

INDEX OF SHEETS 06-14-13 LETTING ITEM 117

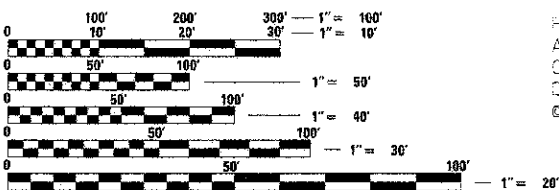
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STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-03 NAME PLATE FOR BRIDGES
- 701901-02 TRAFFIC CONTROL DEVICES
- 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
- B.L.R. 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
- B.L.R. 22-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
- B.L.R. 24-2 MAILBOX TURNOUT FOR LOCAL ROADS

UTILITIES

- FRONTIER COMMUNICATIONS
Attn: Garrett Burt
112 Elm Street
Sycamore, IL 60178
815-895-1538
- AMEREN ILLINOIS
Attn: Bob Torres
P.O. Box 1428
340 Racougla Dr.
LaSalle, IL 61301
815-224-6275
- COMCAST
Attn: Donna Zies
4450 Kishwaukee St.
Rockford, IL 61109
815-395-8977
- CITY OF SPRING VALLEY
City Engineer: John Kusek
McClure Engineering
1138 Columbus St.
Ottawa, IL 61350
815-433-2020



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER - IPN
PROJECT MANAGER - BKC
CONTRACT NO. 87551

FUNCTIONAL CLASSIFICATION
LOCAL ROAD (URBAN)
DESIGN SPEED 30 MPH
2013 ADT = 562
3R GUIDELINES

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID PROJECT
HIGHWAY BRIDGE PROJECT

TOWNSHIP ROUTE 398 (PERU PRINCETON RD.)

SECTION 09-10113-00-BR

PROJECT BROS-0011(094)

STRUCTURE REPLACEMENT

BUREAU COUNTY

HALL ROAD DISTRICT

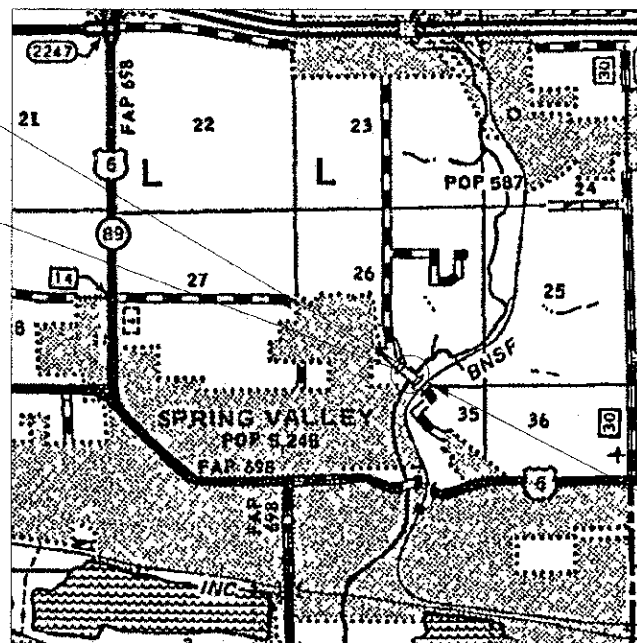
2013

C-93-056-13



RANGE 11 EAST 4th. P.M.

CONSTRUCTION BEGINS
STATION 18+90



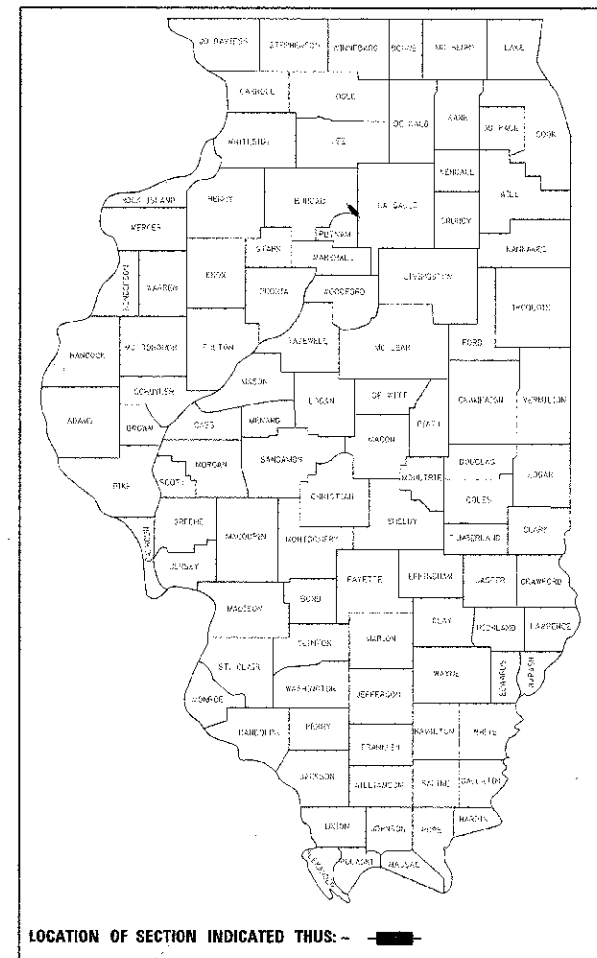
PROPOSED STRUCTURE: S.N. 006-4343
A SINGLE SPAN (108'7"-2") PRECAST PRESTRESSED
CONCRETE DECK BEAM BRIDGE ON CLOSED
DRILLED-SHAFT WITH SHEET PILE ABUTMENTS
@ STA. 20+00. SKEWED 0°.

CONSTRUCTION ENDS
STATION 21+20

GROSS LENGTH = 230 FT. = 0.044 MILE
NET LENGTH = 230 FT. = 0.044 MILE

Bradley S. Hoffmann
DATE: 3/25/2013
EXPIRES 11/30/2013

TWP. 398	SECTION 09-10113-00-BR	COUNTY BUREAU	TOTAL SHEETS 1	SHEET NO. 1
WPA# 1004012		CONTRACT NO. 87551		
ILLINOIS FED. AID PROJECT BROS-0011(094)				



LOCATION OF SECTION INDICATED THIS: -

BUREAU COUNTY HIGHWAY DEPARTMENT

APPROVED 03/28 2013
John C. Jones
BUREAU COUNTY ENGINEER

APPROVED 03/28 2013
Mark Murray
HALL ROAD COMMISSIONER

PASSED 4-2 2013
David Red
DISTRICT 3 LOCAL ROADS & STREETS ENGINEER

RELEASING FOR BID
BASED ON LIMITED
REVIEW 4-2 2013
Paul S. Grotzer
DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER



WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T. 815-284-3381 DESIGN FIRM: #184-000918

SUMMARY OF QUANTITIES
CONSTRUCTION TYPE CODE: 0011

PAY CODE	QUANTITY	UNIT	ITEM
20300100	371	CU. YD.	CHANNEL EXCAVATION
25100630	732	SQ. YD.	EROSION CONTROL BLANKET
28000250	16	POUND	TEMPORARY EROSION CONTROL SEEDING
28000400	513	FOOT	PERIMETER EROSION BARRIER
*31100100	260	TON	SUBBASE GRANULAR MATERIAL, TYPE A
*40200800	7	TON	AGGREGATE SURFACE COURSE, TYPE B
*40600100	187	GAL. LN	BITUMINOUS MATERIALS (PRIME COAT)
40603305	39	TON	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N30
48100100	36	TON	AGGREGATE SHOULDERS, TYPE A
*50100100	1	EACH	REMOVAL OF EXISTING STRUCTURES
*50300225	45.4	CU. YD.	CONCRETE STRUCTURES
50400605	2,789	SQ. FT.	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)
50500405	5,340	POUND	FINISHING AND ERECTING STRUCTURAL STEEL
50800105	22,850	POUND	REINFORCEMENT BARS
+ *50800205	178	FOOT	STEEL RAILING, TYPE S1
51500100	1	EACH	NAME PLATES
*51602000	128	FOOT	PERMANENT CASING
51603000	10.5	CU. YD.	DRILLED SHAFT IN SOIL
51604000	27.2	CU. YD.	DRILLED SHAFT IN ROCK
67100100	1	L. SUM	MOBILIZATION
Z0013798	1	L. SUM	CONSTRUCTION LAYOUT
*X2010400	223	UNIT	STUMP REMOVAL ONLY
*X2020410	253	CU. YD.	EARTH EXCAVATION (SPECIAL)
*X2070302	1,292	TON	POROUS GRANULAR EMBANKMENT, SPECIAL
*X2501100	0.16	ACRE	SEEDING, CLASS 3 (SPECIAL)
*X2810210	78	TON	STONE RIPRAP, CLASS A5 (SPECIAL)
*X5121800	3,090	SQ. FT.	PERMANENT STEEL SHEET PILING
*X7010216	1	L. SUM	TRAFFIC CONTROL AND PROTECTION (SPECIAL)
*40602995	54	TON	HOT-MIX ASPHALT BINDER COURSE, TL-P2.5, N30

* See B.L.R. 11310 in the contract documents for Special Provisions.
+ Denotes specialty item.

FILE = S:\PROJECTS\2012\1001012_Bureau\1001012_Summary_Quantities.dwg



DESIGNED -	JAN NILAUSSA	REVISED -	
CHECKED -	BRAD KLEINMAIER	REVISED -	
DRAWN -	RON ALLEN	REVISED -	
CHECKED -	BRAD KLEINMAIER	REVISED -	

BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20 + 00

SUMMARY OF QUANTITIES
STRUCTURE NO. 006-4143

TWP. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
398	03-10113-00-BR	BUREAU	19 2
WHA# 109-012		CONTRACT NO. 87551	
[INC. NO. 5, P. 20, 430 PROJECT BR05-0010094]			

GENERAL NOTES

All elevations shown on the plans are established from U.S.G.S. mean sea level datum.

Existing structures (including foundations, walls, cisterns, wells or other underground structures) within the right-of-way shall be removed in accordance with Article 501.04 and 501.05 of the Standard Specifications, without additional compensation, unless otherwise noted in the Plans or Special Provisions.

The Contractor shall seed all disturbed areas within the project limits.

No overhaul has been computed and none shall be paid for from any source.

The final top four inches of soil in any right-of-way area disturbed by the Contractor must be a cohesive soil capable of supporting vegetation complying with Section 211 of the Standard Specification for top soil.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications.

All utility poles, gas pipes, etc. in the way of the improvements shall be moved by the utilities prior to construction and shall not be included in the contract. The Contractor shall notify the respective utilities to make the necessary adjustments prior to construction.

The location and elevation of the various underground utilities as shown on the plans are not to be taken as exact. The Contractor shall use special care when conducting construction operations near them to prevent damage.

The utilities located within the project limits or immediately adjacent to the project construction limits include:

AMEREN ILLINOIS
Attn: Bob Torres
P.O. Box 1428
340 Roccuglia Dr.
LaSalle, IL 61301
815-224-5275

FRONTIER COMMUNICATIONS
Attn: Carroll Burt
112 Elm Street
Sycamore, IL 60178
(815) 895-1536

COMCAST
Attn: Donna Zies
4450 Kishwaukee St.
Rockford, IL 61109
815-395-8977

CITY OF SPRING VALLEY
City Engineer: John Kusek
McClure Engineering
1138 Columbus St.
Ottawa, IL 61350
815-433-2020

A minimum of 48 hours advance notice is required for non-emergency work.

A Nationwide 404 Permit has been issued for this project and the conditions of that Permit must be adhered to.

Where section or subsection monuments are encountered, the Engineer shall be notified before such monuments are removed. The Contractor shall protect and carefully preserve all property markers, monuments and right-of-way pins until the Owner, an Authorized Surveyor, or Agent has witnessed or otherwise referenced their location.

Existing mail boxes, street signs and traffic signs that are within the construction limits shall be removed and reset by the Contractor. Cost of removing and resetting to be included in the contract unit price bid per Cubic Yard for Earth Excavation (Special).

Where the proposed construction meets an existing bituminous surface, or where sawing is stated on the plans, the existing shall be sawed in a neat, straight line. Cost of sawing to be included in the contract unit price bid per Cubic Yard for Earth Excavation (Special).

All borrow/waste/use sites must be approved by the Illinois Department of Transportation prior to removing any material from the project site or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

COMMITMENTS

Tree clearing is prohibited between April 1st and September 30th.

SCHEDULE OF QUANTITIES

EROSION CONTROL BLANKET			
LOCATION	SG. YD.	REMARKS	
LT. STA. 18+90.00 - 21+20.00	357		
RT. STA. 18+90.00 - 21+20.00	375		
TOTAL	732	SG. YD.	25100630

TEMPORARY EROSION CONTROL SEEDING			
LOCATION	POUND	REMARKS	
LT. STA. 18+90.00 - 21+20.00	8	100 LB./ACRE	
RT. STA. 18+90.00 - 21+20.00	8	100 LB./ACRE	
TOTAL	16	POUND	28000250

SCHEDULE OF QUANTITIES

PERIMETER EROSION BARRIER			
LOCATION	FOOT	REMARKS	
LT. STA. 18+90 - 19+02	12		
RT. STA. 18+90 - 19+69	99		
LT. STA. 19+05 - 19+10	5		
LT. STA. 19+21 - 19+28	7		
LT. STA. 19+31 - 19+69	57		
STA. 19+83 - 21+20	333		
TOTAL	513	FOOT	28000400

SUBBASE GRANULAR MATERIAL, TYPE A			
LOCATION	TON	REMARKS	
STA. 18+90.00 - 19+55.50	128	12"	
STA. 20+44.50 - 21+20.00	132	12"	
TOTAL	260	TON	*31100100

AGGREGATE SURFACE COURSE, TYPE B			
LOCATION	TON	REMARKS	
P. E. L. STA. 19+16	17	8"	
TOTAL	17	TON	*40200800

BITUMINOUS MATERIALS (PRIME COAT)			
LOCATION	GALLON	REMARKS	
STA. 18+90.00 - 19+55.50	17	0.10 GAL/SQ. YD. ON BIT.	
STA. 20+44.50 - 21+20.00	18	0.10 GAL/SQ. YD. ON BIT.	
STA. 18+90.00 - 19+55.50	75	0.40 GAL/SQ. YD. ON AGG.	
STA. 20+44.50 - 21+20.00	77	0.40 GAL/SQ. YD. ON AGG.	
TOTAL	187	GALLON	*40600100

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N30			
LOCATION	TON	REMARKS	
STA. 18+90.00 - 19+55.50	19	2"	
STA. 20+44.50 - 21+20.00	20	2"	
TOTAL	39	TON	40603305

AGGREGATE SHOULDERS, TYPE A			
LOCATION	TON	REMARKS	
LT. STA. 18+90.00 - 19+03.07	2	6"	
RT. STA. 18+90.00 - 19+55.50	7	6"	
LT. STA. 19+27.50 - 19+55.50	4	6"	
LT. STA. 20+44.50 - 21+20.00	12	6"	
RT. STA. 20+44.50 - 21+20.00	11	6"	
TOTAL	36	TON	48100100

STUMP REMOVAL ONLY			
LOCATION	UNIT	REMARKS	
36' LT. OF STA. 19+36	10		
31' LT. OF STA. 19+39	10		
32' LT. OF STA. 19+41	14		
33' LT. OF STA. 19+41	7		
34' LT. OF STA. 19+43	12		
34' RT. OF STA. 20+10	14		
28' LT. OF STA. 20+26	7		
33' RT. OF STA. 20+27	12		
25' RT. OF STA. 20+75	6		
28' RT. OF STA. 20+77	10		
24' RT. OF STA. 20+77	12		
22' LT. OF STA. 21+16	7		
24' LT. OF STA. 18+97	44	2 @ 22"	
31' LT. OF STA. 19+58	20		
36' LT. OF STA. 19+60	20		
25' LT. OF STA. 20+66	18		
TOTAL	223	UNIT	*X2010400

SEEDING, CLASS 3 (SPECIAL)			
LOCATION	ACRE	REMARKS	
LT. STA. 18+90.00 - 21+20.00	0.08		
RT. STA. 18+90.00 - 21+20.00	0.08		
TOTAL	0.16	ACRE	*X2501100

HOT-MIX ASPHALT BINDER COURSE, IL-12.5, N30			
LOCATION	TON	REMARKS	
STA. 18+90.00 - 19+55.50	27	2 3/4"	
STA. 20+44.50 - 21+20.00	27	2 3/4"	
TOTAL	54	TON	*XX000001

*See Special Provisions.

T.R. 398 EARTHWORK TOTALS

LOCATION	EARTH EXCAVATION (SPECIAL) X2020410	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25%	EMBANKMENT	CHANNEL EXCAVATION 20300100	CHANNEL EXCAVATION ADJUSTED FOR SHRINKAGE 62.5%	EARTHWORK BALANCE WASTE
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
TOTAL	253	190	103	371	140	227

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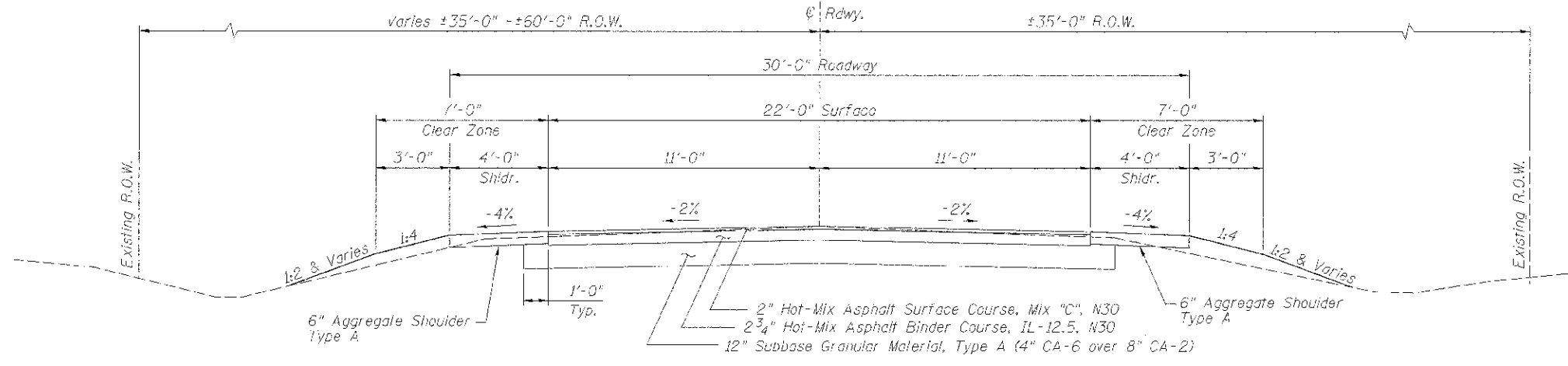


DESIGNED - IAN NILAUSEN	REVISED -
CHECKED - BRAD KLEINMAIER	REVISED -
DRAWN - RON ALLEN	REVISED -
CHECKED - BRAD KLEINMAIER	REVISED -

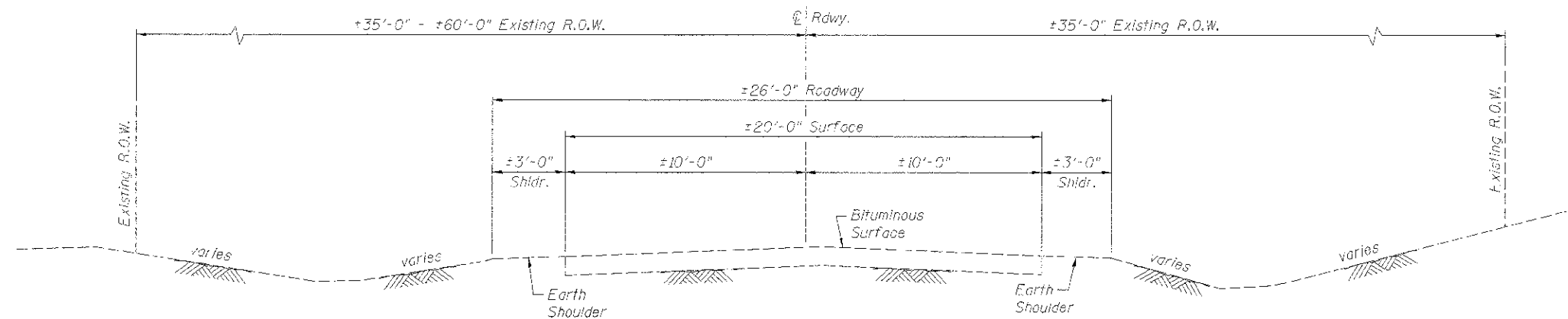
**BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00**

**GENERAL NOTES, COMMITMENTS & SCHEDULE OF QUANTITIES
STRUCTURE NO. 006-4143**

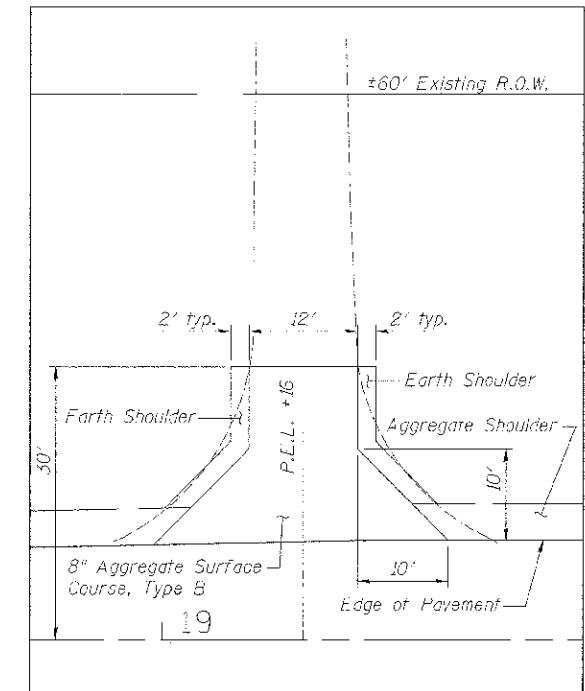
TWP. 39S	SECTION 09-10113-00-0R	COUNTY BUREAU	TOTAL SHEET NO. 19	SHEET NO. 3
WIA# 100-012			CONTRACT NO. 87551	
ILLINOIS FED. AID PROJECT BR05-0011054				



PROPOSED ROADWAY TYPICAL SECTION
(Sta. 18+90.00-19+55.50 & Sta. 20+44.50-21+20.00)



EXISTING ROADWAY TYPICAL SECTION



PRIVATE ENTRANCE DETAIL

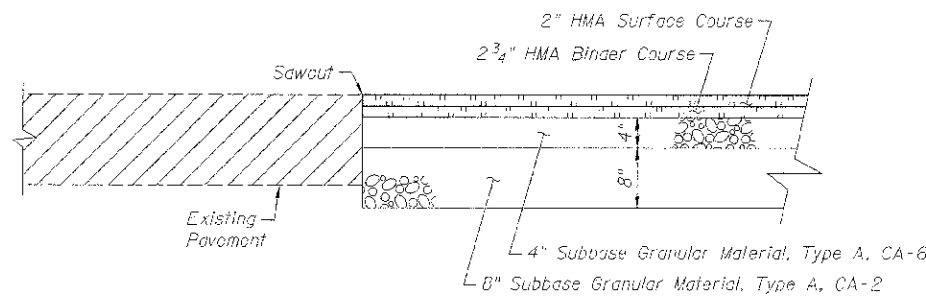
***PAVEMENT MIXTURE REQUIREMENTS**

	Surface	Binder
PG:	58-28	58-28
Design Air Voids	3.0 @ N30	3.0 @ N30
Mixture Composition (Gradation Mixture)	IL 9.5	IL 12.5
Friction Aggregate	C	-
Density Testing	Correlation	Correlation

*Mix Design shall be approved by Engineer prior to use.

T.R. 398 - HORIZONTAL CONTROL POINTS (NAD83-2007)

PT #	N	E	EL.	DESCRIPTION
100	1702073.31	2565815.22	500.39	5/8" I.P.
101	1702480.35	2565285.58	504.58	PK NAIL



TYPICAL CORE JOINT DETAIL
Stations 18+90 & 21+20

PAVEMENT STRUCTURAL DESIGN

T.R. 398
Structural Design Traffic (S.D.T.) = Year 2023
Class III Road
80,000# Truck Design
E_{RI} : 2 ksi (Poor Subgrade)
TF = 0.16
HMA Mix Temp. = 74.5° F
HMA E_{ac} = 595 ksi
HMA Design Strain = 250 microstrain
USE:
2" Hot-Mix Asphalt Surface Course, Mix "C", N30
2 3/4" Hot-Mix Asphalt Binder Course, IL-12.5, N30
12" Subbase Granular Material, Type A (4" CA-6 over 8" CA-2)

P.V.	513	} 583 ADT
S.U.	41	
M.U.	29	

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DESIGNED	TAN MI AUSEN	REVISED	-
CHECKED	BRAD KLEINWATER	REVISED	-
DRAWN	SON ALLEN	REVISED	-
CHECKED	BRAD KLEINWATER	REVISED	-

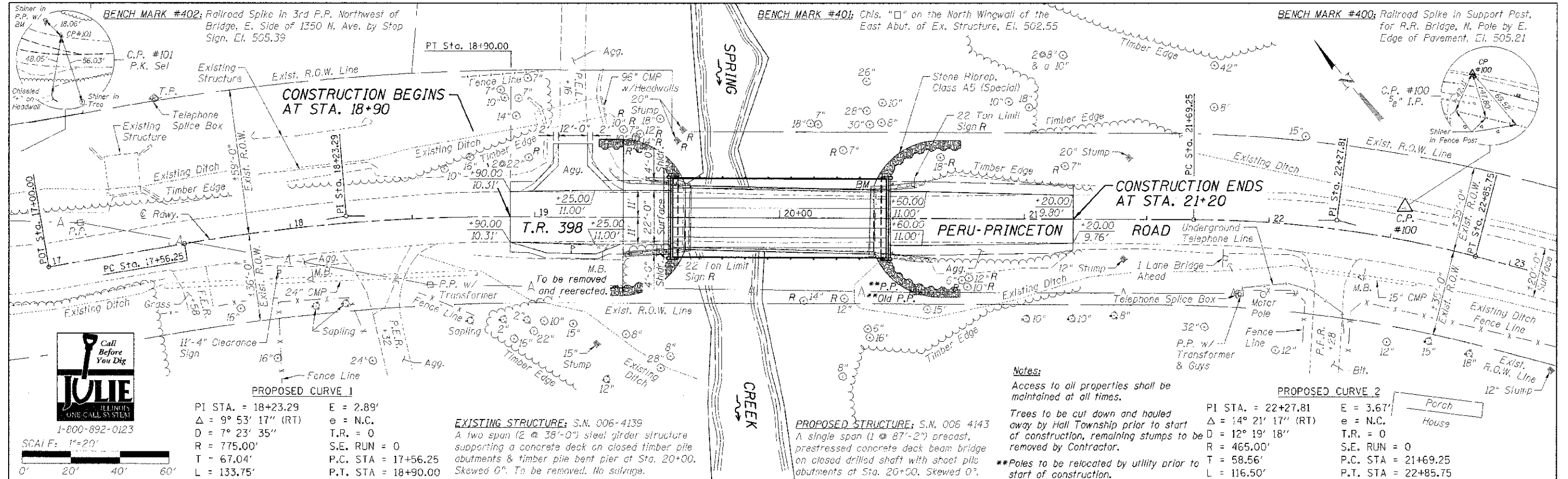
BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20 + 00

TYPICAL SECTIONS
STRUCTURE NO. 006-4143

TRP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
398	09-10-13-00-BR	BUREAU	19	4
WHA# 1304032		CONTRACT NO. 87551		
[ILLINOIS] FEB. AND PROJECT 9405-0010941				

DATE: _____
 BY: _____
 CHECKED: _____
 DESIGNED: _____
 DRAWN: _____
 P.L. AN

DATE: _____
 BY: _____
 CHECKED: _____
 DESIGNED: _____
 DRAWN: _____
 P.L. AN



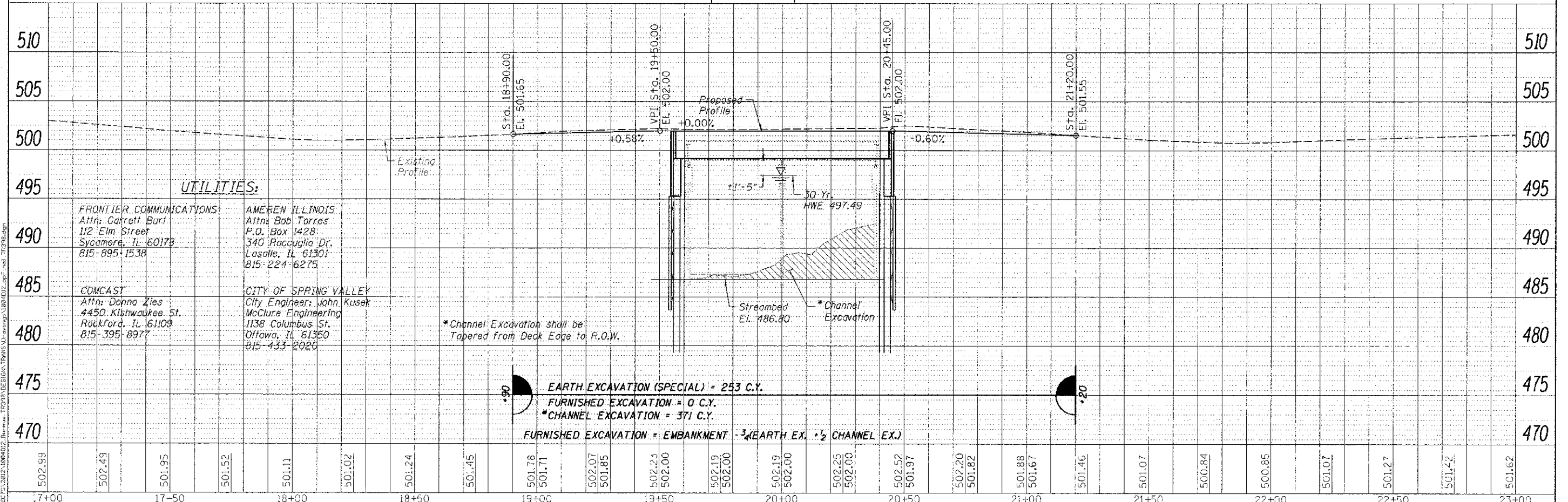
PROPOSED CURVE 1
 PI STA. = 18+23.29 E = 2.89'
 Δ = 9° 53' 17" (RT) e = N.C.
 D = 7° 23' 35" T.R. = 0
 R = 775.00' S.E. RUN = 0
 T = 67.04' P.C. STA = 17+56.25
 L = 133.75' P.T. STA = 18+90.00

EXISTING STRUCTURE; S.N. 006-4139
 A two span (2 @ 38'-0") steel girder structure supporting a concrete deck on closed timber pile abutments & timber pile bent pier at Sta. 20+00. Skewed 0°. To be removed. No salvage.

PROPOSED STRUCTURE; S.N. 006 4143
 A single span (1 @ 87'-2") precast, prestressed concrete deck beam bridge on closed drilled shaft with sheet pile abutments at Sta. 20+00. Skewed 0°.

Notes:
 Access to all properties shall be maintained at all times.
 Trees to be cut down and hauled away by Hall Township prior to start of construction, remaining stumps to be removed by Contractor.
 **Poles to be relocated by utility prior to start of construction.

PROPOSED CURVE 2
 PI STA. = 22+27.81 E = 3.67'
 Δ = 14° 21' 17" (RT) e = N.C.
 D = 12° 19' 18" T.R. = 0
 R = 465.00' S.E. RUN = 0
 T = 58.56' P.C. STA = 21+69.25
 L = 116.50' P.T. STA = 22+85.75



UTILITIES:

FRONTIER COMMUNICATIONS:
 Attn: Garrett Burt
 112 Elm Street
 Sycamore, IL 60178
 815-895-1538

AMEREN ILLINOIS:
 Attn: Bob Torres
 P.O. Box 1428
 340 Raccaglia Dr.
 LaSalle, IL 61301
 815-224-6275

COMCAST:
 Attn: Donna Zies
 4450 Kishwaukee St.
 Rockford, IL 61109
 815-395-8977

CITY OF SPRING VALLEY:
 City Engineer: John Kusek
 McClure Engineering
 1138 Columbus St.
 Ottawa, IL 61350
 815-433-2020

*Channel Excavation shall be Tapered from Deck Edge to R.O.W.

EARTH EXCAVATION (SPECIAL) = 253 C.Y.
FURNISHED EXCAVATION = 0 C.Y.
***CHANNEL EXCAVATION = 371 C.Y.**

FURNISHED EXCAVATION = EMBANKMENT - 3/4 EARTH EX. + 1/2 CHANNEL EX.



DESIGNED: IAN NILAUSEN
 CHECKED: BRAD KLEINMAIER
 DRAWN: RON ALLEN
 CHECKED: BRAD KLEINMAIER

REVISED: _____
 REVISED: _____
 REVISED: _____
 REVISED: _____

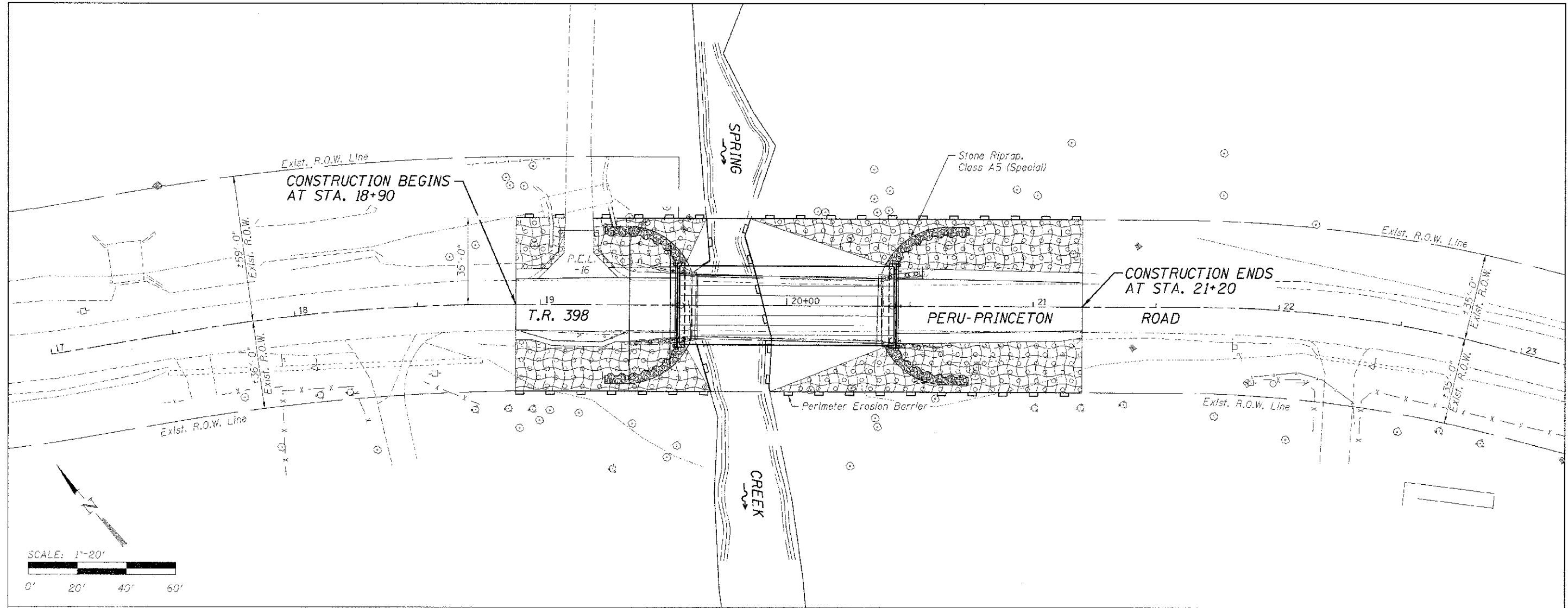
BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

PLAN & PROFILE
STRUCTURE NO. 006-4143

TWP. R.1.E.	SECTION	COUNTY	TOTAL SHEET
398	09-10113-00-BR	BUREAU	19 5
WHA# 1334012	CONTRACT NO. 87551		

PLAN	DATE
BY	
REVISIONS	
NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
NO. 4	DATE
NO. 5	DATE
NO. 6	DATE
NO. 7	DATE
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NO. 16	DATE
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NO. 19	DATE
NO. 20	DATE
NO. 21	DATE
NO. 22	DATE
NO. 23	DATE
NO. 24	DATE
NO. 25	DATE
NO. 26	DATE
NO. 27	DATE
NO. 28	DATE
NO. 29	DATE
NO. 30	DATE

PROFILE	DATE
BY	
REVISIONS	
NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
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NO. 26	DATE
NO. 27	DATE
NO. 28	DATE
NO. 29	DATE
NO. 30	DATE



EROSION CONTROL NOTES

The soil erosion and sediment control practices will be inspected weekly and after 1/2" of rain or more by the individual on site in charge of soil erosion and sediment control during the construction of the project.

Perimeter erosion barrier shall comply with Section 280 of the Standard Specifications and shall be placed as shown on the Erosion Control Plan and in accordance with stations shown on the Schedule of Quantities sheet or as directed by the Engineer.

Silt fence shall be installed following the completion and stabilization of all areas adjacent to the on-site drainages. The silt fence will remain in place until the contributing area is stabilized.

For Seeding, Class 3 (Special) see Special Provisions.




Erosion control blanket shall be placed on all disturbed areas as shown on this Erosion Control Plan sheet and in accordance with Section 251 of the Standard Specifications for Road and Bridge Construction.

The use of green dye in the erosion control blanket is not acceptable.

Stockpiles of soil and other building materials to remain in place more than 3 days shall be furnished with erosion and sediment control measures (i.e. perimeter silt fence). Stockpiles to remain in place for 14 days or more shall receive temporary seeding.

All adjacent streets must be kept clear of debris, inspected daily and cleaned when necessary.

LEGEND

-  Perimeter Erosion Barrier
-  Seeding, Class 3 (Special)
-  Erosion Control Blanket

BILL OF MATERIAL

Item	Unit	Quantity
Erosion Control Blanket	Sq. Yd.	732
Temporary Erosion Control Seeding	Pound	16
Perimeter Erosion Barrier	Foot	513
Seeding, Class 3 (Special)	Acre	0.16



DESIGNED - IAN NILAUSEN	REVISED -
CHECKED - BRAD KLEINMAIER	REVISED -
DRAWN - RON ALLEN	REVISED -
CHECKED - BRAD KLEINMAIER	REVISED -

BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

EROSION CONTROL PLAN
STRUCTURE NO. 006-4143
 SCALE: 1" = 20'-0"
 SHEET NO. 1 OF 1 SHEETS
 STA. 17+00.00 TO STA. 23+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
15N	09-10115-00-BR	BUREAU	74	6
WHA* 1004D:2		CONTRACT NO. 87551		
ILLINOIS FED. AID PROJECT BR05-001(094)				

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EXISTING STRUCTURE: S.N. 006-4139
Originally constructed in 1953 at Sta. 20+00 as a two span (2@38'-0") steel beam bridge. The structure is supported on timber piles with timber backing, 79'-6" back to back of abutments and 26'-0" out to out of deck. The existing structure is to be removed and replaced.

BENCH MARK: Chis. "□" on the NE wingwall of the exist. bridge, El. 502.55

No Salvage.

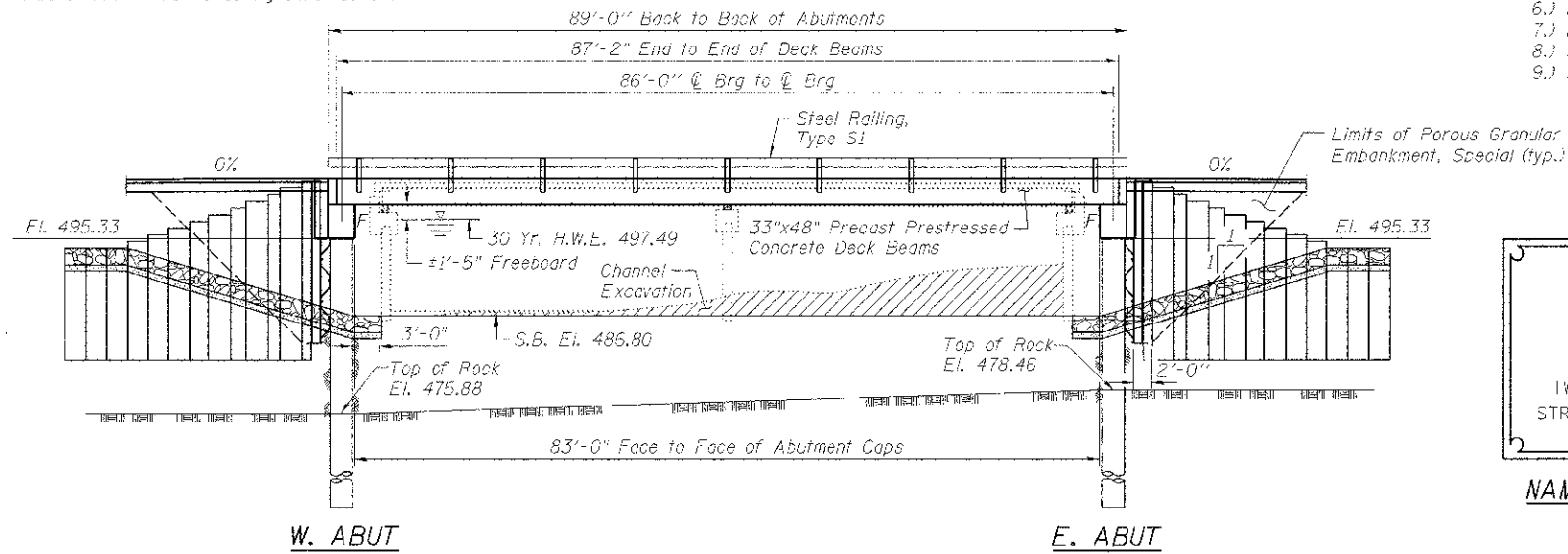
Road will be closed to traffic during construction.

INDEX OF SHEETS

- 1.) General Plan & Elevation
- 2.) 33" x 48" PPC Deck Deck
- 3.) 33" x 48" PPC Deck Beam Details
- 4.) West Abutment Details
- 5.) West Abutment Sheet Pile Layout
- 6.) East Abutment Details
- 7.) East Abutment Sheet Pile Layout
- 8.) Steel Railing, Type S1 Details
- 9.) Soil Boring Logs

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPFR	SUB	TOTAL
Channel Excavation	Cu. Yd.	---	371	371
Removal of Existing Structures	Each	---	---	1
Concrete Structures	Cu. Yd.	---	45.4	45.4
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	2,789	---	2,789
Furnishing and Erecting Structural Steel	Pound	---	5,340	5,340
Reinforcement Bars	Pound	---	22,650	22,650
Steel Railing, Type S1	Foot	178	---	178
Name Plates	Each	---	1	1
Permanent Casing	Foot	---	128	128
Drilled Shaft in Soil	Cu. Yd.	---	10.5	10.5
Drilled Shaft in Rock	Cu. Yd.	---	27.2	27.2
Porous Granular Embankment, Special	---	---	1,292	1,292
Stone Riprap, Class A5 (Special)	Ton	---	78	78
Permanent Steel Sheet Piling	Sq. Ft.	---	3,090	3,090



SPRING CREEK
BUILT 2013 BY
BUREAU COUNTY
SECTION 09-1013-00-BR
TWP. RTE. 398 STATION 20+00
STR. NO. 006-4143 LOADING HL-93

NAME PLATE LETTERING
Refer To Std. 51500i

GENERAL NOTES

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

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

Backfill shall be placed behind the abutment after the superstructure has been set and dowels placed and cured. See Article 502.10 of the Standard Specifications.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, mask off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4.

H.S. bolts shall be mechanically galvanized & shall be ASTM A325 Type 1.

LOADING HL-93

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

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications

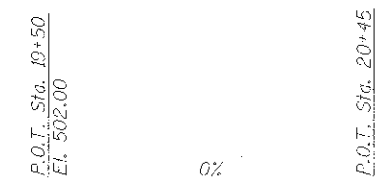
DESIGN STRESSES

FIELD UNITS

- f'c = 3,500 psi
- f'c = 4,000 psi (Drilled Shafts)
- fy = 60,000 psi (Reinforcement)
- PRECAST PRESTRESSED UNITS**
- f'c = 6,000 psi
- f'ci = 5,000 psi
- fpu = 270,000 psi (1/2" Low Lax Strands)
- fpbt = 201,960 psi (1/2" Low Lax Strands)

SEISMIC DATA

- Seismic Performance Zone (SPZ) = 1
- Design Spectral Acceleration at 1.0 sec. (S_{0.1}) = 0.069
- Design Spectral Acceleration at 0.2 sec. (S_{0.2}) = 0.121
- Soil Site Class = C



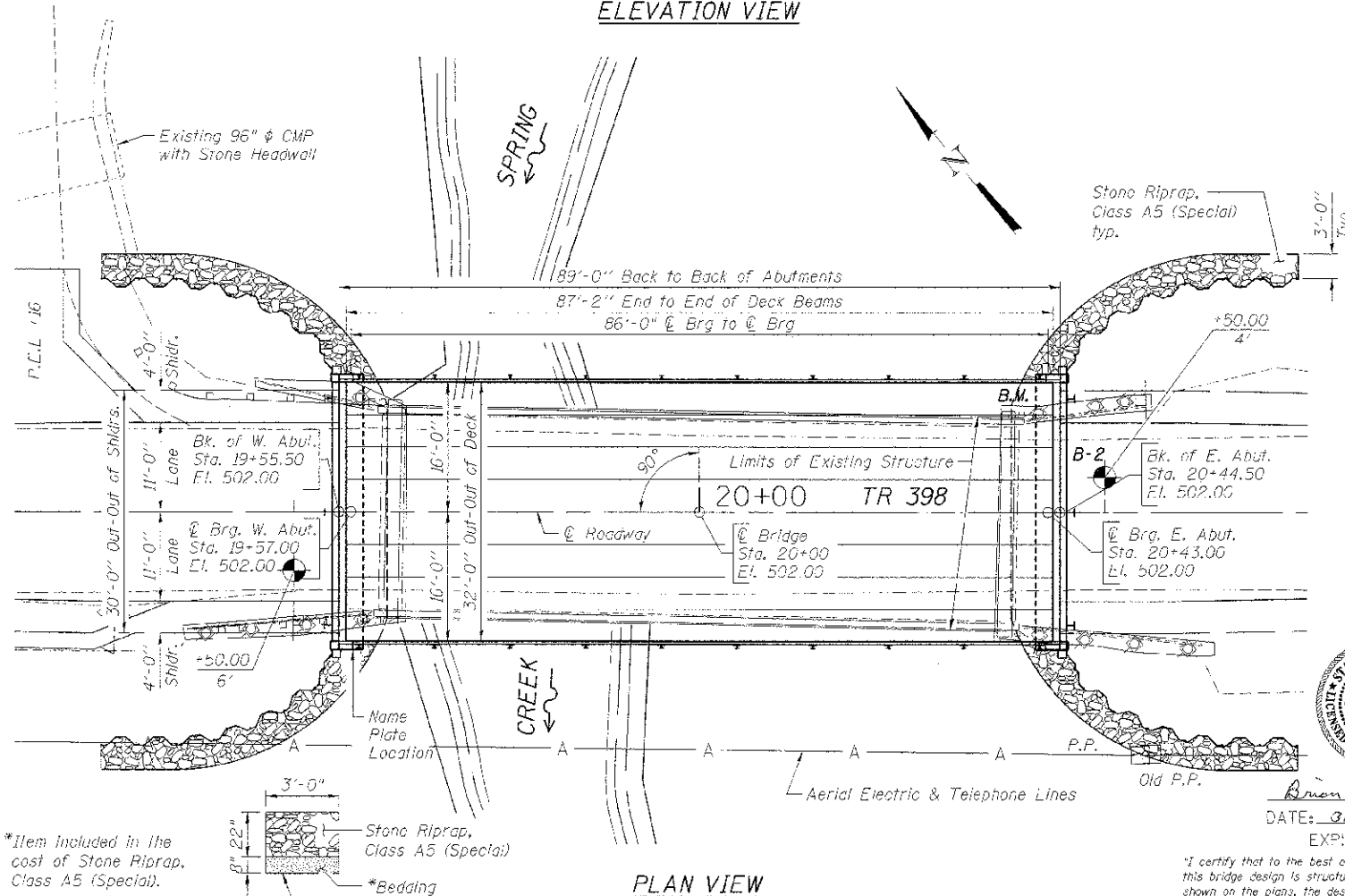
WATERWAY INFORMATION

Flood		Q		Opening Sq. Ft.		Nat. Head - Ft.		Headwater El.	
Freq.	C.F.S.	Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
10	3,855	524	776	495.15	0.20	0.00	496.35	495.90	
Design	30	5,550	619	887	497.49	0.66	0.00	498.15	497.38
Base	100	7,285	715	998	498.83	2.54	0.39	501.37	499.82
Max. Colo.	500	9,880	757	1,007	500.93	2.14	1.61	503.07	502.54

Drainage Area = 48.3 sq. mi. Low Grade Elev. 500.85 @ Sta. 22+00

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation - ft.	West Abut.	East Abut.
	475.88	478.46



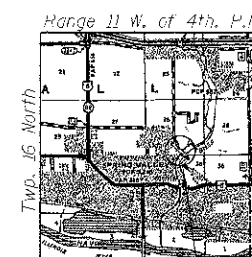
*Item included in the cost of Stone Riprap, Class A5 (Special).

STONE RIPRAP, CLASS A5 (SPECIAL)



Brian A. Converse
DATE: 07/27/2013
EXPIRES 11/30/14

"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 Bridge Design Specifications."



GENERAL PLAN AND ELEVATION
T.R. 398 (PERU-PRINCETON RD.) OVER SPRING CREEK
SECTION 09-1013-00-BR
BUREAU COUNTY
STATION 20+00
STRUCTURE NO. 006-4143



DESIGNED - TAN NRI AHSFN	REVISED -
CHECKED - BRIAN CONVERSE	REVISED -
DRAWN - ROH ALLEN	REVISED -
CHECKED - BRIAN CONVERSE	REVISED -

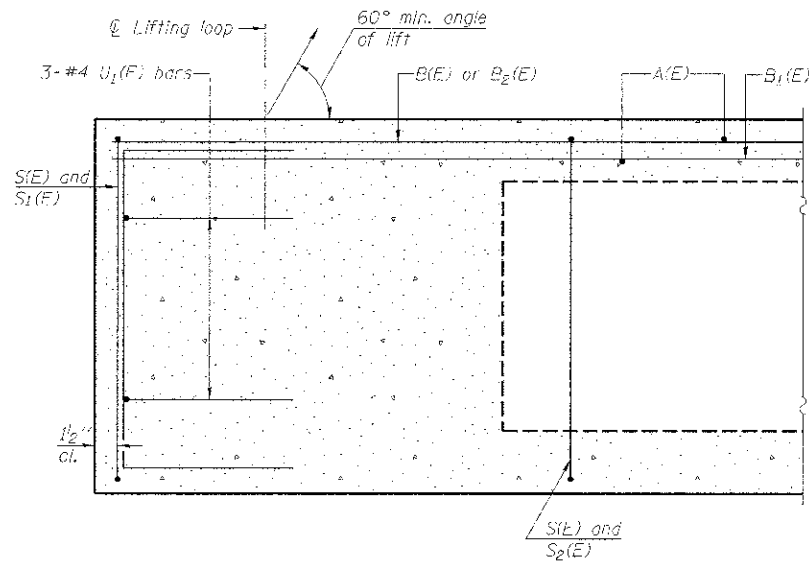
BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

GENERAL PLAN & ELEVATION
STRUCTURE NO. 006-4143

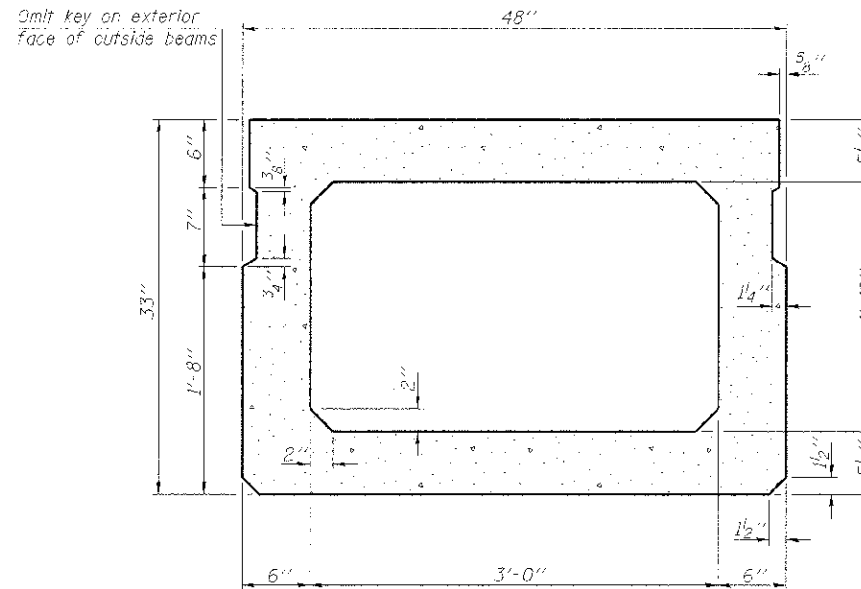
STRUCTURAL SHEET NO. 1 OF 9

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
398	09-1013-00-BR	BUREAU	19	7
WFA# 1004012			CONTRACT NO. 87551	

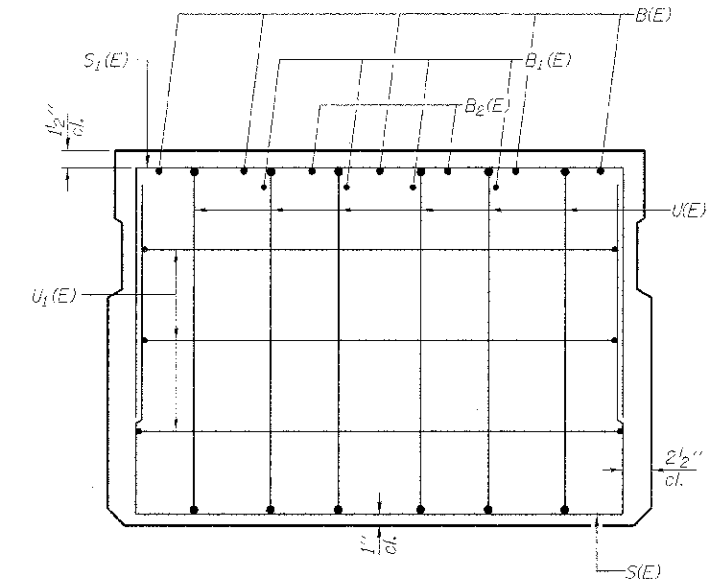
ILLINOIS REG. AID PROJECT BRS-0010949



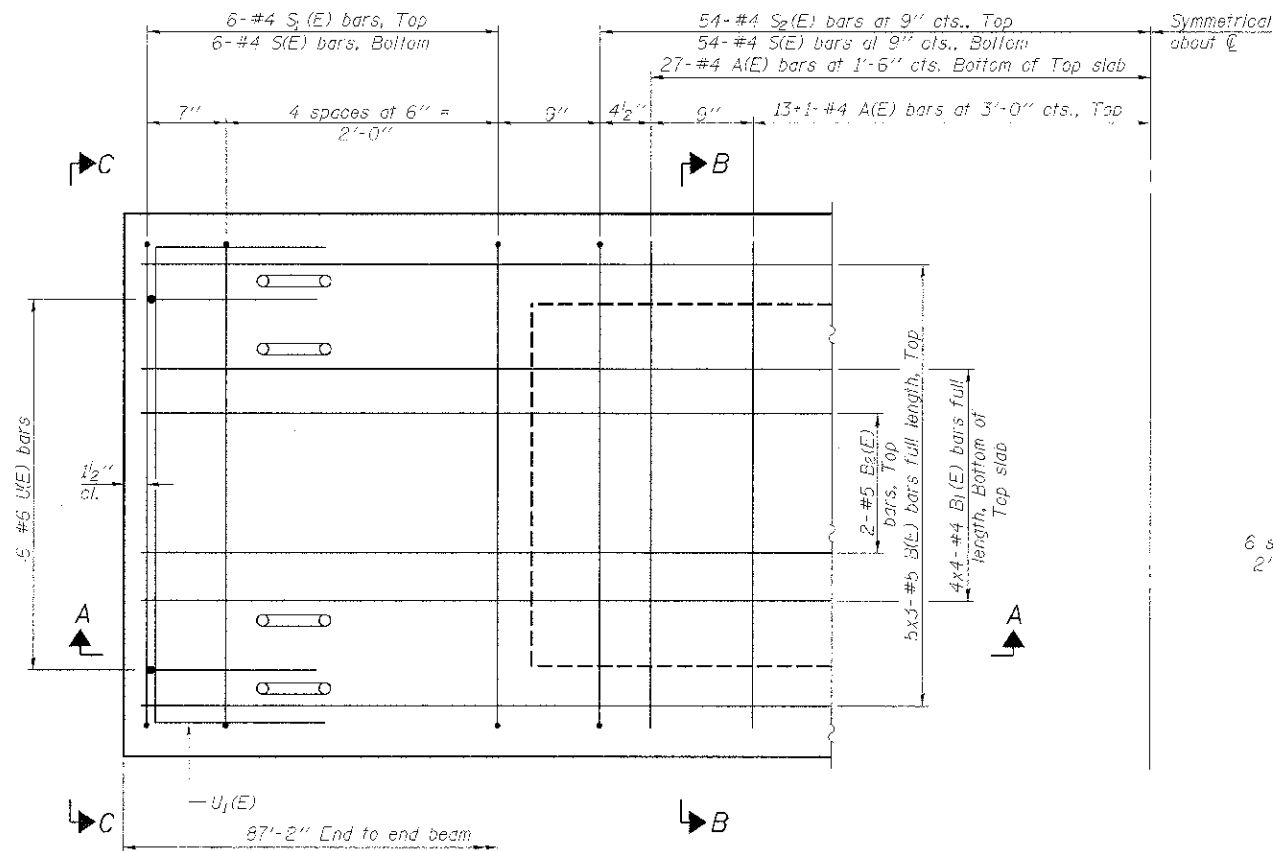
SECTION A-A



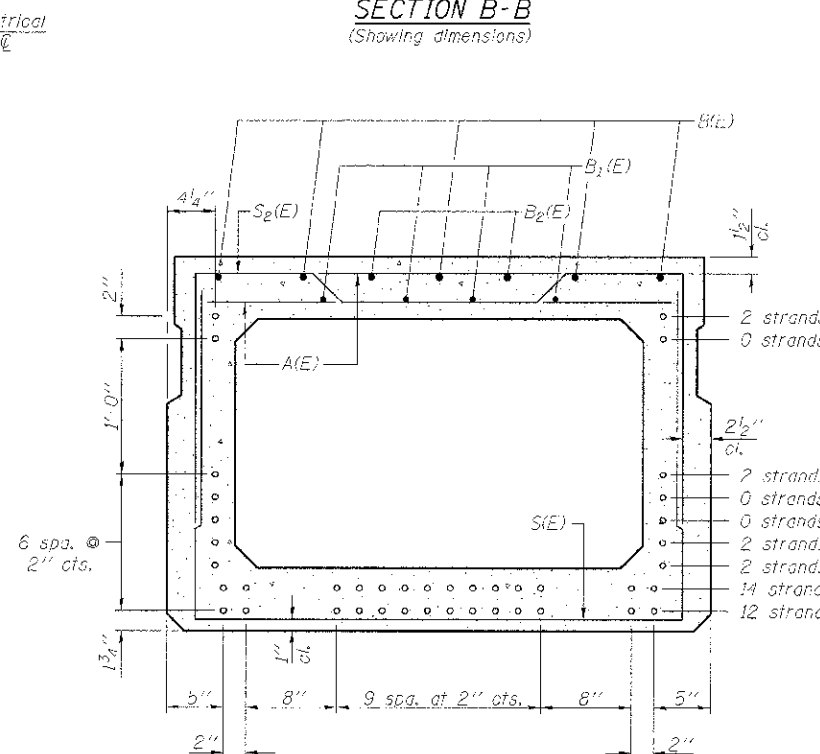
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible strand locations)

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)	81	#4	3'-7"	—
B1(E)	15	#5	36'-8"	—
B2(E)	16	#4	23'-3"	—
B3(E)	1	#5	10'-0"	—
S1(E)	120	#4	8'-5"	┌
S2(E)	12	#4	7'-3"	┌
U1(E)	12	#6	5'-0"	┌
U2(E)	6	#4	6'-0"	┌

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

Bars indicated thus 5x3-#5 etc. indicates 5 lines of bars with 3 lengths per line.

Bars indicated thus 13+1-#4 etc. indicates 13 bars each side of centerline plus 1 additional bar at centerline.

Note: Spacing of S1(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.

MINIMUM BAR LAP

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

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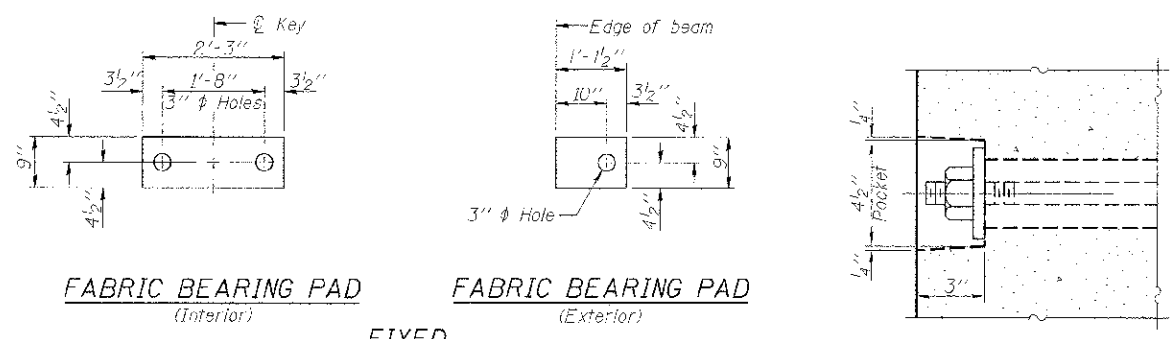
DESIGNED - IPN	REVISED -
CHECKED - BKC	REVISED -
DRAWN - IPN	REVISED -
CHECKED - BKC	REVISED -

BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

33" x 48" PPC DECK BEAM
STRUCTURE NO. 006-4143

STRUCTURAL SHEET NO. 2 OF 3

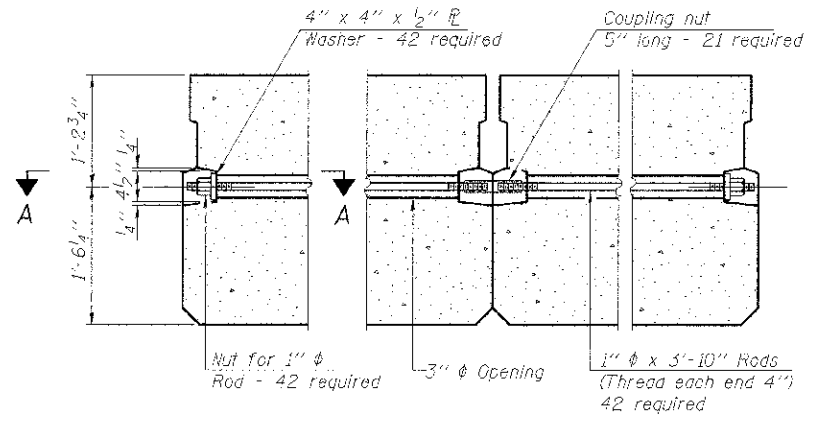
TWP. R1E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
398	09-10113-00-BR	BUREAU	19	8
WHA# 1004012		CONTRACT NO. 87551		
ILLINOIS FED. AID PROJECT BR05-00110941				



FABRIC BEARING PAD
(Interior) **FABRIC BEARING PAD**
(Exterior)

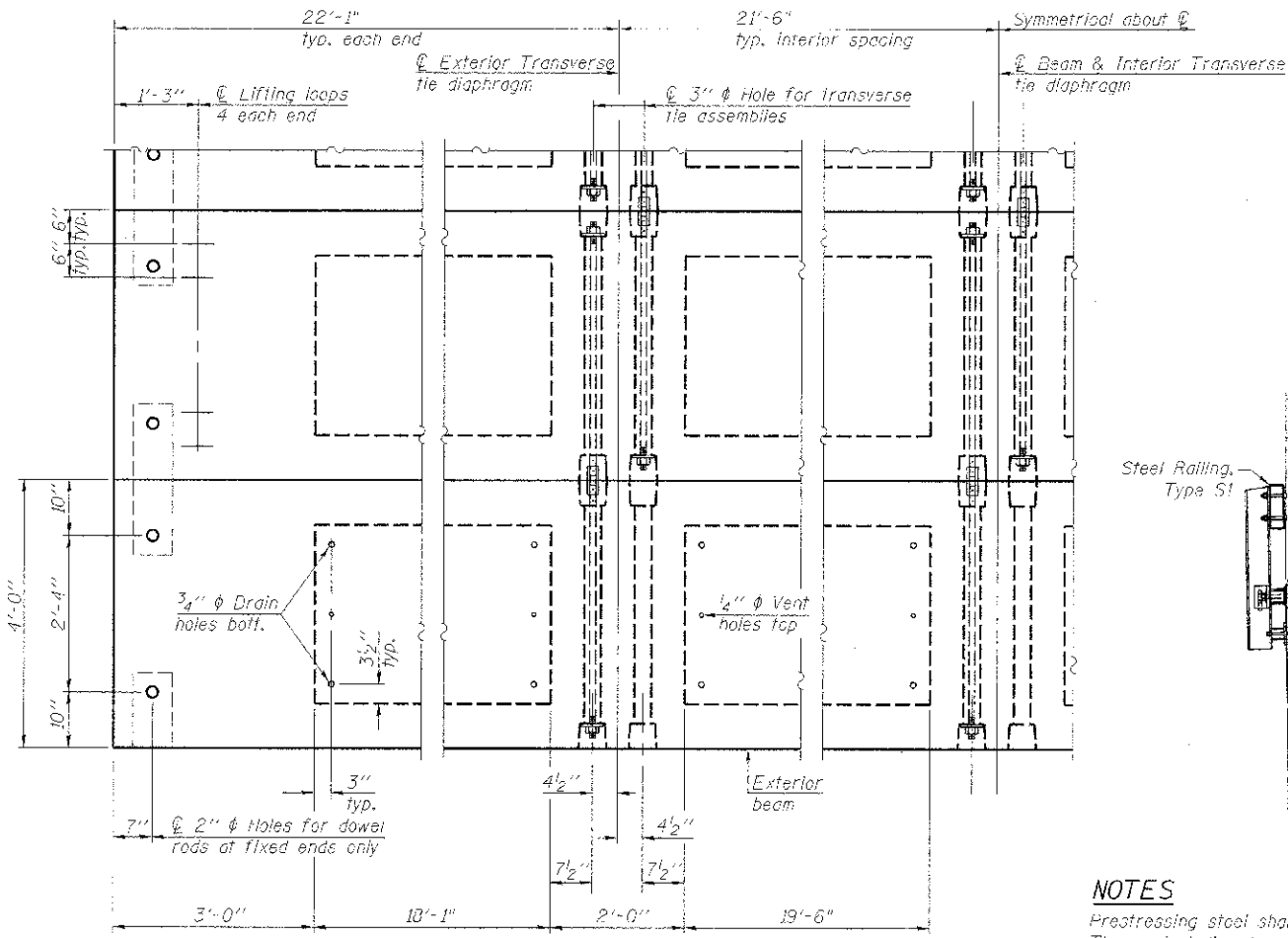
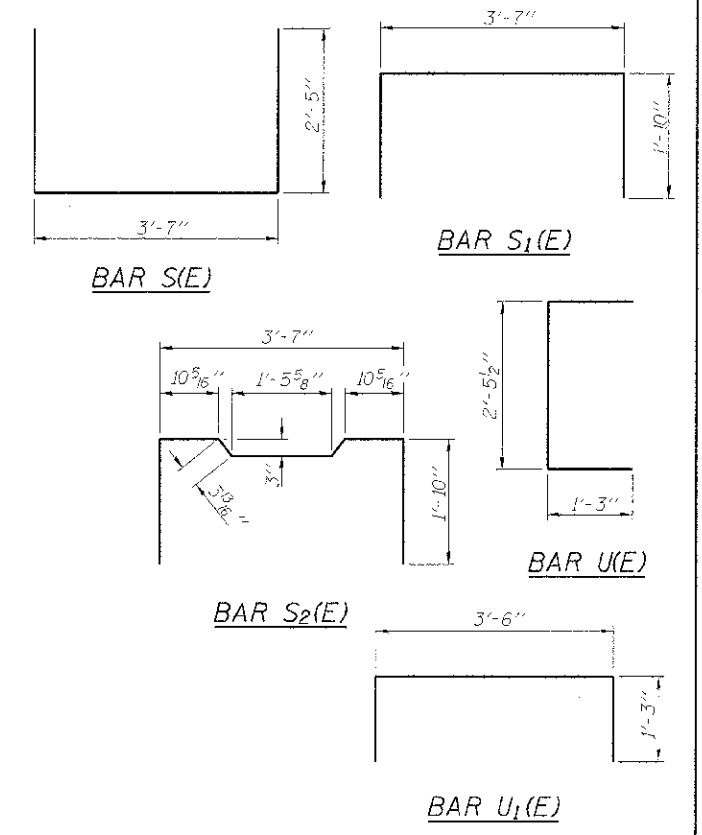
FIXED

All bearing pads shall be 1" thick.



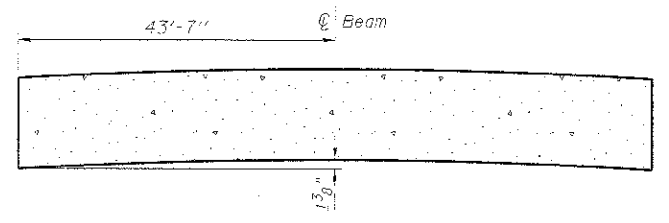
SECTION A-A

TYPICAL TRANSVERSE TIE ASSEMBLY

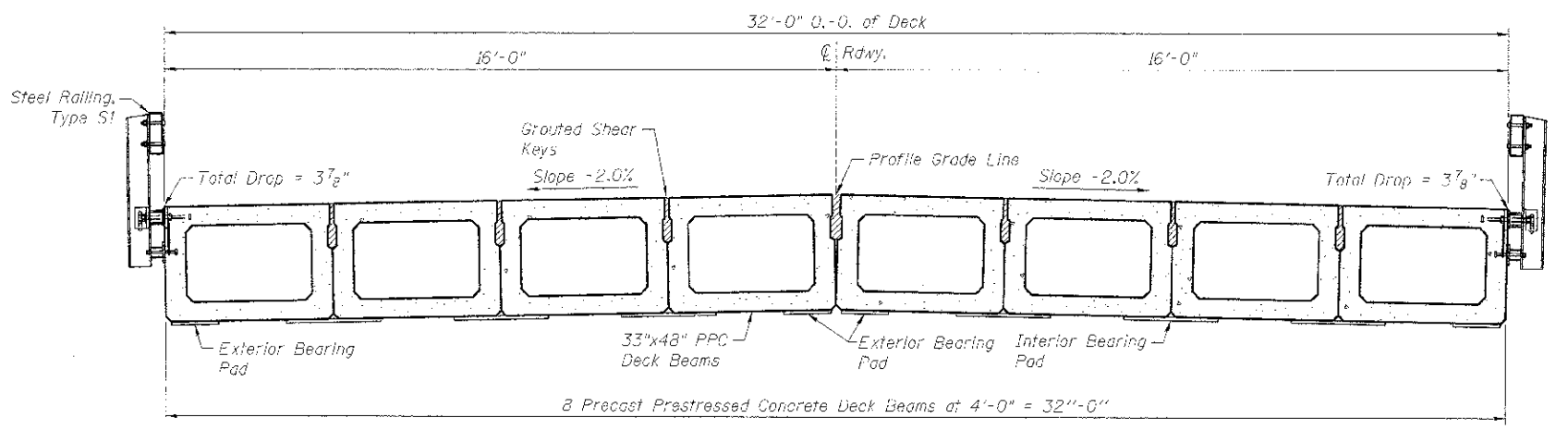


PLAN VIEW

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

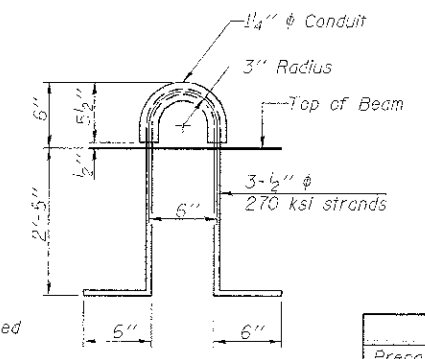


CAMBER DIAGRAM



NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7 wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Reinforcement bars shall conform to ASTM A 705, Grade 60. (See Special Provisions).
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6,000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5,000 psi.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Conc. Deck Bms. (33" Depth)	Sq. Ft.	2,789



DESIGNED - IPM	REVISED -
CHECKED - BKC	REVISED -
DRAWN - IPM	REVISED -
CHECKED - BKC	REVISED -

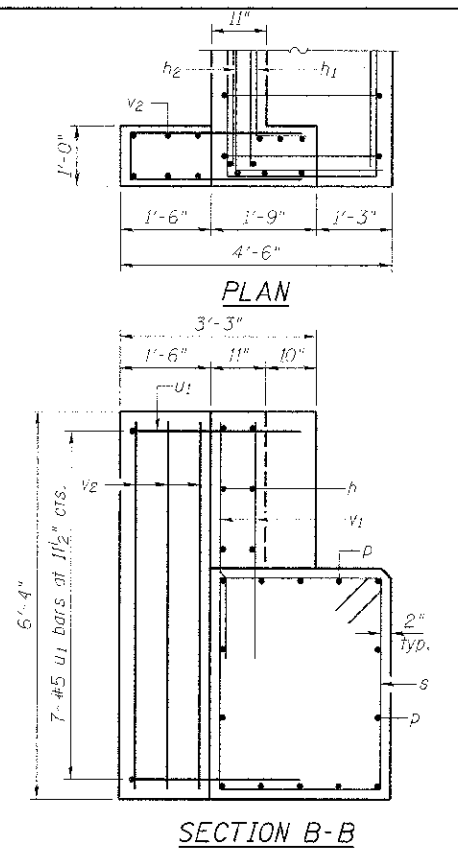
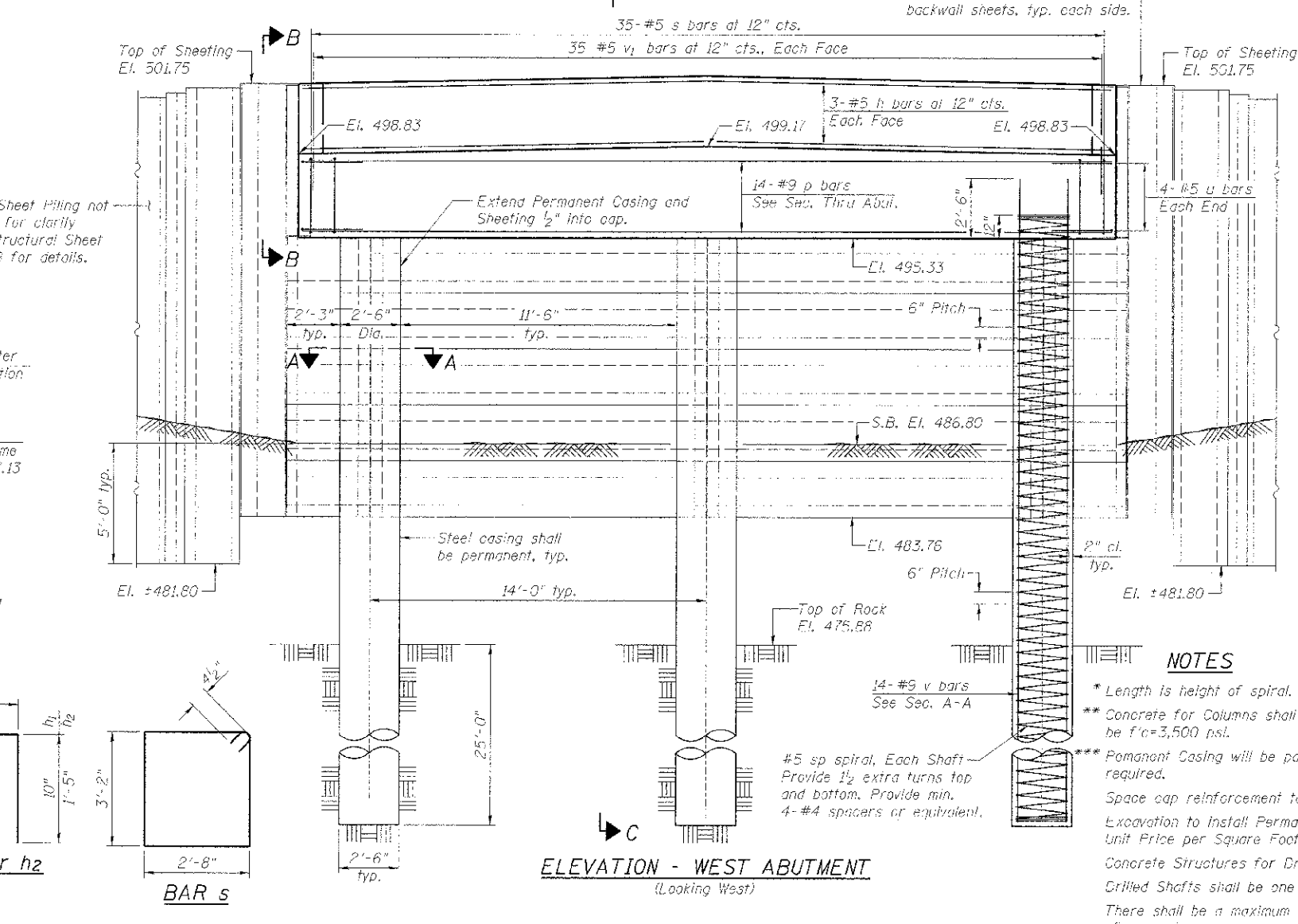
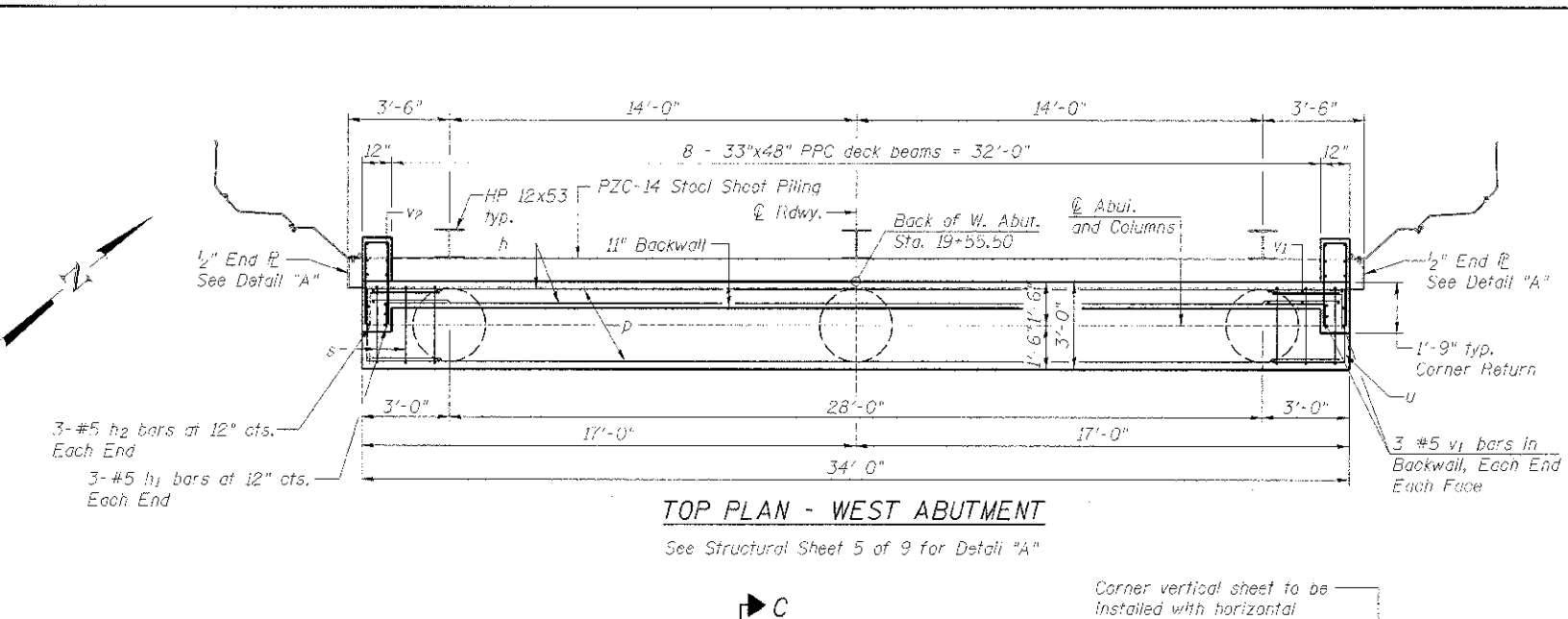
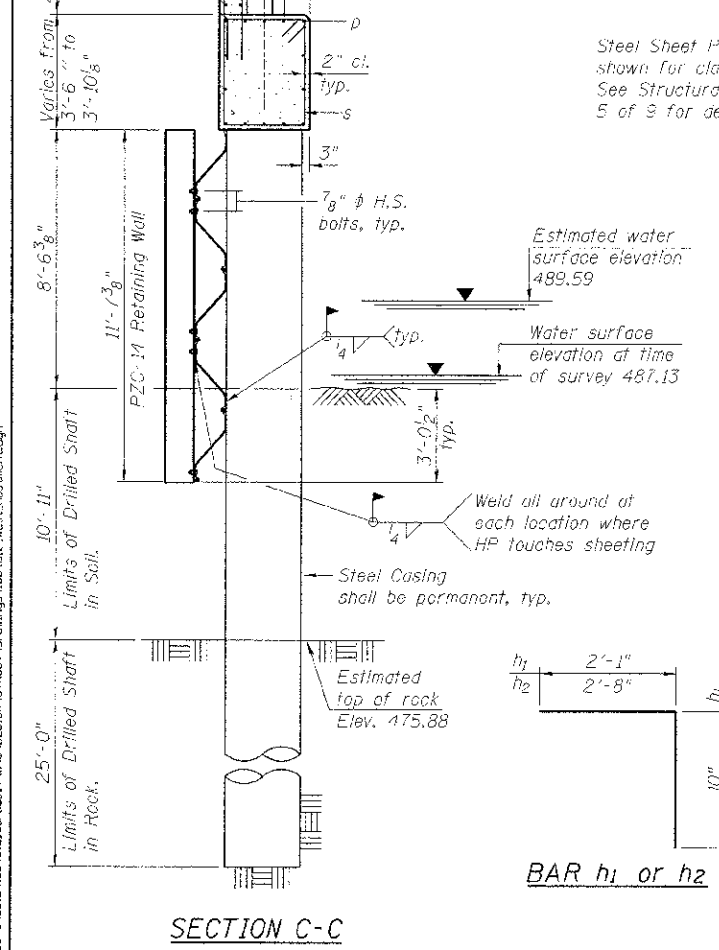
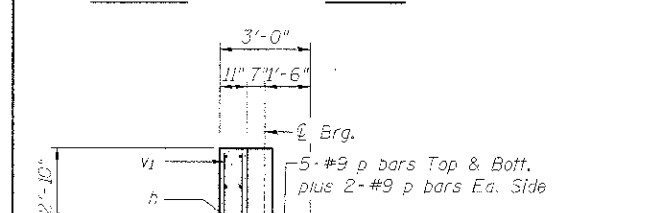
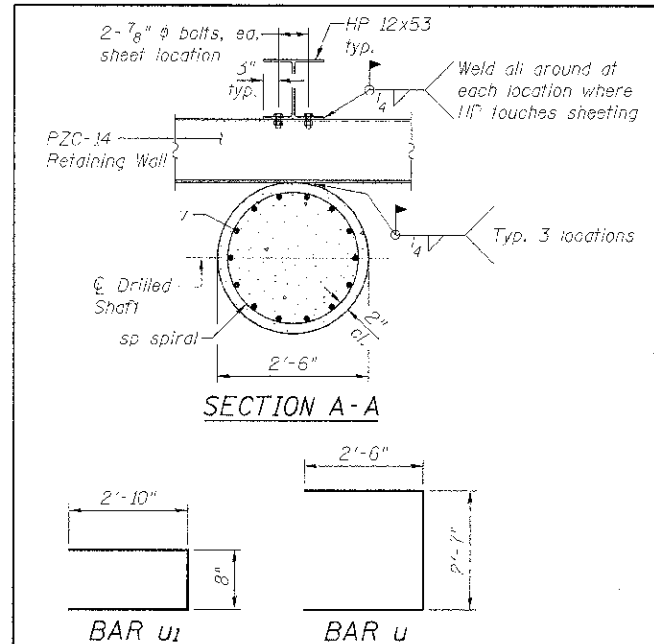
BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20 + 00

33" x 48" PPC DECK BEAM DETAILS
STRUCTURE NO. 006-4143

STRUCTURAL SHEET NO. 3 OF 9

TWP. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS: NO.
398	09-10113-00-BR	BUREAU	19 9
WHA* 1004012		CONTRACT NO. 87551	
ILLINOIS, FED. AID PROJECT BROS-CO11(034)			

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BILL OF MATERIAL - W. ABUT.

Bar	No.	Size	Length	Shape	
h	6	#5	33'-8"	—	
h1	6	#5	2'-11"	L	
h2	6	#5	4'-1"	L	
u	14	#9	33'-8"	—	
s	35	#5	12'-5"	□	
sp	3	#5	45'-4"	≡≡≡	
u	8	#5	7'-7"	□	
u1	14	#5	6'-4"	□	
v	42	#9	46'-11"	—	
v1	82	#5	3'-9"	—	
v2	12	#5	6'-0"	—	
** Concrete Structures				Cu. Yd.	22.7
Furnishing & Erecting Structural Steel				Pound	2,670
Reinforcement Bars				Pound	11,560
*** Permanent Casing				Foot	63
Drilled Shaft in Soil				Cu. Yd.	6.0
Drilled Shaft in Rock				Cu. Yd.	13.6
Permanent Steel Sheet Piling				Sq. Ft.	1,584

NOTES

- * Length is height of spiral.
- ** Concrete for Columns shall be f'c=4,000 psi. Concrete for Abutment Cap & Backwall shall be f'c=3,500 psi.
- *** Permanent Casing will be paid for a length that is three (3) feet longer than theoretically required.
- Excavation to install Permanent Steel Sheet Piling shall be included in the Contract Unit Price per Square Foot for Permanent Steel Sheet Piling.
- Concrete Structures for Drilled Shaft shall be from Elevation 486.80 to Elevation 495.33.
- Drilled Shafts shall be one continuous pour with no construction joints.
- There shall be a maximum 24 hour time period between completion of shaft & pouring of concrete.



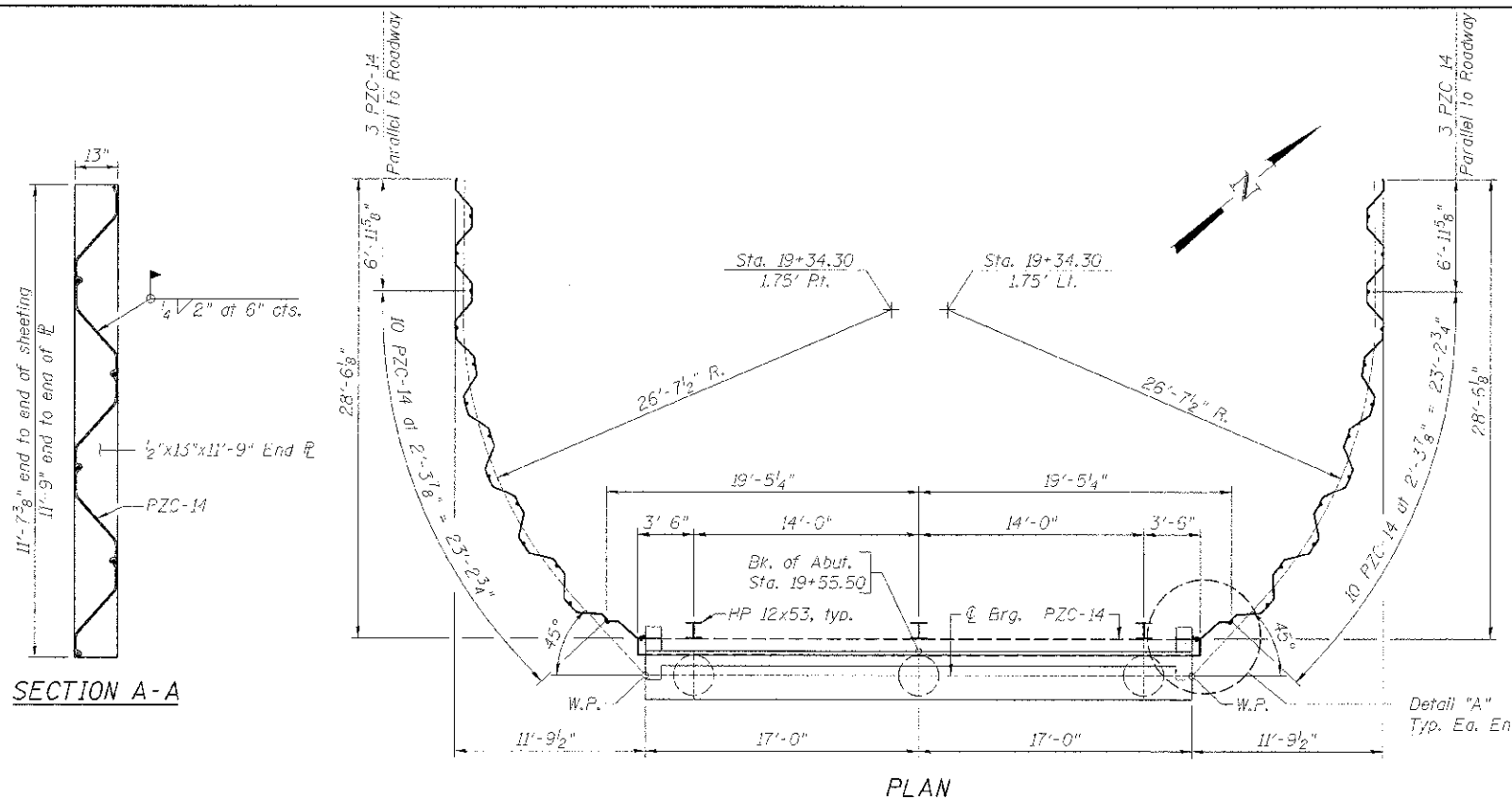
DESIGNED - BKC	REVISED -
CHECKED - BKC	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

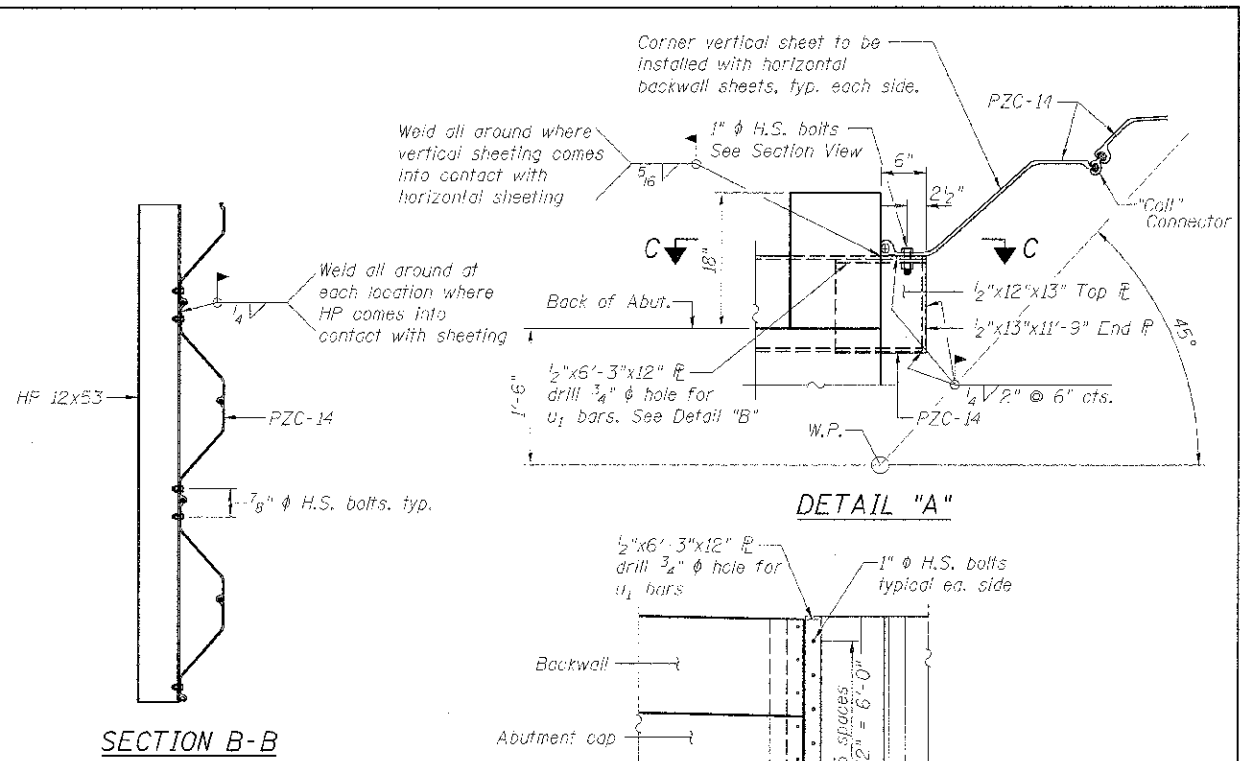
WEST ABUTMENT DETAILS
STRUCTURE NO. 006-4143

TWP. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS: NO.
398	09-10113-00-BR	BUREAU	19 10
WHA* 1004012		CONTRACT NO. 87551	
ILLINOIS FED. AID PROJECT #R05-00110941			

STRUCTURAL SHEET NO. 4 OF 9

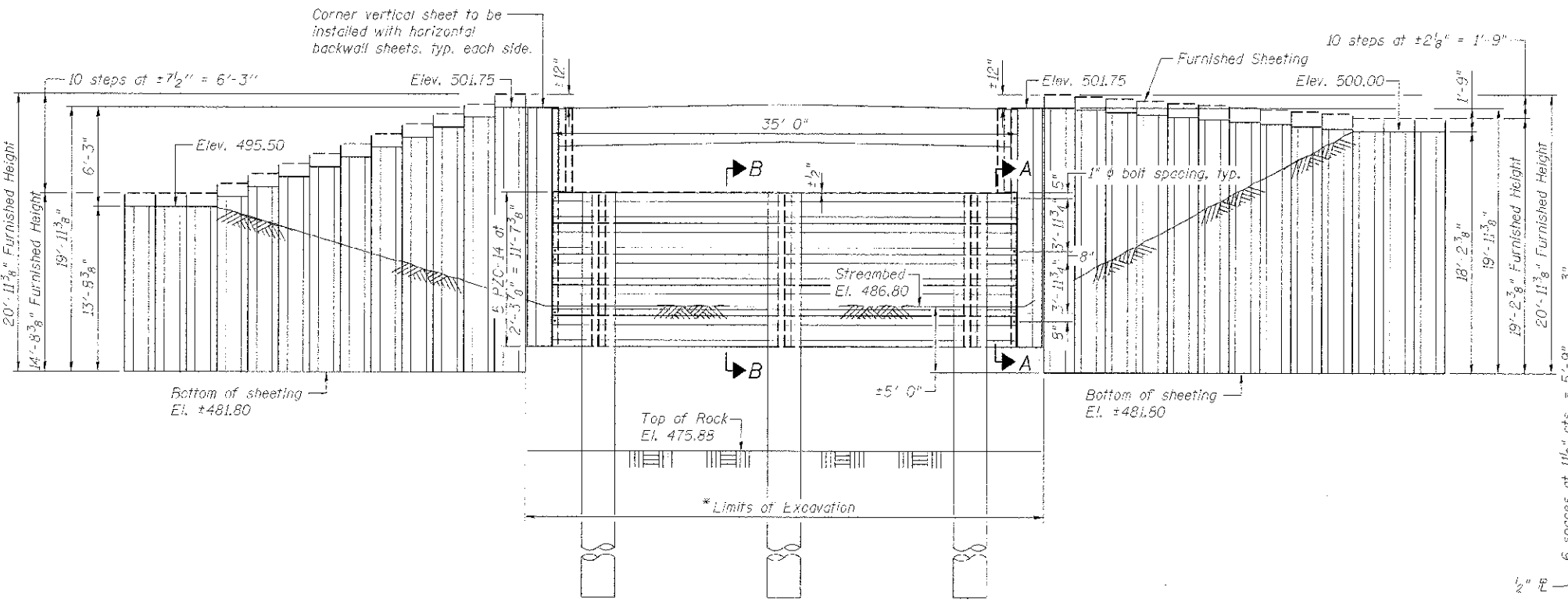


PLAN



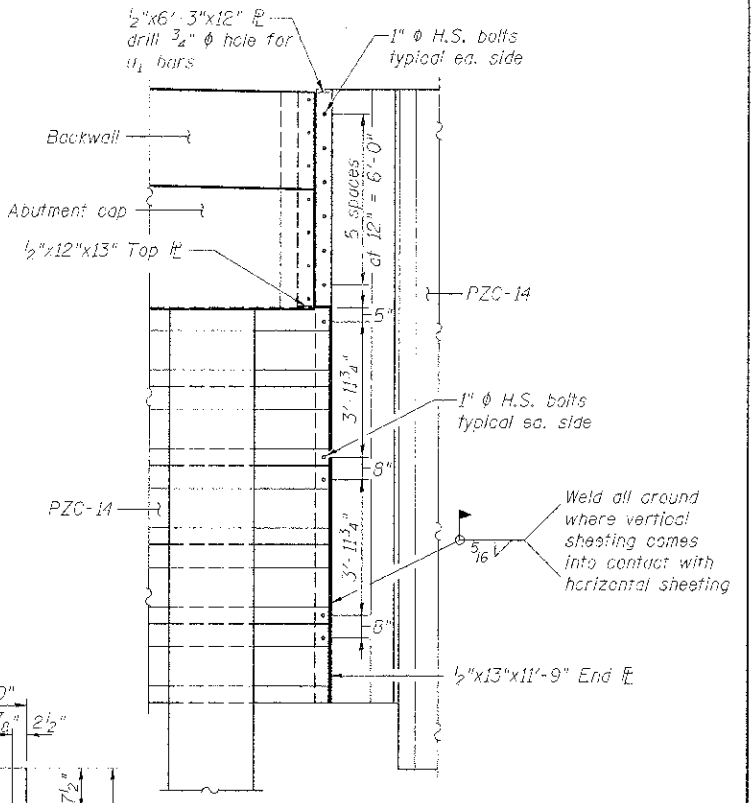
SECTION B-B

DETAIL "A"



ELEVATION

(Locking West)
(Sheeting shown straight for clarity)



SECTION C-C

NOTES

- * Care shall be taken to not excavate beyond these limits.
- See Structural sheet 4 of 9 for Bill of Material.
- Abutment details not shown for clarity. See Structural Sheet 4 of 9 for details.
- The Contractor shall be paid for furnished sheeting as shown and Contractor shall drive the sheeting an extra 6" if top is not damaged, as directed by the Engineer.
- Contractor shall shop prime and paint all sheeting, plates and I-beams and only touch-up painting shall be performed in field.
- Sheeting shall be ASTM A572 Grade 50 Hot Rolled.
- Cost to cut sheeting after driving shall be included in the Contract Unit Price per Square Foot for Permanent Sheet Piling.

DETAIL "B"

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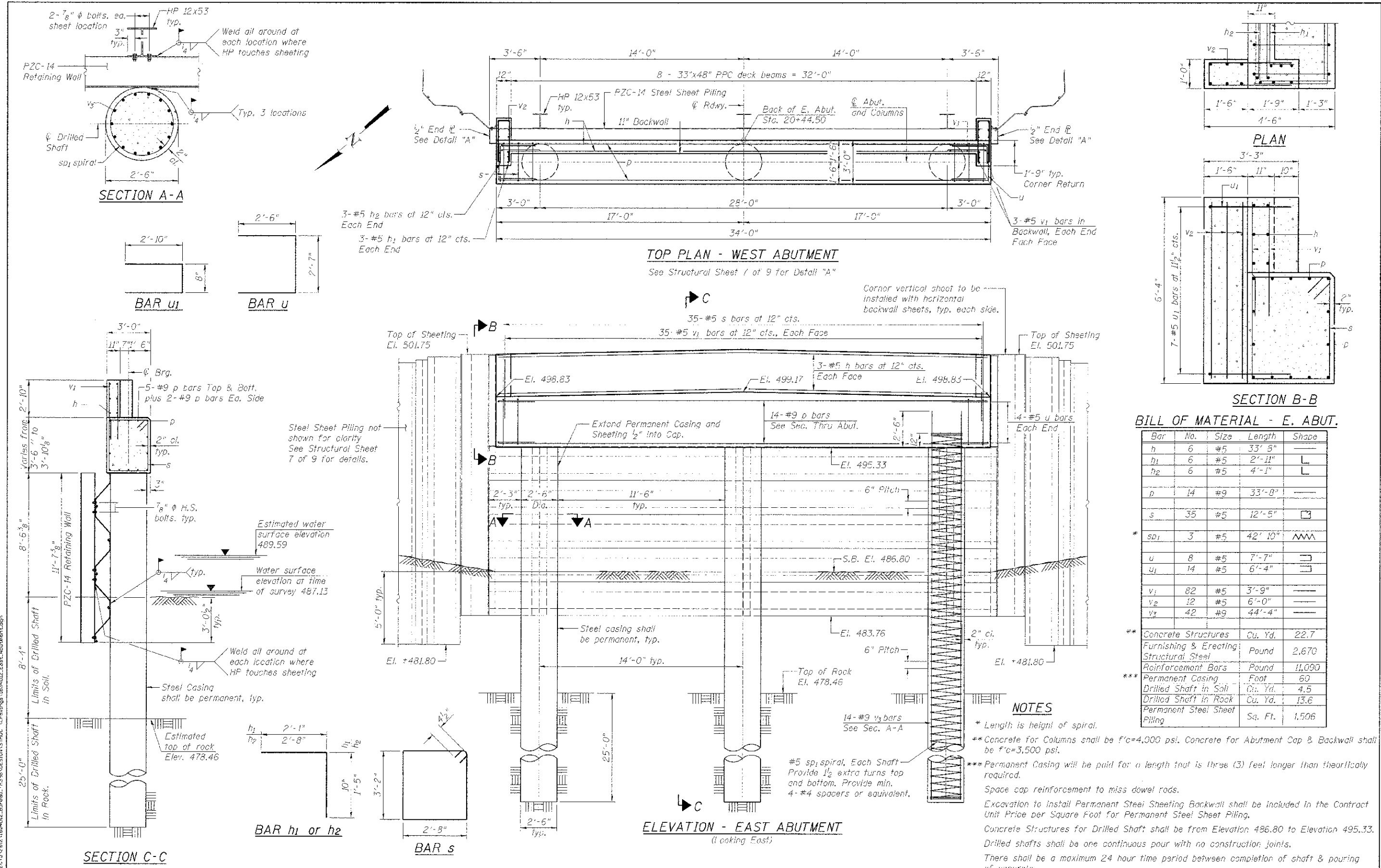
WILETT HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-5391 DESIGN FIRM: #184-000918

DESIGNED - BKC	REVISED -
CHECKED - BKC	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

WEST ABUTMENT SHEET PILE LAYOUT
STRUCTURE NO. 006-4143

TRM. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
398	G9-10113-00-BR	BUREAU	19	11
WHA* 1004012			CONTRACT NO. 87551	
ILLINOIS FED. AID PROJECT BRUS-00110949				



BILL OF MATERIAL - E. ABUT.

Bar No.	Size	Length	Shape
h	#5	33'-5"	—
h1	#5	2'-11"	L
h2	#5	4'-1"	L
d	#9	33'-8"	—
s	#5	12'-5"	□
sd1	#5	42'-10"	~
u	#5	7'-7"	□
u1	#5	6'-4"	□
v1	#5	3'-9"	—
v2	#5	6'-0"	—
v3	#9	44'-4"	—
** Concrete Structures			Cu. Yd. 22.7
Furnishing & Erecting Structural Steel			Pound 2,670
Reinforcement Bars			Pound 11,090
*** Permanent Casing			Foot 60
Drilled Shaft in Soil			Cu. Yd. 4.5
Drilled Shaft in Rock			Cu. Yd. 13.6
Permanent Steel Sheet Piling			Sq. Ft. 1,506

NOTES

- * Length is height of spiral.
- ** Concrete for Columns shall be f'c=4,000 psi. Concrete for Abutment Cap & Backwall shall be f'c=3,500 psi.
- *** Permanent Casing will be paid for a length that is three (3) feet longer than theoretically required.

Space cap reinforcement to miss dowel rods.
Excavation to install Permanent Steel Sheeting Backwall shall be included in the Contract Unit Price per Square Foot for Permanent Steel Sheet Piling.
Concrete Structures for Drilled Shaft shall be from Elevation 486.80 to Elevation 495.33.
Drilled shafts shall be one continuous pour with no construction joints.
There shall be a maximum 24 hour time period between completion of shaft & pouring of concrete.



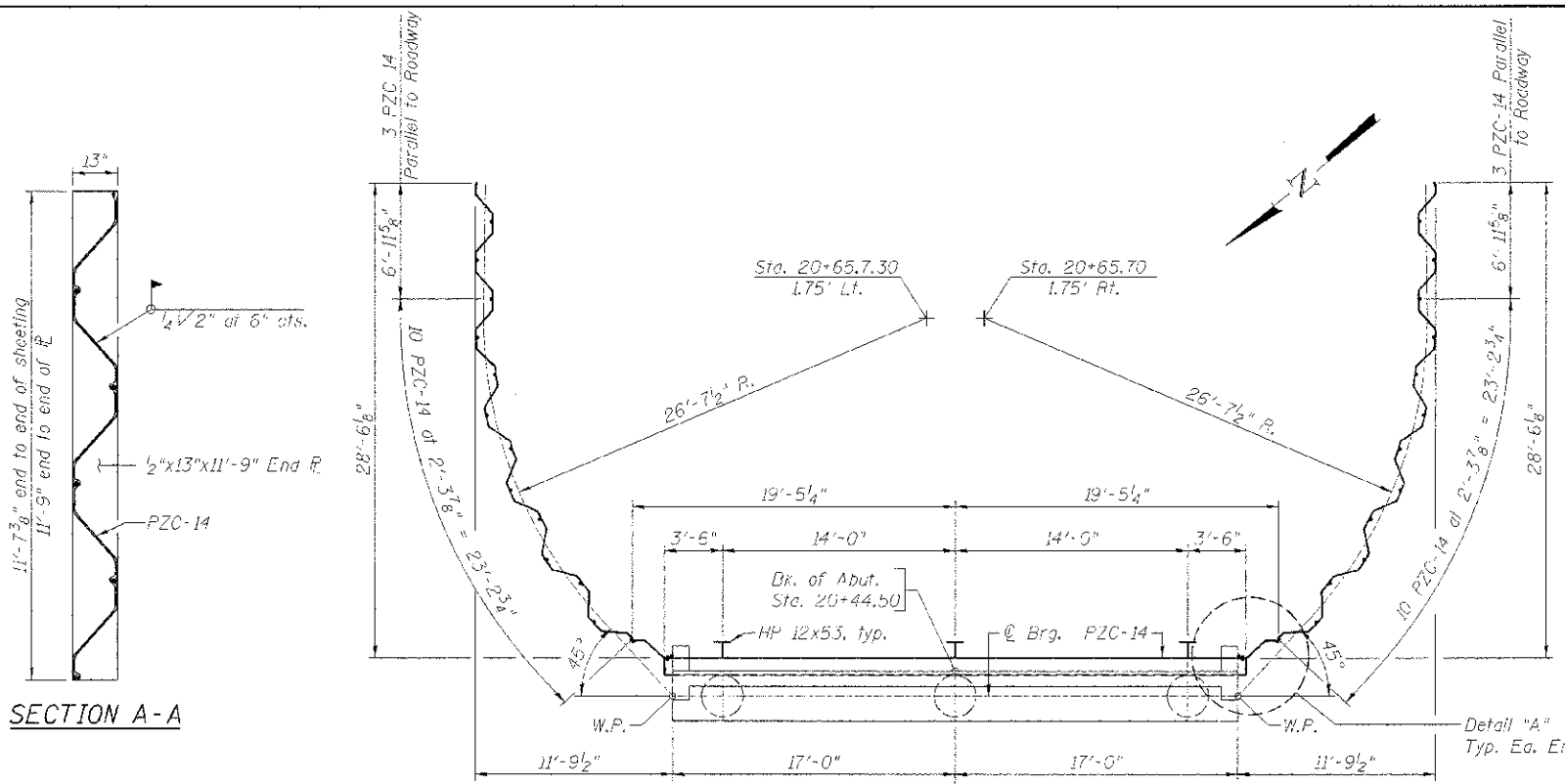
DESIGNED - BKC	REVISED -
CHECKED - BKC	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

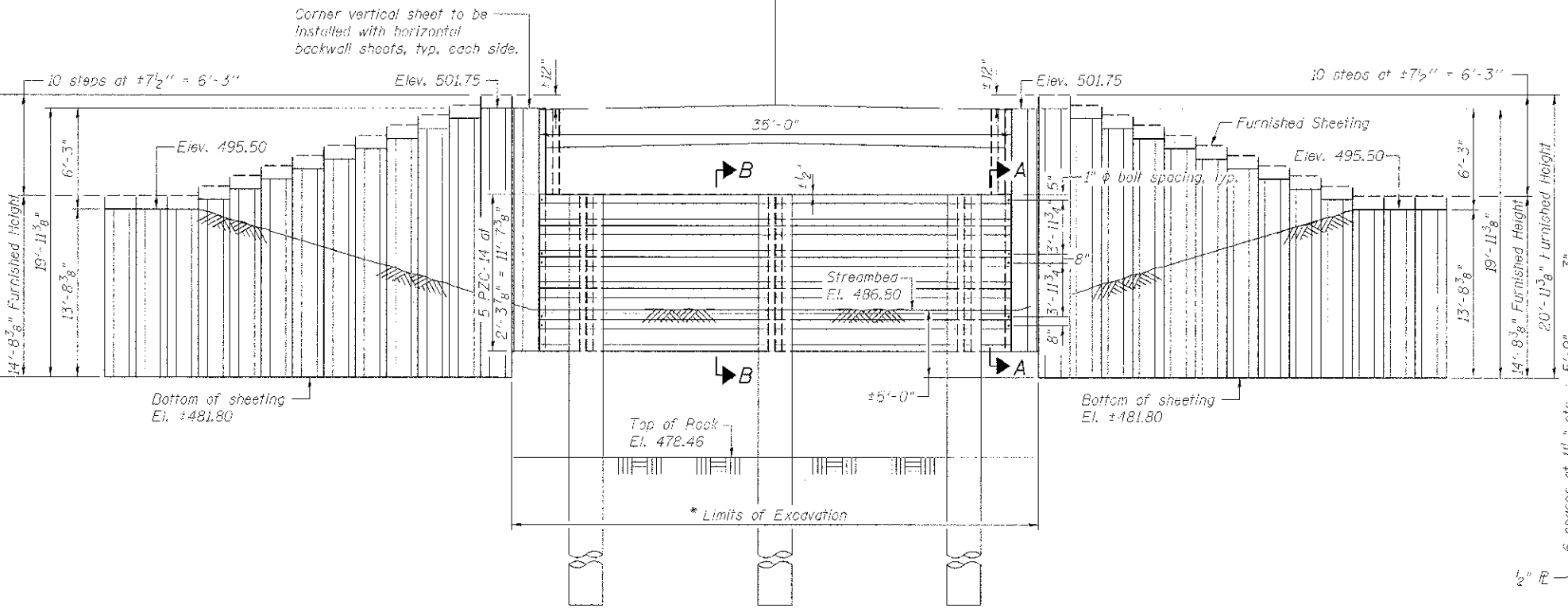
EAST ABUTMENT DETAILS
STRUCTURE NO. 006-4143
 STRUCTURAL SHEET NO. 6 OF 9

TWP. R.T.E.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
399	09-1013-00-BR	BUREAU	19	12
W*#A 100/D12		CONTRACT NO. 87551		
ILLINOIS FED. AID PROJECT BR05-00110941				

FILE = S:\PROJECTS\2012\1804012_Bur Oak\TR398\DESIGN\STRUCT\1804012_East_Abutment.dwg

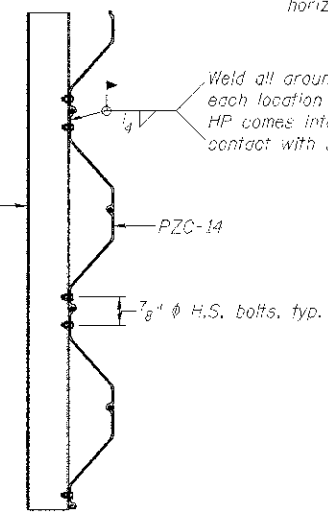


PLAN

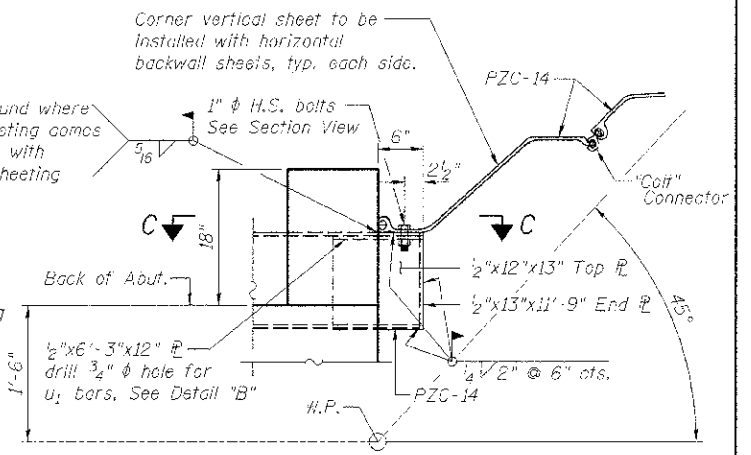


ELEVATION

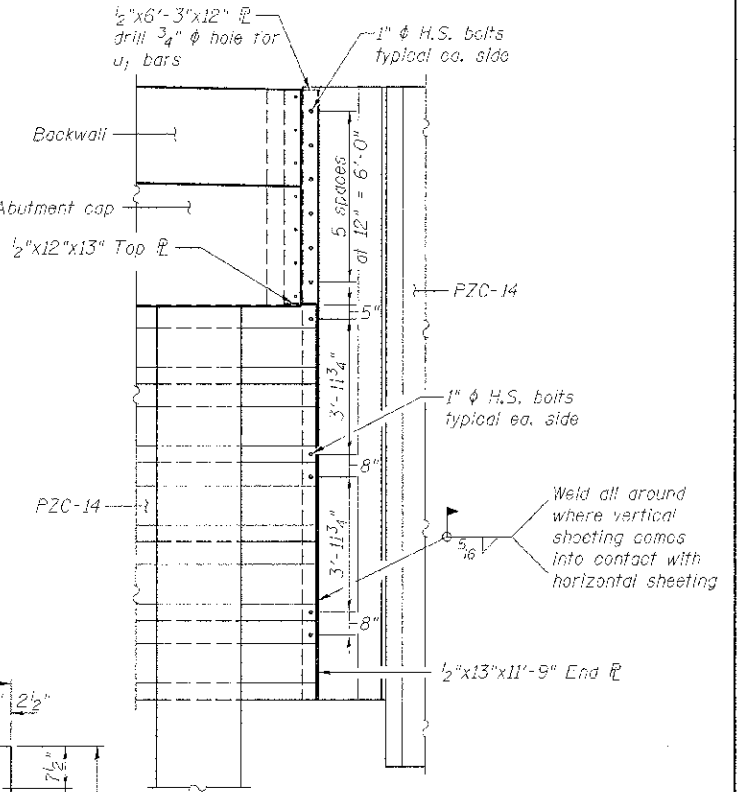
(Looking East)
(Sheeting shown straight for clarity)



SECTION B-B



DETAIL "A"



SECTION C-C

NOTES

- * Care shall be taken to not excavate beyond these limits.
- See Structural sheet 6 of 9 for Bill of Material.
- Abutment details not shown for clarity. See Structural Sheet 6 of 9 for details.
- The Contractor shall be paid for furnished sheeting as shown and Contractor shall drive the sheeting an extra 6" if top is not damaged, as directed by the Engineer.
- Contractor shall shop prime and paint all sheeting, plates and I-beams and only touch-up painting shall be performed in field.
- Sheeting shall be ASTM A572 Grade 50 Hot Rolled.
- Cost to cut sheeting after driving shall be included in the Contract Unit Price per Square Foot for Permanent Sheet Piling.

DETAIL "B"

FILE # SA\PROJECT\15\2015\1004012_Bureau\1059\DESIGN\STRUCT\CD\awmg\1004012_East_AbutmentSheetPileLayout.dwg

WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEILING
809 EAST 2ND STREET, DIXON, IL 61021-0387
T: 815-284-3381 DESIGN FAX: 815-284-00918

DESIGNED - RKC	REVISED -
CHECKED - BKC	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

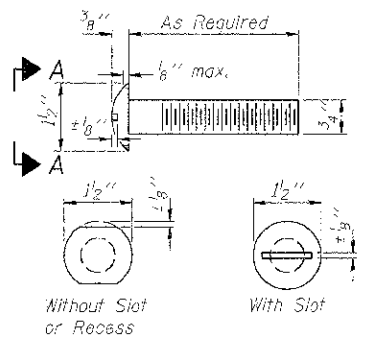
BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

EAST ABUTMENT SHEET PILE LAYOUT
STRUCTURE NO. 006-4143

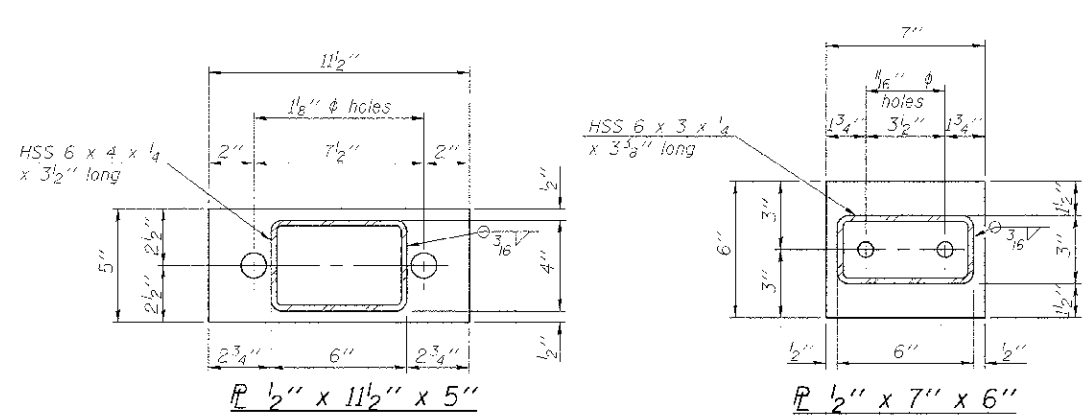
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
398	03-10113-00-DR	BUREAU	19	17
WHA* 1004012			CONTRACT NO. 87551	

ILLINOIS FED. AID PROJECT BROS-001-0941

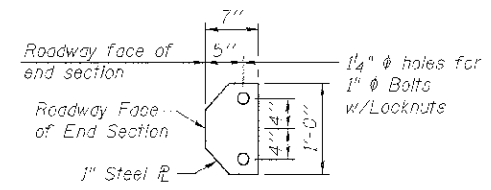
STRUCTURAL SHEET NO. 7 OF 9



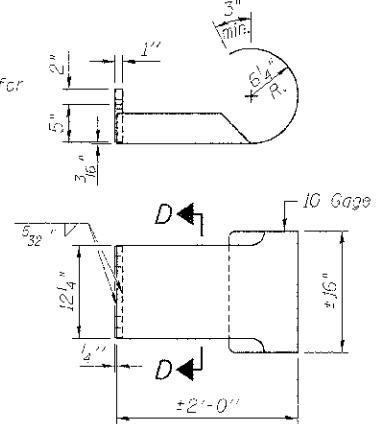
VIEW A-A
ROUND HEAD BOLT



ELEVATION VIEW



SECTION D-D

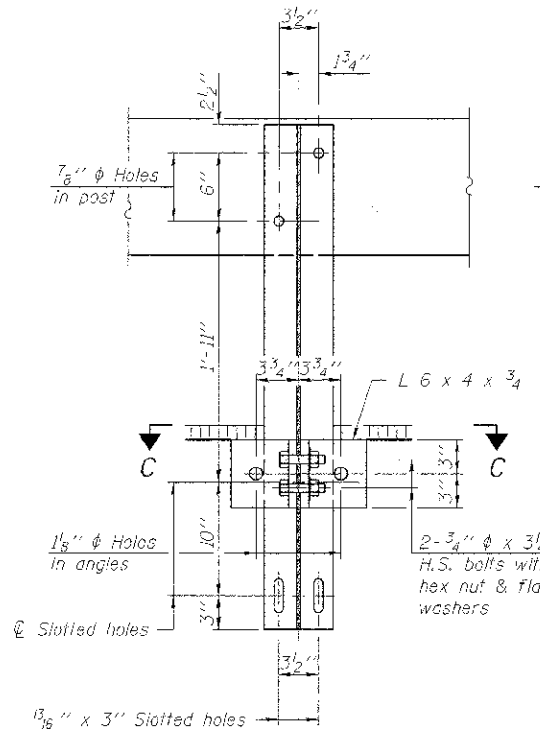


CURLLED END SECTION DETAILS

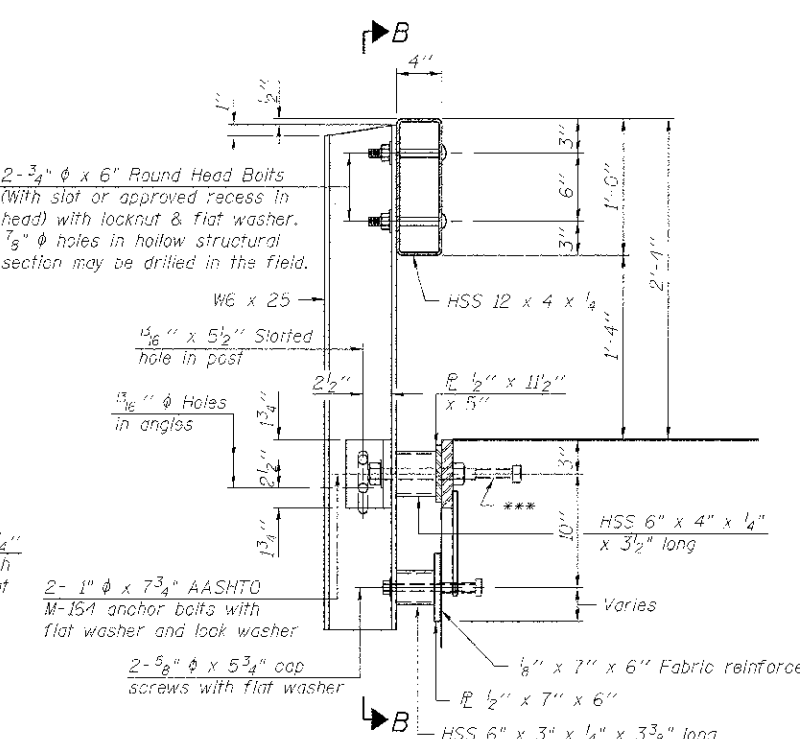
NOTES:
 ****(4 required)
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Rolling, Type S1.
 All steel 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.

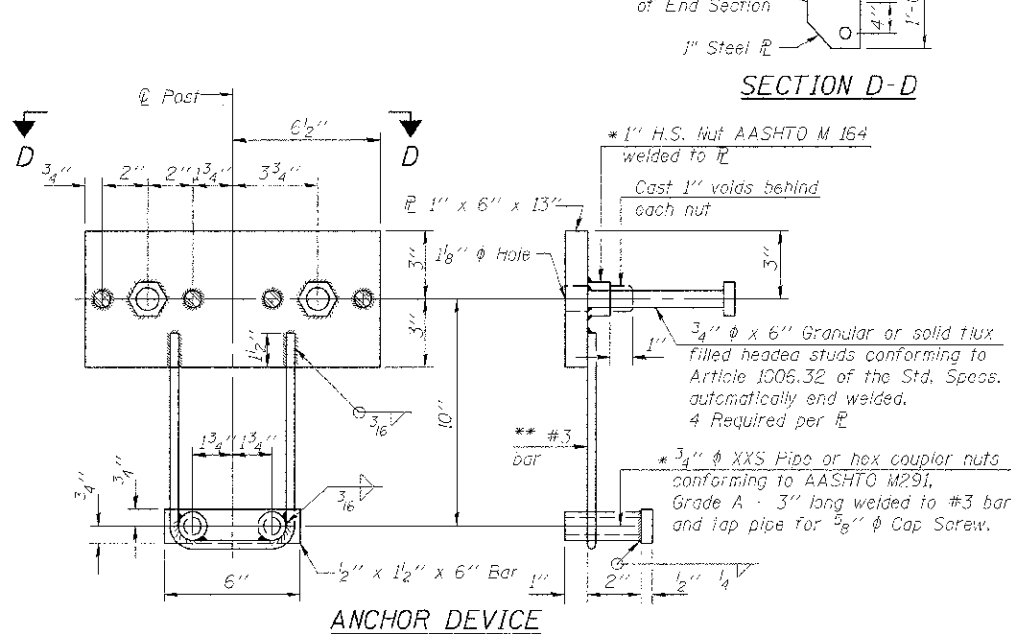
**** Cost of Curled End Sections to be included with Steel Railing, Type S1.



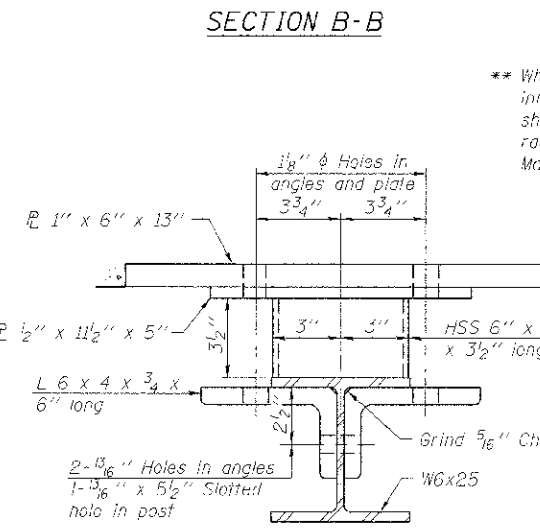
SECTION B-B



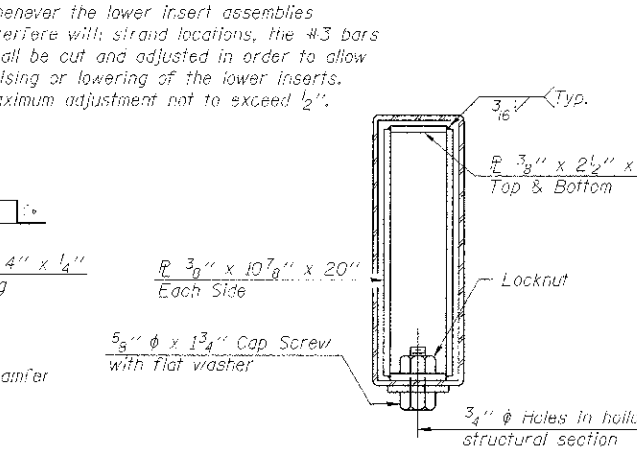
SECTION AT RAILING POST



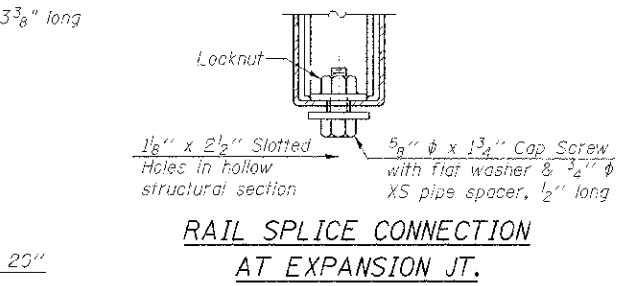
ANCHOR DEVICE



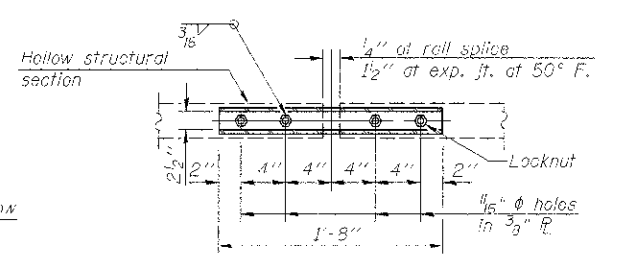
SECTION C-C



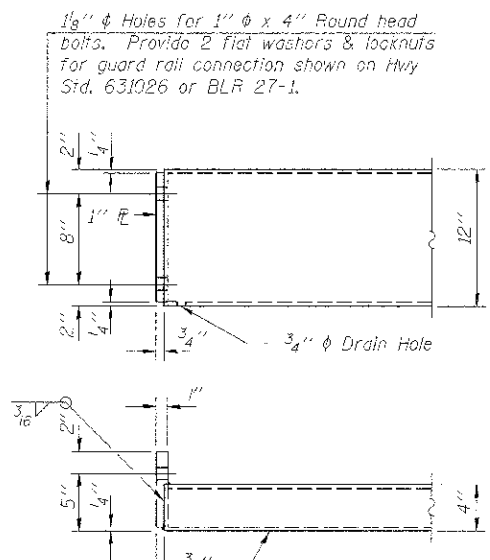
SECTIONS AT RAIL SPLICE



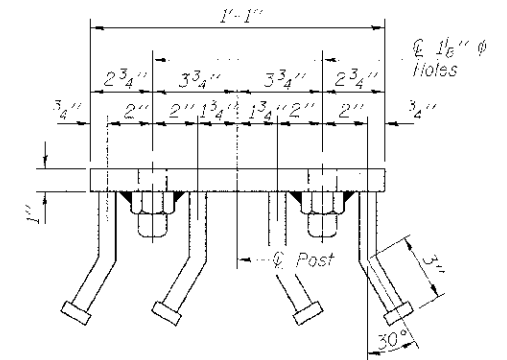
RAIL SPLICE CONNECTION AT EXPANSION JT. TYPICAL



PLAN-BOTT. SPLICE



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foat	178

** 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".

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

1/8" ϕ Holes for 1" ϕ x 4" Round head bolts. Provide 2 flat washers & locknuts for guard rail connection shown on Hwy Std. 631026 or BLR 27-1.

FILE: S:\PROJECTS\2012\1004\02\BRIDGE\DESIGN\STRUCT\Drawings\10040212_S-1_Rail.dwg

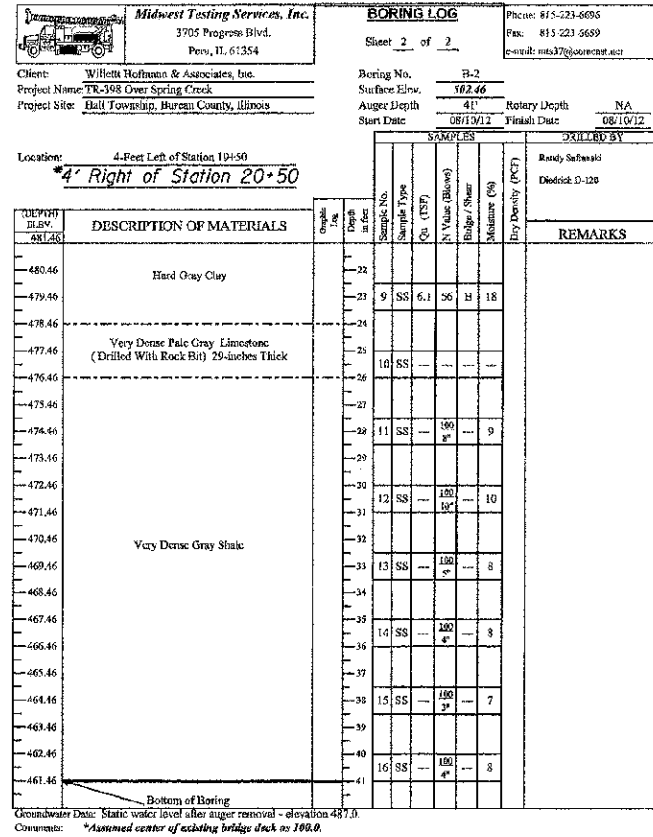
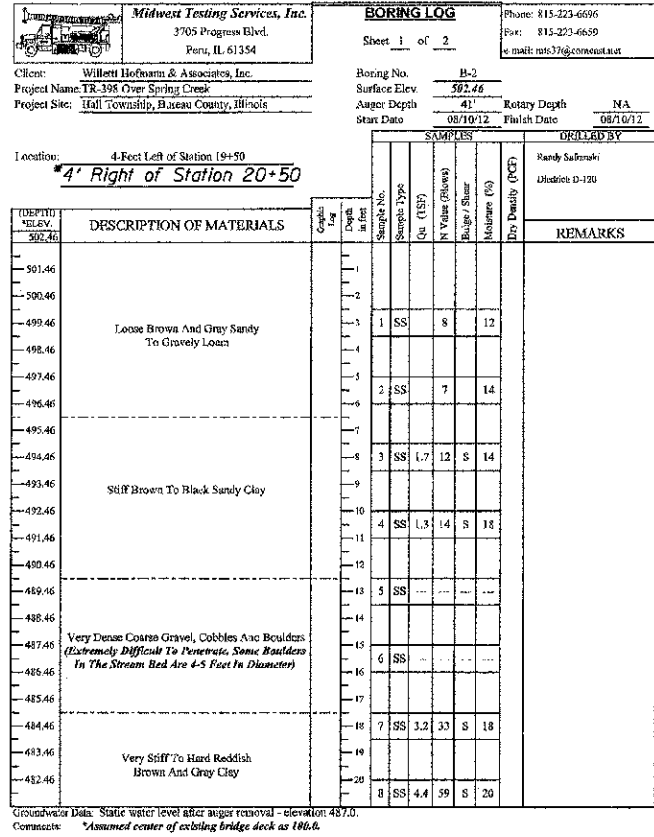
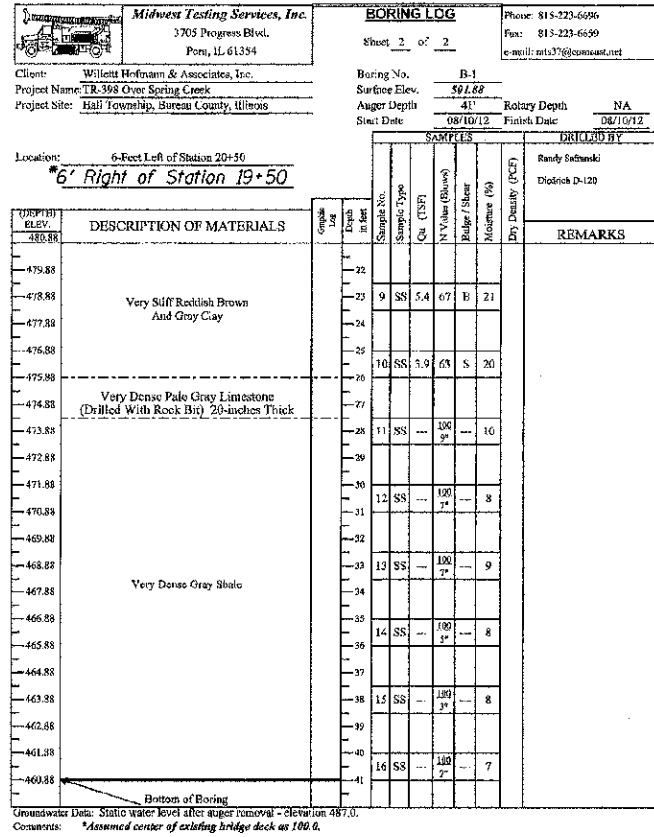
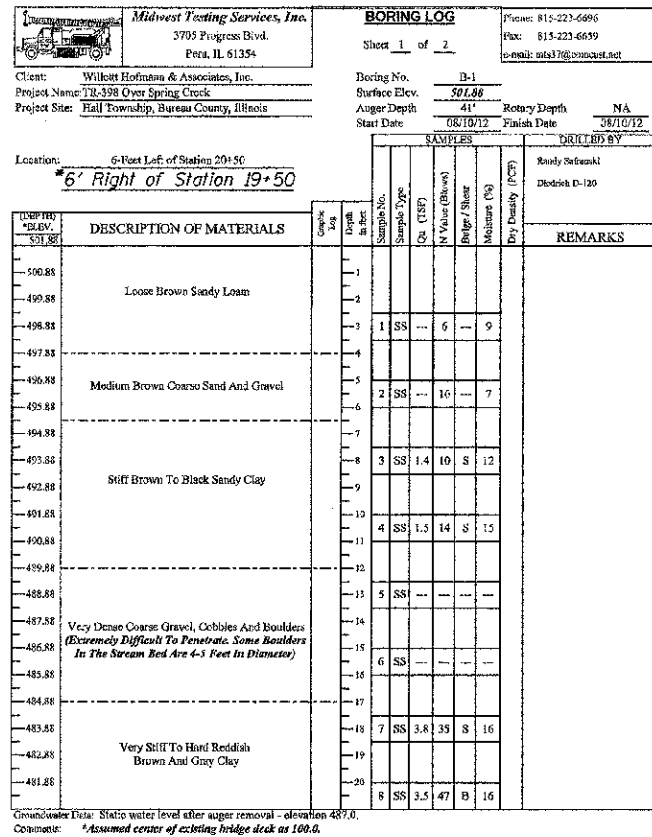


DESIGNED -	IPN	REVISED -	
CHECKED -	BKC	REVISED -	
DRAWN -	IPN	REVISED -	
CHECKED -	BKC	REVISED -	

BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

STEEL RAILING, TYPE S1 DETAILS
STRUCTURE NO. 006-4143
 STRUCTURAL SHEET NO. 8 OF 9

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
399	09-10113-00-BR	BUREAU	19	14
WHA# 1004012		CONTRACT NO. 87551		
ILLINOIS FED. AID PROJECT BRCS-03110341				



*Stationing of roadway was reversed after soil borings were obtained.



DESIGNED -	IPN	REVISED -	
CHECKED -	BKC	REVISED -	
DRAWN -	IPN	REVISED -	
CHECKED -	BKC	REVISED -	

**BUREAU COUNTY
 T.R. 398 OVER SPRING CREEK
 STATION 20+00**

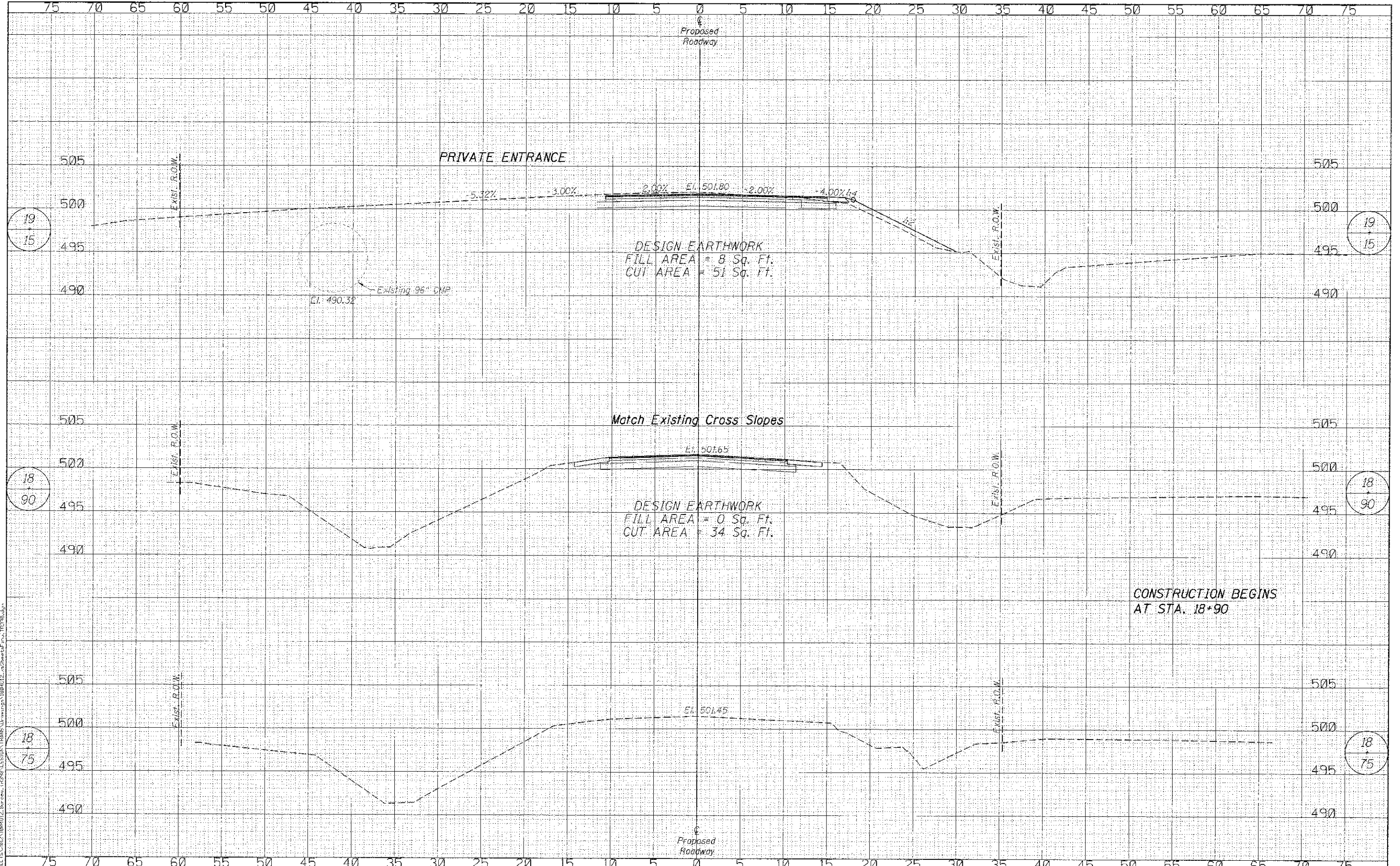
**SOIL BORING LOGS
 STRUCTURE NO. 006-4143**

STRUCTURAL SHEET NO. 9 OF 9

TWP.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39N	09-10113-00-BR	BUREAU	19	15
WHA# 1004012		CONTRACT NO. 87551		
ILLINOIS FED. AID PROJECT BRCS-00110941				

DATE	
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PROJECT NO.	
SECTION	
DATE PLOTTED	
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DATE	
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SECTION	
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WILLETT HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FAX: 815-284-00918

DESIGNED -	IAN NILAUSEN	REVISED -	
CHECKED -	BRAD KLEINMAIER	REVISED -	
DRAWN -	RON ALLEN	REVISED -	
CHECKED -	BRAD KLEINMAIER	REVISED -	

**BUREAU COUNTY
 T.R. 398 OVER SPRING CREEK
 STATION 20+00**

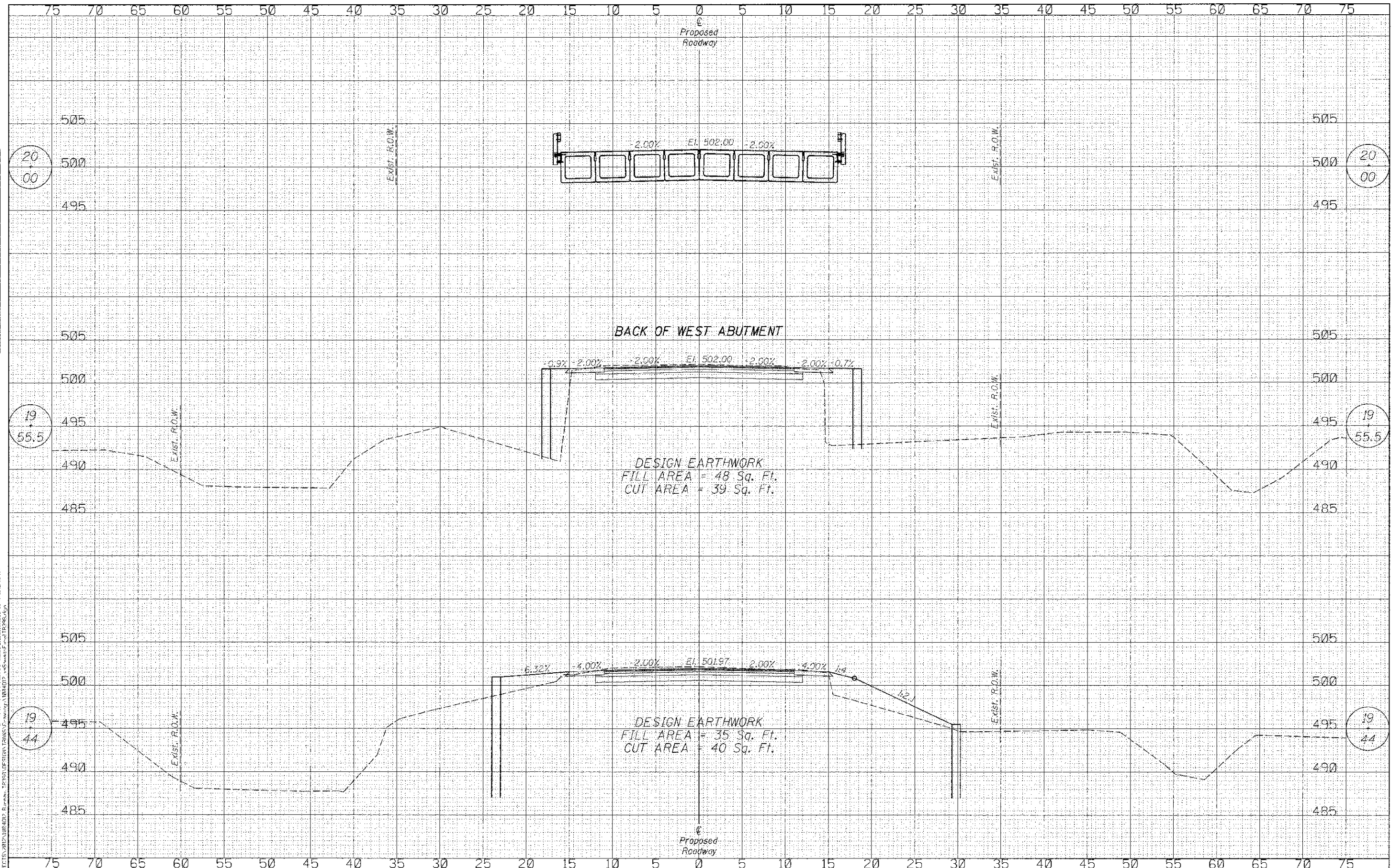
CROSS SECTIONS	
STRUCTURE NO. 006-4143	
SCALE: 1"=5'	SHEET NO. 1 OF 4 SHEETS
STA. 18+75.00 TO STA. 19+5.00	

TWP.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
398	09-10113-00-BR	BUREAU	19	16
WHA* 1004D12		CONTRACT NO. 87551		
ILLINOIS FED. AID PROJECT BR05-00110940				

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DATE	
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FINISHED	
SURVEY	
NOTE BOOK	
TEMPLATE	
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AREAS CHECKED	

DATE	
BY	
ORIGINAL	
SURVEY	
NOTE BOOK	
TEMPLATE	
AREAS	
AREAS CHECKED	



WILLET HOFMANN ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DUNON, IL 61021 0967
 T-315-234-5321 DESIGN FIRM #15400078

DESIGNED - IAN NILAUSEN	REVISED -
CHECKED - BRAD KLEINMAIER	REVISED -
DRAWN - RON ALLEN	REVISED -
CHECKED - BRAD KLEINMAIER	REVISED -

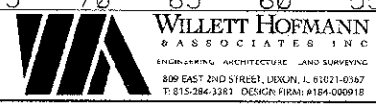
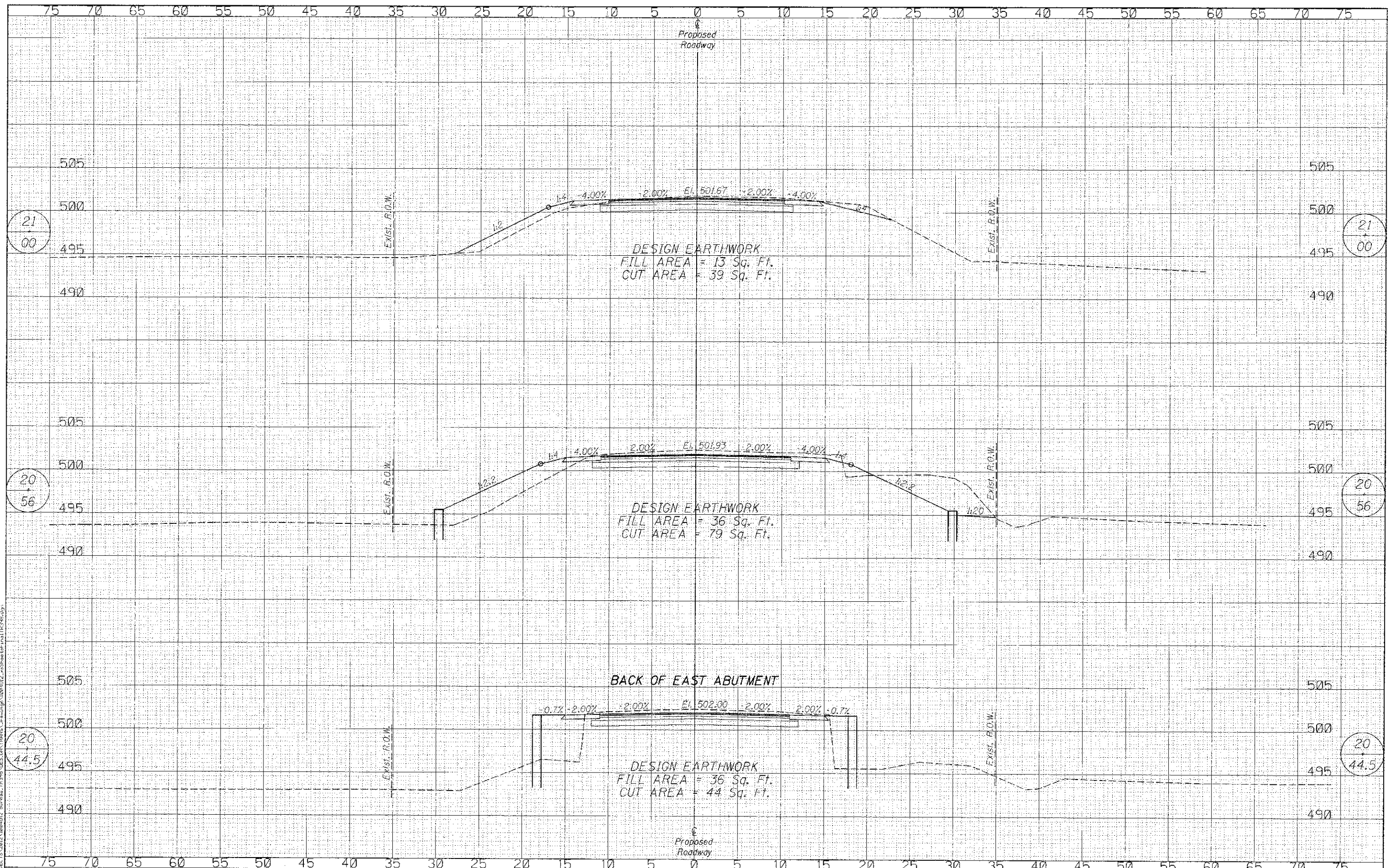
BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

CROSS SECTIONS		
STRUCTURE NO. 006-4143		
SCALE: 1"=5'	SHEET NO. 2 OF 4 SHEETS	STA. 19+44.00 TO STA. 20+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
398	09-10113-00-BR	BUREAU	19	17
WHA# :004012		CONTRACT NO. 87551		
[I:\NO\S] FED. AID PROJECT BR05-0211094				

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DESIGNED -	IAN NILAUSEN	REVISED -	
CHECKED -	BRAD KLEINMAIER	REVISED -	
DRAWN -	RON ALLEN	REVISED -	
CHECKED -	BRAD KLEINMAIER	REVISED -	

BUREAU COUNTY
T.R. 398 OVER SPRING CREEK
STATION 20+00

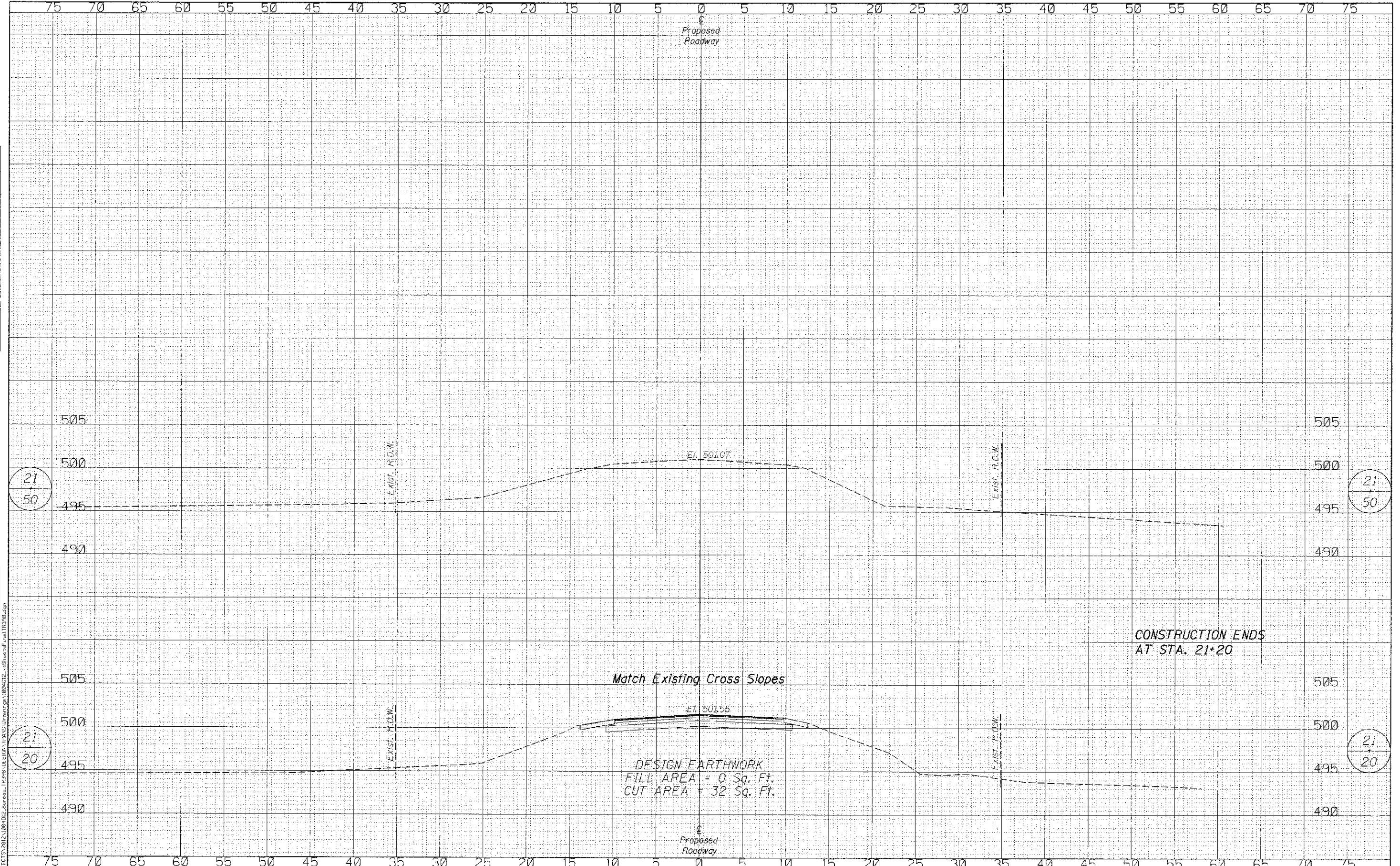
CROSS SECTIONS
STRUCTURE NO. 006-4143

SCALE: 1"=5' | SHEET NO. 3 OF 4 SHEETS | STA. 20+44.50 TO STA. 21+00.00

TWP.	SECTION	COUNTY	TOTAL SHEETS
398	09-10113-00-BR	BUREAU	19 18
WHA#	1004012	CONTRACT NO.	87551
ILLINOIS FED. AID PROJECT BRGS-001(1094)			

DATE	
BY	
REVISIONS	
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WILLET HOFMANN ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAS 2ND STREET, DIXON, IL 61021-0347
 T: 815-284-3361 (FAX) F: 815-284-3362

DESIGNED	- IAN NILAUSER	REVISED	-
CHECKED	- BRAD KLEINMAIER	REVISED	-
DRAWN	- RON ALLEN	REVISED	-
CHECKED	- BRAD KLEINMAIER	REVISED	-

BUREAU COUNTY
 T.R. 398 OVER SPRING CREEK
 STATION 20+00

CROSS SECTIONS
 STRUCTURE NO. 006-4143
 SCALE: 1"=5'
 SHEET NO. 4 OF 4 SHEETS
 STA. 21-20.00 TO STA. 21+50.00

DWP. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
398	09-10113-00-BR	BUREAU	19	19
WHA* 1004E12		CONTRACT NO. 87551		
ILLINOIS FED. AID PROJECT BR05-00110941				