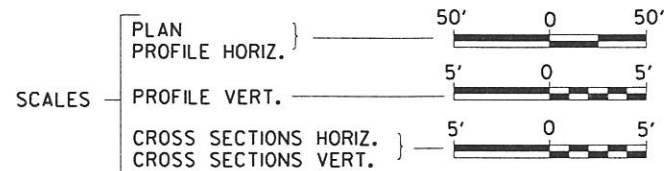
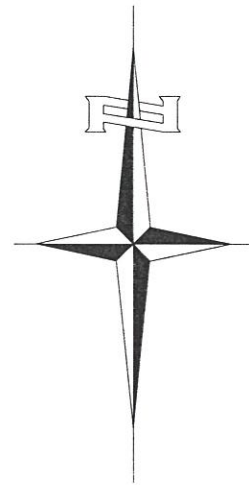


03-09-2018 LETTING ITEM 096

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM-BRIDGE
BUREAU COUNTY
GOLD ROAD DISTRICT SECTION 13-08123-00-BR
TOWNSHIP ROAD 60B OVER SMITH DITCH
PROJECT NO. XXPG(375)
JOB NUMBER C-93-045-17

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	GENERAL NOTES, TYPICAL SECTIONS, DETAILS
3.	SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES
4.	TRAFFIC CONTROL PLAN
5.	EROSION CONTROL PLAN
6.	PLAN AND PROFILE
7.-17.	STRUCTURE PLANS
18.-23.	CROSS SECTIONS



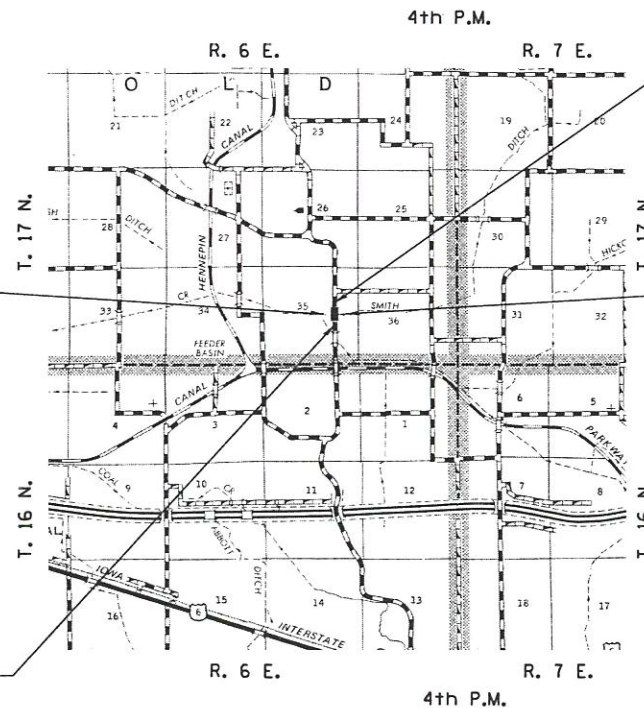
REQUIRED HIGHWAY STANDARDS

- 000001-06
- 280001-07
- 515001-03
- 542401-03
- 701901-07
- 725001-01
- BLR 21-9

EXISTING STRUCTURE SN 006-3060
 THREE SPAN PRECAST NELSON BEAM BRIDGE ON
 TIMBER PILE BENT PIERS AND TIMBER PILE BENT
 ABUTMENTS, ALL WITH CONCRETE CAPS,
 ±50'-0" BK TO BK, AND 30'-0" O TO O DECK,
 NO SKEW. (TO BE REMOVED)

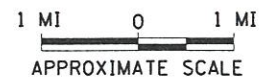
SECTION 13-08123-00-BR
 ENDS
 STATION 22+00.00

PROPOSED STRUCTURE SN 006-4111
 SINGLE SPAN 21" PPC DECK BEAM SUPERSTRUCTURE
 ON CONCRETE SPILL-THRU PILE BENT ABUTMENTS,
 58'-0" BK TO BK, AND 24'-0" O TO O DECK,
 NO SKEW

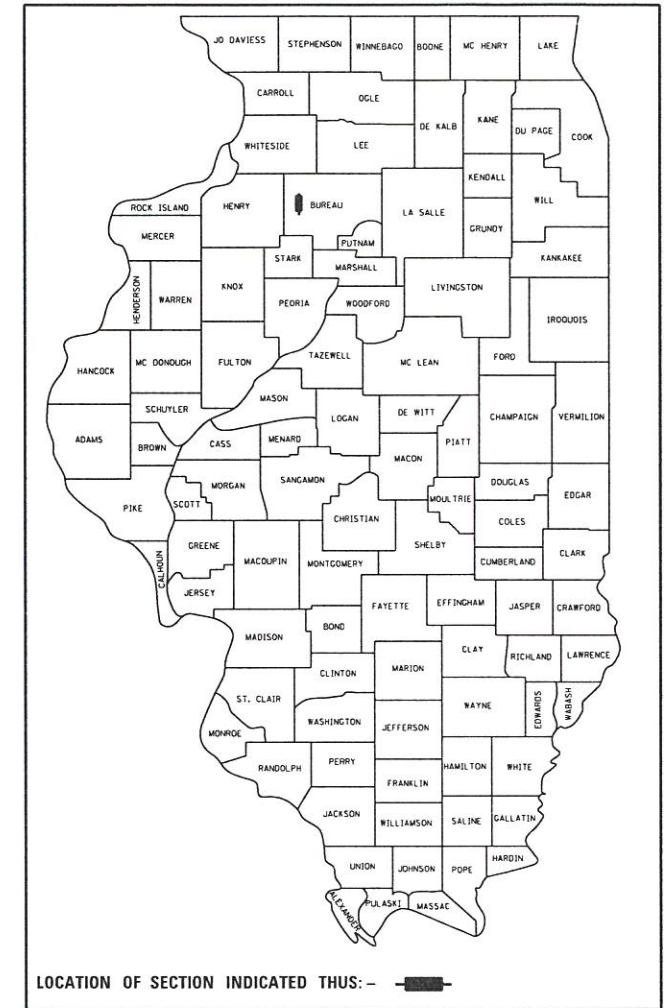


SECTION 13-08123-00-BR
 BEGINS
 STATION 17+50.00

LOCATION MAP



NET LENGTH OF PROJECT = 450.00 FEET = 0.085 MILES
 DESIGN CLASSIFICATION: LOCAL ROAD (NON-URBAN)
 DESIGN ADT = 115 (18)
 DESIGN SPEED = 30 MPH



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PLANS DESIGNED IN ACCORDANCE WITH BUREAU
 OF LOCAL ROADS AND STREETS MANUAL GUIDELINES
 FOR TWO LANE RURAL LOCAL ROADS - RECONSTRUCTION

APPROVED 12/05 2017

David Jensen
 GOLD ROAD DISTRICT
 HIGHWAY COMMISSIONER

APPROVED 12/05 2017

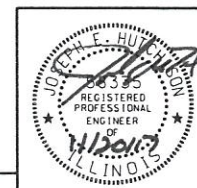
John C. Johnson
 BUREAU COUNTY ENGINEER

PASSED 12/20 2017

Daniel B. E...
 DISTRICT THREE ENGINEER OF
 LOCAL ROADS & STREETS

Released For
 Bid Based on
 Limited Review 12/20 2017

Kevin J. Gable
 REGION TWO ENGINEER
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



E. H. Hutchison
 SIGNATURE

ENGINEER'S SEAL

Hutchison Engineering, Inc.
 JACKSONVILLE-SHOREWOOD
 PEORIA-MOLINE

2017 JOB#4112

UTILITY COMPANIES

CORNBELT ENERGY
 BLOOMINGTON, ILLINOIS

FRONTIER COMMUNICATIONS
 ROSEVILLE, ILLINOIS

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

GOLD ROAD DISTRICT

CONTRACT NO. 87672

GENERAL NOTES

THE REMOVAL OF EXISTING OIL & CHIP SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE PROJECT 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.

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.

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

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

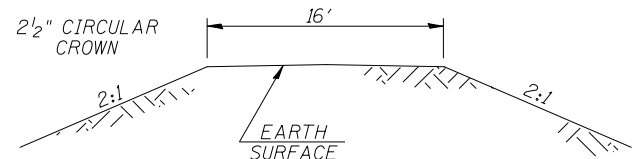
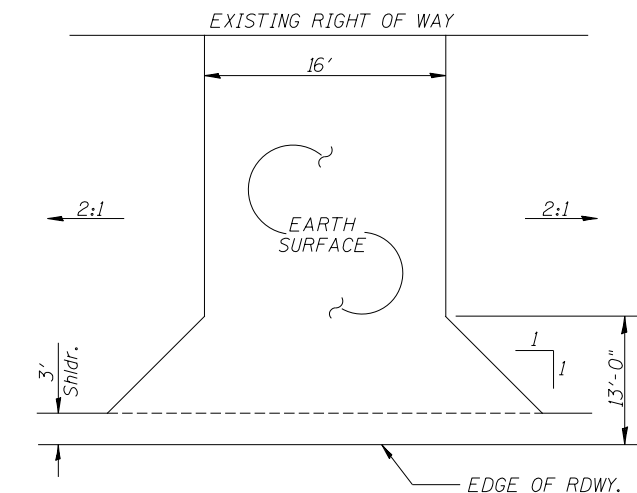
THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES 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.

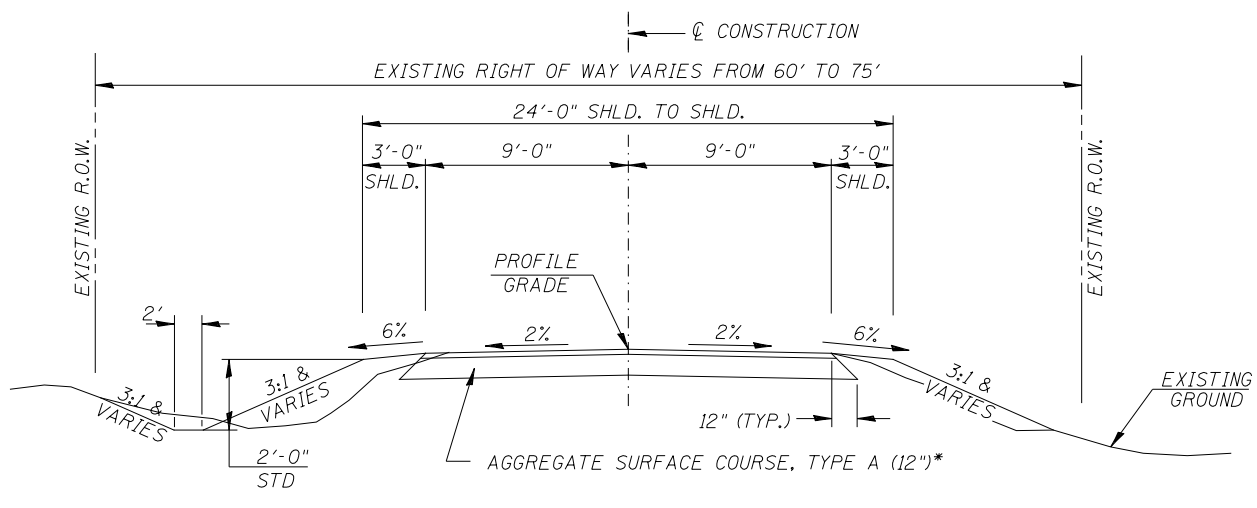
WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE FINAL SURFACE OF ALL DISTURBED/EMBANKMENT AREAS SHALL BE SEEDED. THE TOP 4 INCHES OF THE SEEDER AREAS SHALL BE COHESIVE VEGETATION SUSTAINING SOIL SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF SHAPING THE SLOPES AND PROVIDING VEGETATION SUSTAINING SOIL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. TOPSOIL MAY BE STRIPPED AND STOCKPILED FROM THE SITE OR HAULED IN FROM AN ALTERNATE LOCATION AS APPROVED BY THE ENGINEER.

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

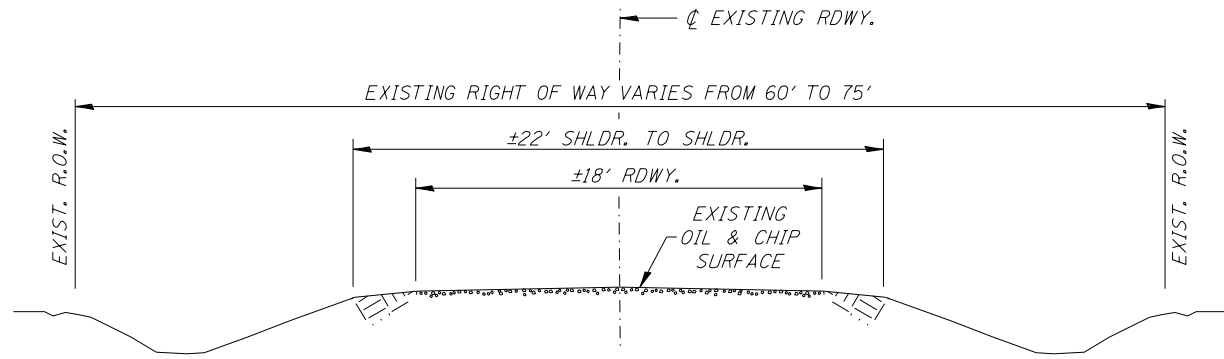


FIELD ENTRANCES
 STA 19+50 LT
 STA 19+50 RT
 STA 20+50 LT
 STA 20+50 RT



*TOP 3"-CA-6 GRADATION
 BOTTOM 9"-CA-2 GRADATION

PROPOSED TYPICAL SECTION
 STA. 17+50.00 TO STA. 19+71.00
 STA. 20+29.00 TO STA. 22+00.00
 EXCEPT TRANSITIONS
 BRIDGE OMISSION
 STA. 19+71.00 TO STA. 20+29.00



EXISTING TYPICAL SECTION

FILE NAME = V:\4112 - TR60B over Smith Ditch (Bureau)	USER NAME = SMierzwa	DESIGNED -	REVISED -
CADD\CADD Sheets\4112-t001.dgn		DRAWN -	REVISED -
PLOT SCALE = 2.0000' / in.		CHECKED -	REVISED -
PLOT DATE = 12/8/2017		DATE -	REVISED -

**BUREAU COUNTY
 TOWNSHIP ROAD 60B
 OVER SMITH DITCH**

GENERAL NOTES, TYPICAL SECTIONS, DETAILS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 17+50.00 TO STA. 22+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 60B	13-08123-00-BR	BUREAU	23	2
CONTRACT NO. 87672				
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. XPG13751	

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
① 20200100	EARTH EXCAVATION	CU YD	210
20300100	CHANNEL EXCAVATION	CU YD	100
① 20700220	POROUS GRANULAR EMBANKMENT	CU YD	23.4
25100630	EROSION CONTROL BLANKET	SQ YD	2,107
28000305	TEMPORARY DITCH CHECKS	FOOT	24
28000400	PERIMETER EROSION BARRIER	FOOT	695
28000500	INLET AND PIPE PROTECTION	EACH	2
40200100	AGGREGATE SURFACE COURSE, TYPE A	TON	527
① 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	85
50300225	CONCRETE STRUCTURES	CU YD	19.8
50300280	CONCRETE ENCASEMENT	CU YD	2.6
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1,348
50800105	REINFORCEMENT BARS	POUND	2,300
△ 50900205	STEEL RAILING, TYPE S1	FOOT	116
51200957	FURNISHING METAL SHELL PILES 12"X0.250"	FOOT	312
51202305	DRIVING PILES	FOOT	312
51203200	TEST PILE METAL SHELLS	EACH	2
51500100	NAME PLATES	EACH	1
54200229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	70
54215559	METAL END SECTIONS 24"	EACH	2
60801024	FLAP GATE 24"	EACH	2
67100100	MOBILIZATION	L SUM	1
① X2501100	SEEDING, CLASS 3 (SPECIAL)	ACRE	0.4
① X2810208	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	325
① X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1
① Z0013798	CONSTRUCTION LAYOUT	L SUM	1
① XX008900	FIELD TILE ADJUSTMENT OVER 8"	FOOT	50

① SEE SPECIAL PROVISIONS

CONSTRUCTION CODE TYPE: 0010

△ SPECIALTY ITEM S

EARTHWORK SUMMARY

STATION TO STATION	EARTH EXCAVATION	CHANNEL EXCAVATION	STRUCTURE EXCAVATION	FILL	WASTE (SHORTAGE)
	CU YD	CU YD	CU YD	CU YD	CU YD
RDWY 17+50.00 - 19+71.00	99			56	18
RDWY 20+29.00 - 22+00.00	109			37	45
CHANNEL		100			
STRUCTURE			100		
TOTAL	208	100	100	93	63
USE	210	100	*100	-	65

(● 25% SHRINKAGE)

*STRUCTURE EXCAVATION SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 502 OF THE STANDARD SPECIFICATIONS. INDIVIDUAL PAYMENT FOR STRUCTURE EXCAVATION WILL NOT BE MADE, BUT SHALL BE IN ACCORDANCE WITH SECTION 502.13.

EROSION CONTROL BLANKET

STATION TO STATION	SIDE	WIDTH	LENGTH	AREA (SQ YD)
17+50 - 19+71	LEFT	VARIES	221'	514
17+50 - 19+71	RIGHT	VARIES	221'	514
20+29 - 22+00	LEFT	VARIES	171'	470
20+29 - 22+00	RIGHT	VARIES	171'	609
TOTAL				2,107

AGGREGATE SURFACE COURSE, TYPE A

STATION TO STATION	THICKNESS	WIDTH	LENGTH	TON
17+50.00 - 18+00.00	1.00'	19.67' AVG.	50.00'	69
18+00.00 - 19+71.00	1.00'	19.00'	171.00'	227
20+29.00 - 21+50.00	1.00'	19.00'	121.00'	161
21+50.00 - 22+00.00	1.00'	19.86' AVG.	50.00'	70
TOTAL				527

PERIMETER EROSION BARRIER

STATION TO STATION	SIDE	FOOT
18+25 - 19+71	LEFT	165
18+75 - 19+71	RIGHT	115
20+29 - 22+00	LEFT	200
20+29 - 22+00	RIGHT	215
TOTAL		695

TEMPORARY DITCH CHECKS

STATION	SIDE	FOOT
17+50	LEFT	12
17+50	RIGHT	12
TOTAL		24

INLET AND PIPE PROTECTION

STATION	SIDE	EACH
20+66	LEFT	1
20+67	RIGHT	1
TOTAL		2

PIPE CULVERT REMOVAL

STATION	SIZE	SIDE	FOOT
20+36	24"	LEFT	42
20+36	24"	RIGHT	43
TOTAL			85

PIPE CULVERTS, CLASS D, TYPE 1 24"

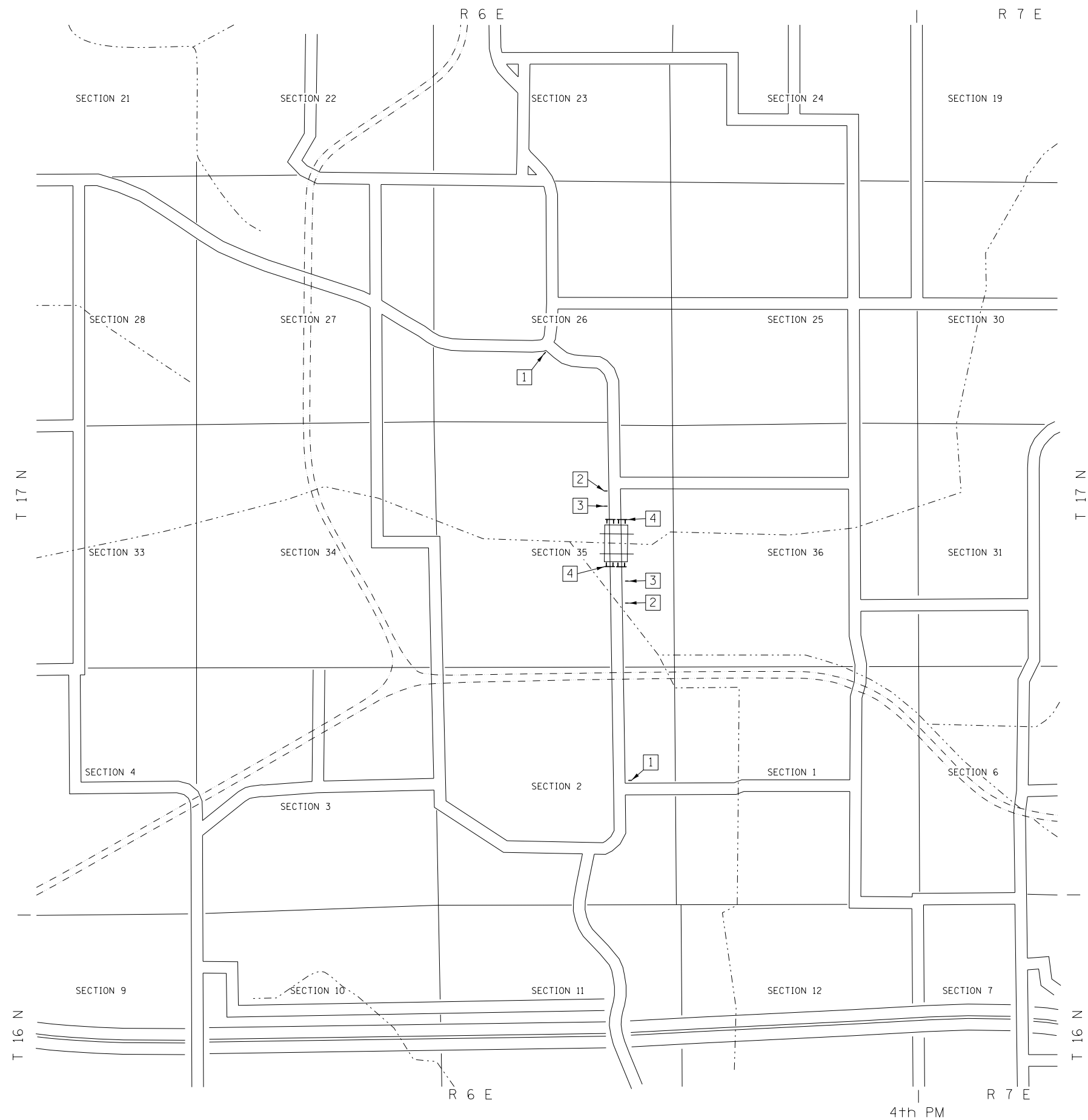
STATION	SIDE	FOOT
20+50	LEFT	34
20+50	RIGHT	36
TOTAL		70

METAL END SECTIONS 24"

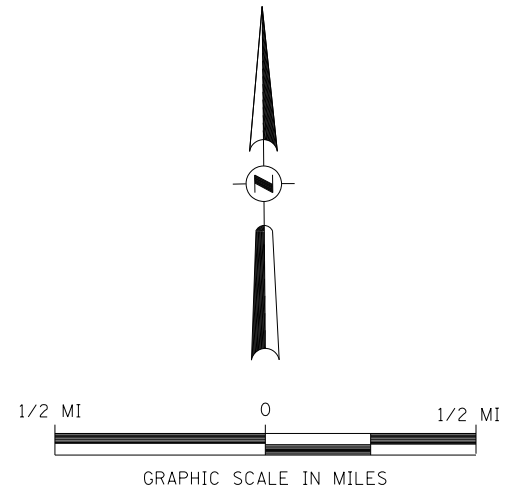
STATION	SIDE	EACH
20+66	LEFT	1
20+67	RIGHT	1
TOTAL		2

FLAP GATE 24"

STATION	SIDE	EACH
20+31	RIGHT	1
20+32	LEFT	1
TOTAL		2



- 1 ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY R11-3
 - 2 ROAD CLOSED AHEAD W20-3
 - 3 ROAD CLOSED 500 FT W20-3
 - 4 TYPE III BARRICADES
- SEE STANDARD BLR 21 AND SPECIAL PROVISIONS



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PLOT DATE = 12/8/2017		DATE -	REVISED -

**BUREAU COUNTY
TOWNSHIP ROAD 60B
OVER SMITH DITCH**

TRAFFIC CONTROL PLAN

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 17+50.00 TO STA. 22+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 60B	13-08123-00-BR	BUREAU	23	4
CONTRACT NO. 87672				
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. XPG(375)	

T 17 N, R 6 E, 4th PM
SECTION 35

DITCH

PROPOSED STRUCTURE
S.N. 006-4111

+50

+25

+71

+29

+66

+00

17

18

19

20

21

22

23

TOWNSHIP ROAD 60B

+50

+75

+71

+29







+67

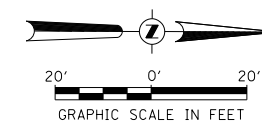
+00

SMITH

T 17 N, R 6 E, 4th PM
SECTION 35

LEGEND

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



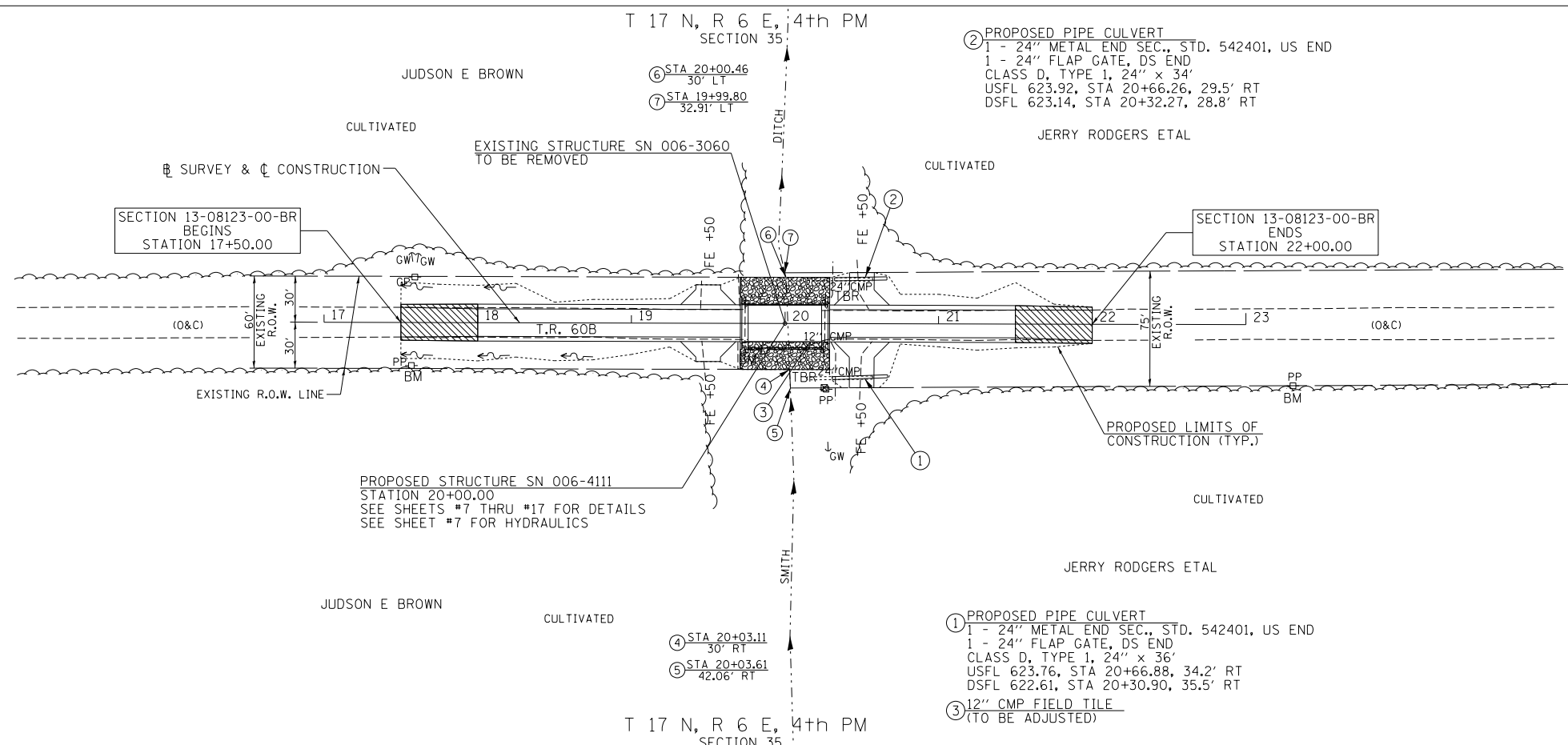
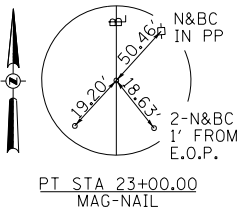
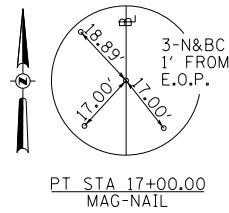
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	PLOT DATE = 12/8/2017	DATE -	REVISED -

**BUREAU COUNTY
TOWNSHIP ROAD 60B
OVER SMITH DITCH**

EROSION CONTROL PLAN

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 17+50.00 TO STA. 22+00.00

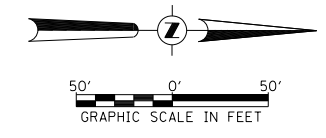
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 60B	13-08123-00-BR	BUREAU	23	5
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 87672	
FED. AID PROJECT NO. XYP613751				



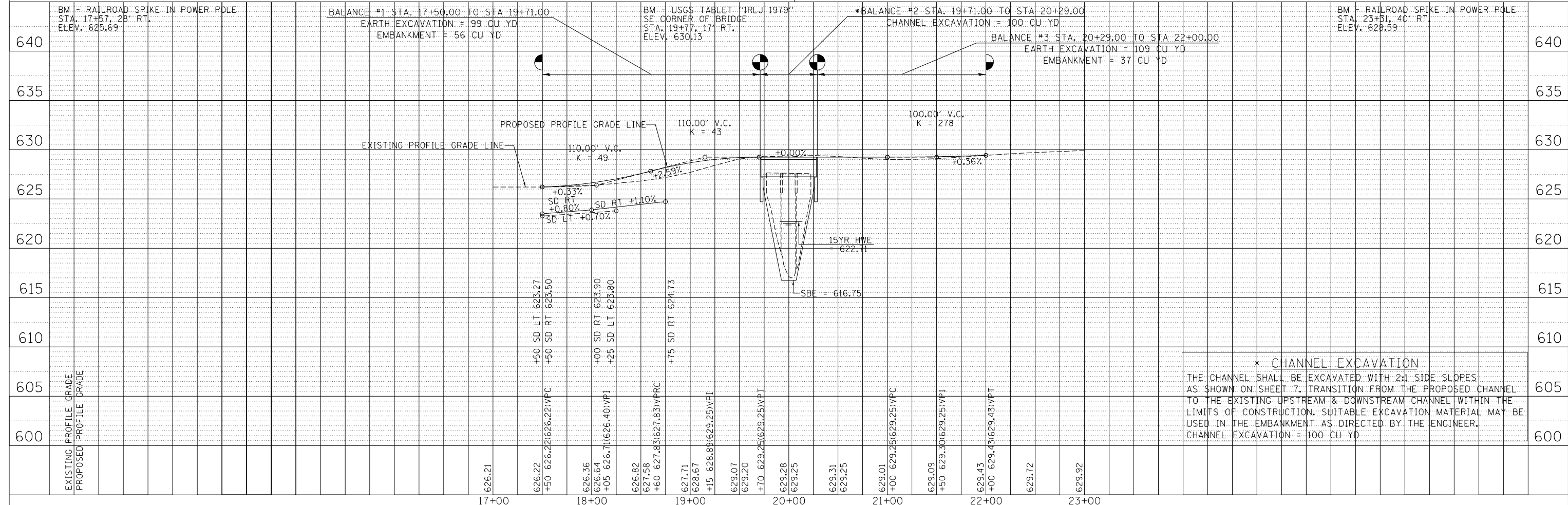
DATE	
BY	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
AS BUILT CHECKED	
CADD FILE NAME	
NO.	
PLAN	
NOTE BOOK	
NO.	

- LEGEND**
- TRANSITION TO OR FROM EXISTING TO PROPOSED TYPICAL PAVEMENT
 - PROPOSED RIPRAP PLACEMENT
 - SPECIAL DITCH WITH FLOW DIRECTION

- PROPOSED PIPE CULVERT**
- ① 1 - 24" METAL END SEC., STD. 542401, US END
1 - 24" FLAP GATE, DS END
CLASS D, TYPE 1, 24" x 34'
USFL 623.92, STA 20+66.26, 29.5' RT
DSFL 623.14, STA 20+32.27, 28.8' RT
 - ② 1 - 24" METAL END SEC., STD. 542401, US END
1 - 24" FLAP GATE, DS END
CLASS D, TYPE 1, 24" x 36'
USFL 623.76, STA 20+66.88, 34.2' RT
DSFL 622.61, STA 20+30.90, 35.5' RT
 - ③ 12" CMP FIELD TILE
(TO BE ADJUSTED)



DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NO.	
PROFILE	
NOTE BOOK	
NO.	



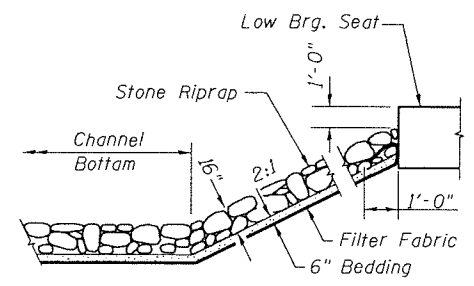
*** CHANNEL EXCAVATION**
 THE CHANNEL SHALL BE EXCAVATED WITH 2:1 SIDE SLOPES AS SHOWN ON SHEET 7. TRANSITION FROM THE PROPOSED CHANNEL TO THE EXISTING UPSTREAM & DOWNSTREAM CHANNEL WITHIN THE LIMITS OF CONSTRUCTION. SUITABLE EXCAVATION MATERIAL MAY BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.
 CHANNEL EXCAVATION = 100 CU YD

FILE NAME =	USER NAME = SMierzwa	DESIGNED -	REVISED -	BUREAU COUNTY TOWNSHIP ROAD 60B OVER SMITH DITCH	PLAN AND PROFILE	RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
V:\4112 - TR60B over Smith Ditch (Bureau)\CADD\CADD Sheets\4112-P001.dgn		DRAWN -	REVISED -			TR 60B	13-08123-00-BR	BUREAU	23	6
PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -			CONTRACT NO. 87672				
PLOT DATE = 12/8/2017		DATE -	REVISED -			SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. 17+50.00 TO STA. 22+00.00				
						FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XYPG13751		

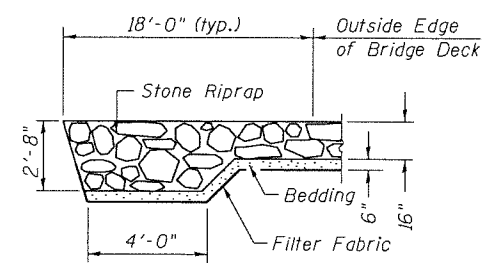
B.M.: RR Spike in Power Pole Sta. 17+57, 28' Rt. Elev. 625.69
 B.M.: RR Spike in Power Pole Sta. 23+31, 40' Rt. Elev. 628.59

Existing Structure:
 Three span precast Nelson beam bridge on timber pile bent piers with concrete caps and timber pile bent abutments with concrete caps. The structure is ±50'-0" back to back of abutments, 30'-0" out to out deck, and is not skewed. Str. No. 006-3060

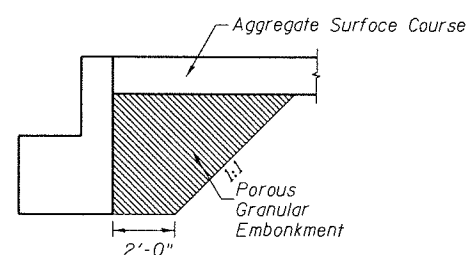
Salvage: None
 Road to be closed to traffic during construction.



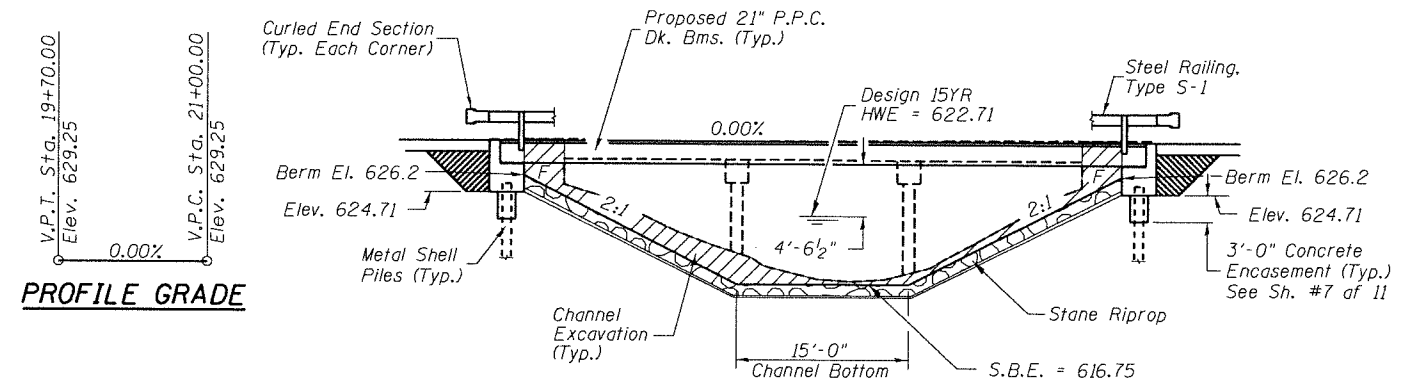
STONE RIPRAP DETAIL



SECTION A-A

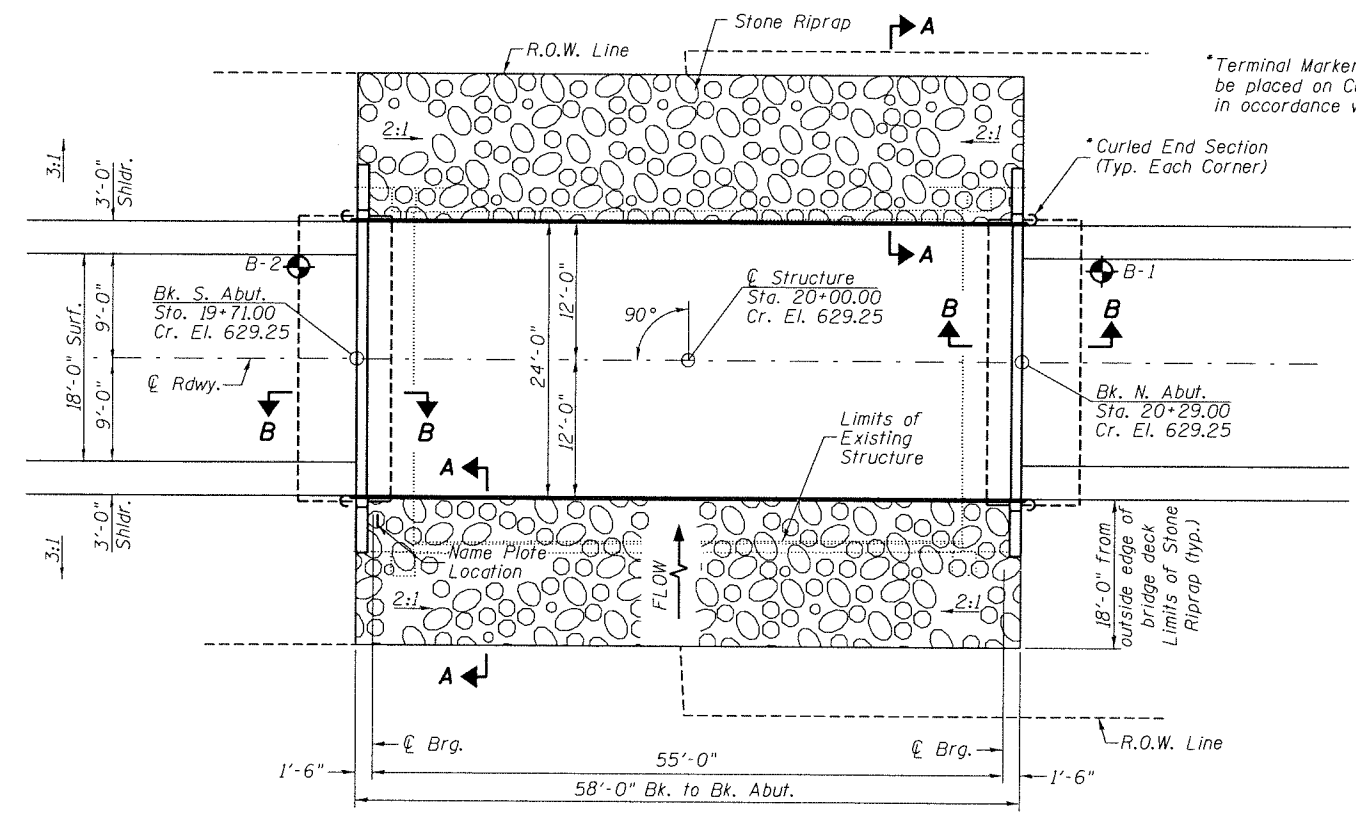


SECTION B-B



PROFILE GRADE

ELEVATION



PLAN

DESIGN SCOUR TABLE

Location	S. Abut.	N. Abut.
Design Scour Elevation	624.71	624.71

WATERWAY INFORMATION

Drainage Area = 8.33 Sq. Mi. Low Grade Elev. = 626.21 @ Sta. 17+00.00

Flood	Freq. Yr.	C.F.S.	Opening	Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
			Exist.	Prop.	Exist.	Prop.	Exist.
Design	15	552	117	159	622.71	0.20	0.03
Base	100	825	158	207	623.89	0.27	0.06

DESIGN SPECIFICATIONS

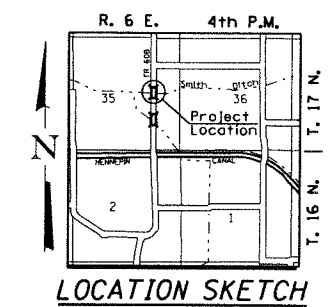
2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 & 2016 Interims

DESIGN STRESSES

(FIELD UNITS) f'c = 3,500 p.s.i. fy = 60,000 p.s.i. (Rein.)
 (PRECAST PRESTRESSED UNITS) f'c = 6,000 p.s.i. f'ci = 5,000 p.s.i. f's = 270,000 p.s.i. (1/2" Strands) f'si = 201,960 p.s.i. (1/2" Strands)

LOADING HL-93

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



LOCATION SKETCH

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 Sheets 8-11 of 11.
 A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Article 1020.05(b)(10) 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.

**SMITH DITCH
 BUILT 2011 BY
 GOLD ROAD DISTRICT
 BUREAU COUNTY
 SEC. 13-08123-00-BR
 T.R. 60B STATION 20+00.00
 F.A. PROJ. NO. XXPG(375)
 STR. NO. 006-4111 LOADING HL-93**

NAME PLATE

Locate Name Plate at S.E. Wingwall Corner of Bridge (See Std. 515001)

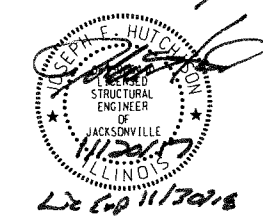
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD	---	100	100
Stone Riprap, Class A4 (Special)	TON	---	325	325
Removal of Existing Structures	EACH	---	1	1
Concrete Structures	CU YD	---	19.8	19.8
Precast Prestressed Concrete Deck Beams (21" Depth)	SO FT	1,348	---	1,348
Reinforcement Bars	POUND	---	2,300	2,300
Steel Railing, Type S-1	FOOT	116	---	116
Furnishing Metal Shell Piles 12"x0.250"	FOOT	---	312	312
Driving Piles	FOOT	---	312	312
Test Pile Metal Shells	EACH	---	2	2
Concrete Encasement	CU YD	---	2.6	2.6
Name Plates	EACH	---	1	1
① Porous Granular Embankment	CU YD	---	23.4	23.4

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 Standard Specification for Highway Bridges. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

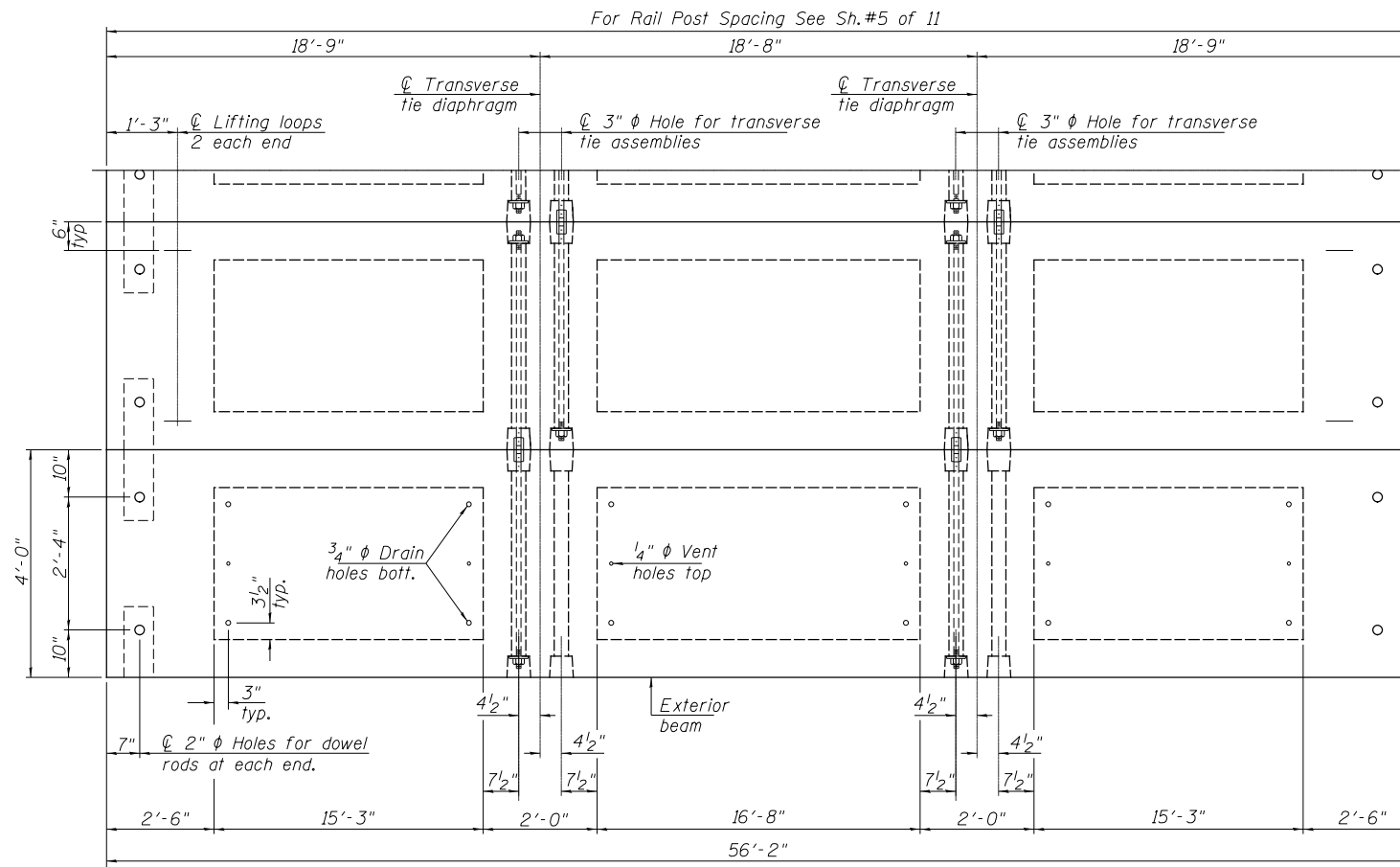
[Signature]
 Illinois Structural No. 6440
 Expires 11/30/2018



**GENERAL PLAN & ELEVATION
 BUREAU COUNTY
 SECTION 13-08123-00-BR
 TOWNSHIP ROAD 60B
 OVER SMITH DITCH**

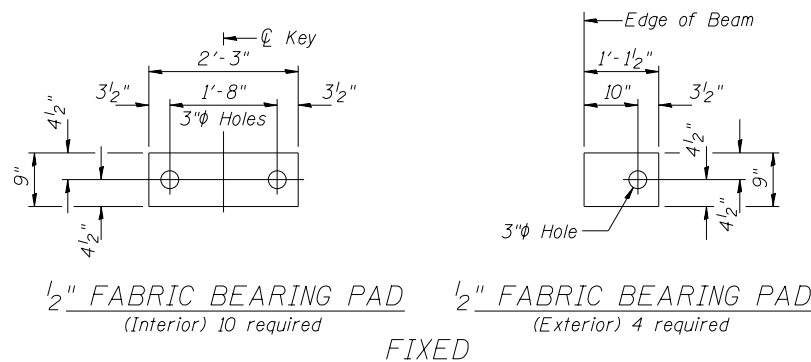
DESIGNED	E.M.L.
CHECKED	S.T.M.
DRAWN	E.M.L.
CHECKED	S.T.M.

SHEET NO. 1 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	7
	S.N. 006-4111		CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT NO. XXPG(375)		



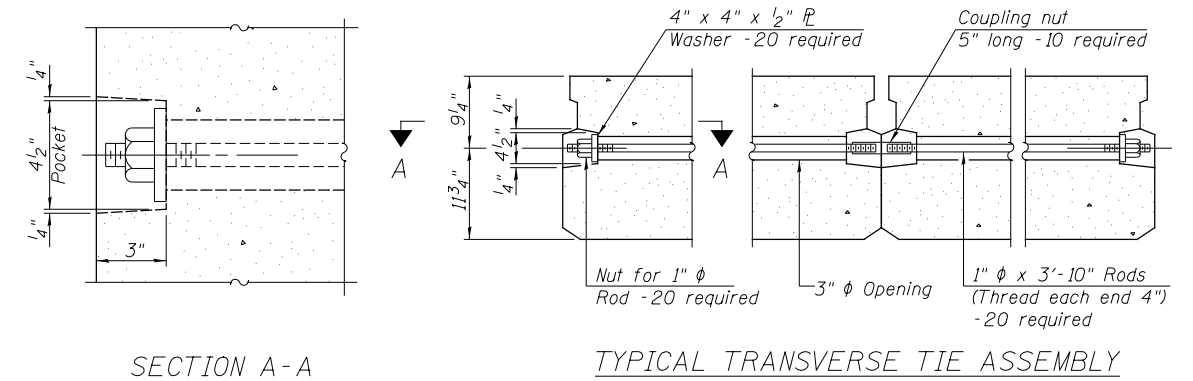
PLAN VIEW

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



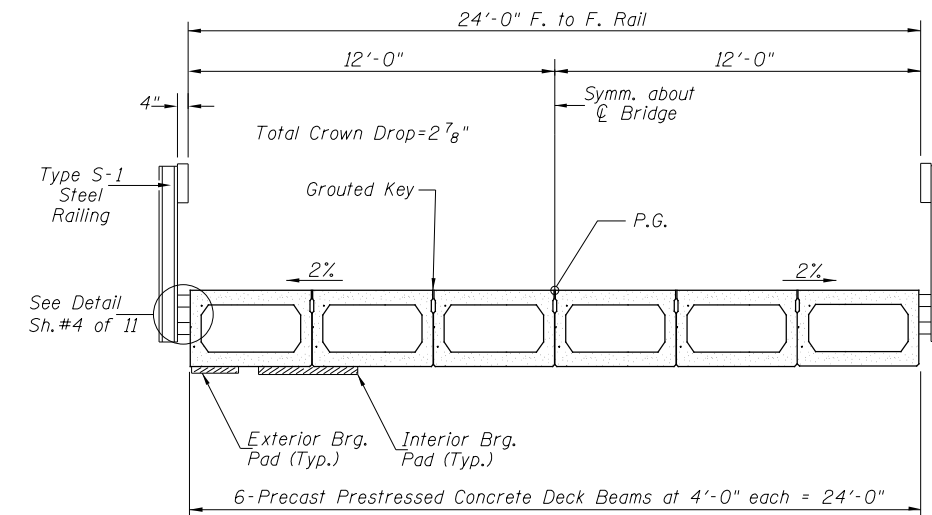
NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
 Reinforcement bars shall conform to ASTM A706, 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" ϕ lifting pin shall be used to engage the lifting loops during handling.
 Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
 Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
 Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



SECTION A-A

TYPICAL TRANSVERSE TIE ASSEMBLY



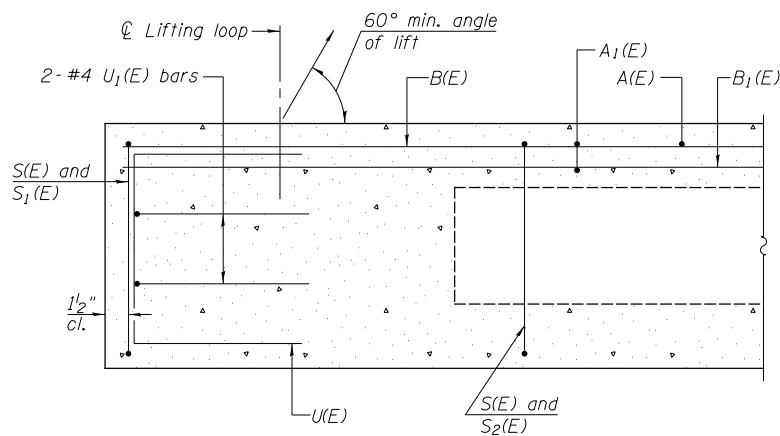
CROSS SECTION

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (21" Depth)	SQ FT	1,348

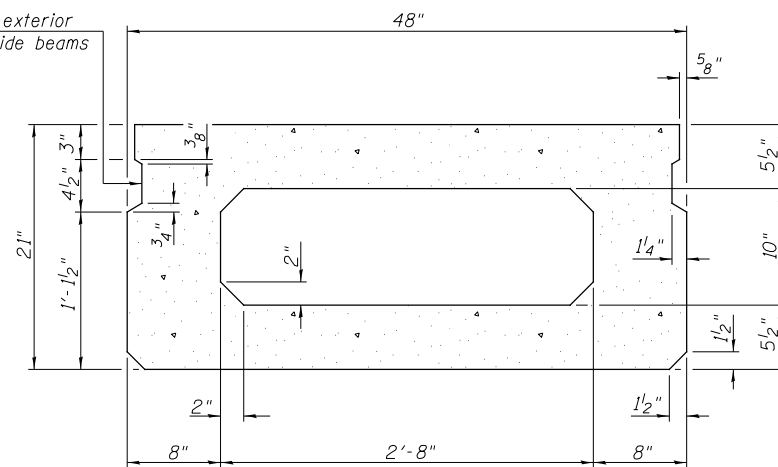
SUPERSTRUCTURE
 BUREAU COUNTY
 SECTION 13-08123-00-BR
 TOWNSHIP ROAD 60B
 OVER SMITH DITCH

SHEET NO. 2 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	8
S.N. 006-4111			CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XXPG(375)			

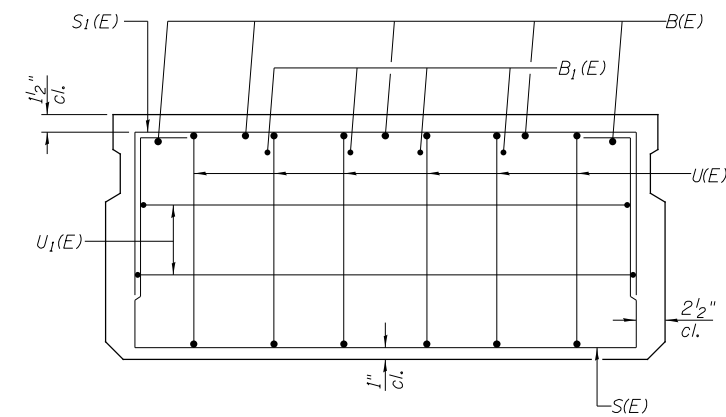


SECTION C-C

**Omit key on exterior face of outside beams

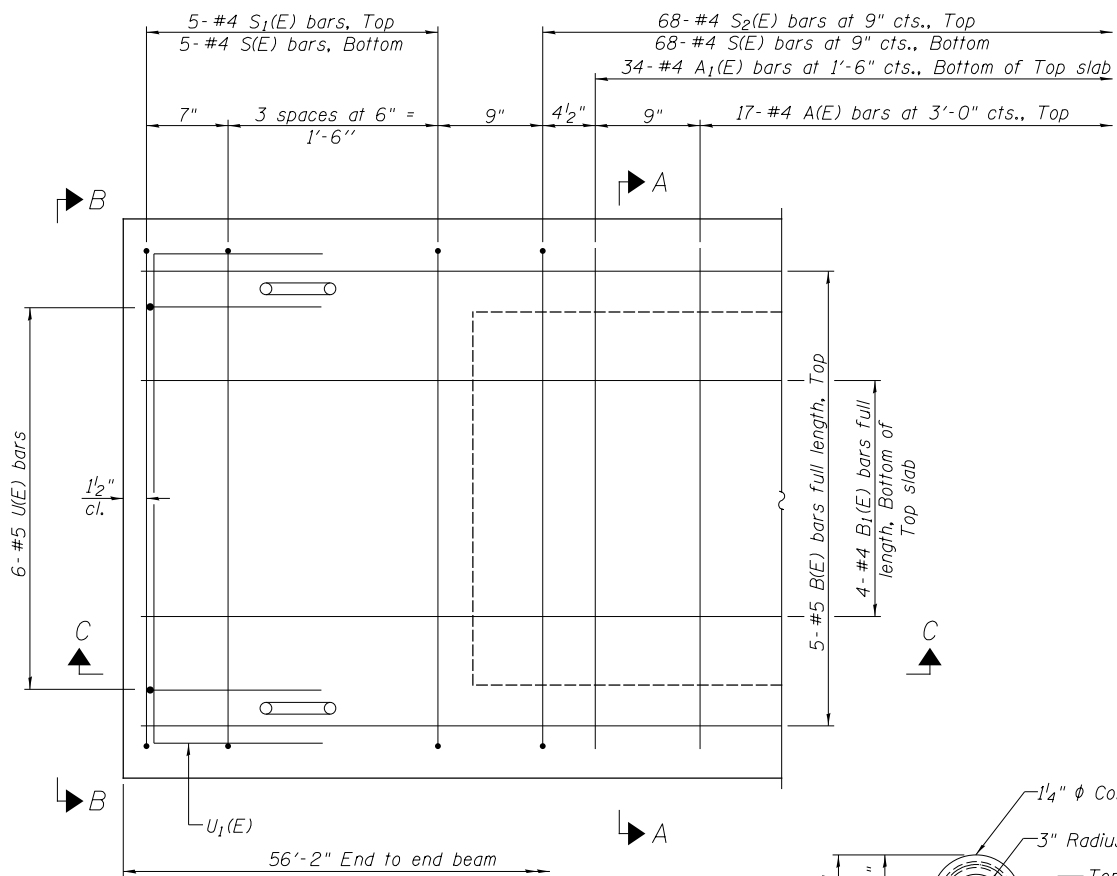


SECTION A-A
(Showing dimensions)

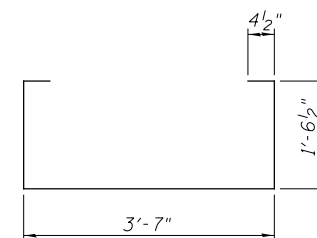


VIEW B-B

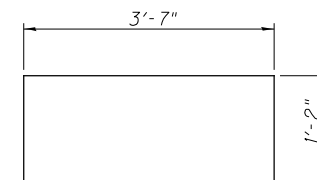
**Rail post anchor devices (Sheet 4 of 11) to be cast into exterior face of outside beams.



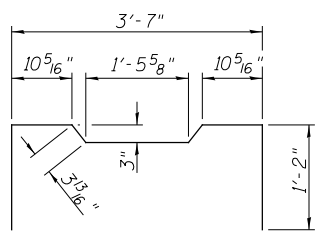
PLAN VIEW



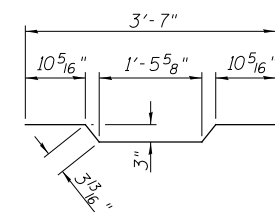
BAR S(E)



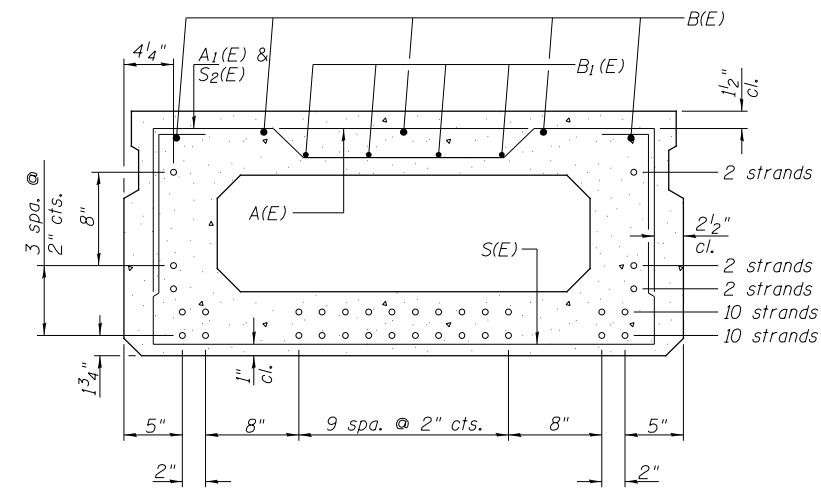
BAR S1(E)



BAR S2(E)



BAR A1(E)



SECTION A-A

26- $\frac{1}{2}$ " ϕ Strands Each Strand Stressed to 30,900 Lbs.
 10-Strands $1\frac{3}{4}$ " up, 10-Strands $3\frac{3}{4}$ " up, 2-Strands $5\frac{3}{4}$ " up
 2-Strands $7\frac{3}{4}$ " up, 2-Strands $1'-3\frac{3}{4}$ " up
 Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

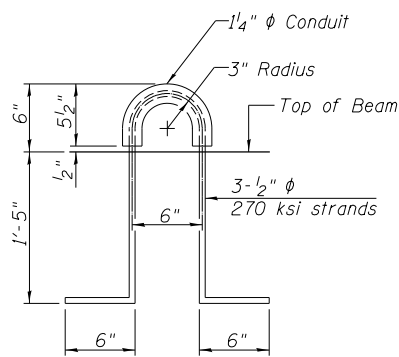
BAR LIST-ONE BEAM ONLY
(For Information Only)

BAR	NO.	SIZE	LENGTH	SHAPE
A(E)	17	#4	3'-7"	—
A1(E)	34	#4	3'-10"	—
B(E)	5	#5	*55'-11"	—
B1(E)	4	#4	*55'-11"	—
S(E)	78	#4	7'-5"	U
S1(E)	10	#4	5'-11"	U
S2(E)	68	#4	6'-2"	U
U(E)	12	#5	4'-0"	U
U1(E)	4	#4	6'-0"	U

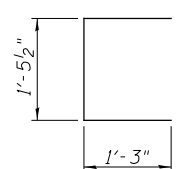
* Total Length, Lap as necessary

MIN. BAR LAP
 #4 bar = 1'-11"
 #5 bar = 2'-6"

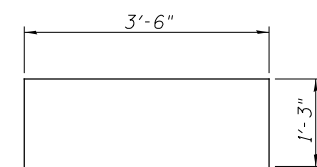
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



LIFTING LOOP DETAIL



BAR U(E)



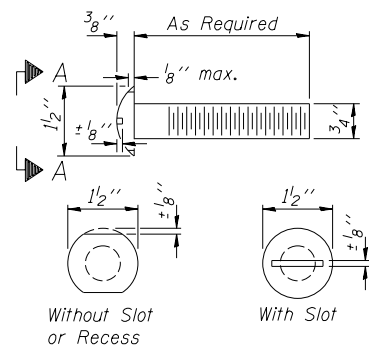
BAR U1(E)

Note: See Sheet 2 of 11 for additional details and Bill of Material.

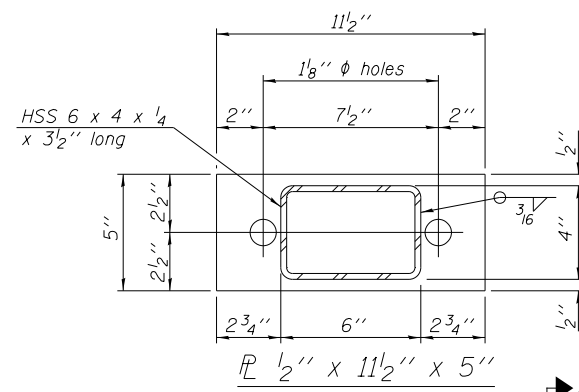
SUPERSTRUCTURE DETAILS
 BUREAU COUNTY
 SECTION 13-08123-00-BR
 TOWNSHIP ROAD 60B
 OVER SMITH DITCH

SHEET NO. 3 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	9
	S.N. 006-4111		CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XXPG(375)			

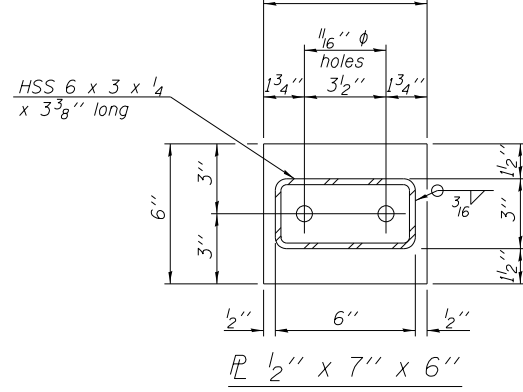
FOR RAIL POST SPACING SEE SH.#5 OF 11



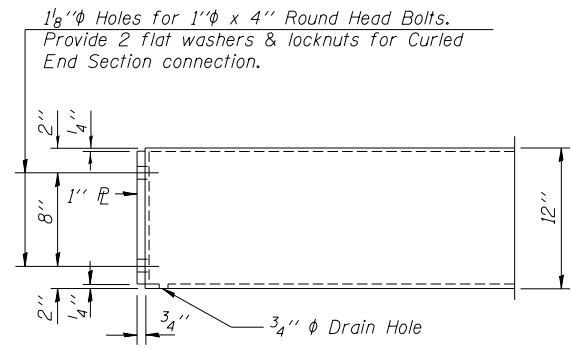
VIEW A-A
ROUND HEAD BOLT



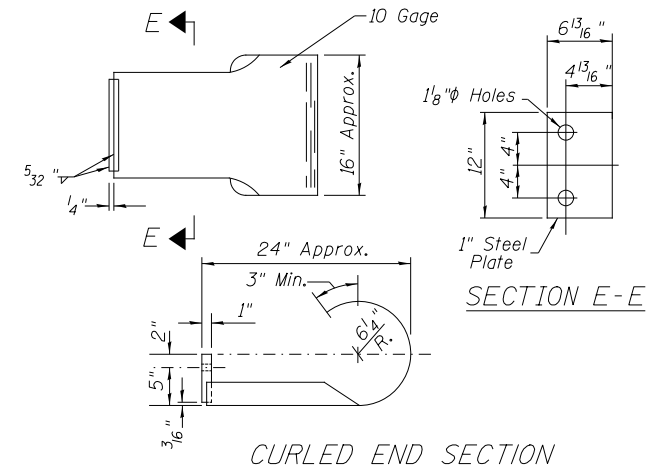
PL 1/2" x 11 1/2" x 5"



PL 1/2" x 7" x 6"



END OF RAIL DETAILS

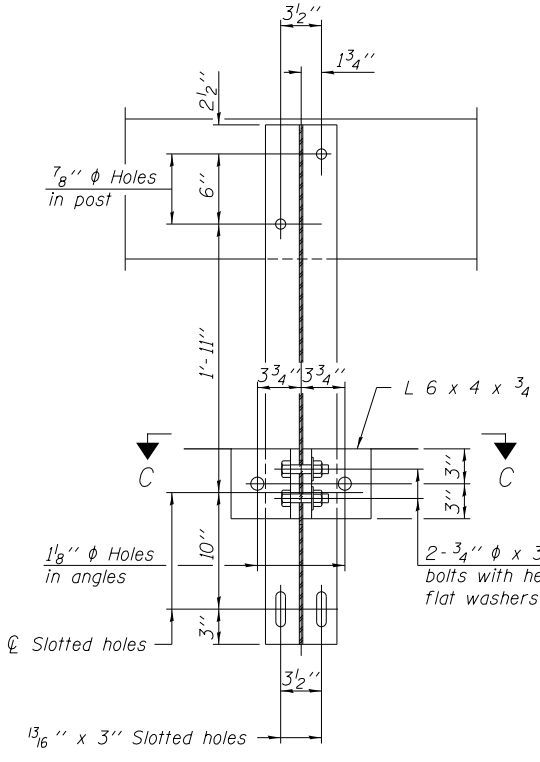


CURLED END SECTION

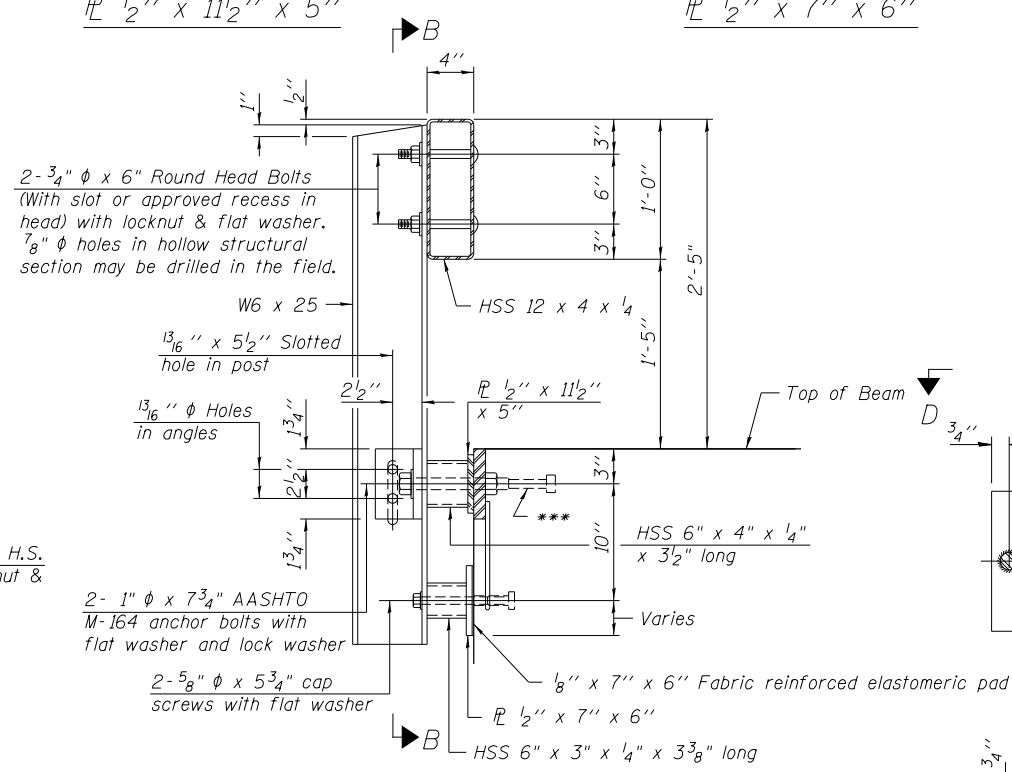
(Each Corner-4 Req'd) Terminal Markers-Direct Applied shall be placed on end of each Curled End Section. Cost of Curled End Sections and Terminal Markers-Direct Applied included with Steel Railing, Type S-1.

NOTES

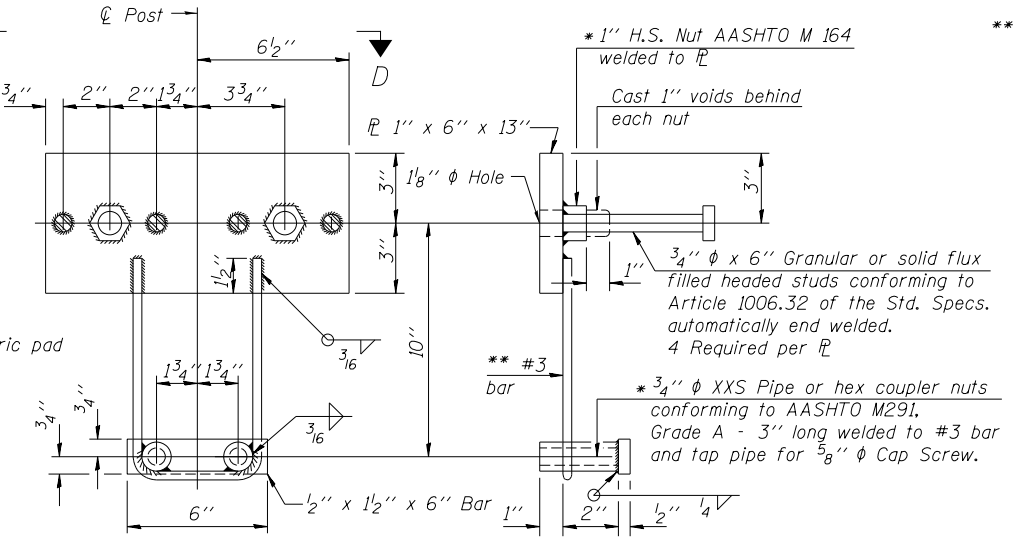
- All field drilled holes shall be coated with an approved zinc rich paint before erection.
- For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
- All steel rail elements shall 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.



SECTION B-B

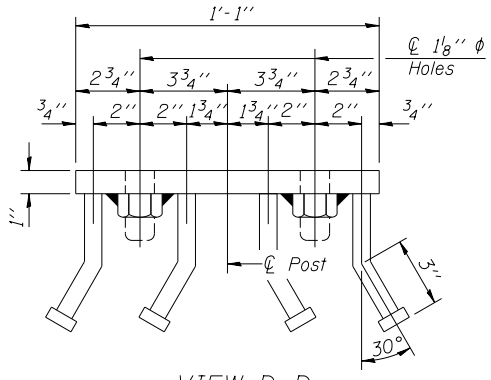


SECTION AT RAILING POST

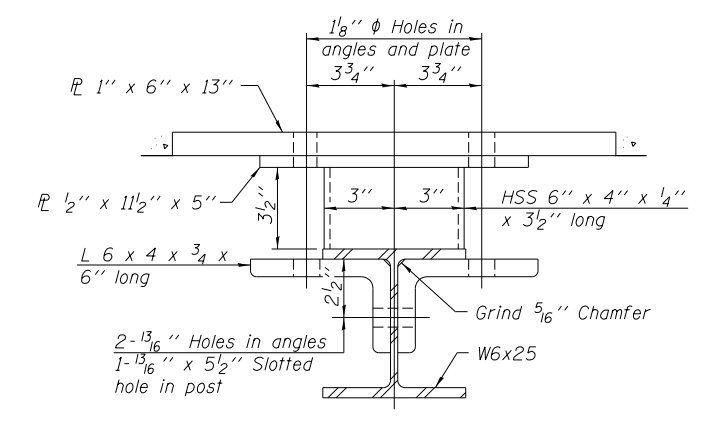


ANCHOR DEVICE

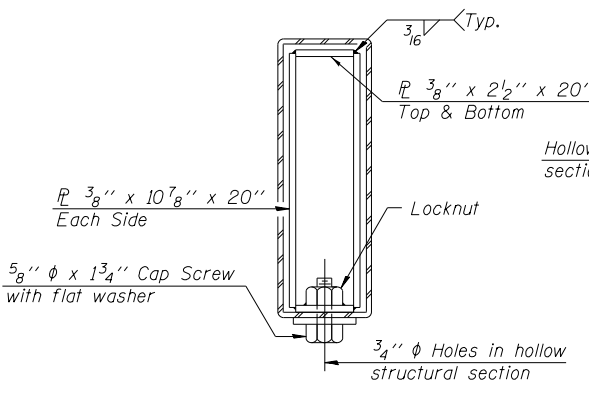
* Threaded areas shall be plugged or blocked off during casting of beam.



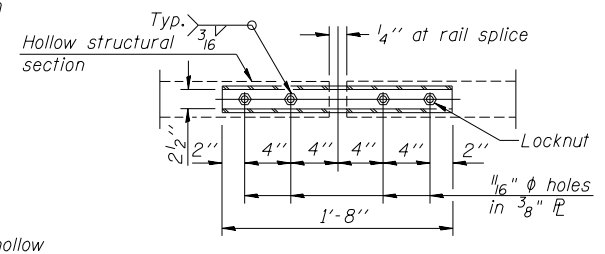
VIEW D-D



SECTION C-C



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE TYPICAL

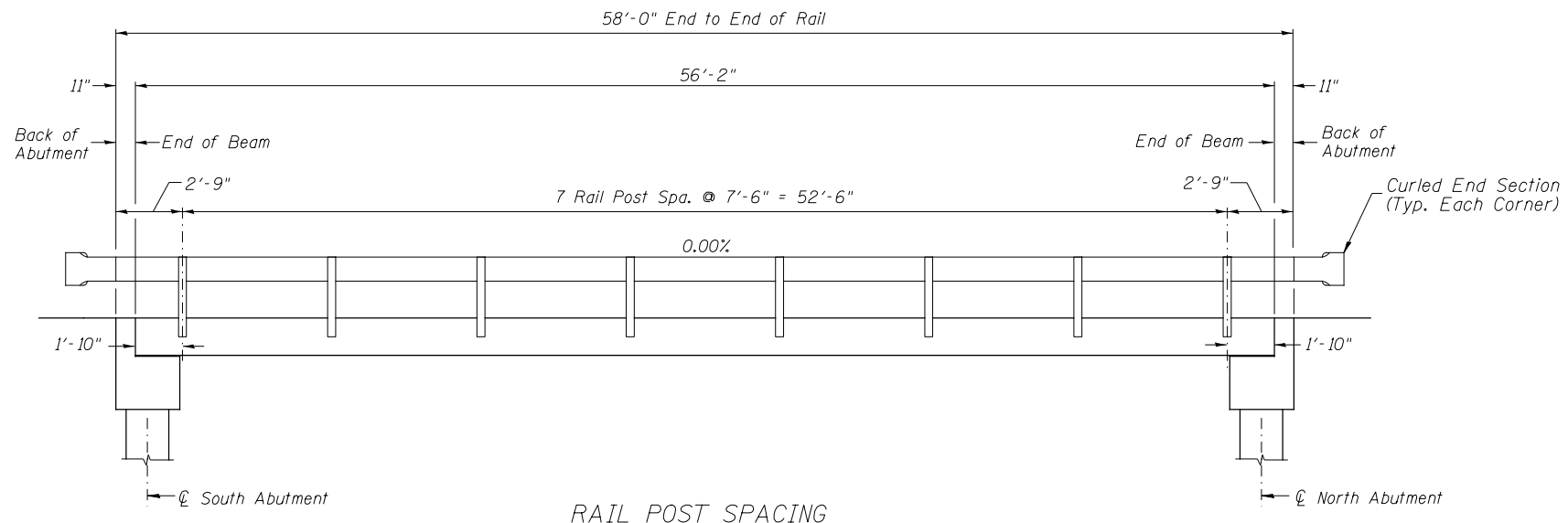
** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2 inch.

BILL OF MATERIAL

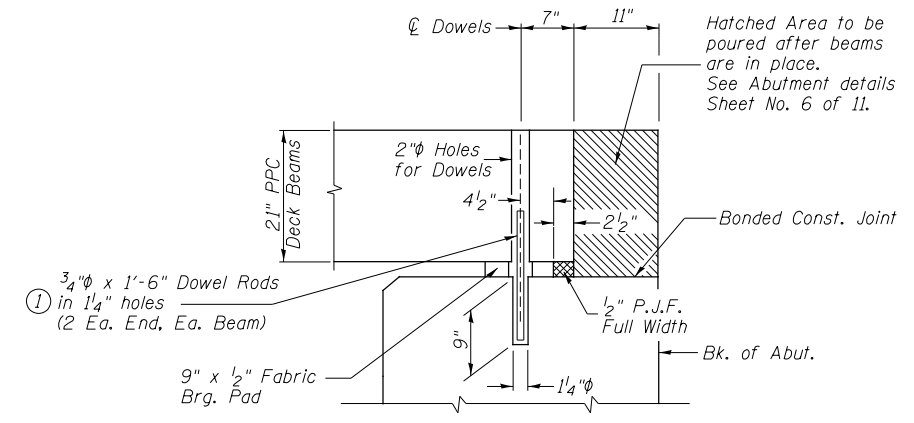
ITEM	UNIT	QUANTITY
Steel Railing, Type S-1	FOOT	116

STEEL RAILING, TYPE S-1
BUREAU COUNTY
SECTION 13-08123-00-BR
TOWNSHIP ROAD 60B
OVER SMITH DITCH

SHEET NO. 4 11 SHEETS	ROUTE NO. TR 60B	SECTION 13-08123-00-BR	COUNTY BUREAU	TOTAL SHEETS 23	SHEET NO. 10
	S.N. 006-4111		CONTRACT NO. 87672		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XXPG(375)		



RAIL POST SPACING



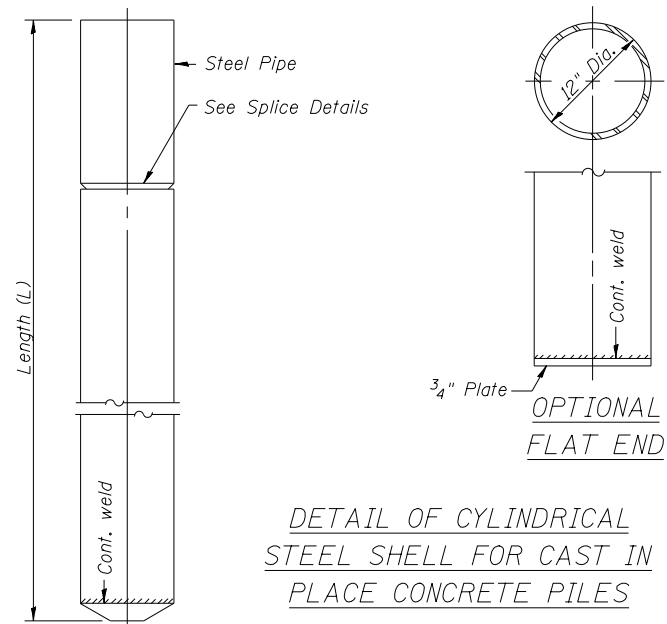
SECTION THRU ABUTMENTS

① Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hr.) prior to grouting the shear keys.

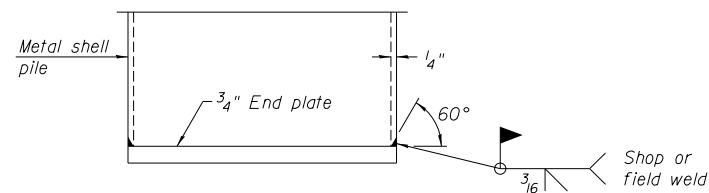
RAIL POST SPACING AND
SUPERSTRUCTURE DETAILS
BUREAU COUNTY
SECTION 13-08123-00-BR
TOWNSHIP ROAD 60B
OVER SMITH DITCH

SHEET NO. 5 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	11
	S.N. 006-4111		CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT NO. XXPG(375)		

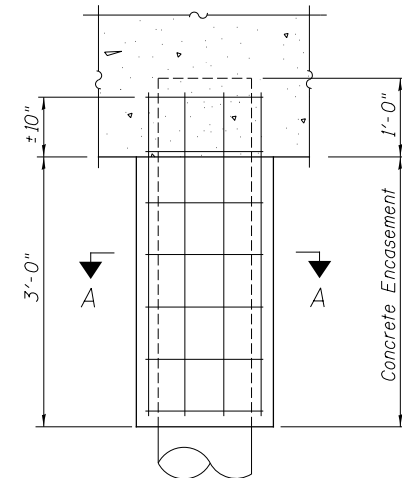
Notes: Driving and bearing ends of pipe shall be cut square. The thickness of the shell shall be 0.25 inches with a tolerance of 5%. The shell shall be according to Article 1006.05(a) of the Standard Specifications, and shall be ASTM A252 Grade 3.



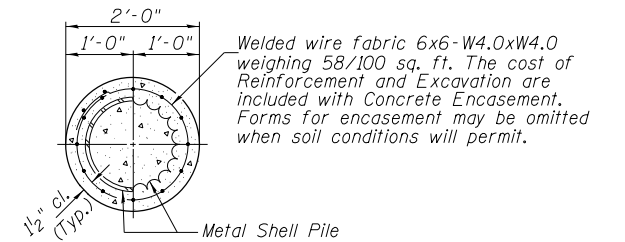
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



END PLATE ATTACHMENT

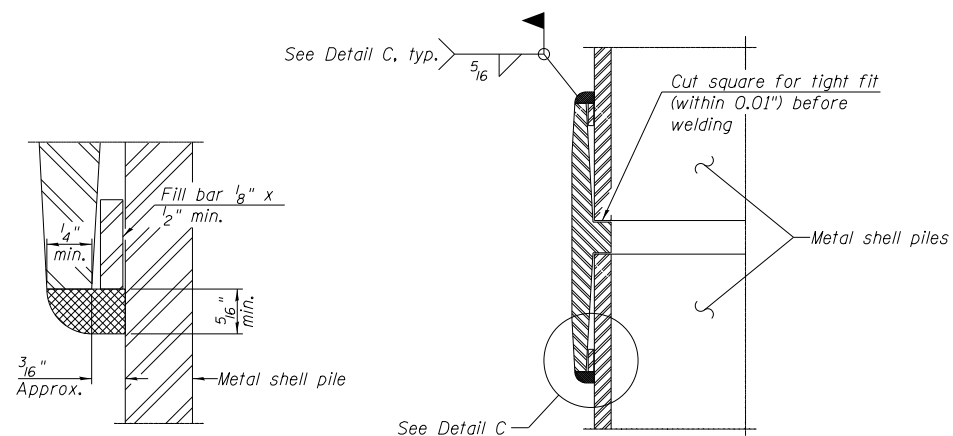


ELEVATION



SECTION A-A

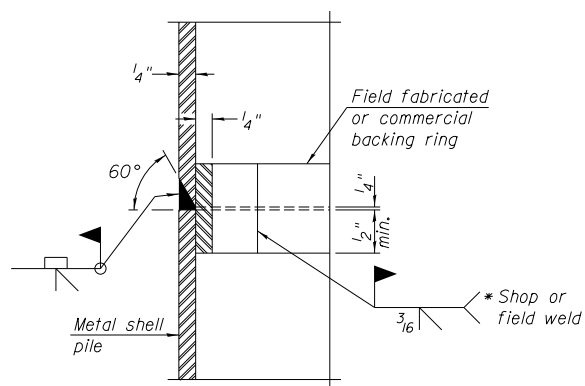
DETAIL OF METAL SHELL PILE ENCASEMENT AT ABUTMENTS



DETAIL C

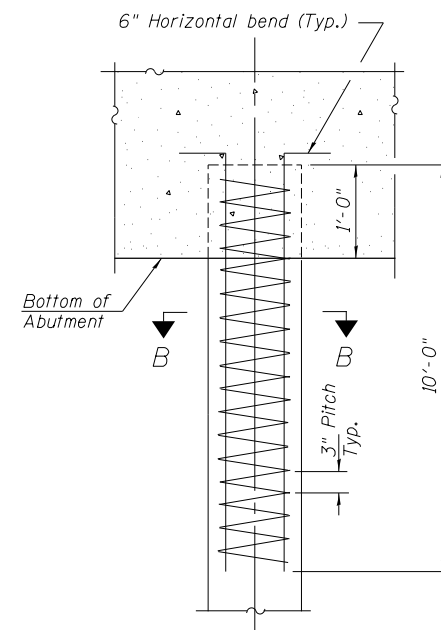
WELDED COMMERCIAL SPLICE

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.

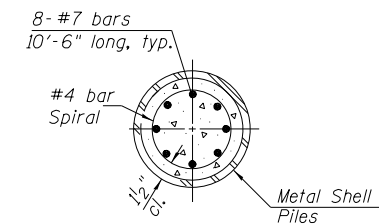


COMPLETE PENETRATION WELD SPLICE

* 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.



ELEVATION



SECTION B-B

The cost of Reinforcement is included with Furnishing Metal Shell Piles 12"x0.250"

REINFORCEMENT AT ABUTMENTS

METAL SHELL PILE DETAILS
BUREAU COUNTY
SECTION 13-08123-00-BR
TOWNSHIP ROAD 60B
OVER SMITH DITCH

Note:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

SHEET NO. 7 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	13
	S.N. 006-4111		CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XXPG(375)			

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 1 of 4

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc
Project Name: Section 13-08123-00-BR TR 60B
Project Site: Gold Road District Bureau County, Illinois

Boring No. B-1
Surface Elev. 99.80
Auger Depth 66' Rotary Depth NA
Start Date 07/08/17 Finish Date 07/08/17

Location: 8' West of Centerline of Roadway and
36' North of Center of Bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Edge / Shear		
99.80										
98.80	Stiff Black And Brown Silty Clay (Fill)		1							
97.80			2							
96.80			3	1	SS	1.3	6	B	20	
95.80	Medium Brown Coarse Clean Sand		4							
94.80			5							
93.80			6	2	SS	1.0	4	B	22	
92.80	Medium Gray Fine To Coarse Clean Sand		7							
91.80			8							
90.80			9	3	SS	---	16	---	10	
89.80	Very Stiff Gray Clay With Silt Seams		10							
88.80			11							
87.80			12	4	SS	---	18	---	10	
86.80	Medium Gray Fine To Coarse Clean Sand		13							
85.80			14							
84.80			15	5	SS	---	16	---	---	
83.80	Very Stiff Gray Clay With Silt Seams		16							
82.80			17							
81.80			18	6	SS	---	21	---	---	
80.80	Medium Gray Fine To Coarse Clean Sand		19							
79.80			20							
				7	SS	---	13	---	---	
	Very Stiff Gray Clay With Silt Seams									
				8	SS	---	12	---	---	

Groundwater Data: Static water level at time of drilling - Elevation 88.0
Comments: *Assumed center of existing bridge to be elevation 100.00.*

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 2 of 4

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc
Project Name: Section 13-08123-00-BR TR 60B
Project Site: Gold Road District Bureau County, Illinois

Boring No. B-1
Surface Elev. 99.80
Auger Depth 66' Rotary Depth NA
Start Date 07/08/17 Finish Date 07/08/17

Location: 8' West of Centerline of Roadway and
36' North of Center of Bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Edge / Shear		
78.80										
77.80	Medium Gray Coarse Sand And Fine Gravel		22							
76.80			23	9	SS	---	15	---	---	
75.80			24							
74.80	Very Stiff Gray Clay With Silt Seams		25							
73.80			26	10	SS	---	17	---	---	
72.80			27							
71.80	Medium Gray Fine To Coarse Clean Sand		28							
70.80			29							
69.80			30	11	SS	---	18	---	---	
68.80	Very Stiff Gray Clay With Silt Seams		31							
67.80			32							
66.80			33	12	SS	---	13	---	---	
65.80	Medium Gray Fine To Coarse Clean Sand		34							
64.80			35							
63.80			36	13	SS	2.8	14	B	15	
62.80	Very Stiff Gray Clay With Silt Seams		37							
61.80			38							
60.80			39							
59.80	Medium Gray Fine To Coarse Clean Sand		40							
58.80			41	14	SS	2.4	14	B	16	

Groundwater Data: Static water level at time of drilling - Elevation 88.0
Comments: *Assumed center of existing bridge to be elevation 100.00.*

SOIL BORING LOGS
BUREAU COUNTY
SECTION 13-08123-00-BR
TOWNSHIP ROAD 60B
OVER SMITH DITCH

SHEET NO. 8 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	14
	S.N. 006-4111		CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XXPG(375)			

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 3 of 4

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc
Project Name: Section 13-08123-00-BR TR 60B
Project Site: Gold Road District Bureau County, Illinois

Boring No. B-1
Surface Elev. 99.80
Auger Depth 66' Rotary Depth NA
Start Date 07/08/17 Finish Date 07/08/17

Location: 8' West of Centerline of Roadway and
36' North of Center of Bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bluge / Shear			Moisture (%)
57.80			43						Randy Safranski Diedrich D-120		
56.80			44								
55.80			45	15	SS	2.2	13	B		17	
54.80			46								
53.80			47								
52.80			48								
51.80			49								
50.80	Very Stiff Gray Clay With Silt Seams		50	16	SS	2.3	14	B		16	
49.80			51								
48.80			52								
47.80			53								
46.80			54								
45.80			55	17	SS	2.5	16	B	14		
44.80			56								
43.80			57								
42.80			58								
41.80			59								
40.80			60								
39.80			61	18	SS	2.1	12	B	16		
38.80			62								
37.80											

Groundwater Data: Static water level at time of drilling - Elevation 88.0
Comments: *Assumed center of existing bridge to be elevation 100.00.*

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 4 of 4

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc
Project Name: Section 13-08123-00-BR TR 60B
Project Site: Gold Road District Bureau County, Illinois

Boring No. B-1
Surface Elev. 99.80
Auger Depth 66' Rotary Depth NA
Start Date 07/08/17 Finish Date 07/08/17

Location: 8' West of Centerline of Roadway and
36' North of Center of Bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bluge / Shear			Moisture (%)
36.80			64						Randy Safranski Diedrich D-120		
35.80	Very Stiff Gray With Silt Seams		65								
34.80			66	19	SS	2.1	12	B		17	
33.80	Boring Terminated		67								
32.80			68								
31.80			69								
30.80			70								
29.80			71								
28.80			72								
27.80			73								
26.80			74								
25.80			75								
24.80			76								
23.80			77								
22.80			78								
21.80			79								
20.80			80								
19.80			81								
18.80			82								
17.80			83								
16.80											

Groundwater Data: Static water level at time of drilling - Elevation 88.0
Comments: *Assumed center of existing bridge to be elevation 100.00.*

SOIL BORING LOGS
BUREAU COUNTY
SECTION 13-08123-00-BR
TOWNSHIP ROAD 60B
OVER SMITH DITCH

SHEET NO. 9 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	15
	S.N. 006-4111		CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XXPG(375)			

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 1 of 4

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc
Project Name: Section 13-08123-00-BR TR 60B
Project Site: Gold Road District Bureau County, Illinois

Boring No. B-2
Surface Elev. 99.90
Auger Depth 66' Rotary Depth NA
Start Date 07/08/17 Finish Date 07/08/17

Location: 8' West of Centerline of Roadway and
34' South of Center of Bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bluge / Shear	Moisture (%)		
99.90											
98.90	Stiff Brown Silty Clay (Fill)		1								
97.90			2								
96.90	Stiff Brown Silty Clay		3	1	SS	1.6	7	S	15		
95.90			4								
94.90	Stiff Brown Silty Clay		5	2	SS	1.5	6	B	20		
93.90			6								
92.90	Medium Brown Coarse Clean Sand		7	3	SS	---	13	---	12		
91.90			8								
90.90	Medium Brown Coarse Clean Sand		9								
89.90			10	4	SS	---	16	---	10		
88.90	Medium Gray Fine Sand to Fine Gravel		11								
87.90			12								
86.90	Medium Gray Fine Sand to Fine Gravel		13	5	SS	---	15	---	---		
85.90			14								
84.90	Medium Gray Fine Sand to Fine Gravel		15	6	SS	---	17	---	---		
83.90			16								
82.90	Medium Gray Fine Sand to Fine Gravel		17								
81.90			18	7	SS	---	15	---	---		
80.90	Medium Gray Fine Sand to Fine Gravel		19								
79.90			20	8	SS	---	14	---	---		

Groundwater Data: Static water level at time of drilling - Elevation 88.0
Comments: *Assumed center of existing bridge to be elevation 100.00.*

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 2 of 4

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc
Project Name: Section 13-08123-00-BR TR 60B
Project Site: Gold Road District Bureau County, Illinois

Boring No. B-2
Surface Elev. 99.90
Auger Depth 66' Rotary Depth NA
Start Date 07/08/17 Finish Date 07/08/17

Location: 8' West of Centerline of Roadway and
34' South of Center of Bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bluge / Shear	Moisture (%)		
78.90											
77.90			22								
76.90			23	9	SS	---	16	---	---		
75.90	Medium Gray Coarse Sand And Fine Gravel		24								
74.90			25								
73.90	Medium Gray Coarse Sand And Fine Gravel		26	10	SS	---	19	---	---		
72.90			27								
71.90	Medium Gray Coarse Sand And Fine Gravel		28	11	SS	---	15	---	---		
70.90			29								
69.90	Medium Gray Coarse Sand And Fine Gravel		30								
68.90			31	12	SS	---	17	---	---		
67.90	Very Stiff Gray Clay With Silt Seams		32								
66.90			33								
65.90	Very Stiff Gray Clay With Silt Seams		34								
64.90			35								
63.90	Very Stiff Gray Clay With Silt Seams		36	13	SS	2.5	13	B	16		
62.90			37								
61.90	Very Stiff Gray Clay With Silt Seams		38								
60.90			39								
59.90	Very Stiff Gray Clay With Silt Seams		40								
58.90			41	14	SS	3.2	21	B	14		

Groundwater Data: Static water level at time of drilling - Elevation 88.0
Comments: *Assumed center of existing bridge to be elevation 100.00.*

SOIL BORING LOGS
BUREAU COUNTY
SECTION 13-08123-00-BR
TOWNSHIP ROAD 60B
OVER SMITH DITCH

SHEET NO. 10 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	16
	S.N. 006-4111		CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XXPG(375)			

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 3 of 4

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc
Project Name: Section 13-08123-00-BR TR 60B
Project Site: Gold Road District Bureau County, Illinois

Boring No. B-2
Surface Elev. 99.90
Auger Depth 66' Rotary Depth NA
Start Date 07/08/17 Finish Date 07/08/17

Location: 8' West of Centerline of Roadway and
34' South of Center of Bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Edge / Shear	Moisture (%)	
57.90										Randy Safranski Diedrich D-120
56.90	Dense Gray Silt		43							
55.90		44								
54.90			45	15	SS	--	32	--	18	
53.90			46							
52.90	Hard Gray Silty Loam Till		47							
51.90		48								
50.90		49								
49.90			50	16	SS	4.3	30	S	18	
48.90			51							
47.90	Dense Gray Silt		52							
46.90		53								
45.90		54								
44.90			55	17	SS	--	32	--	--	
43.90			56							
42.90			57							
41.90	Hard Gray Clay Till		58							
40.90		59								
39.90		60								
38.90			61	18	SS	4.7	21	S	12	
37.90			62							

Groundwater Data: Static water level at time of drilling - Elevation 88.0
Comments: *Assumed center of existing bridge to be elevation 100.00.*

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 4 of 4

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc
Project Name: Section 13-08123-00-BR TR 60B
Project Site: Gold Road District Bureau County, Illinois

Boring No. B-2
Surface Elev. 99.90
Auger Depth 66' Rotary Depth NA
Start Date 07/08/17 Finish Date 07/08/17

Location: 8' West of Centerline of Roadway and
34' South of Center of Bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Edge / Shear	Moisture (%)	
36.90										Randy Safranski Diedrich D-120
35.90	Hard Gray Clay Till		64							
34.90		65								
33.90			66	19	SS	4.3	25	S	12	
32.90	Boring Terminated		67							
31.90		68								
30.90		69								
29.90		70								
28.90		71								
27.90		72								
26.90		73								
25.90		74								
24.90	75									
23.90	76									
22.90	77									
21.90	78									
20.90	79									
19.90	80									
18.90	81									
17.90	82									
16.90	83									

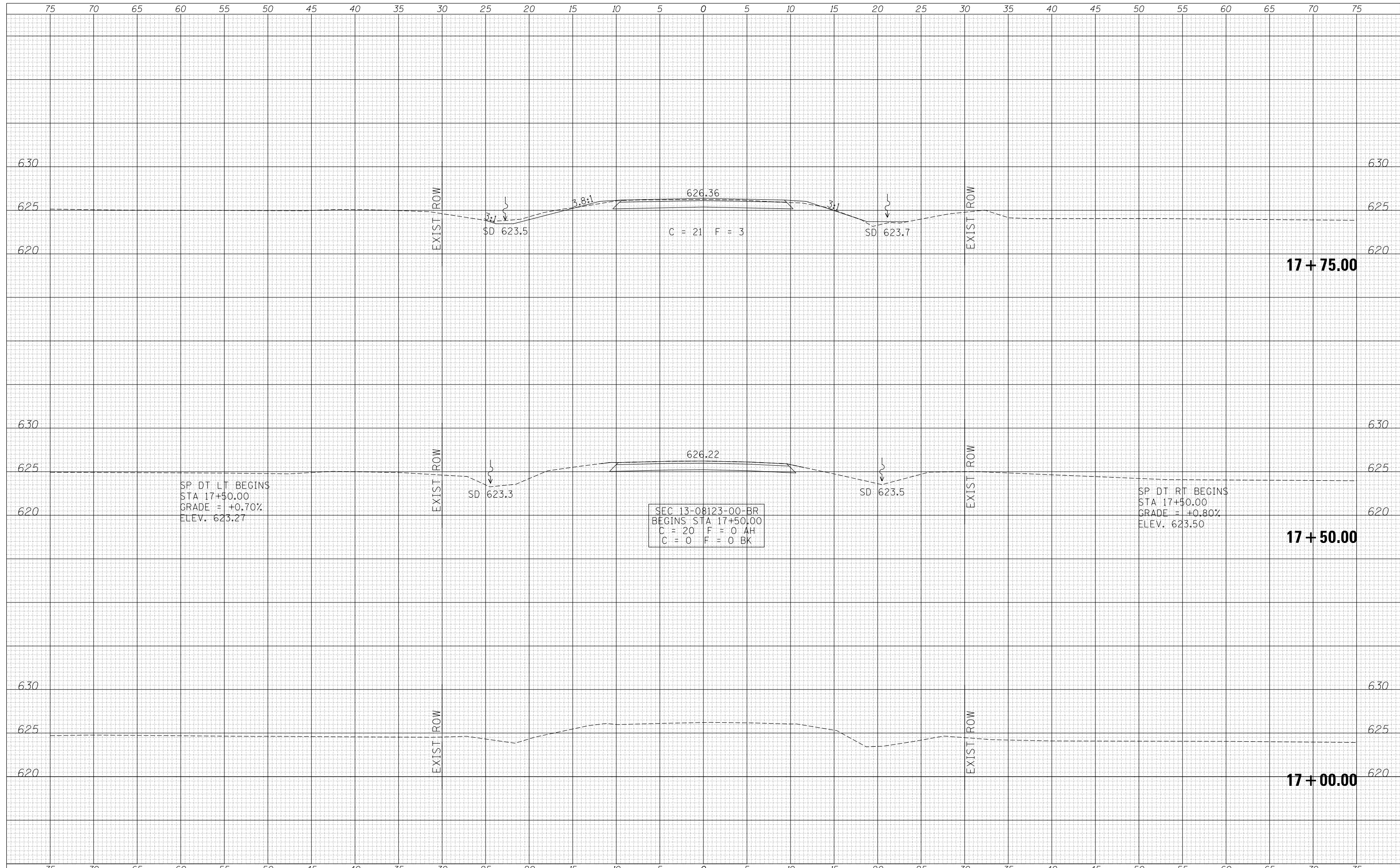
Groundwater Data: Static water level at time of drilling - Elevation 88.0
Comments: *Assumed center of existing bridge to be elevation 100.00.*

SOIL BORING LOGS
BUREAU COUNTY
SECTION 13-08123-00-BR
TOWNSHIP ROAD 60B
OVER SMITH DITCH

SHEET NO. 11 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 60B	13-08123-00-BR	BUREAU	23	17
	S.N. 006-4111		CONTRACT NO. 87672		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. XXPG(375)			

DATE	
BY	
FINAL SURVEY	
NO. _____	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

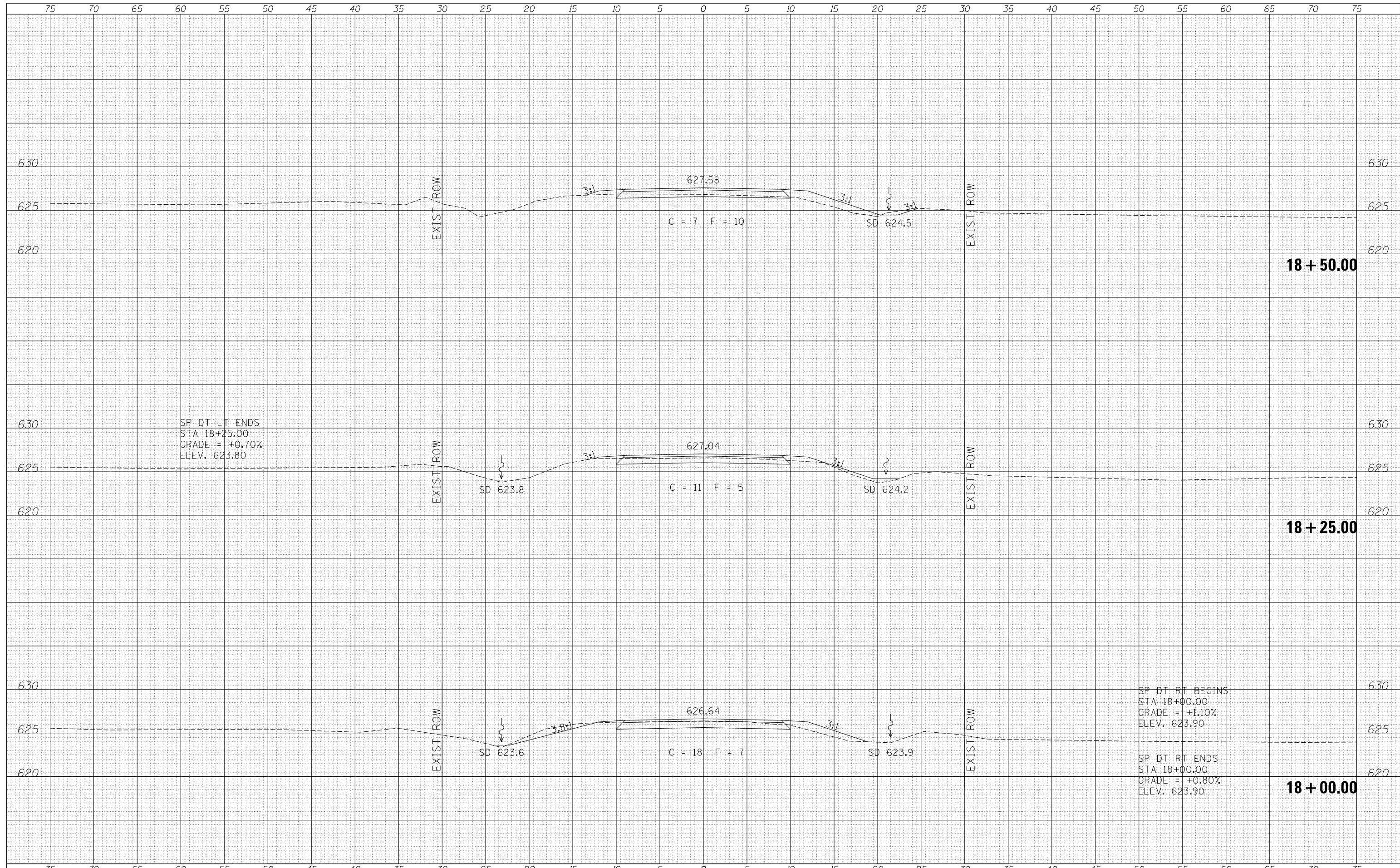
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BY	
ORIGINAL SURVEY	
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PLOTTED	
TEMPLATE	
AREAS	
CHECKED	



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PLOT DATE = 12/8/2017		DATE -	REVISED -		SCALE: 1"=5'	SHEET 1 OF 6 SHEETS	STA. 17+00.00 TO STA. 17+75.00	FED. ROAD DIST. NO. 7 ILLINOIS	FED. AID PROJECT NO. XPG(375)			

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

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



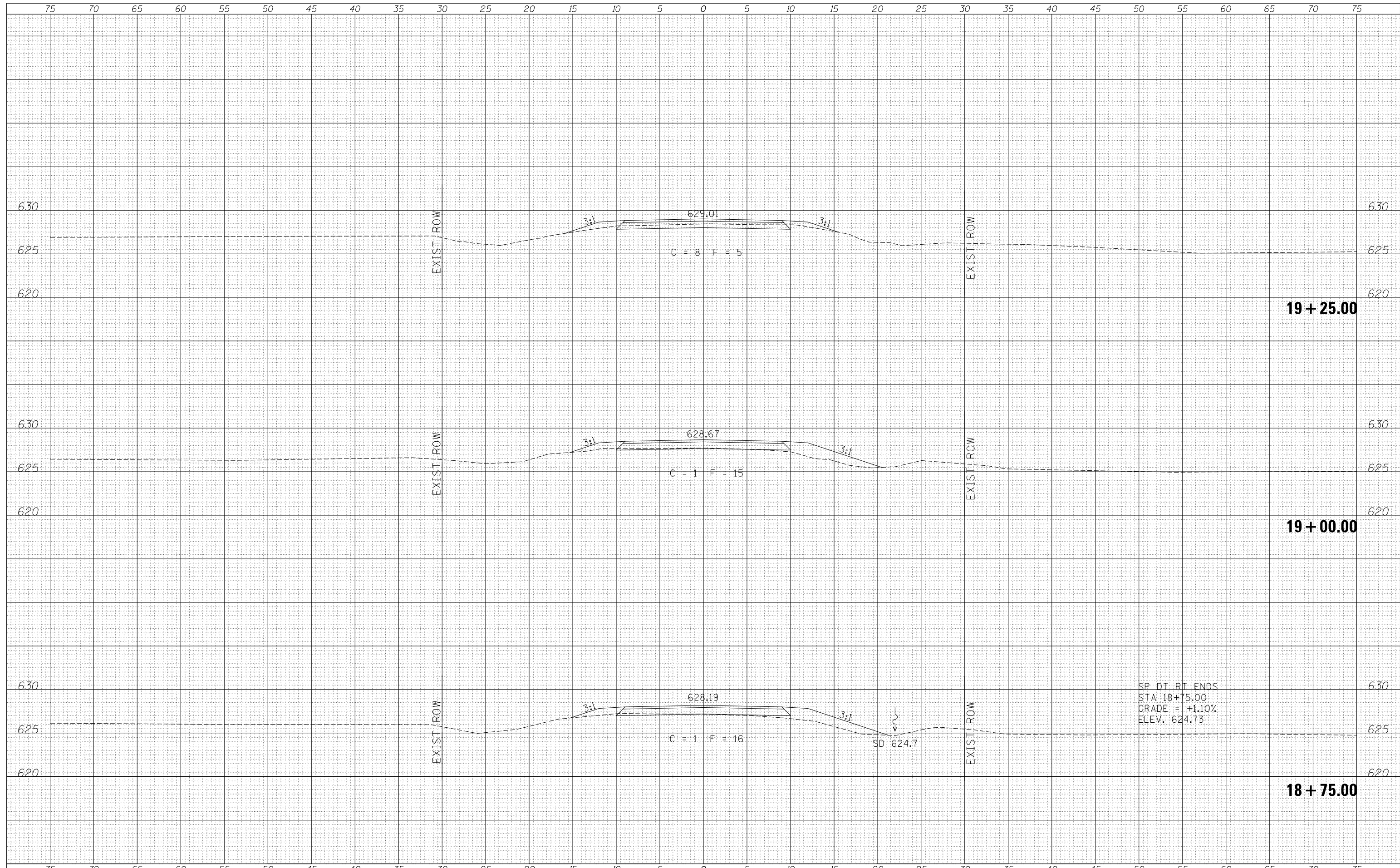
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 GRADE = +0.70%
 ELEV. 623.80

SP DT RT BEGINS
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 GRADE = +1.10%
 ELEV. 623.90

SP DT RT ENDS
 STA 18+00.00
 GRADE = +0.80%
 ELEV. 623.90

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

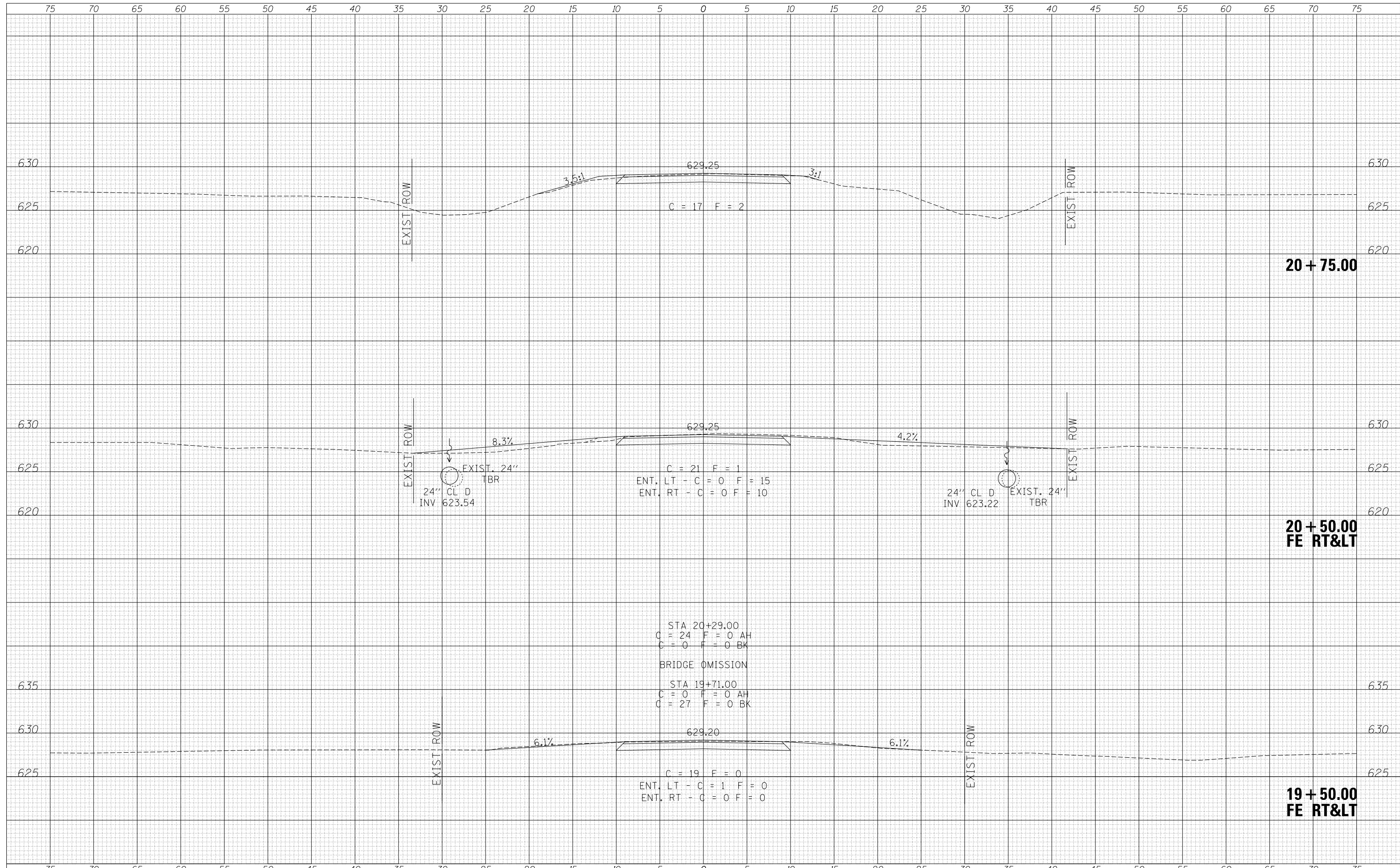
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BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME =	USER NAME = smierzwa	DESIGNED -	REVISED -	BUREAU COUNTY TOWNSHIP ROAD 60B OVER SMITH DITCH	CROSS SECTIONS				RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 12/8/2017		DATE -	REVISED -		FED. ROAD DIST. NO. 7 ILLINOIS				FED. AID PROJECT NO. XPG(375)				
MODELNAME				SCALE: 1"=5'	SHEET 3	OF 6 SHEETS	STA. 18+75.00	TO STA. 19+25.00					

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

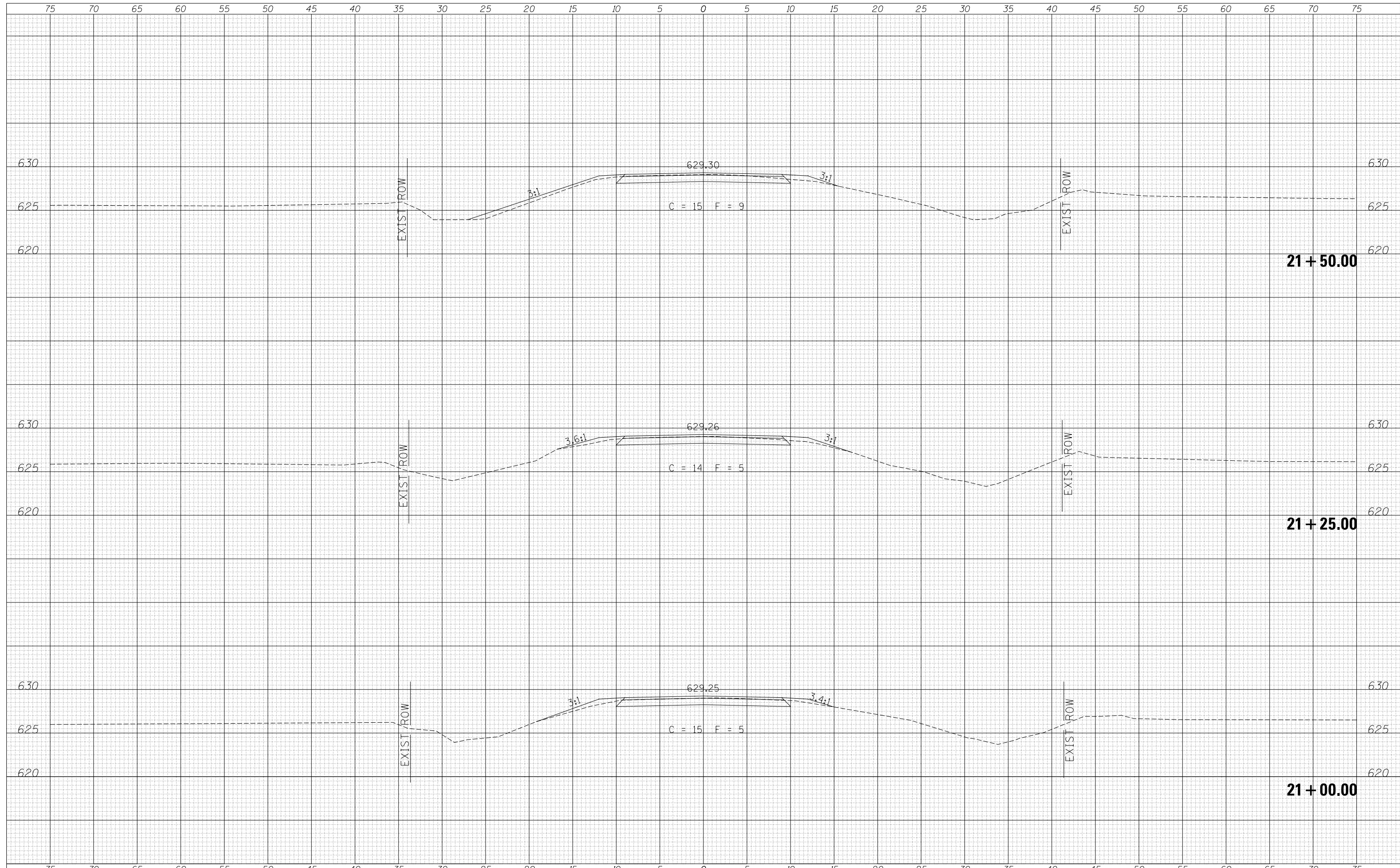
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BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



FILE NAME -	USER NAME - SMierzwa	DESIGNED -	REVISED -	BUREAU COUNTY TOWNSHIP ROAD 60B OVER SMITH DITCH	CROSS SECTIONS	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
V:\4112 - TR60B over Smith Ditch (Bureau)\CADD\CADD Sheets\4112-xshs.dgn	DRAWN -	REVISED -	TR 60B			13-08123-00-BR	BUREAU	23	21	
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 87672							
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				SCALE: 1"=5'	SHEET 4 OF 6 SHEETS	STA. 19+50.00 TO STA. 20+75.00				

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

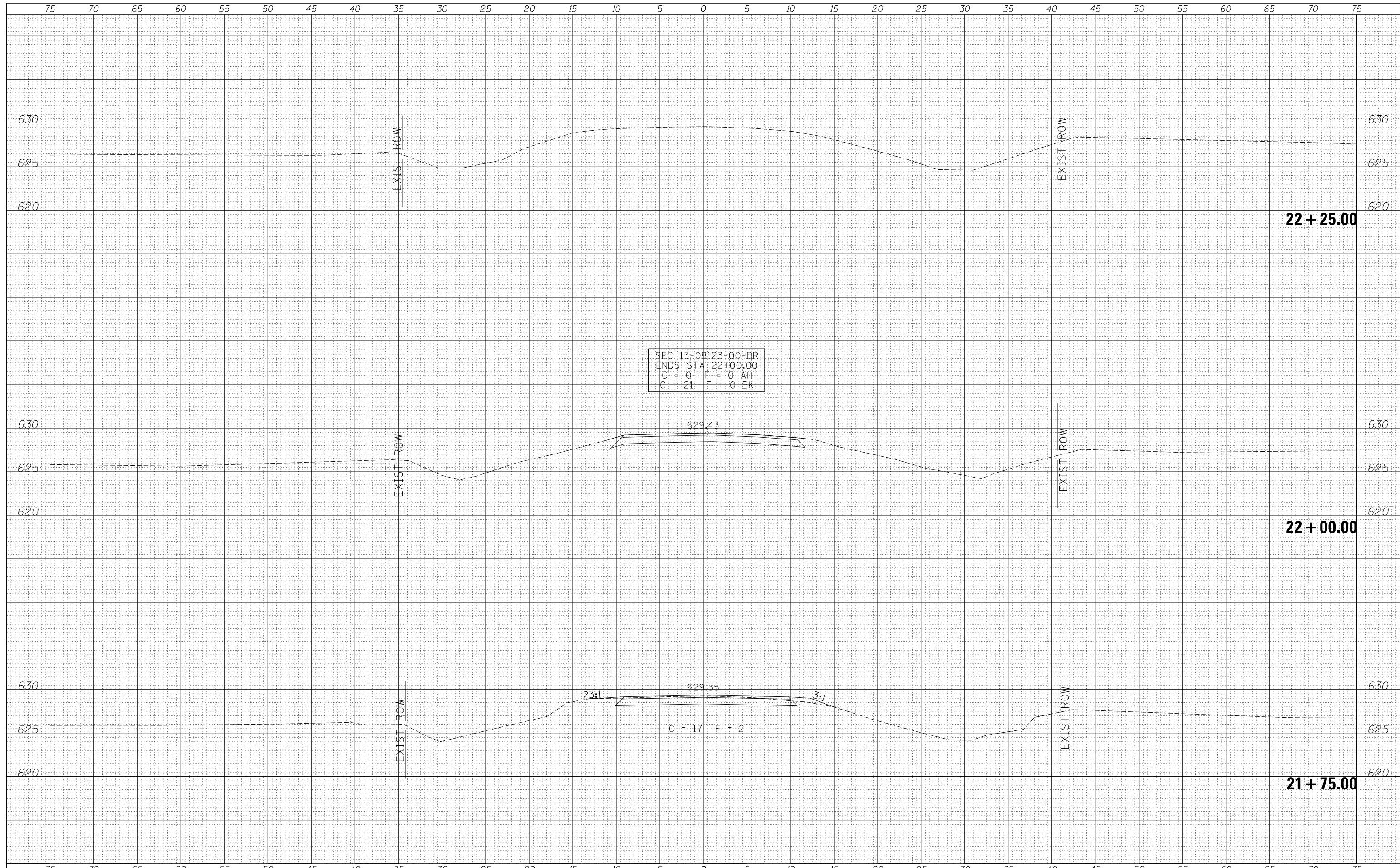
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SURVEY	
NOTE BOOK	
NO.	



FILE NAME -	USER NAME - smierzwa	DESIGNED -	REVISED -	BUREAU COUNTY TOWNSHIP ROAD 60B OVER SMITH DITCH	CROSS SECTIONS	<table border="1"> <tr><th>ROUTE</th><th>SECTION</th><th>COUNTY</th><th>TOTAL SHEETS</th><th>SHEET NO.</th></tr> <tr><td>TR 60B</td><td>13-08123-00-BR</td><td>BUREAU</td><td>23</td><td>22</td></tr> <tr><td colspan="5">CONTRACT NO. 87672</td></tr> <tr><td colspan="5">FED. ROAD DIST. NO. 7 ILLINOIS</td></tr> </table>	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	TR 60B	13-08123-00-BR	BUREAU	23	22	CONTRACT NO. 87672					FED. ROAD DIST. NO. 7 ILLINOIS				
ROUTE	SECTION	COUNTY	TOTAL SHEETS			SHEET NO.																				
TR 60B	13-08123-00-BR	BUREAU	23			22																				
CONTRACT NO. 87672																										
FED. ROAD DIST. NO. 7 ILLINOIS																										
V:\4112 - TR60B over Smith Ditch (Bureau)\CADD\CADD Sheets\4112-xshs.dgn	DRAWN -	REVISED -	SCALE: 1"=5'	SHEET 5 OF 6 SHEETS	STA. 21+00.00 TO STA. 21+50.00	FED. AID PROJECT NO. XYPG13751																				
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -																								
MODELNAME	DATE -	REVISED -																								

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

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



FILE NAME -	USER NAME - smierzwa	DESIGNED -	REVISED -	BUREAU COUNTY TOWNSHIP ROAD 60B OVER SMITH DITCH	CROSS SECTIONS	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
V:\4112 - TR60B over Smith Ditch (Bureau\CADD\CADD Sheets\4112-xshs.dgn	DRAWN -	REVISED -	TR 60B			13-08123-00-BR	BUREAU	23	23	
MODELNAME	CHECKED -	REVISED -	CONTRACT NO. 87672							
PLOT SCALE = 10.0000' / in.	DATE -	REVISED -	FED. ROAD DIST. NO. 7			ILLINOIS	FED. AID PROJECT NO. XPG(375)			