04-23-2021 LETTING ITEM 092

GENERAL NOTES, TYPICAL SECTIONS, PAVEMENT DESIGN INFORMATION, DETAILS

SUMMARY OF QUANTITIES. SCHEDULES OF QUANTITIES

TRAFFIC CONTROL PLAN

EROSION CONTROL PLAN

PLAN AND PROFILE

STRUCTURE PLANS

19-23 CROSS SECTIONS

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

PLANS FOR PROPOSED

SURFACE TRANSPORTATION PROGRAM-BRIDGE

BUREAU COUNTY

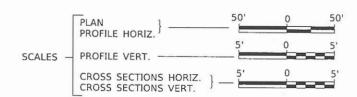
SECTION 12-00241-00-BR F.A.S. 1246 (CH 24) OVER

R. 7 F.

BRANCH OF POND CREEK

PROJECT NO. S43W(369)

JOB NUMBER C-93-003-21



HIGHWAY STANDARDS (INCLUDED IN PROPOSAL)

000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 280001-07 TEMPORARY EROSION CONTROL SYSTEMS

515001-04 NAME PLATE FOR BRIDGES

INDEX OF SHEETS SHEET NO. DESCRIPTION

2

7-18

COVER SHEET

630301-09 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY

701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE 701011-04 OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY

701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701901-08 TRAFFIC CONTROL DEVICES

725001-01 OBJECT AND TERMINAL MARKERS

BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR

CONSTRUCTION ON RURAL LOCAL HIGHWAYS BLR 26-3 STEEL PLATE BEAM GUARDRAIL 29" (731mm) HEIGHT

BLR 27-1 TRAFFIC BARRIER TERMINAL TYPE 5A

SECTION 12-00241-00-BR BEGINS STATION 18+50.00

EXISTING STRUCTURE NO. 006-3100 THREE SPAN PRECAST NELSON BEAM BRIDGE ON TIMBER PILE BENT PIERS AND TIMBER PILE BENT ABUTMENTS ALL WITH CONCRETE CAPS

±52'-0" BK TO BK. AND 30'-0" O TO O DECK NO SKEW. (TO BE REMOVED)

LOCATION MAP

APPROXIMATE SCALE

NET LENGTH OF PROJECT = 309.68 FEET = 0.059 MILES

DESIGN CLASSIFICATION: MAJOR COLLECTOR (NON-URBAN)
DESIGN ADT: 330 (2021)
DESIGN SPEED: 40 MPH

Hutchison Engineering, Inc. JACKSONVILLE-SHOREWOOD PEORIA-QUAD CITIES

EXP: 11/30/2021

ENGINEER'S

LOCATION OF SECTION INDICATED THUS: - -

12-00241-00-BR

FED. ROAD DIST. NO. 7 ILLINOIS CONTRACT NO. 87764

SHEETS NO.

BUREAU 23 1

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 COLLECTORS - RECONSTRUCTION

APPROVED Mul. BUREAU COUNTY ENGINEE TEBRURRY 22 PASSED Holub

DISTRICT THREE ENGINEER OF LOCAL ROADS & STREETS

Released For Bid Based on

REGION TWO ENGINEER STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

OAK BROOK, ILLINOIS

ROSEVILLE, ILLINOIS

UTILITY COMPANIES

AMEREN ILLINOIS

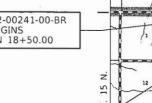
LASALLE, ILLINOIS

FRONTIER COMMUNICATIONS

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

OR 811

CONTRACT NO. 87764



2021

PROPOSED STRUCTURE SN 006-3104

SECTION 12-00241-00-BR

ENDS STATION 21+59.68

E E

SINGLE SPAN 21" PPC DECK BEAM SUPERSTRUCTURE

ON CONCRETE SPILL-THRU PILE BENT ABUTMENTS. 48'-0" BK TO BK, AND 30'-0" O TO O DECK,

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	HMA SURFACE
LOCATION(S):	ENTIRE PROJECT
PG GRADE:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50
MIXTURE COMPOSITION:	IL-9.5
FRICTION AGGREGATE:	MIXTURE C
MIXTURE WEIGHT:	112#/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA
SUBLOT SIZE:	N/A
DENSITY TEST METHOD:	LR 1030

(LOOKING EAST)

TO' EXISTING RIGHT OF WAY 30' 40' 30'-0" SHLD. TO SHLD. 30'-0" 11'-0" 11'-0" 4'-0" SHLD. PROFILE GRADE GRADE GRADE HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50, VAR. (2" MIN.) PROPOSED TYPICAL SECTION

(LOOKING EAST)

STA. 18+50.00 TO STA. 19+76.00

STA. 20+24.00 TO STA. 21+59.68

EXCEPT TRANSITIONS

BRIDGE OMISSION STA. 19+76.00 TO STA. 20+24.00

- 2/14/2021

REVISED -

REVISED -

REVISED -

REVISED

DESIGNED - S.T.M.

DRAWN - J.P.S.

DΔTE

HECKED - S.T.M.

CONSTRUCT GUARDRAIL

SHOULDER WIDENING IN

FILE NAME =

:\3547 - CH 24 over Branch of Pond Creek (

ACCORDANCE WITH STD 630301

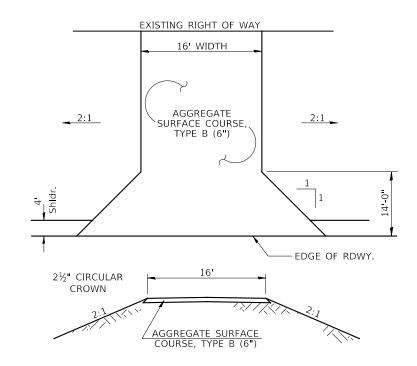
JSER NAME = SMierzwa

PLOT DATE = 2/14/2021

\Updated Plans - December 2020\3547t001.dgr

COMMITMENTS

THERE ARE NO COMMITMENTS FOR THIS PROJECT.



PROPOSED FIELD ENTRANCES

STA 18+80 RT STA 19+30 LT STA 20+84 RT

SCALE: NONE

GENERAL NOTES

ANY ADDITIONAL REMOVAL OF EXISTING HOT-MIX ASPHALT SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE NEW BRIDGE SHALL BE REMOVED AS STRUCTURE 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.

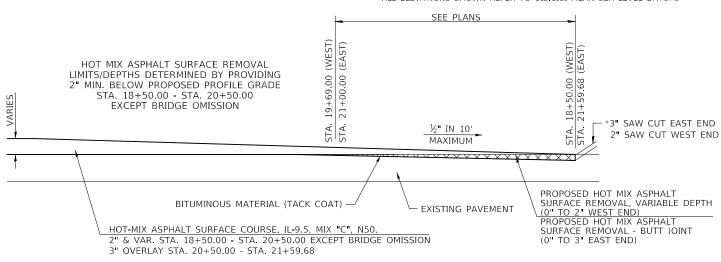
THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES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



PAVEMENT REMOVAL DETAIL

*COST INCLUDED IN SURFACE REMOVAL.

BUREAU COUNTY
COUNTY HIGHWAY 24 OVER
BRANCH OF POND CREEK

GENERAL NOTES, TYPICAL SECTIONS,
PAVEMENT DESIGN INFORMATION, DETAILS

SHEET NO. 1 OF 1 SHEETS STA. 18+50.00 TO STA. 21+59.68

	CODE NO.	ITEM	UNIT	QUANTITY
SP	20200100	EARTH EXCAVATION	CU YD	35
	20300100	CHANNEL EXCAVATION	CU YD	50
SP	20700220	POROUS GRANULAR EMBANKMENT	CU YD	29.6
BDE	25100630	EROSION CONTROL BLANKET	SQ YD	968
BDE	28000400	PERIMETER EROSION BARRIER	FOOT	580
·	40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	45
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	363
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	295
BDE	40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	134
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	34
SP	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
BDE	50300225	CONCRETE STRUCTURES	CU YD	24.3
3DE	50300280	CONCRETE ENCASEMENT	CU YD	2.6
	50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1,385
	50800105	REINFORCEMENT BARS	POUND	2,760
	51200957	FURNISHING METAL SHELL PILES 12"X0.250"	FOOT	280
	51202305	DRIVING PILES	FOOT	280
	51203200	TEST PILE METAL SHELLS	EACH	2
	51500100	NAME PLATES	EACH	1
	58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	160
	58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	125
BDE	63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	2
BDE	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2
	67100100	MOBILIZATION	L SUM	1
	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
SP	X2501100	SEEDING, CLASS 3 (SPECIAL)	ACRE	0.2
SP	X2810208	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	300
SP	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	291
SP	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
BDE	XX006199	STEEL BRIDGE RAIL, TYPE SM (SPECIAL)	FOOT	96
cs	Z0013798	CONSTRUCTION LAYOUT	L SUM	1

SP: SEE SPECIAL PROVISIONS
BDE: SEE BUREAU OF DESIGN AND ENVIRONMENT CHECK SHEET
CS: SEE CHECK SHEET FOR RECURRING SPECIAL PROVISIONS
NOTE: PAVEMENT MARKING DONE BY OTHERS

\$\Delta SPECIALTY ITEMS\$

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH						
STATION TO STATION	WIDTH	LENGTH	SQ YD			
18+50.00 - 19+69.00	22.00'	119.00'	291			
TOTAL			291			

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT						
STATION TO STATION	WIDTH	LENGTH	SQ YD			
21+00.00 - 21+59.68	VARIES	59.68'	295			
TOTAL			295			

AGGREGATE SHOULDERS, TYPE B					
STATION TO STATION	SIDE	WIDTH	LENGTH	TON	
18+50.00 - 19+00.00	LEFT	3.09' AVG.	50.00'	4	
18+50.00 - 18+59.00	RIGHT	1.68' AVG.	9.00'	1	
19+00.00 - 19+10.00	LEFT	4.00'	10.00'	1	
19+00.00 - 19+76.00	RIGHT	4.00'	76.00'	7	
19+50.00 - 19+76.00	LEFT	4.00'	26.00'	2	
20+24.00 - 21+00.00	LEFT	4.00'	76.00'	7	
20+24.00 - 20+64.00	RIGHT	4.00'	40.00'	4	
21+00.00 - 21+63.39	LEFT	2.23' AVG.	83.60'	4	
21+04.87 - 21+52.78	RIGHT	2.47' AVG.	66.26'	4	
TOTAL				34	

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 18+50.00 - 19+76.00	19			4	10		
RDWY 20+24.00 - 21+59.68	14			17	(7)		
CHANNEL		50					
STRUCTURE			95				
TOTAL	33	50	95	21	3		
USE	35	50	*95	-	3		

*STRUCTURE EXCAVATION SHALL BE COMPLETED IN ACCORDANCE WITH (@ 25% SHRINKAGE) SECTION 502 OF THE STANDARD SPECIFICATIONS. INDIVIDUAL PAYMENT FOR STRUCTURE EXCAVATION WILL NOT BE MADE, BUT SHALL BE IN ACCORDANCE WITH SECTION 502.13.

PERIMETER EROSION BARRIER						
STATION TO STATION	SIDE	FOOT				
18+50 - 19+76	LEFT	130				
18+50 - 19+76	RIGHT	130				
20+24 - 21+62	LEFT	165				
20+24 - 21+51	RIGHT	155				
TOTAL		580				

EROSION CONTROL BLANKET						
STATION TO STATION	SIDE	WIDTH	LENGTH	AREA (SQ YD)		
18+50 - 19+22	LEFT	VARIES	72'	120		
18+50 - 18+73	RIGHT	VARIES	23'	58		
18+88 - 19+76	RIGHT	VARIES	88'	239		
19+38 - 19+76	LEFT	VARIES	38'	58		
20+24 - 21+43	LEFT	VARIES	119'	174		
20+24 - 20+79	RIGHT	VARIES	55 '	143		
20+88 - 21+51	RIGHT	VARIES	63'	145		
21+44 - 21+62	LEFT	VARIES	18'	31		
TOTAL				968		

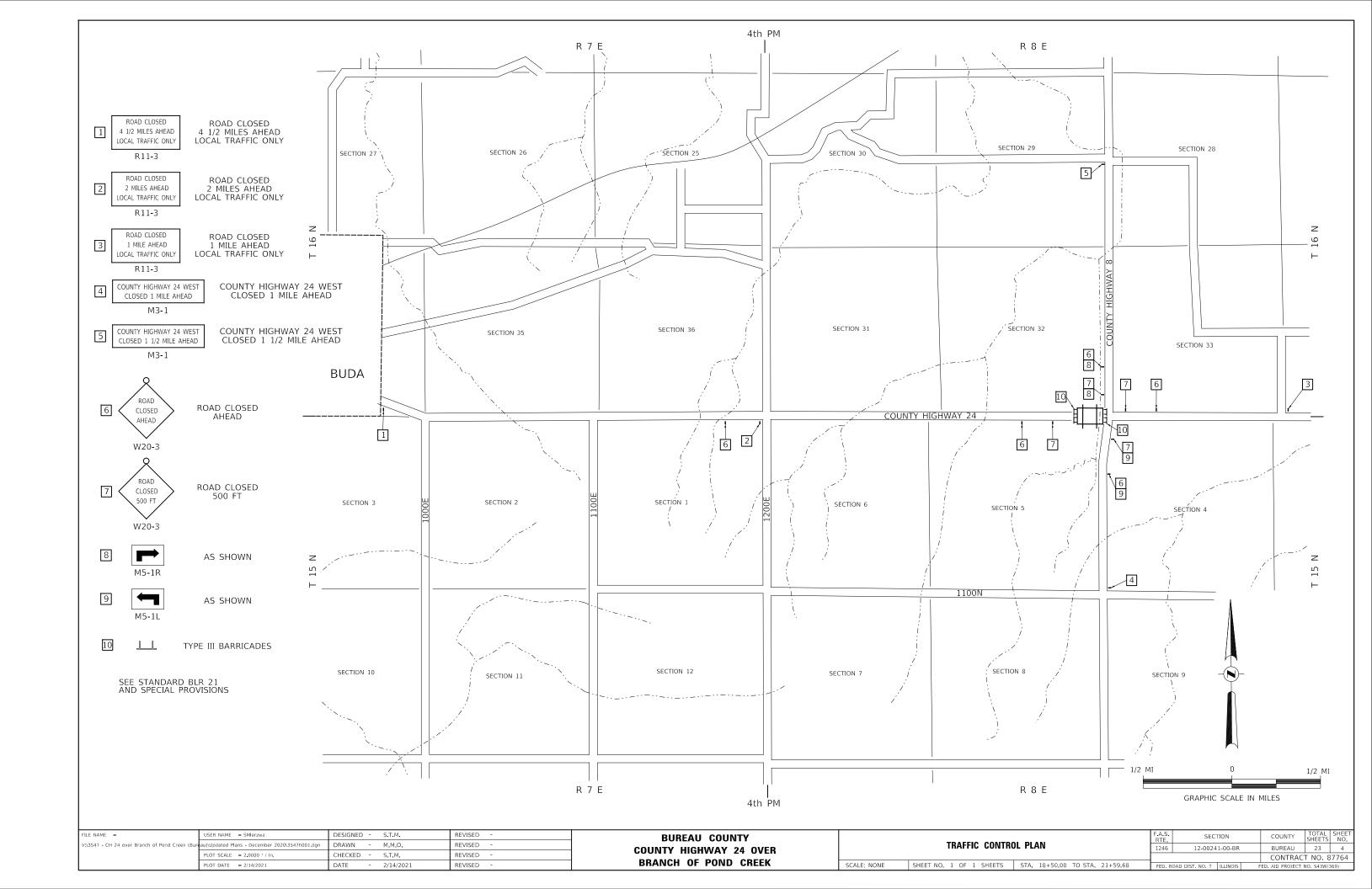
AGGREGATE SURFACE COURSE, TYPE B						
STATION TO STATION	THICKNESS	WIDTH	LENGTH	TON		
ENTRANCE - 18+80 RT	0.50'	16' & VAR.	14.00'	15		
ENTRANCE - 19+30 LT	0.50'	16' & VAR.	14.00'	15		
ENTRANCE - 20+84 RT	0.50'	16' & VAR.	14.00'	15		
TOTAL				45		

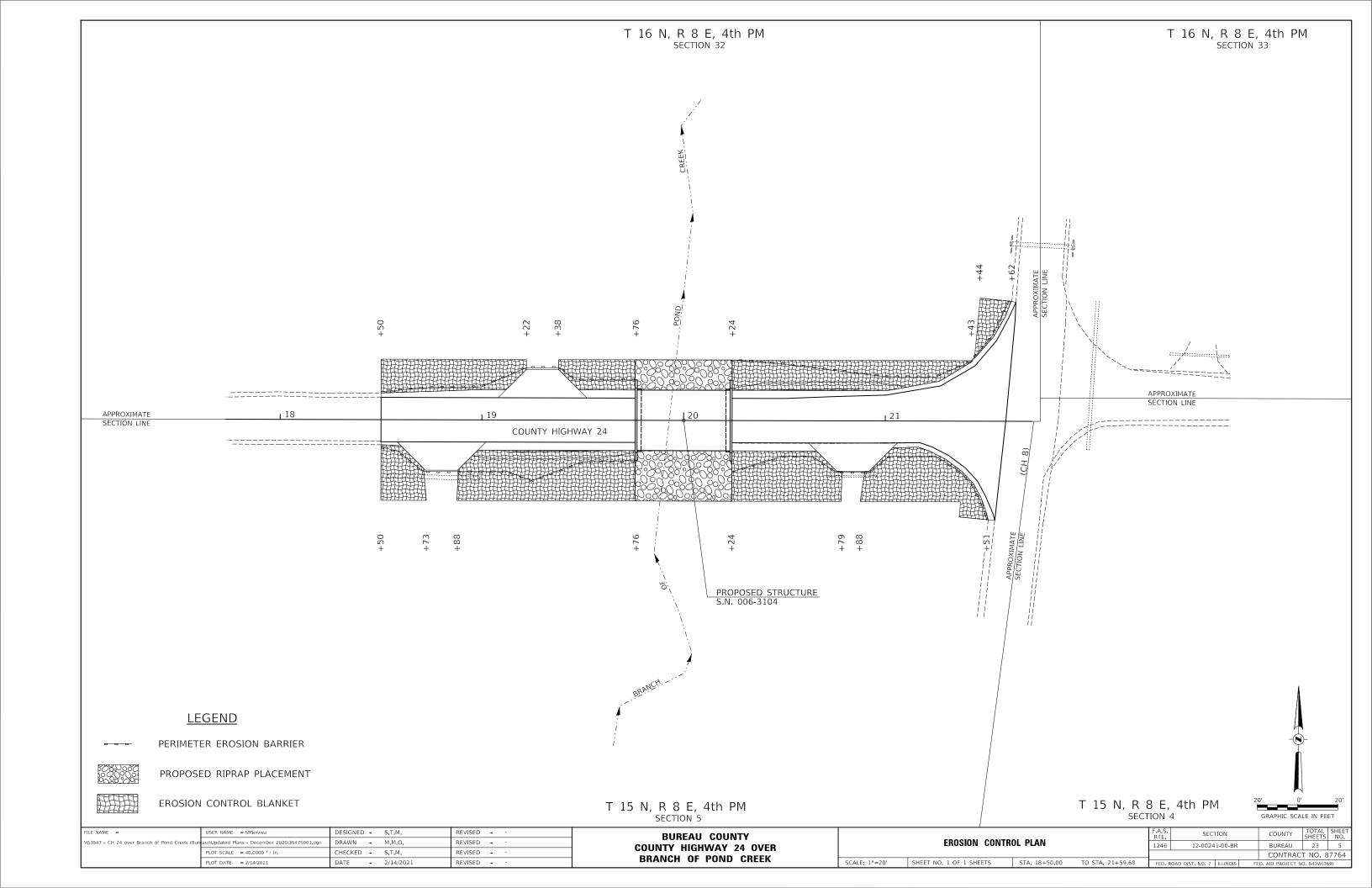
PAVEMENT SCHEDULE						
STATION TO STATION	WIDTH	THICKNESS	LENGTH	BITUMINOUS MATERIALS (TACK COAT) 0.05 LBS/SQ FT	HOT-MIX ASPHALT SURFACE CSE 112#/SQ YD/IN	
10.50.00. 10.76.00	22 241 41/6			POUND	TON	
18+50.00 - 19+76.00	22.34' AVG.	nounces.	126.00	141		
20+24.00 - 20+50.00	22.48' AVG.		26.00'	29		
20+50.00 - 21+00.00	23.32' AVG.		50.00'	58		
21+00.00 - 21+59.68	VARIES		59.68'	135		
18+50.00 - 19+76.00	22.17' AVG.	0.17' AVG.	126.00'		35	
BRIDGE DECK	30.00'	0.15' AVG.	48.00'		17	
20+24.00 - 20+50.00	22.24' AVG.	0.24' AVG.	26.00'		10	
20+50.00 - 21+00.00	23.16' AVG.	0.25'	50.001		22	
21+00.00 - 21+59.68	VARIES	0.25'	59.681		50	
TOTAL				363	134	

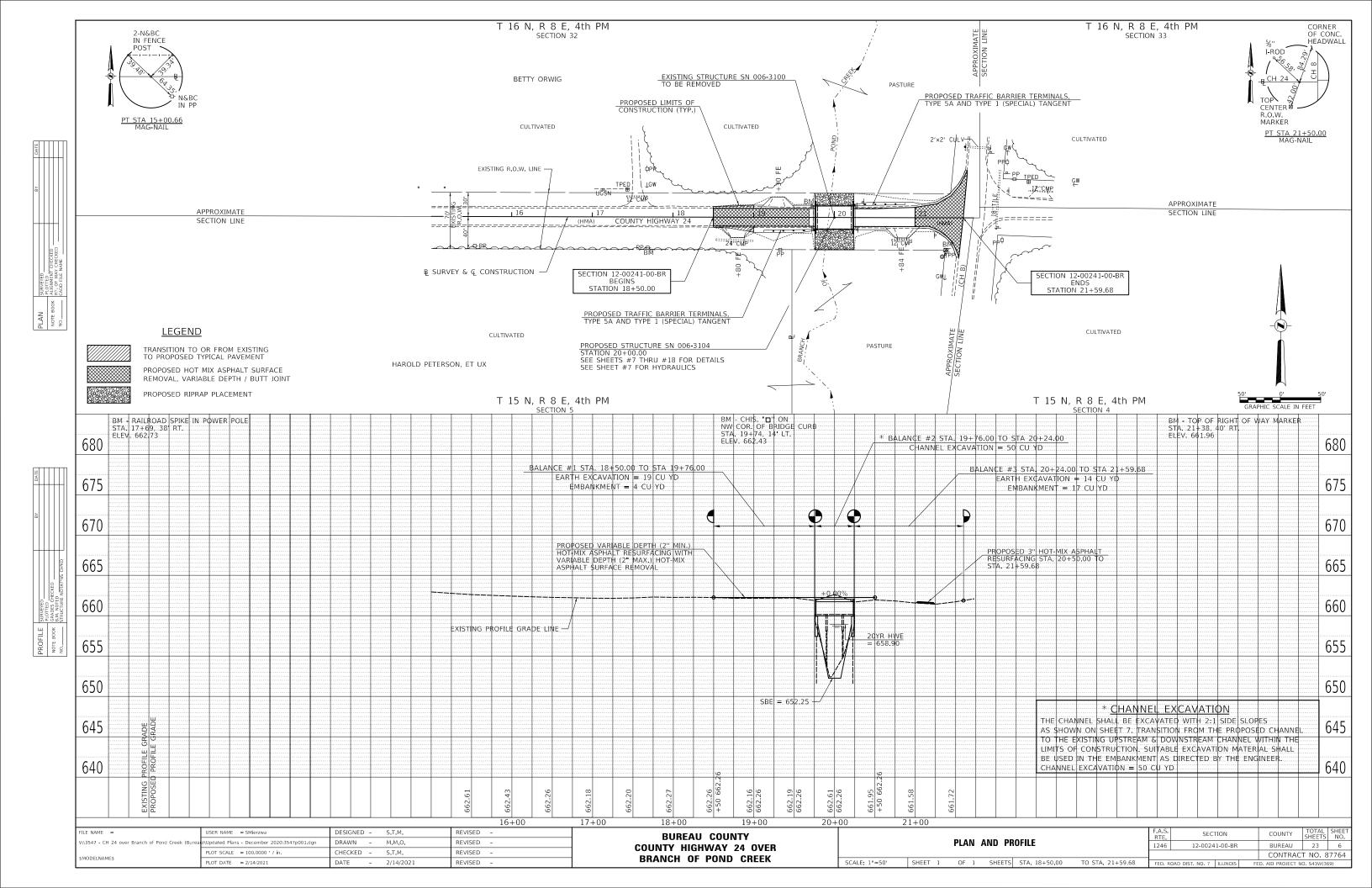
TRAFFIC BARRIER TERMINAL, TYPE 5A						
STATION TO STATION	SIDE	EACH				
19+62.75 - 19+76.00	RIGHT	1				
20+24.00 - 20+37.25	LEFT	1				
TOTAL	2					

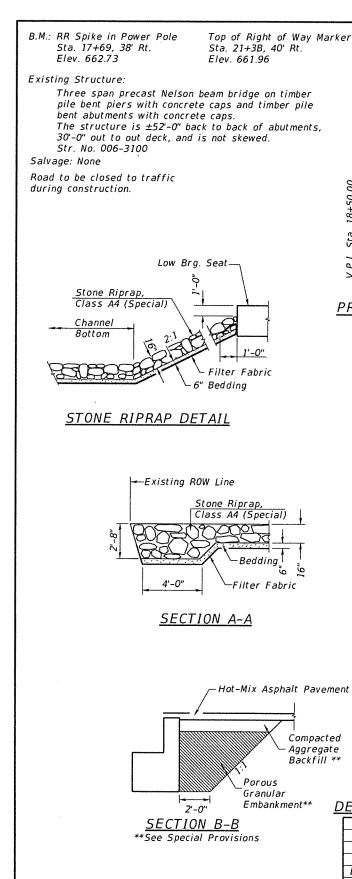
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT						
STATION TO STATION	SIDE	EACH				
19+12.75 - 19+62.75	RIGHT	1				
20+37.25 - 20+87.25	LEFT	1				
TOTAL		2				

FILE NAME =	USER NAME = SMierzwa	DESIGNED - S.T.M.	REVISED -	BUREAU COUNTY	SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES		SECTION	COUNTY SH	OTAL SHEET
V:\3547 - CH 24 over Branch of Pond Creek (Bur	au)\Updated Plans - December 2020\3547q001.dgn	DRAWN - M.M.O.	REVISED -	COUNTY HIGHWAY 24 OVER			12-00241-00-BR	BUREAU	23 3
	PLOT SCALE = 100.0000 ' / in. PLOT DATE = 2/14/2021	DATE - 2/14/2021	REVISED -	BBVNCH UE BUND CBEEK	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 18+50.00 TO STA. 21+59.68	FED. ROAL	D DIST. NO. 7 ILLINOIS	CONTRACT N	NO. 87764 S43W(369)









Design Scour Elevations (ft.) 1tem 113 W. Abut. | E. Abut. 0100 657.4 657.4 0200 657.4 657.4 Design 657.4 657.4 Check 657.4 657.4

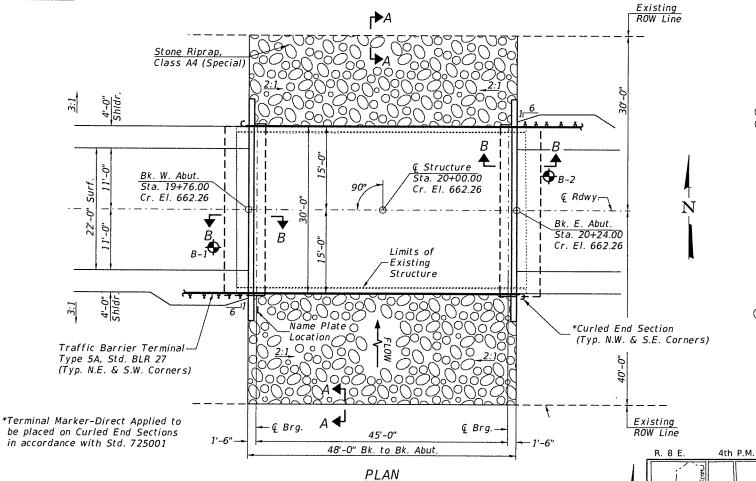
WATERWAY INFORMATION

DESIG	NED	S.T.M.
CHEC	KED	C.T.M./J.E.H.
DRAW	'N	S.T.M.
CHEC	KED	C.T.M./J.E.H.

Drainage Area = 1.53 Sq. Mi. Low Grade Elev. = 661.68 @ Sta. 21+25.00 Freq. 0 Opening Sq. Ft Yr. Nat. Head - Ft. Headwater El. Yr. C.F.S. Exist. Prop. H.W.E. Exist. Prop. Exist. Prop. 20 1,114 162 189 658.90 0.88 0.02 659.7B 658.92 Flood Design 100 1,680 196 222 659.68 2.15 0.38 661.83 660.06 Base

Steel Bridge Rail, Type SM (Special) Proposed 21" P.P.C. Dk. Bms. (Typ.) Curled End Section Traffic Barrier Terminal Typ. N.W. & S.E. Corners) Type 5A, Std. BLR 27-Design 20YR (Typ. N.E. & S.W. Corners) HWE = 65B.900.00% Berm El. 658.9 Berm El. 65B.9 Elev. 657.44-- Elev. 657.44 3'-0" Concrete Metal Shell Encasement (Typ.) Stone Riprap, Piles (Typ.) _ See Sh. #8 of 12 Channel Class A4 (Special) Excavation -Channel Bottom -5.B.E. = 652.25(Typ.) ELEVATION

PROFILE GRADE



DESIGN SCOUR ELEVATION TABLE

DESIGN SPECIFICATIONS 2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

(F1ELD 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.

 $f's = 270,000 \text{ p.s.i.} (\frac{1}{2}" \text{ Strands})$ $f'si = 201,960 \text{ p.s.i.} (\frac{1}{2}" \text{ Strands})$

LOADING HL-93

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

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 9-12 of 12.

A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Articles 1020.05(b)(10) and 1021.07 of the Standard Specifications.

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 1DOT Manual for Fabrication of Precast Prestressed Concrete Products.

> BRANCH OF POND CREEK BU1LT 202 BY BUREAU COUNTY SEC. 12-00241-00-BR C.H. 24 STATION 20+00.00 F.A. PROJ. NO. S43W(369) STR. NO. 006-3104 LOADING HL-93

NAME PLATE

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

TOTAL BILL OF MATERIAL

	1TEM	UNIT	SUPER	SUB	TOTAL
	Channel Excavation	CU YD		50	50
①	Stone Riprap, Class A4 (Special)	TON		300	300
0	Removal of Existing Structures	EACH			1
	Concrete Structures	CU YD			24.3
	Precast Prestressed Concrete Deck Beams (21" Depth)	SO FT	1,385		1,3B5
	Reinforcement Bars	POUND			2,760
	Steel Bridge Rail, Type SM (Special)	FOOT	96		96
	Furnishing Metal Shell Piles 12"x0.250"	F00T		2B0	280
	Driving Piles	FOOT		280	280
	Test Pile Metal Shells	EACH		2	2
	Concrete Encasement	CU YD		2.6	2.6
	Name Plates	EACH		1	1
	Waterproofing Membrane System	SO YD	160		160
	Portland Cement Mortar Fairing Course	FOOT	125		125
	Hot-Mix Asphalt Surface Course, 1L-9.5, Mix "C", N50	TON	17		17
1	Porous Granular Embankment	CUYD		29.6	29.6
	Terminal Marker - Direct Applied	EACH	2		2
	@ C C :-! B				

(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.

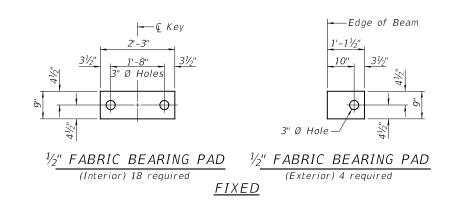
Illinois Structural No. 7999 Expires 11/30/2022

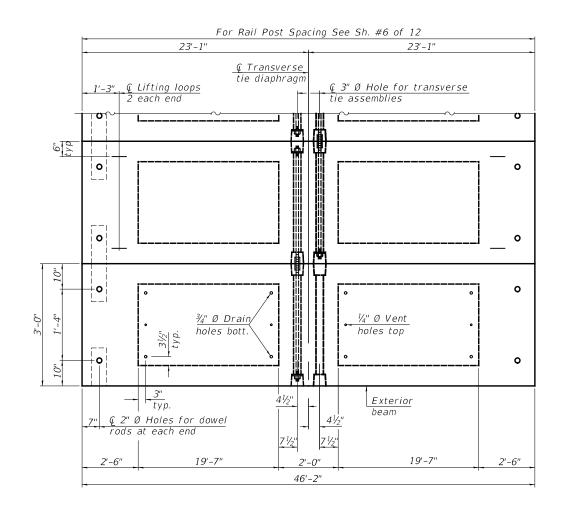


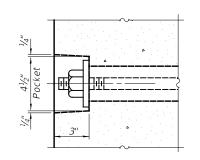
LOCATION SKETCH

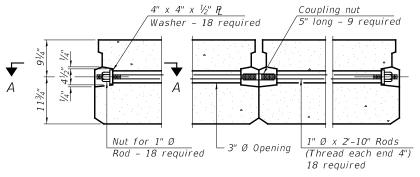
GENERAL PLAN & ELEVATION BUREAU COUNTY SECTION 12-00241-00-BR COUNTY HIGHWAY 24 OVER BRANCH OF POND CREEK

SHEET NO. 1	F.A.S. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
J. (a.c.) 140. 1	1246	12-00241-00-BR		BUREAU	23	7
12 SHEETS		S.N. 006-3104	CONTRACT NO. 87764			
	FED. RO	AD DIST. NO. 7 ILLINOIS	FEC	. AID PROJECT	NO. \$43V	/ (369)



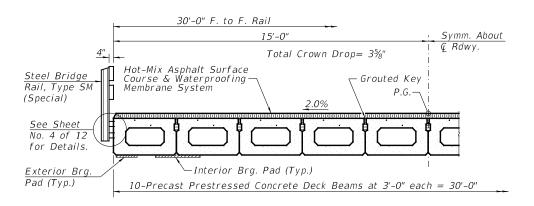






SECTION A-A

TYPICAL TRANSVERSE TIE ASSEMBLY



HALF CROSS SECTION

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (21" Depth)	SQ FT	1,385

<u>PLAN VIEW</u>

<u>NOTES</u>

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

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be $\frac{1}{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in. The 1" \emptyset 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.

 $Two^{'}$ %'' fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

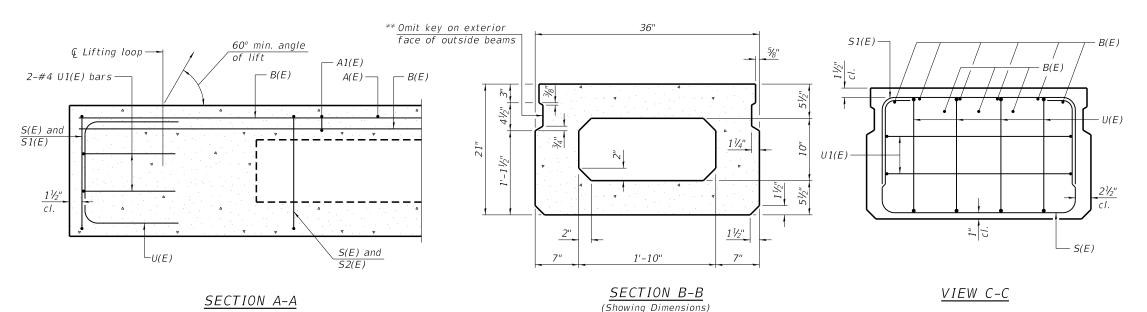
A minimum $2\frac{1}{2}$ " Ø lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used

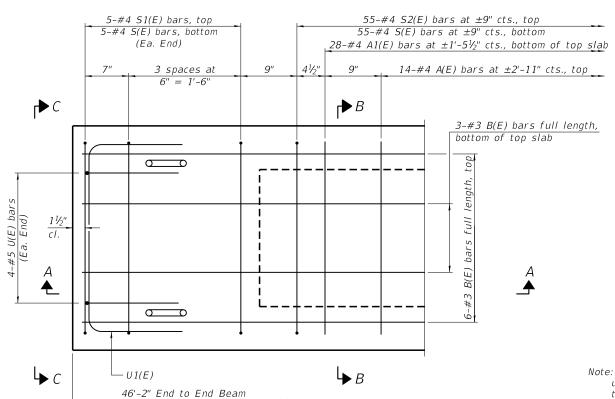
in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi. SUPERSTRUCTURE
BUREAU COUNTY
SECTION 12-00241-00-BR
COUNTY HIGHWAY 24 OVER
BRANCH OF POND CREEK

SHEET NO. 2	F.A.S. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
SHEET NO. 2	1246	12-00241-00-BR		BUREAU	23	8	
12 SHEETS	S.N. 006-3104			CONTRACT NO. 87764			
	FED. RC	AD DIST. NO. 7 ILLINOIS	FED	AID PROJECT	NO. S43V	V(369)	

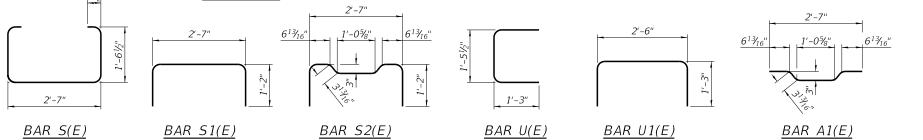


** Rail post anchor devices (Sheet 4 of 12) to be cast into exterior face of outside beams.



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.



5" 6" 5 spa. at 6" 2" cts.

SECTION B-B

16-½" Ø Strands Each Strand Stressed to 30,900 Lbs. 6-Strands 1¾" up, 8-Strands 3¾" up, 2-Strands 15¾" up Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

- A1(E) or S2(E)

S(E)-

0,0000°

- B(E)

c1.

- 2 strands

- 8 strands - 6 strands

BAR LIST ONE BEAM ONLY (For information only)

BAR	NO.	SIZE	LENGTH	SHAPE
A(E)	14	#4	2'-7"	
A1(E)	28	#4	2'-10"	{
B(E)	9	#3	*45'-11"	
S(E)	65	#4	6'-5"	Г
S1(E)	10	#4	4'-11"	J
52(E)	55	#4	5'-2"]
U(E)	8	#5	4'-0"	П
U1(E)	4	#4	5'-0"]

Note:

See Sheet No. 2 of 12 for additional details and Bill of Material.

*Total length, lap as necessary.

 $\frac{MINIMUM BAR LAP}{\#3 bar = 1'-6''}$

SUPERSTRUCTURE DETAILS

BUREAU COUNTY

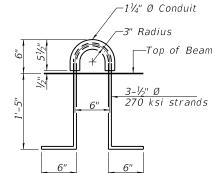
SECTION 12-00241-00-BR

COUNTY HIGHWAY 24 OVER

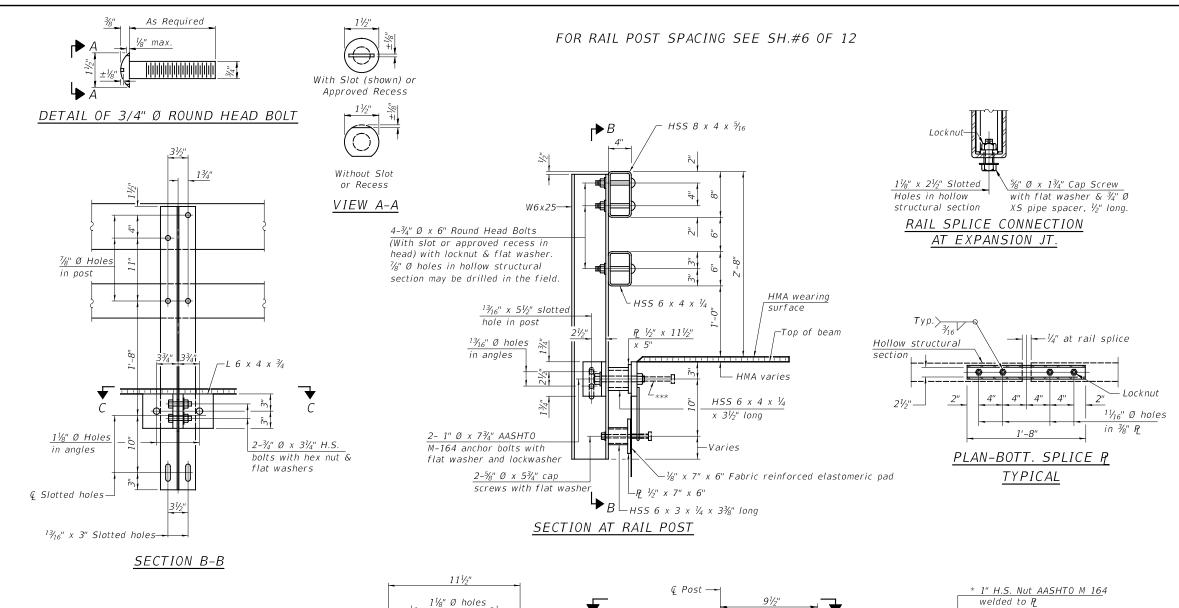
BRANCH OF POND CREEK

SHEET NO. 3

F.A.S. RTE.	SECT	ION		COUNTY	TOTAL SHEETS	SHEE NO.
1246	12-00241-00-BR			BUREAU	23	9
	S.N. 006-31	104		CONTRACT N	10. 8776	54
FED. RC	AD DIST. NO. 7	ILLINOIS	FED	. AID PROJECT	NO. S43V	V(369)



LIFTING LOOP DETAIL



HSS 6 x 4 x 1/4

HSS 6 x 3 x 1/4

x 3\%" long

 $P_1 \frac{1}{2}$ " x $11\frac{1}{2}$ " x 5"

holes

P₂ ½" x 7" x 6"

13/4" 31/2"

x 3½" long

11/8" Ø Holes in

angles and plate

33/4"

SECTION C-C

HSS 6 x 4 x 1/4

x 31/3" long

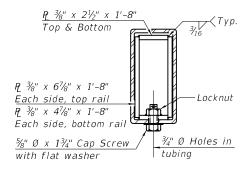
-Grind ¾₁₆" Chamfer

33/4"

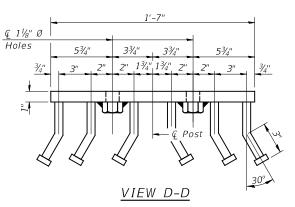
welded to R Cast 1" voids behind each nut P₂ 1" x 6" x 19" 11/8" Ø Hole- $\frac{3}{4}$ " Ø x 6" Granular or solid flux filled headed studs conforming to article 1006.32 of the Std. Specs. automatically end welded. (6 Required per P2) **#3. * 1" Round bar stock AASHTO M270 G50 or bar hex coupler nuts conforming to AASHTO M291, Grade A - 3" long welded to #3 bar. Tap pipe for 5/8" Ø cap screw. -½" x 1½" x 6" Bar

ANCHOR DEVICE

- *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 ½".



SECTION AT RAIL SPLICE



1246

12 SHEETS

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

For multi-span bridges, sufficient $\frac{1}{4}$ " x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans Cost included with Steel Bridge Rail, Type SM (Special).

All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.

*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Steel Bridge Rail, Type SM (Special)	FOOT	96

STEEL BRIDGE RAIL TYPE SM (SPECIAL BUREAU COUNTY SECTION 12-00241-00-BR COUNTY HIGHWAY 24 OVER

BUREAU

23 | 10

BRANCH OF POND CREEK TOTAL SHEET NO. F.A.S. SECTION COUNTY RTE. SHEET NO. 4

12-00241-00-BR

S.N. 006-3104 CONTRACT NO. 87764 FED. ROAD DIST. NO. 7 ILLINOIS | FED. AID PROJECT NO. S43W(369)

(Sheet 1 of 2)

P_ 1" x 6" x 19"

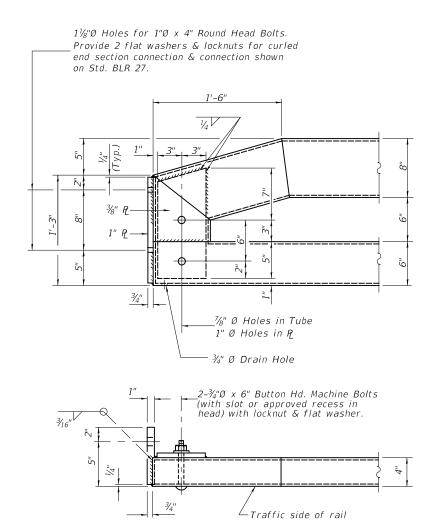
L6 x 4 x 3/4 x

 $2-\frac{13}{16}$ " Holes in angles

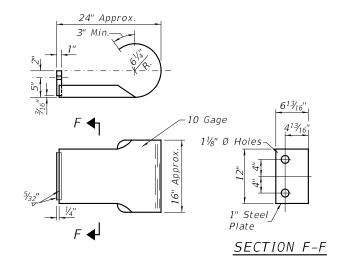
 $1-\frac{13}{16}$ " x $5\frac{1}{2}$ " Slotted

hole in post

6" long



END OF RAIL DETAILS



CURLED END SECTION

(2 Req'd) Cost Included with Steel Bridge Rail, Type SM (Special). Terminal Markers - Direct Applied shall be placed on end of each Curled End Section. (Typ. N.W. & S.E. Corners)

STEEL BRIDGE RAIL,

TYPE SM (SPECIAL)

BUREAU COUNTY

SECTION 12-00241-00-BR

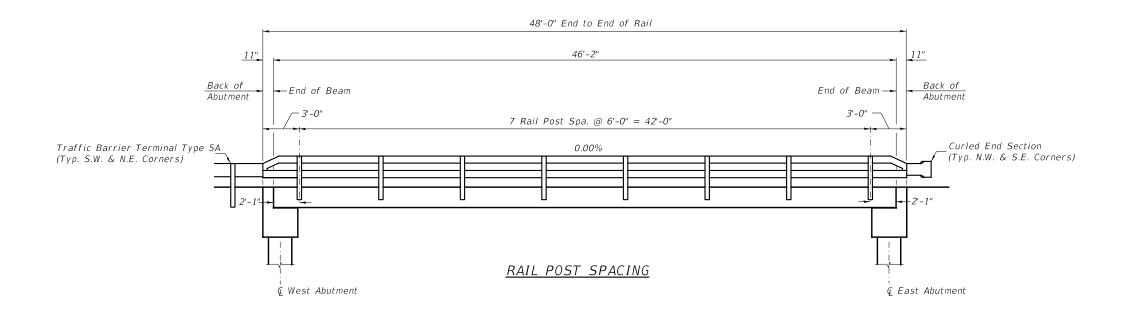
COUNTY HIGHWAY 24 OVER

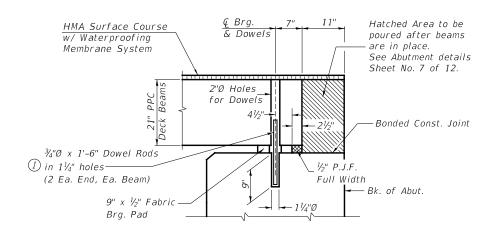
BRANCH OF POND CREEK

(Sheet 2 of 2)

SHEET NO. 5	
12 SHEETS	ŀ

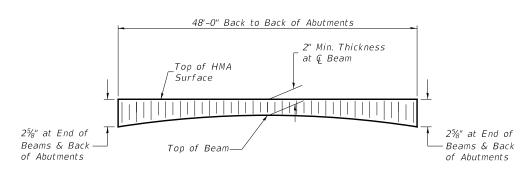
F.A.S. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.	
1246	12-00241-00-BR	BUREAU	23	11		
	S.N. 006-3104	CONTRACT N	IO. 8776	54		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT NO. S43W(369)						





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.



HOT-MIX ASPHALT SURFACE PROFILE Includes Waterproofing Membrane System

RAIL POST SPACING AND SUPERSTRUCTURE DETAILS

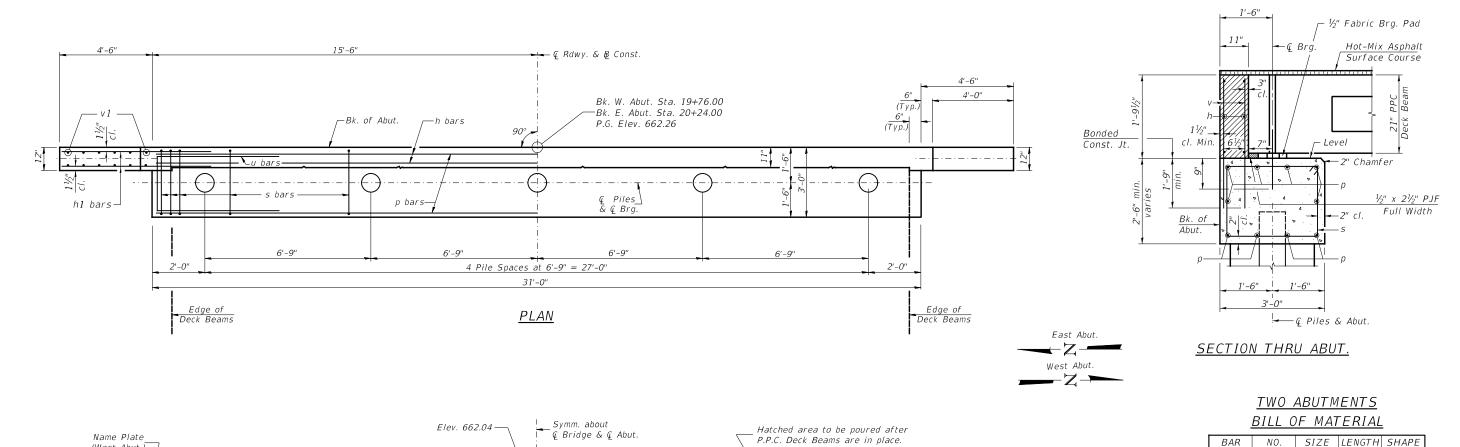
BUREAU COUNTY

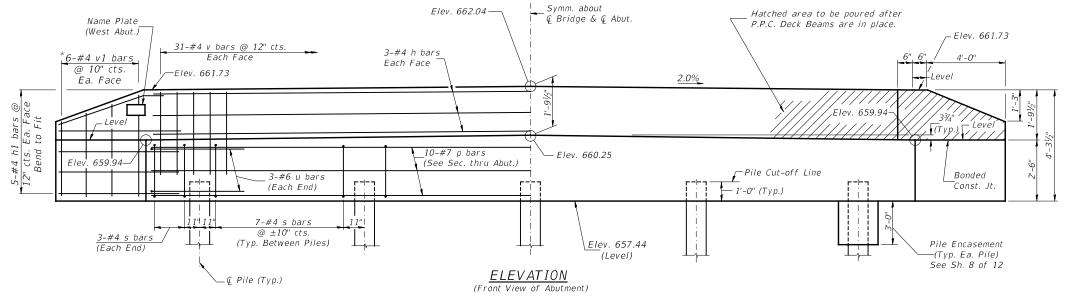
SECTION 12-00241-00-BR

COUNTY HIGHWAY 24 OVER

BRANCH OF POND CREEK

SHEET NO. 6	F.A.S. RTE.				COUNTY	TOTAL SHEETS	SHEET NO.
SHEET NO. 0	1246	12-00241-00-BR			BUREAU	23	12
12 SHEETS	S.N. 006-3104				CONTRACT N	10. 8776	54
	FED. ROAD DIST. NO. 7 ILLINOIS			FEC	. AID PROJECT	NO. S43W	V(369)



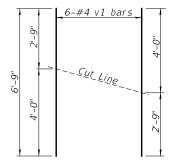


PILE DATA

Type & Size: Metal Shell 12"x0.250" walls Nominal Required Bearing: 209 kips

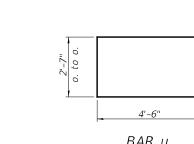
Nominal Required Bearing: 209 kips Factored Resistance Available: 115 kips

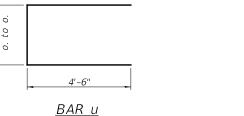
Est. Length: 35' West Abutment 35' East Abutment No. Req'd.: 10 (Includes 1 Test Pile at Each Abut.)



2'-8" BAR s

BAR CUTTING DIAGRAM *Order v1 bars full length. Cut as shown and use remainder of bars in opposite face.





ABUTMENTS
BUREAU COUNTY
SECTION 12-00241-00-BR
COUNTY HIGHWAY 24 OVER
BRANCH OF POND CREEK

SHEET NO. 7	F.A.S. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO
SHEET NO. 7	1246	12-00241-00-BR		BUREAU	23	13
12 SHEETS		S.N. 006-3104		CONTRACT N	NO. 8776	54
	FED. RC	AD DIST. NO. 7 ILLINOIS	FEC	. AID PROJECT	NO. 543V	V(369)

12

40

20

68

12

124

24

Concrete Structures

Reinforcement Bars

Piles 12"x0.250"

Driving Piles

Name Plates

Concrete Encasement

Furnishing Metal Shell

Test Pile Metal Shells

h1

р

v 1

#4

#4

#7

#4

#6

#4

#4

30'-9"

6'-6"

30'-9"

10'-5"

11'-7"

3'-6"

6'-9"

CU YD

CU YD

POUND

FOOT

FOOT

EACH

EACH

24.3

2.6

2,760

280

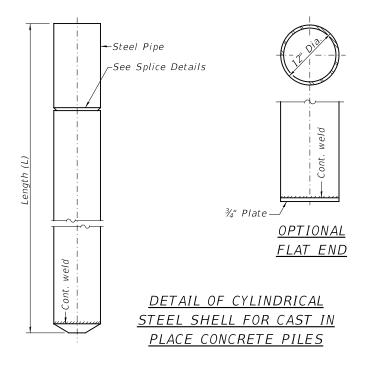
280

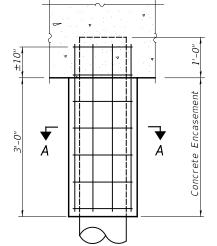
2

NOTES

- 1. The backwall and the portion of the wingwalls above the bonded construction joint shall be cast against the in-place beam.
- 2. All edges shall have standard ¾" chamfer.

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.



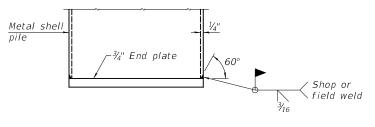


Welded wire fabric 6x6-W4.0xW4.0 1'-0" 1'-0" weighing 58/100 sq. ft. The cost of Reinforcement and Excavation are included with Concrete Encasement. Forms for encasement may be omitted when soil conditions will permit. -Metal Shell Pile

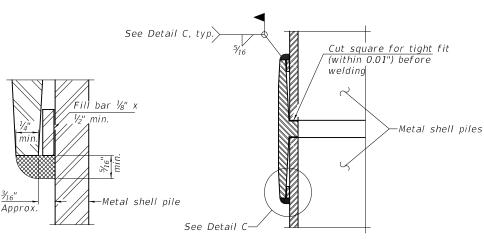
SECTION A-A

ELEVATION

DETAIL OF METAL SHELL PILE ENCASEMENT AT ABUTMENTS



END PLATE ATTACHMENT



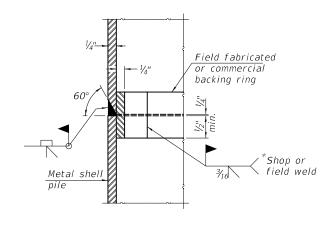
DETAIL C

Notes:

The $\frac{1}{8}$ " x $\frac{1}{2}$ " min. fill bar may be constructed of

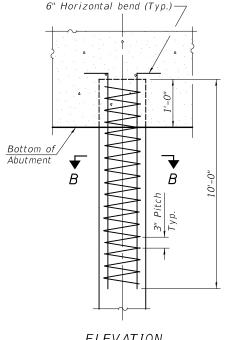
2 bars with a $\frac{1}{8}$ " max. gap between them. Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE

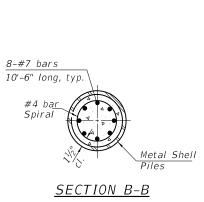


COMPLETE PENETRATION WELD SPLICE

* 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



The cost of Reinforcement is included with Furnishing

Metal Shell Piles 12"x0.250" METAL SHELL PILE DETAILS

BUREAU COUNTY

SECTION 12-00241-00-BR COUNTY HIGHWAY 24 OVER

BRANCH OF POND CREEK

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

SHEET	NO.	8
JIILLI	NO.	

12 SHEETS

REINFORCEMENT AT ABUTMENTS

TOTAL SHEET SHEETS NO. F.A.S. SECTION COUNTY RTE. 1246 12-00241-00-BR BUREAU 23 | 14 S.N. 006-3104 CONTRACT NO. 87764 FED. ROAD DIST. NO. 7 ILLINOIS | FED. AID PROJECT NO. S43W(369)

		Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354	3705 Progress Blvd. Peru, IL 61354 Sheet 1 of 4							Fax:	815-223-6690 815-223-6659 il: mts37@come)	
Client: Project Name; Project Site:		Engineering, Inc. AS) 1246 Section 12-00214-00-BR nunty, II.		Sur Au	face	Ele Dept	h		B-1 562.1 76' 2/05/ LES	0		iry Depth sh Date DRILLE	NA 12/05/15 D BY
Location:	8'	Right of Station 19+70		T	No.	Type	SF)	N Value (Blows)	Shear	(%) a	usity (PCF)	Randy Safransk Diedrich D-120	
(DEPTH) ELEV. 662,10	DESCI	RIPTION OF MATERIALS	Graphic	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value	Bulge / Shear	Moisture (%)	Dry Density	REMA	RKS
	Medi	um Brown Gravely Clay (Fill)			1	ss		13	,	12			
-657,10		Stiff Black Clay		5 6 7 8	2	ss	1.4	5	В	23			
653.10 652.10 651.10	Stiff B	rown Clay With Gravel Seams	Neres score	-9 -10 -11	4	ss	1.5	7	В	27	8		
-650,10 -649,10 -648,10 -647,10	Ver	ry Stiff Brownish Gray Clay		12 13 14 15	5		2.0	12	В	19	8		
-646.10 -645.10 -644.10 -643.10	Mediur	n Brown Fine And Coarse Sand		—16 —17 —18 —19	7	SS	2.1	14					
		Very Stiff Gray Clay			8	SS	2.0	13	В	17	8		

		Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354					G L of				Fax:	ne: 815-223-6696 815-223-6659 nil: mts37@comcast.net
Client: Project Name: Project Site:	CH 24 (I	n Engineering, Inc. FAS) 1246 Section 12-00214-00-BR County, II.		Sui Au	face	No. Ele Dept ate	th	1:	B-1 662.1 76' 2/05/	10		ary Depth NA sh Date 12/05/15
Location:	8	Right of Station 19+70				7700	5.	AMP (sw			(PCF)	DRILLED BY Randy Safranski Diedrich D-120
(DEPTH) ELEV. 641.10	DESC	RIPTION OF MATERIALS	Graphic	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
- 640.10				- 22	20,78			E				
639.10 638.10				—23 —24	9	SS	2.0	12	В	19		
-637.10 -636.10				25 	10	SS	2.3	13	В	19		
- -635,10 -				- -27 -		.00	2,1			20		
-634.10 - -633.10	Very Stiff (Gray Clay Till With Occasional Gravel		28 	11	33	2,1	12	В	20		
-632.10 -631.10				-30 -31	12	SS	3.2	22	В	15		
-630.10 -629.10				32 33	13	SS	2.8	17	В	18		
-628.10 -627.10				34 	8							
- 627.10 - 626.10					14	SS	3.0	18	В	18		
625.10 624.10				37 38								
-623.10 -622.10				39 40	8.0		in the toucher			4200		
- 621.10		Hard Gray Clay Till		_ 41	15	SS	4.5	26	S	17		

Groundwater Data: Ststic water level after auger removal - Elevation 653.0

Comments:

SOIL BORING LOGS

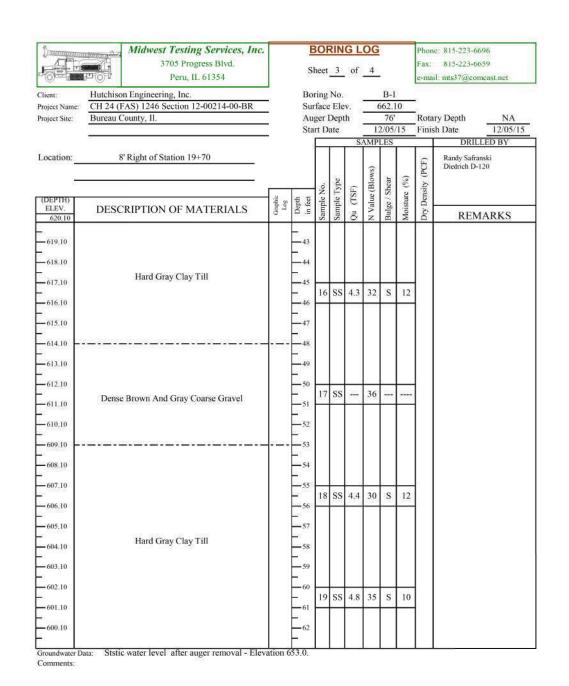
BUREAU COUNTY

SECTION 12-00241-00-BR

COUNTY HIGHWAY 24 OVER

BRANCH OF POND CREEK

SHEET NO. 9	F.A.S. RTE.	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
SHEET NO. 5	1246	12-0024	1-00-BR		BUREAU	23	15
12 SHEETS		S.N. 006-3	104		CONTRACT N	NO. 8776	54
	FED. RC	AD DIST. NO. 7	ILLINOIS	FEC	D. AID PROJECT	NO. S43V	V(369)



Danne		Midwest Testing Services, Inc. 3705 Progress Blvd.		E	OF	RIN	G L	OG			Phon Fax:	ne: 815-223-6696 : 815-223-6659 ail: mts37@comcast.net			
		Peru, IL 61354		SI	neet	4	of	4	ě						
Client: Project Name: Project Site:		n Engineering, Inc. AS) 1246 Section 12-00214-00-BR ounty, II.		Sui Au	face	No. Ele Dept ate	h	1:	B-1 662.1 76' 2/05/	0		rry Depth NA sh Date 12/05/15			
Location:	8'	Right of Station 19+70			30 - 3		S	AMP.	LES		CF)	DRILLED BY Randy Safranski Diedrich D-120			
(DEPTH) ELEV. 599.10	DESC	RIPTION OF MATERIALS	Graphic	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS			
				—64 —65 —66	20	ss	4.1	29	S	12					
- 595.10 - 594.10 - 593.10 - 592.10 - 591.10		Hard Gray Clay Till		67 68 69 70	21	SS	4.7	37	S	12					
-590.10 -589.10 -588.10 -587.10 -586.10				72 -73 -74 -75 -76	22	ss	4.5	36	S	11					
-585.10 -584.10 -583.10 -582.10		Boring Terminated													
-581.10 -580.10 -579.10				81 82 83											

SOIL BORING LOGS

BUREAU COUNTY

SECTION 12-00241-00-BR

COUNTY HIGHWAY 24 OVER

BRANCH OF POND CREEK

SHEET NO. 10	F.A.S. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
SHEET NO. 10	1246	12-00241-00-BR		BUREAU	23	16
12 SHEETS		S.N. 006-3104		CONTRACT N	10. 8776	54
	FED. RC	AD DIST. NO. 7 ILLINOIS	FED). AID PROJECT	NO. S43V	V(369)

		Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354		50			G L				Fax:	e: 815-223-6 815-223-6 il: mts37@co	6659
Client: Project Name: Project Site:	CH 24 (F	n Engineering, Inc. FAS) 1246 Section 12-00214-00-BR County, II.		Sur Au	face	No. Ele Dept ate	h		B-2 662.1 76' 2/05/ LES	0		ry Depth sh Date DRII	NA 12/05/15 LLED BY
Location:	0.0	6' Left of Station 20+30		T	No.	Type	F)	N Value (Blows)	Shear	(%) a	Dry Density (PCF)	Randy Safr Diedrich D	anski -120
(DEPTH) ELEV. 662,10	DESC	ERIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value	Bulge / Shear	Moisture (%)	Dry Der	REN	MARKS
-661.10 -660.10 -659.10 -658.10	Мес	lium Brown Gravely Clay (Fill)			1	SS		16		10			
-657.10 -656.10		Stiff Black Clay		5 6	2	ss	1.3	6	В	23			
-655.10 -654.10 -653.10					3	ss	1.5	7	В	21	380		
-652.10 -651.10 -650.10		Stiff Brownish Gray Clay		-10 -11 -12	4	SS	1.1	5	В	22	8		
-649,10 -648,10				—13 —14	5	SS	1.9	10	В	20	8		
-647.10				15	6	SS		17			6		
-645.10 -644.10 -643.10	Medium	Brown Fine Sand And Fine Gravel		-17 -18 -19	7	SS		21			8		
-642.10				20	8	SS		10			8		

		Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354					G L of				Fax:	ne: 815-223-6696 815-223-6659 iil: mts37@comeast.net
Client: Project Name: Project Site:	CH 24 (I	n Engineering, Inc. FAS) 1246 Section 12-00214-00-BR County, II.		Sui Au	face	No. Ele Dept ate	v. th	1.	B-2 662.1 76' 2/05/	10		nry Depth NA sh Date 12/05/15
Location:	j	6' Left of Station 20+30				1	5	AMP (sw			(PCF)	DRILLED BY Randy Safranski Diedrich D-120
(DEPTH) ELEV. 641.10	DESC	RIPTION OF MATERIALS	Graphic	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
					20.00							
639.10 638.10				—23 —24	9	SS	2,6	15	В	16		
-637.10 -636.10				25 26	10	SS	2.3	13	В	18		
- -635.10 - -634.10	Very Stiff (Gray Clay Till With Occasional Gravel			11	ee	2.4	13	В	18		
- 633.10 - 633.10					-11	33	2,4	13	В	18		
-632.10 -631.10				30 31	12	SS	2.9	17	В	16		
630.10 629.10				32 33	13	SS	2.5	14	В	18		
-628.10 -627.10				34 35	S:X							
- 626.10 - 626.10					14	SS	2.2	12	В	12		
625.10 624.10				—37 —38								
-623.10 -622.10		Very Stiff Gary Clay Till		39 40	8-4							
- 621.10				41	15	SS	3.6	23	В	4		

Groundwater Data: Ststic water level after auger removal - Elevation 653.5.

SOIL BORING LOGS BUREAU COUNTY <u>SECTION 12-00241-00-BR</u> COUNTY HIGHWAY 24 OVER BRANCH OF POND CREEK

SHEET NO. 11	F.A.S RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
SHEET NO. 11	1246	12-0024	1-00-BR		BUREAU	23	17
12 SHEETS		S.N. 006-31	104		CONTRACT	NO. 87	764
	FED. RC	AD DIST. NO. 7	ILLINOIS	FEC	D. AID PROJECT	NO. S43V	V(369)

		Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354		500			G L				Fax:	e: 815-223-6696 815-223-6659 il: mts37@comcast.net
Client: Project Name: Project Site:	CH 24 (I	on Engineering, Inc. FAS) 1246 Section 12-00214-00-BR County, II.		Sur	face	No. Ele Dept ate	v. h		B-2 662.1 76' 2/05/	0		try Depth NA sh Date 12/05/15 DRILLED BY
Location:	0)	6' Left of Station 20+30			500	٥	3.			(9)	(PCF)	Randy Safranski Diedrich D-120
(DEPTH) ELEV. 620.10	DESC	CRIPTION OF MATERIALS	Graphic	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
		Hard Gray Clay Till		43 44 45 46 47 48	16	SS	4.1	28	В	13		
-614,10613,10612,10612,10611,10610,10609,10		ry Dense To Dense Brown And Gray Fine To Coarse Gravel			17	ss		52				
-608.10 607.10 606.10 605.10 604.10		Hard Cons Class Till		54 55 56 57 58	18	SS		41				
-603.10 -602.10 -601.10 -600.10		Hard Gray Clay Till		-59 -60 -61 -62	19	ss	5.1	38	S	11	Q	

	THURSDAY STATE OF	Testing Services, Inc. 705 Progress Blvd. Peru, IL 61354					G L of				Fax:	815-223-66 815-223-66 il: mts37@cor	559
Client: Project Name: Project Site:	Hutchison Engineeri CH 24 (FAS) 1246 S Bureau County, II.	ng, Inc. ection 12-00214-00-BR		Sui	face	No. Ele Dept ate	h		B-2 662.1 76' 2/05/	0		ry Depth sh Date	NA 12/05/15 LED BY
Location:	6' Left of St	ation 20+30			85 5	1/1/251	. 3/		100000)	(PCF)	Randy Safra Diedrich D-	nski
(DEPTH) ELEV. 599.10	DESCRIPTION	OF MATERIALS	Graphic	Log Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REM	IARKS
- 598.10 - 597.10 - 596.10 - 596.10 - 595.10 - 594.10 - 594.10 - 593.10	Hard Gr	ay Clay Till		-64 -65 -66 -67 -68 -69	20	ss	4.6	25	В	12			
				70 -71 -72 -73 -74	21	SS	5.0	29	S	11			
-587.10 -586.10 -585.10 -585.10 -584.10 -583.10 -582.10	Boring	Terminated		75 -76 -77 -78 -79 -80	22	SS	5.2	33	S	10			
581.10 580.10 579.10 Groundwater D.		after auger removal - Elev		-81 -82 -83									

SOIL BORING LOGS

BUREAU COUNTY

SECTION 12-00241-00-BR

COUNTY HIGHWAY 24 OVER

BRANCH OF POND CREEK

SHEET NO. 12	F.A.S. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
	1246	12-00241-00-BR		BUREAU	23	18
12 SHEETS	S.N. 006-3104			CONTRACT NO. 87764		
	FED. ROAD DIST. NO. 7 ILLINOIS F			FED. AID PROJECT NO. S43W(369		

