

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**PLANS FOR PROPOSED  
SUPERSTRUCTURE REPLACEMENT  
LOCAL BRIDGE FORMULA PROGRAM**  
TR 37B (3200 N. RD.) OVER UPPER SALT CREEK  
LUDLOW TOWNSHIP  
SECTION 22-14120-00-BR  
PROJECT BKLI(479)  
CHAMPAIGN COUNTY

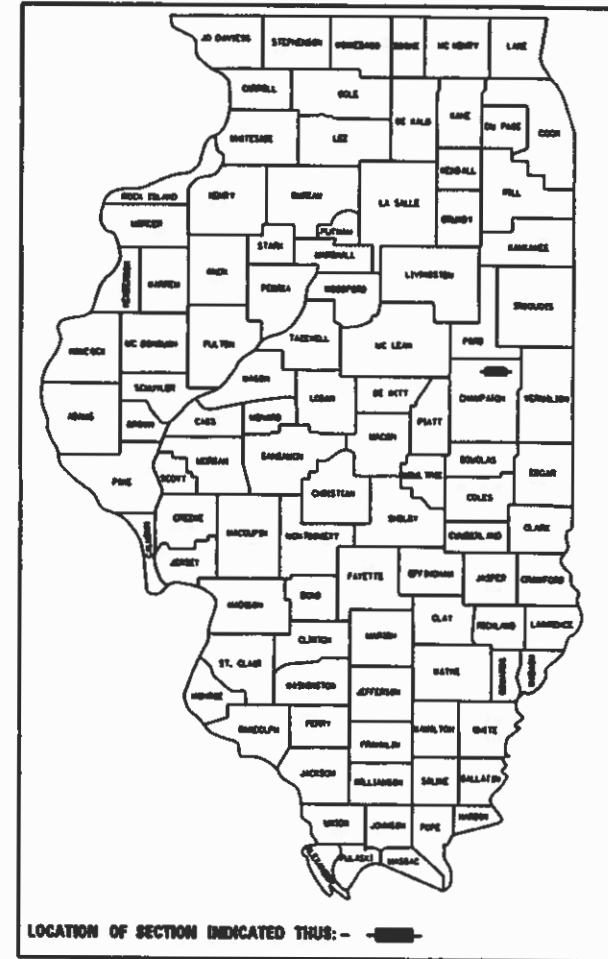
T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	21	1
ILLINOIS FED. AID PROJECT			CONTRACT NO. 91634	
ILLINOIS FED. AID PROJECT			BKLI479	

**INDEX OF SHEETS**

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- 7 TYPICAL SECTIONS
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**STANDARDS (IN PROPOSAL)**

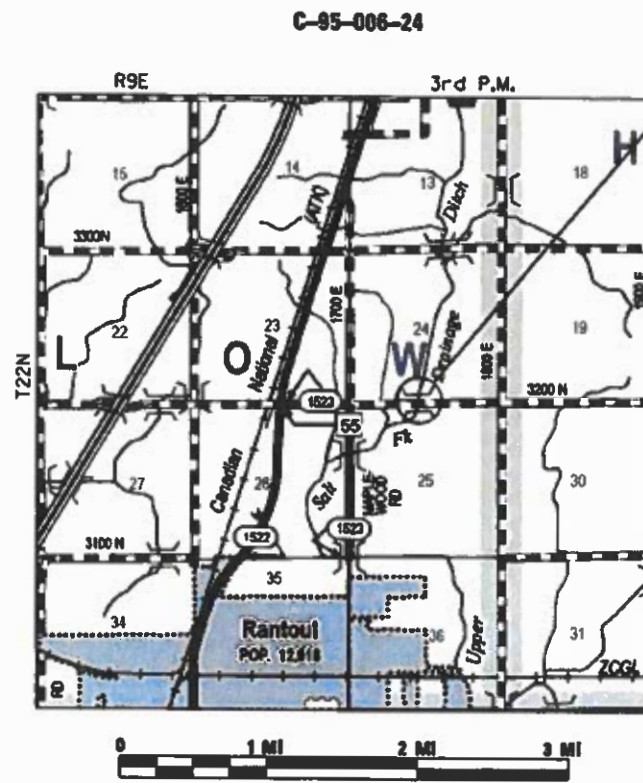
- 000001-08 STANOARO SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 515001-04 NAME PLATE FOR BRIDGES
- 701901-08 TRAFFIC CONTROL DEVICES
- 725001-01 OBJECT AND TERMINAL MARKERS
- 8LR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS



LOCATION OF SECTION INDICATED THUS: —

**FUNCTIONAL CLASSIFICATION - LOCAL ROAD**  
CURRENT ADT = 150  
DESIGN SPEED = 30 MPH  
3R GUIDELINES

APPROVED	<u>3/8</u>	20 <u>23</u>
	COUNTY ENGINEER	
APPROVED		20
PASSED	<u>MARCH 20</u>	20 <u>23</u>
	DISTRICT FIVE ENGINEER OF LOCAL ROADS AND STREETS	
Released For Bid Based on Limited Review	<u>March 20</u>	20 <u>23</u>
	REGION THREE ENGINEER	
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		



**LOCATION MAP**

TOTAL LENGTH = 64.00 FEET (0.013 MI)  
NET LENGTH = 64.00 FEET (0.013 MI)

**UTILITY COMPANIES:**

- EASTERN ILLINI ELECTRIC COOP.  
330 W. OTTAWA  
PO BOX 96  
PAXTON, IL 60957  
PHONE: (217)-379-2131 EXT 173  
CONTACT: BRAD SMITH
- VILLAGE OF RANTOUL  
333 SOUTH TANNER  
RANTOUL, IL 61866  
PHONE: (217)-892-6526  
CONTACT: PUBLIC WORKS DEPARTMENT
- MEDIACOM  
211 E SANGAMON AVE  
RANTOUL, IL 61866  
PHONE: (845)-768-8074  
CONTACT: DANIEL SALEE



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.

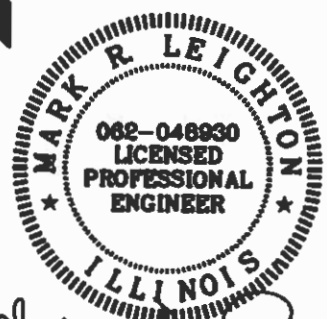
J.U.L.L.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
DR 811

**PROJECT MANAGER: MARK R. LEIGHTON, P.E., P.L.S.**

**CONTRACT NO. 91634**



WORK CONSISTS OF THE REMOVAL OF EXISTING PRECAST CHANNEL BEAMS AND REPLACEMENT WITH PPC DECK BEAMS, SUBSTRUCTURE REHABILITATION, AND THE NECESSARY BACKFILL AND INCIDENTAL APPROACH WORK FOR S.N. 010-4023 AT STA. 10+00.00.



Expires: 11/30/2023 2-22-23

**GENERAL NOTES**

1. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.
2. ELEVATIONS USED THROUGHOUT THIS PLAN SET ARE REFLECTED FROM THE EXISTING BRIDGE PLANS FOR S.N. 010-4023.
3. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF CONTRACT ITEMS INVOLVED.
4. THE FOLLOWING APPLICATION RATES HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:  
 TEMPORARY EROSION CONTROL SEEDING: 100 LB/ACRE  
 AGGREGATE BASE COURSE: 2.05 TONS/CU YD  
 AGGREGATE SURFACE COURSE: 2.05 TONS/CU YD  
 RIPRAP: 1.75 TONS/CU YD
5. THE CONTRACTOR'S OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS. ANY ADDITIONAL STAGING AREAS ADJACENT TO THE PROJECT AREA ARE SUBJECT TO PRIOR APPROVAL BY THE ENGINEER AND MUST NOT CONFLICT WITH EXISTING SIDE ROADS, INTERSECTIONS, DRIVEWAYS, OR DRAINAGE. ALL OPERATIONS SHALL BE SUBJECT TO REGULATORY REQUIREMENTS PERMITTED FOR THIS PROJECT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THE ABOVE REQUIREMENTS.
6. DISTURBED AREAS SHALL RECEIVE PERMANENT STABILIZATION WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION ACTIVITIES. TEMPORARY STABILIZATION OF WORK AREAS IS REQUIRED FOR ALL AREAS REMAINING UNDISTURBED FOR 14 DAYS, UNLESS WORK RESUMES PRIOR TO 21 DAYS. TEMPORARY STABILIZATION MUST BE APPROVED BY THE ENGINEER.
7. THE CONTRACTOR SHALL RELOCATE OR REMOVE AND REPLACE ALL SIGNS THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS AND TEMPORARILY RESET ALL SUCH SIGNS DURING ALL STAGES OF CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL DETERMINE THE PERMANENT LOCATION FOR EXISTING SIGNS TO BE RE-ERECTED.
8. CONTRACTOR SHALL FOLLOW CONSTRUCTION REQUIREMENTS OF SECTION 611 WHEN EXISTING FIELD TILE IS ENCOUNTERED. ALL FIELD TILES ENCOUNTERED SHALL BE CAREFULLY PRESERVED, REPAIRED AND CONNECTED TO THE PROPOSED DRAINAGE STRUCTURES, SEWERS OR DITCHES AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE VARIOUS DRAINAGE ITEMS OR AS DIRECTED BY THE ENGINEER.
9. THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. UNLESS ELEVATIONS ARE SHOWN. ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTH SUPPLIED BY THE UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.
10. EMBANKMENTS ON HILLSIDES OR SLOPES SHALL BE CONSTRUCTED ACCORDING TO ARTICLE 205.03.
11. CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO STARTING ANY OTHER CONSTRUCTION WORK AT SITE.
12. CONTRACTOR SHALL VERIFY THE LENGTH OF REQUIRED PIPE CULVERTS AND PIPE DRAINS PRIOR TO ORDERING.
13. WHERE PERMANENT SURVEY MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE DISTURBED. THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER AND AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THE LOCATION.

**GENERAL NOTES**

14. THE CONTRACTOR SHALL USE CARE IN ALL REMOVAL ACTIVITIES NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
15. A UNIFORMLY STRAIGHT SAW CUT SHALL BE MADE AT LOCATIONS WHERE PROPOSED CONTROLLED LOW-STRENGTH MATERIAL LIMITS MEET THE EXISTING OIL & CHIP SURFACES. THE SAW CUT SHALL BE MADE FULL DEPTH THROUGH THE EXISTING SURFACE. THIS WORK WILL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT ITEMS INVOLVED AND NO EXTRA COMPENSATION WILL BE ALLOWED.

**COMMITMENTS**

1. THERE ARE NO COMMITMENTS ON THIS PROJECT.

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design firm  
 no. 184001036  
  
 engineers • planners • land surveyors

USER NAME = bjohanson	DESIGNED - BJJ	REVISED -
	DRAWN - GSJ	REVISED -
PLOT SCALE = 1200.0000' / ft.	CHECKED - CWC	REVISED -
PLOT DATE = 2/22/2023	DATE - 2/22/2023	REVISED -

**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

**GENERAL NOTES AND COMMITMENTS  
TR 37B OVER UPPER SALT CREEK**

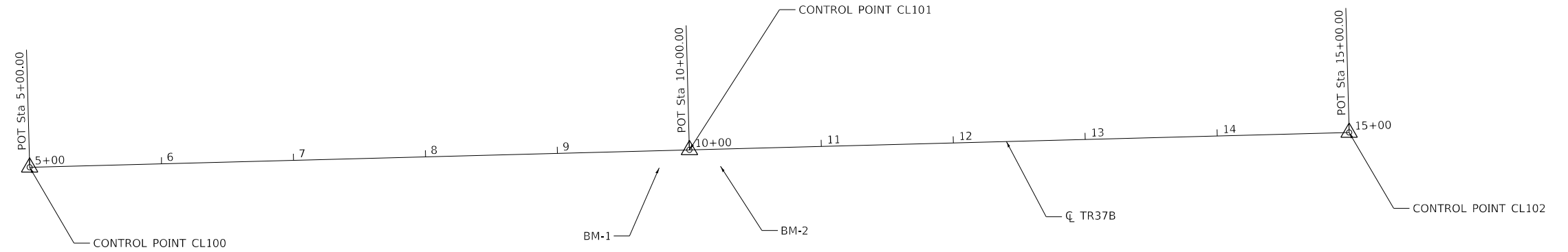
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T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	20	2
CONTRACT NO. 91634				
			ILLINOIS	FED. AID PROJECT

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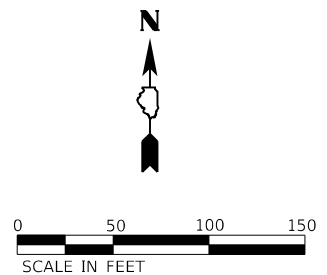
Beginning chain TR37B description
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Point CL100      N  1,338,365.897 E  1,041,023.182 Sta   5+00.00
Course from CL100 to CL101 N 88° 29' 14.3" E Dist 500.000
Point CL101      N  1,338,379.096 E  1,041,523.008 Sta  10+00.00
Course from CL101 to CL102 N 88° 29' 14.3" E Dist 500.000
Point CL102      N  1,338,392.295 E  1,042,022.834 Sta  15+00.00
=====
Ending chain TR37B description

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BM 1  
 STA 9+76.75, 13.00' RT  
 TOP OF CONCRETE WEST ABUTMENT WINGWALL  
 ELEVATION = 98.08

BM 2  
 STA 10+23.25, 13.00' RT  
 TOP OF CONCRETE EAST ABUTMENT WINGWALL  
 ELEVATION = 98.46



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PLOT DATE = 2/22/2023	CHECKED - CWC	REVISED -
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**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

<b>ALIGNMENT, TIES AND BENCHMARKS TR 37B OVER UPPER SALT CREEK</b>			
SCALE: 1" = 50'	SHEET 1	OF 1	SHEETS
STA.	TO STA.		

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	20	3
CONTRACT NO. 91634				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				BRIDGE
				0013
				S.N. 010-4023
20200100	EARTH EXCAVATION	CU YD	8	8
20300100	CHANNEL EXCAVATION	CU YD	8	8
28100107	STONE RIPRAP, CLASS A4	SQ YD	53	53
28200200	FILTER FABRIC	SQ YD	53	53
35101400	AGGREGATE BASE COURSE, TYPE B	TON	18	18
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	1
50102400	CONCRETE REMOVAL	CU YD	0.2	0.2
50200100	STRUCTURE EXCAVATION	CU YD	18.6	18.6
50300225	CONCRETE STRUCTURES	CU YD	8.6	8.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	3.1	3.1
50400205	PRECAST PRESTRESSED CONCRETE DECK BEAMS (11" DEPTH)	SQ FT	1238	1238
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1060	1060
* 50900305	STEEL RAILING, TYPE T1	FOOT	96	96
51500100	NAME PLATES	EACH	1	1

\*SPECIALTY ITEMS

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PLOT DATE = 2/22/2023	CHECKED - CWC	REVISED -
	DATE - 2/22/2023	REVISED -

**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

**SUMMARY OF QUANTITIES  
TR 37B OVER UPPER SALT CREEK**

SCALE: 1" = 50' SHEET 1 OF 2 SHEETS STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	20	4
			CONTRACT NO. 91634	
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				BRIDGE
				0013
				S.N. 010-4023
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	39.6	39.6
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	2	2
60103400	PIPE DRAINS, CORRUGATED STEEL 10"	FOOT	20	20
60103700	PIPE DRAINS, CORRUGATED STEEL 18"	FOOT	20	20
67100100	MOBILIZATION	L SUM	1	1
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.25	0.25
* X5060601	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1
X6110073	EXISTING FIELD TILE REMOVAL	FOOT	40	40
X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1
* Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1

\* SPECIALTY ITEMS

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	DATE - 2/22/2023	REVISED -

CHAMPAIGN COUNTY HIGHWAY DEPARTMENT

SUMMARY OF QUANTITIES  
TR 37B OVER UPPER SALT CREEK

SCALE: 1" = 50' SHEET 2 OF 2 SHEETS STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	20	5
			CONTRACT NO. 91634	
		ILLINOIS	FED. AID PROJECT	

LOCATION	20200100	20300100	FOR INFORMATION ONLY		EARTHWORK BALANCE WASTE(+) AND SHORTAGE (-)
	EARTH EXCAVATION	CHANNEL EXCAVATION	EXCAVATION TO BE USED IN EMBANKMENT (ADJUSTED FOR SHRINKAGE) (EXC. x 0.75)	EMBANKMENT (FILL)	
	CU. YD.	CU. YD.	CU. YD.	CU. YD.	
STA. 9+68.00 TO STA. 9+75.50	4		3	5	-2
STA. 9+75.50 TO STA. 10+24.50		8	* 3		3
STA. 10+24.50 TO STA. 10+32.00	4		3	4	-1
TOTAL	8	8	9	9	0

EARTH EXCAVATION SHRINKAGE FACTOR = 25%

\*CHANNEL EXCAVATION USED IN EMBANKMENT= 50%

35101400 AGGREGATE BASE COURSE, TYPE B

TR 37B	TON
CL 9+68.00 TO CL 9+76.17	9
CL 10+23.8 TO CL 10+32.00	9
TOTAL	18

60103700 PIPE DRAINS, CORRUGATED STEEL 18"

TR 37B	FOOT
TOTAL	20

X7011800 TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21

TR 37B	L SUM
TOTAL	1

67100100 MOBILIZATION

TR 37B	L SUM
TOTAL	1

60100060 CONCRETE HEADWALLS FOR PIPE DRAINS

TR 37B	EACH
TOTAL	2

X2501000 SEEDING, CLASS 2 (SPECIAL)

TR 37B	ACRE
LT 9+68.00 TO LT 9+76.17	0.03
LT 10+23.8 TO LT 10+32.00	0.03
RT 9+68.00 TO RT 9+76.17	0.03
RT 10+23.8 TO RT 10+32.00	0.03
* TOTAL PER MIN. DEGREE OF ACCURACY	TOTAL 0.25

60103400 PIPE DRAINS, CORRUGATED STEEL 10"

TR 37B	FOOT
TOTAL	20

X6110073 EXISTING FIELD TILE REMOVAL

TR 37B	FOOT
TOTAL	40

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design firm  
no. 184001036



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	DRAWN - GSJ	REVISED -
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CHAMPAIGN COUNTY HIGHWAY DEPARTMENT

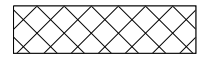
SCHEDULE OF QUANTITIES  
TR 37B OVER UPPER SALT CREEK

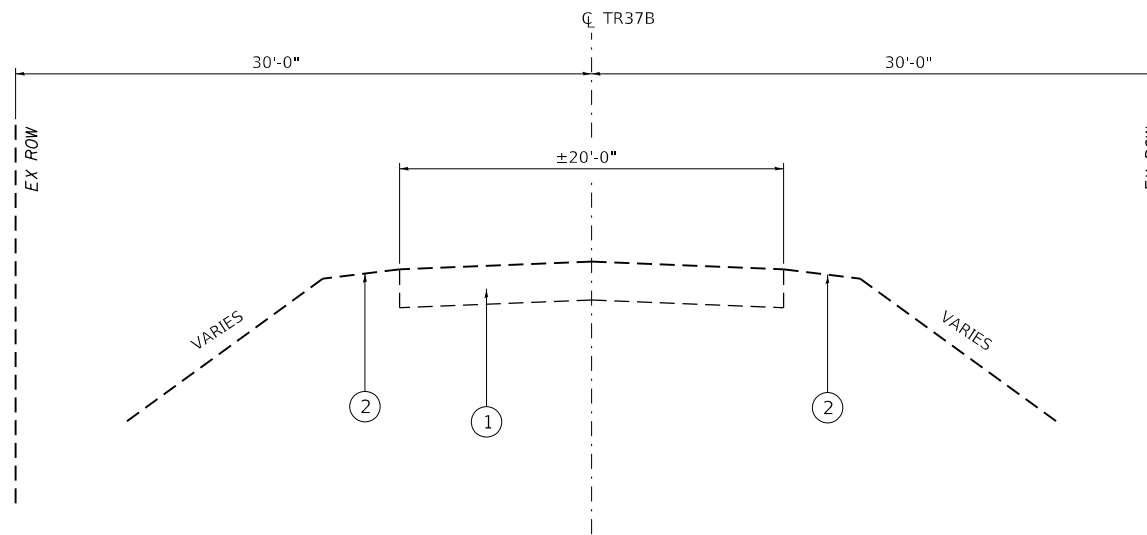
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37B	22-14120-00-BR	CHAMPAIGN	20	6
			CONTRACT NO. 91634	
			ILLINOIS FED. AID PROJECT	

**LEGEND**

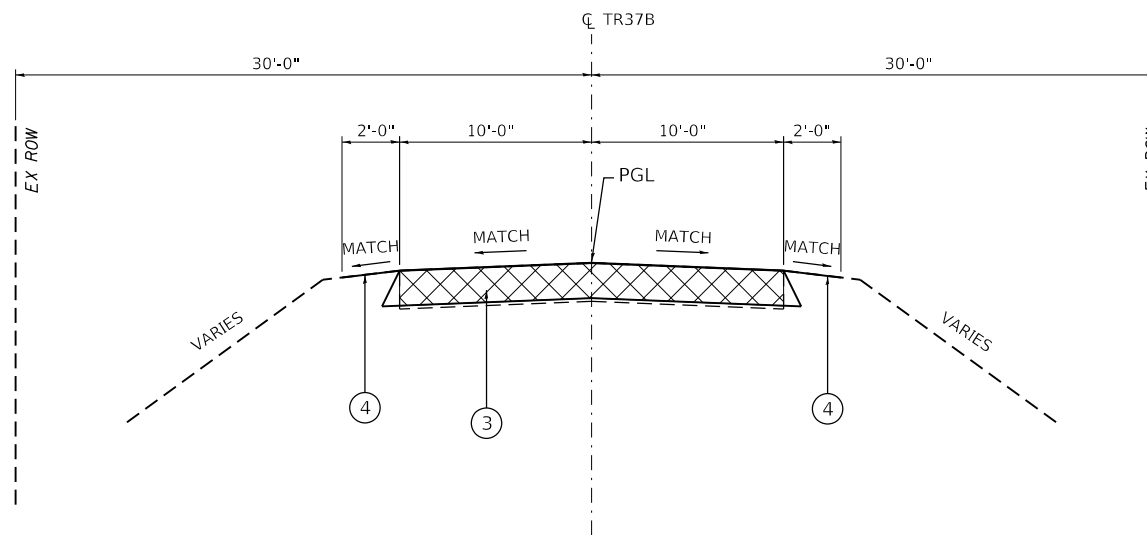
- ① EX OIL AND CHIP
- ② EX EARTH SHOULDER
- ③ PR AGGREGATE BASE COURSE, TYP B (8")
- ④ PR EARTH SHOULDERS

 TO BE REMOVED



**EXISTING TYPICAL SECTION**

STA. 9+68.00 TO STA. 9+75.50  
 BRIDGE OMISSION STA. 9+75.50 TO 10+24.50  
 STA. 10+24.50 TO STA. 10+32.00  
 (LOOKING EAST)



**PROPOSED TYPICAL SECTION**

STA. 9+68.00 TO STA. 9+75.50  
 BRIDGE OMISSION STA. 9+75.50 TO 10+24.50  
 STA. 10+24.50 TO STA. 10+32.00  
 (LOOKING EAST)

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**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

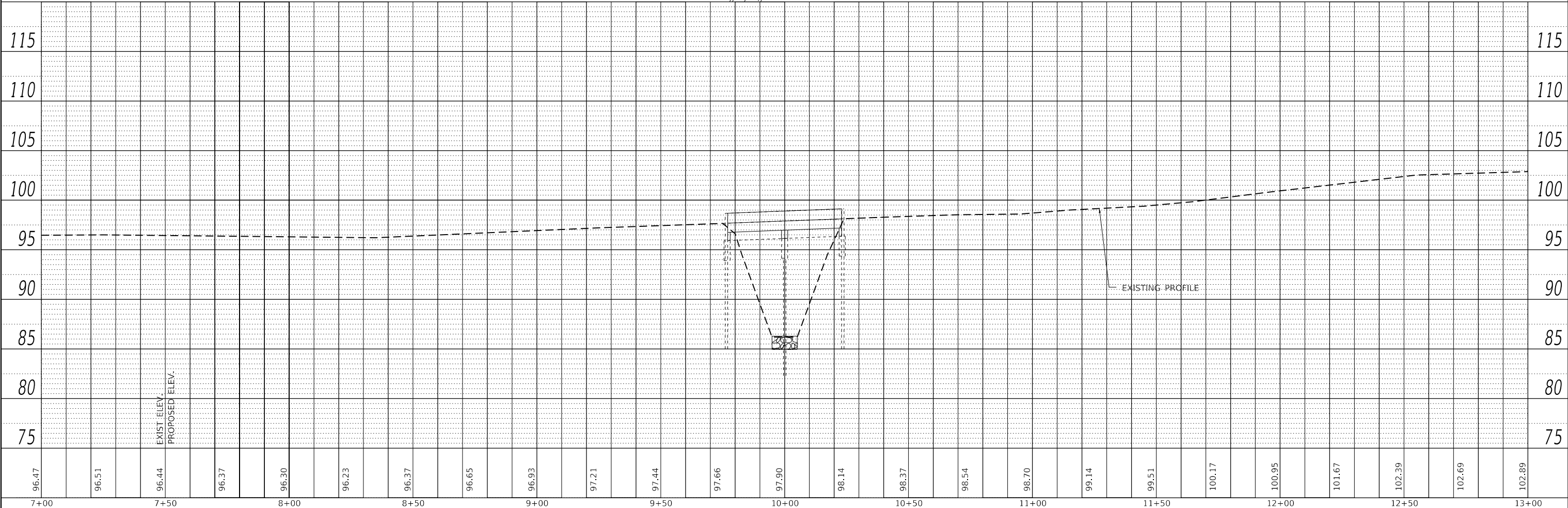
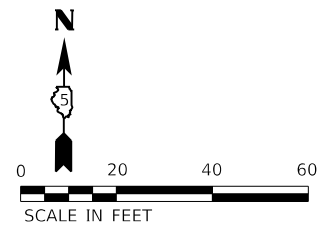
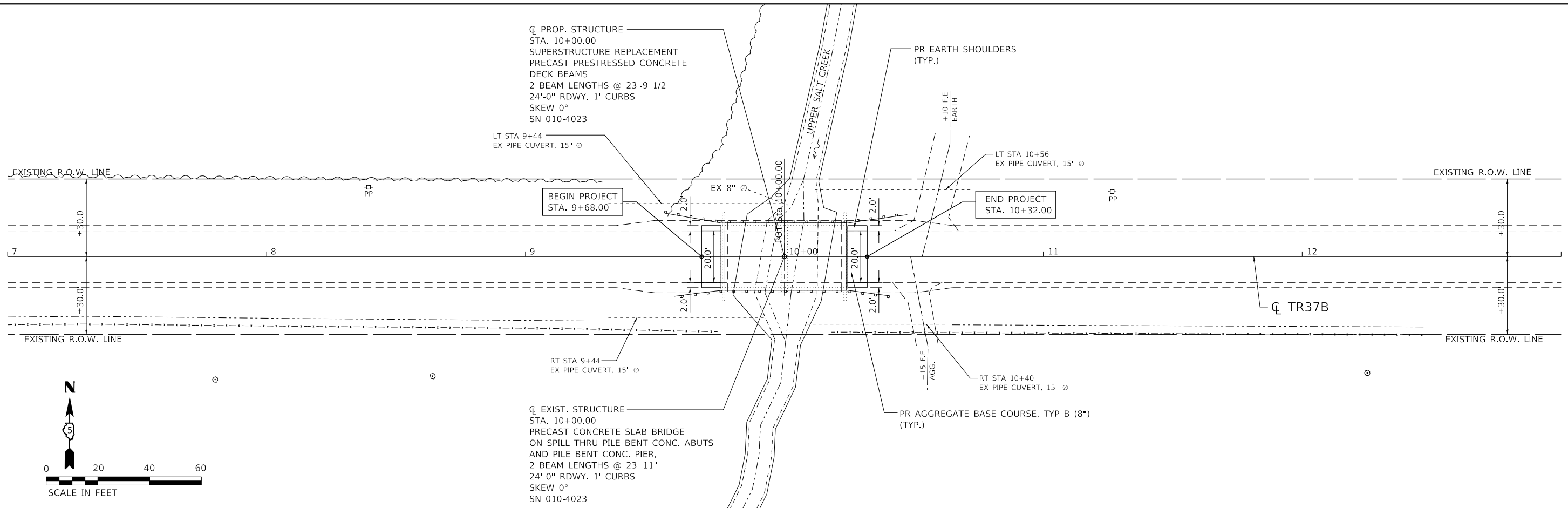
<b>TYPICAL SECTIONS</b>			
<b>TR 37B OVER UPPER SALT CREEK</b>			
SCALE: 1" = 10'	SHEET 1	OF 1 SHEETS	STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	20	7
CONTRACT NO. 91634				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	CHECKED
	NOTE BOOK	NO.
	CAD FILE NAME	

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

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7+00	7+50	8+00	8+50	9+00	9+50	10+00	10+50	11+00	11+50	12+00	12+50	13+00												
96.47	96.51	96.44	96.37	96.30	96.23	96.37	96.65	96.93	97.21	97.44	97.66	97.90	98.14	98.37	98.54	98.70	99.14	99.51	100.17	100.95	101.67	102.39	102.69	102.89

design firm  
no. 184001036

engineers + planners + land surveyors

USER NAME = bjohnson	DESIGNED - BJJ	REVISED -
PLOT SCALE = 480,0000' / ft.	DRAWN - GSJ	REVISED -
PLOT DATE = 2/22/2023	CHECKED - CWC	REVISED -
	DATE - 2/22/2023	REVISED -

**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

**PLAN AND PROFILE**  
**TR 37B OVER UPPER SALT CREEK**

SCALE: 1" = 20'    SHEET 1 OF 1 SHEETS    STA.    TO STA.

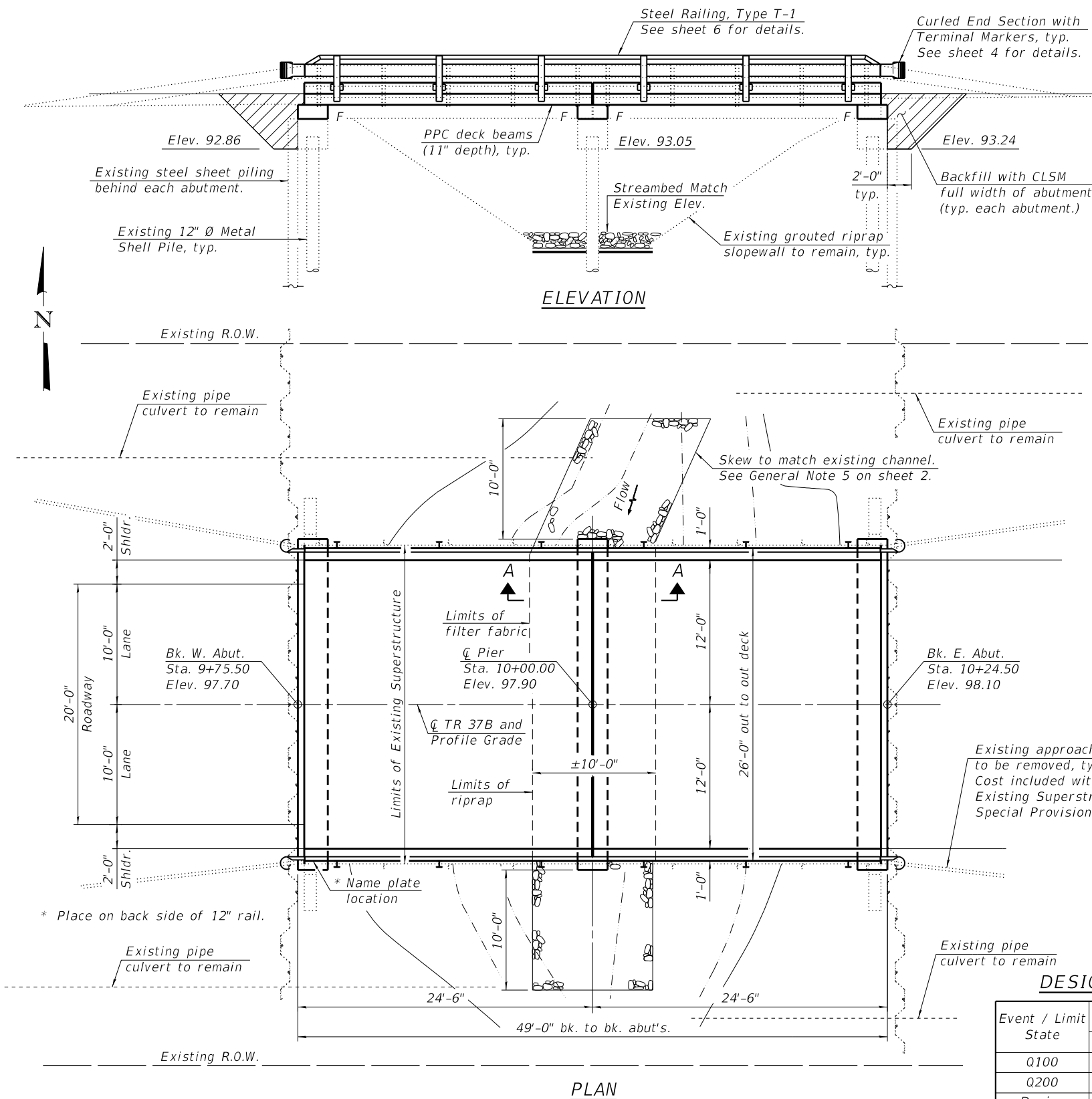
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37B	22-14120-00-BR	CHAMPAIGN	20	8
CONTRACT NO. 91634				
ILLINOIS		FED. AID PROJECT		



Benchmark: BM1, Sta. 9+76.75, 13.00' Rt. Top of concrete west abutment wingwall. Elevation = 98.08

Existing Structure: SN 010-4023 was built in 1973 as Section CAB 11-73, Station 10+00. The structure is a two span precast channel beam bridge on a pile bent pier and pile bent abutments. The bridge is 49'-0" back-to-back of abutments with an out-to-out bridge width of 26'-0". The superstructure is to be removed and replaced. Road is to be closed and traffic detoured during construction.

Salvage: None



**SCOPE OF WORK**

1. Remove and replace existing superstructure with six (6) new 11" x 52" Precast Prestressed Concrete (PPC) Deck Beams.
2. Add new reinforced concrete curbs with Type T1 steel railing.
3. Existing abutment and pier caps to be raised with full width and length reinforced concrete cap extensions.
4. Modify wingwalls to accommodate new superstructure.
5. Four (4) piles at the pier will be cleaned and painted.
6. Streambed around the pier to be armored with stone riprap.

**INDEX OF SHEETS**

1. General Plan and Elevation
2. General Data
3. 11" x 52" PPC Deck Beam Details
- 4.-5. Superstructure Details
6. Steel Railing, Type T-1
7. Substructure Details
- 8.-13. Existing Plans (for information only)

**Notes:**

1. See roadway plans for additional information not shown herein.
2. See sheet 2 for Existing Profile Grade and Section A-A.

**DESIGN SPECIFICATIONS (New Const.)**

2020 AASHTO LRFD Bridge Design Specifications  
9th Edition

**LOADING HL-93 (New Const.)**

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

**DESIGN STRESSES**

**FIELD UNITS (New Construction)**

f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)

**FIELD UNITS (Existing)**

f'c = 1,400 psi  
fs = 20,000 psi (Reinforcement)

**PRECAST UNITS (New Construction)**

f'c = 6,000 psi  
f'ci = 5,000 psi  
f'pu = 270,000 psi (1/2" low lax strands)  
f'pbt = 201,960 psi (1/2" low lax strands)

**SEISMIC DATA (Exist Const.)**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. (S<sub>01</sub>) = 0.089g  
Design Spectral Acceleration at 1.0 sec. (S<sub>05</sub>) = 0.158g  
Soil Site Class = C

UPPER SALT CREEK  
RE-BUILT 20 BY  
CHAMPAIGN COUNTY  
SEC. 22-14120-00-BR  
TR 37B STA. 10+00  
STR. NO. 010-4023 LOADING HL93

**NAME PLATE**

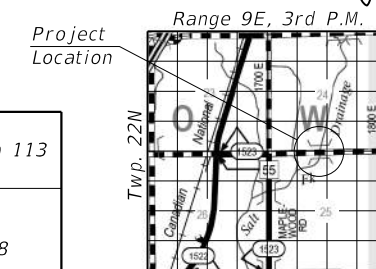
See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



**DESIGN SCOUR ELEVATION TABLE**

Event / Limit State	Design Scour Elev. (ft.)			Item 113
	W. Abut.	Pier	E. Abut.	
Q100	-	83.0	-	8
Q200	-	82.9	-	
Design	92.8	83.0	93.2	
Check	92.8	82.9	93.2	



LOCATION SKETCH

**GENERAL PLAN AND ELEVATION**  
**TR 37B OVER UPPER SALT CREEK**  
**SECTION 22-14120-00-BR**  
**CHAMPAIGN COUNTY**  
**STATION 10+00.00**  
**STRUCTURE NO. 010-4023**

FILE NAME: C:\SP\WHKS & CO\Jobs-Spring - Projects\Champaign County\9494 Champaign Co. TR37B over Upper Salt Creek\CADD\CAD\_Sheets\SN\_010-4023.dgn



USER NAME =	SUSERS	DESIGNED -	GEM	REVISED -	
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**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

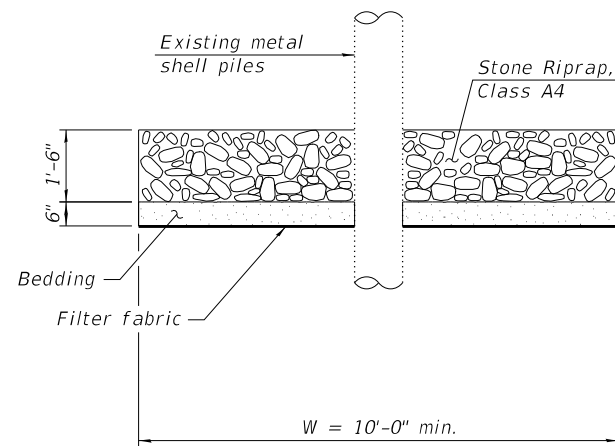
**STRUCTURE NO. 010-4023**

SHEET 1 OF 13 SHEETS

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	21	9
CONTRACT NO. 91634				
ILLINOIS		FED. AID PROJECT		

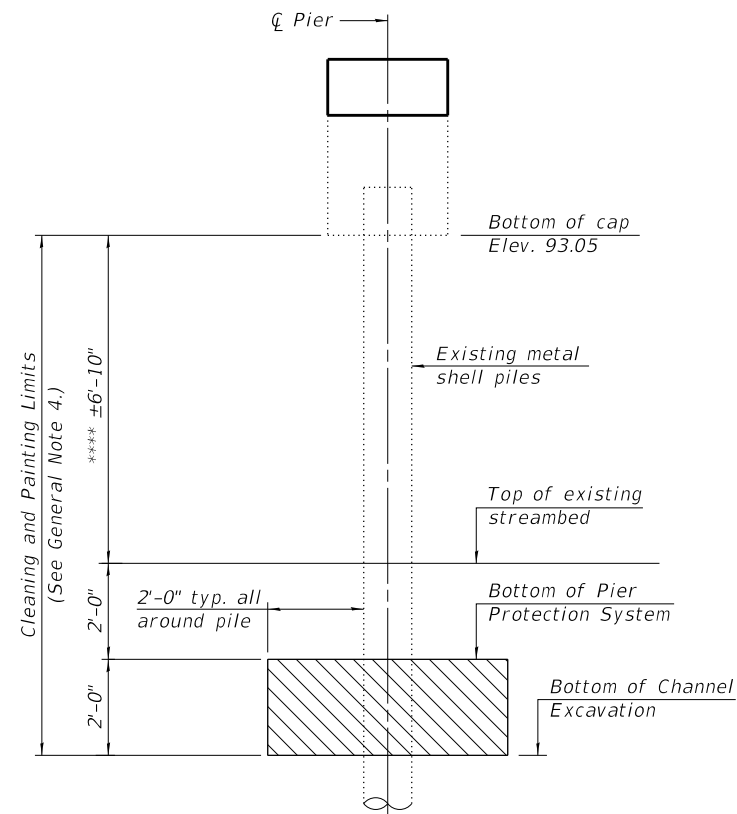
**GENERAL NOTES**

- Reinforcement bars designated (E) shall be epoxy coated.
- Plan dimensions and details relative to existing plans are subject to nominal construction 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 at the unit price bid for the work.
- Elevations shown herein have been taken from the existing plans and are subject to field verification and adjustment during construction.
- Cleaning and painting of the existing metal shell piles shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures except where otherwise noted herein. Piles shall be painted to the limits defined herein and according to the requirements of Paint System 2 - PS/EM/U or System 4 - PS/EM/AC. Surface preparation shall be accomplished by Commercial Grade Power Tool Cleaning according to the requirements of SSPC-SP15. The color of the final finish coat shall be Gray, Munsell No. 5B 7/1.  
The bridge owner has the option to omit the top finish coat. If this is desired, the intermediate aluminum epoxy mastic coat shall no longer be a spot coat but a full coat.
- Layout of the Pier Protection System may be varied in the field to suit ground conditions as directed by the Engineer. Minimum width of riprap shall be 10'-0". Thickness of riprap and bedding shall be as detailed herein.
- The Contractor shall be responsible for diverting the water flow from the construction area using a method meeting the approval of the Engineer. This shall not be paid for separately but shall be included in the cost of the Contract.



**SECTION A-A**  
(Showing Pier Protection System)

Item	Unit	Super	Sub	Total
Channel Excavation	Cu. Yd.	-	8	8
Stone Riprap, Class A4	Sq. Yd.	-	53	53
Filter Fabric	Sq. Yd.	-	53	53
Removal of Existing Superstructures	Each	1	-	1
Concrete Removal	Cu. Yd.	-	0.2	0.2
Structure Excavation	Cu. Yd.	-	18.6	18.6
Concrete Structures	Cu. Yd.	-	8.6	8.6
Concrete Superstructure	Cu. Yd.	3.1	-	3.1
Precast Prestressed Concrete Deck Beams (11" Depth)	Sq. Ft.	1,238	-	1,238
Reinforcement Bars, Epoxy Coated	Pound	150	910	1,060
Steel Railing, Type T1	Foot	96	-	96
Name Plates	Each	1	-	1
Controlled Low-Strength Material	Cu. Yd.	-	39.6	39.6
Terminal Marker - Direct Applied	Each	4	-	4
Cleaning and Painting Steel Bridge No. 1	L. Sum	-	1	1
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 1	L. Sum	-	1	1



**CORROSION PROTECTION DETAIL**

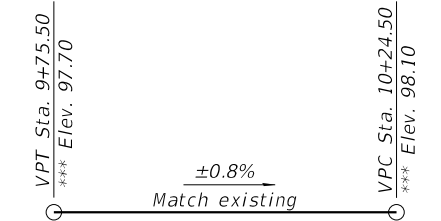
(Required 4 - 12" Ø piles)

\*\*\*\* Estimated limits of exposed metal shell piles. Contractor to field verify prior to commencing work.

**LEGEND**

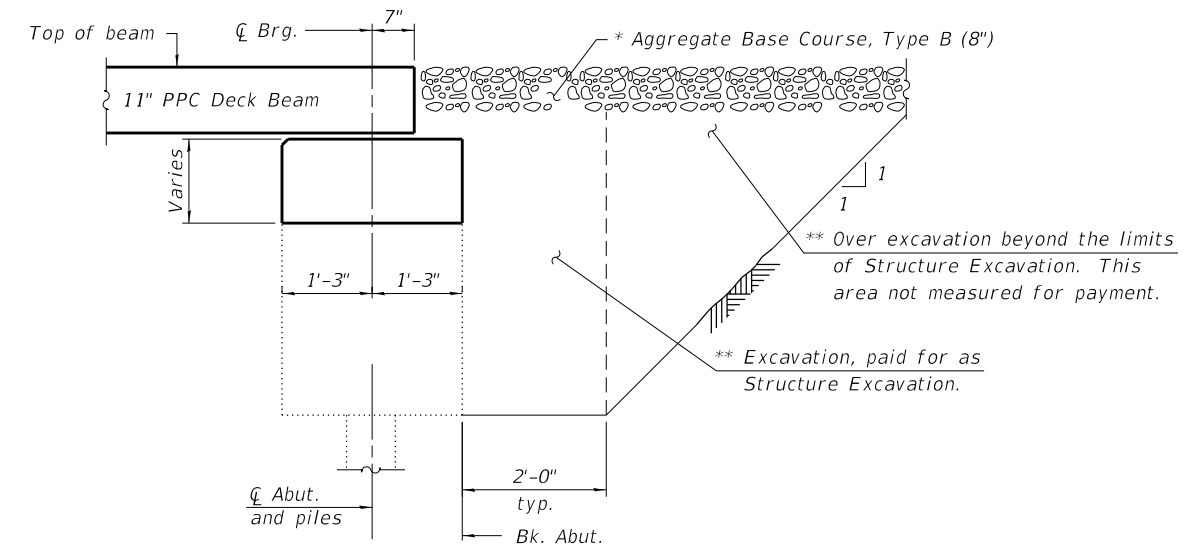
Limits of Channel Excavation

**TOTAL BILL OF MATERIAL**



**PROPOSED PROFILE GRADE**  
(Along C TR 37B)

\*\*\* Elevations were taken from existing plans and adjusted for a 4" wearing surface thickness measured in the field by WHKS & Co. in March 2022. (See General Note 3)



**SECTION AT ABUTMENT**

\* See Roadway Plans

\*\* Backfill with Controlled Low-Strength Material (CLSM) (Mix 2) full width of abutment cap only, typ. each abutment.

FILE NAME: C:\SP\WHKS & CO\Jobs-Spring - Projects\Champaign County\9494 Champaign Co. TR37B over Upper Salt.CX\CADD\CAD\_Sheets\SN\_010-4023.dgn



design firm no. 184001036	USER NAME = bjohnson	DESIGNED - GEM	REVISED -
		CHECKED - SBC	REVISED -
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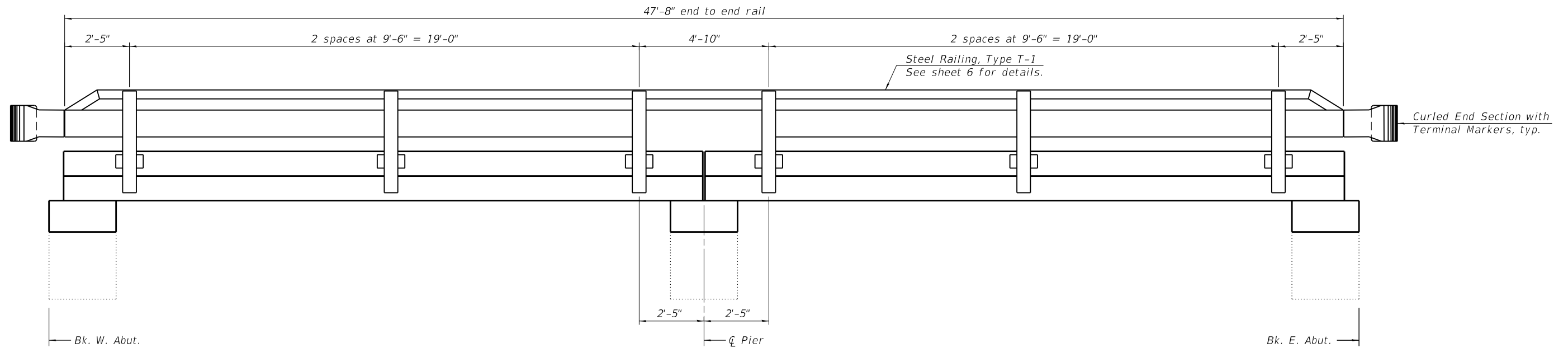
**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

**GENERAL DATA**  
**STRUCTURE NO. 010-4023**

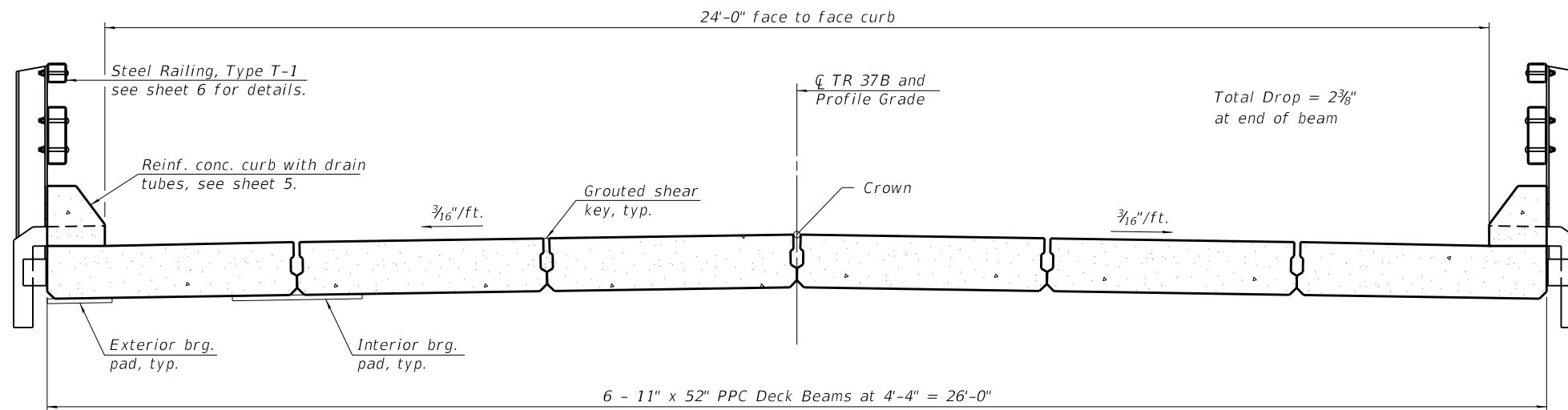
SHEET 2 OF 13 SHEETS

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 91634				
ILLINOIS		FED. AID PROJECT		

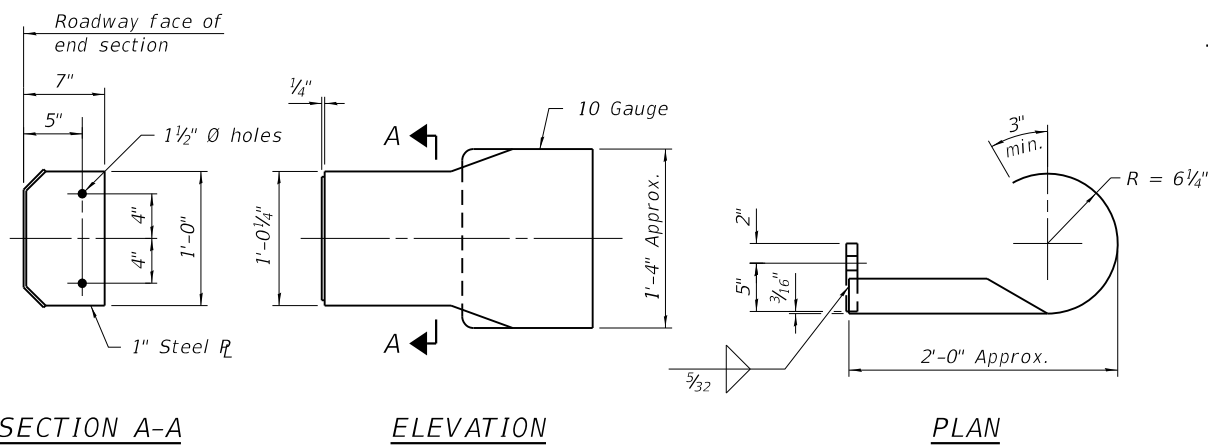




**RAIL POST SPACING**  
(Looking at South face. North face similar.)

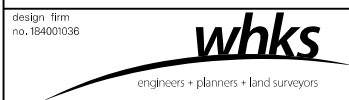


**CROSS SECTION**  
(Looking East)



**DETAILS OF CURLED END SECTION**  
(Cost included with Steel Railing, Type T-1.)

FILE NAME: C:\SP\WHKS & COL\Jobs-Spring - Projects\Champaign County\9494 Champaign Co. TR37B over Upper Salt Creek\DD\CAD\_Sheets\SN\_010-4023.dgn



design firm no. 184001036	USER NAME = dheberling	DESIGNED - GEM	REVISED -
		CHECKED - SBC	REVISED -
	PLOT DATE = 2/23/2023	DRAWN - DLH	REVISED -
	PLOT DATE = 7:36:44 AM	CHECKED - GEM/SBC	REVISED -

**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

**SUPERSTRUCTURE DETAILS**  
**STRUCTURE NO. 010-4023**

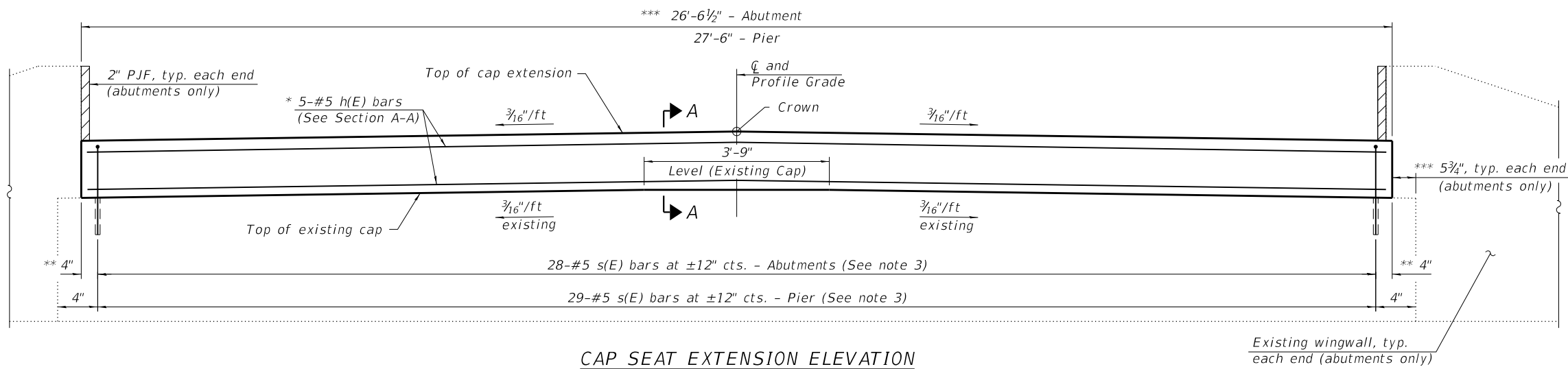
SHEET 4 OF 13 SHEETS

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 91634				

ILLINOIS FED. AID PROJECT







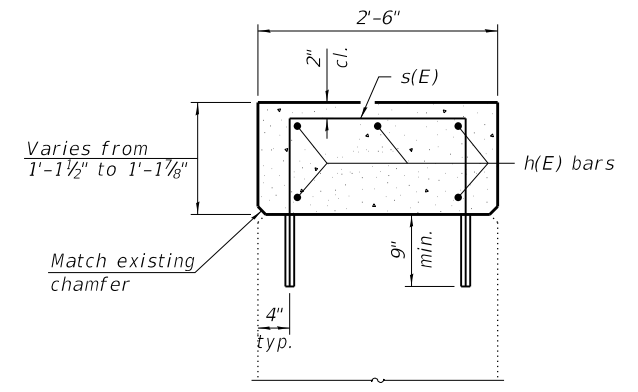
**CAP SEAT EXTENSION ELEVATION**

(Abutment shown. Pier similar, except as noted.)

\* Cut h(E) bars in field to fit, as required. (abutments only)

\*\* See Detail 1

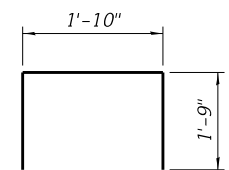
\*\*\* Dimensions are estimated. To be finalized in the field by the Contractor to facilitate superstructure installation. (See Detail 2)



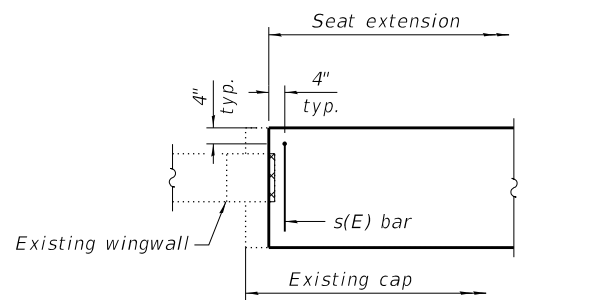
**SECTION A-A**

**LEGEND**

Limits of Concrete Removal



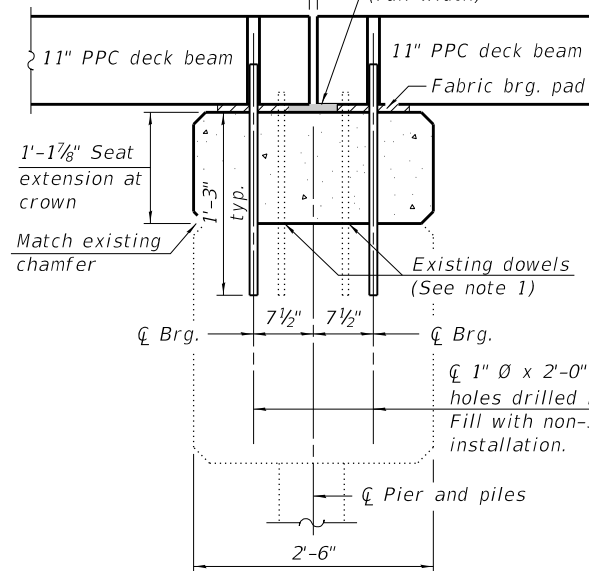
**BAR s(E)**



**DETAIL 1**

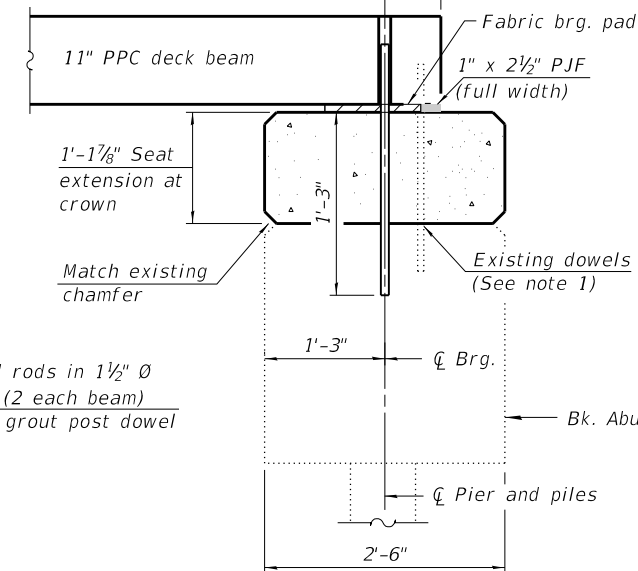
(Showing s(E) bar location at abutment ends.)

1" Joint shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam length.

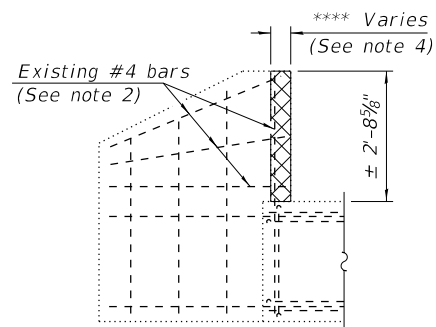


**SECTION THRU PIER**

Cl 1" Ø x 2'-0" Dowel rods in 1 1/2" Ø holes drilled in cap (2 each beam) Fill with non-shrink grout post dowel installation.



**SECTION THRU ABUTMENT**



**DETAIL 2**

(Showing wingwall concrete removal limits.)

\*\*\*\* Dimension to be determined in the field by the Contractor to facilitate superstructure installation. Estimated removal = ±1 1/2".

**BILL OF MATERIAL**

(1 Abutment)

Bar	No.	Size	Length	Shape
h(E)	5	#5	27'-2"	—
s(E)	28	#5	5'-4"	□
Concrete Removal			Cu. Yd.	0.1
Concrete Structures			Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated			Pound	300

**BILL OF MATERIAL**

(Pier only)

Bar	No.	Size	Length	Shape
h(E)	5	#5	27'-2"	—
s(E)	29	#5	5'-4"	□
Concrete Structures			Cu. Yd.	3.0
Reinforcement Bars, Epoxy Coated			Pound	310

**Notes:**

- Burn existing dowels flush with top of cap. Grind existing dowels smooth and seal with epoxy. Epoxy used shall be approved by the Engineer. Cost is included with Removal of Existing Superstructure.
- Burn any existing reinforcement extending into the wingwall concrete removal limits flush with the remaining concrete surface. Grind existing reinforcement smooth and seal with epoxy. Epoxy used shall be approved by the Engineer. Cost included with Concrete Removal.
- Drill and grout s(E) bars in accordance with Article 584 of the Standard Specification. Cost included with Reinforcing Bars, Epoxy Coated.
- Removal of the wingwalls shall be completed in a manner such that the removal is the minimum necessary to allow for installation of the new superstructure as detailed herein. The Contractor shall provide sawing equipment adequate in size and horsepower to complete the required full-depth sawing operation. Chipping and/or hydraulic hammers are not allowed along the vertical wingwall removal lines. The resulting vertical surface of the wingwalls after concrete removal operations shall be smooth and plumb.
- The abutment/pier cap seat extension height is estimated based on a 4" wearing surface thickness measured in the field by WHKS & Co. in March 2022. If the wearing surface encountered in the field on the existing bridge is different, contact the Engineer of Record for further disposition. See General Notes 2 and 3 on sheet 2.

FILE NAME: C:\SP\WHKS & CO\Jobs-Spring - Projects\Champaign County\9494 Champaign Co. TR37B over Upper Salt.CK\CADD\CAD\_Sheets\SN\_010-4023.dgn



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**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

**SUBSTRUCTURE DETAILS  
STRUCTURE NO. 010-4023**

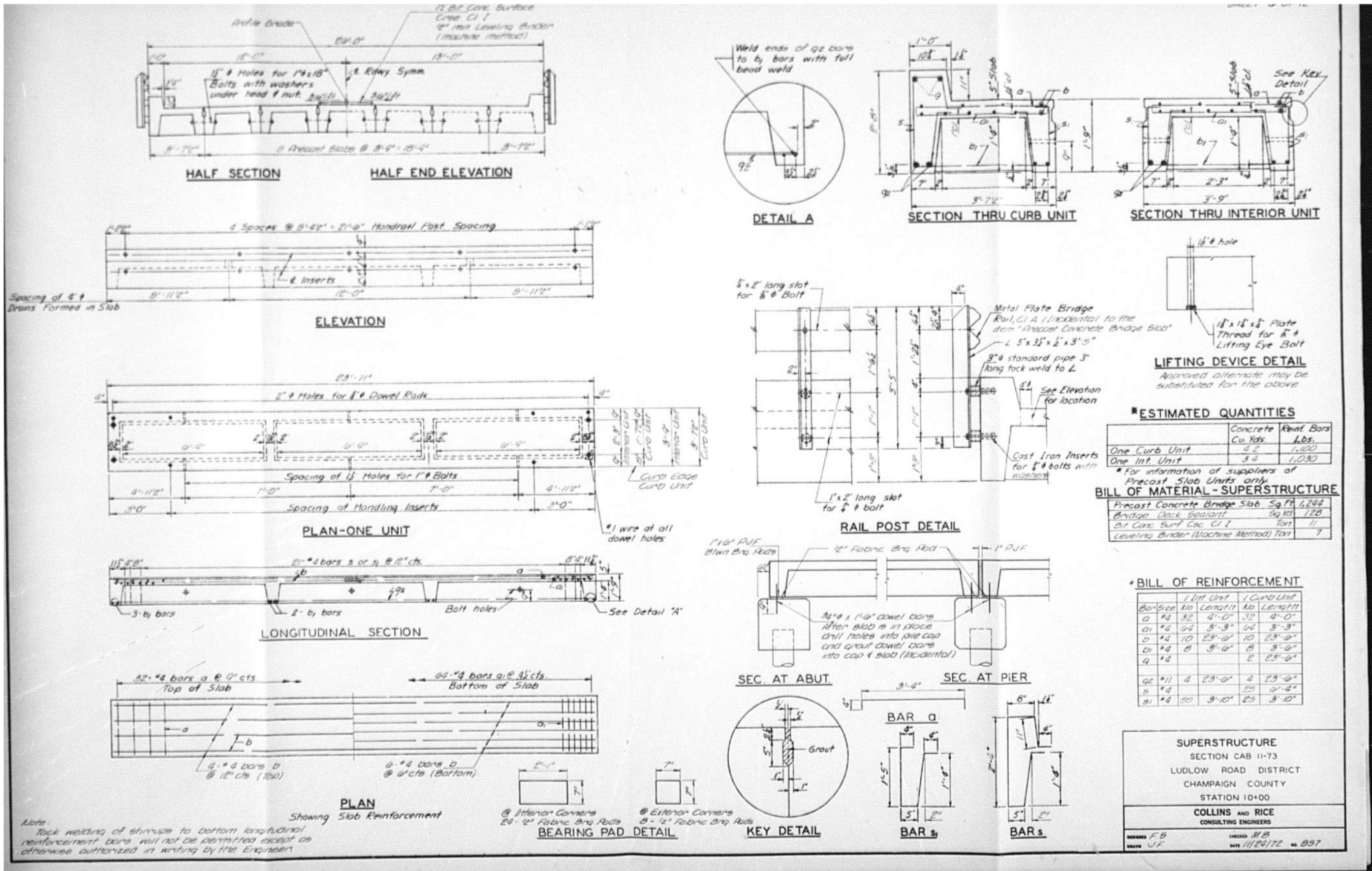
SHEET 7 OF 13 SHEETS

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	21	15
CONTRACT NO. 91634			ILLINOIS FED. AID PROJECT	









FILE NAME: C:\SP\WHKS & COL\Jobs-Spring - Projects\Champaign County\9494 Champaign Co. TR37B over Upper Salt CK\CADD\CAD\_Sheets\SN\_010-4023.dgn

design firm  
no. 184001036

engineers • planners • land surveyors

USER NAME = dheberling	DESIGNED - GEM	REVISED -
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CHAMPAIGN COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS - FOR INFORMATION ONLY  
 STRUCTURE NO. 010-4023

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	21	17
CONTRACT NO. 91634				
ILLINOIS		FED. AID PROJECT		

**SUPERSTRUCTURE**  
 SECTION CAB 11-73  
 LUDLOW ROAD DISTRICT  
 CHAMPAIGN COUNTY  
 STATION 10+00

**COLLINS AND RICE**  
 CONSULTING ENGINEERS

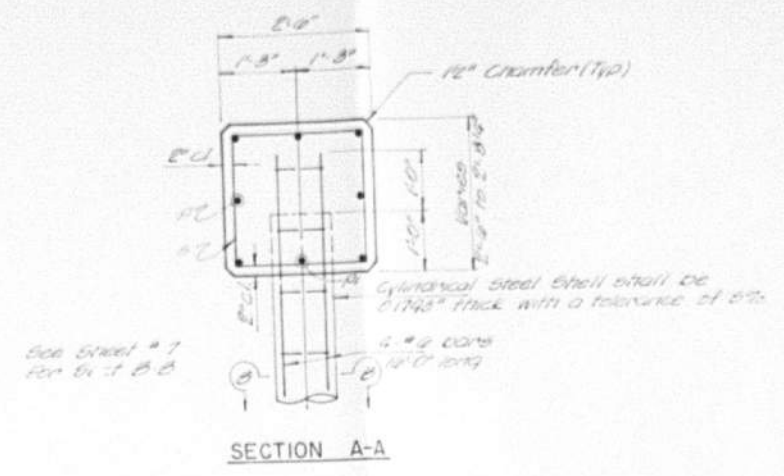
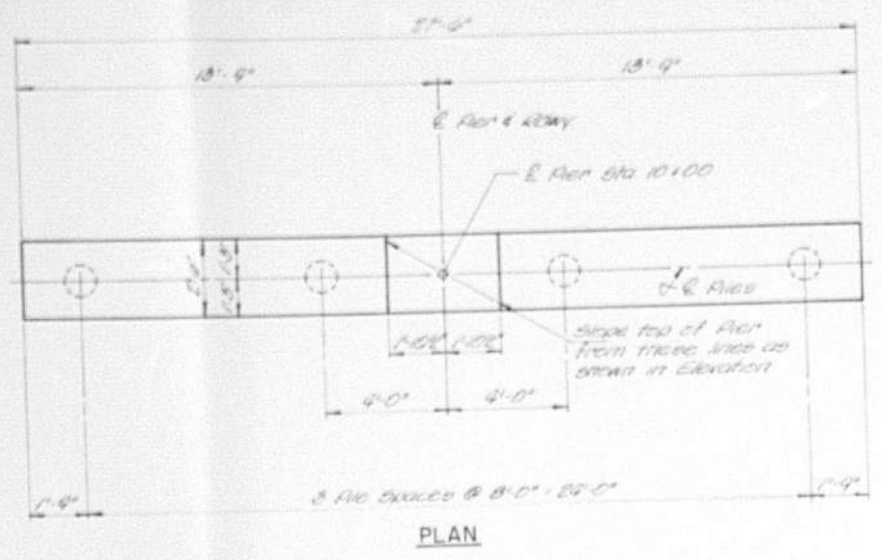
DRAWN: F.B.  
 CHECKED: J.F.

DRAWN: M.B.  
 CHECKED: J.F.

DATE: 11/29/72 NO. 857

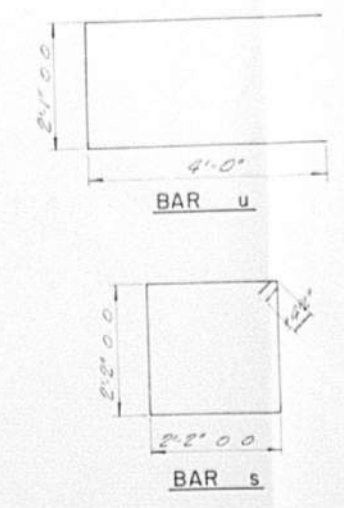
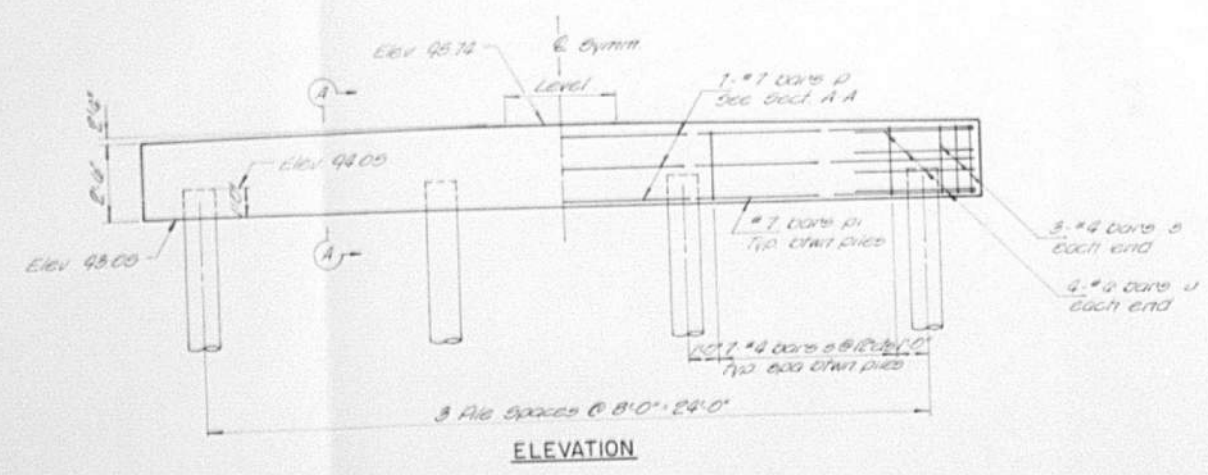






PILE DATA

Type	Metal Shell Cast-in-Place Core
Lip Req'd	0
Min Capacity	50 Tons / Pile
Est. Length	30 Feet / Pile



BILL OF MATERIAL - 1 PIER

BAR	NO.	SIZE	LENGTH	SHAPE
P	7	#7	27'-0"	—
PI	3	#7	7'-8"	—
U	8	#4	10'-1"	□
S	27	#4	9'-9"	□

Class 1 Concrete CU10 60  
 Reinforcement Bars LD 130  
 Metal Shell Piles, 12" LMF 140

PIER  
 SECTION CAB 11-73  
 LUDLOW ROAD DISTRICT  
 CHAMPAIGN COUNTY  
 STATION 10+00  
 COLLINS AND RICE  
 CONSULTING ENGINEERS

DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: 11/24/72, No. 897

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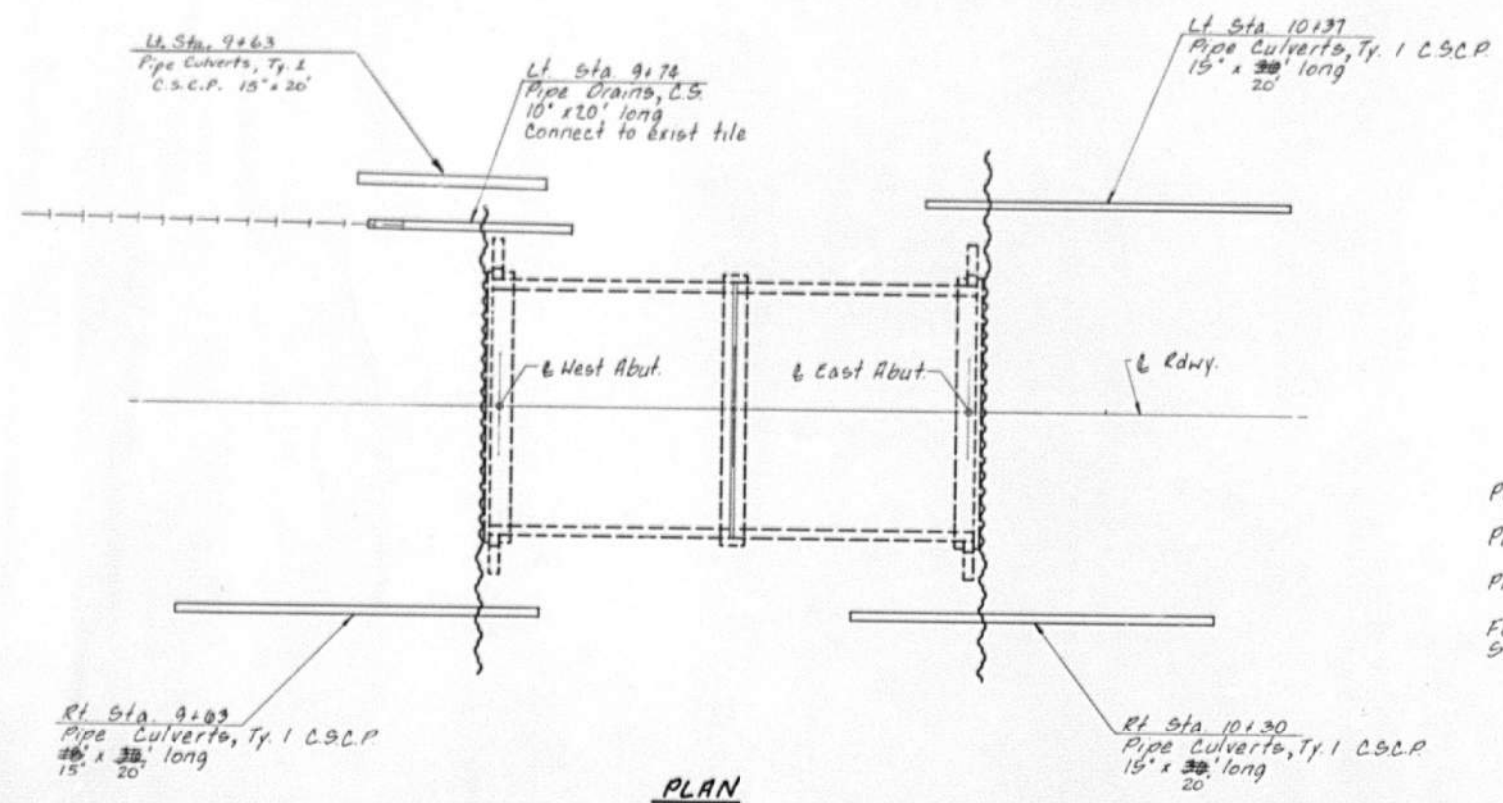
CHAMPAIGN COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS - FOR INFORMATION ONLY  
 STRUCTURE NO. 010-4023

SHEET 11 OF 13 SHEETS

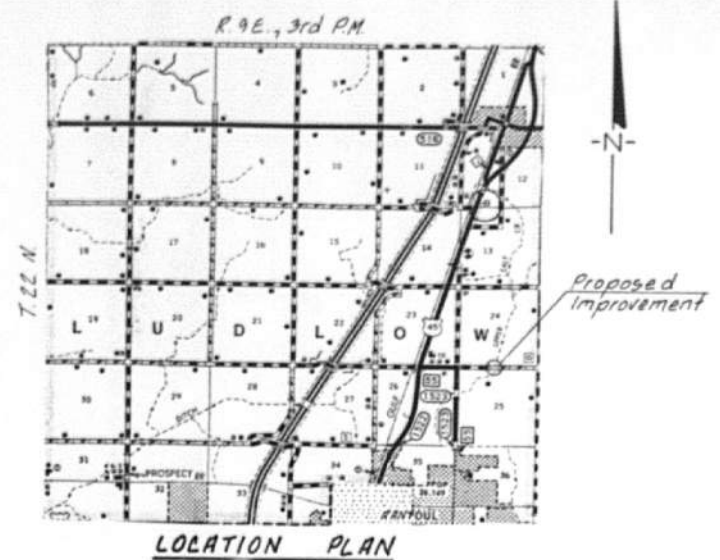
TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	21	19
			CONTRACT NO. 91634	
		ILLINOIS FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHAMPAIGN	2	1
FED. ROAD DIST. NO. 1	ILLINOIS PROJECT			



**PLAN**

Note: The cost of cutting steel sheet piling to extend pipe culverts and pipe drains thru sheeting is incidental to the pay item "FURNISHING AND DRIVING STEEL SHEET PILING".



**LOCATION PLAN**

# AS BUILT

## SUMMARY OF QUANTITIES

ITEM	UNIT	QUANTITY
PIPE CULVERTS, TYPE 1 15' C.S.C.P.	LIN FT	<del>75</del> 60
PIPE CULVERTS, TYPE 1 10' C.S.C.P.	LIN FT	<del>30</del> 0
PIPE DRAINS, CORRUGATED STEEL 10'	LIN FT	20
FURNISHING AND DRIVING STEEL SHEET PILING	SQ FT	<del>1,032</del> 1998

NOTE: PMA-22 was not available. SZ-22 was substituted. The width of the PMA-22 (per sheet) was 1.635' and the width of the SZ-22 (per sheet) is 2.135' (25%). The following lengths of SZ-22 were used:

36 pcs. @ 16' = 1224.76 SQ. FT.  
 18 pcs. @ 20' = 768.60 SQ. FT.  
 1998.36 SQ. FT.

**ABUTMENT REPAIR**  
 STRUCTURE NO. 010-4023  
 LUDLOW ROAD DISTRICT  
 CHAMPAIGN COUNTY  
 STATION 10+00

**COLLINS AND RICE**  
 CONSULTING ENGINEERS

DESIGNED: F.S.  
 DRAWN: R.N.

CHECKED: M.J.R.  
 DATE: 6-20-07 NO. 2231

7. and 1. Stans Jr.  
 Illinois Structural No. 2934

FILE NAME: C:\SP\WHKS & COL\Jobs-Spring - Projects\Champaign County\9494 Champaign Co. TR378 over Upper Salt CK\CADD\CAD\_Sheets\SM\_010-4023.dgn



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**CHAMPAIGN COUNTY HIGHWAY DEPARTMENT**

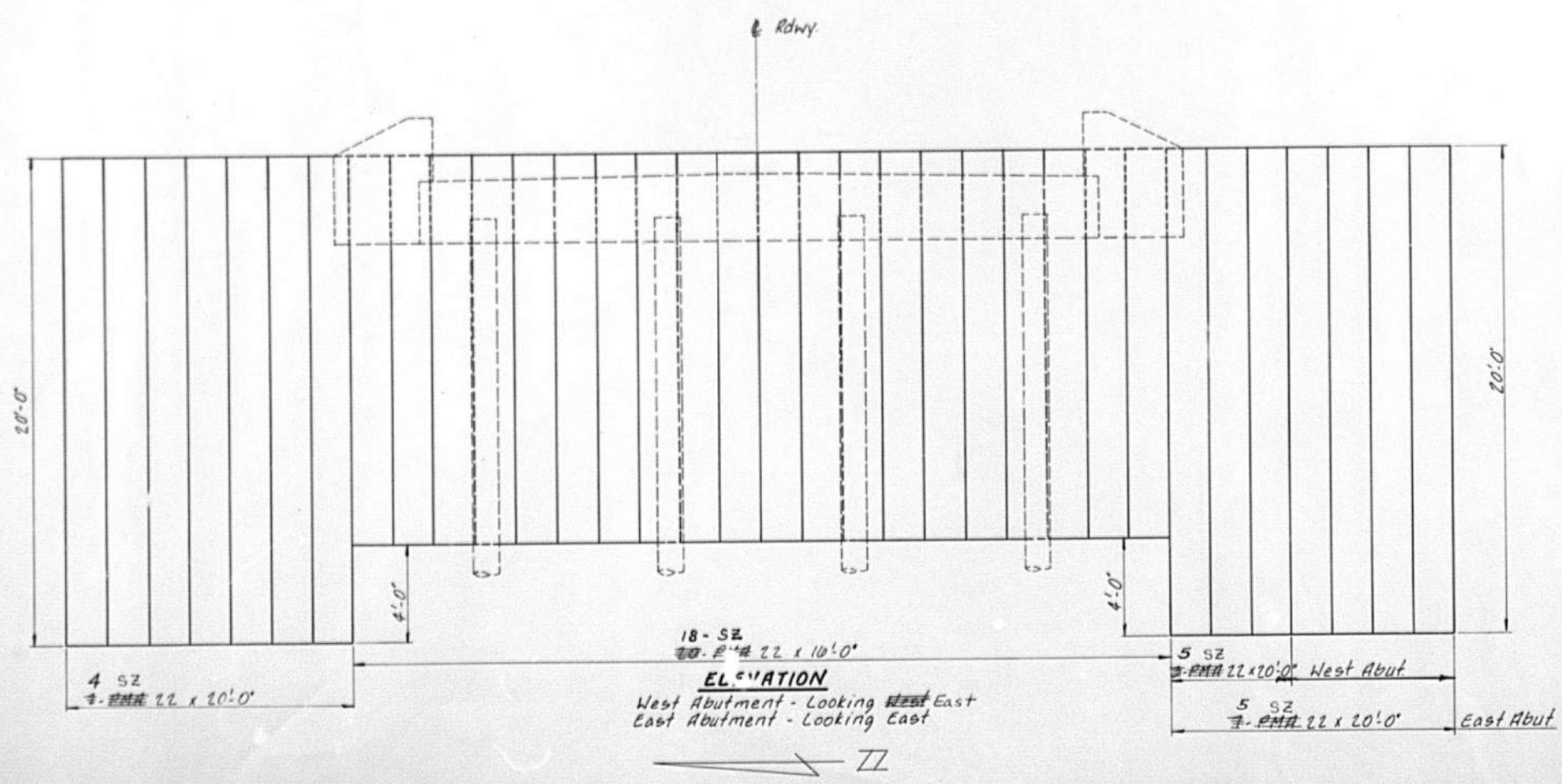
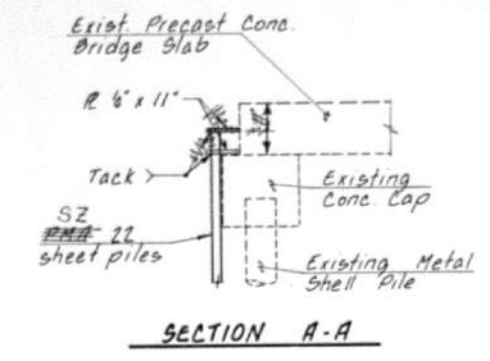
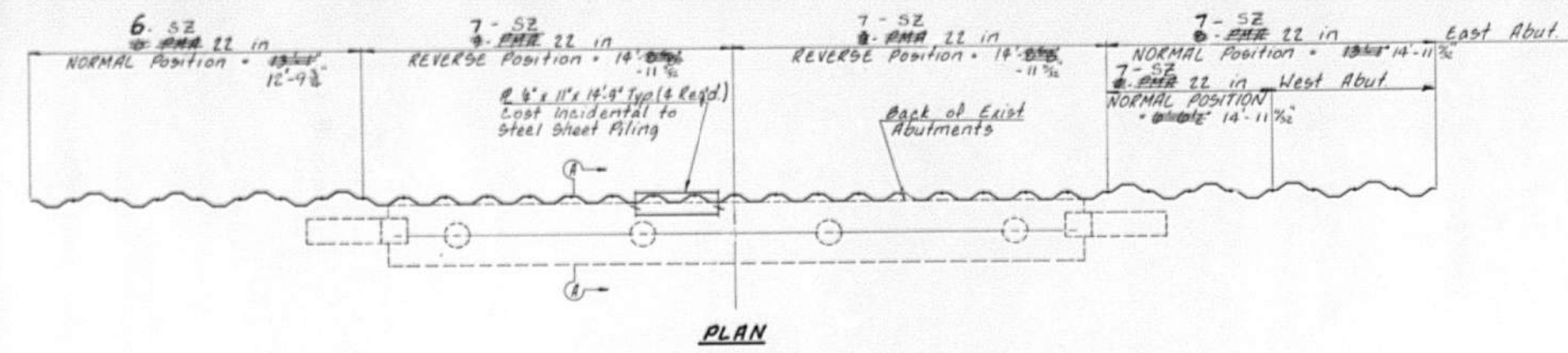
**EXISTING PLANS - FOR INFORMATION ONLY**  
**STRUCTURE NO. 010-4023**

SHEET 12 OF 13 SHEETS

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	21	20
			CONTRACT NO. 91634	
		ILLINOIS	FED. AID PROJECT	



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHAMPAIGN	2	2
FED. ROAD DIST. NO. 1	ILLINOIS PROJECT			



Note: Painting of Steel Sheet Piling is not required.

<b>ABUTMENT REPAIR</b>	
STRUCTURE NO. 010-4023 LUDLOW ROAD DISTRICT CHAMPAIGN COUNTY STATION 10+00	
COLLINS AND RICE CONSULTING ENGINEERS	
DESIGNED: F.S.	CHECKED: M.J.R.

FILE NAME: C:\SP\WHKS & COLLABS\Spring - Projects\Champaign County\9494 Champaign Co. TR37B over Upper Salt CKCAD\CAD\_Sheets\SN\_010-4023.dgn



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CHAMPAIGN COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS - FOR INFORMATION ONLY  
STRUCTURE NO. 010-4023

SHEET 13 OF 13 SHEETS

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37B	22-14120-00-BR	CHAMPAIGN	21	21
			CONTRACT NO. 91634	
		ILLINOIS	FED. AID PROJECT	