

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	05-00085-00-BR	MARSHALL	13	1
		ILLINOIS	PROJ. NO. BROS-123(21)	

CONTRACT NO. 89397

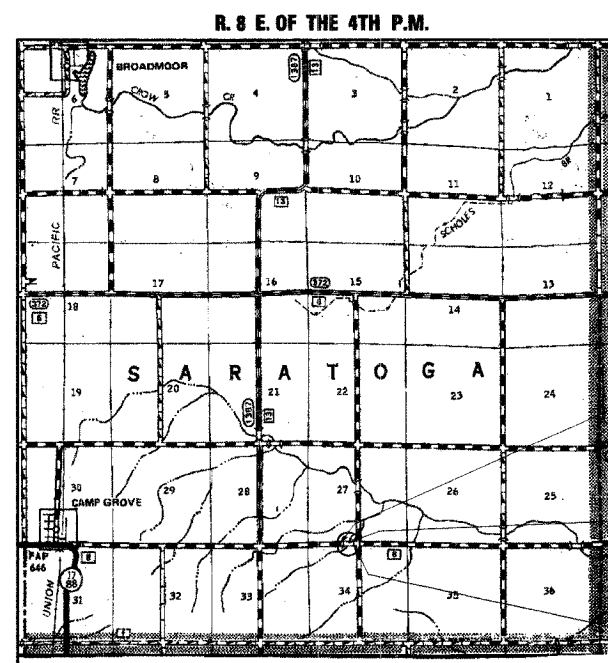
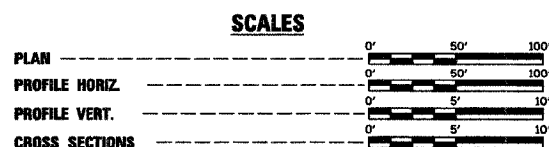
# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED BRIDGE REPLACEMENT AND REHABILITATION PROGRAM

**SECTION 05-00085-00-BR  
MARSHALL COUNTY  
PROJECT NO. BROS-123(21)  
COUNTY HIGHWAY 8  
JOB NO. C-94-078-06**

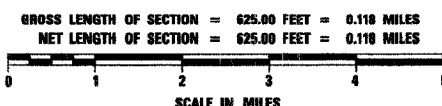
INDEX OF SHEETS	
SHEET NO.	TITLE
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES, GENERAL NOTES & TYPICAL SECTIONS
3.	PLAN AND PROFILE SHEET
4.-8.	BRIDGE PLANS
9.-13.	STATION CROSS SECTIONS

**STANDARDS:**

- 280001-02
- 515001-02
- 630001-06
- 631026-02
- 635006-02
- 701301-02
- 702001-06
- BLR 21-6



**LOCATION PLAN**



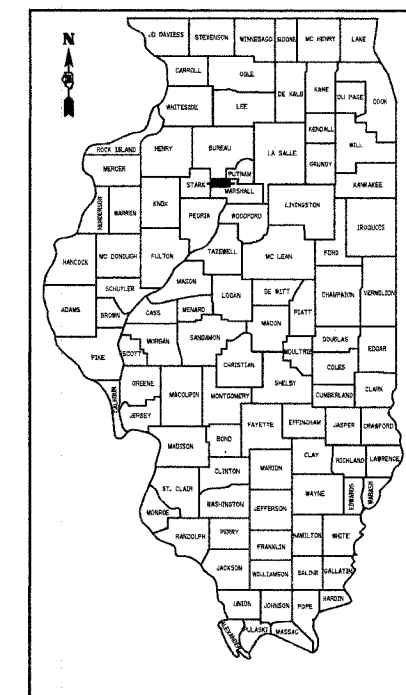
IMPROVEMENT BEGINS  
STA. 12 + 50

STA. 15 + 04 - SPECIAL BRIDGE DESIGN  
PRECAST PRESTRESSED CONCRETE  
DECK BEAM BRIDGE, ONE SPAN @  
55'-0" 28'-0" ROADWAY, 20° SKEW  
EXISTING S.N. 062-3124  
PROPOSED S.N. 062-3133

IMPROVEMENT ENDS  
STA. 18 + 75



*Fred J. Stone Jr. (1-30-06)*  
ILLINOIS PROFESSIONAL NO. 26065  
EXPIRES 11-30-05



LOCATION OF SECTION INDICATED THUS: →

**CLASSIFICATION: RURAL TWO-LANE COLLECTOR**  
**DESIGN VOLUME: ADT UNDER 400**  
**CURRENT ADT: 131 (2005)**  
**DESIGN SPEED: 40 MPH**

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

APPROVED	<i>January 27, 2006</i> <i>George P. Meister</i> COUNTY ENGINEER
PASSED	<i>February 3, 2006</i> <i>John J. Valle</i> DISTRICT FOUR ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW	<i>February 3, 2006</i> <i>Joseph J. Pave</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	

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

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	05-00085-00-BR	MARSHALL	13	2
		ILLINOIS	PROJ. NO. BROS-123(21)	
CONTRACT NO. 89397				

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	287
20300100	CHANNEL EXCAVATION	CU YD	330
20400800	FURNISHED EXCAVATION	CU YD	28
25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.5
28000250	TEMPORARY EROSION CONTROL SEEDINGS	POUND	80
28000300	TEMPORARY DITCH CHECKS	EACH	2
28000400	PERIMETER EROSION BARRIER	FOOT	400
28101700	RIPRAP, SPECIAL	TON	112
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	45
35101400	AGGREGATE BASE COURSE, TYPE B	TON	835
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	43
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	488
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	20.0
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1540
50800105	REINFORCEMENT BARS	POUND	2410
50900205	STEEL RAILING, TYPE S1	FOOT	110
51201000	FURNISHING METAL PILE SHELLS 12"	FOOT	440
51202600	DRIVING AND FILLING SHELLS	FOOT	440
51203200	TEST PILE METAL SHELLS	EACH	2
51500100	NAME PLATES	EACH	1
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ. YD.	172
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	165
54205470	PIPE CULVERTS, CLASS D, TYPE 1, EQUIVALENT ROUND SIZE 15"	FOOT	92
63200310	GUARDRAIL REMOVAL	FOOT	304
67100100	MOBILIZATION	L SUM	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	126
X4066614	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50	TON	107

\*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.

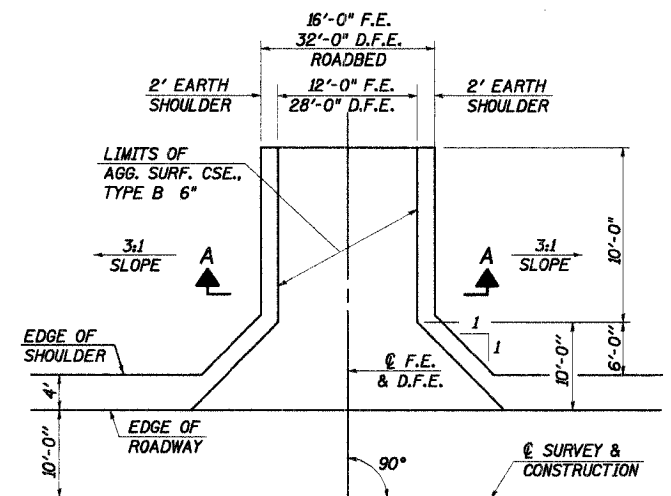
THE AREA TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY, AS DIRECTED BY THE ENGINEER.

SEEDING, CLASS 2 (SPECIAL) = 0.5 ACRE

**TEMPORARY EROSION CONTROL**

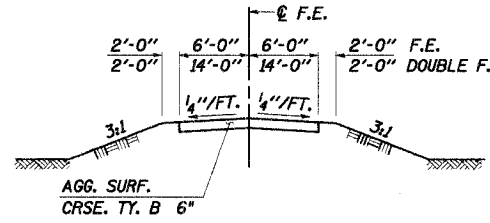
THE FOLLOWING QUANTITIES ARE ESTIMATES ONLY. ACTUAL QUANTITIES FOR EROSION CONTROL WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND THERE WILL BE NO ADJUSTMENT IN ANY UNIT PRICE DUE TO A CHANGE IN PLAN QUANTITY.

- PERIMETER EROSION BARRIER = 400 FOOT
- TEMPORARY EROSION CONTROL SEEDINGS = 80 POUND
- TEMPORARY DITCH CHECKS = 2 EACH

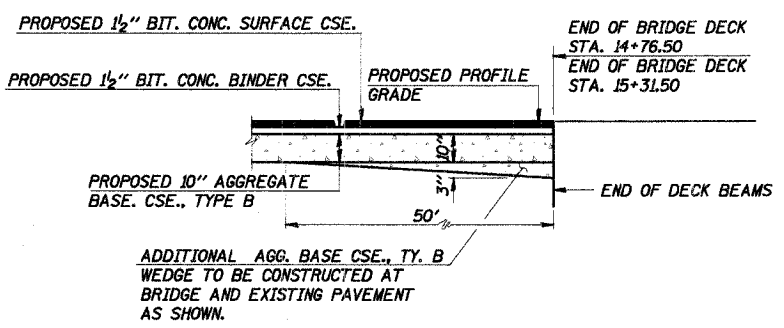


**FIELD ENTRANCE DETAIL**

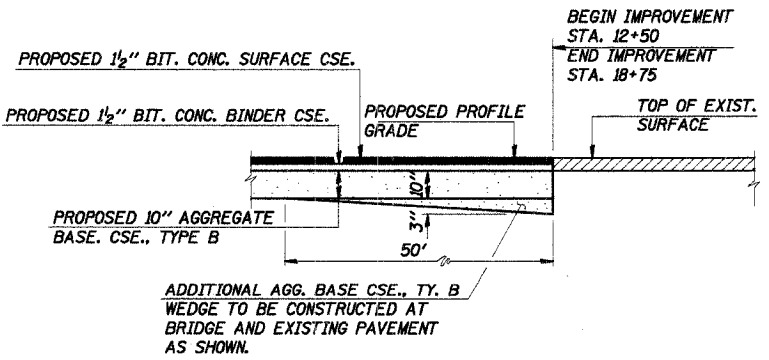
F.E. LT. STA. 13+05  
DOUBLE F.E. RT. STA. 17+30



**SECTION A-A**

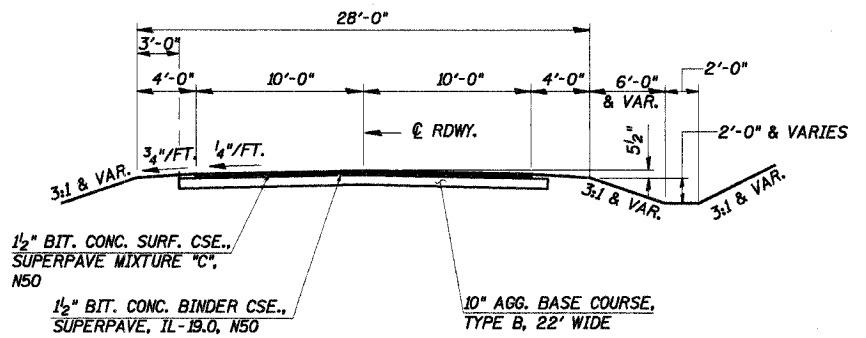


**ELEVATION AT BRIDGE**



**ELEVATION AT BEGINNING AND END OF IMPROVEMENT**

**JOINT DETAILS**

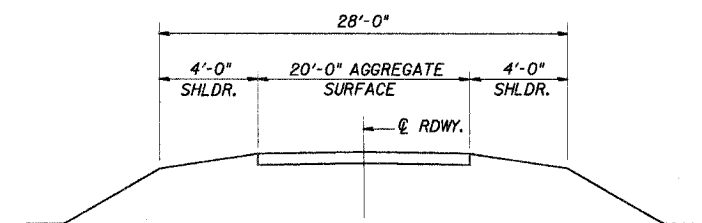


**TYPICAL PROPOSED CROSS SECTION**

STA. 12+50 TO STA. 18+75  
ROAD CLASSIFICATION: MINOR COLLECTOR (NON-URBAN) O-250  
CURRENT ADT LESS THAN 150

SUGGESTED FILL SECTION  
CONSTRUCT AS SHOWN BY  
STATION CROSS SECTIONS

SUGGESTED CUT SECTION  
CONSTRUCT AS SHOWN BY  
STATION CROSS SECTIONS



**EXISTING TYPICAL CROSS SECTION**

**BITUMINOUS MIXTURE REQUIREMENTS**

MIXTURE USE(S)	SURFACE COURSE/ INCIDENTAL BITUMINOUS SURFACING	BINDER COURSE
AC/PG:	58-22	58-22
RAP % (MAX)	15%	15%
DESIGN AIR VOIDS:	3.0% @ N <sub>des</sub> = 50	3.0% @ N <sub>des</sub> = 50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5	IL 19.0
FRICTION AGGREGATE:	MIXTURE C	N/A

**SUMMARY OF QUANTITIES, GENERAL NOTES  
AND TYPICAL CROSS SECTION**  
COUNTY HIGHWAY 8  
SECTION 05-00085-00-BR  
MARSHALL COUNTY  
STA. 15+04

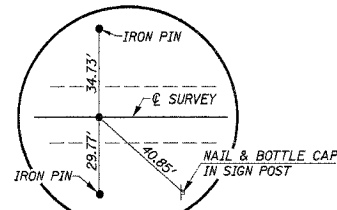
4440 ASH GROVE  
SPRINGFIELD, ILL. 62711  
(217) 793-8600  
oasino@famvid.com

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

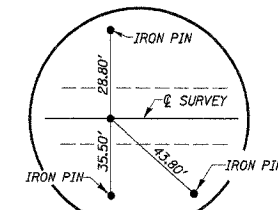
JOB NO.: 0413  
FILE: SUMTYP.DGN  
DATE: 01/31/06

S.W. 1/4 SEC. 27, T. 13 N., R. 8 E., 4TH P.M.  
 DAVID E. & CATHERINE J. IRELAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 6	05-00085	MARSHALL	13	3
STA. 10+00.00		TO STA. 19+99.25		
ILLINOIS		PROJ. NO. BROS-1232D		
CONTRACT NO. 69397				



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



P.O.T. STA. 19+99.25  
 IRON PIN (FLUSH)

**PIPES TO BE REMOVED**  
 LT. STA. 13+05, 15" C.M.P. 23' LONG  
 RT. STA. 17+24, 15" C.M.P. 61' LONG  
 QUANTITIES INCLUDED IN "EARTH EXCAVATION".

LT. STA. 13+05 F.E.  
 PIPE CULVERT, CLASS D  
 TYPE 1, E.R.S. 15", 40' LONG

STA. 17+29.88  
 168' LT

RT. STA. 17+30 D.F.E.  
 PIPE CULVERT, CLASS D  
 TYPE 1, E.R.S. 15", 52' LONG

STA. 15+04 - SPECIAL BRIDGE DESIGN  
 PRECAST PRESTRESSED CONCRETE  
 DECK BEAM BRIDGE, SINGLE SPAN 55'  
 28'-0" ROADWAY, SKEW = 20°

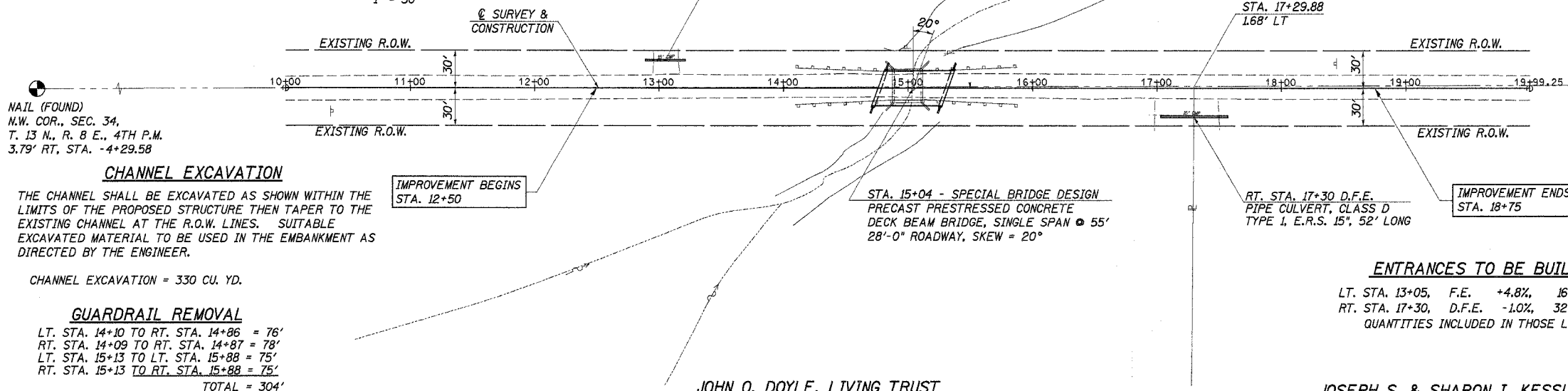
**EXISTING STRUCTURE NO. 062-3124**  
 SINGLE SPAN, CONCRETE SLAB BRIDGE, WITH CLOSED  
 CONCRETE ABUTMENTS AND WINGWALLS.  
 BK.-TO-BK. = 26'-0"  
 O.-TO-O. = 26'-4"  
 0° SKEW  
 REMOVAL OF EXISTING STRUCTURES = 1 EACH

**ENTRANCES TO BE BUILT**

LT. STA. 13+05, F.E. +4.8%, 16' ROADBED  
 RT. STA. 17+30, D.F.E. -1.0%, 32' ROADBED  
 QUANTITIES INCLUDED IN THOSE LISTED

**UTILITIES**

BURIED GAS PIPE  
 CILCO  
 1-309-672-5142



**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 = 330 CU. YD.

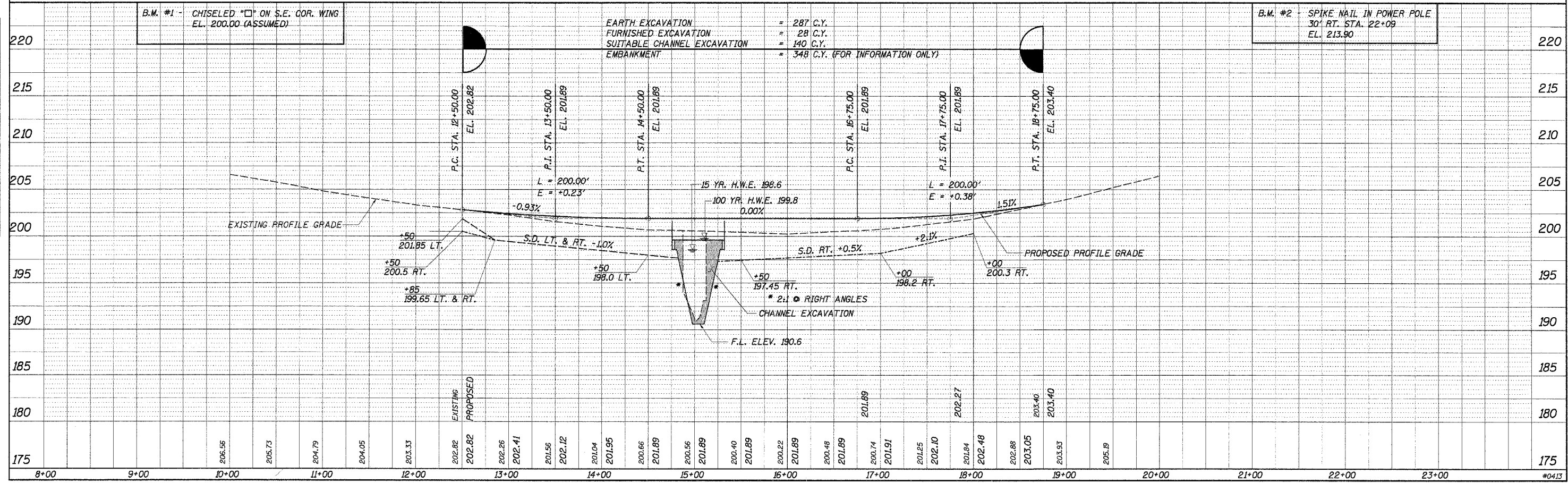
**GUARDRAIL REMOVAL**

LT. STA. 14+10 TO RT. STA. 14+86 = 76'  
 RT. STA. 14+09 TO RT. STA. 14+87 = 78'  
 LT. STA. 15+13 TO LT. STA. 15+88 = 75'  
 RT. STA. 15+13 TO RT. STA. 15+88 = 75'  
 TOTAL = 304'

JOHN O. DOYLE, LIVING TRUST

N.W. 1/4 SEC. 34, T. 13 N., R. 8 E., 4TH P.M.

JOSEPH S. & SHARON I. KESSLING



EARTH EXCAVATION = 287 C.Y.  
 FURNISHED EXCAVATION = 28 C.Y.  
 SUITABLE CHANNEL EXCAVATION = 140 C.Y.  
 EMBANKMENT = 348 C.Y. (FOR INFORMATION ONLY)

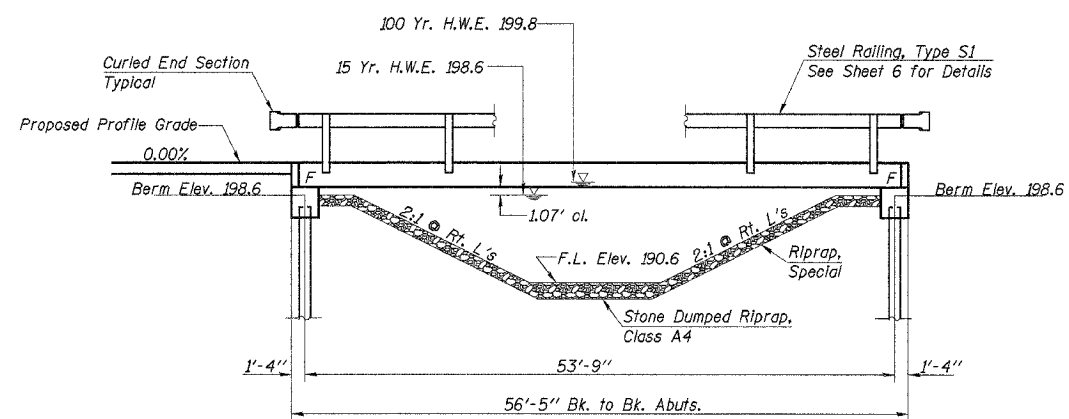
B.M. #2 SPIKE NAIL IN POWER POLE  
 30' RT. STA. 22+09  
 EL. 213.90

DATE	BY	REVISION

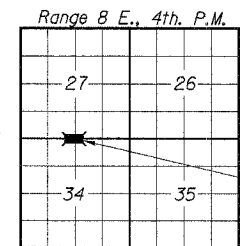
DATE	BY	REVISION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	05-00085-00-BR	MARSHALL	13	4

ILLINOIS PROJ. NO. BR05-123(2.1)  
CONTRACT NO. 89397



**ELEVATION**



**LOCATION PLAN**

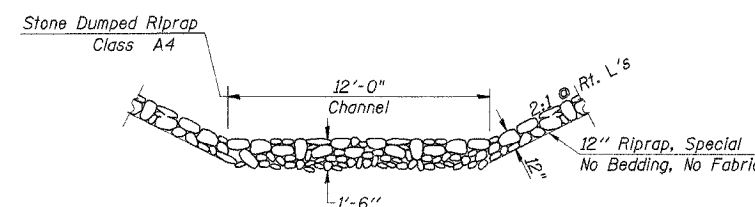
**GENERAL NOTES**

See Proposal Booklet for Boring data.

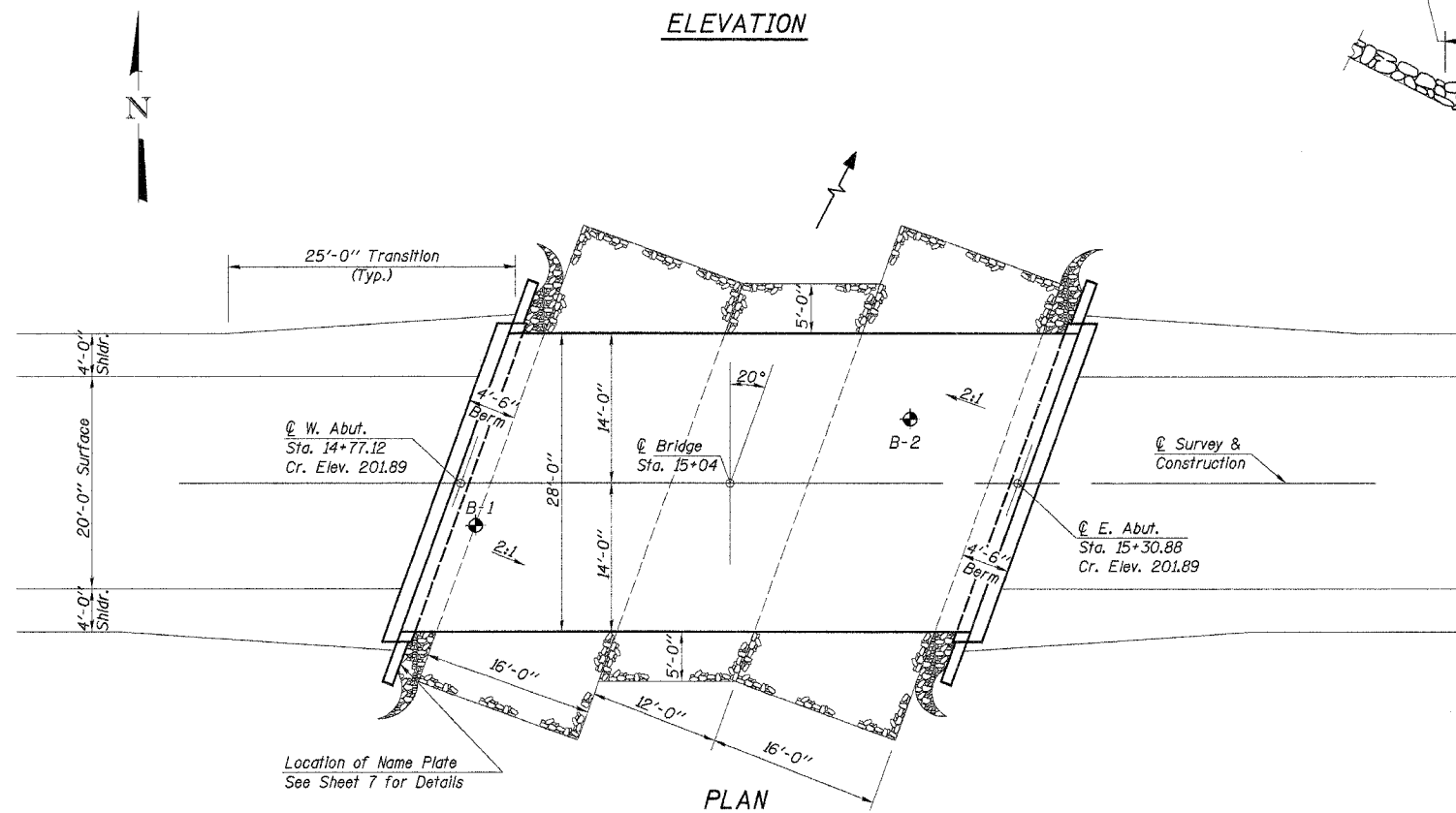
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

The Contractor shall drive one metal shell test pile in a permanent location at the West abutment and the East 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.



**RIPRAP PLACEMENT**



**PLAN**

BUILT 200\_ BY  
MARSHALL COUNTY  
SEC. 05-00085-00-BR  
COUNTY ROUTE 8  
F.A. PROJ. BR05-123(2.1)  
STR. NO. 062-3133  
LOADING HS20

**LETTERING FOR NAME PLATE**

See Std. 515001

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1540		1540
Concrete Structures	Cu. Yd.		20.0	20.0
Reinforcement Bars	Pound		2410	2410
Steel Railing, Type S1	Foot	110		110
Name Plates	Each		1	1
Metal Pile Shells 12"	Foot		440	440
Test Pile Metal Shells	Each		2	2
Riprap, Special	Ton		112	112
Stone Dumped Riprap, Class A4	Ton		45	45
Blk. Conc. Surf. Crse., Mix "C", N50	Ton	20		20
Waterproofing Membrane System	Sq. Yd.	172		172
Portland Cement Mortar Fairing Course	Foot	165		165

**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'."

Fred J. Stone, Jr. (1-30-06)  
ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/06)



**WATERWAY INFORMATION**

Drainage Area	0.67 Sq. Mi.
Existing Opening (15 Yr.)	145 Sq. Ft.
Required Opening (15 Yr.)	247 Sq. Ft.
Proposed Opening (15 Yr.)	247 Sq. Ft.
Design Discharge (15 Yr.)	477 C.F.S.
Created Head (15 Yr.)	0.0 Ft.
100 Year Discharge	802 C.F.S.
100 Yr. Created Head	0.2 Ft.

DESIGNED	SFM
CHECKED	FJS
DRAWN	SAP & JPS
CHECKED	SFM

**GENERAL PLAN & ELEVATION**

COUNTY HIGHWAY 8  
SECTION 05-00085-00-BR  
MARSHALL COUNTY  
STATION 15+04

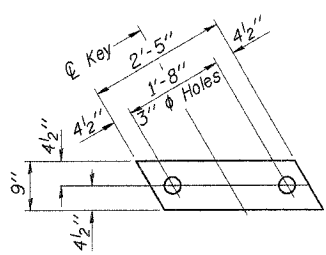
4440 ASH GROVE  
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oastone@amvid.com

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CONSULTING ENGINEERS

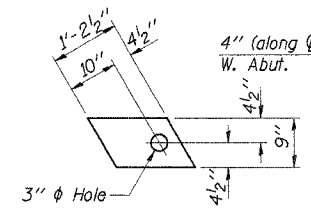
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DATE: 01/31/06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	05-00085-00-BR	MARSHALL	13	5
		ILLINOIS	PROJ. NO. BR05-123(2D)	

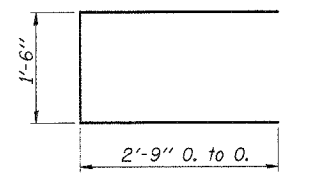
CONTRACT NO. 89397



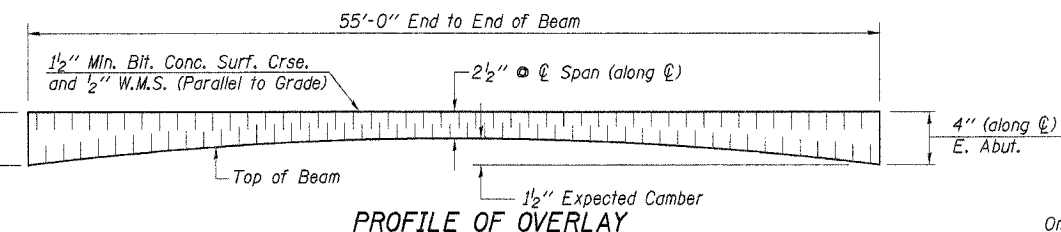
**FABRIC BEARING PAD**  
(Interior)  
(12 Req'd.)



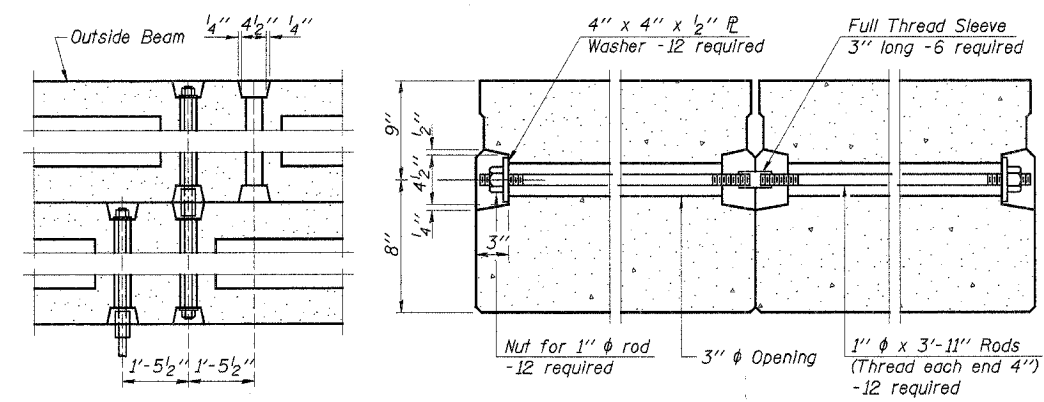
**FABRIC BEARING PAD**  
(Exterior)  
(4 Req'd.)  
**FIXED**



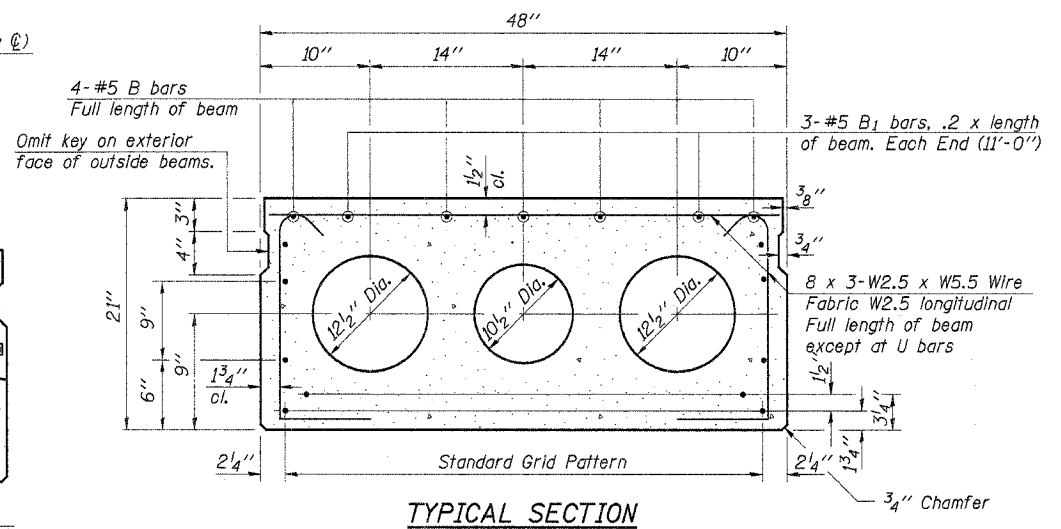
**BAR U<sub>1</sub>**



**PROFILE OF OVERLAY**

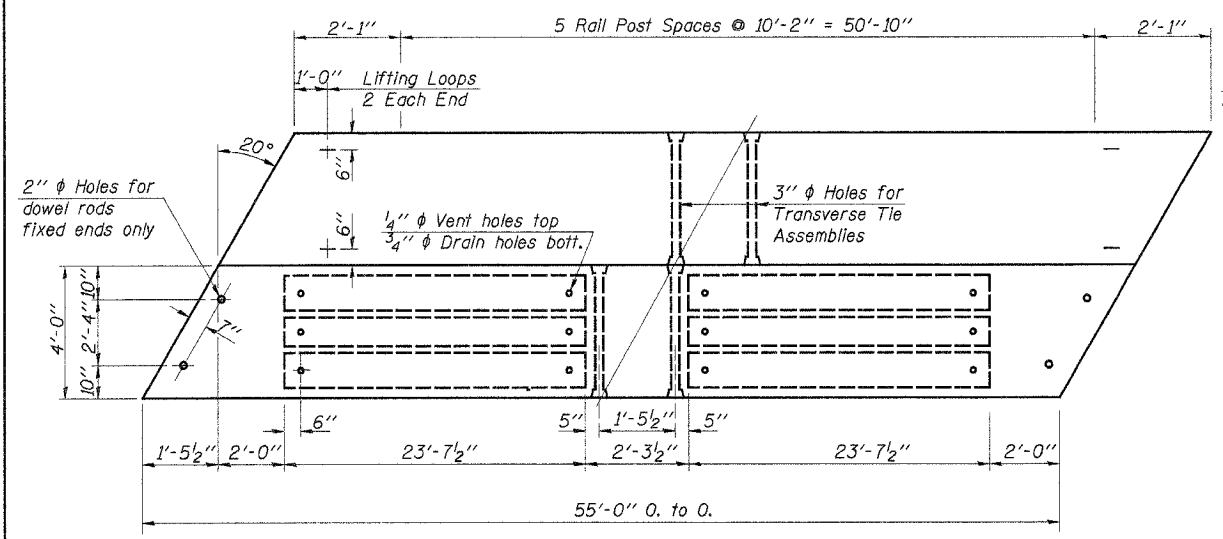


**TYPICAL TRANSVERSE TIE ASSEMBLY**

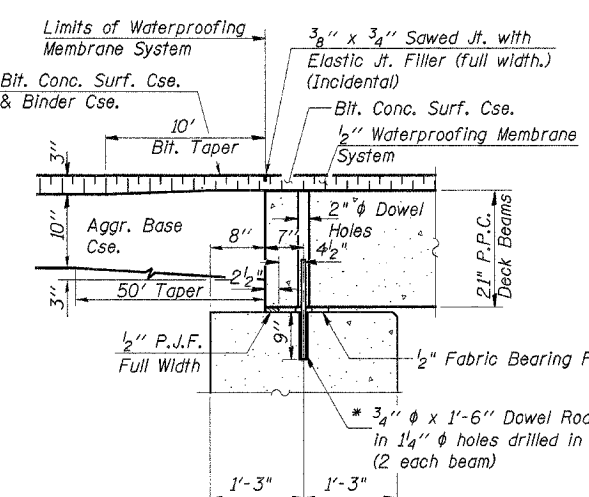


**TYPICAL SECTION**

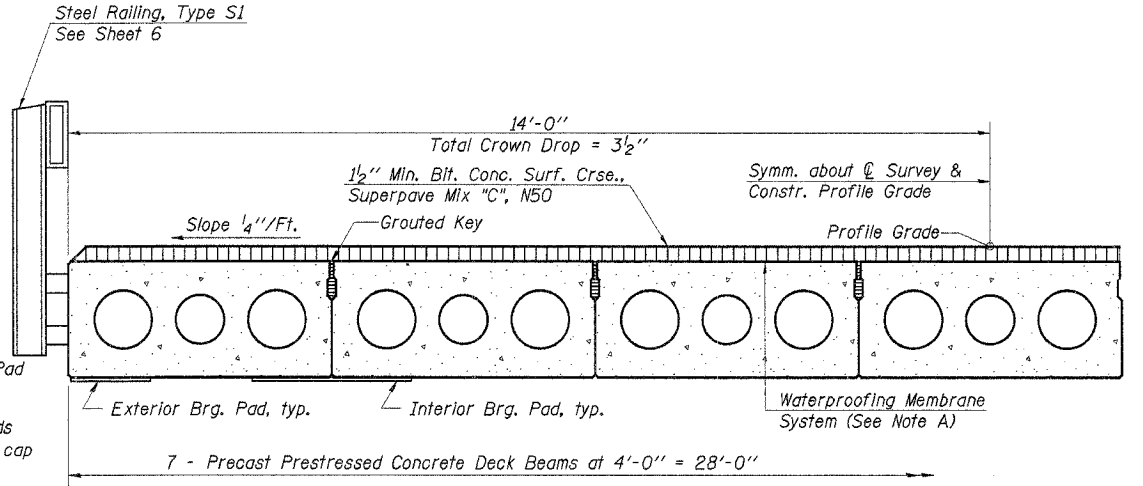
22-1/2" phi Strands, Each Strand Stressed to 30,900 Lbs. Note: Place strands symmetrically about C of beam.  
14-Strands 1 3/4" up, 4-Strands 3/4" up, 2-Strands 6" up, 2-Strands 15" up



**PLAN**



**SEC. THRU ABUT.**  
(@ Rt. Δ's to Abutment)



**HALF CROSS SECTION**

Note A:  
The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughed by brooming. The finished surface shall be free of depressions or high spots with sharp corners and the top edge of keys shall be roughed or chamfered a min. of 1/4".

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

**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" phi-270 ksi strands, as shown. The 1" phi 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 1/2" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. (32 Required) 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. Required Release Strength, f'ci, shall be 4,000 p.s.i. See Special Provisions for review and distribution of shop drawings. Rail post anchor devices shall be cast into outside beam as elsewhere specified.

**BILL OF MATERIAL**

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1540
Bit. Conc. Surf. Crse., Mix "C", N50	Ton	20
Waterproofing Membrane System	Sq. Yd.	172
P.C. Mortar Fairing Course	Foot	165

Estimated Total Weight (One Beam) = 42,920 Pounds

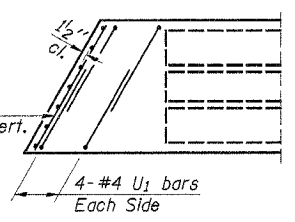
**SUPERSTRUCTURE**

COUNTY HIGHWAY 8  
SECTION 05-00085-00-BR  
MARSHALL COUNTY  
STATION 15+04

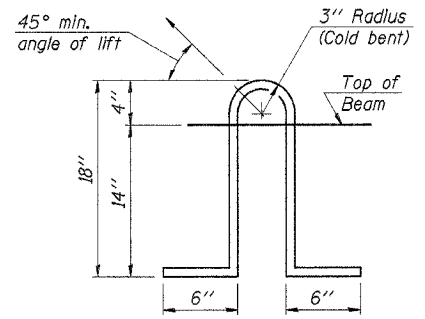
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8800 casinc@amvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0413 FILE: 17x49L.DGN DATE: 01/31/06
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DESIGNED	SFM
CHECKED	FJS
DRAWN	SAP & JPS
CHECKED	SFM

PD-4-L 9-1-03

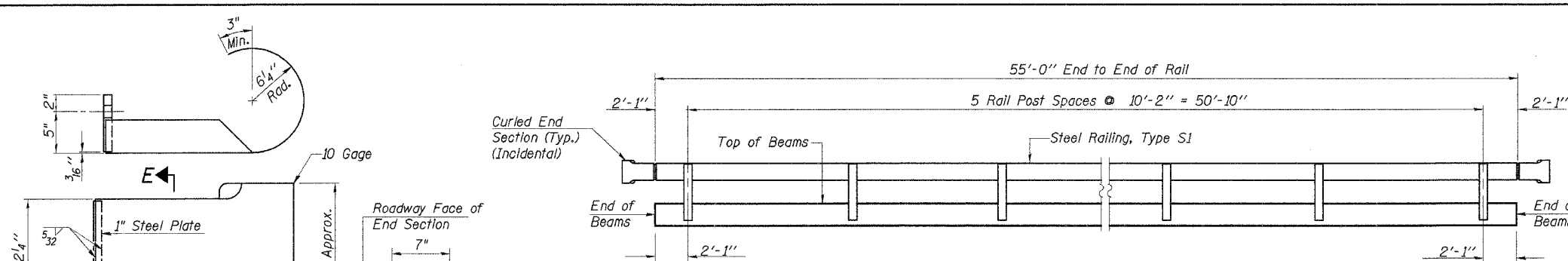


**END PLAN**



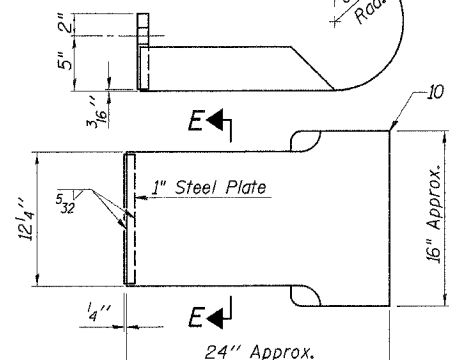
**LIFTING LOOP DETAIL**

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	05-00085-00-BR	MARSHALL	13	6
		ILLINOIS	PROJ. NO. BR05-123(2)	
CONTRACT NO. 89397				

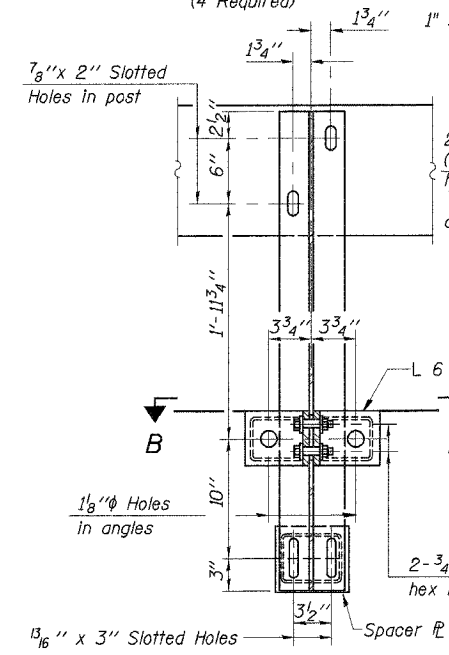


**ELEVATION**

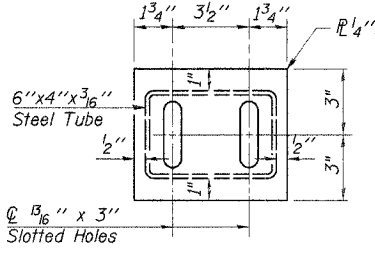
**CURLED END SECTION DETAILS**  
(4 Required)



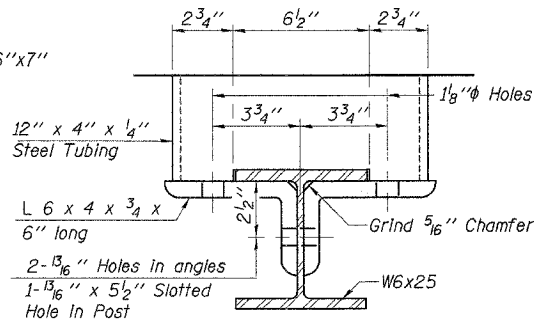
**SECTION E-E**



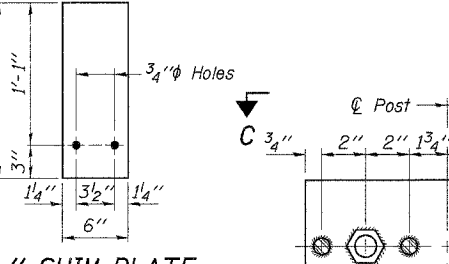
**DETAIL "D"**



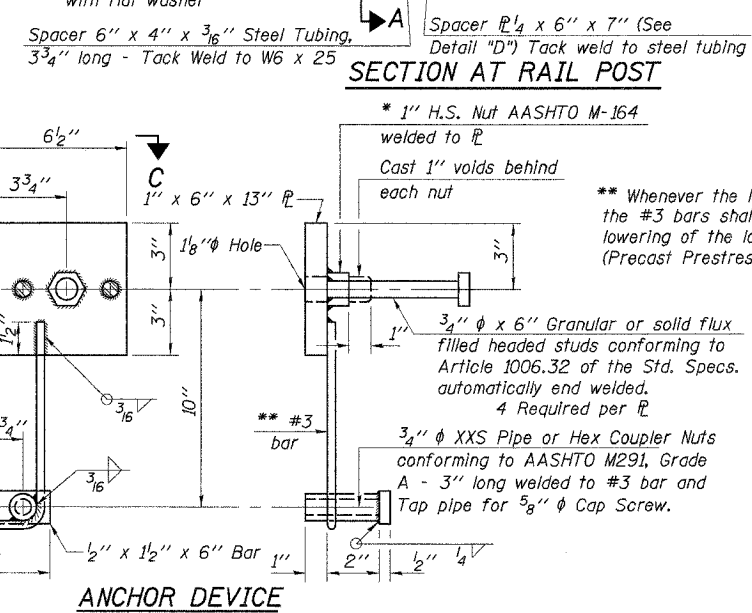
**SECTION B-B**



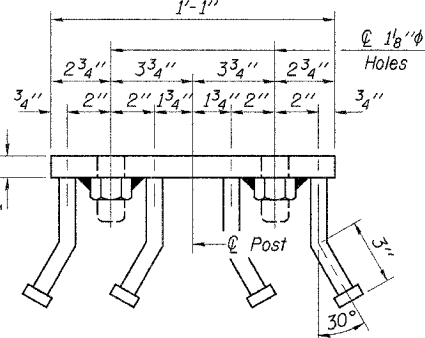
**SECTION A-A**



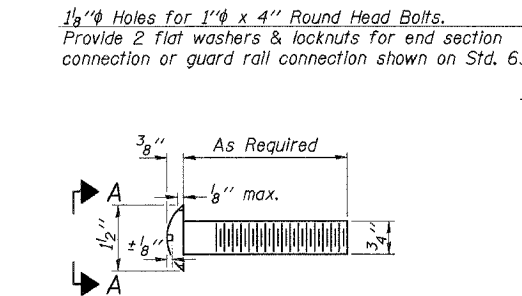
**SECTION AT RAIL POST**



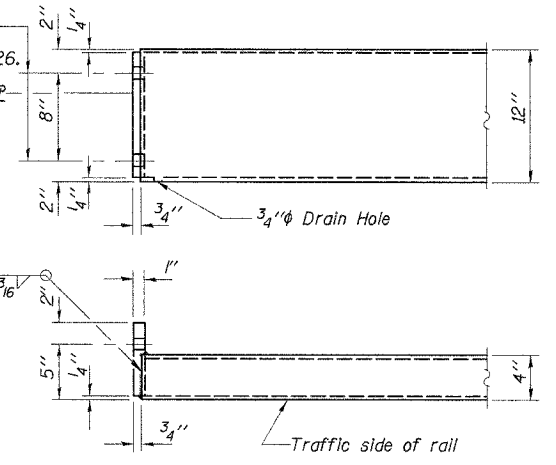
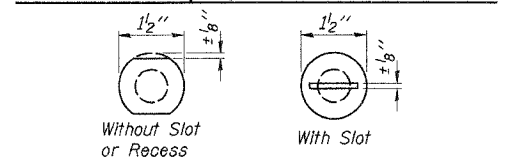
**VIEW C-C**



**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	110

**STEEL RAILING, TYPE S1**

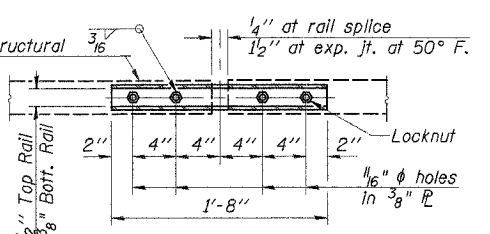
COUNTY HIGHWAY 8  
SECTION 05-00085-00-BR  
MARSHALL COUNTY  
STATION 15+04

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

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

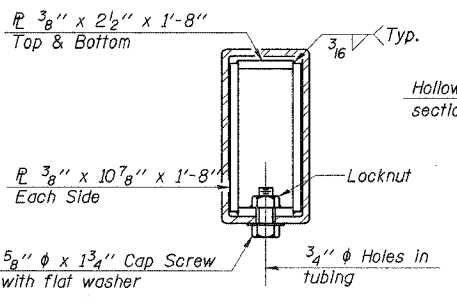
JOB NO.: 0413  
FILE: RAIL\_SL1DGN  
DATE: 01/31/06

**PLAN-BOTT. SPLICE P**

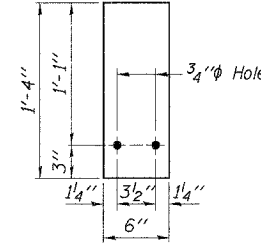


**TYPICAL**

**SECTIONS AT RAIL SPLICE**



**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. Cast incidental to Steel Railing.

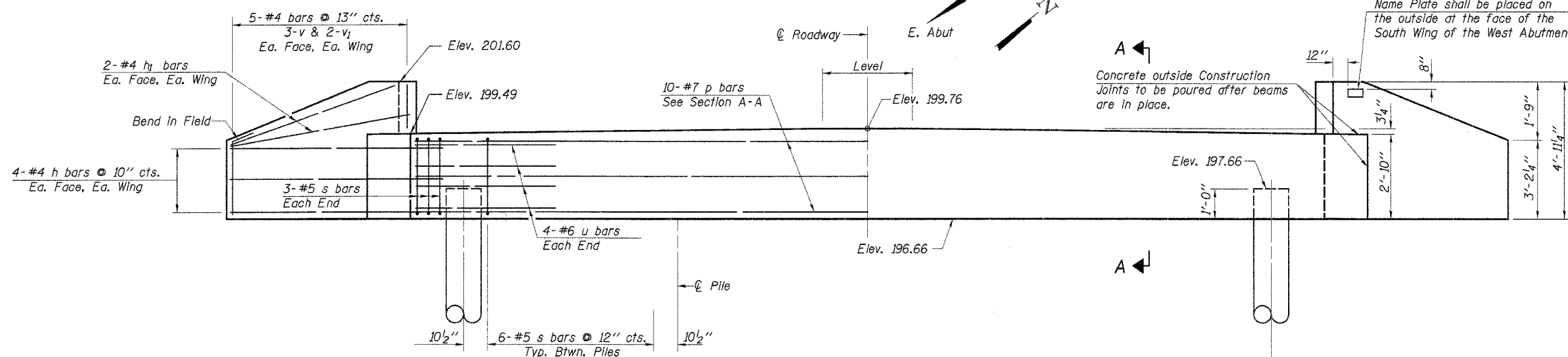
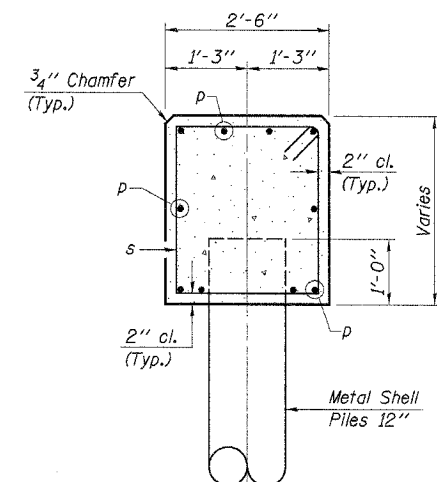
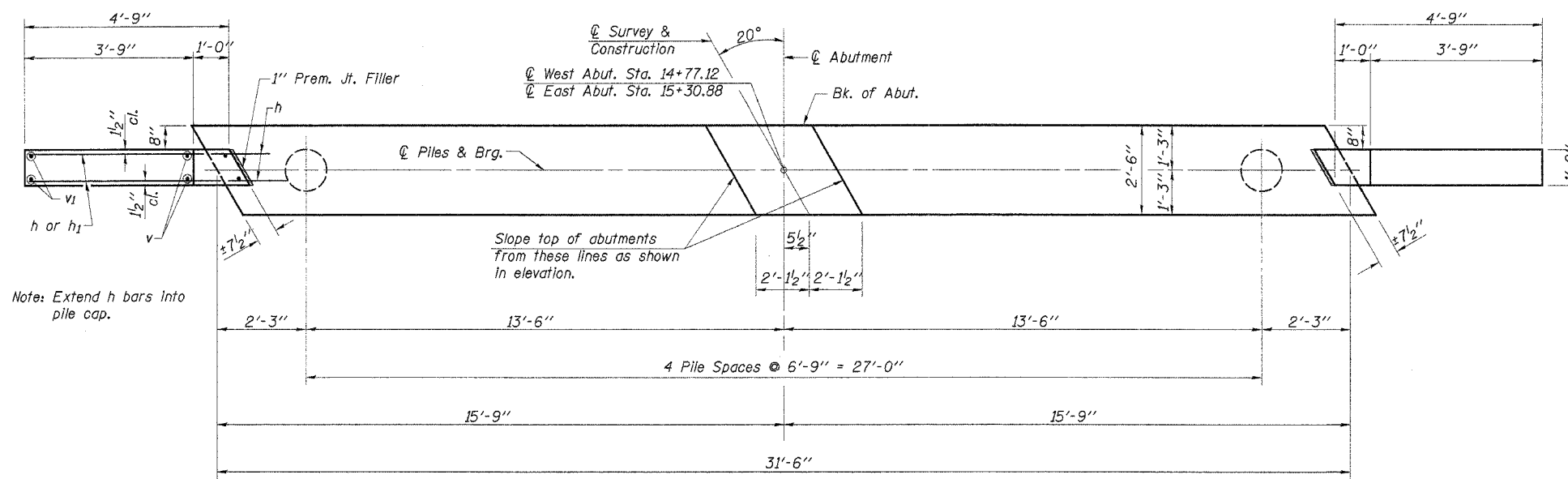
DESIGNED	SFM
CHECKED	FJS
DRAWN	SAP & JPS
CHECKED	SFM

\* 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)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	05-00085-00-BR	MARSHALL	13	7
ILLINOIS PROJ. NO. BROS-123(2)				

CONTRACT NO. 89397



2 ABUTMENTS  
 BILL OF MATERIAL

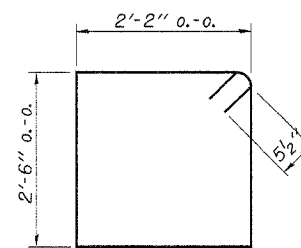
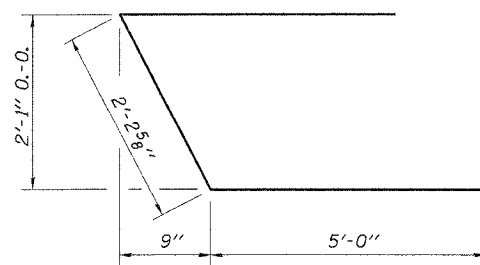
Bar	No.	Size	Length	Shape	
h	32	#4	6'-3"	—	
h <sub>1</sub>	16	#4	4'-5"	—	
p	20	#7	3'-2"	—	
s	60	#5	10'-3"	□	
u	16	#6	12'-3"	▤	
v	24	#4	4'-7"	—	
v <sub>1</sub>	16	#4	3'-6"	—	
Concrete Structures				Cu. Yd.	20.0
Reinforcement Bars				Pound	2410
Name Plates				Each	1
Test Pile Metal Shells				Each	2
Metal Pile Shells 12"				Foot	440

See Sheet 8 for Pile Details.

PILE DATA

Type..... Metal Pile Shells 12"  
 No. Req'd. (2 Abuts.)..... \*10  
 Capacity..... 40 Tons/Pile  
 Est. Length..... 60 Foot W.A.  
 50 Foot E.A.

\*Includes 1 Test Pile to be driven in a permanent location at the West Abutment and the East Abutment



DESIGNED	SFM
CHECKED	FJS
DRAWN	SAP & JPS
CHECKED	SFM

ABUTMENTS

COUNTY HIGHWAY 8  
 SECTION 05-00085-00-BR  
 MARSHALL COUNTY  
 STATION 15+04

4440 ASH GROVE  
 SPRINGFIELD, IL 62711  
 (217) 793-8693  
 oasinc@amvid.com

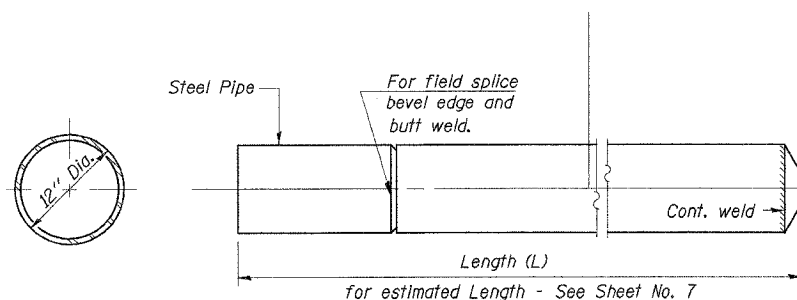
OZYURT AND STONE, INC.  
 CONSULTING ENGINEERS

JOB NO.: 0413  
 FILE: ABUT-30R.DGN  
 DATE: 01/31/06

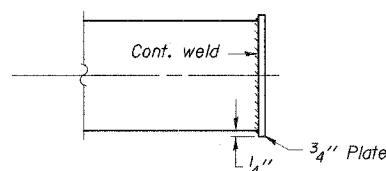
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	05-00085-00-BR	MARSHALL	13	8
		ILLINOIS	PROJ. NO. BROS-123(21)	

CONTRACT NO. 89397

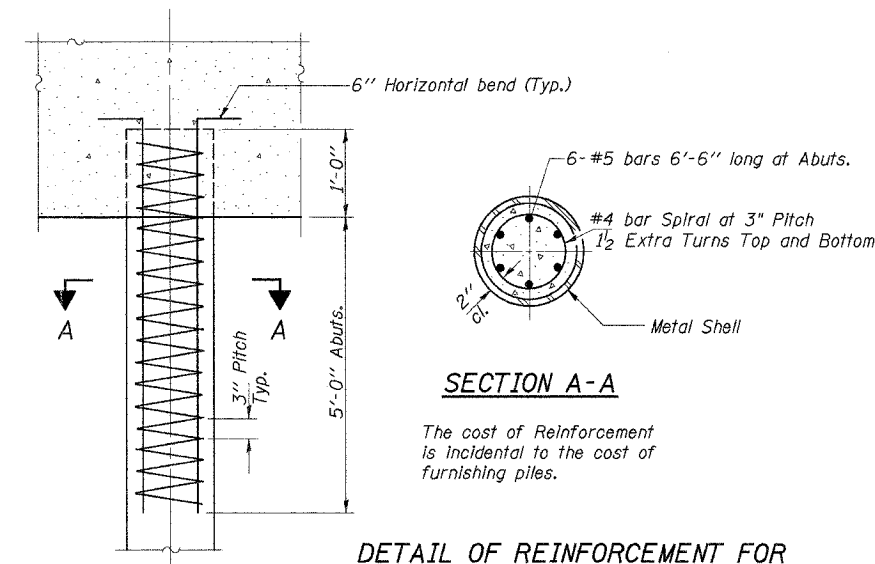
Notes: Drivng and bearing ends of pipe shall be cut square.  
The thickness of the shell shall be 0.1793 inches with a tolerance of 5%. The shell shall be in accordance with Article 1006.05(a) of the Standard Specifications.



DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



OPTIONAL FLAT END



DETAIL OF REINFORCEMENT FOR METAL SHELLS

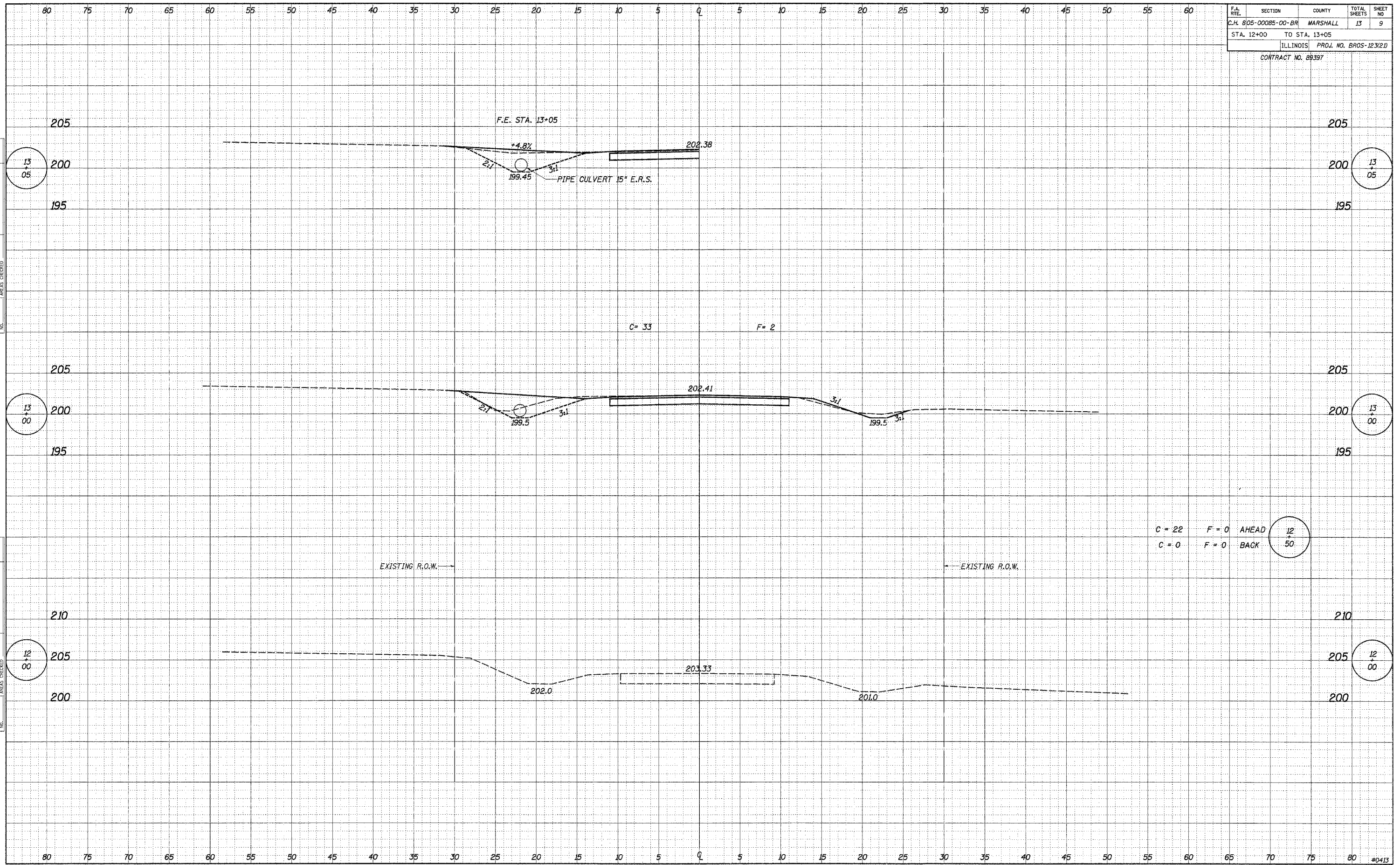
DETAIL OF METAL SHELL FOR CAST IN PLACE CONCRETE PILES

DESIGNED	SFM
CHECKED	FJS
DRAWN	SAP & JPS
CHECKED	SFM

<b>CONCRETE PILE DETAILS</b>		
COUNTY HIGHWAY 8 SECTION 05-00085-00-BR MARSHALL COUNTY STATION 15+04		
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 783-8600 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0413 FILE: 0413PILES.DGN DATE: 01/31/06



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 805-00085-00-BR		MARSHALL	13	9
STA. 12+00		TO STA. 13+05		
ILLINOIS		PROJ. NO. BR05-123(2)		
CONTRACT NO. 89397				

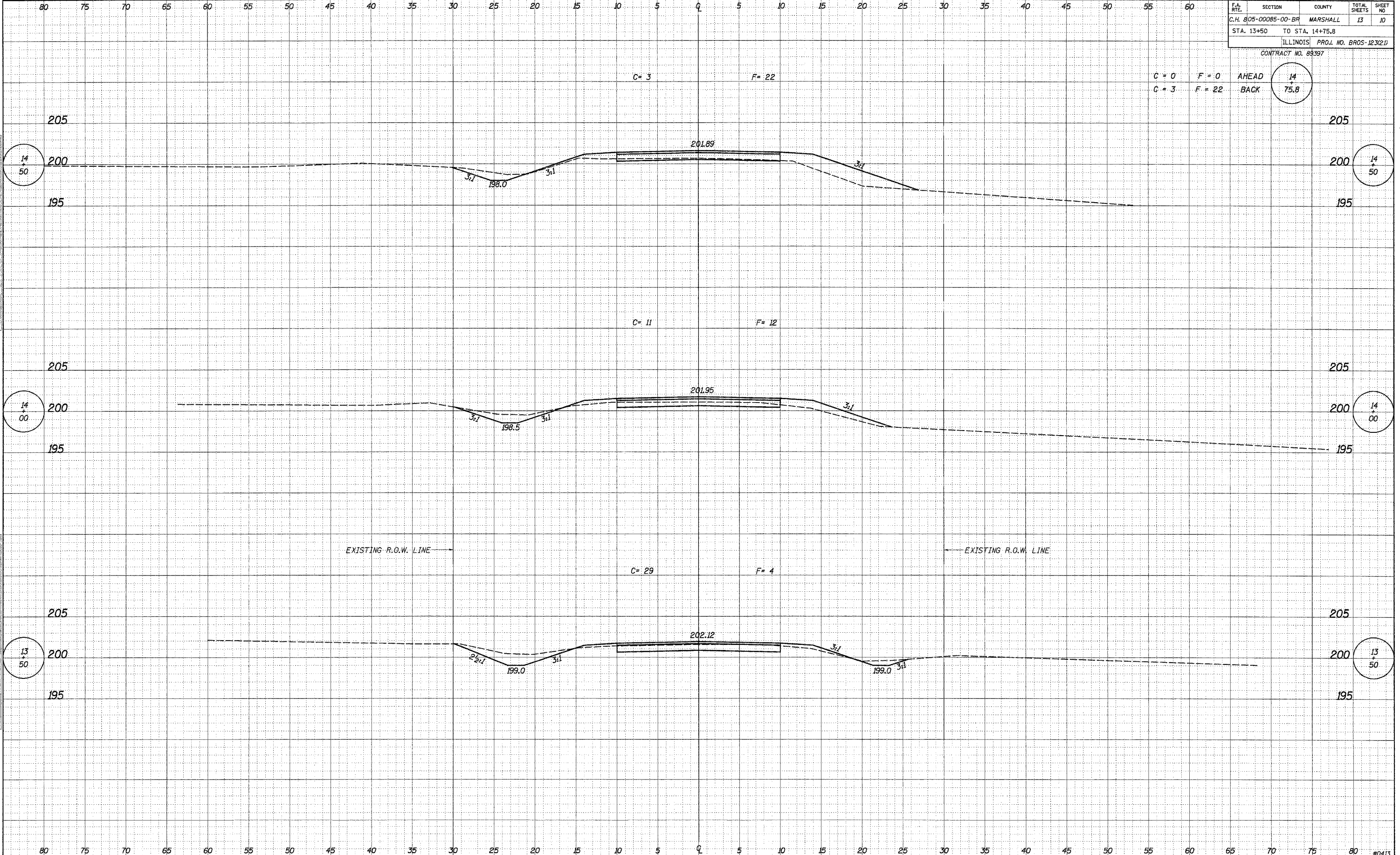


DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 TEMPLATE: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 AREAS CHECKED: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 TEMPLATE: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 AREAS CHECKED: \_\_\_\_\_

E.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 805-00085-00-BR	MARSHALL	ILLINOIS	13	10
STA. 13+50 TO STA. 14+75.8				
CONTRACT NO. 89397				

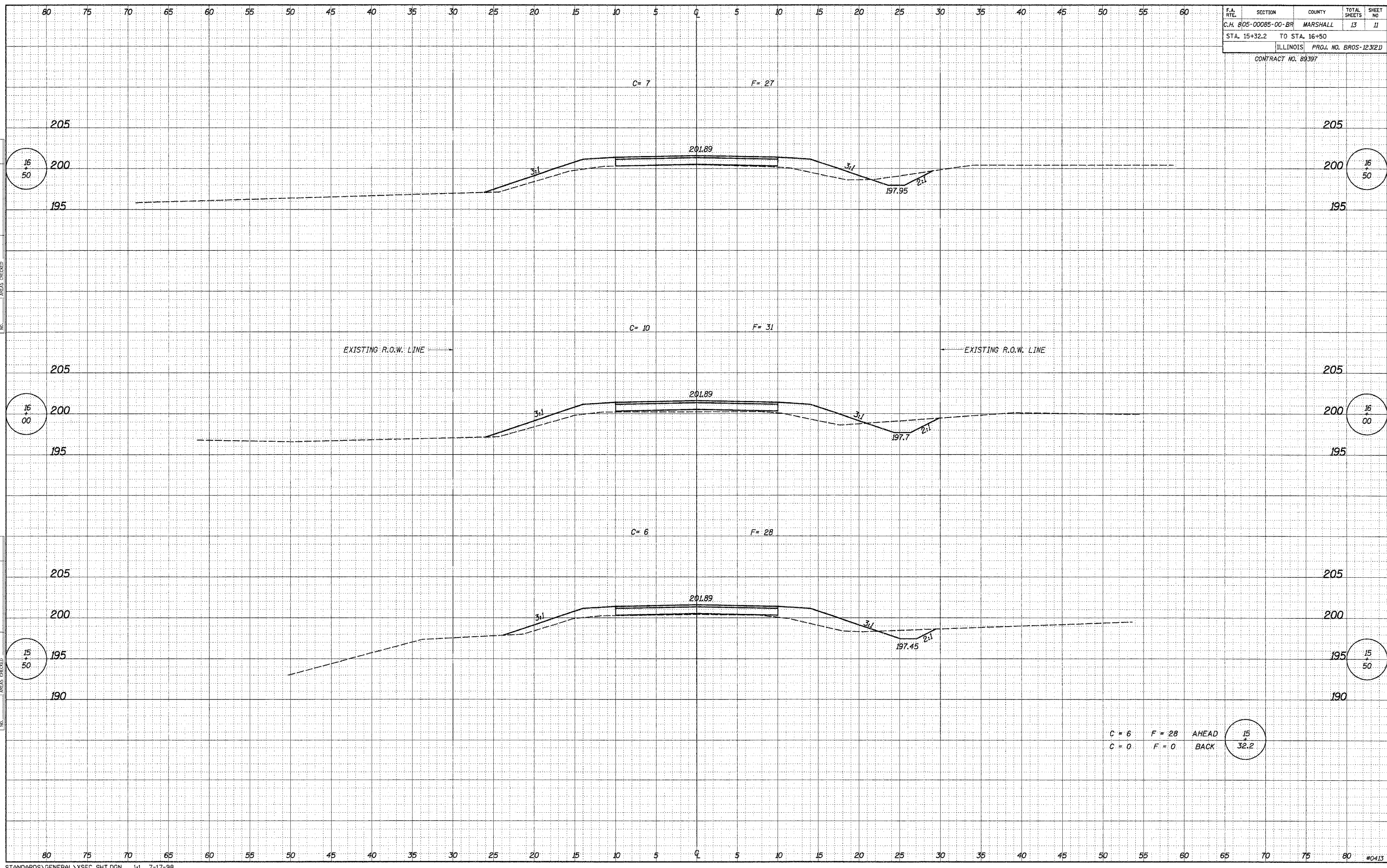
$C = 0$     $F = 0$    AHEAD   14  
 $C = 3$     $F = 22$    BACK   75.8



DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEY \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEY \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 805-00085-00-BR		MARSHALL	13	11
STA. 15+32.2		TO STA. 16+50		
ILLINOIS		PROJ. NO. BROS-123(2)		
CONTRACT NO. 89397				



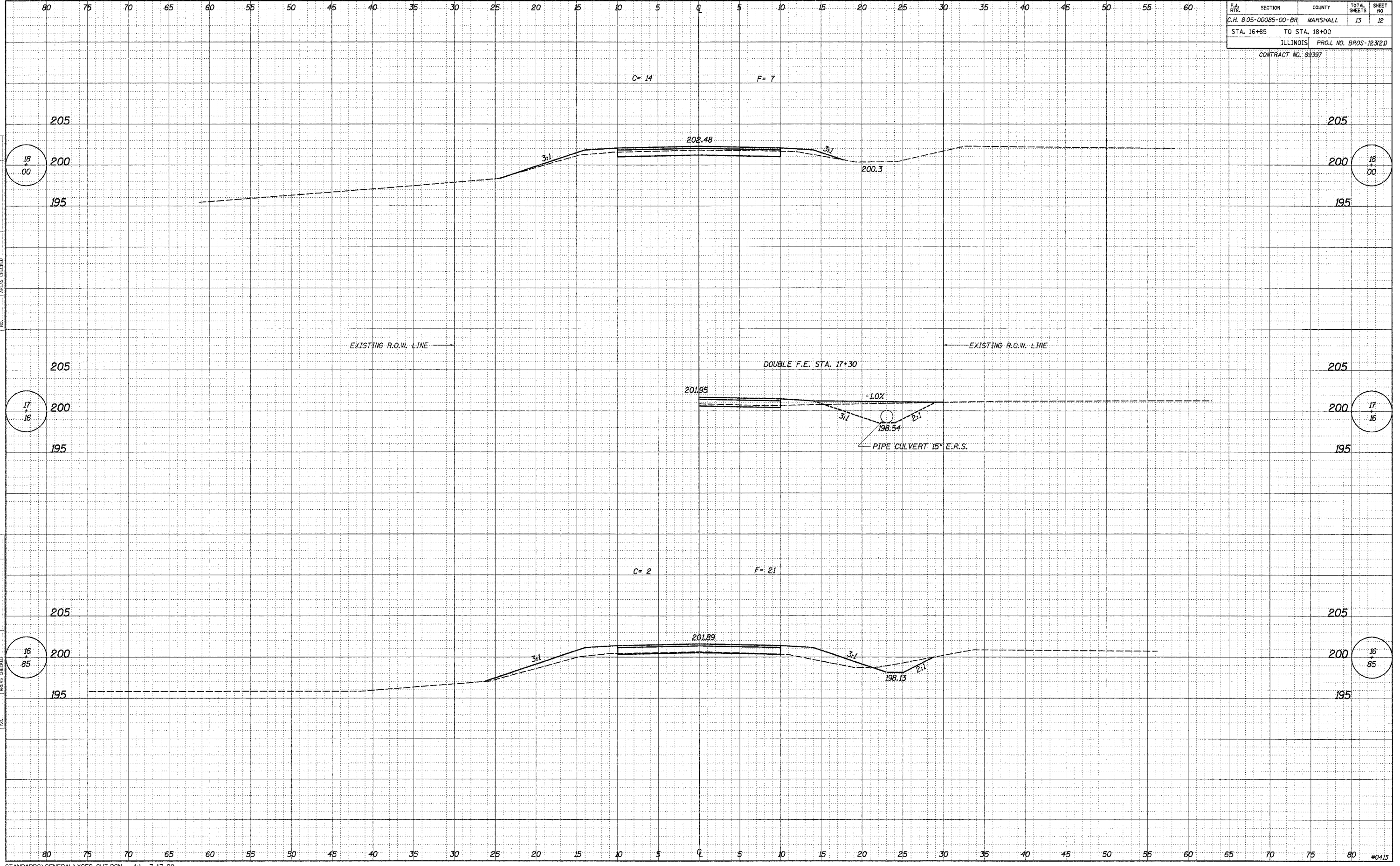
DATE  
BY  
FINAL SURVEY NOTE BOOK NO.  
SUBMITTED PLOTTED TEMPLATE AREAS CHECKED

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

C = 6 F = 28 AHEAD  
C = 0 F = 0 BACK

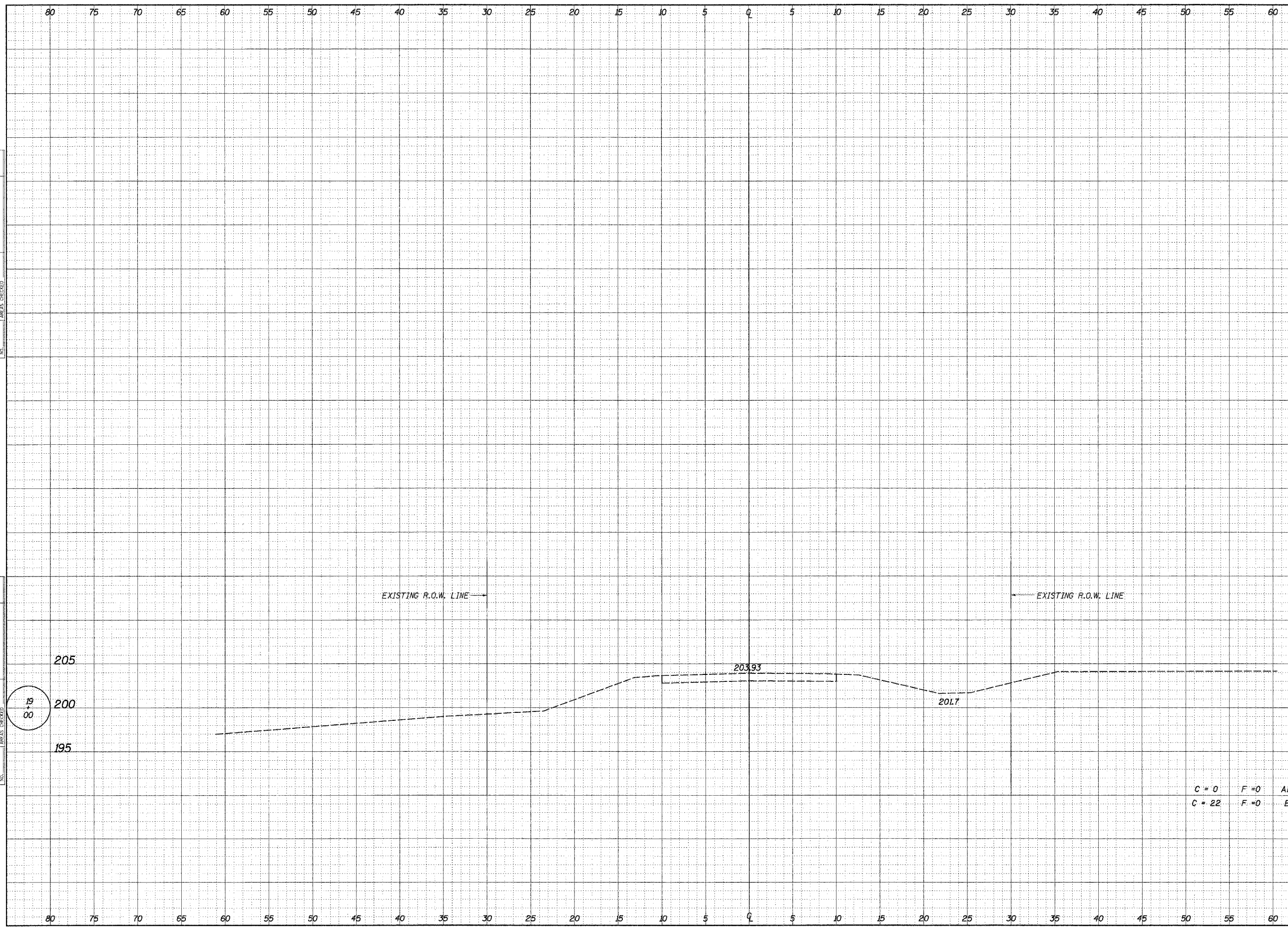
15  
+  
32.2

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8/05-00085-00-BR	MARSHALL	ILLINOIS	13	12
STA. 16+85		TO STA. 18+00		
ILLINOIS		PROJ. NO. BROS-123(2)		
CONTRACT NO. 89397				



DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 TEMPLATE \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 TEMPLATE \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_



F.A. RYE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
C.H. 805-00085-00-BR		MARSHALL	13	13
STA. 18+75		TO STA. 19+00		
ILLINOIS PROJ. NO. BROS-12321				
CONTRACT NO. 89397				

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
	AREAS CHECKED

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
	AREAS CHECKED