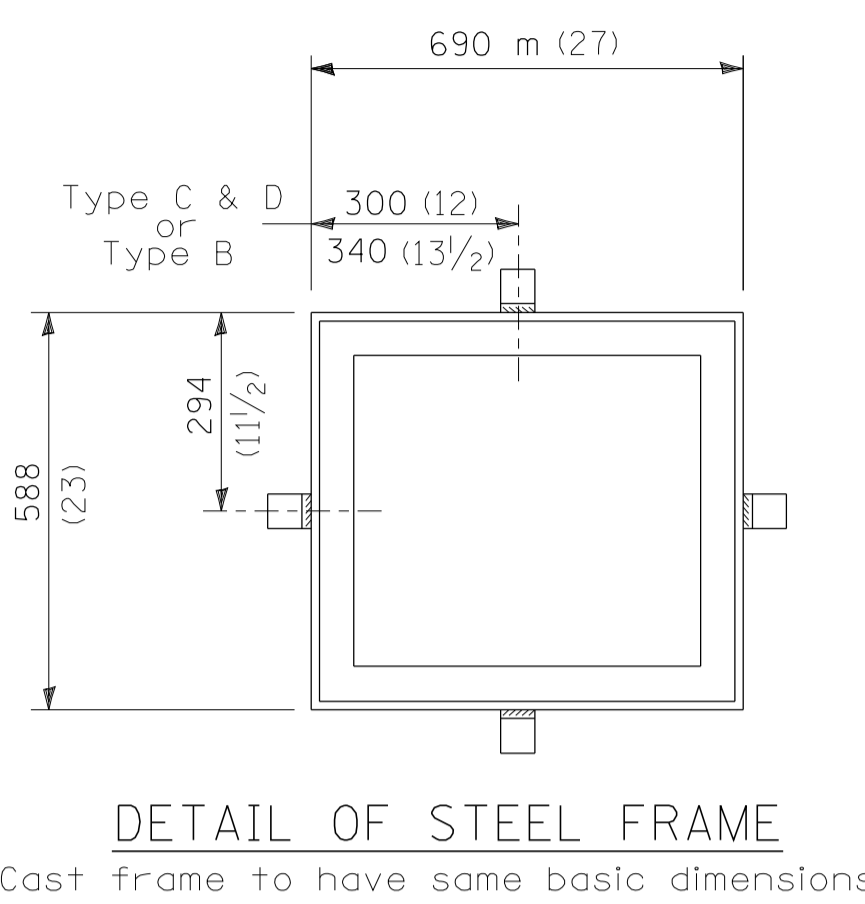
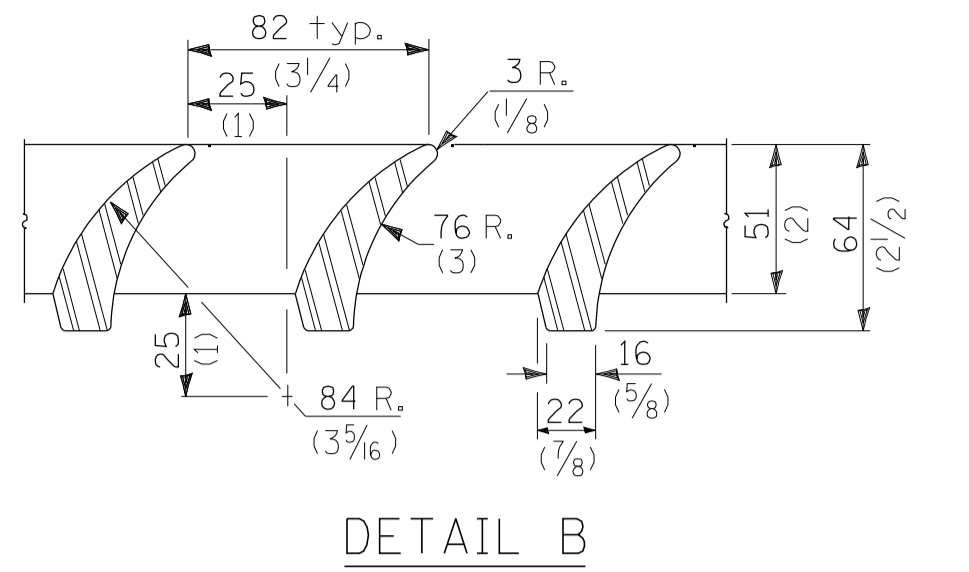
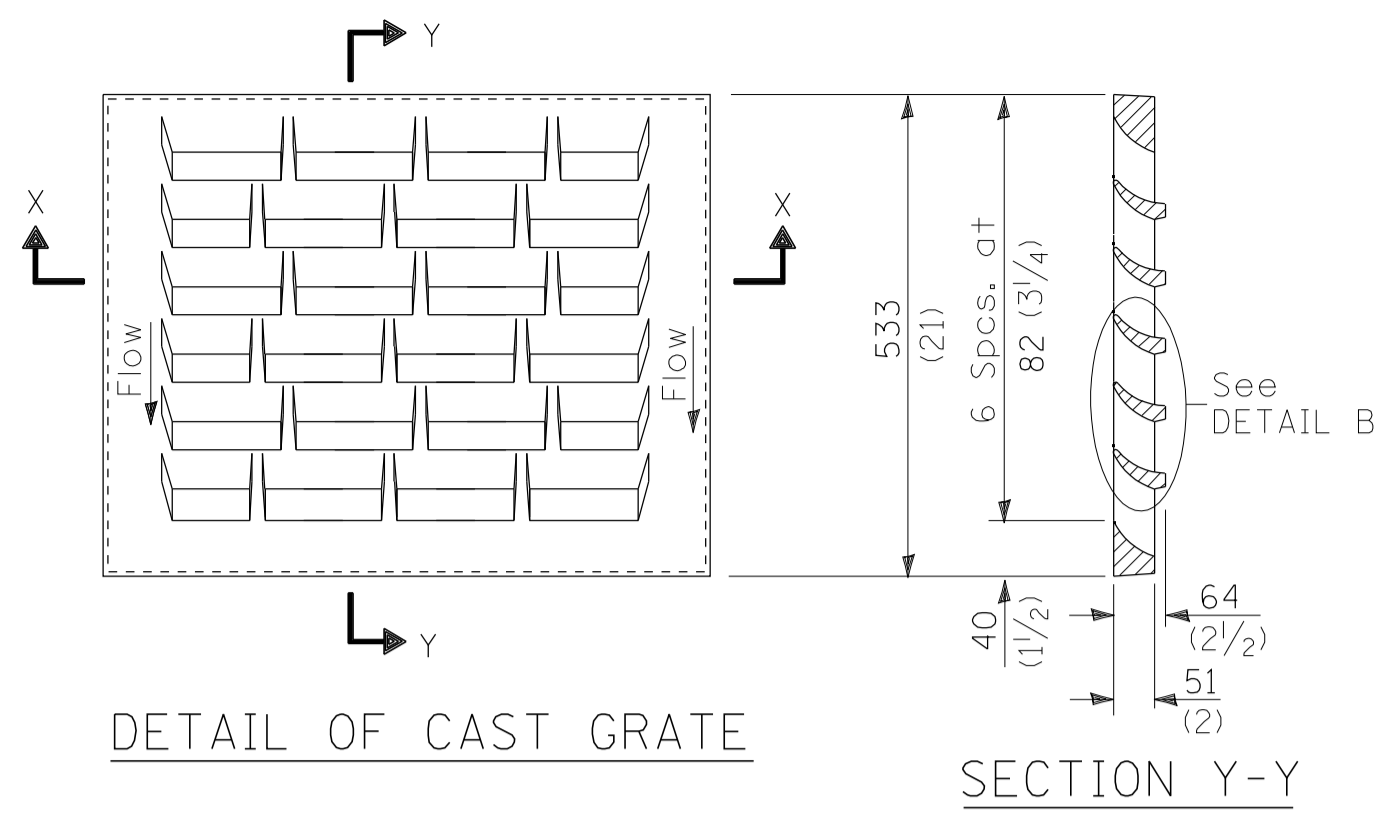
Note that blow counts shown above are for 12" penetration in lieu of the typical 6" shown on borings 1, 2, & 3.

ILLINOIS DEPARTMENT OF TRANSPORTATION

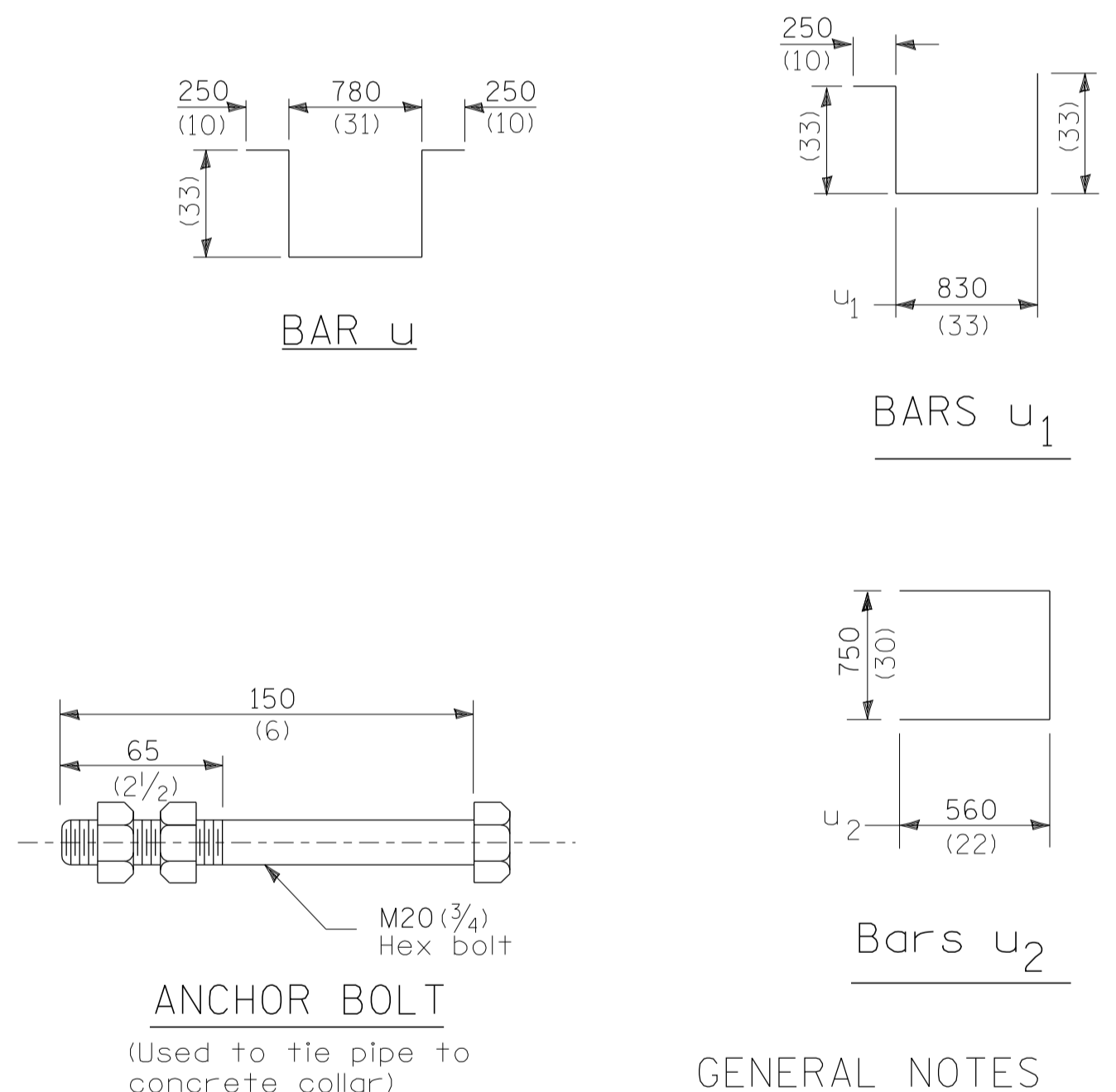
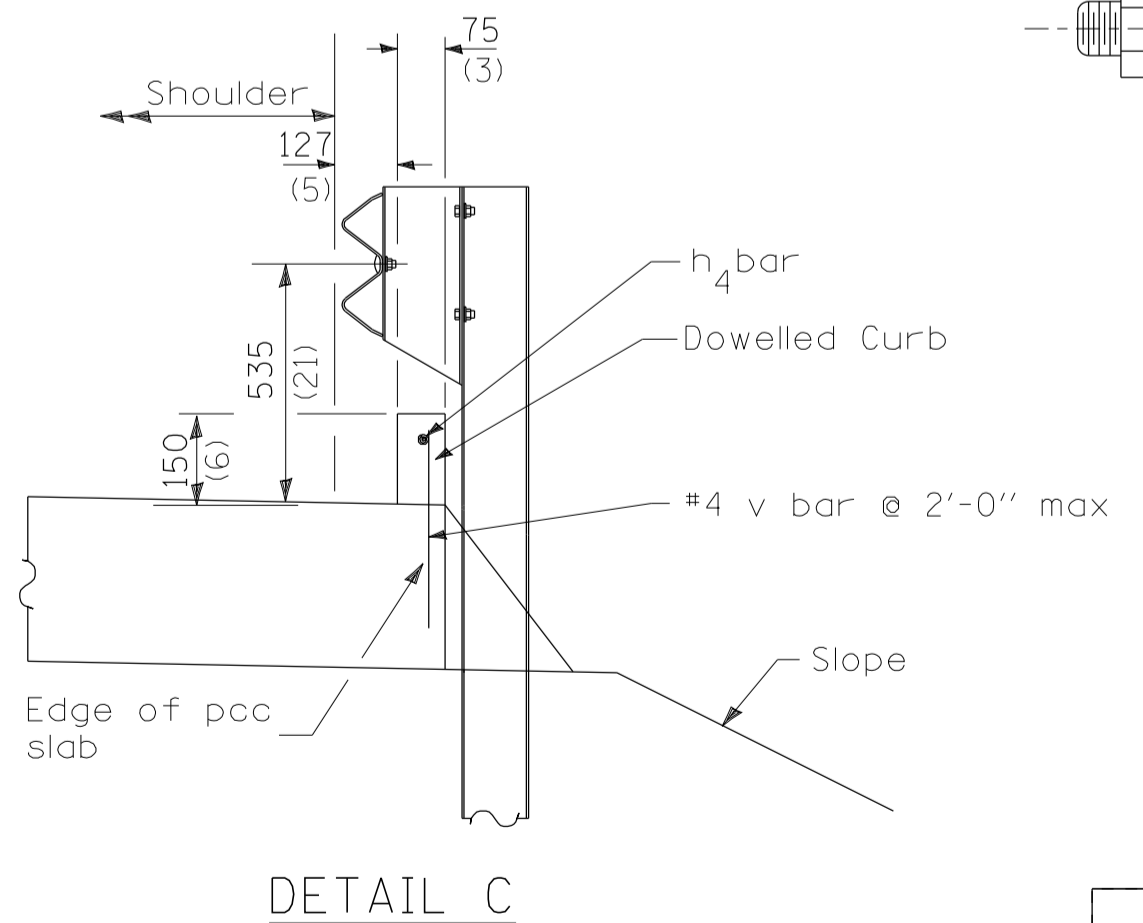
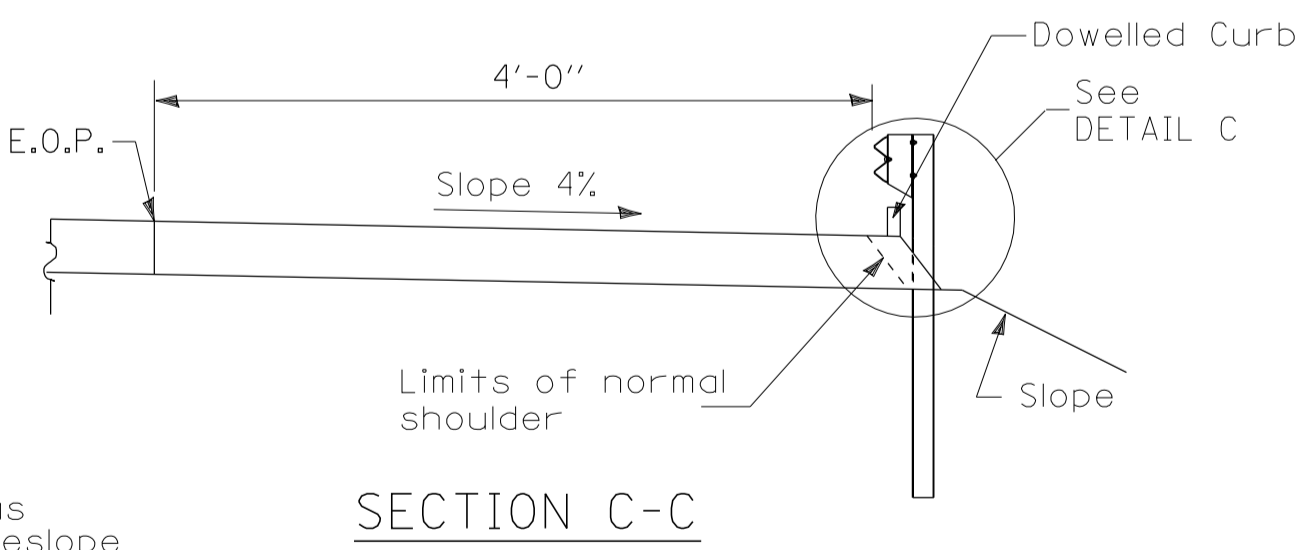
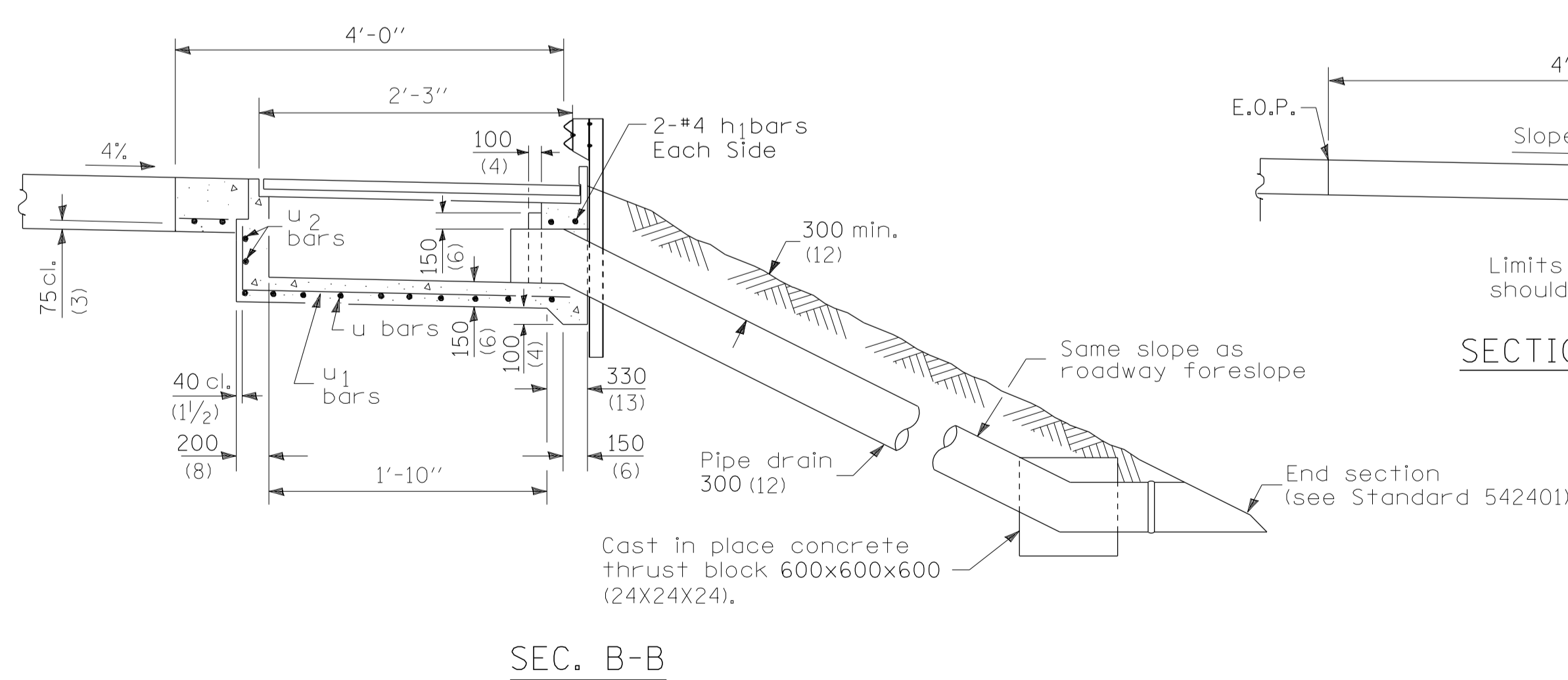
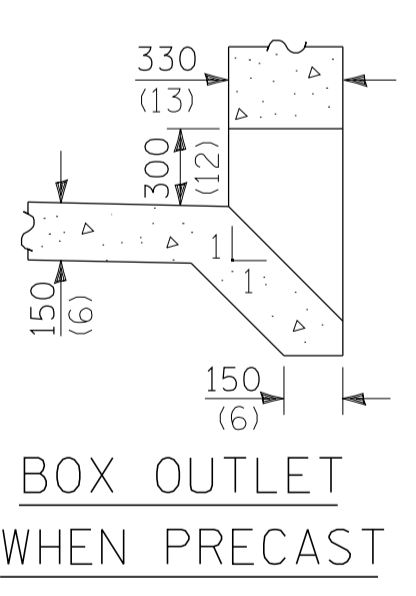
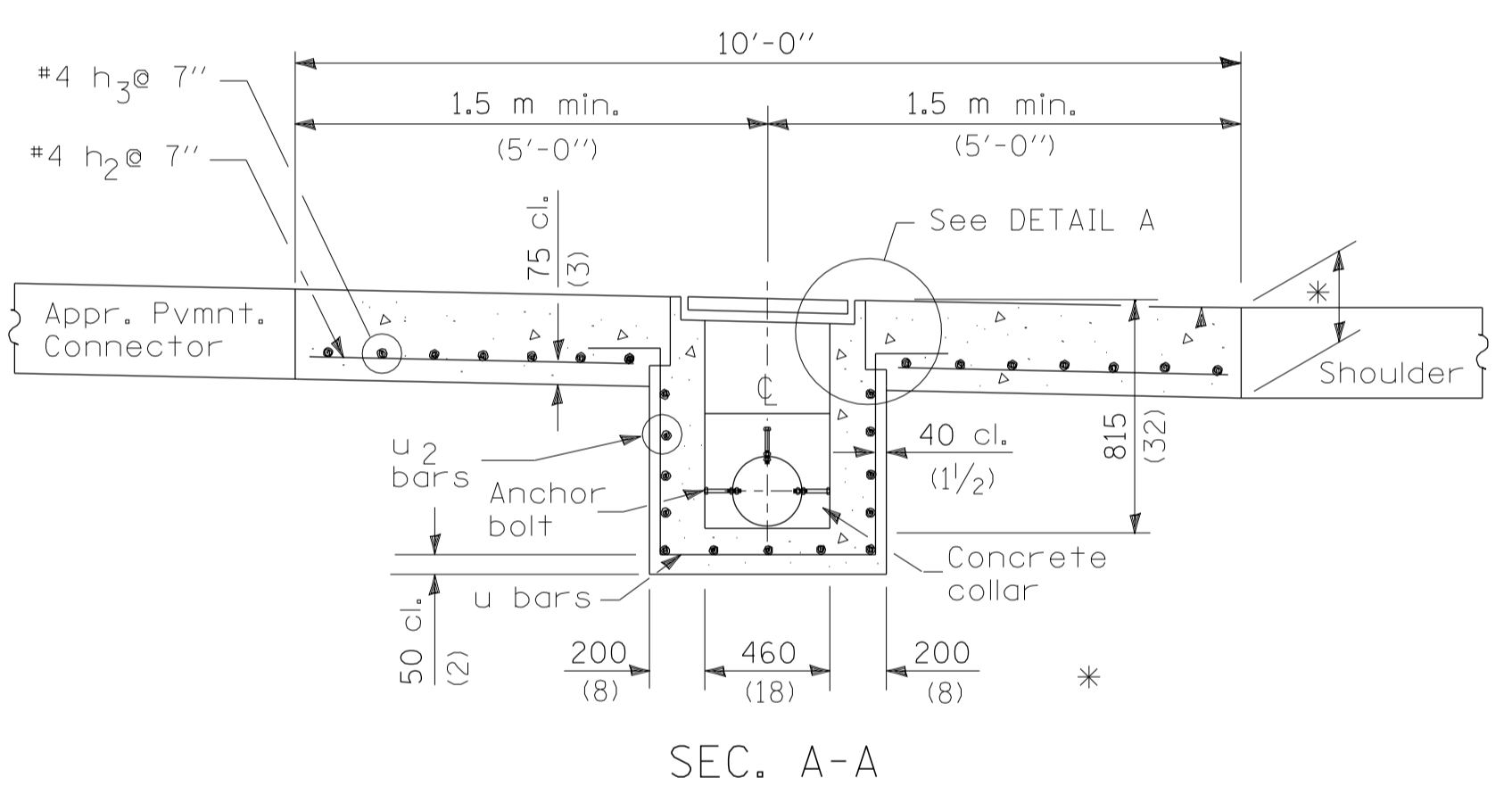
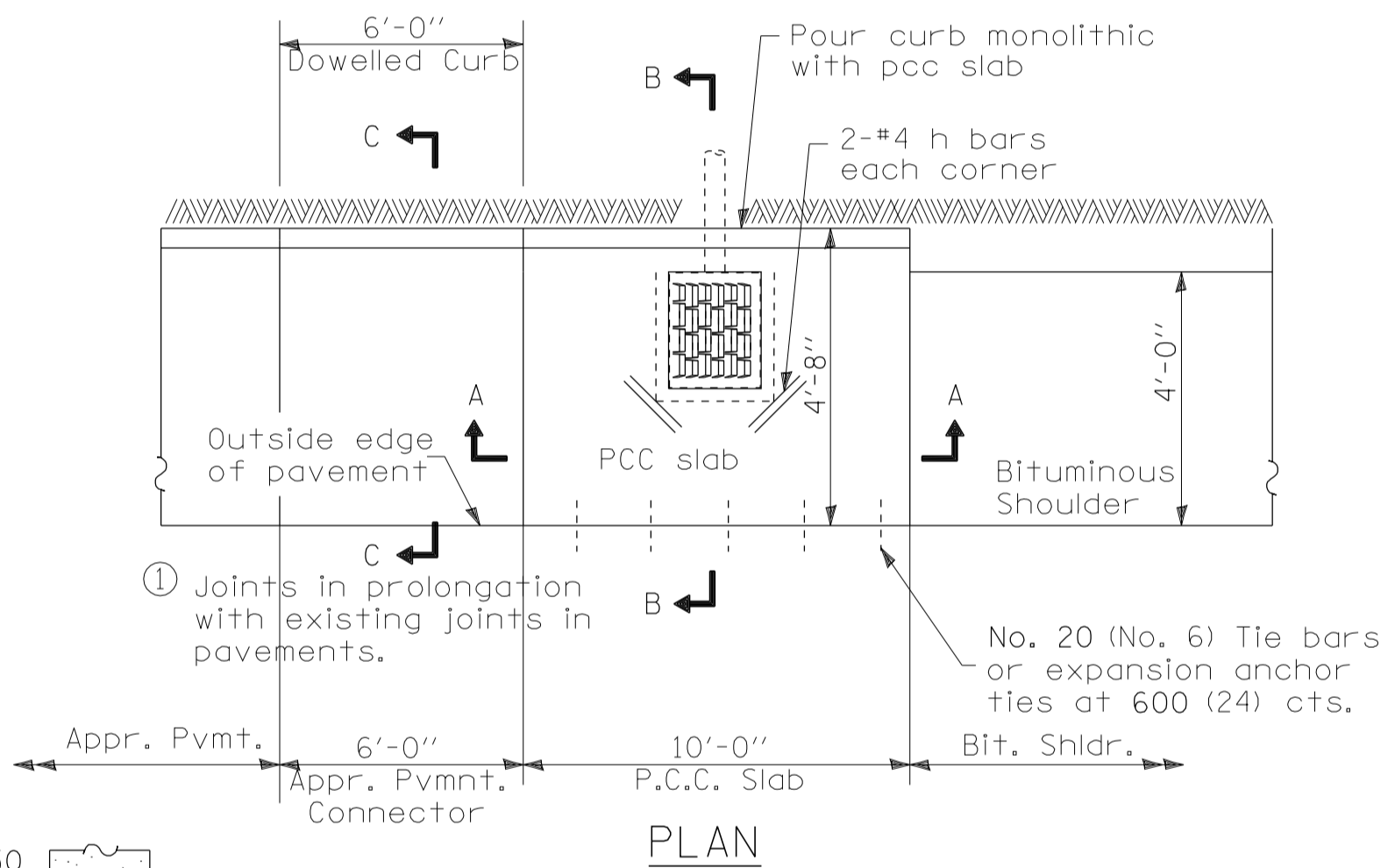
BORING LOGS SHEET 3 OF 3
IL ROUTE 133 OVER THE
LITTLE EMBARRAS RIVER
F.A.P. ROUTE 749 SECTION (122BR)BR
COLES COUNTY
STATION 933+50.00
STRUCTURE NO. 015-0074

DATE: MARCH 2006 DRAWN BY: MLO
CHECKED BY: PEB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	38
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REQUIRED MATERIAL			
TYPE B INLET AND PCC SLAB			
Bar	Qty.	Size	Length
h	8	(No.4)	4'-0"
h ₁	4	(No.4)	9'-8"
h ₂	12	(No.4)	3'-2"
h ₃	14	(No.4)	4'-4"
h ₄	2	(No.4)	15'-8"
u	4	(No.4)	9'-9"
u ₁	3	(No.4)	9'-11"
u ₂	6	(No.4)	6'-2"
v	20	(No.4)	10"
Concrete	cu. yds.	0.9	
Reinf. bars	lbs.	216	
Grating	sq. ft.	3.6	



GENERAL NOTES
 See Standard 420001 for joint details not shown.
 All exposed edges of the inlet, except the upper perimeter, shall be beveled 20 mm (3/4").
 All dimensions are in millimeters (inches) unless otherwise shown.
 The cost of PCC slab shall be included in the cost of Type B Inlet Box, Standard 609001 (SPECIAL)

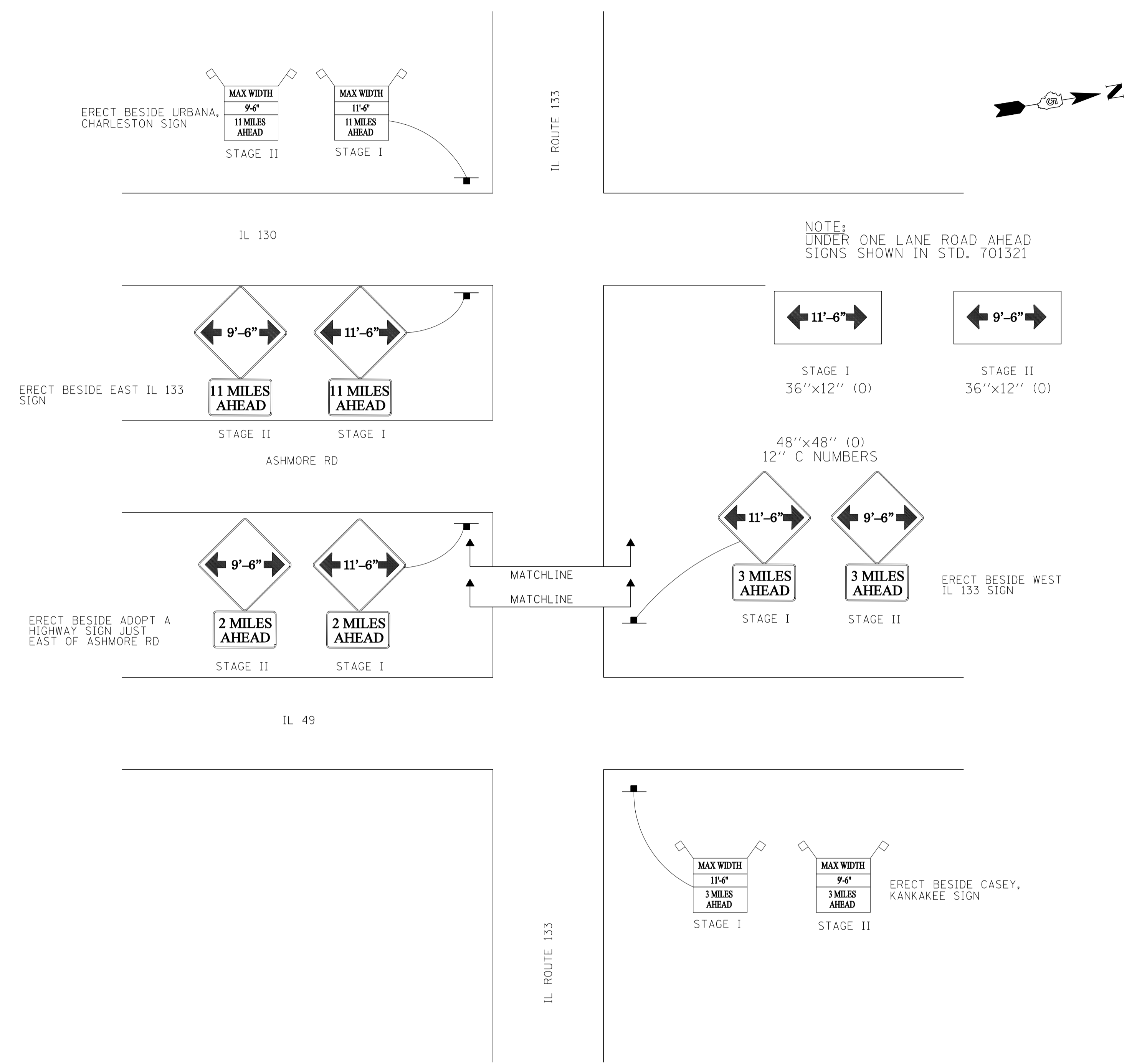
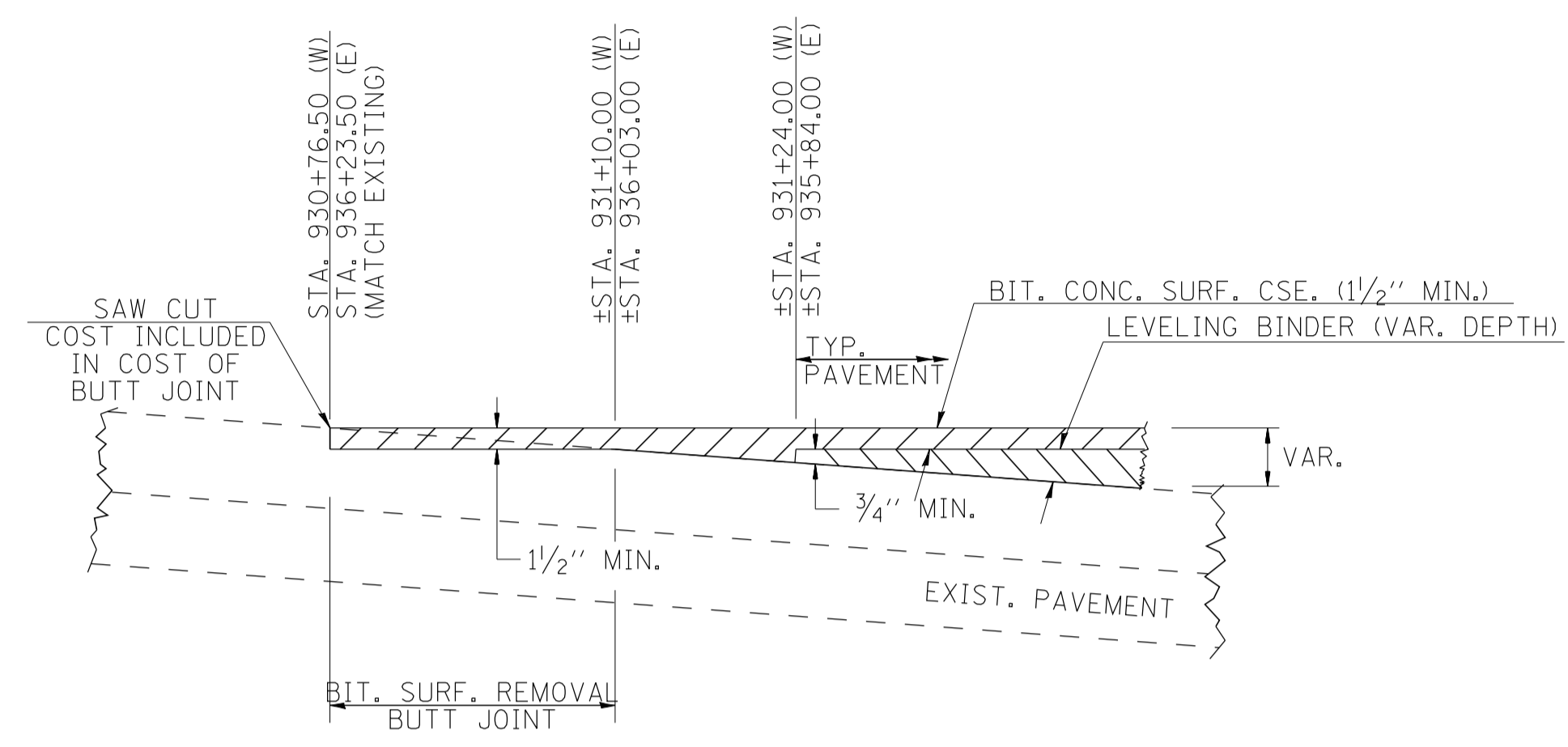
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ROADWAY DETAILS
 DRAWN BY MLO
 CHECKED BY PBB
 DATE: 01/06

PLOT DATE = 7/24/2006
 FILE NAME = F:\03\0301\05\0\Drawings\Details.dgn
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 USER NAME = Trucks

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	39
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

BUTT JOINT DETAIL



WIDTH RESTRICTION SIGNING DETAIL

PLOT DATE = 7/24/2006
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

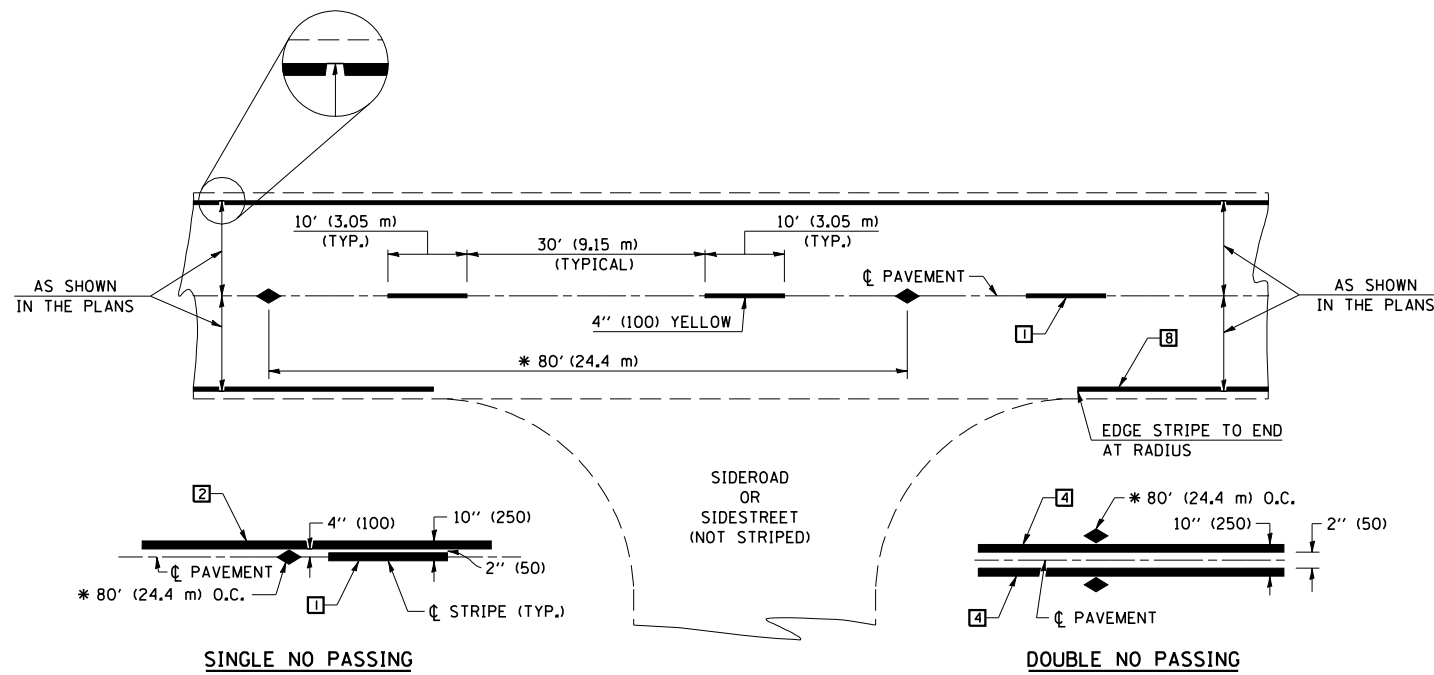
ROADWAY DETAILS

DATE : 01/06

DRAWN BY MLO
 CHECKED BY PBB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	40
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

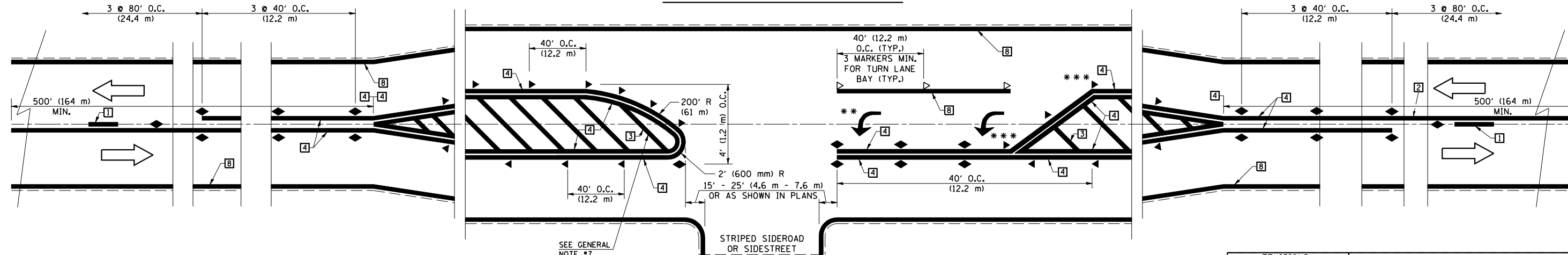
TYPICAL PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) CROSS WALK (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

TYPICAL PAVEMENT MARKERS LEGEND

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

DETAIL OF RURAL LEFT TURN LANE



*** REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.
 ** TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

SHEET 1 OF 4

DESIGNED	NAME	DATE	REVISIONS
J.M.H.		5/85	
FMS		6/88	
CTD		6/88	
CADD NO.	F-5.25		

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS

SHEET 1 OF 3

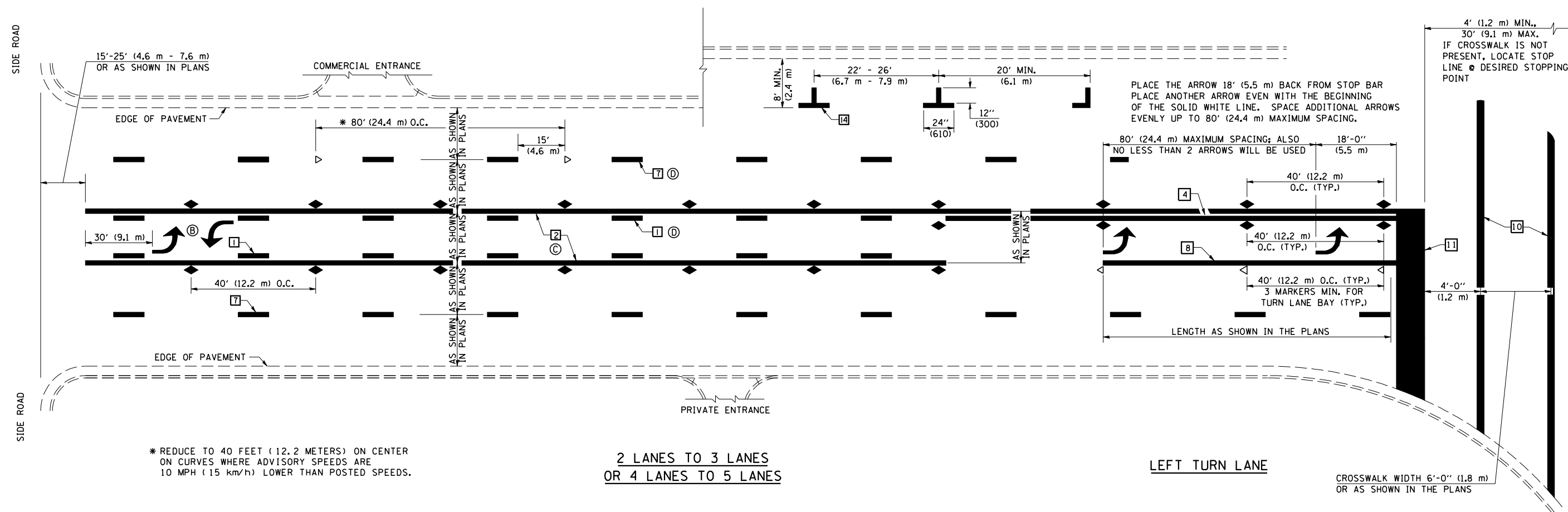
DATE: 01/06

DRAWN BY: MLO
 CHECKED BY: PBB

PLOT DATE = 8/14/2006
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 USER NAME = cregre

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	41
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

2 LANES TO 3 LANES
OR 4 LANES TO 5 LANES

LEFT TURN LANE

CROSSWALK WIDTH 6'-0'' (1.8 m)
OR AS SHOWN IN THE PLANS

SHEET 2 OF 4

	NAME	DATE	REVISIONS	
DESIGNED	J.M.H.	5/85	NAME	DATE
CHECKED	FMS	6/85	GEOMETRICS/K.A.G.	07/02
CADD NO.	F-5.25	6/88	K.A.G.	09/05

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE

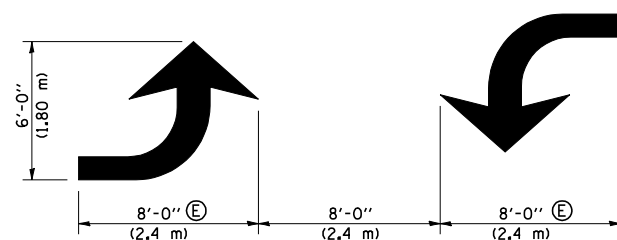
ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING DETAILS
SHEET 2 OF 3

DATE: 01/06
DRAWN BY: MLO
CHECKED BY: PBB

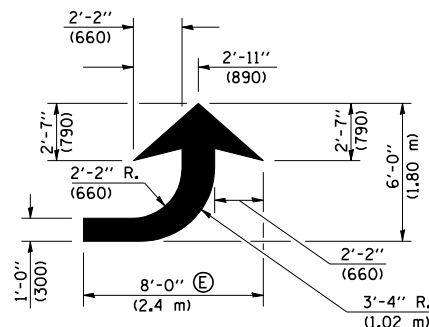
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USER NAME: creigre

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	42
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS

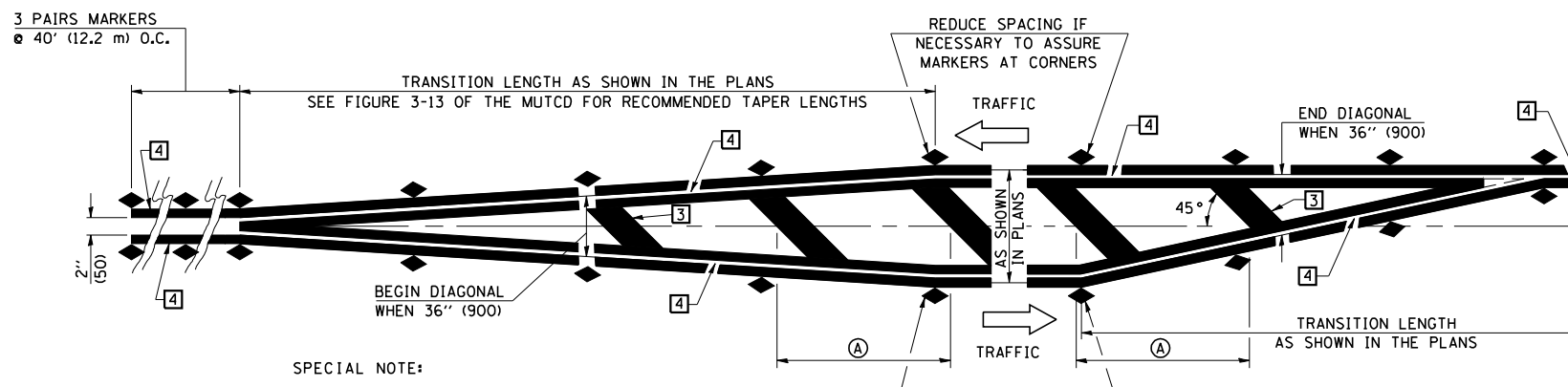


TYPICAL DOUBLE TURN ARROWS (WHITE)



LEFT ARROW

REVERSE FOR RIGHT ARROW
AREA = 15.6 SQ. FT. (1.47 m²)
(WHITE)



SPECIAL NOTE:

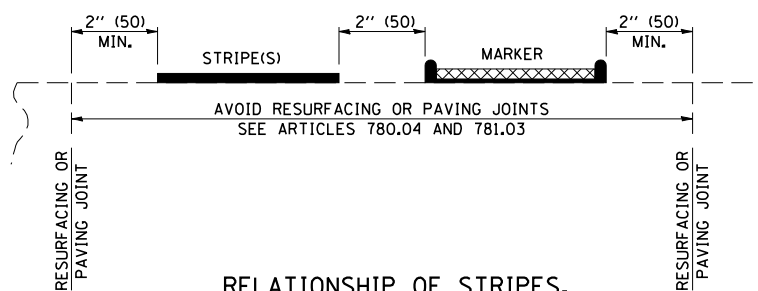
THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).
RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNERS

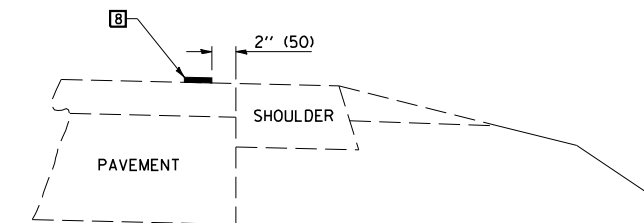
REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNERS

NOTE (A)
SEE GENERAL NOTE # 7

TYPICAL MEDIAN TRANSITIONS



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS



RELATIONSHIP OF EDGE STRIPE TO SAFETY SHOULDER OR PAVED SURFACE

SPECIAL NOTES:

- (B) TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
- (C) THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
- (D) THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
- (E) TURN ARROW SIZE DEPENDS ON THE LOCATION.
RURAL LOCATION - LARGE ARROW SIZE
URBAN LOCATION - SMALL ARROW SIZE

GENERAL NOTES

- 1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
- 2. SCALE: NONE
- 3. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
- 4. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
- 5. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
- 6. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT
- 7. THE FOLLOWING CRITERIA SHALL BE USED FOR THE DIAGONAL PAVEMENT MARKING SPACING,
<30 MPH USE 15' (<50 km/h USE 4.5 m)
30-45 MPH USE 20' (50-75 km/h USE 6.0 m)
>45 MPH USE 30' (>75 km/h USE 9.0 m)

MARKER REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING DETAILS
SHEET 3 OF 3

DATE: 01/06
DRAWN BY: MLO
CHECKED BY: PBB

SHEET 3 OF 4

NAME	DATE	REVISIONS
DESIGNED	J.M.H. 5/05	NAME DATE
CHECKED	FMS 6/05	GEOMETRICS/K.A.G. 07/02
CADD NO.	F-5.25	K.A.G. 09/05

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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 USER NAME: crengre

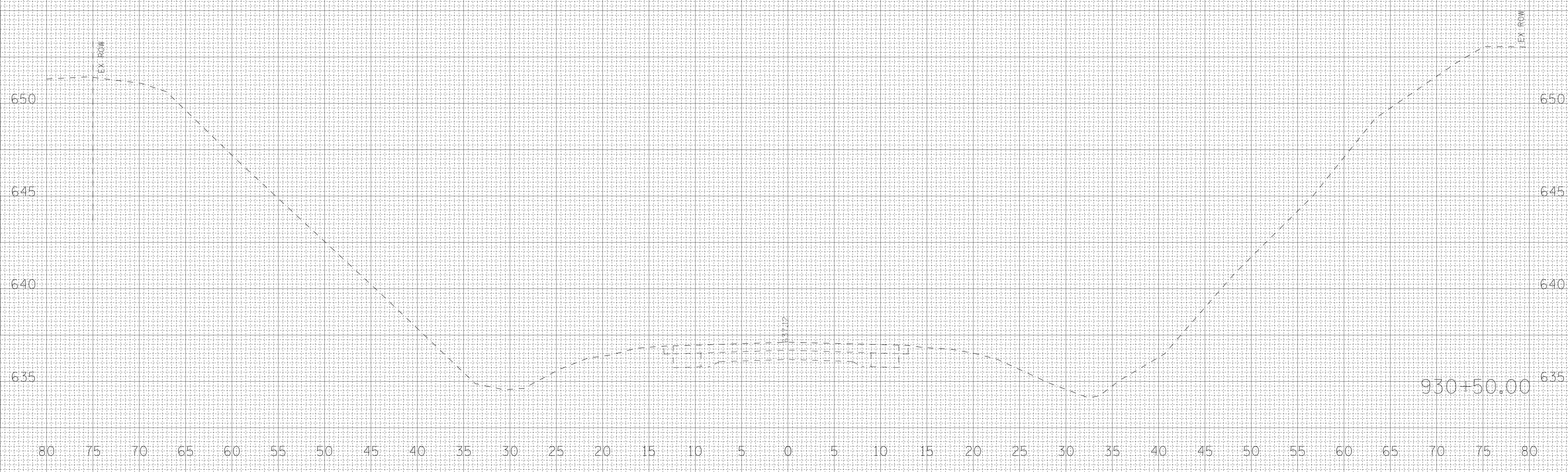
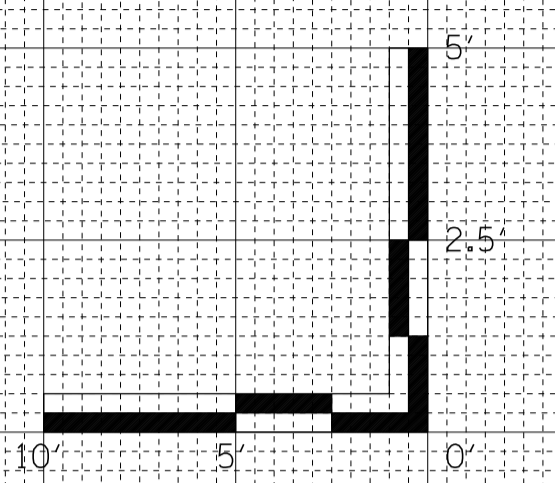
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	43
STA. 930+50.00		TO STA. 930+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

DATE	
BY	
SURVEYED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
AREAS	
CHECKED	
NO.	

PLOT DATE = 7/24/2006
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 USER NAME = jbrcks



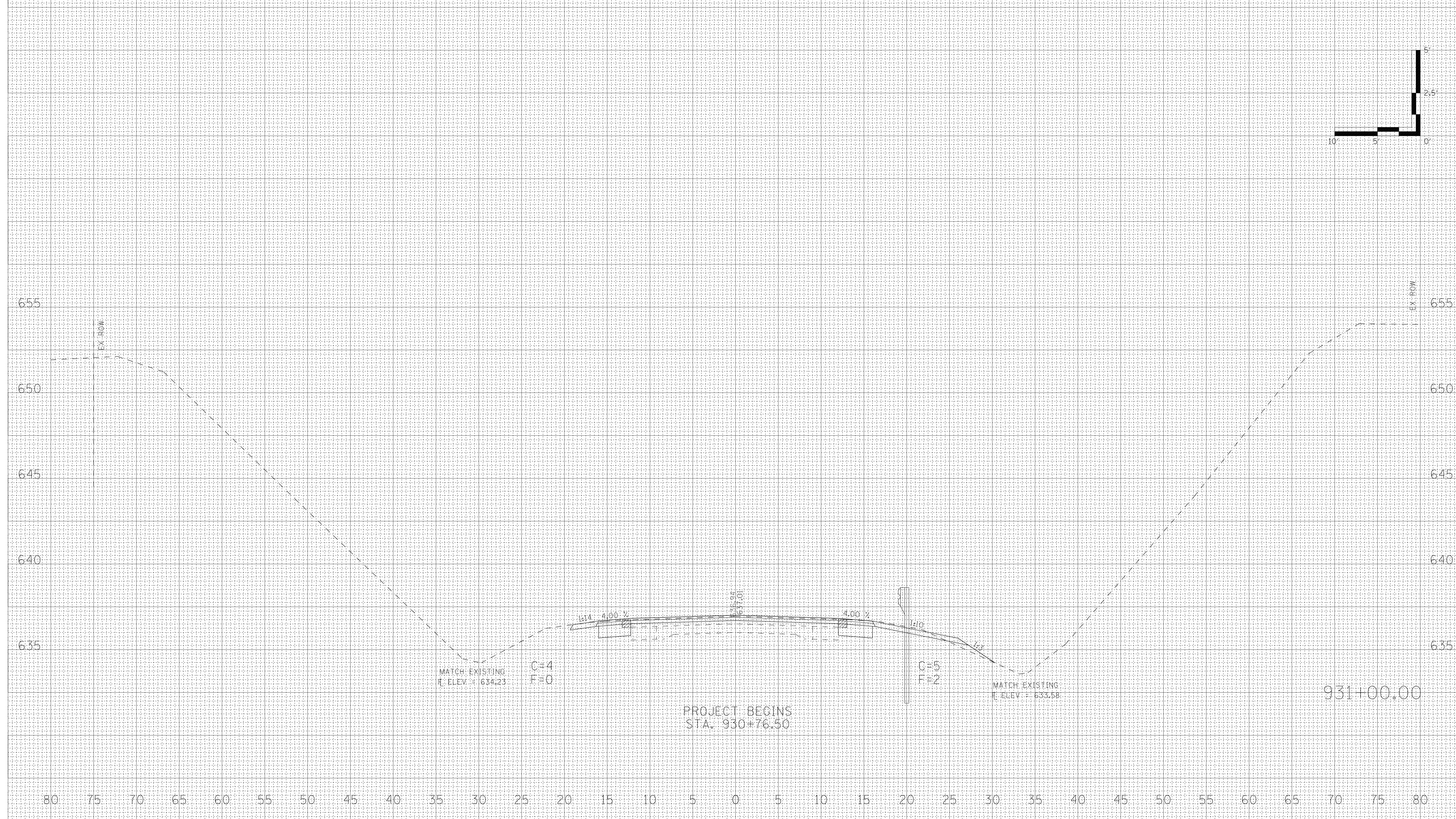
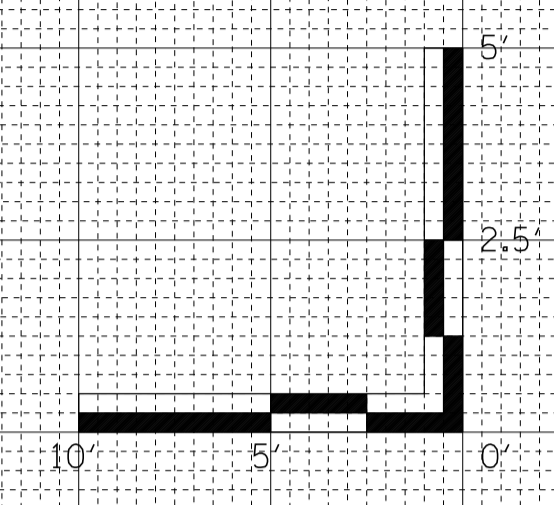
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749	(122BR)BR	COLES	49	44
STA. 931+00.00		TO STA. 931+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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DATE	
BY	
SURVEYED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
NOTE BOOK	
AREAS CHECKED	
NO.	

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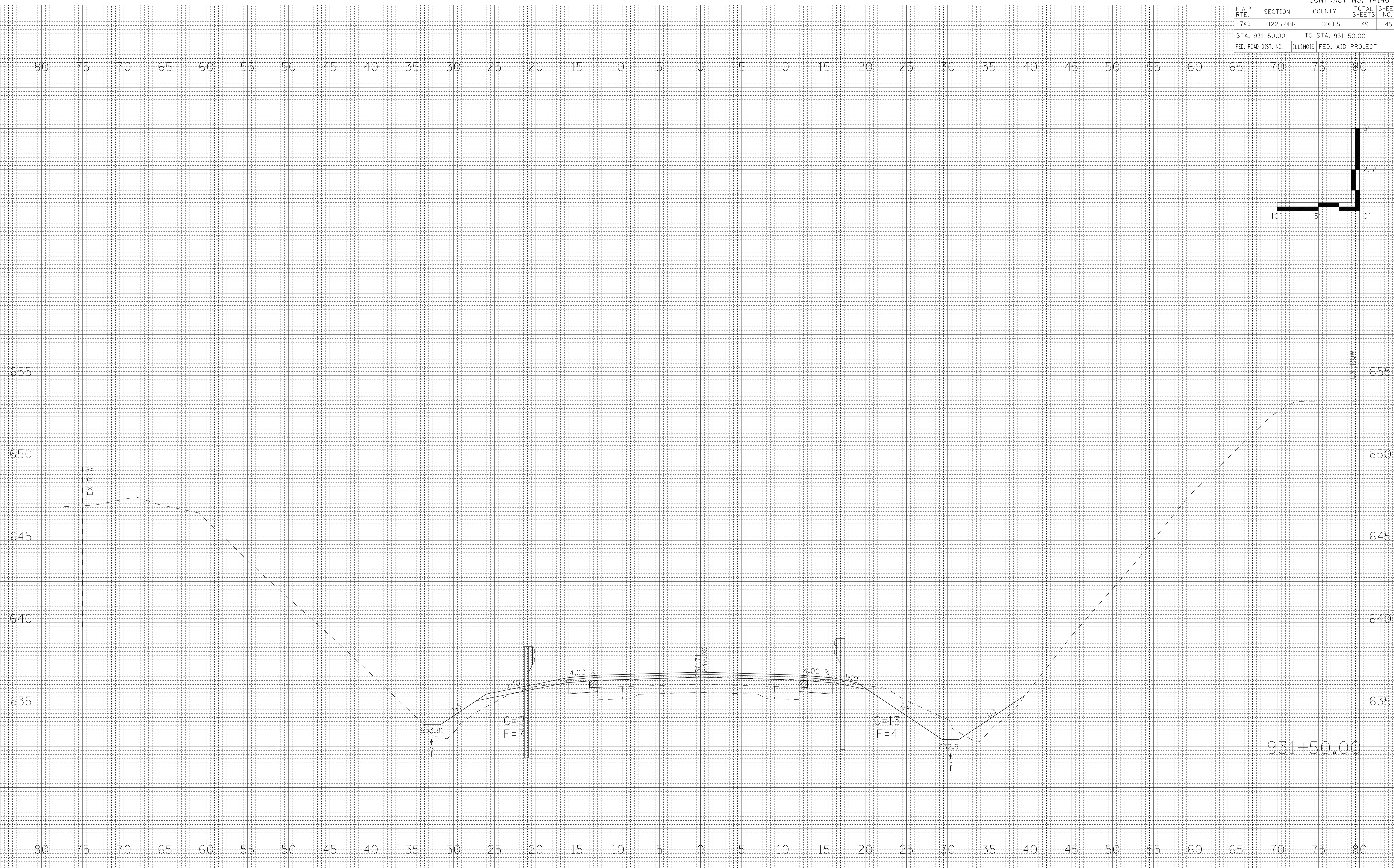
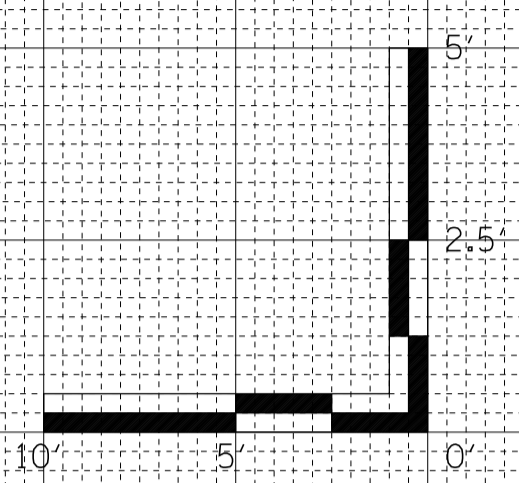


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	45
STA. 931+50.00		TO STA. 931+50.00		
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT

BY		DATE	
SURVEYED			
TEMPERATURE			
AREAS			
CHECKED			

BY		DATE	
ORIGINAL SURVEY			
TEMPERATURE			
AREAS			
CHECKED			

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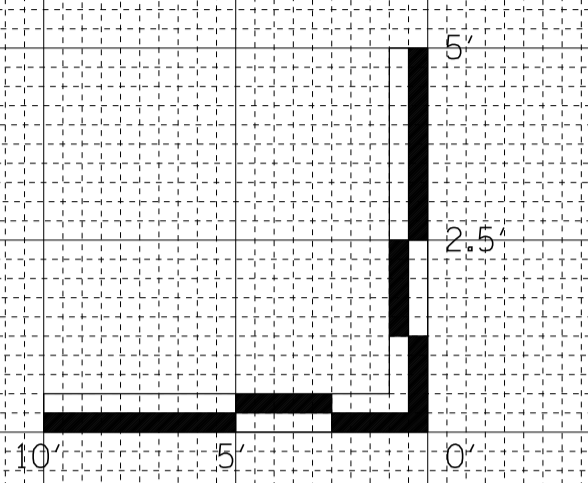
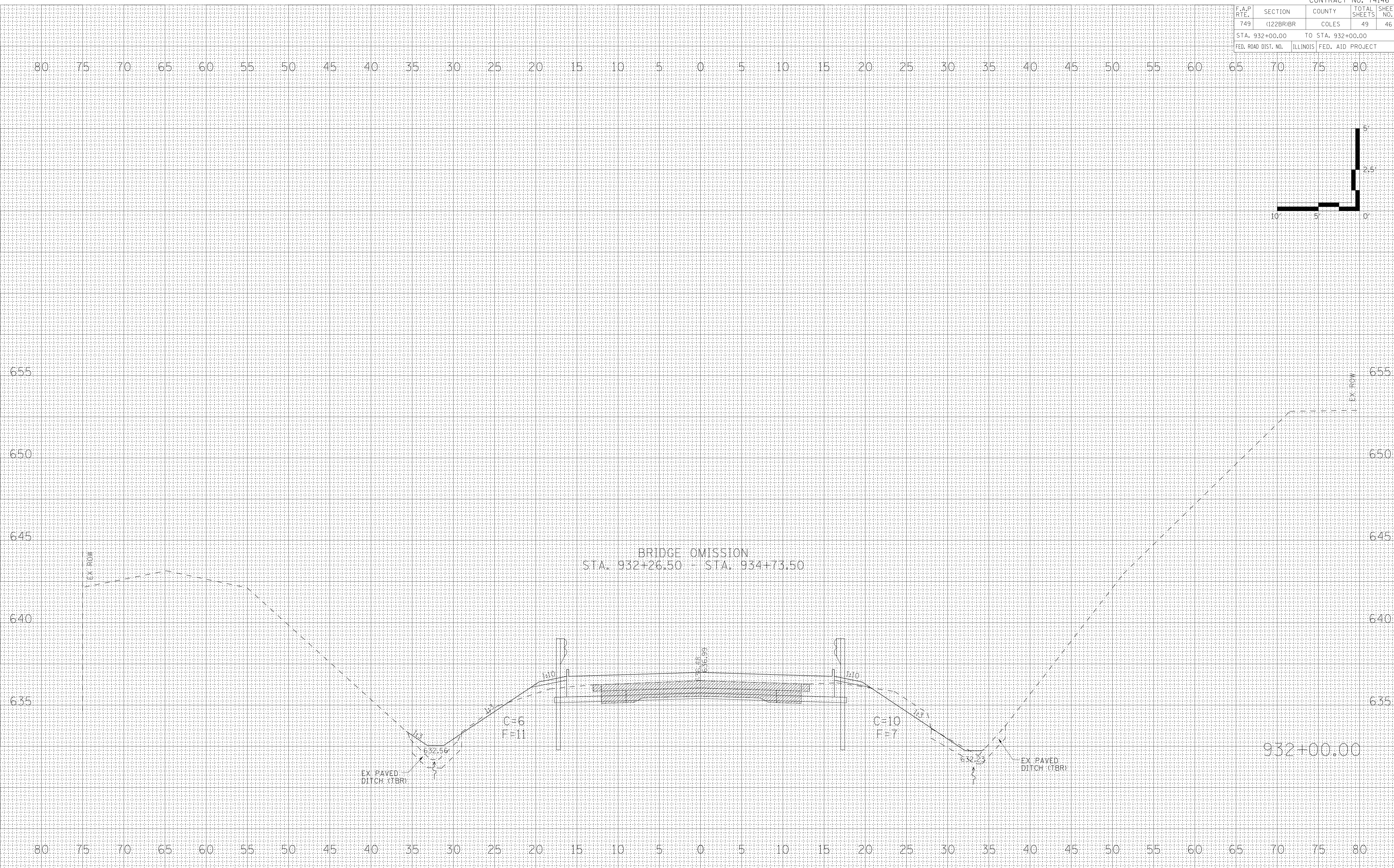


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	46
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FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT

DATE	
BY	
SURVEYED	
TEMPLATE	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
TEMPLATE	
AREAS CHECKED	
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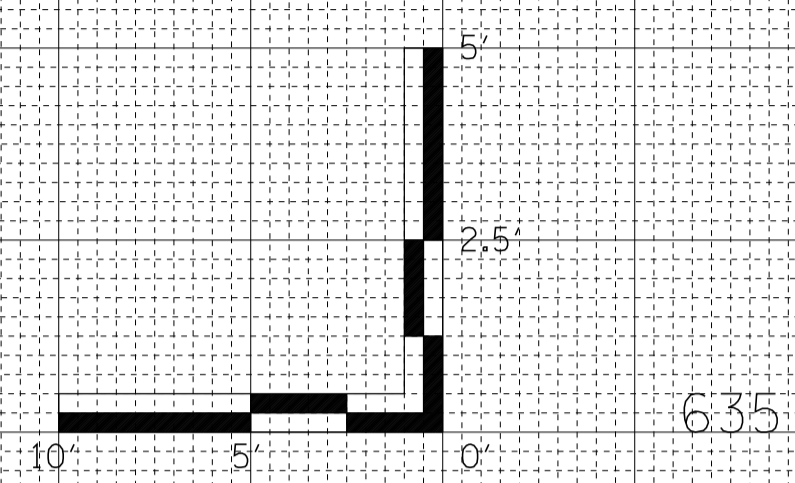
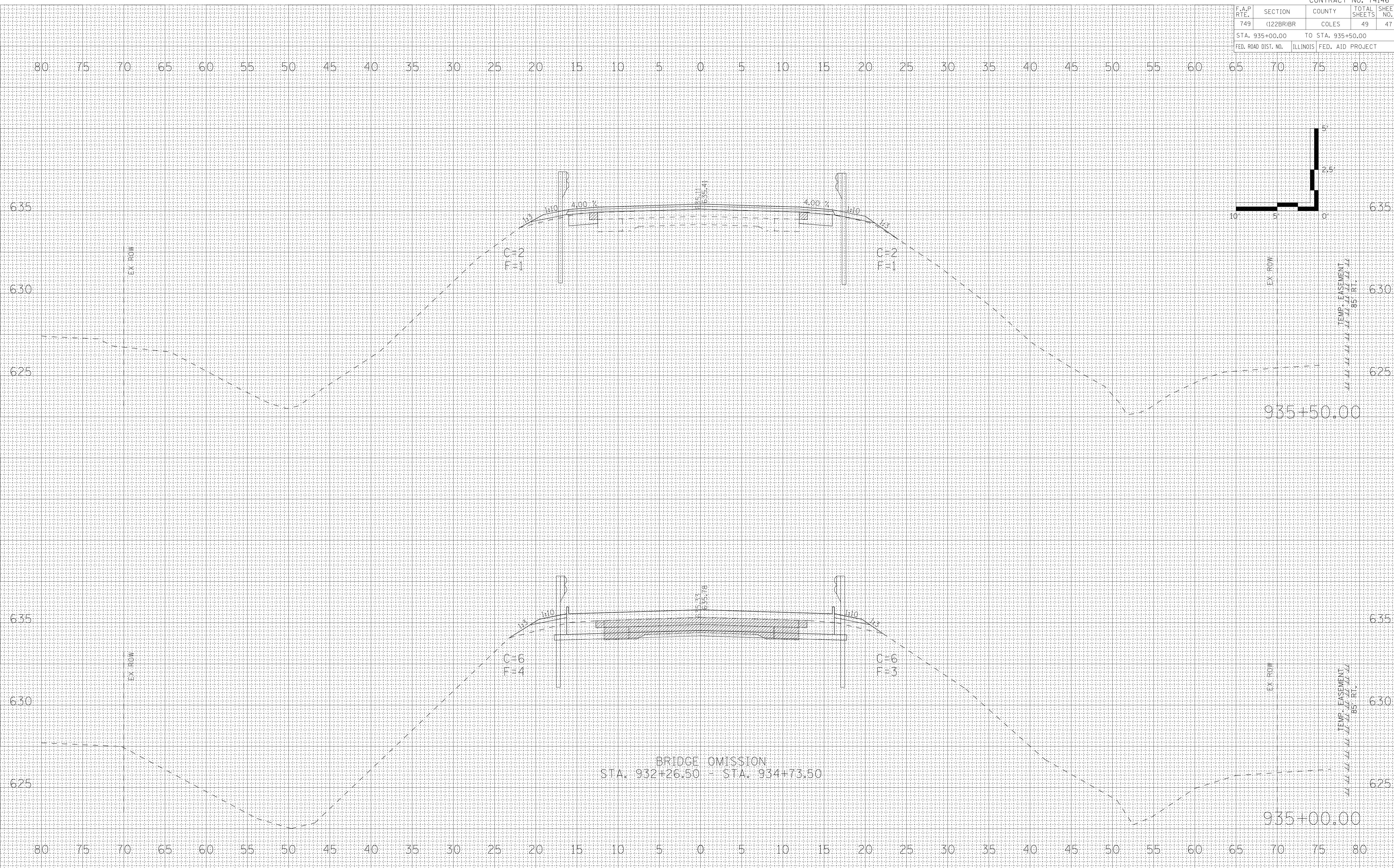


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	47
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FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DATE	
BY	
FINAL SURVEY	
NO. _____	
NO. _____	
NO. _____	
NO. _____	
NO. _____	

DATE	
BY	
ORIGINAL SURVEY	
NO. _____	
NO. _____	
NO. _____	
NO. _____	
NO. _____	

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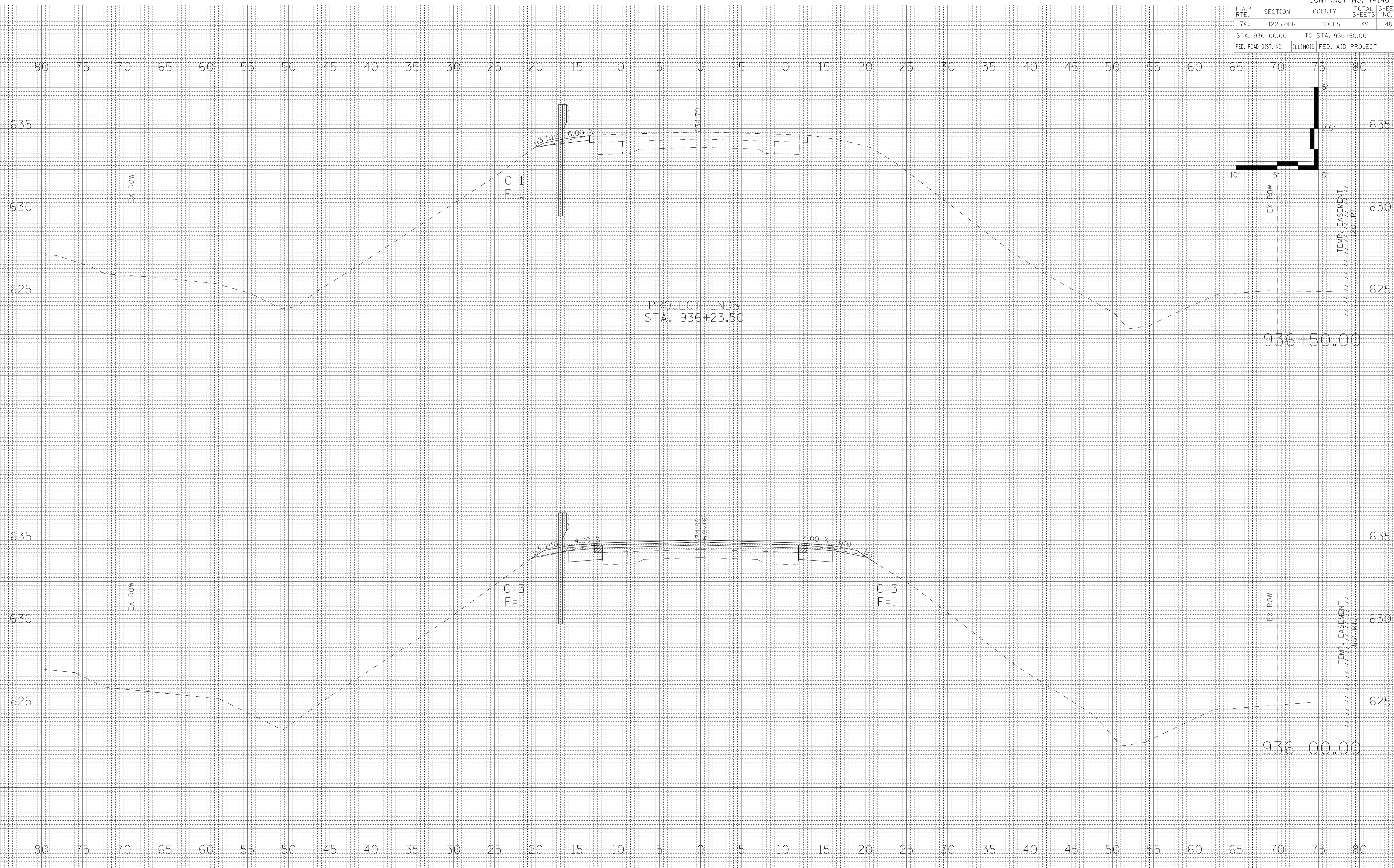


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	48
STA. 936+00.00		TO STA. 936+50.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE	BY

DATE	BY

PLOT DATE = 7/24/2006
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 USER NAME = brw



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(122BR)BR	COLES	49	49
STA. 937+00.00		TO STA. 937+50.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
AREAS CHECKED	
NO.	

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