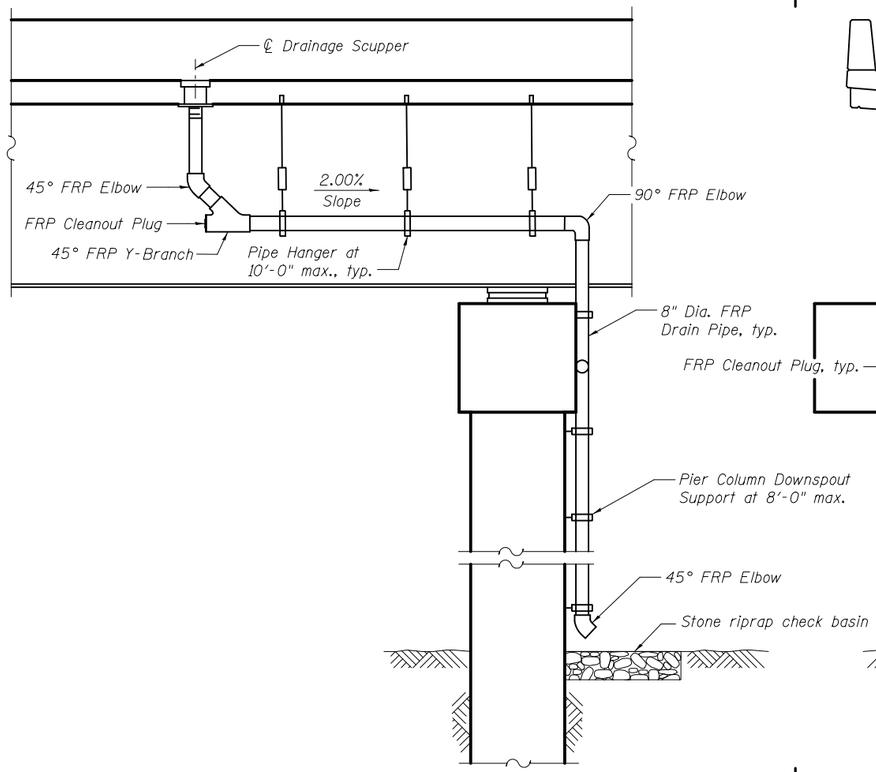
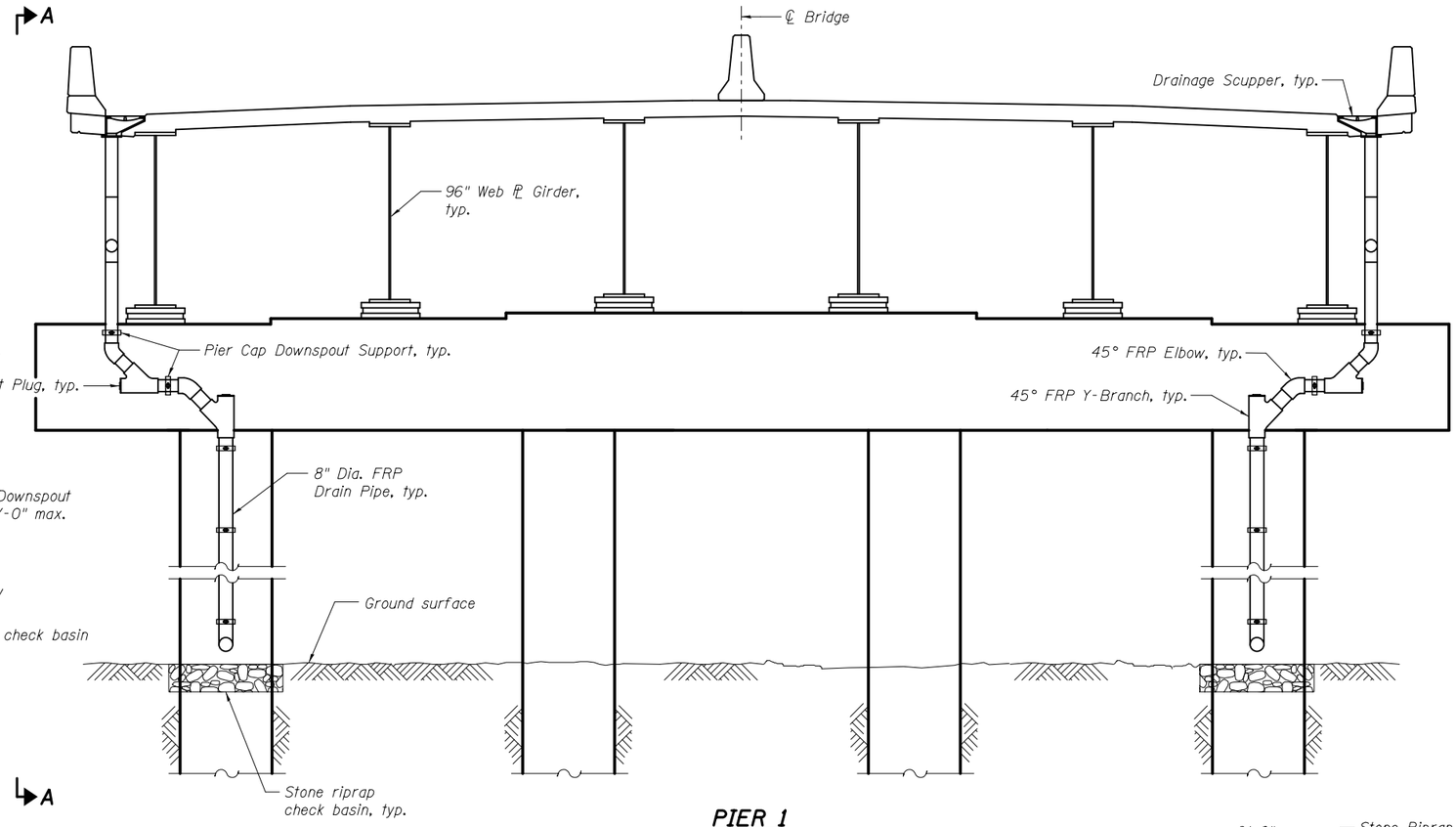
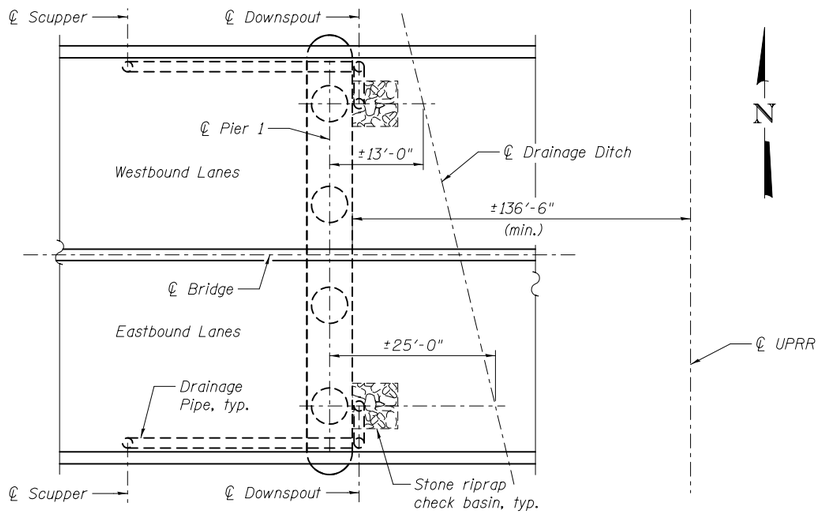


VIEW A-A



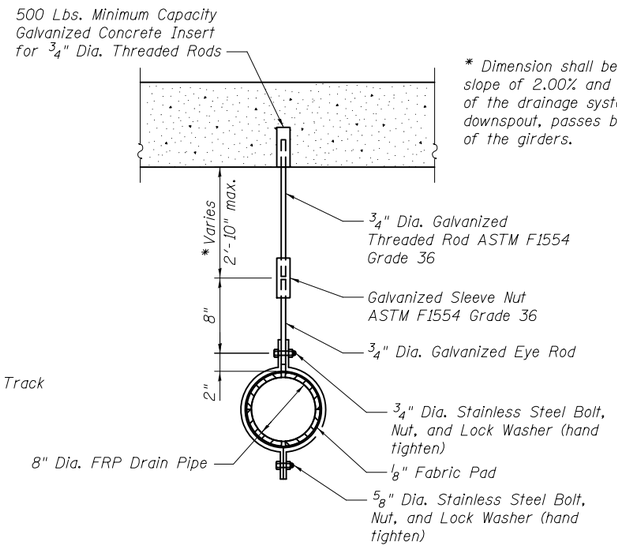
PIER 1

(Looking West)

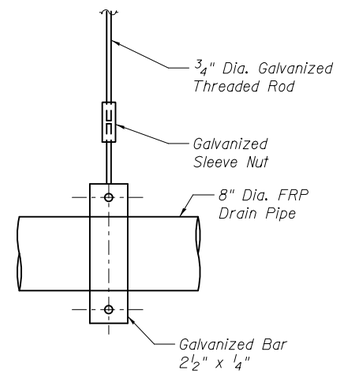


DRAINAGE PLAN AT PIER 1

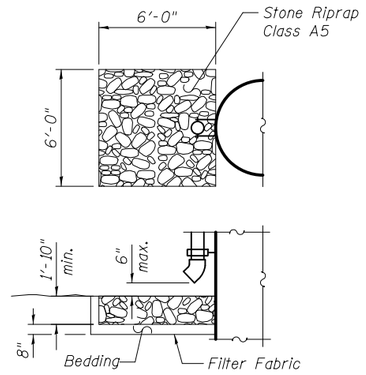
Note: Surface drainage flows east towards drainage ditch.



PIPE HANGER DETAIL



ELEVATION



STONE RIPRAP CHECK BASIN DETAIL

Notes:

Drainage pipe and fittings shall be Fiberglass Reinforced Pipe (FRP).

For location of drainage scupper stations, see table on sheet S1.

For drainage scupper details, see sheet S27.

For pier cap downspout support details, see sheet S58.

For pier column downspout support details, see sheet S59.

The proposed structure will not change the quantity or characteristics of the flow in the railroad right-of-way.

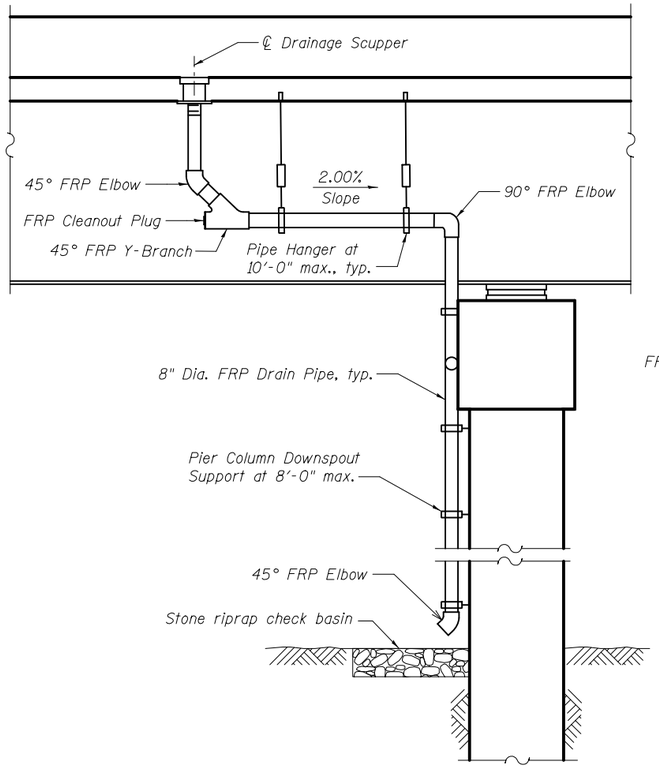
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - LNB	REVISED
	CHECKED - MJP	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 3/12/2018	CHECKED - LNB	REVISED

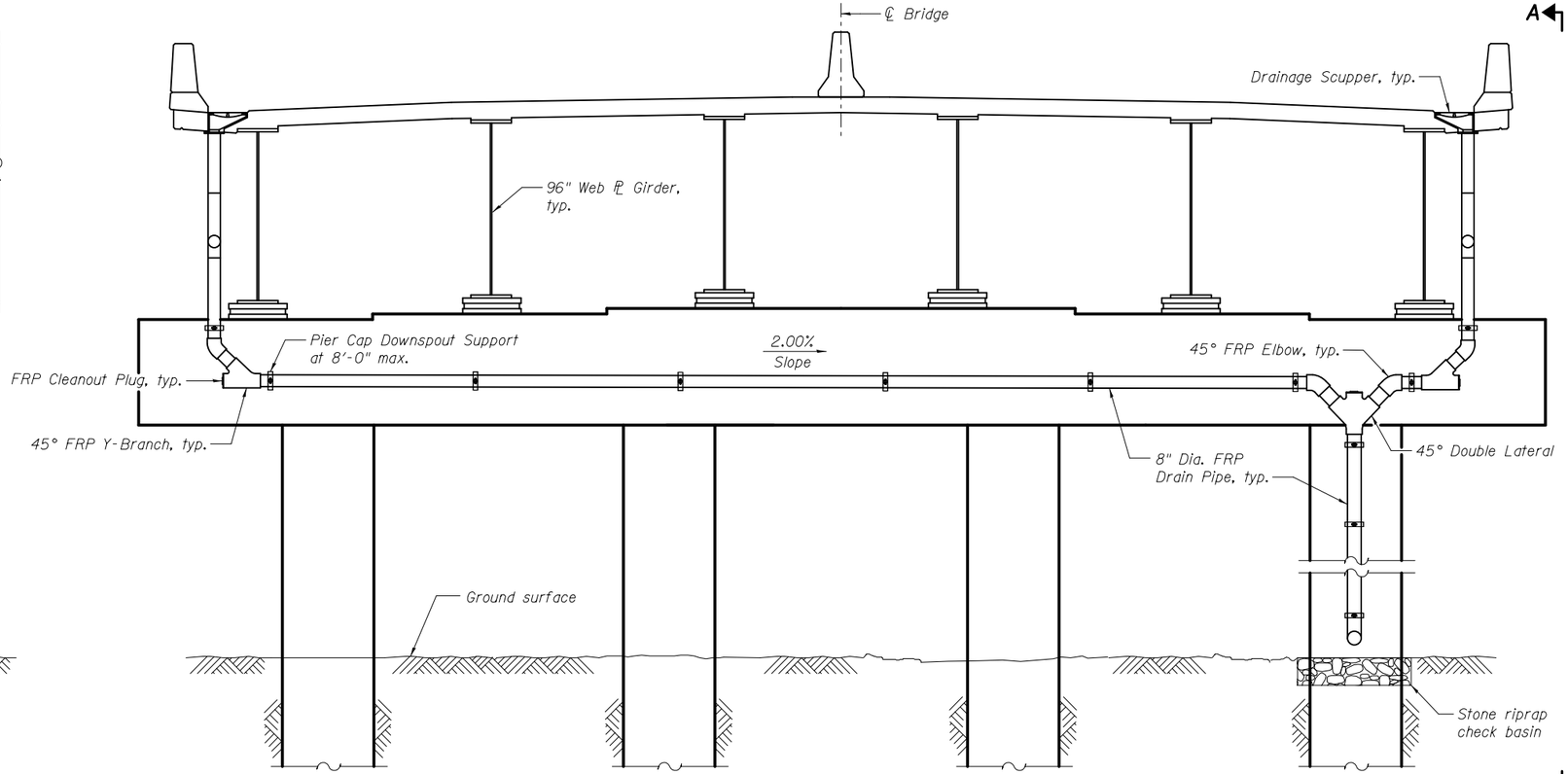
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

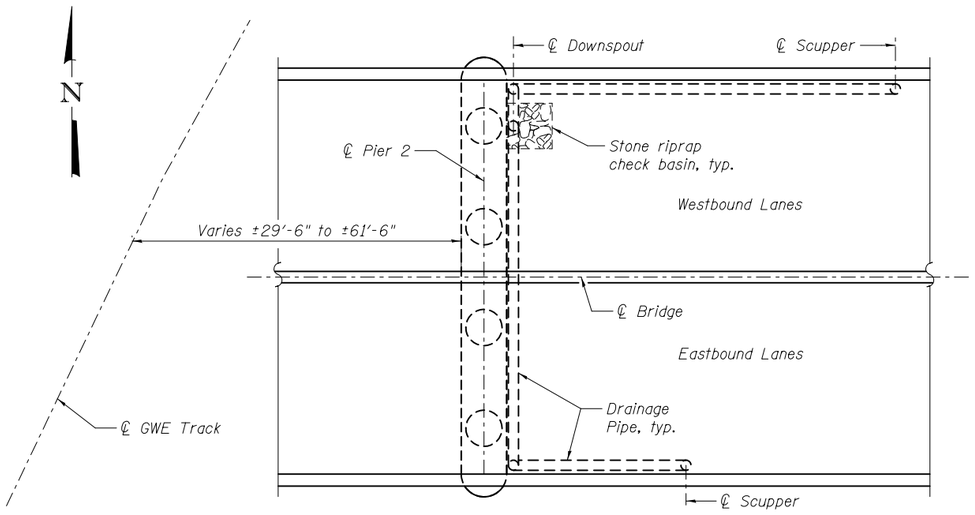
CLOSED DRAINAGE SYSTEM – 2
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. S57 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	201
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



VIEW A-A



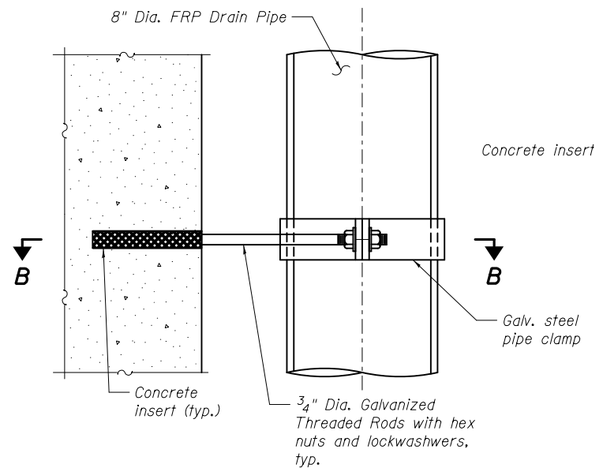


DRAINAGE PLAN AT PIER 2

Note: Surface drainage flows east towards Missouri Avenue.

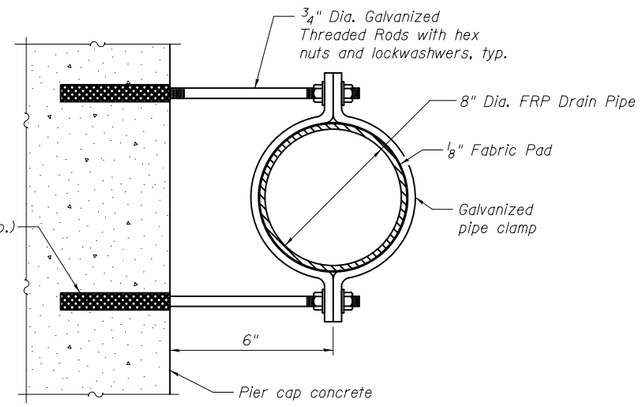
PIER 2

(Looking West)



DOWNSPOUT SUPPORT AT PIER CAP

Note: Not to be used for pier columns.



SECTION B-B

Notes:

Drainage pipe and fittings shall be Fiberglass Reinforced Pipe (FRP).

For location of drainage scupper stations, see table on sheet S1.

For drainage scupper details, see sheet S27.

For pipe hanger supports, see sheet S57.

For stone riprap check basin detail, see sheet S57.

For downspout support at pier column, see sheet S59.

The proposed structure will not change the quantity or characteristics of the flow in the railroad right-of-way.

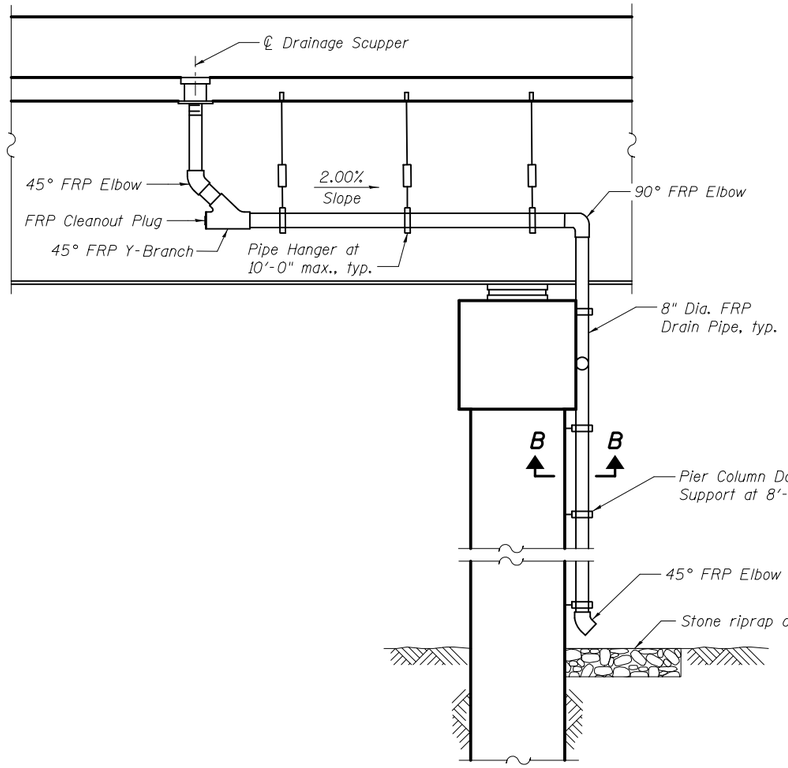
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - LNB	REVISED
	CHECKED - MJP	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 3/12/2018	CHECKED - LNB	REVISED

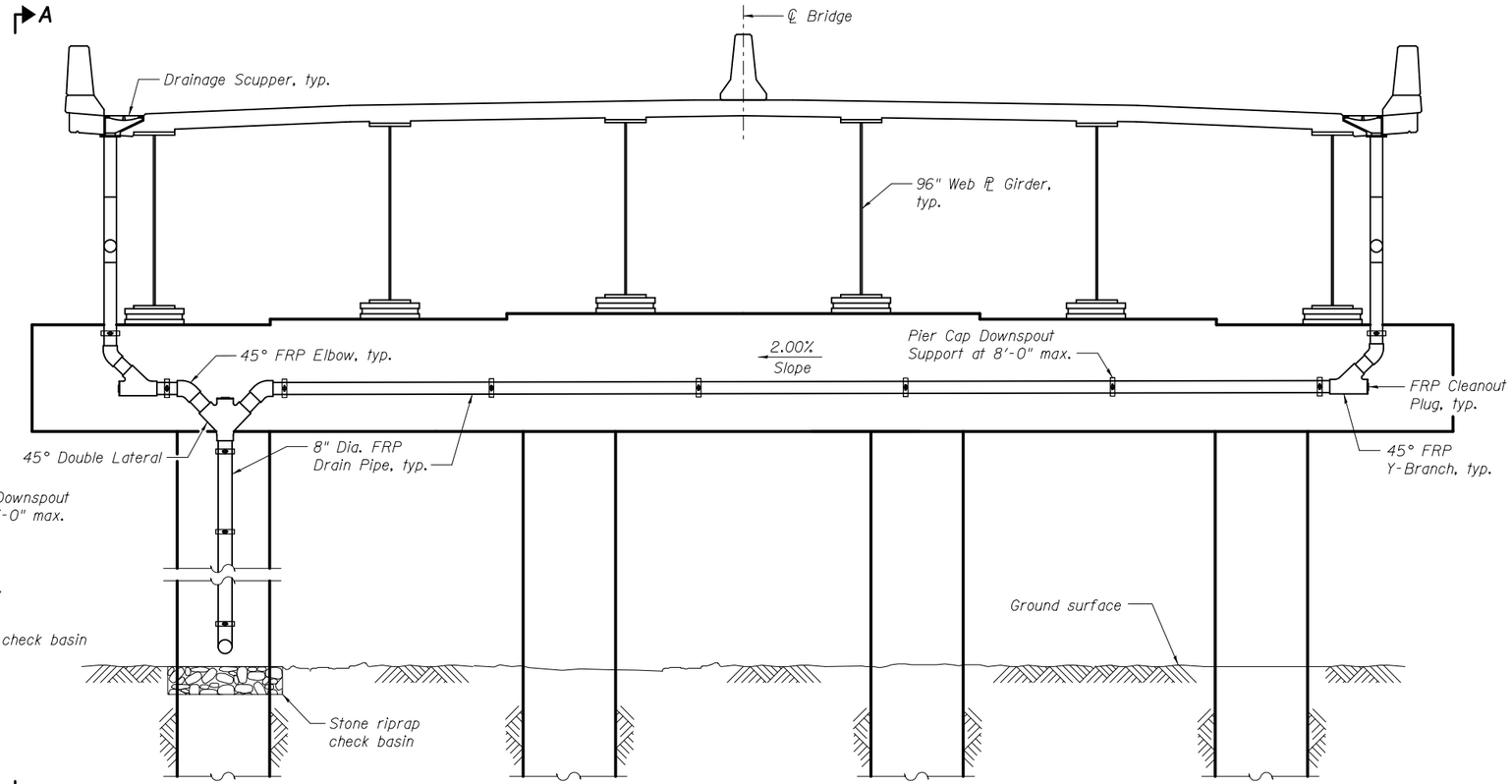
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CLOSED DRAINAGE SYSTEM – 3
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. S58 OF S77 SHEETS

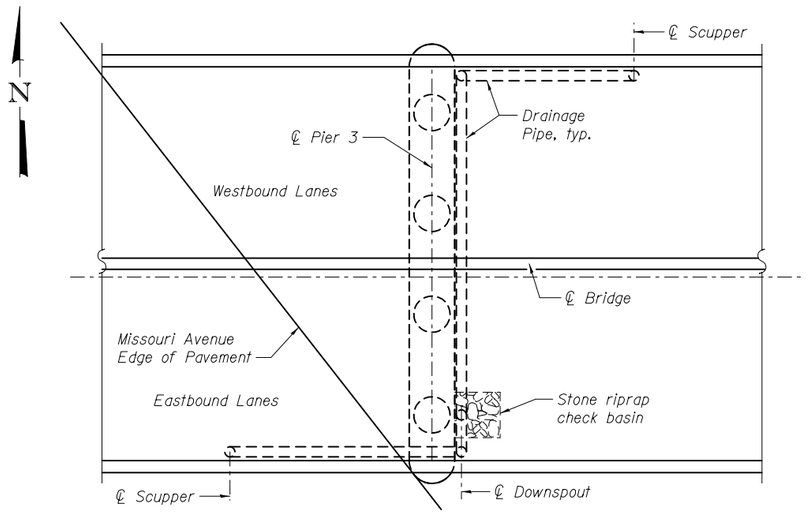
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	202
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



VIEW A-A

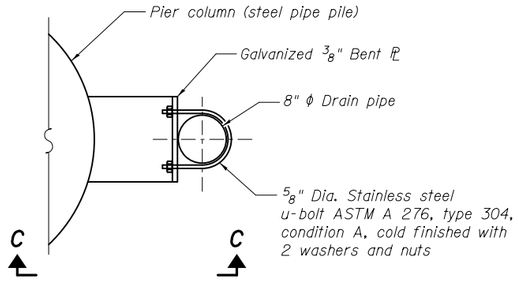


PIER 3
(Looking West)



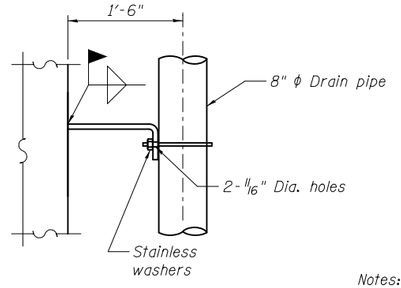
DRAINAGE PLAN AT PIER 3

Note: Surface drainage flows east towards I-55/I-64.



SECTION B-B

Cut ℄ to fit column curvature



VIEW C-C

DOWNSPOUT SUPPORT AT PIER COLUMN

Notes:
Drainage pipe and fittings shall be Fiberglass Reinforced Pipe (FRP).
For location of drainage scupper stations, see table on sheet S1.
For drainage scupper details, see sheet S27.
For pipe hanger supports, see sheet S57.
For stone riprap check basin detail, see sheet S57.
For downspout support at pier cap, see sheet S58.

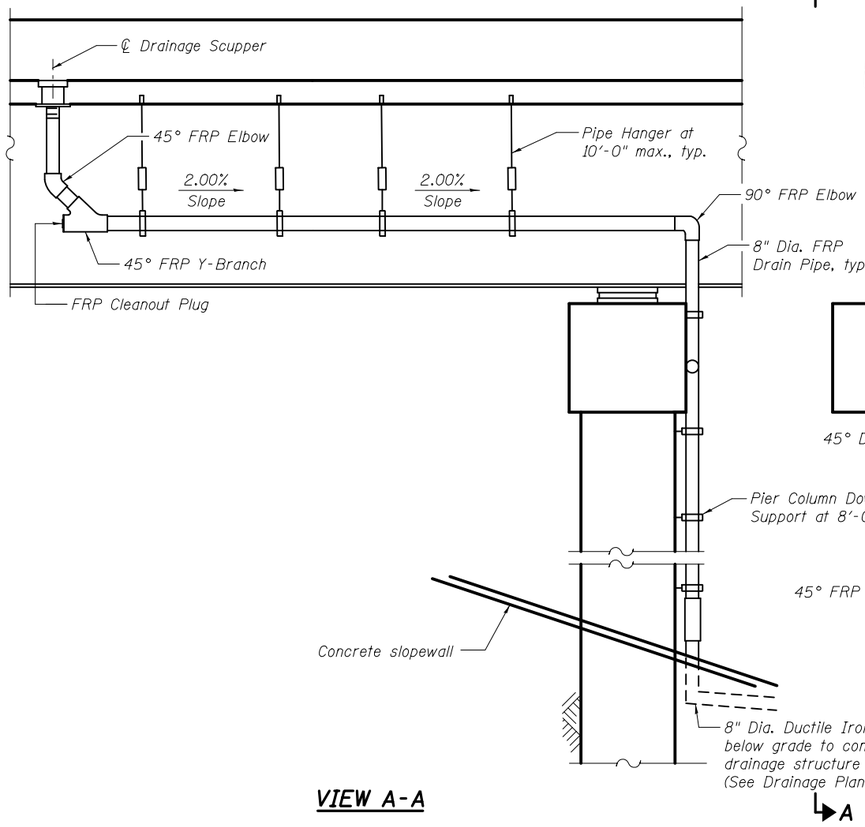
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - LNB	REVISED
	CHECKED - MJP	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 3/12/2018	CHECKED - LNB	REVISED

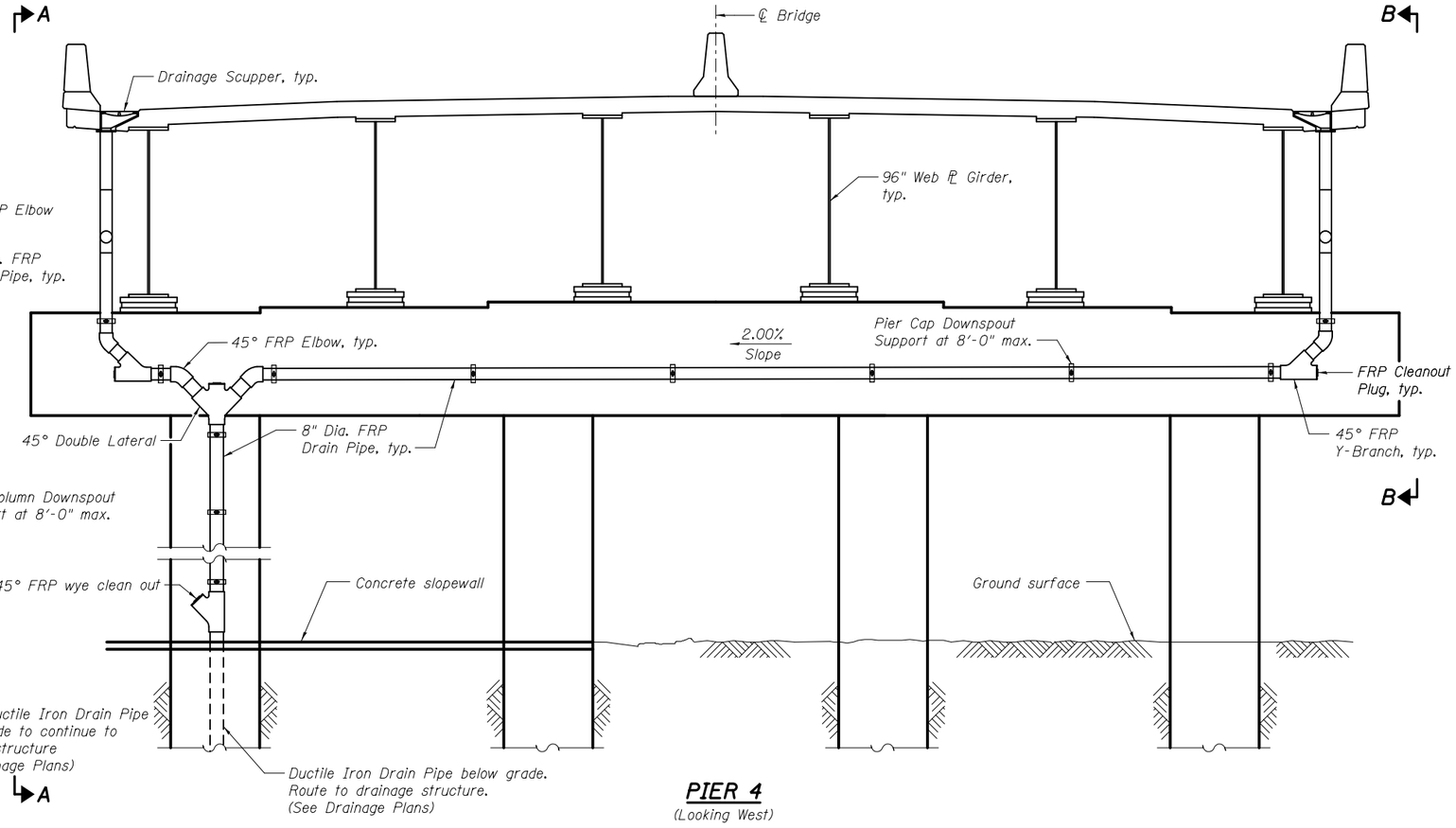
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CLOSED DRAINAGE SYSTEM – 4
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. 59 OF 77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	203
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

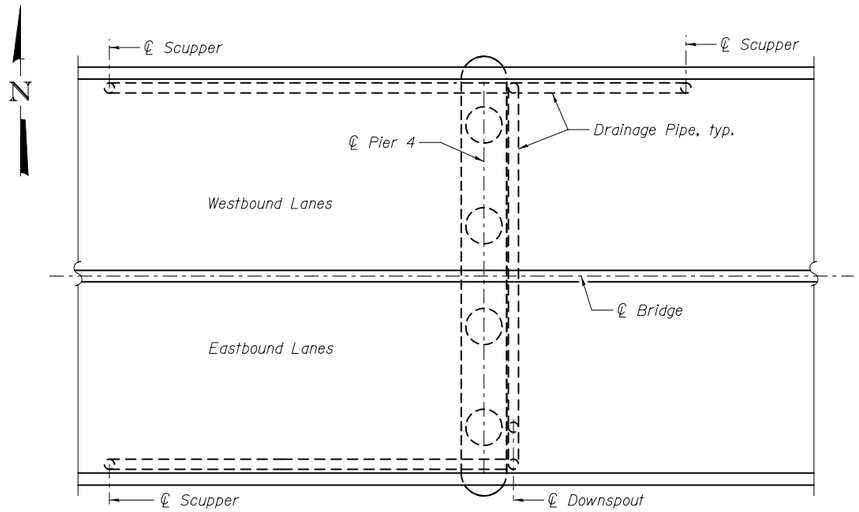


VIEW A-A



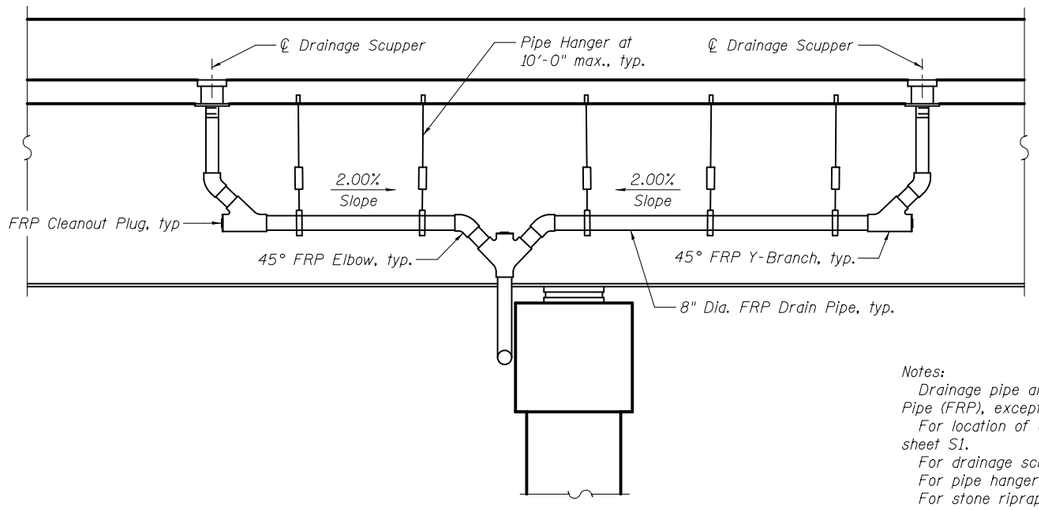
PIER 4

(Looking West)



DRAINAGE PLAN AT PIER 4

Note: Surface drainage flows east to toe of slopewall.



VIEW B-B

Notes:

Drainage pipe and fittings shall be Fiberglass Reinforced Pipe (FRP), except as noted.

For location of drainage scupper stations, see table on sheet S1.

For drainage scupper details, see sheet S27.

For pipe hanger supports, see sheet S57.

For stone riprap check basin detail, see sheet S57.

For downspout support at pier cap, see sheet S58.

For downspout support at pier column, see sheet S59.

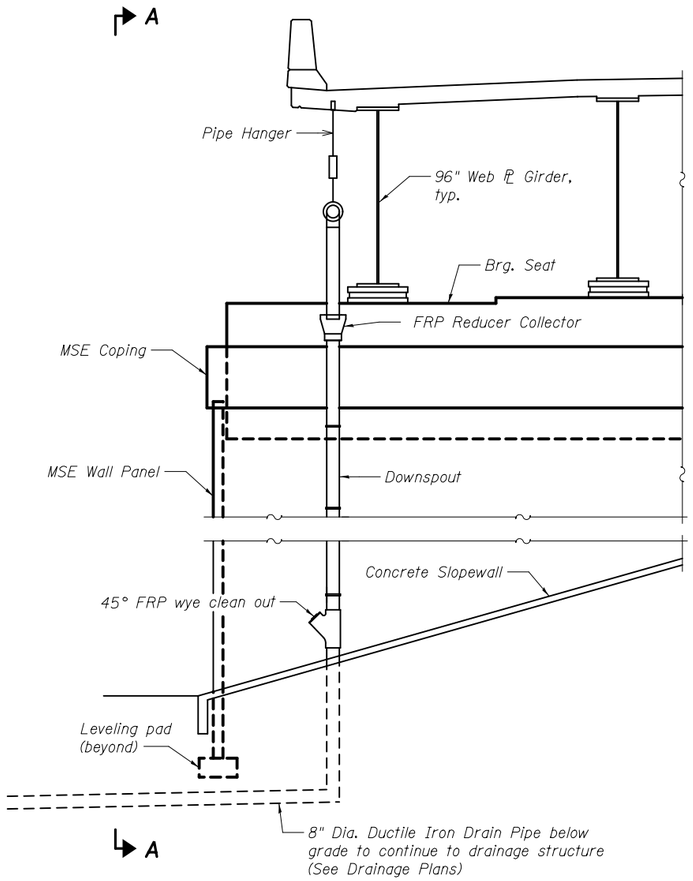
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - LNB	REVISED
	CHECKED - MJP	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 3/12/2018	CHECKED - LNB	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

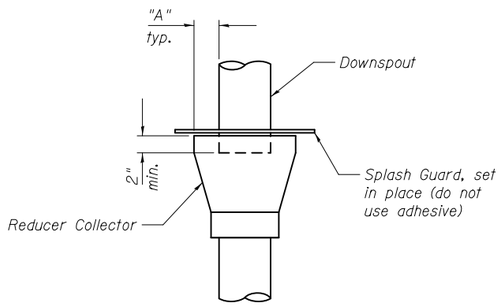
CLOSED DRAINAGE SYSTEM – 5
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. 560 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	204
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



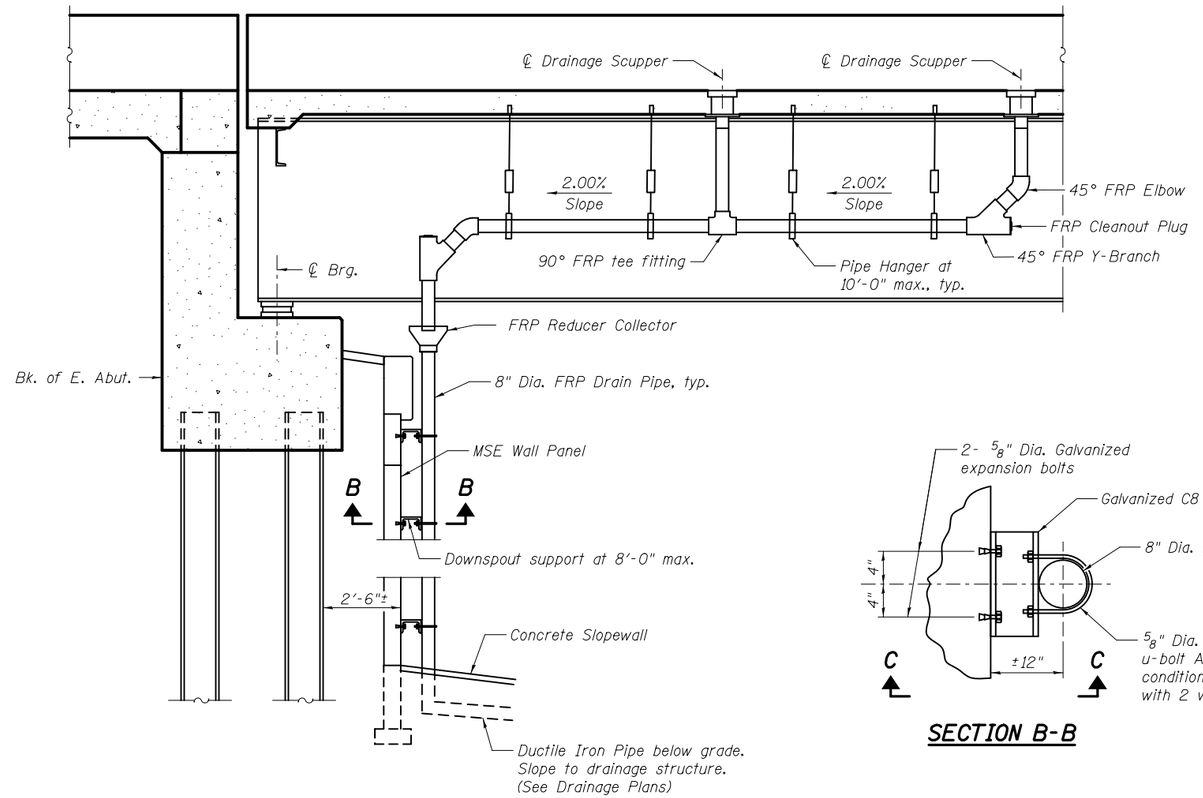
PARTIAL ELEVATION AT EAST ABUTMENT

(Looking East)

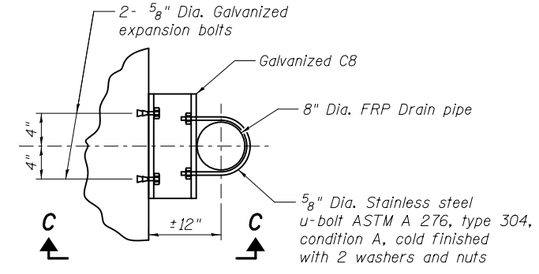


FRP REDUCER COLLECTOR DETAIL

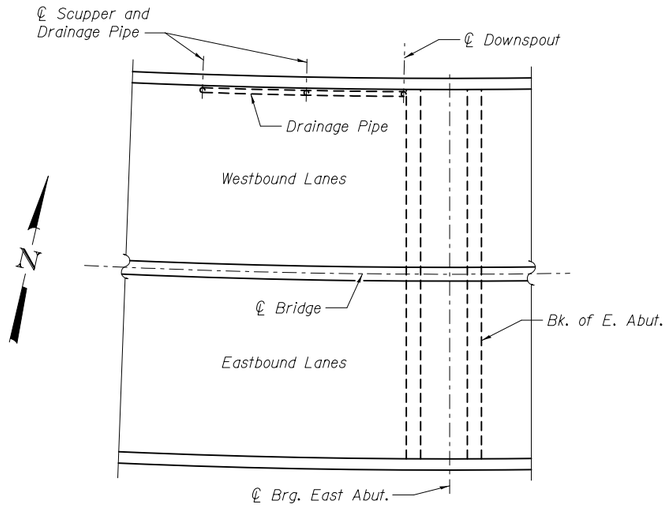
Dim. "A" = 6" min. in longitudinal direction of deck



VIEW A-A

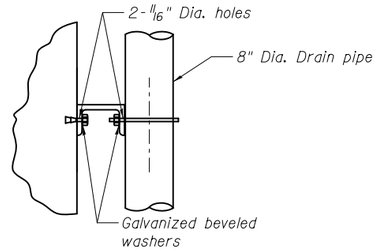


SECTION B-B



DRAINAGE PLAN NEAR EAST ABUTMENT

Note: Surface drainage flows west to toe of slopewall.



VIEW C-C

Notes:

Drainage pipe and fittings shall be Fiberglass Reinforced Pipe (FRP), except as noted.

For location of drainage scupper stations, see table on sheet S1.

For drainage scupper details, see sheet S27.

For pipe hanger supports, see sheet S57.

MODJESKI and MASTERS
Experience great bridges.

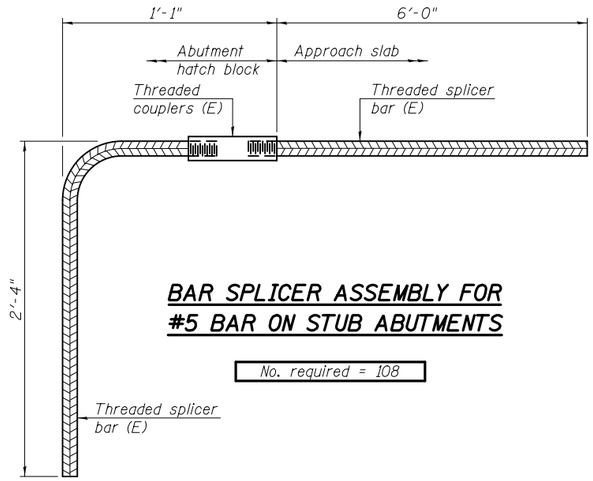
USER NAME =	DESIGNED - PRC	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CLOSED DRAINAGE SYSTEM - 6
S.N. 082-0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I-55SB/64WB

SHEET NO. S61 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	205
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 108

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY
S.N. 082-0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I-55SB/64WB
SHEET NO. 562 OF 577 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	206
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/9-6/15/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station
BORING NO. BB-301
Station 61+50
Offset 80.0 ft LT
Ground Surface Elev. 417.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 395.5 ft ▼
Upon Completion N/A ft
After 16 Hrs. 393.0 ft ▽

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
FILL: Dark brown and brown, silty clay, with cinders and brick, A-4		2 4 6	2.8 P	18
		10 18 14	3.3 P	17
FILL: Crushed Rock and Brick, A-1	412.3		>4.5 P	13
FILL: Dark brown and brown, silty clay, trace cinders and brick, A-4	-5			
	410.8	2 1 2	0.3 B/20	33
CLAY: Brown and gray, trace iron stains, A-7				
	-10	ST	1.1 S/2.8	36
		WOH 2 2	1.2 S/15	32
	-15	1 2 4	1.6 S/15	34
	401.5			
LOAM: Brown, A-4		1 2 5	1.0 P	30
	400.0		N/C	
SAND: Brown, A-3	399.0			
LOAM: Brown, A-4	398.0	1 5	0.5 B/20	31
SAND: Brown, A-3	-20	9	N/C	
SAND: Brown, A-3 *(continued)*				
	▼	4 9 11	N/C	
	394.0			
SILTY SAND: Brown, A-3 Begin Mud Rotary at 23 feet.	▽	4 5	N/C	
	-25	5		
	391.5			
CLAY LOAM: Gray, A-5		5 5 6	--	
	389.0			
SILTY LOAM: Gray, A-4		3 2	N/C	
	-30	5		
	385.0			
SAND: Brown, A-3				
	-35	7 8 10	N/C	
	380.0			
SANDY LOAM: Brown, A-4				
	-40	8 7 7	N/C	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/9-6/15/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station
BORING NO. BB-301
Station 61+50
Offset 80.0 ft LT
Ground Surface Elev. 417.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 395.5 ft ▼
Upon Completion N/A ft
After 16 Hrs. 393.0 ft ▽

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY LOAM: Brown, A-4 *(continued)*				
With clay nodules and gravel	-45	5 5 10	N/C	
	370.0			
SAND: Brown, A-3				
STOP: 6/9/2016 at 3:25pm START: 6/10/2016 at 7:00am	-50	7 8 10	N/C	
Becomes brownish-gray	-55	9 17 21	N/C	
	-60	17 19 24	N/C	
SAND: Brown, A-3 *(continued)*				
Becomes gray, fine to medium sand	-65	10 13 10	N/C	
Trace organics, with gravel	-70	8 15 9	N/C	
	345.5			
SAND: Gray, A-3 Rough Drilling ~ 72.0'				
	342.8			
SANDY CLAY: Gray, A-6	342.5	7 10	N/C	
SAND: Gray, A-3	-75	11		
	-80	10 11 11	N/C	
With medium to large gravel				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 1
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. 564 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	207
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/9-6/15/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station
BORING NO. BB-301
Station 61+50
Offset 80.0 ft LT
Ground Surface Elev. 417.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 395.5 ft ▼
Upon Completion N/A ft
After 16 Hrs. 393.0 ft ▽

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Gray, A-3 *(continued)*				SAND w/ GRAVEL: Gray, with fractured rock, A-1	27		
	5 6 7	N/C			36 29 32	N/C	
-85 330.0 SAND w/ GRAVEL: Gray, A-1				-105 308.0			
	50/6" 23 13	N/C		GRAVEL w/ SAND: Gray, trace weathered sandstone, A-1	50/5"	--	
-90 325.0 SAND: Gray, A-3 STOP: 6/10/2016 at 2:15pm START: 6/13/2016 at 9:45am				-110			
	22 31 36	N/C			41 50/6" 50/6"	N/C	
-95 Set Casing				-115			
	23 25	N/C		298.0 Borehole continued with rock coring.			
317.0 -100				-120			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 6/9-6/15/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair CORING METHOD

STRUCT. NO. 082-6003(E), 082-0374(P)
Station
BORING NO. BB-301
Station 61+50
Offset 80.0 ft LT
Ground Surface Elev. 417.0 ft

CORING BARREL TYPE & SIZE NX Wireline
Core Diameter 2 in
Top of Rock Elev. 296.50 ft
Begin Core Elev. 296.14 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
LIMESTONE: Light gray, moderately hard, very finely crystalline, thin to medium bedded, trace chert nodules, trace stylolites	1	100	94	3.07	
With chert nodules					
5.8" closed vertical fracture					
2.75" closed vertical fracture, no chert nodules					
3.25" closed vertical fracture					
Becomes argillaceous					
Trace chert nodules					
No chert nodules					
-125					634.3
2.5" closed vertical fracture	2	100	95	2.6	
Becomes medium to thickly bedded					
Trace chert nodules					
-130					1129.7
	3	100	88	3.3	
Becomes medium bedded					1214.6
Becomes thinly bedded					
-135					1096.3
280.14					
Boring terminated at 136.9 ft.					
Boring grouted to 136.86 ft.					
-140					

Color pictures of the cores Yes
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/9-6/16/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-302B
Station 64+01
Offset 34.0 ft LT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 394.9 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Offset 10.0ft East of BB-302A. No sampling performed to 33.5ft. Drilled with HSA down to 5.0ft, then switched to mud rotary and began advancing casing.				Concrete Rubble			
				395.0 ▼ FILL (driller noted)			
-5				-25			
-10 Began losing large quantities of mud into the hole.				-30			
				382.5			
-15				SAND: Gray, A-3 -35	7 15 15	N/C	
				STOP: 6/10/2016			
-20				Trace silt -40	10 8 12	N/C	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/9-6/16/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-302B
Station 64+01
Offset 34.0 ft LT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 394.9 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Gray, A-3 *(continued)*				SAND: Gray, A-3 *(continued)*			
-45	9 10 13	N/C		-65 Becomes gray	10 17 26	N/C	
367.5 CLAY: Gray, A-6							
367.0 SILTY SAND: Gray, A-3 -50	4 7 7	0.5 B/20 N/C		-70	14 16 20	N/C	
363.5 SAND: Gray, A-3				342.5 WOOD and ORGANICS			
-55	9 11 13	N/C		342.0 SAND: Gray, trace fine gravel, A-3 -75	6 12 17	N/C	
Becomes brown, trace fine gravel -60	6 5 6	N/C		336.3 -80	8 13 8	N/C 1.0	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/9-6/16/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-302B
Station 64+01
Offset 34.0 ft LT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 394.9 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Gray, A-7 / SAND: Gray, trace fine gravel, A-3 — 336.0		P		SAND: Gray, few fine gravels, A-3 *(continued)*			
				312.5			
-85	7 12 14	N/C		GRAVEL: Gray, A-1 — 311.5	42 50/6"	N/C	
No gravel				SAND: Gray, trace clay, A-3			
-90	8 10 10	N/C		-105	19 24 30	N/C	
324.5				305.0			
SAND w/ GRAVEL: Gray, A-1				GRAVEL w/ COBBLE: Gray, A-1			
322.5				302.5			
SAND: Gray, few fine gravels, A-3	14 17	N/C		SAND: Gray, trace silt, A-3	50/5"	--	
-95	14			-115			
-100	15 27 27	N/C		-120	21 50/3"	--	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/9-6/16/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-302B
Station 64+01
Offset 34.0 ft LT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 394.9 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Gray, trace silt, A-3 *(continued)*			
Limestone cuttings in mud wash from 119.3' to 122.8'			
293.2			
Borehole continued with rock coring.			
-125			
-130			
-135			
-140			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 6/9-6/16/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair CORING METHOD

STRUCT. NO. 082-6003(E), 082-0374(P) CORING BARREL TYPE & SIZE NX Wireline

Station

BORING NO. BB-302B Core Diameter 2 in

Station 64+01 Top of Rock Elev. 296.70 ft

Offset 34.0 ft LT Begin Core Elev. 293.20 ft

Ground Surface Elev. 416.0 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
293.20 LIMESTONE: Gray, moderately hard, very finely crystalline, thinly bedded, slightly weathered	1	95	66	5.5	
Becomes medium bedded					766.2
-125 Becomes thinly bedded, trace chert nodules, trace stylolites					
Becomes massively bedded	2	100	93	4.4	1128.7
With chert nodules					
Trace chert nodules					
Becomes thickly bedded					
-130 4.5" open vertical fracture					
No chert nodules	3	99	78	3.8	897.9
5" closed vertical fracture					908.5
-135 Trace chert nodules					
Becomes thin to medium bedded, trace stylolites	4	100	76	4.5	
No chert nodules					
278.00					853.7
Boring terminated at 122.8 ft.					
Boring grouted to 122.8 ft.					
-140					

Color pictures of the cores Yes

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/2-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)

Station

BORING NO. BB-303

Station 65+93

Offset 20.0 ft RT

Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft

Stream Bed Elev. N/A ft

Groundwater Elev.:

First Encounter 386.5 ft ▼

Upon Completion N/A ft

After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
FILL: Dark brown and black, clay, with limestone and crushed rock, A-6	3 8 11	N/C	15
	8 7 3	N/C	11
-5			
409.5	6 3 2	0.3 S/15	30
FILL: Gray, silty clay, A-6			
408.5 FILL: Gray, clay, with cinders, A-6	2 3 2	N/C	17
-10			
405.0	1 1 3	1.1 S/20	32
FILL: Brownish-gray, clay, A-7			
	3 6 6	0.8 P	27
-15			
400.5	3 4 6	N/C	
SANDY LOAM: Brown, A-4			
398.0	1 3 5	N/C	18
LOAM: Brown, A-4			
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
395.5 LOAM: Brown, A-4 *(continued)*			
SANDY LOAM: Brown, A-4	4 8 8	N/C	
393.0			
SAND: Brown, A-3	4 6 10	N/C	
391.5			
391.3 SILT: Brown, A-6			
-25 SAND: Brown, A-3			
	3 4 9	N/C 0.5 P	28
387.5			
SILTY CLAY LOAM: Gray, A-4	1 1 9	0.3 S/15 N/C	34
386.5 ▼			
-30 SAND: Orangish-brown, A-3			
Begin Mud Rotary at 30.5 feet.			
	5 4 4	N/C	
Becomes brown, trace silt			
-35			
	3 8 13	N/C	
Becomes gray with brown			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 5
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. S67 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	211
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/2-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-303
Station 65+93
Offset 20.0 ft RT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 386.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Orangish-brown, A-3 *(continued)*			
Trace fine gravel	4 12 17	N/C	
-45			
	14 18 19	N/C	
-50			
	21 19 17	N/C	
-55			
	7 12 16	N/C	
-60			
SAND: Orangish-brown, A-3 *(continued)*			
-65	9 17 18	N/C	
	8 11 15	N/C	
-70			
	19 20 18	N/C	
-75			
	25 25 22	N/C	
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/2-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-303
Station 65+93
Offset 20.0 ft RT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 386.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
STOP: 6/2/2016 SAND: Orangish-brown, A-3 *(continued)* START: 6/3/2016			
-85	20 33 36	N/C	
327.3			
SAND w/ LIMESTONE COBBLE: Gray, A-1 326.8	38 38	N/C	
SAND: Gray, A-3 326.3			
-90	20		
SAND: Gray, A-3			
With limestone fragments ~93.5'	21 19	N/C	
-95	20		
Rough Drilling from 96.0' to 98.0'			
-100	1 3 12	N/C	
SAND: Gray, A-3 *(continued)*			
-105	9 17 30	N/C	
307.7			
COBBLE w/ GRAVEL: Brown and gray, A-1 STOP: 6/3/2016 START: 6/6/2016	50/5" --		
-110	50/5" --		
	50/3" --		
305.2			
Borehole continued with rock coring.			
-115			
-120			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 6
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. S68 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	212
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 6/2-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair CORING METHOD

STRUCT. NO. 082-6003(E), 082-0374(P) CORING BARREL TYPE & SIZE NX Wireline

Station

Core Diameter 2 in

BORING NO. BB-303 Top of Rock Elev. 305.20 ft

Station 65+93 Begin Core Elev. 305.20 ft

Offset 20.0 ft RT

Ground Surface Elev. 416.0 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
ROCK CORE from 110.8'-115.1' - Recovered cobble fragments and fractured gravels	305.20	1	14	0	4.42	
	-115					
ROCK CORE from 115.1'-116.1' - Recovered cobble fragments and fractured gravel	300.90	2	25	0	3	
COBBLE w/ GRAVEL: Brown and gray, A-1	299.90	SS-31				
		SS-32				
LIMESTONE: Dark and light gray, very hard, aphanitic to coarsely crystalline, highly fractured, moderately weathered	296.50	3	69	33	7.7	
Becomes light gray, moderately hard, finely crystalline, thinly bedded, slightly weathered	-120					
5.5" open vertical fracture						1243.8
Becomes banded Becomes medium bedded Becomes cherty, hard		4	100	100	4	1053.5
	-125	5	100	72	5	263.5
0.6" open vertical fracture						
0.9" open vertical fracture						
13.6 open vertical fracture, becomes thinly bedded						
Becomes thickly bedded	-130	6	95	88	4.9	
	285.25					

Color pictures of the cores Yes

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 6/2-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair CORING METHOD

STRUCT. NO. 082-6003(E), 082-0374(P) CORING BARREL TYPE & SIZE NX Wireline

Station

Core Diameter 2 in

BORING NO. BB-303 Top of Rock Elev. 305.20 ft

Station 65+93 Begin Core Elev. 305.20 ft

Offset 20.0 ft RT

Ground Surface Elev. 416.0 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
LIMESTONE: Light gray, moderately hard, finely crystalline, thickly bedded, slightly weathered, cherty *(continued)*						121.6
	-135					519.5
	279.50					
Boring terminated at 136.5 ft.						
Boring grouted to 136.5 ft.						
	-140					
	-145					
	-150					

Color pictures of the cores Yes

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 7
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. 569 OF 577 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	213
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/6-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-304
Station 68+79
Offset 35.0 ft LT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 389.0 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				FILL: Brown and black, sandy clay, with cinders, A-6
414.5				
	3 4 4	N/C	16	FILL: Brown, sand, A-3
413.0				
				FILL: Brown with red and gray, sand, with brick and cinders, A-2
-5				
409.5	4			
409.0	4 4	--		FILL: Red, brick, A-1
				FILL: Brown, sand, A-3
408.0				
	WOH 2 1	1.2 B/20	38	CLAY: Dark gray, trace iron stains, A-7
-10				
	2 3 4	1.5 S/15	36	
-15	ST	0.9 S/5.2	33	
	1 3 3	1.5 B/20	33	
398.0				
	4 5 9	N/C		SAND: Brown, A-3 Begin Mud Rotary at 19.0 feet.
-20				
				SAND: Brown, A-3 *(continued)*
-25	4 6 8	N/C		
	3 7 7	N/C		
	4 5 5	N/C		▼
387.3				
	4 4 7	--		SILTY SAND: Gray, A-3
386.0				
-30				SAND: Gray, A-3
-35	5 6 8	N/C		
-40	6 7 7	N/C		With medium sand

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/6-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-304
Station 68+79
Offset 35.0 ft LT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 389.0 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SAND: Gray, A-3 *(continued)*
-45	11 12 14	N/C		
-50	7 12 13	N/C		
-55	9 13 14	N/C		
-60	9 13 14	N/C		
				SAND: Gray, A-3 *(continued)*
-65	12 13 16	N/C		Trace gravel
349.0				
				SAND: Gray, coarse, with gravel, A-1
-70	16 15 15	N/C		
-75	26 35 31	N/C		
339.0				
				SAND: Gray, A-3
-80	26 37 37	N/C		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 8
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. S70 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	214
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/6-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station
BORING NO. BB-304
Station 68+79
Offset 35.0 ft LT
Ground Surface Elev. 416.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 389.0 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SAND: Gray, A-3 *(continued)*
				Rough drilling from 81.0'-82.0'
	10 13 14	N/C		
-85				Rough drilling from 85.5'-88.5'
329.0				SAND: Gray, medium to coarse, with gravel, A-1
				Advance with casing at 88.5'
-90	17 24 28	N/C		
-95	14 21 27	N/C		
-100	22			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	23 26	N/C		SAND: Gray, medium to coarse, with gravel, A-1 *(continued)*
				Intermittent hard drilling from 101.0'-104.0'
312.0				COBBLE w/ GRAVEL: Gray and brown, A-1
-105	25 33 50/5"	N/C		
				Rock fragments in sample
-110	18 37 50/5"	N/C		
				STOP: 6/7/2016 at 3:55pm START: 6/8/2016 at 7:00am
-115	50/5"	--		
296.4				Borehole continued with rock coring.
-120	50/0"			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 6/6-6/8/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair CORING METHOD

STRUCT. NO. 082-6003(E), 082-0374(P)
Station
CORING BARREL TYPE & SIZE NX Wireline
Core Diameter 2 in
Top of Rock Elev. 296.38 ft
Begin Core Elev. 296.38 ft
BORING NO. BB-304
Station 68+79
Offset 35.0 ft LT
Ground Surface Elev. 416.0 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)	Description
296.38	1	100	80	1.1		SANDSTONE: Gray, soft, very fine grained, medium bedded, slightly weathered, calcarecus, argillaceous
					6.2	1.5" clay seam, becomes parted to banded Becomes thin to medium bedded
						Becomes banded to thinly bedded
292.65						Becomes thickly bedded
					647.0	LIMESTONE: Light gray, moderately hard, very finely crystalline, medium bedded, slightly weathered
-125	2	100	87	2.55		2.6" clay seam Becomes massively bedded, finely crystalline, with chert
	3	100	86	3.2	396.9	2.1" open fracture, becomes thickly bedded 2.5" clay seam, becomes banded to thinly bedded
-130						Becomes thinly bedded 0.5" clay seam, becomes thickly bedded
					1236.4	Becomes massively bedded
						Becomes argillaceous
281.38					303.6	Becomes medium bedded
-135						Boring terminated at 134.6 ft. Boring grouted to 134.62 ft.

Color pictures of the cores Yes
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 9
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. 571 OF 577 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	215
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/25-5/31/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-305
Station 71+43
Offset 55.0 ft LT
Ground Surface Elev. 415.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 377.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				CRUSHED ROCK: Gray, 3-inch minus
414.0				
	4 9 7	>4.5 P		FILL: Black, clay, with cinders and brick, limestone gravel, A-6
	2 3 3	--		Limestone gravel in shoe, no other recovery
-5				
	1 1 1	0.5 P		
407.0				CLAY: Gray, A-7
	1 1 2	1.5 P 0.9 S/20		
-10				
	1 2 2	1.6 S/20		Becomes brownish-gray
	1 1 2	0.8 S/20		
-15				
399.5				SAND: Brown, A-3
	3 5 7	N/C		
396.5				CLAY: Brown, A-6
396.0				SANDY LOAM: Brown, A-4
-20	2 2 6	0.2 S/20		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SANDY LOAM: Brown, A-4 *(continued)*
	2 4 5	N/C		
	1 4 5	N/C		
-25				
	3 5 6	N/C		
385.9				CLAY: Brown, trace fine sand, A-6
	5 5 9	N/C 0.3 P		
-30				
383.5				SANDY LOAM: Brown, A-4
	6 9 11	N/C		
-35				
378.0				SAND: Brown, A-3
	3 5 13	N/C		
-40				Becomes gray

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/25-5/31/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-305
Station 71+43
Offset 55.0 ft LT
Ground Surface Elev. 415.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 377.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SAND: Brown, A-3 *(continued)* Begin Mud Rotary at 40.0 feet.
	12 12 12	N/C		
-45				
368.0				SANDY LOAM: Gray, A-4
	10 18 18	N/C		
-50				
363.0				SAND: Gray, A-3
	9 14 16	N/C		
-55				
	9 8 13	N/C		
-60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SAND: Gray, A-3 *(continued)*
	14 12 10	N/C		
-65				
348.0				GRAVEL: Gray, A-1
346.5				SAND: Gray, A-3
	11 16 17	N/C		
345.0 -70				GRAVEL: Gray, A-1
341.5				SAND: Gray, A-3
	14 16 23	N/C		
-75				
336.5				SANDY LOAM: Gray, A-4
335.9				SAND: Gray, A-3
335.3 -80	11 15 17	N/C		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 10
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. 572 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	216
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/25-5/31/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station
BORING NO. BB-305
Station 71+43
Offset 55.0 ft LT
Ground Surface Elev. 415.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 377.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
GRAVEL: Gray, A-1 *(continued)* Rough drilling from 80.0'-82.0'				GRAVEL: Gray, A-1			
331.5				311.5			
SAND: Gray, A-3	13 9 12	N/C		SAND: Brownish-gray, trace gravel, A-3	14 27 36	N/C	
-85				-105			
				Rough drilling from 105.0'-107.8'			
					48 50/4"	--	
Coarse sand and rock fragments	20 22 21	N/C		Weathered limestone and granite fragments in shoe; set casing at 109.3' STOP: 5/26/2016 START: 5/27/2016			
-90				305.0 -110			
				COBBLE w/ GRAVEL: Gray and brown, A-1 No sample recovery	50/5"	--	
Hard drilling from 92.0'-93.0'				302.7	50/3"	--	
				Borehole continued with rock coring.			
	14 15 14	N/C					
-95				-115			
	8 18 23	N/C					
315.0 -100				-120			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 5/25-5/31/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair CORING METHOD

STRUCT. NO. 082-6003(E), 082-0374(P)
Station
BORING NO. BB-305
Station 71+43
Offset 55.0 ft LT
Ground Surface Elev. 415.0 ft

CORING BARREL TYPE & SIZE NX Wireline
Core Diameter 2 in
Top of Rock Elev. 298.50 ft
Begin Core Elev. 302.70 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
GRAVEL: Limestone and granite cobbles and boulders	1	12	0		
302.70					
-115					
SANDSTONE: Gray, moderately hard, very fine grained, banded, slightly weathered, calcarecus Becomes medium bedded	2	69	56	5	94.1
298.50					
Becomes thickly bedded	3	95	82	2.8	85.7
-120					
3.2" open vertical fracture, becomes thin to medium bedded 2.2" open vertical fracture					
Becomes banded to thinly bedded, trace stylites	4	100	74	2.4	157.0
-125					
287.15					
LIMESTONE: Light gray, moderately hard, very finely crystalline, medium bedded, slightly weathered	5	86	54	4	230.1
-130					
1.75" open vertical fracture 284.50					
Boring terminated at 130.5 ft. Boring grouted to 130.5 ft.					

Color pictures of the cores Yes
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 11
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. 573 OF 577 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	217
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
426.8			
3" TOPSOIL			
FILL: Brown and gray, clay, trace fine sand and cinders, A-6	2 4 4	>4.5 P	24
424.0			
FILL: Brown, sandy clay, A-6			
422.5	2 3 3	0.5 P	38
FILL: Brown, sand, A-3 422.0			
FILL: Brown, clay, with cinders, trace sand, A-6			
420.5	2 5 5	N/C	
FILL: Brown, sand, A-3			
	4 5 6	N/C	
-10			
Trace clay lumps	3 4 6	N/C	
	4 6 8	N/C	
-15			
	7 9 12	N/C	
	6 7	N/C	
407.5			
FILL: Black, cinders, A-4 -20	4	N/C	36
FILL: Black, cinders, A-4 *(continued)*			
Rough drilling at 20.5'	2 2 2	N/C	30
405.0			
CLAY: Gray, with iron stains and nodules, A-7		1.5 P	32
	1 2 2	0.8 P	28
Trace iron stains -25			
401.5			
SILTY LOAM: Gray, A-4	ST	0.5 S/10.6	33
	2 5 7	0.9 S/15 N/C	28 29
-30			
395.0			
CLAY: Gray, A-7	WOH 1 2	0.9 B/20	49
-35			
390.0			
SAND: Brown, A-3	6 8 10	N/C	
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*			
Begin Mud Rotary at 40.0 feet.			
	10 12 15	N/C	
-45			
	5 7 12	N/C	
-50			
Becomes brownish-gray	10 11 12	N/C	
-55			
	4 6 10	N/C	
-60			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*			
	10 19 21	N/C	
-65			
359.5			
SAND: Brown and gray, A-1			
358.8			
SAND: Gray, A-3	6 11 12	N/C	
-70			
Trace gravel	8 8 7	N/C	
-75			
	12 10 7	N/C	
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SAND: Gray, A-3 *(continued)*
	10 14 16	N/C		
-85				Rough drilling from 87.0'-88.5'
	15 14 12	N/C		
-90				
	12 50/5"	N/C		
332.5				
-95				SAND: Gray, A-1
	16 22 16	N/C		
-100				
				SAND: Gray, A-1 *(continued)* Advance with casing at 100.0'
-105	29 38 50/4"	N/C		
				With gravel
-110	23 44 47	N/C		
				No gravel
-115	27 33 37	N/C		
309.0				
				WEATHERED LIMESTONE w/ CLAY LOAM: Brown and gray, with chert gravel, A-1
-120	50/5"	--		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				WEATHERED LIMESTONE w/ CLAY LOAM: Brown and gray, with chert gravel, A-1 *(continued)*
	30 41 50/5"	N/C		
-125				
300.3				
	50/1"	--		Borehole continued with rock coring.
-130				
-135				
-140				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 13
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. 575 OF 577 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	219
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION East Saint Louis, Illinois, SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY Saint Clair CORING METHOD

STRUCT. NO. 082-6003(E), 082-0374(P) CORING BARREL TYPE & SIZE NX Wireline

Station

Core Diameter 2 in

BORING NO. BB-306 Top of Rock Elev. 300.28 ft

Station 74+00 Begin Core Elev. 300.28 ft

Offset 31.0 ft LT

Ground Surface Elev. 427.0 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
LIMESTONE: Light gray, hard, very finely crystalline, thin to medium bedded, moderately weathered, with interbedded clay seams	300.28	1	100	73	2.22	
Becomes thinly bedded						820.6
	-130					
Becomes fractured Becomes thinly bedded	296.05	2	100	89	1.3	
SANDSTONE: Gray, hard, very fine grained, thickly bedded, slightly weathered, calcareous						228.6
	-135					
	289.50					225.4
LIMESTONE: Light gray, moderately hard, very finely crystalline, thickly bedded, slightly weathered						
Becomes banded, with 0.3" clay seam	-140					211.5
	286.55	3	100	67	1	
SANDSTONE: Gray, hard, very fine grained, banded to thinly bedded, slightly weathered 1.3" interbedded limestone 0.65" clay seam, becomes medium bedded	284.68					
Boring terminated at 142.3 ft. Boring grouted to 142.32 ft.	-145					

Color pictures of the cores Yes

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/1/16

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION 38.6289833282, -90.1609112849, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. SN 082-W315

Station 73+59 to 75+18.50

BORING NO. RW-302

Station 72+84

Offset 67.0 ft LT

Ground Surface Elev. 400.0 ft

Surface Water Elev. N/A ft

Stream Bed Elev. N/A ft

Groundwater Elev.:

First Encounter 382.0 ft ▼

Upon Completion N/A ft

After N/A Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
1.2 ft. ASPHALTIC CONCRETE				
	398.9			
FILL: Brown and gray, sandy clay, A-6		2 8 10	0.9 S/15	14
	397.0			
FILL: Brown, sand and crushed rock, A-1		3 3 3	N/C	3
	-5			
	394.0			
SANDY LOAM: Brown, A-6		3 6 7	N/C	12
	391.5			
SAND: Brown, A-3		2 4 6	N/C	10
	-10			
		3 4 6	N/C	7
		3 8 12	N/C	3
	-15			
		5 9 10	N/C	13
	▼			
Some silt		2 7 10	N/C	
	-20			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*	379.5			
SANDY LOAM: Gray, A-5		1 5 9	N/C	
	376.5			
SAND: Gray trace brown, A-3		1 4 8	N/C	
	375.0 -25			
SANDY LOAM: Gray, A-5 Began mud rotary at 25.0 ft..		8 13 15	N/C	
	372.0			
SAND: Gray trace brown, A-3		7 9 11	N/C	
	-30			
		13 15 14	--	
	-35			
		15 16 12	N/C	
	360.0 -40			

Boring terminated at 40.0 ft.
Boring grouted to 40.0 ft.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/3-6/6/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION 38.6286208892, -90.1607292089, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. SN 082-W315
Station 73+59 to 75+18.50

BORING NO. RW-303
Station 73+50
Offset 59.0 ft RT
Ground Surface Elev. 428.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 384.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
RIP-RAP with SILTY CLAY			
427.0			
FILL: Brown, clay loam, A-6	3 5 6	N/C	17
424.3			
FILL: Brown, silty clay, A-5 424.0	1 3 4	0.7 S/15	19
FILL: Brown, sand, A-3 423.3 -5			
FILL: Brown, clay loam, A-6			
422.0			
FILL: Brown, sandy loam, A-4	2 2 2	N/C	20
420.0			
FILL: Brown, sand, A-3	ST	2.3 P	22
418.3 -10			
FILL: Brown, clay, A-6			
417.3			
FILL: Brown, silty clay loam, with brick, A-6	4 5 5	0.6 S/10	21
	3 4 16	1.9 S/15	19
413.3 -15			
FILL: Brown, sand, A-3			
With gravel and crushed rock	7 8 7	N/C	
With concrete fragments	3 2 3	N/C	37
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Clogging in split spoon due to concrete fragments 407.5			
FILL: Brown, sand, A-3 *(continued)*	5 3 3	1.0 S/15	34
FILL: Gray, clay, A-7			
405.0			
SILTY SAND: Gray, trace iron stains, A-4	2 1 2	N/C	33
-25 402.5			
CLAY: Gray, A-7			
Unconfined Compression Strength Test Performed 400.5	ST	0.5 S/2	33
400.0			
SANDY LOAM: Brown, A-4			
SAND: Brown, A-3	9 10 8	N/C	
-30			
Stop: 6/3/2016 at 3:00 pm			
Start: 6/6/2016 at 7:40 am			
	7 11 12	N/C	
-35			
	8 12 17	N/C	
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/3-6/6/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION 38.6286208892, -90.1607292089, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. SN 082-W315
Station 73+59 to 75+18.50

BORING NO. RW-303
Station 73+50
Offset 59.0 ft RT
Ground Surface Elev. 428.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 384.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*			
▼			
	4 6 7	N/C	
-45			
	4 6 7	N/C	
378.0 -50			
Boring terminated at 50.0 ft.			
Boring grouted to 50 ft.			
-55			
-60			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - MJP	REVISED
	CHECKED - LNB	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 3/12/2018	CHECKED - MJP	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 15
S.N. 082–0374 MLK BRIDGE APPROACH OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I–55SB/64WB
SHEET NO. S77 OF S77 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	221
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

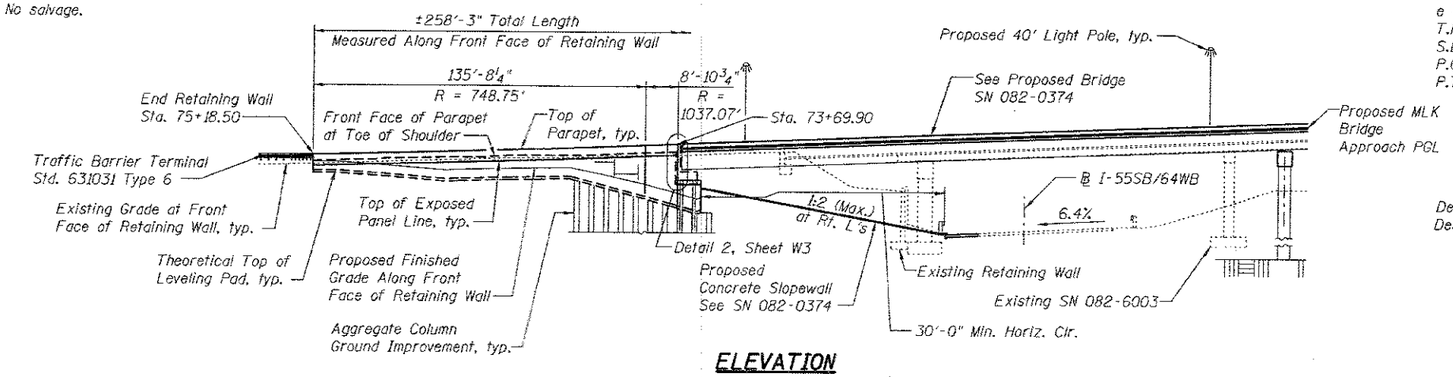
Bench Mark MLK-6: Chiseled square centered on top of the flattop area of a concrete wingwall located at the northwest corner of tunnel SN 082-0013 for connector exit lane to 3rd Street and Eads Bridge, which runs under East MLK Bridge Approach in East St. Louis, Illinois. Elevation NAVD 88 = 428.576

Existing Structure: The existing retaining wall does not have a structure number. It was constructed in 1965 as part of the F.A.I. Route 70 project I-70-1(76)1. It is a cast-in-place concrete wall on a footing with concrete piles.

The existing structure is to be removed and replaced.

The MLK Bridge Approach structure is to be completely closed to traffic during construction.

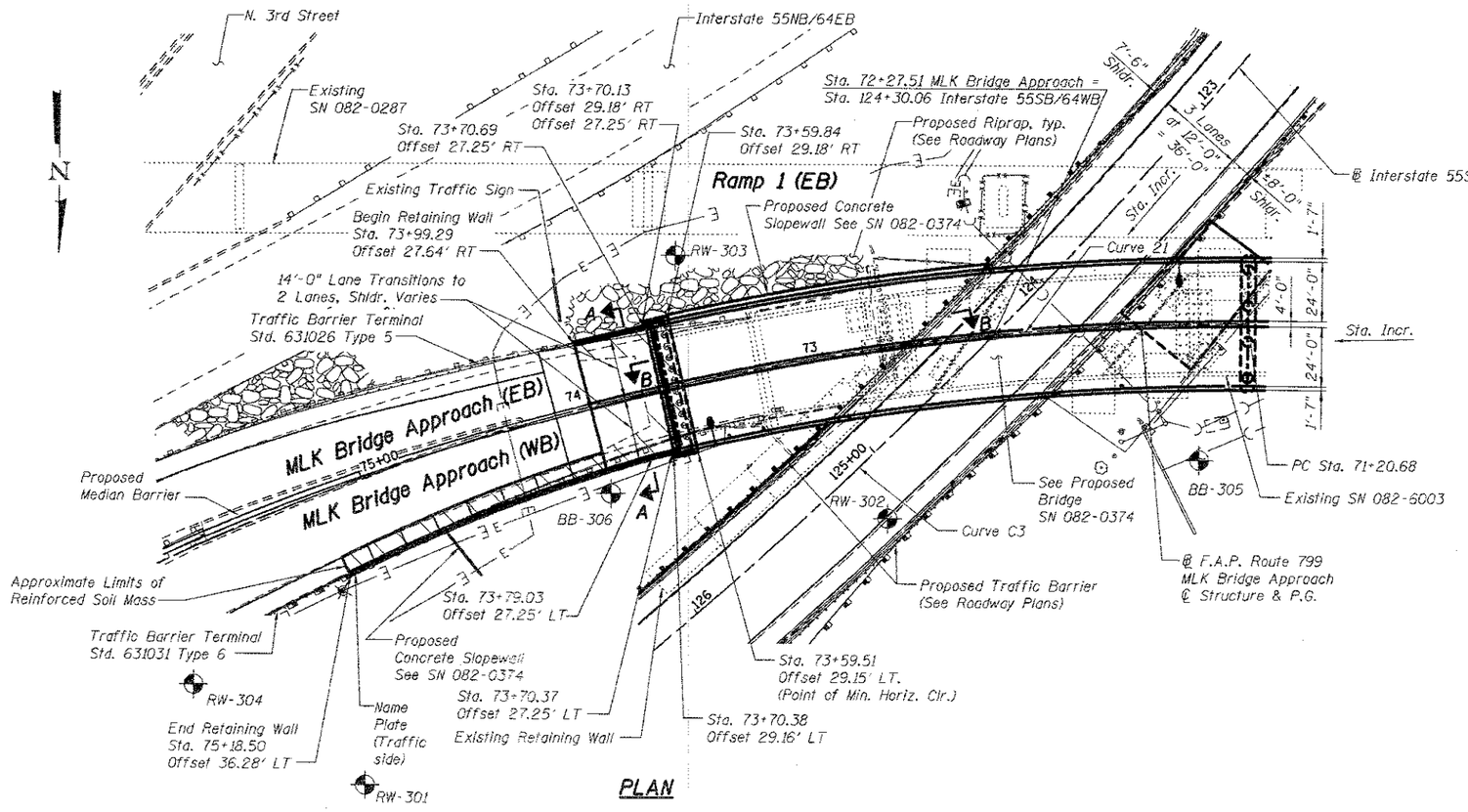
No salvage.



ELEVATION

(Looking South)

See sheet W3 for proposed retaining wall details.



PLAN

CURVE C3 DATA

P.I. Sta. = 125+66.38
Δ = 21° 41' 42" (RT)
D = 2° 44' 22"
R = 2,091.61'
T = 400.79'
L = 791.99'
E = 38.05'
e = N/A
T.R. = N/A
S.E. Run = N/A
P.C. Sta. = 121+65.59
P.T. Sta. = 129+57.58

CURVE 21 DATA

P.I. Sta. = 74+81.50
Δ = 37° 27' 17" (LT)
D = 5° 23' 00"
R = 1,064.32'
T = 360.82'
L = 695.75'
E = 59.50'
e = 4.7%
T.R. = 31'
S.E. Run = 99'
P.C. Sta. = 71+20.68
P.T. Sta. = 78+16.44

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 and 2016 Interims

DESIGN STRESSES

FIELD UNITS

f'_c = 4,000 psi
f_y = 60,000 psi (reinforcement)

PRECAST UNITS

f'_c = 4,000 psi (precast face panels)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.24 g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.54 g
Soil Site Class = D

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

JERILYN M. HASSARD
081-006521
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

JERILYN M. HASSARD 03-22-18
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-006521
EXPIRES 11/30/2018

LEGEND

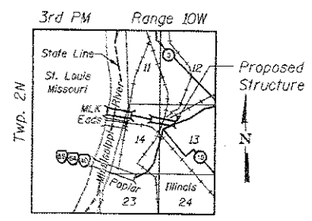
- Reinforced Soil Mass
- MSE Wall Panels
- Soil Borings

STATION 75+18.50
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 799 SEC. 1BR-1-1
LOADING HL-93
STRUCTURE NO. 082-W315

NAME PLATE

See Std. 515001

Notes:
Wall stations and offsets are given to the front face (FF) of the wall and are measured from the baseline of MLK Bridge Approach.
For Section A-A, see sheet W4.
For Section B-B, see sheet W5.
Existing utilities shown will be relocated to avoid any conflicts during construction.
For Ground Improvement Performance Requirements, see sheet W2.



LOCATION SKETCH

RETAINING WALL AT MLK BRIDGE APPROACH F.A.P. ROUTE 799 SEC. 1BR-1-1 ST. CLAIR COUNTY STATION 73+99.29 (EB) TO 75+18.50 (WB) STRUCTURE NO. 082-W315

USER NAME =	DESIGNED - YSS	REVISED	
	CHECKED - ZJS	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 02/06/2018	CHECKED - JMH	REVISED	

MODJESKI and MASTERS
Experience grows bridges.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
S.N. 082-W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W1 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	222
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

INDEX OF SHEETS

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Wall stations and offsets are given to the front face (FF) of the wall and are measured from baseline of the MLK Bridge Approach structure and centerline of F.A.P. Route 799, except as noted. The FF of the wall is to be considered edge of panel.
3. See Special Provision for Aggregate Column Ground Improvement for design and construction requirements.
4. For existing soils laboratory data, see the Geotechnical Investigation Laboratory Data Special Provision.
5. The piles, with pile sleeves, for SN 082-0374 are located within the reinforced soil mass and will be driven prior to the placement of the reinforced soil mass. See SN 082-0374 plans for additional pile requirements.
6. Wall system supplier shall coordinate the proposed wall configuration with the Aggregate Column Ground Improvement subcontractor.
7. Wall construction shall not begin until after ground improvement has been completed in the area of the new wall.
8. The MSE wall supplier's internal stability design shall account for the seismic loading. For Seismic Data, see sheet W1.

MSE WALL SETTLEMENT

1. The Top of Exposed Panel Elevations shown on the plans are final elevations after any settlement.
2. The MSE wall supplier is alerted to the fact that outside the ground improvement limits, one (1) inch of settlement is anticipated. The wall system supplier shall take appropriate measures to accommodate this settlement in the wall design.
3. The MSE wall supplier is alerted to the fact that within the ground improvement limits, the wall settlement will be determined by the ground improvement design. The wall system supplier shall coordinate with the Aggregate Column Ground Improvement subcontractor to accommodate this settlement in the wall design.

TOTAL BILL OF MATERIAL

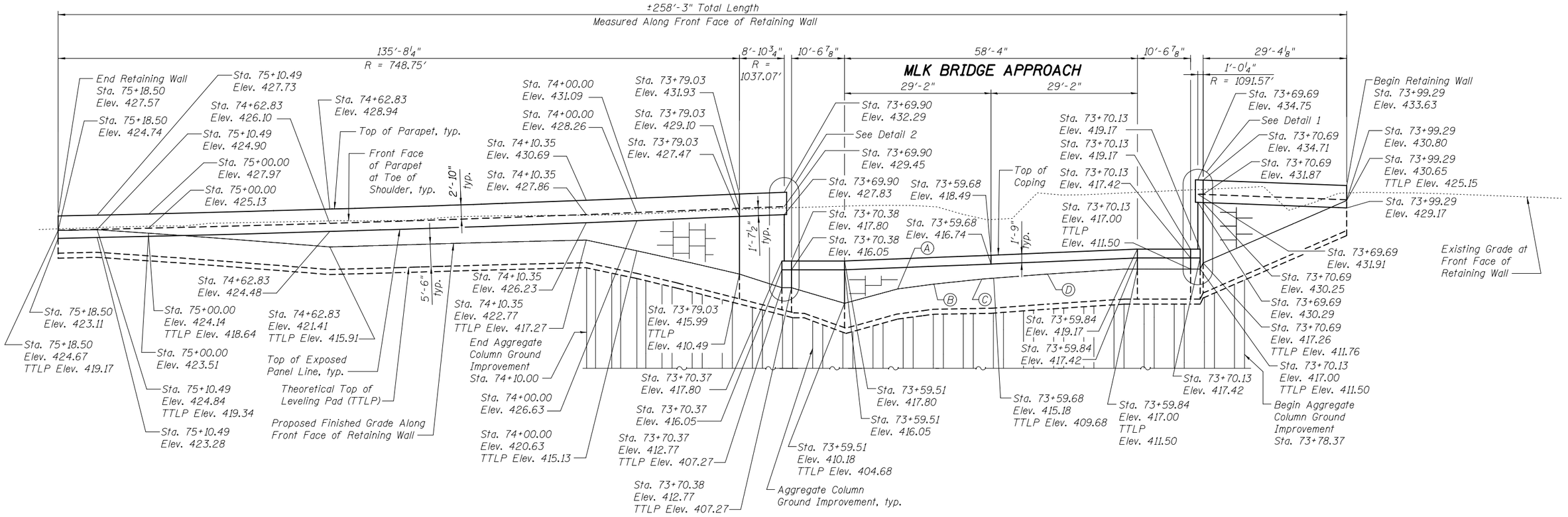
ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	1,639
Concrete Superstructure	Cu. Yd.	61.3
Protective Coat	Sq. Yd.	138
Reinforcement Bars, Epoxy Coated	Pound	9,450
Name Plates	Each	1
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	2,313
Aggregate Column Ground Improvement	L. Sum	1

GROUND IMPROVEMENT PERFORMANCE REQUIREMENTS

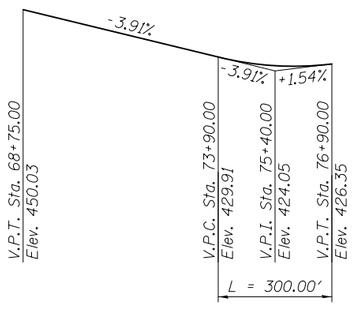
1. Minimum factor of safety for global slope stability shall be 1.5 for both the permanent and temporary condition.
2. Allowable bearing pressure (with F.S.) shall be equal to or greater than the equivalent uniform service bearing pressure of 4300 psf.

   Minimum factor of safety against equivalent uniform service bearing pressure shall be 2.0 if a load test is performed.

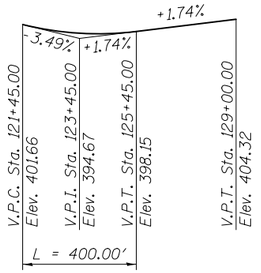
   Minimum factor of safety against equivalent uniform service bearing pressure shall be 2.5 if a load test is not performed.
3. Minimum coefficient of friction at the base of the wall shall be 0.624 for sliding.
4. Total settlement measured at the theoretical top of leveling pad shall not exceed 1.0 inch.
5. Total settlement measured on the pavement shall not exceed 1.0 inch.
6. Differential settlement measured along the theoretical top of leveling pad shall not exceed 1/100.
7. The assumed structure life for settlement computations shall be 75 years.
8. Contractor's verification program shall include monitoring points or other instrumentation to demonstrate compliance with the stated performance requirements.
9. The Shop Drawings and construction procedures submittal shall indicate the sequence of construction within the limits of Aggregate Column Ground Improvement. The aggregate column installation shall be coordinated with utility removal, structure removals, proposed utility installation, and bridge pile driving.
10. Aggregate columns shall be installed before the bridge piles are driven; however, the piles shall not be driven through the aggregate of an installed column. The aggregate column layout shall provide clearance for the bridge piles.
11. Primary consolidation of the soil within the depth of the ACGI to be at least 90 percent complete when the bridge piles are to be driven. Any required waiting periods shall be coordinated with the bridge construction schedule.



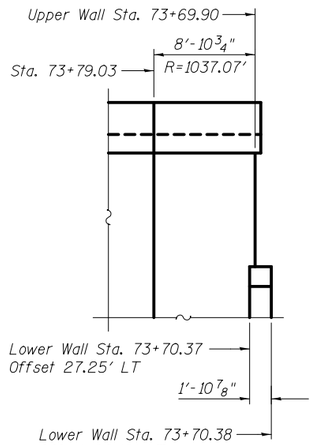
UNFOLDED ELEVATION VIEW



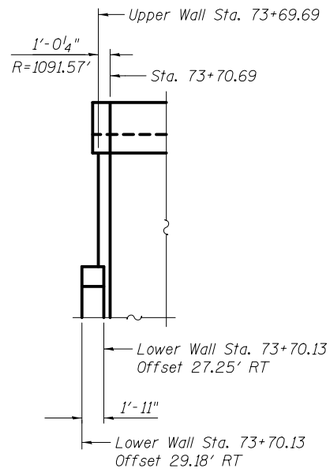
PROFILE GRADE
(Along MLK Bridge Approach)



PROFILE GRADE
(Along I-55SB/64WB)
(Original Design)



DETAIL 2



DETAIL 1

Ⓐ Sta. 73+59.57
Elev. 413.04
TTLP Elev. 407.54

Ⓑ Sta. 73+59.62
Elev. 414.00
TTLP Elev. 408.50

Ⓒ Sta. 73+59.67
Elev. 415.00
TTLP Elev. 409.50

Ⓓ Sta. 73+59.74
Elev. 416.00
TTLP Elev. 410.50

Notes:
Abutment is wider than the typical roadway section. See Details 1 and 2 for M.S.E. width transition.
See sheet W2 for Ground Improvement Performance Requirements.

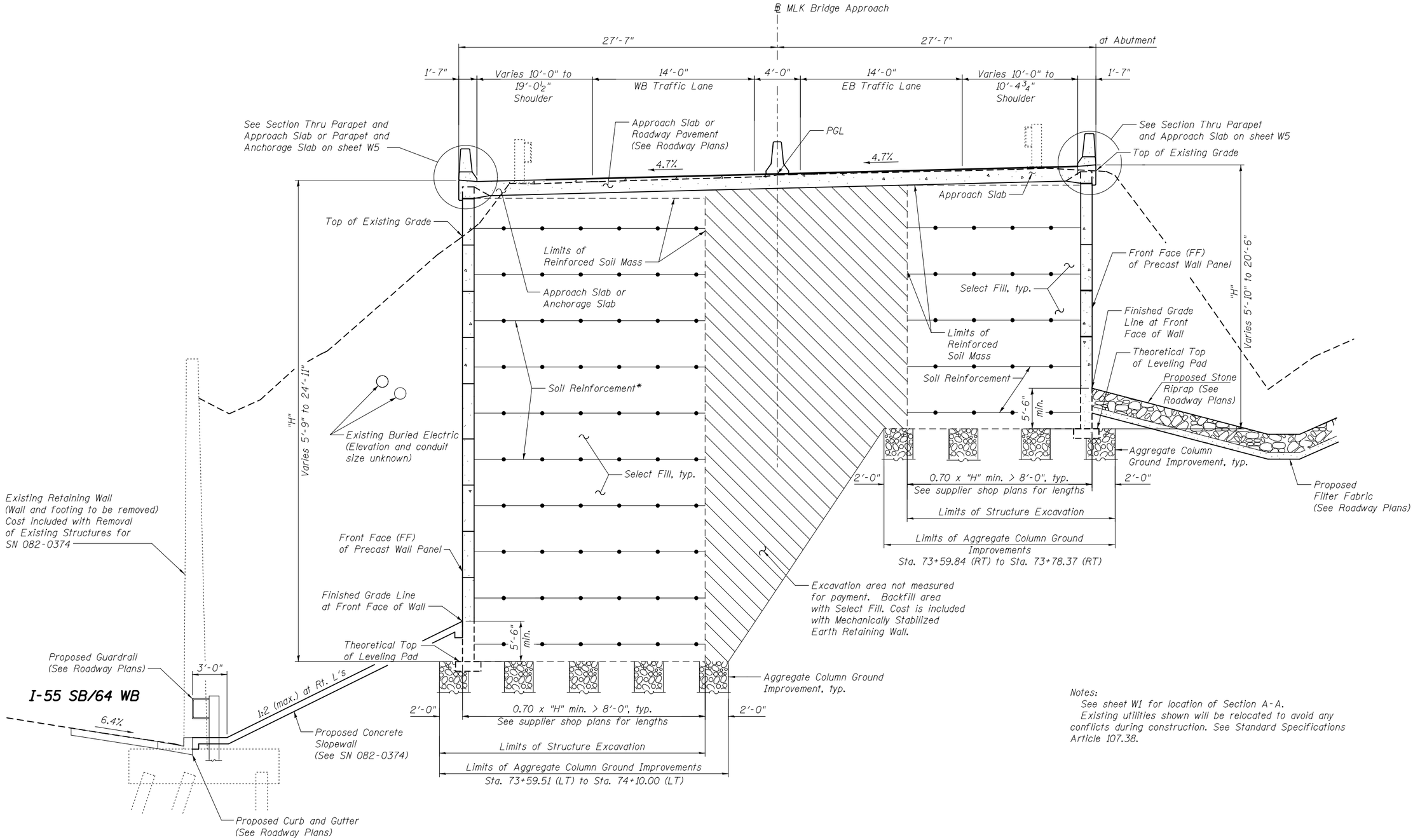
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - ZJB	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - ZJB	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UNFOLDED WALL ELEVATION
S.N. 082-W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W3 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	224
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



Notes:
See sheet W1 for location of Section A-A.
Existing utilities shown will be relocated to avoid any conflicts during construction. See Standard Specifications Article 107.38.

* The M.S.E. wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.5 kips/ft. of wall.

SECTION A-A

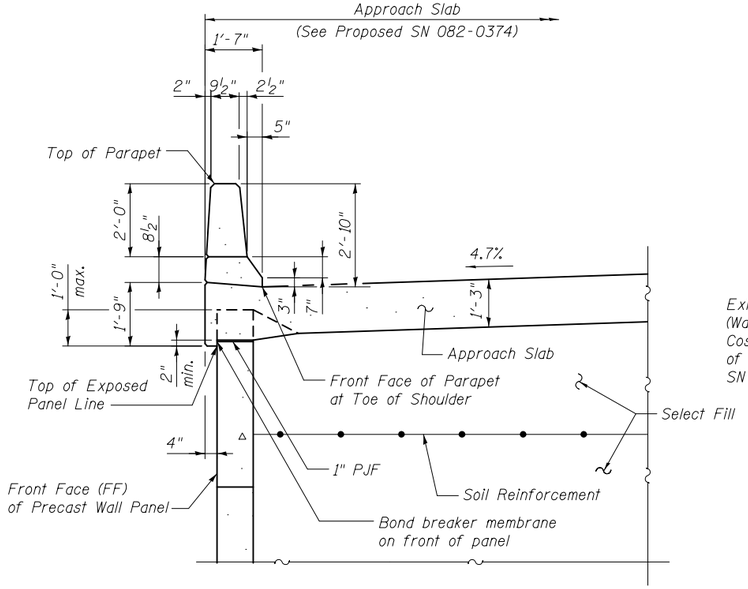
(Typical Wall Section at Approach Slab)

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - YSS	REVISED
		CHECKED - ZJB	REVISED
	PLOT SCALE =	DRAWN - AEC	REVISED
	PLOT DATE = 02/06/2018	CHECKED - YSS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

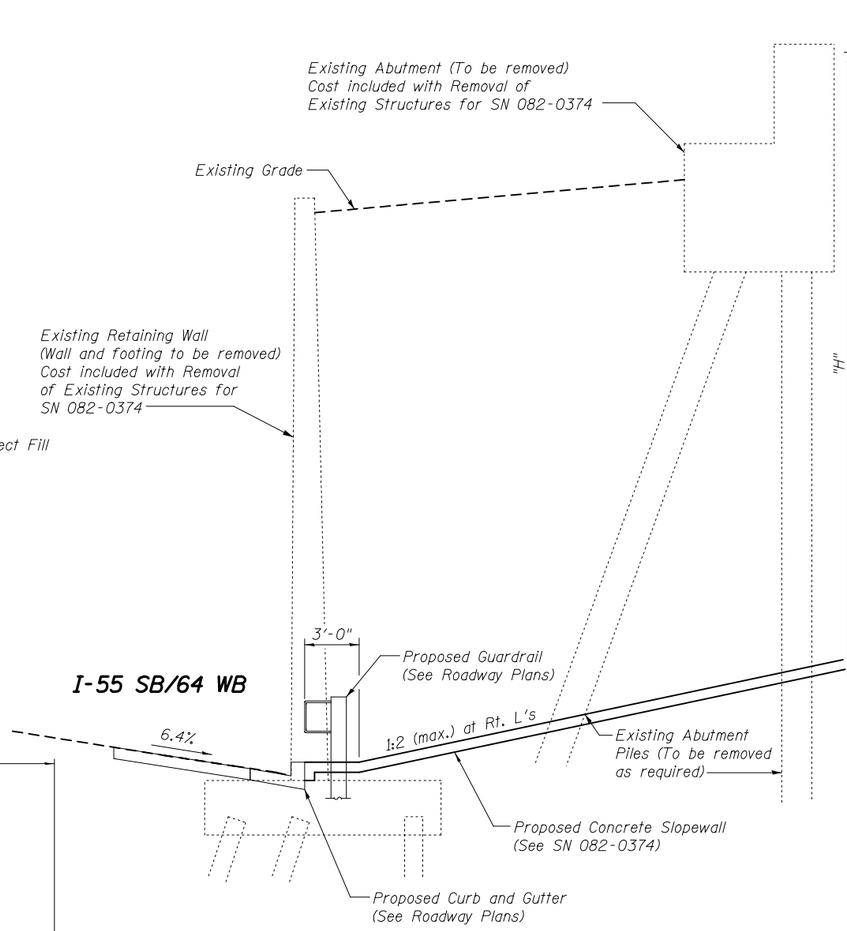
MSE DETAILS – 1
S.N. 082-W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W4 OF W16 SHEETS

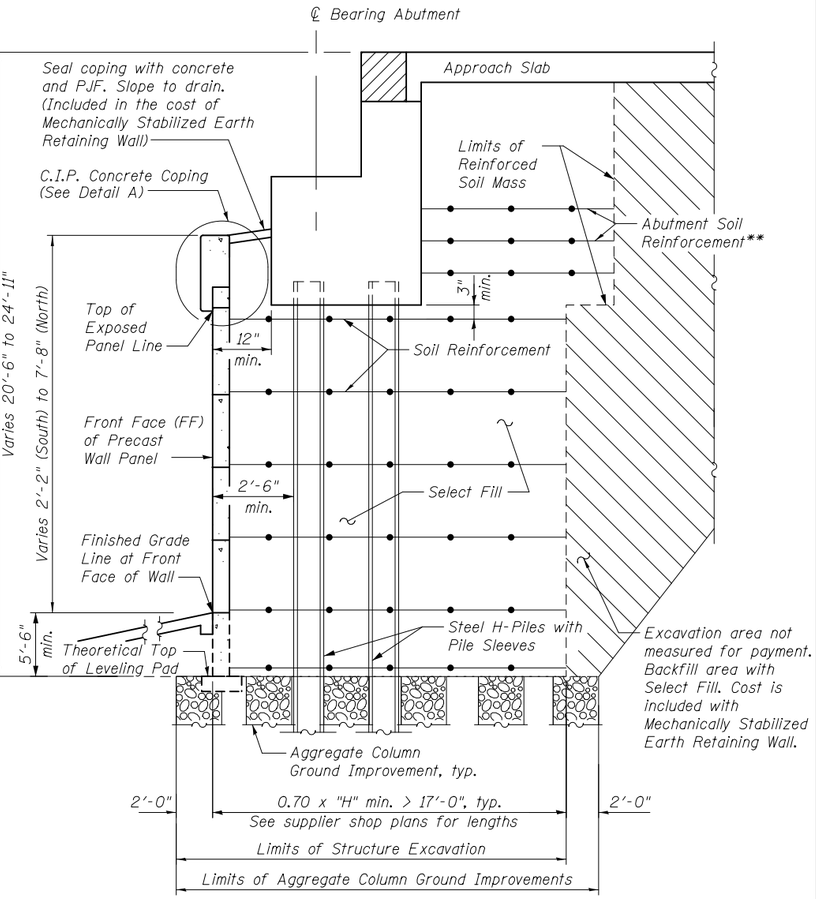
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	225
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



SECTION THRU PARAPET AND APPROACH SLAB

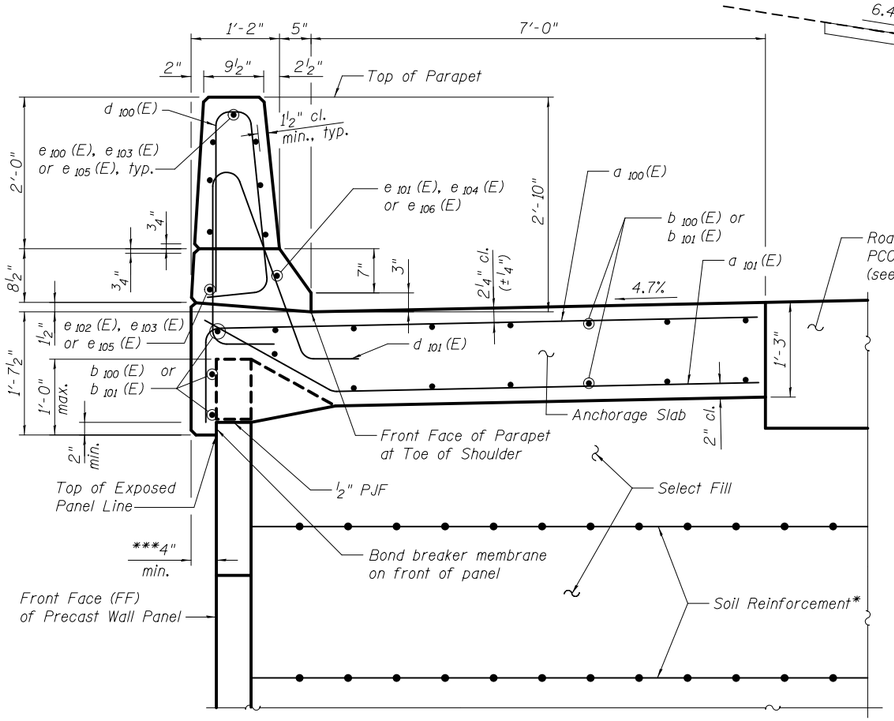
(WB Shown, EB Similar)



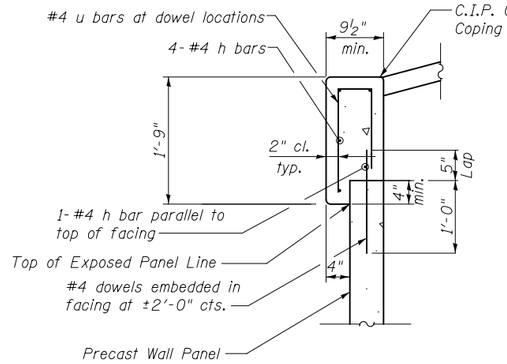


SECTION B-B

(Typical Wall Section Thru Abutment)



SECTION THRU PARAPET AND ANCHORAGE SLAB



DETAIL A
C.I.P. CONCRETE COPING

Notes:

See Proposed Structure SN 082-0374 Plans for abutment, approach slab and slopewall details.

See sheet W1 for location of Section B-B.

Concrete and reinforcing steel for C.I.P. Concrete Coping are included in the cost of Mechanically Stabilized Earth Retaining Wall.

* *The M.S.E. wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.5 kips/ft of wall.*

** *The M.S.E. wall supplier shall design the abutment soil reinforcement to resist a factored horizontal force of 7.4 kips/ft of abutment. Cost shall be included with the cost of "Mechanically Stabilized Earth Retaining Wall".*

*** *Contractor shall detail overhang width along wall radius to provide minimum dimension required.*

MODJESKI and MASTERS
Experience great bridges.

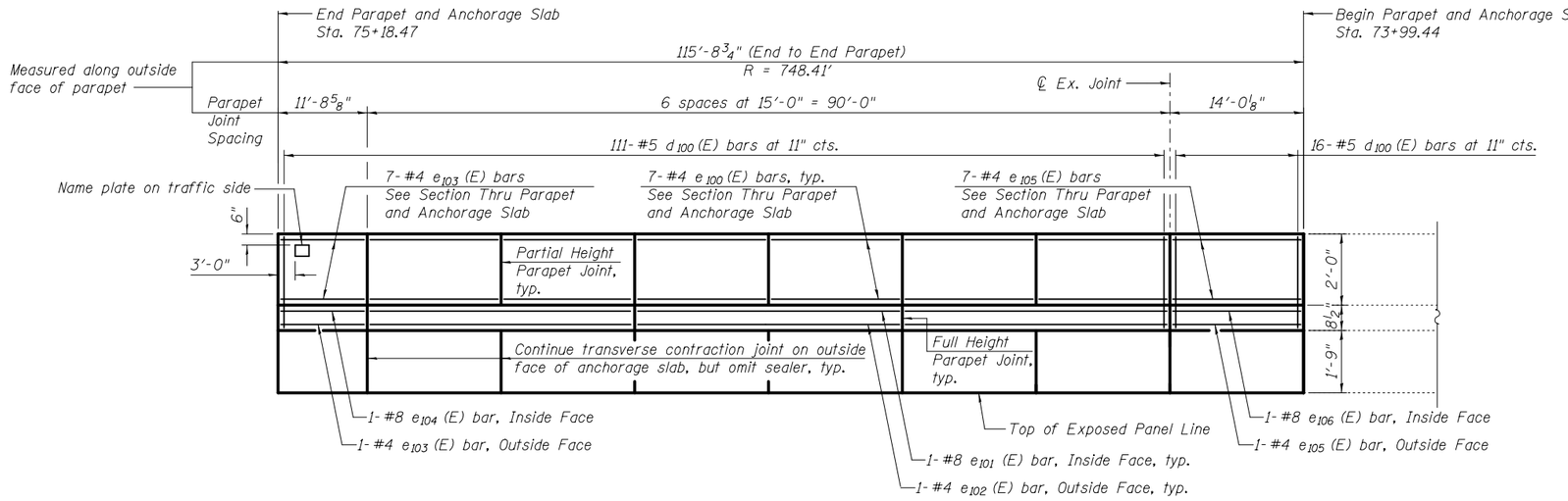
USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - YSS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

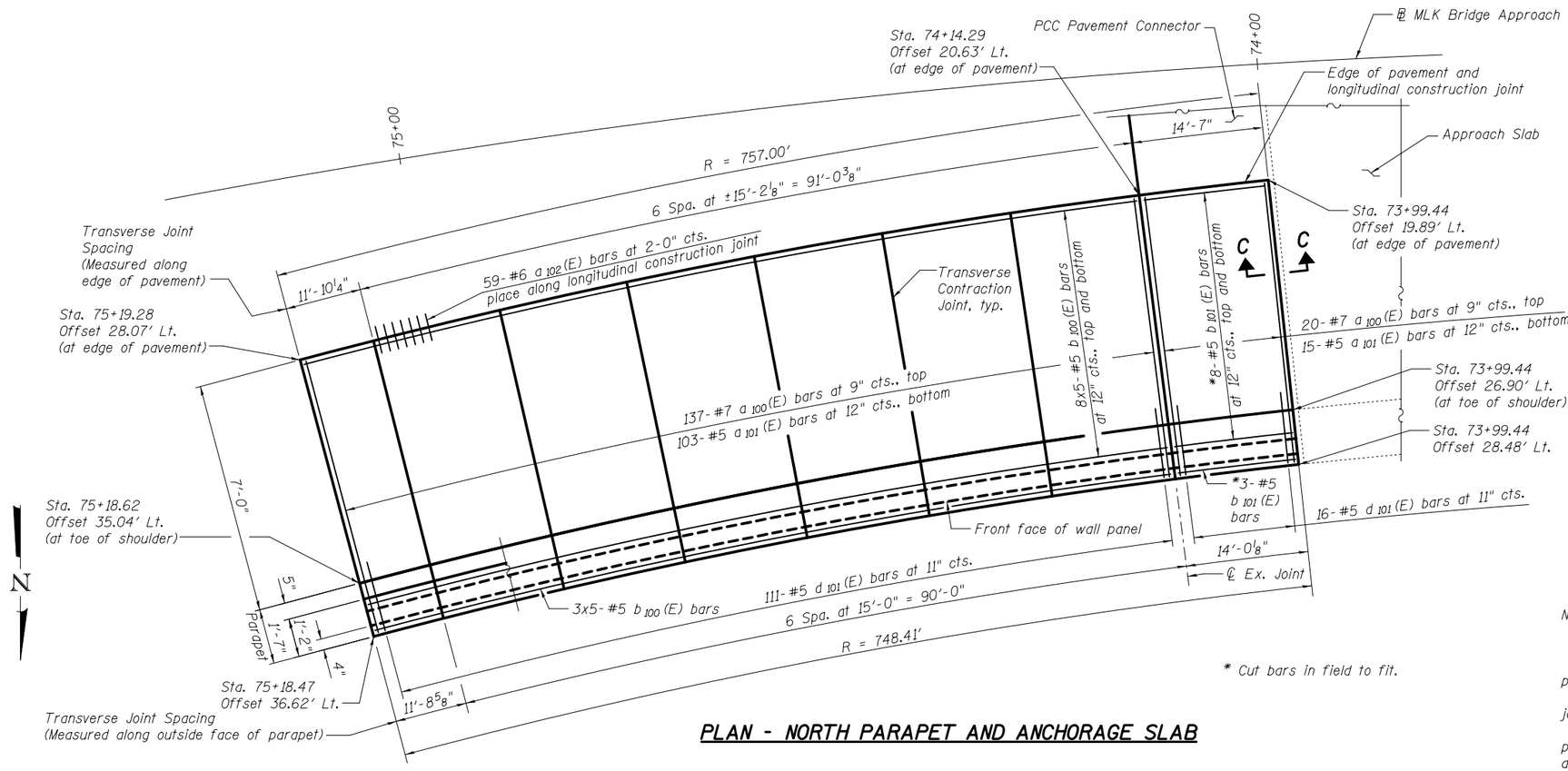
MSE DETAILS – 2
S.N. 082–W315 RETAINING WALL AT MLK BRIDGE APPROACH

SHEET NO. W5 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	226
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		



OUTSIDE ELEVATION OF NORTH PARAPET



PLAN - NORTH PARAPET AND ANCHORAGE SLAB

* Cut bars in field to fit.

Notes:

For Section Thru Parapet and Anchorage Slab, see sheet W5.

For Section C-C and Bill of Material, see sheet W7.

Bars indicated thus 8x5-#5 etc. indicates 8 lines of bars with 5 lengths per line.

Joints in the adjacent pavement shall be aligned with the anchorage slab joints.

Stations and offsets on this sheet are given to the outside face of the parapet and are measured from the baseline of MLK Bridge Approach, except as noted.

MODJESKI and MASTERS
Experience great bridges.

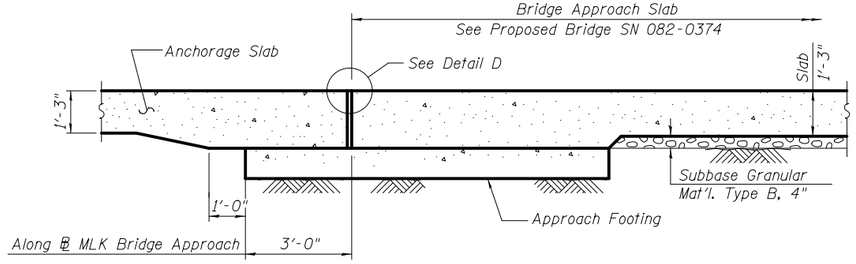
USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - YSS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

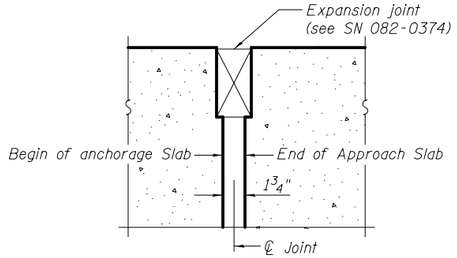
PARAPET AND ANCHORAGE SLAB
S.N. 082-W315 RETAINING WALL AT MLK BRIDGE APPROACH

SHEET NO. W6 OF W16 SHEETS

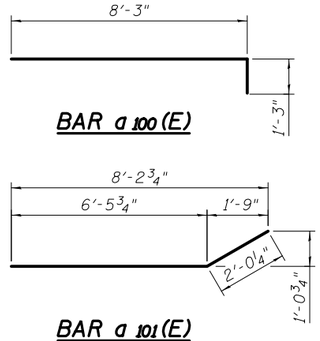
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	227
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

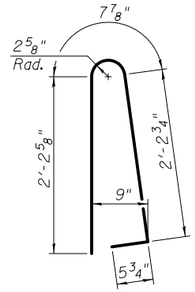


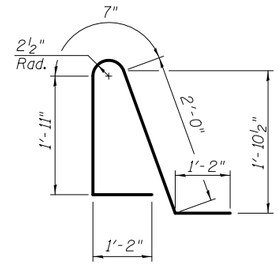
SECTION C-C

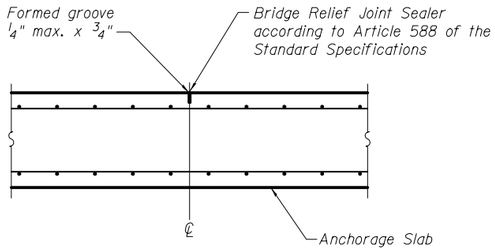


DETAIL D

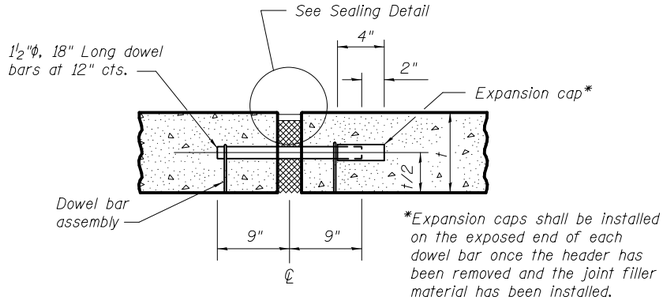








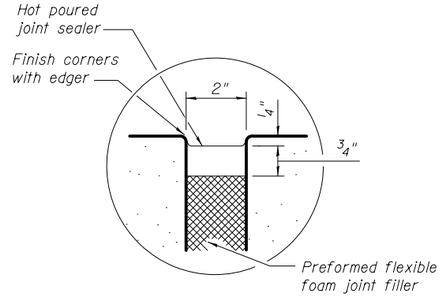
TRANSVERSE CONTRACTION JOINT



*Expansion caps shall be installed on the exposed end of each dowel bar once the header has been removed and the joint filler material has been installed.

ANCHORAGE SLAB EXPANSION JOINT

Expansion joint and dowel bars included in the cost of Concrete Superstructure.

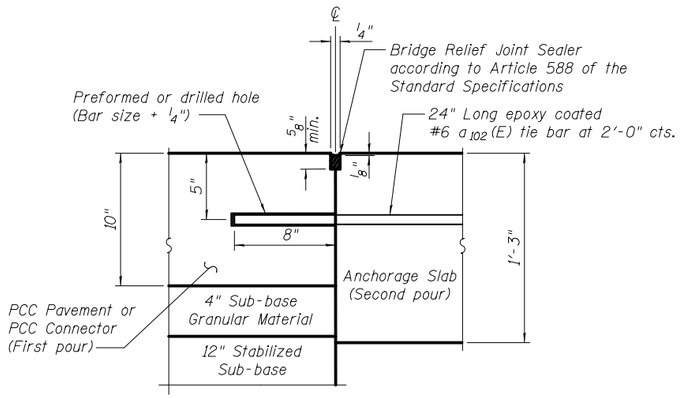


SEALING DETAIL

BILL OF MATERIAL**

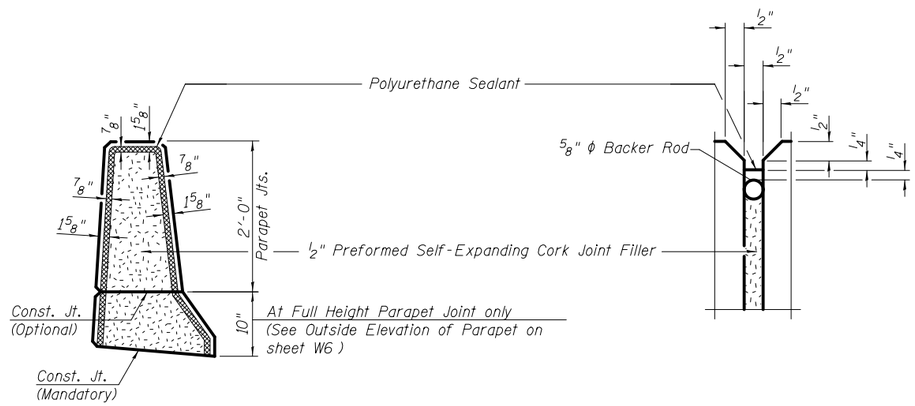
Bar	No.	Size	Length	Shape
a_{100} (E)	157	#7	9'-6"	
a_{101} (E)	118	#5	8'-6"	
a_{102} (E)	59	#6	2'-0"	
b_{100} (E)	95	#5	23'-6"	
b_{101} (E)	19	#5	14'-4"	
d_{100} (E)	127	#5	5'-7"	
d_{101} (E)	127	#5	6'-10"	
e_{100} (E)	42	#4	14'-9"	
e_{101} (E)	3	#8	29'-9"	
e_{102} (E)	3	#4	29'-9"	
e_{103} (E)	8	#4	11'-5"	
e_{104} (E)	1	#8	11'-5"	
e_{105} (E)	8	#4	13'-9"	
e_{106} (E)	1	#8	13'-9"	
Reinforcement Bars, Epoxy Coated		Pound	9,450	
Concrete Superstructure		Cu. Yd.	61.3	

**For anchorage slab and north parapet thereon



Notes:
The Contractor may substitute at his option, formed in place tie bars provided the bar length is increased to 30" and the tie bar is centered across the joint.
Preformed or drilled hole shall be in the first pour.

LONGITUDINAL CONSTRUCTION JOINT GROUTED-IN-PLACE TIE BAR



PARAPET JOINT DETAILS

MIN. BAR LAP

#5 bars - 3'-6"

Notes:
For location of Section C-C, see sheet W6.
The Polyurethane Sealant shall be non-staining gray one component non-sag elastomeric gun grade meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25. Use T with a 5/8" backer rod. Cost included with Concrete Superstructure.
The 1/2" Preformed Self-Expanding Cork Joint Filler shall be according to Article 1051.07 of the Standard Specifications. Cost included with Concrete Superstructure.

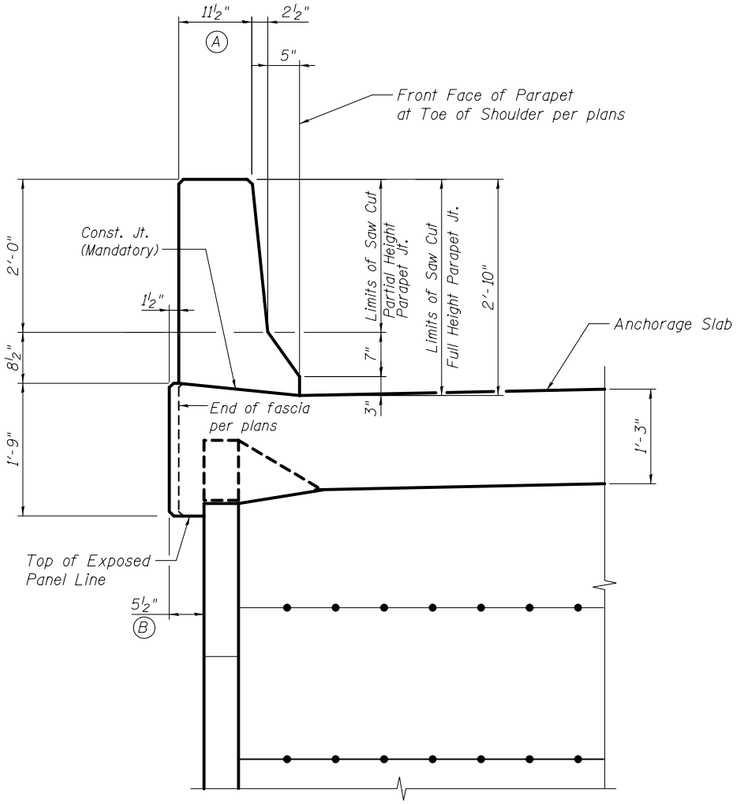
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - YSS	REVISED

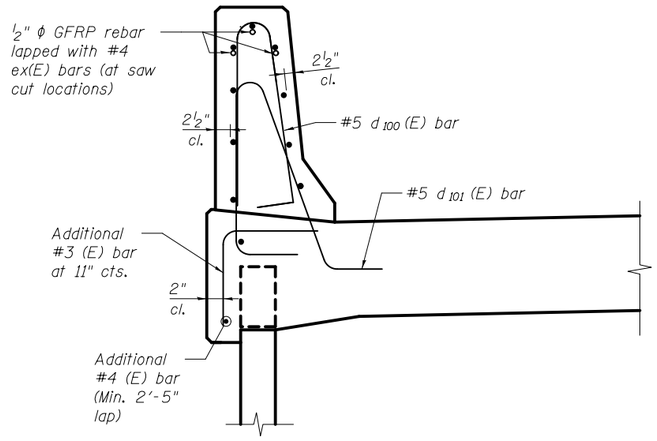
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
S.N. 082-W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W7 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	228
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



SECTION THRU PARAPET AND ANCHORAGE SLAB



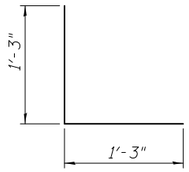
SECTION

(Showing reinforcement clearances
for slip forming and additional
reinforcement bars)

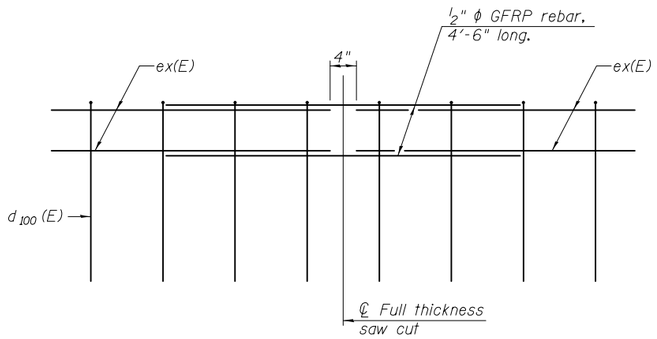
GENERAL NOTES

All dimensions shall remain the same as shown on MSE wall details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft.

Full thickness saw cut at all joint locations in lieu of cork joint filler.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section
at each parapet joint location.)

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - YSS	REVISED
		CHECKED - ZJB	REVISED
	PLOT SCALE =	DRAWN - AEC	REVISED
	PLOT DATE = 02/06/2018	CHECKED - YSS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL PARAPET SLIPFORMING OPTION
S.N. 082-W315 RETAINING WALL AT MLK BRIDGE APPROACH

SHEET NO. W8 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	229
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Page 1 of 1

Date 5/25/16

ROUTE Interstate 64 **DESCRIPTION** PTB 172, Item 22 - FAP 799 (MLK Drive) **LOGGED BY** BDG (SCI)

SECTION 1BR-1-1 **LOCATION** 38.6290913789, -90.1600632111, **SEC.** 13, **TWP.** 2N, **RNG.** 10W,
Latitude , Longitude

COUNTY Saint Clair **DRILLING METHOD** CME 550 w/HSA **HAMMER TYPE** Automatic

STRUCT. NO. SN 082-W315
Station 73+59 to 75+18.50

BORING NO. RW-301
Station 75+38
Offset 107.0 ft LT
Ground Surface Elev. 404.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A **Hrs.** N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
403.7			
4" TOPSOIL			
FILL: Brown and gray, clay, trace iron stains, A-6	1 3 3	1.2 B/20	37
401.0			
SILTY CLAY: Gray and brown, trace sand, A-5	2 2 2	0.2 B/20	40
-5			
398.5			
CLAY LOAM: Gray and brown, trace iron stains, A-6	WOH 1 2	0.9 B/20	34
395.5			
SAND: Brown, A-3	ST	--	
-10			
Began mud rotary at 11.0 ft..			
392.3	2 4 3	N/C	33
392.0 CLAY LOAM: Gray and brown, A-6			
SAND: Brown, A-3			
Trace silt	2 3 5	0.5 P N/C	45 30
Becomes brown			
-15			
	5 5 5	N/C	
	3 3 6	N/C	
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*			
	10 10 10	N/C	
	11 14 16	N/C	
-25			
	7 7 9	N/C	
Becomes gray			
	6 8 9	N/C	
Trace organics			
-30			
	4 4 4	N/C	
Becomes brown			
-35			
Low mud return, wood debris observed			
	5 5 6	N/C	
364.5			
Boring terminated at 39.5 ft.			
-40			

Boring grouted to 39.5 ft.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Page 1 of 1

Date 6/1/16

ROUTE Interstate 64 **DESCRIPTION** PTB 172, Item 22 - FAP 799 (MLK Drive) **LOGGED BY** TC (SCI)

SECTION 1BR-1-1 **LOCATION** 38.6289833282, -90.1609112849, **SEC.** 13, **TWP.** 2N, **RNG.** 10W,
Latitude , Longitude

COUNTY Saint Clair **DRILLING METHOD** CME 550 w/HSA **HAMMER TYPE** Automatic

STRUCT. NO. SN 082-W315
Station 73+59 to 75+18.50

BORING NO. RW-302
Station 72+84
Offset 67.0 ft LT
Ground Surface Elev. 400.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 382.0 ft ▼
Upon Completion N/A ft
After N/A **Hrs.** N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
1.2 ft. ASPHALTIC CONCRETE			
398.9			
FILL: Brown and gray, sandy clay, A-6	2 8 10	0.9 S/15	14
397.0			
FILL: Brown, sand and crushed rock, A-1	3 3 3	N/C	3
-5			
394.0			
SANDY LOAM: Brown, A-6	3 6 7	N/C	12
391.5			
SAND: Brown, A-3	2 4 6	N/C	10
-10			
	3 4 6	N/C	7
	3 8 12	N/C	3
-15			
	5 9 10	N/C	13
▼			
	2 7 10	N/C	
Some silt			
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*			
379.5			
SANDY LOAM: Gray, A-5	1 5 9	N/C	
376.5			
SAND: Gray trace brown, A-3	1 4 8	N/C	
375.0 -25			
SANDY LOAM: Gray, A-5 Began mud rotary at 25.0 ft..			
	8 13 15	N/C	
372.0			
SAND: Gray trace brown, A-3	7 9 11	N/C	
-30			
	13 15 14	--	
-35			
	15 16 12	N/C	
360.0 -40			
Boring terminated at 40.0 ft.			

Boring grouted to 40.0 ft.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 1
S.N. 082–W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W9 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	230
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/3-6/6/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION 38.6286208892, -90.1607292089, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. SN 082-W315
Station 73+59 to 75+18.50

BORING NO. RW-303
Station 73+50
Offset 59.0 ft RT
Ground Surface Elev. 428.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 384.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
RIP-RAP with SILTY CLAY			
427.0			
FILL: Brown, clay loam, A-6	3 5 6	N/C	17
424.3			
FILL: Brown, silty clay, A-5 424.0	1 3 4	0.7 S/15	19
FILL: Brown, sand, A-3 423.3 -5			
FILL: Brown, clay loam, A-6			
422.0			
FILL: Brown, sandy loam, A-4	2 2 2	N/C	20
420.0			
FILL: Brown, sand, A-3	ST	2.3 P	22
418.3 -10			
FILL: Brown, clay, A-6			
417.3			
FILL: Brown, silty clay loam, with brick, A-6	4 5 5	0.6 S/10	21
	3 4 16	1.9 S/15	19
413.3 -15			
FILL: Brown, sand, A-3			
With gravel and crushed rock	7 8 7	N/C	
With concrete fragments	3 2 3	N/C	37
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Clogging in split spoon due to concrete fragments 407.5			
FILL: Brown, sand, A-3 *(continued)*	5 3 3	1.0 S/15	34
FILL: Gray, clay, A-7			
405.0			
SILTY SAND: Gray, trace iron stains, A-4	2 1 2	N/C	33
-25			
402.5			
CLAY: Gray, A-7			
Unconfined Compression Strength Test Performed 400.5	ST	0.5 S/2	33
400.0			
SANDY LOAM: Brown, A-4			
SAND: Brown, A-3	9 10 8	N/C	
Stop: 6/3/2016 at 3:00 pm			
Start: 6/6/2016 at 7:40 am			
-30			
	7 11 12	N/C	
-35			
	8 12 17	N/C	
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 6/3-6/6/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION 38.6286208892, -90.1607292089, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. SN 082-W315
Station 73+59 to 75+18.50

BORING NO. RW-303
Station 73+50
Offset 59.0 ft RT
Ground Surface Elev. 428.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 384.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*			
▼			
	4 6 7	N/C	
-45			
	4 6 7	N/C	
378.0 -50			
Boring terminated at 50.0 ft.			
Boring grouted to 50 ft.			
-55			
-60			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 2
S.N. 082–W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W10 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	231
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/25/16

ROUTE Interstate 64 **DESCRIPTION** PTB 172, Item 22 - FAP 799 (MLK Drive) **LOGGED BY** BDG (SCI)

SECTION 1BR-1-1 **LOCATION** 38.6289209382, -90.1598692515, **SEC.** 13, **TWP.** 2N, **RNG.** 10W,
Latitude , Longitude

COUNTY Saint Clair **DRILLING METHOD** CME 550 w/HSA **HAMMER TYPE** Automatic

STRUCT. NO. SN 082-W315
Station 73+59 to 75+18.50

BORING NO. RW-304
Station 75+98
Offset 39.0 ft LT
Ground Surface Elev. 422.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A **Hrs.** N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DESCRIPTION
				FILL: Brown, silty clay, trace fine sand, A-6
	3 5 7	1.6 S/15	17	
419.0				
				FILL: Brown, silty loam, A-4
	3 4 5	0.6 S/15	25	
-5 / 416.5				
				FILL: Dark brown, silty clay, trace gravel and brick fragments, A-6
	3 3 5	1.6 S/15	22	
414.0				
				FILL: Gray, silty loam, A-6
	ST	1.4 S/4	20	Unconfined Compression Strength Test Performed
-10 / 411.0				
	4 9 50/3"	N/C	11	FILL: Brown and red, gravel and sand, with brick fragments, A-2
409.5				
				FILL: Brown, sand, A-3
	1 9 7	N/C	11 28	
407.8				
-15				FILL: Black and dark brown, crushed asphaltic, A-3
405.5				
	ST	1.0 S/1.8	34	CLAY: Gray, with sand, A-7 Unconfined Compression Strength Test Performed
404.0				
				SILTY CLAY: Brown, A-6
	2 3 4	1.5 P	25	
-20				
401.5				SILTY CLAY: Brown, A-6 *(continued)*
400.5				SILTY LOAM: Brown, A-5
	1 2 3	1.9 B/20 0.5 P	30	SILTY SAND: Brown, A-5
399.0				
				CLAY: Gray, trace iron nodules, A-6
	ST	0.7 S/6	33	Unconfined Compression Strength Test Performed
-25				
	1 2 3	0.5 P	32	With iron stains
394.0				
				SAND: Brown, A-3
	3 5 7	N/C		
-30				
				END OF DAY: 5/25 START OF DAY: 5/26 (Delayed due to lightning 2.25 hrs)
	4 4 5	N/C		Becomes gray
-35				
	9 10 12	N/C		
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/25/16

ROUTE Interstate 64 **DESCRIPTION** PTB 172, Item 22 - FAP 799 (MLK Drive) **LOGGED BY** BDG (SCI)

SECTION 1BR-1-1 **LOCATION** 38.6289209382, -90.1598692515, **SEC.** 13, **TWP.** 2N, **RNG.** 10W,
Latitude , Longitude

COUNTY Saint Clair **DRILLING METHOD** CME 550 w/HSA **HAMMER TYPE** Automatic

STRUCT. NO. SN 082-W315
Station 73+59 to 75+18.50

BORING NO. RW-304
Station 75+98
Offset 39.0 ft LT
Ground Surface Elev. 422.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A **Hrs.** N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DESCRIPTION
				SAND: Brown, A-3 *(continued)*
	5 8 12	N/C		
-45				
	10 14 17	N/C		
372.5				
-50				Boring terminated at 49.5 ft.
				Boring grouted to 49.5 ft.
-55				
-60				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/25-5/31/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION 38.6290280807, -90.1613723778, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

BORING NO. BB-305
Station 71+43
Offset 55.0 ft LT
Ground Surface Elev. 415.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 377.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				CRUSHED LIMESTONE: Gray, 3-inch minus
414.0				
	4 9 7	>4.5 P		FILL: Black, clay, with cinders and brick, limestone gravel, A-6
	2 3 3	--		Limestone gravel in shoe, no recovery
-5				
	1 1 1	0.5 P		
407.0				
				CLAY: Gray, A-7
	1 1 2	1.5 P 0.9 S/20		
-10				
	1 2 2	1.6 S/20		Becomes brownish-gray
	1 1 2	0.8 S/20		
-15				
399.5				
	3 5 7	N/C		SAND: Brown, A-3
396.5				
396.0	2 2 6	0.2 S/20		CLAY: Brown, A-6 SANDY LOAM: Brown, A-4
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SANDY LOAM: Brown, A-4 *(continued)*
	2 4 5	N/C		
	1 4 5	N/C		
-25				
	3 5 6	N/C		
385.9				
	5 5 9	N/C 0.3 P		CLAY: Brown, trace fine sand, A-6
-30				
383.5				
				SANDY LOAM: Brown, A-4
	6 9 11	N/C		
-35				
378.0				
				SAND: Brown, A-3 ▼
	3 5 13	N/C		Becomes gray Began mud rotary at 40.0 ft..
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/25-5/31/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION 38.6290280807, -90.1613723778, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

BORING NO. BB-305
Station 71+43
Offset 55.0 ft LT
Ground Surface Elev. 415.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 377.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SAND: Brown, A-3 *(continued)*
	12 12 12	N/C		
-45				
368.0				
				SANDY LOAM: Gray, A-4
	10 18 18	N/C		
-50				
363.0				
				SAND: Gray, A-3
	9 14 16	N/C		
-55				
	9 8 13	N/C		
-60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SAND: Gray, A-3 *(continued)*
	14 12 10	N/C		
-65				
348.0				
				GRAVEL: Gray, A-1
346.5				
	11 16 17	N/C		SAND: Gray, A-3
-70				
345.0				
				GRAVEL: Gray, A-1
341.5				
	14 16 23	N/C		SAND: Gray, A-3
-75				
336.5				
335.9	11 15 17	N/C		SANDY LOAM: Gray, A-4 SAND: Gray, A-3
335.3				
-80				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/25-5/31/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION 38.6290280807, -90.1613723778, SEC. 13, TWP. 2N, RNG. 10W,
Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

BORING NO. BB-305
Station 71+43
Offset 55.0 ft LT
Ground Surface Elev. 415.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 377.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
GRAVEL: Gray, A-1 *(continued)* Rough drilling from 80.0 ft.-82.0 ft.				GRAVEL: Gray, A-1			
331.5				311.5			
SAND: Gray, A-3	13 9 12	N/C		SAND: Brownish-gray, trace gravel, A-3 Rough drilling from 105.0 ft.-107.8 ft.	14 27 36	N/C	
-85				-105			
Coarse sand and rock fragments	20 22 21	N/C		Weathered limestone and granite fragments in shoe; set casing at 109.3 ft. STOP: 5/26/2016 START: 5/27/2016	48 50/4"	---	
-90				305.0 -110			
Rough drilling from 92.0 ft.-93.0 ft.				COBBLE w/ GRAVEL: Gray and brown, A-1 No recovery	50/5"	---	
				302.7			
				Borehole continued with rock coring.	50/3"	---	
	14 15 14	N/C					
-95				-115			
	8 18 23	N/C					
315.0 -100				-120			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 5/25-5/31/2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY TC (SCI)

SECTION 1BR-1-1 LOCATION 38.6290280807, -90.1613723778, SEC. 13, TWP. 2N, RNG. 10W,
Latitude , Longitude

COUNTY Saint Clair CORING METHOD

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

CORING BARREL TYPE & SIZE NX Wireline
Core Diameter 2 in
Top of Rock Elev. 298.5 ft
Begin Core Elev. 302.7 ft

BORING NO. BB-305
Station 71+43
Offset 55.0 ft LT
Ground Surface Elev. 415.0 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
GRAVEL: Limestone and granite cobbles and boulders	1	12	0		
302.70					
-115					
SANDSTONE: Gray, moderately hard, very fine grained, banded, slightly weathered, calcarecus Becomes medium bedded	2	69	56	5	
298.50					94.1
Becomes thickly bedded	3	95	82	2.8	
-120					
3.2" open vertical fracture, becomes thin to medium bedded 2.2" open vertical fracture					85.7
Becomes banded to thinly bedded, trace stylolites	4	100	74	2.4	
-125					157.0
287.15					
LIMESTONE: Light gray, moderately hard, very finely crystalline, medium bedded, slightly weathered	5	86	54	4	
-130					230.1
1.75" open vertical fracture 284.50					
Boring terminated at 130.5 ft. Boring grouted to 130.5 ft.					

Color pictures of the cores Yes
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 5
S.N. 082–W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W13 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	234
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION 38.6288584526, -90.1605354324, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
426.8			
3" TOPSOIL			
FILL: Brown and gray, clay, trace sand and cinders, A-6	2 4 4	>4.5 P	24
424.0			
FILL: Brown, sandy clay, A-6	2 3 3	0.5 P	38
422.5			
FILL: Brown, sand, A-3			
422.0			
-5 FILL: Brown, clay, with cinders, trace sand, A-6			
420.5			
FILL: Brown, sand, A-3	2 5 5	N/C	
	4 5 6	N/C	
-10			
Trace clay lumps	3 4 6	N/C	
	4 6 8	N/C	
-15			
	7 9 12	N/C	
	6 7 4	N/C N/C	36
407.5			
-20 FILL: Black, cinders, A-4			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
FILL: Black, cinders, A-4 *(continued)*			
Rough drilling at 20.5 ft.	2 2 2	N/C 1.5 P	30 32
405.0			
CLAY: Gray, with iron stains and nodules, A-7			
Trace iron stains	1 2 2	0.8 P	28
-25 401.5			
SILTY LOAM: Gray, A-4	ST	0.5 S/10.6	33
	2 5 7	0.9 S/15 N/C	28 29
-30			
395.0			
CLAY: Gray, A-7	WOH 1 2	0.9 B/20	49
-35			
390.0			
SAND: Brown, A-3	6 8 10	N/C	
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 DESCRIPTION PTB 172, Item 22 - FAP 799 (MLK Drive) LOGGED BY BDG (SCI)

SECTION 1BR-1-1 LOCATION 38.6288584526, -90.1605354324, SEC. 13, TWP. 2N, RNG. 10W, Latitude , Longitude

COUNTY Saint Clair DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*			
Began mud rotary at 40.0 ft..			
	10 12 15	N/C	
-45			
	5 7 12	N/C	
-50			
Becomes brownish-gray	10 11 12	N/C	
-55			
	4 6 10	N/C	
-60			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Brown, A-3 *(continued)*			
	10 19 21	N/C	
-65			
359.5			
SAND: Brown and gray, A-1			
358.8			
SAND: Gray, A-3	6 11 12	N/C	
-70			
Trace gravel	8 8 7	N/C	
-75			
	12 10 7	N/C	
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 6
S.N. 082–W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W14 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	235
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 **DESCRIPTION** PTB 172, Item 22 - FAP 799 (MLK Drive) **LOGGED BY** BDG (SCI)

SECTION 1BR-1-1 **LOCATION** 38.6288584526, -90.1605354324, **SEC.** 13, **TWP.** 2N, **RNG.** 10W,
Latitude , Longitude

COUNTY Saint Clair **DRILLING METHOD** CME 550 w/HSA **HAMMER TYPE** Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A **Hrs.** N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	10 14 16	N/C	
-85			
	15 14 12	N/C	
-90			
	12 50/5"	N/C	
332.5			
SAND: Gray, A-1			
-95			
	16 22 16	N/C	
-100			

SAND: Gray, A-3 *(continued)*

Rough drilling from 87.0 ft.-88.5 ft.

SAND: Gray, A-1 *(continued)*
Boring advance with casing at 100.0 ft.

With gravel

No gravel

309.0
WEATHERED LIMESTONE w/ CLAY LOAM: Brown and gray, with chert gravel, A-1

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	29 38 50/4"	N/C	
-105			
	23 44 47	N/C	
-110			
	27 33 37	N/C	
-115			
	50/5"	--	
-120			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 **DESCRIPTION** PTB 172, Item 22 - FAP 799 (MLK Drive) **LOGGED BY** BDG (SCI)

SECTION 1BR-1-1 **LOCATION** 38.6288584526, -90.1605354324, **SEC.** 13, **TWP.** 2N, **RNG.** 10W,
Latitude , Longitude

COUNTY Saint Clair **DRILLING METHOD** CME 550 w/HSA **HAMMER TYPE** Automatic

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter N/A ft
Upon Completion N/A ft
After N/A **Hrs.** N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	30 41 50/5"	N/C	
-125			
	50/1"	--	
-130			
-135			
-140			

WEATHERED LIMESTONE w/ CLAY LOAM: Brown and gray, with chert gravel, A-1 *(continued)*

Borehole continued with rock coring.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 02/06/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING – 7
S.N. 082–W315 RETAINING WALL AT MLK BRIDGE APPROACH
SHEET NO. W15 OF W16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	236
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

ROCK CORE LOG

Date 5/26-6/2-2016

ROUTE Interstate 64 **DESCRIPTION** PTB 172, Item 22 - FAP 799 (MLK Drive) **LOGGED BY** BDG (SCI)

SECTION 1BR-1-1 **LOCATION** 38.6288584526, -90.1605354324, **SEC.** 13, **TWP.** 2N, **RNG.** 10W,
Latitude , **Longitude**

COUNTY Saint Clair **CORING METHOD**

STRUCT. NO. 082-6003(E), 082-0374(P)
Station 73+59 to 75+18.50

CORING BARREL TYPE & SIZE NX Wireline
Core Diameter 2 **in**
Top of Rock Elev. 300.3 **ft**
Begin Core Elev. 300.3 **ft**

BORING NO. BB-306
Station 74+00
Offset 31.0 ft LT
Ground Surface Elev. 427.0 **ft**

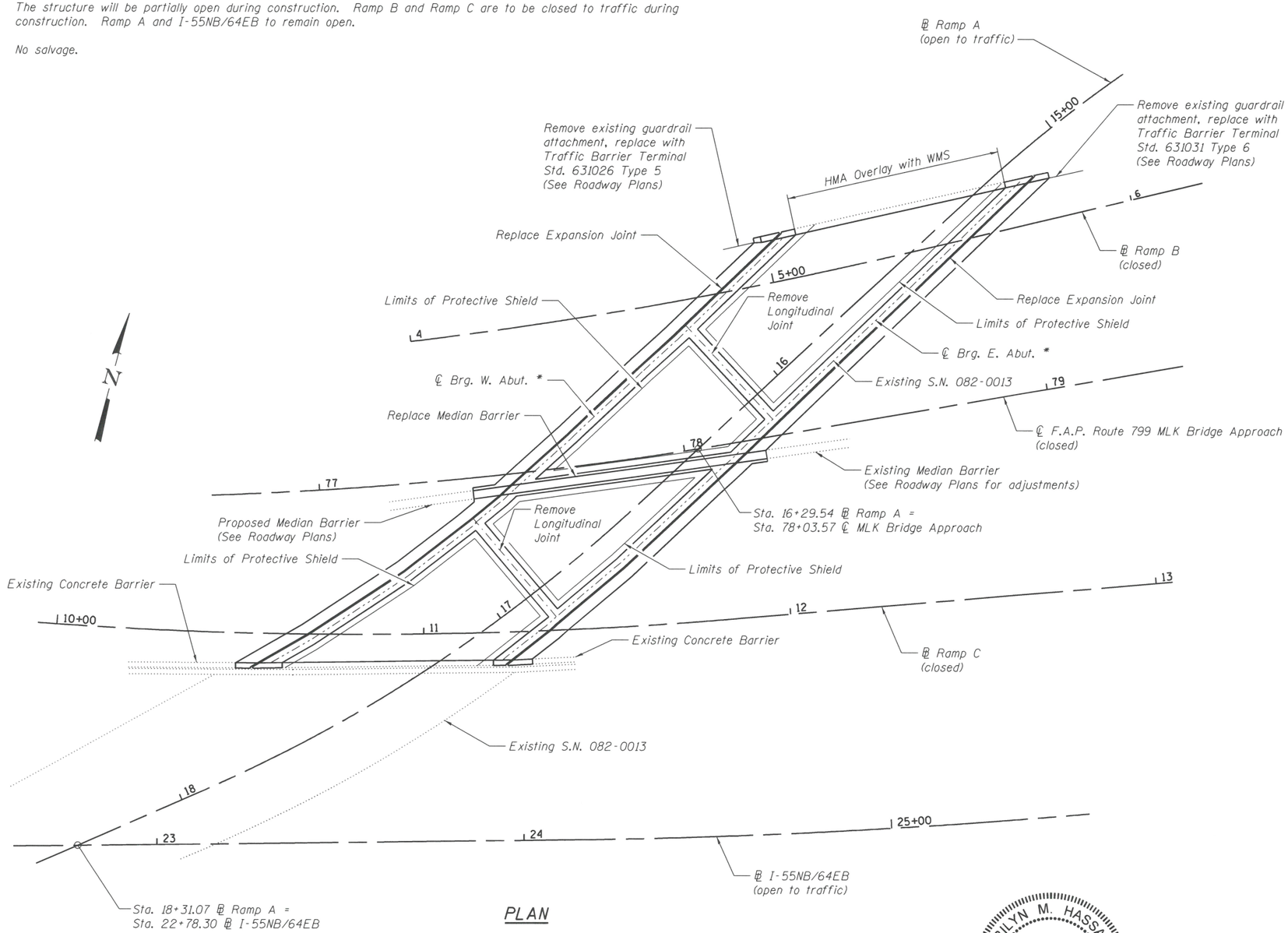
	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
WEATHERED LIMESTONE w/ CLAY LOAM: Brown and gray, with chert gravel, A-1 *(continued)*	300.28	1	100	73	2.22	
LIMESTONE: Light gray, hard, very finely crystalline, thin to medium bedded, moderately weathered, with interbedded clay seams Becomes thinly bedded						820.6
	-130					
Becomes fractured Becomes thinly bedded	296.05	2	100	89	1.3	
SANDSTONE: Gray, hard, very fine grained, thickly bedded, slightly weathered, calcareous						228.6
	-135					
	289.50					225.4
LIMESTONE: Light gray, moderately hard, very finely crystalline, thickly bedded, slightly weathered						
Becomes banded, with 0.3" clay seam	-140					211.5
	286.55	3	100	67	1	
SANDSTONE: Gray, hard, very fine grained, banded to thinly bedded, slightly weathered 1.3" interbedded limestone 0.65" clay seam, becomes medium bedded	284.68					
Boring terminated at 142.3 ft. Boring grouted to 142.3 ft.						
	-145					

Color pictures of the cores Yes
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

The structure will be partially open during construction. Ramp B and Ramp C are to be closed to traffic during construction. Ramp A and I-55NB/64EB to remain open.

No salvage.



PLAN

* Structural repair of concrete along stem of abutment and wingwalls required.

GENERAL NOTES

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. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contactor 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.

Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Surface preparation at the construction joints shall be performed using high-pressurized water spray, using equipment capable of producing a minimum water pressure of 5000 psi.

The Contractor shall install a protective shield to protect motorists and pedestrians on Ramp A from construction debris. Installation and removal of the protective shield shall occur during one of the interstate weekend closures.

Existing Structure Plans are available for review in the District office. Contact Herve Gelin at (618) 346-3179.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Polymerized Bituminous Materials (Tack Coat)	Pound	146	-	146
Polymerized Hot-Mix Asphalt Surface Course, Mix "E", N90	Ton	46	-	46
Concrete Removal	Cu. Yd.	111.4	-	111.4
Protective Shield	Sq. Yd.	379	-	379
Concrete Superstructure	Cu. Yd.	126.0	-	126.0
Protective Coat	Sq. Yd.	300	-	300
Reinforcement Bars, Epoxy Coated	Pound	16,240	-	16,240
Preformed Joint Strip Seal	Foot	378.7	-	378.7
Waterproofing Membrane System	Sq. Yd.	645	-	645
Epoxy Crack Injection	Foot	-	200	200
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.	-	950	950
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq. Ft.	-	70	70
Longitudinal Joint Sealant	Foot	330	-	330

JERILYN M. HASSARD
081-006521
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

JERILYN M. HASSARD 03-22-18
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-006521
EXPIRES 11/30/2018

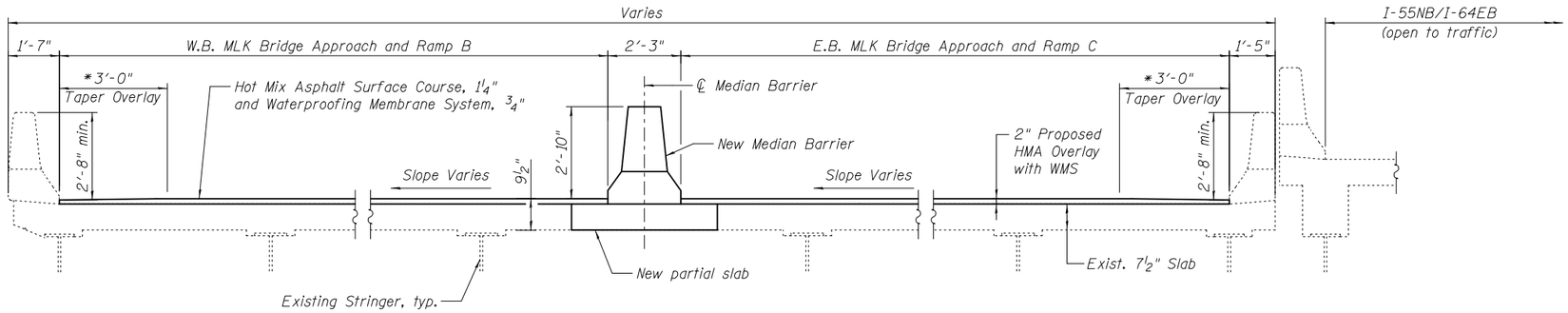
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN, GENERAL NOTES, AND TOTAL BILL OF MATERIAL
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 1 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	238
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



CROSS SECTION

Looking East

* Taper HMA Overlay to 1½" if required to maintain minimum barrier height.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Polymerized Bituminous Materials (Tack Coat)	Pound	146
Polymerized Hot-Mix Asphalt Surface Course, Mix "E", N90	Ton	46
Waterproofing Membrane System	Sq. Yd.	645
Longitudinal Joint Sealant	Foot	330

Notes:

For median barrier replacement details, see sheet 4 and 5 of 9.

Longitudinal Joint Sealant and Tack Coat shall be placed on top of the ½" thick Asphalt Sand Seal Protection Layer of the WMS.

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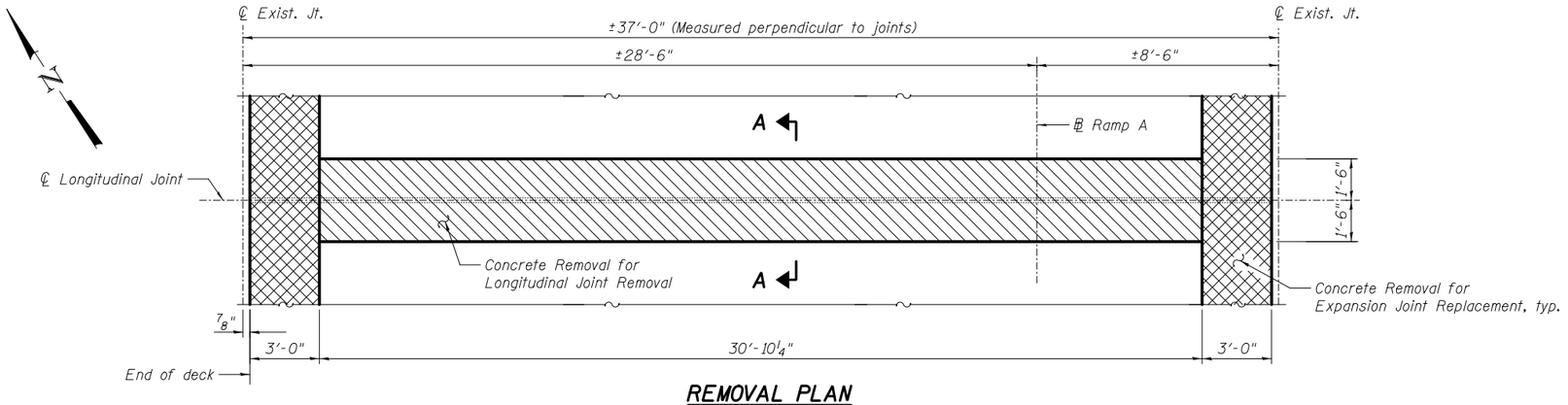
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HMA OVERLAY
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 2 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	239
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

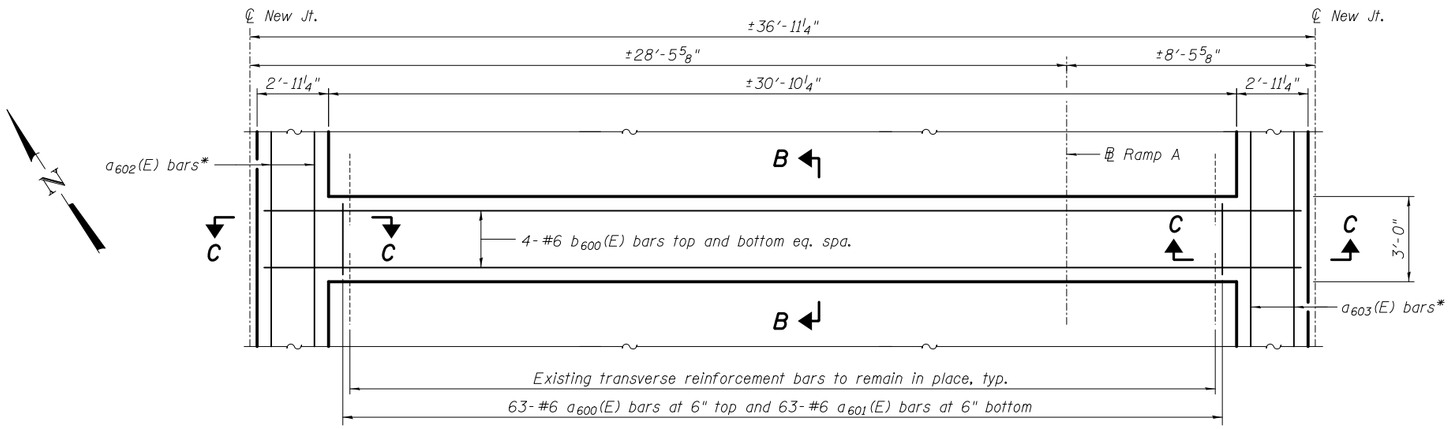


REMOVAL PLAN

(North and South Longitudinal Joint)

BILL OF MATERIAL

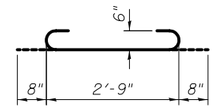
Bar	No.	Size	Length	Shape
a_{600}(E)	126	#6	2′-9"	——
a_{601} (E)	126	#6	4′-1"	⊂⊃
b_{600}(E)	16	#6	36′-5"	——
Concrete Removal			Cu. Yd.	5.2
Concrete Superstructure			Cu. Yd.	4.9
Reinforcement Bars, Epoxy Coated			Pound	2,170



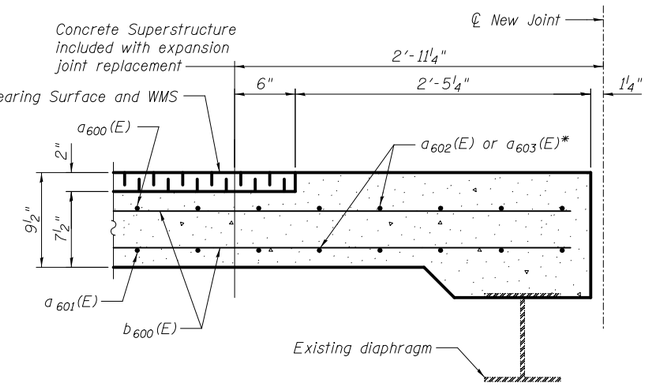
REPLACEMENT PLAN

(North and South Longitudinal Joint)

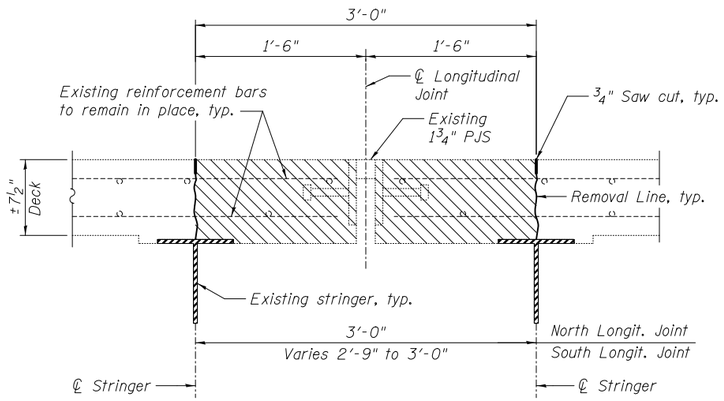
* See Expansion Joint Replacement Details



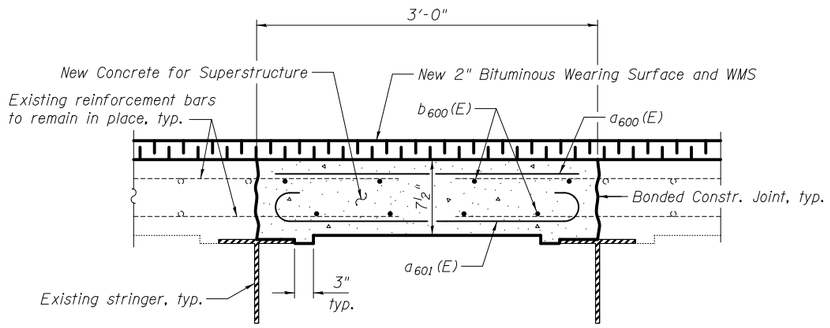
BAR a_{601}(E)



SECTION C-C



SECTION A-A



SECTION B-B

Notes:

Hatched areas indicate concrete section to be removed. Perimeters of Concrete Removal area shall be saw cut 3/4" prior to the removal of the concrete. Existing transverse reinforcement shall be cleaned, straightened and incorporated into the new construction.

For Expansion Joint Replacement, see sheets 6 and 7 of 9.

MODJESKI and MASTERS
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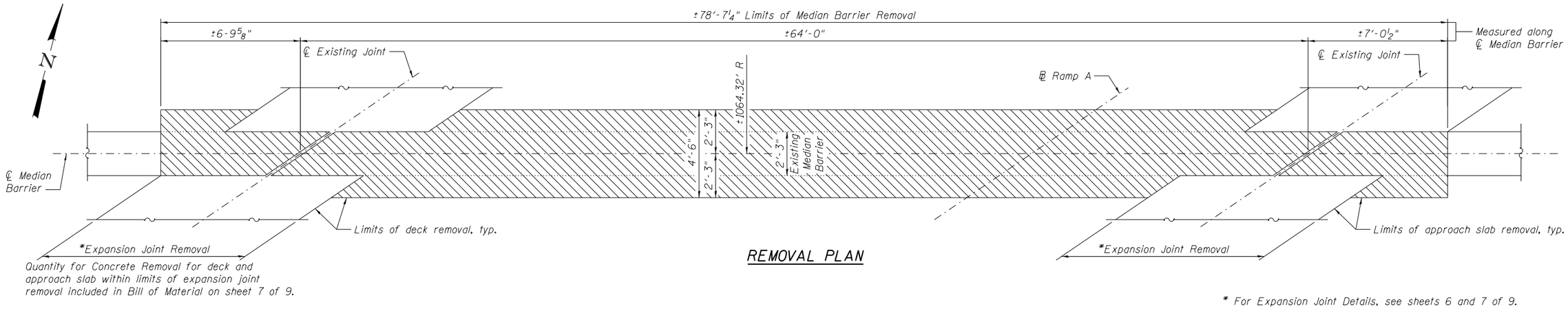
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LONGITUDINAL JOINT REMOVAL
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 3 OF 9 SHEETS

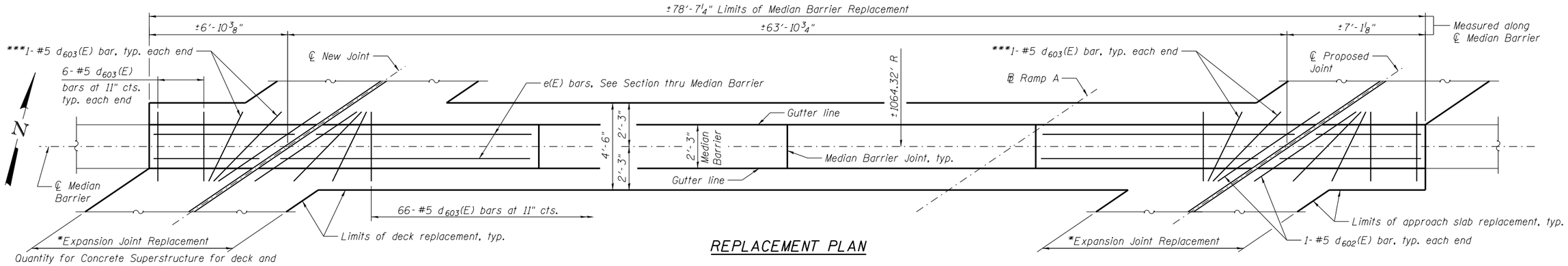
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	240
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



REMOVAL PLAN

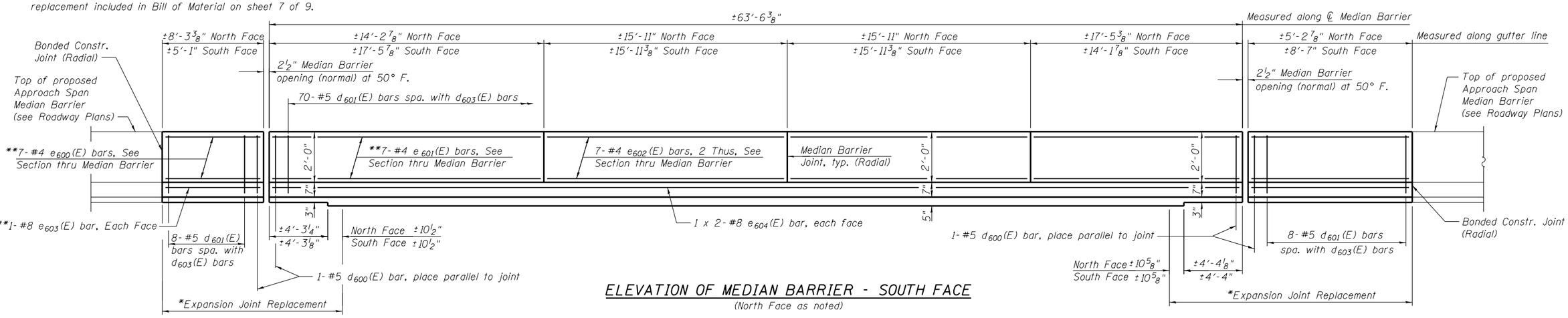
Quantity for Concrete Removal for deck and approach slab within limits of expansion joint removal included in Bill of Material on sheet 7 of 9.

* For Expansion Joint Details, see sheets 6 and 7 of 9.



REPLACEMENT PLAN

Quantity for Concrete Superstructure for deck and approach slab within limits of expansion joint replacement included in Bill of Material on sheet 7 of 9.



ELEVATION OF MEDIAN BARRIER - SOUTH FACE

(North Face as noted)

MINIMUM BAR LAP

(Median Barrier)

#8 bar = 5'-11"

** Order $e_{600}(E)$, $e_{601}(E)$ and $e_{603}(E)$ bars full length. Cut to fit skew and use remainder of bars in opposite end.

*** Splay to fit skew

Notes:
Bar indicated thus, 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.
For Median Barrier details and Bill of Material, see sheet 5 of 9.

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - CDB	REVISED
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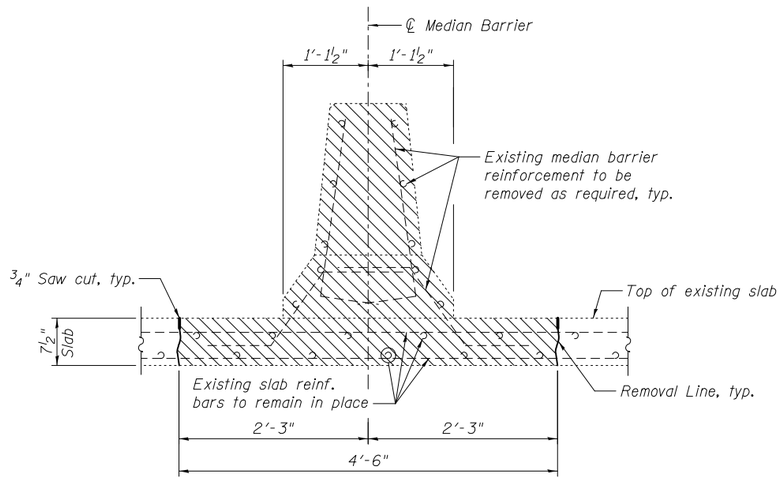
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

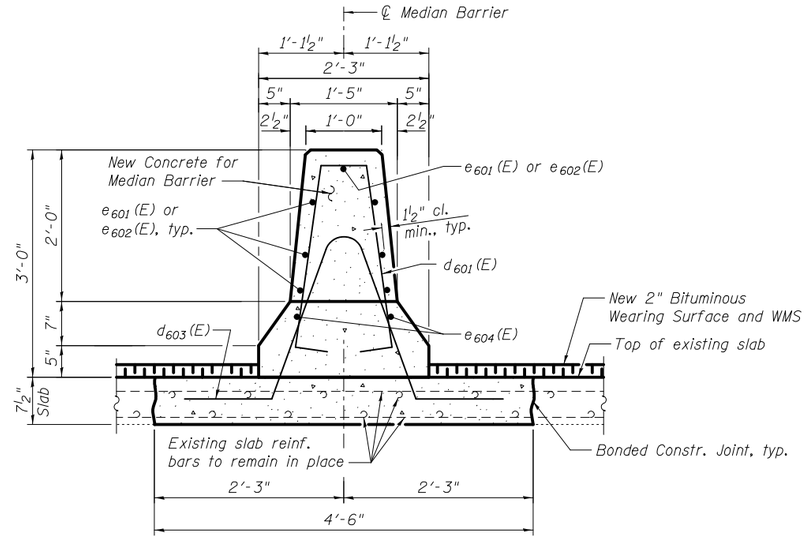
MEDIAN BARRIER REPLACEMENT DETAILS – 1
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 4 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	241
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



SECTION THRU MEDIAN BARRIER SHOWING REMOVAL

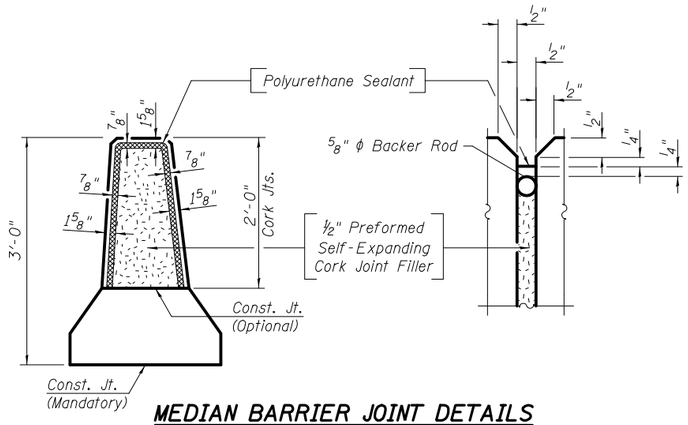
Note:
Hatched areas indicate concrete section to be removed. Perimeters of Concrete Removal area shall be saw cut ¾" prior to the removal of the concrete. Existing slab reinforcement shall be cleaned, straightened and incorporated into the new construction.



SECTION THRU MEDIAN BARRIER SHOWING REPLACEMENT AT WEARING SURFACE

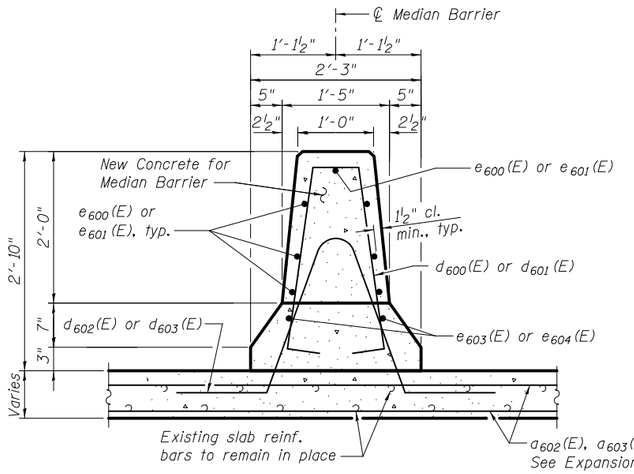
MEDIAN BARRIER BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$d_{600}(E)$	4	#5	6'-10"	
$d_{601}(E)$	86	#5	6'-5"	
$d_{602}(E)$	4	#5	7'-4"	
$d_{603}(E)$	86	#5	6'-10"	
$e_{600}(E)$	7	#4	13'-2"	
$e_{601}(E)$	7	#4	31'-1"	
$e_{602}(E)$	14	#4	15'-8"	
$e_{603}(E)$	2	#8	13'-2"	
$e_{604}(E)$	4	#8	34'-7"	
Concrete Removal			Cu. Yd.	17.2
Concrete Superstructure			Cu. Yd.	19.8
Protective Coat			Sq. Yd.	61
Reinforcement Bars, Epoxy Coated			Pound	2,050

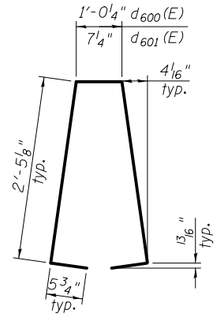


MEDIAN BARRIER JOINT DETAILS

Notes:
The ⅛" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and color shall be gray. Cost included with Concrete Superstructure.
The ½" Preformed Self-Expanding Cork Joint Filler shall be according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.

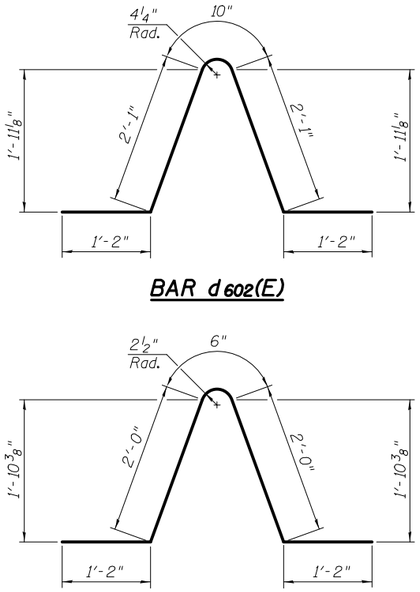


SECTION THRU MEDIAN BARRIER SHOWING REPLACEMENT AT EXPANSION JOINT



BAR $d_{600}(E)$ BAR $d_{601}(E)$

BAR $d_{603}(E)$



BAR $d_{602}(E)$

Note:
Median barrier concrete shall be paid for as Concrete Superstructure.

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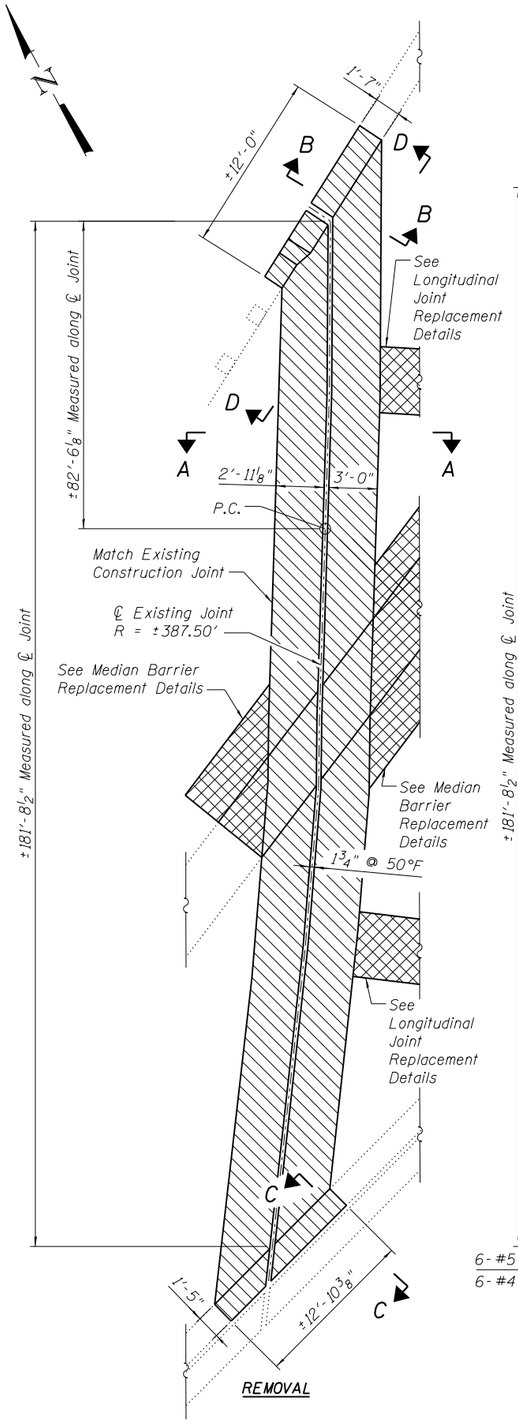
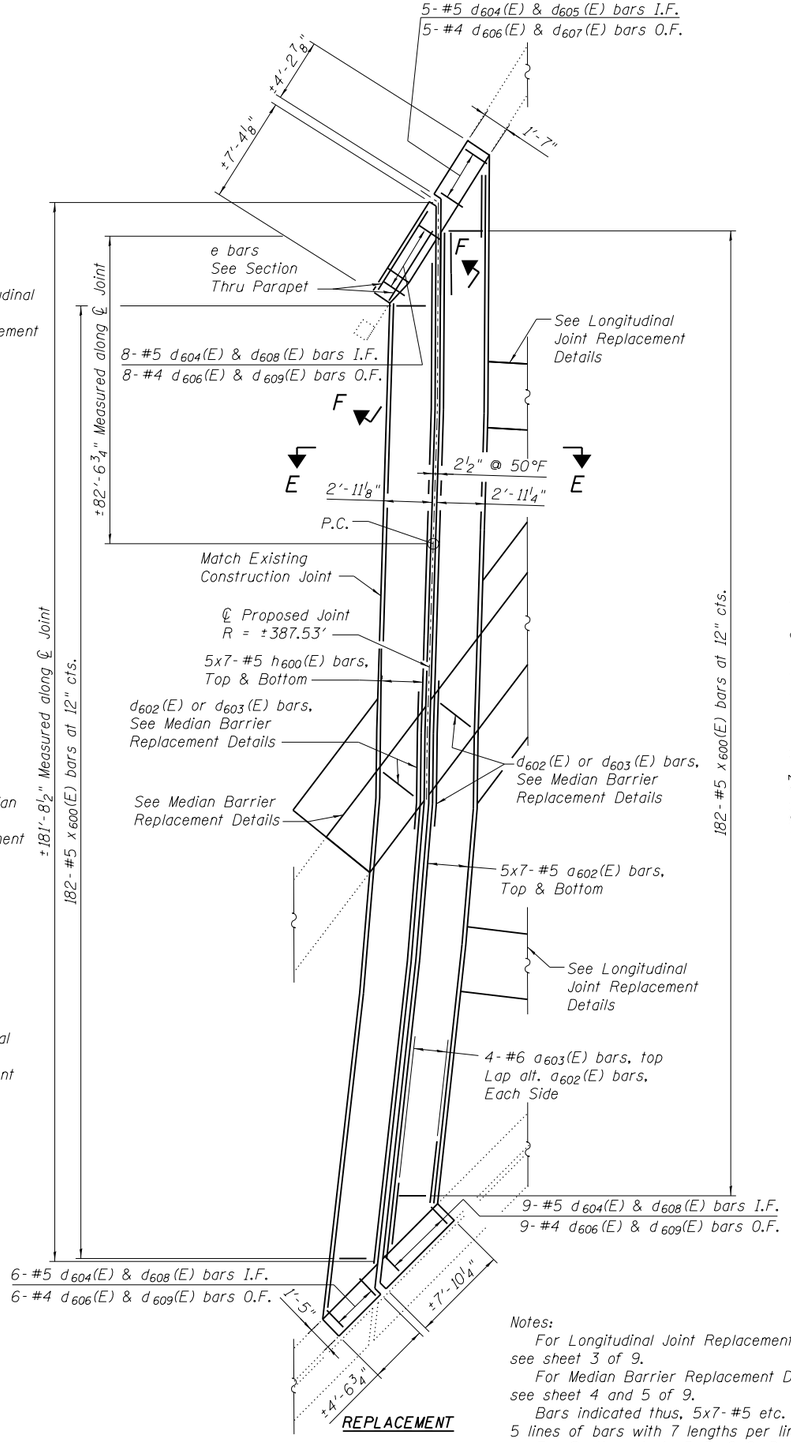
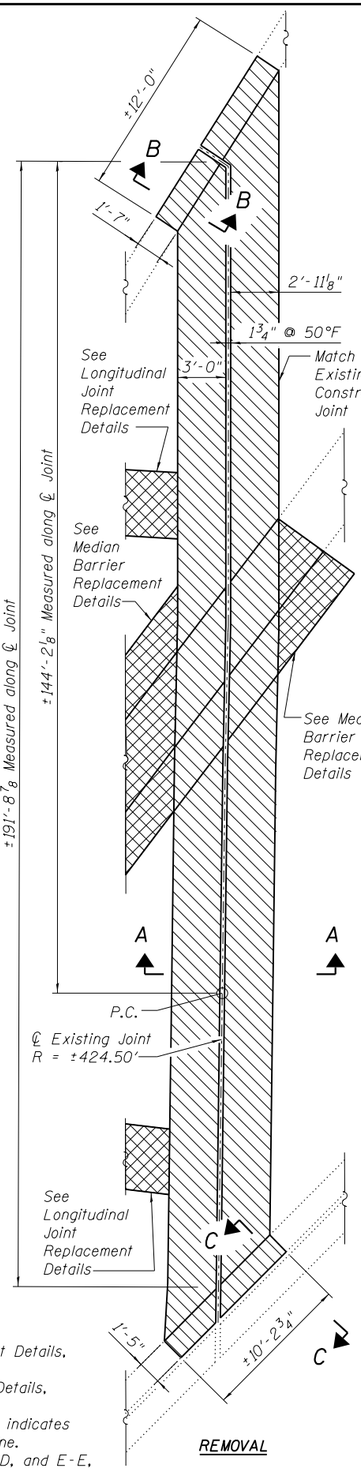
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

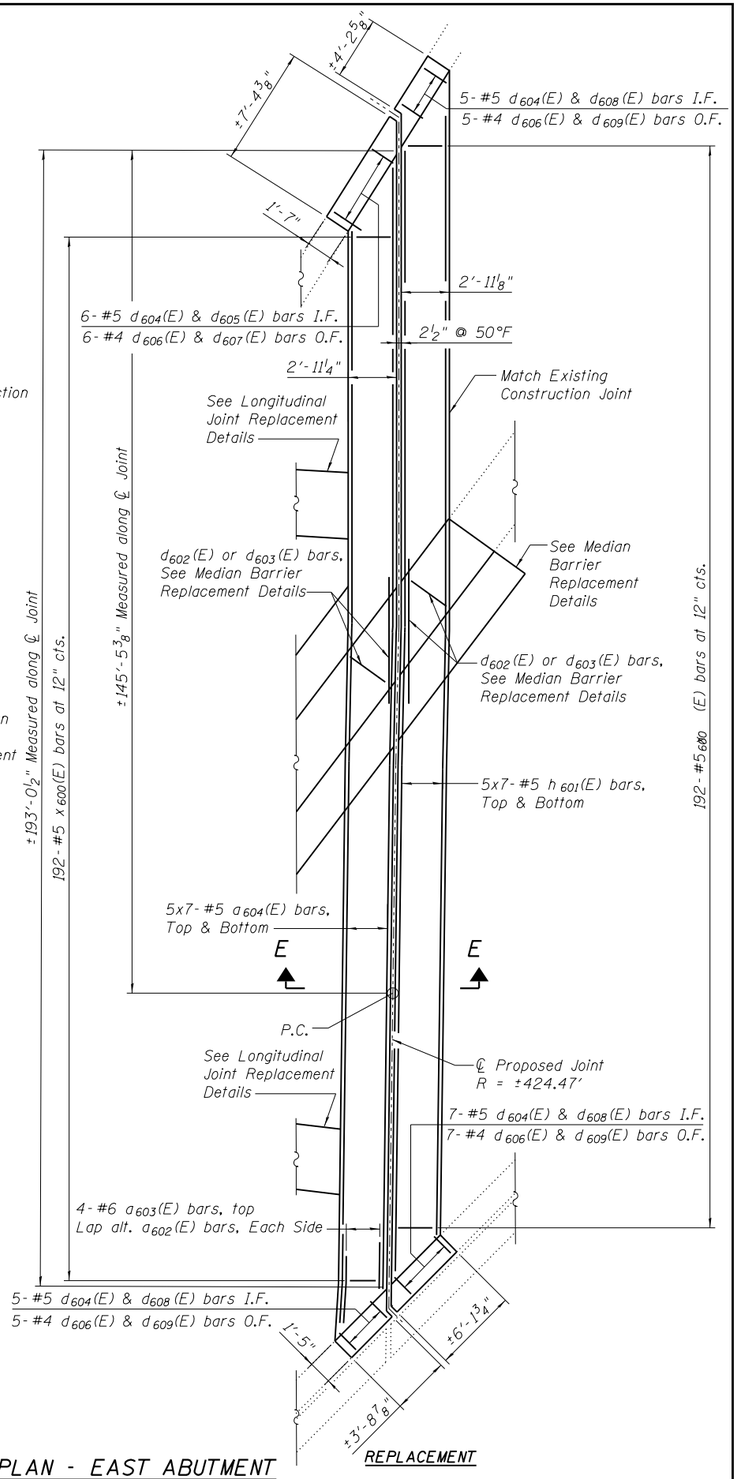
MEDIAN BARRIER REPLACEMENT – 2
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 5 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	242
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			









Notes:
For Longitudinal Joint Replacement Details, see sheet 3 of 9.
For Median Barrier Replacement Details, see sheet 4 and 5 of 9.
Bars indicated thus, 5x7-#5 etc. indicates 5 lines of bars with 7 lengths per line.
For Sections A-A, B-B, C-C, D-D, and E-E, Section Thru Parapet, bar details and Bill of Materials, see sheet 7 of 9.

PLAN - WEST ABUTMENT

PLAN - EAST ABUTMENT

Note: Hatched areas indicate removal.

MODJESKI and MASTERS
Experience great bridges.

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PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

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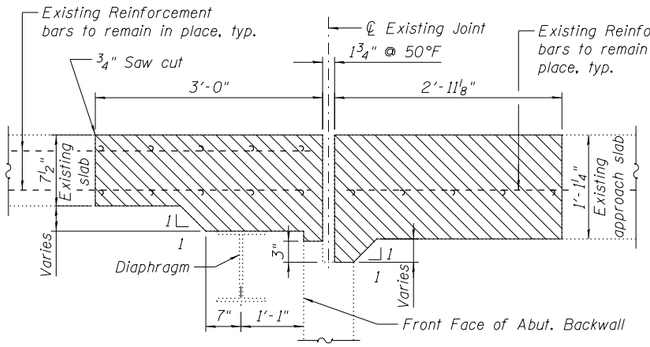
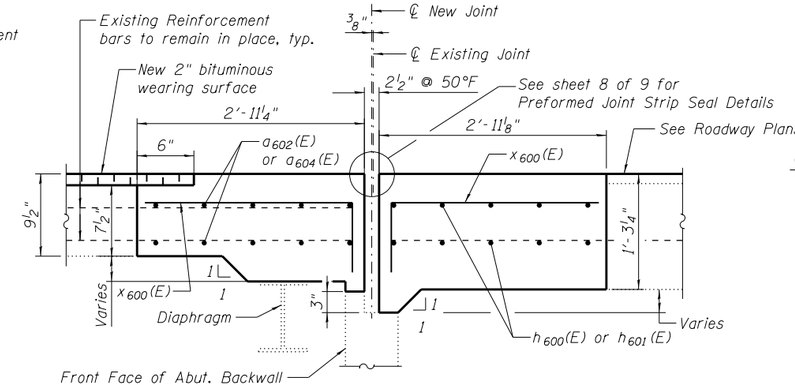
EXPANSION JOINT REPLACEMENT DETAILS – 1
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 6 OF 9 SHEETS

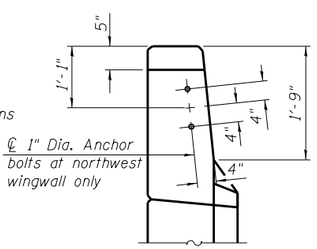
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	243
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		



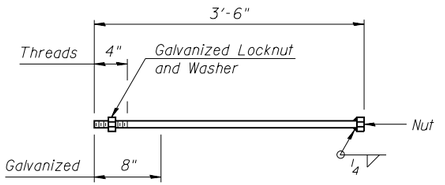
SECTION A-A
(near ℄ Roadway)



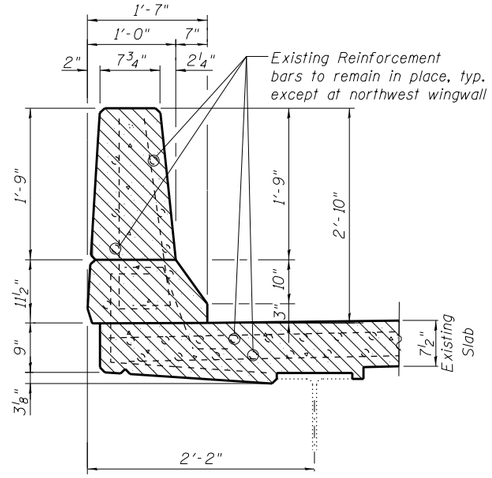
SECTION E-E
(near ℄ Roadway)



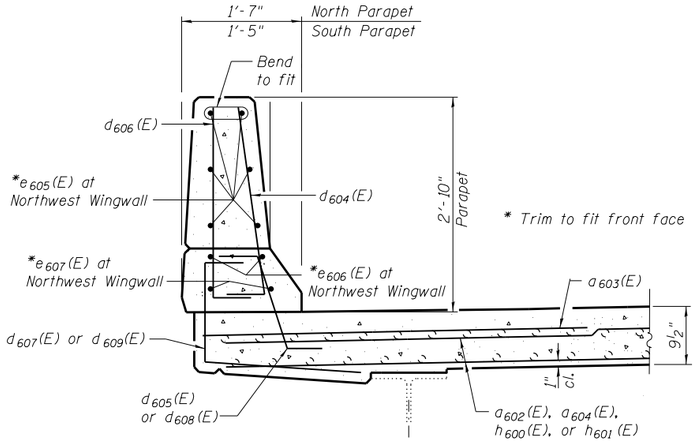
VIEW G-G



1" DIA. ANCHOR BOLT
(2 - required)



SECTION B-B

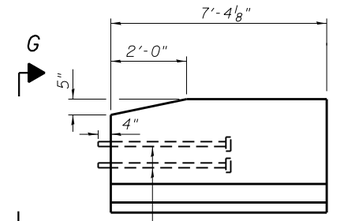


TYPICAL SECTION THRU PARAPET

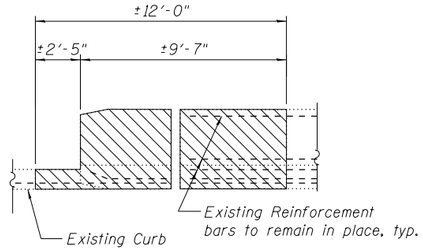
Dimensions of parapet replacement should match existing parapet dimensions at repair location.

Section thru new 2" bituminious wearing surface similar.

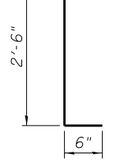
e bars shown for parapet section at northwest wingwall. For all other locations, existing reinforcement bars to remain in place.



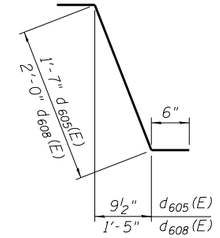
VIEW F-F



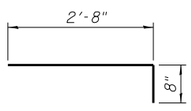
VIEW D-D
Guardrail not shown for clarity.



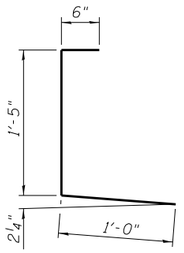
BARS d604(E) & d606(E)



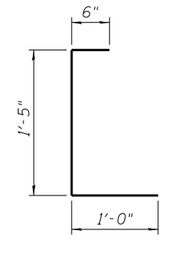
BAR d605(E) & d608(E)



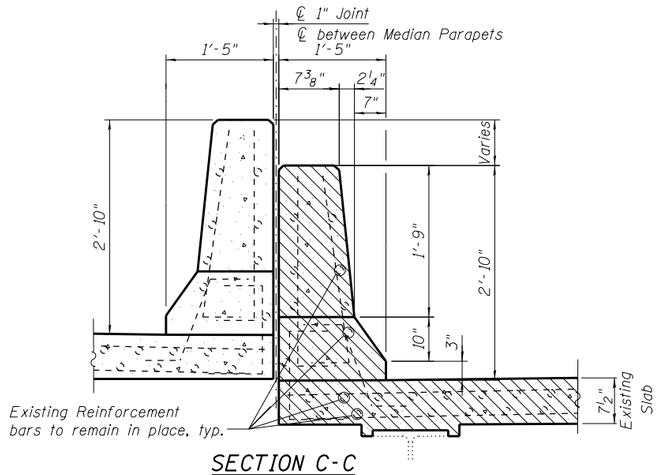
BAR x600(E)



BAR d607(E)



BAR d609(E)



SECTION C-C

MINIMUM BAR LAP
(Slab)
#5 bar = 3'-6"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a602(E)	70	#5	28'-11"	——
a603(E)	16	#6	6'-6"	——
a604(E)	70	#5	30'-5"	——
d604(E)	51	#5	3'-0"	⌊
d605(E)	11	#5	2'-7"	⌐
d606(E)	51	#4	3'-0"	⌊
d607(E)	11	#4	2'-11"	⌊
d608(E)	40	#5	3'-0"	⌐
d609(E)	40	#4	2'-11"	⌊
h600(E)	70	#5	28'-11"	——
h601(E)	70	#5	30'-5"	——
e605(E)	6	#4	7'-1"	——
e606(E)	2	#8	7'-1"	——
e607(E)	2	#5	7'-1"	——
x600(E)	748	#5	3'-4"	⌐
Concrete Removal			Cu. Yd.	89.0
Concrete Superstructure			Cu. Yd.	101.3
Protective Coat			Sq. Yd.	239
Reinforcement Bars, Epoxy Coated			Pound	12,020

Note: Hatched areas indicate concrete removal.

MODJESKI and MASTERS
Experience great bridges.

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PLOT SCALE =	DRAWN - AEC	REVISED
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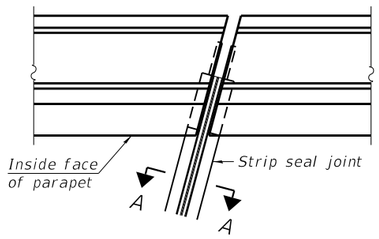
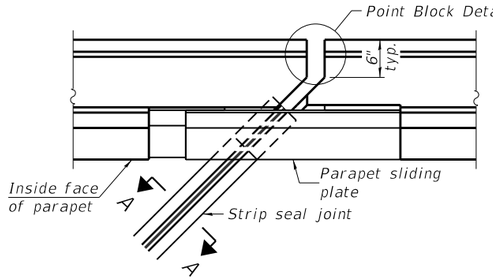
EXPANSION JOINT REPLACEMENT DETAILS – 2
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 7 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	244
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

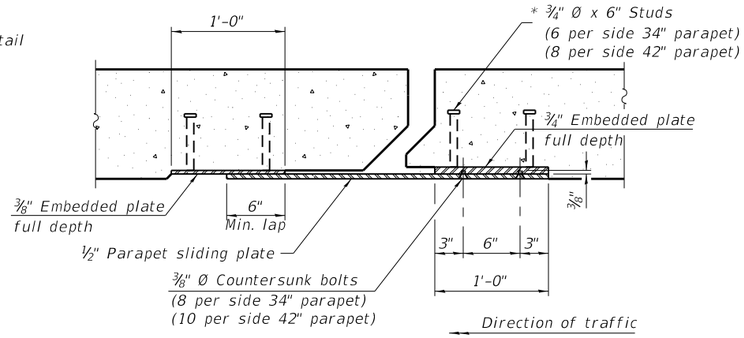


FOR SKEWS ≤ 30°

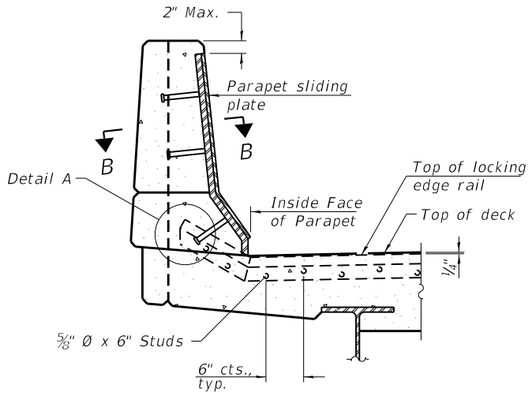


FOR SKEWS > 30°

PLAN AT PARAPET

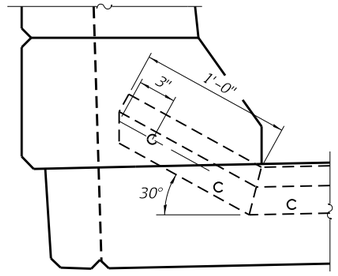


SECTION B-B

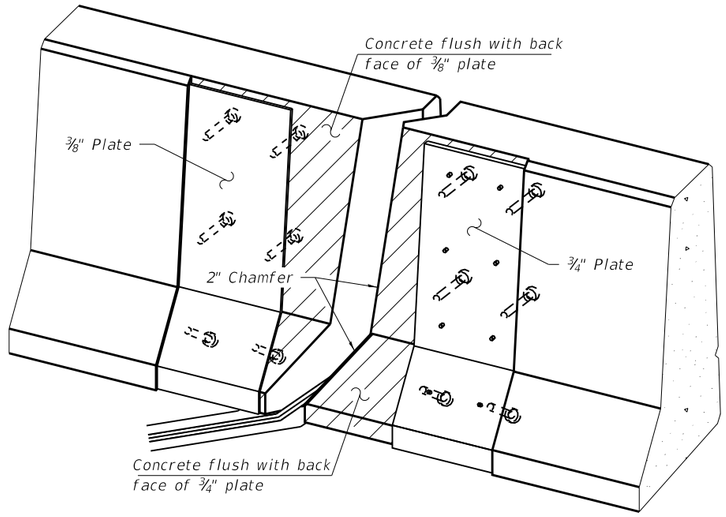


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

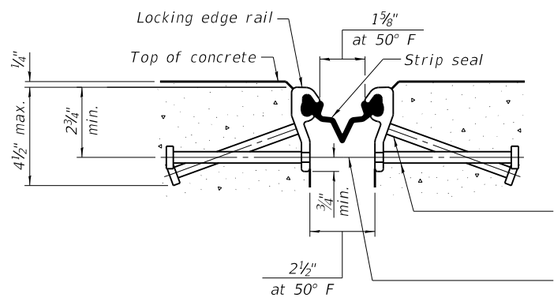


DETAIL A

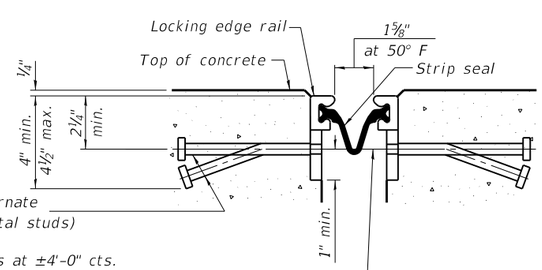


TRIMETRIC VIEW

(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT



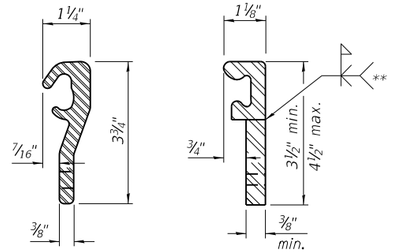
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅞" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

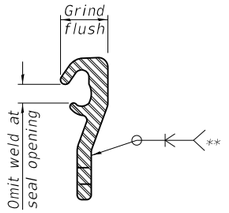


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

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.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	378.7

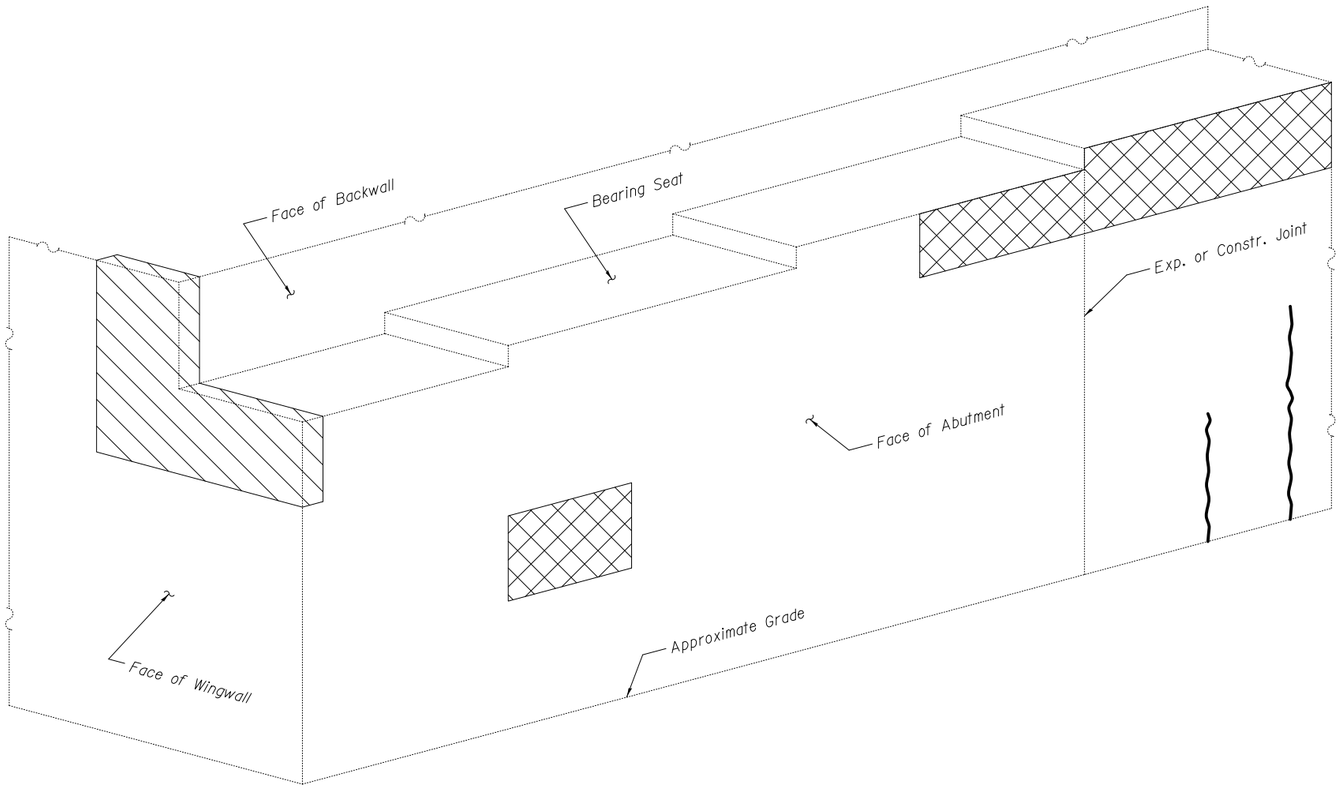
EJ-SS 8-11-17

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - CDB	REVISED
		CHECKED - RLM	REVISED
	PLOT SCALE =	DRAWN - AEC	REVISED
	PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 8 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	245
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



PARTIAL ELEVATION OF WINGWALL AND ABUTMENT

(General View)

Note:
Repairs shown in the Partial Elevation of Wingwall and Abutment provide a general representation of the repairs that will be required to the exposed surfaces of the East and West Abutments and wingwalls. The repairs shown do not represent actual repair locations and extents of repair. Actual locations to be repaired and the corresponding repair limits will be determined by the Engineer at the time of construction. Quantities provided in the Bill of Material are estimated.

LEGEND

- Epoxy Crack Injection
- Structural Repair of Concrete < 5 inches
- Structural Repair of Concrete > 5 inches

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Epoxy Crack Injection	Foot	200
Structural Repair of Concrete (Depth Equal to or less than 5 inches)	Sq. Ft.	950
Structural Repair of Concrete (Depth Greater than 5 inches)	Sq. Ft.	70

MODJESKI and MASTERS
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	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

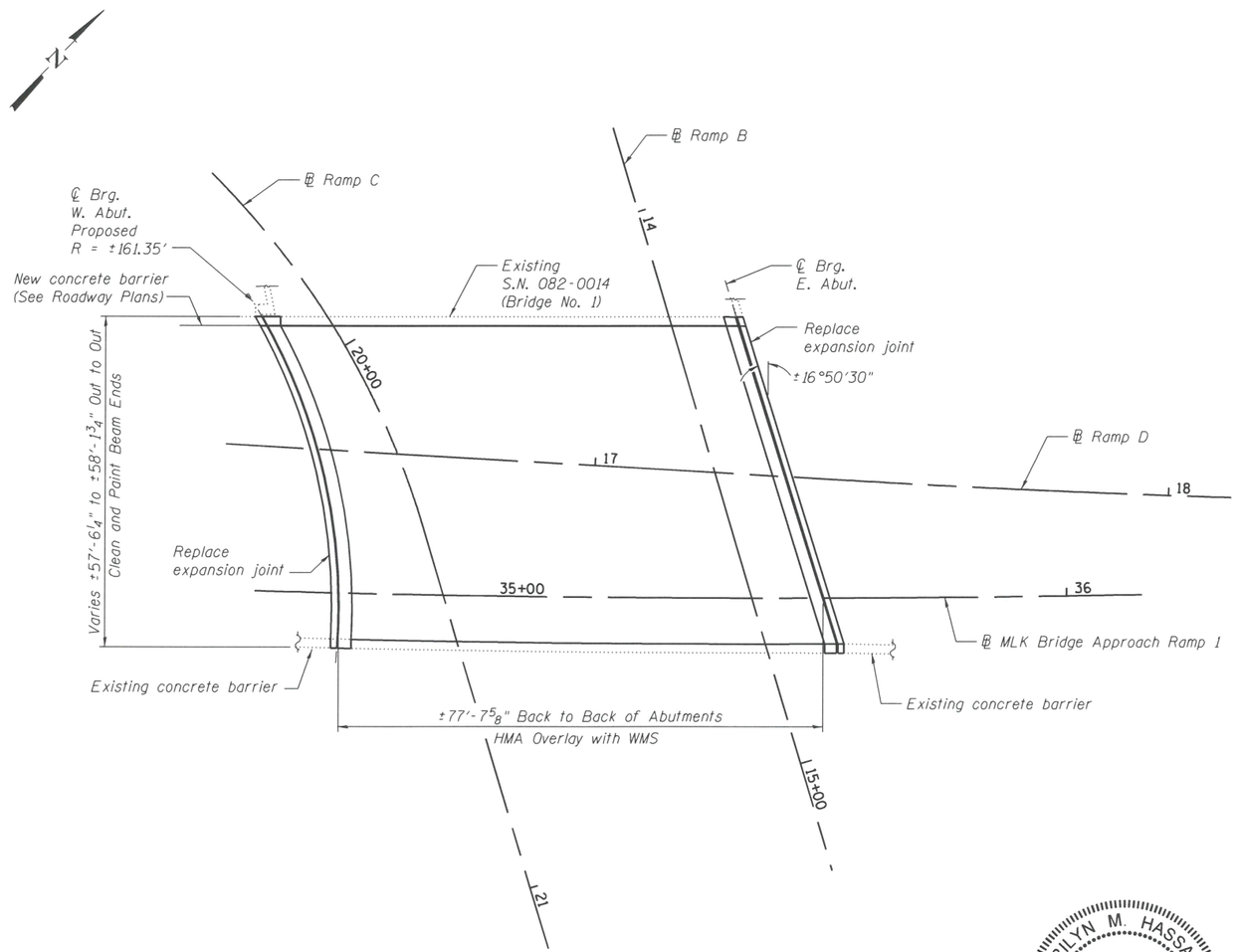
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WINGWALL AND ABUTMENT REPAIRS
S.N. 082-0013 MLK BRIDGE APPROACH OVER RAMP A
SHEET NO. 9 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	246
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

Ramp D is to remain open to traffic during construction. Ramp 1, Ramp B, and Ramp C are to be closed to traffic during construction. Stage construction will be utilized to perform the repairs on the structure.

No salvage.



PLAN

GENERAL NOTES

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. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contactor 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.

Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Surface preparation at the construction joints shall be performed using high-pressurized water spray, using equipment capable of producing a minimum water pressure of 5000 psi.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures. Areas to be cleaned and painted shall consist of all beam ends, end diaphragms and steel components of the steel bearings at the abutments. Beam end painting shall extend 5 feet from centerline bearing of beams longitudinally. This surface preparations shall be accomplished according to the requirements of Near-White Metal Blast Cleaning SSPC-SP10. The paint system shall be applied as specified for System I OZ/E/U. The color of the final finish coat shall be Grey, Munsell No. 5B 7/1.

Complete cost of painting the locations described on this sheet shall be considered included with the pay item Cleaning and Painting Steel Bridge No. 1.

Care shall be taken not to damage rubber bearing or joint components during the blasting and cleaning operations. Any damage to these components shall be repaired at the Contractor's expense.

Existing Structure Plans are available for review in the District office. Contact Herve Gelin at (618) 346-3179.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Polymerized Bituminous Materials (Tack Coat)	Pound	103	-	103
Polymerized Hot-Mix Asphalt Surface Course, Mix "E", N90	Ton	32	-	32
Concrete Removal	Cu. Yd.	16.4	-	16.4
Concrete Superstructure	Cu. Yd.	18.6	-	18.6
Protective Coat	Sq. Yd.	72	-	72
Reinforcement Bars, Epoxy Coated	Pound	2,680	-	2,680
Bar Splicers	Each	18	-	18
Preformed Joint Strip Seal	Foot	125.0	-	125.0
Waterproofing Membrane System	Sq. Yd.	459	-	459
Cleaning and Painting Steel Bridge No. 1	L. Sum	1	-	1
Longitudinal Joint Sealant	Foot	298	-	298
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 1	L. Sum	1	-	1

JERILYN M. HASSARD
081-006521
LICENSED
STRUCTURAL
ENGINEER
STATE OF ILLINOIS

Jerilyn M. Hassard 03-22-18

JERILYN M. HASSARD
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-006521
EXPIRES 11/30/2018

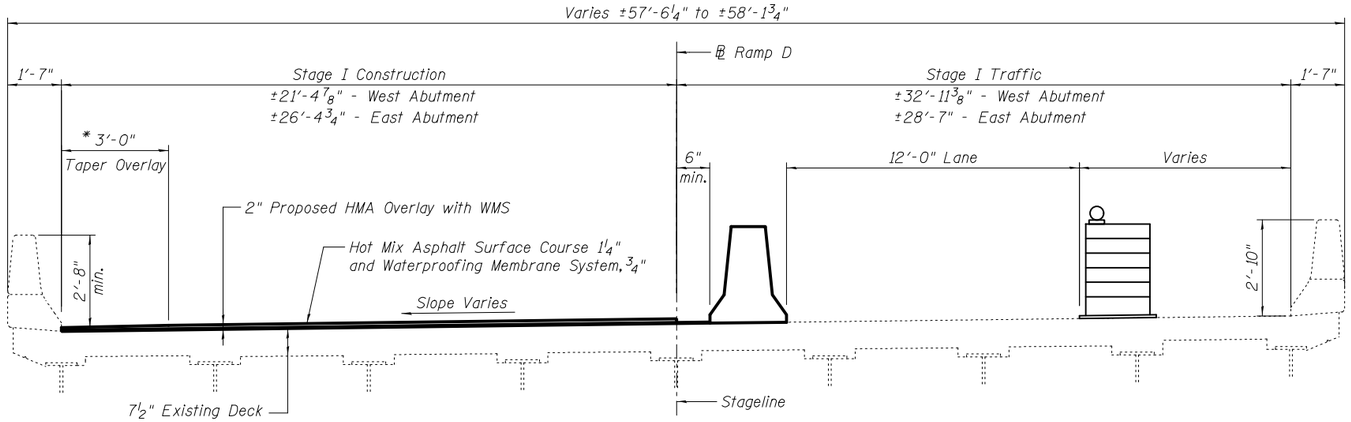
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

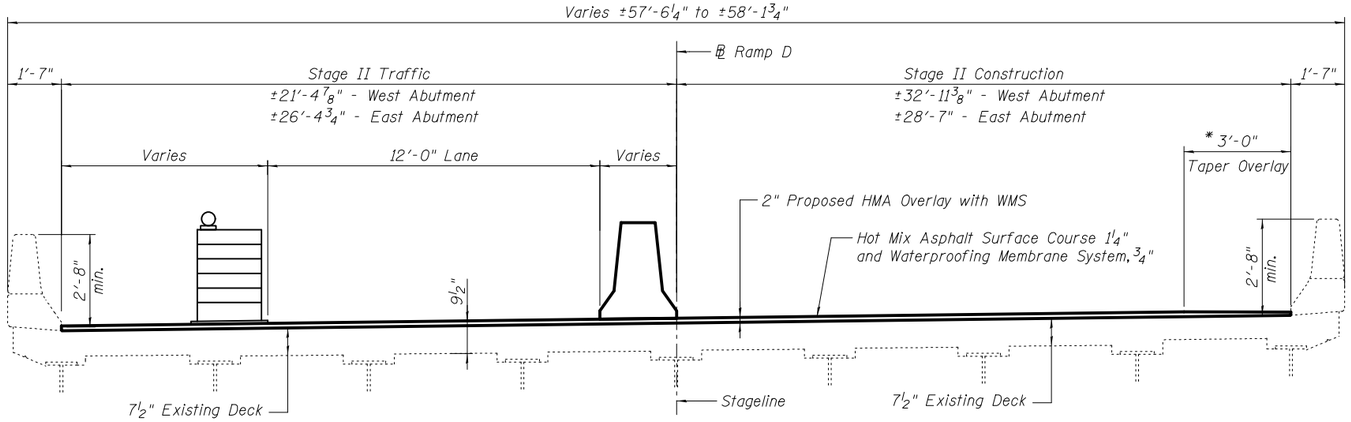
GENERAL PLAN, GENERAL NOTES, AND TOTAL BILL OF MATERIAL
S.N. 082-0014 MLK BRIDGE APPROACH AND RAMP D
OVER RAMP B AND RAMP C
SHEET NO. 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	247
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



STAGE I TYPICAL SECTION

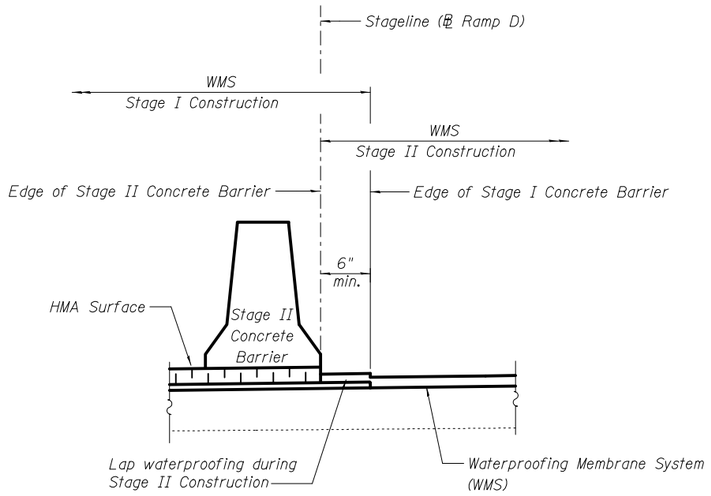
Looking Upstation



STAGE II TYPICAL SECTION

Looking Upstation

* Taper HMA Overlay to 1 1/2" if required to maintain minimum barrier height.



WATERPROOFING TREATMENT AT STAGE CONSTRUCTION LINE

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Polymerized Bituminous Materials (Tack Coat)	Pound	103
Polymerized Hot-Mix Asphalt Surface Course, Mix "E", N90	Ton	32
Waterproofing Membrane System	Sq. Yd.	459
Longitudinal Joint Sealant	Foot	298

Note:
Longitudinal Joint Sealant and Tack Coat shall be placed on top of the 1/2" thick Asphalt Sand Seal Protection Layer of the WMS.

MODJESKI and MASTERS
Experience great bridges.

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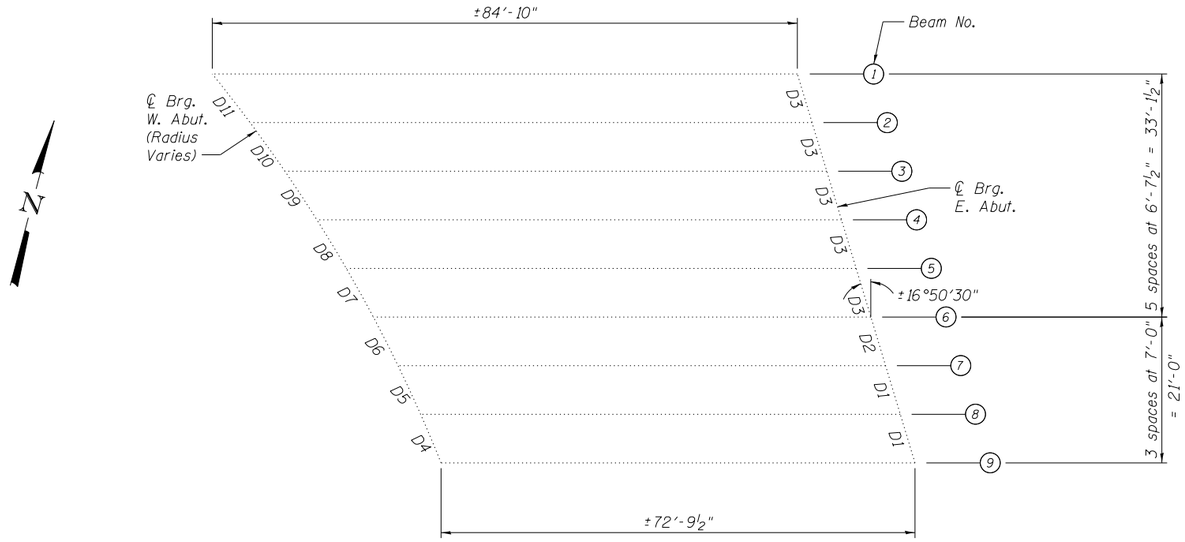
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HMA OVERLAY
S.N. 082-0014 MLK BRIDGE APPROACH AND RAMP D OVER RAMP B AND RAMP C
SHEET NO. 2 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	248
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



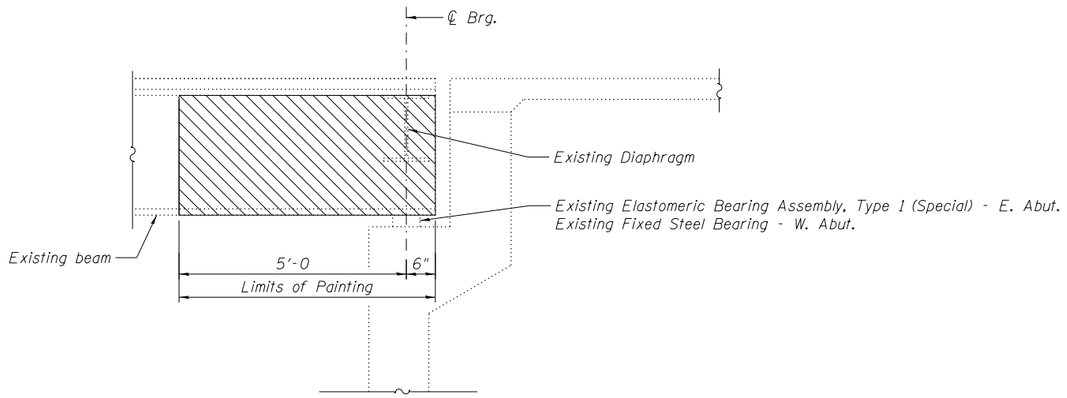
FRAMING PLAN

DIAPHRAGM SCHEDULE

DIAPHRAGM	MATERIAL
D1 thru D2	W12X40
D3	12WF27
D4 thru D6	W12X40
D7 thru D11	12WF27

BEAM SCHEDULE

BEAM	MATERIAL
1	36WF230
2	36WF194
3	36WF194
4	36WF194
5	36WF194
6	36WF194
7	W36X194
8	W36X194
9	W36X194



ELEVATION AT ABUTMENT

East Abutment shown, West Abutment Similar.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Cleaning and Painting Steel Bridge No. 1	L. Sum	1
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 1	L. Sum	1

MODJESKI and MASTERS
Experience great bridges.

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PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

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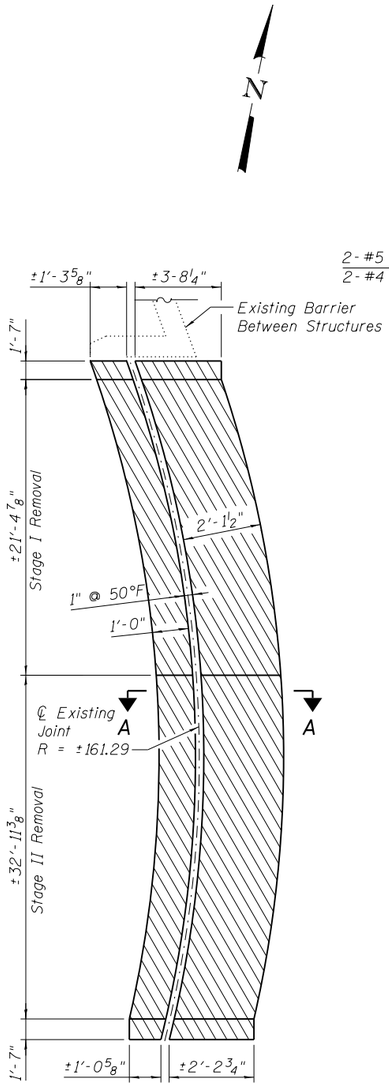
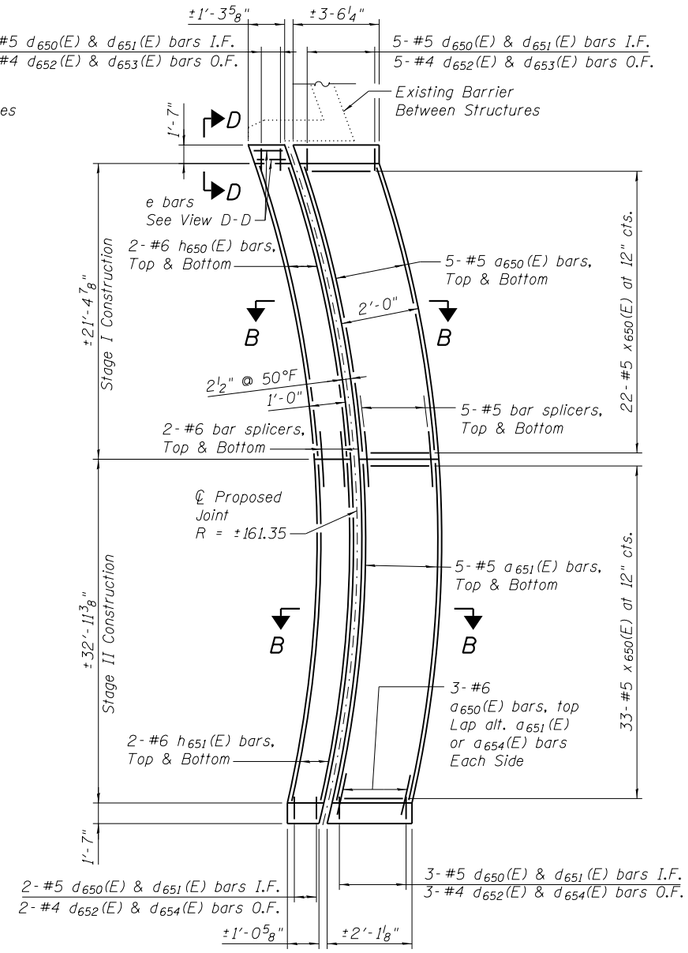
PAINTING DETAILS
S.N. 082-0014 MLK BRIDGE APPROACH AND RAMP D OVER RAMP B AND RAMP C
SHEET NO. 3 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	249
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



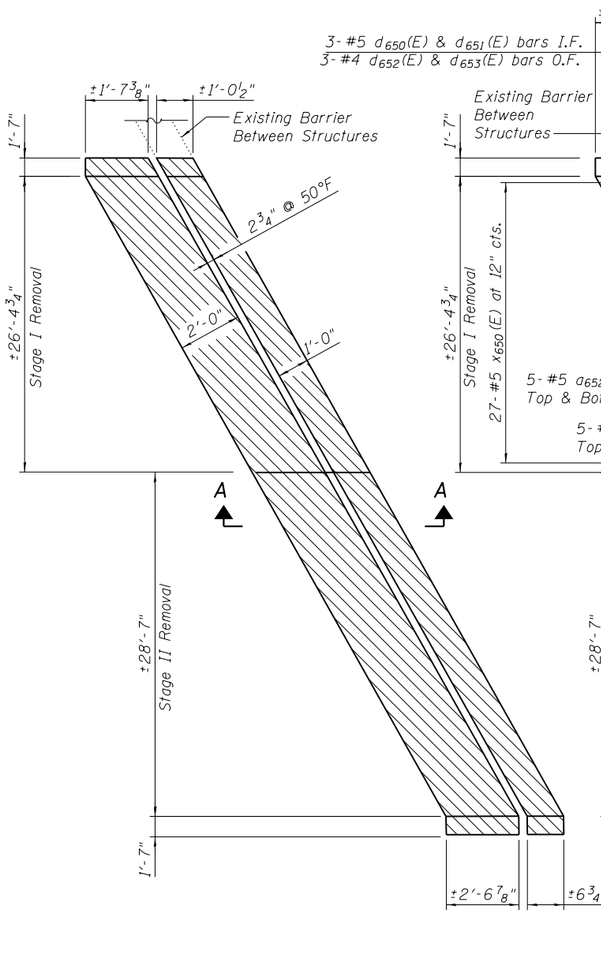


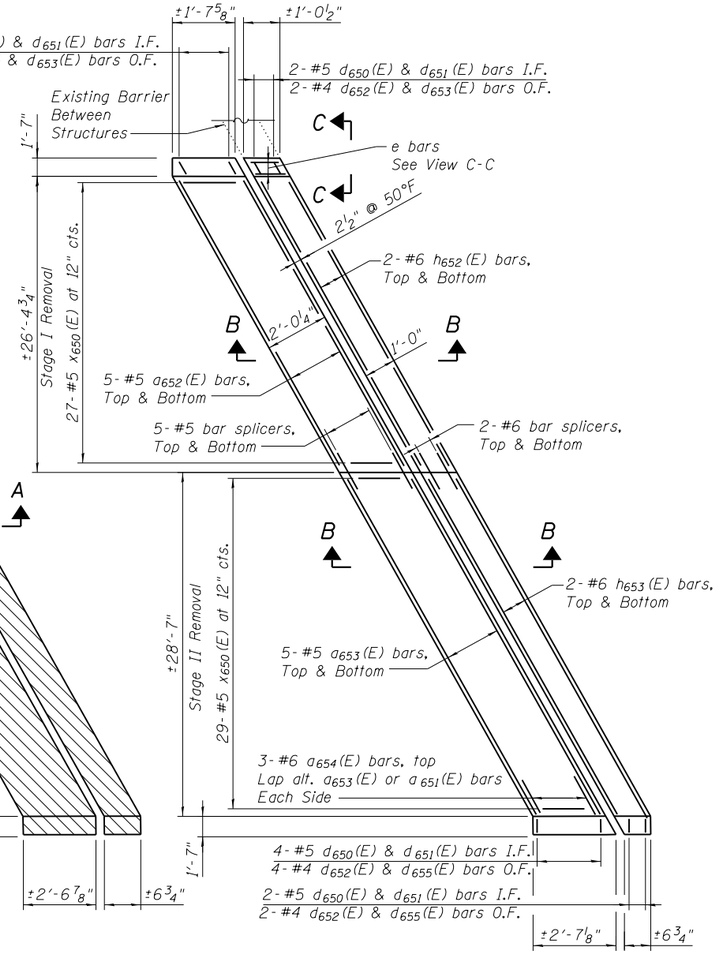
REMOVAL

REPLACEMENT

PLAN - WEST ABUTMENT

Note: Hatched areas indicate removal.





REMOVAL

REPLACEMENT

PLAN - EAST ABUTMENT

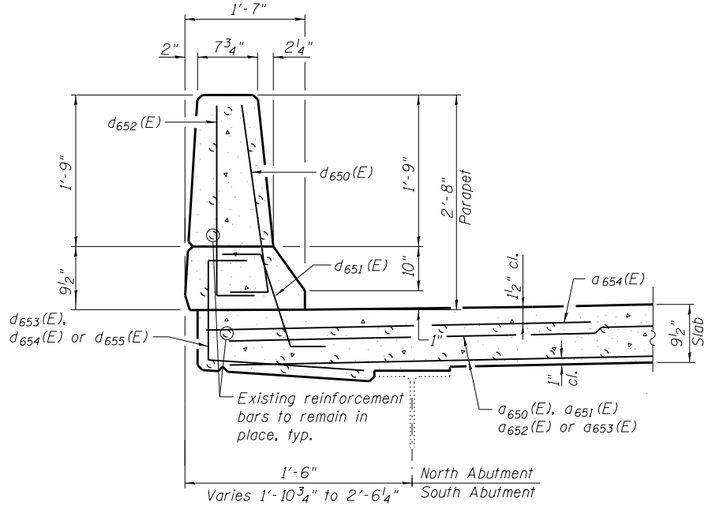
Note:
For Section A-A, B-B, View C-C, D-D, bar details and the Bill of Material, see sheet 5 of 7.

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - CDB	REVISED
		CHECKED - JMH	REVISED
	PLOT SCALE =	DRAWN - AEC	REVISED
	PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

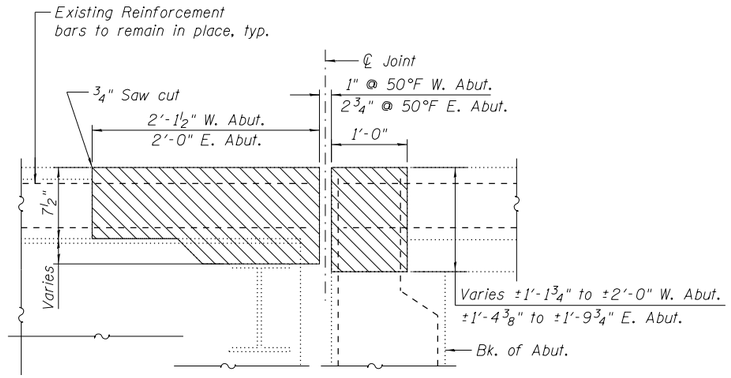
EXPANSION JOINT REPLACEMENT DETAILS – 1
S.N. 082-0014 MLK BRIDGE APPROACH AND RAMP D OVER RAMP B AND RAMP C
SHEET NO. 4 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	250
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		



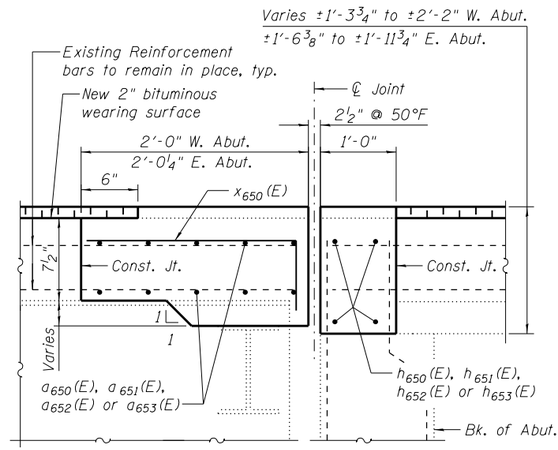
TYPICAL SECTION THRU PARAPET

Dimensions of parapet replacement should match existing parapet dimensions at repair location.



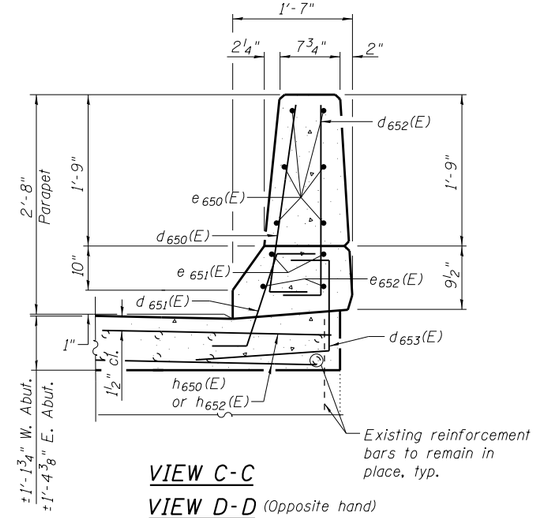
SECTION A-A

(near ¢ Roadway)



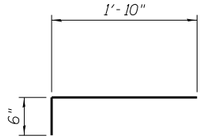
SECTION B-B

(near ¢ Roadway)

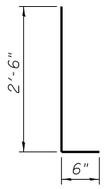


VIEW C-C

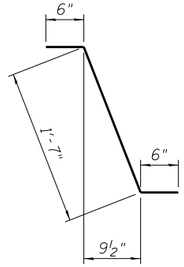
VIEW D-D *(Opposite hand)*



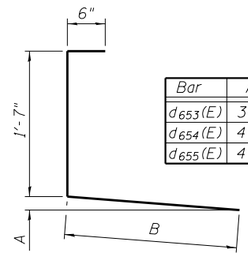
BAR x650(E)



BARS d650(E) & d652(E)



BAR d651(E)



Bar	A	B
d653(E)	3 3/4"	0'-6"
d654(E)	4 3/8"	1'-1"
d655(E)	4 3/8"	1'-5"

BAR d653(E), d654(E) or d655(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a650(E)	10	#5	25'-3"	—
a651(E)	10	#5	38'-9"	—
a652(E)	10	#5	28'-11"	—
a653(E)	10	#5	31'-3"	—
a654(E)	12	#5	6'-6"	—
d650(E)	23	#5	3'-0"	⌊
d651(E)	23	#5	2'-7"	⌐
d652(E)	23	#4	3'-0"	⌊
d653(E)	12	#4	2'-7"	⌐
d654(E)	5	#4	3'-2"	⌐
d655(E)	6	#4	3'-6"	⌐
e650(E)	12	#4	0'-9"	—
e651(E)	4	#8	0'-9"	—
e652(E)	4	#5	0'-9"	—
h650(E)	4	#6	25'-3"	—
h651(E)	4	#6	38'-9"	—
h652(E)	4	#6	28'-11"	—
h653(E)	4	#6	31'-3"	—
x650(E)	111	#5	2'-4"	⌐
Concrete Removal			Cu. Yd.	16.4
Concrete Superstructure			Cu. Yd.	18.6
Protective Coat			Sq. Yd.	72
Reinforcement Bars, Epoxy Coated			Pound	2,680

Note: Hatched areas indicate removal.

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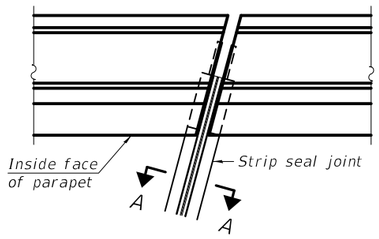
USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

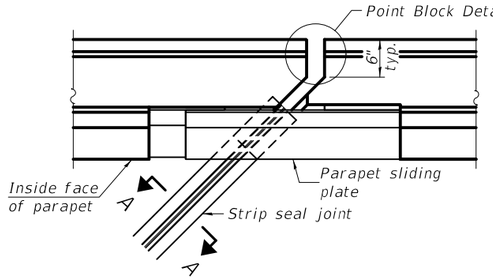
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS – 2
S.N. 082-0014 MLK BRIDGE APPROACH AND RAMP D
OVER RAMP B AND RAMP C
SHEET NO. 5 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	251
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

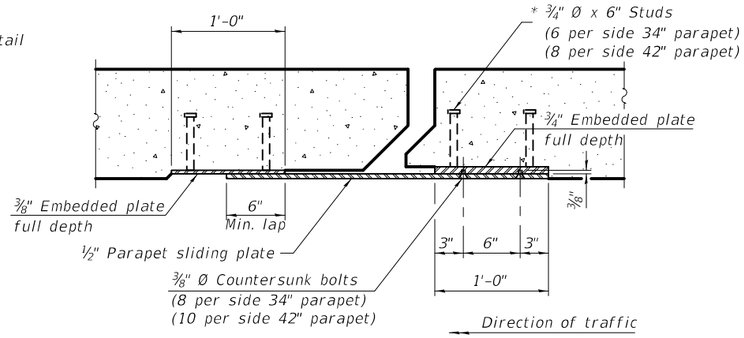


FOR SKEWS ≤ 30°



FOR SKEWS > 30°

PLAN AT PARAPET



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

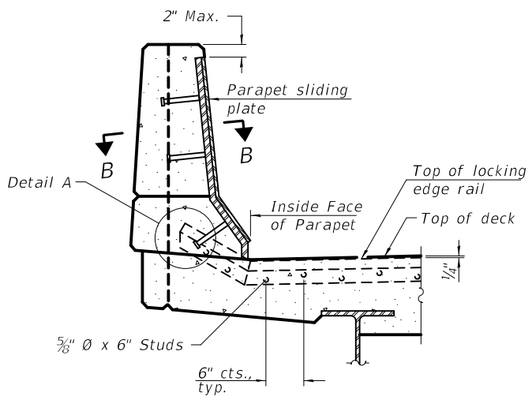
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

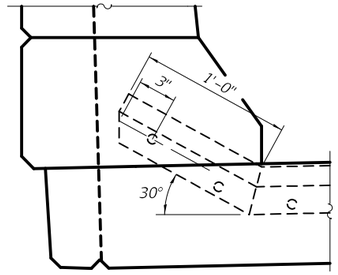
34" F-shape barrier shown, 42" F-shape similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

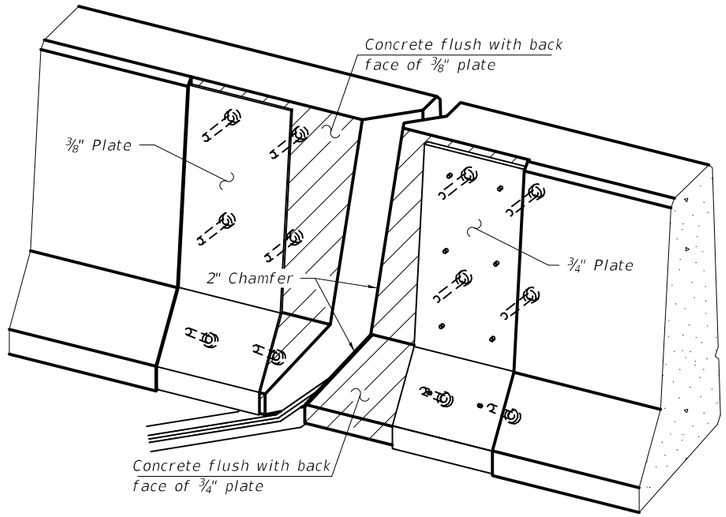


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

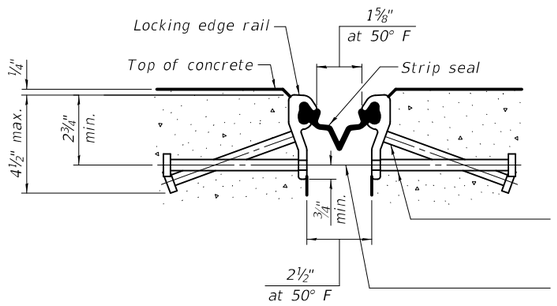


DETAIL A

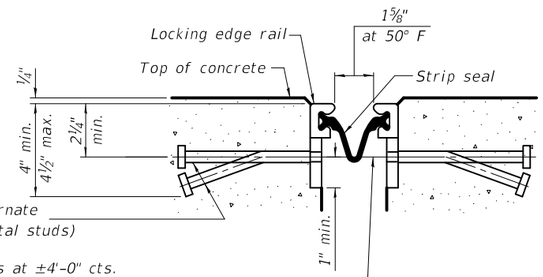


TRIMETRIC VIEW

(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT



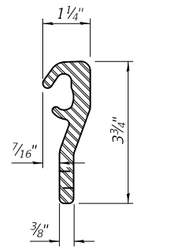
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

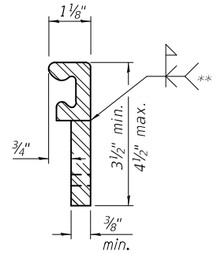
⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

** Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.*



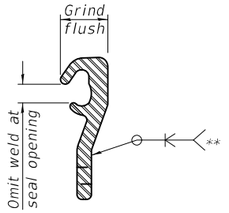
ROLLED
(EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

*** Back gouge not required if complete joint penetration is verified by mock-up.*



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	125.0

EJ-SS 8-11-17

USER NAME =	DESIGNED - CDB	REVISED	
	CHECKED - JMH	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED	

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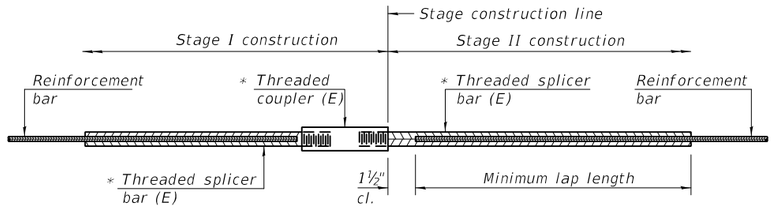
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
S.N. 082-0014 MLK BRIDGE APPROACH AND RAMP D
OVER RAMP B AND RAMP C
SHEET NO. 6 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	252
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

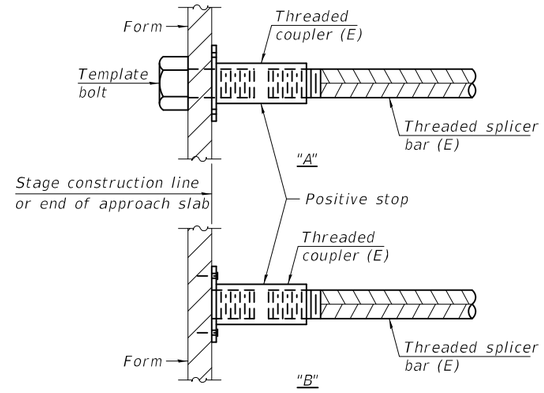


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

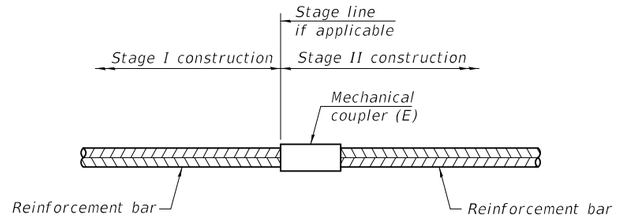
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
W. Abut. Backwall	#6	4	4'-10"
Slab at W. Abut.	#5	10	3'-6"
Slab at E. Abut.	#5	10	3'-6"
E. Abut. Backwall	#6	4	4'-10"



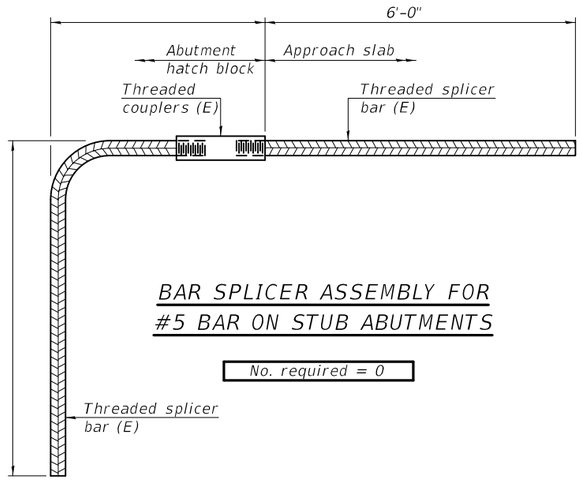
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 0

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 2-17-2017

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	CHECKED - JMH	REVISED
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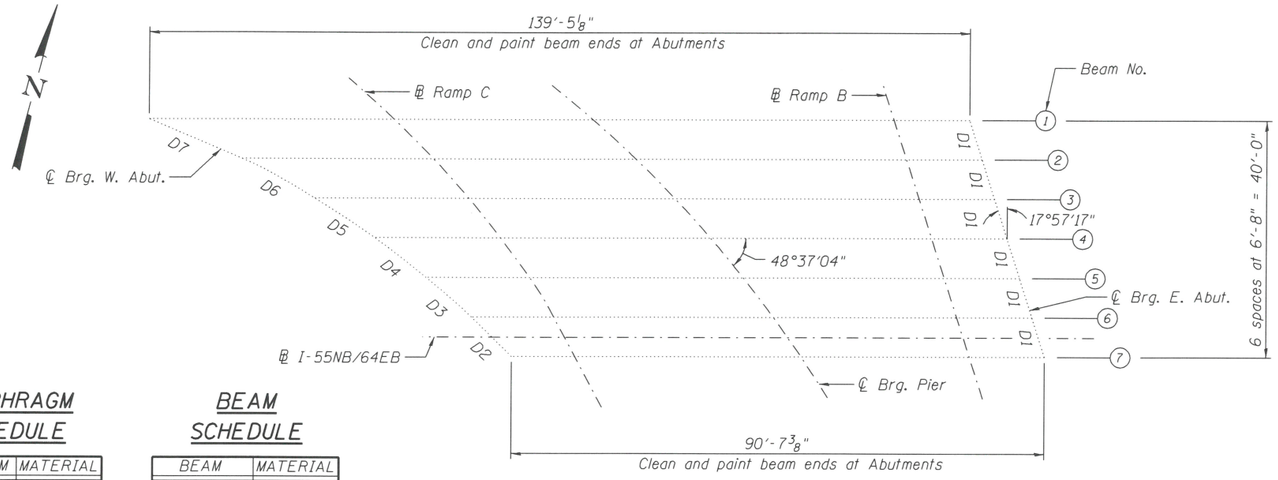
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
S.N. 082-0014 MLK BRIDGE APPROACH AND RAMP D OVER RAMP B AND RAMP C
SHEET NO. 7 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	253
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

The structure is to remain open to traffic during construction. Ramp B and C are to be closed to traffic during construction.



FRAMING PLAN

(S.N. 082-0023; Bridge No. 2)

DIAPHRAGM SCHEDULE

DIAPHRAGM	MATERIAL
D1	12WF27
D2	14WF30
D3	16WF36
D4	16WF36
D5	16WF36
D6	16WF36
D7	16WF40

BEAM SCHEDULE

BEAM	MATERIAL
1	36WF194
2	33WF141
3	33WF141
4	33WF141
5	33WF130
6	33WF130
7	36WF150

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contactor 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.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures. Areas to be cleaned and painted shall consist of all beam ends, end diaphragms and steel components of the steel bearings at the abutments. Beam end painting shall extend 5 feet from centerline bearing longitudinally. This surface preparation shall be accomplished according to the requirements of Near-White Metal Blast Cleaning SSPC-SP10. The paint system shall be applied as specified for System I OZ/E/U. The color of the final finish coat shall be Grey, Munsell No. 5B 7/1.

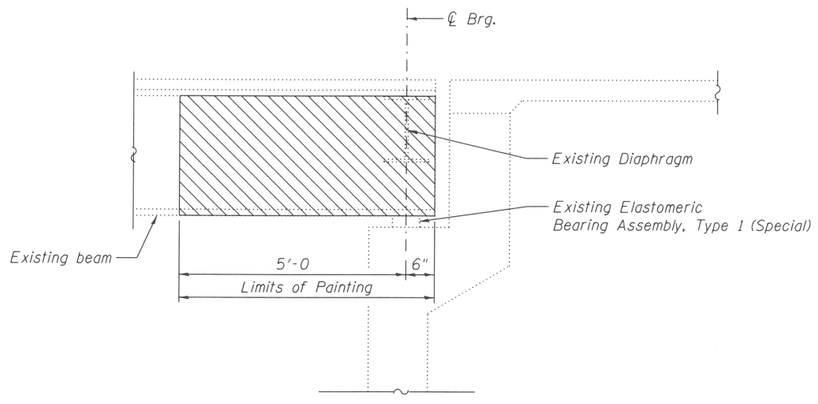
Care shall be taken not to damage rubber bearing or joint components during the blasting and cleaning operations. Any damage to these components shall be repaired at the Contractor's expense.

Complete cost of painting the locations described on this sheet shall be considered included with the pay item Cleaning and Painting Steel Bridge No. 2.

Existing Structure Plans are available for review in the District office. Contact Herve Gelin at (618) 346-3179.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Cleaning and Painting Steel Bridge No. 2	L. Sum	1	-	1
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 2	L. Sum	1	-	1



ELEVATION AT ABUTMENT

East Abutment shown, West Abutment Similar.

JERILYN M. HASSARD
081-006521
LICENSED
STRUCTURAL
ENGINEER
STATE OF ILLINOIS

Jerilyn M. Hassard 03-22-18

JERILYN M. HASSARD
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-006521
EXPIRES 11/30/2018

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USER NAME =	DESIGNED - CDB	REVISED	
	CHECKED - JMH	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED	

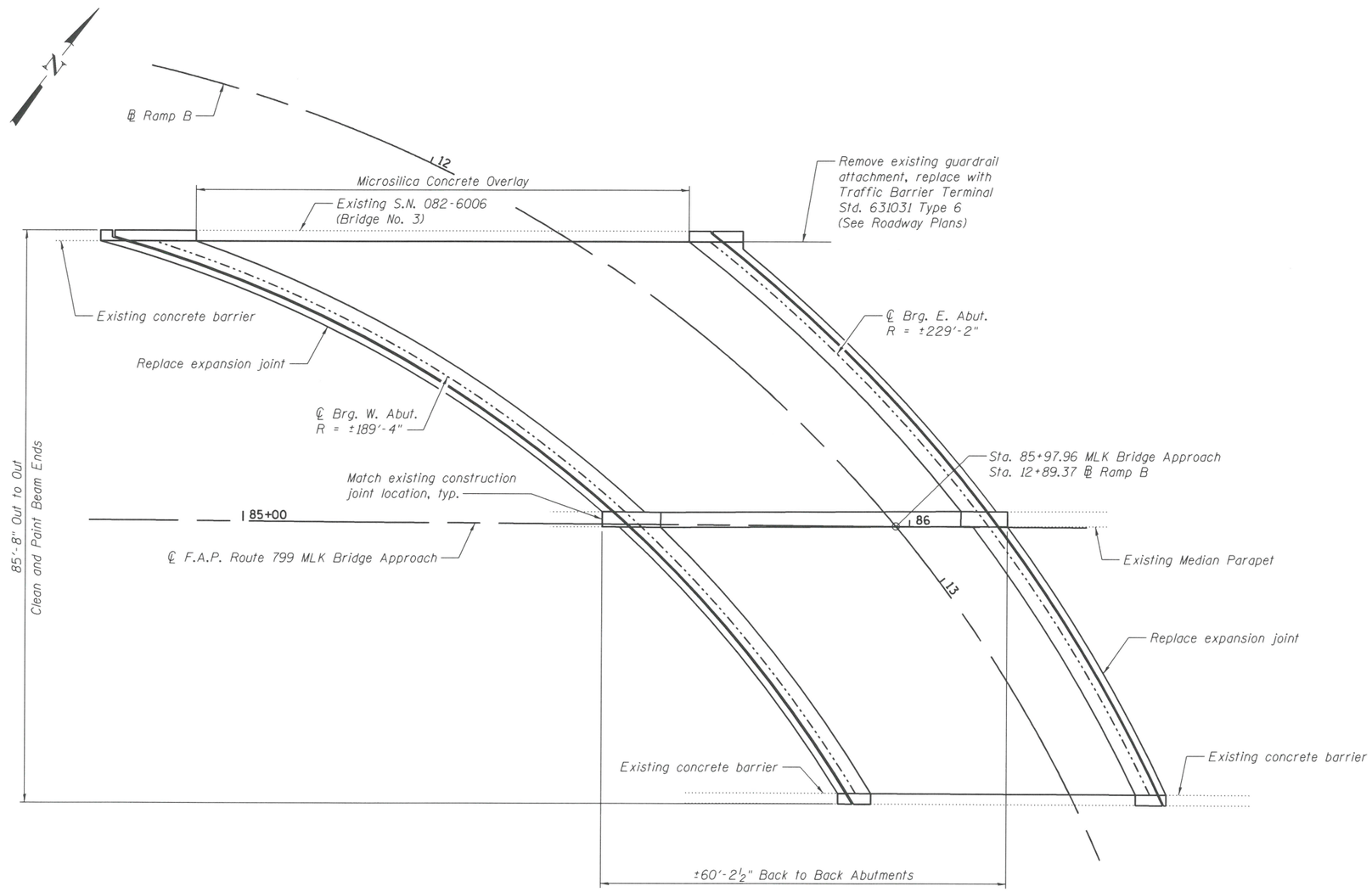
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN, GENERAL NOTES, AND PAINTING DETAILS
S.N. 082-0023 I-55NB/64EB
OVER RAMP B AND RAMP C
SHEET NO. 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	254
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

The structure and Ramp B are to be completely closed to traffic during construction.

No salvage.



PLAN

GENERAL NOTES

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. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contactor 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.

Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Surface preparation at the construction joints shall be performed using high-pressurized water spray, using equipment capable of producing a minimum water pressure of 5000 psi.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures. Areas to be cleaned and painted shall consist of all beam ends, end diaphragms and steel components of the steel bearings at the abutments. Beam end painting shall extend 5 feet from centerline bearing of beams longitudinally. This surface preparation shall be accomplished according to the requirements of Near-White Metal Blast Cleaning SSPC-SP10. The paint system shall be applied as specified for System I OZ/E/U. The color of the final finish coat shall be Grey, Munsell No. 5B 7/1.

Complete cost of painting the locations described on this sheet shall be considered included with the pay item Cleaning and Painting Steel Bridge No. 3.

Care shall be taken not to damage rubber bearing or joint components during the blasting and cleaning operations. Any damage to these components shall be repaired at the Contractor's expense.

Bridge deck scarification and microsilica concrete overlay shall be as specified in the special provision for Bridge Deck Microsilica Overlay.

Protective coat shall only be applied to the deck and parapets (top and inside faces) adjacent to the proposed expansion joints and not the microsilica overlay.

Existing Structure Plans are available for review in the District office. Contact Herve Gelin at (618) 346-3179.

Synthetic fibers shall be added to the bridge deck microsilica concrete overlay. See Special Provisions.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	47.6	-	47.6
Concrete Superstructure	Cu. Yd.	48.9	-	48.9
Bridge Deck Grooving	Sq. Yd.	572	-	572
Protective Coat	Sq. Yd.	117	-	117
Reinforcement Bars, Epoxy Coated	Pound	6,170	-	6,170
Preformed Joint Strip Seal	Foot	251.0	-	251.0
Cleaning and Painting Steel Bridge No. 3	L. Sum	1	-	1
Bridge Deck Scarification 2"	Sq. Yd.	540.5	-	540.5
Bridge Deck Microsilica Concrete Overlay 2¼"	Sq. Yd.	540.5	-	540.5
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 3	L. Sum	1	-	1

JERILYN M. HASSARD
081-006521
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

Jerilyn M. Hassard 03-22-18

JERILYN M. HASSARD
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-006521
EXPIRES 11/30/2018

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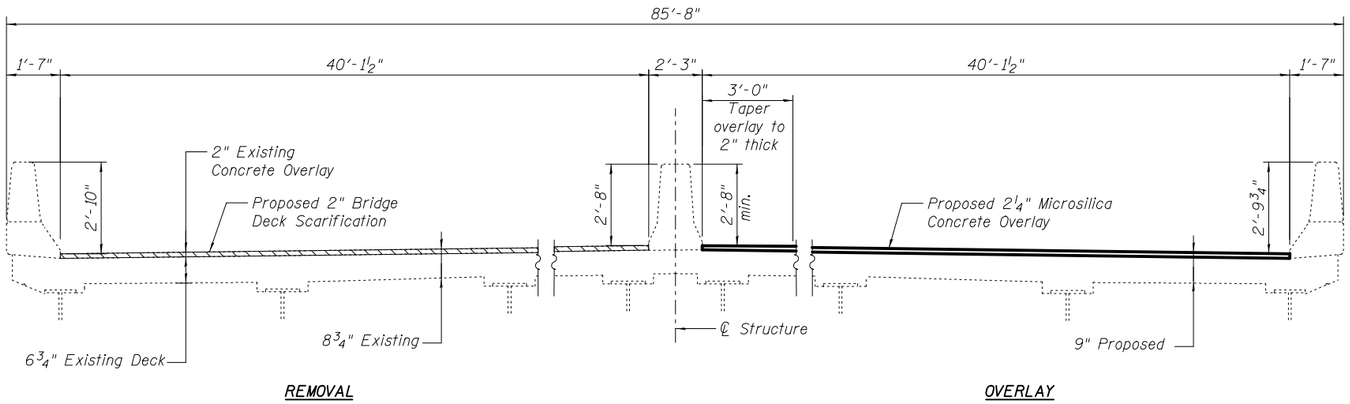
USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN, GENERAL NOTES, AND TOTAL BILL OF MATERIAL
S.N. 082-6006 MLK BRIDGE APPROACH OVER RAMP B
SHEET NO. 1 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	255
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



CROSS SECTION

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Bridge Deck Grooving	Sq. Yd.	572
Bridge Deck Scarification 2"	Sq. Yd.	540.5
Bridge Deck Microsilica Concrete Overlay 2¼"	Sq. Yd.	540.5

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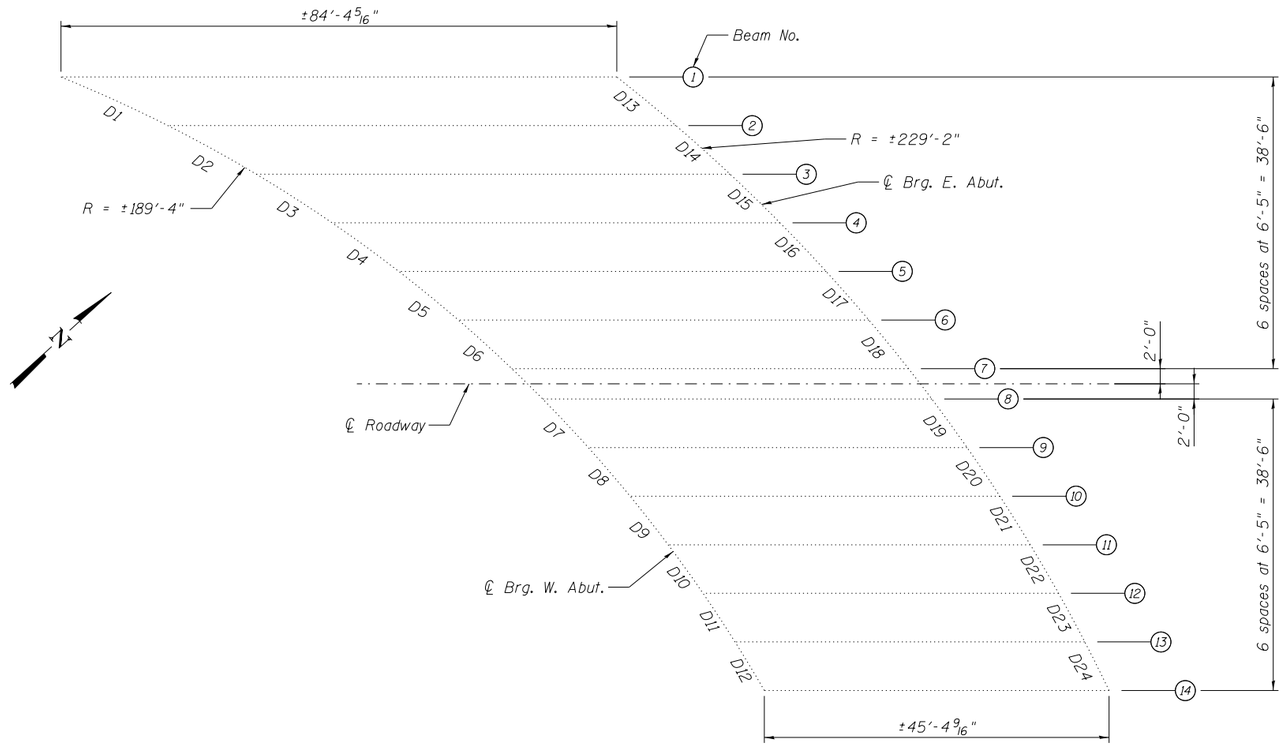
USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MICROSILICA CONCRETE OVERLAY
S.N. 082-6006 MLK BRIDGE APPROACH OVER RAMP B
SHEET NO. 2 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	256
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



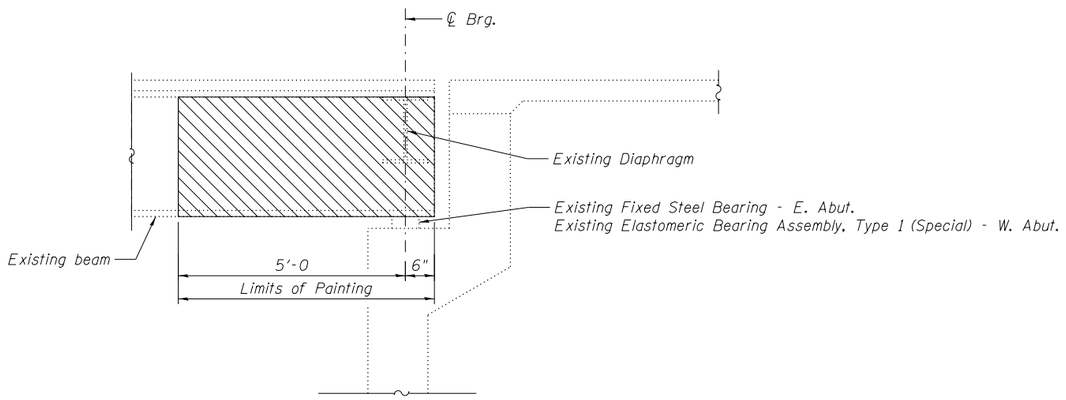
FRAMING PLAN

DIAPHRAGM SCHEDULE

DIAPHRAGM	MATERIAL
D1 thru D7	16WF36
D13 thru D15	
D8 thru D12	14WF30
D16 thru D24	

BEAM SCHEDULE

BEAM	MATERIAL
1	36WF194
2	36WF194
3	36WF150
4	36WF150
5	36WF150
6	36WF150
7	36WF150
8	36WF150
9	36WF150
10	36WF150
11	36WF150
12	36WF150
13	36WF150
14	36WF150



ELEVATION AT ABUTMENT

East Abutment shown, West Abutment Similar.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Cleaning and Painting Steel Bridge No. 3	L. Sum	1
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 3	L. Sum	1

MODJESKI and MASTERS
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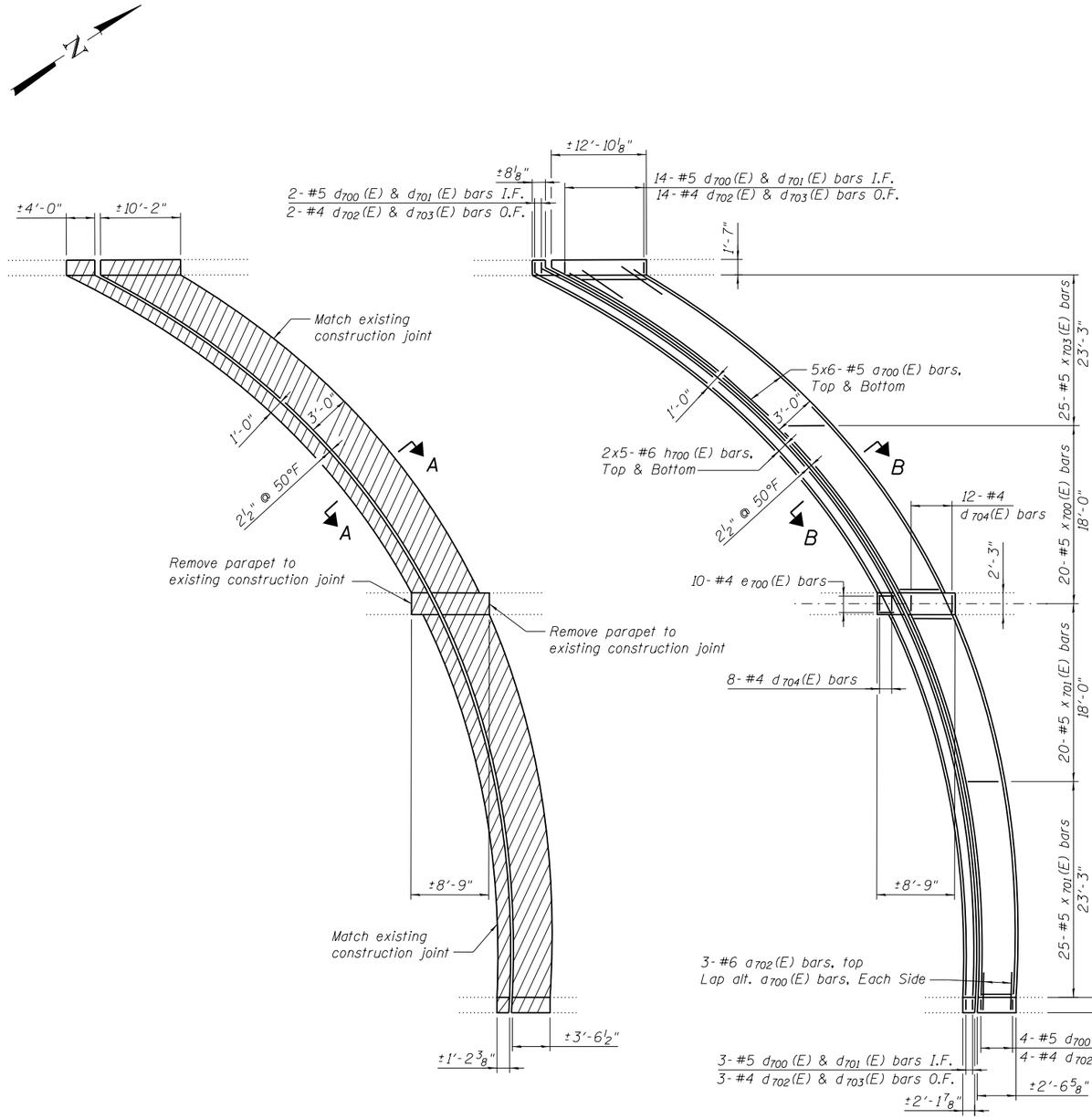
USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAINTING DETAILS
S.N. 082-6006 MLK BRIDGE APPROACH OVER RAMP B
SHEET NO. 3 OF 6 SHEETS

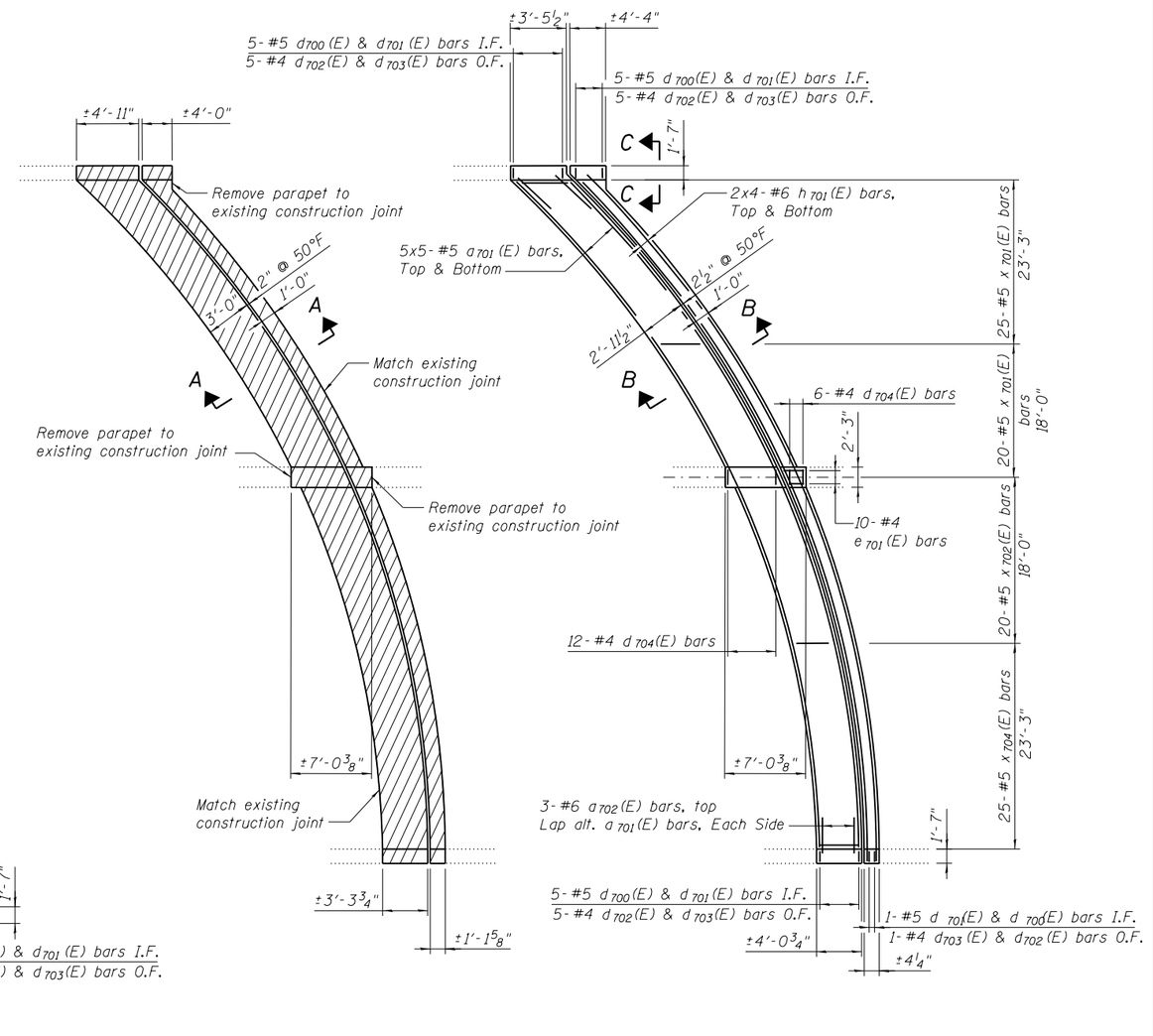
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	257
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



REMOVAL

REPLACEMENT

PLAN - WEST ABUTMENT



REMOVAL

REPLACEMENT

PLAN - EAST ABUTMENT

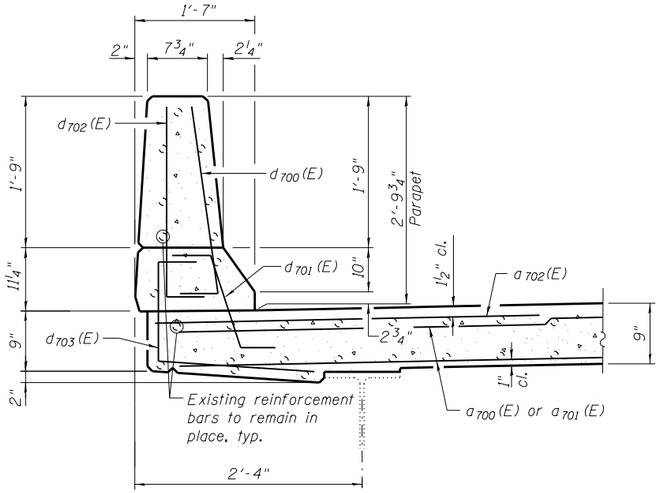
Notes:
Bars indicated thus 5x6-#5 etc. indicates 5 lines of bars with 6 lengths per line.
For Section A-A, B-B, View C-C and the Bill of Material, see sheet 5 of 6.

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - CDB	REVISED
		CHECKED - JMH	REVISED
	PLOT SCALE =	DRAWN - AEC	REVISED
	PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

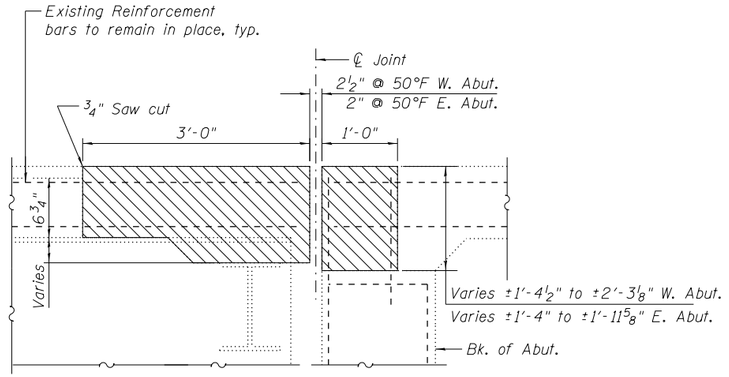
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS – 1
S.N. 082-6006 MLK BRIDGE APPROACH OVER RAMP B
SHEET NO. 4 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	258
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

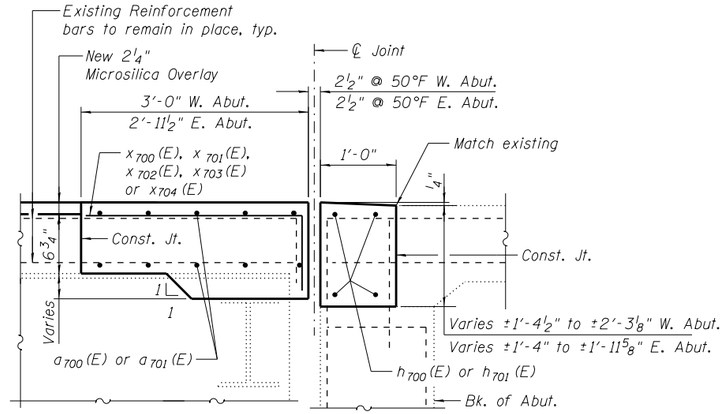


TYPICAL PARAPET SECTION



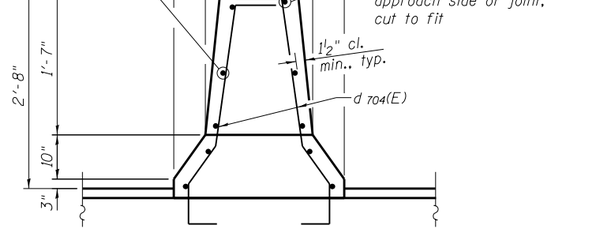
SECTION A-A

(near ℄ Roadway)



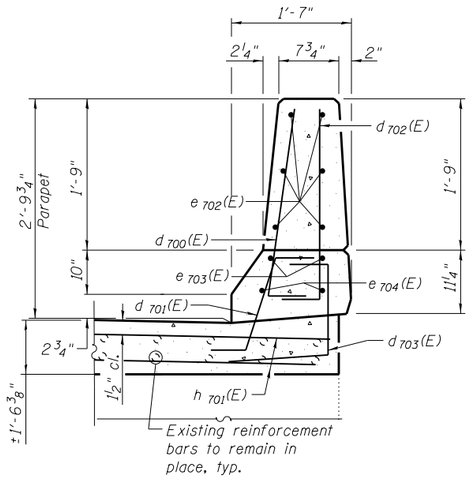
SECTION B-B

(near ℄ Roadway)

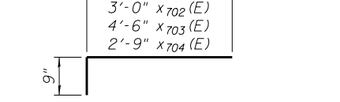


SECTION THRU MEDIAN BARRIER

Note: Section and reinforcement replaced in kind.



VIEW C-C



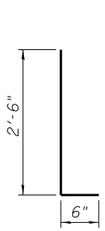
BARS x 700 (E), x 701 (E) & x 702 (E)

BILL OF MATERIAL

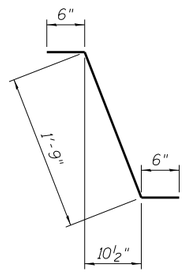
Bar	No.	Size	Length	Shape
a 700 (E)	60	#5	26'-4"	
a 701 (E)	50	#5	25'-1"	
a 702 (E)	12	#6	6'-6"	
d 700 (E)	39	#5	3'-0"	
d 701 (E)	39	#5	2'-9"	
d 702 (E)	39	#4	3'-0"	
d 703 (E)	39	#4	3'-6"	
d 704 (E)	38	#4	4'-4"	
e 700 (E)	10	#4	4'-5"	
e 701 (E)	10	#4	4'-0"	
e 702 (E)	6	#4	3'-7"	
e 703 (E)	2	#8	3'-7"	
e 704 (E)	2	#5	3'-7"	
h 700 (E)	20	#6	31'-8"	
h 701 (E)	16	#6	31'-8"	
x 700 (E)	20	#5	4'-9"	
x 701 (E)	90	#5	4'-0"	
x 702 (E)	20	#5	3'-9"	
x 703 (E)	25	#5	5'-3"	
x 704 (E)	25	#5	3'-6"	
Concrete Removal			Cu. Yd.	47.6
Concrete Superstructure			Cu. Yd.	48.9
Protective Coat			Sq. Yd.	117
Reinforcement Bars, Epoxy Coated			Pound	6,170

MINIMUM BAR LAP

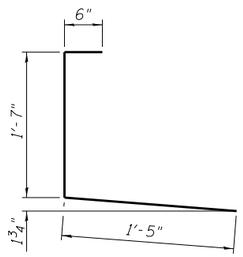
#5 bar = 3'-6"
#6 bar = 4'-5"



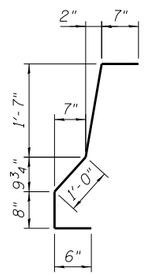
BARS d 700 (E) & d 702 (E)



BAR d 701 (E)



BAR d 703 (E)



BAR d 704 (E)

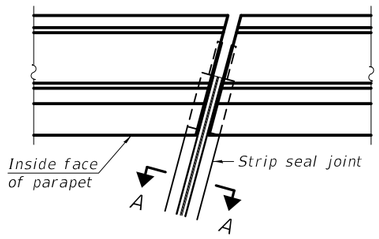
Note: Hatched areas indicate removal.

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - CDB	REVISED
		CHECKED - JMH	REVISED
	PLOT SCALE =	DRAWN - AEC	REVISED
	PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

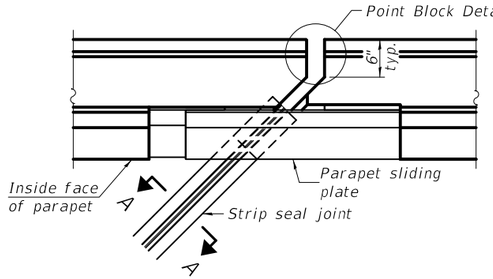
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS – 2
S.N. 082-6006 MLK BRIDGE APPROACH OVER RAMP B
SHEET NO. 5 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	259
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

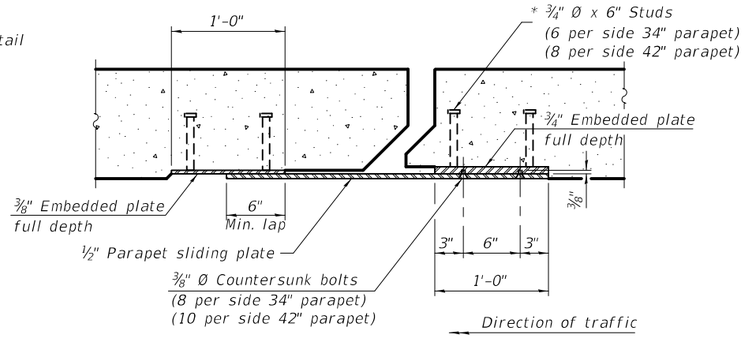


FOR SKEWS ≤ 30°



FOR SKEWS > 30°

PLAN AT PARAPET



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

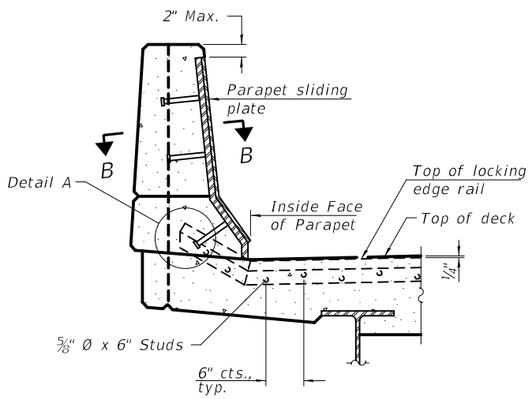
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

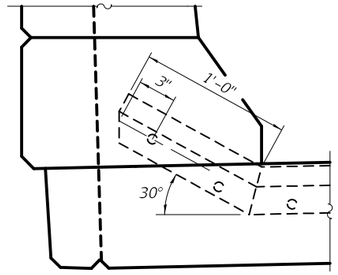
34" F-shape barrier shown, 42" F-shape similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

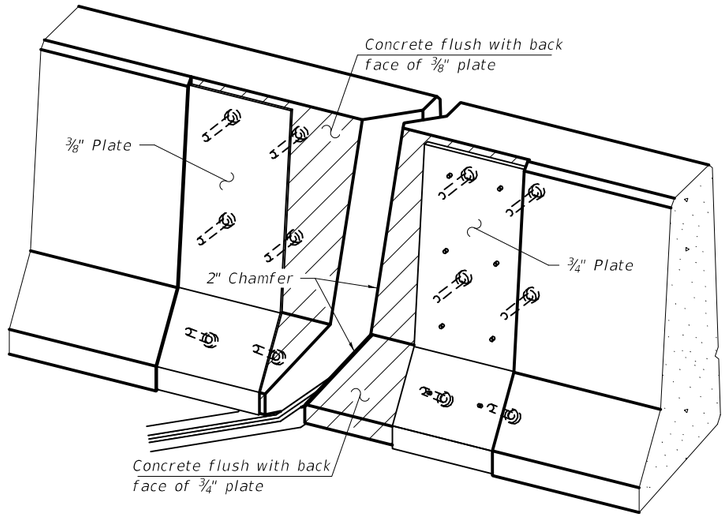


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

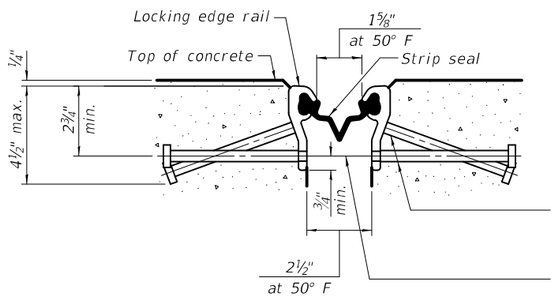


DETAIL A

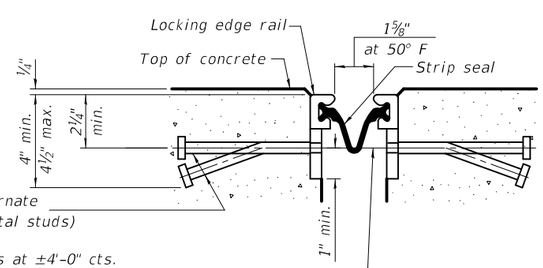


TRIMETRIC VIEW

(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT



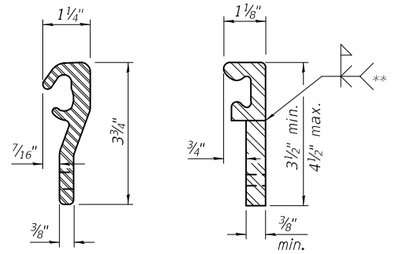
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅞" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

** Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.*

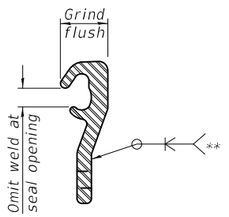


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

*** Back gouge not required if complete joint penetration is verified by mock-up.*



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	251.0

EJ-SS 8-11-17

USER NAME =	DESIGNED - CDB	REVISED	
	CHECKED - JMH	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED	

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Experience great bridges.

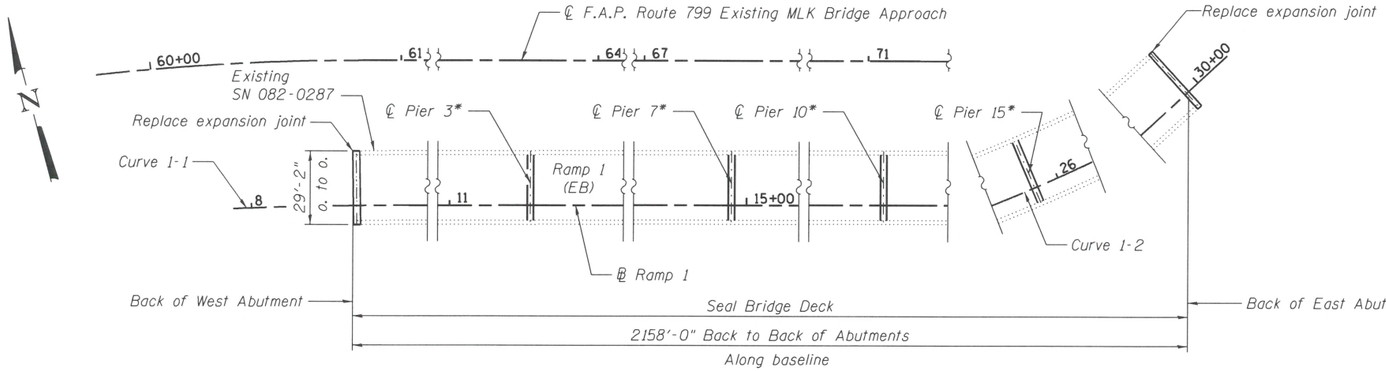
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
S.N. 082-6006 MLK BRIDGE APPROACH OVER RAMP B
SHEET NO. 6 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	260
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

The structure is to be completely closed to traffic during construction.

No salvage.



PLAN

*Finger joint trough cleaning locations

CURVE 1-1 DATA

P.I. Sta. = 6+77.67
Δ = 13° 00′ 25" (RT)
D = 3° 30′ 00"
R = 1637.02′
T = 186.61′
L = 371.62′
E = 10.60′
P.C. Sta. = 4+91.06
P.T. Sta. = 8+62.68

CURVE 1-2 DATA

P.I. Sta. = 25+77.53
Δ = 42° 28′ 36" (LT)
D = 8° 00′ 00"
R = 716.20′
T = 278.35′
L = 530.96′
E = 52.19′
P.C. Sta. = 22+99.18
P.T. Sta. = 28+30.14

GENERAL NOTES

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. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contactor 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.

Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Surface preparation at the construction joints shall be performed using high-pressurized water spray, using equipment capable of producing a minimum water pressure of 5000 psi.

Bridge deck concrete sealer shall be applied on top and inside of all concrete barriers and top of slab for entire bridge length as specified in the special provision for Bridge Deck Concrete Sealer.

Existing Structure Plans are available for review in the District office. Contact Herve Gelin at (618) 346-3179.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	8.1	-	8.1
Concrete Superstructure	Cu. Yd.	8.2	-	8.2
Reinforcement Bars, Epoxy Coated	Pound	1,160	-	1,160
Preformed Joint Strip Seal	Foot	56.0	-	56.0
Clean Trough	Each	4	-	4
Bridge Deck Concrete Sealer	Sq. Ft.	71,781	-	71,781

JERILYN M. HASSARD
081-006521
LICENSED
STRUCTURAL
ENGINEER
STATE OF ILLINOIS

Jerilyn M. Hassard 03-22-18

JERILYN M. HASSARD
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-006521
EXPIRES 11/30/2018

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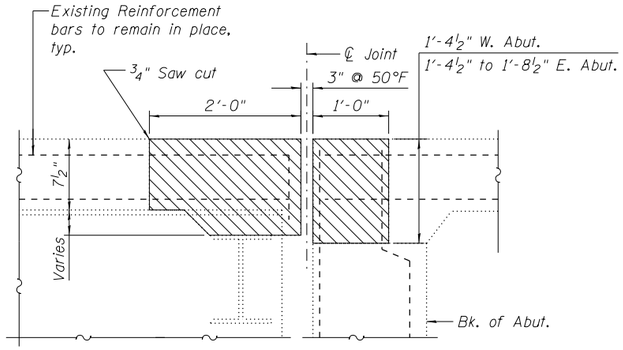
USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

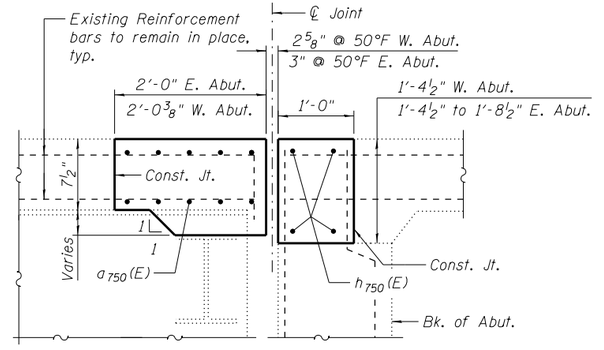
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
S.N. 082-0287 MLK BRIDGE RAMP 1 OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I-55SB/64WB
SHEET NO. 1 OF 3 SHEETS

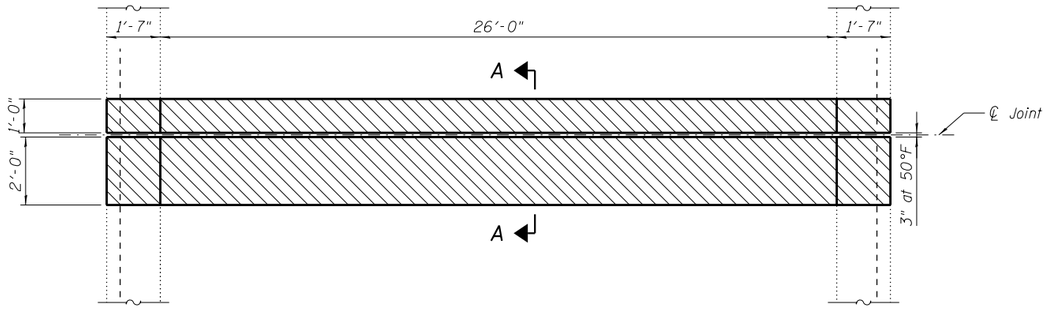
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	261
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



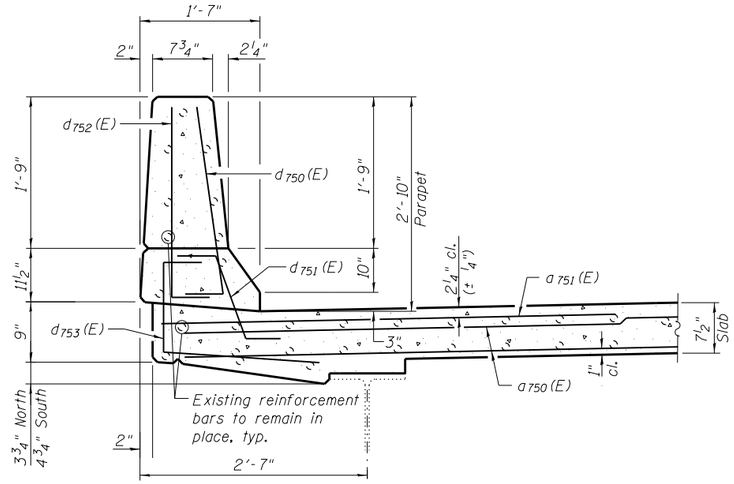
SECTION A-A
(near ℄ Roadway)



SECTION B-B
(near ℄ Roadway)

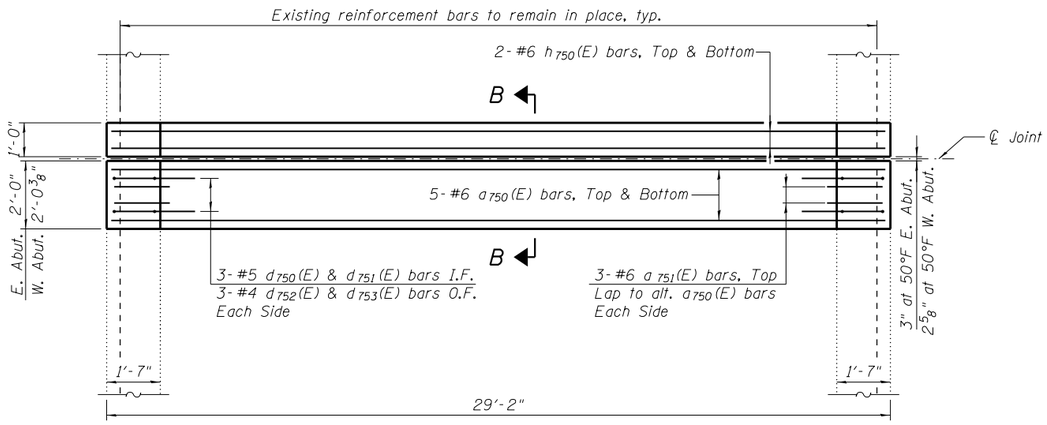


REMOVAL PLAN
West Abutment Shown; East Abutment Opposite Hand



TYPICAL PARAPET SECTION

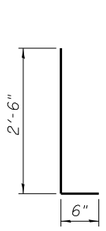
Z



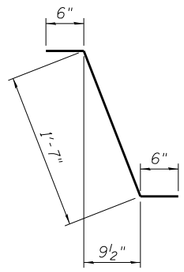
REPLACEMENT PLAN
West Abutment Shown; East Abutment Opposite Hand

BILL OF MATERIAL

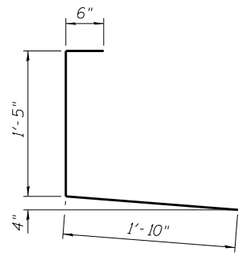
Bar	No.	Size	Length	Shape
a750(E)	20	#5	27'-2"	
a751(E)	12	#6	6'-6"	
d750(E)	12	#5	3'-0"	
d751(E)	12	#5	2'-7"	
d752(E)	12	#4	3'-0"	
d753(E)	12	#4	3'-9"	
h750(E)	8	#6	28'-10"	
Concrete Removal			Cu. Yd.	8.1
Concrete Superstructure			Cu. Yd.	8.2
Reinforcement Bars, Epoxy Coated			Pound	1,160



BAR d750(E) & d752(E)



BAR d751(E)



BAR d753(E)

Note:
For joint details, see sheet 3 of 3.

Note: Hatched areas indicate removal.

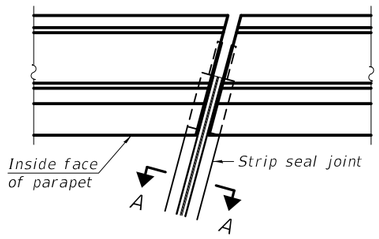
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

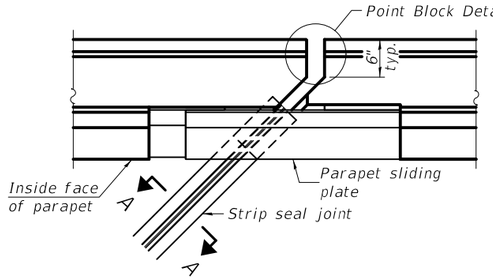
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS
S.N. 082-0287 MLK BRIDGE RAMP 1 OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I-55SB/64WB
SHEET NO. 2 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	262
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

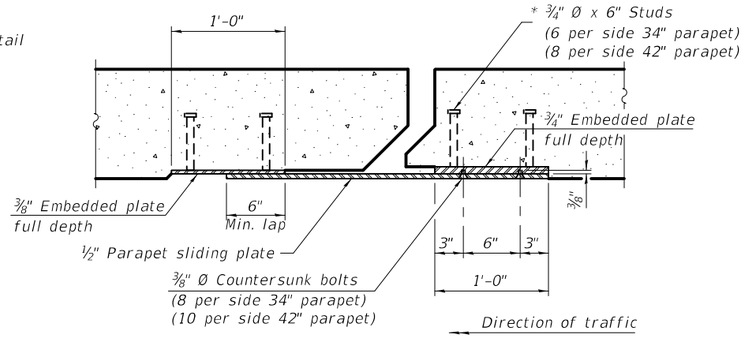


FOR SKEWS ≤ 30°



FOR SKEWS > 30°

PLAN AT PARAPET



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

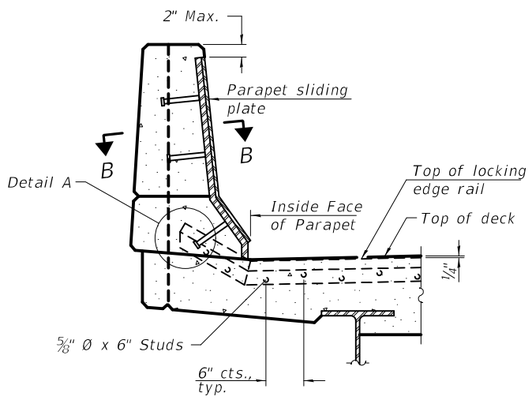
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

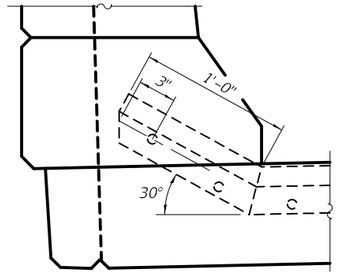
34" F-shape barrier shown, 42" F-shape similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

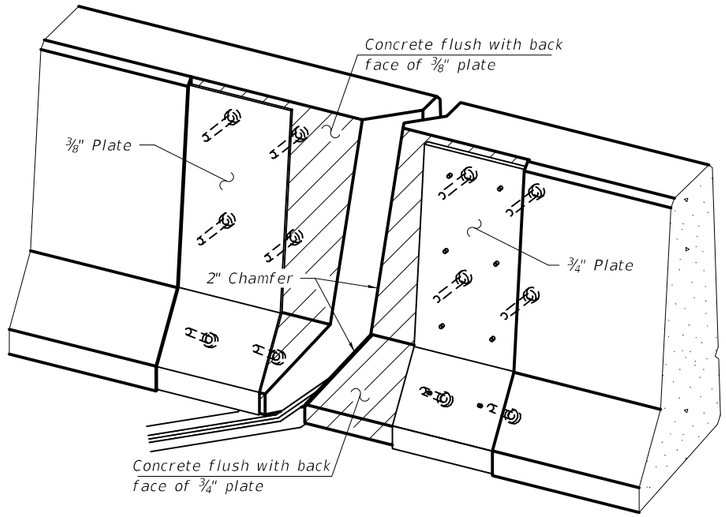


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

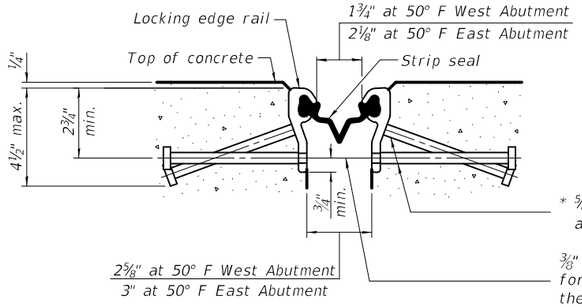


DETAIL A

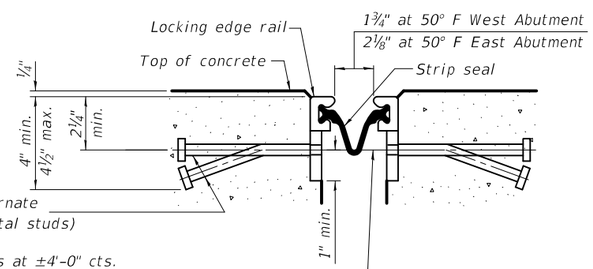


TRIMETRIC VIEW

(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT



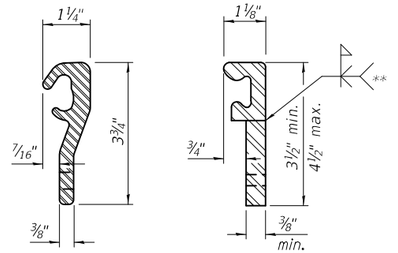
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

** Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.*

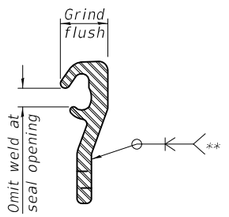


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

*** Back gouge not required if complete joint penetration is verified by mock-up.*



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	56.0

EJ-SS 8-11-17

USER NAME =	DESIGNED - CDB	REVISED	
	CHECKED - JMH	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED	

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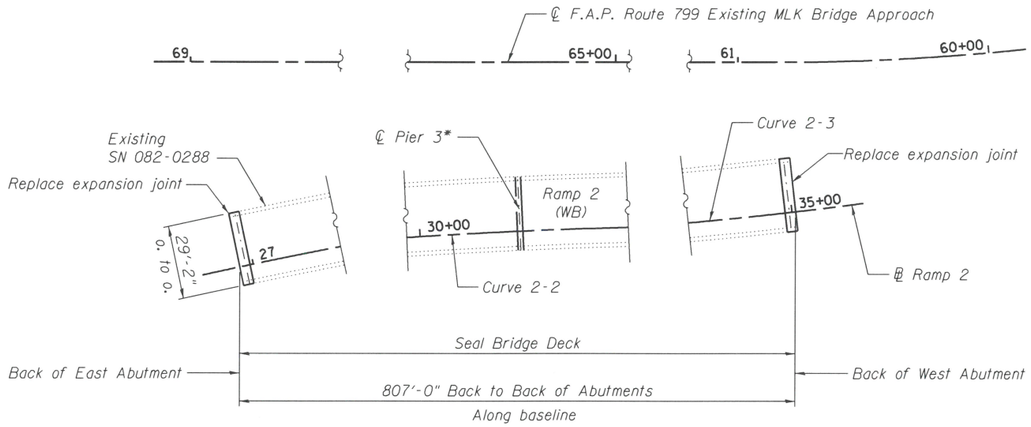
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
S.N. 082-0287 MLK BRIDGE RAMP 1 OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, MISSOURI AVE. AND I-55SB/64WB
SHEET NO. 3 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	263
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

The structure is to be completely closed to traffic during construction.

No salvage.



*Finger joint trough cleaning location

PLAN

GENERAL NOTES

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. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contactor 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.

Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Surface preparation at the construction joints shall be performed using high-pressurized water spray, using equipment capable of producing a minimum water pressure of 5000 psi.

Bridge deck concrete sealer shall be applied on top and inside of all concrete barriers and top of slab for entire bridge length as specified in the special provision for Bridge Deck Concrete Sealer.

Existing Structure Plans are available for review in the District office. Contact Herve Gelin at (618) 346-3179.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	8.0	-	8.0
Concrete Superstructure	Cu. Yd.	8.0	-	8.0
Reinforcement Bars, Epoxy Coated	Pound	1,170	-	1,170
Preformed Joint Strip Seal	Foot	56.0	-	56.0
Clean Trough	Each	1	-	1
Bridge Deck Concrete Sealer	Sq. Ft.	26,843	-	26,843

CURVE 2-2 DATA

P.I. Sta. = 25+85.24
Δ = 31° 05′ 32" (RT)
D = 2° 46′ 00"
R = 2070.93′
T = 576.12′
L = 1123.82′
E = 78.64′
P.C. Sta. = 20+09.12
P.T. Sta. = 31+32.94

CURVE 2-3 DATA

P.I. Sta. = 35+45.70
Δ = 16° 49′ 30" (LT)
D = 4° 00′ 00"
R = 1432.39′
T = 211.84′
L = 420.63′
E = 15.58′
P.C. Sta. = 33+33.86
P.T. Sta. = 37+54.49

JERILYN M. HASSARD
081-006521
LICENSED
STRUCTURAL
ENGINEER
STATE OF ILLINOIS

Jerilyn M. Hassard 03-22-18

JERILYN M. HASSARD
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-006521
EXPIRES 11/30/2018

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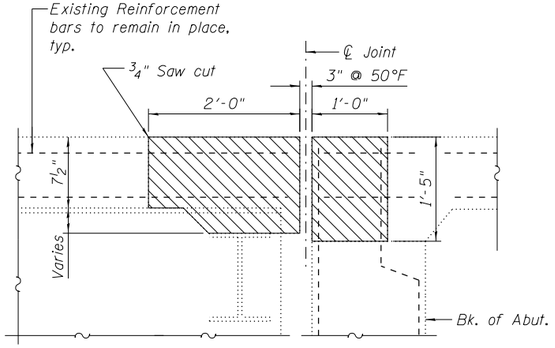
USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

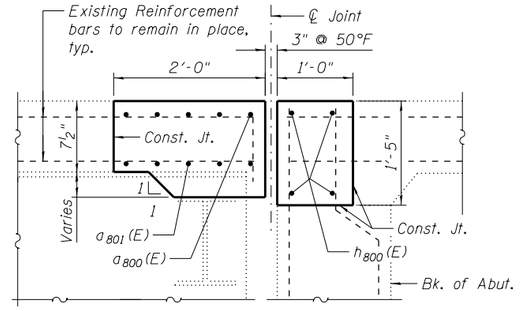
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
S.N. 082-0288 MLK BRIDGE RAMP 2 OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, AND MISSOURI AVE.
SHEET NO. 1 OF 3 SHEETS

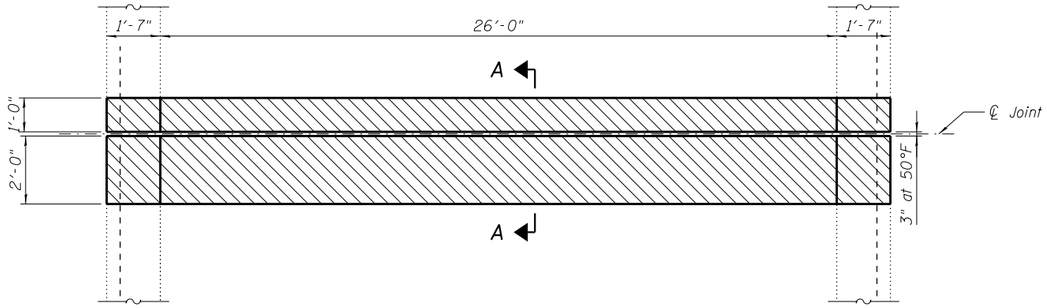
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	264
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



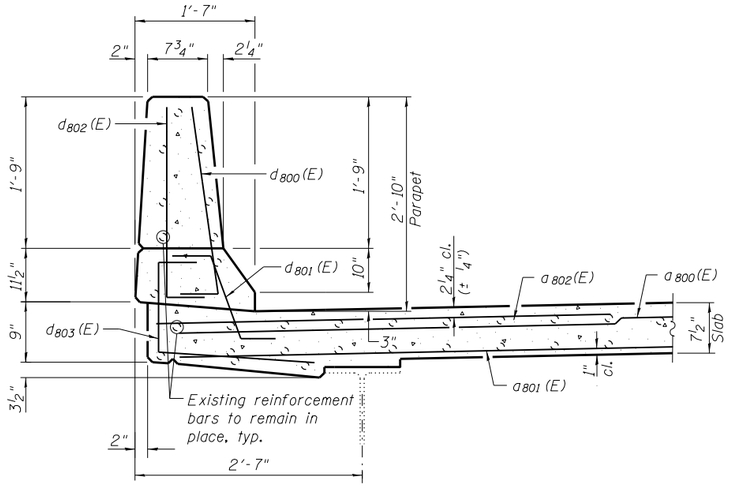
SECTION A-A
Near ℄ Roadway



SECTION B-B
Near ℄ Roadway

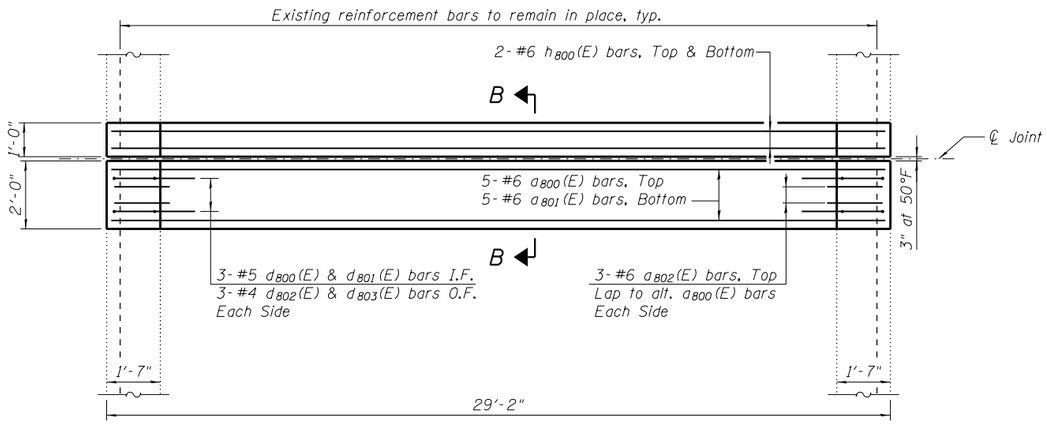


REMOVAL PLAN
West Abutment shown; East Abutment Opposite Hand



TYPICAL PARAPET SECTION

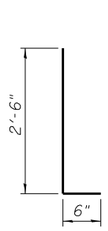
Z



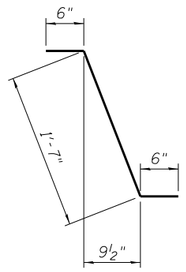
REPLACEMENT PLAN
West Abutment shown; East Abutment Opposite Hand

BILL OF MATERIAL

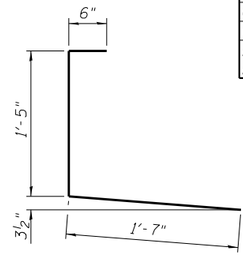
Bar	No.	Size	Length	Shape
a800 (E)	10	#5	28'-6"	——
a801 (E)	10	#5	27'-6"	——
a802 (E)	12	#6	6'-6"	——
d800 (E)	12	#5	3'-0"	L
d801 (E)	12	#5	2'-7"	⌐
d802 (E)	12	#4	3'-0"	L
d803 (E)	12	#4	3'-6"	⌐
h800 (E)	8	#6	28'-10"	——
Concrete Removal			Cu. Yd.	8.0
Concrete Superstructure			Cu. Yd.	8.0
Reinforcement Bars, Epoxy Coated			Pound	1,170



BAR d800(E) & d802(E)



BAR d801(E)



BAR d803(E)

Note:
For joint details, see sheet 3 of 3.

Note: Hatched areas indicate removal.

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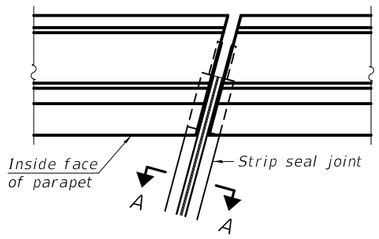
USER NAME =	DESIGNED - CDB	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED

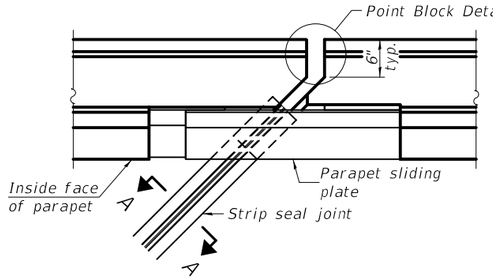
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS
S.N. 082-0288 MLK BRIDGE RAMP 2 OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, AND MISSOURI AVE.
SHEET NO. 2 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	265
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

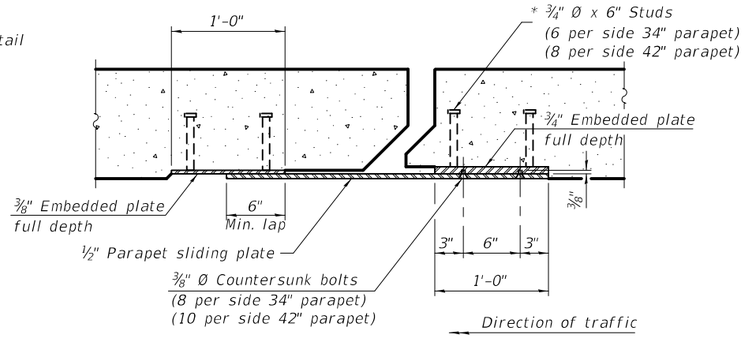


FOR SKEWS ≤ 30°



FOR SKEWS > 30°

PLAN AT PARAPET



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

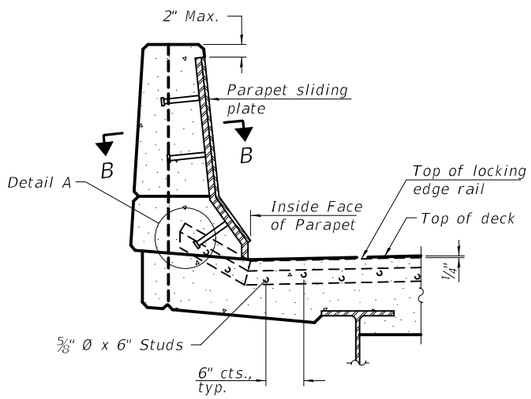
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

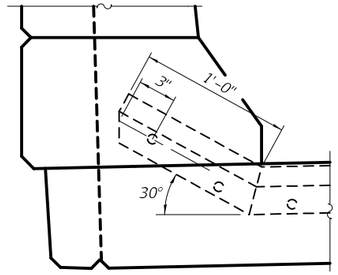
34" F-shape barrier shown, 42" F-shape similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

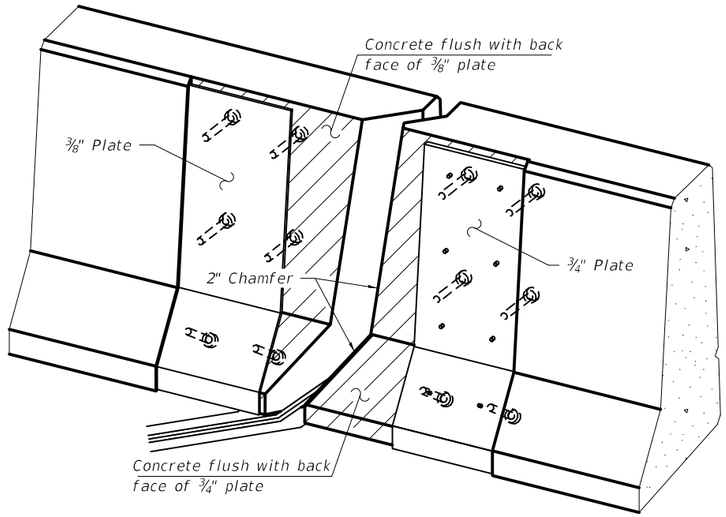


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

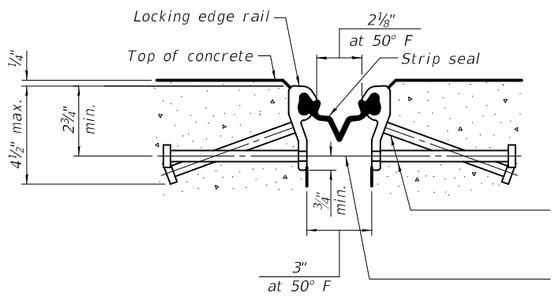


DETAIL A



TRIMETRIC VIEW

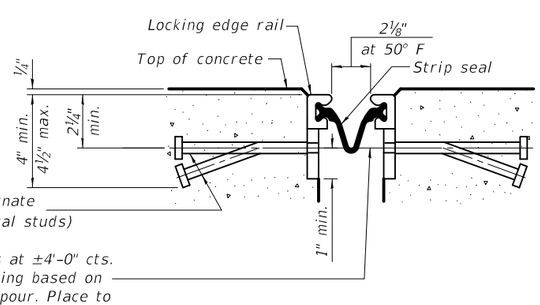
(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

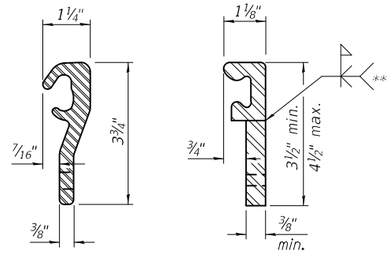
⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



SHOWING WELDED RAIL JOINT

SECTION A-A

** Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.*

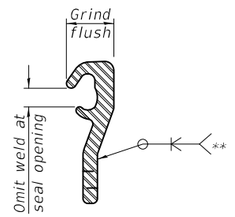


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

*** Back gouge not required if complete joint penetration is verified by mock-up.*



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	56.0

EJ-SS 8-11-17

USER NAME =	DESIGNED - CDB	REVISED	
	CHECKED - JMH	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 03/22/2018	CHECKED - JMH	REVISED	

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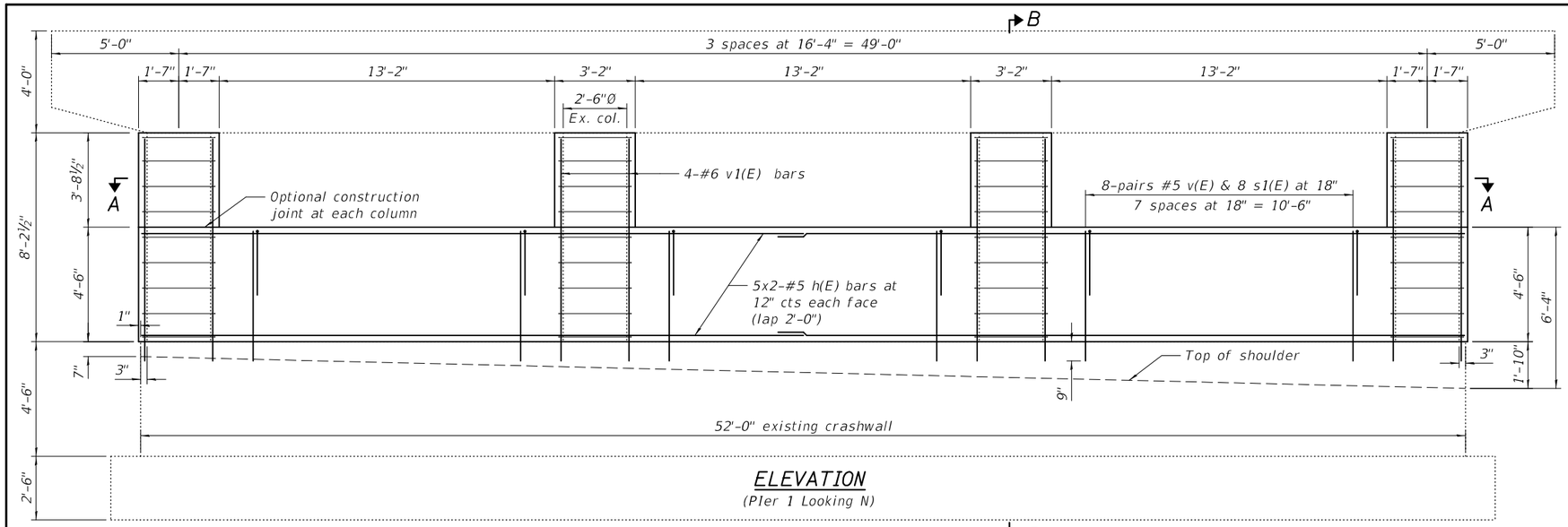
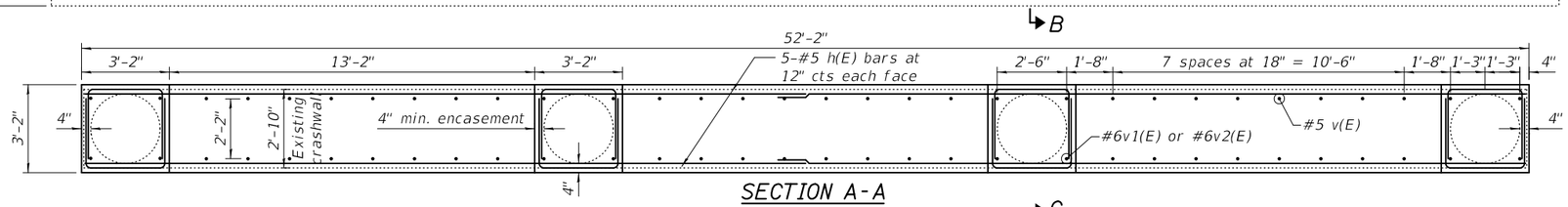
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
S.N. 082-0288 MLK BRIDGE RAMP 2 OVER RELOCATED IL RTE 3, VARIOUS RAILROADS, AND MISSOURI AVE.
SHEET NO. 3 OF 3 SHEETS

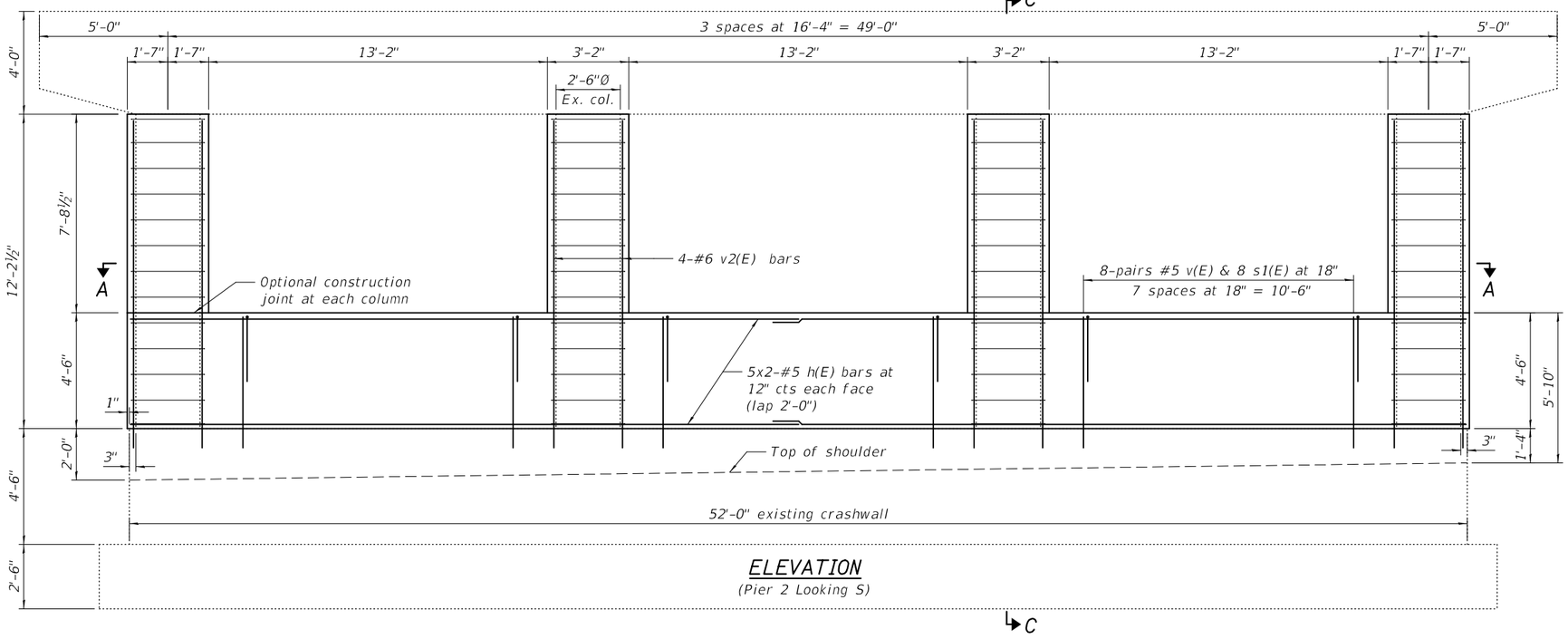
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	266
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		



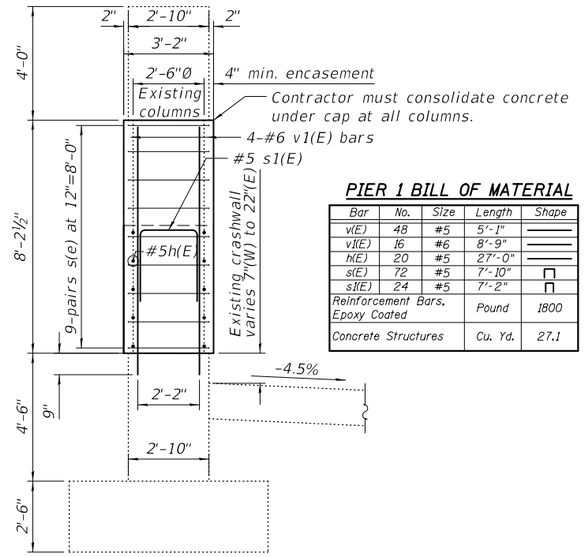
ELEVATION
(PIer 1 Looking N)



SECTION A-A



ELEVATION
(Pier 2 Looking S)



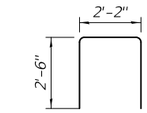
SECTION B-B
(PIer 1 Looking East)

PIER 1 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
v(E)	48	#5	5'-1"	
v1(E)	16	#6	8'-9"	
h(E)	20	#5	27'-0"	
s(E)	72	#5	7'-10"	
s1(E)	24	#5	7'-2"	
Reinforcement Bars, Epoxy Coated			Pound	1800
Concrete Structures			Cu. Yd.	27.1

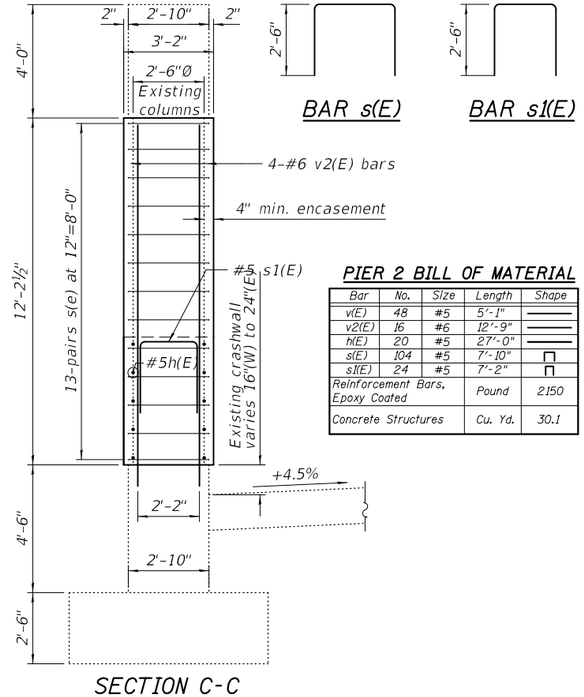
NOTES

"Concrete Structures" quantity is for extending the crashwall 4'-6" and encasing the pier columns.
All loose and unsound concrete shall be removed from the columns, cost included with "Concrete Structures".
Vertical bars shall be drilled and epoxy grouted into existing crashwall 9" in accordance with Article 584 of the Standard Specs. Cost included with "Reinforcement Bars, Epoxy Coated".



BAR s(E)

BAR s1(E)



SECTION C-C
(PIer 2 Looking West)

PIER 2 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
v(E)	48	#5	5'-1"	
v2(E)	16	#6	12'-9"	
h(E)	20	#5	27'-0"	
s(E)	104	#5	7'-10"	
s1(E)	24	#5	7'-2"	
Reinforcement Bars, Epoxy Coated			Pound	2150
Concrete Structures			Cu. Yd.	30.1

DESIGNED - J. Uehle	EXAMINED	DATE - JANUARY 19, 2018	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
CHECKED - V. Vellz	ENGINEER OF STRUCTURAL SERVICES		
DRAWN - J. Uehle	PASSED	REVISED ___	
CHECKED - V. Vellz	ENGINEER OF BRIDGES AND STRUCTURES	REVISED ___	

PIER CRASHWALL & COLUMN REPAIRS
S.N. 082-0135 (MISSOURI AVE. OVER WB 55/70)
SHEET NO. 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	267
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK • Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
$MODELNAME$	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

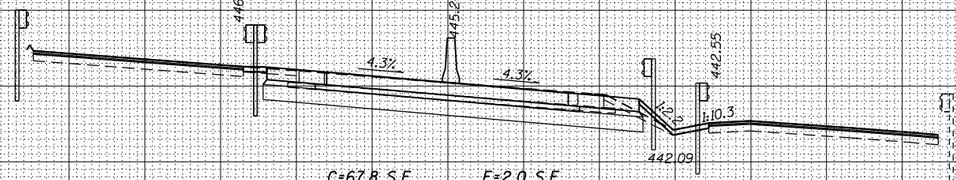
CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 1 OF 22 SHEETS | STA. 58+00.00 TO STA. 58+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	268
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

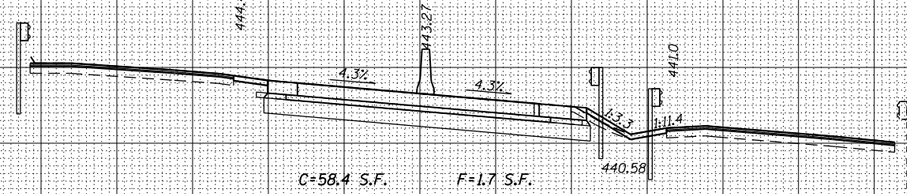
445
440



60 + 00.00

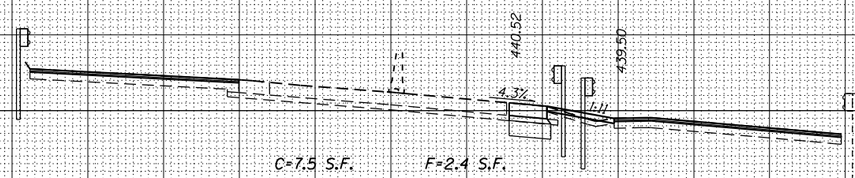
445
440

445
440



59 + 50.00

440
435



59 + 00.00

440
435

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FINAL SURVEY

NO.	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TEMPLATE		
		AREAS		
		AREAS CHECKED		

ORIGINAL SURVEY

NO.	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TEMPLATE		
		AREAS		
		AREAS CHECKED		

EFK Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

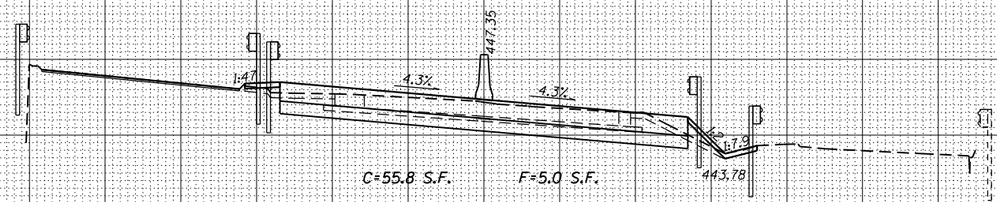
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

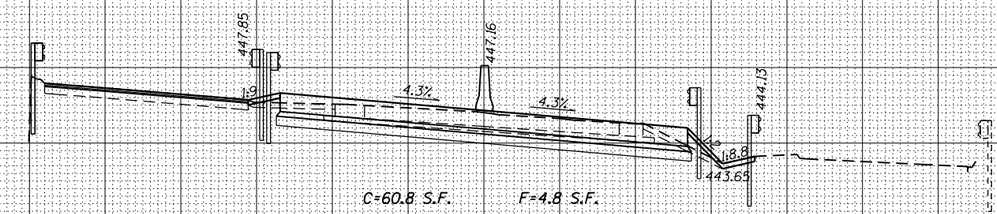
SCALE: 5'V - 10'H | SHEET 2 OF 22 SHEETS | STA. 59+00.00 TO STA.60+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	269
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

STA. 60+54.70 - STA. 73+99.29
SEE BRIDGE PLANS



60 + 54.70



60 + 50.00

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK•Moen, LLC
Civil Engineering Design

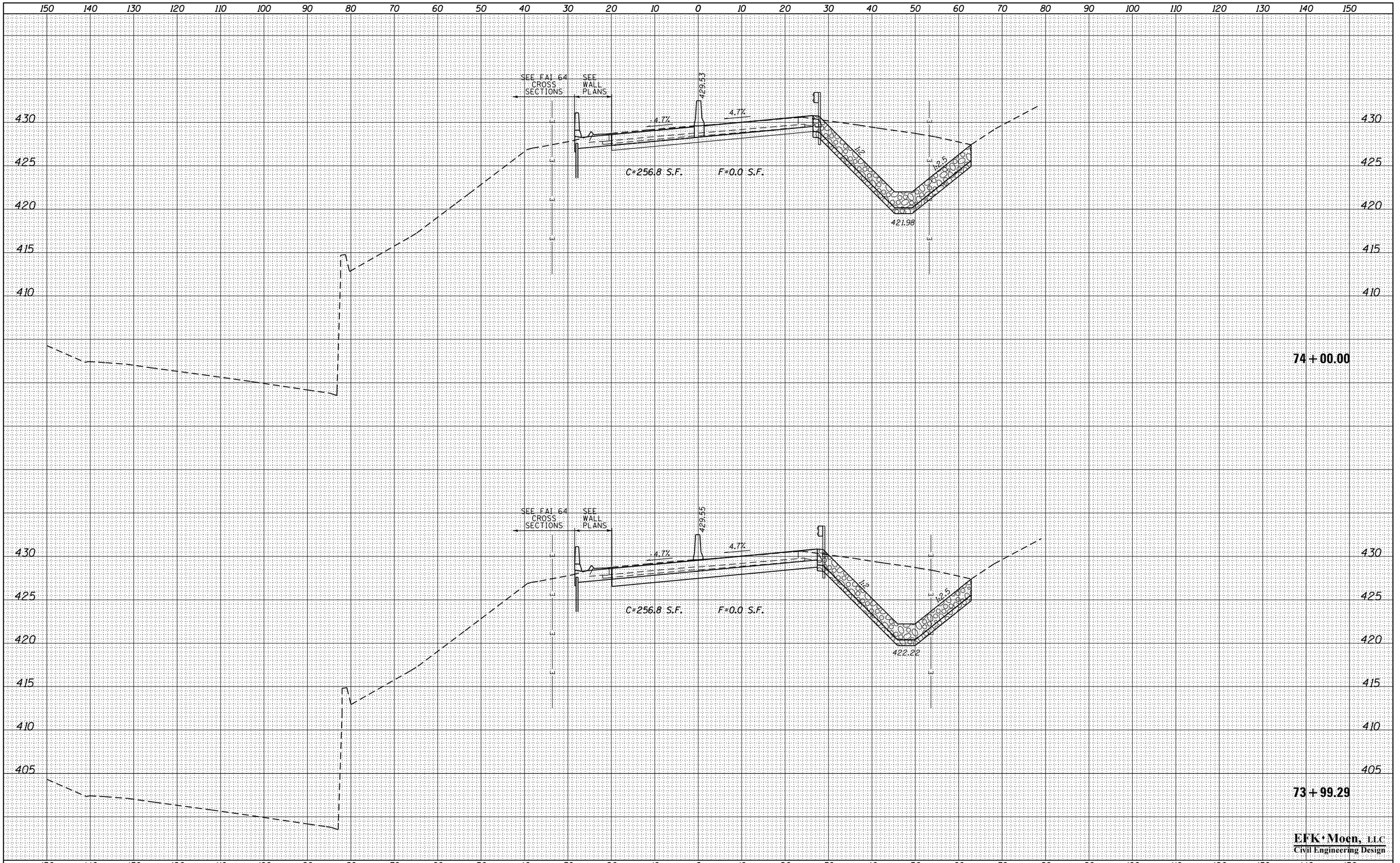
FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 3 OF 22 SHEETS | STA. 60+50.00 TO STA. 60+54.70

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	270
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY / ORIGINAL SURVEY

NO.	NOTE BOOK	BY	DATE
	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

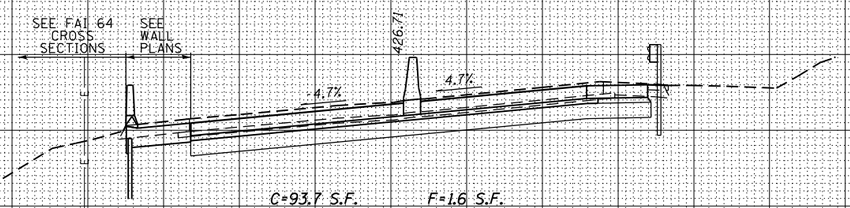
CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 4 OF 22 SHEETS | STA. 73+99.29 | TO STA. 74+00.00

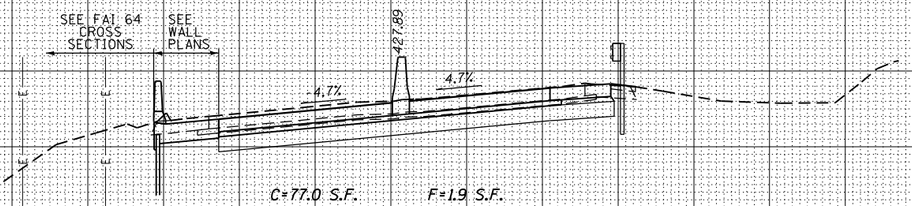
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	271
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

430 425 420 415 410 405



75 + 00.00



74 + 50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

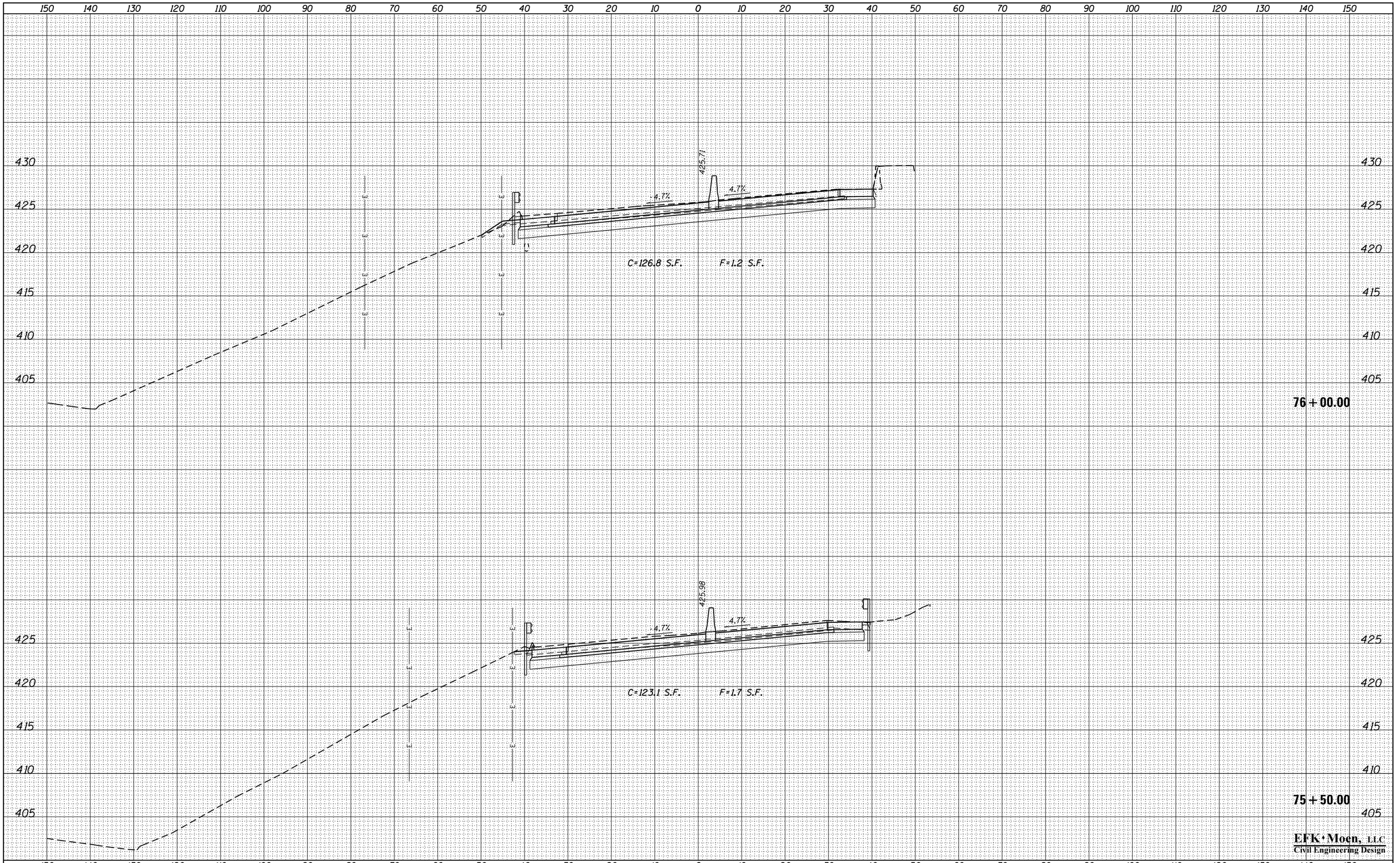
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 5 OF 22 SHEETS | STA. 74+50.00 TO STA. 75+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	272
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

ORIGINAL SURVEY	NO.	NOTE BOOK	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				



FINAL SURVEY	NO.	NOTE BOOK	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 6 OF 22 SHEETS | STA. 75+50.00 TO STA. 76+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	273
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

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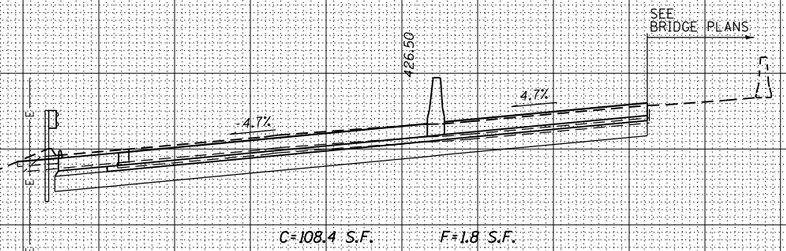
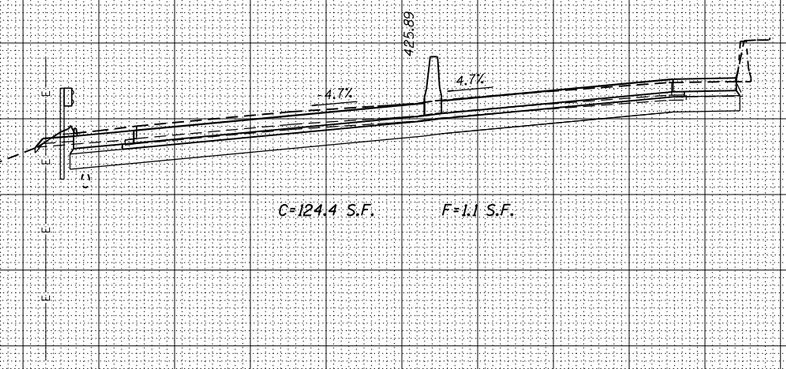
430 425 420 415 410 405



C=108.4 S.F. F=1.8 S.F.

77+00.00



C=124.4 S.F. F=1.1 S.F.

76+50.00

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

EFK·Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 7 OF 22 SHEETS | STA. 76+50.00 | TO STA. 77+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	274
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

430 425 420 415 410

SEE BRIDGE PLANS

428.39

MATCH EX

C=27.4 S.F. F=6.0 S.F.

78+00.00

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

430 425 420 415 410 405

SEE BRIDGE PLANS

427.70

4.7%

C=72.6 S.F. F=2.0 S.F.

77+50.00

EFK•Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 8 OF 22 SHEETS | STA. 77+50.00 | TO STA. 78+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	275
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
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TEMPLATE		
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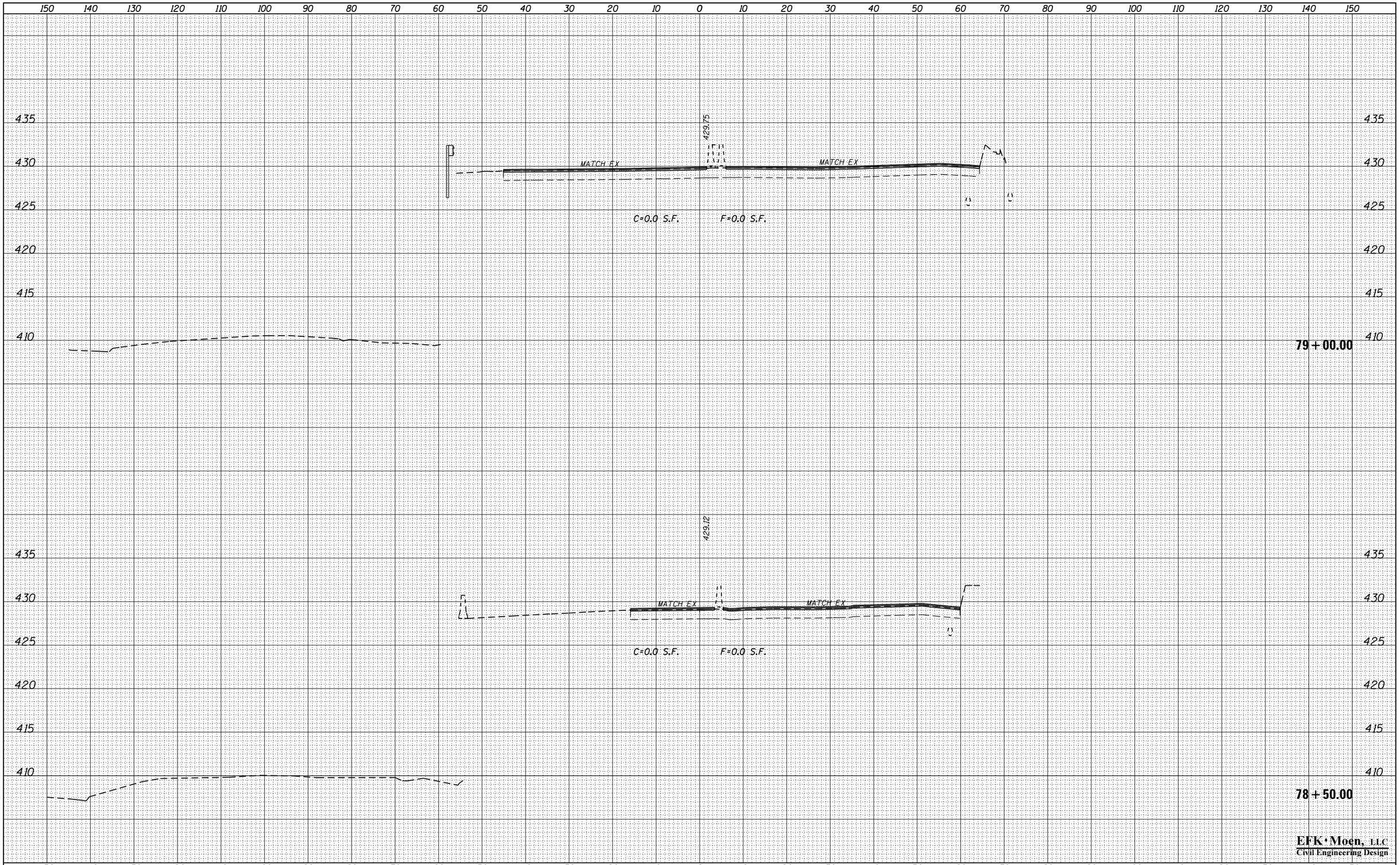
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
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TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK•Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 9 OF 22 SHEETS | STA. 78+50.00 TO STA. 79+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	276
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
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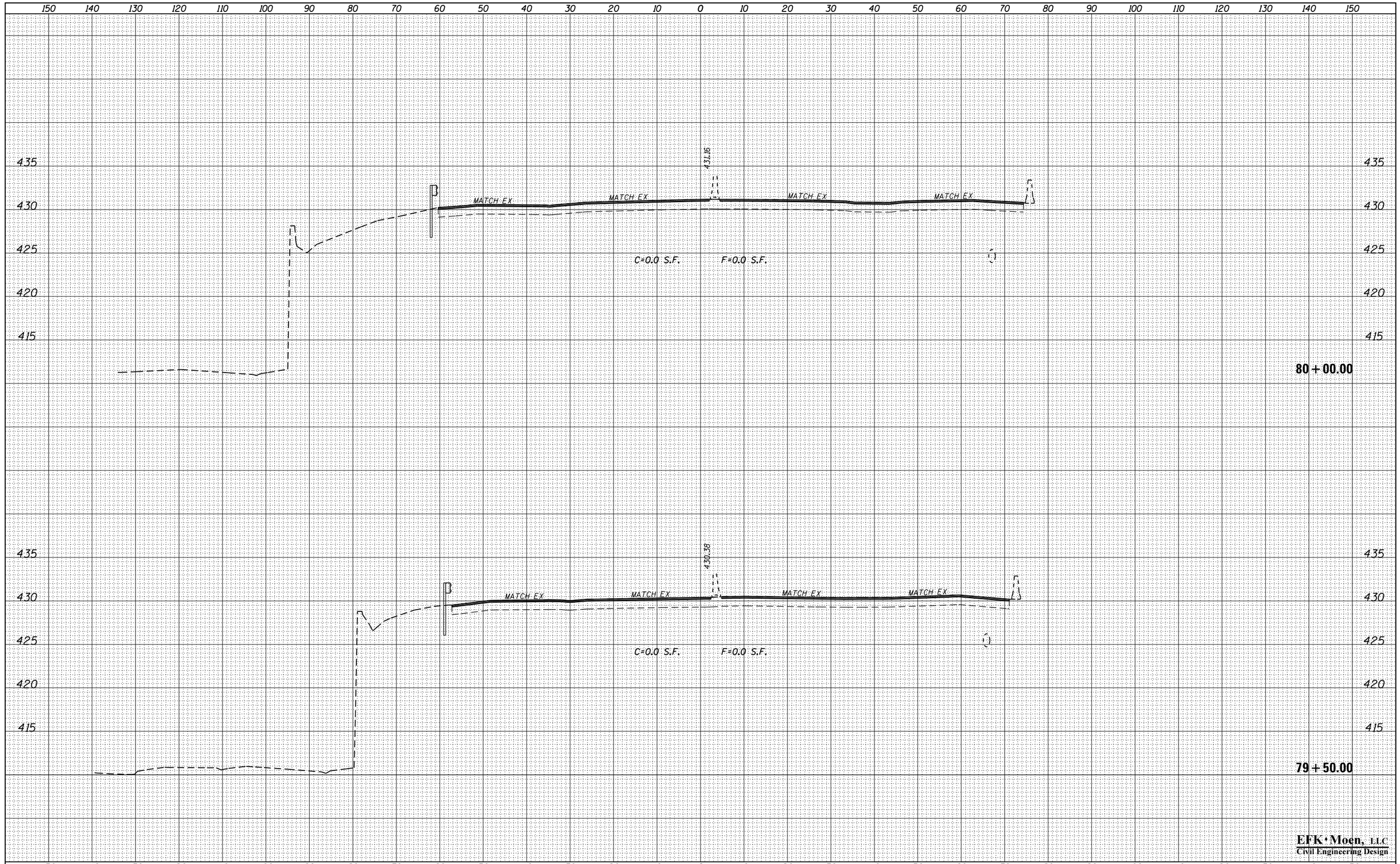
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
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PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

EFK•Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

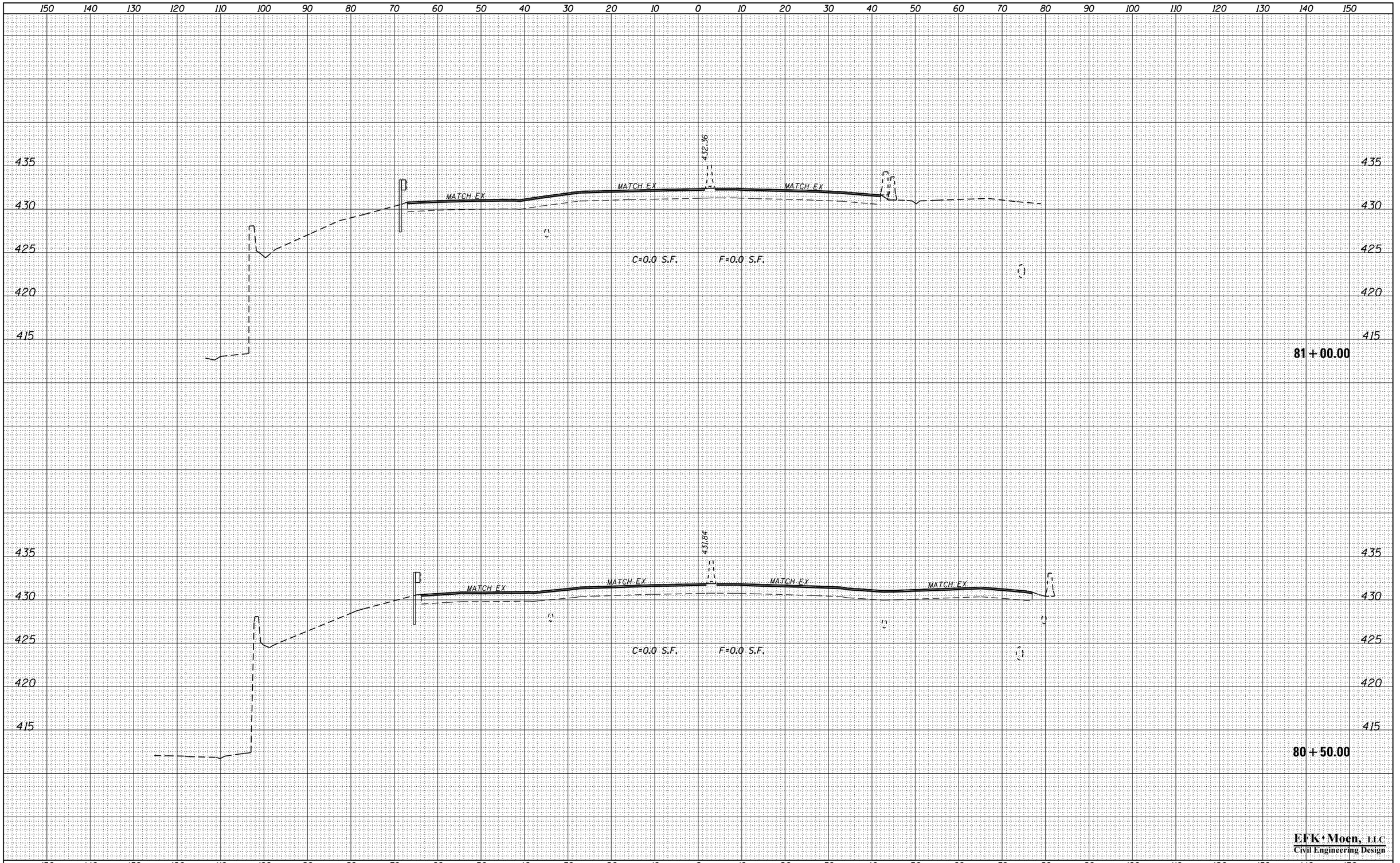
CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 10 OF 22 SHEETS | STA. 79+50.00 TO STA. 80+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	277
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK•Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

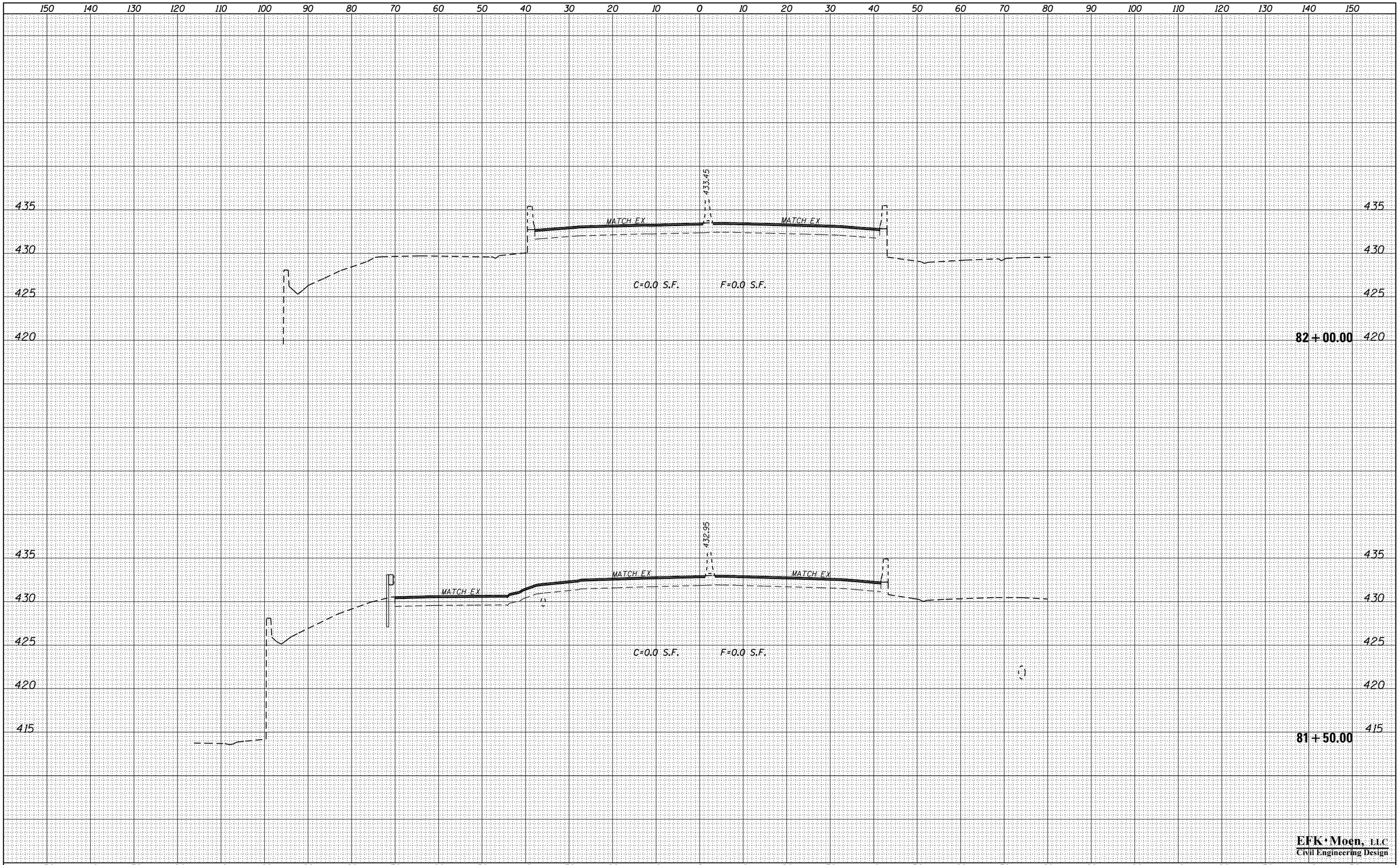
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 11 OF 22 SHEETS | STA. 80+50.00 TO STA. 81+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	278
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 12 OF 22 SHEETS | STA. 81+50.00 TO STA. 82+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	279
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

435.14

MATCH EX MATCH EX

C=0.0 S.F. F=0.0 S.F.

435 430 425

83 + 50.00

434.60

MATCH EX MATCH EX

C=0.0 S.F. F=0.0 S.F.

435 430 425

83 + 00.00

434.03

MATCH EX MATCH EX

C=0.0 S.F. F=0.0 S.F.

435 430 425

82 + 50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY	NO.	NOTE BOOK	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

ORIGINAL SURVEY	NO.	NOTE BOOK	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

EFK•Moen, LLC
Civil Engineering Design

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$MODELNAME$	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

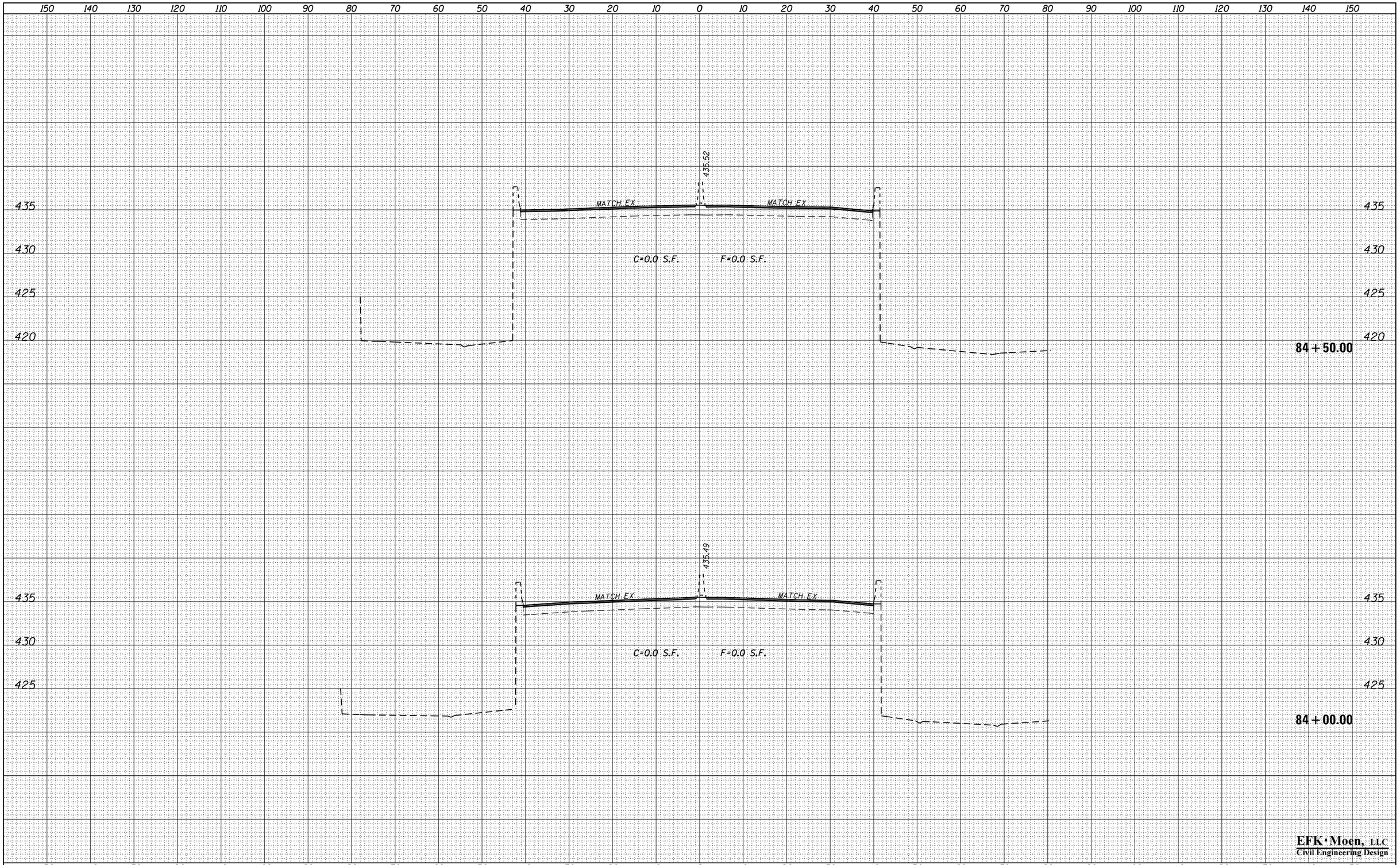
CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 13 OF 22 SHEETS | STA. 82+50.00 TO STA.83+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	280
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

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$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

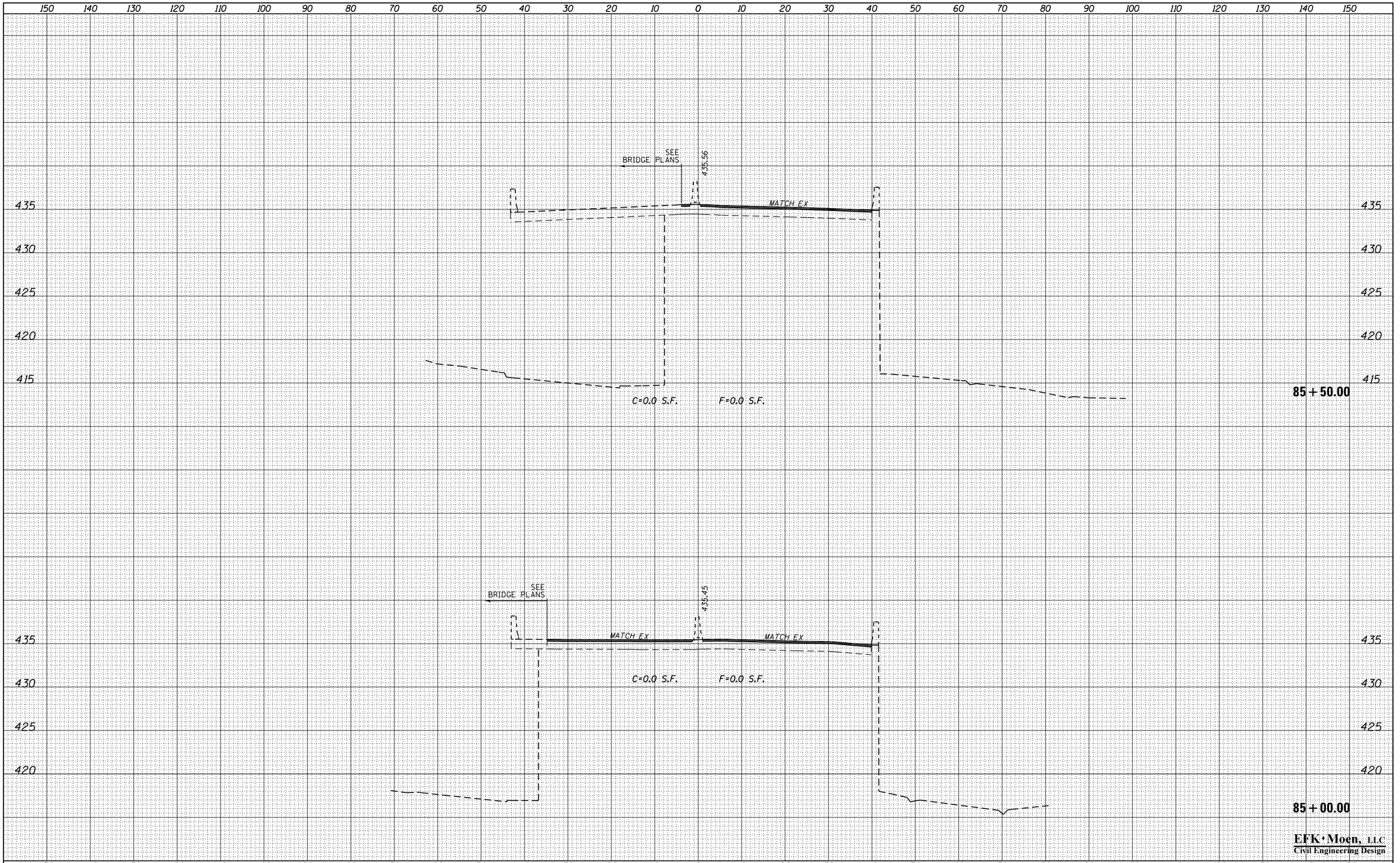
CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 14 OF 22 SHEETS | STA. 84+00.00 TO STA. 84+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	281
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

EFK•Moen, LLC
Civil Engineering Design

FINAL SURVEY	NOTE BOOK	
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
NO.	AREAS CHECKED	BY



ORIGINAL SURVEY	NOTE BOOK	
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
NO.	AREAS CHECKED	BY

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 15 OF 22 SHEETS | STA. 85+00.00 TO STA. 85+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	282
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

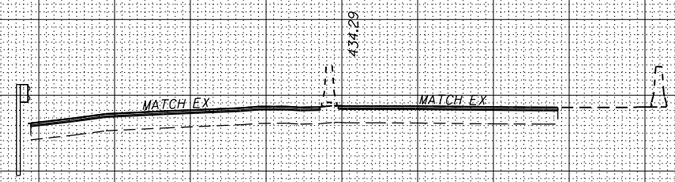
FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY

DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

435
430
425
420
415



C=0.0 S.F. F=0.0 S.F.

86+50.00

414.26

86+00.00

C=0.0 S.F. F=0.0 S.F.

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY

DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 16 OF 22 SHEETS | STA. 86+00.00 TO STA.86+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	283
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY

DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

430

425

431.34

MATCH EX

MATCH EX

C=0.0 S.F.

F=0.0 S.F.

88+00.00

430

425

432.07

MATCH EX

MATCH EX

C=0.0 S.F.

F=0.0 S.F.

87+50.00

430

425

433.07

MATCH EX

MATCH EX

C=0.0 S.F.

F=0.0 S.F.

87+00.00

430

425

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY

DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 17 OF 22 SHEETS | STA. 87+00.00 | TO STA.88+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	284
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

426.66

430

425

MATCH EX

MATCH EX

90 + 00.00

C=0.0 S.F. F=0.0 S.F.

428.15

430

425

MATCH EX

MATCH EX

89 + 50.00

C=0.0 S.F. F=0.0 S.F.

429.39

430

425

MATCH EX

MATCH EX

89 + 00.00

C=0.0 S.F. F=0.0 S.F.

430.52

430

425

MATCH EX

MATCH EX

88 + 50.00

C=0.0 S.F. F=0.0 S.F.

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 18 OF 22 SHEETS | STA. 88+50.00 TO STA. 90+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	285
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

425
420

421.51

MATCH EX — MATCH EX

C=0.0 S.F. F=0.0 S.F.

92+00.00

422.76

MATCH EX — MATCH EX

C=0.0 S.F. F=0.0 S.F.

91+50.00

423.93

MATCH EX — MATCH EX

C=0.0 S.F. F=0.0 S.F.

91+00.00

425.27

MATCH EX — MATCH EX

C=0.0 S.F. F=0.0 S.F.

90+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY

NO.	BY	DATE
NOTE BOOK		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY

NO.	BY	DATE
NOTE BOOK		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 19 OF 22 SHEETS | STA. 90+50.00 TO STA. 92+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	286
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

420
415

416.75

MATCH EX

MATCH EX

94+00.00

C=0.0 S.F. F=0.0 S.F.

417.72

MATCH EX

MATCH EX

93+50.00

C=0.0 S.F. F=0.0 S.F.

419.01

MATCH EX

MATCH EX

93+00.00

C=0.0 S.F. F=0.0 S.F.

420.28

MATCH EX

MATCH EX

92+50.00

C=0.0 S.F. F=0.0 S.F.

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY

NO.	NOTE BOOK	BY	DATE

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY

NO.	NOTE BOOK	BY	DATE

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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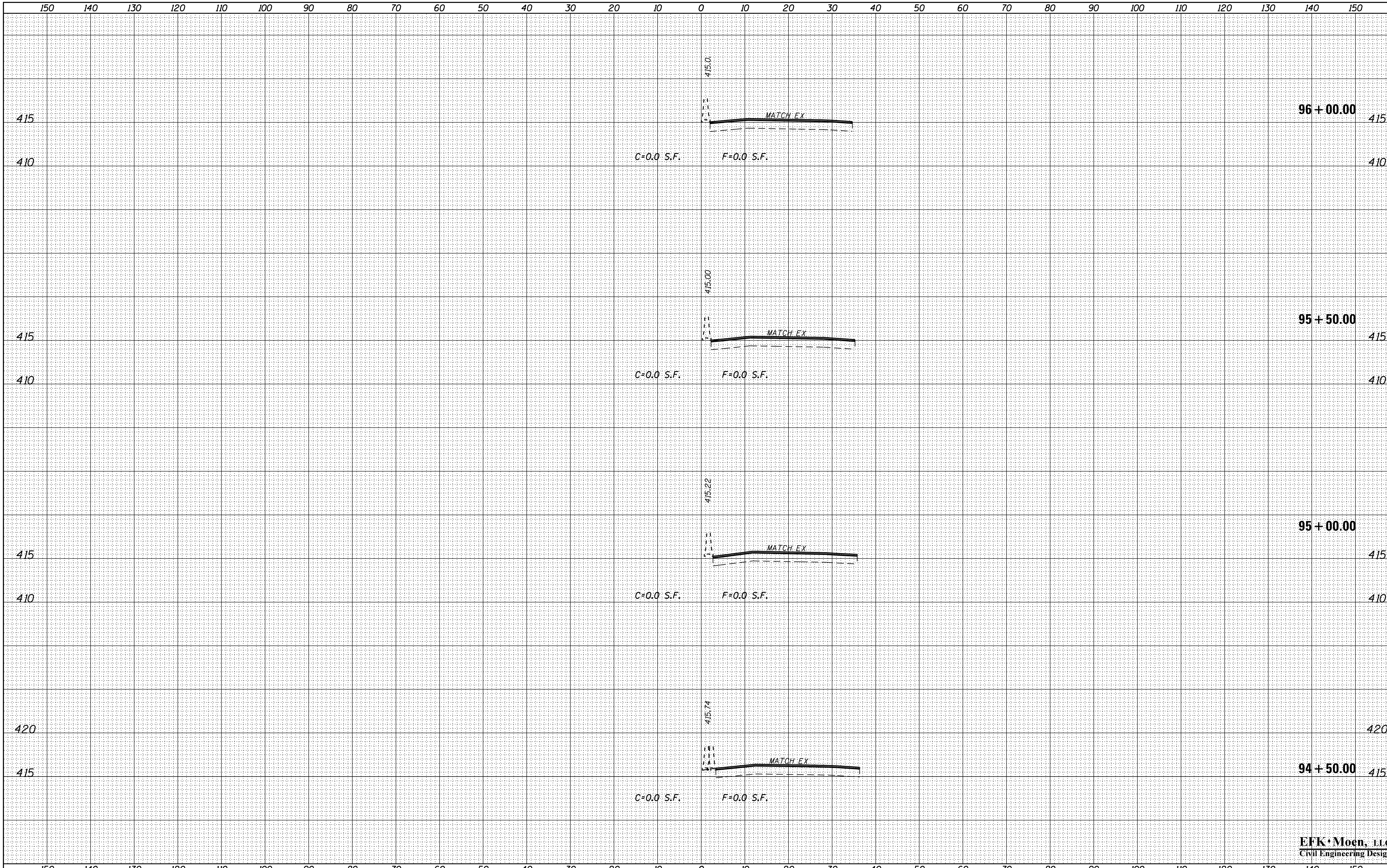
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 20 OF 22 SHEETS | STA. 92+50.00 TO STA. 94+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	287
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		



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ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 600-D876G39-sht-xsec-MLK.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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$MODELNAME$	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

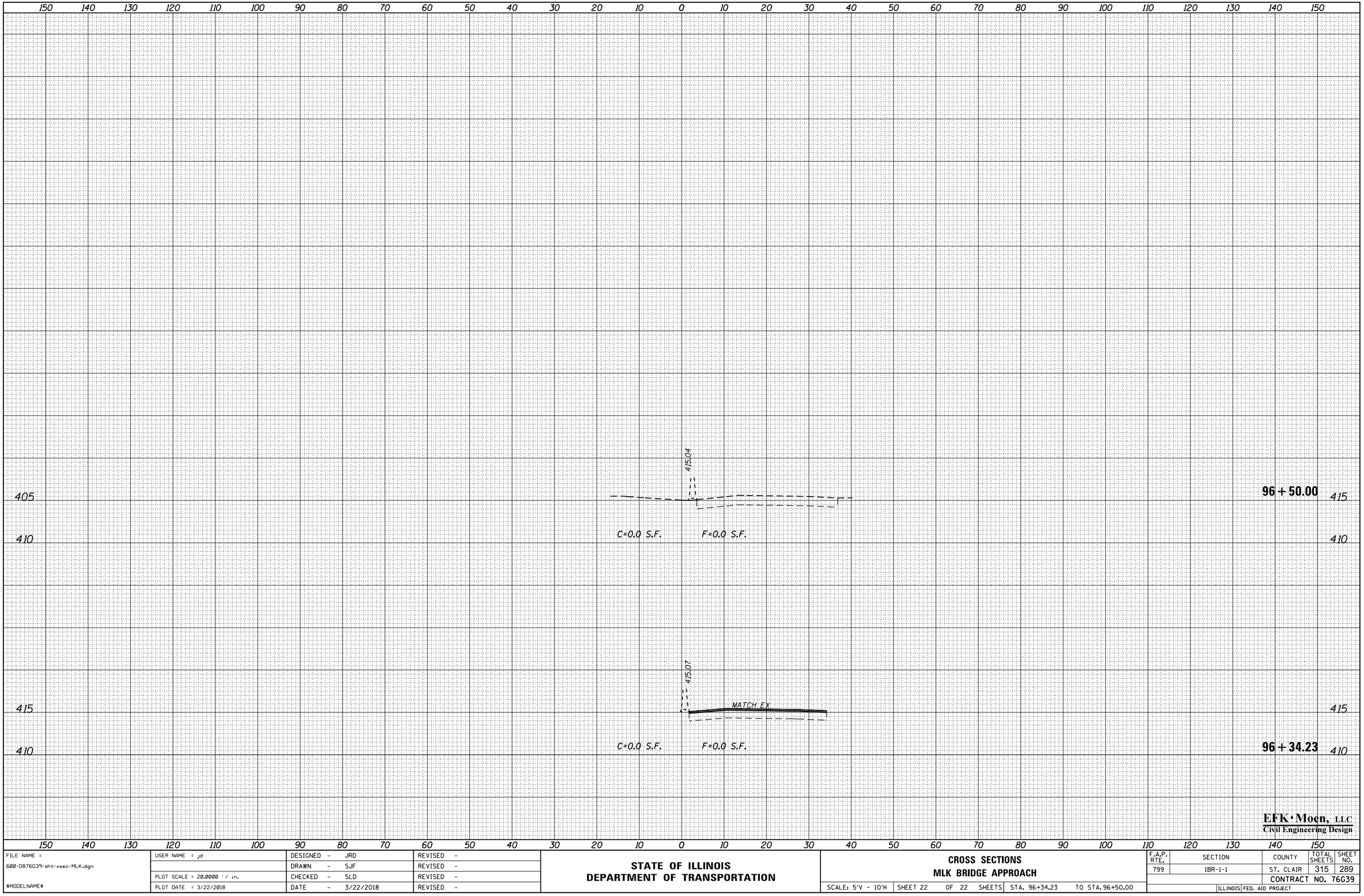
CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 21 OF 22 SHEETS | STA. 94+50.00 TO STA. 96+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	288
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



EFK·Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MLK BRIDGE APPROACH

SCALE: 5'V - 10'H | SHEET 22 OF 22 SHEETS | STA. 96+34.23 | TO STA. 96+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	289
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

415
410
405
400
395

CRASH WALL (SEE BRIDGE PLANS)

C=0.0 S.F. F=0.0 S.F.

122 + 50.00

415
410
405
400
395

CRASH WALL (SEE BRIDGE PLANS)

C=0.0 S.F. F=0.0 S.F.

122 + 00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 700-D876G39-sht-xsec-55-64.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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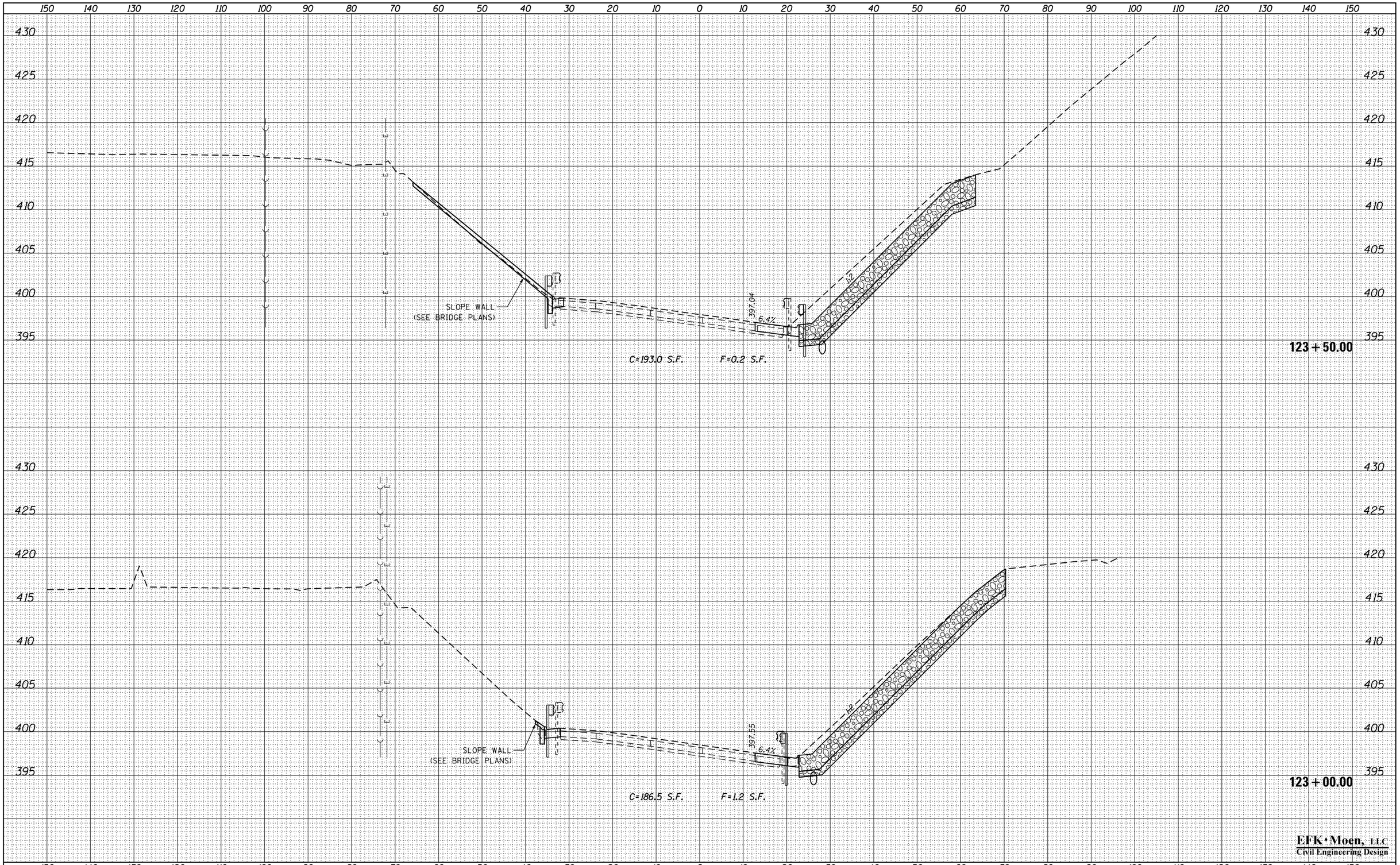
$MODELNAME$	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
I-55SB /64WB

SCALE: 10'H : 5'V | SHEET 1 OF 8 SHEETS | STA. 122+00.00 | TO STA. 122+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	290
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY

NOTE BOOK

NO.

ORIGINAL SURVEY

NOTE BOOK

NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

EFK • Moen, LLC
Civil Engineering Design

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		DRAWN - SJF	REVISED -
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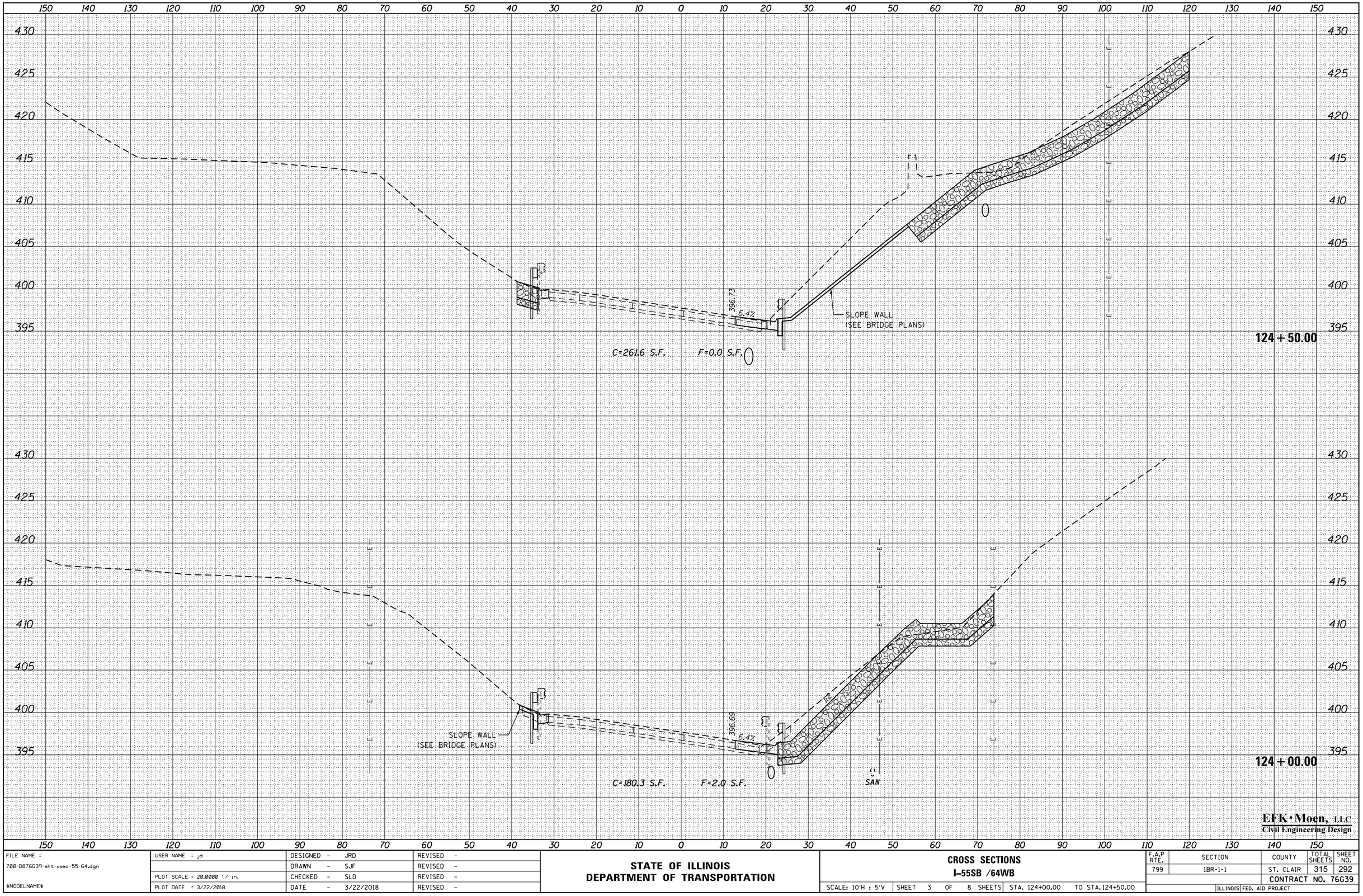
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
I-55SB /64WB

SCALE: 10'H : 5'V | SHEET 2 OF 8 SHEETS | STA. 123+00.00 | TO STA.123+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	291
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY

NO.	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TEMPLATE		
		AREAS		
		AREAS CHECKED		

ORIGINAL SURVEY

NO.	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TEMPLATE		
		AREAS		
		AREAS CHECKED		

EFK·Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
I-55SB /64WB

SCALE: 10'H : 5'V | SHEET 3 OF 8 SHEETS | STA. 124+00.00 TO STA.124+50.00

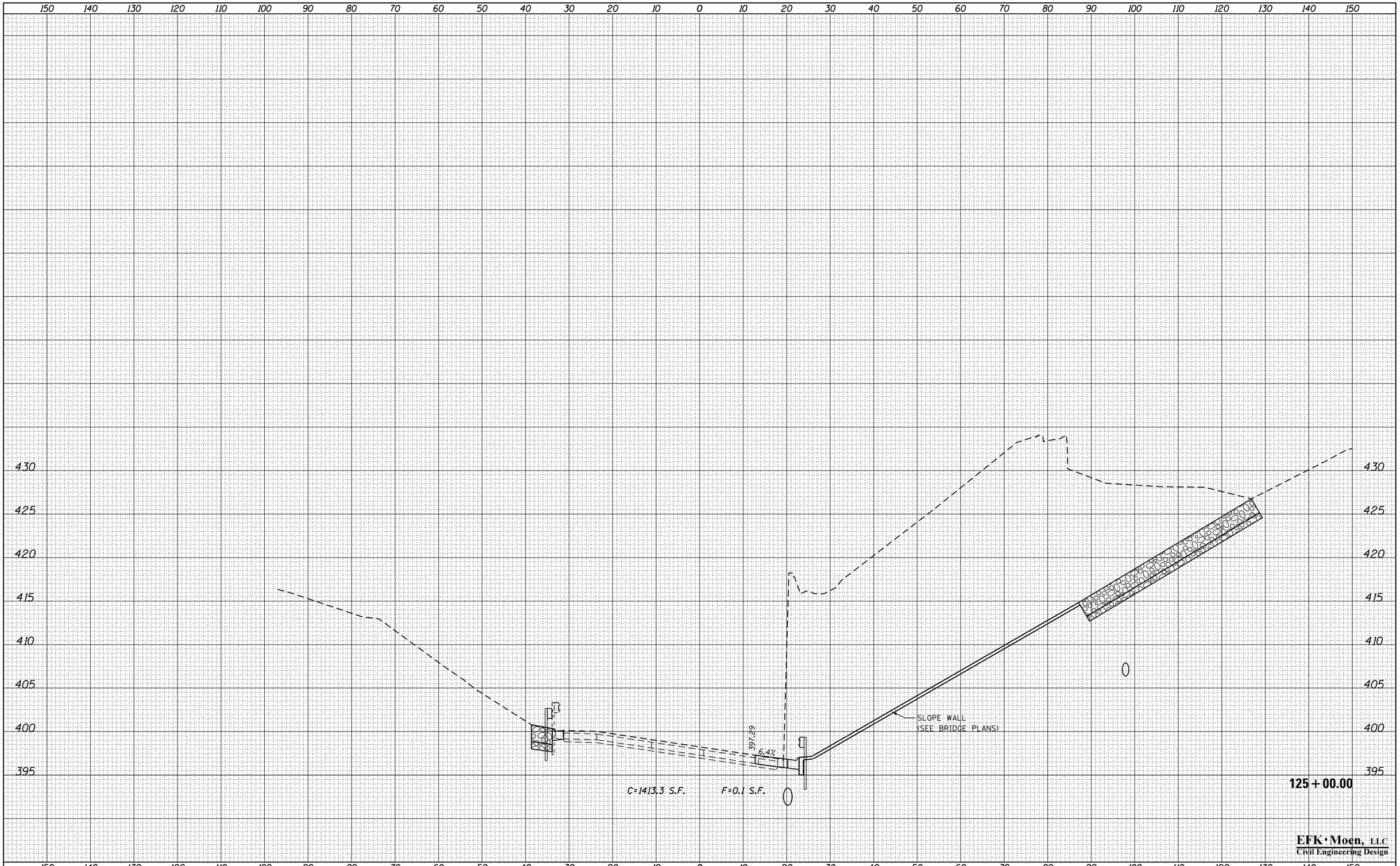
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	292
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



EFK•Moen, LLC
Civil Engineering Design

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	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
$MODELNAME$	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

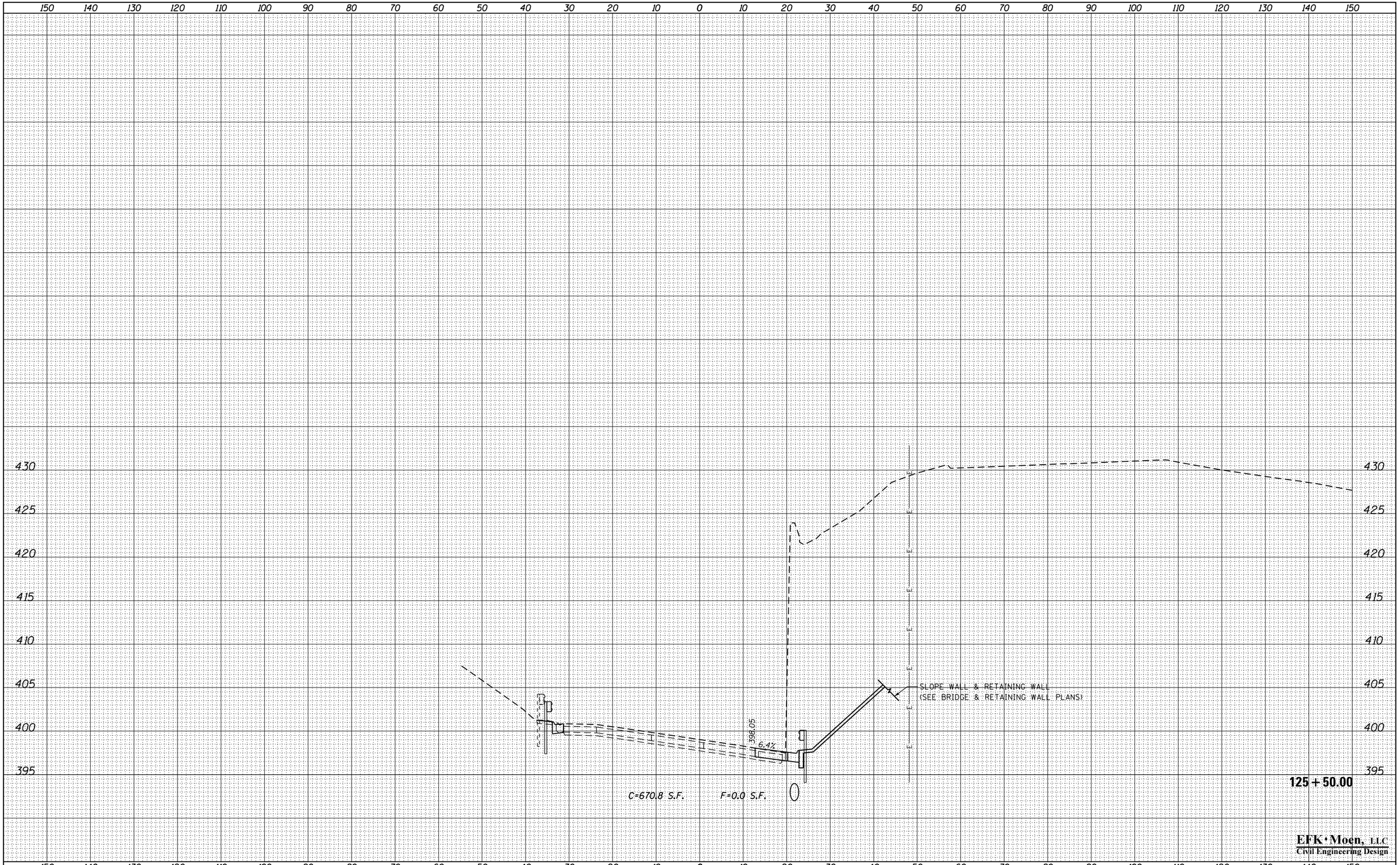
CROSS SECTIONS
I-55SB /64WB

SCALE: 10'H : 5'V | SHEET 4 OF 8 SHEETS | STA. 125+00.00 TO STA. 125+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	293
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



EFK • Moen, LLC
Civil Engineering Design

FILE NAME = 700-D876G39-sht-xsec-55-64.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

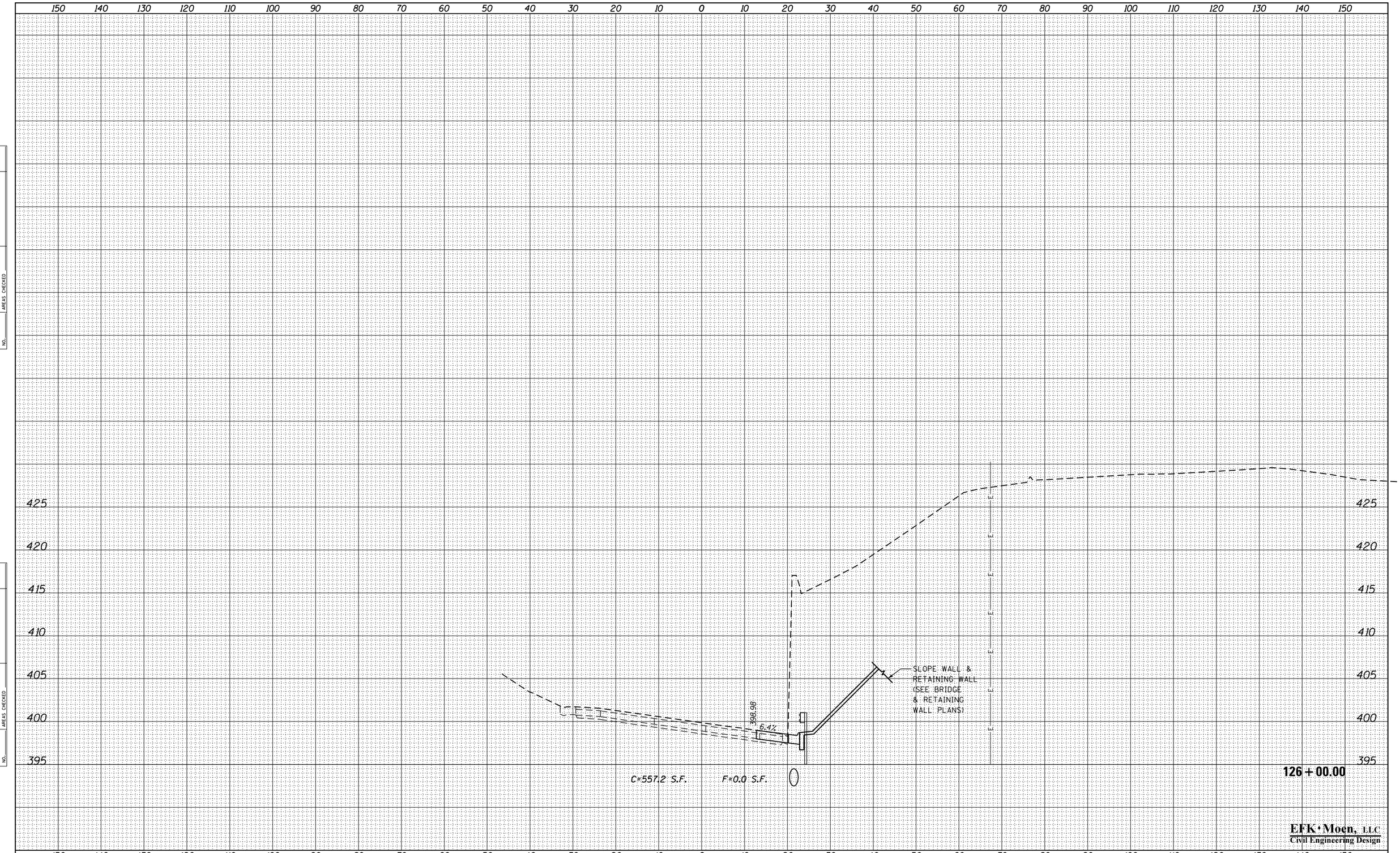
CROSS SECTIONS
I-55SB /64WB

SCALE: 10'H : 5'V | SHEET 5 OF 8 SHEETS | STA. 125+50.00 | TO STA.125+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	294
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



EFK·Moen, LLC
Civil Engineering Design

FILE NAME =	USER NAME = jd	DESIGNED - JRD	REVISED -
700-D876G39-sht-xsec-55-64.dgn		DRAWN - SJF	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 6/13/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

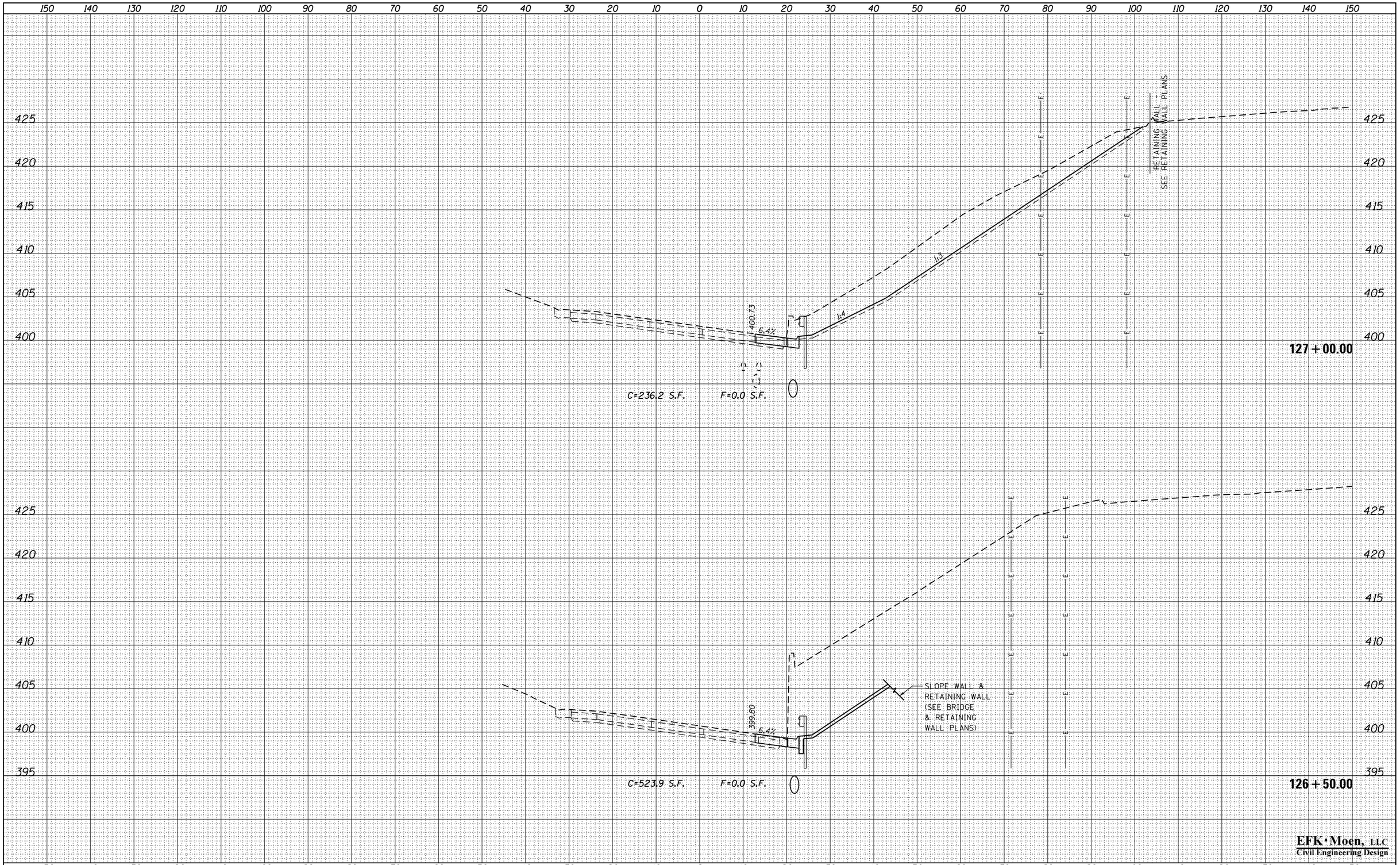
CROSS SECTIONS
I-55SB /64WB

SCALE: 10'H : 5'V | SHEET 6 OF 8 SHEETS | STA. 126+00.00 | TO STA.126+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	295
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 700-D876G39-sht-xsec-55-64.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

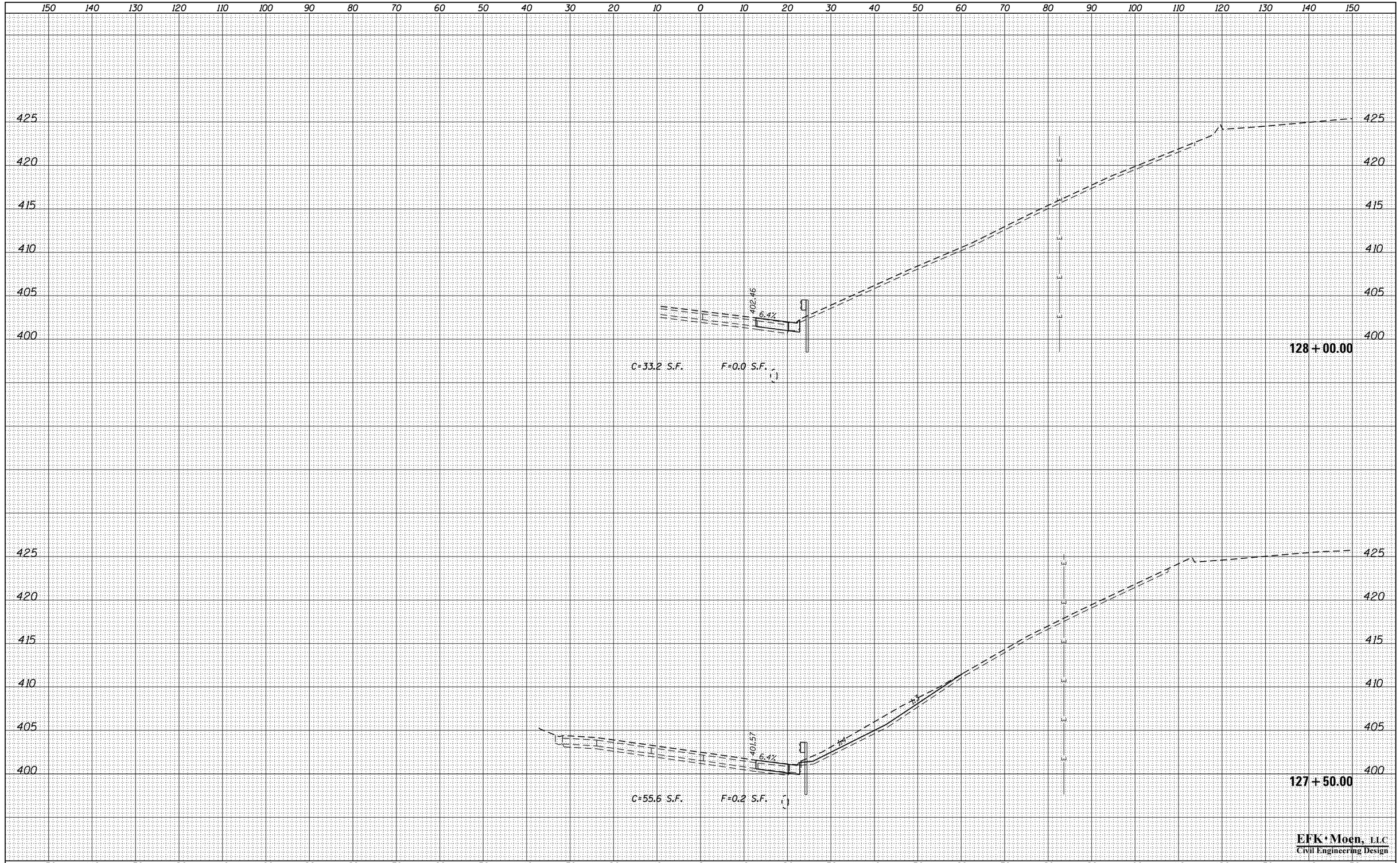
CROSS SECTIONS
I-55SB /64WB

SCALE: 10'H : 5'V | SHEET 7 OF 8 SHEETS | STA. 126+50.00 TO STA.127+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	296
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 700-D876G39-sht-xsec-55-64.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
I-55SB /64WB

SCALE: 10'H : 5'V | SHEET 8 OF 8 SHEETS | STA. 127+50.00 | TO STA.128+00.00

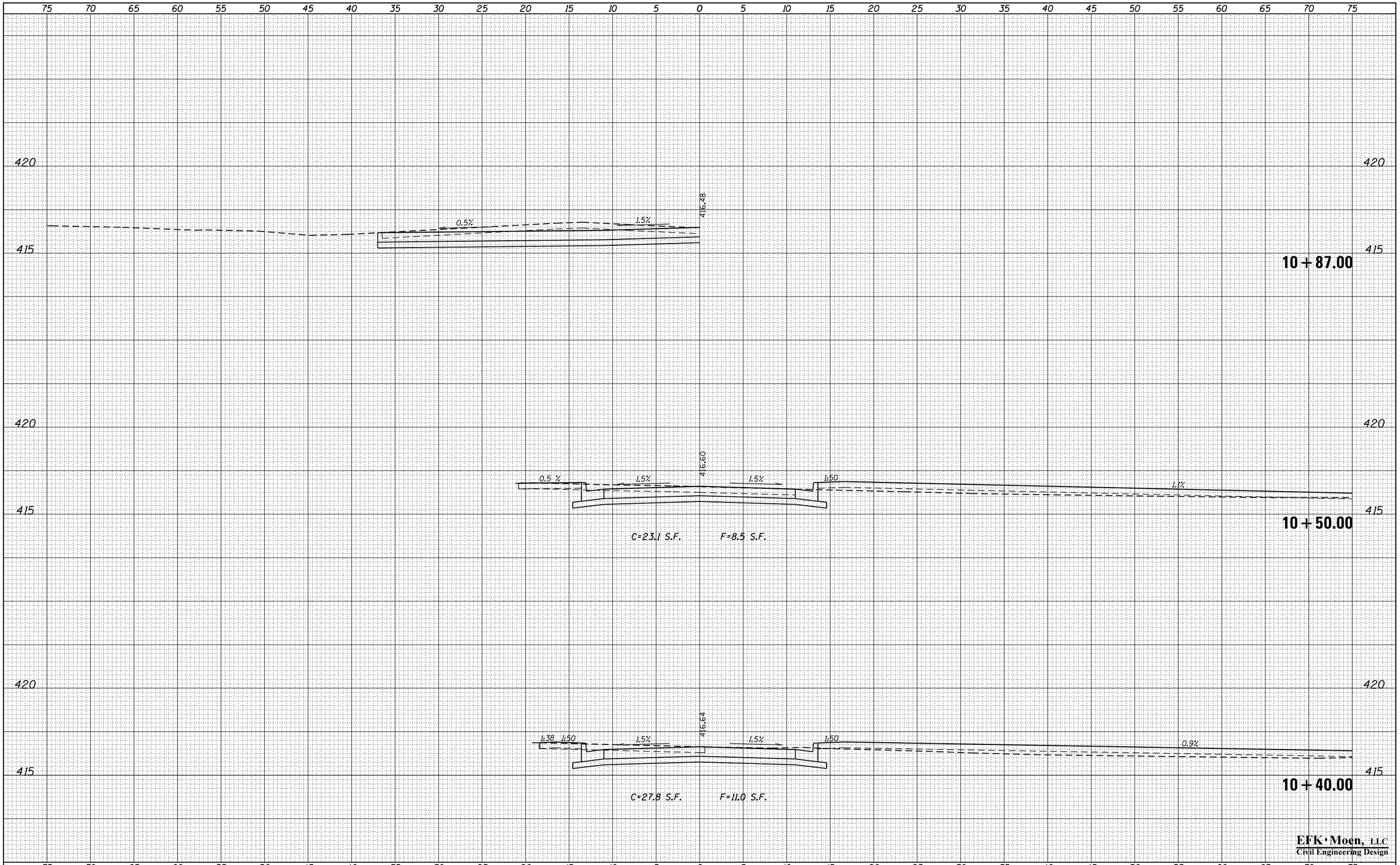
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	297
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



EFK•Moen, LLC
Civil Engineering Design

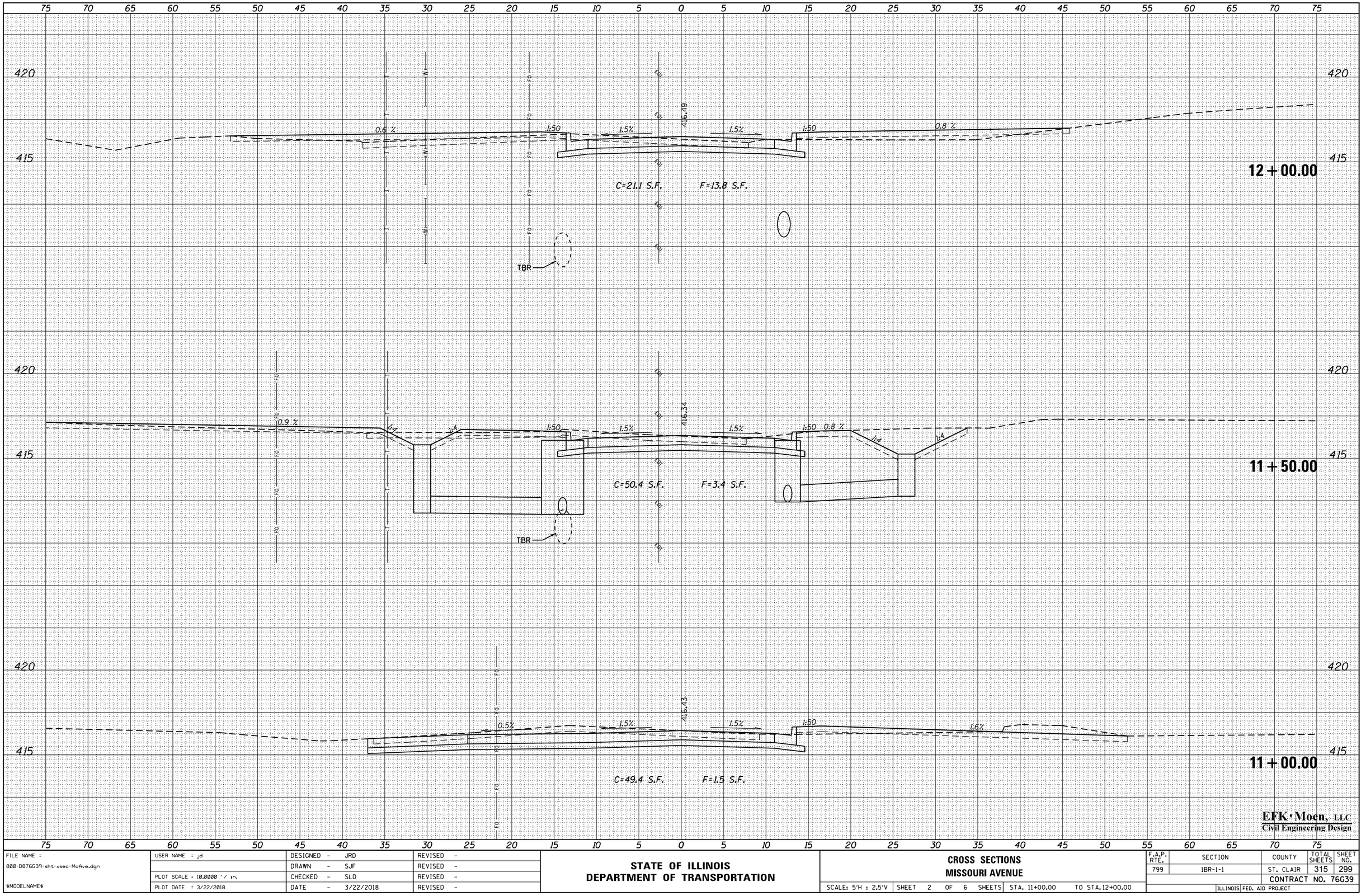
FILE NAME =	USER NAME = jd	DESIGNED - JRD	REVISED -
800-D876G39-sht-xsec-MoAve.dgn		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 10.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MISSOURI AVENUE

SCALE: 5'H : 2.5'V | SHEET 1 OF 6 SHEETS | STA. 10+40.00 TO STA.10+87.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	298
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY

NO.	NOTE BOOK	BY	DATE
	AREAS		
	AREAS CHECKED		

SURVEYED
PLOTTED
TEMPLATE

ORIGINAL SURVEY

NO.	NOTE BOOK	BY	DATE
	AREAS		
	AREAS CHECKED		

SURVEYED
PLOTTED
TEMPLATE

EFK·Moen, LLC
Civil Engineering Design

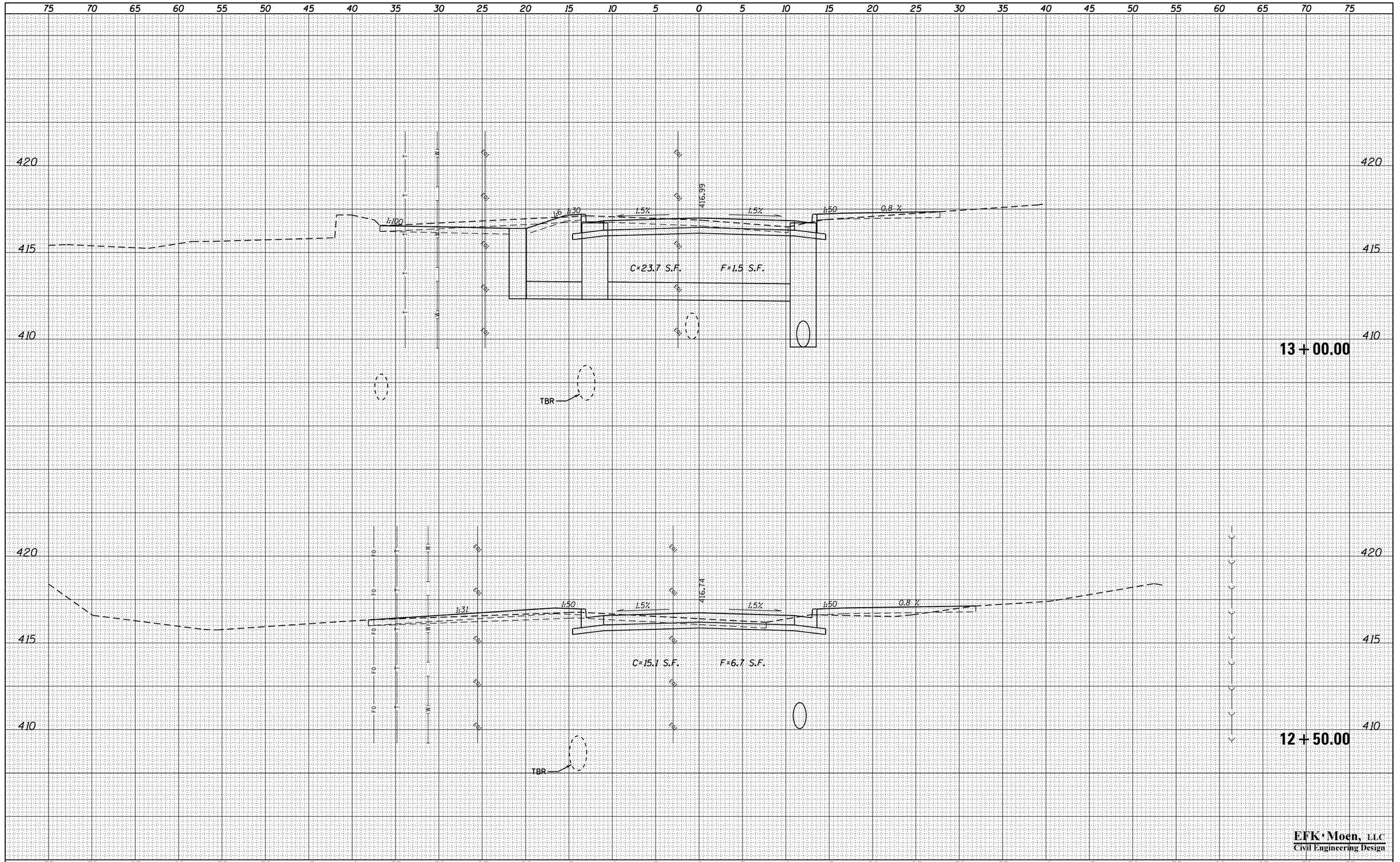
FILE NAME = 800-D876G39-sht-xsec-MoAve.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 10.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MISSOURI AVENUE

SCALE: 5'H : 2.5'V | SHEET 2 OF 6 SHEETS | STA. 11+00.00 TO STA.12+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	299
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY

NOTE BOOK

NO.

SURVEYED

PLOTTED

TEMPLATE

AREAS

AREAS CHECKED

BY

DATE

ORIGINAL SURVEY

NOTE BOOK

NO.

SURVEYED

PLOTTED

TEMPLATE

AREAS

AREAS CHECKED

BY

DATE

EFK·Moen, LLC
Civil Engineering Design

FILE NAME = 800-D876G39-sht-xsec-MoAve.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 10.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

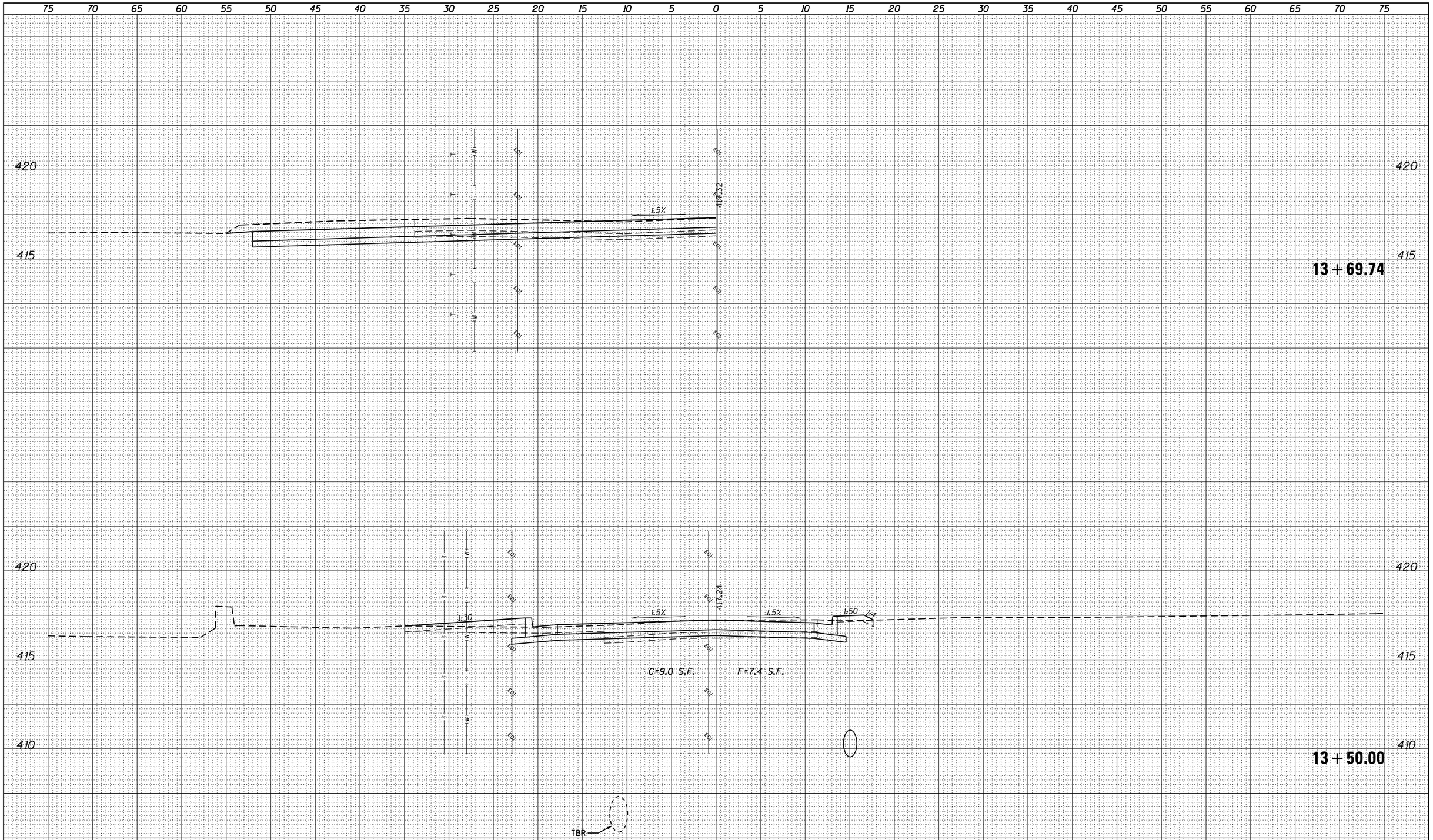
CROSS SECTIONS
MISSOURI AVENUE

SCALE: 5'H : 2.5'V | SHEET 3 OF 6 SHEETS | STA. 12+50.00 TO STA.13+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	300
		CONTRACT NO. 76G39		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK·Moen, LLC
Civil Engineering Design

FILE NAME = 800-D876G39-sht-xsec-MoAve.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

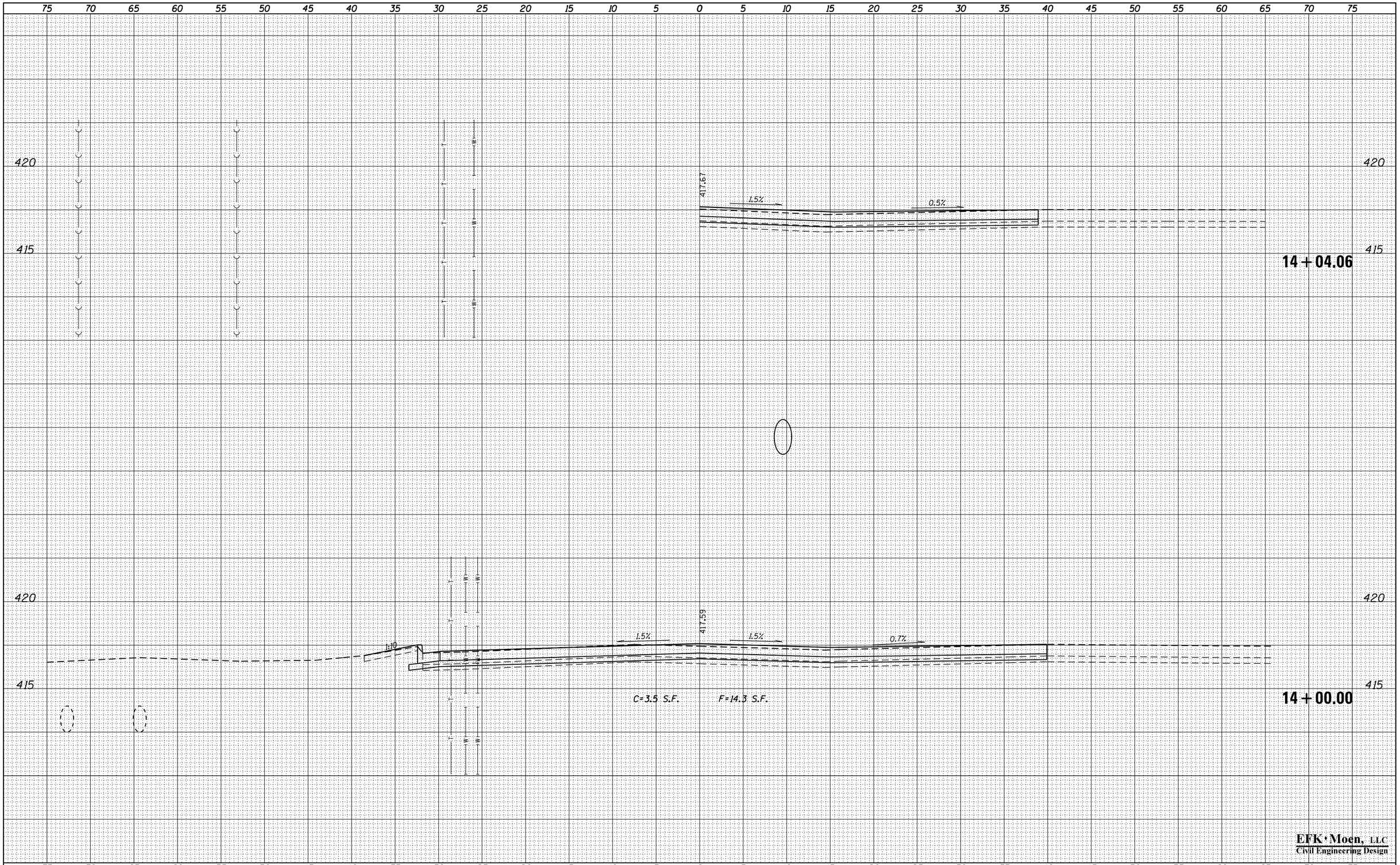
CROSS SECTIONS
MISSOURI AVENUE

SCALE: 5'H : 2.5'V | SHEET 4 OF 6 SHEETS | STA. 13+50.00 | TO STA.13+69.74

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	301
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK·Moen, LLC
Civil Engineering Design

FILE NAME = 800-D876G39-sht-xsec-MoAve.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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$MODELNAME$	PLOT SCALE = 10.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

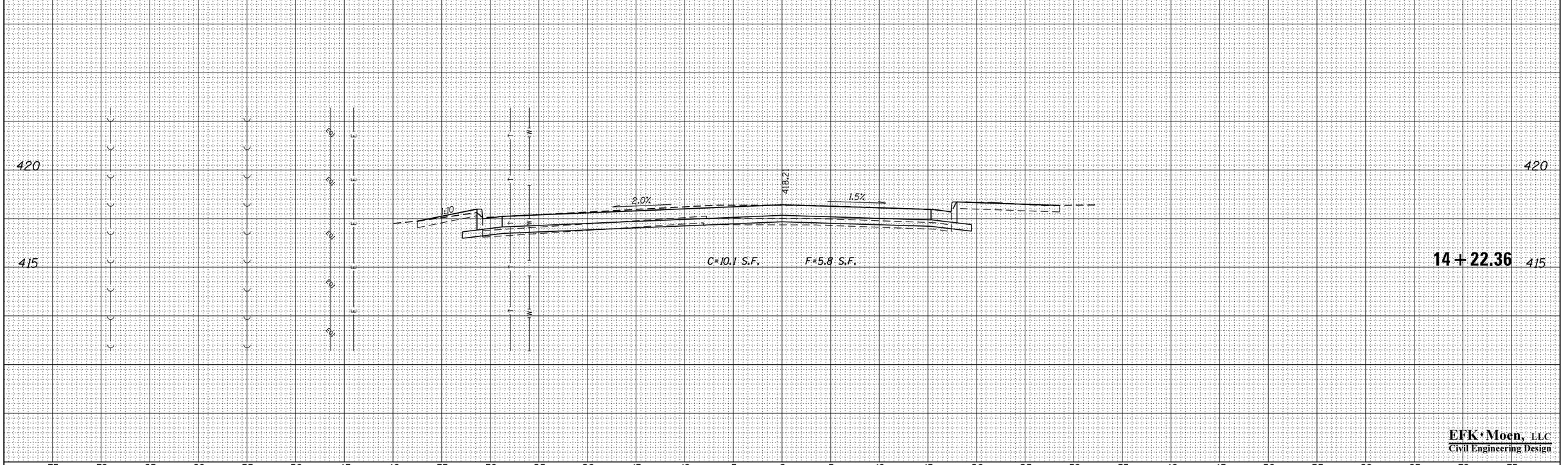
CROSS SECTIONS
MISSOURI AVENUE

SCALE: 5'H : 2.5'V | SHEET 5 OF 6 SHEETS | STA. 14+00.00 | TO STA.14+04.06

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	302
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



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	PLOT DATE = 3/22/2018	DATE - 3/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
MISSOURI AVENUE

SCALE: 5'H : 2.5'V | SHEET 6 OF 6 SHEETS | STA. 14+22.36 | TO STA.14+22.36

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	303
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED
NO.		BY				
		DATE				

ORIGINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED
NO.		BY				
		DATE				

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

430
425
420
415

MATCH EX

9 + 00.00

MATCH EX

8 + 50.00

MATCH EX

8 + 21.00

EFK • Moen, LLC
Civil Engineering Design

FILE NAME = 900-D876G39-sht-xsec-RAMP B.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
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$MODELNAME$	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

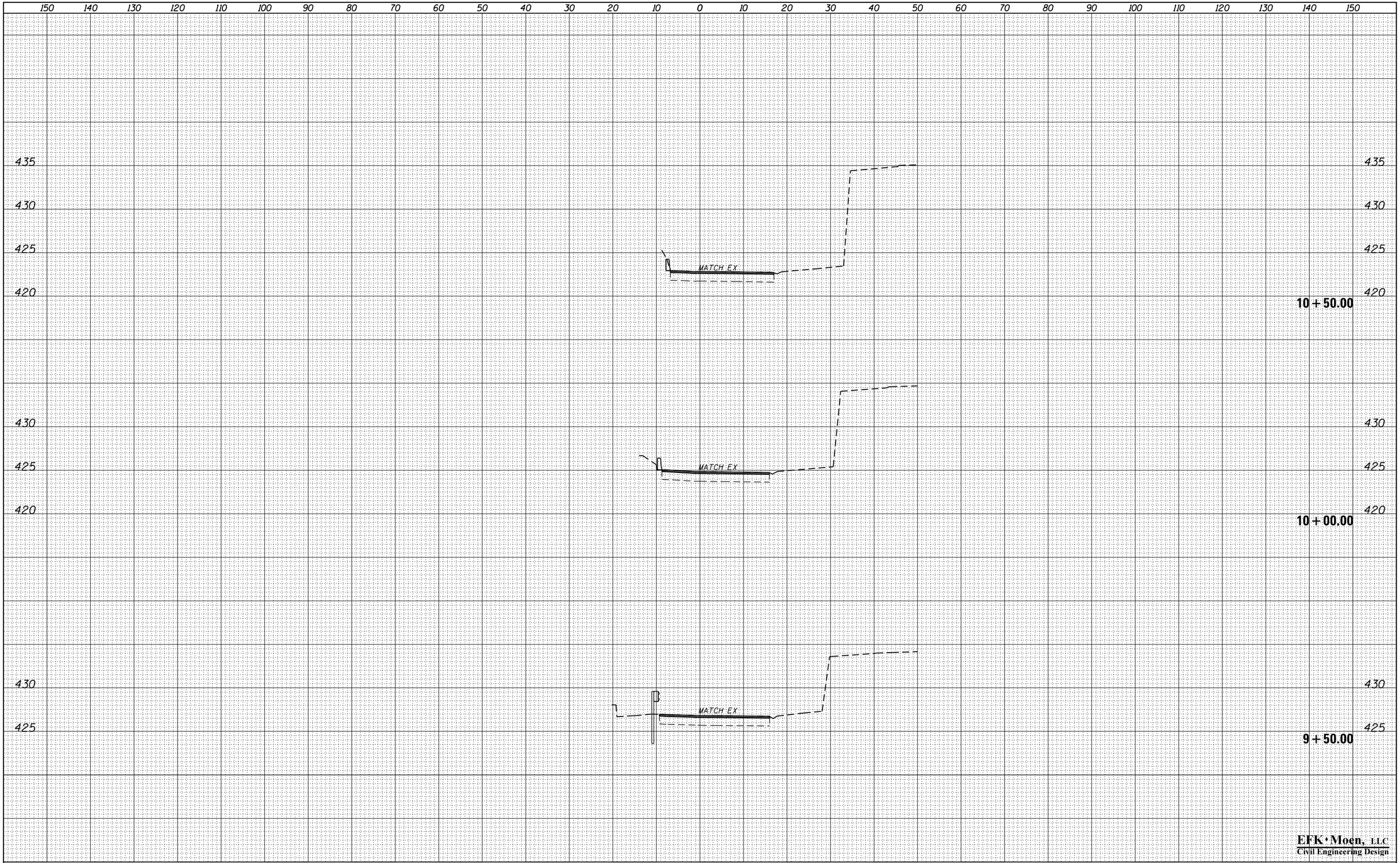
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP B

SCALE: 10'H : 5'V | SHEET 1 OF 6 SHEETS | STA. 8+21.00 | TO STA. 9+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	304
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TEMPLATE		
		AREAS		
NO.		AREAS CHECKED		



ORIGINAL SURVEY	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TEMPLATE		
		AREAS		
NO.		AREAS CHECKED		

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 900-D876G39-sht-xsec-RAMP B.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP B

SCALE: 10'H : 5'V | SHEET 2 OF 6 SHEETS | STA. 9+50.00 | TO STA.10+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	305
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

435
430
425
420
415

MATCH EX

11 + 50.00

435
430
425
420

MATCH EX

11 + 00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 900-D876G39-sht-xsec-RAMP B.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

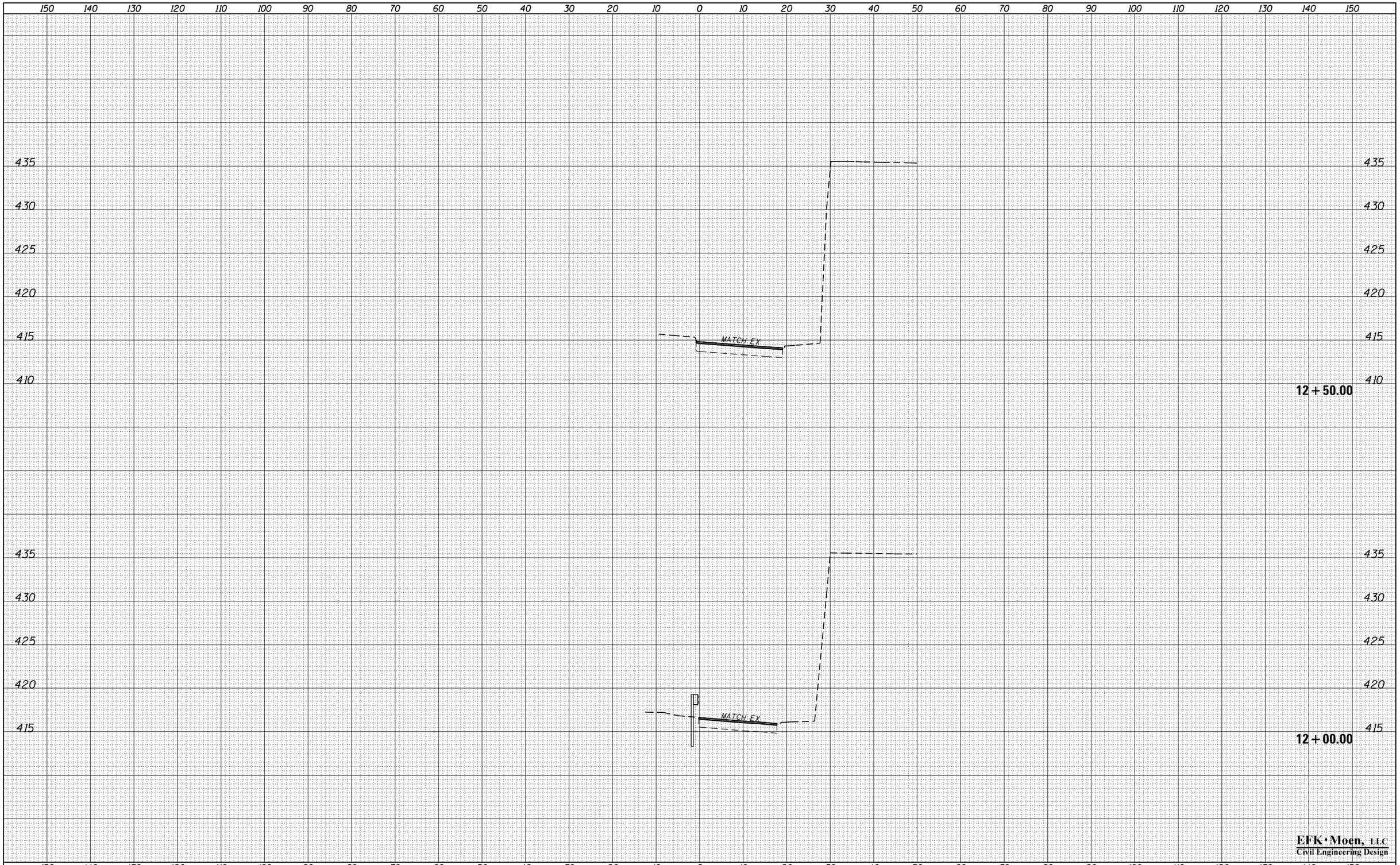
CROSS SECTIONS
RAMP B

SCALE: 10'H : 5'V | SHEET 3 OF 6 SHEETS | STA. 11+00.00 | TO STA. 11+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	306
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NO.	NOTE BOOK	BY	DATE

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED



ORIGINAL SURVEY	NO.	NOTE BOOK	BY	DATE

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 900-D876G39-sht-xsec-RAMP B.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

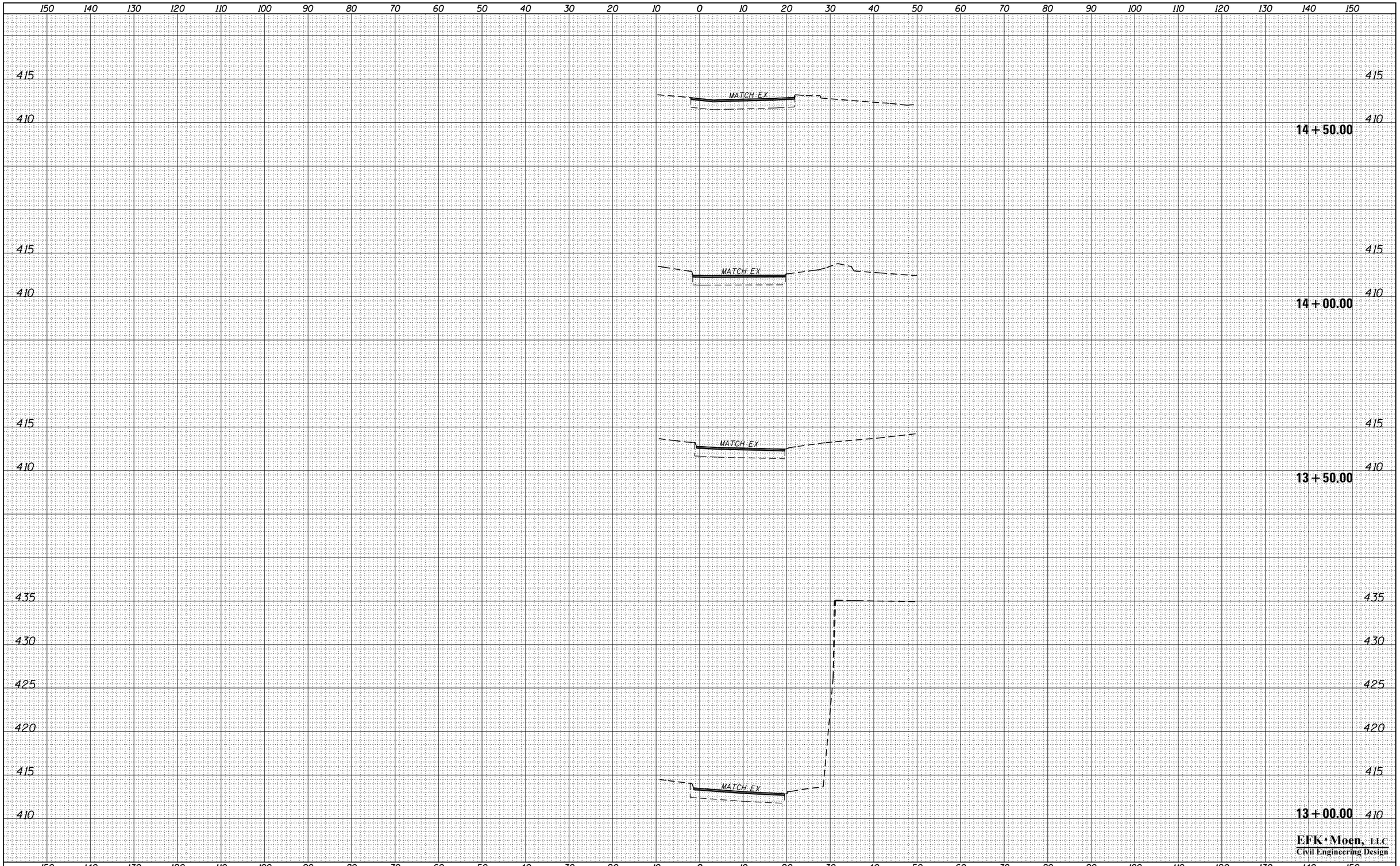
CROSS SECTIONS
RAMP B

SCALE: 10'H : 5'V | SHEET 4 OF 6 SHEETS | STA. 12+00.00 | TO STA.12+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	307
		CONTRACT NO. 76G39		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED	NO.	BY	DATE

ORIGINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED	NO.	BY	DATE



EFK•Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP B

SCALE: 10'H : 5'V | SHEET 5 OF 6 SHEETS | STA. 13+00.00 TO STA.14+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	308
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

415
410

MATCH EX

16 + 37.00

415
410

MATCH EX

16 + 00.00

415
410

MATCH EX

15 + 50.00

415
410

MATCH EX

15 + 00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 900-D876G39-sht-xsec-RAMP B.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

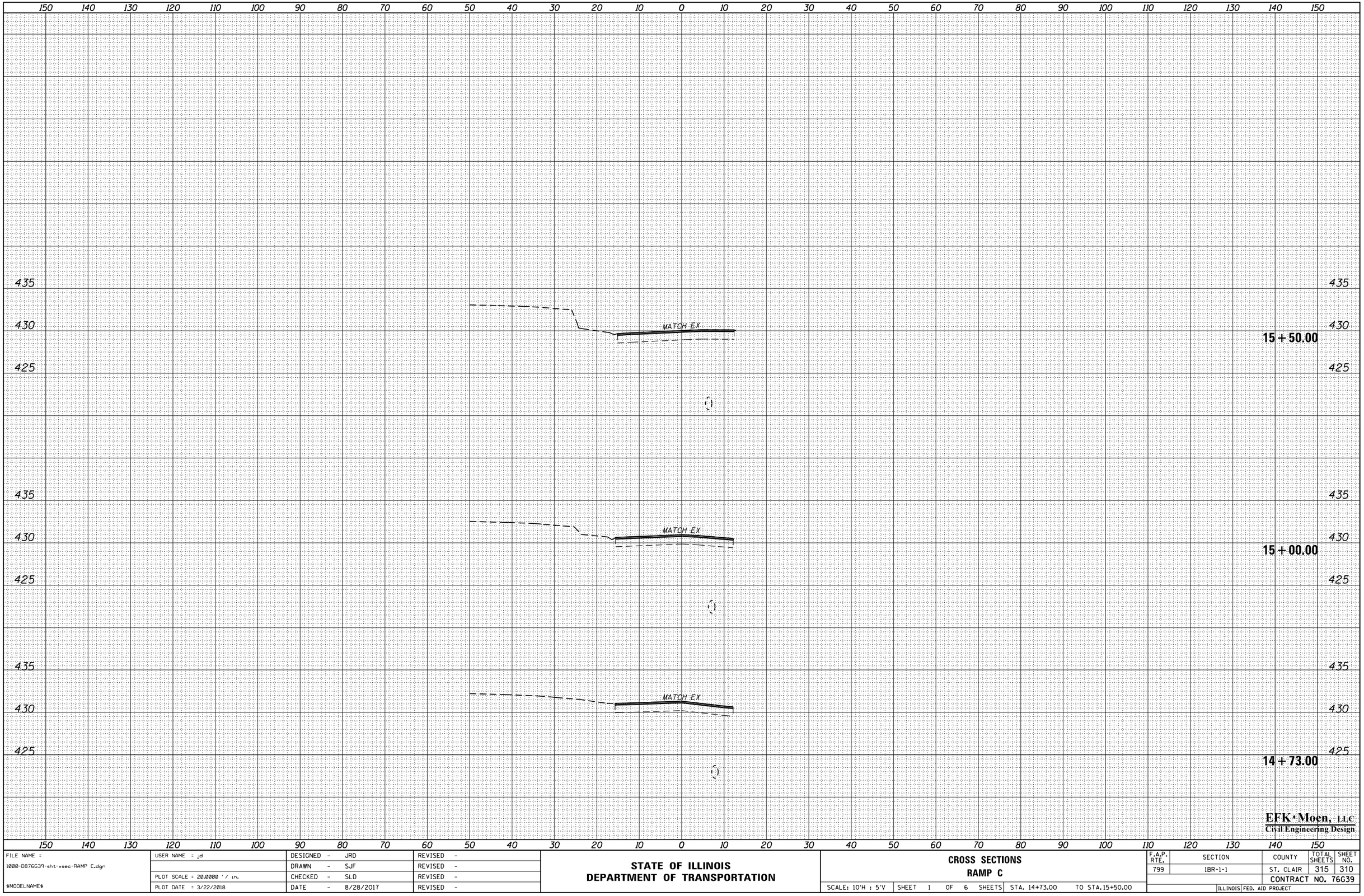
CROSS SECTIONS
RAMP B

SCALE: 10'H : 5'V | SHEET 6 OF 6 SHEETS | STA. 15+00.00 | TO STA.16+37.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	309
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

EFK • Moen, LLC
Civil Engineering Design

FILE NAME = 1000-D876G39-sht-xsec-RAMP C.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP C

SCALE: 10'H : 5'V | SHEET 1 OF 6 SHEETS | STA. 14+73.00 | TO STA.15+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	310
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED
NO.		BY				
		DATE				

ORIGINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED
NO.		BY				
		DATE				

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

435
430
425
420

MATCH EX

17 + 00.00

435
430
425

MATCH EX

16 + 50.00

435
430
425

MATCH EX

16 + 00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EFK • Moen, LLC
Civil Engineering Design

FILE NAME = 1000-D876G39-sht-xsec-RAMP C.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

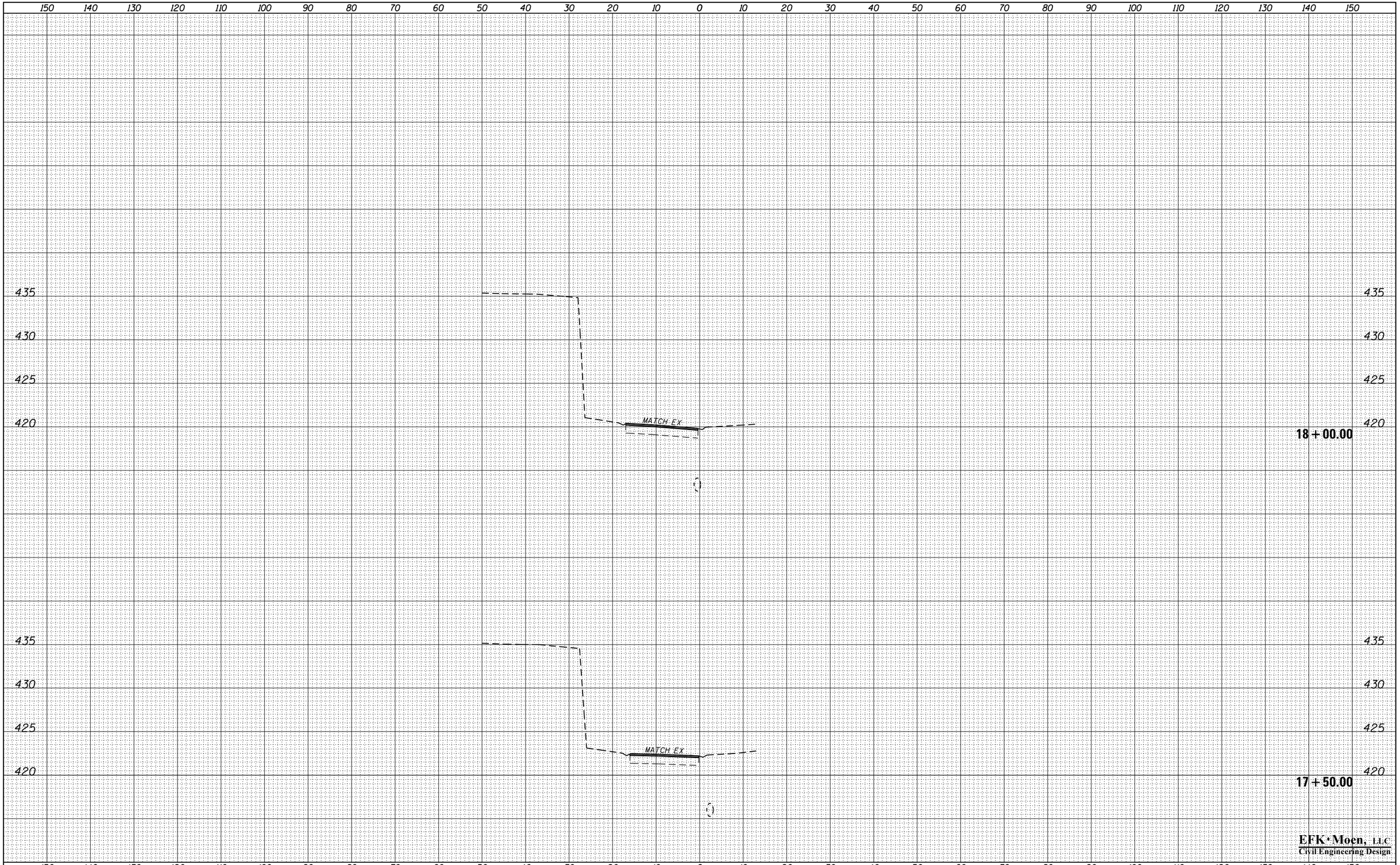
CROSS SECTIONS
RAMP C

SCALE: 10'H : 5'V | SHEET 2 OF 6 SHEETS | STA. 16+00.00 | TO STA.17+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	311
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

BY	DATE

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 1000-D876G39-sht-xsec-RAMP C.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP C

SCALE: 10'H : 5'V | SHEET 3 OF 6 SHEETS | STA. 17+50.00 | TO STA.18+00.00

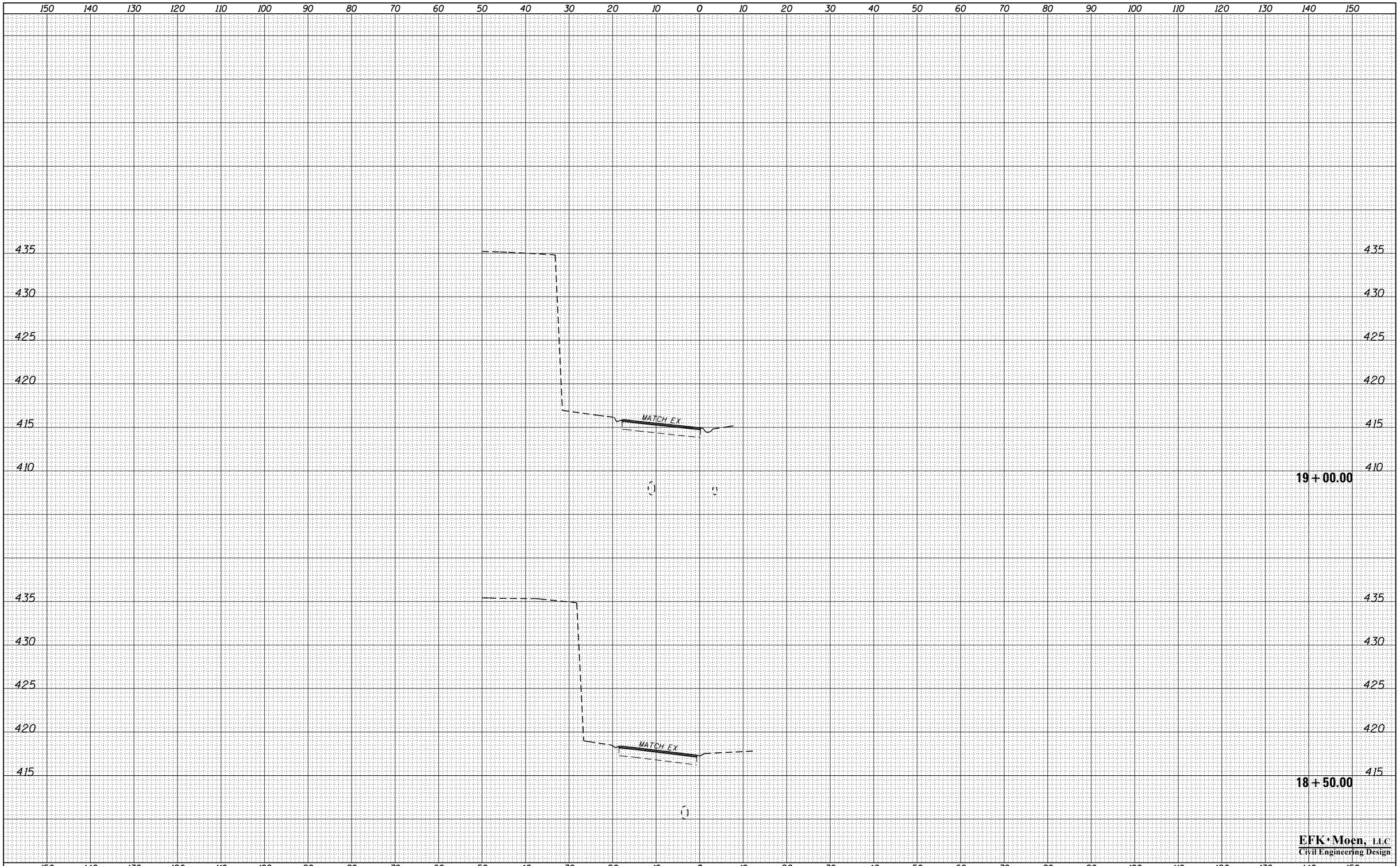
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	312
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 1000-D876G39-sht-xsec-RAMP C.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP C

SCALE: 10'H : 5'V | SHEET 4 OF 6 SHEETS | STA. 18+50.00 TO STA.19+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	313
		CONTRACT NO. 76G39		
	ILLINOIS FED. AID PROJECT			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

415
410

MATCH EX

21 + 00.00

415
410

MATCH EX

20 + 50.00

415
410

MATCH EX

19 + 50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
NOTE BOOK		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
NOTE BOOK		
NO.	AREAS CHECKED	

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = 1000-D876G39-sht-xsec-RAMP C.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP C

SCALE: 10'H : 5'V | SHEET 5 OF 6 SHEETS | STA. 19+50.00 | TO STA. 21+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	314
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

415

410

MATCH EX

22+30.00

415

410

415

410

MATCH EX

22+00.00

415

410

MATCH EX

21+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

ORIGINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

EFK·Moen, LLC
Civil Engineering Design

FILE NAME = 1000-D876G39-sht-xsec-RAMP C.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - SJF	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/22/2018	DATE - 8/28/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP C

SCALE: 10'H : 5'V | SHEET 6 OF 6 SHEETS | STA. 21+50.00 | TO STA. 22+30.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR-1-1	ST. CLAIR	315	315
		CONTRACT NO. 76G39		
		ILLINOIS FED. AID PROJECT		