

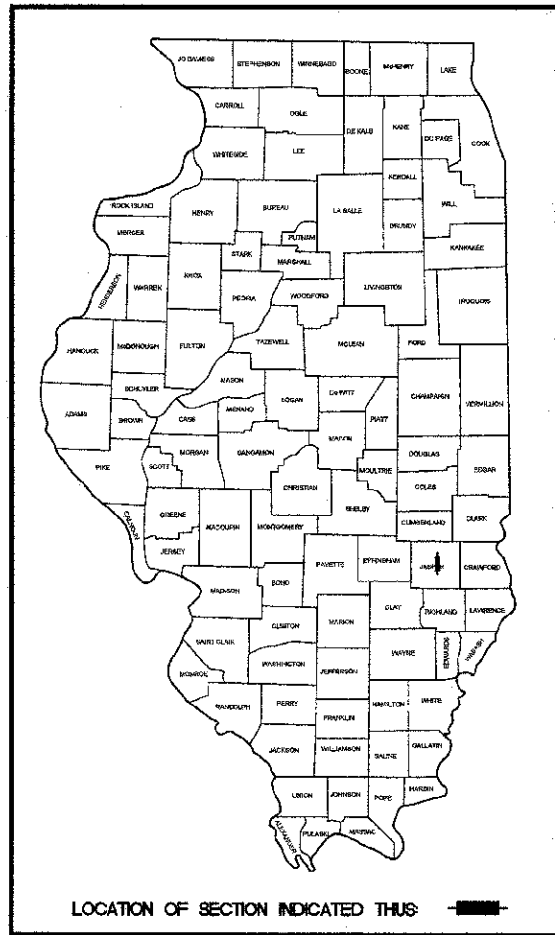
06-14-13 LETTING ITEM 233

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAGLE TRAIL
ENHANCEMENT FUNDS
SECTION 10-00045-00-BT
PROJECT NO. TE-00D7(048)
JOB NO. C-97-040-11
ITEP NO. 729005
MULTI-USE PATH
CITY OF NEWTON
JASPER COUNTY, ILLINOIS

CONTRACT #95708	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00045-00-BT		JASPER	46	1
	F.A.				
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

FOR INDEX OF SHEETS
AND STANDARDS
SEE SHEET 2



SCALES

PLAN	0	20	40
PROFILE (HORIZONTAL)	0	20	40
PROFILE (VERTICAL)	0	5	10
CROSS SECTIONS (HORIZONTAL)	0	10	20
CROSS SECTIONS (VERTICAL)	0	5	10

DESIGN STAGE J.U.L.I.E. DIG NUMBER

DIG # X0520373 & X0520376

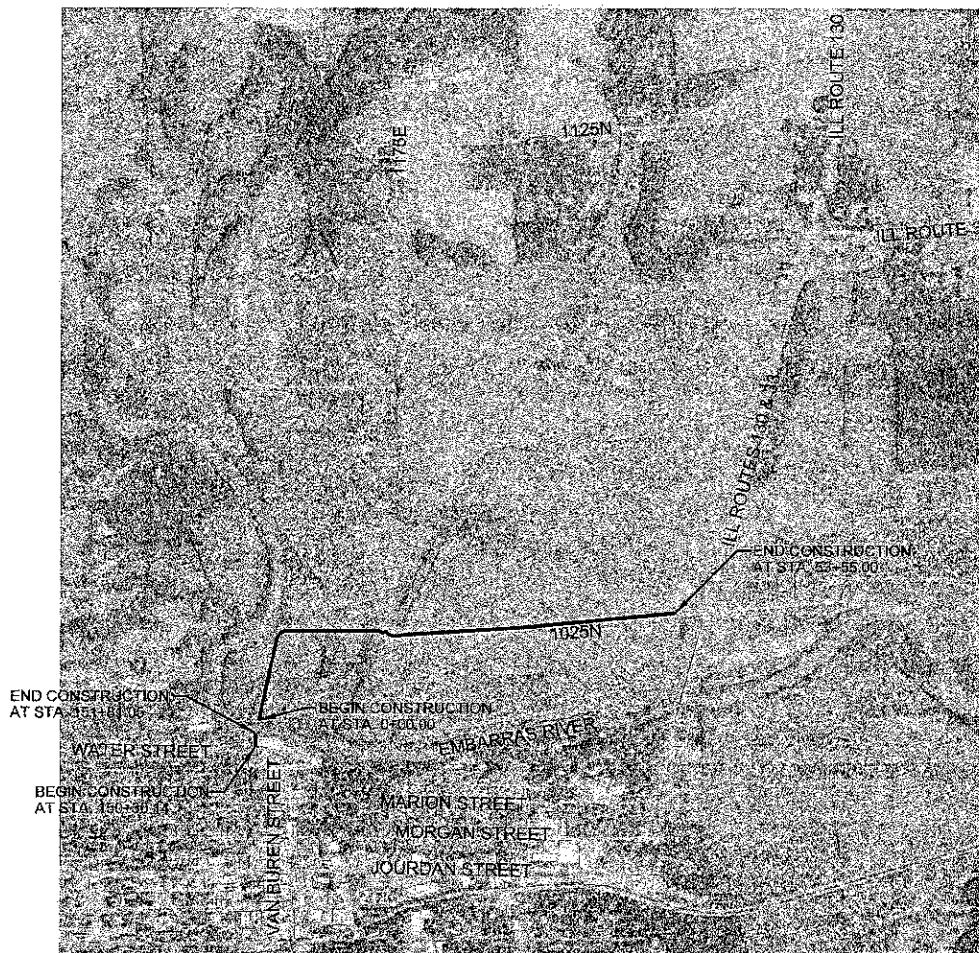
J.U.L.I.E.

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

UTILITY NOTE

THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES, REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR MUST CONTACT J.U.L.I.E. 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.

Contract No. 95708



LOCATION MAP
CITY OF NEWTON
LENGTH OF PROJECT
EAGLE TRAIL = 5505.91 Feet (1.04 Mile)



APPROVED: April 10 2013
MAYOR, CITY OF NEWTON

PASSED: March 26 4-18 2013
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review: April 18 2013
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAGLE TRAIL
SECTION 10-00045-00-BT

PLANS DATED: April 11, 2013

M **G**
engineering

MILANO & CRUNCH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-1282
FAX: (217) 343-3433
Web Address: www.mgengr.com
Design Firm #: 284-003030

Lee R. Beckman
My License Expires 11-30-13

File name: S:\DWG\1010294\dwg\Title Sheet.dwg
Plot date: 04/11/13 at 10:30

P.E. No. 52690

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00045-00-BT	JASPER	46	2	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		


CONTRACT #95708

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS AND STANDARDS
3	SUMMARY OF QUANTITIES SHEET
4-5	TYPICAL SECTIONS
6	SCHEDULE OF QUANTITIES AND GENERAL NOTES SHEET
7-12	MULTI-USE PATH PLAN AND PROFILE SHEETS
13	BOX CULVERT EXTENSION PLAN AND DETAIL SHEET
14	MISCELLANEOUS DETAILS SHEET
15	PARKING AREA PLAN SHEET
16-31	BRIDGE PLAN AND DETAIL SHEETS
32-34	RIGHT-OF-WAY AND REFERENCE TIES PLAN SHEETS
35-46	CROSS-SECTION SHEETS

STANDARDS

000001-06	Standard Symbols, Abbreviations, and Patterns
280001-07	Temporary Erosion Control Systems
424001-07	Perpendicular Curb Ramps for Sidewalks
515001-03	Name Plate for Bridges
630001-10	Steel Plate Beam Guardrail
664001-02	Chain Link Fence
701001-02	Off-Road Operations, 2L, 2W, More Than 15' Away
701006-04	Off-Road Operations, 2L, 2W, 15' (4.5 m) to 24" (600 mm) from Pavement Edge
701011-03	Off-Road Moving Operations, 2L, 2W, Day Only
701901-02	Traffic Control Devices
720001-01	Sign Panel Mounting Details
720006-03	Sign Panel Erection Details
720011-01	Metal Posts For Signs, Markers & Delineators
780001-03	Typical Pavement Markings

	MILANO & GRUNLOH ENGINEERS, LLC 114 WEST WASHINGTON P.O. BOX 89 EFFINGHAM, ILLINOIS 62421 PHONE: (217) 342-7262 (800) 677-2714 FAX #: (217) 342-8433	INDEX OF SHEETS EAGLE TRAIL CITY OF NEWTON SECTION 10-00045-00-BT JASPER COUNTY, ILLINOIS
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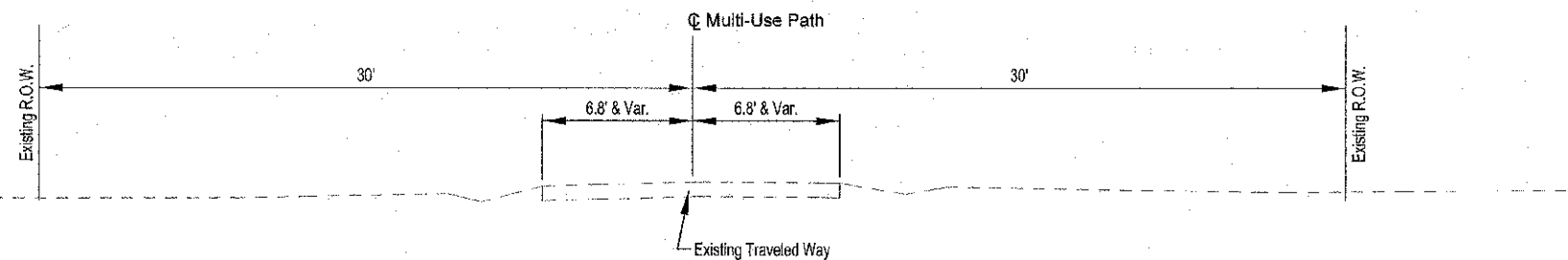
SUMMARY OF QUANTITIES			
ITEM #	DESCRIPTION	QUANTITY	UNIT
20200100	EARTH EXCAVATION	855	CU YD
20400800	FURNISHED EXCAVATION	100	CU YD
35101400	AGGREGATE BASE COURSE, TYPE B	437	TON
42001200	PAVEMENT FABRIC	243	SQ YD
42001300	PROTECTIVE COAT	6220	SQ YD
42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	53236	SQ FT
42400410	PORTLAND CEMENT CONCRETE SIDEWALK 8 INCH	2190	SQ FT
42400800	DETECTABLE WARNINGS	40	SQ FT
50102700	MASONRY REMOVAL	46.0	CU YD
50200100	STRUCTURE EXCAVATION	284.0	CU YD
50300225	CONCRETE STRUCTURES	45.5	CU YD
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	37450	POUND
50700105	TREATED TIMBER	14570	F.B.M.
50700305	HARDWARE	2780	POUND
50800205	REINFORCEMENT BARS, EPOXY COATED	3160	POUND
50900805	PEDESTRIAN RAILING	80	FOOT
50901780	PIPE HANDRAIL	380	FOOT
51500100	NAME PLATES	1	EACH
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE 1	2	EACH
62100530	ANCHOR BOLTS, 1 1/4"	12	EACH
64010302	PRECAST CONCRETE BOX CULVERTS 3' X 2'	43	FOOT
642D0217	PIPE CULVERTS, CLASS D, TYPE 1 12"	12	FOOT
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	44	FOOT
66400305	CHAIN LINK FENCE, 6'	164	FOOT

Δ SPECIALTY ITEMS

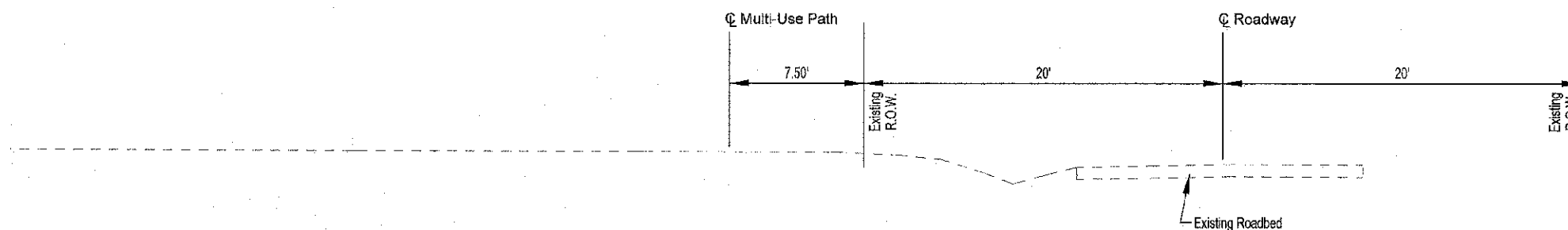
SUMMARY OF QUANTITIES			
ITEM #	DESCRIPTION	QUANTITY	UNIT
67100100	MOBILIZATION	1	L SUM
72000100	SIGN PANEL - TYPE 1	10.8	SQ FT
72900100	METAL POST - TYPE A	26.5	FOOT
78001100	PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS	5	SQ FT
78001110	PAINT PAVEMENT MARKING - LINE 4"	560	FOOT
X0636100	PARKING BLOCKS	7	EACH
X0325153	MASONRY CLEANING AND TUCKPOINTING	44.5	SQ YD
X2501000	SEEDING, CLASS 2 (SPECIAL)	0.5	ACRE
X2810214	STONE RIPRAP, CLASS A7 (SPECIAL)	82	TON
X6640300	CHAIN LINK FENCE REMOVAL	141	FOOT
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	1	L SUM
Z0001903	STRUCTURAL STEEL REMOVAL	21980	POUND
Z0001905	STRUCTURAL STEEL REPAIR	100	POUND
Z0003618	REMOVAL OF EXISTING TIMBER FLOOR	1	EACH
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	10	SQ FT
Z0031300	JACKING AND CRIBBING	1	L SUM
Z0004002	BOLLARDS	10	EACH
Z0053600	RIVET REMOVAL AND REPLACEMENT	220	EACH
Z0073410	TEMPORARY SUPPORT SYSTEM, LOCATION 1	1	EACH
Z0073420	TEMPORARY SUPPORT SYSTEM, LOCATION 2	1	EACH
LR420021	PORTLAND CEMENT CONCRETE PAVEMENT 6" (SPECIAL)	558	SQ YD
X000309	BOLLARDS, QUICK RELEASE	5	EACH
X2030205	ROCK EXCAVATION (SPECIAL)	256	CU YD

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00045-00-BT	JASPER	46	4
FED. ROAD DIST. NO. 7	LANDS	FED. AID PROJECT		

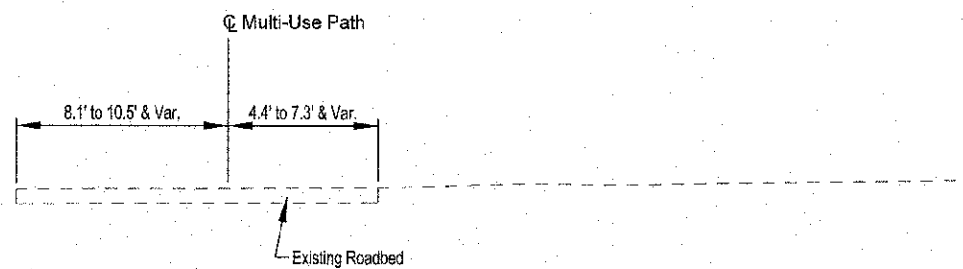
CONTRACT #56708



EXISTING SECTION
STATION 0+00.0 TO STATION 21+46.5



EXISTING SECTION
STATION 21+46.5 TO STATION 53+55.0



EXISTING SECTION
STATION 150+30.1 TO STATION 151+81.0

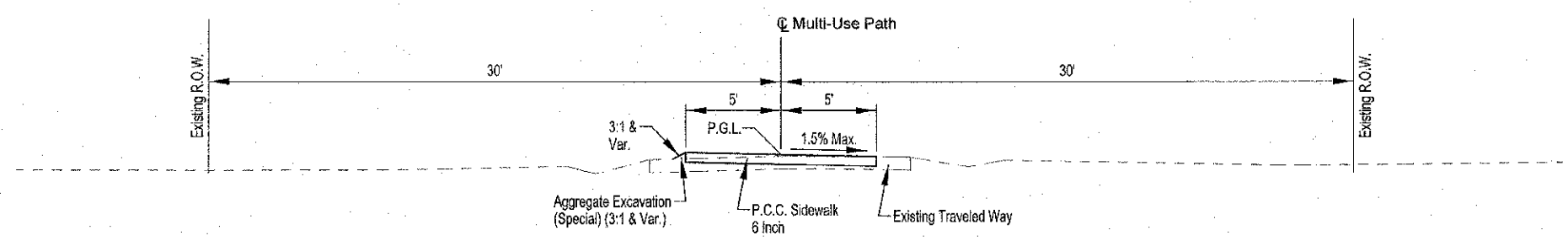
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MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
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Web Address: www.mgsengineers.com
Design Firm #: 184-020102

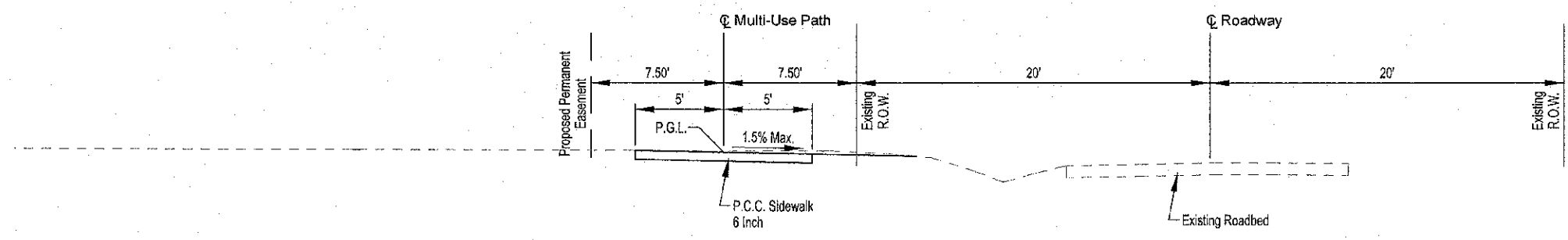
TYPICAL SECTION
EAGLE TRAIL
CITY OF NEWTON
SECTION 10 00045-00-BT
JASPER COUNTY, ILLINOIS

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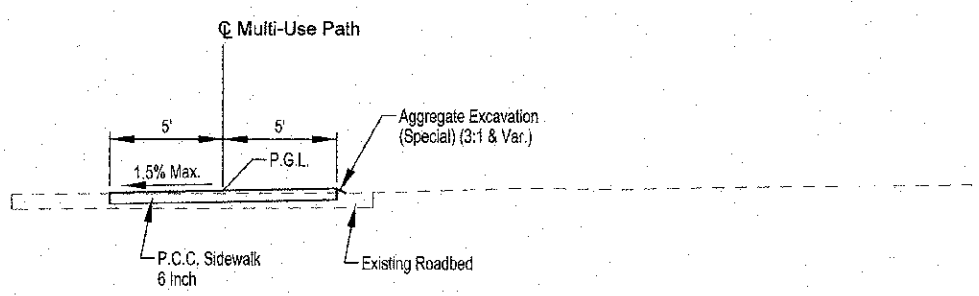
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-0045-00-BT	JASPER	46	5
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT:	
CONTRACT #85708				



PROPOSED SECTION
STATION 0+00.0 TO STATION 21+46.5



PROPOSED SECTION
STATION 21+46.5 TO STATION 53+55.0



PROPOSED SECTION
STATION 150+30.1 TO STATION 151+81.0

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MILANO & GRIMM, CH ENGINEERS, I.C.
114 WEST WASHINGTON
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(217) 341-2633
Fax #: (217) 341-2633
Web Address: www.mgengr.com
Design Firm #: 184-002105

TYPICAL SECTION
EAGLE TRAIL
CITY OF NEWTON
SECTION 10-0045-00-BT
JASPER COUNTY, ILLINOIS

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00045-00-BT	JASPER	46	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

CONTRACT #86708

ROCK EXCAVATION (SPECIAL) SCHEDULE			
LOCATION	(1) * ROCK EXCAVATION (SPECIAL)	(2) EMBANKMENT	(3) EARTHWORK BALANCE WASTE + OR SHORTAGE (-)
Sta to Sta	CU YD	CU YD	CU YD
0+00 TO 21+65	266	78	190
TOTAL	266	78	190

* Indicates a pay item

LOCATION	FURNISH EXCAVATION
	FOOT CU YD
Sta. 21+90.89	60
Sta. 22+98.92	40
TOTAL	100

LOCATION	PIPE CULVERTS, CLASS D, TYPE 1 12"
	FOOT FOOT
Sta. 37+22.27	12
TOTAL	12

EARTH EXCAVATION SCHEDULE				
LOCATION	(1) *EARTH EXCAVATION	(2) EXCAVATION TO BE USED IN EMBANKMENT (0.75 X Col. 1)	(3) EMBANKMENT	(4) EARTHWORK BALANCE WASTE + OR SHORTAGE (-)
Sta to Sta	CU YD	CU YD	CU YD	CU YD
21+65 TO 53+55	842	482	14	488
150+32 TO 151+81.05	13	10	8	2
PARKING AREA	200	160	0	160
TOTAL	855			620

* Indicates a pay item
Shrinkage used is 25%

LOCATION	AGGREGATE BASE COURSE, TYPE B
	FOOT TON
Sta. 0+00 to 53+55	200
Sta. 150+32 to 151+81.05	100
Rt. Sta. 150+20 to 151+38 (Parking Area)	137
TOTAL	437

LOCATION	PRECAST CONCRETE BOX CULVERTS, 3' X 2'
	FOOT
Lt. Sta. 21+90.89	25
Lt. Sta. 22+98.92	18
TOTAL	43

LEGEND

- IRON PIN FOUND
- 1/4" IRON PIN FOUND
- IP IRON PIPE FOUND
- N&W NAIL & WASHER FOUND
- N NAIL FOUND
- PK PK NAIL FOUND
- RR RAILROAD SPIKE FOUND
- T "T" FENCE POST FOUND
- X CHISELED "X" IN CONCRETE FOUND
- OH DRILLED HOLE IN CONCRETE FOUND
- S SURVEY DISC FOUND
- STONE FOUND
- TREE (DECIDUOUS)
- TREE (EVERGREEN)
- FIRE HYDRANT (EXISTING)
- WM WATER METER (EXISTING)
- WM WATER MAIN (EXISTING)
- WS WATER SERVICE LINE (EXISTING)
- V VALVE (GAS OR WATER) (EXISTING)
- GM GAS METER (EXISTING)
- GM GAS MAIN (EXISTING)
- GS GAS SERVICE LINE (EXISTING)
- CP CABLE TV PEDESTAL (EXISTING)
- CT UNDERGROUND CABLE TV (EXISTING)
- TP TELEPHONE PEDESTAL (EXISTING)
- TM TELEPHONE MANHOLE (EXISTING)
- TC TELEPHONE CABLE (EXISTING)
- TS TELEPHONE SERVICE WIRE (EXISTING)
- SM STORM MANHOLE (EXISTING)
- SI STORM INLET (EXISTING)
- SS STORM SEWER (EXISTING)
- SM SANITARY MANHOLE (EXISTING)
- SS SANITARY SEWER (EXISTING)
- PP POWER POLE (EXISTING)
- PP POWER POLE w/LIGHT (EXISTING)
- GA GUY ANCHOR (EXISTING)
- LP LIGHTPOLE (EXISTING)
- EP ELECTRIC PEDESTAL (EXISTING)
- OE OVERHEAD ELECTRIC (EXISTING)
- UE UNDERGROUND ELECTRIC (EXISTING)
- LS LANDSCAPING
- FP FENCE POST
- F FENCE

LOCATION	P.C.C. SIDEWALK 6 INCH	P.C.C. SIDEWALK 8 INCH	PAVEMENT FABRIC	DETECTABLE WARNINGS	P.C.C. PAVEMENT 6" (SPECIAL)	PROTECTIVE COAT
	SQ FT	SQ FT	SQ YD	SQ FT	SQ YD	SQ YD
Sta. 0+00.00 to 21+32.00	21677					2408
Sta. 21+32.00 to 23+20.00		1890	210			210
Sta. 23+20.00 to 36+07.00	13770					1530
Sta. 36+07.00 to 37+27.00		300	33			33
Sta. 37+27.00 to 53+55.00	16280					1809
Sta. 150+32.00 to 151+81.05	1509					167
Sta. 21+45.50				20		
Sta. 21+62.50				20		
Rt. Sta. 150+20 to 151+38 (Parking Area)					558	62
TOTAL	53236	2190	245	40	558	8220

LOCATION	SIGN PANEL-TYPE 1
	SQ FT
Sta. 53+57.00	10.75
TOTAL	10.75

LOCATION	METAL POST-TYPE A
	FOOT
Sta. 53+57.00	26.5
TOTAL	26.5

LOCATION	SPB8 TYPE A, 6 FOOT POSTS
	FOOT
9' Rt. to 63' Rt., Sta. 151+40	44
TOTAL	44

LOCATION	CHAIN LINK FENCE	CHAIN LINK FENCE REMOVAL
	FOOT	FOOT
57' Rt. Sta. 150+25 to 9.5' Rt. 151+78	164	141
TOTAL	164	141

LOCATION	PAINT PAVEMENT MARKING - LINE 4"	PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS (YELLOW)
	FOOT	SQ FT
Rt. Sta. 150+20 to 151+38 (Parking Area)	560	5
TOTAL	560	5

LOCATION	BOLLARDS	BOLLARDS, QUICK RELEASE
	EACH	EACH
Sta. 0+05.00	2	1
Sta. 21+32.00	2	1
Sta. 21+78.00	2	1
Sta. 150+33.00	2	1
Sta. 151+75.05	2	1
TOTAL	10	5

LOCATION	PARKING BLOCKS
	FOOT EACH
Rt. Sta. 150+20 to 151+38 (Parking Lot)	7
TOTAL	7

LOCATION	PIPE HANDRAIL
	FOOT
5.5' Lt. Sta. 2+17.78 to 2+67.78	50
5.5' Rt. Sta. 2+17.78 to 2+67.78	50
5.5' Lt. Sta. 8+22.65 to 8+62.65	30
5.5' Rt. Sta. 8+22.65 to 8+62.65	30
5.5' Lt. Sta. 13+58.77 to 14+01.77	45
5.5' Rt. Sta. 13+58.77 to 14+01.77	45
5.5' Lt. Sta. 16+42.57 to 16+87.57	45
5.5' Rt. Sta. 16+42.57 to 16+87.57	45
5.5' Lt. Sta. 20+55.70 to 20+75.70	20
5.5' Rt. Sta. 20+55.70 to 20+75.70	20
TOTAL	380

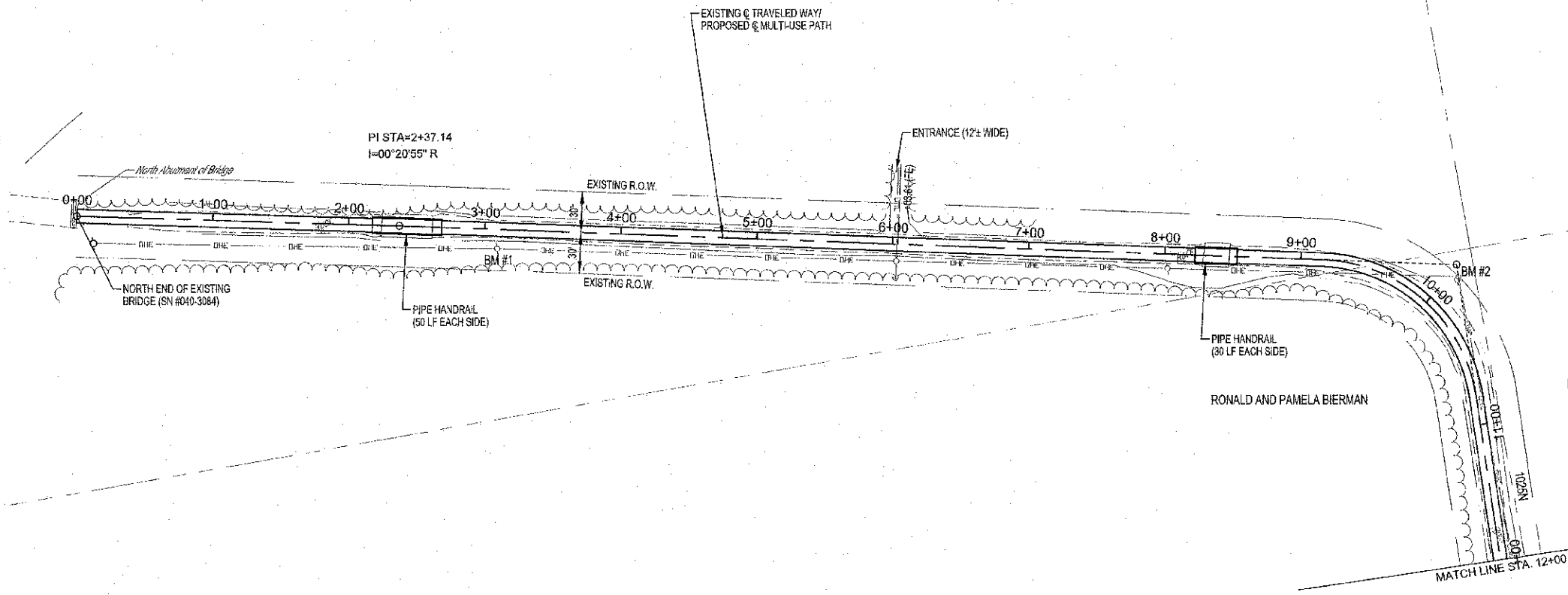
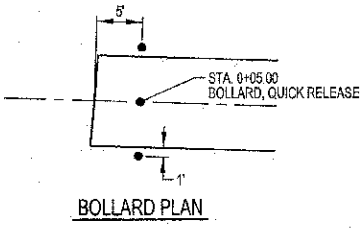
- Pavement grades shown are at the top of pavement surfaces, unless otherwise noted in the plans.
- All elevations refer to U.S.G.S. mean sea level datum.
- Any reference to a standard in the plans shall be interpreted to mean the edition as indicated by the sub-number listed on Sheet 2.
- Before ordering pipe culverts the Contractor shall consult the Engineer for exact lengths.
- CURB AND GUTTER, WALKS, SLABS, AND PCC DRIVEWAY PAVEMENT 8"

A. Concrete walks shall be in accordance with IDOT Std. Spec. Unless otherwise shown, locate sidewalk contraction joints at 5 ft on center and expansions joints at 50 ft on center.

MILANO & GRINICH ENGINEERS, LLC
 114 WEST WASHINGTON
 P.O. BOX 897
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 Phone: (217) 347-7232
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 Fax: (217) 342-3433
 Web Address: www.mgeengineers.com
 Design Firm #: 134-003109

SCHEDULE OF QUANTITIES AND
 GENERAL NOTES
 EAGLE TRAIL
 CITY OF NEWTON
 SECTION 10-00045-00-BT
 JASPER COUNTY, ILLINOIS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-0045-00-6T		JASPER	46	7
CONTRACT #95708				



CURVE #1

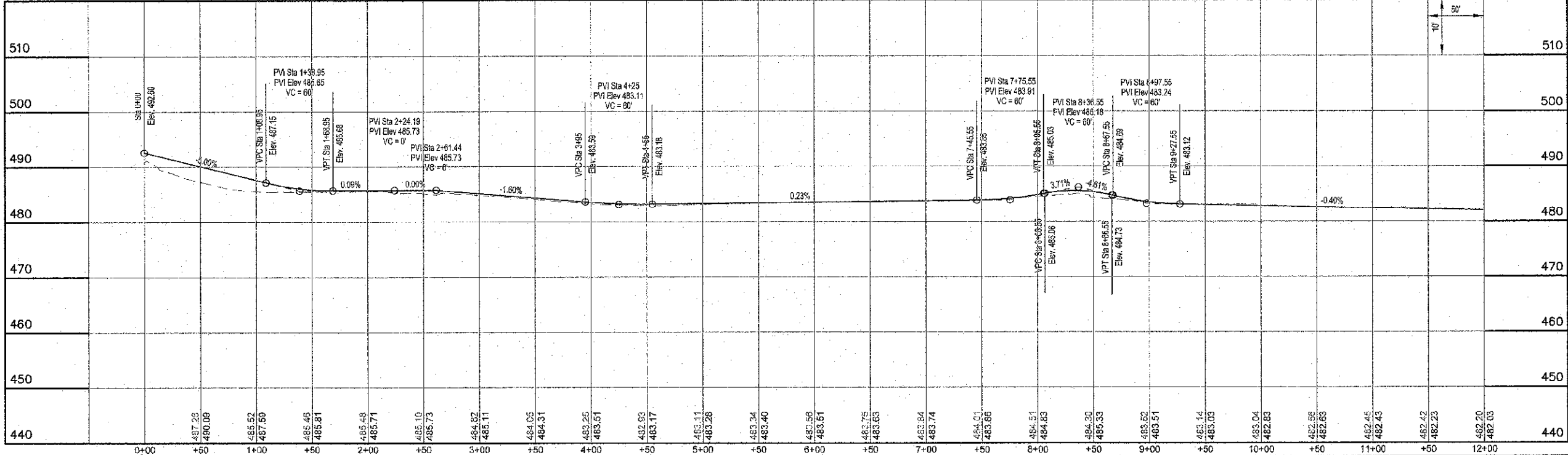
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I=79°22'02" R
Da=49°33'27"
T=97.91'
R=118.00'
L=163.46'
C=150.70'
E=35.33'
M=27.19'
PC STA=9+16.59
PT STA=10+80.05

NOTE: CONTRACTOR TO FIELD VERIFY BETWEEN BENCHMARK ELEVATIONS

- BM #1**
RAILROAD SPIKE IN POWER POLE
AT 14.1 RT. STA. 3+09.6
ELEV.=486.75
- BM #2**
RAILROAD SPIKE IN POWER POLE
AT 30.0 LT. STA. 10+03.7
ELEV.=485.49

MILANO & GRUNLOCH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 661
EFFINGHAM, ILLINOIS 62401
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(800) 672-2714
Fax #: (217) 342-3433
Web Address: www.mgengr.com
Design Firm #: 154-202108

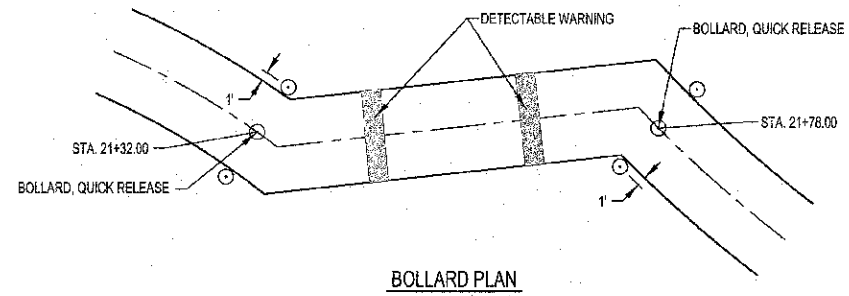
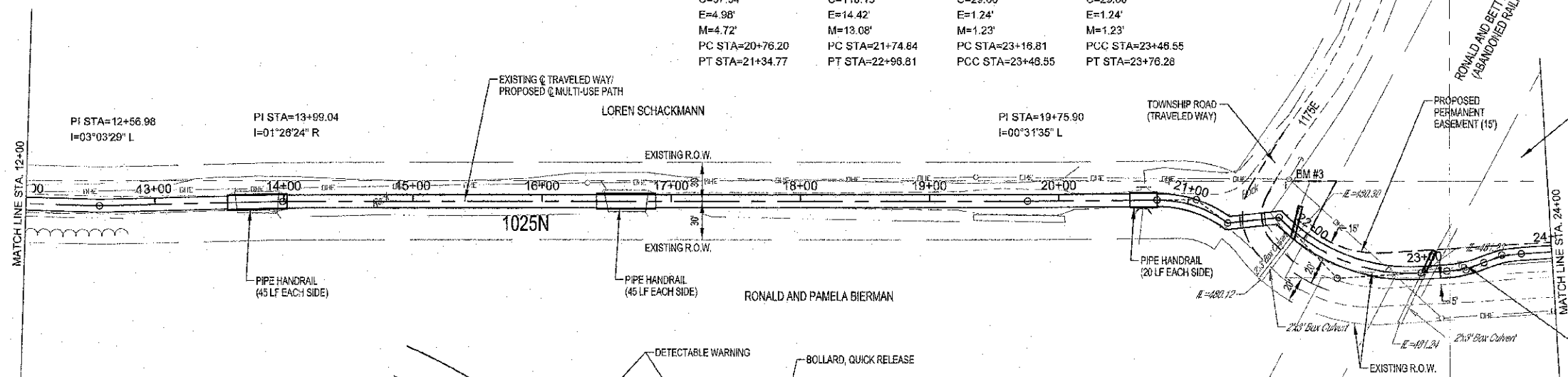
SCALES:
1" = 50' HOR
1" = 10' VER



MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-0045-00-BT		JASPER	46	8
FED. ROAD DIST. NO. 7				
ILL. HOB. FED. AID PROJECT				
CONTRACT #8708				

CURVE #	CURVE #	CURVE #	CURVE #
PI STA=21+06.56 I=37°17'04" R Da=63°39'43" T=30.38' R=90.00' L=56.57' C=57.54' E=4.98' M=4.72' PC STA=20+76.20 PT STA=21+34.77	PI STA=22+40.00 I=49°55'07" L Da=40°55'32" T=65.16' R=140.00' L=121.97' C=118.15' E=14.42' M=13.08' PC STA=21+74.84 PT STA=22+96.81	PI STA=23+31.82 I=18°55'48" L Da=63°39'43" T=15.00' R=90.00' L=29.74' C=29.60' E=1.24' M=1.23' PCC STA=23+16.81 PT STA=23+48.55	PI STA=23+61.55 I=18°55'48" R Da=63°39'43" T=15.00' R=90.00' L=29.74' C=29.60' E=1.24' M=1.23' PCC STA=23+48.55 PT STA=23+76.28



NOTE: CONTRACTOR TO FIELD VERIFY BETWEEN BENCHMARK ELEVATIONS

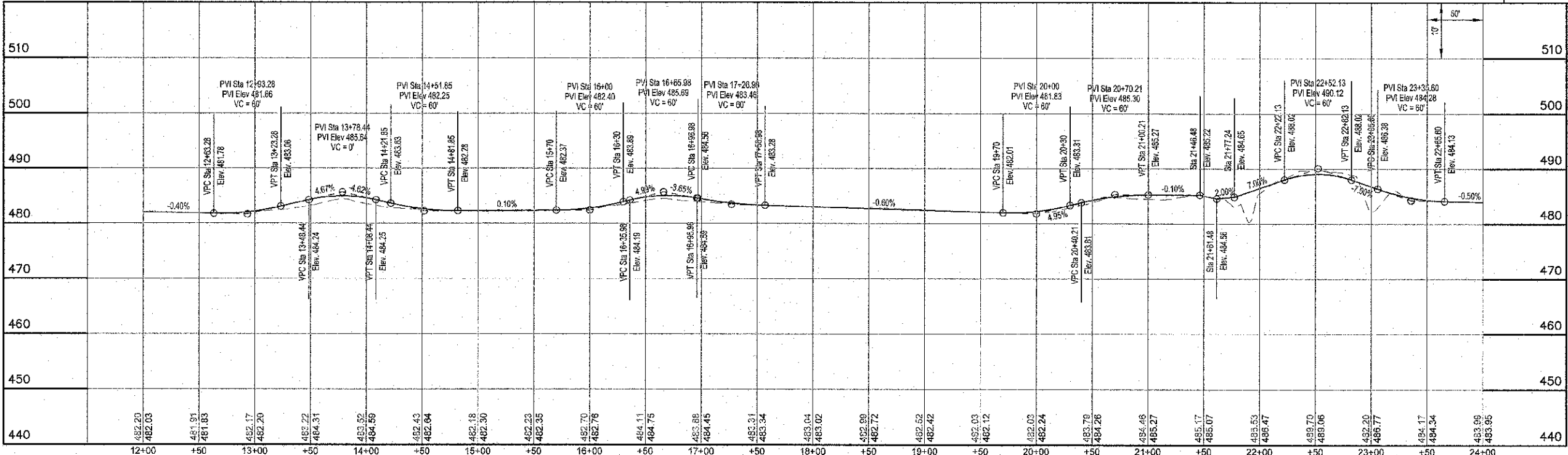
BM #2
RAILROAD SPIKE IN POWER POLE
AT 30.0'L, STA. 10+03.7
ELEV.=486.49

BM #3
RAILROAD SPIKE IN POWER POLE
AT 28.8'L, STA. 21+85.7 (FWD)
ELEV.=485.94

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EFFINGHAM, ILL. 62401
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Web Address: www.mge-engineers.com
Dustin Filmer: 334.003108

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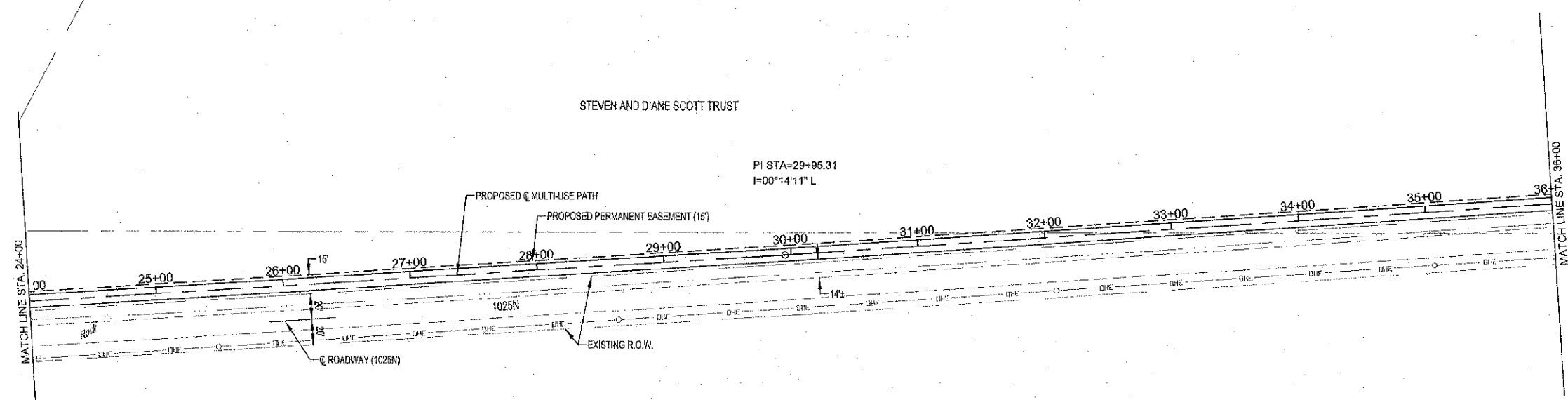
SCALES:
1" = 60' HOR
1" = 10' VER



MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00045-00-ET		JASPER	46	9

CONTRACT #85700

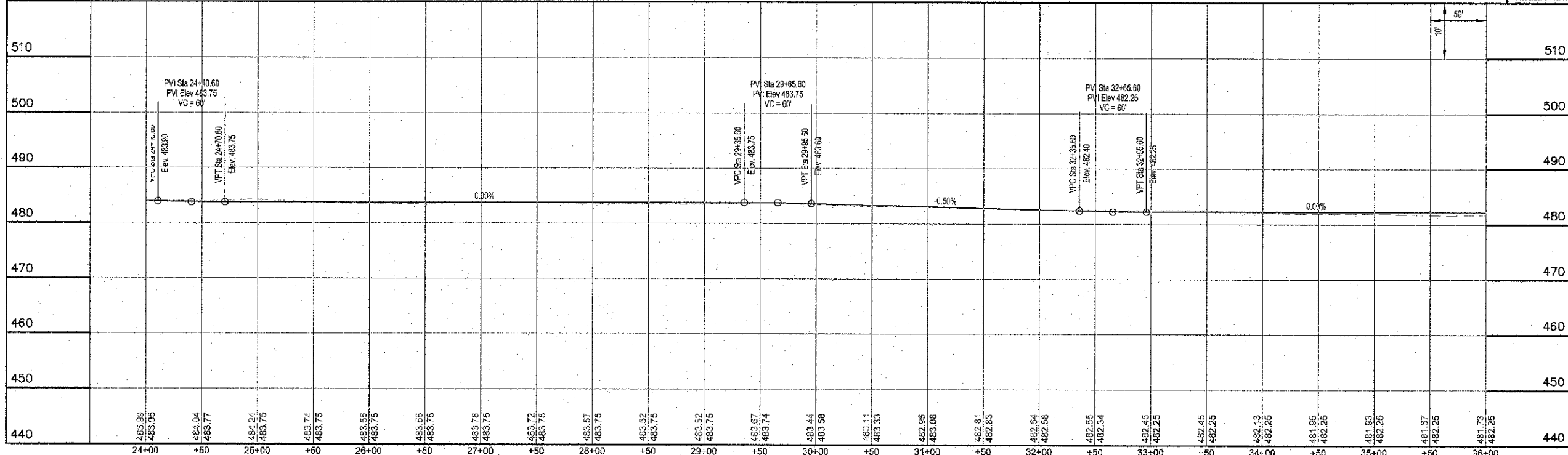


SCALES:
1" = 60' HOR
1" = 10' VER

NOTE: CONTRACTOR TO FIELD VERIFY BETWEEN BENCHMARK ELEVATIONS

- BM #3**
RAILROAD SPIKE IN POWER POLE
AT 28.8' LT, STA. 21+85.7 (FWD)
ELEV.=485.94
- BM #4**
RAILROAD SPIKE IN POWER POLE
AT 49.7' RT, STA. 46+32.8
ELEV.=483.15

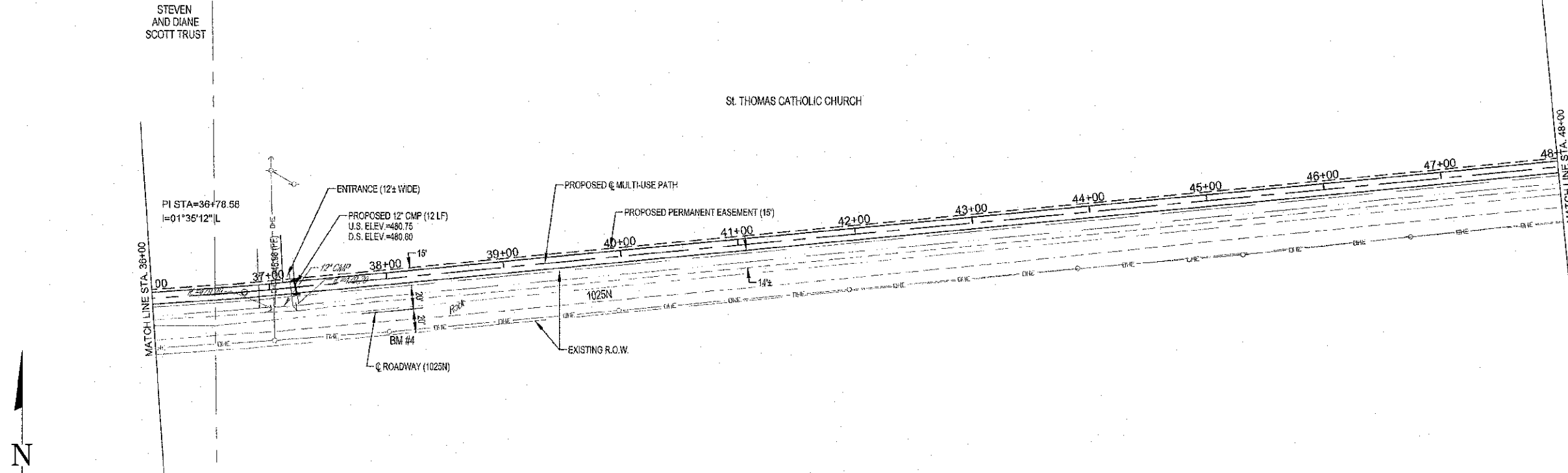
MELANO & CRUNLICH ENGINEERS, LLC
14 WEST WASHINGTON
P.O. BOX 687
EFFINGHAM, ILLINOIS 62401
Phone: (217) 547-7322
Fax: (217) 542-3493
E-mail: info@melanoandcrunlich.com
Web Address: www.melanoandcrunlich.com
Illinois Firm # 184-003102
File name: S:\DWG\1010294\mg\Trail.dwg
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P.L. 05/08/07/08/09



MULTI-USE PATH

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PROJ. ROAD DIST. NO. 7	BLK/PTS	ISS. AND PROJ. D/T		

CONTRACT #95708

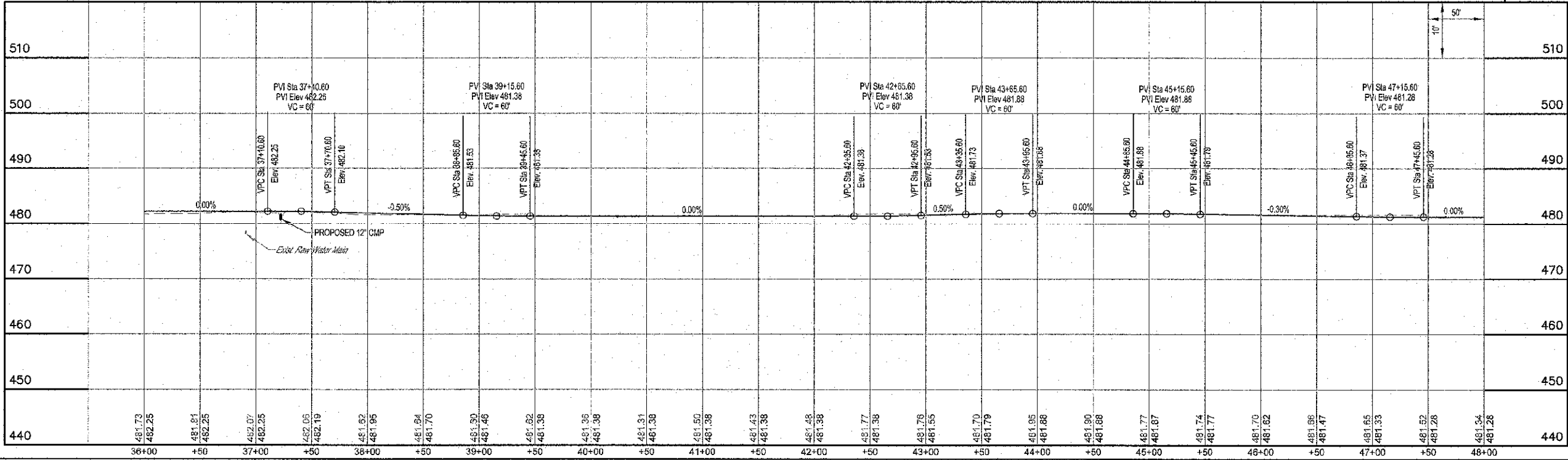


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NOTE: CONTRACTOR TO FIELD VERIFY BETWEEN BENCHMARK ELEVATIONS

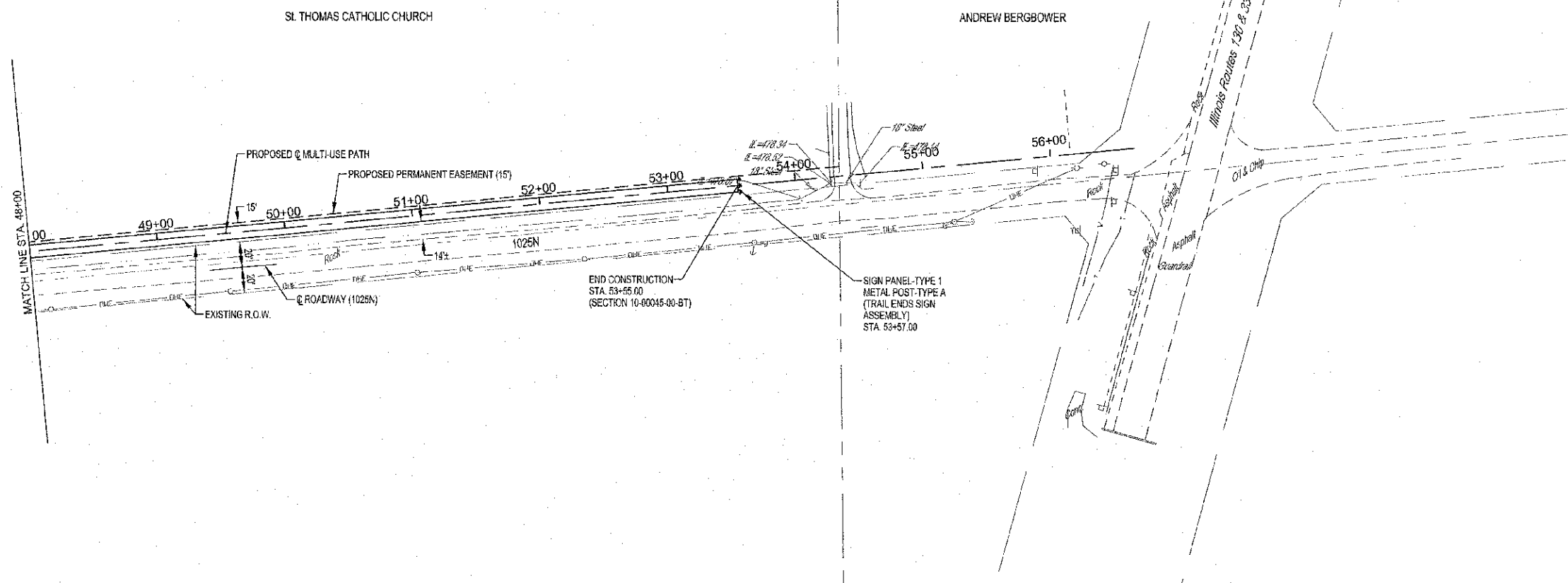
- BM #3**
RAILROAD SPIKE IN POWER POLE
AT 28.8'L.T. STA. 21+85.7 (FWD)
ELEV. = 486.94
- BM #4**
RAILROAD SPIKE IN POWER POLE
AT 49.7'RT. STA. 46+32.6
ELEV. = 493.15

MILANO & GRINLOCH ENGINEERS, LLC
 114 WEST WASHINGTON
 P.O. BOX 897
 EFFINGHAM, ILLINOIS 62424
 Phone: (217) 542-7222
 (815) 617-0714
 Fax #: (217) 542-2435
 Web Address: www.milanoeng.com
 Design Firm #: 154-003108



MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00045-00-BT		JASPER	46	11
FED. ROAD DIST. NO. 7		BLK/SEC	PER. AD. PROJECT	
CONTRACT #95708				



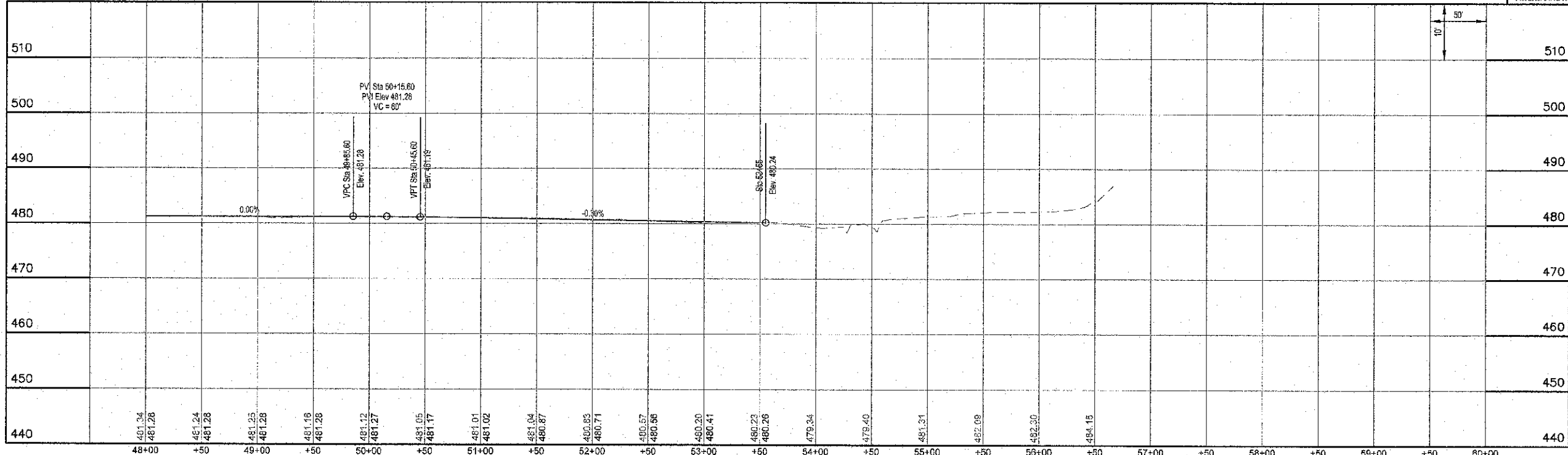
SCALES:
1" = 60' HOR
1" = 10' VER

NOTE: CONTRACTOR TO FIELD VERIFY BETWEEN BENCHMARK ELEVATIONS

- BM #3**
RAILROAD SPIKE IN POWER POLE
AT 28.8' LT, STA. 21+65.7 (FWD)
ELEV. = 486.94
- BM #4**
RAILROAD SPIKE IN POWER POLE
AT 43.7' RT, STA. 48+32.5
ELEV. = 483.15

M MILANO & GRUNLOH ENGINEERS, LLC
134 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
Phone: (217) 547-7929
Fax: (217) 547-2714
Web Address: www.mgeng.com
Delta Plot # 1M-523128

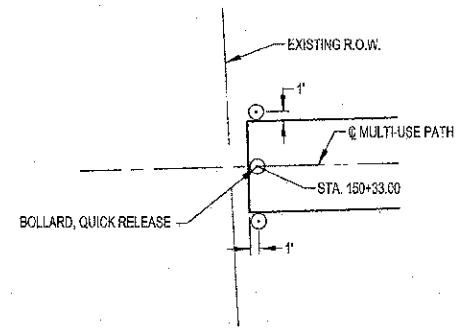
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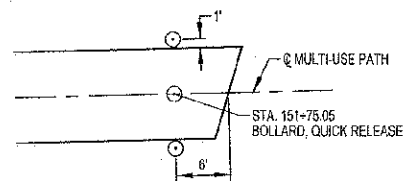
MULTI-USE PATH

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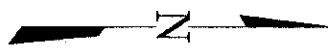
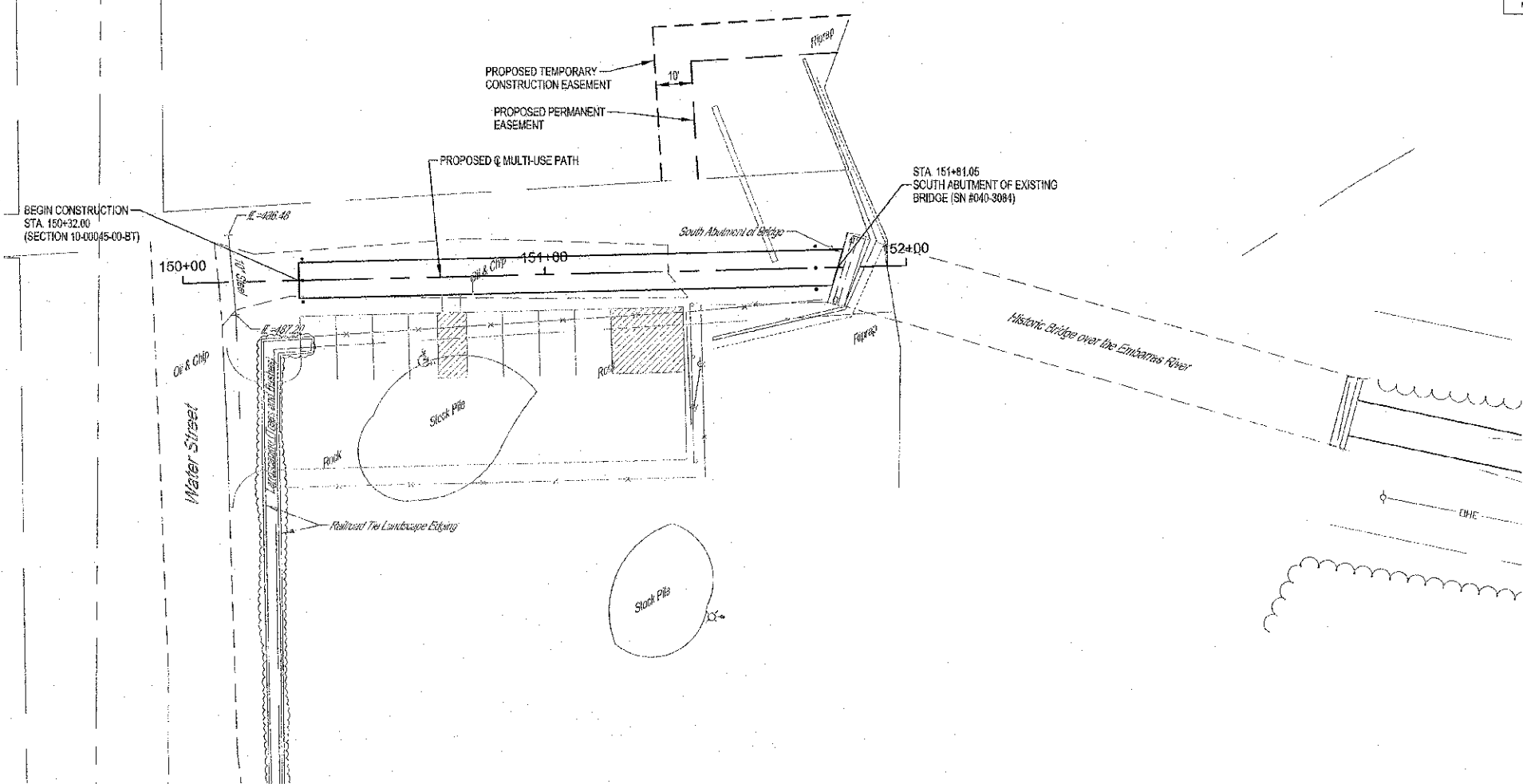
CONTRACT #85708



BOLLARD PLAN "A"



BOLLARD PLAN "B"

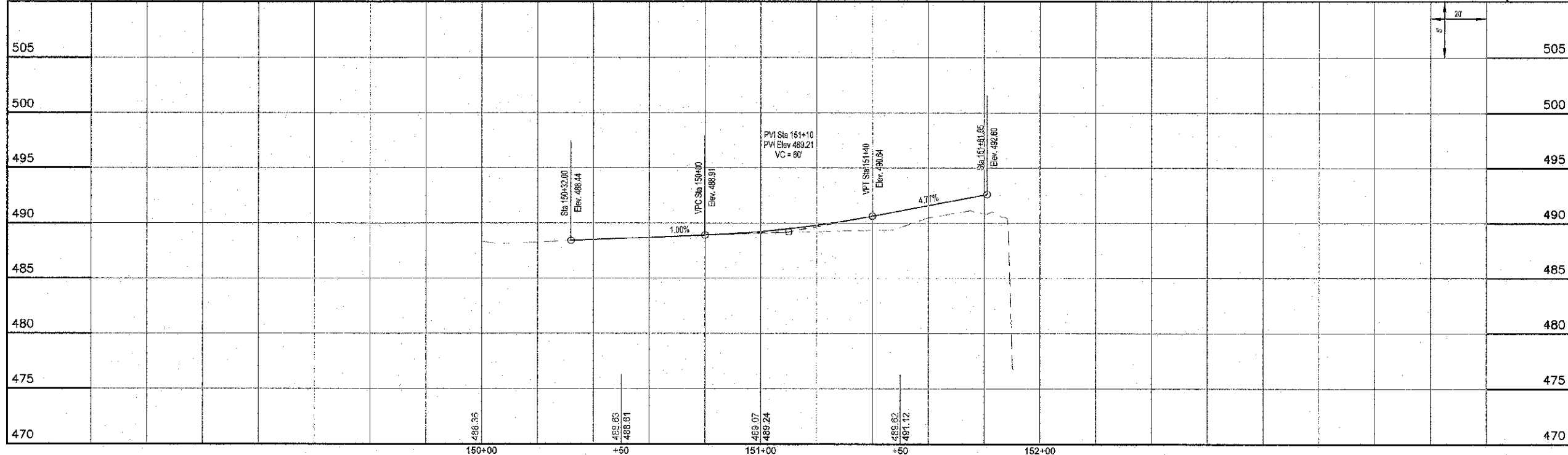


SCALES:
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1" = 5' VER

BM #5
NORTH RIM OF MANHOLE
175.3 FT. STA. 150+72.7
ELEV. = 493.13

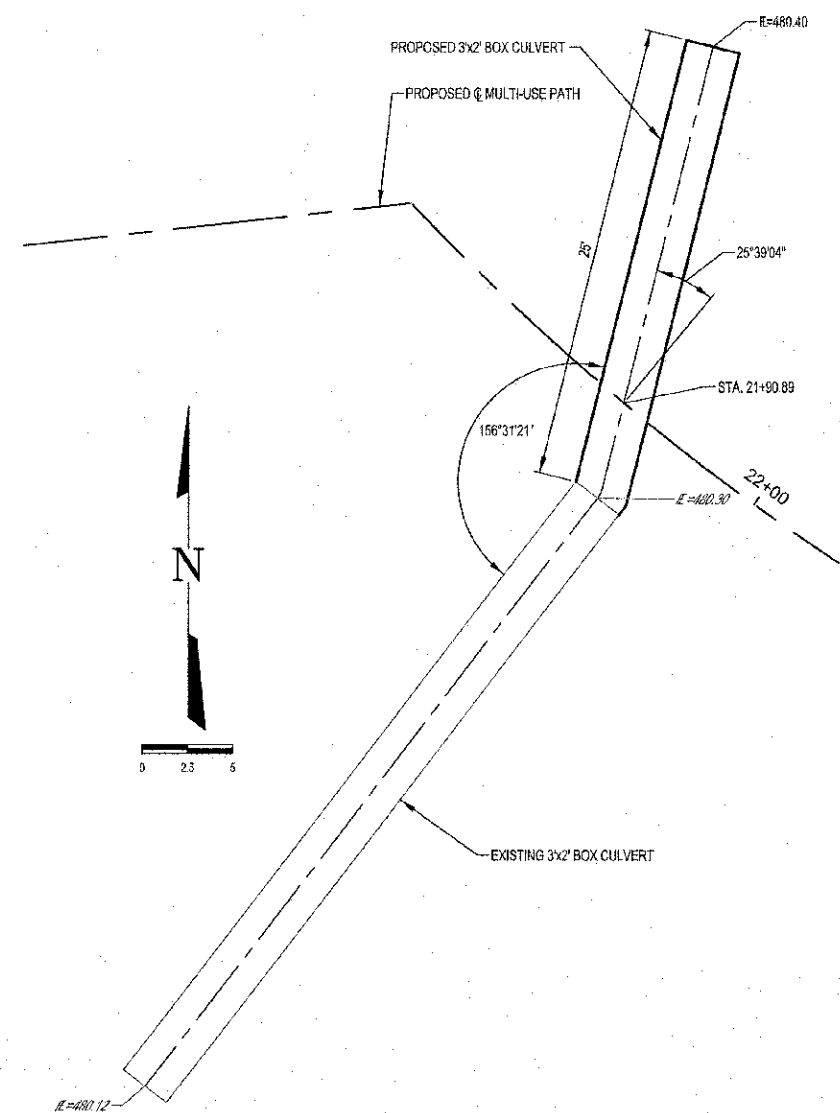
M **engineering** **G**

MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 887
EFFINGHAM, ILLINOIS 62401
Phone: (217) 341-7322
Fax: (217) 342-3428
Web Address: www.mgengr.com
Design Firm #: 184-833102
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Plot date: 04/10/13 at 15:30
P.E. 051.086.887 (689.49)

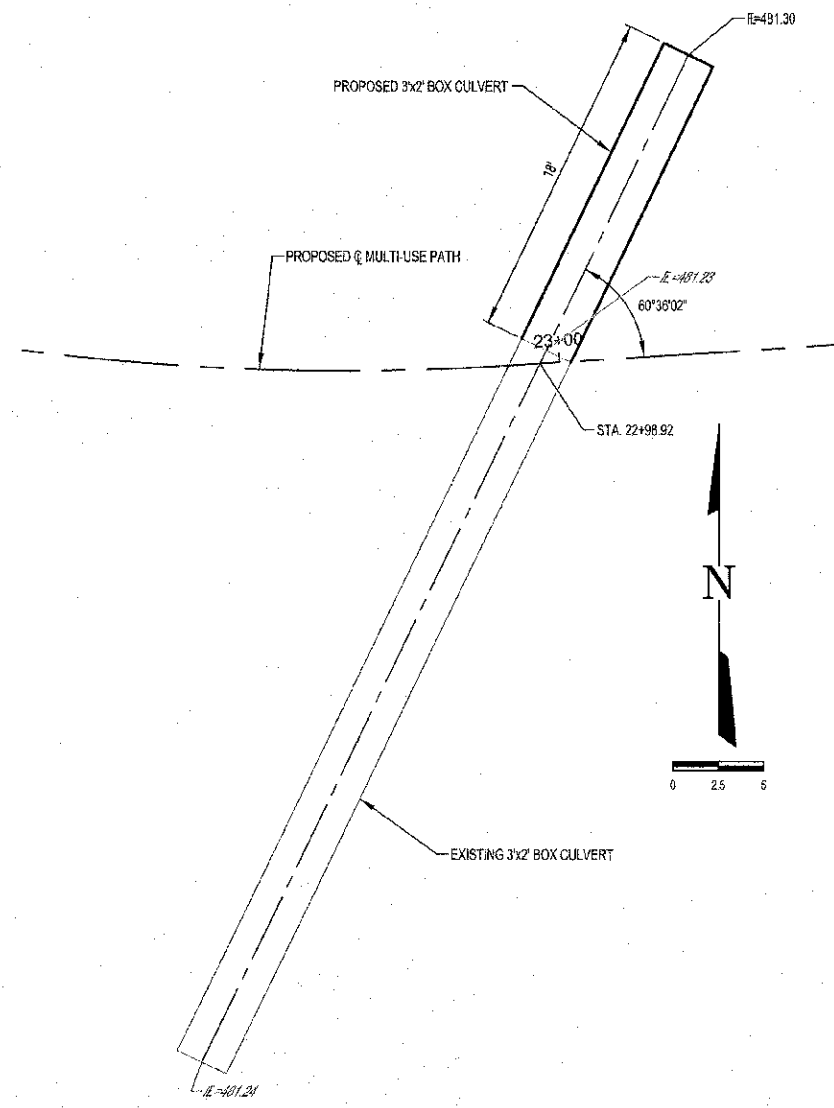


MULTI-USE PATH

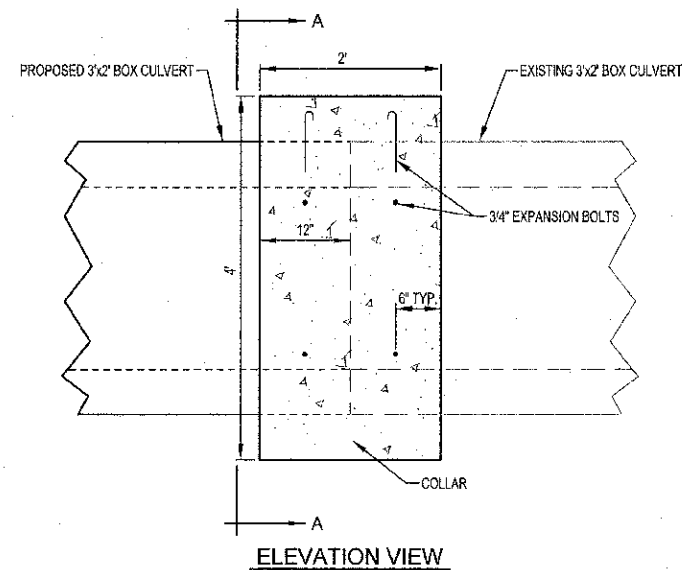
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10-0045-00-BT	JASPER	46	13	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		
CONTRACT #895108				



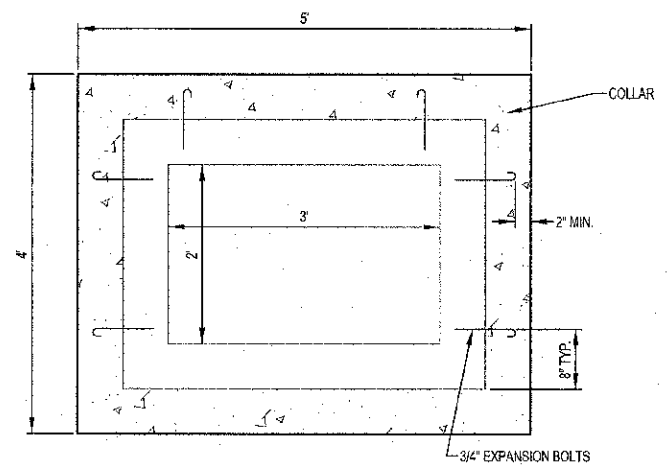
BOX CULVERT EXTENSION



BOX CULVERT EXTENSION



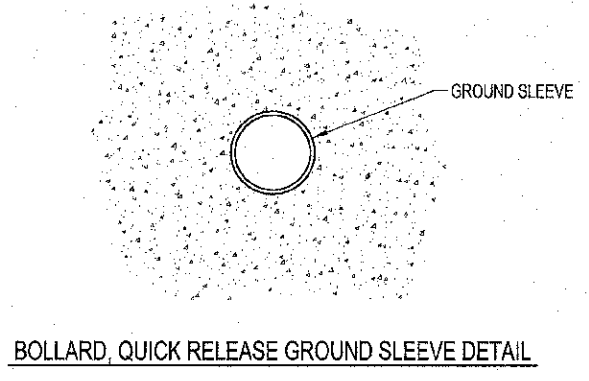
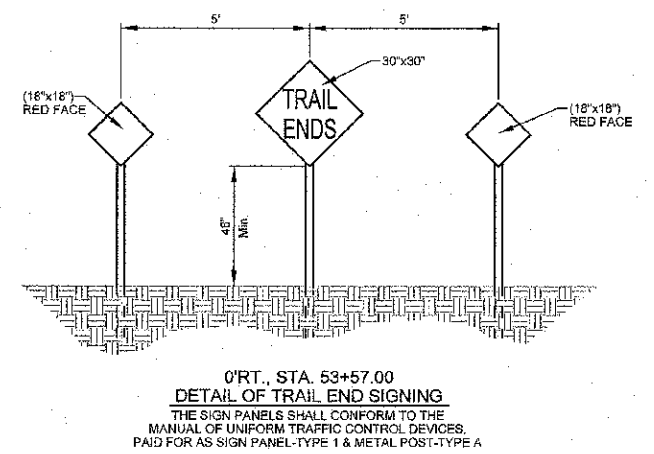
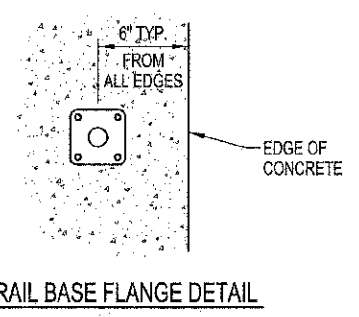
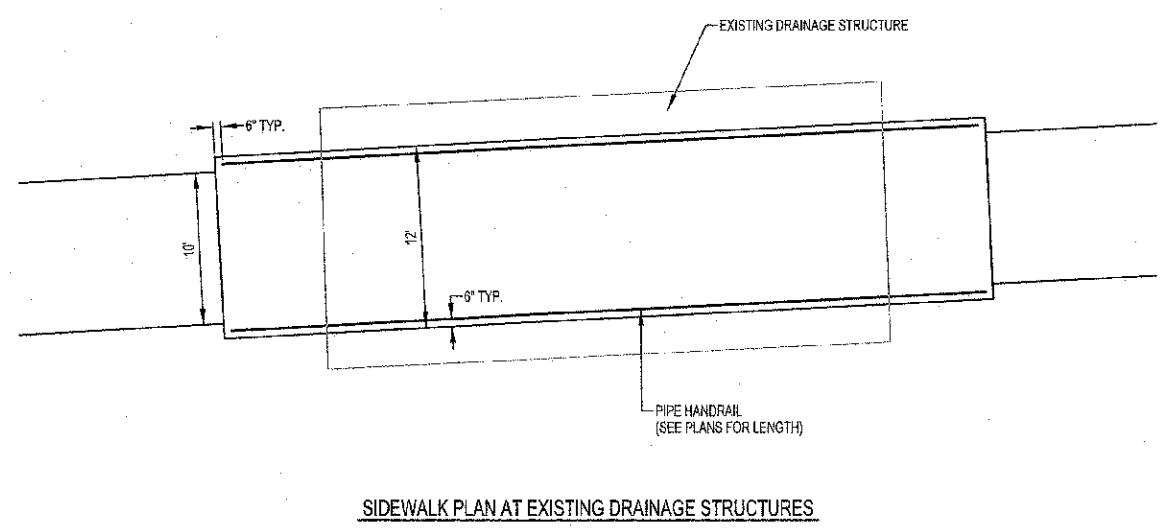
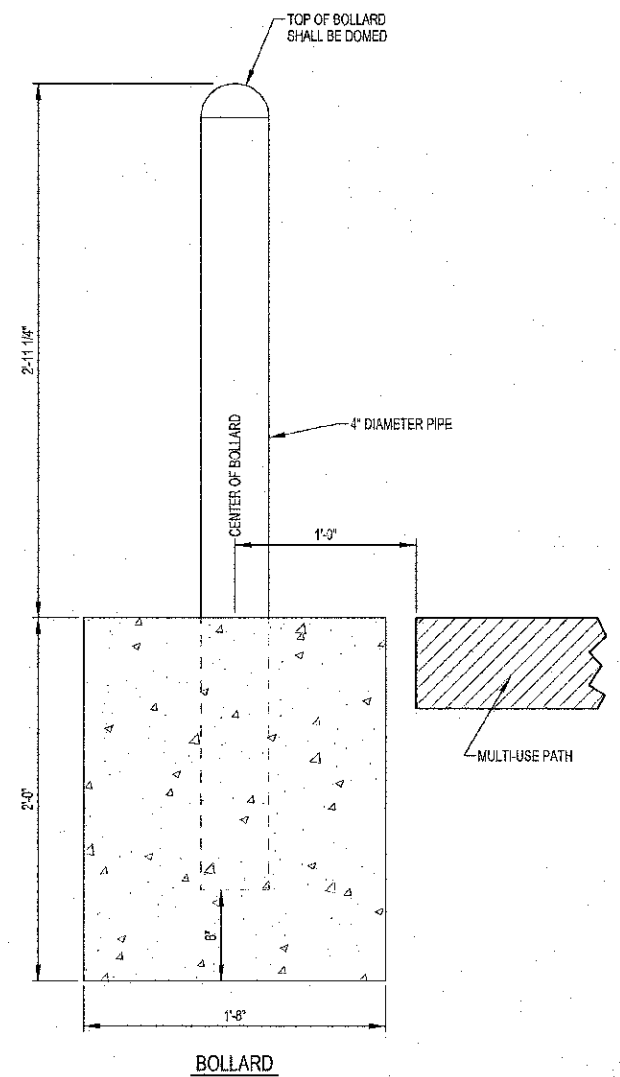
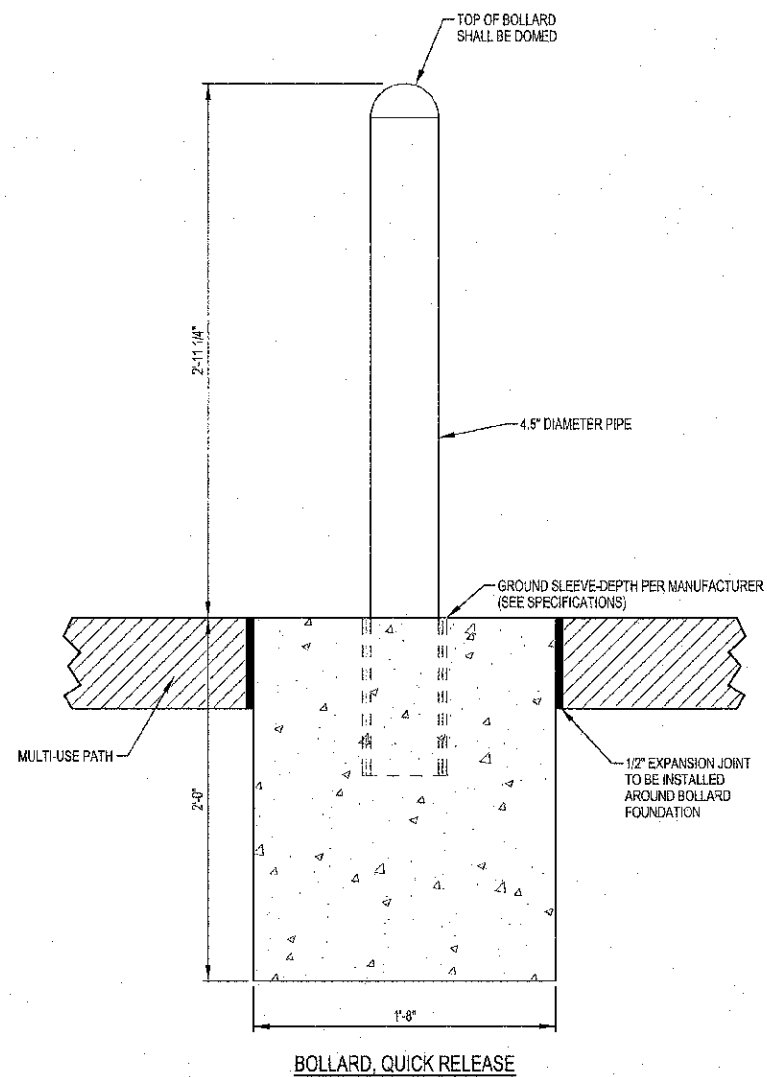
ELEVATION VIEW



SECTION "A-A"

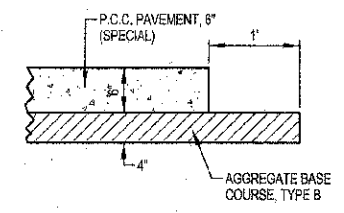
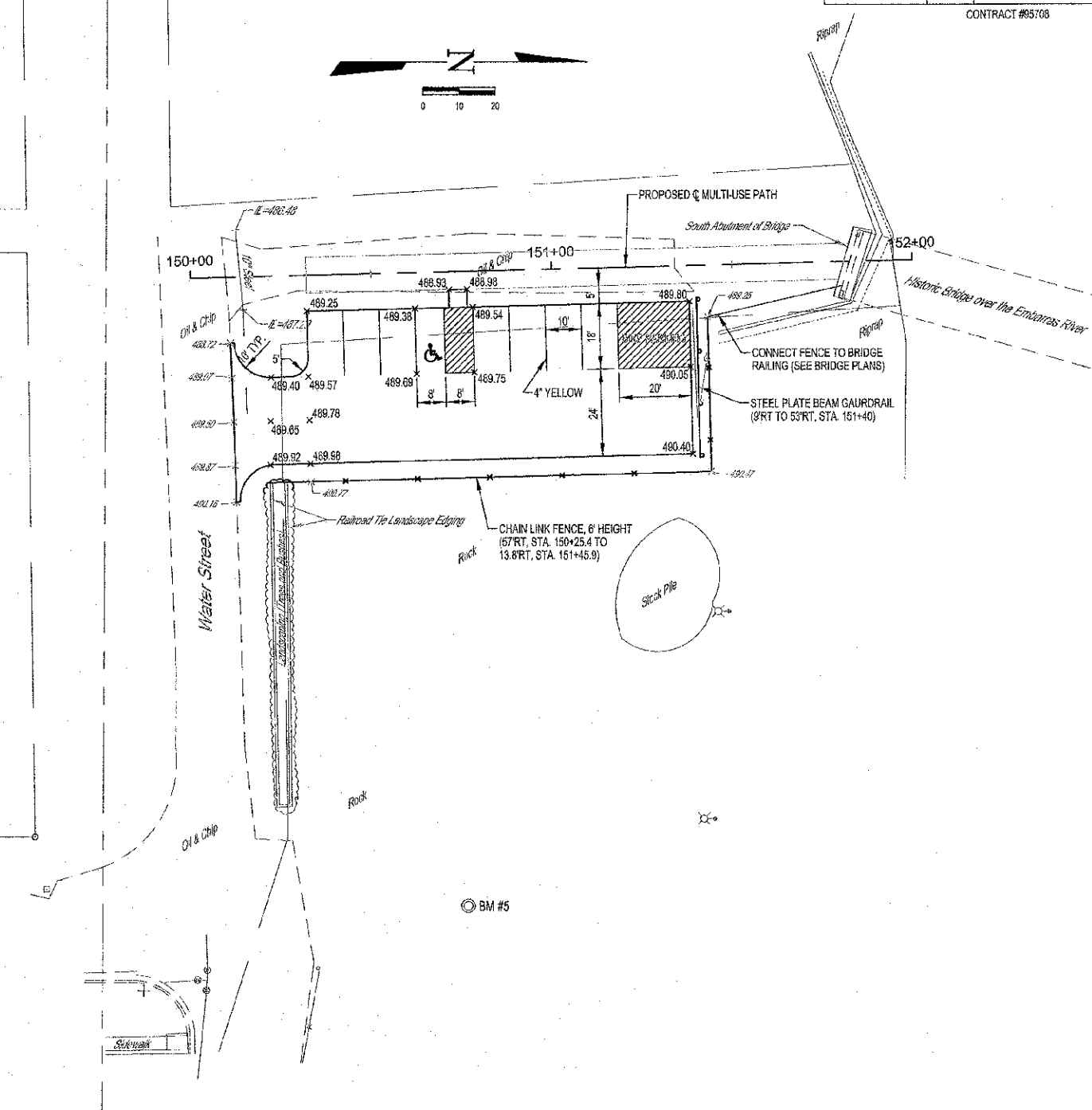
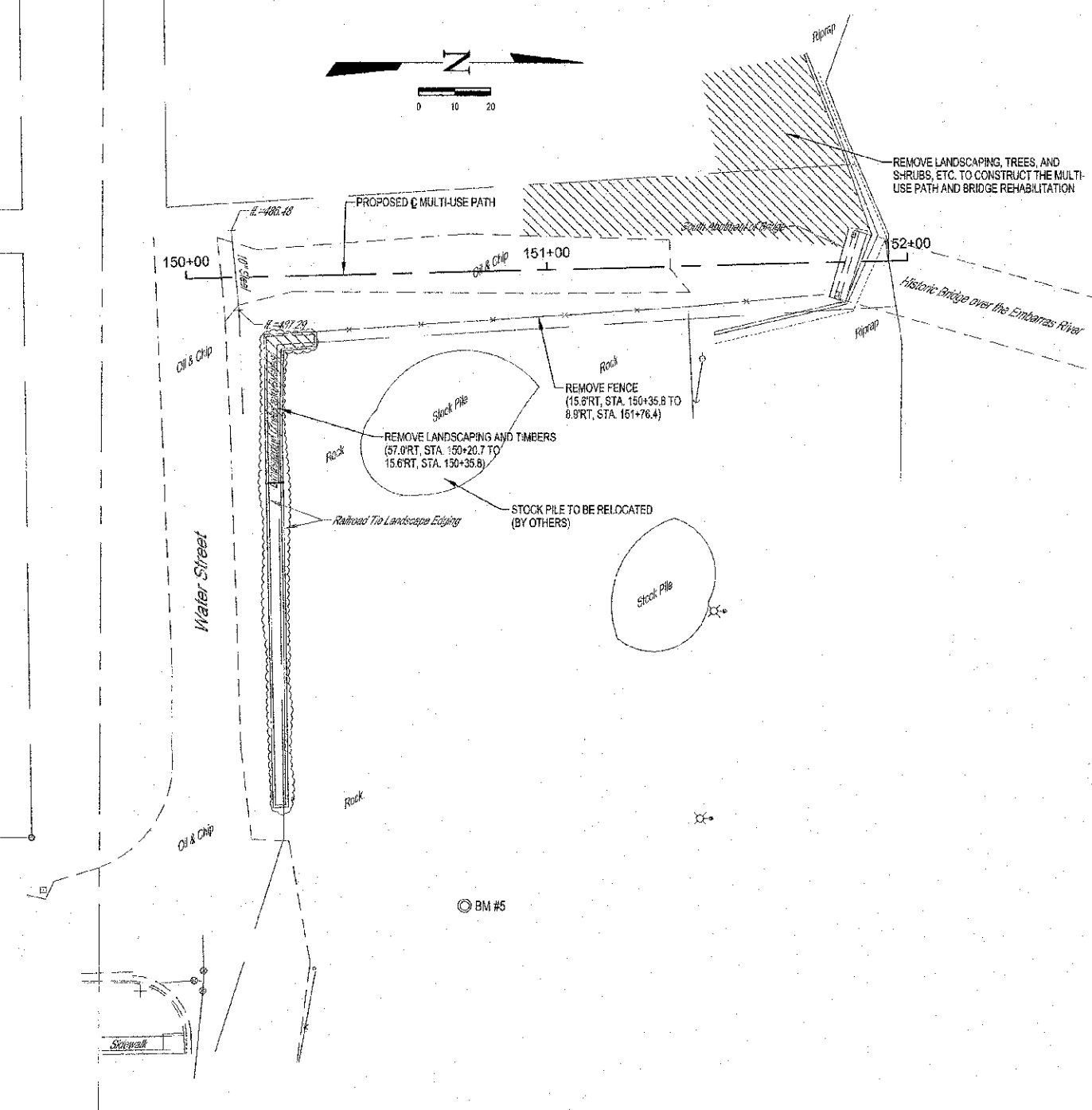
	MILANO & GRUNICH ENGINEERS, LLC 114 WEST WASHINGTON P.O. BOX 807 EFFINGHAM, ILLINOIS 62401 Phone: (217) 947-7882 (800) 871-2114 Fax: (217) 946-9433 Web Address: www.mgengr.com Design Firm #: 184 003158	BOX CULVERT EXTENSION PLAN AND DETAILS EAGLE TRAIL CITY OF NEWTON SECTION 10-0045-00-BT JASPER COUNTY, ILLINOIS
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00045-00-BT	JASPER	46	14
FED. ROAD DIST. NO. 7	ILLINOIS	FED. A-G PROJECT:		
CONTRACT #95708				



	MILANO & GRUNICH ENGINEERS LLC 1-1 W 28TH ST. SPRINGFIELD, IL 62761 P.O. BOX 899 EFFINGHAM, ILLINOIS 62401 Phone: (217) 341-7282 (800) 871-0714 Fax: (217) 341-5438 Web Address: www.mgengineers.com Design Firm #: 184-003108	MISCELLANEOUS DETAILS EAGLE TRAIL CITY OF NEWTON SECTION 10-00045-00-BT JASPER COUNTY, ILLINOIS
	File name: S:\DWG\1010234\dwg\Details.dwg Plot date: 04/11/13 at 07:00	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-0045-00-BT		JASPER	46	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. NO. PROJECT:	CONTRACT #63708	



BM #5
NORTH RIM OF MANHOLE
175.3RT, STA. 150+72.7
ELEV.=493.13

MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 617
EFFINGHAM, ILL. 62420-0617
Phone: (217) 241-7282
(630) 617-0774
Fax: (217) 241-5433
Web Address: www.mgeengineers.com
Design Firm #: 164-003108

PARKING AREA PLAN
EAGLE TRAIL
CITY OF NEWTON
SECTION 10-0045-00-BT
JASPER COUNTY, ILLINOIS

File name: S:\DWG\10\10294\dwg\parking Area.dwg
Plot date: 04/11/13 at 07:05 F.B. 685,686,687,688,689

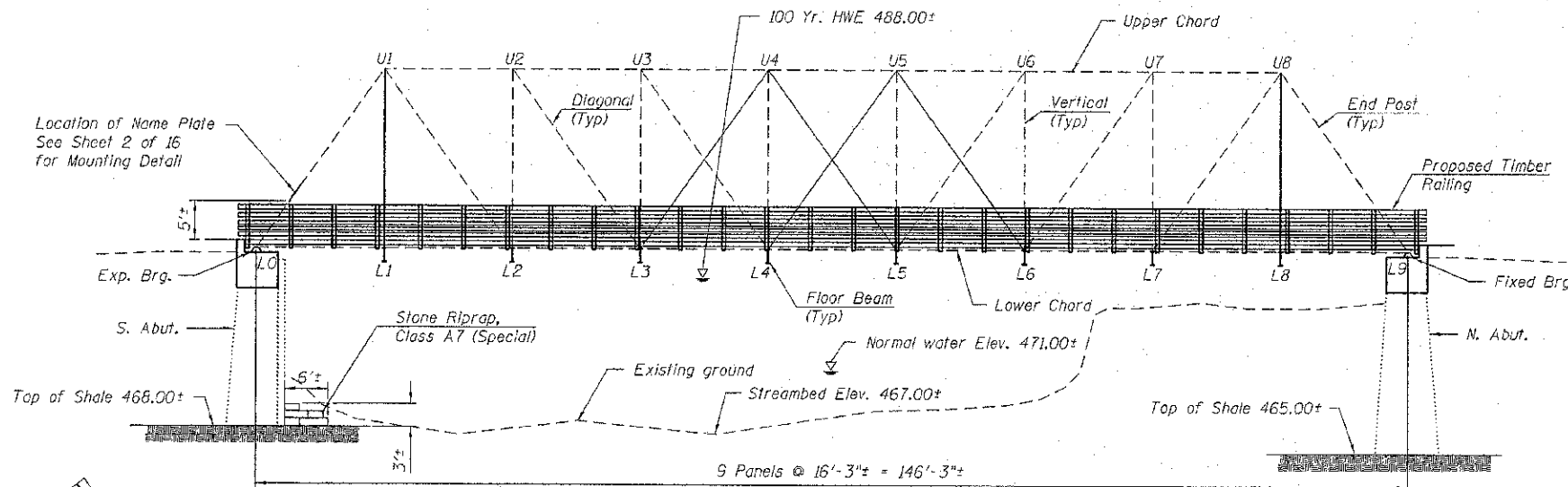
Bench Mark: BM#5, North rim of manhole, 175.3' RT, Sta 150+72.7, Elev 493.13

Existing Structure: S.N. 040-3084 built in 1890.
 The current structure is a Single Span Thru Pratt Truss Bridge constructed on masonry abutments of large limestone blocks. It has a length of 146'-3" C-C of bearings and a width of ±16'-6" inside to inside of trusses. The floor for the truss consists of treated timber planks resting on 8 steel floor stringers running the length of the bridge.
 The existing structure will be rehabilitated to carry pedestrian traffic.

- Salvaged Materials:
- Existing Limestone removed from abutments shall be salvaged and used as Riprap at the South Abutment and Wingwall.
 - Existing barricades and signage shall be stockpiled on site and will be removed by the City of Newton.

INDEX OF SHEETS

- General Plan & Elevation
- General Notes & Bill of Material
- Construction Details
- Truss Layout
- Timber Deck & Railing Plan
- Timber Deck Framing Detail
- Timber Details
- Steel Framing Plan
- Replacement Counter Details
- Pin & Pin Plate Details
- Bearing Details
- North Abutment Details
- South Abutment Details
- Southwest Wingwall Details
- Bridge Approach Railing
- Soil Boring Logs



DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	S. Abut.
	455.00±	468.00±

LOADING

Vehicle Load: H-10 Truck
 Pedestrian Load: 65 psf uniform load (Primary Members)
 85 psf uniform load (Secondary Members)

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges, 17th Edition
 AASHTO 1997 Guide Specifications for Design of Pedestrian Bridges

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)

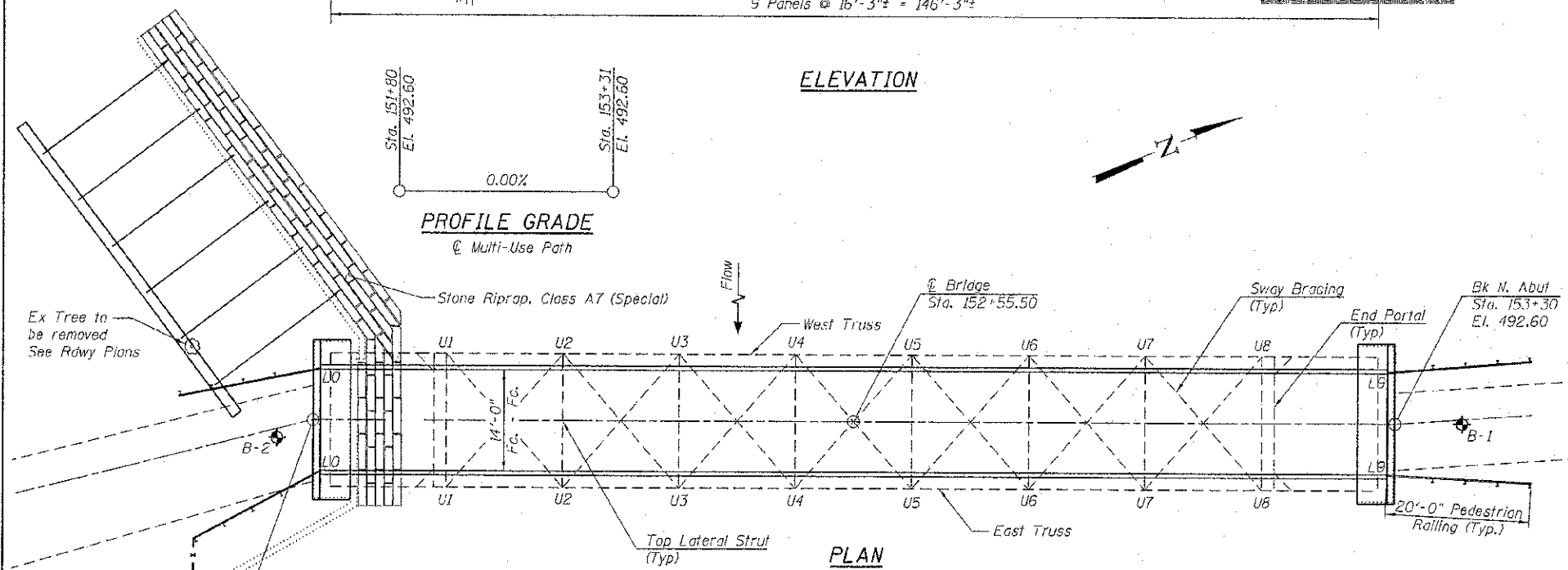
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (Steel Members)
 $f_b = 1,600$ psi (Timber)
 $f_b = 1,850$ psi (Timber Planking)

FIELD UNITS (EXISTING CONSTRUCTION)

$f_y = 14,000$ psi (Wrought Iron members)

SEISMIC DATA

Seismic Performance Category (SPC) A
 Bedrock Acceleration Coefficient (A) = 0.075g
 Site Coefficient (S) = 2.0



PROFILE GRADE

Multi-Use Path

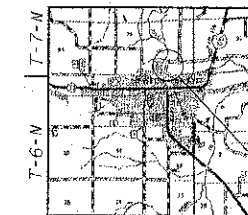


ELEVATION

PLAN

**GENERAL PLAN AND ELEVATION
 TR 164 OVER EMBARRAS RIVER
 SECTION 10-00045-00-BT
 JASPER COUNTY
 STATION 152+55.50
 STRUCTURE NO. 040-3084**

R-9-E 3rd P.M.



LOCATION SKETCH

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 Guide Specifications for Design of Pedestrian Bridges".

David Boohar
 David Boohar, Illinois S.E. 081-004775 Date 4-11-2013
 Expires 11-30-2014

EMBARRAS RIVER
 RE-BUILT 20 BY
 CITY OF NEWTON
 SEC. 10-00045-00-BT
 LOADING H-10
 STR. NO. 040-3084

NAME PLATE
 See Sta. 515001

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 STRUCTURE NO. 040-3084

SHEET NO. 1 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	16	1

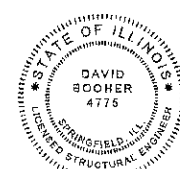
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ILLINOIS FED. AID PROJECT

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 MODEL = emhdblp
 PLOT DRIVER = SPLTWINS



USER NAME = kcheonan	DESIGNED =	REVISIONS
FILE NAME = 0403084-001-OPE.dgn	CHECKED =	REVISIONS
PLOT SCALE = 1/8" = 1'-0"	DRAWN =	REVISIONS
PLOT DATE = 4/11/2013	CHECKED =	REVISIONS



GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

All structural steel shall be AASHTO M 270 Grade 50W. Calculated weight of structural steel = 37,450 pounds.

No field welding is permitted except as specified in the contract documents.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.

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.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.

Unless otherwise noted, exposed concrete edges shall have a 3/4" chamfer.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The Contractor shall provide and install all necessary timber shims to construct a level deck surface.

Timber deck planks shall be placed with the grain such that cupping will not cause water to sit on a plank.

All structural timber shall be treated to conform to Section 507 of the Standard Specifications.

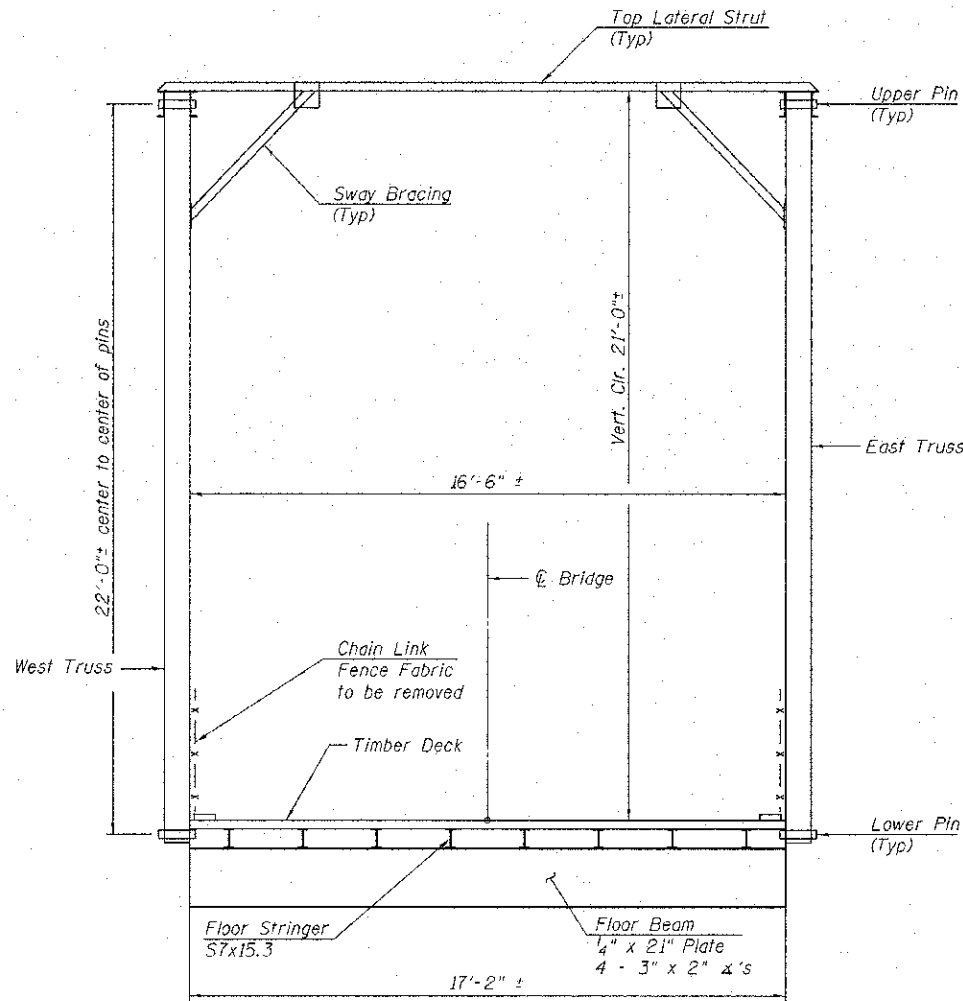
All hardware required for timber construction, including nuts, washers, lag screws, threaded rods and miscellaneous fasteners shall be stainless steel or hot-dipped galvanized and shall conform to Section 507 of the Standard Specifications unless noted otherwise.

If, during the performance of the work, the Contractor finds a conflict or discrepancy related to existing details and dimensions of the existing structure, the Contractor shall report such discrepancies to the Engineer in writing at once and before proceeding with the work affected thereby. The Contractor shall obtain written interpretation or clarification of such discrepancies.

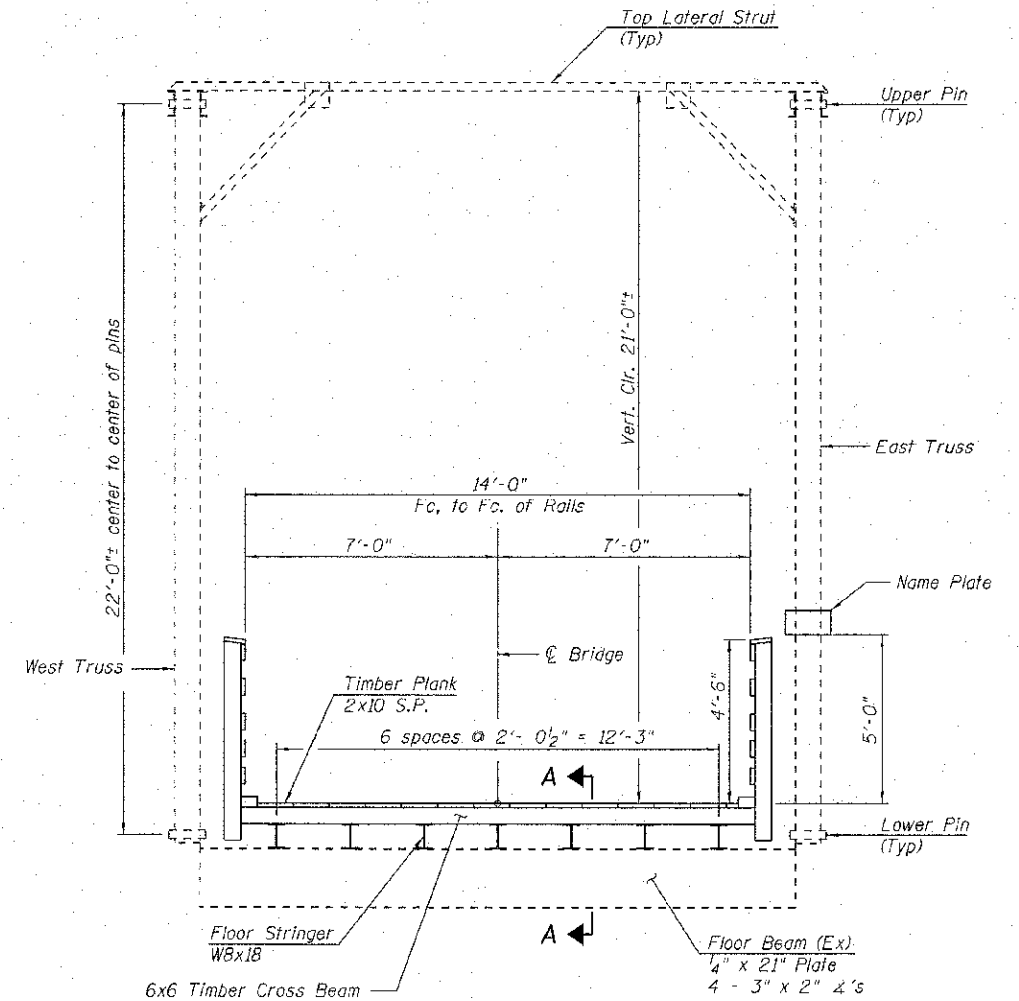
All trees and shrubs within 10' of the bridge wingwalls and abutments shall be removed including roots.

All lumber dimensions given are nominal dimensions. The minimum surfaced areas of timbers shall be as follows:

NOMINAL SIZE	DRESSED
2 x 6	1 1/2" x 5 1/2"
2 x 8	1 1/2" x 7 1/4"
2 x 12	1 1/2" x 11 1/4"
3 x 12	2 1/2" x 11 1/4"
6 x 6	5 1/2" x 5 1/2"
8 x 8	7 1/2" x 7 1/2"



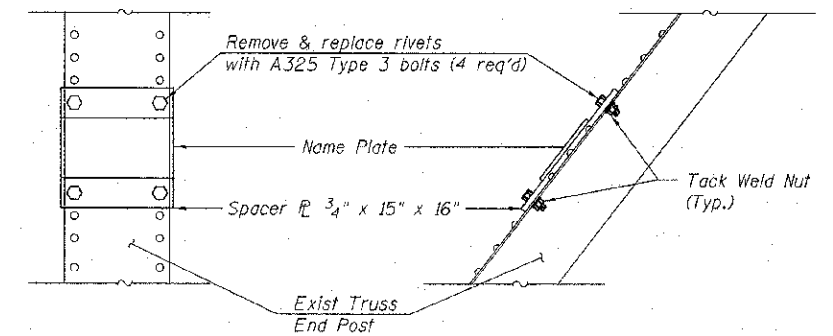
EXISTING CROSS SECTION



PROPOSED CROSS SECTION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Masonry Removal	Cu Yd		46.0	46.0
Structure Excavation	Cu Yd		284.0	284.0
Concrete Structures	Cu Yd		45.5	45.5
Furnishing & Erecting Structural Steel	Pound	37,450		37,450
Treated Timber	F.B.M.	14,570		14,570
Hardware	Pound	2,780		2,780
Reinforcement Bars, Epoxy Coated	Pound		3,160	3,160
Pedestrian Railing	Foot	80		80
Name Plates	Each	1		1
Elastomeric Bearing Assembly, Type I	Each	2		2
Anchor Bolts, 1/4"	Each		12	12
Masonry Cleaning & Tuckpointing	Sq Yd		44.5	44.5
Stone Riprap, Class A7 (Special)	Ton		82	82
Structural Steel Removal	Pound	21,980		21,980
Structural Steel Repair	Pound		100	100
Removal of Existing Timber Floor	Each	1		1
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft		10	10
Jacking & Cribbing	L Sum		1	1
Rivet Removal & Replacement	Each	220		220
Temporary Support System, Location 1	Each		1	1
Temporary Support System, Location 2	Each		1	1



NAME PLATE MOUNTING DETAIL

- Notes:
 1. Drill holes in spacer plate to fit over rivet heads.
 2. Weld Name Plate to spacer plate.

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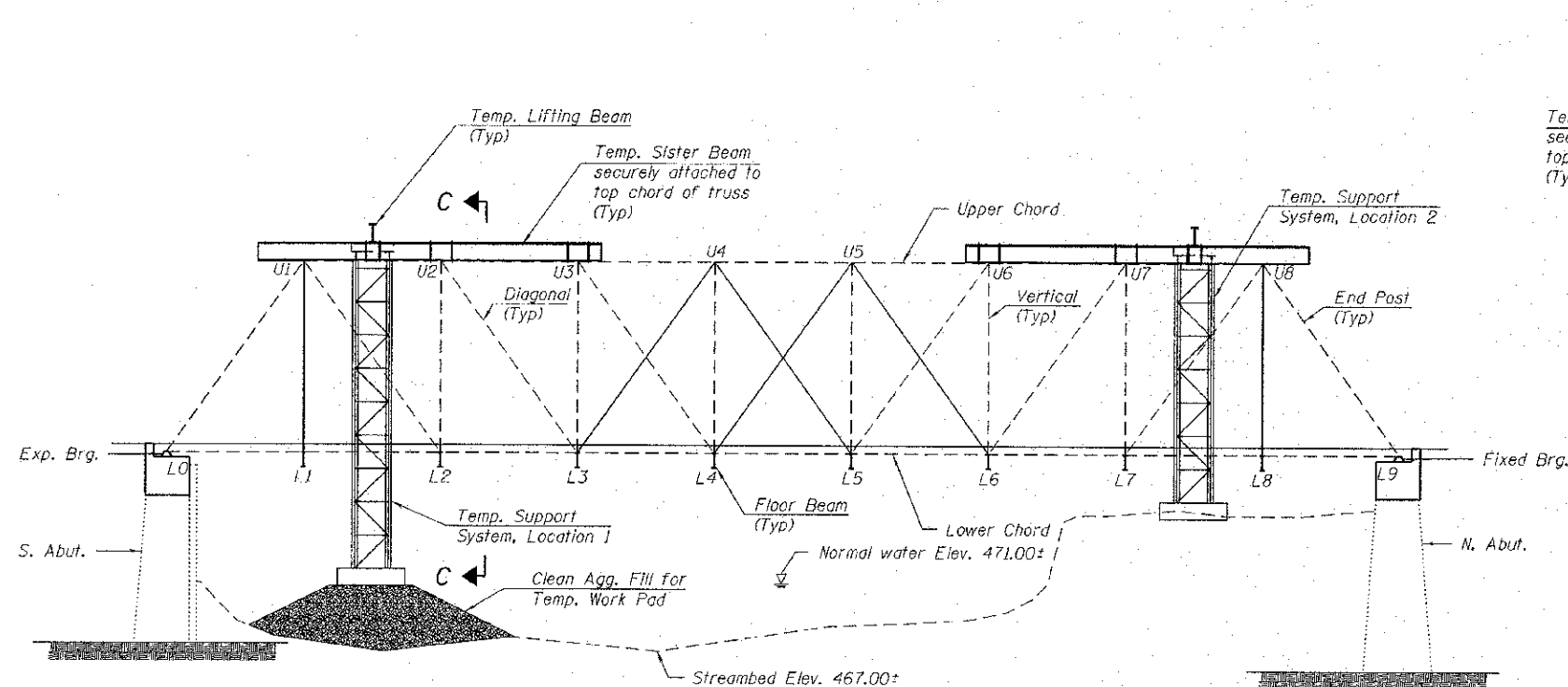
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PLOT DATE = 4/11/2013	CHECKED -	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

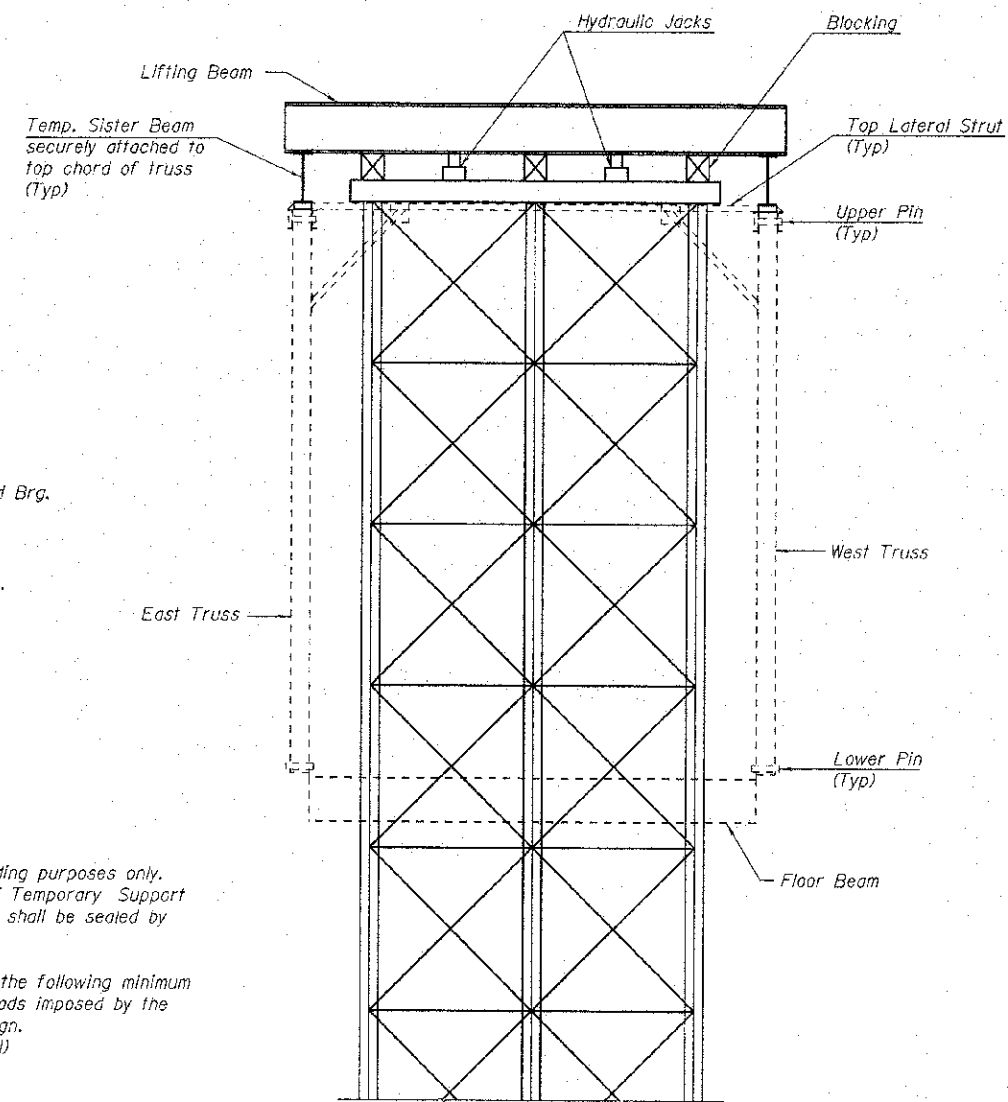
**GENERAL NOTES & BILL OF MATERIAL
STRUCTURE NO. 040-3084**

SHEET NO. 2 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	46	17
CONTRACT NO.				
[ILLINOIS] FED. AID PROJECT				



ELEVATION
(Looking West)



VIEW C-C

TEMPORARY SUPPORT NOTES

1. Temporary support details and scheme shown is for bidding purposes only. Contractor shall provide design and working drawings of Temporary Support System intended for use. Design and working drawings shall be sealed by Illinois Licensed Structural Engineer.
2. Temporary support system shall be capable of carrying the following minimum loads with a factor of safety of 2.0. Any additional loads imposed by the Contractor's methods shall be accounted for in the design.
 - a. Dead Load Existing Structure = 90,000 lbs (total)
 - b. Live Load Allowance = 40 psf
 - c. Wind Load Pressure = 20 psf
 - d. Stream Flow Pressure = 27 psf (50 year velocity = 19.3 f/s)
3. South Temporary Support System shall be founded on a Temporary In-Stream Work Pad. North Temporary Support shall be founded on existing ground.
4. Temporary support system shall be designed to allow for jacking and cribbing of the existing structure. Existing structure shall be raised a minimum of 6" above its existing elevation to allow for construction of the abutment caps and removal and replacement of pins and bearings. Existing structure shall be jacked to an upright and level position and blocked or cribbed securely in place. Jacks will only be used to raise and lower structure. Structure will be supported on blocking or cribbing. Cost of this work shall be included in JACKING & CRIBBING.

SCOPE OF WORK

1. Replace bearings.
2. Repair stone abutments and install concrete abutment caps.
3. Replace existing deck with new timber deck and railing.
4. Replace all stringers.
5. Strengthen floor beams with new cover plates.
6. Replace pins at L0, U1, L1, L9, U8 and L8 on both trusses (12 pins).
7. Replace vertical member L1-U1 and L8-U8 on both trusses (4 verticals).
8. Replace diagonal counters L3-U4, L4-U5, L5-U4 and L6-U5 on both trusses (8 counters).
9. Stabilize concrete wall at south abutment using deadman and tiebacks.
10. Complete miscellaneous repairs to other truss members as needed.

SUGGESTED SEQUENCE OF CONSTRUCTION:

1. Repair S.W. Wingwall and install tie-backs and deadman.
2. Construct In-stream pad for temporary bridge support system.
3. Remove existing timber deck and floor stringers.
4. Excavate behind abutments to a depth of six feet±.
5. Construct temporary bridge support system and raise and shore existing truss.
6. Remove existing bearings, replace existing members and pins as indicated and retrofit existing floor beams.
7. Repair existing abutments and pour new concrete abutment caps.
8. Install new bearings, set bridge on new abutment caps and remove temporary bridge supports.
9. Install new stringers and new timber deck and railings.
10. Place Stone Riprap Special against S.W. Wingwall.
11. Remove In-stream pad, returning stream bed to original cross section.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Support System, Location 1	Each	1
Temporary Support System, Location 2	Each	1
Jacking & Cribbing	L. Sum	1

FILE NAME = S:\Projects\2012_08\05\12_06\11 M&G Newton Bldg_Plan\CAD\CADD Sheets\0403084-xxxx-003-Construction_Detail.dgn
 MODEL = 3D04LS
 PLOT DRIVER = PLOTDR54



USER NAME = kchapman	DESIGNED -	REVISED
FILE NAME = 2403004-xxxx-003-Construction	CHECKED -	REVISED
PLOT SCALE = 4000.0000 1/2" = 1'	DRAWN -	REVISED
PLOT DATE = 4/11/2013	CHECKED -	REVISED

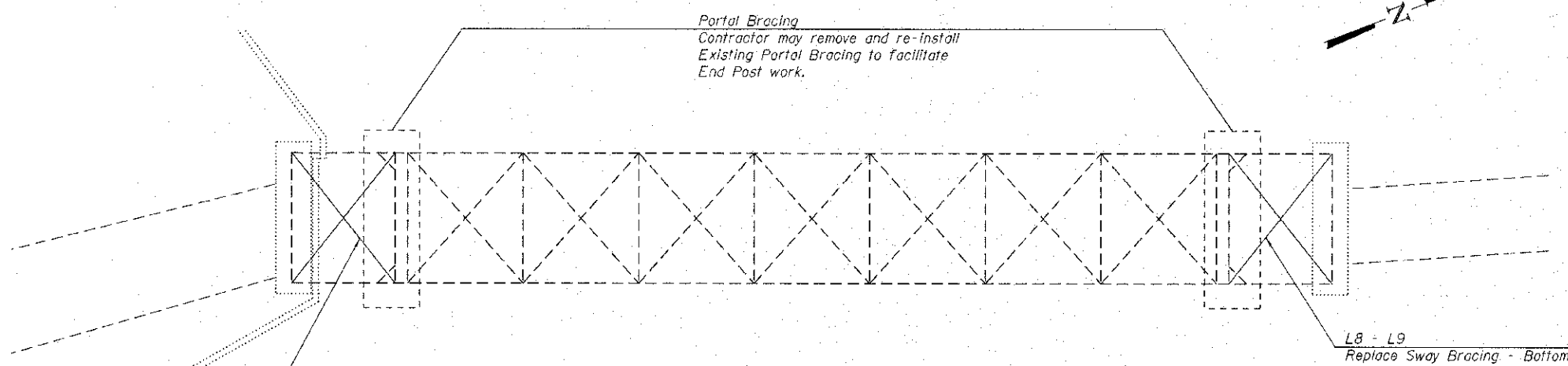
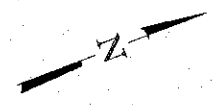
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION DETAILS
STRUCTURE NO. 040-3084**

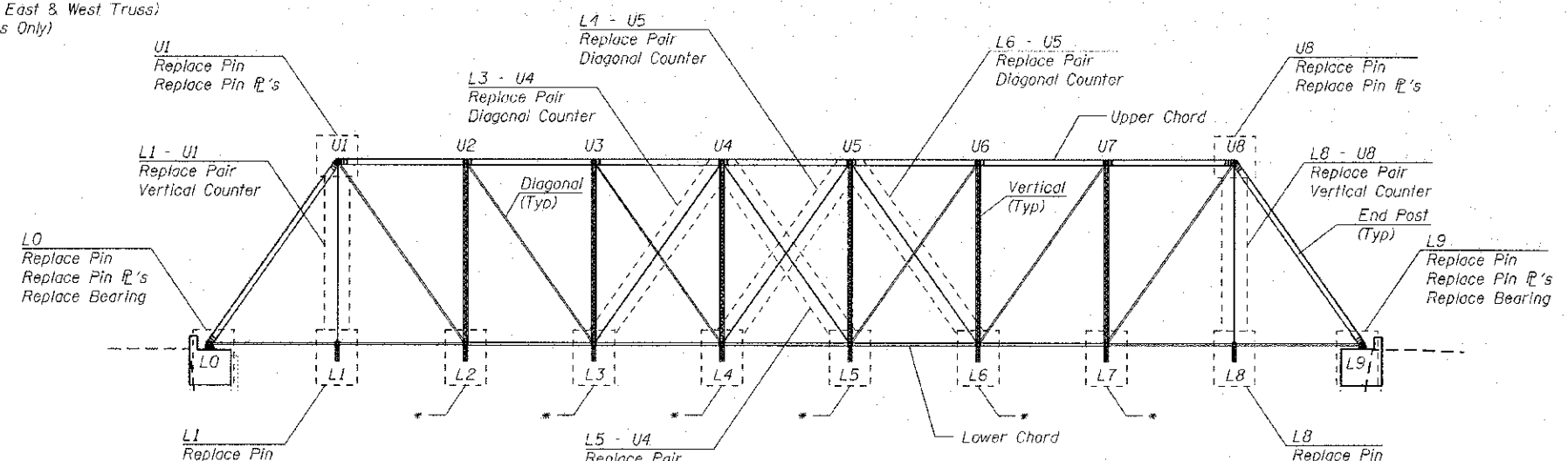
SHEET NO. 3 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	16	18
CONTRACT NO.				

ILLINOIS FED. AID PROJECT

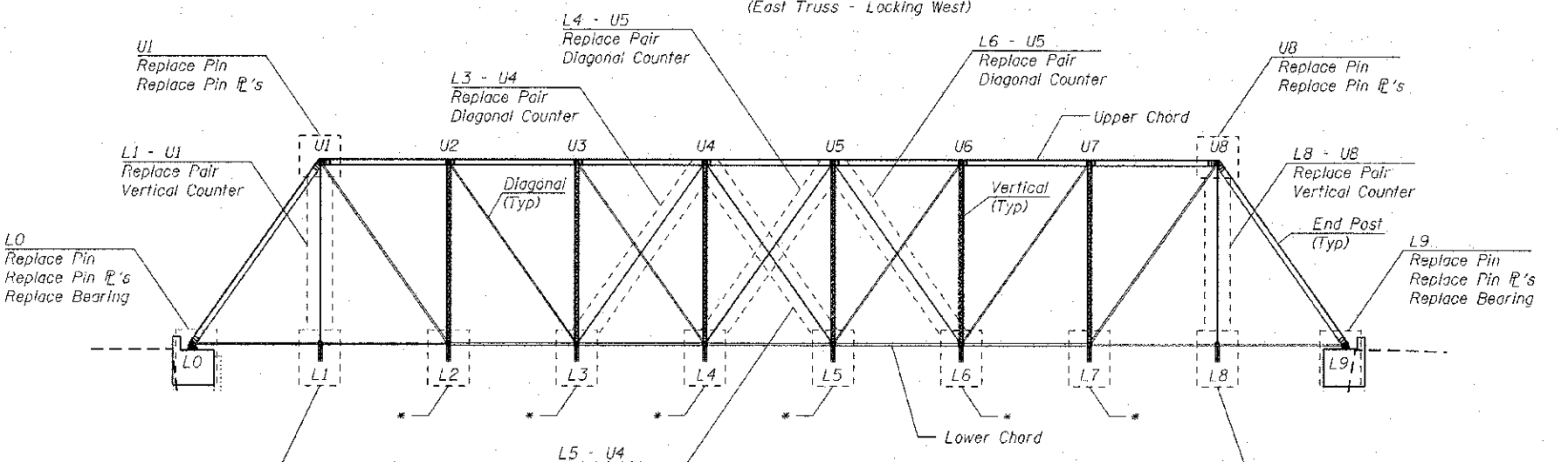


TRUSS PLAN
(Showing Top of Truss)



TRUSS ELEVATION
(East Truss - Looking West)

* L2, L3, L4, L5, L6, L7
Repair Steel



TRUSS ELEVATION
(West Truss - Looking West)

FILE NAME = S:\p\m\2012\2012-08-08\04-0000\04-0000-001-Truss.dwg
 MODEL = BRIDGE
 PLOT DRIVER = PLOTDRV24

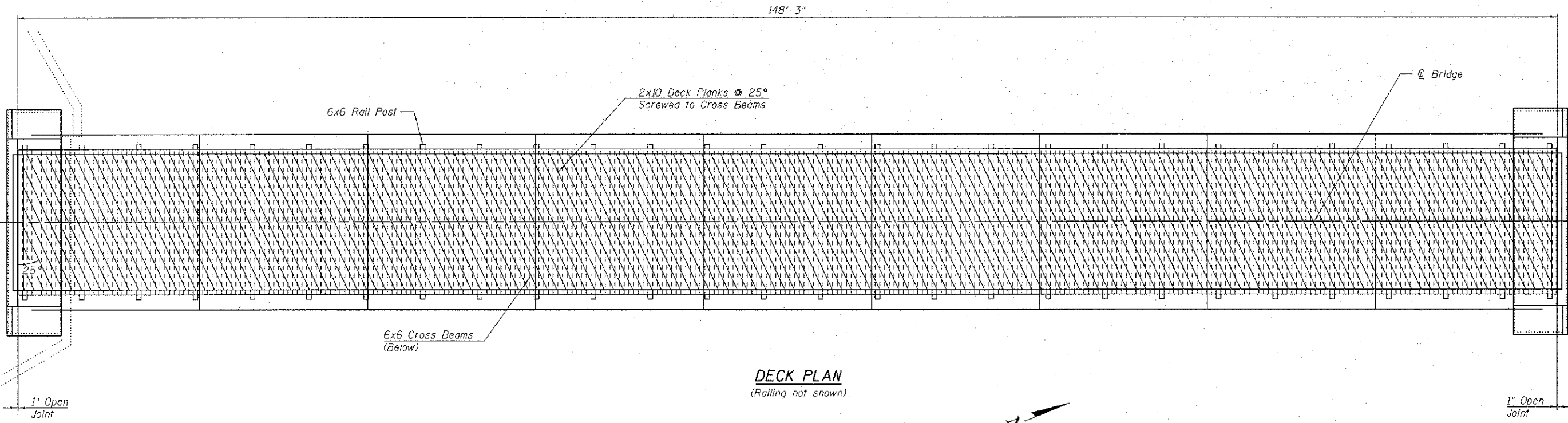


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FILE NAME = 0403084-xxxx-004-Truss.dwg	CHECKED -	REVISED
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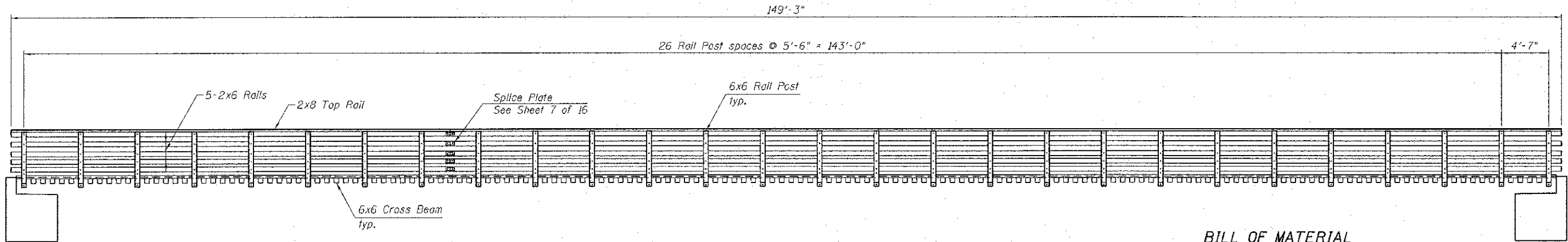
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS LAYOUT
STRUCTURE NO. 040-3084
SHEET NO. 4 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	76	19
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



DECK PLAN
(Railing not shown)



RAIL ELEVATION

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Treated Timber	F.B.M.	14,570
Hardware	Pound	2,780

FILE NAME = 0403084-xxxx-005-Timber Deck&Railing Plan.dgn
 MODEL = Default
 PLOT DRIVER = VBA:TDOT.PDF, 11x17, 11x17



USER NAME = S.D.Lukas	DESIGNED -	REVISED
FILE NAME = 0403084-xxxx-005-Timber Deck&Railing Plan.dgn	CHECKED -	REVISED
PLOT SCALE = 20:0.0000 1" = 20'	DRAWN -	REVISED
PLOT DATE = 4/11/2013	CHECKED -	REVISED

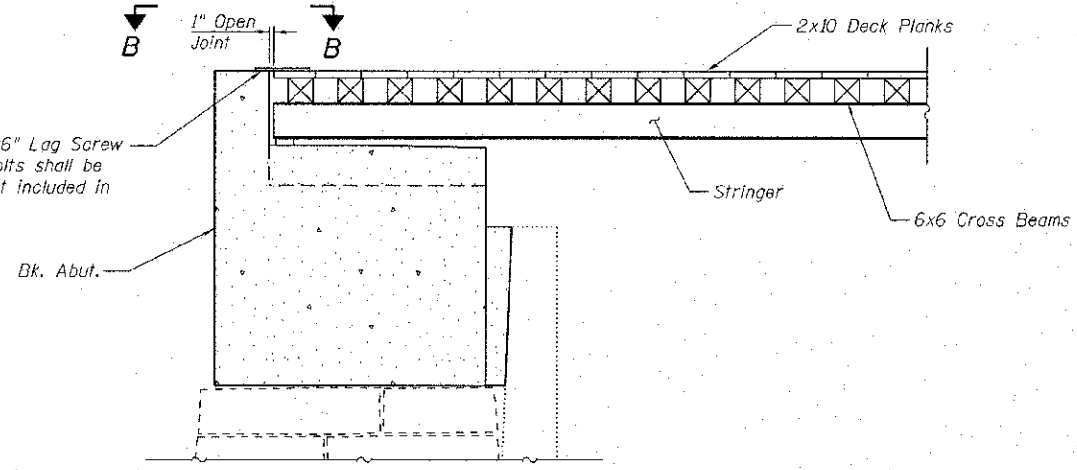
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TIMBER DECK & RAILING PLAN
STRUCTURE NO. 040-3084

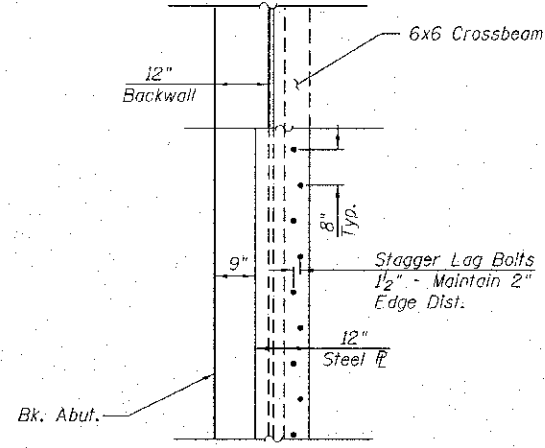
SHEET NO. 5 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	46	20
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

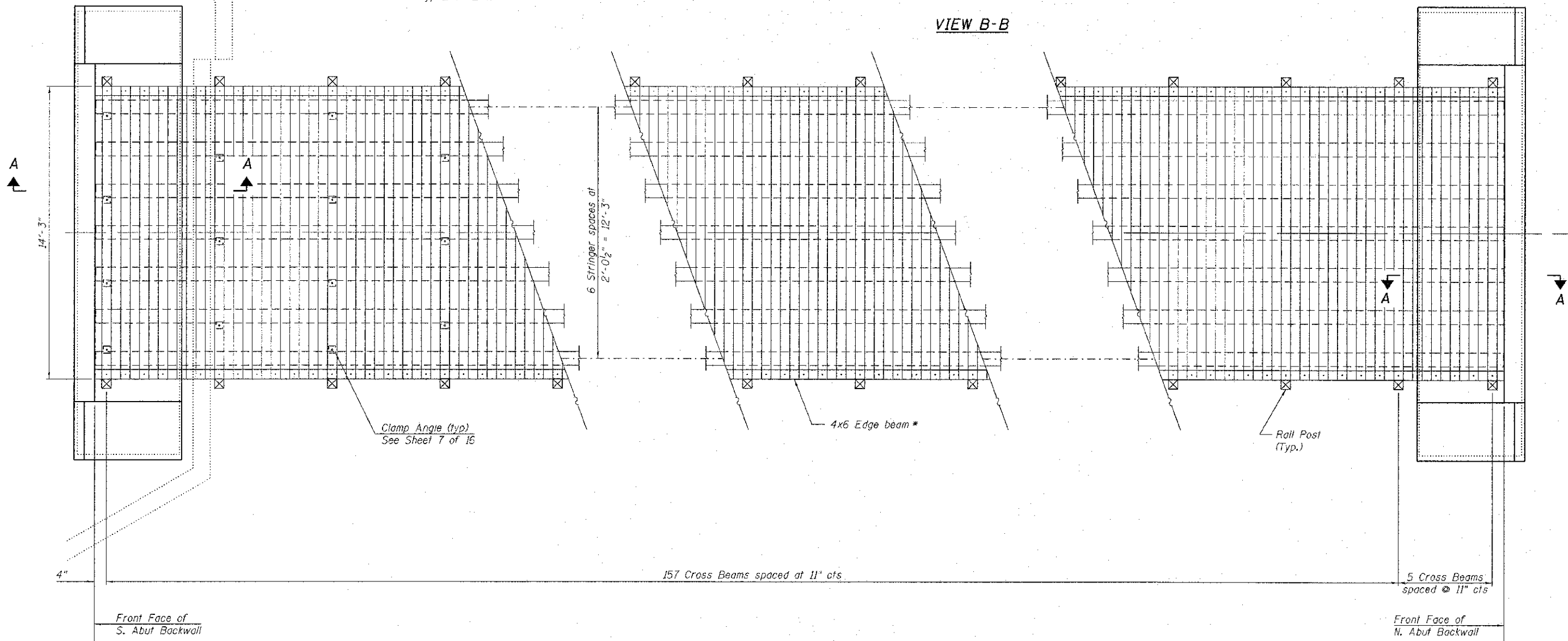
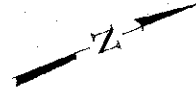
1/4" x 12" x 14'-0"
Bolt to deck using 1/2" x 6" Lag Screw
at 8" cts. (Plate and Bolts shall be
Hot-Dip Galvanized) Cost included in
HARDWARE



SECTION A-A
(Typ Each End)



VIEW B-B



TIMBER DECK FRAMING PLAN
(Deck Planks & Rolling Not Shown)

* Provide 4x6 Edge Beam in minimum 10' length. Locate butt joints
between cross beams. No butt joints allowed at rail posts.

See Sheet 5 of 16 For Bill of Material

FILE NAME = S:\Projects\2012\J00512-16-010011\400 Newson Bk. Fch\1000\4000 Struc\0403084-xxxx-006-TimberDeck Framing Detail.dgn
MODEL = BRIDGES
PLOT DRIVER = PLOTDRVS

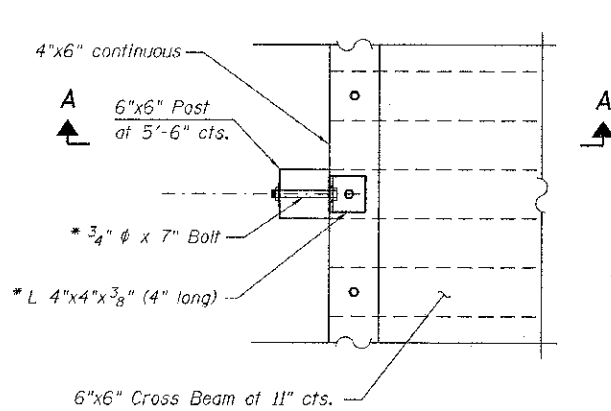


USER NAME = kchapman	DESIGNED -	REVISED
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PLOT DATE = 4/11/2013	CHECKED -	REVISED

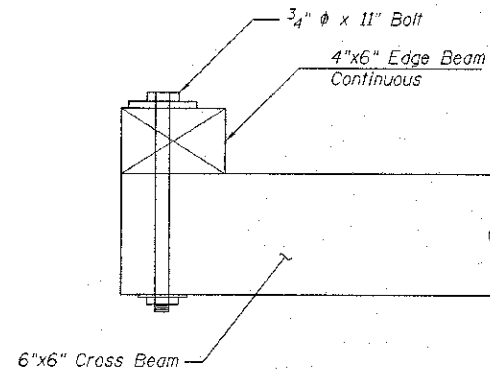
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TIMBER FRAMING DETAILS
STRUCTURE NO. 040-3084
SHEET NO. 6 OF 16 SHEETS

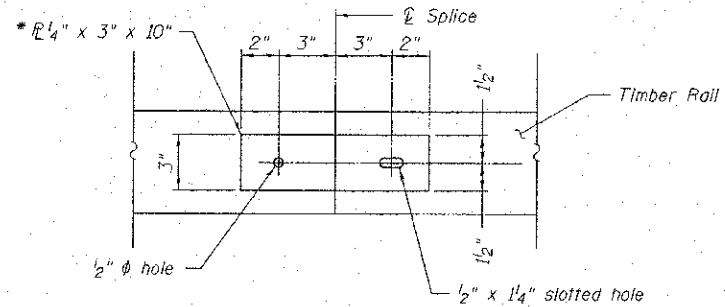
TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	40	21
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



PLAN AT RAIL POST

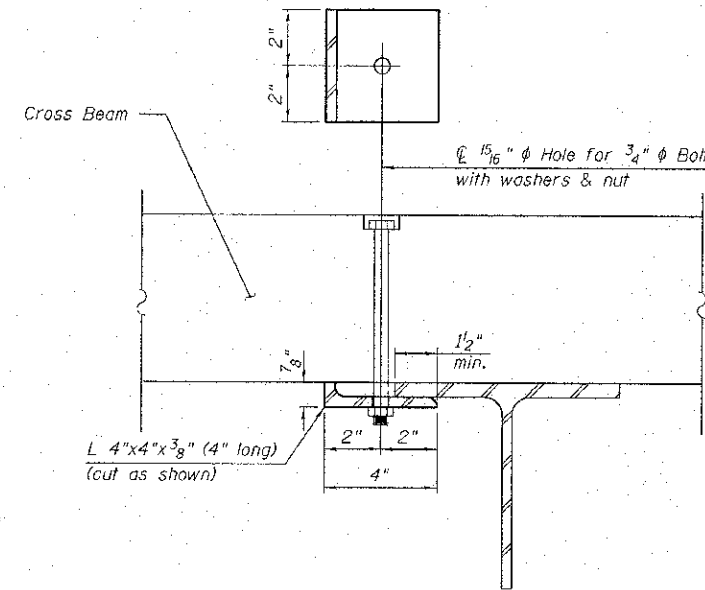


SECTION A-A



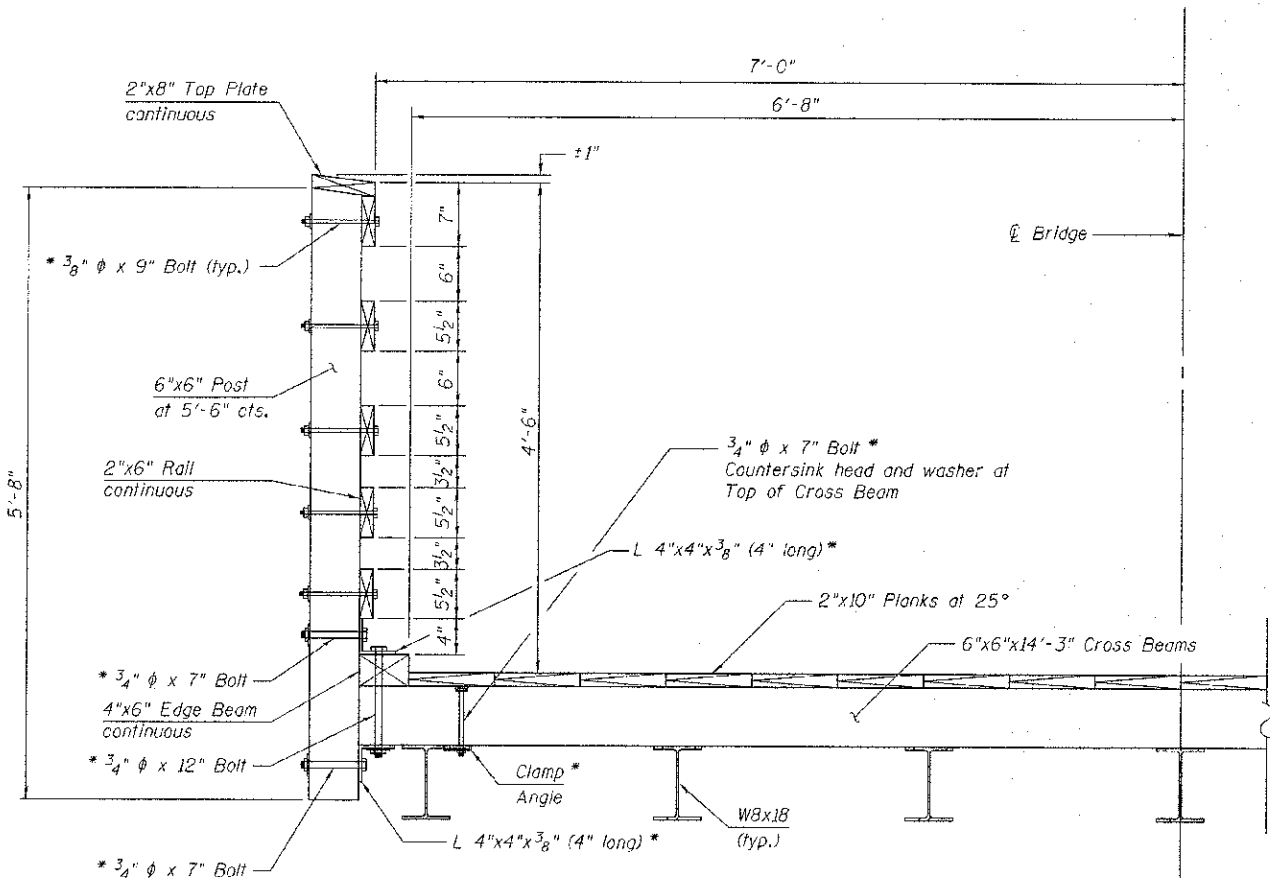
SPLICE DETAIL *

Note: Minimize splices in rails and top plate. Where possible span 3 rail posts. All bolts shall be Carriage Bolts with washer under head and nut unless otherwise shown.



CLAMP ANGLE *

(96 Required)



SECTION AT RAIL POST

* Weight included in HARDWARE

See Sheet 5 of 16 for Bill of Material

TIMBER DECK SCHEDULE

Description	Nominal Size	No.	Length (Foot)	Total Area (Sq Ft)	Foot Board Measure
Deck Plank	2x10	17	148'-3"	2,100.21	4,200.42
Cross Beam	6x6	162	14'-3"	1,154.25	6,925.50
Edge Beam	4x6	2	148'-3"	148.25	593.00
				Total	11,718.92
				Use	11,720

TIMBER RAILING SCHEDULE

Description	Nominal Size	No.	Length (Foot)	Total Area (Sq Ft)	Foot Board Measure
Post	6x6	56	5'-8"	158.76	952.56
Top Plate	2x8	2	149'-3"	199.00	398.00
Rails	2x6	10	149'-3"	746.25	1,492.50
				Total	2,843.06
				Use	2,850

DECK HARDWARE SCHEDULE

Description	No.	Weight per Each	Total Weight (Lbs.)	Comments
3/4" x 12" Bolt w/nut & 2 washers	56	1.81	101.36	1 per post
3/4" x 11" Bolt w/nut & 2 washers	268	1.69	452.92	2 per cross beam - posts
3/4" x 7" Bolt w/nut & 2 washers	98	1.18	115.64	alt. 3 or 4 per post beam
Clamp Angle 4"x4"x3/8" (4" long)	98	3.23	316.54	alt. 3 or 4 per post beam
Joint Plate 12"x4" (14" long)	2	147.17	294.34	1 each end
Lag Screw 1/2" x 6"	42	0.31	13.02	21 each end
Deck Screw 3/8" x 6"	2592	0.21	544.32	2/plank at intersection w/ cross beam
			Total	1838.14
			Use	1840

RAILING HARDWARE SCHEDULE

Description	No.	Weight per Each	Total Weight (Lbs.)	Comments
3/8" x 9" Bolt w/nut & washer	280	0.31	86.8	5 per post
3/4" x 7" Bolt w/nut & washer	112	1.13	126.56	2 per post
Post Angle 4"x4"x3/8" (4" long)	112	3.23	361.76	2 per post
Top Plate screws 3/8"x6"	112	0.21	23.52	2 per post
Splice Plate 3"x10"x4"	144	2.13	306.72	est. 12 per rail and top PL
Splice 3/8" x 3" Bolt w/nut and washer	288	0.12	34.56	2 per splice
			Total	939.92
			Use	940

FILE NAME = 0403084-xxxx-087-Timber Details.dgn
 MODEL = Default
 PLOT DRIVER = V8,TDOT_PDF.plt
 PLOT DATE = 4/11/2013



QUIGG ENGINEERING INC

USER NAME = S.Dulekus	DESIGNED -	REVISIONS
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PLOT DATE = 4/11/2013	CHECKED -	3

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

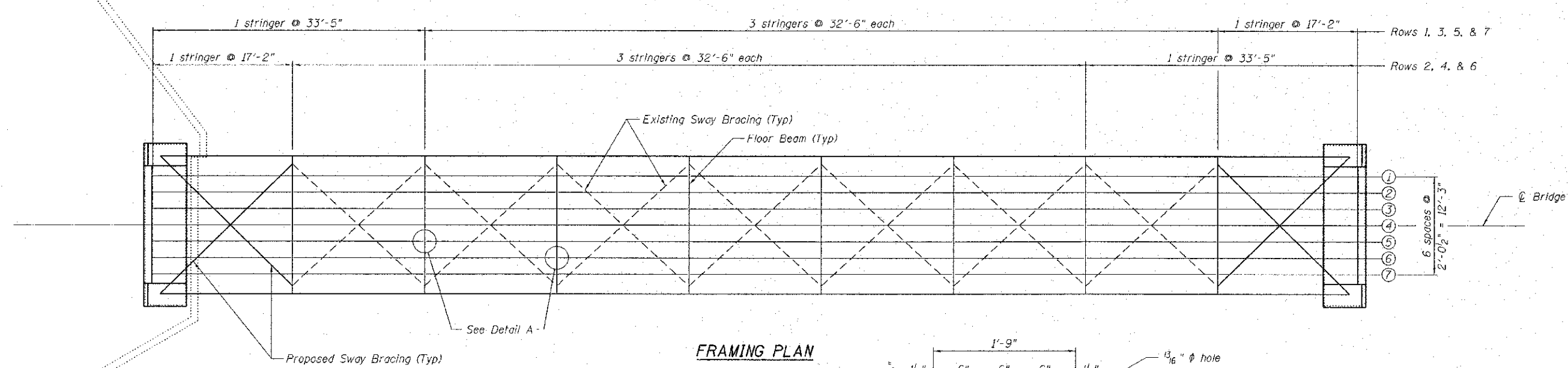
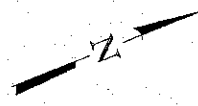
TIMBER DETAILS
 STRUCTURE NO. 040-3084

SHEET NO. 7 OF 16 SHEETS

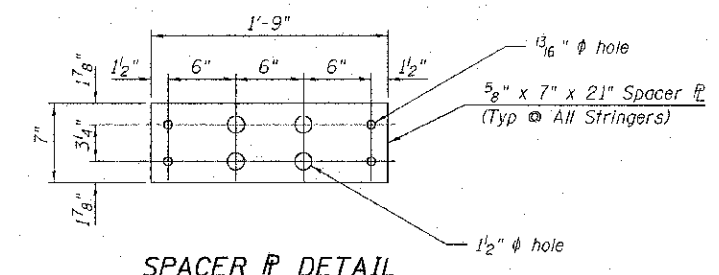
TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	76	22

CONTRACT NO.

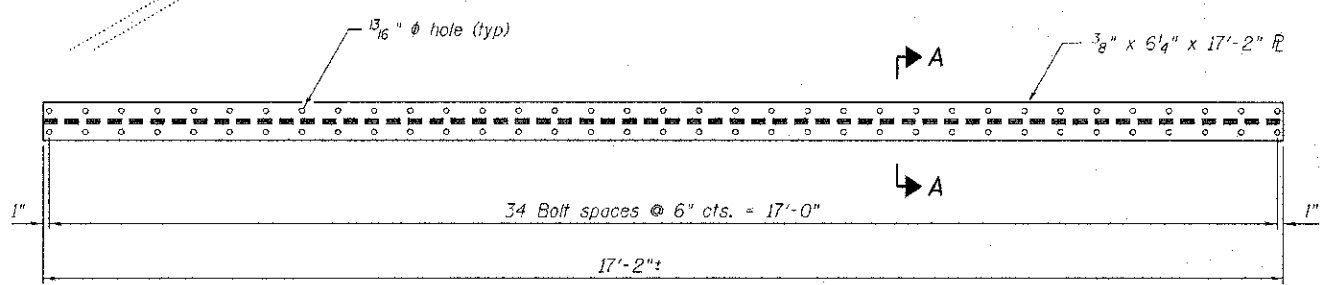
ILLINOISIFIED, AID PROJECT



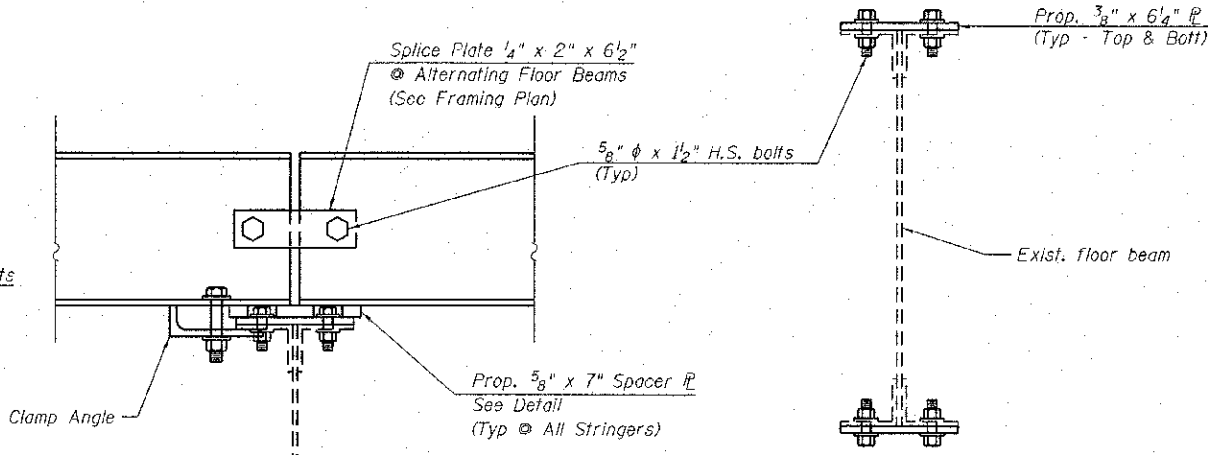
FRAMING PLAN



SPACER PLATE DETAIL

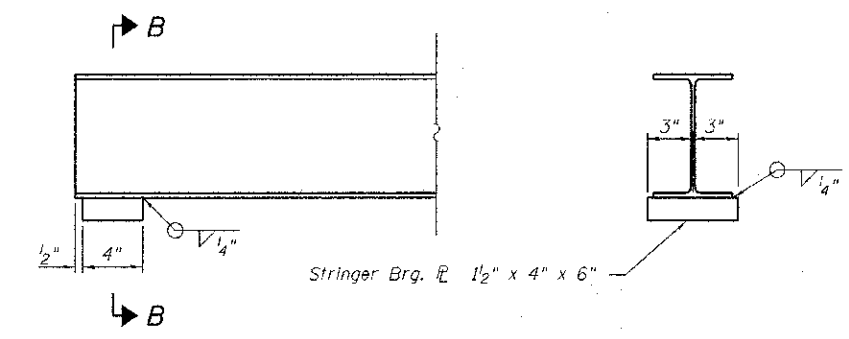


FLOOR BEAM PLAN



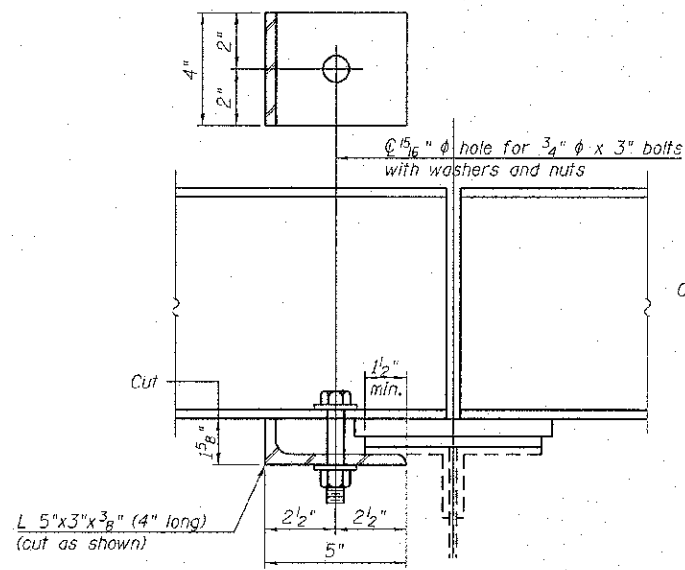
DETAIL A

SECTION A-A
(Floor Beam Strengthening)



STEEL STRINGER ELEVATION

SECTION B-B



CLAMP ANGLE
(56 Required)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing & Erecting Structural Steel	Pound	24,060
Structural Steel Removal	Pound	17,910

Notes:
All steel shall be AASHTO M270, Grade 50W.

FILE NAME = 0403084-xxxx-088-Frame Plan.dgn
 MODEL = Defaults
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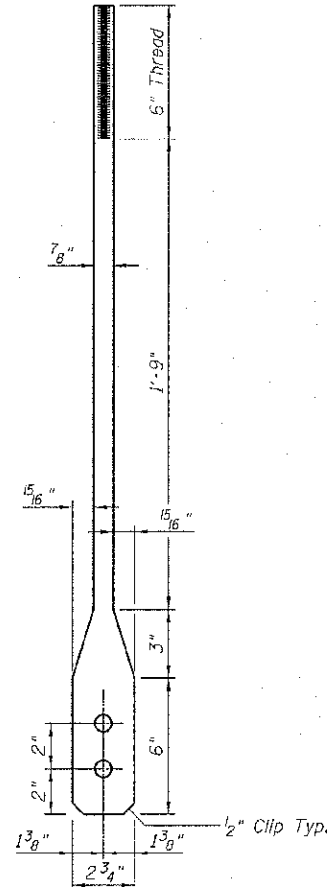


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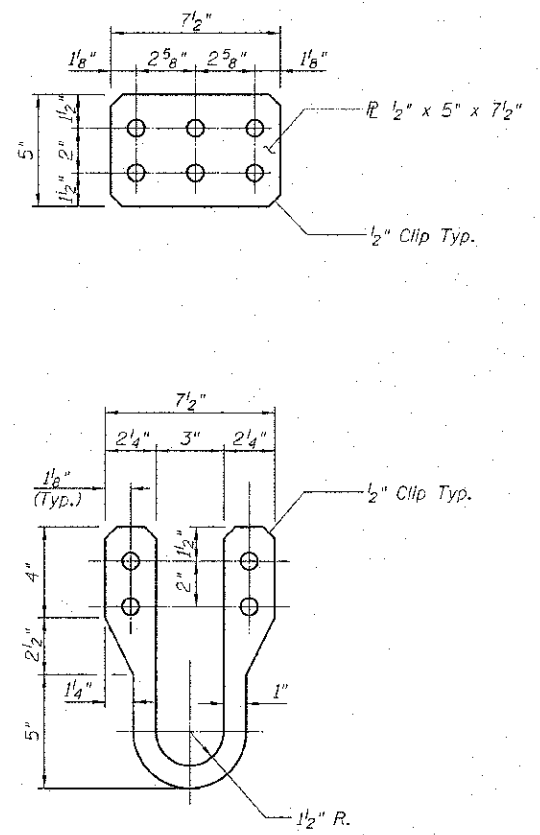
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL FRAMING PLAN
STRUCTURE NO. 040-3084
SHEET NO. 8 OF 16 SHEETS

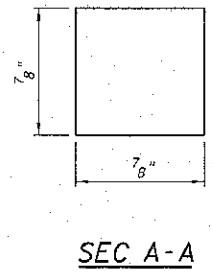
TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	46	23
CONTRACT NO.			ILLINOIS FED. AID PROJECT	



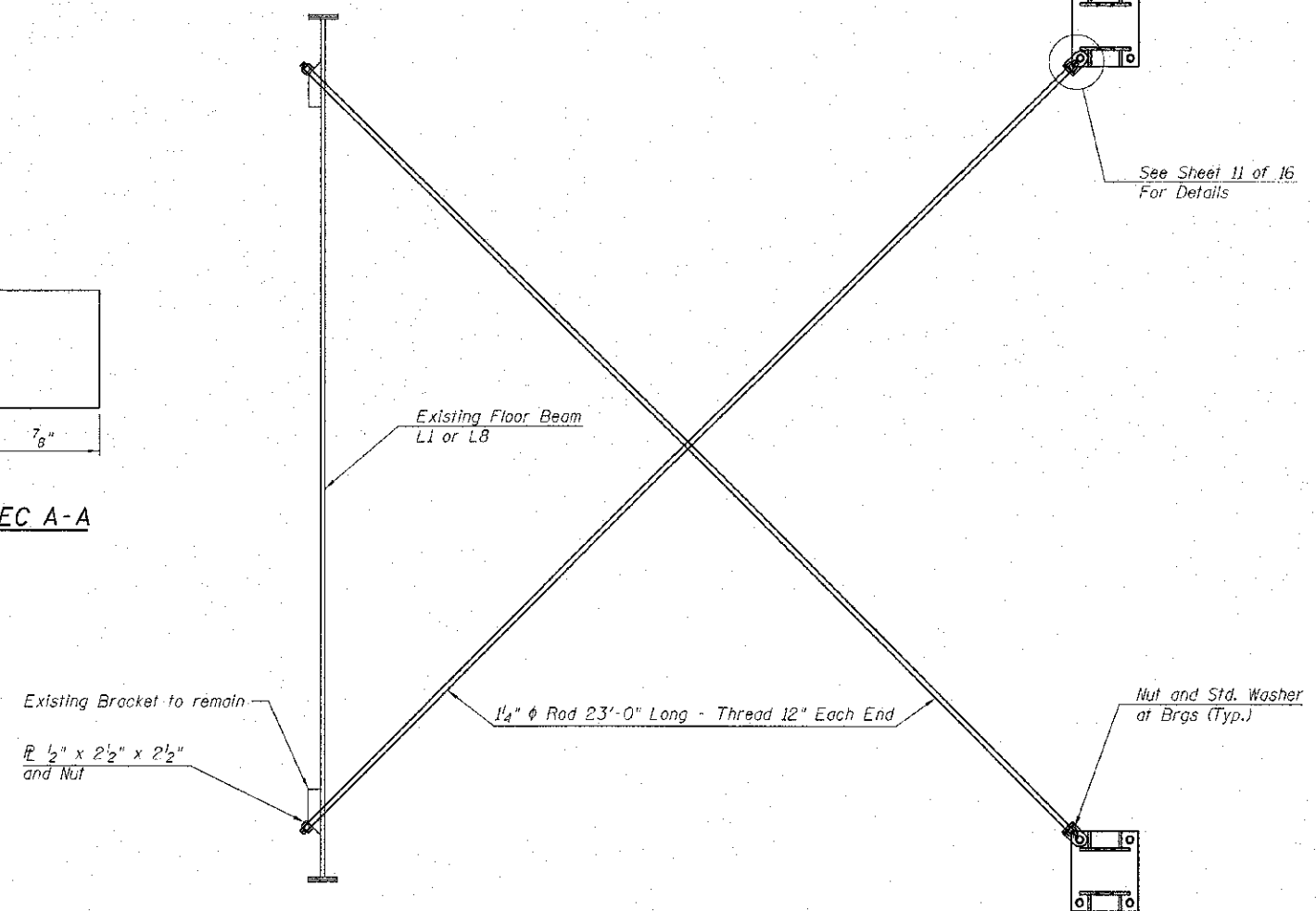
COUNTER END
(Fabricate From 7/8" Plate)



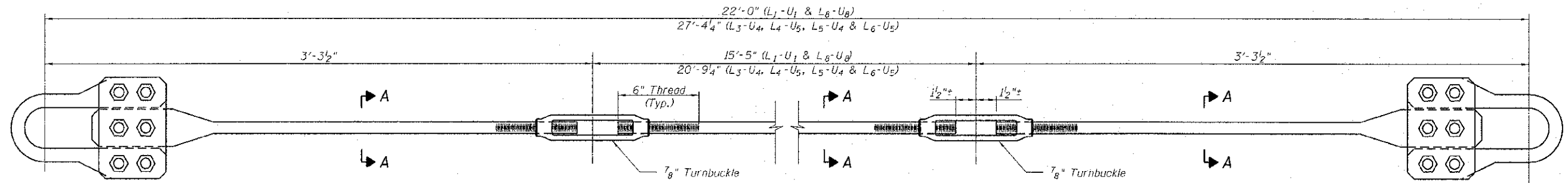
COUNTER PIN CONNECTOR
(Cut From PL 7/8" x 7 1/2" x 1 1/2")



SEC A-A



PLAN - SWAY BRACING - BOTTOM
(Typical End Bays)



PLAN

- Notes**
1. Structural Steel for Counters and Sway Bracing shall conform to AASHTO M270, Grade 50W.
 2. Bolts for Counters shall conform to ASTM A325, Type 3.
 3. All Counters are installed in pairs.
 4. Cost of steel members and hardware for Counters and Sway Bracing is included in FURNISHING & ERECTING STRUCTURAL STEEL.
 5. Removal of existing Counters and Sway Bracing shall be included in the cost for STRUCTURAL STEEL REMOVAL.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing & Erecting Structural Steel	Pound	6,550
Structural Steel Removal	Pound	2,520

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 MODEL = 0403084-xxxx-009-ReplaceCounterDetails.dgn
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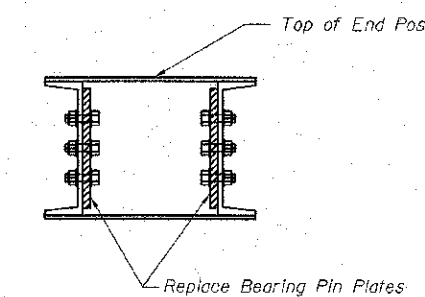
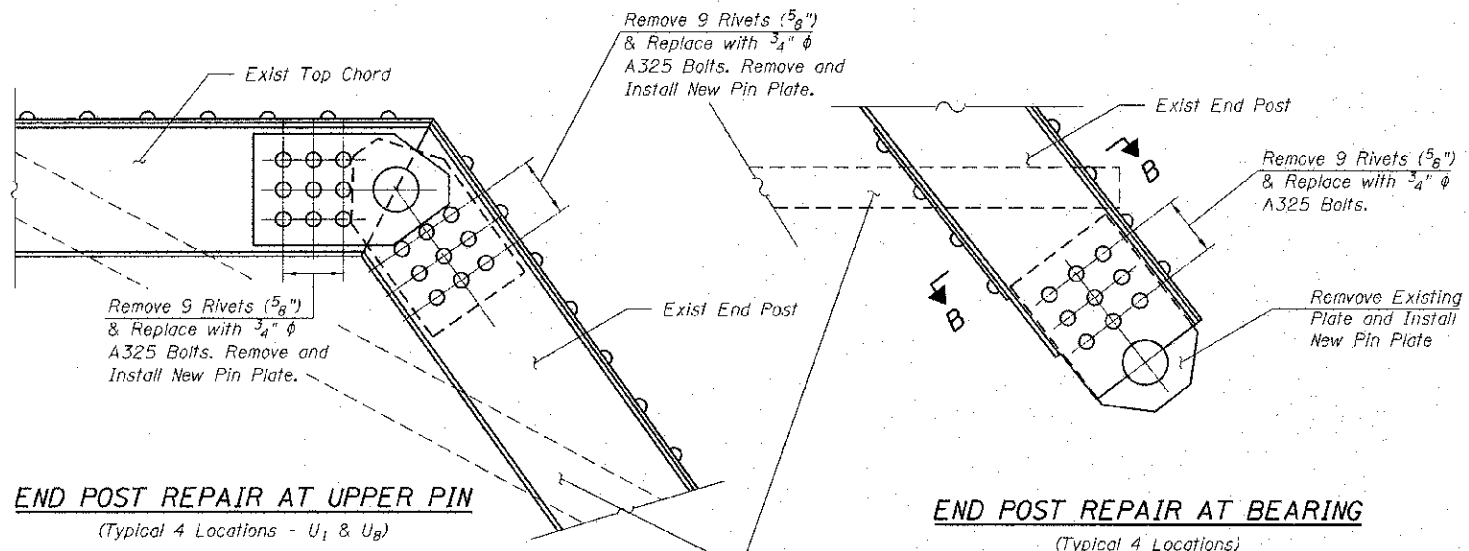
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STATE OF ILLINOIS
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REPLACEMENT COUNTER DETAILS
STRUCTURE NO. 040-3084

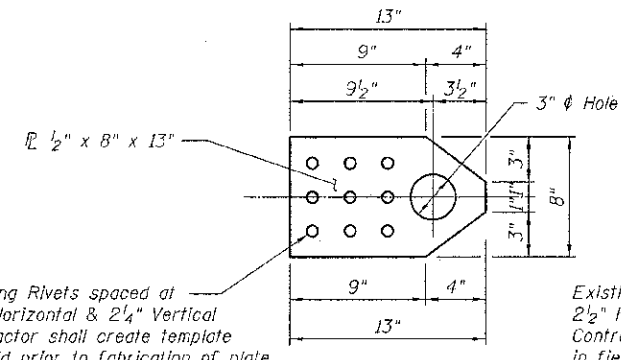
SHEET NO. 9 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	46	27
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

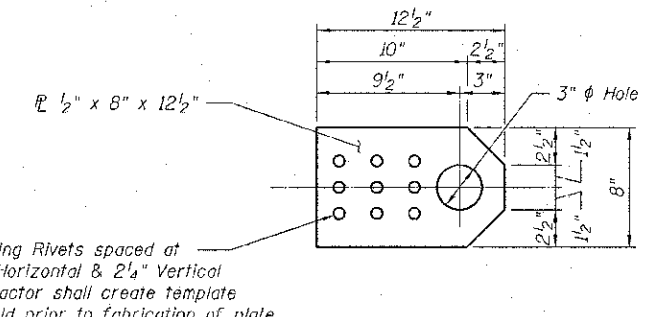


SECTION B-B

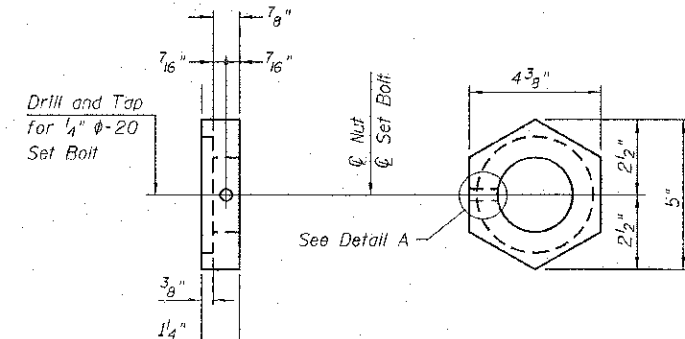
Temporary bracing shall be installed prior to removal of rivets. Temporary bracing shall hold truss in position during repairs. Cost included in FURNISHING & ERECTING STRUCTURAL STEEL.



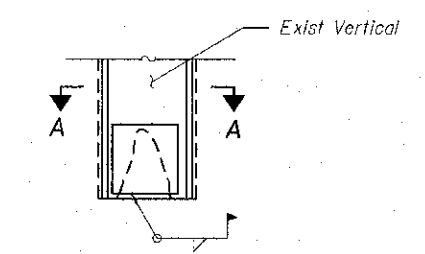
END POST PLATE
(16 Required - 4 Per Joint - U1 & U8)



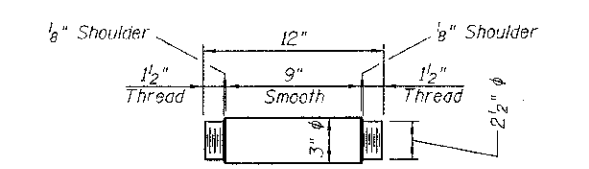
BEARING PIN PLATE
(8 Required - 2 Per Bearing - L0 & L9)



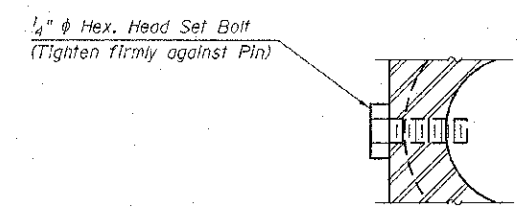
EXTERIOR NUT DETAIL



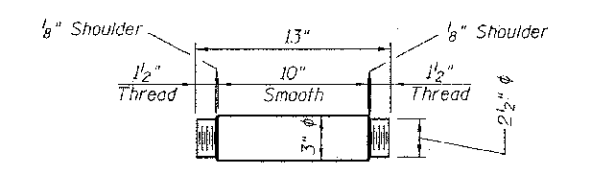
STEEL REPAIR
(At Lower Pin Connection)



REPLACEMENT PIN AT BEARING, L1 & L8
(8 Req'd - L0, L1, L8, & L9)



DETAIL A
(Set Bolts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232)



REPLACEMENT PIN TOP END POST
(4 Req'd - U1 & U8)

Notes

- Steel for Pin Plates shall conform to AASHTO M270, Grade 50W.
- Bolts for Pin Plates shall conform to ASTM A325, Type 3.
- Pins shall conform to ASTM A276, UNS 21800 (Nitronic 60 or equal), 12 threads per inch.
- Pins and Pin Plates shall conform to the minimum Charpy V-notch toughness of 25 ft-lbs at 40 degrees F.
- Pin Nuts shall be ASTM A76, Grade 12L14, Minimum Yield of 36 ksi. Tighten nuts to bring into firm contact with outside steel, back off nut 1/4 turn, and tighten set screw.
- Pin Plates, pins, nuts, bolts, and associated hardware shall be included in FURNISHING & ERECTING STRUCTURAL STEEL.
- Removal of existing rivets shall be included in RIVET REMOVAL & REPLACEMENT.
- Removal of existing steel pins and associated plates and hardware shall be included in STRUCTURAL STEEL REMOVAL.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing & Erecting Structural Steel	Pound	1,540
Structural Steel Removal	Pound	750
Rivet Removal & Replacement	Each	216
Structural Steel Repair	Pound	100

FILE NAME = S:\P\Projects\2012\JOBS\12-36-518011\MG Newcan Blvd Path\CONCAD Sheets\040-3084-structure\Pin&PlateDetail.dgn
 MODEL = BRUCE
 PLOT DRIVER = HPGLTRV5

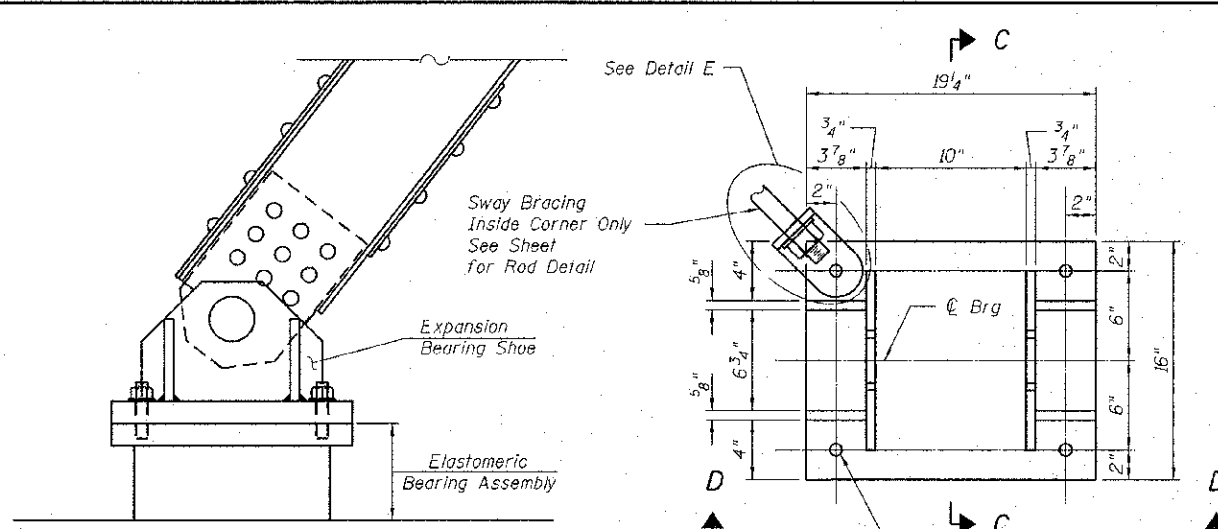


USER NAME = kshepman	DESIGNED -	REVISED
FILE NAME = 0403084-xxxx-010-Pin&PlateDetail.dwg	CHECKED -	REVISED
PLOT SCALE = 20:0.0000 1' = 10"	DRAWN -	REVISED
PLOT DATE = 4/11/2013	CHECKED -	REVISED

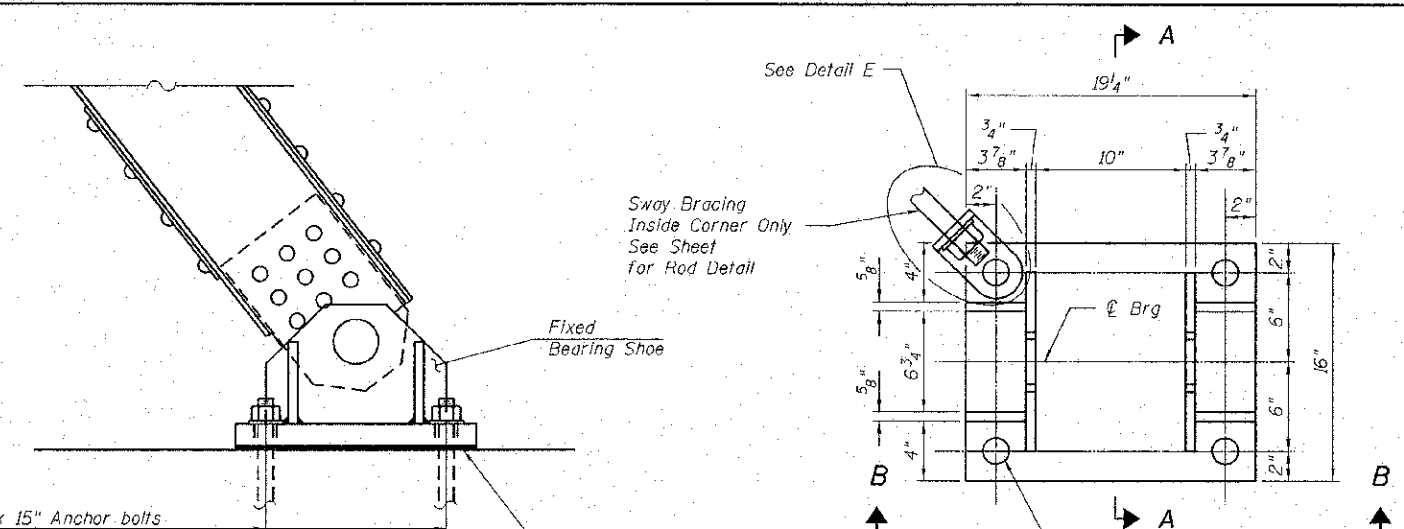
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIN & PIN PLATE DETAILS
STRUCTURE NO. 040-3084
SHEET NO. 10 OF 16 SHEETS

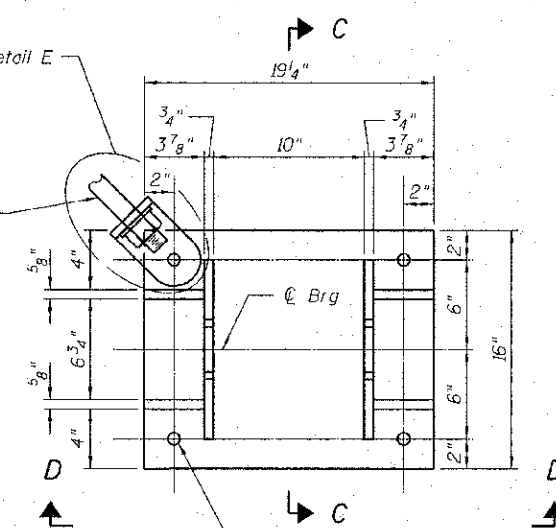
TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	16	25
CONTRACT NO.			ILLINOIS FED. AID PROJECT	



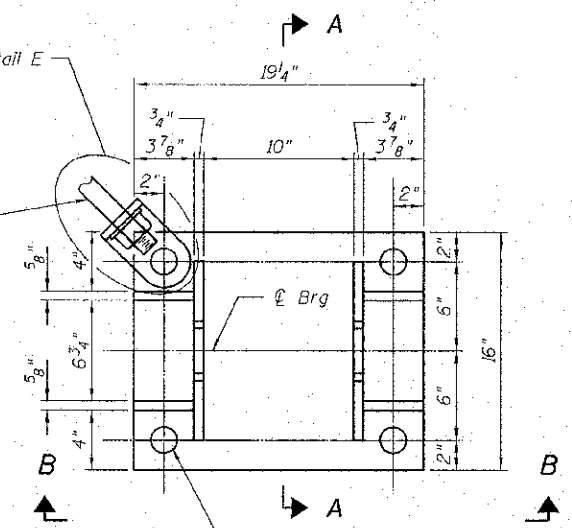
ELEVATION AT SOUTH ABUT.
(Expansion Bearing)



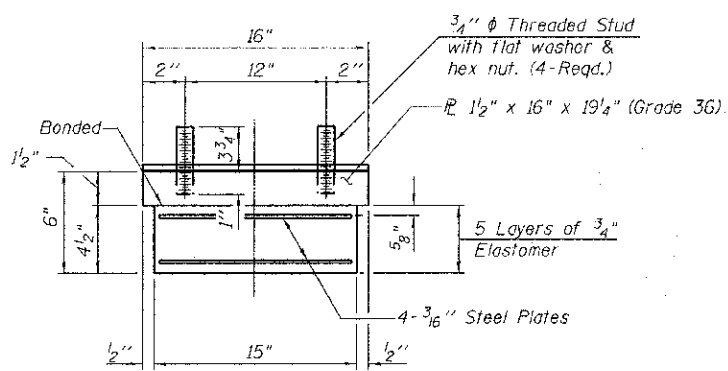
ELEVATION AT NORTH ABUT.
(Fixed Bearing)



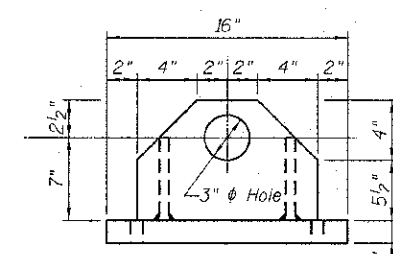
PLAN
(Exp. Brg Shoe)



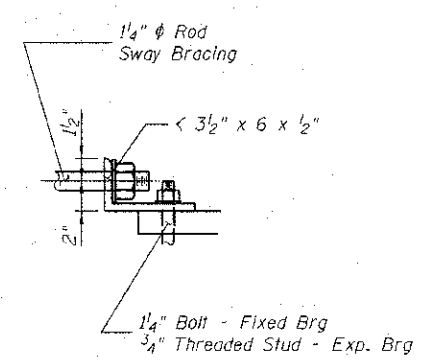
PLAN
(Fixed Brg Shoe)



ELASTOMERIC BEARING ASSEMBLY, TYPE 1

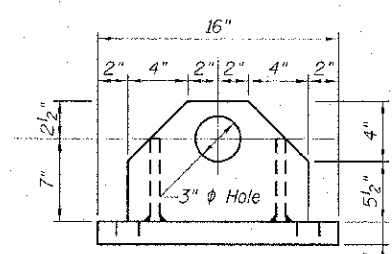


SECTION C-C
(Exp. Brg Shoe)

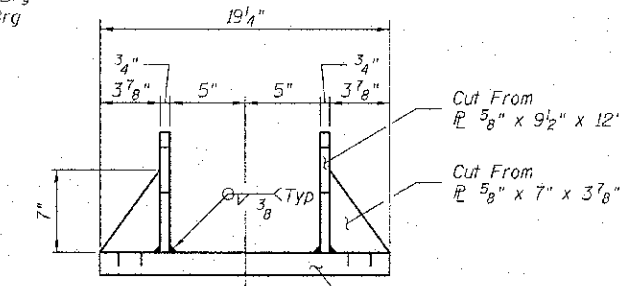


SECTION F-F

DETAIL E

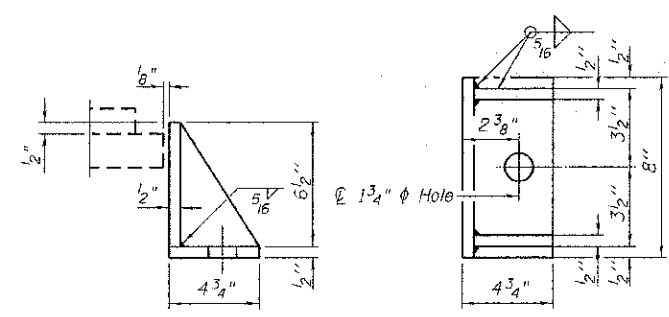


SECTION A-A
(Fixed Brg Shoe)



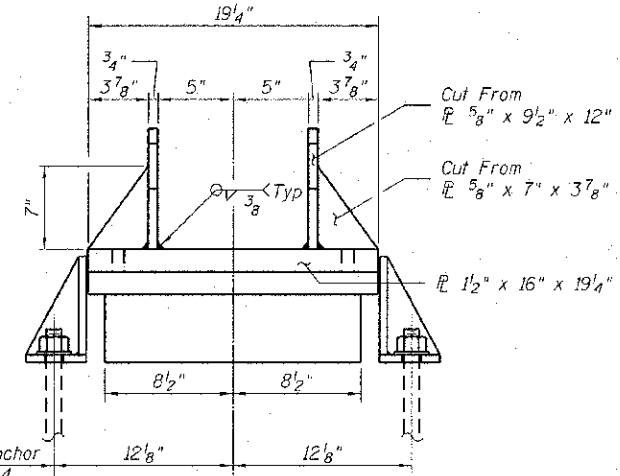
SECTION B-B
(Fixed Brg)

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SECTION D-D
(Exp. Brg)

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers, shims and other steel members required for the bearing assembly shall be included in the cost of STRUCTURAL STEEL.
Fixed Bearings shall not be paid for separately but shall be included in the cost of STRUCTURAL STEEL.
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type 1	Each	2
Anchor Bolts 1/2"	Each	12
Structural Steel	Lbs	1250
Steel Removal	Lbs	800

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 MODEL = SHEDELE
 PLOT DRIVER = BPLTDVISA



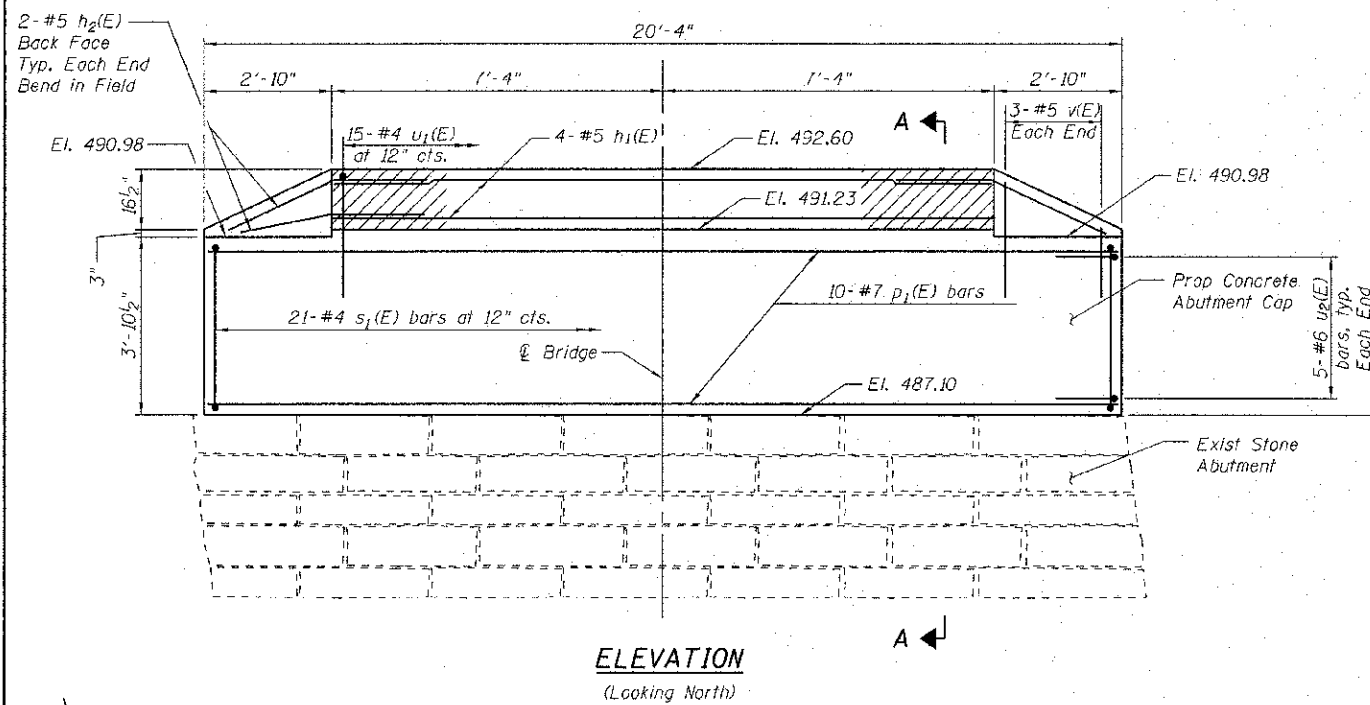
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PLOT DATE = 4/18/2013	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

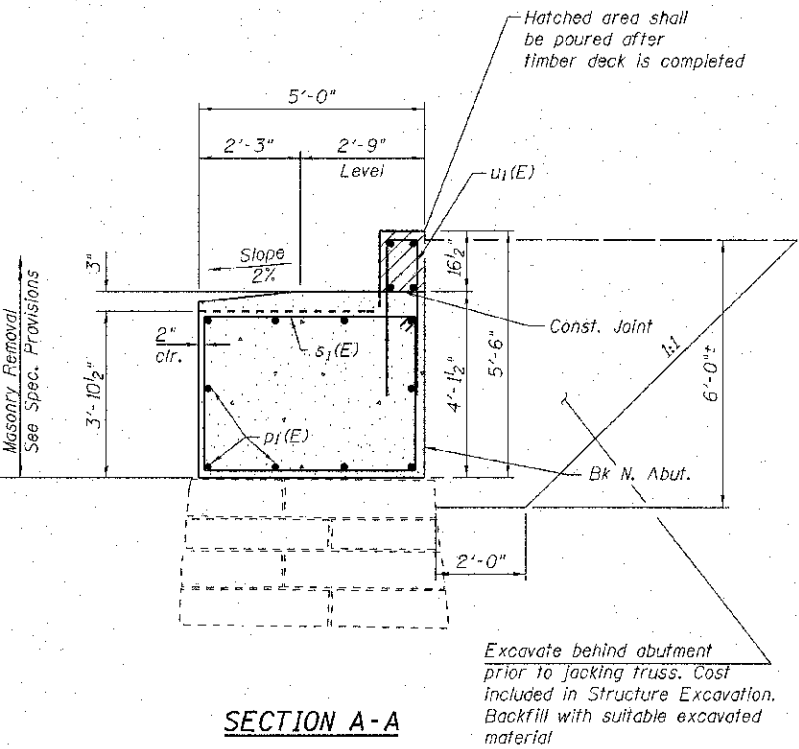
BEARING DETAILS
STRUCTURE NO. 040-3084

SHEET NO. 11 OF 16 SHEETS

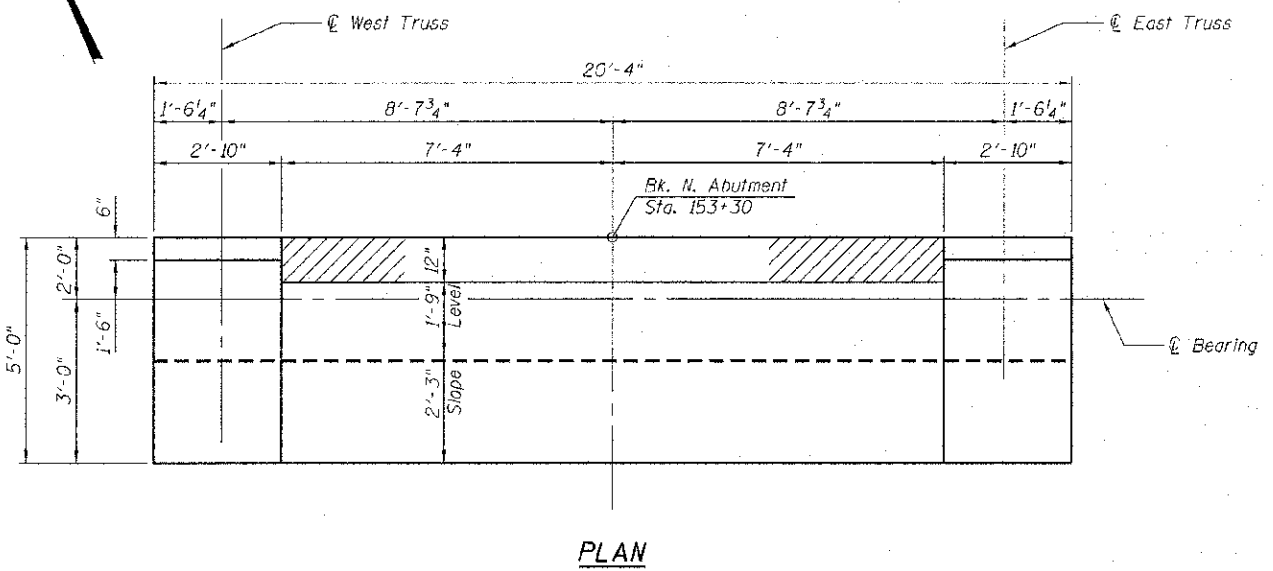
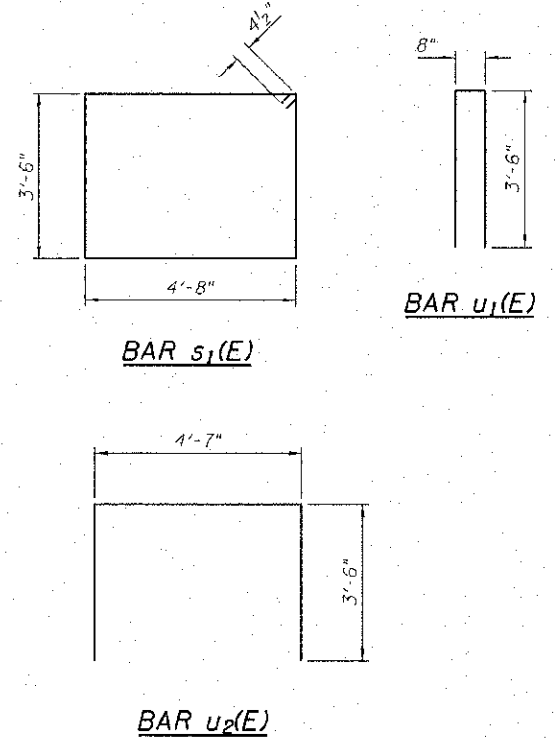
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164	10-00045-00-B1	JASPER	40	26
CONTRACT NO.			ILLINOIS FED. AID PROJECT	



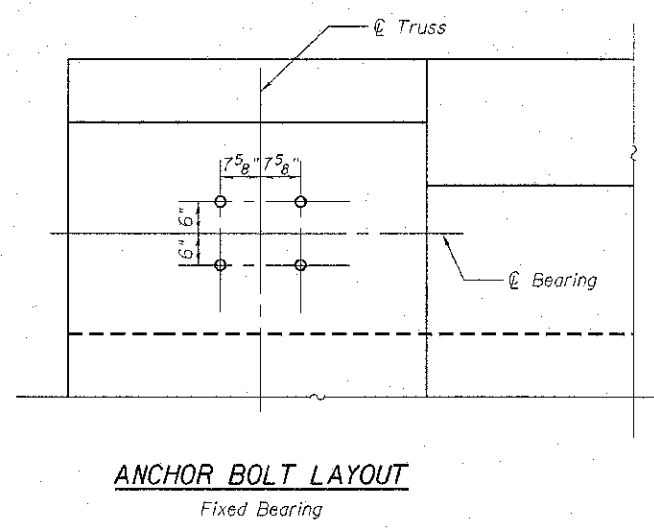
ELEVATION
(Looking North)



SECTION A-A



PLAN



ANCHOR BOLT LAYOUT
Fixed Bearing

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	4	#5	14'-0"	—
h2(E)	4	#5	6'-0"	—
p1(E)	10	#7	20'-0"	—
s1(E)	21	#4	17'-5"	□
u1(E)	15	#4	7'-8"	U
u2(E)	10	#6	11'-7"	U
v(E)	6	#5	4'-3"	—
Structure Excavation			Cu. Yd.	28
Concrete Structures			Cu. Yd.	16.6
Reinforcement Bars, Epoxy Coated			Pound	1,010
Masonry Removal			Cu. Yd.	41
Masonry Cleaning & Tuckpointing			Sq. Yd.	44.5

FILE NAME = E:\Projects\2012 Jobs\12-96-01\0111 MG Newon Blue Plan\CD\CADD Sheets\0403084-xxxx-012-Nor-Abutment.dwg
 MODEL DRIVER = PLOT.DRV
 PLOT DATE = 4/11/2013

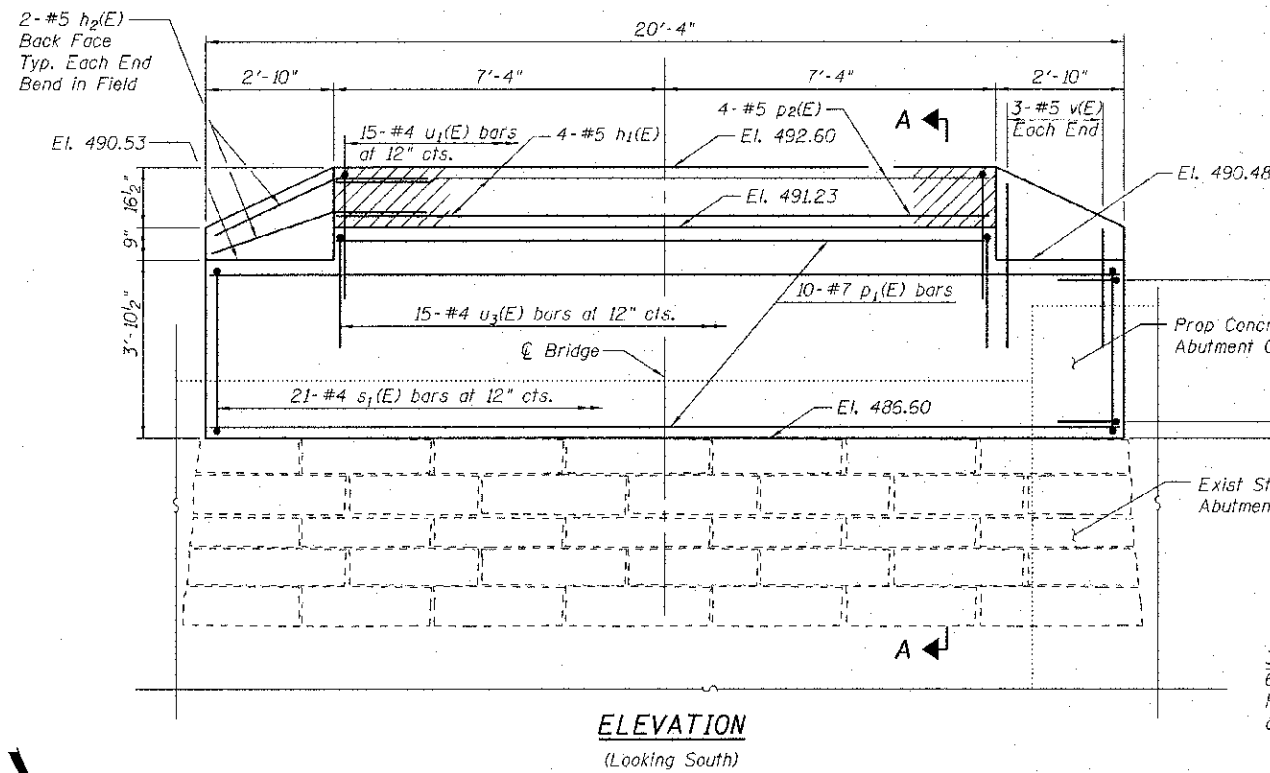


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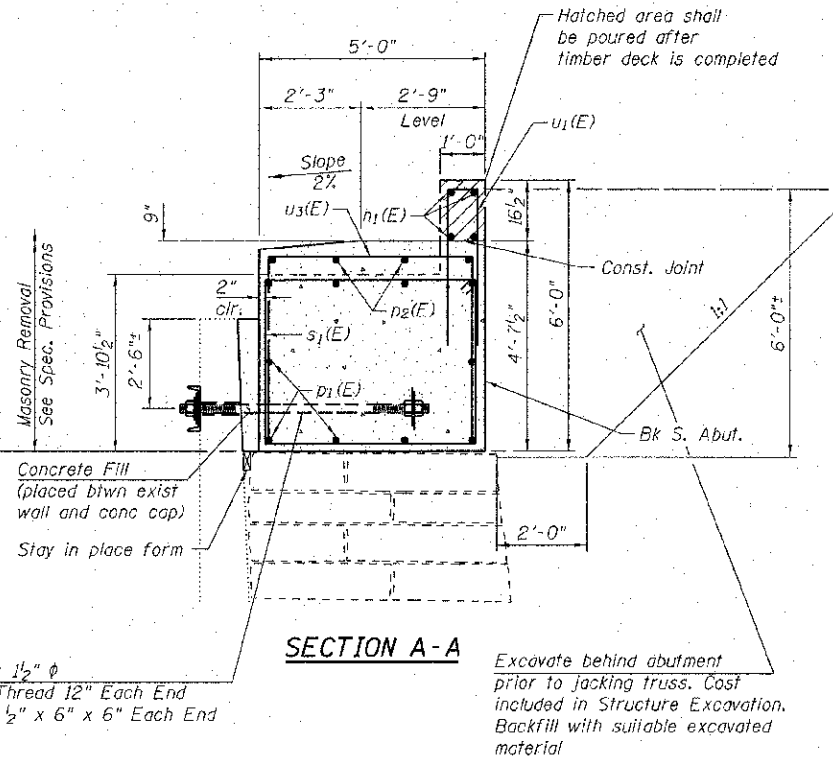
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT DETAILS
STRUCTURE NO. 040-3084
SHEET NO. 12 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	76	27
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



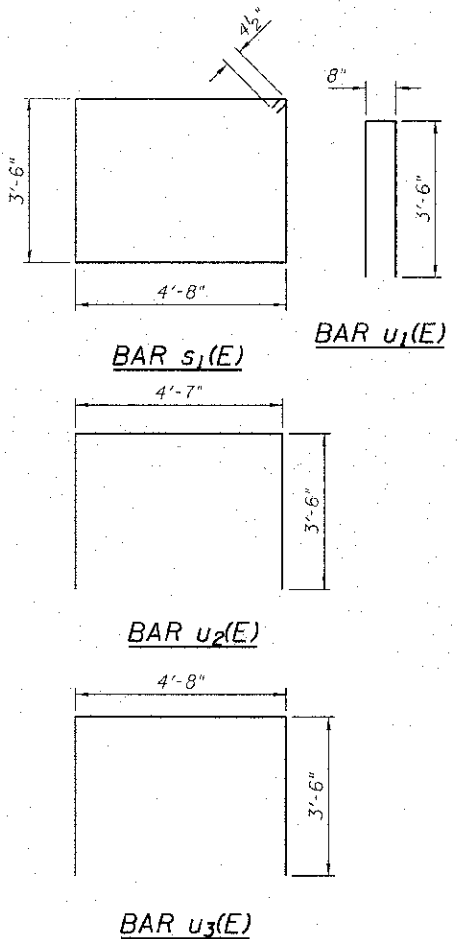
ELEVATION
(Looking South)



SECTION A-A

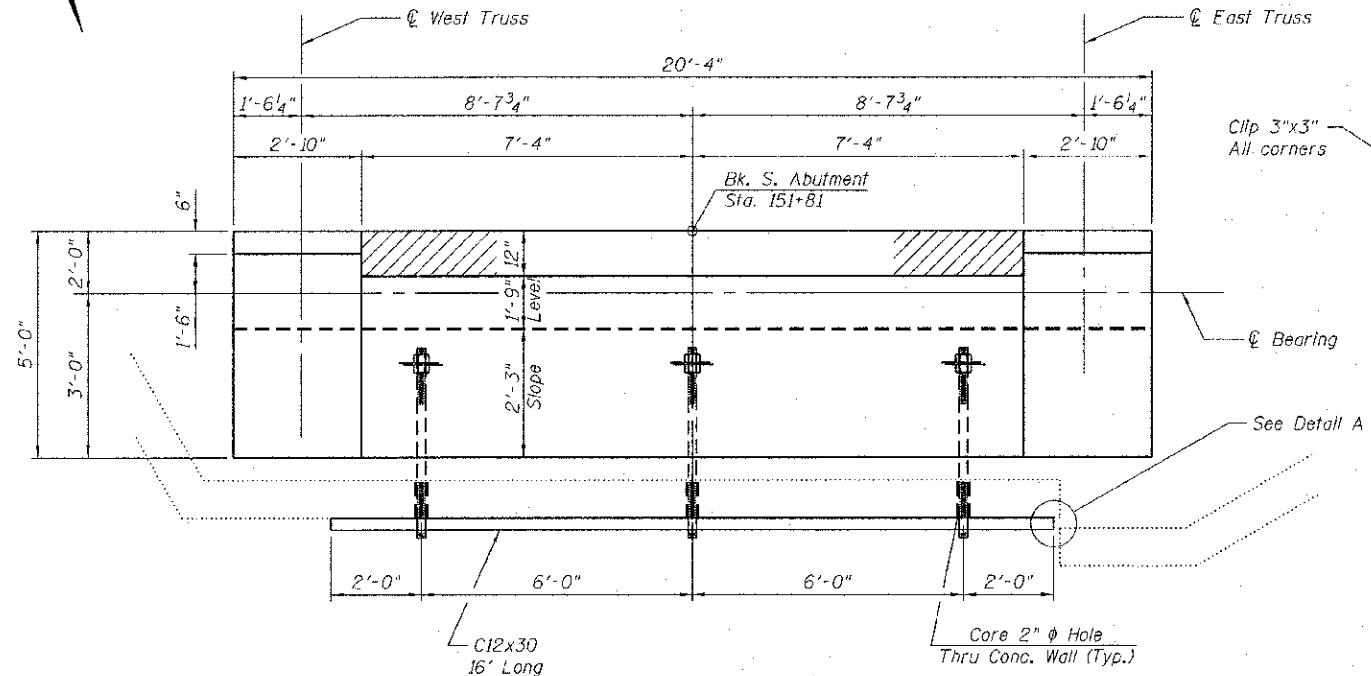
3 - Tie Rods 1/2" ϕ
6'-0" Long, Thread 12" Each End
Plate Washer 1/2" x 6" x 6" Each End
and 3 Nuts

Excavate behind abutment
prior to jacking truss. Cost
included in Structure Excavation.
Backfill with suitable excavated
material

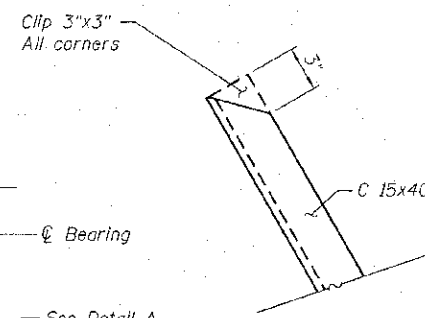


Notes

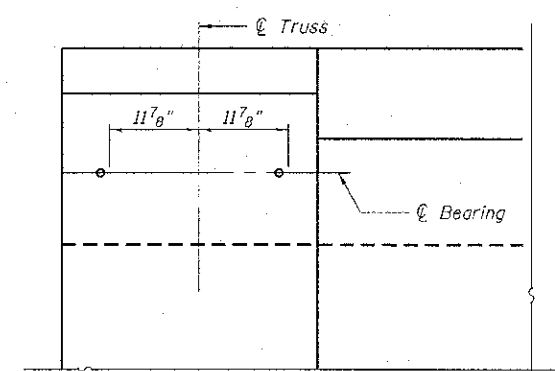
- Channels, plates, threaded tie-rods, and associated hardware shall conform to AASHTO M270, Grade 36, hot-dip galvanized.
- Coring holes in concrete wall will not be paid for separately, but shall be included in the cost of FURNISHING & ERECTING STRUCTURAL STEEL.



PLAN



DETAIL A



ANCHOR BOLT LAYOUT

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	4	#5	14'-0"	—
h2(E)	4	#5	6'-0"	—
p1(E)	10	#7	20'-0"	—
p2(E)	4	#6	20'-0"	—
s1(E)	21	#4	17'-5"	□
u1(E)	15	#4	7'-8"	U
u2(E)	10	#6	11'-7"	U
u3(E)	15	#4	11'-8"	U
v(E)	6	#5	4'-3"	—
Structure Excavation		Cu. Yd.	23	
Concrete Structures		Cu. Yd.	18.6	
Reinforcement Bars, Epoxy Coated		Pound	1250	
Masonry Removal		Cu. Yd.	25	
Furnishing & Erecting Structural Steel		Pound	600	

FILE NAME = S:\Projects\2012\005512-06-SIB2011-MSG-Nelson-Bk-South-Abutment\Plan.dgn
 MODEL = MODEL5
 PLOT DRIVER = PLOTDRIVER



USER NAME = kshepman	DESIGNED -	REVISED
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PLOT SCALE = 20:0.0000 1' = 1/4"	DRAWN -	REVISED
PLOT DATE = 4/11/2013	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS
STRUCTURE NO. 040-3084

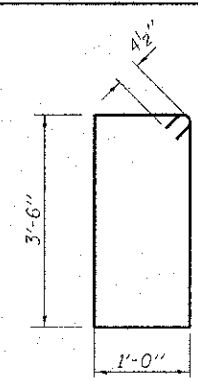
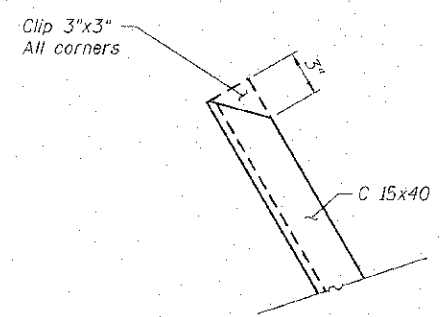
SHEET NO. 13 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	76	28
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

BILL OF MATERIAL

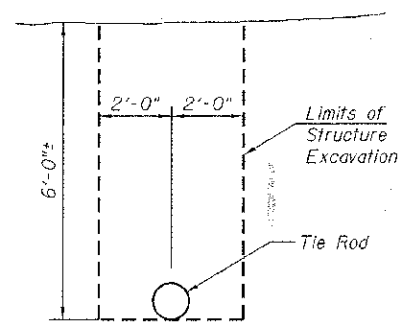
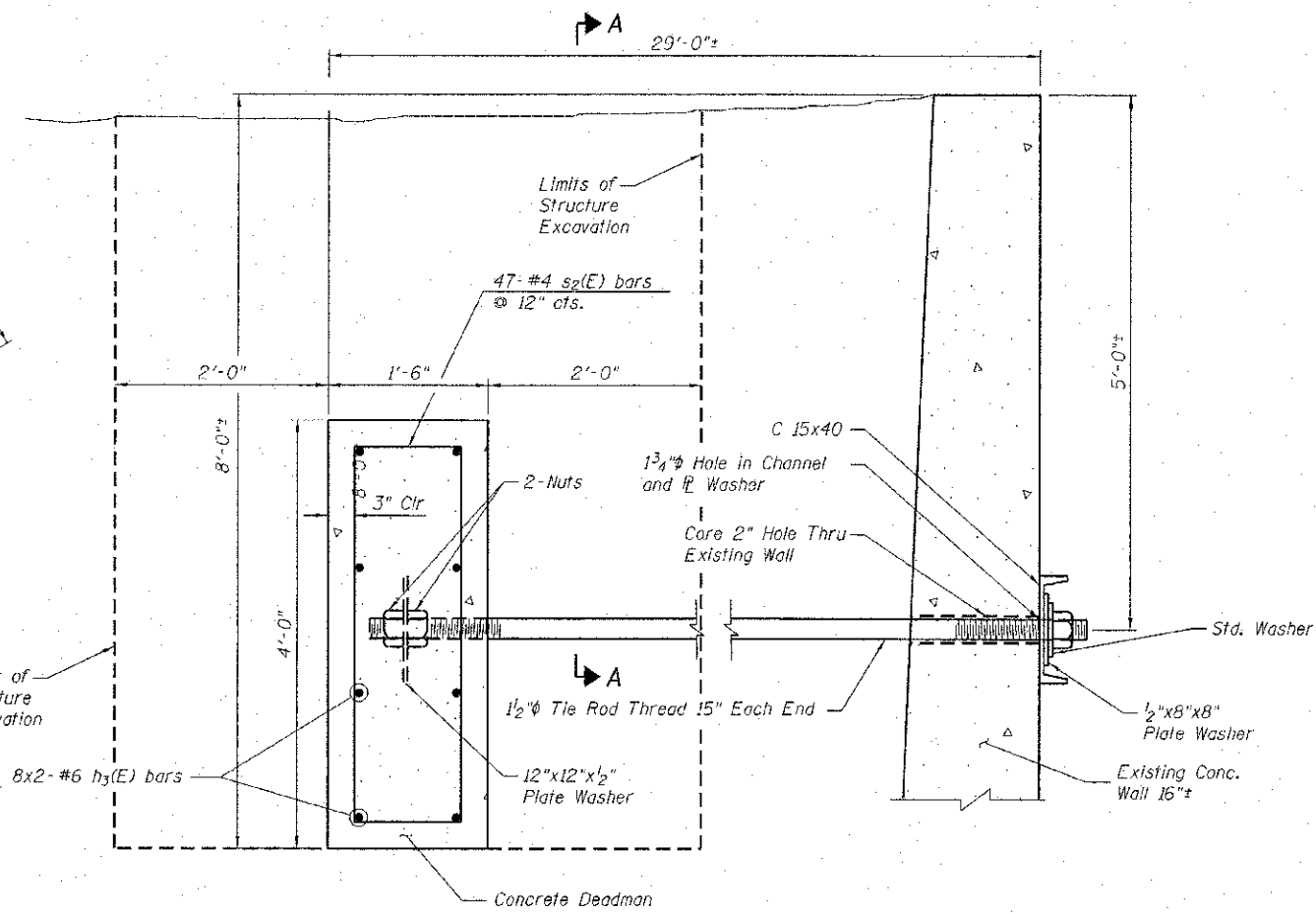
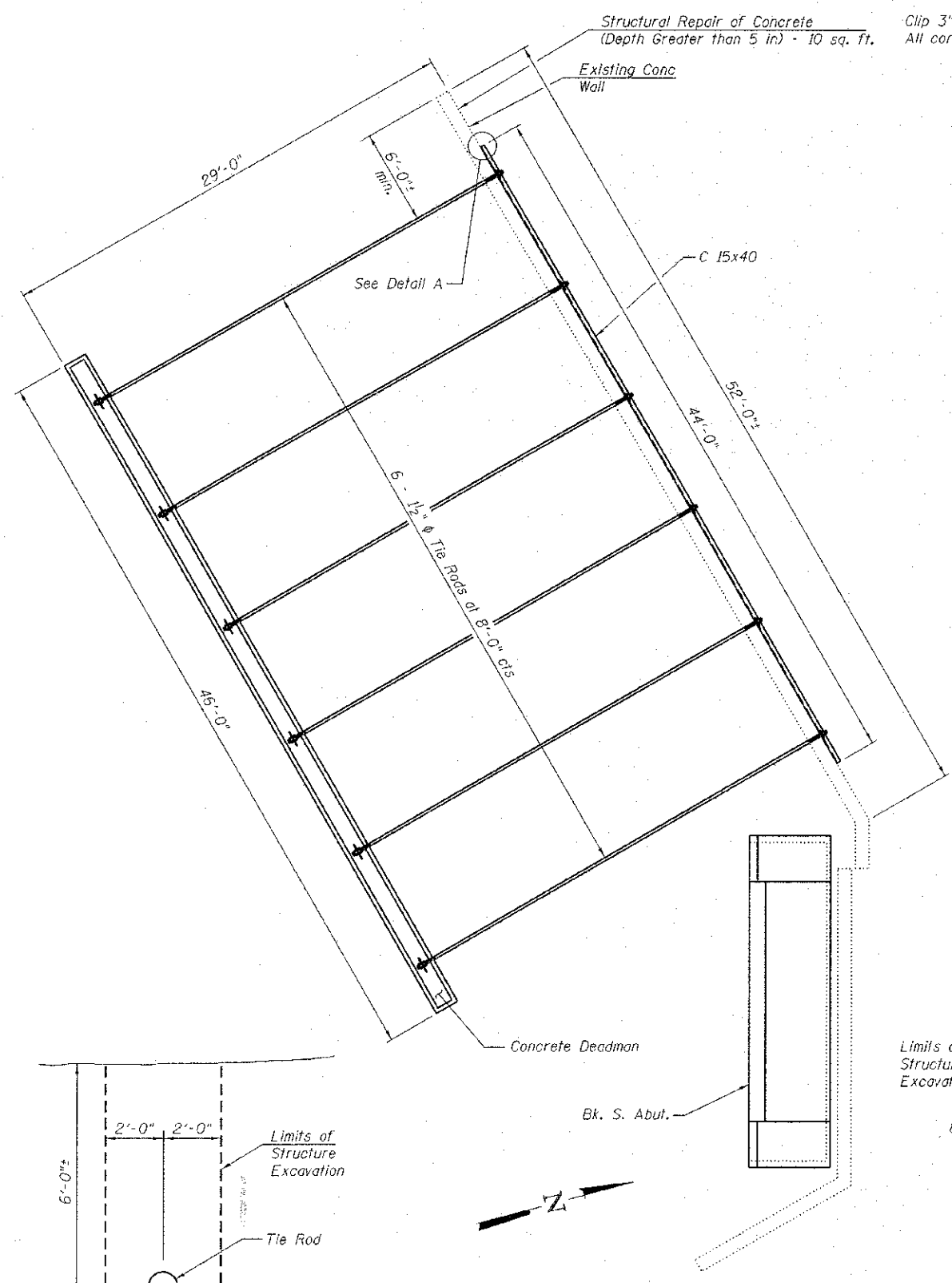
Bar	No.	Size	Length	Shape	
h3(E)	16	#6	24'-6"	—	
s2(E)	47	#4	9'-9"	□	
Furnishing & Erecting Structural Steel				Pound	3,350
Structure Excavation				Cu. Yd.	226
Concrete Structures				Cu. Yd.	10.3
Reinforcement Bars, Epoxy Coated				Pound	900
Structural Repair of Concrete (Depth Greater than 5 in)				Sq. Ft.	10

DETAIL A



Notes

1. Channels, plates, threaded tie-rods, and associated hardware shall conform to AASHTO M270, Grade 36, hot-dip galvanized.
2. Excavation required for tie-rod and deadman installation shall be paid for as STRUCTURE EXCAVATION.
3. Coring holes in concrete wall will not be paid for separately, but shall be included in the cost of FURNISHING & ERECTING STRUCTURAL STEEL.



SECTION A-A

DEADMAN ANCHOR PLAN VIEW

CONNECTION DETAIL AT DEADMAN

CONNECTION DETAIL AT WALL

FILE NAME = 0403084-xxxx-014-WingwallDetail.dgn
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 PLOT DRIVER = PLOT1001.PDF
 PLOT DATE = 4/11/2013



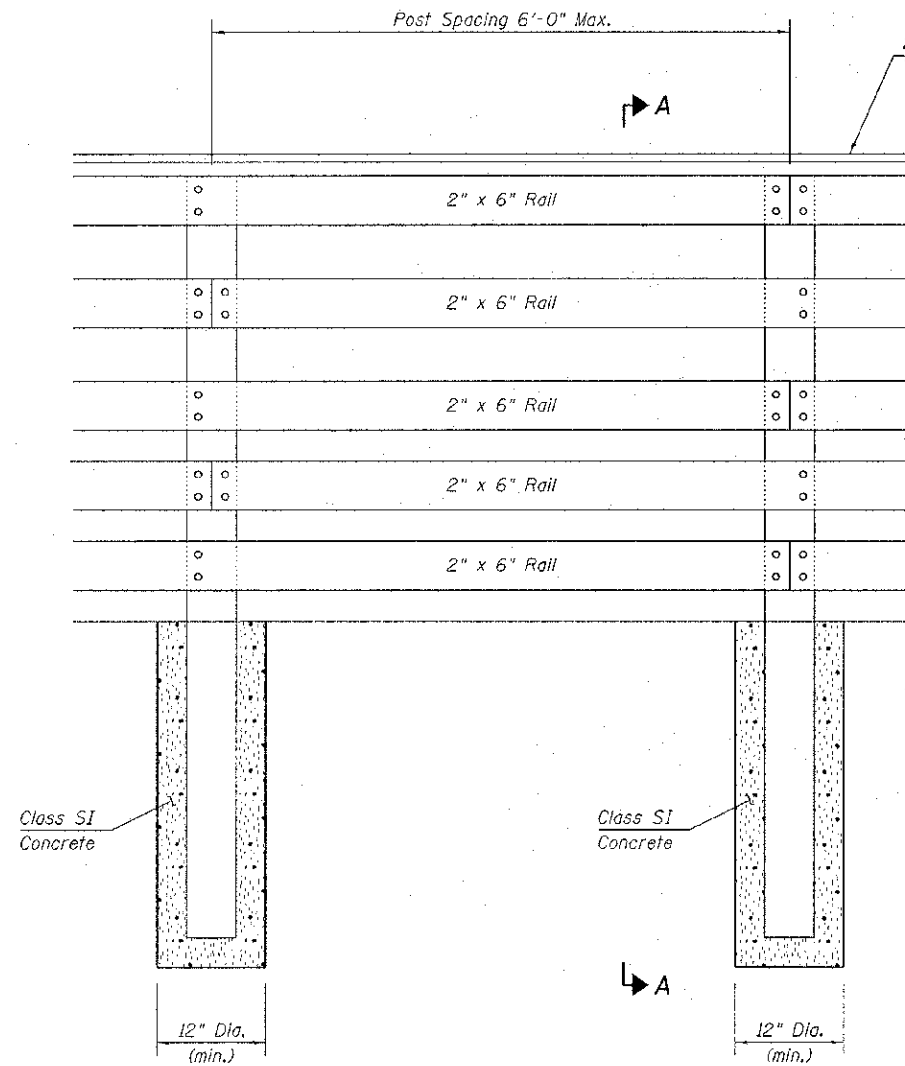
USER NAME = S.Dulekis	DESIGNED -	REVIS
FILE NAME = 0403084-xxxx-014-WingwallDetail.dgn	CHECKED -	REVIS
PLOT SCALE = 20:0.0000 1/2" = 1'-0"	DRAWN -	REVIS
PLOT DATE = 4/11/2013	CHECKED -	REVIS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

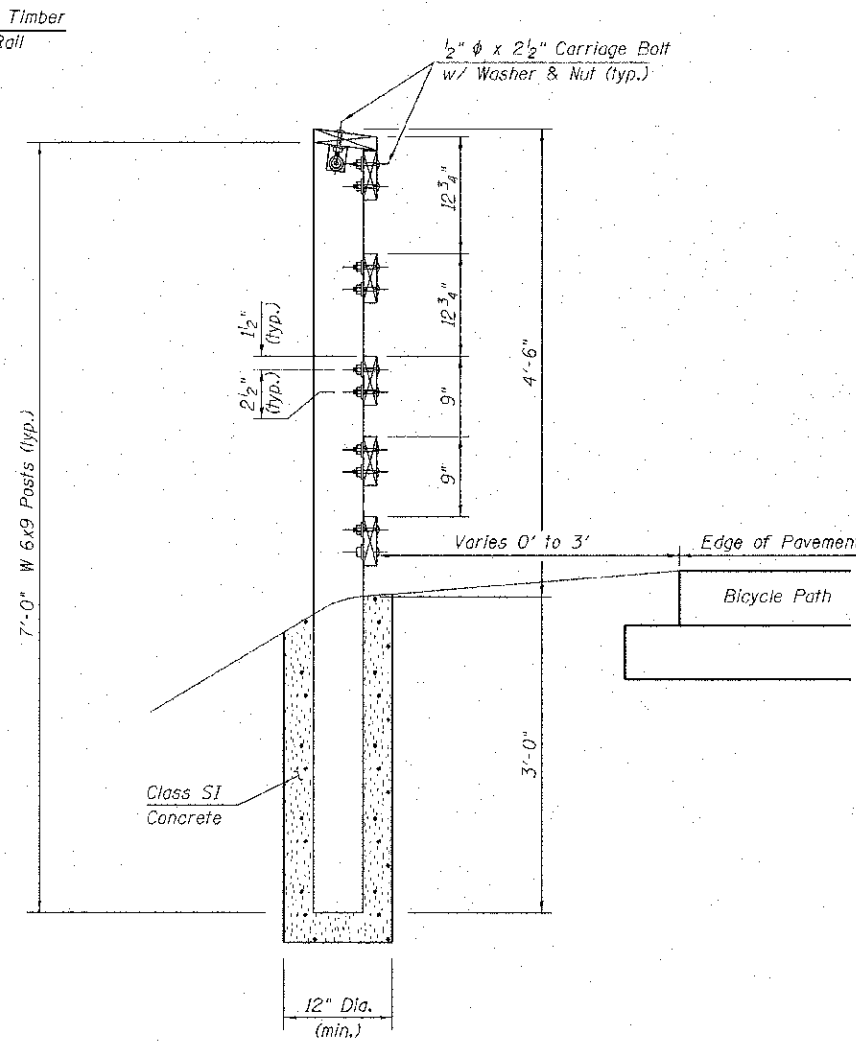
**SOUTHWEST WINGWALL DETAILS
STRUCTURE NO. 040-3084**

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	46	29
CONTRACT NO.			ILLINOIS FED. AID PROJECT	

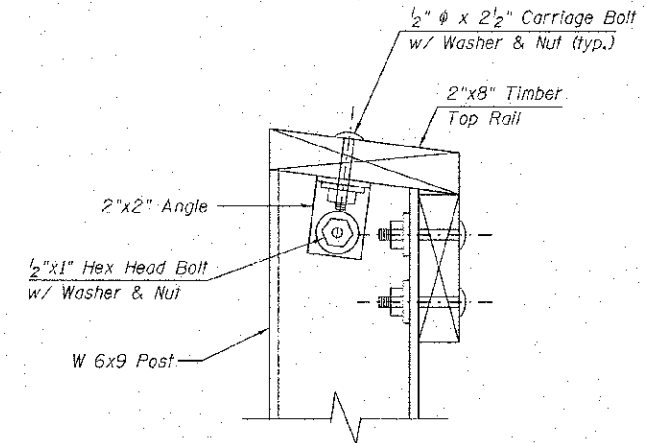
SHEET NO. 14 OF 16 SHEETS



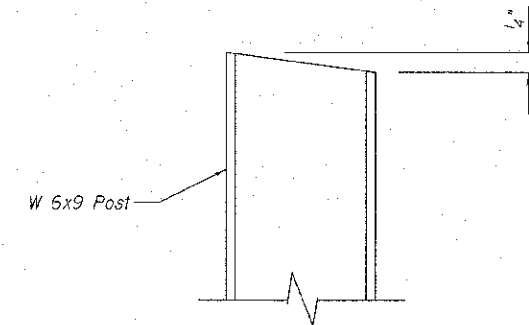
ELEVATION VIEW



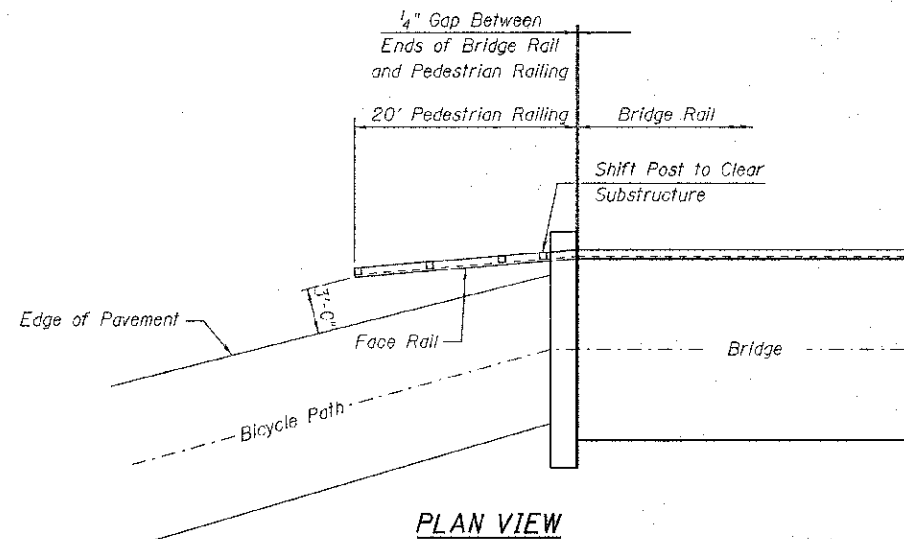
SECTION A-A



TOP RAIL CONNECTION DETAIL



TOP OF POST DETAIL



PLAN VIEW

NOTES

1. Steel posts shall be as specified in Article 1006.23
2. All hardware shall be as specified in Article 1006.25
3. Timber Rails shall be Treated Southern Pine as specified in Article 1007.03
4. Stagger alternating Butt Ends on Face Rail and Top Rail. Center all Butt End Joints on the Posts.
5. Cut ends of Top Rail and Face Rails to match Bridge Rail.
6. Steel Posts, Timber Rails, Concrete for Posts, and hardware shall be included in PEDESTRIAN RAILING.

BILL OF MATERIAL

Item	Unit	Quantity
Pedestrian Railing	Foot	80

FILE NAME = 0403084-xxxx-015-Bridge Approach Railing.dgn
 MODEL =
 PLOT DRIVER = VBA_PLOT_PDF.plt



USER NAME = S.Dulakis	DESIGNED -	REVISED
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PLOT SCALE = 20:0,0000 1' = 1"	DRAWN -	REVISED
PLOT DATE = 4/11/2013	CHECKED -	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH RAILING
STRUCTURE NO. 040-3084**

SHEET NO. 15 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
164	10-00045-00-BT	JASPER	46	30
CONTRACT NO.			ILLINOIS FED. AID PROJECT	

B-1

Station 153+40, 0' Rt
Ground Surface Elev. = 490.0±

BRIDGE FOUNDATION SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Route: City of Newton Bike Trail over Embarras River
Section: 10-00045-00-BT
County: Jasper
Structure No. Not Available
Station: 10 ft. north of north abutment
Offset: At Centerline

Boring: B-1
Page: Page 1 of 1
Date of Boring: February 13, 2012
Drilled By: Zach Wilcoxon
Checked By: Daniel E. Tappendorf, P.E.
MET Project No: 23016

Surface Water Depth: - 21 ft. of deck Ground Water Elevation: when drilling: 20 ft. depth at completion: Cave at 10 ft.				Surface Water Depth: - 21 ft. of deck Ground Water Elevation: when drilling: 20 ft. depth at completion: Cave at 15 ft.			
DEPTH (ft.)	BLOW S (6")	Qu (tsf)	MC (%)	DEPTH (ft.)	BLOW S (6")	Qu (tsf)	MC (%)
Ground Surface Elevation: -				Ground Surface Elevation: -			
Dark brown clayey SILT (OL) Topsoil				Black weathered SHALE			
				75/25			
Auger Refusal at 28 ft.				Auger Refusal at 28 ft.			
Brown sandy CLAY (SC)							
Brown clayey SAND (SC)							
Brown fine to medium SAND (SP)							
Gray clayey SAND (SC)							
Gray fine to medium SAND (SP)							
Black weathered SHALE							

N - Standard Penetration Test (SPT) = Sum of last two blow values in sample
MC - Moisture Content - Percent of dry weight
Qu - Unconfined Compressive Strength - tons per square foot (tsf)

Type Failure: B-Bulge, S-Shear, P-Penetrometer
Qu test

B-2

Station 151+71, 5' Rt
Ground Surface Elev. = 491.0±

BRIDGE FOUNDATION SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Route: City of Newton Bike Trail over Embarras River
Section: 10-00045-00-BT
County: Jasper
Structure No. Not Available
Station: 10 ft. south of south abutment
Offset: 5 ft. east of centerline

Boring: B-2
Page: Page 1 of 1
Date of Boring: February 13, 2012
Drilled By: Zach Wilcoxon
Checked By: Daniel E. Tappendorf
MET Project No: 23016

Surface Water Depth: - 21 ft. of deck Ground Water Elevation: when drilling: 20 ft. depth at completion: Cave at 15 ft.				Surface Water Depth: - 21 ft. of deck Ground Water Elevation: when drilling: 20 ft. depth at completion: Cave at 15 ft.			
DEPTH (ft.)	BLOW S (6")	Qu (tsf)	MC (%)	DEPTH (ft.)	BLOW S (6")	Qu (tsf)	MC (%)
Ground Surface Elevation: -				Ground Surface Elevation: -			
Dark gray weathered SHALE				Dark gray weathered SHALE			
				50/11			
Auger Refusal at 28 ft.				Auger Refusal at 28 ft.			
Brown silty CLAY (CL)							
Brown sandy CLAY (SC)							
Gray clayey SAND (SC)							
Dark gray weathered SHALE							

N - Standard Penetration Test (SPT) = Sum of last two blow values in sample
MC - Moisture Content - Percent of dry weight
Qu - Unconfined Compressive Strength - tons per square foot (tsf)

Type Failure: B-Bulge, S-Shear, P-Penetrometer
Qu test

FILE NAME = S:\Projects\2012 Jobs\12-96-318011 MIG Newton Bike Path\00\000 Sheets\0403084-xxxx-B1-Boring.dgn
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PLOT DRIVER = PLOTDRIVER



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PLOT DATE = 4/11/2013	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

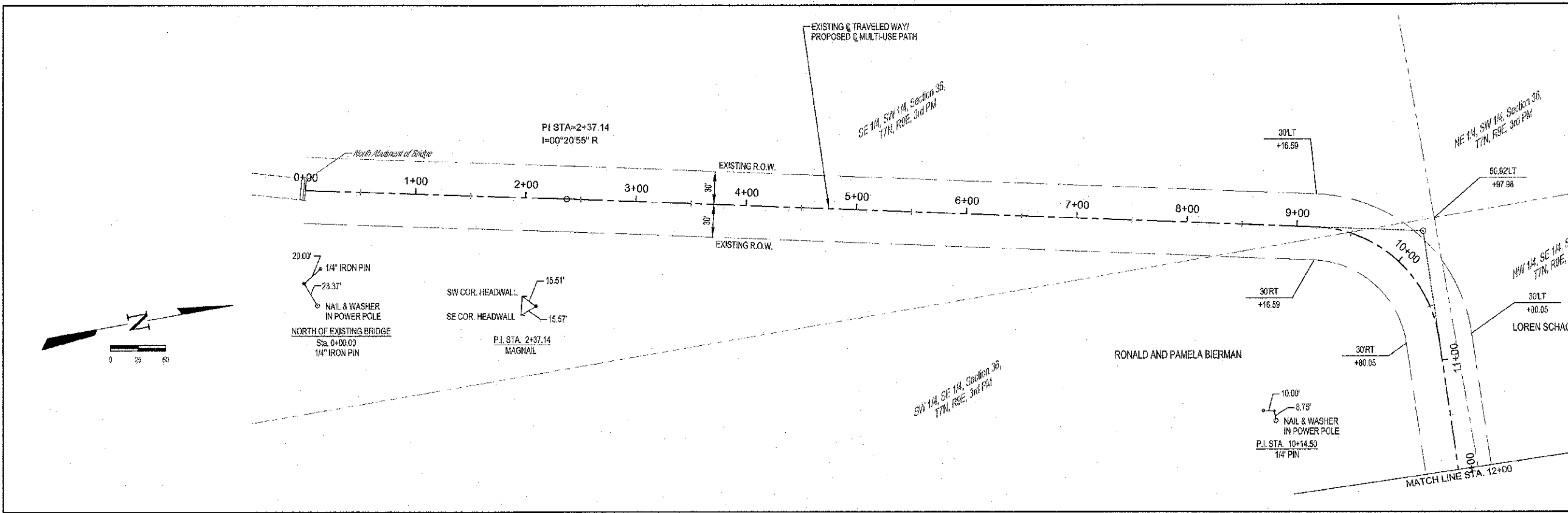
SOIL BORING LOGS
STRUCTURE NO. 040-3084
SHEET NO. 16 OF 16 SHEETS

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.				

ILLINOIS FED. AID PROJECT

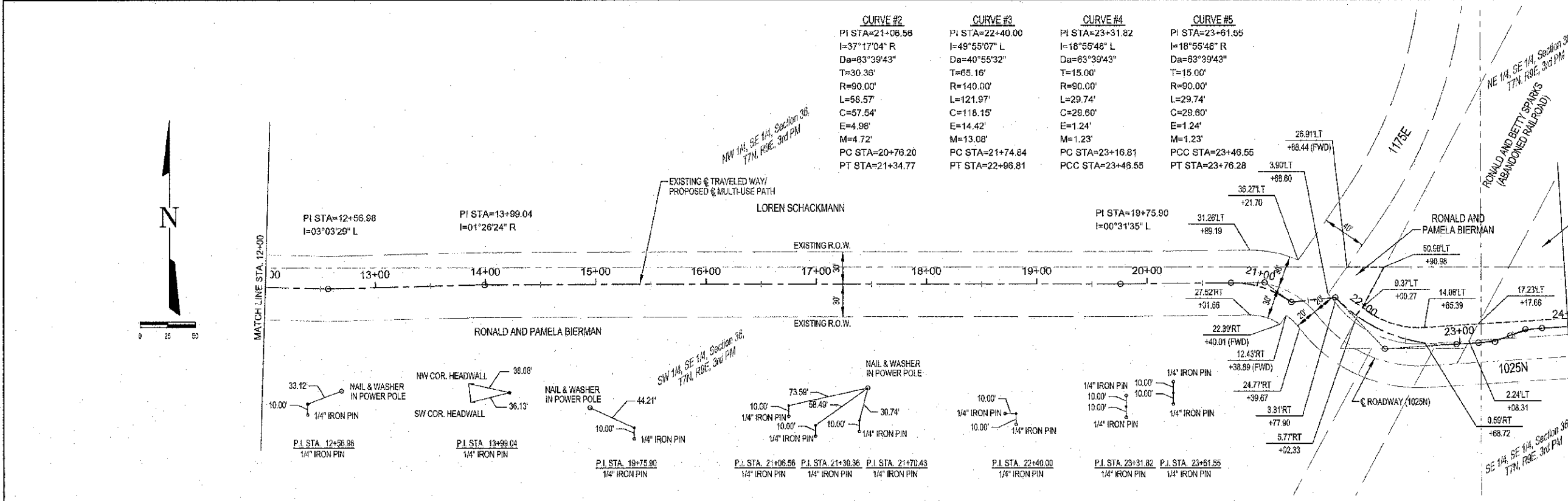
SECTION	10-0045-03-BT
CITY	JASPER
TOTAL SHEETS	46
SHEET NO.	32

CONTRACT #65708



CURVE #1

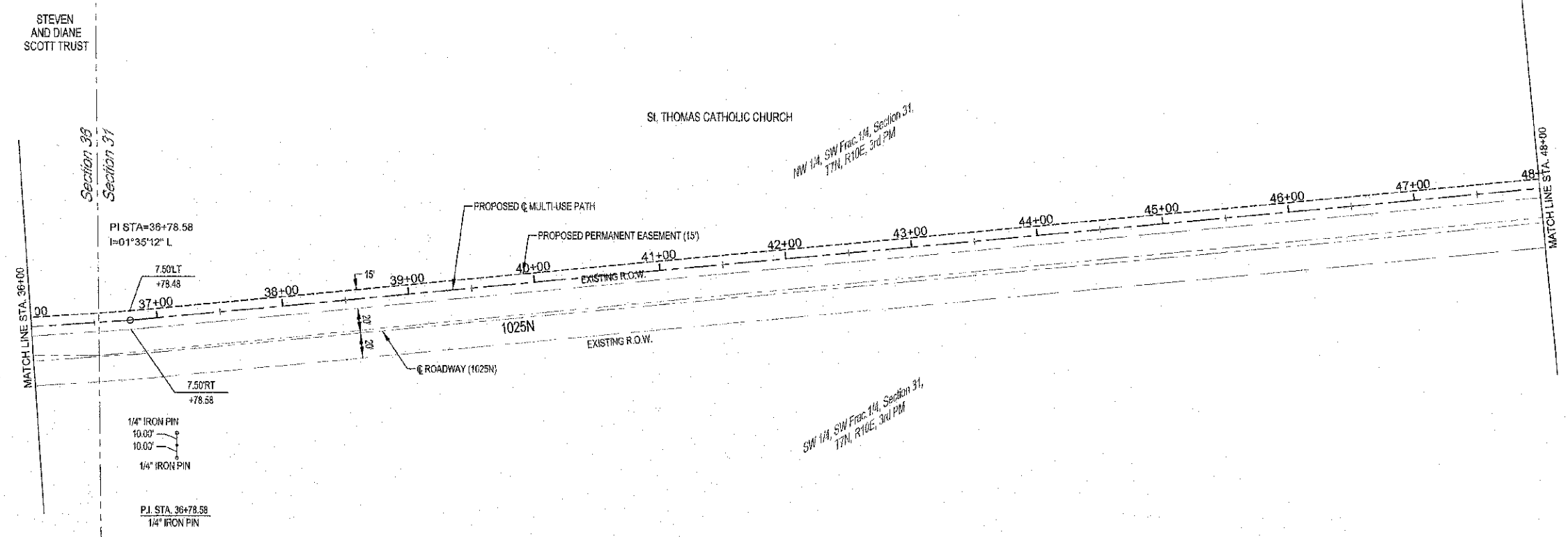
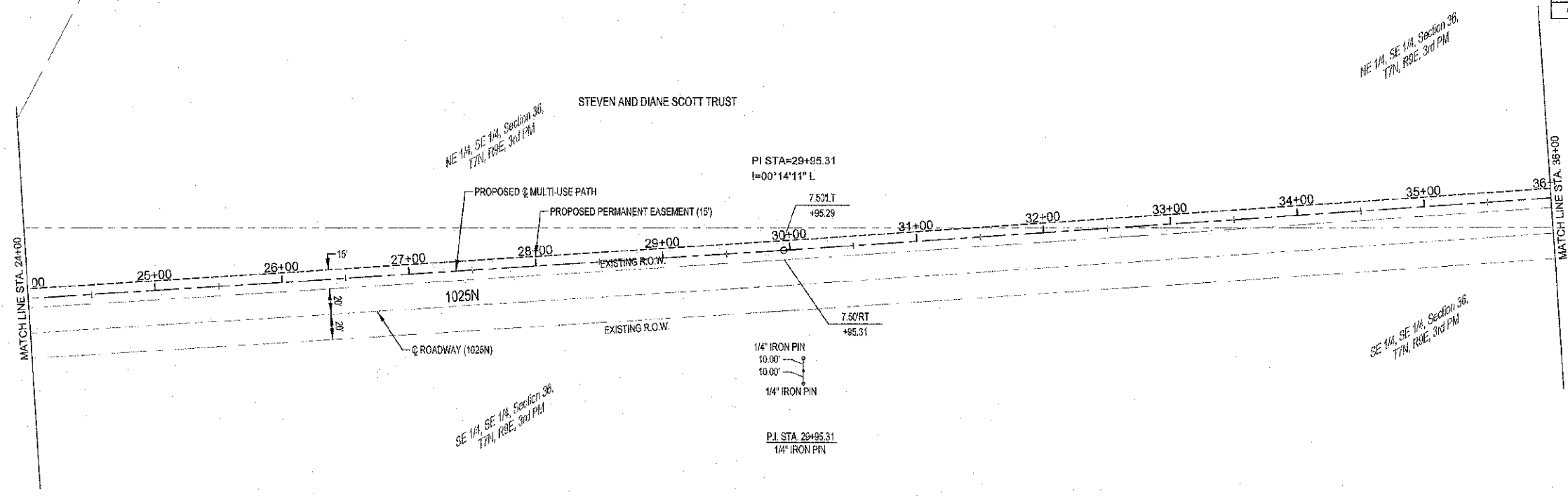
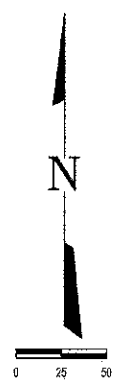
PI STA	=10+14.50
I	=79°22'02" R
Da	=49°33'27"
T	=97.91'
R	=118.00'
L	=163.46'
C	=150.70'
E	=35.33'
M	=27.19'
PC STA	=9+16.59
PT STA	=10+80.05



CURVE #2	CURVE #3	CURVE #4	CURVE #5
PI STA=21+06.56	PI STA=22+40.00	PI STA=23+31.82	PI STA=23+61.55
I=37°17'04" R	I=49°55'07" L	I=18°55'48" L	I=18°55'48" R
Da=63°39'43"	Da=40°55'32"	Da=63°39'43"	Da=63°39'43"
T=30.36'	T=65.16'	T=15.00'	T=15.00'
R=90.00'	R=140.00'	R=90.00'	R=90.00'
L=58.57'	L=121.97'	L=29.74'	L=29.74'
C=57.64'	C=118.15'	C=28.60'	C=28.60'
E=4.98'	E=14.42'	E=1.24'	E=1.24'
M=4.72'	M=13.08'	M=1.23'	M=1.23'
PC STA=20+76.20	PC STA=21+74.84	PC STA=23+16.81	PCC STA=23+46.55
PT STA=21+34.77	PT STA=22+08.81	PCC STA=23+48.55	PT STA=23+78.28

	MILANO & GRUNLOH ENGINEERS, LLC	RIGHT-OF-WAY PLAN AND REFERENCE TIES EAGLE TRAIL CITY OF NEWTON SECTION 10-00045-00-BT JASPER COUNTY, ILLINOIS
	114 WEST WASHINGTON	
	P.O. BOX 897	
	EFFINGHAM, ILLINOIS 62421	
Phone: (217) 347-7362	(618) 677-2714	
Fax: (217) 346-3493	(617) 246-3493	
Web Address: www.mgengr.com	Design Firm #: 186-003100	
File name: S:\D\G\1010294\ROW Plan.dwg	Plot date: 04/11/13 at 07:05	F.B. 685,686,687,689,880

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 7	KLING'S	FED. AID PROJECT	CONTRACT #96708	

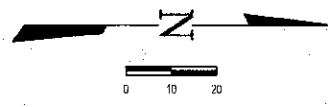
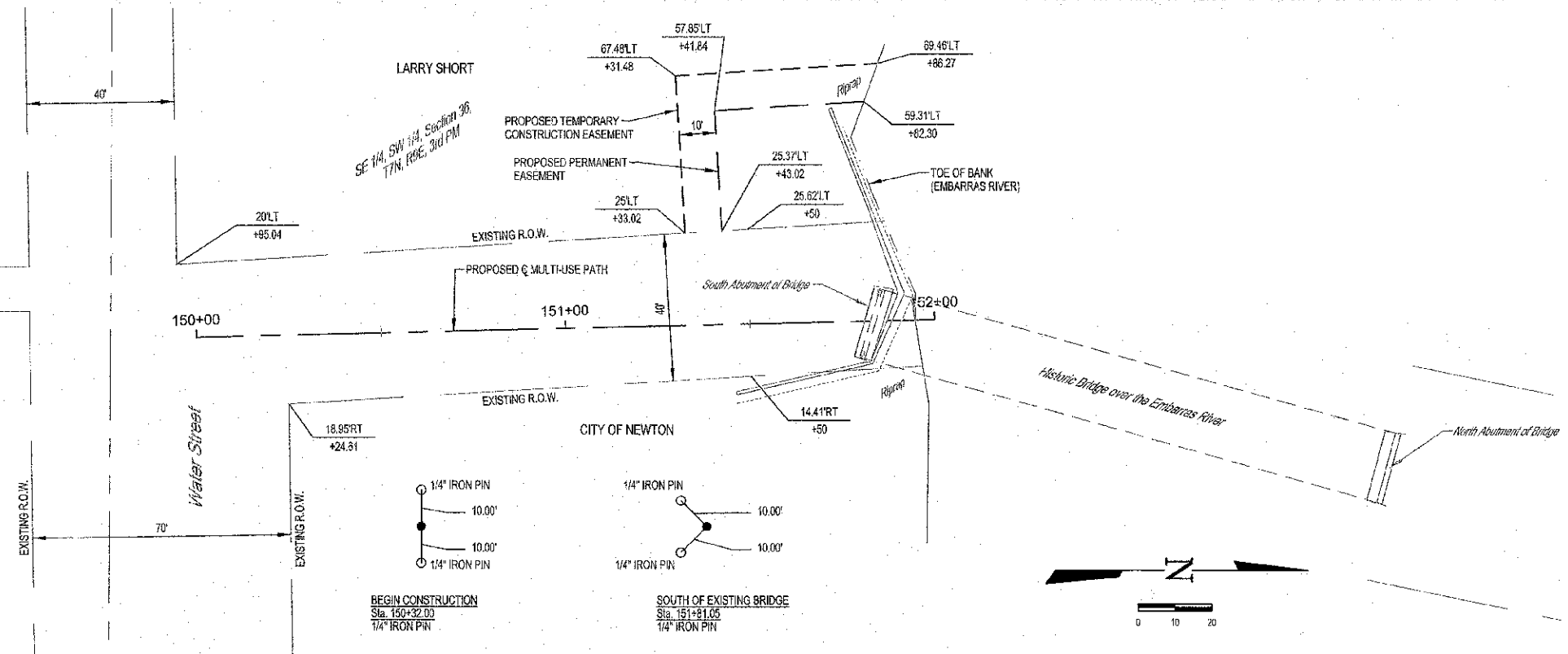
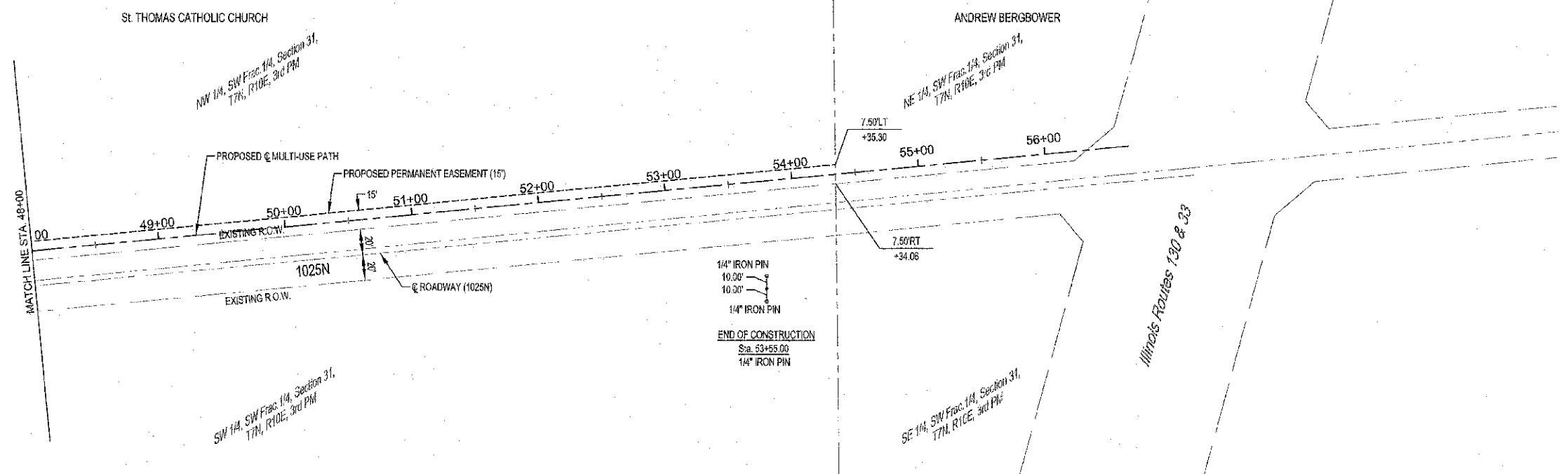
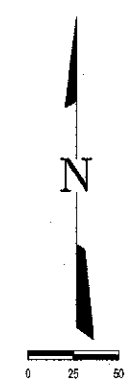


M
G
 MILANO & GRUNLICH ENGINEERS, LLC
 114 WEST WASHINGTON
 P.O. BOX 697
 EFFINGHAM, ILLINOIS 62401
 Phone: (217) 347-7222
 (800) 577-2744
 Fax #: (217) 346-5433
 Web Address: www.mgengr.com
 Design Firm #: 594-073168

RIGHT-OF-WAY PLAN AND
 REFERENCE TIES
 EAGLE TRAIL
 CITY OF NEWTON
 SECTION 10-00045-00-BT
 JASPER COUNTY, ILLINOIS

File name: S:\DWG\1010294\dwg\ROW Plan.dwg
 Plot date: 04/11/13 at 07:05
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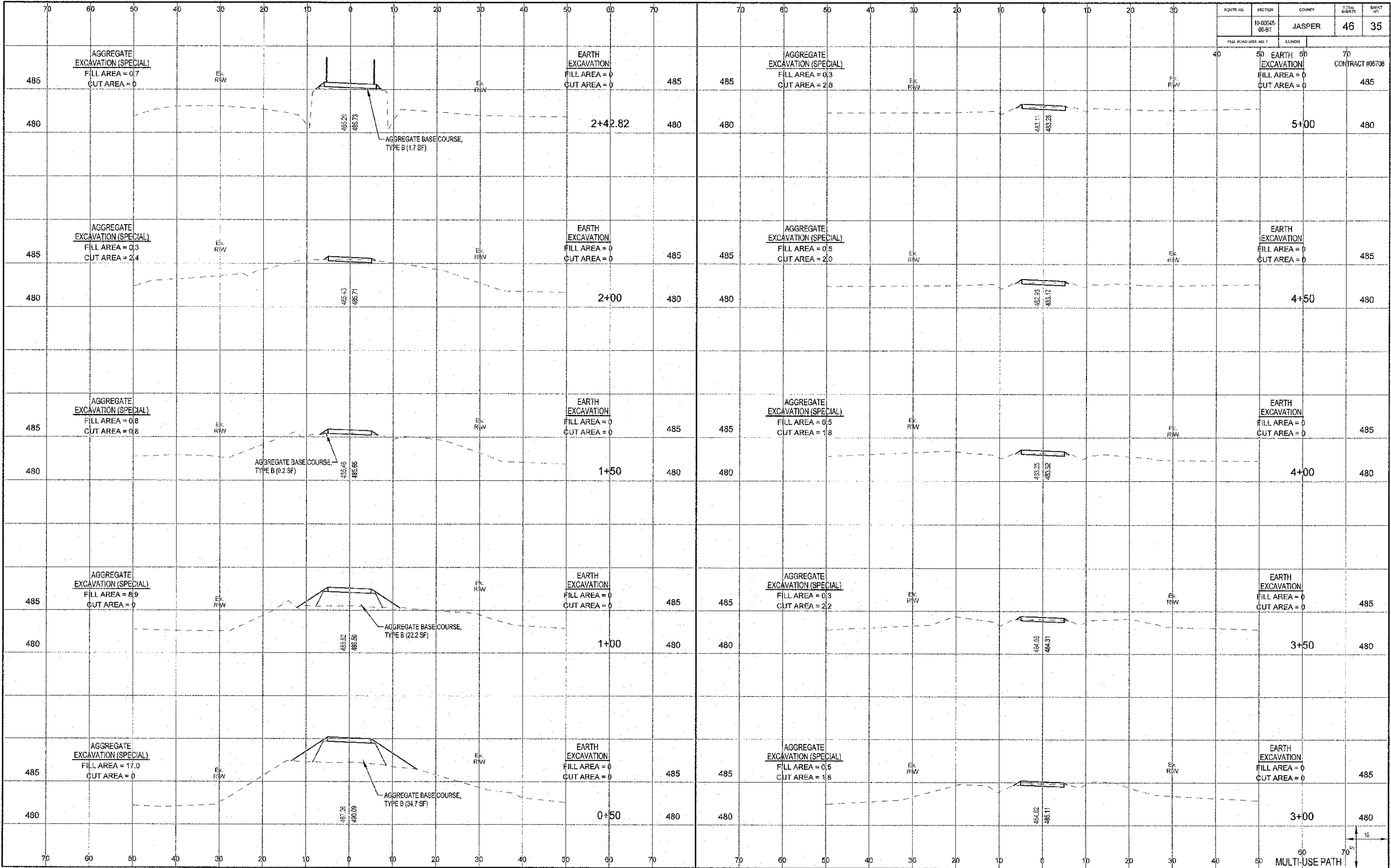
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-0045-00-BT	JASPER	46	34
FED. ROAD DIST. NO.	LINE NO.	FED. AID PROJECT		
			CONTRACT #95708	



	MILANO & GRUNLOH ENGINEERS, LLC	RIGHT-OF-WAY PLAN AND REFERENCE TIES EAGLE TRAIL CITY OF NEWTON SECTION 10-0045-00-BT JASPER COUNTY, ILLINOIS
	114 WEST WASHINGTON P.O. BOX 867 SPRINGFIELD, ILLINOIS 62701	
	Phone: (217) 347-7262 (800) 672-2714 Fax #: (217) 346-9433	
	Web Address: www.mgengr.com Design Firm #: 184-003108	
File name: S:\DWG\10\10294\ROW Plan.dwg Plot date: 04/11/13 at 07:05		F.B. 685,686,687,688,800

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00045-00-BT		JASPER	46	35
FED. ROAD DIST. NO. 7	ELINGS			

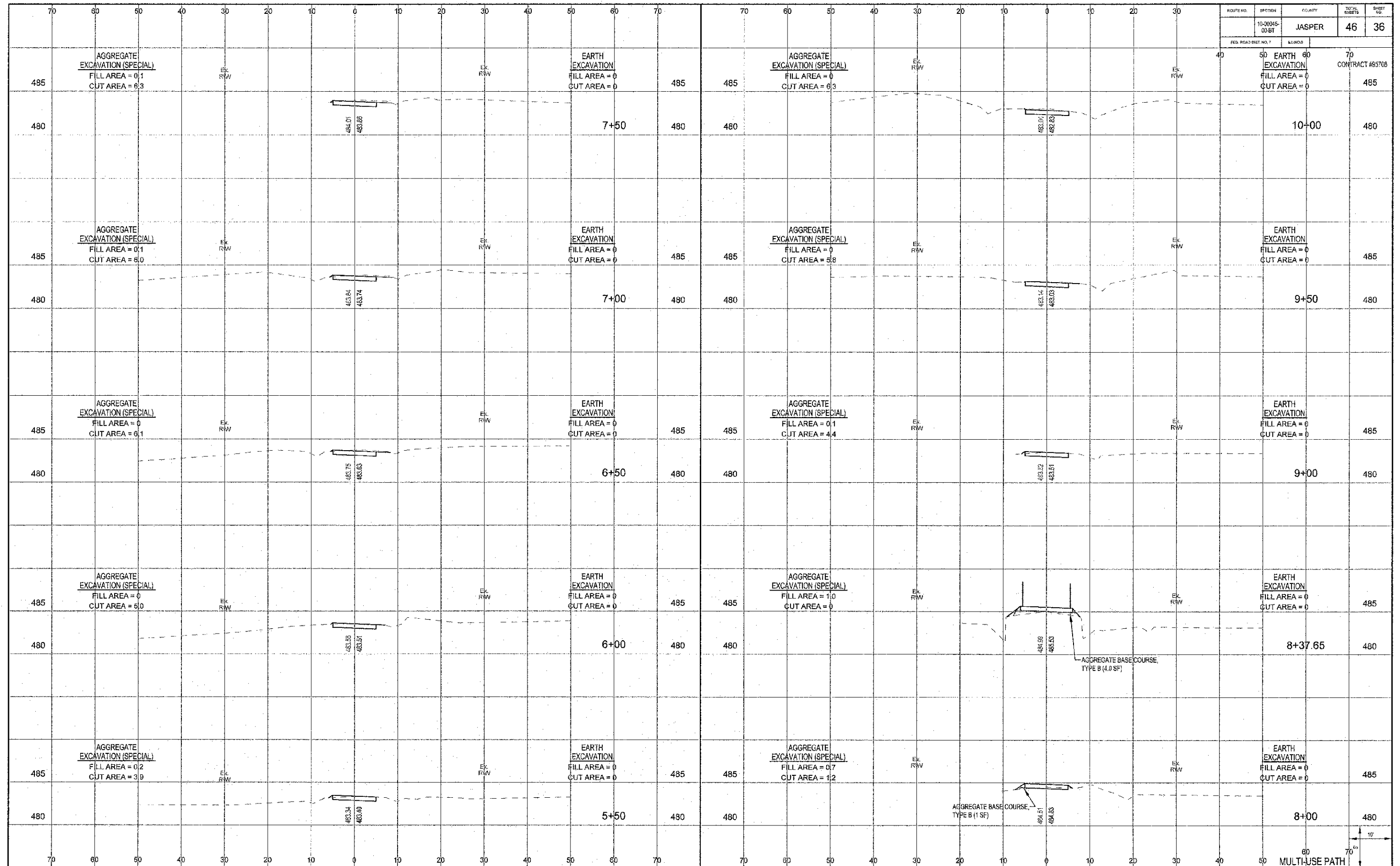
CONTRACT #95708



MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00045-00 ST		JASPER	46	36
FED. ROAD DIST. NO. 7		LL10008		

40 50 60 70
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0
CONTRACT #85708



70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0.1
CUT AREA = 6.3
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

70 60 50 40 30 20 10 0 10 20 30
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 6.3
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

485 480
484.01 483.88
7+50

485 480
483.00 482.83
10+00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0.1
CUT AREA = 6.0
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

70 60 50 40 30 20 10 0 10 20 30
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 5.8
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

485 480
483.84 483.74
7+00

485 480
483.14 483.03
9+50

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 6.1
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

70 60 50 40 30 20 10 0 10 20 30
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0.1
CUT AREA = 4.4
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

485 480
483.75 483.63
6+50

485 480
483.52 483.51
9+00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 5.0
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

70 60 50 40 30 20 10 0 10 20 30
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 1.0
CUT AREA = 0
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

485 480
483.55 483.51
6+00

485 480
484.98 484.53
8+37.65

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0.2
CUT AREA = 3.9
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

70 60 50 40 30 20 10 0 10 20 30
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0.7
CUT AREA = 1.2
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0

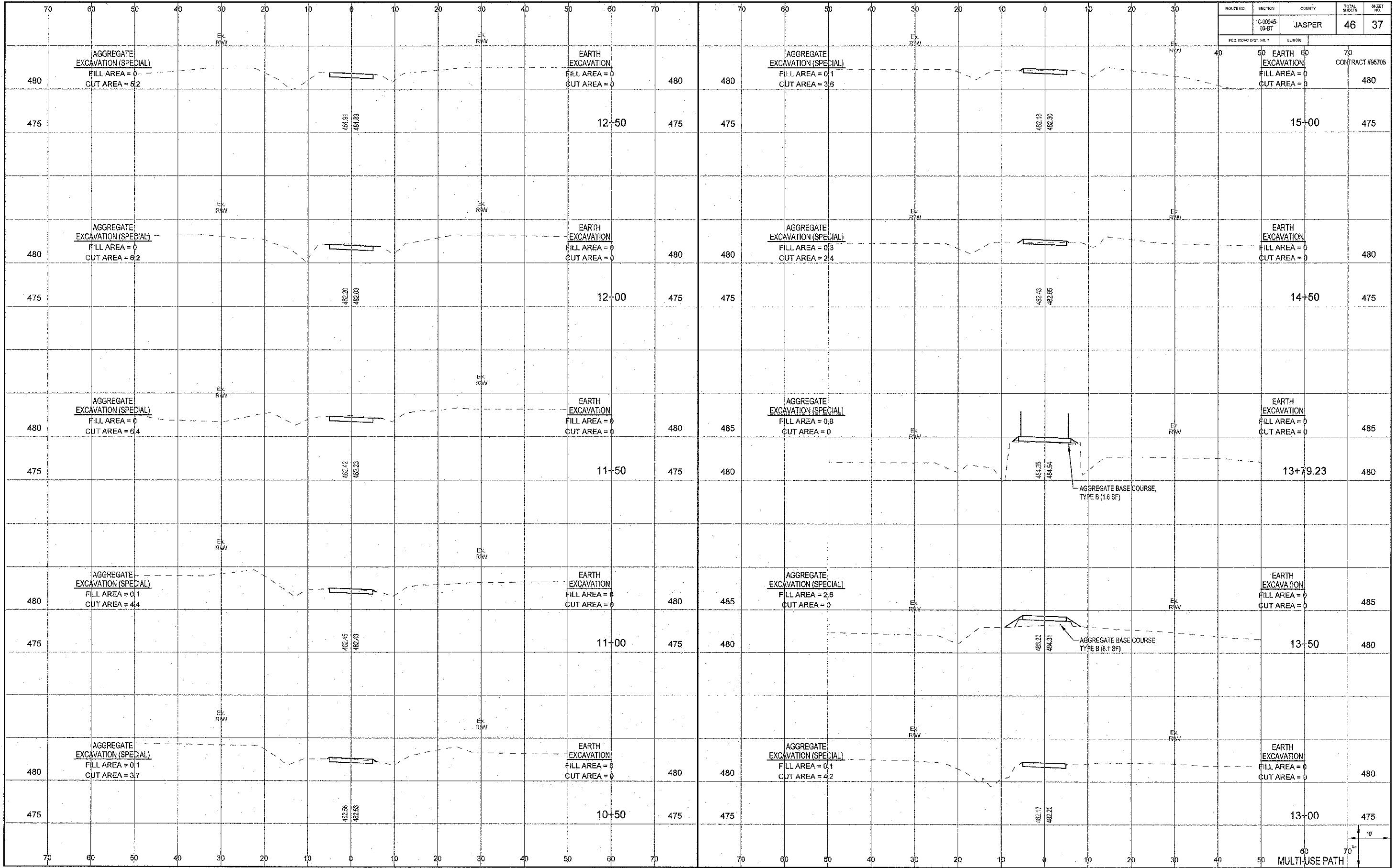
485 480
483.34 483.40
5+50

485 480
484.81 484.83
8+00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0.1
CUT AREA = 6.3
EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 0
AGGREGATE BASE COURSE, TYPE B (4.0 SF)
AGGREGATE BASE COURSE, TYPE B (1 SF)
MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1C-0034S-00-BT		JASPER	46	37

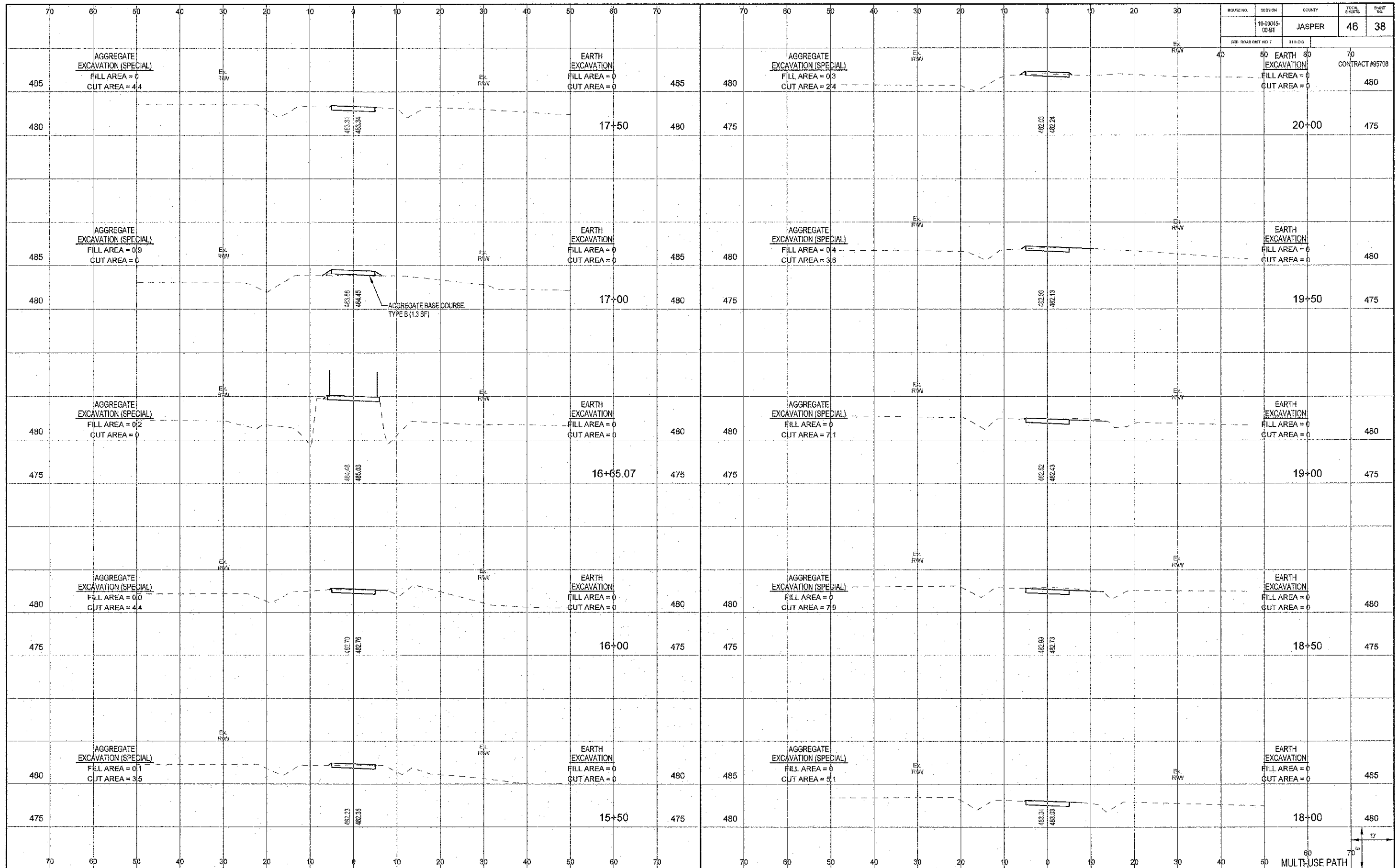
FED. ROAD DIST. NO. 7
ILLINOIS
CONTRACT #98708



MULTI-USE PATH

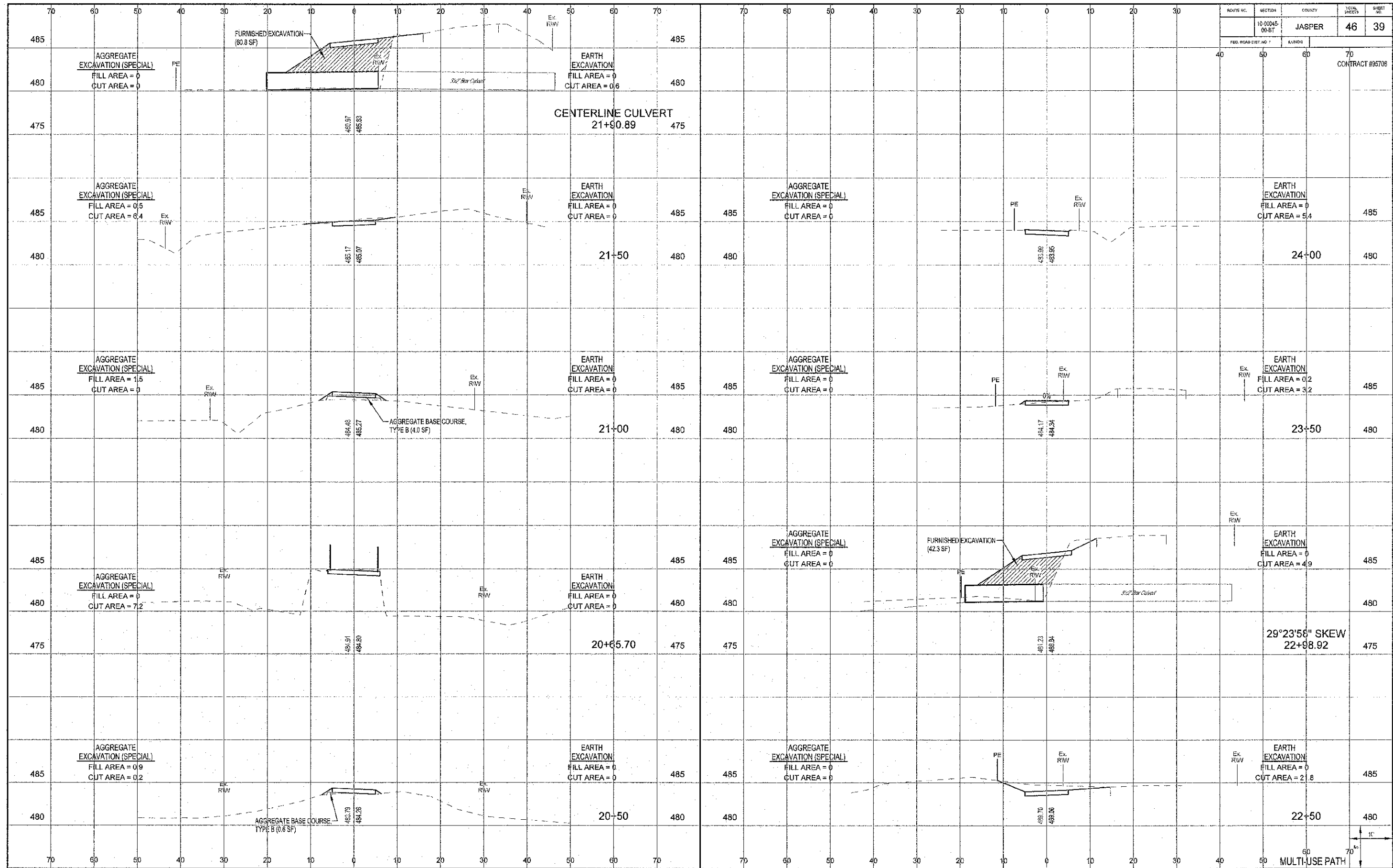
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-20045-00BT		JASPER	46	38

FED. ROAD DIST. NO. 7 I.I.R.O.S. CONTRACT #85709



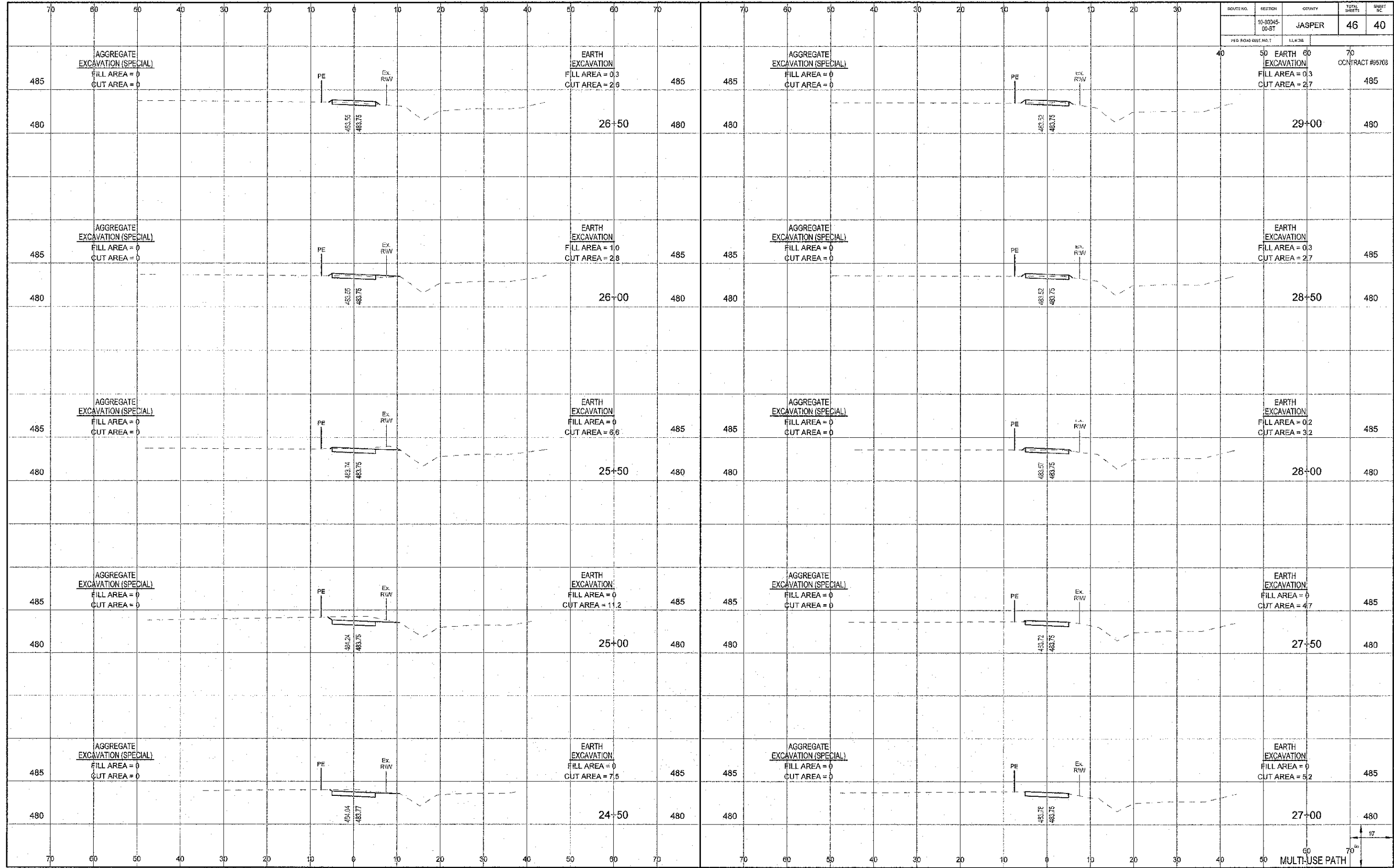
MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00045-00-BT		JASPER	46	39
FED. ROAD DIST. NO. 7				
				CONTRACT #98708



60
70
MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00345-00-BT		JASPER	46	40
FED ROAD DIST. NO. 1		ILLINOIS		



40 50 60 70
EARTH EXCAVATION
FILL AREA = 0.3
CUT AREA = 2.7
CONTRACT #85703

485 485
480 480
29+00 480

485 485
480 480
28+50 480

485 485
480 480
28+00 480

485 485
480 480
27+50 480

485 485
480 480
27+00 480

485 485
480 480
26+50 480

485 485
480 480
26+00 480

485 485
480 480
25+50 480

485 485
480 480
25+00 480

485 485
480 480
24+50 480

485 485
480 480
24+50 480

485 485
480 480
24+50 480

485 485
480 480
24+50 480

485 485
480 480
24+50 480

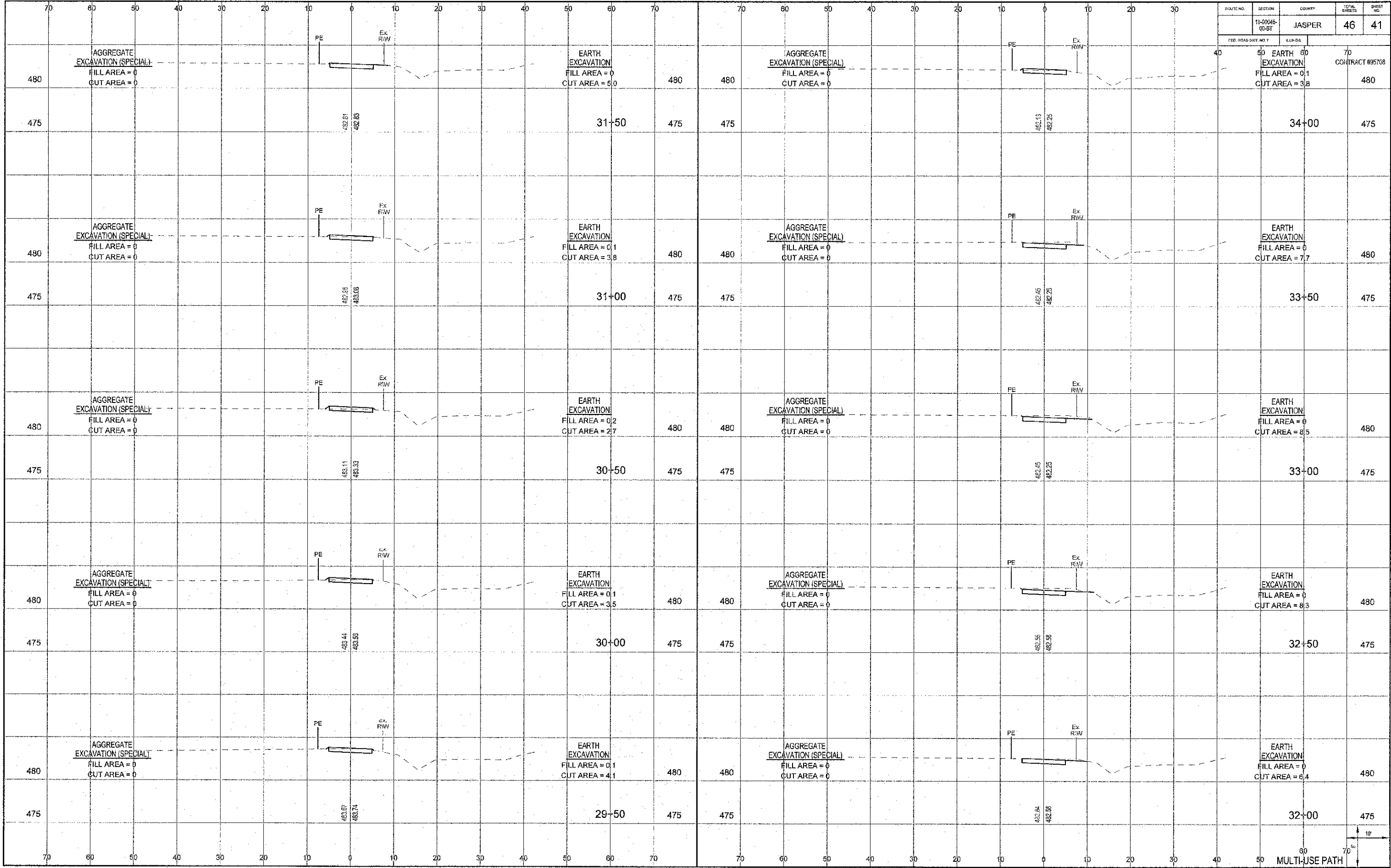
485 485
480 480
24+50 480

485 485
480 480
24+50 480

MULTI-USE PATH

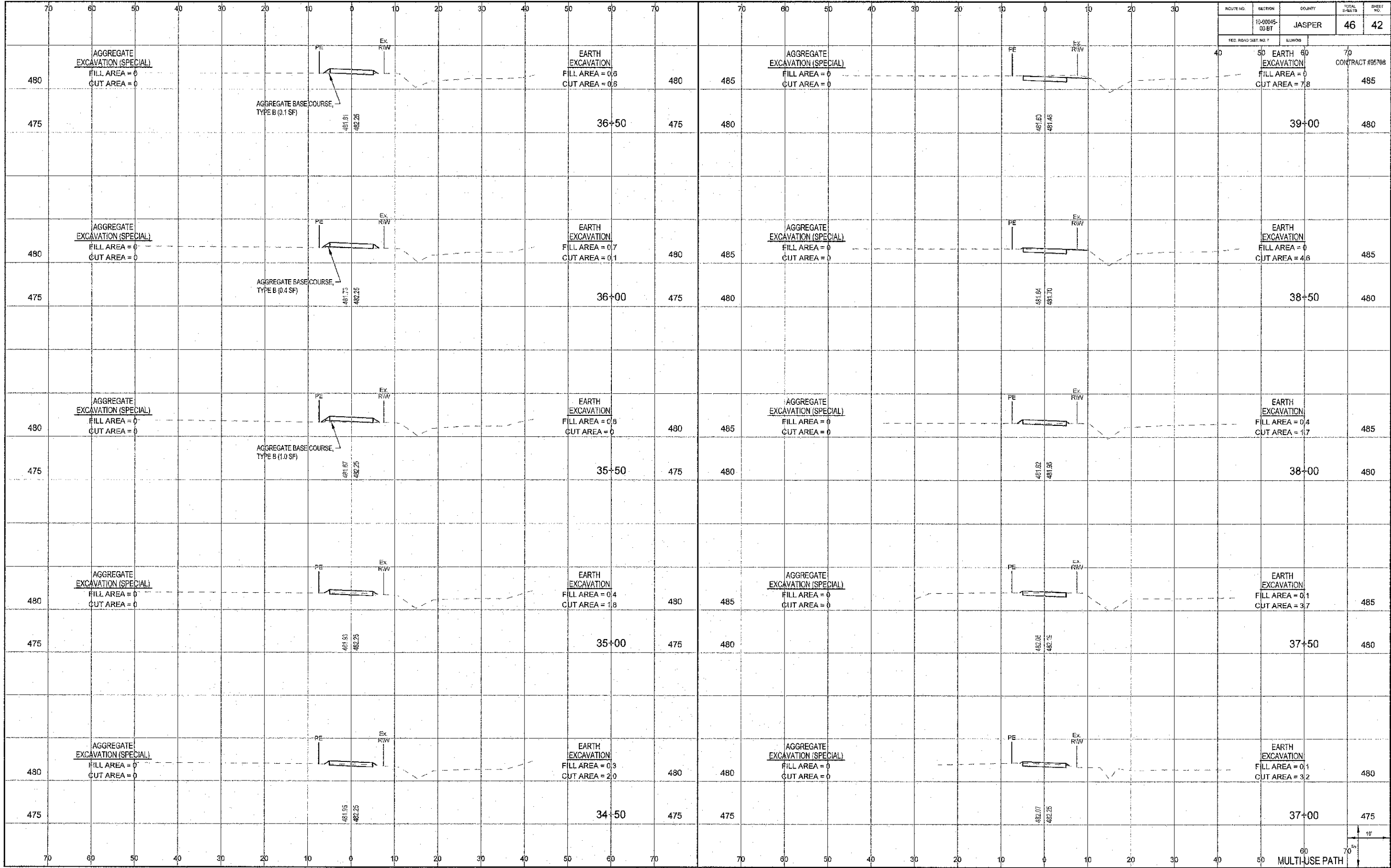
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-0045-00-BT		JASPER	46	41

FED. ROAD DIST. NO. 7 ILL. 0-6
 CONTRACT #95708



10'
 70'
 MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-0045-00 BT		JASPER	46	42
FED. ROAD DIST. NO. 7	ILLINOIS			



40 50 60 70
 EARTH EXCAVATION
 FILL AREA = 0
 CUT AREA = 7.8
 CONTRACT #95708

480 485
 36+50 475 480
 39+00 480

480 485
 36+00 475 480
 38+50 480

480 485
 35+50 475 480
 38+00 480

480 485
 35+00 475 480
 37+50 480

480 485
 34+50 475 480
 37+00 475

480 485
 37+50 480

480 485
 37+00 475

480 485
 37+50 480

480 485
 37+00 475

480 485
 37+50 480

480 485
 37+00 475

480 485
 37+50 480

480 485
 37+00 475

480 485
 37+50 480

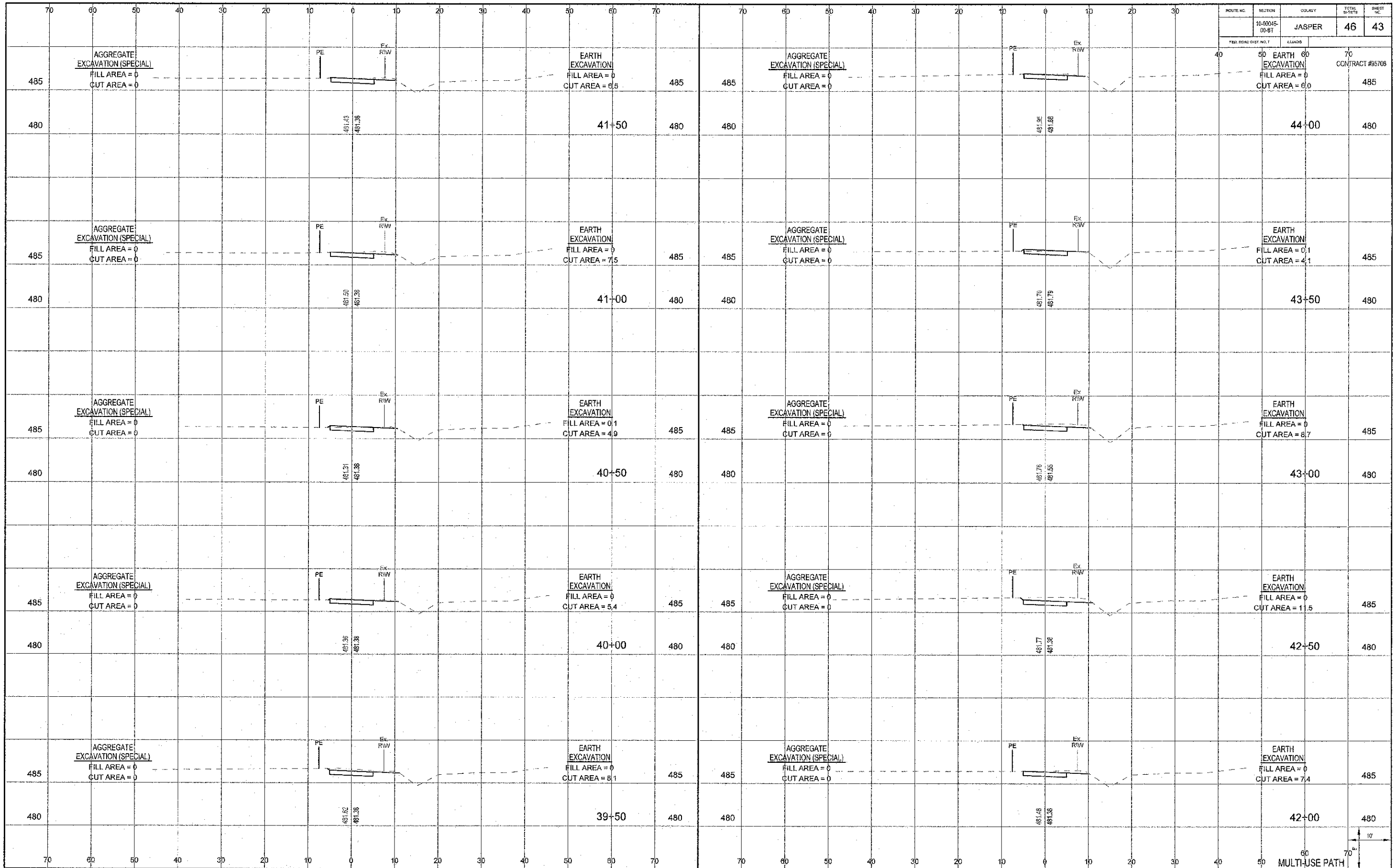
480 485
 37+00 475

480 485
 37+50 480

480 485
 37+00 475



MULTI-USE PATH



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00045-00-8T		JASPER	46	43

CONTRACT #95708

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 6.5

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 6.0

41+50

44+00

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 7.5

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0.1
CUT AREA = 4.1

41+00

43+50

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0.1
CUT AREA = 4.9

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 8.7

40+50

43+00

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 5.4

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 11.5

40+00

42+50

AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 8.1

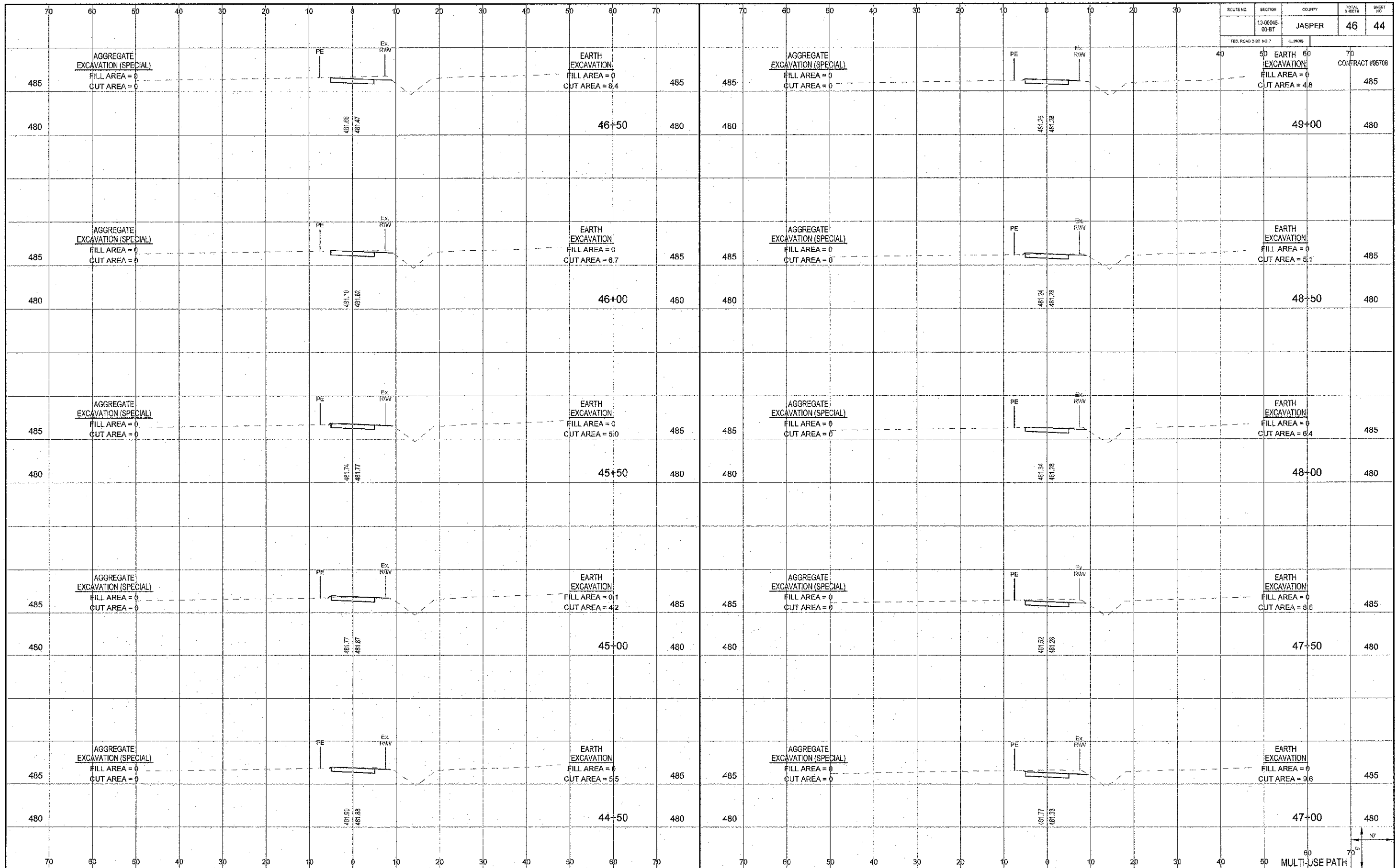
AGGREGATE EXCAVATION (SPECIAL)
FILL AREA = 0
CUT AREA = 0

EARTH EXCAVATION
FILL AREA = 0
CUT AREA = 7.4

39+50

42+00

MULTI-USE PATH



ROUTE NO.	SECTION	COUNTY	TOTAL S. FEET	SHEET NO.
13-00945-00-BT		JASPER	46	44
FED. ROAD DIST. NO. 7		S. INCHES		

40 50 60 70
 EARTH EXCAVATION
 FILL AREA = 0
 CUT AREA = 4.8
 CONTRACT #95708

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

EARTH EXCAVATION
 FILL AREA = 0
 CUT AREA = 8.4

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

49+00

46+50

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

EARTH EXCAVATION
 FILL AREA = 0
 CUT AREA = 6.7

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

48+50

46+00

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

EARTH EXCAVATION
 FILL AREA = 0
 CUT AREA = 5.0

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

48+00

45+50

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

EARTH EXCAVATION
 FILL AREA = 0.1
 CUT AREA = 4.2

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

47+50

45+00

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

EARTH EXCAVATION
 FILL AREA = 0
 CUT AREA = 5.5

AGGREGATE EXCAVATION (SPECIAL)
 FILL AREA = 0
 CUT AREA = 0

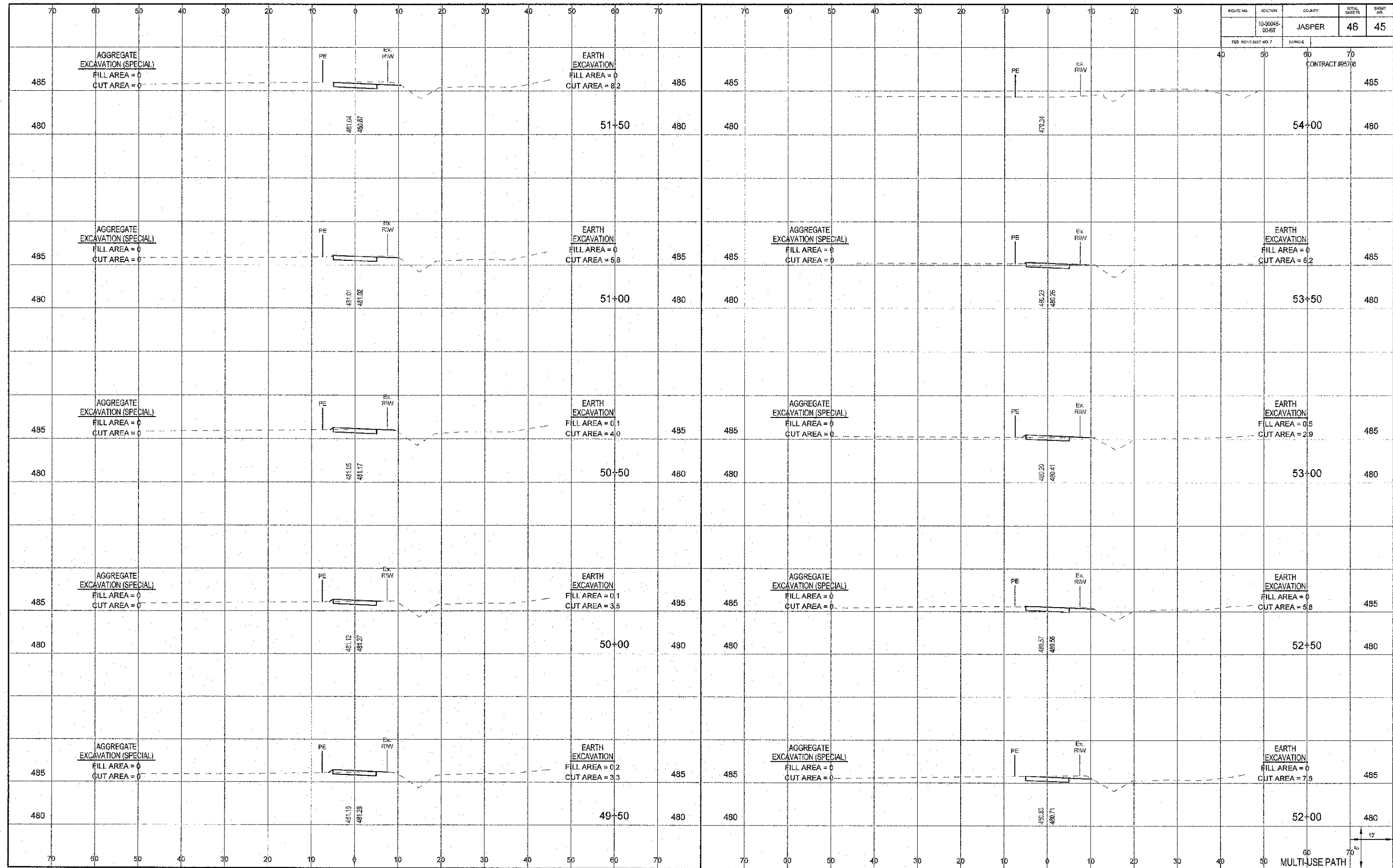
47+00

44+50

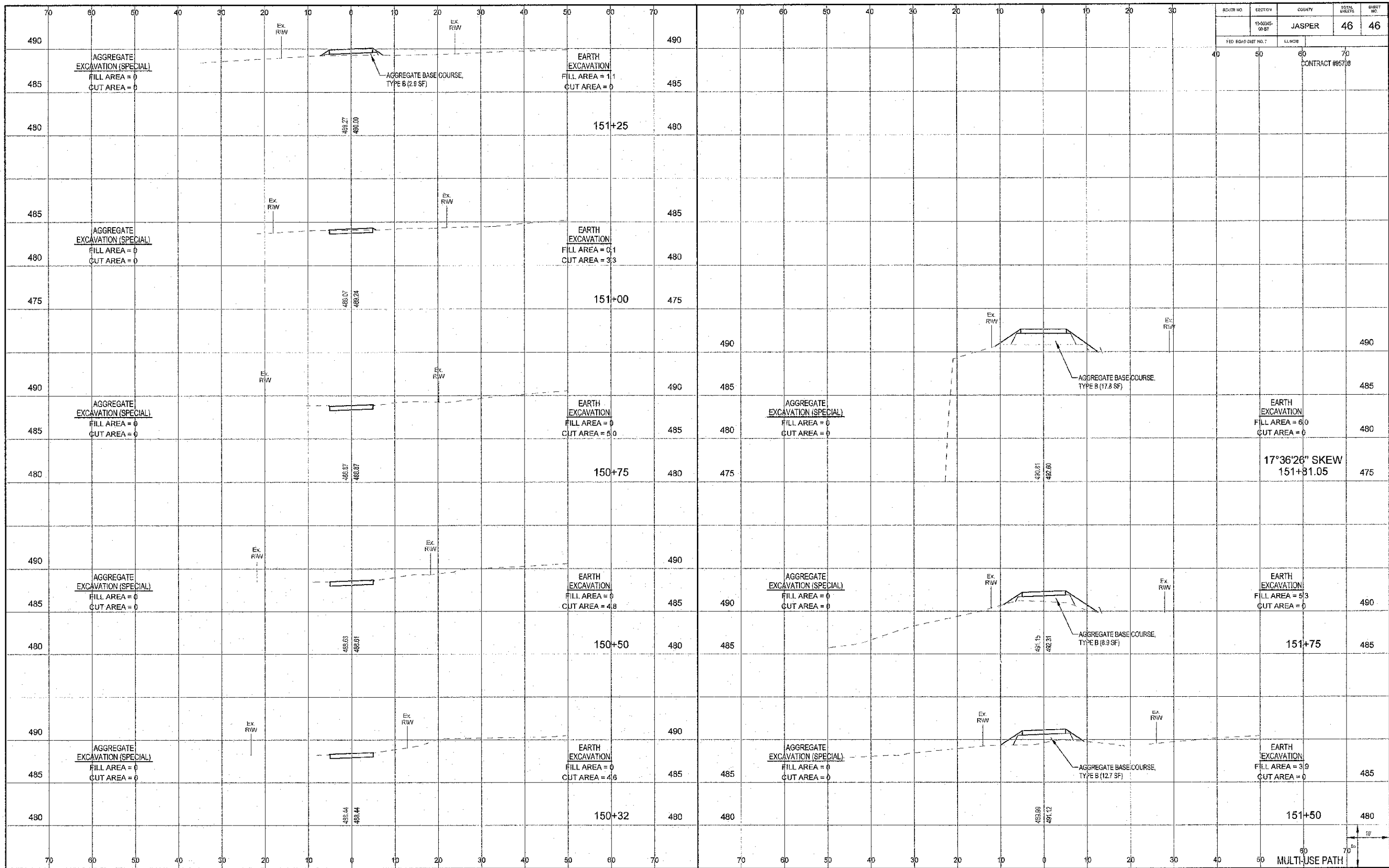
60 70
 MULTI-USE PATH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00045-00-BT	JASPER		46	45
FED. ROAD DIST. NO. 7		ILLINOIS		

CONTRACT #95708



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
15-0045-00-87		JASPER	46	46
FED ROAD DIST NO. 7	ILLINOIS	CONTRACT #65708		



60 70
MULTI-USE PATH