

Appendix A. Supporting Figures

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Curve 1 Data

PI	300+44.30
PC	300+00.00
PT	300+87.20
Δ	24°58'51.46" (LT)
D	28°38'52.40"
L	87.20'
T	44.30'
R	200.00'

Curve 2 Data

PI	301+75.92
PC	300+87.20
PT	302+54.20
Δ	47°50'31.11" (RT)
D	28°38'52.40"
L	167.00'
T	88.72'
R	200.00'

Curve 3 Data

PI	311+34.14
PC	309+68.14
PT	312+78.14
Δ	50°44'51.69" (LT)
D	16°22'12.80"
L	310.00'
T	166.00'
R	350.00'

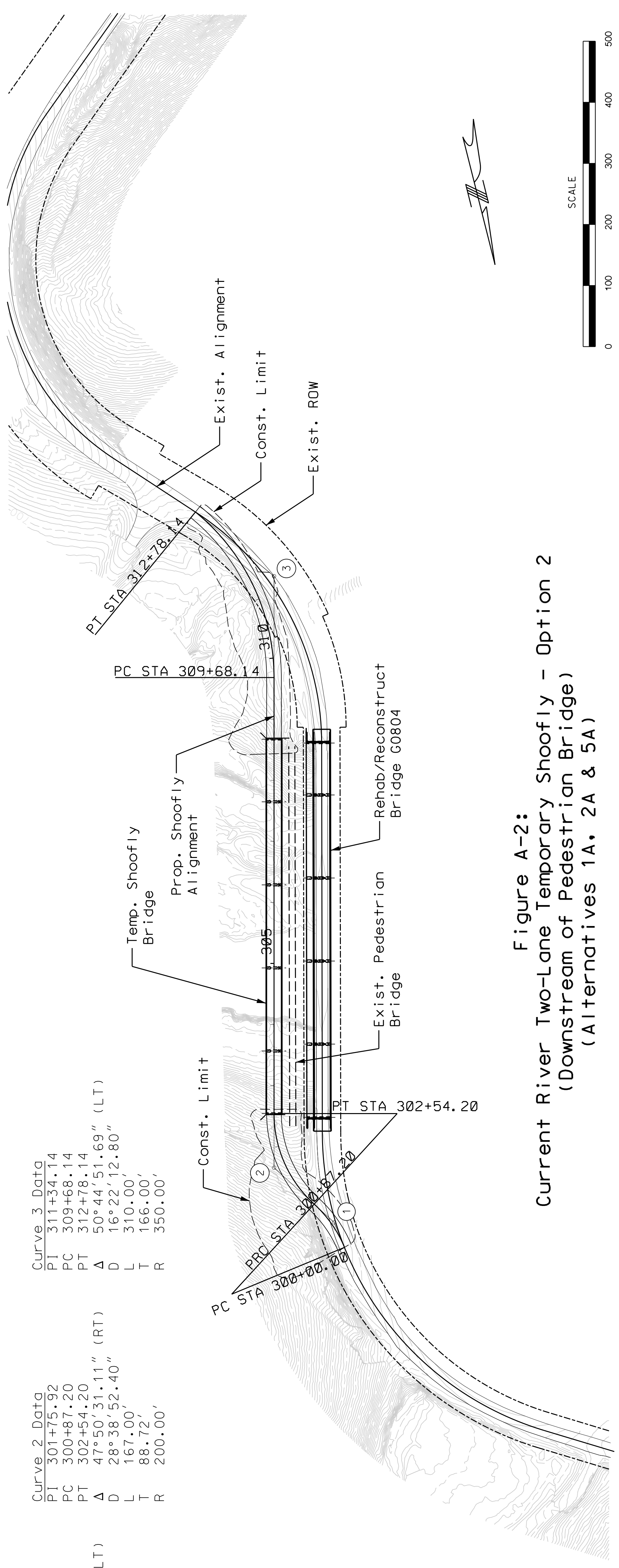
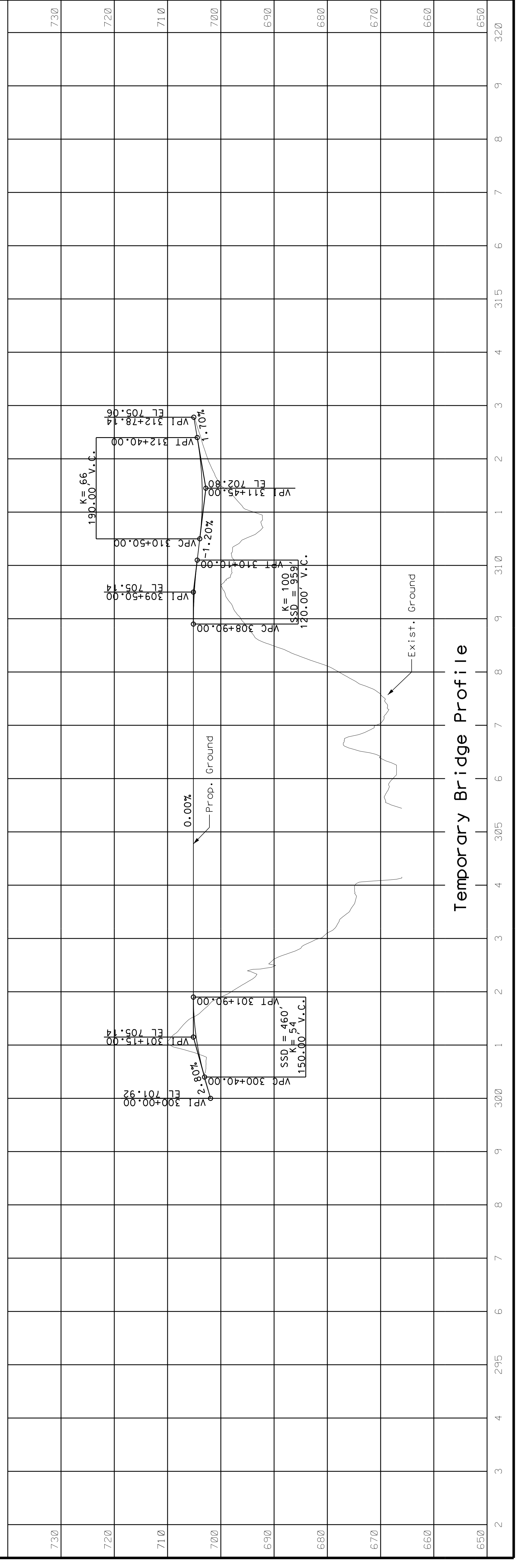


Figure A-2:
Current River Two-Lane Temporary Shoofly - Option 2
(Downstream of Pedestrian Bridge)
(Alternatives 1A, 2A & 5A)



DATE PREPARED	10/21/2019	DATE	
ROUTE	19	DESCRIPTION	
STATE	MO		
DISTRICT	SE		
SHEET NO.	A.2		
COUNTY	SHANNON		
JOB NO.	J9P3305		
CONTRACT ID.			
PROJECT NO.			
BRIDGE NO.	CURRENT RIVER		

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
10450 Holmes Rd
Suite 600
Kansas City, MO 64131
816-360-2700
Certificate of Authority: 000856

NOT FOR CONSTRUCTION

Curve 1 Data

PI	200+20.47
PC	200+00.00
PT	200+40.91
Δ	5°51'36.15" (LT)
D	14°19'26.20"
L	40.91'
T	20.47'
R	400.00'

Curve 2 Data

PI	201+87.23
PC	200+47.03
PT	203+16.72
Δ	38°37'48.89" (RT)
D	14°19'26.20"
L	269.69'
T	140.20'
R	400.00'

Curve 3 Data

PI	211+46.88
PC	210+16.28
PT	212+66.28
Δ	40°55'32.00" (LT)
D	16°22'12.80"
L	250.00'
T	130.60'
R	350.00'

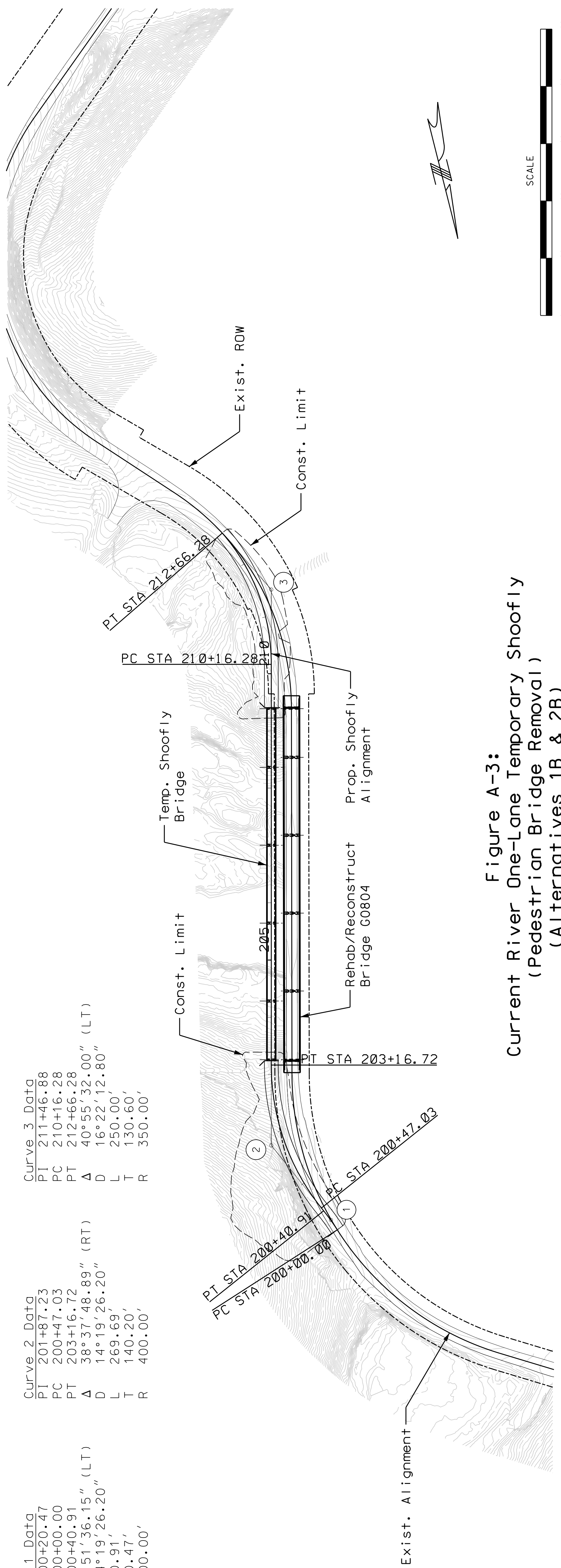
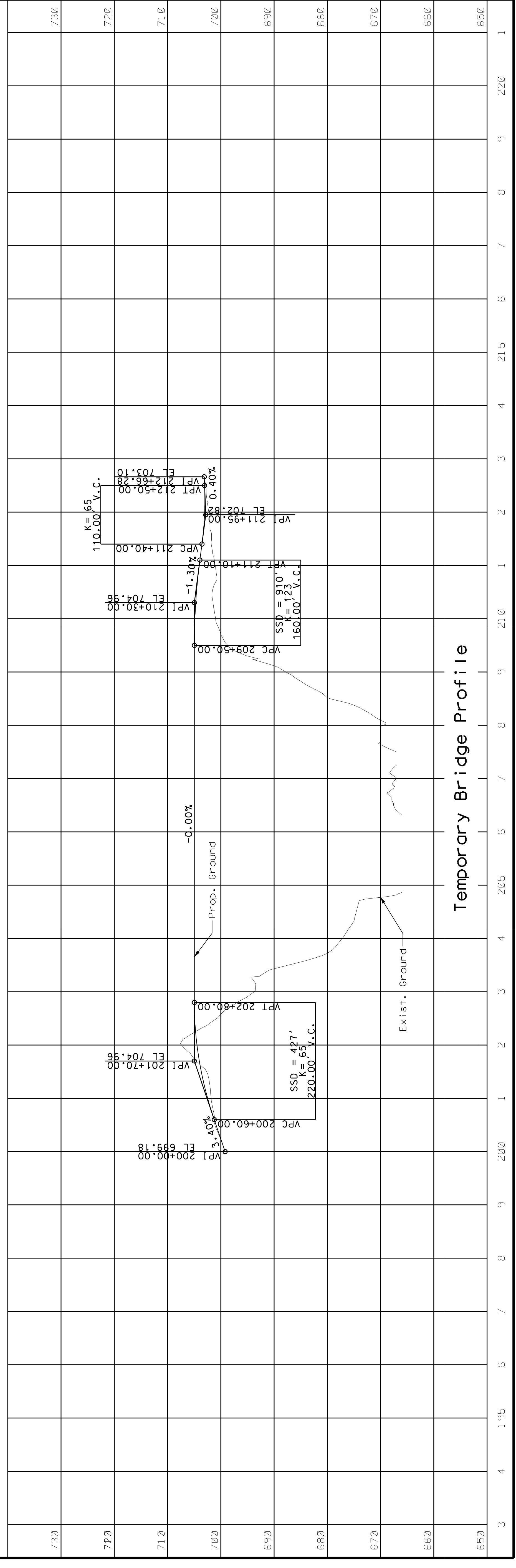


Figure A-3:
Current River One-Lane Temporary Shoofly
(Pedestrian Bridge Removal)
(Alternatives 1B & 2B)



		10450 Holmes Rd Suite 600 Kansas City, MO 64131 816-360-2700 Certificate of Authority: 000856	
		105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
DATE	DESCRIPTION	BRIDGE NO.	CURRENT RIVER
PROJECT NO.			
JOB NO.	J9P3305		
CONTRACT ID.			
COUNTY	SHANNON		
DISTRICT	SE		
STATE	MO		
ROUTE	19		
DATE PREPARED	10/21/2019		

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Curve 1 Data
 PI 1633+10.02
 PC 1629+39.96
 PT 1635+77.10
 Δ 73°00'38.08" (RT)
 D 11°27'32.96"
 L 637.14'
 T 370.05'
 R 500.00'

Curve 2 Data
 PI 1644+87.36
 PC 1642+06.41
 PT 1647+18.35
 Δ 58°39'49.20" (LT)
 D 11°27'32.96"
 L 511.94'
 T 280.95'
 R 500.00'

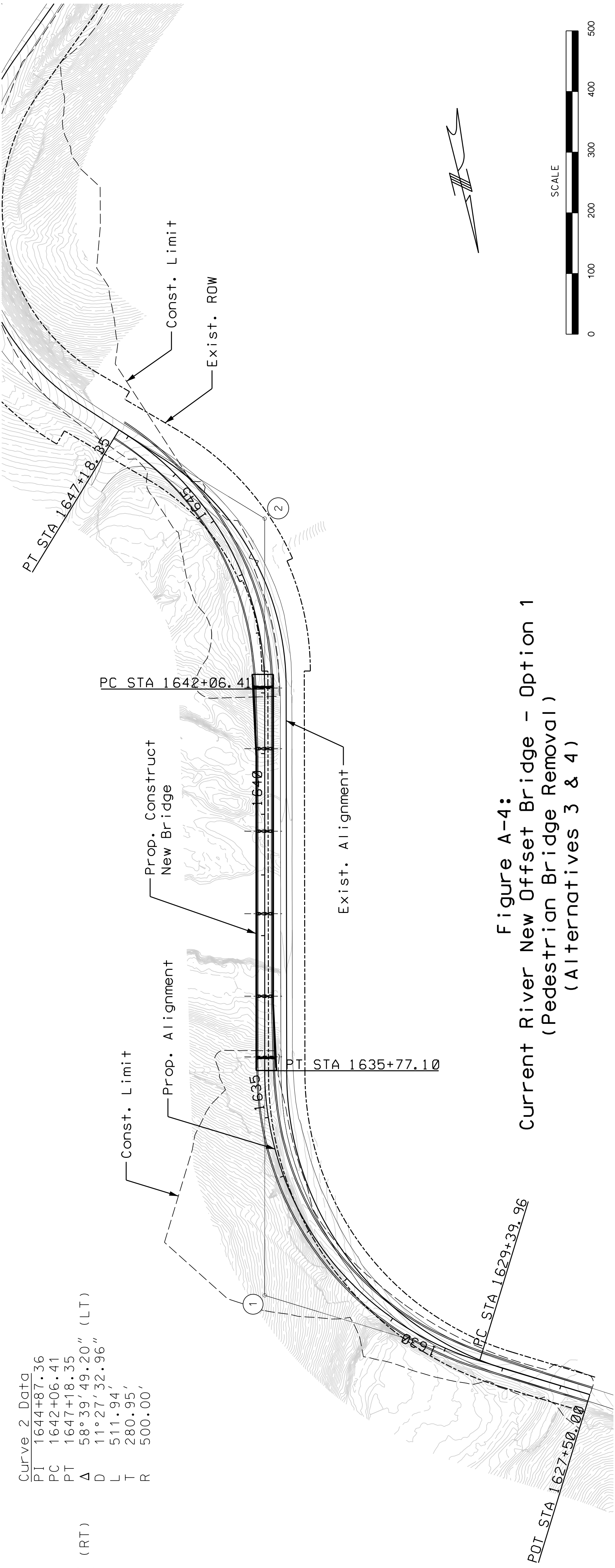
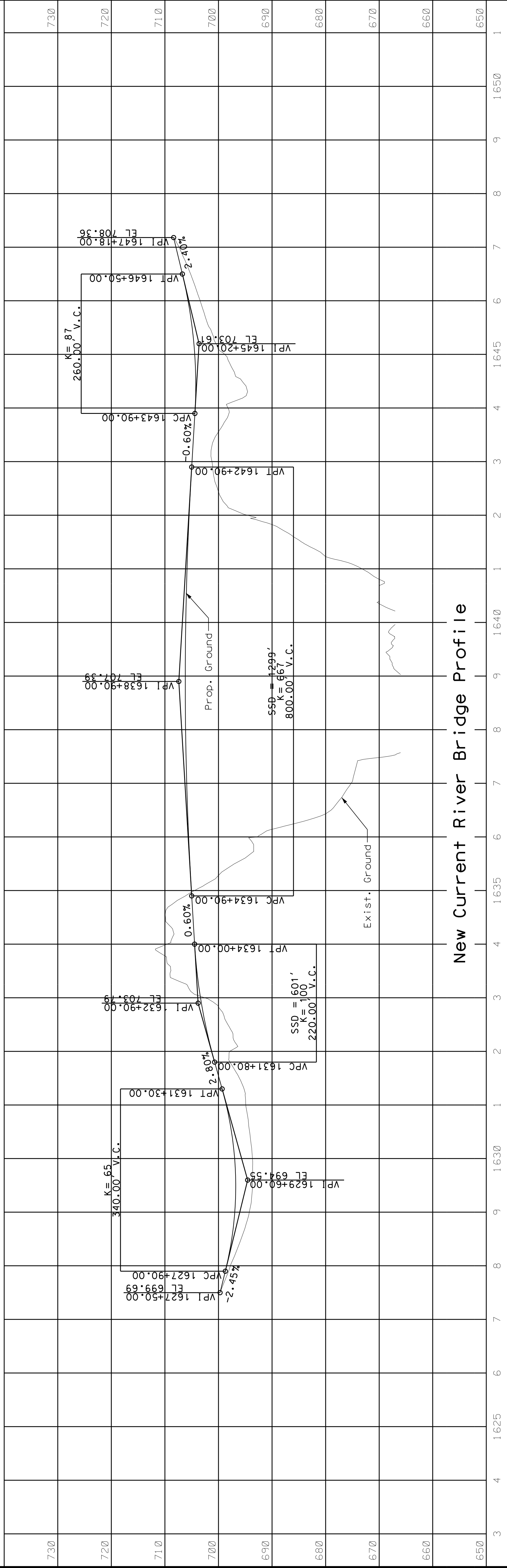
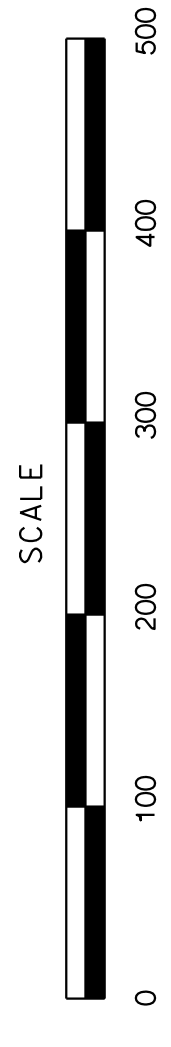


Figure A-4:
 Current River New Offset Bridge - Option 1
 (Pedestrian Bridge Removal)
 (Alternatives 3 & 4)



New Current River Bridge Profile

NOT FOR CONSTRUCTION

DATE PREPARED	10/21/2019
ROUTE	19 MO
DISTRICT	SE A.4
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	CURRENT RIVER

DESCRIPTION	DATE

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Curve 1 Data
 PT 1633+54.31
 PC 1629+82.87
 PT 1636+21.80
 Δ 73°12'57.85" (RT)
 D 11°27'32.96"
 L 638.93'
 T 371.44'
 R 500.00'

Curve 2 Data
 PT 1645+33.95
 PC 1642+96.72
 PT 1647+32.46
 Δ 56°13'47.20" (LT)
 D 12°54'16.04"
 L 435.74'
 T 237.22'
 R 444.00'

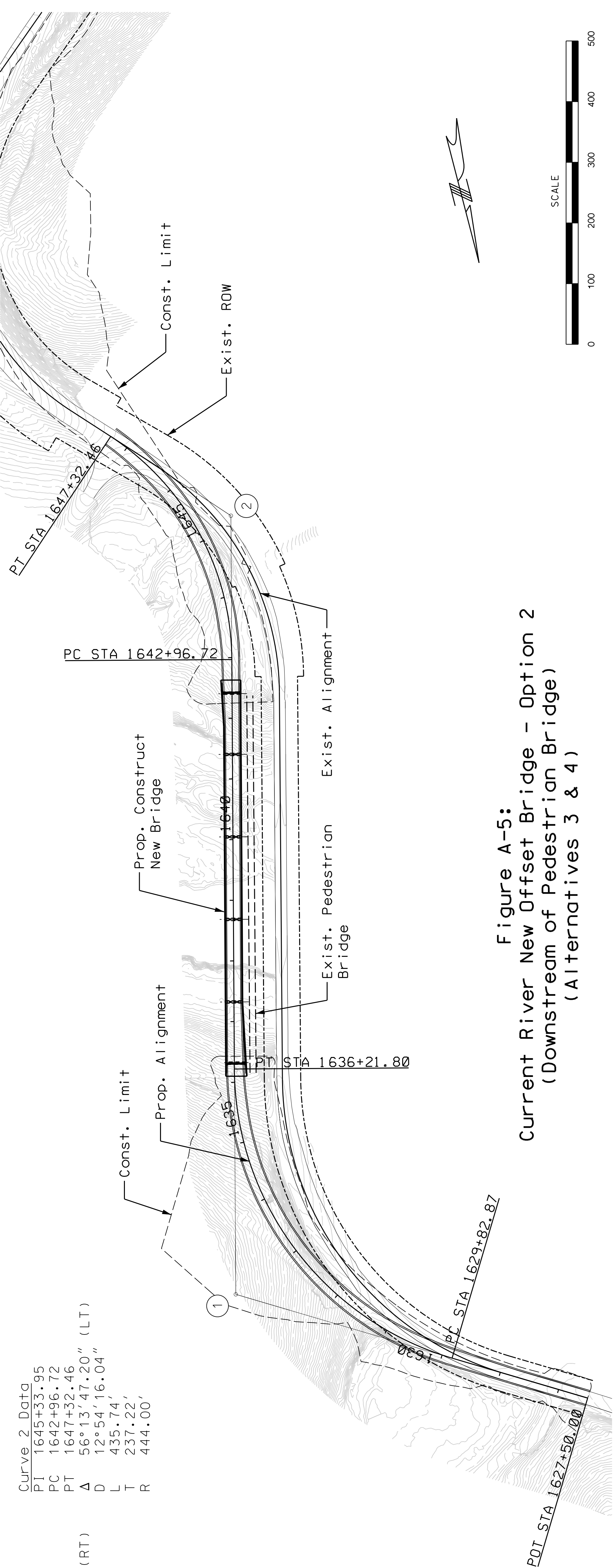
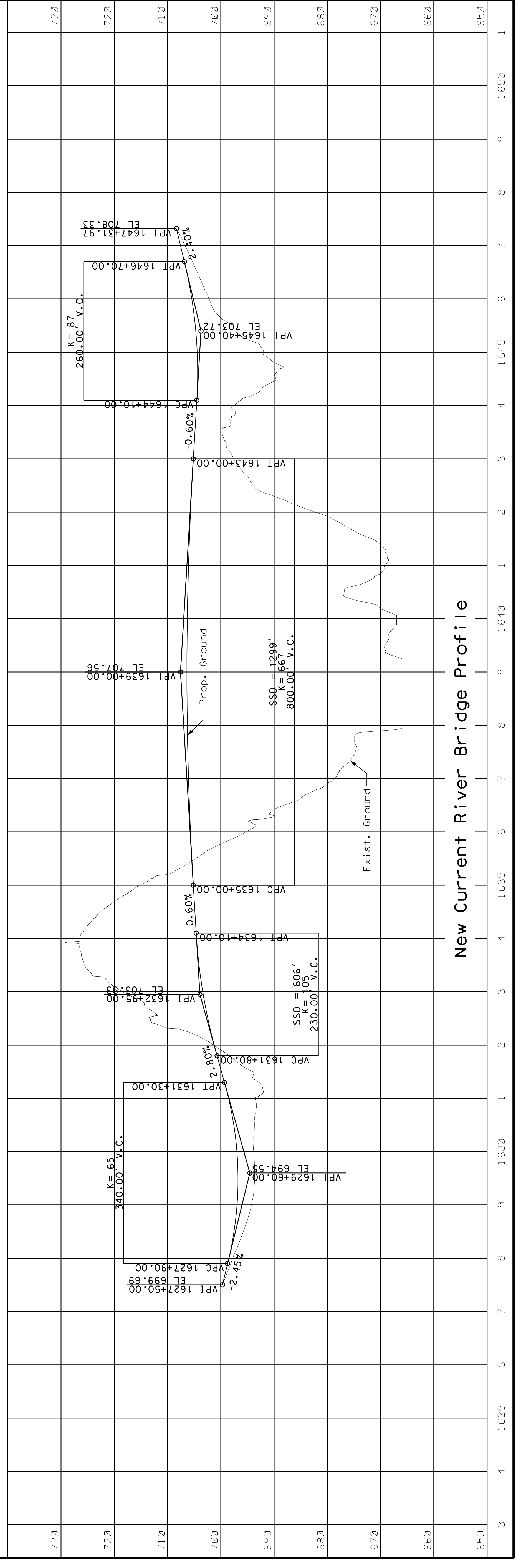


Figure A-5:
 Current River New Offset Bridge - Option 2
 (Downstream of Pedestrian Bridge)
 (Alternatives 3 & 4)



New Current River Bridge Profile

NOT FOR CONSTRUCTION

DATE PREPARED	10/21/2019
ROUTE	19 MO
DISTRICT	SE
SHEET NO.	A.5
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	CURRENT RIVER

DESCRIPTION	DATE

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Curve 1 Data

PI	401+44.50
PC	400+00.00
PT	402+69.33
Δ	51°26'16.86" (RT)
D	19°05'54.94"
L	269.33'
T	144.50'
R	300.00'

Curve 2 Data

PI	411+75.85
PC	411+25.58
PT	412+25.58
Δ	14°19'26.20" (LT)
D	14°19'26.20"
L	100.00'
T	50.26'
R	400.00'

Curve 3 Data

PI	413+21.21
PC	412+70.58
PT	413+71.30
Δ	14°25'33.72" (RT)
D	14°19'26.20"
L	100.71'
T	50.62'
R	400.00'

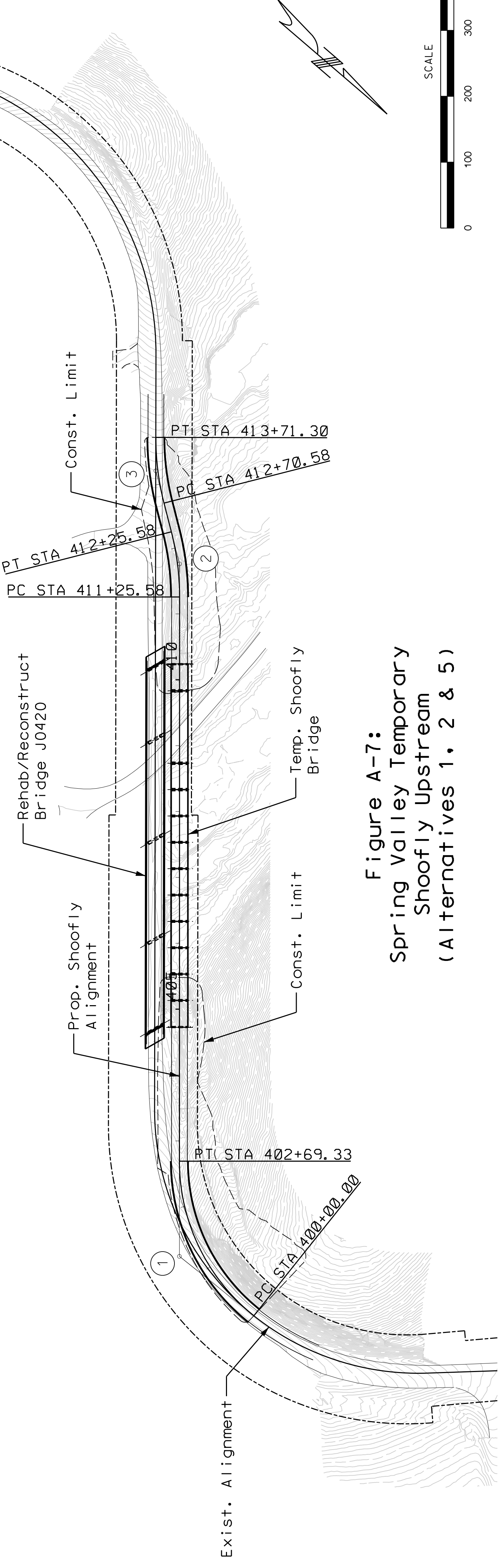
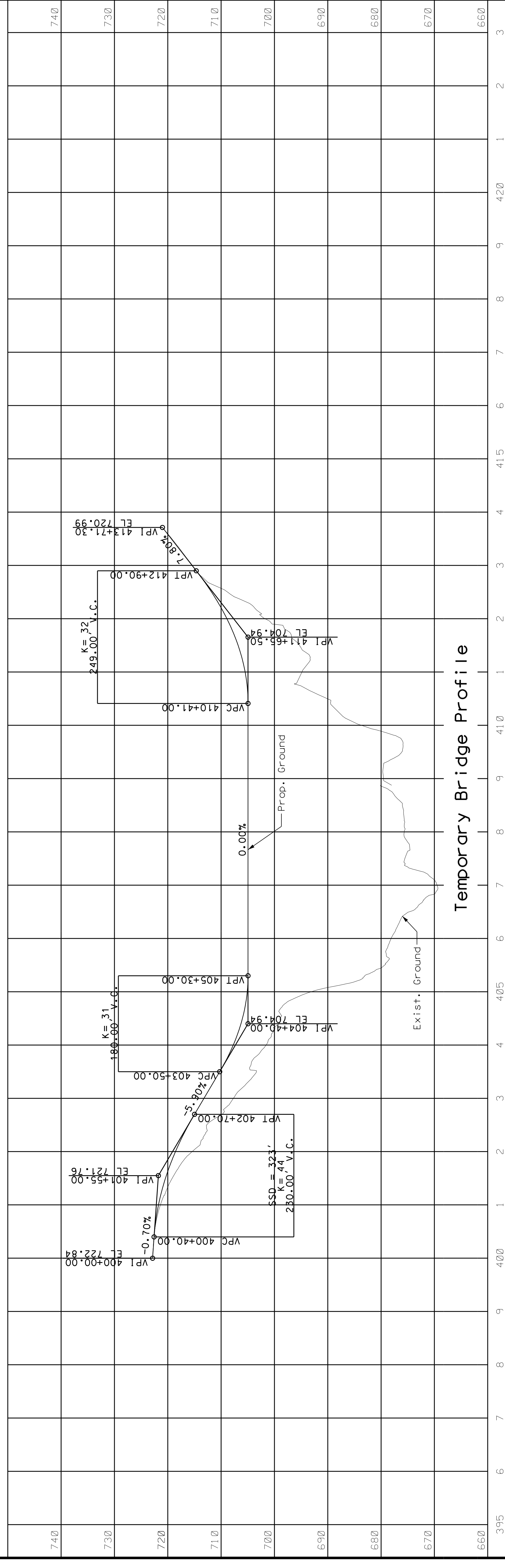


Figure A-7:
Spring Valley Temporary
Shoofly Upstream
(Alternatives 1, 2 & 5)



NOT FOR CONSTRUCTION	DATE PREPARED 10/21/2019	ROUTE 19	STATE MO	DISTRICT SE	SHEET NO. A.7	COUNTY SHANNON	JOB NO. J9P3305	CONTRACT ID.	PROJECT NO.	BRIDGE NO. SPRING VALLEY	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	MODOOT 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	HDR Engineering, Inc. 10450 Holmes Rd Suite 600 Kansas City, MO 64131 816-360-2700 Certificate of Authority: 000856
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Curve 1 Data
 PT 1704+55.15
 PC 1700+00.00
 PT 1707+11.97
 Δ 90°39'05.00" (RT)
 D 12°43'56.62"
 L 711.97'
 T 455.15'
 R 450.00'

Curve 2 Data
 PT 1720+93.62
 PC 1717+51.56
 PT 1723+51.56
 Δ 68°45'17.77" (LT)
 D 11°27'32.96"
 L 600'
 T 342.07'
 R 500.00'

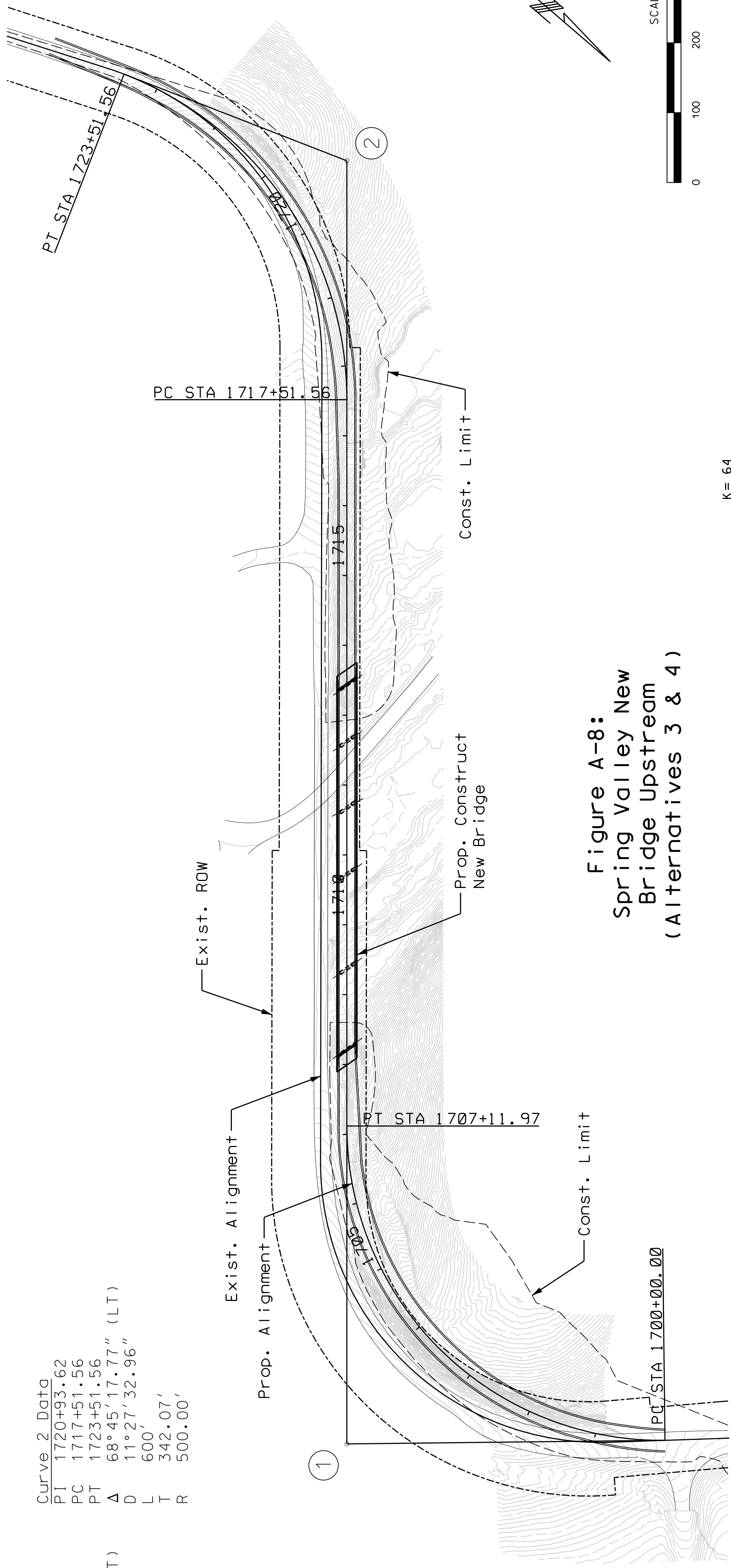
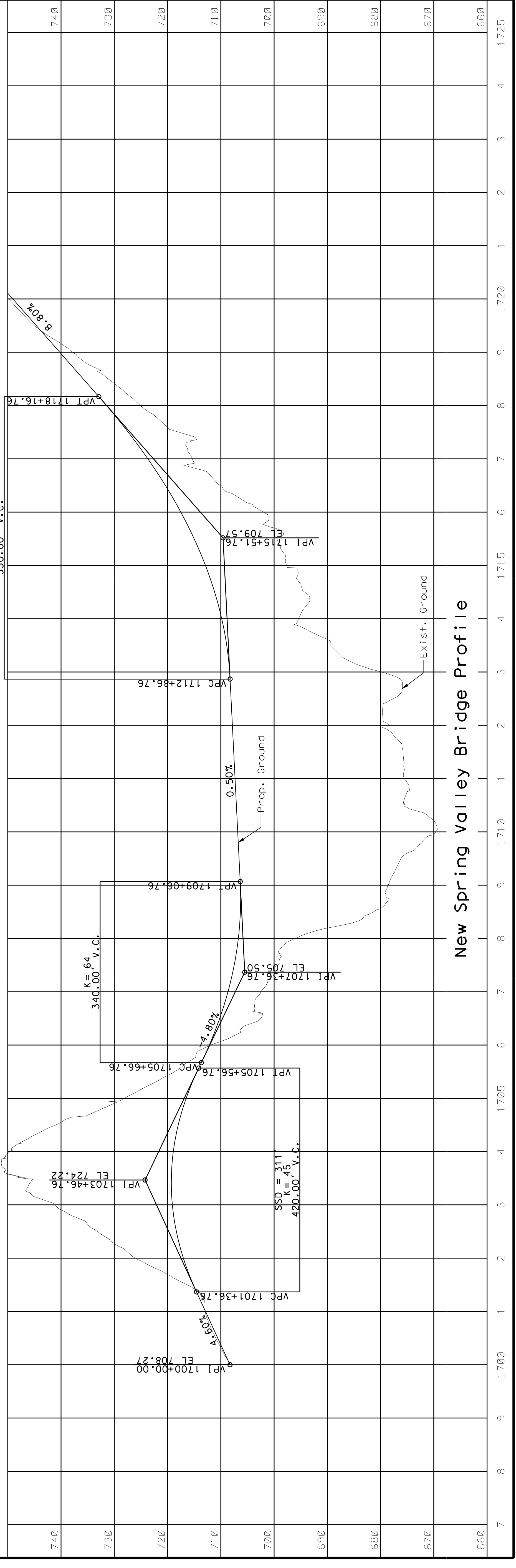
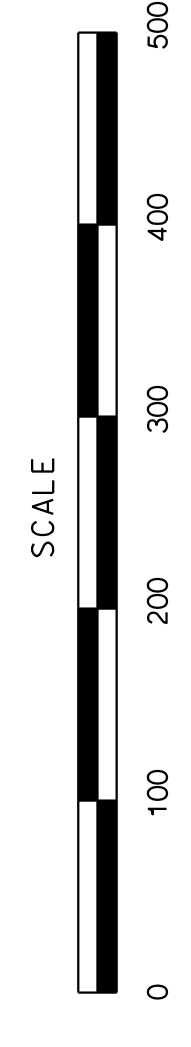
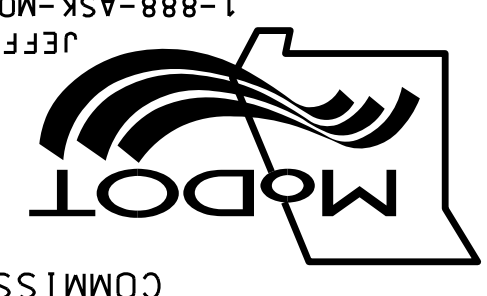


Figure A-8:
 Spring Valley New
 Bridge Upstream
 (Alternatives 3 & 4)



New Spring Valley Bridge Profile



DATE PREPARED	10/21/2019
ROUTE	19 MO
DISTRICT	SE
SHEET NO.	A.8
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	SPRING VALLEY
DATE	

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DATE PREPARED	10/20/2019
ROUTE	19
STATE	MO
DISTRICT	BR
SHEET NO.	A.9
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	
PROJECT NO.	

BRIDGE NO.	CURRENT RIVER
DESCRIPTION	
DATE	

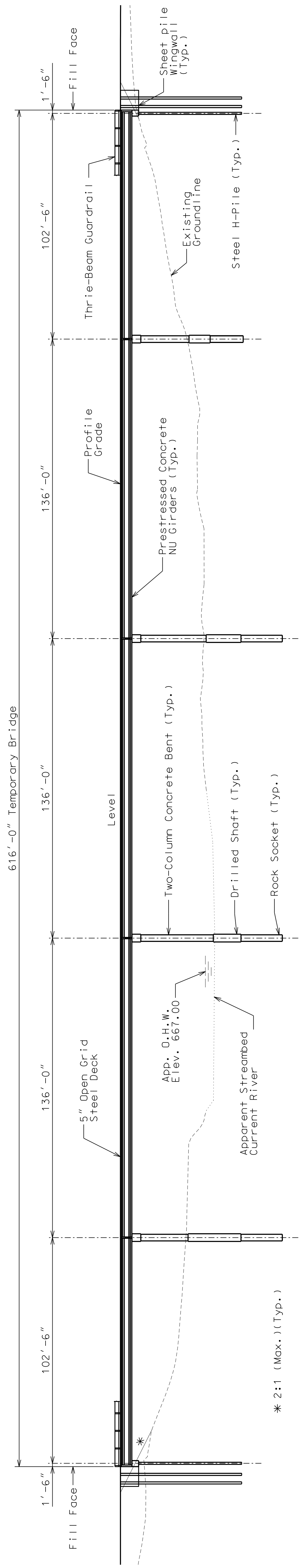
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



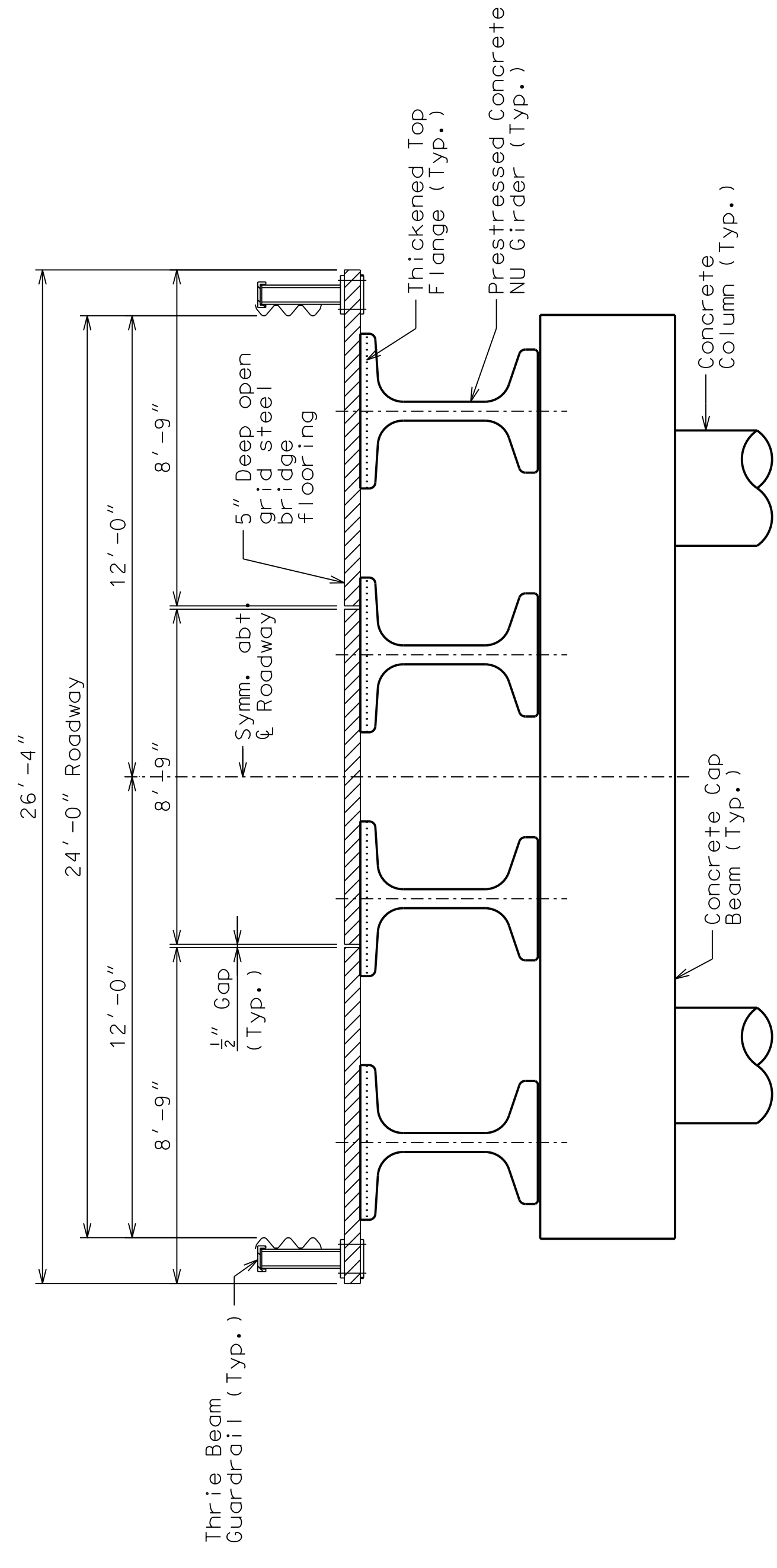
105 WEST CAPITOL JEFFERSON CITY, MO 65102
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7301 WEST 133RD STREET
OVERLAND PARK, KS 66213
AUTHORITY NO. 001592



GENERAL ELEVATION



TEMPORARY ROUTE 19 BRIDGE
PROP. TYP. SECTION @ INT. BENT

Figure A-9: Current River - Temporary Bridge Elevation and Section

Note: This drawing is not to scale. Follow dimensions.

DATE PREPARED
10/21/2019

ROUTE
19

DISTRICT
BR

COUNTY
SHANNON

JOB NO.
J9P3305

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
CURRENT RIVER

DESCRIPTION


DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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1-888-ASK-MODOT (1-888-275-6636)

7301 WEST 133RD STREET OVERLAND PARK, KS 66213 AUTHORITY NO. 001592

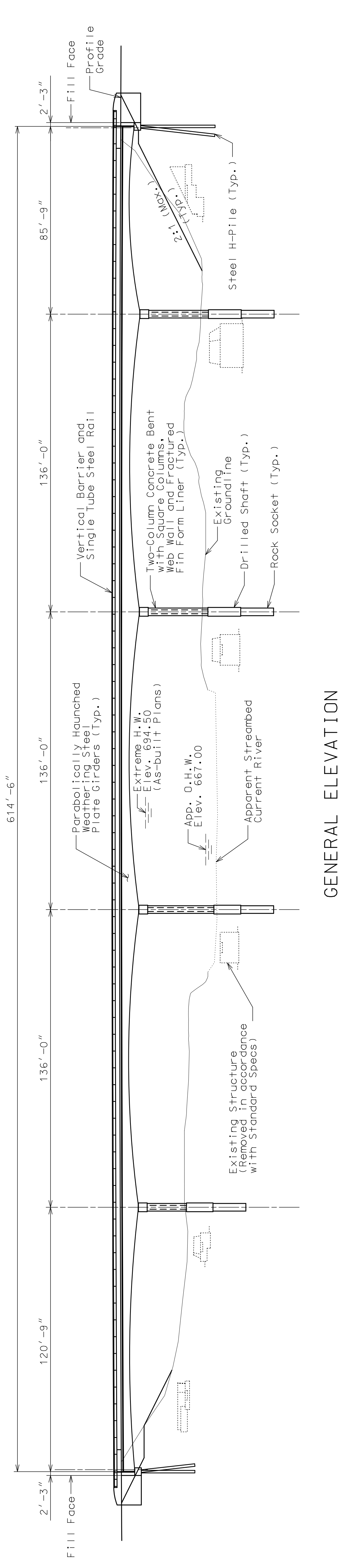


MISSOURI DOT

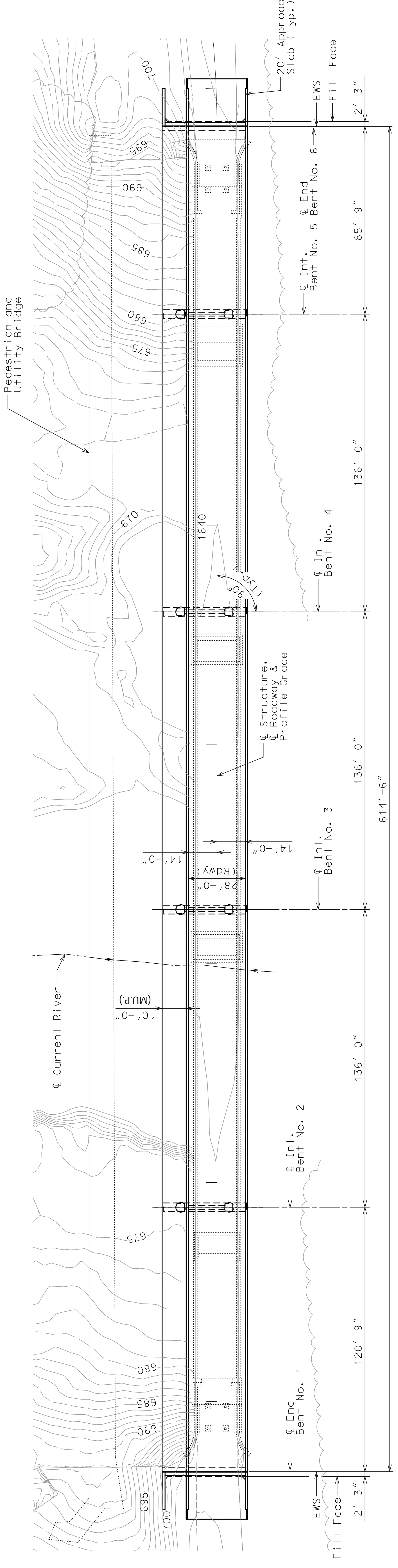
105 WEST CAPITOL JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

7301 WEST 133RD STREET OVERLAND PARK, KS 66213 AUTHORITY NO. 001592



GENERAL ELEVATION



Note: A bridge replacement that includes a mixed use path is shown. The roadway portion of the highway only bridge included in Alternate 2A, Option 2 would be similar.

PLAN

Figure A-11: Current River - Girder Bridge Replacement on Alignment Plan and Elevation

Note: This drawing is not to scale. Follow dimensions.

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NOT FOR CONSTRUCTION


DATE PREPARED	10/21/2019
ROUTE	19
STATE	MO
DISTRICT	BR
SHEET NO.	A.12
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	
PROJECT NO.	

BRIDGE NO.	CURRENT RIVER
DESCRIPTION	
DATE	

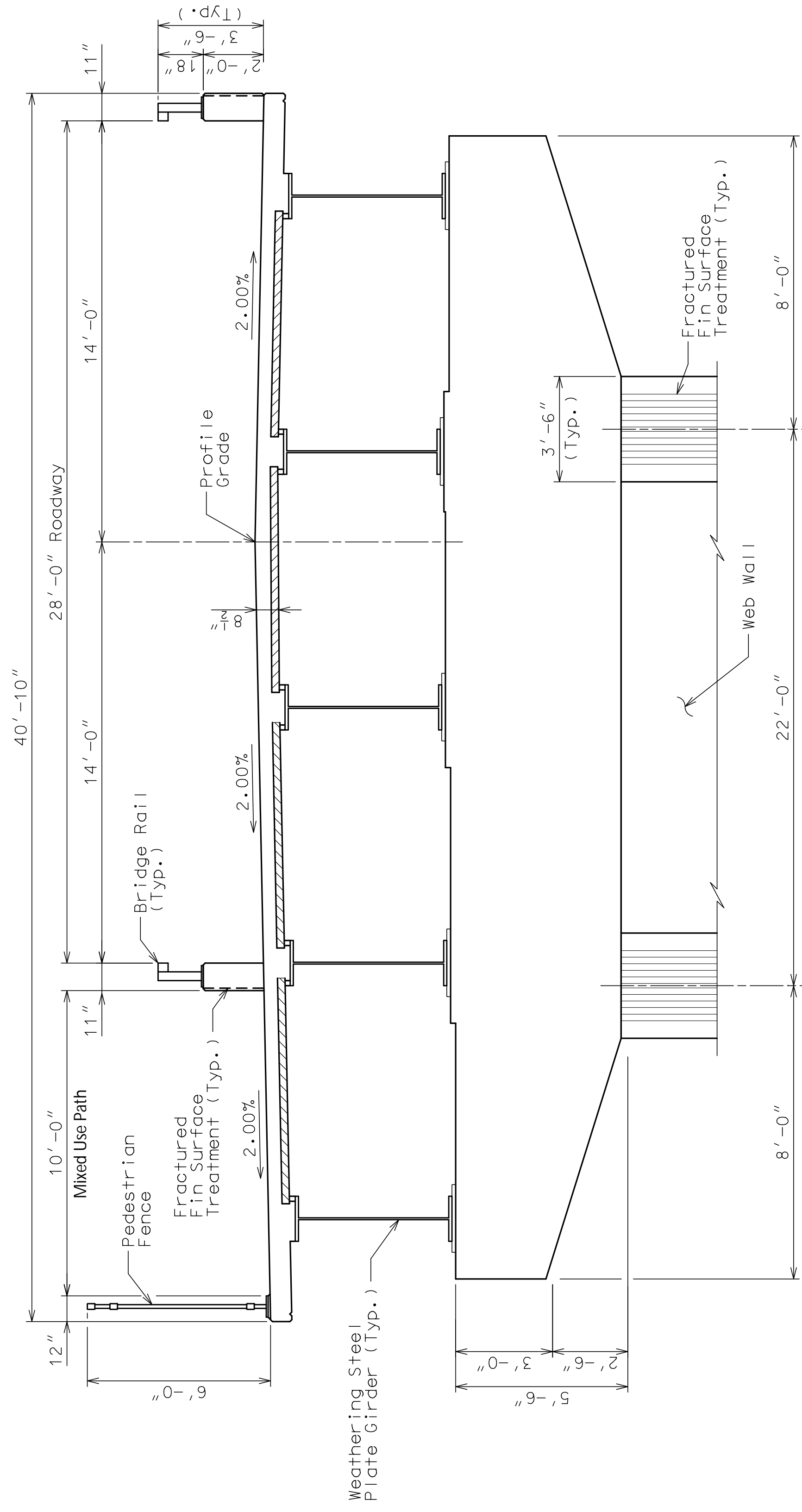
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JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



7301 WEST 133RD STREET
OVERLAND PARK, KS 66213
AUTHORITY NO. 001592



ROUTE 19 BRIDGE OVER CURRENT RIVER
PROP. TYP. SECTION @ INT. BENT

Figure A-12: Current River - Girder Bridge Replacement Typical Section

Note: This drawing is not to scale. Follow dimensions.

NOT FOR CONSTRUCTION

DATE PREPARED
11/19/2019

ROUTE
19

STATE
MO

DISTRICT
BR

SHEET NO.
A.13

COUNTY
SHANNON

JOB NO.
J9P3305

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
CURRENT RIVER

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MDOT

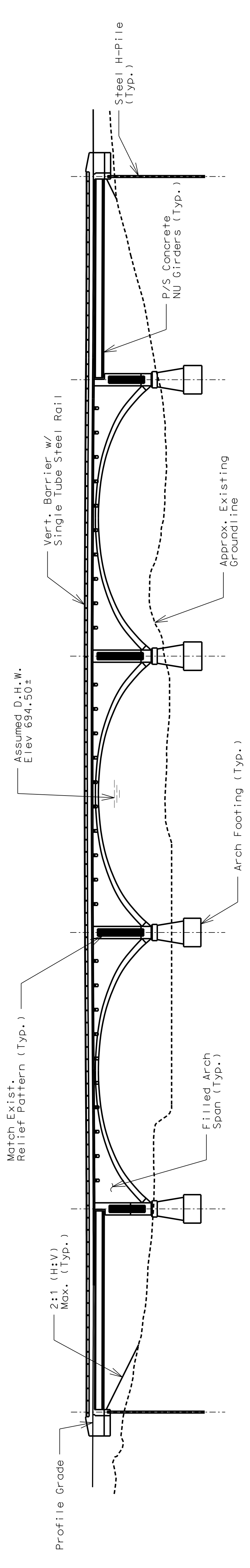
105 WEST CAPITOL JEFFERSON CITY, MO 65102

1-888-ASK-MDOT (1-888-275-6636)

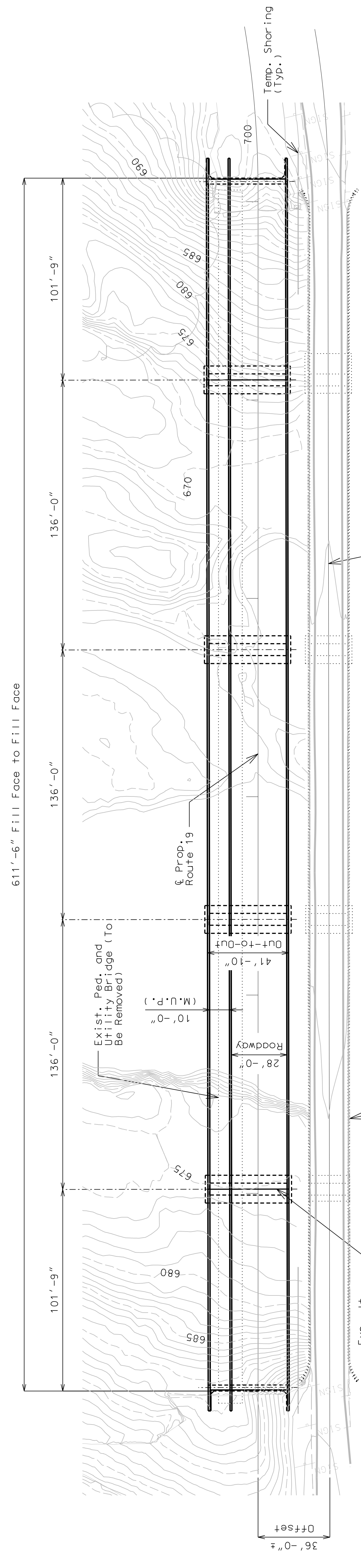
HDR Engineering, Inc.

4435 Main Street Suite 1000 Kansas City, MO 64111-1856

816-360-2700 Certificate of Authority: 000856



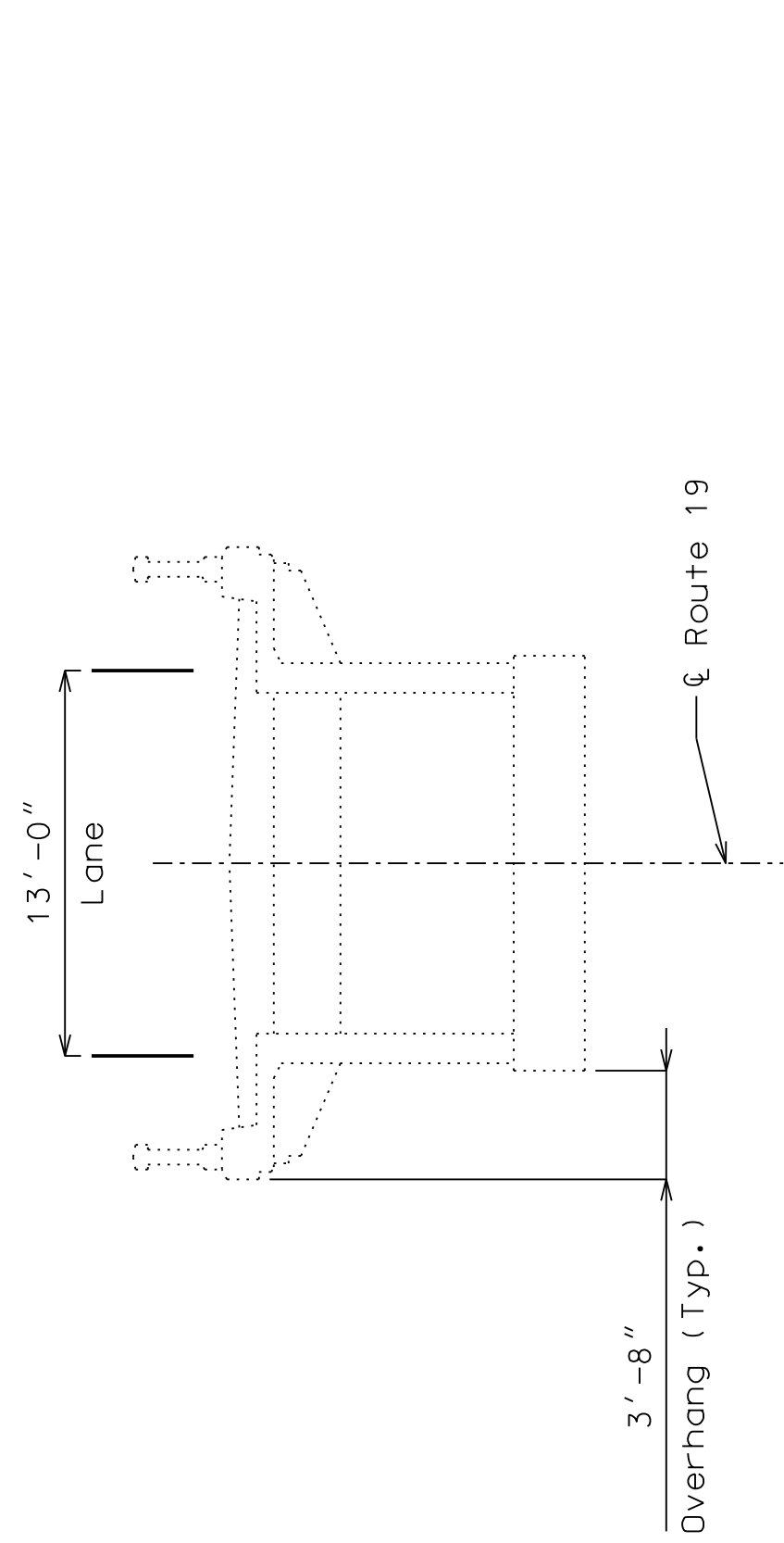
ELEVATION



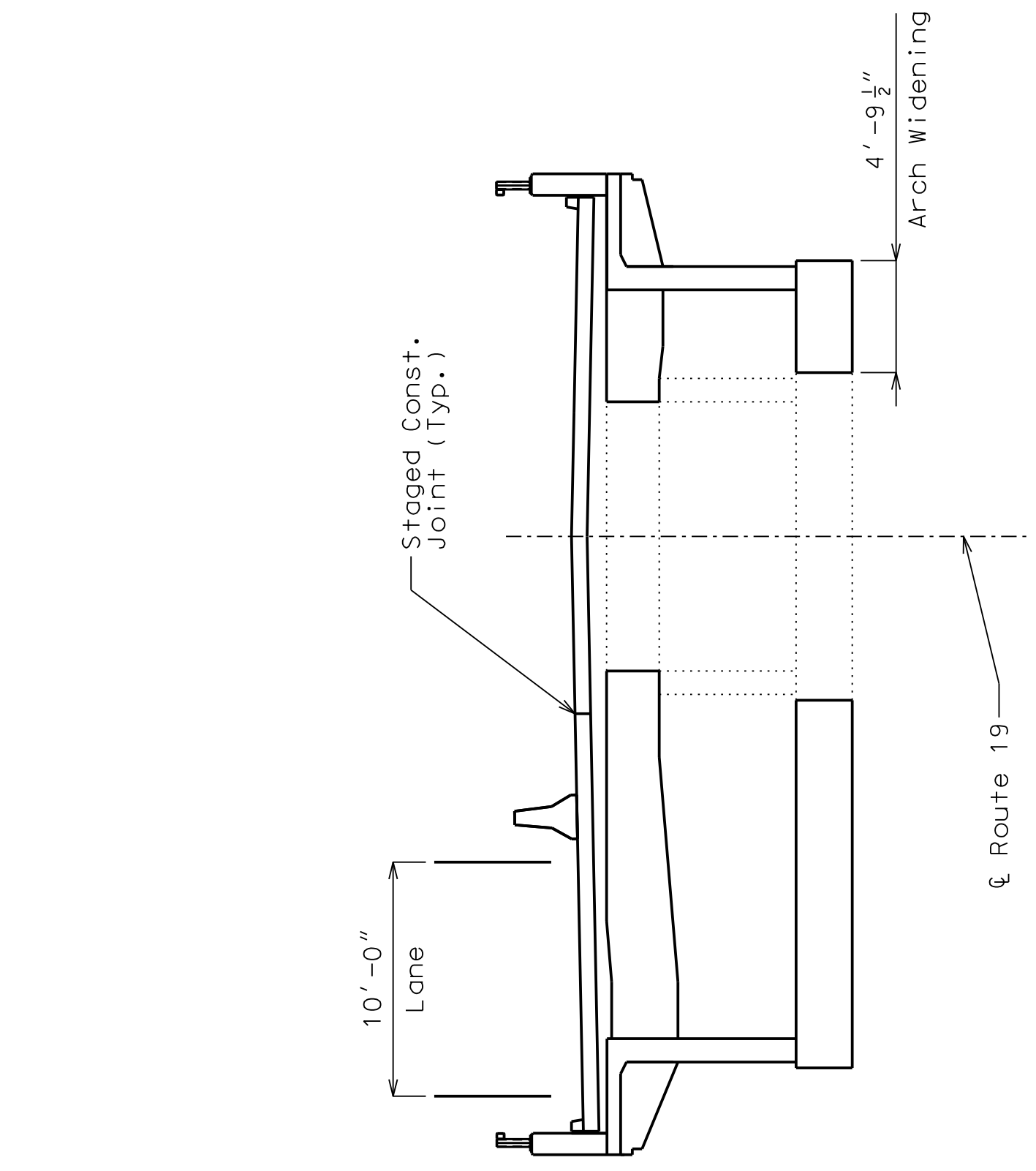
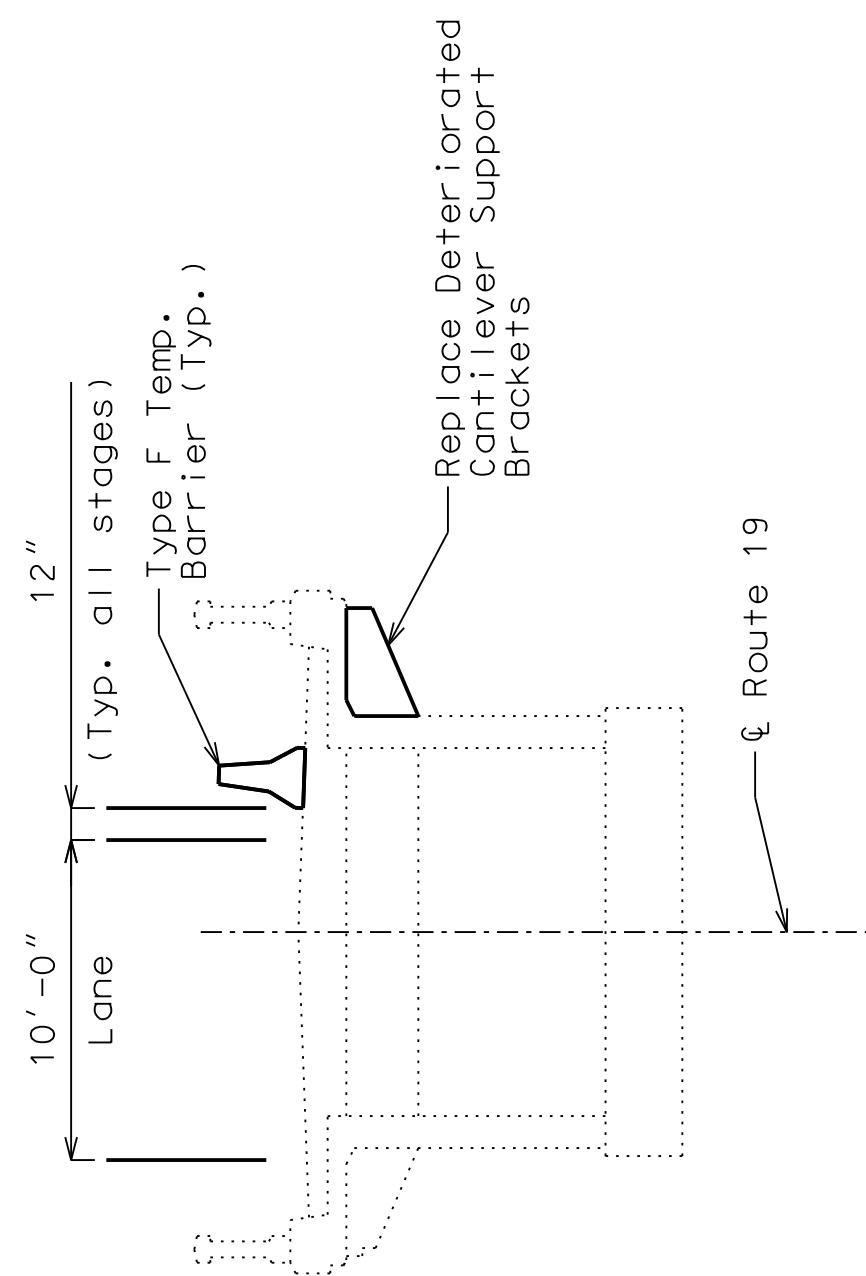
PLAN

Figure A-13: Current River - Replacement In-Kind on Offset Alignment Plan and Elevation

Note: This drawing is not to scale. Follow dimensions.

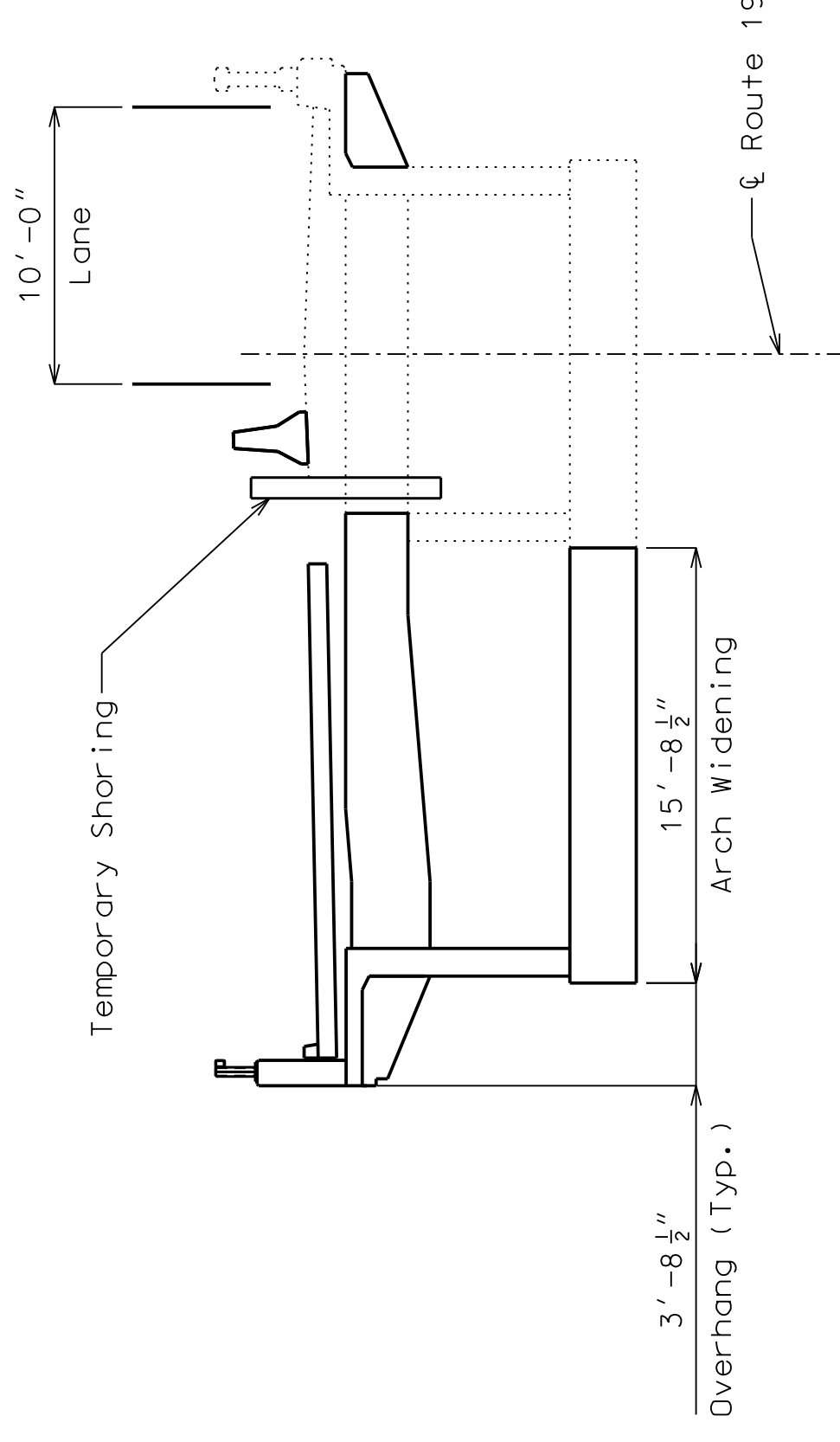


EXISTING

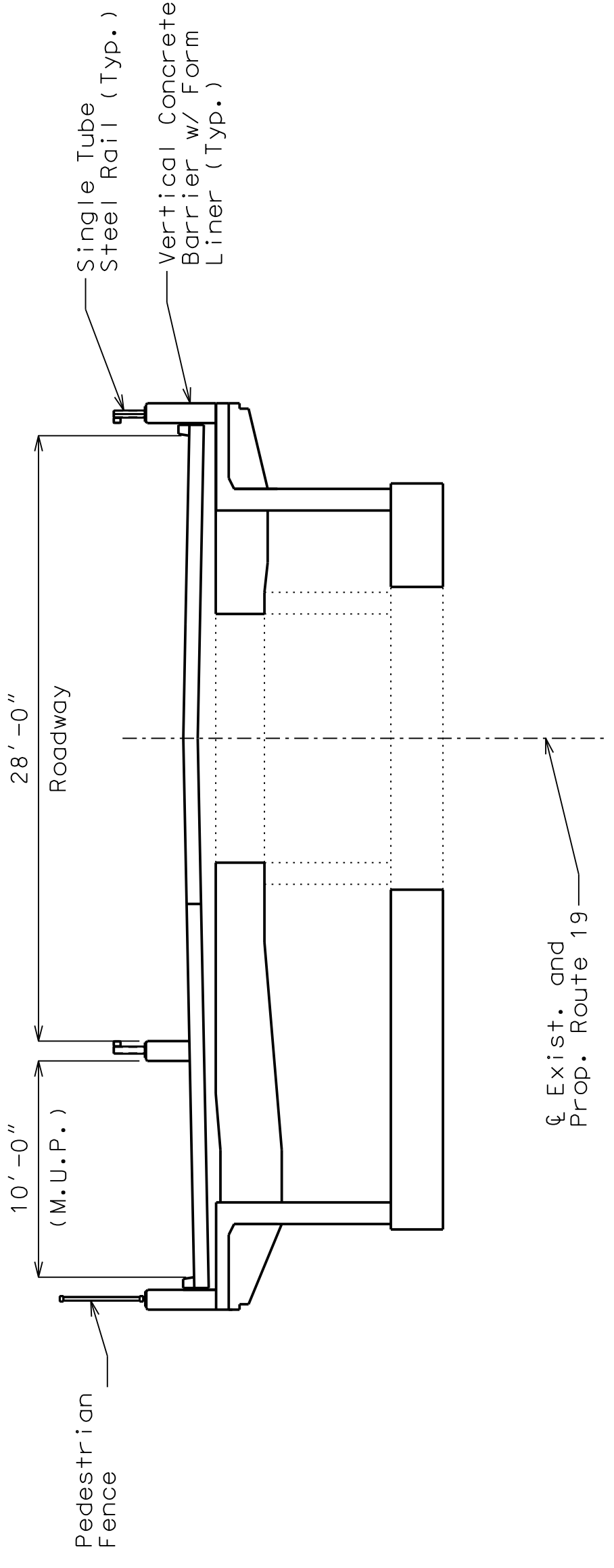


STAGE 3

STAGE 1



STAGE 2



FINAL

NOT FOR CONSTRUCTION

DATE PREPARED	10/21/2019
ROUTE	19
STATE	MO
DISTRICT	BR
SHEET NO.	A. 14
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	

PROJECT NO.	
BRIDGE NO.	
CURRENT RIVER	

DESCRIPTION	
DATE	

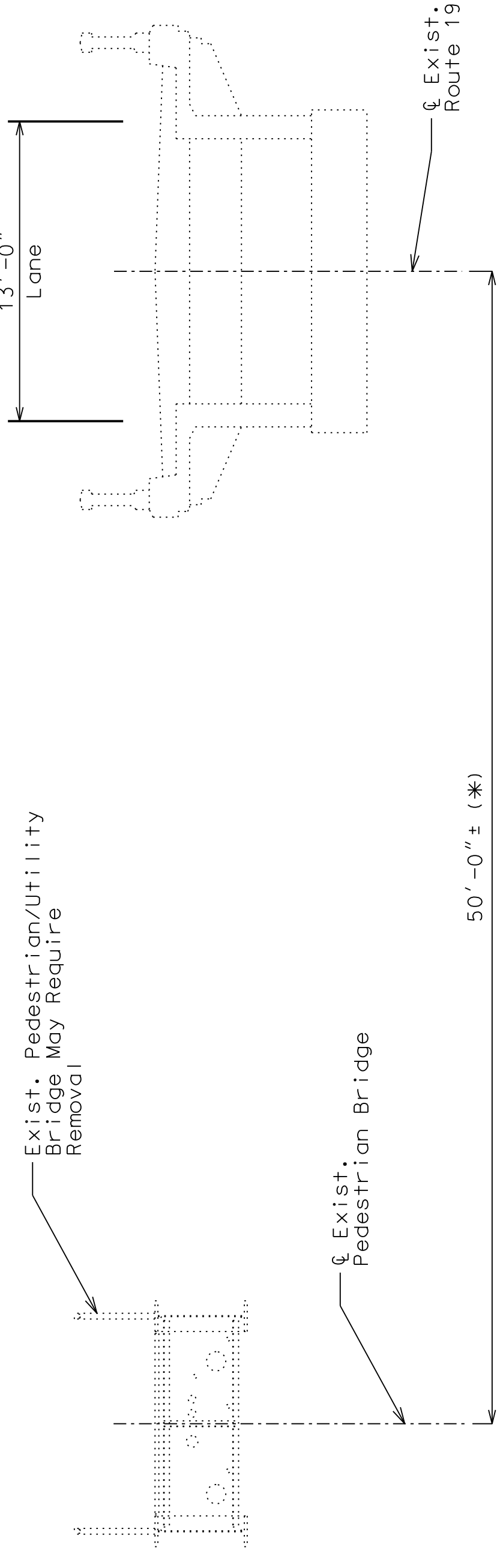
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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JEFFERSON CITY, MO 65102
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4435 Main Street
Suite 1000
Kansas City, MO 64111-1856
816-360-2700
Certificate of Authority: 000856
HDR Engineering, Inc.

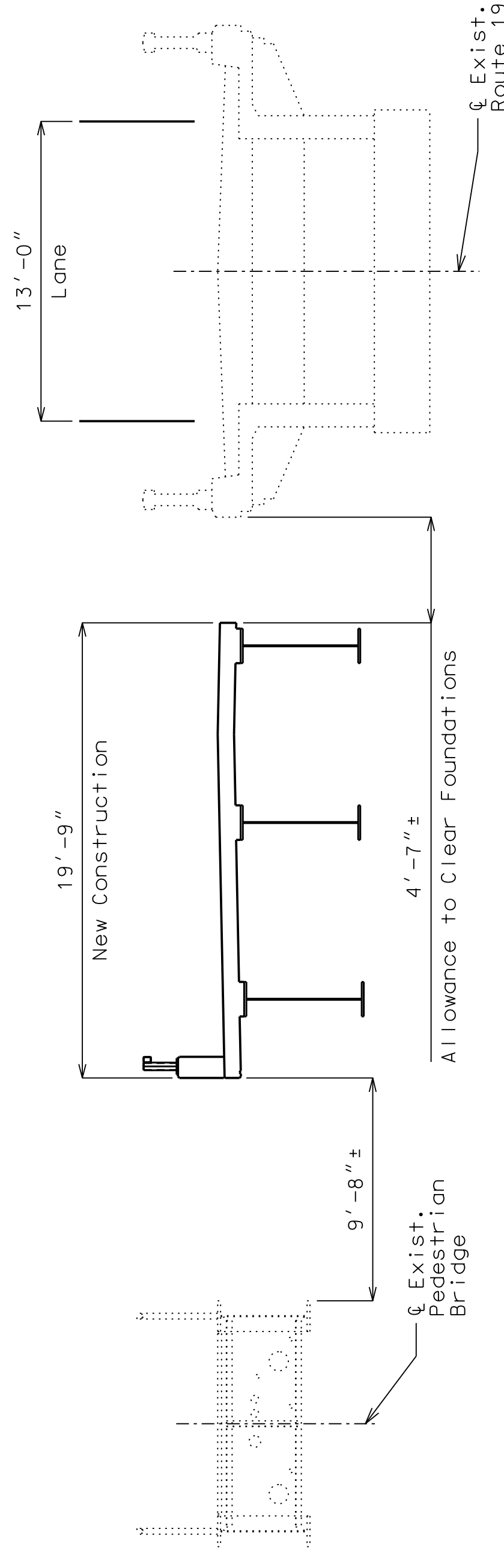
Figure A-14: Current River - Rehabilitation and Widening of Existing Bridge Phasing

Note: This drawing is not to scale. Follow dimensions.



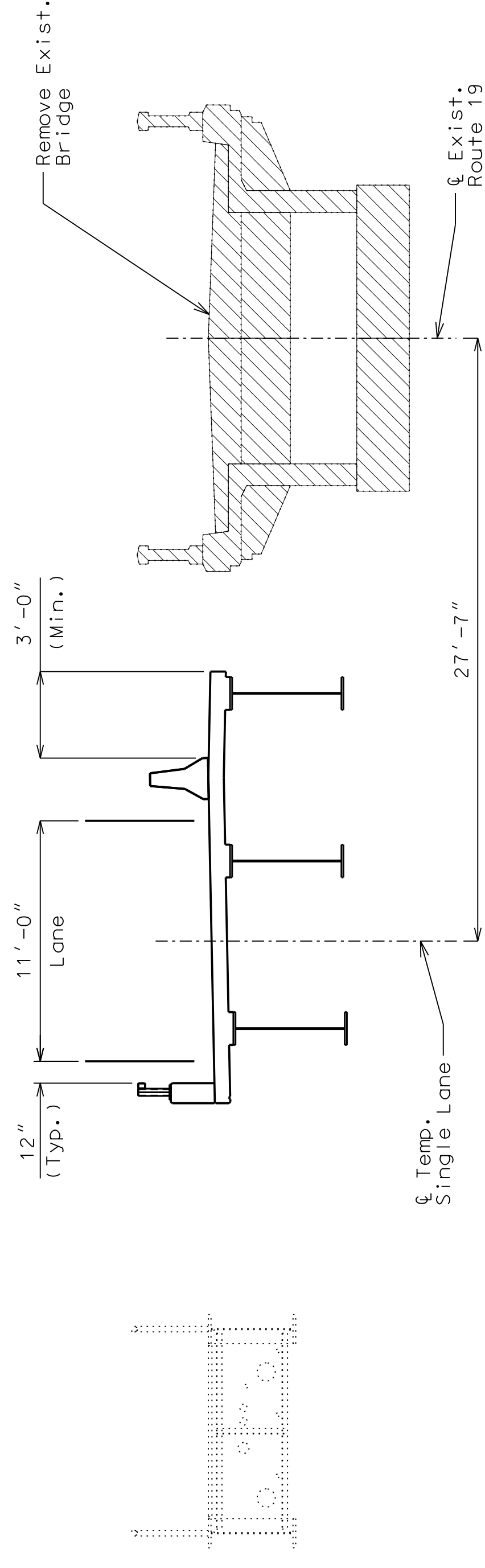
(*) - Scaled from aerial drawing

EXISTING



STAGE 1

STAGE 2



NOT FOR CONSTRUCTION

DATE PREPARED	11/26/2019
ROUTE	19
STATE	MO
DISTRICT	BR
SHEET NO.	A. 15

COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	

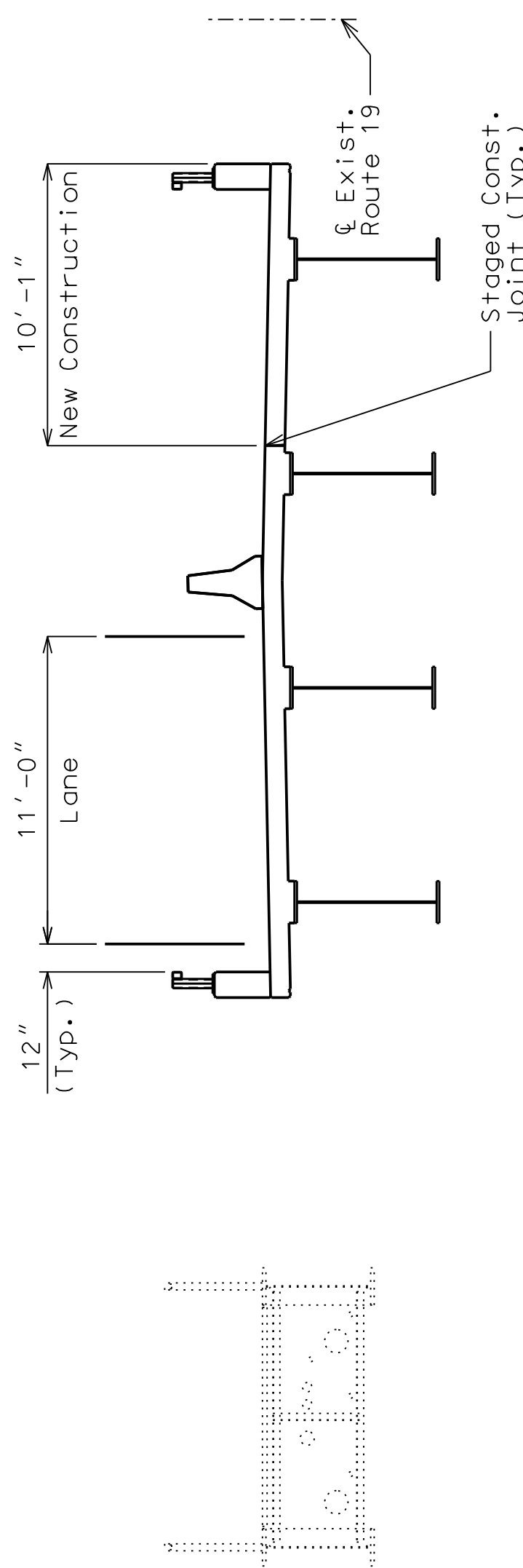
PROJECT NO.	
BRIDGE NO.	CURRENT RIVER

DESCRIPTION	
DATE	

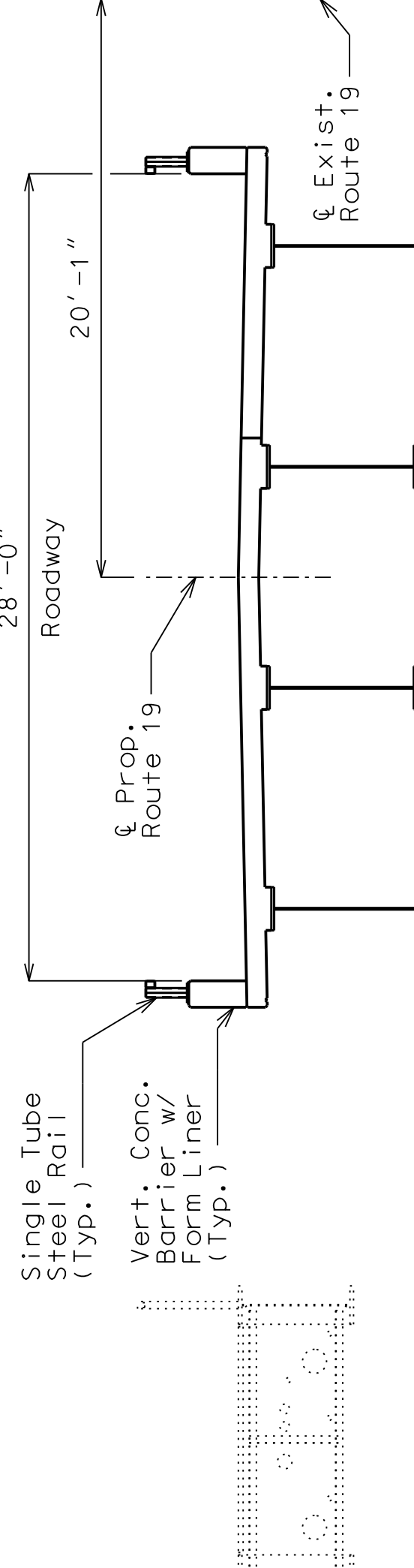
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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JEFFERSON CITY, MO 65102
1-888-ASK-MDOT (1-888-275-6636)

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Suite 1000
Kansas City, MO 64111-1856
816-360-2700
Certificate of Authority: 000856



STAGE 3



FINAL

Figure A-15: Current River - Phased Replacement Near Existing Alignment

Note: This drawing is not to scale. Follow dimensions.

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DATE PREPARED	10/20/2019
ROUTE	19
DISTRICT	BR
STATE	MO
SHEET NO.	A.16
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	
PROJECT NO.	

BRIDGE NO.	SPRING VALLEY
DESCRIPTION	
DATE	

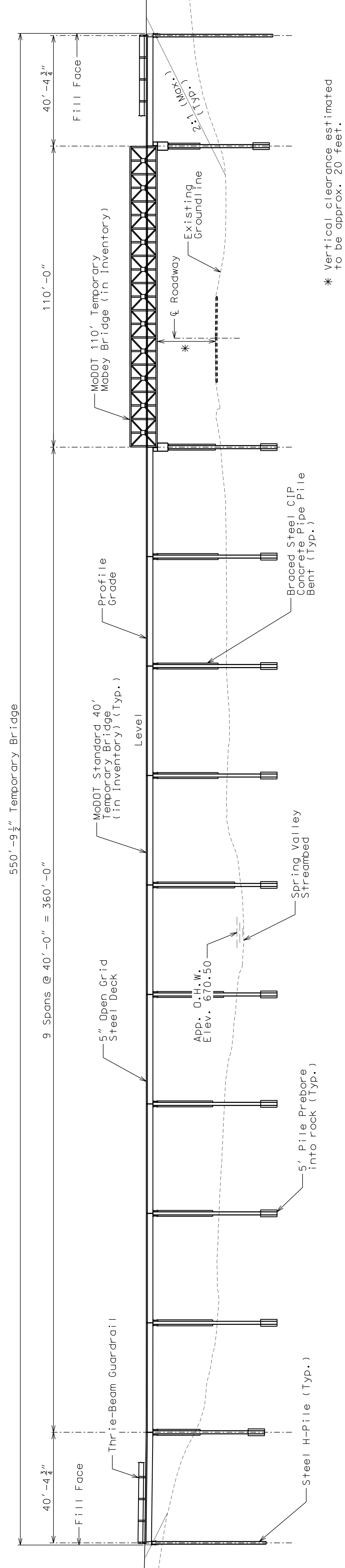
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



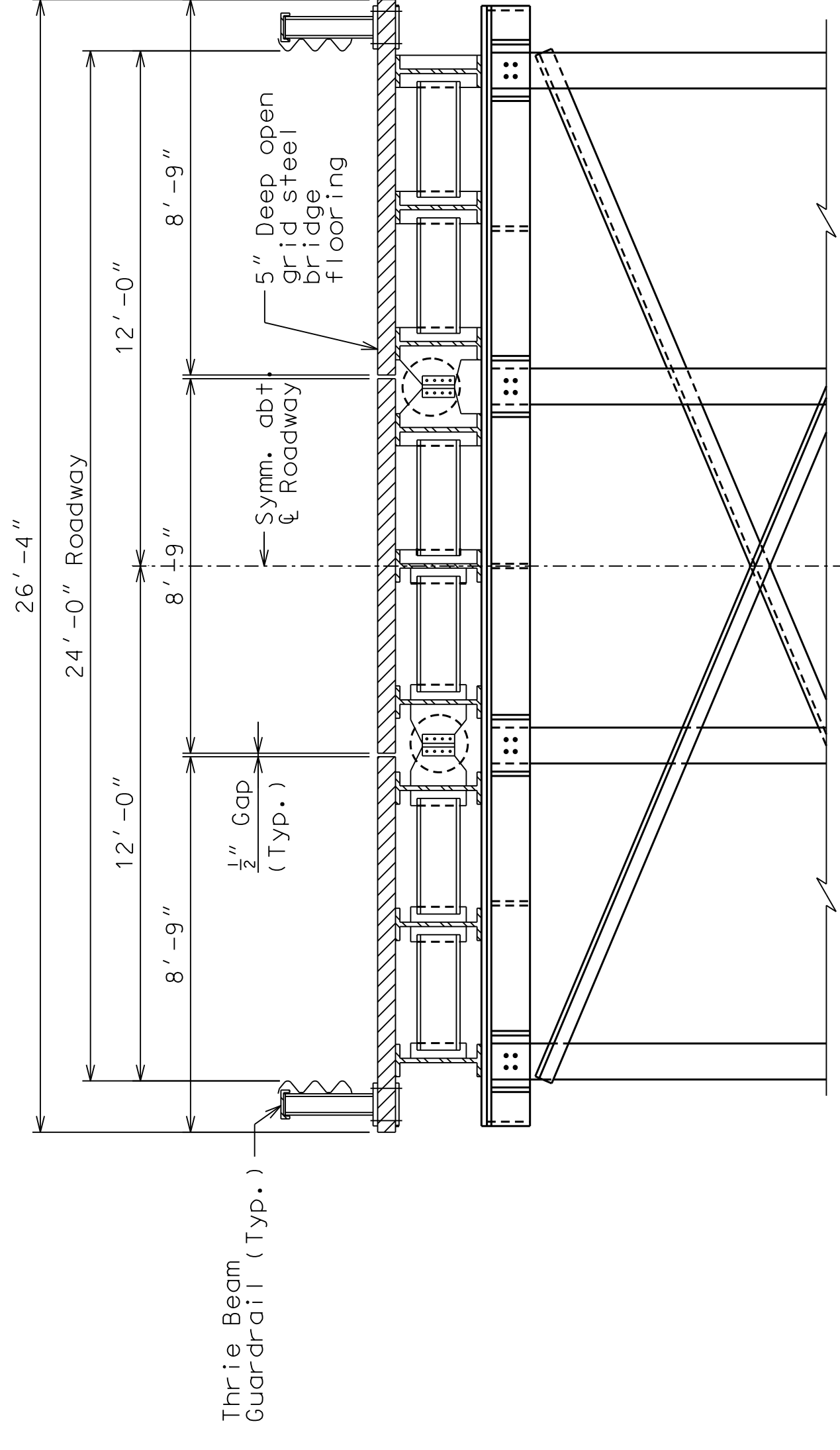
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OVERLAND PARK, KS 66213
AUTHORITY NO. 001592



GENERAL ELEVATION

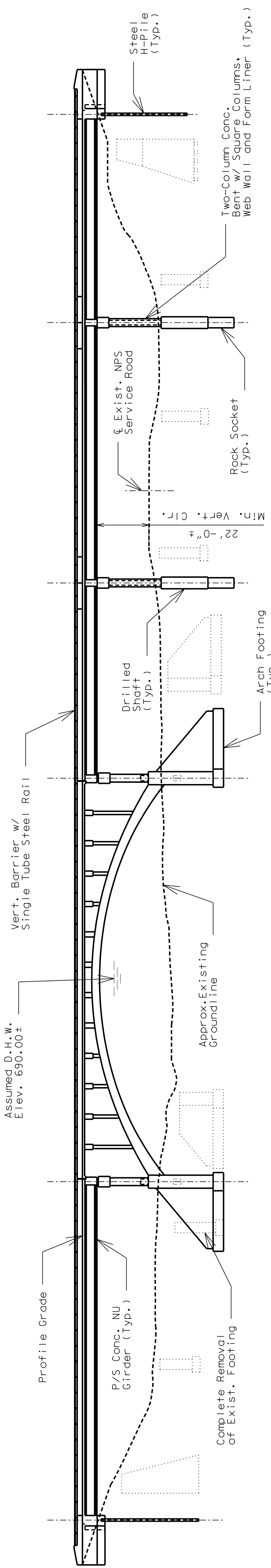


TEMPORARY ROUTE 19 BRIDGE
PROP. TYP. SECTION @ INT. BENT

Figure A-16: Spring Valley - Temporary Bridge Elevation and Section

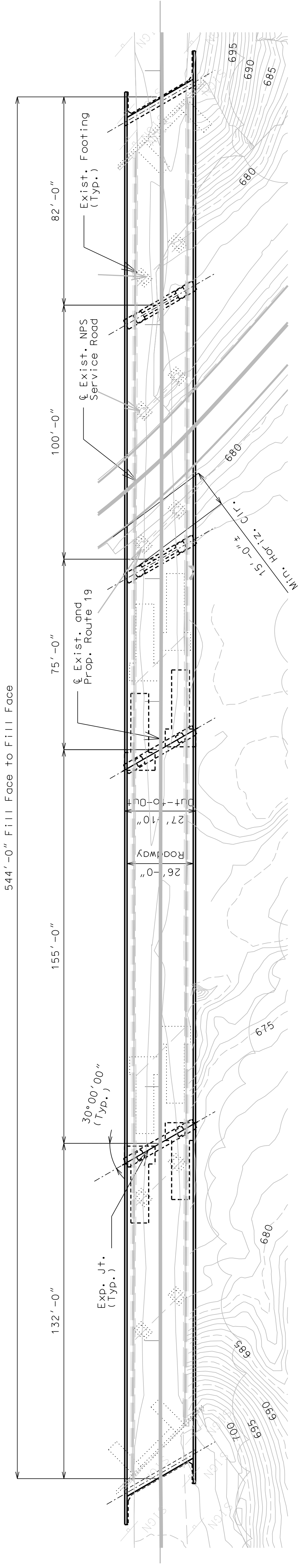
Note: This drawing is not to scale. Follow dimensions.

DATE PREPARED	11/19/2019
ROUTE	19
STATE	MO
DISTRICT	BR
SHEET NO.	A.17
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
SPRING VALLEY	
DESCRIPTION	
DATE	



ELEVATION

Note:
 Prestressed concrete girder approach spans are shown.
 Haunched steel plate girder spans are also possible
 but are not shown.



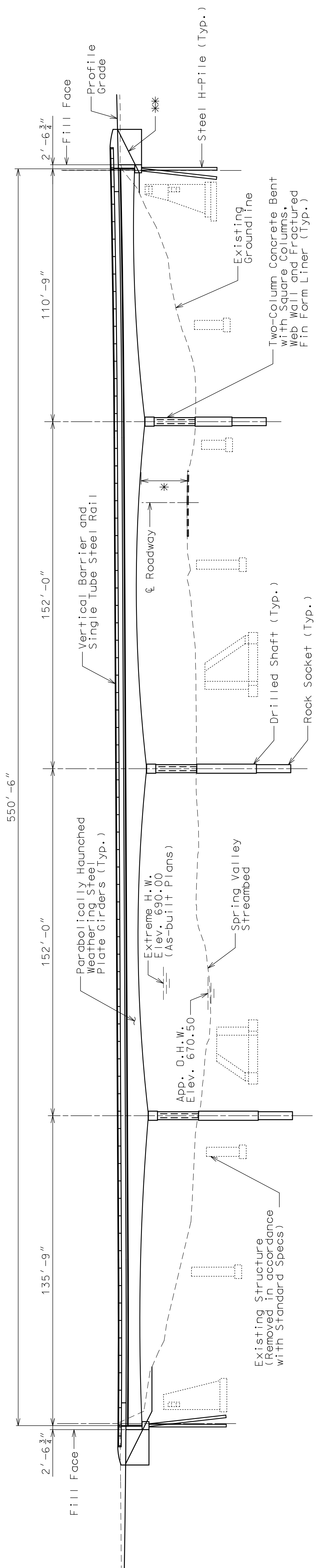
PLAN

Note:
 Minimum vertical and horizontal clearances shown are
 estimated based on limited survey data.

Figure A-17: Spring Valley - Replacement In-Kind on Alignment Plan and Elevation

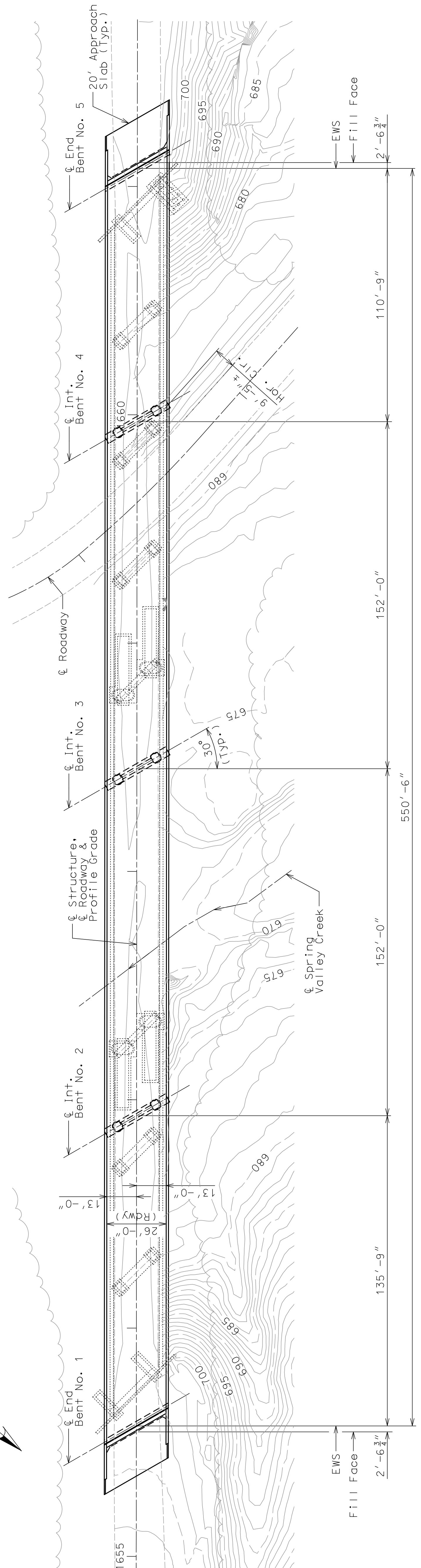
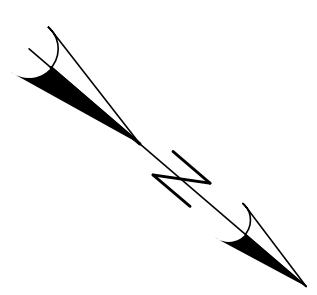
Note: This drawing is not to scale. Follow dimensions.

NOT FOR CONSTRUCTION



GENERAL ELEVATION

* Vertical clearance estimated to be approx. 20 feet.
 ** 2:1 (Max.)(Typ.)



PLAN

Figure A-18: Spring Valley - Girder Bridge Replacement on Alignment Plan and Elevation

Note: This drawing is not to scale. Follow dimensions.

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DATE PREPARED	10/21/2019
ROUTE	19
STATE	MO
DISTRICT	BR
SHEET NO.	A.19
COUNTY	SHANNON
JOB NO.	J9P3305
CONTRACT ID.	
PROJECT NO.	

BRIDGE NO.	SPRING VALLEY
DESCRIPTION	
DATE	

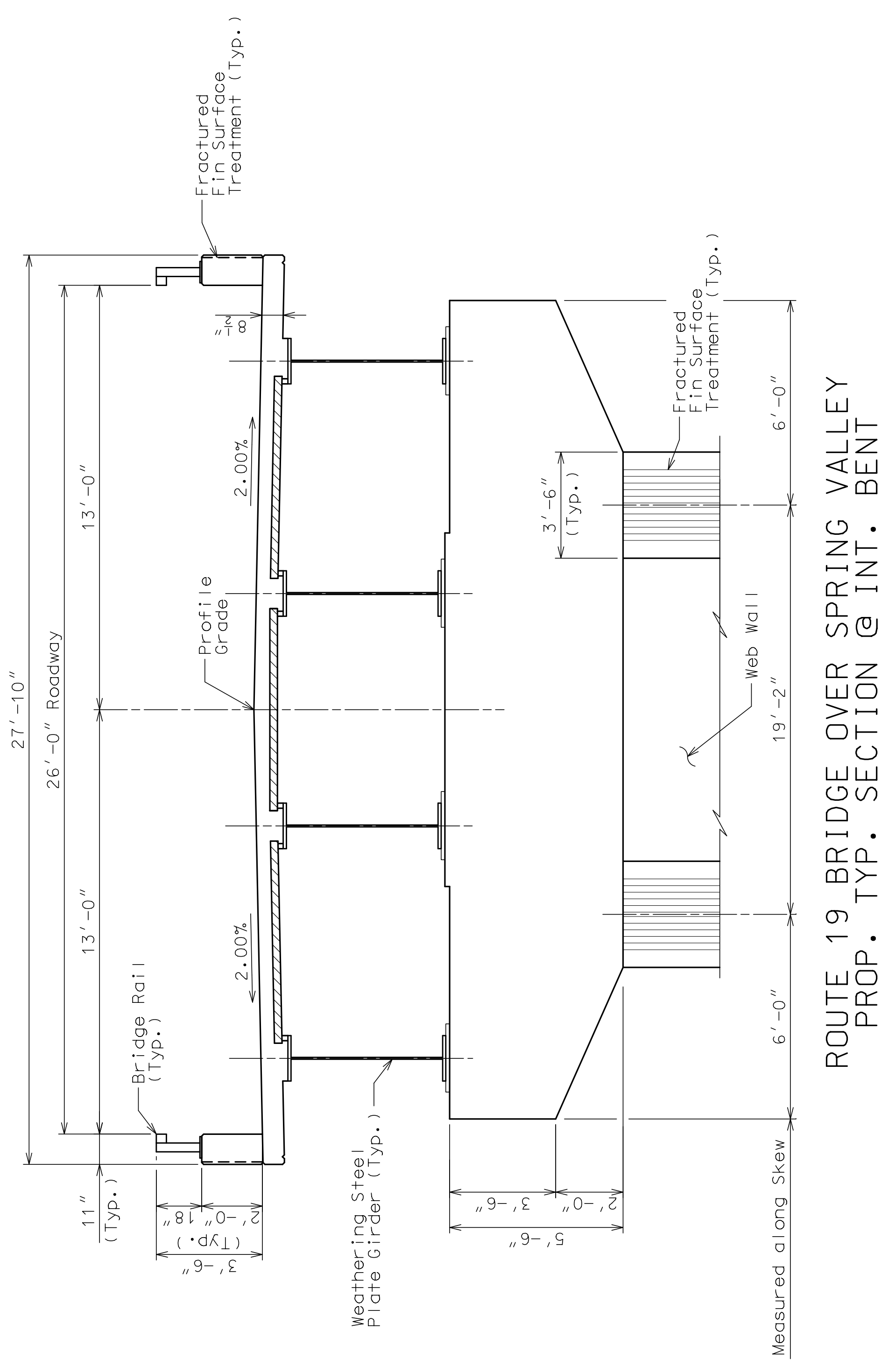
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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OVERLAND PARK, KS 66213
AUTHORITY NO. 001592



ROUTE 19 BRIDGE OVER SPRING VALLEY
PROP. TYP. SECTION @ INT. BENT

Figure A-19: Spring Valley - Girder Bridge Replacement Typical Section

Note: This drawing is not to scale. Follow dimensions.

NOT FOR CONSTRUCTION

DATE PREPARED
11/19/2019

ROUTE
19

STATE
MO

DISTRICT
BR

SHEET NO.
A.21

COUNTY
SHANNON

JOB NO.
J9P3305

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
SPRING VALLEY

DATE	DESCRIPTION

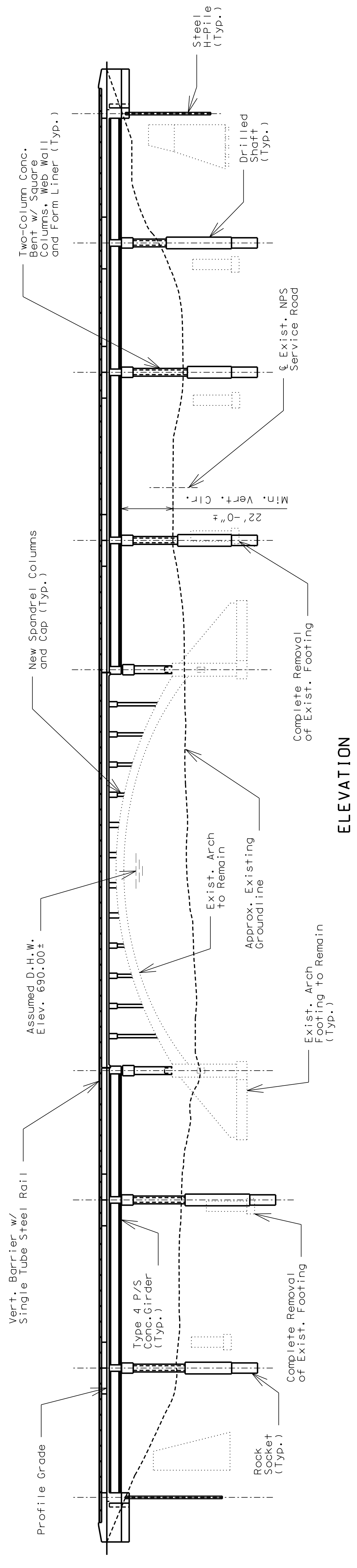
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MDOT

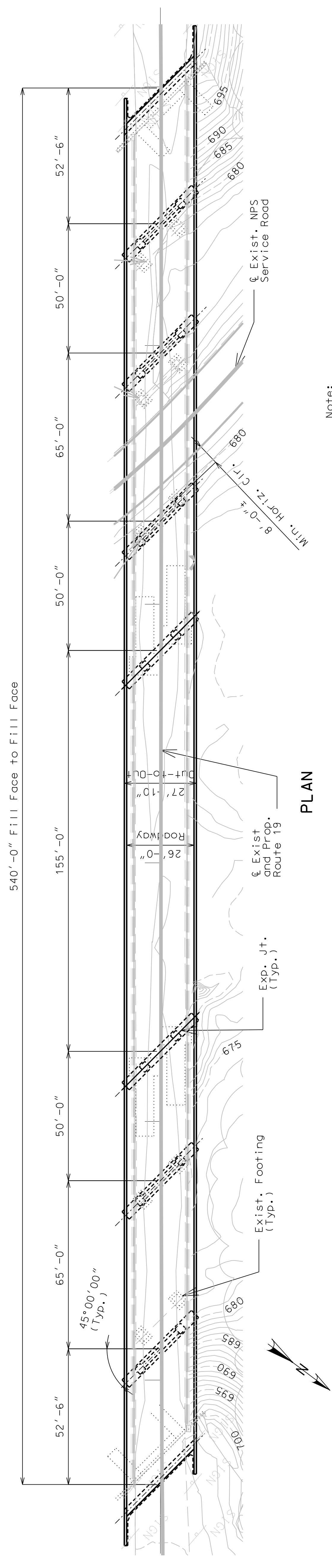
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MDOT (1-888-275-6636)

HDR Engineering, Inc.

4435 Main Street
Suite 1000
Kansas City, MO 64111-1856
816-360-2700
Certificate of Authority: 000856



Note:
Prestressed concrete girder approach spans are shown.
Haunched steel plate girder spans are also possible but are not shown.



Note:
Minimum vertical and horizontal clearances shown are estimated based on limited survey data.

Figure A-21: Spring Valley - Rehabilitation and Widening of Existing Bridge Plan and Elevation

Note: This drawing is not to scale. Follow dimensions.

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