

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	1
FED. ROAD DIST. NO. 7		ILLINOIS	CONTRACT NO. 93545	

**INDEX OF SHEETS**

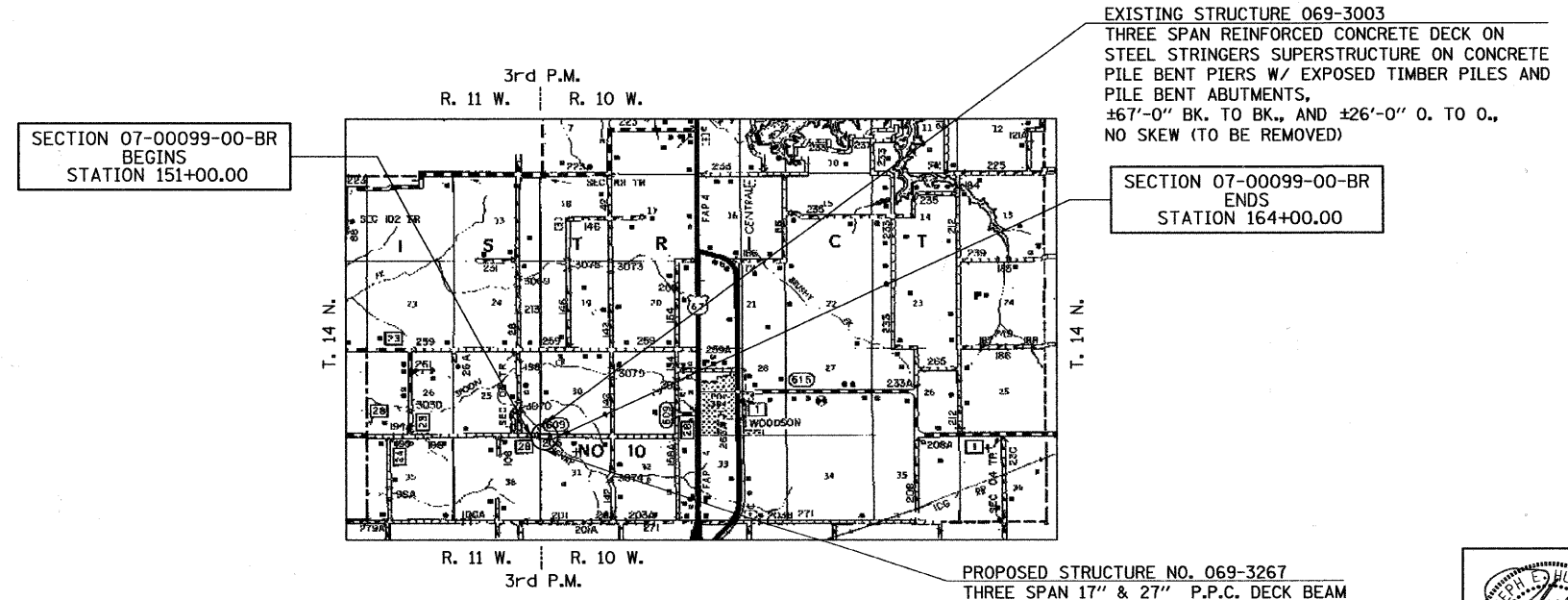
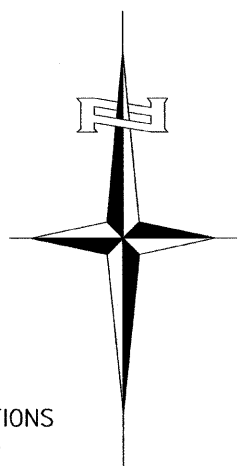
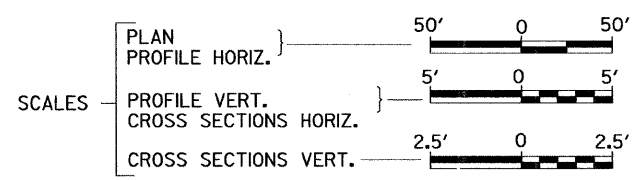
SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	GENERAL NOTES, TYPICAL SECTIONS, PAVEMENT DESIGN INFORMATION
3.	DETAILS, SUMMARY OF QUANTITIES
4.	SCHEDULES OF QUANTITIES
5.	TRAFFIC CONTROL PLAN
6.	STORM WATER POLLUTION PREVENTION PLAN
7.-8.	PLAN AND PROFILE
9.-20.	STRUCTURE PLANS
21.-48.	CROSS SECTIONS

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**PLANS FOR PROPOSED**  
**HIGHWAY BRIDGE PROGRAM**  
**MORGAN COUNTY**  
**SECTION 07-00099-00-BR**  
**F.A.S. 609 (CH 28) OVER HENRY CREEK**  
**PROJECT NO. BRS-0609(109)**  
**JOB NUMBER C-96-205-11**



**REQUIRED HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
630001-09	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631032-06	TRAFFIC BARRIER TERMINAL, TYPE 6A
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS



**UTILITY COMPANIES**

FRONTIER COMMUNICATIONS  
JACKSONVILLE, ILLINOIS

ILLINOIS RURAL ELECTRIC  
WINCHESTER, ILLINOIS

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

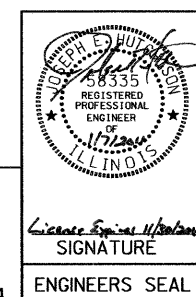
**LOCATION MAP**

1 MI 0 1 MI  
APPROXIMATE SCALE

NET LENGTH OF PROJECT = 1,300.00 FEET = 0.246 MILES

DESIGN CLASSIFICATION: MAJOR-COLLECTOR (NON-URBAN)  
DESIGN ADT = 1,075 (2031)  
DESIGN SPEED = 40 MPH

**Hutchison Engineering, Inc.**  
JACKSONVILLE ILLINOIS

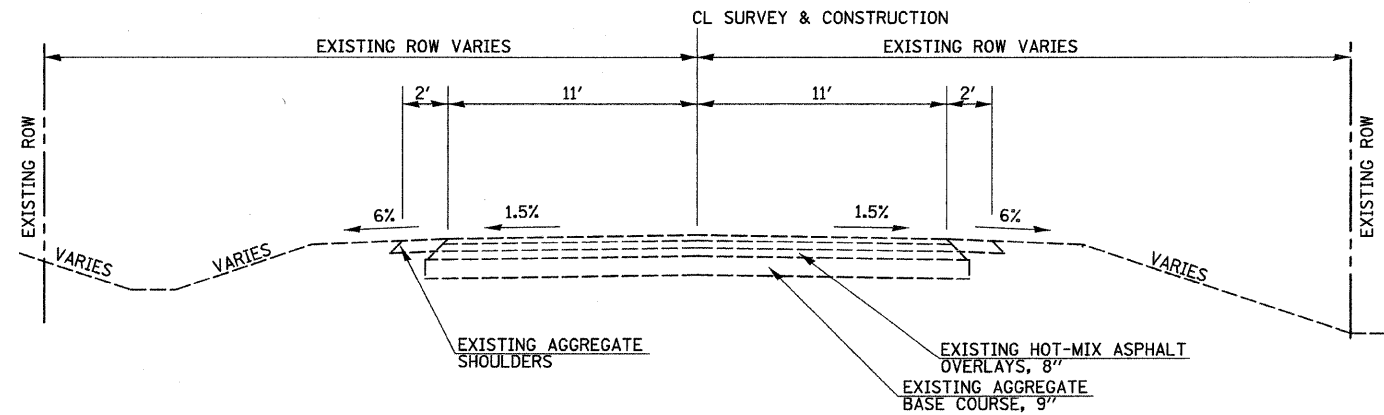


APPROVED	<u>1-7</u>	2011
	<i>Calvin W. Homes</i>	MORGAN COUNTY ENGINEER
PASSED	<u>February 7</u>	2011
	<i>Jessie J. Felt</i>	DISTRICT SIX ENGINEER OF LOCAL ROADS & STREETS
PASSED	<u>February 7</u>	2011
	<i>Ron Duchambeau</i>	DISTRICT SIX ENGINEER OF CONSTRUCTION
Released For Bid Based on Limited Review	<u>February 7</u>	2011
	<i>Roger Druehl</i>	DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER
		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

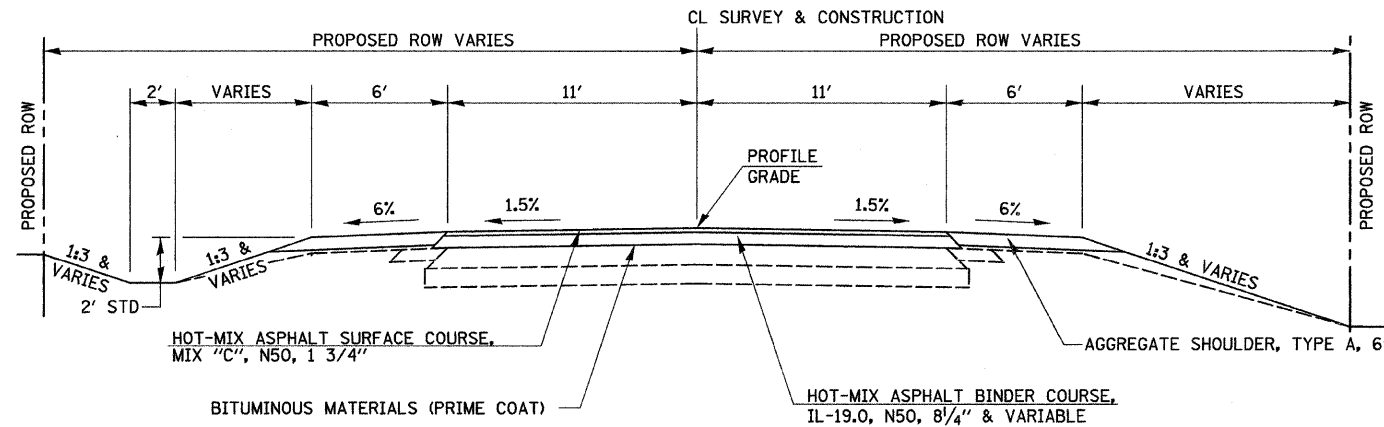
2484C001

**CONTRACT NO. 93545**

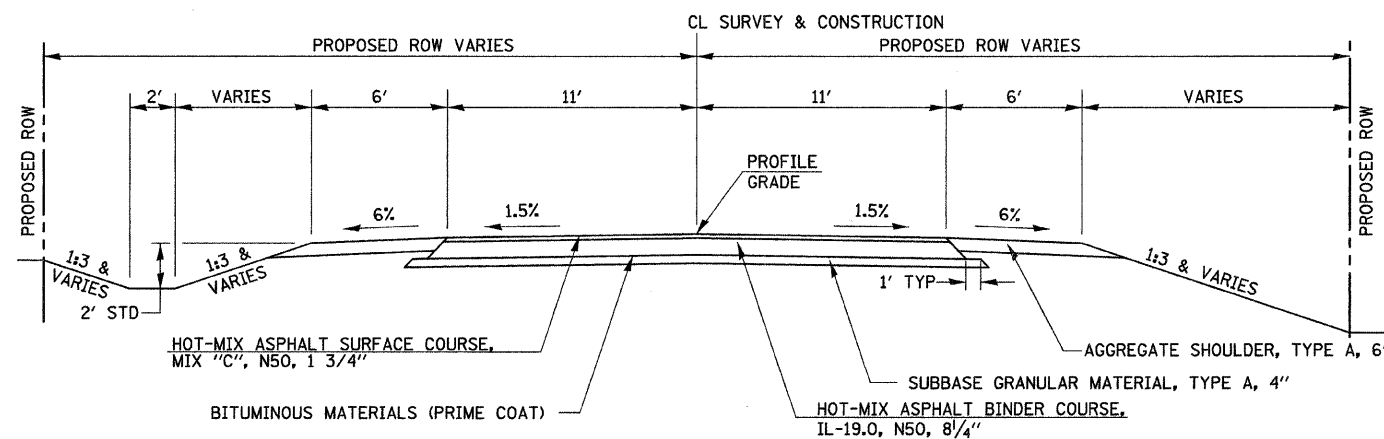
2010 JOB#2484



**EXISTING TYPICAL SECTION**  
STA 151+00.00 TO STA 164+00.00



**PROPOSED TYPICAL SECTION**  
STA 151+00.00 TO STA 153+05.00  
STA 162+95.00 TO STA 164+00.00  
EXCEPT TRANSITIONS



CONSTRUCT GUARDRAIL  
SHOULDER WIDENING IN  
ACCORDANCE WITH STD 630301

**PROPOSED TYPICAL SECTION**  
STATION 153+05.00 TO STATION 155+55.21  
BRIDGE OMISSION STATION 155+55.21 TO STATION 157+18.96  
STATION 157+18.96 TO STATION 162+95.00

**GENERAL NOTES**

PLAN QUANTITIES FOR TREE REMOVAL HAVE BEEN BASED ON ALL TREES WITHIN THE PROPOSED RIGHT OF WAY. THIS QUANTITY MAY BE REVISED DURING CONSTRUCTION, AT THE DIRECTION OF THE ENGINEER, BY DELETING FROM THE TREE REMOVAL QUANTITIES, SUCH TREES THAT DO NOT INTERFERE WITH THE PROPOSED CONSTRUCTION.

THE REMOVAL OF EXISTING BITUMINOUS SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE NEW BRIDGE SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

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

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

**STRUCTURAL DESIGN INFORMATION**  
**COUNTY HIGHWAY 28**

ROAD CLASSIFICATION: CLASS III 80,000 LB./20 YEAR DESIGN  
STRUCTURAL DESIGN TRAFFIC:  
PV = 760 SU = 95 MU = 95  
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
P = 50% S = 50% M = 50%  
FLEXIBLE PAVEMENT DESIGN: MINIMUM TF = 0.47  
D+ (REQ) = 3.70, MINIMUM SOIL SUPPORT: IBR = 3  
PAVEMENT STRUCTURE MATERIALS:  
HOT-MIX ASPHALT SURFACE, 1 3/4", a<sub>1</sub> = 0.40  
HOT-MIX ASPHALT BINDER, 8 1/4", a<sub>2</sub> = 0.33  
SUB-BASE GRANULAR MATERIAL, TYPE A, 4", a<sub>3</sub> = 0.10  
D+ (PROVIDED) = 3.82

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

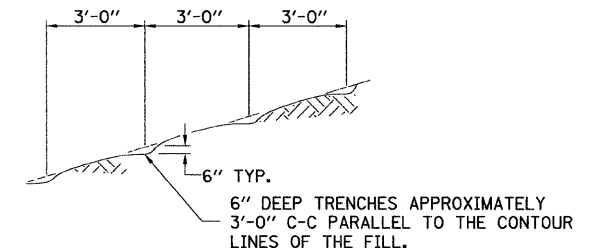
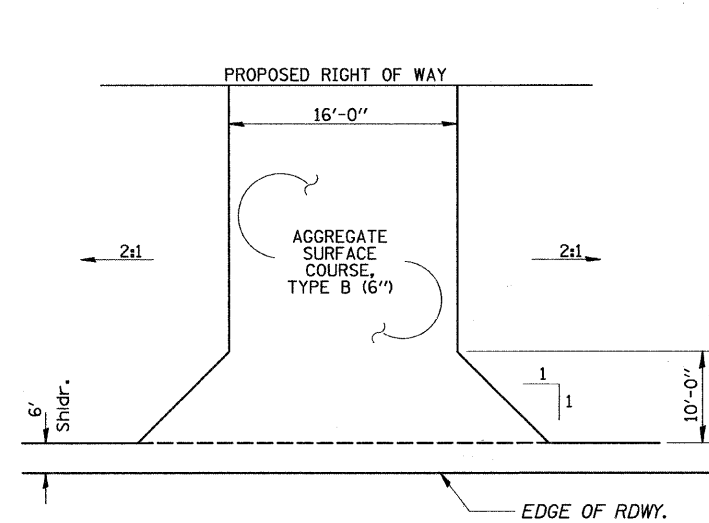
MIXTURE USE	BINDER	SURFACE (MIX "C")
AC/PG	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4% @ N50	4% @ N50
MIX COMPOSITION	IL-19.0	IL-12.5 OR IL-9.5

If RAP option is selected, the asphalt cement grade may need to be adjusted. This will be determined by the Engineer.

FILE NAME = V:\Bridge\2484-Morgan\2484T001.dgn	USER NAME = cthomas	DESIGNED - JRB	REVISED -	<b>MORGAN COUNTY COUNTY HIGHWAY 28 OVER HENRY CREEK</b>	<b>GENERAL NOTES, TYPICAL SECTIONS, PAVEMENT DESIGN INFORMATION</b>	F.A.S. RTE. 609	SECTION 07-00099-00-BR	COUNTY MORGAN	TOTAL SHEETS 48	SHEET NO. 2	
PLOT SCALE = 5.0000' / IN.	CHECKED - JRB	REVISOR -	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA. 151+00.00 TO STA. 164+00.00	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BRS-0609109	
PLOT DATE = 1/6/2011	DATE - 12/22/08	REVISOR -	CONTRACT NO. 93545								

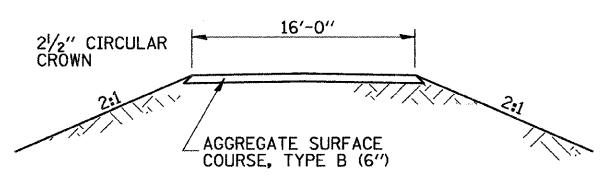
**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	223
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	18
20200100	EARTH EXCAVATION	CU YD	4,030
20300100	CHANNEL EXCAVATION	CU YD	520
20400800	FURNISHED EXCAVATION	CU YD	11,395
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1,500
28000305	TEMPORARY DITCH CHECKS	FOOT	1,188
28000400	PERIMETER EROSION BARRIER	FOOT	385
28000500	INLET AND PIPE PROTECTION	EACH	3
28100209	STONE RIPRAP, CLASS A5	TON	975
28200200	FILTER FABRIC	SQ YD	3,665
28300400	AGGREGATE DITCH	TON	1,507
31100100	SUBBASE GRANULAR MATERIAL, TYPE A	TON	480
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	147
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,219
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	455
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1,040
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	361
48100100	AGGREGATE SHOULDERS, TYPE A	TON	580
① 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	72
50200100	STRUCTURE EXCAVATION	CU YD	235
50300225	CONCRETE STRUCTURES	CU YD	152.5
50300280	CONCRETE ENCASEMENT	CU YD	8.2
① 50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	1,305
① 50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	3,548
50800105	REINFORCEMENT BARS	POUND	14,420
* ① 50901050	STEEL RAILING, TYPE SM	FOOT	328
51200957	FURNISHING METAL SHELL PILES 12"x0.250"	FOOT	384
51200959	FURNISHING METAL SHELL PILES 14"x0.312"	FOOT	947
① 51202305	DRIVING PILES	FOOT	1,331
① 51203200	TEST PILE METAL SHELLS	EACH	4
51500100	NAME PLATES	EACH	1
① 54201063	PIPE CULVERTS, CLASS D, TYPE 2 18"	FOOT	82
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	546
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	400
① 59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	16.8
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	587.5
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	152
67100100	MOBILIZATION	L SUM	1
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	5,200
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	16
* ① 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
① X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	2.4
① X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1
① X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1
① X5080600	MECHANICAL SPLICERS	EACH	88
① X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1
① Z0013798	CONSTRUCTION LAYOUT	L SUM	1
① Z0076600	TRAINERS	HR	500



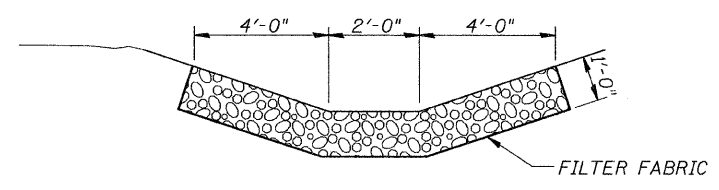
NOTE: ALL SLOPES 3:1 OR STEEPER AND GREATER THAN 5' IN HEIGHT SHALL BE CONTOUR PLOWED AS SHOWN IN DETAIL, COST SHALL BE INCLUDED WITH SEEDING, CLASS 2 (SPECIAL).

**DETAIL OF CONTOUR PLOWING**



**FIELD ENTRANCES**

STA 154+30 RT  
STA 160+64 LT  
STA 163+94 LT



**DETAIL OF AGGREGATE DITCH**

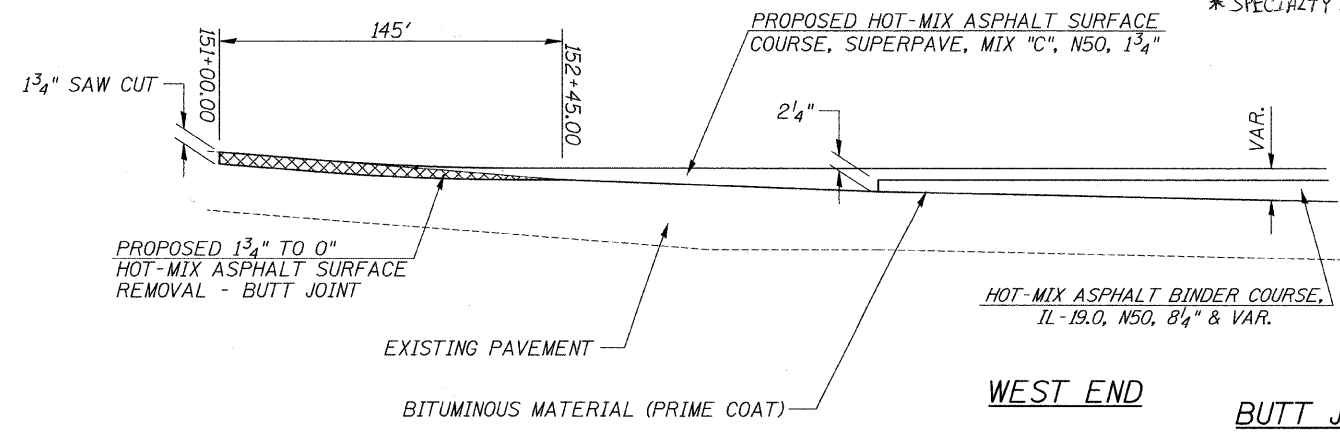
SEE ARTICLE 283.03 FOR FILTER FABRIC PLACEMENT

① SEE SPECIAL PROVISIONS

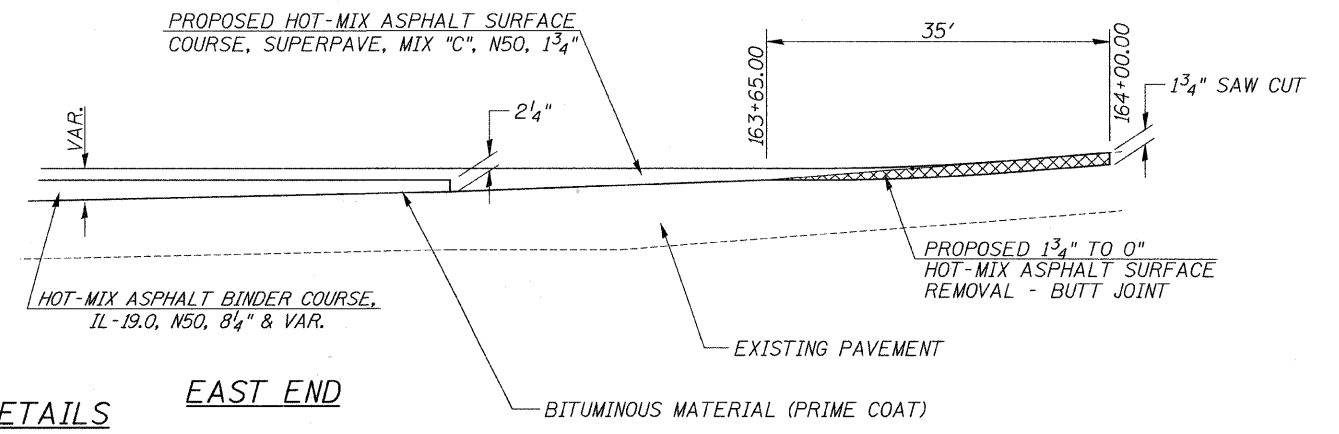
CONSTRUCTION TYPE CODE (0011)

Δ = (0042)

\* SPECIALTY ITEMS



**WEST END**

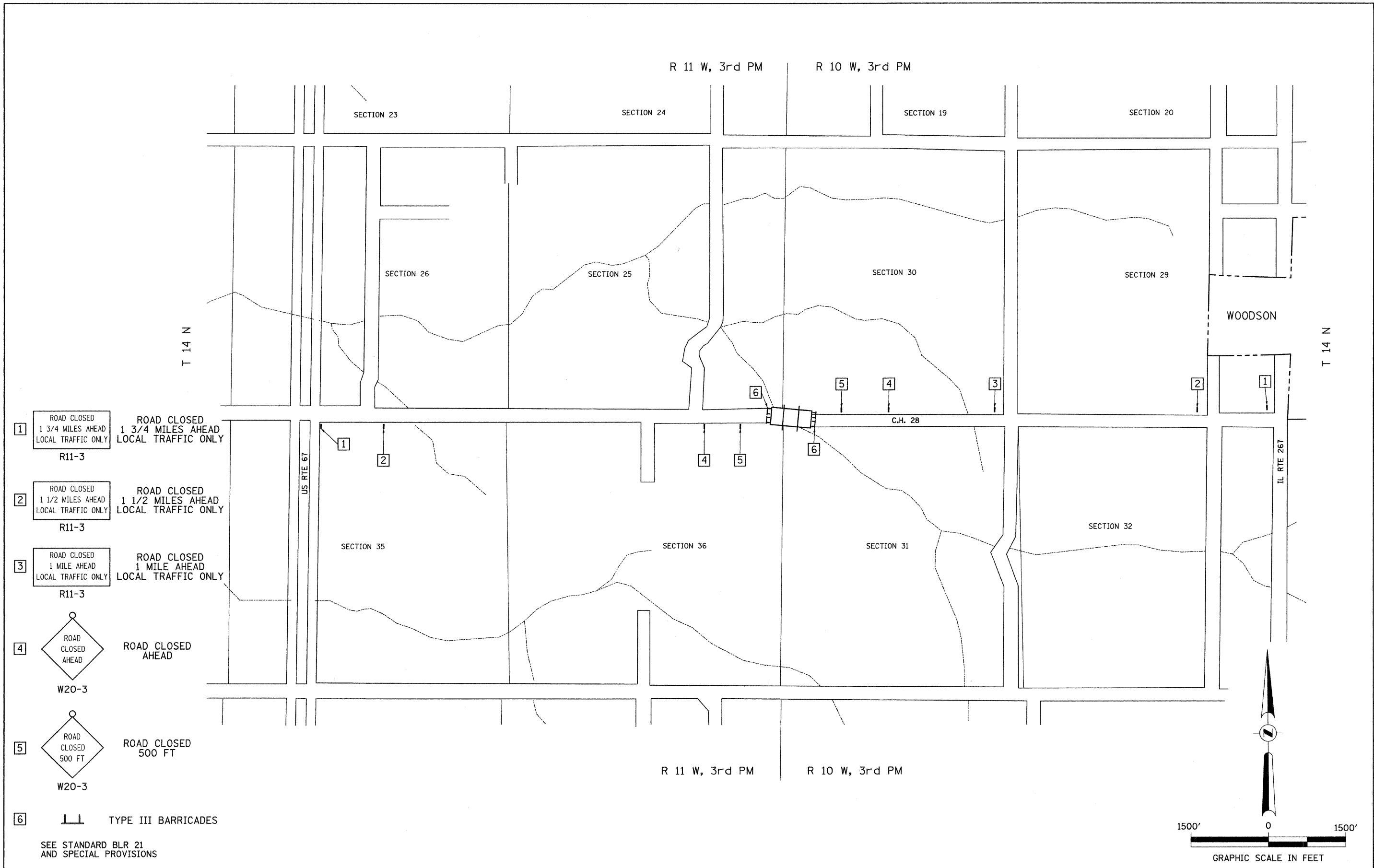


**EAST END**

**BUTT JOINT DETAILS**

FILE NAME = V:\Bridg\2484-Morgan\24840001.dgn	USER NAME = cthomas	DESIGNED - JRB	REVISED -	<b>MORGAN COUNTY COUNTY HIGHWAY 28 OVER HENRY CREEK</b>	<b>DETAILS, SUMMARY OF QUANTITIES</b>	F.A.S. R.T.E. = 609	SECTION = 07-00099-00-BR	COUNTY = MORGAN	TOTAL SHEETS = 48	SHEET NO. = 3	
PLOT SCALE = 1/8" = 1' IN.	CHECKED - JRB	REVISED -	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA. 151+00.00 TO STA. 164+00.00	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BRS-06091091	
PLOT DATE = 1/6/2011	DATE = 12/22/08	REVISED -									
CONTRACT NO. <b>93545</b>											





- 1 ROAD CLOSED  
1 3/4 MILES AHEAD  
LOCAL TRAFFIC ONLY  
R11-3
- 2 ROAD CLOSED  
1 1/2 MILES AHEAD  
LOCAL TRAFFIC ONLY  
R11-3
- 3 ROAD CLOSED  
1 MILE AHEAD  
LOCAL TRAFFIC ONLY  
R11-3
- 4 ROAD CLOSED  
AHEAD  
W20-3
- 5 ROAD CLOSED  
500 FT  
W20-3
- 6 TYPE III BARRICADES

SEE STANDARD BLR 21  
AND SPECIAL PROVISIONS






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	PLOT SCALE = 1.00" / IN.	CHECKED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. 151+00.00 TO STA. 164+00.00	CONTRACT NO. 93545				
	PLOT DATE = 1/6/2011	DATE - 03/02/09	REVISED -		FED. ROAD DIST. NO. 7 ILLINOIS    FED. AID PROJECT BRS-0609109							

T14N, R11W, 3rd PM

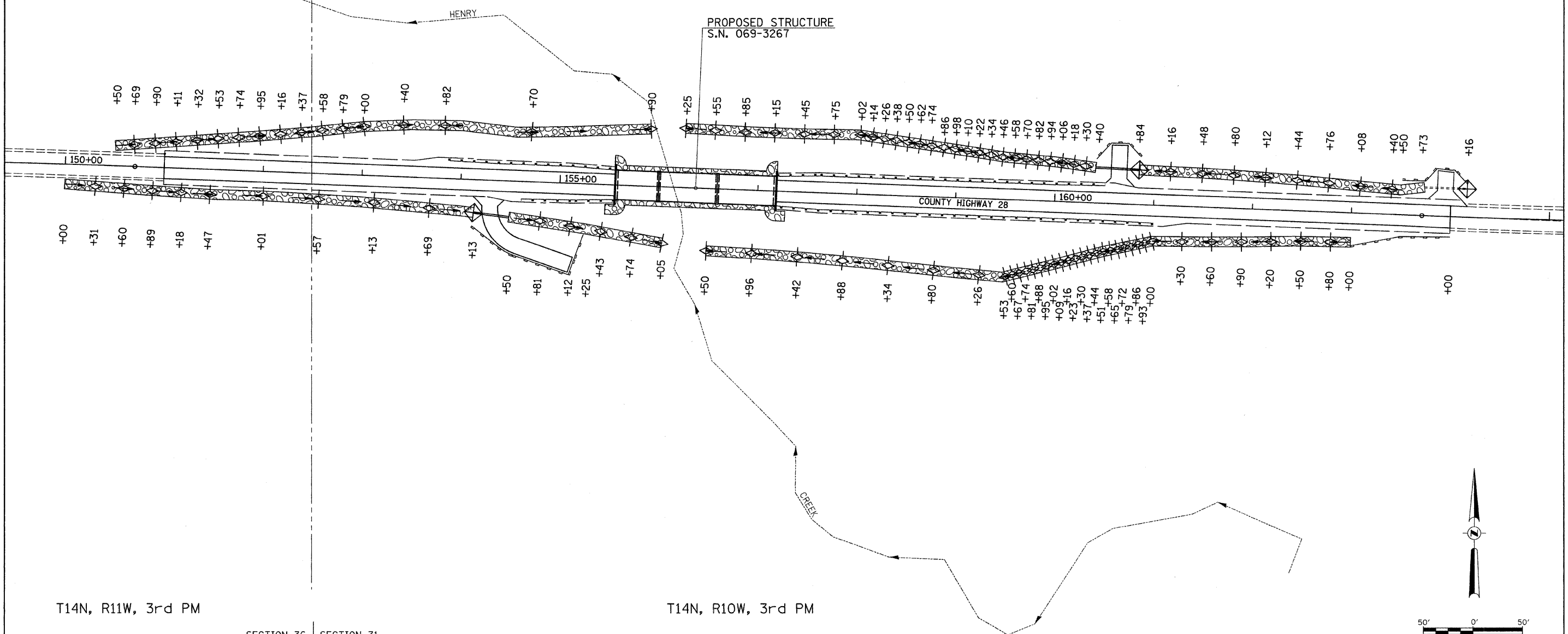
T14N, R10W, 3rd PM

SECTION 25 SECTION 30

LEGEND

-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK
-  INLET AND PIPE PROTECTION
-  SPECIAL DITCH - FLOW LINE AND DIRECTION
-  PROPOSED RIPRAP/AGGREGATE DITCH PLACEMENT

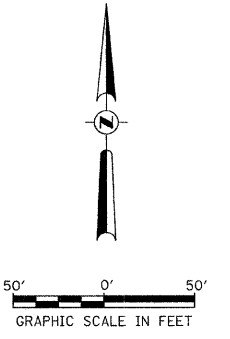
NOTE: TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 280.04 OF THE STANDARD SPECIFICATIONS.



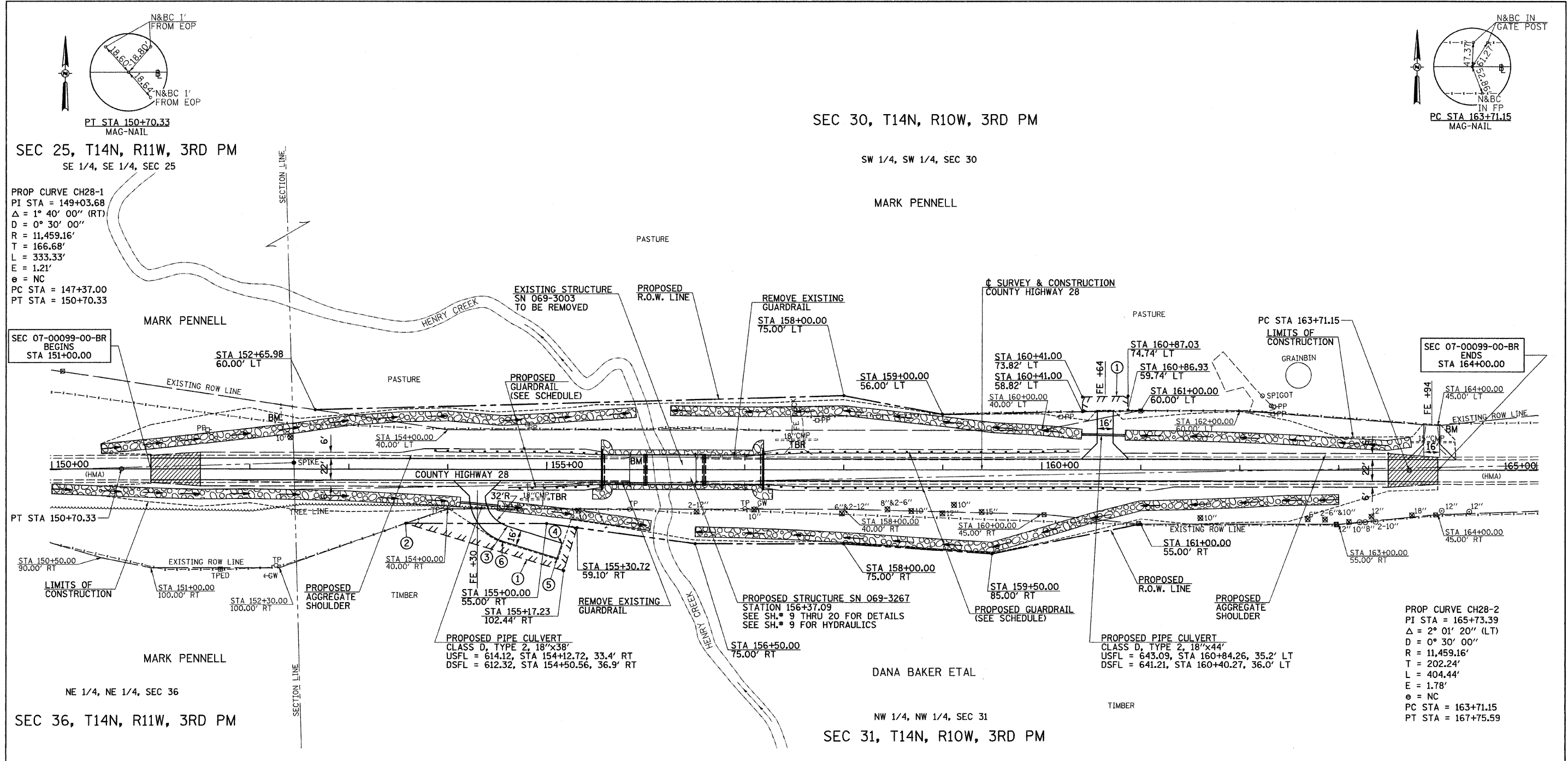
T14N, R11W, 3rd PM

T14N, R10W, 3rd PM

SECTION 36 SECTION 31



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	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -		SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEETS	STA. 151+00.00 TO STA. 164+00.00	609	07-00099-00-BR	MORGAN	48	6
	PLOT DATE = 1/6/2011	CHECKED -	REVISED -					CONTRACT NO. 93545				
		DATE -	REVISED -					FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609(09)				



PROP CURVE CH28-1  
 PI STA = 149+03.68  
 $\Delta = 1^\circ 40' 00''$  (RT)  
 $D = 0^\circ 30' 00''$   
 $R = 11,459.16'$   
 $T = 166.68'$   
 $L = 333.33'$   
 $E = 1.21'$   
 $e = NC$   
 PC STA = 147+37.00  
 PT STA = 150+70.33

SEC 07-00099-00-BR  
 BEGINS  
 STA 151+00.00

PT STA 150+70.33

MARK PENNELL  
 NE 1/4, NE 1/4, SEC 36  
 SEC 36, T14N, R11W, 3RD PM

BM - RAILROAD SPIKE IN CORNER POST  
 STA. 152+32, 46' LT.  
 ELEV. 620.89

SEC 30, T14N, R10W, 3RD PM

SW 1/4, SW 1/4, SEC 30

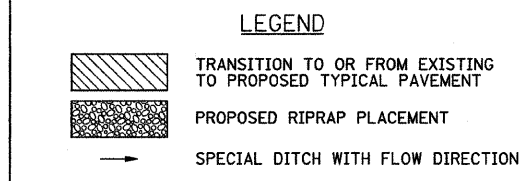
MARK PENNELL

DANA BAKER ETAL

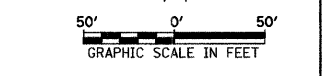
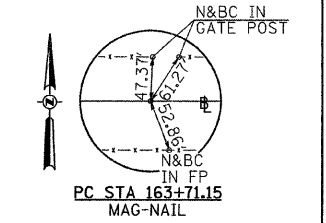
NW 1/4, NW 1/4, SEC 31  
 SEC 31, T14N, R10W, 3RD PM

BM - CHISLED "□" ON NW  
 WINGWALL OF BRIDGE  
 STA. 155+84, ±14' LT.  
 ELEV. 613.48

BM - RAILROAD SPIKE IN HEDGE POST  
 STA. 164+11, 47' LT.  
 ELEV. 663.39



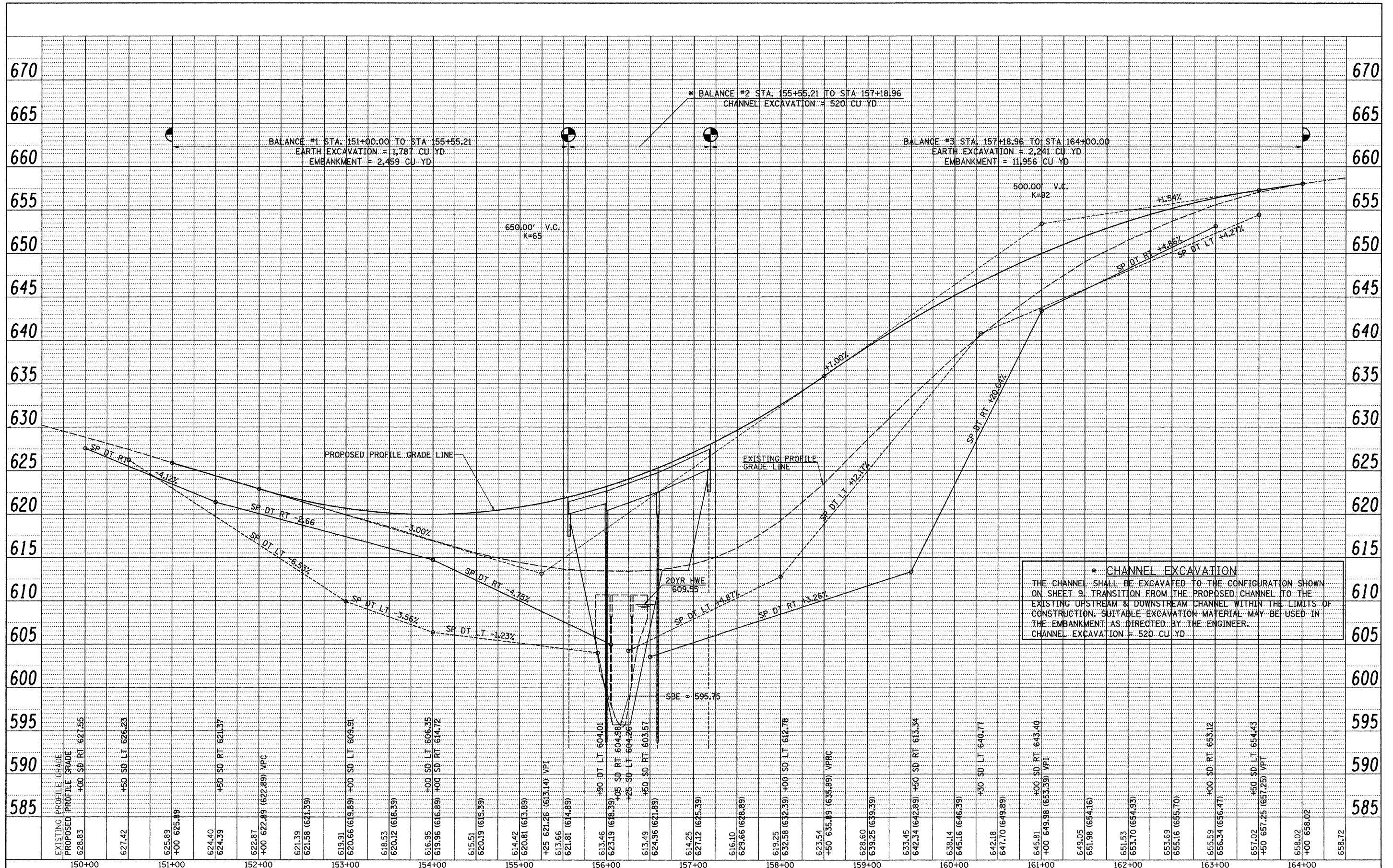
- ① TEMPORARY EASEMENT FOR PURPOSE OF RECONSTRUCTING FIELD ENTRANCE
- ② STA 153+57.50 55.00' RT
- ③ STA 154+60.49 57.55' RT
- ④ STA 155+15.41 74.64' RT
- ⑤ STA 155+10.65 89.92' RT
- ⑥ STA 154+55.74 72.83' RT



FILE NAME = V:\Nbridge\2484-Morgan\2484PLAN.dgn	USER NAME = cthomas	DESIGNED - JRB	REVISED -	<b>MORGAN COUNTY COUNTY HIGHWAY 28 OVER HENRY CREEK</b>	<b>PLAN</b>	F.A.S. RTE. 609	SECTION 07-00099-00-BR	COUNTY MORGAN	TOTAL SHEETS 48	SHEET NO. 7
PLOT SCALE = 50.00' / IN.	CHECKED - JRB	REVISOR -	SCALE: 1"=50'			SHEET NO. 1 OF 2 SHEETS	STA. 151+00.00 TO STA. 164+00.00	FED. ROAD DIST. NO. 7 [ILLINOIS]	FED. AID PROJECT BRS-06091099	
PLOT DATE = 1/6/2011	DATE - 12-31-08	REVISOR -				CONTRACT NO. 030545				

PLAN	SURVEYED	BY	DATE
	NOTED		
	CHECKED		
	BY		
	DATE		
	NO.		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	NOTED		
	CHECKED		
	BY		
	DATE		
	NO.		
	FILE NAME		



**\* CHANNEL EXCAVATION**  
 THE CHANNEL SHALL BE EXCAVATED TO THE CONFIGURATION SHOWN ON SHEET 9. TRANSITION FROM THE PROPOSED CHANNEL TO THE EXISTING UPSTREAM & DOWNSTREAM CHANNEL WITHIN THE LIMITS OF CONSTRUCTION. SUITABLE EXCAVATION MATERIAL MAY BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.  
 CHANNEL EXCAVATION = 520 CU YD

FILE NAME = V:\B-rdgs\2484-Morgan\2484PROF1.dgn	USER NAME = cthomas	DESIGNED - JRB	REVISED -	<b>MORGAN COUNTY          COUNTY HIGHWAY 28          OVER HENRY CREEK</b>	<b>PROFILE</b>	F.A.S. RTE. 609	SECTION 07-00099-00-BR	COUNTY MORGAN	TOTAL SHEETS 48	SHEET NO. 8	
PLOT SCALE = 50.000' / IN.	CHECKED - JRB	REVISED -	SCALE: HORIZ. 1"=50'			SHEET NO. 2 OF 2 SHEETS	STA. 151+00.00 TO STA. 164+00.00	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BR5-0609109	
PLOT DATE = 1/6/2011	DATE - 12-31-08	REVISED -	CONTRACT NO. 93545								



BM - RR Spike in Corner Post  
Sta. 152+32, 46' Lt.  
Elev. 620.89

BM - RR Spike in Hedge Post  
Sta. 164+11, 47' Lt.  
Elev. 663.39

**HENRY CREEK  
BUILT 201\_ BY  
MORGAN COUNTY  
SEC. 07-00099-00-BR  
C.H. 28 STATION 156+37.09  
F.A. PROJ. BRS-0609(109)  
STR. NO. 069-3267 LOADING HL-93**

**Existing Structure:**

Three span reinforced concrete deck on steel stringers superstructure supported on concrete pile bent piers with exposed timber piles and pile bent abutments.  
The structure is ±67' back to back abutments has an ±26' width and is not skewed.  
Str. No. 069-3003

Salvage: None

Road to be closed to traffic during construction.

**NAME PLATE**

Locate Name Plate on Face of Wingwall  
S.W. Corner of Bridge (See Std. 515001)

Traffic Barrier Terminal  
Type 6A, Std. 631032  
(Typ. Each Corner)

**GENERAL NOTES**

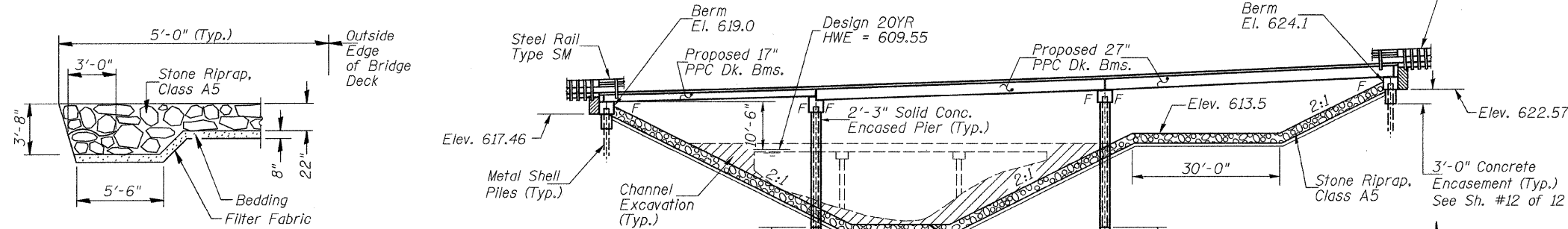
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles.  
For Soil Boring Logs, See Special Provisions.

A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Article 1020.05(b)(12) of the Standard Specifications.

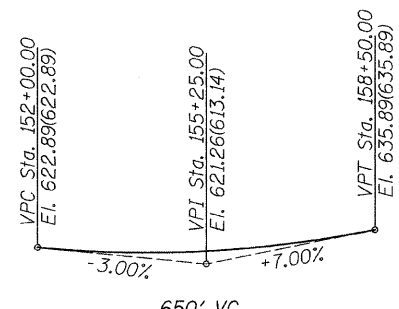
Reinforcement Bars shall conform to the requirements of ASTM A706 Grade 60. Reinforcement Bars designated (E) shall be epoxy coated.  
Layout of the slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

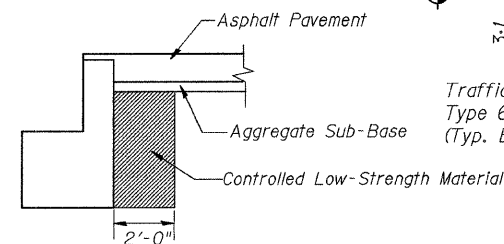
The existing structural steel coating may contain lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.



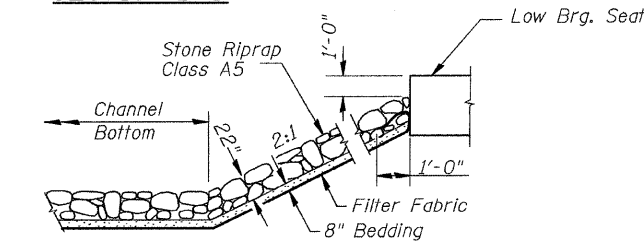
**SECTION A-A**



**PROFILE GRADE**

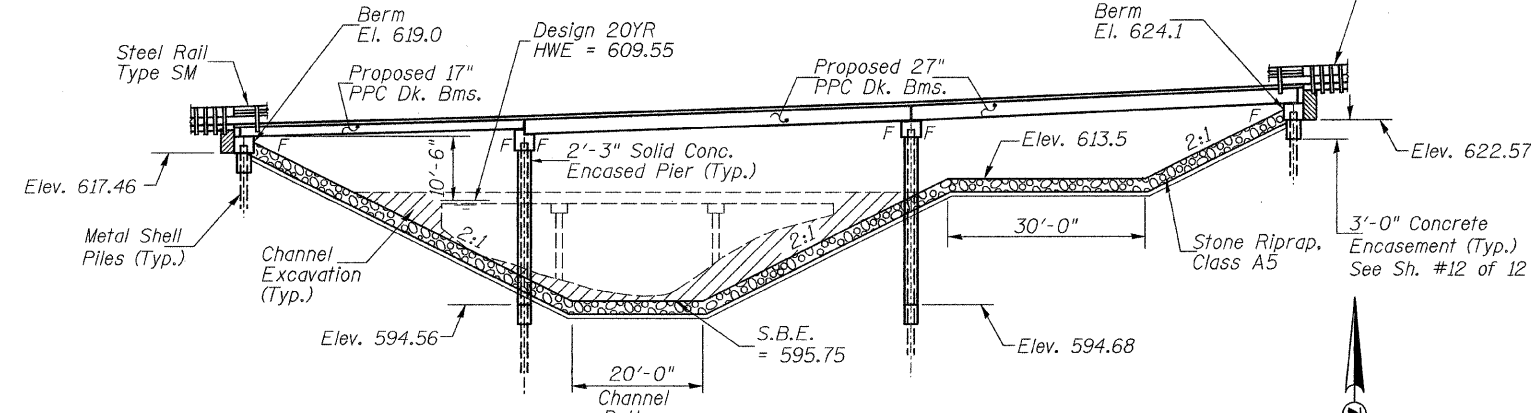


**SECTION B-B**

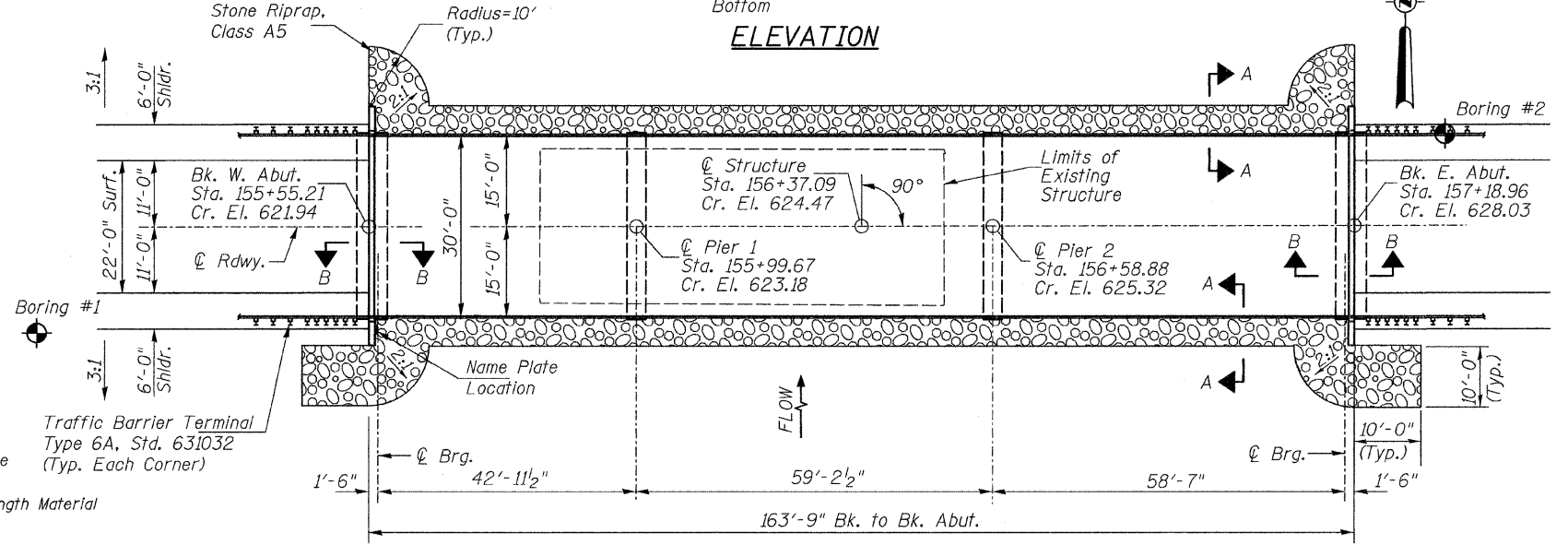


**STONE RIPRAP DETAIL**

DESIGNED	C.T.M.
CHECKED	B.A.N.
DRAWN	C.T.M.
CHECKED	B.A.N.



**ELEVATION**



**PLAN**

**DESIGN SCOUR TABLE**

Location	W. Abut	Pier 1	Pier 2	E. Abut
Design Scour Elevation	617.46	591.56	591.68	622.57

**SEISMIC DATA**  
Seismic Performance Zone (SPZ) = 2  
Design Spectral Acceleration at 1.0 sec. (S<sub>D1</sub>) = 0.156g  
Design Spectral Acceleration at 0.2 sec. (S<sub>D5</sub>) = 0.288g  
Soil Site Class = D

**WATERWAY INFORMATION**

Drainage Area = 4.84 Sq. Mi.		Low Grade Elev. = 619.96 @ Sta. 153+95.00						
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	20	1,687	514	652	609.55	0.00	609.55	609.55
Base	100	2,520	576	785	611.23	0.08	611.31	611.23

**DESIGN STRESSES**

**FIELD UNITS**  
f'<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinforcement)

**PRECAST PRESTRESSED UNITS**

f'<sub>c</sub> = 6,000 p.s.i.  
f'<sub>ci</sub> = 5,000 p.s.i.  
f'<sub>s</sub> = 270,000 p.s.i. (1/2" φ low relaxation strands)  
f'<sub>si</sub> = 201,960 p.s.i. (1/2" φ low relaxation strands)

**LOADING HL-93**

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

**DESIGN SPECIFICATIONS**

2007 AASHTO LRFD Bridge Design Specifications with Interims

**TOTAL BILL OF MATERIAL**

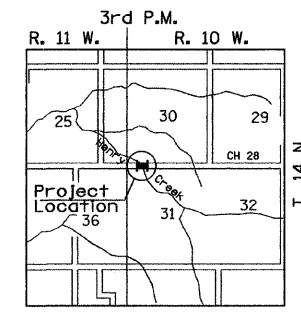
ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD	—	520	520
Stone Riprap, Class A5	TON	—	975	975
Filter Fabric	SQ YD	—	820	820
① Removal of Existing Structures	EACH	—	—	1
Structure Excavation	CU YD	—	235	235
Concrete Structures	CU YD	—	152.5	152.5
① Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	1,305	—	1,305
① Precast Prestressed Concrete Deck Beams (27" Depth)	SQ FT	3,548	—	3,548
Reinforcement Bars	POUND	—	14,420	14,420
① Steel Railing, Type SM	FOOT	328	—	328
Furnishing Metal Shell Piles 12"x0.250"	FOOT	—	384	384
Furnishing Metal Shell Piles 14"x0.312"	FOOT	—	947	947
① Driving Piles	FOOT	—	1,331	1,331
① Test Pile Metal Shells	EACH	—	4	4
Concrete Encasement	CU YD	—	8.2	8.2
① Mechanical Splicers	EACH	—	88	88
Name Plates	EACH	—	1	1
Waterproofing Membrane System	SQ YD	546	—	546
Portland Cement Mortar Fairing Course	FOOT	400	—	400
① Controlled Low-Strength Material	CU YD	—	16.8	16.8
① Underwater Structure Excavation Protection - Location 1 (Pier #1)	EACH	—	1	1
① Underwater Structure Excavation Protection - Location 2 (Pier #2)	EACH	—	1	1
Hot-Mix Asphalt Surface Course, Mix "C", N50	TON	78	—	78

① See Special Provisions

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.

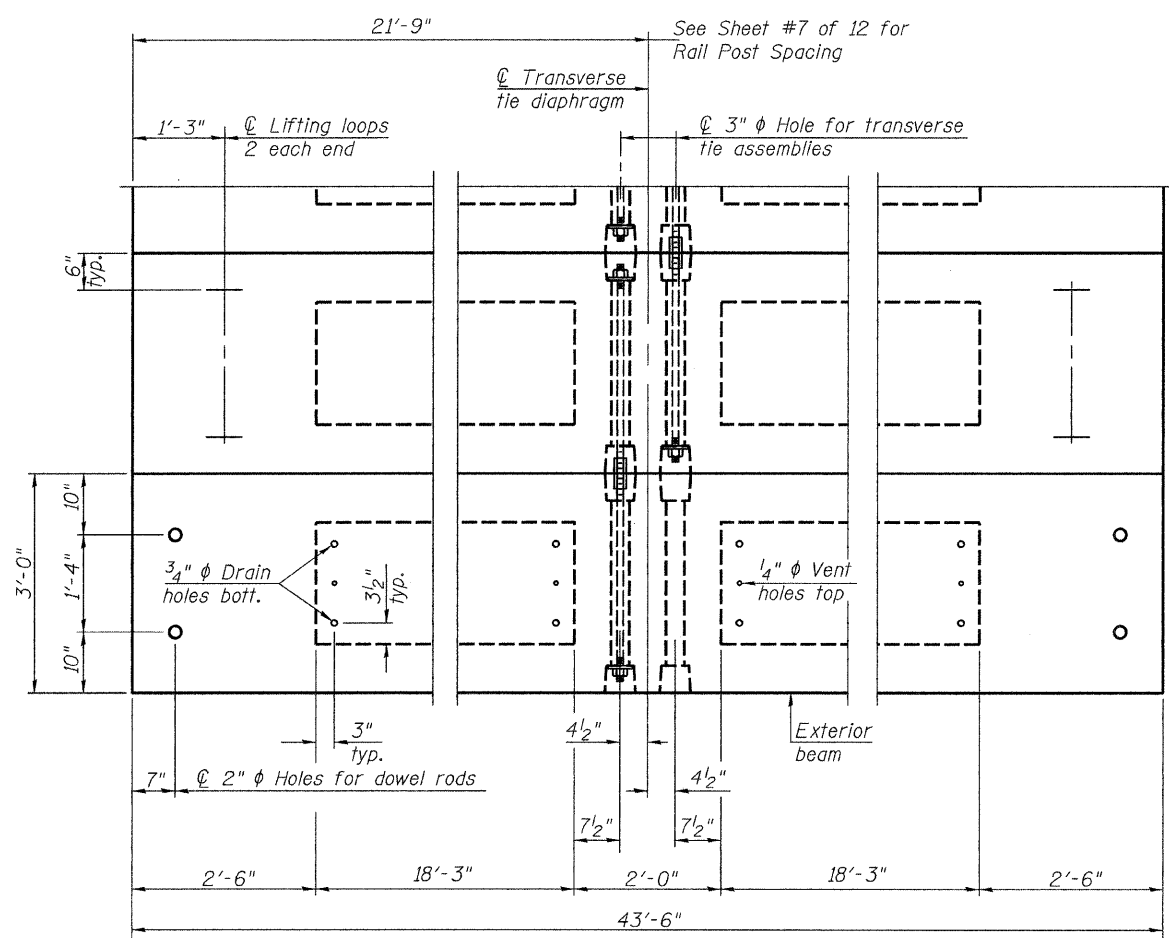
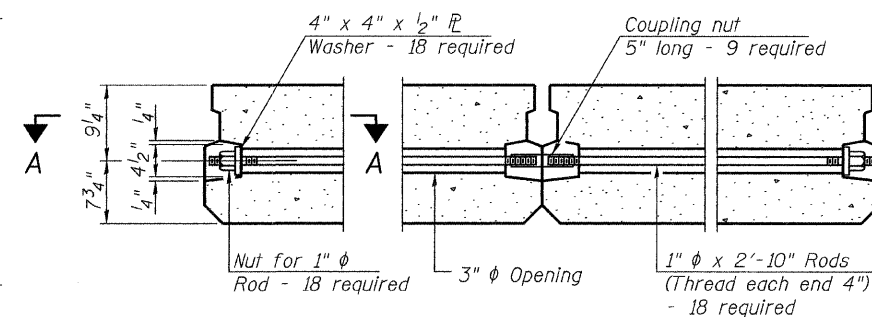
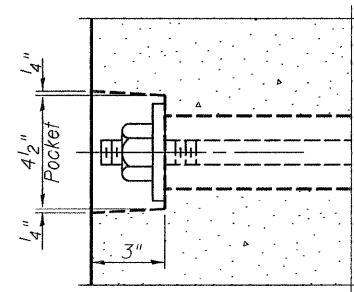
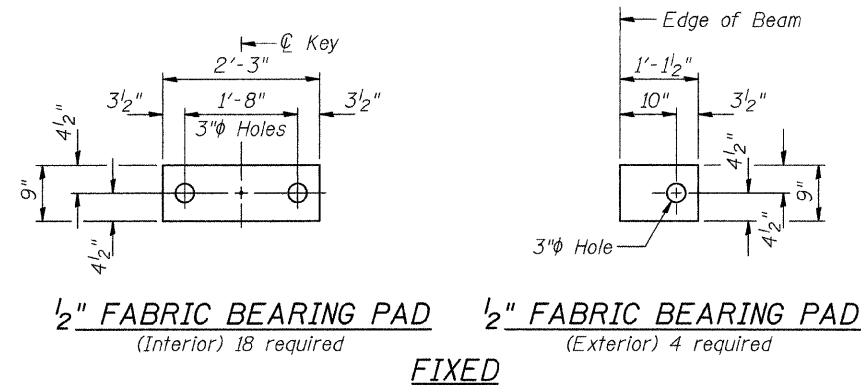
*Benjamin A. New* 1/7/2012  
Illinois Structural No. 6527  
Expires 11/30/2012



**LOCATION SKETCH**

**GENERAL PLAN & ELEVATION  
MORGAN COUNTY  
SECTION 07-00099-00-BR  
C.H. 28 OVER HENRY CREEK**

SHEET NO. 1 12 SHEETS	ROUTE NO. CH 28	SECTION 07-00099-00-BR	COUNTY MORGAN	TOTAL SHEETS 48	SHEET NO. 9
	SN 069-3267		CONTRACT NO. 93545		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRS-0609(109)			



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.

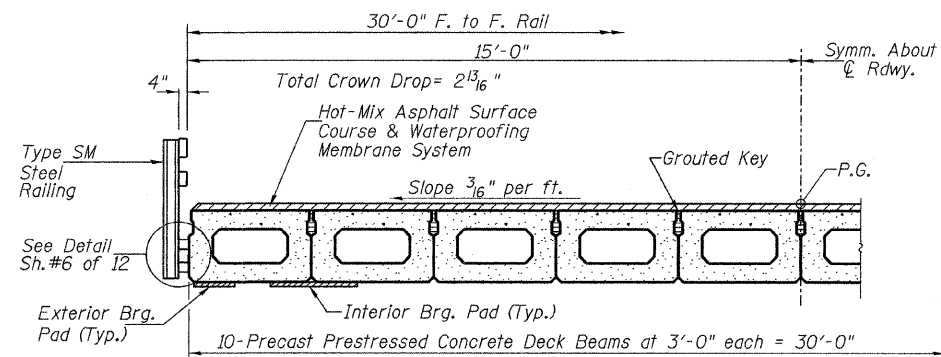
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 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 - SPAN 1**

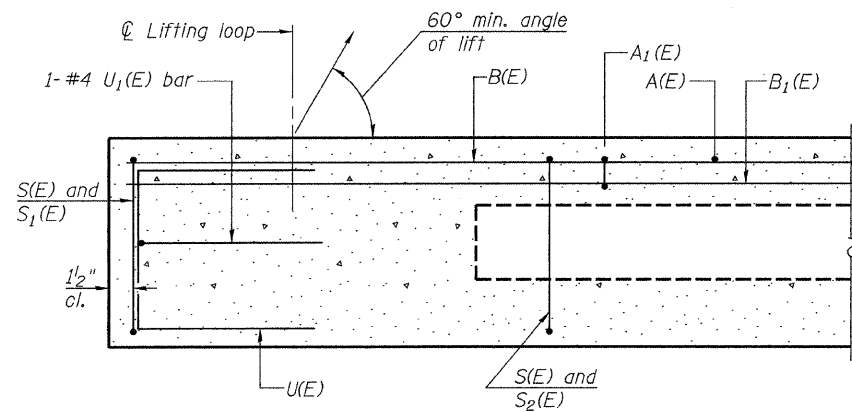
ITEM	UNIT	QUANTITY
① Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	1,305

① See Special Provisions

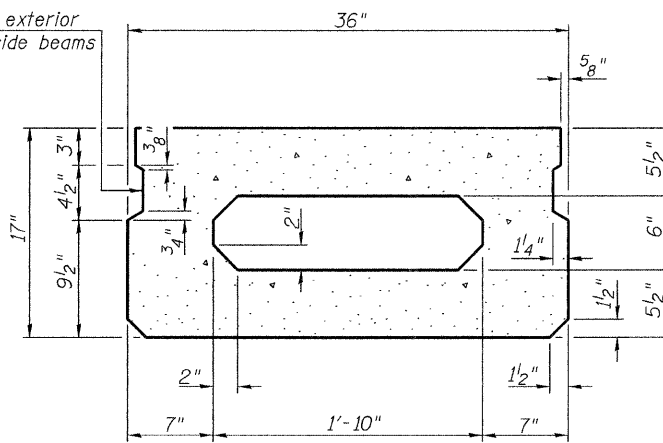
**SUPERSTRUCTURE - SPAN 1**  
**MORGAN COUNTY**  
**SECTION 07-00099-00-BR**  
**C.H. 28 OVER HENRY CREEK**

SHEET NO. 2	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 28	07-00099-00-BR	MORGAN	48	10
12 SHEETS	S.N. 069-3267		CONTRACT NO. 93545		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0609(109)		

\*\*Omit key on exterior face of outside beams

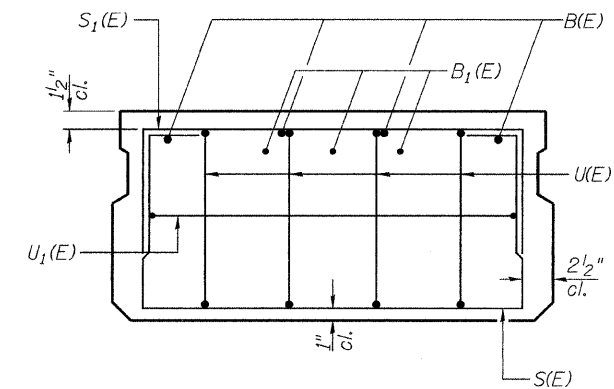


**SECTION C-C**

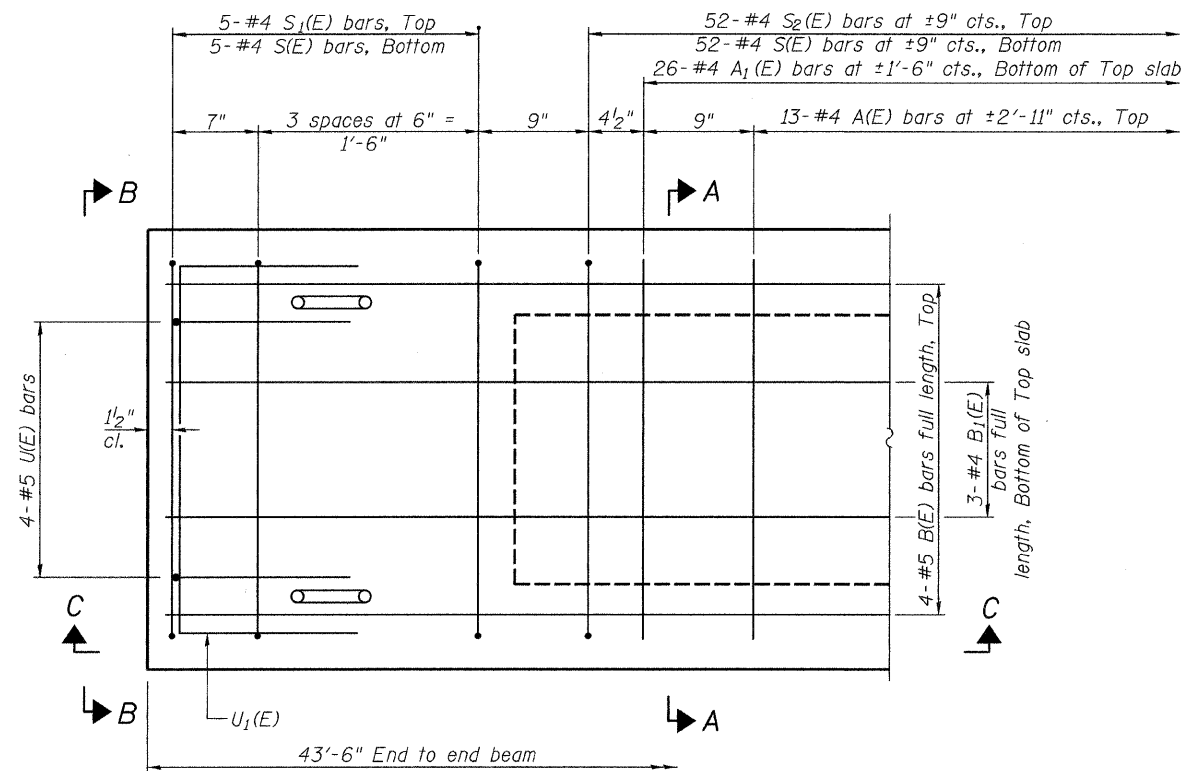


**SECTION A-A**  
(Showing dimensions)

\*\*Rail post anchor devices (Sheet 6 of 12) to be cast into exterior face of outside beams.



**VIEW B-B**

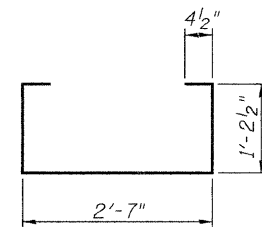


**PLAN VIEW**

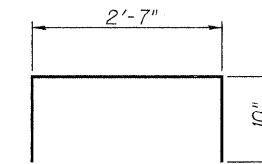
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

**MIN. BAR LAP**

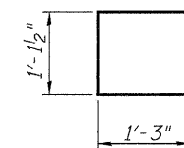
#4 bar = 2'-0"  
#5 bar = 2'-6"



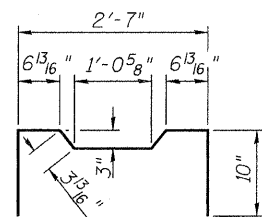
**BAR S(E)**



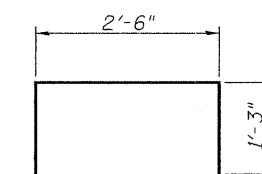
**BAR S1(E)**



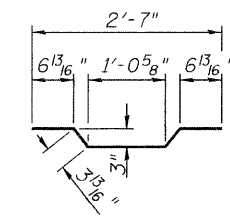
**BAR U(E)**



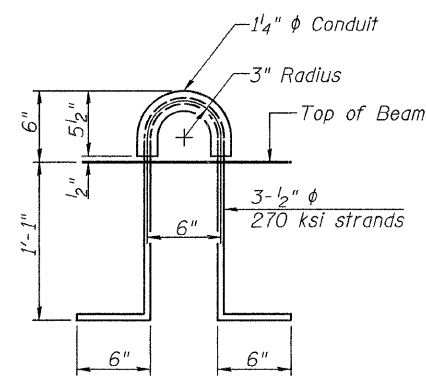
**BAR S2(E)**



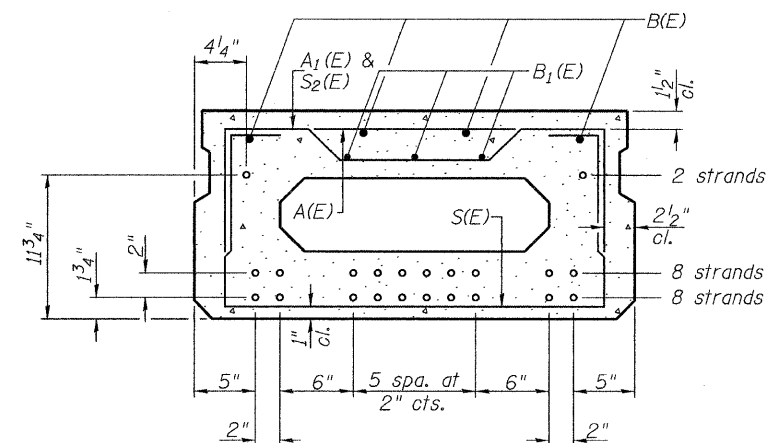
**BAR U1(E)**



**BAR A1(E)**



**LIFTING LOOP DETAIL**



**SECTION A-A**

18-1/2"φ Strands Each Strand Stressed to 30,900 Lbs.  
8-Strands 1 3/4" up, 8-Strands 3 3/4" up, 2-Strands 11 3/4" up

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)	13	#4	2'-7"	—
A1(E)	26	#4	2'-10"	—
B(E)	4	#5	*43'-3"	—
B1(E)	3	#4	*43'-3"	—
S(E)	62	#4	5'-9"	□
S1(E)	10	#4	4'-3"	□
S2(E)	52	#4	4'-6"	□
U(E)	8	#5	3'-8"	□
U1(E)	2	#4	5'-0"	□

\* Total Length, Lap as necessary

Note: See sheet 2 of 12 for additional details and Bill of Material.

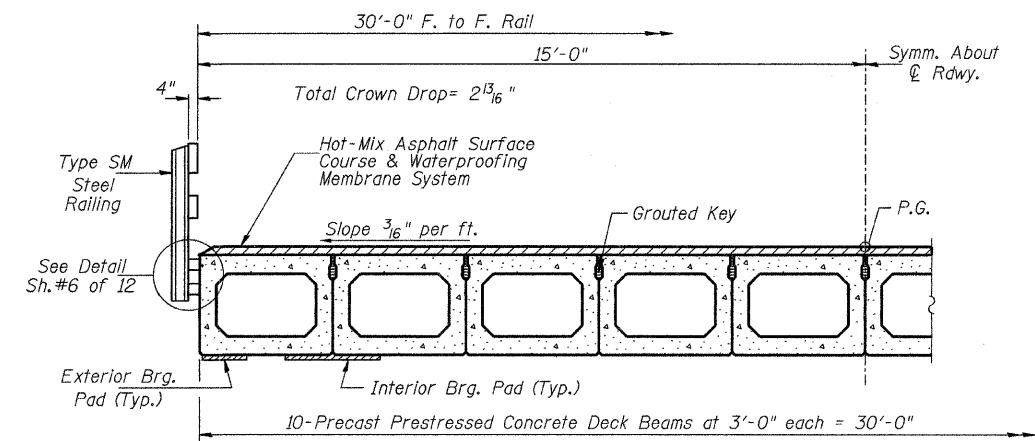
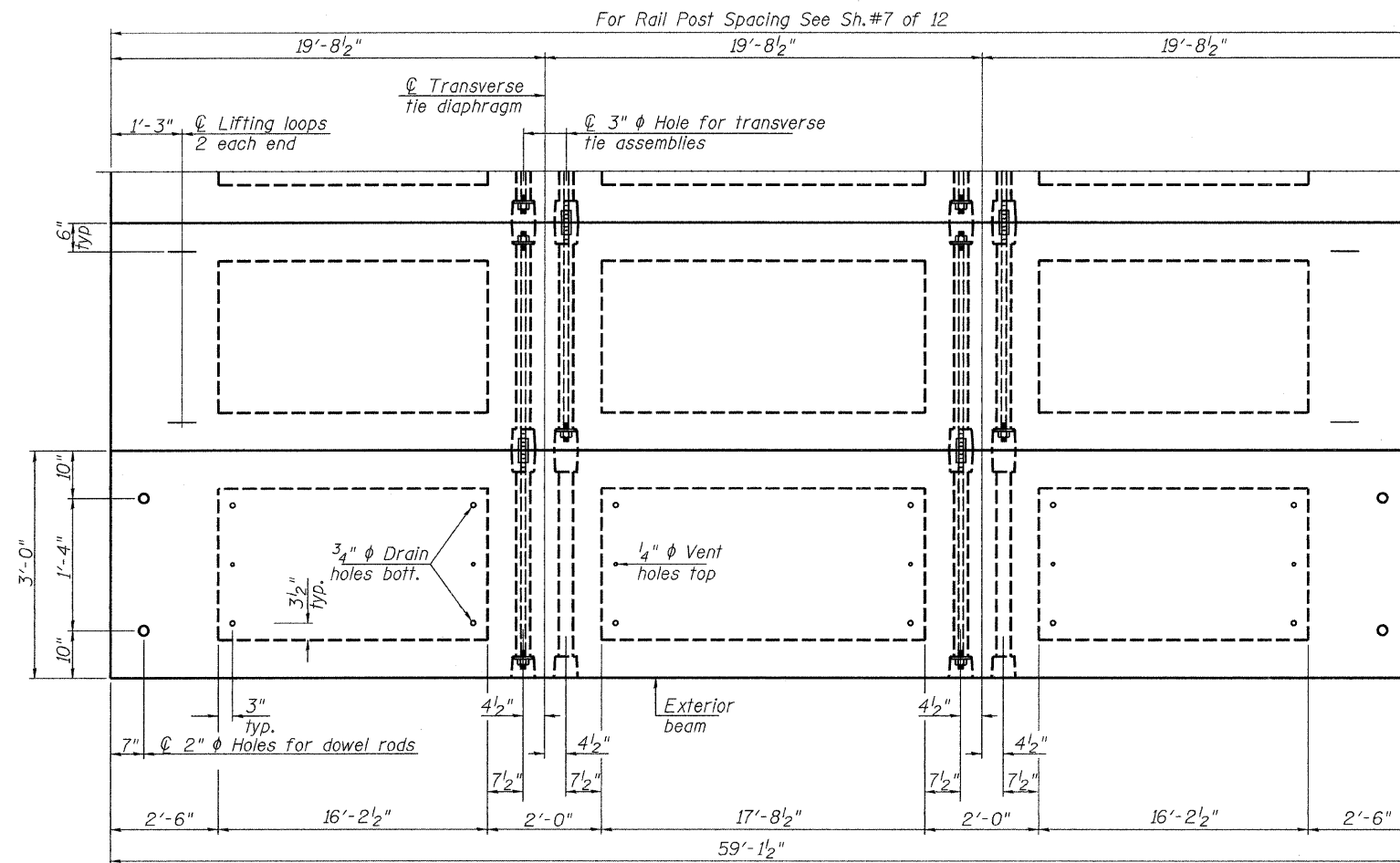
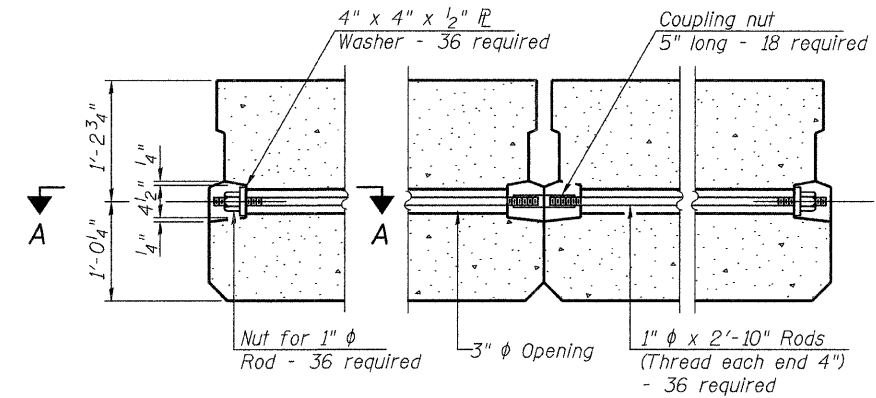
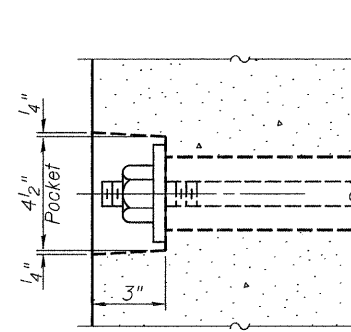
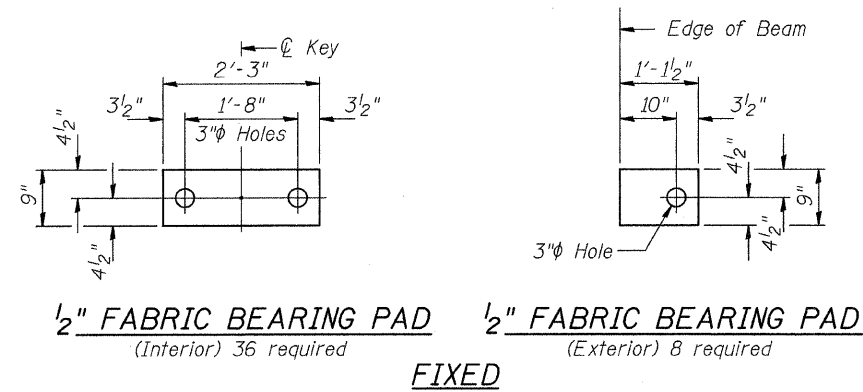
**SUPERSTRUCTURE DETAILS - SPAN 1**

**MORGAN COUNTY**

**SECTION 07-00099-00-BR**

**C.H. 28 OVER HENRY CREEK**

SHEET NO. 3 12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 28	07-00099-00-BR	MORGAN	48	11
SN 069-3267			CONTRACT NO.	93545	
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0609(109)		



**BILL OF MATERIAL - SPANS 2 & 3**

ITEM	UNIT	QUANTITY
① Precast Prestressed Concrete Deck Beams (27" Depth)	SQ FT	3,548

① See Special Provisions

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"  $\phi$  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.

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"  $\phi$  lifting pin shall be used to engage the lifting loops during handling.

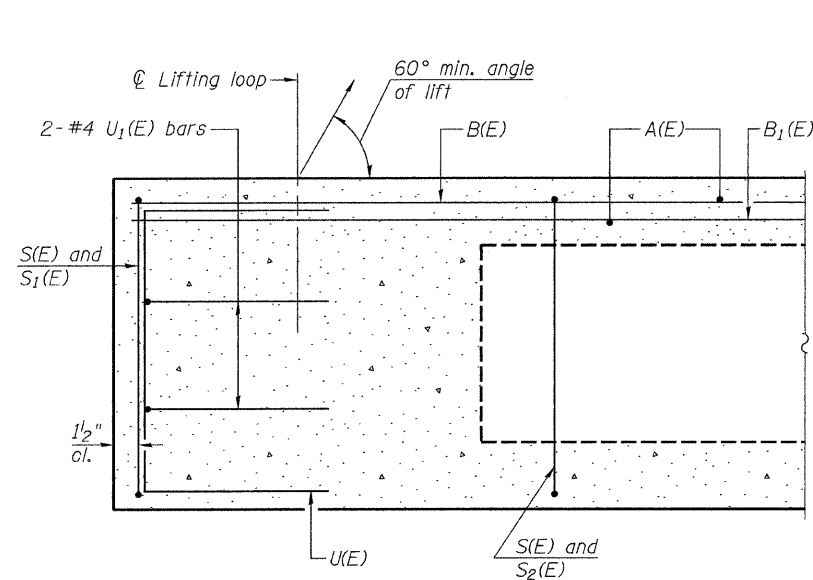
Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete,  $f'c$ , shall be 6000 psi.

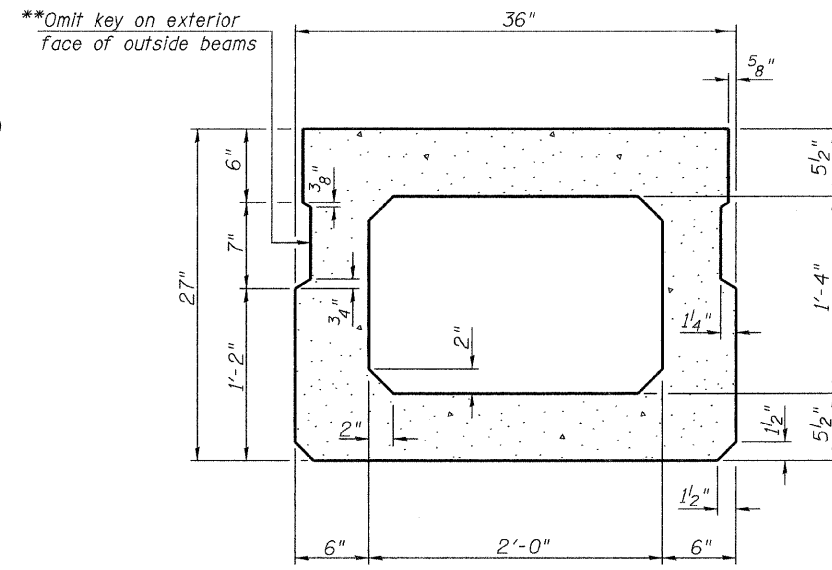
Compressive strength of prestressed concrete at release,  $f'ci$ , shall be 5000 psi.

**SUPERSTRUCTURE - SPANS 2 & 3**  
**MORGAN COUNTY**  
**SECTION 07-00099-00-BR**  
**C.H. 28 OVER HENRY CREEK**

SHEET NO. 4	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	CH 28	07-00099-00-BR	MORGAN	48	12
		SN 069-3267	CONTRACT NO. 93545		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BRS-0609(109)		

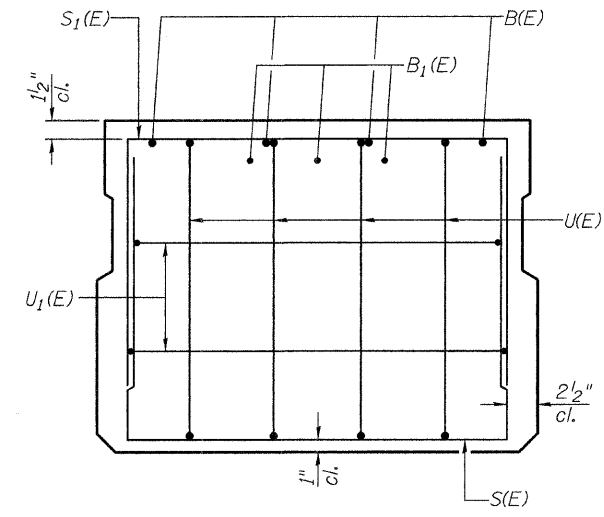


**SECTION C-C**

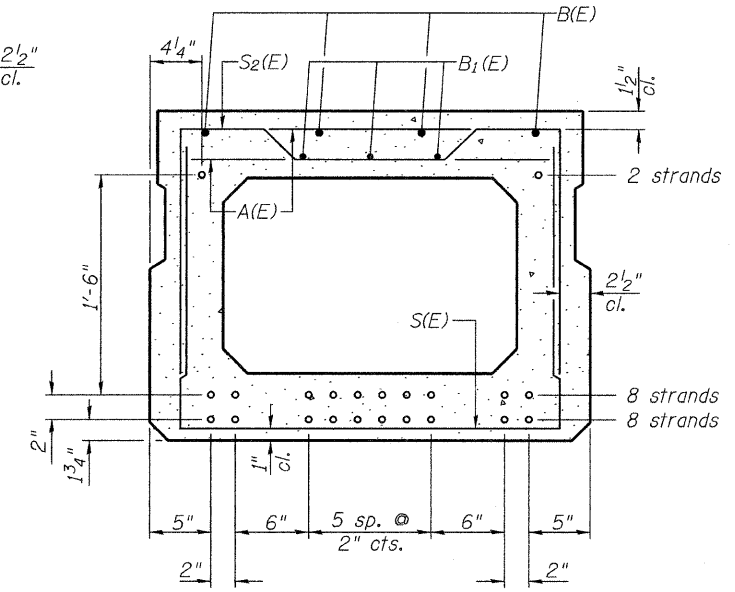


**SECTION A-A**  
(Showing demensions)

\*\*Rail post anchor devices (Sheet 6 of 12) to be cast into exterior face of outside beams.



**VIEW B-B**



**SECTION A-A**

18-1/2"φ Strands Each Strand Stressed to 30,900 Lbs.  
8-Strands 1 3/4" up, 8-Strands 3 3/4" up, 2-Strands 1'-9 3/4" up  
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)	54	#4	2'-7"	—
B(E)	4	#5	*58'-10"	—
B1(E)	3	#4	*58'-10"	—
S(E)	82	#4	6'-5"	⌊
S1(E)	10	#4	5'-11"	⌊
S2(E)	72	#4	6'-2"	⌊
U(E)	8	#5	4'-6"	⌊
U1(E)	4	#4	5'-0"	⌊

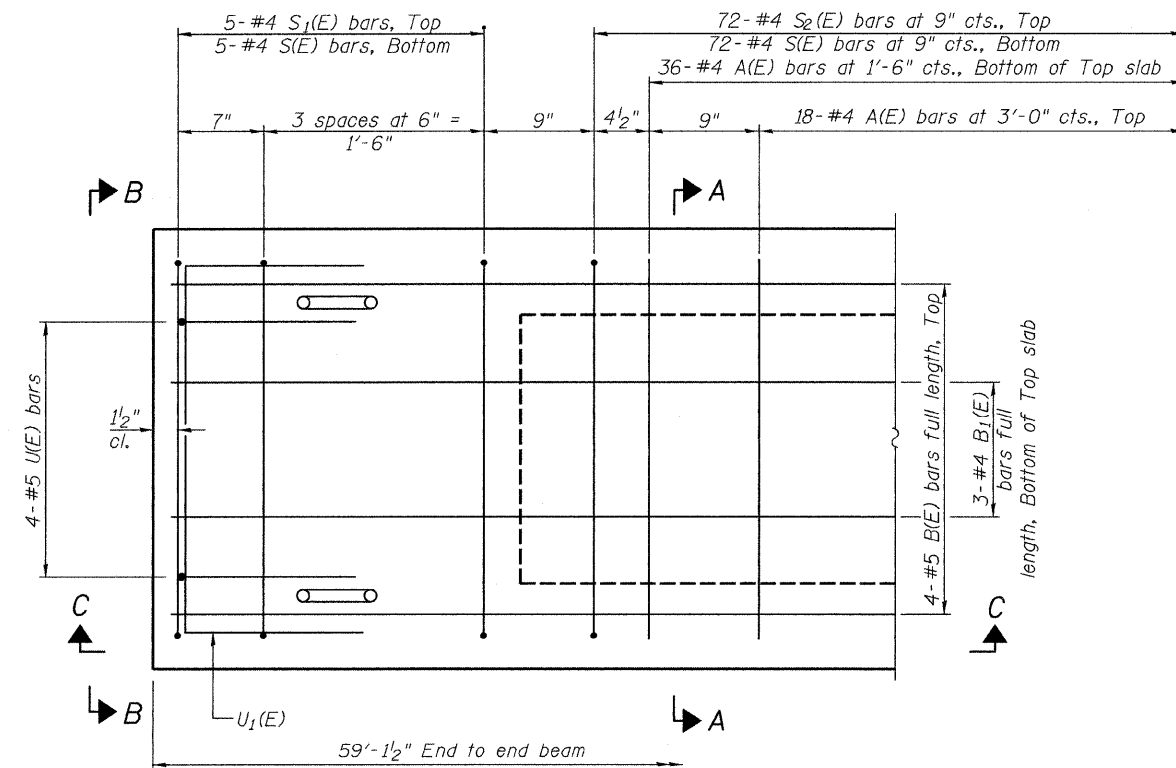
\* Total Length, Lap as necessary

Note: See sheet 4 of 12 for additional details and Bill of Material.

**SUPERSTRUCTURE DETAILS - SPAN 2 & 3**

**MORGAN COUNTY**  
**SECTION 07-00099-00-BR**  
**C.H. 28 OVER HENRY CREEK**

SHEET NO. 5  12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 28	07-00099-00-BR	MORGAN	48	13
	SN 069-3267		CONTRACT NO. 93545		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRS-0609(109)			

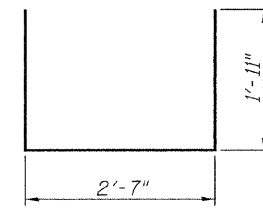


**PLAN VIEW**

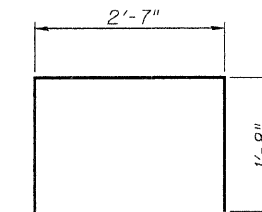
**MINIMUM BAR LAP**

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

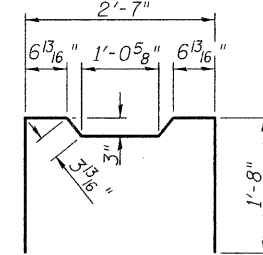
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



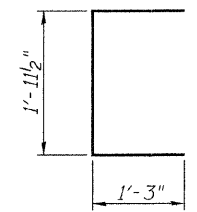
**BAR S(E)**



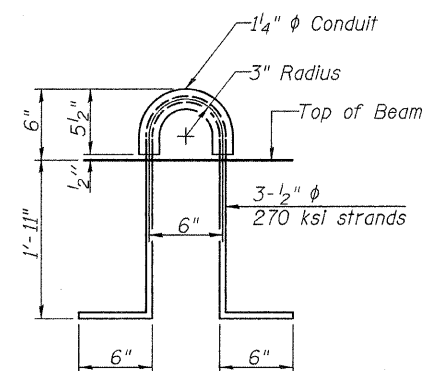
**BAR S1(E)**



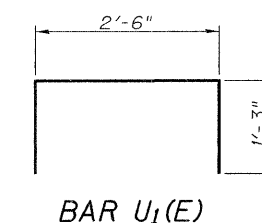
**BAR S2(E)**



**BAR U(E)**

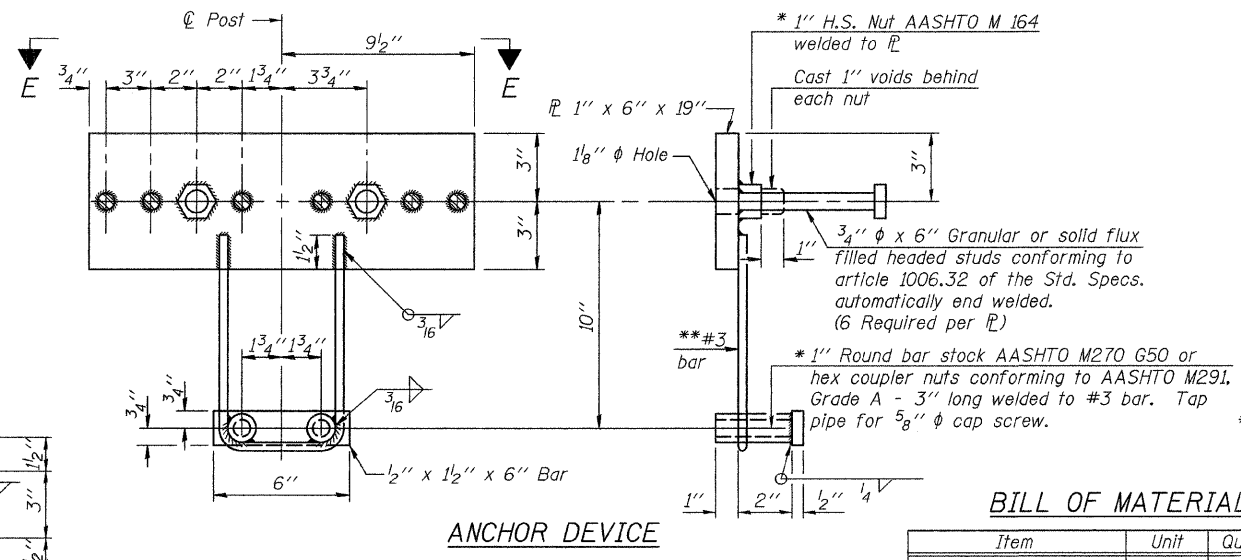
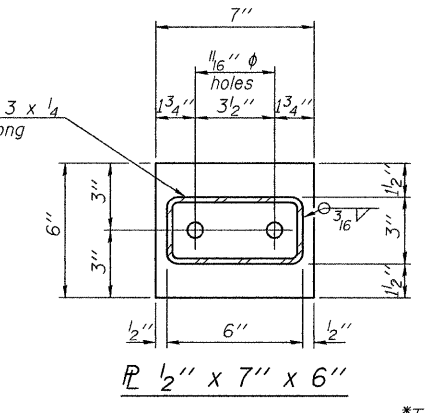
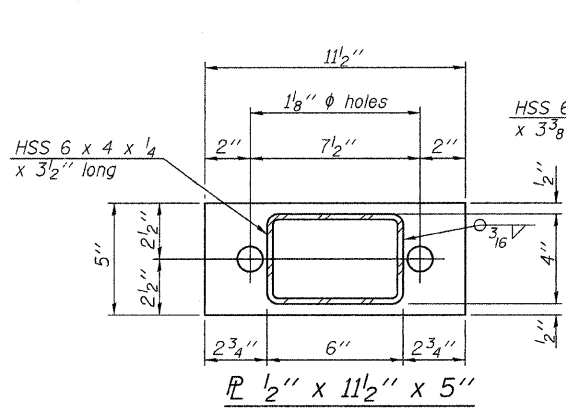
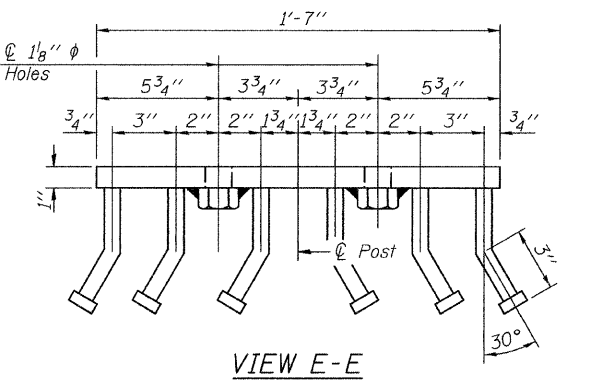
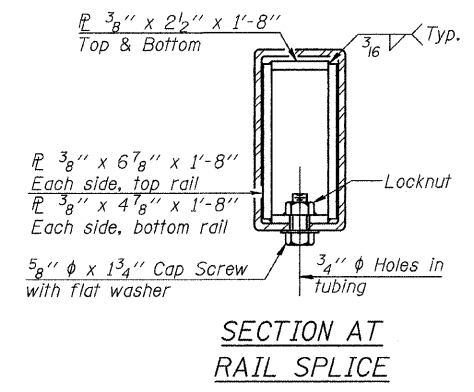
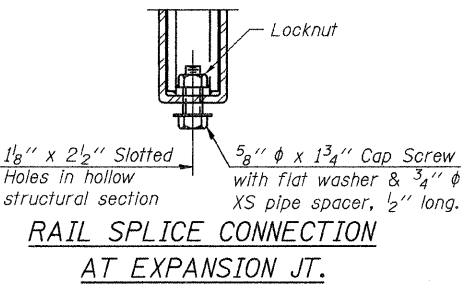
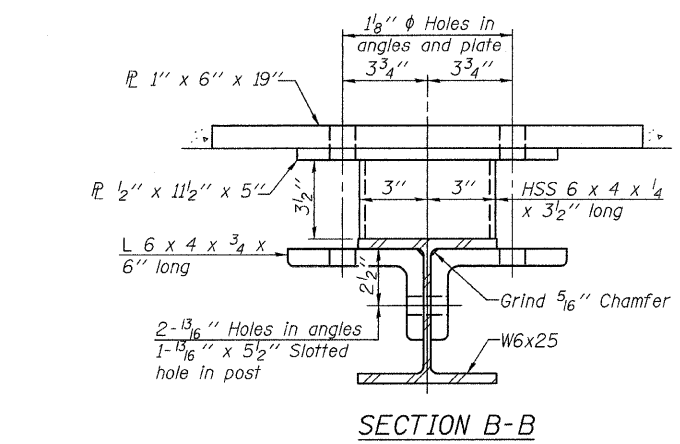
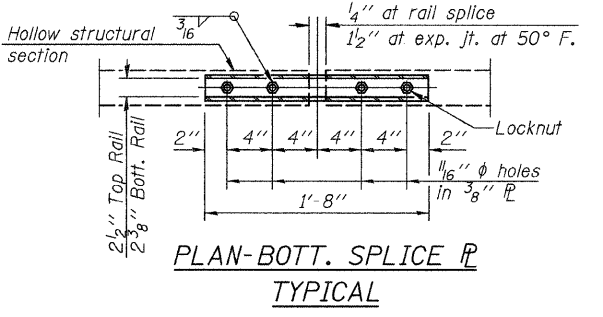
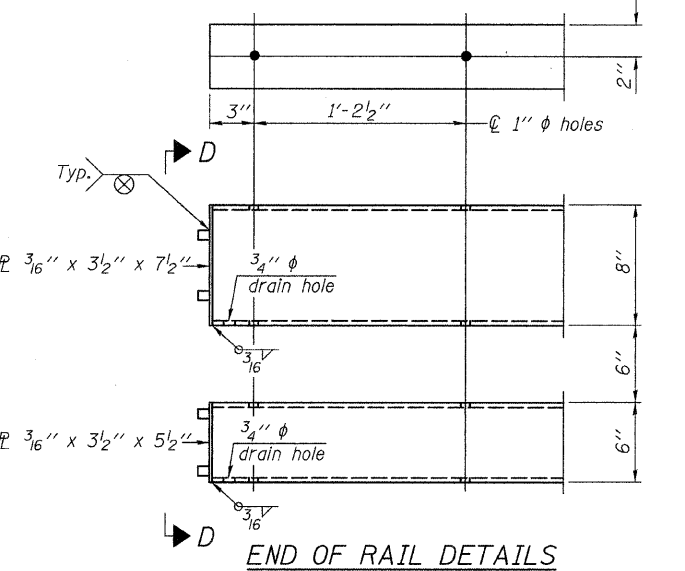
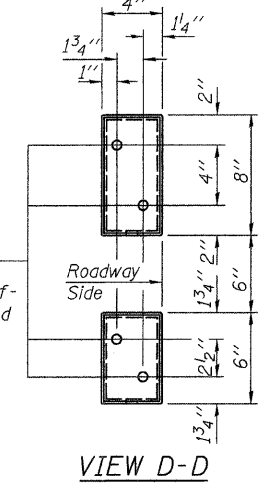
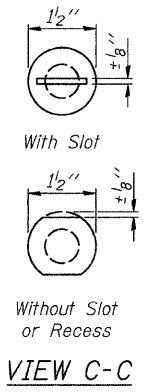
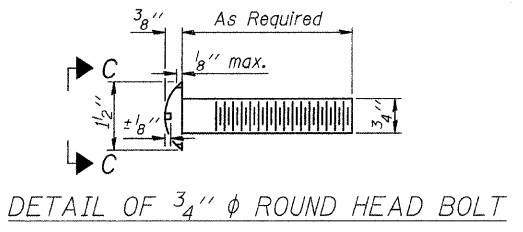
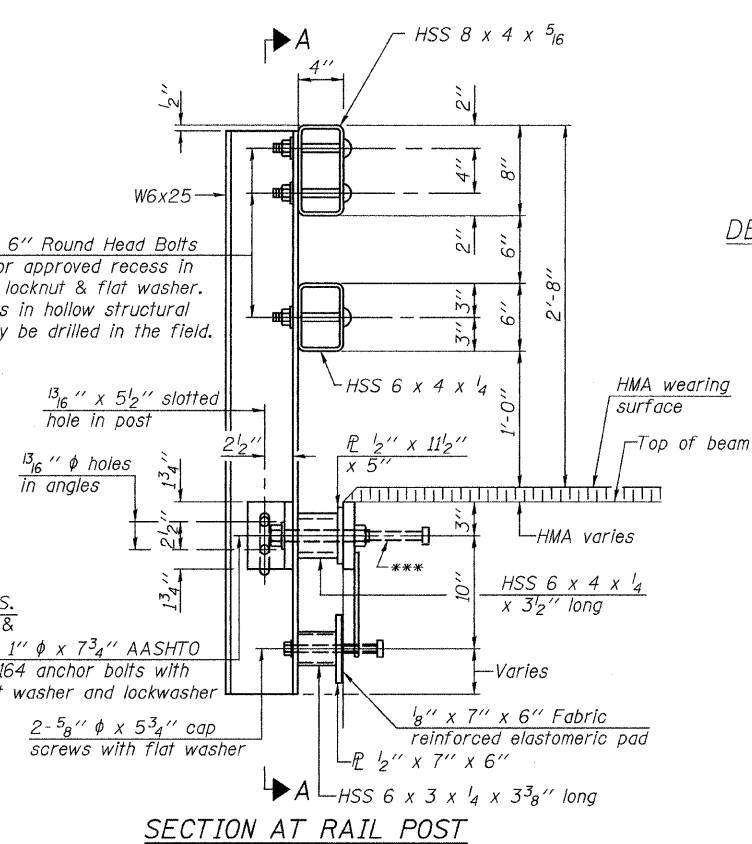
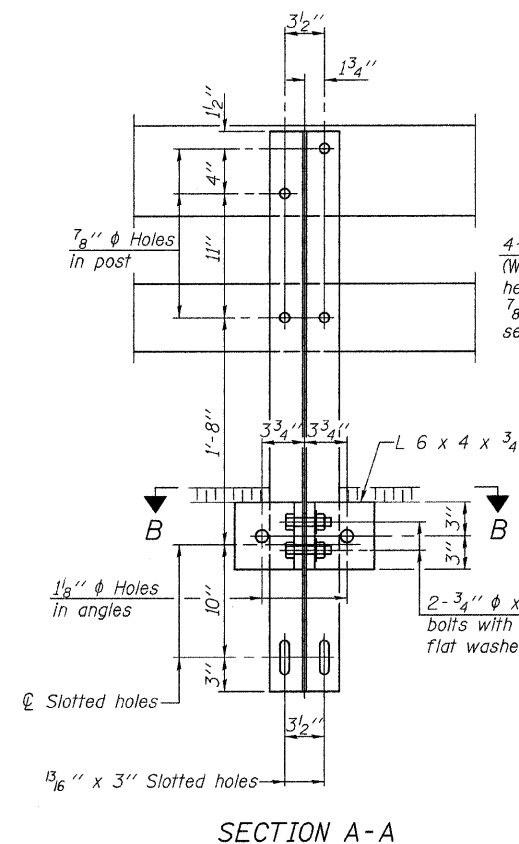


**LIFTING LOOP DETAIL**



**BAR U1(E)**

FOR RAIL POST SPACING SEE SH.#7 OF 12



**BILL OF MATERIAL**

Item	Unit	Quantity
① Steel Railing, Type SM	FOOT	328

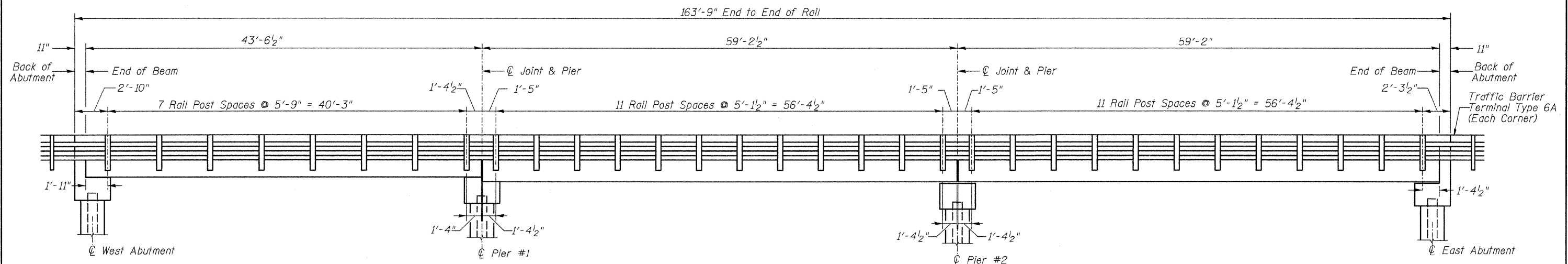
① See Special Provisions

**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.  
 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.

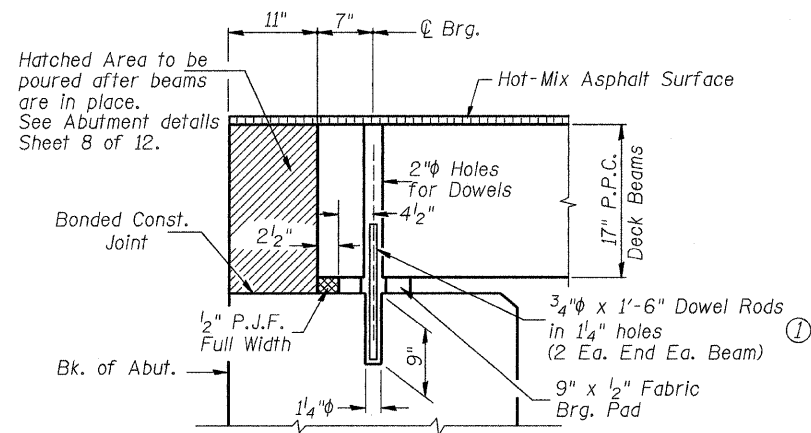
**TYPE SM STEEL RAILING**  
**MORGAN COUNTY**  
**SECTION 07-00099-00-BR**  
**C.H. 28 OVER HENRY CREEK**

SHEET NO. 6 12 SHEETS	ROUTE NO. CH 28	SECTION 07-00099-00-BR	COUNTY MORGAN	TOTAL SHEETS 48	SHEET NO. 14
	SN 069-3267		CONTRACT NO. 93545		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0609(109)		

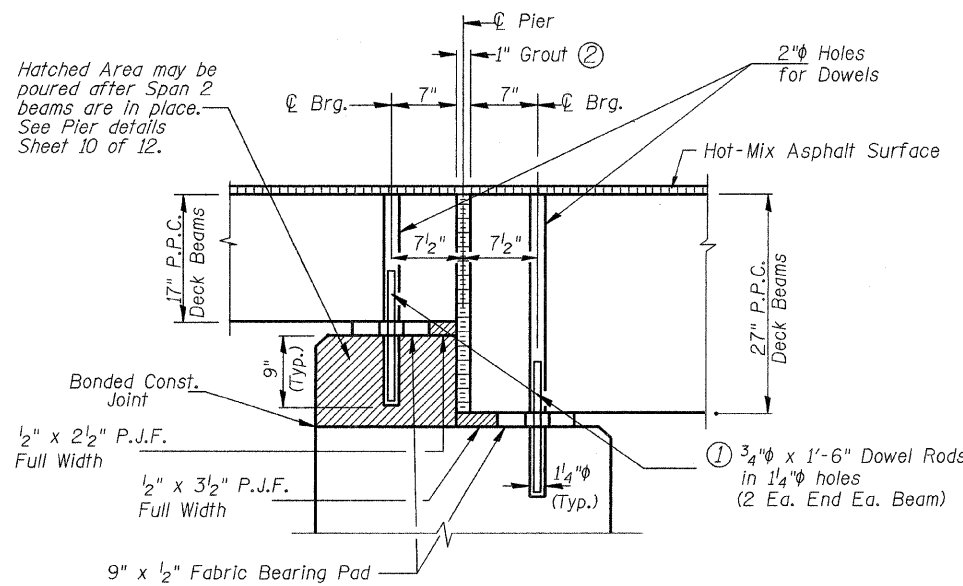
\*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.  
 \*\* Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".



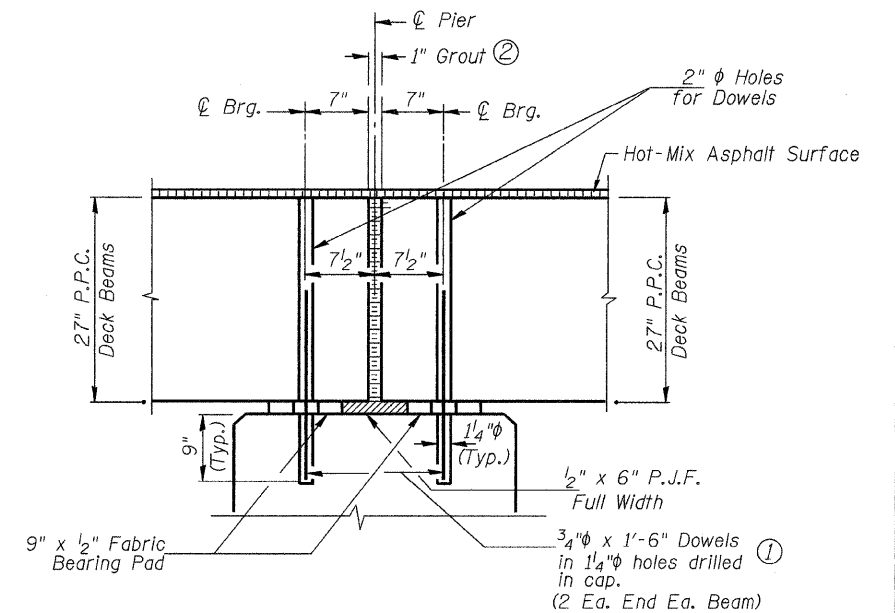
**RAIL POST SPACING**



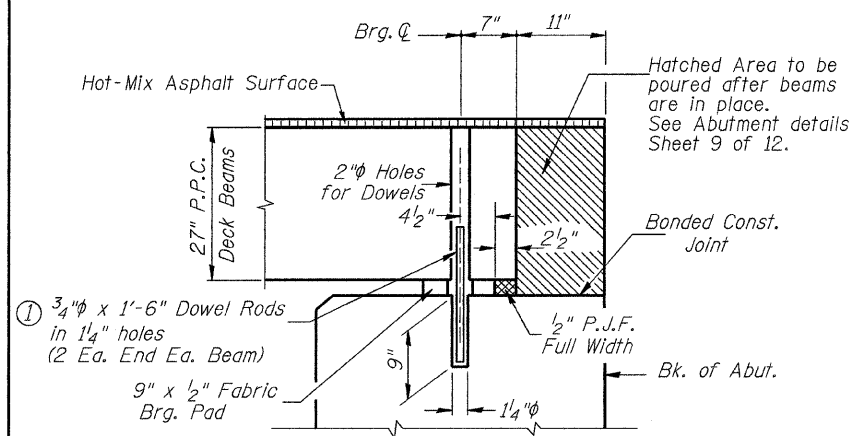
**SECTION THRU WEST ABUTMENT**



**SECTION THRU PIER 1**

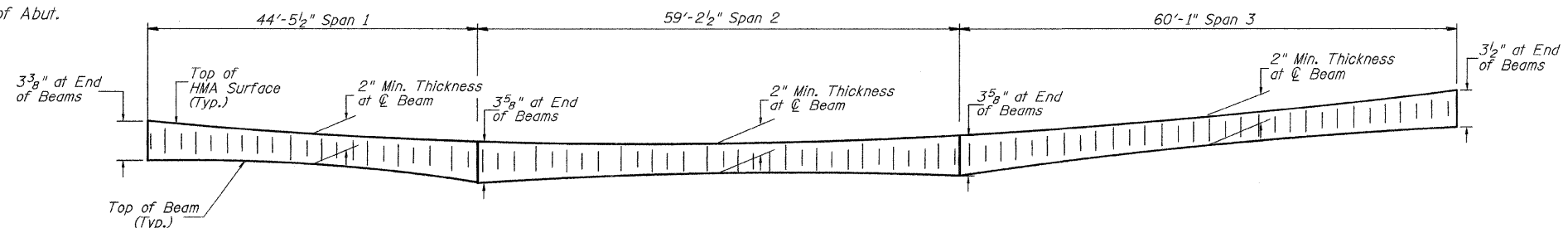


**SECTION THRU PIER 2**



**SECTION THRU EAST ABUTMENT**

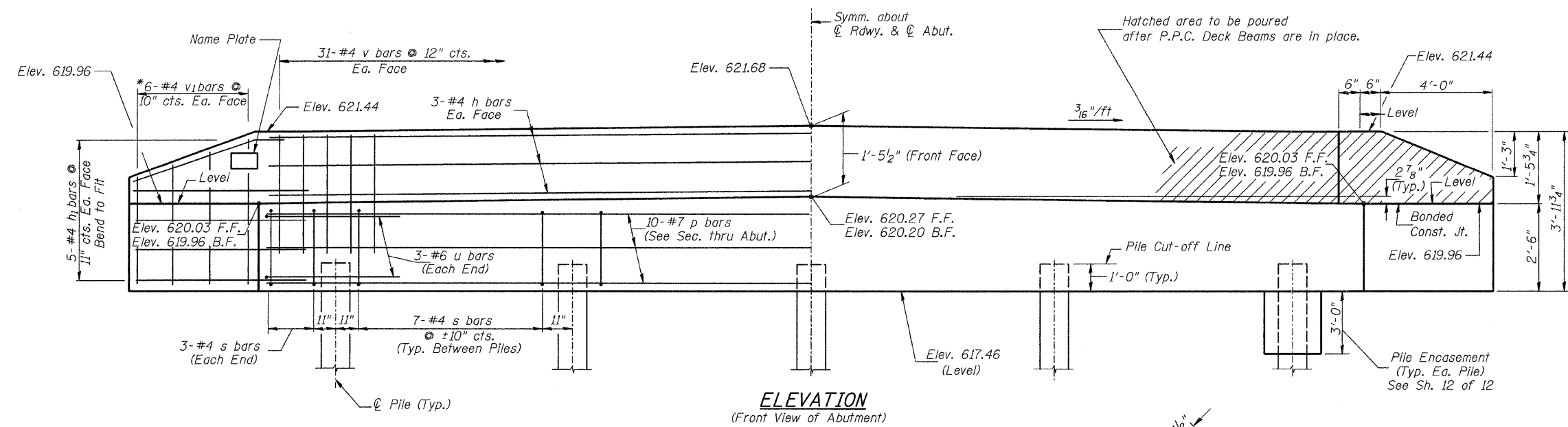
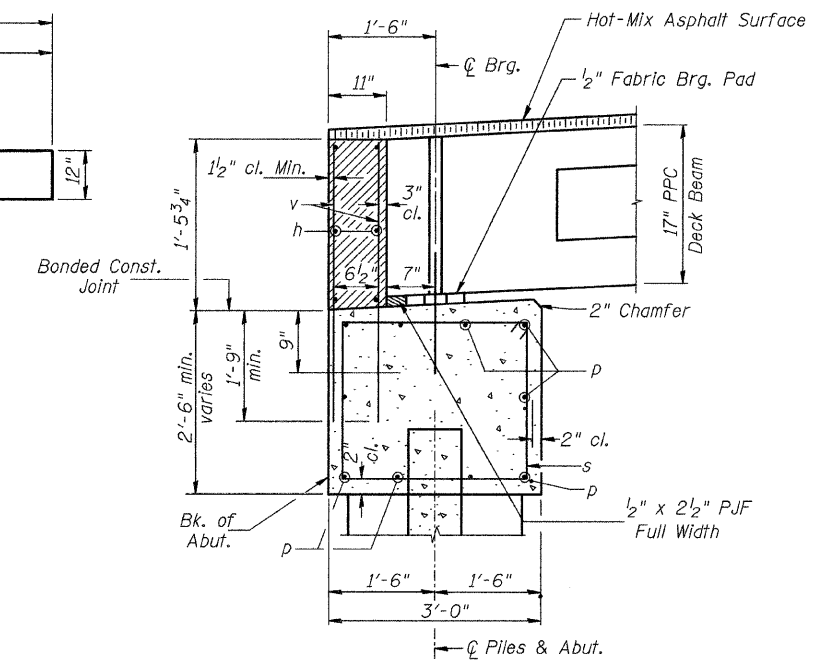
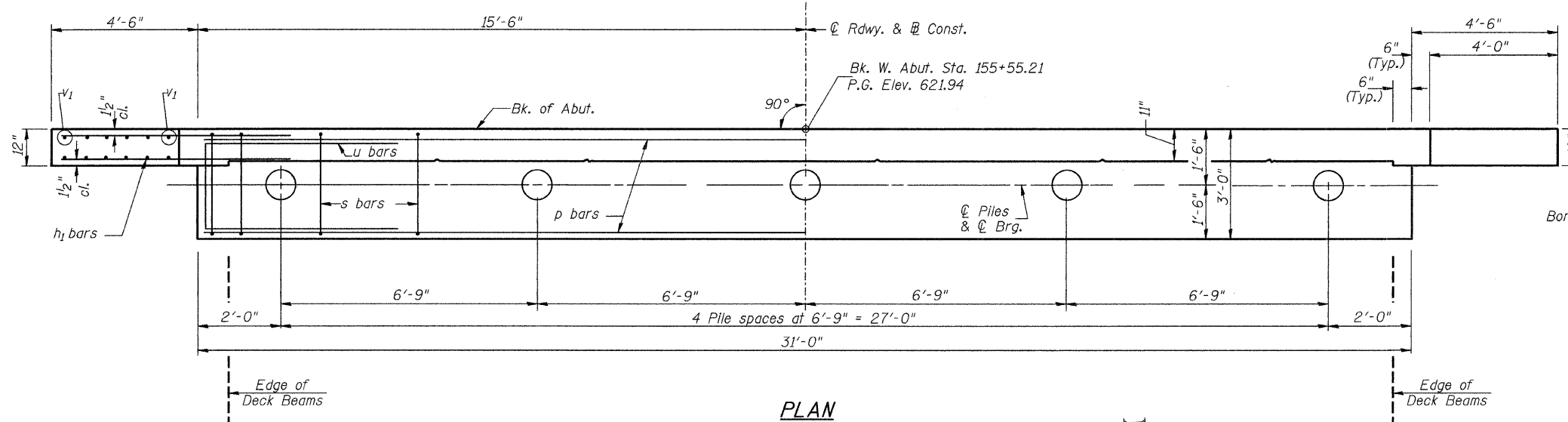
- ① Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hr.) prior to grouting the shear keys.
- ② 1" Joint shall be packed with a very dry mix of 2:1 sand and P.C. mortar. 1" Dimension may vary plus or minus to accommodate tolerance in beam lengths.



**HOT-MIX ASPHALT SURFACE PROFILE**  
Includes Waterproofing Membrane System

**RAIL POST SPACING AND SUPERSTRUCTURE DETAILS**  
**MORGAN COUNTY**  
**SECTION 07-00099-00-BR**  
**C.H. 28 OVER HENRY CREEK**

SHEET NO. 7 12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 28	07-00099-00-BR	MORGAN	48	15
SN 069-3267			CONTRACT NO. 93545		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0609(109)		



**WEST ABUTMENT  
BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
h	#4	30'-9"	—
h <sub>1</sub>	#4	6'-6"	—
p	#7	30'-9"	—
s	#4	10'-5"	□
u	#6	11'-7"	□
v	#4	3'-2"	—
v <sub>1</sub>	#4	6'-1"	—
Concrete Structures			CU YD 11.7
Reinforcement Bars			POUND 1,360
Structure Excavation			CU YD 30
Name Plates			EACH 1
Furnishing Metal Shell Piles 12"x0.250"			FOOT 152
① Driving Piles			FOOT 152
① Test Pile Metal Shells			EACH 1
Concrete Encasement			CU YD 1.3

① See Special Provisions

**DESIGN STRESSES**

$f'_c = 3,500$  p.s.i.  
 $f_y = 60,000$  p.s.i.

**NOTES**

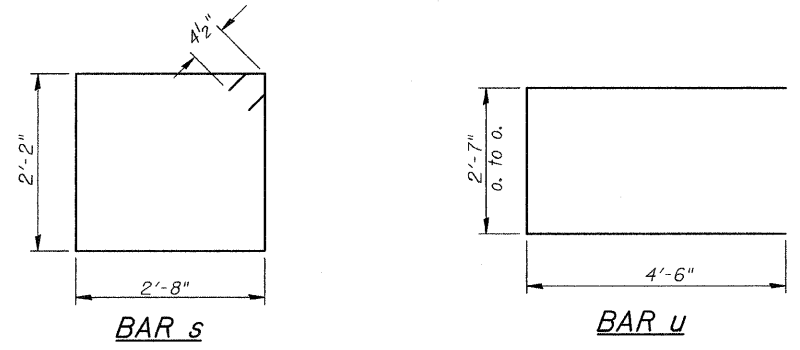
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to ASTM A706 Grade 60.

**PILE DATA**

Type & Size: Metal Shell 12"x0.025"  
Nominal Required Bearing: 220 kips  
Factored Resistance Available: 110 kips  
Est. Length: 38'  
No. Req'd.: 5 (Includes 1 Test Pile)

**BAR CUTTING DIAGRAM**

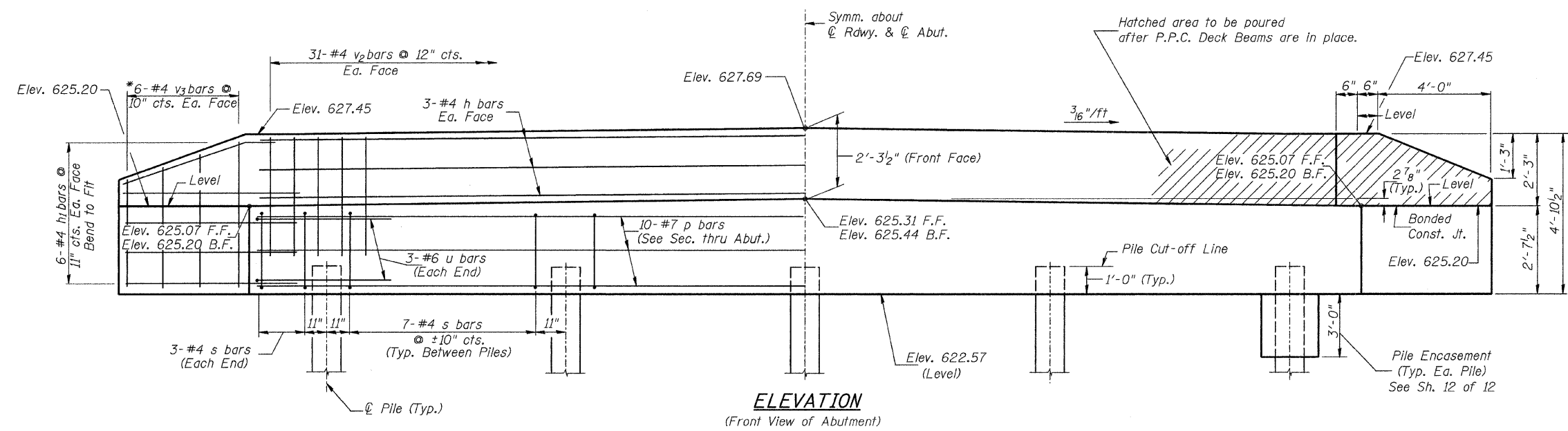
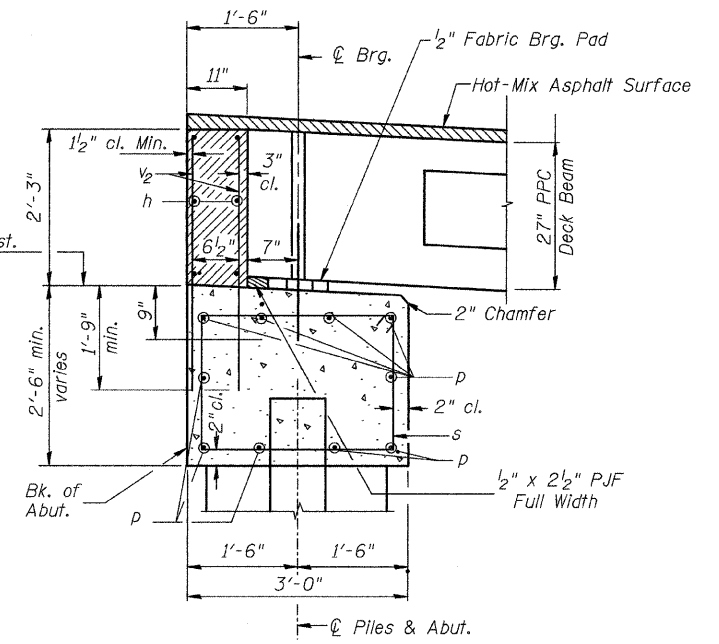
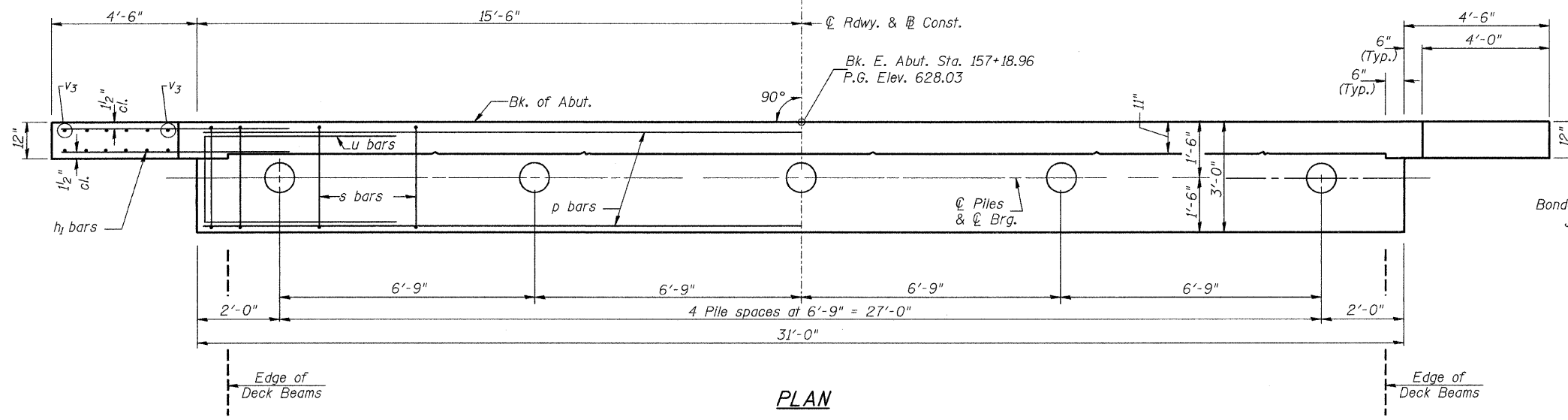
\* Order v<sub>1</sub> bars full length. Cut as shown and use remainder of bars in opposite face.



**WEST ABUTMENT  
MORGAN COUNTY  
SECTION 07-00099-00-BR  
C.H. 28 OVER HENRY CREEK**

SHEET NO. 8 12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 28	07-00099-00-BR	MORGAN	48	16
SN 069-3267			CONTRACT NO. 93545		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0609(109)		

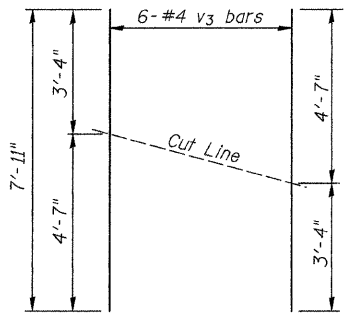




**EAST ABUTMENT BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
h	6 #4	30'-9"	—
h <sub>1</sub>	24 #4	6'-6"	—
p	10 #7	30'-9"	—
s	34 #4	10'-5"	□
u	6 #6	11'-7"	□
v <sub>2</sub>	62 #4	4'-0"	—
v <sub>3</sub>	12 #4	7'-11"	—
Concrete Structures	CU YD	13.0	
Reinforcement Bars	POUND	1,430	
Structure Excavation	CU YD	40	
Furnishing Metal Shell Piles 12"x0.250"	FOOT	232	
Driving Piles	FOOT	232	
Test Pile Metal Shells	EACH	1	
Concrete Encasement	CU YD	1.3	

① See Special Provisions



- NOTES**
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
  - Reinforcement bars shall conform to ASTM A706 Grade 60.

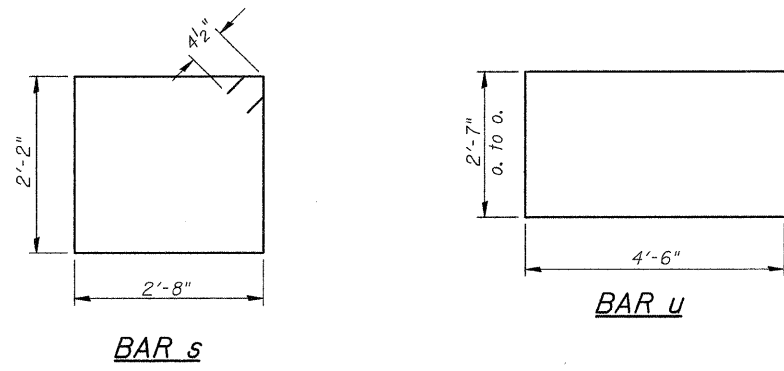
**DESIGN STRESSES**

f'<sub>c</sub> = 3,500 p.s.i.  
f<sub>y</sub> = 60,000 p.s.i.

**PILE DATA**

Type & Size: Metal Shell 12"x0.250"

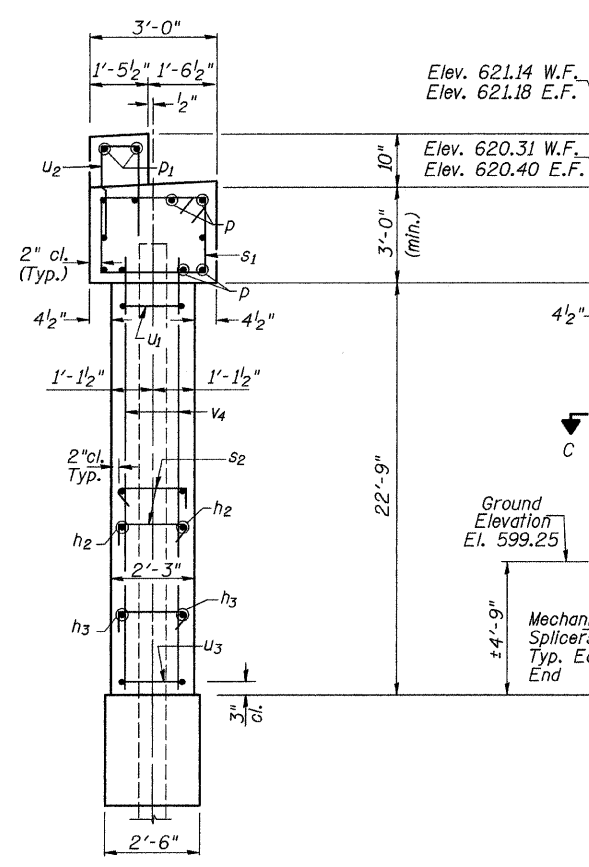
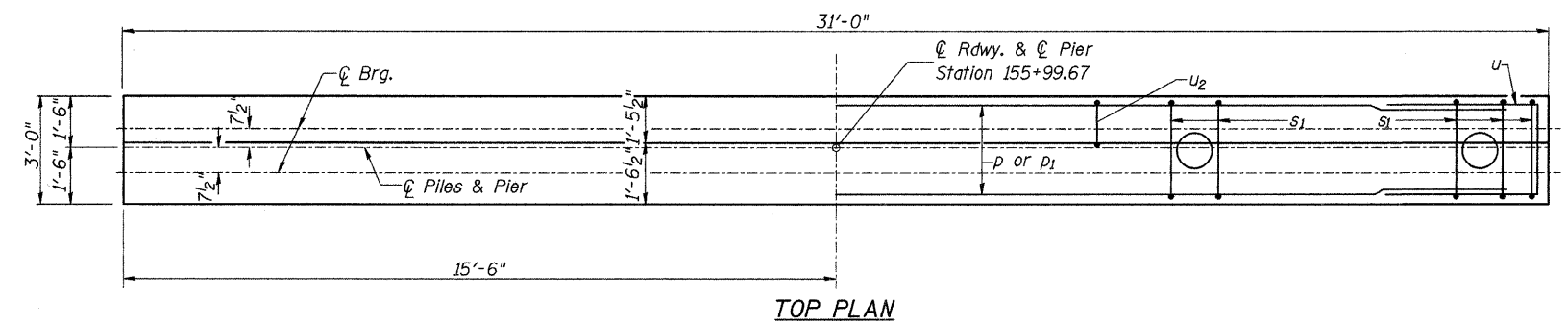
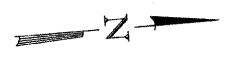
Nominal Required Bearing: 290 kips  
Factored Resistance Available: 145 kips  
Est. Length: 58'  
No. Req'd.: 5 (Includes 1 Test Pile)



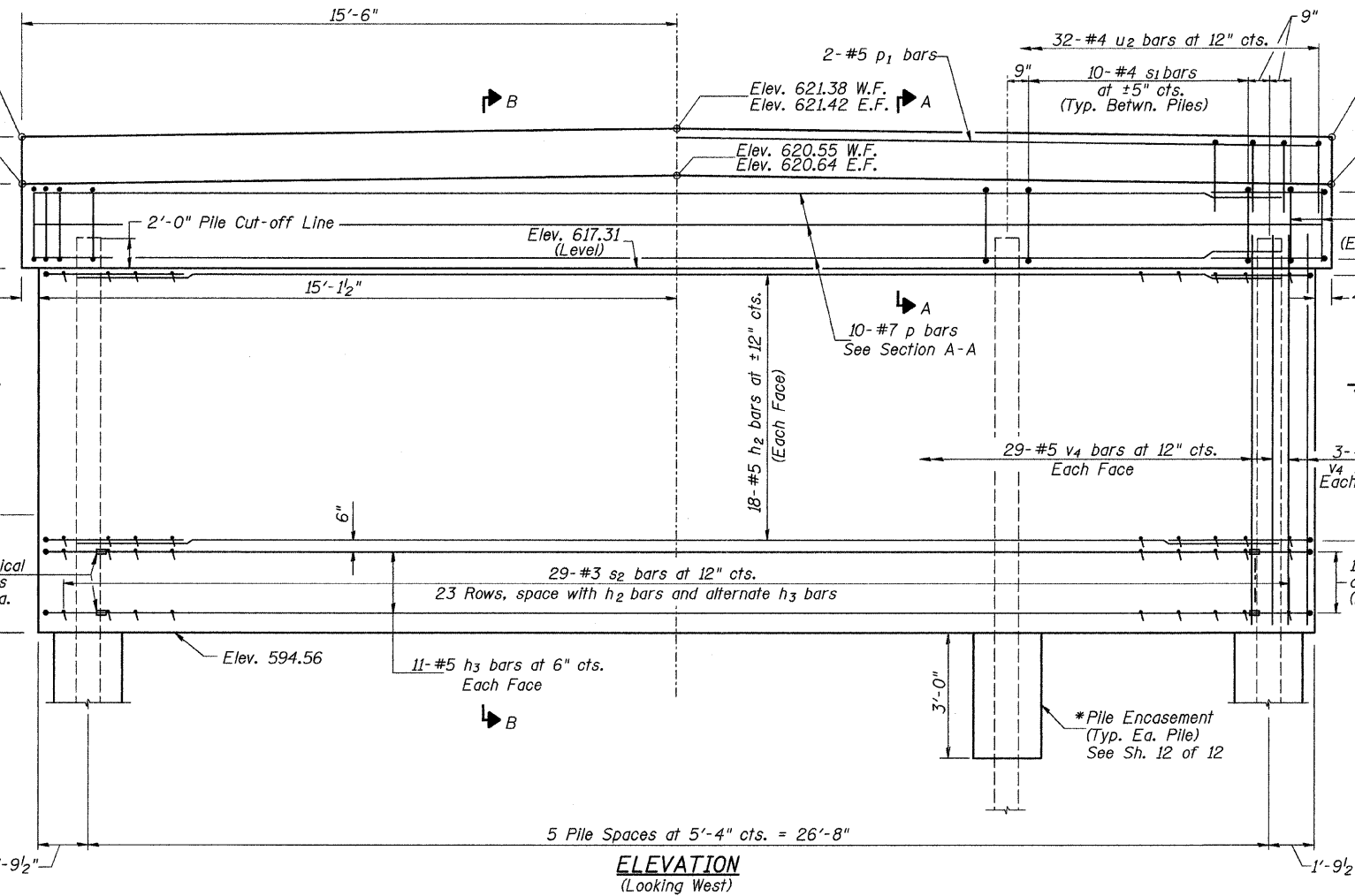
**EAST ABUTMENT MORGAN COUNTY SECTION 07-00099-00-BR C.H. 28 OVER HENRY CREEK**

SHEET NO. 9 12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 28	07-00099-00-BR	MORGAN	48	17
SN 069-3267			CONTRACT NO. 93545		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0609109		

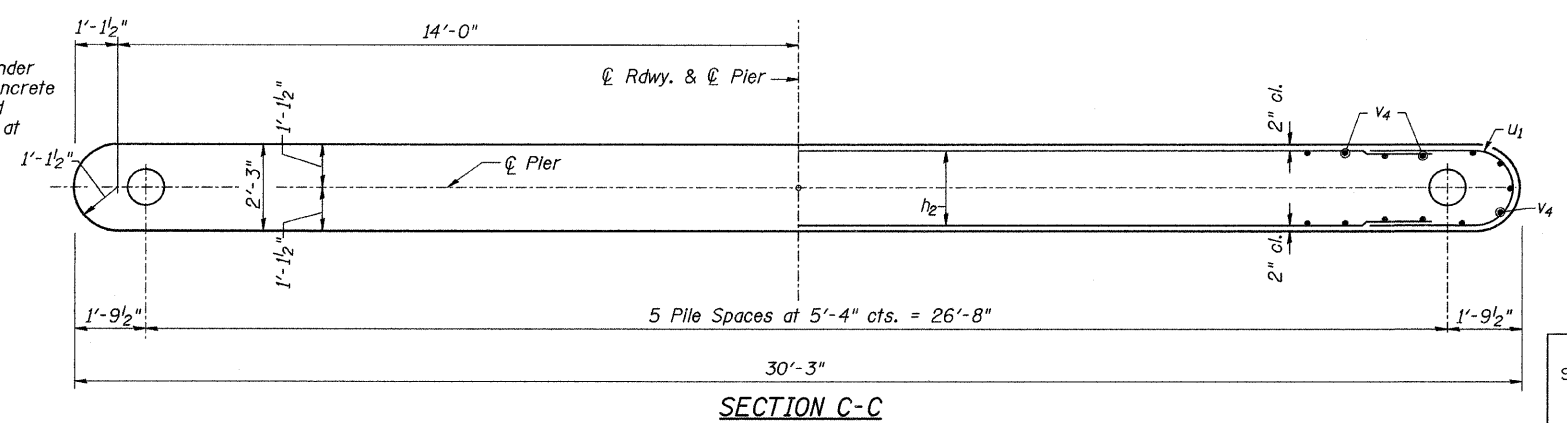
NOTES:  
All edges shall be standard  
3/4" chamfer



SECTION B-B

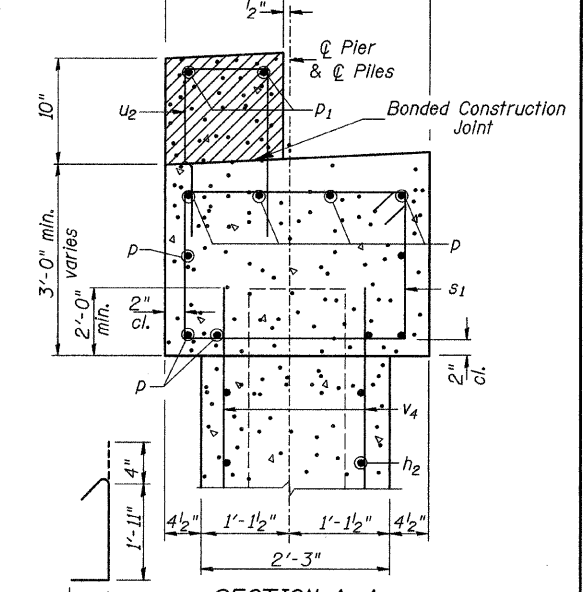


ELEVATION  
(Looking West)



SECTION C-C

Hatched Area may be poured after Span 2 PPC Beams are set.



SECTION A-A

PIER #1  
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h2	36	#5	28'-0"	—
h3	22	#5	25'-0"	—
p	10	#7	30'-9"	—
p1	2	#5	30'-9"	—
s1	56	#4	11'-5"	□
s2	667	#3	2'-11"	└┘
u	6	#6	11'-7"	┌┐
u1	36	#5	7'-0"	┌┐
u2	32	#4	5'-5"	┌┐
u3	22	#5	6'-0"	┌┐
v4	64	#5	24'-7"	—
Concrete Structures			CU YD	62.8
Reinforcement Bars			POUND	5,740
Structure Excavation			CU YD	35
Furnishing Metal Shell Piles 14"x0.312"			FOOT	395
① Driving Piles			FOOT	395
① Test Pile Metal Shells			EACH	1
① Mechanical Splicers			EACH	44
Concrete Encasement			CU YD	2.6
① Underwater Structure Excavation Protection - Location 1			EACH	1

① See Special Provisions

\*If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater in forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water level at the time of construction.

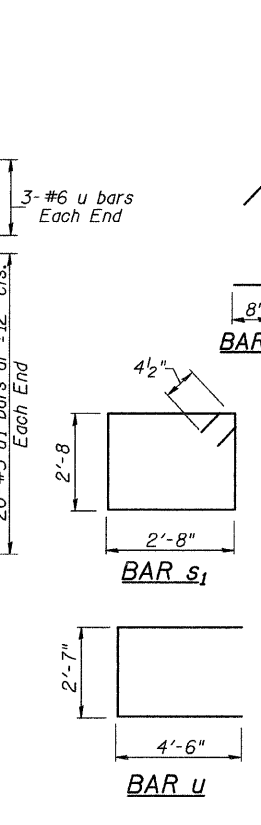
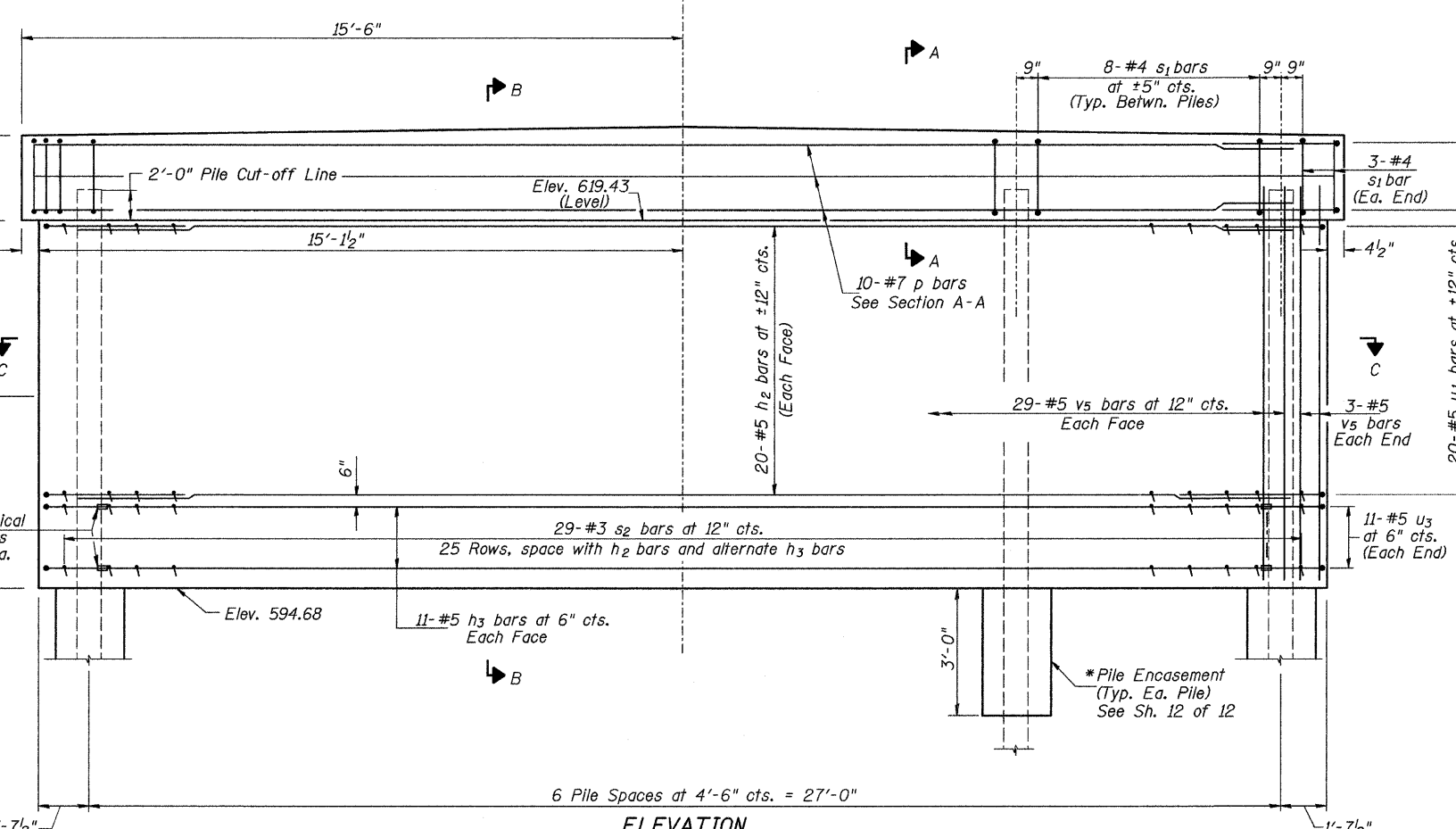
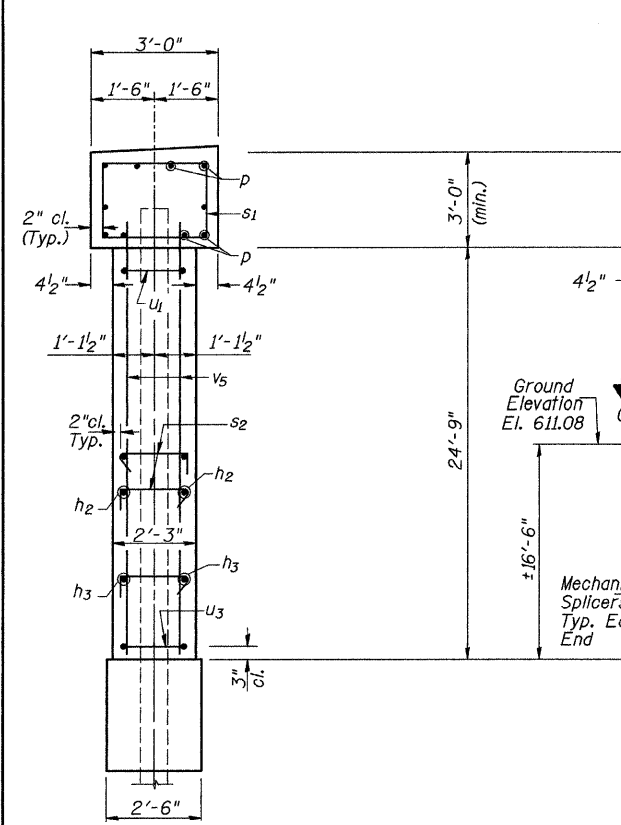
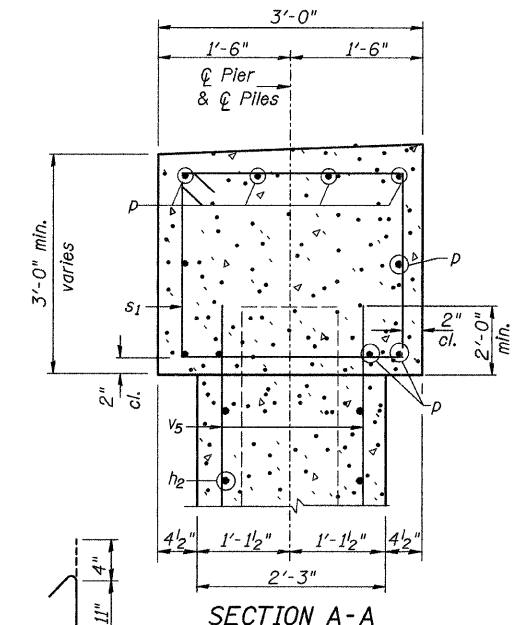
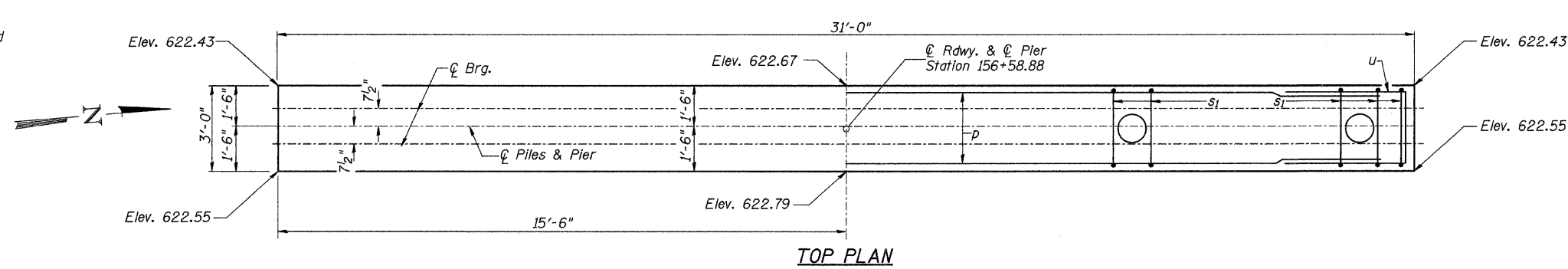
PILE DATA

Type & Size: Metal Shell 14"x0.312"  
Nominal Required Bearing: 420 kips  
Factored Resistance Available: 210 kips  
Est. Length: 79'  
No. Req'd: 6 (Includes 1 Test Pile)

SHEET NO. 10 12 SHEETS	ROUTE NO. CH 28	SECTION 07-00099-00-BR	COUNTY MORGAN	TOTAL SHEETS 48	SHEET NO. 18
	S.N. 069-3267		CONTRACT NO. 98545		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0609(109)		

PIER #1  
MORGAN COUNTY  
SECTION 07-00099-00-BR  
C.H. 28 OVER HENRY CREEK

NOTES:  
All edges shall be standard  
3/4" chamfer



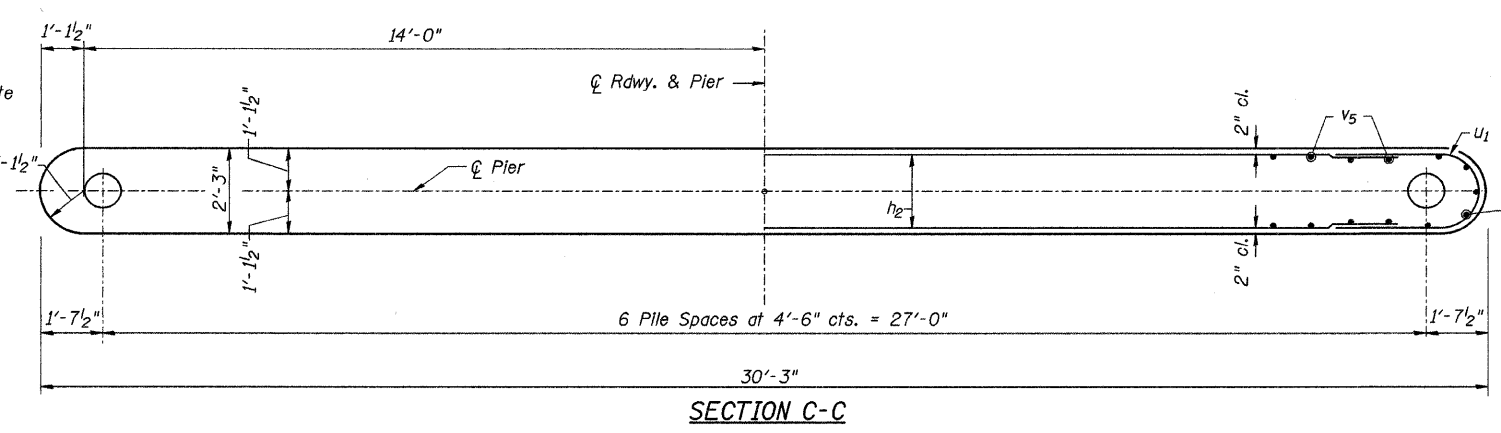
**PIER #2  
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h <sub>2</sub>	40	#5	28'-0"	—
h <sub>3</sub>	22	#5	25'-0"	—
p	10	#7	30'-9"	—
s <sub>1</sub>	54	#4	11'-5"	□
s <sub>2</sub>	725	#3	2'-11"	└┘
u	6	#6	11'-7"	□
u <sub>1</sub>	40	#5	7'-0"	└┘
u <sub>3</sub>	22	#5	6'-0"	└┘
v <sub>5</sub>	64	#5	26'-7"	—
Concrete Structures		CU YD	65.0	
Reinforcement Bars		POUND	5,890	
Structure Excavation		CU YD	130	
Furnishing Metal Shell Piles 14"x0.312"		FOOT	552	
① Driving Piles		FOOT	552	
① Test Pile Metal Shells		EACH	1	
① Mechanical Splicers		EACH	44	
Concrete Encasement		CU YD	3.0	
① Underwater Structure Excavation Protection - Location 2		EACH	1	

① See Special Provisions

\*If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater in forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water level at the time of construction.

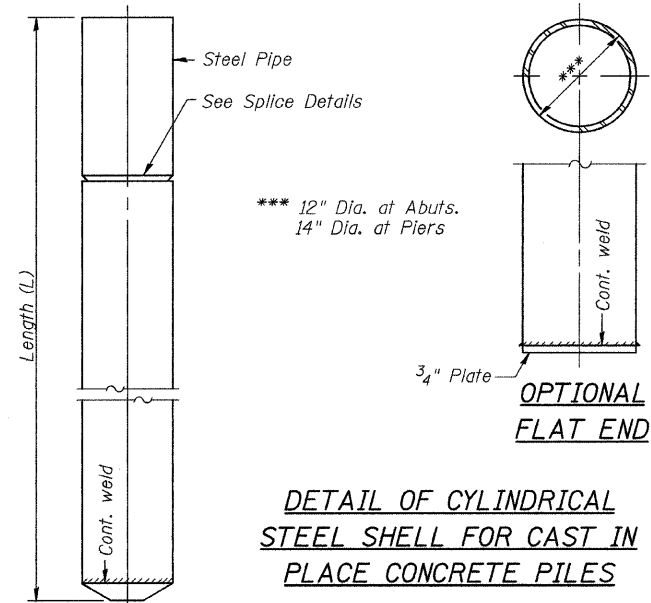
**PILE DATA**  
Type & Size: Metal Shell 14"x0.312"  
Nominal Required Bearing: 400 kips  
Factored Resistance Available: 200 kips  
Est. Length: 92'  
No. Req'd: 7 (Includes 1 Test Pile)



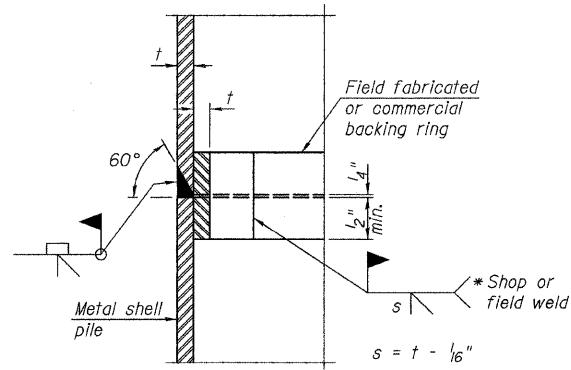
**PIER #2  
MORGAN COUNTY  
SECTION 07-00099-00-BR  
C.H. 28 OVER HENRY CREEK**

SHEET NO. 11 12 SHEETS	ROUTE NO. CH 28	SECTION 07-00099-00-BR	COUNTY MORGAN	TOTAL SHEETS 48	SHEET NO. 19
	S.N. 069-3267		CONTRACT NO. 93545		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0609(109)		

Notes: Driving and bearing ends of pipe shall be cut square. The thickness of the shells shall be 0.25 inches for 12" piles and 0.312 inches for 14" piles with a tolerance of 5%. The shells shall be according to Article 1006.05(a) of the Standard Specifications, and shall be ASTM A252 Grade 3.

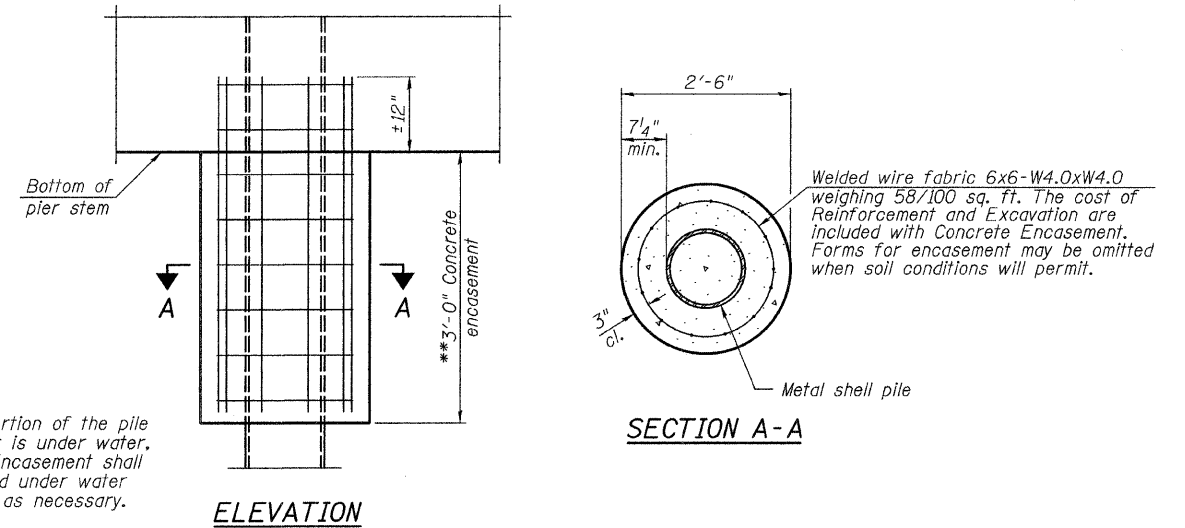


**DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES**

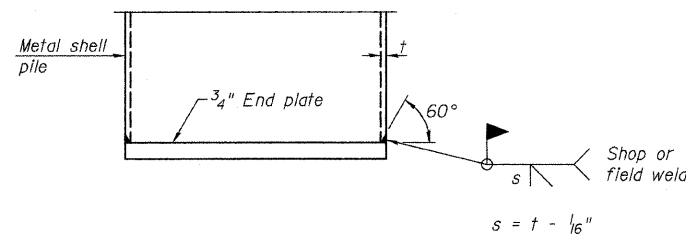


**COMPLETE PENETRATION WELD SPLICE**

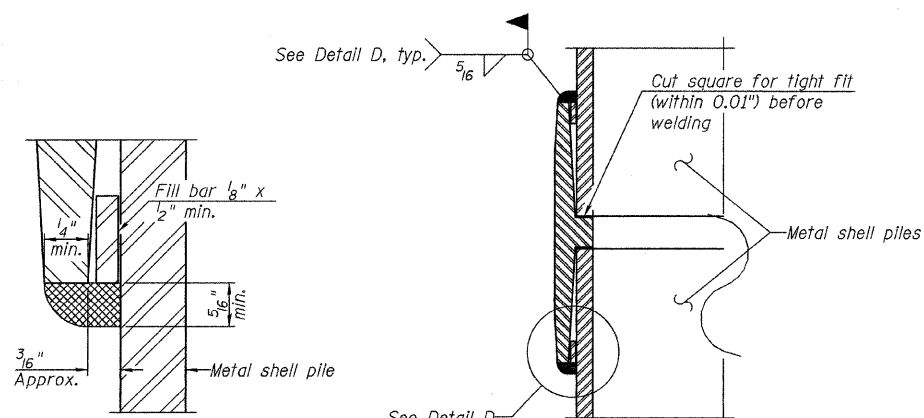
\* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**DETAIL OF PROTECTION FOR METAL SHELLS AT PIERS**



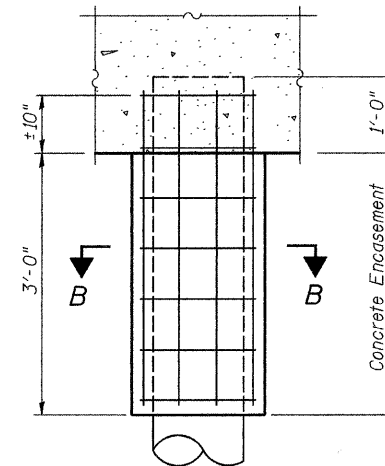
**END PLATE ATTACHMENT**



**DETAIL D**

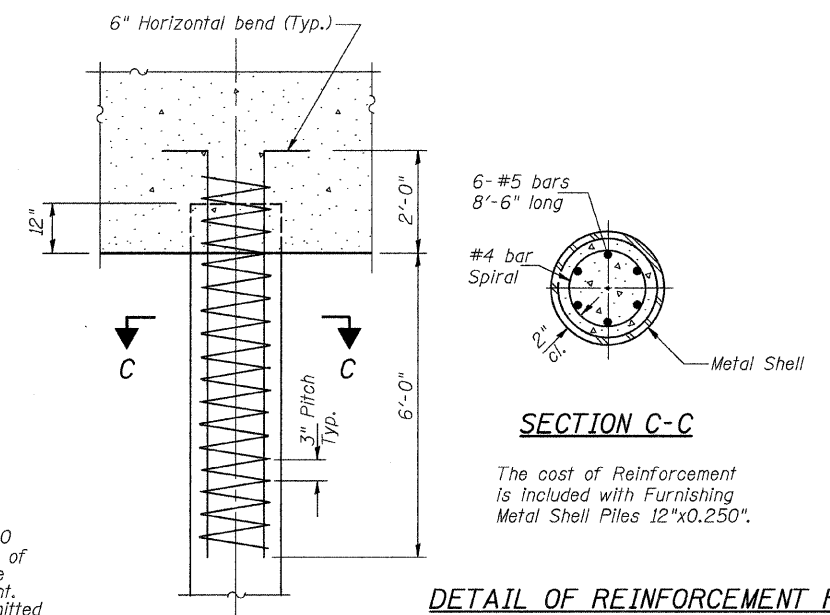
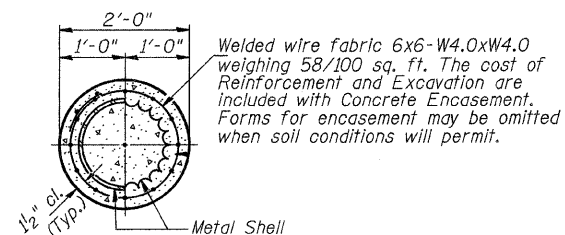
Notes: The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them. Pile segments shall be driven to solid contact with splicer before welding.

**WELDED COMMERCIAL SPLICE**



**SECTION B-B**

**DETAIL OF METAL SHELL PILE ENCASMENT AT ABUTMENTS**

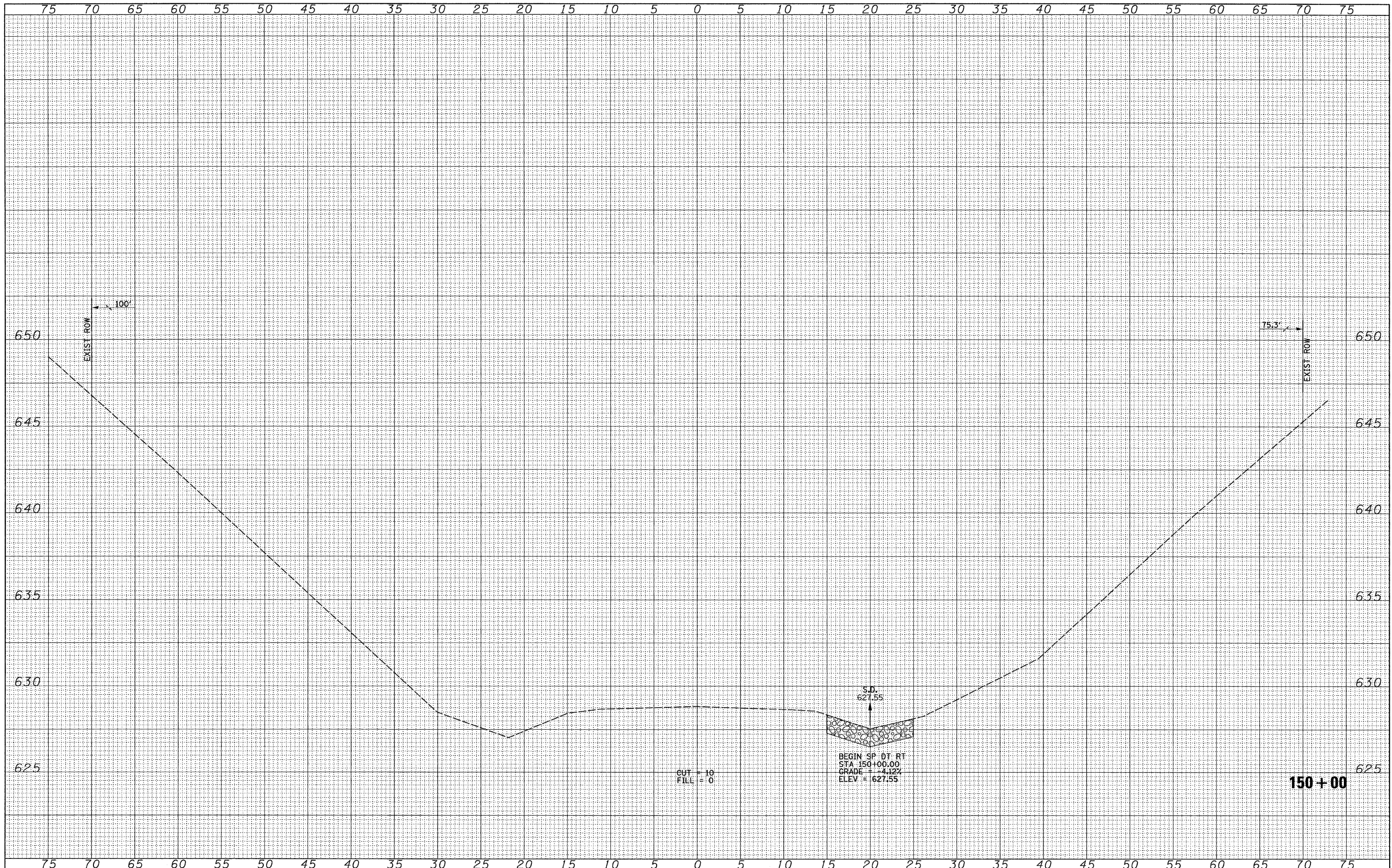


**SECTION C-C**

**DETAIL OF REINFORCEMENT FOR METAL SHELLS AT ABUTMENTS**

**METAL SHELL PILE DETAILS  
MORGAN COUNTY  
SECTION 07-00099-00-BR  
C.H. 28 OVER HENRY CREEK**

SHEET NO. 12	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 28	07-00099-00-BR	MORGAN	48	20
12 SHEETS	S.N. 069-3267		CONTRACT NO. 93545		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRS-0609(109)		



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

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

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		DRAWN -	REVISED -
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PLT DATE =	1/6/2011	DATE -	REVISED -

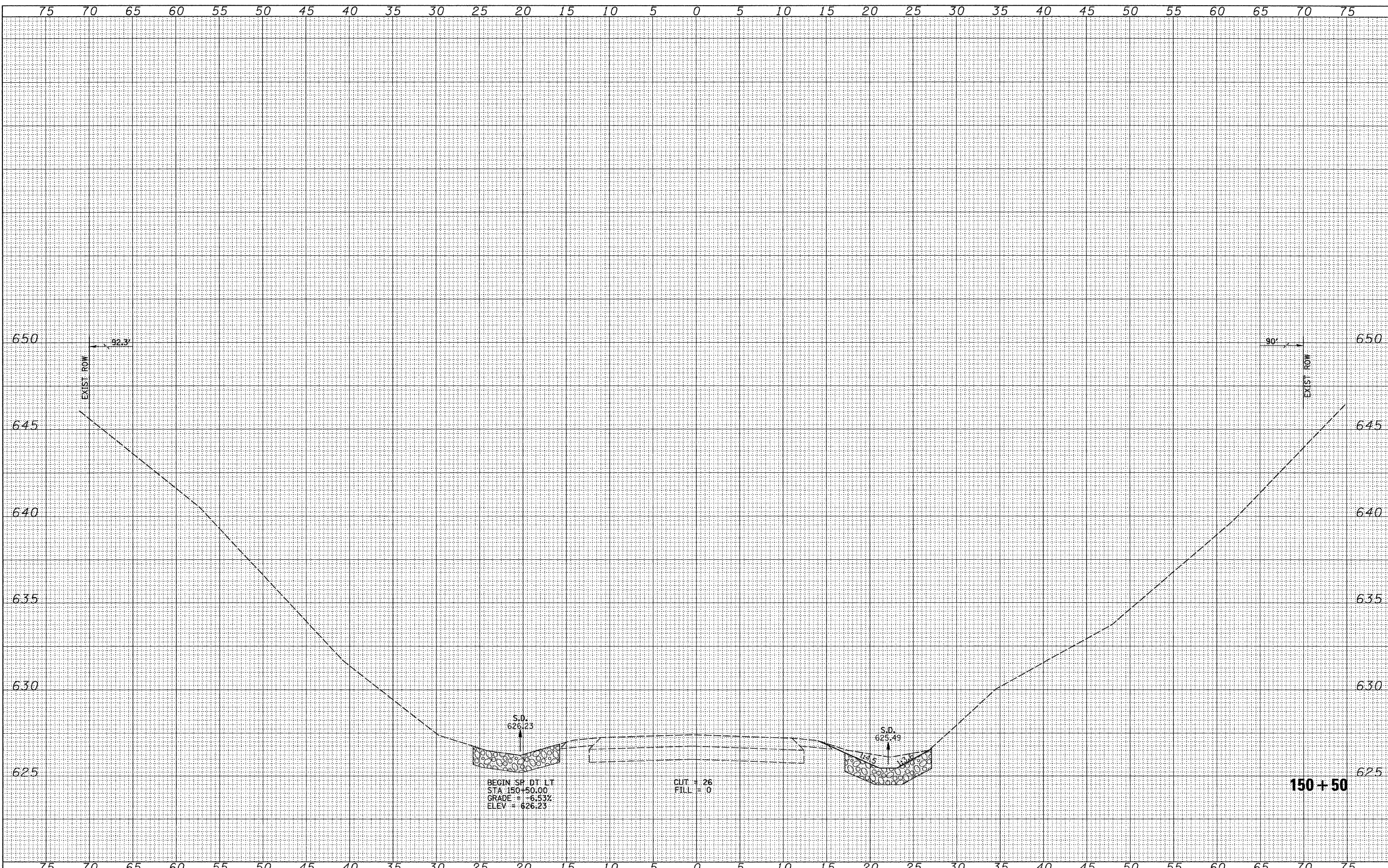
**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**  
 SCALE: HORIZ. 1" = 50'  
 VERT. 1" = 5'  
 SHEET NO. 1 OF 28 SHEETS  
 STA. 150+00 TO STA. 150+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	21
CONTRACT NO. 93543				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR5-0609(109)				

FINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
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ORIGINAL SURVEY	DATE
SURVEYED	BY
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PLOT DATE = 1/6/2011	DATE -	REVISED -

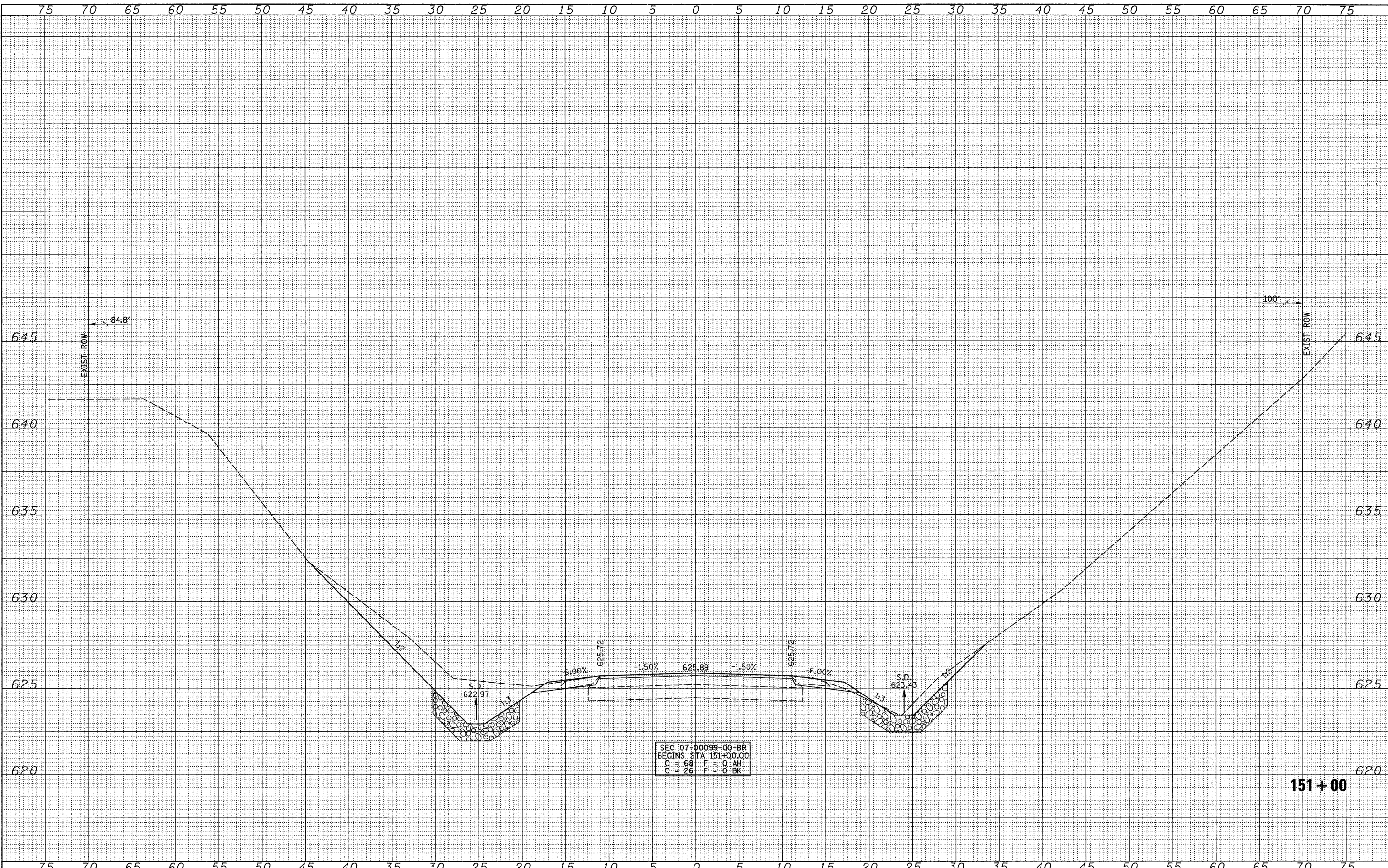
**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**

SCALE: HORIZ: 1"=50'  
 VERT: 1"=5'

SHEET NO. 2 OF 28 SHEETS    STA. 150+50    TO STA. 150+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	22
CONTRACT NO. 99545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR5-06091099				



SEC 07-00099-00-BR  
 BEGINS STA 151+00.00  
 C = 68 F = 0 AH  
 C = 26 F = 0 BK

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FINAL SURVEY	
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NOTE BOOK	
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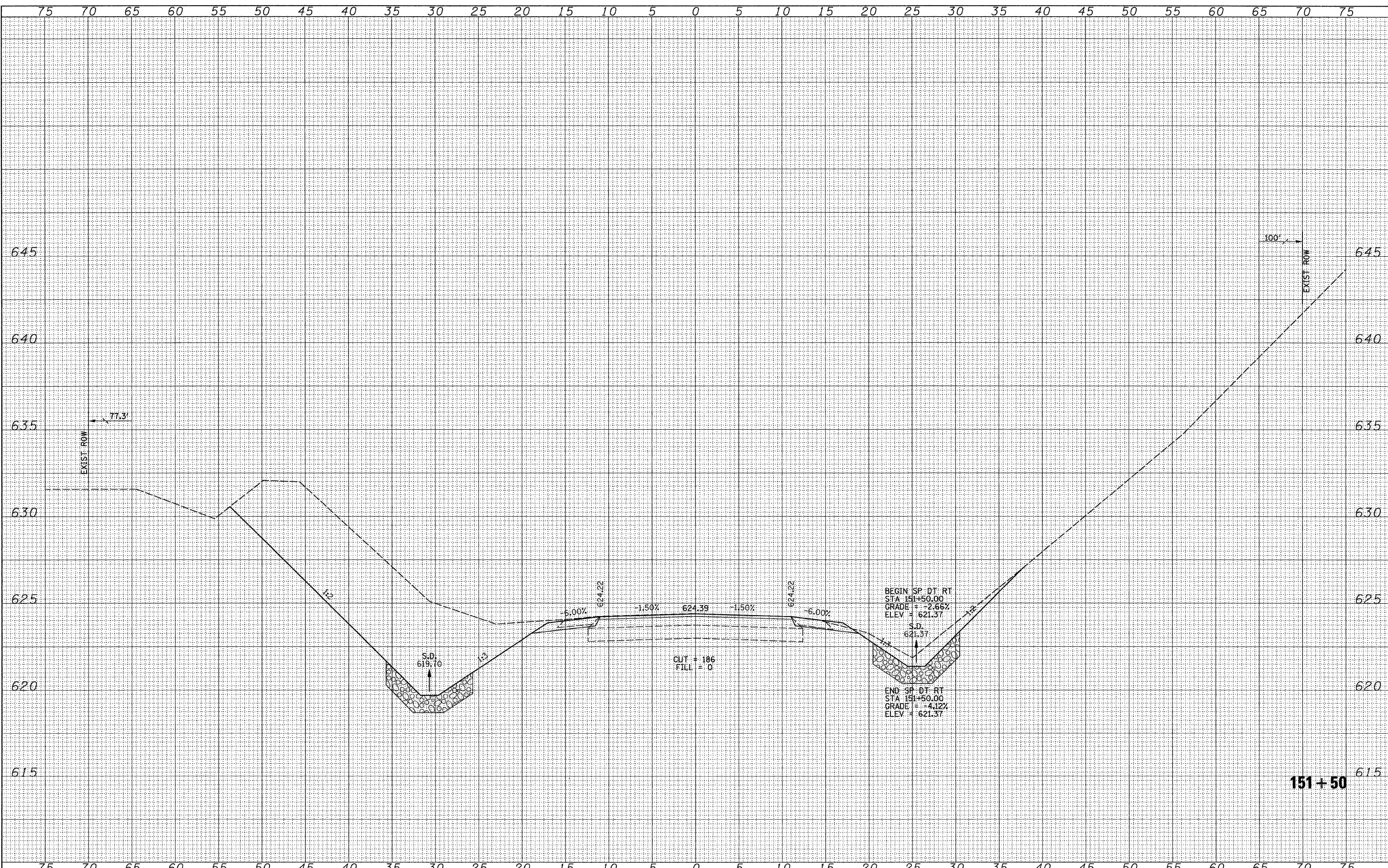
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PLOT SCALE = 5.0000' / IN.	CHECKED -	REVISED -
PLOT DATE = 1/6/2011	DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**  
 SCALE: HORIZ: 1"=50' VERT: 1"=5' SHEET NO. 3 OF 28 SHEETS STA. 151+00 TO STA. 151+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	23
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 (ILLINOIS) FED. AID PROJECT BRS-06091091				



DATE	
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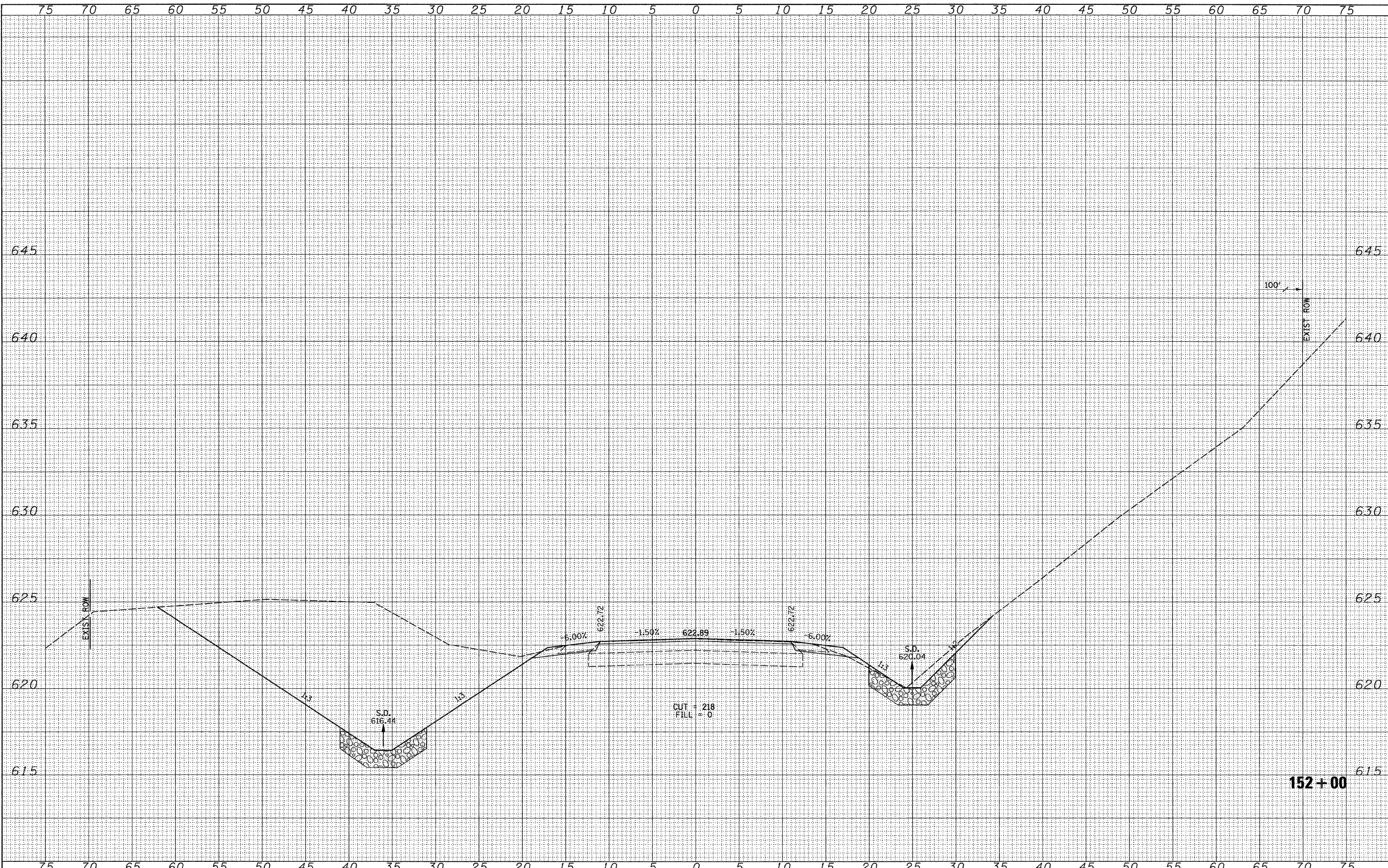
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PLOT DATE = 1/6/2011	DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**  
 SCALE: HORIZ: 1"=50'  
 VERT: 1"=2.5'  
 SHEET NO. 4 OF 28 SHEETS  
 STA. 151+50 TO STA. 151+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	24
CONTRACT NO. 9345				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-06091091				





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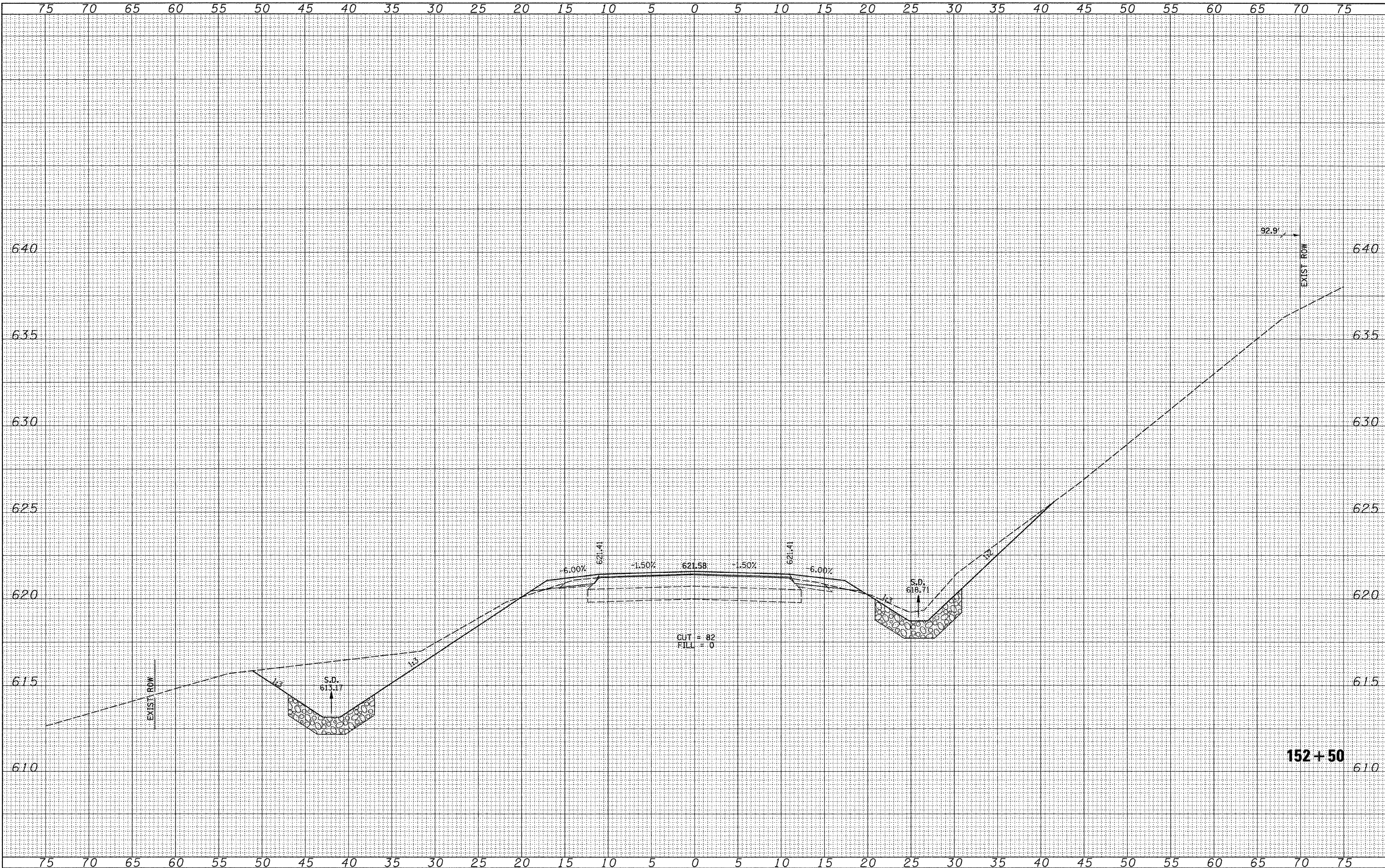
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PLOT SCALE = 5,0000' / IN.	CHECKED -	REVISED -
PLOT DATE = 1/6/2011	DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**

SCALE: HORIZ: 1"=50' VERT: 1"=5' SHEET NO. 5 OF 28 SHEETS STA. 152+00 TO STA. 152+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	25
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR5-06091091				



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USER NAME = cthomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 5.0000' / IN.	CHECKED -	REVISED -
PLOT DATE = 1/6/2011	DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**

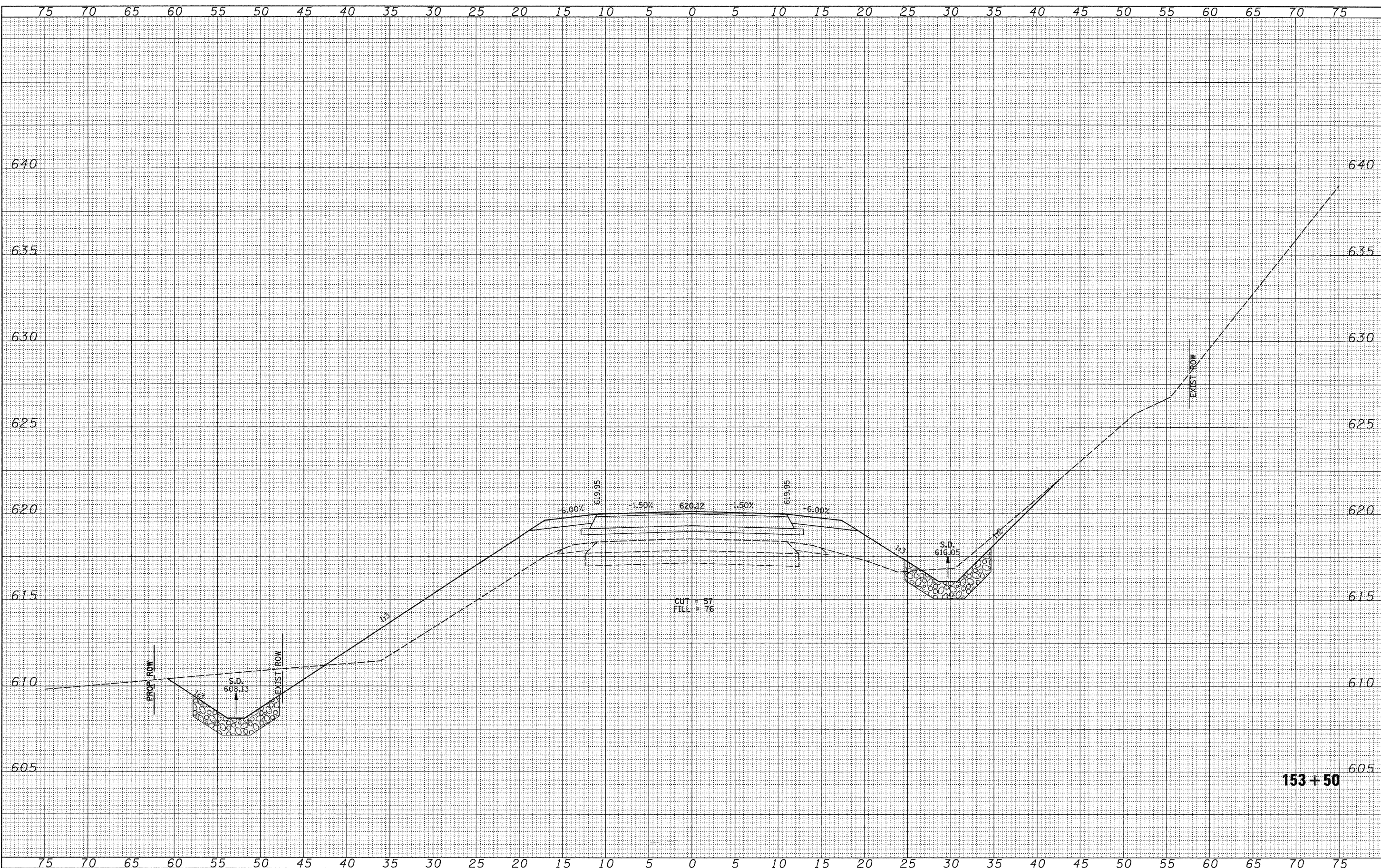
SCALE: HORIZ. 1"=50' VERT. 1"=5'-5"  
 SHEET NO. 6 OF 28 SHEETS STA. 152+50 TO STA. 152+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	26
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 (ILLINOIS) FED. AID PROJECT BRS-06091091				



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FINAL SURVEY	
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FILE NAME =  
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	DATE -	REVISED -

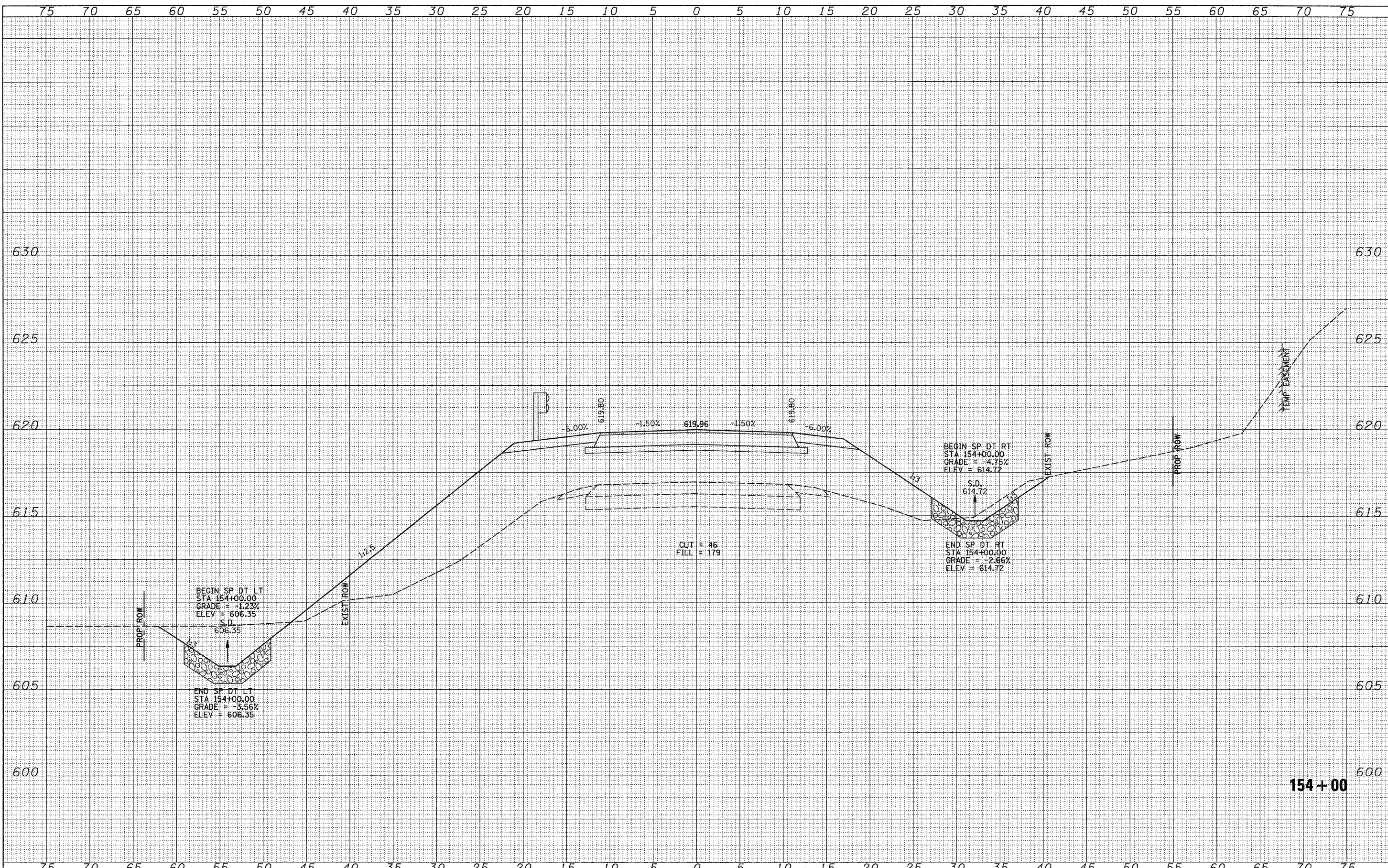
**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**  
 SCALE: HORIZ: 1"=50'  
 VERT: 1"=2.5'  
 SHEET NO. 8 OF 28 SHEETS  
 STA. 153+50 TO STA. 153+50

F.A.S. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	28
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-06091091				

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NOTE BOOK	
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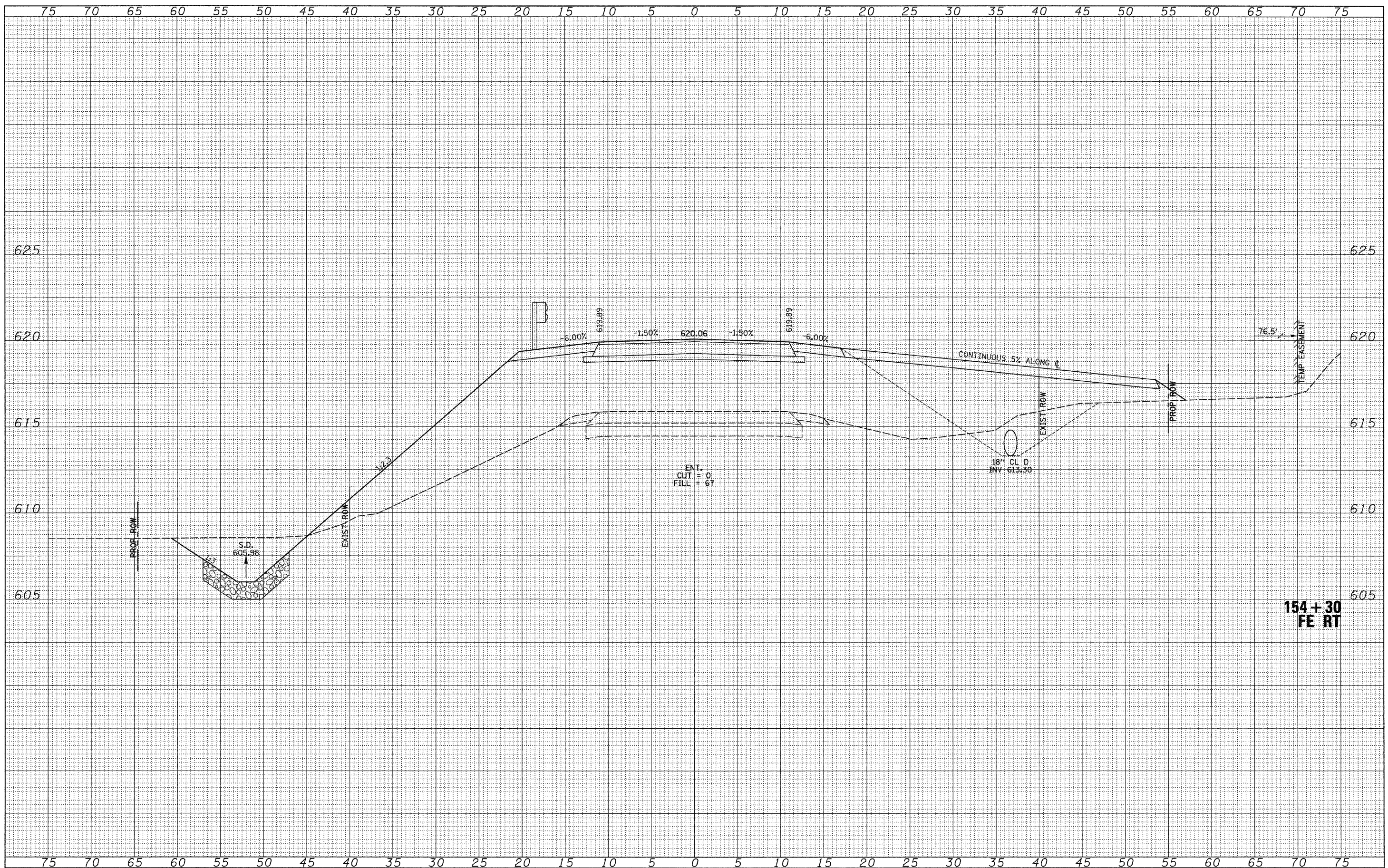


154+00

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V:\Bridg\2484-Morgan\2484\aha2a2.dgn		DRAWN -	REVISED -		609	07-00099-00-BR	MORGAN	48	29	CONTRACT NO. 93545		
		PLOT SCALE = 5,0000' / IN.	REVISED -		SCALE: HORIZ: 1"=50'		SHEET NO. 9 OF 28 SHEETS		STA. 154+00 TO STA. 154+00		FED. ROAD DIST. NO. 7 ILLINOIS	FED. AID PROJECT BRS-06091091
		PLOT DATE = 1/6/2011	REVISED -		VERT: 1"=5'							

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FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
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ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
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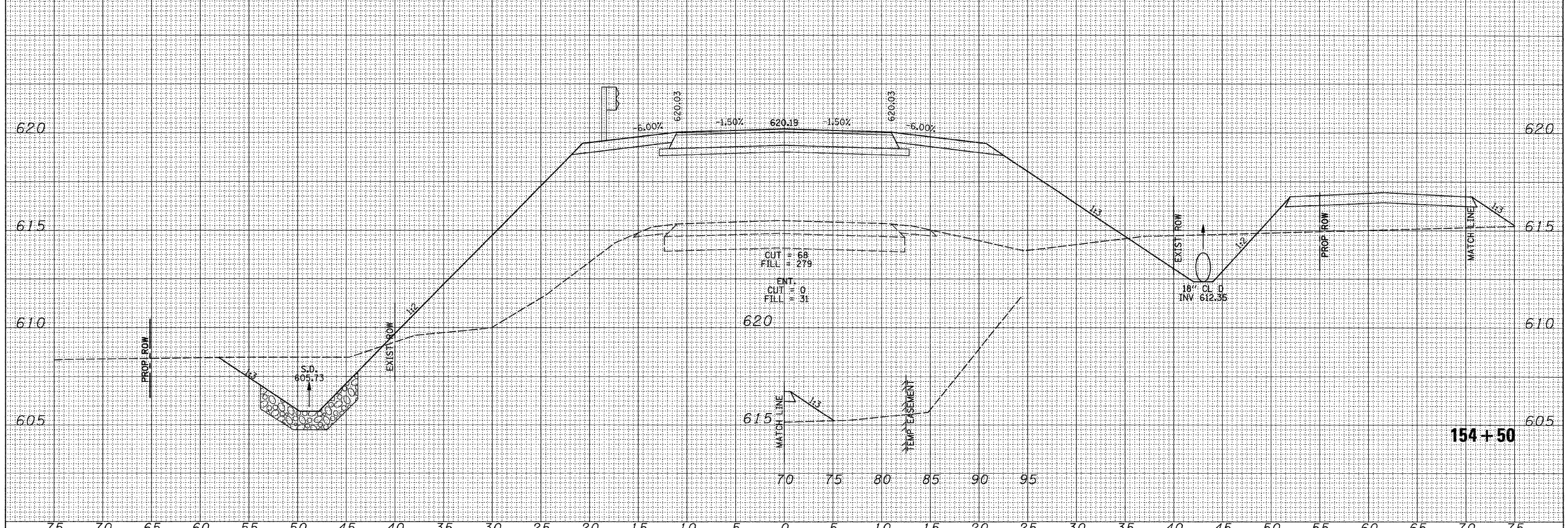
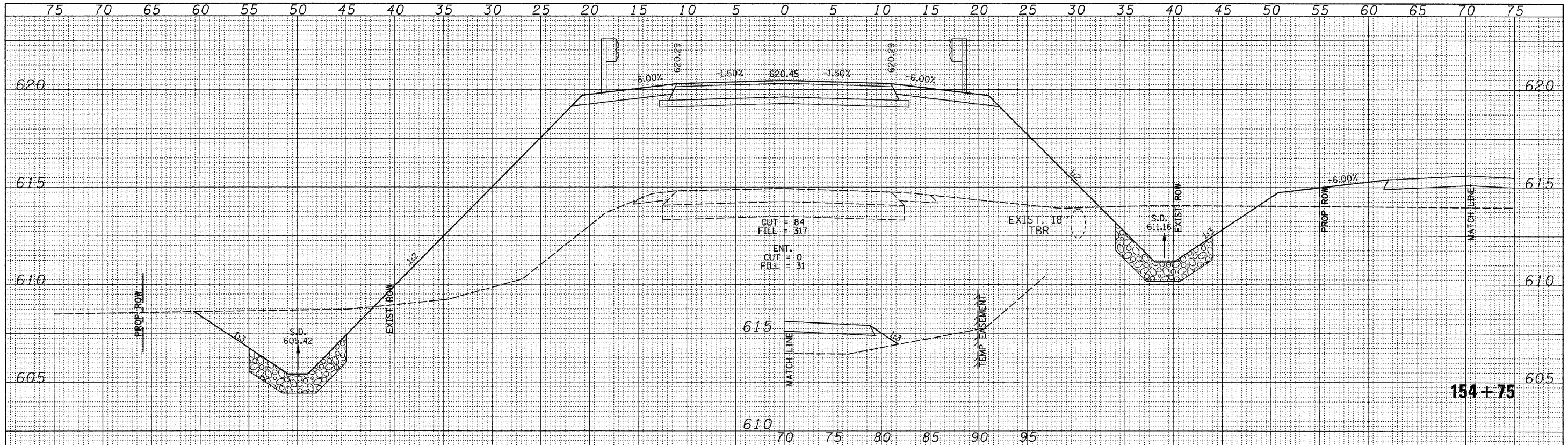


154+30  
FE RT

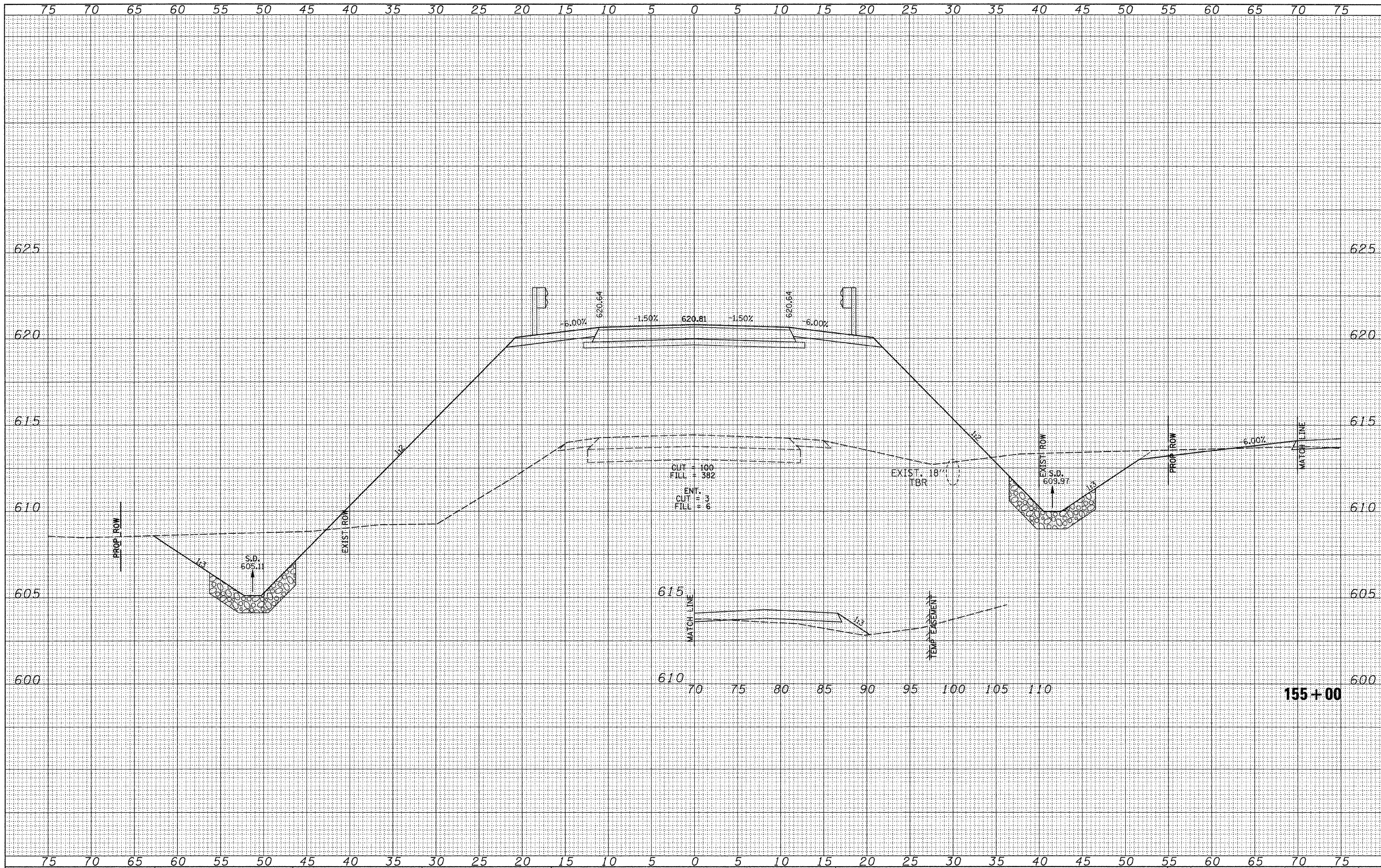
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PLOT SCALE = 5,000' / IN.	CHECKED -	REVISED -	REVISED -		SCALE: HORIZ: 1"=50'	SHEET NO. 10 OF 28 SHEETS	STA. 154+30	TO STA. 154+30	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BRS-06090099
PLOT DATE = 1/6/2011	DATE -	REVISED -	REVISED -								CONTRACT NO. 93545

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	PLOT SCALE = 5.0000' / IN.	CHECKED -	REVISED -		SCALE: HORIZ: 1"=50'		SHEET NO. 11 OF 28 SHEETS		STA. 154+50 TO STA. 154+75		CONTRACT NO. 93545	
	PLOT DATE = 1/6/2011	DATE -	REVISED -		VERT: 1"=5.0'				FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRS-0609109	



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

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

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 PLT DATE = 1/6/2011

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DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**

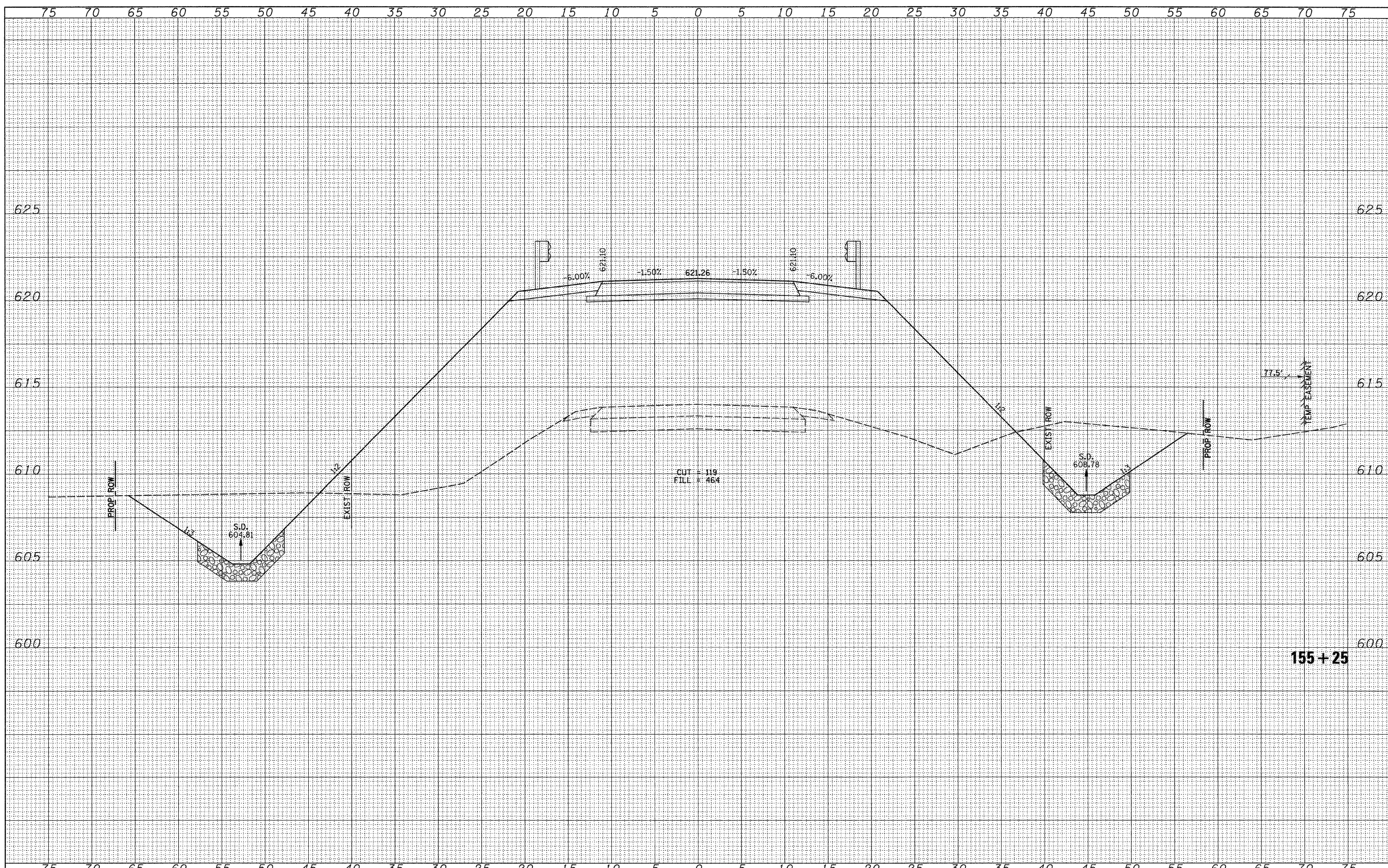
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 VERT: 1"=5'  
 SHEET NO. 12 OF 28 SHEETS  
 STA. 155+00 TO STA. 155+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	32
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-06091091				



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FINAL SURVEY	SURVEYED
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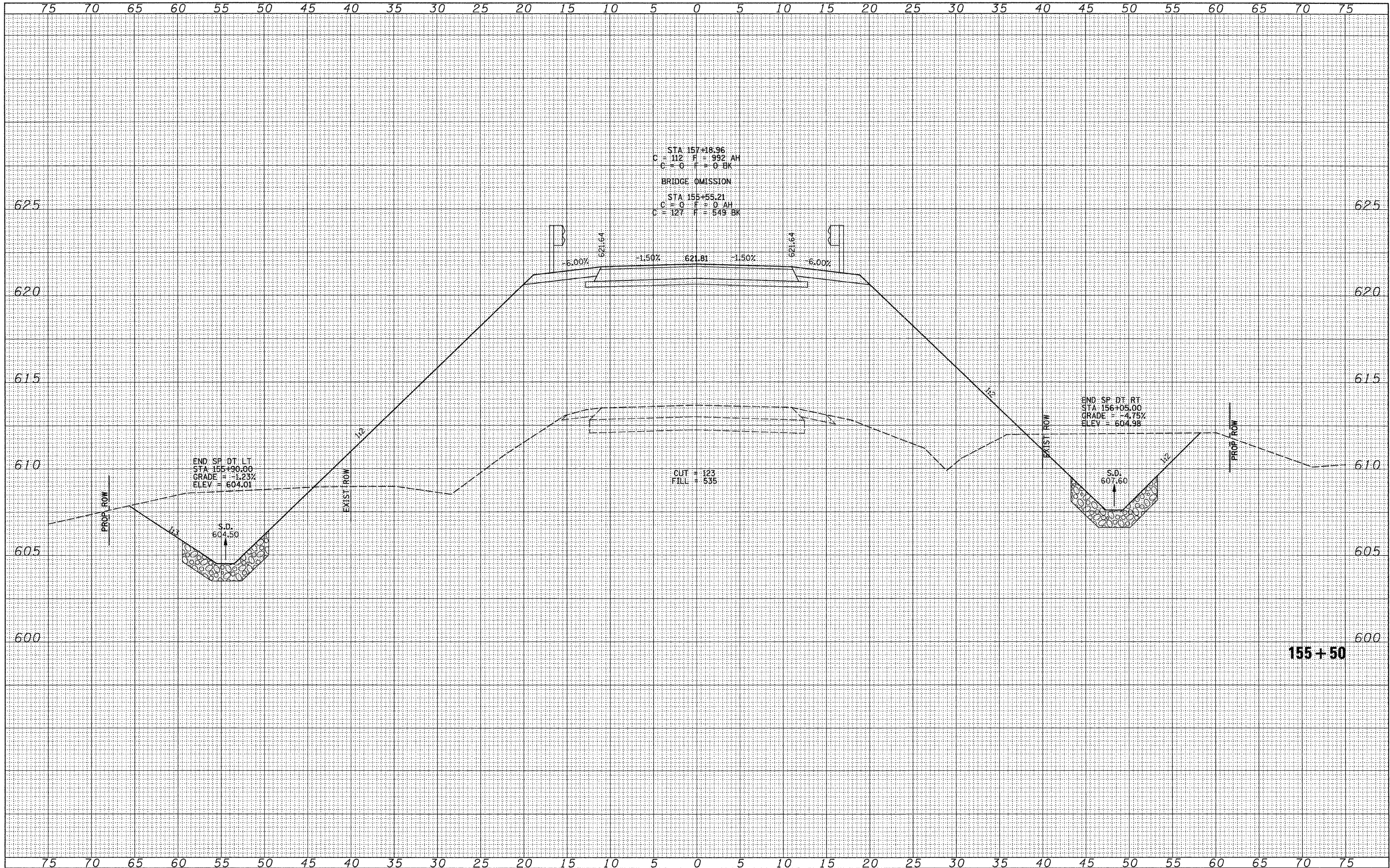


155 + 25

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	PLOT SCALE = 5,0000' / IN.	CHECKED -	REVISED -		SCALE: HORIZ: 1"=50'	SHEET NO. 13 OF 28 SHEETS	STA. 155+25	TO STA. 155+25	CONTRACT NO. 93545			
	PLOT DATE = 1/6/2011	DATE -	REVISED -						FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR5-0609(09)			

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FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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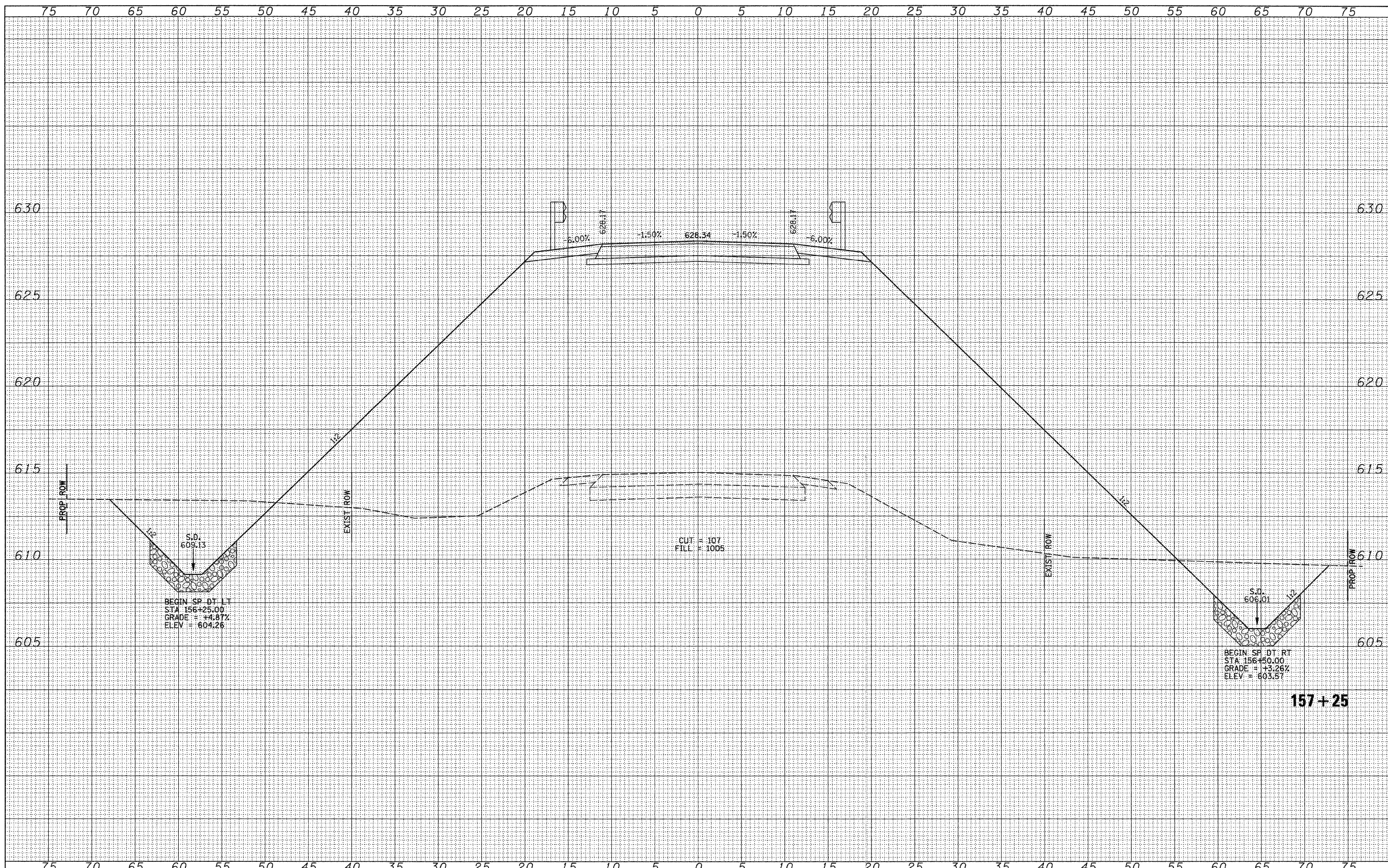
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PLT DATE = 1/6/2011	CHECKED -	REVISED -
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**MORGAN COUNTY  
COUNTY HIGHWAY 28  
OVER HENRY CREEK**

**CROSS SECTIONS**  
SCALE: HORIZ: 1"=50'  
VERT: 1"=5'  
SHEET NO. 14 OF 28 SHEETS  
STA. 155+50 TO STA. 155+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	34
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609(09)				



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FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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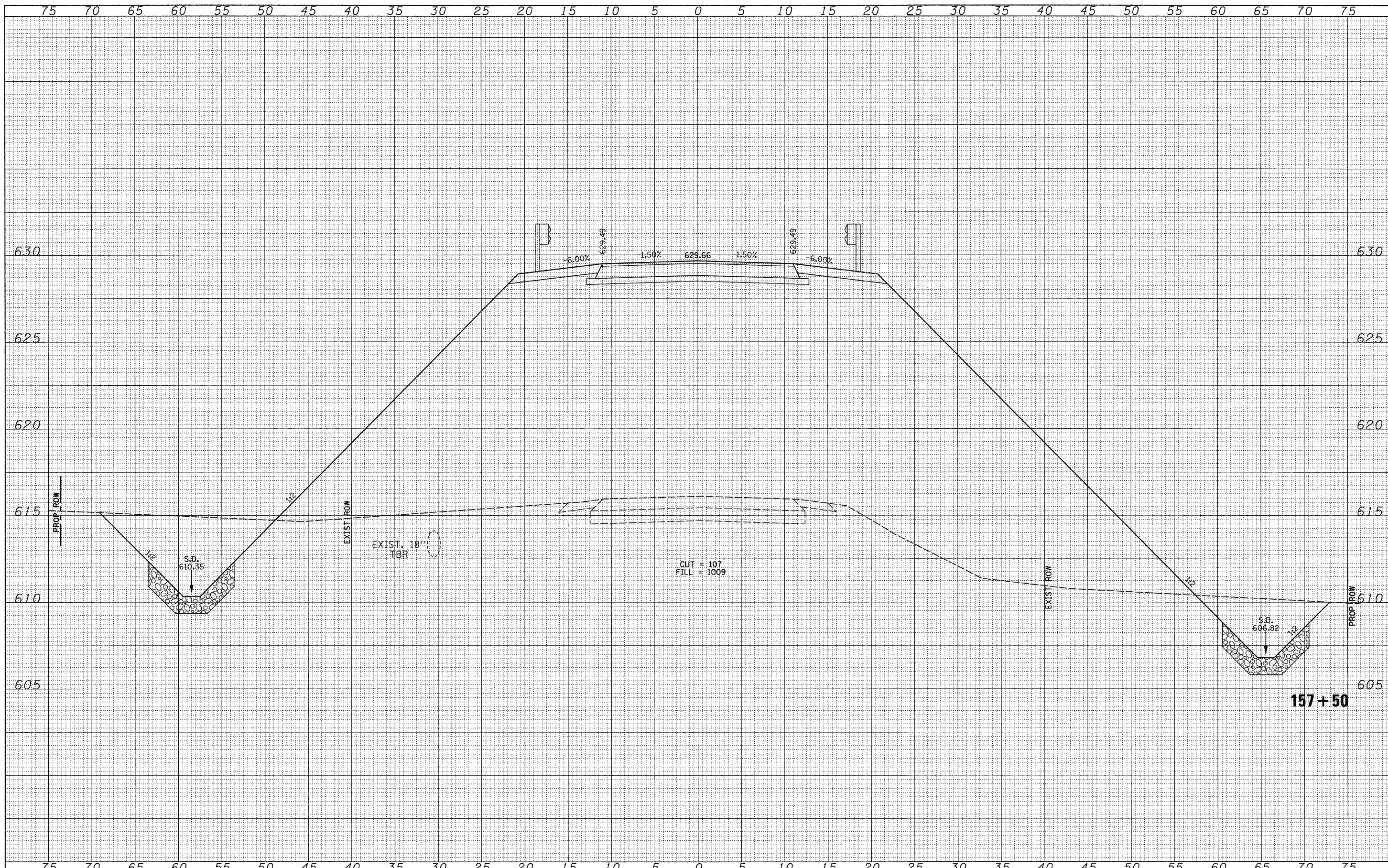
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DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

SCALE: HORIZ: 1"=50'  
 VERT: 1"=5'  
 SHEET NO. 15 OF 28 SHEETS  
 STA. 157+25 TO STA. 157+25

**CROSS SECTIONS**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	35
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 [ILLINOIS] FED. AID PROJECT BRS-0609(09)				



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FINAL SURVEY	SURVEYED
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**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

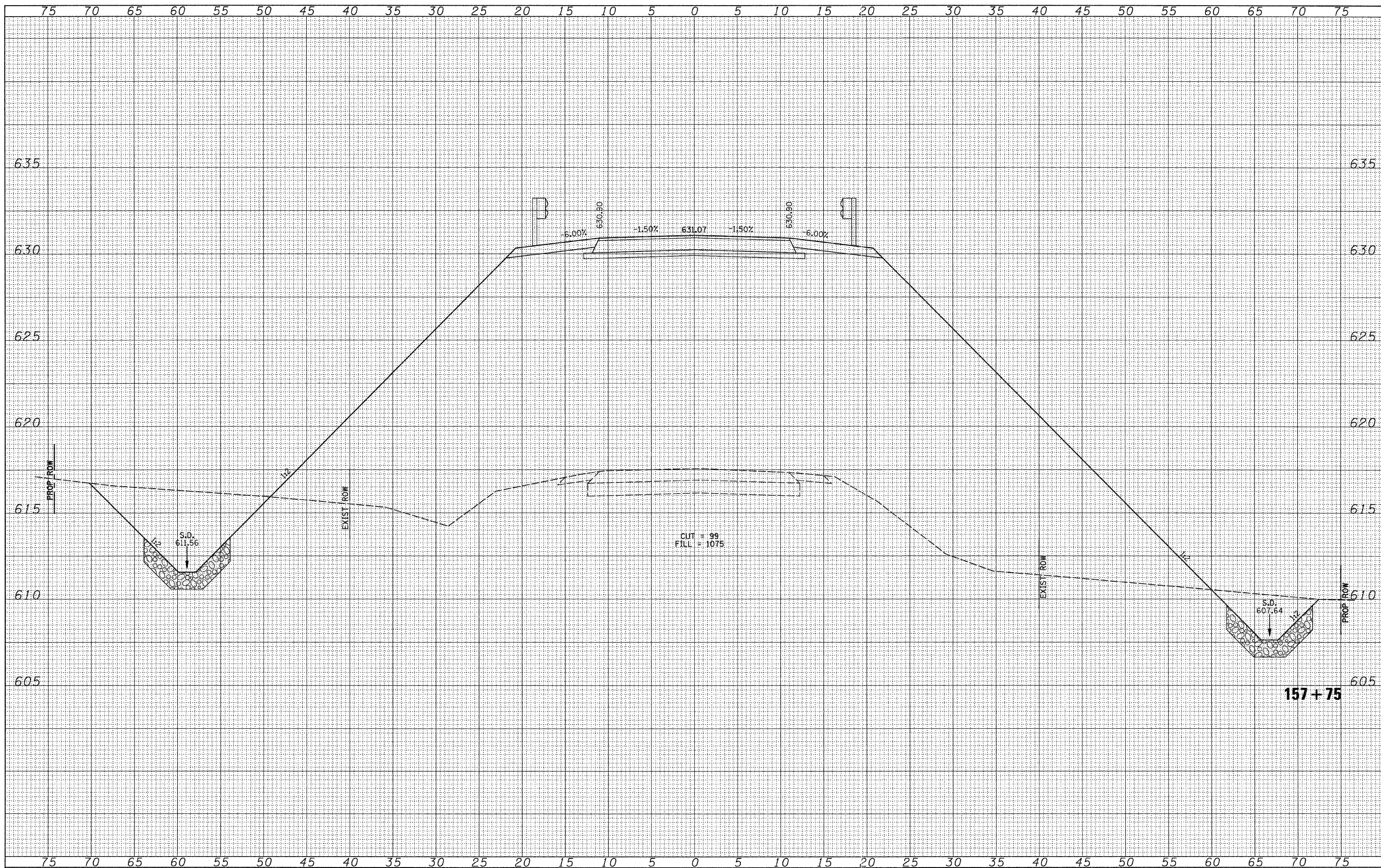
**CROSS SECTIONS**

SCALE: HORIZ: 1"=50'  
 VERT: 1"=5.0'  
 SHEET NO. 16 OF 28 SHEETS  
 STA. 157+50 TO STA. 157+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	36
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609099				

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FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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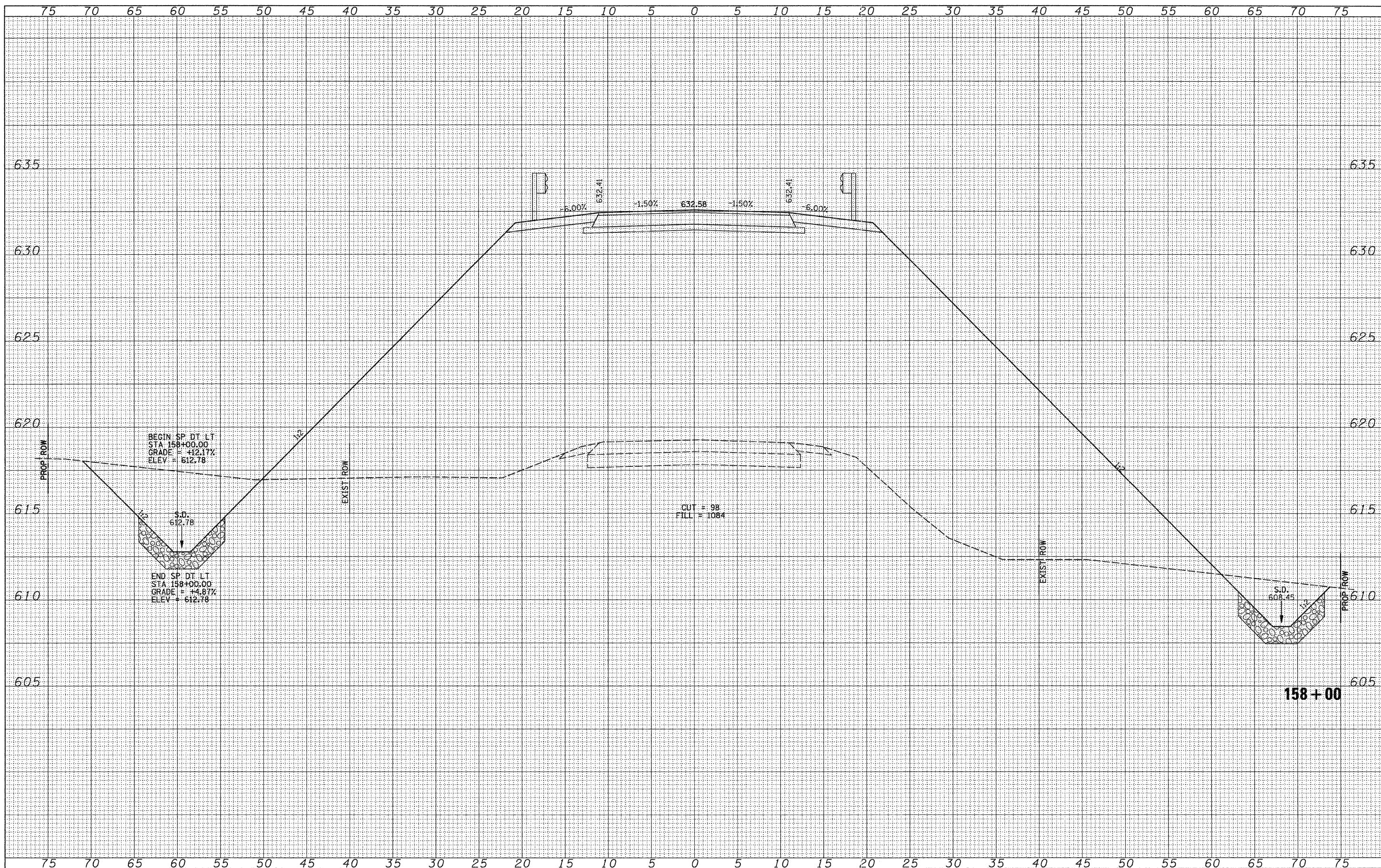
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**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**

SCALE: HORIZ: 1"=50' VERT: 1"=5' SHEET NO. 17 OF 28 SHEETS STA. 157+75 TO STA. 157+75

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	37
CONTRACT NO. 93545			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609(09)	



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PLOT SCALE = 5,0000' / IN.	DRAWN -	REVISED -
PLOT DATE = 1/6/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

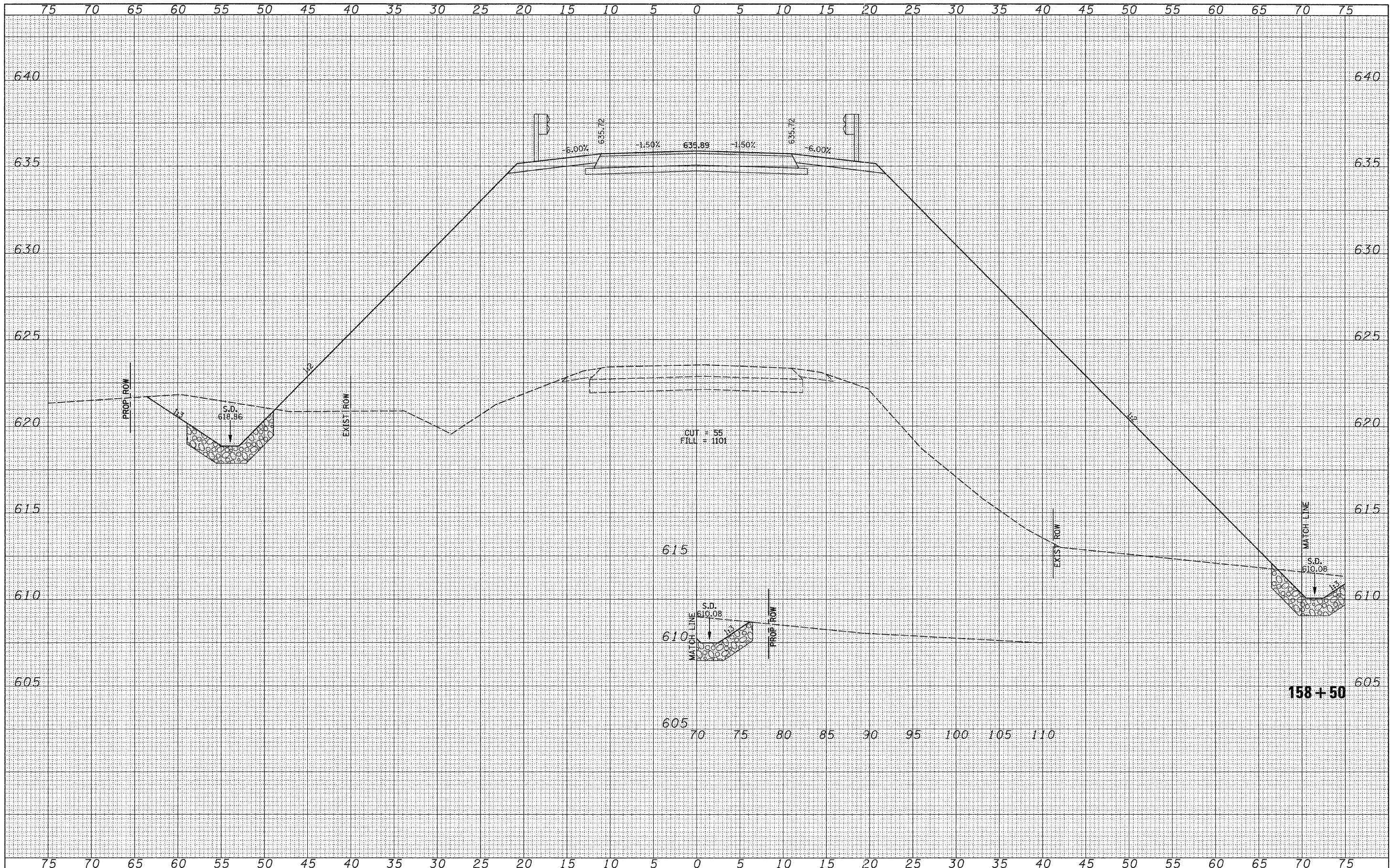
**CROSS SECTIONS**

SCALE: HORIZ: 1"=50'  
 VERT: 1"=5.0'  
 SHEET NO. 18 OF 28 SHEETS  
 STA. 158+00 TO STA. 158+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	38
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7   ILLINOIS   FED. AID PROJECT BRS-0609099				

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FILE NAME =  
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PLOT SCALE = 5,0000' / IN.	DRAWN -	REVISED -
PLOT DATE = 1/6/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

**CROSS SECTIONS**  
 SCALE: HORIZ: 1"=50'  
 VERT: 1"=5.0'  
 SHEET NO. 19 OF 28 SHEETS  
 STA. 158+50 TO STA. 158+50

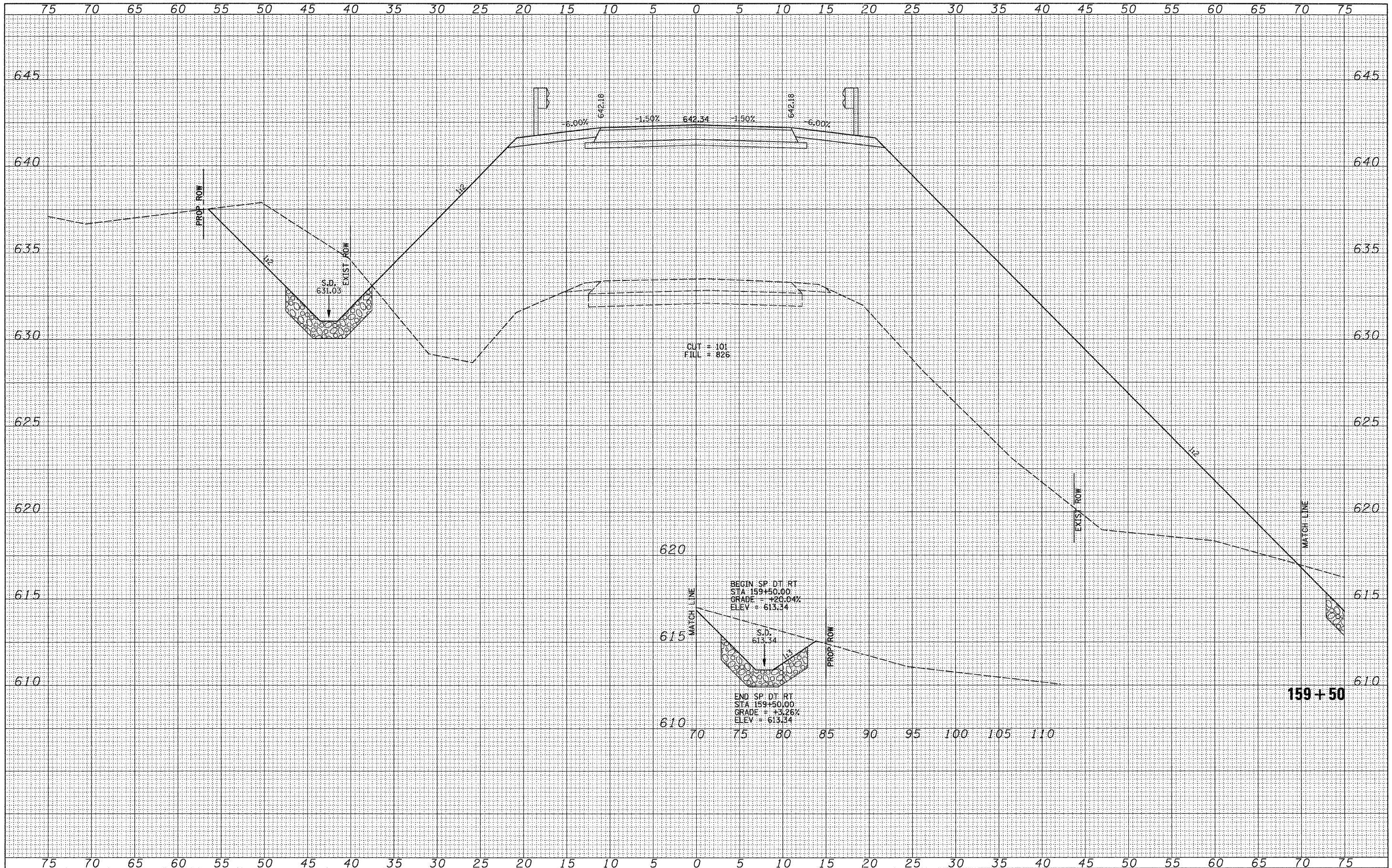
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	39
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR5-0609(109)				





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FINAL SURVEY	SURVEYED
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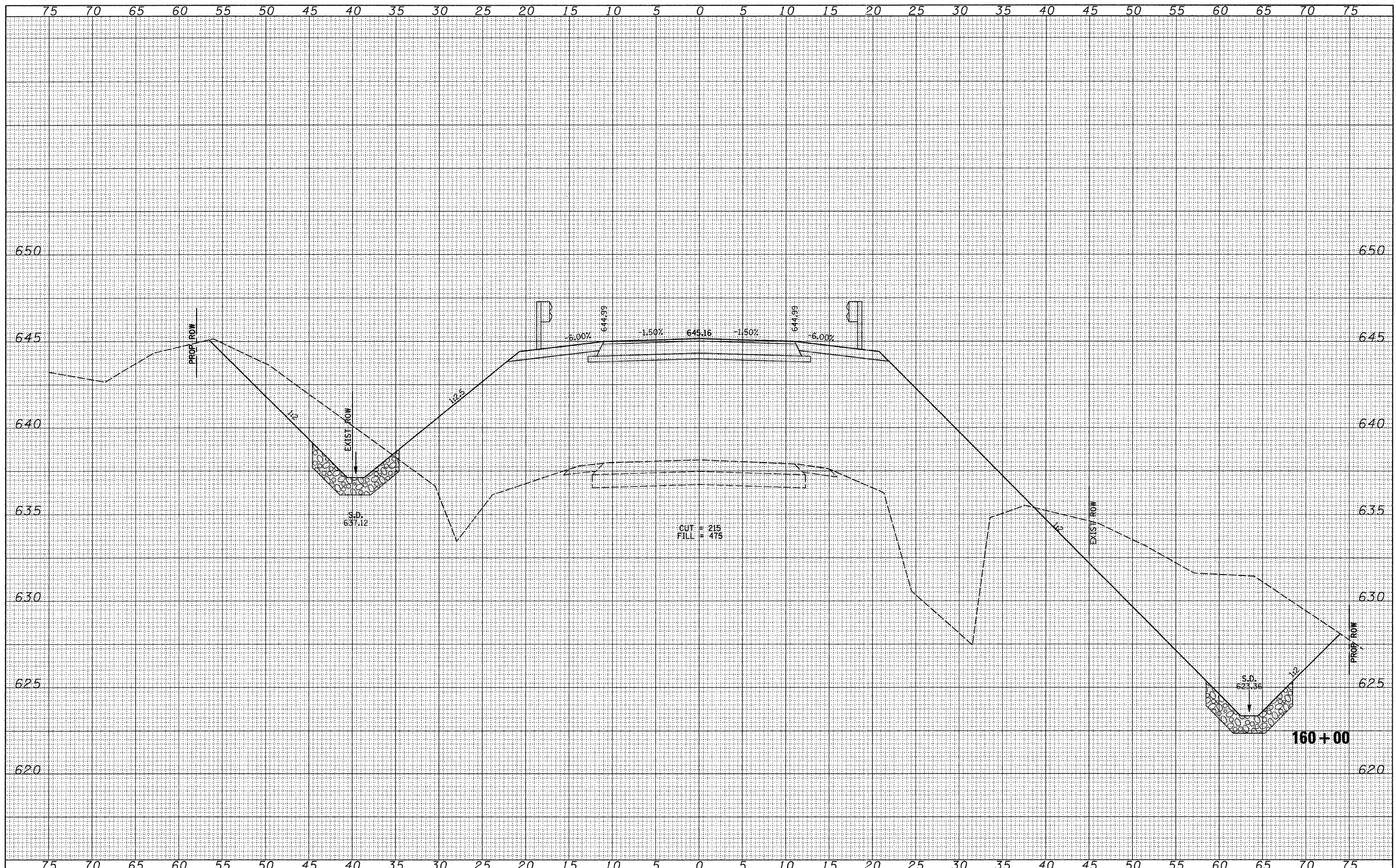
**MORGAN COUNTY  
COUNTY HIGHWAY 28  
OVER HENRY CREEK**

**CROSS SECTIONS**  
SCALE: HORIZ: 1"=50'  
VERT: 1"=5.0'  
SHEET NO. 21 OF 28 SHEETS  
STA. 159+50 TO STA. 159+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	41
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609099				

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

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



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USER NAME = othomas	DESIGNED -	REVISED -
PLLOT SCALE = 5,0000 ' / IN.	DRAWN -	REVISED -
PLLOT DATE = 1/7/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**MORGAN COUNTY  
COUNTY HIGHWAY 28  
OVER HENRY CREEK**

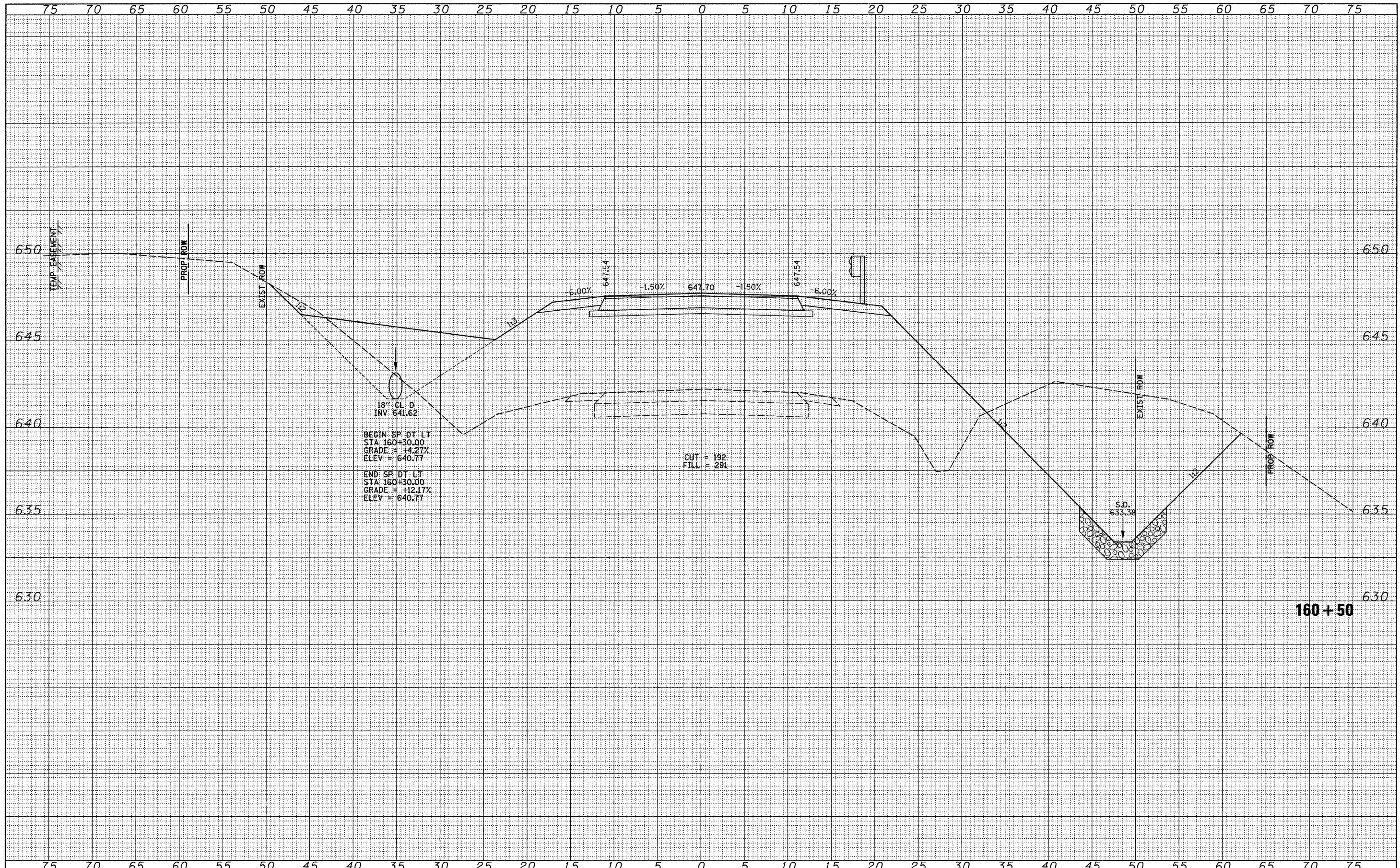
**CROSS SECTIONS**

SCALE: HORIZ: 1"=30' VERT: 1"=2.5' SHEET NO. 22 OF 28 SHEETS STA. 160+00 TO STA. 160+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	42
CONTRACT NO. 93545			FED. ROAD DIST. NO. 7 [ILLINOIS] FED. AID PROJECT BRS-0609(009)	

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

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



FILE NAME = V:\Bridg\2484-Morgan\2484xhsts2.dgn  
 USER NAME = othomas

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

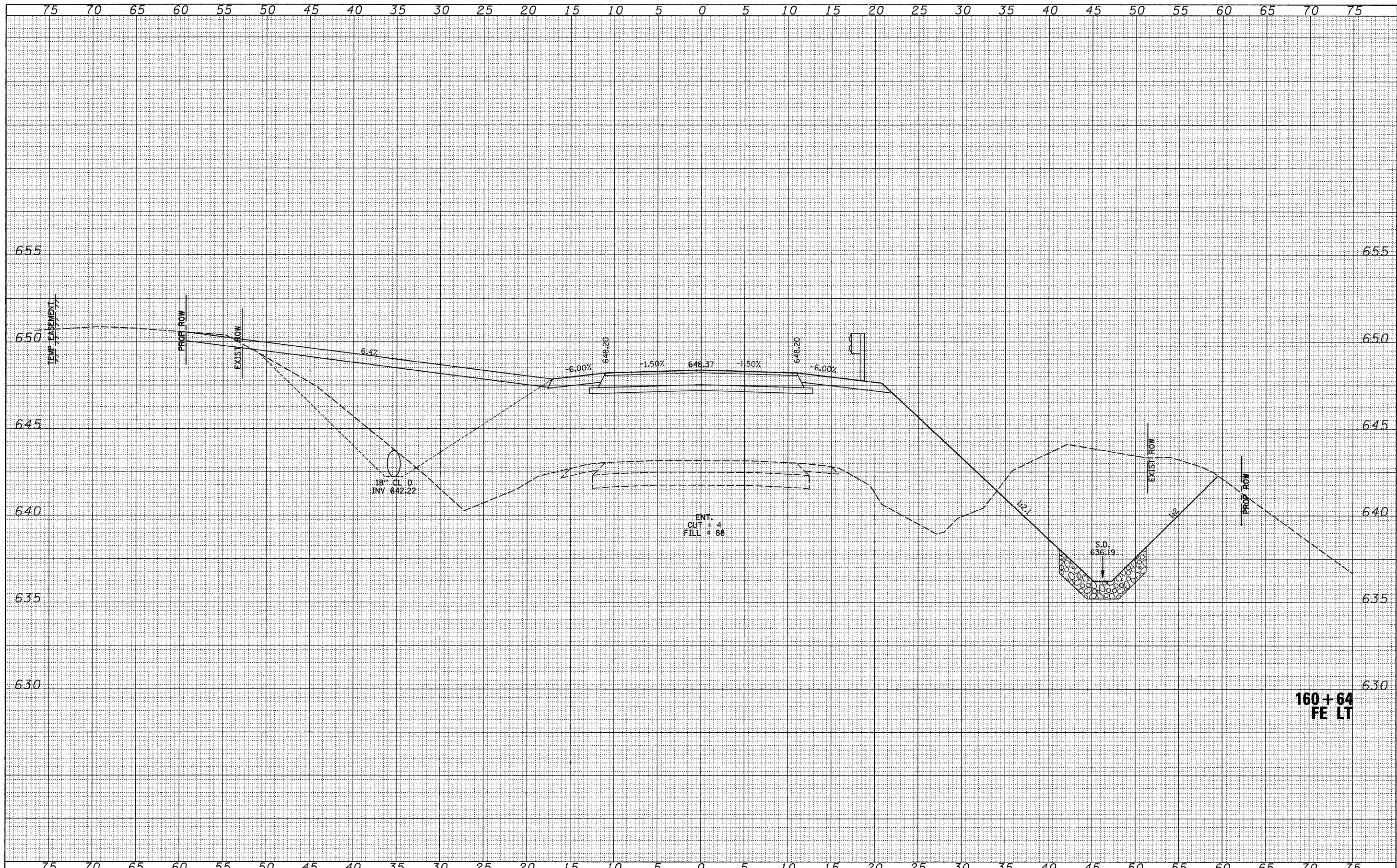
**CROSS SECTIONS**

SCALE: HORIZ: 1"=50'  
 VERT: 1"=5'  
 SHEET NO. 23 OF 28 SHEETS  
 STA. 160+50 TO STA. 160+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	43
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 [ILLINOIS] FED. AID PROJECT BRS-06091099				

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

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



**160+64  
FE LT**

FILE NAME -  
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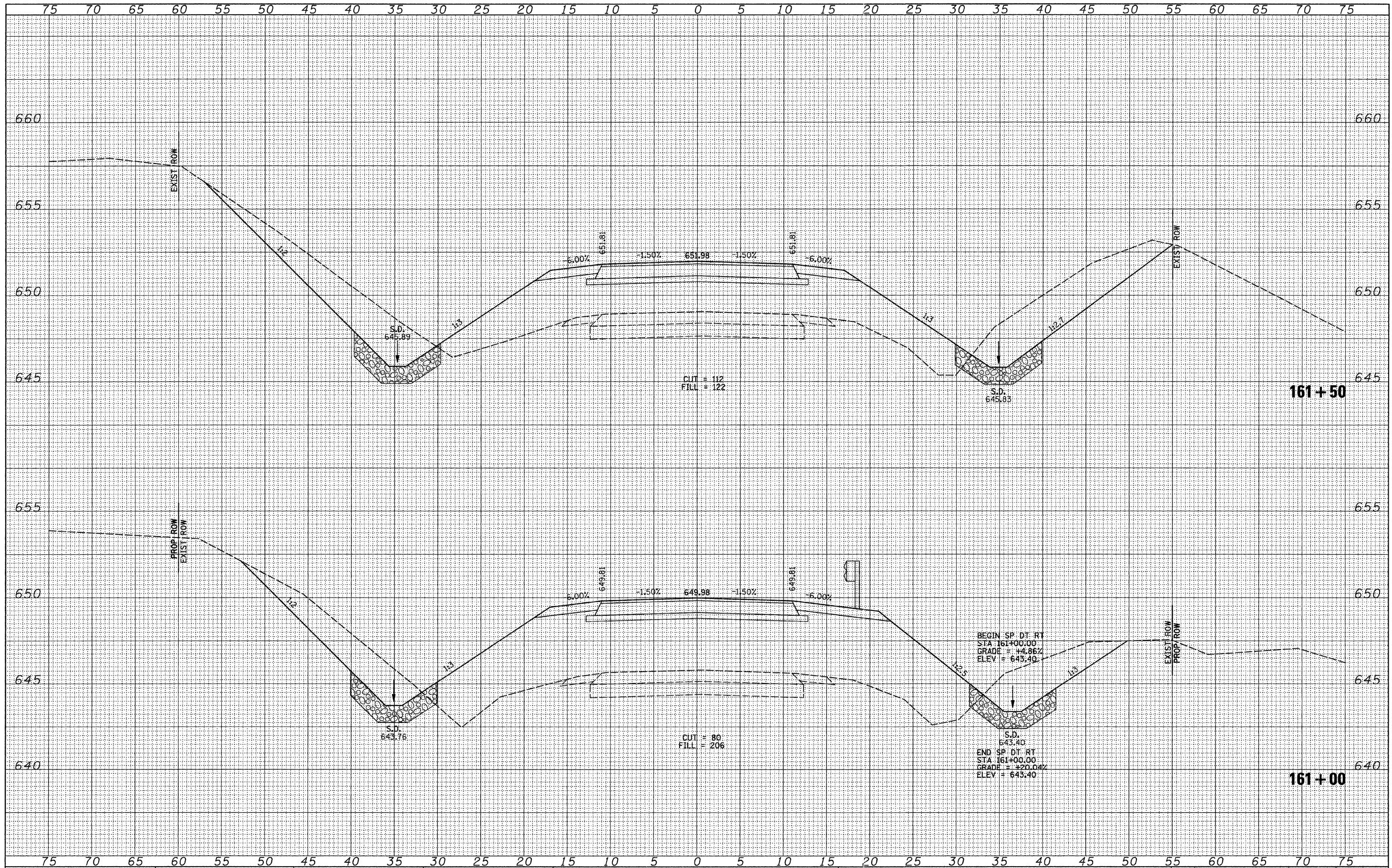
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PLLOT SCALE = 5.0000' / IN.	DRAWN -	REVISED -
PLLOT DATE = 1/7/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**MORGAN COUNTY  
COUNTY HIGHWAY 28  
OVER HENRY CREEK**

**CROSS SECTIONS**

SCALE: HORIZ: 1"=50' VERT: 1"=5' SHEET NO. 24 OF 28 SHEETS STA. 160+64 TO STA. 160+64

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	44
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609109				



DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

FILE NAME = V:\Bridge\2484-Morgan\2484xhsts2.dgn

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PLOT DATE = 1/7/2011	DATE -	REVISED -

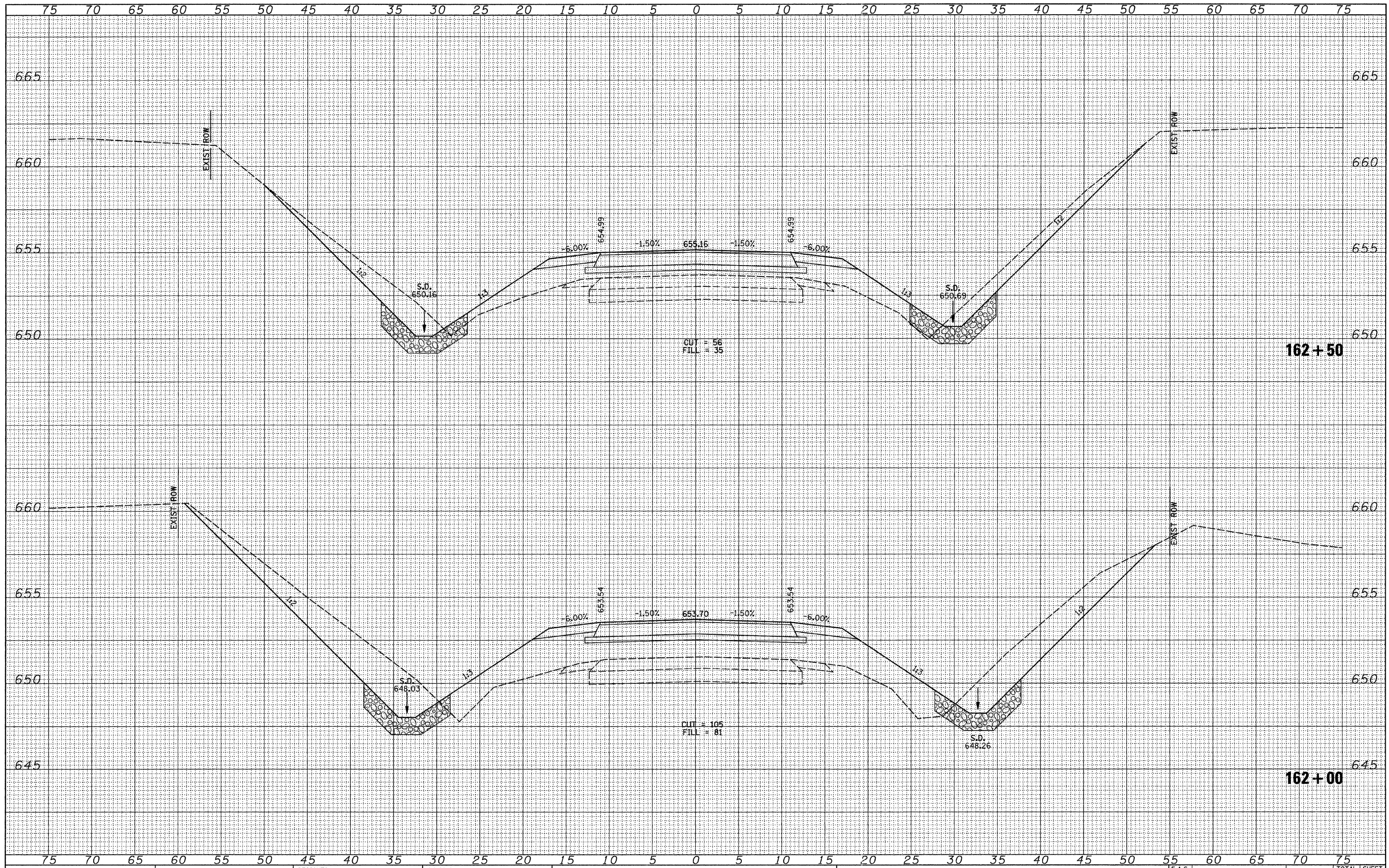
**MORGAN COUNTY  
COUNTY HIGHWAY 28  
OVER HENRY CREEK**

**CROSS SECTIONS**  
SCALE: HORIZ: 1"=50'  
VERT: 1"=5.0'  
SHEET NO. 25 OF 28 SHEETS  
STA. 161+00 TO STA. 161+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	45
CONTRACT NO. 93545				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609009				

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

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



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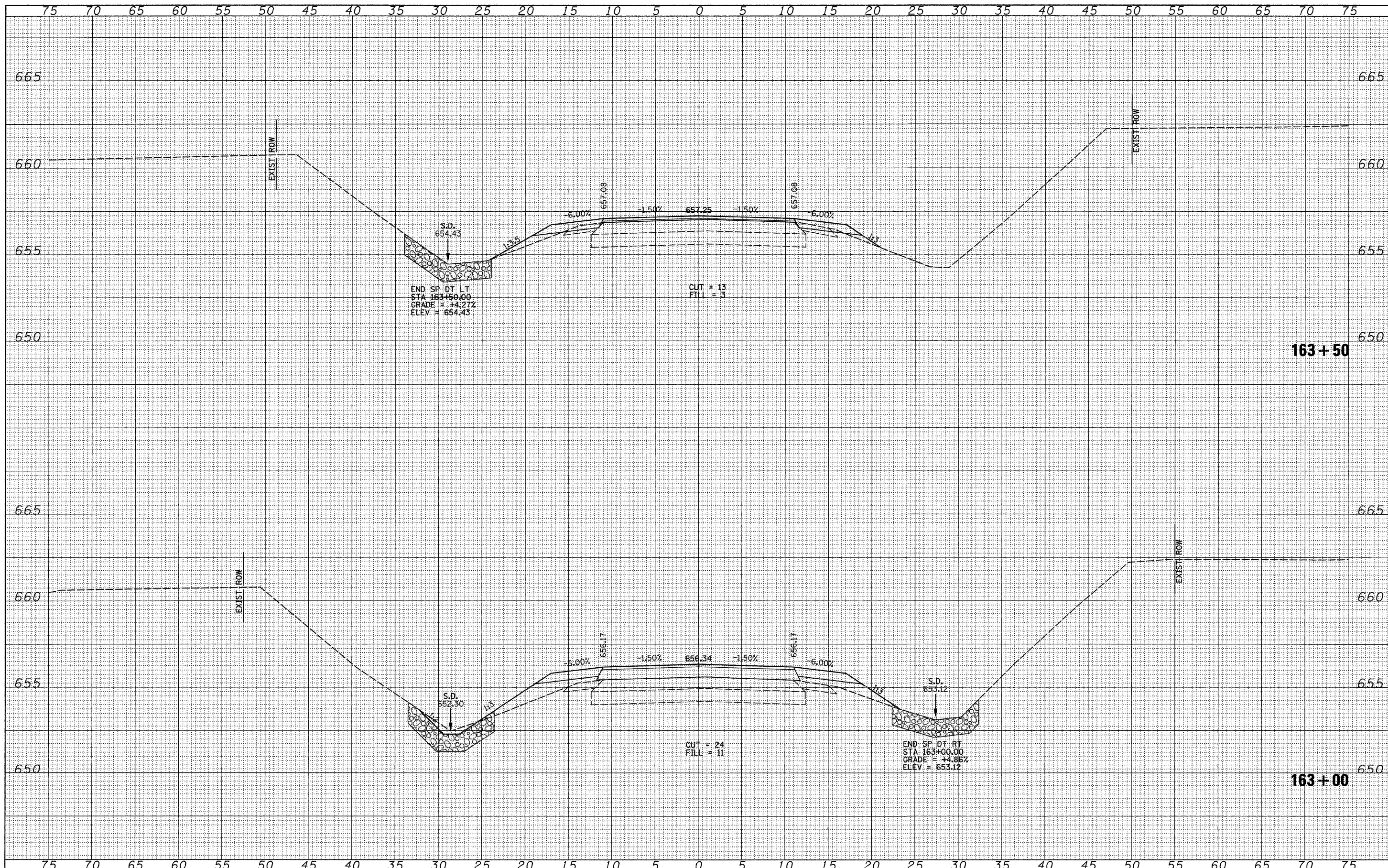
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	DRAWN -	REVISED -
PLOT SCALE = 5.0000' / IN.	CHECKED -	REVISED -
PLOT DATE = 1/7/2011	DATE -	REVISED -

**MORGAN COUNTY  
COUNTY HIGHWAY 28  
OVER HENRY CREEK**

**CROSS SECTIONS**

SCALE: HORIZ. 1" = 25' VERT. 1" = 2.5' SHEET NO. 26 OF 28 SHEETS STA. 162+00 TO STA. 162+50

F.A.S. RTE. 609	SECTION 07-00099-00-BR	COUNTY MORGAN	TOTAL SHEETS 48	SHEET NO. 46
CONTRACT NO. 93545			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609(09)	



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

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

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USER NAME = cthomas	DESIGNED -	REVISED -
PLOT SCALE = 5.0000' / IN.	DRAWN -	REVISED -
PLOT DATE = 1/7/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**MORGAN COUNTY  
 COUNTY HIGHWAY 28  
 OVER HENRY CREEK**

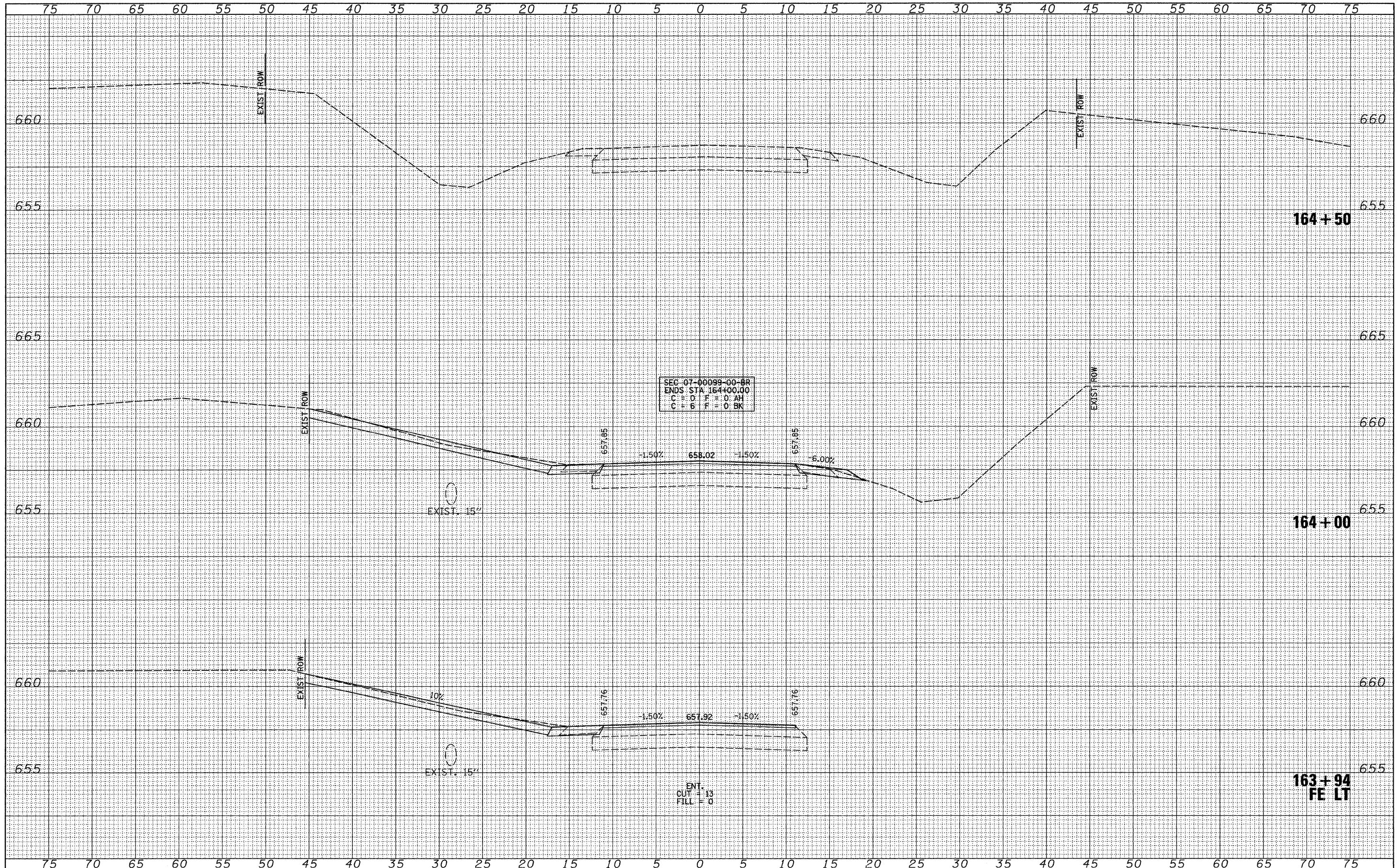
SCALE: HORIZ: 1"=50'  
 VERT: 1"=2.5'  
 SHEET NO. 27 OF 28 SHEETS  
 STA. 163+00 TO STA. 163+50

**CROSS SECTIONS**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	47
			CONTRACT NO. 93545	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0609(009)				

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

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



FILE NAME =  
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USER NAME = othomas  
PLDT SCALE = 5,0000 ' / IN.  
PLDT DATE = 1/7/2011

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**MORGAN COUNTY  
COUNTY HIGHWAY 28  
OVER HENRY CREEK**

**CROSS SECTIONS**

SCALE: HORIZ 1" = 25'  
VERT 1" = 2.5'

SHEET NO. 28 OF 28 SHEETS | STA. 163+94 TO STA. 164+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
609	07-00099-00-BR	MORGAN	48	48
CONTRACT NO. 3545				
FED. ROAD DIST. NO. 7   ILLINOIS   FED. AID PROJECT BRS-0609099				