

INDEX OF DRAWINGS

- 1 CIVIL (PATH)
- 2 COVER SHEET
- 3 SUMMARY OF QUANTITIES; SCHEDULE OF QUANTITIES
- 4 GENERAL NOTES
- 5 TYPICAL SECTIONS
- 6 REMOVAL AND EROSION CONTROL PLAN
- 6-7 PLAN AND PROFILE SHEET
- 8-14 CROSS SECTION SHEETS
- 15-18 LIGHTING PLANS

- STRUCTURAL (BRIDGE)
- 19-21 GP&E PLANS
- 22-27 SUPERSTRUCTURE PLAN
- 28-30 SUPERSTRUCTURE DETAILS
- 31 BICYCLE RAILING DETAILS
- 32 PREFORMED JOINT STRIP SEAL DETAILS
- 33 SOUTH ABUTMENT DETAILS
- 34 NORTH ABUTMENT DETAILS
- 35 MSE WALL DETAILS
- 36-38 PIER REPAIR DETAILS

CITY OF ROCKFORD

RAILS TO TRAILS OVER THE ROCK RIVER

ILLINOIS TRANSPORTATION ENHANCEMENT PROGRAM (ITEP)

SECTION 14-00608-00-BT

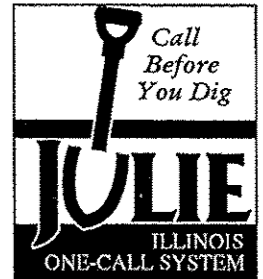
PROJECT NO. TE-00D2(158)

JOB NO. C-92-049-15

ITEP NO. 231010

CONTRACT NO. 85620

2015

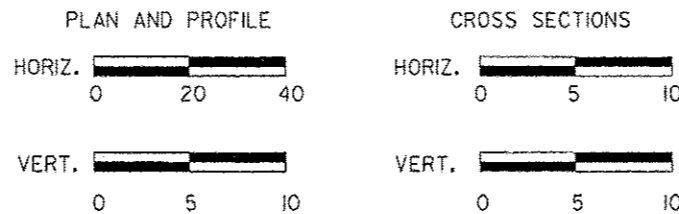


1-800-892-0123

STANDARDS

- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-03 NAME PLATE FOR BRIDGES
- 664001-02 CHAIN LINK FENCE
- 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-04 TRAFFIC CONTROL DEVICES
- 720011-01 METAL POSTS FOR SIGN MKRS & DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATION OF TYPES A & B METAL POST (FOR SIGN & MARKERS)
- 825001-02 LIGHTING CONTROLLER POLE MOUNTED, 240V
- 836001-02 LIGHT POLE FOUNDATION

SCALES:



PROJECT LOCATION
LENGTH OF PROJECT = 1707.6 FEET = 0.32 MILES

UTILITY CONTACTS

SANITARY SEWER:

ROCK RIVER WATER RECLAMATION DISTRICT
MIKE WEBER, P.E.
3501 KISHWAUKEE STREET
ROCKFORD, ILLINOIS 61126-7480
(815) 387-7660

GAS:

NICOR GAS CO.
SCOTT PUFFER
300 WEST TERRA COTTA AVENUE
CRYSTAL LAKE, ILLINOIS 60014
(815) 455-0271 EXT. 250

ELECTRIC:

COMMONWEALTH EDISON CO.
NORA FERNANDEZ
123 ENERGY AVENUE
ROCKFORD, ILLINOIS 61109
(815) 490-2335

CABLE:

COMCAST
MIKE OWENS
4450 KISHWAUKEE STREET
ROCKFORD, ILLINOIS 61098
(815) 395-8977

WATER MAIN:

CITY OF ROCKFORD PUBLIC WORKS
425 EAST STATE STREET
ROCKFORD, ILLINOIS 61104
(815) 987-5637

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ROCKFORD, ILLINOIS 61108
(815) 961-3750

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AT&T COMPANY
BRIAN CRULL
216 NORTH MAIN STREET
ROCKFORD, ILLINOIS 61101
(815) 566-1976

TELEPHONE:

FRONTIER
GARY KLUZ
112 WEST ELM STREET
SYCAMORE, ILLINOIS 60178
(815) 895-1515

CITY OF ROCKFORD
Approved 3-1-15 <u>Matthew Vitner, P.E., City Engineer</u>
Passed <u>MAY 29, 2015</u> <u>Anthony Baratta</u> District 2 Engineer of Local Roads & Streets
Releasing for Bid Based on Limited Review <u>MAY 29, 2015</u> <u>Paul Latta</u> Deputy Director of Highways, Region 2 Engineer

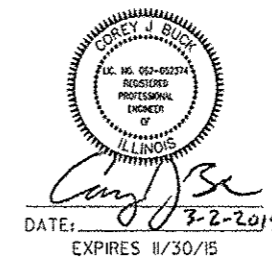


WILLETTS HOFMANN & ASSOCIATES INC

ENGINEERING ARCHITECTURE LAND SURVEYING

57 AIRPORT DRIVE, ROCKFORD, IL 61109
T: 815-964-2897 DESIGN FIRM: #184-000918

DATE: 3-2-2015 WHA# 1016R13



DATE: 3-2-2015
EXPIRES 11/30/15

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE: 0028

CODE	ITEM	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	ACRE	0.25
20200100	EARTH EXCAVATION	CUBIC YARD	1314
20400800	FURNISHED EXCAVATION	CUBIC YARD	886
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQUARE YARD	3,293
25000100	SEEDING, CLASS 1	ACRE	0.75
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	60
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	60
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	60
25100105	MULCH, METHOD 1	ACRE	0.75
25100630	EROSION CONTROL BLANKET	SQUARE YARD	3,293
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	75
28000400	PERIMETER EROSION BARRIER	FOOT	1085
28100209	STONE RIPRAP, CLASS A5	TON	52
35101400	AGGREGATE BASE COURSE, TYPE B	TON	7
35102200	AGGREGATE BASE COURSE, TYPE B 10"	SQUARE YARD	887
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	2,540
40603387	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5FG, N50	TON	104
50102400	CONCRETE REMOVAL	CUBIC YARD	0.4
50300255	CONCRETE SUPERSTRUCTURE	CUBIC YARD	236.0
50300280	CONCRETE ENCASEMENT	CUBIC YARD	5.5
50300300	PROTECTIVE COAT	SQUARE YARD	1,210
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	43
50500505	STUD SHEAR CONNECTORS	EACH	1,802
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	72,710
50901720	BICYCLE RAILING	FOOT	1,893
51500100	NAME PLATES	EACH	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	96
67100100	MOBILIZATION	LUMP SUM	1
78000200	THERMOPLASTIC PAVEMENT MARKING-LINE 4"	FOOT	435
81028330	UNDERGROUND CONDUIT, PVC 1 1/4" DIA.	FOOT	360
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1,360
81100200	CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA. GALVANIZED STEEL	FOOT	550
81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	960
81300830	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18"x18"x8"	EACH	6
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2,308
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	7,433
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	2,700
81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	3,860
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	9,000
81702180	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 3/0	FOOT	1,350
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	65
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQUARE FOOT	140
Z0034210	MECHANICALLY STABILIZED EARTH RETAINING WALL	SQUARE FOOT	124
X0324942	GROUT REMOVAL AND REPLACEMENT	EACH	8
X0325153	MASONRY CLEANING AND TUCKPOINTING	SQUARE YARD	37
X0325689	REMOVAL OF EXISTING TIMBER MEMBERS	LUMP SUM	1
X6640300	CHAIN LINK FENCE REMOVAL	FOOT	96
X6640310	CHAIN LINK GATES REMOVAL	EACH	2
X6640565	CHAIN LINK FENCE, 7' (SPECIAL)	FOOT	8
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LUMP SUM	1
X81301110	JUNCTION BOX (SPECIAL)	EACH	5
X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	1
XX006821	CONCRETE TRUCK WASHOUT	L SUM	1
XX007295	LIGHTING UNIT A, COMPLETE	EACH	11
XX007296	LIGHTING UNIT B, COMPLETE	EACH	13
XX007296	LIGHTING UNIT C, COMPLETE	EACH	3

Δ SPECIALTY ITEMS

SCHEDULE OF QUANTITIES

20100500	TREE REMOVAL	ACRES	
	STA. LT. 106+90 TO LT. STA. 109+95		0.25
20200100	EARTH EXCAVATION	CY	
	STA. 105+50 TO STA. 122+57.6		1,314
20400800	FURNISHED EXCAVATION	CY	
	STA. 105+50 TO STA. 122+57.6		886
21101615	TOPSOIL FURNISH AND PLACE, 4"	SY	
	STA. 105+50 TO STA. 122+57.6		3,293
25000100	SEEDING, CLASS 1	ACRES	
	STA. LT. 105+50 TO STA. 109+96.49		0.09
	STA. RT. 105+50 TO STA. 109+96.49		0.10
	STA. LT. 119+04.55 TO STA. 122+57.6		0.09
	STA. RT. 119+04.55 TO STA. 122+57.6		0.40
	TOTAL		0.68
	TOTAL TO NEAREST .25 ACRE		0.75
25000400	NITROGEN FERTILIZER NUTRIENT		
25000500	PHOSPHORUS FERTILIZER NUTRIENT		
25000600	POTASSIUM FERTILIZER NUTRIENT		
	STA. LT. 105+50 TO STA. 109+96.49		8.1
	STA. RT. 105+50 TO STA. 109+96.49		9.0
	STA. LT. 119+04.55 TO STA. 122+57.6		8.1
	STA. RT. 119+04.55 TO STA. 122+57.6		36
	TOTAL		61.2
	TOTAL TO NEAREST 5 POUND		60

SCHEDULE OF QUANTITIES (CONT.)

25100105	MULCH, METHOD 1	ACRE	
	STA. 105+50 TO STA. 122+57.6		0.75
25100630	EROSION CONTROL BLANKET	SY	
	STA. LT. 105+50 TO STA. 109+96.49		424.8
	STA. RT. 105+50 TO STA. 109+96.49		495.8
	STA. LT. 119+04.55 TO STA. 122+57.6		430.0
	STA. RT. 119+04.55 TO STA. 122+57.6		1,942.5
	TOTAL		3,293.1
	TOTAL TO NEAREST SQUARE YARD		3,293
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	
	STA. 105+50 TO STA. 122+57.6		75
28000400	PERIMETER EROSION BARRIER	FOOT	
	STA. LT. 105+50 TO STA. 109+96.49		445
	STA. RT. 105+50 TO STA. 107+50		200
	STA. RT. 109+85 TO STA. 109+96.49		25
	STA. LT. 119+30 TO STA. 120+65		135
	STA. RT. 119+04.55 TO STA. 122+57.6		280
	TOTAL		1085
28100209	STONE RIPRAP, CLASS A5	TON	
	SOUTH ABUTMENT		52
35101400	AGGREGATE BASE COURSE, TYPE B	TON	
	STA. 109+94.99 TO STA. 110+24.07		7
35102200	AGGREGATE BASE COURSE, TYPE B 10"	SY	
	STA. 105+50 TO STA. 109+94.99		496
	STA. 119+07.63 TO STA. 122+57.6		391
	TOTAL		887

SCHEDULE OF QUANTITIES (CONT.)

40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	
	STA. 105+50 TO STA. 110+24.07		1,419
	STA. 119+07.63 TO STA. 122+57.6		1,121
	TOTAL		2,540
40603387	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5FG, N50	TON	
	STA. 105+50 TO STA. 110+24.07		58
	STA. 119+07.63 TO STA. 122+57.6		46
	TOTAL		104
50102400	CONCRETE REMOVAL	CY	
	NORTH ABUTMENT		0.4
50300255	CONCRETE SUPERSTRUCTURE	CY	
	STA. 110+24.07 TO STA. 119+07.63		236.0
50300280	CONCRETE ENCASEMENT	CY	
	SOUTH ABUTMENT		5.5
50300300	PROTECTIVE COAT	SY	
	STA. 110+24.07 TO STA. 119+07.63		1,210
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	
	STA. 110+24.07 TO STA. 119+07.63		43
50500505	STUD SHEAR CONNECTORS	EACH	
	STA. 110+24.07 TO STA. 119+07.63		1,802
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	
	STA. 110+24.07 TO STA. 119+07.63		72,710
50901720	BICYCLE RAILING	FOOT	
	STA. 109+94.99 TO STA. 119+41.13		1,893
51500100	NAME PLATES	EACH	
	STA. 111+25		1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	
	STA. 110+24.07 TO STA. 119+07.63		96
67100100	MOBILIZATION	L SUM	
	STA. 105+50 TO STA. 122+57.6		1
78000200	THPL PVT MK LINE 4	FOOT	
	STA. 105+50 TO STA. 122+57.6		435
81028330	UNDERGROUND CONDUIT, PVC 1 1/4" DIA.	FOOT	
	SEE ELECTRICAL PLANS		360
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	
	SEE ELECTRICAL PLANS		1,360
81100200	CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA. GALVANIZED STEEL	FOOT	
	SEE ELECTRICAL PLANS		550
81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	
	SEE ELECTRICAL PLANS		960
81300830	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18"x18"x8"	EACH	
	SEE ELECTRICAL PLANS		6
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	
	SEE ELECTRICAL PLANS		2,308
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	
	SEE ELECTRICAL PLANS		7,433
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	
	SEE ELECTRICAL PLANS		2,700
81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	
	SEE ELECTRICAL PLANS		3,860
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	
	SEE ELECTRICAL PLANS		9,000
81702180	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 3/0	FOOT	
	SEE ELECTRICAL PLANS		1,350

SCHEDULE OF QUANTITIES (CONT.)

83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	
	STA. 105+53, 9' RT.		5
	STA. 106+21, 9' RT.		5
	STA. 106+89, 9' RT.		5
	STA. 107+57, 9' RT.		5
	STA. 108+25, 9' RT.		5
	STA. 108+93, 9' RT.		5
	STA. 109+61, 9' RT.		5
	STA. 119+11, 9' RT.		5
	STA. 119+76, 9' LT.		5
	STA. 120+41, 9' LT.		5
	STA. 121+06, 9' LT.		5
	STA. 121+71, 9' LT.		5
	STA. 122+36, 9' LT.		5
	TOTAL		65
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SF	
	SEE STRUCTURAL PLANS		140
Z0034210	MECHANICALLY STABILIZED EARTH RETAINING WALL	SF	
	NORTH ABUTMENT		124
X0324942	GROUT REMOVAL AND REPLACEMENT	EACH	
	SEE STRUCTURAL PLANS		8
X0325153	MASONRY CLEANING AND TUCKPOINTING	SY	
	SEE STRUCTURAL PLANS		37
X0325689	REMOVAL OF EXISTING TIMBER MEMBERS	L SUM	
	STA. 107+35 TO STA. 120+55		1
X6640300	CHAIN LINK FENCE REMOVAL	FOOT	
	SOUTH ABUTMENT		60
	NORTH ABUTMENT		36
	TOTAL		96
X6640310	CHAIN LINK GATES REMOVAL	EACH	
	SOUTH ABUTMENT		1
	NORTH ABUTMENT		1
	TOTAL		2
X6640565	CHAIN LINK FENCE, 7' (SPECIAL)	FOOT	
	SOUTH ABUTMENT		4
	NORTH ABUTMENT		4
	TOTAL		8
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	
	STA. 105+50 TO STA. 122+57.6		1
X81301110	JUNCTION BOX (SPECIAL)	EACH	
	SEE ELECTRICAL PLANS		5
X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	
	STA. LT. 119+35		1
XX006821	CONCRETE TRUCK WASHOUT	L SUM	
	FIELD LOCATED		1
XX007295	LIGHTING UNIT A, COMPLETE	EACH	
	STA. 112+26, 0' LT.		1
	STA. 112+84, 0' LT.		1
	STA. 113+53, 0' LT.		1
	STA. 114+12, 0' LT.		1
	STA. 114+80, 0' LT.		1
	STA. 115+25, 0' LT.		1
	STA. 115+84, 0' LT.		1
	STA. 116+52, 0' LT.		1
	STA. 117+12, 0' LT.		1
	STA. 117+80, 0' LT.		1
	STA. 118+39, 0' LT.		1
	TOTAL		11

XX007296	LIGHTING UNIT B, COMPLETE	EACH	
	STA. 105+53, 9' RT.		1
	STA. 106+21, 9' RT.		1
	STA. 106+89, 9' RT.		1
	STA. 107+57, 9' RT.		1
	STA. 108+25, 9' RT.		1
	STA. 108+93, 9' RT.		1
	STA. 109+61, 9' RT.		1
	STA. 119+11, 9' RT.		1
	STA. 119+76, 9' LT.		1
	STA. 120+41, 9' LT.		1
	STA. 121+06, 9' LT.		1
	STA. 121+71, 9' LT.		1
	STA. 122+36, 9' LT.		1
	TOTAL		13
	LIGHTING UNIT C, COMPLETE	EACH	
	STA. 110+29, 6'-9" RT.		1
	STA. 110+91, 6'-9" RT.		1
	STA. 111+53, 6'-9" RT.		1
	TOTAL		3



DESIGNED - TJA
 CHECKED - CJB
 DRAWN - TJA
 CHECKED - CJB

REVISED -
 REVISED -
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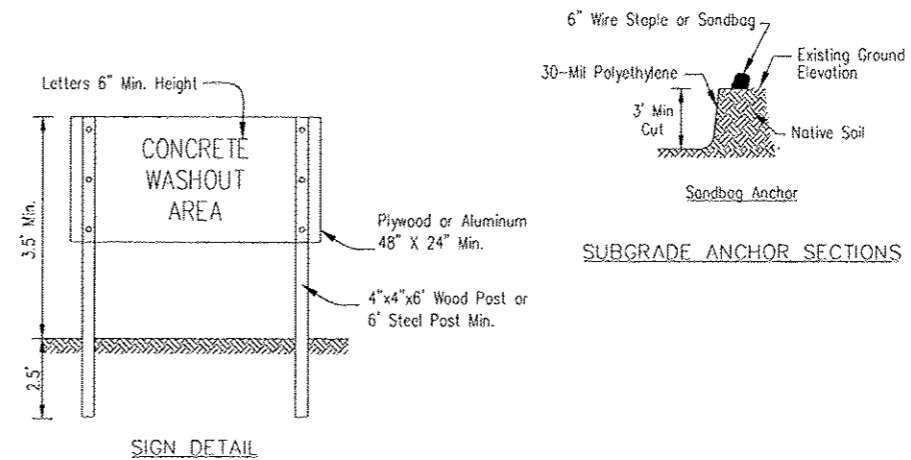
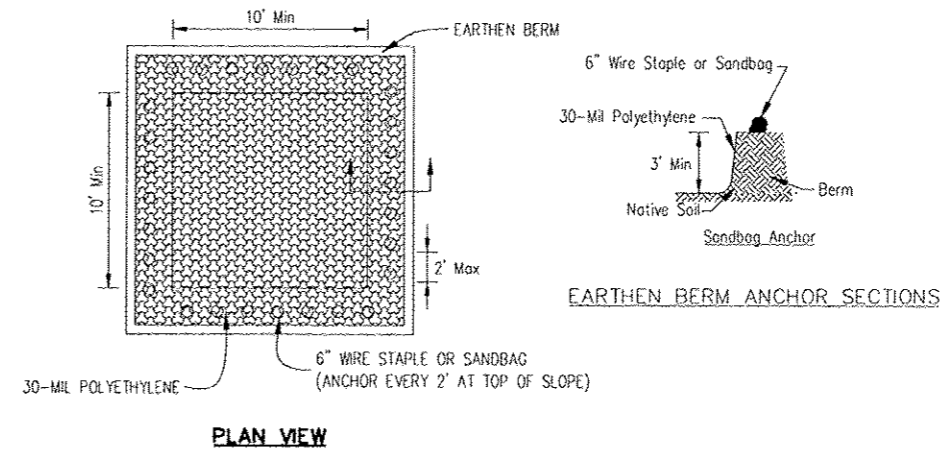
CITY OF ROCKFORD
 RAILS TO TRAILS OVER ROCK RIVER
 2015

SUMMARY OF QUANTITIES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	2
	WHA* 1016R13			CONTRACT NO. 85620

GENERAL NOTES:

- When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the City of Rockford as to the location of such utilities and is only included for the convenience of the bidder.
- The contractor shall seed all disturbed areas within the project limits. Seeding Class 1 shall be used.
- Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding at a rate specified in Sections 250 and 252 of the Standard Specifications.
- The final top four (4) inches of soil in any area disturbed by the contractor must be capable of supporting vegetation.
- Contractor shall notify City a minimum of 48 hours in advance of the start of construction or the continuation of construction following a pause in work.
- City representatives shall only be available between 7:30 am and 3:30 pm on weekdays.
- Inspectors will not be available on Saturdays, Sundays and official City of Rockford holidays.
- City/Engineer does not guarantee the completeness or accuracy of the existing utilities shown on the plans.
- Contractor shall be responsible for following the erosion control provisions provided in the specifications and on the plans.
- Removal of trees under 6" diameter, brush and trimming of trees shall be considered incidental to the work.
- Within 7 days after construction activity ceases on any particular area, all disturbed ground where there will not be further activity for longer than 14 days must be seeded with fast-germinating temporary erosion control seed and protected with mulch, method 1.
- The contractor will be required to construct a Temporary Concrete Washout Facility in accordance with the Illinois Urban Manual. The contractor must submit a plan of his/her proposed concrete washout facility to the resident Engineer for his/her approval at least 10 days prior to the first concrete pour.
- During construction the contractor shall clean up and grade the work area to eliminate concentration of runoff at the close of each work day and maintain or replace (as directed by the Engineer) erosion and sediment control items.
- When needed the contractor shall remove and dispose of silt retained by the temporary erosion control items.
- All maintenance of erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected by the Contractor periodically. Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of each 0.5 inches or greater rainfall, or an equivalent snowfall.
- The contractor shall be responsible for following all requirements of the Illinois Department of Natural Resources, Army Corps of Engineers and the Illinois Environmental Protection Agency.
- Contractor shall be responsible for contacting J.U.L.I.E (1-800-892-0123) prior to the start of any work.



NOTES:

- Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
- Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
- Concrete Truck Washout will be paid for at the Contract unit price per Lump Sum.

CONCRETE WASHOUT AREA DETAIL

FILE = B:\PROJECTS\2213\1613_80_17EP-DESIGN\TRANS\1613_17EP-CN_SUN.dgn

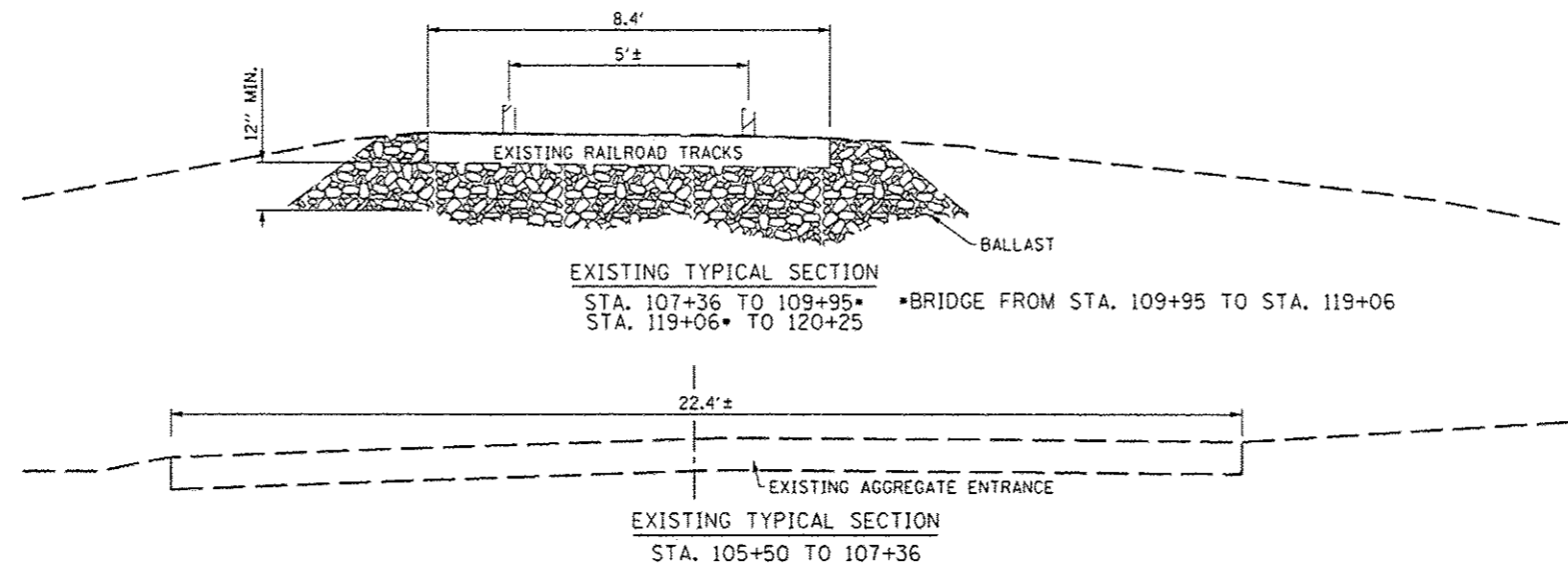
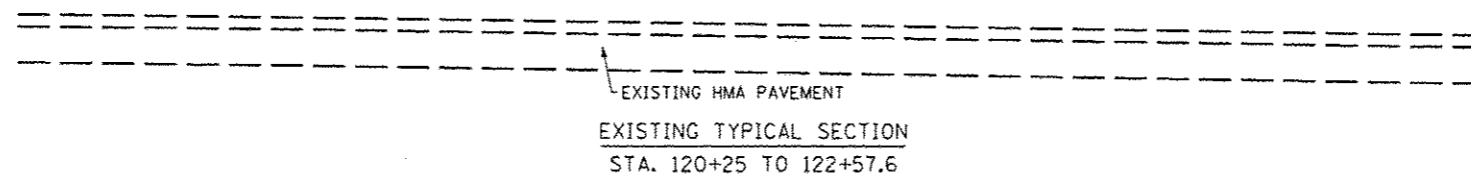
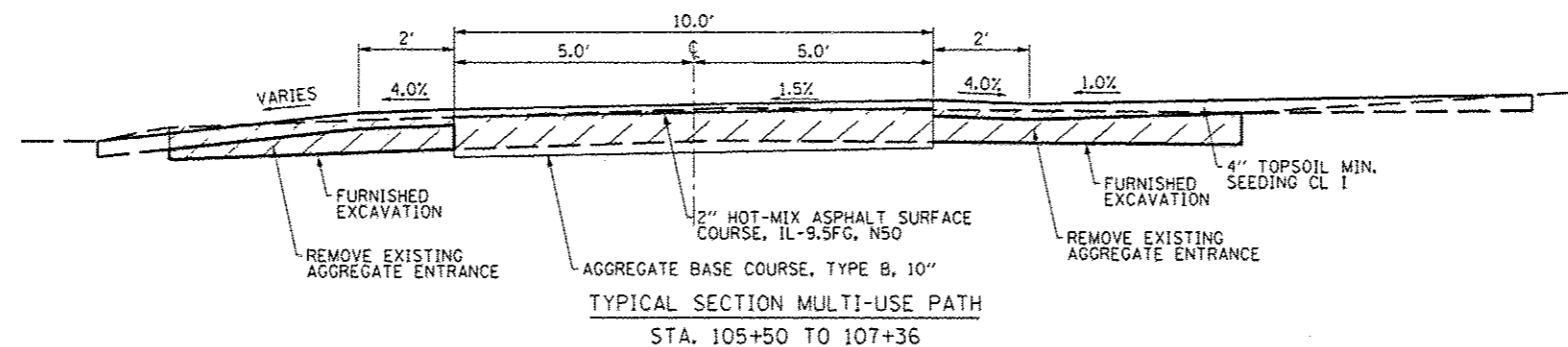
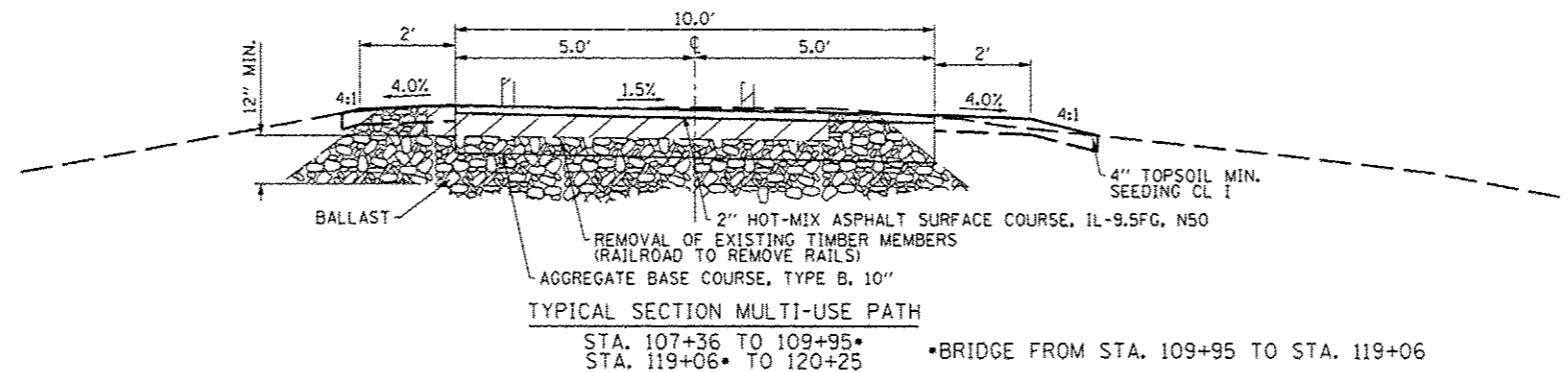
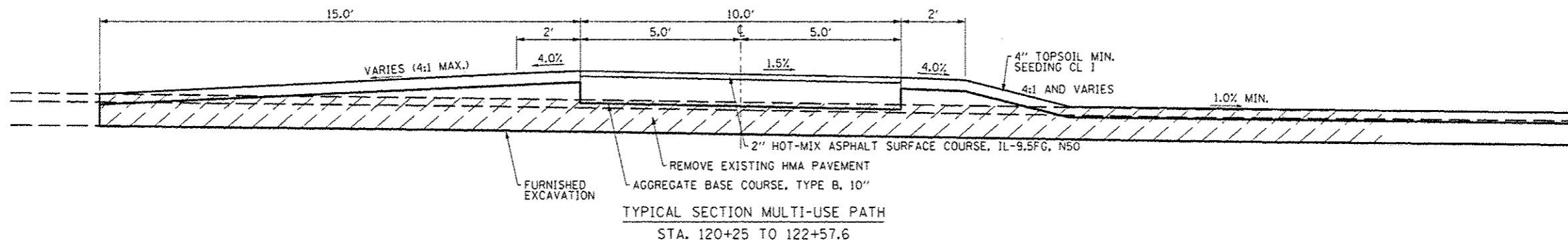


DESIGNED -	TJA	REVISED -	
CHECKED -	CJB	REVISED -	
DRAWN -	TJA	REVISED -	
CHECKED -	CJB	REVISED -	

**CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015**

GENERAL NOTES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	3
	WHA* 1016R13		CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT YE-0021158				



HMA MIX DESIGN

LOCATION AND MIXTURE USE(S):	SHARED USE PATH
PG:	PG 64-22
DESIGN AIR VOIDS	3.0 @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5FG
FRICION AGGREGATE	C
20 YEAR ESAL	N/A
MIX UNIT WEIGHT	112LBS/SY/IN
QUALITY MANAGEMENT PROGRAM TO BE USED	OC/OA



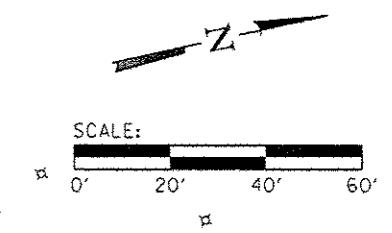
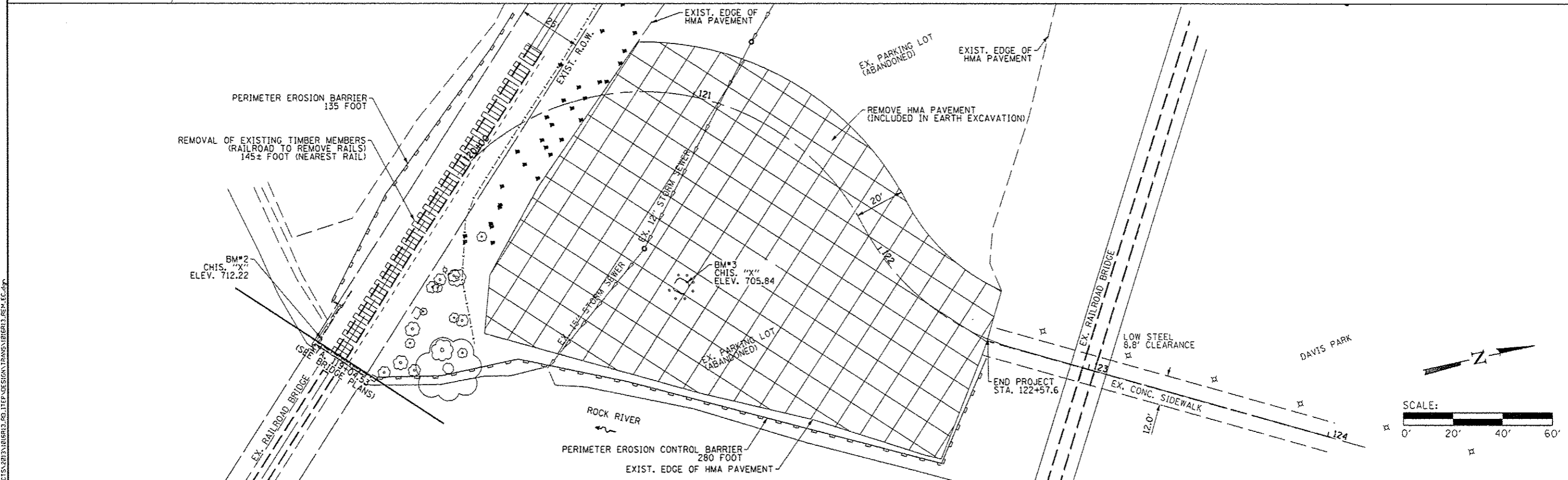
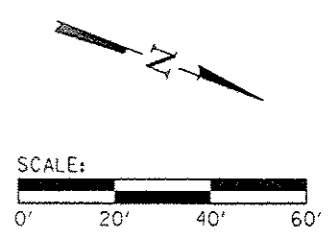
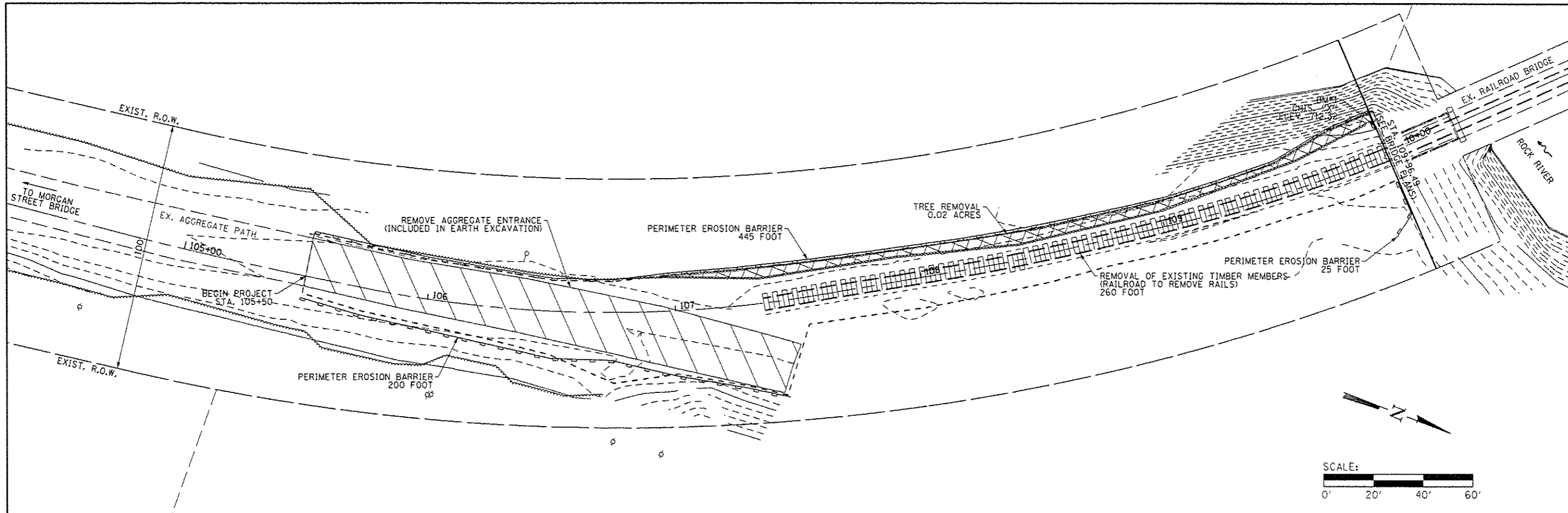
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DRAWN - TJA	REVISED -
CHECKED - CJB	REVISED -

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

TYPICAL SECTIONS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	4
	WHA* 1016R13			CONTRACT NO. 85620
ILLINOIS FED. AID PROJECT TE-0002158				

FILE = S:\PROJECTS\2013\1400608\1400608-00-BT\DESIGN\TYPICALS\1400608-00-BT-TYPICALS.DWG



FILE: S:\PROJECTS\2015\14-00608-00-01\DESIGN\TRANSP\14-00608-00-01-REV.A.DWG

WILLET HOFMANN ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 800 EAST 7TH STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN PRAC: #134-005918

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DRAWN - TJA	REVISED -
CHECKED - CJB	REVISED -

**CITY OF ROCKFORD
 RAILS TO TRAILS OVER ROCK RIVER
 2015**

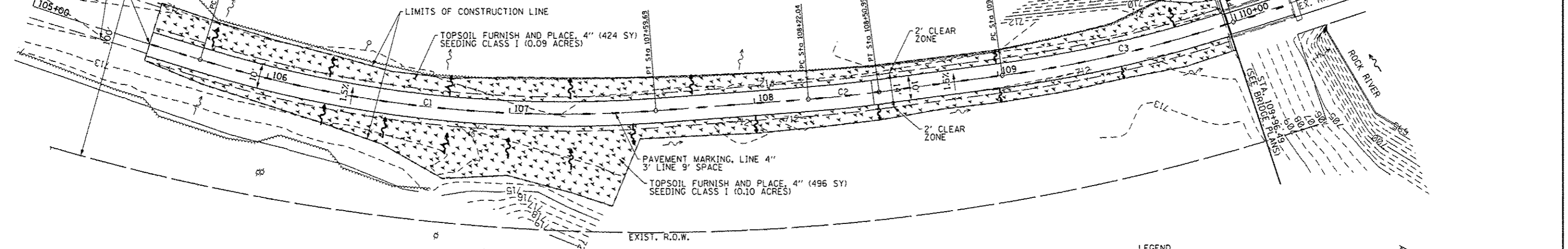
REMOVAL AND EROSION CONTROL PLAN

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-01	WINNEBAGO	38	5
WHA* 1016R13		CONTRACT NO. 85620		
(ILLINOIS) FED. AID PROJECT TE-00021(58)				

PROP. CURVE C1	PROP. CURVE C2	PROP. CURVE C3
PI STA. = 106+66.78	PI STA. = 108+36.52	PI STA. = 109+50.34
$\Delta = 21^\circ 19' 52''$ (LT)	$\Delta = 3^\circ 17' 03''$ (LT)	$\Delta = 10^\circ 59' 31''$ (LT)
D = 11° 20' 45"	D = 11° 20' 45"	D = 11° 20' 45"
R = 505.00'	R = 505.00'	R = 505.00'
T = 95.11'	T = 14.48'	T = 48.59'
L = 188.01'	L = 28.95'	L = 96.88'
E = 8.88'	E = 0.21'	E = 2.33'
$e = \text{---}$	$e = \text{---}$	$e = \text{---}$
T.R. = ---	T.R. = ---	T.R. = ---
S.E. RUN = ---	S.E. RUN = ---	S.E. RUN = ---
P.C. STA = 105+71.68	P.C. STA = 108+22.04	P.C. STA = 109+01.75
P.T. STA = 107+59.69	P.T. STA = 108+50.99	P.T. STA = 109+98.63

BEGIN CONSTRUCTION STA. 105+50

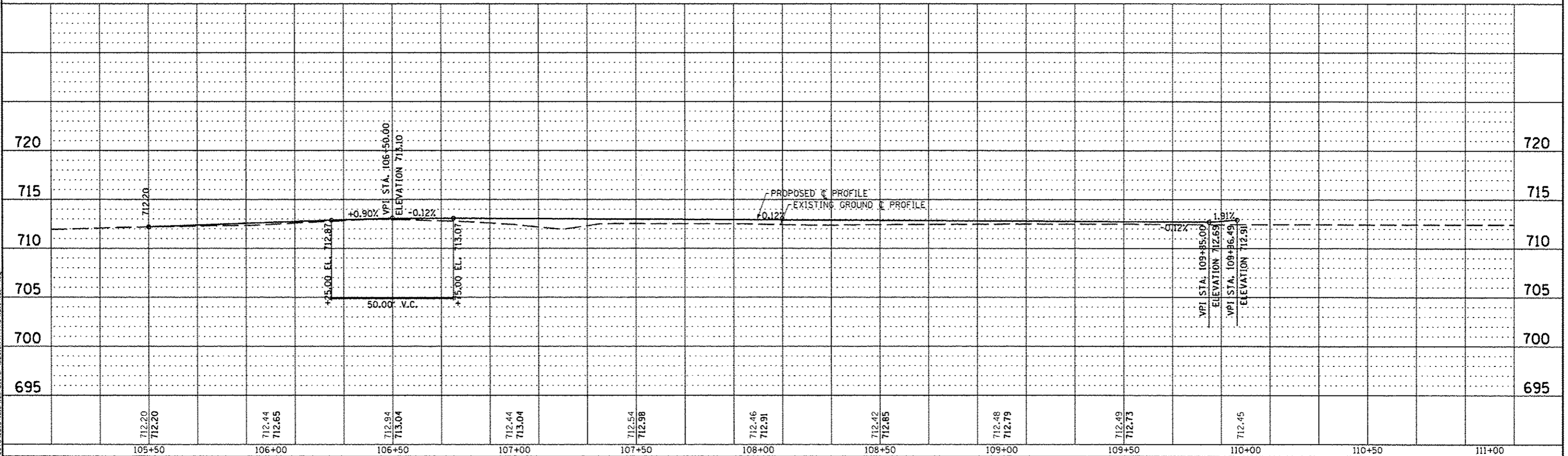
EX. AGGREGATE PATH L105+00



LEGEND

- TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS I
- FERTILIZER
- MULCH, METHOD 1
- SHEET FLOW DIRECTION

SCALE:
0' 20' 40' 60'



WILLET HOFMANN ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DUNDEE, IL 61021-0487
TEL: 815-394-3381 DESIGN: 815-394-0091

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CHECKED - CJB	REVISED -

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

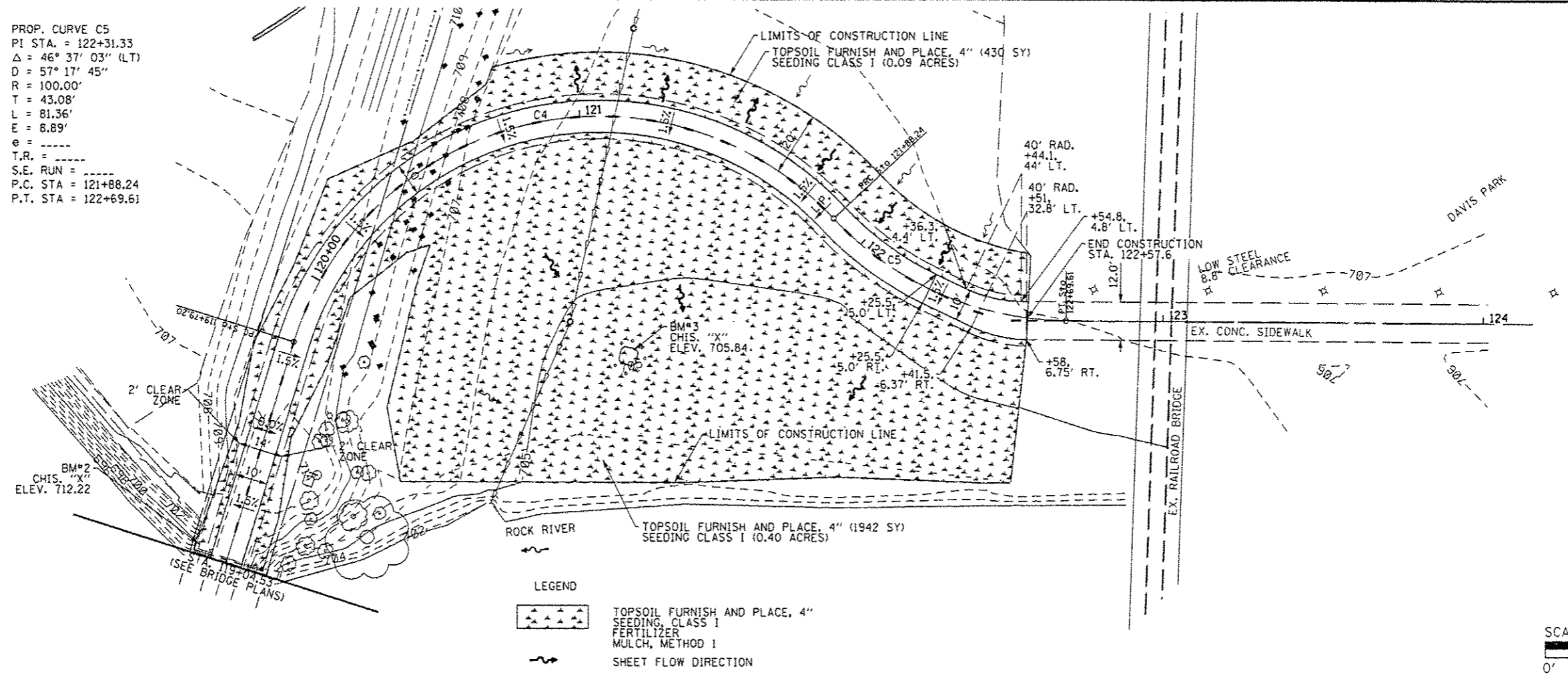
PLAN AND PROFILE SHEET
MULTI-USE PATH
STA. 105+50.00 TO STA. 109+95.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
14-00608-00-BT	WINNEBAGO	38	6	
WHA* 1016R13	CONTRACT NO. 85620		ILLINOIS FED. AID PROJECT TE-000205B	

FILE: S:\PROJECTS\2015\1016R13\RD\11E\DESIGN\TRANS\VEG\13_PP.dwg

PROP. CURVE C4
 P.I. STA. = 121+51.61
 $\Delta = 119^\circ 46' 23''$ (RT)
 $D = 57^\circ 17' 45''$
 $R = 100.00'$
 $T = 172.42'$
 $L = 209.04'$
 $E = 99.32'$
 $e =$
 $T.R. =$
 $S.E. RUN =$
 P.C. STA = 119+79.20
 P.T. STA = 121+88.24

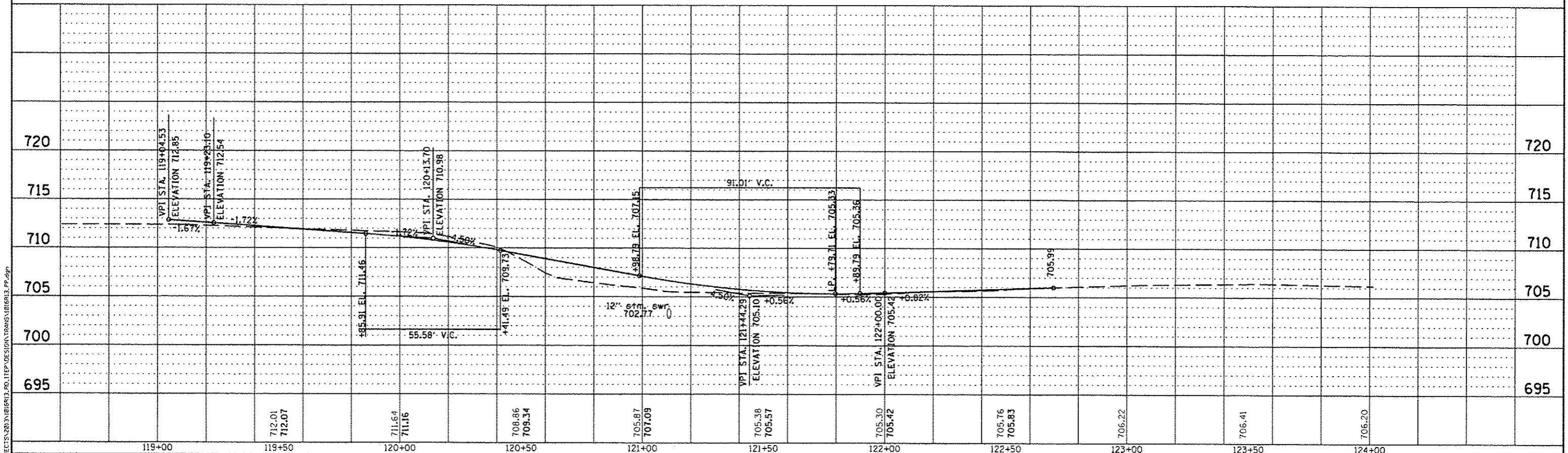
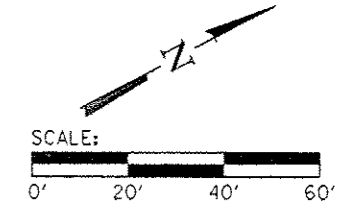
PROP. CURVE C5
 P.I. STA. = 122+31.33
 $\Delta = 46^\circ 37' 03''$ (LT)
 $D = 57^\circ 17' 45''$
 $R = 100.00'$
 $T = 43.08'$
 $L = 81.36'$
 $E = 8.89'$
 $e =$
 $T.R. =$
 $S.E. RUN =$
 P.C. STA = 121+88.24
 P.T. STA = 122+69.61



LEGEND

 TOPSOIL FURNISH AND PLACE, 4"
 SEEDING, CLASS 1
 FERTILIZER
 MULCH, METHOD 1

 SHEET FLOW DIRECTION



WILLET HOFMANN ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 807 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-294-3381 DESIGN FAX: 815-294-0091

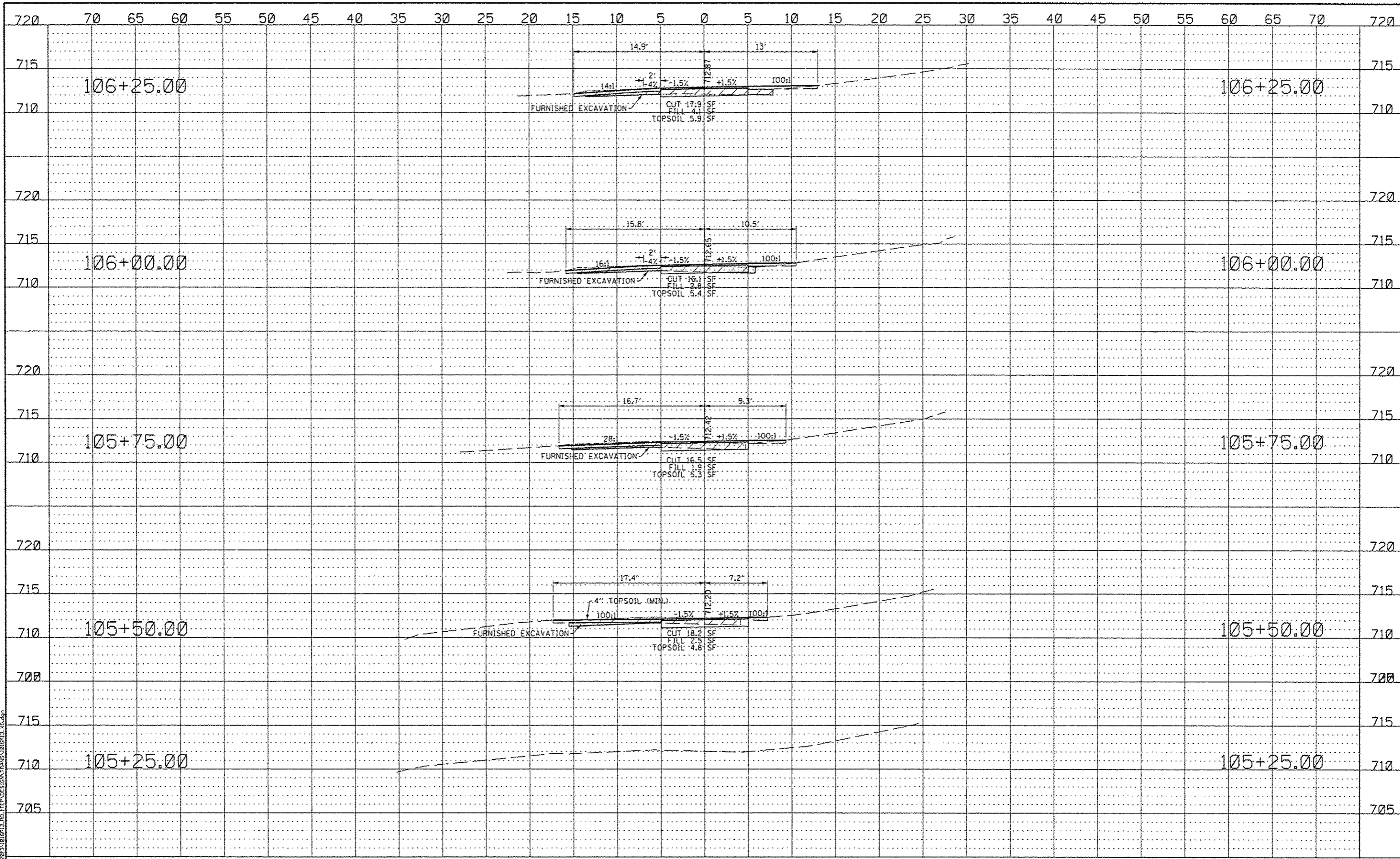
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CHECKED - CJB	REVISED -
DRAWN - TJA	REVISED -
CHECKED - CJB	REVISED -

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

PLAN AND PROFILE
MULTI-USE PATH
 STA. 119+10.00 TO STA. 122+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	7
	WHA* 1016R13		CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT TE-00021581				

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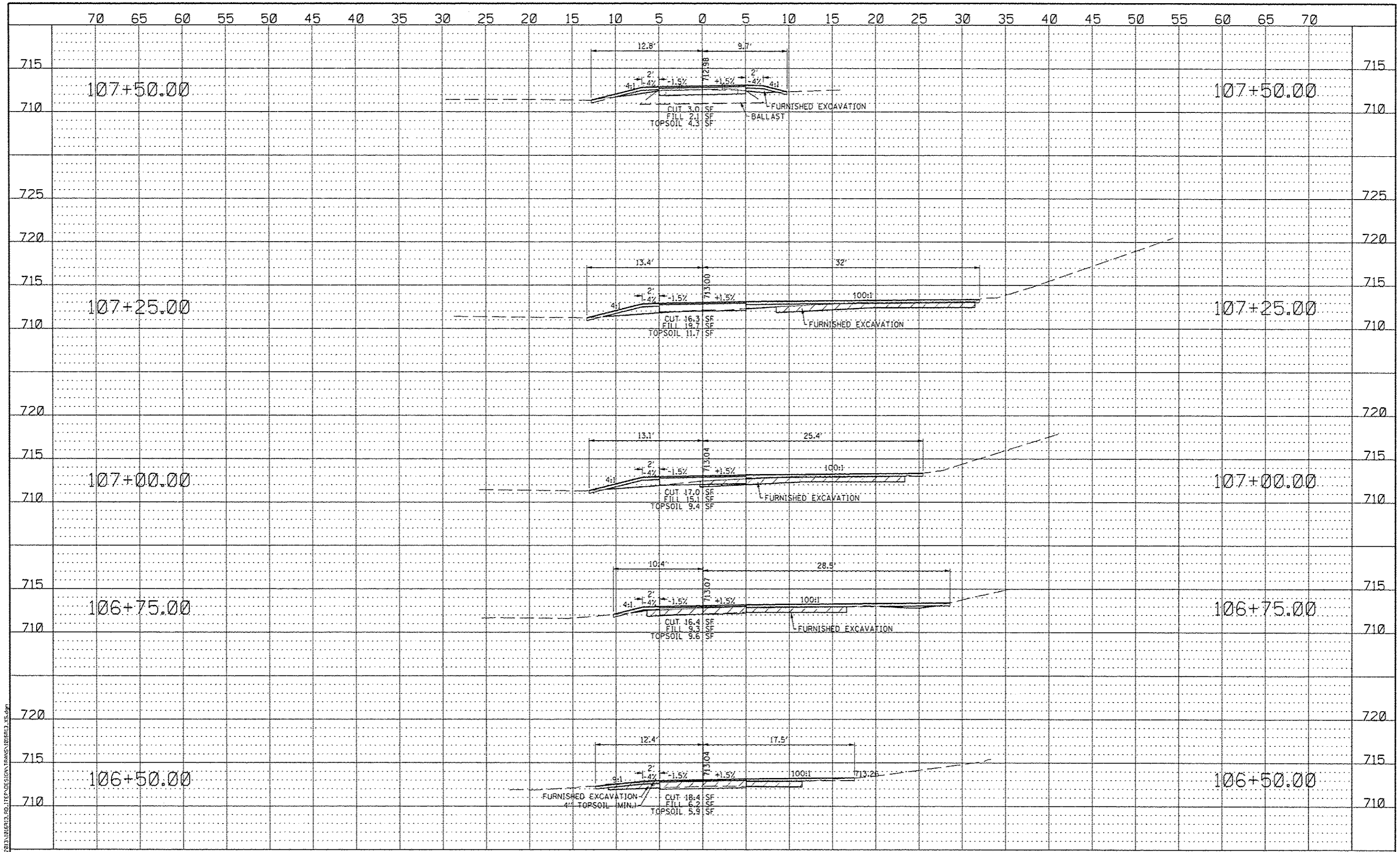


DESIGNED - TJA	REVISED -
CHECKED - CJB	REVISED -
DRAWN - TJA	REVISED -
CHECKED - CJB	REVISED -

**CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015**

**CROSS SECTIONS
EAST SIDE OF RIVER**
STA. 105+25.00 TO STA. 106+25.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	8
	WHA* 1016R13		CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT TE-00021581				



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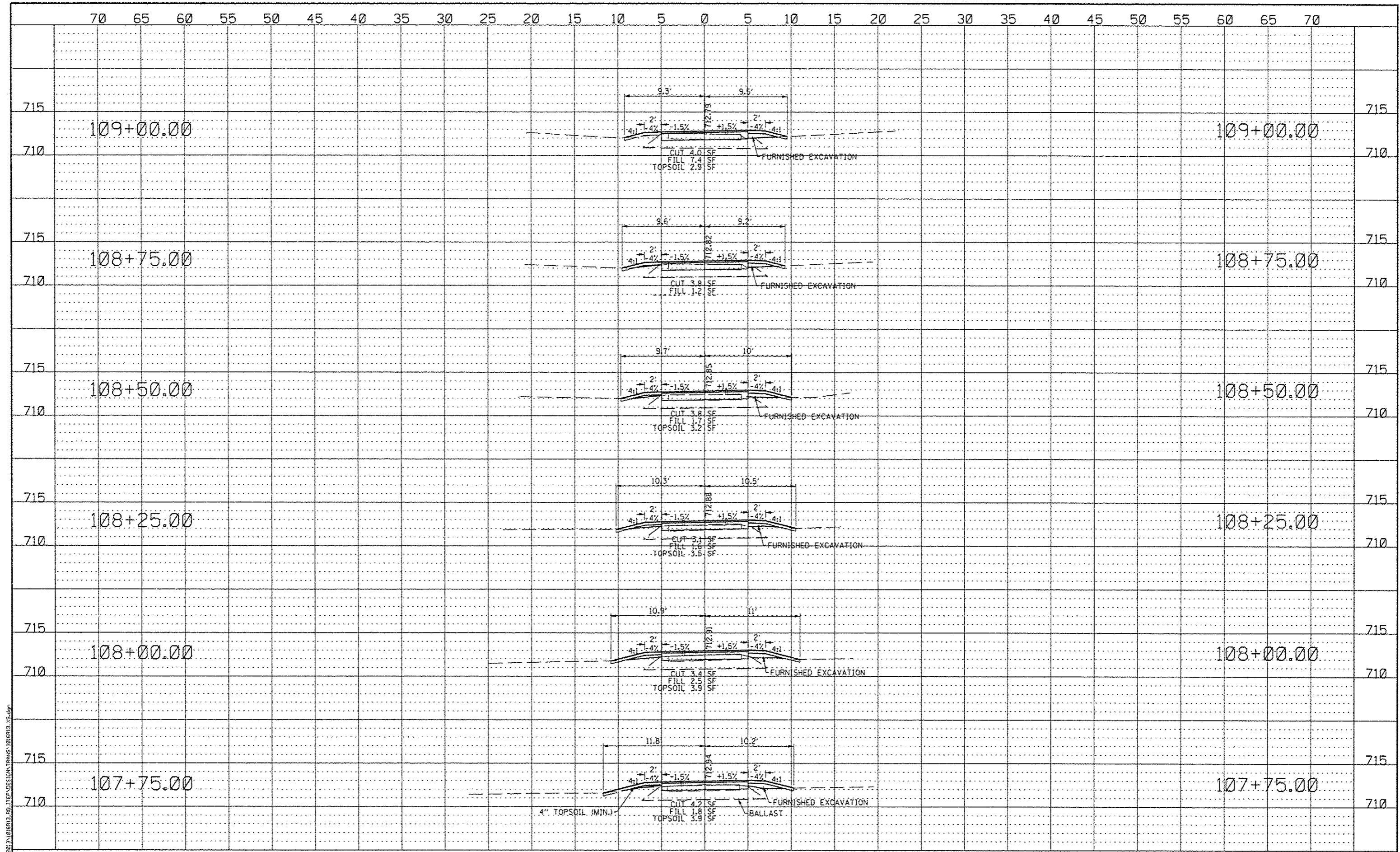


DESIGNED - TJA	REVISED -
CHECKED - CJB	REVISED -
DRAWN - TJA	REVISED -
CHECKED - CJB	REVISED -

**CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015**

**CROSS SECTIONS
EAST SIDE OF RIVER**
STA. 106+50.00 TO STA. 107+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-0T	WINNEBAGO	38	9
	WHA* 1016R13		CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT TE-0002158				



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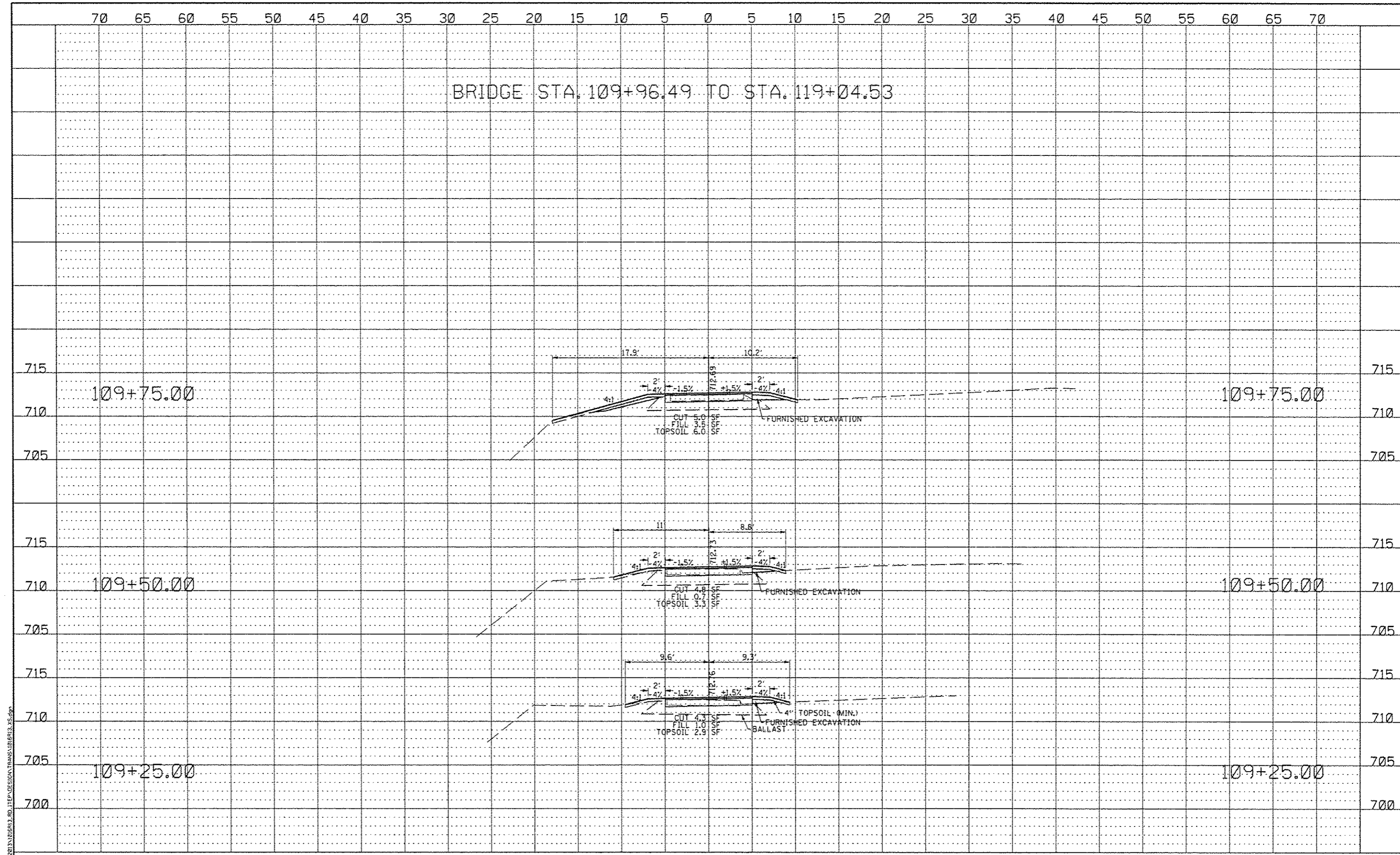
WILLET HOFMANN ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET DIXON, IL 61021-6367
7-315-284-3381 DESIGN FROM: #184-00018

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CHECKED - CJB	REVISED -

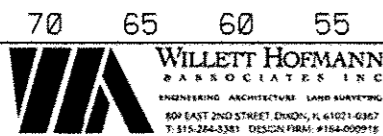
**CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015**

**CROSS SECTIONS
EAST SIDE OF RIVER**
STA. 107+75.00 TO STA. 109+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	10
WHA* 1016R13		CONTRACT NO. B5620		
(ILLINOIS) FED. AID PROJECT TE-0602(158)				



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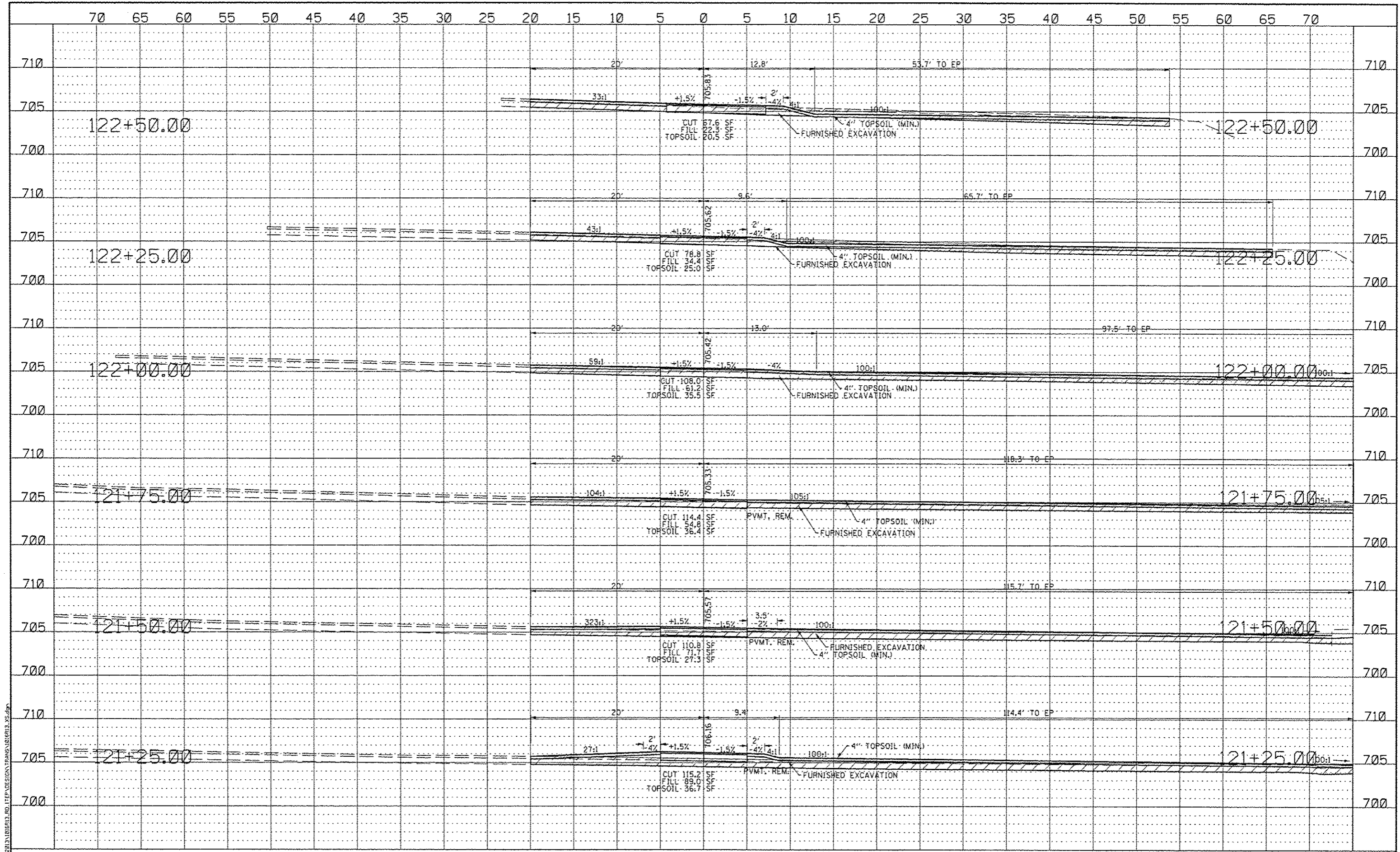
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DRAWN -	TJA	REVISED -	
CHECKED -	CJB	REVISED -	

**CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015**

**CROSS SECTIONS
EAST SIDE OF RIVER**

STA. 109+25.00 TO STA. 109+75.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	11
	WHA* 1016R13		CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT TE-00021581				



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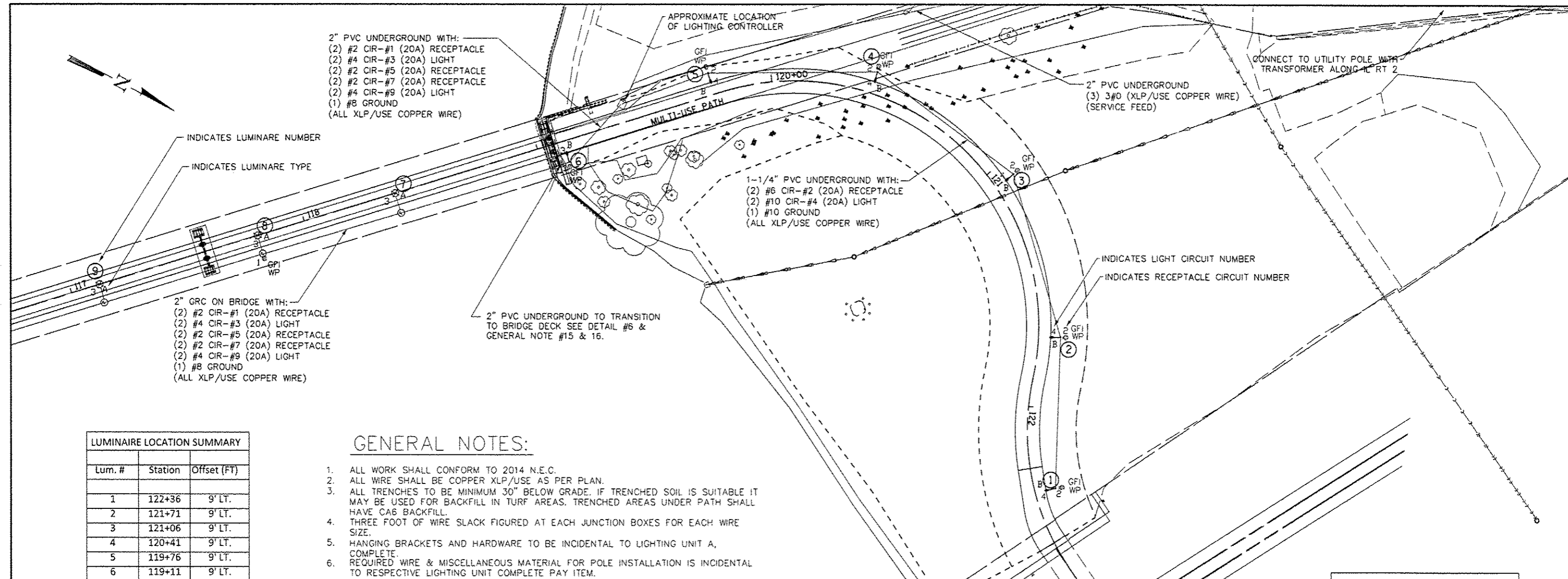
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 ENGINEERING ARCHITECTURE LAND SURVEYING
 807 EAST 2ND STREET DUNDON, IL 61021-0367
 T: 815-734-3381 DESIGN: 4134-000018

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DRAWN - TJA	REVISED -
CHECKED - CJB	REVISED -

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
 2015

CROSS SECTIONS
WEST SIDE OF RIVER
 STA. 121+25.00 TO STA. 122+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	14
	WHA* 1016R13		CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT TC-00021581				



2" PVC UNDERGROUND WITH:
 (2) #2 CIR-#1 (20A) RECEPTACLE
 (2) #4 CIR-#3 (20A) LIGHT
 (2) #2 CIR-#5 (20A) RECEPTACLE
 (2) #2 CIR-#7 (20A) RECEPTACLE
 (2) #4 CIR-#9 (20A) LIGHT
 (1) #8 GROUND
 (ALL XLP/USE COPPER WIRE)

INDICATES LUMINAIRE NUMBER
 INDICATES LUMINAIRE TYPE

2" GRC ON BRIDGE WITH:
 (2) #2 CIR-#1 (20A) RECEPTACLE
 (2) #4 CIR-#3 (20A) LIGHT
 (2) #2 CIR-#5 (20A) RECEPTACLE
 (2) #2 CIR-#7 (20A) RECEPTACLE
 (2) #4 CIR-#9 (20A) LIGHT
 (1) #8 GROUND
 (ALL XLP/USE COPPER WIRE)

2" PVC UNDERGROUND TO TRANSITION TO BRIDGE DECK SEE DETAIL #6 & GENERAL NOTE #15 & 16.

1-1/4" PVC UNDERGROUND WITH:
 (2) #6 CIR-#2 (20A) RECEPTACLE
 (2) #10 CIR-#4 (20A) LIGHT
 (1) #10 GROUND
 (ALL XLP/USE COPPER WIRE)

2" PVC UNDERGROUND
 (3) 3#0 (XLP/USE COPPER WIRE)
 (SERVICE FEED)

CONNECT TO UTILITY POLE WITH TRANSFORMER ALONG RT 2

INDICATES LIGHT CIRCUIT NUMBER
 INDICATES RECEPTACLE CIRCUIT NUMBER

LUMINAIRE LOCATION SUMMARY

Lum. #	Station	Offset (FT)
1	122+36	9' LT.
2	121+71	9' LT.
3	121+06	9' LT.
4	120+41	9' LT.
5	119+76	9' LT.
6	119+11	9' LT.
7*	118+39	0
8*	117+80	0
9*	117+12	0
10*	116+52	0
11*	115+84	0
12*	115+25	0
13*	114+80	0
14*	114+12	0
15*	113+53	0
16*	112+84	0
17*	112+26	0
18	111+53	6' 9" RT.
19	110+91	6' 9" RT.
20	110+29	6' 9" RT.
21	109+61	9' RT.
22	108+93	9' RT.
23	108+25	9' RT.
24	107+57	9' RT.
25	106+89	9' RT.
26	106+21	9' RT.
27	105+53	9' RT.

GENERAL NOTES:

- ALL WORK SHALL CONFORM TO 2014 N.E.C.
- ALL WIRE SHALL BE COPPER XLP/USE AS PER PLAN.
- ALL TRENCHES TO BE MINIMUM 30" BELOW GRADE. IF TRENCHED SOIL IS SUITABLE IT MAY BE USED FOR BACKFILL IN TURF AREAS. TRENCHED AREAS UNDER PATH SHALL HAVE C&B BACKFILL.
- THREE FOOT OF WIRE SLACK FIGURED AT EACH JUNCTION BOXES FOR EACH WIRE SIZE.
- HANGING BRACKETS AND HARDWARE TO BE INCIDENTAL TO LIGHTING UNIT A, COMPLETE.
- REQUIRED WIRE & MISCELLANEOUS MATERIAL FOR POLE INSTALLATION IS INCIDENTAL TO RESPECTIVE LIGHTING UNIT COMPLETE PAY ITEM.
- SIX FOOT OF CONDUIT HAS BEEN ADDED TO PAY ITEM FOOTAGE AT EACH CONCRETE BASE.
- REQUIRED GROUNDING AND MISCELLANEOUS MATERIAL IS INCIDENTAL TO THE POLE CONCRETE FOUNDATION PAY ITEM.
- SIX FOOT OF WIRE SLACK FIGURED AT EACH CONCRETE BASE FOR EACH WIRE SIZE.
- TEN FOOT OF WIRE SLACK FIGURED AT THE LIGHTING CONTROLLER FOR EACH WIRE SIZE.
- FIFTY FOOT OF WIRE SLACK FIGURED AT THE UTILITY POLE AND AT THE METER/CONTROLLER FOR THE SERVICE WIRE.
- PERFORM JULIE AS REQUIRED FOR EXISTING UTILITIES. COORDINATE WITH CITY OF ROCKFORD AND ANY PROPERTY OWNER'S FOR POSSIBLE OWNER OWNED UNDERGROUND ITEMS THAT WILL NOT BE MARKED BY JULIE. OWNER OWNED UNDERGROUND ITEMS TO BE LOCATED BY CONTRACTOR FOR THEIR SCOPE OF WORK. CONTRACTOR TO BE PAID FOR ACTUAL UNITS & FOOTAGES INSTALLED.
- AS-BUILD UNDERGROUND CONDUIT ROUTINGS & FOOTAGES WILL BE REQUIRED.
- ANY EXPOSED CONDUITS WILL BE GALVANIZED HEAVY WALL (GRC) TYPICAL. (GRC) WILL BE INCIDENTAL TO THE PARTICULAR PAYMENT ITEM.
- ANY REQUIRED EXPANSION JOINTS WILL BE INCIDENTAL TO THE PARTICULAR PAYMENT ITEM.
- ANCHOR BOLTS AND VIBRATION PAD FOR THE LIGHT POLE ON THE DECK WILL BE INCIDENTAL TO CONCRETE SUPERSTRUCTURES.

Symbol	Description
⊕	JUNCTION BDX
⊕	RECEPTACLE
⊕	CONTROLLER

LUMINAIRE SCHEDULE

Symbol	Label	Qty	MANUFACTURER	Catalog Number	Description	Lamp
⊕	A	11	LUMEC	DMS50-80W48LED4K-R-LE3F-VOLT-SMB-GNTX FIXTURE HEAD SPX/MJ-LG 8" OUTDOOR LUMINAIRE SUPPORT	120 VOLT; CONTRACTOR TO SUPPLY FIXTURE	55 WATT LED
⊕	B	13	LUMEC	DMS50-80W48LED4K-R-LE3F-VOLT-SMB-GNTX FIXTURE HEAD AC4-1A-GNTX (4') BRACKET ARM RTA608V-16-GNTX 16' POLE W/GFCI RECEPTACLE @ 14' & IN-USE COVER	120 VOLT; CONTRACTOR TO SUPPLY FIXTURE, POLE & ANCHOR BOLTS	55 WATT LED
⊕	C	3	LUMEC	DMS50-80W48LED4K-R-LE3F-VOLT-SMB-GNTX FIXTURE HEAD AC4-1A-GNTX (4') BRACKET ARM RTA608V-16-GNTX 16' POLE	120 VOLT; CONTRACTOR TO SUPPLY FIXTURE, POLE & (NOTE) ANCHOR BOLTS ARE SPECIAL	55 WATT LED

*LUMINAIRES 7 TO 17 SHALL BE MOUNTED TO THE HORIZONTAL TRUSS OVERHEAD. EXACT LOCATIONS SHALL BE FIELD VERIFIED.



FILE = S:\PROJECTS\2013\10161613_10161613_10161613 Lighting Plans.dwg

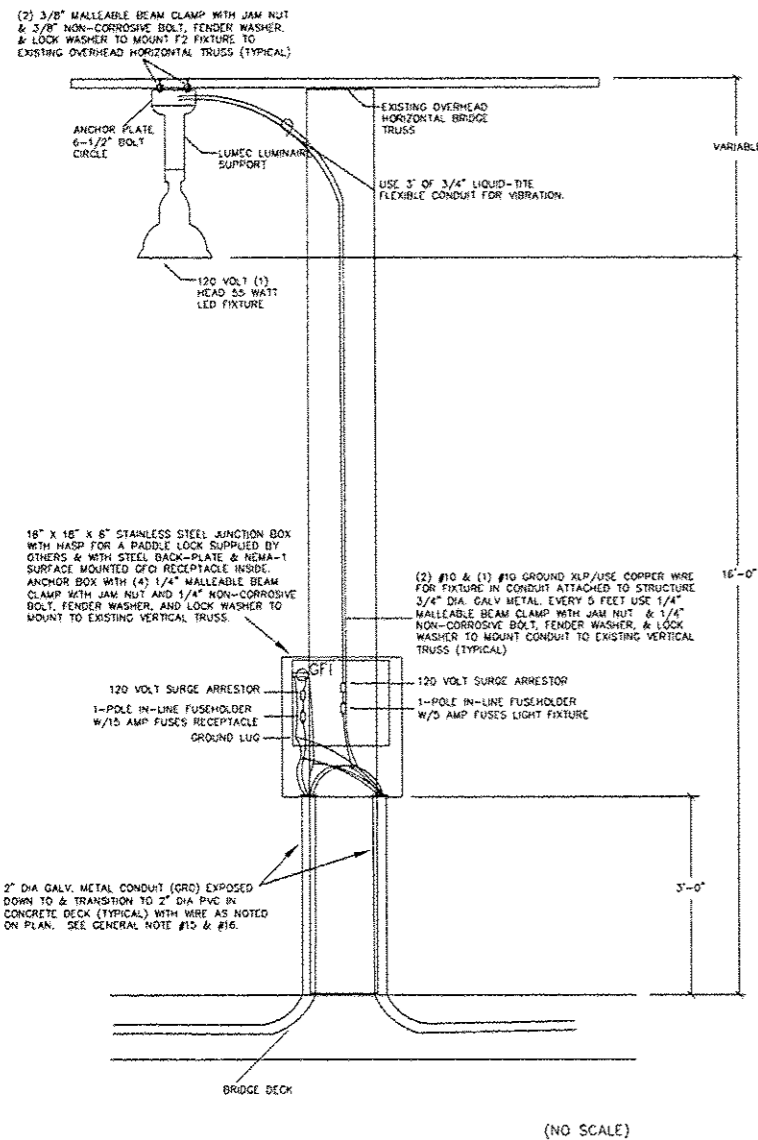


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DRAWN -	REVISED -
CHECKED -	REVISED -

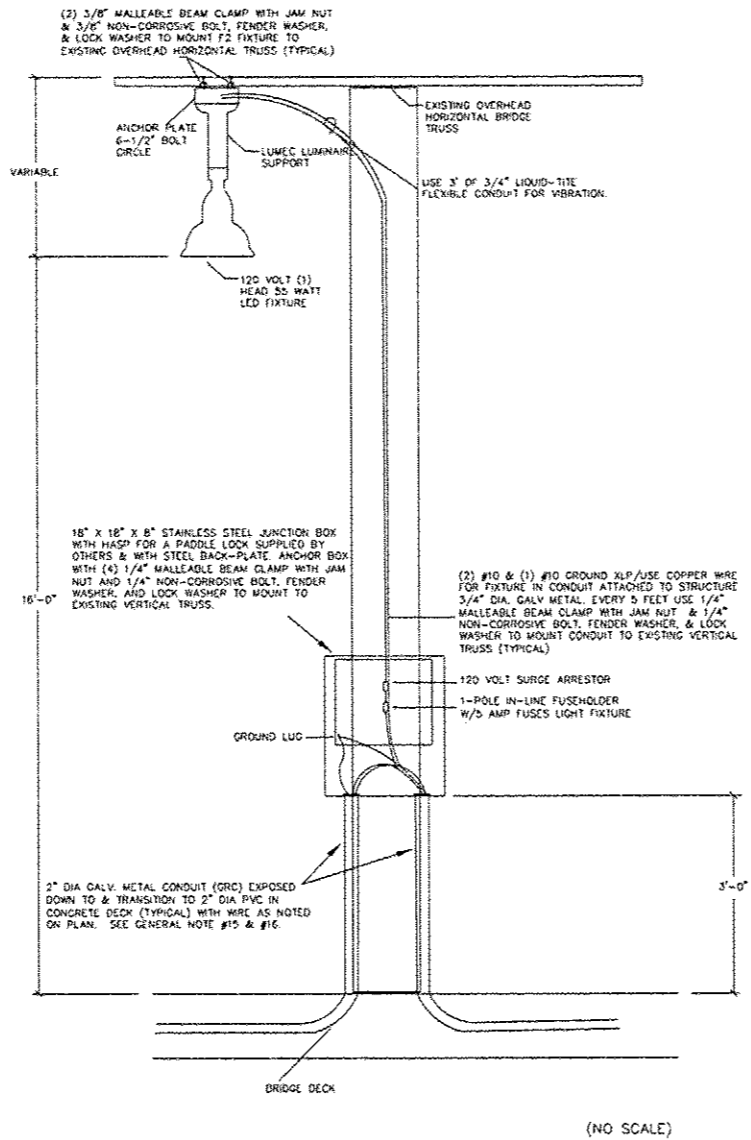
CITY OF ROCKFORD
 RAILS TO TRAILS OVER ROCK RIVER
 2015

LIGHTING PLAN
 MULTI-USE PATH
 STA. 116+74 TO STA. 122+50.00

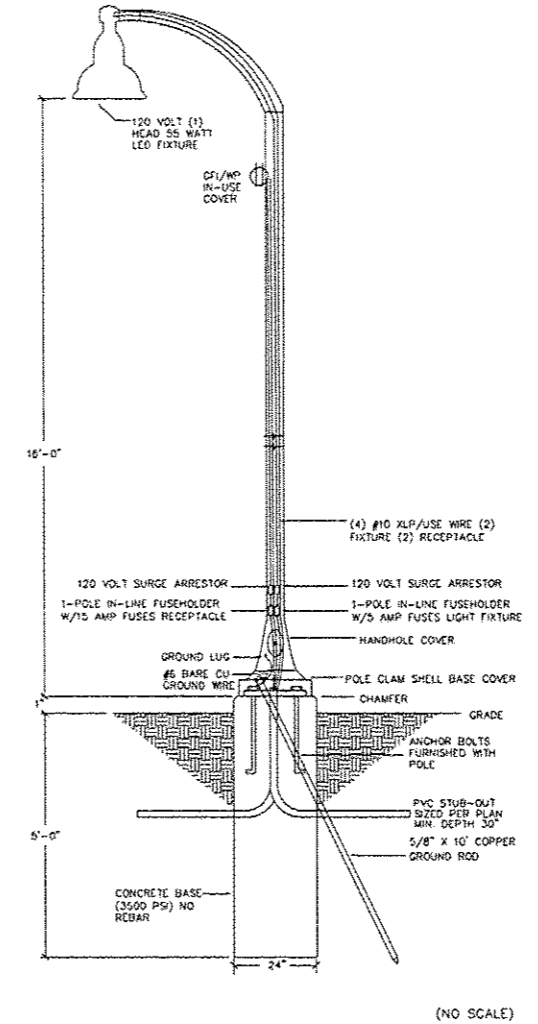
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ILLINOIS FED. AID PROJECT TE-0021581				



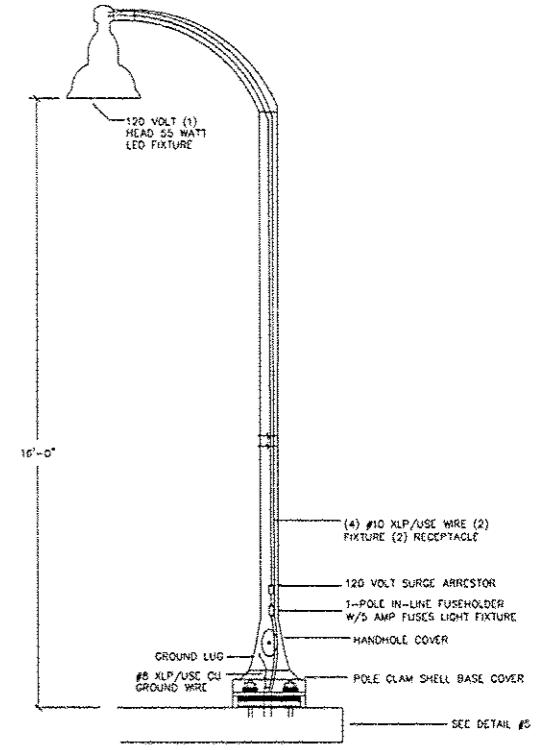
LIGHTING UNIT A, COMP. & J-BOX WITH GFCI RECEPTACLE DETAIL #1



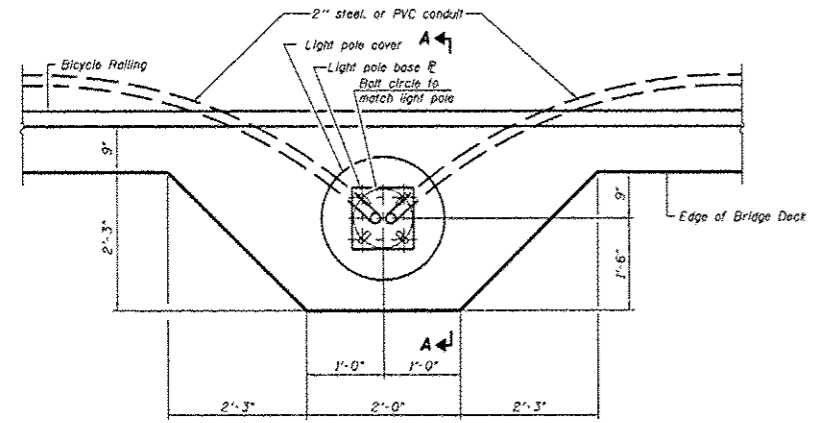
LIGHTING UNIT A, COMP. & J-BOX DETAIL #2



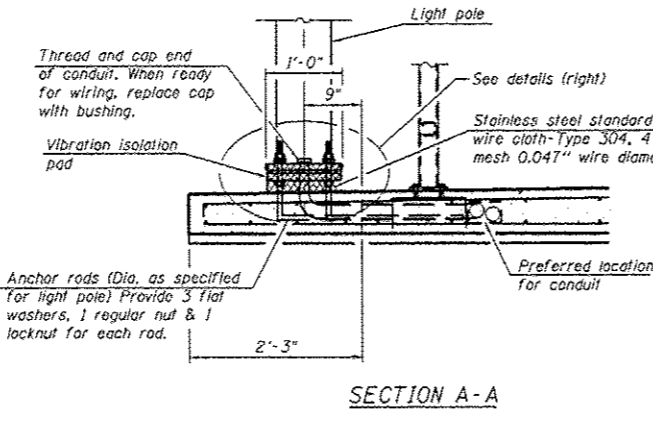
LIGHTING UNIT B, COMP. DETAIL #3



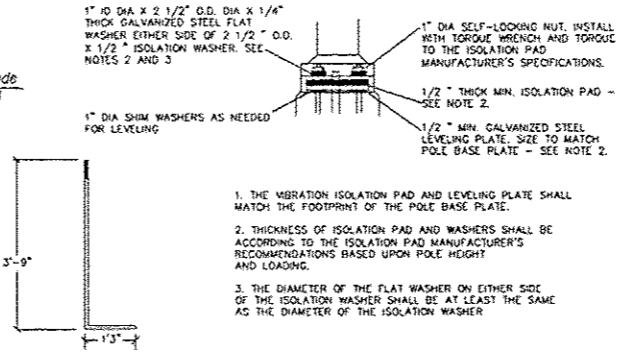
POLE MOUNTED ON BRIDGE PARAPET
LIGHTING UNIT C, COMP. DETAIL #4



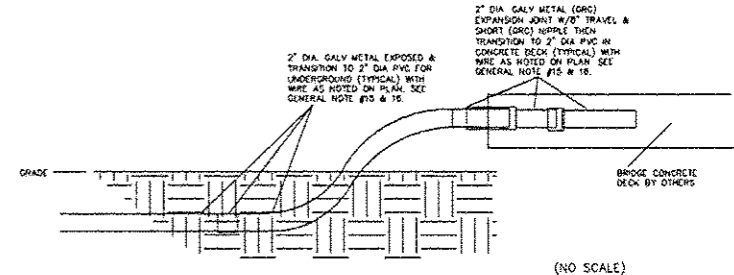
LIGHTING UNIT C, BUMPOUT DETAIL #5



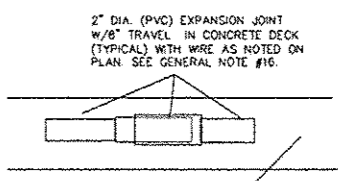
SECTION A-A



1. THE VIBRATION ISOLATION PAD AND LEVELING PLATE SHALL MATCH THE FOOTPRINT OF THE POLE BASE PLATE.
2. THICKNESS OF ISOLATION PAD AND WASHERS SHALL BE ACCORDING TO THE ISOLATION PAD MANUFACTURER'S RECOMMENDATIONS BASED UPON POLE HEIGHT AND LOADING.
3. THE DIAMETER OF THE FLAT WASHER ON EITHER SIDE OF THE ISOLATION WASHER SHALL BE AT LEAST THE SAME AS THE DIAMETER OF THE ISOLATION WASHER.



(GRC) EXPANSION JOINT DETAIL #6



(PVC) EXPANSION JOINT DETAIL #7

FILE = S:\PROJECTS\2015\1016R13\RD_11\EP_DESIGN\TRANS\1016R13_Lighting_Plan.dgn

DESIGNED -	JRR	REVISED -	
CHECKED -		REVISED -	
DRAWN -		REVISED -	
CHECKED -		REVISED -	

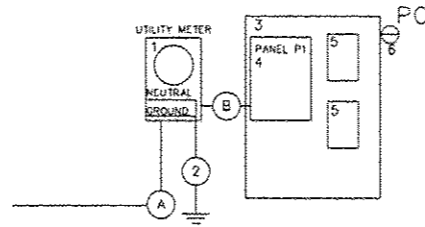
CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

LIGHTING PLAN
MULTI-USE PATH

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	17
WHA* 1016R13		CONTRACT NO. 85620		
ILLINOIS FED. AID PROJECT FE-00021581				

PANEL NAME: P-1		ICT NAME: CITY OF ROCKFORD WALK PATH	
PANEL LOCATION: CONTROL CABINET		SER: (3) #3 & (1) #8 XLP/USE COPPER WIRE	
BUSSING AMPS: 100		VOLTAGE: 120/240 1PH AIC RATING: 10,000	
MOUNTING: SURFACE		MAINS: MAIN 3W	
BUS: COPPER		TYPE: BOLT-IN N1	

CCT NUM	CB SIZE	NUM POLE	DESCRIPTION	AMPS	AS VA	BS VA	CCT NUM	CB SIZE	NUM POLE	DESCRIPTION	AMPS
1	20	1	(7) BRIDGE RECEIPT 1.5A/EA	10.5	2,160.00		2	20	1	(5) F2 LTS WEST RECEIPT 1.5	7.5
3	20	1	(15) BRIDGE LIGHTS .46/EA	6.9		1,104.00	4	20	1	(5) F2 LTS WEST .46A/EA	2.3
5	20	1	SPARE	0	8.00		6	20	1	0.05 PHOTO-CELL	0.05
7	20	1	(3) LT RECEIPTS EAST 1.5/EA	4.5		540.00	8	20	1	SPARE	0
9	20	1	(7) LIGHTS EAST 1.5/EA	3.22	396.40		10	20	1	SPARE	0
11	20	1	(4) LT RECEIPTS EAST 1.5/EA	6		720.00	12	20	1	SPACE	0
13	20	1	SPARE	0	0.00		14	20	1	SPACE	0
15	20	1	SPACE	0	0.00		16	20	1	SPACE	0
17	20	1	SPACE	0	0.00		18	20	1	SPACE	0
TOTAL VOLT/AMPS /PER PHASE:				3,752.40	3,564.00						
AMPERAGE PER PHASE:				31.27	29.76						
AVERAGE AMPERAGE:				30.49							
(DUTY CYCLE) TOTAL LOAD IS 80% OVERALL:				21.34							



- NOTES: 1. 100 AMP 1-PH 3W (NO MAIN) UTILITY METER (CECHA); MOUNT TO BACK SIDE OF LIGHTING CONTROLLER.
 2. #4 CU TO (3) 3/4" X 10' LONG COPPER GROUND RODS (MINIMUM 6' APART TRIANGLE).
 3. 72" TALL X 36" WIDE X 18" DEEP STAINLESS PEDESTAL LOCKABLE HINGED COVER BOX WITH STEEL BACK-PANEL.
 4. P1 AND BREAKERS SHALL BE RATED NOT LESS THAN 10,000 A.I.C. (SEE PANEL SCHEDULE).
 5. LIGHTING CONTACTORS NEMA 1 ENCLOSURE (SEE DETAIL).
 6. PHOTO-CELL (SEE DETAIL).
- FEEDS: A. 2" PVC UNDERGROUND (3) 3/0 XLP/USE COPPER WIRE.
 B. 1-1/4" GRC NIPPLE WITH (3) #3 & (1) #8 XLP/USE COPPER WIRE.

POWER RISER DIAGRAM
 NTS

- 2.07. CORROSION PREVENTION
 A. Protect all metallic materials against corrosion.
 1. All equipment enclosures given rust-inhibiting treatment and standard finish by manufacturer.
 2. Ferrous Metal Parts: Hot dip galvanized, ASTM A123 or ASTM A153.
 a. Includes anchors, bolts, braces, boxes, bodies, clamps, fittings, guards, nuts, pins, rods, shims, thimbles, washers, and miscellaneous parts; other than stainless steel or non-ferrous materials.
 B. Isolation of Dissimilar Metals: Separate dissimilar metals with NEC approved material.

- 2.08. PANELBOARD
 A. Square D NQDD Style, Copper buss, Nema-1, surface mounted, hinged cover. (or equal GE, Siemens, Cutler-Hammer)
 B. BREAKERS
 1. Square D OOB type. (or equal GE, Siemens, Cutler-Hammer)

- 2.09. LUMINAIRES
 A. Manufacturer: See lighting fixture schedule on plans.

3. EXECUTION

- 3.01. INSTALLATION
 A. Drawings are diagrammatic and are intended to convey scope of work and indicate general arrangement of conduit, boxes, equipment, fixtures and other work included in contract.

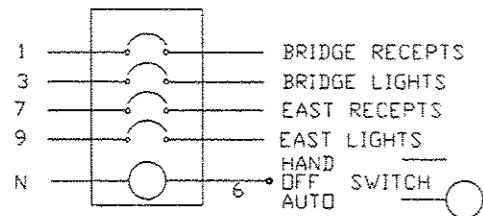
- 3.02. RACEWAYS
 A. Installation of Conduit:
 1. Install conduit and tubing products indicated, in accordance with manufacturer's written instructions and requirements of NEC and NECA, Standard of Installation.
 2. Attach conduit with clamps that meet the application.
 3. Coordinate installation of conduit with prime contractor.
 4. Install conduit free from dents and bruises.
 5. Plug conduit ends to prevent entry of dirt or moisture.
 6. Clean out conduit before installation of conductor(s).
 7. Alter conduit routing to avoid structural obstructions, minimize cross-overs; and where possible, install raceways above water and steam piping.
 8. Allow minimum 6 inch clearance at flues, steam pipes, and heat sources.
 9. Route all exposed conduits parallel or perpendicular to building lines.
 10. Fire rated walls, partitions, floors, ceiling penetrations: Sealed in accordance with NEC 300-21.
 a. Flexible conduit sufficient length to avoid vibration transmission.

- 3.03. IDENTIFICATION
 A. Identify all control components installed with labels.

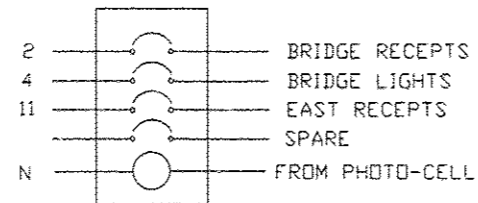
- 3.04. WIRE AND CABLES
 A. Installation:
 1. Conductor size indicated on drawings indicates ampacity requirements using copper conductors.
 2. Identify circuit numbers using appropriate wire labels.

- 3.05. BOXES
 A. Installation:
 1. Provide knockout closures to cap unused knockout holes where blanks have been removed.
 2. Support all boxes independently of conduit.
 3. Outlet Boxes:
 a. Flush mount outlet boxes in areas other than mechanical rooms, electrical rooms, and above removable ceilings.
 4. Pull Boxes and Junction Boxes: Locate pull boxes and junction boxes above removable ceilings or in electrical rooms, utility

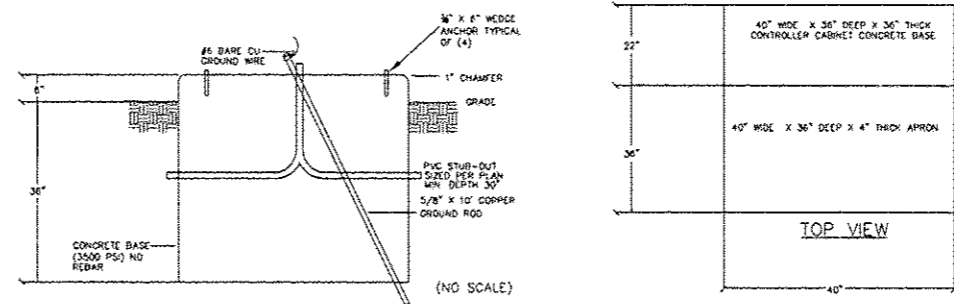
- 3.06. PRESENT EQUIPMENT AND CONSTRUCTION
 A. Examination
 1. Before submitting his bid, Contractor shall visit the present site, building, areas being remodeled and adjacent areas not being remodeled.
 2. Contractor shall contact the Owner to carefully verify all present external and internal exposed, concealed, buried points of connections as to location, size, type, depth.
 3. Verify that abandoned wiring, equipment, piping, boxes, etc. serve only abandoned facilities and remove.
 4. If contractor finds that any present point of points of connection to present facilities/equipment are incorrectly shown on plans or incorrectly specified, he shall notify the Owner, in writing, at least 10 (ten) working days before bids are due to be submitted.
 5. Owner will issue an addendum to all contractors, calling their attention to revised point or points of connection, as required.
 6. If electrical contractors fail to notify the Owner, in writing, as outlined above, it will be expected that their bid includes everything required to provide proper connections to all present points of connection as they actually exist or as they will be provided.



EXTERIOR LIGHTS CONTROL #1



EXTERIOR LIGHTS CONTROL #2



TYPE D FOR GROUND MOUNTED CONTROLLER CABINET DETAIL
 (NO SCALE)

ELECTRICAL SPECIFICATIONS:

1.01. WORK INCLUDES

- A. Light Fixtures.
 B. Trench & backfill.
 C. Raceways.
 D. Wires and necessary terminating materials.
 E. Boxes.
 F. Supporting devices.

1.02. REGULATORY REQUIREMENTS

- A. National Electrical Code, NEC (2014)
 1. Comply with NEC/NFPA No. 70, for construction and installation of basic materials.
 2. NEC 300-21: Wiring Methods: Spread of Fire or Products of Combustion.
 3. Building code for the city of Rockford.
 B. Underwriter's Laboratories, UL:
 1. All basic materials listed and labeled by UL.

1.03. REFERENCED

- A. American National Standards Institute, ANSI:
 1. C80.3: Specification for Electrical Metallic Tubing, Zinc Coated.
 B. National Electrical Manufacturer's Association, NEMA:
 1. Enclosures: Publication 250.
 a. Type 1: Indoor use, atmospheric conditions normal.
 C. Underwriter's Laboratories, UL

1.04. REQUIRED SUBMITTALS

- A. Shop Drawings:
 1. Submit drawings for:
 a. Lighting fixtures.
 b. Poles
 c. Meter Base
 d. Electrical Panel
 e. Stainless Steel Enclosures
 f. Contactors
 g. Receptacles

1.05. PROJECT RECORD DOCUMENTS

- A. Accurately record on drawings actual locations and wiring methods and "As-built" record documents.
 B. Submit for Architect's review.

1.06. DRAWINGS AND SPECIFICATIONS

- A. Any required utility will be arranged and paid for by the Owner.
 B. Work is to be completed as per the Illinois Standard Specifications for Road and Bridge Construction; adopted January 1, 2012.
 C. Material shall be new. Seconds or damaged materials will be rejected by Owner, who reserves the right to disapprove and reject any materials, proposed or installed which, in their opinion, fail to meet quality standards specified. Contractor shall, at his

2. PRODUCTS

2.01. RACEWAYS

- A. Conduit Materials, Components:
 1. Conduit & Fittings:
 a. (RMC) Rigid Metal Conduit; as per the Illinois Standard Specifications for Road and Bridge Construction; adopted January 1, 2012; section 811.
 b. (PVC) Rigid Polyvinyl Chloride Conduit, Schedule 40 exterior underground only, Minimum depth 30" under roadway or vehicular traffic, as per the Illinois Standard Specifications for Road and Bridge Construction; adopted January 1, 2012; section 810.

2.02. WIRES AND CABLES

- A. All wire to be copper XLP/USE; as per the Illinois Standard Specifications for Road and Bridge Construction; adopted January 1, 2012; section 817.

2.03. WIRING SYSTEM IDENTIFICATION

- A. Wire Insulation Color:
 120/240 v., 1 phase, 3 wire
 1. Phase A Black
 2. Phase B Red
 3. Neutral White
 4. Ground Green

2.04. BOXES

- A. All boxes to be stainless steel; as per the Illinois Standard Specifications for Road and Bridge Construction; adopted January 1, 2012; section 813.

2.05. SUPPORTING DEVICES

- A. Conduit Supports:
 1. Single Runs: Galvanized conduit straps or ring bolt type hangers with specialty spring clips.
 2. Vertical Runs: Channel support with conduit fittings.
 B. Anchors
 1. Hollow Masonry: Toggle bolts or spider type expansion anchors.
 2. Solid Masonry: Lead expansion anchors or preset inserts
 3. Metal Surfaces: Machine screws, bolts, or welded studs.
 4. Wood Surfaces: Wood screws.
 5. Concrete Surfaces: Self-drilling anchors or power-driven studs.

2.06. FIRE AND SMOKE PENETRATION SEALANT

- A. NEC 300-21; UL rated flexible sealant.

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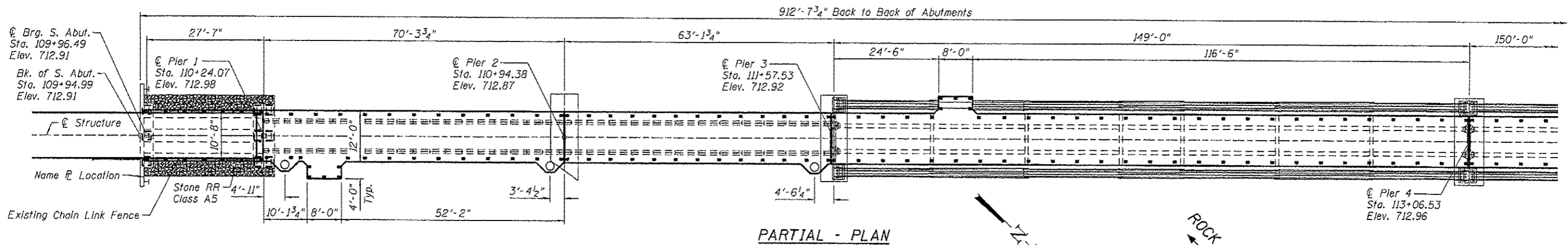
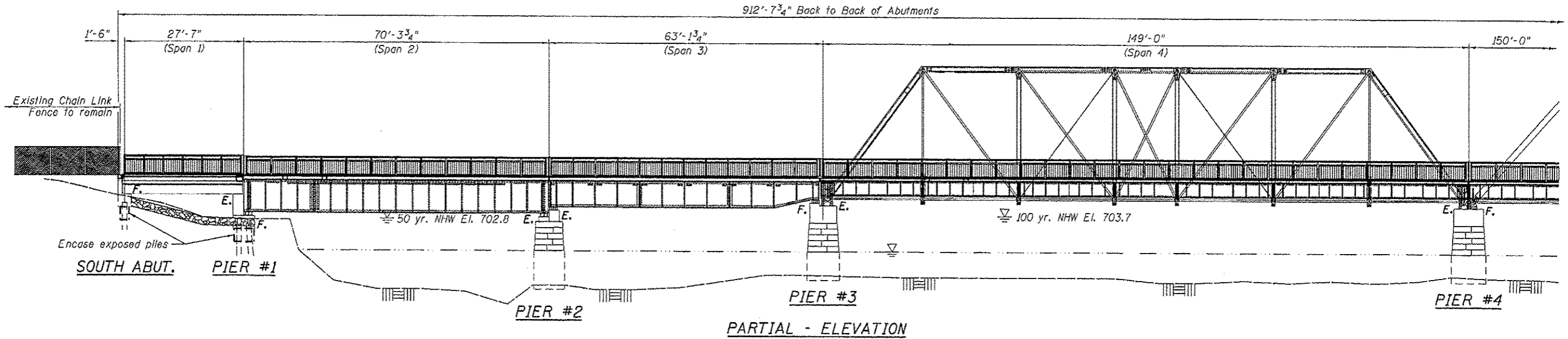
DESIGNED - JRR	REVISED -	CITY OF ROCKFORD RAILS TO TRAILS OVER ROCK RIVER 2015	LIGHTING PLAN MULTI-USE PATH		F.A.-RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED -	REVISED -					14-00608-00-BT	WINNEBAGO	38	18
DRAWN -	REVISED -					WHA# 1016R13			
CHECKED -	REVISED -								CONTRACT NO. 85620

ILLINOIS FED. AID PROJECT TE-00221581

EXISTING STRUCTURE:

The existing structure consists of 8 spans, a precast T-beam span at 27'-7", (2) \bar{L} girders at 70'-3 $\frac{3}{4}$ " and 63'-1 $\frac{3}{4}$ ", 1 truss at 149', 3 trusses at 150', and 1 truss at 148'. Structure to be converted to a shared-use path.

BENCH MARK #403: Chis. "□" in southeast corner of headwall, east side of railroad structure. Elev. 712.32



INDEX OF STRUCTURAL SHEETS

- 1-3.) General Plan and Elevation
- 4-9.) Superstructure
- 10-12.) Superstructure Details
- 13.) Bicycle Rolling
- 14.) Preformed Joint Strip Seal Details
- 15.) South Abutment Details
- 16.) North Abutment Details
- 17.) MSE Wall Details
- 18-20.) Pier Repair Details

SEISMIC DATA
 Seismic Performance Category (SPC) = A
 Horizontal Bedrock Acceleration Coefficient (A) = 0.033g
 Site Coefficient (S) = 1.0

DESIGN SPECIFICATIONS

2002 AASHTO Bridge Design Specifications, 17th Edition

LOADING HS20-44 & PEDESTRIAN LOADING = 90 psf

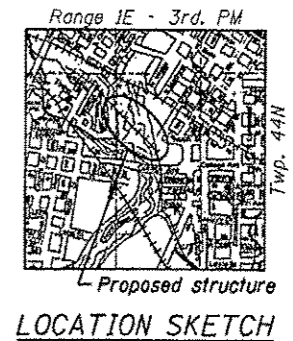
DESIGN STRESSES

FIELD UNITS
 f'c = 3,500 psi (New Construction)
 fy = 60,000 psi (Reinforcement in Deck)
 fy = 33,000 psi (Existing Steel)



Brian K. Comuel
 DATE: 3/2/2015
 EXPIRES 11/30/16

"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
RAILS TO TRAILS OVER ROCK RIVER (PUBLIC WATERS)
SECTION 14-00608-00-BT
CITY OF ROCKFORD
STATION 114+50.50
STRUCTURE NO. 101-6352



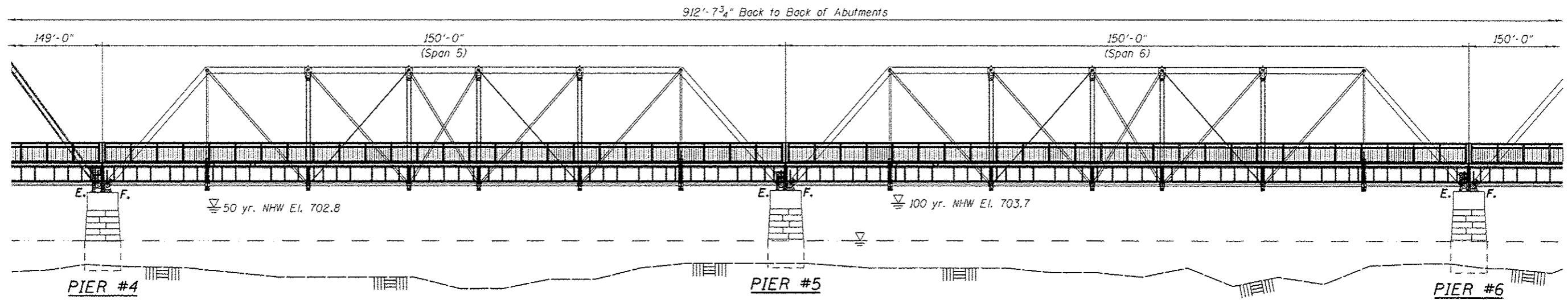
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CHECKED - BSK	REVISED -

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

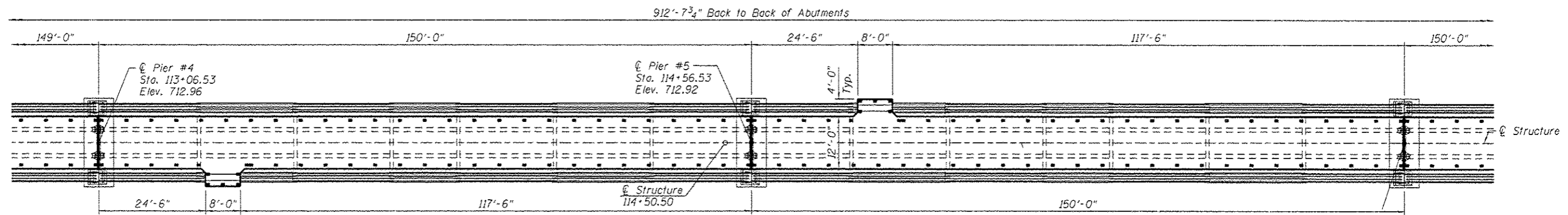
STRUCTURAL SHEET NO. 1 OF 20 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	19
	WHA 1016R13		CONTRACT NO. 85620	

ILLINOIS FED. AID PROJECT 1E-000211501



PARTIAL - ELEVATION



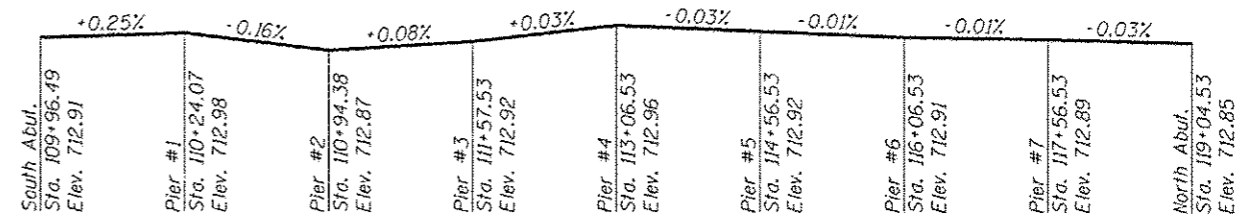
PARTIAL - PLAN



WATERWAY INFORMATION

Drainage Area = 6,530 Sq. Mi. Low Grade Elev. 705.42' @ Sta. 122+00

Flood Yr.	Freq.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater Elev.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
10		33,167	9,320	9,320	700.3	0.7	0.7	701	701	
Design	50	46,441	11,390	11,390	702.8	0	0	702.8	702.8	
Base	100	52,063	12,152	12,152	703.7	0.3	0.3	704	704	
Overtopping	-	-	-	-	-	-	-	-	-	
Max. Calc.	500	66,397	14,685	14,685	707.0	1.0	1.0	708	708	



PROFILE GRADE
(along centerline roadway)

DESIGN SCOUR ELEVATION TABLE

Event / Limit	Design Scour Elevations (ft.)									Item 113
	S. Abut.	Pier #1	Pier #2	Pier #3	Pier #4	Pier #5	Pier #6	Pier #7	N. Abut.	
Q100	N/A	N/A	687.5	689.83	689.85	690.54	689.56	690.54	695.54	5
Design	702.19	697.26	686.5	688.83	688.85	689.54	688.56	689.54	694.54	

GENERAL PLAN AND ELEVATION
RAILS TO TRAILS OVER ROCK RIVER (PUBLIC WATERS)
SECTION 14-00608-00-BT
CITY OF ROCKFORD
STATION 114+50.50
STRUCTURE NO. 101-6352

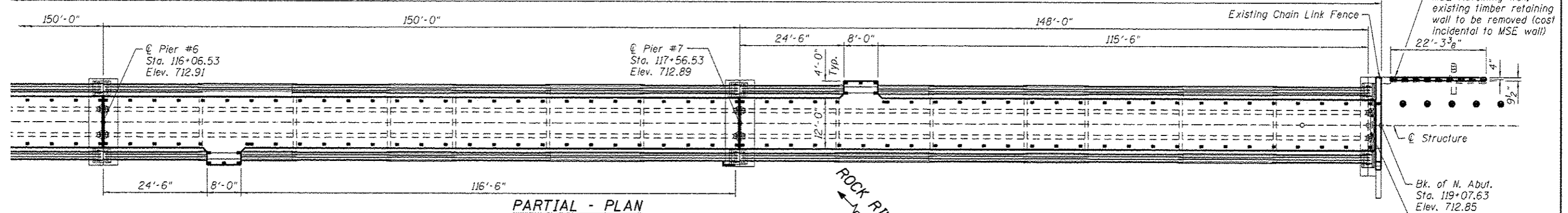
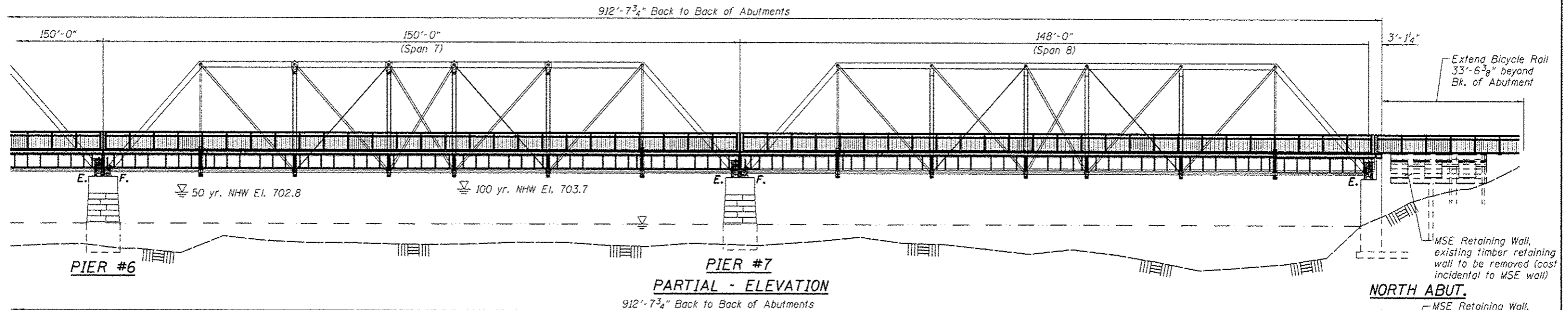


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CHECKED - MAC	REVISED -
DRAWN - RDA	REVISED -
CHECKED - BSK	REVISED -

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

STRUCTURAL SHEET NO. 2 OF 20 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	20
WHA* 1016R13		CONTRACT NO. 85620		
[ILLINOIS] FED. AID PROJECT 1E-000215B				



BILL OF MATERIAL - BRIDGE

ITEM	UNIT	SUB.	SUPER.	TOTAL
Stone Riprap, Class A5	Ton	52	—	52
Aggregate Base Course, Type B	Ton	—	7	7
Hot-Mix Asphalt Surface Course, IL-9.5FG, N50	Ton	—	4	4
Concrete Removal	Cu. Yd.	0.4	—	0.4
Concrete Superstructure	Cu. Yd.	1.2	234.8	236.0
Concrete Encasement	Cu. Yd.	5.5	—	5.5
Protective Coat	Sq. Yd.	—	1,210	1,210
Furnishing & Erecting Structural Steel	Pound	43	—	43
Stud Shear Connectors	Each	28	1,774	1,802
Reinforcement Bars, Epoxy Coated	Pound	740	71,970	72,710
Bicycle Railing	Foot	—	1,893	1,893
Name Plates	Each	—	1	1
Preformed Joint Strip Seal	Foot	—	96	96
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq. Ft.	140	—	140
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	124	—	124
Grout Removal and Replacement	Each	8	—	8
Masonry Cleaning and Tuckpointing	Sq. Yd.	37	—	37
Removal of Existing Timber Members	L. Sum	—	1	1
Chain Link Fence Removal	Foot	—	96	96
Chain Link Gates Removal	Each	—	2	2
Chain Link Fence, 7' (Special)	Foot	—	8	8

*See Special Provisions.

GENERAL NOTES:

- All structural steel shall be AASHTO M270 Grade 36.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the Concrete Superstructure pay item.
- 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.
- Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- All hardware, as noted, shall be hot dipped galvanized in accordance with AASHTO M-232 and included in the cost of Furnishing & Erecting Structural Steel.
- The tops of all piers and abutments and all bottom chord steel members for a distance of three (3') feet either side of centerline of bearing locations shall be cleaned per the Concrete Superstructure Special Provision.
- The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources and the Army Corps of Engineers for any temporary construction activity placed in the water. This shall include placement of material for run-arounds, causeways, etc.
- Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
- Steel angles and plates, hold down wire, and 1/2" galvanized decking shown as optional formwork plan, the Contractor may utilize this plan or provide their own. Shop drawings shall be provided for the chosen plan. If stay-in-place forms are utilized all steel surfaces to remain exposed shall be galvanized in accordance with AASHTO M-232. The cost of all formwork shall be included in the cost for Concrete Superstructure.

RAILS TO TRAILS OVER ROCK RIVER
 BUILT 2015 BY
 CITY OF ROCKFORD
 SECTION 14-00608-00-BT
 STATION 114+50.50
 STR. NO. 101-6352 LOADING HS20

NAME PLATE LETTERING
 Refer to Std. 515001-03

GENERAL PLAN AND ELEVATION
RAILS TO TRAILS OVER ROCK RIVER (PUBLIC WATERS)
SECTION 14-00608-00-BT
CITY OF ROCKFORD
STATION 114+50.50
STRUCTURE NO. 101-6352

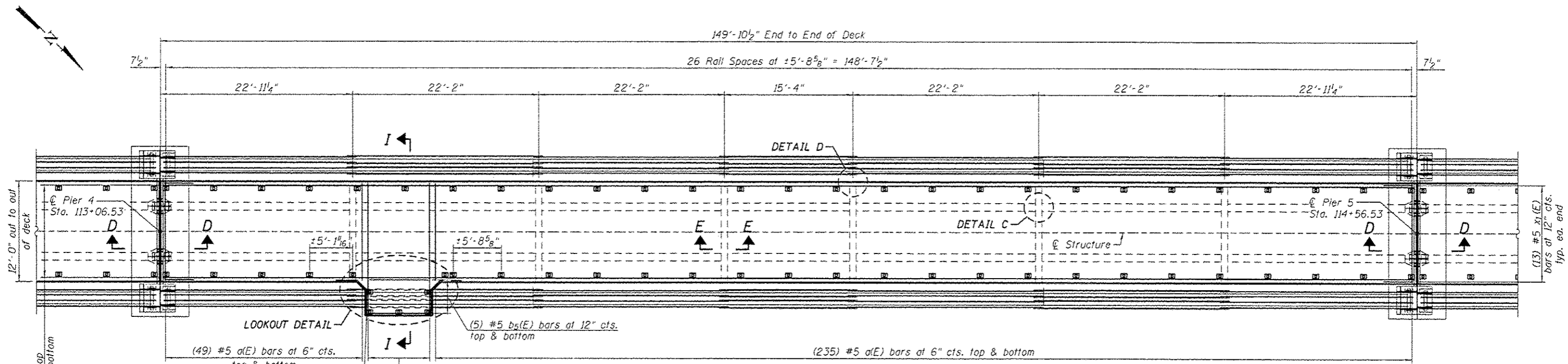


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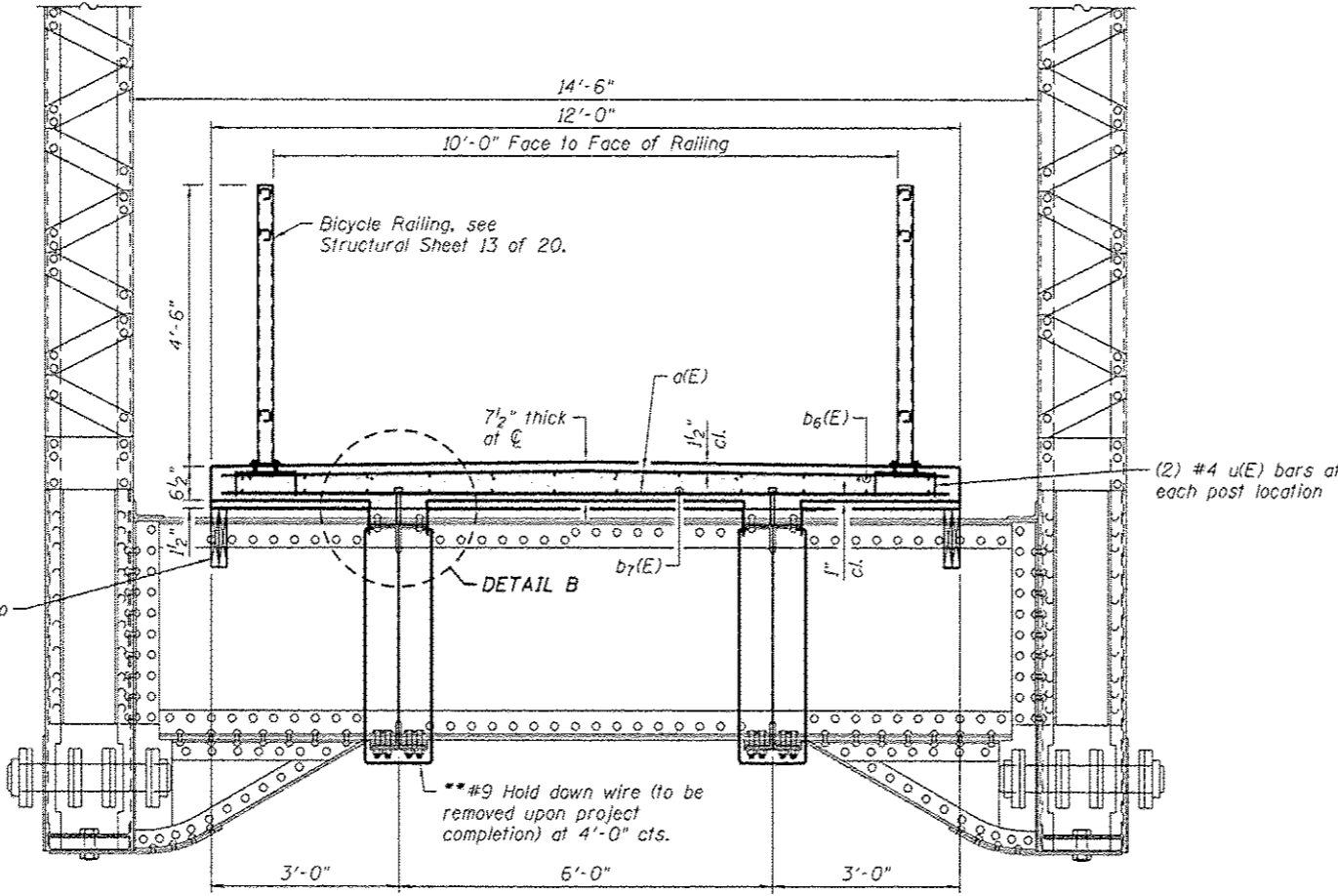
CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

STRUCTURAL SHEET NO. 3 OF 20 SHEETS

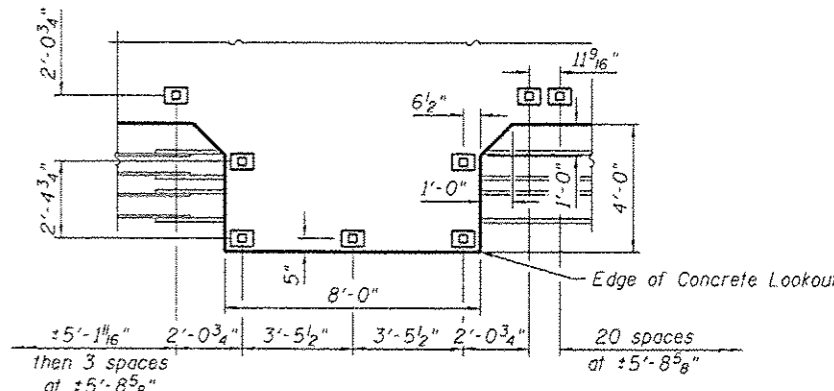
F.A.-RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	21
WHA* 1016R13		CONTRACT NO. 85620		
ILLINOIS FED. AID PROJECT TE-00021581				



PARTIAL PLAN - SPAN 5



CROSS SECTION
(Through Truss, Typ. Spans 4 thru 8)
**Part of optional formwork plan



LOOKOUT DETAIL
Reinforcement not shown for clarity

MINIMUM BAR LAP
#5 bar = 2'-7"

NOTES:
See Structural Sheet 10 of 20 for Superstructure Details and Bill of Material.
See Structural Sheet 11 & 12 of 20 for Sections.

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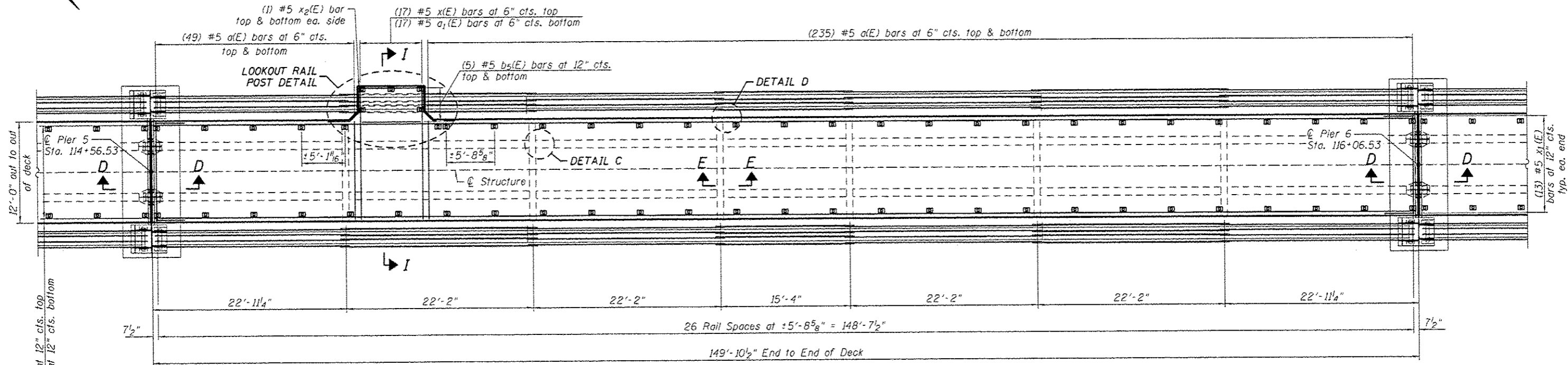


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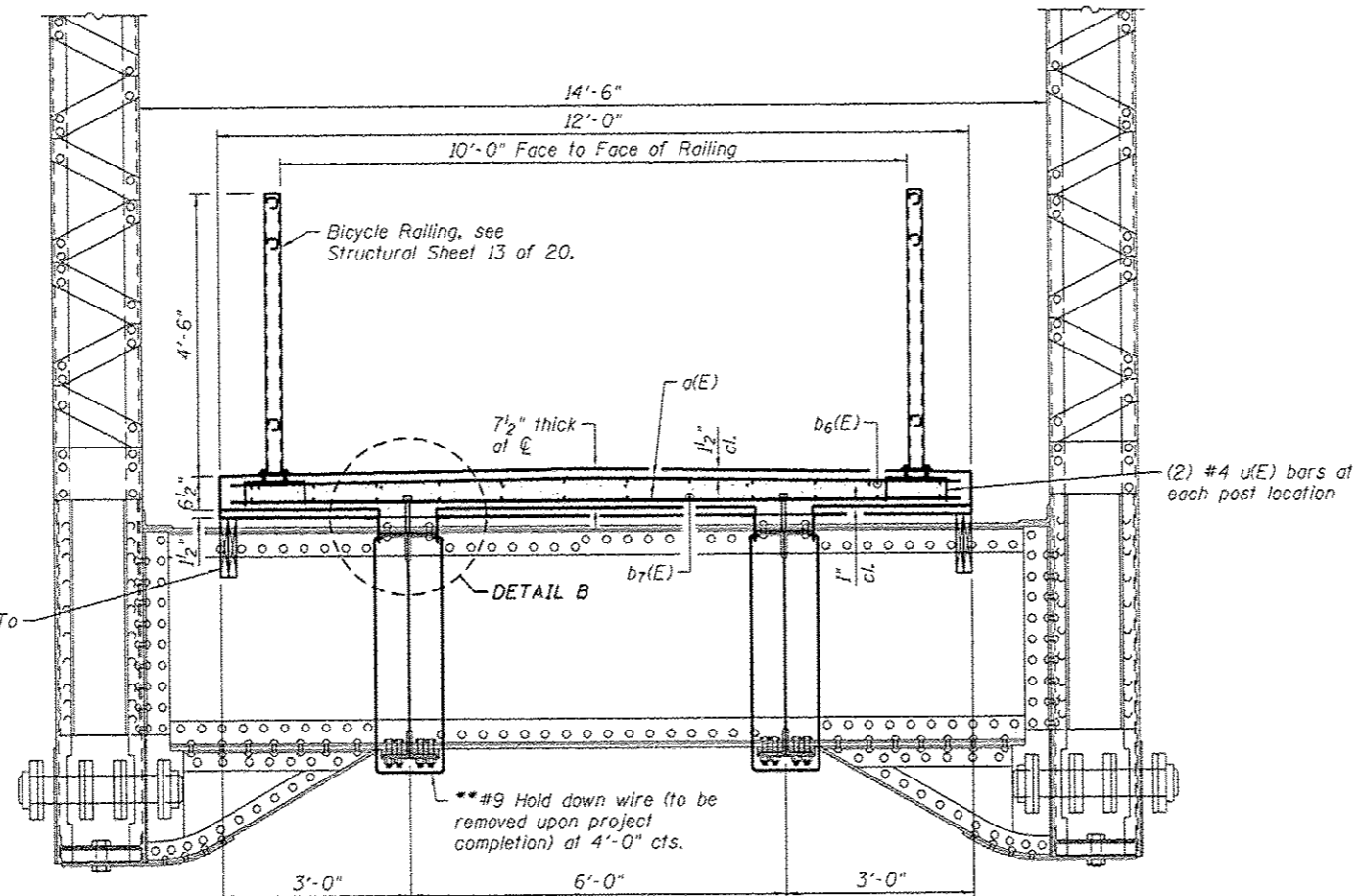
CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

SUPERSTRUCTURE
STRUCTURE NO. 101-6352
STRUCTURAL SHEET NO. 6 OF 20 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-8T	WINNEBAGO	38	24
	WHA* 1016R13		CONTRACT NO. 85620	
(ILLINOIS) FEB. A10 PROJECT TE-00021581				

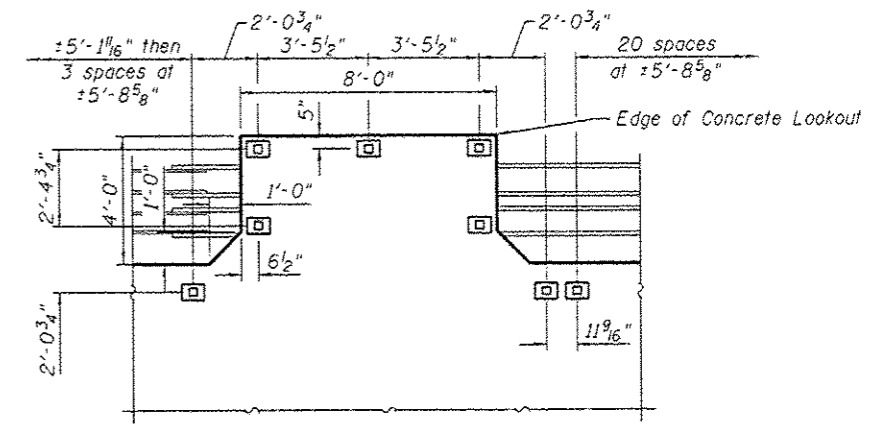


PARTIAL PLAN - SPAN 6



CROSS SECTION

(Through Truss, Typ. Spans 4 thru 8)
 **Part of optional formwork plan



LOOKOUT DETAIL
 Reinforcement not shown for clarity

MINIMUM BAR LAP
 #5 bar = 2'-7"

NOTES:
 See Structural Sheet 10 of 20 for Superstructure Details and Bill of Material.
 See Structural Sheet 11 & 12 of 20 for Sections.

FILE: S:\PROJECTS\2013\1016R13_001\EP\DESIGN\STRUCT\1\20_Drawing\1016R13_Superstructure.dwg

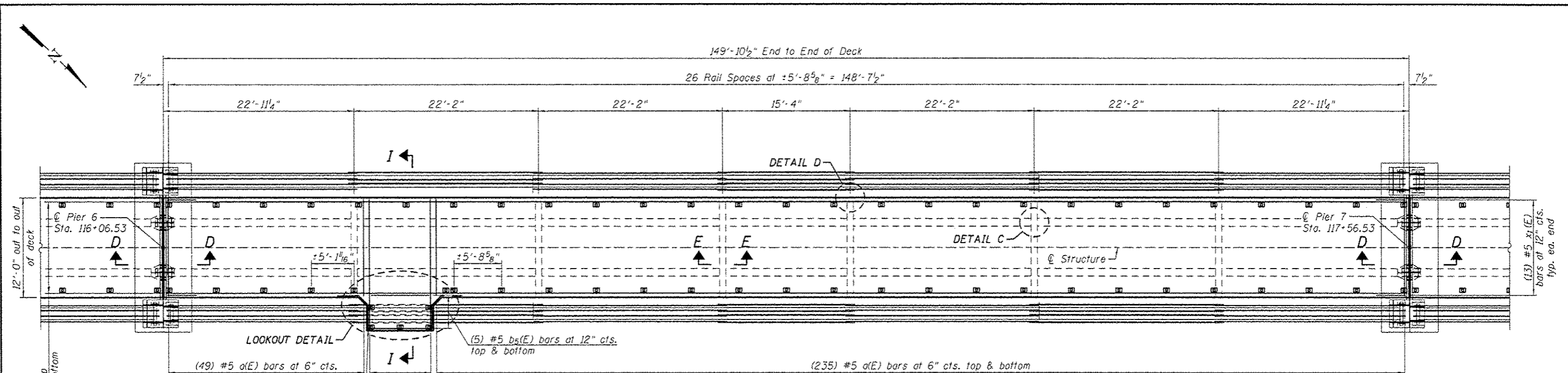


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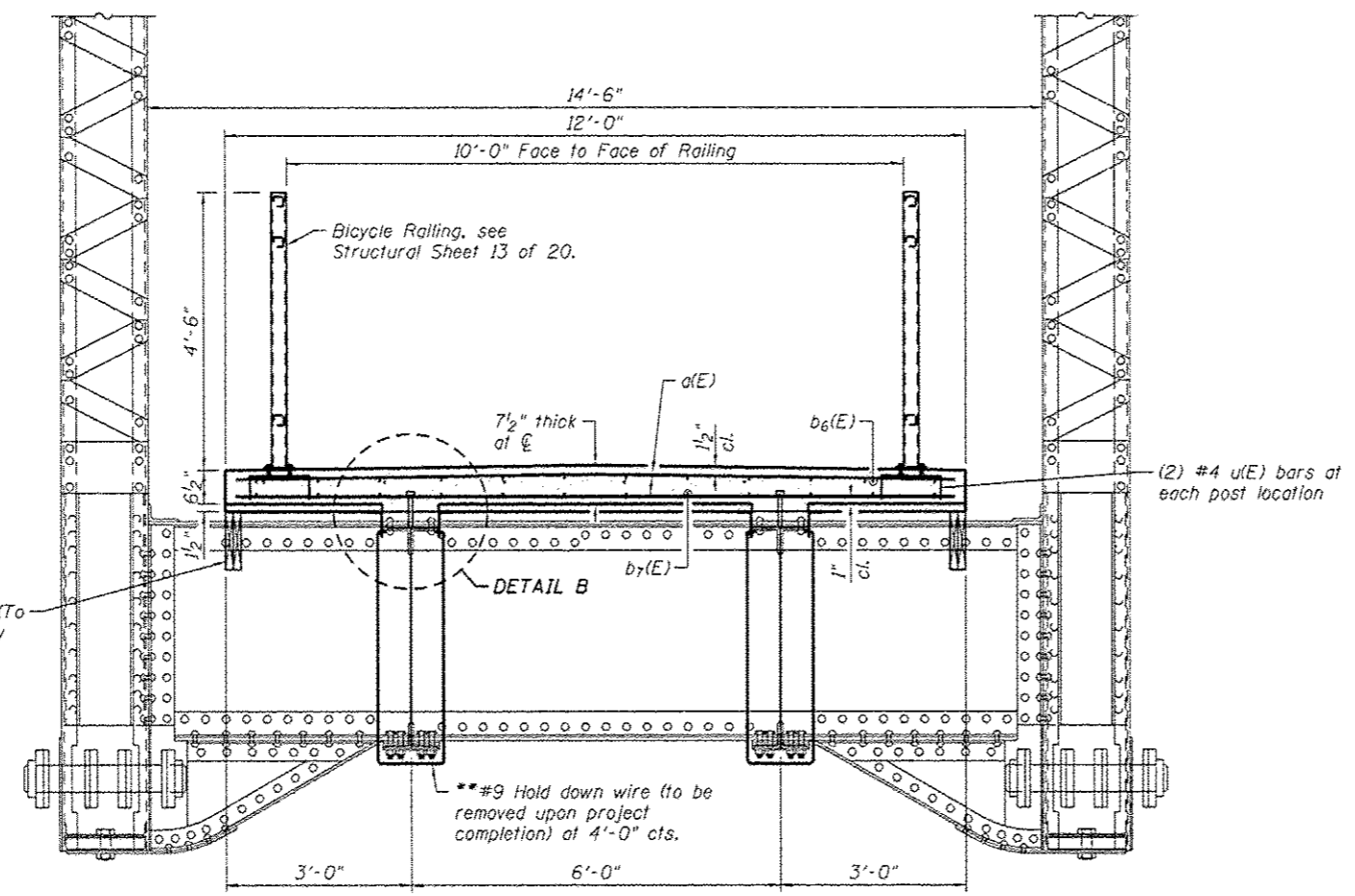
CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

SUPERSTRUCTURE
STRUCTURE NO. 101-6352
 STRUCTURAL SHEET NO. 7 OF 20 SHEETS

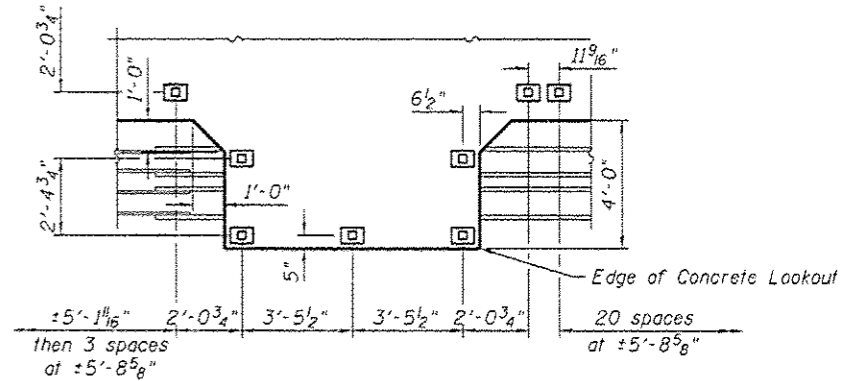
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	25
	WHA* 1016R13		CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT TE-00021581				



PARTIAL PLAN - SPAN 7



CROSS SECTION
(Through Truss, Typ. Spans 4 thru 8)
**Part of optional formwork plan



LOOKOUT DETAIL
Reinforcement not shown for clarity

MINIMUM BAR LAP
#5 bar = 2'-7"

NOTES:
See Structural Sheet 10 of 20 for Superstructure Details and Bill of Material.
See Structural Sheet 11 & 12 of 20 for Sections.

FILE: S:\PROJECTS\2012\1016R13_001\DESIGN\STRUCT\1016R13_001\1016R13_Superstructure.rvt

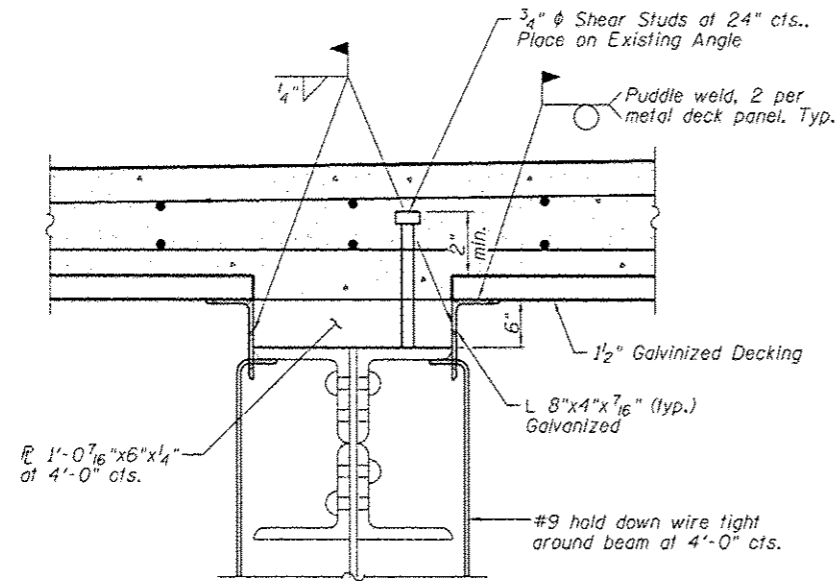
WILLET HOFMANN ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-264-3381 DESIGN: 815-264-6001

DESIGNED - BKC	REVISED -
CHECKED - MAC	REVISED -
DRAWN - RDA	REVISED -
CHECKED - BSK	REVISED -

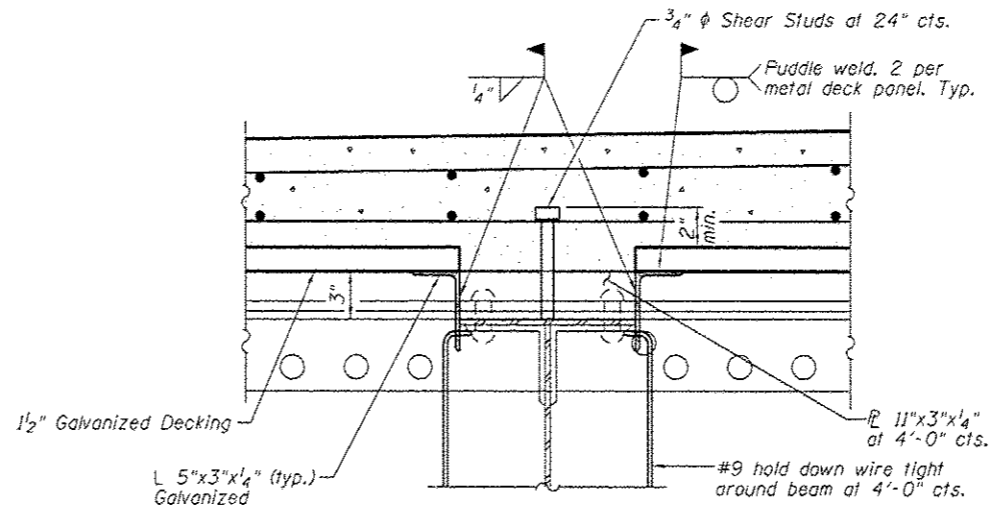
CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

SUPERSTRUCTURE
STRUCTURE NO. 101-6352
STRUCTURAL SHEET NO. 8 OF 20 SHEETS

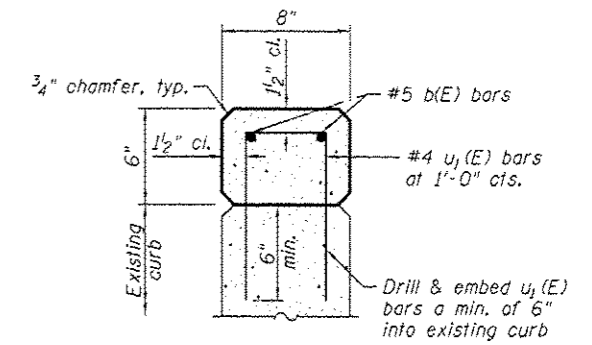
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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WHA# 1016R13			CONTRACT NO. 85620	
[ILLINOIS] FED. AID PROJECT TE-000215B1				



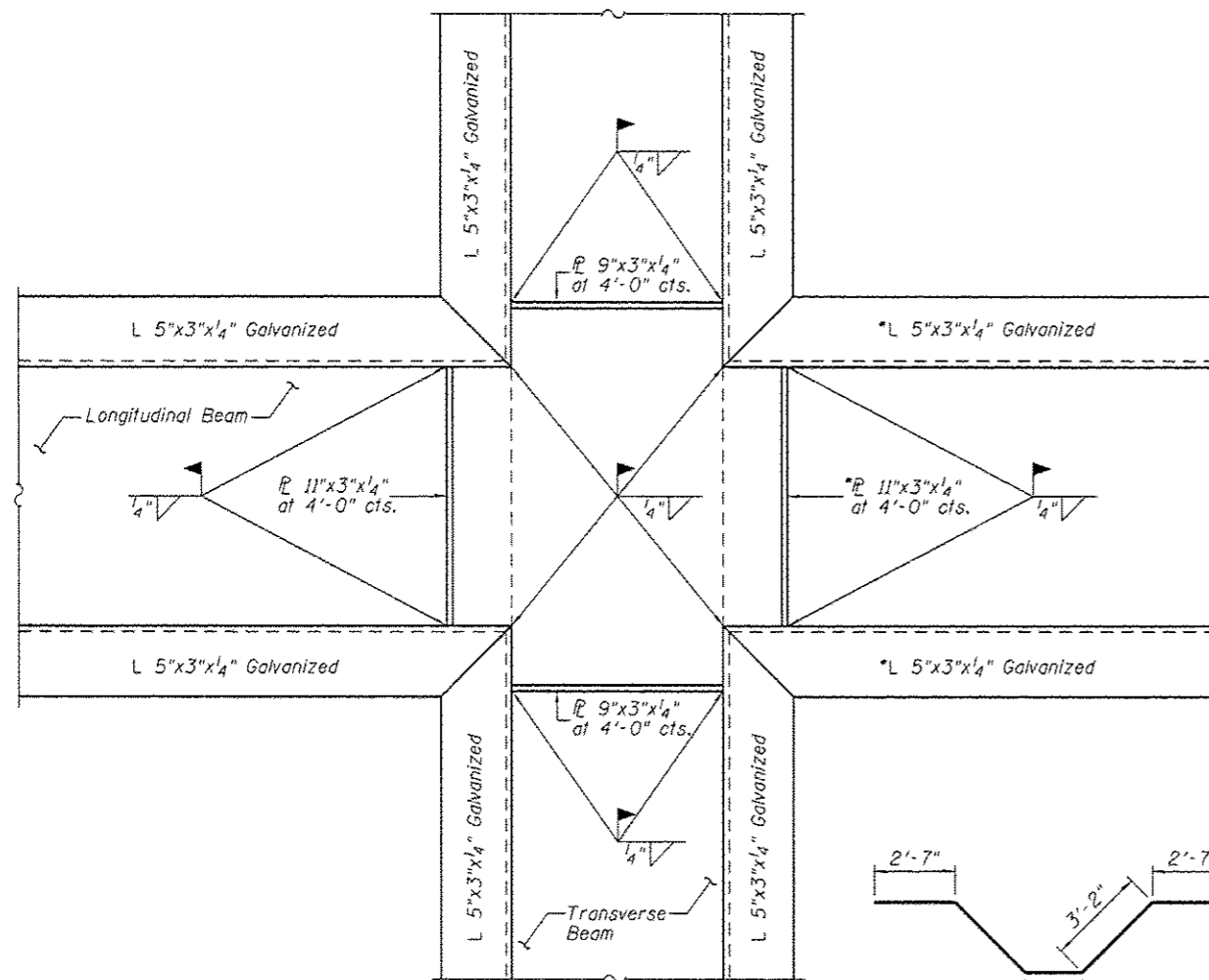
DETAIL A



DETAIL B

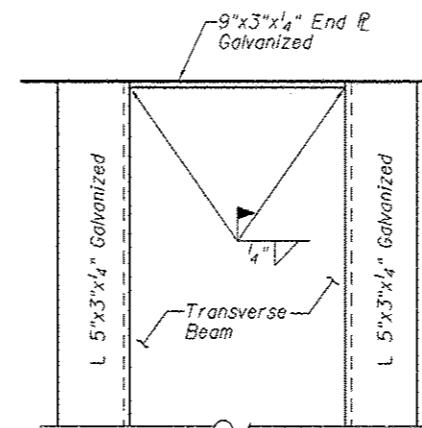


DETAIL E

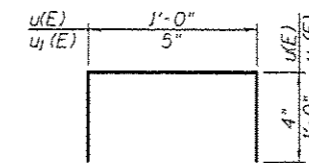


DETAIL C

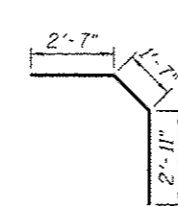
*At North beams of Span 8 the L shall be L 8"x4"x7/16" and the plates shall be L 11"x6"x1/4" except for the 1st after the Transverse Beam which will be as noted.



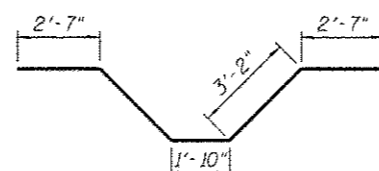
DETAIL D



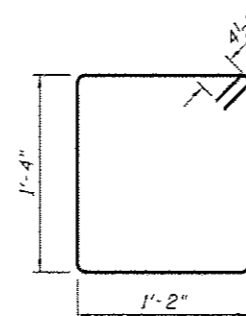
BAR u(E) & u1(E)



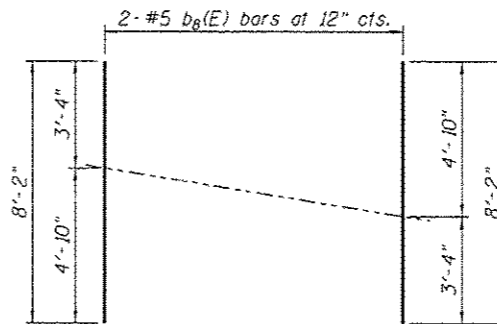
BAR x2(E)



BAR x4(E)

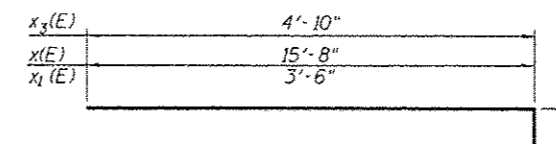


BAR s(E)



FIELD CUTTING DIAGRAM

Order b8(E) bars full length. Cut as shown and use the remainder of bars in second line of the light pole bumpout.



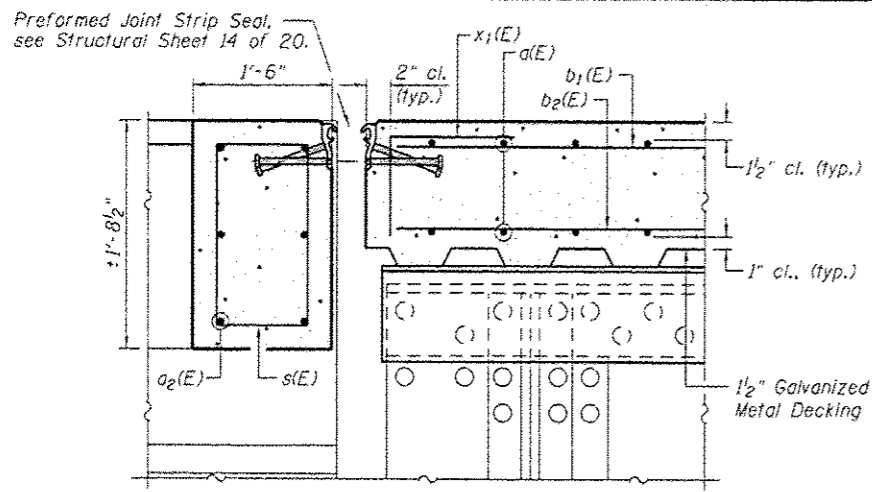
BAR x(E), x1(E) & x3(E)

BILL OF MATERIAL

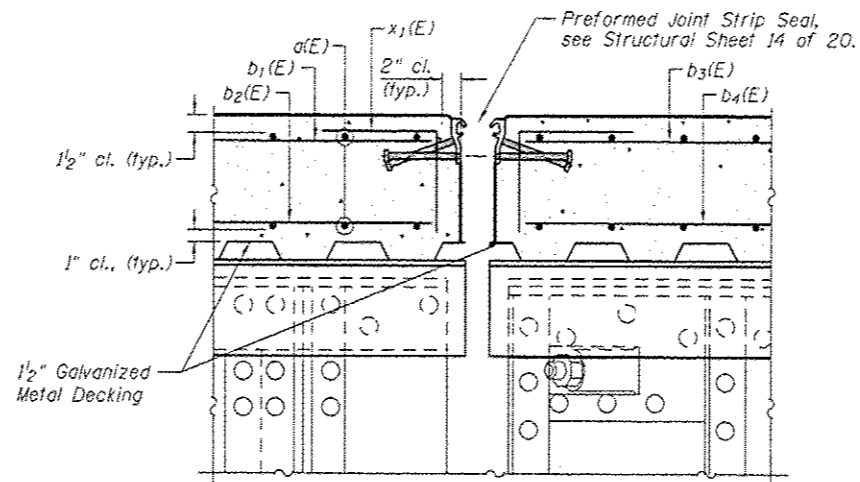
Bar	No.	Size	Length	Shape
a(E)	3,334	#5	11'-8"	—
a1(E)	102	#5	15'-8"	—
a2(E)	6	#5	10'-2"	—
b(E)	4	#5	27'-10"	—
b1(E)	26	#5	36'-4"	—
b2(E)	39	#5	25'-1"	—
b3(E)	26	#5	32'-4"	—
b4(E)	39	#5	22'-5"	—
b5(E)	60	#5	7'-8"	—
b6(E)	260	#5	39'-4"	—
b7(E)	325	#5	32'-0"	—
b8(E)	6	#5	8'-2"	—
s(E)	11	#4	5'-9"	□
u(E)	708	#4	1'-8"	□
u1(E)	58	#4	2'-5"	□
x(E)	102	#5	16'-0"	—
x1(E)	182	#5	3'-10"	—
x2(E)	24	#5	7'-1"	—
x3(E)	18	#5	5'-2"	—
x4(E)	6	#5	13'-4"	—
Aggregate Base Course, Type B	Ton	7		
Hot-Mix Asphalt Surface Course, IL-9.5FG, N50	Ton	4		
Concrete Superstructure	Cu. Yd.	234.8		
Protective Coat	Sq. Yd.	1,210		
Stud Shear Connectors	Each	1,774		
Reinforcement Bars, Epoxy Coated	Pound	71,970		
Removal of Existing Timber Members	L. Sum	1		
Chain Link Fence Removal	Foot	96		
Chain Link Gates Removal	Each	2		
Chain Link Fence, 7' (Special)	Foot	8		

NOTES:

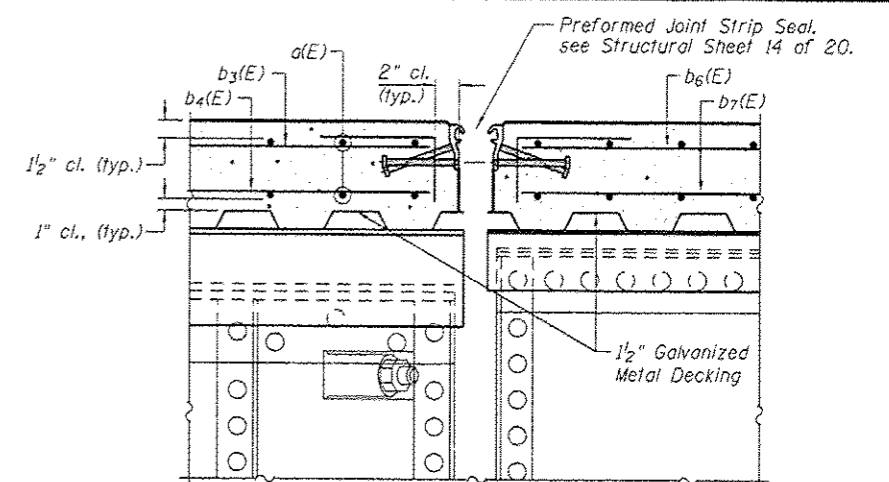
Hold down wire, angles, plates, and decking shown in Details A, B, C, & D are shown as part of optional formwork plan, if the Contractor develops their own formwork plan these elements shall be omitted.



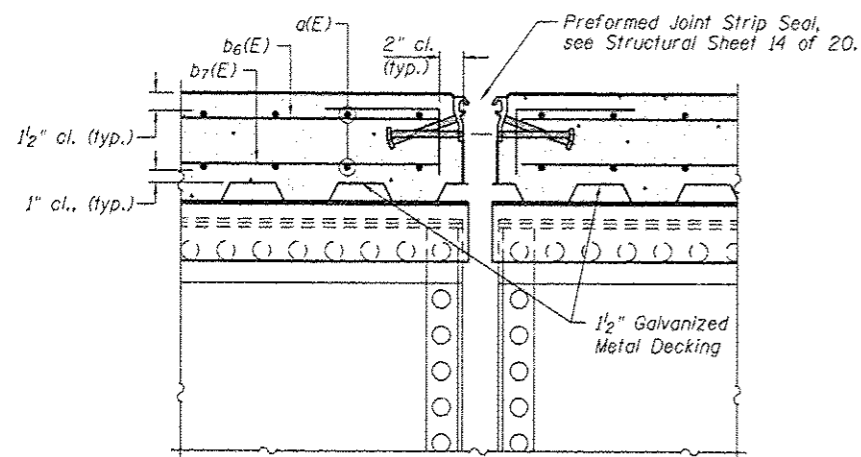
SECTION A-A



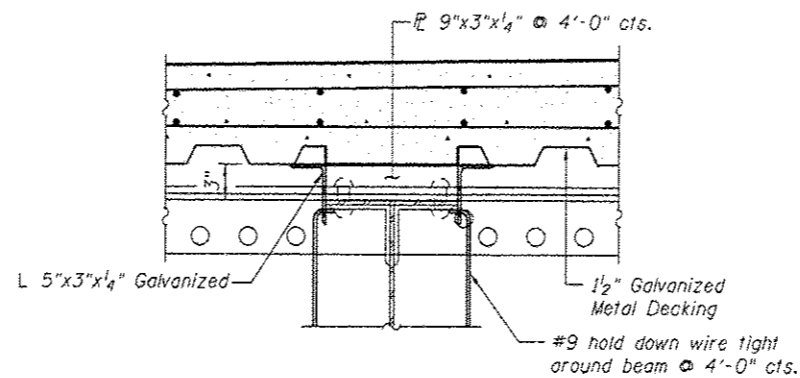
SECTION B-B



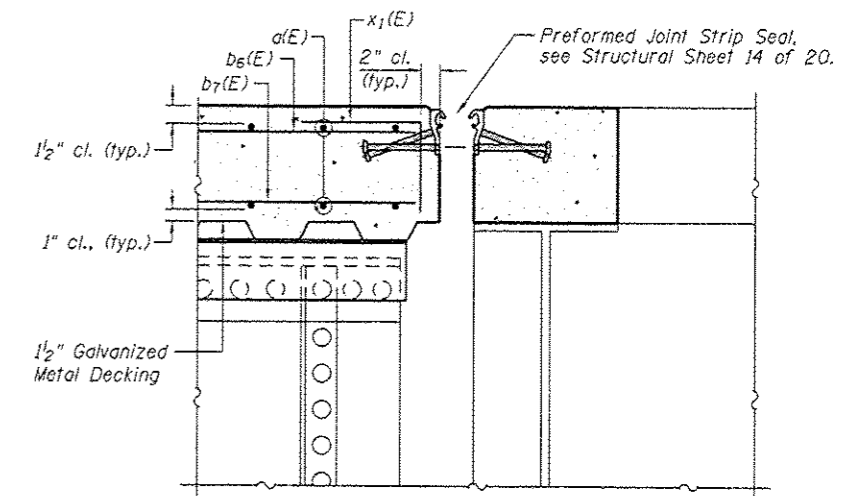
SECTION C-C



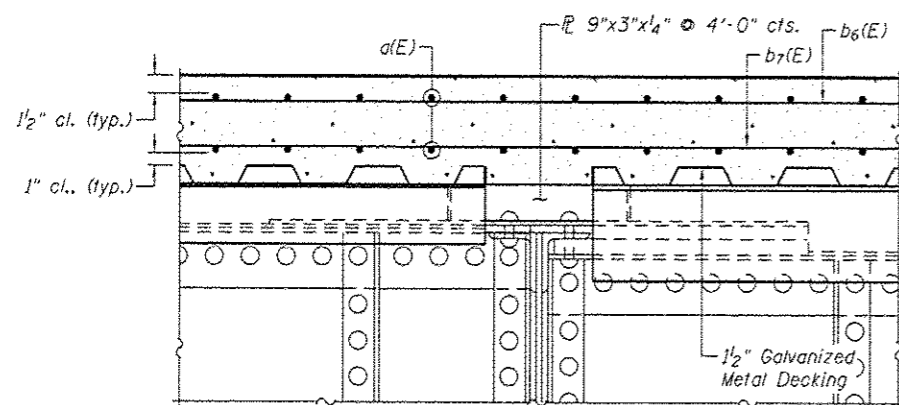
SECTION D-D



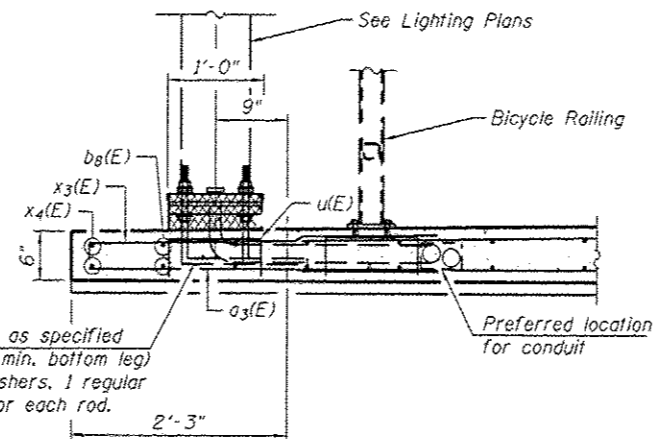
SECTION E-E



SECTION F-F



SECTION G-G



SECTION J-J

Cost of anchor rods is included with Concrete Superstructure.

NOTES:

Hold down wire, angles, plates, and decking shown in sections are shown as part of optional formwork plan, if the Contractor develops their own formwork plan these elements shall be omitted.

FILE = S:\PROJECTS\2013\1016R13_RTE\DESIGN\STRUCT\2D\Drawings\1016R13_Superstructure_Details.dgn



DESIGNED - BKC	REVISED -
CHECKED - MAC	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BSK	REVISED -

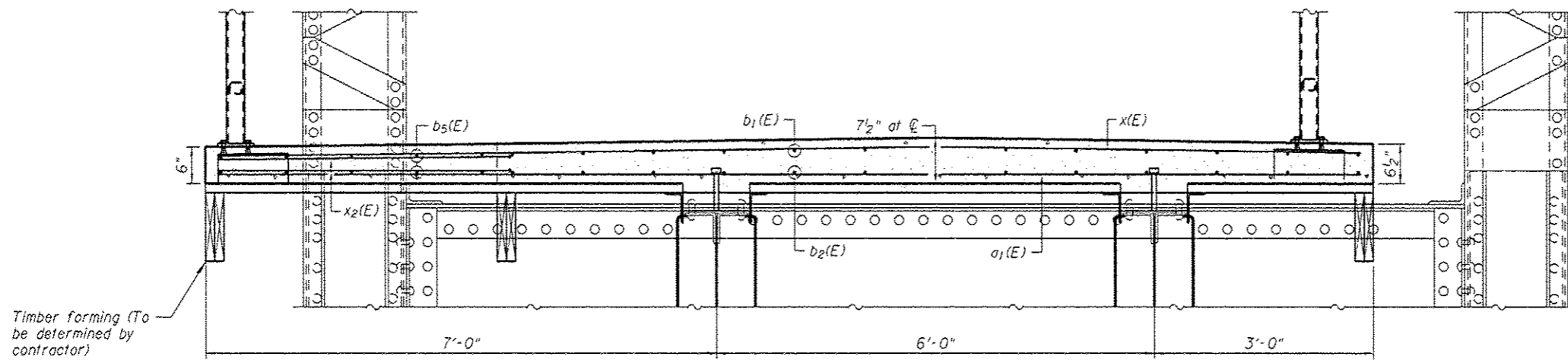
CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 101-6352

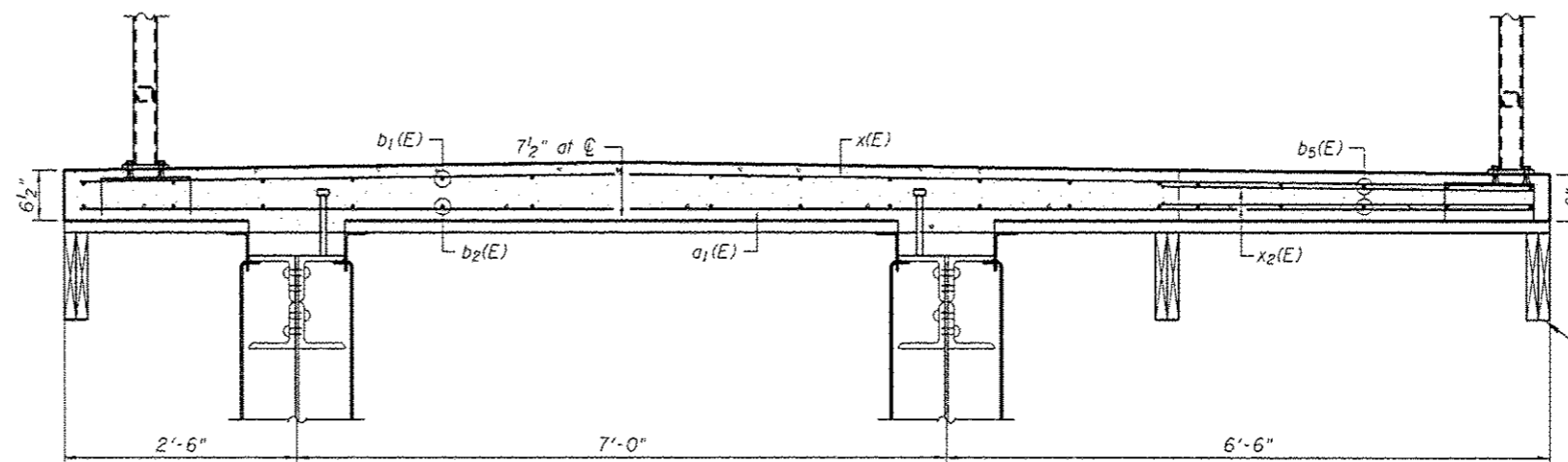
STRUCTURAL SHEET NO. 11 OF 20 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	29
	WHA# 1016R13		CONTRACT NO. 85620	

ILLINOIS FED. AID PROJECT TE-00021581



SECTION I-I



SECTION H-H

FILE: S:\PROJECTS\2013\1016R13_120_Design\1016R13_Superstructure_Details.dwg



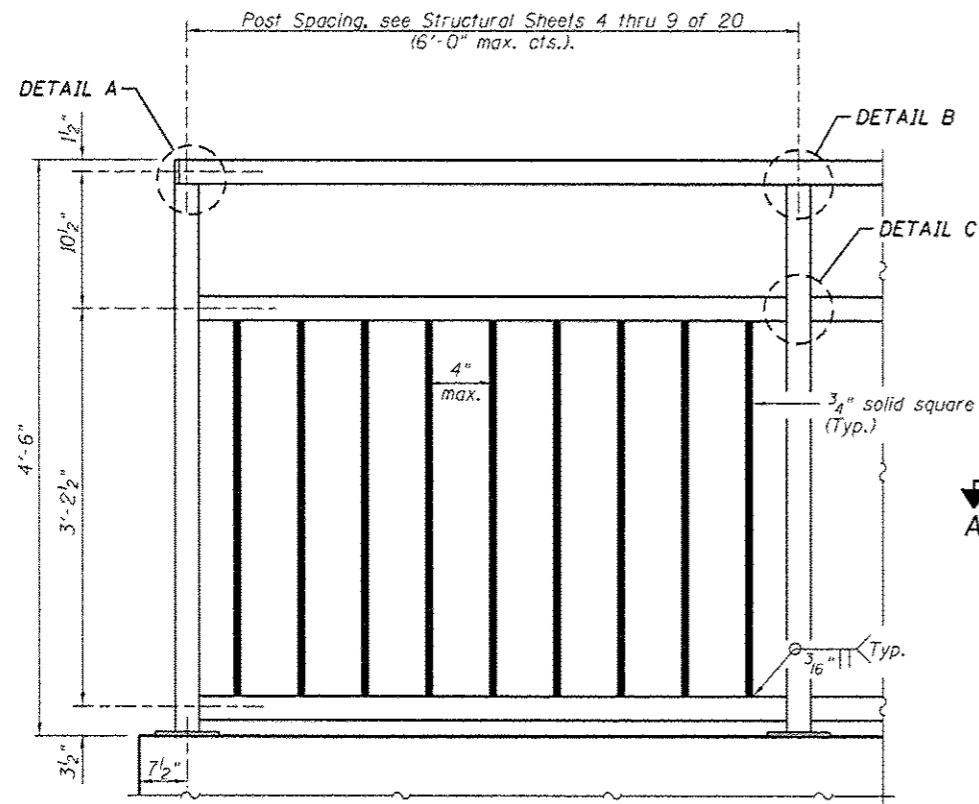
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CHECKED - MAC	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BSK	REVISED -

**CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015**

**SUPERSTRUCTURE DETAILS
STRUCTURE NO. 101-6352**

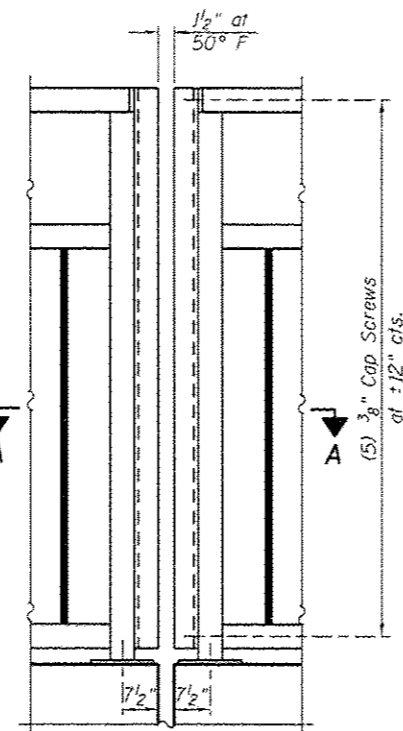
STRUCTURAL SHEET NO. 12 OF 20 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	WHA# 1016R13		CONTRACT NO. 85620	
(ILLINOIS) FED. AID PROJECT TE-0062(158)				



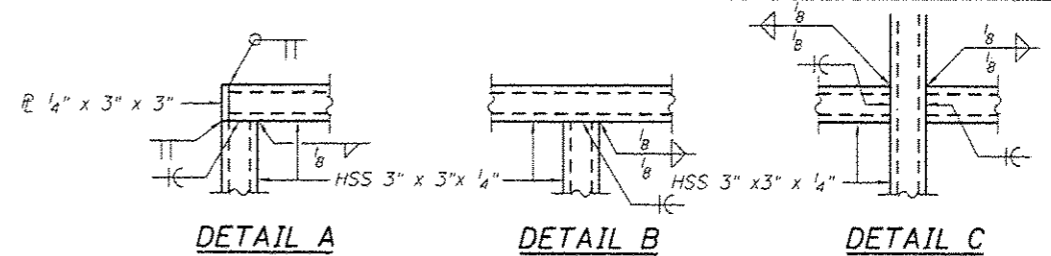
BICYCLE RAILING

(Remove 1'-0" section of decorative top bars as necessary.)



BICYCLE RAILING

(At expansion joints)

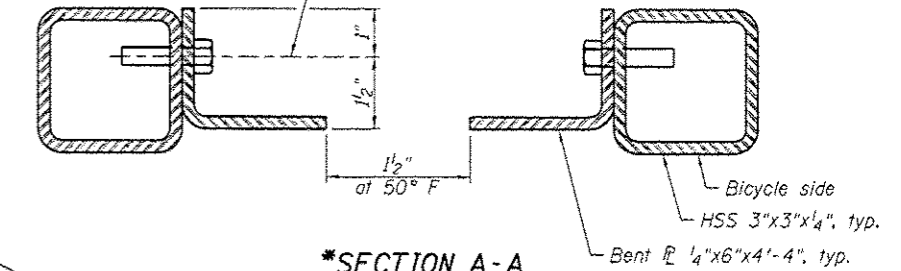


DETAIL A

DETAIL B

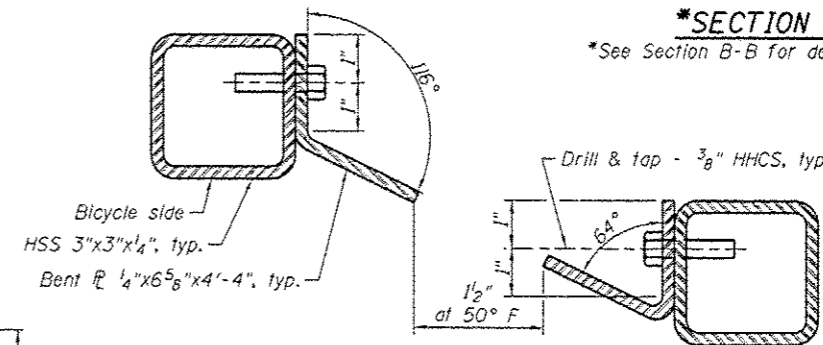
DETAIL C

Drill & tap - 3/8" HHCS, typ.



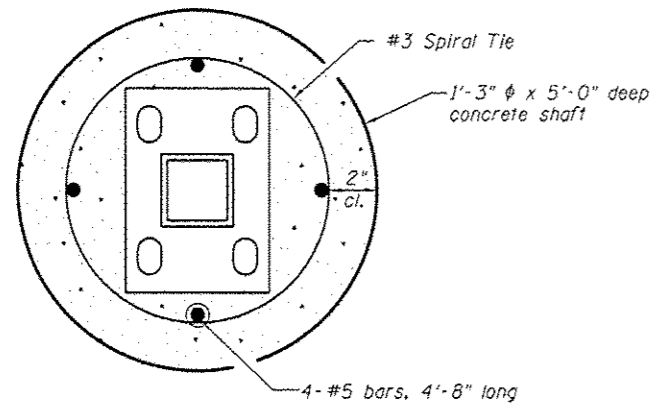
***SECTION A-A**

*See Section B-B for detail at Pier #1

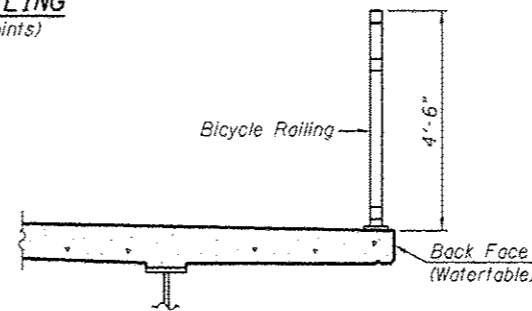


SECTION B-B

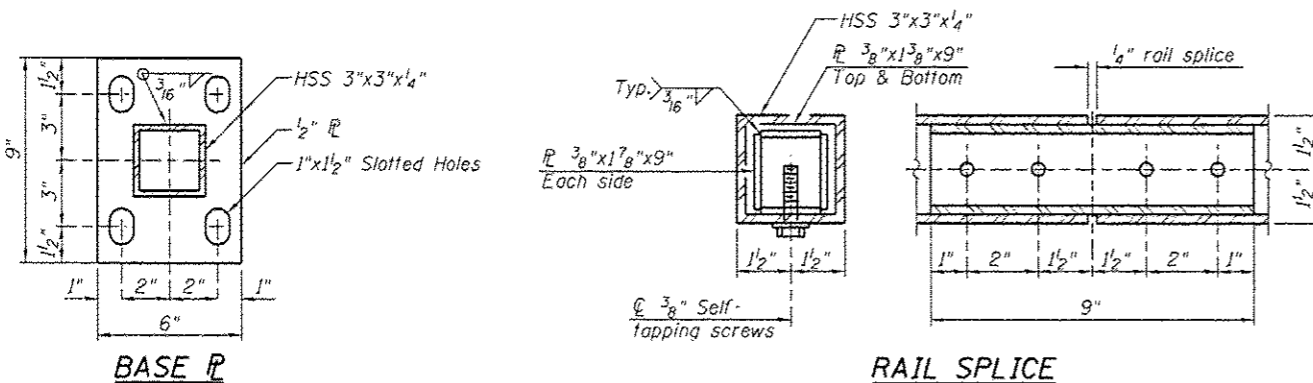
(Detail at Pier #1)



**** BASE PLATE BEYOND STRUCTURE**

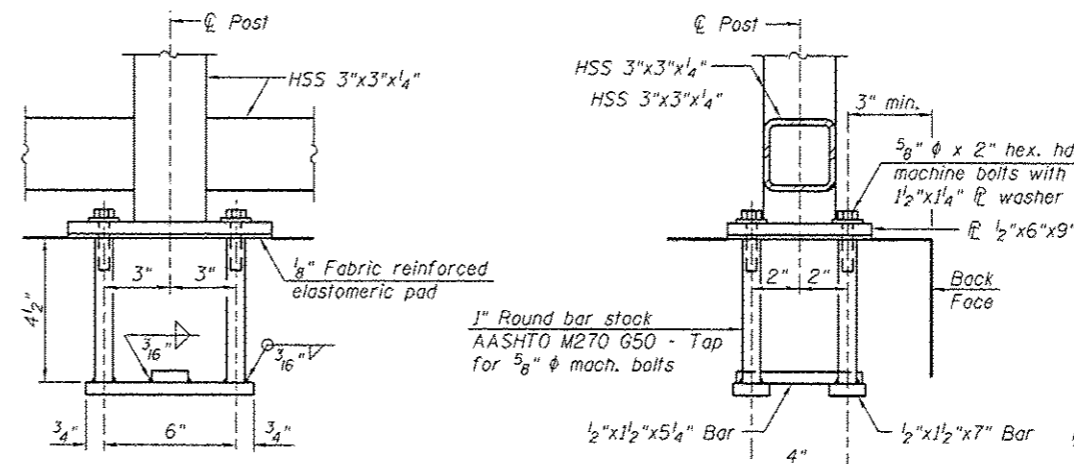


SECTION THRU DECK



BASE PLATE

RAIL SPLICE



ANCHOR ROD DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

LOCATION		LINEAL FOOT
Span #1	Right	28
	Left	28
Span #2	Right	77
	Left	70
Span #3	Right	62
	Left	62
Span #4	Right	150
	Left	156
Span #5	Right	157
	Left	150
Span #6	Right	150
	Left	156
Span #7	Right	156
	Left	150
Span #8	Right	150
	Left	156
Beyond N. Abut.	Left	35

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing	Foot	1,893

NOTE:

Steel rail elements shall be weathering steel according to Article 1006.04 of the Standard Specifications. Bolts shall be according to Article 1006.08(c) and steel cast into concrete shall be according to Article 1006.13

** Cost of base plate foundation shall be incidental to the cost of Bicycle Railing per foot.



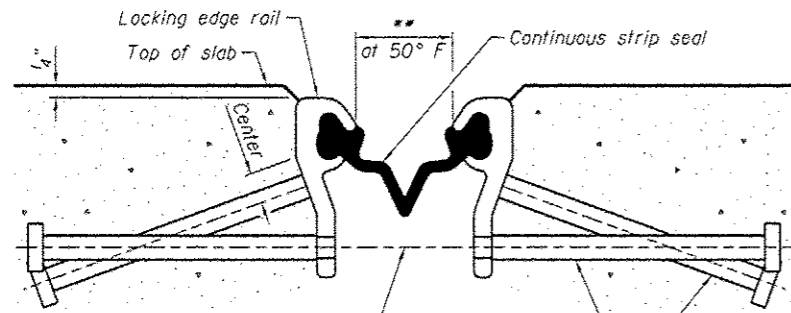
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CHECKED - MAC	REVISED -
DRAWN - RDA	REVISED -
CHECKED - BSK	REVISED -

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

BICYCLE RAILING
STRUCTURE NO. 101-6352

STRUCTURAL SHEET NO. 12 OF 19 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	31
	WHA* 1016R13			CONTRACT NO. 85620
				ILLINOIS FED. AID PROJECT TE-00021581

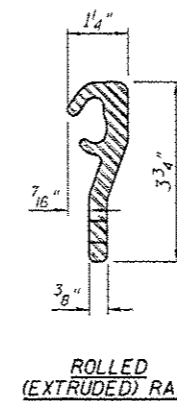


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the \bar{r} 's after forms are removed, typ.

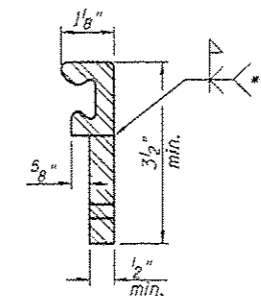
Place 1/2" ϕ x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.

SECTION THRU STRIP SEAL JOINT
(Typical at Piers and West Abutment)

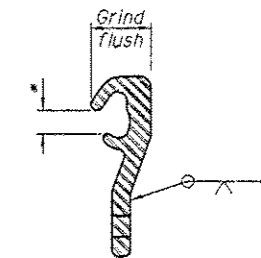
LOCATION	LINEAL FOOT
Pier #1	12'
Pier #2	12'
Pier #3	12'
Pier #4	12'
Pier #5	12'
Pier #6	12'
Pier #7	12'
North Abutment	12'



ROLLED (EXTRUDED) RAIL



WELDED RAIL



LOCKING EDGE RAIL SPLICE

Rolled rail shown, welded rail similar.

LOCKING EDGE RAIL

NOTES:

- * Omit weld at seal opening.
- ** The minimum dimension shall be 1/2" for installation purposes.
- *** Back gouge not required if complete joint penetration is verified by mock-up.

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.

The inside of the Locking Edge Rail groove shall be free of weld residue.

Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

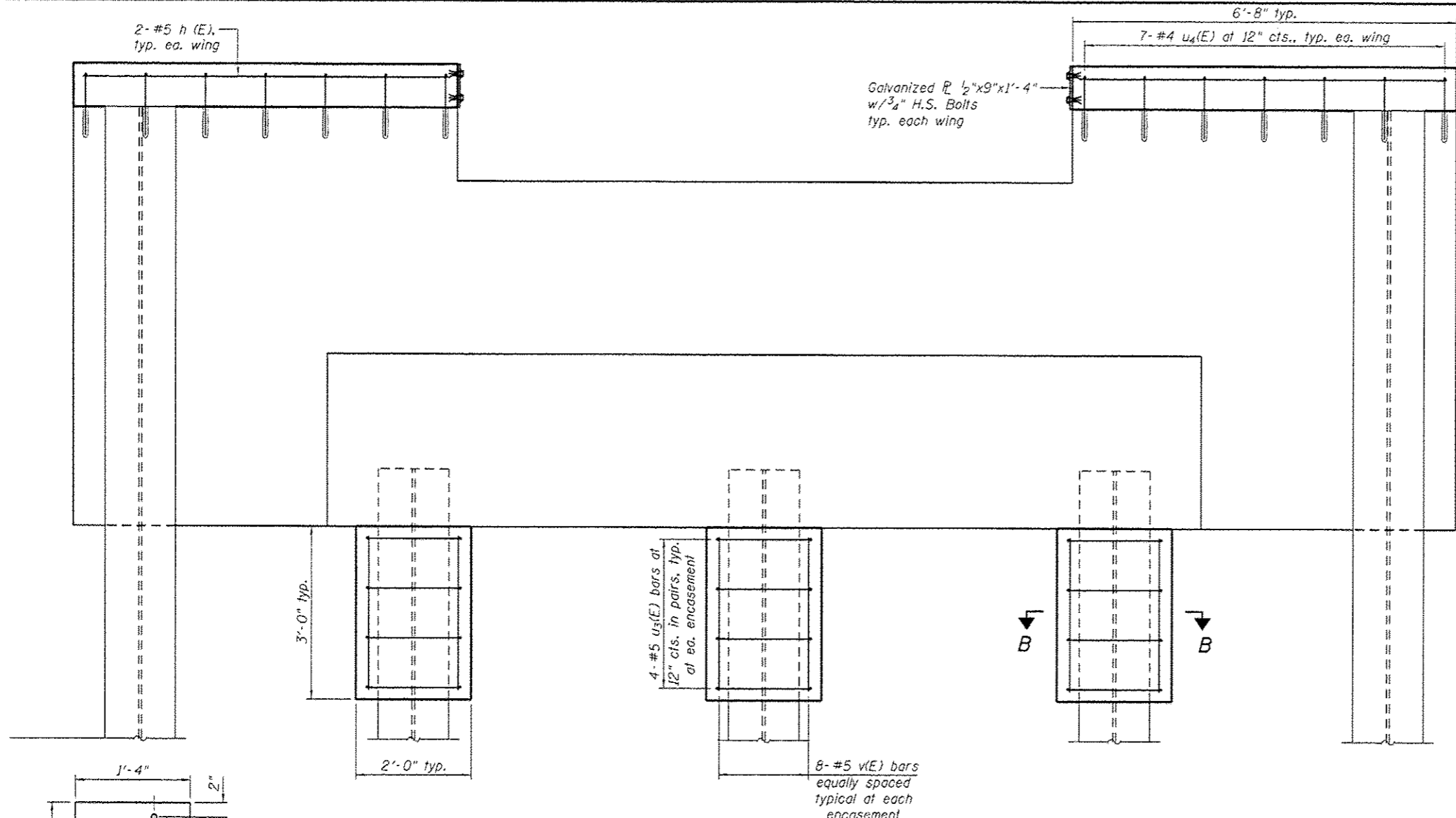
The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

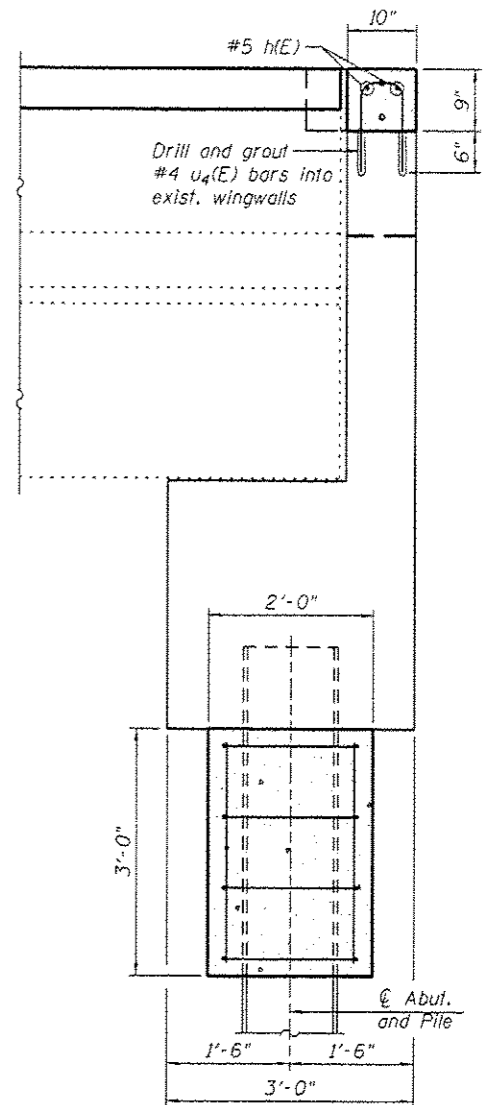
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

BILL OF MATERIAL

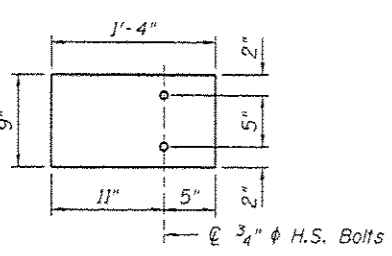
ITEM	UNIT	TOTAL
Preformed Joint Strip Seal	Foot	96



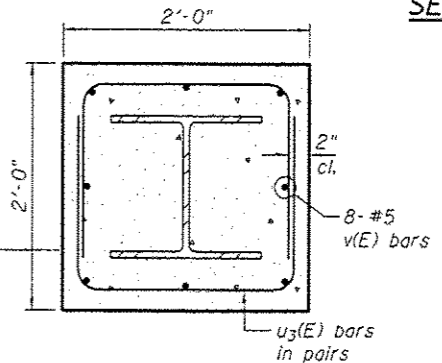
ELEVATION



SECTION A-A



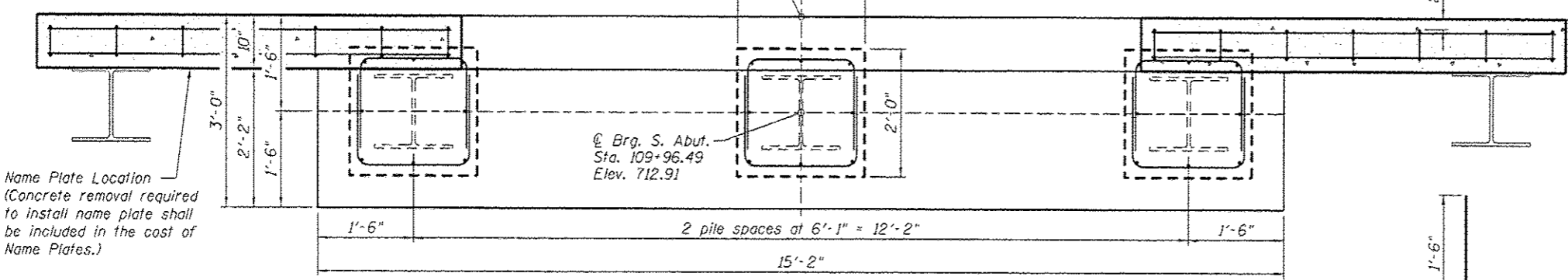
1/2" R DETAIL



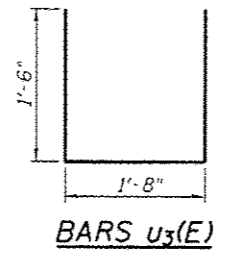
SECTION B-B

BILL OF MATERIAL

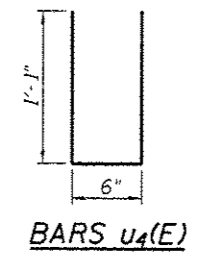
Bar	No.	Size	Length	Shape
h(E)	4	#5	6'-4"	—
u3(E)	24	#5	4'-8"	U
u4(E)	14	#4	2'-8"	U
v(E)	24	#5	2'-8"	—
Concrete Superstructure			Cu. Yd.	0.3
Concrete Encasement			Cu. Yd.	1.3
Reinforcement Bars, Epoxy Coated			Pound	240
Furnishing & Erecting Structural Steel			Pound	43



PLAN



BARS u3(E)



BARS u4(E)

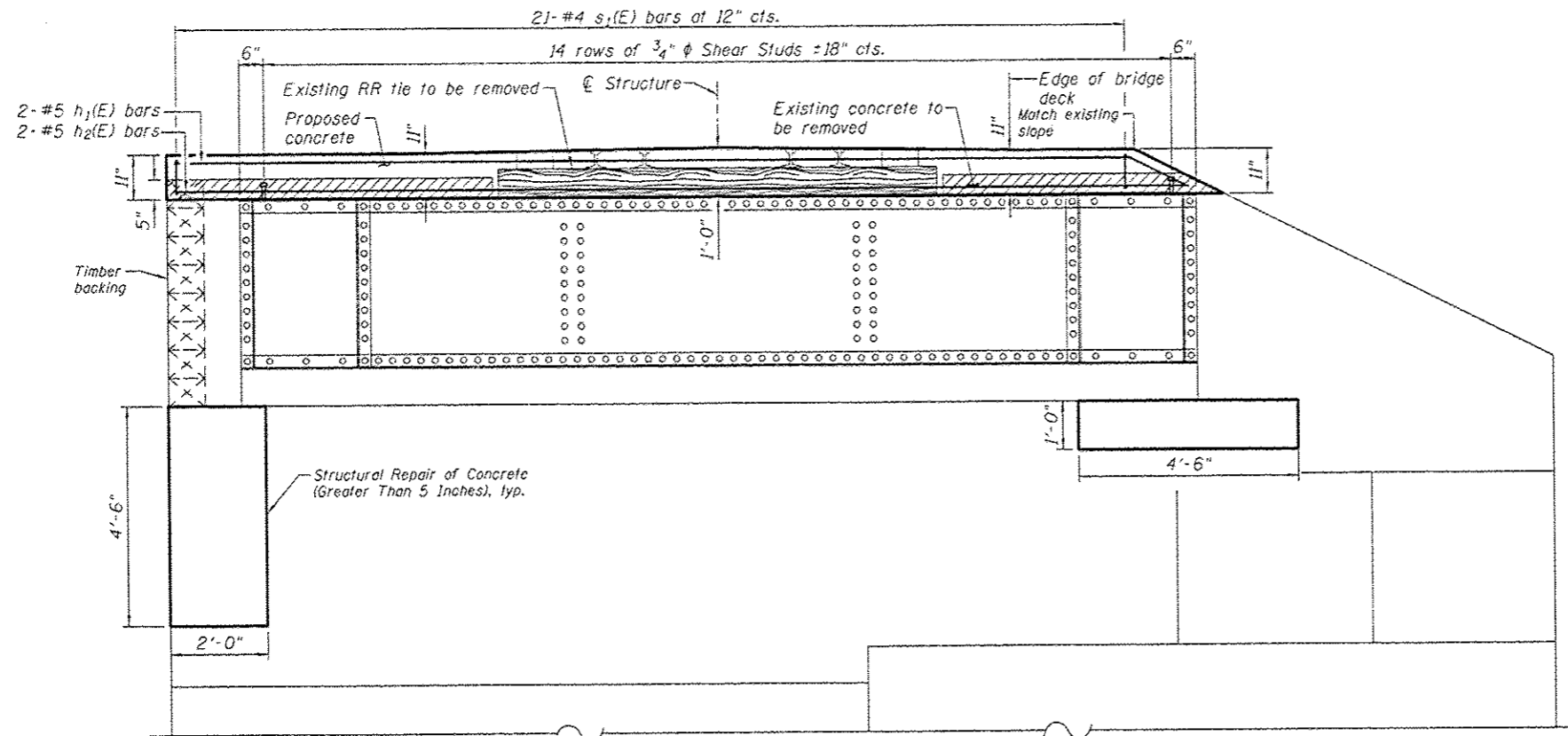


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CHECKED - MAC	REVISED -
DRAWN - RDA	REVISED -
CHECKED - BSK	REVISED -

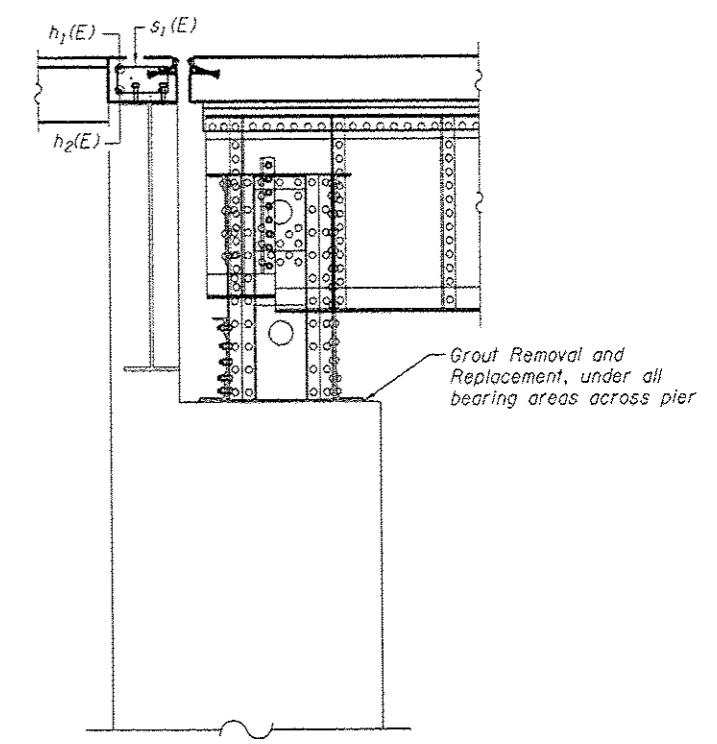
**CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015**

**SOUTH ABUTMENT DETAILS
STRUCTURE NO. 101-6352**
STRUCTURAL SHEET NO. 15 OF 20 SHEETS

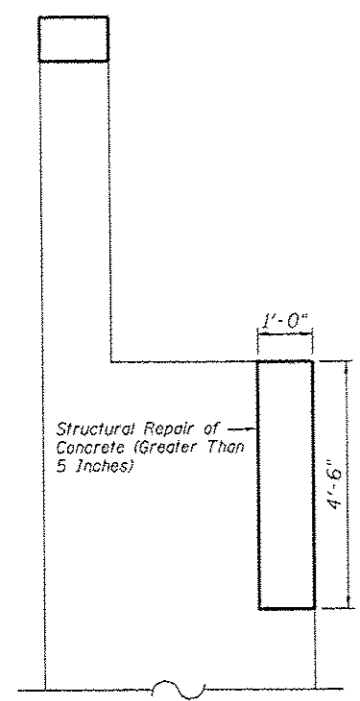
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	33
	WHA* 1016R13		CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT TE-00021581				



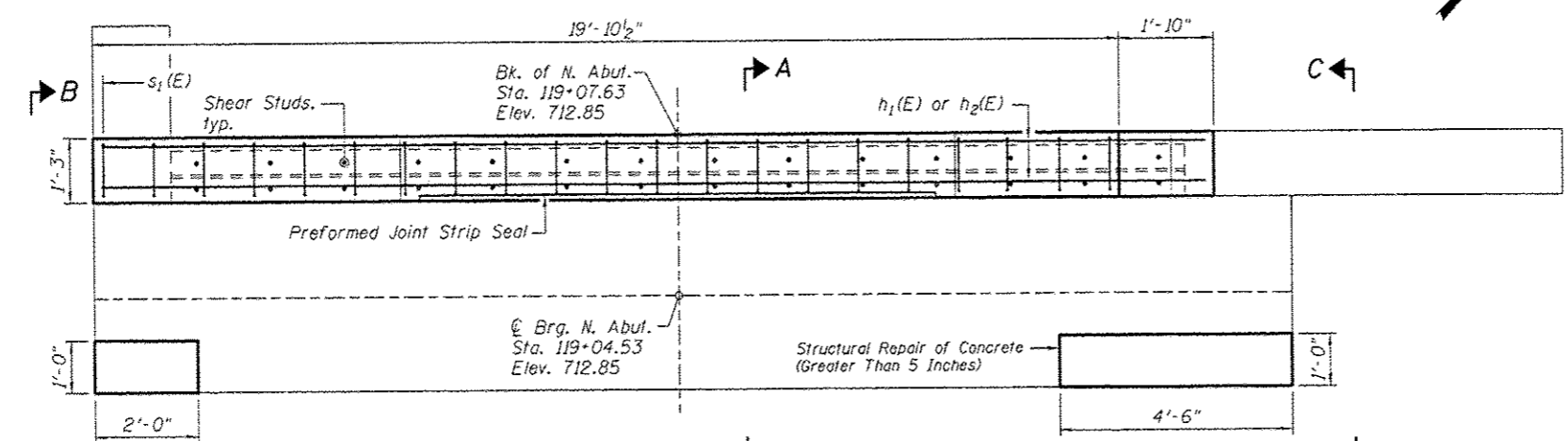
ELEVATION



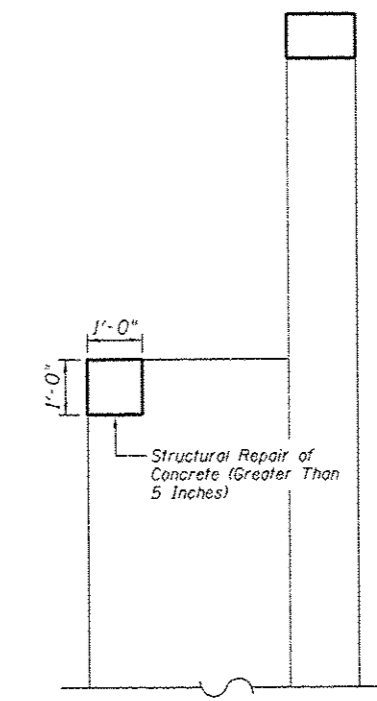
SECTION A-A



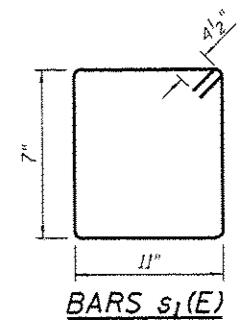
SECTION B-B



PLAN



SECTION C-C



BARS s1(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	2	#5	19'-6"	—
h ₂ (E)	2	#5	21'-4"	—
s ₁ (E)	21	#4	3'-9"	□
Concrete Superstructure			Cu. Yd.	0.9
Concrete Removal			Cu. Yd.	0.4
Reinforcement Bars, Epoxy Coated			Pound	140
Stud Shear Connectors			Each	28
Structural Repair of Concrete (Greater Than 5 Inches)			Sq. Ft.	26
Grout Removal and Replacement			Each	1

FILE: S:\PROJECTS\2013\1016R13\RD_11E\PROJECTS\1016R13_NORTH ABUTMENT DETAILS.dwg

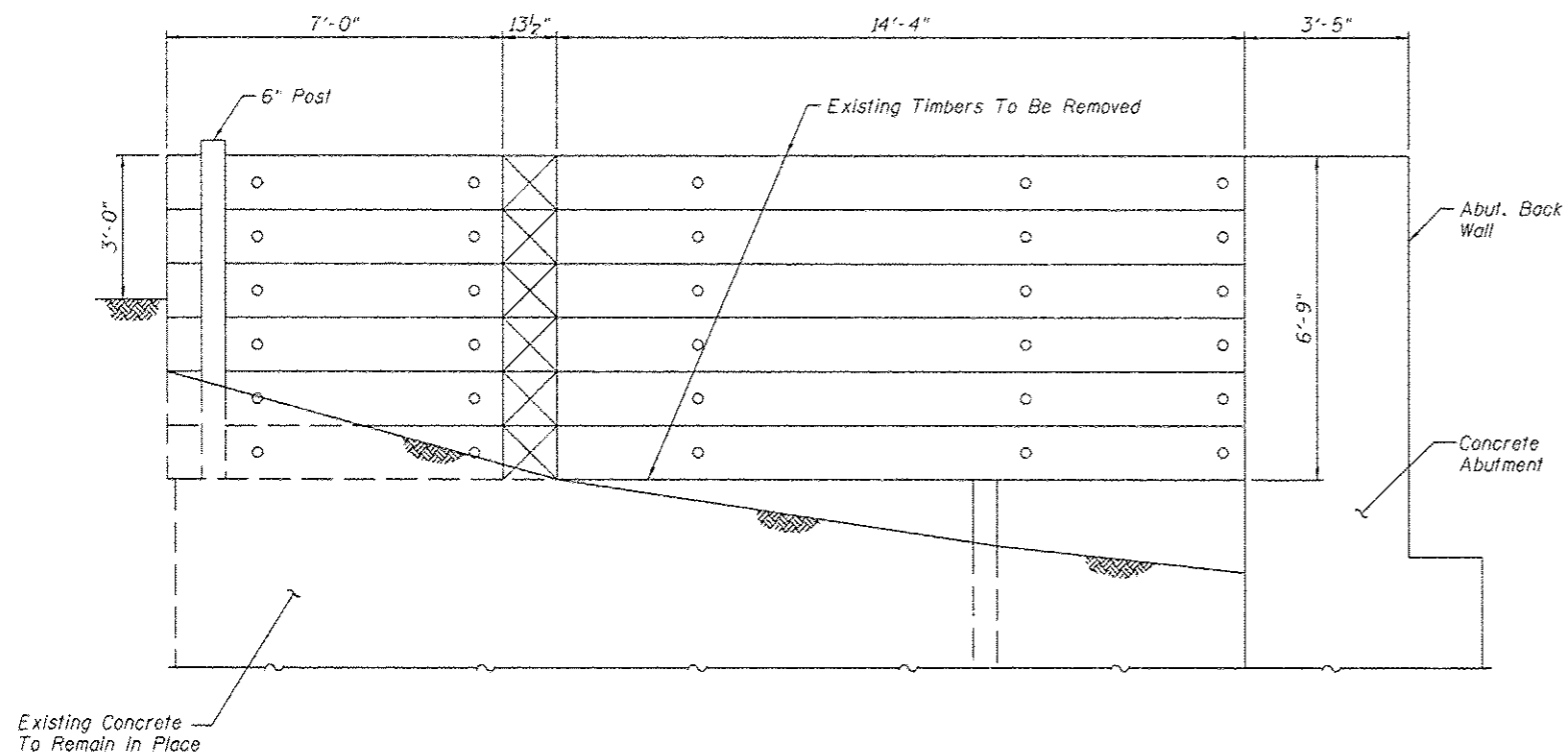
WILLET HOFMANN ASSOCIATES INC.
 ENGINEER ARCHITECTURE LAND SURVEYING
 800 EAST 2ND STREET DUNN, IL 61821-6867
 T: 315-284-3381 DESIGNS FROM: #184-209918

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DRAWN - RDA	REVISED -
CHECKED - BSK	REVISED -

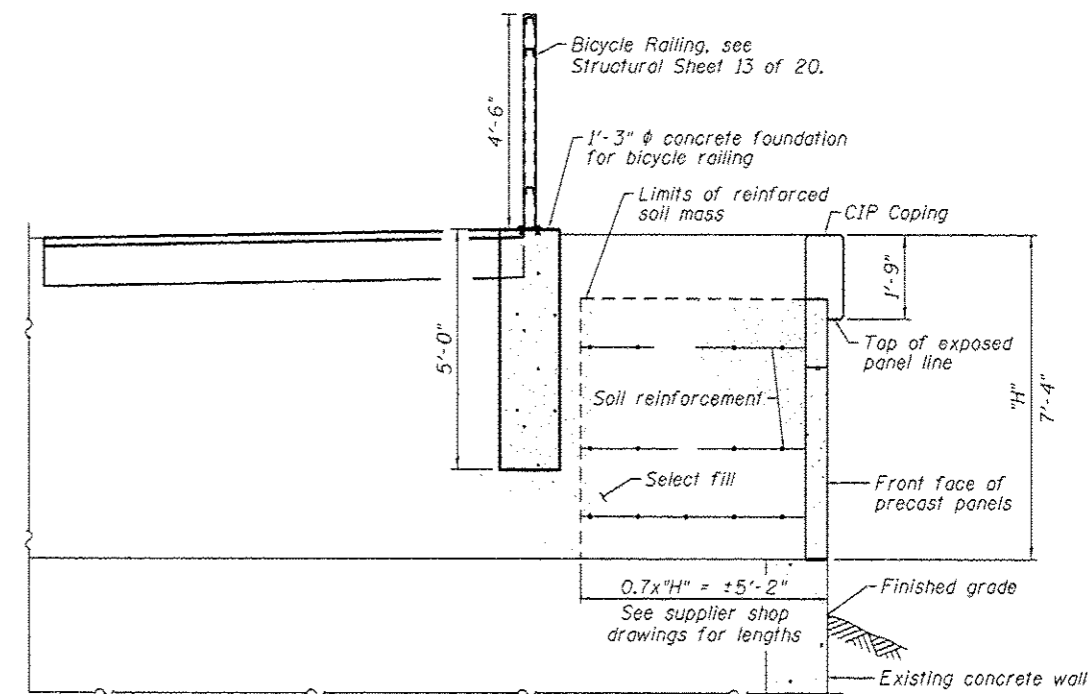
CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
 2015

NORTH ABUTMENT DETAILS
STRUCTURE NO. 101-6352
 STRUCTURAL SHEET NO. 16 OF 20 SHEETS

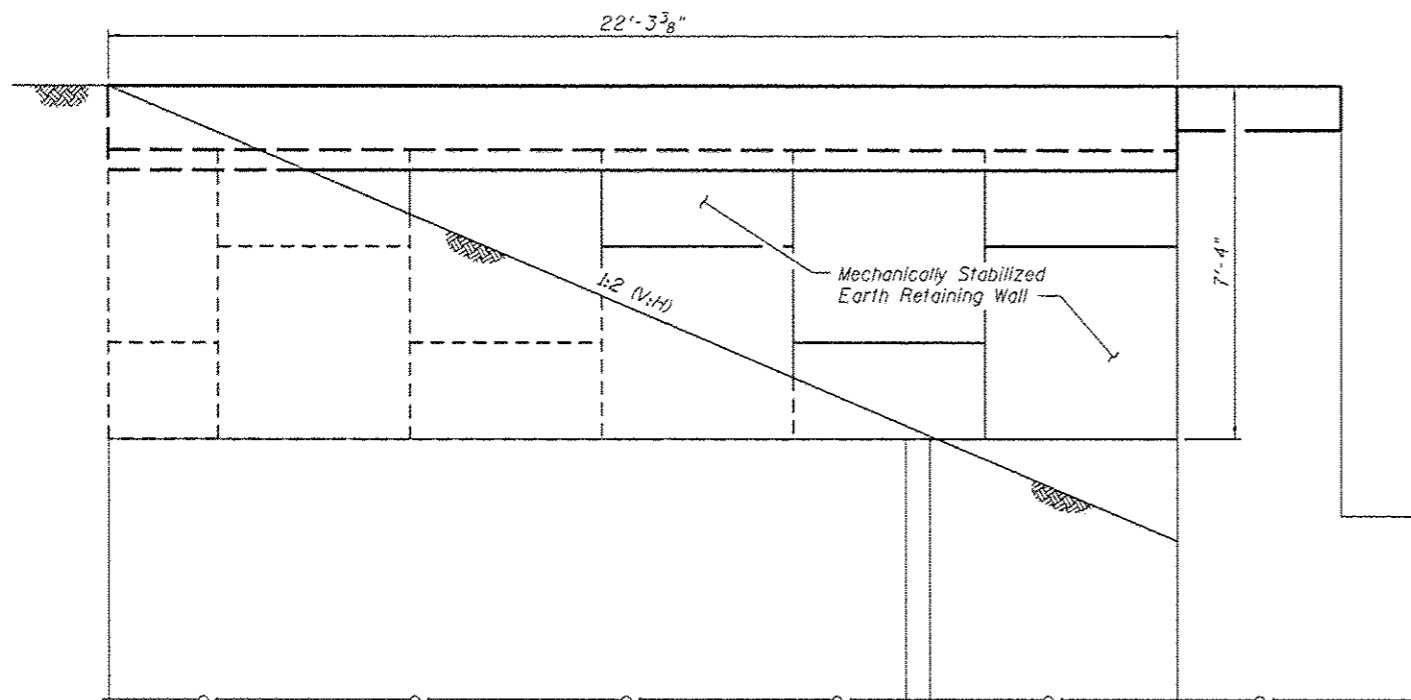
F.A. RYE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	34
WHA# 1016R13		CONTRACT NO. 85620		
ILLINOIS FED. AID PROJECT TE-00020580				



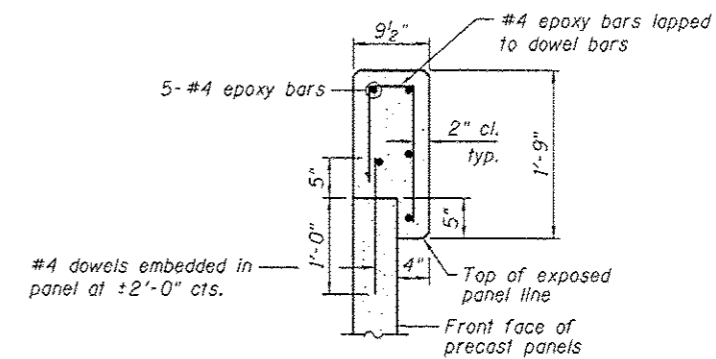
EXISTING WEST WING WALL
(Looking North)



SECTION THRU MSE WALL



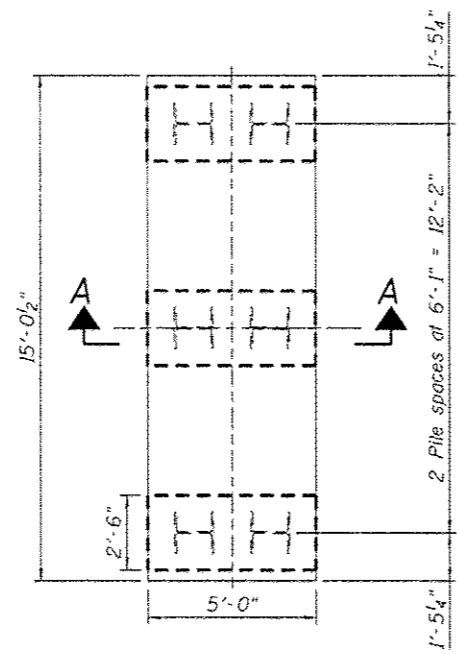
PROPOSED MSE WALL ELEVATION
(Looking North)



EXISTING WEST WING WALL

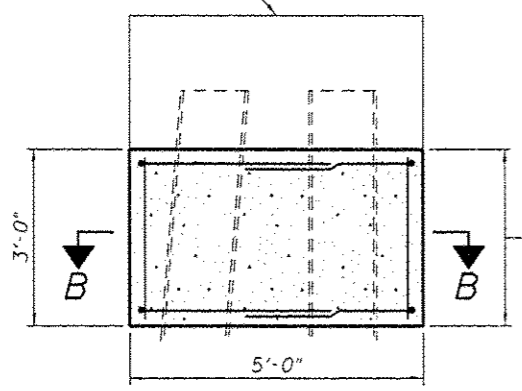
BILL OF MATERIAL

Item	Unit	Quantity
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	124

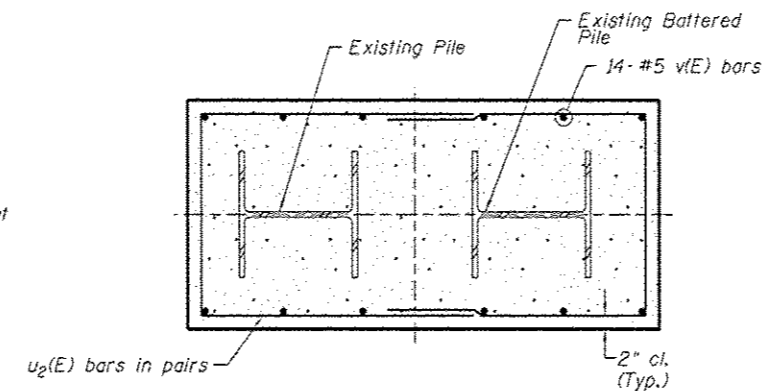


PLAN

Grout Removal and Replacement under all bearing locations across pier (Plate Girder side only)

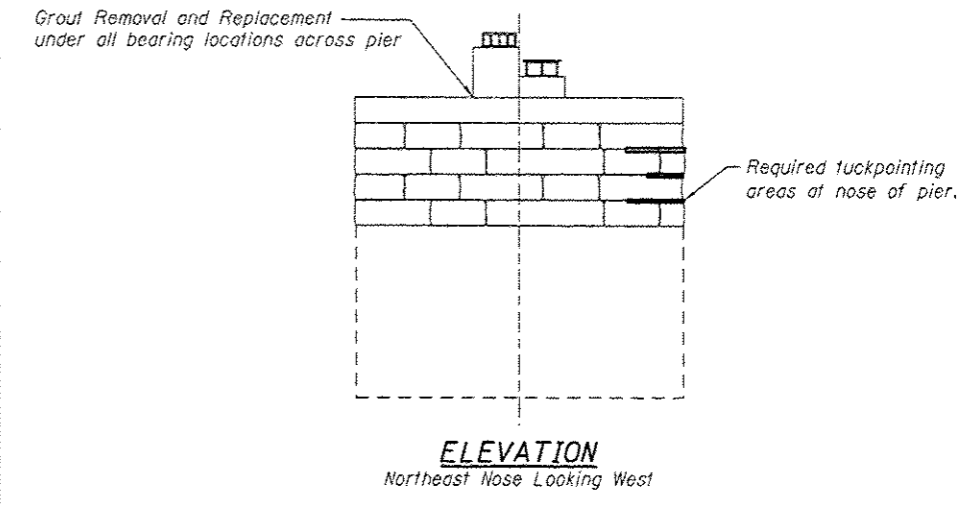


SECTION A-A
Typical Each Encasement

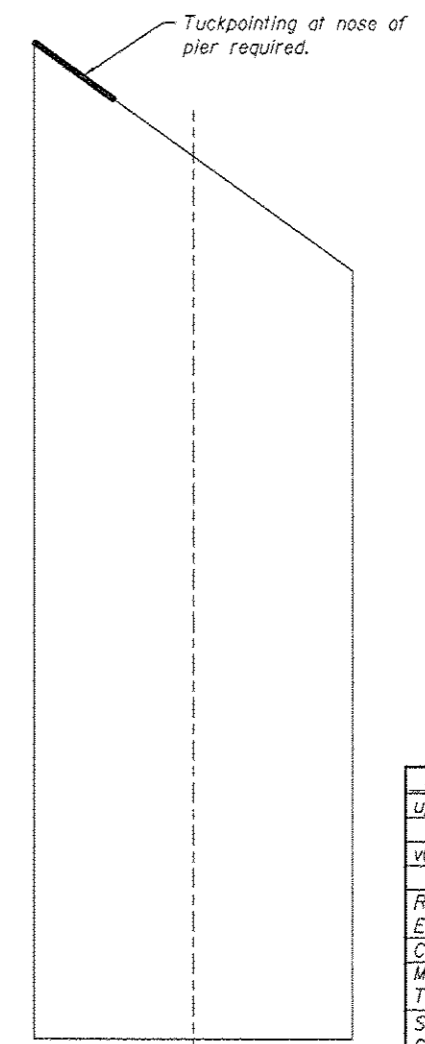


SECTION B-B

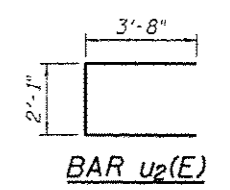
PIER #1



ELEVATION
Northeast Nose Looking West



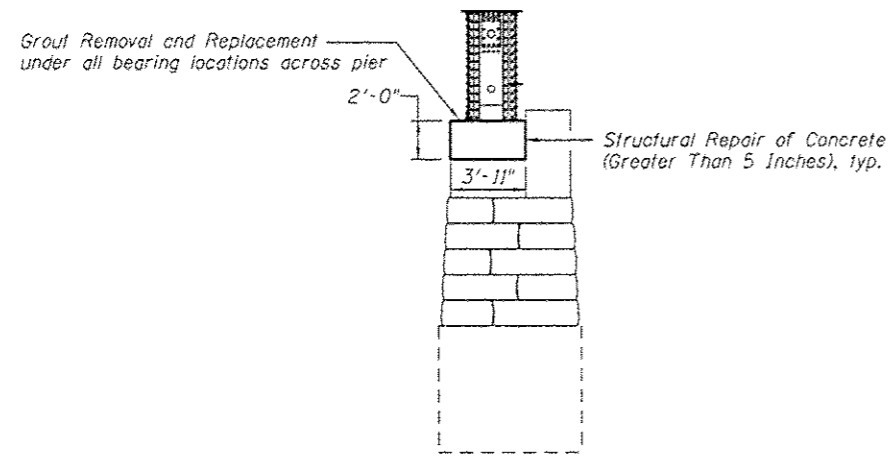
PLAN
PIER #2



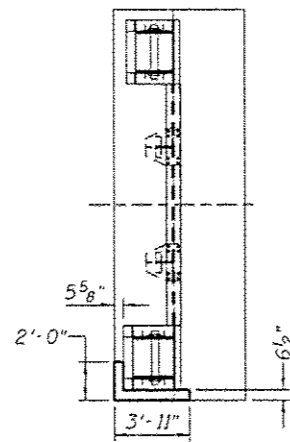
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
u ₂ (E)	24	#5	9'-5"	U
v(E)	42	#5	2'-8"	—
Reinforcement Bars, Epoxy Coated		Pound		360
Concrete Encasement		Cu. Yd.		4.2
Masonry Cleaning & Tuckpointing		Sq. Yd.		37
Structural Repair of Concrete (Greater than 5 inches)		Sq. Ft.		114
Grout Removal and Replacement		Each		6

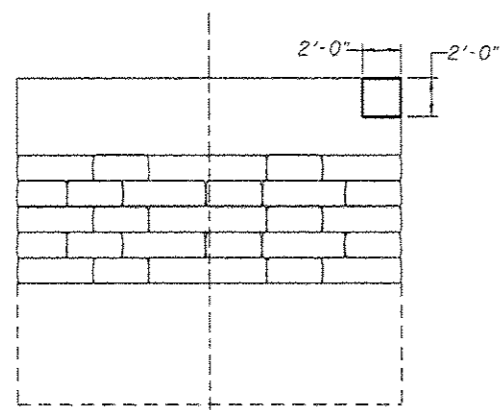
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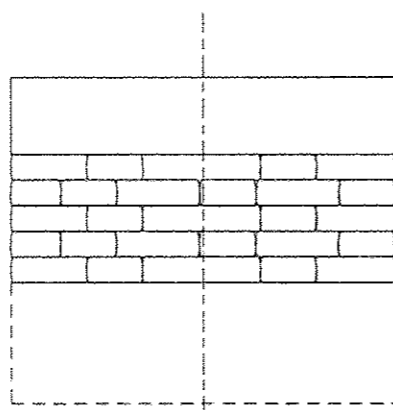
ELEVATION
Looking Northeast



PLAN

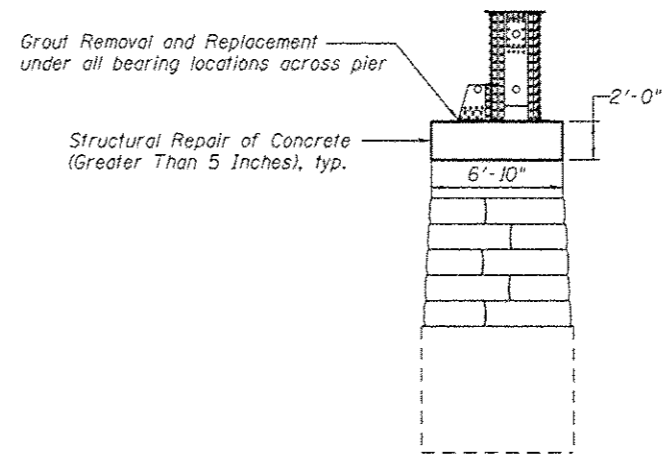


NORTH ELEVATION
Looking Southeast

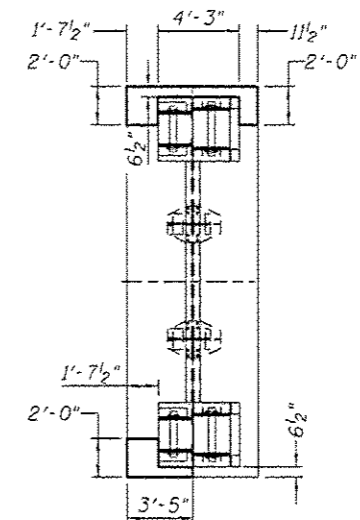


SOUTH ELEVATION
Looking Northwest

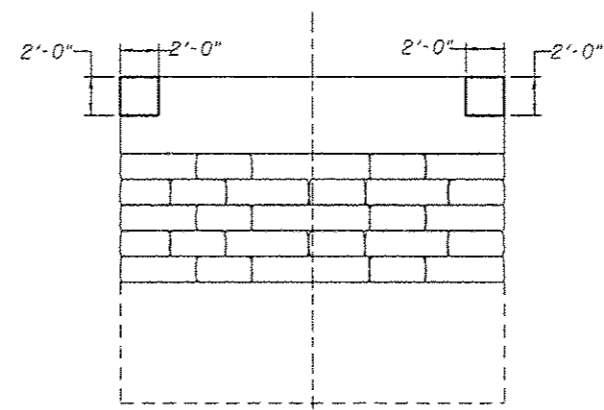
PIER #3



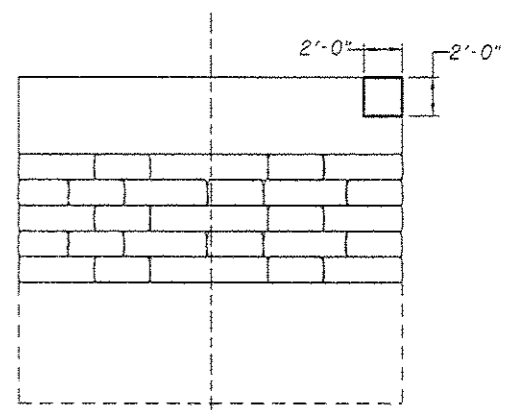
ELEVATION
Looking Northeast



PLAN



NORTH ELEVATION
Looking Southeast



SOUTH ELEVATION
Looking Northwest

PIER #4

FILE: S:\PROJECTS\2012\1016R13_RQ_11EFP\DESIGN\STRUCT_CD_Drawing\1016R13_Pier_Repair_Details.dwg



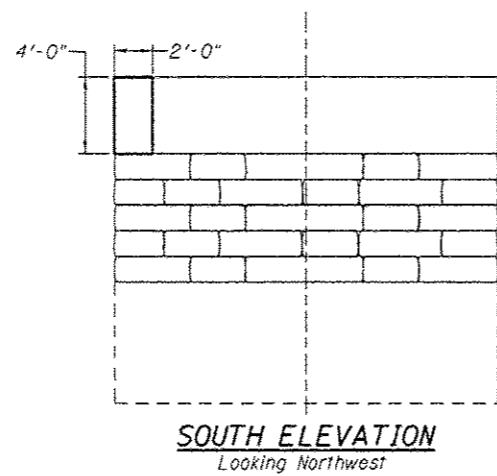
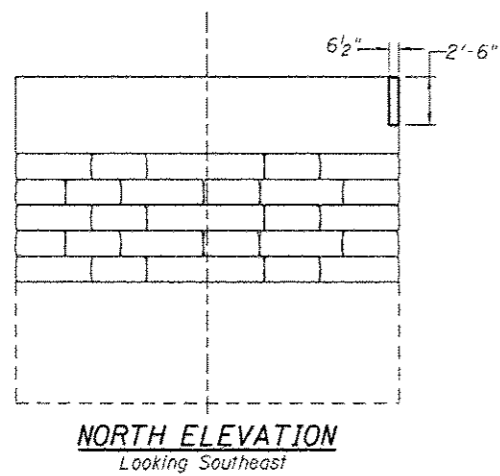
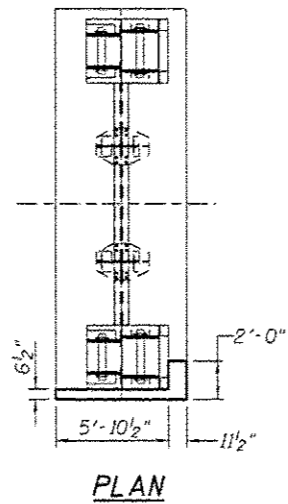
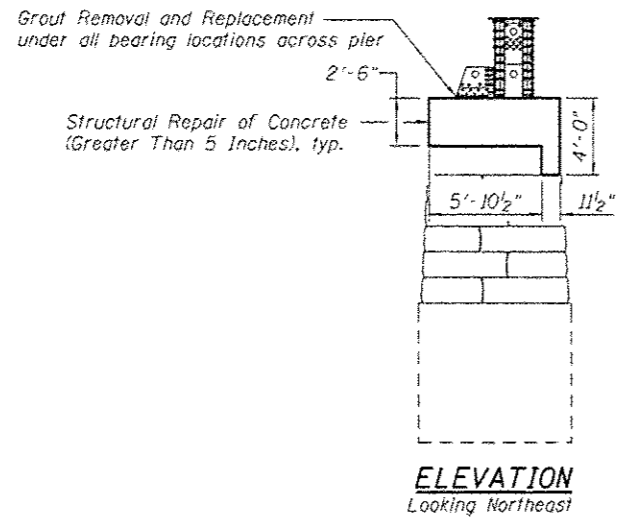
DESIGNED - BKC	REVISED -
CHECKED - MAC	REVISED -
DRAWN - ROA	REVISED -
CHECKED - BSK	REVISED -

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

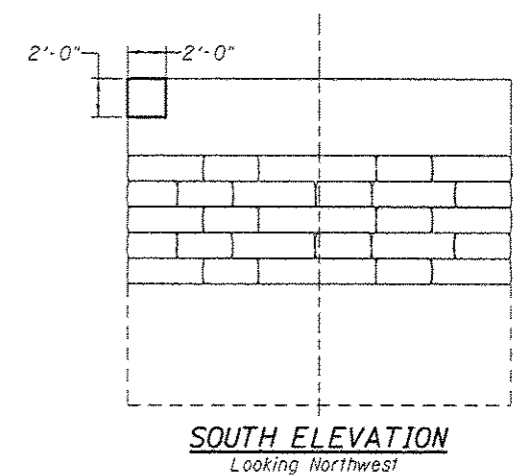
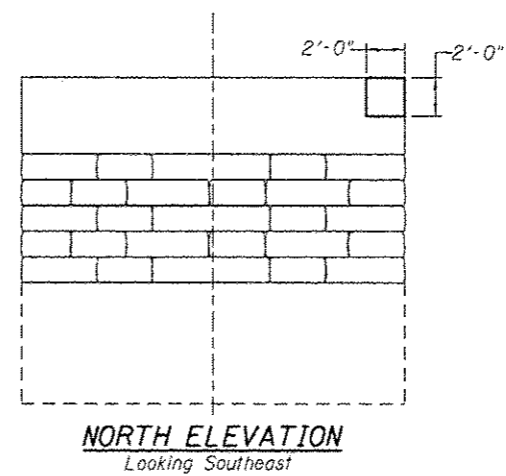
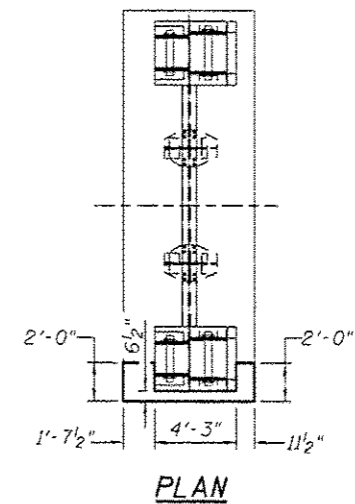
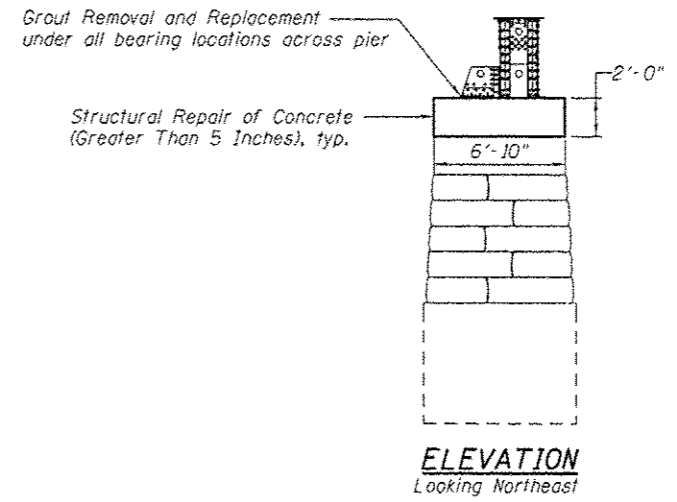
PIER REPAIR DETAILS
STRUCTURE NO. 101-6352

STRUCTURAL SHEET NO. 19 OF 20 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	37
WHA* 1016R13			CONTRACT NO. 85620	
ILLINOIS FED. AID PROJECT TE-00020561				



PIER #6



PIER #7

FILE: S:\PROJECTS\2013\1016R13_R01\TEP\DESIGN\STRUCT\2D_Drawing\1016R13_Pier_Repair_Details.dwg



DESIGNED	- BKC	REVISED	-
CHECKED	- MAC	REVISED	-
DRAWN	- RDA	REVISED	-
CHECKED	- BSK	REVISED	-

CITY OF ROCKFORD
RAILS TO TRAILS OVER ROCK RIVER
2015

PIER REPAIR DETAILS
STRUCTURE NO. 101-6352

STRUCTURAL SHEET NO. 20 OF 20 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00608-00-BT	WINNEBAGO	38	38
	WHA* 1016R13			CONTRACT NO. 85620
				ILLINOIS FED. AID PROJECT TE-00021581