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11-17-2017 LETTING ITEM 054

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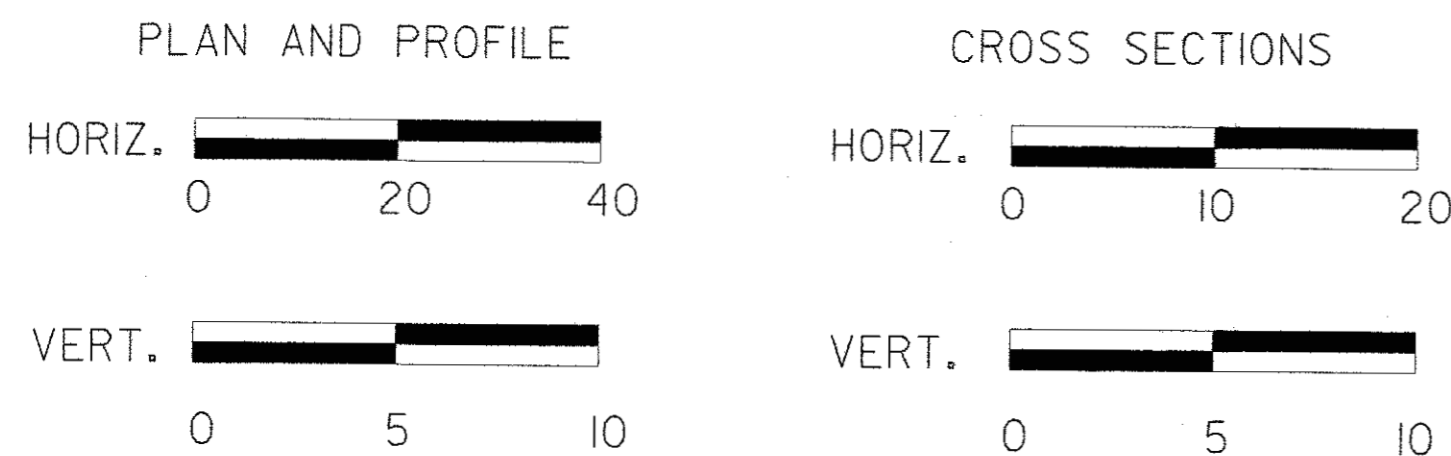
STANDARDS

- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
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- 780001-05 TYPICAL PAVEMENT MARKINGS
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- BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
- BLR 23-4 TRAFFIC BARRIER TERMINAL, TYPE 1
- BLR 27-1 TRAFFIC BARRIER TERMINAL, TYPE 5A

UTILITIES

- ELECTRIC:** COMED
NORA FERNANDEZ
ROCKFORD, IL
(815)490-2335
- GAS:** JO-CARROLL ENERGY, INC.
BOB HOUZENGA
(815)858-4347
- TELEPHONE/CABLE:**
FRONTIER COMMUNICATIONS
DAVID DAY
(815)772-2078

SCALES:



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

STA 20+00
 EXISTING STRUCTURE (SN 098-0042)
 INCLUDES A THREE-SPAN REINFORCED
 CONCRETE SLAB SUPERSTRUCTURE
 SUPPORTED ON PILE BENT SPILL THRU
 ABUTMENTS AND SOLID WALL ON SPREAD
 FOOTING PIERS, 95'-0" BK.-BK. ABUT.
 NO SKEW

STA 40+88.44
 EXISTING STRUCTURE (098-0043)
 THREE SPAN STEEL BEAM BRIDGE
 WITH REINFORCED CONCRETE DECK

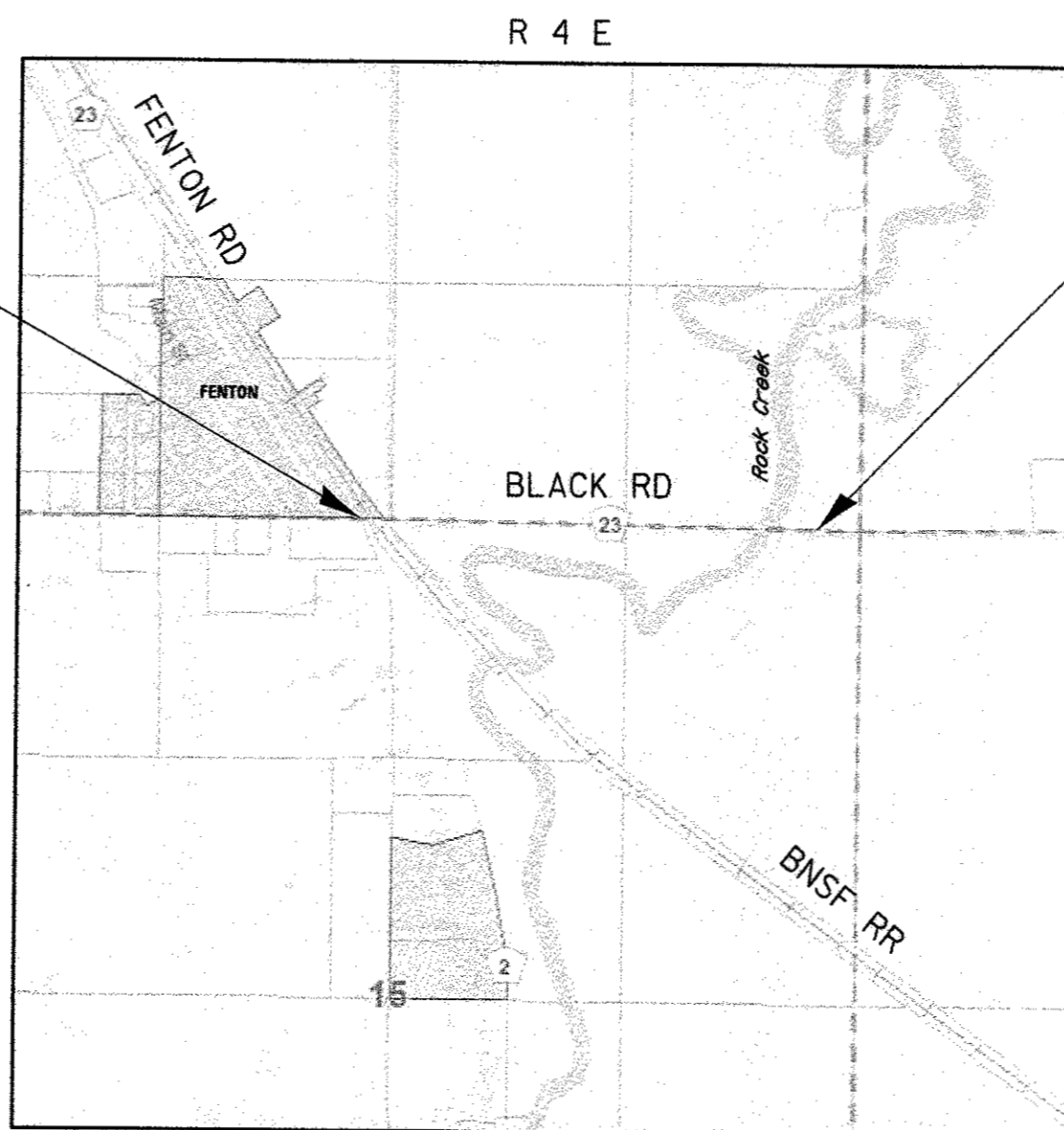
STA 40+89.97
 PROPOSED STRUCTURE (SN 098-3063)
 INCLUDES A THREE-SPAN PRECAST
 PRESTRESSED CONCRETE DECK BEAM
 BRIDGE WITH CONCRETE WEARING
 SURFACE ON SPILL-THRU ABUTMENT
 188'-6" BK.-BK. ABUT.
 30° SKEW

**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**

**ILLINOIS MAJOR
BRIDGE PROGRAM**

**FAS ROUTE 197 - C.H. 23 (BLACK ROAD)
 SECTION 11-00204-00-BR
 PROJECT NO. 80JT(167)
 BRIDGE RECONSTRUCTION & REPLACEMENT
 WHITESIDE COUNTY
 FEDERAL & LOCAL FUNDS**

**C-92-090-16
CONTRACT NO. 85651**



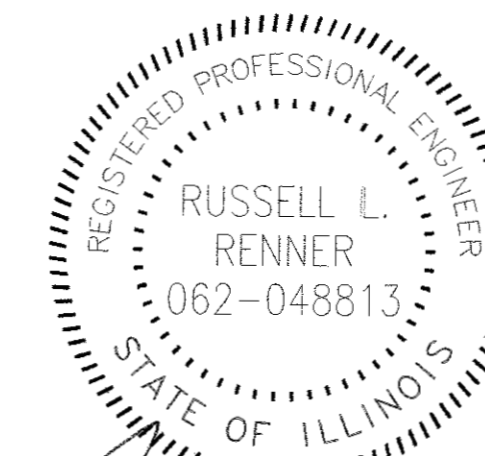
MAP NOT TO SCALE

PROJECT ENDS
STA 45+30

FENTON TOWNSHIP
SECTIONS 10 & 15

BLACK ROAD - CH 23
FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR RURAL
ADT=1100 (2037); 8% TRUCKS
50 MPH DESIGN SPEED

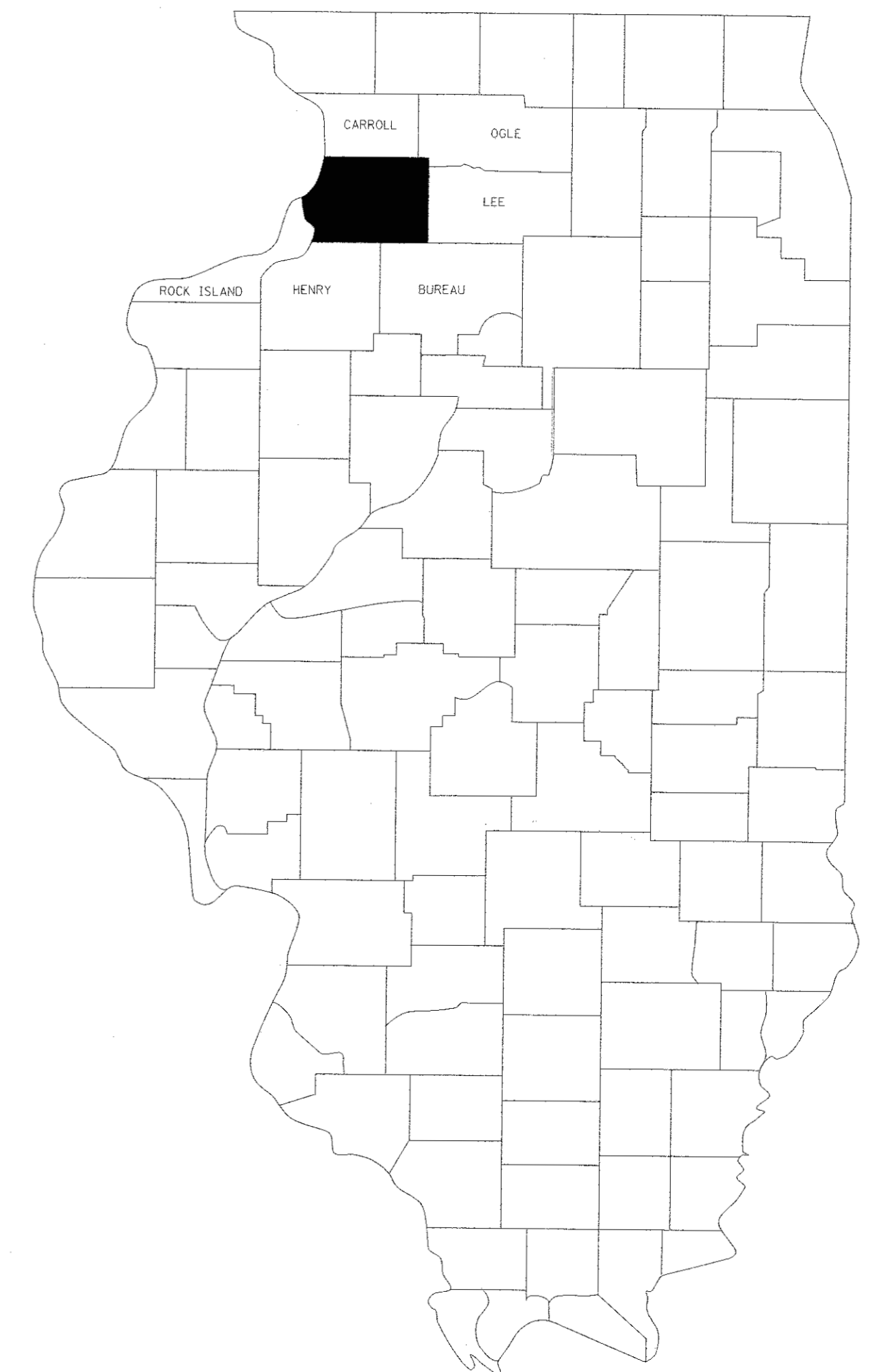
GROSS LENGTH = 2724 FT. = 0.52 MILES
NET LENGTH = 2724 FT. = 0.52 MILES



Russell L. Renner 6/21/17
 DATE

RUSSELL L. RENNER
 MORRISON, ILLINOIS
 ILLINOIS LICENSED PROFESSIONAL
 ENGINEER NO. 062-048813
 EXPIRES 11-30-2017

ROUTE	SECTION	TOTAL SHEETS	SHEET NO.
F.A.S. 197 (BLACK RD)	11-00204-00-BR	55	1



AGENCY RESPONSIBLE FOR LETTING

APPROVED *6/20/17* 20 17
Russell L. Renner
 RUSSELL L. RENNER, P.E., S.E., WHITESIDE COUNTY ENGINEER

PASSED *8/21* 20 17
Kevin F. Mandel
 DISTRICT 2 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
 BASED ON LIMITED REVIEW *8/21* 20 17
Kevin F. Mandel
 DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER



WHITESIDE COUNTY HIGHWAY DEPARTMENT

18819 Lincoln Road Morrison, Illinois 61270
 Phone 815.772.7651 Fax 815.772.4870
 www.whiteside.org

SUMMARY OF QUANTITIES

GENERAL NOTES

REVISIONS	DATE

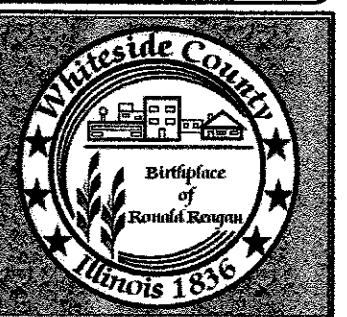
DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:
	J. KOCH	R. RENNER	10/22/15

**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**

1889 Lincoln Road
Morton, Illinois 62570

**WHITESIDE COUNTY HIGHWAY DEPARTMENT
CONTRACT 300 & GENERAL NOTES
BLACK ROAD**

SHEET 1 OF 1 SHEETS STA. TO STA.



ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	2

CONSTRUCTION TYPE CODES
0014 0005 0011

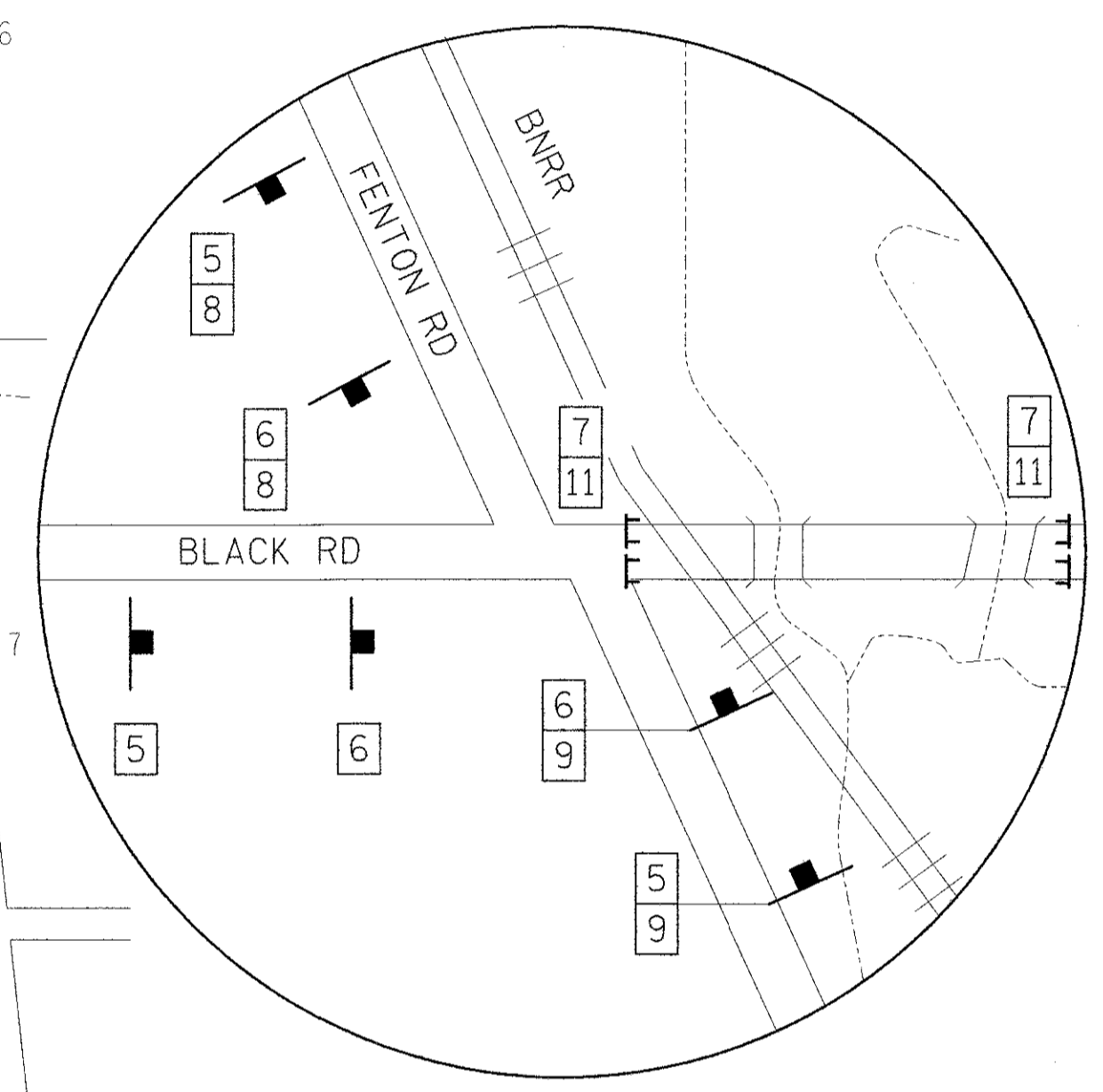
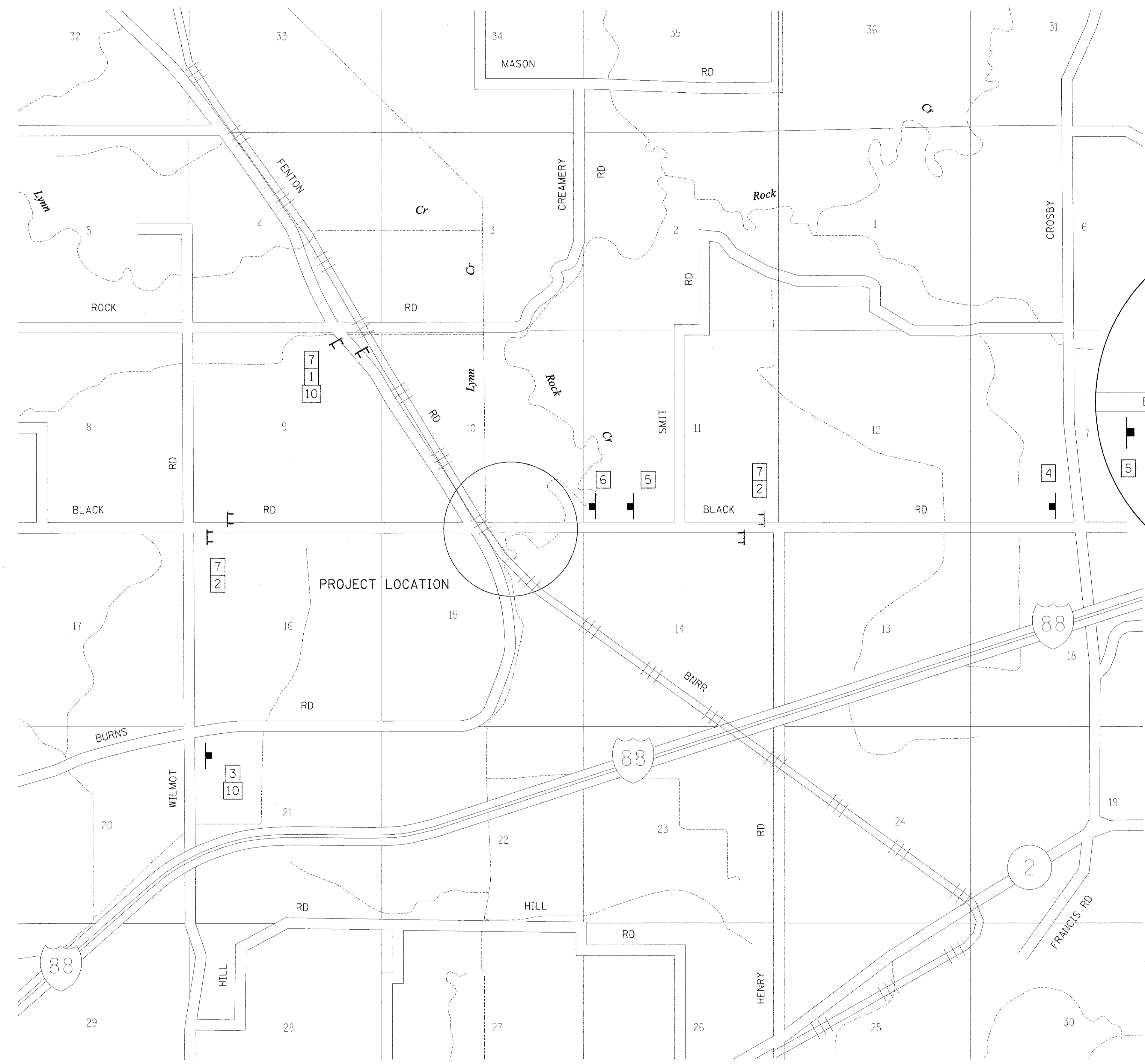
ITEM NO.	ITEM	UNIT	TOTAL QUANTITY	Bridge	Resurfacing	Bridge
				Over Drainage Ditch (098-0042)		Over Rock Creek (098-3063)
20200100	EARTH EXCAVATION	CU YD	1923		423	1500
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	50			50
20400800	FURNISHED EXCAVATION	CU YD	492		492	
25100630	EROSION CONTROL BLANKET	SQ YD	84		84	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	334	100	160	74
28000400	PERIMETER EROSION BARRIER	FOOT	2804	430	1200	1174
28100805	STONE DUMPED RIPRAP, CLASS A3	TON	1270			1270
28200200	FILTER FABRIC	SQ YD	1858			1858
35101400	AGGREGATE BASE COURSE, TYPE B	TON	1360			1360
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	11	11		
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	4149			4149
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	2970	340	1800	830
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ YD	101	101		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	514			514
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50	TON	725	116	417	192
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	260	260		
44201771	CLASS D PATCHES, TYPE IV, 10"	SQ YD	46		46	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	265			265
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	78	21	57	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1			1
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	1		
50102400	CONCRETE REMOVAL	CU YD	3.8	3.8		
50200100	STRUCTURE EXCAVATION	CU YD	40	40		
50300225	CONCRETE STRUCTURES	CU YD	87.3			87.3
50300255	CONCRETE SUPERSTRUCTURE	CU YD	156.8	156.8		
50300260	BRIDGE DECK GROOVING	SQ YD	823	285		538
50300300	PROTECTIVE COAT	SQ YD	1060	343		717
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	5210			5210
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	48,423	35,170		13,253
51201610	FURNISHING STEEL PILES HP12X63	FOOT	252			252
51201900	FURNISHING STEEL PILES HP14X89	FOOT	315			315
51202305	DRIVING PILES	FOOT	567			567
51203610	TEST PILE STEEL HP12X63	EACH	2			2
51203900	TEST PILE STEEL HP14X89	EACH	2			2
51204650	PILE SHOES	EACH	22			22
51500100	NAME PLATES	EACH	2	1		1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	59	59		
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	10	10		
52100520	ANCHOR BOLTS, 1"	EACH	20	20		
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	5	5		
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FT POSTS	FOOT	25	25		
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1		
63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	7	3		4
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4			4
63200310	GUARDRAIL REMOVAL	FOOT	740	132	400	208
66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1			1
67100100	MOBILIZATION	L SUM	1	0.33	0.33	0.34
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	4		4
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	8314	1752	5462	1100
78006100	PREFORMED THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ FT	105.2		105.2	
78100100	RAISED REFLECTIVE PAVEMENT MARKERS	EACH	6	6		
LR631020	TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	2	2		
X1200050	BOX CULVERT REMOVAL	FOOT	31		31	
X2090210	POROUS GRANULAR BACKFILL, SPECIAL	CU YD	274	30	144	100
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	2.6	0.1	2	0.5
X5030305	CONCRETE WEARING SURFACE 5"	SQ YD	580			580
X7010216	TRAFFIC CONTROL & PROTECTION (SPECIAL)	L SUM	1	0.33	0.33	0.34
XX006199	STEEL BRIDGE RAIL, TYPE SM (SPECIAL)	FOOT	567	190		377
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	5	5		
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		
Z0065700	SLOPE WALL REPAIR	SQ YD	6	6		

* SPECIAL PROVISION, STANDARD, OR DETAIL

Δ SPECIALTY ITEMS

- All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.
- The final top four inches of soil in all disturbed areas within the construction limits, excluding the roadway surface, must be a cohesive soil capable of supporting vegetation. All areas to be seeded shall be free of large rocks, concrete, tree roots, branches, and debris of any kind.
- Culvert & bridge flows must be maintained throughout the project. Normal flow shall be allowed to pass at the rate it enters the jobsite. High flows shall be allowed to pass without causing damage to upstream properties.
- The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.39 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123.
- See Special Provisions for Boring Log data.
- After the existing structure is removed any shaping required in the channel under the bridge to conform to the elevation view shall be considered incidental to Removal of the Existing Structure.
- The Contractor shall drive a Test Pile in a permanent location at each abutment and pier as directed by the Engineer before ordering the remainder of the piles. The Contractor shall be required to have splices and extra pile lengths on site in case they are needed.
- Backfilling of abutments shall not be done until the deck beams are in place and the dowels are grouted and cured. Porous Granular Backfill, Special shall be used.
- The Contractor will not be allowed to attach additional chutes to the original equipment chutes of the concrete truck for placement of concrete.
- The top 4" of Aggregate Base Course, Type B, shall consist of gradation CA 06 or CA 10. The bottom 8" shall consist of gradation CA 02.
- All signs and posts within the project limits shall be carefully removed, stored in a safe place within the Right-of-Way, and reinstalled when construction is complete. This work shall be considered incidental to Earth Excavation. Signs damaged during removal or reinstallation shall be replaced at the Contractor's expense.
- Saw cuts in the pavement are required and shall be considered incidental to the project.
- All existing drainage structures not being removed or adjusted by the Contractor that are damaged during construction shall be replaced at the expense of the Contractor.
- Removal of the existing pavement and sub-base shall not be paid for separately but shall be included in the cost of Earth Excavation (Special).
- The Contractor shall be required to contain and dispose of all trash from the jobsite. Burning of trash or vegetation will not be allowed.
- It is estimated that 342 Cu Yd's of dirt will need to be hauled away from the Rock Creek Bridge portion of the project. The Contractor shall haul this material to the Resurfacing portion of the project to be used as fill material. In addition to this fill material, it is estimated that 492 Cu Yd's of dirt will need to be hauled to the Resurfacing portion from outside the project limits.

- 1 ROAD CLOSED
1/4 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a(O) AS SHOWN
- 2 ROAD CLOSED
1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a(O) TO BE PLACED ON
APPROACH SIDE OF
TYPE III BARRICADES
- 3 ROAD CLOSED
2 1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a(O) AS SHOWN
- 4 ROAD CLOSED
3 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a(O) AS SHOWN
- 5 ROAD CLOSED
AHEAD
W/FLASHING LIGHT
W20-3(O)-48
- 6 ROAD CLOSED
500 FT
W/FLASHING LIGHT
W20-3(O)-48
- 7 TYPE III BARRICADES
W/FLASHING LIGHTS
- 8 AS SHOWN
24x18-L(O)
W1-1L
- 9 AS SHOWN
24x18-R(O)
W1-1R
- 10 BLACK RD EAST
AS SHOWN
36x18(O)
CUSTOM
- 11 ROAD
CLOSED
TO BE PLACED ON
APPROACH SIDE OF
TYPE III BARRICADES
R11-2



NOTE: SEE BLR-21 FOR DISTANCES BETWEEN SIGNS

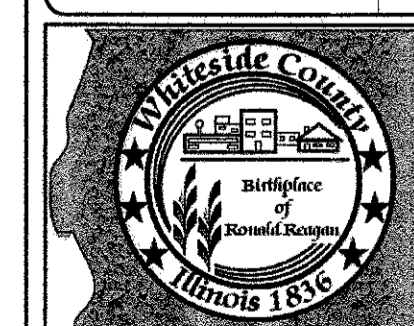
REVISIONS	
DESCRIPTION	DATE

DESIGNED BY:
DRAWN BY:
CHECKED BY:

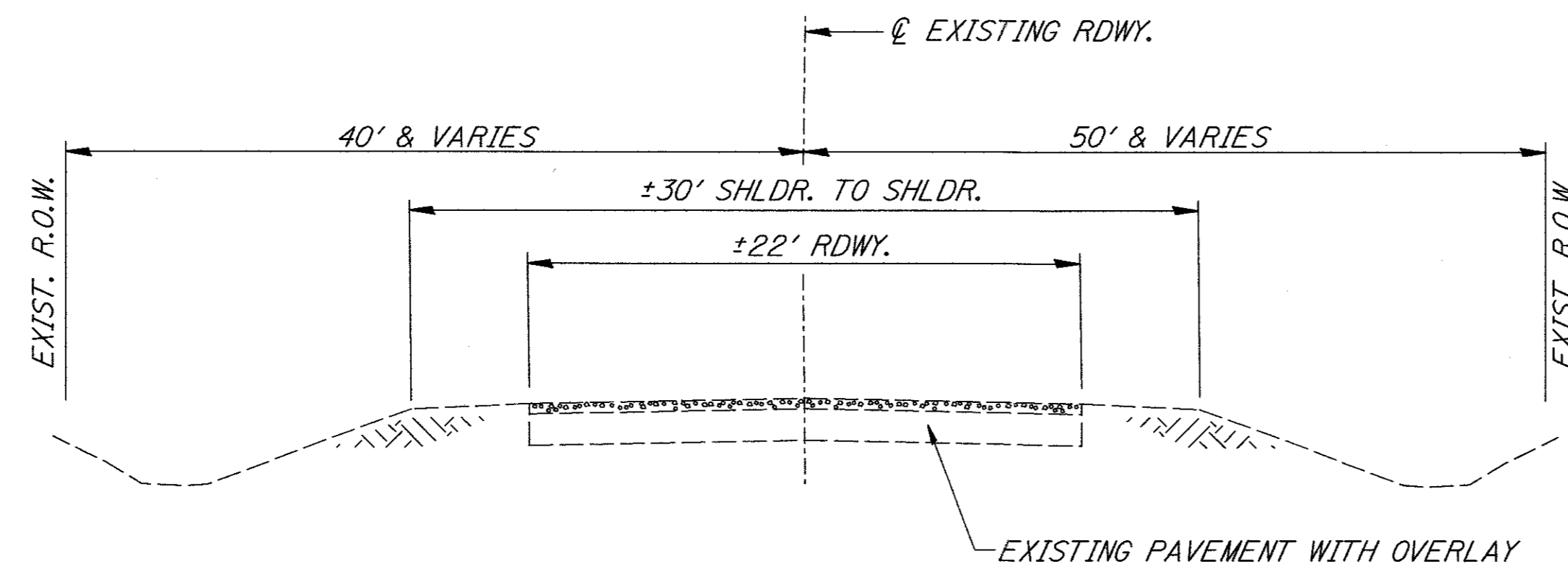
**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
18819 Lincoln Road
Morrison, Illinois 62270

**WHITESIDE COUNTY HIGHWAY DEPARTMENT
TRAFFIC CONTROL PLAN
BLACK RD**

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



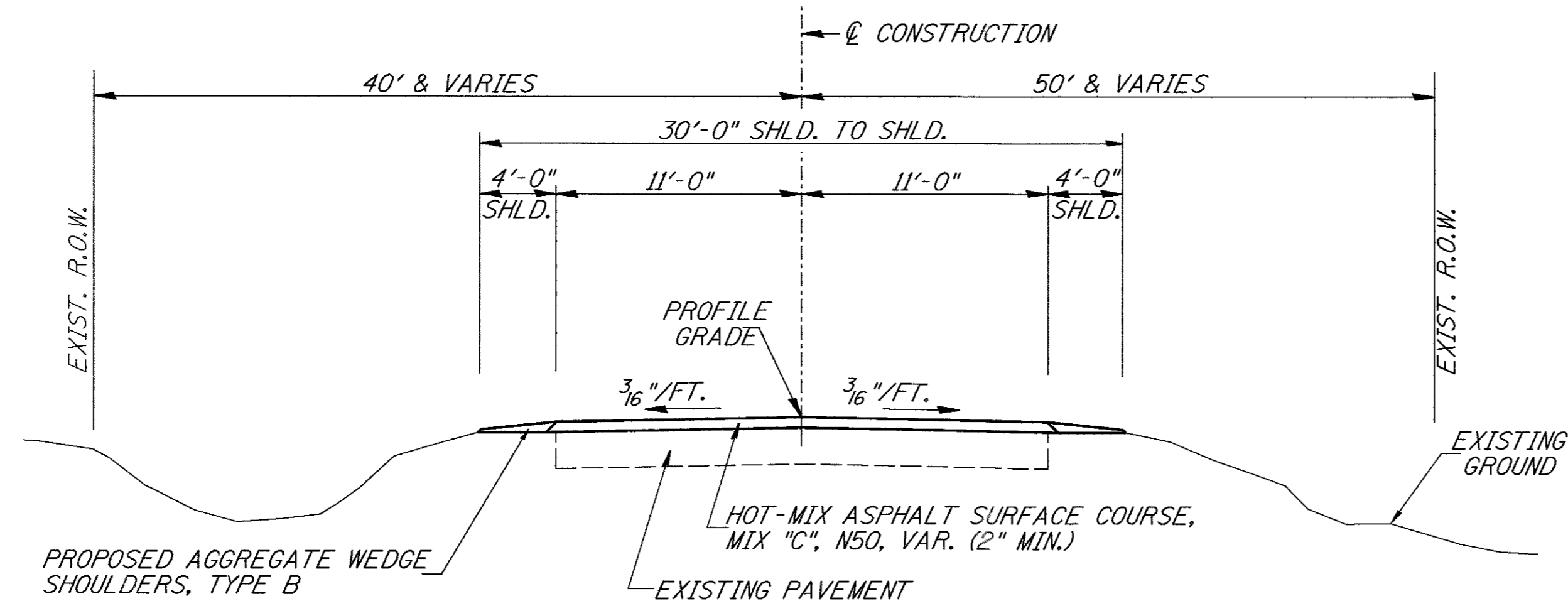
ROUTE
FAS 197 (BLACK RD)
SECTION
11-00204-00-BR
TOTAL SHEETS
55
SHEET NO.
3



EXISTING TYPICAL SECTION
 STA. 18+06.47 TO STA. 19+53.00
 STA. 20+47.00 TO STA. 21+50.00

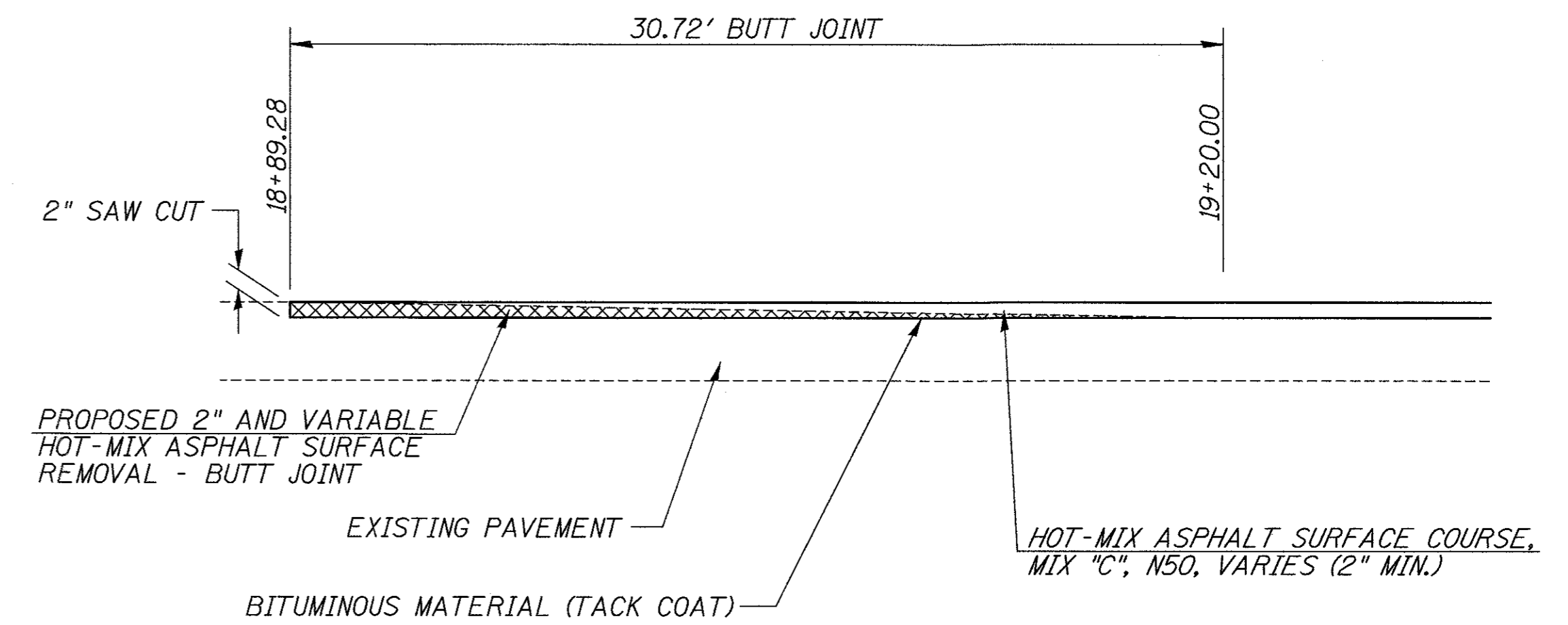
HMA MIX REQUIREMENTS

LOCATION(S):	STA 18+06.47 - 21+50.00
MIXTURE USE(S):	SURFACE
PG:	58-22
DESIGN AIR VOIDS:	4.0% @ N50
MIXTURE COMPOSITION (MIXTURE GRADATION)	IL-9.5
FRICTION AGGREGATE:	C
MIXTURE WEIGHT:	112 LB/IN/SQ YD
QUALITY MANAGEMENT PROGRAM TO BE USED:	QC/QA



PROPOSED TYPICAL SECTION
 STA. 18+06.47 TO STA. 19+52.50
 STA. 20+47.50 TO STA. 21+50.00

BRIDGE OMISSION
 STA. 19+52.50 TO STA. 20+47.50



BUTT JOINT DETAIL

FILE NAME =	USER NAME = bnebel	DESIGNED -	REVISED -
V:\Bridge\2927 - Whiteside\2017 updates\2927t081.dgn		DRAWN -	REVISED -
PLOT SCALE = 1.0000 Ft / in.		CHECKED -	REVISED -
PLOT DATE = 6/20/2017		DATE -	REVISED -

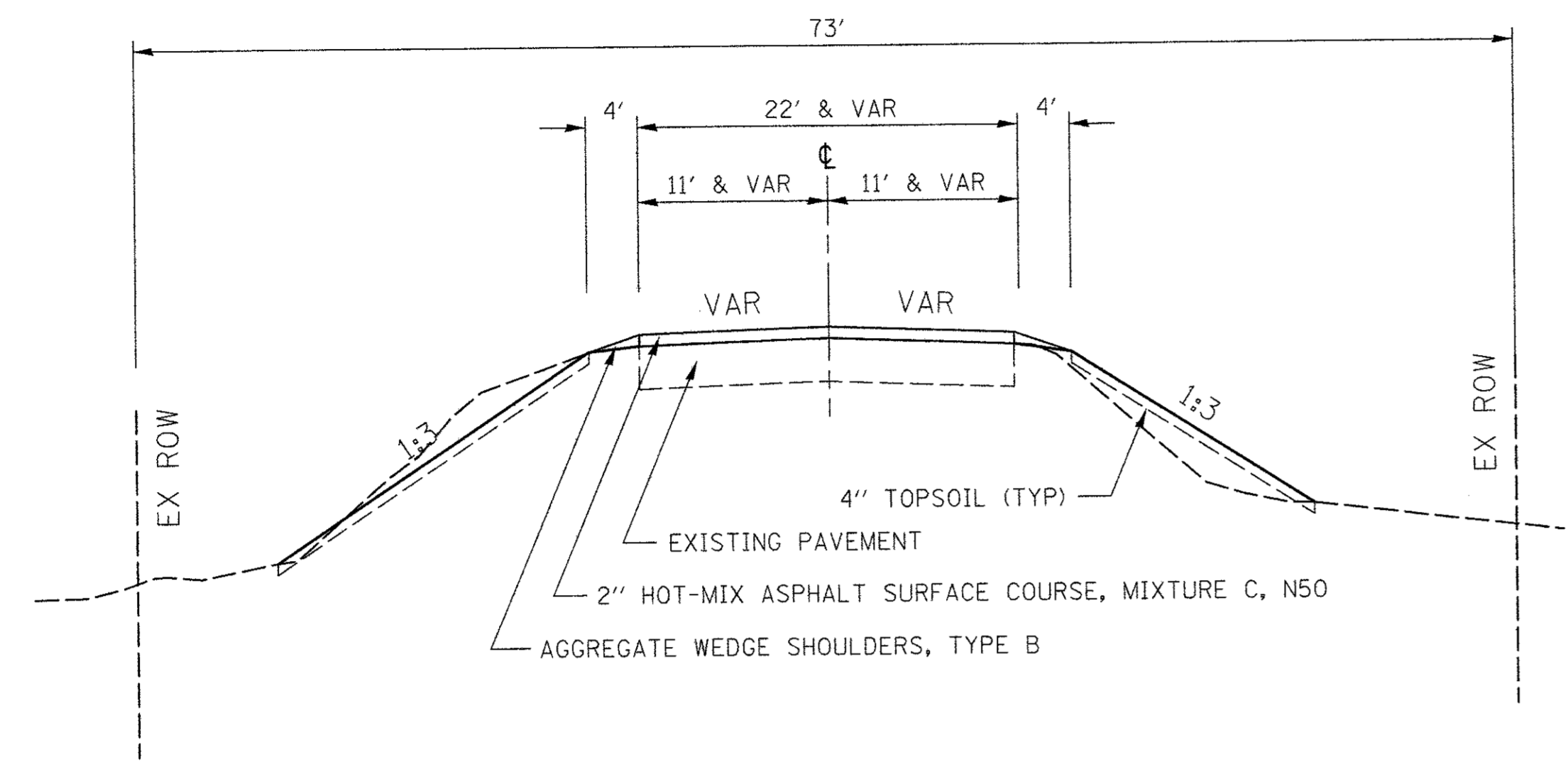
**WHITESIDE COUNTY
 C.H. 23 (BLACK ROAD)
 OVER DRAINAGE DITCH**

GENERAL NOTES, DETAILS, TYPICAL SECTIONS

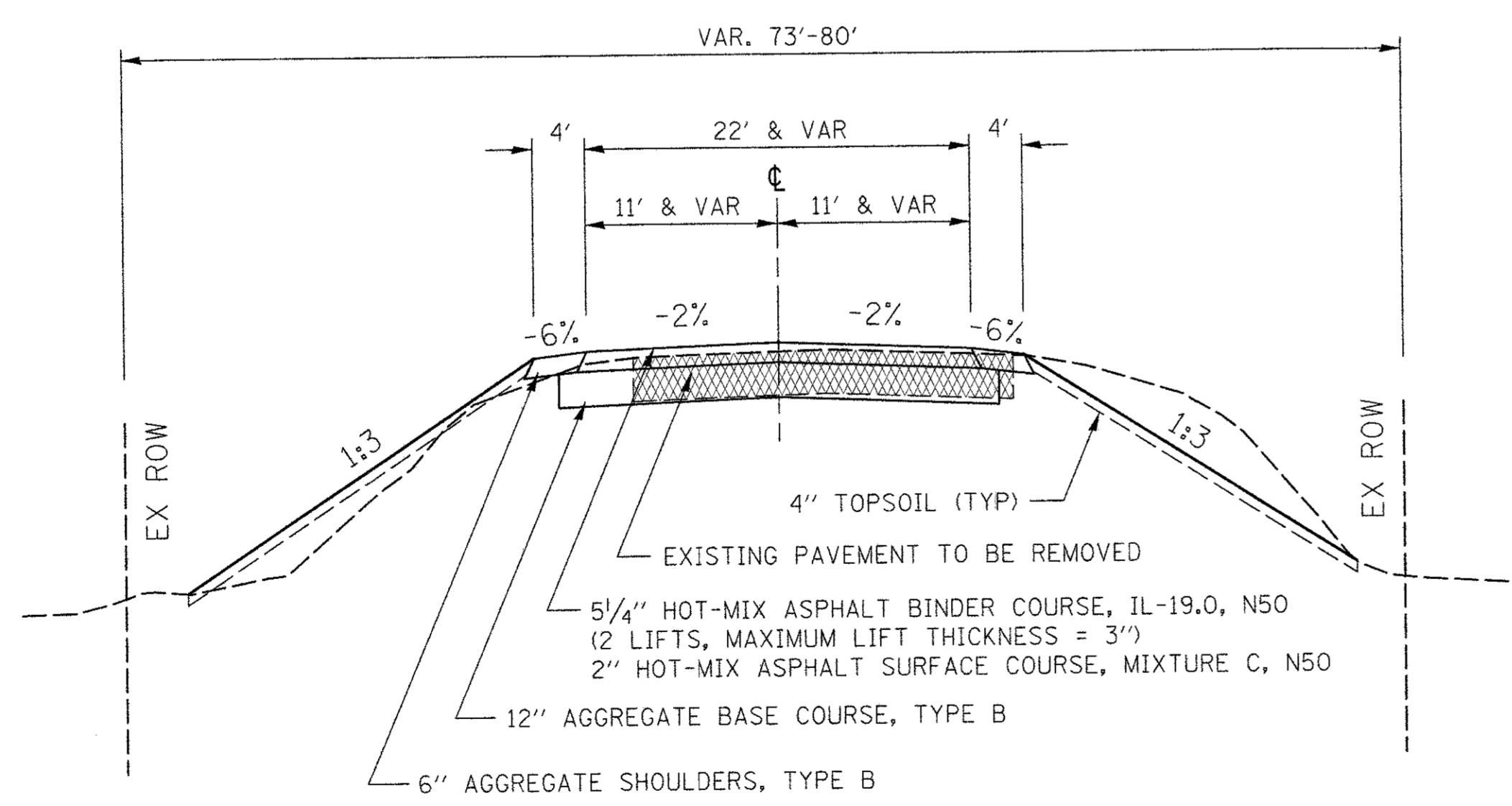
SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. 18+06.47 TO STA. 21+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
197	11-00204-00-BR	WHITESIDE	55	4
CONTRACT NO.				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

FULL DEPTH PAVEMENT DESIGN



BLACK ROAD TYPICAL SECTION
STA. 21+50 TO 36+50



BLACK ROAD TYPICAL SECTION
STA. 36+50 TO 45+30

Date: 8/25/15

Calculations by: J. KOCH

Checked by: R. RENNER

Class: III Roads and Streets

Limits of Analysis:
Station 36+50 To 45+30

Length: 880 Ft 0.17 Miles

Structural Design Traffic:
ADT: 1100
PV: 968
SU: 44
MU: 88

Route: C.H. 23 (BLACK RD)

Section: 11-00204-00-BR

County: WHITESIDE

Location: E. OF FENTON RD

Pavement Design:
Subgrade Support Rating (SSR): POOR (fair, poor, or granular)

Flexible Traffic Factor: 0.39

Selected Design PG Binder: 58-22

Design Pavement HMA Temp.: 78 °F

Design HMA Modulus (E_{AC}): 515 ksi

Design HMA Microstrain: 190

Pavement Thickness: 7 1/4 in

Subgrade: 12" AGG BSE CSE

Comments: BRIDGE APPROACHES ONLY

HMA MIXTURE REQUIREMENTS

Location(s):	Sta 21+50 - 45+30	
Mixture Use(s):	Binder	Surface
PG:	58-22	58-22
Design Air Voids:	4.0% @ N50	4.0% @ N50
Mixture Composition (Mixture Gradation)	IL-19.0	IL-9.5
Friction Aggregate:	N/A	C
Mixture Weight:	112 lb/in/Sq Yd	112 lb/in/Sq Yd
Quality Management		
Program to be used:	QC/QA	QC/QA

REVISIONS

DESCRIPTION	DATE

DESIGNED BY: J. KOCH
DRAWN BY: J. KOCH
CHECKED BY: R. RENNER
DATE: 09/03/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1880 Lincoln Road
Morrison, Illinois 61270

WHITESIDE COUNTY HIGHWAY DEPARTMENT
TYPICAL SECTIONS
BLACK ROAD

SCALE: _____ STA. _____ TO STA. _____

SHEET 2 OF 2 SHEETS

ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	5

FILE: F:\highway\Files\Projects\16-00201-20-BR\Back_Rd\Sheet_500_Typical.dgn

SCHEDULES OF QUANTITIES - S.N. 098-0042

PAVEMENT SCHEDULE

STATION TO STATION	WIDTH	THICKNESS	LENGTH	TACK COAT POUND 0.05 LBS/SQ FT	HOT-MIX ASPHALT SURF CSE, MIX "C", N50 TON 112#/IN/SQ YD
18+06.47 - 18+77.17	33.08' AVG.	---	70.70'	117	
18+89.28 - 19+53.00	27.10' AVG.	---	63.72'	86	
20+47.00 - 21+50.00	22.00' AVG.	---	103.00'	113	
ENTR. 19+45.00 LT	18.74' AVG.	---	4.00'	4	
ENTR. 21+15.00 RT	44.13' AVG.	---	4.00'	9	
ENTR. 21+20.00 LT	53.93' AVG.	---	4.00'	11	
ENTR. 19+45.00 LT	18.74' AVG.	0.25' AVG.	4.00'		1
ENTR. 21+15.00 RT	44.13' AVG.	0.21' AVG.	4.00'		3
ENTR. 21+20.00 LT	53.93' AVG.	0.21' AVG.	4.00'		3
18+06.47 - 18+77.17	33.08' AVG.	0.17'	70.70'		29
18+89.28 - 19+53.00	29.53' AVG.	0.17'	30.72'		11
19+20.00 - 19+53.00	24.84' AVG.	0.31' AVG.	33.00'		19
20+47.00 - 21+50.00	22.50' AVG.	0.29' AVG.	103.00'		50
TOTAL				340	116

TRAFFIC BARRIER TERMINAL, TYPE 1

SIDE	STATION TO STATION	EACH
LEFT	20+73.25 - 20+98.25	1
RIGHT	20+73.25 - 20+98.25	1
TOTAL		2

STEEL PLATE BEAM GUARDRAIL

SIDE	STATION TO STATION	FOOT
LEFT	20+60.75 - 20+73.25	12.5
RIGHT	20+60.75 - 20+73.25	12.5
TOTAL		25

TRAFFIC BARRIER TERMINAL, TYPE 5A

SIDE	STATION TO STATION	EACH
RIGHT	19+39.25 - 19+52.50	1
RIGHT	20+47.50 - 20+60.75	1
LEFT	20+47.50 - 20+60.75	1
TOTAL		3

TRAFFIC BARRIER TERMINAL, TYPE 2

SIDE	STATION TO STATION	EACH
RIGHT	19+26.75 - 19+39.25	1
TOTAL		1

GUARDRAIL REMOVAL

SIDE	STATION TO STATION	FOOT
RIGHT	19+23 - 19+53	32
LEFT	20+47 - 20+98	50
RIGHT	20+47 - 20+98	50
TOTAL		132

AGGREGATE WEDGE SHOULDER, TYPE B

STATION TO STATION	SIDE	WIDTH	THICKNESS	LENGTH	TON
17+83.22 - 18+56.38	LEFT	4.00'	0.19' AVG.	69.13'	4
18+59.13 - 18+90.24	RIGHT	4.00'	0.19' AVG.	65.33'	3
18+65.38 - 19+32.46	LEFT	4.00'	0.19' AVG.	66.19'	4
18+97.26 - 19+53.00	RIGHT	4.00'	0.19' AVG.	56.11'	3
19+51.30 - 19+53.00	LEFT	4.00'	0.19' AVG.	1.70'	1
20+47.00 - 20+84.38	LEFT	4.00'	0.19' AVG.	37.38'	2
20+47.00 - 20+87.54	RIGHT	4.00'	0.19' AVG.	40.54'	2
21+31.57 - 21+50.00	RIGHT	4.00'	0.19' AVG.	18.43'	1
21+38.17 - 21+50.00	LEFT	4.00'	0.19' AVG.	11.90'	1
TOTAL					21

(AT 1.89 TON/CU YD)

AGGREGATE SURFACE COURSE, TYPE B

STATION TO STATION	WIDTH	LENGTH	TON
ENTR. - 19+45.00 LT	13' & VAR.	11.0'	3
ENTR. - 21+15.00 RT	19' & VAR.	11.0'	4
ENTR. - 21+20.00 LT	20' & VAR.	11.0'	4
TOTAL			11

HOT-MIX ASPHALT SURFACE REMOVAL, 2"

STATION TO STATION	WIDTH	LENGTH	SQ YD
18+06.47 - 18+77.17	33.08' AVG.	70.70'	260
TOTAL			260

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

STATION TO STATION	WIDTH	LENGTH	SQ YD
18+89.28 - 19+20.00	29.53' AVG.	30.72'	101
TOTAL			101

PERIMETER EROSION BARRIER

STATION TO STATION	SIDE	FOOT
17+83.00 - 18+54.00	LEFT	65
18+60.00 - 18+92.00	RIGHT	62
18+63.00 - 19+38.00	LEFT	73
19+00.00 - 19+53.00	RIGHT	57
20+47.00 - 21+05.00	LEFT	65
20+47.00 - 21+05.00	RIGHT	65
21+27.00 - 21+50.00	RIGHT	23
21+30.00 - 21+50.00	LEFT	20
TOTAL		430

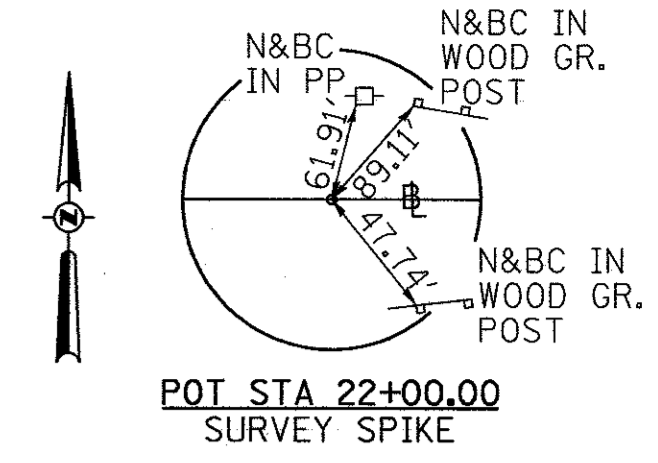
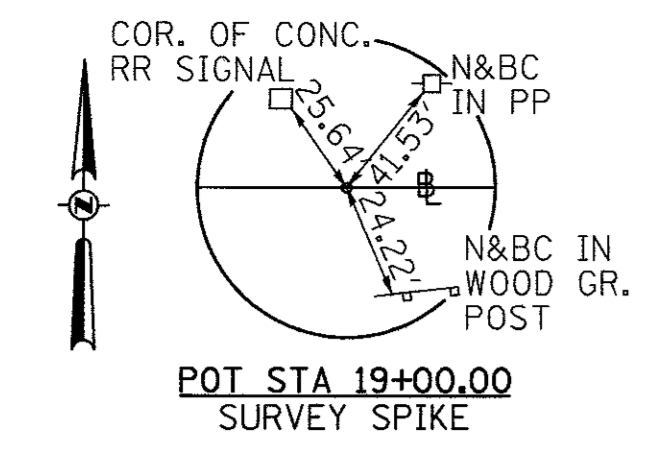
RAISED REFLECTIVE PAVEMENT MARKER

STATION	SIDE	DESCRIPTION	EACH
17+40.00	℄	AMBER	1
17+80.00	℄	AMBER	1
18+20.00	℄	AMBER	1
18+60.00	℄	AMBER	1
19+00.00	℄	AMBER	1
19+40.00	℄	AMBER	1
TOTAL			6

PAINT PAVEMENT MARKING - LINE 4"

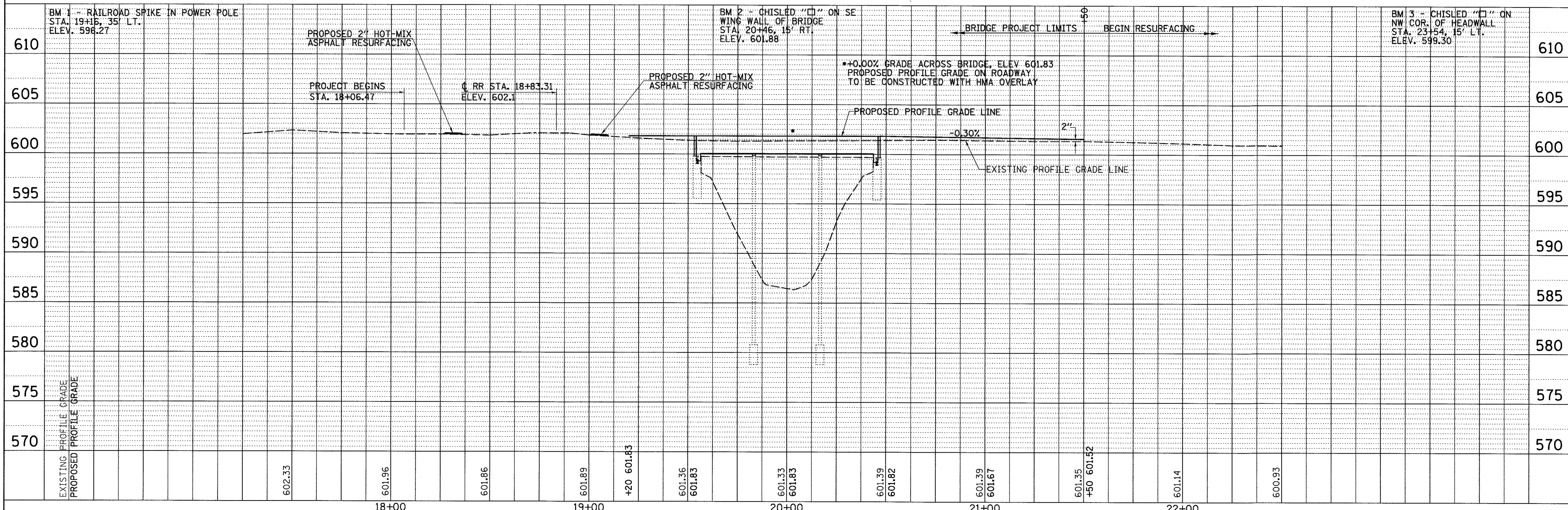
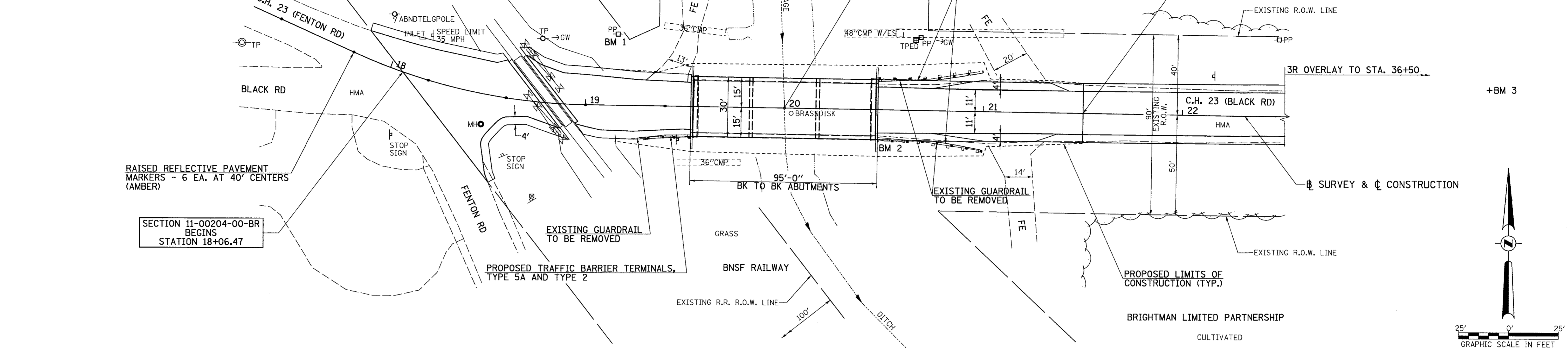
STATION TO STATION	SIDE	DESCRIPTION	FOOT
17+00.00 - 21+50.00	LEFT	WHITE EDGE LINE	450
17+00.00 - 20+85.00	℄	DOUBLE YELLOW	770
20+85.00 - 21+50.00	℄ LEFT	SOLID YELLOW	65
20+85.00 - 21+50.00	℄ RIGHT	SKIP DASH YELLOW	17
17+00.00 - 21+50.00	RIGHT	WHITE EDGE LINE	450
TOTAL			1,752

85651



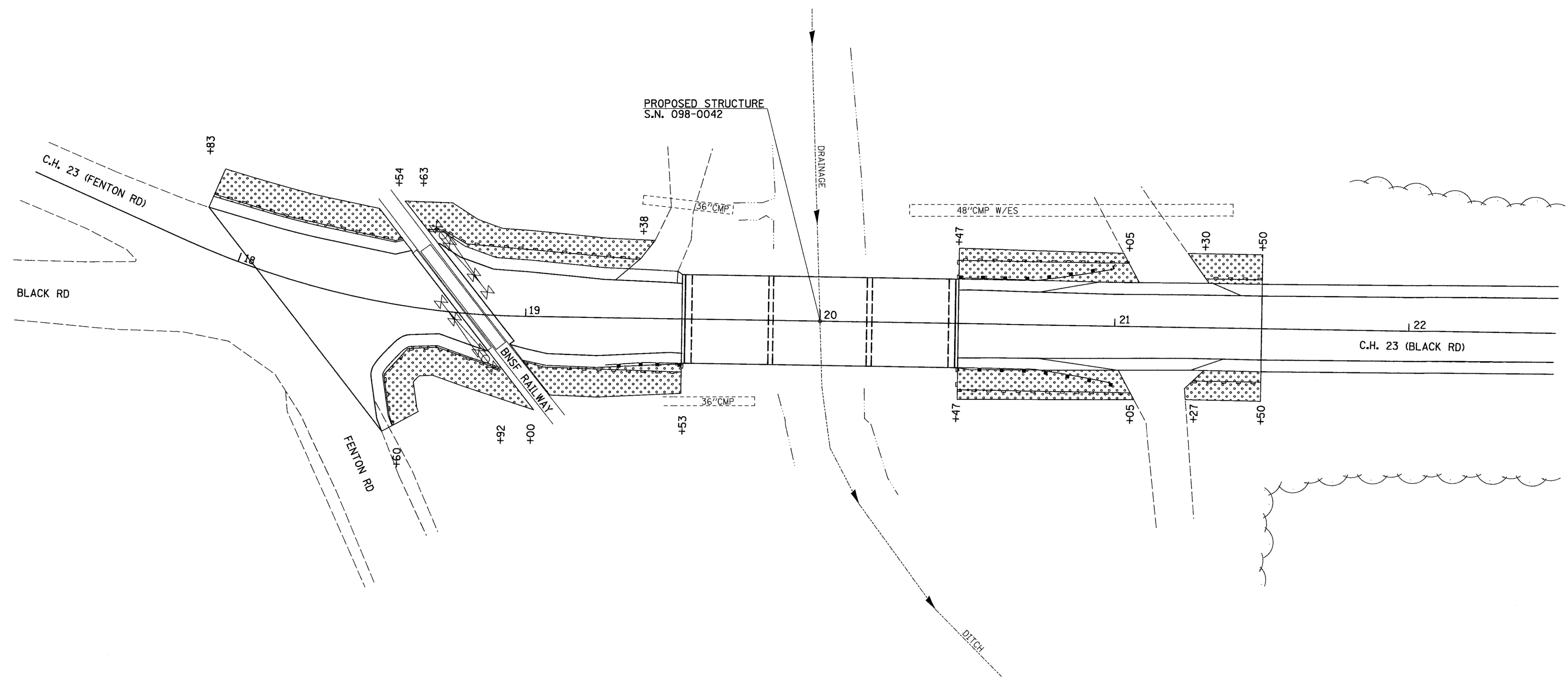
PLAN	SURVEYED	DATE
	ALIGNED	
	CHECKED	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	GRADES	
	CHECKED	
	BY	
	NO.	

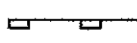
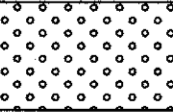


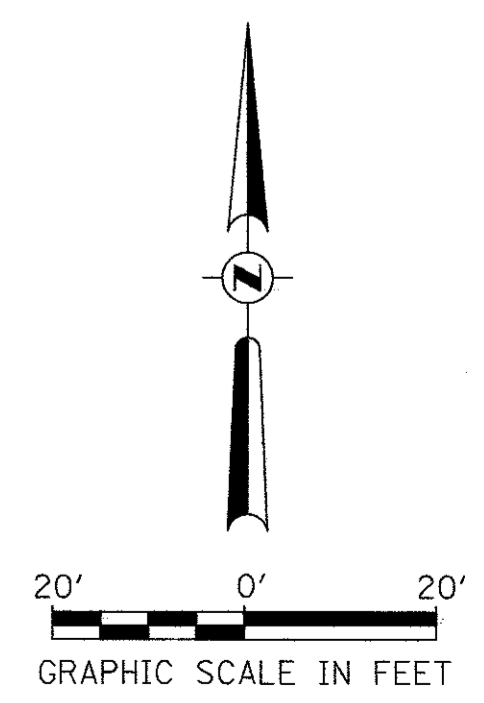
FILE NAME =	USER NAME = ethomas	DESIGNED -	REVISED -	WHITESIDE COUNTY C.H. 23 (BLACK ROAD) OVER DRAINAGE DITCH	PLAN AND PROFILE	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
V:\Bridge\2927 - Whiteside\2017 updates\27p001.dgn		DRAWN -	REVISED -			197	11-00204-00-BR	WHITESIDE	55	7	
PLOT SCALE = 25.0000' / in.		CHECKED -	REVISED -			CONTRACT NO.					
PLOT DATE = 6/16/2017		DATE -	REVISED -			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

SCALE: 1"=25' SHEET NO. 1 OF 1 SHEETS STA. 18+06.47 TO STA. 21+50.00



LEGEND

-  PERIMETER EROSION BARRIER
-  SEEDING, CLASS 2 (SPECIAL)



FILE NAME =	USER NAME = othomas	DESIGNED -	REVISED -
V:\Bridge\2927 - Whiteside\2017 updates\2927s001.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**WHITESIDE COUNTY
C.H. 23 (BLACK ROAD)
OVER DRAINAGE DITCH**

EROSION CONTROL PLAN		
SCALE: 1" = 20'	SHEET NO. 1 OF 1 SHEETS	STA. 18+06.47 TO STA. 21+50.00

F.A.S. RTE. 197	SECTION 11-00204-00-BR	COUNTY WHITESIDE	TOTAL SHEETS 55	SHEET NO. 8
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

BENCH MARK #1

RR Spike in Power Pole
Sta. 19+16, 35' Lt.
Elev. 596.27

EXISTING STRUCTURE

Three span reinforced concrete slab structure on concrete spill thru abutments on steel H piles and concrete solid wall piers on spread footings. 95'-0" Bk. to Bk. and 30'-4" Out to Out., 0° Skew. Str. No. 098-0042

The existing superstructure is to be replaced with a reinforced concrete slab.

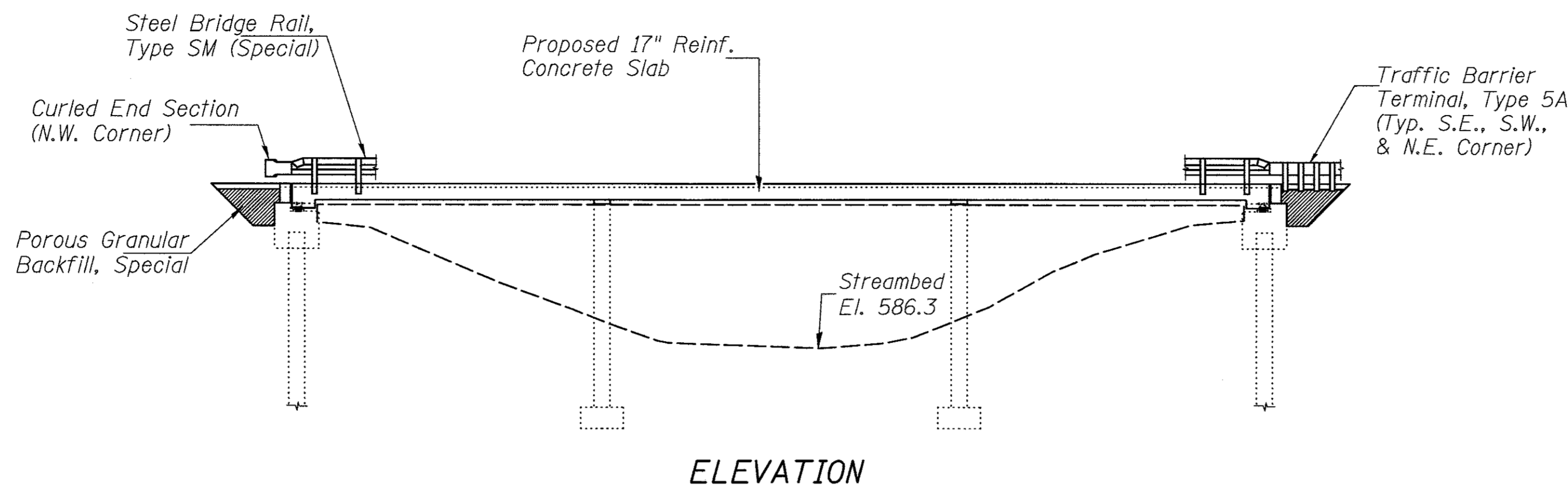
Road to be closed during construction.

No Salvage.

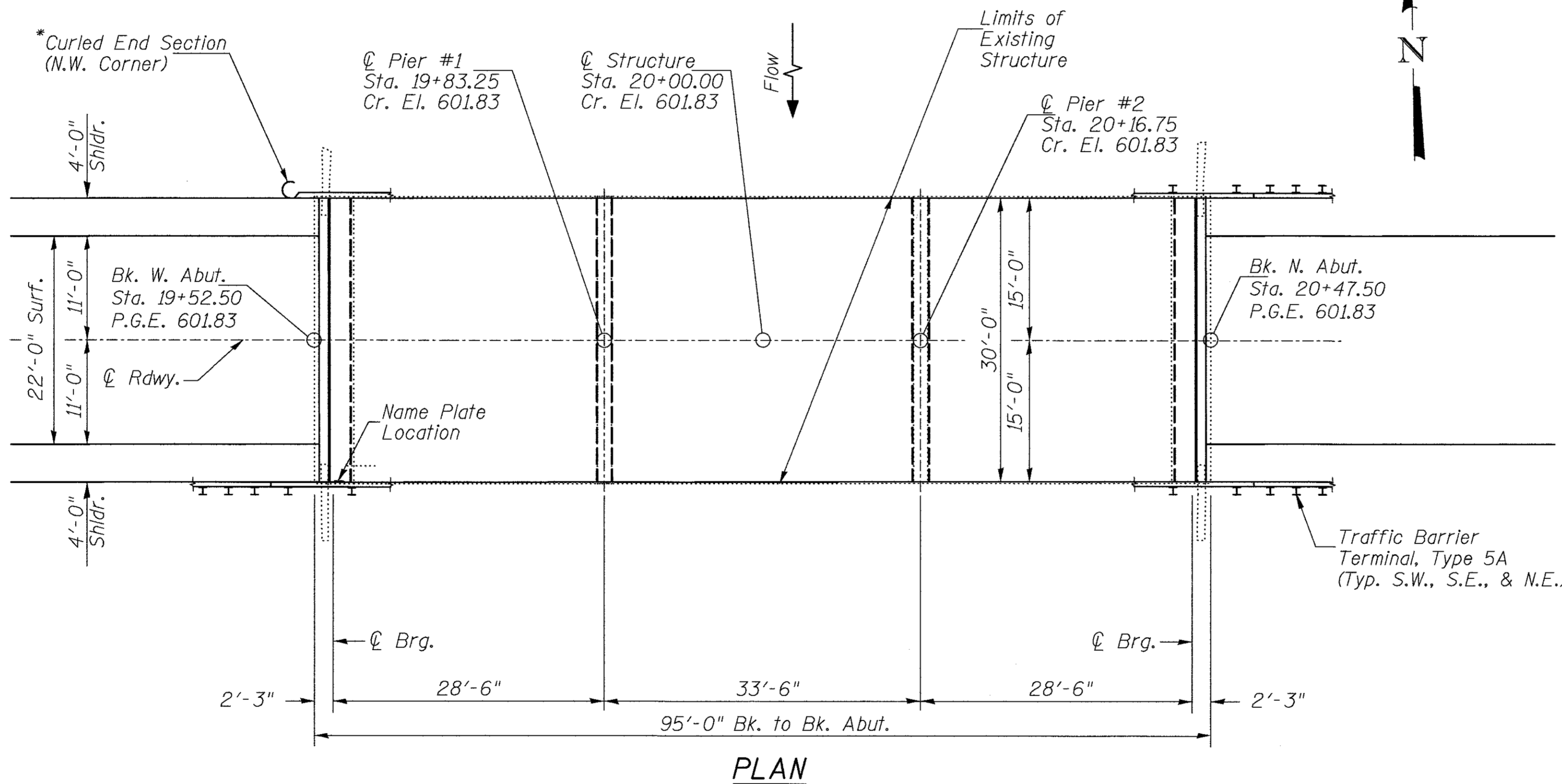
NOTE:
For Bill of Material and General Notes,
See Sheet 2 of 12.

**BRIDGE PLANS
INDEX TO SHEETS**

SHEET #'s	DESCRIPTION
1	General Plan & Elevation
2	General Details
3	Superstructure
4	Preformed Joint Strip Seal
5	Steel Bridge Rail, Type SM (Special)
6	Rail Post Spacing
7	Bearing Details
8	West Abutment Repair
9	Abutments
10	Pier 1 Repair
11	Piers
12	Slope Wall Repair



* Terminal Marker-Direct Applied to be placed on Curled End Sections in accordance with Std. 725001



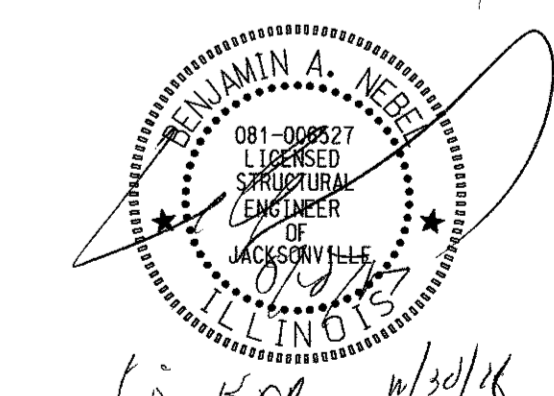
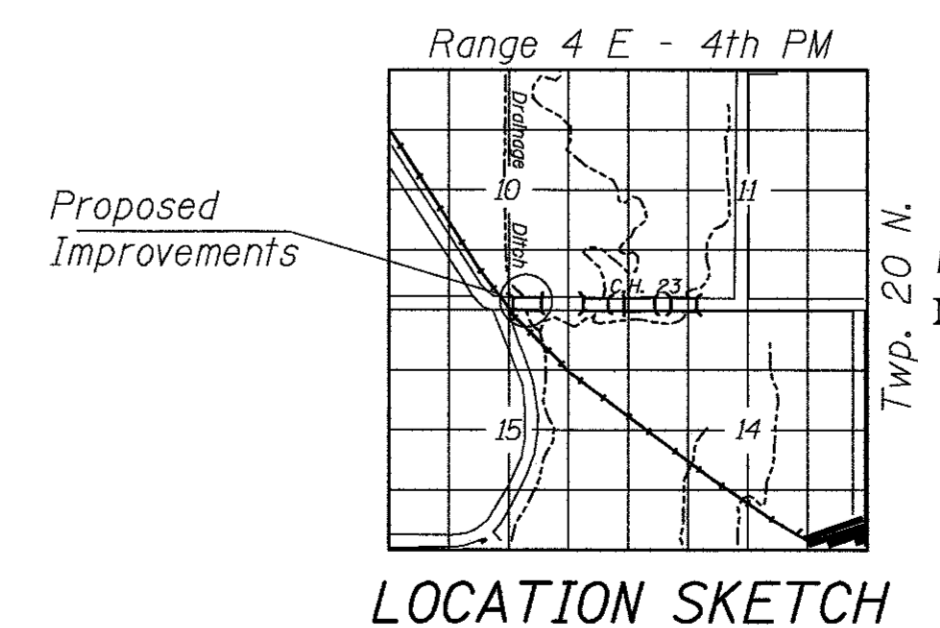
**DRAINAGE DITCH
REBUILT 2018 BY
WHITESIDE COUNTY
SECTION 11-00204-00-BR
CH 23 STATION 20+00.00
STR. NO. 098-0042
LOADING HL-93**

NAME PLATE

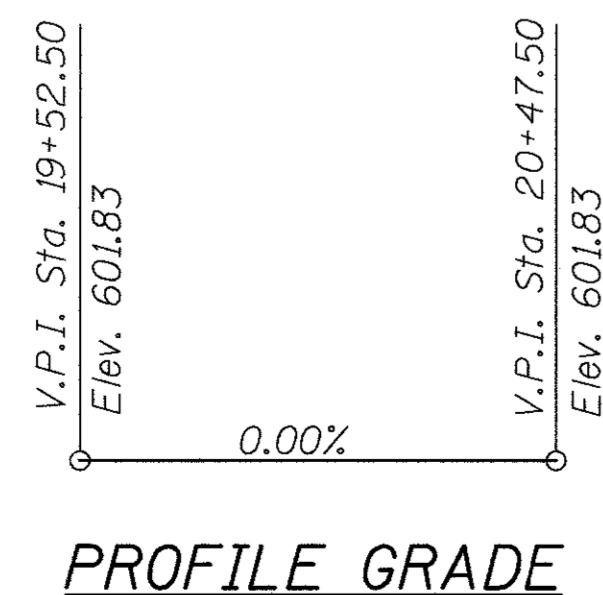
Attach new name plate at west end of 8" element of south bridge rail. Clean and relocate existing name plate adjacent to new name plate. Cost included with nameplate. See Std. 515001.

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

[Signature]
Illinois Structural No. 6527
Expires 11/30/2018



**GENERAL PLAN & ELEVATION
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY**



LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

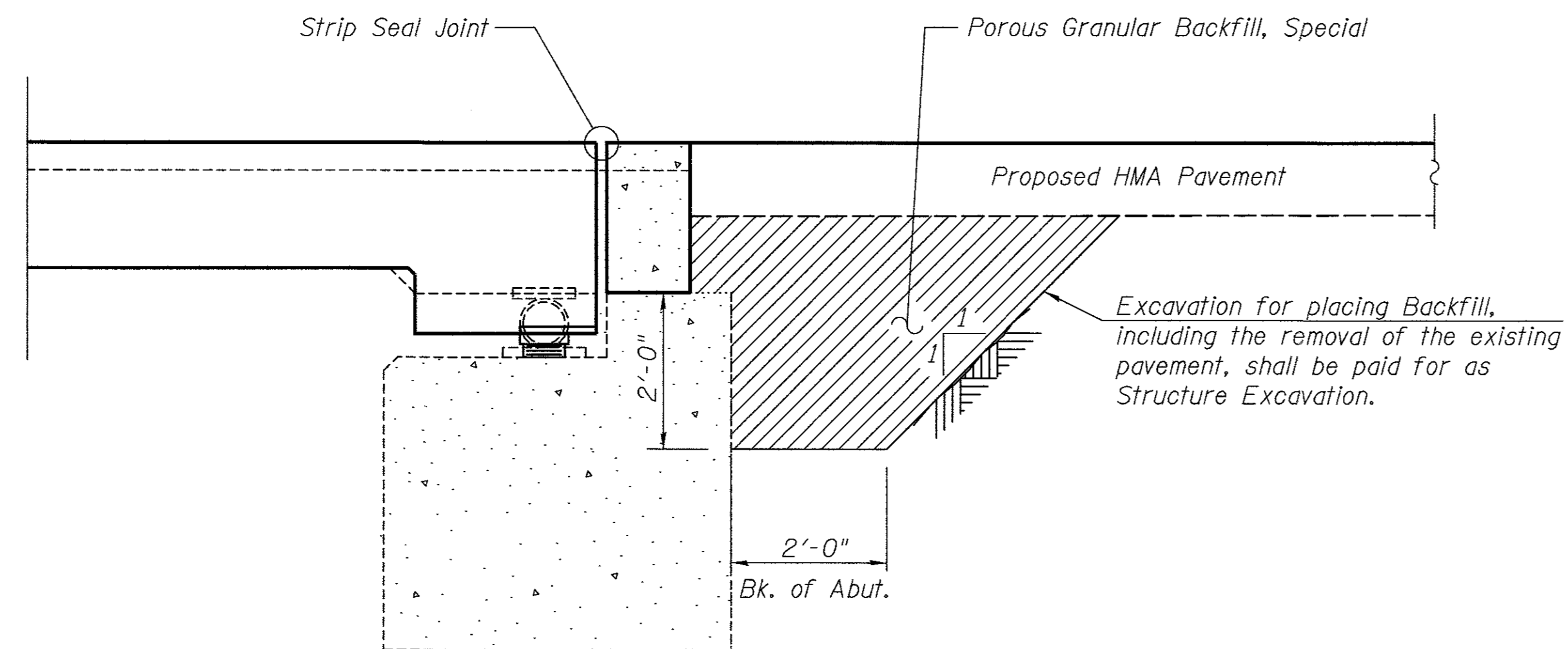
DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications with Interims

**DESIGN STRESSES
FIELD UNITS**

$f'_c = 5,000 \text{ psi}$
 $f_y = 60,000 \text{ psi}$ (Reinforcement)
 $f_y = 50,000 \text{ psi}$ (M270 Grade 50)

DESIGNED	CTM
CHECKED	BAN
DRAWN	CTM
CHECKED	BAN

SHEET NO. 1	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	197	11-00204-00-BR	WHITESIDE	55	9
		S.N. 098-0042	CONTRACT NO. -		
		FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	



SECTION THRU ABUTMENT

GENERAL NOTES

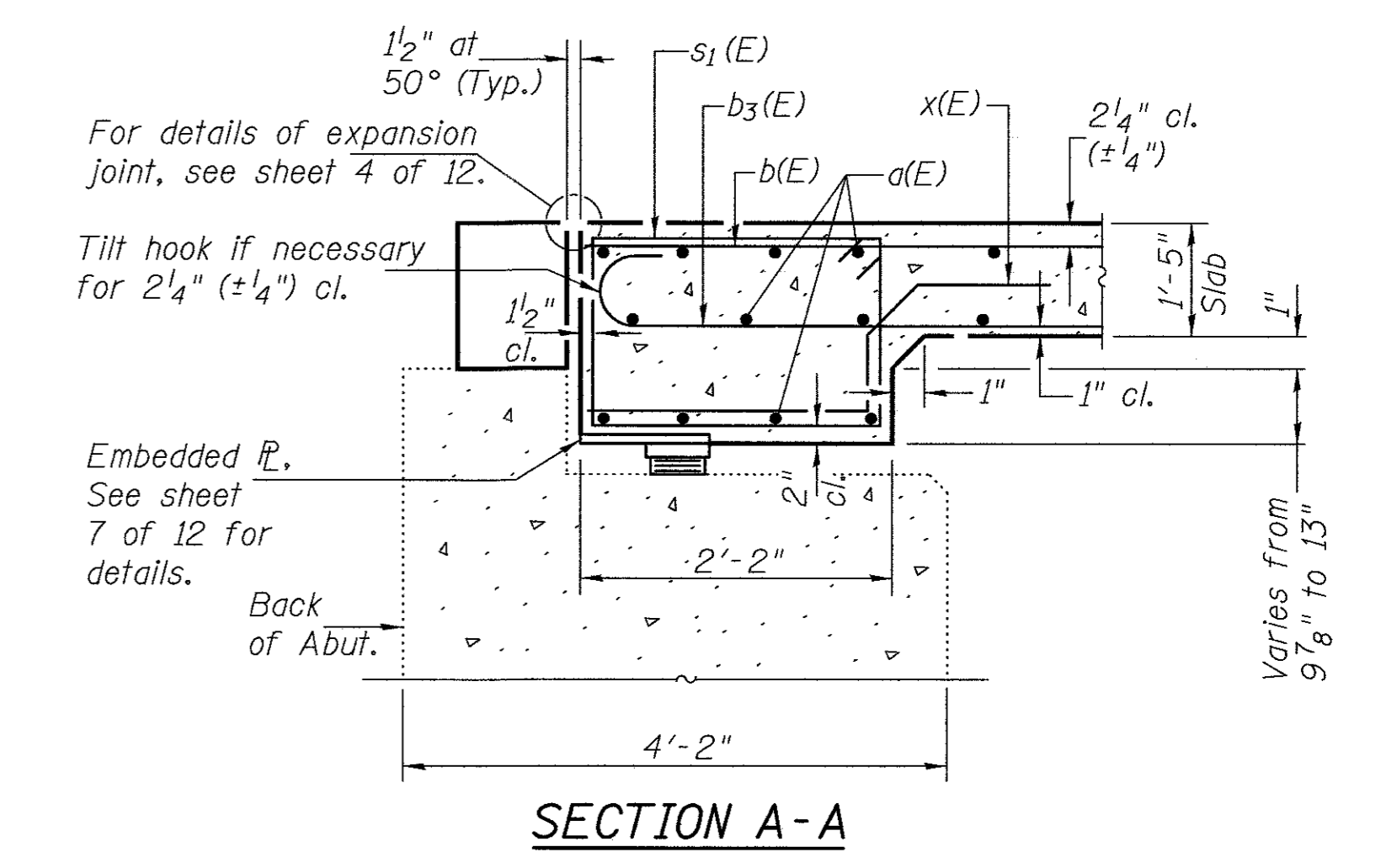
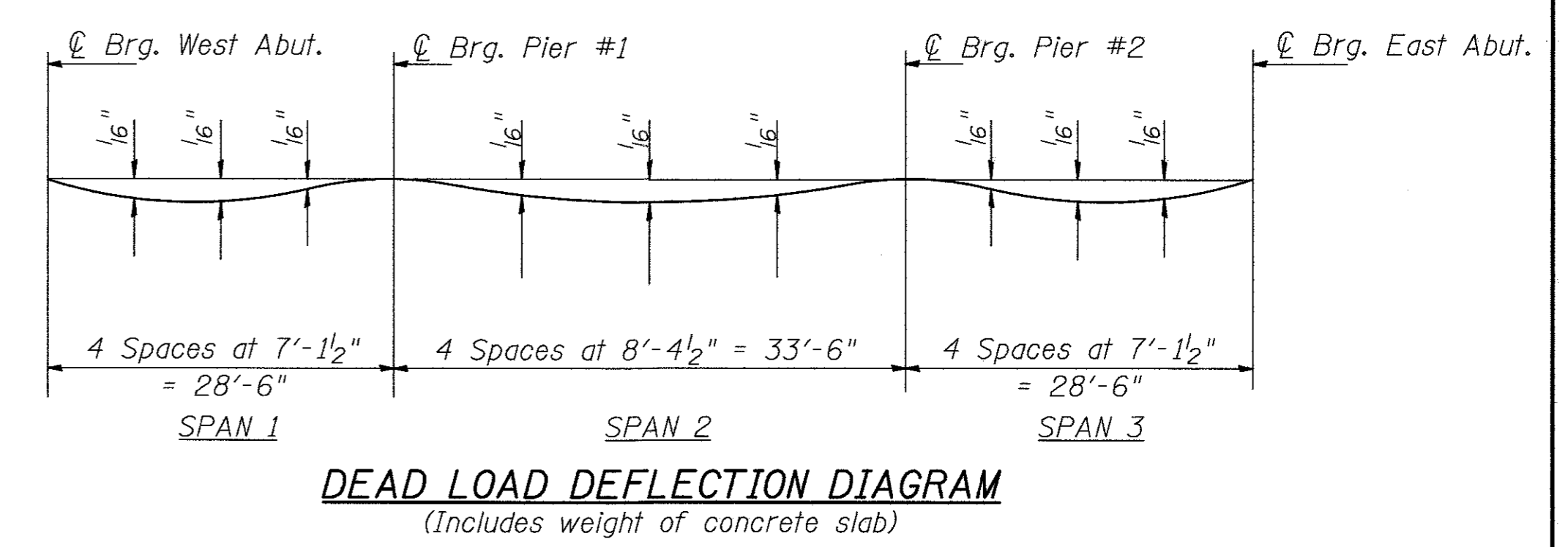
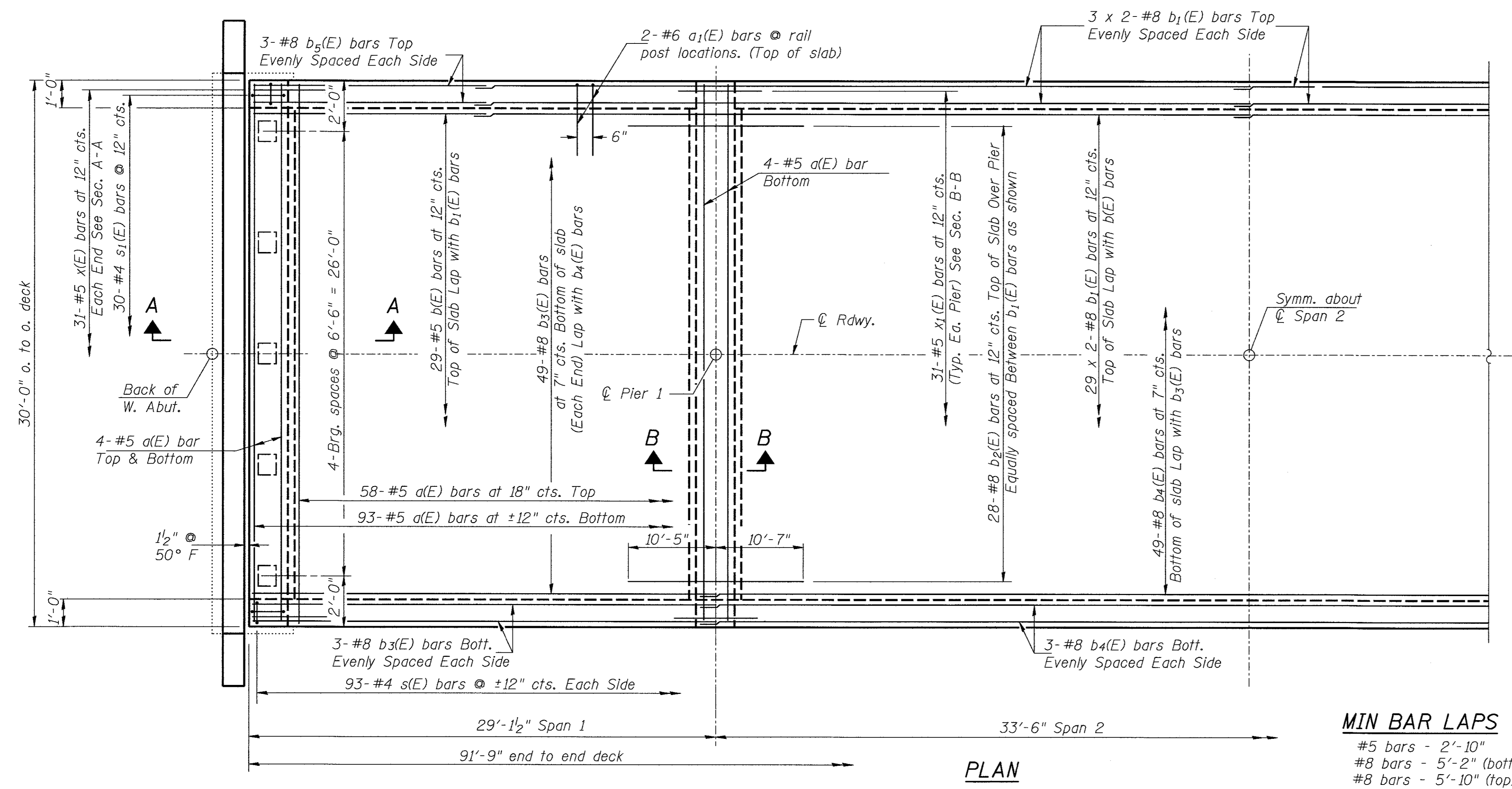
Reinforcement bars designated (E) shall be epoxy coated.
 Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
 The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach slab.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	EACH	1	-	1
Structural Repair of Concrete (Depth Equal to or less than 5 in.)	SQ FT	-	5	5
Slope Wall Repair	SQ YD	-	6	6
Concrete Removal	CU YD	-	3.8	3.8
Structure Excavation	CU YD	-	40	40
Concrete Superstructure	CU YD	156.8	-	156.8
Reinforcement Bars, Epoxy Coated	POUND	34,370	800	35,170
Steel Bridge Rail, Type SM (Special)	FOOT	190	-	190
Preformed Joint Strip Seal	FOOT	59	-	59
Controlled Low-Strength Material	CU YD	-	5	5
Name Plates	EACH	-	-	1
Elastomeric Bearing Assembly, Type I	EACH	-	10	10
Anchor Bolts, 1"	EACH	-	20	20
Bridge Deck Grooving	SQ YD	285	-	285
Protective Coat	SQ YD	343	-	343
Porous Granular Backfill, Special	CU YD	-	30	30

GENERAL DETAILS
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY

SHEET NO. 2	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	197	11-00204-00-BR	WHITESIDE	55	10
		S.N. 098-0042	CONTRACT NO. -		
		FED. ROAD DIST. NO. 7 ILLINOIS	FED. AID PROJECT		

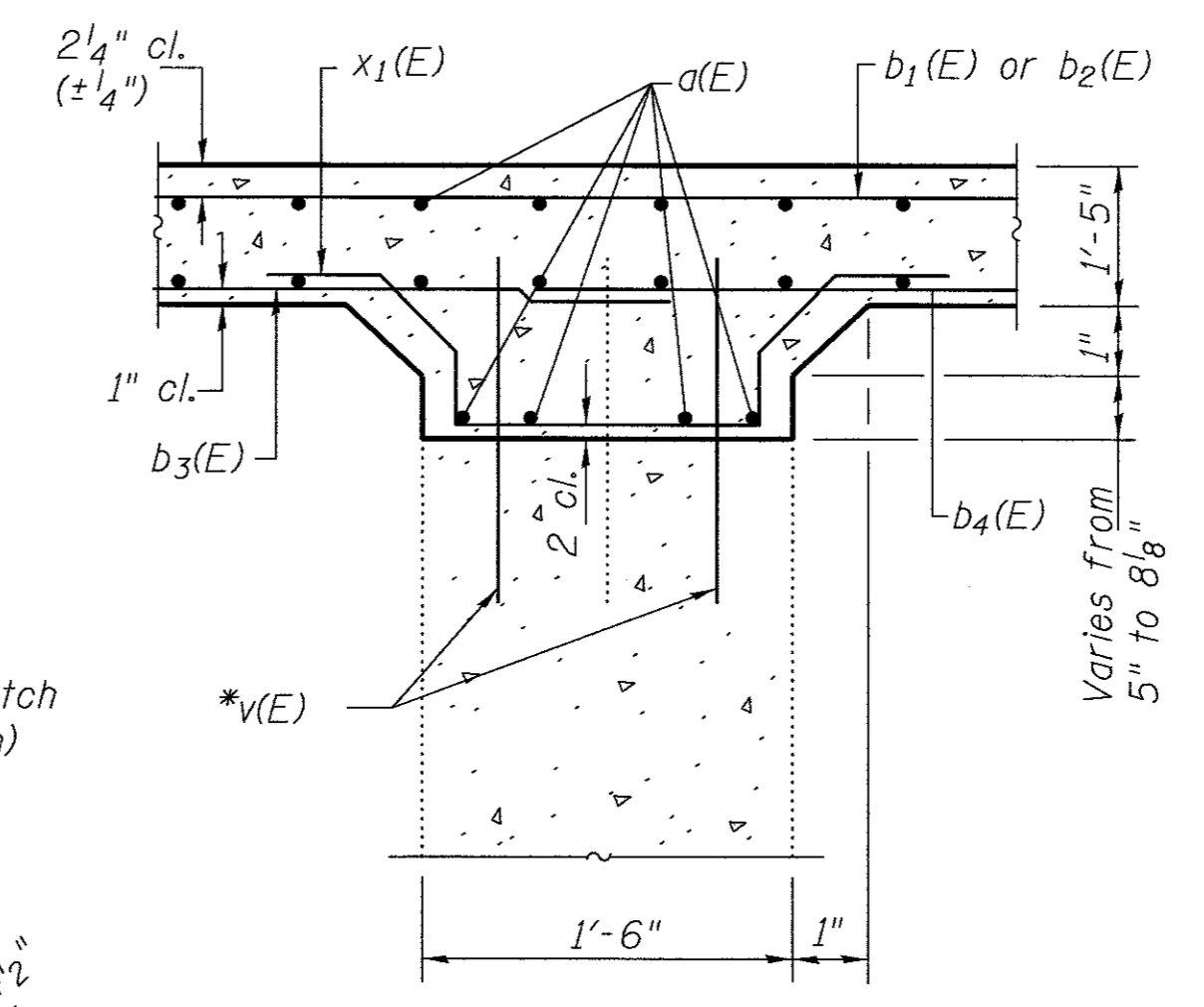
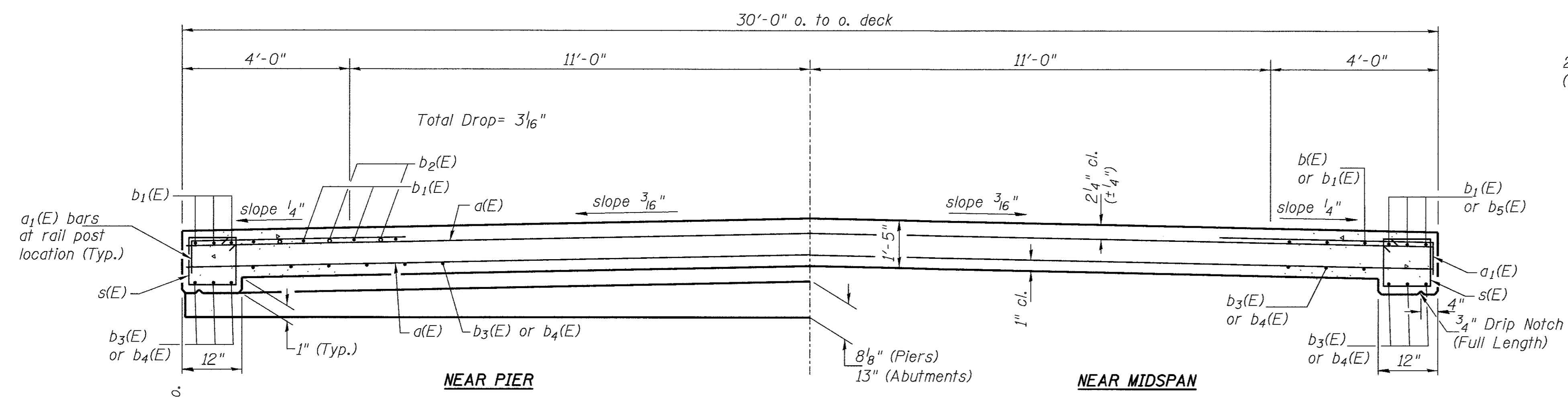


MIN BAR LAPS
 #5 bars - 2'-10"
 #8 bars - 5'-2" (bottom)
 #8 bars - 5'-10" (top)

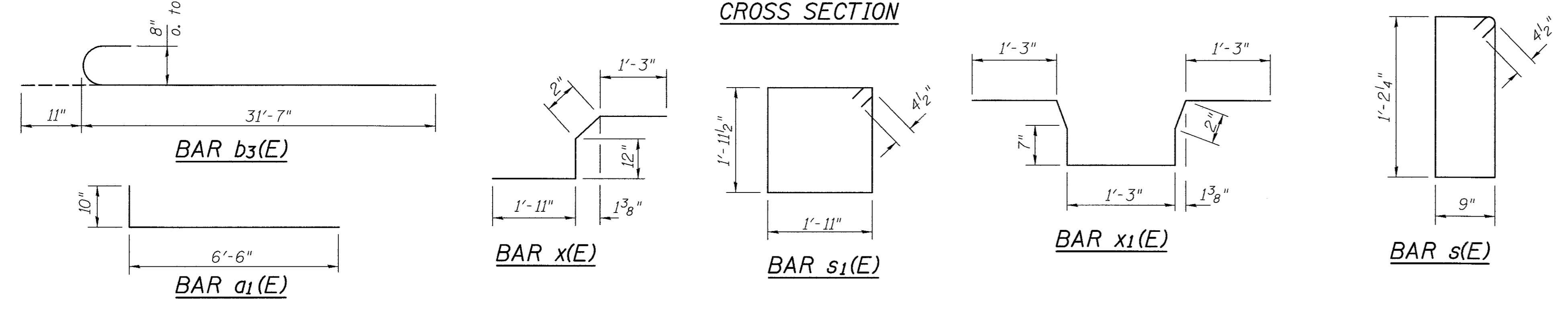
SUPERSTRUCTURE BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	175	#5	29'-9"	—
a ₁ (E)	64	#6	7'-4"	└
b(E)	58	#5	14'-9"	—
b ₁ (E)	70	#8	36'-9"	—
b ₂ (E)	56	#8	21'-0"	—
b ₃ (E)	110	#8	32'-6"	└
b ₄ (E)	55	#8	38'-8"	—
b ₅ (E)	12	#8	17'-9"	—
s(E)	186	#4	4'-8"	┐
s ₁ (E)	60	#4	8'-6"	┐
x(E)	62	#5	4'-4"	└
x ₁ (E)	62	#5	5'-3"	└
Concrete Superstructure			CU YD	156.8
Reinforcement Bars, Epoxy Coated			POUND	34,370

Bars indicated thus 3 x 2-#8 etc. indicates 3 lines of bars with 2 lengths per line.



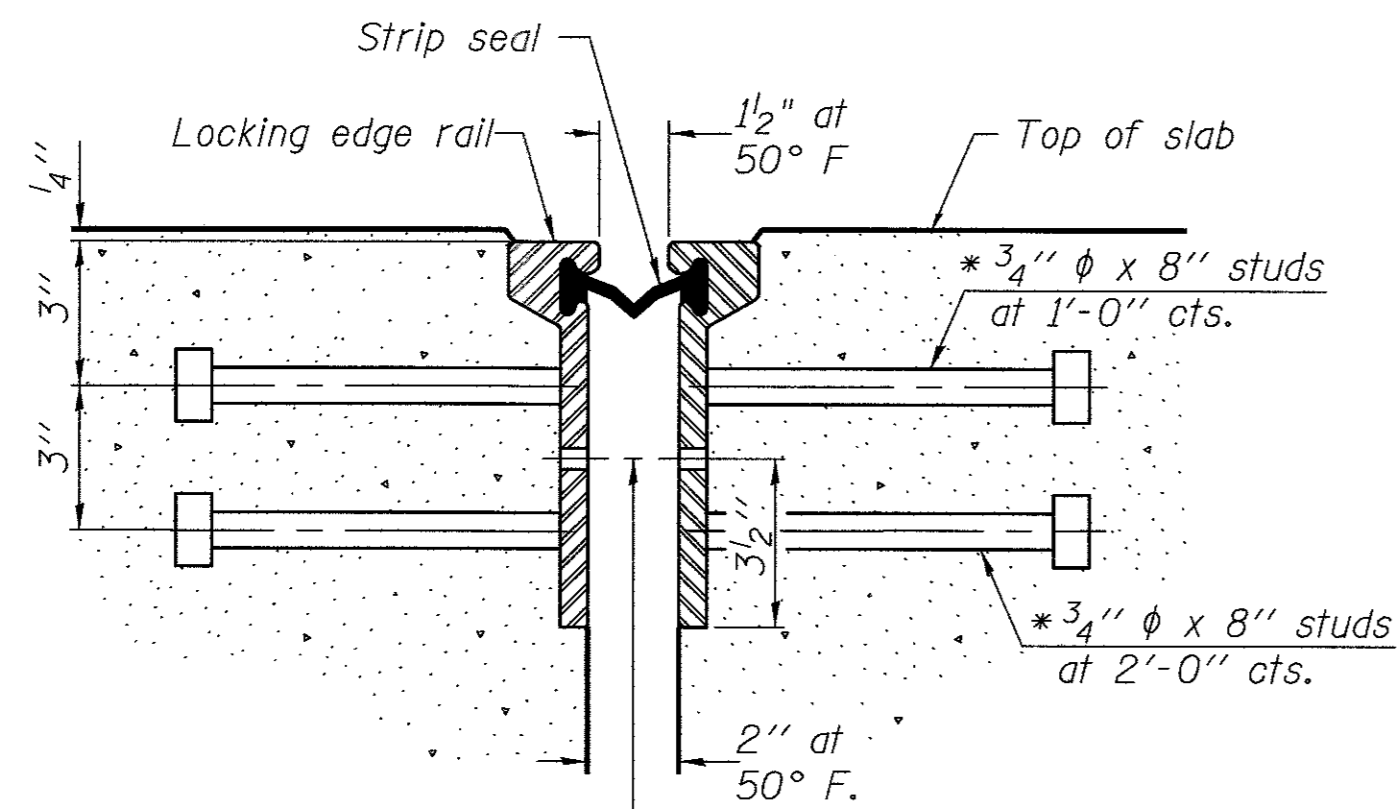
SECTION B-B
 *(E) bars billed with piers. See sheet 11 of 12.



SUPERSTRUCTURE C.H. 23 OVER DRAINAGE DITCH SECTION 11-00204-00-BR WHITESIDE COUNTY

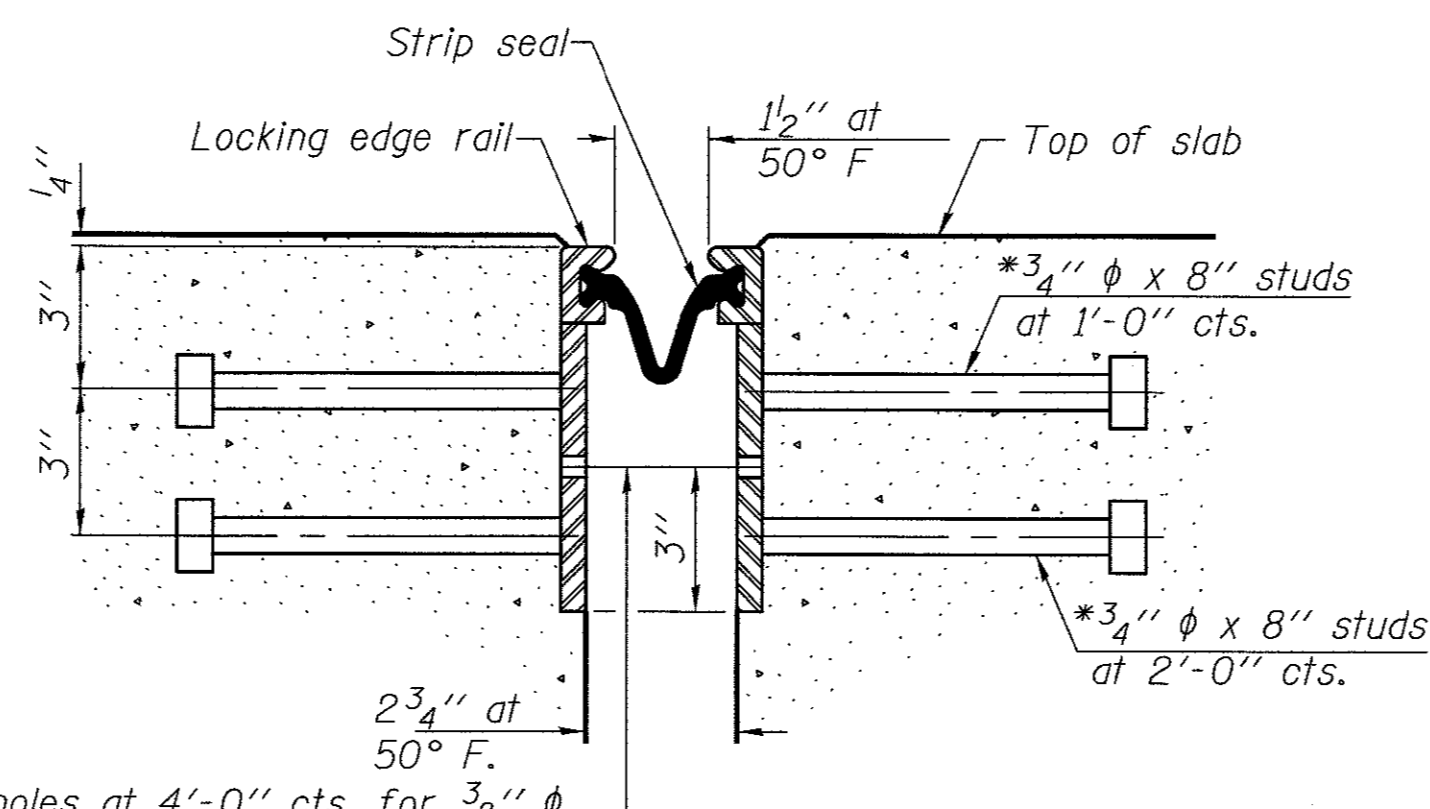
SHEET NO. 3 12 SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	197	11-00204-00-BR	WHITESIDE	55	11
	S.N. 098-0042		CONTRACT NO. -		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT			

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



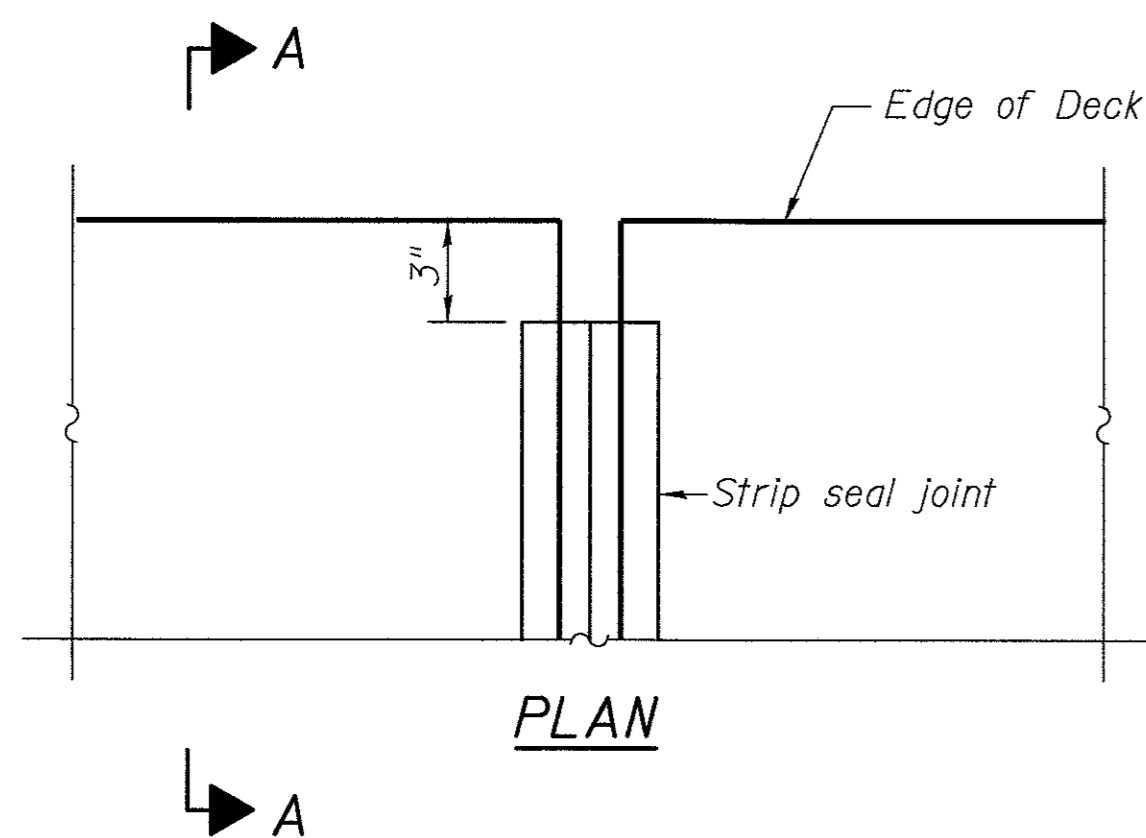
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU ROLLED RAIL JOINT

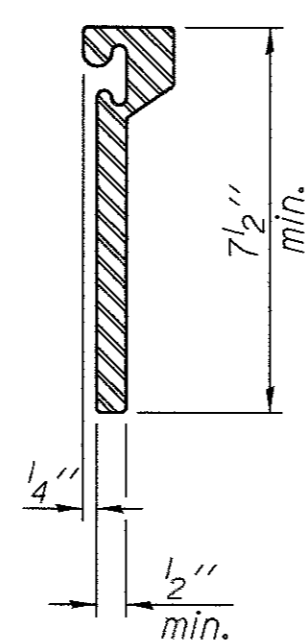


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

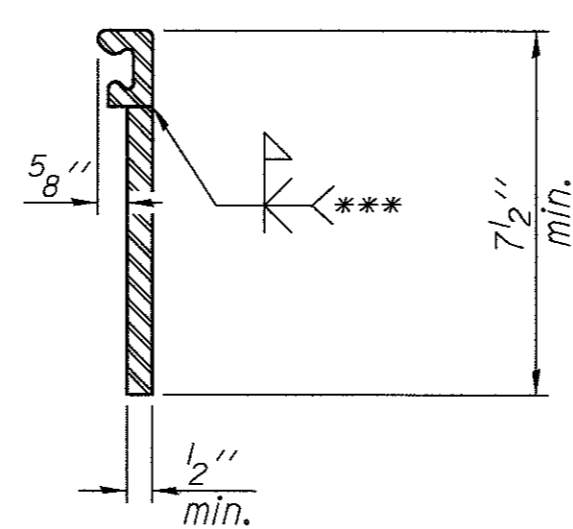
SECTION THRU WELDED RAIL JOINT



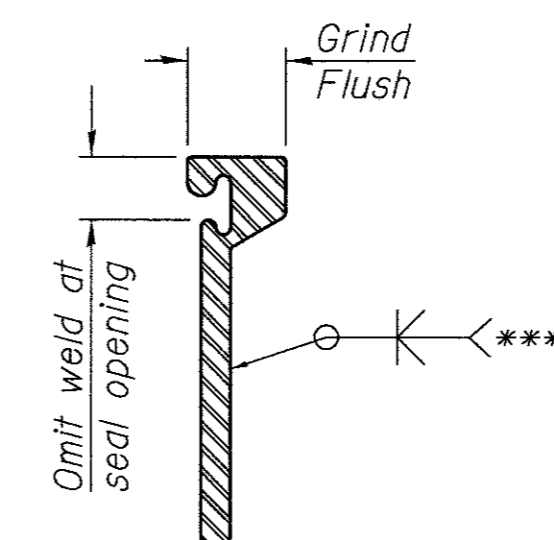
PLAN



ROLLED EXTRUDED RAIL



WELDED RAIL

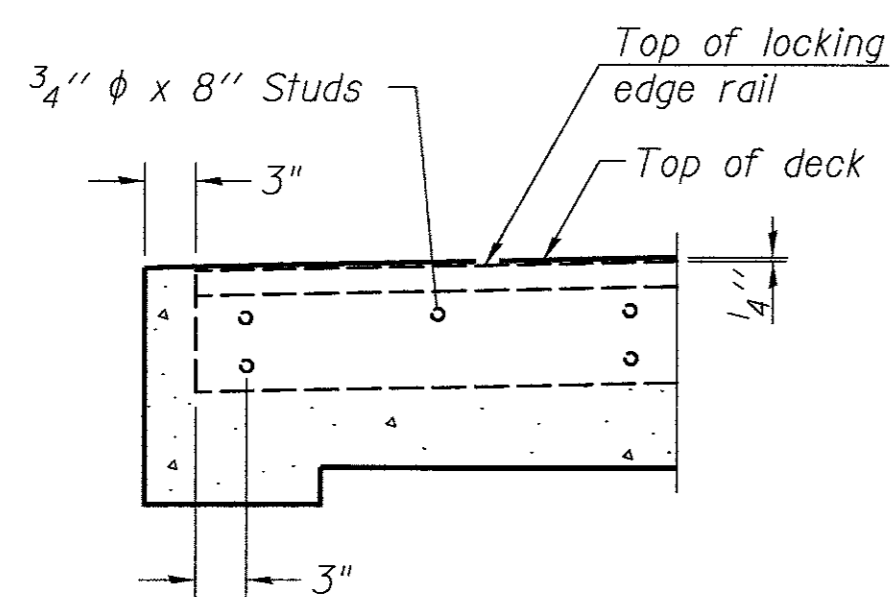


*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS



SECTION A-A

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the Contract.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

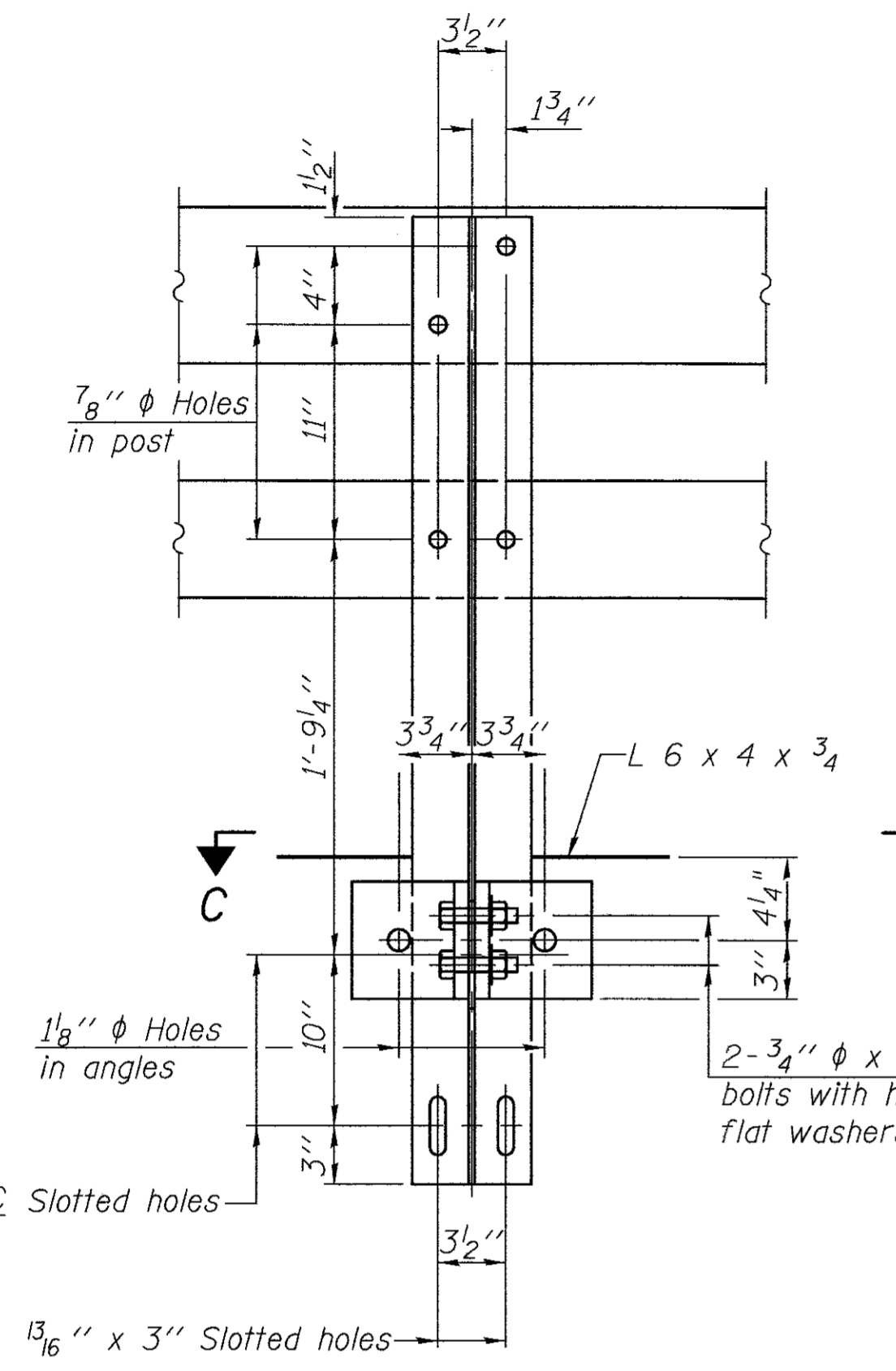
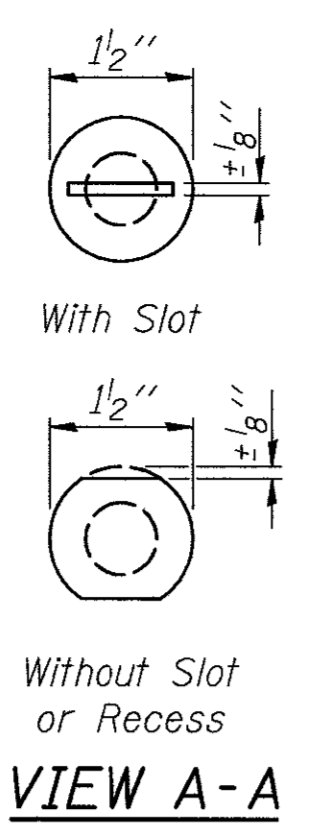
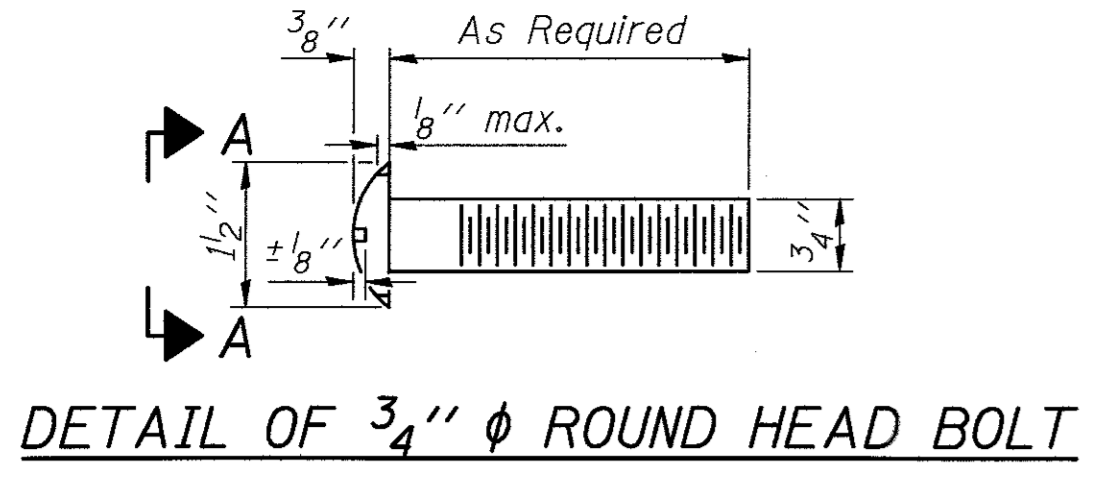
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Preformed Joint Strip Seal	FOOT	59

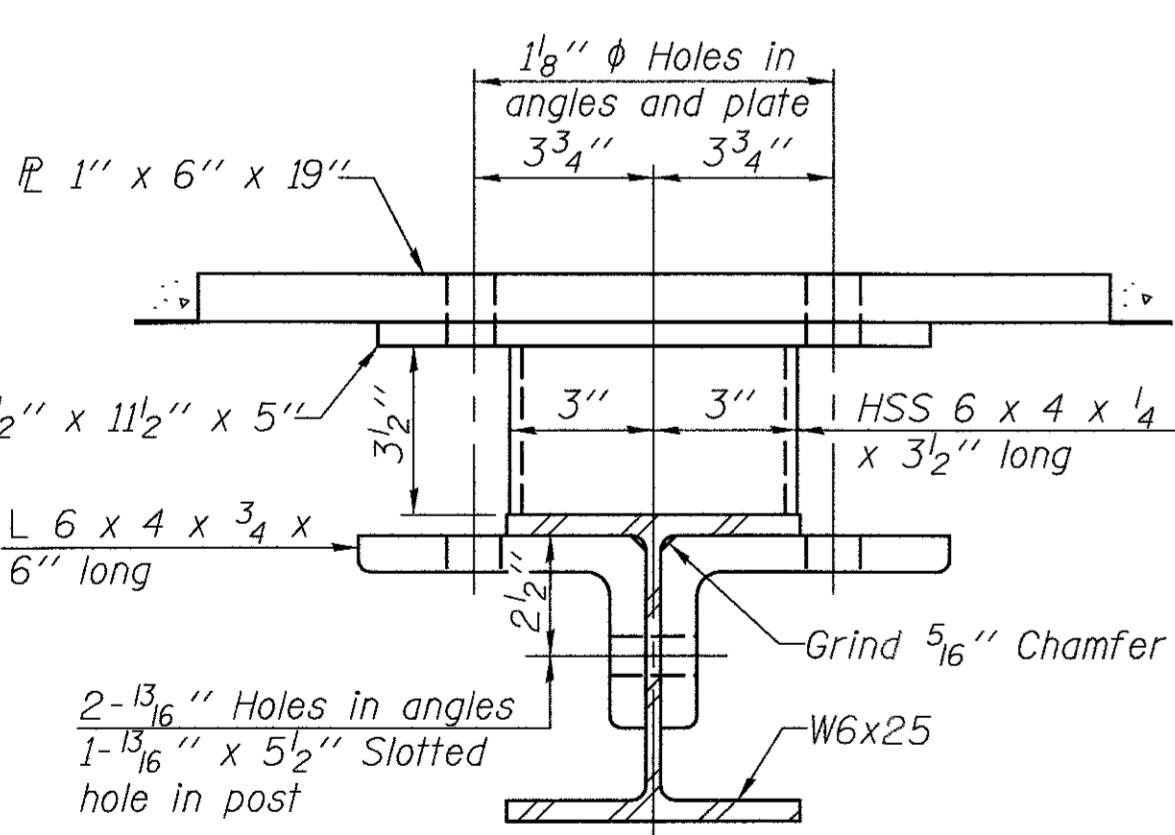
PREFORMED JOINT STRIP SEAL
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY

SHEET NO.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	197	11-00204-00-BR	WHITESIDE	55	12
12 SHEETS			S.N. 098-0042		CONTRACT NO. -
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

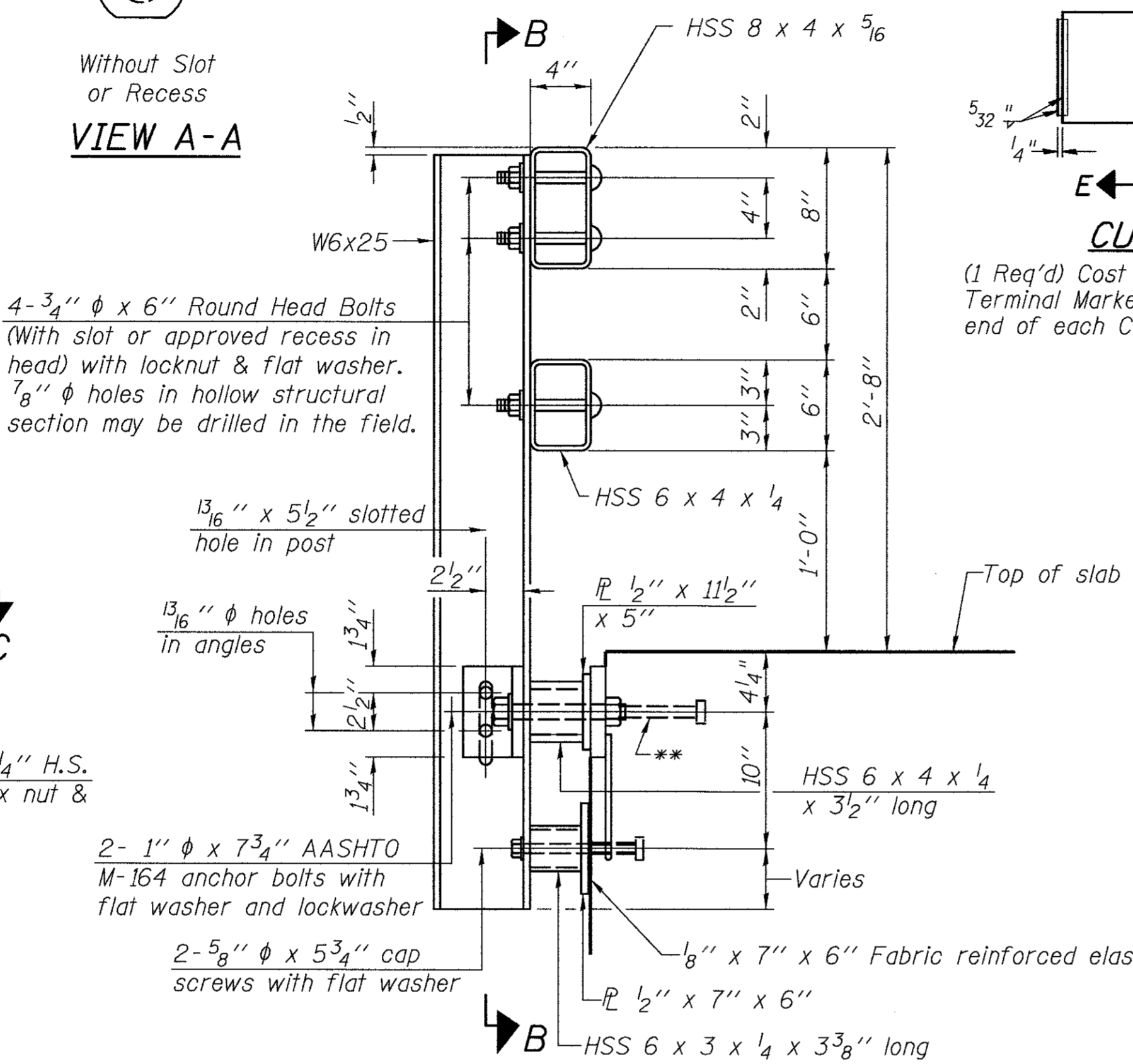
FOR RAIL POST SPACING SEE SH.#6 OF 12.



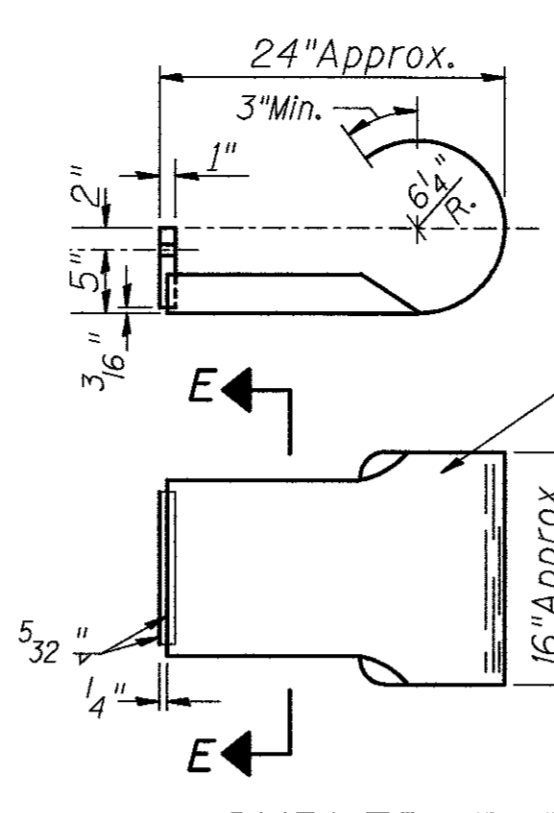
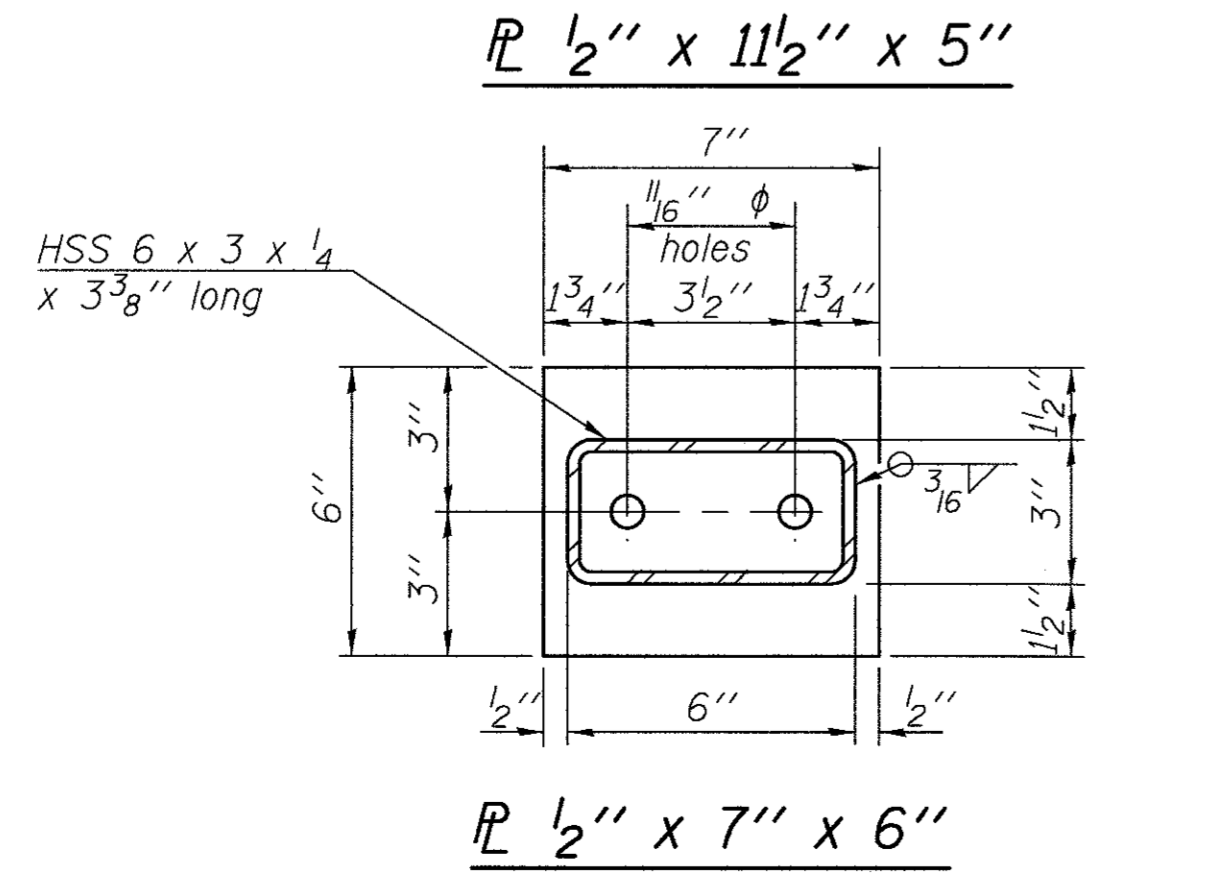
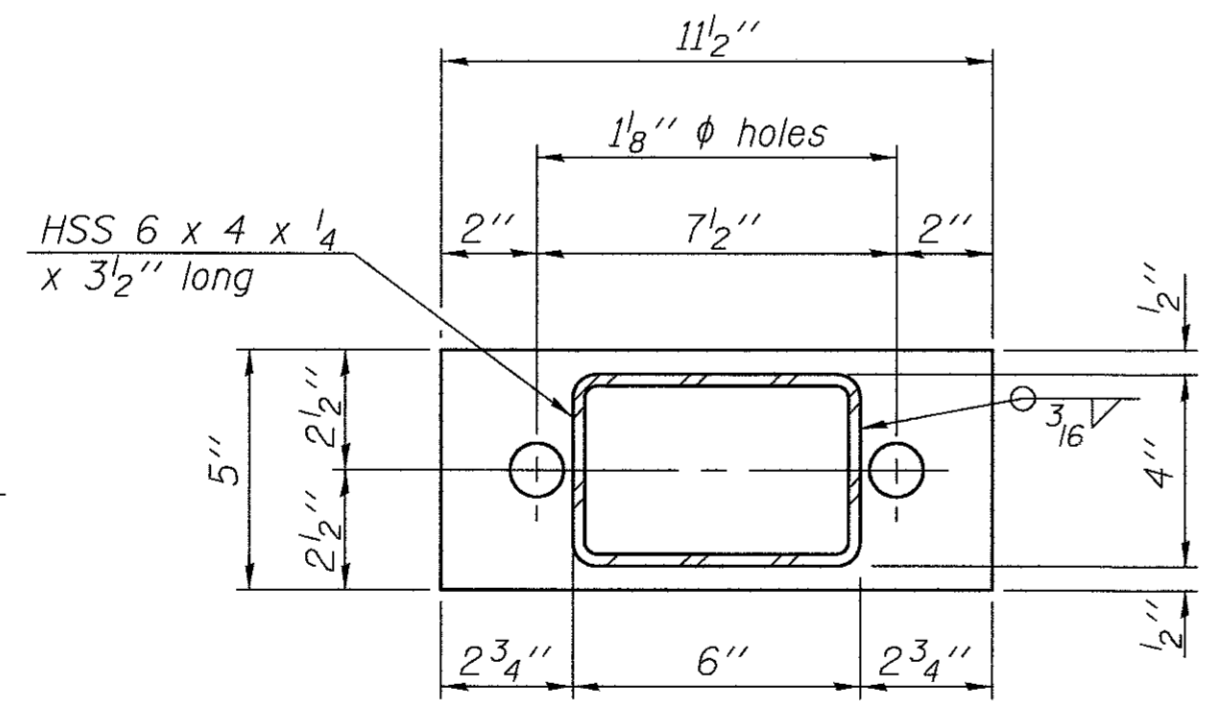
SECTION B-B



SECTION C-C

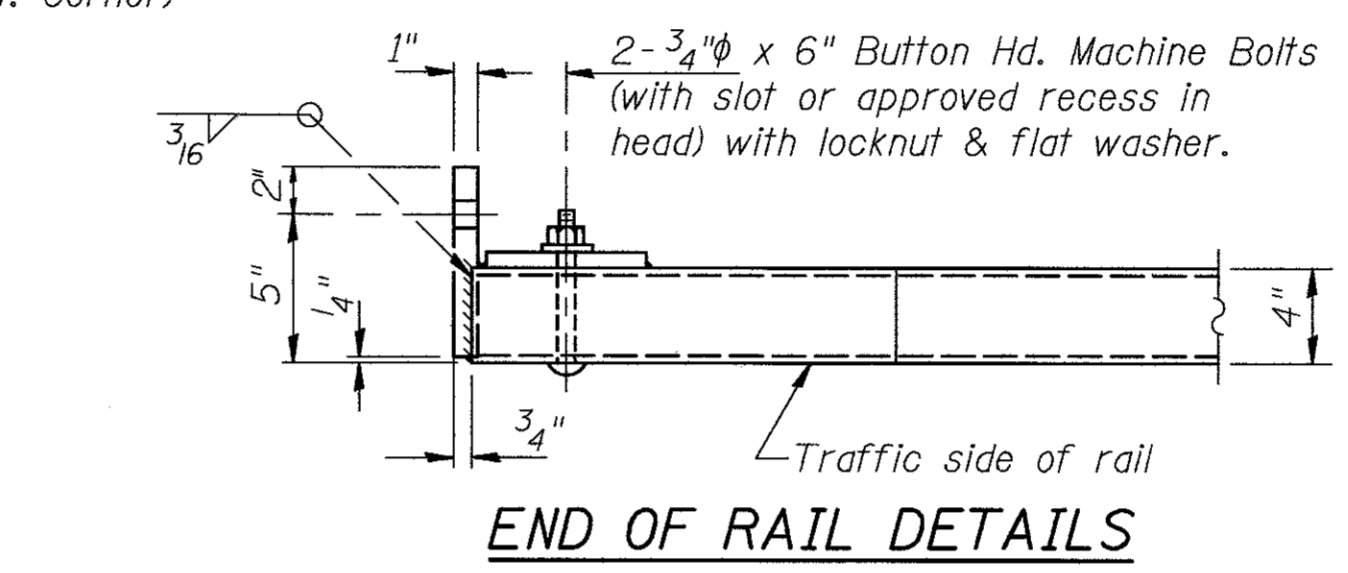


SECTION AT RAIL POST

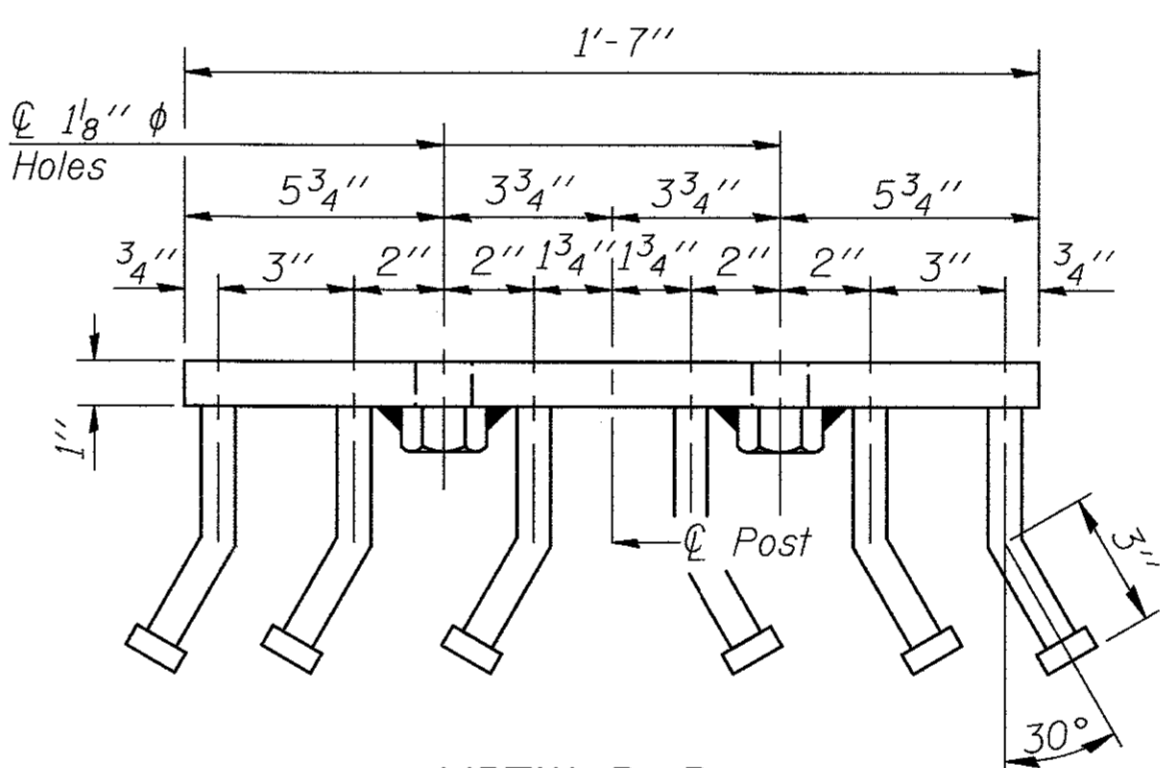


CURLLED END SECTION

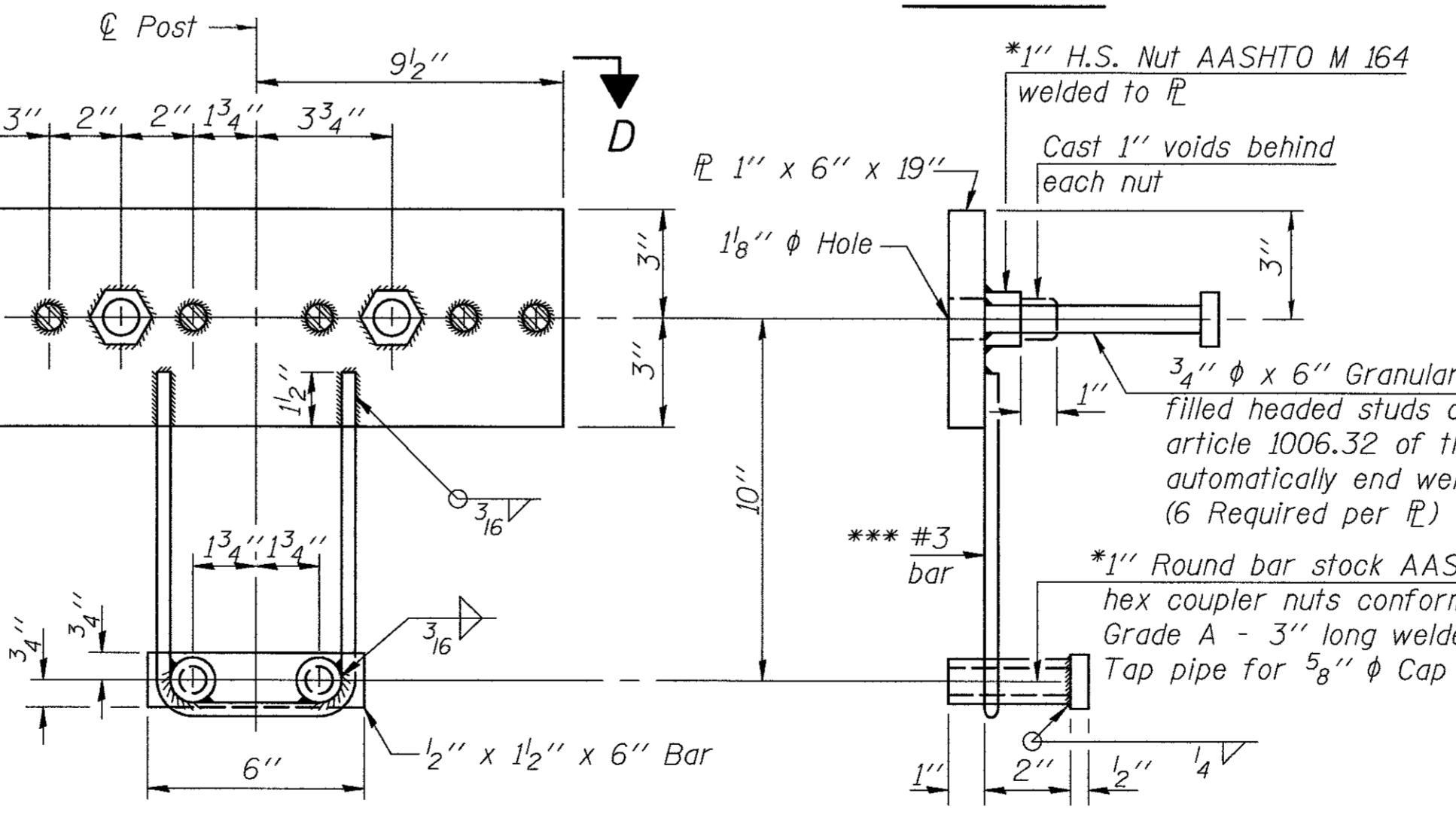
(1 Req'd) Cast Included with Steel Bridge Rail, Type SM (Special). Terminal Markers - Direct Applied shall be placed on end of each Curled End Section. (N.W. Corner)



END OF RAIL DETAILS

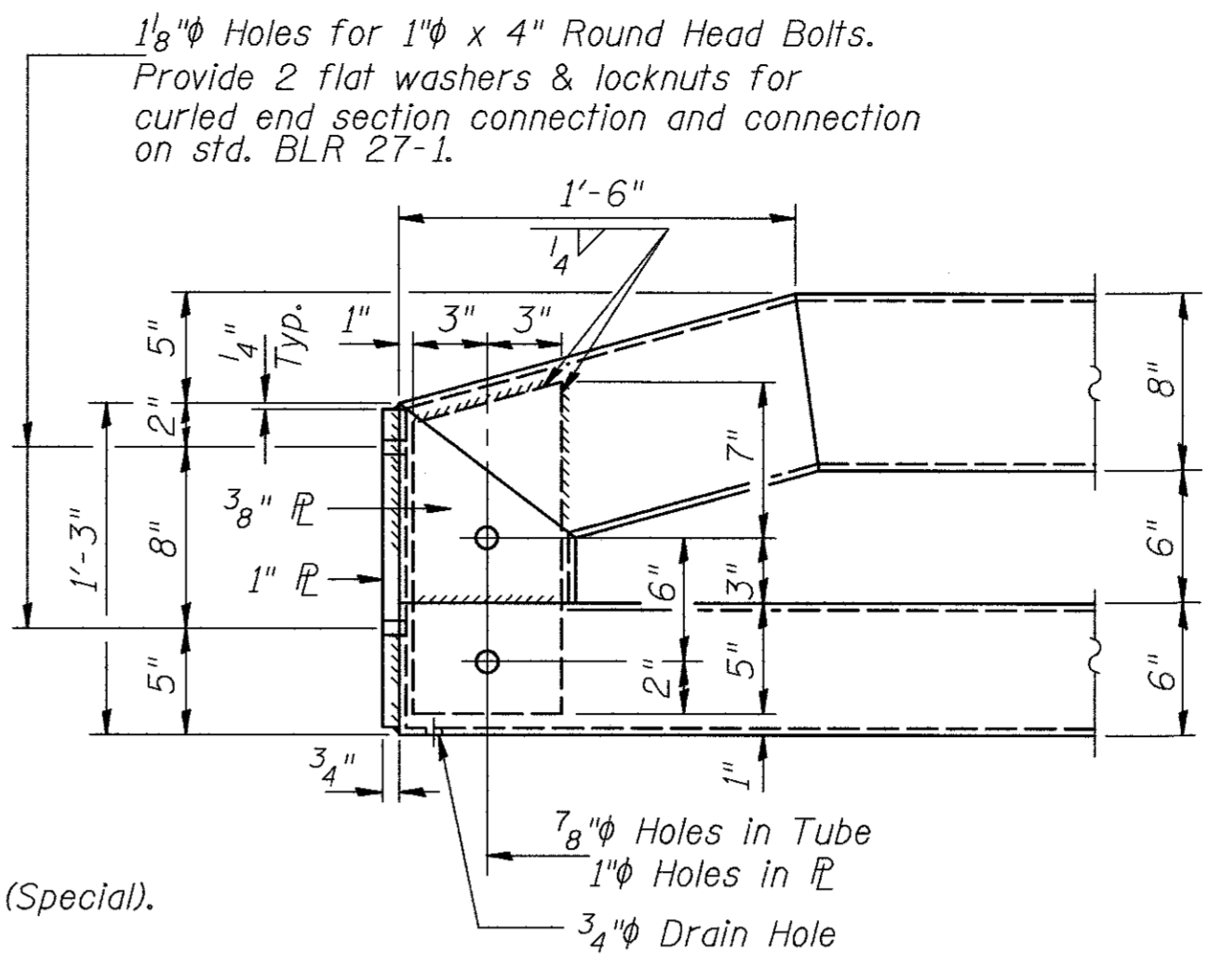


VIEW D-D

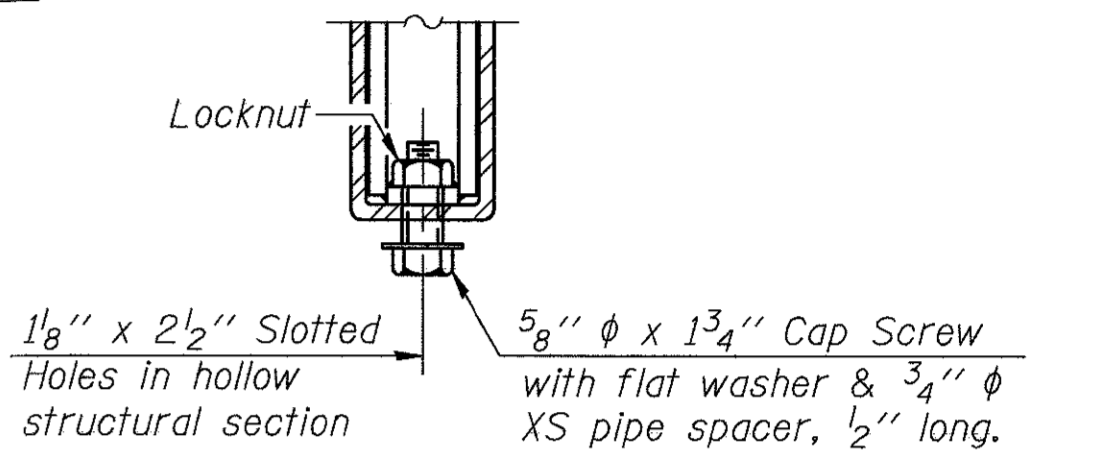


ANCHOR DEVICE

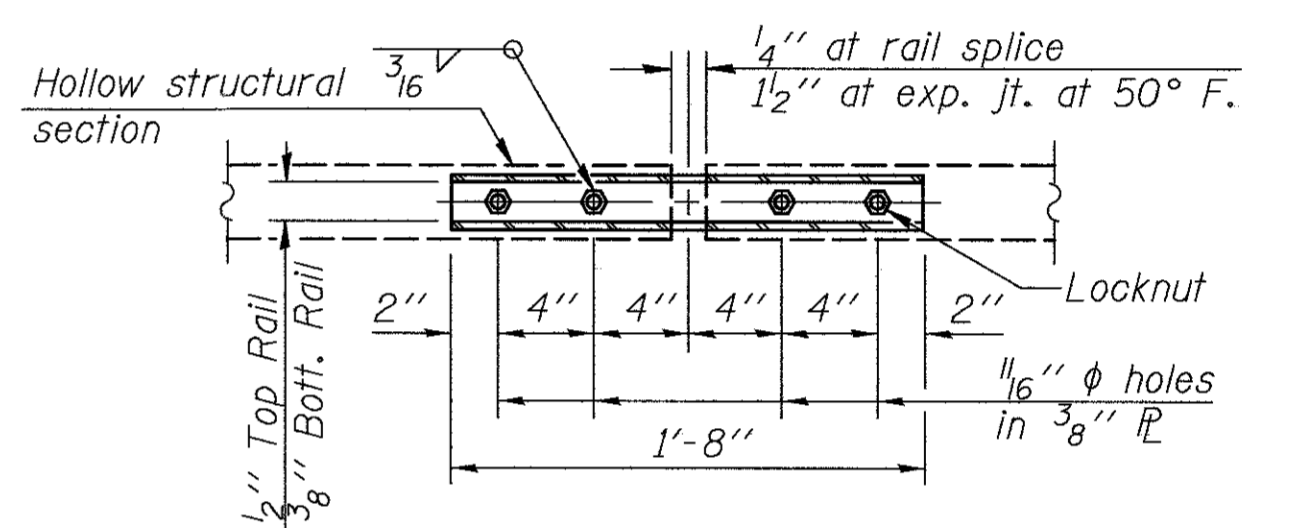
*Threaded areas shall be plugged or blocked off during casting of deck. Galvanized after fabrication.



SECTION AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE P TYPICAL

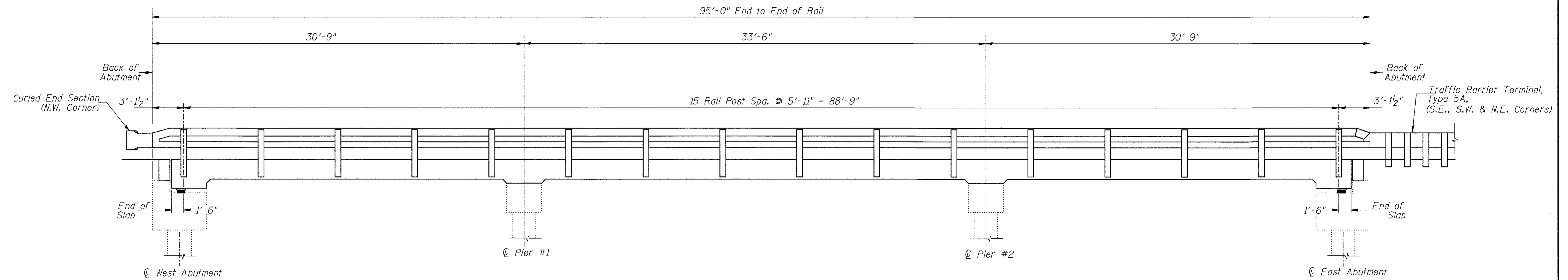
- Notes:
- All field drilled holes shall be coated with an approved zinc rich paint before erection.
 - For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Bridge Rail, Type SM (Special).
 - All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.
 - ** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.
 - *** Whenever the lower insert assemblies interfere with longitudinal reinforcement bar locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Steel Bridge Rail, Type SM (Special)	FOOT	190

STEEL BRIDGE RAIL, TYPE SM (SPECIAL)
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY

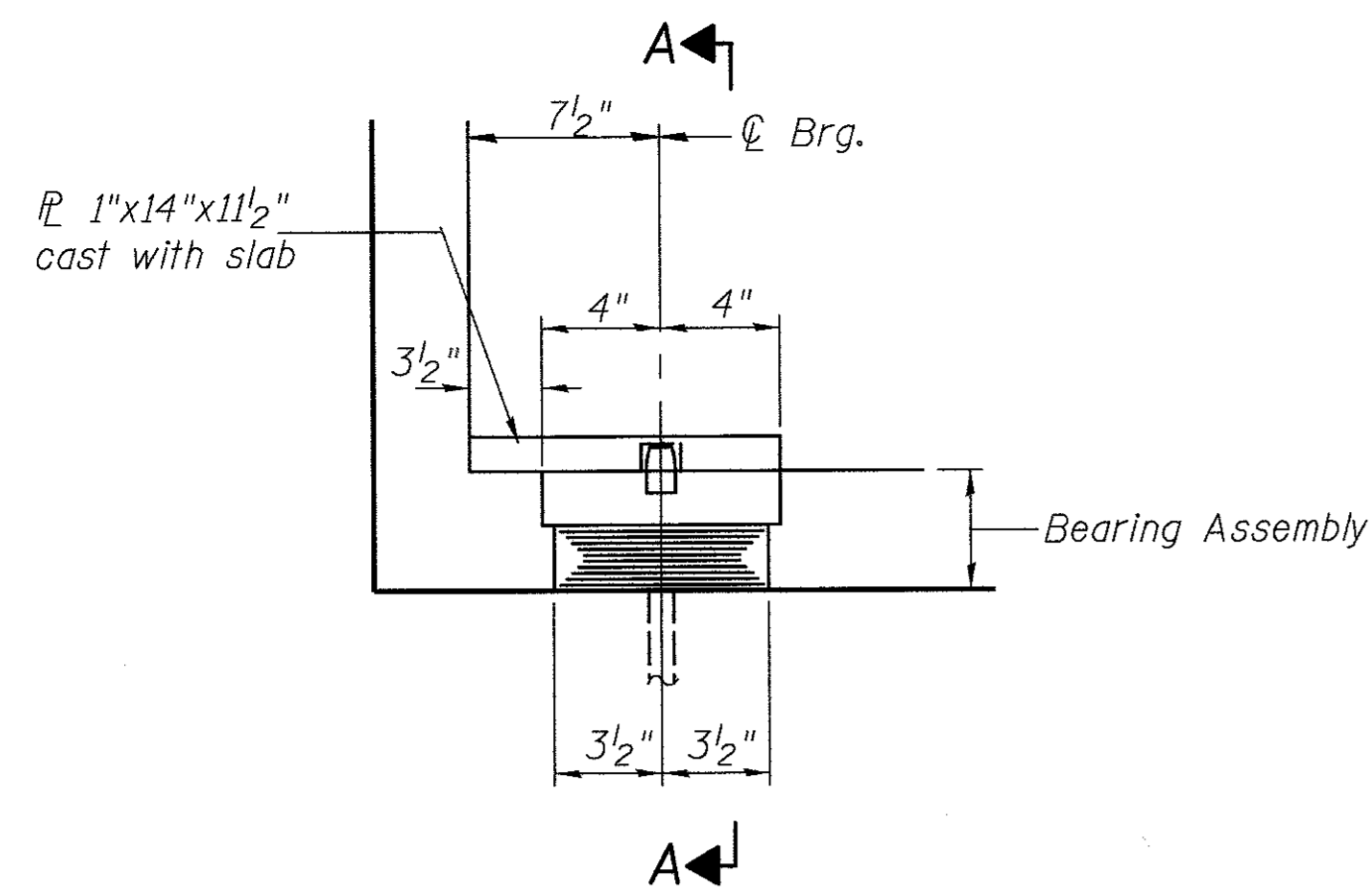
SHEET NO. 5	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	197	11-00204-00-BR	WHITESIDE	55	13
12 SHEETS	S.N. 098-0042		CONTRACT NO. -		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT			



RAIL POST SPACING

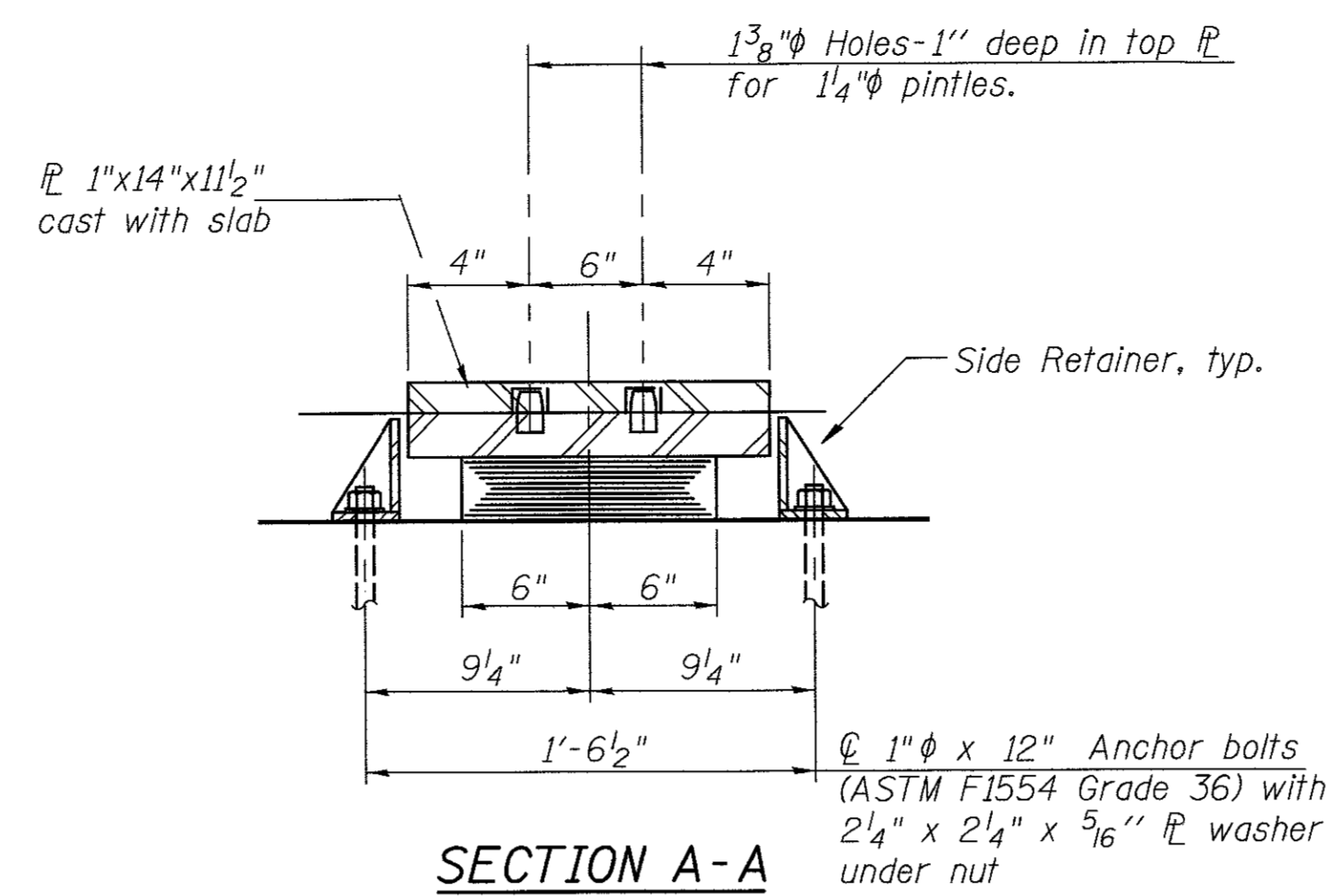
RAIL POST SPACING
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY

SHEET NO. 6	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	197	11-00204-00-BR	WHITESIDE	55	14
S.N. 098-0042			CONTRACT NO. -		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		

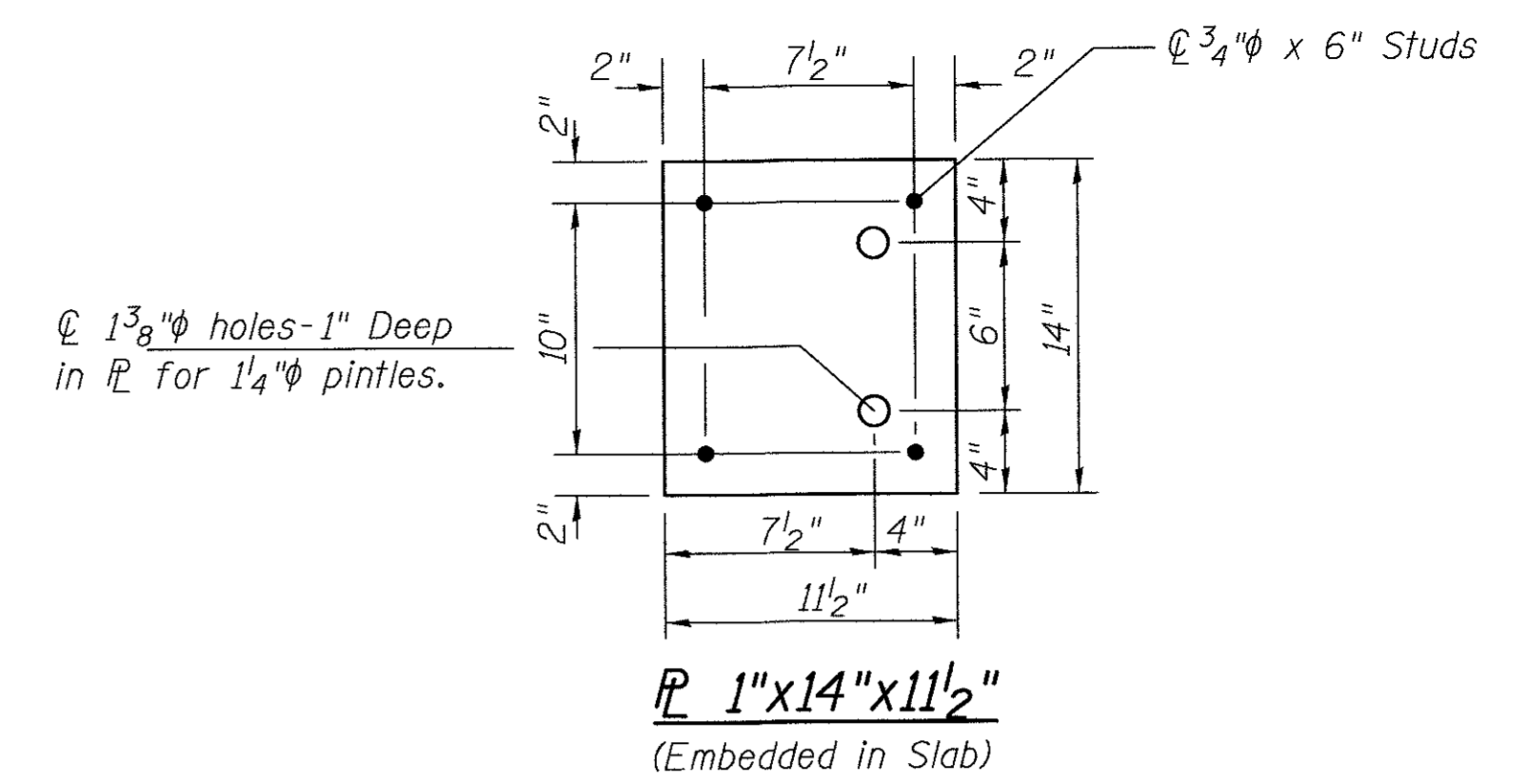


ELEVATION AT ABUT.

**TYPE I ELASTOMERIC EXP. BRG.
AT ABUTMENTS**



SECTION A-A



Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

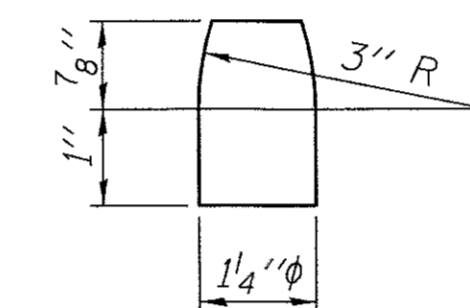
Anchor bolts for side retainers will be installed in holes drilled before members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

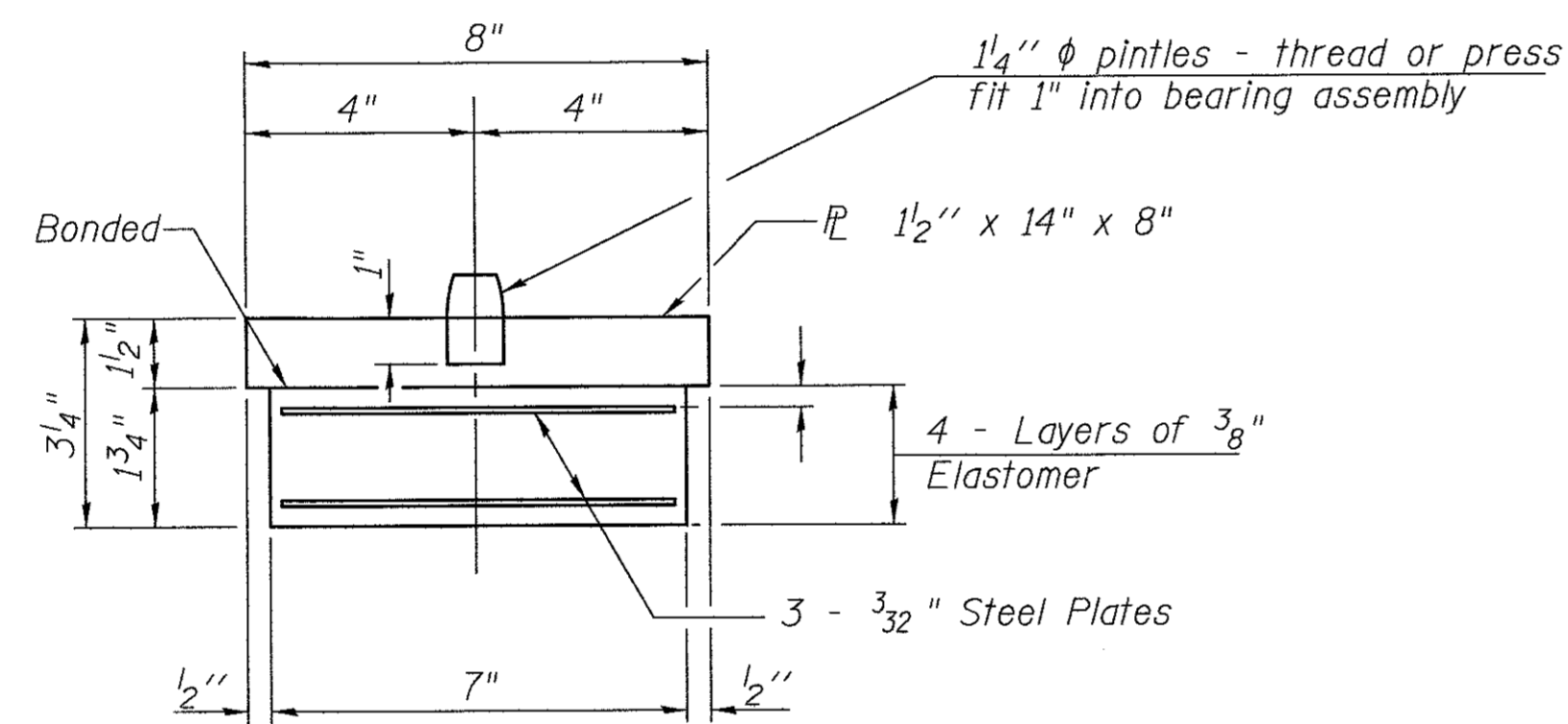
Side retainers, embedded steel plates, and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

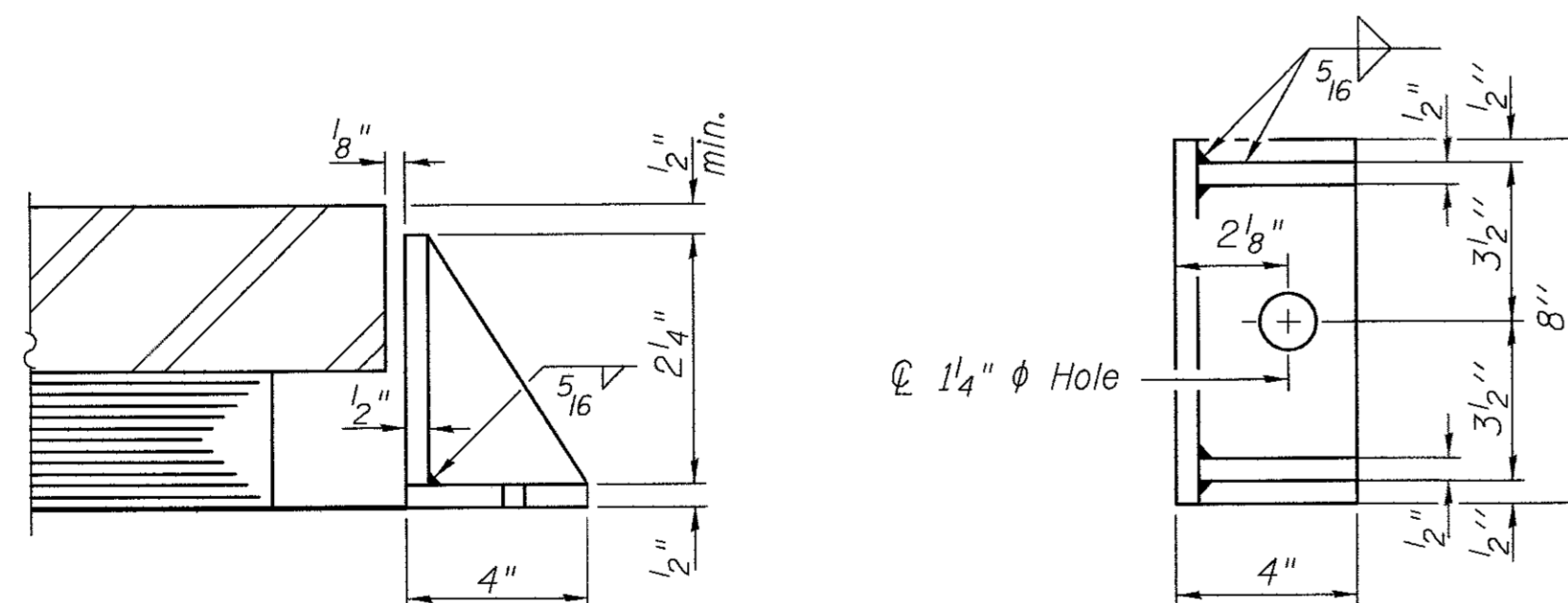
All embedded and separate bearing plates, side retainers, anchor bolts, nuts, washers, and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.



PINTLE



BEARING ASSEMBLY



SIDE RETAINER

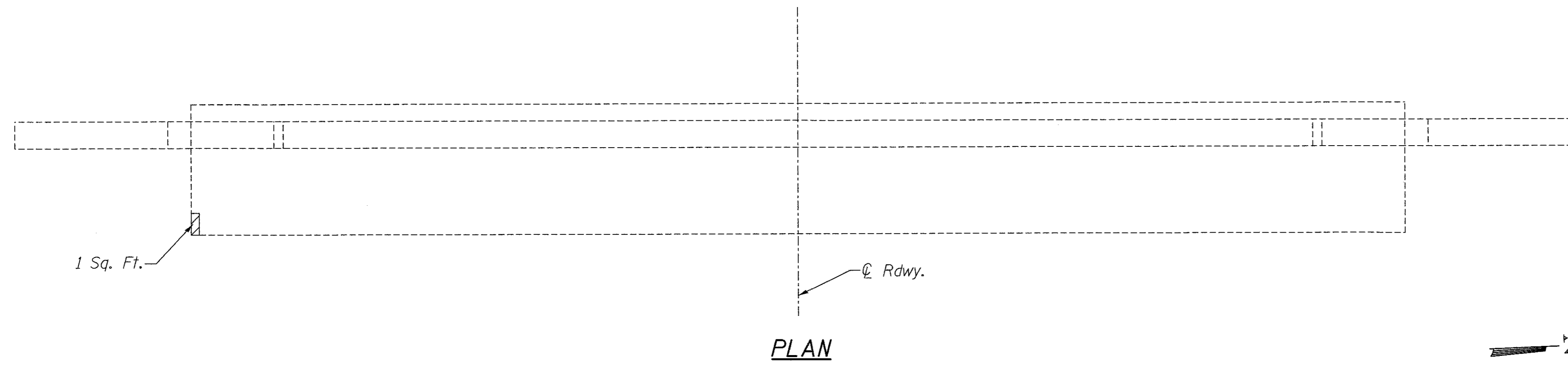
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

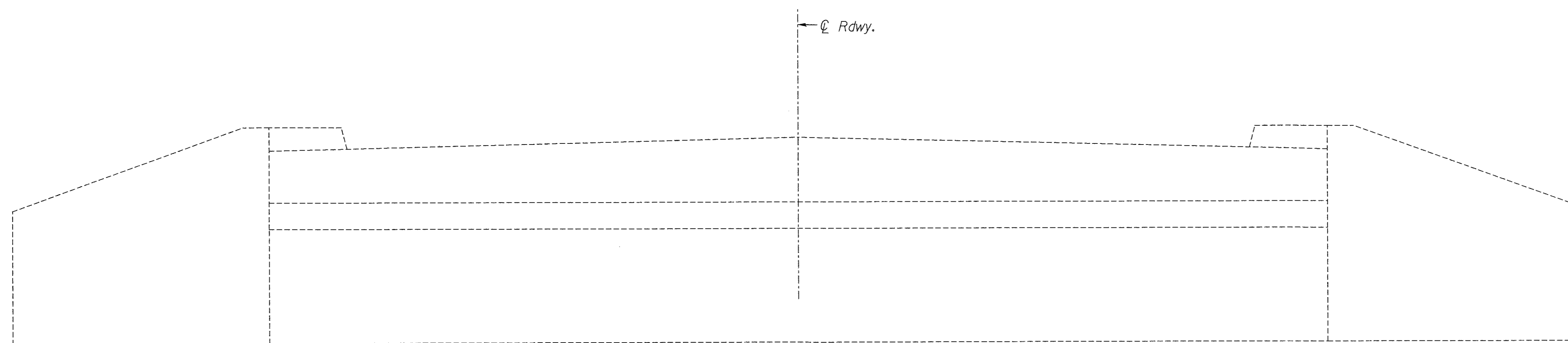
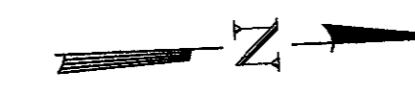
ITEM	UNIT	TOTAL
Elastomeric Bearing Assembly, Type I	EACH	10
Anchor Bolts, 1"	EACH	20

**BEARING DETAILS
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY**

SHEET NO. 7	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	197	11-00204-00-BR	WHITESIDE	55	15
S.N. 098-0042			CONTRACT NO. -		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

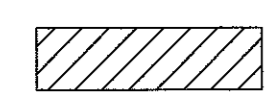


PLAN



ELEVATION
(East Face, Looking West)

LEGEND

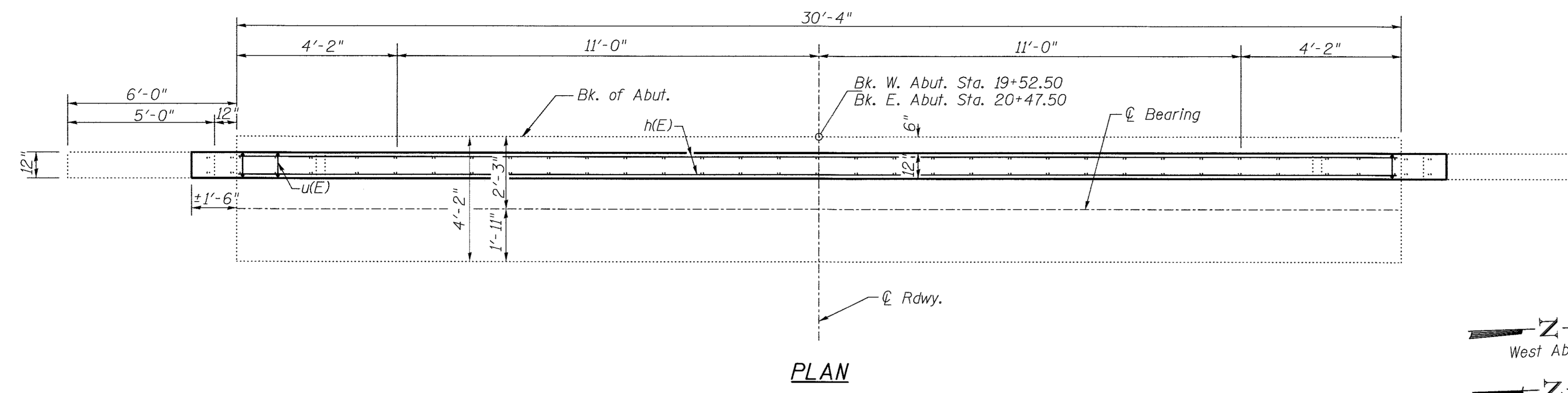
 Structural Repair of Concrete
(Depth equal to or less than 5 inches)

BILL OF MATERIAL

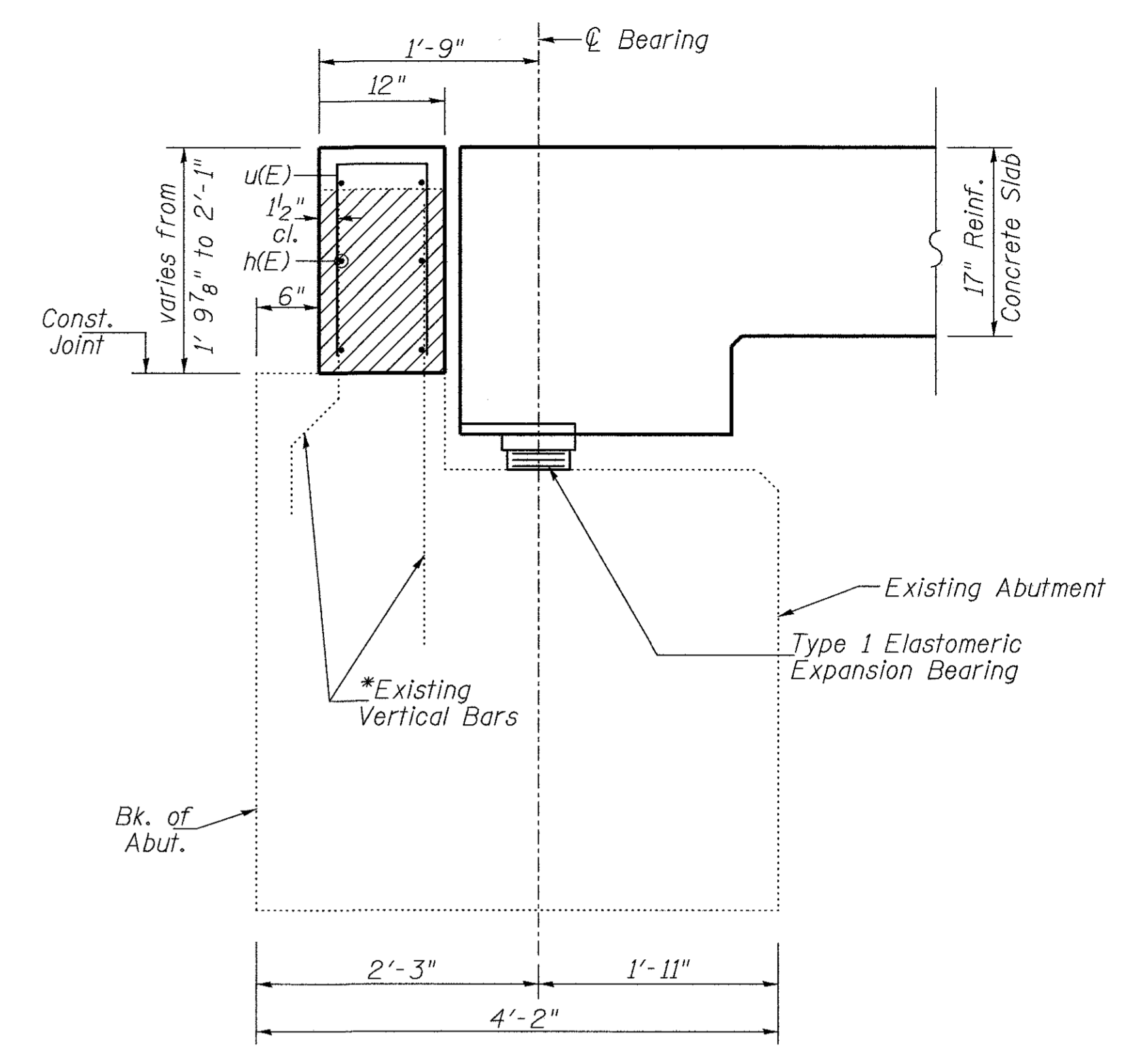
ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5 inches)	SQ FT	1

WEST ABUTMENT REPAIR
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY

SHEET NO. 8	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	197	11-00204-00-BR	WHITESIDE	55	16
S.N. 098-0042			CONTRACT NO. -		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

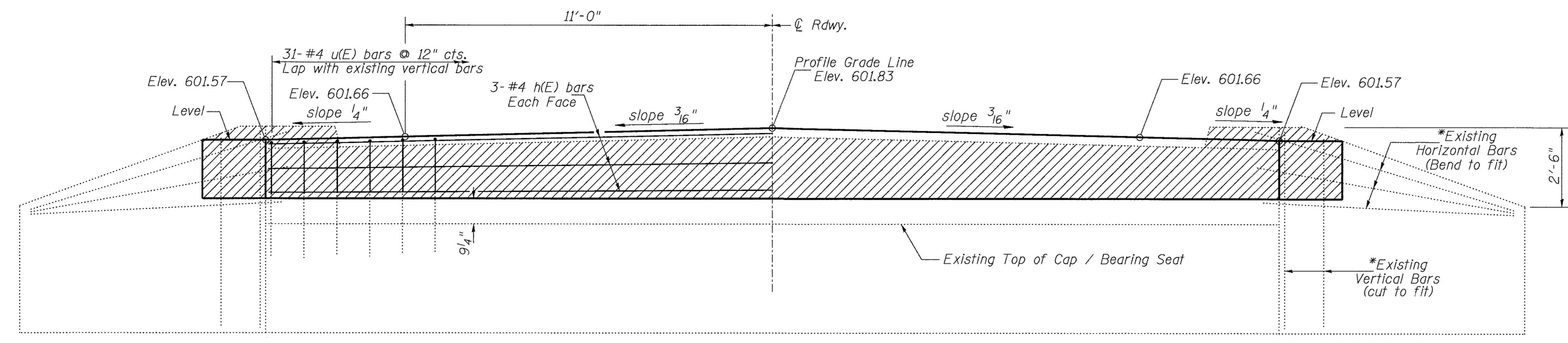


PLAN

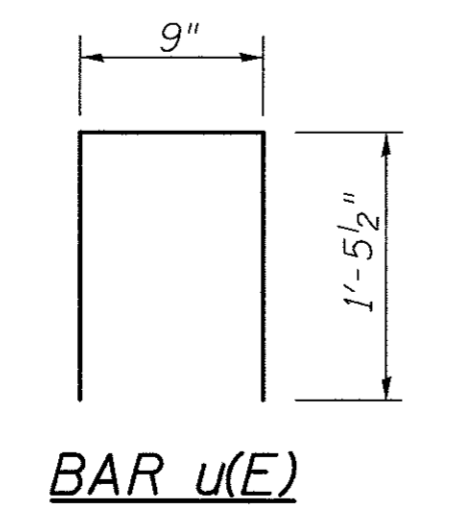
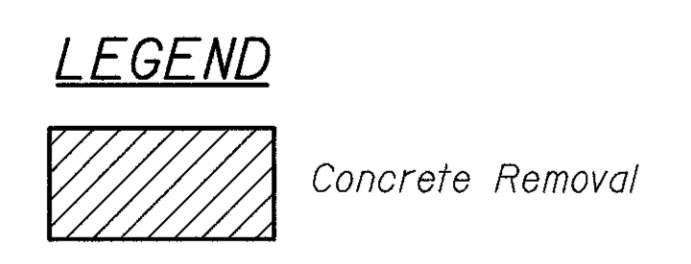


SECTION THRU ABUTMENT

*Existing exposed reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.



ELEVATION
(Front View of Abutment)



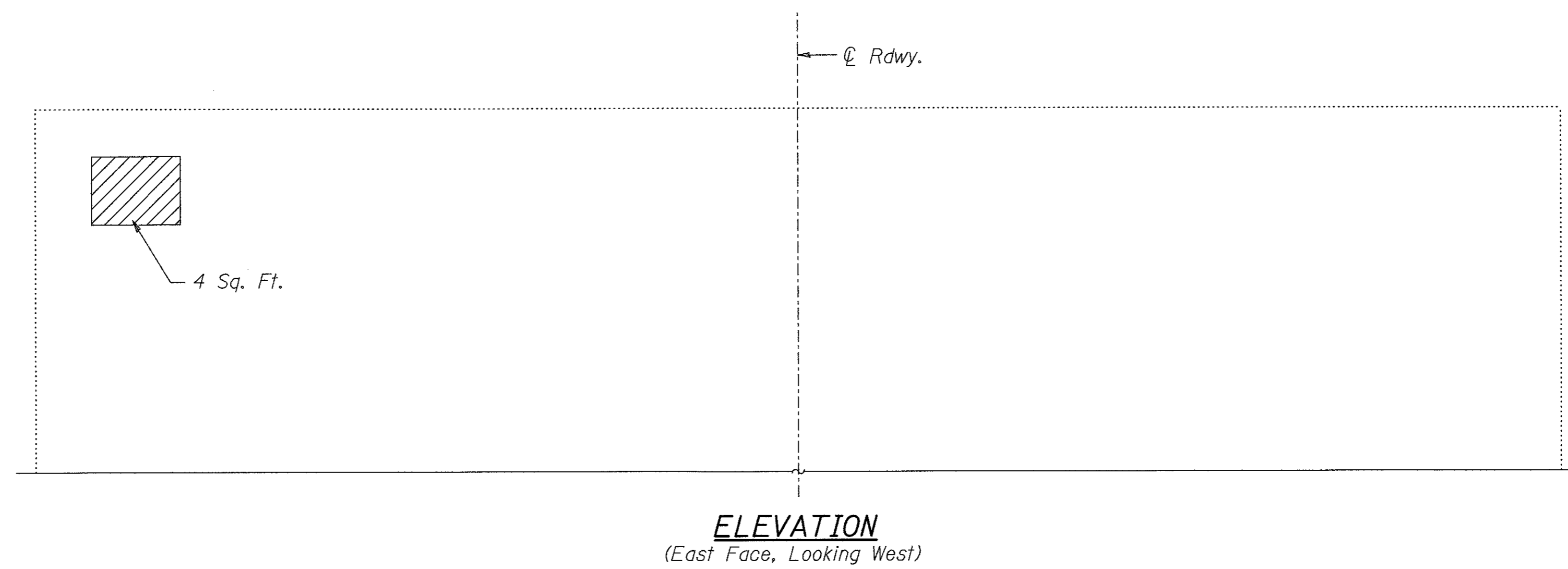
Notes:
Existing exposed reinforcement not incorporated into the new construction shall be burnt flush with existing concrete surface. Grind existing bar smooth and seal with epoxy.
Concrete to be poured after superstructure falsework is removed. Quantity of concrete included with Concrete Superstructure on Sheet 3 of 12.

**TWO ABUTMENTS
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	12	#4	30'-0"	—
u(E)	62	#4	3'-8"	□
Concrete Removal			CU YD	3.8
Reinforcement Bars, Epoxy Coated			POUND	390

**ABUTMENTS
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY**

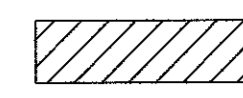
SHEET NO. 9 12 SHEETS	F.A.S. RTE. 197	SECTION 11-00204-00-BR	COUNTY WHITESIDE	TOTAL SHEETS 55	SHEET NO. 17
	S.N. 098-0042		CONTRACT NO. -		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT			



BILL OF MATERIAL

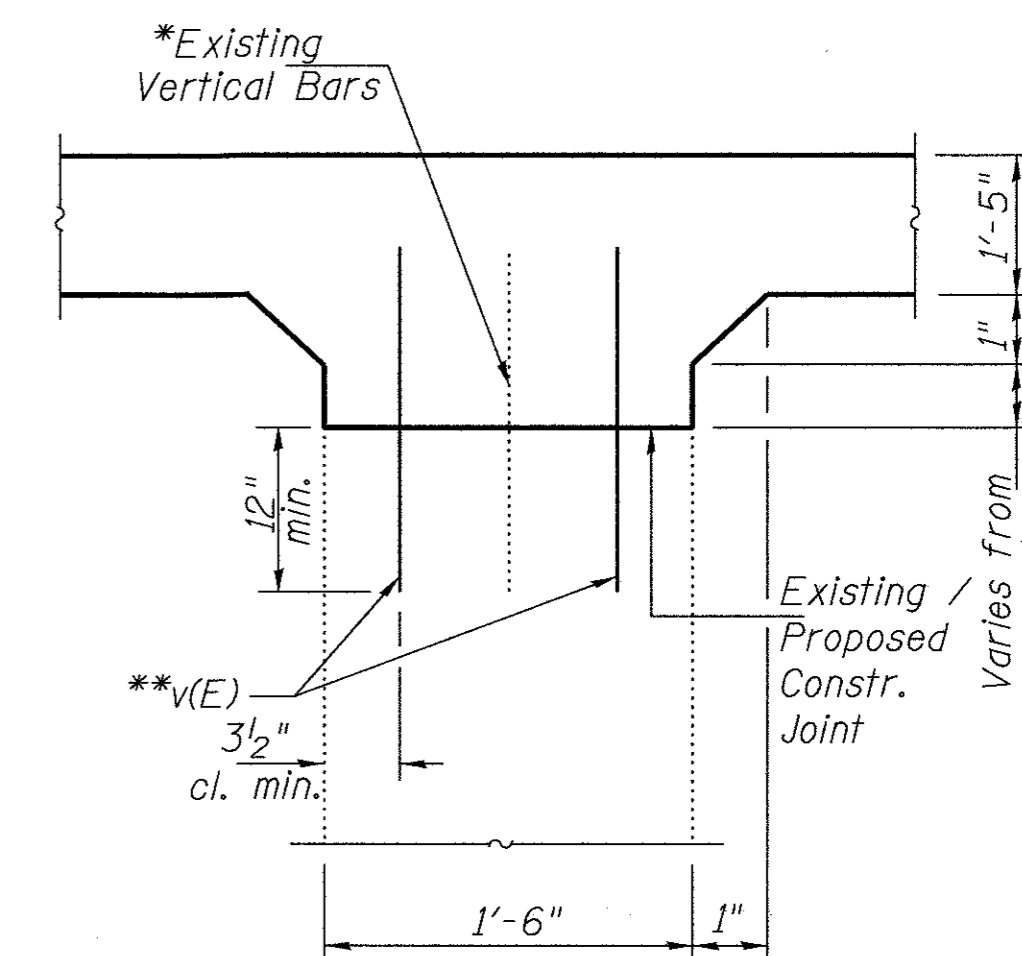
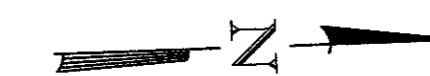
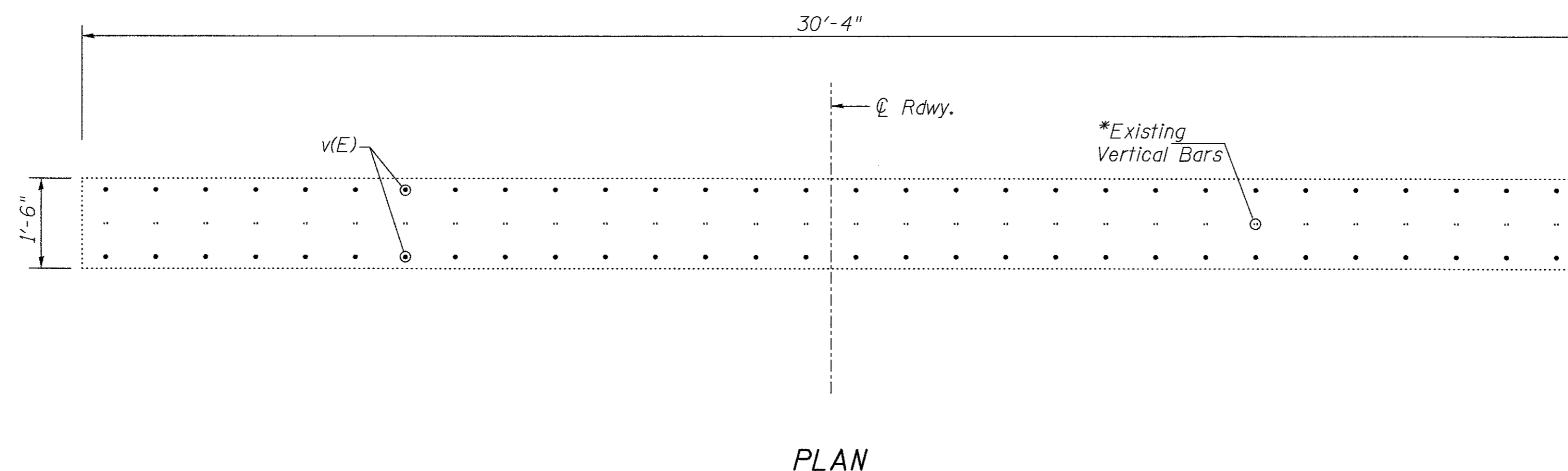
ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5 inches)	SQ FT	4

LEGEND

 Structural Repair of Concrete (Depth equal to or less than 5 inches)

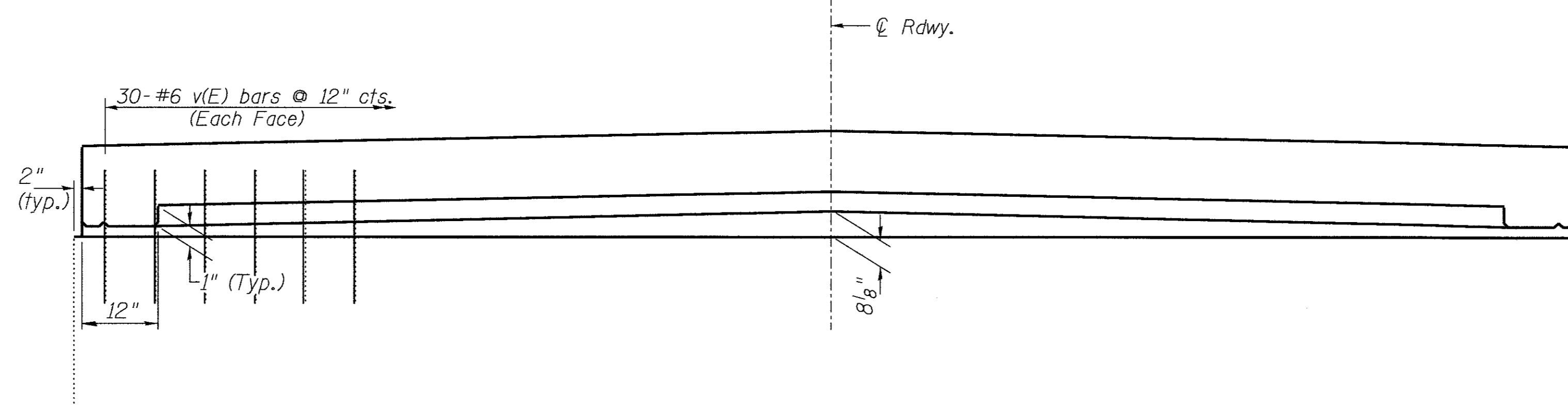
**PIER 1 REPAIR
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY**

SHEET NO. 10	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	197	11-00204-00-BR	WHITESIDE	55	18
S.N. 098-0042			CONTRACT NO. -		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



*Existing exposed reinforcement shall be cleaned and incorporated into the new construction. Cost Included with Concrete Removal.

**Drill and grout bars in 1" x 12" holes min according to Art. 584 of the Standard Specifications.

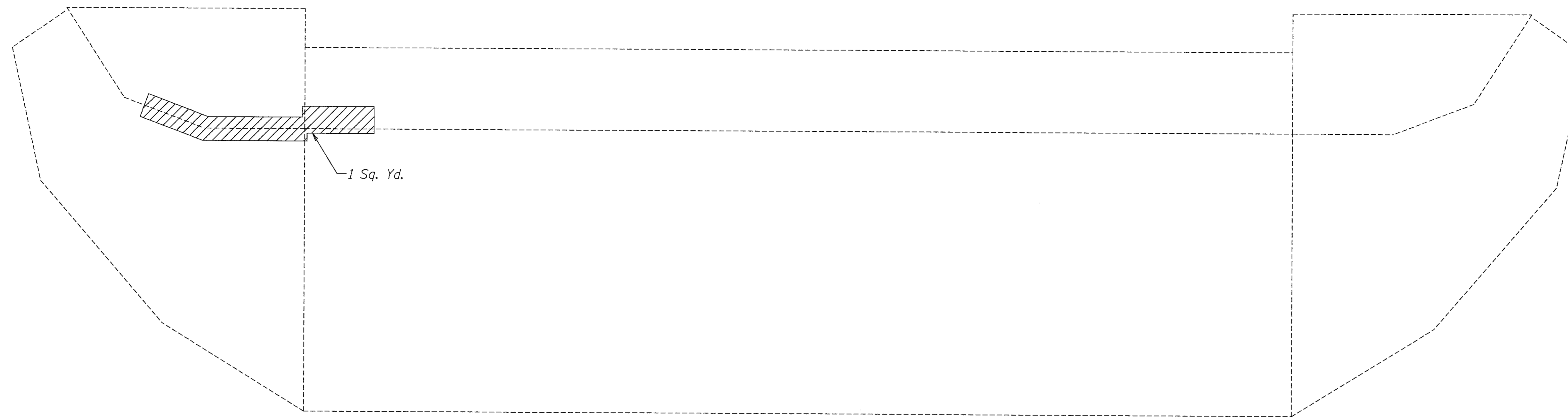


**TWO PIERS
BILL OF MATERIAL**

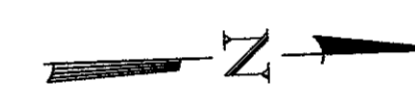
BAR	NO.	SIZE	LENGTH	SHAPE
v(E)	120	#6	2'-3"	—
Reinforcement Bars, Epoxy Coated			POUND	410

**PIERS
C.H. 23 OVER DRAINAGE DITCH
SECTION 11-00204-00-BR
WHITESIDE COUNTY**

SHEET NO. 11 12 SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	197	11-00204-00-BR	WHITESIDE	55	19
	S.N. 098-0042		CONTRACT NO. -		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



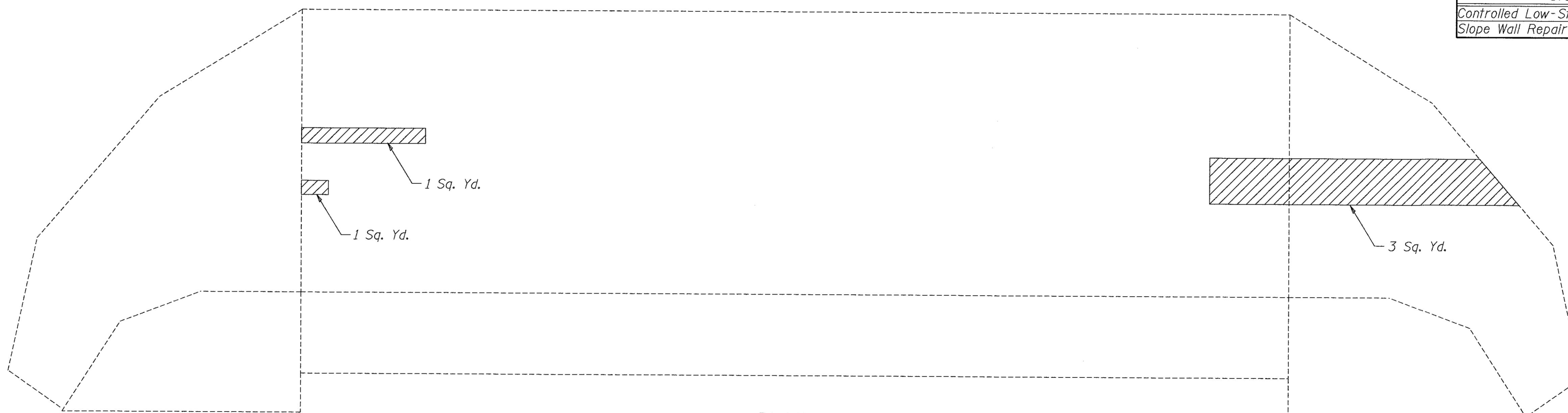
PLAN
(West Slope Wall)



Notes:
 Pump Controlled Low-Strength Material in locations where slope wall undermining has occurred. Quantity is estimated, exact quantity to be determined in field.
 Slopewall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft. Splice 6" minimum with existing, if required.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Controlled Low-Strength Material	CU YD	5
Slope Wall Repair	SQ YD	6



PLAN
(East Slope Wall)

LEGEND

Slope Wall Repair

**SLOPE WALL REPAIR
 C.H. 23 OVER DRAINAGE DITCH
 SECTION 11-00204-00-BR
 WHITESIDE COUNTY**

SHEET NO. 12	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	197	11-00204-00-BR	WHITESIDE	55	20
12 SHEETS	S.N. 098-0042		CONTRACT NO. -		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES – RESURFACING SECTION

20200100	EARTH EXCAVATION	CU YD
Lt & Rt Sta	21 + 50 - 36 + 50	423
TOTAL		423
20400800	FURNISHED EXCAVATION	CU YD
Lt & Rt Sta	21 + 50 - 36 + 50	492
TOTAL		492
25100630	EROSION CONTROL BLANKET	SQ YD
Rt Sta	23 + 25 - 23 + 75	84
TOTAL		84
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND
Lt Sta	21 + 50 - 36 + 50	90
Rt Sta	21 + 50 - 36 + 50	70
TOTAL		160
28000400	PERIMETER EROSION BARRIER	FOOT
Rt Sta	24 + 00 - 35 + 50	1150
Lt Sta	36 + 00 - 36 + 50	50
TOTAL		1200
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND
Sta	21 + 50 - 36 + 50	1800
TOTAL		1800
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50	TON
Sta	21 + 50 - 36 + 50	417
TOTAL		417
44201771	CLASS D PATCHES, TYPE IV, 10"	SQ YD
Sta	23 + 75	46
		46
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON
Lt & Rt Sta	21 + 50 - 36 + 50	57
TOTAL		57
63200310	GUARDRAIL REMOVAL	FOOT
Rt Sta	22 + 65 - 24 + 29	175
Lt Sta	23 + 06 - 25 + 21	225
TOTAL		400

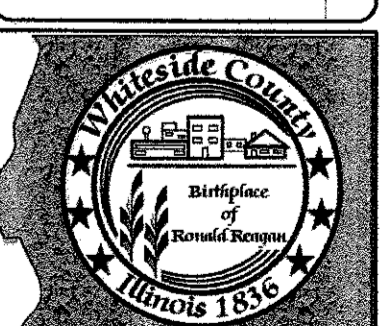
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT
Lt & Rt Sta	21 + 50 - 45 + 30	4760
Sta	21 + 50 - 23 + 00	188
Sta	23 + 00 - 34 + 73	293
Sta	34 + 73 - 36 + 50	221
TOTAL		5462
78006100	PERFORMED THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ FT
Lt Sta	23 + 54	105.2
TOTAL		105.2
X1200050	BOX CULVERT REMOVAL	FOOT
Sta	23 + 75	31
		31
X2090210	POROUS GRANULAR BACKFILL, SPECIAL	CU YD
Sta	23 + 75	144
		144
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE
Lt Sta	21 + 50 - 36 + 50	0.9
Rt Sta	21 + 50 - 36 + 50	0.7
TOTAL		2

REVISIONS	DATE

DESIGNED BY:	
DRAWN BY:	J. KOCH
CHECKED BY:	R. RENNER
DATE:	10/22/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
18810 Lincoln Road
Morrison, Illinois 61270

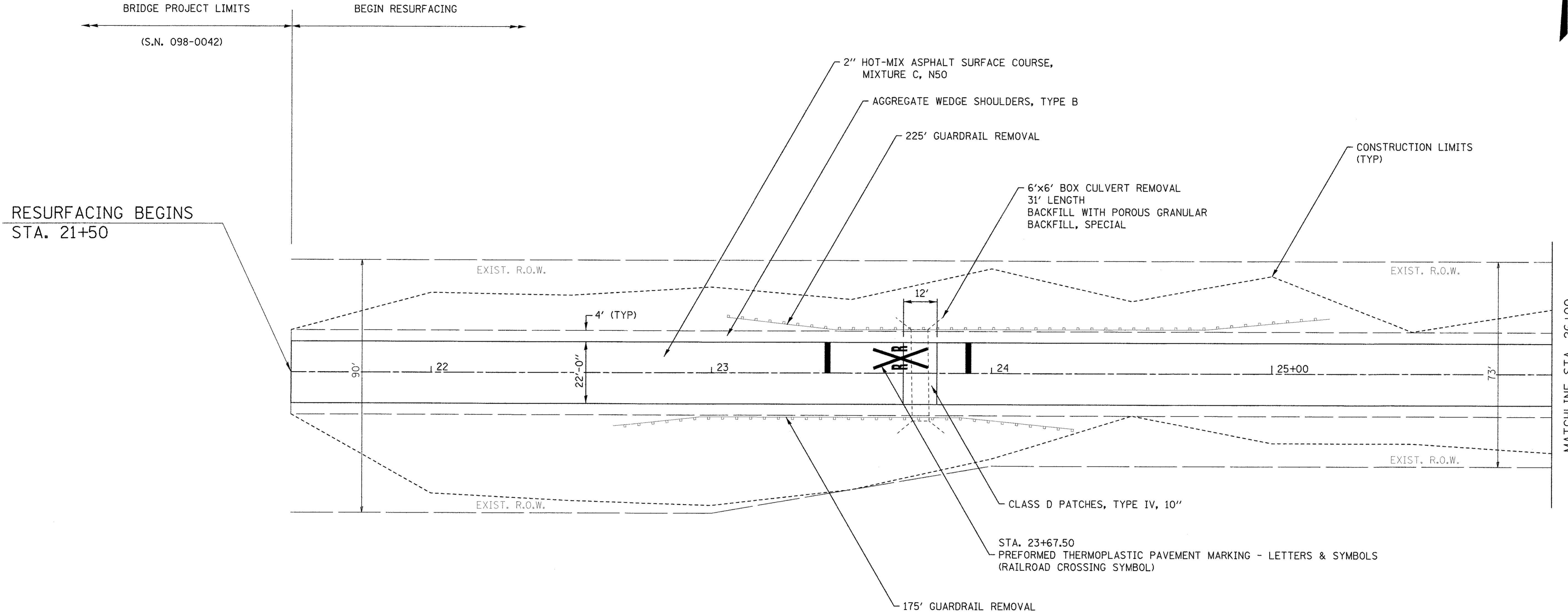
WHITESIDE COUNTY HIGHWAY DEPARTMENT
SCHEDULE OF QUANTITIES
BLACK ROAD RESURFACING SECTION
SCALE: _____ STA. _____ TO STA. _____
SHEET 1 OF 1 SHEETS



ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	21



RESURFACING BEGINS
STA. 21+50

BRIDGE PROJECT LIMITS
(S.N. 098-0042)

BEGIN RESURFACING

2" HOT-MIX ASPHALT SURFACE COURSE,
MIXTURE C, N50

AGGREGATE WEDGE SHOULDERS, TYPE B

225' GUARDRAIL REMOVAL

6'x6' BOX CULVERT REMOVAL
31' LENGTH
BACKFILL WITH POROUS GRANULAR
BACKFILL, SPECIAL

CONSTRUCTION LIMITS
(TYP)

EXIST. R.O.W.

EXIST. R.O.W.

4' (TYP)

12'

90'

22

22'-0"

23

24

25+00

73'

EXIST. R.O.W.

EXIST. R.O.W.

CLASS D PATCHES, TYPE IV, 10"

STA. 23+67.50
PREFORMED THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS
(RAILROAD CROSSING SYMBOL)

175' GUARDRAIL REMOVAL

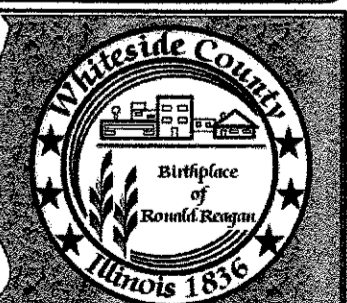
MATCHLINE STA. 26+00

REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 02/01/17
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WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1889 Lincoln Road
Morton, Illinois 62570

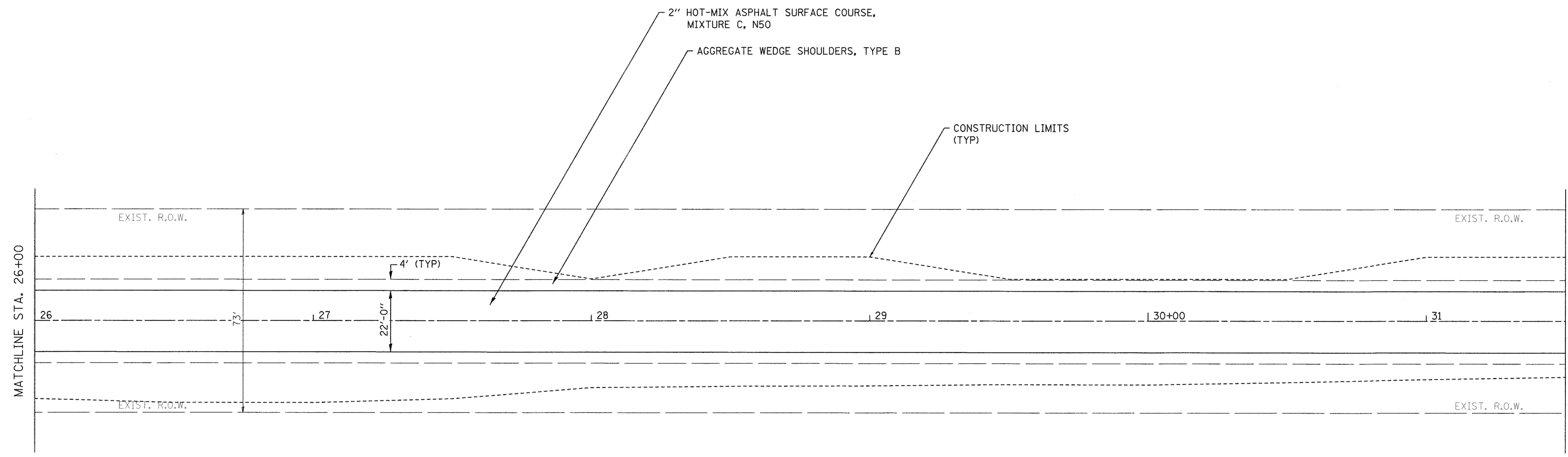
WHITESIDE COUNTY HIGHWAY DEPARTMENT
PLAN
BLACK ROAD RESURFACING
SCALE: 1" = 20'
SHEET 1 OF 3 SHEETS
STA. 21+50 TO STA. 26+00



ROUTE
F.A.S. 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS 55	SHEET NO. 22
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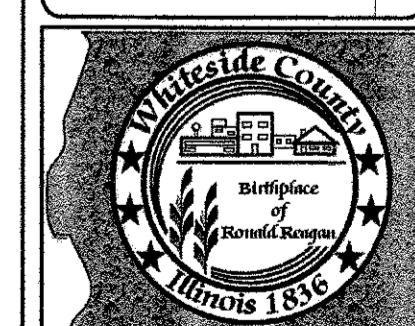
REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	CHECKED BY: R. RENNER
DRAWN BY: J. KOCH	DATE: 02/01/17

**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
18819 Lincoln Road
Morrison, Illinois 62770

**WHITESIDE COUNTY HIGHWAY DEPARTMENT
PLAN
BLACK ROAD RESURFACING**

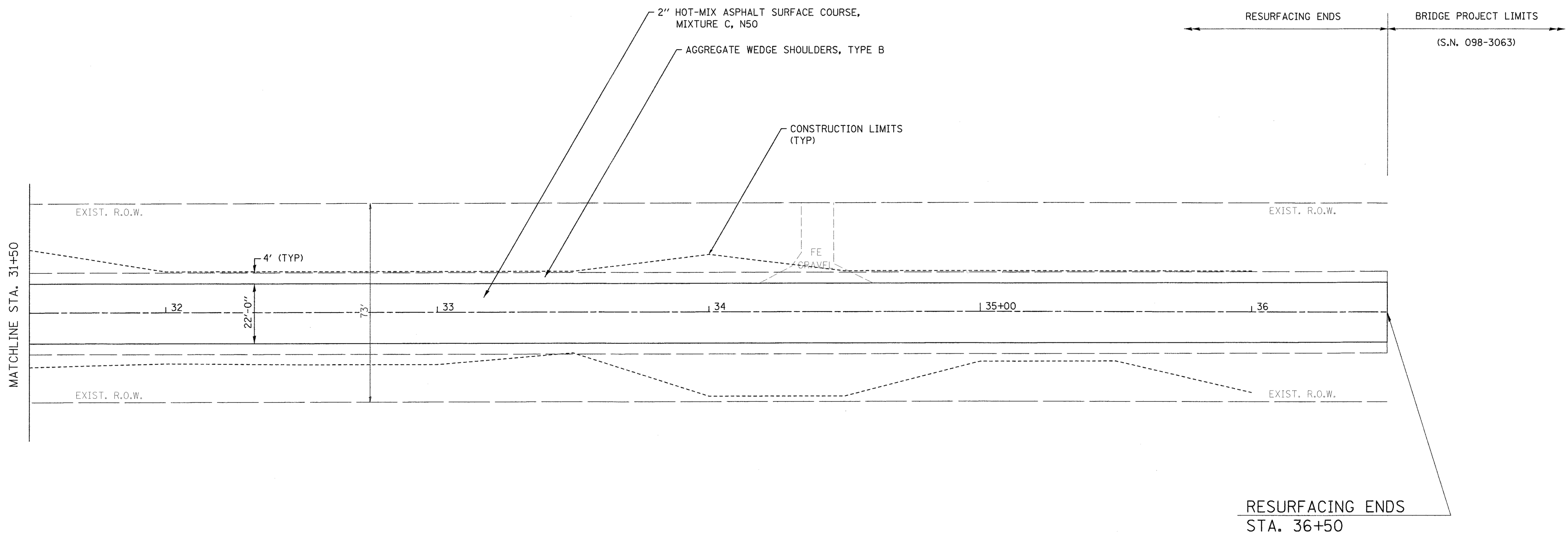
SCALE: 1" = 20' SHEET 2 OF 3 SHEETS STA. 26+00 TO STA. 31+50



ROUTE
F.A.S. 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	23



REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 02/01/17
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WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1800 Lincoln Road
Morrison, Illinois 61270

WHITESIDE COUNTY HIGHWAY DEPARTMENT
PLAN
BLACK ROAD RESURFACING
SCALE: 1" = 20'
SHEET 3 OF 3 SHEETS
STA. 31+50 TO STA. 36+50



ROUTE
F.A.S. 197 (BLACK RD)

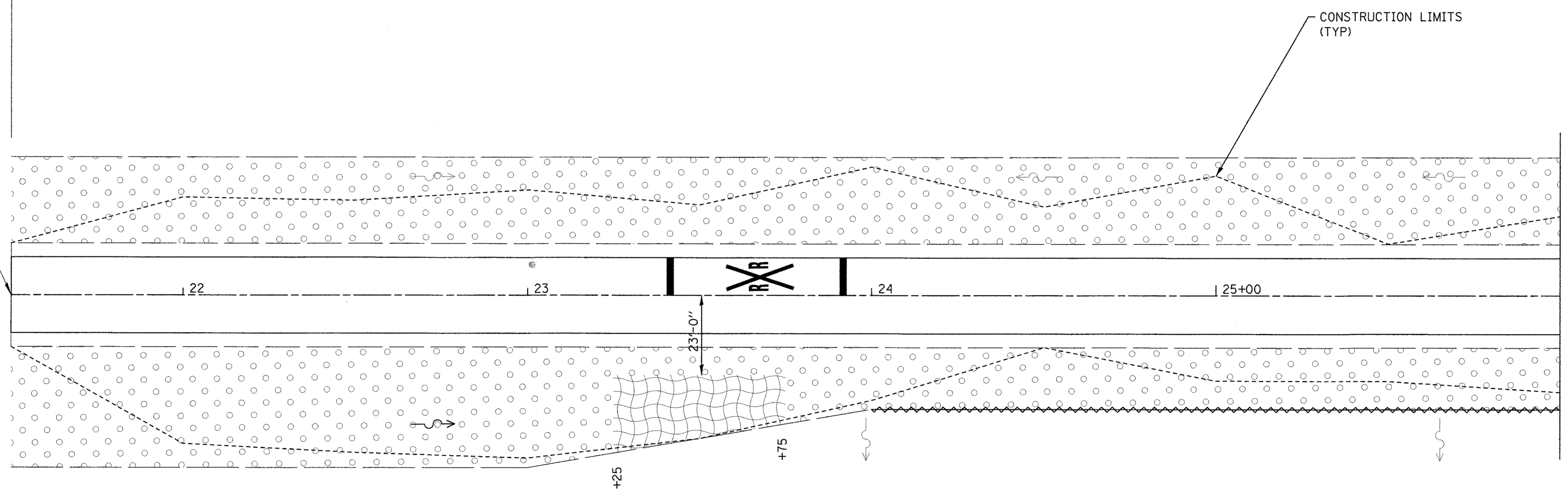
SECTION
11-00204-00-BR

TOTAL SHEETS 55	SHEET NO. 24
---------------------------	------------------------

BRIDGE PROJECT LIMITS
(S.N. 098-0042)

BEGIN RESURFACING

RESURFACING BEGINS
STA. 21+50



MATCHLINE STA. 26+00

LEGEND	
	PERIMETER EROSION BARRIER
	DRAINAGE FLOW
	SEEDING, CLASS 2 (SPECIAL)
	EROSION CONTROL BLANKET

REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 02/01/17
-------------------------	----------------------	--------------------------	----------------

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1889 Lincoln Road
Morton, Illinois 62570

WHITESIDE COUNTY HIGHWAY DEPARTMENT
**EROSION CONTROL & SEEDING
BLACK ROAD RESURFACING**

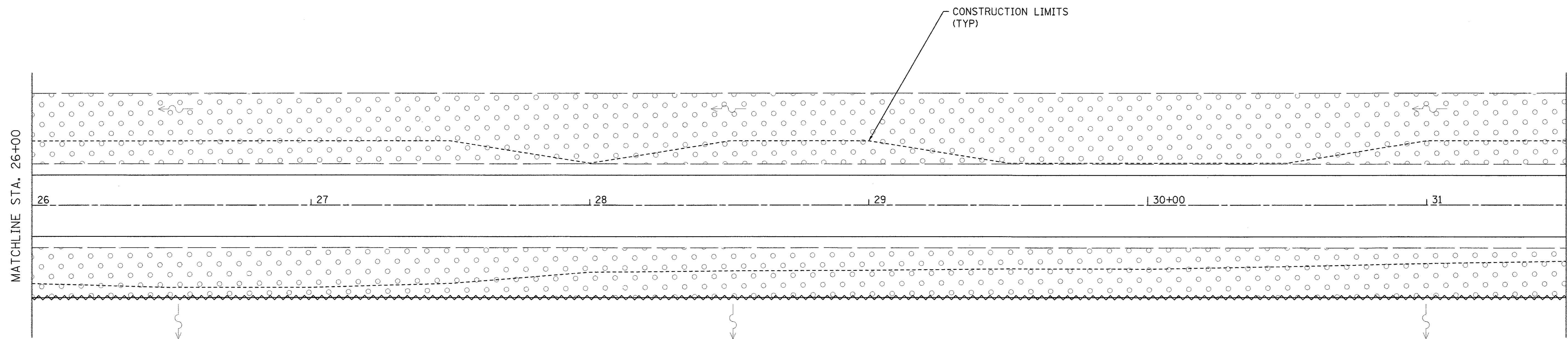
SCALE: 1" = 20'
SHEET 1 OF 3 SHEETS
STA. 21+50 TO STA. 26+00



ROUTE
F.A.S. 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS 55	SHEET NO. 25
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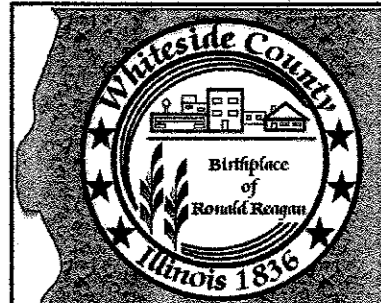
REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 02/01/17
-------------------------	----------------------	--------------------------	-------------------

**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
18819 Lincoln Road
Morrison, Illinois 61270

**WHITESIDE COUNTY HIGHWAY DEPARTMENT
EROSION CONTROL & SEEDING
BLACK ROAD RESURFACING**

SCALE: 1" = 20'
STA. 26+00 TO STA. 31+50
SHEET 2 OF 3 SHEETS

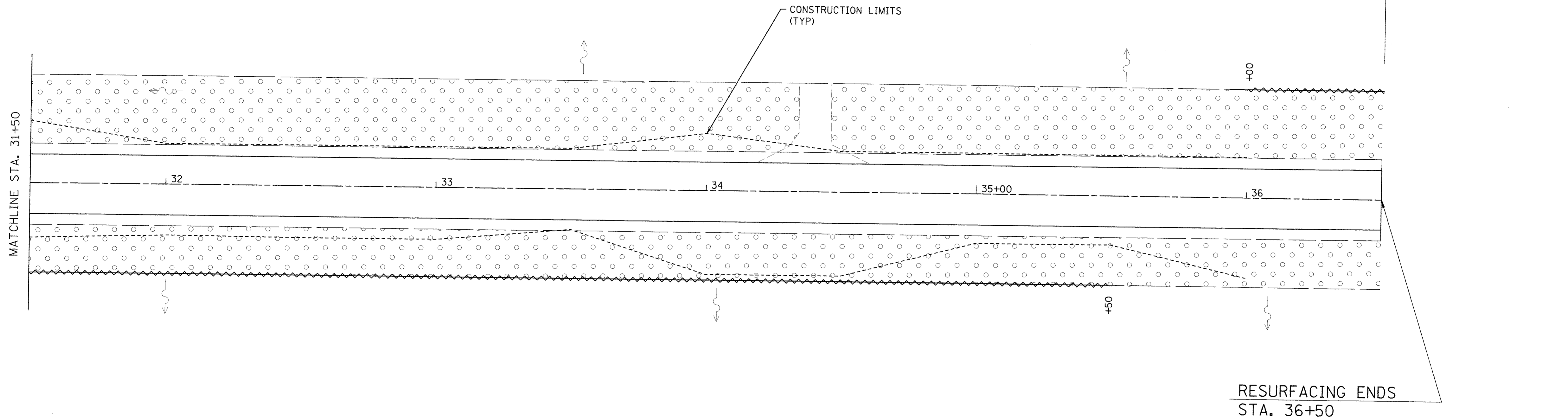


ROUTE
F.A.S. 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS 55	SHEET NO. 26
---------------------------	------------------------

LEGEND	
	PERIMETER EROSION BARRIER
	DRAINAGE FLOW
	SEEDING, CLASS 2 (SPECIAL)
	EROSION CONTROL BLANKET



LEGEND

	PERIMETER EROSION BARRIER
	DRAINAGE FLOW
	SEEDING, CLASS 2 (SPECIAL)
	EROSION CONTROL BLANKET

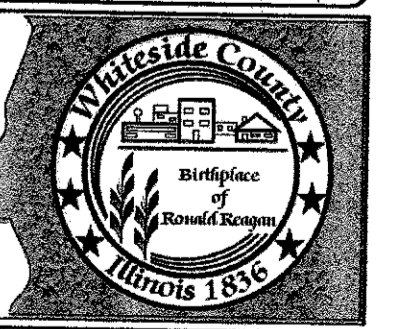
REVISIONS

DESCRIPTION	DATE

DESIGNED BY: J. KOCH
 DRAWN BY: J. KOCH
 CHECKED BY: R. RENNER
 DATE: 02/01/17

WHITESIDE COUNTY HIGHWAY DEPARTMENT
 18819 Lincoln Road
 Morrison, Illinois 61270

WHITESIDE COUNTY HIGHWAY DEPARTMENT
EROSION CONTROL & SEEDING
BLACK ROAD RESURFACING
 STA. 31+50 TO STA. 36+50
 SCALE: 1" = 20'
 SHEET 3 OF 3 SHEETS

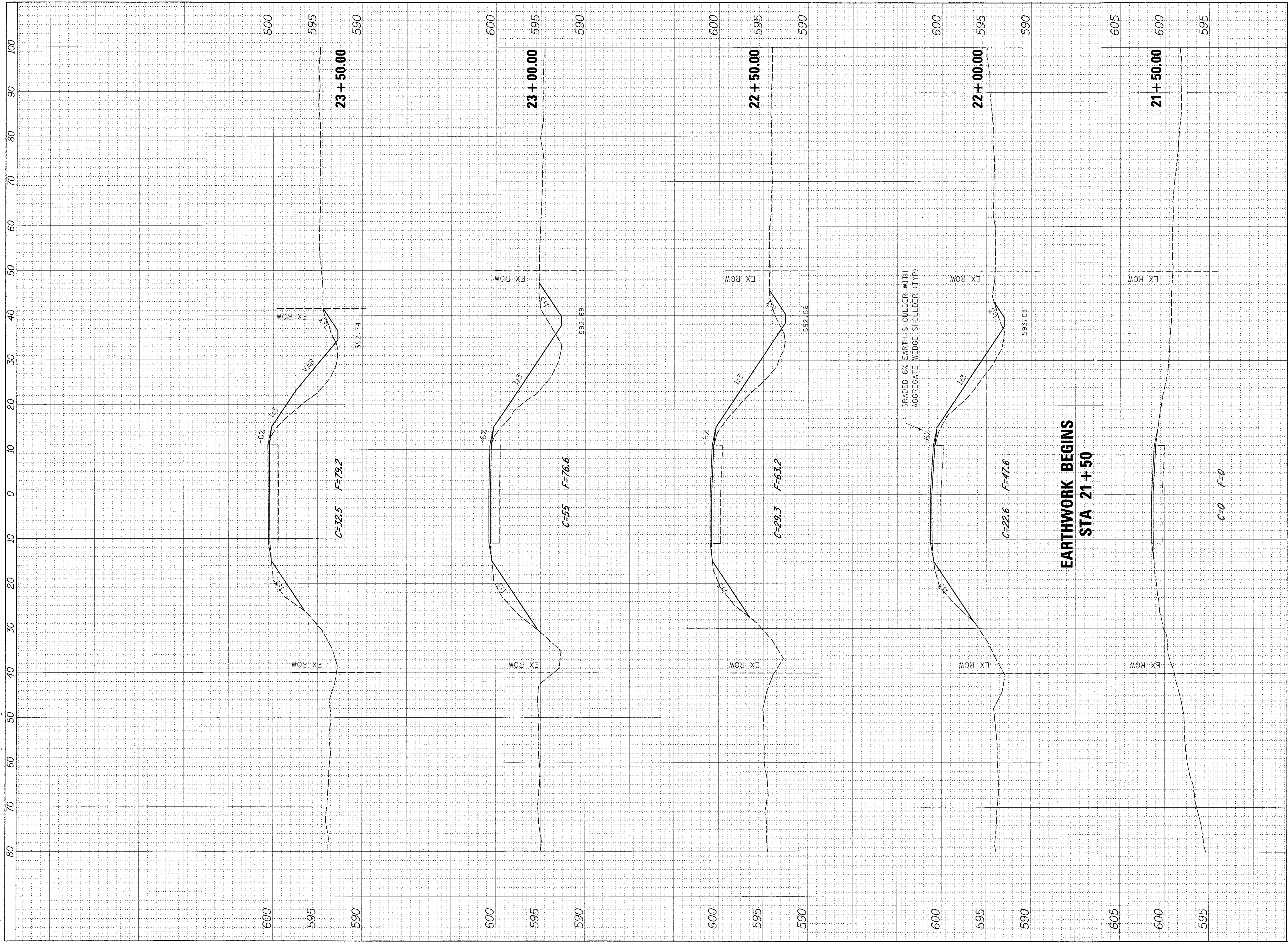


ROUTE
 F.A.S. 197 (BLACK RD)

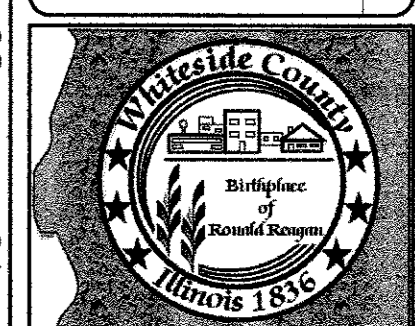
SECTION
 11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	27

F:\Highway Files\Projects\11-00204-00-BR\11-00204-00-BR(1)sheet_101_RoadResurfacing_Sections.dgn



WHITESIDE COUNTY HIGHWAY DEPARTMENT
CROSS SECTIONS
BLACK ROAD RESURFACING



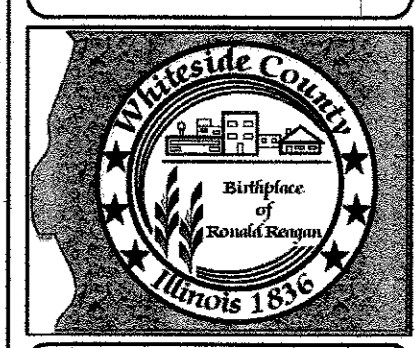
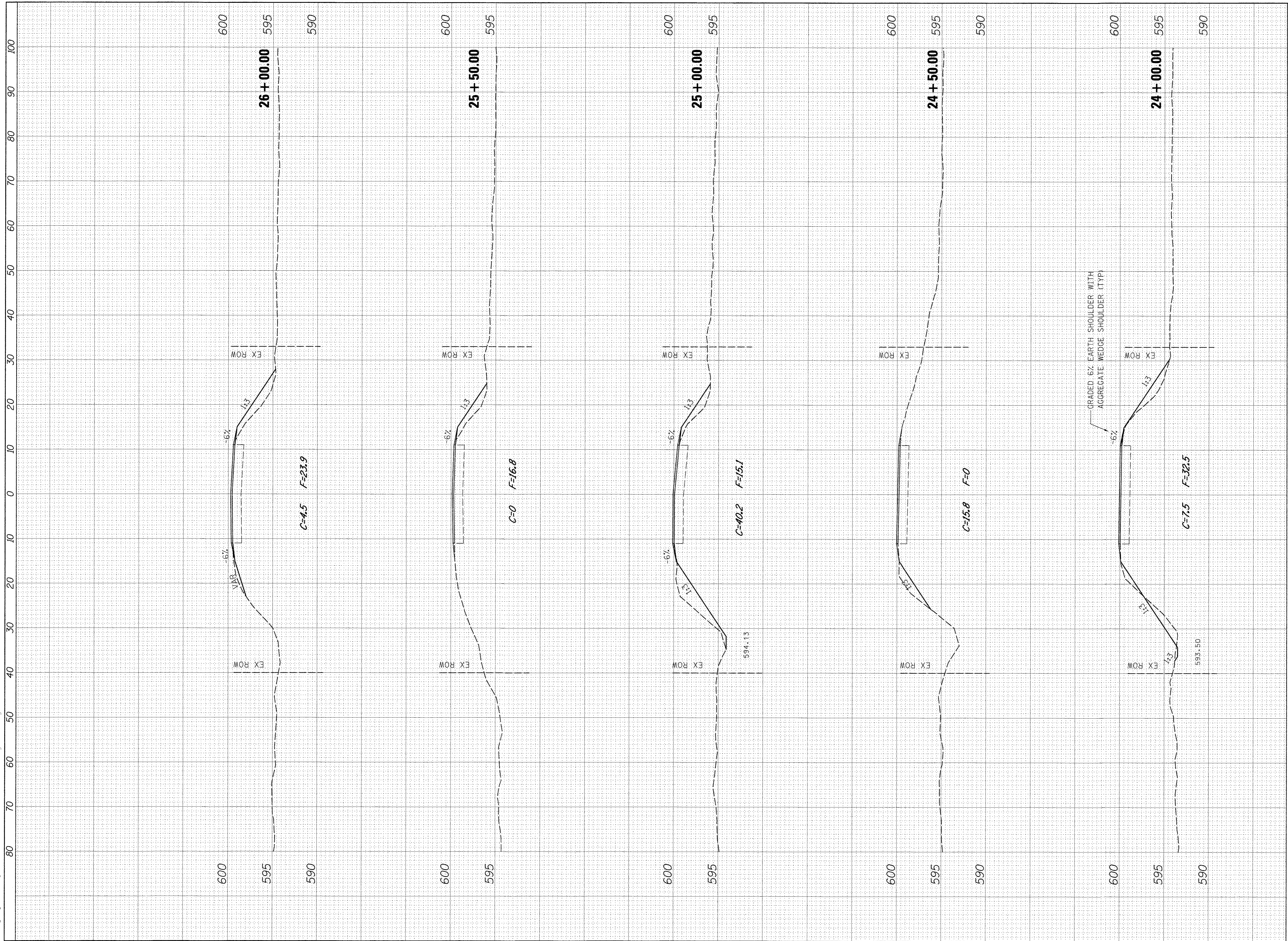
ROUTE FAS 197 (BLACK RD)	
SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 28

WHITESIDE COUNTY
 HIGHWAY DEPARTMENT
 1836 Lincoln Road
 Mazon, Illinois 61270

DESIGNED BY: J. KOCH	REVISIONS
DRAWN BY: J. KOCH	DESCRIPTION
CHECKED BY: R. RENNER	DATE
DATE: 1/31/17	

SCALE: 1" = 10' SHEET 1 OF 6 SHEETS STA. 21+50 TO STA. 23+50

F:\highway files\Projects\11-00204-00-BR\Black_Rd\Resurfacing_Section.dgn



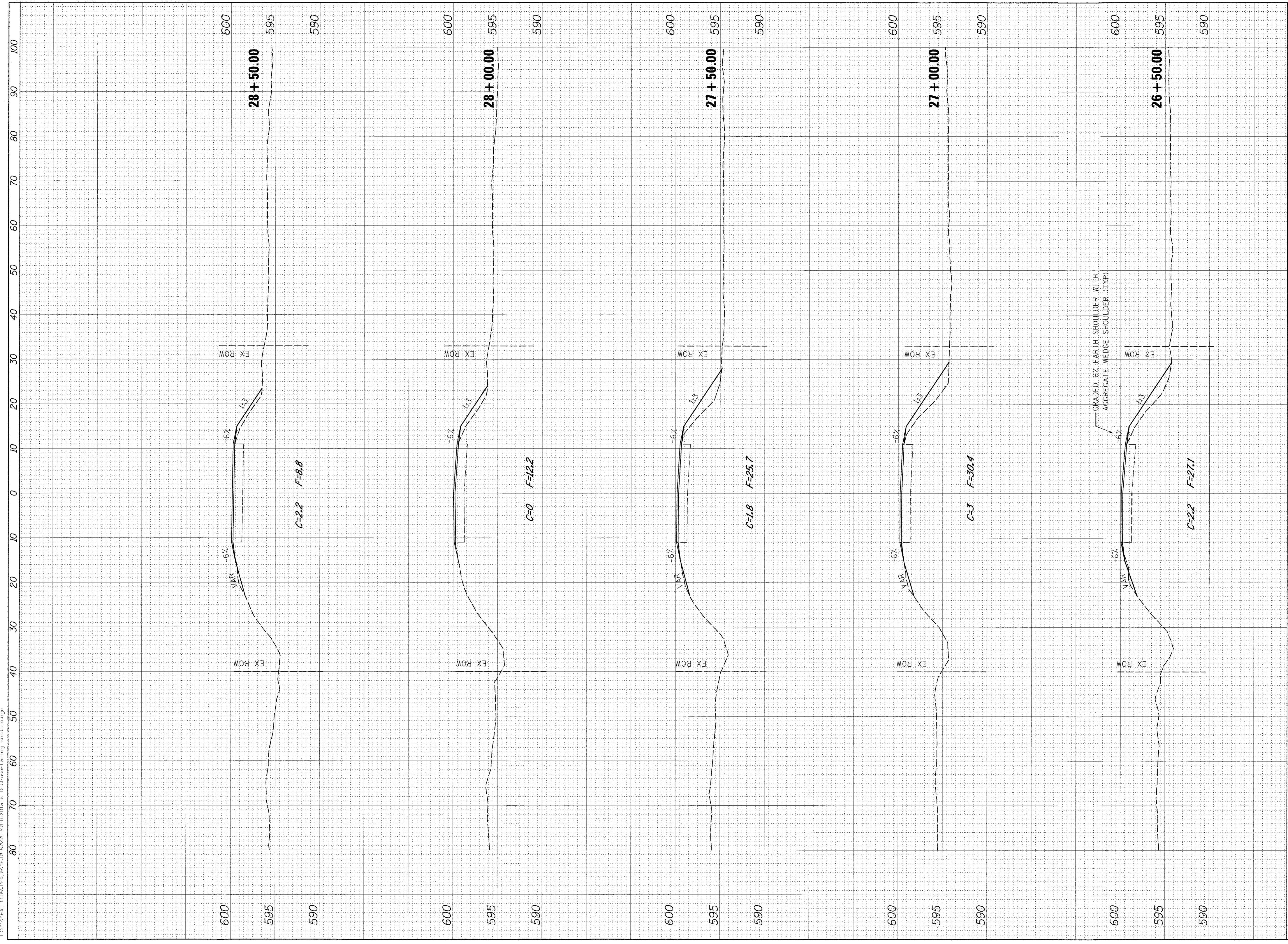
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SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 29

WHITESIDE COUNTY HIGHWAY DEPARTMENT
CROSS SECTIONS
BLACK ROAD RESURFACING
 SCALE: 1" = 10'
 SHEET 2 OF 6 SHEETS
 STA. 24+00 TO STA. 26+00

WHITESIDE COUNTY
 HIGHWAY DEPARTMENT
 1816 Lincoln Road
 Mazon, Illinois 61270

DESIGNED BY: J. KOCH	REVISIONS
DRAWN BY: J. KOCH	DESCRIPTION
CHECKED BY: R. RENNER	DATE
DATE: 1/31/17	

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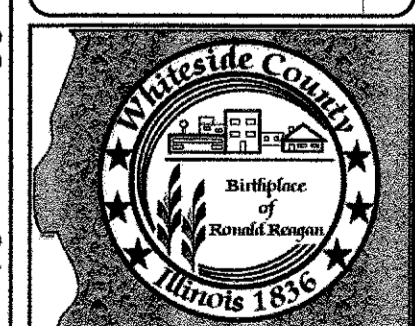
REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	CHECKED BY: R. RENNER
DRAWN BY: J. KOCH	DATE: 1/31/17

**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
1839 Lynch Road
Mazon, Illinois 62520

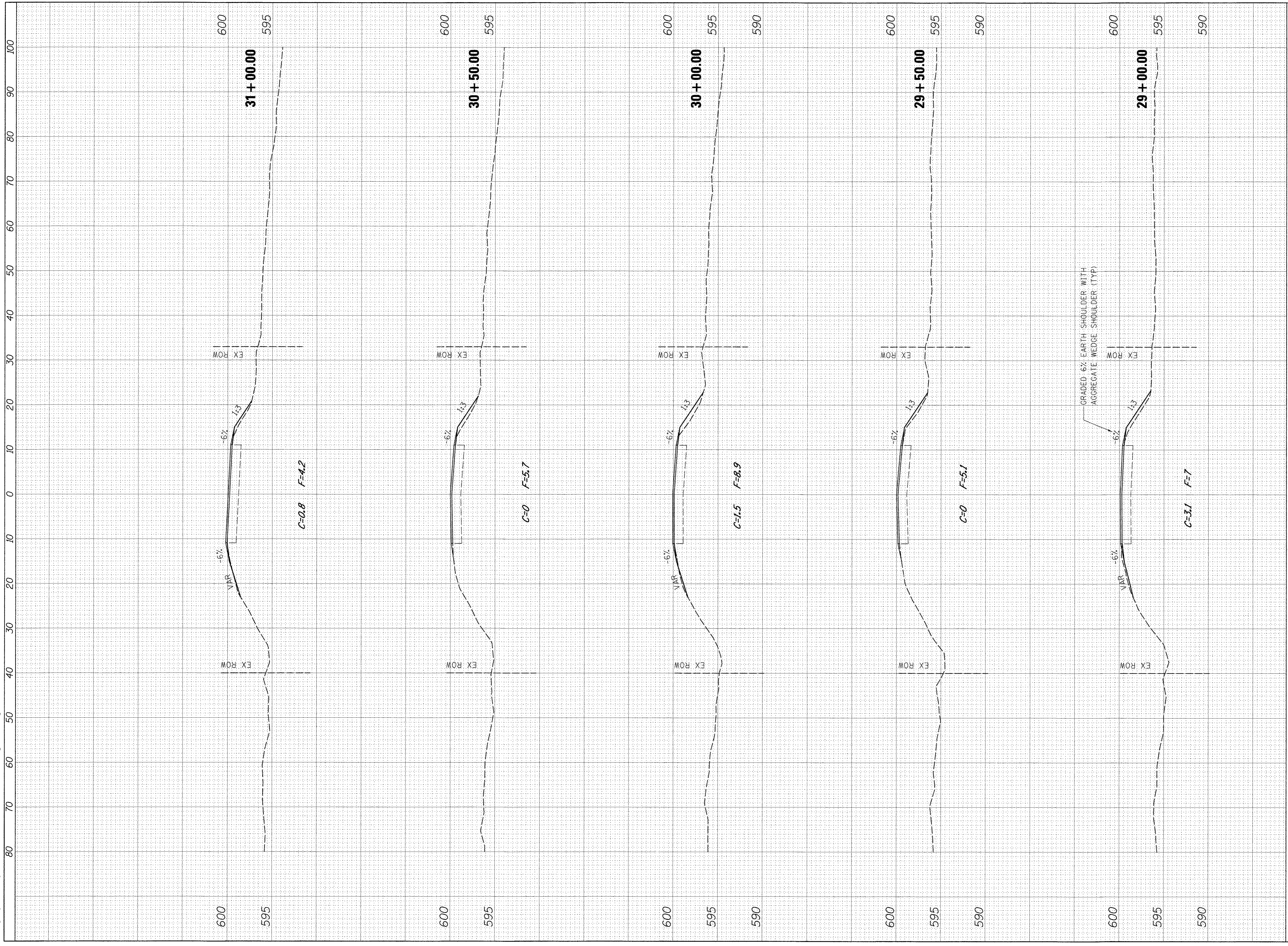
**WHITESIDE COUNTY HIGHWAY DEPARTMENT
CROSS SECTIONS
BLACK ROAD RESURFACING**

SCALE: 1" = 10'
SHEET 3 OF 6 SHEETS
STA. 26+50 TO STA. 28+50



ROUTE FAS 197 (BLACK RD)	
SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 30

F:\highway_files\Projects\11-00204-00-BR\Black_Rd_Resurfacing_Section.dgn



REVISIONS	DESCRIPTION	DATE

DESIGNED BY:
J. KOCH

DRAWN BY:
J. KOCH

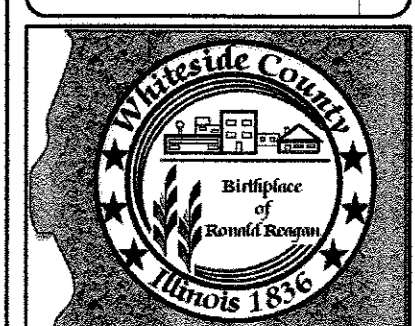
CHECKED BY:
R. RENNER

DATE: 1/31/17

**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
18819 Lincoln Road
Morrison, Illinois 61270

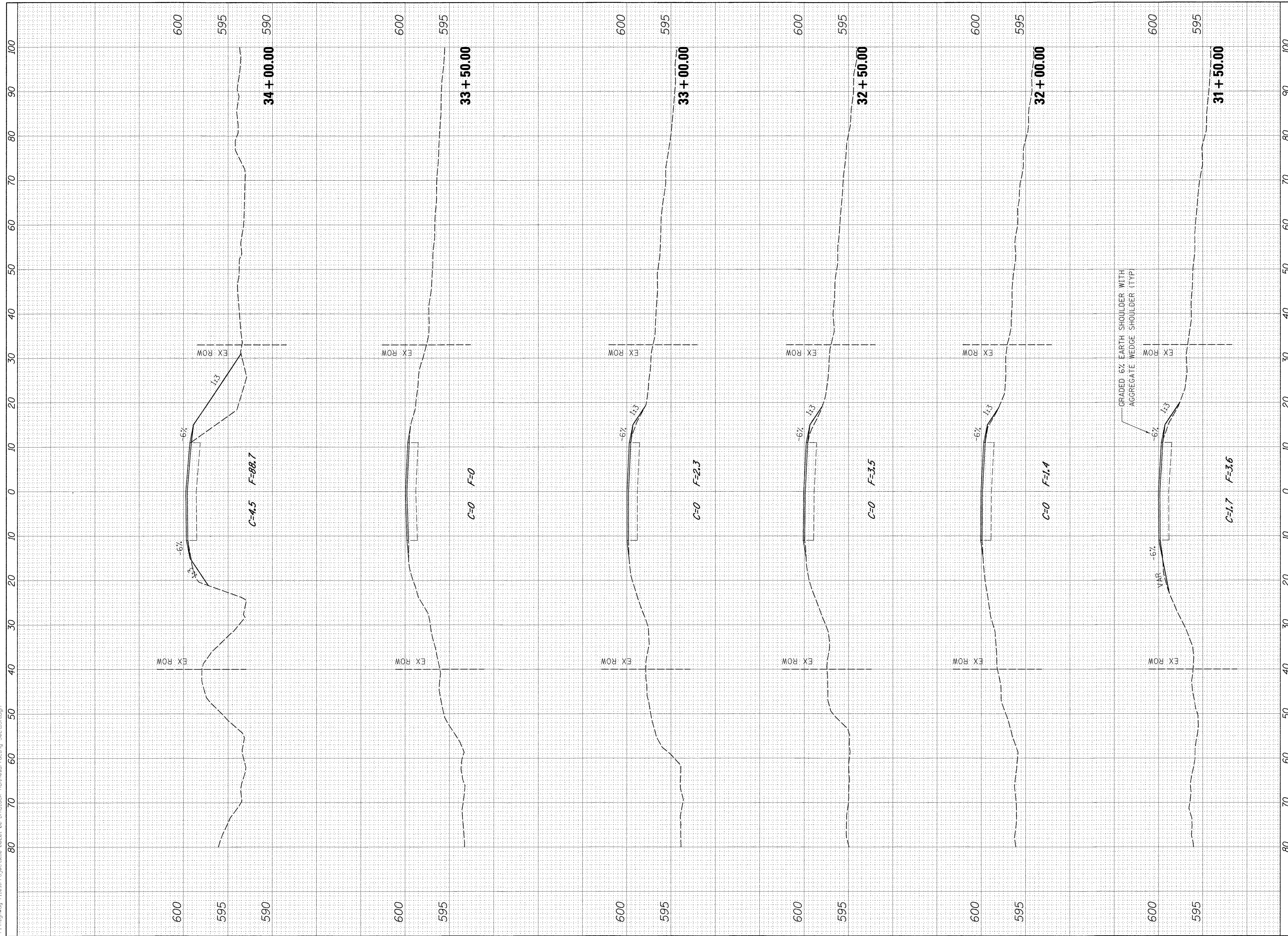
**WHITESIDE COUNTY HIGHWAY DEPARTMENT
CROSS SECTIONS
BLACK ROAD RESURFACING**

SCALE: 1" = 10'
SHEET 4 OF 6 SHEETS
STA. 29+00 TO STA. 31+00



ROUTE FAS 197 (BLACK RD)	
SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 31

F:\highway_files\Projects\11-00204-00-BR\11-00204-00-BR\11-00204-00-BR\Resurfacing Section.dgn



REVISIONS	DESCRIPTION	DATE

DESIGNED BY:
J. KOCH
DRAWN BY:
J. KOCH
CHECKED BY:
R. RENNER
DATE: 1/31/17

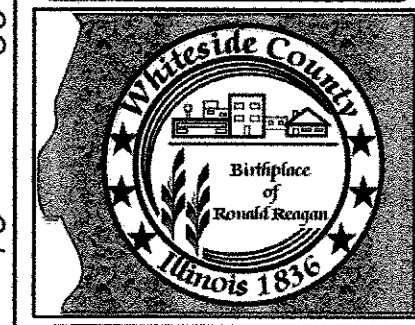
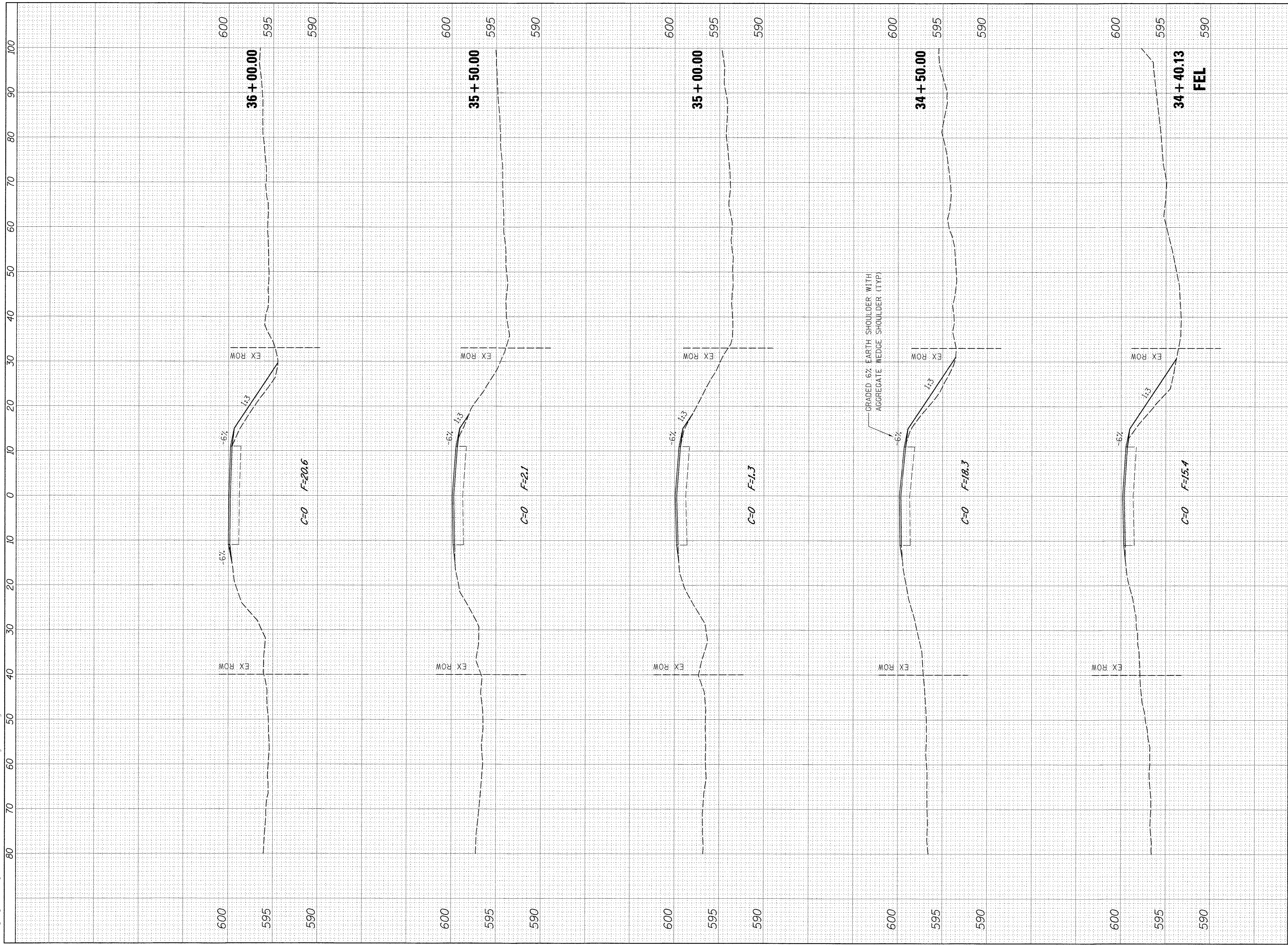
**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
18819 Lincoln Road
Monroe, Louisiana 70501

**WHITESIDE COUNTY HIGHWAY DEPARTMENT
CROSS SECTIONS
BLACK ROAD RESURFACING**

SCALE: 1" = 10'
SHEET 5 OF 6 SHEETS
STA. 31+50 TO STA. 34+00



ROUTE FAS 197 (BLACK RD)	
SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 32



ROUTE FAS 197 (BLACK RD)	
SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 33

WHITESIDE COUNTY HIGHWAY DEPARTMENT
CROSS SECTIONS
BLACK ROAD RESURFACING
 SCALE: 1" = 10'
 SHEET 6 OF 6 SHEETS | STA. 34+50 TO STA. 36+50

WHITESIDE COUNTY
 HIGHWAY DEPARTMENT
 1889 Lincoln Road
 Moline, Illinois 61201

DESIGNED BY: J. KOCH	REVISIONS
DRAWN BY: J. KOCH	DESCRIPTION
CHECKED BY: R. RENNER	DATE
DATE: 1/31/17	

SCHEDULE OF QUANTITIES - S.N. 098-3063

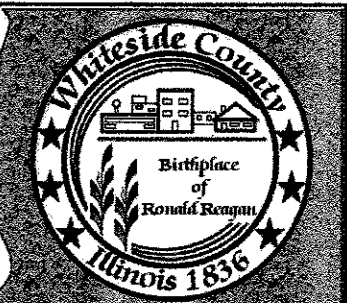
Item No.	Description	Unit	Quantity	Item No.	Description	Unit	Quantity	Item No.	Description	Unit	Quantity
20200100	EARTH EXCAVATION	CU YD		40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON		51201610	FURNISHING STEEL PILES HP 12X63	FOOT	
	Lt & Rt Sta 36 + 00 - 40 + 00		896.5		Sta 36 + 50 - 39 + 95.73		257		Lt & Rt Sta 39 + 97		126
	Lt & Rt Sta 41 + 50 - 45 + 50		600.5		Sta 41 + 84.22 - 45 + 30		257		Lt & Rt Sta 41 + 83		126
	TOTAL		1500		TOTAL		514		TOTAL		252
20201200	REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	CU YD		40603310	HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50	TON		51201900	FURNISHING STEEL PILES HP 14X89	FOOT	
	Throughout Project		50		Sta 36 + 50 - 39 + 95.73		96		Lt & Rt Sta 40 + 54		157.5
	TOTAL		50		Sta 41 + 84.22 - 45 + 30		96		Lt & Rt Sta 41 + 26		157.5
					TOTAL		192		TOTAL		315
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND		48101200	AGGREGATE SHOULDERS, TYPE B	TON		51202305	DRIVING PILES	FOOT	
	Lt Sta 36 + 00 - 40 + 08.97		22		Lt Sta 36 + 50 - 40 + 3.82		67.5		Lt & Rt Sta 39 + 97		126
	Rt Sta 36 + 50 - 39 + 84.9		15		Rt Sta 36 + 50 - 39 + 87.57		64.7		Lt & Rt Sta 40 + 54		157.5
	Rt Sta 41 + 70.97 - 45 + 30		19		Lt Sta 41 + 92.57 - 45 + 30		64.8		Lt & Rt Sta 41 + 26		126
	Lt Sta 41 + 95.25 - 45 + 30		18		Rt Sta 41 + 76.11 - 45 + 30		67.6		Lt & Rt Sta 41 + 83		126
	TOTAL		74		TOTAL		265		TOTAL		567
28000400	PERIMETER EROSION BARRIER	FOOT		50100100	REMOVAL OF EXISTING STRUCTURES	EACH		51203610	TEST PILE STEEL HP12X63	EACH	
	Lt Sta 36 + 50 - 40 + 00		350		Sta 40 + 07.44 - 41 + 72.38		1		Lt Sta 39 + 97		1
	Lt Sta 42 + 01 - 43 + 50		149		Bridge		1		Rt Sta 41 + 83		1
	Rt Sta 36 + 54 - 39 + 79		325		TOTAL		1		TOTAL		2
	Rt Sta 41 + 80 - 45 + 30		350								
	TOTAL		1174								
28100805	STONE DUMPED RIPRAP, CLASS A3	TON		50300225	CONCRETE STRUCTURES	CU YD		51203900	TEST PILE STEEL HP14X89	EACH	
	Lt & Rt Sta 40 + 25.6		673.2		Sta 39 + 97.22		18.1		Sta 40 + 54		1
	Lt & Rt Sta 41 + 56.2		596.8		Lt & Rt Sta 39 + 97.22		1.75		Sta 41 + 26		1
	TOTAL		1270		Sta 40 + 53.97		13.4		TOTAL		2
					Lt & Rt Sta 40 + 53.97		10.4				
					Sta 41 + 25.97		13.4				
					Lt & Rt Sta 41 + 25.97		10.4				
					Sta 41 + 82.72		18.1				
					Lt & Rt Sta 41 + 82.72		1.75				
					TOTAL		87.3				
28200200	FILTER FABRIC	SQ YD		50300260	BRIDGE DECK GROOVING	SQ YD		51204650	PILE SHOES	EACH	
	Lt & Rt Sta 40 + 25.6		985		Sta 39 + 96.89 - 41 + 83.06		538		Lt & Rt Sta 39 + 97		5
	Lt & Rt Sta 41 + 56.2		873		TOTAL		538		Lt & Rt Sta 40 + 54		6
	TOTAL		1858						Lt & Rt Sta 41 + 26		6
									Lt & Rt Sta 41 + 83		5
									TOTAL		22
35101400	AGGREGATE BASE COURSE, TYPE B	TON		50300300	PROTECTIVE COAT	SQ YD		51500100	NAME PLATES	EACH	
	Sta 36 + 50 - 39 + 95.73		659.6		Sta 39 + 95.73 - 41 + 84.22		717		Rt Sta 39 + 88		1
	Sta 41 + 84.22 - 45 + 30		659.5		TOTAL		717		TOTAL		1
	Lt Sta 42 + 75.38		37.9								
	Rt Sta 42 + 92.58		3.4								
	TOTAL		1360								
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND		50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT		63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	
	Sta 36 + 50 - 39 + 95.73		2074.5		Sta 39 + 96.89 - 41 + 83.06		5210		Rt Sta 39 + 74.32		1
	Sta 41 + 84.22 - 45 + 30		2074.5		TOTAL		5210		Lt Sta 39 + 90.64		1
	TOTAL		4149						Rt Sta 42 + 89.14		1
									Lt Sta 42 + 05.81		1
									TOTAL		4
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND		63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	
	Sta 36 + 50 - 39 + 95.73		415		Sta 39 + 97.22		5500		Rt Sta 39 + 24.33		1
	Sta 41 + 84.22 - 45 + 30		415		Sta 40 + 53.97		1126.5		Lt Sta 39 + 40.63		1
	TOTAL		830		Sta 41 + 25.97		1126.5		Rt Sta 42 + 39.13		1
					Sta 41 + 82.72		5500		Lt Sta 42 + 55.81		1
					TOTAL		13,253		TOTAL		4

REVISIONS	DESCRIPTION	DATE

DESIGNED BY:	J. KOCH
DRAWN BY:	R. RENNER
CHECKED BY:	
DATE:	10/22/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1850 Lincoln Road
Marion, Illinois 62770

WHITESIDE COUNTY HIGHWAY DEPARTMENT
SCHEDULE OF QUANTITIES
BLACK ROAD BRIDGE OVER ROCK CREEK
SCALE: STA. TO STA.
SHEET 1 OF 2 SHEETS



ROUTE FAS 197 (BLACK RD)	
SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 34

SCHEDULE OF QUANTITIES – S.N. 098–3063

63200310	GUARDRAIL REMOVAL		FOOT
Rt Sta	39 + 43.06 - 39 + 95		52
Lt Sta	39 + 55.58 - 40 + 07.34		52
Rt Sta	41 + 66.65 - 42 + 18.52		52
Lt Sta	41 + 84.03 - 42 + 36.16		52
	TOTAL		208

66700205	PERMANENT SURVEY MARKERS, TYPE I		EACH
Rt Sta	41 + 75	Top of Headwall	1
	TOTAL		1

72501000	TERMINAL MARKER - DIRECT APPLIED		EACH
Rt Sta	39 + 24.33		1
Lt Sta	39 + 40.63		1
Rt Sta	42 + 39.13		1
Lt Sta	42 + 55.81		1
	TOTAL		4

78001110	PAINT PAVEMENT MARKING - LINE 4"		FOOT
Sta	36 + 50 - 41 + 45	Yellow No Passing Rt	619
Sta	41 + 45 - 45 + 30	Yellow No Passing Lt	481
	TOTAL		1100

X2090210	POROUS GRANULAR BACKFILL, SPECIAL		CU YD
Sta	39 + 90.38		50
Sta	41 + 89.61		50
	TOTAL		100

X2501000	SEEDING, CLASS 2 (SPECIAL)		ACRE
Lt Sta	36 + 00 - 40 + 08.97		0.22
Rt Sta	36 + 50 - 39 + 84.9		0.15
Rt Sta	41 + 70.97 - 45 + 30		0.19
Lt Sta	41 + 95.25 - 45 + 30		0.18
	TOTAL		0.5

X5030305	CONCRETE WEARING SURFACE 5"		SQ YD
Sta	39 + 96.89 - 41 + 83.06		580
	TOTAL		580

XX006199	STEEL BRIDGE RAIL, TYPE SM (SPECIAL)		FOOT
Rt Sta	39 + 87.61 - 41 + 76.11		188.5
Lt Sta	40 + 03.90 - 41 + 92.4		188.5
	TOTAL		377

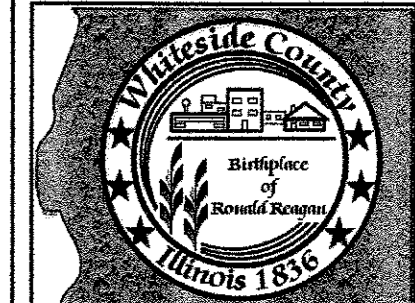
REVISIONS	DATE
	DESCRIPTION

DESIGNED BY:	DATE: 10/22/15
DRAWN BY:	
J. KOCH	
CHECKED BY:	
R. RENNER	

**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
1889 Lincoln Road
Memphis, Tenn. 38270

**WHITESIDE COUNTY HIGHWAY DEPARTMENT
SCHEDULE OF QUANTITIES
BLACK ROAD BRIDGE OVER ROCK CREEK**

SCALE: _____ STA. _____ TO STA. _____
SHEET 2 OF 2 SHEETS



ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	35

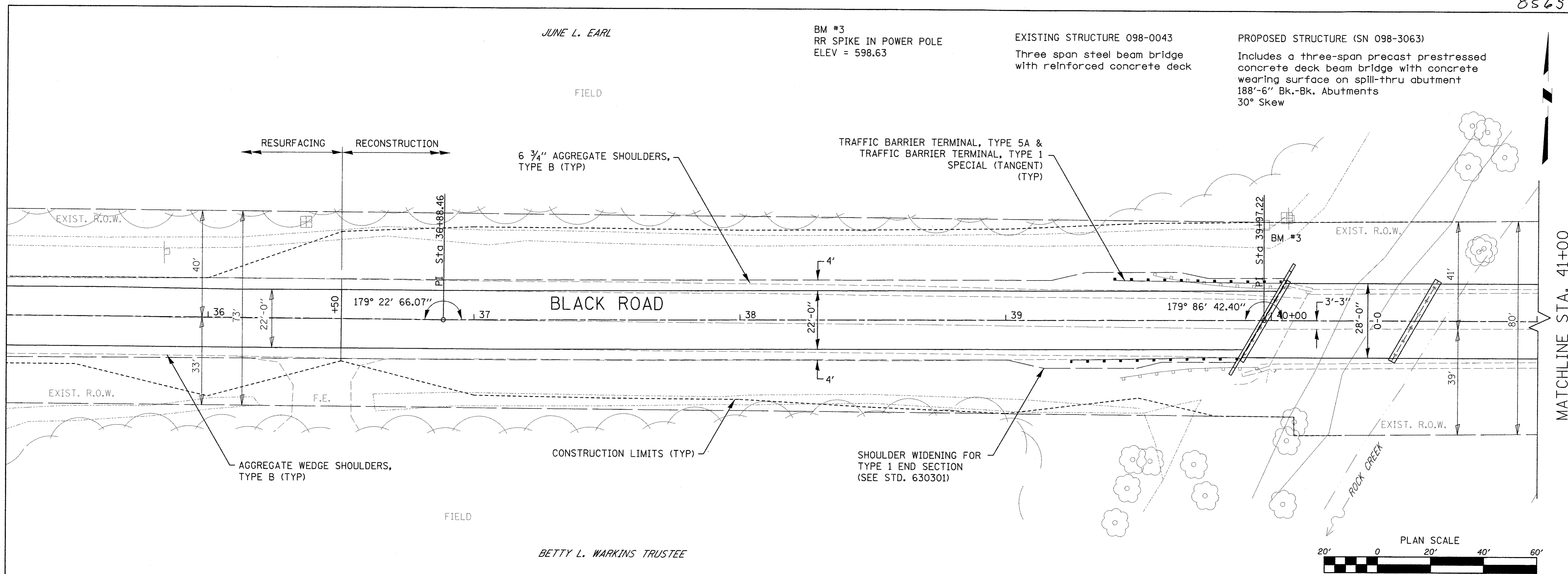
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JUNE L. EARL

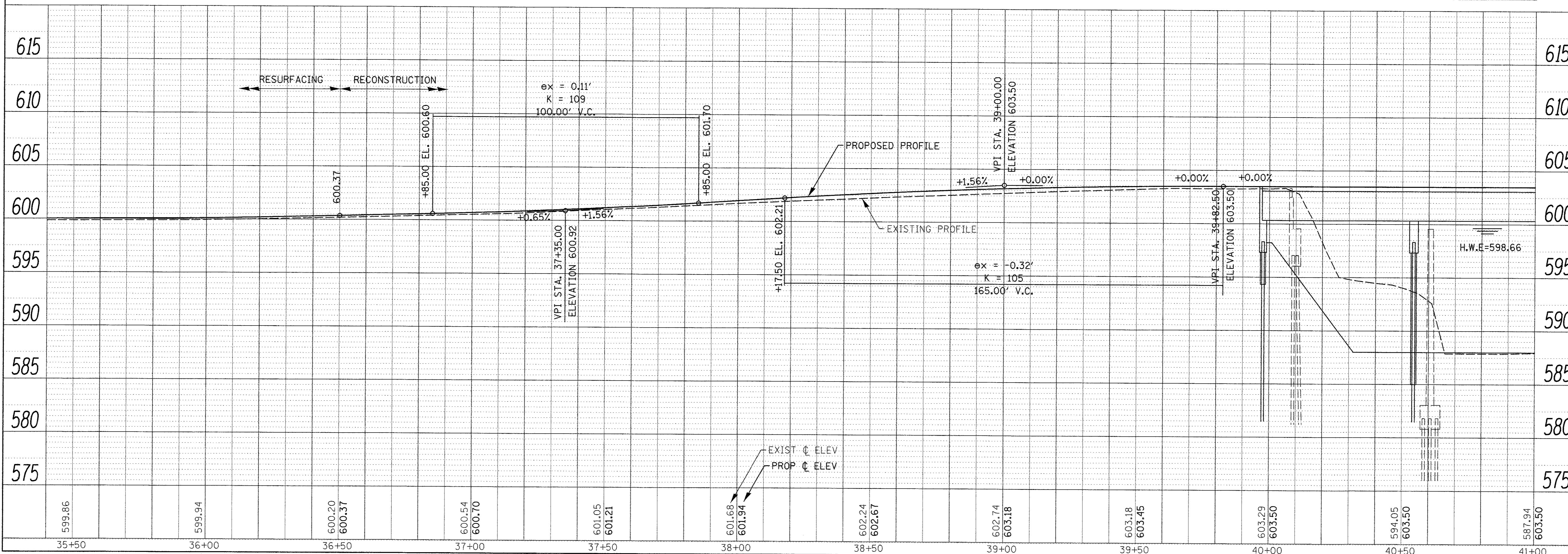
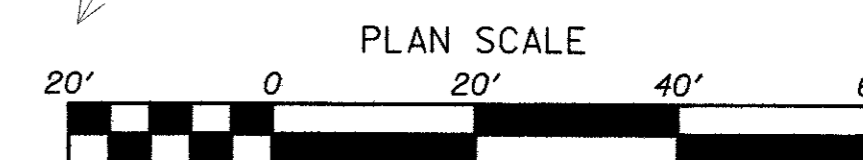
BM #3
RR SPIKE IN POWER POLE
ELEV = 598.63

EXISTING STRUCTURE 098-0043
Three span steel beam bridge
with reinforced concrete deck

PROPOSED STRUCTURE (SN 098-3063)
Includes a three-span precast prestressed
concrete deck beam bridge with concrete
wearing surface on spill-thru abutment
188'-6" Bk.-Bk. Abutments
30° Skew



BETTY L. WARKINS TRUSTEE

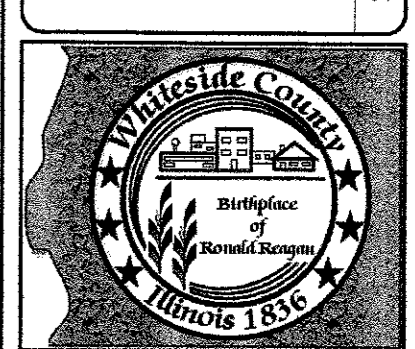


REVISIONS	DESCRIPTION	DATE

DESIGNED BY:	J. KOCH
DRAWN BY:	J. KOCH
CHECKED BY:	R. RENNER
DATE:	01/08/15

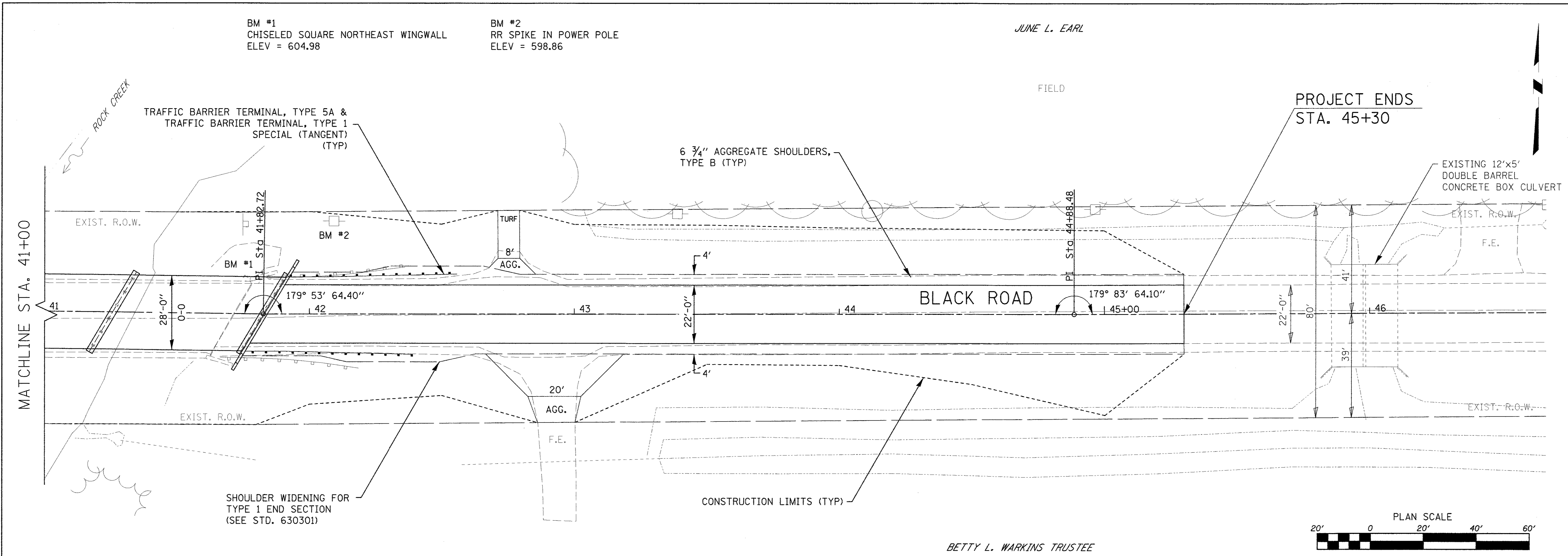
WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1888 Lincoln Road
Morrison, Illinois 62270

WHITESIDE COUNTY HIGHWAY DEPARTMENT
PLAN & PROFILE
BLACK ROAD BRIDGE OVER ROCK CREEK
SCALE: 1" = 20'
SHEET 1 OF 2 SHEETS
STA. 35+50 TO STA. 41+00



ROUTE	FAS 197 (BLACK RD)
SECTION	11-00204-00-BR
TOTAL SHEETS	55
SHEET NO.	36

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JUNE L. EARL

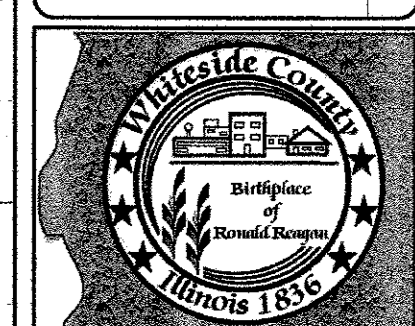
BETTY L. WARKINS TRUSTEE

REVISIONS	DESCRIPTION	DATE

DESIGNED BY:	J. KOCH
DRAWN BY:	J. KOCH
CHECKED BY:	R. RENNER
DATE:	01/08/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1889 Lincoln Road
Morton, Illinois 62450

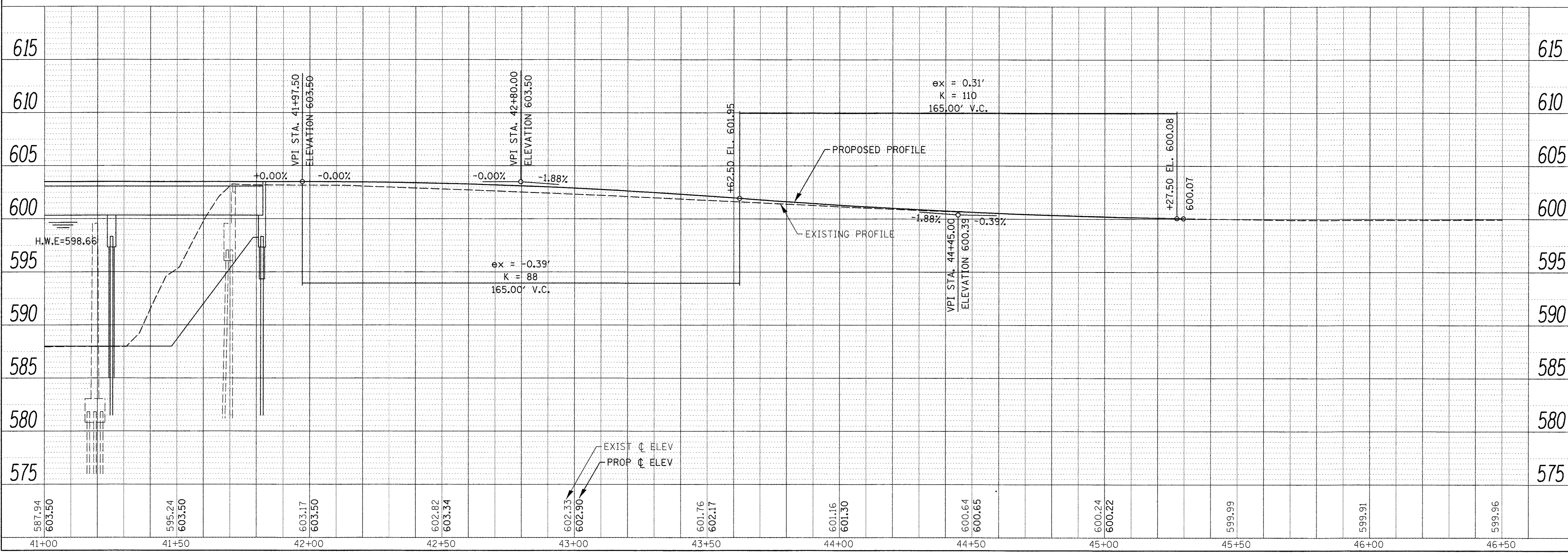
WHITESIDE COUNTY HIGHWAY DEPARTMENT
PLAN & PROFILE
BLACK ROAD BRIDGE OVER ROCK CREEK
SCALE: 1" = 20'
SHEET 2 OF 2 SHEETS
STA. 35+50 TO STA. 41+00



ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS	55
SHEET NO.	37



FILE: F:\Highway Files\Projects\11-00204-00-BR\Black Rd\Sheet P&P\Rock Creek.dgn

REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 05/03/15
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**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
1889 Lincoln Road
Morton, Illinois 61270

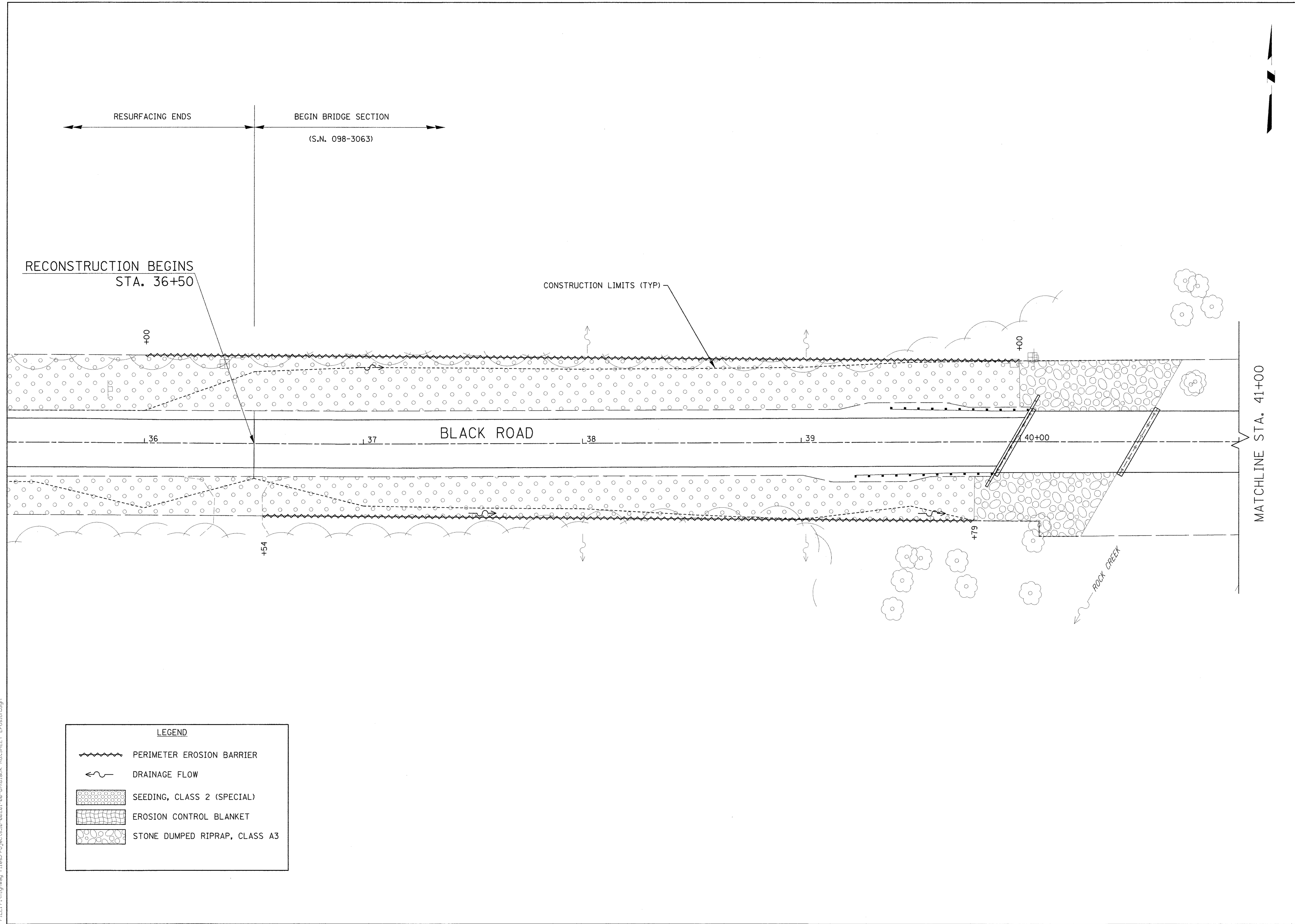
**WHITESIDE COUNTY HIGHWAY DEPARTMENT
EROSION CONTROL & SEEDING
BLACK ROAD BRIDGE OVER ROCK CREEK**
SCALE: 1" = 20'
SHEET 1 OF 2 SHEETS
STA. 35+50 TO STA. 41+00



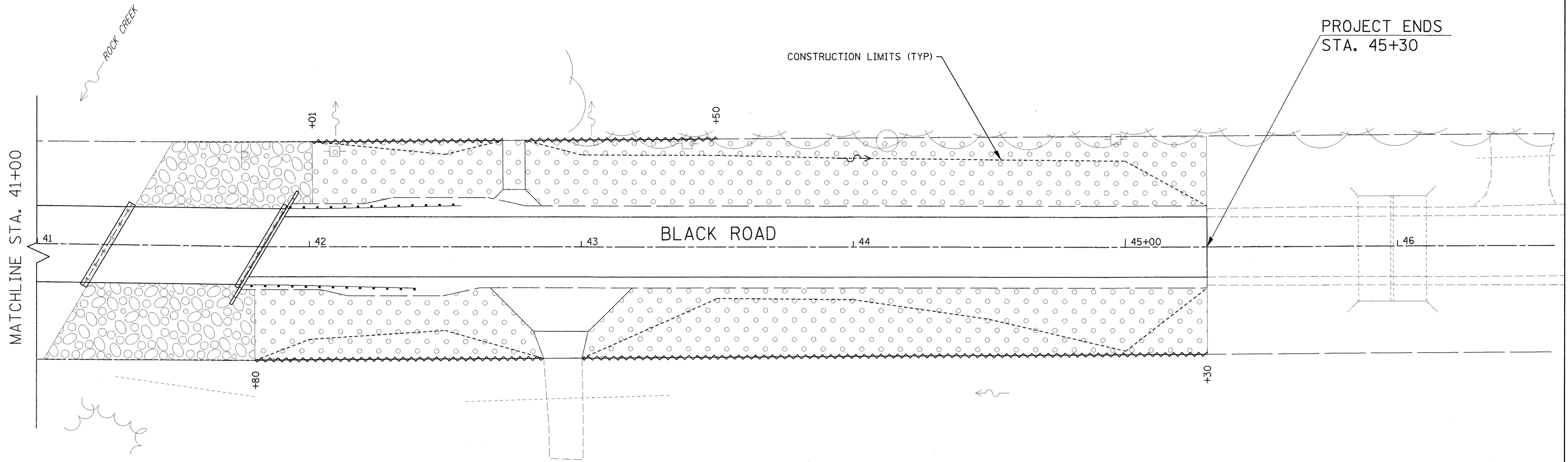
ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	38



LEGEND	
	PERIMETER EROSION BARRIER
	DRAINAGE FLOW
	SEEDING, CLASS 2 (SPECIAL)
	EROSION CONTROL BLANKET
	STONE DUMPED RIPRAP, CLASS A3



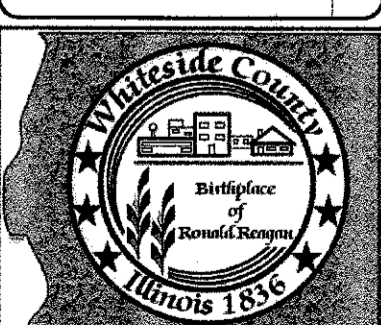
REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 09/03/15
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**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
1889 Lincoln Road
Mason, Illinois 61870

**WHITESIDE COUNTY HIGHWAY DEPARTMENT
EROSION CONTROL & SEEDING
BLACK ROAD BRIDGE OVER ROCK CREEK**

SCALE: 1" = 20'
SHEET 2 OF 2 SHEETS
STA. 41+00 TO STA. 46+50



ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

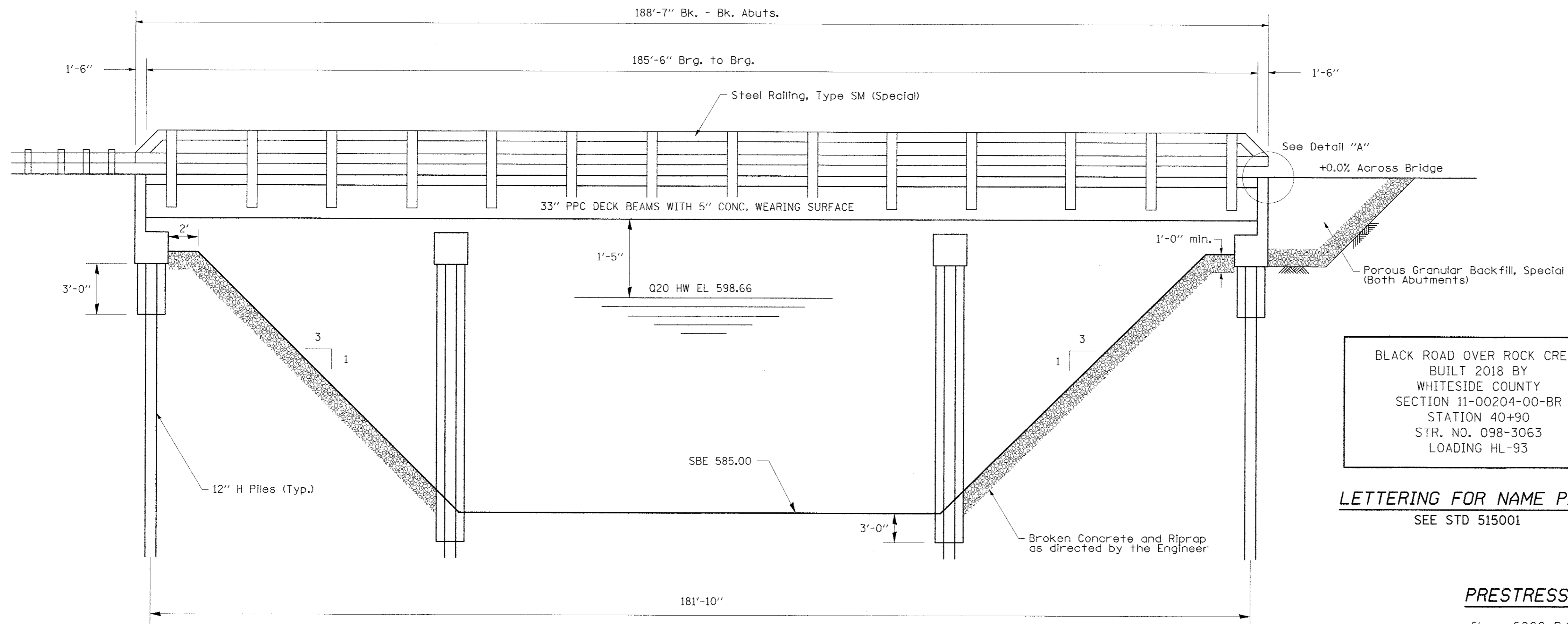
TOTAL SHEETS 55	SHEET NO. 39
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LEGEND	
	PERIMETER EROSION BARRIER
	DRAINAGE FLOW
	SEEDING, CLASS 2 (SPECIAL)
	EROSION CONTROL BLANKET
	STONE DUMPED RIPRAP, CLASS A3

BM #2
RR Spike in PP Lt Sta 42+09
Elev = 598.86

BM #3
RR Spike in PP Lt Sta 39+97
Elev = 598.63

GENERAL PLAN AND ELEVATION



BLACK ROAD OVER ROCK CREEK
BUILT 2018 BY
WHITESIDE COUNTY
SECTION 11-00204-00-BR
STATION 40+90
STR. NO. 098-3063
LOADING HL-93

LETTERING FOR NAME PLATE
SEE STD 515001

TOTAL BILL OF MATERIALS

Description	Unit	Quantity
Stone Dumped Riprap, Class A3	Ton	1270
Removal of Existing Structures	Each	1
Concrete Structures	Cu Yd	87.3
Bridge Deck Grooving	Sq Yd	538
Protective Coat	Sq Yd	717
P P Conc Dk Bm 33	Sq Ft	5210
Reinforcement Bars, Epoxy Coated	Pound	13,253
Furnishing Steel Piles, HP12x63	Foot	252
Furnishing Steel Piles, HP14x89	Foot	315
Driving Piles	Foot	567
Test Pile Steel HP12x63	Each	2
Test Pile Steel HP14x89	Each	2
Pile Shoes	Each	22
Name Plates	Each	1
Porous Granular Backfill, Special	Cu Yd	100
Concrete Wearing Surface	Sq Yd	580
Steel Bridge Rail, Type SM (Special)	Foot	377

EXISTING STRUCTURE:
Three span steel beam bridge with reinforced concrete deck

SALVAGE:
All items deemed salvagable by the Engineer shall be stockpiled on the right of way

ELEVATION

WATERWAY INFORMATION

Flood	Frequency Year	Drainage Area: 204 sq. mi.		Low Grade Elev.: 600.07 at Roadway Sta. 45+27.5		Headwater El.		
		Q (cfs)	Opening Sq. Ft.	Natural H.W.E.	Head-Ft.	Existing	Proposed	
Design	20	6680	1044	1489	598.66	0.46	599.12	598.86
Base	100	9680	1136	1620	599.63	0.81	600.44	600.01
Max. Calc.	200	10,435			599.84	0.88	600.72	600.26

PRESTRESSED UNITS

f'c = 6000 P.S.I.
f'cl = 5000 P.S.I. Release
f's = 270,000 P.S.I.
f'sl = 201,960 P.S.I.

FIELD UNITS

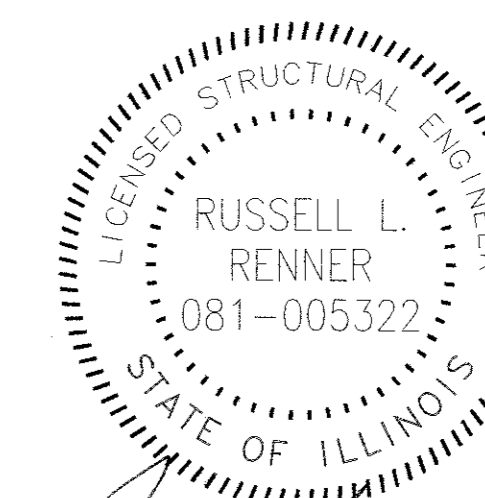
f'c = 3500 P.S.I.
f'y = 60,000 P.S.I. (Reinforcement)
F'y = 50,000 P.S.I. (Hardware)

Design Specifications: 2007 AASHTO Specifications
(Allowed for 50 P.S.F. for future wearing surface)

DESIGN STRESSES

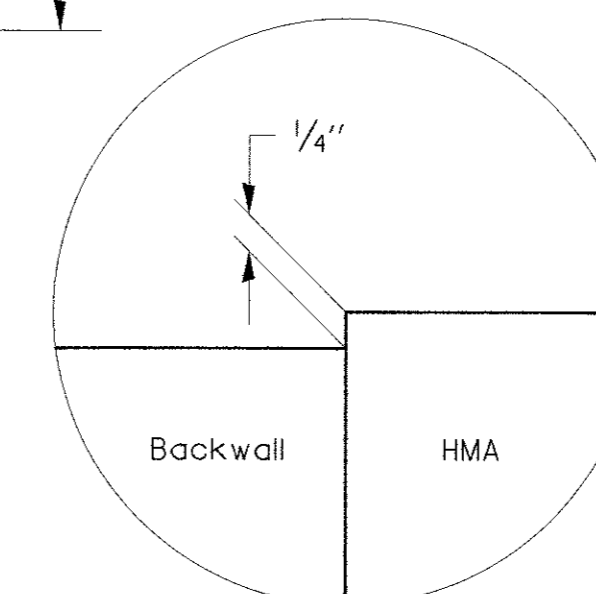
LOADING HL-93

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF THAT THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF THE STRUCTURE AND COMPLIES WITH THE REQUIREMENTS OF THE CURRENT "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES".

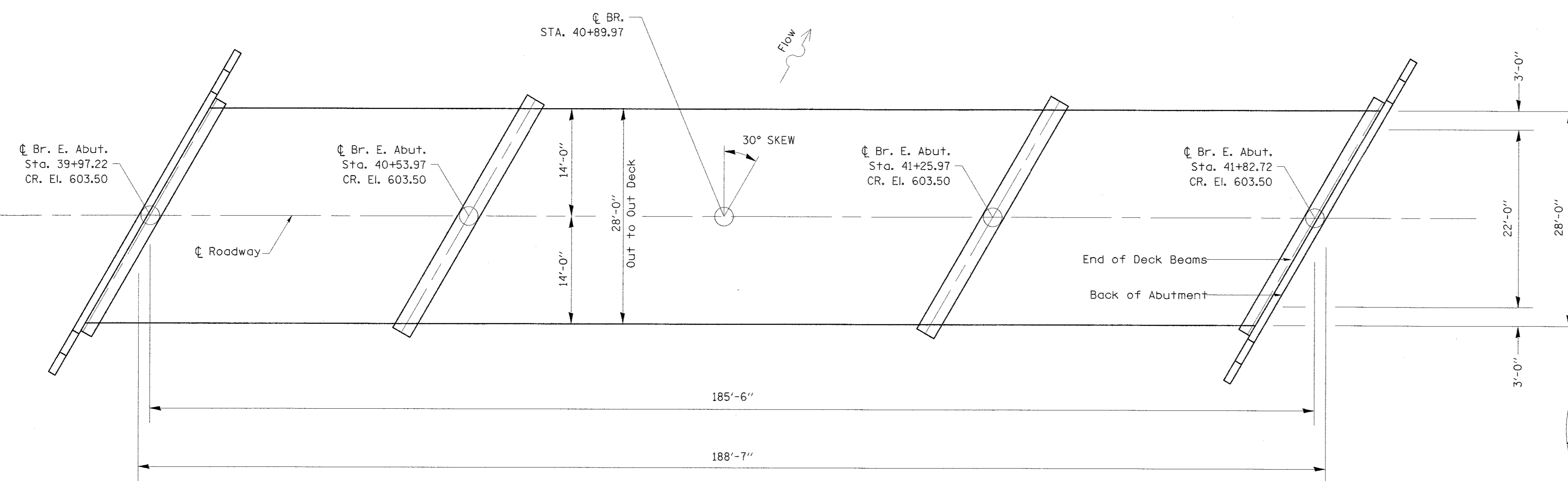


Russell L. Renner
DATE: 6/21/17

RUSSELL L. RENNER
MORRISON, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-005322
EXPIRES 11-30-2018



DETAIL "A"



PLAN VIEW

REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY: R. RENNER
DRAWN BY: J. KOCH
CHECKED BY: R. RENNER
DATE: 09/03/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
16800 Lincoln Road
Morrison, Illinois 61270

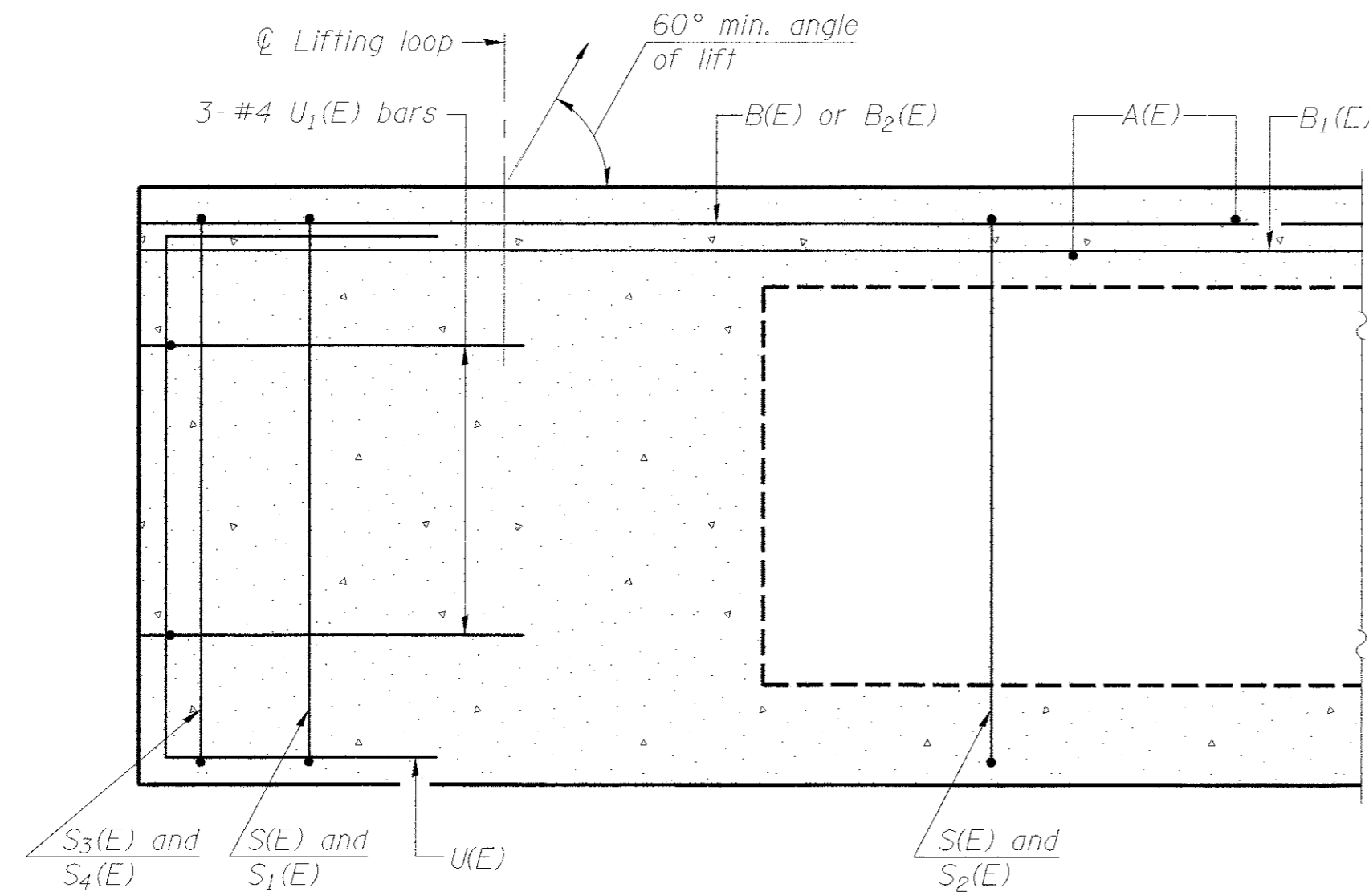
WHITESIDE COUNTY HIGHWAY DEPARTMENT
BRIDGE DETAILS
BLACK ROAD BRIDGE OVER ROCK CREEK

SCALE: SHEET 1 OF 12 SHEETS STA. TO STA.

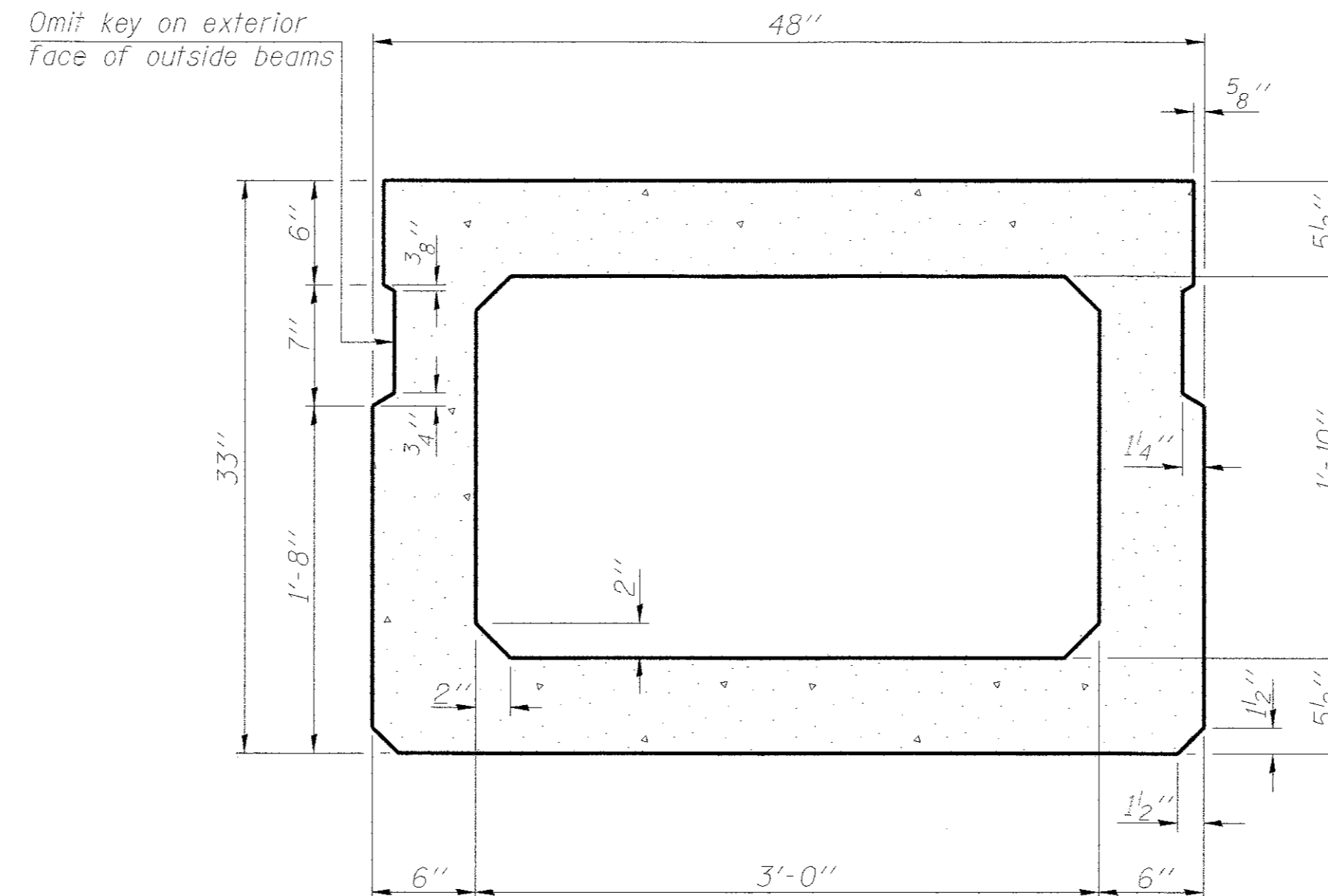
TOTAL SHEETS: 55
SHEET NO.: 40

ROUTE: FAS 197 (BLACK RD)
SECTION: 11-00204-00-BR

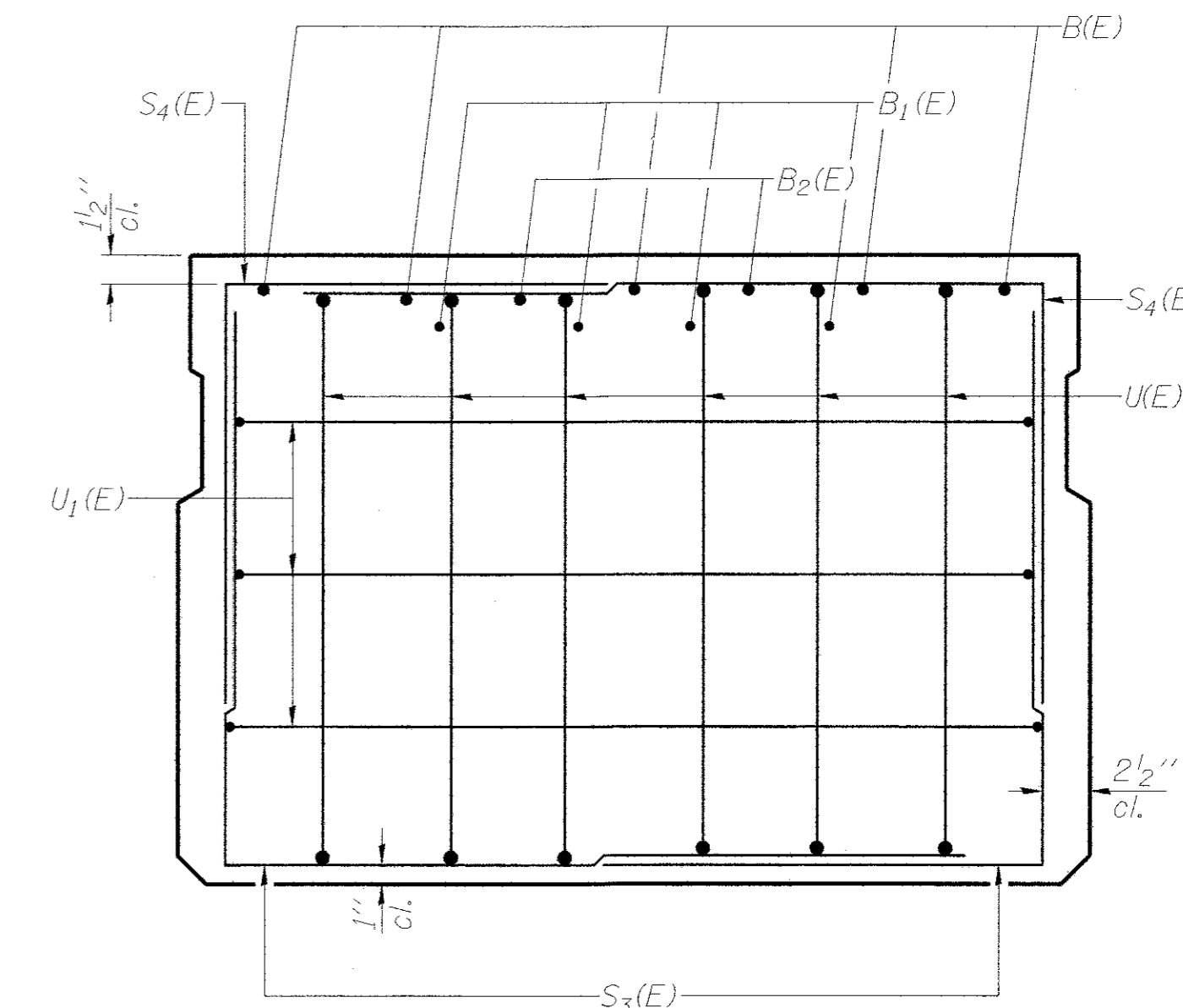
BEAM DETAILS - OUTER SPANS



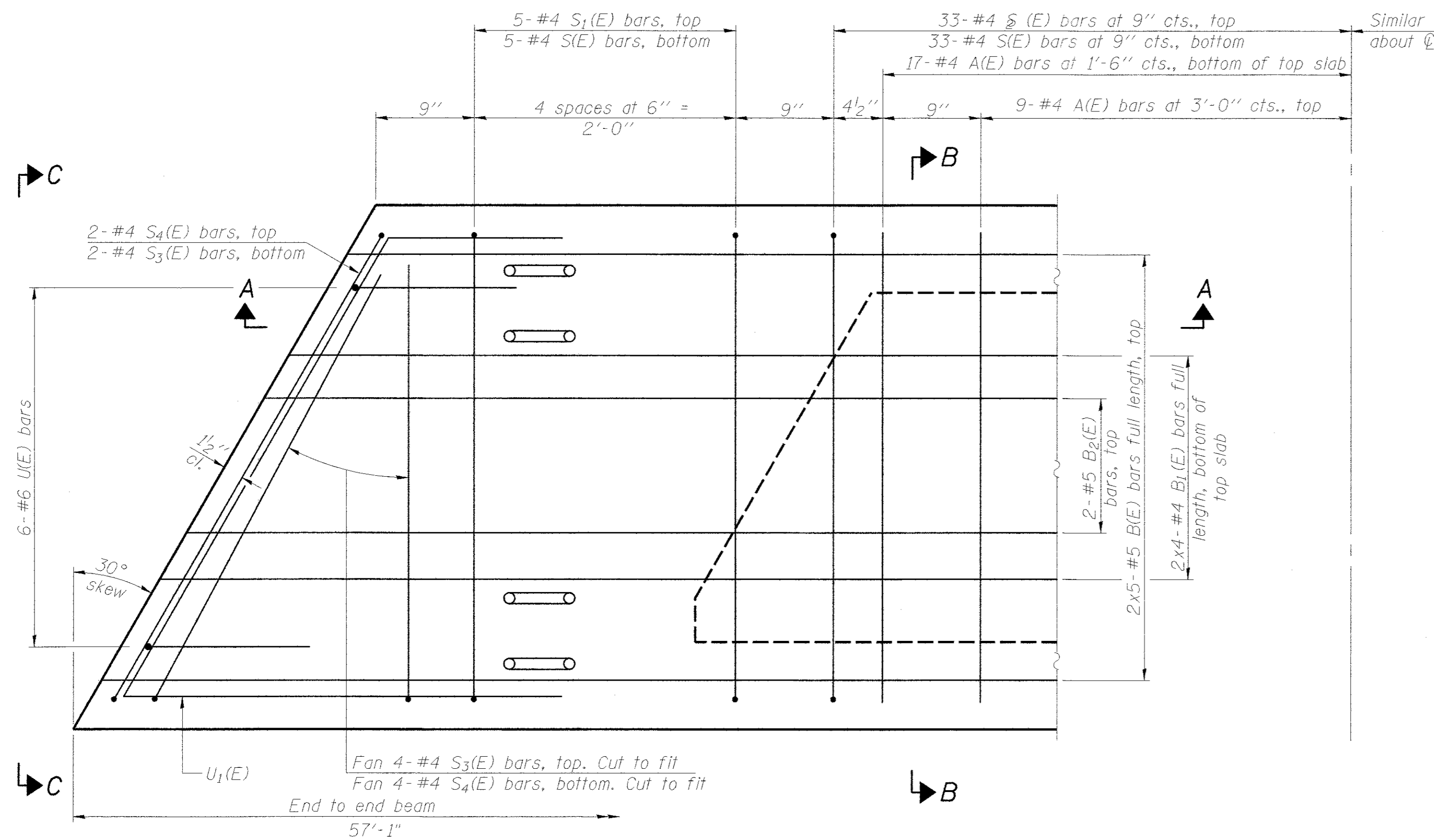
SECTION A-A



SECTION B-B
(Showing dimensions)



VIEW C-C

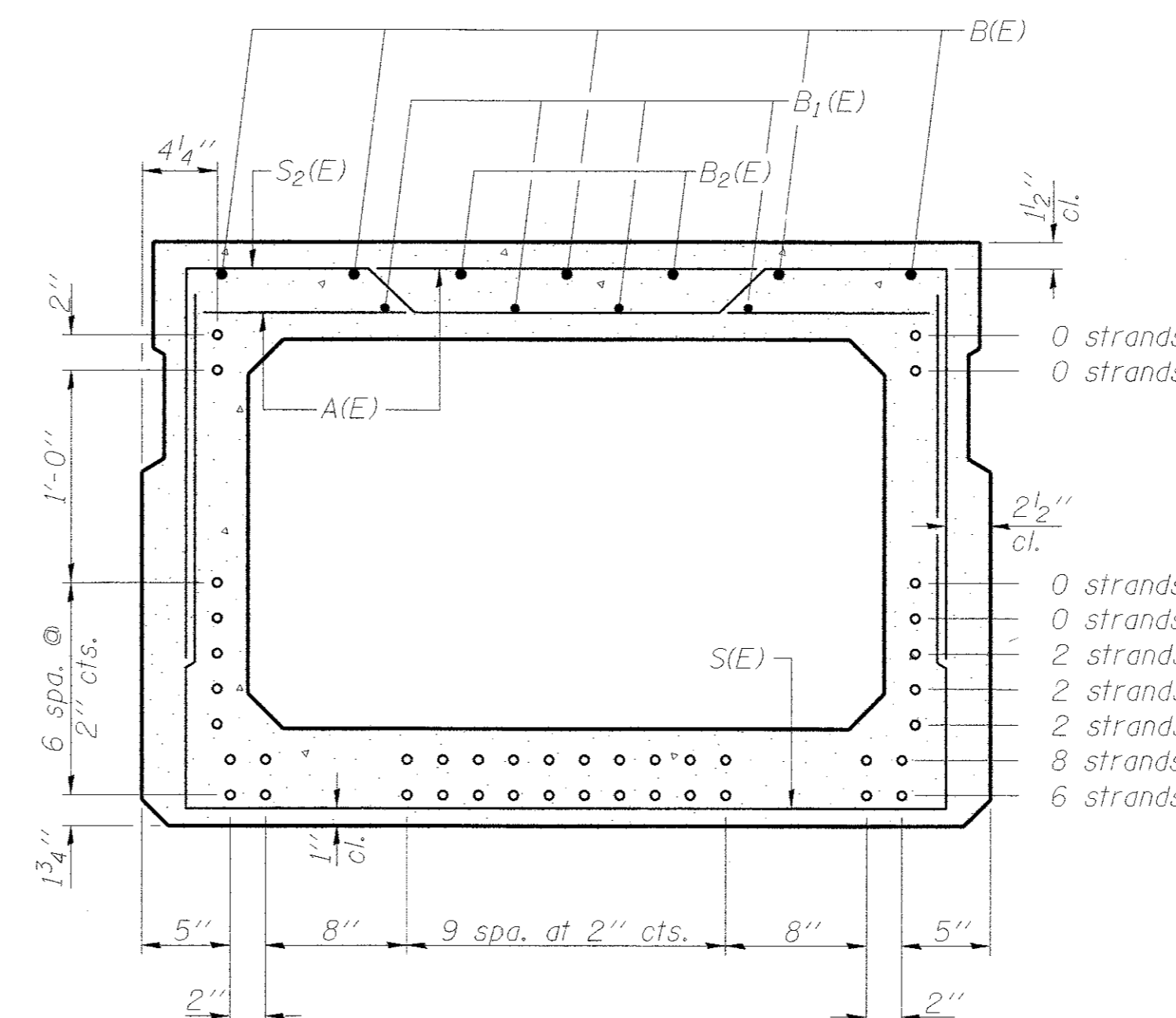


PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP

#4 bar = 2'-0"
#5 bar = 2'-6"



SECTION B-B

(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

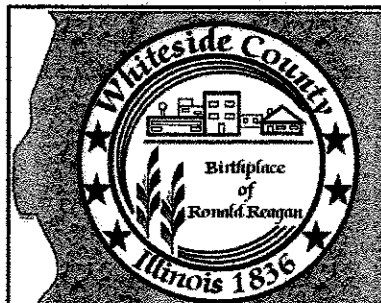
Bar	No.	Size	Length	Shape
A(E)	52	#4	3'-7"	
B(E)	10	#5	29'-8"	
B1(E)	8	#4	29'-5"	
B2(E)	4	#5	10'-0"	
S(E)	76	#4	8'-8"	
S1(E)	10	#4	7'-5"]]
S2(E)	66	#4	7'-8"]]
S3(E)	12	#4	5'-7"]]
S4(E)	12	#4	4'-11"]]
U(E)	12	#6	5'-0"]]
U1(E)	6	#4	8'-9"]]

REVISIONS	DATE

DESIGNED BY: R. RENNER	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 09/03/15
---------------------------	----------------------	--------------------------	----------------

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
18819 Lincoln Road
Morison, Illinois 61270

WHITESIDE COUNTY HIGHWAY DEPARTMENT
BRIDGE DETAILS
BLACK ROAD BRIDGE OVER ROCK CREEK
SCALE: SHEET 2 OF 12 SHEETS TO STA.

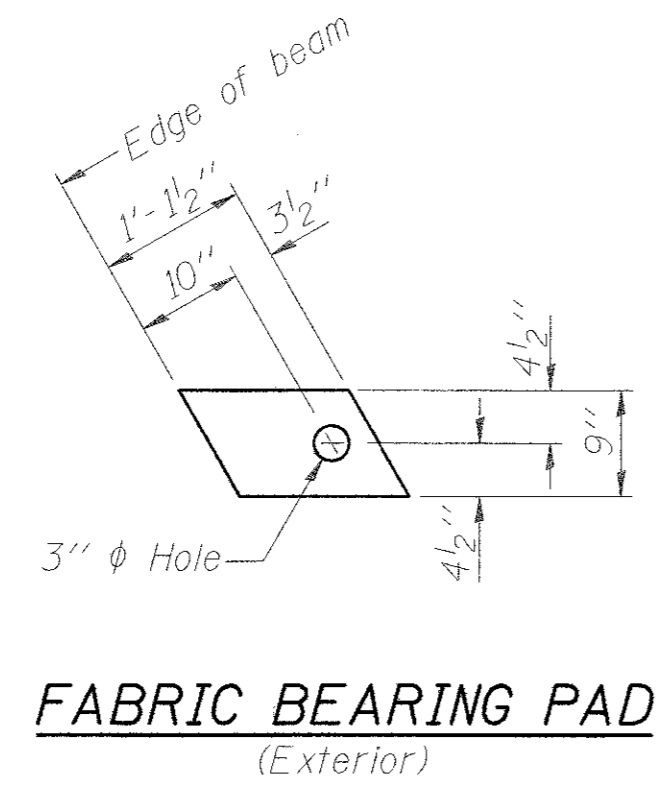
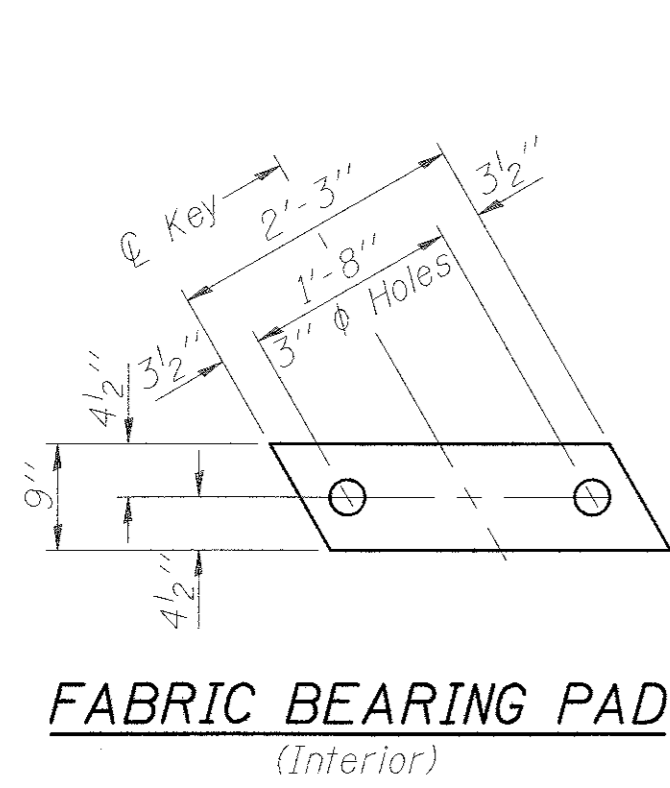


ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

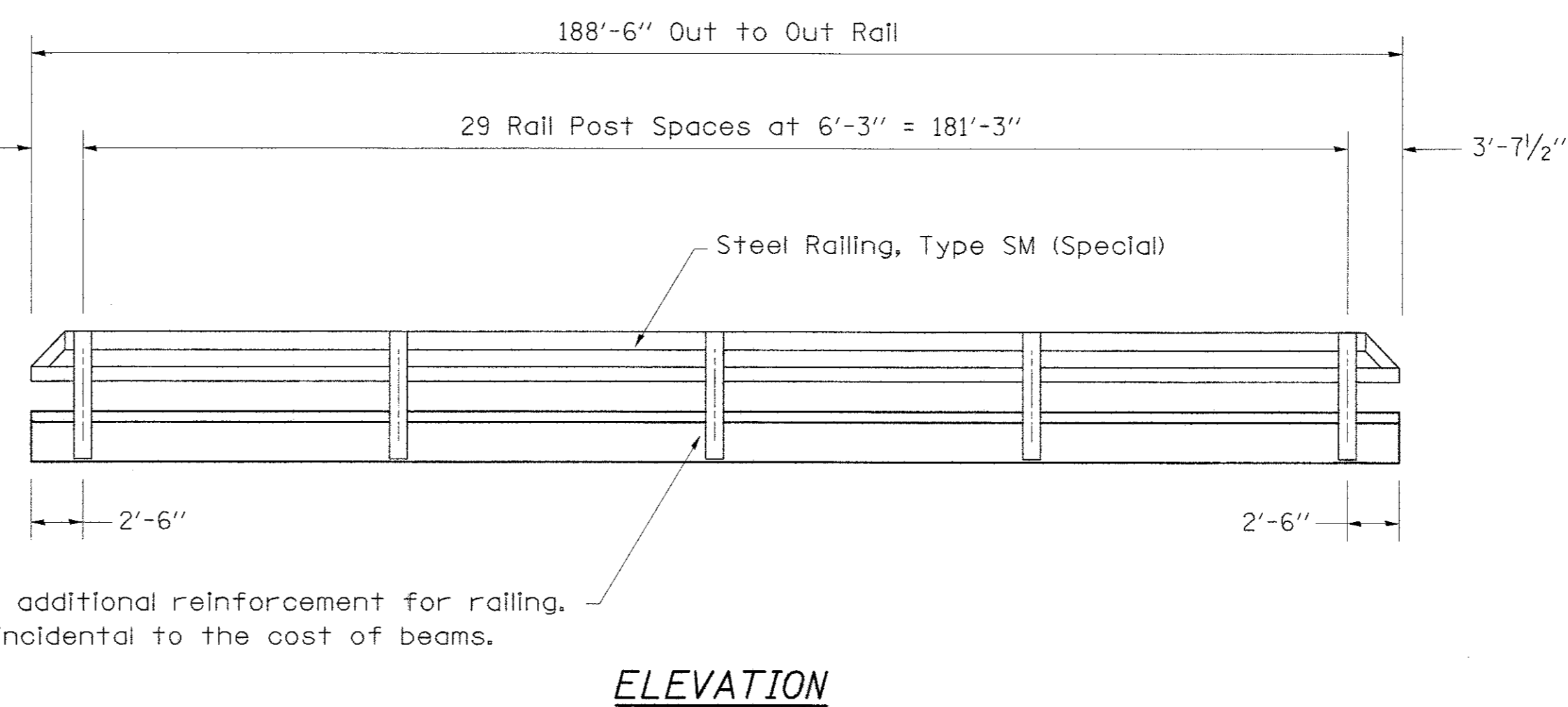
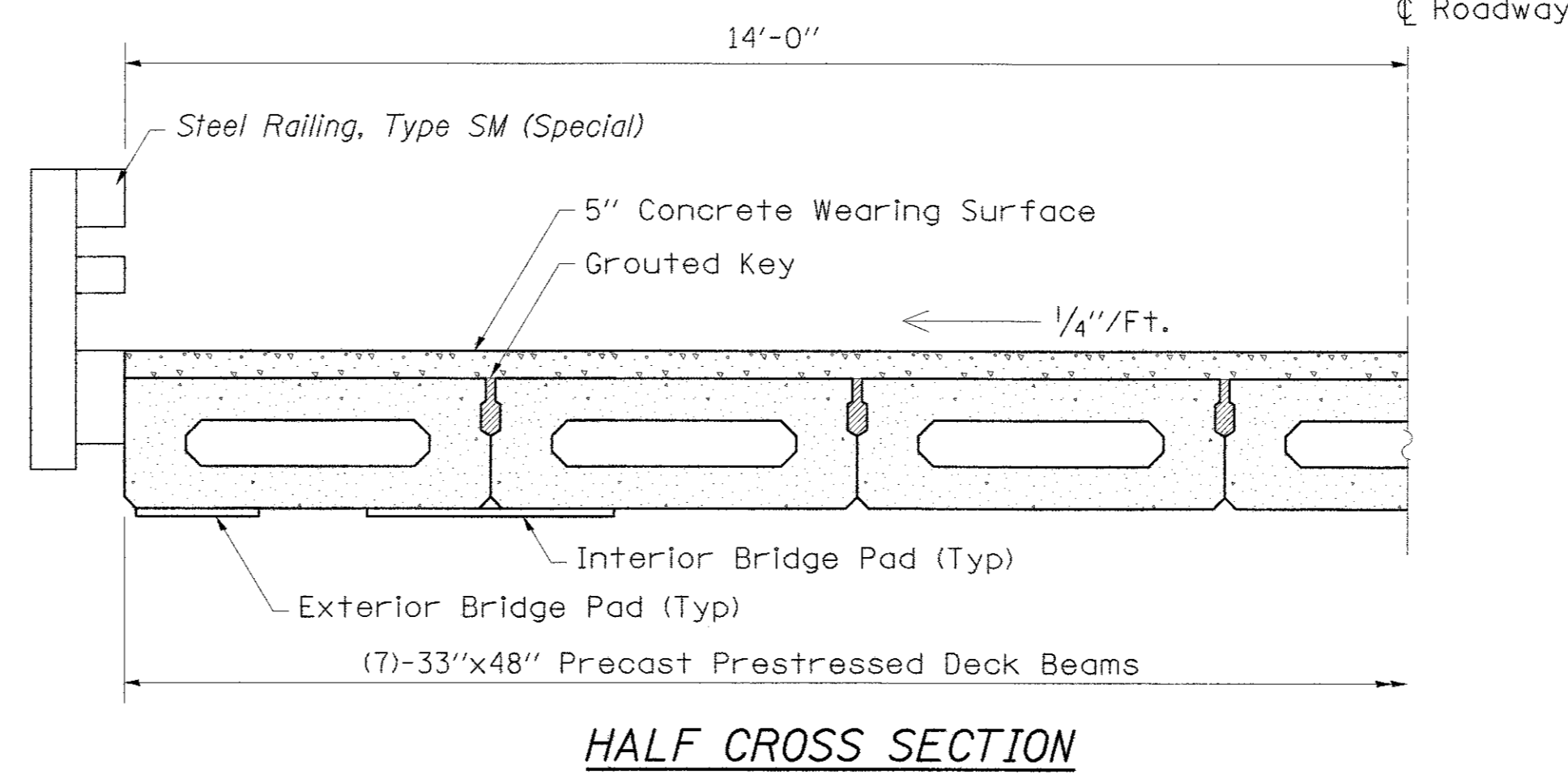
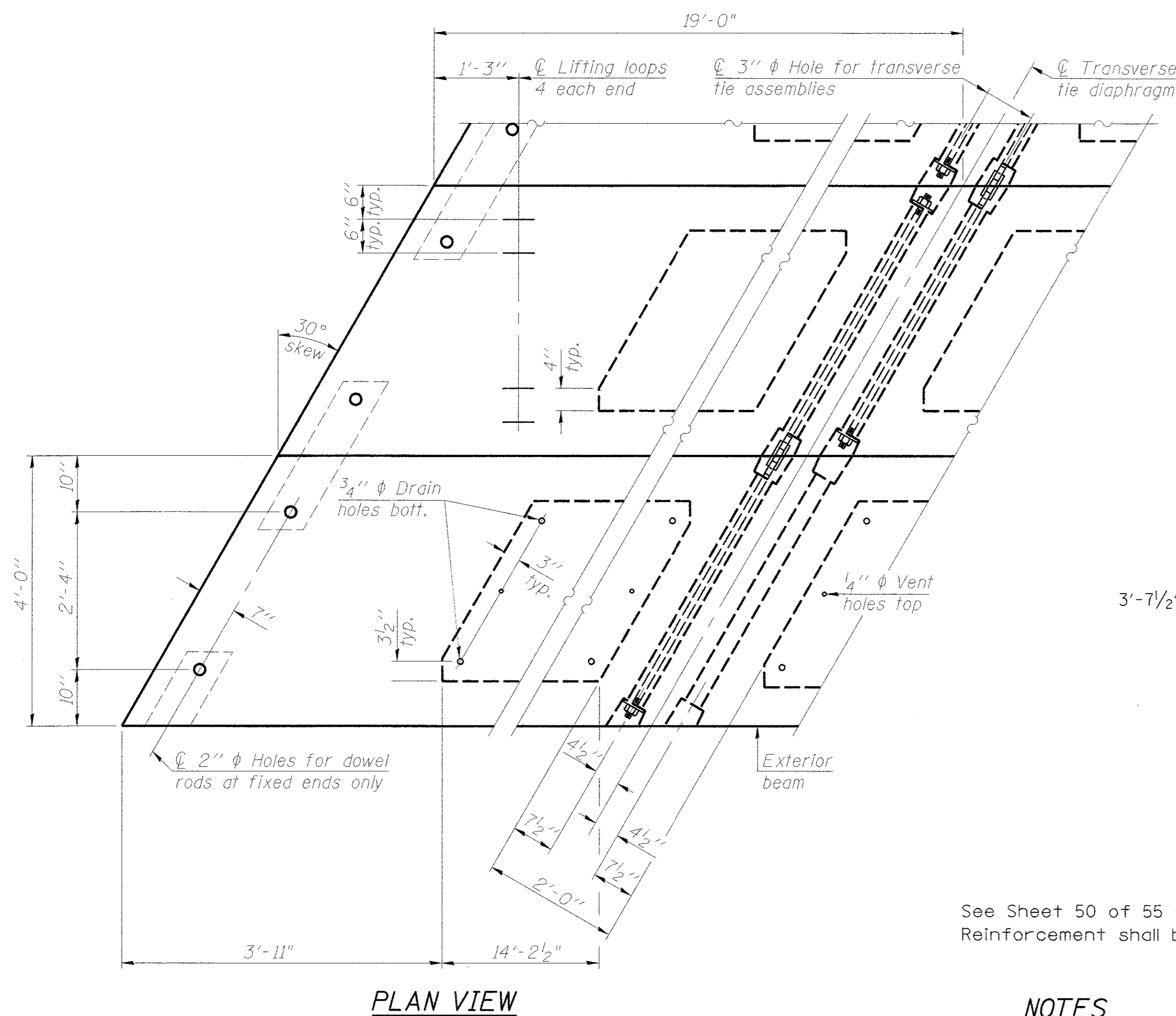
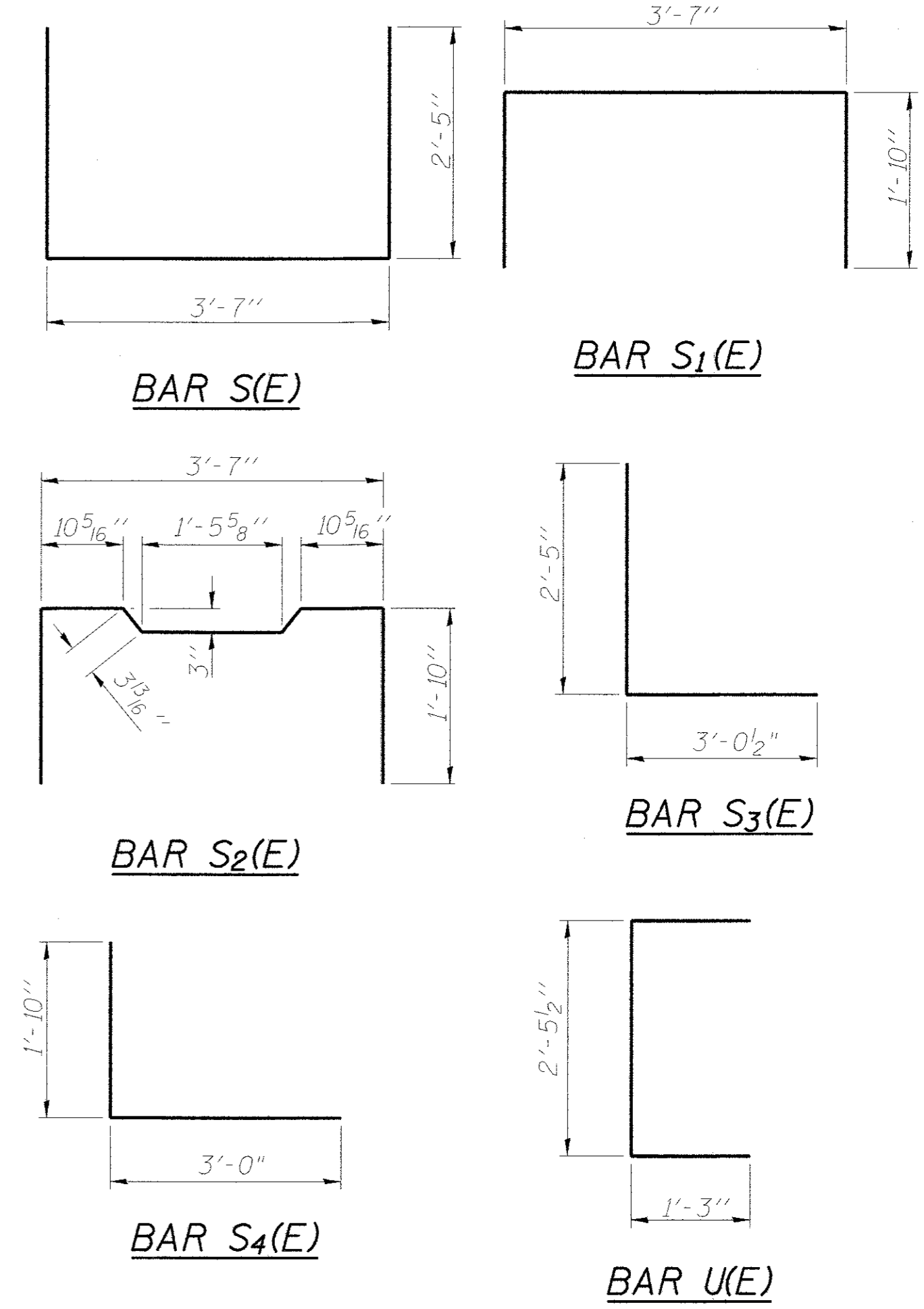
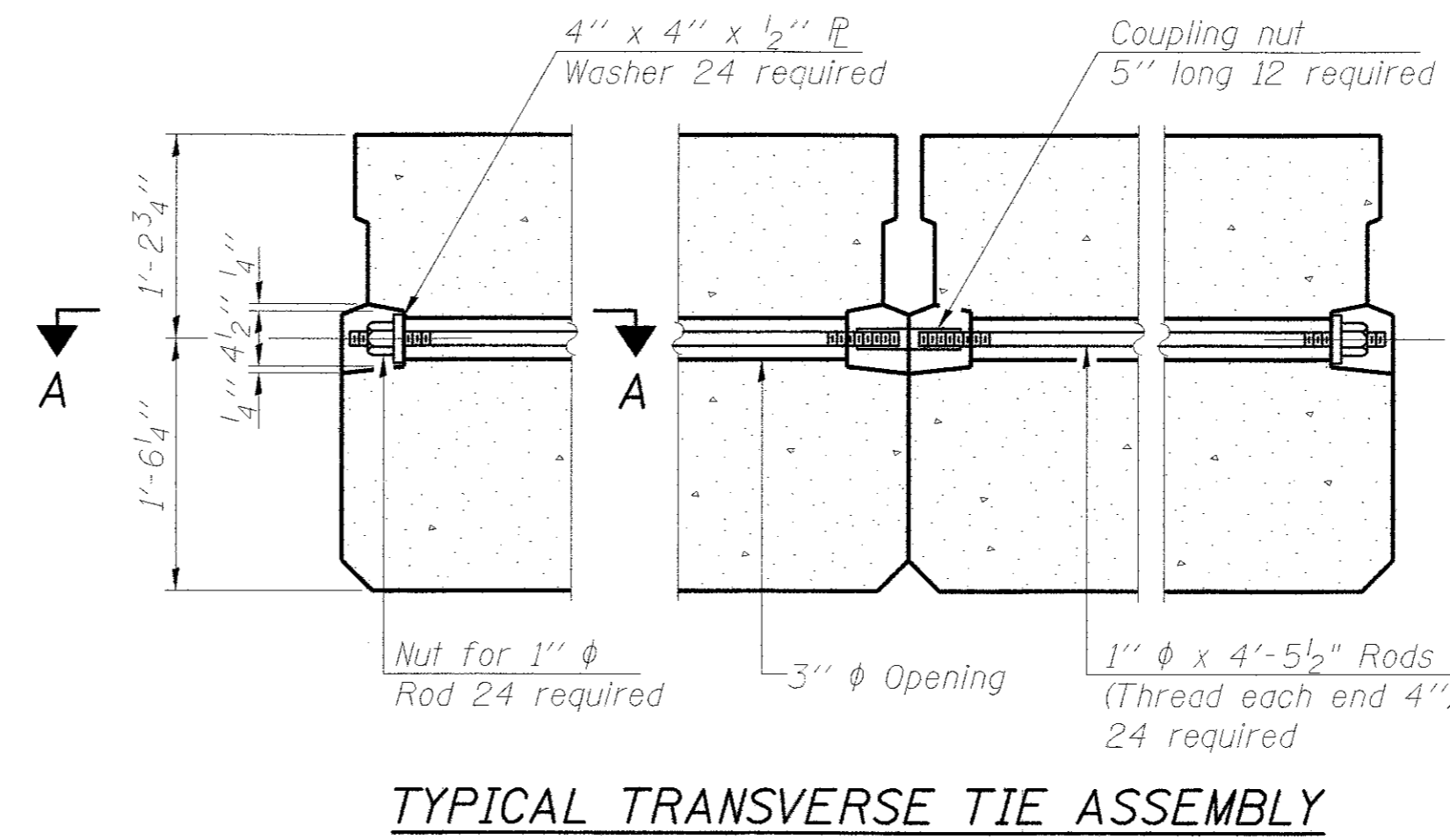
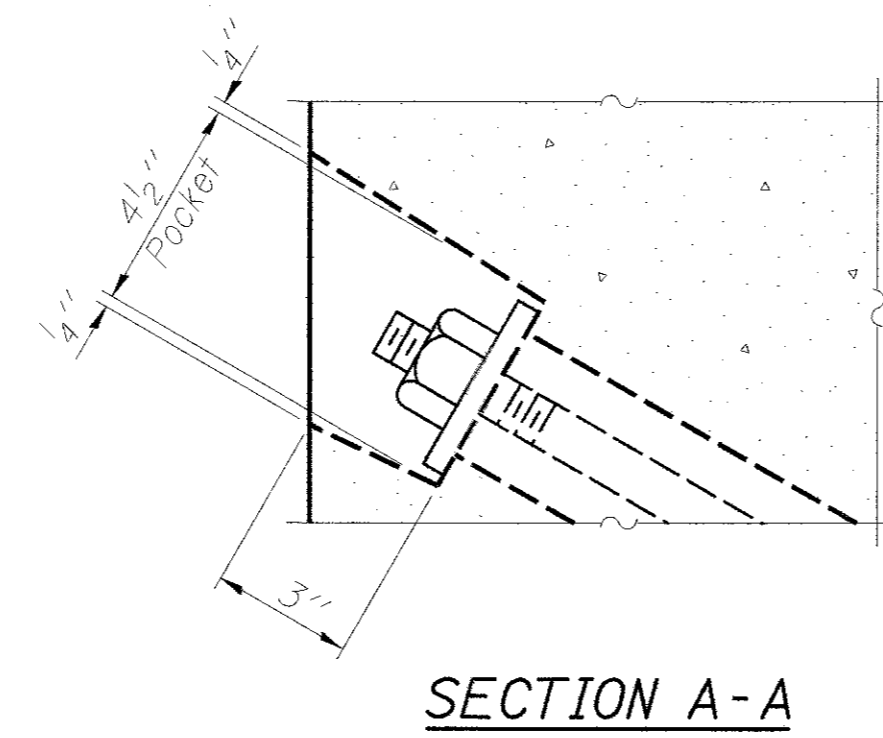
TOTAL SHEETS 55	SHEET NO. 41
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BEAM DETAILS – OUTER SPANS



FIXED

Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



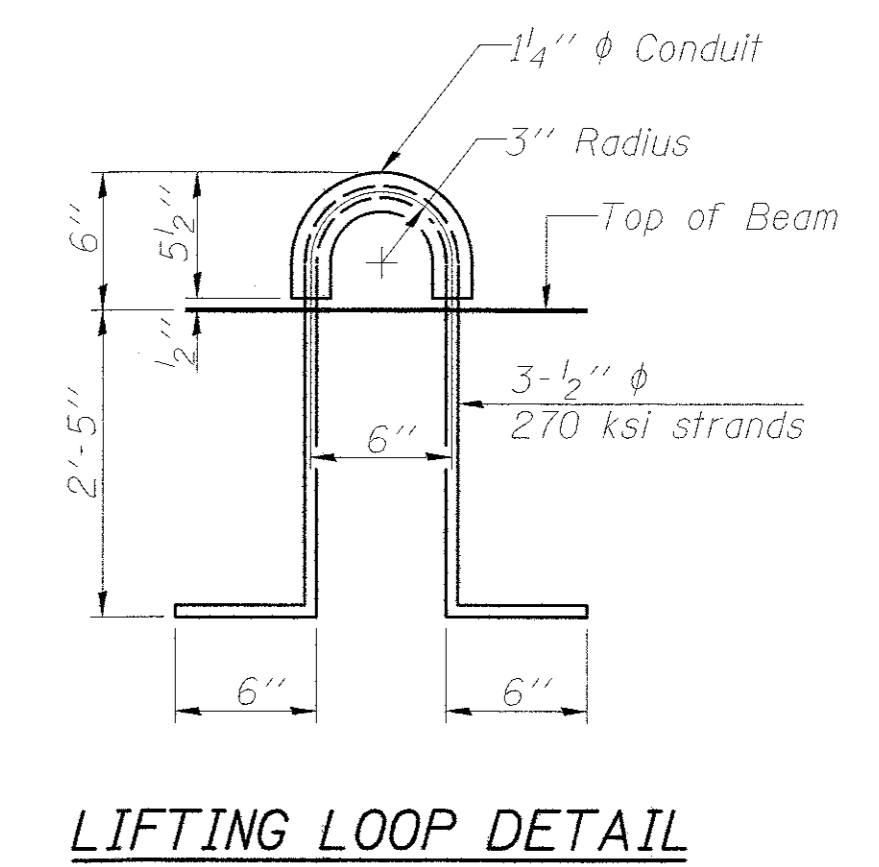
See Sheet 50 of 55 for additional reinforcement for railing.
Reinforcement shall be incidental to the cost of beams.


NOTES

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. The 1" φ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" φ lifting pin shall be used to engage the lifting loops during handling.
Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

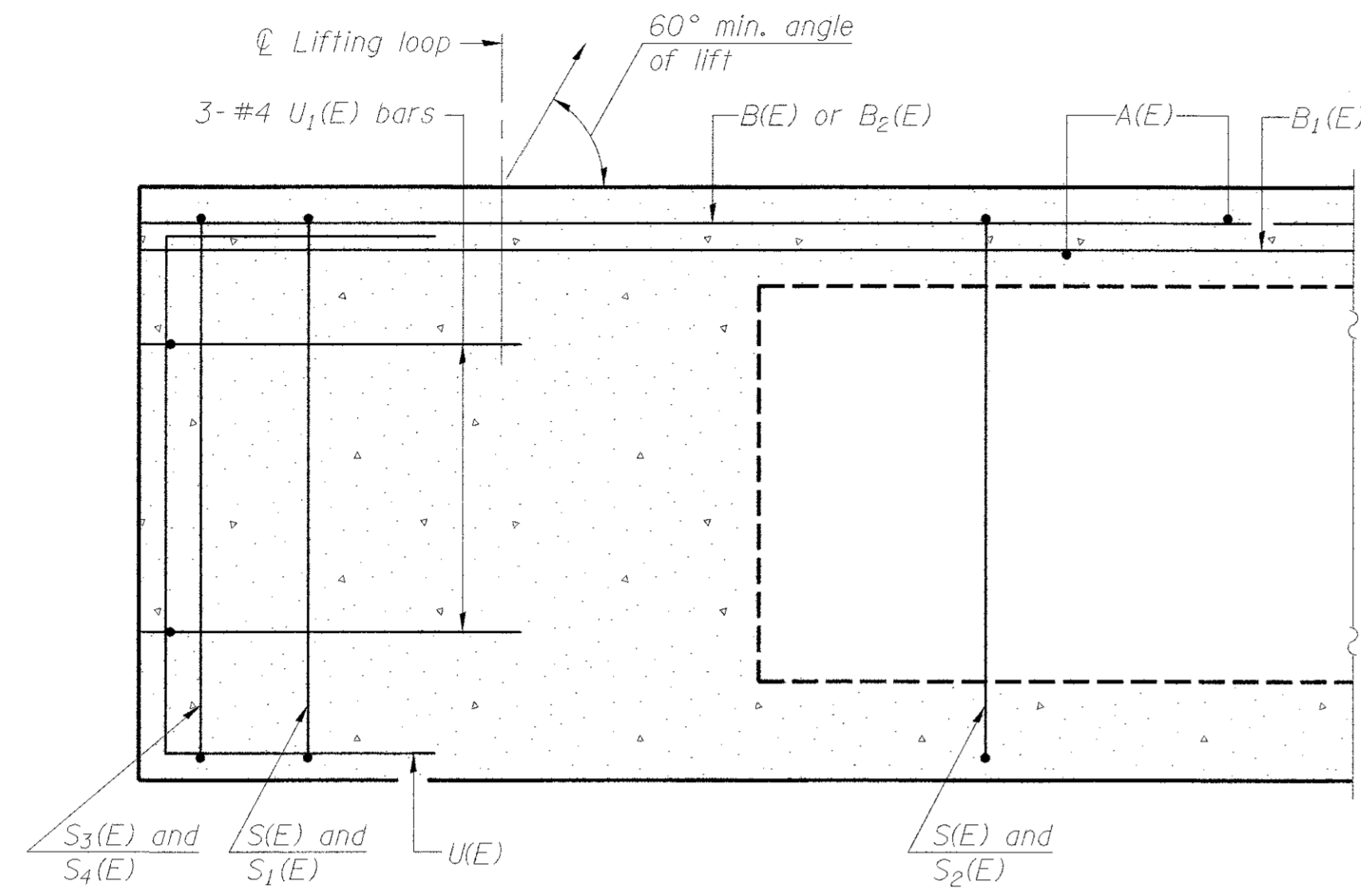
BILL OF MATERIAL

Material Description	Sq. Ft.	Quantity
Precast Prestressed Conc. Deck Bms. (33" depth)		3197

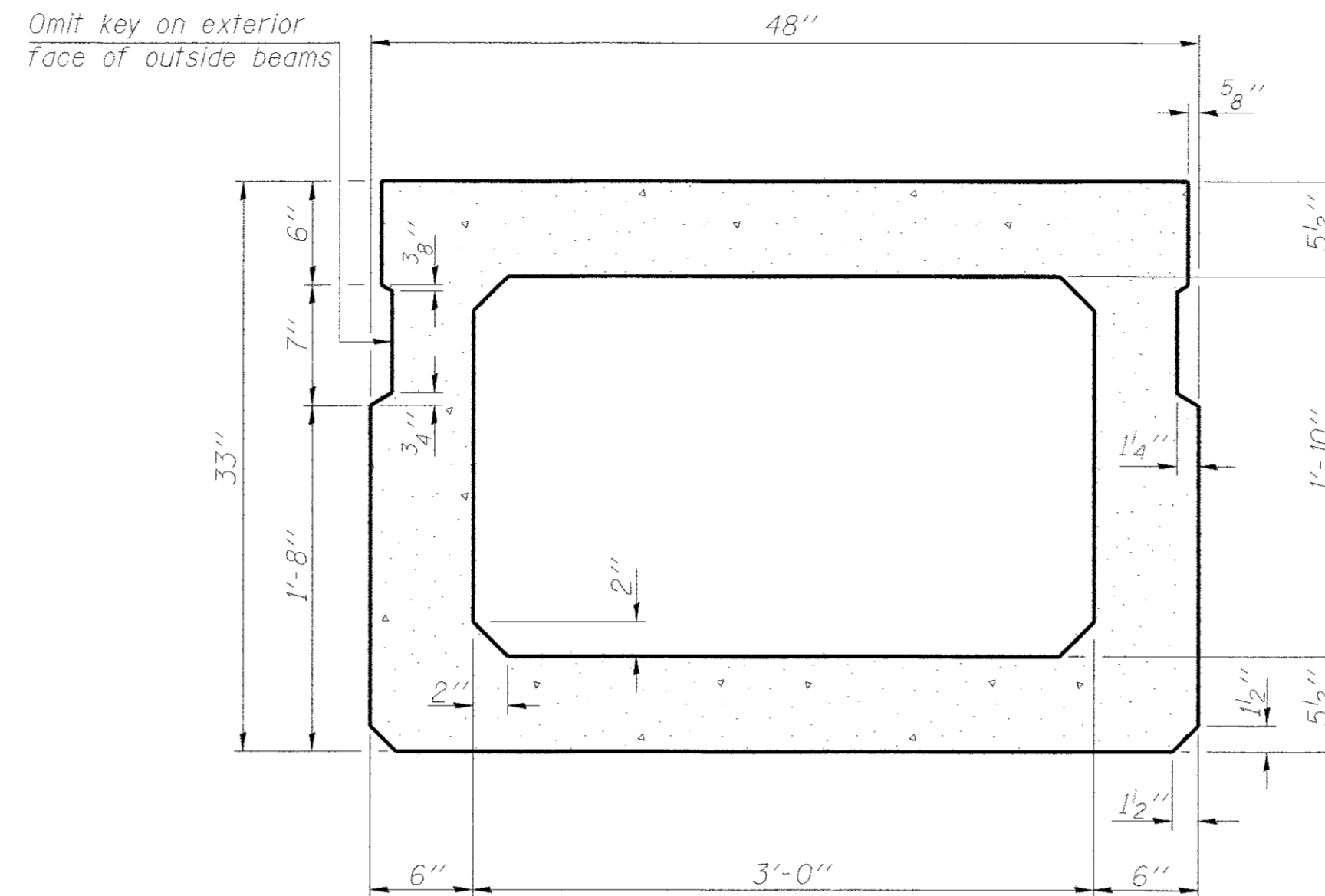


REVISIONS	DATE	
	DESCRIPTION	
DESIGNED BY:	R. RENNER	
DRAWN BY:	J. KOCH	
CHECKED BY:	R. RENNER	
DATE:	09/03/15	
WHITESIDE COUNTY HIGHWAY DEPARTMENT		
BRIDGE DETAILS		
BLACK ROAD BRIDGE OVER ROCK CREEK		
SCALE:	SHEET 3 OF 12 SHEETS	STA. TO STA.
WHITESIDE COUNTY HIGHWAY DEPARTMENT		
BRIDGE DETAILS		
BLACK ROAD BRIDGE OVER ROCK CREEK		
		
ROUTE		
FAS 197 (BLACK RD)		
SECTION		
11-00204-00-BR		
TOTAL SHEETS	SHEET NO.	
55	42	

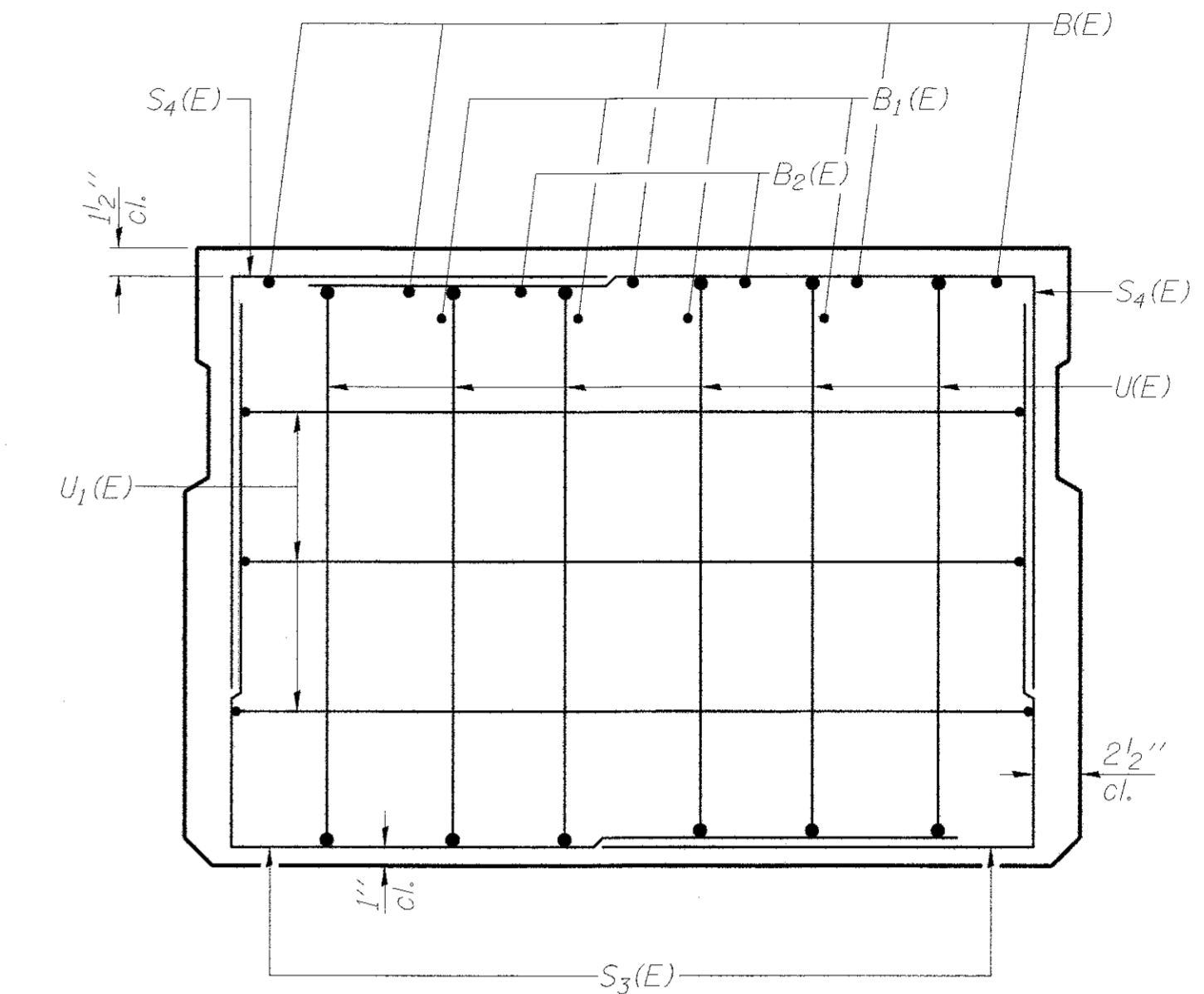
BEAM DETAILS – MIDDLE SPAN



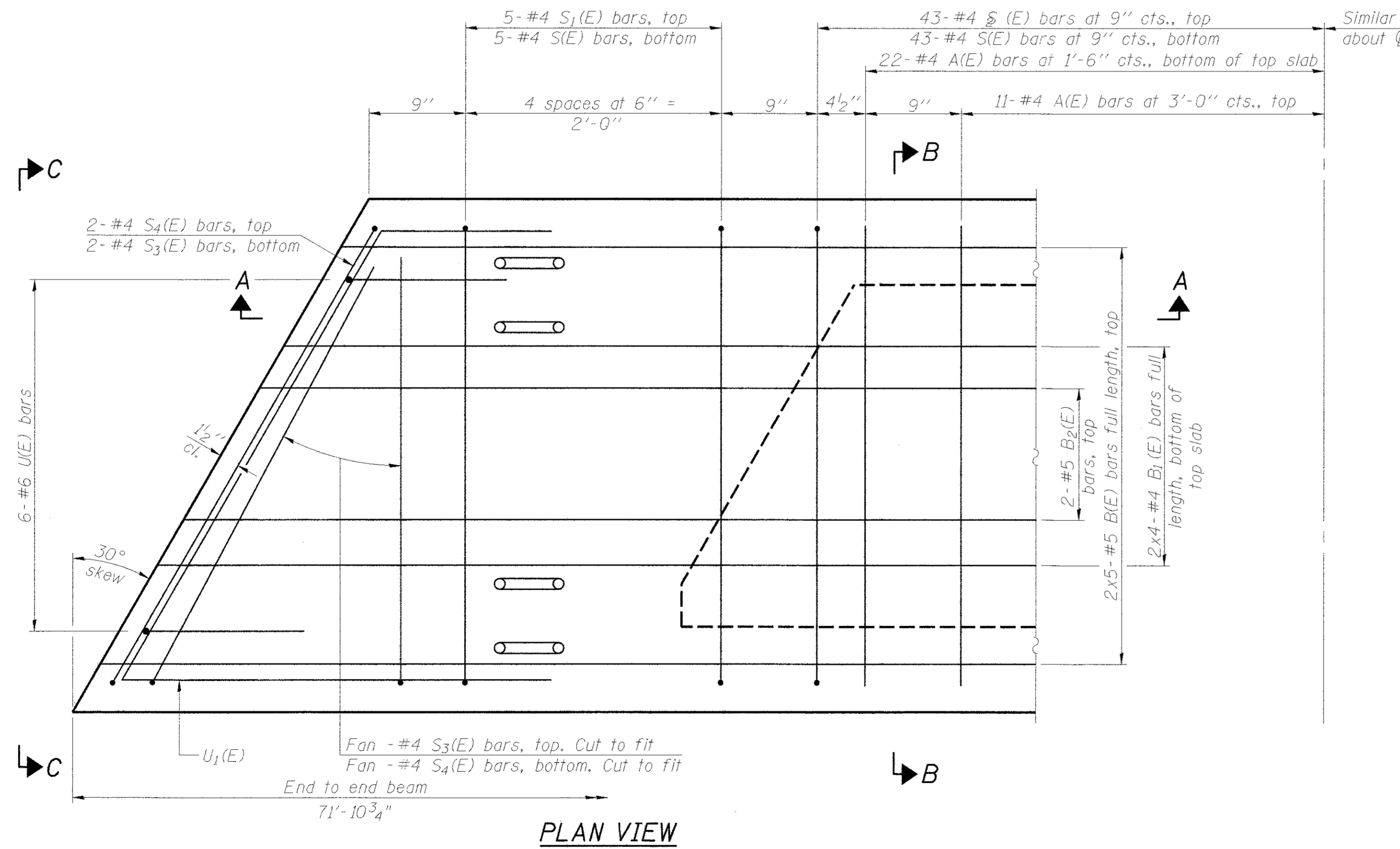
SECTION A-A



SECTION B-B
(Showing dimensions)



VIEW C-C

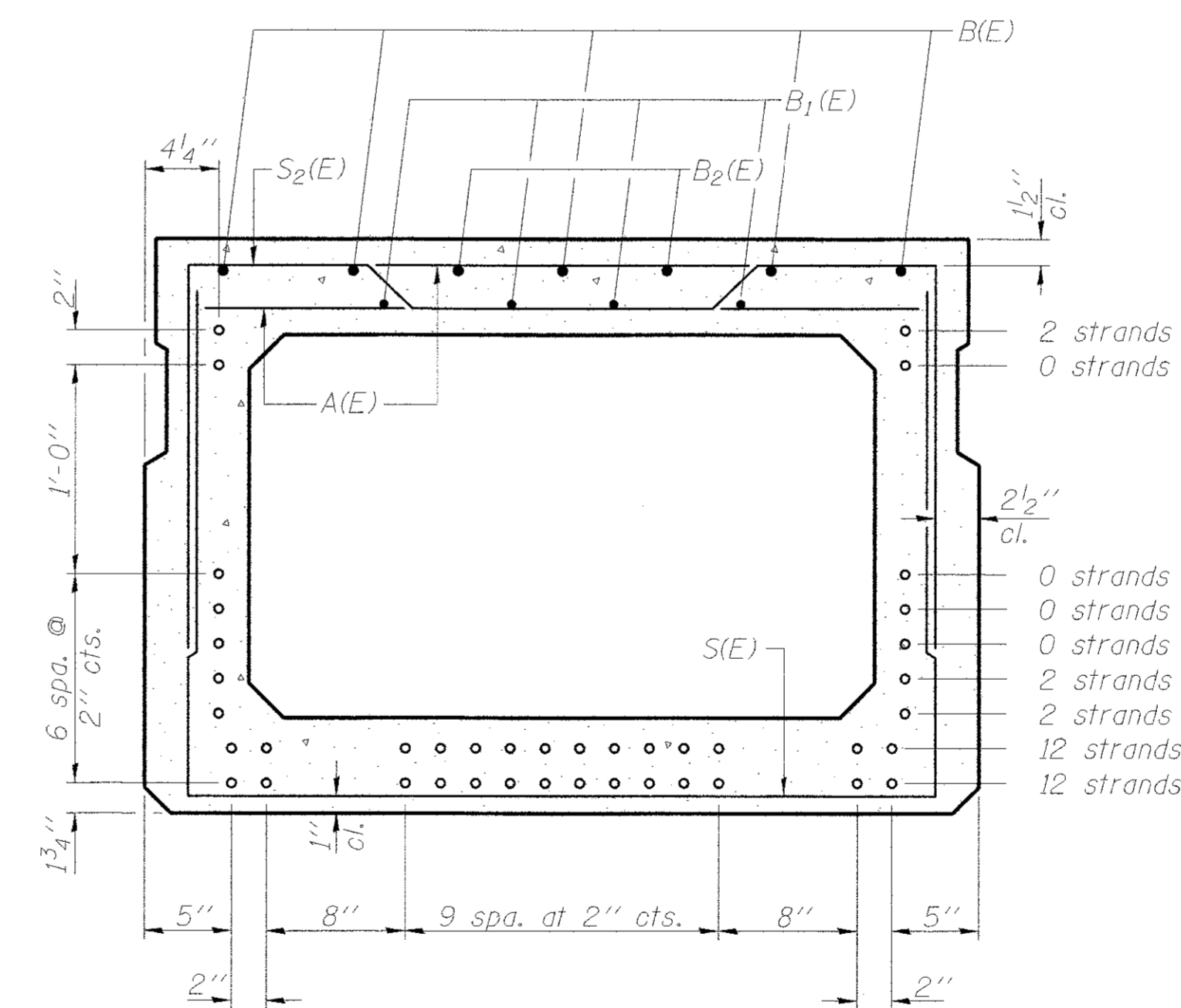


PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP

#4 bar = 2'-0"
#5 bar = 2'-6"



SECTION B-B

(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	66	#4	3'-7"	—
B(E)	10	#5	37'-1"	—
B1(E)	8	#4	36'-10"	—
B2(E)	4	#5	10'-0"	—
S(E)	96	#4	8'-8"	—
S1(E)	10	#4	7'-5"	—
S2(E)	86	#4	7'-8"	—
S3(E)	12	#4	5'-7"	—
S4(E)	12	#4	4'-11"	—
U(E)	12	#6	5'-0"	—
U1(E)	6	#4	8'-9"	—

REVISIONS

DESCRIPTION

DESIGNED BY:
R. RENNER

DRAWN BY:
J. KOCH

CHECKED BY:
R. RENNER

DATE: 09/03/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT

BRIDGE DETAILS

BLACK ROAD BRIDGE OVER ROCK CREEK

ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS
55

SHEET NO.
43

WHITESIDE COUNTY HIGHWAY DEPARTMENT

BRIDGE DETAILS

BLACK ROAD BRIDGE OVER ROCK CREEK

ROUTE
FAS 197 (BLACK RD)

TOTAL SHEETS
55

SHEET NO.
43

TO STA.

STA.

SHEET 4 OF 12 SHEETS

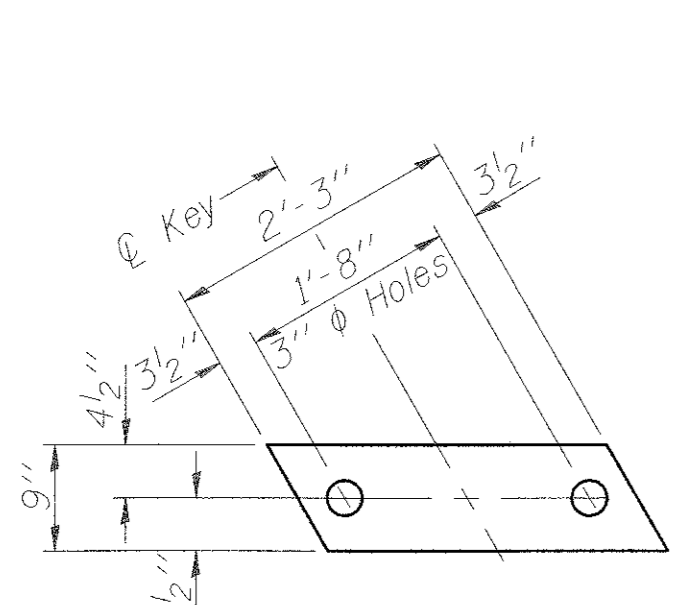
SCALE:



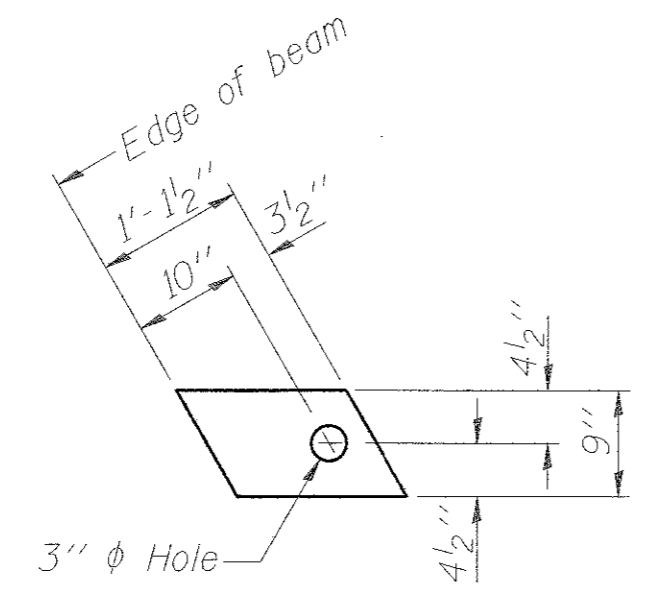
WHITESIDE COUNTY
Highway Department
Established 1836

TO STA.

BEAM DETAILS - MIDDLE SPAN



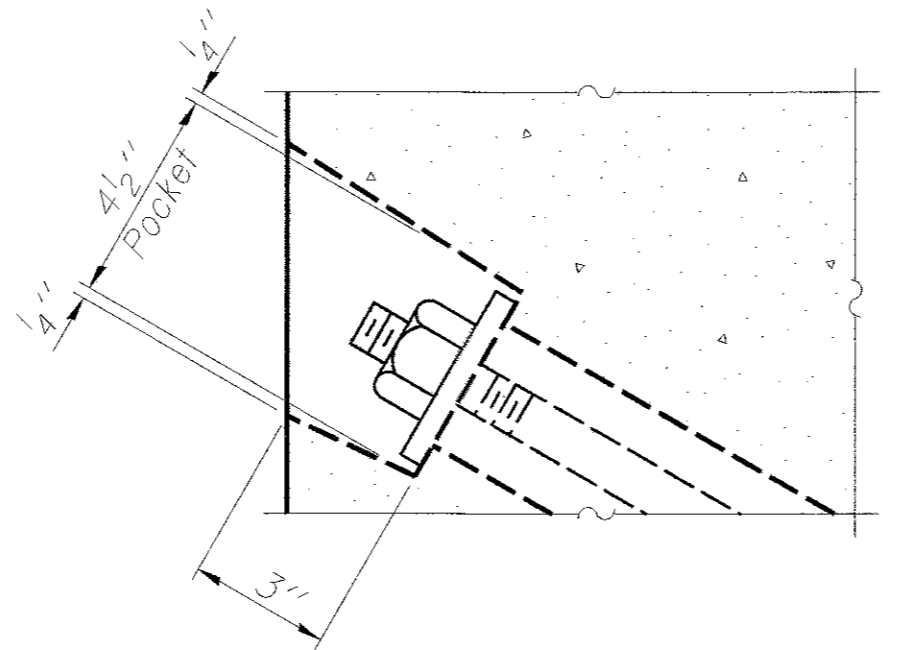
FABRIC BEARING PAD
(Interior)



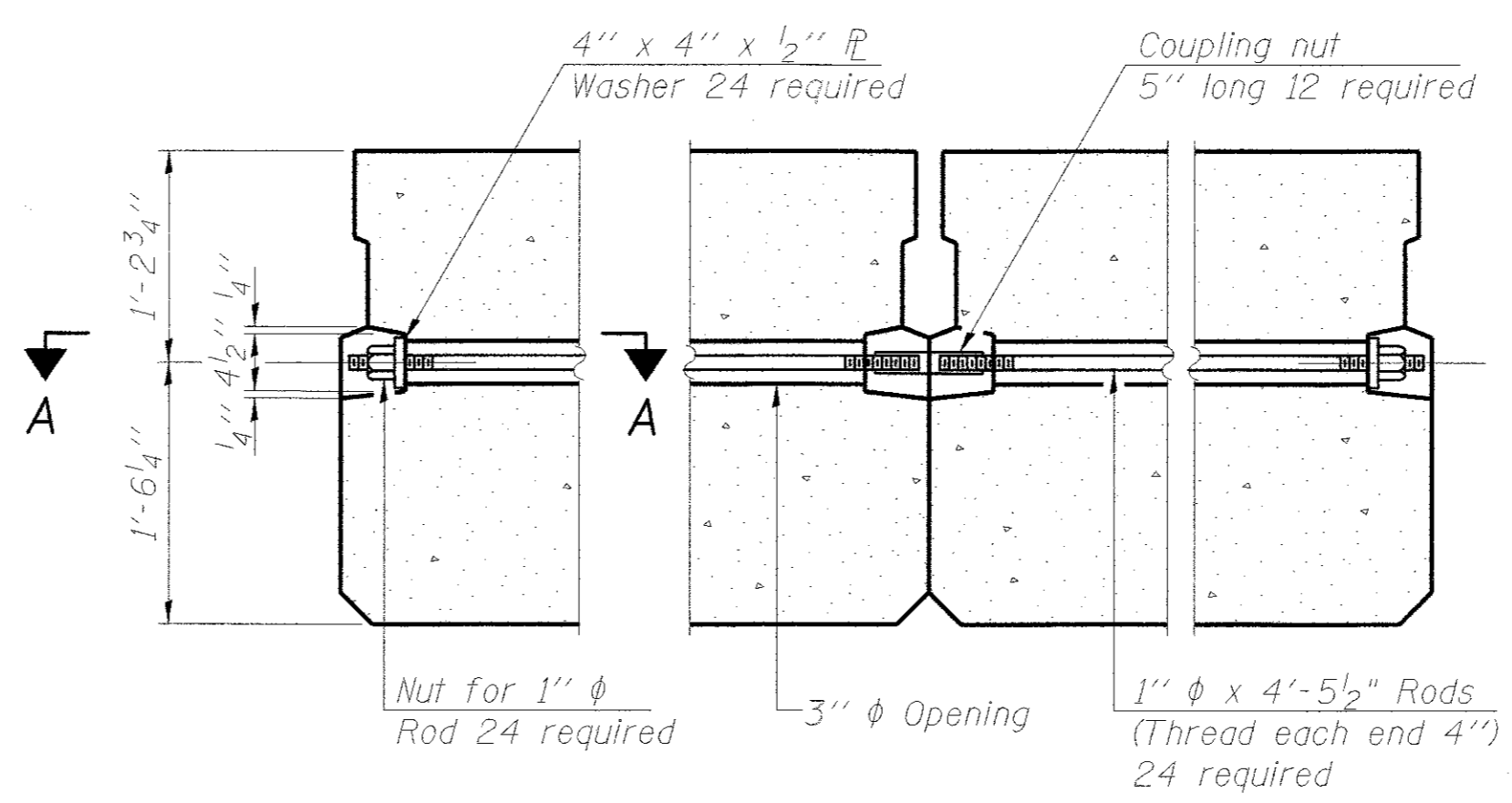
FABRIC BEARING PAD
(Exterior)

FIXED

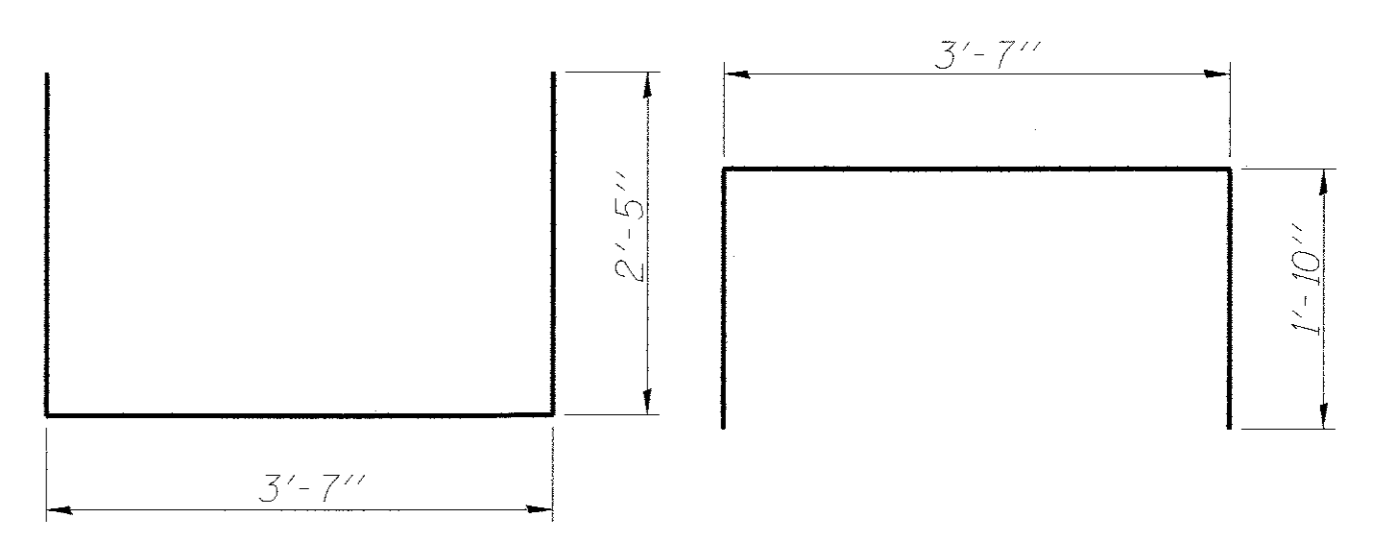
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



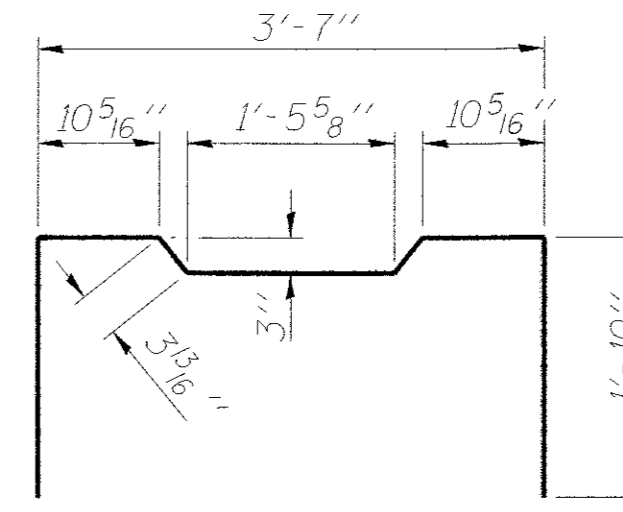
SECTION A-A



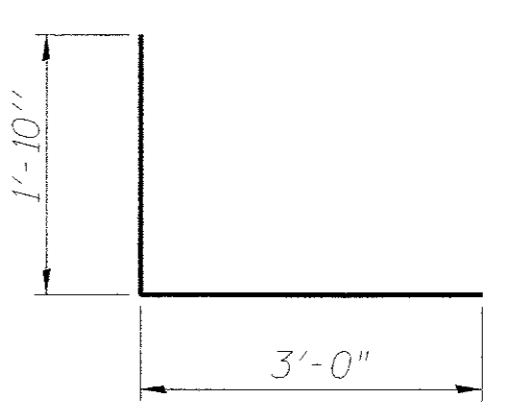
TYPICAL TRANSVERSE TIE ASSEMBLY



BAR S(E)

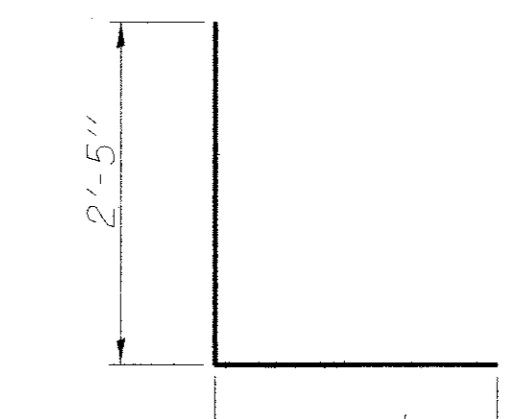


BAR S2(E)

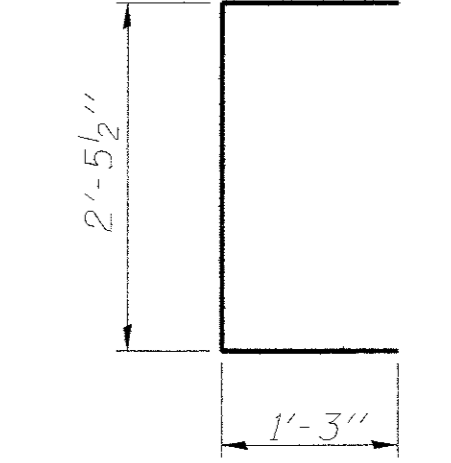


BAR S4(E)

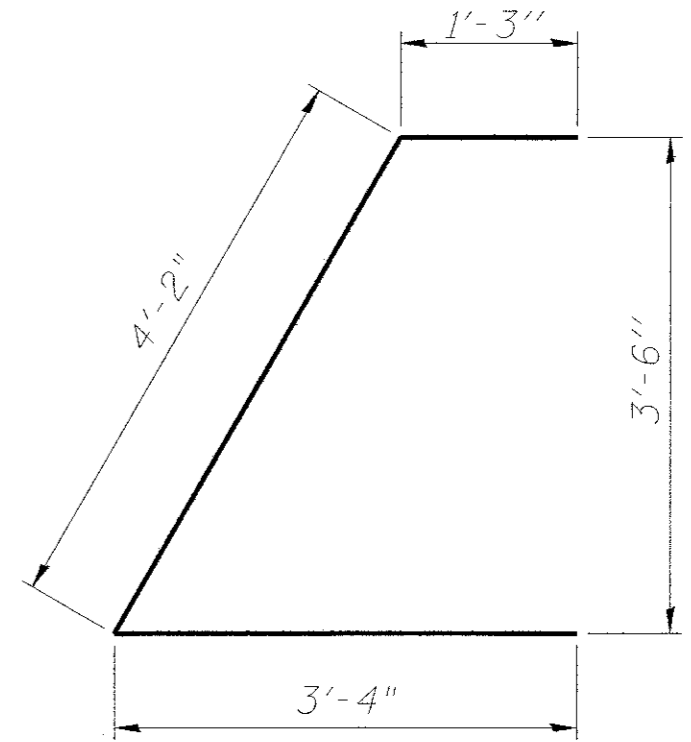
BAR S1(E)



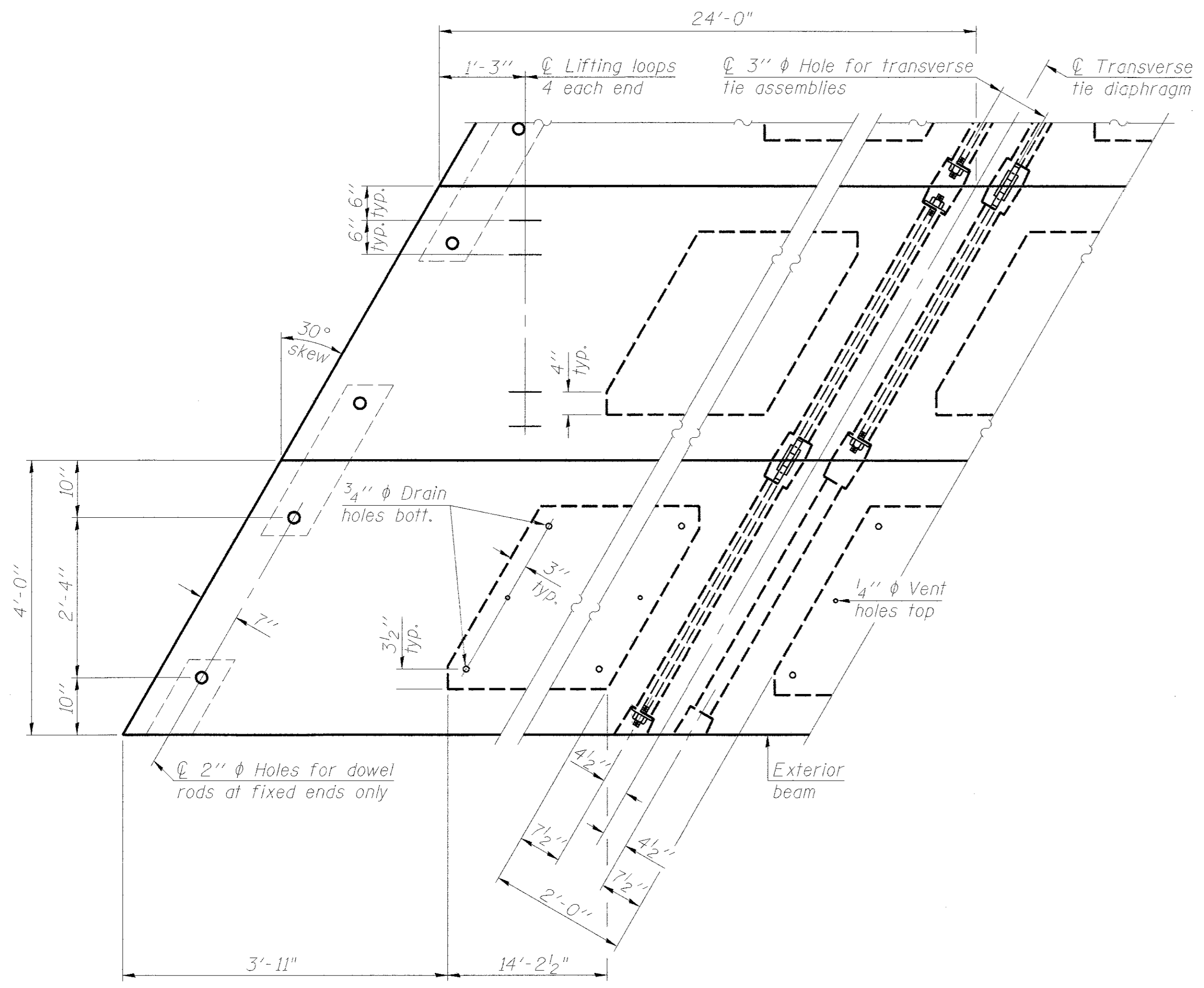
BAR S3(E)



BAR U(E)



BAR U1(E)



PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

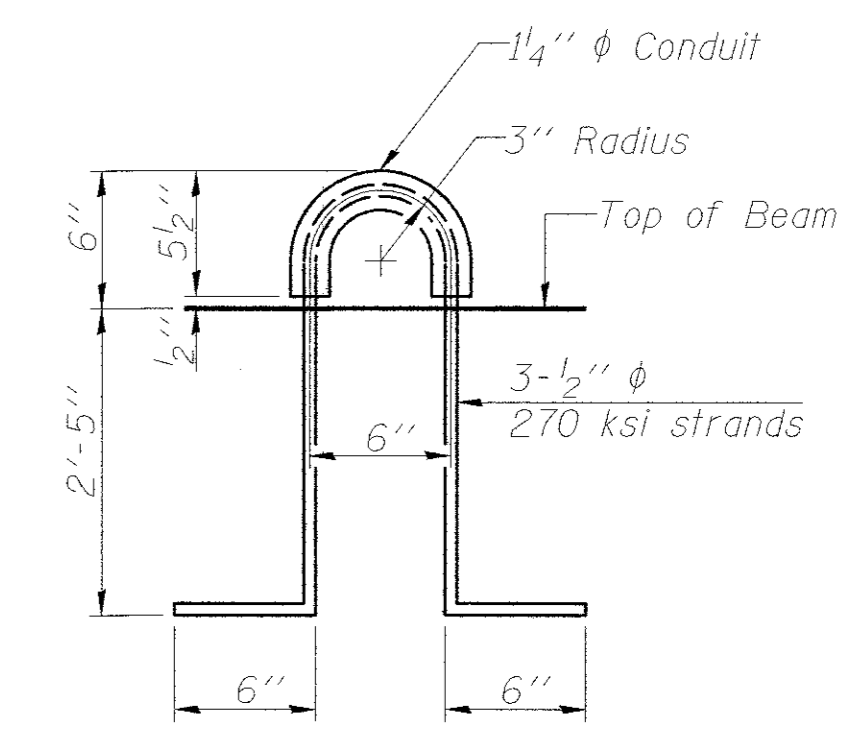
NOTES

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. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
Two 1/4" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft.	2013
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See Sheet 50 of 55 for additional reinforcement for railing. Reinforcement shall be incidental to the cost of beams.



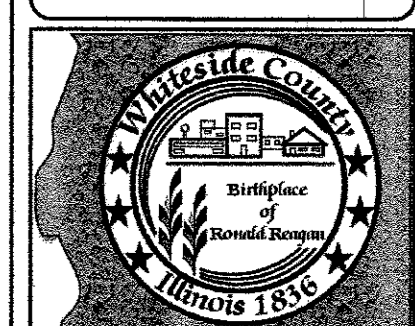
LIFTING LOOP DETAIL

REVISIONS	DATE

DESIGNED BY:	R. RENNER
DRAWN BY:	J. KOCH
CHECKED BY:	R. RENNER
DATE:	09/03/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1000 Lincoln Road
Mason, Texas 76270

WHITESIDE COUNTY HIGHWAY DEPARTMENT
BRIDGE DETAILS
BLACK ROAD BRIDGE OVER ROCK CREEK
SCALE: _____ STA. _____ TO STA. _____
SHEET 5 OF 12 SHEETS

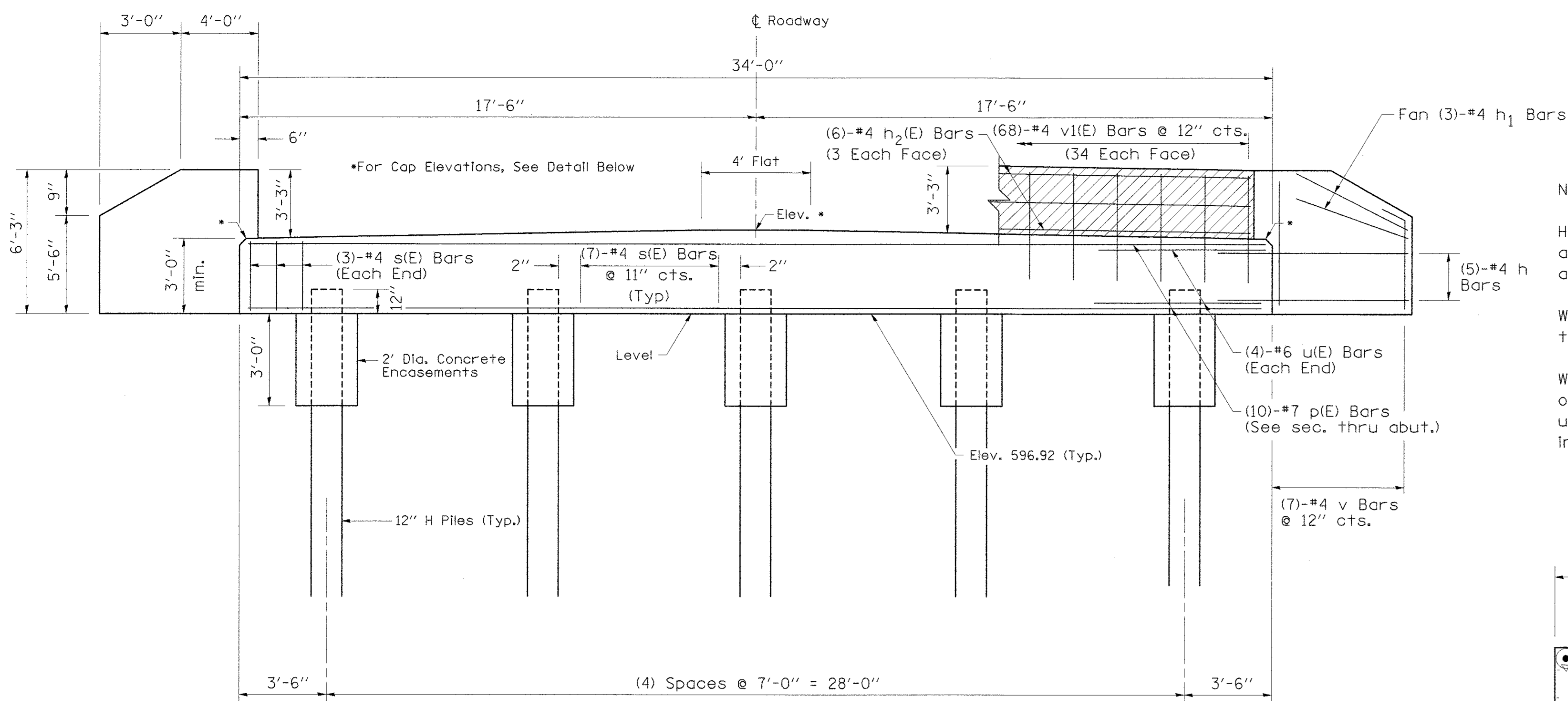


ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	44

ABUTMENT DETAILS



ELEVATION

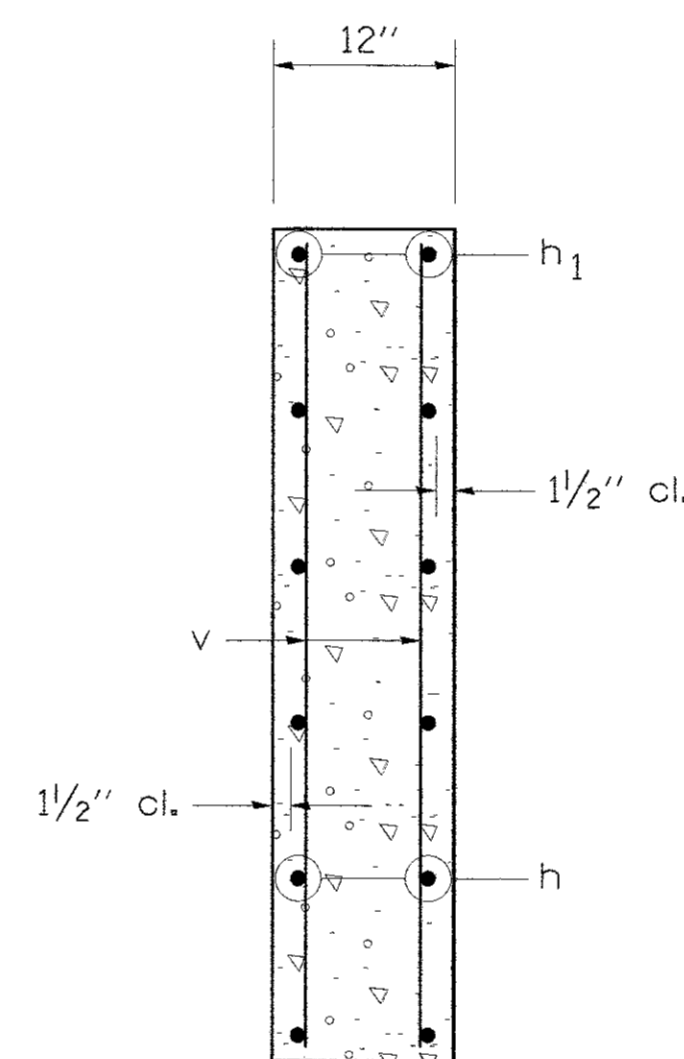
All horizontal dimensions are along centerline of cap

NOTE:

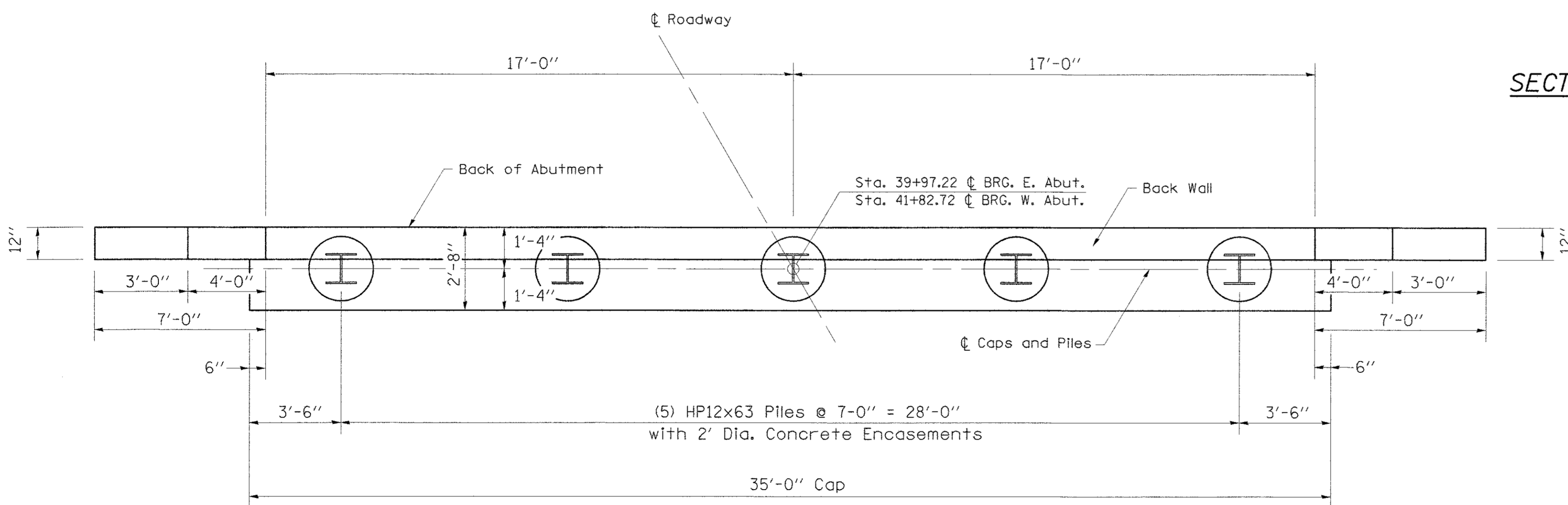
Hatched area to be poured after beams are in place and anchored.

Width shall be the limits of the cap.

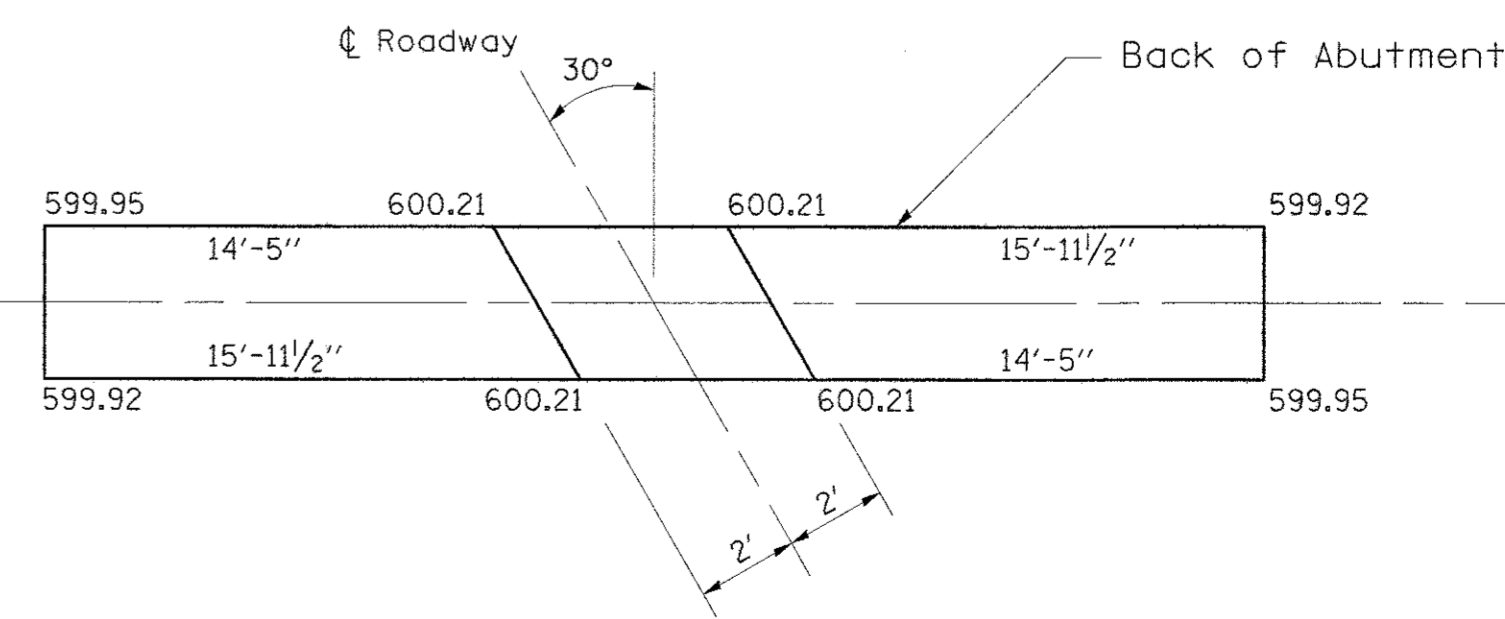
Wingwalls above the top of cap shall not be poured until the deck beams are in place and fastened.



SECTION THRU WINGWALL



PLAN



CAP ELEVATIONS OF ABUTMENTS

PILE DATA INFORMATION

TYPE AND SIZE:	STEEL HP12X63
NOMINAL REQUIRED BEARING:	348 KIPS
ALLOWABLE RESISTANCE AVAILABLE:	116 KIPS
NO. REQUIRED:	8 + 2 TEST PILES (1 EA. ABUT.)
ESTIMATED LENGTH:	30' E. ABUTMENT 33' W. ABUTMENT
MIN. PENETRATION:	10' BELOW STREAMBED

STEEL H PILES SHALL BE ACCORDING TO AASHTO M275 GRADE 50.

THE TEST PILES SHALL BE DRIVEN TO 110 PERCENT OF THE NOMINAL REQUIRED BEARING INDICATED IN THE PILE DATA INFORMATION.

BILL OF MATERIALS

Bar	No.	Size	Length	Shape
h(E)	40	#4	8'-6"	—
h ₁ (E)	24	#4	3'-8"	—
h ₂ (E)	12	#4	33'-8"	—
b(E)	224	#4	25'-6"	—
p(E)	20	#7	34'-8"	—
s(E)	68	#4	10'-9"	□
u(E)	16	#6	10'-4"	□
v(E)	56	#4	5'-11"	—
v ₁ (E)	136	#4	4'-5"	—
a(E)	372	#4	15'-6"	—
Concrete Structures			Cu. Yd.	39.7
Reinforcement Bars (Epoxy Ctd.)			Pound	11,000
Furnishing Steel HP12x63 Piles			Foot	252
Driving Steel HP12x63 Piles			Foot	252
Test Pile - Steel HP12x63			Each	2

REVISIONS	DATE

DESIGNED BY:	R. RENNER
DRAWN BY:	J. KOCH
CHECKED BY:	R. RENNER
DATE:	09/03/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1889 Lincoln Road
Memphis, TN 38120

WHITESIDE COUNTY HIGHWAY DEPARTMENT
BRIDGE DETAILS
BLACK ROAD BRIDGE OVER ROCK CREEK
SCALE: _____ STA. _____ TO STA. _____

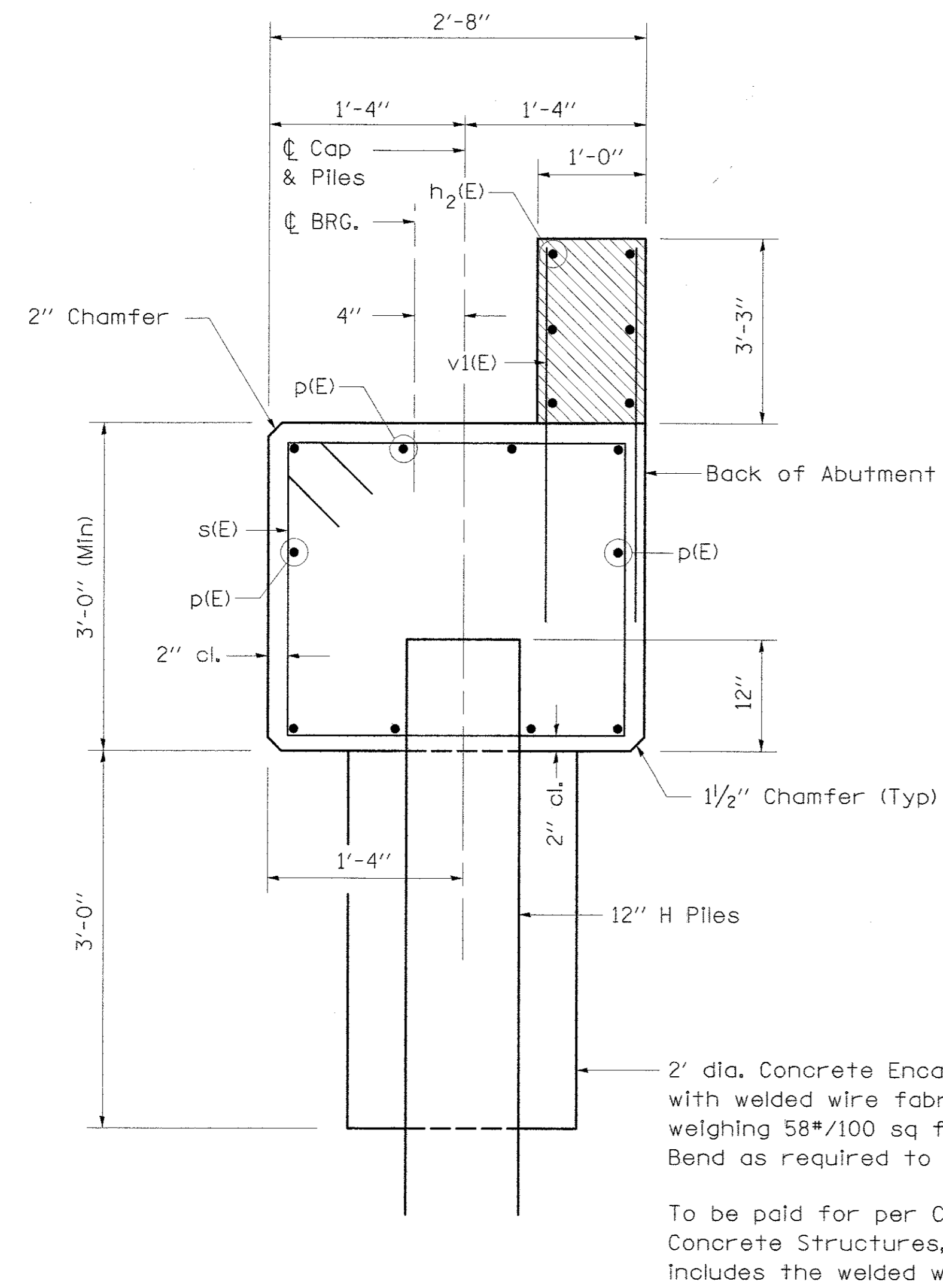


ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

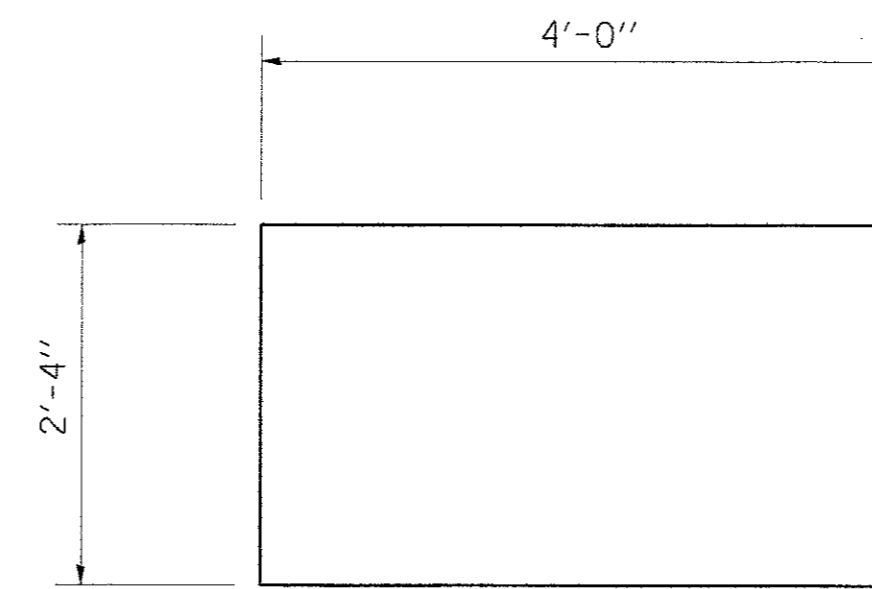
TOTAL SHEETS	55
SHEET NO.	45

ABUTMENT DETAILS

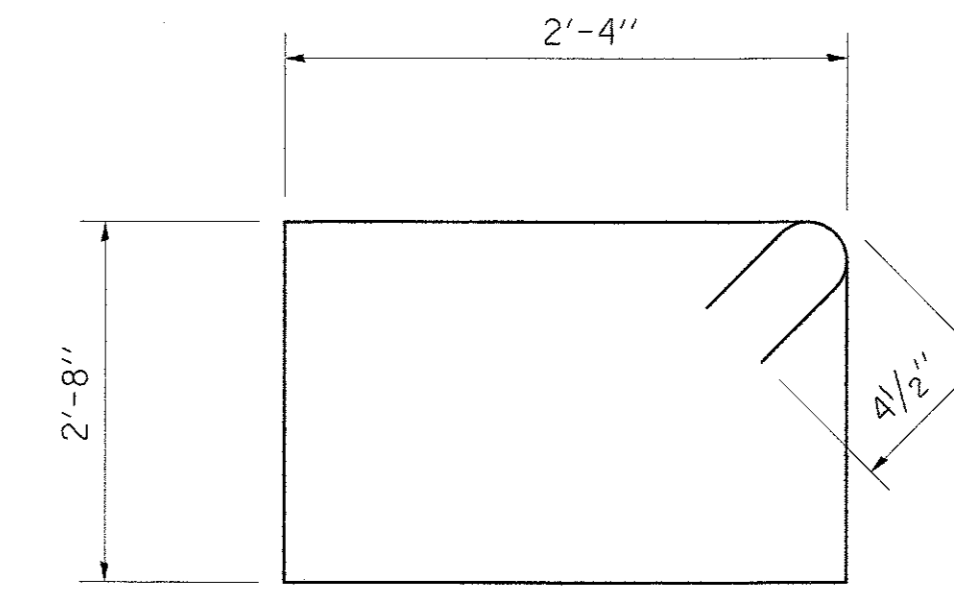


SECTION THRU ABUTMENTS

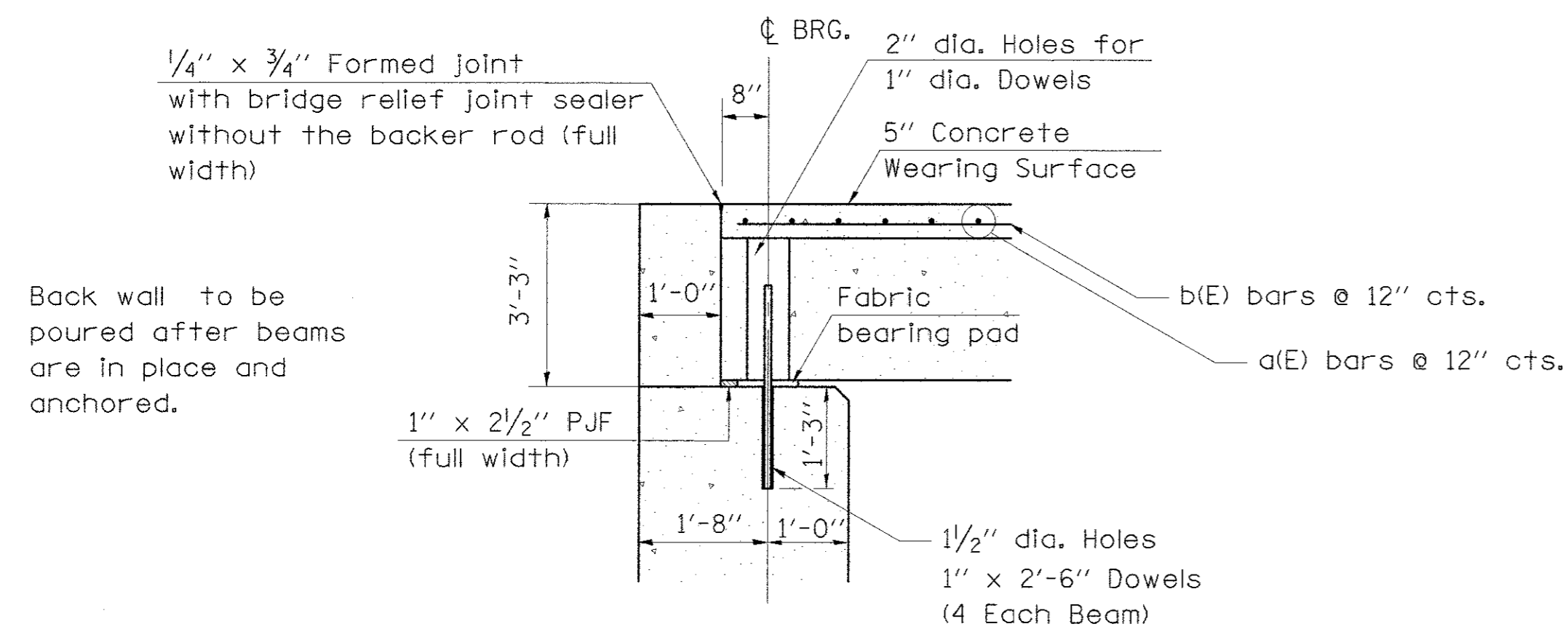
NOTE:
 Hatched area to be poured after beams are in place and anchored.
 Width shall be the limits of the cap.
 Wingwalls above the top of cap shall not be poured until the deck beams are in place and fastened.



BAR u(E)



BAR s(E)



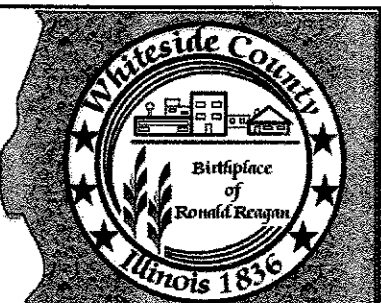
SECTION THRU ABUTMENTS

REVISIONS	DESCRIPTION	DATE

DESIGNED BY: R. RENNER	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 09/03/15
---------------------------	----------------------	--------------------------	-------------------

WHITESIDE COUNTY
 HIGHWAY DEPARTMENT
10899 Lincoln Road
 Memphis, TN 38120

WHITESIDE COUNTY HIGHWAY DEPARTMENT
BRIDGE DETAILS
BLACK ROAD BRIDGE OVER ROCK CREEK
 SCALE: _____ STA. _____ TO STA. _____
 SHEET 7 OF 12 SHEETS

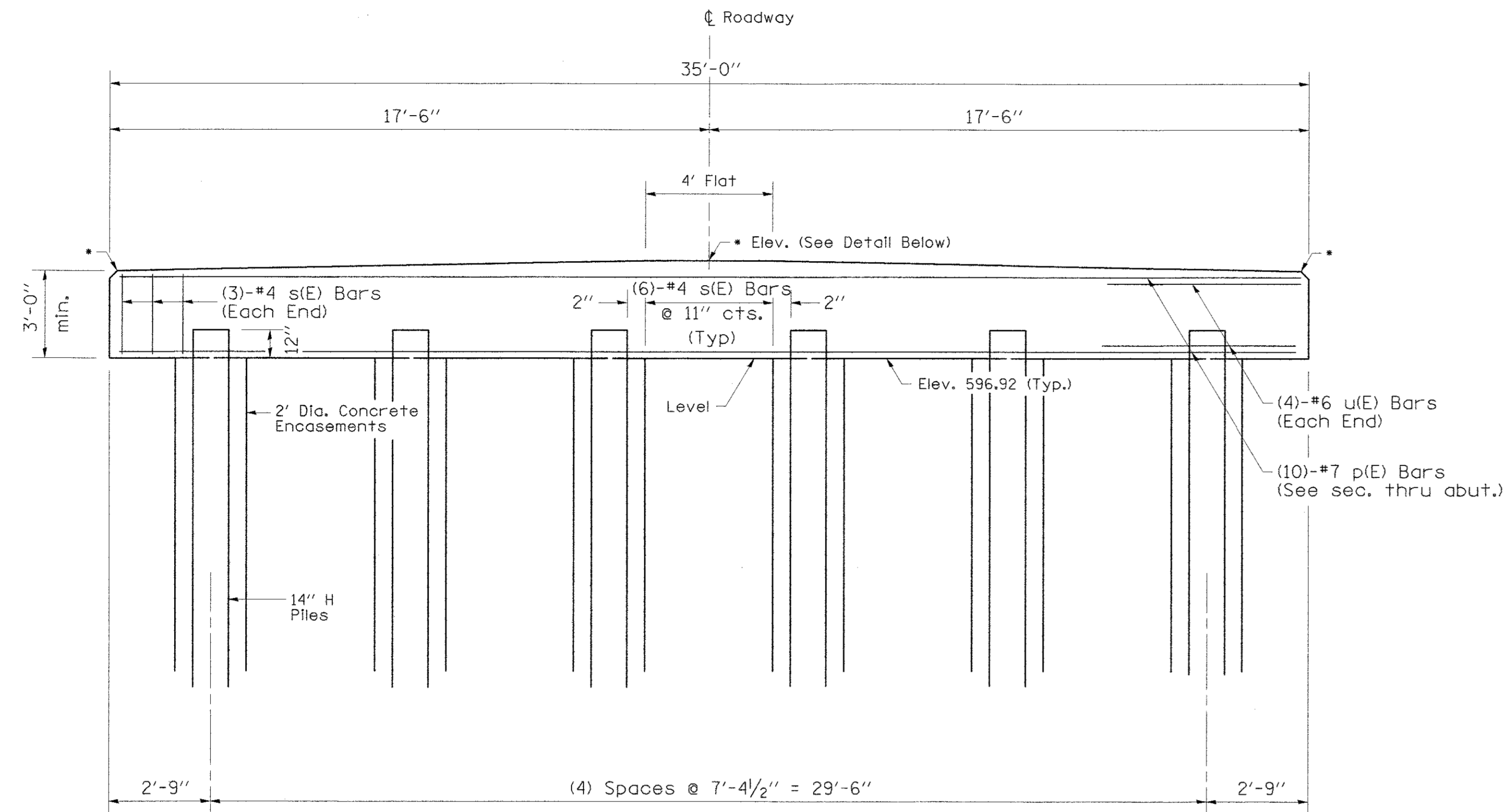


ROUTE
 FAS 197 (BLACK RD)

SECTION
 11-00204-00-BR

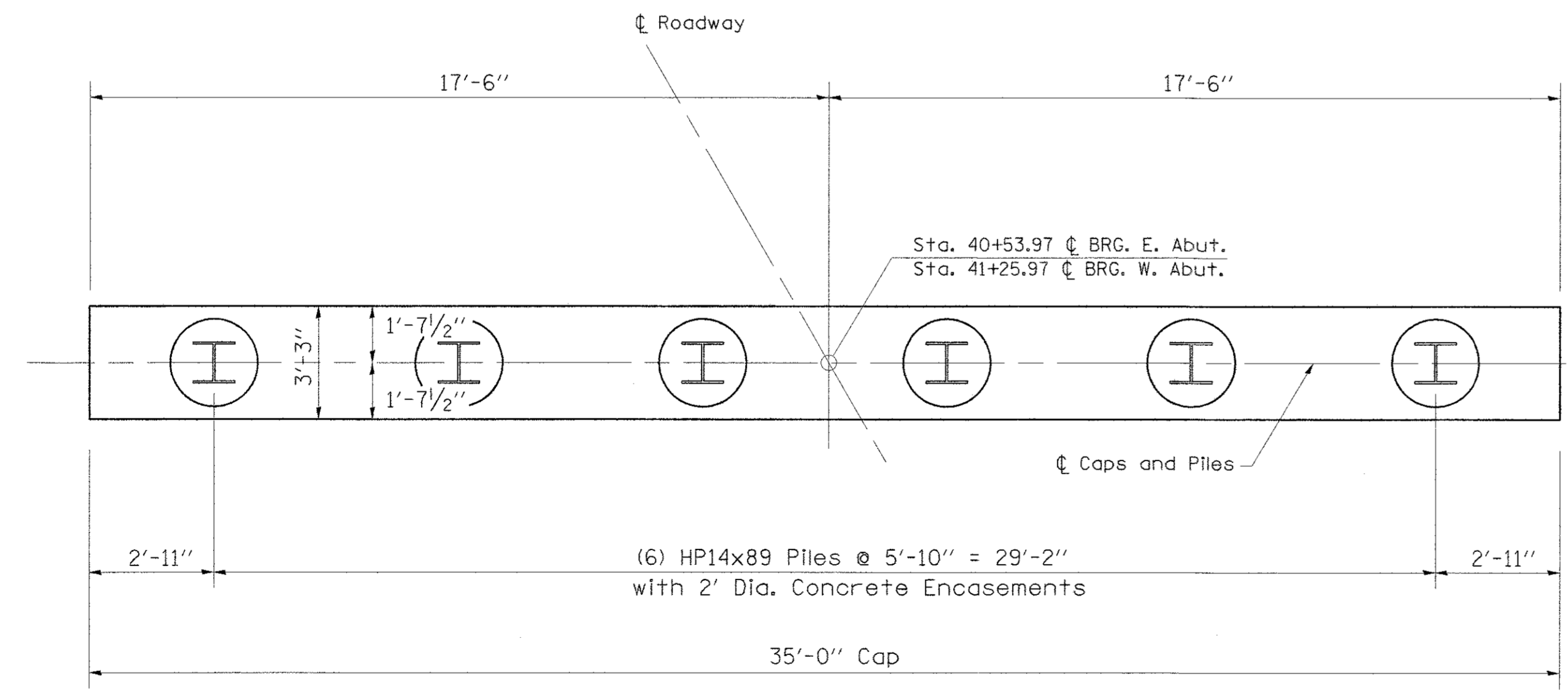
TOTAL SHEETS 55	SHEET NO. 46
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PIER DETAILS



ELEVATION

All horizontal dimensions are along centerline of cap



PLAN

PILE DATA INFORMATION

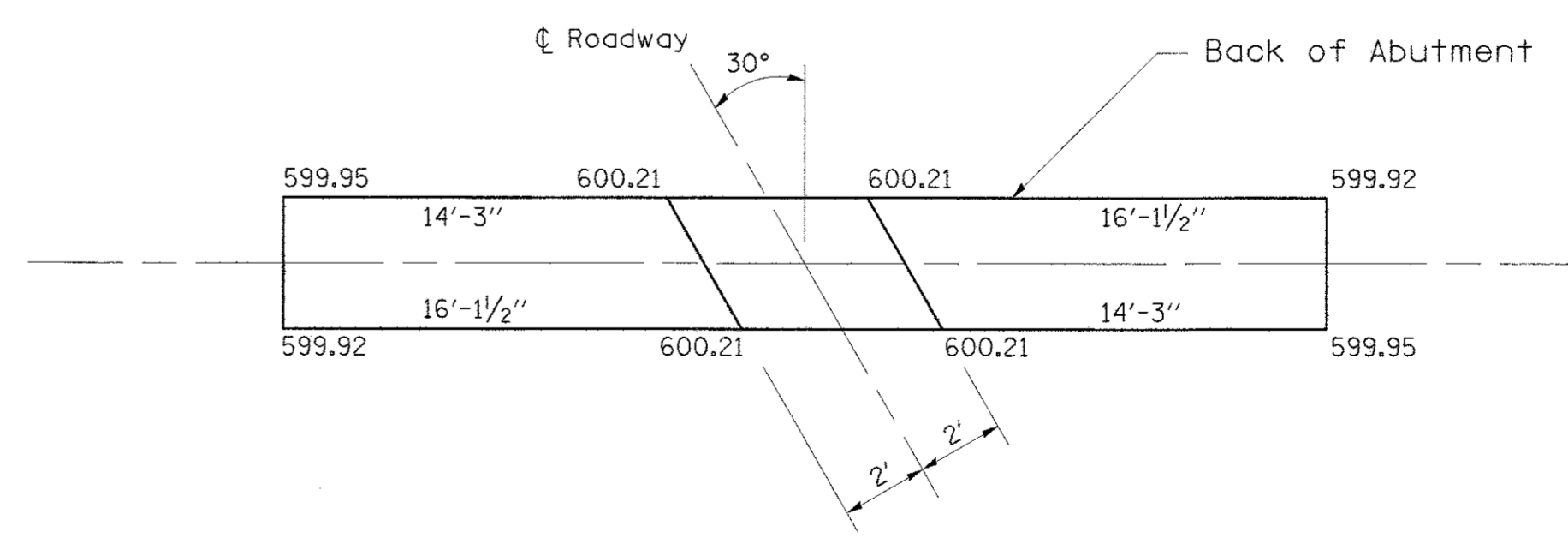
TYPE AND SIZE: HP14x89
 NOMINAL REQUIRED BEARING: 499 KIPS
 ALLOWABLE RESISTANCE AVAILABLE: 166 KIPS
 NO. REQUIRED: 10 + 2 TEST PILES (1 EA. PIER)
 ESTIMATED LENGTH: 30' E. PIER
 33' W. PIER
 MIN. PENETRATION: 10' BELOW STREAMBED

STEEL H-PILES SHALL BE ACCORDING TO AASHTO M270 GRADE 50.

THE TEST PILES SHALL BE DRIVEN TO 110 PERCENT OF THE NOMINAL REQUIRED BEARING INDICATED IN THE PILE DATA INFORMATION.

BILL OF MATERIALS

Bar	No.	Size	Length	Shape	
p(E)	20	#7	34'-8"	—	
s ₁ (E)	72	#4	11'-11"	□	
u ₁ (E)	16	#6	10'-11"	□	
Concrete Structures				Cu. Yd.	39.7
Reinforcement Bars (Epoxy Ctd.)				Pound	2253
Furnishing Steel HP14x89				Foot	315
Driving Steel HP14x89				Foot	315
Test Pile - Steel HP14x89				Each	2



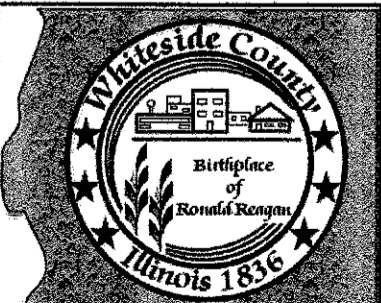
CAP ELEVATIONS OF PIERS

REVISIONS	DESCRIPTION	DATE

DESIGNED BY: R. RENNER	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 09/03/15
---------------------------	----------------------	--------------------------	----------------

WHITESIDE COUNTY
 HIGHWAY DEPARTMENT
 1889 Lincoln Road
 Marion, Iowa 52600

WHITESIDE COUNTY HIGHWAY DEPARTMENT
 BRIDGE DETAILS
 BLACK ROAD BRIDGE OVER ROCK CREEK
 SHEET 8 OF 12 SHEETS
 STA. TO STA.
 SCALE:

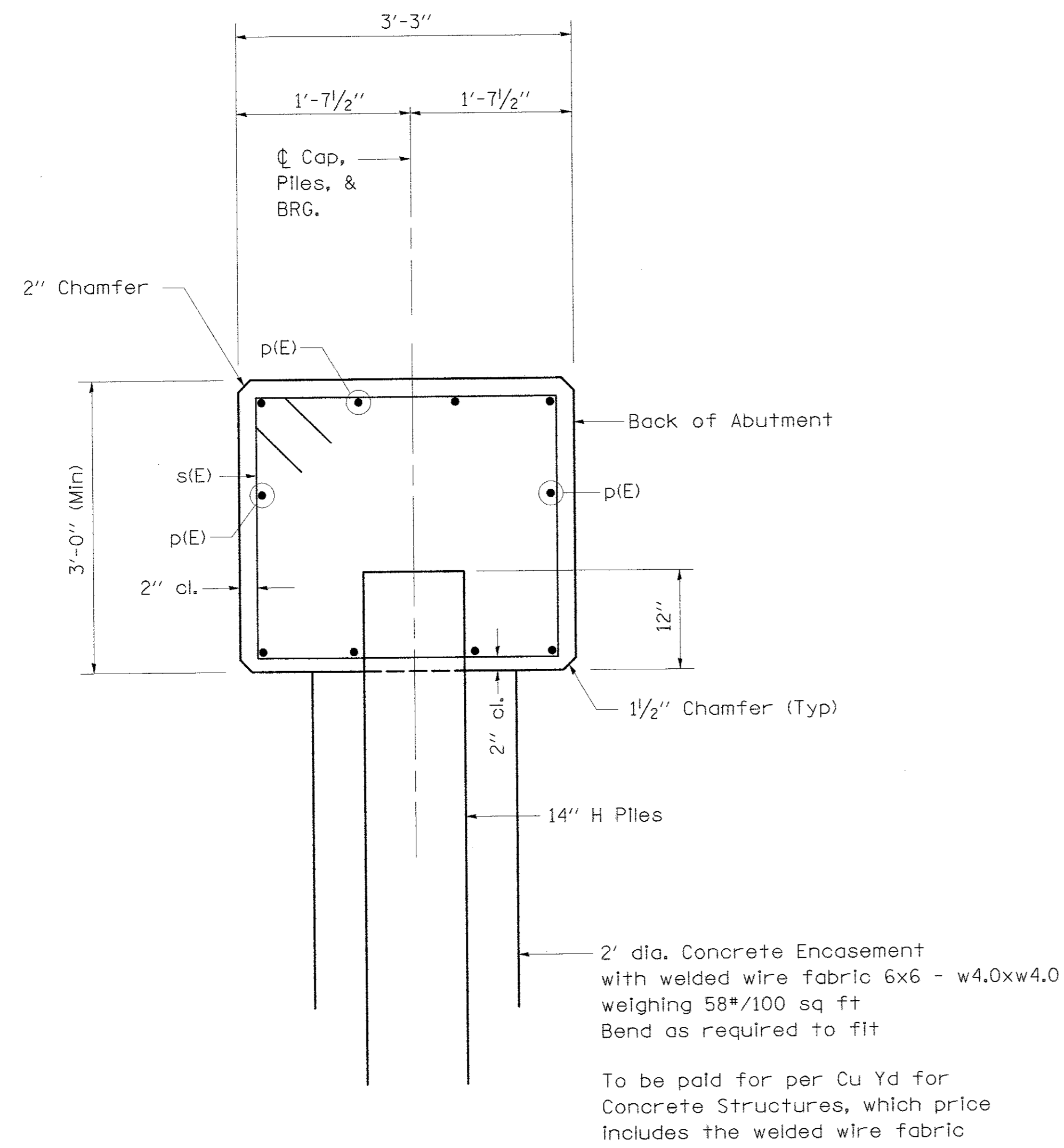


ROUTE
 FAS 197 (BLACK RD)

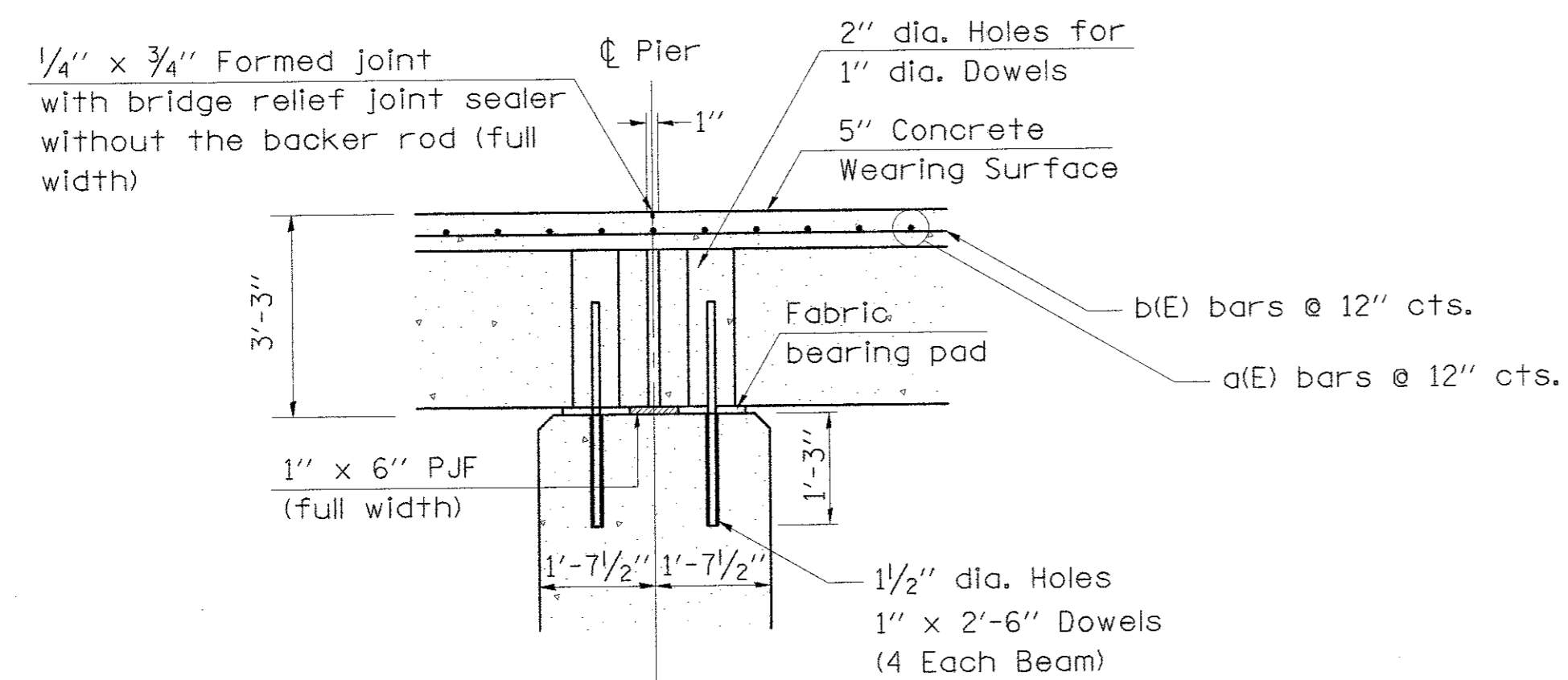
SECTION
 11-00204-00-BR

TOTAL SHEETS	SHEET NO.
55	47

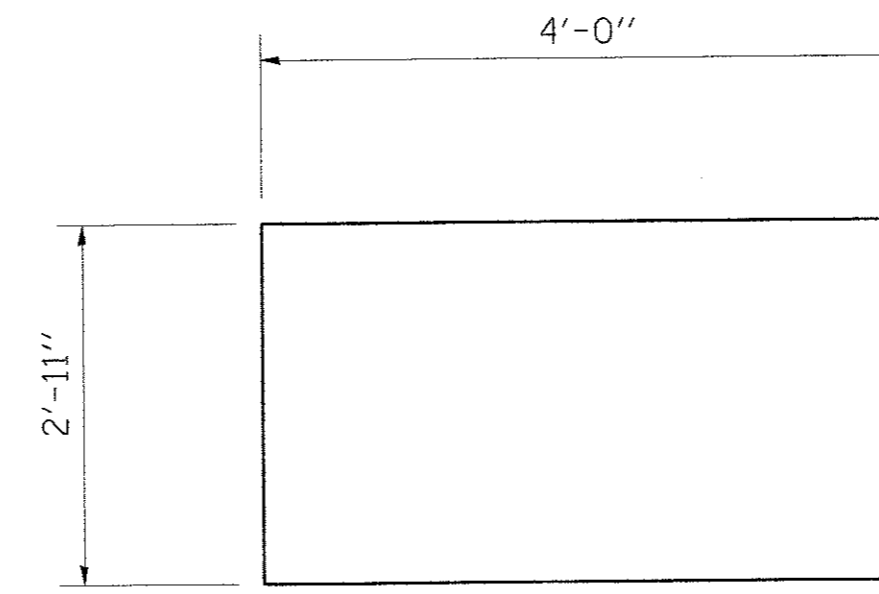
PIER DETAILS



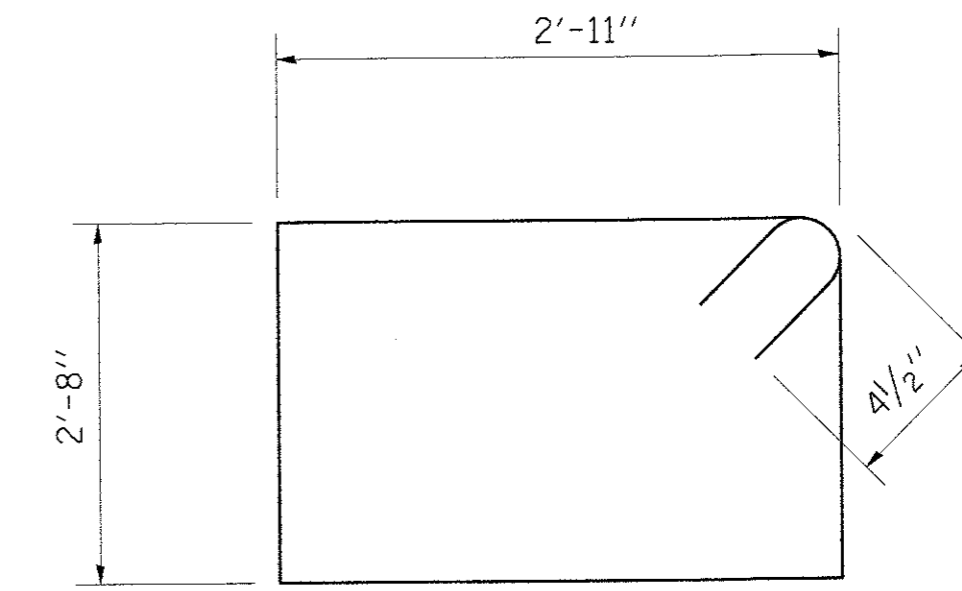
SECTION THRU ABUTMENTS



SECTION THRU PIERS



BAR u(E)



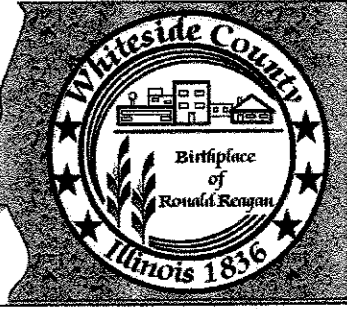
BAR s(E)

REVISIONS	DESCRIPTION	DATE

DESIGNED BY: R. RENNER	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 09/03/15
---------------------------	----------------------	--------------------------	----------------

**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
18819 Unruh Road
Morrison, Illinois 61270

WHITESIDE COUNTY HIGHWAY DEPARTMENT
BRIDGE DETAILS
BLACK ROAD BRIDGE OVER ROCK CREEK
SHEET 9 OF 12 SHEETS
SCALE: TO STA.

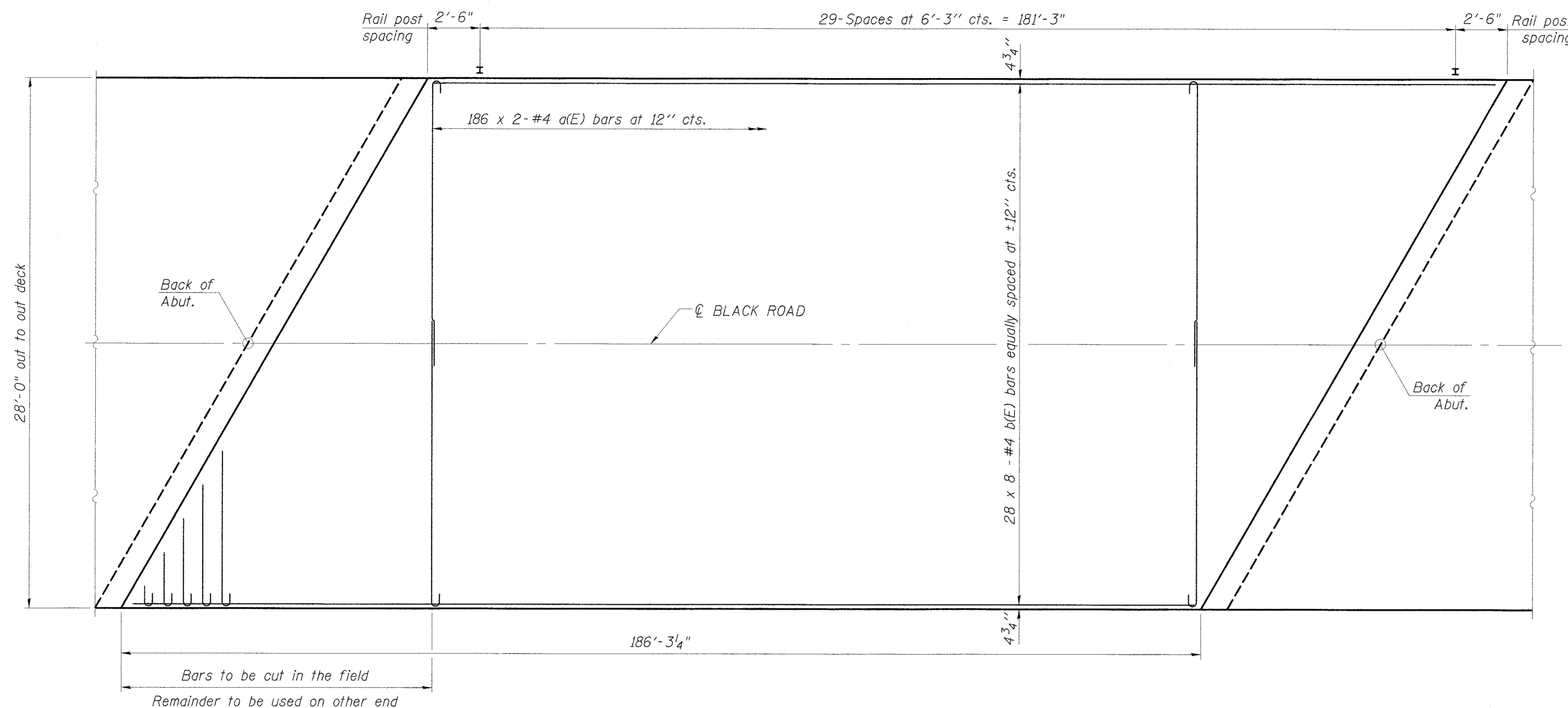


ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS 55	SHEET NO. 48
---------------------------	------------------------

WEARING SURFACE DETAILS

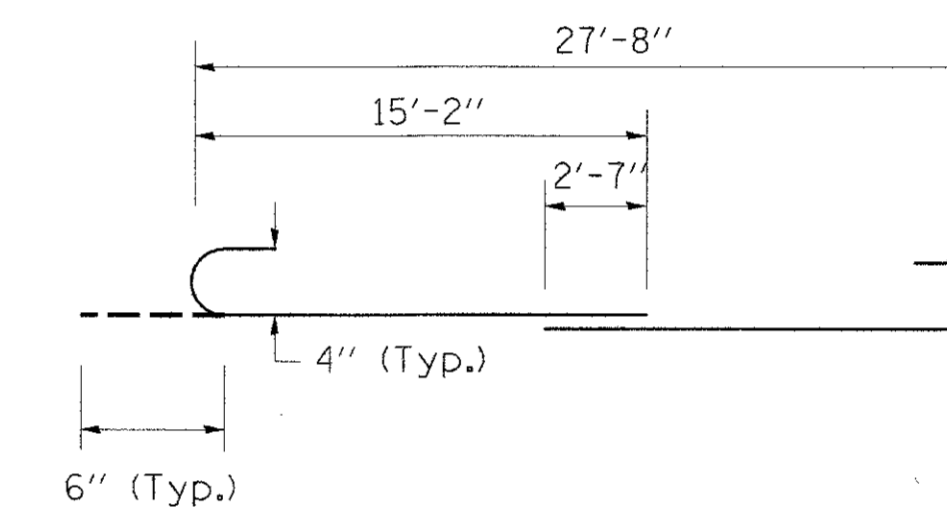


PLAN

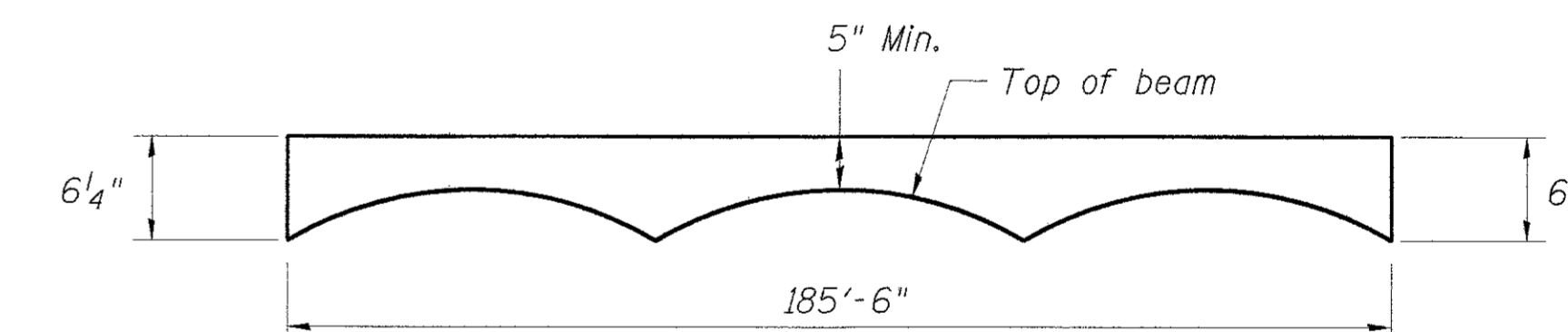
Notes:
The concrete wearing surface shall be placed prior to casting a backwall and/or approach slab.

MINIMUM BAR LAP
#4 bar = 2'-7"

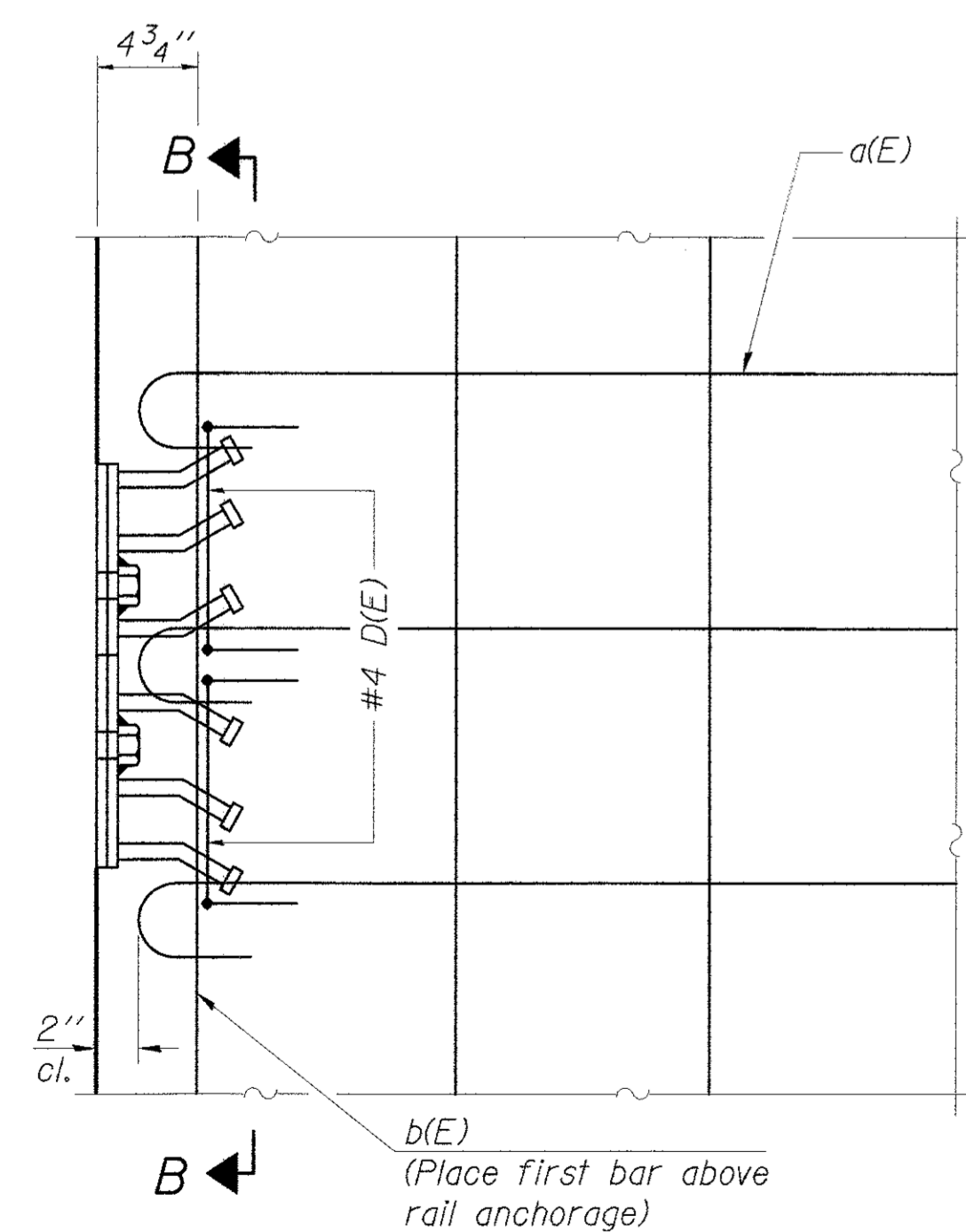
Notes:
Bars indicated thus 20 x 2-#4 etc. indicates 20 lines of bars with 2 lengths per line.



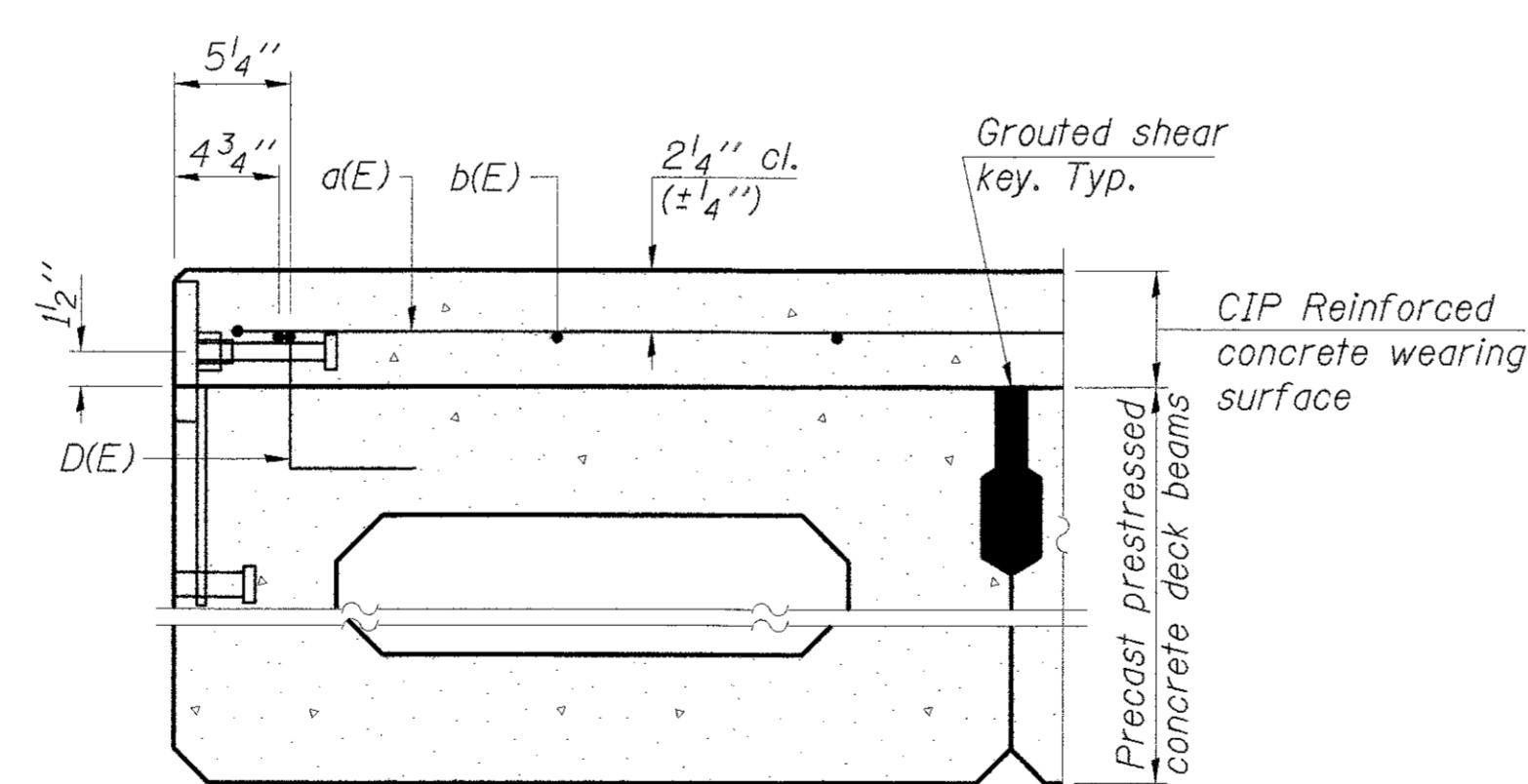
BAR a(E)



ANTICIPATED CONCRETE WEARING SURFACE PROFILE
(For information only)

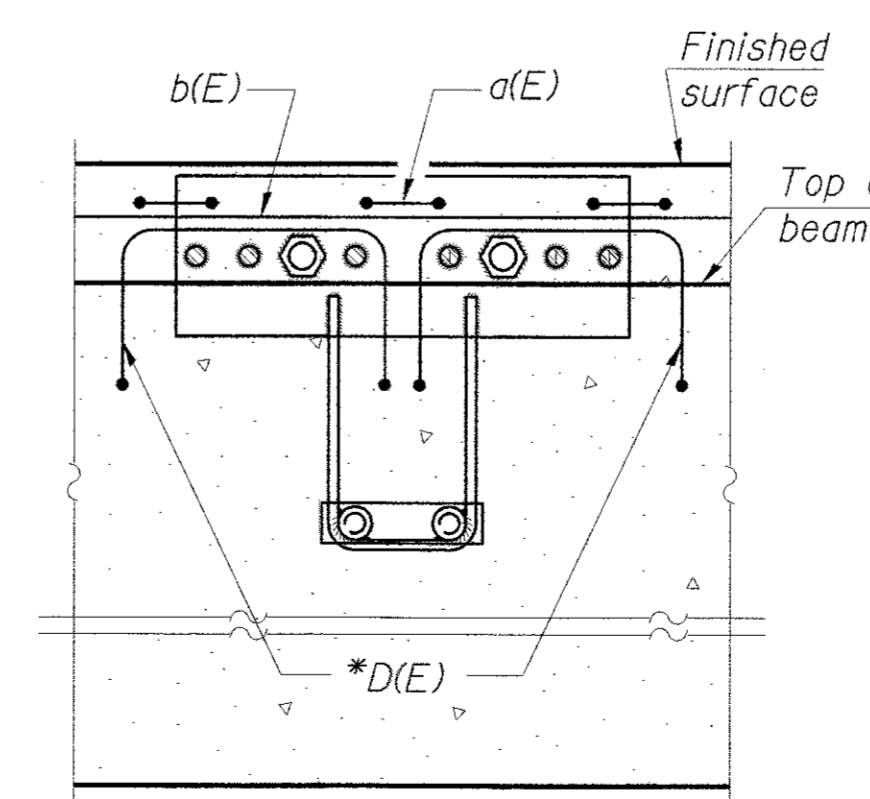


PLAN

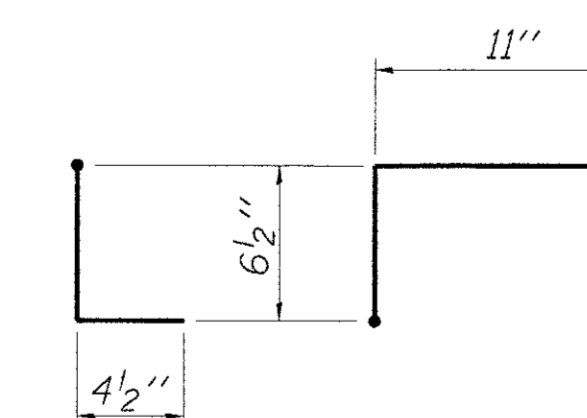


SECTION THRU FASCIA BEAM

Notes:
Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam.



SECTION B-B



BAR D(E)

* Place 2-#4 D(E) bars in beam at each post location as shown. D(E) bar included in cost of beam.

BILL OF MATERIAL

Concrete Wearing Surface, 5"	Sq. Yd.	580
------------------------------	---------	-----

REVISIONS	DATE

DESIGNED BY:	R. RENNER
DRAWN BY:	J. KOCH
CHECKED BY:	R. RENNER
DATE:	09/03/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1889 Lincoln Road
Morton, Illinois 62570

WHITESIDE COUNTY HIGHWAY DEPARTMENT
BRIDGE DETAILS
BLACK ROAD BRIDGE OVER ROCK CREEK
SHEET 10 OF 12 SHEETS
STA. TO STA.
SCALE:

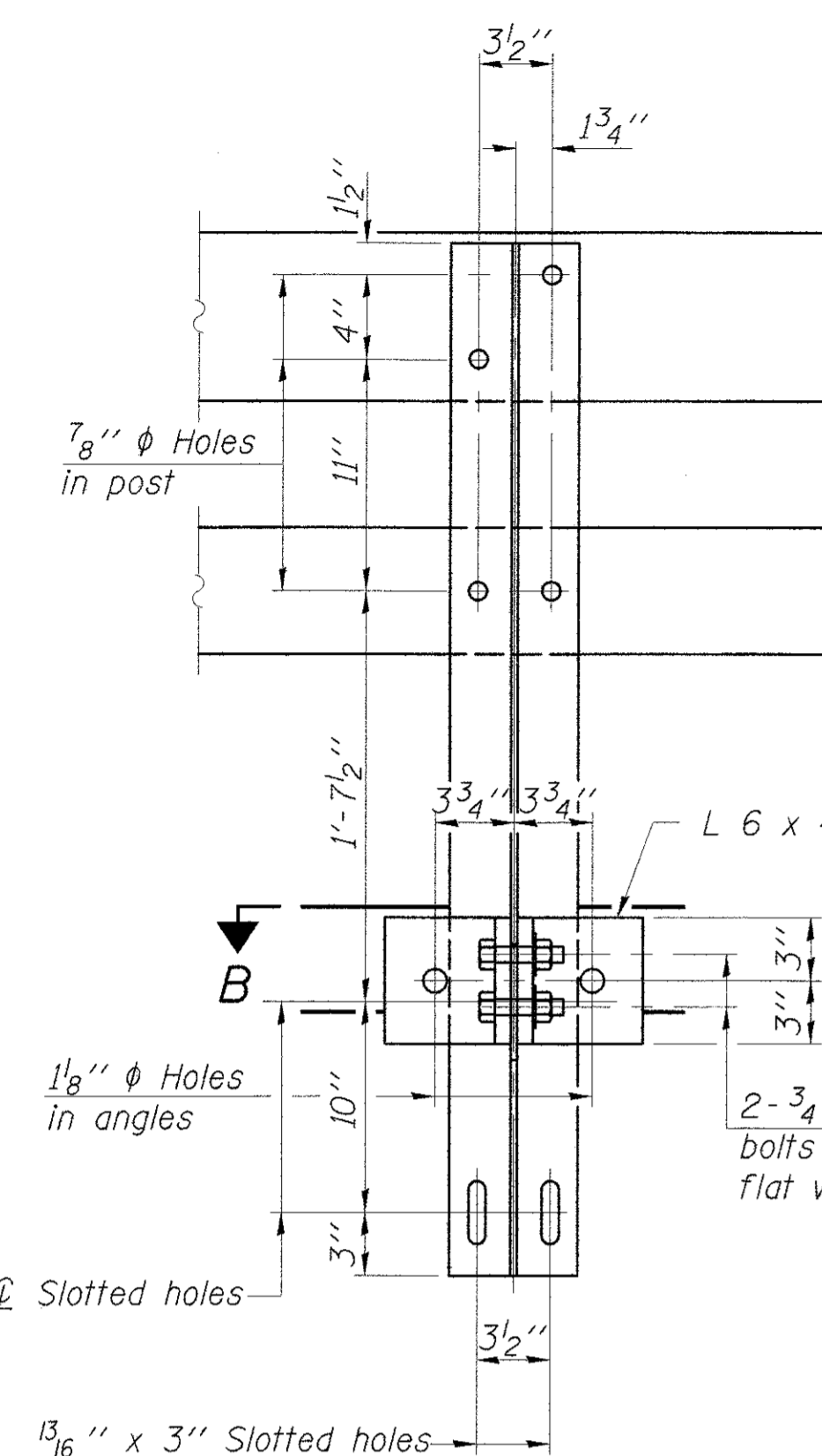


ROUTE
FAS 197 (BLACK RD)

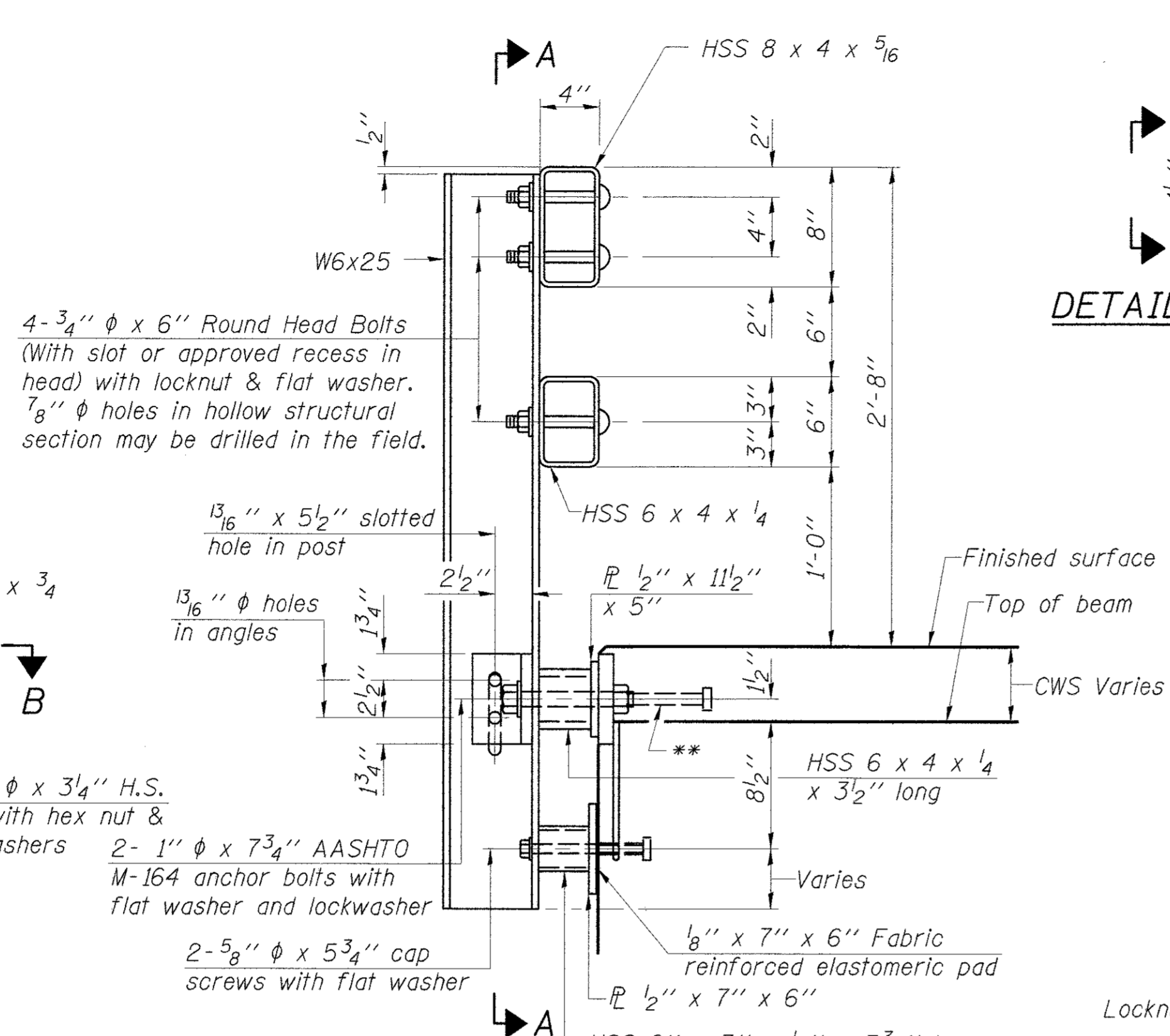
SECTION
11-00204-00-BR

TOTAL SHEETS	55
SHEET NO.	49

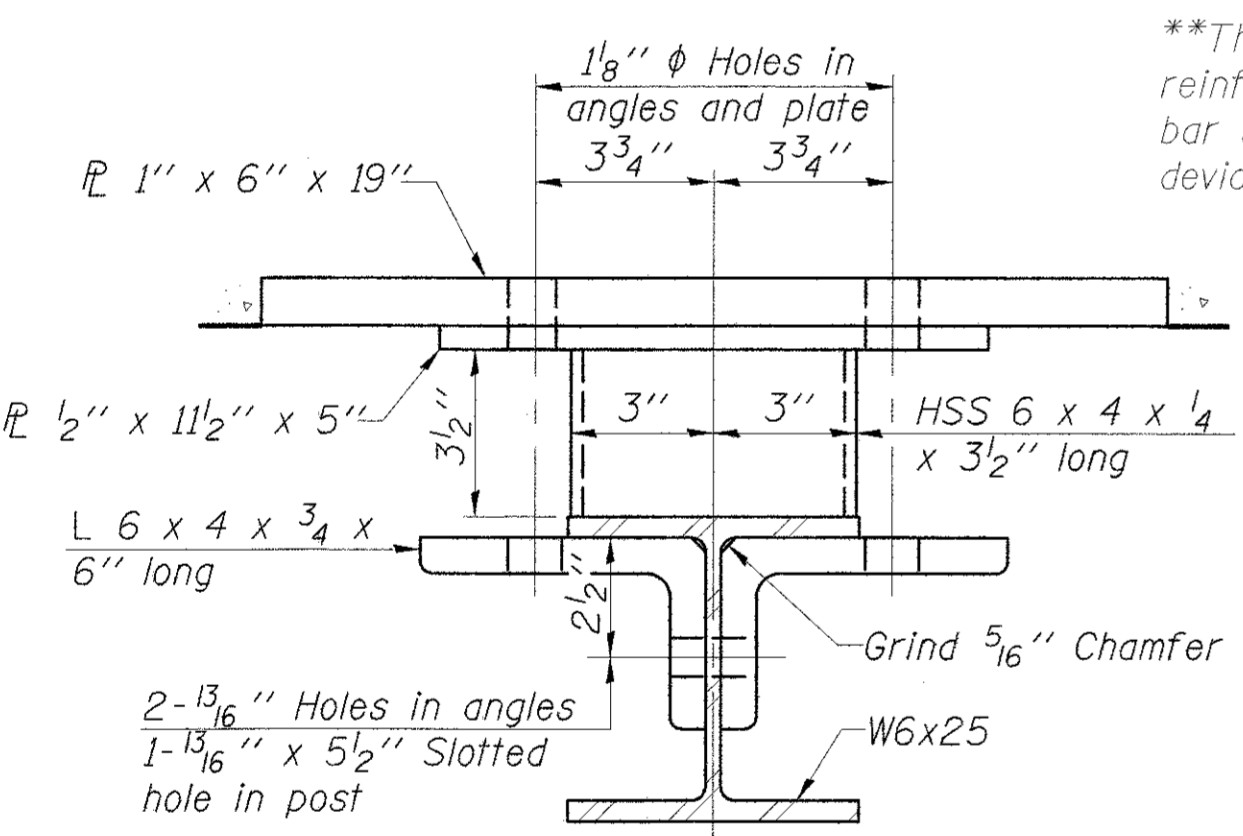
STEEL RAILING, TYPE SM (SPECIAL)



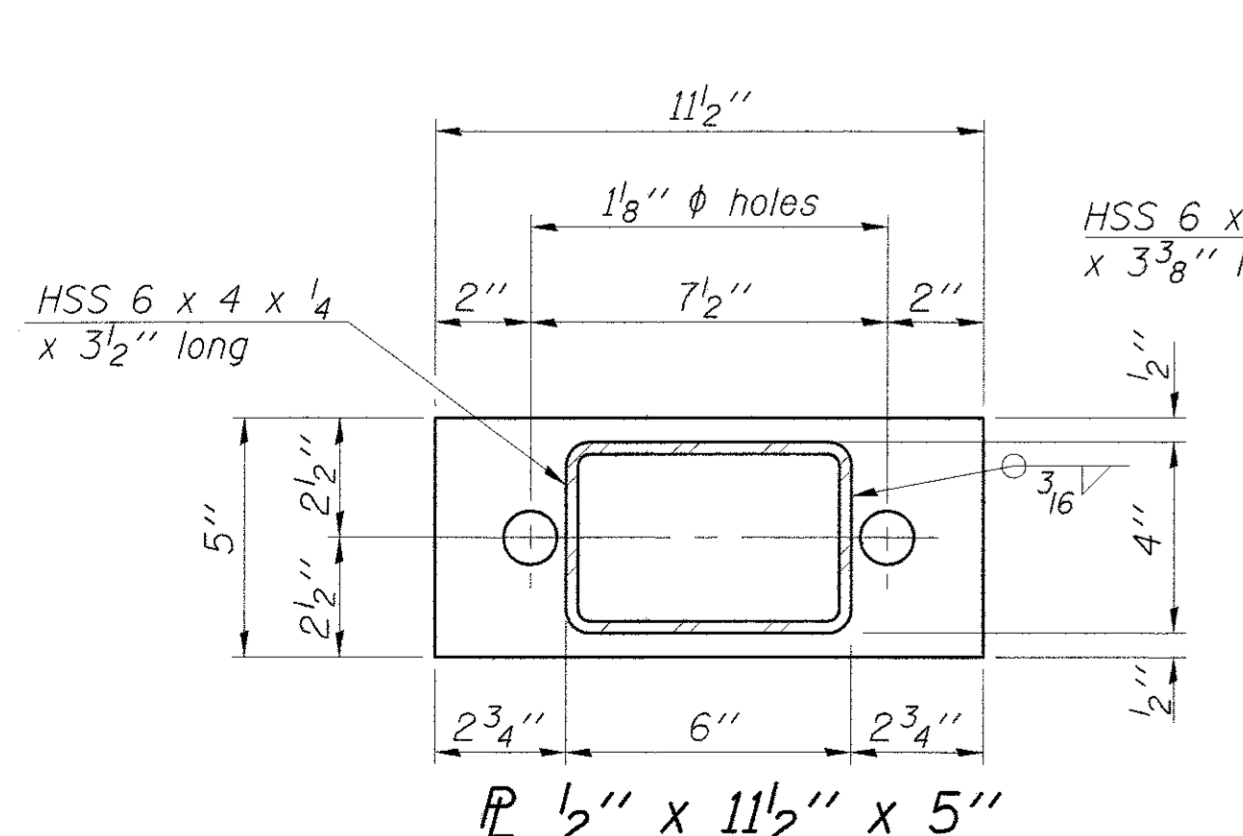
SECTION A-A



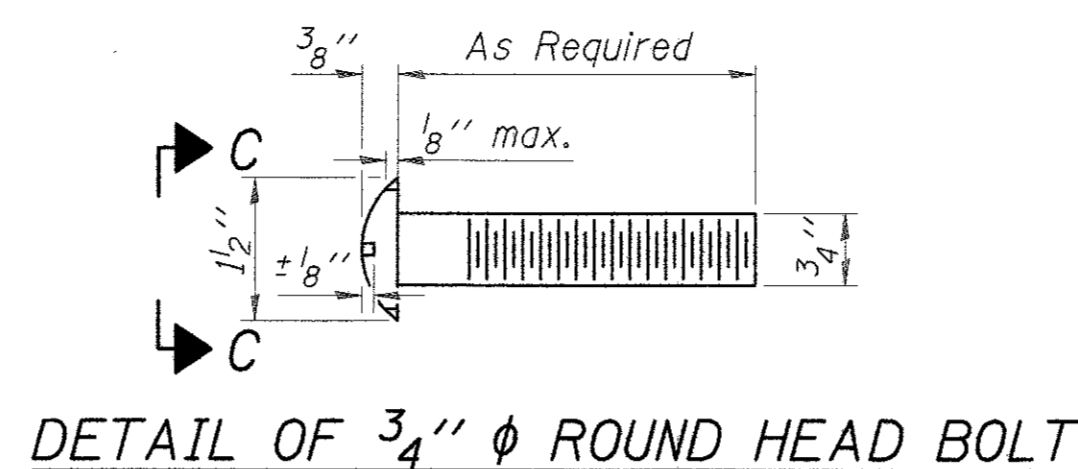
SECTION AT RAIL POST



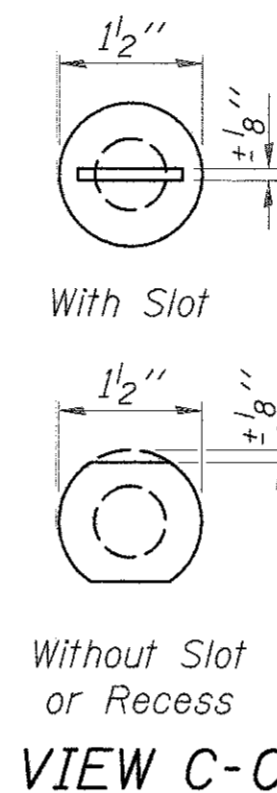
SECTION B-B



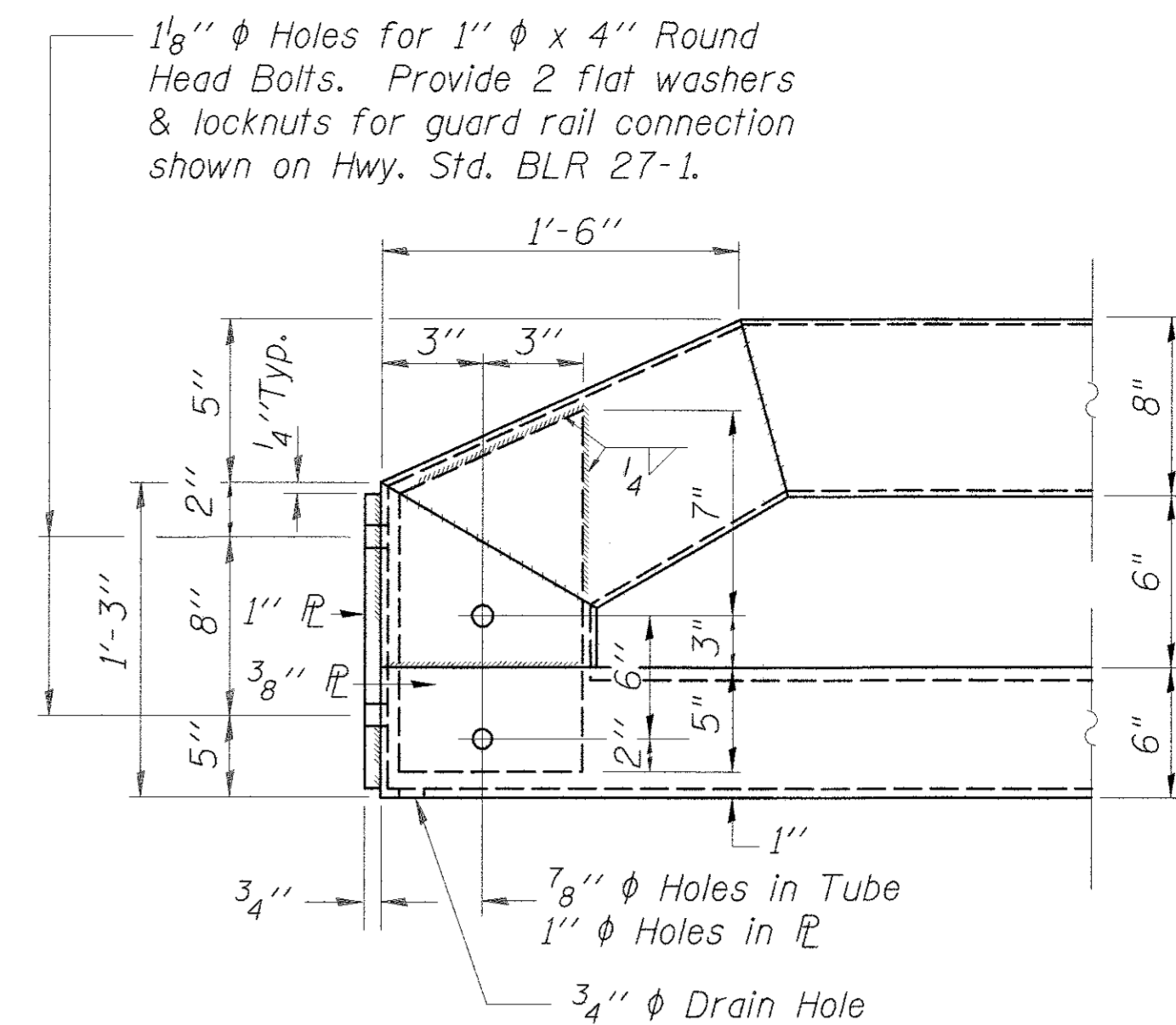
SECTION C-C



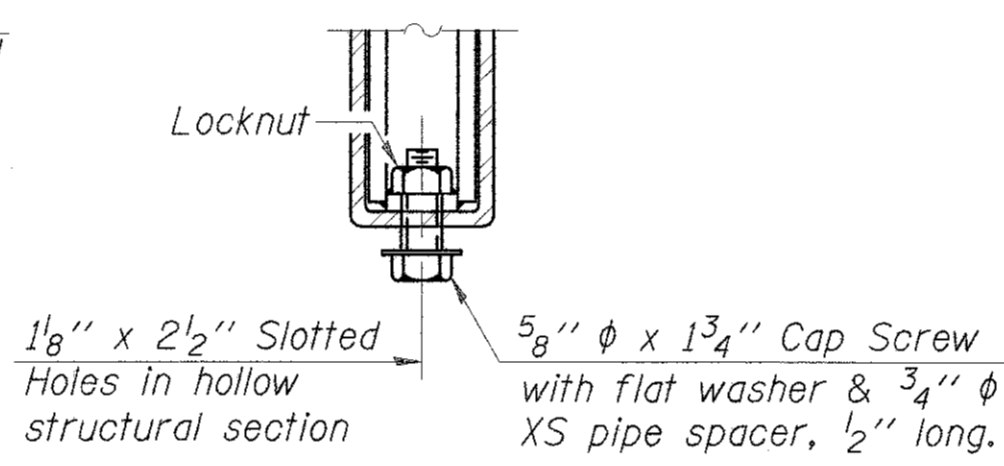
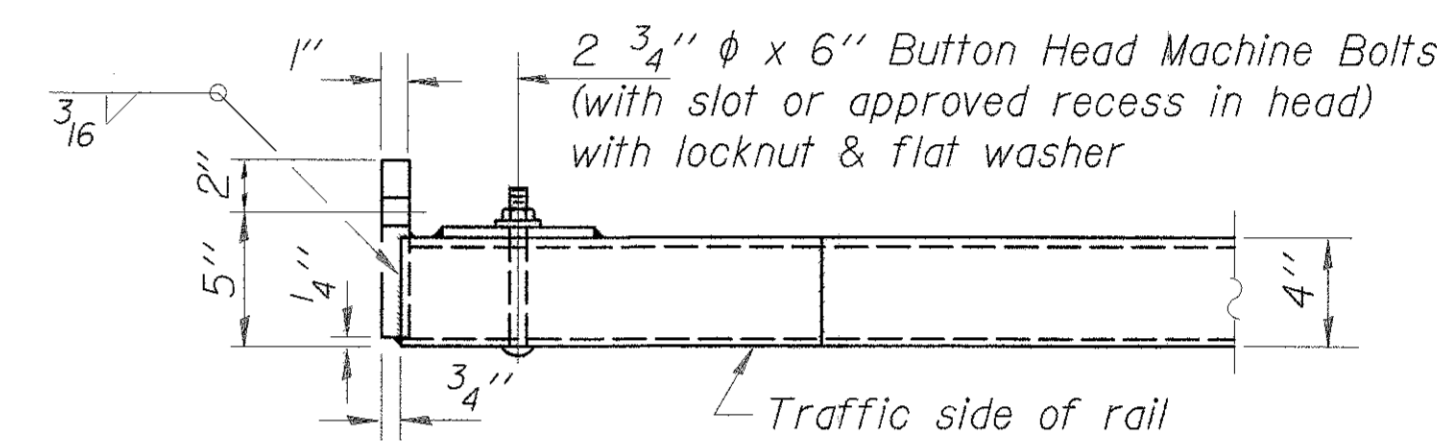
DETAIL OF 3/4" ϕ ROUND HEAD BOLT



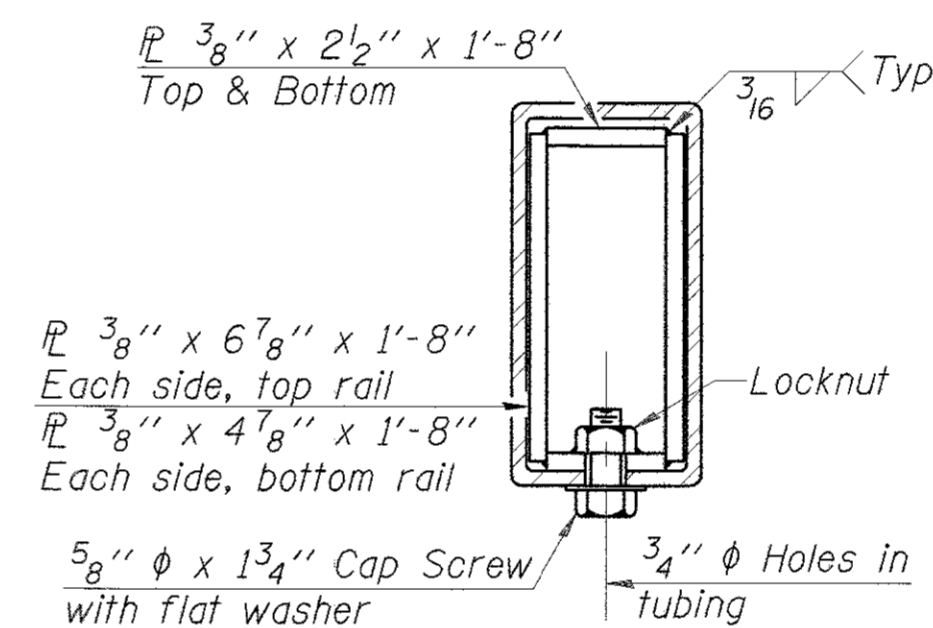
VIEW C-C



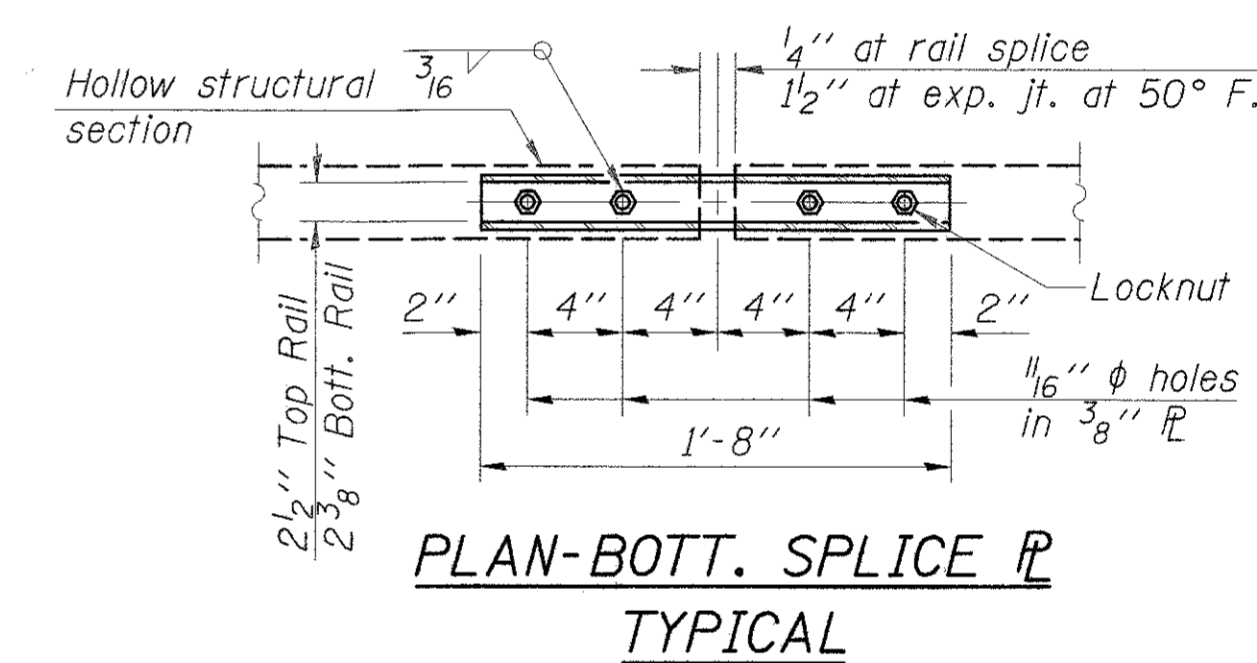
END OF RAIL DETAILS



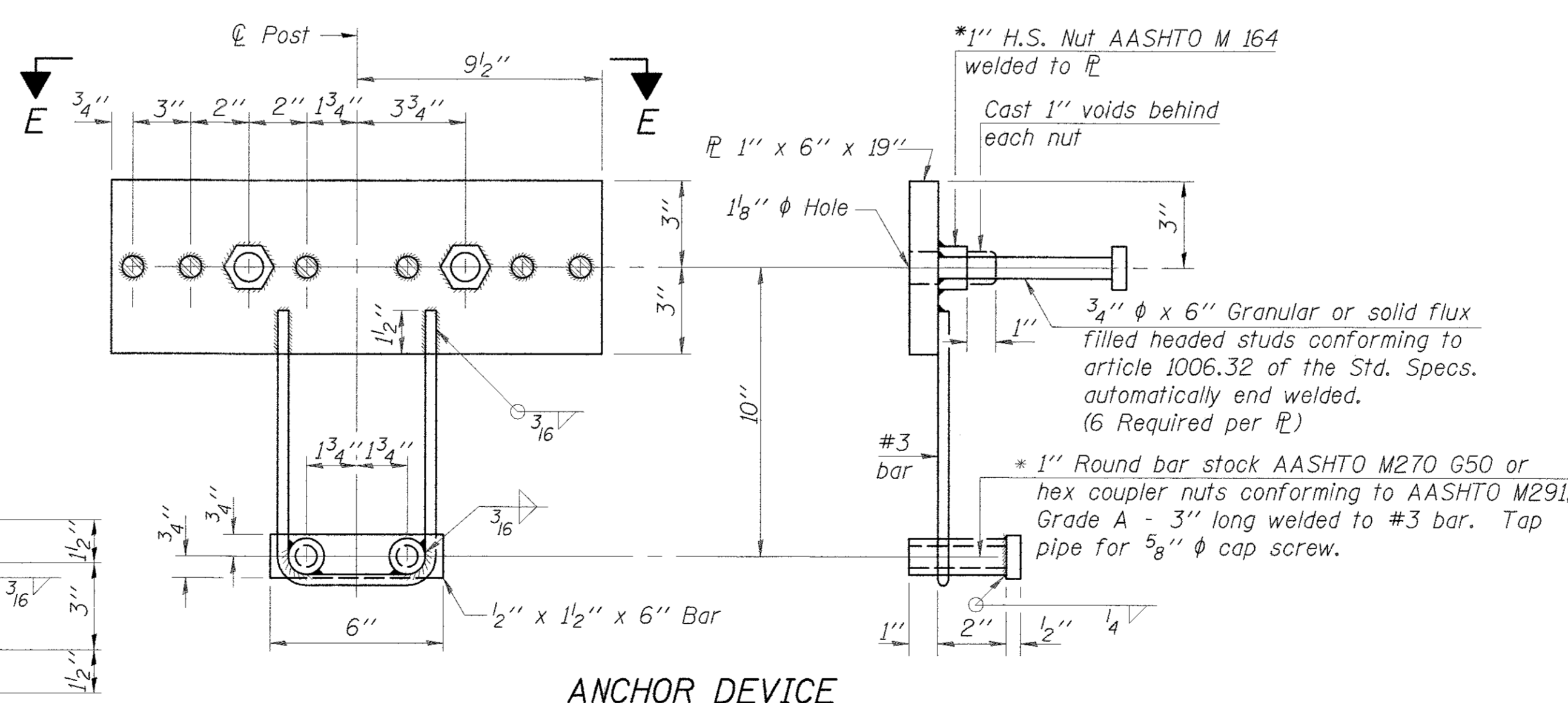
RAIL SPLICE CONNECTION AT EXPANSION JT.



SECTION AT RAIL SPLICE



PLAN-BOTT. SPLICE TYPICAL



ANCHOR DEVICE

*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM (Special).
 Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM (Special)	Foot	377

(6'-3" Maximum Post Spacing) (5" minimum to 7 1/2" maximum CWS thickness)

REVISIONS	DATE
DESCRIPTION	
DESIGNED BY:	R. RENNER
DRAWN BY:	J. KOCH
CHECKED BY:	R. RENNER
DATE:	05/23/15

WHITESIDE COUNTY
 HIGHWAY DEPARTMENT
 18819 Lincoln Road
 Marion, Illinois 62720

WHITESIDE COUNTY HIGHWAY DEPARTMENT
 BRIDGE DETAILS
 BLACK ROAD BRIDGE OVER ROCK CREEK

SHEET 11 OF 12 SHEETS

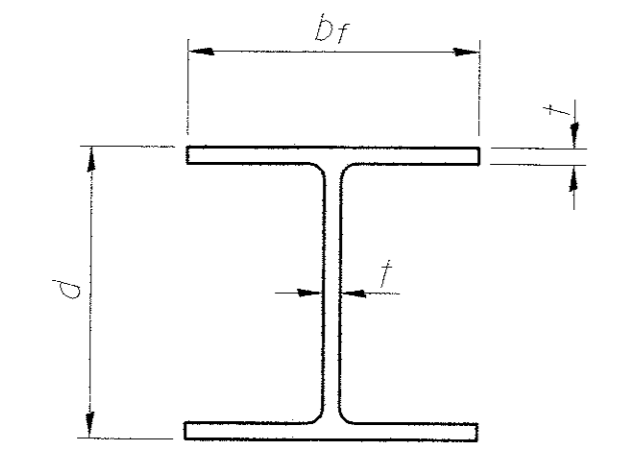
SCALE: TO STA.

ROUTE
 FAS 197 (BLACK RD)

SECTION
 11-00204-00-BR

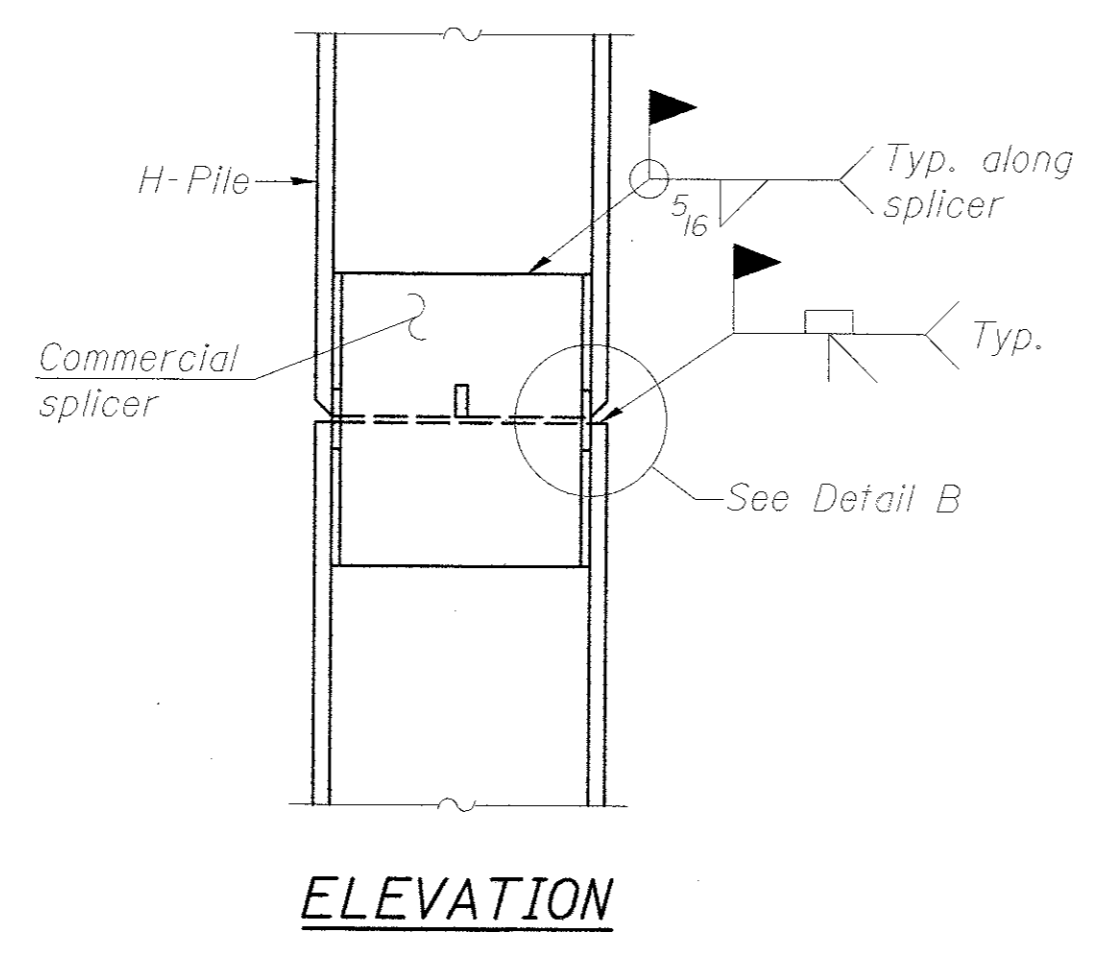
TOTAL SHEETS	55
SHEET NO.	50

PILE DETAILS

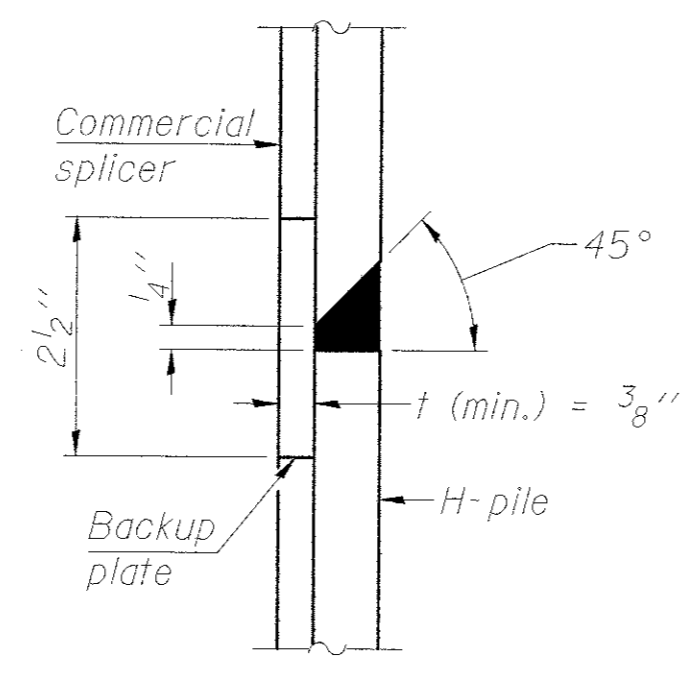


STEEL PILE TABLE

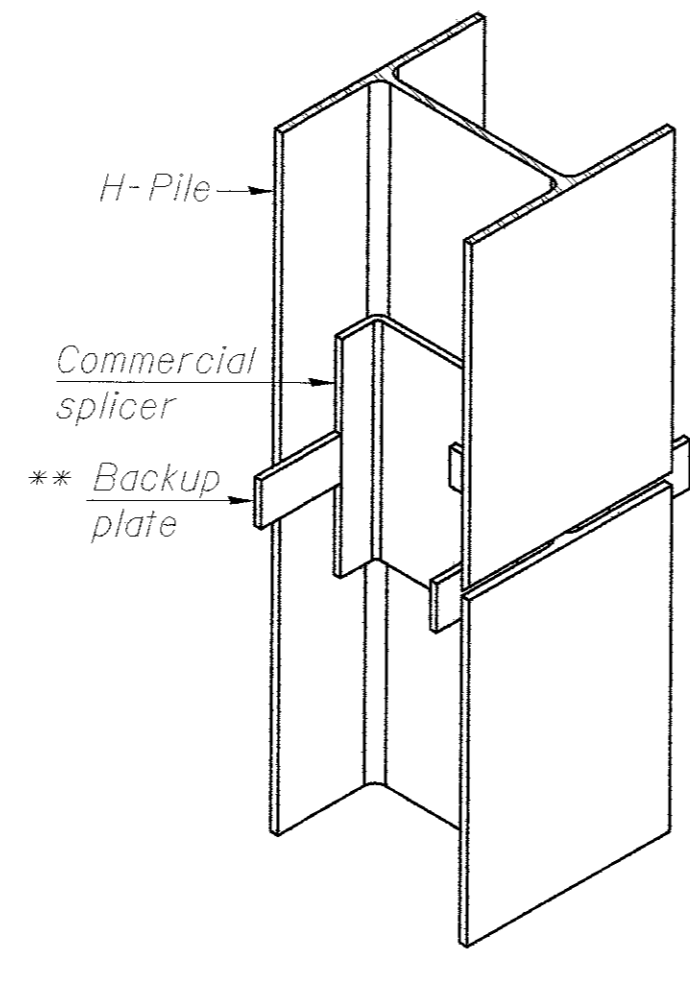
Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 5/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



ELEVATION

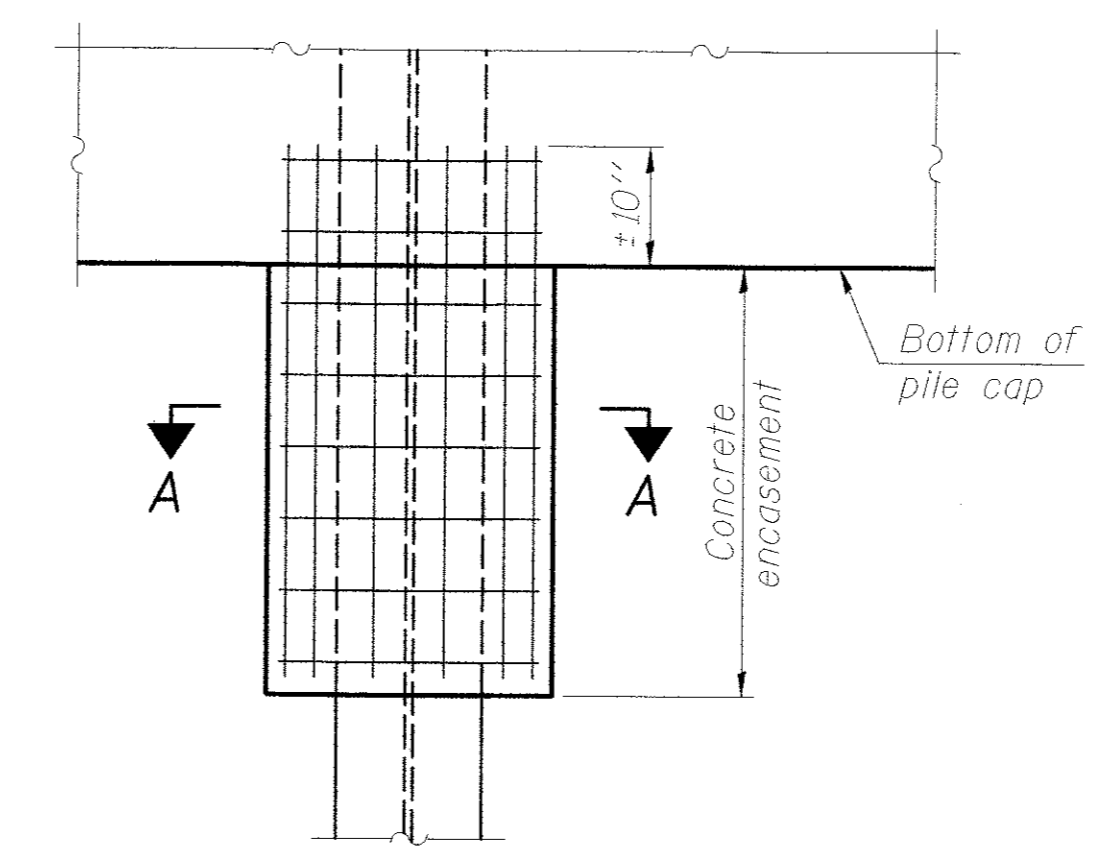


DETAIL "B"



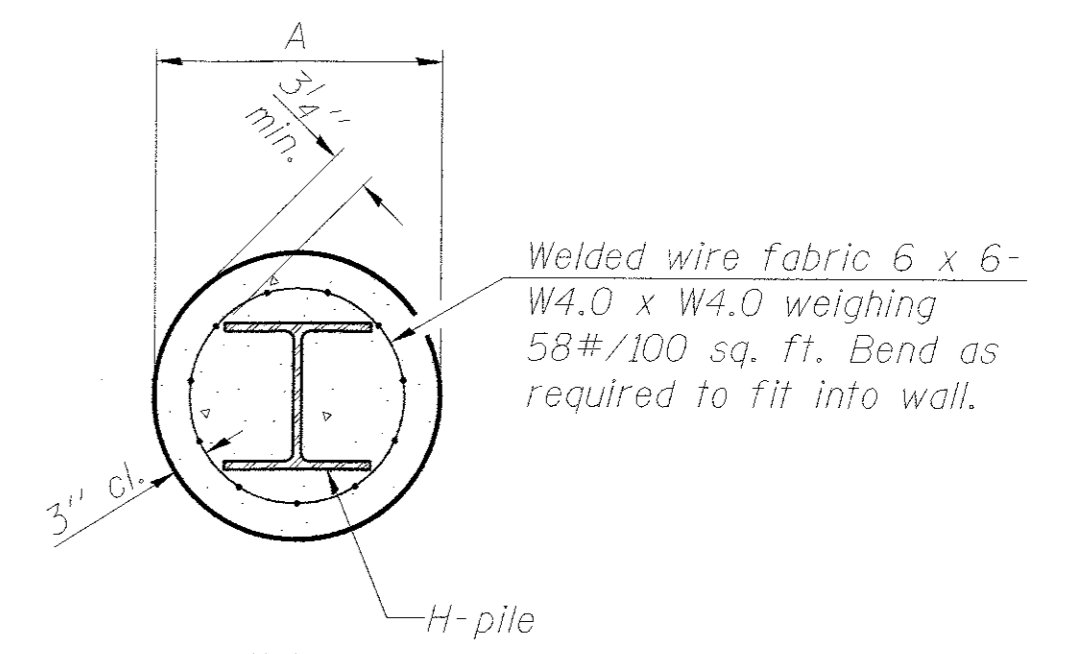
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



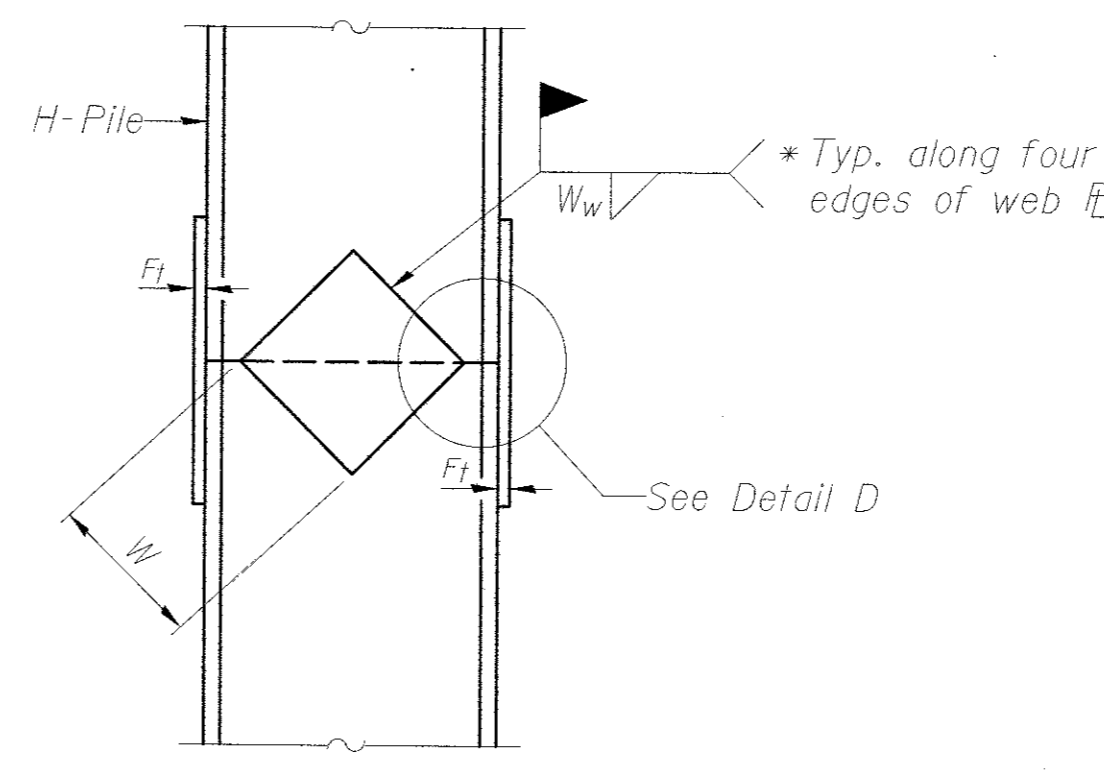
ELEVATION

PILE ENCASEMENT

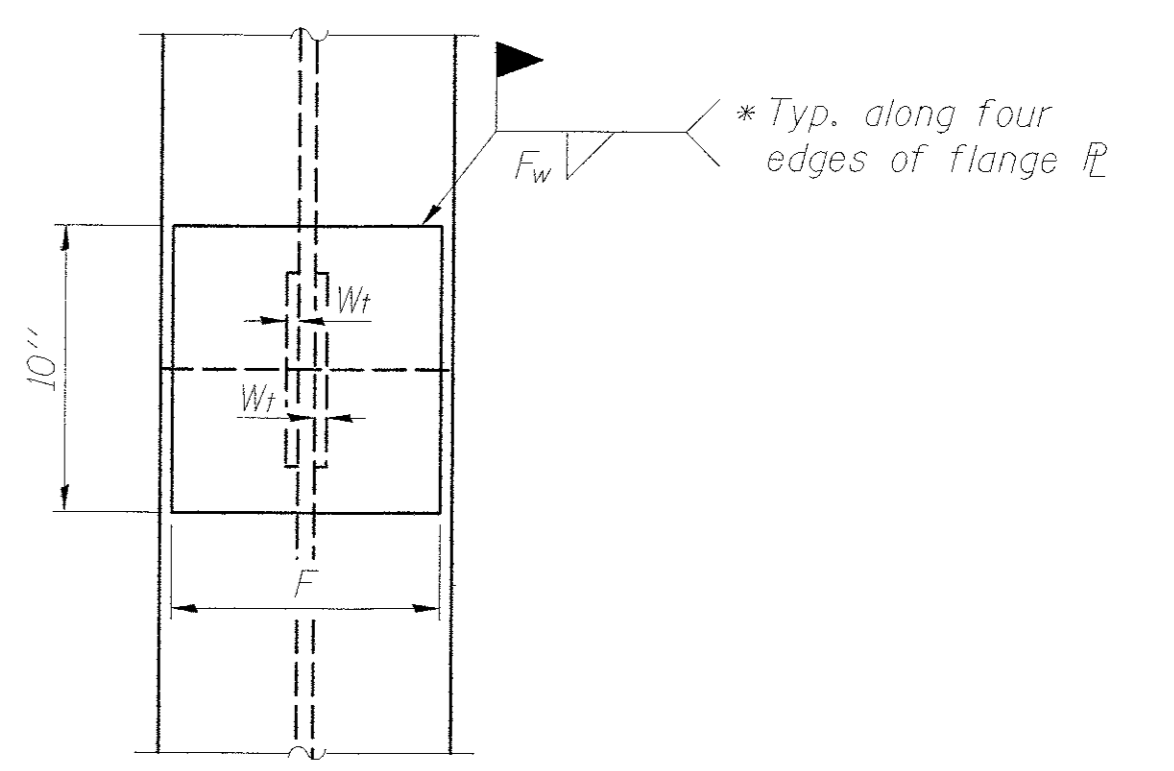


SECTION A-A

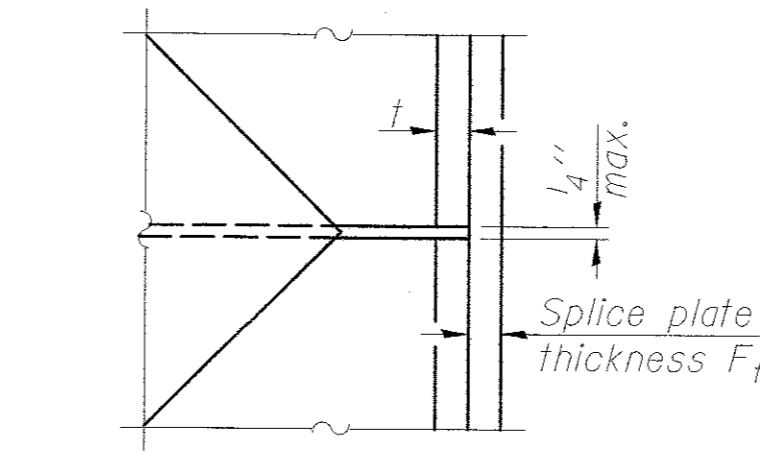
Note:
Forms for encasement may be omitted when soil conditions permit.



ELEVATION



END VIEW



DETAIL D

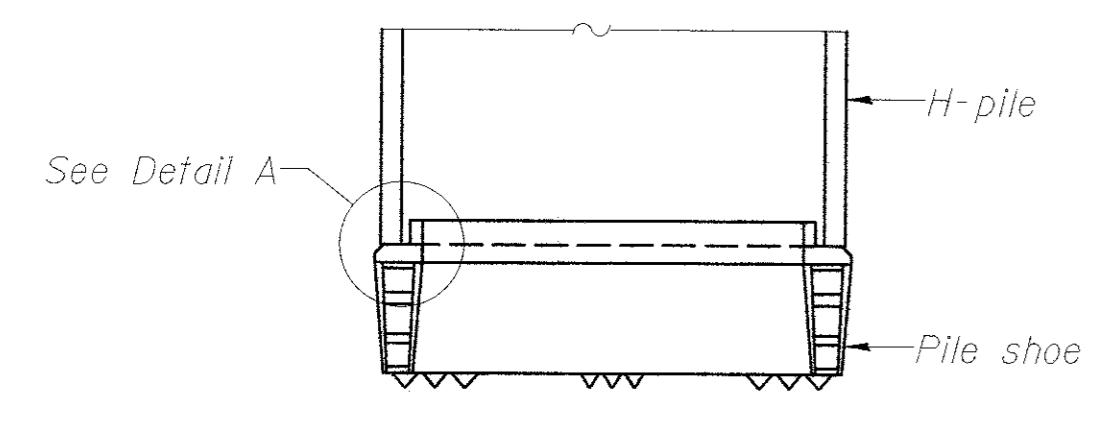
WELDED PLATE FIELD SPLICE

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

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

WELDED COMMERCIAL SPLICE ALTERNATE

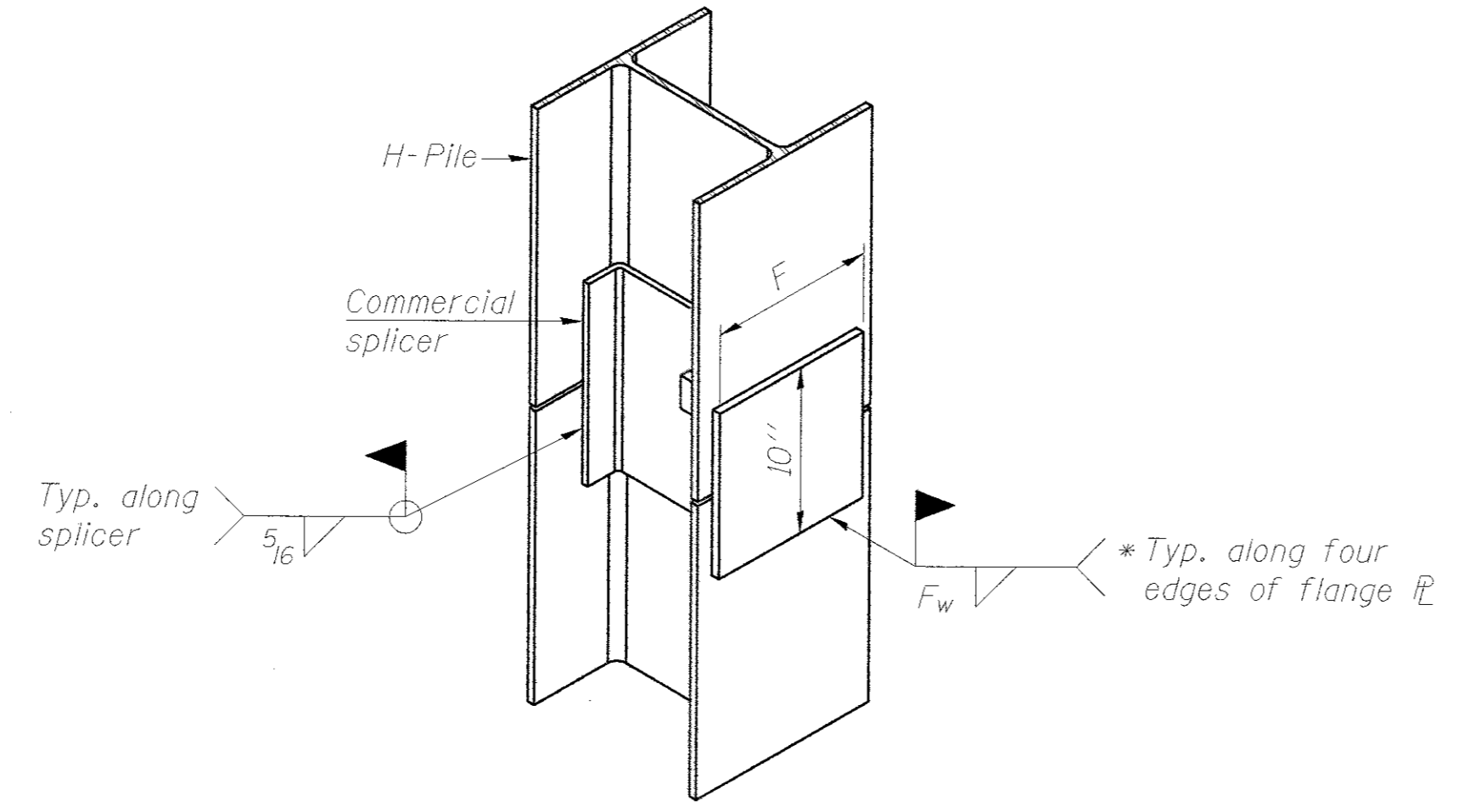
- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



ELEVATION

DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

FILE: F:\highway_files\proj\10-00201-00-BRIBlack Rd\SHSHEET BRIDGE Details.dgn

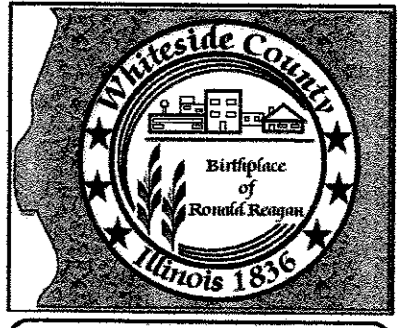
F-HP

REVISIONS	DATE

DESIGNED BY: R. RENNER	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 09/03/15
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WHITESIDE COUNTY
HIGHWAY DEPARTMENT
1880 Lincoln Road
Morton, Illinois 62770

WHITESIDE COUNTY HIGHWAY DEPARTMENT
BRIDGE DETAILS
BLACK ROAD BRIDGE OVER ROCK CREEK
SCALE: SHEET 12 OF 12 SHEETS STA. TO STA.

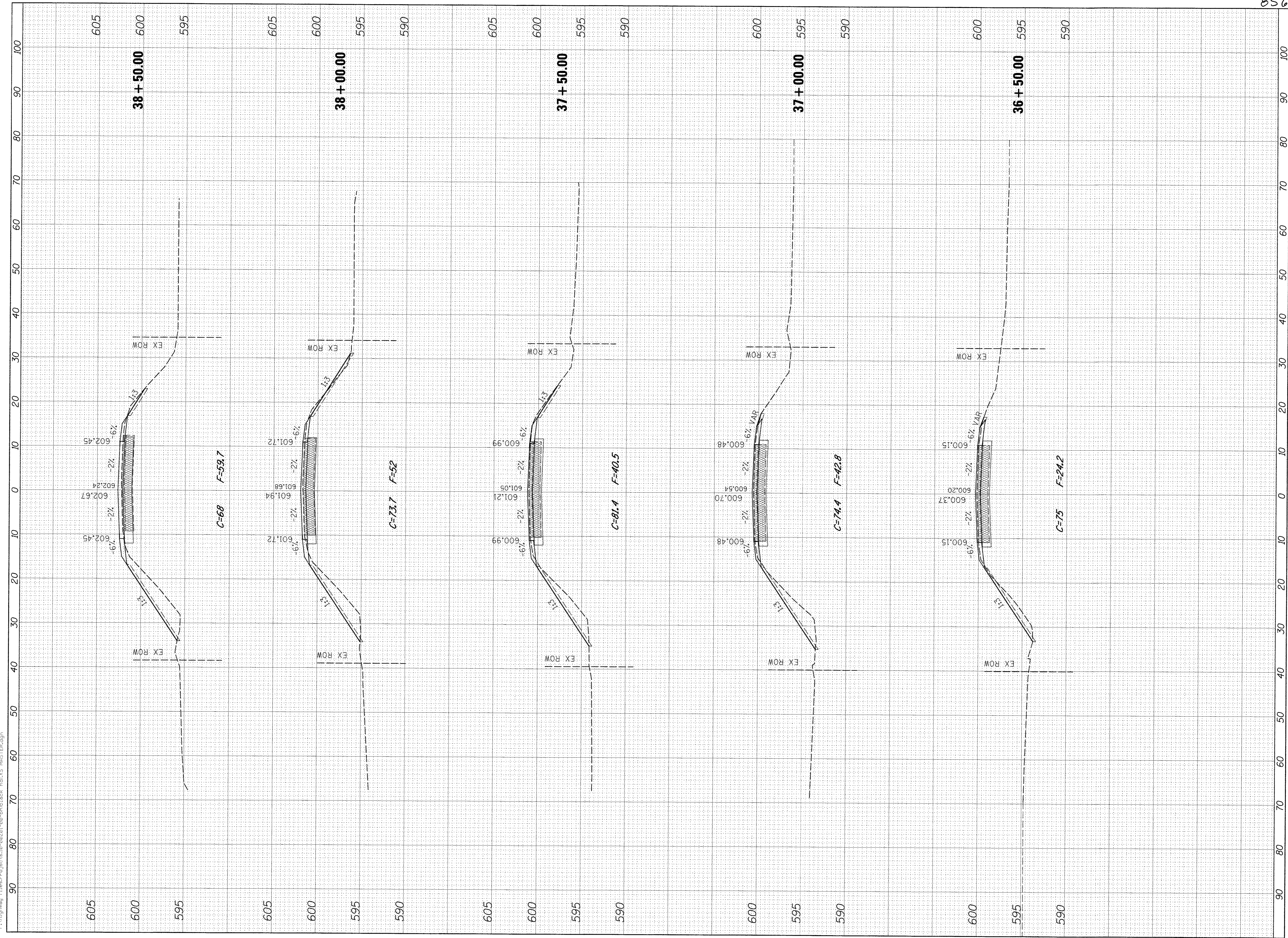


ROUTE
FAS 197 (BLACK RD)

SECTION
11-00204-00-BR

TOTAL SHEETS 55	SHEET NO. 51
--------------------	-----------------

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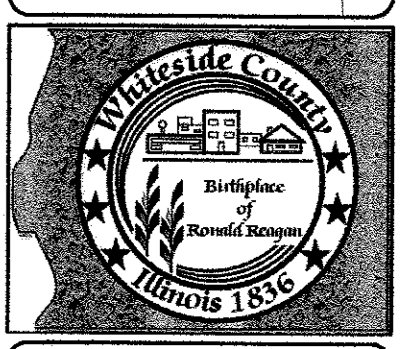


REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH
 DRAWN BY: J. KOCH
 CHECKED BY: R. RENNER
 DATE: 09/03/15

WHITESIDE COUNTY
 HIGHWAY DEPARTMENT
 1819 Lincoln Road
 Mason, Illinois 61270

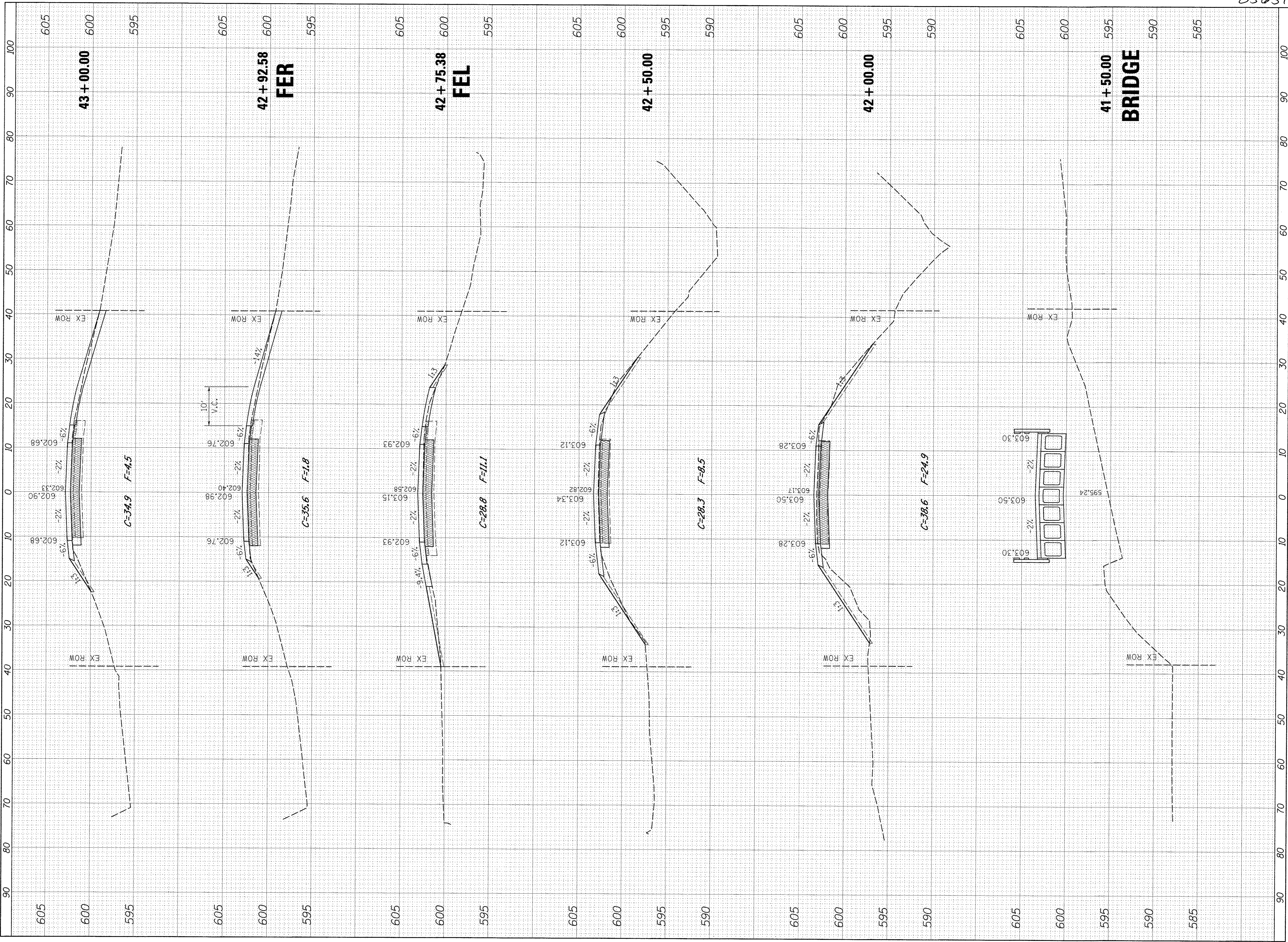
WHITESIDE COUNTY HIGHWAY DEPARTMENT
 CROSS SECTIONS
 BLACK ROAD BRIDGE OVER ROCK CREEK
 SCALE: 1" = 10'
 SHEET 1 OF 4 SHEETS
 STA. 36+50 TO STA. 38+50



ROUTE FAS 197 (BLACK RD)	
SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 52

85651

F:\Highway Files\Projects\11-00204-00-BR\Black Rd\MS MASTER.dgn



REVISIONS	DESCRIPTION	DATE

DESIGNED BY:
J. KOCH

DRAWN BY:
J. KOCH

CHECKED BY:
R. RENNER

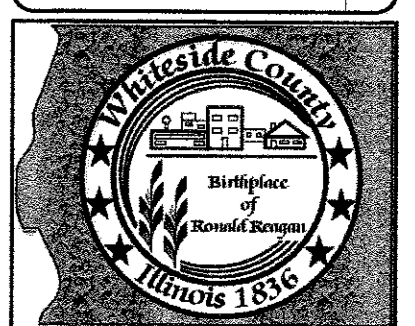
DATE: 09/03/15

WHITESIDE COUNTY
HIGHWAY DEPARTMENT

1880 Lincoln Road
Morrison, Illinois 61770

WHITESIDE COUNTY HIGHWAY DEPARTMENT
CROSS SECTIONS
BLACK ROAD BRIDGE OVER ROCK CREEK

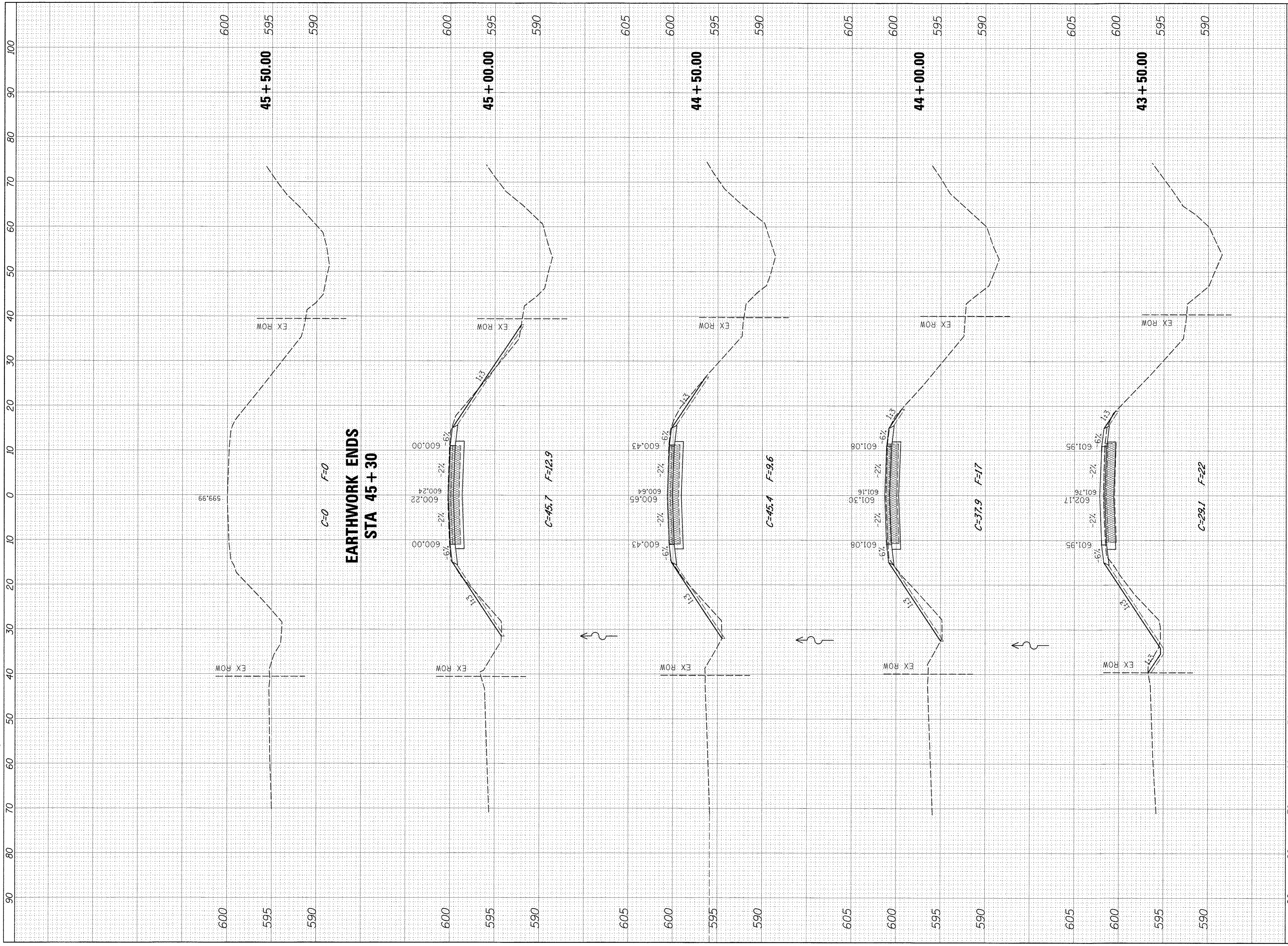
SCALE: 1" = 10'
SHEET 3 OF 4 SHEETS
STA. 41+50 TO STA. 43+00



ROUTE FAS 197 (BLACK RD)	
SECTION 11-00204-00-BR	
TOTAL SHEETS 55	SHEET NO. 54

85651

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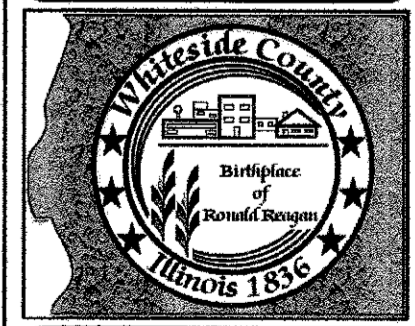
REVISIONS	DESCRIPTION	DATE

DESIGNED BY: J. KOCH	DRAWN BY: J. KOCH	CHECKED BY: R. RENNER	DATE: 08/03/15
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**WHITESIDE COUNTY
HIGHWAY DEPARTMENT**
18810 Lincoln Road
Morrison, Illinois 61270

**WHITESIDE COUNTY HIGHWAY DEPARTMENT
CROSS SECTIONS
BLACK ROAD BRIDGE OVER ROCK CREEK**

SCALE: 1" = 10'
SHEET 4 OF 4 SHEETS
STA. 43+50 TO STA. 45+50



ROUTE FAS 197 (BLACK RD)	SECTION 11-00204-00-BR
TOTAL SHEETS 55	SHEET NO. 55