

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS
T.R. 227	94-24122-00-BR	IROQUOIS	15
ROAD DIST.	ILLINOIS	RIDGELAND	

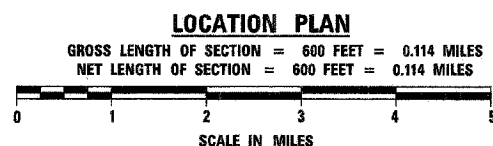
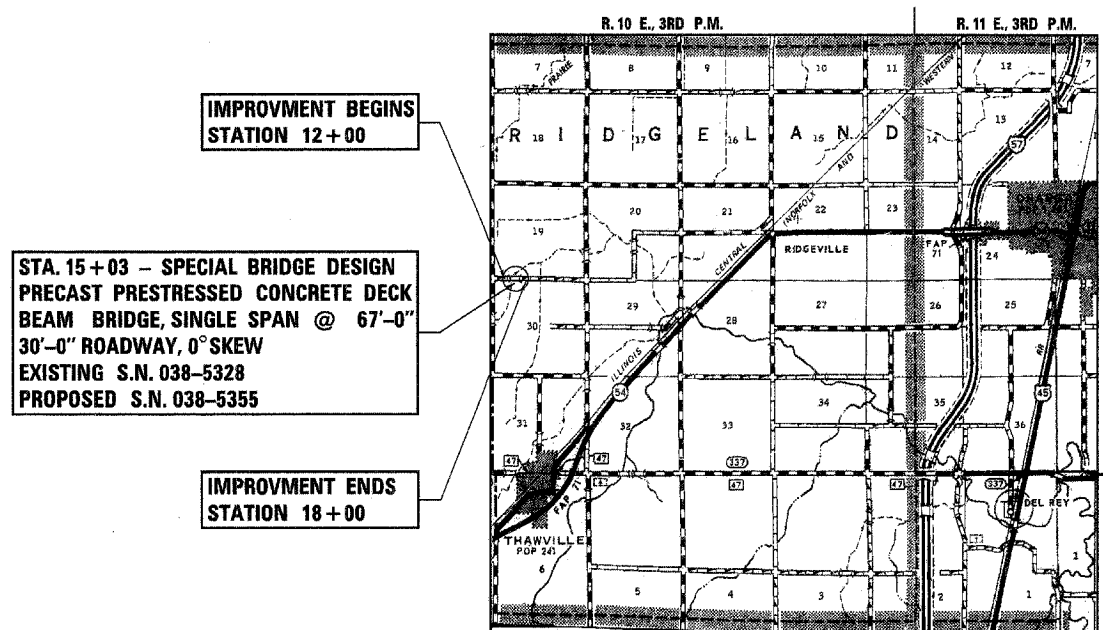
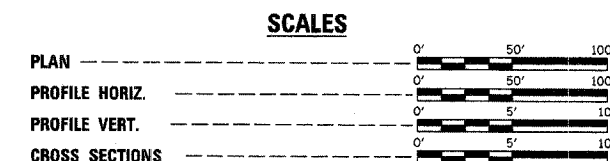
CONTRACT NO. 87298

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
BRIDGE REPLACEMENT AND REHABILITATION PROGRAM
RIDGELAND ROAD DISTRICT
SECTION 94-24122-00-BR
IROQUOIS COUNTY
PROJECT NO. BROS-075(127)
T.R. ROUTE 227
JOB NUMBER C-93-026-05

SHEET NO.	TITLE
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES, GENERAL NOTES & TYPICAL SECTIONS
3.	PLAN AND PROFILE SHEET
4.-8.	BRIDGE PLANS
9.-10.	SOIL BORINGS
11.-15.	STATION CROSS SECTIONS

STANDARDS:

280001-02
 515001-02
 635006-02
 702001-06
 BLR 21-6



FUNCTIONAL CLASSIFICATION: LOCAL ROAD ADT 0-250
CURRENT ADT <150
DESIGN SPEED = 30 M.P.H.



Fred J. Stone, Jr. (8-9-05)
 ILLINOIS PROFESSIONAL NO. 26065
 EXPIRES 11-30-05

TOLL FREE JOINT UTILITY LOCATING
 INFORMATION FOR EXCAVATORS (J.U.L.I.E.)
 TELEPHONE NUMBER 1-800-892-0123

PASSED	4-25	20 05
	<i>Roger Hill</i>	ROAD DISTRICT COMMISSIONER
APPROVED	11-28	20 05
	<i>John Calumet</i>	COUNTY ENGINEER
PASSED	12/20	20 05
	<i>John J. Stone</i>	DISTRICT THREE ENGINEER OF LOCAL ROADS & STREETS
APPROVED	12/20	20 05
	<i>Greg Muto</i>	REGION TWO ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT NO. 87298

4440 ASH GROVE
 SPRINGFIELD, IL 62711
 (217) 793-8600
 oasinc@famvid.com

OZYURT AND STONE, INC.
 CONSULTING ENGINEERS

SUMMARY OF QUANTITIES

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS
T.R. 227	94-24122-00-BR	IROQUOIS	15
ROAD DIST.	ILLINOIS	RIDGELAND	

CONTRACT NO. 87298

NUMBER	ITEM	UNIT	QUANTITY	CONSTRUCTION TYPE CODE X081-2A
20200100	EARTH EXCAVATION	CU YD	795	
* 20300100	CHANNEL EXCAVATION	CU YD	300	
* 20400800	FURNISHED EXCAVATION	CU YD	561	
* 25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.7	
28000250	TEMPORARY EROSION CONTROL SEEDINGS	POUND	70	
* 28000300	TEMPORARY DITCH CHECKS	EACH	4	
* 28000400	PERIMETER EROSION BARRIER	FOOT	400	
* 28100207	STONE RIPRAP, CLASS A4	TON	182	
* 28100807	STONE DUMPED RIPRAP, CLASS A4	TON	81	
28200200	FILTER FABRIC	SQ YD	248	
* 40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	900	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	
50300225	CONCRETE STRUCTURES	CU YD	26.8	
* 50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	2010	
50800105	REINFORCEMENT BARS	POUND	3400	
50900205	STEEL RAILING, TYPE S1	FOOT	134	
51201000	FURNISHING METAL PILE SHELLS 12"	FOOT	400	
51202600	DRIVING AND FILLING SHELLS	FOOT	400	
51203200	TEST PILE METAL SHELLS	EACH	2	
51500100	NAME PLATES	EACH	1	
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	38	
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	62	
* 70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	
67100100	MOBILIZATION	L Sum	1	

*SEE SPECIAL PROVISIONS

GENERAL NOTES

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

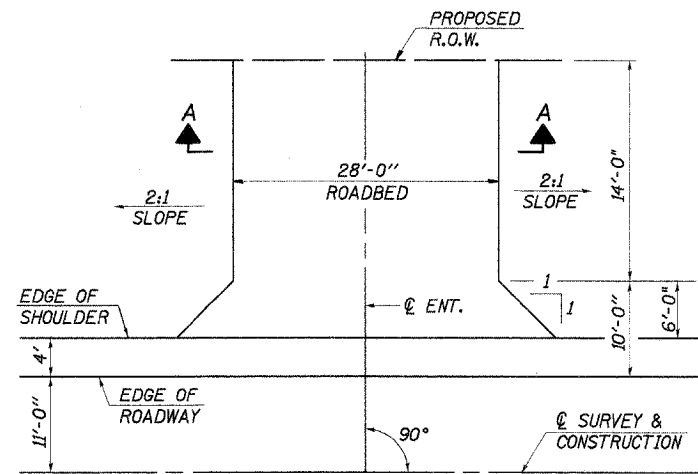
THE AREA TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AND EASEMENTS, AS DIRECTED BY THE ENGINEER.

SEEDING, CLASS 2 (SPECIAL) = 0.7 ACRE

TEMPORARY EROSION CONTROL

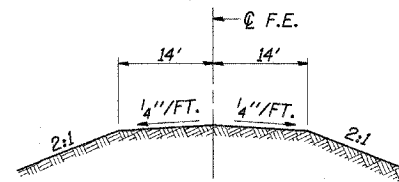
THE FOLLOWING QUANTITIES ARE ESTIMATES ONLY. ACTUAL QUANTITIES FOR EROSION CONTROL WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND THERE WILL BE NO ADJUSTMENT IN ANY PRICE DUE TO A CHANGE IN PLAN QUANTITY.

- PERIMETER EROSION BARRIER = 400 FOOT
- TEMPORARY EROSION CONTROL SEEDINGS = 70 POUND
- TEMPORARY DITCH CHECKS = 4 EACH

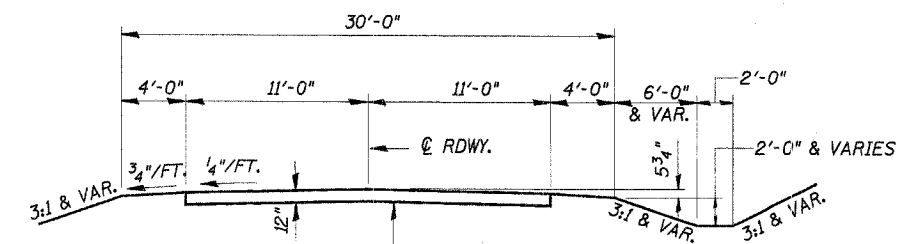


FIELD ENTRANCE DETAIL

F.E. RT. STA. 17+55



SECTION A-A

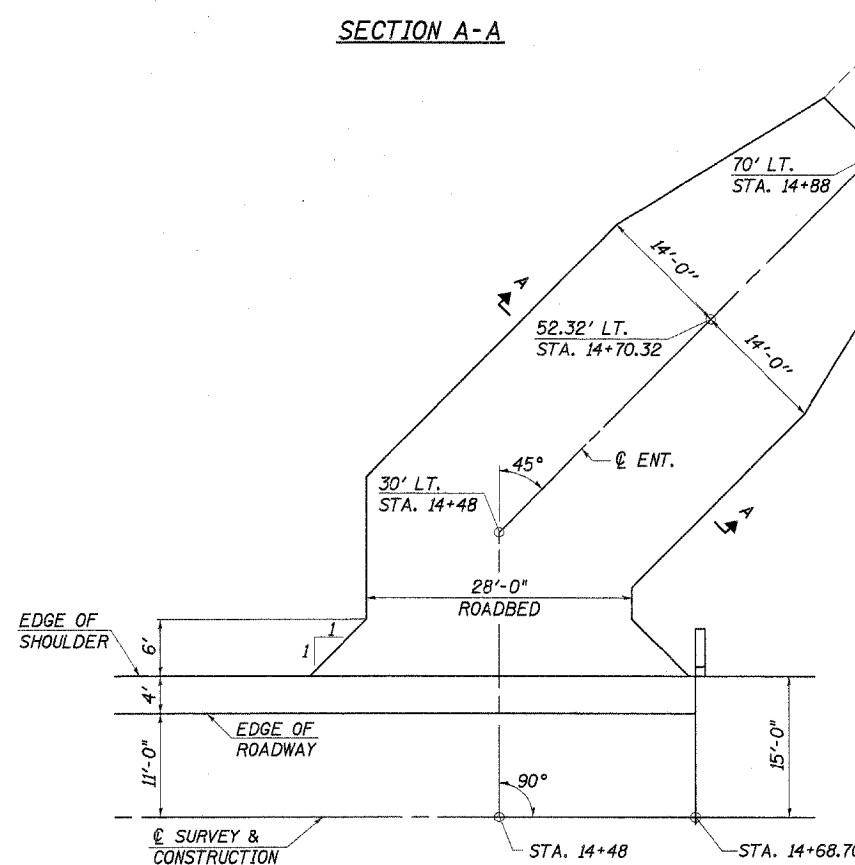


TYPICAL PROPOSED CROSS SECTION

STA. 13+00 TO STA. 17+00

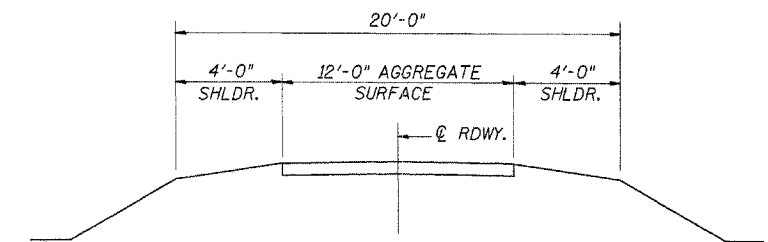
ROAD CLASSIFICATION: LOCAL ROAD ADT 0-250
CURRENT ADT LESS THAN 150

TRANSITION FROM EXISTING ROADWAY TO PROPOSED ROADWAY TO BE CONSTRUCTED FROM STA. 12+00 TO STA. 13+00 AND FROM STA. 17+00 TO STA. 18+00.



FIELD ENTRANCE DETAIL

F.E. LT. STA. 14+48



EXISTING TYPICAL CROSS SECTION

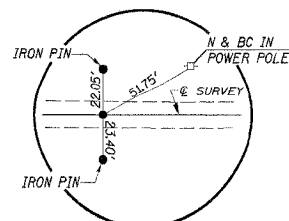
SUMMARY OF QUANTITIES, GENERAL NOTE AND TYPICAL CROSS SECTION
SECTION 94-24122-00-BR
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
STA. 15+03

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@famvid.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	JOB NO.: 0405 FILE: SUMTYP.D DATE: 10-07-
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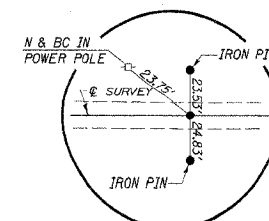
WILLIAM J. COPAS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IROQUOIS	15	3
STA. 20+00.00	TO STA. 20+01.46	ILLINOIS	RIDGELAND	

CONTRACT NO. 87298



P.O.T. STA. 10+00.00
IRON PIN (FLUSH)



P.O.T. STA. 20+01.46
IRON PIN (FLUSH)

ENTRANCES TO BE BUILT

LT. STA. 14+48, F.E. -10.0%, 28' ROADBED
RT. STA. 17+55, F.E. +1.0%, 28' ROADBED
QUANTITIES INCLUDED IN THOSE LISTED

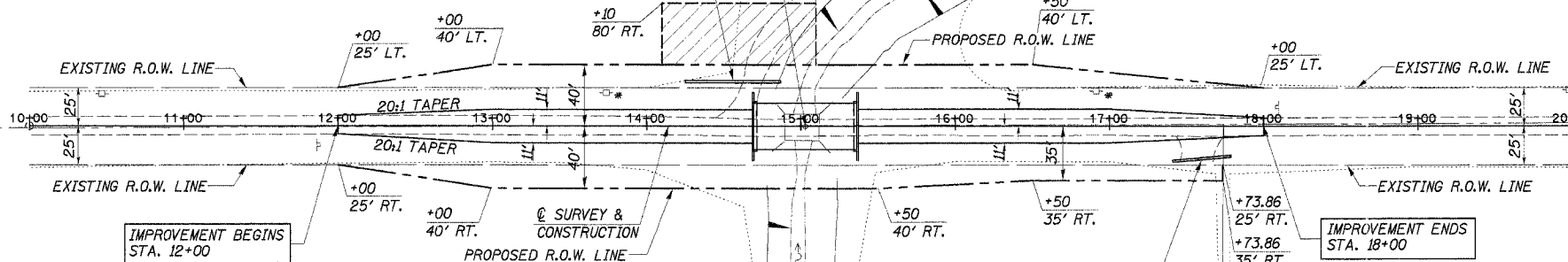
STA. 15+03 - SPECIAL BRIDGE DESIGN
PRECAST PRESTRESSED CONCRETE DECK
BEAM BRIDGE, SINGLE SPAN @ 67'-0"
30' ROADWAY, 0° SKEW

F.E. LT. STA. 14+48
PIPE CULVERTS, CLASS D,
TYPE 1 18", 62' LONG
U.S.F.L. 196.6, STA. 14+22
D.S.F.L. 196.0, STA. 14+84

PIPES TO BE REMOVED
LT. STA. 14+68, 15" CMP, 37' LONG
RT. STA. 17+60, 12" CMP, 31' LONG
QUANTITIES INCLUDED IN "EARTH EXCAVATION".

I PIN/CAP (SET)
SW COR., SECTION 19
T26N, R10E, 3RD P.M.
2.86' RT., STA. 4+74.98

RR SPIKE (FOUND)
SE COR., SECTION 19
T26N, R10E, 3RD P.M.
13.66' LT., STA. 57+33.84



CHANNEL EXCAVATION

THE CHANNEL SHALL BE EXCAVATED AS SHOWN WITHIN THE LIMITS OF THE PROPOSED STRUCTURE THEN TAPER TO THE EXISTING CHANNEL AT THE R.O.W. LINES. SUITABLE EXCAVATED MATERIAL TO BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.

CHANNEL EXCAVATION = 300 CU. YD.

MELBA T. SHEPARD

W1/2, NW1/4, SECTION 30, T26N, R10E, 3RD P.M.

RAY L. BROWNFIELD TRUST

E1/2, NW1/4, SECTION 30, T26N, R10E, 3RD P.M.

EXISTING STRUCTURE 038-5328

SINGLE SPAN TIMBER DECK ON STEEL I-BEAMS
WITH CLOSED CONC. ABUTMENTS AND WINGWALLS.
Bk.-to-Bk. = 24.5'
O.-to-O. = 16.5'
REMOVAL OF EXISTING STRUCTURES = 1 EACH

OVERHEAD POWER

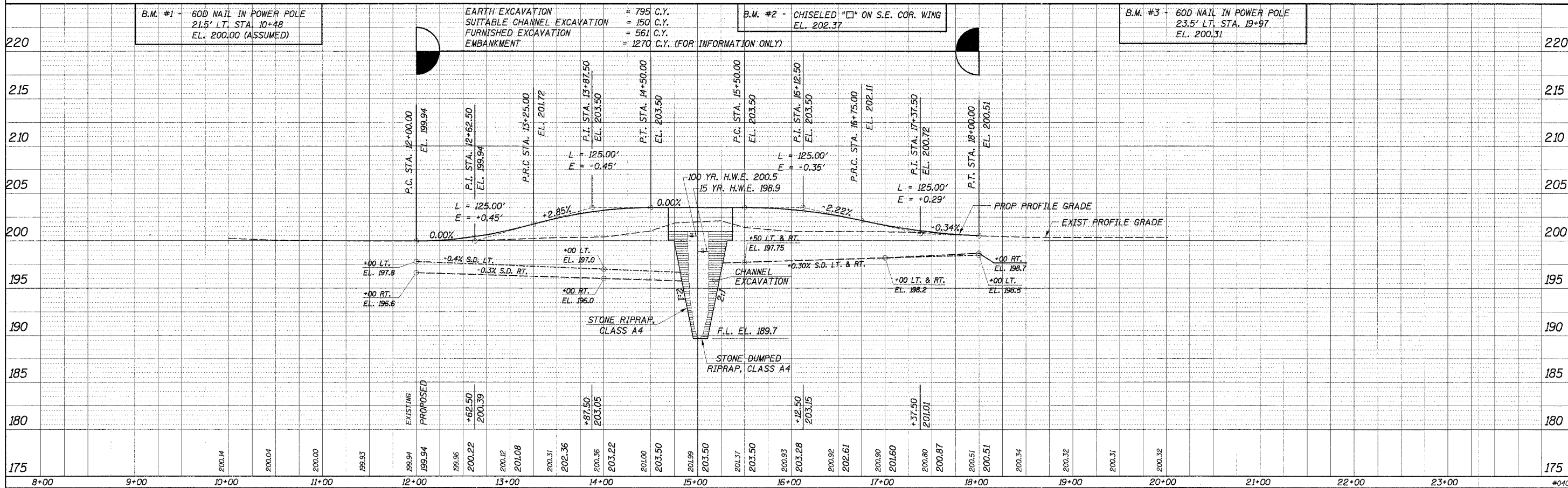
EASTERN ILLINI ELECTRIC
ALAN SCHWEIGHART
217-379-2131 EXT. 173

BURIED CABLE

VERIZON NORTH, INC.
JONNA FRICKE
309-663-3422

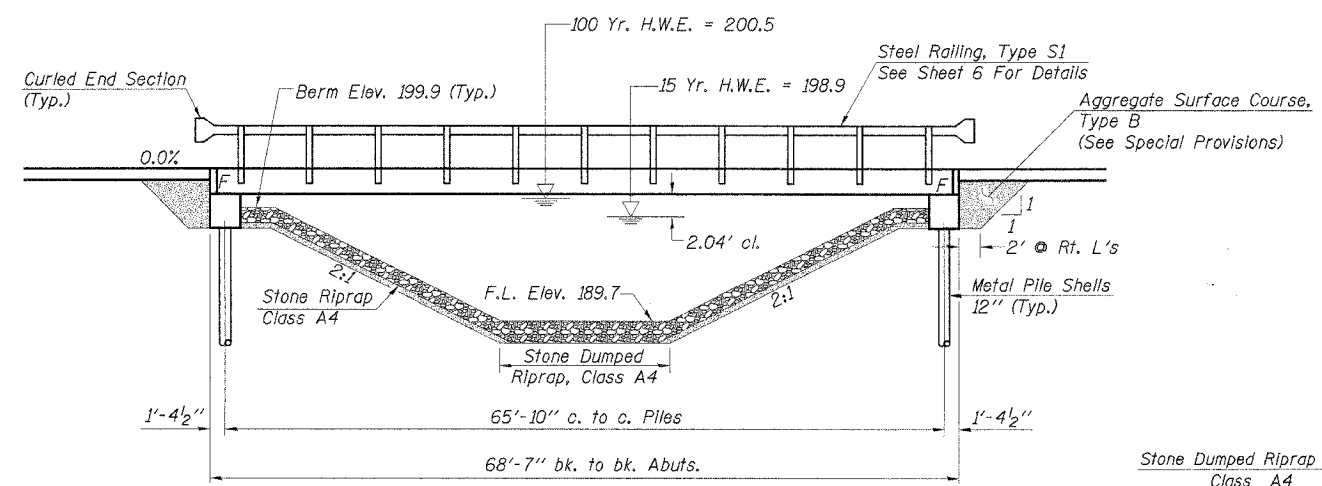
DATE	BY	NO.
6/7/04	MD	

DATE	BY	NO.
6/7/04	MD	

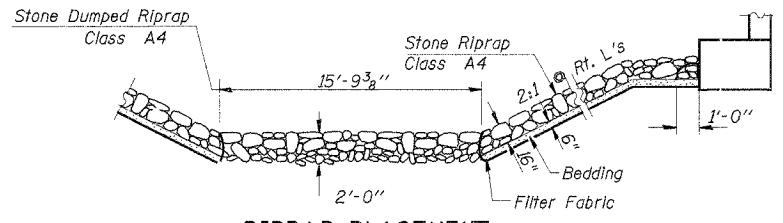


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IROQUOIS	15	4
ROAD DIST.	ILLINOIS		RIDGELAND	

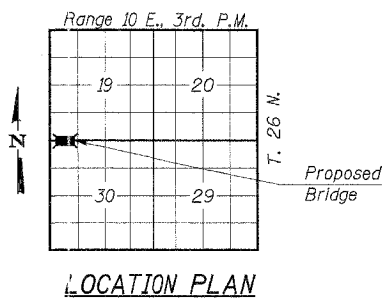
CONTRACT NO. 87298



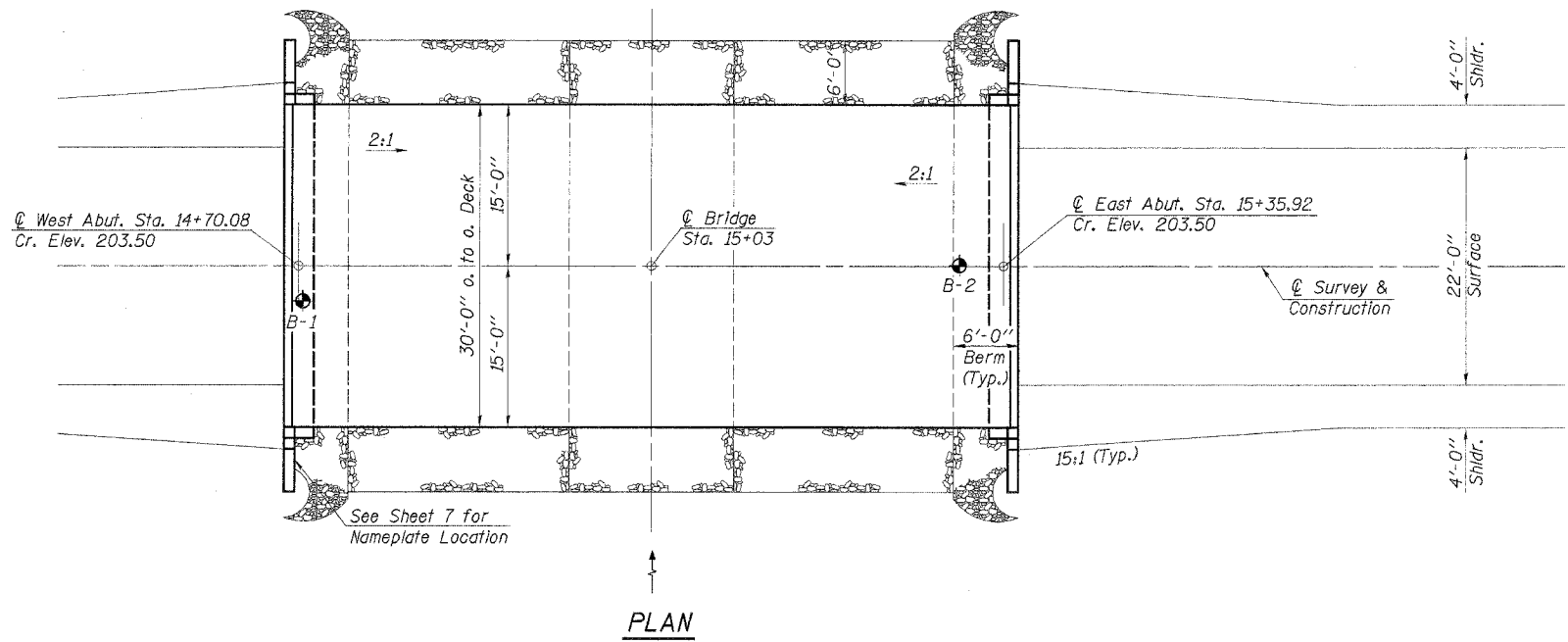
ELEVATION



RIPRAP PLACEMENT



LOCATION PLAN



PLAN

GENERAL NOTES

See sheets 9 & 10 for Boring data.

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

The Contractor shall drive one metal shell test pile in a permanent location at each abutment as directed by the Engineer, before ordering the remainder of piles.

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

Aggregate Surface Course, Ty. B shall be used to backfill behind each abutment as indicated by the Engineer. The additional quantity of CA-10 is included in the total quantity for Aggregate Surface Course, Ty. B. (See Special Provisions).

BUILT 200_ BY
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
SEC. 94-24122-00-BR
F.A. PROJ. BROS-075(127)
LOADING HS20
STR. NO. 038-5355

LETTERING FOR NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2010		2010
Concrete Structures	Cu. Yd.		26.8	26.8
Reinforcement Bars	Pound		3400	3400
Steel Railing, Type S1	Foot	134		134
Name Plates	Each		1	1
Metal Pile Shells 12"	Foot		400	400
Test Pile Metal Shells	Each		2	2
Stone Riprap, Class A4	Ton		182	182
Filter Fabric For Use with Riprap	Sq. Yd.		248	248
Aggregate Surface Course, Type B	Ton		88	88
Stone Dumped Riprap, Class A4	Ton		81	81

WATERWAY INFORMATION

Drainage Area	5.14 Sq. Mi.
Existing Opening (15 Yr.)	183 Sq. Ft.
Required Opening (15 Yr.)	315 Sq. Ft.
Proposed Opening (15 Yr.)	315 Sq. Ft.
Design Discharge (15 Yr.)	707 C.F.S.
Created Head (15 Yr.)	0.1 Ft.
100 Year Discharge	1098 C.F.S.
100 Yr. Created Head	0.2 Ft.

DESIGN STRESSES

$f'_c = 5,000$ p.s.i. (Prestressed Beams)
 $f'_{bi} = 4,000$ p.s.i. (Prestressed Beams)
 $f'_c = 1,400$ p.s.i. (Concrete)
 $f'_s = 270,000$ p.s.i. (Prestressed Strands)
 $f_{si} = 201,960$ p.s.i. (Prestressed Strands)
 $f'_s = 24,000$ p.s.i. (Reinf. Bars -- Field Units)
 $f_y = 60,000$ p.s.i. (Reinf. Bars -- Field Units)
 $n = 9$ (Concrete)
 LOADING HS20-44
 Design Specifications: 2002 AASHTO
 25#/Sq. Ft. included in dead load for future wearing surface.

"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 Standard Specifications For Highway Bridges'."



ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/06)

DESIGNED	S.F.M.
CHECKED	F.J.S.
DRAWN	S.A.P. & J.P.S.
CHECKED	S.F.M.

GENERAL PLAN & ELEVATION

SECTION 94-24122-00-BR
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
STA. 15+03

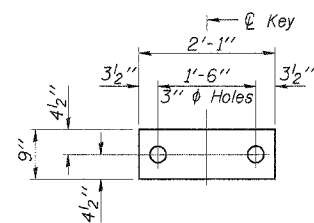
4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8600
oasinc@famvid.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

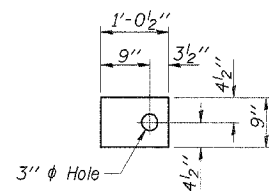
JOB NO.: 0405
FILE: GPE.DGN
DATE: 10-07-04

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IROQUOIS	15	5
ROAD DIST.	ILLINOIS	RIDGELAND		

CONTRACT NO. 87298

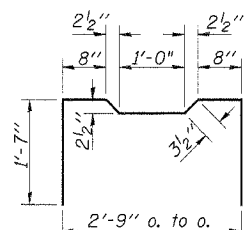


FABRIC BEARING PAD
(Interior)
(16 Req'd)

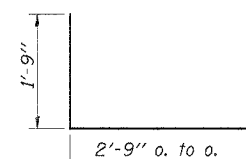


FABRIC BEARING PAD
(Exterior)
(8 Req'd)

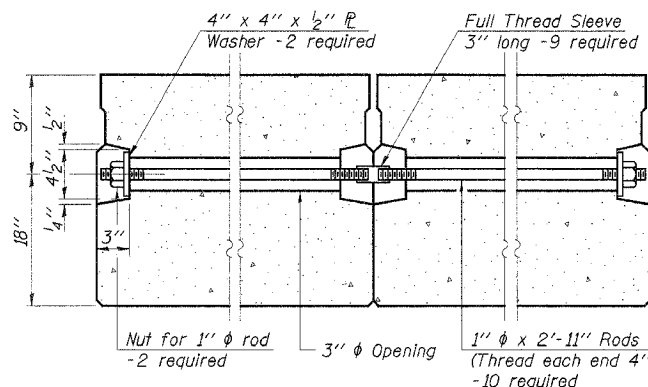
FIXED



BAR A₁

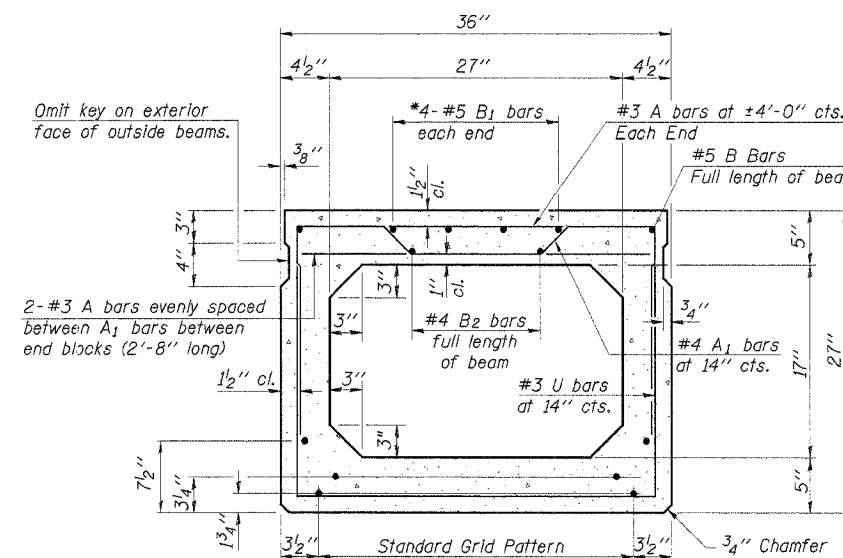


BARS U & U₁



TYPICAL TRANSVERSE TIE ASSEMBLY

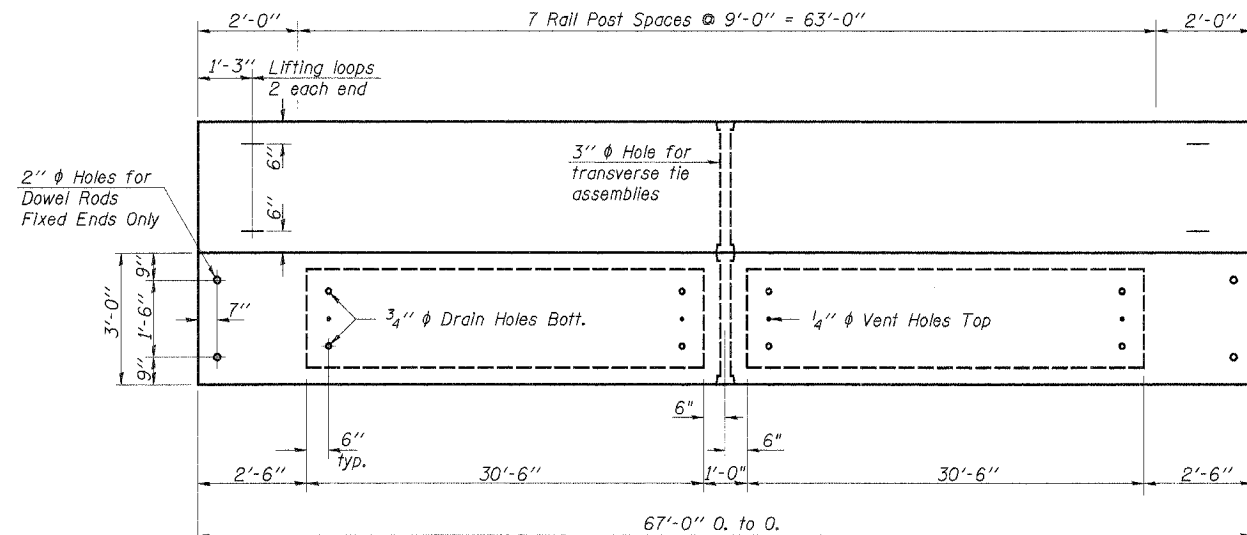
*0.2 x Length of beam (13'-4")



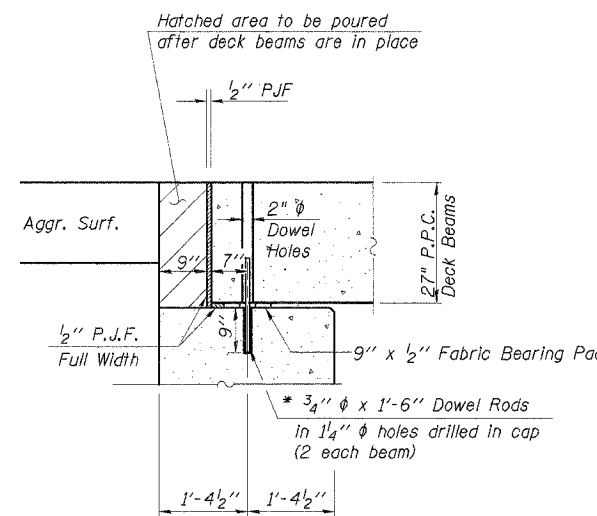
TYPICAL SECTION

15- 1/2" ϕ Strands Each Strand Stressed to 30,900 Lbs.
7 - Strands 1 3/4" up, 6 - Strands 3/4" up, 2 - Strands 7/2" up

Note:
Place strands symmetrically about ϕ of beam.

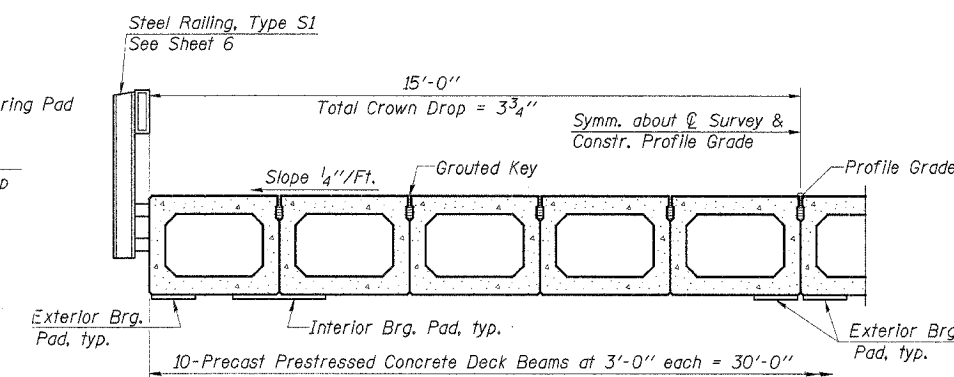


PLAN

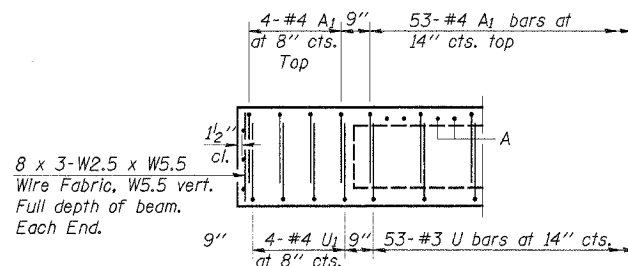


SEC. THRU ABUT.

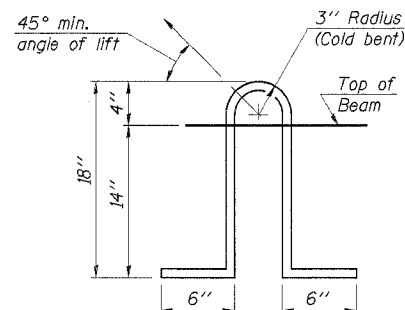
*Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hrs.) prior to grouting the shear keys.



HALF CROSS SECTION



END ELEVATION



LIFTING LOOP DETAIL

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. Lifting loops shall be 3-1/2" ϕ 270 ksi strands, as shown. The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Non prestressing steel shall conform to AASHTO M-31, M-42 or M-53 Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'_{ci} , shall be 4,000 p.s.i.

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2010

Estimated Total Weight (One Beam) = 40,800 Pounds

SUPERSTRUCTURE

SECTION 94-24122-00-BR
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
STA. 15+03

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-6800
casinc@famvid.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

JOB NO.: 0405
FILE: 27x365.dgn
DATE: 10-07-04

DESIGNED	S.F.M.
CHECKED	F.J.S.
DRAWN	S.A.P. & J.P.S.
CHECKED	S.F.M.

PD-5-S 9-1-03

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IROQUOIS	15	6
ROAD DIST.	ILLINOIS	RIDGELAND		

CONTRACT NO. 87298

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 Ft.-Lbs. at 0°F.

All other steel shapes and plates shall conform to the requirements of AASHTO M-270, Grade 36 except posts and angles shall conform to AASHTO M-270, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirement of ASTM designation A-307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M-164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with AASHTO M-232.

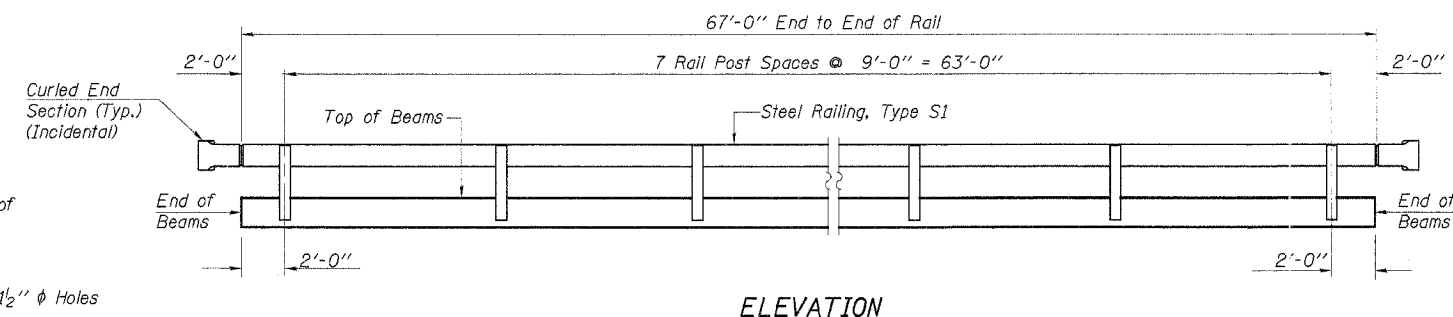
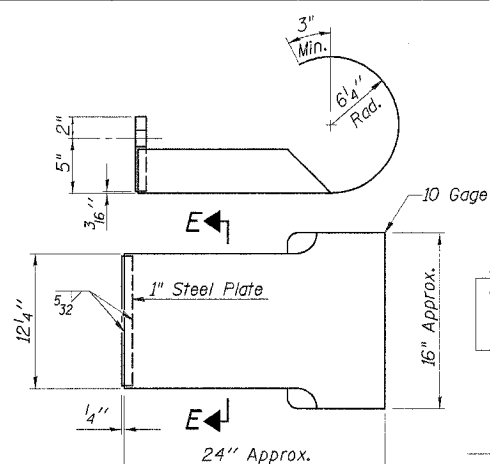
All posts, railing, rail splices, anchor devices, angles and spacers shall be galvanized after shop fabrication in accordance with AASHTO M-111 and ASTM A-385. Galvanized rail shall not be painted.

Railing shall be in accordance with Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for STEEL RAILING, TYPE S1.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

The lower plate of the post spacer in contact with concrete shall receive two coats of asphalt paint conforming to Section 1060.07 Type II or place 1/8" fabric bearing pad between the post spacer and concrete.

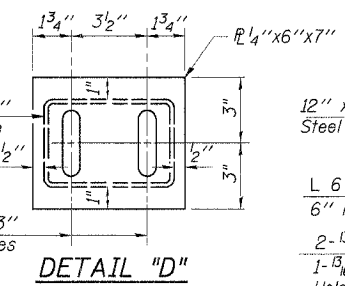
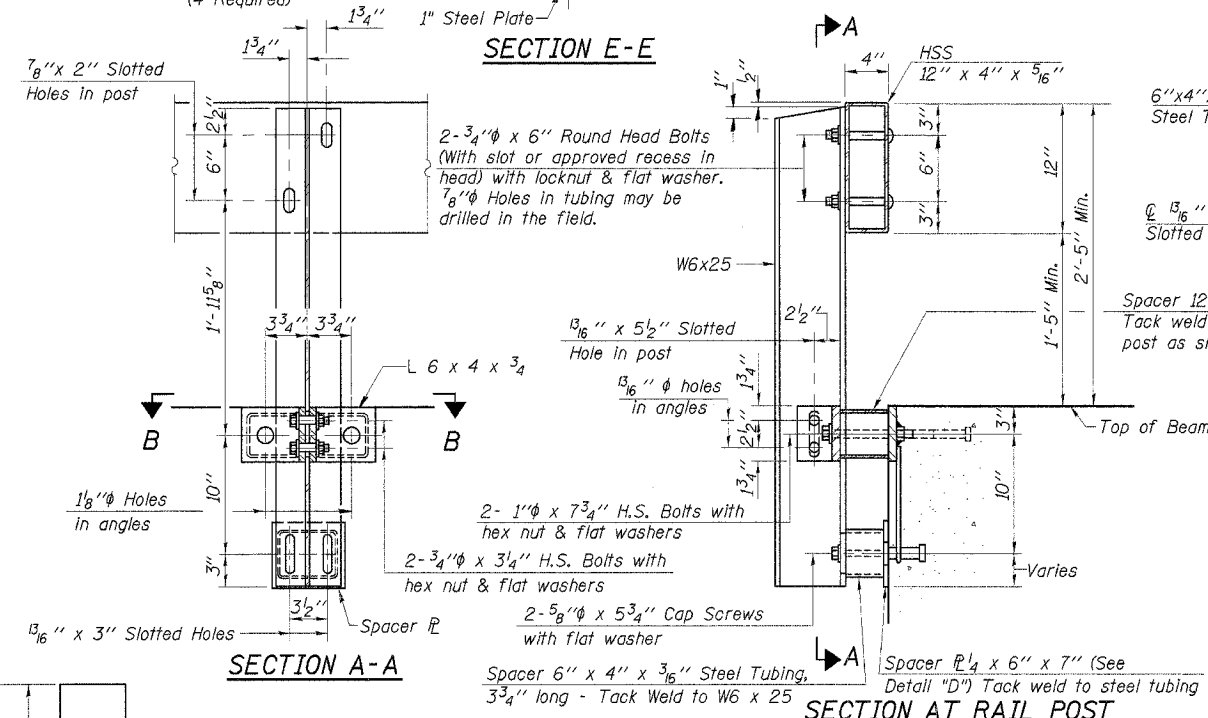
The 3/4" high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened in accordance with Article 505.04(FX2) of the Standard Specifications. The 1" high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/2 turn. The 5/8" cap screws in bottom of posts shall be tightened to a snug fit only.



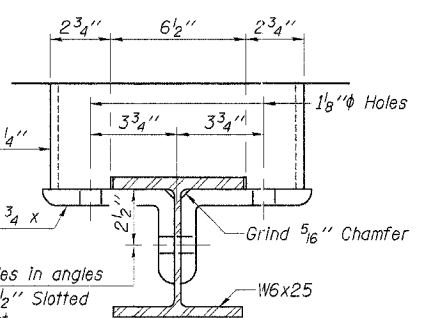
ELEVATION

CURLLED END SECTION DETAILS
(4 Required)

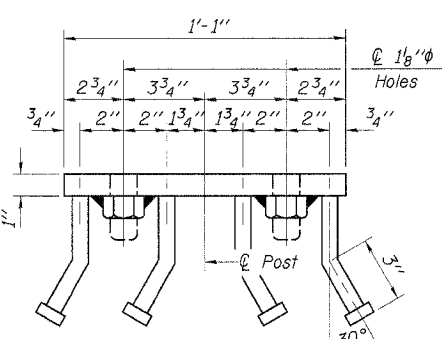
SECTION E-E



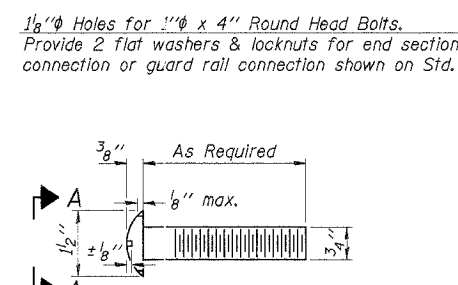
DETAIL 'D'



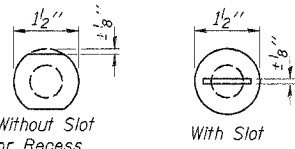
SECTION B-B



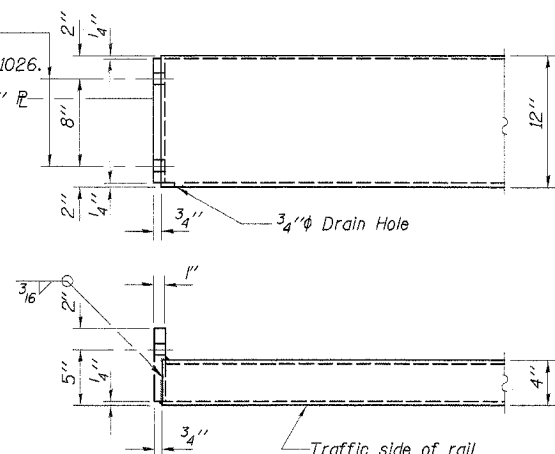
VIEW C-C



DETAIL OF 3/4" ROUND HEAD BOLT



VIEW A-A



END OF RAIL DETAILS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	134

STEEL RAILING, TYPE S1

SECTION 94-24122-00-BR
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
STA. 15+03

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@tamvid.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	JOB NO.: 0405 FILE: RAIL_SI-S.DGN DATE: 10-07-04
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1/4" SHIM PLATE

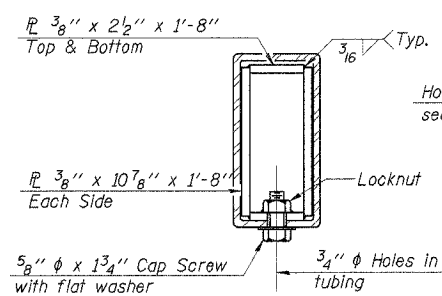
Note: For multi-span bridges, sufficient 1/4" x 6" x 1'-4" galvanized steel shims shall be provided to align rail between adjacent spans. Cost incidental to Steel Railing.

DESIGNED	S.F.M.
CHECKED	F.J.S.
DRAWN	S.A.P. & J.P.S.
CHECKED	S.F.M.

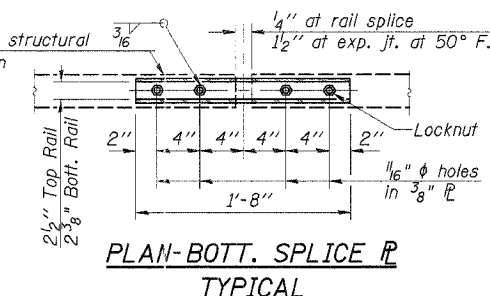
ANCHOR DEVICE

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

** Whenever the lower insert assemblies interfere with strand 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". (Precast Prestressed Concrete Deck Beam Bridges Only)



SECTIONS AT RAIL SPLICE

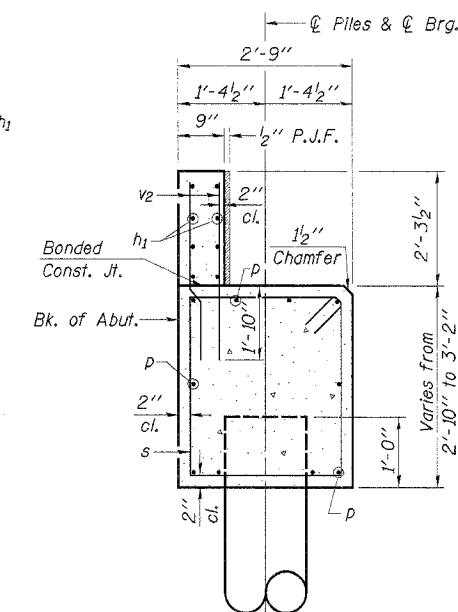
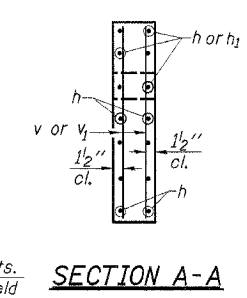
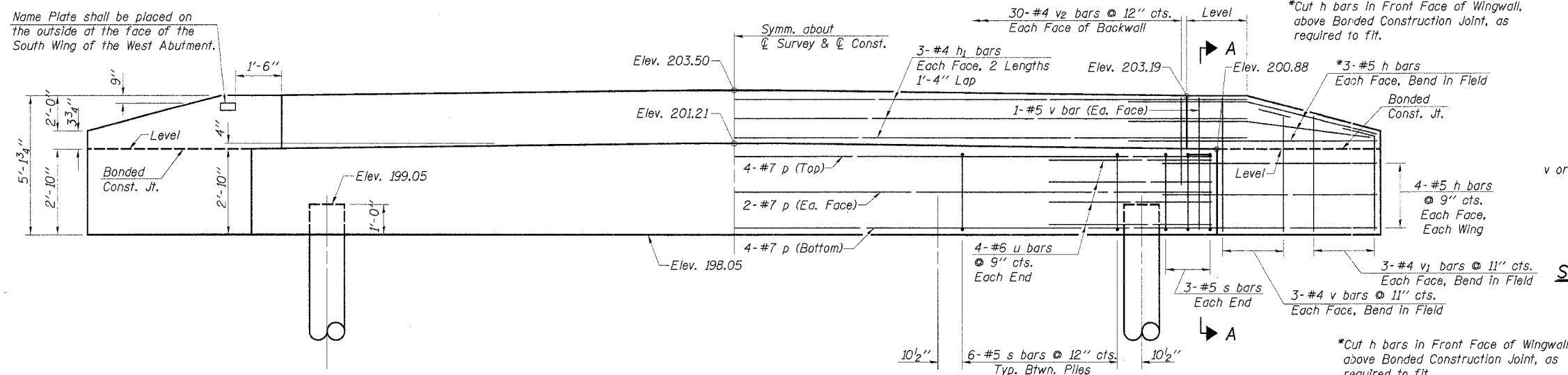


PLAN-BOTT. SPLICE TYPICAL

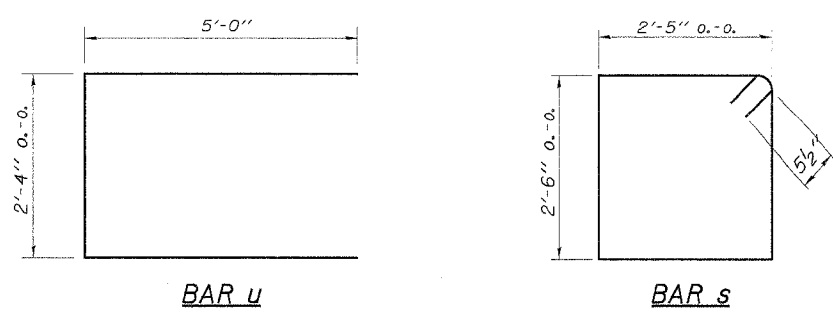
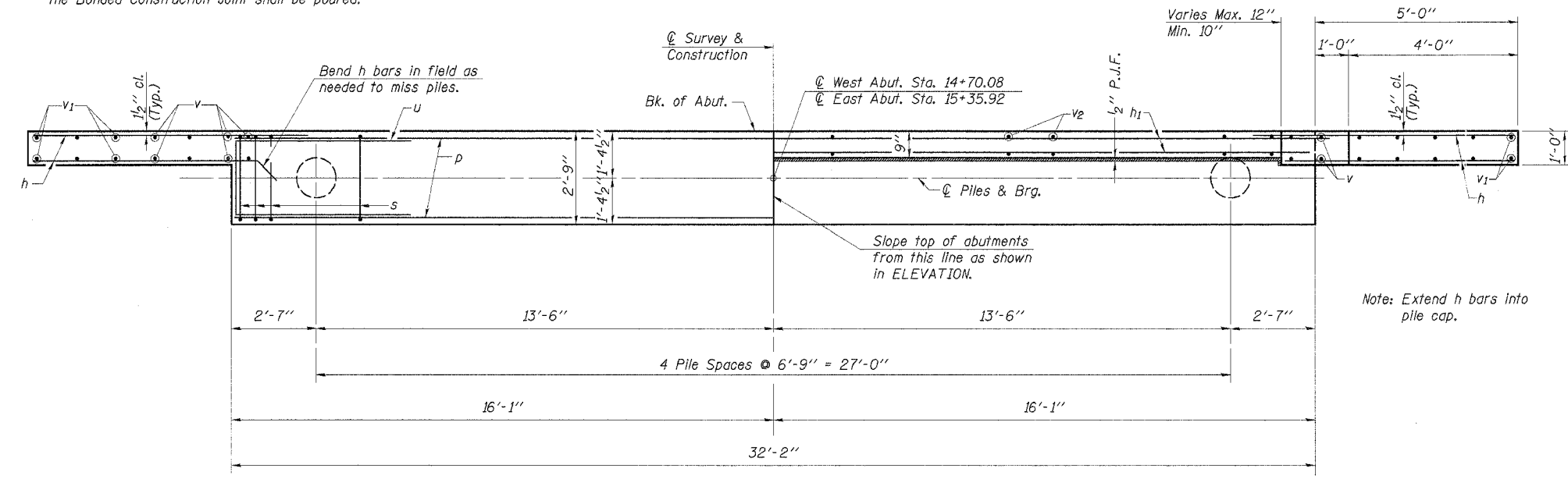
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IROQUOIS	15	7
ROAD DIST.	ILLINOIS		RIDGELAND	

CONTRACT NO. 87298

Name Plate shall be placed on the outside at the face of the South Wing of the West Abutment.



Note: After beams are in place and dowel rods grouted, the backwall and the portions of the wingwalls above the Bonded Construction Joint shall be poured.



PILE DATA

Type..... Metal Pile Shells

No. Req'd. (2 Abuts.)..... **10

Capacity..... 45 Tons/Pile

Est. Length..... 50 Feet/Pile

**Includes 1 Test Pile to be driven in a permanent location at each Abutment.

**2 ABUTMENTS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h	56	#5	6'-3"	—
h ₁	24	#4	17'-6"	—
p	20	#7	31'-10"	—
s	60	#5	10'-9"	□
u	16	#6	12'-4"	—
v	32	#4	4'-10"	—
v ₁	24	#4	3'-9"	—
v ₂	120	#4	3'-11"	—
Concrete Structures	Cu. Yd.	26.8		
Reinforcement Bars	Pound	3400		
Name Plates	Each	1		
Test Pile Metal Shells	Each	2		
Metal Pile Shells 12"	Foot	400		

See Sheet 8 for Pile Details

DESIGNED	S.F.M.
CHECKED	F.J.S.
DRAWN	S.A.P. & J.P.S.
CHECKED	S.F.M.

ABUTMENTS

SECTION 94-24122-00-BR
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
STA. 15+03

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8690
oasinc@famvid.com

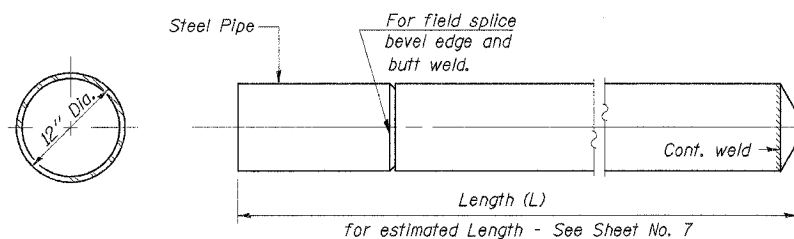
OZYURT AND STONE, INC.
CONSULTING ENGINEERS

JOB NO.: 0405
FILE: ABUT-0-BW.DGN
DATE: 10-07-04

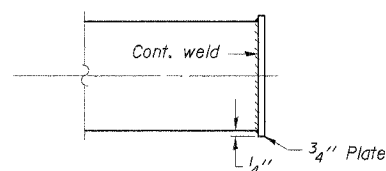
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IROQUOIS	15	8
ROAD DIST.	ILLINOIS	RIDGELAND		

CONTRACT NO. 87298

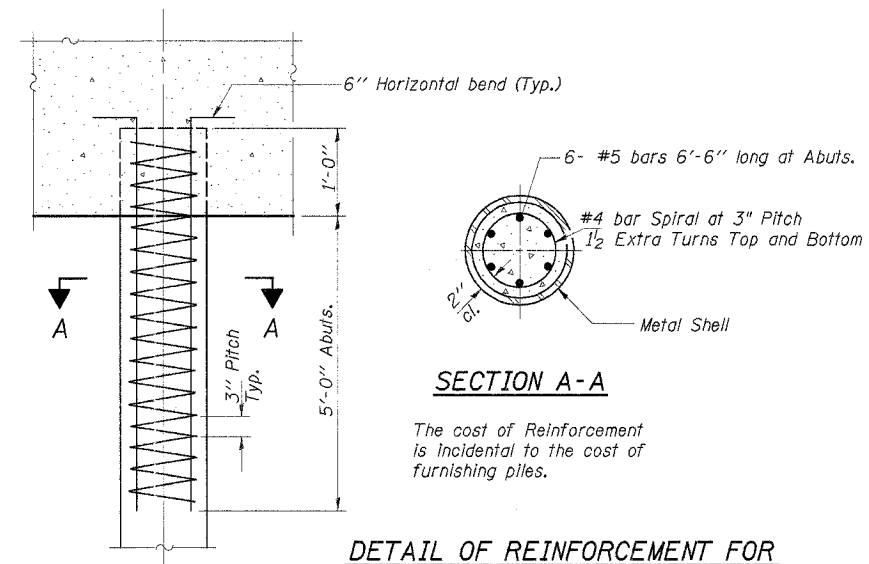
Notes: Driving and bearing ends of pipe shall be cut square.
The thickness of the shell shall be 0.1793 inches with a tolerance of 5%. The shell shall be in accordance with Article 1006.05(a) of the Standard Specifications.



DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



OPTIONAL FLAT END



SECTION A-A

The cost of Reinforcement is incidental to the cost of furnishing piles.

DETAIL OF REINFORCEMENT FOR METAL SHELLS

DETAIL OF METAL SHELL FOR CAST IN PLACE CONCRETE PILES

DESIGNED	S.F.M.
CHECKED	F.J.S.
DRAWN	S.A.P. & J.P.S.
CHECKED	S.F.M.

CONCRETE PILE DETAILS

SECTION 94-24122-00-BR
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
STA. 15+03

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8600
oasinc@famvid.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

JOB NO.: 0405
FILE: METAL_HJDN
DATE: 10-07-04

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IROQUOIS	15	9
ROAD DIST.		ILLINOIS	RIDGELAND	

CONTRACT NO. 87298

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
E-Mail: Midwest@TheRamp.net

BORING LOG
Sheet 1 of 4

Client: Ozyurt & Stone, Inc.
Project Name: Ridgeland Rd. District Sec 94-24122-00-BR
Project Site: TR 227 Over Unnamed Tributary
Iroquois County, Illinois

Boring No. B-1
Surface Elev. 99.80
Auger Depth 66.00
Rotary Depth NA
Start Date 06/10/04
Finish Date 06/11/04

Location: 5' Rt. Station 14 + 68

DEPTH (ELEV.)	DESCRIPTION OF MATERIALS	Grain Size	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Qu (TSF)	N Value (Blows)	Blow / Shear	Moisture (%)		
99.80										
96.80	Stiff Black And Brown Silty Clay (Fill)		1							
95.80			2	1	1.2	11	S	13		
94.80			3	2	1.1	7	B	23		
93.80			4							
92.80	Stiff Brownish Gray Silty Clay		5							
91.80			6	3	1.4	8	B	24		
90.80			7							
89.80			8	4	1.3	8	B	25		
88.80			9							
87.80			10	5	1.4	8	B	25		
86.80			11							
85.80	Medium Gray Silt		12	6	SS	---	14	---	19	
84.80			13							
83.80			14	7	SS	2.1	12	B	20	
82.80	Very Stiff Gray Clay Till		15							
81.80			16	8	SS	2.4	13	B	21	
80.80			17							
79.80			18							

Groundwater Data: Static water level after auger removal - 14' depth.
Comments: Assumed center of existing bridge deck as 100.0.

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3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
E-Mail: Midwest@TheRamp.net

BORING LOG
Sheet 2 of 4

Client: Ozyurt & Stone, Inc.
Project Name: Ridgeland Rd. District Sec 94-24122-00-BR
Project Site: TR 227 Over Unnamed Tributary
Iroquois County, Illinois

Boring No. B-1
Surface Elev. 99.80
Auger Depth 66.00
Rotary Depth NA
Start Date 06/10/04
Finish Date 06/11/04

Location: 5' Rt. Station 14 + 68

DEPTH (ELEV.)	DESCRIPTION OF MATERIALS	Grain Size	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Qu (TSF)	N Value (Blows)	Blow / Shear	Moisture (%)		
99.80										
97.80			22							
96.80	Very Stiff Gray Clay Till		23	9	SS	2.5	13	B	20	
95.80			24							
94.80			25	10	SS	2.9	16	B	20	
93.80			26							
92.80	Medium Gray Silt		27	11	SS	---	18	---	18	
91.80			28							
90.80			29							
89.80			30	12	SS	---	15	---	20	
88.80			31							
87.80			32							
86.80			33	13	SS	2.8	18	B	19	
85.80			34							
84.80	Very Stiff Gray Clay Till		35	14	SS	2.9	16	B	19	
83.80			36							
82.80			37	15	SS	2.7	17	B	20	
81.80			38							
80.80			39							
79.80			40	16	SS	3.1	18	B	19	
78.80			41							

Groundwater Data: Static water level after auger removal - 14' depth.
Comments: Assumed center of existing bridge deck as 100.0.

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
E-Mail: Midwest@TheRamp.net

BORING LOG
Sheet 3 of 4

Client: Ozyurt & Stone, Inc.
Project Name: Ridgeland Rd. District Sec 94-24122-00-BR
Project Site: TR 227 Over Unnamed Tributary
Iroquois County, Illinois

Boring No. B-1
Surface Elev. 99.80
Auger Depth 66.00
Rotary Depth NA
Start Date 06/10/04
Finish Date 06/11/04

Location: 5' Rt. Station 14 + 68

DEPTH (ELEV.)	DESCRIPTION OF MATERIALS	Grain Size	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Qu (TSF)	N Value (Blows)	Blow / Shear	Moisture (%)		
99.80										
96.80			43	17	SS	4.1	24	S	17	
95.80			44							
94.80			45	18	SS	4.3	21	S	16	
93.80			46							
92.80	Hard Brownish Gray Silty Clay Till		47	19	SS	4.6	21	S	16	
91.80			48							
90.80			49							
89.80			50	20	SS	4.1	22	S	16	
88.80			51							
87.80			52							
86.80			53	21	SS	4.4	21	S	16	
85.80			54							
84.80			55	22	SS	4.5	26	S	15	
83.80			56							
82.80	Medium To Dense Gray Fine To Coarse Sand		57	23	SS	---	33	---	---	
81.80			58							
80.80			59							
79.80			60	24	SS	---	33	---	---	
78.80			61							
77.80			62	25	SS	---	28	---	---	

Groundwater Data: Static water level after auger removal - 14' depth.
Comments: Assumed center of existing bridge deck as 100.0.

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
E-Mail: Midwest@TheRamp.net

BORING LOG
Sheet 4 of 4

Client: Ozyurt & Stone, Inc.
Project Name: Ridgeland Rd. District Sec 94-24122-00-BR
Project Site: TR 227 Over Unnamed Tributary
Iroquois County, Illinois

Boring No. B-1
Surface Elev. 99.80
Auger Depth 66.00
Rotary Depth NA
Start Date 06/10/04
Finish Date 06/11/04

Location: 5' Rt. Station 14 + 68

DEPTH (ELEV.)	DESCRIPTION OF MATERIALS	Grain Size	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Qu (TSF)	N Value (Blows)	Blow / Shear	Moisture (%)		
99.80										
96.80	Medium To Dense Gray Fine To Coarse Sand		64	25	SS	---	21	---	---	
95.80			65							
94.80			66	26	SS	---	37	---	---	
93.80			67							
92.80	Bottom Of Boring		68							
91.80			69							
90.80			70							
89.80			71							
88.80			72							
87.80			73							
86.80			74							
85.80			75							
84.80			76							
83.80			77							
82.80			78							
81.80			79							
80.80			80							
79.80			81							
78.80			82							
77.80			83							

Groundwater Data: Static water level after auger removal - 14' depth.
Comments: Assumed center of existing bridge deck as 100.0.

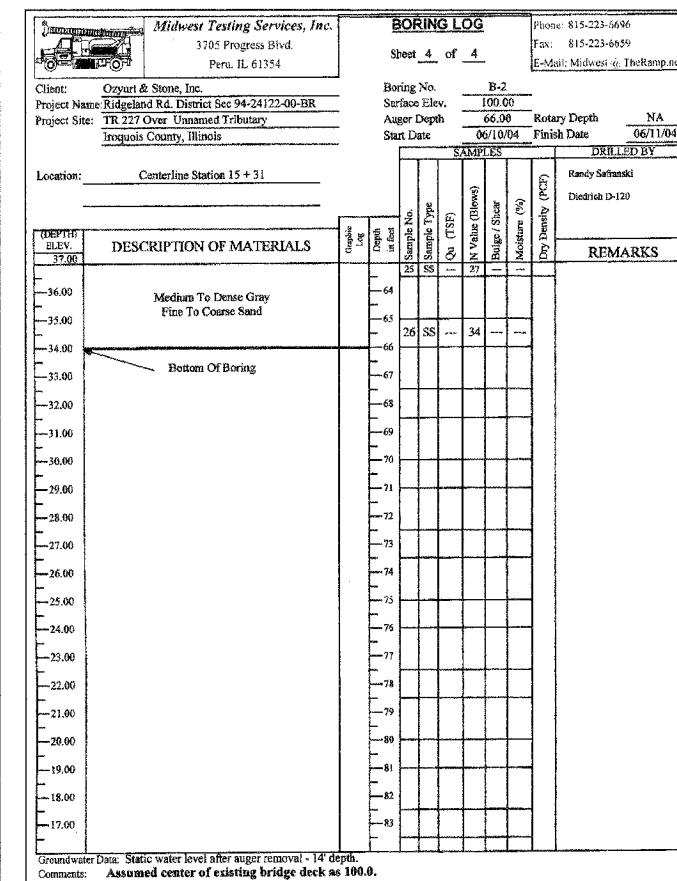
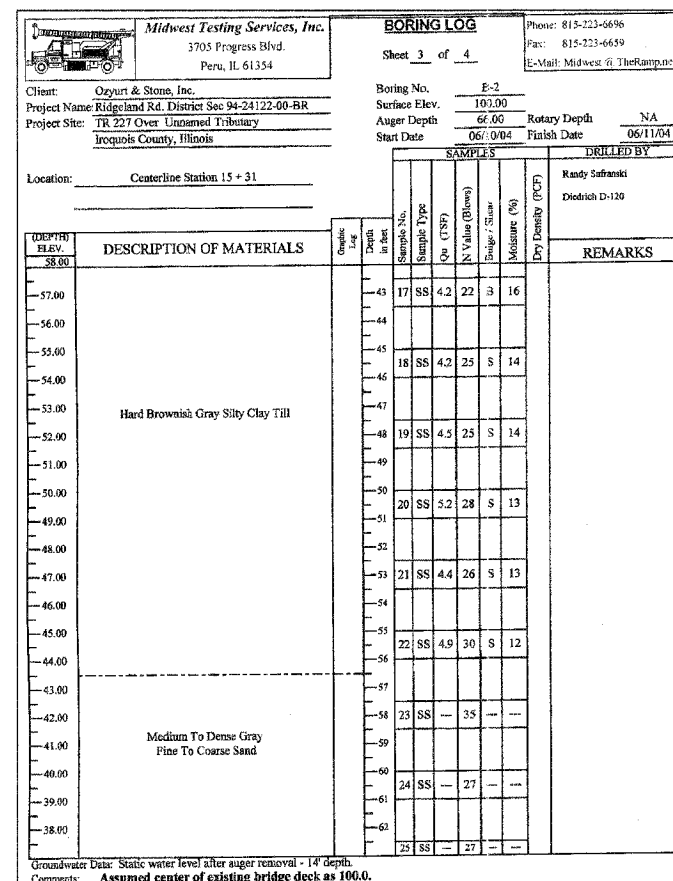
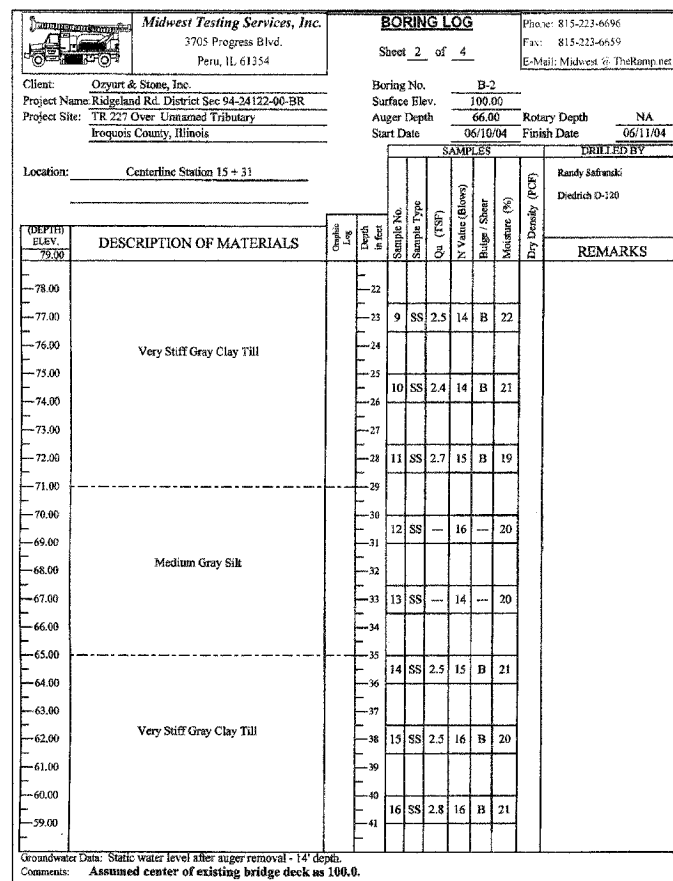
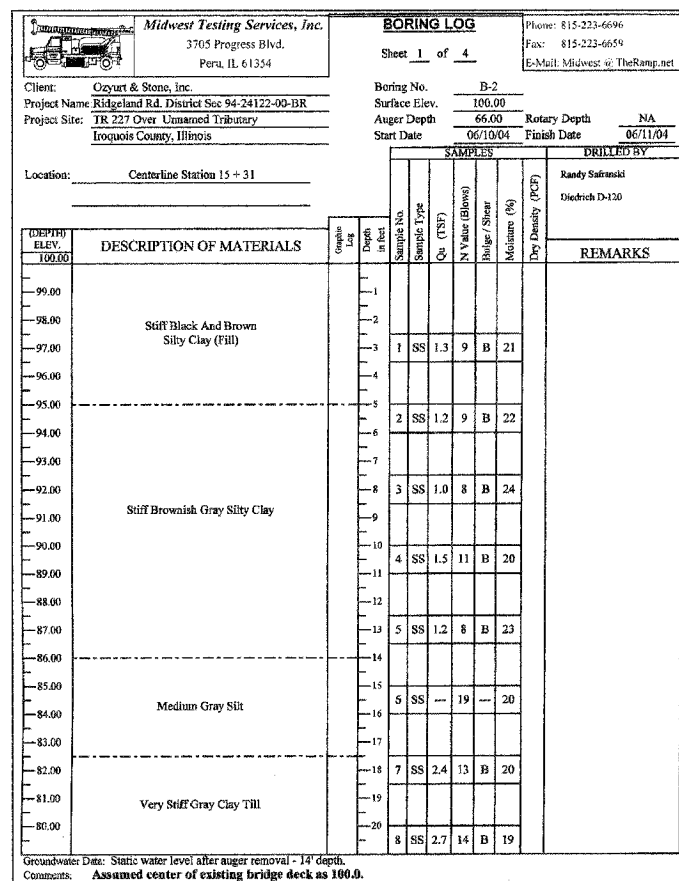
DESIGNED	S.F.M.
CHECKED	F.J.S.
DRAWN	S.A.P. & J.P.S.
CHECKED	S.F.M.

SOIL BORING 1
SECTION 94-24122-00-BR
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
STA. 15+03

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8000 oasinc@amvid.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	JOB NO.: 0405 FILE: boringLdgn DATE: 10-07-04
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IRROQUOIS	15	10
ROAD DIST.		ILLINOIS	RIDGELAND	

CONTRACT NO. 87298



DESIGNED	S.F.M.
CHECKED	F.J.S.
DRAWN	S.A.P. & J.P.S.
CHECKED	S.F.M.

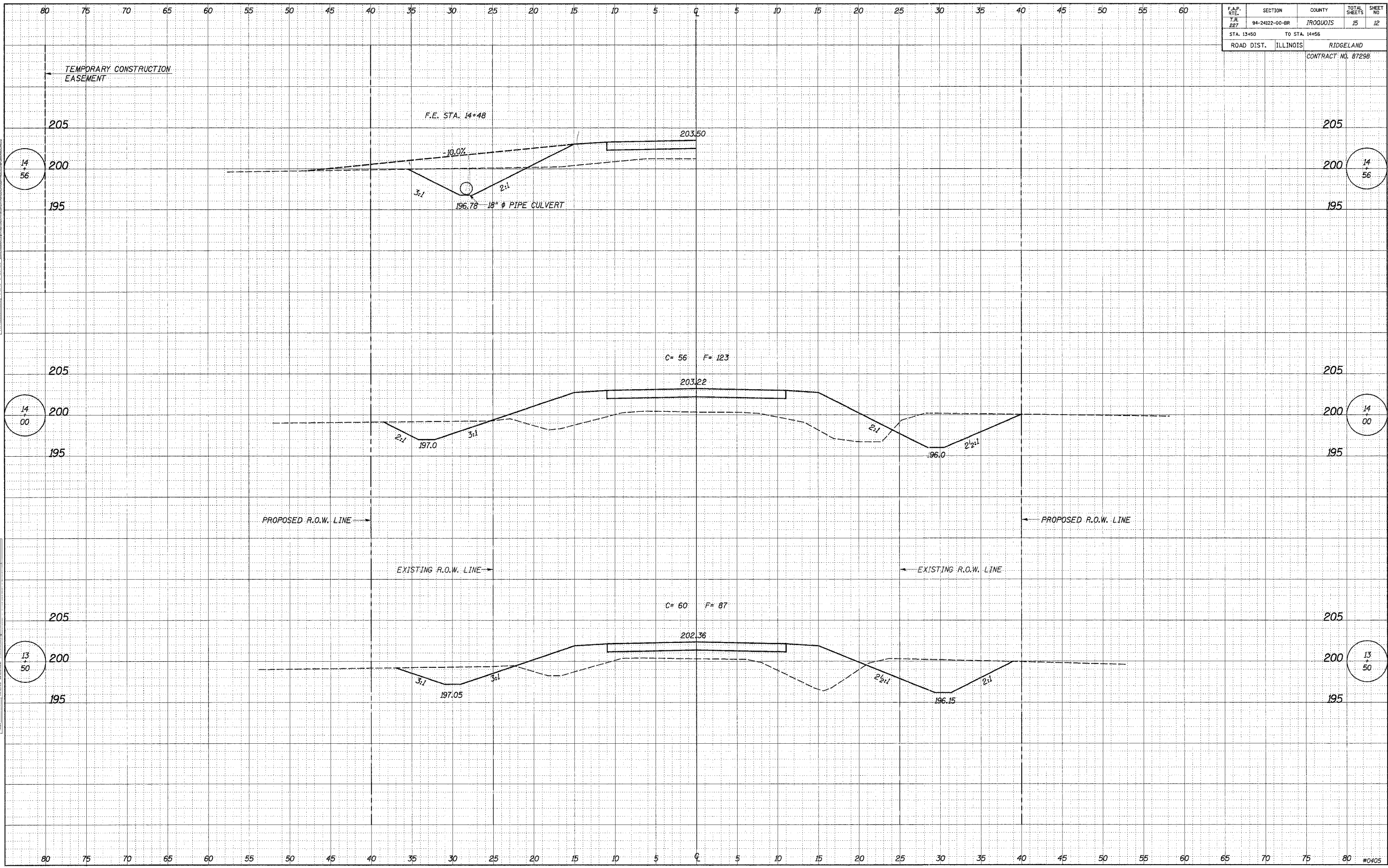
SOIL BORING 2
SECTION 94-24122-00-BR
RIDGELAND ROAD DISTRICT
IROQUOIS COUNTY
STA. 15+03

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 798-8600 oasinc@tamvid.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	JOB NO.: 0405 FILE: boring2.dgn DATE: 10-07-04
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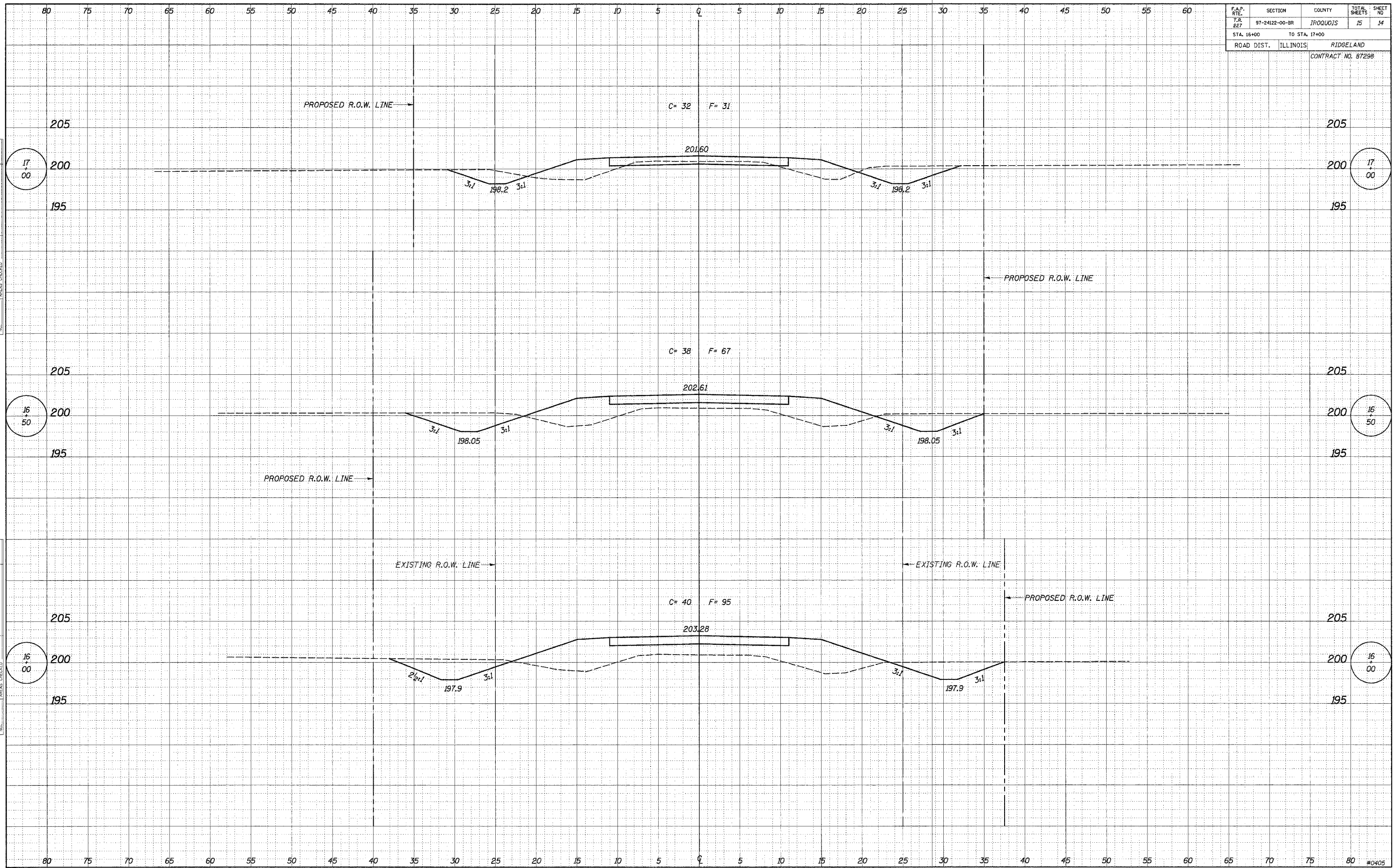
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	94-24122-00-BR	IROQUOIS	15	12
STA. 13+50		TO STA. 14+55		
ROAD DIST.	ILLINOIS	RIDGELAND		
CONTRACT NO. 8729B				

DATE	BY
DESIGNED	CHECKED
NOTED	APPROVED
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	BY
10-18-03	
S.A.P.	
SURVEYED	CHECKED
NOTED	APPROVED
PLOTTED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	97-24122-00-BR	IROQUOIS	15	14
STA. 16+00		TO STA. 17+00		
ROAD DIST. ILLINOIS		RIDGELAND		
CONTRACT NO. 87298				

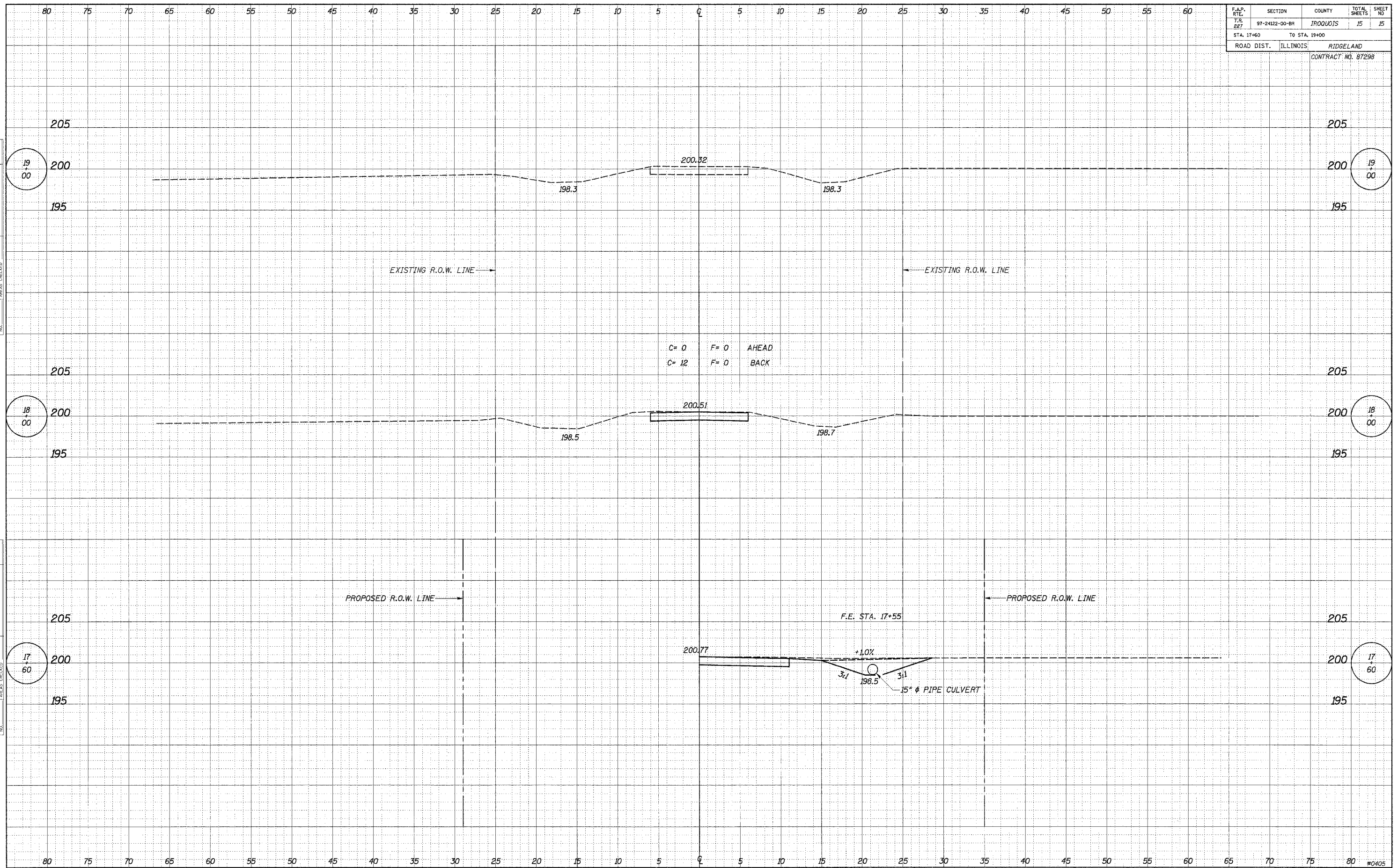


DATE _____
 BY _____
 SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 AREAS CHECKED _____

DATE _____
 BY _____
 SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 AREAS CHECKED _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 227	97-24122-00-BR	IRROQUOIS	15	15
STA. 17+60		TO STA. 19+00		
ROAD DIST. ILLINOIS		RIDGELAND		
CONTRACT NO. 87298				

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



C= 0 F= 0 AHEAD
 C= 12 F= 0 BACK

PROPOSED R.O.W. LINE

PROPOSED R.O.W. LINE

F.E. STA. 17+55

+1.0%

3:1

15" PIPE CULVERT