

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
LOCAL AGENCY IMPROVEMENT**

**FEDERAL-AID HBP PROJECT
HIGHWAY BRIDGE PROGRAM
TR 61A
SECTION 06-15118-01-BR/ OGLE COUNTY
SECTION 06-02121-01-BR/ WINNEBAGO COUNTY
PROJECT BHOS-141(64)
JOB NO. C-92-062-07
CONTRACT NO. 85416
2007**

INDEX OF SHEETS

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- 14 = CROSS SECTIONS

SUMMARY OF QUANTITIES

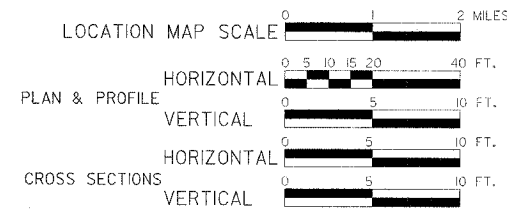
PAY CODE	QUANTITY	UNIT	ITEM
20200100*	83	Cu. Yd.	Earth Excavation
20700220*	16	Cu. Yd.	Porous Granular Embankment
25001000*	0.08	Acre	Seeding, Class 2 (Special)
25100630	373	Sq. Yd.	Erosion Control Blanket
28000400*	173	Foot	Perimeter Erosion Barrier
28100109*	156	Sq. Yd.	Stone Riprap, Class A5
31101000*	74	Ton	Sub-Base Granular Material, Type B
35100100*	50	Ton	Aggregate Base Course, Type A
40603335	136	Ton	Hot-Mix Asphalt Surface Course, Mix "D", N50
50101500	1	Each	Removal of Existing Superstructures
50102400	43.7	Cu. Yd.	Concrete Removal
50200100	62	Cu. Yd.	Structure Excavation
50300225*	50.2	Cu. Yd.	Concrete Structures
50400405	5,936	Sq. Ft.	Precast Prestressed Concrete Deck Beams (21" Depth)
50800205	6,400	Pound	Reinforcement Bars, Epoxy Coated
50900905*	425	Foot	Removing and Re-Erecting Existing Rail
51500100	1	Each	Name Plates
58100200	665	Sq. Yd.	Waterproofing Membrane System
58300100	1,272	Foot	Portland Cement Mortar Fairing Course
67100100	1	L. Sum	Mobilization
70101700*	1	L. Sum	Traffic Control & Protection
X0325305	2.75	Sq. Ft.	Structural Repair of Concrete (Depth Equal to or less than 5 inches)

* See Special Provisions

STANDARDS

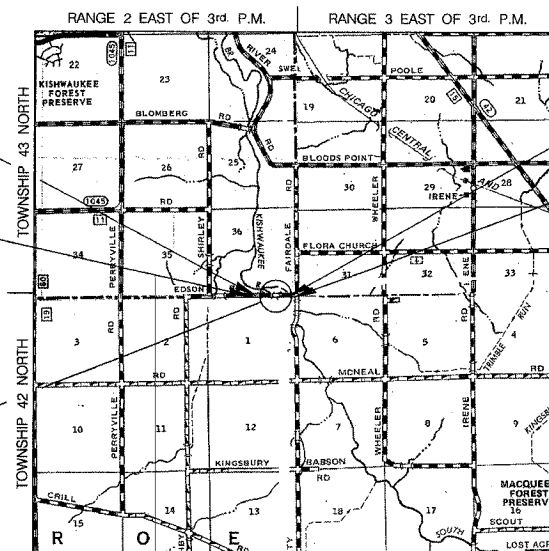
- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 280001-04 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-02 NAME PLATE FOR BRIDGES
- 701901 TRAFFIC CONTROL DEVICES
- 720011 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001 TELESCOPING STEEL SIGN SUPPORT
- 729001 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
- BLR-21-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
- BLR-22-5 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (Two-lane Two-way Rural Traffic) (Road Closed To Thru Traffic)

NET LENGTH 300 FT. = 0.057 MILES



NAME AND ADDRESS OF UTILITIES	TYPE
NICOR GAS Attn: Scott Puffer 300 West Terra Cotta Crystal Lake, IL 60014 (815) 455-0271	GAS
COMED Attn: Dave Schacht 123 Energy Avenue Rockford, IL 61109 (815) 490-3261	ELECTRIC
VERIZON NORTH, INC. Attn: Garrett Burt 112 West Elm Street Sycamore, IL 60178 (815) 895-1538	TELEPHONE

PROPOSED STRUCTURE (S.N. 066-3014)
REHABILITATION ONLY.
REMOVE AND REPLACE ABUTMENT CAPS, PIER CAPS AND PRECAST PRESTRESSED CONCRETE DECK BEAMS. STEEL RAILING TO BE REMOVED AND RE-ERECTED. STONE RIPRAP, CLASS A5 TO BE PLACED AROUND PIERS. STONE RIPRAP A4 TO BE REMOVED AND REPLACED AROUND ABUTMENT CAPS. SUPERSTRUCTURE TO BE PLACED ON EXISTING SOLID STEM ENCASED PILE BENT PIERS AND PILE BENT ABUTMENTS.



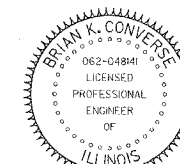
LOCATION MAP

APPROVED October 12, 2007
LOCAL AGENCY OFFICIAL

APPROVED October 12, 2007
LOCAL AGENCY OFFICIAL

Passed October 30, 2007
District 2 Engineer of Local Roads & Streets

Releasing for Bid
Based on Limited
Review October 30, 2007
Deputy Director of Highways, Region 2 Engineer



Brian K. Converse
DATE: 10/11/2007
EXPIRES 11/30/07

Plans Prepared By:
WILLET, HOFMANN & ASSOCIATES, INC.
CONSULTING ENGINEERS
Land Surveying - Transportation - Structural
Environmental - Architecture
800 East Second Street, Dixon, Illinois 61021
Phone 815.294.3381 Fax 815.294.3385
Design Firm #194-000919
www.willettthofmann.com

WHA # 1092D06



HIGHWAY CLASSIFICATION: LOCAL ROAD (NON-URBAN)
DESIGN SPEED: 30 MPH
ADT = 125
3R GUIDELINES

ROUTE	SECTION	COUNTY	SHEET	TOTAL
TR 61A	06-15118-01-BR	OGLE	14	2
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT: D-HOS-14(164)	

GENERAL NOTES

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.

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

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

Nicor Gas Attn: Scott Puffer 300 West Terra Cotta Crystal Lake, IL 60014 (815) 455-0271	ComEd Attn: Dave Schacht 123 Energy Ave. Rockford, IL 61109 (815) 490-3261	Verizon North, Inc. Attn: Garrett Burt 112 West Elm Street Sycamore, IL 60178 (815) 895-1538
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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.

SCHEDULE OF QUANTITIES - CONT.

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50

LOCATION	TON	REMARKS
STA. 39+75 - 39+81.11	2	3" TAPER
STA. 39+81.11 - 39+93.21	5	3"
STA. 39+93.21 - 42+06.79		BRIDGE - SEE GPE
STA. 42+06.79 - 42+13.89	3	3"
STA. 42+13.89 - 42+75	26	3" TAPER
TOTAL	36 TON	

SCHEDULE OF QUANTITIES

SEEDING, CLASS 2 (SPECIAL)

LOCATION	ACRE	REMARKS
RT. STA. 39+75 - 39+93.21	0.01	
LT. STA. 39+75 - 39+93.21	0.01	
RT. STA. 42+06.79 - 42+75	0.03	
LT. STA. 42+06.79 - 42+75	0.03	
TOTAL	0.08 ACRE	

EROSION CONTROL BLANKET

LOCATION	SQ. YD.	REMARKS
RT. STA. 39+75 - 39+93.21	29	
LT. STA. 39+75 - 39+93.21	44	
RT. STA. 42+06.79 - 42+75	140	
LT. STA. 42+06.79 - 42+75	160	
TOTAL	373 SQ. YD.	

PERIMETER EROSION BARRIER

LOCATION	FOOT	REMARKS
RT. STA. 39+75 - 39+83	8	
LT. STA. 39+75 - 39+93	18	
RT. STA. 42+07 - 42+75	79	
LT. STA. 42+07 - 42+75	68	
TOTAL	173 FOOT	

SUB-BASE GRANULAR MATERIAL, TYPE B

LOCATION	TON	REMARKS
STA. 39+75 - 39+81.11	5	TAPER 6" COMPACTED
STA. 39+81.11 - 39+93.21	10	6" COMPACTED
STA. 42+06.79 - 42+13.89	6	6" COMPACTED
STA. 42+13.89 - 42+75	53	TAPER 6" COMPACTED
TOTAL	74 TON	

AGGREGATE BASE COURSE, TYPE A

LOCATION	TON	REMARKS
STA. 39+75 - 39+81.11	3	TAPER 4" COMPACTED
STA. 39+81.11 - 39+93.21	7	4" COMPACTED
STA. 42+06.79 - 42+13.89	4	4" COMPACTED
STA. 42+13.89 - 42+75	36	TAPER 4" COMPACTED
TOTAL	50 TON	

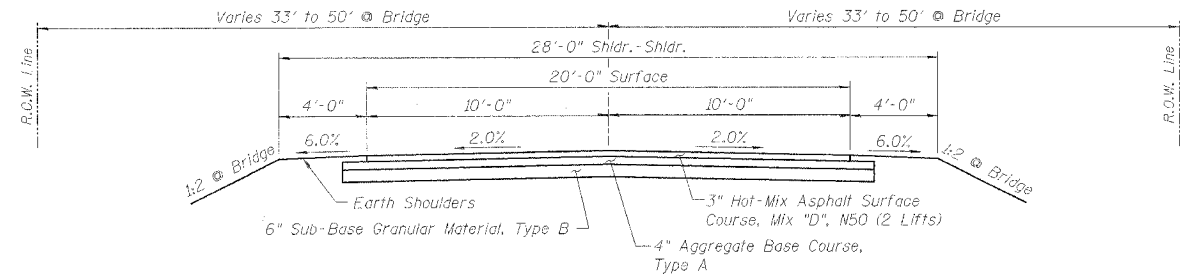
**EDSON ROAD
PAVEMENT STRUCTURAL DESIGN**

STRUCTURAL DESIGN TRAFFIC (S.D.T.) = YEAR 2017 < 200
CLASS IV ROAD
OGLE COUNTY STANDARD: 3" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50
4" AGGREGATE BASE COURSE, TYPE A
6" SUB-BASE GRANULAR MATERIAL, TYPE B

PAVEMENT MIXTURE REQUIREMENTS

LOCATION:	EDSON RD STA 39+75 - 42+75
MIXTURE USE:	SURFACE
PG:	PG 64-22
DESIGN AIR VOIDS	4%
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 12.5 - IL 9.5
FRICTION AGGREGATE	D

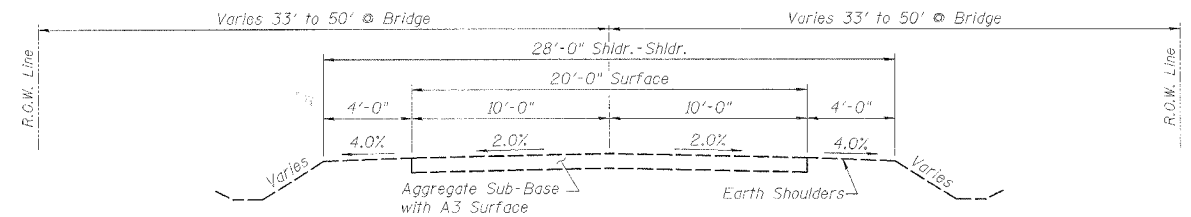
**GENERAL NOTES, SCHEDULES, AND TYPICAL SECTION
EDSON ROAD (TR 61A) OVER
SOUTH BRANCH KISHWAUKEE RIVER
STA. 41+00 (071-3304)
SECTION 06-15118-01-BR
MONROE ROAD DISTRICT
OGLE COUNTY
SECTION 06-02121-01-BR
CHERRY VALLEY ROAD DISTRICT
WINNEBAGO COUNTY
WHA # 1092D06**



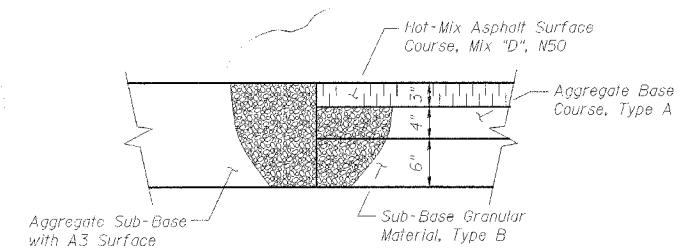
TYPICAL SECTION

Sta. 39+75.00 to Sta. 39+93.21
Sta. 42+06.79 to Sta. 42+75.00

Highway Classification: Local Road (Non-Urban)
Design Speed: 30 mph
ADT = 125

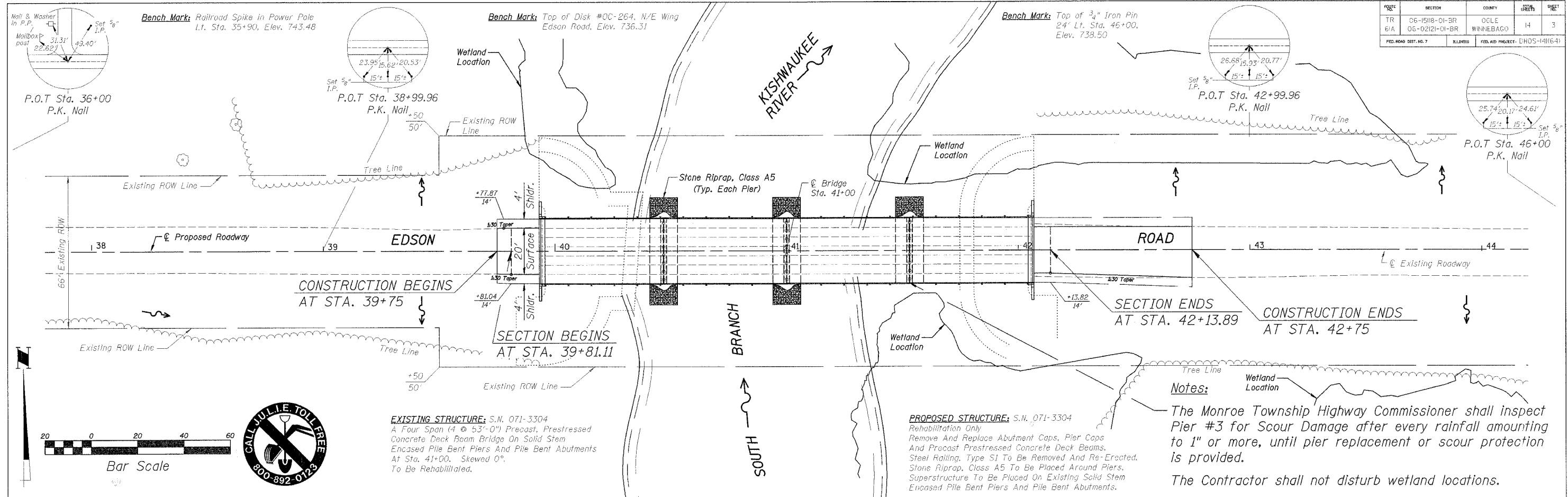


EXISTING TYPICAL SECTION



CORE JOINT DETAIL

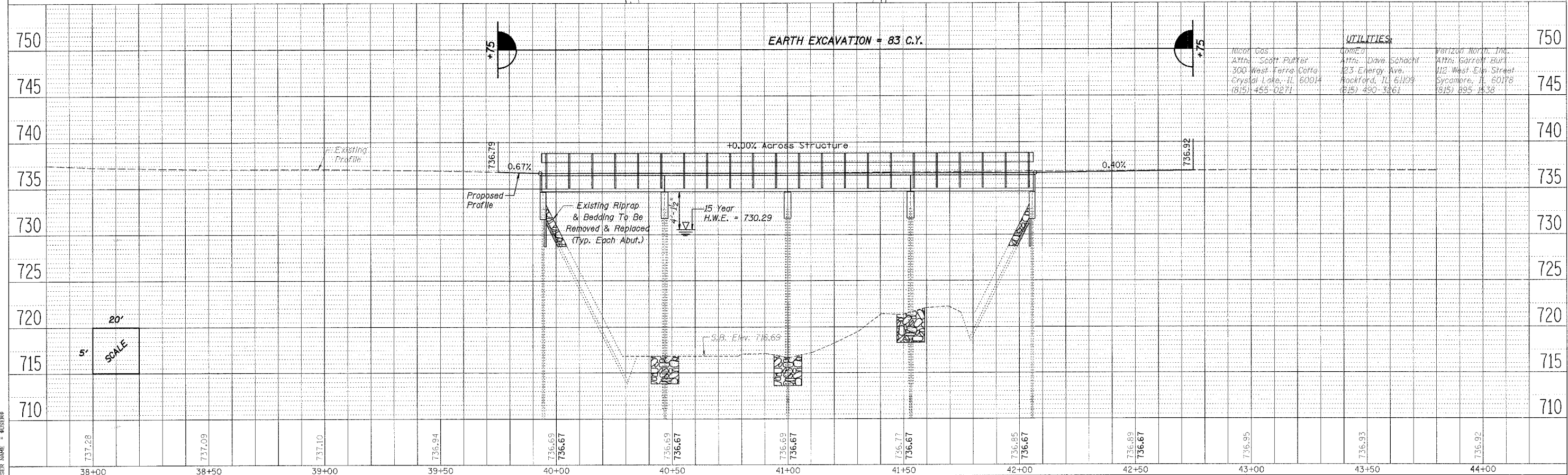
ROUTE	SECTION	COUNTY	TOWNSHIP	SHEET
TR 61A	06-1518-01-BR	OCLE	WINNEBAGO	14
FED. ROAD DIST. NO. 7		FED. AID PROJECT: LHOS-14(6-4)		3



Notes:
 The Monroe Township Highway Commissioner shall inspect Pier #3 for Scour Damage after every rainfall amounting to 1" or more, until pier replacement or scour protection is provided.
 The Contractor shall not disturb wetland locations.

EXISTING STRUCTURE: S.N. 071-3304
 A Four Span (4 @ 53'-0") Precast, Prestressed Concrete Deck Beam Bridge On Solid Stem Encased Pile Bent Piers And Pile Bent Abutments At Sta. 41+00. Skewed 0°. To Be Rehabilitated.

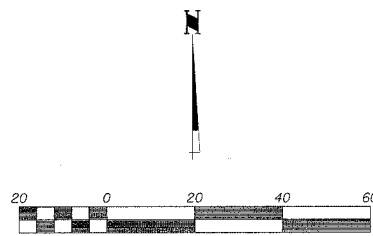
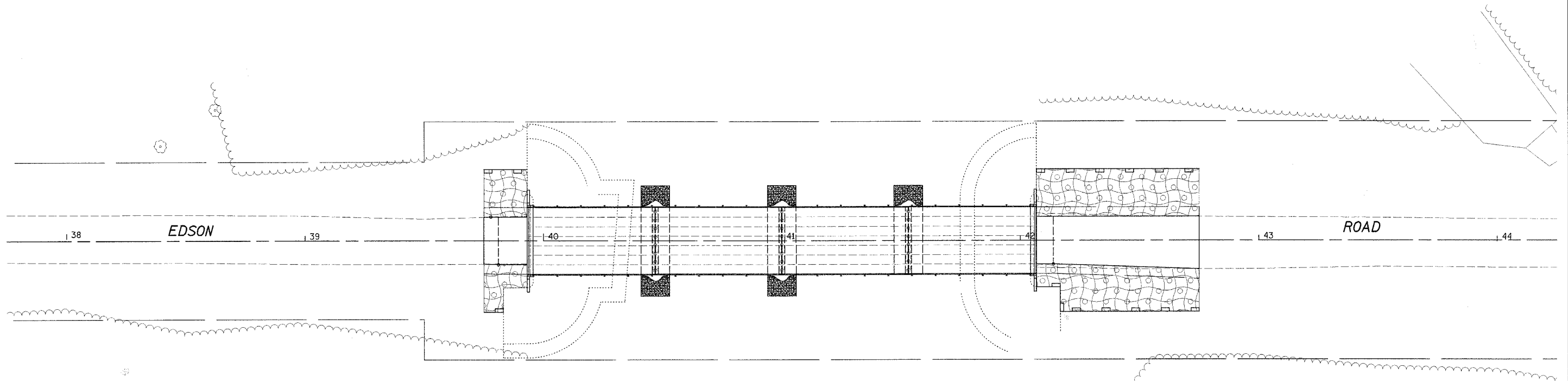
PROPOSED STRUCTURE: S.N. 071-3304
 Rehabilitation Only
 Remove And Replace Abutment Caps, Pier Caps And Precast Prestressed Concrete Deck Beams. Steel Railing, Type S1 To Be Removed And Re-Erected. Stone Riprap, Class A5 To Be Placed Around Piers. Superstructure To Be Placed On Existing Solid Stem Encased Pile Bent Piers And Pile Bent Abutments.



EDSON ROAD (TR 61A) - PLAN & PROFILE

S:\Struct\1092D06EdsonRoad\pp\EDSON1.dgn

ROUTE	SECTION	COUNTY	SHEET	TOTAL SHEETS
TR 61A	06-15118-01-BR	OGLE	14	4
	06-02121-01-BR	WINNEBAGO		
FED. ROAD DIST. NO. 7	BILLINGS	FED. AID PROJECT	BHOS-14(16.4)	



LEGEND

- Perimeter Erosion Barrier
- Seeding, Class 2 (Special)
- Erosion Control Blanket

BILL OF MATERIAL

Item	Unit	Quantity
Seeding, Class 2 (Special)	Acre	0.08
Erosion Control Blanket	Sq. Yd.	373
Perimeter Erosion Barrier	Foot	173

EROSION CONTROL NOTES

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.

For Seeding, Class 2 (Special) see Special Provisions.

Erosion Control Blanket shall be placed in regions 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.

The use of asphalt as a binder is not acceptable.

Mulch shall be placed over the entire seeded region.

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.

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.

Stockpiles of soil and other building materials to remain in place more than three (3) days shall be furnished with erosion and sediment control measures (i.e. Perimeter Silt Fence). Stockpiles to remain in place for 30 days or more shall receive Temporary Seeding.

**EROSION CONTROL PLAN
EDSON ROAD (TR 61A) OVER
SOUTH BRANCH KISHWAUKEE RIVER
STA. 41+00 (071-3304)
SECTION 06-15118-01-BR
MONROE ROAD DISTRICT
OGLE COUNTY
SECTION 06-02121-01-BR
CHERRY VALLEY ROAD DISTRICT
WINNEBAGO COUNTY**

EXISTING STRUCTURE: S.N. 071-3304

A Four Span (4@53') Precast Prestressed Concrete Deck Beams on Solid Stem Encased Pile Bent Piers and Pile Bent Abutments At Sta. 41+00, Skewed 0°. To Be Rehabilitated.
 Section 89-15118-00-BR (Ogle County)
 Section 89-02121-00-BR (Winnebago County)

Bench Mark: Railroad Spike in Power Pole

Lt. Sta. 35+90
 Elev. 743.48

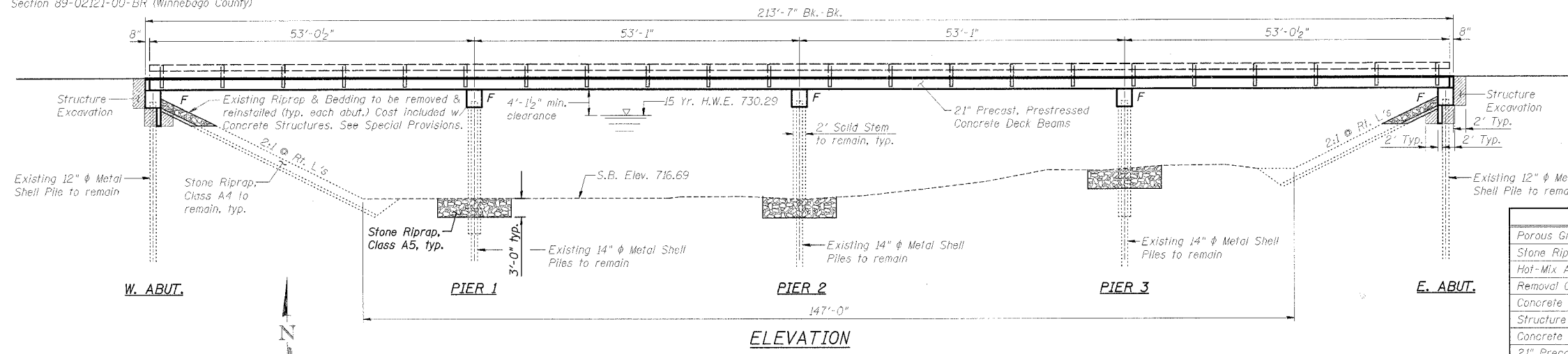
Bench Mark: Top of Disk #0C-264

Northeast Wingwall
 Elev. 736.31

Bench Mark: Top of 3/4" I.P.

24' Lt. Sta. 46+00
 Elev. 738.50

PROJECT	SECTION	COUNTY	DISTRICT	SHEET
TR 61A	06-15118-01-BR	OGLE	14	5
	06-02121-01-BR	WINNEBAGO		
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT: 5HOS-141(6.4)



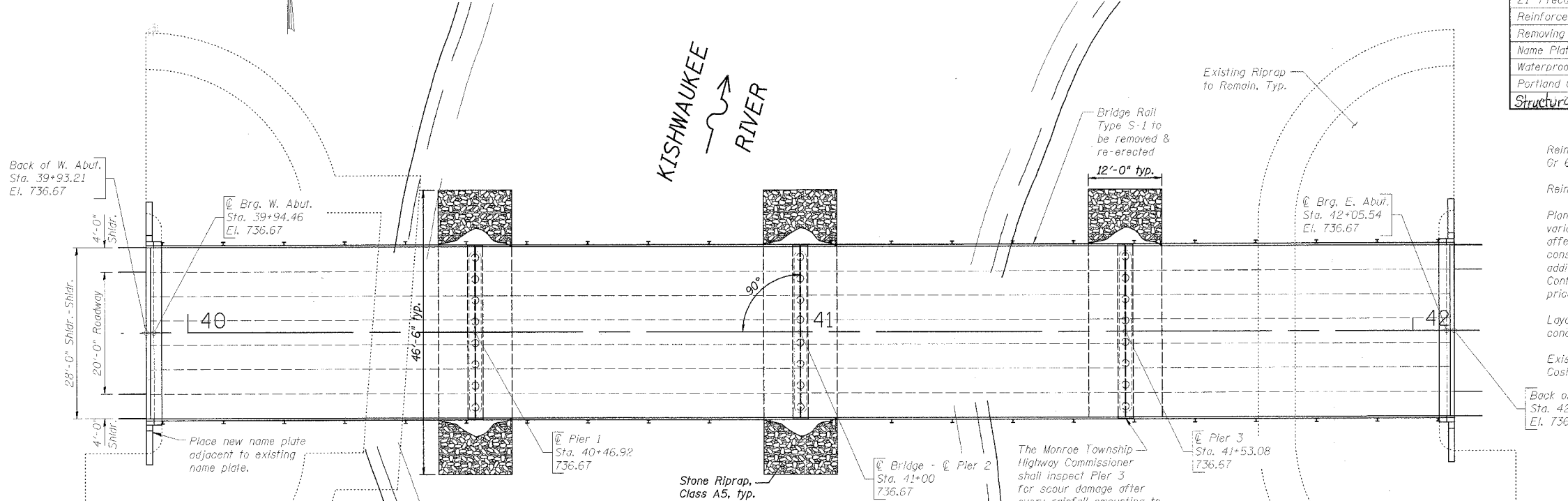
SOUTH BRANCH KISHWAUKEE RIVER
 REHABILITATION 2007 BY
 SECTION 06-15118-01-BR (OGLE CO.)
 SECTION 06-02121-01-BR (WINNEBAGO CO.)
 TR 61A STA. 41+00
 F.A. PROJ. BHOS-141(6.4)
 STR. NO. 071-3304 LOADING HS20

NAME PLATE LETTERING
 REFER TO STD. 515001
BILL OF MATERIALS - BRIDGE

Item	Unit	Sub.	Super.	Total
Porous Granular Embankment	Cu. Yd.	16	—	16
Stone Riprap, Class A5	Sq. Yd.	156	—	156
Hot-Mix Asphalt Surface Course, Mix "D", #50	Ton	—	100	100
Removal Of Existing Superstructures	Each	—	1	1
Concrete Removal	Cu. Yd.	43.7	—	43.7
Structure Excavation	Cu. Yd.	62	—	62
Concrete Structures	Cu. Yd.	50.2	—	50.2
21" Precast, Prestressed Concrete Deck Beams	Sq. Ft.	—	5,936	5,936
Reinforcement Bars, Epoxy Coated	Pound	6,400	—	6,400
Removing and Re-Erecting Existing Rail	Foot	—	425	425
Name Plates	Each	1	—	1
Waterproofing Membrane System	Sq. Yd.	—	665	665
Portland Cement Mortar Fairing Course	Foot	—	1,272	1,272
Structural Repairs of Concrete = 1/4"	Sq. Ft.	2.75	—	2.75

GENERAL NOTES:

Reinforcement bars shall conform to the requirements of ASTM A 706 Or 60 (LL Modified). See Special Provisions.
 Reinforcement bars designated (E) shall be epoxy coated.
 Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
 Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 Existing name plate shall be salvaged & placed adjacent to new name plate. Cost incidental to the contract unit price per Each for Name Plates.



WATERWAY INFORMATION

DRAINAGE AREA	414 Sq. Mi.
DESIGN DISCHARGE (15 YR.)	9,500 C.F.S.
EXISTING OPENING	1,400 Sq. Ft.
REQUIRED OPENING	1,870 Sq. Ft.
PROPOSED OPENING	1,870 Sq. Ft.
CREATED HEAD (15 YR.)	< 0.5'
100 YR. DISCHARGE	15,300 C.F.S.
CREATED HEAD (100 YR.)	< 1.0'
HIGH WATER ELEV. (100 YR.)	733.09 Ft.

DESIGN SPECIFICATIONS

Design In Accordance With 2002 A.A.S.H.T.O. Standard Specifications - 17th Edition

LOADING HS20-44

Allow 25#/Sq. Ft. for Future Wearing Surface.

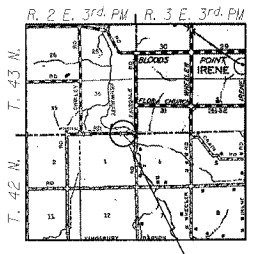
DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ psi
 $f'_ci = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" φ Low Lax Strands)
 $f'_si = 201,960$ psi (1/2" φ Low Lax Strands)



Brian K. Converse
 DATE: 10/21/2007
 EXPIRES 11/30/08

"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES."



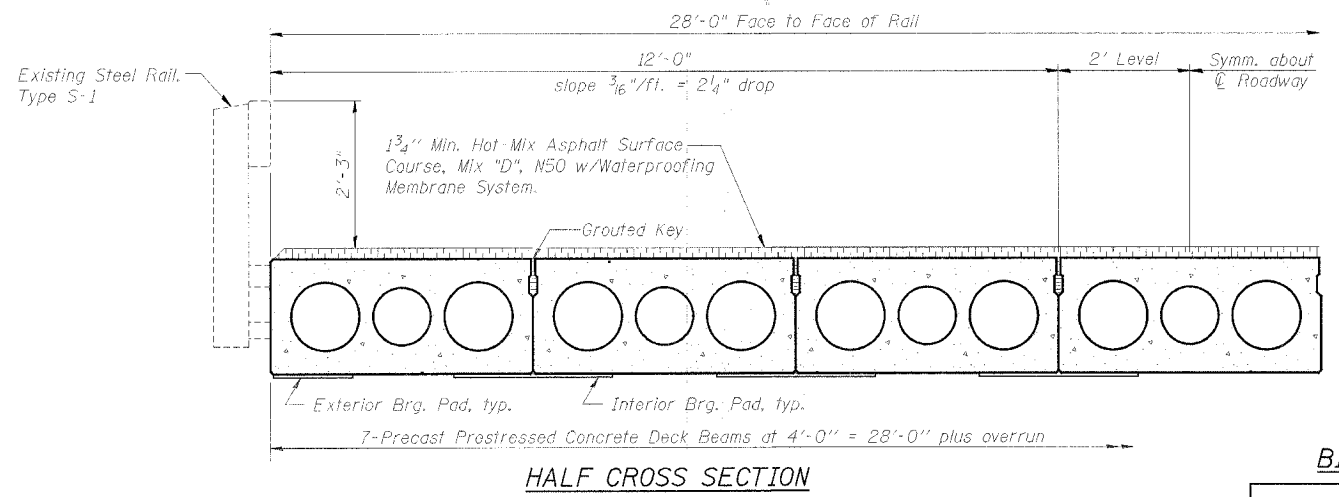
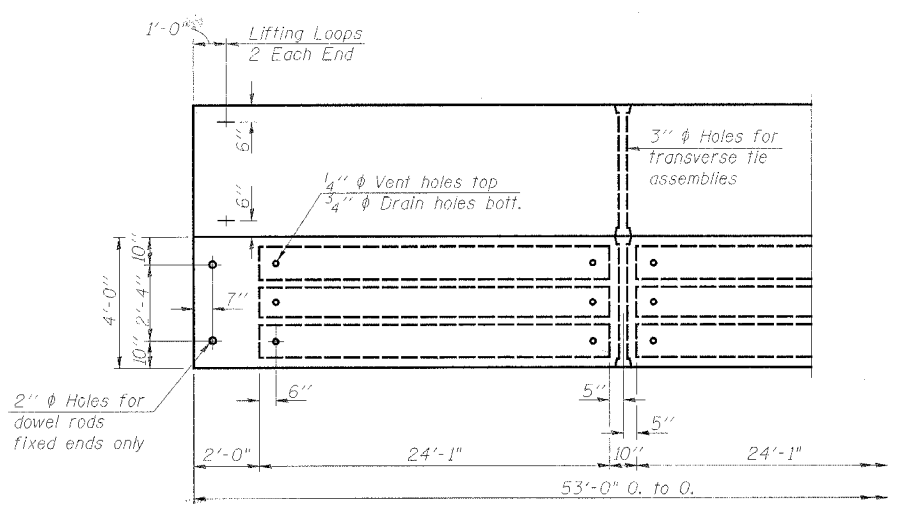
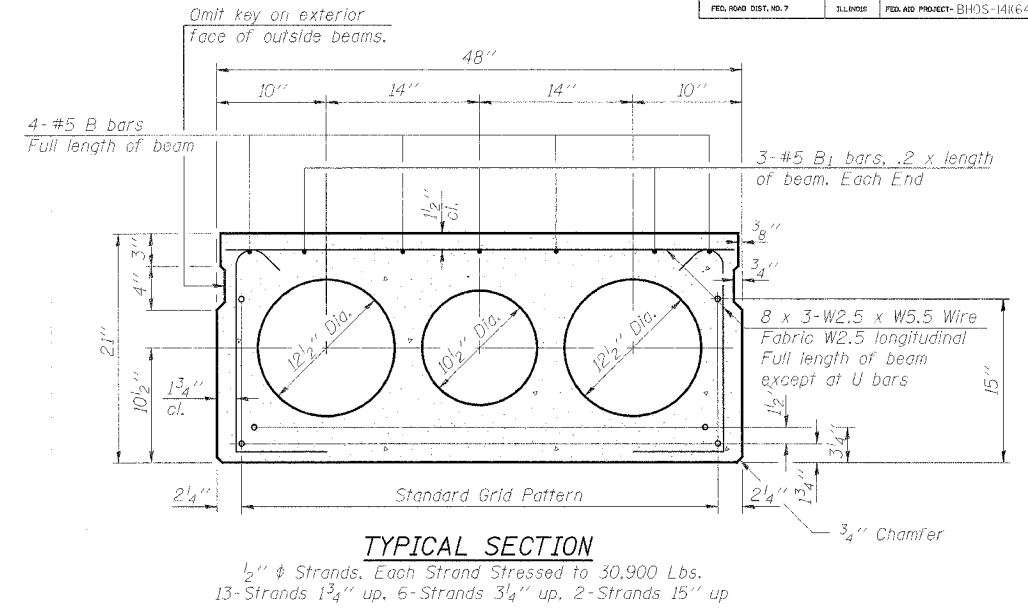
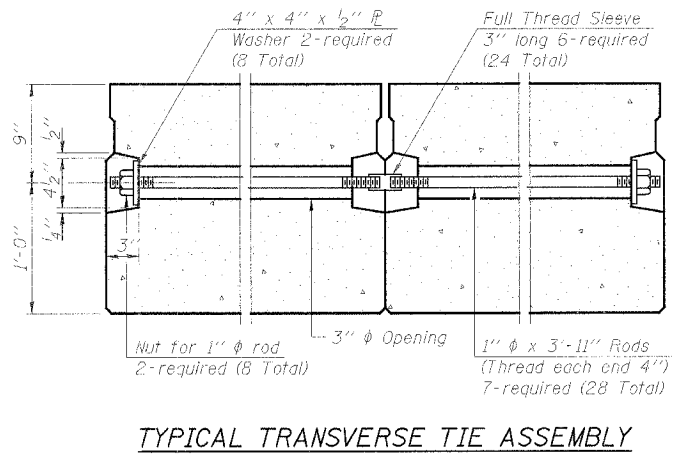
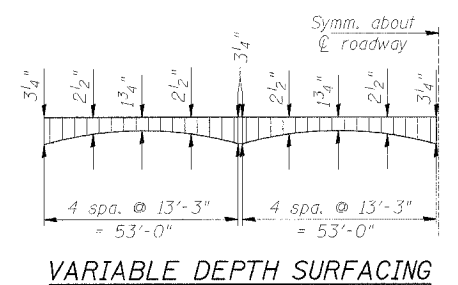
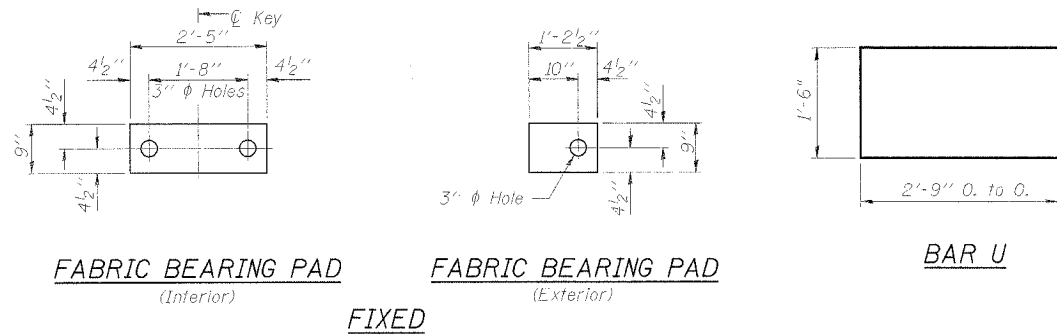
GENERAL PLAN AND ELEVATION
EDSON ROAD (TR 61A) OVER
SOUTH BRANCH KISHWAUKEE RIVER
STA. 41+00 (S.N. 071-3304)
SECTION 06-15118-01-BR
MONROE ROAD DISTRICT
OGLE COUNTY
SECTION 06-02121-01-BR
CHERRY VALLEY ROAD DISTRICT
WINNEBAGO COUNTY

WILLET, HOFMANN & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 Land Surveying - Transportation - Structural
 Environmental - Architecture
 809 East Second Street, Dixon, Illinois 61021
 Phone: 815.294.2381 Fax: 815.294.2385
 Design Firm #184-000918
 www.willett-hofmann.com

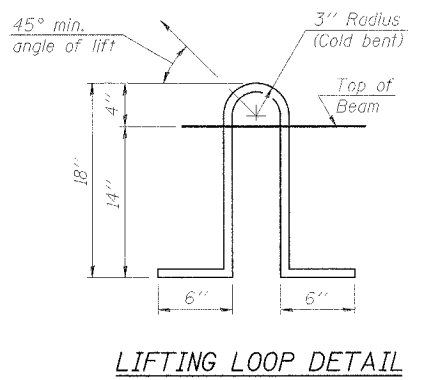
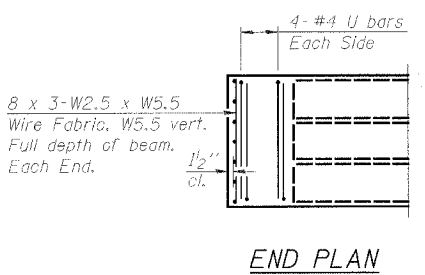
Designed By: M. A. Small
 Date: 4/07
 Checked By: B. K. Converse
 Date: 4/07
 Drawn By: F. D. Lachat
 Date: 4/07

WHA # 1092D06

DATE	SECTION	COUNTY	SHEET	SHEET
TR 61A	06-15118-01-BR 06-02121-01-BR	OGLE WINNEBAGO	14	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- BHOS-14(R64)		



Note:
Place strands symmetrically about centerline of beam.



NOTES

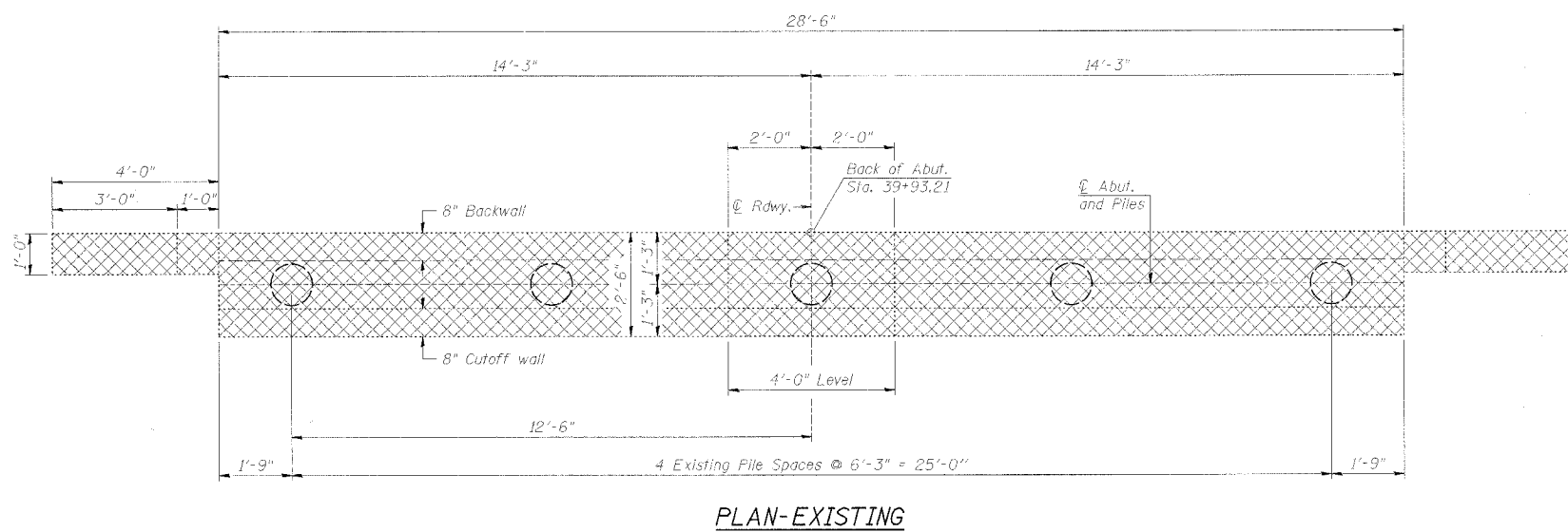
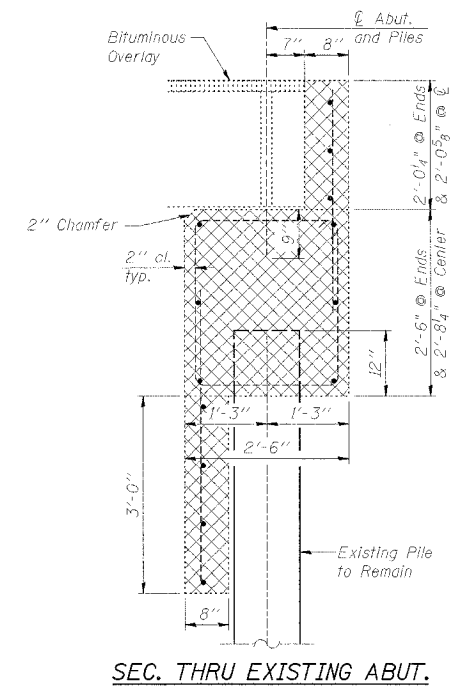
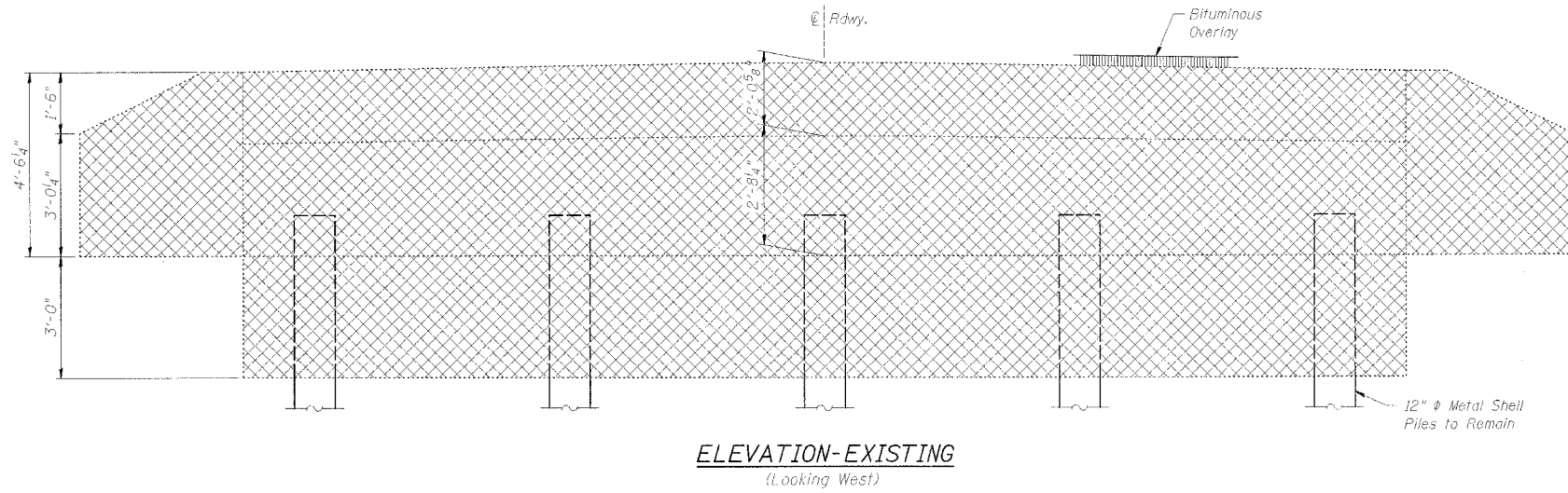
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - 1/2" φ-270 ksi strands, as shown. The 1" φ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Non prestressing steel shall conform to AASHTO M-31, M-42 or M-53 Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i. The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

BILL OF MATERIAL

Item	Unit	Quant.
Hot-Mix Asphalt Surface Course, Mix "D", NSO	Ton	100
21" Precast, Prestressed Conc. Deck Bms.	Sq. Ft.	5,936
Waterproofing Membrane System	Sq. Yd.	665
Portland Cement	Ft.	1,272
Concrete Fairing Course		

DECK BEAM DETAILS
EDSON ROAD (TR 61A) OVER SOUTH BRANCH KISHWAUKEE RIVER STA. 41+00 (071-3304)
SECTION 06-15118-01-BR MONROE ROAD DISTRICT OGLE COUNTY
SECTION 06-02121-01-BR CHERRY VALLEY ROAD DISTRICT WINNEBAGO COUNTY
WHA # 1092D06

ROUTE	SECTION	COUNTY	SHEET	SHEET
TR 61A	06-15118-01-BR 06-02121-01-BR	OGLE WINNEBAGO	14	7
FED. ROAD DIST. NO. 7		BID. NO.	FED. AID PROJECT - BH05-14(164)	



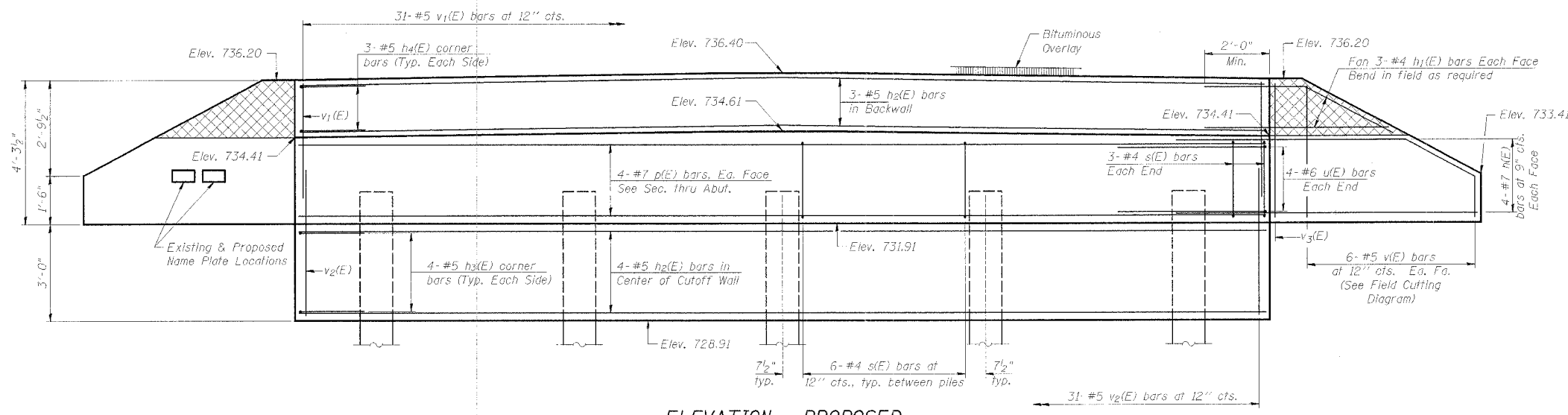
BILL OF MATERIAL - EXISTING WEST ABUTMENT

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	11.5

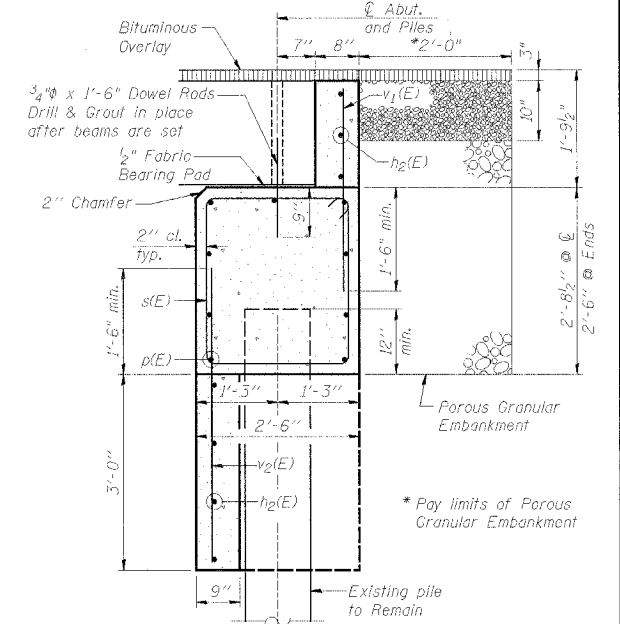
Notes:
 Hatched area indicates Concrete Removal limits.
 The existing pile shall remain in place, and shall be cleaned of all existing concrete. The cost of this work shall be included in the contract price per Cubic Yard of Concrete Removal. The contractor shall exercise care when removing concrete around piles to eliminate any pile damage. Any damage to piles during Concrete Removal operations shall be repaired at contractor's expense to the satisfaction of the Engineer.

**WEST ABUTMENT DETAILS
 EDSON ROAD (TR 61A) OVER
 SOUTH BRANCH KISHWAUKEE RIVER
 STA. 41+00 (071-3304)
 SECTION 06-15118-01-BR
 MONROE ROAD DISTRICT
 OGLE COUNTY
 SECTION 06-02121-01-BR
 CHERRY VALLEY ROAD DISTRICT
 WINNEBAGO COUNTY**

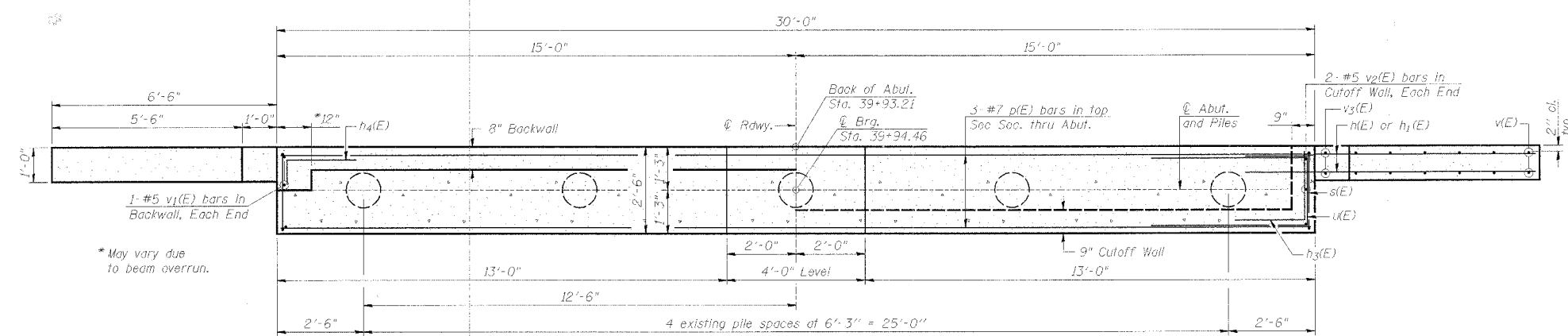
PROJECT	SECTION	COUNTY	DATE	SHEET
TR 61A	06-1518-01-BR 06-02121-01-BR	OGLE WINNEBAGO	14	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT - RHCS-141(64)		



ELEVATION - PROPOSED
(Looking West)



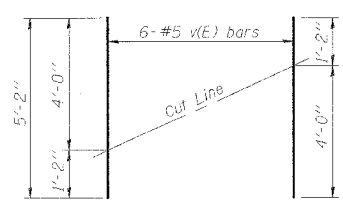
SEC. THRU ABUT.



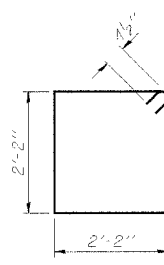
SHOWING BACKWALL

SHOWING CUTOFF WALL

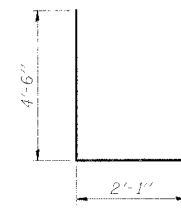
PLAN - PROPOSED



FIELD CUTTING DIAGRAM
Order v(E) full length. Cut as shown and use remainder of bars in opposite face.



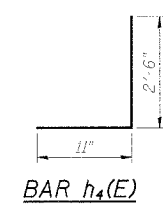
BAR s(E)



BAR u(E)



BAR h3(E)



BAR h4(E)

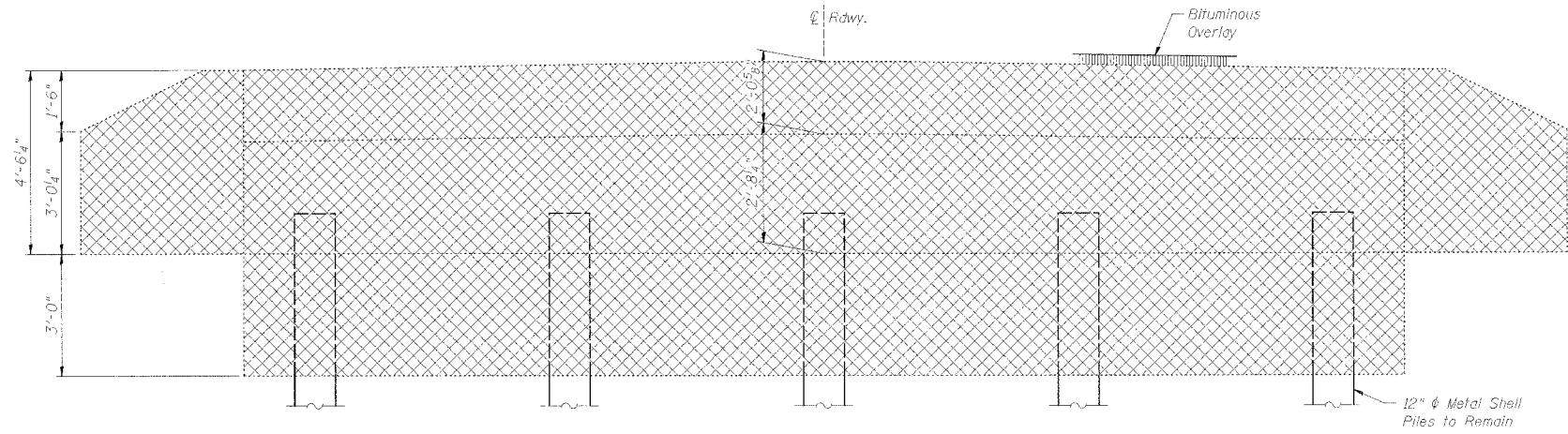
BILL OF MATERIAL - WEST ABUTMENT

Bar	No.	Size	Length	Shape
h1(E)	16	#7	9'-9"	—
h1(E)	12	#4	5'-10"	—
h2(E)	7	#5	29'-8"	—
h3(E)	8	#5	4'-6"	┌
h4(E)	6	#5	3'-5"	┌
p(E)	9	#7	29'-8"	—
s(E)	30	#4	9'-5"	┌
u(E)	8	#6	11'-1"	—
v(E)	24	#5	5'-2"	—
v1(E)	33	#5	3'-3"	—
v2(E)	35	#5	4'-6"	—
v3(E)	4	#5	4'-0"	—
Porous Granular Embankment			Cu. Yd.	8
Structure Excavation			Cu. Yd.	31
Concrete Structures			Cu. Yd.	12.8
Reinforcement Bars, Epoxy Coated			Pound	1,930

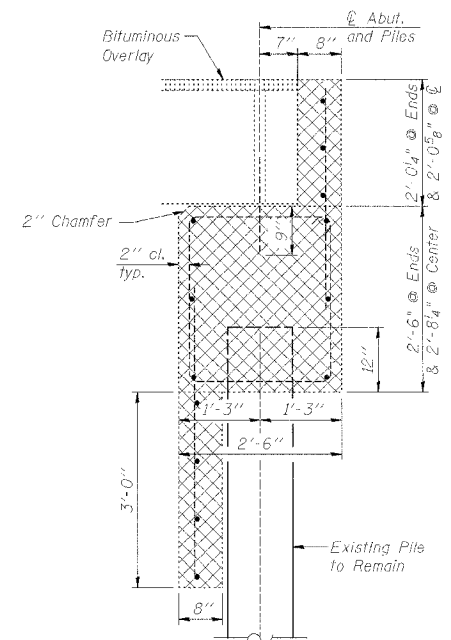
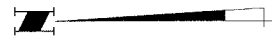
Notes:
Hatched portion of wings to be poured with the backwall after the deck beams have been installed and grout has cured for a minimum of 24 hours.
Wing reinforcement shown is typical, unless shown otherwise.
All exposed edges shall have standard 3/4" chamfers, except as noted.
Space reinforcement in cap to miss dowel rods.

WEST ABUTMENT DETAILS
EDSON ROAD (TR 61A) OVER
SOUTH BRANCH KISHWAUKEE RIVER
STA. 41+00 (071-3304)
SECTION 06-15118-01-BR
MONROE ROAD DISTRICT
OGLE COUNTY
SECTION 06-02121-01-BR
CHERRY VALLEY ROAD DISTRICT
WINNEBAGO COUNTY

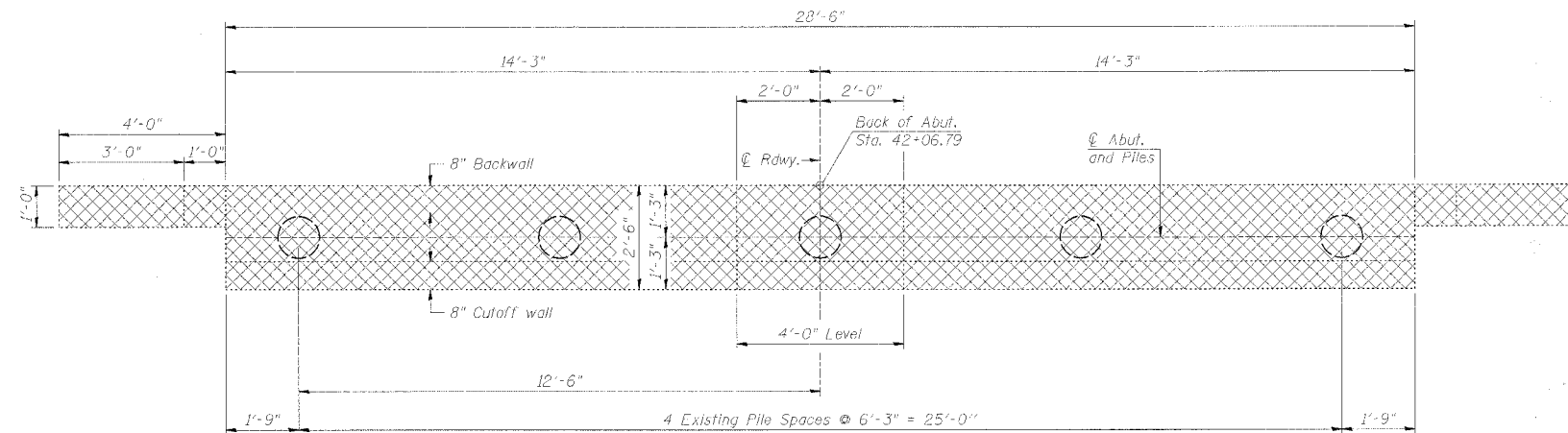
FILE	SECTION	COUNTY	JOB NO.	SHEET
TR 06-1518-01-BR	06-02121-01-BR	OGLE	14	9
WINNEBAGO				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT: D-105-14(64)		



ELEVATION-EXISTING
(Looking East)



SEC. THRU EXISTING ABUT.



PLAN-EXISTING

BILL OF MATERIAL - EXISTING EAST ABUTMENT

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	11.5

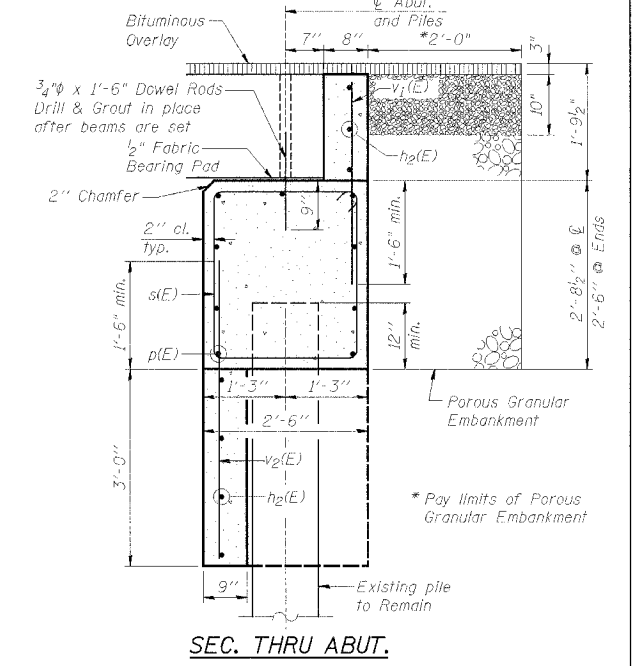
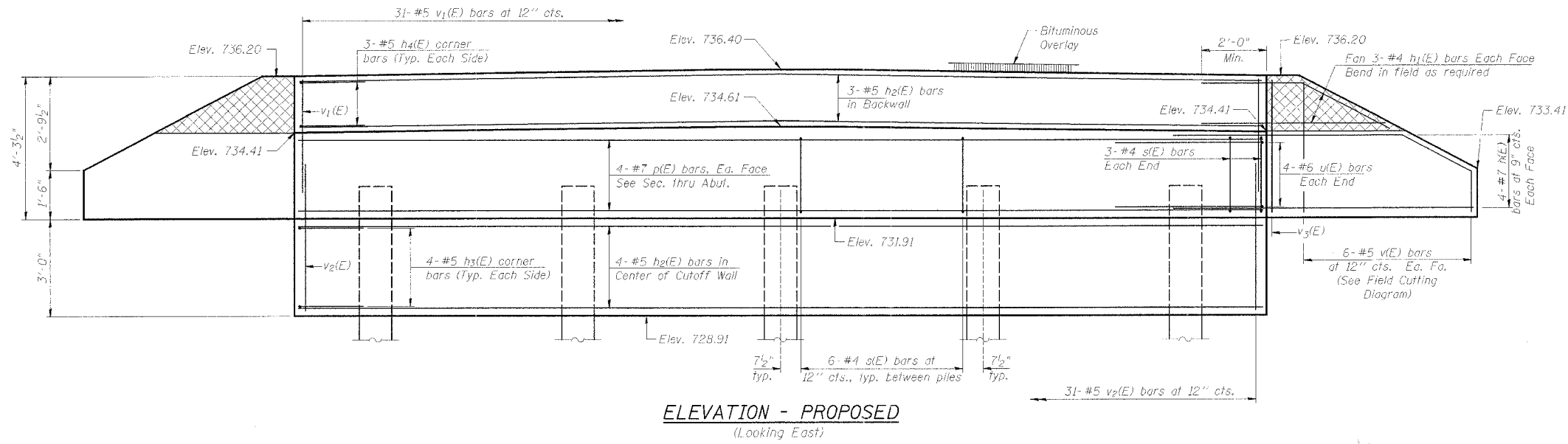
Notes:

Hatched area indicates Concrete Removal limits.

The existing pile shall remain in place, and shall be cleaned of all existing concrete. The cost of this work shall be included in the contract price per Cubic Yard of Concrete Removal. The contractor shall exercise care when removing concrete around piles to eliminate any pile damage. Any damage to piles during Concrete Removal operations shall be repaired at contractor's expense to the satisfaction of the Engineer.

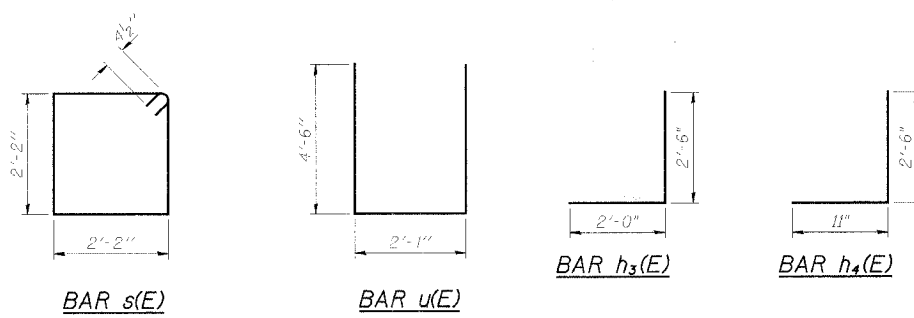
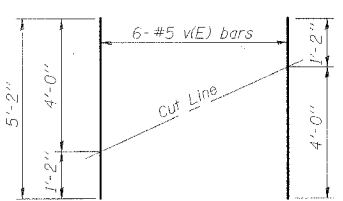
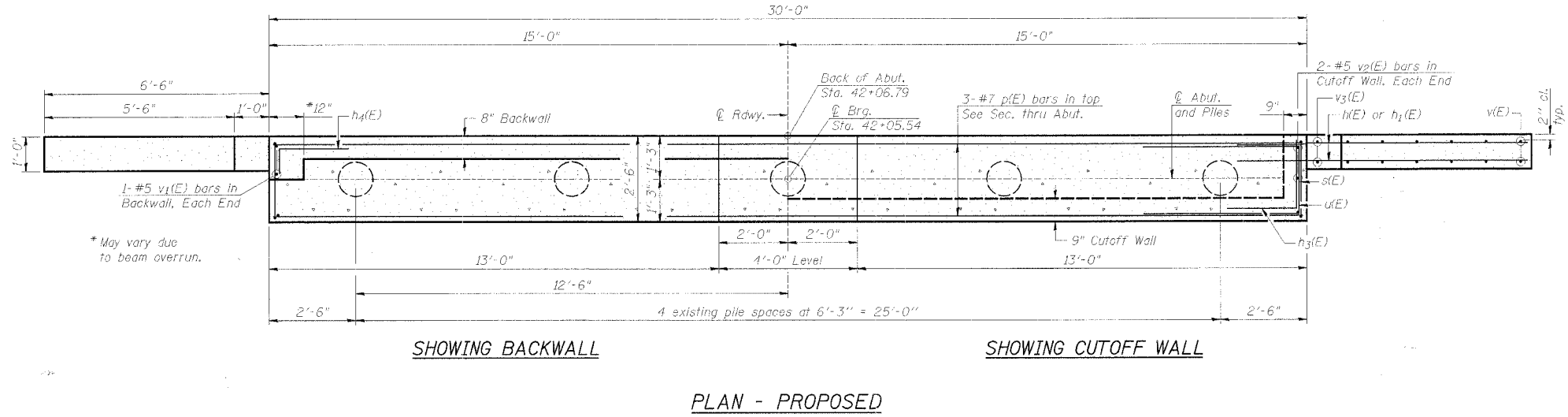
EAST ABUTMENT DETAILS
EDSON ROAD (TR 61A) OVER
SOUTH BRANCH KISHWAUKEE RIVER
STA. 41+00 (071-3304)
SECTION 06-15118-01-BR
MONROE ROAD DISTRICT
OGLE COUNTY
SECTION 06-02121-01-BR
CHERRY VALLEY ROAD DISTRICT
WINNEBAGO COUNTY

PROJECT	SECTION	COUNTY	SHEETS	TOTAL
TR 61A	06-15118-01-BR	OCLE	14	10
FED. ROAD DIST. NO. 7	BLINDS	FED. AID PROJECT	BH05-14(64)	



BILL OF MATERIAL - EAST ABUTMENT

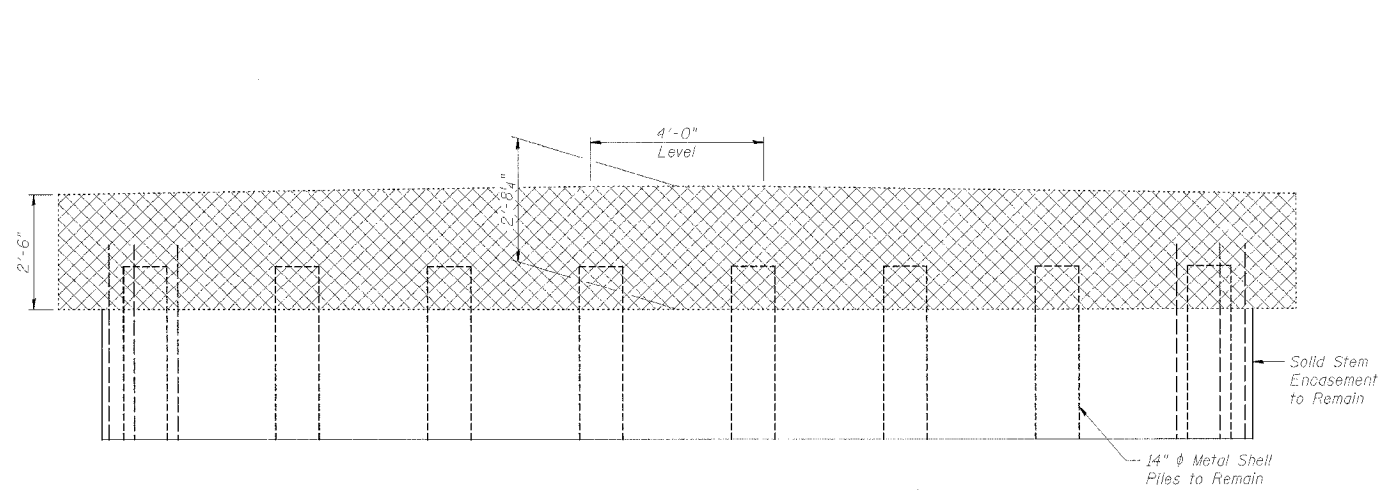
Bar	No.	Size	Length	Shape
h ₁ (E)	16	#7	9'-9"	—
h ₂ (E)	12	#4	5'-10"	—
h ₃ (E)	7	#5	29'-8"	—
h ₄ (E)	8	#5	4'-6"	—
h ₄ (E)	6	#5	3'-5"	—
p(E)	9	#7	29'-8"	—
s(E)	30	#4	9'-5"	□
u(E)	8	#6	11'-1"	—
v(E)	24	#5	5'-2"	—
v ₁ (E)	33	#5	3'-3"	—
v ₂ (E)	35	#5	4'-6"	—
v ₃ (E)	4	#5	4'-0"	—
Porous Granular Embankment			Cu. Yd.	8
Structure Excavation			Cu. Yd.	31
Concrete Structures			Cu. Yd.	12.8
Reinforcement Bars, Epoxy Coated			Pound	1,930



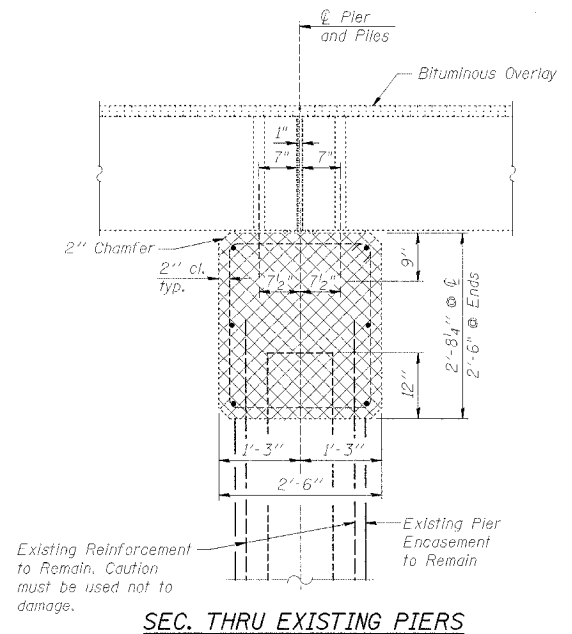
Notes:
 Hatched portion of wings to be poured with the backwall after the deck beams have been installed and grout has cured for a minimum of 24 hours.
 Wing reinforcement shown is typical, unless shown otherwise.
 All exposed edges shall have standard 3/4" chamfers, except as noted.
 Space reinforcement in cap to miss dowel rods.

EAST ABUTMENT DETAILS
 EDSON ROAD (TR 61A) OVER
 SOUTH BRANCH KISHWAUKEE RIVER
 STA. 41+00 (071-3304)
 SECTION 06-15118-01-BR
 MONROE ROAD DISTRICT
 OGLE COUNTY
 SECTION 06-02121-01-BR
 CHERRY VALLEY ROAD DISTRICT
 WINNEBAGO COUNTY
 WHA # 1092D06

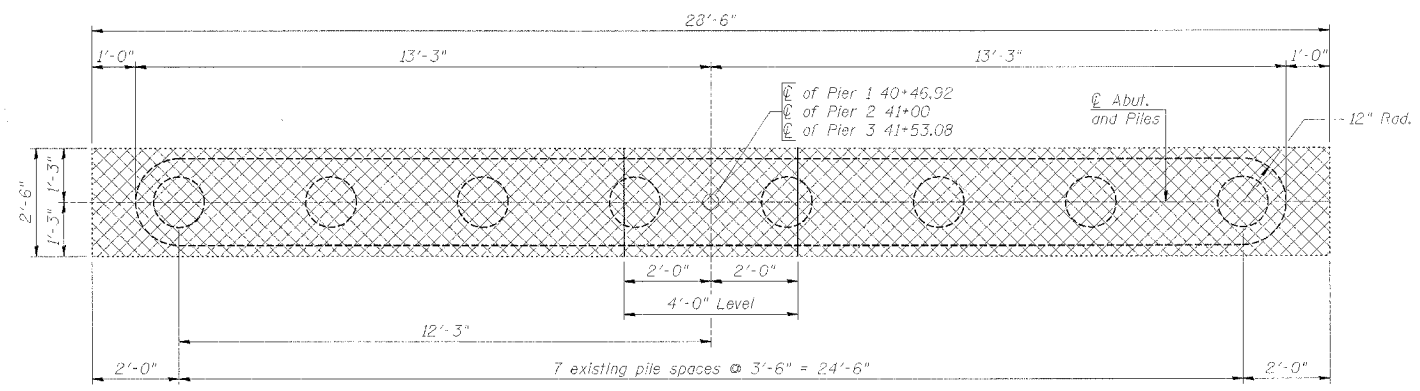
TR 61A	SECTION 06-15118-01-BR 06-02121-01-BR	COUNTY OGLE WINNEBAGO	SHEET 14	PROJECT 11
FED. ROAD DIST. NO. 7		BLANKS	FED. AID PROJECT- BHOS-14(16/4)	



ELEVATION-EXISTING
(Looking West)



SEC. THRU EXISTING PIERS



PLAN-EXISTING

BILL OF MATERIAL - EXISTING PIERS 1, 2 & 3

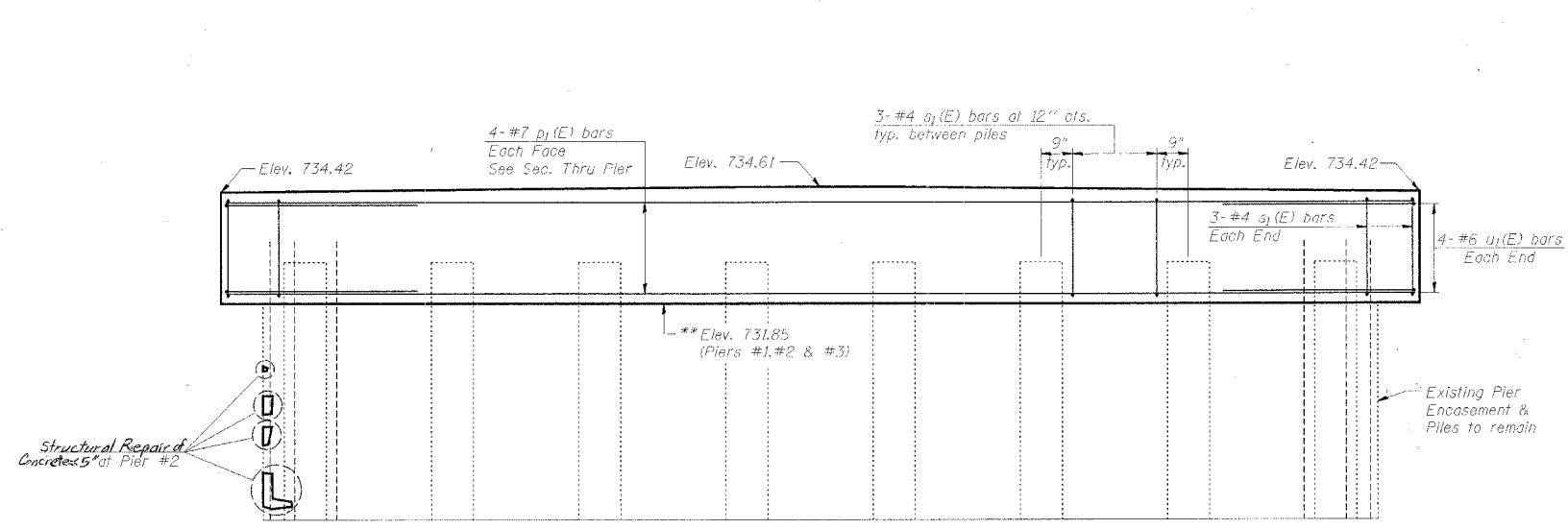
Item	Unit	Quantity
Concrete Removal	Cu. Yd.	20.7

Notes:

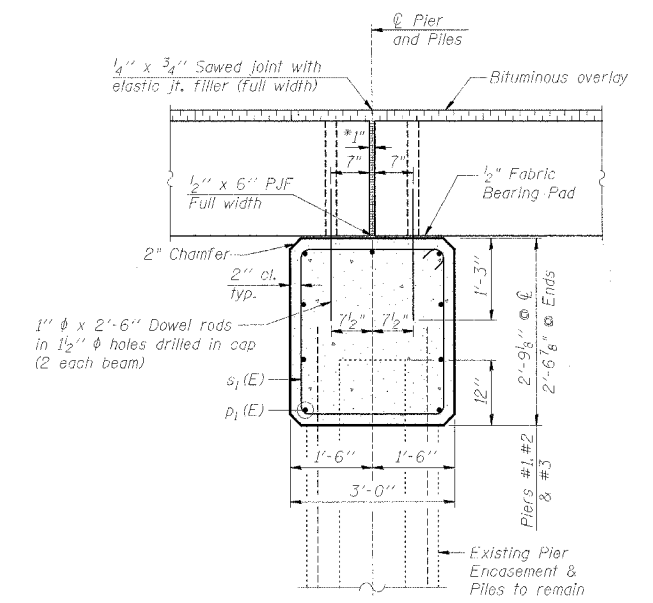
Hatched area indicates Concrete Removal limits.
 The existing pile & vertical reinforcement bars extending into cap, shall be cleaned of all existing concrete. The cost of this work shall be included in the contract price per Cubic Yard of Concrete Removal.
 Contractor shall use caution as to not damage existing Solid Stem Pier Encasement that is to remain in place.

PIERS 1, 2 & 3 DETAILS
EDSON ROAD (TR 61A) OVER
SOUTH BRANCH KISHWAUKEE RIVER
STA. 41+00 (071-3304)
SECTION 06-15118-01-BR
MONROE ROAD DISTRICT
OGLE COUNTY
SECTION 06-02121-01-BR
CHERRY VALLEY ROAD DISTRICT
WINNEBAGO COUNTY

ROUTE	SECTION	COUNTY	SHEETS	SHEET
TR 61A	06-1518-01-BR 06-02121-01-BR	OGLE WINNEBAGO	14	12
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT - BHOS-14(KG4)	



ELEVATION - PROPOSED
(Looking West)



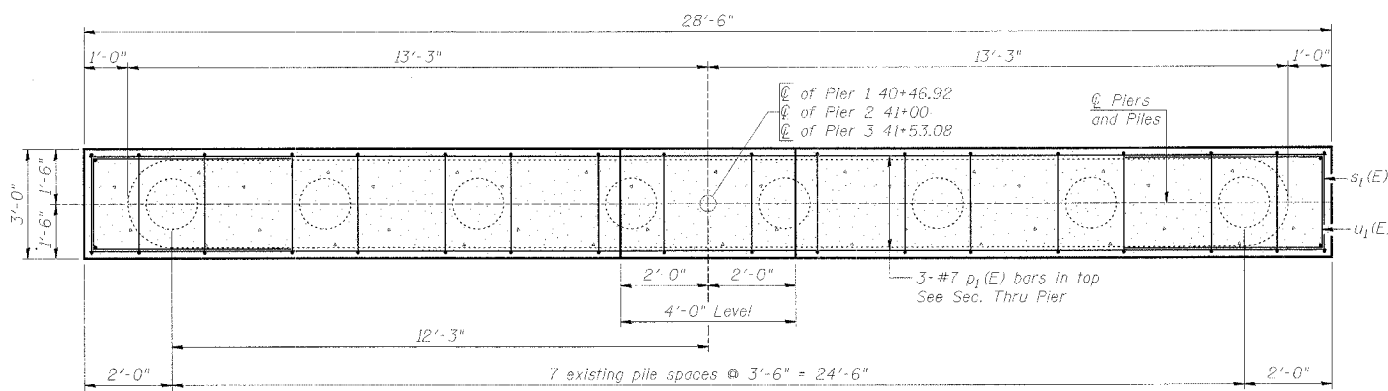
SEC. THRU PROPOSED PIER

BILL OF MATERIAL - PIERS 1, 2 & 3

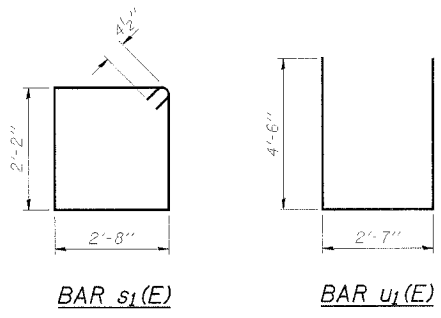
Bar	No.	Size	Length	Shape	
p ₁ (E)	27	#7	28'-2"	—	
s ₁ (E)	81	#4	10'-5"	□	
u ₁ (E)	24	#6	11'-7"	—	
Concrete Structures				Cu. Yd.	24.6
Reinforcement Bars, Epoxy Coated				Pound	2,540
Structural Repair of Concrete 5"				Sq. Ft.	2.75

Notes:

- *1" jr. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.
- After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
- All horizontal dimensions are at right angles to beam ends.
- See sheet 6 of 16 for bearing pad details.
- All exposed edges shall have standard 3/4" chamfers, except as noted.
- Space reinforcement in cap to miss dowel rods.
- **Bottom of cap shall be at top of encasement, verify in field.

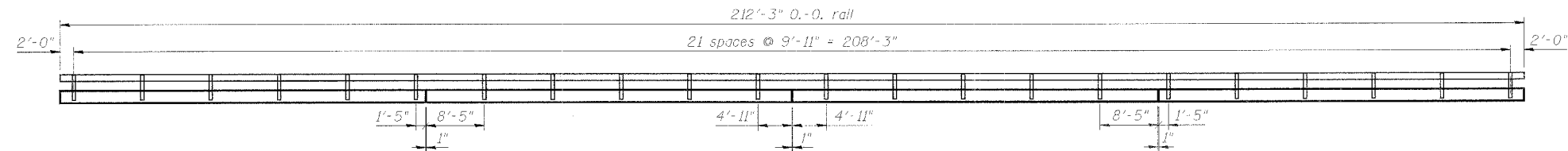


PLAN - PROPOSED

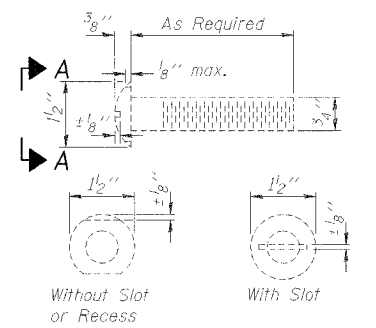
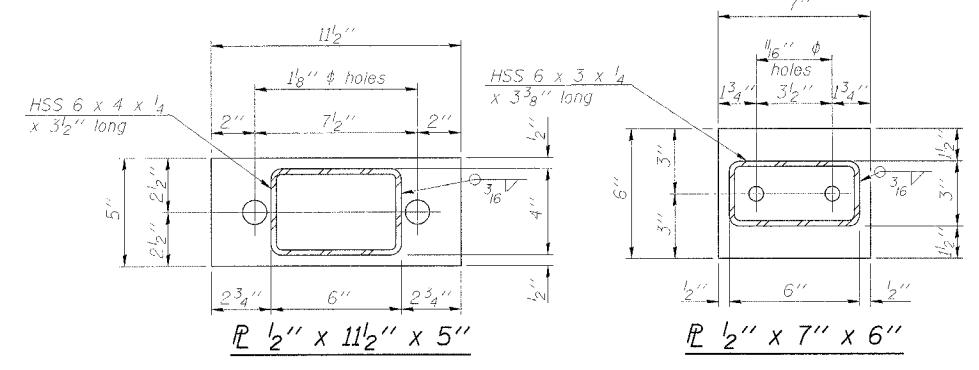


PIERS 1, 2 & 3 DETAILS
EDSON ROAD (TR 61A) OVER
SOUTH BRANCH KISHWAUKEE RIVER
STA. 41+00 (071-3304)
SECTION 06-1518-01-BR
MONROE ROAD DISTRICT
OGLE COUNTY
SECTION 06-02121-01-BR
CHERRY VALLEY ROAD DISTRICT
WINNEBAGO COUNTY

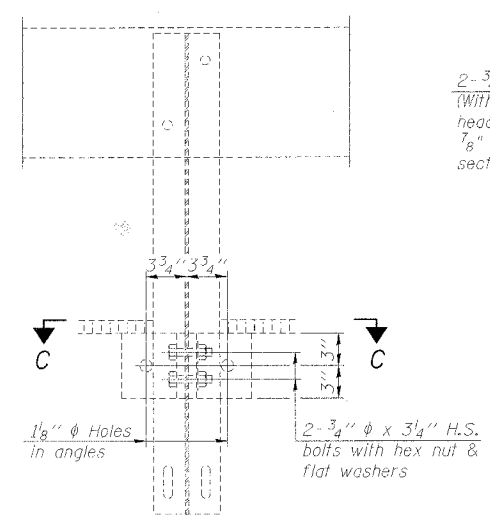
FIGURE	SECTION	COUNTY	SHEET	TOTAL
TR 61A	06-1518-01-BR	OGLE	14	13
	06-02121-01-BR	WINNEBAGO		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT: BHOS-1416(4)	



RAIL POST SPACING

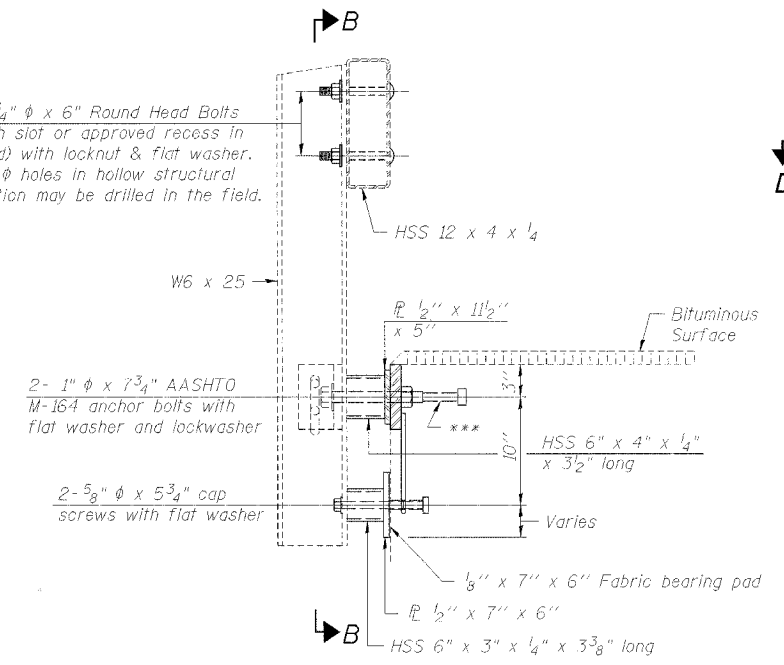


VIEW A-A
ROUND HEAD BOLT

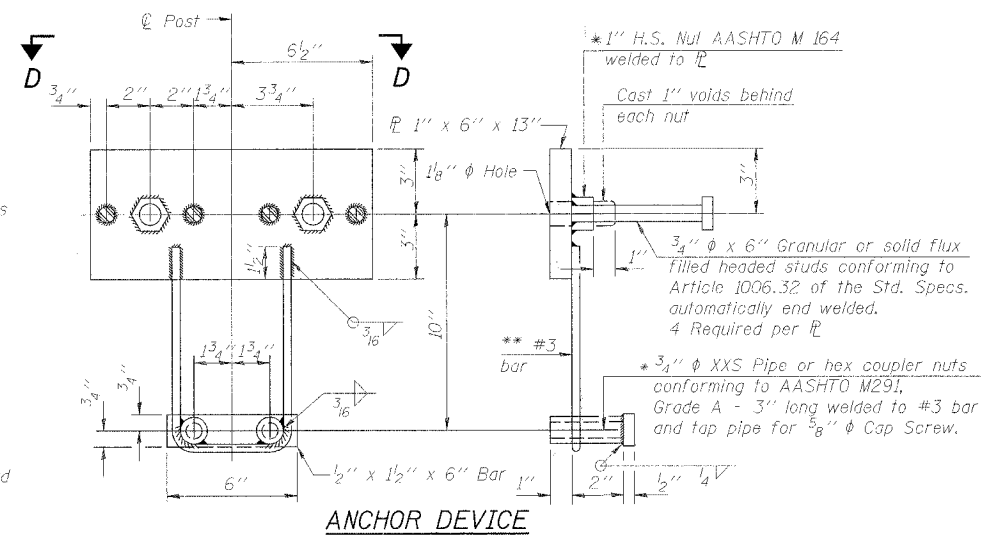


SECTION B-B

2-3/4" ϕ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" ϕ holes in hollow structural section may be drilled in the field.



SECTION AT RAILING POST



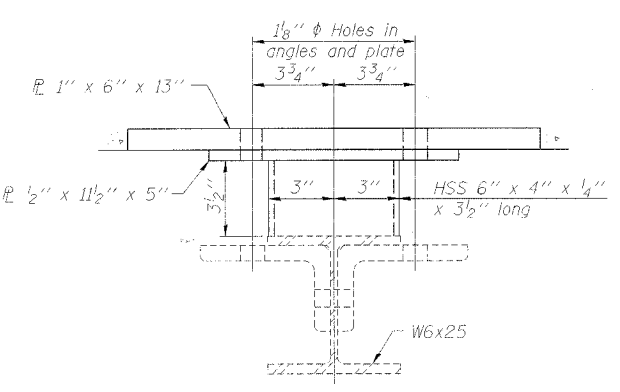
ANCHOR DEVICE

Notes:

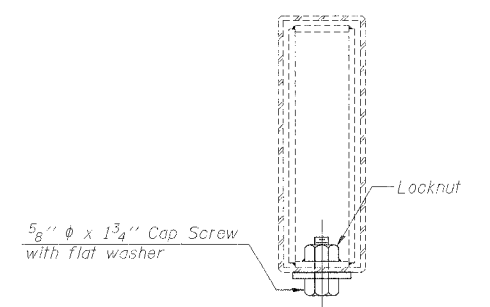
- Rail post, rail & accessories shall be removed from existing beams and re-erected on proposed beams along with new material shown on this Steel Rail, Type S-1 sheet.
- All field drilled holes shall be coated with an approved zinc rich paint before erection.
- For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
- All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
- Threaded areas shall be plugged or blocked off during casting of beam.
- Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".
- 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
Removing & Re-Erecting Existing Rail	Foot	425

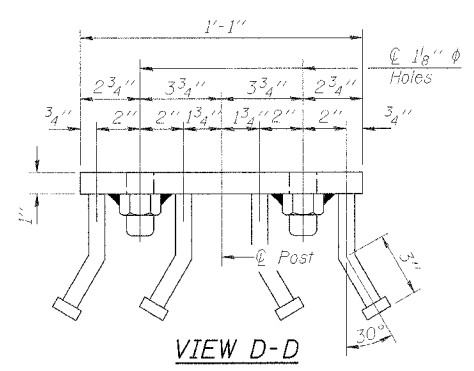


SECTION C-C

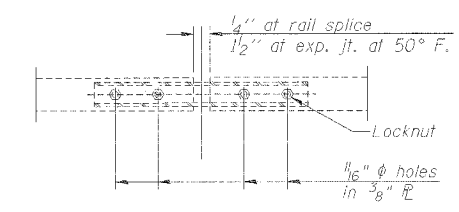


SECTIONS AT RAIL SPLICE

Contractor shall coordinate with rail supplier for number of splices on bridge rail for number of bolts, nuts and washers for replacement.



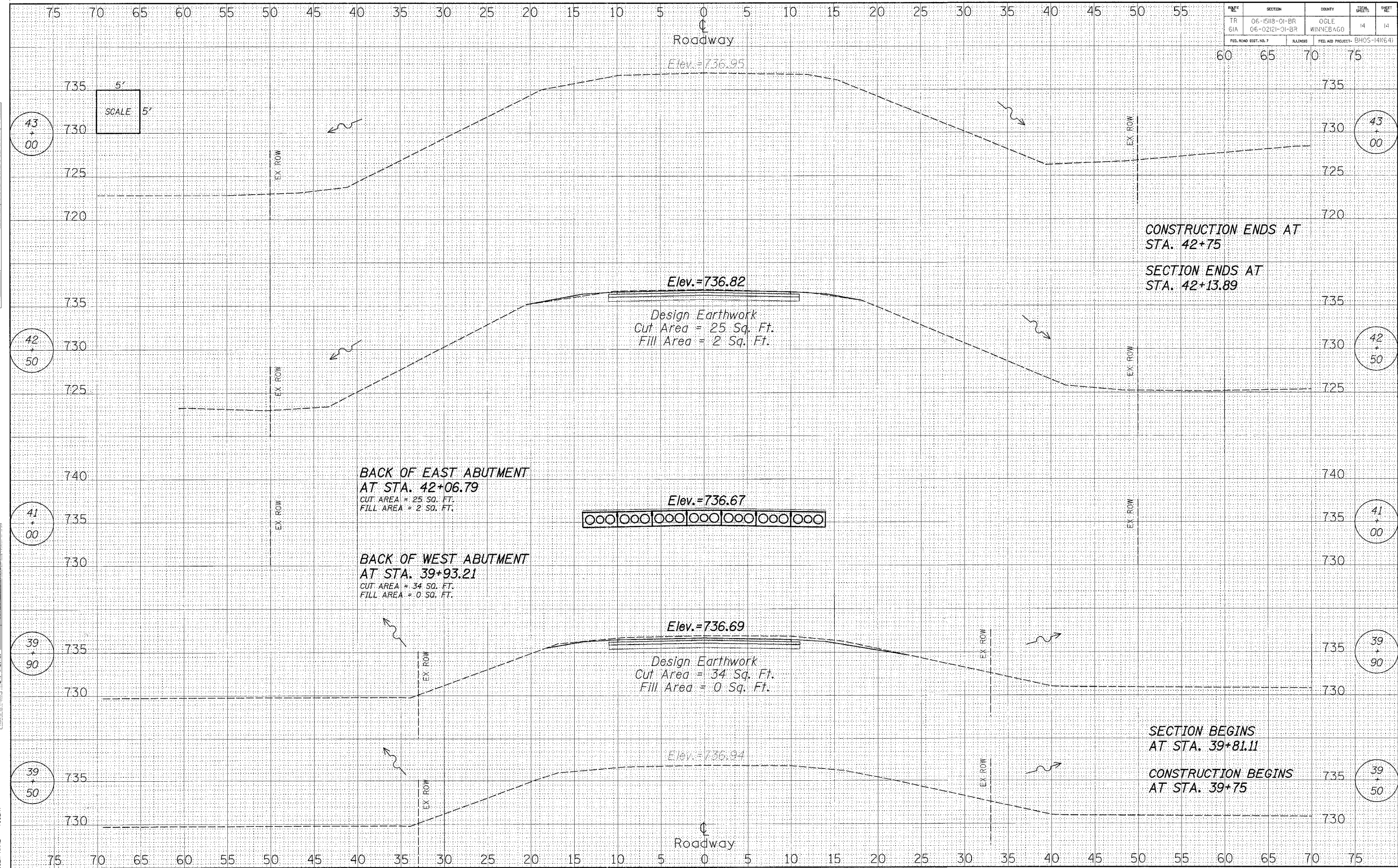
VIEW D-D



PLAN-BOTT. SPLICE P TYPICAL

STEEL RAIL, TYPE S-1
EDSON ROAD (TR 61A) OVER
SOUTH BRANCH KISHWAUKEE RIVER
STA. 41+00 (S.N. 071-3304)
SECTION 06-1518-01-BR
MONROE ROAD DISTRICT
OGLE COUNTY
SECTION 06-02121-01-BR
CHERRY VALLEY ROAD DISTRICT
WINNEBAGO COUNTY
 WHA # 1092D06

PROJECT	SECTION	COUNTY	SHEETS	SHEET
TR 61A	06-15118-01-BR 06-02121-01-BR	OCLE WINNEBAGO	14	14
FED. ROAD DIST. NO. 7	ALLIANCE	FED. AID PROJECT-	EHDOS-141(64)	



DATE: _____
 BY: _____
 SURVEYED: _____
 CHECKED: _____
 FINISHED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS: _____
 AREAS CHECKED: _____

DATE: _____
 BY: _____
 SURVEYED: _____
 CHECKED: _____
 ORIGINAL SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS: _____
 AREAS CHECKED: _____

PLOT DATE = \$DATE\$
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 PLOT SCALE = \$SCALE\$
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