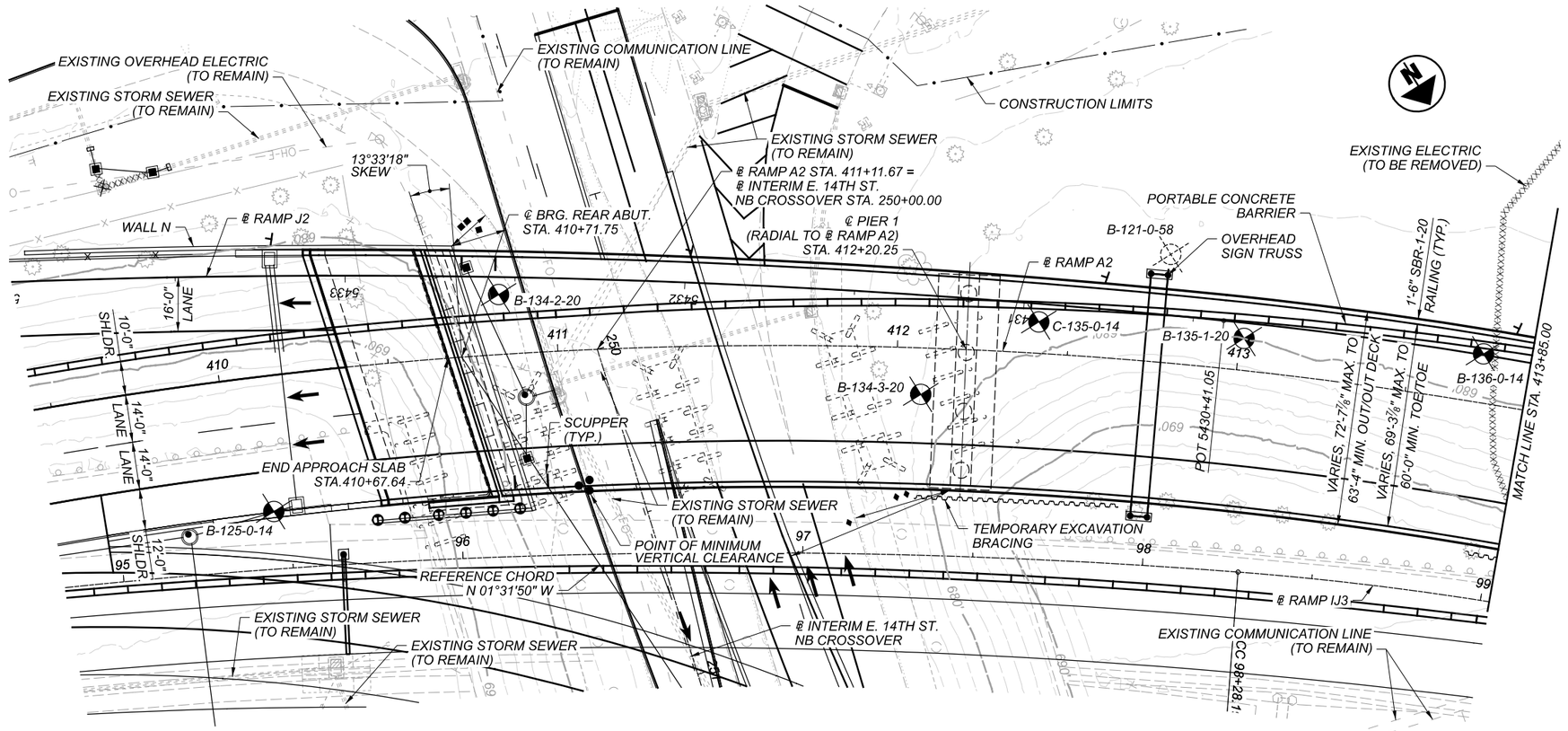
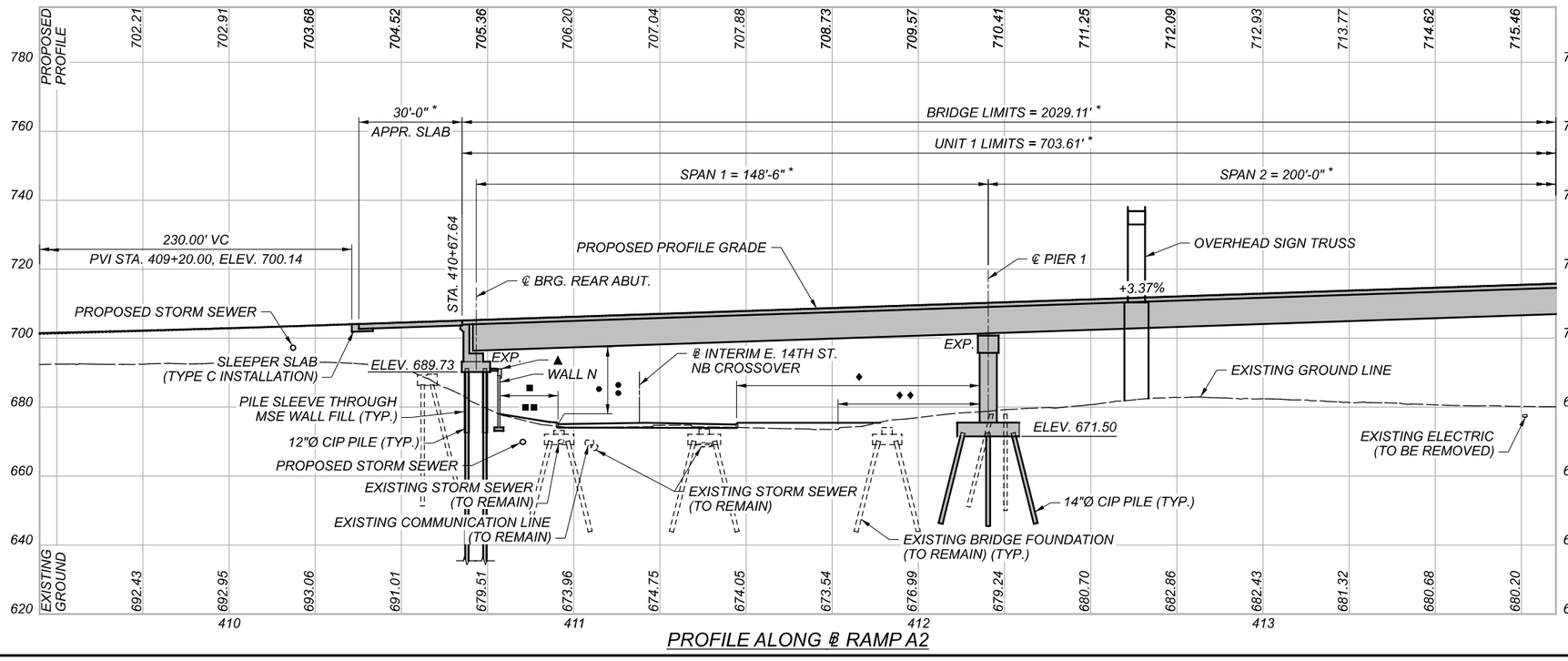


PLAN



PROFILE ALONG ℄ RAMP A2

BENCHMARK DATA

BM-59 STA. 430+49.74, ELEV. 660.15 , OFFSET 458.93' RT., ℄ RAMP A2, MAG NAIL AT NOSE OF DRAINAGE CHANNEL

BM-61 STA. 425+47.56, ELEV. 674.03 , OFFSET 381.20' LT., ℄ RAMP A2, RAILROAD SPIKE IN NORTH FACE OF POWER/LIGHT POLE

BM-62 STA. 431+86.05, ELEV. 672.11 , OFFSET 388.05' LT., ℄ RAMP A2, RAILROAD SPIKE IN EAST FACE OF POWER/LIGHT POLE

BM-66 STA. 421+92.16, ELEV. 671.90 , OFFSET 844.15' LT., ℄ RAMP A2, CUT CROSS ON N-E BOLT OF CANTILEVER OVERHEAD SIGN

BM-67 STA. 418+24.32, ELEV. 674.82 , OFFSET 454.15' LT., ℄ RAMP A2, CUT CROSS ON N-E BOLT OF EAST LEG OF JCT 422 SIGN

BM-68 STA. 411+16.80, ELEV. 678.92 , OFFSET 249.57' LT., ℄ RAMP A2, CUT CROSS ON N-E BOLT OF TRAFFIC SIGNAL POLE

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLANS.

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

FOR HORIZONTAL CURVE DATA, SEE SHEET 2 / 164 .

FOR BORING INFORMATION, SEE SHEET 3 / 164 .

ROADSIDE PROTECTION WILL BE PROVIDED AS NOTED.

DESIGN TRAFFIC:

2015 ADT = 22,200 2015 ADTT = 888

2035 ADT = 23,500 2035 ADTT = 940

DIRECTIONAL DISTRIBUTION = N/A

LEGEND

- BORING LOCATION
- HISTORIC BORING LOCATION
- * MEASURED ALONG ℄ RAMP A2
- ▲ TOP OF WALL ELEV. 692.0

PROPOSED E. 14TH ST.:

- ● 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE 21'-6" ACTUAL MINIMUM VERTICAL CLEARANCE
- ■ REQUIRED CLEAR ZONE: 4'-0" ACTUAL CLEARANCE: 15'-11" PROTECTION PROVIDED: NO
- ♦ REQUIRED CLEAR ZONE: 4'-0" ACTUAL CLEARANCE: 50'-8" PROTECTION PROVIDED: NO

EXISTING E. 14TH ST. (INTERIM):

- ●● 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE 22'-7⅝" ACTUAL MINIMUM VERTICAL CLEARANCE
- ■■ REQUIRED CLEAR ZONE: 4'-0" ACTUAL CLEARANCE: 13'-5" PROTECTION PROVIDED: NO
- ♦♦ REQUIRED CLEAR ZONE: 4'-0" ACTUAL CLEARANCE: 29'-3" PROTECTION PROVIDED: NO

PROPOSED STRUCTURE

TYPE: UNIT 1: FOUR SPAN CONTINUOUS STEEL PLATE GIRDER WITH COMPOSITE REINFORCED CONCRETE DECK, SUPPORTED ON A STUB ABUTMENT BEHIND AN MSE WALL AND CAP AND COLUMN AND HAMMERHEAD PIERS
UNIT 2: SEVEN SPAN CONTINUOUS STEEL PLATE GIRDER WITH COMPOSITE REINFORCED CONCRETE DECK, SUPPORTED ON A FULL HEIGHT ABUTMENT AND CAP AND COLUMN AND STRADDLE BENT PIERS

SPANS: UNIT 1: 148'-6", 200'-0", 205'-0", 143'-10" C/C BEARINGS (MEASURED ALONG ℄ RAMP A2)
UNIT 2: 142'-1", 184'-6", 189'-8", 210'-4", 175'-0", 232'-0", 185'-0" C/C BEARINGS (MEASURED ALONG ℄ RAMP A2)

ROADWAY: VARIES, 69'-3⅞" MAX. TO 60'-0" MIN. TOE/TOE BRIDGE RAILING

LOADING: HL93 WITH 60 PSF FUTURE WEARING SURFACE

SKEW: VARIES

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG, 17" THICK (AS-1-15, AS-2-15)

ALIGNMENT: 04°30'00" CURVE RIGHT TO 08°30'00" CURVE RIGHT

SUPERELEVATION: VARIES, 0.06 FT/FT MAX.

DECK AREA: 130,233 SF

COORDINATES: LATITUDE 41°29'33.92" N
LONGITUDE 81°40'39.65" W

SITE PLAN - (1 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	NJH
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	1
TOTAL	164
SHEET	1443
TOTAL	2338

CUY-90-16.28 (CCG3A)

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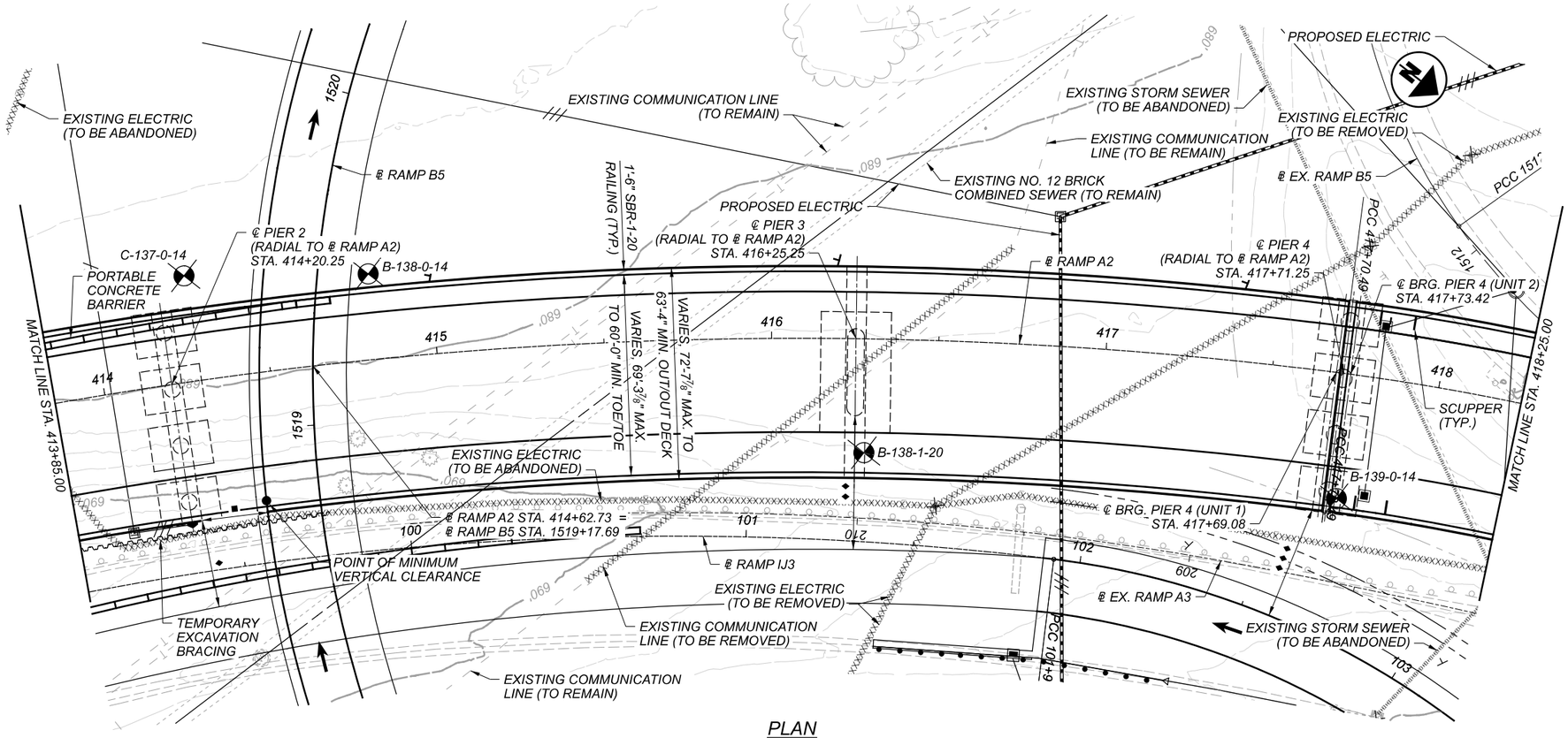
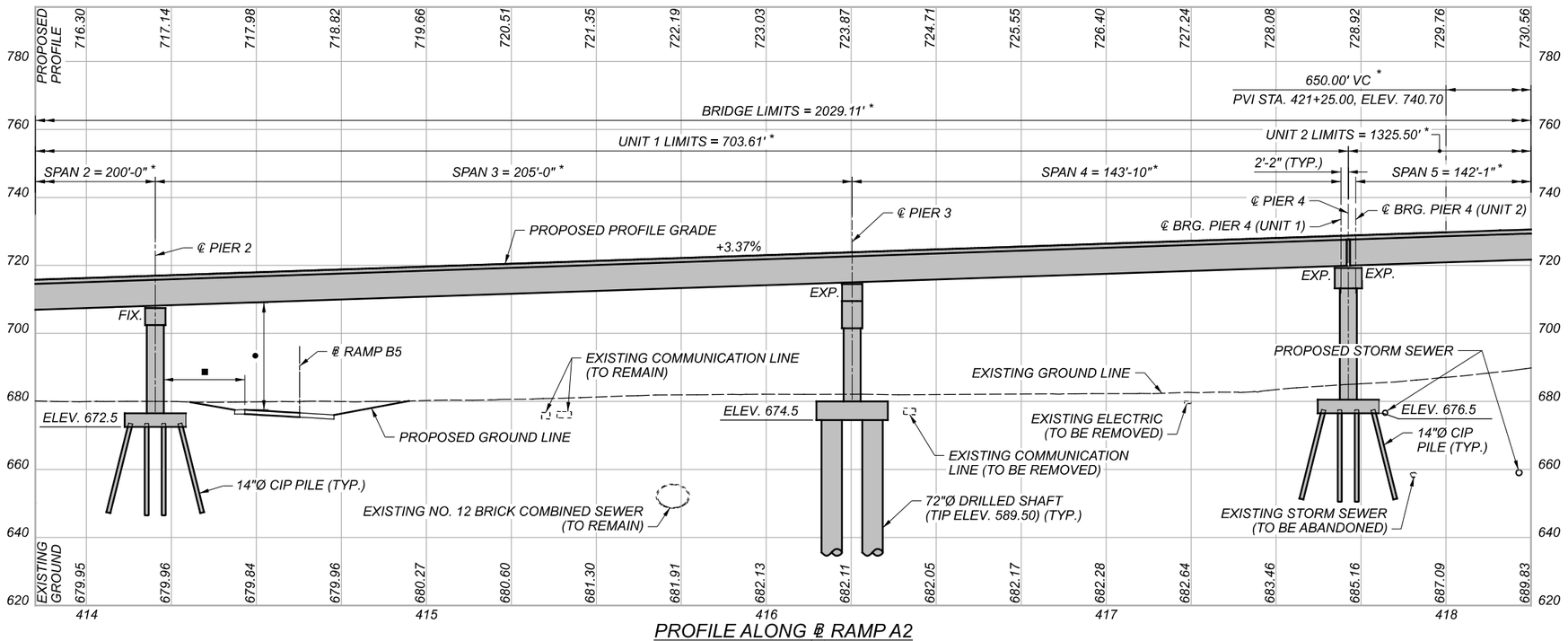


PLAN



PROFILE ALONG ℄ RAMP A2

LEGEND

BORING LOCATION

* MEASURED ALONG ℄ RAMP A2

RAMP B5:
- 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  27'-3¾" ACTUAL MINIMUM VERTICAL CLEARANCE
- REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 19'-9"
  PROTECTION PROVIDED: MGS (FUTURE RAMP B5)

RAMP IJ5:
- REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 26'-3"
  PROTECTION PROVIDED: PCB
- ◆◆ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 39'-11"
  PROTECTION PROVIDED: NO
- ◆◆◆ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 34'-3"
  PROTECTION PROVIDED: NO

RAMP A2 CURVE PRA2-01
P.I. = STA. 413+02.39
Δ = 44°30'41" RT
Dc = 04°30'00"
R = 1,273.24'
T = 521.04'
L = 989.14'
E = 102.49'

RAMP A2 CURVE PRA2-02
P.I. = STA. 424+26.19
Δ = 88°25'03" RT
Dc = 08°30'00"
R = 674.07'
T = 655.7'
L = 1,040.21'
E = 266.31'

RAMP J2 CURVE PRJ2-01
P.I. = STA. 5435+61.54
Δ = 23°06'15" LT
Dc = 02°15'00"
R = 2,546.48'
T = 520.50'
L = 1,026.85'
E = 52.65'

RAMP A3 CURVE PRA3-02
P.I. = STA. 588+26.63
Δ = 88°45'09" LT
Dc = 24°45'00"
R = 231.50'
T = 226.51'
L = 358.60'
E = 92.38'

RAMP A1 CURVE PRA1-01
P.I. = STA. 310+56.73
Δ = 66°35'38" LT
Dc = 38°11'50"
R = 150.00'
T = 98.52'
L = 174.34'
E = 29.46'

NOTES:
1. SEE SHEET 1 / 164 FOR ADDITIONAL SITE PLAN INFORMATION.
2. FOR BORING INFORMATION SEE SHEET 3 / 164 .
3. ROADSIDE PROTECTION WILL BE PROVIDED AS NOTED.

SITE PLAN - (2 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 2 | TOTAL 164
SHEET 1444 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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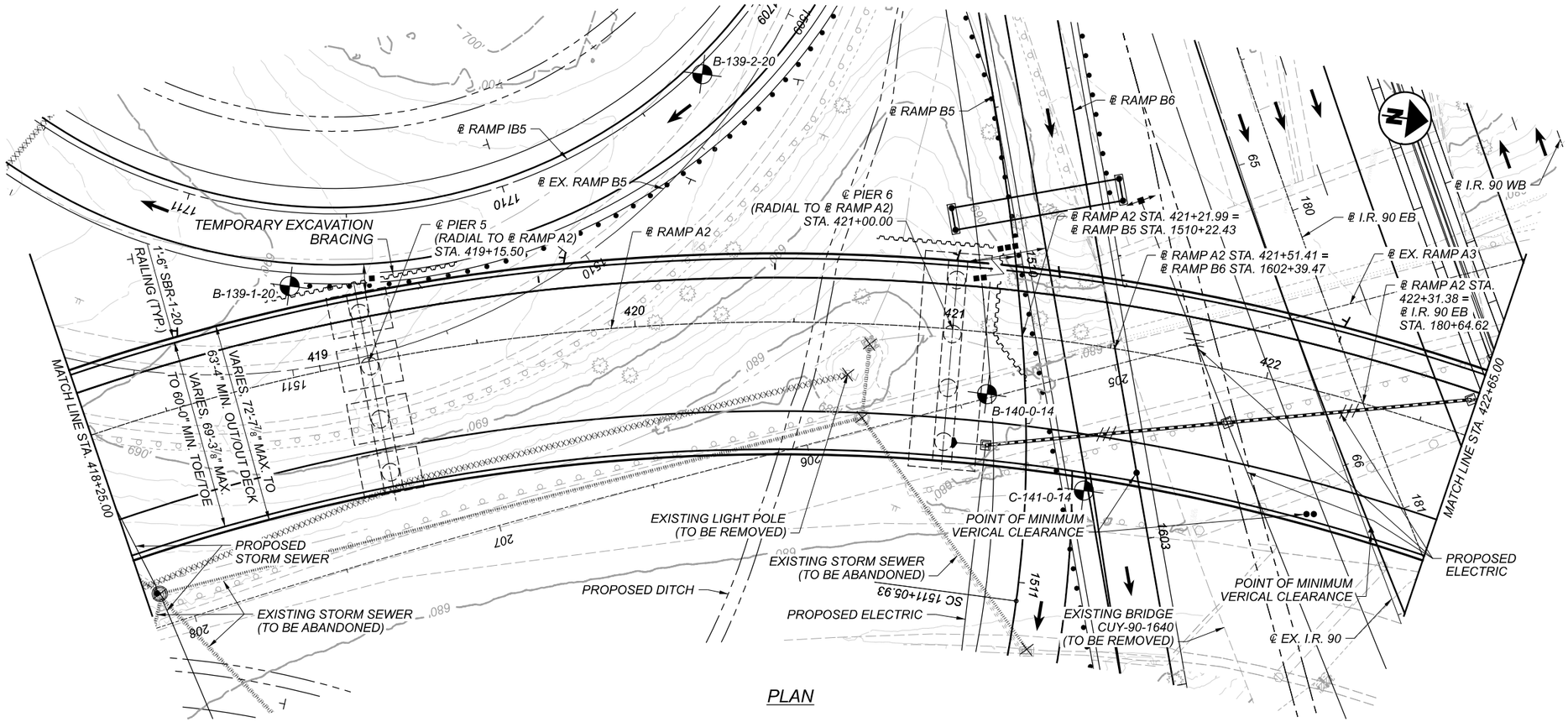
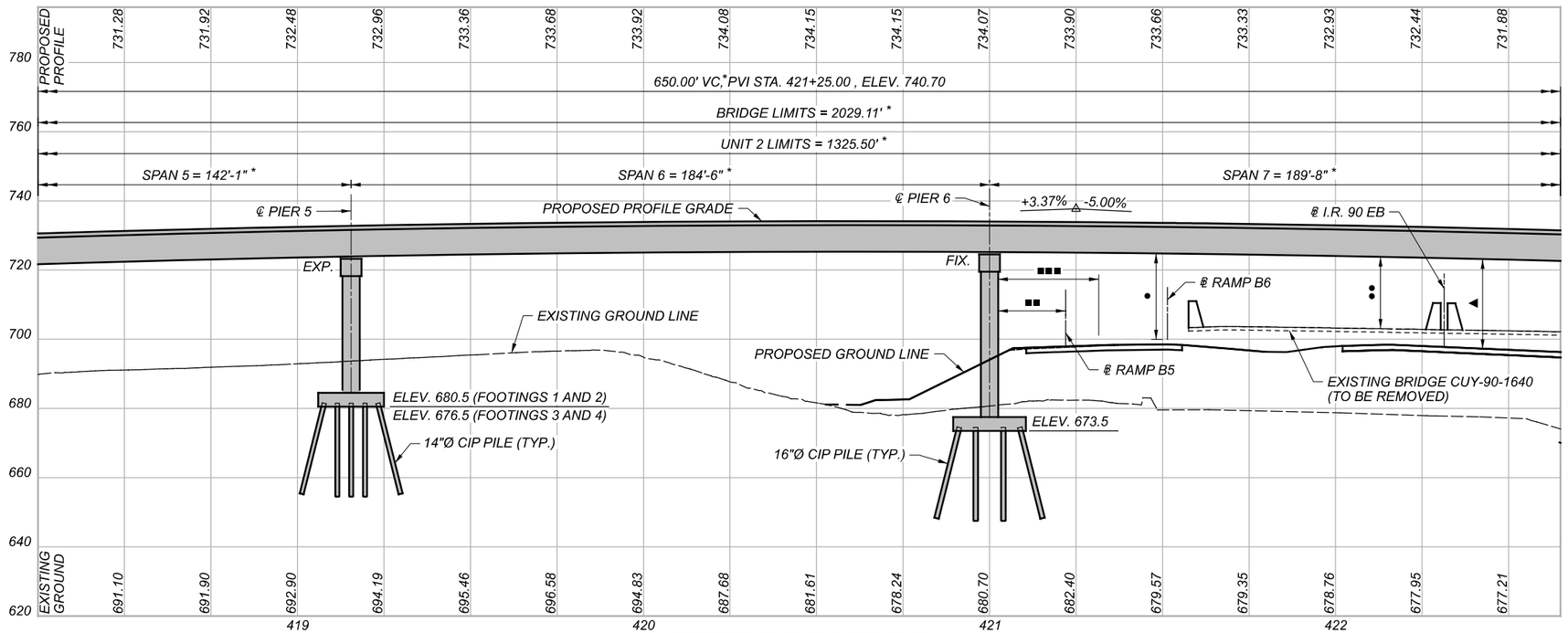


PLAN



PROFILE ALONG ℄ RAMP A2

LEGEND

- BORING LOCATION
- * MEASURED ALONG ℄ RAMP A2

EXISTING I-90 EB:
- ●● 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  17'-9⅝" ACTUAL MINIMUM VERTICAL CLEARANCE

PROPOSED I-90 EB:
- ▲ 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  23'-6⅞" ACTUAL MINIMUM VERTICAL CLEARANCE

RAMP IB5:
- ■ REQUIRED CLEAR ZONE: 17'-0"
  ACTUAL CLEARANCE: 8'-11"
  PROTECTION PROVIDED: MGS

RAMP B5 AND RAMP B6:
- ● 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  24'-9⅞" ACTUAL MINIMUM VERTICAL CLEARANCE
- ■■ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 14'-11"
  PROTECTION PROVIDED: MGS
- ■■■ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 20'-10"
  PROTECTION PROVIDED: MGS

BORING DATA

BORING	STATION	OFFSET
B-125-0-14	410+11.35	39.83' RT.
B-134-2-20	410+83.70	17.62' LT.
B-134-3-20	412+07.30	13.67' RT.
C-135-0-14	412+41.06	9.23' LT.
B-121-0-58	412+77.72	31.91' LT.
B-135-1-20	413+01.20	9.44' LT.
B-136-0-14	413+70.98	14.35' LT.
C-137-0-14	414+28.42	31.61' LT.
B-138-0-14	414+81.88	25.60' LT.
B-138-1-20	416+28.11	34.01' RT.
B-139-0-14	417+74.09	37.36' RT.
B-139-1-20	418+96.35	28.32' LT.
B-139-2-20	420+23.62	78.33' LT.
B-140-0-14	421+12.78	19.37' RT.
C-141-0-14	421+48.58	45.61' RT.
B-142-0-14	423+14.51	86.40' LT.
B-106-0-58	423+17.89	38.08' RT.
B-141-1-20	423+20.13	12.97' LT.
B-142-1-20	424+27.86	27.02' RT.
B-142-2-20	424+92.22	29.13' RT.
B-142-3-20	426+81.27	38.58' RT.
B-080-0-14	428+75.50	92.86' RT.
C-143-0-14	428+80.03	58.56' LT.
B-144-0-14	430+45.80	52.20' RT.
C-145-0-14	430+69.40	40.40' LT.
C-121-0-14	431+45.98	21.86' RT.

NOTES:

1. SEE SHEET 1 / 164 FOR ADDITIONAL SITE PLAN INFORMATION.
2. FOR HORIZONTAL CURVE DATA SEE SHEET 2 / 164.
3. ROADSIDE PROTECTION WILL BE PROVIDED AS NOTED.

SITE PLAN - (3 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 3 | TOTAL 164
SHEET 1445 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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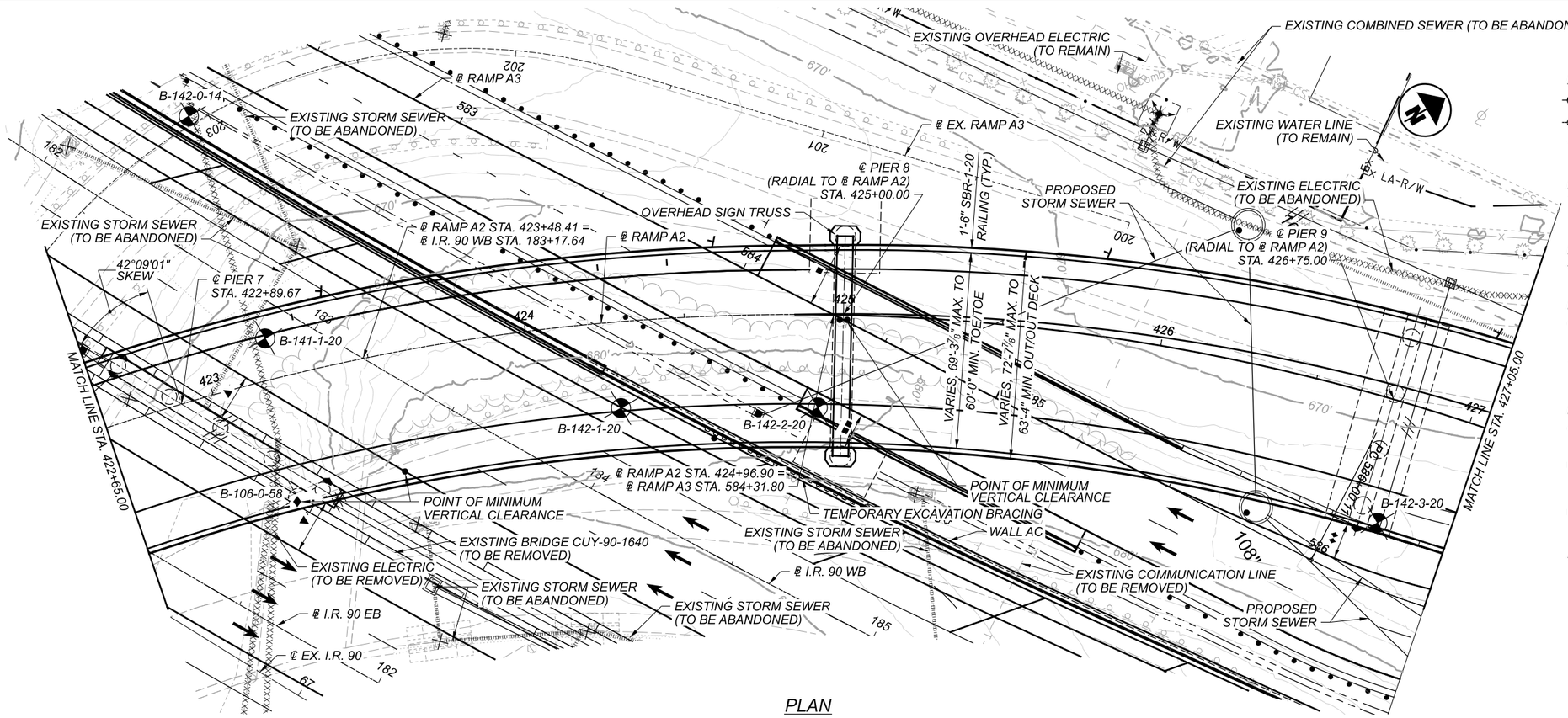
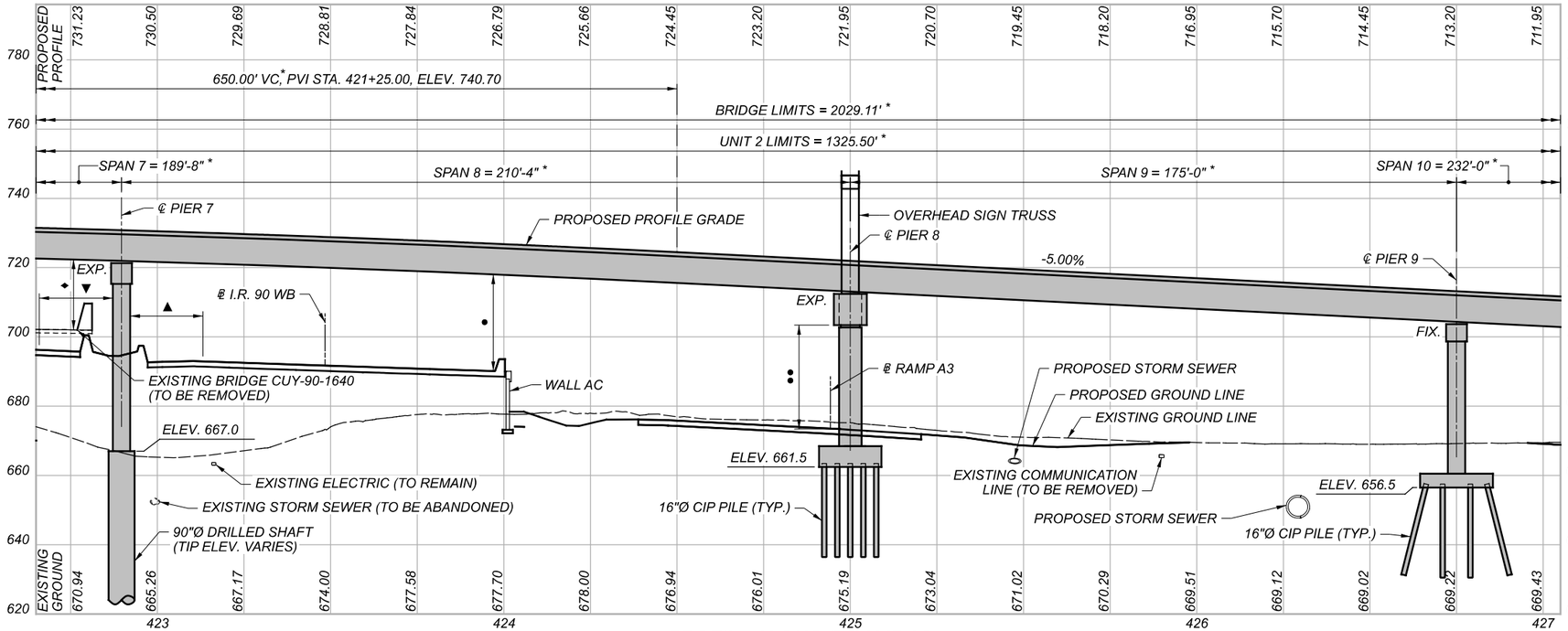


PLAN



PROFILE ALONG ℄ RAMP A2

LEGEND

- BORING LOCATION
- HISTORIC BORING LOCATION
- * MEASURED ALONG ℄ RAMP A2

PROPOSED I-90 EB:
- ▼ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 17'-1"
  PROTECTION PROVIDED: MEDIAN BARRIER

EXISTING I-90 WB:
- ♦ 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  16'-9⅜" ACTUAL MINIMUM VERTICAL CLEARANCE

PROPOSED I-90 WB:
- ● 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  23'-8" ACTUAL MINIMUM VERTICAL CLEARANCE
- ▲ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 14'-6"
  PROTECTION PROVIDED: MEDIAN BARRIER

RAMP A3:
- ●● 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  28'-3⅜" ACTUAL MINIMUM VERTICAL CLEARANCE
- ■ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 20'-4"
  PROTECTION PROVIDED: MOMENT SLAB & BARRIER
- ■■ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 11'-2"
  PROTECTION PROVIDED: MOMENT SLAB & BARRIER
- ♦♦ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 11'-7"
  PROTECTION PROVIDED: TYPE D BARRIER

NOTES:

1. SEE SHEET 1 / 164 FOR ADDITIONAL SITE PLAN INFORMATION.
2. FOR HORIZONTAL CURVE DATA SEE SHEET 2 / 164.
3. FOR BORING INFORMATION SEE SHEET 3 / 164.
4. ROADSIDE PROTECTION WILL BE PROVIDED AS NOTED.

SITE PLAN - (4 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	NJH
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	4
TOTAL	164
SHEET	1446
TOTAL	2338

CUY-90-16.28 (CCG3A)
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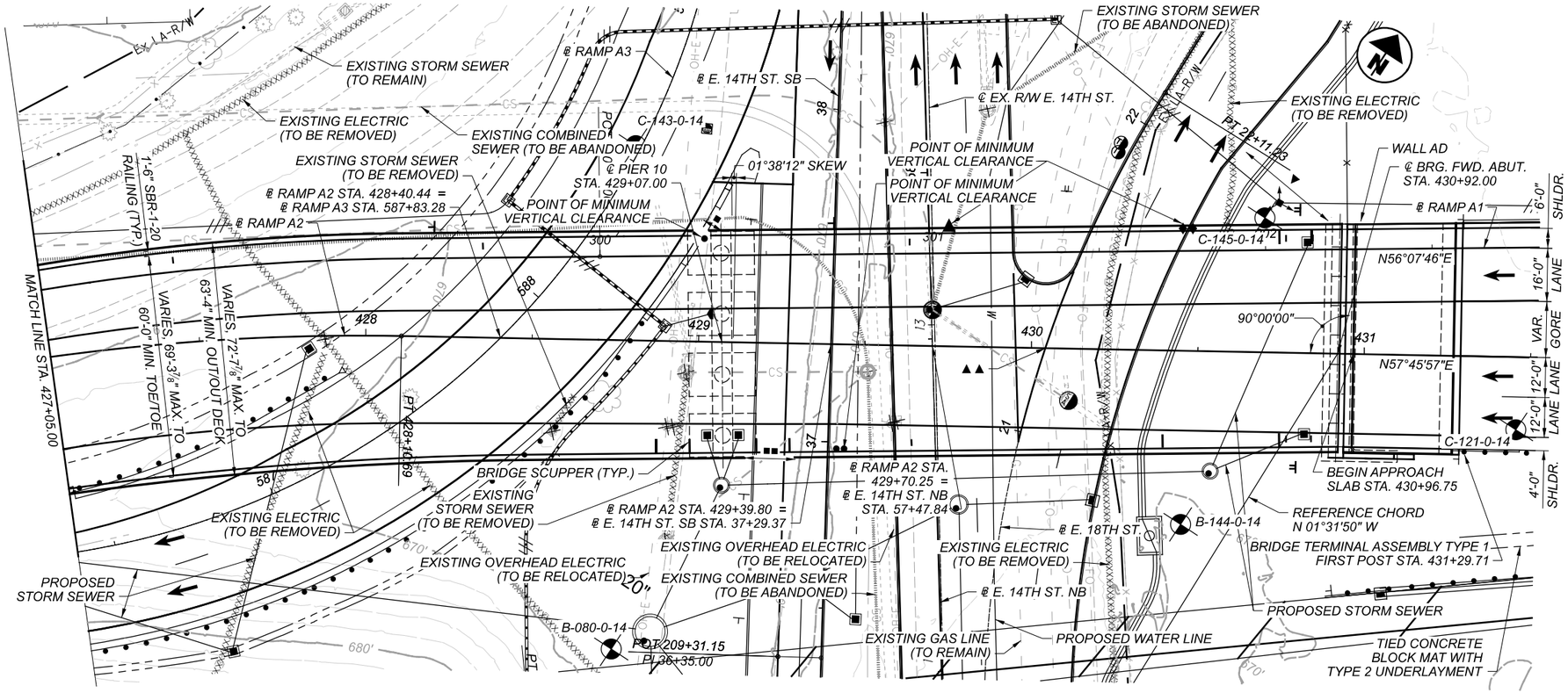
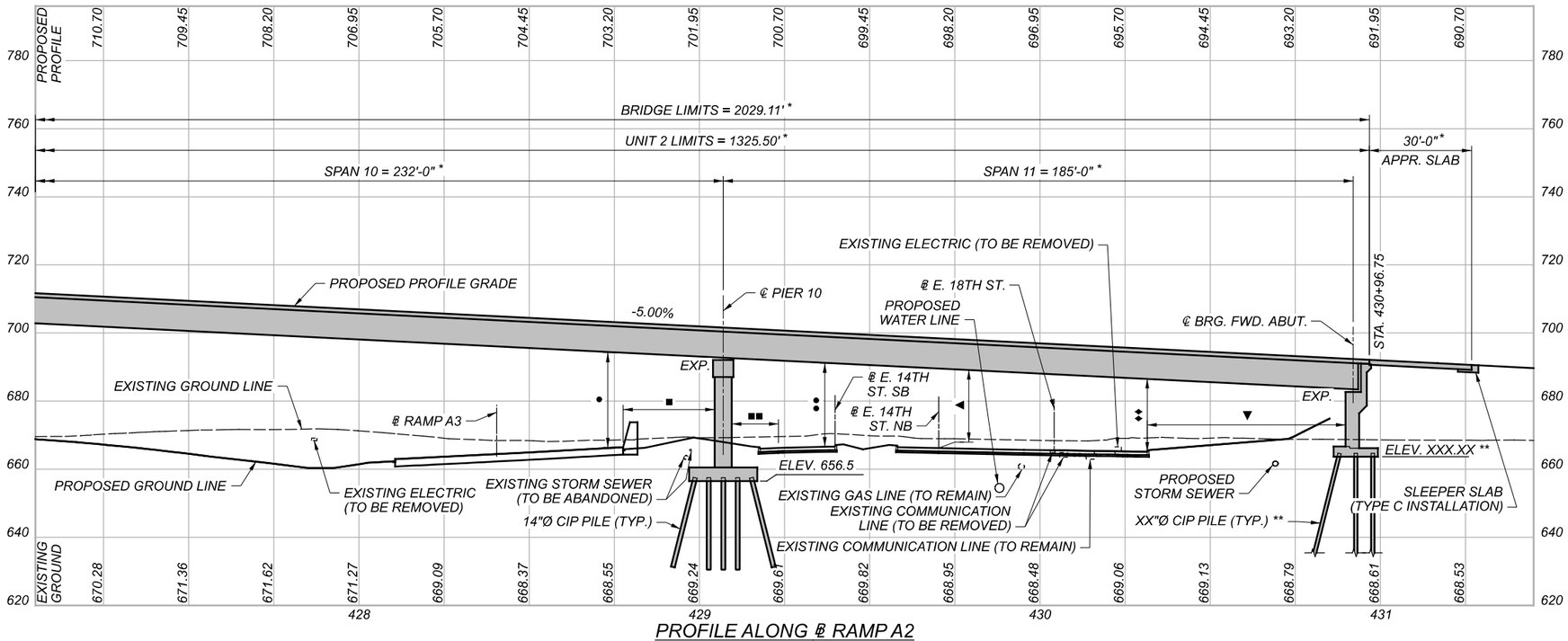


PLAN



PROFILE ALONG ℄ RAMP A2

LEGEND

- BORING LOCATION
- * MEASURED ALONG ℄ RAMP A2
- ▲▲ ℄ RAMP A2 STA. 430+04.17 = ℄ E. 18TH ST. STA. 21+26.18

RAMP A3:
- ● 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  27'-1⅜" ACTUAL MINIMUM VERTICAL CLEARANCE
- ■ REQUIRED CLEAR ZONE: 15'-0"
  ACTUAL CLEARANCE: 6'-6"
  PROTECTION PROVIDED: TYPE D BARRIER

E. 14TH ST. SB:
- ●● 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  24'-10⅛" ACTUAL MINIMUM VERTICAL CLEARANCE
- ■■ REQUIRED CLEAR ZONE: 4'-0"
  ACTUAL CLEARANCE: 6'-4"
  PROTECTION PROVIDED: NO

E. 14TH ST. NB:
- ▲ 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  22'-11⅛" ACTUAL MINIMUM VERTICAL CLEARANCE

E. 18TH ST.:
- ♦♦ 16'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
  21'-1⅞" ACTUAL MINIMUM VERTICAL CLEARANCE
- ▼ REQUIRED CLEAR ZONE: 15'-0"
  ACTUAL CLEARANCE: 32'-2"
  PROTECTION PROVIDED: NO

LEGEND

** WILL BE FINALIZED FOR STAGE 3

NOTES:

1. SEE SHEET 1 / 164 FOR ADDITIONAL SITE PLAN INFORMATION.
2. FOR HORIZONTAL CURVE DATA SEE SHEET 2 / 164.
3. FOR BORING INFORMATION SEE SHEET 3 / 164.
4. ROADSIDE PROTECTION WILL BE PROVIDED AS NOTED.

SITE PLAN - (5 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	NJH
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	5
TOTAL	164
SHEET	1447
TOTAL	2338

CUY-90-16.28 (CCG3A)

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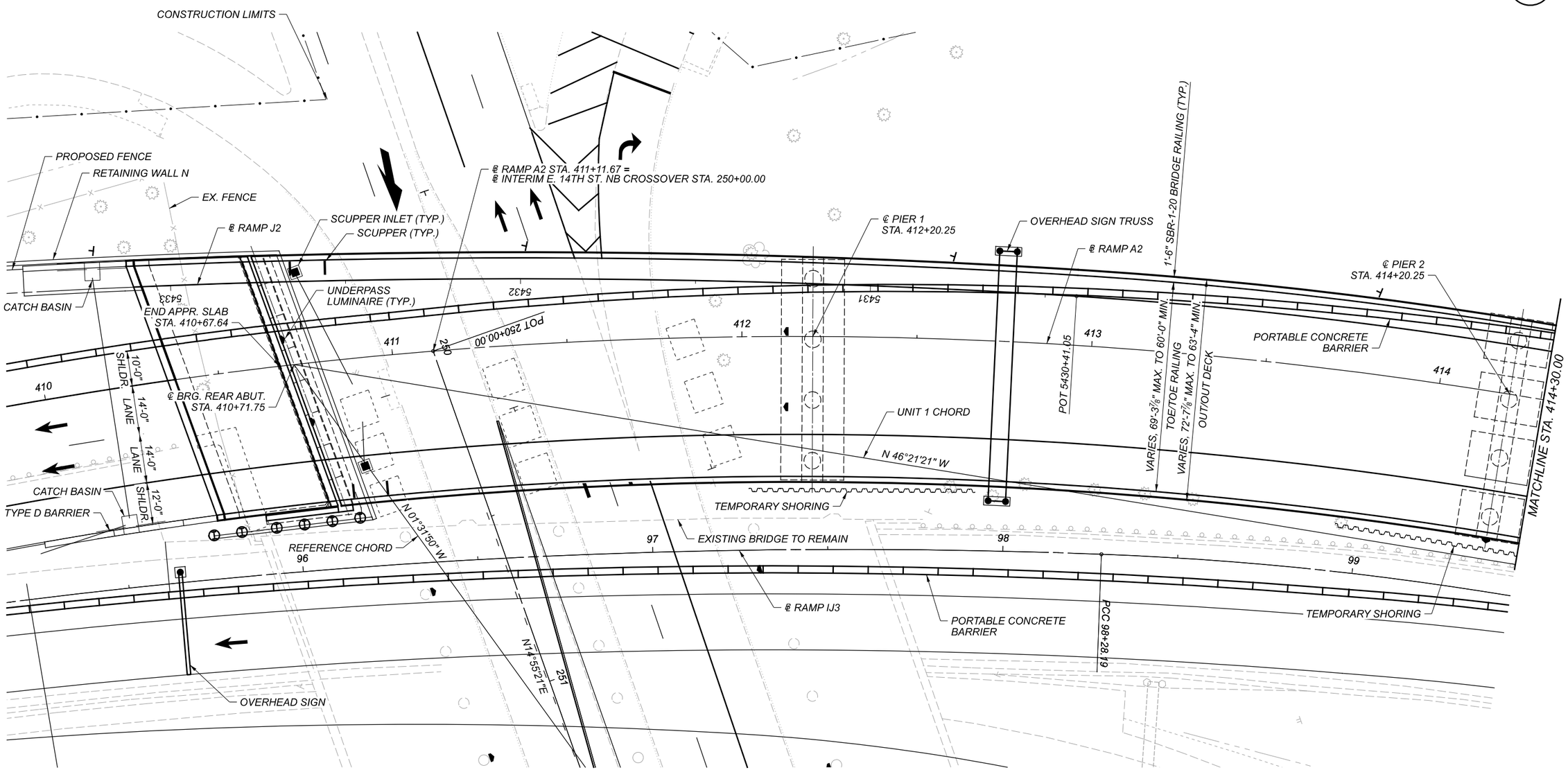

GENERAL PLAN

NOTES:

1. FOR GEOMETRY FROM REFERENCE AND UNIT CHORDS, SEE GEOMETRIC LAYOUT ON SHEET 16 / 164 .
2. FOR VERTICAL CURVE DATA, SEE SITE PLAN ON SHEETS 1 / 164 THRU 5 / 164 .

GENERAL PLAN - (1 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	6
TOTAL	164
SHEET	1448
TOTAL	2338

CUY-90-16.28 (CCG3A)

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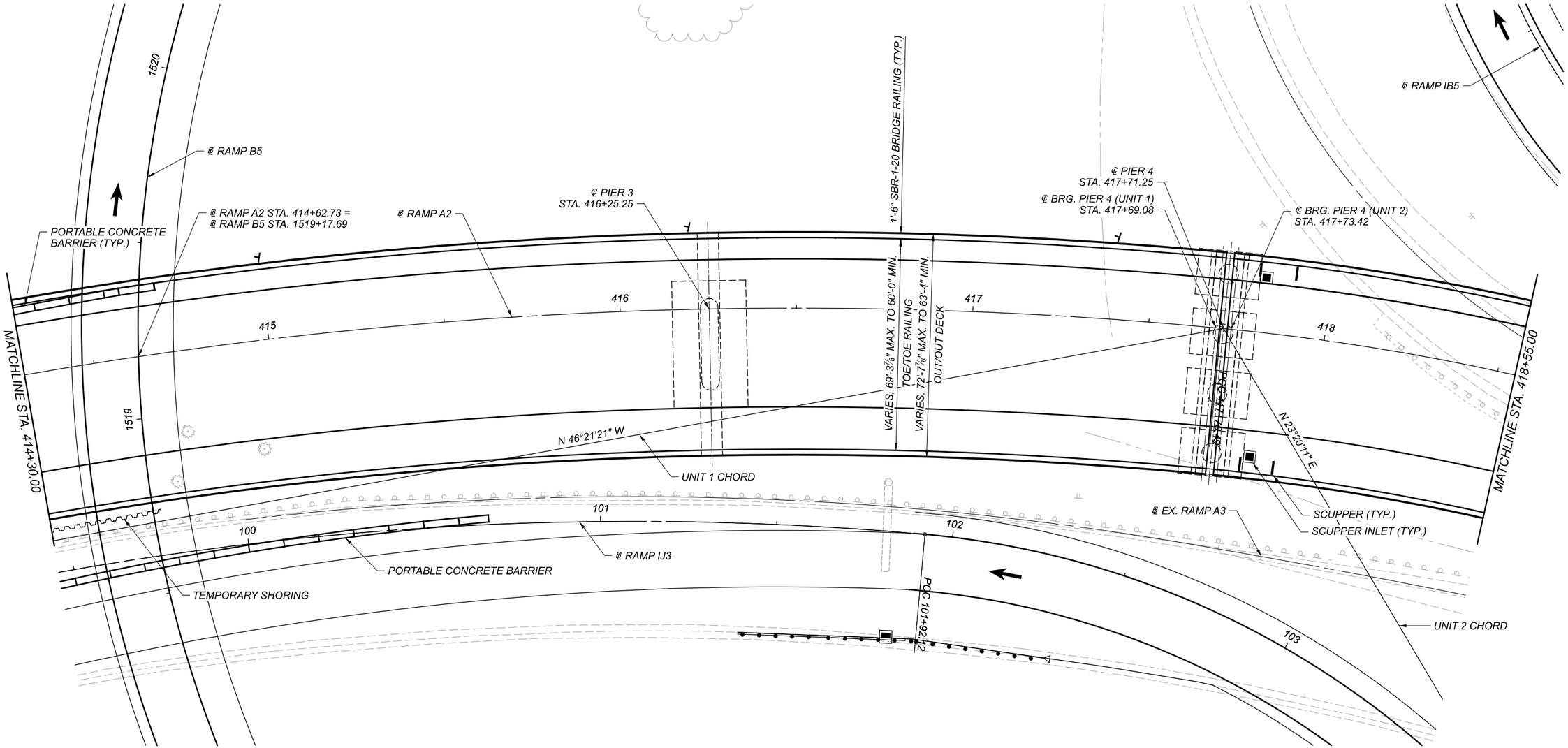

GENERAL PLAN

NOTES:

1. FOR GEOMETRY FROM REFERENCE AND UNIT CHORDS, SEE GEOMETRIC LAYOUT ON SHEET 16 / 164 .
2. FOR VERTICAL CURVE DATA, SEE SITE PLAN ON SHEETS 1 / 164 THRU 5 / 164 .

GENERAL PLAN - (2 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	7
TOTAL	164
SHEET	1449
TOTAL	2338

CUY-90-16.28 (CCG3A)

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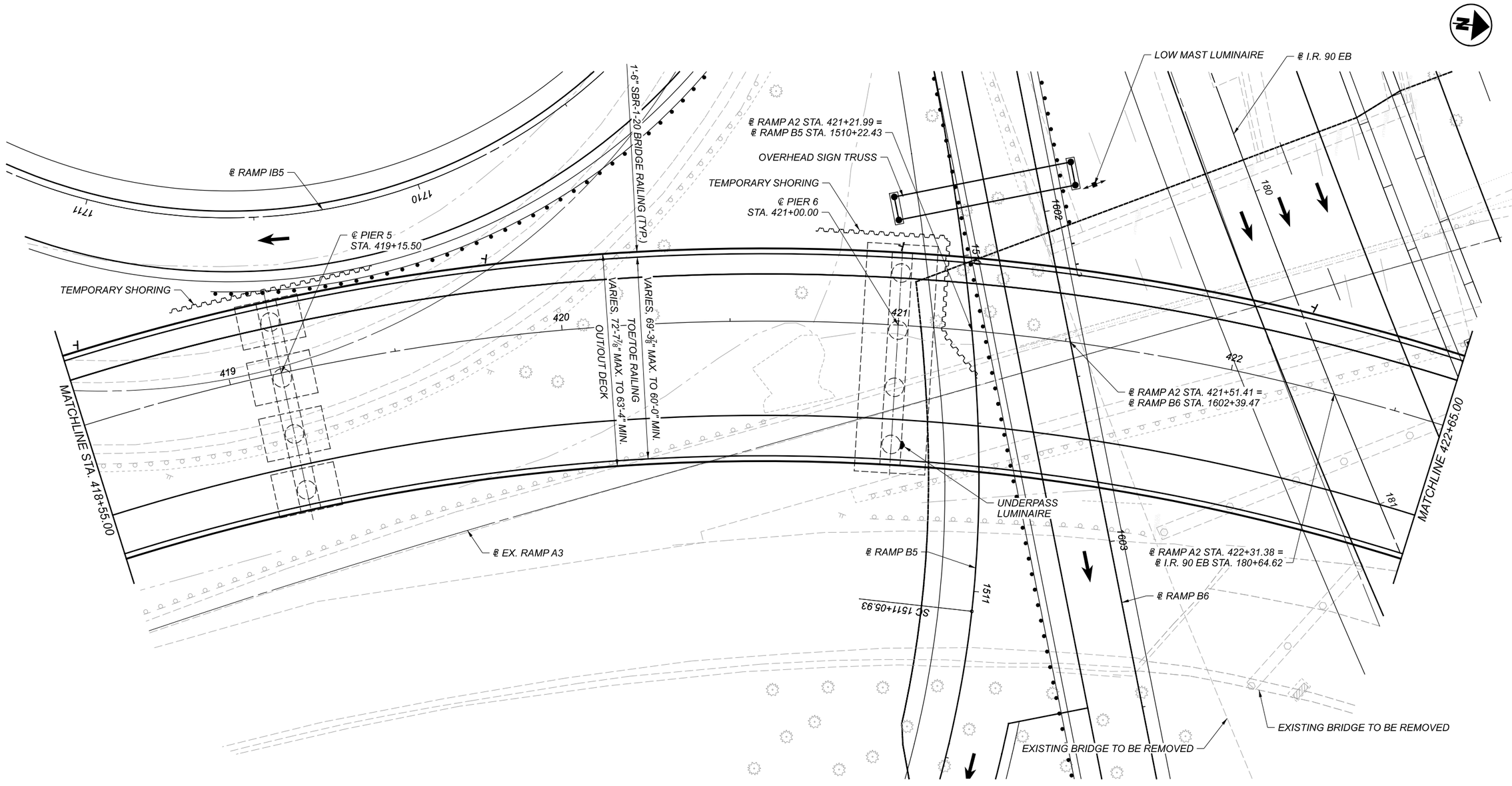

GENERAL PLAN

NOTES:

1. FOR GEOMETRY FROM REFERENCE AND UNIT CHORDS, SEE GEOMETRIC LAYOUT ON SHEET 16 / 164 .
2. FOR VERTICAL CURVE DATA, SEE SITE PLAN ON SHEETS 1 / 164 THRU 5 / 164 .

GENERAL PLAN - (3 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER BTA
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 8 | TOTAL 164
SHEET 1450 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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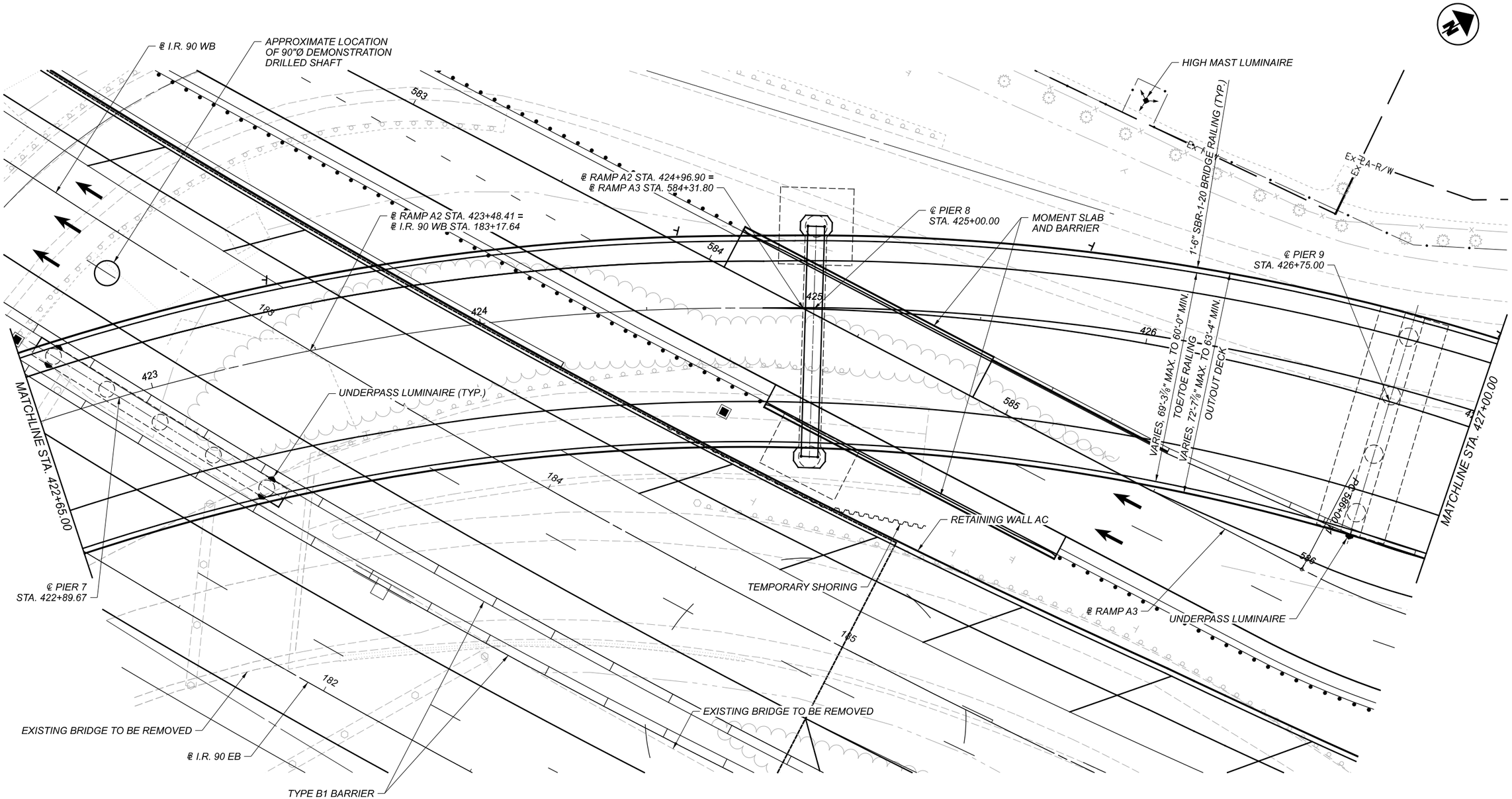

GENERAL PLAN

NOTES:

1. FOR GEOMETRY FROM REFERENCE AND UNIT CHORDS, SEE GEOMETRIC LAYOUT ON SHEET 16 / 164 .
2. FOR VERTICAL CURVE DATA, SEE SITE PLAN ON SHEETS 1 / 164 THRU 5 / 164 .

GENERAL PLAN - (4 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	9
TOTAL	164
SHEET	1451
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:00:19 PM USER: CRICCARDI
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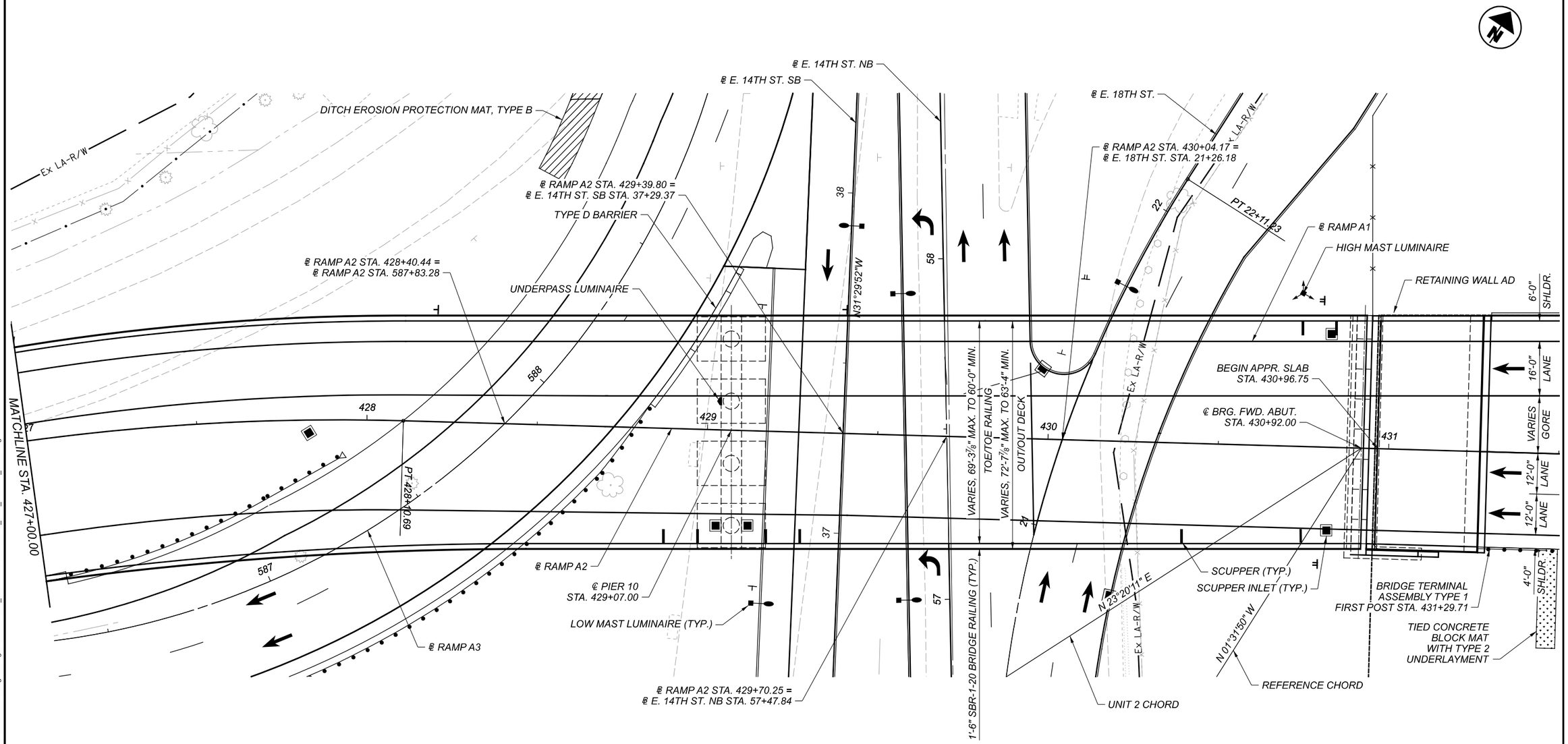

GENERAL PLAN

NOTES:

1. FOR GEOMETRY FROM REFERENCE AND UNIT CHORDS, SEE GEOMETRIC LAYOUT ON SHEET 16 / 164 .
2. FOR VERTICAL CURVE DATA, SEE SITE PLAN ON SHEETS 1 / 164 THRU 5 / 164 .

GENERAL PLAN - (5 OF 5)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	10
TOTAL	164
SHEET	1452
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:00:34 PM USER: CRICCARDI
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	07-17-15
AS-2-15	REVISED	01-18-19
SBR-1-20	REVISED	07-17-20

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	DATED	05-02-2022
840	DATED	04-15-2022
869	DATED	10-17-2014
894	DATED	04-16-2021

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

SPECIAL DESIGN SPECIFICATIONS:

THIS BRIDGE REQUIRED THE USE OF A THREE DIMENSIONAL FINITE ELEMENT MODEL TO ANALYZE THE STRUCTURE, IN WHICH ALL STRUCTURAL COMPONENTS ARE EXPLICITLY MODELED (GIRDERS, DECK, AND ALL CROSSFRAME MEMBERS). THE COMPUTER PROGRAM USED FOR THE STRUCTURAL ANALYSIS WAS LARSA 4D (VERSION 8.00.R9021). THE BRIDGE COMPONENT FORCES WERE DETERMINED BY THIS METHOD AND THE LOAD DISTRIBUTION WAS DETERMINED AS FOLLOWS:

DEAD LOAD DISTRIBUTION: STRUCTURAL STEEL SELF-WEIGHT INCLUDES A 5% INCREASE OF STEEL DENSITY TO ACCOUNT FOR MISCELLANEOUS STEEL DETAILS. THE WEIGHT OF THE CONCRETE DECK SLAB IS PLACED AS A UNIFORMLY DISTRIBUTED LOAD, AND IS DETERMINED BY TRIBUTARY WIDTH TO EACH GIRDER. THE WEIGHT OF THE CONCRETE HAUNCH IS PLACED AS A UNIFORMLY DISTRIBUTED LOAD ALONG EACH GIRDER. EDGE BARRIER LOADS WERE PLACED AS UNIFORM SURFACE LOAD TO THE OVERHANG DECK PLATES, AND THE FUTURE WEARING SURFACE LOAD OF 60 PSF WAS PLACED ON THE CONCRETE DECK AS A UNIFORM SURFACE LOAD IN THE THREE DIMENSIONAL FINITE ELEMENT MODEL.

LIVE LOAD DISTRIBUTION: A LIVE LOAD INFLUENCE SURFACE, IN CONJUNCTION WITH THE THREE DIMENSIONAL FINITE ELEMENT MODEL, WAS USED FOR LIVE LOAD ANALYSIS. INFLUENCE ORDINATES ARE DETERMINED WITHIN THE FINITE ELEMENT PROGRAM BY APPLYING A VERTICAL UNIT LOAD AT LONGITUDINAL AND TRANSVERSE POSITIONS AT DEFINED INCREMENTS ON THE CONCRETE DECK. LIVE LOADS ARE THEN PLACED ON THE INFLUENCE SURFACE AT CRITICAL LOCATIONS TO DETERMINE THE MAXIMUM/MINIMUM STRUCTURAL COMPONENT FORCE EFFECT BASED ON THE LONGITUDINAL AND TRANSVERSE STIFFNESS. THE LIVE LOAD DISTRIBUTION FACTORS VARY ALONG THE WIDTH AND LENGTH OF THE STRUCTURE.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

REDUNDANCY:

THE FOLLOWING ITEMS WERE CONSIDERED NON-REDUNDANT FOR DESIGN AND INCLUDED A LOAD MODIFIER EQUAL TO 1.05 IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.4: PIER 8 CAP AND COLUMNS

DESIGN LOADING:

HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

DESIGN STRESSES:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
CONCRETE CLASS QC4 - COMPRESSIVE STRENGTH 4.0 KSI (MASS CONCRETE)
CONCRETE CLASS QC5, WITH 3/8-IN. MAX. AGGREGATE SIZE: COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFT) AT PIER 3
CONCRETE CLASS QC4, WITH 3/8-IN. MAX. AGGREGATE SIZE: COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFT) AT PIER 7
REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI
GFRP - C&MS 705.28 (MODULUS = 8700 KSI)
STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

DESIGN STRESSES (CONT.):

CAST-IN PLACE STEEL PIPE PILES - ASTM A252, STEEL PIPE GRADE 2
MINIMUM YIELD STRENGTH 35 KSI

	LOCATION	SIZE	WALL THICKNESS
REAR ABUTMENT	12 IN.	0.375 IN.	
PIER 1	14 IN.	0.500 IN.	
PIER 2	14 IN.	0.500 IN.	
PIER 4	14 IN.	0.375 IN.	
PIER 5	14 IN.	0.375 IN.	
PIER 6	16 IN.	0.500 IN.	
PIER 8	16 IN.	0.500 IN.	
PIER 9	16 IN.	0.500 IN.	
PIER 10	14 IN.	0.500 IN.	
FORWARD ABUTMENT	XX IN.	0.XXX IN.	

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

PILE DRIVING CONSTRAINTS:

PRIOR TO DRIVING ABUTMENT PILES TO THE ULTIMATE BEARING VALUE (UBV), CONSTRUCT THE MSE WALL AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENT UP TO THE BOTTOM OF THE FOOTING FOR A MINIMUM DISTANCE OF 200 FEET BEHIND THE REAR ABUTMENT. THE CONTRACTOR MAY PRE-DRIVE ABUTMENT PILES BEFORE CONSTRUCTING MSE WALLS. PRE-DRIVING CONSISTS OF INSTALLING THE ABUTMENT PILES INTO THE SOIL ONLY AS FAR AS NECESSARY SO THAT THE PILE WILL REMAIN VERTICAL DURING MSE WALL CONSTRUCTION. IF PRE-DRIVING PILES, INSTALL PILE SLEEVES AROUND PILES BEFORE CONSTRUCTING THE MSE WALL. PROVIDE AT LEAST 3-FT OF PILE ABOVE THE TOP OF THE PILE SLEEVE TO MEET THE REQUIREMENTS OF C&MS 507.09 REGARDING SPLICES. DO NOT DRIVE ABUTMENT PILES TO THE UBV UNTIL AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND A (___) CALENDAR DAY WAITING PERIOD HAS ELAPSED. THE ENGINEER MAY ADJUST THE LENGTH OF THE WAITING PERIOD BASED ON SETTLEMENT PLATFORM READINGS. AFTER THE SPECIFIED WAITING PERIOD HAS ELAPSED, DRIVE ABUTMENT PILES TO THE UBV. IN ORDER TO REMOVE ANY NEGATIVE SKIN FRICTION THAT HAS DEVELOPED DURING THE WAITING PERIOD, DRIVE EACH ABUTMENT PILE A DISTANCE OF AT LEAST 0.5-IN.

IF NOT PRE-DRIVING ABUTMENT PILES, INSTALL THE ABUTMENT PILES THROUGH PILE SLEEVES AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND THE SPECIFIED WAITING PERIOD HAS ELAPSED.

ITEM 203 EMBANKMENT, AS PER PLAN:

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STATIONS 409+67.00 TO 431+97.00.

PROPRIETARY RETAINING WALL DATA:

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH SS840 TO SUPPORT THE ABUTMENT. THE DESIGN FOR INTERNAL STABILITY SHALL INCLUDE A NOMINAL (I.E. UNFACTORED) HORIZONTAL STRIP LOAD DUE TO FRICTION (FR) FROM THE SUPERSTRUCTURE OF 1.85 K/FT AT THE REAR ABUTMENT (WALL N) APPLIED PERPENDICULAR TO THE FACE OF WALL AT THE BASE OF THE CONCRETE FOOTING. THIS STRIP LOAD DOES NOT INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL. HOWEVER, THE PROPRIETARY WALL SUPPLIER SHALL INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL IN THE DESIGN CALCULATIONS.

FOUNDATION BEARING RESISTANCE:

THE REAR ABUTMENT (WALL N) REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF ___ KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF ___ KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 13.2 KIPS PER SQUARE FOOT.

FRICTION DRILLED SHAFTS:

THE MAXIMUM FACTORED LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS 1988 KIPS AT PIER 3 AND 2246 KIPS AT PIER 7. THIS LOAD IS RESISTED BY FRICTIONAL SIDE RESISTANCE ALONG THE LENGTH OF THE DRILLED SHAFT AND BY TIP RESISTANCE. AT PIER 3, THE FACTORED SIDE RESISTANCE IS 1657.1 KIPS, ASSUMED TO ACT ALONG THE BOTTOM ___ FEET OF THE DRILLED SHAFT, AND THE FACTORED TIP RESISTANCE IS 381.8 KIPS. AT PIER 7, THE FACTORED SIDE RESISTANCE IS 1828.6 KIPS, ASSUMED TO ACT ALONG THE BOTTOM ___ FEET OF THE DRILLED SHAFT, AND THE FACTORED TIP RESISTANCE IS 196.4 KIPS.

LATERALLY LOADED DRILLED SHAFTS:

THE MAXIMUM FACTORED LATERAL LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT AT PIER 3 IS 58.5 KIPS. THIS LOAD PRODUCES A MAXIMUM FACTORED BENDING MOMENT OF 934 KIP-FEET, AND A MAXIMUM FACTORED SHEAR OF 58.5 KIPS, WITHIN THE DRILLED SHAFT.

THE MAXIMUM FACTORED LATERAL LOAD AND BENDING MOMENT TO BE SUPPORTED BY EACH DRILLED SHAFT AT PIER 7 ARE 94.1 KIPS AND 3624 KIP-FEET, RESPECTIVELY. THESE LOADS PRODUCE A MAXIMUM FACTORED BENDING MOMENT OF 5342 KIP-FEET, AND A MAXIMUM FACTORED SHEAR OF 141 KIPS, WITHIN THE DRILLED SHAFT.

ITEM 524 - DRILLED SHAFTS, MISC.: DEMONSTRATION SHAFT

PART 1: DESCRIPTION

THIS WORK CONSISTS OF ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS TO CONSTRUCT A DEMONSTRATION DRILLED SHAFT FOR TESTING AND EVALUATION TO VERIFY THE PROPOSED CONSTRUCTION METHODS FOR THE PRODUCTION DRILLED SHAFTS.

COMPLETE THE INSTALLATION OF THE DEMONSTRATION DRILLED SHAFT WITHIN (___) DAYS OF CONTRACT AWARD DATE. THE DEPARTMENT WILL CONSIDER THE DEMONSTRATION DRILLED SHAFT INSTALLATION COMPLETE AFTER RECEIVING WRITTEN ACCEPTANCE FROM THE ENGINEER.

PART 2: MATERIALS

THE DEMONSTRATION DRILLED SHAFT SHALL USE THE SAME CONCRETE MIX DESIGN AND STEEL REINFORCEMENT AS THE PRODUCTION DRILLED SHAFTS.

PART 3: EXECUTION

SUBMIT A DRILLED SHAFT INSTALLATION PLAN TO THE ENGINEER FOR ACCEPTANCE IN ACCORDANCE WITH THE REQUIREMENTS OF C&MS 524.03. CONSTRUCT AT LEAST ONE DEMONSTRATION DRILLED SHAFT IN THE AREA SHOWN IN THE PLANS AND IN ACCORDANCE WITH THE ACCEPTED WRITTEN INSTALLATION. UPON CONSTRUCTION OF THE DEMONSTRATION DRILLED SHAFT, AND RECEIPT OF TESTING AND EVALUATION RESULTS CONFIRMING THE DEMONSTRATION DRILLED SHAFT HAS BEEN INSTALLED IN ACCORDANCE WITH CONTRACT DOCUMENTS, THE ENGINEER WILL ISSUE A LETTER ACCEPTING THE INSTALLATION PLAN FOR THE CONSTRUCTION OF THE SUBSEQUENT PRODUCTION DRILLED SHAFTS.

IF MODIFICATION(S) TO THE INSTALLATION PLAN ARE MADE, WHETHER DUE TO THE TESTING AND EVALUATION RESULTS OR FOR OTHER REASON, THE DEPARTMENT WILL REQUIRE CONSTRUCTION OF AN ADDITIONAL DEMONSTRATION SHAFT CONSTRUCTED IN ACCORDANCE WITH THE MODIFIED INSTALLATION PLAN, AT NO ADDITIONAL COST. THE DIAMETER, LENGTH, REINFORCING, INSTALLATIONS METHODS, AND OTHER MISCELLANEOUS DETAILS OF THE DEMONSTRATION SHAFT SHALL BE THE SAME AS THE PRODUCTION DRILLED SHAFTS.

SUBMIT THE LOCATION OF THE DEMONSTRATION SHAFT TO THE ENGINEER FOR ACCEPTANCE. LOCATE THE DEMONSTRATION DRILLED SHAFT SUCH THAT NO INTERFERENCE OCCURS WITH THE FOUNDATIONS OF EXISTING OR PROPOSED STRUCTURES, THE PROPOSED MAINTENANCE OF TRAFFIC, OR EXISTING OR PROPOSED UTILITIES.

TEST THE DEMONSTRATION DRILLED SHAFT BY THERMAL INTEGRITY PROFILING (TIP) ACCORDING TO ASTM D7949, METHOD B; BY CROSSHOLE SONIC LOGGING (CSL) ACCORDING TO ASTM D6760; AND BY HIGHSTRAIN DYNAMIC TESTING ACCORDING TO ASTM D4945.

PART 4: MEASUREMENT AND PAYMENT

THE DEPARTMENT WILL MEASURE DEMONSTRATION DRILLED SHAFT BY THE NUMBER OF FEET, MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE REQUIRED BOTTOM ELEVATION OF THE SHAFT TO THE PROPOSED TOP PLAN ELEVATION.

IN ADDITION TO THE PROVISIONS OF C&MS 524.17, THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES OF DEMONSTRATION DRILLED SHAFT AFTER INSTALLATION OF THE DEMONSTRATION SHAFT AND AFTER BEING PROVIDED WITH WRITTEN TESTING AND EVALUATION RESULTS ACCEPTABLE TO THE ENGINEER.

THE CONTRACT PRICE IS FULL COMPENSATION FOR FURNISHING AND INSTALLING DRILLED SHAFTS IN ACCORDANCE WITH THE ABOVE REQUIREMENTS, INCLUDING MOBILIZATION, SITE ACCESS, AND FINAL REMOVAL OF THE SHAFT TO 36 INCHES BELOW FINAL GRADE.

THE DEPARTMENT WILL PAY FOR TESTING AND EVALUATION OF THE ACCEPTED DEMONSTRATION SHAFT SEPARATELY. THE DEPARTMENT WILL NOT PAY FOR TESTING AND EVALUATION OF ADDITIONAL DEMONSTRATION DRILLED SHAFTS. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:
ITEM 524 – DRILLED SHAFTS, MISC.: DEMONSTRATION DRILLED SHAFT

GENERAL NOTES - (1 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER BTA
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 11 | TOTAL 164
SHEET 1453 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:00:52 PM USER: CRICCARDI
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ITEM 524 - DRILLED SHAFTS, MISC.: CSL TESTING, 90" DIA. SHAFT
PERFORM INTEGRITY TESTING ON ONE (1) OF THE DRILLED SHAFTS AT PIER 7 BY CROSSHOLE SONIC LOGGING (CSL). PERFORM CSL TESTING PER ASTM D6760, "STANDARD TEST METHOD FOR INTEGRITY TESTING OF CONCRETE DEEP FOUNDATIONS BY ULTRASONIC CROSSHOLE TESTING," AND PER THE PROJECT SPECIAL PROVISIONS.

ITEM 894 - THERMAL INTEGRITY PROFILER (T.I.P.) TEST:
PERFORM INTEGRITY TESTING ON ONE (1) OF THE DRILLED SHAFTS AT PIER 3 AND ONE (1) OF THE DRILLED SHAFTS AT PIER 7 BY THERMAL INTEGRITY PROFILING (TIP). PERFORM TIP TESTING PER ASTM D7949, "STANDARD TEST METHODS FOR THERMAL INTEGRITY PROFILING OF CONCRETE DEEP FOUNDATIONS," METHOD B, AND PER SUPPLEMENTAL SPECIFICATION 894.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):
REAR ABUTMENT PILES:
THE ULTIMATE BEARING VALUE IS 310 KIPS PER PILE
12-IN DIAMETER PILES 110 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 1 PILES:
THE ULTIMATE BEARING VALUE IS 351 KIPS PER PILE
14-IN DIAMETER PILES 90 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 2 PILES:
THE ULTIMATE BEARING VALUE IS 376 KIPS PER PILE
14-IN DIAMETER PILES 60 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 4 PILES:
THE ULTIMATE BEARING VALUE IS 259 KIPS PER PILE
14-IN DIAMETER PILES 45 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 5 PILES:
THE ULTIMATE BEARING VALUE IS 329 KIPS PER PILE
14-IN DIAMETER PILES 70 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 6 PILES:
THE ULTIMATE BEARING VALUE IS 412 KIPS PER PILE
16-IN DIAMETER PILES 65 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 8 PILES:
THE ULTIMATE BEARING VALUE IS 409 KIPS PER PILE
16-IN DIAMETER PILES 95 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 9 PILES:
THE ULTIMATE BEARING VALUE IS 415 KIPS PER PILE
16-IN DIAMETER PILES 90 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 10 PILES:
THE ULTIMATE BEARING VALUE IS 400 KIPS PER PILE
14-IN DIAMETER PILES 85 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

FORWARD ABUTMENT PILES:
THE ULTIMATE BEARING VALUE IS ___ KIPS PER PILE
__-IN DIAMETER PILES ___ FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PILE DRIVING:
USE A PILE DRIVING HAMMER OF A MINIMUM RATED ENERGY OF 42,000 FOOT-POUNDS TO INSTALL THE PILES. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED ____ POUNDS PER SQUARE INCH.

ITEM SPECIAL - STRUCTURE MISC.: VIBRATION MONITORING
MONITOR GROUND VIBRATIONS CAUSED BY DRILLED SHAFT INSTALLATION AT PIER 3 TO MINIMIZE THE POTENTIAL DAMAGE TO THE EXISTING STORM SEWER.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO ESTABLISH THE ACCEPTABLE VIBRATION LIMITS AND TO PERFORM THE VIBRATION MONITORING. USE A VIBRATION SPECIALIST THAT IS AN EXPERT IN THE INTERPRETATION OF VIBRATION DATA, AND WHO MEETS ONE OF THE FOLLOWING CRITERIA: 1) IS A REGISTERED ENGINEER WITH AT LEAST TWO YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS, OR 2) HAS AT LEAST FIVE YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS. DO NOT USE A VIBRATION SPECIALIST THAT IS AN EMPLOYEE OF THE CONTRACTOR.

SUBMIT A RESUME OF THE CREDENTIALS OF THE PROPOSED VIBRATION SPECIALIST AT OR BEFORE THE PRECONSTRUCTION MEETING. INCLUDE IN THE RESUME A LIST OF CONSTRUCTION PROJECTS ON WHICH THE VIBRATION SPECIALIST WAS RESPONSIBLY IN CHARGE OF MONITORING THE VIBRATIONS. LIST A DESCRIPTION OF THE PROJECTS, WITH DETAILS OF THE VIBRATION INTERPRETATIONS MADE ON THE PROJECT. LIST THE NAMES AND TELEPHONE NUMBERS OF PROJECT OWNERS WITH SUFFICIENT KNOWLEDGE OF THE PROJECTS TO VERIFY THE SUBMITTED INFORMATION. OBTAIN THE ENGINEER'S ACCEPTANCE OF THE VIBRATION SPECIALIST BEFORE BEGINNING ANY PILE DRIVING WORK. ALLOW 30 DAYS FOR THE REVIEW OF THIS DOCUMENTATION.

USE SEISMOGRAPHS CAPABLE OF CONTINUOUSLY RECORDING THE PEAK PARTICLE VELOCITY FOR THREE MUTUALLY PERPENDICULAR COMPONENTS OF VIBRATION, AND OF PROVIDING A PERMANENT RECORD OF THE ENTIRE VIBRATION EVENT. USE A SUFFICIENT NUMBER OF SEISMOGRAPHS TO PROVIDE REDUNDANCY IN CASE ONE DEVICE SHOULD FAIL. SUBMIT A PLAN OF THE PROPOSED SEISMOGRAPH LOCATIONS TO THE ENGINEER FOR REVIEW.

THE VIBRATION SPECIALIST SHALL PERFORM THE FOLLOWING:
1. *MEASURE THE AMBIENT GROUND VIBRATIONS NEAR THE STORM SEWER BEFORE THE DRILLING OPERATION BEGINS.*
2. *ESTABLISH VIBRATION LIMITS TO MINIMIZE POTENTIAL DAMAGE TO THE STORM SEWER AND EXPLAIN WHY THEY ARE BEING USED TO THE ENGINEER BEFORE PERFORMING DRILLING OPERATIONS NEAR THE SEWER.*
3. *MONITOR GROUND VIBRATIONS DURING DRILLING OPERATIONS.*
4. *IMMEDIATELY INFORM THE CONTRACTOR AND ENGINEER IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED.*
5. *FURNISH THE DATA RECORDED AND INCLUDE THE FOLLOWING:*
   - *A. IDENTIFICATION OF SEISMOGRAPH.*
   - *B. DISTANCE AND DIRECTION OF SEISMOGRAPH FROM DRILLING OPERATIONS.*
   - *C. START TIME AND DURATION OF DRILLING OPERATIONS.*
   - *D. LIST OF SHAFTS DRILLED DURING EACH MONITORING INTERVAL.*

IMMEDIATELY SUSPEND ALL DRILLING OPERATIONS IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED. EVALUATE ALTERNATIVE CONSTRUCTION PROCEDURES TO REDUCE THE VIBRATIONS.

SUBMIT THREE COPIES OF THE FINAL REPORT WHICH CONTAINS ALL MEASUREMENTS, INTERPRETATIONS, AND RECOMMENDATIONS TO THE ENGINEER.

THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM SPECIAL - STRUCTURE MISC.: VIBRATION MONITORING. THE DEPARTMENT WILL PAY THE FINAL TWENTY PERCENT AFTER THE ENGINEER RECEIVES THE FINAL REPORT.

THE DEPARTMENT WILL PAY ACCORDING TO C&MS 109.05 FOR ALTERNATIVE CONSTRUCTION PROCEDURES THAT THE ENGINEER DETERMINES ARE NECESSARY TO REDUCE VIBRATIONS.

ITEM SPECIAL - STRUCTURE MISC.: PRECONSTRUCTION CONDITION SURVEY
BEFORE DRILLING OPERATION BEGINS AT PIER 3, CONDUCT A CONDITION SURVEY OF EXISTING STORM SEWER WITHIN 200-FT OF THE DRILLED SHAFT WORK. THE PURPOSE OF THE SURVEY IS TO DOCUMENT THE CONDITION OF THE STORM SEWER PRIOR TO DRILLING OPERATIONS, SO THAT CLAIMS OF DAMAGE CAUSED BY THE DRILLING CAN BE VERIFIED.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO PERFORM OR SUPERVISE THE CONDITION SURVEY. USE A VIBRATION SPECIALIST THAT MEETS THE QUALIFICATION REQUIREMENTS FOR VIBRATION MONITORING.

RECORD THE CONDITION OF THE STORM SEWER, USING WRITTEN TEXT, PHOTOGRAPHS, AND VIDEO RECORDINGS. RECORD THE LOCATION, SIZE, AND TYPE OF ALL CRACKS AND OTHER STRUCTURAL DEFICIENCIES.

IF OWNERS FAIL TO ALLOW ACCESS TO THE PROPERTY FOR THE PRECONSTRUCTION CONDITION SURVEY, SEND A CERTIFIED LETTER TO THE OWNER OR OCCUPANT. DOCUMENT THE NOTIFICATION EFFORT AND THE CERTIFIED LETTER IN THE REPORT.

SUBMIT THREE COPIES OF A REPORT TO THE ENGINEER THAT SUMMARIZES THE PRECONSTRUCTION CONDITION OF THE STORM SEWER, AND THAT IDENTIFIES AREAS OF CONCERN.

THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM SPECIAL STRUCTURE MISC.: PRECONSTRUCTION CONDITION SURVEY.

PILES DRIVEN TO FULL ESTIMATED LENGTH WITH PILE/SOIL SETUP:
THE ULTIMATE BEARING VALUE (UBV) FOR THE PILES IS SHOWN IN THE TABLE BELOW. PART OF THE UBV WILL BE ACHIEVED THROUGH PILE/SOIL SETUP, WHICH IS A TIME DEPENDENT INCREASE IN RESISTANCE THAT OCCURS IN SOME SOILS.

NOTIFY THE ENGINEER AT LEAST 5 DAYS BEFORE DRIVING PILES SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

DRIVE THE FIRST TWO PILES AT THE RESPECTIVE SUBSTRUCTURE LOCATIONS TO THE FULL ESTIMATED LENGTH SHOWN IN THE TABLE. PERFORM DYNAMIC LOAD TESTING ON BOTH PILES WHILE DRIVING. AFTER DRIVING AND TESTING THE FIRST TWO PILES, DRIVE THE REMAINING PILES IN THE SUBSTRUCTURE TO THE SAME DEPTH AS THE FIRST TWO PILES. AFTER DRIVING ALL PILES TO THE ESTIMATED LENGTH, CEASE ALL DRIVING OPERATIONS AT THE SUBSTRUCTURE FOR A PERIOD THE PERIOD OF DAYS SHOWN BELOW. INCLUDE THE WAITING PERIOD AS A SEPARATE ACTIVITY IN THE PROGRESS SCHEDULE. AFTER THE WAITING PERIOD, PERFORM PILE RESTRIKES ON BOTH OF THE FIRST TWO PILES (ONE RESTRIKE ITEM).

SUBMIT ALL TEST RESULTS TO THE ENGINEER. IF THE RESTRIKE TEST RESULTS INDICATE THAT BOTH PILES ACHIEVED THE REQUIRED UBV, ALL PILES IN THE SUBSTRUCTURE MAY BE ACCEPTED BY THE ENGINEER.

IF THE RESTRIKE TEST RESULTS INDICATE THAT EITHER OF THE TWO PILES DID NOT ACHIEVE THE REQUIRED UBV, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING. THE ENGINEER WILL REVIEW THE TEST RESULTS AND ESTABLISH ADDITIONAL RESTRIKE TESTING OR DRIVING CRITERIA FOR THE PILING IN THE SUBSTRUCTURE WITH THE ASSISTANCE OF THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

IF DIRECTED BY THE ENGINEER, PERFORM ADDITIONAL RESTRIKE TESTING OR DRIVE ALL PILES IN THE SUBSTRUCTURE TO THE ESTABLISHED DRIVING CRITERIA. THE DEPARTMENT WILL PAY FOR SPLICING OF THE PILES BEYOND THE ESTIMATED LENGTH PROVIDED IN THE PLANS UNDER C&MS 109.05 WITH A NEGOTIATED PRICE PER SPLICE.

THIS PLAN NOTE INCLUDES A QUANTITY OF ONE EACH ITEM 523 DYNAMIC LOAD TESTING, AS PER PLAN AND A QUANTITY OF ONE EACH ITEM 523 RESTRIKE, AS PER PLAN PER EACH SUBSTRUCTURE UNIT.

SUBSTRUCTURE LOC.	*UBV*	*EST. LENGTH*	*WAITING PERIOD*
REAR ABUTMENT	*310 KIPS*	*105 FEET*	
PIER 1	*351 KIPS*	*85 FEET*	
PIER 2	*376 KIPS*	*55 FEET*	
PIER 4	*259 KIPS*	*40 FEET*	
PIER 5	*329 KIPS*	*65 FEET*	
PIER 6	*412 KIPS*	*60 FEET*	
PIER 8	*409 KIPS*	*90 FEET*	
PIER 9	*415 KIPS*	*85 FEET*	
PIER 10	*400 KIPS*	*80 FEET*	
FWD. ABUTMENT	*XXX KIPS*	*XX FEET*	

GENERAL NOTES - (2 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
HDR
DESIGNER TJE | CHECKER BTA
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 12 | TOTAL 164
SHEET 1454 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:00:58 PM USER: CRICCARDI
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ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN:
THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN.

ITEM 524 - DRILLED SHAFTS, 90" DIAMETER, ABOVE BEDROCK, AS PER PLAN:
INSTALLATION OF DRILLED SHAFTS AT PIER 7 WILL REQUIRE CORING THROUGH EXISTING PILE FOUNDATIONS. SPECIALIZED EQUIPMENT, MATERIAL, AND ALL NECESSARY LABOR TO PERFORM THIS WORK WILL BE CONSIDERED INCIDENTAL AND INCLUDED WITH PAY ITEM 524 - DRILLED SHAFTS, 90" DIAMETER, ABOVE BEDROCK, AS PER PLAN. REFER TO FOUNDATION PLANS FOR LOCATIONS OF ANTICPATED CONFLICT LOCATIONS.

ITEM 516 SPECIAL - MODULAR EXPANSION JOINT:
THE REAR ABUTMENT JOINT SHALL BE A DS BROWN D-240 OR APPROVED ALTERNATE, THE THE PIER 4 JOINT SHALL BE A DS BROWN D-560 OR APPROVED ALTERNATE, AND THE FORWARD ABUTMENT JOINT SHALL BE A DS BROWN D-400 OR APPROVED ALTERNATE.

THE MANUFACTURER SHALL SUBMIT DESIGN CALCULATIONS SHOWING THAT THE DEVICE CAN MEET THE IMPACT AND FATIGUE DESIGN REQUIREMENTS SET FORTH BY THE CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

A. DESCRIPTION
FURNISH ALL MATERIALS, SERVICES, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO DESIGN, FABRICATE, INSPECT, TEST AND INSTALL MODULAR EXPANSION JOINTS IN ACCORDANCE WITH THE PLANS AND THESE NOTES. ALL REQUIREMENTS OF 513 & 516 APPLY, UNLESS MODIFIED BY THESE NOTES.

EACH MODULAR EXPANSION JOINT SYSTEM SHALL ACCOMMODATE THE MOVEMENTS AND ROTATIONS AS INDICATED.

B. DESIGN
1. PREPARE AND CHECK THE DESIGN UNDER THE AUTHORITY OF AN OHIO REGISTERED PROFESSIONAL ENGINEER. THE REGISTERED ENGINEER SHALL SEAL, SIGN AND DATE THE DESIGN CALCULATIONS AND SHOP DRAWINGS.
2. INCLUDE DESIGN CALCULATIONS WITH THE CONTRACTOR'S SUBMISSION OF SHOP DRAWINGS PER 513.06.
3. PROVIDE A DETAILED INSTALLATION PROCEDURE AND INCLUDE ANY SPECIFIC MANUFACTURER'S NOTES NECESSARY FOR COMPLETION OF THE WORK.
4. DESIGN AND TEST THE MODULAR JOINT COMPONENTS, JOINT ARMOR AND ANCHORAGES ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS.
5. DESIGN TEMPORARY AND FIELD CONNECTIONS TO THE BRIDGE TO ACCOMMODATE ADJUSTMENTS FOR ROADWAY GEOMETRY AND VARYING TEMPERATURE.
6. DESIGN FOR THE PLAN SPECIFIED THERMAL MOVEMENT PER AASHTO LRFD 3.12.2 FOR A COLD CLIMATE (TEMPERATURE RANGE IS FROM -30°F TO +120°F WITH A BASE TEMPERATURE SET TO 60°F).
7. SUPPLY SUPPORT BAR BEARINGS TO TRANSFER THE LOAD FROM THE SUPPORT BARS TO THE JOINT ARMOR.
8. FOR DESIGN OF THE DECK JOINT AT ALL LIMIT STATES, THE DYNAMIC LOAD ALLOWANCE (IM) SHALL BE TAKEN AS 125% OF THE STATIC EFFECT OF EITHER THE DESIGN TRUCK OR THE DESIGN TANDEM.
9. SUPPLY EQUALIZATION SPRINGS TO COUNTER THE COMPRESSION FORCES FROM THE SEALING ELEMENTS AND MAINTAIN EQUAL EXPANSION PROPERTIES FOR EACH SEALING ELEMENT ACROSS THE JOINT.
10. SUPPLY CONTROL SPRINGS WHICH WORK LONGITUDINALLY TO MAINTAIN EQUIDISTANT SPACING BETWEEN TRANSVERSE SEPARATION BEAMS.
11. SUPPLY SEPARATION BEAMS / TRANSVERSE DIVIDERS / CENTER BEAMS TO LIMIT TOTAL HORIZONTAL MOVEMENT IN ANY INDIVIDUAL STRIP SEAL.
12. SUPPLY A STRIP SEAL TYPE SEAL CONNECTED TO MATCHING RETAINERS CONNECTED TO THE JOINT ARMOR AND THE SEPARATION BEAMS. DO NOT EXCEED 3.15 INCHES OF TOTAL HORIZONTAL MOVEMENT IN ANY INDIVIDUAL STRIP SEAL.
13. SUPPLY REMOVABLE AND REPLACEABLE NEOPRENE SEALS, SUPPORT BAR BEARINGS AND EQUALIZATION SPRINGS.
14. SET SEALS AND RETAINERS 1/8" LOWER THAN THE ROADWAY SURFACE.
15. DESIGN AND FABRICATE THE MODULAR JOINT AS A CONTINUOUS FULL LENGTH MEMBER WITHOUT FIELD SPLICES.

C. MATERIALS
1. SUPPLY STRUCTURAL STEEL MEETING ASTM A709 GRADE 50. SUPPLY SEPARATION BEAMS / TRANSVERSE DIVIDERS / CENTER BEAMS, EDGE BEAMS AND JOINT ARMOR MEETING CHARPY V NOTCH IMPACT REQUIREMENTS PER ASTM A709 TABLE S1.2 ZONE 2 TEMPERATURE RANGE. SUPPLY TUBE SECTIONS MEETING ASTM A501 OR A500 GRADE B.
2. SUPPLY ASTM A240, TYPE 304 STAINLESS STEEL, 13 GAGE MINIMUM THICKNESS WITH A #8 MIRROR FINISH FOR SLIDING SURFACES IN CONTACT WITH PTFE.
3. SUPPLY TESTING AND REPORTS BY THE MANUFACTURER OR AN INDEPENDENT TESTING LABORATORY FOR ALL ELASTOMERIC, PTFE URETHANE AND PREFORMED FABRIC MATERIALS USED IN ALL BEARINGS AND SPRINGS. THE SUBMISSION OF MATERIAL CERTIFICATION AND TESTING DATA SHALL BE PER 513.08. THE MODULAR BRIDGE JOINT SYSTEM SHALL BE TESTED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS APPENDIX A19.
4. SUPPLY STRIP SEALS CONFORMING TO ASTM D5973. SUBMIT CERTIFIED TEST DATA PER 513.08 FROM THE MANUFACTURER OR AN ACCREDITED LABORATORY. D5973 SECTION 8, LOT SIZE IS ONE SAMPLE PER JOINT. A SAMPLE IS A PIECE 4 FEET LONG WITH ALL MANUFACTURER'S MARKINGS. THE SEAL AND RETAINER ARE AN INTEGRAL SYSTEM SUPPLIED BY ONE MANUFACTURER.
5. SEAL RETAINERS: EXTRUDE, HOT ROLL OR MACHINE, STEEL RETAINERS INTO A SOLID SHAPE. RETAINERS MANUFACTURED FROM BENT PLATE OR BUILT UP PIECES ARE NOT ACCEPTABLE. THE INTERNAL DIMENSIONS OF THE RETAINER SHALL BE SPECIFIED BY THE MANUFACTURER TO ACHIEVE POSITIVE SEAL ANCHORAGE.
6. SEPARATION BEAMS / TRANSVERSE DIVIDERS / CENTER BEAMS SHALL BE A SOLID, MACHINED OR EXTRUDED STEEL SECTION.
7. LUBRICANT-ADHESIVE. ONE PART MOISTURE CURING POLYURETHANE COMPOUND MEETING THE REQUIREMENTS OF ASTM D4070 AND AS SPECIFIED BY THE SEAL MANUFACTURER.
8. HARDWARE SHALL BE ASTM A325 TYPE 1, GALVANIZED, OR A449 GALVANIZED.

D. FABRICATION
1. THE MODULAR JOINTS SHALL BE FABRICATED ACCORDING TO CMS 513.
2. SHOP ASSEMBLE THE MODULAR JOINT WITH ALL COMPONENTS EXCEPT, NEOPRENE SEALS, PER 513.24 EXCEPT THAT FULL ASSEMBLY IS REQUIRED WITH PHASED CONSTRUCTION.
3. JOINTS IN STRIP SEALS: NO JOINTS ARE ALLOWED.
4. JOINTS IN RETAINERS: WELDS ARE WATER TIGHT, PARTIAL PENETRATION WELDS AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. MAKE SPLICES ONLY IN COMPRESSION ZONES OF THE JOINT ARMOR. GRIND FLUSH ALL WELDS IN CONTACT WITH THE SEAL AND JOINT ARMOR. DO NOT USE SHORT PIECES OF RETAINERS LESS THAN 6'-0" LONG, UNLESS REQUIRED AT CURBS OR SIDEWALKS. DO NOT PROVIDE ADDITIONAL SPLICES IN RETAINERS AT CURB OR SIDEWALK SECTIONS OTHER THAN REQUIRED FOR GEOMETRY.
5. SHOP OR FIELD WELDS OF CENTER BEAMS, SHALL BE COMPLETE PENETRATION WELDS, GROUND TO PROVIDE A SMOOTH TRANSITION AND BE 100% ULTRASONICALLY TESTED PER AASHTO / AWS BRIDGE WELDING CODE, WITH TENSION ACCEPTANCE CRITERIA, WITNESSED BY THE DEPARTMENT.
6. SUPPORT BAR CONNECTIONS SHALL BE COMPLETE PENETRATION WELDS GROUND TO PROVIDE SMOOTH TRANSITIONS AND BE 100% ULTRASONICALLY TESTED PER AASHTO / AWS BRIDGE WELDING CODE, WITH TENSION ACCEPTANCE CRITERIA, WITNESSED BY THE DEPARTMENT.
7. TEMPORARY SUPPORTS: FABRICATOR DESIGNED AND INSTALLED SUPPORTS ARE REQUIRED TO SUPPORT SHIPPING, ERECTION AND CONSTRUCTION FORCES WITHOUT DAMAGE TO THE STEEL ARMOR OR COATINGS. THESE SUPPORTS SHALL BE ADJUSTABLE FOR FIELD TEMPERATURE SETTING. PROVIDE PROTECTIVE LAYERS BETWEEN TEMPORARY SUPPORTS AND COATED SURFACES TO PREVENT DAMAGE.

E. COATING
1. GALVANIZE OR METALLIZE ALL STEEL SURFACES AND COMPONENTS, EXCEPT AT STAINLESS STEEL AND PTFE SLIDING SURFACES. THESE COATINGS MAY BE MIXED ON ONE ASSEMBLY, IF ALL SIMILAR COMPONENTS OF THE ASSEMBLY HAVE THE SAME COATING TYPE.
2. PROVIDE A GALVANIZED COATING PER ASTM A123, WITH A MINIMUM THICKNESS OF 4 MILS. CLEAN EXCESSIVE GALVANIZING AS NECESSARY TO ACHIEVE MECHANICAL MOVEMENT AND SEAL INSTALLATION.
3. PROVIDE A METALIZED COATING PER THE SOCIETY FOR PROTECTIVE COATINGS (SSPC) SPECIFICATION SSPC-CS23.00 (MARCH 17, 2003) FOR THERMAL SPRAY METALLIC COATINGS. THE COATING SHALL BE A MINIMUM OF 8 MILS THICK. THE METALLIZING WIRE SHALL BE 100% ZINC. AREAS OF STRUCTURAL STEEL THAT ARE IN CONTACT WITH CAST-IN-PLACE CONCRETE SHALL HAVE AN ADDITIONAL COATING. THE COATING SHALL BE THE EPOXY INTERMEDIATE COAT SPECIFIED IN CMS 514. THE COATING THICKNESS WILL COVER ALL PEAKS, VALLEYS AND SURFACE ROUGHNESS ATTRIBUTED TO METALIZING.
4. COATING REPAIRS: DAMAGED COATINGS SHALL BE REPAIRED BY ASTM A780, ANNEX "A1. REPAIR USING ZINC BASED ALLOYS". THE PROCEDURE SHALL BE AS FOLLOWS: REMOVE SURFACE CONTAMINATES, PREHEAT TO 600 DEGREE F, AND APPLY ZINC COATING BY RUBBING WITH A PURE ZINC STICK OR SPRINKLING ZINC POWDER ON THE PREHEATED SURFACE, TO ACHIEVE A MINIMUM COATING THICKNESS OF 6 MILS. MAKE COATING REPAIRS OF WELDED SURFACES PRIOR TO CONCRETE PLACEMENT OPERATIONS.
5. THE METALIZED OR GALVANIZED COATINGS SHOULD NOT BE FIELD PAINTED, EXCEPT FOR AREAS DAMAGED BY CONNECTION TO PAINTED SUPERSTRUCTURE STEEL MEMBERS. THESE AREAS SHALL BE PAINTED USING THE SAME SYSTEM SPECIFIED FOR THE SUPERSTRUCTURE.
6. PRIOR TO SHIPPING, RETAINER GROOVES SHALL BE PROTECTED FROM CONSTRUCTION DEBRIS BY THE INSTALLATION OF BACKER RODS OR OTHER EFFECTIVE MASKING TECHNIQUES.

F. INSTALLATION
1. PROVIDE A JOINT MANUFACTURER'S TECHNICAL REPRESENTATIVE TO PHYSICALLY OVERSEE THE FABRICATION, INSTALLATION, ADJUSTMENT AND TESTING DURING ALL OPERATIONS. WHERE SPECIAL INSTRUCTIONS ARE NOT CONTAINED HEREIN OR ELSEWHERE IN THESE NOTES, DIRECTION FOR THE INSTALLATION SHALL BE ACCORDING TO THE RECOMMENDATIONS OF THE TECHNICAL REPRESENTATIVE.
2. COORDINATE AND SCHEDULE THE TECHNICAL REPRESENTATIVE.
3. INSTALL THE SUPERSTRUCTURE SUPPORTING UNITS BEFORE INSTALLING THE MODULAR JOINT. POSITION THE JOINT TO MATCH ROADWAY GEOMETRY, SUPERSTRUCTURE CONNECTIONS AND TEMPERATURE OPENING. TAKE CARE TO MAINTAIN EXACT ALIGNMENT OF ADJACENT ENDS OF THE ARMOR AND SEPARATION BEAMS / TRANSVERSE DIVIDERS / CENTER BEAMS FOR FIELD WELDED UNITS. PROVIDE TEMPORARY SUPPORTS AS DIRECTED BY THE MANUFACTURER TO MAINTAIN THE PROPER POSITIONING. FOR PHASED CONSTRUCTION, THE CONTRACTOR'S METHODS FOR INSTALLATION AND TEMPORARY SUPPORTS SHALL ACHIEVE SEPARATION OF THE PHASES AND UNRESTRICTED TEMPERATURE MOVEMENT.
4. PERFORM CONCRETE PLACEMENT USING VIBRATION AND HAND WORK AS NECESSARY TO ACHIEVE CONSOLIDATION AND ELIMINATE AIR VOIDS.
5. PLACE THE DECK CONCRETE FIRST. CHECK THE ABUTMENT OR ADJACENT SPAN SIDE OF THE MODULAR JOINT FOR ALIGNMENT AND TEMPERATURE ADJUSTMENT. TEMPERATURE SHALL BE MEASURED AT THE UNDERSIDE OF THE CONCRETE DECK AT EACH END AND MID-SPAN TO ACHIEVE THE AVERAGE SUPERSTRUCTURE TEMPERATURE. PLACE THE BACKWALL OR ADJACENT SPAN CONCRETE SECOND. THE MANUFACTURER'S REPRESENTATIVE SHALL CHECK THAT TEMPERATURE MOVEMENT HAS NOT CAUSED ANY DAMAGE TO THE BOND BETWEEN THE JOINT AND THE CONCRETE.
6. EXAMINE SEAL RETAINERS FOR SOIL OR DEFECTS THAT CAN DAMAGE THE SEAL. REPAIR ANY DEFECTS AS DIRECTED BY THE MANUFACTURER'S REPRESENTATIVE.
7. SOLVENT CLEAN THE NEOPRENE SEAL ELEMENTS AND THE RETAINER GROOVES TO REMOVE OIL, GREASE OR OTHER SOIL IMMEDIATELY PRIOR TO INSTALLING THE SEALS. INSTALL SEALS USING PROCEDURES AND ADHESIVE SPECIFIED BY THE JOINT MANUFACTURER. KEEP THE BONDING SURFACES CLEAN, DRY AND WARMER THAN 45°F.
8. TEST THE INSTALLED MODULAR JOINT FOR LEAKS. FLOOD THE TOTAL EXPANSION JOINT LENGTH WITH WATER FOR A PERIOD OF NOT LESS THAN ONE HOUR. COVER THE ENTIRE JOINT SYSTEM BY EITHER PONDING OR FLOWING WATER. LOCATE ANY POINTS OF LEAKAGE AND TAKE ANY AND ALL MEASURES NECESSARY TO STOP THE LEAKAGE. PERFORM THIS WORK AT THE CONTRACTOR'S EXPENSE. PERFORM A SECOND WATER TEST AFTER ALL REPAIRS HAVE BEEN MADE.

G. METHOD OF MEASUREMENT
INCLUDE THE COST OF THE MANUFACTURER'S TECHNICAL REPRESENTATIVE AND ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO DESIGN, SUPPLY, INSTALL AND TEST A MODULAR EXPANSION JOINT ACCORDING TO THE PLANS AND THESE NOTES. THE DEPARTMENT WILL MEASURE EXPANSION JOINTS BY THE NUMBER OF FEET HORIZONTALLY ALONG THE JOINT CENTERLINE BETWEEN AND THE OUTER LIMITS OF THE FABRICATED JOINT.

H. BASIS OF PAYMENT
THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
516	FT	SPECIAL - MODULAR EXPANSION JOINT

GENERAL NOTES - (3 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER BTA
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 13 | TOTAL 164
SHEET 1455 | TOTAL 2338

CUY-90-16.28 (CCG3A)
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DECK PLACEMENT ASSUMPTIONS

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.53 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ITEM 512 SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION):

APPLY A PERMANENT GRAFFITI COATING QUALIFIED ACCORDING TO S1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. APPLY THE GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ABREVIATIONS:

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CONTAINED IN THE LEGEND BELOW:

ABUT. - ABUTMENT
APPR. - APPROACH
℄ - BASELINE
BOT. - BOTTOM
BRG. - BEARING
BRGS. - BEARINGS
BTA - BRIDGE TERMINAL ASSEMBLY
℄ - CENTERLINE
C/C - CENTER TO CENTER
CIP - CAST-IN-PLACE
C.J. - CONTRUCTION JOINT
CLR. - CLEARANCE
CP - COMPLETE PENETRATION BUTT WELD
CMS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONC. - CONCRETE
CONST. - CONSTRUCTION
C.P.P. - CORRUGATED PLASTIC PIPE
CS - INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESSES ONLY
CU YD - CUBIC YARD
CVN - CHARPY V-NOTCH TESTING
DIA. - DIAMETER
E.F. - EACH FACE
ELEV., EL. - ELEVATION
EQ. - EQUAL
EX. - EXISTING
EXP. - EXPANSION
F.A. - FORWARD ABUTMENT
F.F. - FAR FACE
F/F - FACE TO FACE
F.S. - FIELD SPLICE
FT/FT - FOOT PER FOOT
FTG. - FOOTING
FWD. - FORWARD
GEN. - GENERAL
INT. - INTEGRAL
LF - LEFT FORWARD
LT. - LEFT
MAX. - MAXIMUM
M.E. - MATCH EXISTING
MIN. - MINIMUM
MISC. - MISCELLANEOUS
MOT - MAINTENANCE OF TRAFFIC
N.F. - NEAR FACE
NO./# - NUMBER
O/O - OUT TO OUT
P.C.P.P - PERFORATED CORRUGATED PLASTIC PIPE
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
PG - PROFILE GRADE
PGL - PROFILE GRADE LINE
PROP. - PROPOSED
PT - POINT OF TANGENCY
PVC - POINT OF VERTICAL CURVATURE
PVI - POINT OF VERTICAL INTERSECTION
PVT - POINT OF VERTICAL TANGENCY
R. - RADIUS
R.A. - REAR ABUTMENT
RCP - ROCK CHANNEL PROTECTION
RF - RIGHT FORWARD
RT. - RIGHT
R/W - RIGHT OF WAY
SAN. - SANITARY
SER. - SERIES
SHLDR. - SHOULDER
SHT. - SHEET
S.O. - SERIES OF
SPA. - SPACES OR SPACING
SR - STATE ROUTE
STA. - STATION
STD. - STANDARD
STM. - STORM
STR. - STRAIGHT
TBM - TEMPORARY BENCH MARK
TEMP. - TEMPORARY
T.O.S. - TOE OF SLOPE
T/PARAPET - TOE OF PARAPET
T/T - TOE TO TOE
TYP. - TYPICAL
U.G. - UNDERGROUND
U.N.O - UNLESS NOTED OTHERWISE
VAR. - VARIES
VC - VERTICAL CURVE
VERT. - VERTICAL
W/O - WITHOUT

CUY-90-16.28 (CCG3A)

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GENERAL NOTES - (4 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
HDR
DESIGNER TJE | CHECKER BTA
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 14 | TOTAL 164
SHEET 1456 | TOTAL 2338

ESTIMATED QUANTITIES

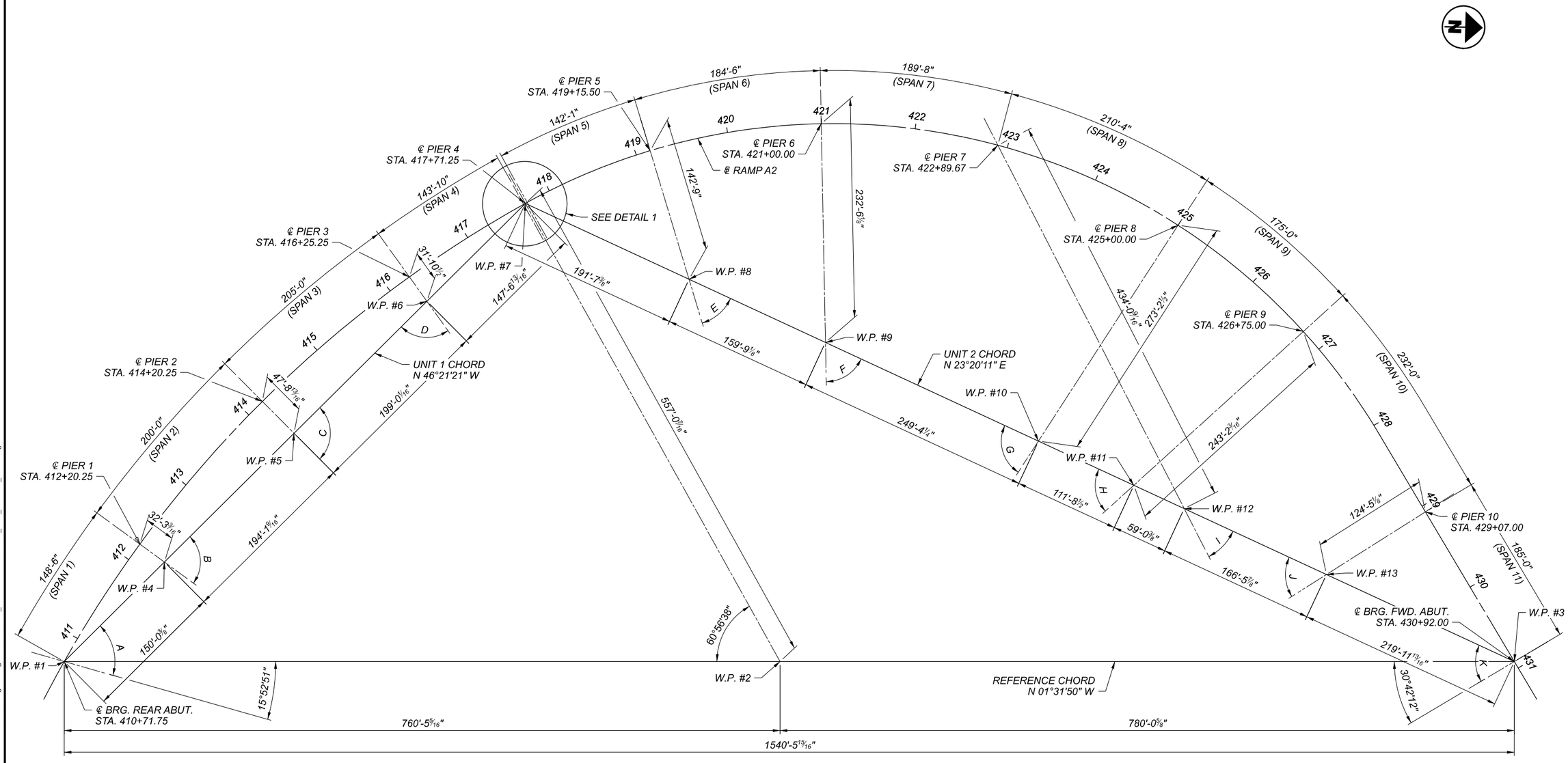
CALCULATED BY: DATE: XX/XX/202X
CHECKED BY: DATE: XX/XX/202X

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	SHEET REF.
203	20001		CY	EMBANKMENT, AS PER PLAN					
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					
503	21100		CY	UNCLASSIFIED EXCAVATION					
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION					
507	00500		FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN					
507	00550		FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED					
507	00600		FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN					
507	00650		FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED					
507	00700		FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN					
507	00750		FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED					
509	10000		LB	EPOXY COATED REINFORCING STEEL					
509	30020		FT	NO. 4 GFRP DEFORMED BARS					
511	34446		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK					
511	34450		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)					
511	41012		CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS					
511	44112		CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING					
511	45602		CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA					
511	46512		CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING					
512	10001		SY	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)					
512	10100		SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)					
512	33000		SY	TYPE 2 WATERPROOFING					
513	10301		LB	STRUCTURAL STEEL MEMBERS, LEVEL 5, AS PER PLAN					
513	20000		EACH	WELDED STUD SHEAR CONNECTORS					
514	00060		SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT					
514	00066		SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT					
516	10010		FT	ARMORLESS PREFORMED JOINT SEAL					
516	13600		SF	1" PREFORMED EXPANSION JOINT FILLER					
516	13900		SF	2" PREFORMED EXPANSION JOINT FILLER					
SPECIAL	51612400		FT	SPECIAL - MODULAR EXPANSION JOINT					
518	12301		EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN					
518	21200		CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC					
518	40000		FT	6" PERFORATED CORRUGATED PLASTIC PIPE					
518	40011		FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN					
523	20001		EACH	DYNAMIC LOAD TESTING, AS PER PLAN					
523	20501		EACH	RESTRIKE, AS PER PLAN					
524	94946		FT	DRILLED SHAFTS, 72" DIAMETER, ABOVE BEDROCK					
524	94989		FT	DRILLED SHAFTS, 90" DIAMETER, ABOVE BEDROCK					
524	95000		FT	DRILLED SHAFTS, MISC.: DEMONSTRATION SHAFT					
524	95000		FT	DRILLED SHAFTS, MISC.: CSL TESTING, 90" DIA. SHAFT					
526	30011		SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN					
526	90030		FT	TYPE C INSTALLATION					
SPECIAL	53000200	LS		SPECIAL - STRUCTURES MISC.: VIBRATION MONITORING					
SPECIAL	53000200	LS		SPECIAL - STRUCTURES MISC.: PRECONSTRUCTION CONDITION SURVEY					
855	00010		LB	POST-TENSIONING STRAND TENDON					
869	00100		EACH	HIGH LOAD MULTI-ROTATIONAL (HLMR) BEARINGS					
869	00101		EACH	HIGH LOAD MULTI-ROTATIONAL (HLMR) BEARINGS, AS PER PLAN					
894	10000		EACH	THERMAL INTEGRITY PROFILING (TIP) TEST					

ESTIMATED QUANTITIES
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
HDR
DESIGNER BTA | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 15 | TOTAL 164
SHEET 1457 | TOTAL 2338

CUY-90-16.28 (CCG3A)

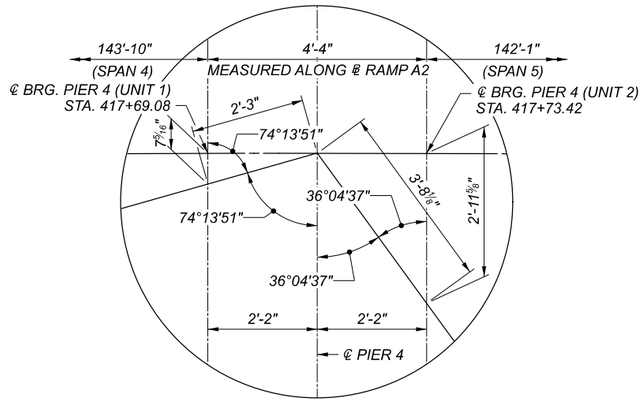


PLAN

LOCATION	LABEL	ANGLE
℄ BRG. REAR ABUT.	A	60°42'22"
℄ PIER 1	B	80°56'37"
℄ PIER 2	C	89°56'37"
℄ PIER 3	D	80°49'53"
℄ PIER 4	-	-
℄ PIER 5	E	48°20'17"
℄ PIER 6	F	64°01'14"
℄ PIER 7	I	37°59'32"
℄ PIER 8	G	81°58'46"
℄ PIER 9	H	67°06'16"
℄ PIER 10	J	57°12'26"
℄ BRG. FWD. ABUT.	K	55°34'14"

<u>CURVE PRA2-01</u>
P.I. = STA. 413+02.39
Δ = 44°30'41" RT
Dc = 04°30'00"
R = 1,273.24'
T = 521.04'
L = 989.14'
E = 102.49'

<u>CURVE PRA2-02</u>
P.I. = STA. 424+26.19
Δ = 88°25'03" RT
Dc = 08°30'00"
R = 674.07'
T = 655.7'
L = 1,040.21'
E = 266.31'



DETAIL 1

<u>NOTE:</u>
SPANS MEASURED ALONG ℄ RAMP A2

GEOMETRIC LAYOUT
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

CUY-90-16.28 (CCG3A)

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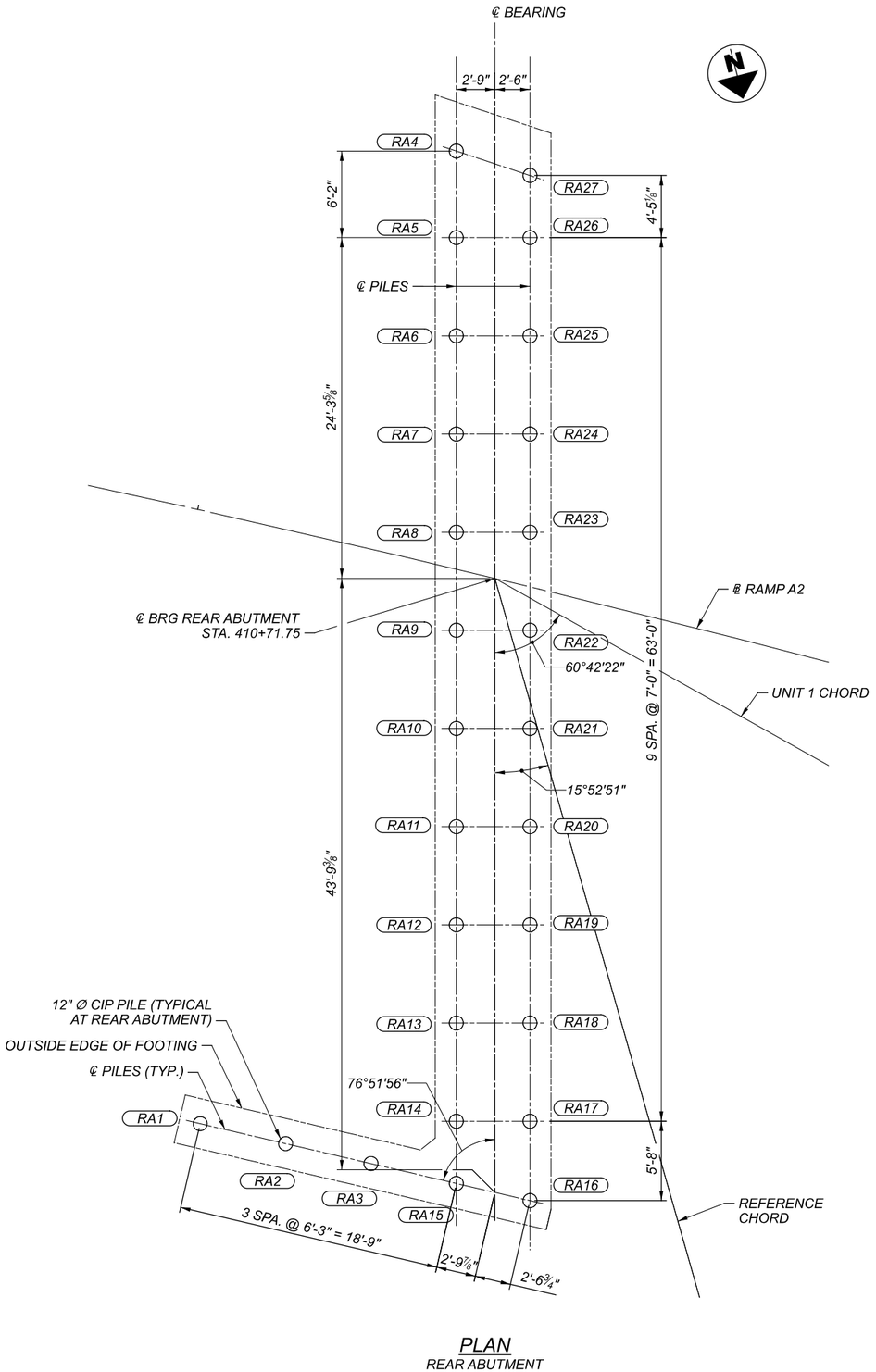
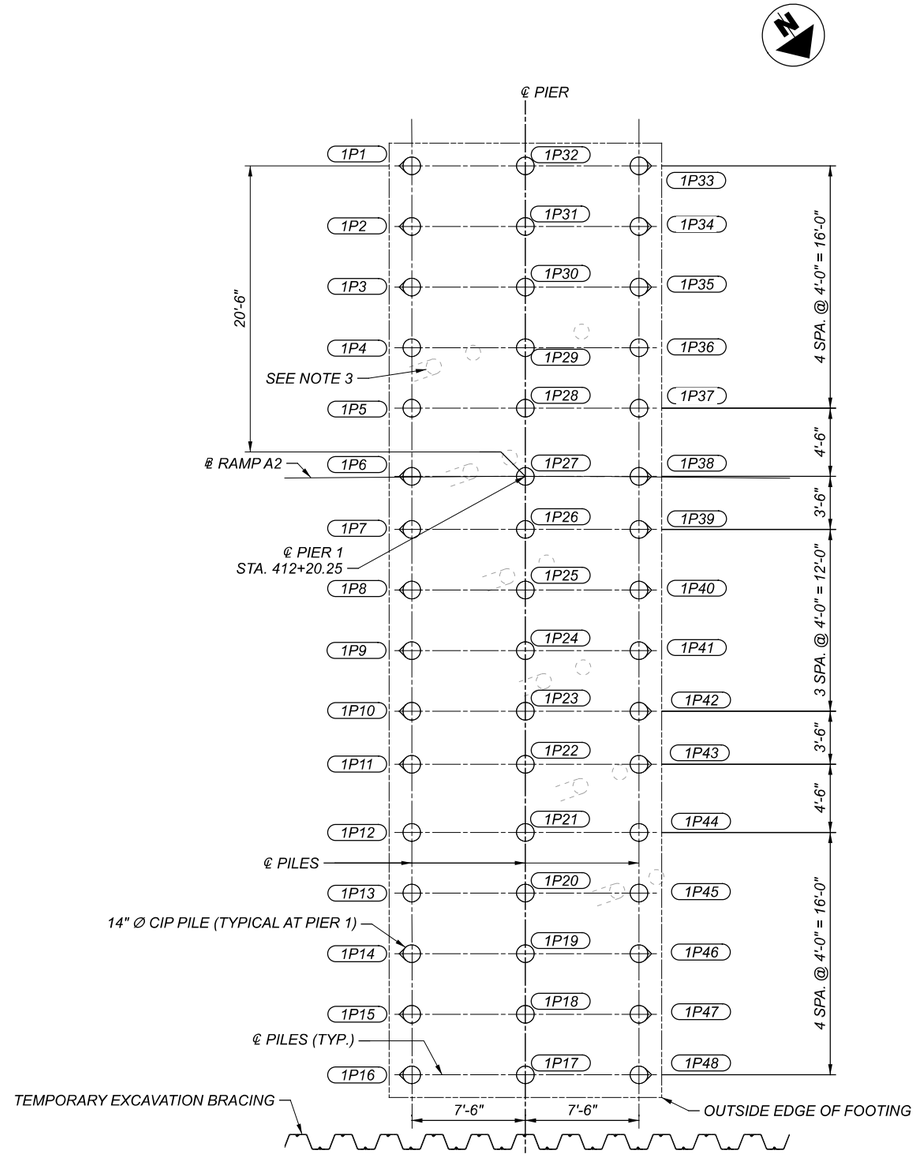
SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	JS
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	16
TOTAL	164
SHEET	1458
TOTAL	2338



PLAN
REAR ABUTMENT



PLAN
PIER 1

LEGEND:

- CIP PILE (VERTICAL)
- CIP PILE (BATTERED 1:4)
- EX. 12" Ø± CIP PILE (VERTICAL)
- EX. 12" Ø± CIP PILE (BATTERED 1:4)
- (#) PILE NUMBER
- [#] DRILLED SHAFT NUMBER

NOTES:

1. FOR REAR ABUTMENT DETAILS, SEE SHEETS 28 / 164 THRU 30 / 164 .
2. FOR PIER 1 DETAILS, SEE SHEETS 33 / 164 AND 34 / 164 .
3. REMOVE PORTIONS OF EX. STRUCTURE PER CMS 202.03.

FOUNDATION PLAN - (1 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	JS
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	17
TOTAL	164
SHEET	1459
TOTAL	2338

CUY-90-16.28 (CCG3A)

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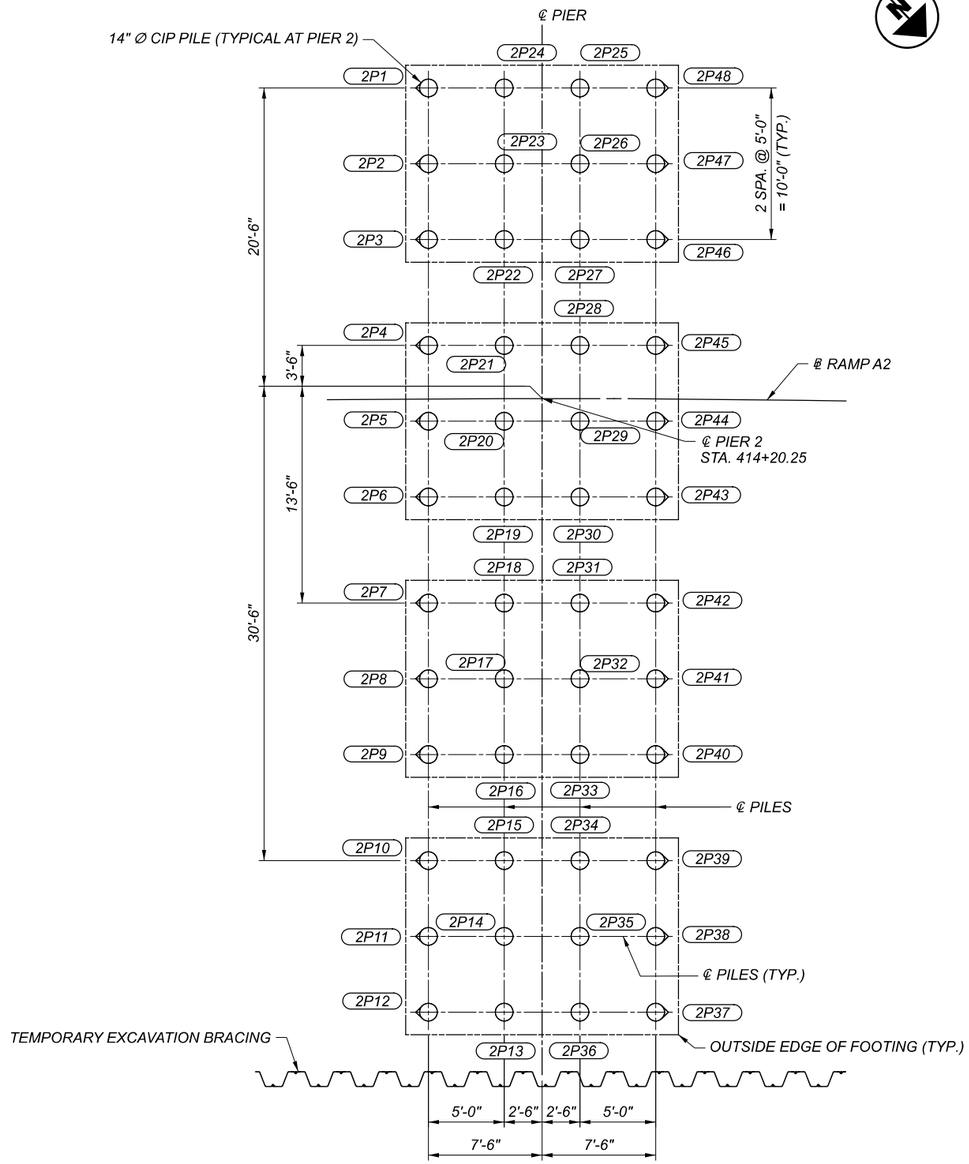
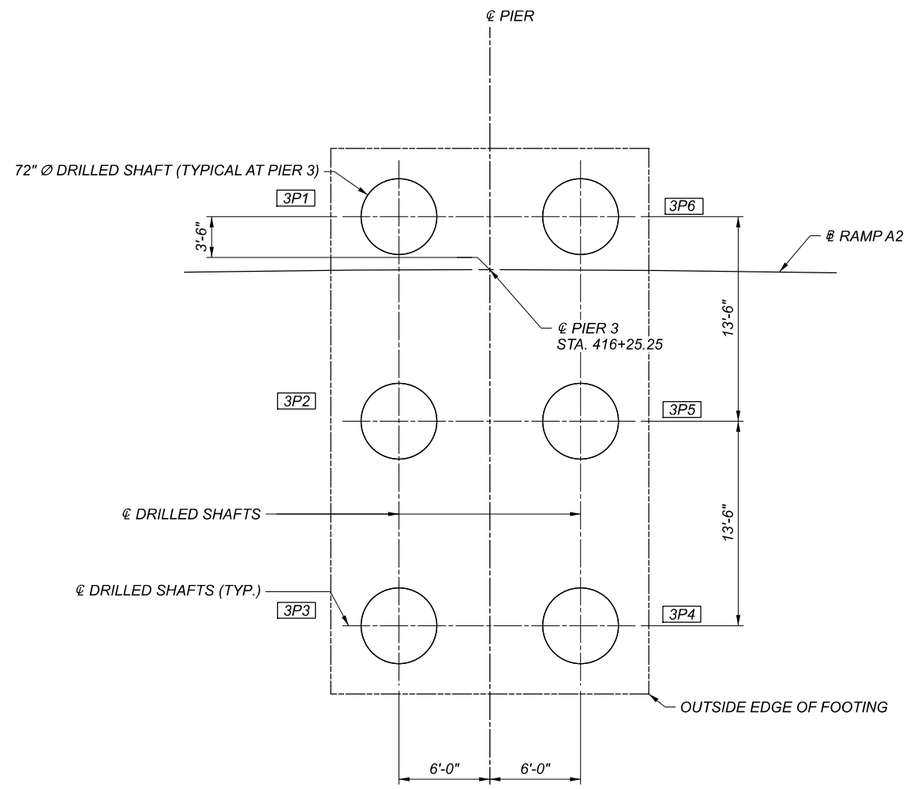


PLAN
PIER 2



PLAN
PIER 3

LEGEND:

- CIP PILE (VERTICAL)
- CIP PILE (BATTERED 1:4)
- EX. 12" Ø± CIP PILE (VERTICAL)
- EX. 12" Ø± CIP PILE (BATTERED 1:4)
- (#) PILE NUMBER
- [#] DRILLED SHAFT NUMBER

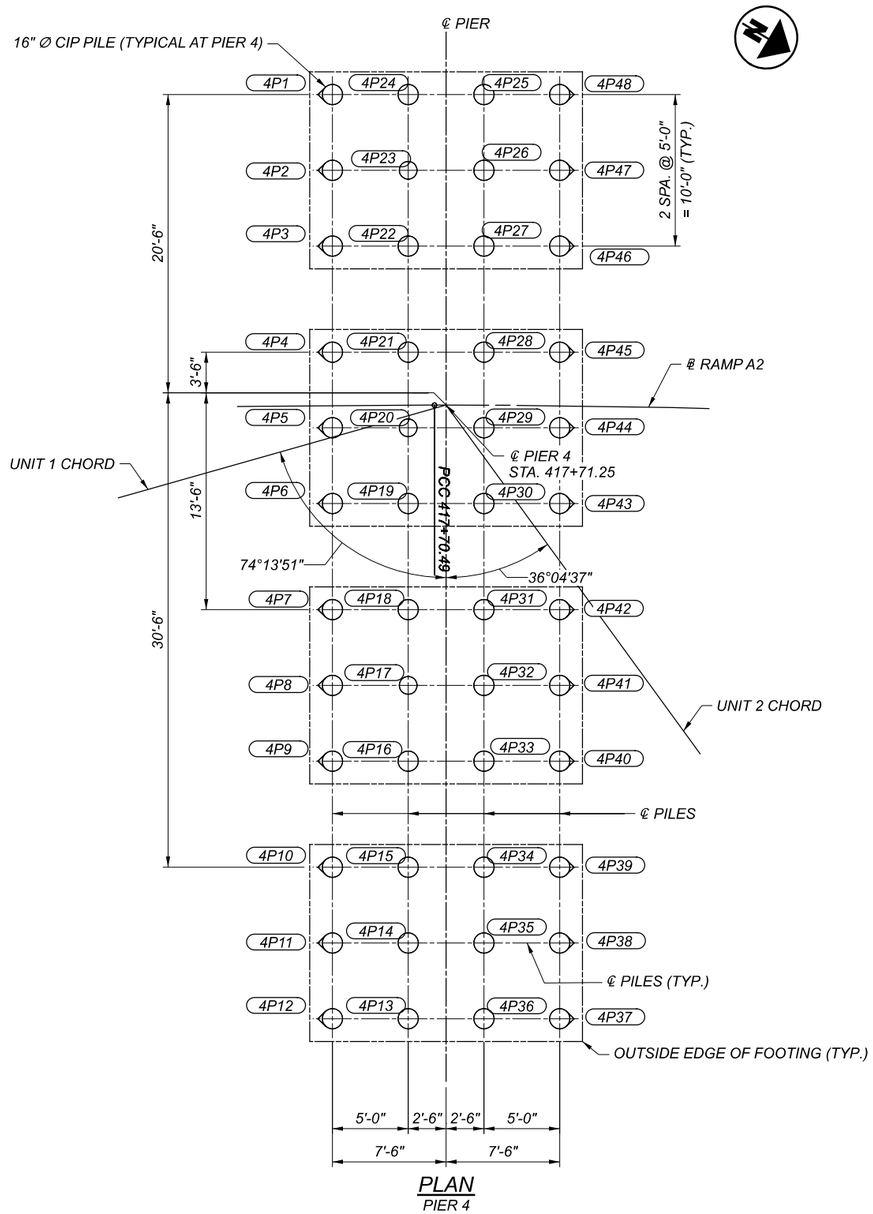
NOTES:

1. FOR PIER 2 DETAILS, SEE SHEETS [35 / 164] AND [36 / 164].
2. FOR PIER 3 DETAILS, SEE SHEETS [37 / 164] THRU [39 / 164].

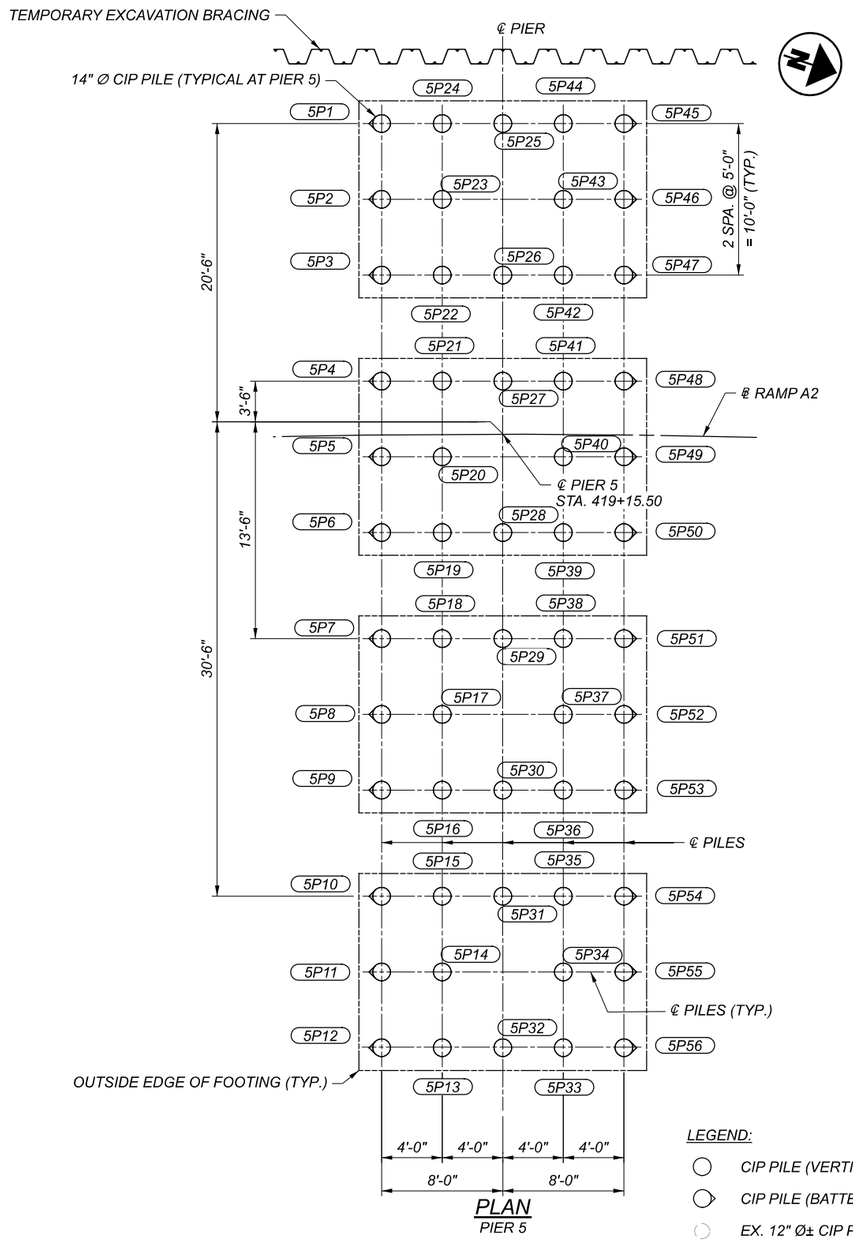
FOUNDATION PLAN - (2 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER JS | CHECKER TJE
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 18 | TOTAL 164
SHEET 1460 | TOTAL 2338

CUY-90-16.28 (CCG3A)



PLAN
PIER 4



PLAN
PIER 5

LEGEND:

- CIP PILE (VERTICAL)
- CIP PILE (BATTERED 1:4)
- EX. 12" Ø± CIP PILE (VERTICAL)
- EX. 12" Ø± CIP PILE (BATTERED 1:4)
- (#) PILE NUMBER
- [#] DRILLED SHAFT NUMBER

NOTES:

1. FOR PIER 4 DETAILS, SEE SHEETS 40 / 164 THRU 42 / 164.
2. FOR PIER 5 DETAILS, SEE SHEETS 43 / 164 AND 44 / 164.

FOUNDATION PLAN - (3 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	JS
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	19
TOTAL	164
SHEET	1461
TOTAL	2338

CUY-90-16.28 (CCG3A)

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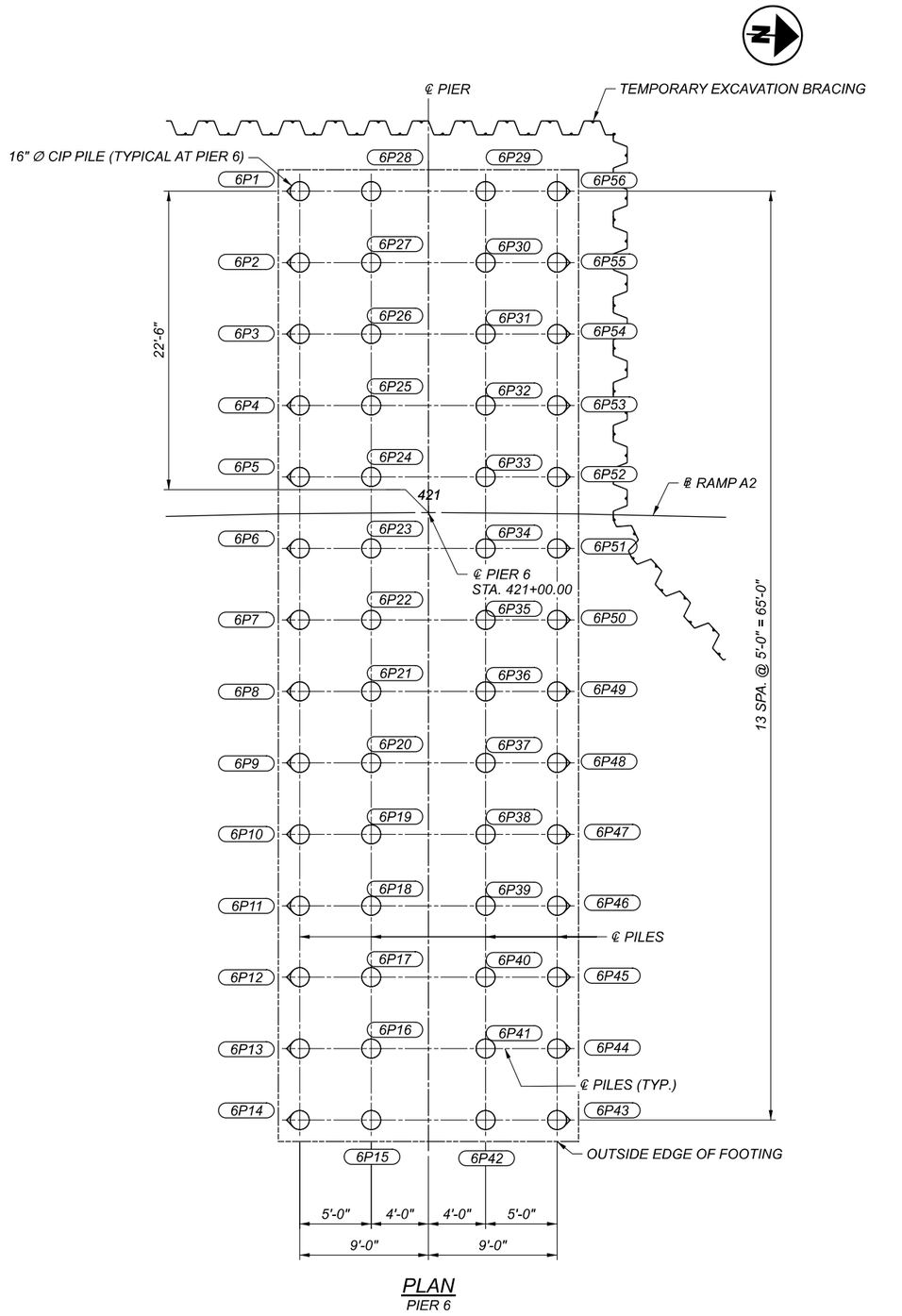
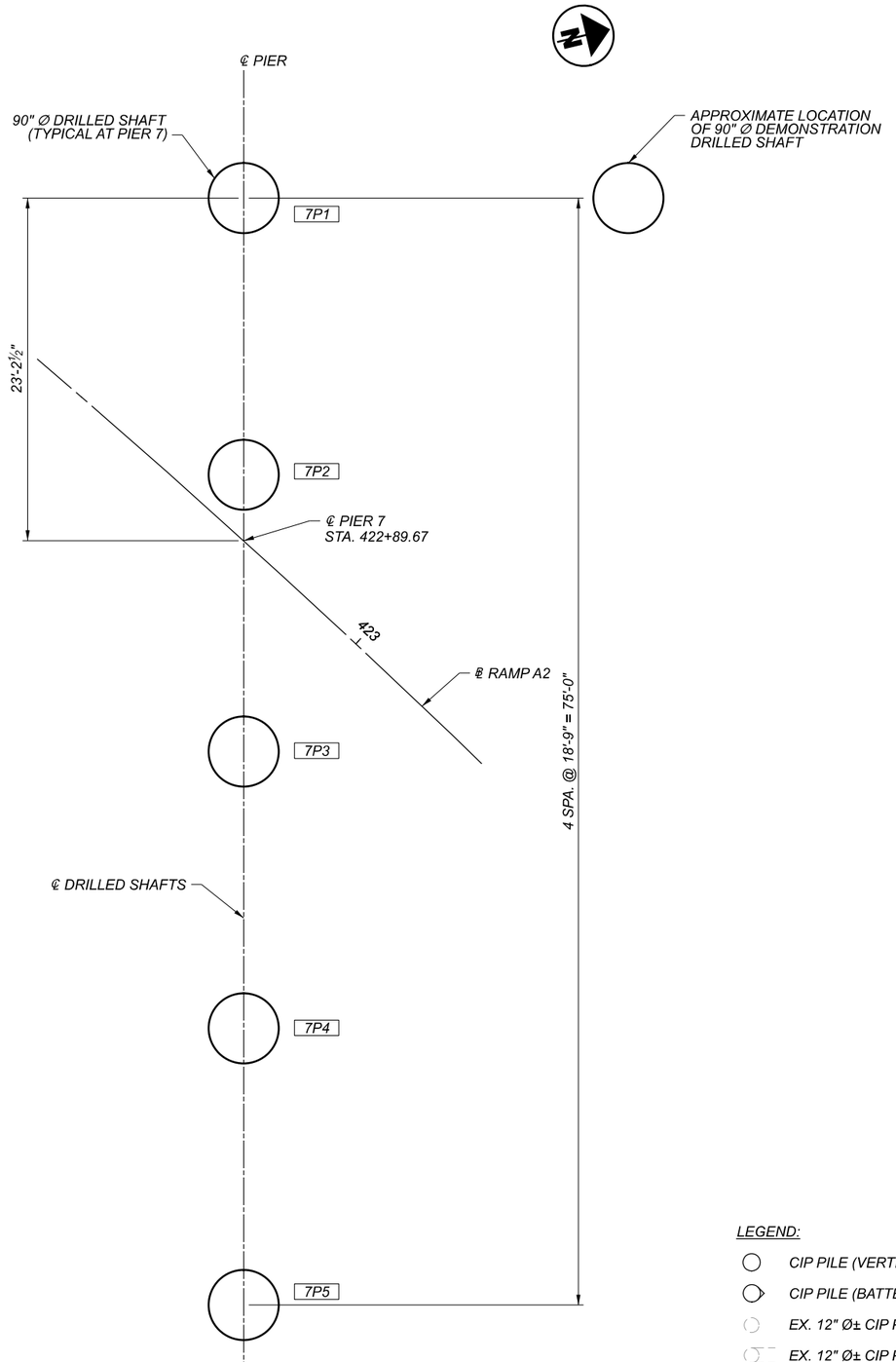


PLAN
PIER 6



PLAN
PIER 7

LEGEND:

- CIP PILE (VERTICAL)
- CIP PILE (BATTERED 1:4)
- EX. 12" Ø± CIP PILE (VERTICAL)
- EX. 12" Ø± CIP PILE (BATTERED 1:4)
- (#) PILE NUMBER
- [#] DRILLED SHAFT NUMBER

NOTES:

1. FOR PIER 6 DETAILS, SEE SHEETS 45 / 164 AND 46 / 164.
2. FOR PIER 7 DETAILS, SEE SHEETS 47 / 164 AND 48 / 164.

FOUNDATION PLAN - (4 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	JS
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	20
TOTAL	164
SHEET	1462
TOTAL	2338

CUY-90-16.28 (CCG3A)

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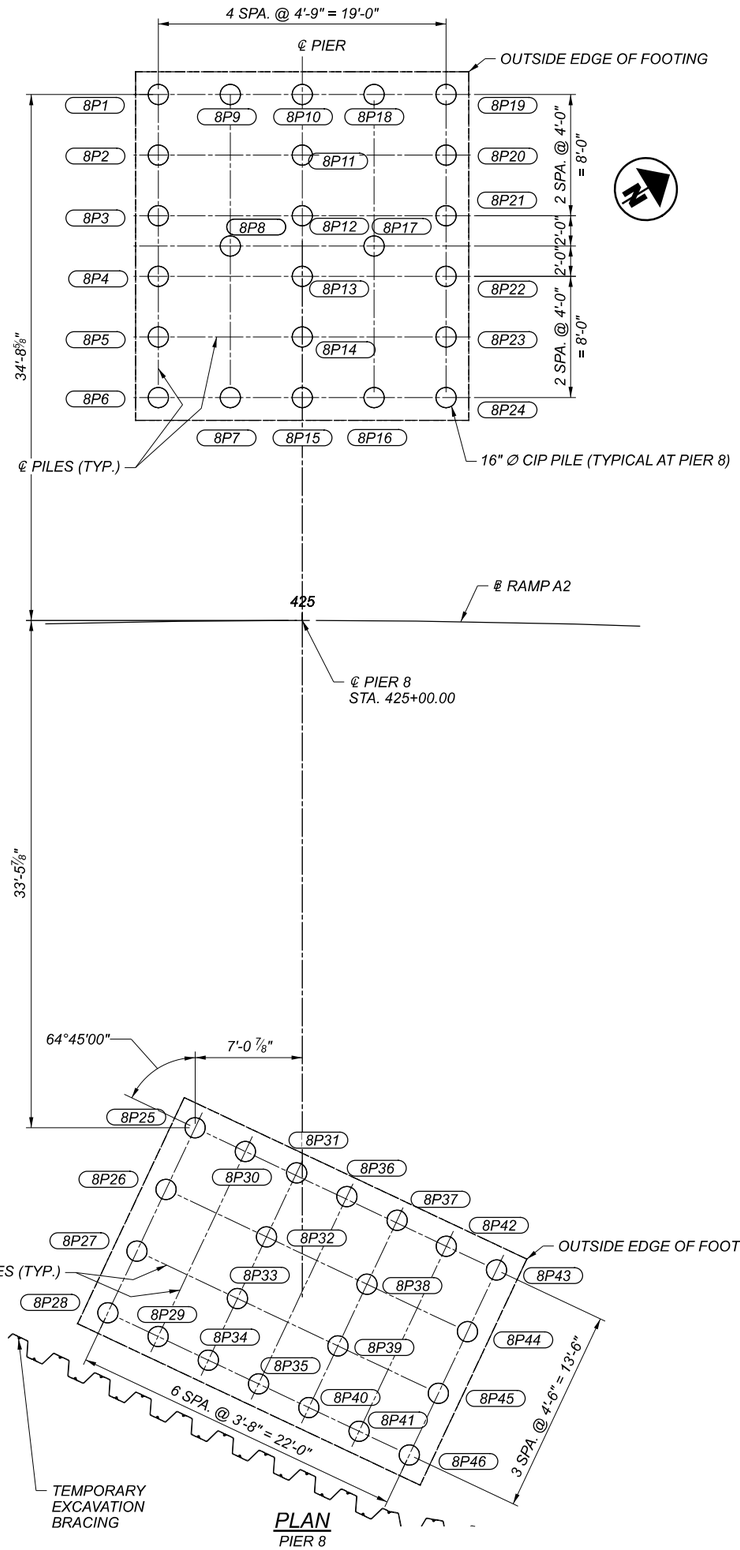
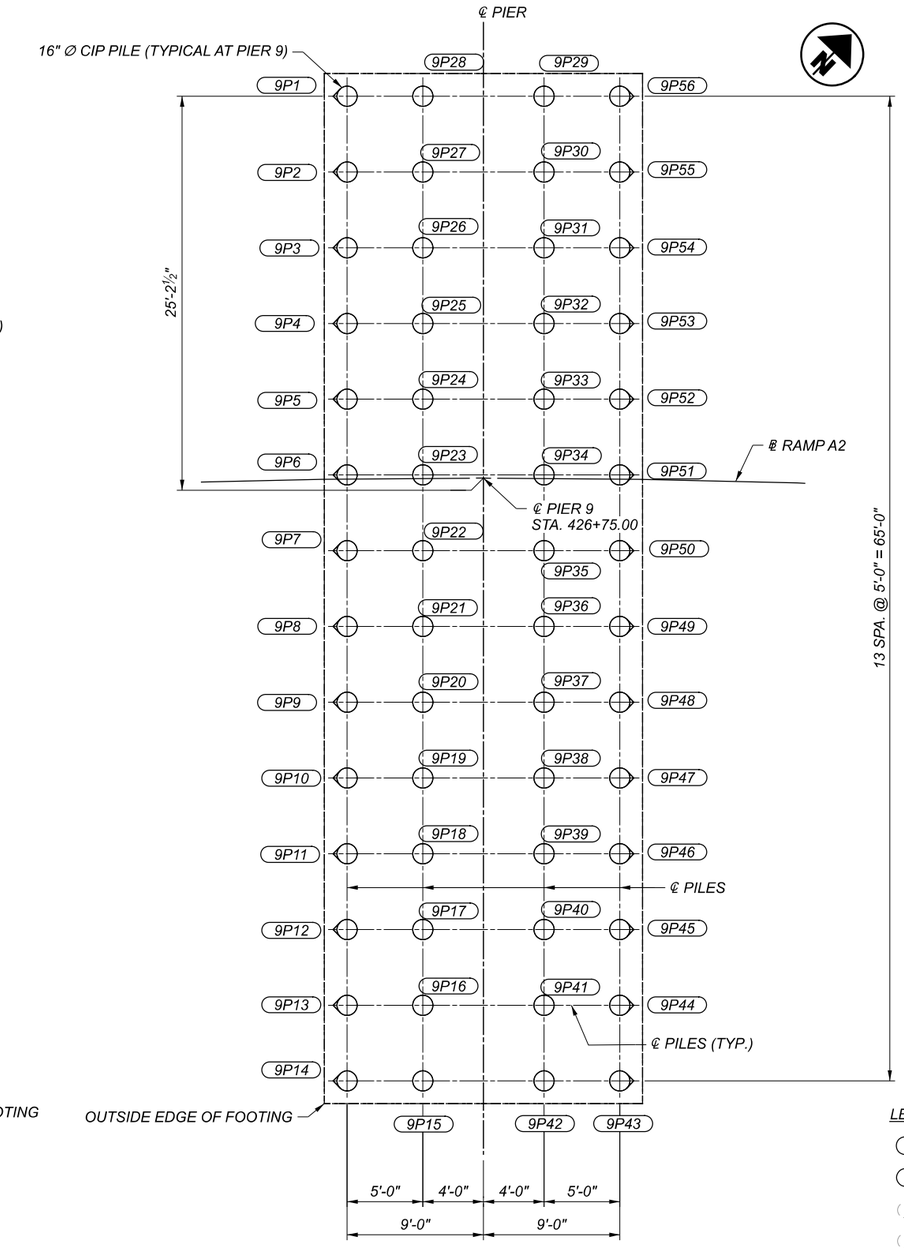


PLAN
PIER 8



PLAN
PIER 9

LEGEND:

- CIP PILE (VERTICAL)
- CIP PILE (BATTERED 1:4)
- EX. 12" Ø± CIP PILE (VERTICAL)
- EX. 12" Ø± CIP PILE (BATTERED 1:4)
- (#) PILE NUMBER
- [#] DRILLED SHAFT NUMBER

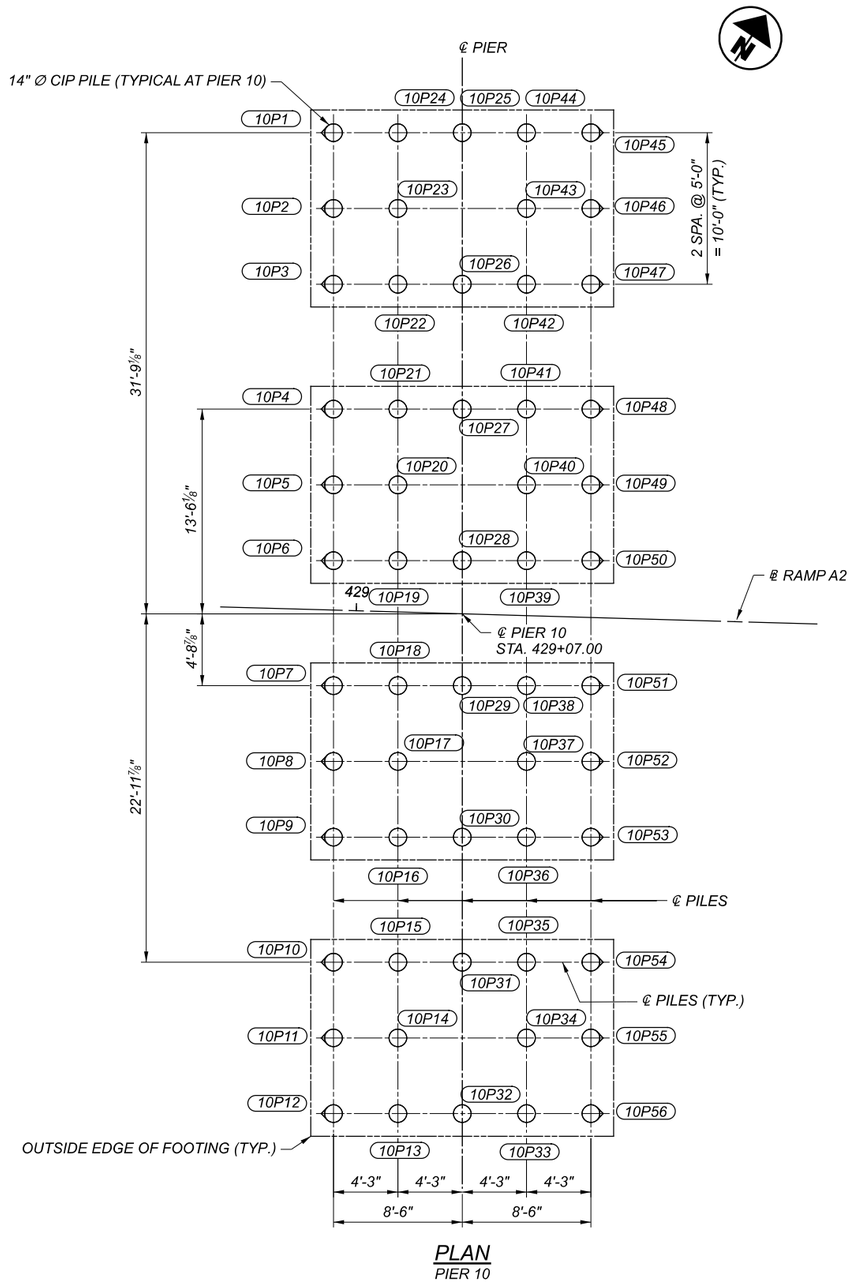
NOTES:

1. FOR PIER 8 DETAILS, SEE SHEETS 49 / 164 THRU 53 / 164 .
2. FOR PIER 9 DETAILS, SEE SHEETS 54 / 164 AND 55 / 164 .

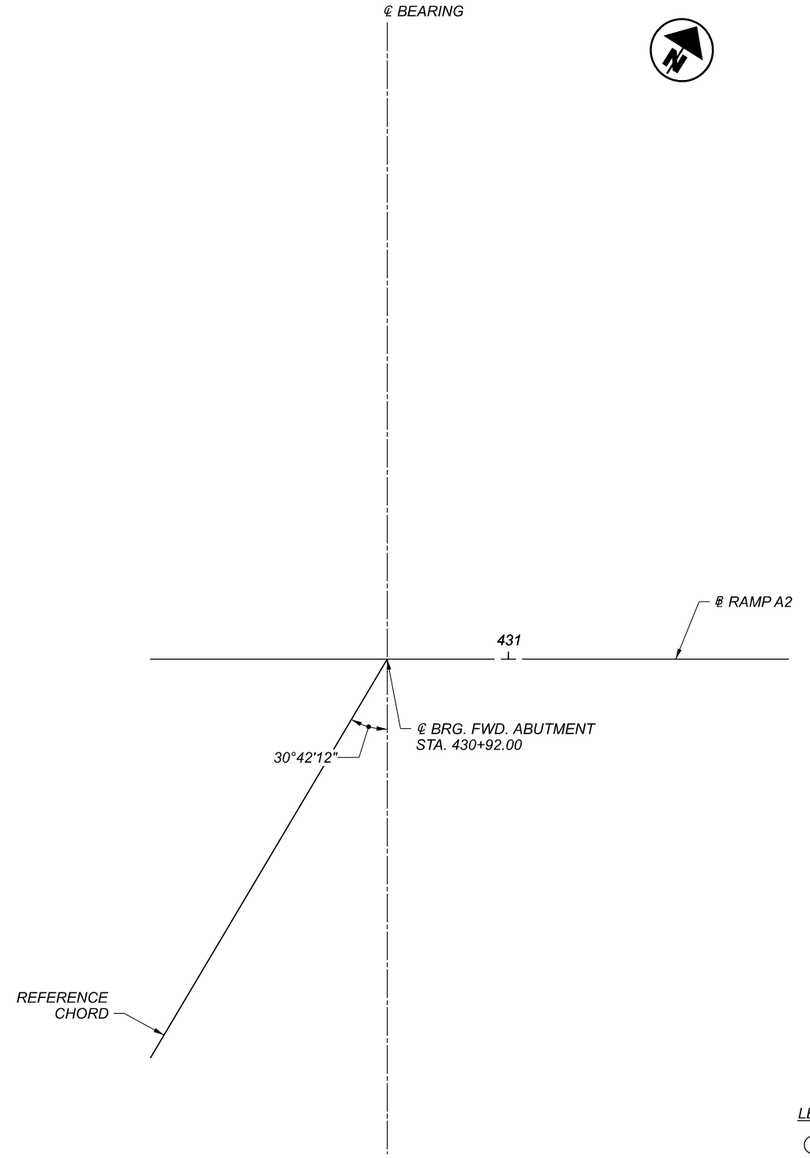
FOUNDATION PLAN - (5 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	JS
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	21
TOTAL	164
SHEET	1463
TOTAL	2338

CUY-90-16.28 (CCG3A)



PLAN
PIER 10



PLAN
FORWARD ABUTMENT

LEGEND:

- *CIP PILE (VERTICAL)*
- *CIP PILE (BATTERED 1:4)*
- *EX. 12" Ø± CIP PILE (VERTICAL)*
- *EX. 12" Ø± CIP PILE (BATTERED 1:4)*
- *(#) PILE NUMBER*
- *[#] DRILLED SHAFT NUMBER*

NOTES:

1. *FOR PIER 10 DETAILS, SEE SHEETS 56 / 164 THRU 57 / 164 .*
2. *FOR FORWARD ABUTMENT DETAILS, SEE SHEETS 31 / 164 THRU 32 / 164 .*
3. *FORWARD ABUTMENT TO BE DESIGNED AT LATER DATE.*

FOUNDATION PLAN - (6 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	FHR
DESIGNER	JS
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	22
TOTAL	164
SHEET	1464
TOTAL	2338

CUY-90-16.28 (CCG3A)

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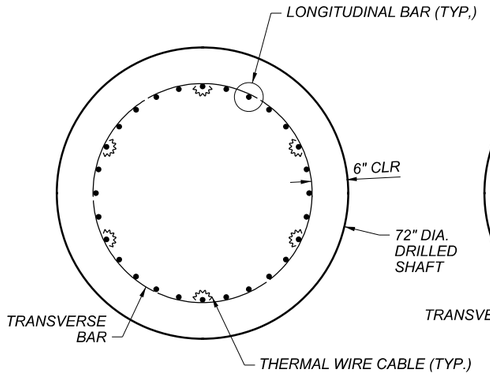
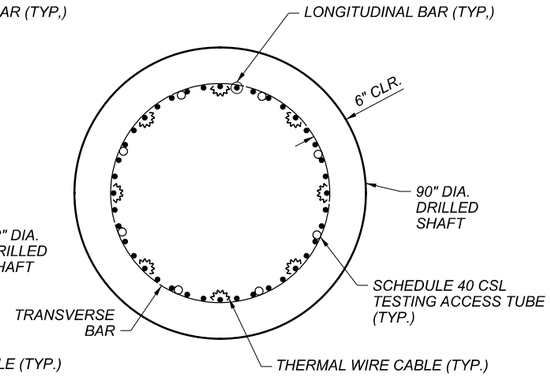


SECTION A-A
NO SCALE



SECTION B-B
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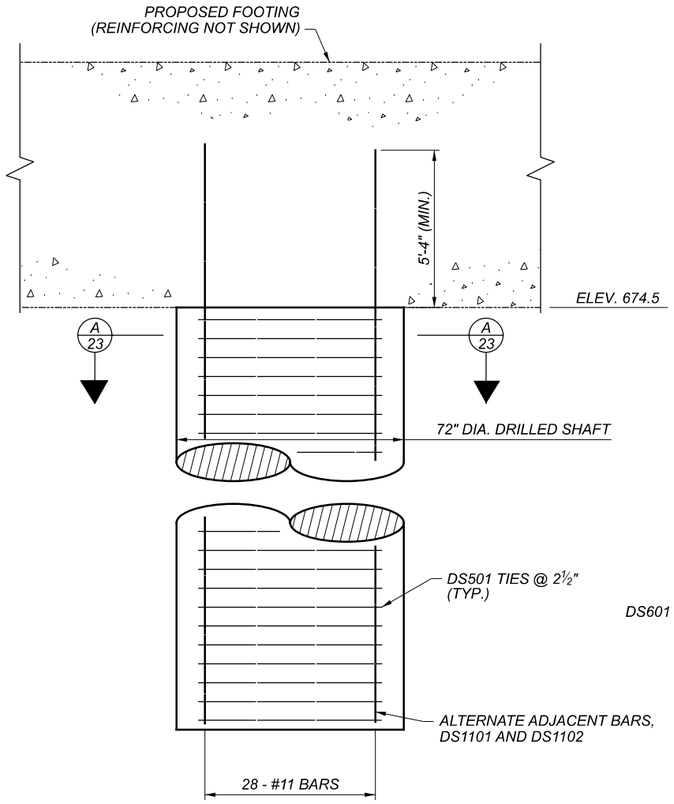
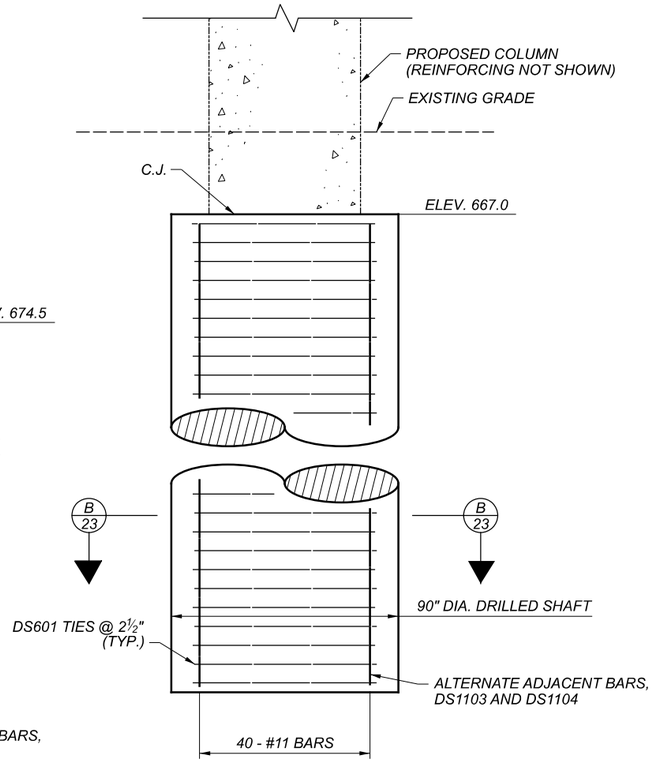
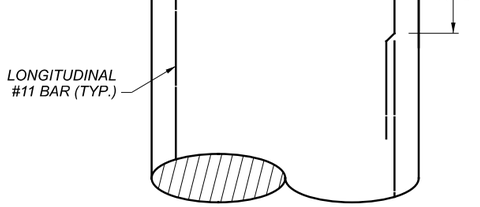


DRILLED SHAFT DETAIL
PIER 3
NO SCALE



DRILLED SHAFT DETAIL
PIER 7
NO SCALE



LAP SPLICE DETAIL
NO SCALE

PIER	DRILLED SHAFT NUMBER	ESTIMATED QUANTITIES, PER SHAFT		REINFORCING BAR MARKS		NUMBER OF PRODUCTION DRILLED SHAFTS TO BE TESTED		DEMONSTRATION DRILLED SHAFT REQUIRED
		DRILLED SHAFT 72" DIAMETER	DRILLED SHAFT 90" DIAMETER	LONGITITUDNAL	TIES	BY T.I.P.	BY CSL	
3	3PI TO 3P6	XX FT.	--	DS1101, DS1102	DS501	6	--	NO
7	7PI TO 7P5	--	XX FT.	DS1103, DS1104	DS601	5	5	YES

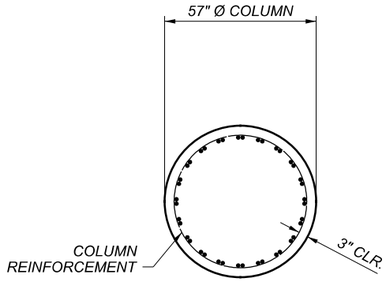
NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 14 / 164 .
2. FOR PIER 3 PLAN, ELEVATION AND DETAILS, SEE SHEETS 37 / 164 THRU 39 / 164 .
3. FOR PIER 7 PLAN, ELEVATION AND DETAILS, SEE SHEET 47 / 164 AND 48 / 164 .
4. FOR FOUNDATION PLANS, SEE SHEETS 17 / 164 THRU 22 / 164 .
5. THE INSTALLATION SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN A 48 HOUR CURE.
6. CARE SHALL BE EXERCISED AS TO COVER UNATTENDED OPEN SHAFTS. TEMPORARY COVERS SHALL BE OF ADEQUATE STRENGTH TO PREVENT A PERSON FORM FALLING IN. NO DRILLED SHAFT EXCAVATION MAY BE LEFT OVERNIGHT WITHOUT CONCRETE PLACED.
7. THE DEMONSTRATION DRILLED SHAFT FOR PIER 7 REQUIRES TESTING AND EVALUATION, THAT IS TO BE INCLUDED IN PAYMENT SEPARATELY FROM ITEM 524 - DRILLED SHAFTS, MISC.: DEMONSTRATION DRILLED SHAFT, AND SHALL BE INCLUDED WITH PAYMENT FOR THE FOLLOWING:
   - ITEM 524 - DRILLED SHAFTS, MISC.: CSL TESTING, 90" DIA. SHAFT
   - ITEM 524 - DRILLED SHAFTS, MISC.: HIGH-STRAIN DYNAMIC TESTING OF DRILLED SHAFTS
   - ITEM 894 - THERMAL INTEGRITY PROFILER (T.I.P.) TEST

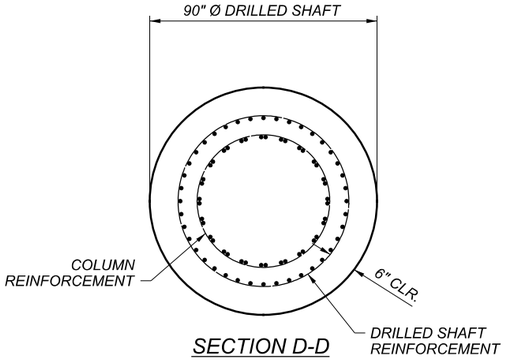
DRILLED SHAFT DETAILS - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER PJC | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 23 | TOTAL 164
SHEET 1465 | TOTAL 2338

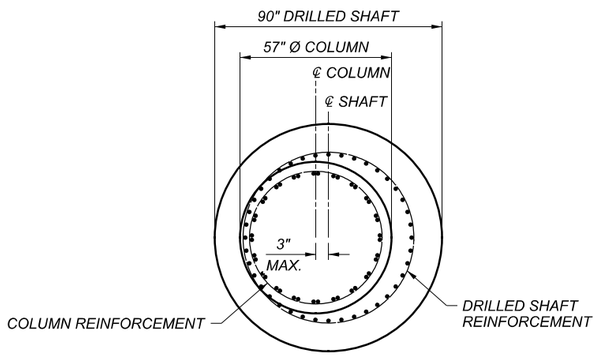
CUY-90-16.28 (CCG3A)



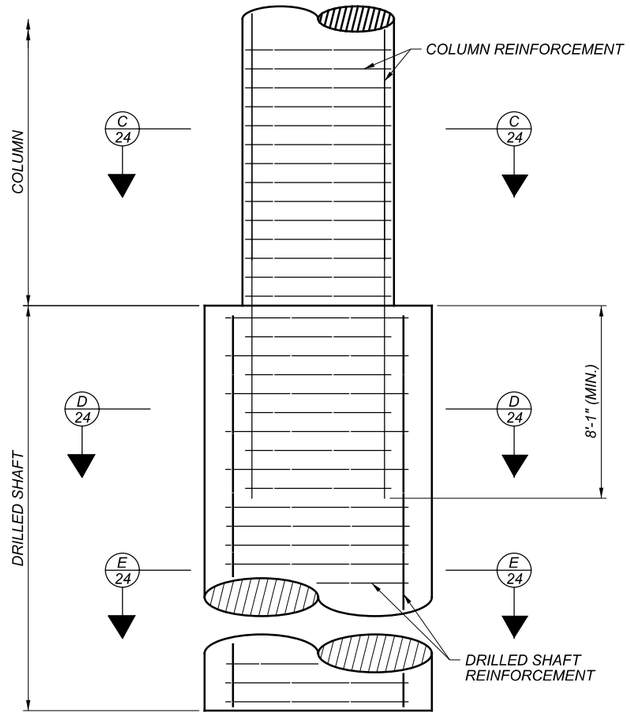
SECTION C-C



SECTION D-D

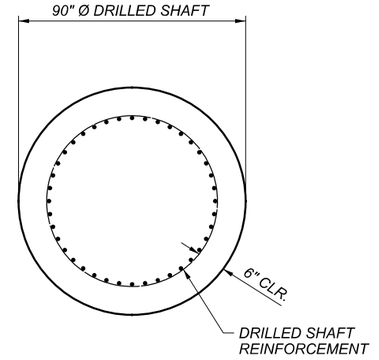


SHAFT OFFSET TOLERANCE



DRILLED SHAFT TO COLUMN DETAIL

PIER 7



SECTION E-E

NOTES:

1. FOR ADDITIONAL DRILLED SHAFT NOTES AND DETAILS, SEE SHEETS 23 / 164 .
2. FOR PIER 7 PLAN, ELEVATION AND DETAILS, SEE SHEETS 47 / 164 THRU 48 / 164 .

DRILLED SHAFT DETAILS - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	24
TOTAL	164
SHEET	1466
TOTAL	2338

CUY-90-16.28 (CCG3A)

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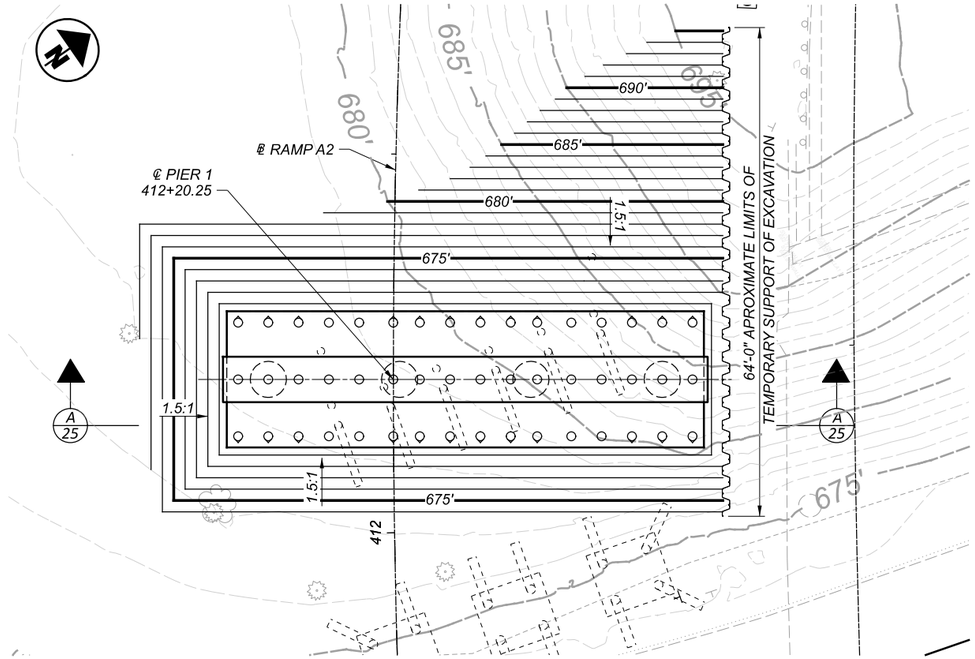
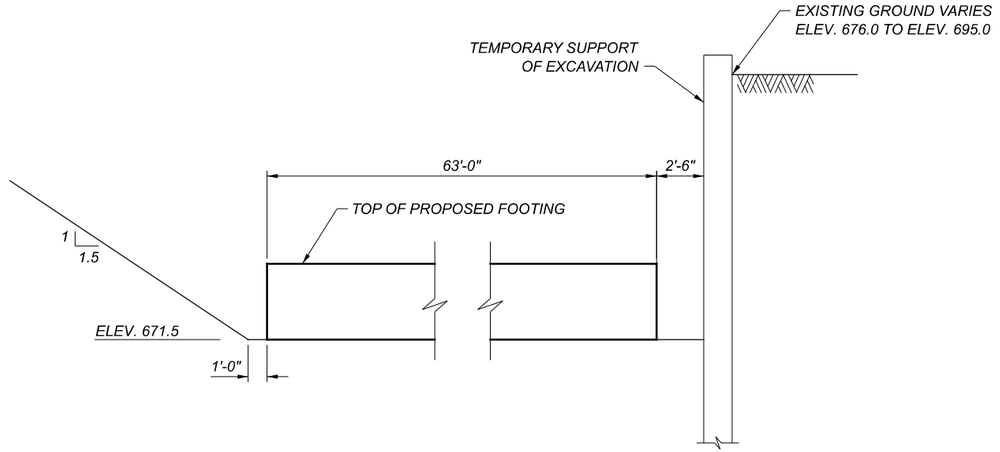
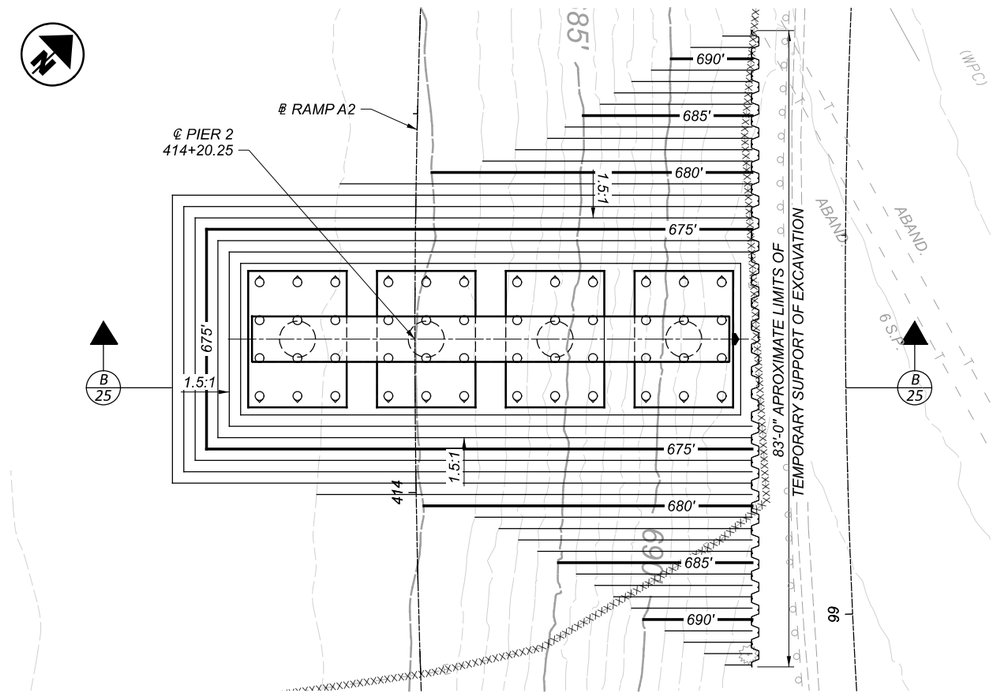


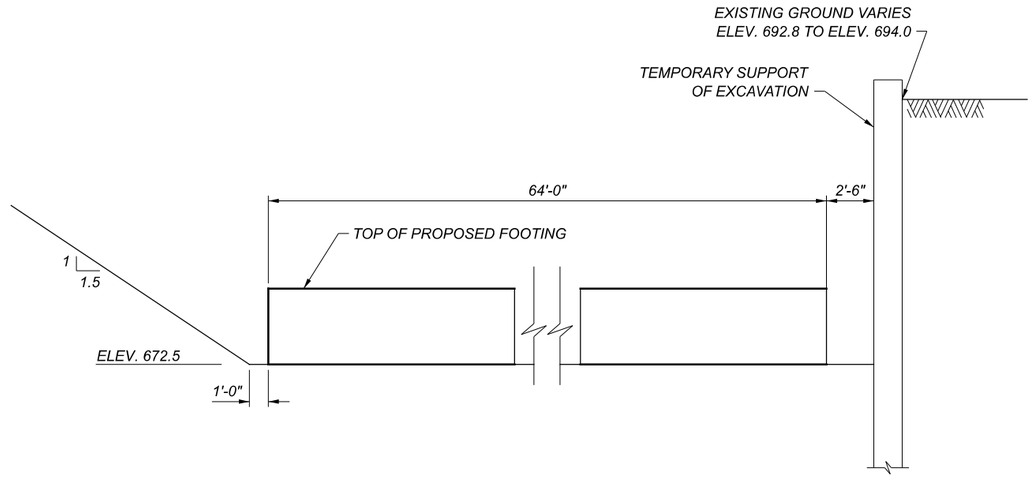
PIER 1 PLAN



SECTION A-A



PIER 2 PLAN



SECTION B-B

CONCEPTUAL TEMPORARY SHORING LOCATIONS AND EXCAVATION DEPTHS SHOWN. STAGE 3 DESIGN CONTRACT MODIFICATION PENDING APPROVAL. DESIGN AND DETAILS TO BE FINALIZED WITH NEXT SUBMISSION.

TEMPORARY SHORING DETAILS - (1 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	25
TOTAL	164
SHEET	1467
TOTAL	2338

CUY-90-16.28 (CCG3A)
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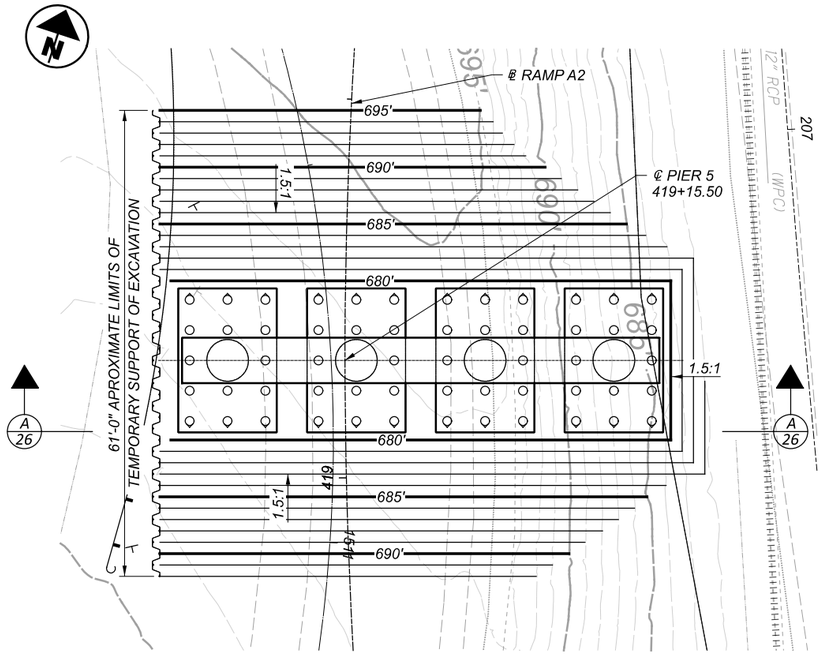
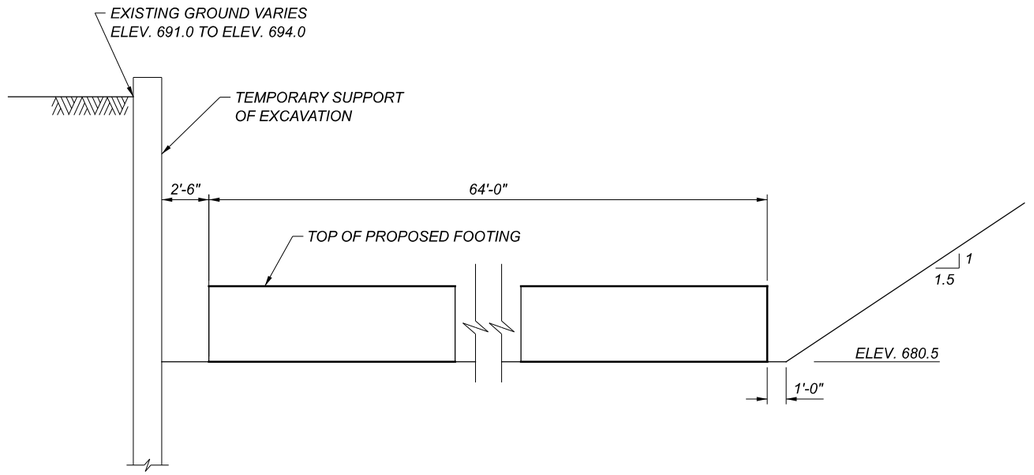
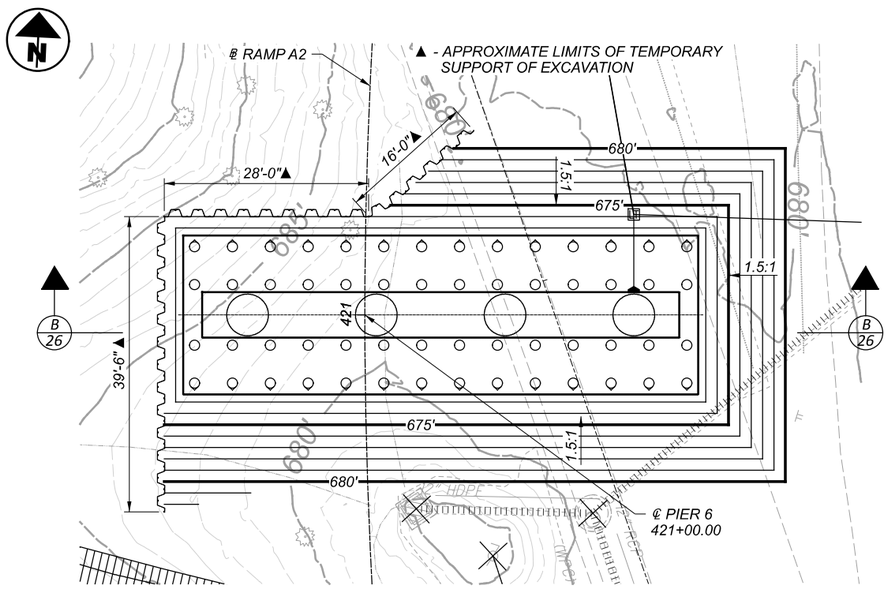


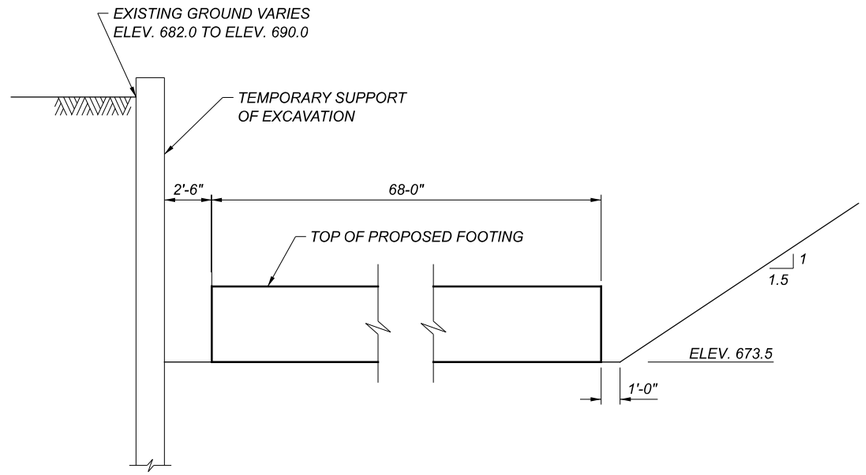
PIER 5 PLAN



SECTION A-A



PIER 6 PLAN



SECTION B-B

CONCEPTUAL TEMPORARY SHORING LOCATIONS AND EXCAVATION DEPTHS SHOWN. STAGE 3 DESIGN CONTRACT MODIFICATION PENDING APPROVAL. DESIGN AND DETAILS TO BE FINALIZED WITH NEXT SUBMISSION.

TEMPORARY SHORING DETAILS - (2 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
HDR
DESIGNER MKO | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 26 | TOTAL 164
SHEET 1468 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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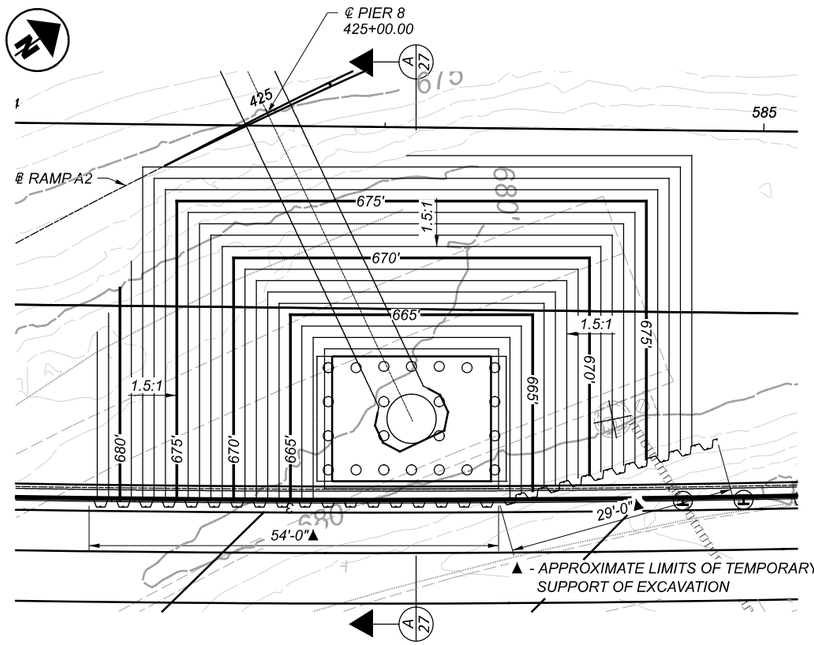
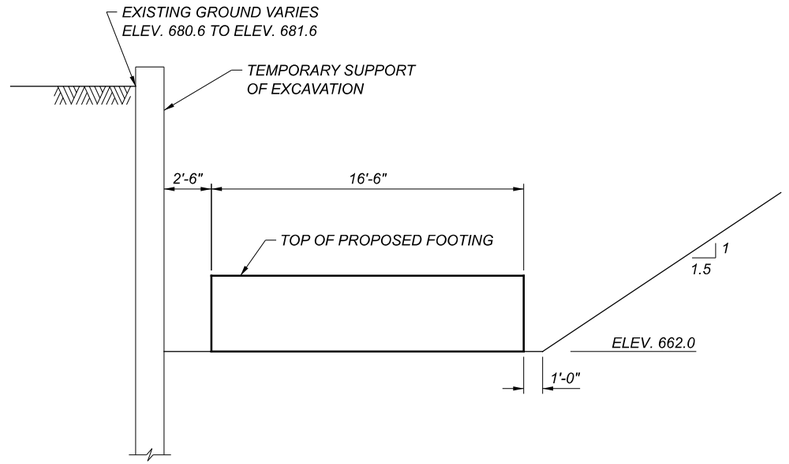


PIER 8 PLAN



SECTION A-A

CONCEPTUAL TEMPORARY SHORING LOCATIONS AND EXCAVATION DEPTHS SHOWN. STAGE 3 DESIGN CONTRACT MODIFICATION PENDING APPROVAL. DESIGN AND DETAILS TO BE FINALIZED WITH NEXT SUBMISSION.

TEMPORARY SHORING DETAILS - (3 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER MKO | CHECKER RBK

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 27 | TOTAL 164

SHEET 1469 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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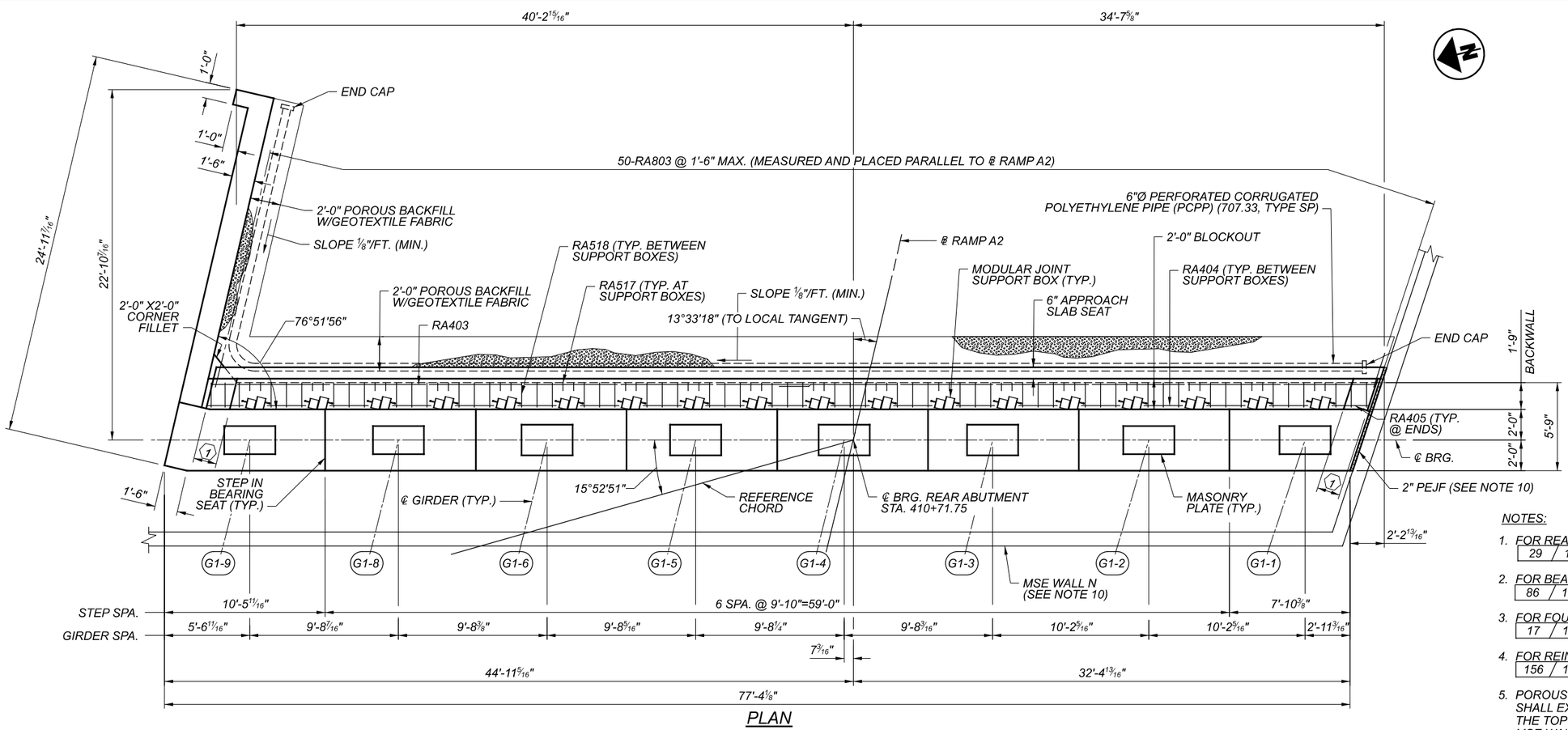
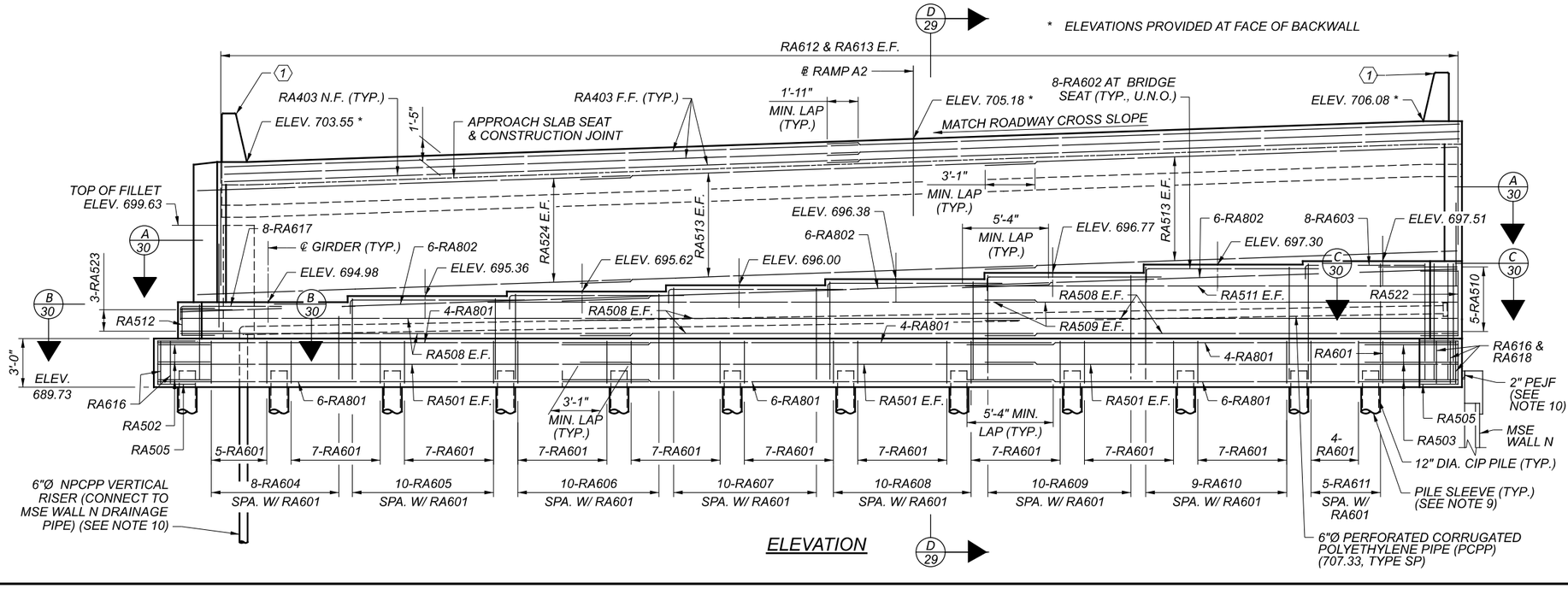


PLAN



ELEVATION

NOTES:

1. FOR REAR ABUTMENT DETAILS, SEE SHEETS 29 / 164 THRU 30 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
4. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
5. POROUS BACKFILL WITH GEOTEXTILE FABRIC, 2'-0" THICK SHALL EXTEND VERTICALLY FROM THE SUBGRADE TO THE TOP OF THE FOOTING AND LATERALLY FROM THE MSE WALL TO THE END OF THE WINGWALL.
6. SEALING OF THE BEAM SEATS: IF THE BEAM SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.
7. THE CONTRACTOR MAY USE AN APPROVED EQUAL MODULAR EXPANSION JOINT SYSTEM. IF AN APPROVED EQUAL MODULAR JOINT SYSTEM IS SELECTED, THE CONTRACTOR SHALL SUBMIT A CORRECTIVE WORK PER CMS 501.05.C. THE SUBMITTAL SHALL INCLUDE ALL PROPOSED CHANGES ASSOCIATED WITH THE PROPOSED MODULAR EXPANSION SYSTEM, INCLUDING BUT NOT LIMITED TO; REINFORCING CHANGES, BLOCKOUT DIMENSIONAL CHANGES, MATERIAL SPECIFICATION AND BRIDGE RAILING MODIFICATIONS.
8. BACKWALL CONCRETE: IN ADDITION TO CMS 511.09, DO NOT PLACE BACKWALL CONCRETE ABOVE THE CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT UNTIL AFTER THE DECK CONCRETE IN THE DECK END BLOCKOUT HAS BEEN PLACED.
9. PIPE PILE SLEEVES: MIN. 14" DIA., CMS 707.33 OR 707.42. REFER TO SS 840 FOR BACKFILLING OF SLEEVES AFTER PLACEMENT. INCLUDE FOR PAYMENT WITH ITEM 840, SEE MSE WALL N PLANS.
10. SEE MSE WALL N PLANS FOR ADDITIONAL DETAILS. INCLUDE MSE WALL , 2" PEJF AND 6"Ø NPCPP VERTICAL RISER FOR PAYMENT WITH ITEM 840, SEE MSE WALL N PLANS.

LEGEND:

(1) FOR REAR APPROACH SLAB RAILING DETAILS, SEE SHEET 154 / 164

REAR ABUTMENT PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	MKO
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	28
TOTAL	164
SHEET	1470
TOTAL	2338

CUY-90-16.28 (CCG3A)

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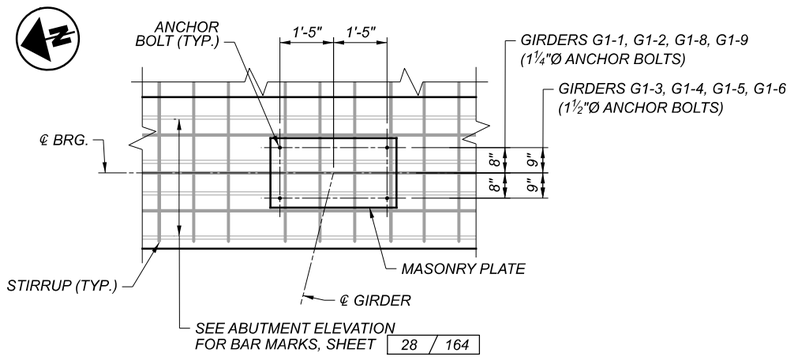
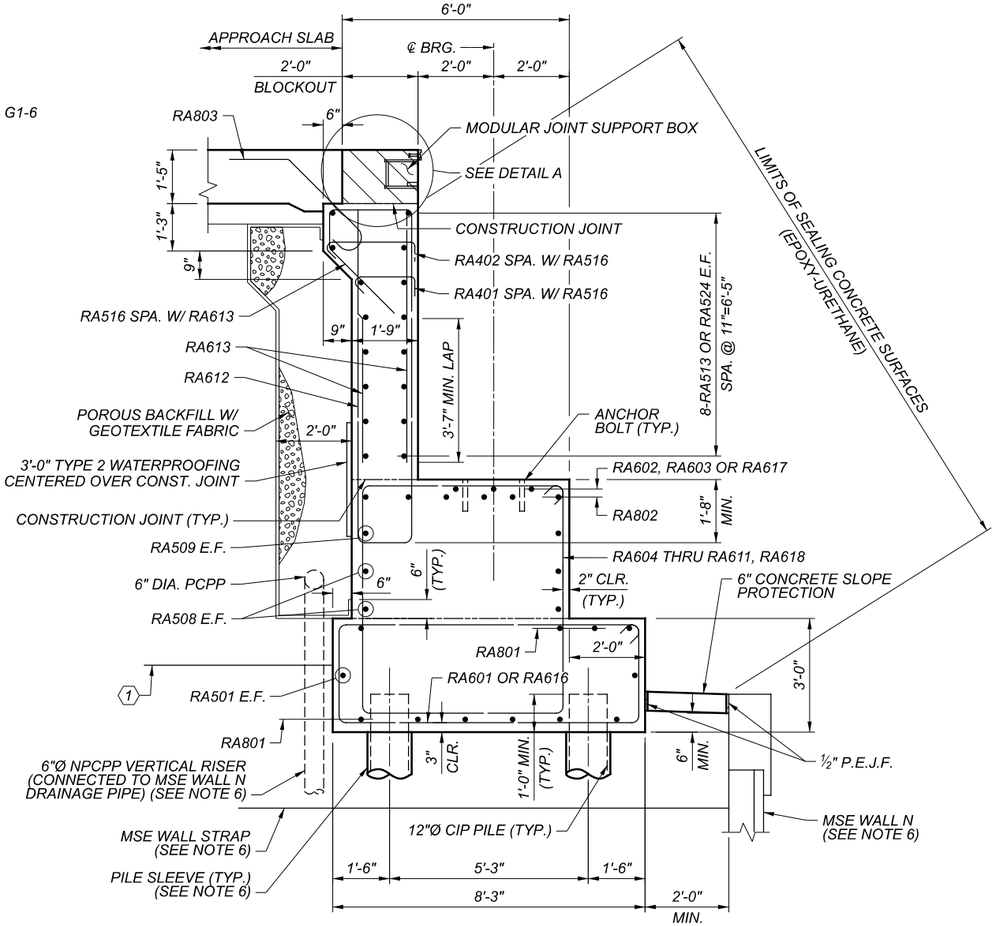
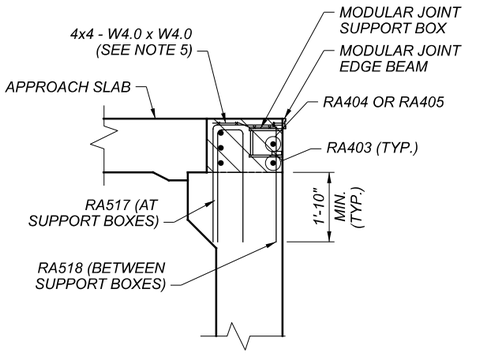


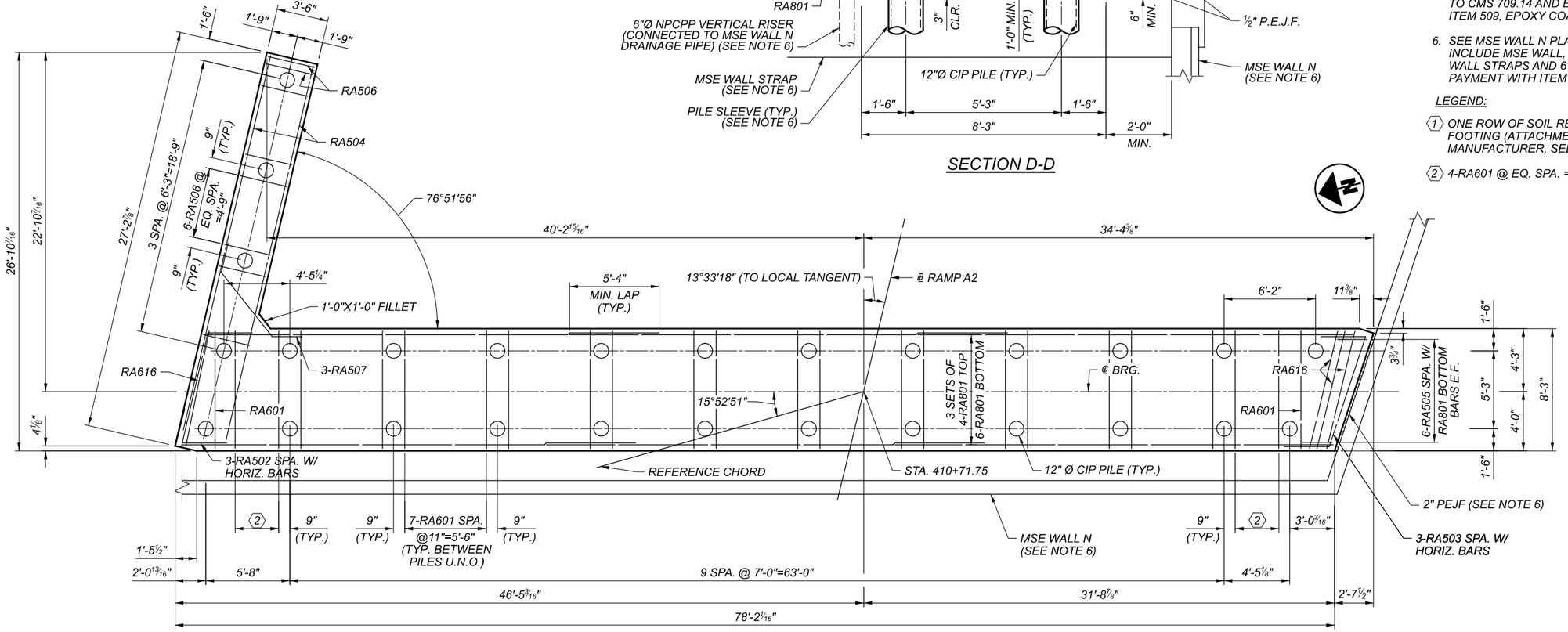
BEARING ANCHOR PLAN



SECTION D-D



DETAIL A



FOOTING PLAN

NOTES:

1. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
2. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
3. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
4. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.
5. GALVANIZED WELDED WIRE FABRIC SHALL CONFORM TO CMS 709.14 AND BE INCLUDED FOR PAYMENT WITH ITEM 509, EPOXY COATED REINFORCING STEEL.
6. SEE MSE WALL N PLANS FOR ADDITIONAL DETAILS. INCLUDE MSE WALL, 2" PEJF, PILE SLEEVES, MSE WALL STRAPS AND 6"Ø NPCPP VERTICAL RISER FOR PAYMENT WITH ITEM 840, SEE MSE WALL N PLANS.

LEGEND:

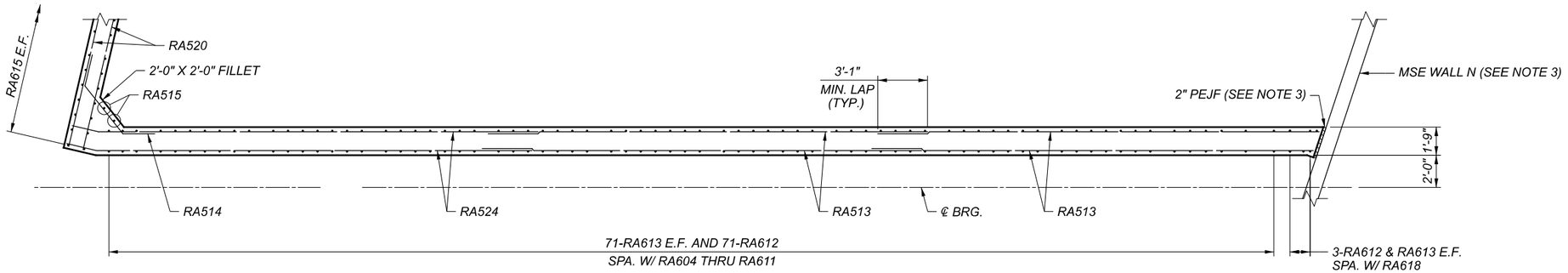
1 ONE ROW OF SOIL REINFORCEMENT ATTACHED TO FOOTING (ATTACHMENT DETAIL PER WALL MANUFACTURER, SEE NOTE 6).

2 4-RA601 @ EQ. SPA. = 2'-11"

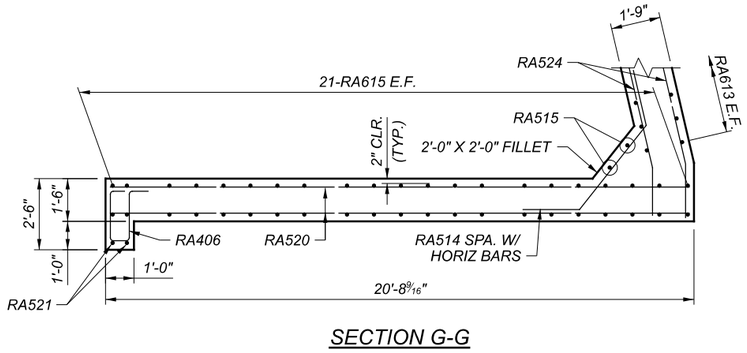
REAR ABUTMENT FOOTING PLAN AND SECTION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	MKO
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	29
TOTAL	164
SHEET	1471
TOTAL	2338

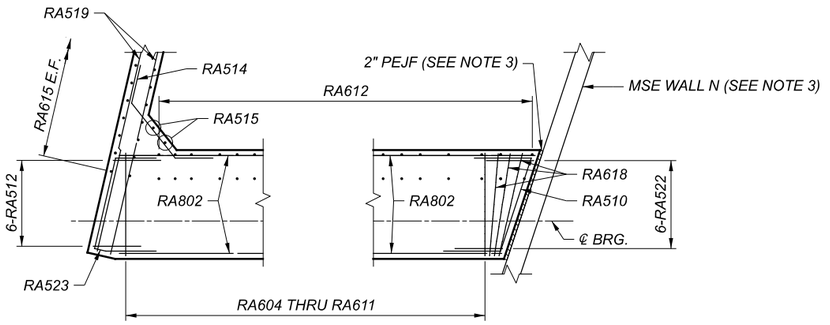
CUY-90-16.28 (CCG3A)



SECTION A-A

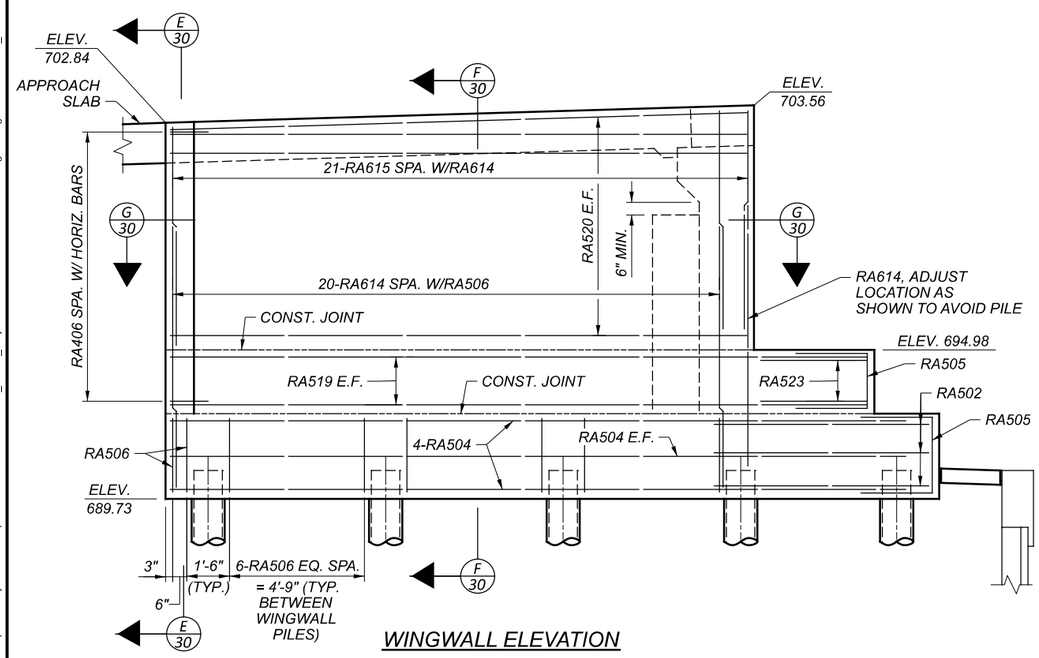


SECTION G-G

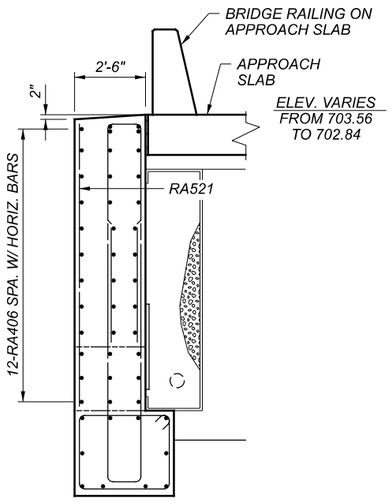


SECTION B-B

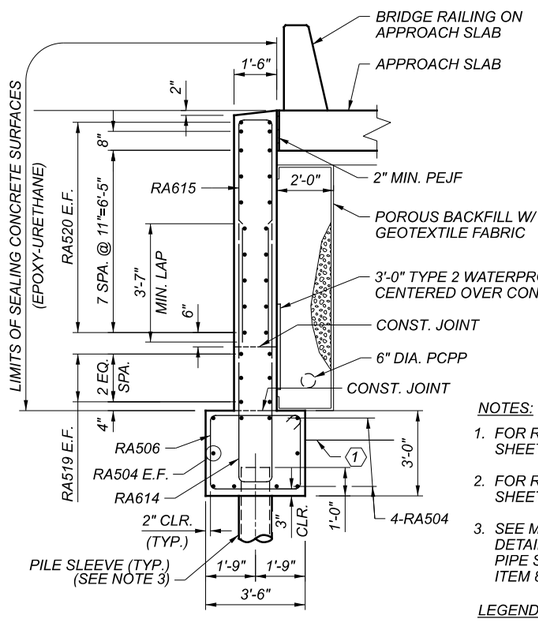
SECTION C-C



WINGWALL ELEVATION



SECTION E-E
SEE SECTION F-F FOR
ADDITIONAL DETAILS



SECTION F-F

NOTES:

1. FOR REAR APPROACH SLAB DETAILS, SEE SHEET 152 / 164
2. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
3. SEE MSE WALL N PLANS FOR ADDITIONAL DETAILS. INCLUDE MSE WALL, PEJF AND PIPE SLEEVES FOR PAYMENT WITH ITEM 840, SEE MSE WALL N PLANS.

LEGEND:

(1) ONE ROW OF SOIL REINFORCEMENT ATTACHED TO FOOTING (ATTACHMENT PER WALL MANUFACTURER, SEE NOTE 3).

REAR ABUTMENT WINGWALL DETAILS
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	MKO
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	30
TOTAL	164
SHEET	1472
TOTAL	2338

CUY-90-16.28 (CCG3A)

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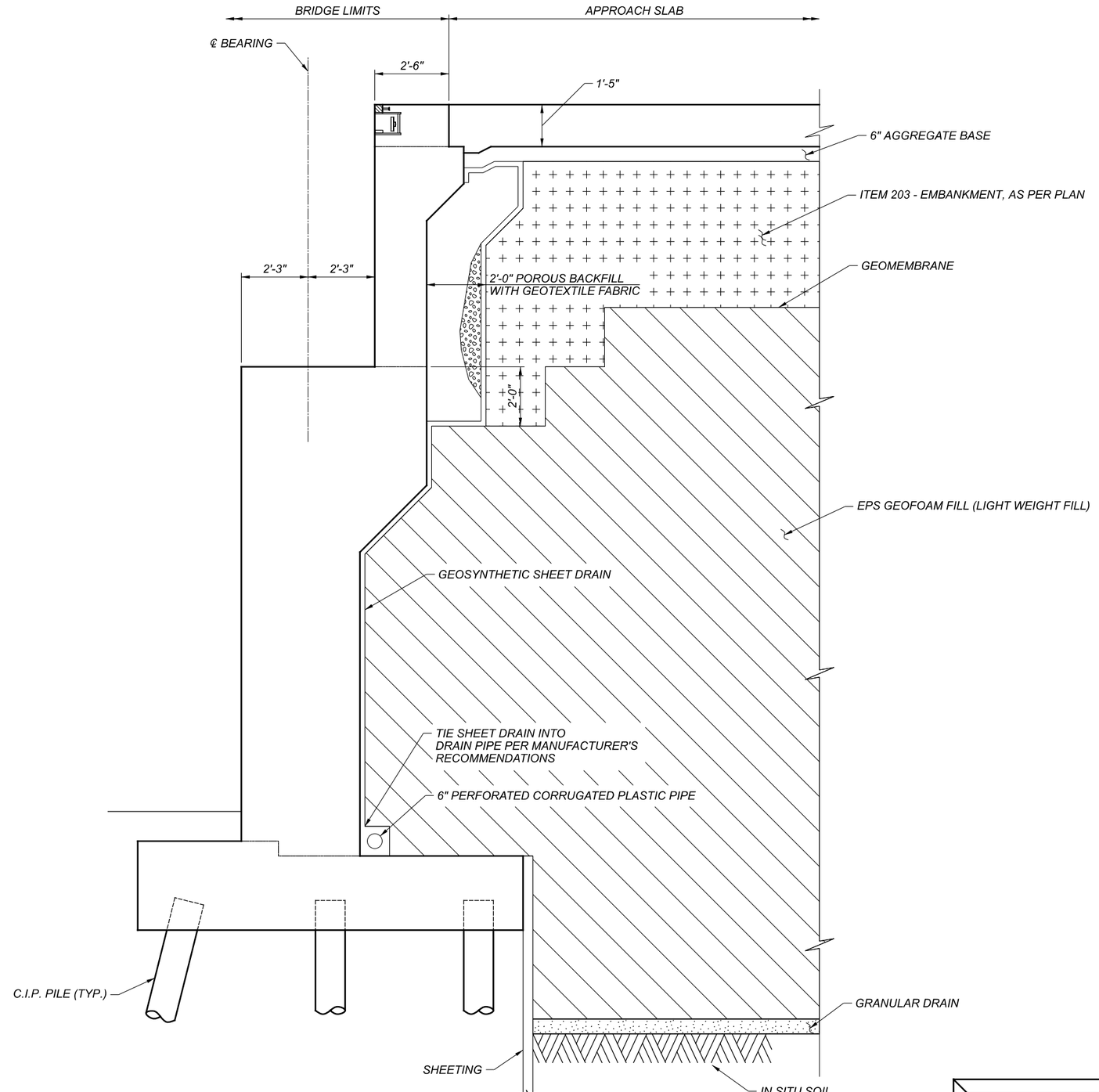
FORWARD ABUTMENT PLAN AND ELEVATION NOT SHOWN. DETAILS ARE IMPACTED BY THE IMPLEMENTATION OF THE LIGHT WEIGHT FILL EMBANKMENT. STAGE 3 DESIGN CONTRACT MODIFICATION PENDING APPROVAL. DESIGN AND DETAILS TO BE FINALIZED WITH NEXT SUBMISSION.

DESIGNER	BTA	SFN	1806910
CHECKER	JS	DESIGN AGENCY	
REVIEWER	JMS 06/22/22		
PROJECT ID	82382		
SUBSET	31 TOTAL 164		
SHEET	1473 TOTAL 2338		

FORWARD ABUTMENT PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)



FORWARD ABUTMENT SECTION

CONCEPTUAL FORWARD ABUTMENT SECTION SHOWN. DETAILS ARE IMPACTED BY THE IMPLEMENTATION OF THE LIGHT WEIGHT FILL EMBANKMENT. STAGE 3 DESIGN CONTRACT MODIFICATION PENDING APPROVAL. DESIGN AND DETAILS TO BE FINALIZED WITH NEXT SUBMISSION.

FORWARD ABUTMENT FOOTING PLAN AND SECTION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	BTA
CHECKER	JS
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	32
TOTAL	164
SHEET	1474
TOTAL	2338

CUY-90-16.28 (CCG3A)

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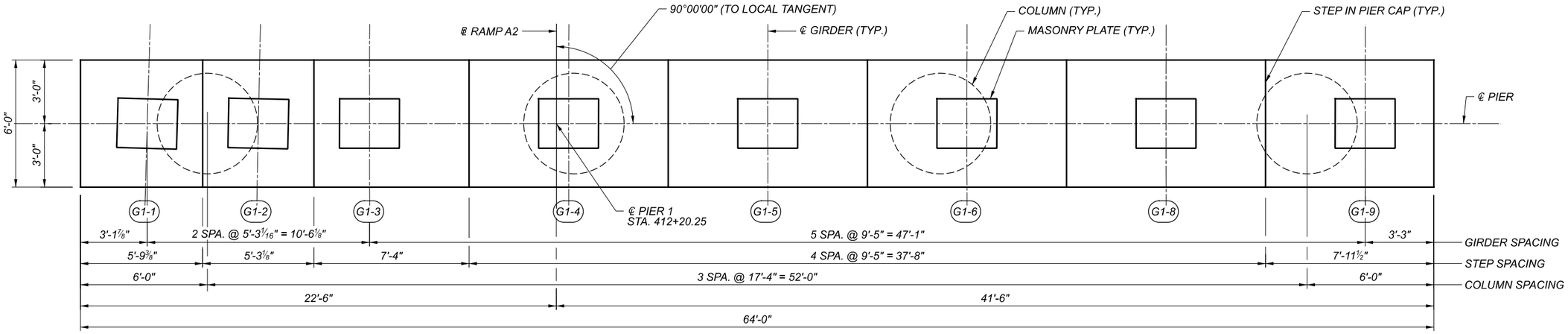
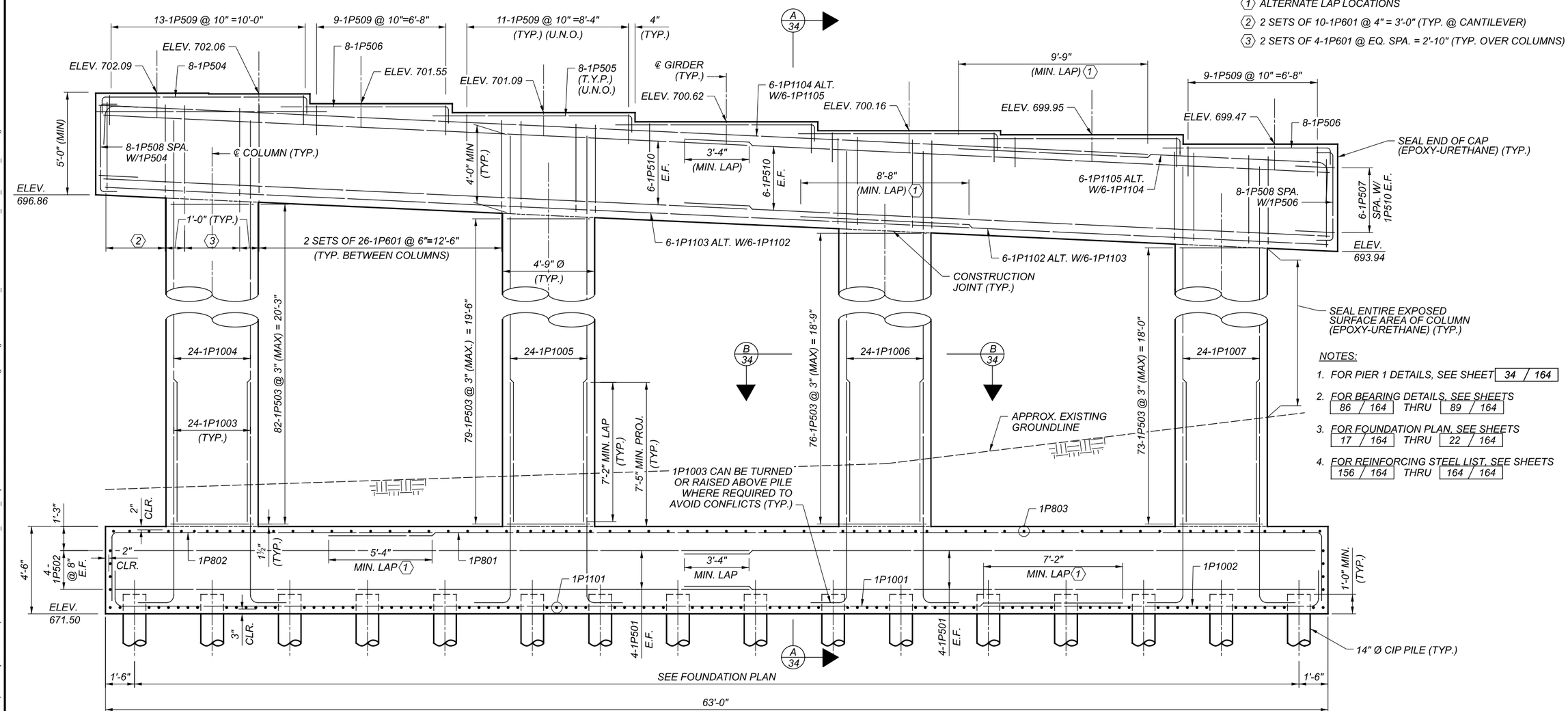


PLAN



ELEVATION

LEGEND:

1. ALTERNATE LAP LOCATIONS
2. 2 SETS OF 10-1P601 @ 4" = 3'-0" (TYP. @ CANTILEVER)
3. 2 SETS OF 4-1P601 @ EQ. SPA. = 2'-10" (TYP. OVER COLUMNS)

NOTES:

1. FOR PIER 1 DETAILS, SEE SHEET 34 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
4. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164

PIER 1 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
OVER I.R. 90 AND CR-721 (E. 14TH ST.)
I.R. 77 SB OVER

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	33
TOTAL	164
SHEET	1475
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:04:16 PM USER: CRICCARDI
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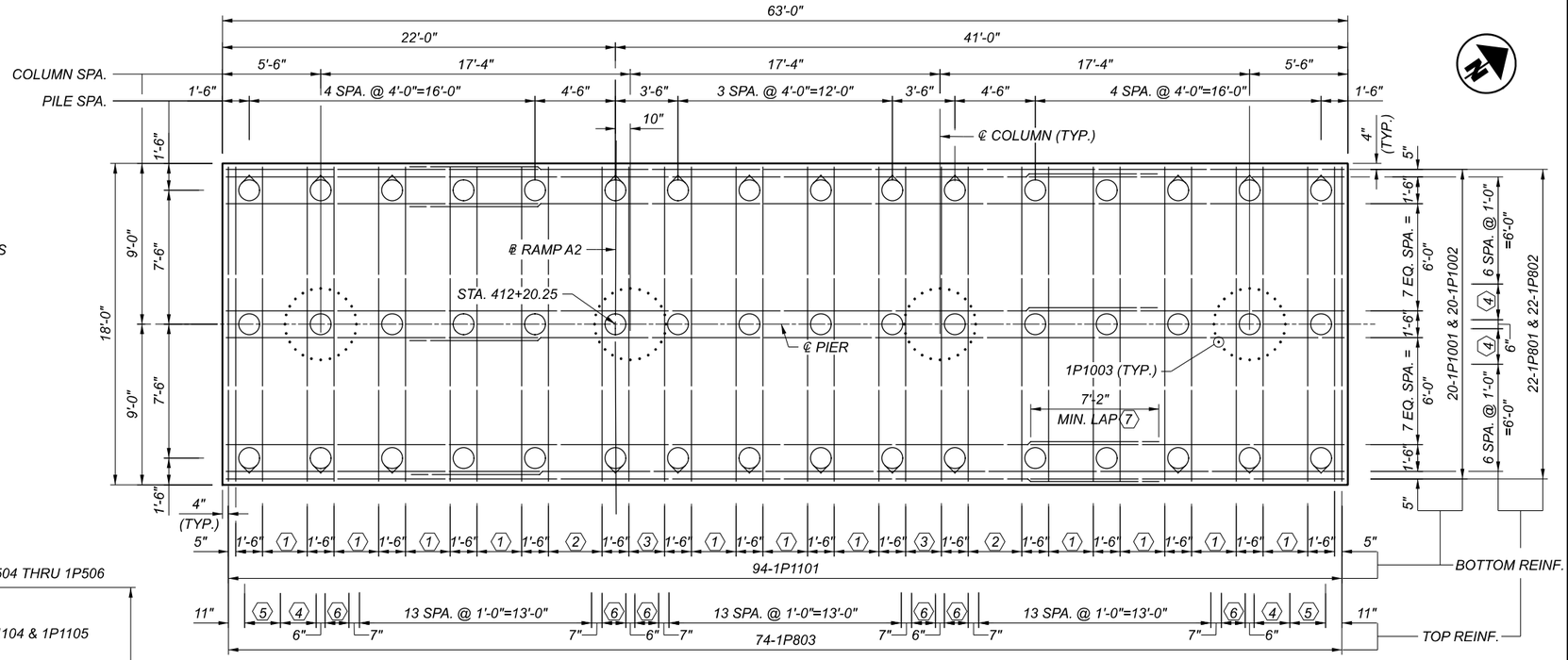
LEGEND:

1. 5 SPA. @ 6"=2'-6"
2. 6 SPA. @ 6"=3'-0"
3. 4 SPA. @ 6"=2'-0"
4. 3 SPA. @ 8"=2'-0"
5. 2 SPA. @ 1'-0"=2'-0"
6. 2 SPA. @ 8"=1'-4"
7. ALTERNATE LAP LOCATIONS

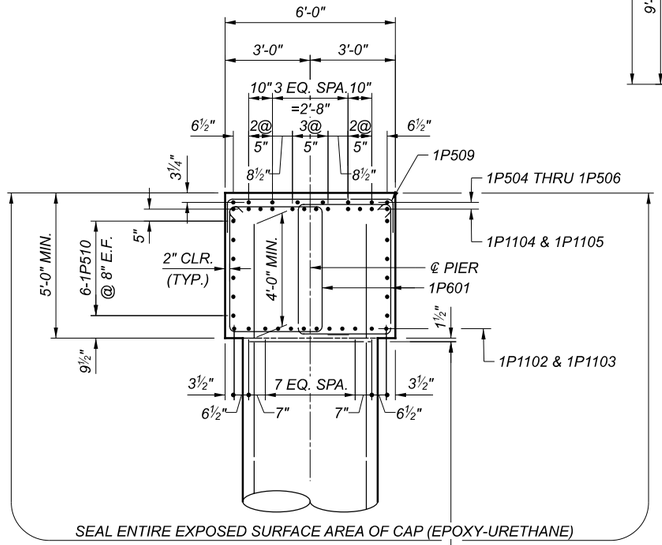


FOOTING PLAN

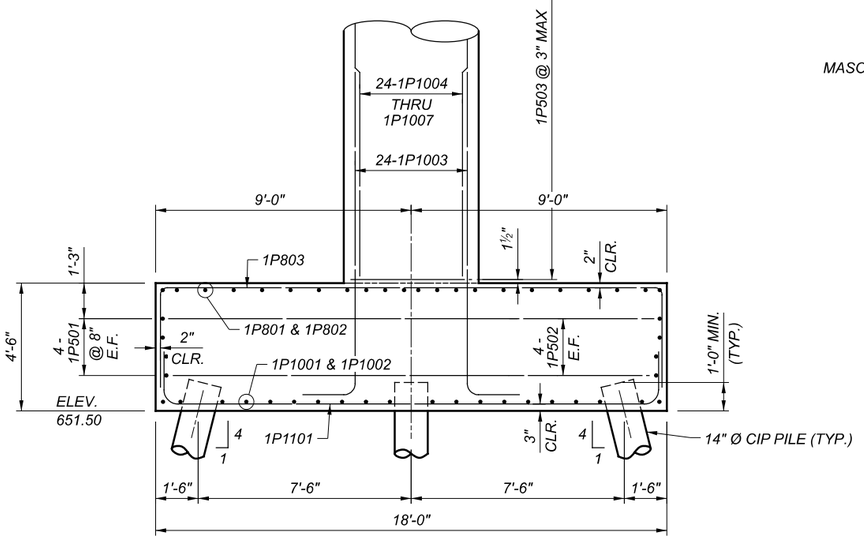
(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)

NOTES:

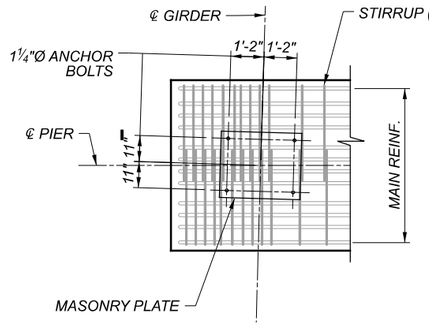
1. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
2. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
3. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
4. PILES MARKED ◯ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
5. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.



SEAL ENTIRE EXPOSED SURFACE AREA OF CAP (EPOXY-URETHANE)

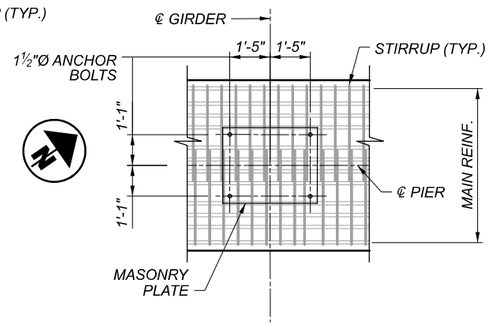


SECTION A-A



GIRDER G1-1 SHOWN

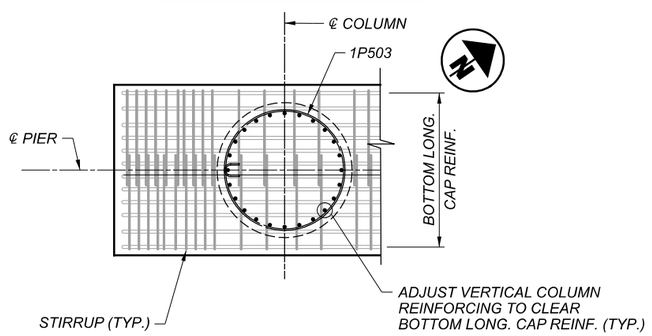
GIRDERS G1-2, G1-8 & G1-9 SIMILAR



GIRDER G1-3 SHOWN

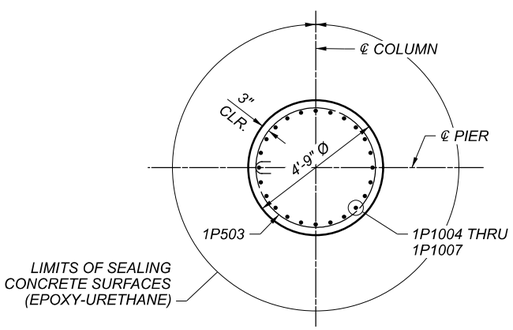
GIRDERS G1-4, G1-5 & G1-6 SIMILAR

BEARING ANCHOR PLANS



CAP AND COLUMN INTERFACE DETAILS

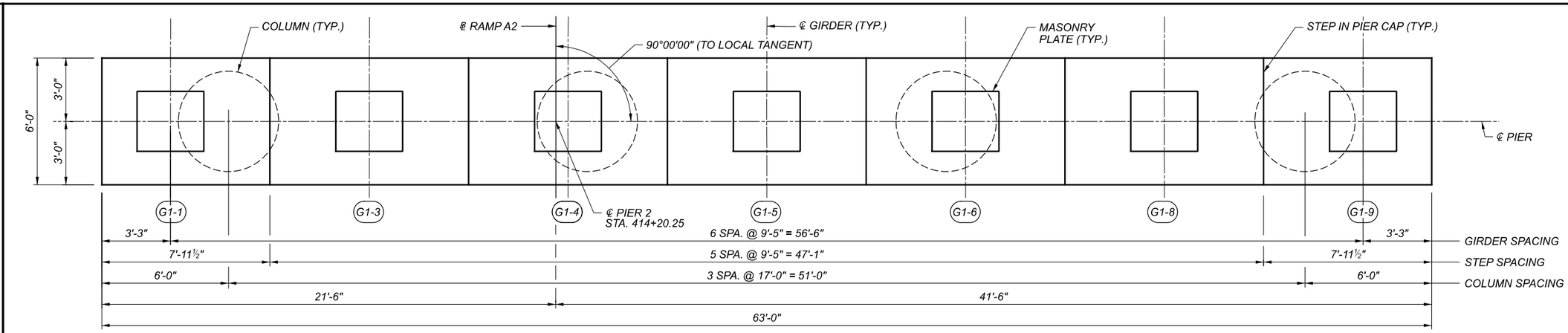
EXTERIOR COLUMN SHOWN, INTERIOR COLUMN SIMILAR



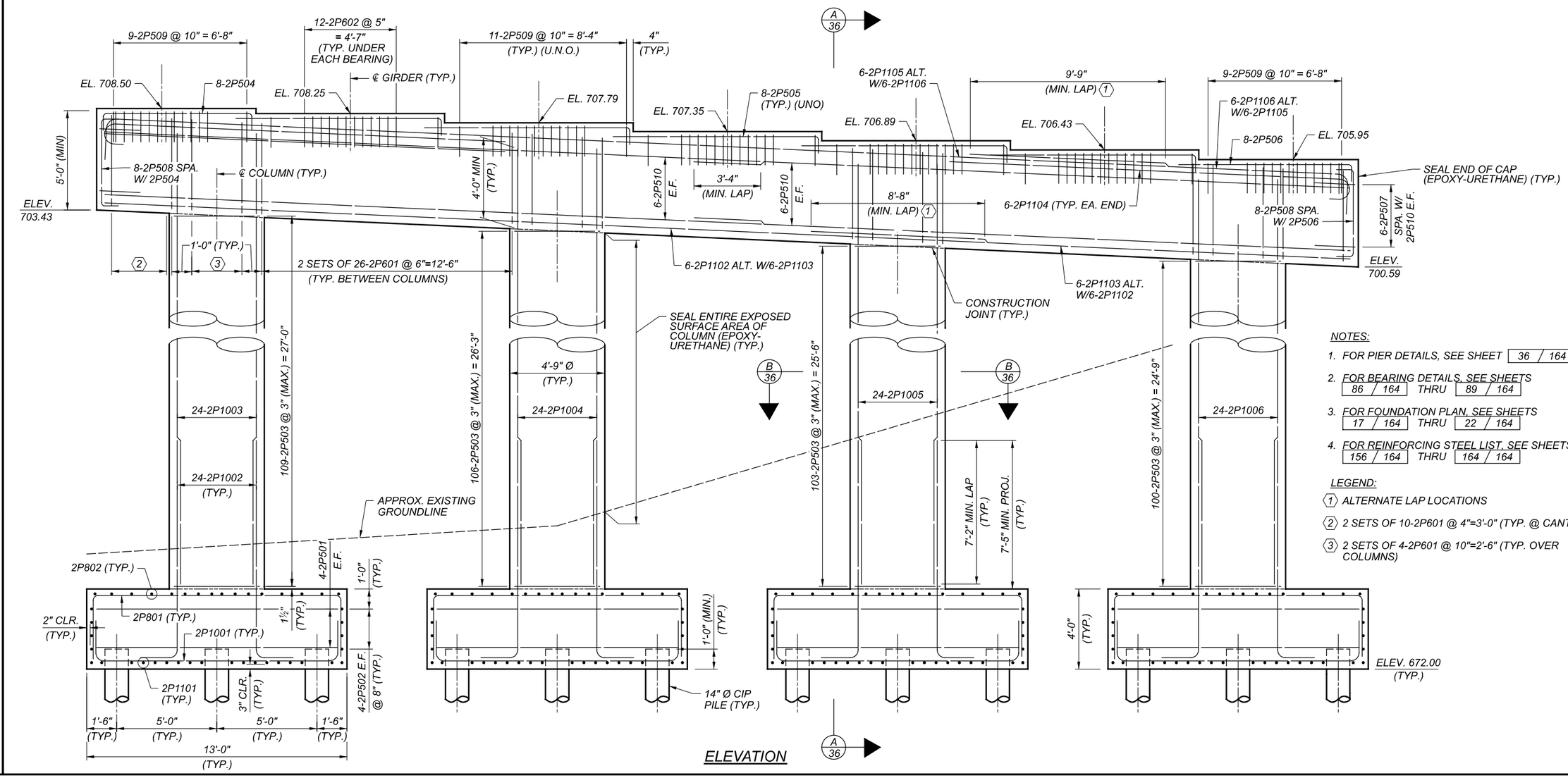
SECTION B-B

PIER 1 DETAILS
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	34
TOTAL	164
SHEET	1476
TOTAL	2338



PLAN



ELEVATION

NOTES:

1. FOR PIER DETAILS, SEE SHEET 36 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
4. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164

LEGEND:

1. ALTERNATE LAP LOCATIONS
2. 2 SETS OF 10-2P601 @ 4"=3'-0" (TYP. @ CANTILEVER)
3. 2 SETS OF 4-2P601 @ 10"=2'-6" (TYP. OVER COLUMNS)

PIER 2 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:04:22 PM USER: CRICCARDI
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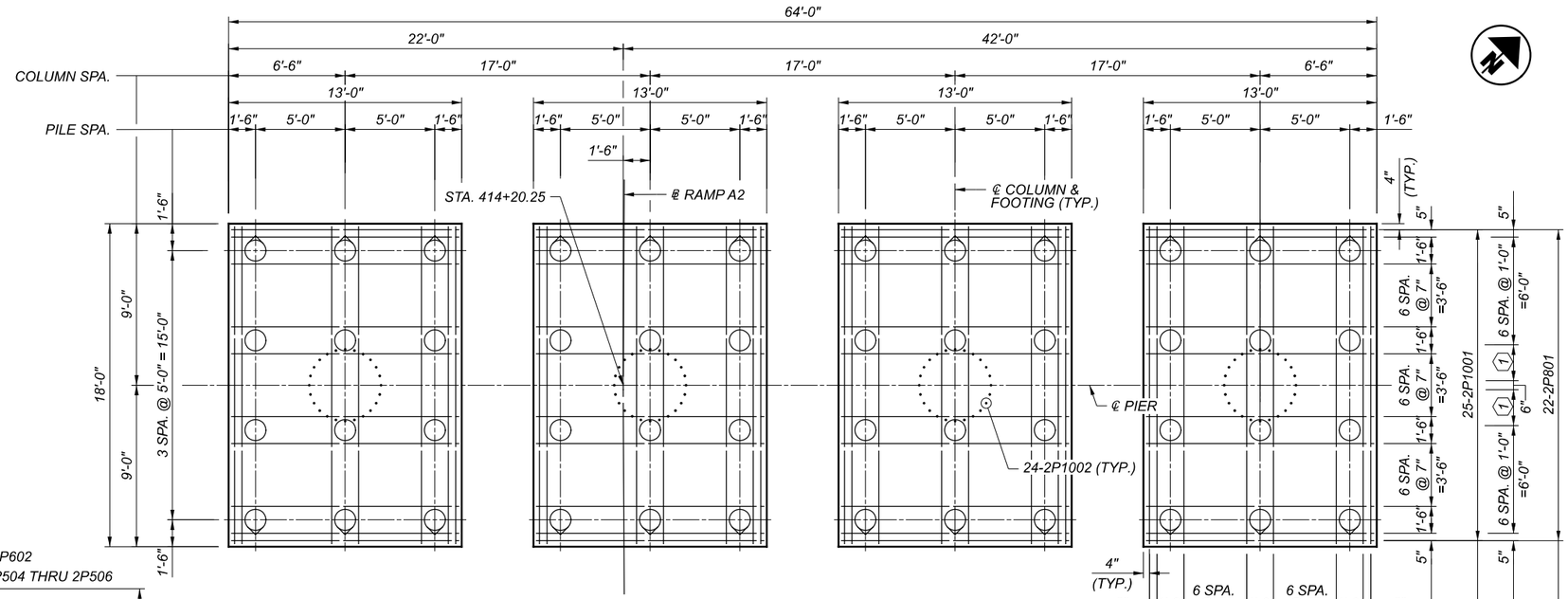
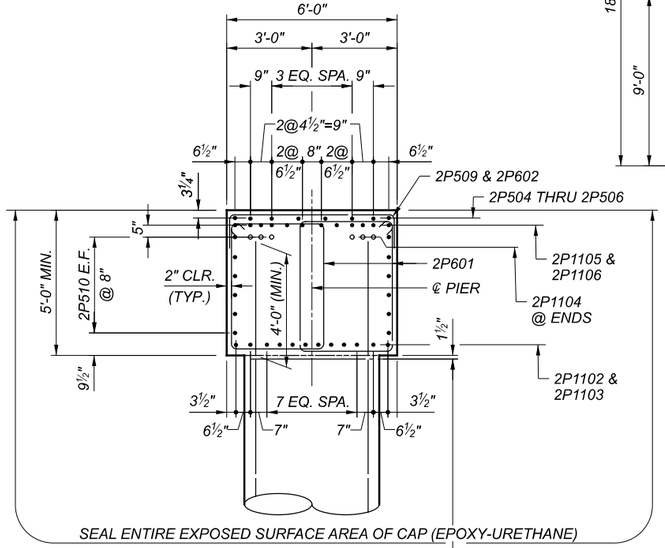
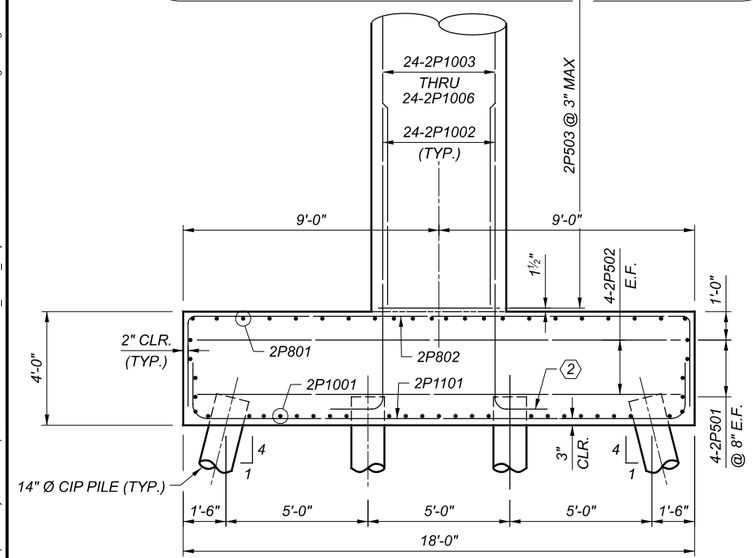
SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	35
TOTAL	164
SHEET	1477
TOTAL	2338



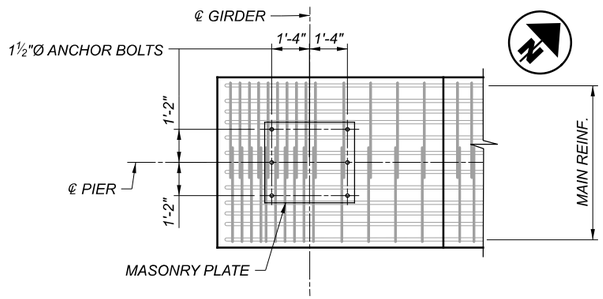
FOOTING PLAN

(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)



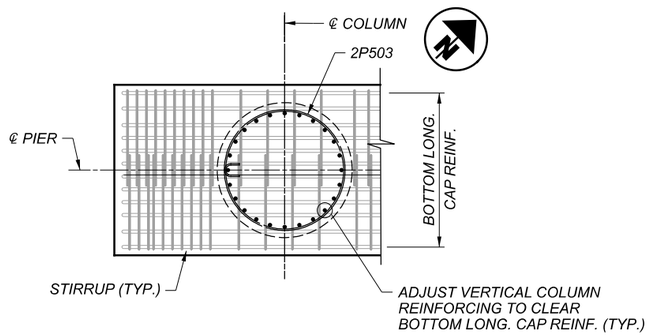


SECTION A-A



BEARING ANCHOR PLAN

GIRDER G1-1 SHOWN
GIRDERS G1-3,G1-4,G1-5, G1-6, G1-8 & G1-9 SIMILAR



CAP AND COLUMN INTERFACE DETAILS

EXTERIOR COLUMN SHOWN, INTERIOR COLUMN SIMILAR

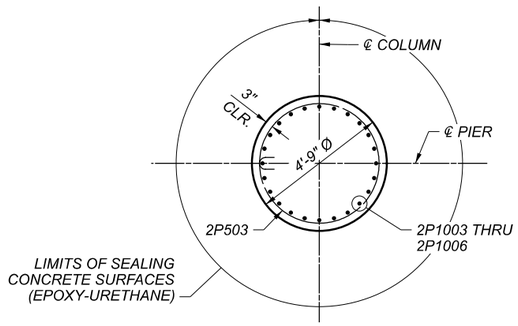
LEGEND:

(1) *3 SPA. 8"*

(2) *2P1002 CAN BE TURNED OR RAISED ABOVE PILE WHERE REQUIRED TO AVOID CONFLICTS (TYP.)*

NOTES:

1. *FOR BEARING DETAILS, SEE SHEETS* 86 / 164 *THRU* 89 / 164
2. *FOR FOUNDATION PLAN, SEE SHEETS* 17 / 164 *THRU* 22 / 164
3. *FOR REINFORCING STEEL LIST, SEE SHEETS* 156 / 164 *THRU* 164 / 164
4. *PILES MARKED THUS ◯ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.*
5. *ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.*

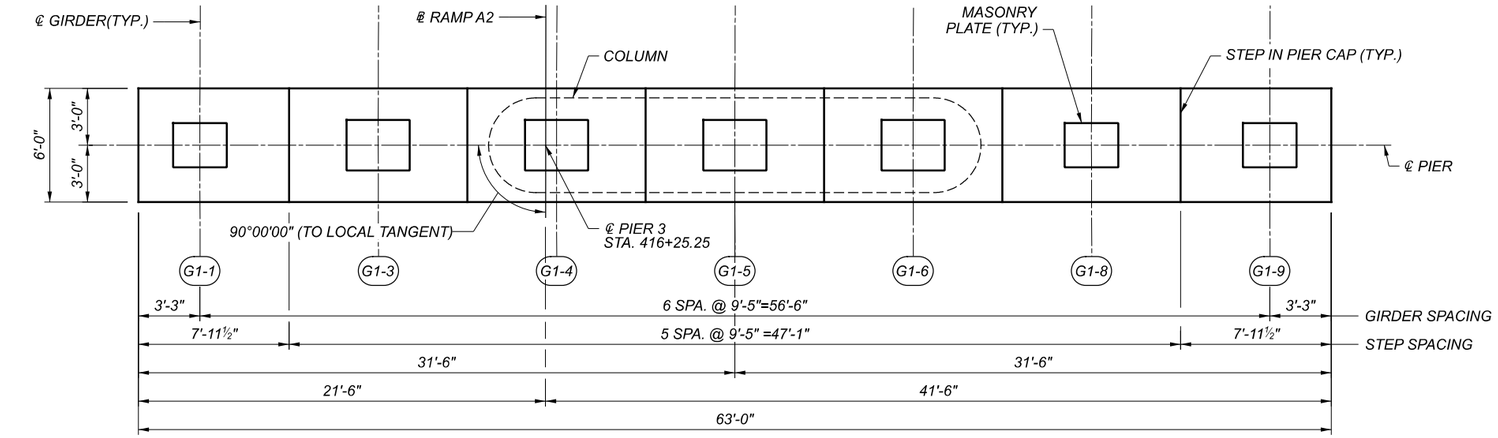


SECTION B-B

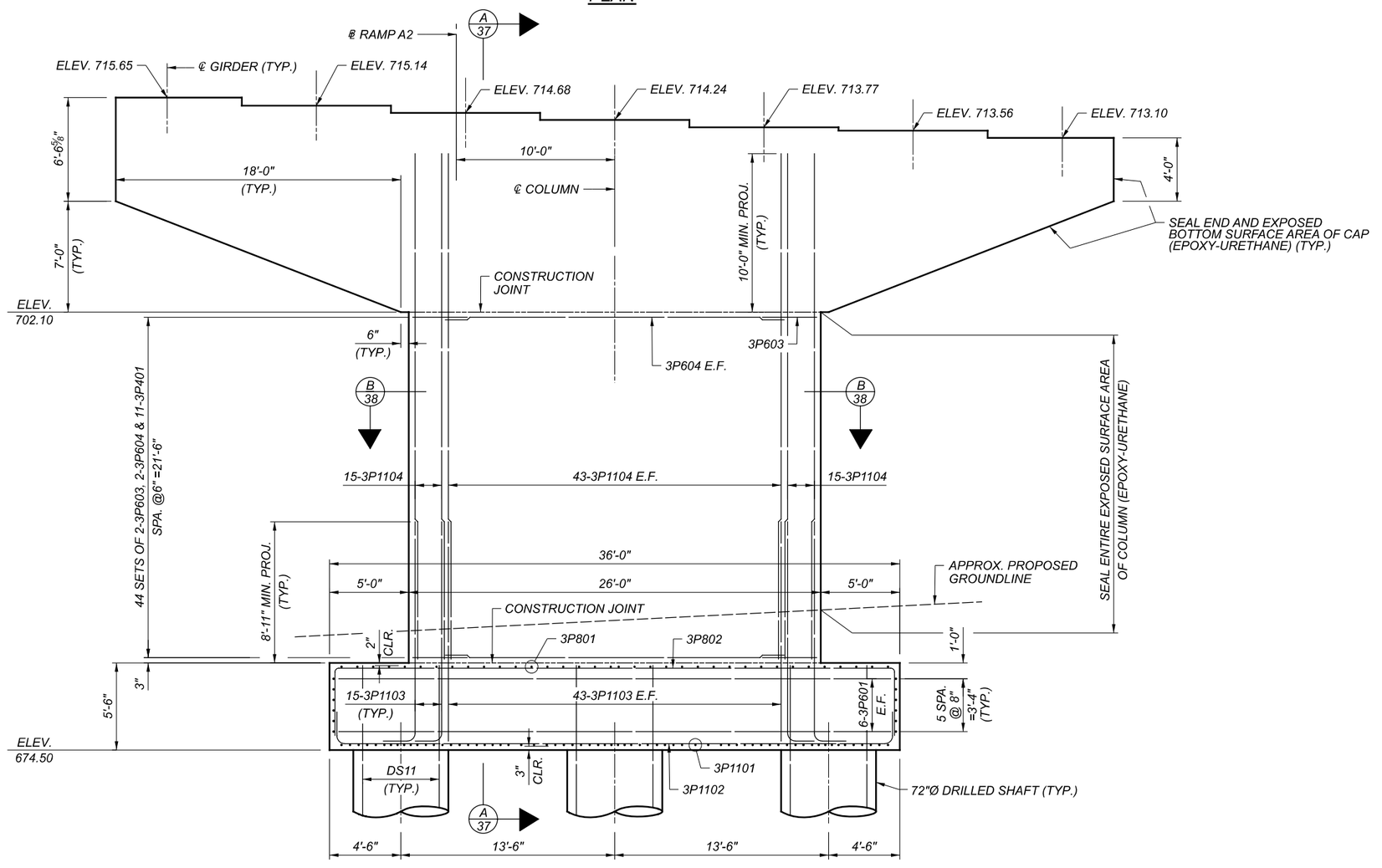
PIER 2 DETAILS
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	36
TOTAL	164
SHEET	1478
TOTAL	2338

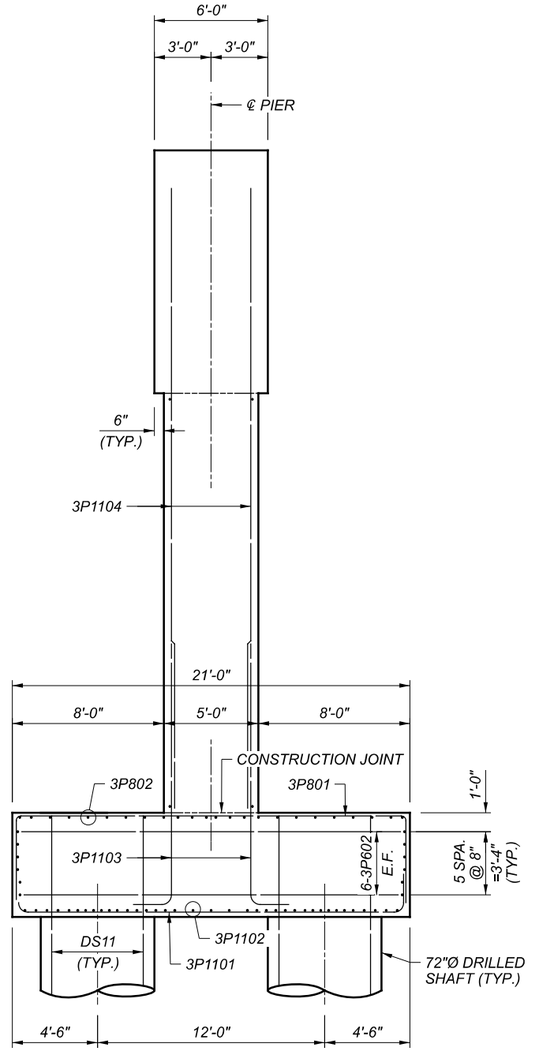
CUY-90-16.28 (CCG3A)



PLAN



ELEVATION
(CAP REINFORCING NOT SHOWN)



SECTION A-A
(CAP REINFORCING NOT SHOWN)

NOTES:

1. FOR CAP, BEARING AND COLUMN REINFORCING INTERFACE DETAIL, SEE SHEET 39 / 164
2. FOR CAP REINFORCEMENT DETAILS, SEE SHEET 38 / 164
3. FOR FOOTING PLAN AND ADDITIONAL DETAILS, SEE SHEET 39 / 164
4. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
5. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
6. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164

PIER 3 PLAN & ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER PJC | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 37 | TOTAL 164
SHEET 1479 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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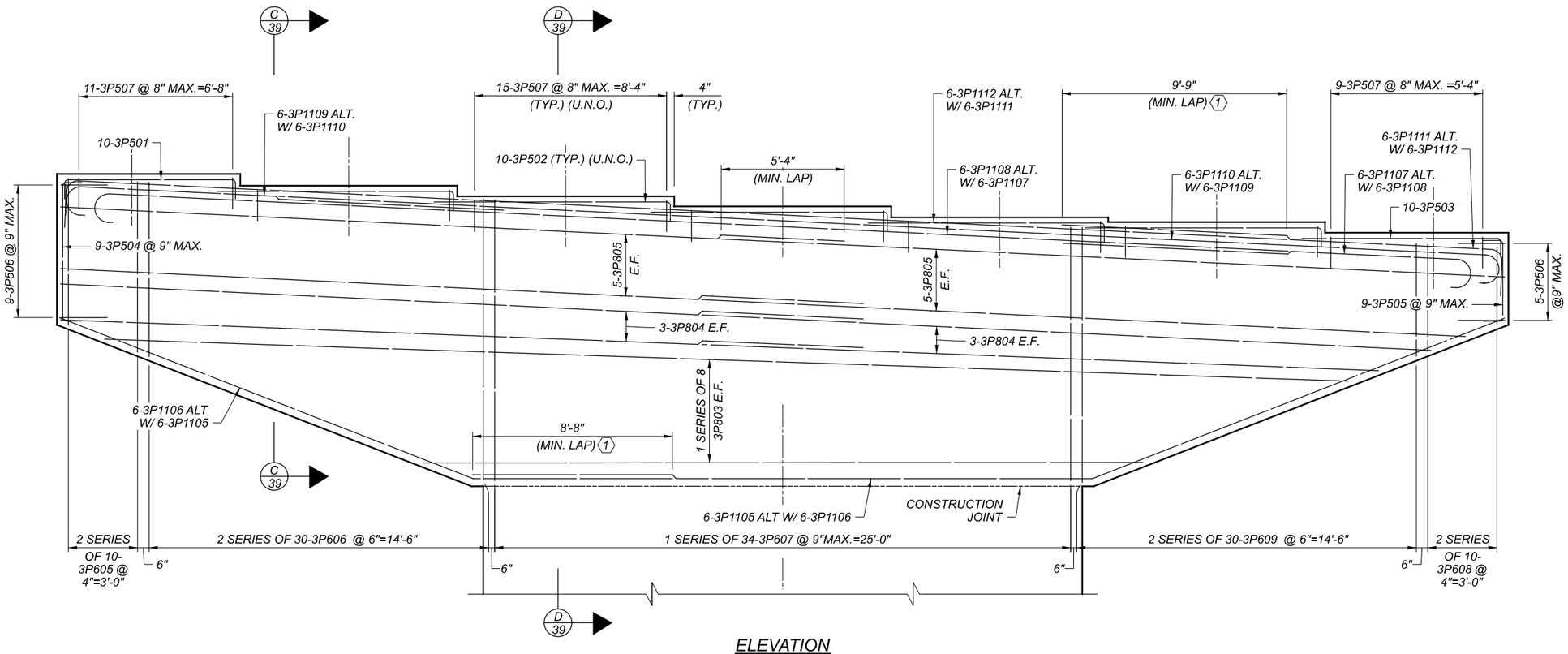
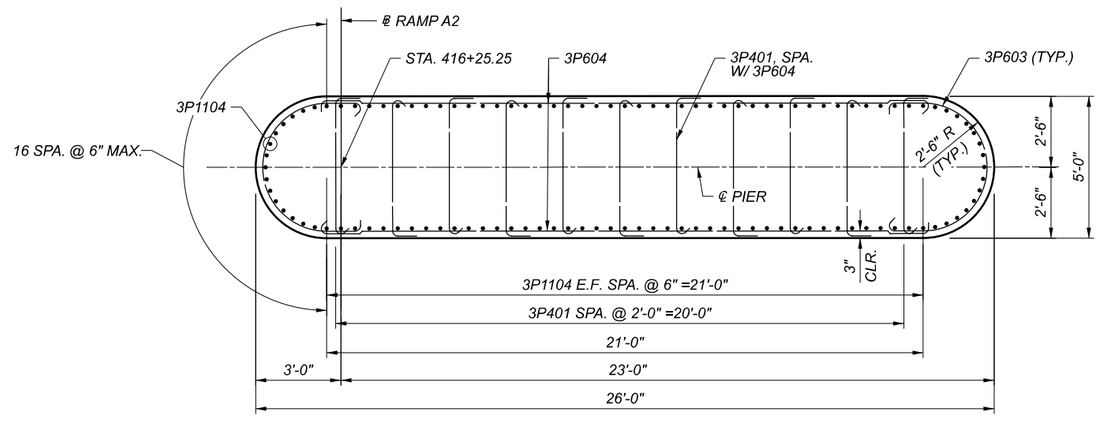


ELEVATION

(COLUMN REINFORCING NOT SHOWN)



SECTION B-B

NOTES:

1. FOR PIER COLUMN DETAILS, SEE SHEET 37 / 164

1 ALTERNATE LAP LOCATIONS

PIER 3 DETAILS - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	NJH
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	38
TOTAL	164
SHEET	1480
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:04:41 PM USER: CRICCARDI
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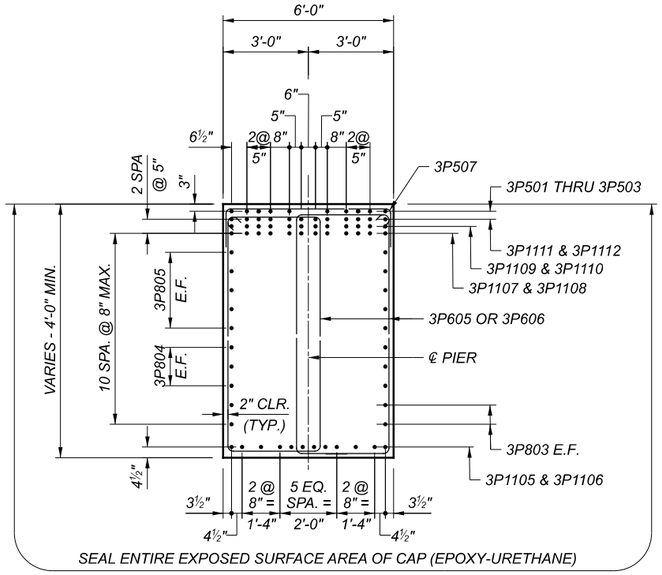
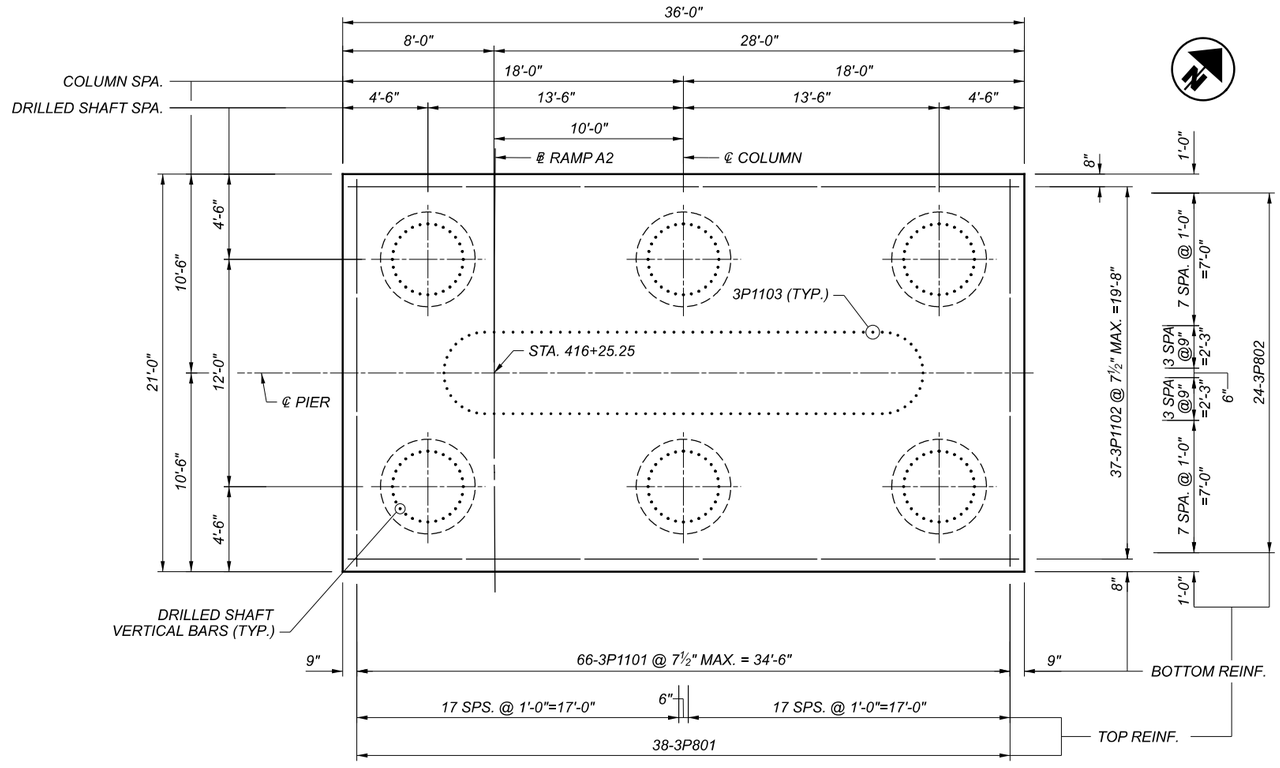
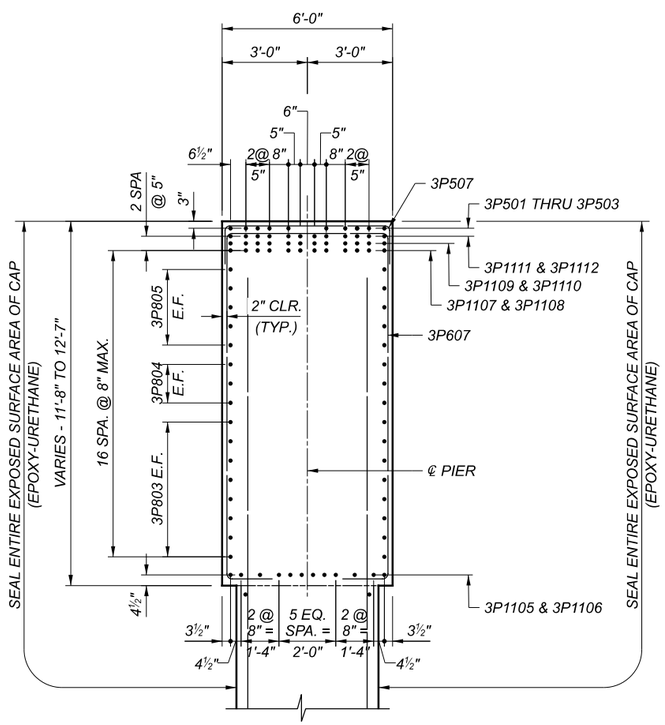


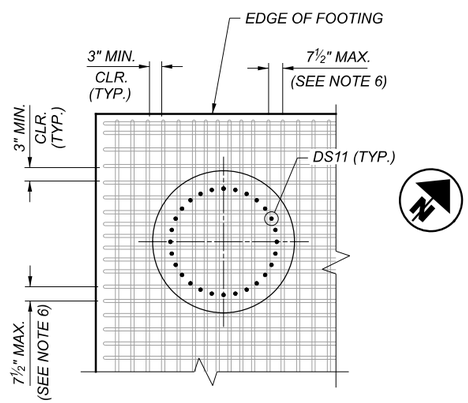
SECTION C-C



FOOTING PLAN



SECTION D-D

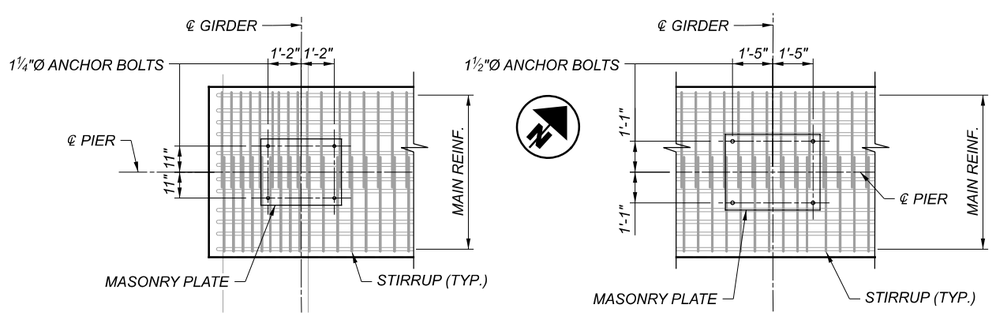


DRILLED SHAFT FOOTING INTERFACE DETAIL

TOP LEFT CORNER SHOWN, OTHERS SIMILAR

NOTES:

1. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
2. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
3. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
4. FOR DRILLED SHAFT DETAILS SEE SHEETS 23 / 164 THRU 24 / 164
5. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.
6. FOOTING REINFORCING MAY BE REPOSITIONED AS REQUIRED TO CLEAR LONGITUDINAL DRILLED SHAFT REINFORCING.



GIRDER G1-1 SHOWN

GIRDERS G1-8 & G1-9 SIMILAR

GIRDER G1-3 SHOWN

GIRDERS G1-4, G1-5 & G1-6 SIMILAR

BEARING ANCHOR PLANS

PIER 3 DETAILS - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	NJH
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	39
TOTAL	164
SHEET	1481
TOTAL	2338

CUY-90-16.28 (CCG3A)

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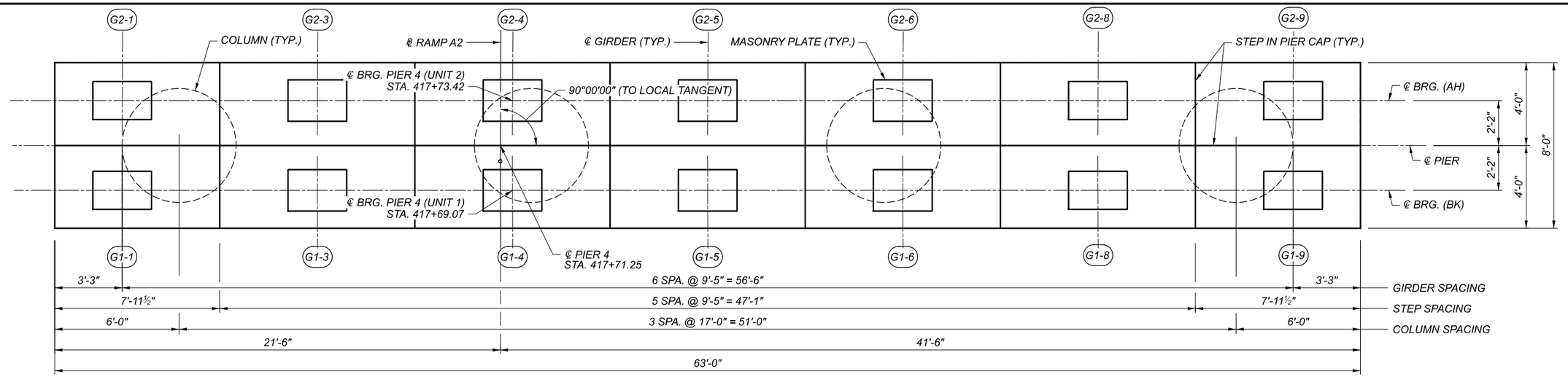
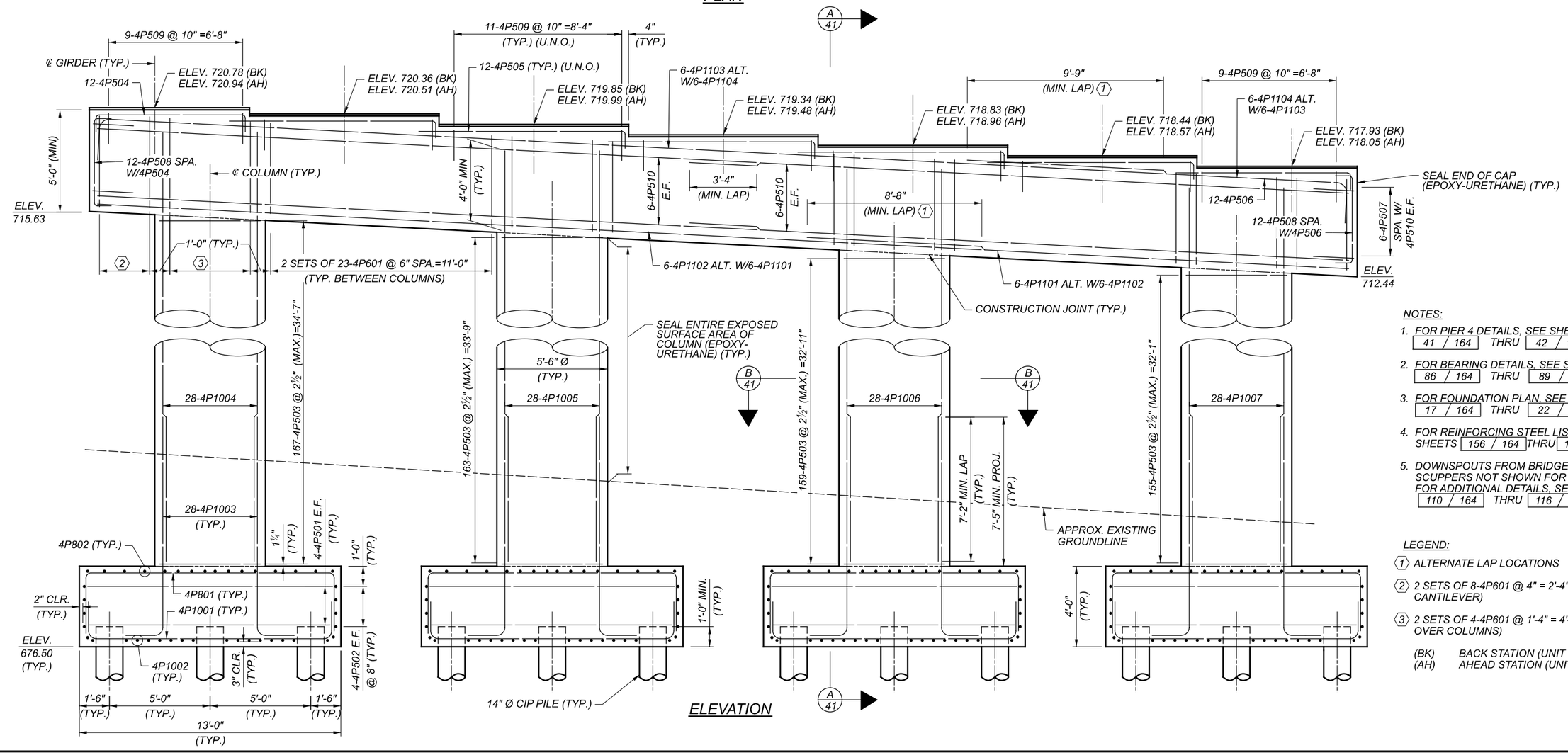


PLAN



ELEVATION

NOTES:

1. FOR PIER 4 DETAILS, SEE SHEETS 41 / 164 THRU 42 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
4. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
5. DOWNSPOUTS FROM BRIDGE DECK SCUPPERS NOT SHOWN FOR CLARITY. FOR ADDITIONAL DETAILS, SEE SHEETS 110 / 164 THRU 116 / 164

LEGEND:

1 ALTERNATE LAP LOCATIONS

2 2 SETS OF 8-4P601 @ 4" = 2'-4" (TYP. @ CANTILEVER)

3 2 SETS OF 4-4P601 @ 1'-4" = 4'-0" (TYP. OVER COLUMNS)

(BK) BACK STATION (UNIT 1)
(AH) AHEAD STATION (UNIT 2)

PIER 4 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	40
TOTAL	164
SHEET	1482
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:04:55 PM USER: CRICCARDI
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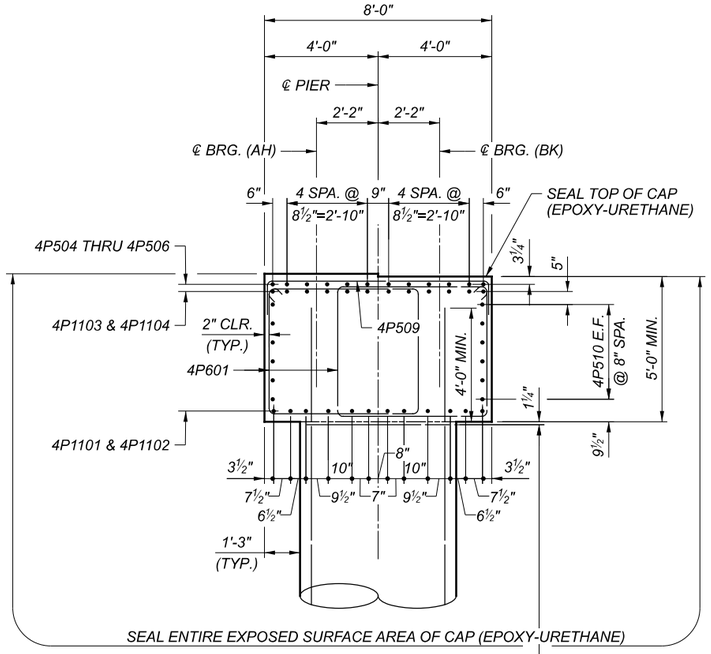
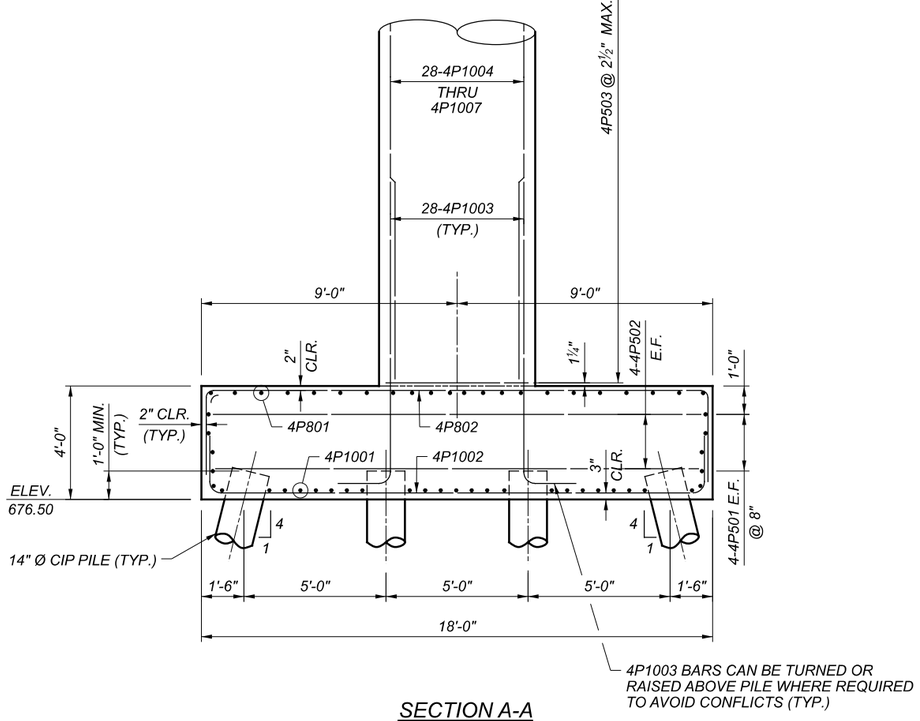
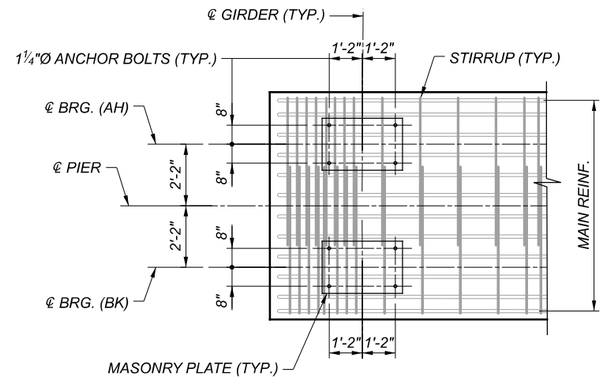




SECTION A-A

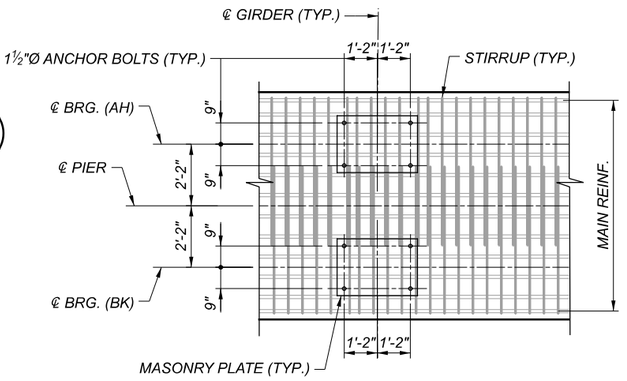


GIRDER G1-1 SHOWN

GIRDERS G1-8 & G1-9 SIMILAR (UNIT 1 GIRDERS)

GIRDER G2-1 SHOWN

GIRDERS G2-8 & G2-9 SIMILAR (UNIT 2 GIRDERS)



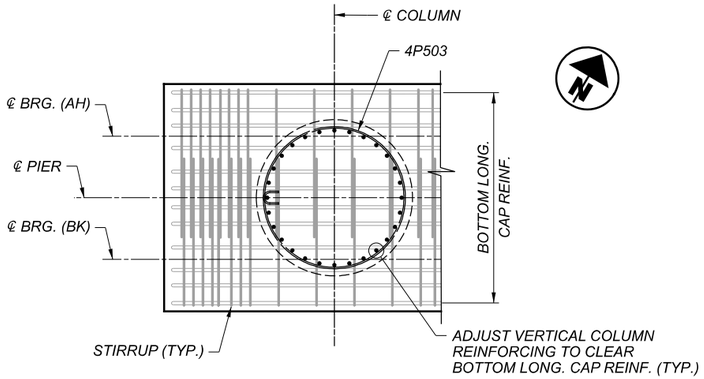
GIRDER G1-3 SHOWN

GIRDERS G1-4, G1-5 & G1-6 SIMILAR (UNIT 1 GIRDERS)

GIRDER G2-3 SHOWN

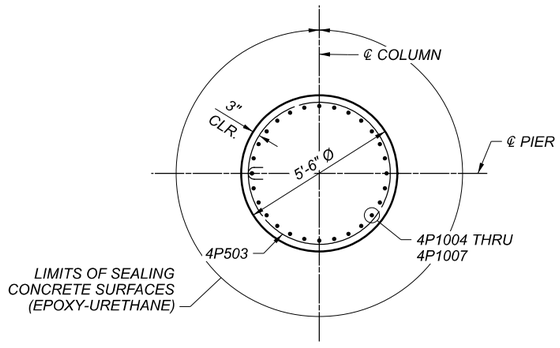
GIRDERS G2-4, G2-5 & G2-6 SIMILAR (UNIT 2 GIRDERS)

BEARING ANCHOR PLANS



CAP AND COLUMN INTERFACE DETAILS

EXTERIOR COULMN SHOWN, INTERIOR COLUMN SIMILAR



SECTION B-B

NOTES:

1. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
2. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
3. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.
4. SEALING OF THE BEAM SEATS: IF THE BEAM SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.

PIER 4 DETAILS - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	41
TOTAL	164
SHEET	1483
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:05:02 PM USER: CRICCARDI
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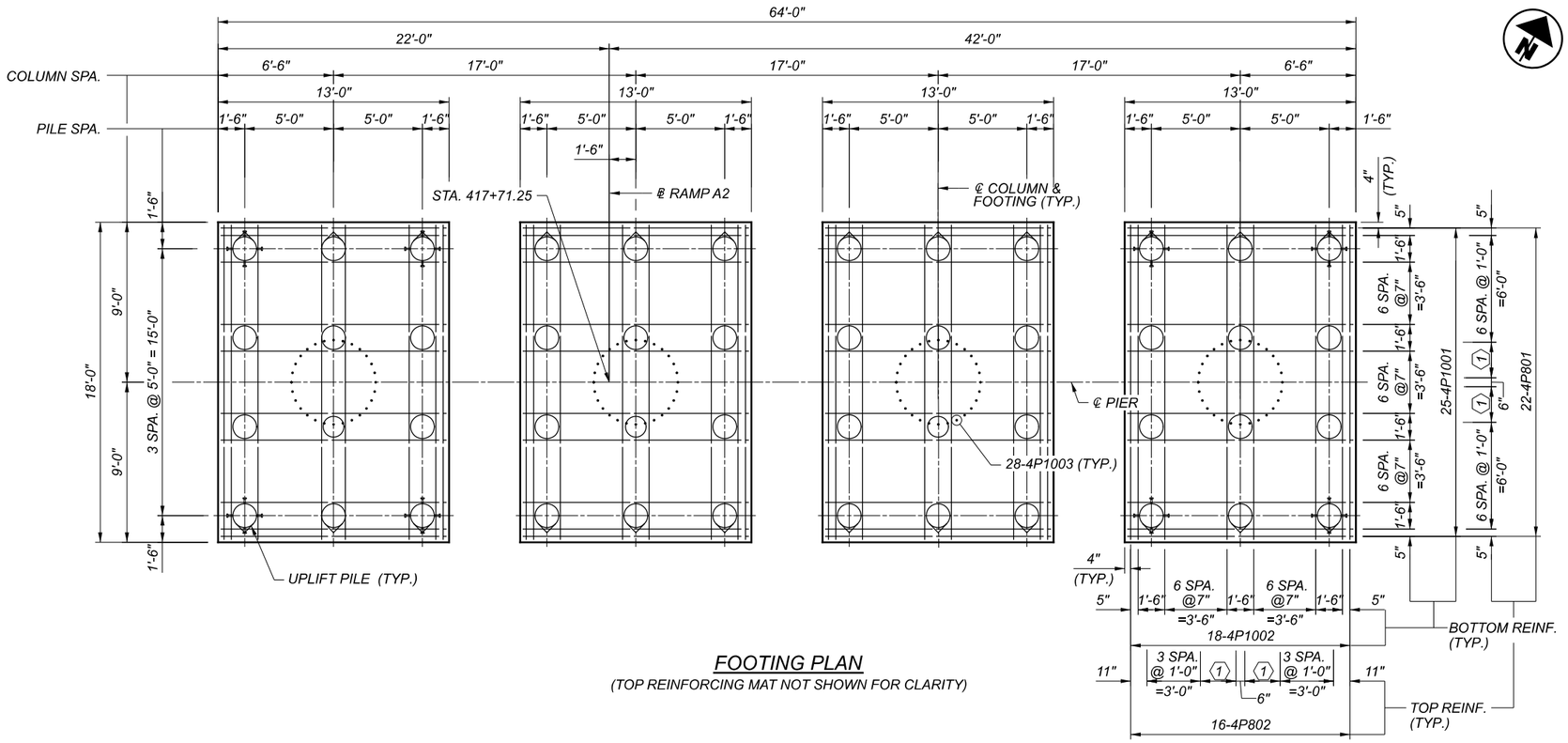
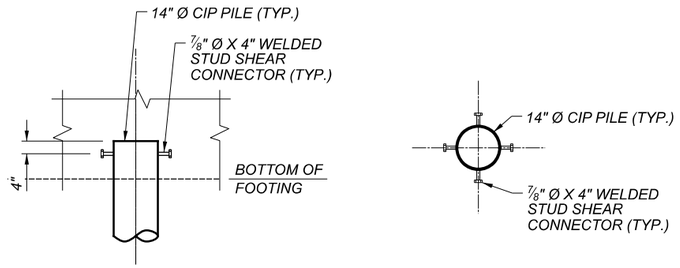


FOOTING PLAN

(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)



PILE SHEAR/UPLIFT RESTRAINT DETAILS

NOTES:

1. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
2. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
3. PILES MARKED ◯ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.

LEGEND:

⟨1⟩ 3 SPA. 8"

PIER 4 DETAILS - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	42
TOTAL	164
SHEET	1484
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:05:09 PM USER: CRICCARDI
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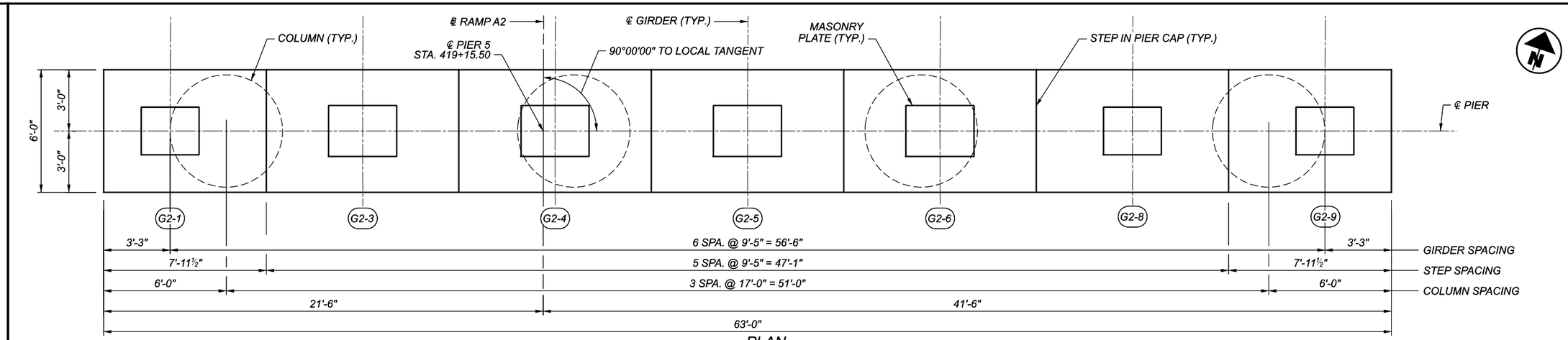
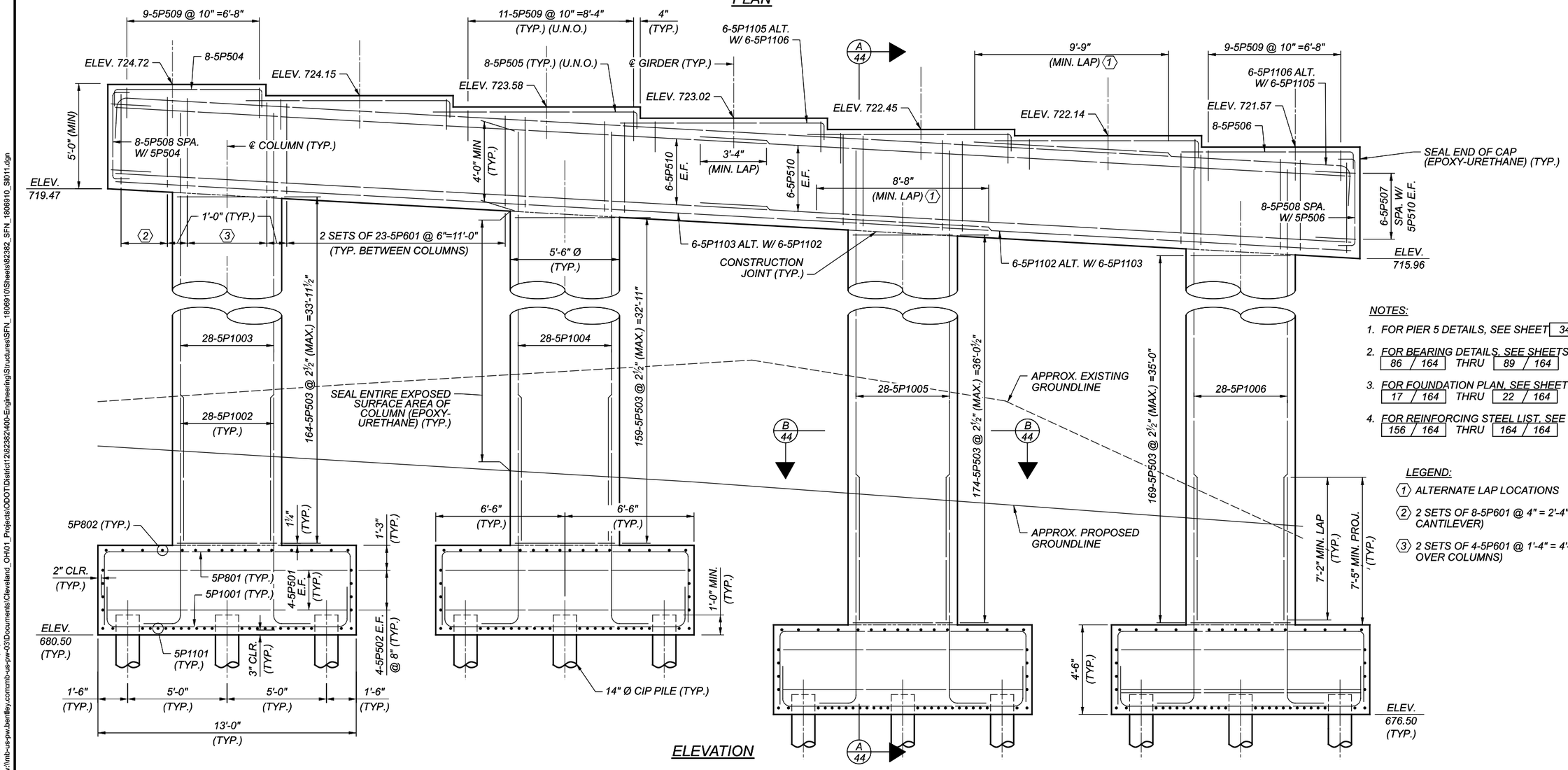


PLAN



ELEVATION

NOTES:

1. FOR PIER 5 DETAILS, SEE SHEET 34 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
4. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164

LEGEND:

1 ALTERNATE LAP LOCATIONS

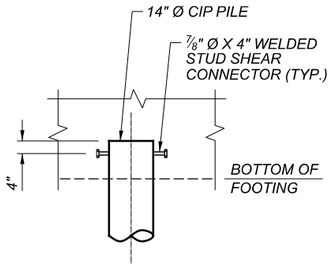
2 2 SETS OF 8-5P601 @ 4" = 2'-4"(TYP. @ CANTILEVER)

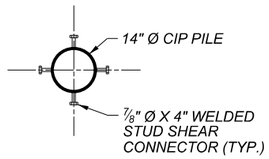
3 2 SETS OF 4-5P601 @ 1'-4" = 4'-0" (TYP. OVER COLUMNS)

PIER 5 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

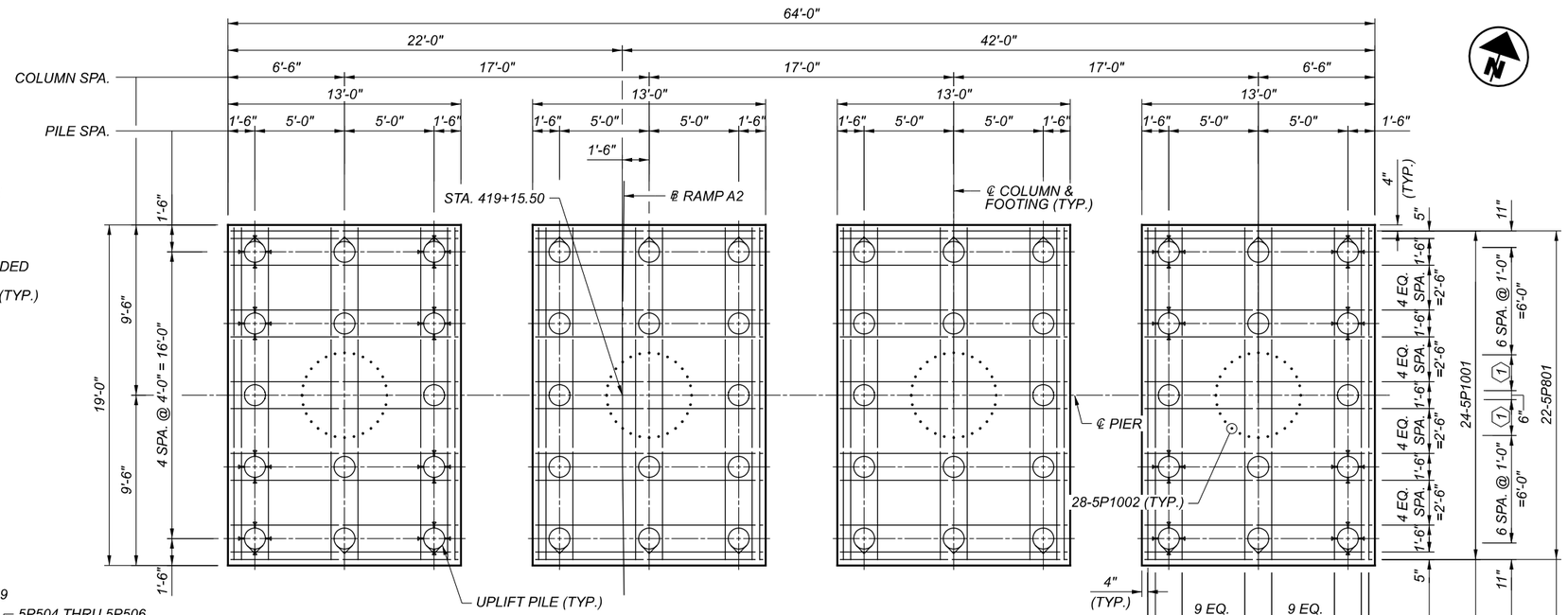
CUY-90-16.28 (CCG3A)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER PJC | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 43 | TOTAL 164
SHEET 1485 | TOTAL 2338



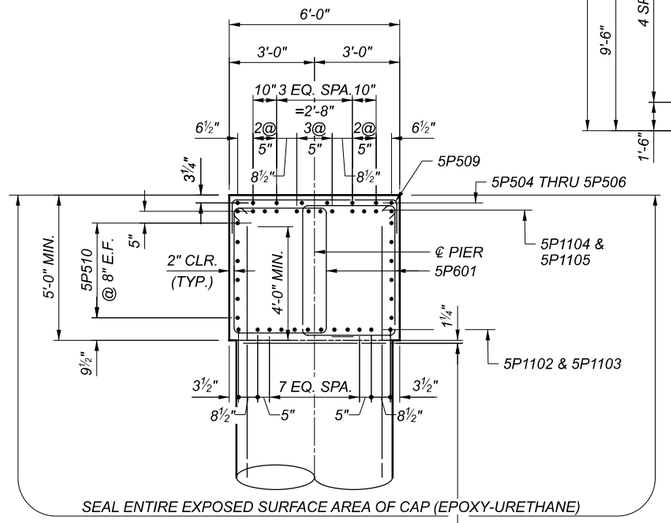


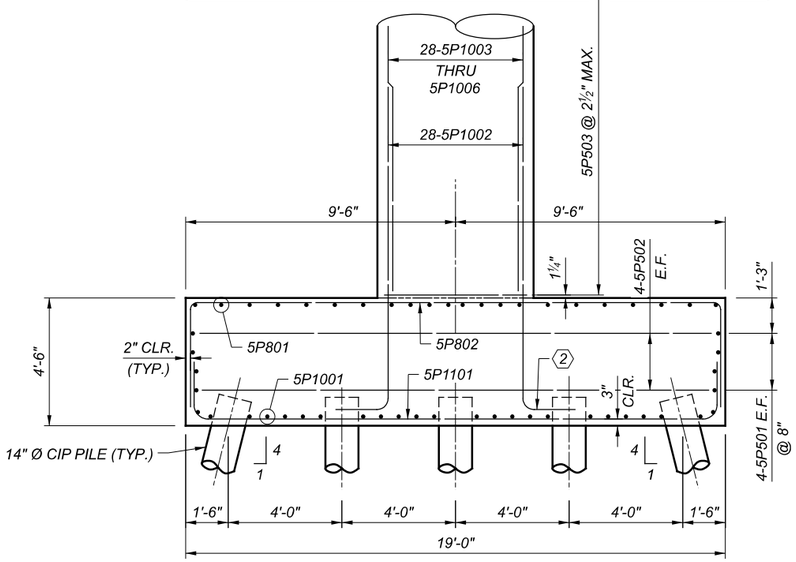
PILE SHEAR/UPLIFT RESTRAINT DETAILS



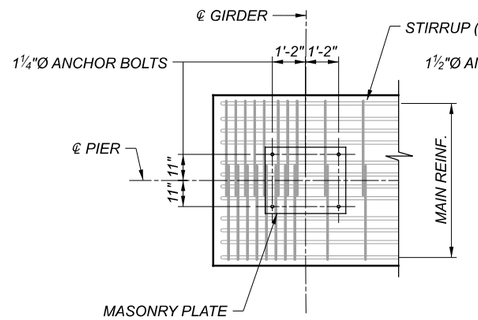
FOOTING PLAN

(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)



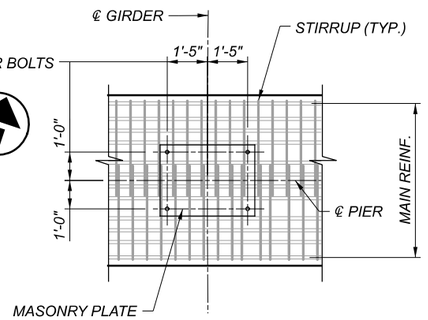


SECTION A-A



GIRDER G2-1 SHOWN

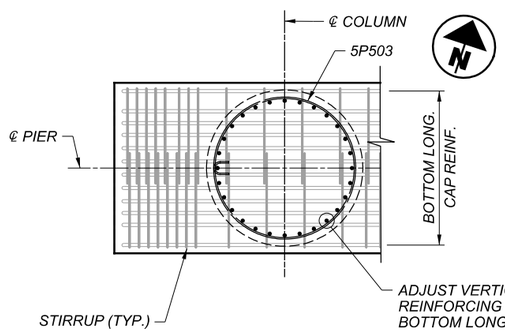
GIRDERS G2-8 & G2-9 SIMILAR



GIRDER G2-3 SHOWN

GIRDERS G2-4, G2-5 & G2-6 SIMILAR

BEARING ANCHOR PLANS



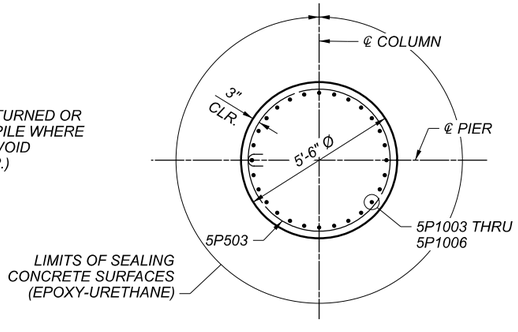
CAP AND COLUMN INTERFACE DETAILS

EXTERIOR COLUMN SHOWN, INTERIOR COLUMN SIMILAR

LEGEND:

(1) 3 SPA. 8"

(2) 5P1002 CAN BE TURNED OR RAISED ABOVE PILE WHERE REQUIRED TO AVOID CONFLICTS (TYP.)



SECTION B-B

NOTES:

1. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
2. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
3. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
4. PILES MARKED ⬡ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
5. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.

PIER 5 DETAILS
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	44
TOTAL	164
SHEET	1486
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:05:23 PM USER: CRICCARDI
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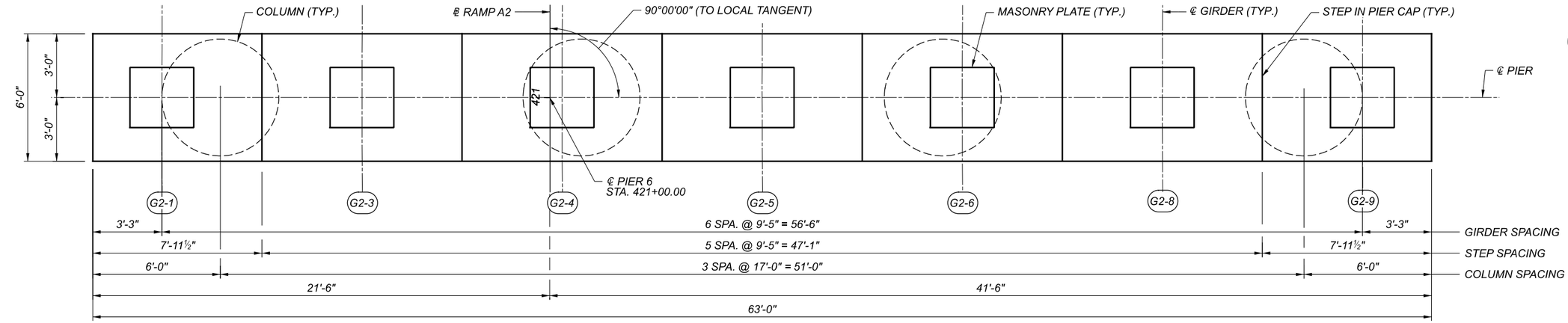
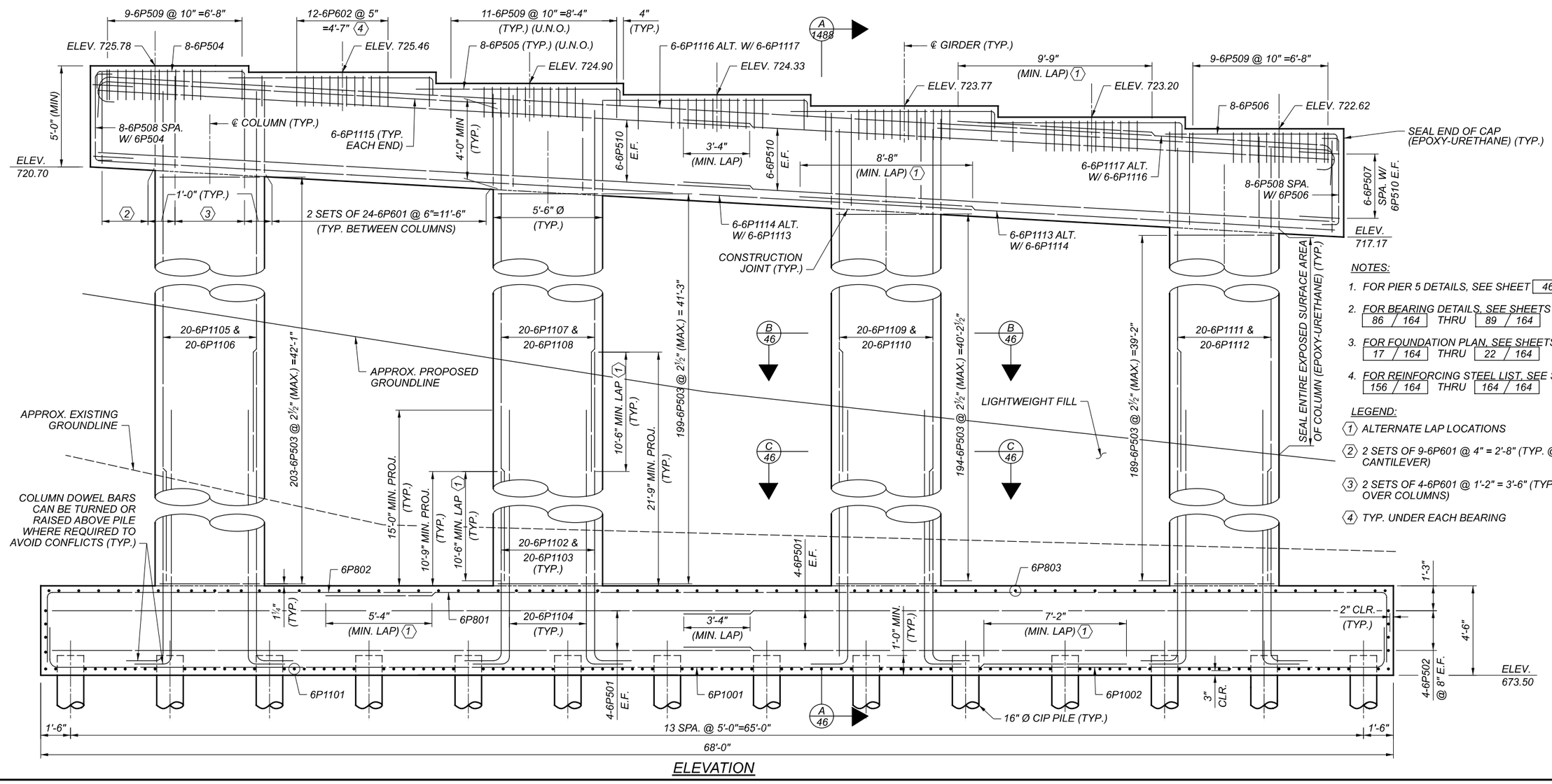


PLAN



ELEVATION

NOTES:

1. FOR PIER 5 DETAILS, SEE SHEET 46 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
4. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164

LEGEND:

1. ALTERNATE LAP LOCATIONS
2. 2 SETS OF 9-6P601 @ 4" = 2'-8" (TYP. @ CANTILEVER)
3. 2 SETS OF 4-6P601 @ 1'-2" = 3'-6" (TYP. OVER COLUMNS)
4. TYP. UNDER EACH BEARING

PIER 6 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	45
TOTAL	164
SHEET	1487
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:05:29 PM USER: CRICCARDI
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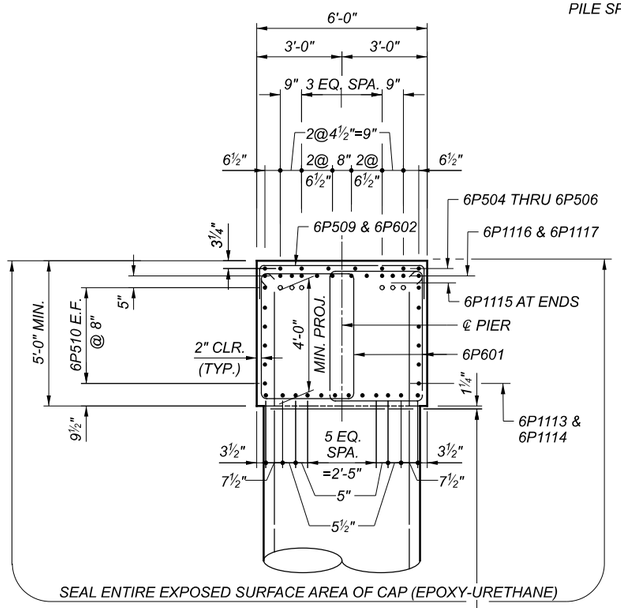
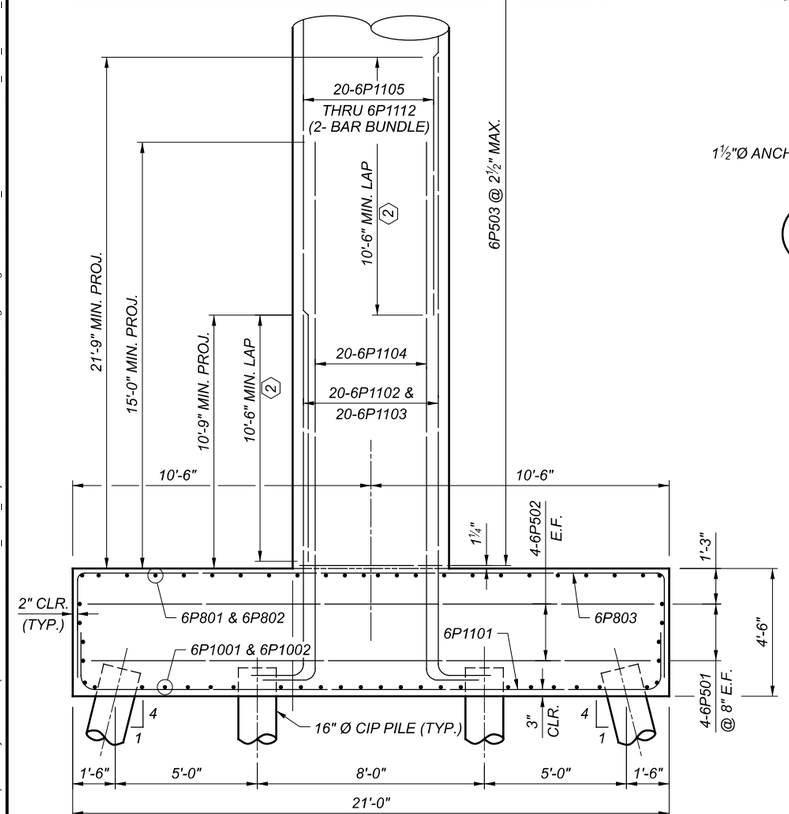
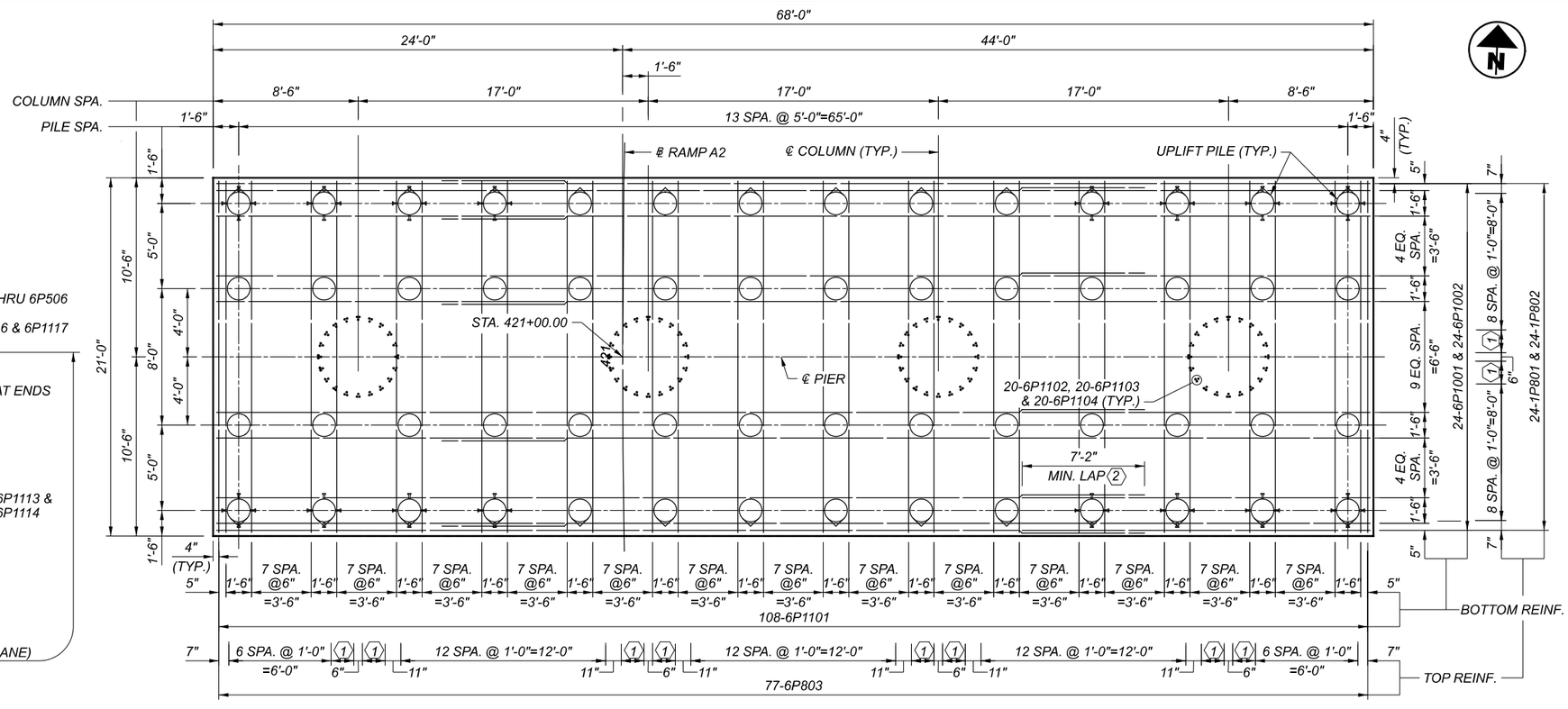


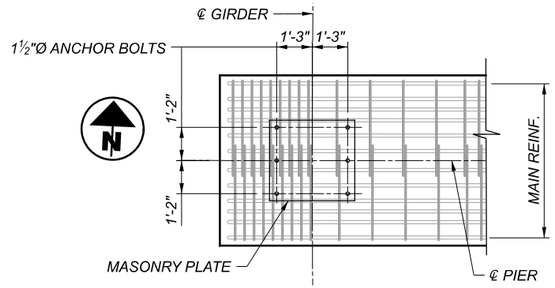


SECTION A-A



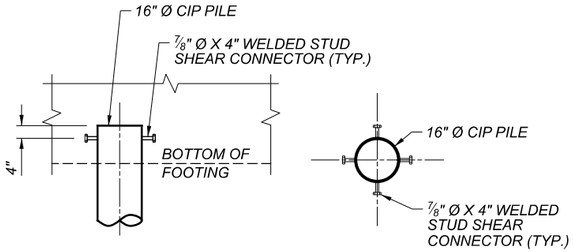
FOOTING PLAN

(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)

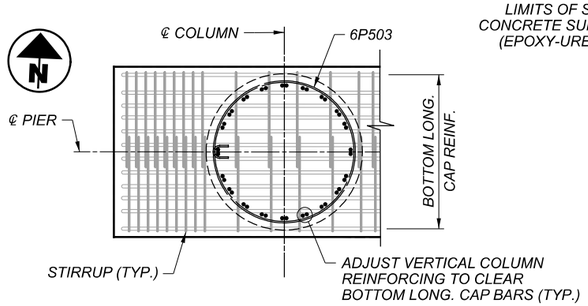


BEARING ANCHOR PLAN

GIRDER G2-1 SHOWN
GIRDERS G2-3, G2-4, G2-5, G2-6, G2-8 & G2-9 SIMILAR

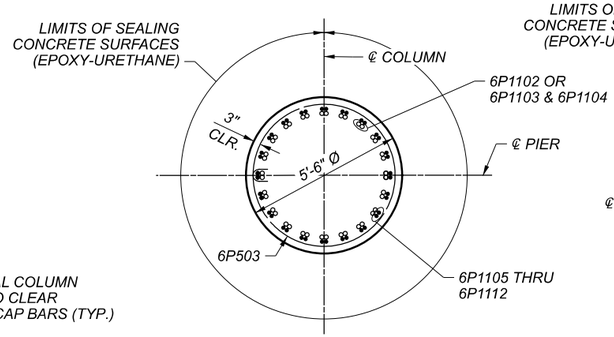


PILE SHEAR/UPLIFT RESTRAINT DETAILS

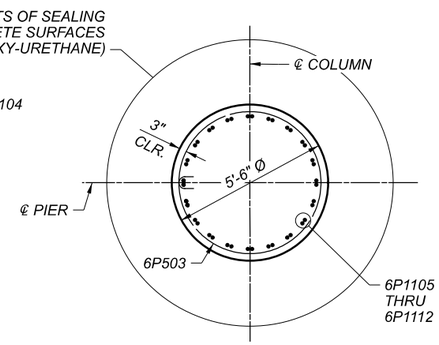


CAP AND COLUMN INTERFACE DETAILS

EXTERIOR COLUMN SHOWN, INTERIOR COLUMN SIMILAR



SECTION C-C



SECTION B-B

NOTES:

1. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
2. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
3. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
4. PILES MARKED ◯ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
5. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.

LEGEND:

⟨1⟩ 2 SPA. @ 8"=1'-4"

⟨2⟩ ALTERNATE LAP LOCATIONS

PIER 6 DETAILS
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	46
TOTAL	164
SHEET	1488
TOTAL	2338

CUY-90-16.28 (CCG3A)

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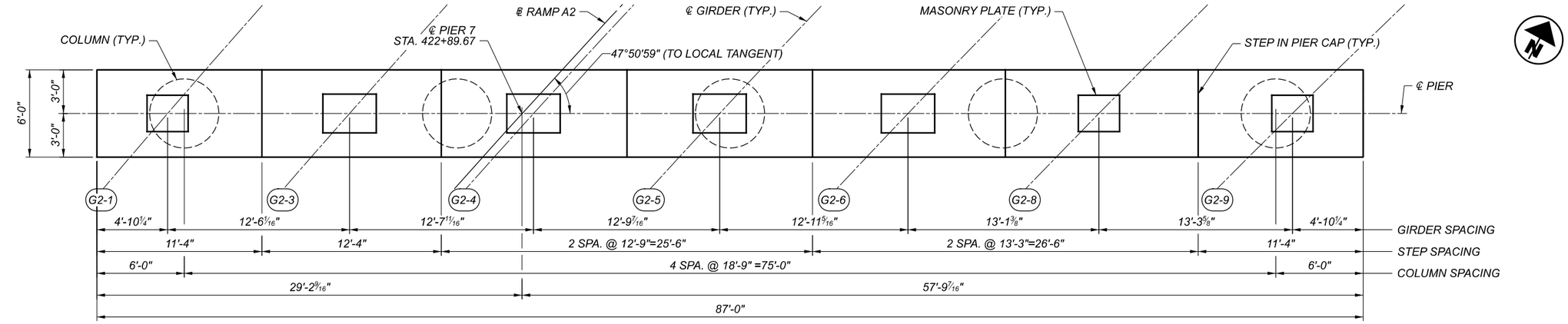
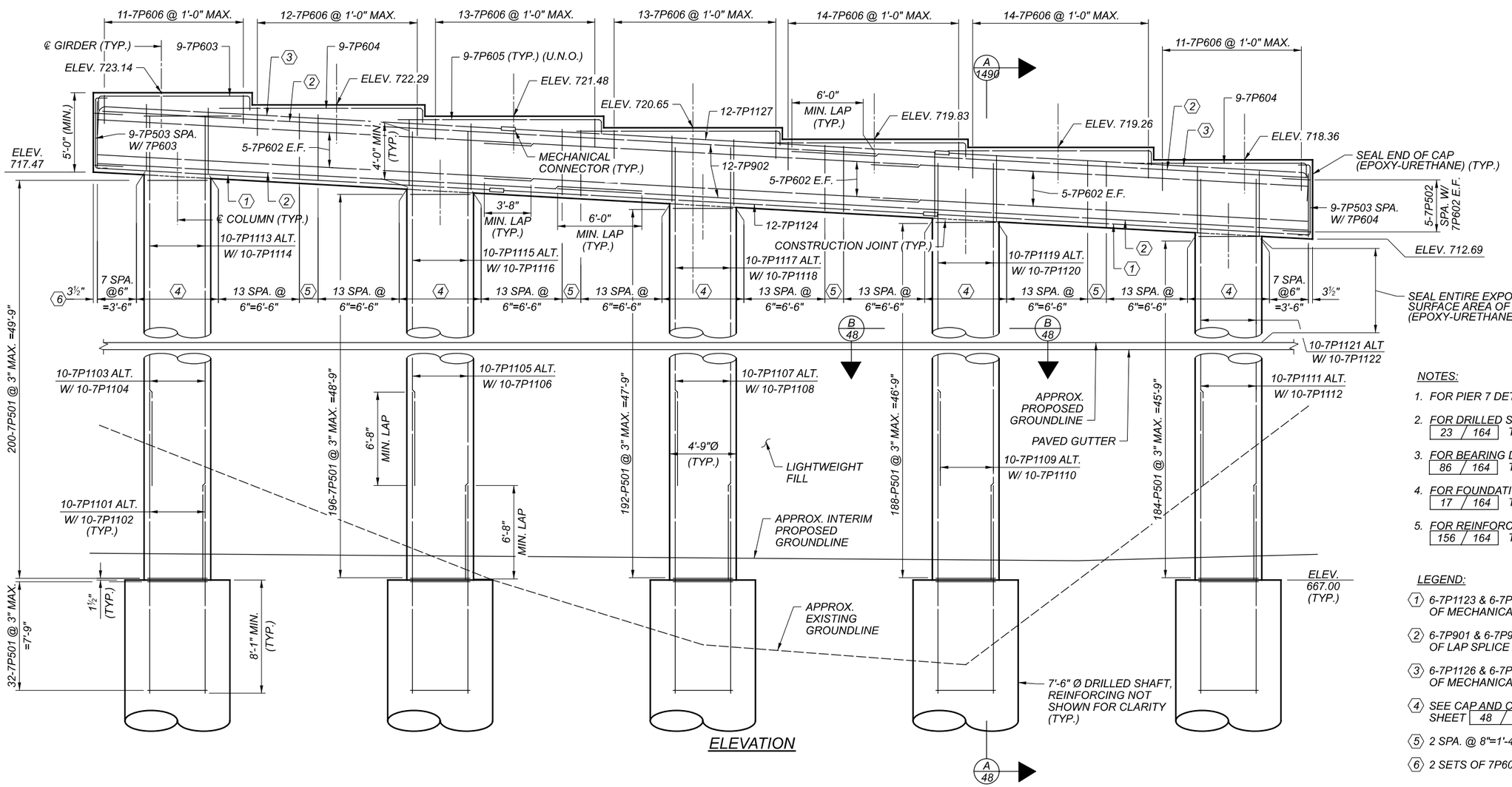


PLAN



ELEVATION

NOTES:

1. FOR PIER 7 DETAILS, SEE SHEET 48 / 164
2. FOR DRILLED SHAFT DETAILS SEE SHEETS 23 / 164 THRU 24 / 164
3. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
4. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
5. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164

LEGEND:

1. 6-7P1123 & 6-7P1125 ALTERNATE LOCATION OF MECHANICAL CONNECTOR AT EACH BAR
2. 6-7P901 & 6-7P903 ALTERNATE LOCATION OF LAP SPLICE
3. 6-7P1126 & 6-7P1128 ALTERNATE LOCATION OF MECHANICAL CONNECTOR AT EACH BAR
4. SEE CAP AND COLUMN INTERFACE DETAIL SHEET 48 / 164
5. 2 SPA. @ 8"=1'-4"
6. 2 SETS OF 7P601 SPA.

PIER 7 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	47
TOTAL	164
SHEET	1489
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:05:42 PM USER: CRICCARDI
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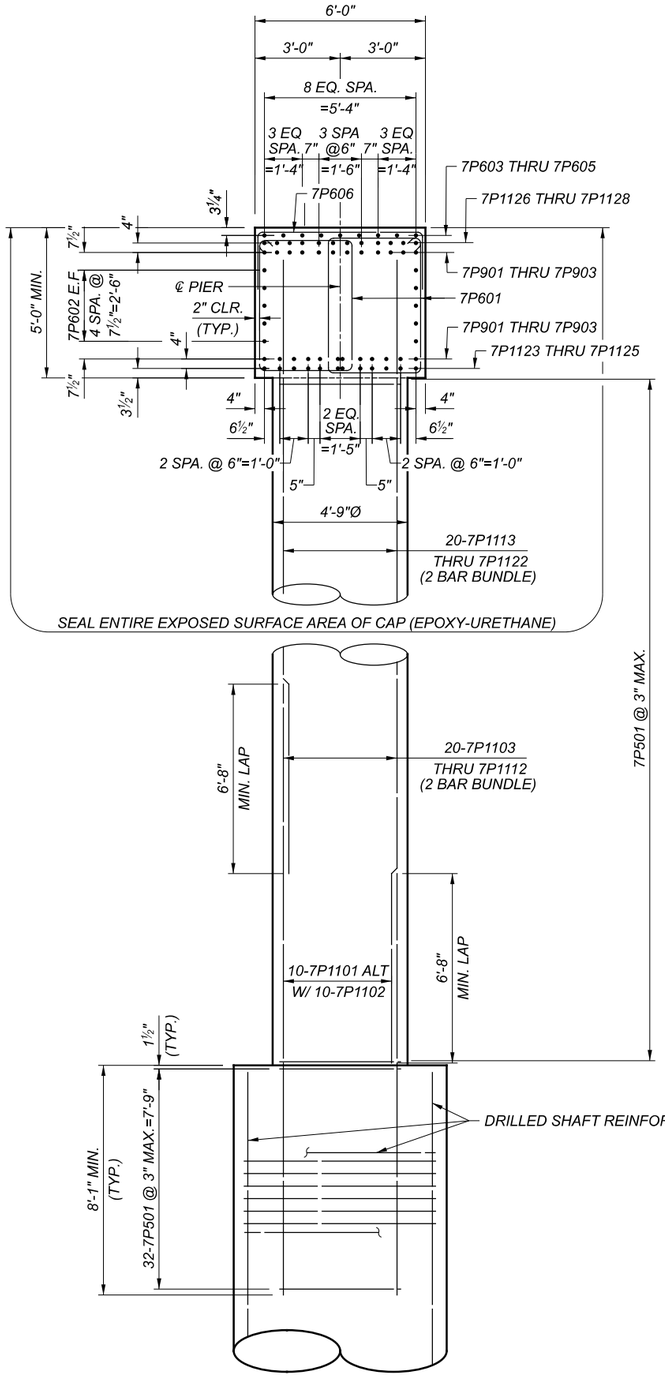
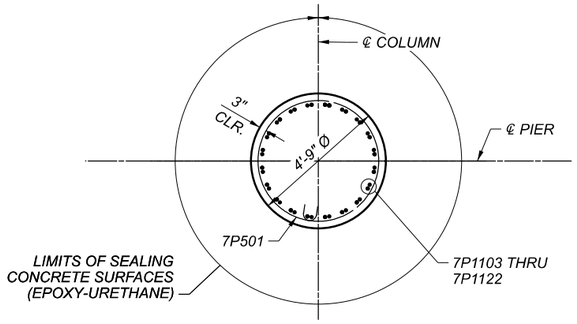
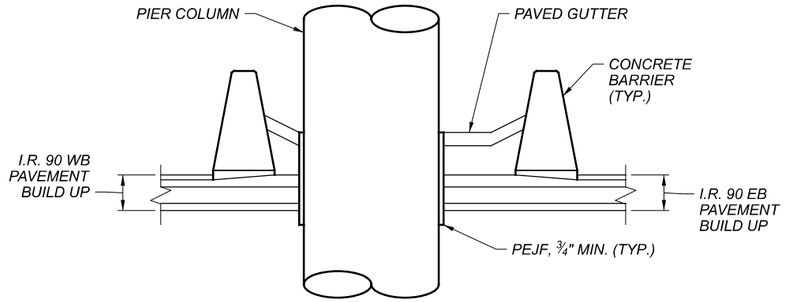


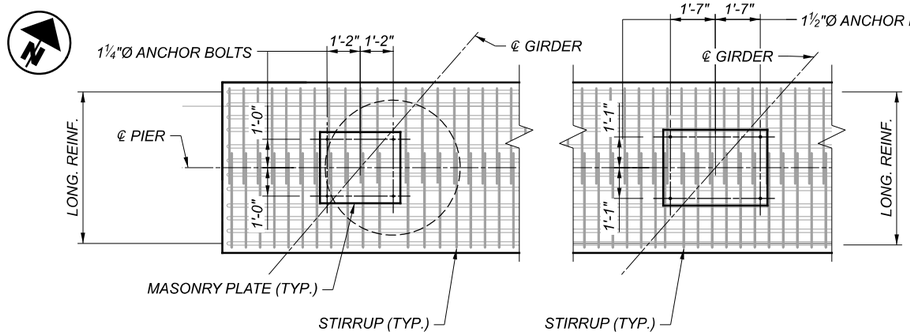
SECTION A-A



SECTION B-B



PIER COLUMN DETAIL



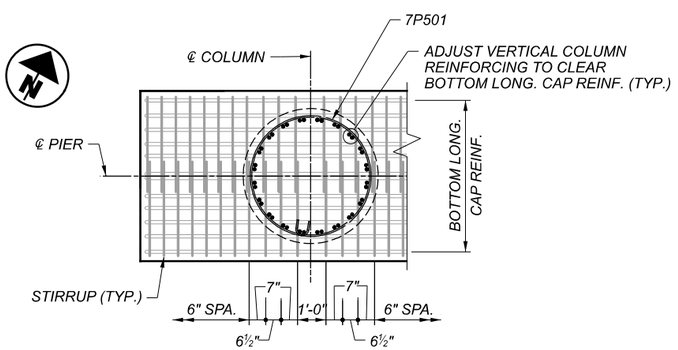
GIRDER G2-1 SHOWN

GIRDERS G2-8 & G2-9 SIMILAR

GIRDER G2-3 SHOWN

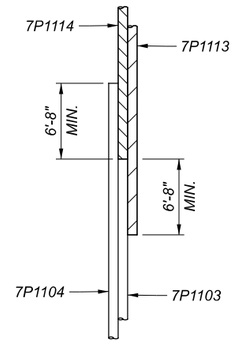
GIRDERS G2-4, G2-5 & G2-6 SIMILAR

BEARING ANCHOR PLANS



CAP AND COLUMN INTERFACE DETAILS

EXTERIOR COLUMN SHOWN, INTERIOR COLUMN SIMILAR



COLUMN BUNDLE LAP DETAIL

COLUMN 1 SHOWN, OTHERS SIMILAR

NOTES:

1. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
2. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
3. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
4. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.
5. FOR DRILLED SHAFT DETAILS, SEE SHEETS 23 / 164 THRU 24 / 164

PIER 7 DETAILS

CUY-77-1587 (BRIDGE 9)

I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	48
TOTAL	164
SHEET	1490
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:05:49 PM USER: CRICCARDI
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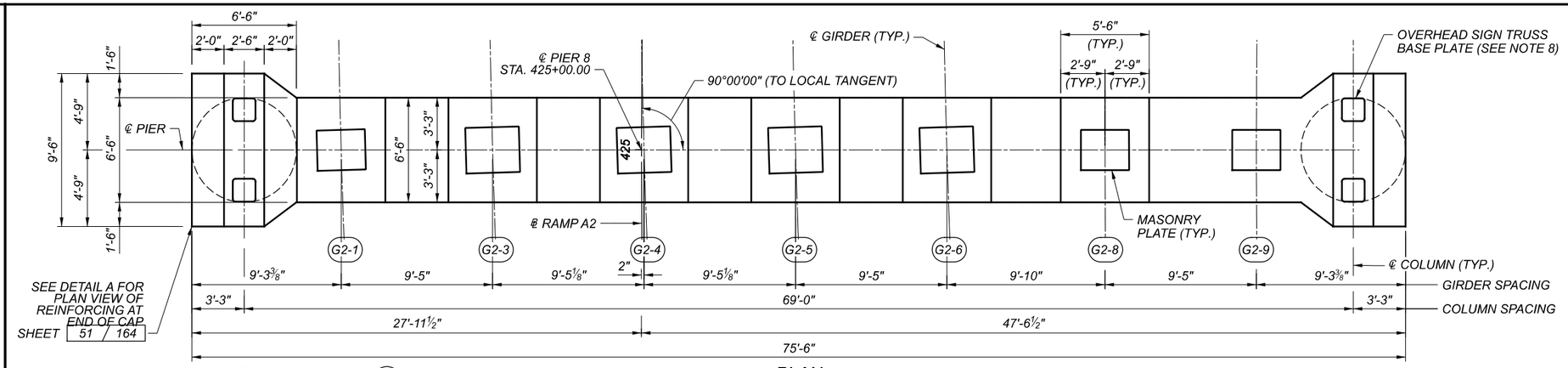
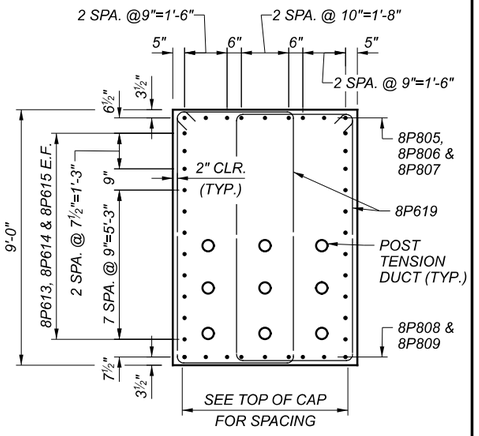


LEGEND:

1. ALTERNATE LAP LOCATIONS
2. 9-8P617 ALIGN W/ 8P808, BEND DOWN AFTER STRESSING
3. 9-8P618 ALIGN W/ 8P808, BEND UP AFTER STRESSING
4. BEND IN TO BLOCKOUT AFTER STRESSING



SECTION A-A

NOTES:

1. FOR POST TENSIONING DETAILS SEE SHEETS 52 / 164
2. FOR FOOTING PLAN SEE SHEET 50 / 164
3. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
4. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
5. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
6. FOR PIER CAP BEARING DETAILS, SEE SHEETS 53 / 164
7. ALL EXPOSED SURFACES EXCEPT FOR TOP OF BEAM SEAT SHALL BE SEALED WITH EPOXY-URETHANE SEALER.
8. SEE STEEL TRUSS OVERHEAD SIGN SUPPORT DETAILS OHIO STANDARD PLAN SHEET TC-15.116.
9. FOR PEDESTAL DETAILS, SEE SHEET 51 / 164
10. FOR OVERHEAD SIGN PEDESTAL REINFORCING DETAILS, SEE SHEET 51 / 164

PIER 8 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	PJC
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	49
TOTAL	164
SHEET	1491
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:05:56 PM USER: CRICCARDI
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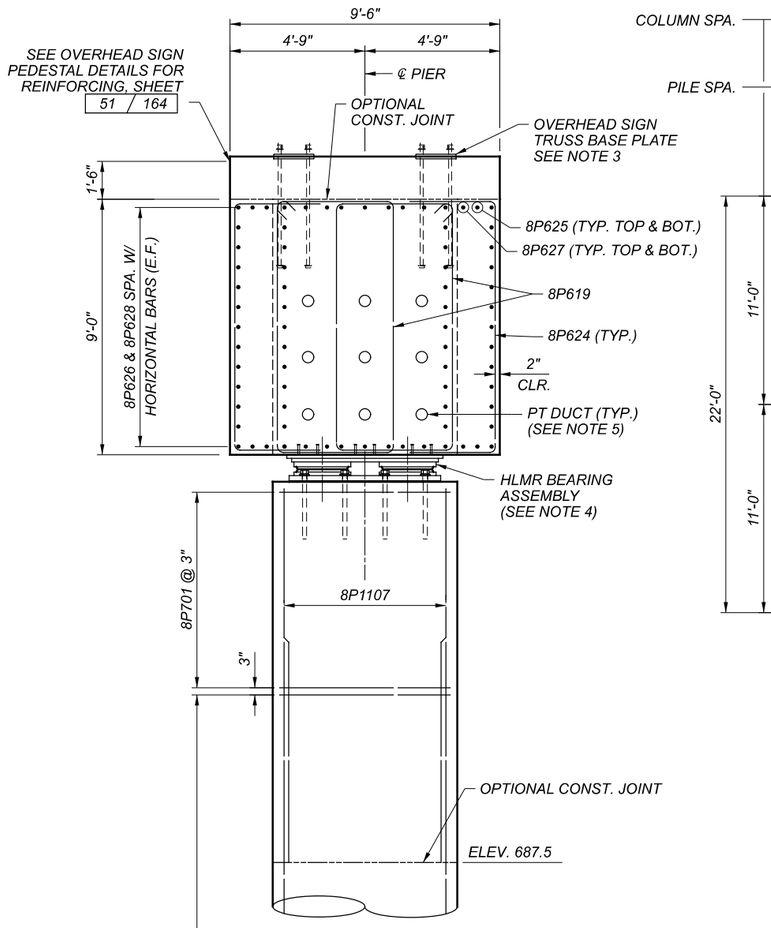
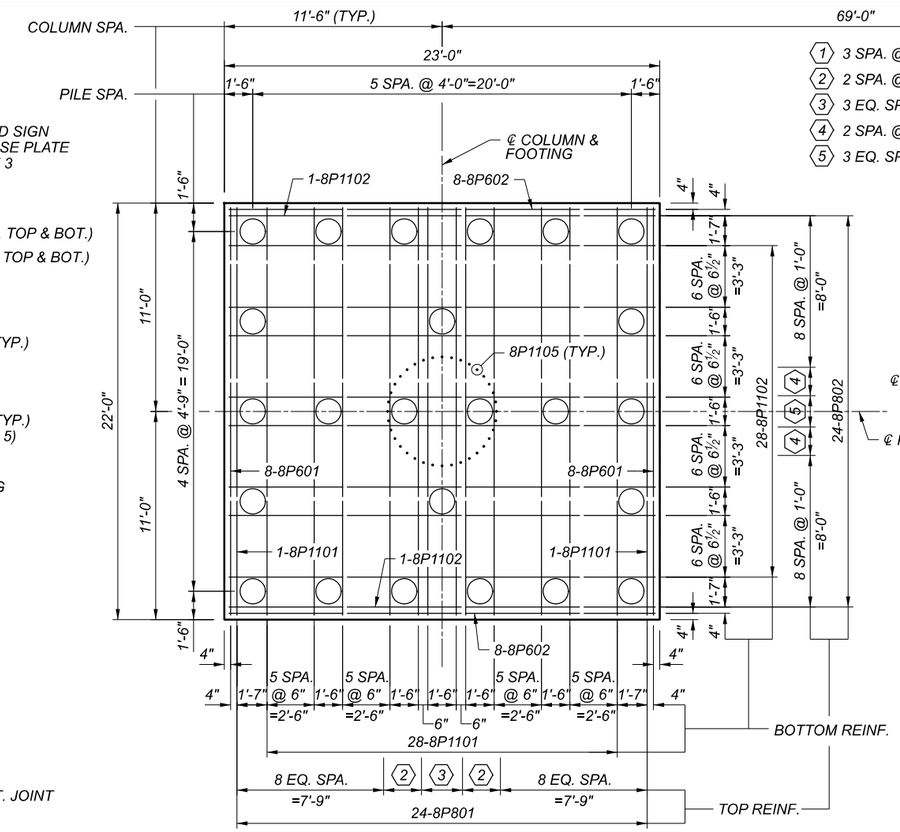
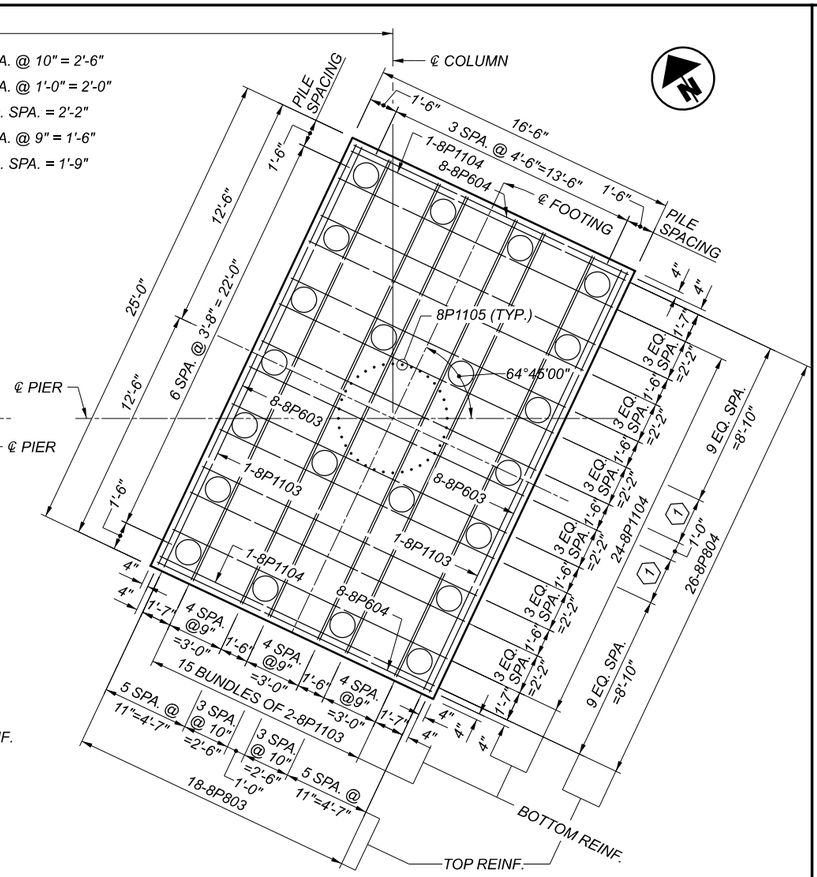


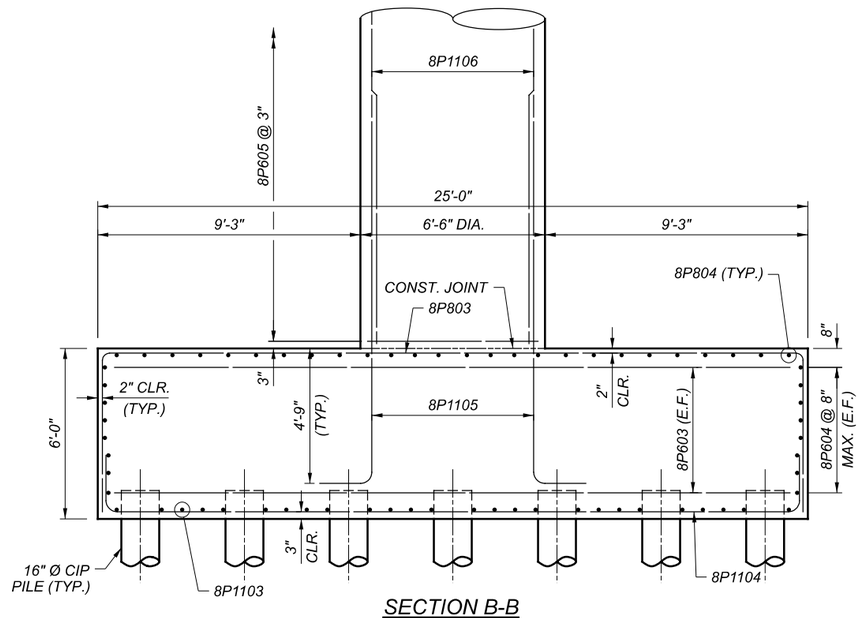
SECTION B-B
LEFT COLUMN



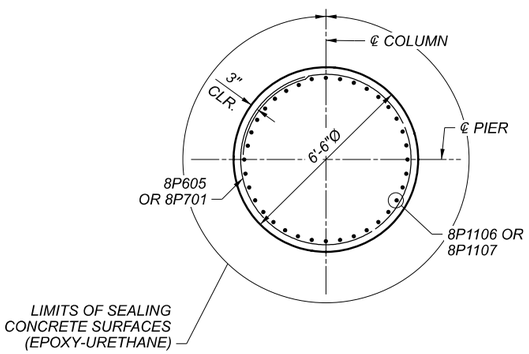
LEFT COLUMN FOOTING PLAN
(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)



RIGHT COLUMN FOOTING PLAN
(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)



SECTION B-B
RIGHT COLUMN (FOOTING SKEWED, SEE PLAN VIEW)
(SEE SECTION B-B LEFT COLUMN FOR INFORMATION NOT SHOWN)



SECTION C-C

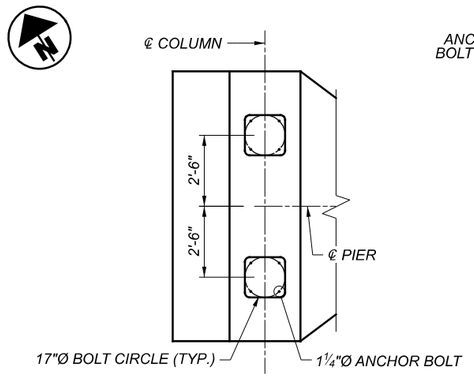
NOTES:

1. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164 .
2. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
3. FOR OVERHEAD SIGN TRUSS, BASEPLATE AND ANCHORAGE DETAILS, SEE ODOT STD. DWG. TC-15.116.
4. FOR HLMR BEARING DETAILS, SEE SHEET 53 / 164 .
5. FOR POST-TENSIONING DETAILS, SEE SHEET 52 / 164 .

PIER 8 DETAILS - (1 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

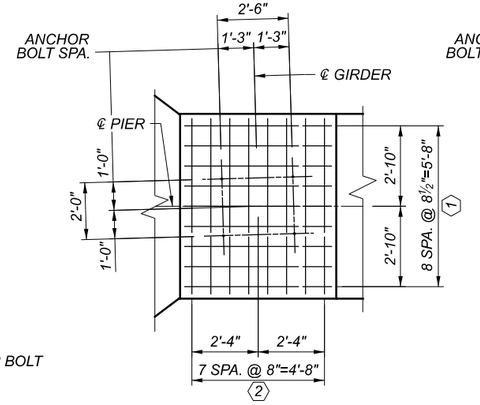
SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	PJC
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	50
TOTAL	164
SHEET	1492
TOTAL	2338

CUY-90-16.28 (CCG3A)



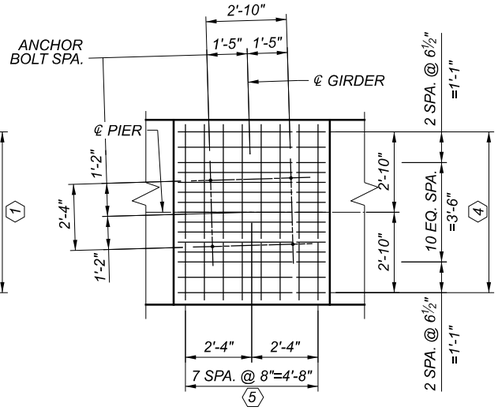
OVERHEAD SIGN PEDESTAL PLAN

SEE OHIO STANDARD PLAN
SCD TC-21.11 FOR DETAILS



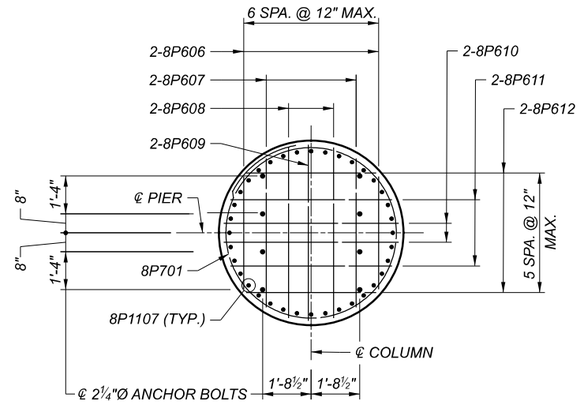
G2-1 PEDESTAL PLAN

G2-8 PEDESTAL SIMILAR

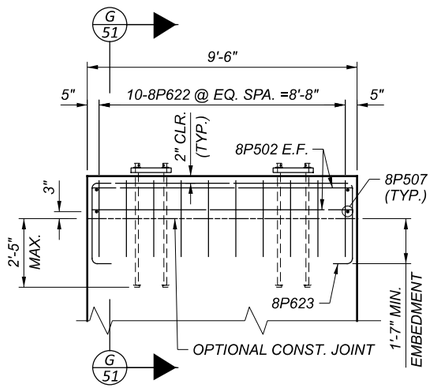


G2-3 PEDESTAL PLAN

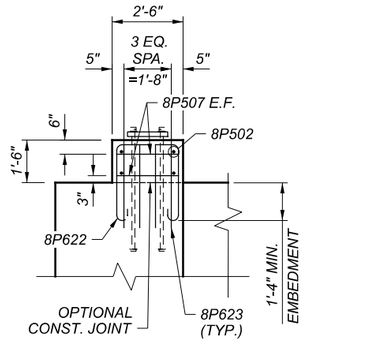
G2-4, G2-5, G2-6 PEDESTALS SIMILAR



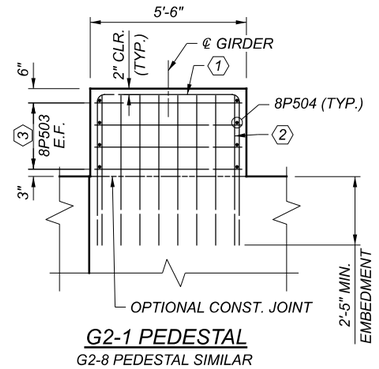
SECTION D-D



OVERHEAD SIGN PEDESTAL REINFORCING



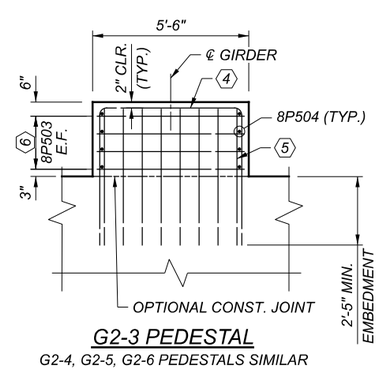
SECTION G-G



G2-1 PEDESTAL

G2-8 PEDESTAL SIMILAR

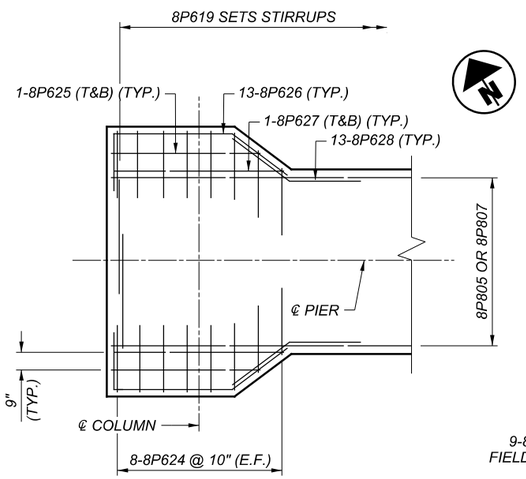
GIRDER PEDESTAL	1	2	3
G2-1	8P501	8P502	4 BARS, 3 EQ. SPA.=2'-4¼"
G2-8	8P505	8P506	N/A



G2-3 PEDESTAL

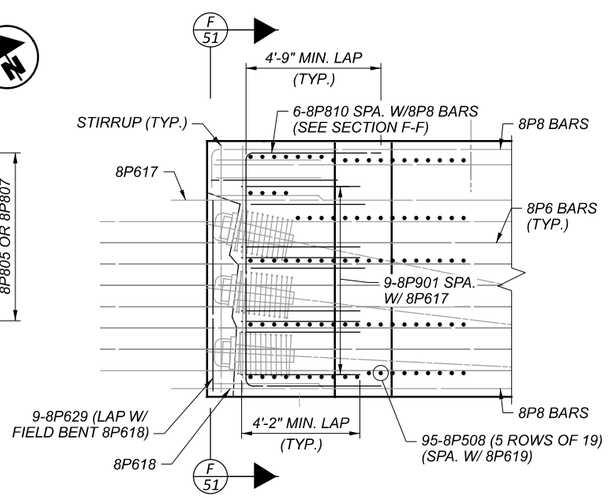
G2-4, G2-5, G2-6 PEDESTALS SIMILAR

GIRDER PEDESTAL	4	5	6
G2-3	8P620	8P621	4 BARS, 3 EQ. SPA.=1'-10½"
G2-4	8P620	8P621	3 BARS, 2 EQ. SPA.=1'-3⅝"
G2-5	8P620	8P621	2 BARS, 1 SPA. @ 9⅜"
G2-6	8P620	8P621	1 BAR

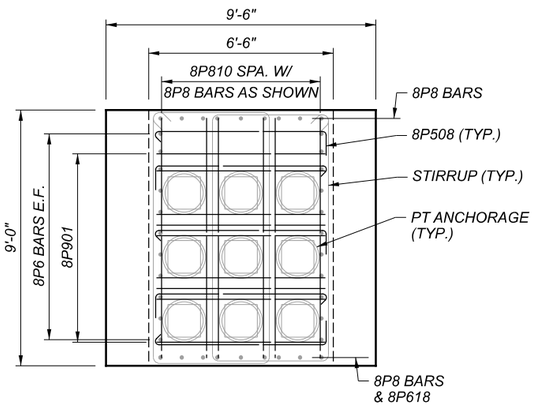


DETAIL A - CAP PLAN AT END

(LEFT END SHOWN, RIGHT END SIMILAR)



ANCHORAGE ZONE REINFORCING DETAIL



SECTION F-F

8P617 NOT SHOWN FOR CLARITY

NOTES:

1. FOR POST TENSIONING DETAILS SEE SHEETS 52 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
4. FOR PIER CAP BEARING DETAILS, SEE SHEET 53 / 164
5. SEE STEEL TRUSS OVERHEAD SIGN SUPPORT DETAILS OHIO STANDARD PLAN SHEET TC-15.116.

PIER 8 DETAILS - (2 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER NJH | CHECKER PJC
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 51 | TOTAL 164
SHEET 1493 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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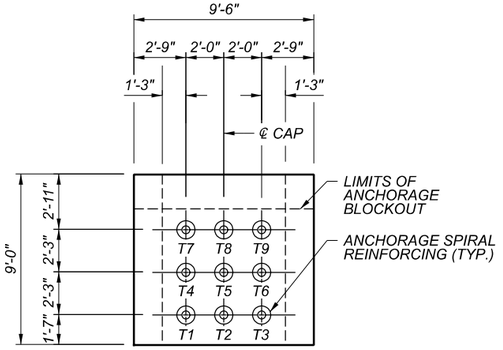
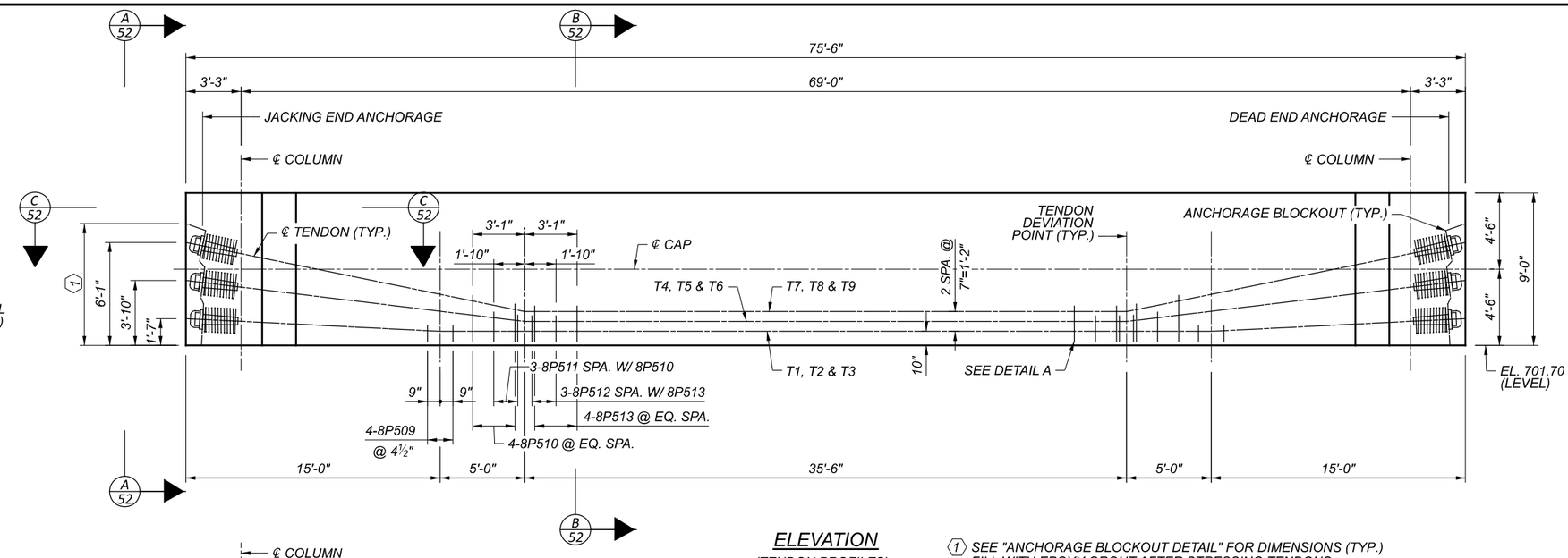


VIEW A-A

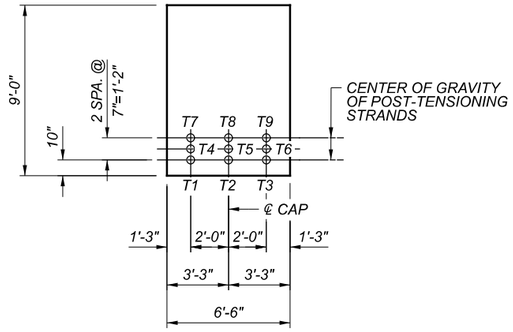
SHOWING END ANCHORAGE BLOCKOUTS
(LEFT END SHOWN, RIGHT END OPPOSITE HAND)



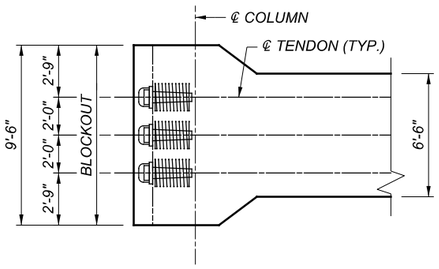
ELEVATION

(TENDON PROFILES)

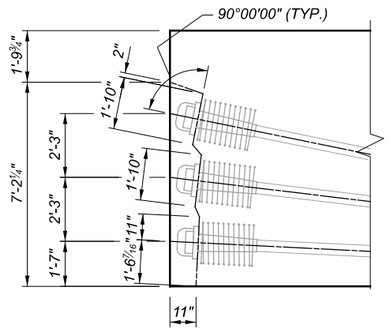
1 SEE "ANCHORAGE BLOCKOUT DETAIL" FOR DIMENSIONS (TYP.)
FILL WITH EPOXY GROUT AFTER STRESSING TENDONS.



SECTION B-B



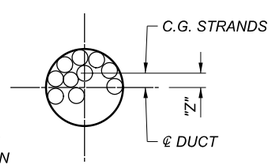
SECTION C-C



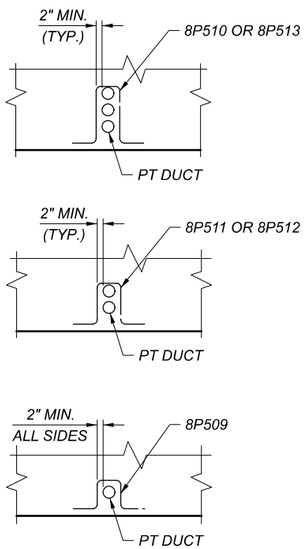
ANCHORAGE BLOCKOUT DETAIL

TENDON SIZE	"Z"
24 - 0.6"	⅞"

CONSIDER THE AMOUNT OF TENDON OFFSET ("Z") WITHIN THE DUCT AS SHOWN FOR THE PURPOSE OF LOCATING DUCTS.



TENDON OFFSET DETAIL



DETAIL A

NOTES:

1. FURNISH AND INSTALL ALL POST-TENSIONING HARDWARE, COMPONENTS, STRANDS AND GROUT IN ACCORDANCE WITH ODOT SUPPLEMENTAL SPECIFICATION 855 AND THESE PLANS.
2. ANY REINFORCING INTERFERING WITH TENDON ALIGNMENT OR STRESSING SHALL BE ADJUSTED AS APPROVED BY THE ENGINEER.
3. PIER CAP CONCRETE SHALL BE INCLUDED IN ITEM 511 - CLASS QC4 MASS CONCRETE, SUBSTRUCTURE, AS PER PLAN. CONCRETE SHALL OBTAIN A MINIMUM COMPRESSIVE STRENGTH OF 5.0 KSI BEFORE ANY POST-TENSIONING IS PERFORMED.
4. PRESTRESSING STEEL SHALL BE 0.60 INCH DIAMETER UNCOATED 7-WIRE, LOW RELAXATION, GRADE 270 CONFORMING TO ASTM A416.
5. LOCAL ZONE ANCHORAGE AND REINFORCEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND POST-TENSIONING SUPPLIER PER SUPPLEMENTAL SPECIFICATION 855.
6. EACH TENDON SHALL BE JACKED TO 100% OF THE REQUIRED JACKING FORCE PRIOR TO JACKING THE NEXT TENDON. PARTIAL JACKING SHALL NOT BE PERFORMED UNLESS APPROVED BY THE ENGINEER.
7. NO CAMBER OF THE PIER CAP IS REQUIRED.

POST-TENSIONING DESIGN NOTES:

THE POST-TENSIONING DESIGN IS BASED ON THE FOLLOWING VALUES AND ASSUMPTIONS:

CONCRETE COMPRESSIVE STRENGTHS: $f'ci$ = 5.0 KSI (MIN.) AT TIME OF STRESSING
$f'c$ = 6.0 KSI (MIN.) AT 28 DAYS

WOBBLE FRICTION COEFFICIENT, K = 0.0002
FRICTION COEFFICIENT, u = 0.23
ANCHOR SET = 0.25 INCHES (BASED ON SINGLE END STRESSING)

LOSSES OTHER THAN FRICTION AND ANCHOR SET ARE SUUMED TO BE 21.25 KSI.

THE TENDON ARRANGEMENT SHOWN IS BASED ON 24 x 0.6" DIAMETER STRAND TENDONS WITH AREA = 5.21 SQ. IN. PER TENDON. 4¾" NOMINAL OUTSIDE DIAMETER CORRUGATED POLYPROPYLENE DUCTS WERE ASSUMED.

THE ASSUMED JACKING FORCE, P(JACK) = 1016 KIPS PER TENDON

CONSTRUCTION SEQUENCE:

STAGE 1: CONSTRUCT FOOTINGS AND COLUMNS. INSTALL BEARING PADS ON EACH COLUMN.

STAGE 2: ERECT FORMWORK FOR PIER CAP.

STAGE 3: INSTALL PIER CAP REINFORCEMENT, TENDONS AND ANCHORAGES.

STAGE 4: PLACE PIER CAP CONCRETE (INCLUDING GIRDER PEDESTALS). FALSEWORK AND BOTTOM FORMS SHALL REMAIN INPLACE UNTIL FULL JACKING FORCES ARE ACHIEVED IN EACH TENDON IN STAGE 6.

STAGE 5: AFTER CONCRETE HAS REACHED f'ci, STRESS TENDONS T2, T5 AND T8 IN ANY ORDER.

STAGE 6: SIMULTANEOUSLY STRESS TENDONS T7 AND T9.

STAGE 7: ERECT STEEL SUPERSTRUCTURE AND REMOVE PIER CAP FALSEWORK.

STAGE 8: SIMULTANEOUSLY STRESS TENDONS T1 AND T3.

STAGE 9: CAST CONCRETE DECK.

STAGE 10: SIMULTANEOUSLY STRESS TENDONS T4 AND T6.

STAGE 11: CAST BRIDGE RAILING.

STAGE 12: WELD CONNECTION BETWEEN BEARING SOLE PLATES AND CAP MASONRY PLATES.

STAGE 13: CAST CLOSURE POURS AT BOTH ENDS OF THE PIER CAP AND SEAL CONCRETE SURFACES.

ANY DEVIATIONS FROM THE CONSTRUCTION SEQUENCE SHOWN MUST BE APPROVED BY THE ENGINEER.

PIER 8 DETAILS - (3 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	PJC
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	52
TOTAL	164
SHEET	1494
TOTAL	2338

CUY-90-16.28 (CCG3A)

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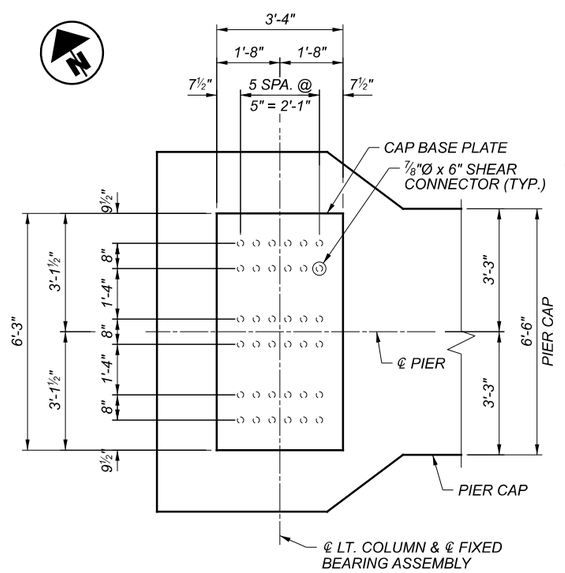
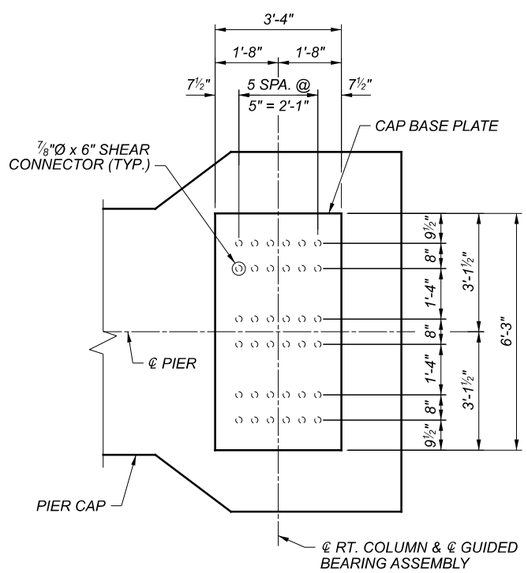
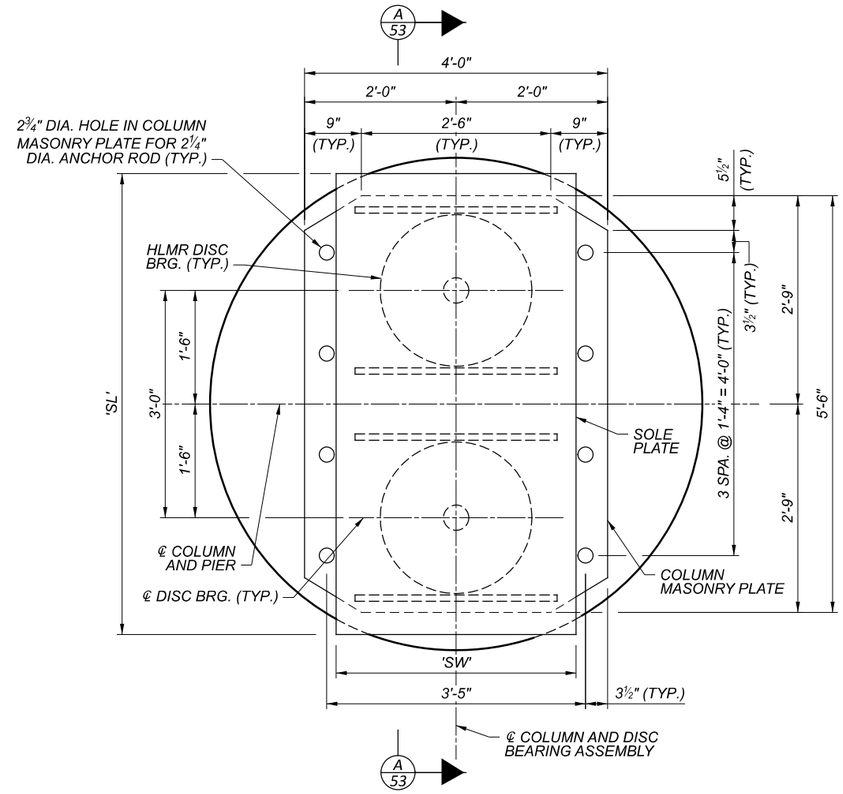


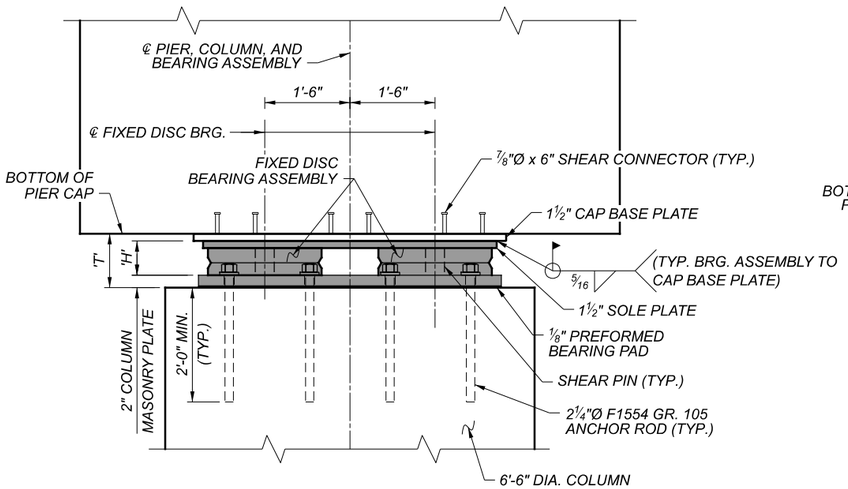
CAP BASE PLATE DETAIL
LT. COLUMN



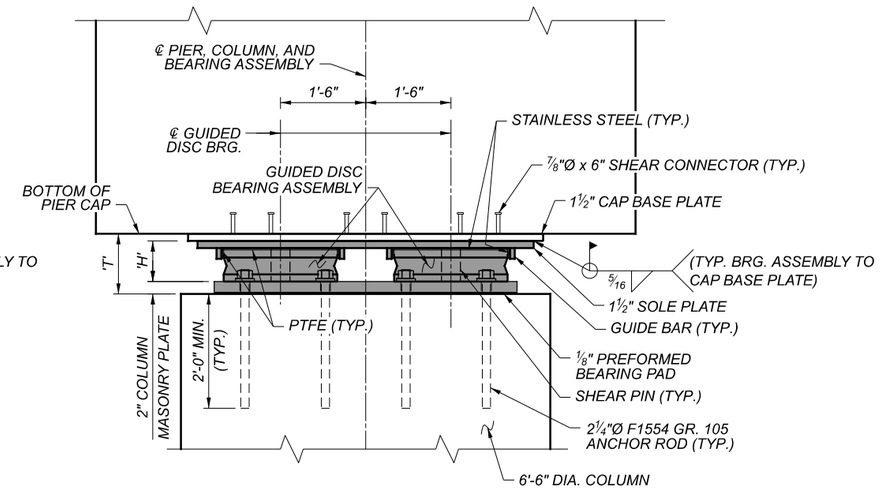
CAP BASE PLATE DETAIL
RT. COLUMN



COLUMN BEARING PLAN VIEW
(RT. COLUMN SHOWN, LT. COLUMN SIMILAR)



SECTION A-A
LT. COLUMN



SECTION A-A
RT. COLUMN

NOTES:

1. *TOTAL BEARING HEIGHT, 'T' IS MEASURED FROM BOTTOM OF CAP TO TOP OF BEARING SEAT AT CENTERLINE OF BEARING.*
2. *EXERCISE CAUTION WHEN WELDING NEAR THE DISC BEARING PADS IN CONTACT WITH THE STEEL. WELD IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS TO MAINTAIN A SAFE TEMPERATURE SO AS NOT TO DAMAGE THE DISC BEARINGS. ANY DAMAGE DUE TO WELDING WILL BE CAUSE FOR REJECTION.*
3. *ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION OF THE COLUMNS AND INCLUDED WITH PAYMENT FOR ITEM 869 - HIGH LOAD MULTI-ROTATIONAL (HLMR) BEARINGS, AS PER PLAN.*
4. *TOP OF COLUMN ELEVATIONS ARE BASED ON THE BEARING HEIGHTS PROVIDED IN THE TABLE SHOWN. IF THE CONTRACTOR'S SELECTED BEARING MANUFACTURER HAS A DESIGN THAT DOES NOT CONFORM TO THE HEIGHTS PROVIDED IN THE TABLE, ADJUST THE TOP OF COLUMN ELEVATIONS AT NO ADDITIONAL COST TO THE STATE.*
5. *BEARINGS ARE TO BE SET BY USE OF A STEEL TEMPLATE WITH A MINIMUM THICKNESS OF ¼-INCH.*
6. *FOR ADDITIONAL BEARING NOTES, SEE NOTES 2 THRU 8 ON SHEET* 90 / 164 .

PIER 8 COLUMN BEARING TABLE

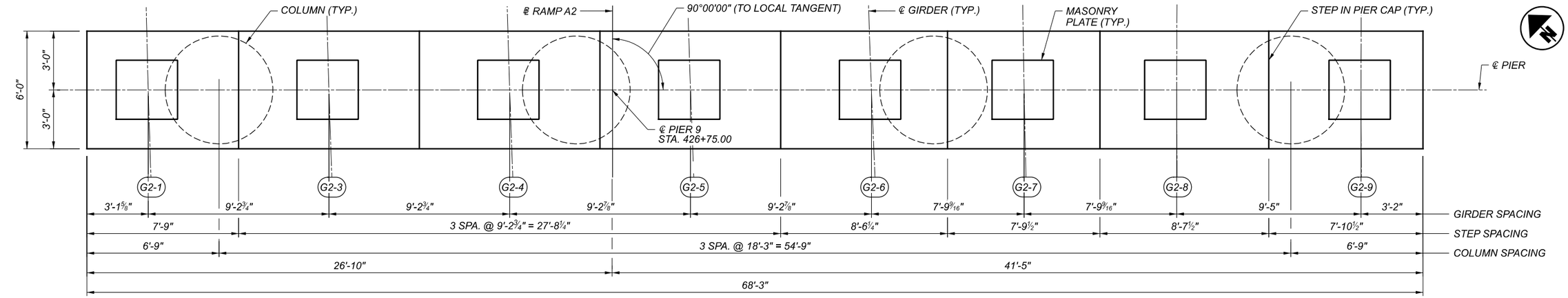
LOCATION	TYPE	NO. REQ'D*	SKEW (DEGREES)	SOLE PLATE 'SL'	SOLE PLATE 'SW'	SOLE PLATE SLOPE (%)	EST. HLMR DISC HEIGHT, H (INCHES)	TOTAL BEARING HEIGHT, T (INCHES)	MAXIMUM DESIGN LOADS (KIPS) STRENGTH LIMIT STATE TOTAL VERTICAL LOAD	STRENGTH LIMIT STATE TOTAL HORIZONTAL LOAD	SERVICE LIMIT STATE TOTAL VERTICAL LOAD	SERVICE LIMIT STATE VERTICAL DEAD LOAD	SERVICE LIMIT STATE TOTAL HORIZONTAL LOAD	DESIGN MOVEMENTS (INCHES) PARALLEL TO ℄ PIER 8 CONTRACTION	DESIGN MOVEMENTS (INCHES) PARALLEL TO ℄ PIER 8 EXPANSION	DESIGN ROTATION** (RADIANS)	DESIGN COEFFICIENT OF FRICTION
LT. COLUMN	FIXED	2	0.00	64.00	34.00	0.00	7.63	11.25	2250	466	1910	972	77	0.0	0.0	0.02	N/A
RT. COLUMN	GUIDED EXP.	2	0.00	73.00	38.00	0.00	8.73	12.36	1950	241	1646	859	63	2.0	1.4	0.02	0.06

** THE MASONRY PLATE IS SHARED BETWEEN A PAIR OF ADJACENT BEARINGS. TWO (2) HLMR DISC BEARINGS, THE MASONRY PLATE, AND THE SOLE PLATE CONSTITUTE ONE (1) BEARING ASSEMBLY.*
*** ROTATIONS INCLUDE AN ALLOWANCE OF 0.005 RADIANS FOR UNCERTAINTIES.*

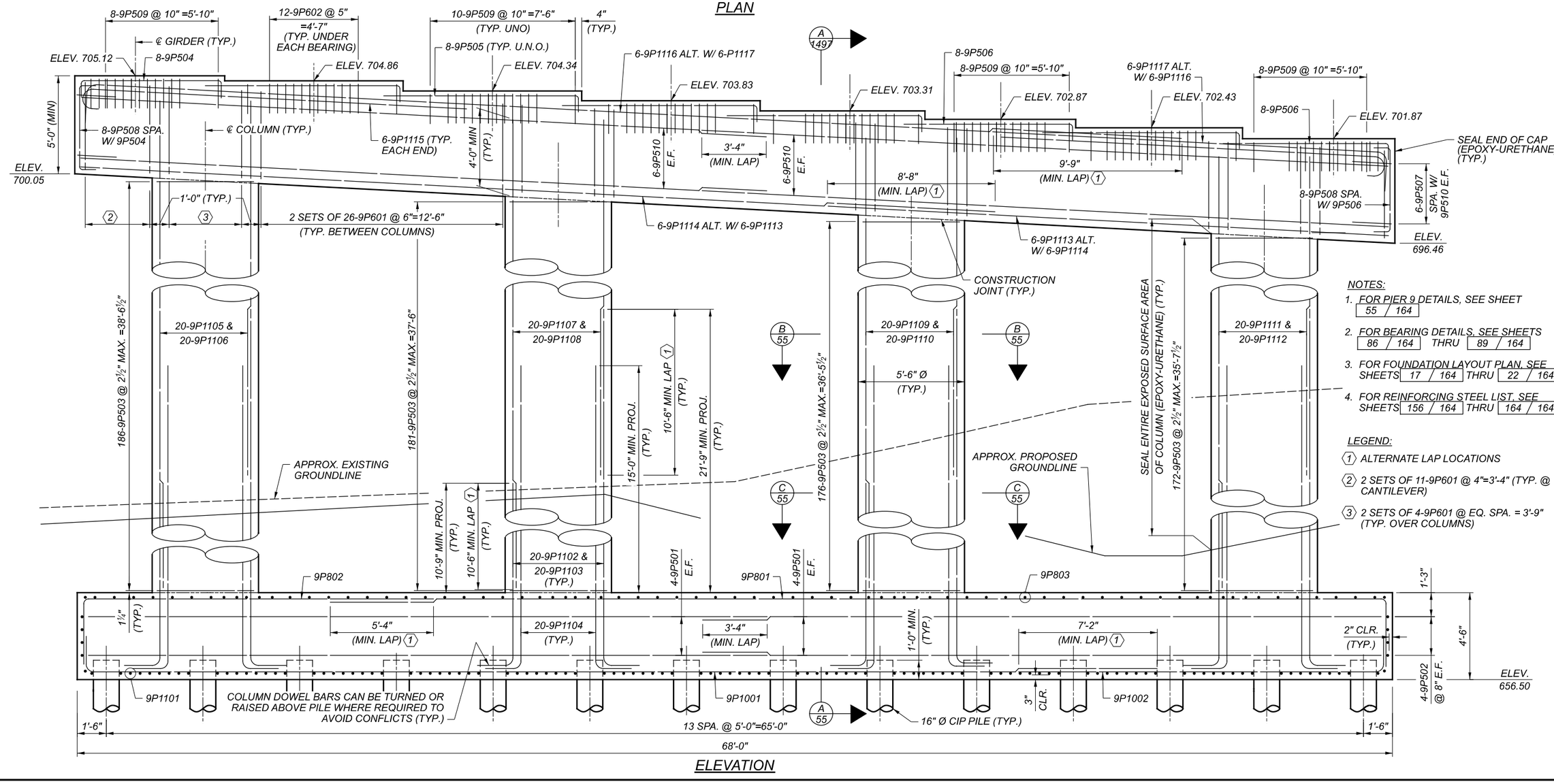
PIER 8 DETAILS - (4 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER NJH | CHECKER ABO
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 53 | TOTAL 164
SHEET 1495 | TOTAL 2338

CUY-90-16.28 (CCG3A)



PLAN



ELEVATION

NOTES:

1. FOR PIER 9 DETAILS, SEE SHEET 55 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR FOUNDATION LAYOUT PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
4. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164

LEGEND:

1. ALTERNATE LAP LOCATIONS
2. 2 SETS OF 11-9P601 @ 4"=3'-4" (TYP. @ CANTILEVER)
3. 2 SETS OF 4-9P601 @ EQ. SPA. = 3'-9" (TYP. OVER COLUMNS)

PIER 9 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:06:28 PM USER: CRICCARDI
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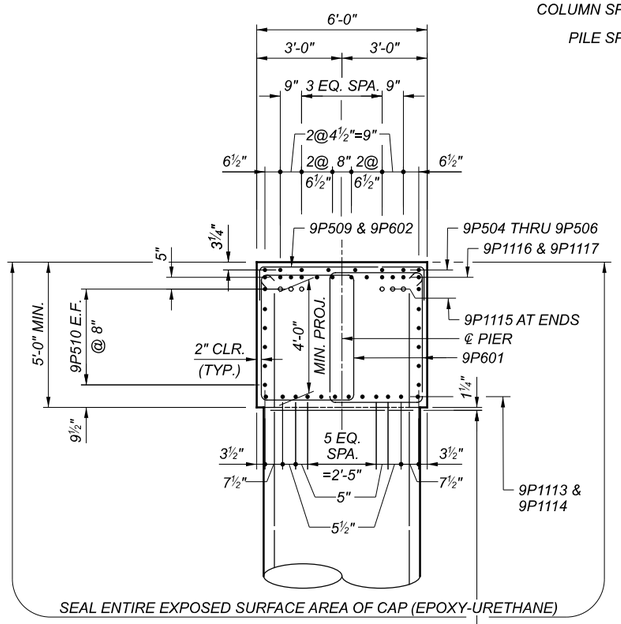
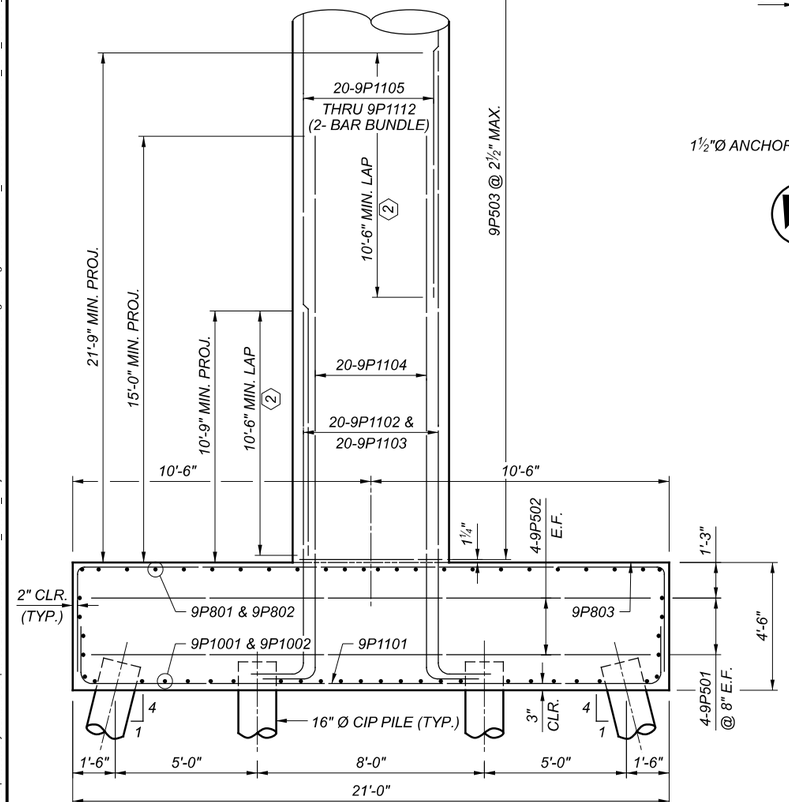
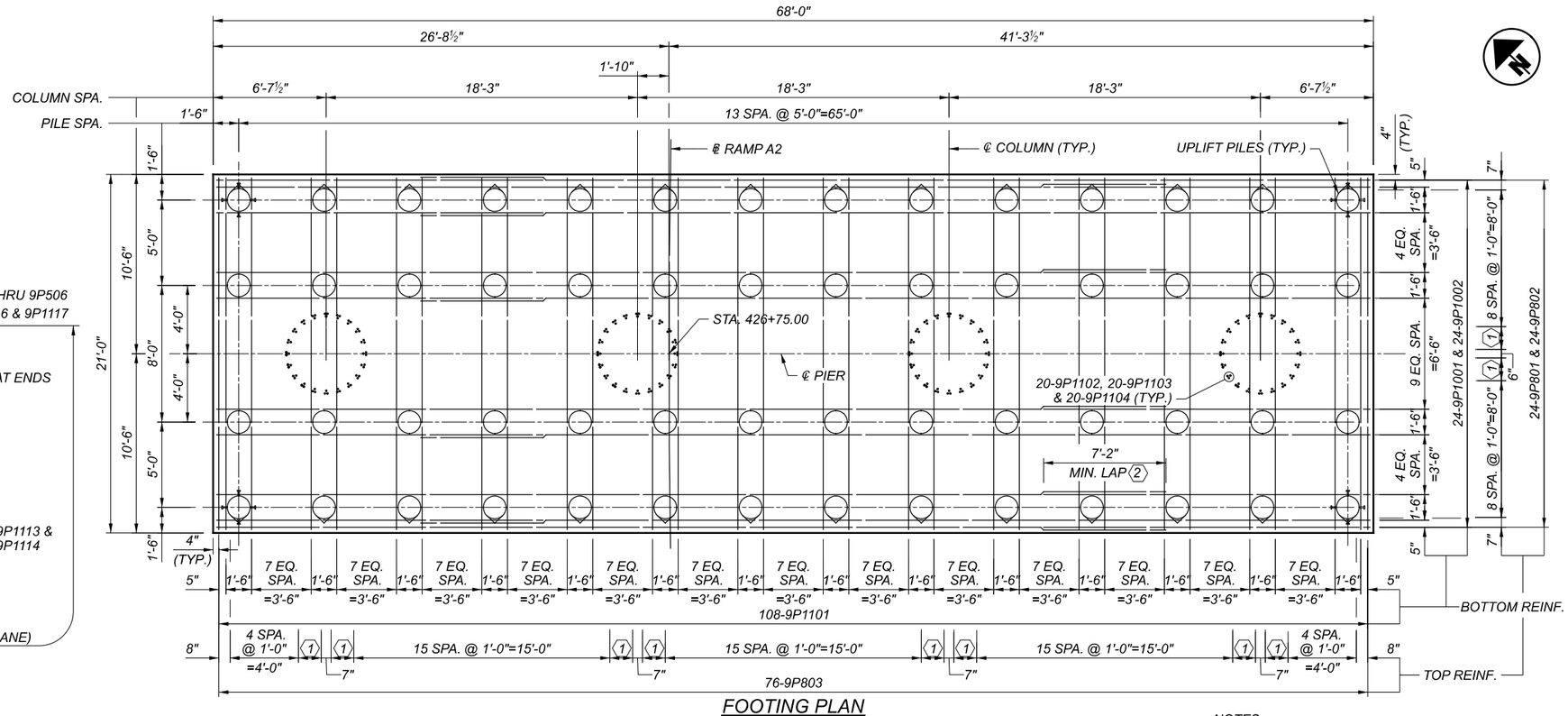
SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	54
TOTAL	164
SHEET	1496
TOTAL	2338



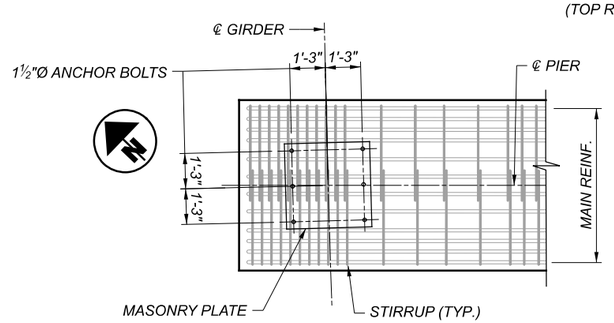


SECTION A-A



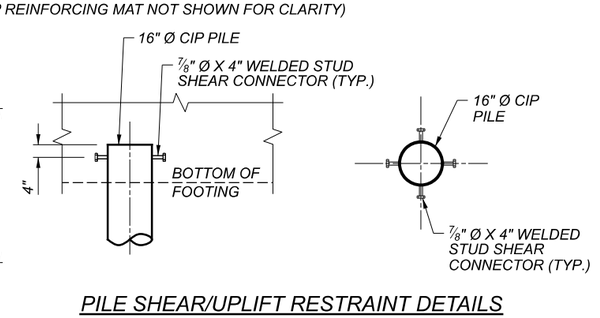
FOOTING PLAN

(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)

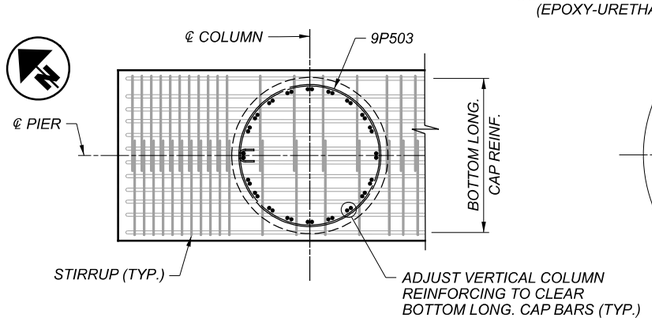


BEARING ANCHOR PLAN

GIRDER G2-1 SHOWN
GIRDERS G2-3, G2-4, G2-5, G2-6, G2-8 & G2-9 SIMILAR

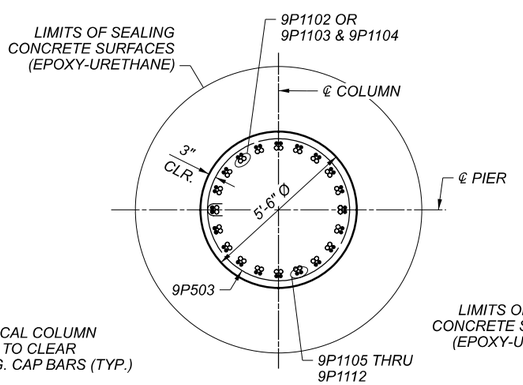


PILE SHEAR/UPLIFT RESTRAINT DETAILS

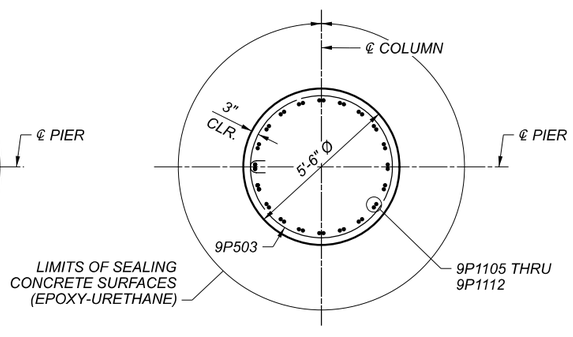


CAP AND COLUMN INTERFACE DETAILS

EXTERIOR COLUMN SHOWN, INTERIOR COLUMN SIMILAR



SECTION C-C



SECTION B-B

NOTES:

1. *FOR BEARING DETAILS, SEE SHEETS* 86 / 164 *THRU* 89 / 164
2. *FOR FOUNDATION PLAN, SEE SHEETS* 17 / 164 *THRU* 22 / 164
3. *FOR REINFORCING STEEL LIST, SEE SHEETS* 156 / 164 *THRU* 164 / 164
4. *PILES MARKED ◯ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.*
5. *ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.*

LEGEND:

(1) *2 SPA. @ 8"=1'-4"*

(2) *ALTERNATE LAP LOCATIONS*

PIER 9 DETAILS
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	55
TOTAL	164
SHEET	1497
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:06:35 PM USER: CRICCARDI
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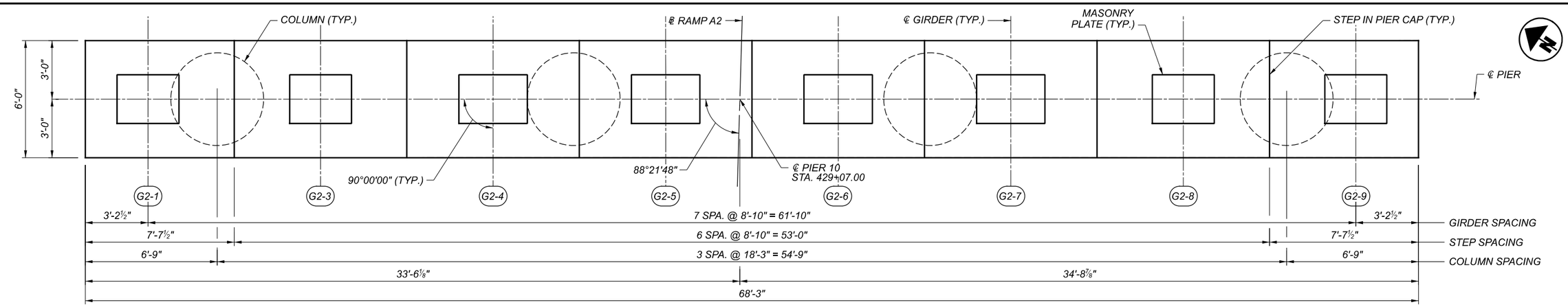
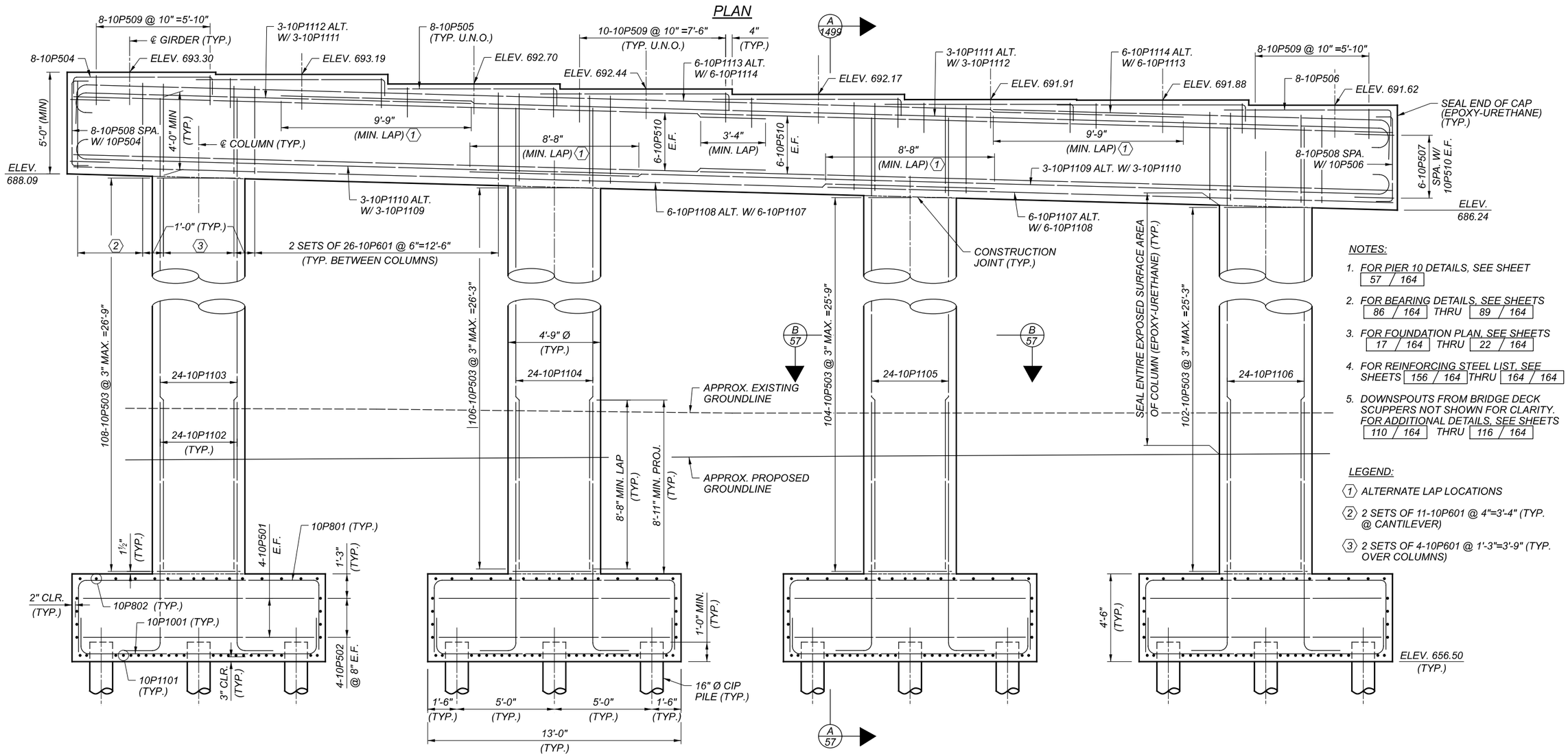


PLAN



ELEVATION

NOTES:

1. FOR PIER 10 DETAILS, SEE SHEET 57 / 164
2. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
3. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
4. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
5. DOWNSPOUTS FROM BRIDGE DECK SCUPPERS NOT SHOWN FOR CLARITY. FOR ADDITIONAL DETAILS, SEE SHEETS 110 / 164 THRU 116 / 164

LEGEND:

1 ALTERNATE LAP LOCATIONS

2 2 SETS OF 11-10P601 @ 4"=3'-4" (TYP. @ CANTILEVER)

3 2 SETS OF 4-10P601 @ 1'-3"=3'-9" (TYP. OVER COLUMNS)

PIER 10 PLAN AND ELEVATION
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	56
TOTAL	164
SHEET	1498
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:06:41 PM USER: CRICCARDI
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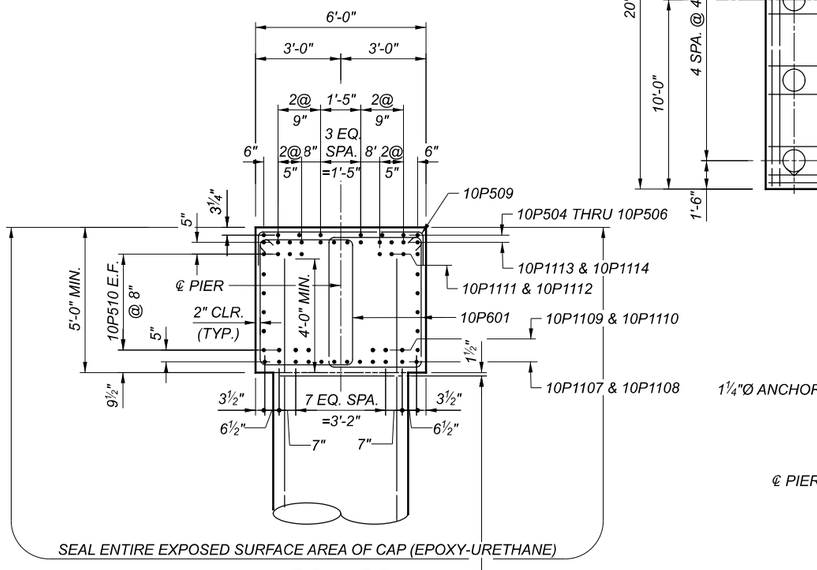
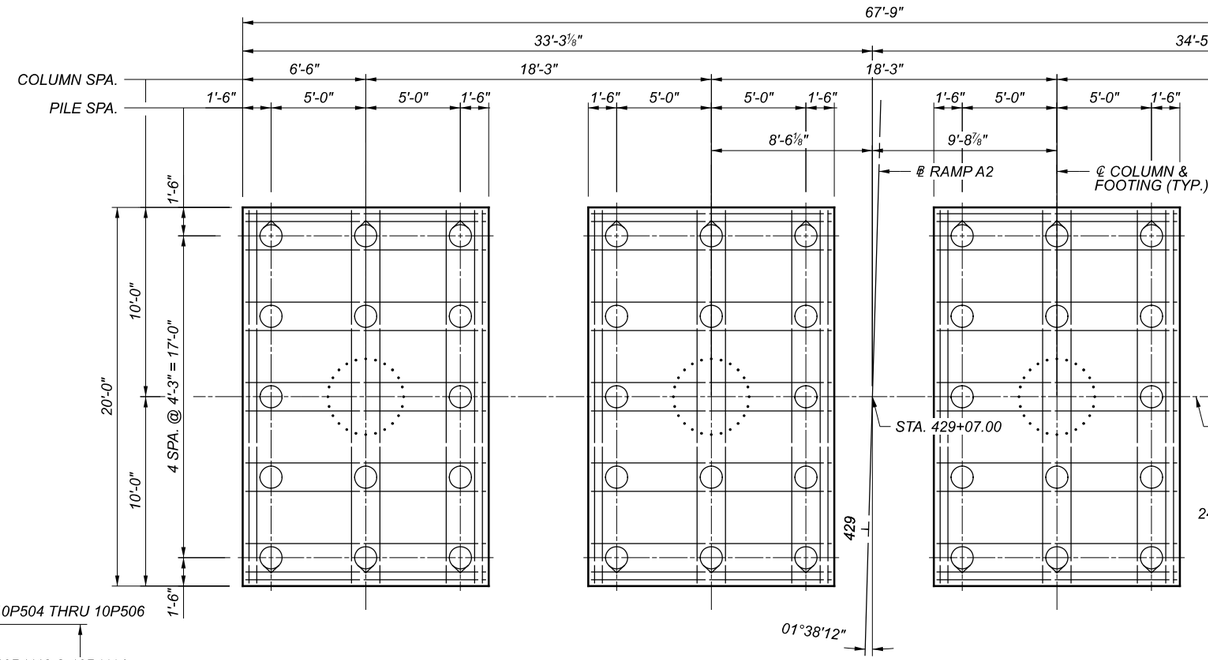
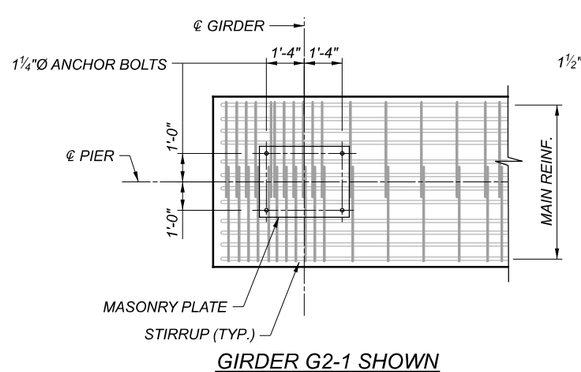




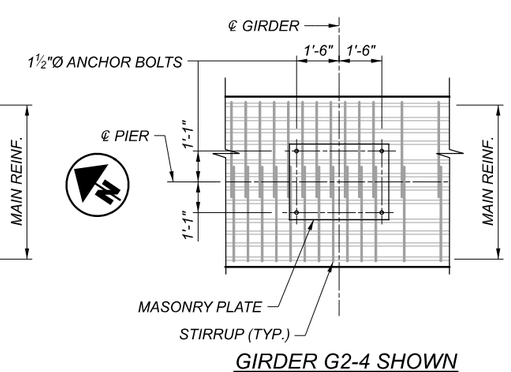
FOOTING PLAN

(TOP REINFORCING MAT NOT SHOWN FOR CLARITY)



GIRDER G2-1 SHOWN

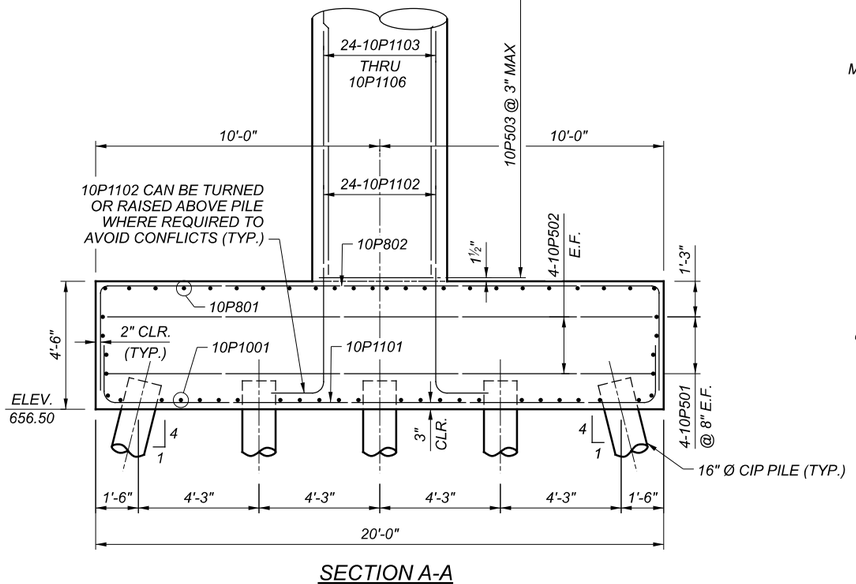
GIRDERS G2-3, G2-8 & G2-9 SIMILAR



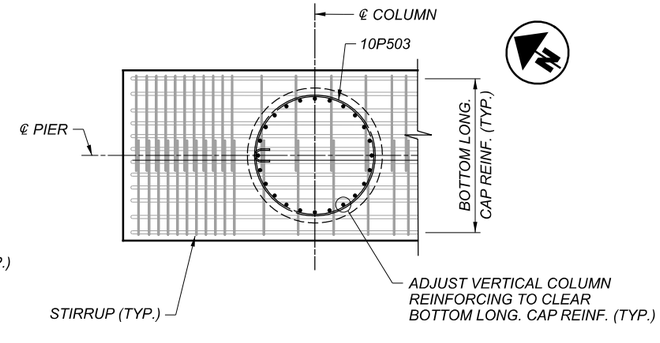
GIRDER G2-4 SHOWN

GIRDERS G2-5, G2-6 & G2-7 SIMILAR

BEARING ANCHOR PLANS



SECTION A-A



CAP AND COLUMN INTERFACE DETAILS

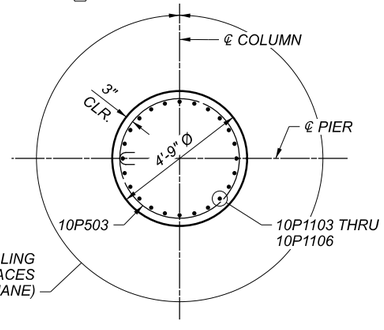
EXTERIOR COLUMN SHOWN, INTERIOR COLUMN SIMILAR

NOTES:

1. FOR BEARING DETAILS, SEE SHEETS 86 / 164 THRU 89 / 164
2. FOR FOUNDATION PLAN, SEE SHEETS 17 / 164 THRU 22 / 164
3. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164
4. PILES MARKED ◯ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
5. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.

LEGEND:

(1) 3 SPA. 8"



SECTION B-B

PIER 10 DETAILS

CUY-77-1587 (BRIDGE 9)

I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	57
TOTAL	164
SHEET	1499
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:08:47 PM USER: CRICCARDI
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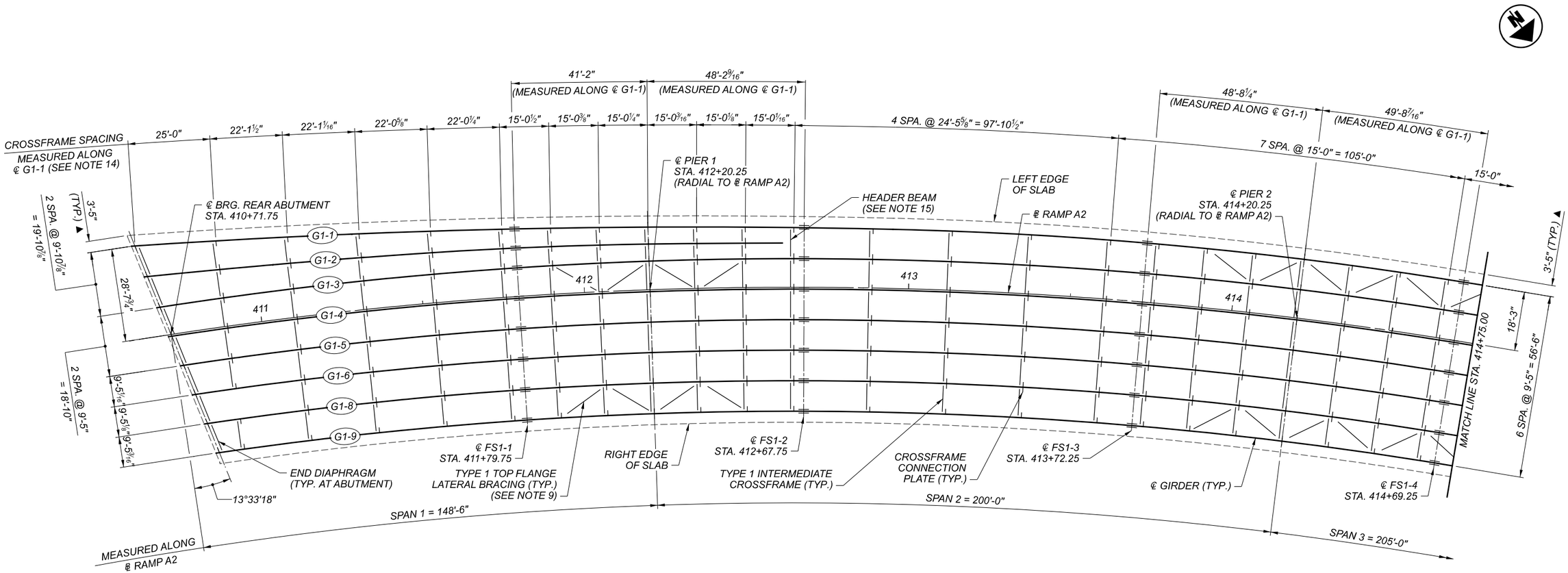

UNIT 1 FRAMING PLAN

GIRDER RADIUS TABLE												
GIRDER #	STA./OFF. FROM		STA./OFF. TO		STA./OFF. FROM		STA./OFF. TO		STA./OFF. FROM		STA./OFF. TO	
G1-1	410+65.00	28.67' LT.	412+94.77	18.25' LT.	412+94.77	18.25' LT.	417+69.12	18.25' LT.	-	-	-	-
	R = 2550.7291'				R = 1291.4895'				-			
G1-2	410+67.30	18.75' LT.	411+54.26	15.49' LT.	411+54.26	15.49' LT.	412+20.25	14.09' LT.	412+20.25	14.09' LT.	412+64.61	13.63' LT.
	R = 2364.6596'				R = 1316.6005'				R = 3098.1694'			
G1-3	410+69.64	8.83' LT.	417+69.10	8.83' LT.	-	-	-	-	-	-	-	-
	R = 1282.0729'				-				-			
G1-4	410+71.89	0.58' RT.	417+69.08	0.58' RT.	-	-	-	-	-	-	-	-
	R = 1272.6562'				-				-			
G1-5	410+74.18	10.00' RT.	417+69.06	10.00' RT.	-	-	-	-	-	-	-	-
	R = 1263.2395'				-				-			
G1-6	410+76.51	19.42' RT.	417+69.04	19.42' RT.	-	-	-	-	-	-	-	-
	R = 1253.8229'				-				-			
G1-8	410+78.87	28.83' RT.	417+69.02	28.83' RT.	-	-	-	-	-	-	-	-
	R = 1244.4062'				-				-			
G1-9	410+81.27	38.25' RT.	417+69.00	38.25' RT.	-	-	-	-	-	-	-	-
	R = 1234.9895'				-				-			

LEGEND:

(#) GIRDER NUMBER

▲ DECK OVERHANG MEASURED PERPENDICULAR TO GIRDER ℄

NOTES:

1. TRANSVERSE DIMENSIONS ARE MEASURED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GR. 50.
3. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 14 / 164.
4. FOR UNIT 2 FRAMING PLAN, SEE SHEETS 60 / 164 THRU 63 / 164.
5. FOR UNIT 1 GIRDER ELEVATION, SEE SHEET S 64 / 164 AND 65 / 164.
6. FOR GIRDER STEEL DETAILS, SEE SHEETS 69 / 164 THRU 71 / 164.
7. FOR FIELD SPLICE DETAILS, SEE SHEETS 72 / 164 AND 73 / 164.
8. FOR CROSSFRAME DETAILS, SEE SHEETS 74 / 164 AND 75 / 164.
9. FOR TOP FLANGE LATERAL BRACING DETAILS, SEE SHEET 76 / 164.
10. FOR GEOMETRIC LAYOUT, SEE SHEET 16 / 164.
11. FOR BEARING ORIENTATION AND DETAILS, SEE SHEETS 86 / 164 THRU 91 / 164.
12. FOR INSPECTION HANDRAIL DETAILS, SEE SHEET 79 / 164.
13. FOR UNIT 1 GIRDER CAMBER AND DEFLECTIONS, SEE SHEETS 80 / 164 AND 81 / 164.
14. FIELD SPLICES, CROSSFRAMES AND HEADER BEAMS ARE ORIENTED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
15. FOR HEADER BEAM DETAILS, SEE SHEETS 77 / 164 AND 78 / 164.
16. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164.

UNIT 1 FRAMING PLAN - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER RWJ | CHECKER APR
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 58 | TOTAL 164
SHEET 1500 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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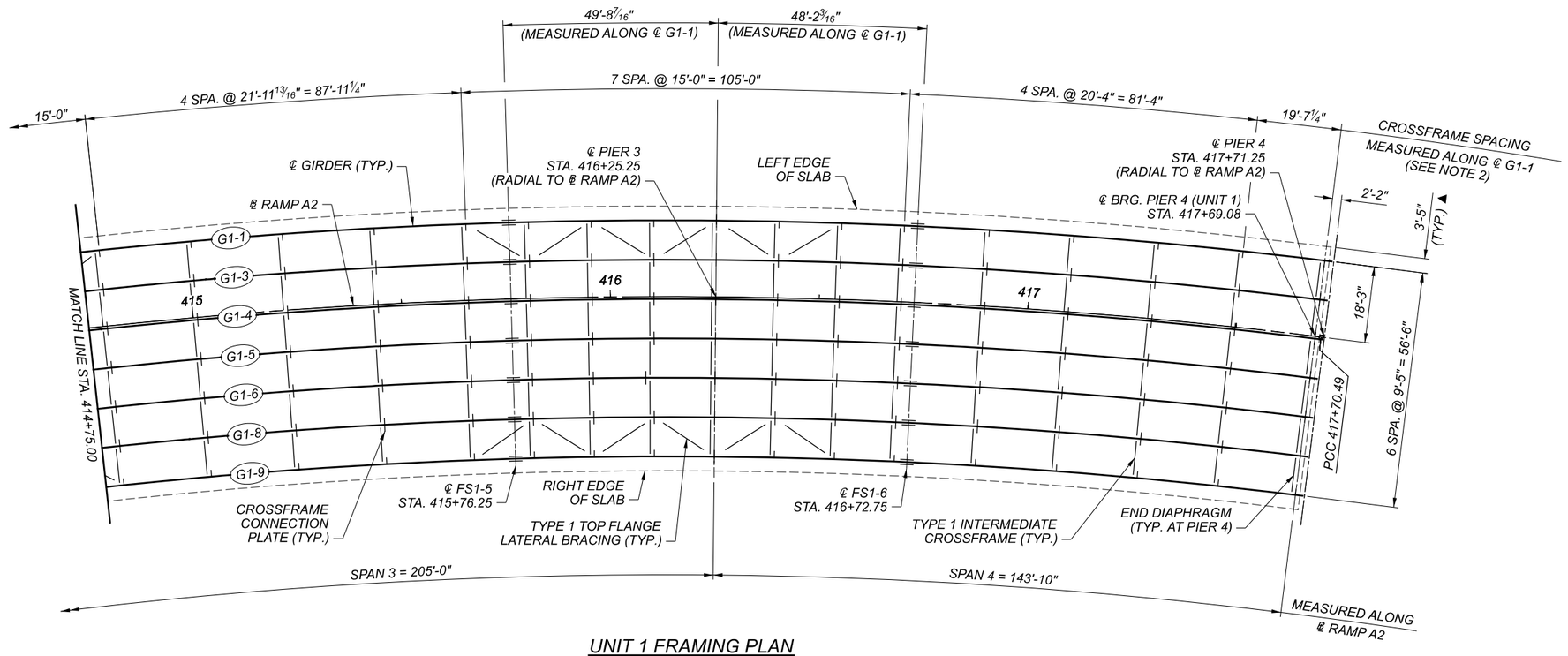


UNIT 1 FRAMING PLAN

LEGEND:

(#) GIRDER NUMBER

▲ DECK OVERHANG MEASURED PERPENDICULAR TO GIRDER ℄

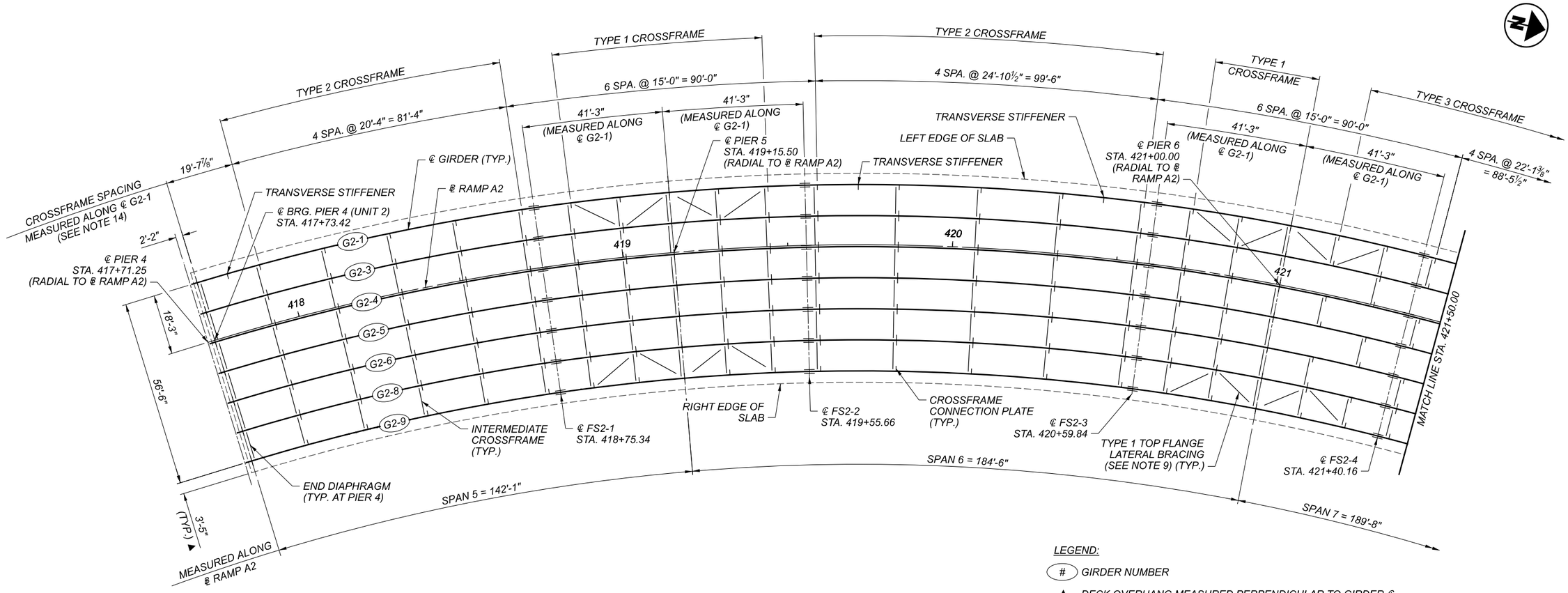
NOTES:

1. TRANSVERSE DIMENSIONS ARE MEASURED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
2. FIELD SPLICES, CROSSFRAMES AND HEADER BEAMS ARE ORIENTED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
3. FOR ADDITIONAL NOTES, SEE SHEET 58 / 164 .
4. FOR GIRDER RADIUS TABLE, SEE SHEET 58 / 164 .

UNIT 1 FRAMING PLAN - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RJW
CHECKER	APR
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	59
TOTAL	164
SHEET	1501
TOTAL	2338

CUY-90-16.28 (CCG3A)



UNIT 2 FRAMING PLAN

LEGEND:

(#) GIRDER NUMBER

▲ DECK OVERHANG MEASURED PERPENDICULAR TO GIRDER ℄

NOTES:

1. TRANSVERSE DIMENSIONS ARE MEASURED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GR. 50.
3. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 14 / 164.
4. FOR UNIT 1 FRAMING PLAN, SEE SHEETS 58 / 164 AND 59 / 164.
5. FOR UNIT 2 GIRDER ELEVATION, SEE SHEETS 66 / 164 THRU 68 / 164.
6. FOR GIRDER STEEL DETAILS, SEE SHEETS 69 / 164 THRU 71 / 164.
7. FOR FIELD SPLICE DETAILS, SEE SHEETS 72 / 164 AND 73 / 164.
8. FOR CROSSFRAME DETAILS, SEE SHEETS 74 / 164 AND 75 / 164.
9. FOR TOP FLANGE LATERAL BRACING DETAILS, SEE SHEET 76 / 164.
10. FOR GEOMETRIC LAYOUT, SEE SHEET 16 / 164.
11. FOR BEARING ORIENTATION AND DETAILS, SEE SHEETS 86 / 164 THRU 91 / 164.
12. FOR INSPECTION HANDRAIL DETAILS, SEE SHEET 79 / 164.
13. FOR UNIT 2 GIRDER CAMBER AND DEFLECTIONS, SEE SHEETS 82 / 164 THRU 85 / 164.
14. FIELD SPLICES, CROSSFRAMES AND HEADER BEAMS ARE ORIENTED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
15. FOR HEADER BEAM DETAILS SEE SHEETS 77 / 164 AND 78 / 164.
16. WHERE TRANSVERSE STIFFENERS ARE SHOWN, THEY SHALL BE LOCATED AT EQUAL SPACES BETWEEN ADJACENT CROSSFRAME CONNECTION PLATES OR BETWEEN THE BEARING STIFFENER AND THE ADJACENT CROSSFRAME CONNECTION PLATE.
17. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164.

GIRDER RADIUS/GEOMETRY TABLE

GIRDER #	STA./OFF. FROM	STA./OFF. TO	STA./OFF. FROM	STA./OFF. TO	STA./OFF. FROM	STA./OFF. TO	STA./OFF. FROM	STA./OFF. TO
G2-1	417+73.36 18.25' LT.	424+75.58 18.25' LT.	424+75.58 18.25' LT.	424+94.09 18.51' LT.	424+94.09 18.51' LT.	428+10.58 27.56' LT.	428+10.58 26.56' LT.	430+92.00 35.60' LT.
	R = 692.3180'		TANGENT		R = 696.4030'		TANGENT	
G2-3	417+73.39 8.83' LT.	424+75.58 8.83' LT.	424+75.58 8.83' LT.	424+94.34 9.10' LT.	424+94.34 9.10' LT.	428+12.15 18.77' LT.	428+12.15 18.77' LT.	430+92.00 26.76' LT.
	R = 682.9013'		TANGENT		R = 692.3904'		TANGENT	
G2-4	417+73.42 0.58' RT.	424+75.58 0.58' RT.	424+75.58 0.58' RT.	424+94.60 0.32' RT.	424+94.60 0.32' RT.	428+14.85 10.01' LT.	428+14.85 10.01' LT.	430+92.00 17.92' LT.
	R = 673.4846'		TANGENT		R = 688.3858'		TANGENT	
G2-5	417+73.45 10.00' RT.	424+75.58 10.00' RT.	424+75.58 10.00' RT.	424+94.87 9.73' RT.	424+94.87 9.73' RT.	428+17.54 1.25' LT.	428+17.54 1.25' LT.	430+92.00 9.09' LT.
	R = 664.0679'		TANGENT		R = 684.3811'		TANGENT	
G2-6	417+73.48 19.42' RT.	424+75.58 19.42' RT.	424+75.58 19.42' RT.	424+95.15 19.14' RT.	424+95.15 19.14' RT.	428+20.24 7.51' RT.	428+20.24 7.51' RT.	430+92.00 0.25' LT.
	R = 654.6512'		TANGENT		R = 680.3765'		TANGENT	
G2-7	425+44.97 23.25 RT.	428+34.79 15.94' RT.	428+34.79 15.94' RT.	430+92.00 8.59' RT.	- -	- -	- -	- -
	SPIRAL **		TANGENT		-		-	
G2-8	417+73.51 28.83' RT.	427+01.50 28.83' RT.	427+01.50 28.83' RT.	428+38.67 24.66' RT.	428+38.67 24.66' RT.	430+92.00 17.42' RT.	- -	- -
	R = 645.2345'		R = 994.9109'		TANGENT		-	
G2-9	417+73.55 38.25' RT.	427+01.50 38.25' RT.	427+01.50 38.25' RT.	428+47.65 33.24' RT.	428+47.65 33.24' RT.	430+92.00 26.26' RT.	- -	- -
	R = 635.8180'		R = 1051.1072'		TANGENT		-	

** GIRDER G2-7 FOLLOWS A GEOMETRIC SPIRAL THROUGH THE MIDPOINT BETWEEN GIRDERS G2-6 AND G2-8

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:07:08 PM USER: CRICCARDI
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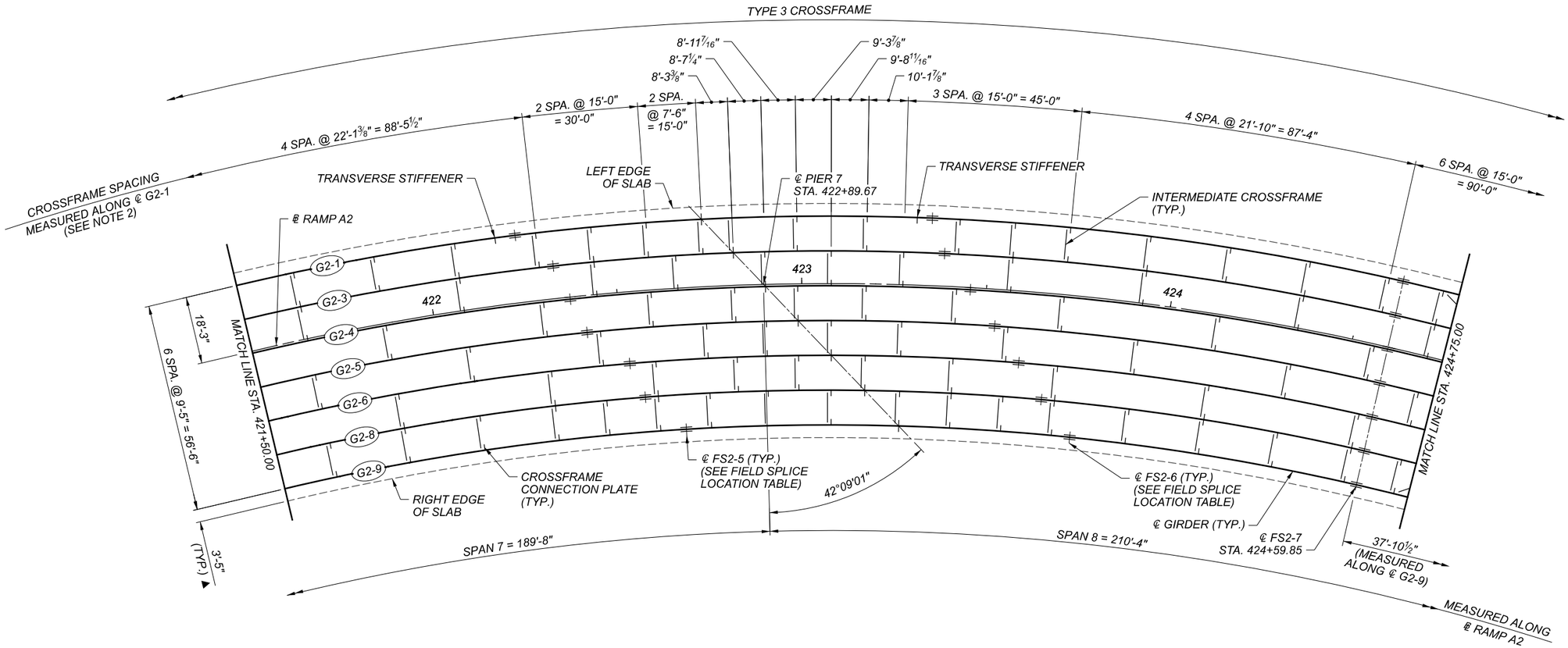
UNIT 2 FRAMING PLAN - (1 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 60 | TOTAL 164
SHEET 1502 | TOTAL 2338



UNIT 2 FRAMING PLAN

FIELD SPLICE LOCATION TABLE		
GIRDER #	FS2-5	FS2-6
G2-1	422+24.50	423+34.61
G2-3	422+33.62	423+38.25
G2-4	422+37.24	423+45.66
G2-5	422+40.89	423+52.88
G2-6	422+51.88	423+60.25
G2-8	422+55.48	423+67.43
G2-9	422+66.48	423+76.47

LEGEND:

(#) GIRDER NUMBER

▲ DECK OVERHANG MEASURED PERPENDICULAR TO GIRDER ℄

NOTES:

1. TRANSVERSE DIMENSIONS ARE MEASURED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
2. FIELD SPLICES, CROSSFRAMES AND HEADER BEAMS ARE ORIENTED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
3. FOR ADDITIONAL NOTES, SEE SHEET 60 / 164 .
4. FOR GIRDER RADIUS/GEOMETRY TABLE, SEE SHEET 60 / 164 .

UNIT 2 FRAMING PLAN - (2 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 61 | TOTAL 164
SHEET 1503 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:07:15 PM USER: CRICCARDI
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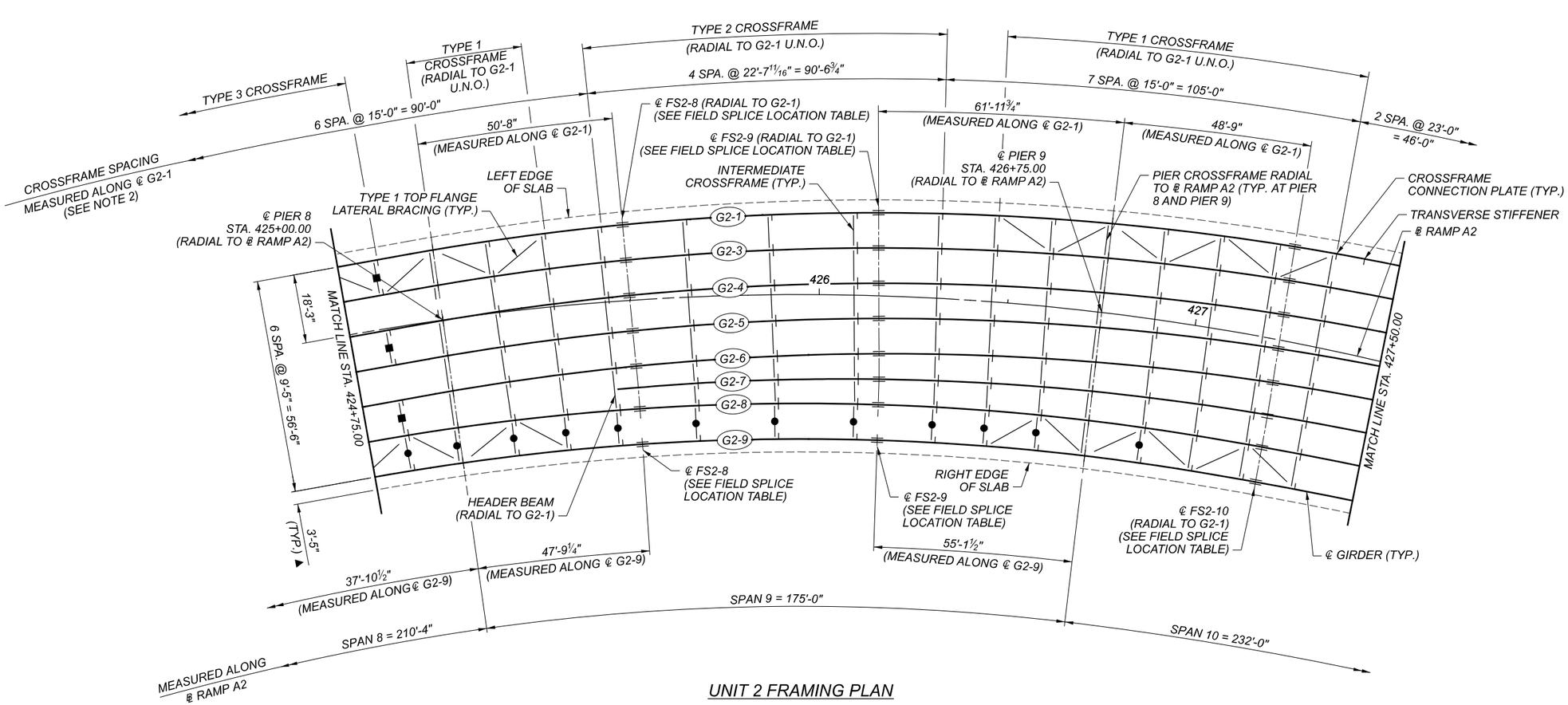


UNIT 2 FRAMING PLAN

FIELD SPLICE LOCATION TABLE			
GIRDER #	FS2-8	FS2-9	FS2-10
G2-1	425+49.23	426+15.08	427+23.07
G2-3	425+49.49	426+15.33	427+23.32
G2-4	425+49.75	426+15.59	427+23.57
G2-5	425+50.02	426+15.86	427+23.83
G2-6	425+50.30	426+16.14	427+24.10
G2-7	-	426+16.35	427+24.36
G2-8	425+50.65	426+16.56	427+24.62
G2-9	425+50.64	426+16.56	427+24.92

LEGEND:

(#) GIRDER NUMBER

▲ DECK OVERHANG MEASURED PERPENDICULAR TO GIRDER ℄

CROSSFRAME ORIENTED NORMAL TO G2-1

CROSSFRAME ORIENTED NORMAL TO G2-9

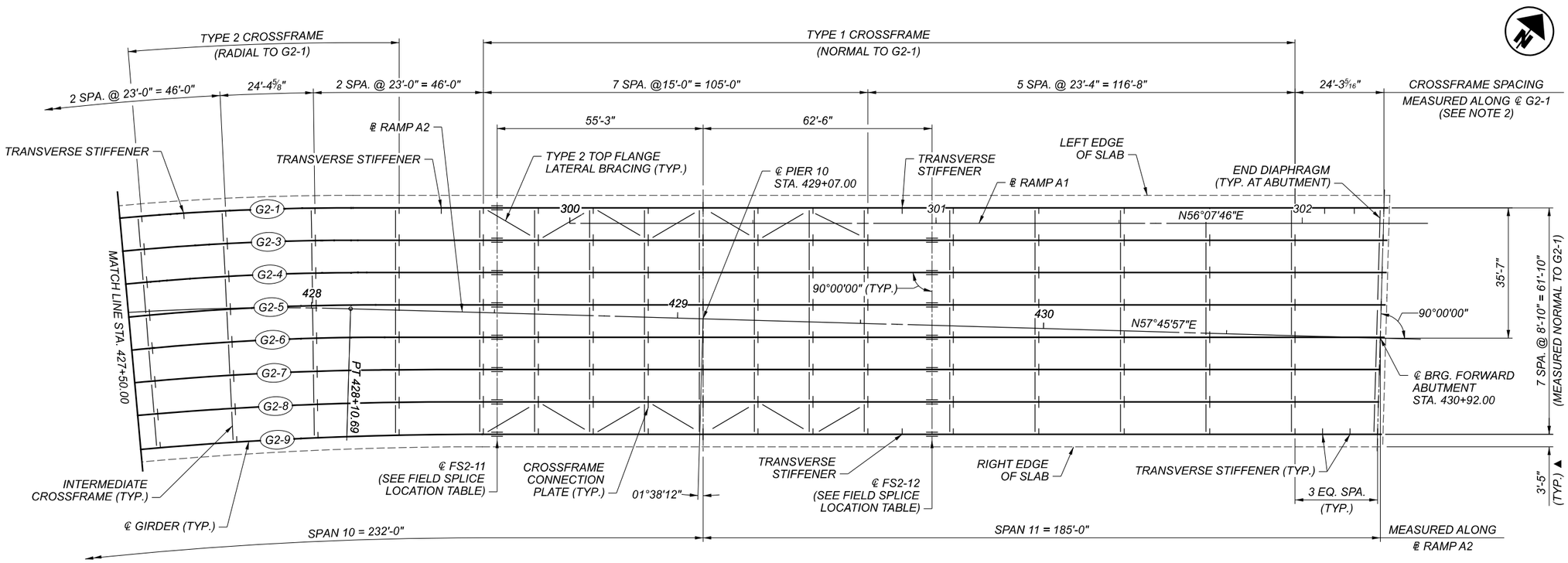
NOTES:

1. TRANSVERSE DIMENSIONS ARE MEASURED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
2. FIELD SPLICES, CROSSFRAMES AND HEADER BEAMS ARE ORIENTED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
3. FOR ADDITIONAL NOTES, SEE SHEET 60 / 164 .
4. FOR GIRDER RADIUS/GEOMETRY TABLE, SEE SHEET 60 / 164 .

UNIT 2 FRAMING PLAN - (3 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY FHWA
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 62 | TOTAL 164
SHEET 1504 | TOTAL 2338

CUY-90-16.28 (CCG3A)



UNIT 2 FRAMING PLAN

FIELD SPLICE LOCATION TABLE		
GIRDER #	FS2-11	FS2-12
G2-1	428+50.91	429+68.61
G2-3	428+51.16	429+68.86
G2-4	428+51.41	429+69.11
G2-5	428+51.66	429+69.37
G2-6	428+51.92	429+69.62
G2-7	428+52.17	429+69.87
G2-8	428+52.42	429+70.12
G2-9	428+52.67	429+70.38

LEGEND:

(#) GIRDER NUMBER

▲ DECK OVERHANG MEASURED PERPENDICULAR TO GIRDER ℄

NOTES:

1. TRANSVERSE DIMENSIONS ARE MEASURED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
2. FIELD SPLICES, CROSSFRAMES AND HEADER BEAMS ARE ORIENTED RADIAL TO ℄ RAMP A2 UNLESS NOTED OTHERWISE.
3. FOR ADDITIONAL NOTES, SEE SHEET 60 / 164 .
4. FOR GIRDER RADIUS/GEOMETRY TABLE, SEE SHEET 60 / 164 .

UNIT 2 FRAMING PLAN - (4 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 63 | TOTAL 164
SHEET 1505 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:07:27 PM USER: CRICCARDI
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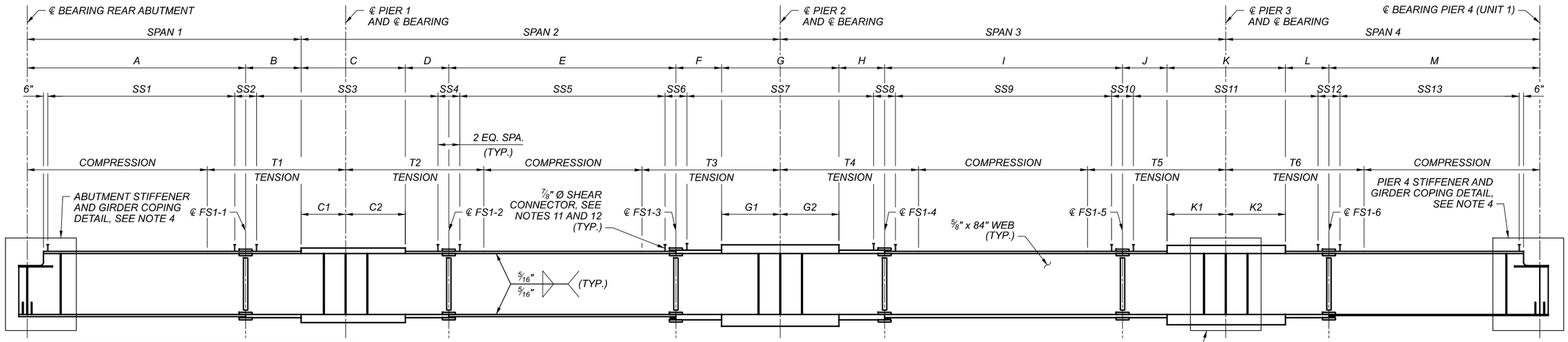

GIRDER ELEVATION
(G1-1 AND G1-3 THRU G1-9)

UNIT 1 TOP FLANGE TENSION ZONE LIMITS

GIRDER #	T1	T2	T3	T4	T5	T6
G1-1	78'-0"	**	**	103'-0"	81'-0"	105'-0"
G1-3	76'-0"	**	**	81'-0"	81'-0"	85'-0"
G1-4	66'-0"	69'-0"	84'-0"	81'-0"	60'-0"	85'-0"
G1-5	66'-0"	69'-0"	84'-0"	81'-0"	60'-0"	73'-0"
G1-6	66'-0"	69'-0"	84'-0"	81'-0"	60'-0"	73'-0"
G1-8	85'-0"	69'-0"	84'-0"	81'-0"	81'-0"	85'-0"
G1-9	**	**	**	**	**	105'-0"

** ENTIRE SPAN IN TENSION

UNIT 1 SPAN LENGTHS

LOCATION	SPAN 1	SPAN 2	SPAN 3	SPAN 4
RAMP A2	148'-6"	200'-0"	205'-0"	143'-10"
G1-1	158'-4 5/8"	202'-10 3/4"	207'-11 1/4"	145'-11 1/4"
G1-3	151'-7 15/16"	201'-4 5/8"	206'-5 1/16"	144'-10 3/16"
G1-4	148'-3 1/2"	199'-10 7/8"	204'-10 7/8"	143'-9 3/16"
G1-5	144'-11 1/16"	198'-5 1/8"	203'-4 11/16"	142'-8 3/16"
G1-6	141'-6 5/8"	196'-11 3/8"	201'-10 1/2"	141'-7 3/16"
G1-8	138'-2 3/16"	195'-5 5/8"	200'-4 5/16"	140'-6 1/8"
G1-9	134'-9 11/16"	193'-11 7/8"	198'-10 1/8"	139'-5 1/8"

UNIT 1 GIRDER DIMENSIONS

	C1	C2	G1	G2	K1	K2
G1-1	20'-9 15/16"	27'-11"	27'-4 5/8"	27'-4 5/8"	27'-4 5/8"	27'-10 3/4"
G1-3	20'-7 11/16"	27'-8 5/16"	27'-2 1/4"	27'-2 1/4"	27'-2 1/4"	27'-8 5/16"
G1-4	20'-5 7/8"	27'-5 7/8"	26'-11 7/8"	26'-11 7/8"	26'-11 7/8"	27'-5 7/8"
G1-5	20'-4 1/16"	27'-3 7/16"	26'-9 7/16"	26'-9 7/16"	26'-9 7/16"	27'-3 7/16"
G1-6	20'-2 1/4"	27'-0 15/16"	26'-7 1/16"	26'-7 1/16"	26'-7 1/16"	27'-0 15/16"
G1-8	20'-0 7/16"	26'-10 1/2"	26'-4 11/16"	26'-4 11/16"	26'-4 11/16"	26'-10 1/2"
G1-9	19'-10 5/8"	26'-8 1/16"	26'-2 1/4"	26'-2 1/4"	26'-2 1/4"	26'-8 1/16"

UNIT 1 GIRDER DIMENSIONS

GIRDER #	A	B	C	D	E	F	G	H	I	J	K	L	M
G1-1	117'-2 5/8"	20'-4 1/16"	48'-8 15/16"	20'-3 1/2"	106'-0"	21'-3 5/8"	54'-9 1/4"	22'-3 13/16"	108'-6 3/8"	22'-3 13/16"	55'-3 3/8"	20'-3 7/16"	97'-9 1/16"
G1-3	110'-10 9/16"	20'-1 11/16"	48'-4"	20'-1 11/16"	105'-2 5/8"	21'-1 3/4"	54'-4 1/2"	22'-1 13/16"	107'-8 15/16"	22'-1 13/16"	54'-10 9/16"	20'-1 11/16"	97'-0 3/16"
G1-4	107'-9 3/4"	19'-11 7/8"	47'-11 3/4"	19'-11 7/8"	104'-5 3/8"	20'-11 7/8"	53'-11 3/4"	21'-11 7/8"	106'-11 3/8"	21'-11 7/8"	54'-5 3/4"	19'-11 7/8"	96'-3 7/16"
G1-5	104'-8 7/8"	19'-10 1/8"	47'-7 1/2"	19'-10 1/8"	103'-8 1/8"	20'-10"	53'-6 7/8"	21'-9 15/16"	106'-1 15/16"	21'-9 15/16"	54'-0 7/8"	19'-10 1/8"	95'-6 5/8"
G1-6	101'-8 1/16"	19'-8 9/16"	47'-3 3/16"	19'-8 5/16"	102'-10 7/8"	20'-8 3/16"	53'-2 1/8"	21'-8"	105'-4 3/8"	21'-8"	53'-8"	19'-8 5/16"	94'-9 15/16"
G1-8	98'-7 3/16"	19'-6 9/16"	46'-10 15/16"	19'-6 9/16"	102'-1 9/16"	20'-6 5/16"	52'-9 3/8"	21'-6"	104'-6 15/16"	21'-6"	53'-3 3/16"	19'-6 9/16"	94'-1 1/16"
G1-9	95'-6 5/16"	19'-4 13/16"	46'-6 11/16"	19'-4 13/16"	101'-4 5/16"	20'-4 7/16"	52'-4 9/16"	21'-4 1/16"	103'-9 7/16"	21'-4 1/16"	52'-10 3/8"	19'-4 13/16"	93'-4 1/4"

UNIT 1 TOP FLANGE PLATE SIZES

GIRDER #	A	B	C	D	E	F	G	H	I	J	K	L	M
G1-1	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/2" x 22"	1 1/4" x 22"	1" x 22"	1" x 22"	2" x 22"	1" x 22"	1" x 22"
G1-3	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"	1" x 22"	1 3/4" x 22"	1" x 22"	1" x 22"
G1-4	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"	1" x 22"	1 3/4" x 22"	1" x 22"	1" x 22"
G1-5	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"
G1-6	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"
G1-8	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"
G1-9	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"	1" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"

UNIT 1 BOTTOM FLANGE PLATE SIZES

GIRDER #	A	B	C	D	E	F	G	H	I	J	K	L	M
G1-1	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/2" x 24"	2 3/4" x 24"	1 1/2" x 24"	1 1/4" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"
G1-3	1" x 22"	1" x 22"	1 3/4" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/2" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"
G1-4	1" x 22"	1" x 22"	1 3/4" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/2" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"
G1-5	1" x 22"	1" x 22"	1 3/4" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"
G1-6	1" x 22"	1" x 22"	1 3/4" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"
G1-8	1" x 22"	1" x 22"	1 3/4" x 22"	1" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"
G1-9	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2 1/2" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"

NOTES:

1. ALL FLANGE AND WEB PLATES, INCLUDING FIELD SPLICE PLATES, CROSSFRAME MEMBERS, AND CROSSFRAME CONNECTION PLATES SHALL BE DESIGNATED (CVN).
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN C&MS 711.01.
3. FOR FRAMING PLAN, SEE SHEETS 58 / 164 THRU 63 / 164 .
4. FOR GIRDER STEEL DETAILS, SEE SHEETS 69 / 164 THRU 71 / 164 .
5. FOR CROSSFRAME DETAILS, SEE SHEETS 74 / 164 AND 75 / 164 .
6. FOR FIELD SPLICE DETAILS, SEE SHEETS 72 / 164 AND 73 / 164 .
7. FOR CAMBER AND DEFLECTION VALUES, SEE SHEETS 80 / 164 THRU 85 / 164 .
8. FOR BEARING DETAILS, SEE SHEETS 88 / 164 THRU 91 / 164 .
9. PER C&MS 513.06, DETAIL STRUCTURAL STEEL TO FIT UNDER FULL STEEL DEAD LOAD PRIOR TO DECK PLACEMENT WITH THE GIRDER WEBS PLUMB.
10. WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINES IS PERMITTED ONLY IN AREAS OF TOP FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 5/16".
11. SHEAR CONNECTORS SHALL NOT BE LOCATED OVER FLANGE TRANSITIONS. SHEAR CONNECTOR SPACING MAY BE ADJUSTED AS NEEDED AT FLANGE TRANSITIONS TO AVOID CONFLICT.
12. FOR UNIT 1 SHEAR CONNECTOR HEIGHTS AND SPACING, SEE SHEET 65 / 164 .

UNIT 1 GIRDER ELEVATION - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER RWJ | CHECKER APR
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 64 | TOTAL 164
SHEET 1506 | TOTAL 2338

CUY-90-16.28 (CCG3A)
MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:07:33 PM USER: CRICCARDI
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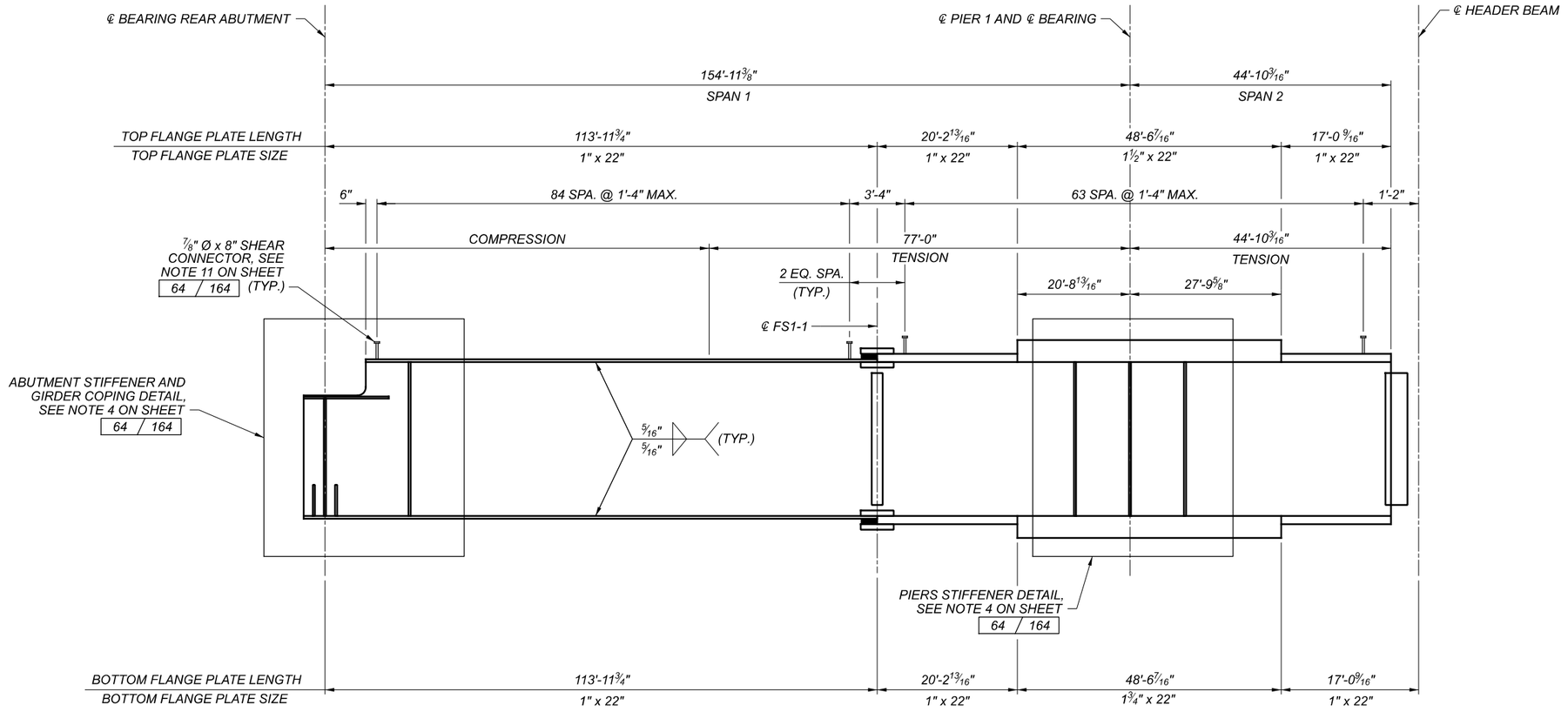


GIRDER ELEVATION
(G1-2)

UNIT 1 SHEAR CONNECTOR HEIGHT

GIRDER #	A	B	C	D	E	F	G	H	I	J	K	L	M
G1-1	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"
G1-3	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"
G1-4	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"
G1-5	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"
G1-6	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"
G1-8	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"
G1-9	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"

UNIT 1 SHEAR CONNECTOR SPACING

GIRDER #	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12	SS13
G1-1	98 SPA. @ 1'-2" MAX.	3'-4"	74 SPA. @ 1'-2" MAX.	3'-4"	88 SPA. @ 1'-2" MAX.	3'-4"	82 SPA. @ 1'-2" MAX.	3'-11"	90 SPA. @ 1'-2" MAX.	3'-11"	81 SPA. @ 1'-2" MAX.	3'-4"	81 SPA. @ 1'-2" MAX.
G1-3	81 SPA. @ 1'-4" MAX.	3'-4"	64 SPA. @ 1'-4" MAX.	3'-4"	77 SPA. @ 1'-4" MAX.	3'-4"	71 SPA. @ 1'-4" MAX.	3'-4"	79 SPA. @ 1'-4" MAX.	3'-4"	71 SPA. @ 1'-4" MAX.	3'-4"	70 SPA. @ 1'-4" MAX.
G1-4	79 SPA. @ 1'-4" MAX.	3'-4"	64 SPA. @ 1'-4" MAX.	3'-4"	76 SPA. @ 1'-4" MAX.	3'-4"	71 SPA. @ 1'-4" MAX.	3'-4"	78 SPA. @ 1'-4" MAX.	3'-4"	70 SPA. @ 1'-4" MAX.	3'-4"	70 SPA. @ 1'-4" MAX.
G1-5	77 SPA. @ 1'-4" MAX.	3'-4"	63 SPA. @ 1'-4" MAX.	3'-4"	76 SPA. @ 1'-4" MAX.	3'-4"	70 SPA. @ 1'-4" MAX.	3'-4"	78 SPA. @ 1'-4" MAX.	3'-4"	70 SPA. @ 1'-4" MAX.	3'-4"	69 SPA. @ 1'-4" MAX.
G1-6	74 SPA. @ 1'-4" MAX.	3'-4"	63 SPA. @ 1'-4" MAX.	3'-4"	75 SPA. @ 1'-4" MAX.	3'-4"	70 SPA. @ 1'-4" MAX.	3'-4"	77 SPA. @ 1'-4" MAX.	3'-4"	69 SPA. @ 1'-4" MAX.	3'-4"	69 SPA. @ 1'-4" MAX.
G1-8	72 SPA. @ 1'-4" MAX.	3'-4"	63 SPA. @ 1'-4" MAX.	3'-4"	75 SPA. @ 1'-4" MAX.	3'-4"	69 SPA. @ 1'-4" MAX.	3'-4"	76 SPA. @ 1'-4" MAX.	3'-4"	69 SPA. @ 1'-4" MAX.	3'-4"	68 SPA. @ 1'-4" MAX.
G1-9	80 SPA. @ 1'-2" MAX.	3'-4"	71 SPA. @ 1'-2" MAX.	3'-4"	85 SPA. @ 1'-2" MAX.	3'-4"	78 SPA. @ 1'-2" MAX.	3'-4"	87 SPA. @ 1'-2" MAX.	3'-4"	78 SPA. @ 1'-2" MAX.	3'-4"	77 SPA. @ 1'-2" MAX.

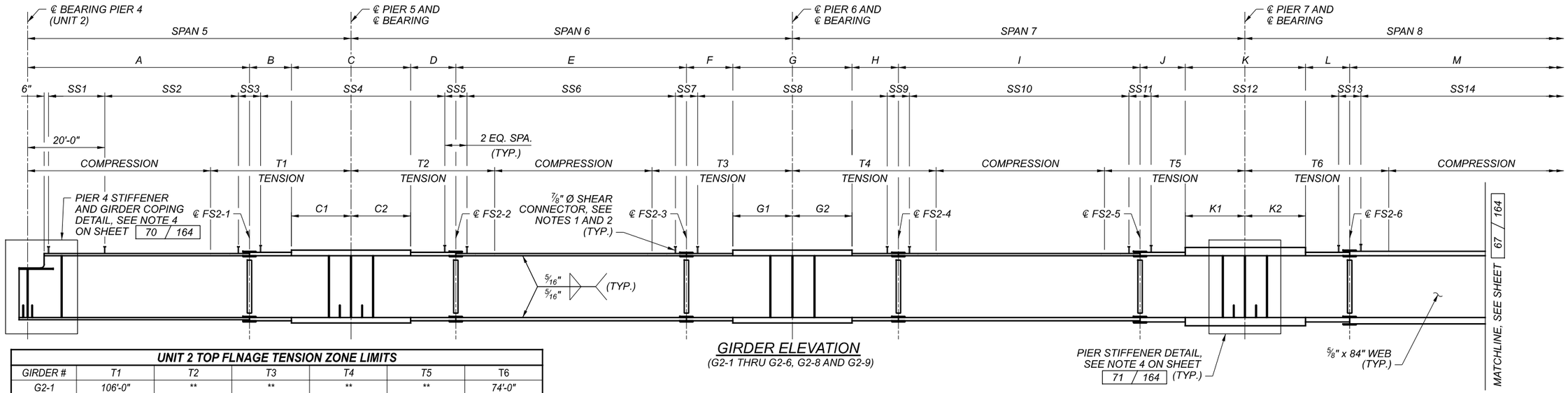
NOTES:

1. FOR GIRDER ELEVATION NOTES, SEE SHEET 64 / 164.

UNIT 1 GIRDER ELEVATION - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER RWJ | CHECKER APR
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 65 | TOTAL 164
SHEET 1507 | TOTAL 2338

CUY-90-16.28 (CCG3A)



GIRDER ELEVATION
(G2-1 THRU G2-6, G2-8 AND G2-9)

UNIT 2 TOP FLNAGE TENSION ZONE LIMITS

GIRDER #	T1	T2	T3	T4	T5	T6
G2-1	106'-0"	**	**	**	**	74'-0"
G2-3	84'-6"	93'-6"	87'-6"	**	**	76'-0"
G2-4	83'-6"	86'-6"	86'-6"	**	**	86'-6"
G2-5	72'-6"	85'-0"	85'-0"	80'-6"	89'-6"	92'-6"
G2-6	71'-6"	84'-0"	90'-0"	79'-6"	69'-0"	92'-6"
G2-8	70'-6"	**	**	78'-6"	63'-0"	**
G2-9	116'-6"	**	**	77'-0"	64'-6"	**

** ENTIRE SPAN IN TENSION

UNIT 2 SPAN LENGTHS

LOCATION	SPAN 5	SPAN 6	SPAN 7	SPAN 8	SPAN 9	SPAN 10	SPAN 11
℄ RAMP A2	142'-1"	184'-6"	189'-8"	210'-4"	175'-0"	232'-0"	185'-0"
G2-1	145'-11 7/8"	189'-5 15/16"	181'-9 1/8"	232'-4 9/16"	180'-6 13/16"	236'-4 11/16"	185'-11 5/16"
G2-3	143'-11 11/16"	186'-11"	184'-2 7/16"	221'-0 5/8"	178'-1 3/4"	234'-10"	185'-8 1/4"
G2-4	141'-11 1/2"	184'-4 1/16"	190'-0 7/16"	209'-7 9/16"	175'-8 11/16"	233'-3 1/4"	185'-5 1/4"
G2-5	139'-11 5/16"	181'-9 1/8"	195'-11 9/16"	198'-1 5/16"	173'-3 5/8"	231'-8 9/16"	185'-2 3/16"
G2-6	137'-11 1/8"	179'-2 1/4"	202'-0 1/16"	186'-5 13/16"	170'-10 9/16"	230'-1 15/16"	184'-11 3/16"
G2-8	135'-10 15/16"	176'-7 5/16"	208'-1 15/16"	174'-8 3/4"	167'-6 3/16"	227'-1 3/8"	184'-5 1/8"
G2-9	133'-10 3/4"	174'-0 3/8"	214'-5 3/8"	162'-10 1/4"	165'-0 13/16"	225'-6 9/16"	184'-2 1/8"

UNIT 2 GIRDER DIMENSIONS

GIRDER #	C1	C2	G1	G2	K1	K2
G2-1	22'-6"	22'-6"	22'-6"	22'-6"	22'-6"	35'-2"
G2-3	22'-2 5/16"	22'-2 5/16"	22'-2 5/16"	22'-2 5/16"	26'-8"	31'-4"
G2-4	21'-10 5/8"	21'-10 5/8"	21'-10 5/8"	21'-10 5/8"	27'-5"	32'-2"
G2-5	21'-7"	21'-7"	21'-7"	21'-7"	28'-5"	31'-8"
G2-6	21'-3 5/16"	21'-3 5/16"	21'-3 5/16"	21'-3 5/16"	29'-4"	25'-11"
G2-8	20'-11 5/8"	20'-11 5/8"	20'-11 5/8"	20'-11 5/8"	30'-1"	26'-11"
G2-9	20'-7 15/16"	20'-7 15/16"	20'-7 15/16"	20'-7 15/16"	30'-11"	20'-8"

UNIT 2 GIRDER DIMENSIONS

GIRDER #	A	B	C	D	E	F	G	H	I	J	K	L	M
G2-1	104'-8 7/8"	18'-9"	45'-0"	18'-9"	106'-11 15/16"	18'-9"	45'-0"	18'-9"	86'-7 1/2"	28'-1"	57'-8"	27'-4"	128'-7 5/8"
G2-3	103'-3 7/16"	18'-5 15/16"	44'-4 5/8"	18'-5 15/16"	105'-6 1/2"	18'-5 15/16"	44'-4 5/8"	18'-5 15/16"	94'-8 3/16"	22'-2"	58'-0"	25'-10"	123'-2 5/16"
G2-4	101'-10"	18'-2 7/8"	43'-9 1/4"	18'-2 7/8"	104'-1 1/16"	18'-2 7/8"	43'-9 1/4"	18'-2 7/8"	96'-11 15/16"	25'-6"	59'-7"	23'-3"	114'-1"
G2-5	100'-4 1/2"	17'-11 13/16"	43'-2"	17'-11 13/16"	102'-7 1/2"	17'-11 13/16"	43'-2"	17'-11 13/16"	99'-2 3/4"	28'-9"	60'-1"	21'-6"	105'-4 7/16"
G2-6	98'-11 1/16"	17'-8 3/4"	42'-6 5/8"	17'-8 3/4"	101'-2 1/8"	17'-8 3/4"	42'-6 5/8"	17'-8 3/4"	108'-6"	25'-2"	55'-3"	24'-10"	96'-8 3/4"
G2-8	97'-5 5/8"	17'-5 11/16"	41'-11 1/4"	17'-5 11/16"	99'-8 11/16"	17'-5 11/16"	41'-11 1/4"	17'-5 11/16"	110'-4 5/8"	29'-3"	57'-0"	20'-11"	88'-5 1/2"
G2-9	96'-0 3/16"	17'-2 5/8"	41'-3 7/8"	17'-2 5/8"	98'-3 1/4"	17'-2 5/8"	41'-3 7/8"	17'-2 5/8"	119'-1 13/16"	26'-6"	51'-7"	25'-8"	78'-7 3/4"

UNIT 2 TOP FLANGE PLATE SIZES

GIRDER #	A	B	C	D	E	F	G	H	I	J	K	L	M
G2-1	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	2 1/4" x 22"	1" x 22"	1" x 22"	1 1/2" x 24"	3" x 24"	1 1/2" x 24"	1 3/4" x 24"
G2-3	1" x 22"	1 1/2" x 22"	2" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	2" x 22"	1" x 22"	1" x 22"	1 3/4" x 24"	2 3/4" x 24"	1 3/4" x 24"	1 1/2" x 24"
G2-4	1" x 22"	1 1/2" x 22"	2" x 22"	1 1/2" x 22"	1" x 22"	1" x 22"	2" x 22"	1" x 22"	1" x 22"	1 3/4" x 24"	2 3/4" x 24"	2" x 24"	1 1/4" x 22"
G2-5	1" x 22"	1 1/2" x 22"	2" x 22"	1 1/2" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1 1/4" x 24"	1 1/2" x 24"	2 1/2" x 24"	1 1/2" x 24"	1 1/4" x 24"
G2-6	1" x 22"	1 1/2" x 22"	2" x 22"	1 1/2" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/2" x 24"	2 1/2" x 24"	1 1/2" x 24"	1 1/2" x 22"
G2-8	1" x 22"	1 1/2" x 22"	2" x 22"	1 1/2" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1 1/4" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1" x 22"
G2-9	1" x 22"	1 1/2" x 22"	2" x 22"	1 1/2" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1 1/4" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1" x 22"

UNIT 2 BOTTOM FLANGE PLATE SIZES

GIRDER #	A	B	C	D	E	F	G	H	I	J	K	L	M
G2-1	1" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1 1/2" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1 1/2" x 22"	2" x 24"	3" x 24"	2" x 24"	2 3/4" x 24"
G2-3	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 3/4" x 24"	3" x 24"	2 1/2" x 24"	2 1/4" x 24"
G2-4	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 3/4" x 24"	3" x 24"	2 1/2" x 24"	1 3/4" x 22"
G2-5	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	2" x 24"	2" x 24"	3" x 24"	2 1/4" x 24"	2" x 24"
G2-6	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 24"	2 3/4" x 24"	2" x 24"	1 1/2" x 22"
G2-8	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1 1/4" x 22"	1 1/2" x 22"	2 3/4" x 22"	1 1/2" x 22"	1" x 22"
G2-9	1" x 22"	1 1/2" x 22"	2 1/4" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1 1/4" x 22"	1 1/2" x 22"	2 3/4" x 22"	1 1/2" x 22"	1" x 22"

NOTES:

1. *FOR UNIT 2 SHEAR CONNECTOR HEIGHTS AND SPACING, SEE SHEET 68 / 164.*
2. *SHEAR CONNECTORS SHALL NOT BE LOCATED OVER FLANGE TRANSITIONS. SHEAR CONNECOR SPACING MAY BE ADJUSTED AS NEEDED AT FLANGE TRANSITIONS TO AVOID CONFLICT.*
3. *FOR ADDITIONAL GIRDER ELEVATION NOTES, SEE SHEET 58 / 164.*

UNIT 2 GIRDER ELEVATION - (1 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 66 | TOTAL 164
SHEET 1508 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:07:47 PM USER: CRICCARDI
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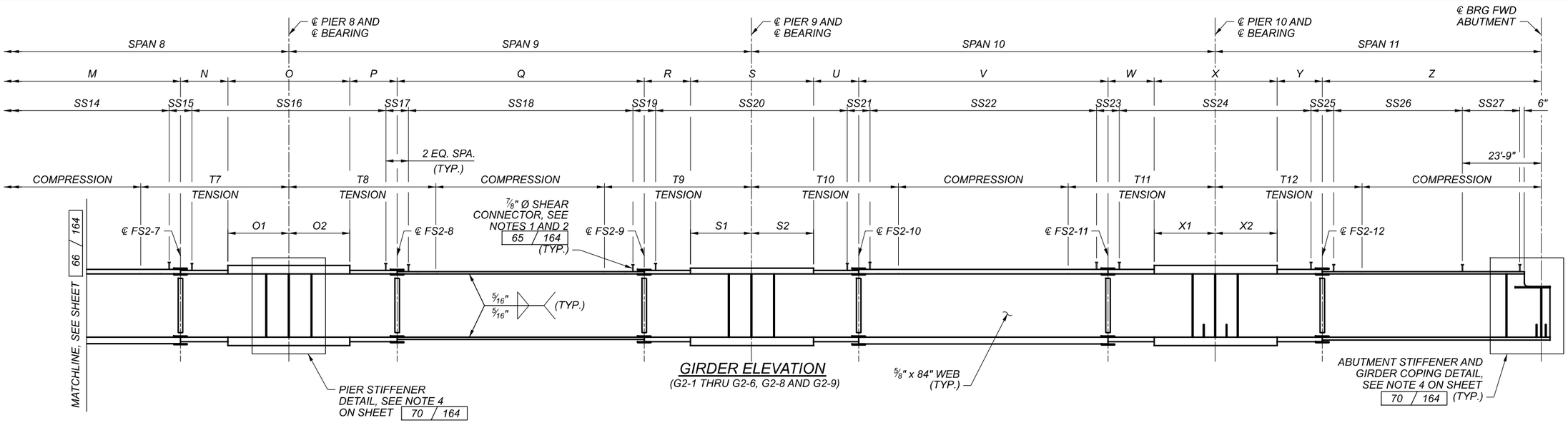


GIRDER ELEVATION
(G2-1 THRU G2-6, G2-8 AND G2-9)

UNIT 2 TOP FLANGE TENSION ZONE LIMITS

GIRDER #	T7	T8	T9	T10	T11	T12
G2-1	67'-0"	**	**	83'-0"	83'-0"	138'-6"
G2-3	82'-6"	**	**	82'-6"	83'-0"	109'-6"
G2-4	81'-0"	**	**	81'-6"	83'-0"	92'-0"
G2-5	80'-0"	**	**	81'-0"	83'-0"	92'-0"
G2-6	79'-0"	**	**	80'-0"	83'-0"	92'-0"
G2-8	**	**	**	78'-6"	105'-6"	92'-0"
G2-9	**	**	**	**	**	109'-6"

UNIT 2 GIRDER DIMENSIONS

GIRDER #	O1	O2	S1	S2	X1	X2
G2-1	22'-6 1/8"	22'-6"	26'-3"	26'-3"	26'-3"	26'-3"
G2-3	22'-2 1/2"	22'-5 7/16"	25'-7 3/4"	26'-1 15/16"	26'-3"	26'-3"
G2-4	21'-10 3/16"	22'-4 15/16"	25'-0 7/16"	26'-0 7/8"	26'-3"	26'-3"
G2-5	21'-7 3/16"	22'-4 3/8"	24'-5 3/16"	25'-11 3/4"	26'-3"	26'-3"
G2-6	21'-3 7/16"	22'-3 13/16"	23'-9 15/16"	25'-10 11/16"	26'-3"	26'-3"
G2-8	20'-11 11/16"	22'-3 1/4"	22'-10"	25'-8 11/16"	26'-3"	26'-3"
G2-9	20'-8"	21'-11 3/8"	22'-6"	25'-7 5/8"	26'-3"	26'-3"

UNIT 2 GIRDER DIMENSIONS

GIRDER #	M	N	O	P	Q	R	S	U	V	W	X	Y	Z
G2-1	128'-7 5/8"	18'-8 13/16"	45'-0 1/8"	28'-2"	67'-11 1/16"	35'-8 3/4"	52'-6"	23'-7"	131'-3 11/16"	29'-0"	52'-6"	36'-3"	123'-5 5/16"
G2-3	123'-2 5/16"	18'-5 13/16"	44'-7 15/16"	27'-9 7/16"	67'-0 1/8"	35'-3"	51'-9 11/16"	23'-3 5/16"	130'-1 3/4"	29'-0"	52'-6"	36'-3"	123'-2 1/4"
G2-4	114'-1"	18'-2 3/4"	44'-3 1/8"	27'-4 7/8"	66'-1 1/8"	34'-9 5/16"	51'-1 5/16"	22'-11 9/16"	128'-11 13/16"	29'-0"	52'-6"	36'-3"	122'-11 1/4"
G2-5	105'-4 7/16"	17'-11 11/16"	43'-11 9/16"	27'-0 5/16"	65'-2 3/16"	34'-3 9/16"	50'-4 15/16"	22'-7 7/8"	127'-9 15/16"	29'-0"	52'-6"	36'-3"	122'-8 3/16"
G2-6	96'-8 3/4"	17'-8 5/8"	43'-7 1/4"	26'-7 3/4"	64'-3 1/4"	33'-9 13/16"	49'-8 5/8"	22'-4 1/8"	126'-8 1/8"	29'-0"	52'-6"	36'-3"	122'-5 3/16"
G2-8	88'-5 1/2"	17'-5 9/16"	43'-2 15/16"	26'-2 9/16"	63'-1 1/16"	33'-1 5/16"	48'-6 11/16"	21'-9 5/16"	124'-4 3/8"	29'-0"	52'-6"	36'-3"	121'-11 1/8"
G2-9	78'-7 3/4"	17'-2 1/2"	42'-7 3/8"	25'-9 7/8"	62'-2 1/16"	32'-7 1/2"	48'-1 5/8"	21'-5 1/2"	123'-2 1/16"	29'-0"	52'-6"	36'-3"	121'-8 1/8"

UNIT 2 TOP FLANGE PLATE SIZES

GIRDER #	M	N	O	P	Q	R	S	U	V	W	X	Y	Z
G2-1	1 3/4" x 24"	1 1/2" x 24"	3" x 24"	1 1/2" x 24"	1" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1 3/4" x 22"	1 3/4" x 24"	3" x 24"	1 3/4" x 24"	1" x 22"
G2-3	1 1/2" x 24"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1 3/4" x 22"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	1" x 22"
G2-4	1 1/4" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1 1/2" x 22"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	1" x 22"
G2-5	1 1/4" x 24"	1 1/4" x 22"	1 3/4" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 3/4" x 22"	2 3/4" x 22"	1 3/4" x 22"	1" x 22"
G2-6	1 1/2" x 22"	1 1/4" x 22"	1 3/4" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 3/4" x 22"	2 3/4" x 22"	1 3/4" x 22"	1" x 22"
G2-8	1" x 22"	1 1/4" x 22"	1 3/4" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 3/4" x 22"	2 3/4" x 22"	1 3/4" x 22"	1" x 22"
G2-9	1" x 22"	1 1/4" x 22"	1 3/4" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 3/4" x 22"	2 3/4" x 22"	1 3/4" x 22"	1" x 22"

UNIT 2 BOTTOM FLANGE PLATE SIZES

GIRDER #	M	N	O	P	Q	R	S	U	V	W	X	Y	Z
G2-1	2 3/4" x 24"	1 3/4" x 24"	3" x 24"	1 3/4" x 24"	1" x 22"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	2 1/2" x 24"	1 3/4" x 24"	3" x 26"	1 3/4" x 24"	1 1/4" x 22"
G2-3	2 1/4" x 24"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	2 1/2" x 24"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	1 1/4" x 22"
G2-4	1 3/4" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1" x 22"	1 1/2" x 22"	2 1/2" x 22"	1 1/2" x 22"	1 3/4" x 22"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	1 1/4" x 22"
G2-5	2" x 24"	1 1/2" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1 1/2" x 22"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	1 1/4" x 22"
G2-6	1 1/2" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1 1/2" x 22"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	1 1/4" x 22"
G2-8	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2 1/4" x 22"	1 1/4" x 22"	1 1/4" x 22"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	1 1/4" x 22"
G2-9	1" x 22"	1 1/4" x 22"	2" x 22"	1 1/4" x 22"	1" x 22"	1 1/4" x 22"	2 1/2" x 22"	1 1/4" x 22"	1 1/4" x 22"	1 3/4" x 22"	3" x 22"	1 3/4" x 22"	1 1/4" x 22"

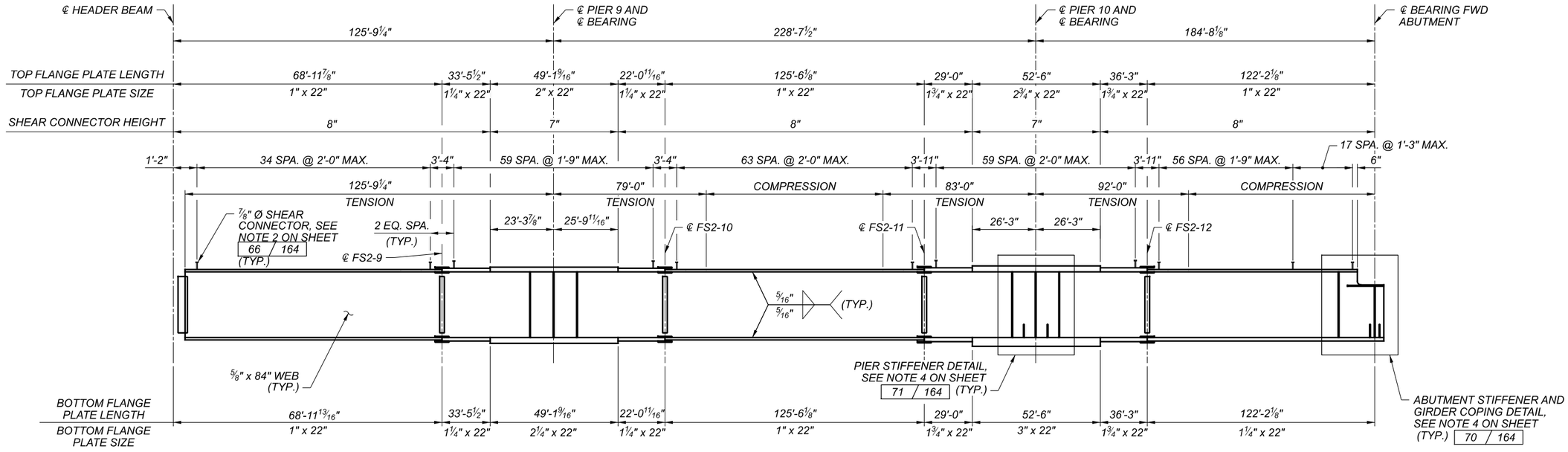
NOTES:

1. FOR GIRDER ELEVATION NOTES, SEE SHEET 58 / 164.

UNIT 2 GIRDER ELEVATION - (2 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 67 | TOTAL 164
SHEET 1509 | TOTAL 2338

CUY-90-16.28 (CCG3A)



GIRDER ELEVATION
(G2-7)

UNIT 2 SHEAR CONNECTOR SPACING

GIRDER #	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12	SS13	SS14	SS15
G2-1	27 SPA. @ 8" MAX.	84 SPA. @ 1'-0" MAX.	3'-4"	79 SPA. @ 1'-0" MAX.	4'-6"	103 SPA. @ 1'-0" MAX.	4'-6"	78 SPA. @ 1'-0" MAX.	4'-6"	83 SPA. @ 1'-0" MAX.	4'-6"	109 SPA. @ 1'-0" MAX.	4'-6"	125 SPA. @ 1'-0" MAX.	4'-6"
G2-3	15 SPA. @ 1'-3" MAX.	55 SPA. @ 1'-6" MAX.	3'-4"	53 SPA. @ 1'-6" MAX.	3'-4"	77 SPA. @ 1'-4" MAX.	3'-4"	59 SPA. @ 1'-4" MAX.	3'-4"	69 SPA. @ 1'-4" MAX.	3'-11"	68 SPA. @ 1'-6" MAX.	4'-6"	90 SPA. @ 1'-4" MAX.	3'-11"
G2-4	15 SPA. @ 1'-3" MAX.	54 SPA. @ 1'-6" MAX.	3'-4"	52 SPA. @ 1'-6" MAX.	3'-4"	68 SPA. @ 1'-6" MAX.	3'-4"	58 SPA. @ 1'-4" MAX.	3'-4"	71 SPA. @ 1'-4" MAX.	3'-11"	70 SPA. @ 1'-6" MAX.	3'-11"	74 SPA. @ 1'-6" MAX.	3'-11"
G2-5	15 SPA. @ 1'-3" MAX.	53 SPA. @ 1'-6" MAX.	3'-4"	51 SPA. @ 1'-6" MAX.	3'-4"	67 SPA. @ 1'-6" MAX.	3'-4"	57 SPA. @ 1'-4" MAX.	3'-11"	64 SPA. @ 1'-6" MAX.	4'-6"	71 SPA. @ 1'-6" MAX.	4'-6"	68 SPA. @ 1'-6" MAX.	3'-11"
G2-6	15 SPA. @ 1'-3" MAX.	52 SPA. @ 1'-6" MAX.	3'-4"	50 SPA. @ 1'-6" MAX.	3'-4"	66 SPA. @ 1'-6" MAX.	3'-4"	50 SPA. @ 1'-6" MAX.	3'-4"	79 SPA. @ 1'-4" MAX.	3'-4"	68 SPA. @ 1'-6" MAX.	3'-11"	62 SPA. @ 1'-6" MAX.	3'-11"
G2-8	15 SPA. @ 1'-3" MAX.	51 SPA. @ 1'-6" MAX.	3'-4"	50 SPA. @ 1'-6" MAX.	3'-4"	65 SPA. @ 1'-6" MAX.	3'-4"	49 SPA. @ 1'-6" MAX.	3'-11"	80 SPA. @ 1'-4" MAX.	3'-11"	70 SPA. @ 1'-6" MAX.	3'-4"	64 SPA. @ 1'-4" MAX.	3'-4"
G2-9	27 SPA. @ 8" MAX.	75 SPA. @ 1'-0" MAX.	3'-4"	73 SPA. @ 1'-0" MAX.	3'-4"	95 SPA. @ 1'-0" MAX.	3'-4"	73 SPA. @ 1'-0" MAX.	3'-11"	116 SPA. @ 1'-0" MAX.	3'-11"	101 SPA. @ 1'-0" MAX.	3'-4"	76 SPA. @ 1'-0" MAX.	3'-4"

UNIT 2 SHEAR CONNECTOR SPACING

GIRDER #	SS16	SS17	SS18	SS19	SS20	SS21	SS22	SS23	SS24	SS25	SS26	SS27
G2-1	88 SPA. @ 1'-0" MAX	3'-11"	65 SPA. @ 1'-0" MAX.	3'-11"	109 SPA. @ 1'-0" MAX.	3'-4"	128 SPA. @ 1'-0" MAX.	3'-4"	115 SPA. @ 1'-0" MAX.	3'-4"	99 SPA. @ 1'-0" MAX.	32 SPA. @ 8" MAX.
G2-3	59 SPA. @ 1'-6" MAX.	3'-4"	43 SPA. @ 1'-6" MAX.	3'-4"	62 SPA. @ 1'-9" MAX.	3'-4"	64 SPA. @ 2'-0" MAX.	3'-4"	58 SPA. @ 2'-0" MAX.	3'-4"	56 SPA. @ 1'-9" MAX.	17 SPA. @ 1'-3" MAX.
G2-4	58 SPA. @ 1'-6" MAX.	3'-4"	42 SPA. @ 1'-6" MAX.	3'-4"	71 SPA. @ 1'-6" MAX.	3'-4"	63 SPA. @ 2'-0" MAX.	3'-4"	58 SPA. @ 2'-0" MAX.	3'-4"	56 SPA. @ 1'-9" MAX.	17 SPA. @ 1'-3" MAX.
G2-5	57 SPA. @ 1'-6" MAX.	3'-4"	42 SPA. @ 1'-6" MAX.	3'-4"	70 SPA. @ 1'-6" MAX.	3'-4"	63 SPA. @ 2'-0" MAX.	3'-4"	58 SPA. @ 2'-0" MAX.	3'-4"	56 SPA. @ 1'-9" MAX.	17 SPA. @ 1'-3" MAX.
G2-6	57 SPA. @ 1'-6" MAX.	3'-4"	35 SPA. @ 1'-9" MAX.	3'-4"	59 SPA. @ 1'-9" MAX.	3'-4"	62 SPA. @ 2'-0" MAX.	3'-4"	58 SPA. @ 2'-0" MAX.	3'-4"	56 SPA. @ 1'-9" MAX.	17 SPA. @ 1'-3" MAX.
G2-8	56 SPA. @ 1'-6" MAX.	3'-4"	35 SPA. @ 1'-9" MAX.	3'-4"	58 SPA. @ 1'-9" MAX.	3'-4"	70 SPA. @ 1'-9" MAX.	3'-4"	58 SPA. @ 2'-0" MAX.	3'-4"	56 SPA. @ 1'-9" MAX.	17 SPA. @ 1'-3" MAX.
G2-9	83 SPA. @ 1'-0" MAX.	3'-4"	59 SPA. @ 1'-0" MAX.	3'-4"	99 SPA. @ 1'-0" MAX.	3'-4"	120 SPA. @ 1'-0" MAX.	3'-4"	115 SPA. @ 1'-0" MAX.	3'-4"	97 SPA. @ 1'-0" MAX.	32 SPA. @ 8" MAX.

UNIT 2 SHEAR CONNECTOR HEIGHT

GIRDER #	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	U	V	W	X	Y	Z
G2-1	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"
G2-3	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"
G2-4	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	7"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"
G2-5	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"
G2-6	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"
G2-8	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"
G2-9	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"	8"	8"	8"	8"	8"	7"	8"	8"	8"	7"	8"	8"

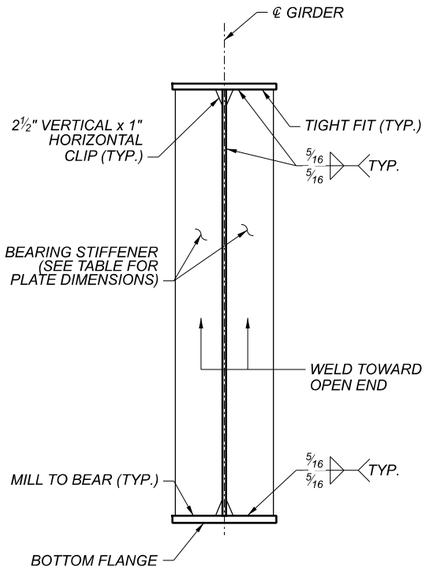
NOTES:

1. FOR GIRDER ELEVATION NOTES, SEE SHEET 58 / 164.

UNIT 2 GIRDER ELEVATION - (3 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

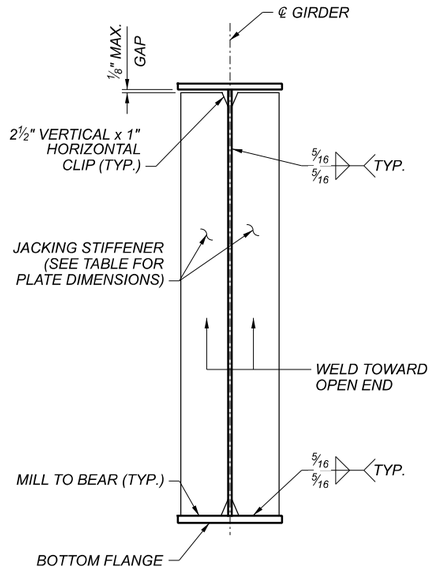
SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 68 | TOTAL 164
SHEET 1510 | TOTAL 2338

CUY-90-16.28 (CCG3A)

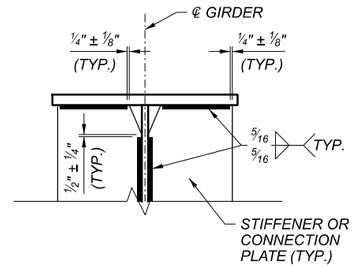


BEARING STIFFENER DETAIL

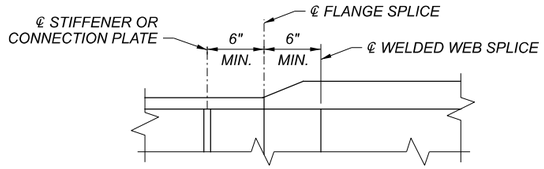
BEARING AND JACKING STIFFENER DIMENSIONS			
	LOCATION	BEARING STIFFENER	JACKING STIFFENER
UNIT 1	REAR ABUT.	℄ 1" x 10"	℄ 1" x 10"
	PIER 1	℄ 1" x 10"	℄ 1" x 10"
	PIER 2	℄ 1" x 10"	℄ 1" x 10"
	PIER 3	℄ 1" x 10"	℄ 1" x 10"
	PIER 4	℄ 1" x 10"	℄ 1" x 10"
UNIT 2	PIER 4	℄ 1" x 10"	℄ 1" x 10"
	PIER 5	℄ 1" x 10"	℄ 1" x 10"
	PIER 6	℄ 1" x 10"	℄ 1" x 10"
	PIER 7	℄ 1 ¼" x 10"	℄ 1 ¼" x 10"
	PIER 8	℄ 1 ¼" x 10"	℄ 1 ¼" x 10"
	PIER 9	℄ 1" x 10"	℄ 1" x 10"
	PIER 10	℄ 1 ¼" x 10"	℄ 1 ¼" x 10"
	FWD. ABUT.	℄ 1" x 10"	℄ 1" x 10"

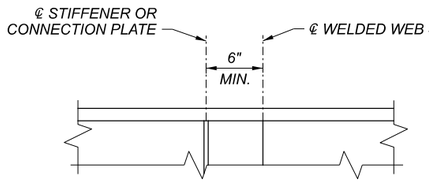


JACKING STIFFENER DETAIL

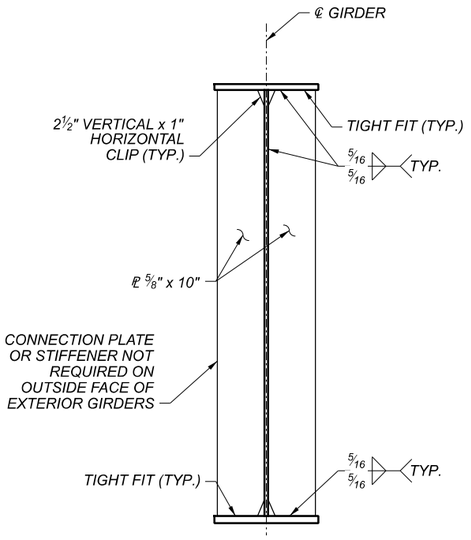


STIFFENER AND CONNECTION PLATE WELD TERMINATION DETAILS

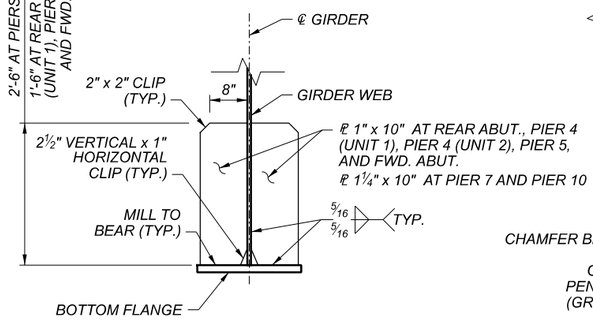




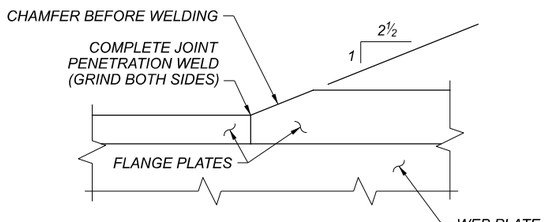
WELDED SHOP SPLICE CLEARANCE DETAILS



TRANSVERSE STIFFENER/ CONNECTION PLATE DETAIL
(INTERIOR GIRDER SHOWN)



AUXILIARY STIFFENER DETAIL



FLANGE SHOP SPLICE DETAIL
(TO BE USED AT FLANGE THICKNESS TRANSITIONS)

NOTES:

1. ALL STIFFENER AND CONNECTION PLATES SHALL BE ASTM A709, GRADE 50 STEEL.
2. CROSSFRAME CONNECTION PLATES SHALL BE NORMAL TO THE TOP FLANGE UNLESS NOTED OTHERWISE. BEARING, AUXILIARY AND JACKING STIFFENERS SHALL BE VERTICAL AFTER ERECTION.
3. FOR ADDITIONAL NOTES AND GIRDER ELEVATIONS, SEE SHEETS 64 / 164 THRU 68 / 164 .
4. FOR CROSSFRAME CONNECTION PLATES AND TRANSVERSE STIFFENER LOCATIONS, SEE FRAMING PLANS ON SHEETS 58 / 164 THRU 63 / 164 .
5. FOR JACKING STIFFENER AND AUXILIARY BEARING STIFFENER PLACEMENT, SEE SHEET 70 / 164 AND 71 / 164 .
6. IF THE TRANSVERSE STIFFENER IS LOCATED IN A REGION WHERE THE TOP FLANGE IS IN TENSION, AS INDICATED ON THE GIRDER ELEVATIONS, THE STIFFENER TO TOP FLANGE WELD SHALL BE ELIMINATED.

GIRDER DETAILS - (1 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	ABO
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	69
TOTAL	164
SHEET	1511
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:08:06 PM USER: CRICCARDI
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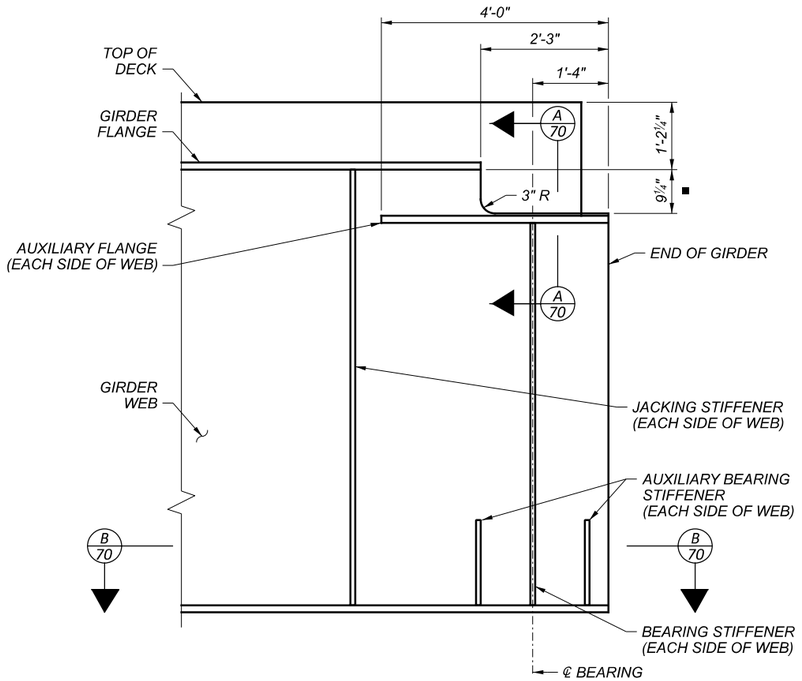
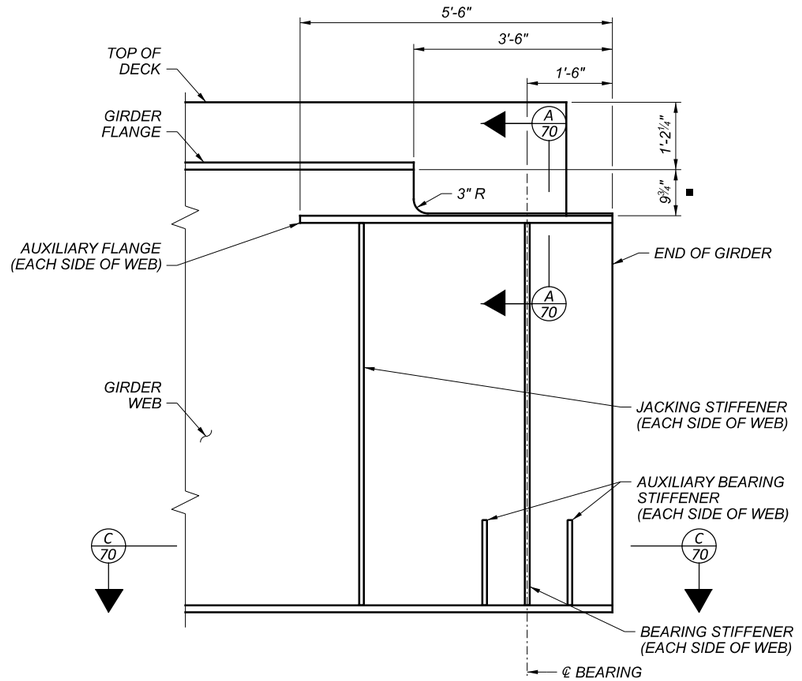
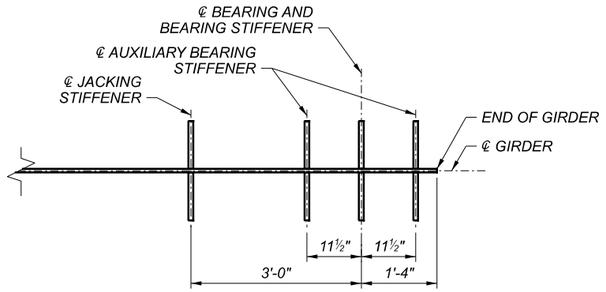


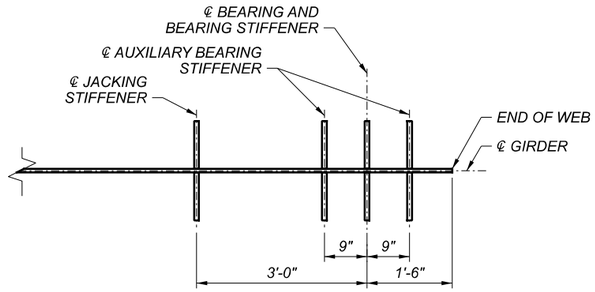
REAR ABUTMENT STIFFENER AND COPING DETAIL
(SEE NOTE 1)



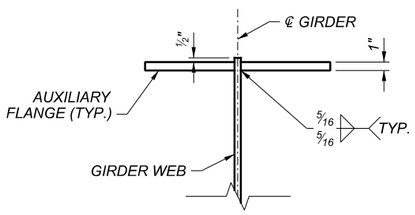
FORWARD ABUTMENT STIFFENER AND COPING DETAIL
(SEE NOTE 1)



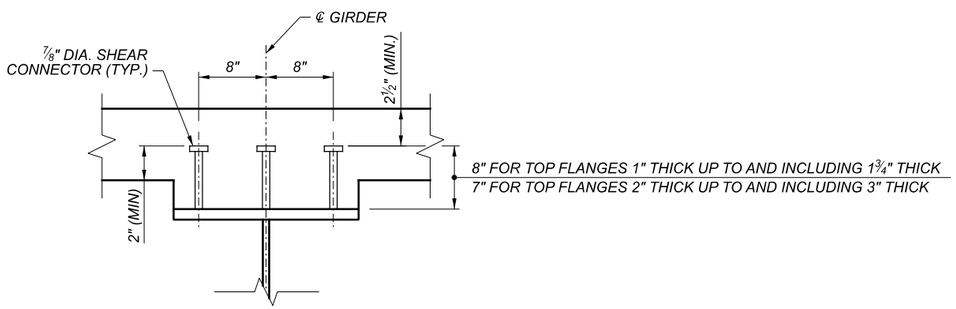
SECTION B-B



SECTION C-C



SECTION A-A



SHEAR CONNECTOR DETAIL
(SEE NOTE 3)

LEGEND:

■ MEASURED TO TOP OF AUXILIARY FLANGE

NOTES:

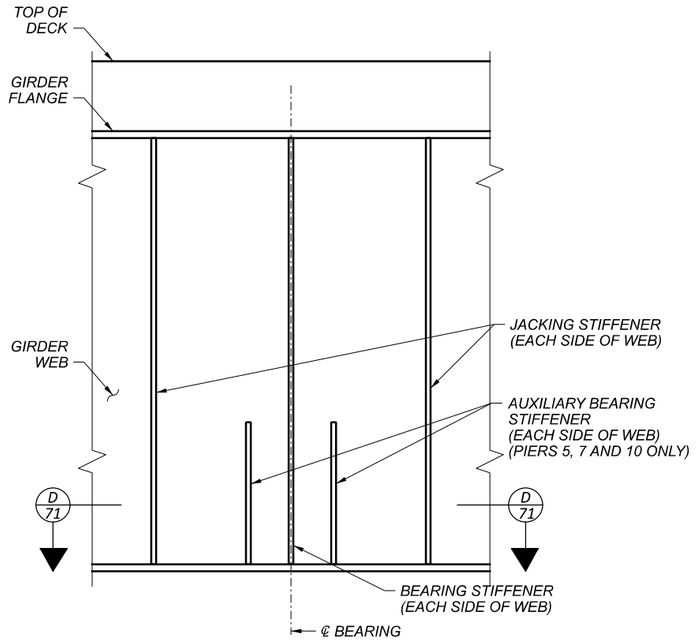
1. BEARING, AUXILIARY AND JACKING STIFFENERS SHALL BE VERTICAL AFTER ERECTION.
2. FOR ADDITIONAL STIFFENER NOTES AND DETAILS, SEE SHEET 69 / 164 .
3. CONTRACTOR TO VERIFY MINIMUM COVER AND EMBEDMENTS WILL BE MAINTAINED FOR SHEAR CONNECTORS ONCE CONCRETE DECK IS POURED.

GIRDER DETAILS - (2 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	ABO
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	70
TOTAL	164
SHEET	1512
TOTAL	2338

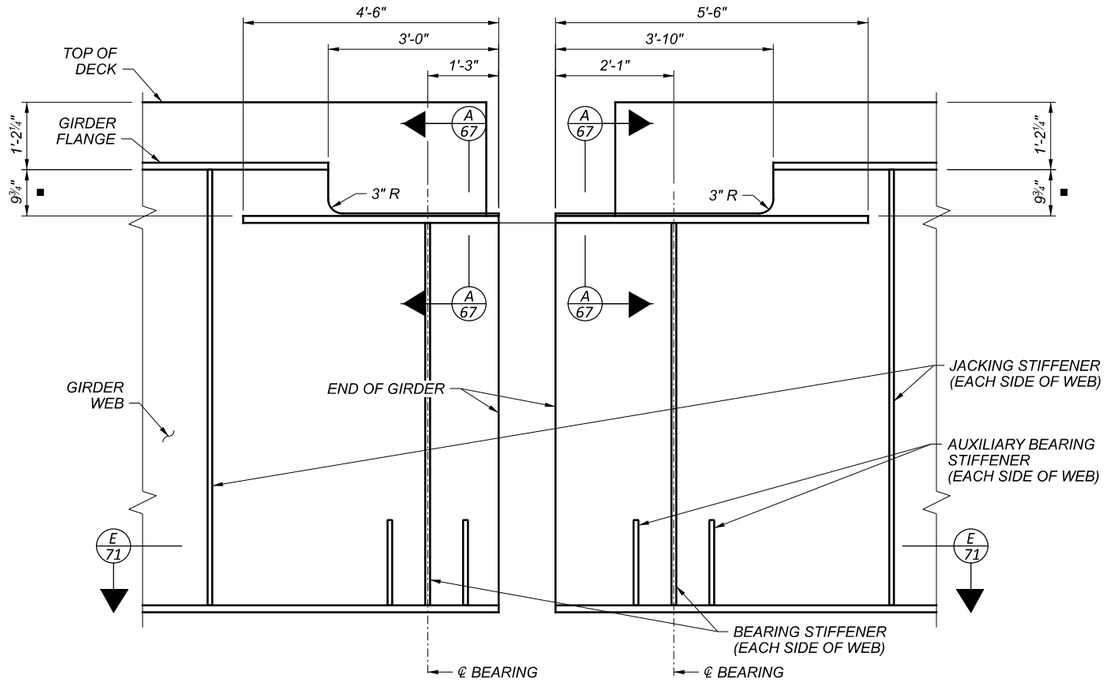
CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:08:12 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SS028.dgn



TYPICAL PIER STIFFENER DETAIL

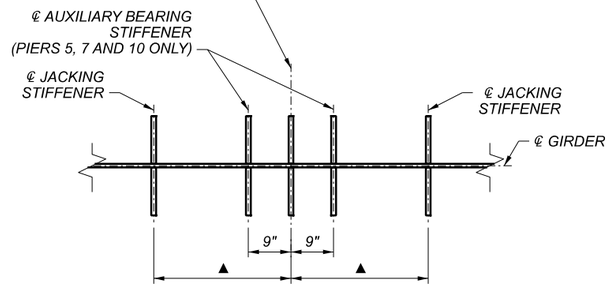
(SEE NOTE 1)



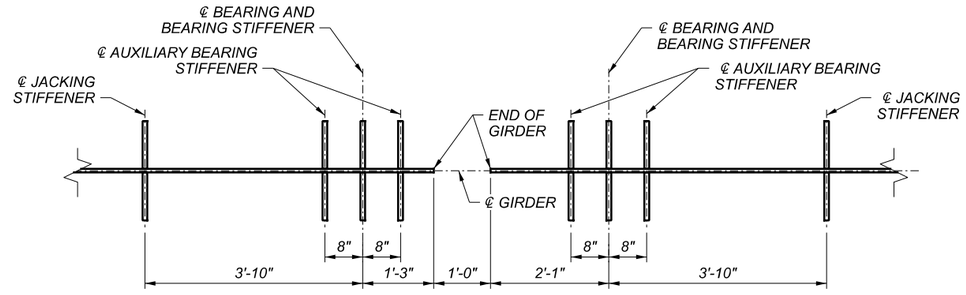
PIER 4 STIFFENER AND COPING DETAIL

(SEE NOTE 1)

*TO TOP OF AUXILIARY FLANGE



SECTION D-D



SECTION E-E

LOCATION	GIRDER	▲
PIER 1	G1-1 THRU G1-9	2'-5"
PIER 2	G1-1 THRU G1-9	2'-5"
PIER 3	G1-1 THRU G1-9	2'-5"
PIER 5	G2-1 THRU G2-9	2'-5"
PIER 6	G2-1 THRU G2-9	2'-5"
PIER 7	G2-1 THRU G2-9	3'-3"
PIER 8	G2-1 THRU G2-9	2'-4½"
PIER 9	G2-1 THRU G2-9	2'-5"
PIER 10	G1-1, G2-3, G2-8 AND G2-9	2'-4½"
PIER 10	G2-4 THRU G2-7	2'-5"

LEGEND:

■ MEASURED TO TOP OF AUXILIARY FLANGE

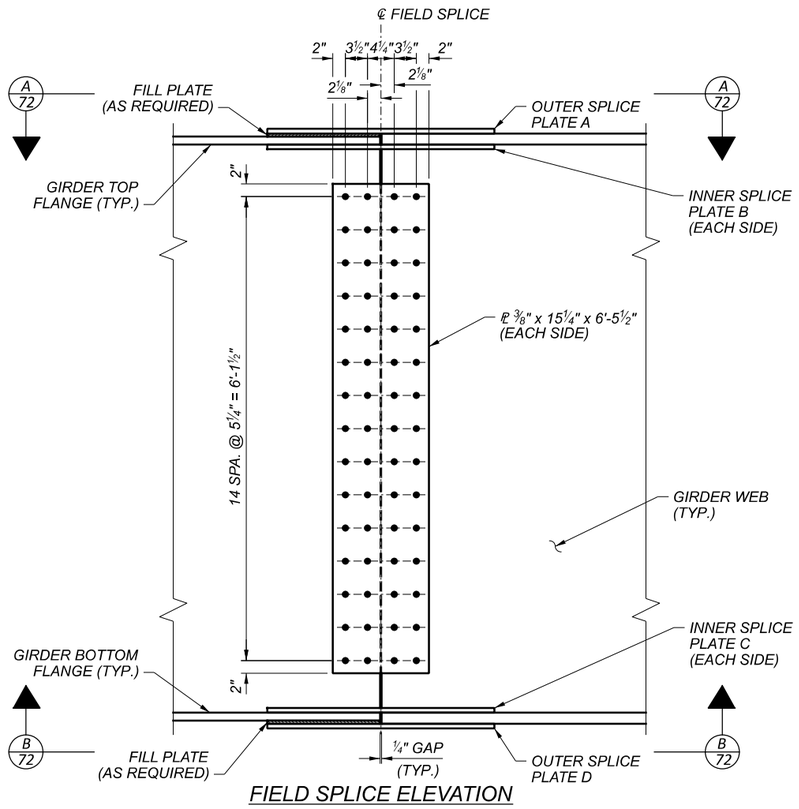
NOTES:

1. BEARING, AUXILIARY AND JACKING STIFFENERS SHALL BE VERTICAL AFTER ERECTION.
2. FOR ADDITIONAL STIFFENER NOTES AND DETAILS, SEE SHEET 69 / 164 .

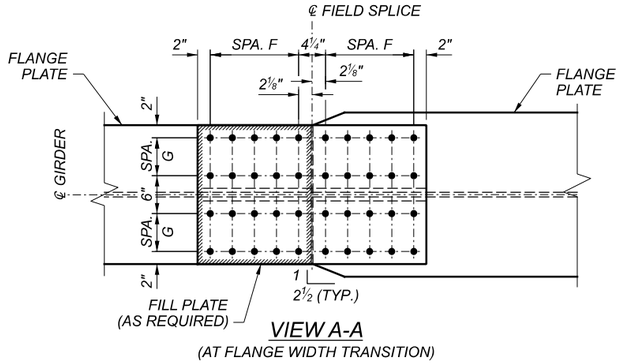
GIRDER DETAILS - (3 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
HDR
DESIGNER MKO | CHECKER ABO
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 71 | TOTAL 164
SHEET 1513 | TOTAL 2338

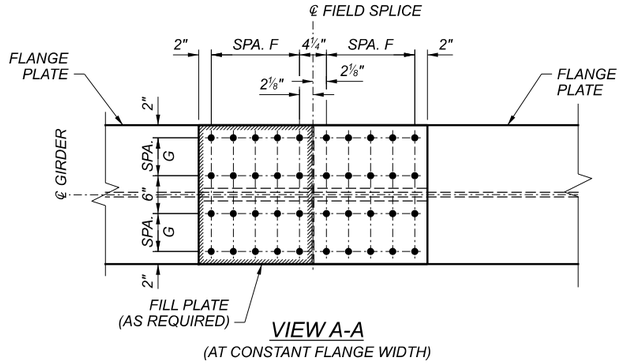
CUY-90-16.28 (CCG3A)



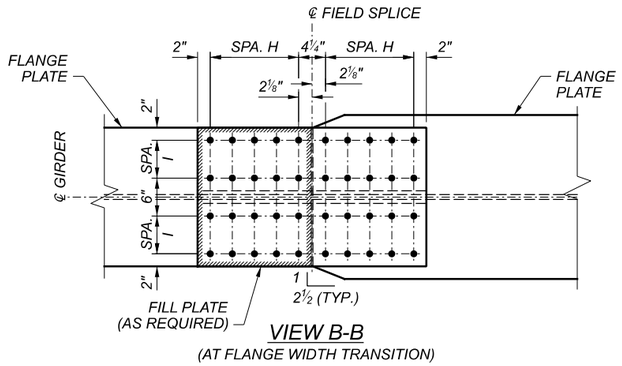
FIELD SPLICE ELEVATION



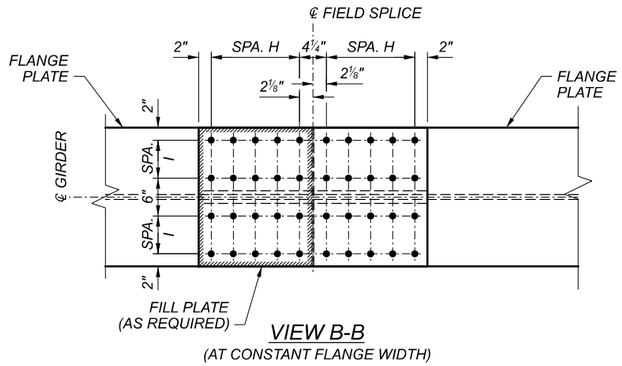
VIEW A-A
(AT FLANGE WIDTH TRANSITION)



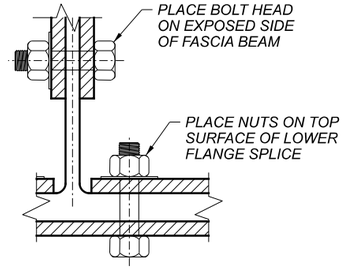
VIEW A-A
(AT CONSTANT FLANGE WIDTH)



VIEW B-B
(AT FLANGE WIDTH TRANSITION)



VIEW B-B
(AT CONSTANT FLANGE WIDTH)



BOLT ORIENTATION DETAIL

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 12 / 164.
2. FOR FRAMING PLAN, SEE SHEETS 60 / 164 THRU 59 / 164.
3. FOR GIRDER ELEVATIONS, SEE SHEETS 64 / 164 THRU 68 / 164.
4. ALL SPLICE MATERIAL TO BE ASTM A709 GRADE 50 STEEL.
5. HIGH STRENGTH BOLTS SHALL BE 1" DIA. ASTM F3125 GRADE A325, TYPE I IN 1⅛" DIA. HOLES. EXCLUDE THREADS FROM THE SHEAR PLANES FOR FLANGE SPLICE BOLTS. THREADS ARE PERMITTED TO BE INCLUDED IN THE SHEAR PLANES FOR WEB SPLICE BOLTS.
6. ALL SPLICE PLATES SHALL HAVE SHALL BE DESIGNATED (CVN) AND MEET MIMNIMUM (CVN) NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN C&MS 711.01.
7. FULL BOLT PATTERNS NOT SHOWN.
8. ALL FILL PLATES SHALL BE A SINGLE PLATE.
9. DIRECT TENSION INDICATORS (DTIs) ARE NOT PERMITTED.
10. FOR TABLES OF SPLICE DIMENSIONS AND SPLICE DESIGNATIONS, SEE SHEET 73 / 164.

FIELD SPLICE DETAILS - (1 OF 2)

CUY-77-1587 (BRIDGE 9)

I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RWJ
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	72
TOTAL	164
SHEET	1514
TOTAL	2338

FIELD SPLICE LAYOUT - UNIT 1								
LOCATION	G1-1	G1-2	G1-3	G1-4	G1-5	G1-6	G1-8	G1-9
FS1-1	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1
FS1-2	Type 1	--	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1
FS1-3	Type 1	--	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1
FS1-4	Type 2	--	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1
FS1-5	Type 2	--	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1
FS1-6	Type 1	--	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1

FIELD SPLICE LAYOUT - UNIT 2								
LOCATION	G2-1	G2-3	G2-4	G2-5	G2-6	G2-7	G2-8	G2-9
FS2-1	Type 1	Type 1	Type 1	Type 1	Type 1	--	Type 1	Type 1
FS2-2	Type 3	Type 1	Type 1	Type 1	Type 1	--	Type 1	Type 1
FS2-3	Type 3	Type 1	Type 1	Type 1	Type 1	--	Type 1	Type 1
FS2-4	Type 3	Type 1	Type 1	Type 7	Type 1	--	Type 2	Type 2
FS2-5	Type 3	Type 2	Type 2	Type 4	Type 1	--	Type 2	Type 2
FS2-6	Type 4	Type 4	Type 5	Type 4	Type 7	--	Type 1	Type 1
FS2-7	Type 4	Type 7	Type 7	Type 7	Type 2	--	Type 1	Type 1
FS2-8	Type 2	Type 1	Type 1	Type 1	Type 1	--	Type 1	Type 1
FS2-9	Type 2	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1
FS2-10	Type 5	Type 7	Type 7	Type 2	Type 2	Type 1	Type 2	Type 2
FS2-11	Type 6	Type 5	Type 5	Type 3	Type 3	Type 2	Type 2	Type 2
FS2-12	Type 2	Type 2	Type 2	Type 2	Type 2	Type 2	Type 2	Type 2

FIELD SPLICE DIMENSIONS									
FIELD SPLICE		TOP FLANGE SPLICE				BOTTOM FLANGE SPLICE			
TYPE	QTY	PLATE A	PLATE B	SPA. F	SPA. G	PLATE C	PLATE D	SPA. H	SPA. I
1	82	¾" x 22"	¾" x 10"	3 @ 3 ½" = 10 ½"	1 @ 6"	¾" x 10"	¾" x 22"	3 @ 3 ½" = 10 ½"	1 @ 6"
2	26	¾" x 22"	¾" x 10"	4 @ 3 ½" = 1'-2"	1 @ 6"	¾" x 10"	¾" x 22"	4 @ 3 ½" = 1'-2"	1 @ 6"
3	6	¾" x 22"	¾" x 10"	5 @ 3 ½" = 1'-5 ½"	1 @ 6"	1" x 10"	⅞" x 22"	5 @ 3 ½" = 1'-5 ½"	1 @ 6"
4	5	⅞" x 24"	1" x 11"	5 @ 3 ½" = 1'-5 ½"	1 @ 7"	1 ⅜" x 11"	1 ¼" x 24"	8 @ 3 ½" = 2'-4"	1 @ 7"
5	4	1" x 22"	1 ⅛" x 10"	4 @ 3 ½" = 1'-2"	1 @ 6"	1 ⅛" x 10"	1 ⅛" x 22"	6 @ 3 ½" = 1'-9"	1 @ 6"
6	1	1 ⅛" x 22"	1 ⅛" x 10"	4 @ 3 ½" = 1'-2"	1 @ 6"	1 ⅛" x 11"	1" x 24"	7 @ 3 ½" = 2'-0 ½"	1 @ 7"
7	7	1" x 22"	1" x 10"	4 @ 3 ½" = 1'-2"	1 @ 6"	1" x 10"	1" x 22"	5 @ 3 ½" = 1'-5 ½"	1 @ 6"

UNIT 1 - TOP FLANGE FILL PLATE THICKNESS								
LOCATION	G1-1	G1-2	G1-3	G1-4	G1-5	G1-6	G1-8	G1-9
FS1-1	--	--	--	--	--	--	--	--
FS1-2	--	--	--	--	--	--	--	--
FS1-3	1/4"	--	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
FS1-4	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
FS1-5	--	1/4"	--	--	--	--	--	--
FS1-6	--	--	--	--	--	--	--	--

UNIT 2 - TOP FLANGE FILL PLATE THICKNESS								
LOCATION	G2-1	G2-3	G2-4	G2-5	G2-6	G2-7	G2-8	G2-9
FS2-1	1/2"	1/2"	1/2"	1/2"	1/2"	--	1/2"	1/2"
FS2-2	1/2"	1/2"	1/2"	1/2"	1/2"	--	1/2"	1/2"
FS2-3	--	--	--	1/4"	1/4"	--	1/4"	1/4"
FS2-4	--	--	--	--	1/4"	--	--	--
FS2-5	1/2"	3/4"	3/4"	1/4"	1/2"	--	1/4"	1/4"
FS2-6	1/4"	1/4"	3/4"	1/4"	--	--	1/2"	1/2"
FS2-7	1/4"	1/4"	--	--	1/4"	--	1/4"	1/4"
FS2-8	1/2"	1/4"	1/4"	1/4"	1/4"	--	1/4"	1/4"
FS2-9	1/2"	1/2"	1/2"	1/4"	1/4"	1/4"	1/4"	1/4"
FS2-10	1/4"	1/4"	--	1/4"	1/4"	1/4"	1/4"	1/4"
FS2-11	--	--	1/4"	3/4"	3/4"	3/4"	3/4"	3/4"
FS2-12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"

UNIT 1 - BOTTOM FLANGE FILL PLATE THICKNESS								
LOCATION	G1-1	G1-2	G1-3	G1-4	G1-5	G1-6	G1-8	G1-9
FS1-1	1/4"	--	--	--	--	--	--	1/4"
FS1-2	1/4"	--	--	--	--	--	--	1/4"
FS1-3	1/2"	--	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
FS1-4	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
FS1-5	--	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
FS1-6	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"

UNIT 2 - BOTTOM FLANGE FILL PLATE THICKNESS								
LOCATION	G2-1	G2-3	G2-4	G2-5	G2-6	G2-7	G2-8	G2-9
FS2-1	3/4"	1/2"	1/2"	1/2"	1/2"	--	1/2"	1/2"
FS2-2	1/4"	1/2"	1/2"	1/2"	1/2"	--	1/2"	1/2"
FS2-3	1/4"	1/2"	1/2"	1/2"	1/2"	--	1/2"	1/2"
FS2-4	1/4"	1/2"	1/2"	1/2"	1/2"	--	1/4"	1/4"
FS2-5	1/2"	3/4"	3/4"	--	1/2"	--	1/4"	1/4"
FS2-6	1/4"	1/4"	3/4"	1/4"	1/2"	--	1/2"	1/2"
FS2-7	--	3/4"	1/4"	1/2"	1/4"	--	1/4"	1/4"
FS2-8	3/4"	1/2"	1/2"	1/4"	1/4"	--	1/4"	1/4"
FS2-9	1/2"	1/2"	1/2"	1/4"	1/4"	1/4"	1/4"	1/4"
FS2-10	1/2"	1"	1/4"	1/4"	1/4"	1/4"	--	--
FS2-11	--	3/4"	--	1/4"	1/4"	3/4"	1/2"	1/2"
FS2-12	--	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

NOTE:

1. FOR SPLICE DETAILS AND ADDITIONAL NOTES, SEE SHEET 72 / 164 .

FIELD SPLICE DETAILS - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER RWJ | CHECKER TJE

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 73 | TOTAL 164

SHEET 1515 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:08:30 PM USER: CRICCARDI
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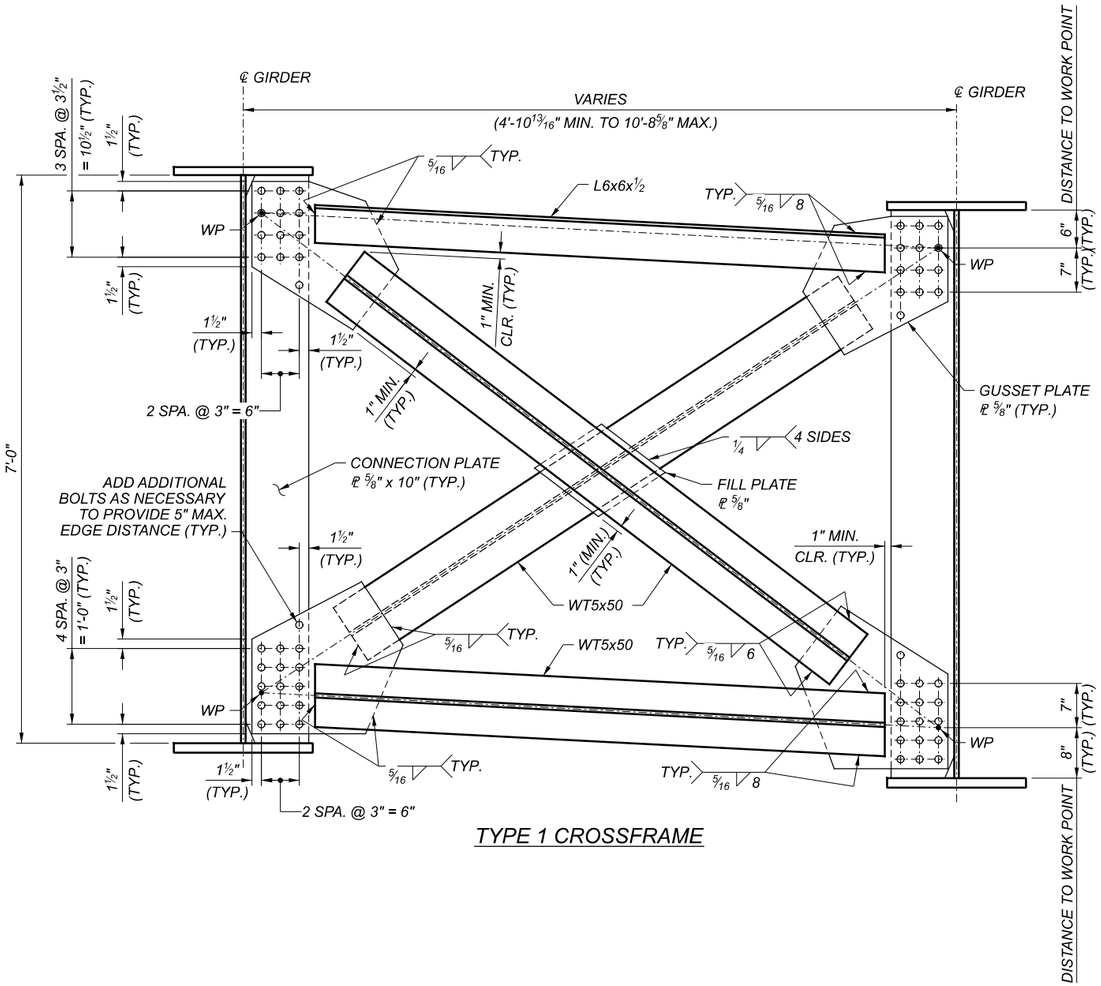
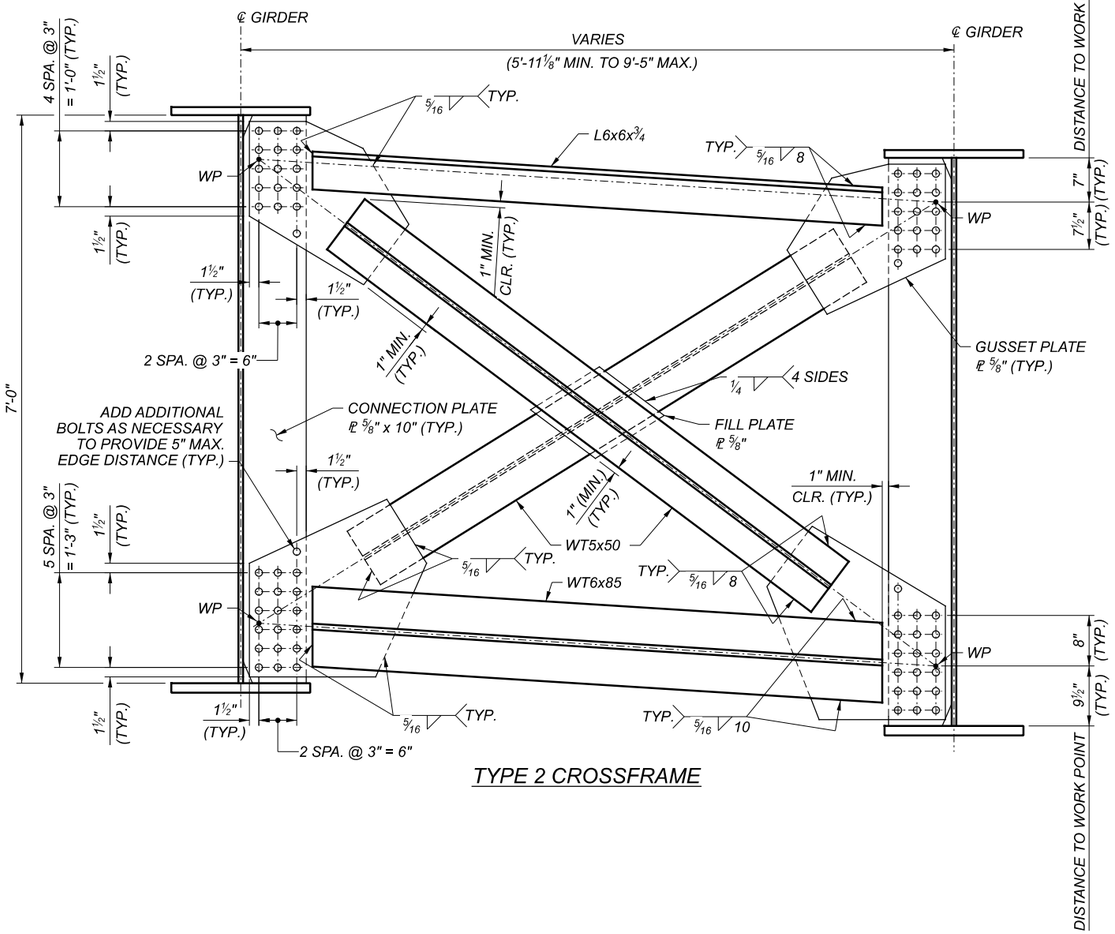


TYPE 1 CROSSFRAME



TYPE 2 CROSSFRAME

NOTES:

1. FOR STIFFENER AND CONNECTION PLATE DETAILS, SEE SHEET 69 / 164 .
2. FOR CROSSFRAME LOCATIONS, SEE FRAMING PLAN ON SHEETS 58 / 164 THRU 63 / 164 .
3. ALL CROSSFRAME MEMBERS AND GUSSET PLATES SHALL BE ASTM A709, GRADE 50 STEEL.
4. HIGH STRENGTH BOLTS SHALL BE 1" DIA. ASTM F3125 GRADE A325, TYPE I IN 1 1/8" DIA. STANDARD HOLES FOR CROSSFRAMES.
5. ALL CROSSFRAME MEMBERS, INCLUDING CONNECTION PLATES, GUSSET PLATES, ANGLES, W-SHAPES AND WT-SHAPES SHALL BE DESIGNATED (CVN). FOR ADDITIONAL NOTES, SEE SHEET 64 / 164 .
6. PROVIDE CLASS A SURFACE CONDITION FOR THE CONTACT AREA OF BOLTED PARTS FOR THE CROSSFRAMES.
7. LOCATE MEMBER NEUTRAL AXIS ALONG THE WORK LINE FROM WP TO WP.
8. SHOP ASSEMBLY OF THE CROSSFRAMES TO ADJACENT GIRDERS IS REQUIRED.

CROSSFRAMES - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RWJ
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	74
TOTAL	164
SHEET	1516
TOTAL	2338

CUY-90-16.28 (CCG3A)

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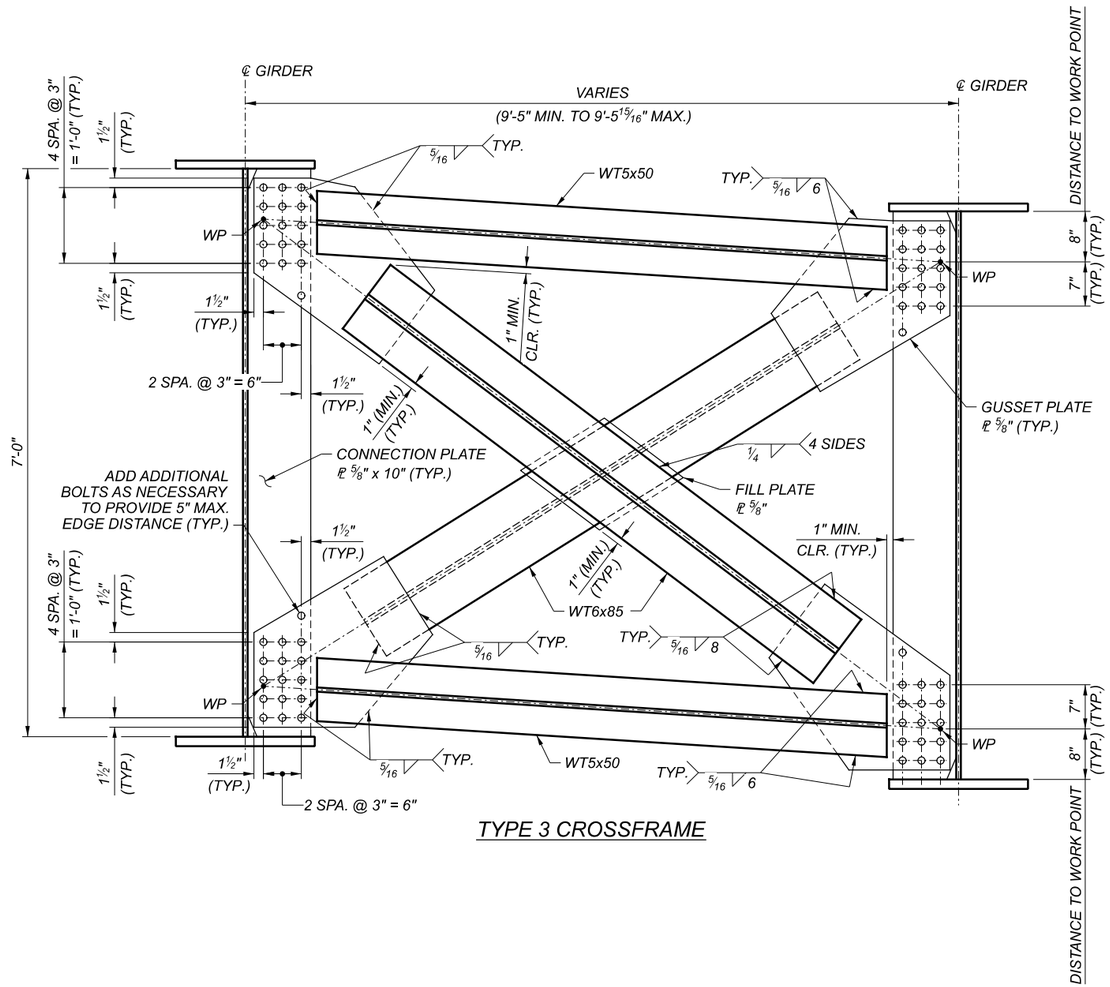
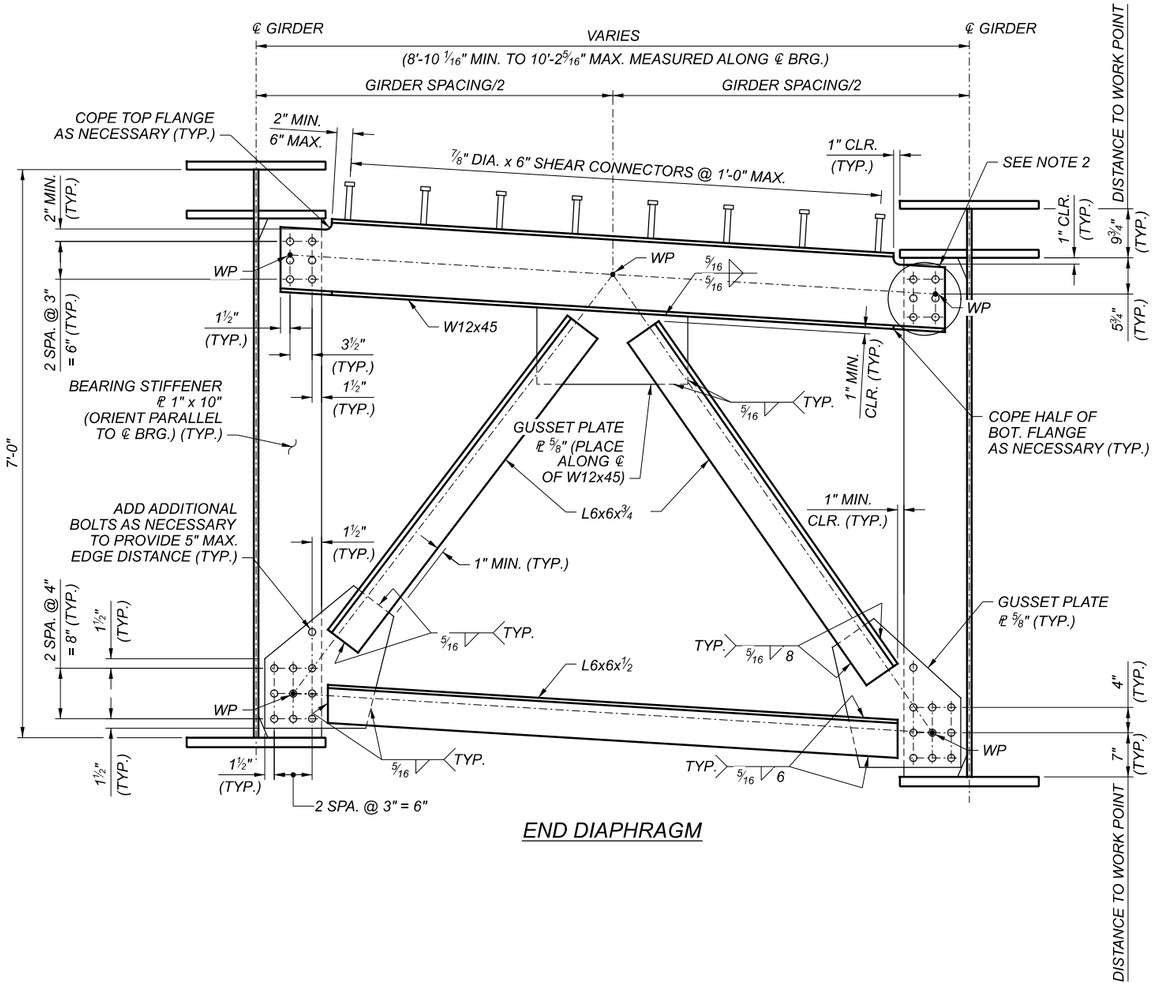


TYPE 3 CROSSFRAME



END DIAPHRAGM

NOTES:

1. FOR CROSSFRAME NOTES, SEE SHEET 74 / 164.
2. BOLT COLUMNS IN TOP CHORD CONNECTION MAY BE ADJUSTED VERTICALLY TO ALIGN BOLT ROWS PARALLEL TO TOP CHORD WORK LINE. MAINTAIN MINIMUM BOLT CLEARANCES.

CROSSFRAMES - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RWJ
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	75
TOTAL	164
SHEET	1517
TOTAL	2338

CUY-90-16.28 (CCG3A)

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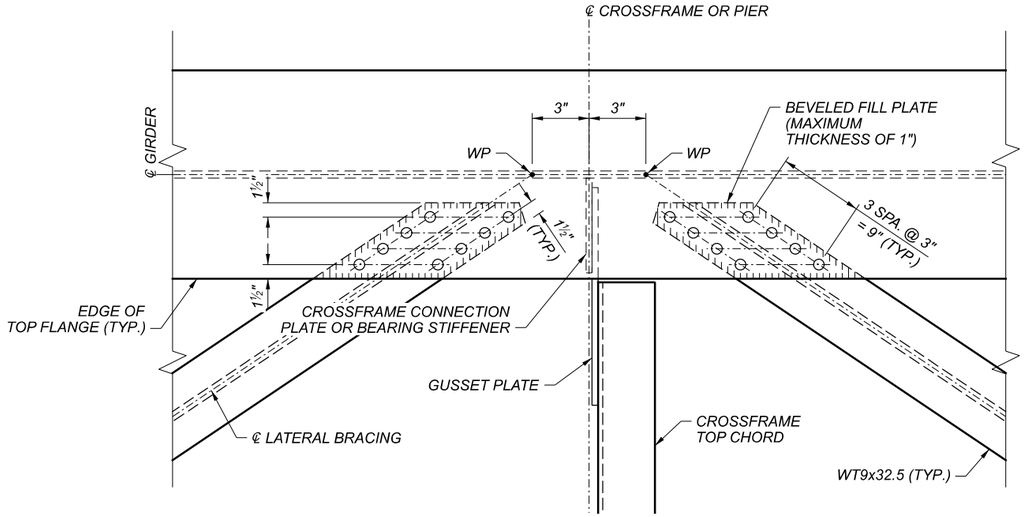
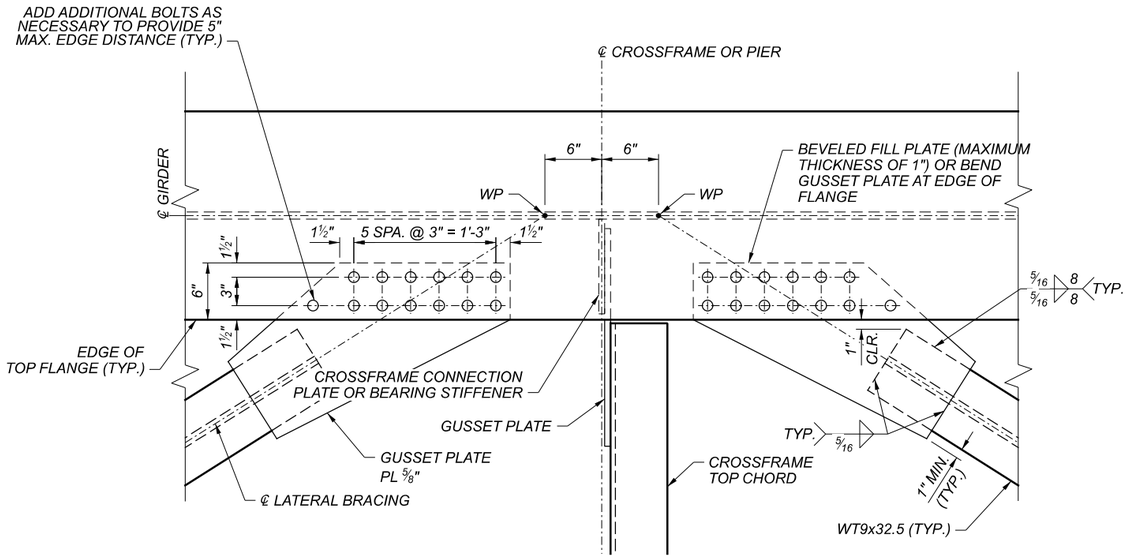


TOP FLANGE LATERAL BRACING CONNECTION PLAN - TYPE 1

(SYMMETRICAL ABOUT ℄ CROSSFRAME)



TOP FLANGE LATERAL BRACING CONNECTION PLAN - TYPE 2

(SYMMETRICAL ABOUT ℄ CROSSFRAME)

NOTES:

1. FOR LATERAL BRACING LOCATIONS, SEE FRAMING PLAN ON SHEETS 58 / 164 THRU 63 / 164.
2. ALL LATERAL BRACING MEMBERS AND GUSSET PLATES SHALL BE ASTM A709, GRADE 50 STEEL.
3. HIGH STRENGTH BOLTS SHALL BE 1" DIA. ASTM F3125 GRADE A325, TYPE I IN 1⅛" DIA. STANDARD HOLES FOR LATERAL BRACING.
4. PROVIDE CLASS A SURFACE CONDITION FOR THE CONTACT AREA OF BOLTED PARTS FOR THE LATERAL BRACING.
5. LOCATE MEMBER NEUTRAL AXIS ALONG THE WORK LINE FROM WP TO WP.
6. ADJUST SHEAR CONNECTOR LOCATIONS AS NECESSARY TO AVOID NECESSARY TO AVOID CONFLICTS WITH LATERAL BRACING CONNECTIONS.

LATERAL BRACING
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RWJ
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	76
TOTAL	164
SHEET	1518
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:08:49 PM USER: CRICCARDI
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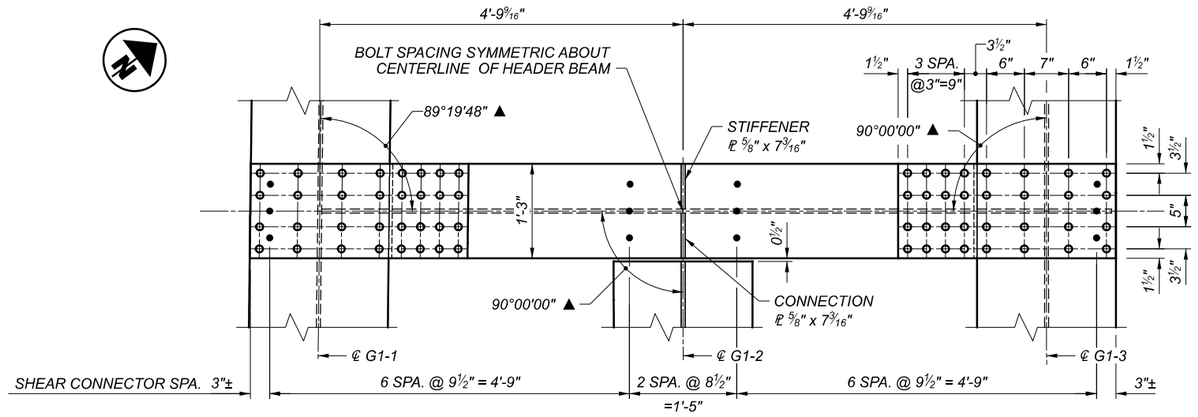
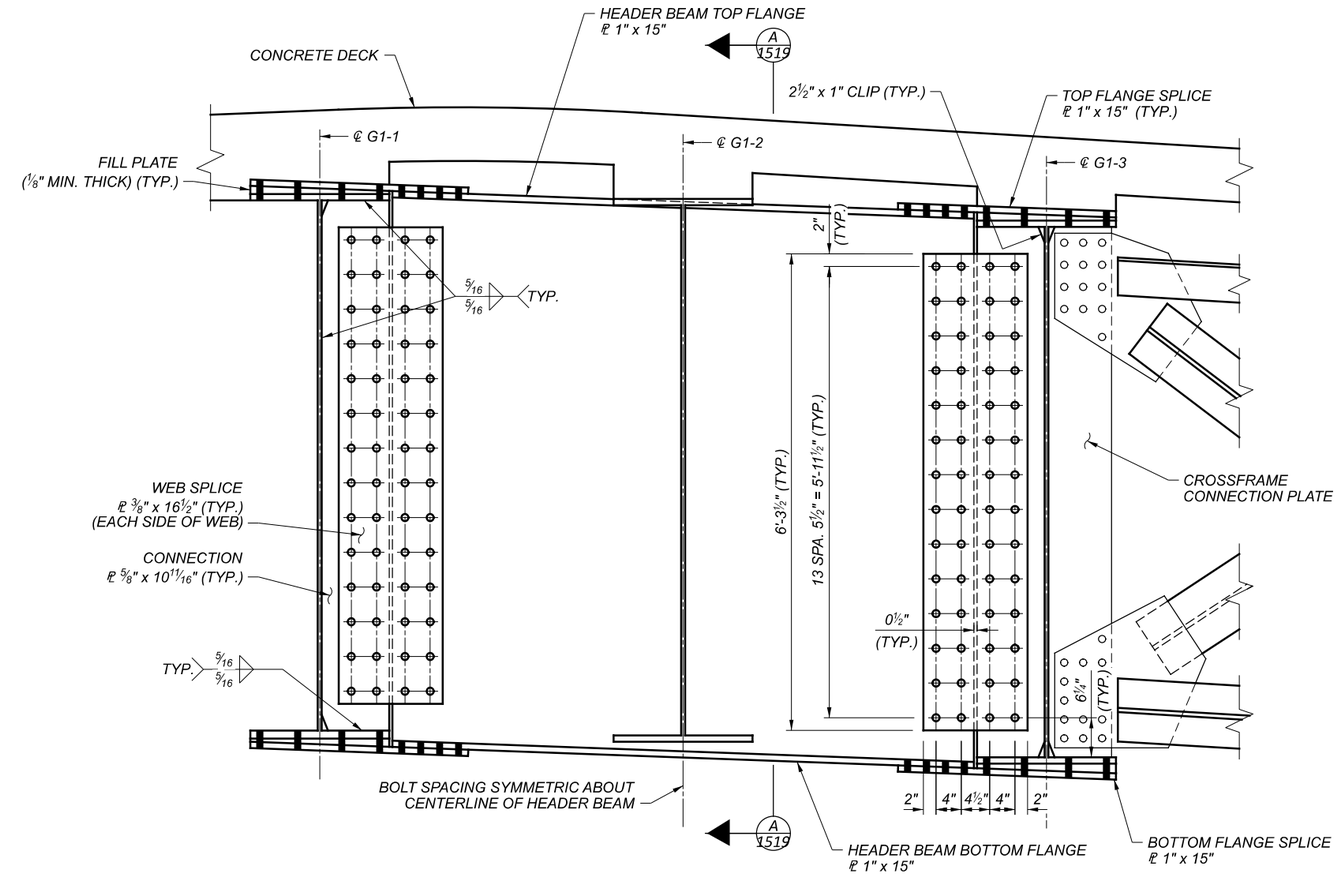
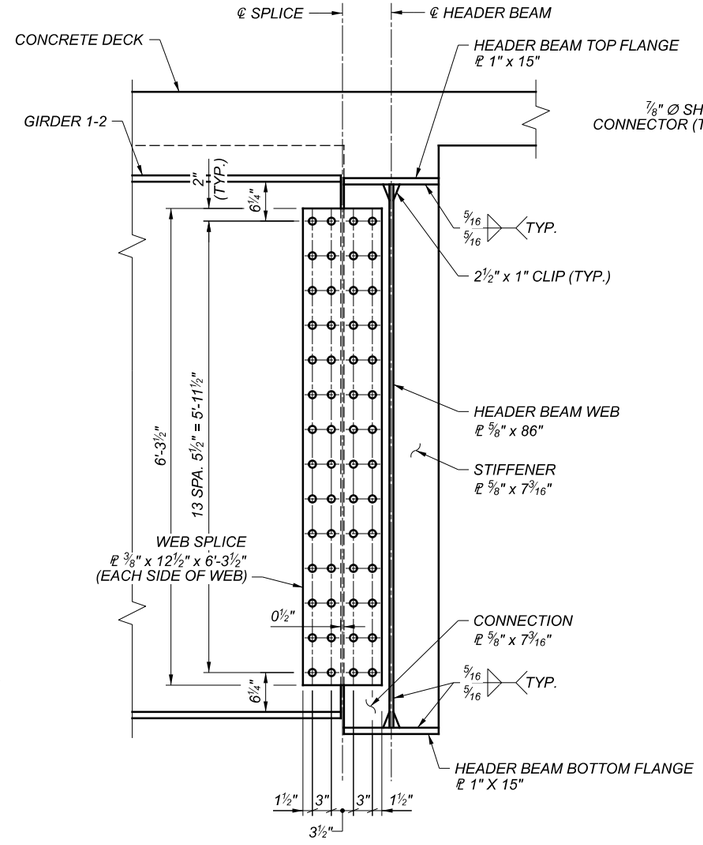


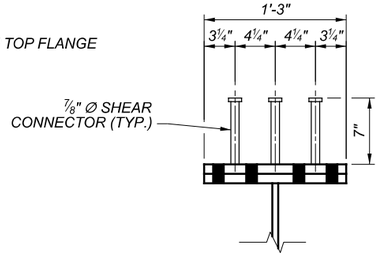
PLAN VIEW - UNIT 1 HEADER BEAM
(CONCRETE DECK NOT SHOWN)



ELEVATION - UNIT 1 HEADER BEAM



VIEW A-A



SHEAR CONNECTOR DETAIL

LEGEND:

▲ ANGLE MEASUREMENTS ARE TO LOCAL TANGENT OF GIRDER AT THE INTERSECTION OF GIRDER CENTERLINE AND HEADER BEAM CENTERLINE.

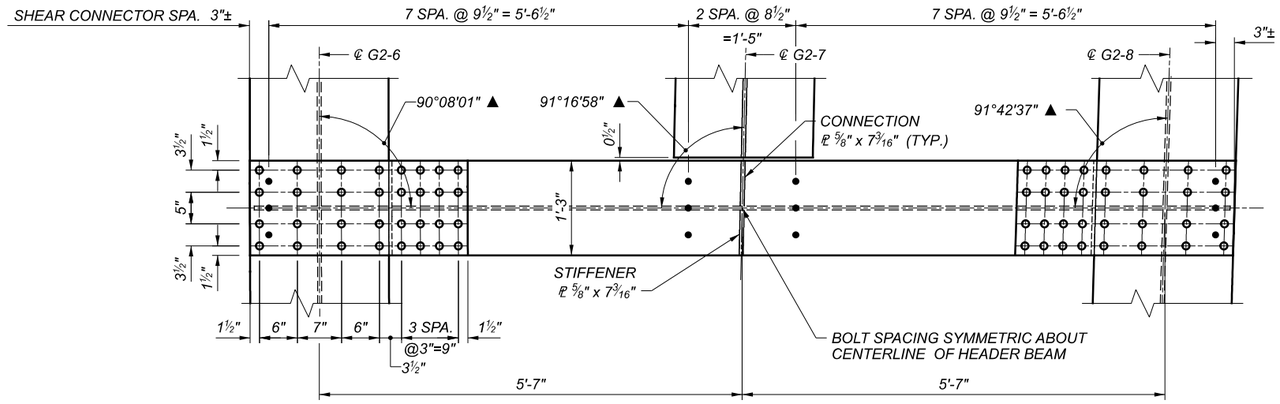
NOTES:

1. ALL BOLTS ARE 1" DIA. ASTM F3125 GRADE A325, TYPE I IN STANDARD 1⅛" DIA. HOLES.
2. BOLT THREADS ARE ASSUMED TO BE EXCLUDED FROM THE SHEAR PLANES FOR THE FLANGE SPLICES.
3. BOLT THREADS ARE ASSUMED TO BE INCLUDED IN THE SHEAR PLANES FOR THE WEB SPLICES.

HEADER BEAM DETAILS - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

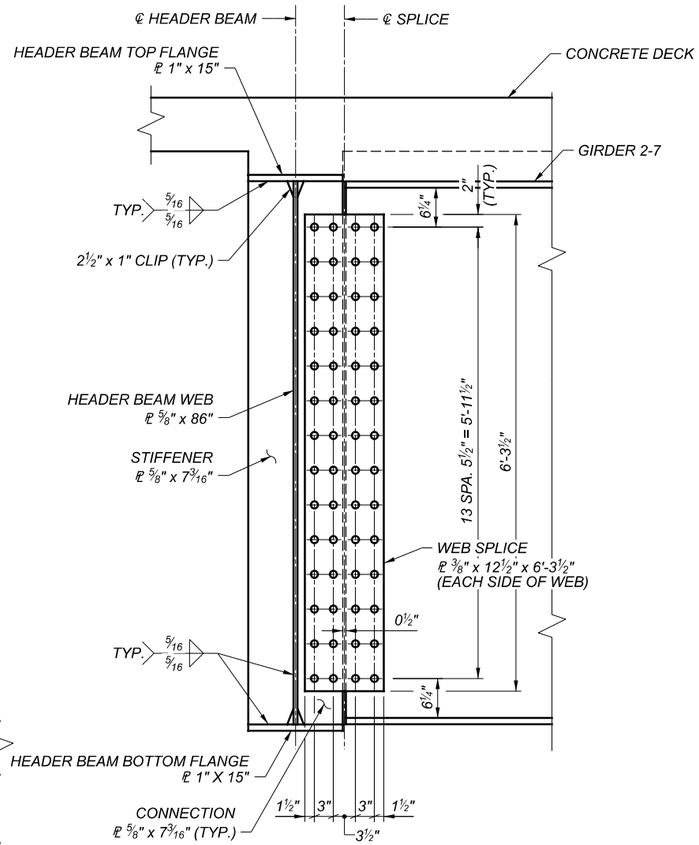
SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 77 | TOTAL 164
SHEET 1519 | TOTAL 2338

CUY-90-16.28 (CCG3A)

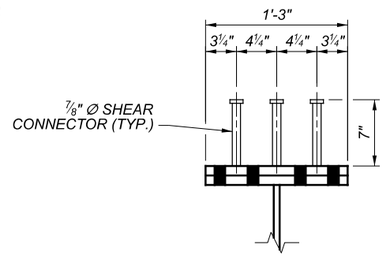


PLAN VIEW - UNIT 2 HEADER BEAM

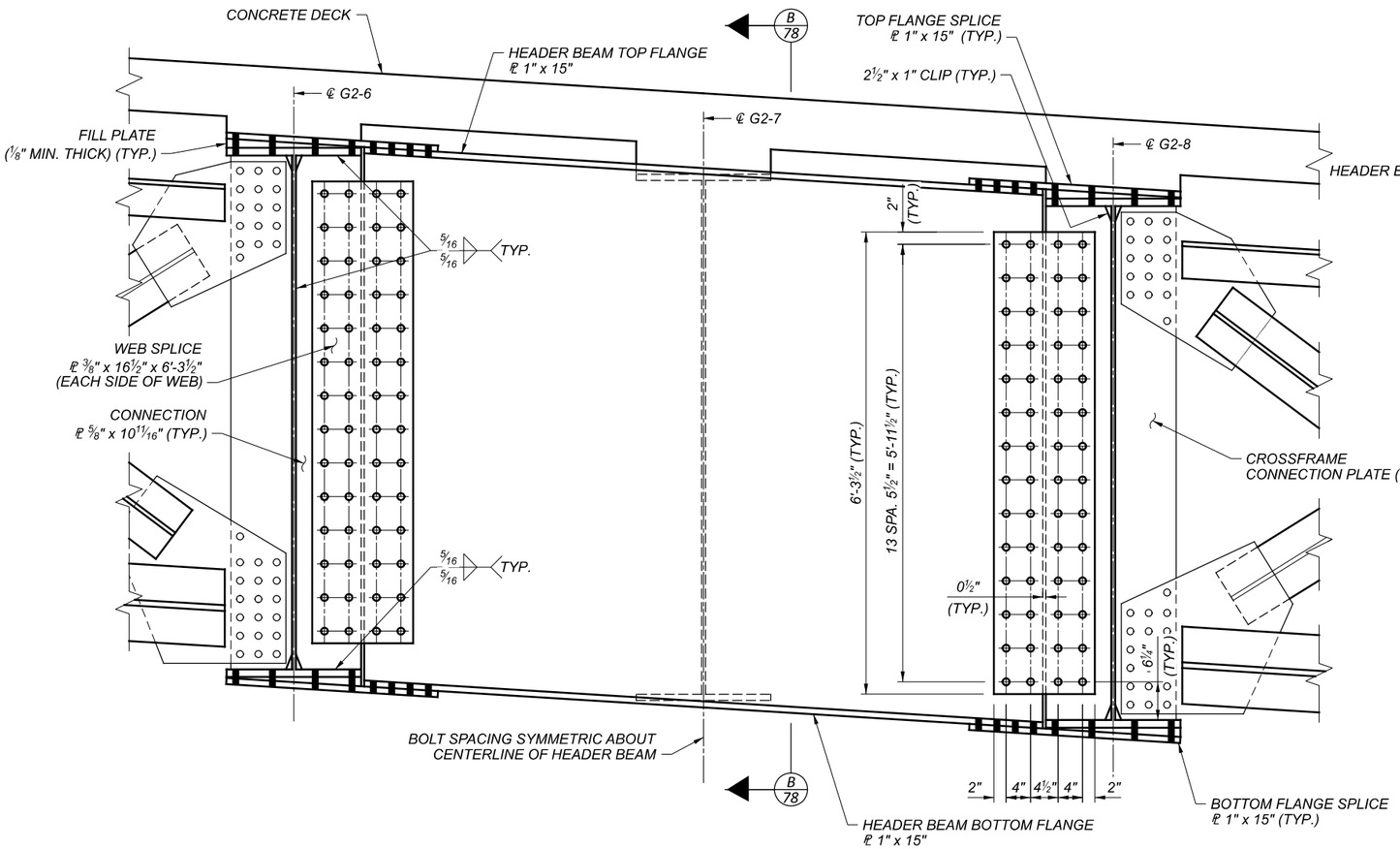
(CONCRETE DECK NOT SHOWN)



VIEW B-B



SHEAR CONNECTOR DETAIL



ELEVATION - UNIT 2 HEADER BEAM

LEGEND:

▲ ANGLE MEASUREMENTS ARE TO LOCAL TANGENT OF GIRDER AT THE INTERSECTION OF GIRDER CENTERLINE AND HEADER BEAM CENTERLINE.

NOTES:

1. ALL BOLTS ARE 1" DIA. ASTM F3125 GRADE A325, TYPE I IN STANDARD 1⅛" DIA. HOLES.
2. BOLT THREADS ARE ASSUMED TO BE EXCLUDED FROM THE SHEAR PLANES FOR THE FLANGE SPLICES.
3. BOLT THREADS ARE ASSUMED TO BE INCLUDED IN THE SHEAR PLANES FOR THE WEB SPLICES.

HEADER BEAM DETAILS - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	78
TOTAL	164
SHEET	1520
TOTAL	2338

CUY-90-16.28 (CCG3A)
MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:09:00 PM USER: CRICCARDI
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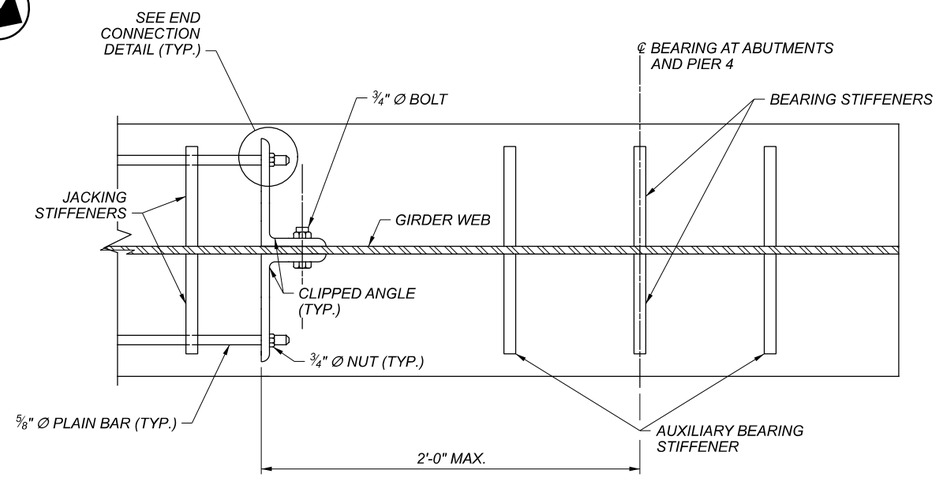
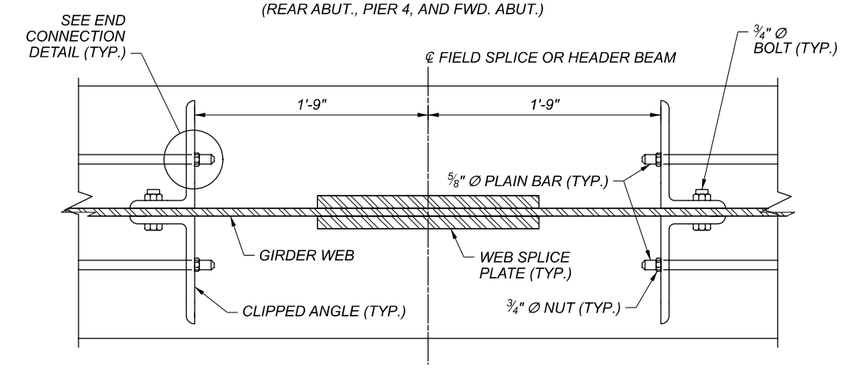
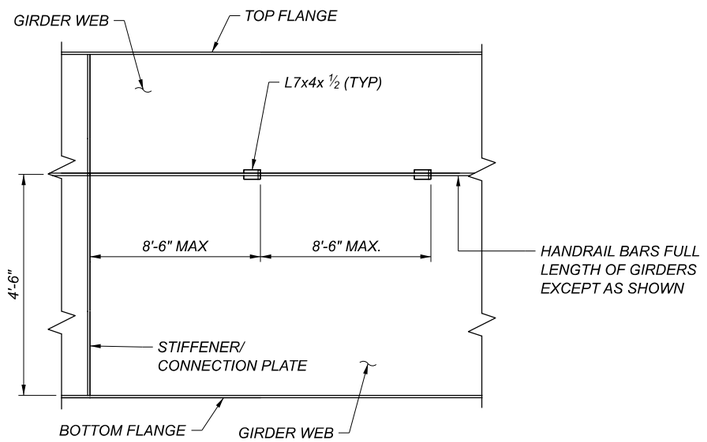


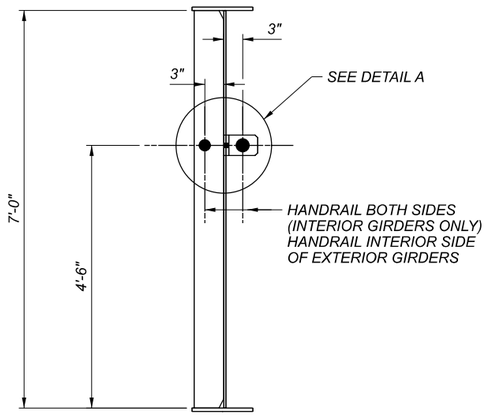
HANDRAIL PLAN AT END BEARINGS
(REAR ABUT., PIER 4, AND FWD. ABUT.)



HANDRAIL PLAN AT FIELD SPLICES AND HEADER BEAMS
(SEE NOTE 3)



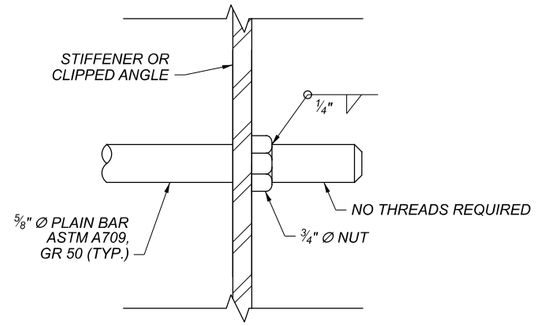
HANDRAIL ELEVATION



HALF SECTION AT STIFFENER/CONNECTION PLATE

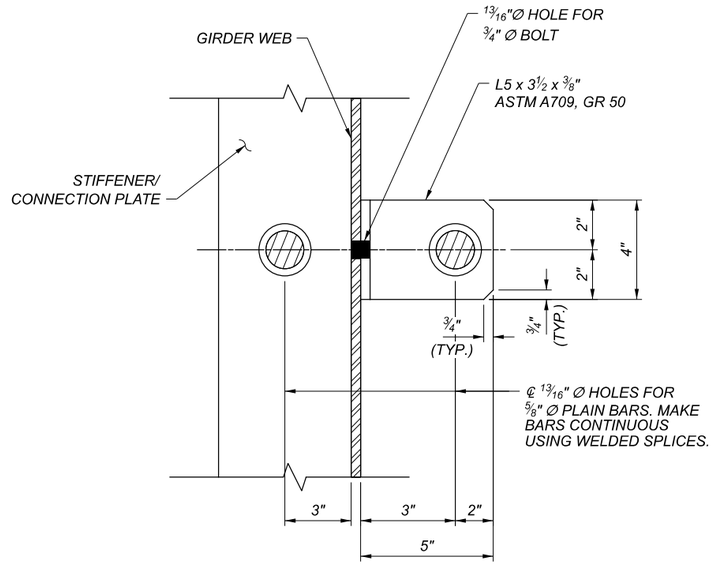
HALF SECTION BETWEEN STIFFENER/CONNECTION PLATES

HANDRAIL SECTION



END CONNECTION DETAIL

WELD SHOP SPLICE DETAIL



HALF SECTION AT STIFFENER/CONNECTION PLATE

HALF SECTION BETWEEN STIFFENER/CONNECTION PLATES

DETAIL A

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 12 / 164 .
2. BOLTS FOR HANDRAIL CLIP ANGLES SHALL BE ASTM F3125, GRADE A325, TYPE I.
3. END HANDRAIL ACCORDING TO THE DETAILS AT ANY GIRDER FACE WHICH TERMINATES INTO A HEADER BEAM OR IS INTERUPTED BY A HEADER BEAM CONNECTION PLATE.

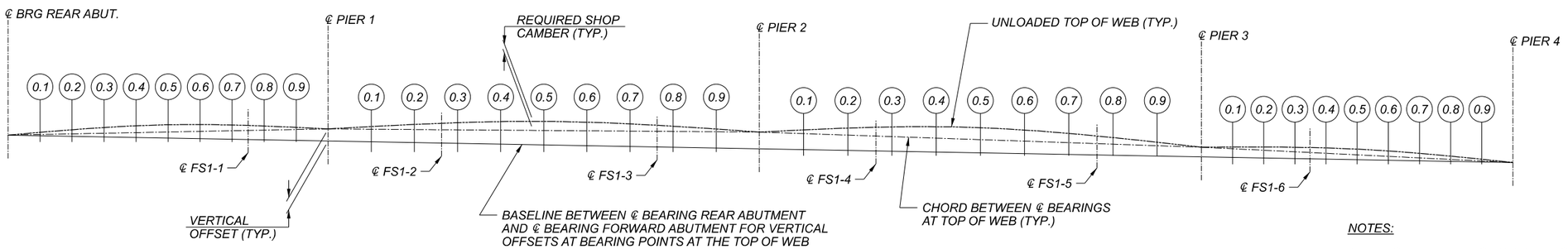
INSPECTION HANDRAIL DETAILS
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	BTA
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	79
TOTAL	164
SHEET	1521
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:09:06 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH01_Projects\ODOT\District12\82382\400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SS017.dgn

STRUCTURAL STEEL DEFLECTION AND CAMBER																						
		UNIT 1 - SPAN 1										UNIT 1 - SPAN 2										
	POINT	0.1	0.2	0.3	0.4	0.5	0.6	0.7	FS1-1	0.8	0.9	0.1	0.2	FS1-2	0.3	0.4	0.5	0.6	0.7	FS1-3	0.8	0.9
G1-1	DEFLECTION DUE TO WEIGHT OF STEEL	-5/16"	-9/16"	-3/4"	-13/16"	-13/16"	-11/16"	-1/2"	-7/16"	-5/16"	-1/8"	-1/16"	-3/16"	-1/4"	-3/8"	-1/2"	-9/16"	-1/2"	-3/8"	-1/4"	-3/16"	0"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-7/8"	-1 5/8"	-2 1/8"	-2 3/8"	-2 1/4"	-1 15/16"	-1 3/8"	-1 1/8"	-13/16"	-5/16"	-3/16"	-5/8"	-7/8"	-1 5/16"	-1 7/8"	-2 1/8"	-2"	-1 1/2"	-1 1/16"	-3/4"	-1/4"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-5/16"	-1/2"	-11/16"	-3/4"	-3/4"	-3/4"	-5/8"	-5/8"	-1/2"	-1/4"	-1/4"	-3/8"	-7/16"	-7/16"	-3/8"	-5/16"	-1/4"	-3/16"	-3/16"	-1/8"	-1/16"
	REQUIRED SHOP CAMBER	-1 1/2"	-2 11/16"	-3 9/16"	-3 15/16"	-3 13/16"	-3 3/8"	-2 1/2"	-2 3/16"	-1 5/8"	-11/16"	-1/2"	-1 3/16"	-1 9/16"	-2 1/8"	-2 3/4"	-3"	-2 3/4"	-2 1/16"	-1 1/2"	-1 1/16"	-5/16"
G1-2	DEFLECTION DUE TO WEIGHT OF STEEL	-5/16"	-1/2"	-11/16"	-3/4"	-3/4"	-5/8"	-7/16"	-3/8"	-1/4"	-1/8"	-1/16"	-3/16"	-	-	-	-	-	-	-	-	-
	DEFLECTION DUE TO REMAINING DEAD LOAD	-13/16"	-1 1/2"	-1 15/16"	-2 1/8"	-2 1/16"	-1 3/4"	-1 1/4"	-1 1/16"	-3/4"	-1/4"	-3/16"	-11/16"	-	-	-	-	-	-	-	-	-
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-3/16"	-3/8"	-7/16"	-7/16"	-7/16"	-3/8"	-5/16"	-1/4"	-3/16"	-1/8"	-1/16"	0"	-	-	-	-	-	-	-	-	-
	REQUIRED SHOP CAMBER	-1 5/16"	-2 3/8"	-3 1/16"	-3 5/16"	-3 1/4"	-2 3/4"	-2"	-1 11/16"	-1 3/16"	-1/2"	-5/16"	-7/8"	-	-	-	-	-	-	-	-	-
G1-3	DEFLECTION DUE TO WEIGHT OF STEEL	-1/4"	-1/2"	-5/8"	-11/16"	-11/16"	-9/16"	-7/16"	-3/8"	-1/4"	-1/8"	-1/16"	-1/4"	-5/16"	-7/16"	-9/16"	-5/8"	-9/16"	-3/8"	-1/4"	-3/16"	-1/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/4"	-1 3/8"	-1 13/16"	-1 15/16"	-1 7/8"	-1 5/8"	-1 1/8"	-1"	-5/8"	-1/4"	-1/4"	-3/4"	-1"	-1 3/8"	-1 15/16"	-2 3/16"	-2"	-1 1/2"	-1 1/16"	-3/4"	-1/4"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
	REQUIRED SHOP CAMBER	-1"	-1 7/8"	-2 7/16"	-2 5/8"	-2 9/16"	-2 3/16"	-1 9/16"	-1 3/8"	-7/8"	-3/8"	-5/16"	-1"	-1 5/16"	-1 13/16"	-2 1/2"	-2 13/16"	-2 9/16"	-1 7/8"	-1 5/16"	-15/16"	-5/16"
G1-4	DEFLECTION DUE TO WEIGHT OF STEEL	-1/4"	-7/16"	-9/16"	-5/8"	-9/16"	-1/2"	-3/8"	-5/16"	-3/16"	-1/16"	-1/8"	-1/4"	-3/8"	-1/2"	-5/8"	-11/16"	-9/16"	-7/16"	-5/16"	-3/16"	-1/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-11/16"	-1 1/4"	-1 5/8"	-1 3/4"	-1 11/16"	-1 7/16"	-1"	-7/8"	-9/16"	-3/16"	-5/16"	-7/8"	-1 1/16"	-1 1/2"	-2"	-2 3/16"	-2"	-1 1/2"	-1 1/16"	-13/16"	-1/4"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
	REQUIRED SHOP CAMBER	-15/16"	-1 11/16"	-2 3/16"	-2 3/8"	-2 1/4"	-1 15/16"	-1 3/8"	-1 3/16"	-3/4"	-1/4"	-7/16"	-1 1/8"	-1 7/16"	-2"	-2 5/8"	-2 7/8"	-2 9/16"	-1 15/16"	-1 3/8"	-1"	-5/16"
G1-5	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-3/8"	-1/2"	-9/16"	-1/2"	-7/16"	-5/16"	-1/4"	-3/16"	-1/16"	-1/8"	-5/16"	-3/8"	-1/2"	-11/16"	-11/16"	-5/8"	-7/16"	-5/16"	-1/4"	-1/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/8"	-1 1/16"	-1 7/16"	-1 9/16"	-1 1/2"	-1 1/4"	-7/8"	-3/4"	-7/16"	-1/8"	-5/16"	-15/16"	-1 3/16"	-1 9/16"	-2 1/16"	-2 1/4"	-2 1/16"	-1 1/2"	-1 1/8"	-13/16"	-1/4"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
	REQUIRED SHOP CAMBER	-13/16"	-1 7/16"	-1 15/16"	-2 1/8"	-2"	-1 11/16"	-1 3/16"	-1"	-5/8"	-3/16"	-7/16"	-1 1/4"	-1 9/16"	-2 1/16"	-2 3/4"	-2 15/16"	-2 11/16"	-1 15/16"	-1 7/16"	-1 1/16"	-5/16"
G1-6	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-5/16"	-7/16"	-7/16"	-7/16"	-3/8"	-1/4"	-3/16"	-1/8"	-1/16"	-1/8"	-3/8"	-7/16"	-9/16"	-11/16"	-3/4"	-5/8"	-1/2"	-5/16"	-1/4"	-1/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/2"	-15/16"	-1 1/4"	-1 3/8"	-1 5/16"	-1 1/16"	-3/4"	-11/16"	-3/8"	-1/8"	-3/8"	-1"	-1 1/4"	-1 11/16"	-2 1/8"	-2 5/16"	-2 1/8"	-1 9/16"	-1 1/8"	-7/8"	-5/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
	REQUIRED SHOP CAMBER	-11/16"	-1 1/4"	-1 11/16"	-1 13/16"	-1 3/4"	-1 7/16"	-1"	-7/8"	-1/2"	-3/16"	-1/2"	-1 3/8"	-1 11/16"	-2 1/4"	-2 13/16"	-3 1/16"	-2 3/4"	-2 1/16"	-1 7/16"	-1 1/8"	-3/8"
G1-8	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-1/4"	-5/16"	-3/8"	-5/16"	-1/4"	-3/16"	-3/16"	-1/16"	0"	-1/8"	-3/8"	-7/16"	-9/16"	-3/4"	-3/4"	-11/16"	-1/2"	-3/8"	-1/4"	-1/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-7/16"	-7/8"	-1 1/8"	-1 3/16"	-1 1/8"	-7/8"	-5/8"	-9/16"	-5/16"	-1/16"	-7/16"	-1 1/16"	-1 5/16"	-1 3/4"	-2 3/16"	-2 3/8"	-2 1/8"	-1 5/8"	-1 3/16"	-7/8"	-5/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
	REQUIRED SHOP CAMBER	-9/16"	-1 1/8"	-1 7/16"	-1 9/16"	-1 7/16"	-1 1/8"	-13/16"	-3/4"	-3/8"	-1/16"	-9/16"	-1 7/16"	-1 3/4"	-2 5/16"	-2 15/16"	-3 1/8"	-2 13/16"	-2 1/8"	-1 9/16"	-1 1/8"	-3/8"
G1-9	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-3/16"	-1/4"	-1/4"	-1/4"	-3/16"	-1/8"	-1/8"	-1/16"	0"	-3/16"	-3/8"	-1/2"	-5/8"	-3/4"	-3/4"	-11/16"	-1/2"	-3/8"	-5/16"	-1/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-7/16"	-3/4"	-15/16"	-1"	-15/16"	-3/4"	-1/2"	-7/16"	-1/4"	-1/16"	-1/2"	-1 1/8"	-1 3/8"	-1 13/16"	-2 1/4"	-2 7/16"	-2 3/16"	-1 5/8"	-1 3/16"	-15/16"	-3/8"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
	REQUIRED SHOP CAMBER	-9/16"	-15/16"	-1 3/16"	-1 1/4"	-1 3/16"	-15/16"	-5/8"	-9/16"	-5/16"	-1/16"	-11/16"	-1 1/2"	-1 7/8"	-2 7/16"	-3"	-3 3/16"	-2 7/8"	-2 1/8"	-1 9/16"	-1 1/4"	-1/2"



CAMBER DIAGRAM

NOTES:

1. NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR VERTICAL CURVE ADJUSTMENT AND TOTAL REQUIRED SHOP CAMBER INDICATE VALUES BELOW THE CHORD LINE.
2. DEFLECTION AND ADJUSTMENTS FOR VERTICAL CURVES ARE GIVEN TO THE NEAREST $\frac{1}{16}$ INCH. THE ADJUSTMENT FOR HORIZONTAL CURVATURE IS ZERO AT ALL LOCATIONS.
3. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 14 / 164.
4. FOR FRAMING PLAN AND BEAM ELEVATION, SEE SHEETS 58 / 164 AND 59 / 164.
5. FOR PLAN VIEW, SEE FINAL DECK ELEVATIONS, SHEETS 140 / 164 THRU 150 / 164.

UNIT 1 - GIRDER DEFLECTION AND CAMBER - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 80 | TOTAL 164
SHEET 1522 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:09:12 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com\mb-us-pw-031Documents\Cleveland_OH\01_Projects\ODOT\District12\82382400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SS018.dgn

STRUCTURAL STEEL DEFLECTION AND CAMBER

		UNIT 1 - SPAN 3											UNIT 1 - SPAN 4									
	POINT	0.1	0.2	FS1-4	0.3	0.4	0.5	0.6	0.7	FS1-5	0.8	0.9	0.1	0.2	0.3	FS1-6	0.4	0.5	0.6	0.7	0.8	0.9
G1-1	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-9/16"	-11/16"	-7/8"	-1 1/8"	-1 1/4"	-1 3/16"	-15/16"	-3/4"	-9/16"	-1/4"	0"	-1/16"	-1/8"	-3/16"	-1/4"	-3/8"	-3/8"	-3/8"	-5/16"	-3/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/2"	-1 1/4"	-1 5/8"	-2 1/8"	-2 7/8"	-3 1/8"	-2 15/16"	-2 5/16"	-1 13/16"	-1 7/16"	-5/8"	-1/8"	-3/8"	-3/4"	-7/8"	-1 1/8"	-1 7/16"	-1 9/16"	-1 7/16"	-1 3/16"	-11/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	-1/8"	-3/16"	-5/16"	-5/16"	-3/8"	-1/2"	-9/16"	-11/16"	-3/4"	-1/2"
	REQUIRED SHOP CAMBER	-11/16"	-1 13/16"	-2 5/16"	-3"	-4"	-4 3/8"	-4 1/8"	-3 1/4"	-2 9/16"	-2"	-7/8"	-1/4"	-5/8"	-1 3/16"	-1 3/8"	-1 3/4"	-2 5/16"	-2 1/2"	-2 1/2"	-2 1/4"	-1 3/8"
G1-3	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-1/2"	-5/8"	-13/16"	-1 1/16"	-1 3/16"	-1 1/8"	-7/8"	-11/16"	-9/16"	-1/4"	0"	-1/16"	-3/16"	-3/16"	-1/4"	-3/8"	-3/8"	-3/8"	-5/16"	-3/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-7/16"	-1 3/16"	-1 1/2"	-2"	-2 11/16"	-3"	-2 13/16"	-2 3/16"	-1 11/16"	-1 5/16"	-9/16"	-1/8"	-5/16"	-11/16"	-13/16"	-1 1/16"	-1 3/8"	-1 7/16"	-1 3/8"	-1 1/16"	-5/8"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	-1/16"	-1/8"	-1/8"	-3/16"	-3/16"	-1/4"	-5/16"	-3/8"	-7/16"	-1/4"
	REQUIRED SHOP CAMBER	-5/8"	-1 11/16"	-2 1/8"	-2 13/16"	-3 3/4"	-4 3/16"	-3 15/16"	-3 1/16"	-2 3/8"	-1 7/8"	-13/16"	-3/16"	-1/2"	-1"	-1 3/16"	-1 1/2"	-2"	-2 1/8"	-2 1/8"	-1 13/16"	-1 1/16"
G1-4	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-1/2"	-5/8"	-13/16"	-1"	-1 1/8"	-1 1/16"	-13/16"	-5/8"	-1/2"	-3/16"	0"	-1/16"	-3/16"	-3/16"	-1/4"	-3/8"	-3/8"	-3/8"	-5/16"	-3/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-7/16"	-1 1/8"	-1 7/16"	-1 15/16"	-2 9/16"	-2 13/16"	-2 5/8"	-2 1/16"	-1 9/16"	-1 1/4"	-1/2"	-1/16"	-5/16"	-5/8"	-3/4"	-1"	-1 5/16"	-1 3/8"	-1 5/16"	-1"	-9/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
	REQUIRED SHOP CAMBER	-5/8"	-1 5/8"	-2 1/16"	-2 3/4"	-3 9/16"	-3 15/16"	-3 11/16"	-2 7/8"	-2 3/16"	-1 3/4"	-11/16"	-1/16"	-3/8"	-13/16"	-15/16"	-1 1/4"	-1 11/16"	-1 3/4"	-1 11/16"	-1 5/16"	-3/4"
G1-5	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-7/16"	-9/16"	-3/4"	-15/16"	-1 1/16"	-1"	-13/16"	-5/8"	-1/2"	-3/16"	0"	-1/16"	-3/16"	-3/16"	-1/4"	-3/8"	-3/8"	-3/8"	-5/16"	-3/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/8"	-1 1/16"	-1 5/16"	-1 13/16"	-2 7/16"	-2 11/16"	-2 1/2"	-2"	-1 1/2"	-1 3/16"	-1/2"	-1/16"	-5/16"	-5/8"	-3/4"	-1"	-1 1/4"	-1 5/16"	-1 1/4"	-1"	-9/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/8"	3/16"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/16"
	REQUIRED SHOP CAMBER	-9/16"	-1 1/2"	-1 7/8"	-2 9/16"	-3 3/8"	-3 3/4"	-3 1/2"	-2 13/16"	-2 1/8"	-1 11/16"	-11/16"	0"	-1/4"	-5/8"	-3/4"	-1"	-1 5/16"	-1 5/16"	-1 3/16"	-13/16"	-7/16"
G1-6	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-7/16"	-1/2"	-11/16"	-7/8"	-1"	-15/16"	-3/4"	-9/16"	-1/2"	-3/16"	0"	-1/16"	-3/16"	-3/16"	-1/4"	-3/8"	-3/8"	-3/8"	-5/16"	-3/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/8"	-1"	-1 1/4"	-1 11/16"	-2 5/16"	-2 9/16"	-2 3/8"	-1 7/8"	-1 7/16"	-1 3/16"	-7/16"	-1/16"	-5/16"	-5/8"	-3/4"	-15/16"	-1 3/16"	-1 5/16"	-1 3/16"	-15/16"	-9/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	1/8"	1/4"	3/8"	3/8"	1/2"	5/8"	3/4"	13/16"	15/16"	5/8"
	REQUIRED SHOP CAMBER	-9/16"	-1 7/16"	-1 3/4"	-2 3/8"	-3 3/16"	-3 9/16"	-3 5/16"	-2 5/8"	-2"	-1 11/16"	-5/8"	1/16"	-1/8"	-7/16"	-9/16"	-11/16"	-15/16"	-15/16"	-3/4"	-5/16"	-1/8"
G1-8	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-3/8"	-1/2"	-5/8"	-13/16"	-15/16"	-7/8"	-11/16"	-9/16"	-7/16"	-3/16"	0"	-1/16"	-3/16"	-3/16"	-1/4"	-3/8"	-3/8"	-3/8"	-5/16"	-3/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/16"	-15/16"	-1 3/16"	-1 5/8"	-2 3/16"	-2 7/16"	-2 5/16"	-1 13/16"	-1 7/16"	-1 1/8"	-1/2"	-1/8"	-5/16"	-5/8"	-3/4"	-15/16"	-1 3/16"	-1 1/4"	-1 3/16"	-15/16"	-1/2"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	3/16"	3/8"	9/16"	9/16"	11/16"	7/8"	1 1/16"	1 1/4"	1 3/8"	7/8"
	REQUIRED SHOP CAMBER	-7/16"	-1 5/16"	-1 11/16"	-2 1/4"	-3"	-3 3/8"	-3 3/16"	-2 1/2"	-2"	-1 9/16"	-11/16"	1/16"	0"	-1/4"	-3/8"	-1/2"	-11/16"	-9/16"	-5/16"	1/8"	3/16"
G1-9	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-5/16"	-7/16"	-9/16"	-3/4"	-7/8"	-13/16"	-11/16"	-1/2"	-7/16"	-3/16"	-1/16"	-1/8"	-3/16"	-3/16"	-1/4"	-5/16"	-3/8"	-5/16"	-1/4"	-1/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/16"	-7/8"	-1 1/8"	-1 9/16"	-2 1/16"	-2 5/16"	-2 3/16"	-1 3/4"	-1 3/8"	-1 1/8"	-1/2"	-3/16"	-3/8"	-11/16"	-3/4"	-15/16"	-1 3/16"	-1 1/4"	-1 1/8"	-7/8"	-1/2"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	1/4"	7/16"	11/16"	3/4"	15/16"	1 3/16"	1 3/8"	1 5/8"	1 7/8"	1 3/16"
	REQUIRED SHOP CAMBER	-7/16"	-1 3/16"	-1 9/16"	-2 1/8"	-2 13/16"	-3 3/16"	-3"	-2 7/16"	-1 7/8"	-1 9/16"	-11/16"	0"	-1/16"	-3/16"	-3/16"	-1/4"	-5/16"	-1/4"	3/16"	3/4"	9/16"

NOTES:

1. *NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR VERTICAL CURVE ADJUSTMENT AND TOTAL REQUIRED SHOP CAMBER INDICATE VALUES BELOW THE CHORD LINE.*
2. *DEFLECTION AND ADJUSTMENTS FOR VERTICAL CURVES ARE GIVEN TO THE NEAREST $\frac{1}{16}$ INCH. THE ADJUSTMENT FOR HORIZONTAL CURVATURE IS ZERO AT ALL LOCATIONS.*
3. *FOR GENERAL NOTES, SEE SHEETS* 11 / 164 *THRU* 14 / 164.
4. *FOR FRAMING PLAN AND BEAM ELEVATION, SEE SHEETS* 58 / 164 *AND* 59 / 164.

UNIT 1 - GIRDER DEFLECTION AND CAMBER - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY FHR
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 81 | TOTAL 164
SHEET 1523 | TOTAL 2338

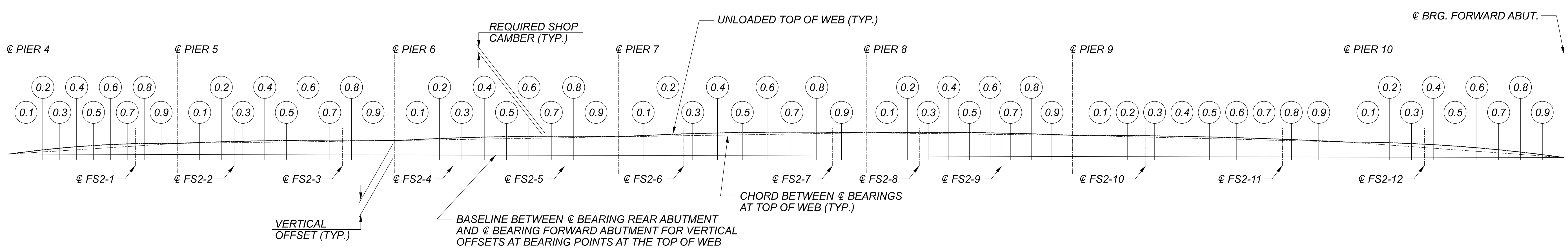
CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:09:18 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400>Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SS019.dgn

STRUCTURAL STEEL DEFLECTION AND CAMBER

	POINT	UNIT 2 - SPAN 5									
	POINT	0.1	0.2	0.3	0.4	0.5	0.6	0.7	FS2-1	0.8	0.9
G1-1	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-3/8"	-7/16"	-1/2"	-7/16"	-5/16"	-3/16"	-3/16"	-1/16"	0"
G1-1	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/4"	-1 3/8"	-1 3/4"	-1 7/8"	-1 13/16"	-1 1/2"	-1"	-15/16"	-9/16"	-3/16"
G1-1	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	1 9/16"	2 7/8"	3 9/16"	4"	4 1/8"	3 15/16"	3 7/16"	3 5/16"	2 9/16"	1 7/16"
G1-1	REQUIRED SHOP CAMBER	5/8"	1 1/8"	1 3/8"	1 5/8"	1 7/8"	2 1/8"	2 1/4"	2 3/16"	1 15/16"	1 1/4"
G1-3	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-3/8"	-7/16"	-1/2"	-7/16"	-3/8"	-1/4"	-3/16"	-1/8"	-1/16"
G1-3	DEFLECTION DUE TO REMAINING DEAD LOAD	-11/16"	-1 1/4"	-1 5/8"	-1 3/4"	-1 5/8"	-1 3/8"	-15/16"	-7/8"	-1/2"	-3/16"
G1-3	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	1 5/16"	2 1/2"	3 1/4"	3 3/4"	3 7/8"	3 3/4"	3 1/4"	3 1/8"	2 1/2"	1 3/8"
G1-3	REQUIRED SHOP CAMBER	7/16"	7/8"	1 3/16"	1 1/2"	1 13/16"	2"	2 1/16"	2 1/16"	1 7/8"	1 1/8"
G1-4	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-3/8"	-7/16"	-1/2"	-7/16"	-3/8"	-1/4"	-1/4"	-1/8"	-1/16"
G1-4	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/8"	-1 1/8"	-1 7/16"	-1 5/8"	-1 1/2"	-1 1/4"	-7/8"	-13/16"	-1/2"	-3/16"
G1-4	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	1"	2"	2 7/8"	3 3/8"	3 5/8"	3 1/2"	3 1/8"	3"	2 3/8"	1 5/16"
G1-4	REQUIRED SHOP CAMBER	3/16"	1/2"	1"	1 1/4"	1 11/16"	1 7/8"	2"	1 15/16"	1 3/4"	1 1/16"
G1-5	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-5/16"	-7/16"	-1/2"	-7/16"	-3/8"	-1/4"	-1/4"	-1/8"	-1/16"
G1-5	DEFLECTION DUE TO REMAINING DEAD LOAD	-9/16"	-1 1/16"	-1 3/8"	-1 1/2"	-1 7/16"	-1 3/16"	-13/16"	-3/4"	-7/16"	-3/16"
G1-5	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	3/4"	1 9/16"	2 7/16"	3 1/16"	3 5/16"	3 1/4"	2 15/16"	2 13/16"	2 1/4"	1 5/16"
G1-5	REQUIRED SHOP CAMBER	0"	3/16"	5/8"	1 1/16"	1 7/16"	1 11/16"	1 7/8"	1 13/16"	1 11/16"	1 1/16"
G1-6	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-5/16"	-7/16"	-7/16"	-7/16"	-3/8"	-1/4"	-1/4"	-1/8"	-1/16"
G1-6	DEFLECTION DUE TO REMAINING DEAD LOAD	-9/16"	-15/16"	-1 1/4"	-1 3/8"	-1 5/16"	-1 1/8"	-13/16"	-3/4"	-7/16"	-3/16"
G1-6	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	7/16"	1 1/8"	2 1/16"	2 11/16"	3 1/16"	3 1/16"	2 3/4"	2 11/16"	2 1/8"	1 1/4"
G1-6	REQUIRED SHOP CAMBER	-5/16"	-1/8"	3/8"	7/8"	1 5/16"	1 9/16"	1 11/16"	1 11/16"	1 9/16"	1"
G1-8	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-5/16"	-7/16"	-7/16"	-7/16"	-3/8"	-1/4"	-1/4"	-3/16"	-1/16"
G1-8	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/2"	-7/8"	-1 3/16"	-1 5/16"	-1 1/4"	-1 1/16"	-3/4"	-11/16"	-7/16"	-3/16"
G1-8	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	1/8"	5/8"	1 5/8"	2 3/8"	2 3/4"	2 13/16"	2 9/16"	2 1/2"	2"	1 3/16"
G1-8	REQUIRED SHOP CAMBER	-9/16"	-9/16"	0"	5/8"	1 1/16"	1 3/8"	1 9/16"	1 9/16"	1 3/8"	15/16"
G1-9	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-5/16"	-3/8"	-7/16"	-7/16"	-3/8"	-1/4"	-1/4"	-3/16"	-1/16"
G1-9	DEFLECTION DUE TO REMAINING DEAD LOAD	-7/16"	-13/16"	-1 1/16"	-1 3/16"	-1 1/8"	-1"	-3/4"	-11/16"	-7/16"	-3/16"
G1-9	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-1/8"	3/16"	1 1/4"	2"	2 7/16"	2 9/16"	2 7/16"	2 5/16"	1 15/16"	1 1/8"
G1-9	REQUIRED SHOP CAMBER	-3/4"	-15/16"	-3/16"	3/8"	7/8"	1 3/16"	1 7/16"	1 3/8"	1 5/16"	7/8"

	POINT	UNIT 2 - SPAN 6										
	POINT	0.1	0.2	FS2-2	0.3	0.4	0.5	0.6	0.7	FS2-3	0.8	0.9
G1-1	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-7/16"	-1/2"	-3/4"	-1"	-1 1/8"	-1 1/16"	-7/8"	-11/16"	-5/8"	-5/16"
G1-1	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/16"	-15/16"	-1 1/16"	-1 5/8"	-2 1/4"	-2 9/16"	-2 7/16"	-2"	-1 7/16"	-1 1/4"	-9/16"
G1-1	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 3/8"	4 3/16"	4 1/2"	5 1/2"	6 5/16"	6 9/16"	6 5/16"	5 1/2"	4 1/2"	4 3/16"	2 3/8"
G1-1	REQUIRED SHOP CAMBER	1 7/8"	2 13/16"	2 15/16"	3 1/8"	3 1/16"	2 7/8"	2 13/16"	2 5/8"	2 3/8"	2 5/16"	1 1/2"
G1-3	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-3/8"	-7/16"	-5/8"	-7/8"	-15/16"	-15/16"	-3/4"	-9/16"	-1/2"	-1/4"
G1-3	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/16"	-13/16"	-15/16"	-1 7/16"	-2"	-2 1/4"	-2 1/8"	-1 3/4"	-1 3/16"	-1 1/16"	-1/2"
G1-3	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 3/8"	4 3/16"	4 1/2"	5 1/2"	6 5/16"	6 9/16"	6 5/16"	5 1/2"	4 1/2"	4 3/16"	2 3/8"
G1-3	REQUIRED SHOP CAMBER	1 7/8"	3"	3 1/8"	3 7/16"	3 7/16"	3 3/8"	3 1/4"	3"	2 3/4"	2 5/8"	1 5/8"
G1-4	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-5/16"	-3/8"	-9/16"	-3/4"	-13/16"	-3/4"	-5/8"	-7/16"	-3/8"	-3/16"
G1-4	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/4"	-3/4"	-13/16"	-1 5/16"	-1 3/4"	-2"	-1 7/8"	-1 1/2"	-1"	-15/16"	-3/8"
G1-4	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 3/8"	4 3/16"	4 1/2"	5 1/2"	6 5/16"	6 9/16"	6 5/16"	5 1/2"	4 1/2"	4 3/16"	2 3/8"
G1-4	REQUIRED SHOP CAMBER	2"	3 1/8"	3 5/16"	3 5/8"	3 13/16"	3 3/4"	3 11/16"	3 3/8"	3 1/16"	2 7/8"	1 13/16"
G1-5	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-1/4"	-5/16"	-7/16"	-5/8"	-5/8"	-5/8"	-7/16"	-5/16"	-1/4"	-1/8"
G1-5	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/4"	-5/8"	-3/4"	-1 1/8"	-1 9/16"	-1 3/4"	-1 5/8"	-1 1/4"	-13/16"	-3/4"	-5/16"
G1-5	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 3/8"	4 3/16"	4 1/2"	5 1/2"	6 5/16"	6 9/16"	6 5/16"	5 1/2"	4 1/2"	4 3/16"	2 3/8"
G1-5	REQUIRED SHOP CAMBER	2"	3 5/16"	3 7/16"	3 15/16"	4 1/8"	4 3/16"	4 1/16"	3 13/16"	3 3/8"	3 3/16"	1 15/16"
G1-6	DEFLECTION DUE TO WEIGHT OF STEEL	-1/16"	-1/4"	-1/4"	-3/8"	-1/2"	-1/2"	-7/16"	-5/16"	-3/16"	-3/16"	-1/16"
G1-6	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/16"	-9/16"	-5/8"	-1"	-1 3/8"	-1 1/2"	-1 3/8"	-1 1/16"	-11/16"	-9/16"	-3/16"
G1-6	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 3/8"	4 3/16"	4 1/2"	5 1/2"	6 5/16"	6 9/16"	6 5/16"	5 1/2"	4 1/2"	4 3/16"	2 3/8"
G1-6	REQUIRED SHOP CAMBER	2 1/8"	3 3/8"	3 5/8"	4 1/8"	4 7/16"	4 9/16"	4 1/2"	4 1/8"	3 5/8"	3 7/16"	2 1/8"
G1-8	DEFLECTION DUE TO WEIGHT OF STEEL	-1/16"	-3/16"	-3/16"	-1/4"	-5/16"	-3/8"	-5/16"	-3/16"	-1/8"	-1/16"	0"
G1-8	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/16"	-1/2"	-9/16"	-7/8"	-1 3/16"	-1 1/4"	-1 1/8"	-13/16"	-1/2"	-7/16"	-1/8"
G1-8	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 3/8"	4 3/16"	4 1/2"	5 1/2"	6 5/16"	6 9/16"	6 5/16"	5 1/2"	4 1/2"	4 3/16"	2 3/8"
G1-8	REQUIRED SHOP CAMBER	2 1/8"	3 1/2"	3 3/4"	4 3/8"	4 13/16"	4 15/16"	4 7/8"	4 1/2"	3 7/8"	3 11/16"	2 1/4"
G1-9	DEFLECTION DUE TO WEIGHT OF STEEL	-1/16"	-1/8"	-1/8"	-3/16"	-3/16"	-3/16"	-1/8"	-1/16"	0"	0"	1/16"
G1-9	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/16"	-7/16"	-1/2"	-3/4"	-1"	-1 1/16"	-15/16"	-5/8"	-5/16"	-1/4"	-1/16"
G1-9	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 3/8"	4 3/16"	4 1/2"	5 1/2"	6 5/16"	6 9/16"	6 5/16"	5 1/2"	4 1/2"	4 3/16"	2 3/8"
G1-9	REQUIRED SHOP CAMBER	2 1/8"	3 5/8"	3 7/8"	4 9/16"	5 1/8"	5 5/16"	5 1/4"	4 13/16"	4 3/16"	3 15/16"	2 3/8"



CAMBER DIAGRAM

NOTES:

1. NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR VERTICAL CURVE ADJUSTMENT AND TOTAL REQUIRED SHOP CAMBER INDICATE VALUES BELOW THE CHORD LINE.
2. DEFLECTION AND ADJUSTMENTS FOR VERTICAL CURVES ARE GIVEN TO THE NEAREST 1/16 INCH. THE ADJUSTMENT FOR HORIZONTAL CURVATURE IS ZERO AT ALL LOCATIONS.
3. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 14 / 164.
4. FOR FRAMING PLAN AND BEAM ELEVATION, SEE SHEETS 60 / 164 THRU 63 / 164.

UNIT 2 - GIRDER DEFLECTION AND CAMBER - (1 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 82 | TOTAL 164
SHEET 1524 | TOTAL 2338

CUY-90-16.28 (CCG3A)
MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:09:25 PM USER: CRICCARDI
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STRUCTURAL STEEL DEFLECTION AND CAMBER

		UNIT 2 - SPAN 7											UNIT 2 - SPAN 8									
	POINT	0.1	0.2	FS2-4	0.3	0.4	0.5	0.6	0.7	FS2-5	0.8	0.9	0.1	0.2	FS2-6	0.3	0.4	0.5	0.6	0.7	0.8	FS2-7	0.9
G1-1	DEFLECTION DUE TO WEIGHT OF STEEL	1/8"	1/4"	5/16"	3/8"	7/16"	9/16"	5/8"	5/8"	5/8"	9/16"	3/8"	-3/4"	-1 11/16"	-2 1/4"	-2 1/2"	-3 1/8"	-3 3/8"	-3 1/4"	-2 11/16"	-1 13/16"	-1 5/8"	-7/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	1/16"	-1/16"	-3/16"	-5/16"	-1/2"	-9/16"	-3/8"	-1/16"	0"	3/16"	1/4"	-1 1/8"	-2 5/8"	-3 11/16"	-4 1/8"	-5 1/4"	-5 3/4"	-5 1/2"	-4 9/16"	-3 1/16"	-2 11/16"	-1 7/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 1/8"	3 3/4"	4 1/8"	4 7/8"	5 9/16"	5 13/16"	5 9/16"	4 7/8"	4 3/4"	3 3/4"	2 1/8"	3 3/8"	5 7/8"	7 3/16"	7 5/8"	8 5/8"	8 13/16"	8 3/16"	6 3/4"	4 5/8"	4 1/16"	2 1/8"
	REQUIRED SHOP CAMBER	2 5/16"	3 15/16"	4 1/4"	4 15/16"	5 1/2"	5 13/16"	5 13/16"	5 7/16"	5 3/8"	4 1/2"	2 3/4"	1 1/2"	1 9/16"	1 1/4"	1"	1/4"	-5/16"	-9/16"	-1/2"	-1/4"	-1/4"	-3/16"
G1-3	DEFLECTION DUE TO WEIGHT OF STEEL	1/16"	1/16"	1/16"	1/16"	1/16"	1/8"	3/16"	1/4"	1/4"	1/4"	3/16"	-9/16"	-1 1/4"	-1 5/8"	-1 7/8"	-2 3/8"	-2 9/16"	-2 7/16"	-2"	-1 3/8"	-1 5/16"	-11/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	0"	-1/4"	-5/16"	-1/2"	-3/4"	-13/16"	-5/8"	-3/8"	-1/4"	-1/16"	1/16"	-7/8"	-2"	-2 11/16"	-3 3/16"	-4 1/16"	-4 7/16"	-4 1/4"	-3 9/16"	-2 7/16"	-2 1/4"	-1 3/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 5/16"	4 1/16"	4 3/8"	5 3/8"	6 1/8"	6 3/8"	6 1/8"	5 3/8"	4 15/16"	4 1/16"	2 5/16"	3 1/16"	5 7/16"	6 7/16"	7 1/16"	7 15/16"	8 1/16"	7 1/2"	6 1/8"	4 1/8"	3 3/4"	1 15/16"
	REQUIRED SHOP CAMBER	2 3/8"	3 7/8"	4 1/8"	4 15/16"	5 7/16"	5 11/16"	5 11/16"	5 1/4"	4 15/16"	4 1/4"	2 9/16"	1 5/8"	2 3/16"	2 1/8"	2"	1 1/2"	1 1/16"	13/16"	9/16"	5/16"	3/16"	1/16"
G1-4	DEFLECTION DUE TO WEIGHT OF STEEL	0"	-1/8"	-1/8"	-3/16"	-5/16"	-5/16"	-3/16"	-1/16"	-1/16"	0"	1/16"	-3/8"	-13/16"	-1 1/8"	-1 1/4"	-1 9/16"	-1 11/16"	-1 11/16"	-1 7/16"	-1"	-1"	-9/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/16"	-3/8"	-7/16"	-3/4"	-1 1/16"	-1 1/8"	-15/16"	-5/8"	-9/16"	-1/4"	0"	-5/8"	-1 3/8"	-1 15/16"	-2 3/16"	-2 7/8"	-3 3/16"	-3 1/8"	-2 5/8"	-1 7/8"	-1 3/4"	-1"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 1/2"	4 7/16"	4 5/8"	5 7/8"	6 11/16"	7"	6 11/16"	5 7/8"	5 5/8"	4 7/16"	2 1/2"	2 13/16"	5"	6"	6 7/16"	7 1/4"	7 3/8"	6 13/16"	5 9/16"	3 11/16"	3 1/2"	1 11/16"
	REQUIRED SHOP CAMBER	2 7/16"	3 15/16"	4 1/16"	4 15/16"	5 5/16"	5 9/16"	5 9/16"	5 3/16"	5"	4 3/16"	2 9/16"	1 13/16"	2 13/16"	2 15/16"	3"	2 13/16"	2 1/2"	2"	1 1/2"	13/16"	3/4"	1/8"
G1-5	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-5/16"	-5/16"	-1/2"	-5/8"	-5/8"	-9/16"	-3/8"	-3/8"	-3/16"	-1/16"	-3/16"	-1/2"	-11/16"	-13/16"	-1 1/16"	-1 3/16"	-1 3/16"	-1 1/16"	-3/4"	-3/4"	-7/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/4"	-5/8"	-5/8"	-1 1/16"	-1 7/16"	-1 1/2"	-1 3/8"	-1"	-1"	-9/16"	-3/16"	-3/8"	-15/16"	-1 5/16"	-1 1/2"	-2 1/16"	-2 5/16"	-2 5/16"	-2"	-1 7/16"	-1 7/16"	-13/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	2 3/4"	4 7/8"	4 15/16"	6 7/16"	7 5/16"	7 5/8"	7 5/16"	6 7/16"	6 5/16"	4 7/8"	2 3/4"	2 9/16"	4 9/16"	5 9/16"	5 7/8"	6 5/8"	6 11/16"	6 1/8"	5"	3 5/16"	3 1/4"	1 1/2"
	REQUIRED SHOP CAMBER	2 3/8"	3 15/16"	4"	4 7/8"	5 1/4"	5 1/2"	5 3/8"	5 1/16"	4 15/16"	4 1/8"	2 1/2"	2"	3 1/8"	3 9/16"	3 9/16"	3 1/2"	3 3/16"	2 5/8"	1 15/16"	1 1/8"	1 1/16"	1/4"
G1-6	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-7/16"	-7/16"	-11/16"	-15/16"	-1"	-7/8"	-11/16"	-9/16"	-3/8"	-1/8"	-1/8"	-1/4"	-7/16"	-1/2"	-11/16"	-13/16"	-13/16"	-11/16"	-1/2"	-1/2"	-5/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/16"	-15/16"	-7/8"	-1 9/16"	-2 1/16"	-2 1/4"	-2 1/16"	-1 9/16"	-1 3/8"	-7/8"	-3/8"	-3/16"	-9/16"	-7/8"	-1 1/16"	-1 7/16"	-1 11/16"	-1 3/4"	-1 1/2"	-1 1/16"	-1 1/8"	-5/8"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	3"	5 5/16"	5 3/16"	7"	8"	8 3/8"	8"	7"	6 9/16"	5 3/8"	3"	2 5/16"	4 1/8"	5"	5 5/16"	5 15/16"	6"	5 1/2"	4 7/16"	2 7/8"	3"	1 5/16"
	REQUIRED SHOP CAMBER	2 1/2"	3 15/16"	3 7/8"	4 3/4"	5"	5 1/8"	5 1/16"	4 3/4"	4 5/8"	4 1/8"	2 1/2"	2"	3 5/16"	3 11/16"	3 3/4"	3 13/16"	3 1/2"	2 15/16"	2 1/4"	1 5/16"	1 3/8"	3/8"
G1-8	DEFLECTION DUE TO WEIGHT OF STEEL	-1/4"	-9/16"	-1/2"	-7/8"	-1 1/16"	-1 1/8"	-1 1/16"	-13/16"	-3/4"	-1/2"	-3/16"	-1/16"	-1/8"	-1/4"	-1/4"	-3/8"	-7/16"	-7/16"	-3/8"	-5/16"	-5/16"	-3/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/2"	-1 1/4"	-1 1/8"	-2"	-2 9/16"	-2 3/4"	-2 1/2"	-1 15/16"	-1 13/16"	-1 3/16"	-1/2"	-1/8"	-7/16"	-11/16"	-13/16"	-1 1/8"	-1 5/16"	-1 5/16"	-1 1/8"	-3/4"	-7/8"	-7/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	3 1/4"	5 7/8"	5 1/2"	7 11/16"	8 3/4"	9 1/8"	8 3/4"	7 11/16"	7 7/16"	5 13/16"	3 1/4"	2 1/8"	3 3/4"	4 5/8"	4 13/16"	5 3/8"	5 1/2"	5"	4 1/16"	2 3/4"	3"	1 3/8"
	REQUIRED SHOP CAMBER	2 1/2"	4 1/16"	3 7/8"	4 13/16"	5 1/8"	5 1/4"	5 3/16"	4 15/16"	4 7/8"	4 1/8"	2 9/16"	1 15/16"	3 3/16"	3 11/16"	3 3/4"	3 7/8"	3 3/4"	3 1/4"	2 9/16"	1 11/16"	1 13/16"	3/4"
G1-9	DEFLECTION DUE TO WEIGHT OF STEEL	-5/16"	-11/16"	-9/16"	-1"	-1 1/4"	-1 5/16"	-1 1/4"	-15/16"	-7/8"	-5/8"	-1/4"	1/16"	0"	0"	-1/16"	-1/8"	-1/8"	-1/8"	-1/8"	-1/16"	-1/16"	-1/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-11/16"	-1 9/16"	-1 5/16"	-2 7/16"	-3 1/16"	-3 1/4"	-2 15/16"	-2 5/16"	-2 1/16"	-1 7/16"	-5/8"	-1/16"	-3/16"	-7/16"	-1/2"	-3/4"	-15/16"	-15/16"	-3/4"	-1/2"	-9/16"	-1/4"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	3 9/16"	6 3/8"	5 13/16"	8 3/8"	9 9/16"	10"	9 9/16"	8 3/8"	7 13/16"	6 3/8"	3 5/8"	1 7/8"	3 5/16"	4 1/8"	4 1/4"	4 3/4"	4 13/16"	4 3/8"	3 1/2"	2 5/16"	2 11/16"	1 1/8"
	REQUIRED SHOP CAMBER	2 9/16"	4 1/8"	3 15/16"	4 15/16"	5 1/4"	5 7/16"	5 3/8"	5 1/8"	4 7/8"	4 5/16"	2 3/4"	1 7/8"	3 1/8"	3 11/16"	3 11/16"	3 7/8"	3 3/4"	3 5/16"	2 5/8"	1 3/4"	2 1/16"	13/16"

NOTES:

1. *NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR VERTICAL CURVE ADJUSTMENT AND TOTAL REQUIRED SHOP CAMBER INDICATE VALUES BELOW THE CHORD LINE.*
2. *DEFLECTION AND ADJUSTMENTS FOR VERTICAL CURVES ARE GIVEN TO THE NEAREST $\frac{1}{16}$ INCH. THE ADJUSTMENT FOR HORIZONTAL CURVATURE IS ZERO AT ALL LOCATIONS.*
3. *FOR GENERAL NOTES, SEE SHEETS* 11 / 164 *THRU* 14 / 164.
4. *FOR FRAMING PLAN AND BEAM ELEVATION, SEE SHEETS* 60 / 164 *THRU* 63 / 164.

UNIT 2 - GIRDER DEFLECTION AND CAMBER - (2 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 83 | TOTAL 164
SHEET 1525 | TOTAL 2338

CUY-90-16.28 (CCG3A)

STRUCTURAL STEEL DEFLECTION AND CAMBER

		UNIT 2 - SPAN 9											UNIT 2 - SPAN 10										
	POINT	0.1	0.2	FS2-8	0.3	0.4	0.5	0.6	FS2-9	0.7	0.8	0.9	0.1	0.2	FS2-10	0.3	0.4	0.5	0.6	0.7	FS2-11	0.8	0.9
G1-1	DEFLECTION DUE TO WEIGHT OF STEEL	3/8"	5/8"	3/4"	13/16"	7/8"	7/8"	13/16"	13/16"	3/4"	5/8"	3/8"	-13/16"	-1 5/8"	-1 11/16"	-2 3/8"	-2 13/16"	-2 7/8"	-2 9/16"	-2"	-1 1/2"	-1 1/4"	-9/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	5/16"	1/2"	3/8"	3/8"	1/4"	1/4"	3/8"	7/16"	1/2"	9/16"	3/8"	-1 1/4"	-2 3/4"	-2 7/8"	-4 1/16"	-4 13/16"	-4 15/16"	-4 5/16"	-3 3/16"	-2 5/16"	-1 7/8"	-11/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-1/16"	-1/16"	-1/8"	-1/8"	-1/8"	-1/8"	-1/8"	-1/8"	-1/8"	-1/16"	-1/16"	1 7/16"	1 13/16"	2"	2 1/8"	2 3/8"	2 5/8"	2 3/4"	2 1/16"	1 7/8"	1 1/2"	15/16"
	REQUIRED SHOP CAMBER	5/8"	1 1/16"	1"	1 1/16"	1"	1"	1 1/16"	1 1/8"	1 1/8"	1 1/8"	11/16"	-5/8"	-2 9/16"	-2 9/16"	-4 5/16"	-5 1/4"	-5 3/16"	-4 1/8"	-3 1/8"	-1 15/16"	-1 5/8"	-5/16"
G1-3	DEFLECTION DUE TO WEIGHT OF STEEL	1/4"	7/16"	1/2"	9/16"	9/16"	5/8"	5/8"	5/8"	9/16"	1/2"	5/16"	-11/16"	-1 7/16"	-1 9/16"	-2 1/8"	-2 9/16"	-2 5/8"	-2 3/8"	-1 13/16"	-1 3/8"	-1 1/8"	-1/2"
	DEFLECTION DUE TO REMAINING DEAD LOAD	1/8"	1/4"	3/16"	3/16"	1/16"	1/8"	1/4"	5/16"	3/8"	7/16"	5/16"	-1 3/16"	-2 9/16"	-2 11/16"	-3 13/16"	-4 9/16"	-4 11/16"	-4 1/8"	-3 1/16"	-2 3/16"	-1 3/4"	-5/8"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-1/16"	-1/16"	-1/8"	-1/8"	-1/8"	-1/8"	-1/8"	-1/8"	-1/8"	-1/16"	-1/16"	1 1/16"	1 7/16"	1 9/16"	1 3/4"	1 15/16"	2 1/8"	2 1/4"	1 11/16"	1 9/16"	1 1/4"	13/16"
	REQUIRED SHOP CAMBER	5/16"	5/8"	9/16"	5/8"	1/2"	5/8"	3/4"	13/16"	13/16"	7/8"	9/16"	-13/16"	-2 9/16"	-2 11/16"	-4 3/16"	-5 3/16"	-5 3/16"	-4 1/4"	-3 3/16"	-2"	-1 5/8"	-5/16"
G1-4	DEFLECTION DUE TO WEIGHT OF STEEL	1/16"	1/4"	5/16"	5/16"	5/16"	3/8"	3/8"	7/16"	3/8"	3/8"	3/16"	-5/8"	-1 5/16"	-1 3/8"	-1 7/8"	-2 5/16"	-2 3/8"	-2 1/8"	-1 5/8"	-1 1/4"	-1"	-7/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/16"	0"	0"	-1/16"	0"	1/8"	3/16"	5/16"	3/8"	5/16"	-1 1/8"	-2 7/16"	-2 9/16"	-3 5/8"	-4 5/16"	-4 7/16"	-3 15/16"	-2 7/8"	-2 1/16"	-1 5/8"	-9/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-1/16"	-1/8"	-3/4"	-1/8"	-3/16"	-3/16"	-3/16"	-1/8"	-1/8"	-1/8"	-1/16"	5/8"	15/16"	1"	1 3/16"	1 3/8"	1 9/16"	1 5/8"	1 1/4"	1 3/16"	15/16"	9/16"
	REQUIRED SHOP CAMBER	0"	3/16"	-7/16"	3/16"	1/16"	3/16"	5/16"	1/2"	9/16"	5/8"	7/16"	-1 1/8"	-2 13/16"	-2 15/16"	-4 5/16"	-5 1/4"	-5 1/4"	-4 7/16"	-3 1/4"	-2 1/8"	-1 11/16"	-7/16"
G1-5	DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/16"	1/16"	1/16"	1/8"	1/8"	3/16"	1/4"	1/4"	1/4"	3/16"	-9/16"	-1 1/8"	-1 3/16"	-1 11/16"	-2 1/16"	-2 1/8"	-1 15/16"	-1 7/16"	-1 1/16"	-7/8"	-3/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/8"	-1/8"	-3/16"	-3/16"	-1/4"	-3/16"	0"	1/8"	3/16"	5/16"	1/4"	-1 1/16"	-2 1/4"	-2 3/8"	-3 7/16"	-4 1/8"	-4 1/4"	-3 3/4"	-2 3/4"	-1 15/16"	-1 9/16"	-9/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-1/16"	-1/8"	-3/16"	-3/16"	-3/16"	-3/16"	-3/16"	-3/16"	-3/16"	-1/8"	-1/16"	1/8"	7/16"	7/16"	11/16"	7/8"	1"	1"	7/8"	3/4"	11/16"	3/8"
	REQUIRED SHOP CAMBER	-3/16"	-3/16"	-5/16"	-5/16"	-5/16"	-1/4"	0"	3/16"	1/4"	7/16"	3/8"	-1 1/2"	-2 15/16"	-3 1/8"	-4 7/16"	-5 5/16"	-5 3/8"	-4 11/16"	-3 5/16"	-2 1/4"	-1 3/4"	-9/16"
G1-6	DEFLECTION DUE TO WEIGHT OF STEEL	-1/16"	-1/16"	-1/8"	-1/8"	-1/16"	-1/16"	0"	1/16"	1/16"	1/8"	1/8"	-7/16"	-1"	-1 1/16"	-1 1/2"	-1 13/16"	-1 7/8"	-1 11/16"	-1 5/16"	-15/16"	-3/4"	-5/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/4"	-5/16"	-3/8"	-3/8"	-7/16"	-5/16"	-1/8"	0"	1/16"	1/4"	3/16"	-1"	-2 1/8"	-2 1/4"	-3 1/4"	-3 15/16"	-4 1/16"	-3 9/16"	-2 9/16"	-1 7/8"	-1 7/16"	-1/2"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-1/8"	-3/16"	-3/16"	-3/16"	-1/4"	-1/4"	-1/4"	-1/4"	-3/16"	-1/8"	-1/16"	-3/8"	-3/16"	-3/16"	9/16"	11/16"	11/16"	11/16"	11/16"	1/16"	1/2"	1/4"
	REQUIRED SHOP CAMBER	-7/16"	-9/16"	-11/16"	-11/16"	-3/4"	-5/8"	-3/8"	-3/16"	-1/16"	1/4"	1/4"	-1 13/16"	-3 5/16"	-3 1/2"	-4 3/16"	-5 1/16"	-5 1/4"	-4 9/16"	-3 3/16"	-2 3/4"	-1 11/16"	-9/16"
G1-7	DEFLECTION DUE TO WEIGHT OF STEEL	-	-	-3/16"	-3/16"	-3/16"	-3/16"	-1/8"	-1/16"	0"	1/16"	1/16"	-3/8"	-7/8"	-7/8"	-1 1/4"	-1 9/16"	-1 5/8"	-1 1/2"	-1 1/8"	-13/16"	-5/8"	-1/4"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-	-	-7/16"	-1/2"	-1/2"	-7/16"	-1/4"	-1/8"	0"	1/8"	3/16"	-15/16"	-2 1/16"	-2 3/16"	-3 1/16"	-3 3/4"	-3 7/8"	-3 7/16"	-2 1/2"	-1 3/4"	-1 3/8"	-7/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-	-	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1 1/16"	-1 1/16"	-1 1/8"	-1"	-7/8"	-3/4"	-5/8"	-3/16"	-1/16"	-1/8"	-1/8"
	REQUIRED SHOP CAMBER	-	-	-11/16"	-3/4"	-3/4"	-11/16"	-7/16"	-1/4"	-1/16"	1/8"	3/16"	-2 3/8"	-4"	-4 3/16"	-5 5/16"	-6 3/16"	-6 1/4"	-5 9/16"	-3 13/16"	-2 5/8"	-2 1/8"	-13/16"
G1-8	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-1/4"	-5/16"	-5/16"	-5/16"	-5/16"	-1/4"	-3/16"	-1/8"	0"	0"	-5/16"	-11/16"	-3/4"	-1 1/16"	-1 5/16"	-1 3/8"	-1 1/4"	-15/16"	-11/16"	-9/16"	-3/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/4"	-7/16"	-9/16"	-9/16"	-5/8"	-9/16"	-3/8"	-1/4"	-1/8"	1/16"	1/8"	-7/8"	-1 15/16"	-2 1/16"	-2 15/16"	-3 9/16"	-3 11/16"	-3 5/16"	-2 3/8"	-1 5/8"	-1 5/16"	-7/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	-1 13/16"	-2"	-2 3/16"	-2 1/8"	-2 1/16"	-1 7/8"	-1 5/8"	-13/16"	-9/16"	-9/16"	-3/8"
	REQUIRED SHOP CAMBER	-3/8"	-11/16"	-7/8"	-7/8"	-15/16"	-7/8"	-5/8"	-7/16"	-1/4"	1/16"	1/8"	-3"	-4 5/8"	-5"	-6 1/8"	-6 15/16"	-6 15/16"	-6 3/16"	-4 1/8"	-2 7/8"	-2 7/16"	-1"
G1-9	DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	-5/16"	-7/16"	-7/16"	-1/2"	-1/2"	-3/8"	-5/16"	-1/4"	-1/8"	0"	-1/4"	-9/16"	-9/16"	-7/8"	-1 1/16"	-1 1/8"	-1 1/16"	-3/4"	-9/16"	-7/16"	-1/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/16"	-9/16"	-11/16"	-3/4"	-13/16"	-3/4"	-1/2"	-3/8"	-1/4"	0"	1/16"	-13/16"	-1 13/16"	-1 15/16"	-2 3/4"	-3 3/8"	-3 1/2"	-3 1/8"	-2 1/4"	-1 9/16"	-1 1/4"	-3/8"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	-2 3/8"	-2 5/8"	-2 7/8"	-2 3/4"	-2 11/16"	-2 1/2"	-2 3/16"	-1 1/8"	-3/4"	-13/16"	-9/16"
	REQUIRED SHOP CAMBER	-1/2"	-7/8"	-1 1/8"	-1 3/16"	-1 5/16"	-1 1/4"	-7/8"	-11/16"	-1/2"	-1/8"	1/16"	-3 7/16"	-5"	-5 3/8"	-6 3/8"	-7 1/8"	-7 1/8"	-6 3/8"	-4 1/8"	-2 7/8"	-2 1/2"	-1 1/16"

NOTES:

1. *NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR VERTICAL CURVE ADJUSTMENT AND TOTAL REQUIRED SHOP CAMBER INDICATE VALUES BELOW THE CHORD LINE.*
2. *DEFLECTION AND ADJUSTMENTS FOR VERTICAL CURVES ARE GIVEN TO THE NEAREST $\frac{1}{16}$ INCH. THE ADJUSTMENT FOR HORIZONTAL CURVATURE IS ZERO AT ALL LOCATIONS.*
3. *FOR GENERAL NOTES, SEE SHEETS* 11 / 164 *THRU* 14 / 164.
4. *FOR FRAMING PLAN AND BEAM ELEVATION, SEE SHEETS* 60 / 164 *THRU* 63 / 164.

UNIT 2 - GIRDER DEFLECTION AND CAMBER - (3 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 84 | TOTAL 164
SHEET 1526 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:09:37 PM USER: CRICCARDI
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STRUCTURAL STEEL DEFLECTION AND CAMBER

		UNIT 2 - SPAN 11									
	POINT	0.1	0.2	0.3	FS2-8	0.4	0.5	0.6	0.7	0.8	0.9
G1-1	DEFLECTION DUE TO WEIGHT OF STEEL	1/8"	1/16"	-1/16"	-1/8"	-1/4"	-1/2"	-9/16"	-5/8"	-1/2"	-1/4"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/16"	-11/16"	-1 7/16"	-1 3/4"	-2 1/4"	-2 7/8"	-3 1/8"	-2 7/8"	-2 1/4"	-1 1/4"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-13/16"	-1 5/8"	-1 7/16"	-1 3/8"	-1 1/4"	-1 1/16"	-7/8"	-11/16"	-7/16"	-1/4"
	REQUIRED SHOP CAMBER	-7/8"	-2 1/4"	-2 15/16"	-3 1/4"	-3 3/4"	-4 7/16"	-4 9/16"	-4 3/16"	-3 3/16"	-1 3/4"
G1-3	DEFLECTION DUE TO WEIGHT OF STEEL	1/16"	0"	-3/16"	-1/4"	-3/8"	-9/16"	-11/16"	-11/16"	-9/16"	-5/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/16"	-3/4"	-1 1/2"	-1 13/16"	-2 5/16"	-2 7/8"	-3 1/8"	-2 7/8"	-2 1/4"	-1 3/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-5/8"	-1 1/4"	-1 1/16"	-1 1/16"	-15/16"	-3/4"	-5/8"	-7/16"	-5/16"	-1/8"
	REQUIRED SHOP CAMBER	-3/4"	-2"	-2 3/4"	-3 1/8"	-3 5/8"	-4 3/16"	-4 7/16"	-4"	-3 1/8"	-1 5/8"
G1-4	DEFLECTION DUE TO WEIGHT OF STEEL	0"	-1/16"	-1/4"	-3/8"	-1/2"	-11/16"	-13/16"	-3/4"	-5/8"	-5/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/4"	-3/4"	-1 9/16"	-1 7/8"	-2 3/8"	-2 15/16"	-3 1/8"	-2 7/8"	-2 1/4"	-1 3/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-3/8"	-3/4"	-5/8"	-5/8"	-9/16"	-7/16"	-3/8"	-1/4"	-3/16"	-1/16"
	REQUIRED SHOP CAMBER	-5/8"	-1 9/16"	-2 7/16"	-2 7/8"	-3 7/16"	-4 1/16"	-4 5/16"	-3 7/8"	-3 1/16"	-1 9/16"
G1-5	DEFLECTION DUE TO WEIGHT OF STEEL	0"	-1/8"	-3/8"	-7/16"	-5/8"	-13/16"	-7/8"	-13/16"	-5/8"	-3/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-1/4"	-13/16"	-1 5/8"	-1 15/16"	-2 7/16"	-3"	-3 3/16"	-2 15/16"	-2 1/4"	-1 3/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	-1/8"	-1/4"	-3/16"	-3/16"	-3/16"	-1/8"	-1/8"	-1/16"	-1/16"	-1/16"
	REQUIRED SHOP CAMBER	-3/8"	-1 3/16"	-2 3/16"	-2 9/16"	-3 1/4"	-3 15/16"	-4 3/16"	-3 13/16"	-2 15/16"	-1 5/8"
G1-6	DEFLECTION DUE TO WEIGHT OF STEEL	-1/16"	-3/16"	-7/16"	-9/16"	-11/16"	-7/8"	-15/16"	-7/8"	-11/16"	-3/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/16"	-7/8"	-1 11/16"	-2"	-2 1/2"	-3 1/16"	-3 3/16"	-2 15/16"	-2 1/4"	-1 3/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	1/8"	5/16"	1/4"	1/4"	3/16"	3/16"	1/8"	1/8"	1/16"	1/16"
	REQUIRED SHOP CAMBER	-1/4"	-3/4"	-1 7/8"	-2 5/16"	-3"	-3 3/4"	-4"	-3 11/16"	-2 7/8"	-1 1/2"
G1-7	DEFLECTION DUE TO WEIGHT OF STEEL	-1/16"	-1/4"	-1/2"	-5/8"	-13/16"	-1"	-1 1/16"	-15/16"	-3/4"	-3/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-5/16"	-15/16"	-1 3/4"	-2 1/16"	-2 9/16"	-3 1/8"	-3 1/4"	-3"	-2 1/4"	-1 3/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	7/16"	13/16"	11/16"	11/16"	9/16"	1/2"	3/8"	5/16"	3/16"	1/8"
	REQUIRED SHOP CAMBER	1/16"	-3/8"	-1 9/16"	-2"	-2 13/16"	-3 5/8"	-3 15/16"	-3 5/8"	-2 13/16"	-1 7/16"
G1-8	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-5/16"	-5/8"	-11/16"	-7/8"	-1 1/16"	-1 1/8"	-1"	-3/4"	-3/8"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/8"	-1"	-1 13/16"	-2 1/8"	-2 5/8"	-3 3/16"	-3 3/8"	-3 1/16"	-2 5/16"	-1 3/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	11/16"	1 5/16"	1 1/8"	1 1/16"	1"	13/16"	5/8"	1/2"	5/16"	1/8"
	REQUIRED SHOP CAMBER	3/16"	0"	-1 5/16"	-1 3/4"	-2 1/2"	-3 7/16"	-3 7/8"	-3 9/16"	-2 3/4"	-1 7/16"
G1-9	DEFLECTION DUE TO WEIGHT OF STEEL	-1/8"	-3/8"	-11/16"	-13/16"	-15/16"	-1 1/8"	-1 3/16"	-1 1/16"	-13/16"	-7/16"
	DEFLECTION DUE TO REMAINING DEAD LOAD	-3/8"	-1 1/16"	-1 15/16"	-2 1/4"	-2 3/4"	-3 5/16"	-3 7/16"	-3 1/8"	-2 3/8"	-1 3/16"
	ADJUSTMENT FOR VERTICAL CURVE/SUPERELEVATION	15/16"	1 13/16"	1 9/16"	1 1/2"	1 3/8"	1 1/8"	7/8"	11/16"	7/16"	3/16"
	REQUIRED SHOP CAMBER	7/16"	3/8"	-1 1/16"	-1 9/16"	-2 5/16"	-3 5/16"	-3 3/4"	-3 1/2"	-2 3/4"	-1 7/16"

NOTES:

1. NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR VERTICAL CURVE ADJUSTMENT AND TOTAL REQUIRED SHOP CAMBER INDICATE VALUES BELOW THE CHORD LINE.
2. DEFLECTION AND ADJUSTMENTS FOR VERTICAL CURVES ARE GIVEN TO THE NEAREST $\frac{1}{16}$ INCH. THE ADJUSTMENT FOR HORIZONTAL CURVATURE IS ZERO AT ALL LOCATIONS.
3. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 14 / 164.
4. FOR FRAMING PLAN AND BEAM ELEVATION, SEE SHEETS 60 / 164 THRU 63 / 164.

UNIT 2 - GIRDER DEFLECTION AND CAMBER - (4 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 85 | TOTAL 164
SHEET 1527 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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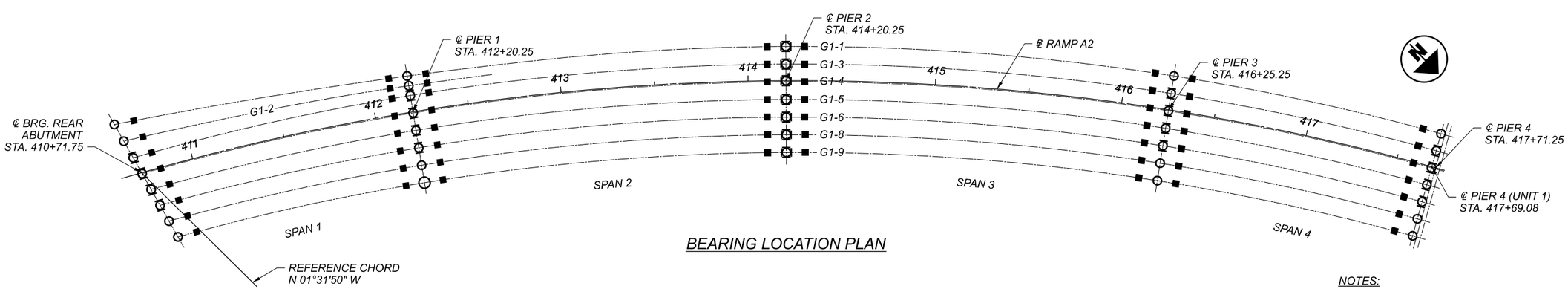
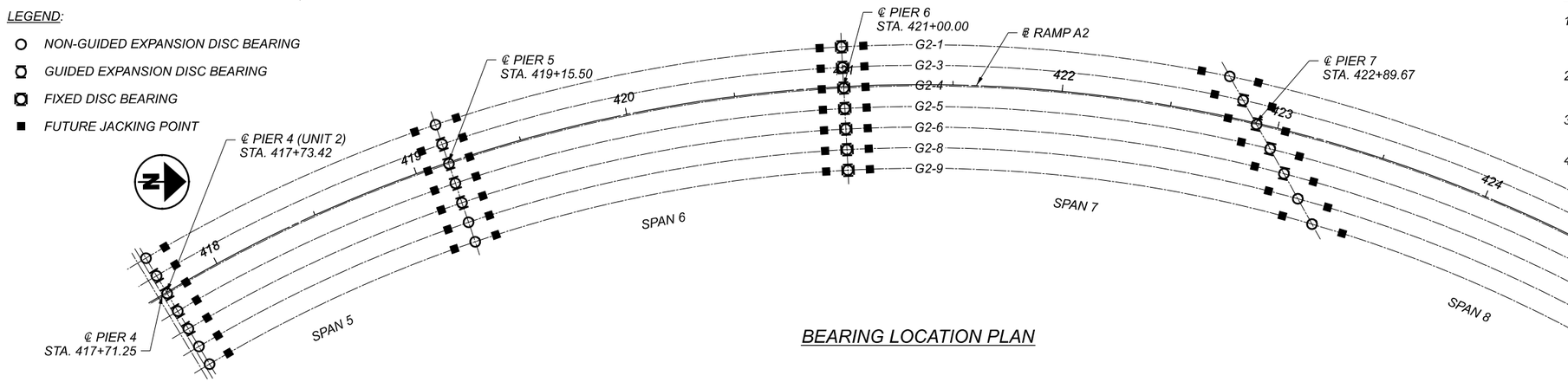
LOCATION	GIRDER		BEARING TYPE	MASONRY PLATE							SOLE PLATE			ANCHOR BOLTS		EST. HLMR DISC BEARING HEIGHT, 'H'	TOTAL BEARING HEIGHT, 'T'
	NO.	SKEW		'ML'	'MW'	'MT'	'A'	'B'	'C'	'D'	'SL'	'SW'	SLOPE	NO. OF BOLTS PER GIRDER	DIAMETER		
		(DEGREES)		(INCHES)	(INCHES)	(INCHES)	(SPA)	(INCHES)	(INCHES)	(INCHES)	(INCHES)	(INCHES)	(%)		(INCHES)	(INCHES)	(INCHES)
REAR ABUT	G1-1, G1-2, G1-8, G1-9	0.00	NON-GUIDED	22.00	40.00	1.25	1	16.00	16.00	34.00	22.00	24.00	3.37	4	1.25	3.95	5.33
REAR ABUT	G1-3, G1-4, G1-5, G1-6	0.00	GUIDED	24.00	40.00	1.25	1	18.00	18.00	34.00	27.50	24.00	3.37	4	1.50	5.45	6.83
PIER 1	G1-1, G1-2, G1-8, G1-9	0.00	NON-GUIDED	28.00	34.00	1.25	1	22.00	22.00	28.00	26.00	24.00	3.37	4	1.25	5.20	6.58
PIER 1	G1-3, G1-4, G1-5, G1-6	0.00	GUIDED	32.00	40.00	1.25	1	26.00	26.00	34.00	33.50	29.50	3.37	4	1.50	8.20	9.58
PIER 2	G1-1, G1-3, G1-4, G1-5, G1-6, G1-8, G1-9	0.00	FIXED	34.00	38.00	1.25	2	14.00	28.00	32.00	23.00	26.00	3.37	6	1.50	7.75	9.13
PIER 3	G1-1, G1-8, G1-9	0.00	NON-GUIDED	28.00	34.00	1.25	1	22.00	22.00	28.00	26.50	24.00	3.37	4	1.25	5.20	6.58
PIER 3	G1-3, G1-4, G1-5, G1-6	0.00	GUIDED	32.00	40.00	1.25	1	26.00	26.00	34.00	33.50	29.50	3.37	4	1.50	8.20	9.58
PIER 4 (UNIT 1)	G1-1, G1-8, G1-9	0.00	NON-GUIDED	22.00	34.00	1.25	1	16.00	16.00	28.00	22.00	24.00	3.37	4	1.25	3.95	5.33
PIER 4 (UNIT 1)	G1-3, G1-4, G1-5, G1-6	0.00	GUIDED	24.00	34.00	1.25	1	18.00	18.00	28.00	27.00	24.00	3.37	4	1.50	5.45	6.83
PIER 4 (UNIT 2)	G2-1, G2-8, G2-9	0.00	NON-GUIDED	22.00	34.00	1.25	1	16.00	16.00	28.00	31.50	24.00	3.37	4	1.25	3.95	5.33
PIER 4 (UNIT 2)	G2-3, G2-4, G2-5, G2-6	0.00	GUIDED	24.00	34.00	1.25	1	18.00	18.00	28.00	36.50	24.00	3.37	4	1.50	5.45	6.83
PIER 5	G2-1, G2-8, G2-9	0.00	NON-GUIDED	28.00	34.00	1.25	1	22.00	22.00	28.00	34.50	24.00	1.88	4	1.25	5.20	6.58
PIER 5	G2-3, G2-4, G2-5, G2-6	0.00	GUIDED	30.00	40.00	1.25	1	24.00	24.00	34.00	42.00	29.50	1.88	4	1.50	8.20	9.58
PIER 6	G2-1, G2-3, G2-4, G2-5, G2-6, G2-8, G2-9	0.00	FIXED	34.00	36.00	1.25	2	14.00	28.00	30.00	23.00	24.00	-0.49	6	1.50	7.75	9.13
PIER 7	G2-1	0.00	NON-GUIDED	30.00	34.00	1.25	1	24.00	24.00	28.00	29.00	26.00	-2.73	4	1.25	5.20	6.58
PIER 7	G2-3	0.00	GUIDED	32.00	44.00	1.25	1	26.00	26.00	38.00	39.50	31.00	-2.83	4	1.50	8.70	10.08
PIER 7	G2-4	0.00	GUIDED	32.00	44.00	1.25	1	26.00	26.00	38.00	39.50	31.00	-2.94	4	1.50	8.70	10.08
PIER 7	G2-5	0.00	GUIDED	32.00	44.00	1.25	1	26.00	26.00	38.00	39.50	31.00	-3.05	4	1.50	8.70	10.08
PIER 7	G2-6	0.00	GUIDED	32.00	44.00	1.25	1	26.00	26.00	38.00	39.50	31.00	-3.17	4	1.50	8.70	10.08
PIER 7	G2-8	0.00	NON-GUIDED	30.00	34.00	1.25	1	24.00	24.00	28.00	29.00	26.00	-3.29	4	1.25	5.20	6.58
PIER 7	G2-9	0.00	NON-GUIDED	30.00	34.00	1.25	1	24.00	24.00	28.00	29.00	26.00	-3.42	4	1.25	5.20	6.58
PIER 8	G2-1, G2-8, G2-9	0.00	NON-GUIDED	30.00	36.00	1.25	1	24.00	24.00	30.00	28.50	26.00	-5.00	4	1.25	5.95	7.33
PIER 8	G2-3, G2-4, G2-5, G2-6	0.00	GUIDED	34.00	40.00	1.25	1	28.00	28.00	34.00	33.00	29.50	-5.00	4	1.50	8.20	9.58



BEARING LOCATION PLAN

LEGEND:

- NON-GUIDED EXPANSION DISC BEARING
- GUIDED EXPANSION DISC BEARING
- FIXED DISC BEARING
- FUTURE JACKING POINT



BEARING LOCATION PLAN

NOTES:

1. FOR DETAILS ASSOCIATED WITH THE BEARING ASSEMBLIES, SEE SHEETS 88 / 164 THRU 90 / 164
2. FOR FUTURE JACKING NOTES, SEE SHEET 91 / 164
3. TOTAL BEARING HEIGHT INCLUDES 1/8" BEARING PAD.
4. SKEW ANGLE IS THE ANGLE FROM GUIDE BAR TO CENTERLINE OF GIRDER.

BEARING LOCATION PLAN - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER ABO | CHECKER RBK

REVIEWER JMS 06/22/22

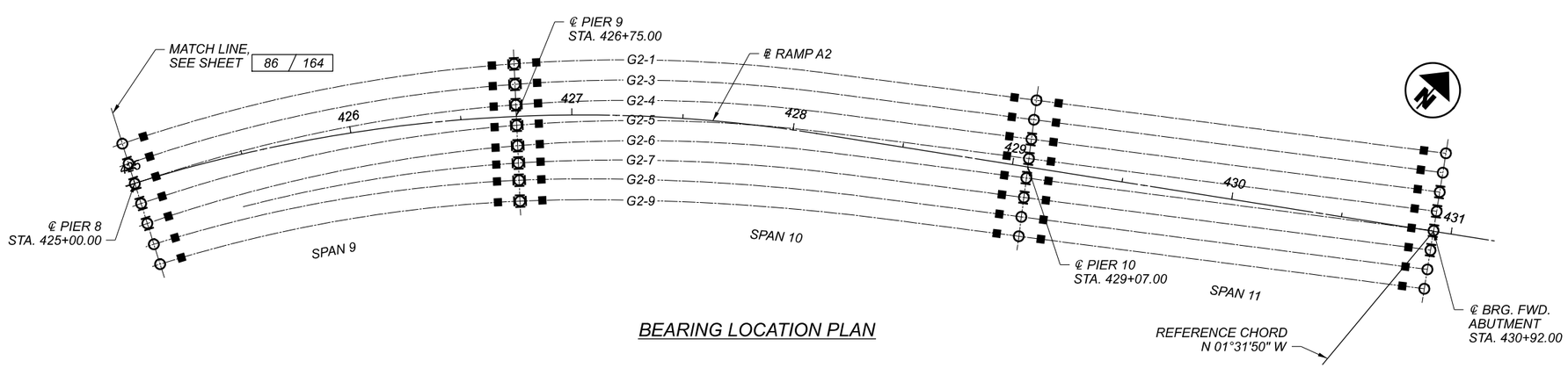
PROJECT ID 82382

SUBSET 86 | TOTAL 164

SHEET 1528 | TOTAL 2338

CUY-90-16.28 (CCG3A)

LOCATION	GIRDER		BEARING TYPE	MASONRY PLATE							SOLE PLATE			ANCHOR BOLTS		EST. HLMR DISC BEARING HEIGHT, 'H'	TOTAL BEARING HEIGHT, 'T'
	NO.	SKEW		'ML'	'MW'	'MT'	'A'	'B'	'C'	'D'	'SL'	'SW'	SLOPE	NO. OF BOLTS PER GIRDER	DIAMETER		
		(DEGREES)		(INCHES)	(INCHES)	(INCHES)	(SPA)	(INCHES)	(INCHES)	(INCHES)	(INCHES)	(INCHES)	(%)		(INCHES)	(INCHES)	(INCHES)
PIER 9	G2-1, G2-3, G2-4, G2-5, G2-6, G2-7, G2-8, G2-9	0.00	FIXED	36.00	36.00	1.25	2	15.00	30.00	30.00	24.00	24.00	-5.00	6	1.50	7.81	9.19
PIER 10	G2-1	0.00	NON-GUIDED	30.00	38.00	1.25	1	24.00	24.00	32.00	35.00	28.00	-5.00	4	1.25	5.95	7.33
PIER 10	G2-3, G2-8, G2-9	0.00	NON-GUIDED	30.00	38.00	1.25	1	24.00	24.00	32.00	35.00	24.00	-5.00	4	1.25	5.95	7.33
PIER 10	G2-4, G2-5, G2-6, G2-7	0.00	GUIDED	32.00	42.00	1.25	1	26.00	26.00	36.00	42.00	31.00	-5.00	4	1.50	8.70	10.08
FWD ABUT	G2-1, G2-3, G2-8, G2-9	0.00	NON-GUIDED	22.00	34.00	1.25	1	16.00	16.00	28.00	28.50	24.00	-5.00	4	1.25	3.95	5.33
FWD ABUT	G2-4, G2-5, G2-6, G2-7	0.00	GUIDED	24.00	34.00	1.25	1	18.00	18.00	28.00	34.00	24.00	-5.00	4	1.50	5.45	6.83



BEARING LOCATION PLAN

LEGEND:

- NON-GUIDED EXPANSION DISC BEARING
- GUIDED EXPANSION DISC BEARING
- FIXED DISC BEARING
- FUTURE JACKING POINT

NOTES:

1. FOR DETAILS ASSOCIATED WITH THE BEARING ASSEMBLIES, SEE SHEETS 88 / 164 THRU 90 / 164
2. FOR FUTURE JACKING NOTES, SEE SHEET 91 / 164
3. TOTAL BEARING HEIGHT INCLUDES ⅛" BEARING PAD.
4. SKEW ANGLE IS THE ANGLE FROM GUIDE BAR TO CENTERLINE OF GIRDER.

BEARING LOCATION PLAN - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
HDR
DESIGNER ABO | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 87 | TOTAL 164
SHEET 1529 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:09:55 PM USER: CRICCARDI
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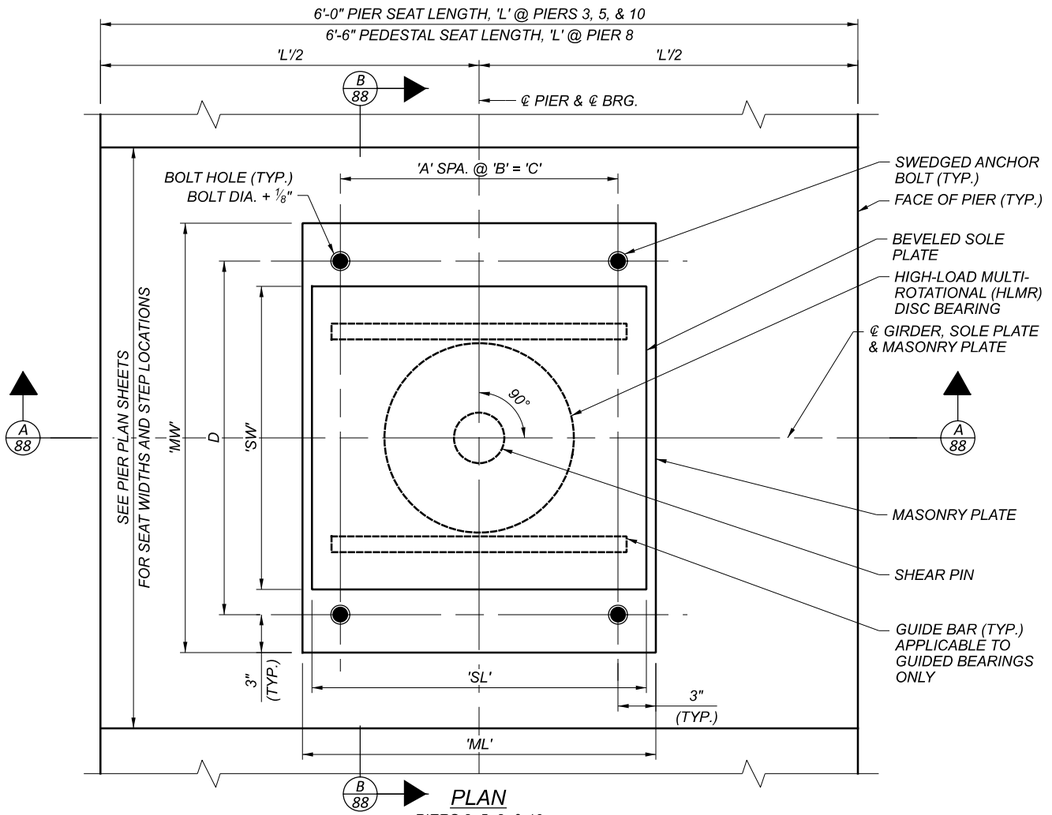

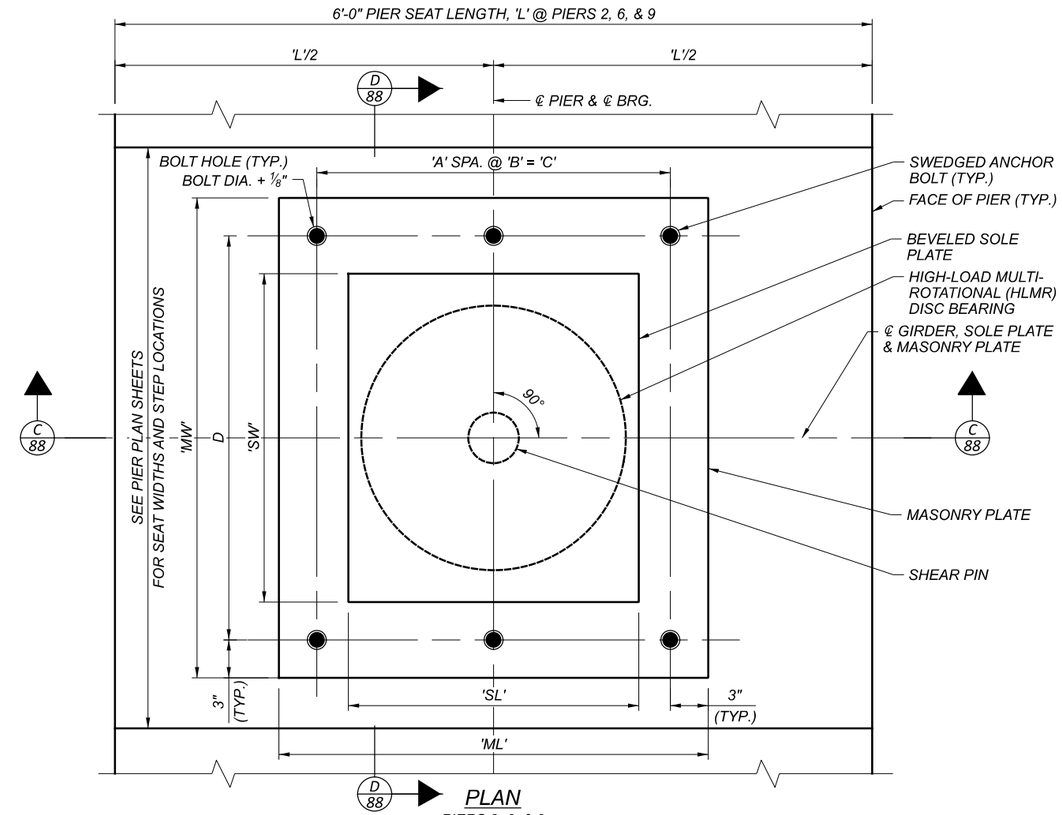

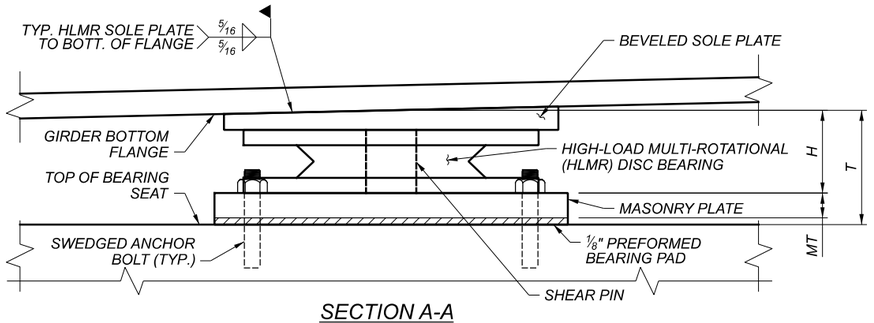

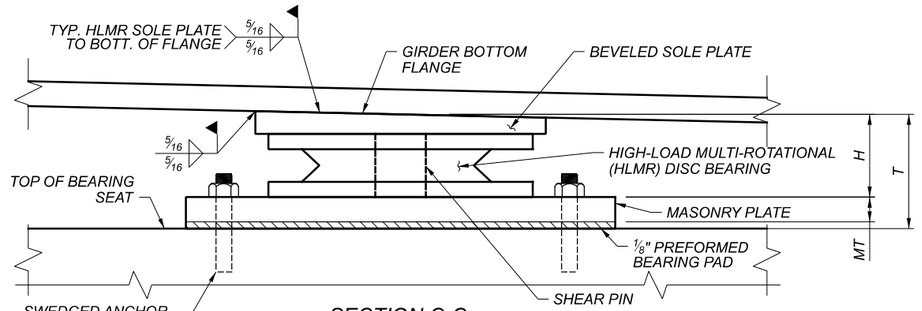

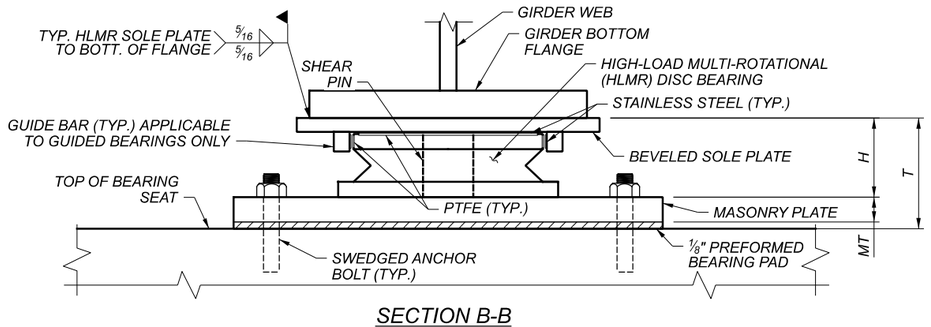

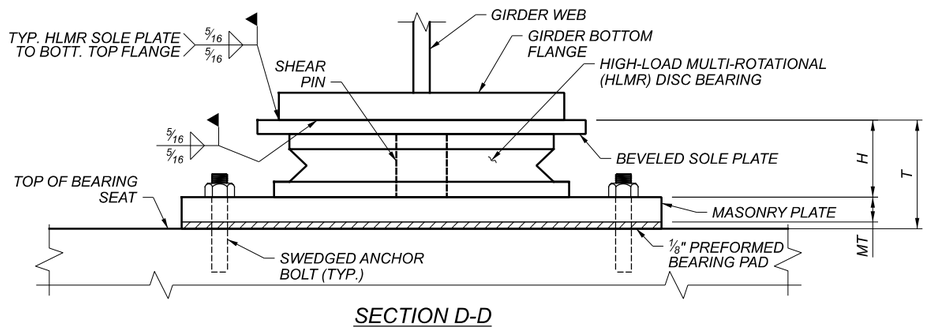

BEARING DETAILS - (1 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	ABO
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	88
TOTAL	164
SHEET	1530
TOTAL	2338

CUY-90-16.28 (CCG3A)

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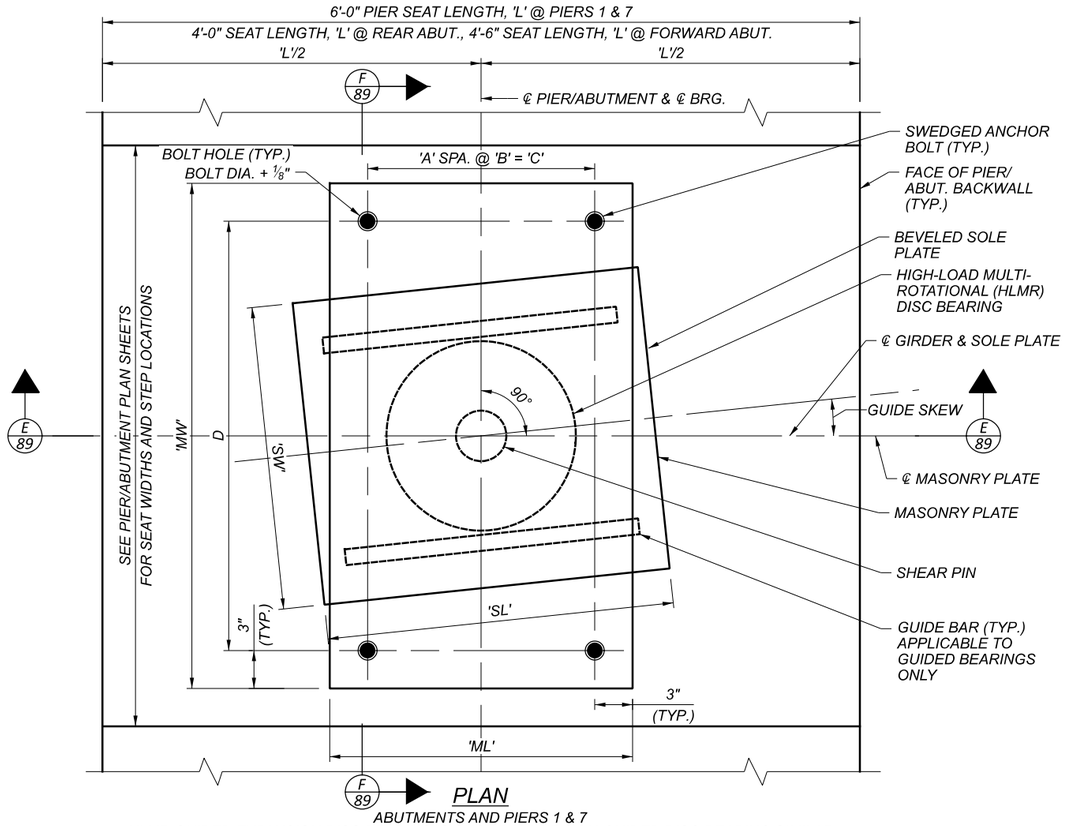
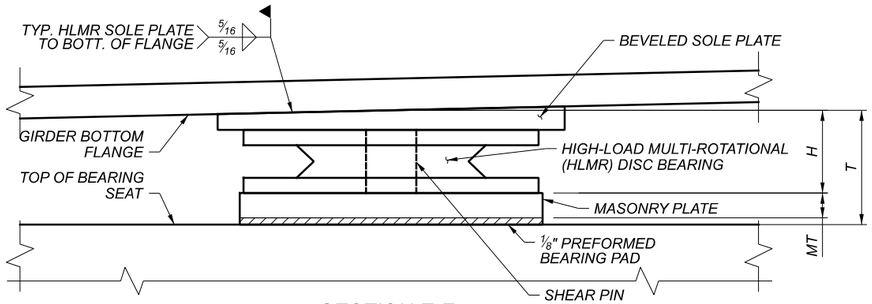


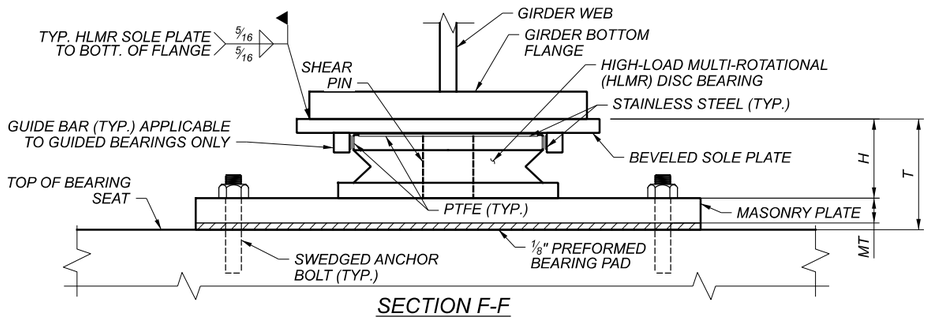
PLAN

ABUTMENTS AND PIERS 1 & 7
HLMR GUIDED EXPANSION DISC BEARING IS SHOWN, HLMR NON-GUIDED DISC BEARING SIMILAR



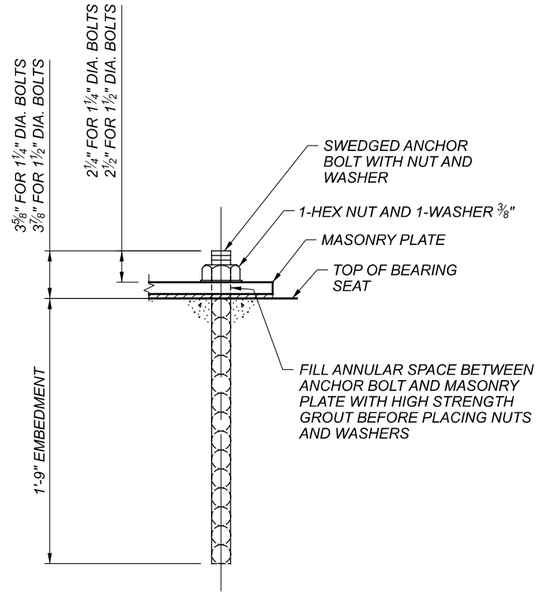
SECTION E-E

ANCHOR BOLTS NOT SHOWN FOR CLARITY



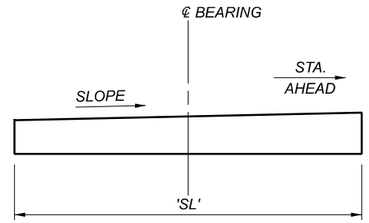
SECTION F-F

SECTION SHOWN FOR PIERS, ABUTMENTS SIMILAR



SWEDGED ANCHOR BOLT DETAIL

NOT TO SCALE



SOLE PLATE DETAIL

NOT TO SCALE

NOTES:

1. FOR INFORMATION ASSOCIATED WITH THE BEARING ASSEMBLIES SEE SHEETS 88 / 164 AND 90 / 164.
2. A POSITIVE (+) SOLE PLATE SLOPE INDICATES INCREASING THICKNESS AHEAD STATION.
3. TOTAL BEARING HEIGHT, 'T' IS MEASURED FROM BOTTOM OF FLANGE TO TOP OF BEARING SEAT AT CENTERLINE OF BEARING.
4. EXERCISE CAUTION WHEN WELDING NEAR THE DISC BEARING PADS IN CONTACT WITH THE STEEL. WELD IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS TO MAINTAIN A SAFE TEMPERATURE SO AS NOT TO DAMAGE THE DISC BEARINGS. ANY DAMAGE DUE TO WELDING WILL BE CAUSE FOR REJECTION.
5. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION OF THE GIRDERS AND INCLUDED WITH PAYMENT FOR ITEM 869 - HIGH LOAD MULTI-ROTATIONAL (HLMR) BEARINGS, AS PER PLAN.

BEARING DETAILS - (2 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	ABO
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	89
TOTAL	164
SHEET	1531
TOTAL	2338

CUY-90-16.28 (CCG3A)

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DISC BEARING DATA TABLE

LOCATION	GIRDER NO.	BEARING TYPE	MAXIMUM DESIGN LOADS (KIPS)					DESIGN MOVEMENTS (INCHES) PARALLEL TO CL GIRDER		DESIGN ROTATION (RADIANS)	DESIGN COEFFICIENT OF FRICTION
			STRENGTH LIMIT STATE		SERVICE LIMIT STATE						
			TOTAL VERTICAL LOAD	TOTAL HORIZONTAL LOAD	TOTAL VERTICAL LOAD	VERTICAL DEAD LOAD	TOTAL HORIZONTAL LOAD	CONTRACTION	EXPANSION		
REAR ABUT	G1-1, G1-2, G1-8, G1-9	NON-GUIDED	355	--	280	140	--	4.18	3.35	0.0117	0.06
REAR ABUT	G1-3, G1-4, G1-5, G1-6	GUIDED	321	60	250	120	11	4.24	3.35	0.0102	0.06
PIER 1	G1-1, G1-2, G1-8, G1-9	NON-GUIDED	1040	--	810	470	--	2.97	2.47	0.0094	0.06
PIER 1	G1-3, G1-4, G1-5, G1-6	GUIDED	899	200	680	450	19	2.91	2.42	0.0086	0.06
PIER 2	G1-1, G1-3, G1-4, G1-5, G1-6, G1-8, G1-9	FIXED	1159	410	900	540	50	--	--	0.0106	--
PIER 3	G1-1, G1-8, G1-9	NON-GUIDED	1023	--	780	470	--	2.57	3.02	0.0102	0.06
PIER 3	G1-3, G1-4, G1-5, G1-6	GUIDED	1098	200	840	510	29	2.51	2.96	0.0093	0.06
PIER 4 (UNIT 1)	G1-1, G1-8, G1-9	NON-GUIDED	377	--	290	130	--	3.28	4.06	0.0114	0.06
PIER 4 (UNIT 1)	G1-3, G1-4, G1-5, G1-6	GUIDED	309	50	240	120	7	3.24	4.05	0.0102	0.06
PIER 4 (UNIT 2)	G2-1, G2-8, G2-9	NON-GUIDED	404	--	310	140	--	8.75	7.13	0.0121	0.06
PIER 4 (UNIT 2)	G2-3, G2-4, G2-5, G2-6	GUIDED	326	50	250	120	11	8.66	7.04	0.0109	0.06
PIER 5	G2-1, G2-8, G2-9	NON-GUIDED	1030	--	800	460	--	7.10	5.80	0.0099	0.06
PIER 5	G2-3, G2-4, G2-5, G2-6	GUIDED	934	190	720	470	34	7.03	5.71	0.0090	0.06
PIER 6	G2-1, G2-3, G2-4, G2-5, G2-6, G2-8, G2-9	FIXED	1165	405	890	540	84	--	--	0.0113	--
PIER 7	G2-1, G2-8, G2-9	NON-GUIDED	1118	--	860	520	--	4.49	3.74	0.0148	0.06
PIER 7	G2-3, G2-4, G2-5, G2-6	GUIDED	1338	225	1030	670	24	4.30	3.62	0.0127	0.06
PIER 8	G2-1, G2-8, G2-9	NON-GUIDED	1450	--	1110	650	--	2.59	2.44	0.0128	0.06
PIER 8	G2-3, G2-4, G2-5, G2-6	GUIDED	915	180	700	430	50	2.50	2.36	0.0113	0.06
PIER 9	G2-1, G2-3, G2-4, G2-5, G2-6, G2-7, G2-8, G2-9	FIXED	1128	455	870	530	76	--	--	0.0131	--
PIER 10	G2-1, G2-3, G2-8, G2-9	NON-GUIDED	1296	--	1020	640	--	4.85	5.90	0.0108	0.06
PIER 10	G2-4, G2-5, G2-6, G2-7	GUIDED	1054	285	810	570	38	4.68	5.77	0.0091	0.06
FWD ABUT	G2-1, G2-3, G2-8, G2-9	NON-GUIDED	431	--	330	160	--	5.92	7.43	0.0137	0.06
FWD ABUT	G2-4, G2-5, G2-6, G2-7	GUIDED	350	70	270	140	13	5.75	7.30	0.0112	0.06

NOTES:

1. FOR INFORMATION AND DETAILS ASSOCIATED WITH THE BEARING ASSEMBLIES, SEE SHEETS 86 / 164 THRU 89 / 164 .
2. DISC BEARINGS SHALL BE DESIGNED, FABRICATED, TESTED AND INSTALLED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 869, CHAPTER 14 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND CHAPTER 18 OF THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS. THE SHOP DRAWINGS SHALL BE SUBMITTED SHOWING MANUFACTURER, MATERIALS, AND DIMENSIONS OF ALL COMPONENTS OF THE BEARING ASSEMBLY TO THE ENGINEER FOR APPROVAL. THE MANUFACTURER SHALL SUBMIT CERTIFIED COPIES OF TEST REPORTS TO THE ENGINEER FOR REVIEW.
3. HIGH LOAD MULTI-ROTATIONAL BEARINGS SHALL BE DISC TYPE. POT BEARINGS ARE NOT PERMITTED. BEARING ASSEMBLIES SHOWN ARE SCHEMATIC.
4. ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 105. NUTS SHALL CONFORM TO ASTM A563. WASHERS SHALL CONFORM TO ASTM F436. MASONRY PLATE SHALL CONFORM TO ASTM A709, GRADE 36 OR GRADE 50.
5. BEARINGS SHALL BE DESIGNED AND DETAILED SUCH THAT THE BEARING ASSEMBLY CAN BE REMOVED FOR REPLACEMENT OR REPAIR.
6. MARK THE THICKER EDGE OF THE SOLE PLATE AS SUCH FOR THE PURPOSE OF FIELD IDENTIFICATION. PLACE MARK ON THE EDGE OF THE SOLE PLATE SO THAT IT WILL BE VISIBLE AFTER BEARING INSTALLATION.
7. MARK EACH BEARING WITH THE NAME OF THE MANUFACTURER AND TYPE OR MODEL NUMBER. PLACE THE IDENTIFICATION MARK IN A PERMANENT MANNER AND LOCATION SO THAT IT IS VISIBLE AFTER ERECTION.
8. THE MANUFACTURER SHALL WELD OR PRESS FIT THE BEARING PLATE TO THE MASONRY PLATE TO ENSURE FULL LATERAL CAPACITY CAN BE TAKEN BY THE BEARING.
9. GUIDED AND NON-GUIDED BEARINGS MAY BE REQUIRED TO BE FIXED TEMPORARILY DURING ERECTION OF SUPERSTRUCTURE. THE CONTRACTOR SHALL DESIGN TEMPORARY FIXING DEVICES AND SUBMIT DETAILS FOR REVIEW BY THE ENGINEER.
10. TACK WELD OR SECURELY CLAMP THE BEVELED LOAD PLATE TO THE GIRDER BOTTOM FLANGE DURING DECK CASTING. AFTER A MINIMUM OF SEVEN DAYS AFTER DECK CASTING IS COMPLETE, THE BEARING SHALL BE RESET. THE BEARING RE-SETTING SHALL CENTER THE DISC (ACCOUNTING FOR SETTING TEMPERATURE) ON THE SOLE PLATE PRIOR TO COMPLETING THE BOTTOM FLANGE TO BEVELED LOAD PLATE WELD.
11. THE BEARING PROVIDER IS RESPONSIBLE FOR DESIGN AND SUPPLY OF MASONRY PLATE, LOWER BEARING PLATE, ELASTOMERIC DISC, UPPER BEARING PLATE, SOLE PLATE AND GUIDE BARS, ANY AND ALL PTFE AND STAINLESS STEEL SLIDING SURFACES, AND ANY OTHER REQUIRED COMPONENTS OF THE BEARING ASSEMBLY.
12. THE MINIMUM THICKNESS OF EACH BEARING PLATE AND SOLE PLATE SHALL BE AS REQUIRED BY DESIGN BUT MUST BE AT LEAST ¾".
13. ROTATION VALUES IN THE TABLE INCLUDE AN ALLOWANCE OF 0.005 RADIANS FOR UNCERTAINTIES.
14. THE PIER AND ABUTMENT BEAM SEAT ELEVATIONS ARE BASED ON BEARING HEIGHTS PROVIDED IN THE TABLE SHOWN. IF THE CONTRACTOR'S SELECTED BEARING MANUFACTURER HAS A DESIGN THAT DOES NOT CONFORM TO THE HEIGHTS PROVIDED IN THE TABLE, ADJUST THE BEARING SEAT ELEVATIONS AT NO ADDITIONAL COST TO THE STATE. ADJUST THE LOCATION OF REINFORCING STEEL HORIZONTALLY AS NECESSARY TO AVOID INTERFERENCE WITH THE BEARING ANCHOR BOLTS. MAINTAIN THE MINIMUM CONCRETE COVER AND MINIMUM SPACING REQUIRED BY THE PROJECT PLANS. IF THE REINFORCING STEEL CANNOT BE MOVED TO PROVIDE THE REQUIRED POSITION FOR THE ANCHOR BOLTS, THE CONTRACTOR'S BEARING MANUFACTURER SHALL RE-DESIGN THE BEARINGS TO ACCOMMODATE AN ACCEPTABLE ANCHOR BOLT CONFIGURATION.
15. BEARINGS ARE TO BE SET BY USE OF A STEEL TEMPLATE WITH A MINIMUM THICKNESS OF ¼-IN.

BEARING DETAILS - (3 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER ABO | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 90 | TOTAL 164
SHEET 1532 | TOTAL 2338

CUY-90-16.28 (CCG3A)
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MAXIMUM JACKING LOAD TABLE (TONS)							
LOCATION	**GIRDER NO.**	**BEARING TYPE**	**DL**	**JDL**	**LL**	**JLL**	**TOTAL**
REAR ABUT	G1-1, G1-2, G1-8, G1-9	NON-GUIDED	67	87	55	96	184
REAR ABUT	G1-3, G1-4, G1-5, G1-6	GUIDED	59	77	48	84	161
PIER 1	G1-1, G1-2, G1-8, G1-9	NON-GUIDED	232	301	120	209	511
PIER 1	G1-3, G1-4, G1-5, G1-6	GUIDED	222	289	90	158	446
PIER 2	G1-1, G1-3, G1-4, G1-5, G1-6, G1-8, G1-9	FIXED	266	346	129	226	572
PIER 3	G1-1, G1-8, G1-9	NON-GUIDED	232	302	117	205	507
PIER 3	G1-3, G1-4, G1-5, G1-6	GUIDED	255	331	123	214	545
PIER 4 (UNIT 1)	G1-1, G1-8, G1-9	NON-GUIDED	62	80	60	105	186
PIER 4 (UNIT 1)	G1-3, G1-4, G1-5, G1-6	GUIDED	56	73	47	83	156
PIER 4 (UNIT 2)	G2-1, G2-8, G2-9	NON-GUIDED	66	86	65	114	199
PIER 4 (UNIT 2)	G2-3, G2-4, G2-5, G2-6	GUIDED	58	76	50	88	163
PIER 5	G2-1, G2-8, G2-9	NON-GUIDED	228	297	120	210	507
PIER 5	G2-3, G2-4, G2-5, G2-6	GUIDED	232	301	100	176	477
PIER 6	G2-1, G2-3, G2-4, G2-5, G2-6, G2-8, G2-9	FIXED	266	346	136	237	583
PIER 7	G2-1, G2-8, G2-9	NON-GUIDED	257	335	143	251	586
PIER 7	G2-3, G2-4, G2-5, G2-6	GUIDED	330	429	136	238	667
PIER 8	G2-1, G2-8, G2-9	NON-GUIDED	325	422	170	298	720
PIER 8	G2-3, G2-4, G2-5, G2-6	GUIDED	214	278	102	178	456
PIER 9	G2-1, G2-3, G2-4, G2-5, G2-6, G2-7, G2-8, G2-9	FIXED	262	340	124	218	558
PIER 10	G2-1, G2-3, G2-8, G2-9	NON-GUIDED	319	415	128	223	638
PIER 10	G2-4, G2-5, G2-6, G2-7	GUIDED	283	367	90	158	525
FWD ABUT	G2-1, G2-3, G2-8, G2-9	NON-GUIDED	75	98	66	116	214
FWD ABUT	G2-4, G2-5, G2-6, G2-7	GUIDED	67	87	50	87	174

JACKING LOAD NOTES:

JDL = 1.30DL
JLL = 1.75LL

WHERE:
DL DENOTES DEAD LOAD REACTIONS AT BEARING
JDL DENOTES JACKING DESIGN DEAD LOAD REACTIONS AT BEARING
LL DENOTES LIVE LOAD + IM REACTIONS AT BEARING
JLL DENOTES JACKING DESIGN LIVE LOAD + IM REACTIONS AT BEARING
TOTAL DENOTES JDL + JLL

LOADS SHOWN ARE PER BEARING AND IN UNITS OF TONS.

FUTURE JACKING NOTES:

1. *SUBMIT THE PROPOSED JACKING AND/OR BEARING REPLACEMENT PROCEDURE TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF ANY JACKING OPERATIONS.*

2. *JACK THE SUPERSTRUCTURE ONLY AT LOCATIONS SHOWN ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING THE JACKS AND JACKING PROCEDURE, INCLUDING, BUT NOT LIMITED TO, CHECKING CONCRETE BEARING STRESSES, STABILITY, AND GIRDER AND DETAIL STRESSES. FOR LOADS, SEE MAXIMUM JACKING LOAD TABLE. NOTE THAT THE LOADS GIVEN ARE THOSE AT THE BEARINGS, NOT NECESSARILY THE JACKS. ANALYSIS MAY BE REQUIRED TO DETERMINE SOME JACKING LOADS.*

3. *JACK EACH GIRDER AT A GIVEN SUBSTRUCTURE LOCATION SIMULTANEOUSLY AND WITH THE SAME DISPLACEMENT AND RATE OF DISPLACEMENT. PROVIDE HYDRAULIC REGULATING DEVICES AS REQUIRED.*

4. *CENTER THE JACKS ON THE CENTERLINE OF THE GIRDER WEBS AND THE JACKING STIFFENER PLATES OR AS DETAILED IN THE JACKING PROCEDURE SUBMITTED TO THE DEPARTMENT.*

5. *ACCOUNT FOR ANY THERMAL MOVEMENTS AND ANY HORIZONTAL FORCES THAT MAY BE ENCOUNTERED DURING THE PERIOD WHEN THE SUPERSTRUCTURE IS BEING JACKED OR IS SHORED ON TEMPORARY SUPPORTS.*

6. *IF TRAFFIC IS PERMITTED ON THE BRIDGE DURING JACKING, ACCOUNT FOR THE EFFECTS OF VIBRATIONS DUE TO TRAFFIC ON THE BRIDGE AND ALSO NEAR THE SUBSTRUCTURE UNIT ON WHICH JACKING IS TAKING PLACE OR WHILE THE SUPERSTRUCTURE IS BEING SHORED ON TEMPORARY SUPPORTS.*

7. *WHEN JACKING AT EXPANSION JOINTS, REMOVE THE RAILING COVER PLATES TO PREVENT DAMAGE TO THE JOINT.*

8. *DO NOT DAMAGE THE SUPERSTRUCTURE OR SUBSTRUCTURE WHEN JACKING AND REPLACING THE BEARINGS.*

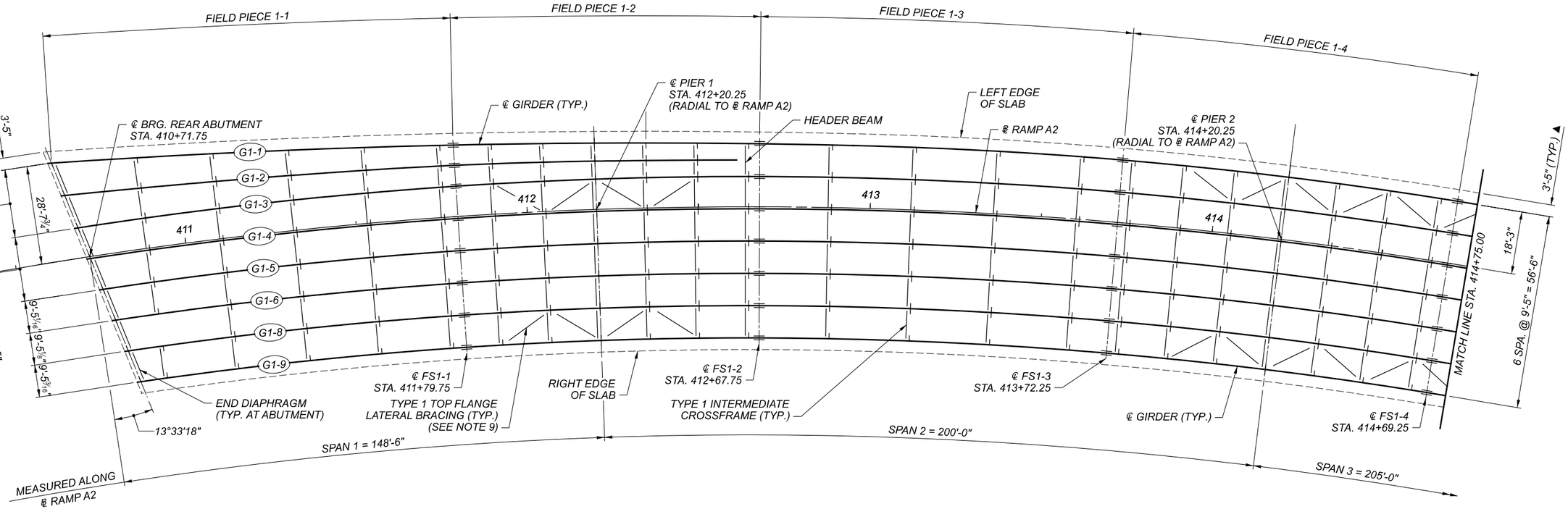
9. *THE MAXIMUM ALLOWABLE JACKING DISPLACEMENT OF THE SUPERSTRUCTURE IS ONE INCH (1") VERTICAL.*

10. *PROVIDE RESTRAINT AGAINST TRANSVERSE WIND LOADING DURING JACKING OPERATIONS.*

BEARING DETAILS - (4 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
HDR
DESIGNER ABO | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 91 | TOTAL 164
SHEET 1533 | TOTAL 2338

CUY-90-16.28 (CCG3A)



LEGEND:

(#) = GIRDER NUMBER

UNIT 1 ERECTION PLAN

CONCEPTUAL ERECTION SEQUENCE

ERECTION PROCEEDS FROM WEST TO EAST AND AS FOLLOWS:

1. THE FIRST GIRDERS ERECTED IN ALL SPANS ARE ASSUMED TO BE A TANDEM GIRDER PAIR WITH ALL CROSSFRAMES ATTACHED AND TOP FLANGE LATERAL BRACING ATTACHED. IT IS ASSUMED THAT GIRDERS ARE PLACED IN UNIT 1 FROM THE RIGHT SIDE OF THE BRIDGE TO THE LEFT SIDE OF THE BRIDGE.
2. SET ALL BEARINGS AT REAR ABUTMENT AND PIER 1.
3. PLACE FIELD PIECE 1-1 AND HOLD WITH CRANE.
4. PLACE FIELD PIECE 1-2 AND SPLICE WITH FIELD PIECE 1-1.
5. ERECT FIELD PIECE 1-1 AND FIELD PIECE 1-2 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 2.
6. SET ALL BEARINGS AT PIER 2.
7. PLACE FIELD PIECE 1-3 AND SPLICE WITH FIELD PIECE 1-2. HOLD FIELD PIECE 1-3 WITH CRANE.
8. PLACE FIELD PIECE 1-4 AND SPLICE WITH FIELD PIECE 1-3.
9. ERECT FIELD PIECE 1-3 AND FIELD PIECE 1-4 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 3.

NOTES:

1. THE CONCEPTUAL ERECTION SEQUENCE IS A REPRESENTATION OF ONE POTENTIAL ERECTION SEQUENCE AND IS BASED ON THE USE OF TWO CRANES. ALL INTERMEDIATE STAGES OF ERECTION, TEMPORARY RESTRAINING DEVICES, TEMPORARY BRACING, COMPRESSION FLANGE STIFFENING TRUSS, CRANE LOCATIONS, ETC. THAT MAY BE NECESSARY, ARE NOT SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF PARTIAL AND COMPLETE GIRDERS THROUGHOUT THE ERECTION PROCESS. THE CONTRACTOR'S ATTENTION IS DIRECTED TO CMS 513.26 FOR THE REQUIREMENTS FOR STABILITY OF STEEL GIRDERS DURING SHIPPING AND ERECTION AND THE SUBMITTAL REQUIREMENTS OF CMS 501.05.B.4.
2. THE ERECTION METHOD USED BY THE CONTRACTOR SHALL BE DOCUMENTED ON THE ERECTION DRAWINGS WITH ALL SUPPORTING STABILITY CALCULATIONS SUBMITTED IN ACCORDANCE WITH CMS 501 AND 513. THE CONTRACTOR MAY SUBMIT AN ALTERNATE MEANS OF ERECTION FROM THE CONCEPT SHOWN IN THE PLANS AND SHALL REFERENCE THE FHWA NHI-15-044 PUBLICATION FOR STRUCTURAL STABILITY IN BRIDGE CONSTRUCTION.
3. IF A FIELD SPLICE IS INCLUDED IN LIFT LENGTH, BOLT THE GIRDER SECTIONS TOGETHER ON THE GROUND BEFORE LIFTING IN PLACE. INSTALL ONE HUNDRED PERCENT (100%) OF THE HOLES WITH COMPLETELY TIGHTENED BOLTS.
4. IF TWO GIRDER LINES ARE TO BE PLACED SIMULTANEOUSLY, INSTALL ALL CROSSFRAMES BETWEEN THE TWO GIRDERS AND SNUG TIGHT THE BOLTS ON THE GROUND BEFORE LIFTING AND PLACING THE PAIR OF GIRDERS.
5. IF A SINGLE GIRDER LINE IS PLACED, DO NOT RELEASE THE GIRDER FROM THE LIFTING APPARATUS UNTIL ALL CROSSFRAMES IN THE ADJACENT BAY HAVE BEEN INSTALLED WITH BOLTS SNUG TIGHT.
6. WIND LOADING FOR THIS ERECTION CONCEPT IS BASED ON THE AASHTO GUIDE SPECIFICATIONS FOR WIND LOADS ON BRIDGES DURING CONSTRUCTION. A 115 MPH WIND SPEED AND WIND EXPOSURE CATEGORY C WAS ASSUMED. THE MAXIMUM WIND SPEED IS REDUCED TO 45 MPH WHEN ONLY TWO GIRDERS ARE ERECTED IN ANY SPAN.
7. SINGLE GIRDER LINES MAY REQUIRE TEMPORARY BRACING OR HOLD CRANES.
8. SEVENTY FIVE PERCENT (75%) OF THE BOLTS IN THE FIELD SPLICE MUST BE INSTALLED BEFORE ALLOWING TRAFFIC TO PASS BENEATH OR ADJACENT TO THE STRUCTURE PER CMS 513.26.
9. UNLESS OTHERWISE NOTED, PERMANENTLY FASTEN ALL CROSSFRAME, FIELD SPLICE, AND TOP FLANGE LATERAL BRACING CONNECTIONS PER CMS 513.26 BEFORE POURING THE DECK CONCRETE.
10. ALL CROSSFRAMES MUST BE IN PLACE WITH ALL BOLTS INSTALLED BEFORE ALLOWING TRAFFIC TO PASS BENEATH OR ADJACENT TO THE STRUCTURE.
11. TEMPORARILY RESTRAIN TRANSVERSE AND LONGITUDINAL MOVEMENT AT ALL NON-GUIDED BEARINGS UNTIL MOVEMENT RESTRAINT IS PROVIDED BY INSTALLATION OF FIXED BEARINGS. TEMPORARILY RESTRAIN LONGITUDINAL MOVEMENT AT ALL GUIDED BEARINGS UNTIL MOVEMENT RESTRAINT IS PROVIDED BY INSTALLATION OF FIXED BEARINGS. FIXED BEARINGS ARE NOT CONSIDERED TO BE FULLY INSTALLED UNTIL ANCHOR BOLTS HAVE BEEN GROUTED AND SOLE PLATES ARE WELDED TO THE BOTTOM FLANGE.
12. TEMPORARY BEARING RESTRAINTS MUST REMAIN IN PLACE UNTIL BEARING ANCHOR BOLTS ARE GROUTED AND SOLE PLATES ARE WELDED TO THE GIRDER BOTTOM FLANGE.

ERECTION PLAN AND DETAILS - (1 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER MKO | CHECKER JK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 92 | TOTAL 164
SHEET 1534 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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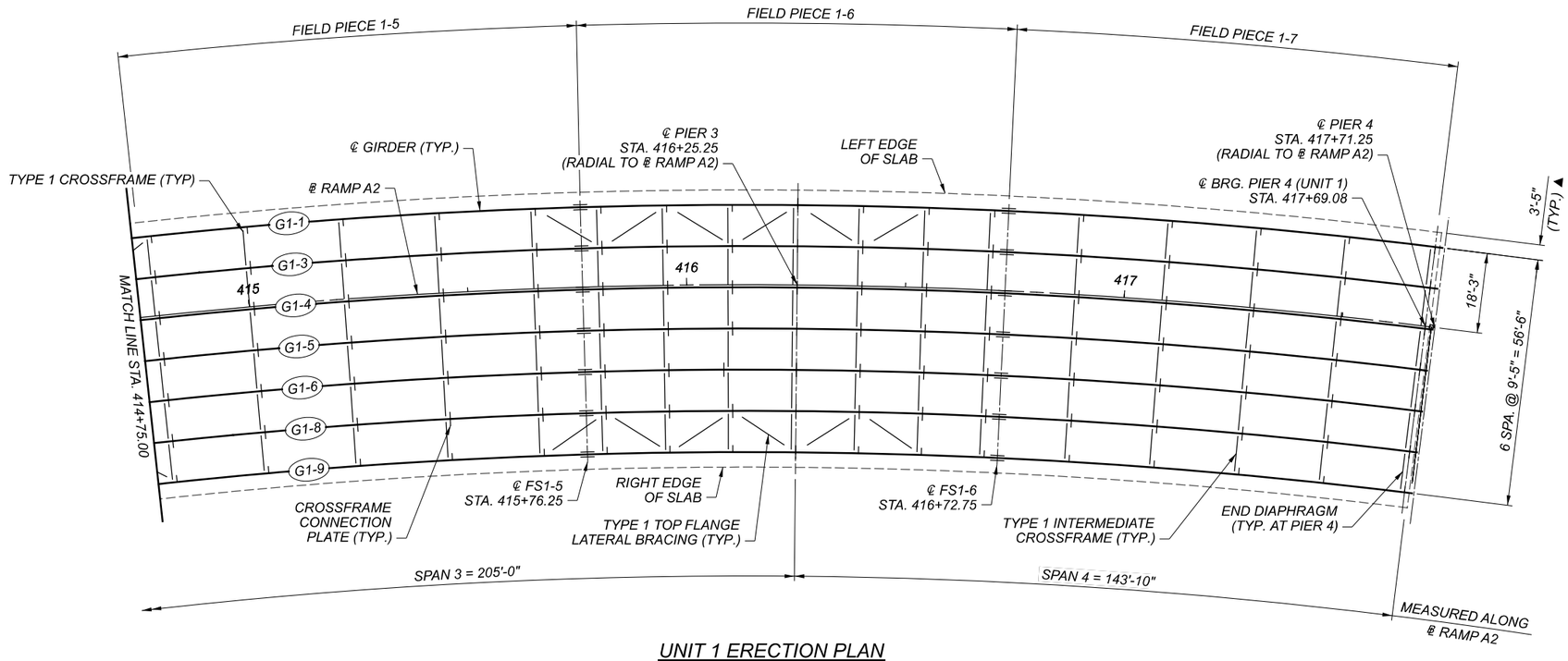

UNIT 1 ERECTION PLAN

CONCEPTUAL ERECTION SEQUENCE

10. SET ALL BEARINGS AT PIER 3.
11. PLACE FIELD PIECE 1-5 AND SPLICE WITH FIELD PIECE 1-4. HOLD FIELD PIECE 1-5 WITH CRANE.
12. PLACE FIELD PIECE 1-6 AND SPLICE WITH FIELD PIECE 1-5.
13. ERECT FIELD PIECE 1-5 AND FIELD PIECE 1-6 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 4.
14. SET ALL BEARINGS AT PIER 4.
15. PLACE FIELD PIECE 1-7 AND SPLICE WITH FIELD PIECE 1-6 FOR ALL GIRDERS.

LEGEND:

(#) = GIRDER NUMBER

NOTES:

1. FOR ERECTION PLAN NOTES SEE SHEET 92 / 164.

ERECTION PLAN AND DETAILS - (2 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	JK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	93
TOTAL	164
SHEET	1535
TOTAL	2338

CUY-90-16.28 (CCG3A)

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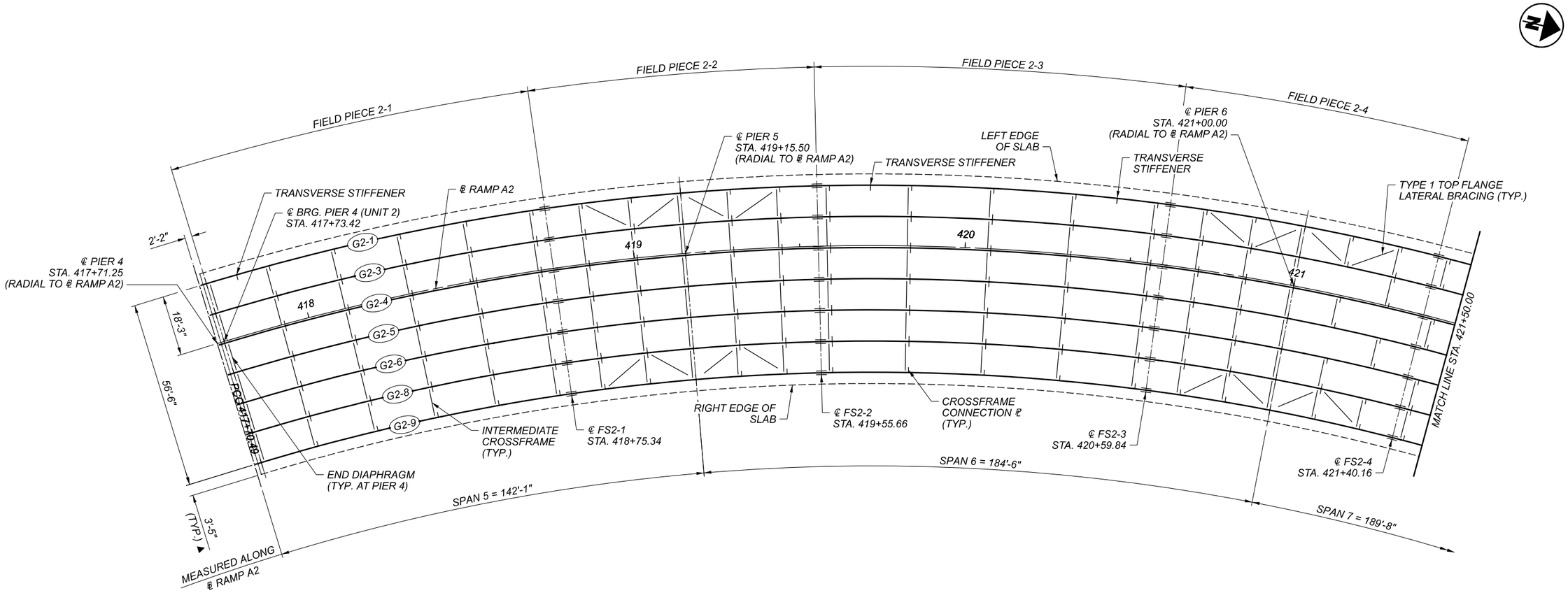


UNIT 2 ERECTION PLAN

CONCEPTUAL ERECTION SEQUENCE

ERECTION PROCEEDS FROM WEST TO EAST FROM PIER 4 TO PIER 7, THEN EAST TO WEST FROM THE FORWARD ABUTMENT TO PIER 8, AND AS FOLLOWS.

1. *THE FIRST GIRDERS PLACED IN SPANS 5 THROUGH 7 AND 9 THROUGH 11 ARE ASSUMED TO BE A TANDEM GIRDER PAIR WITH ALL CROSSFRAMES ATTACHED AND TOP FLANGE LATERAL BRACING ATTACHED.*
2. *SET ALL BEARINGS AT PIER 4 AND PIER 5.*
3. *PLACE FIELD PIECE 2-1 AND HOLD WITH CRANE.*
4. *PLACE FIELD PIECE 2-2 AND SPLICE WITH FIELD PIECE 2-1.*
5. *ERECT FIELD PIECE 2-1 AND FIELD PIECE 2-2 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 6.*
6. *SET ALL BEARINGS AT PIER 6.*
7. *PLACE FIELD PIECE 2-3 AND SPLICE WITH FIELD PIECE 2-2. HOLD FIELD PIECE 2-3 WITH CRANE.*
8. *PLACE FIELD PIECE 2-4 AND SPLICE WITH FIELD PIECE 2-3.*
9. *ERECT FIELD PIECE 2-3 AND FIELD PIECE 2-4 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 7.*

LEGEND:

(#) = *GIRDER NUMBER*

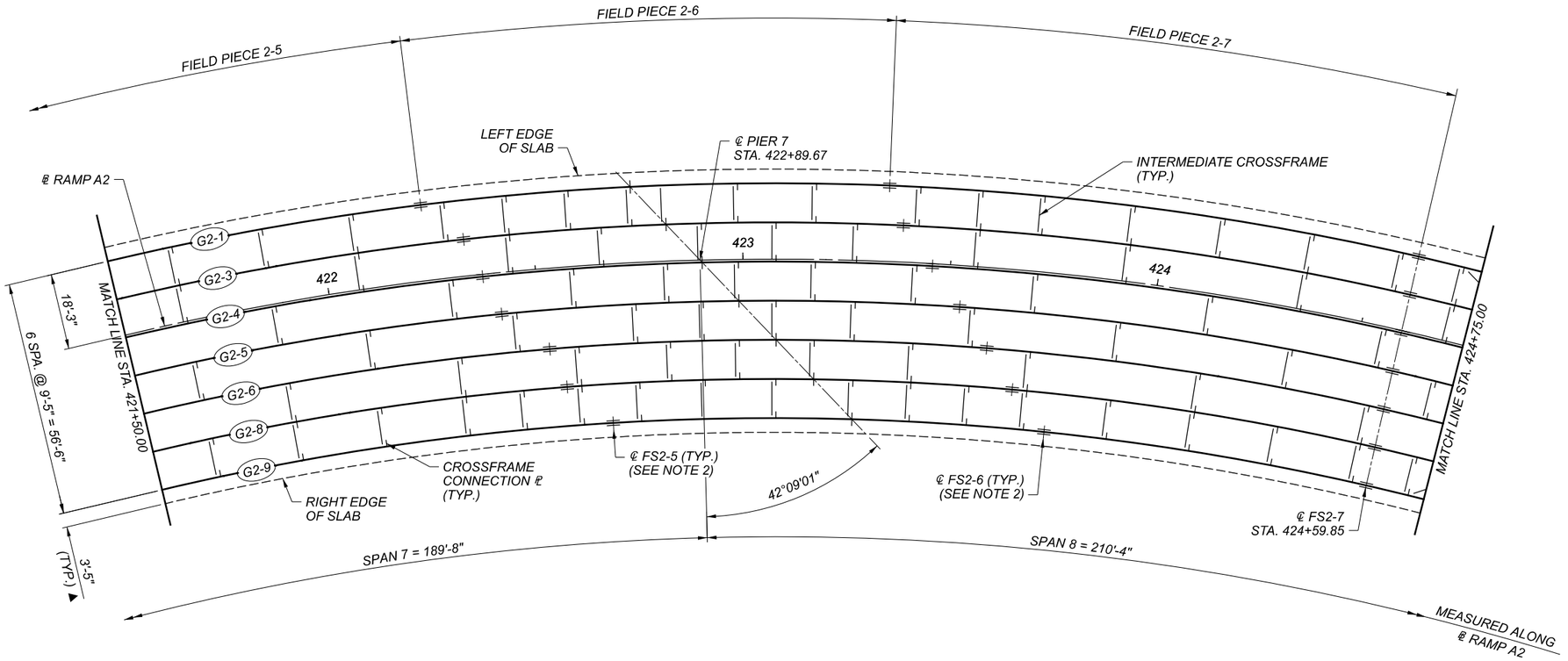
NOTES:

1. *FOR ERECTION PLAN NOTES SEE SHEET* 92 / 164.

ERECTION PLAN AND DETAILS - (3 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 90 AND CR-721 (E. 14TH ST.) OVER I.R. 77 SB

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	JK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	94
TOTAL	164
SHEET	1536
TOTAL	2338

CUY-90-16.28 (CCG3A)



UNIT 2 ERECTION PLAN

CONCEPTUAL ERECTION SEQUENCE

10. SET ALL BEARINGS AT PIER 7.
11. PLACE FIELD PIECE 2-5 AND SPLICE WITH FIELD PIECE 2-4. HOLD FIELD PIECE 2-5 WITH CRANE.
12. PLACE FIELD PIECE 2-6 AND SPLICE WITH FIELD PIECE 2-5.
13. ERECT FIELD PIECE 2-5 AND FIELD PIECE 2-6 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 11. (SEE SHEET 96 / 164)

LEGEND:

(#) = GIRDER NUMBER

NOTES:

1. FOR ERECTION PLAN NOTES SEE SHEET 92 / 164 .
2. FOR FIELD SPLICE LOCATION TABLE, SEE SHEETS 61 / 164 THRU 63 / 164 .

UNIT 2 ERECTION PLAN AND DETAILS - (4 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER MKO | CHECKER JK

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 95 | TOTAL 164

SHEET 1537 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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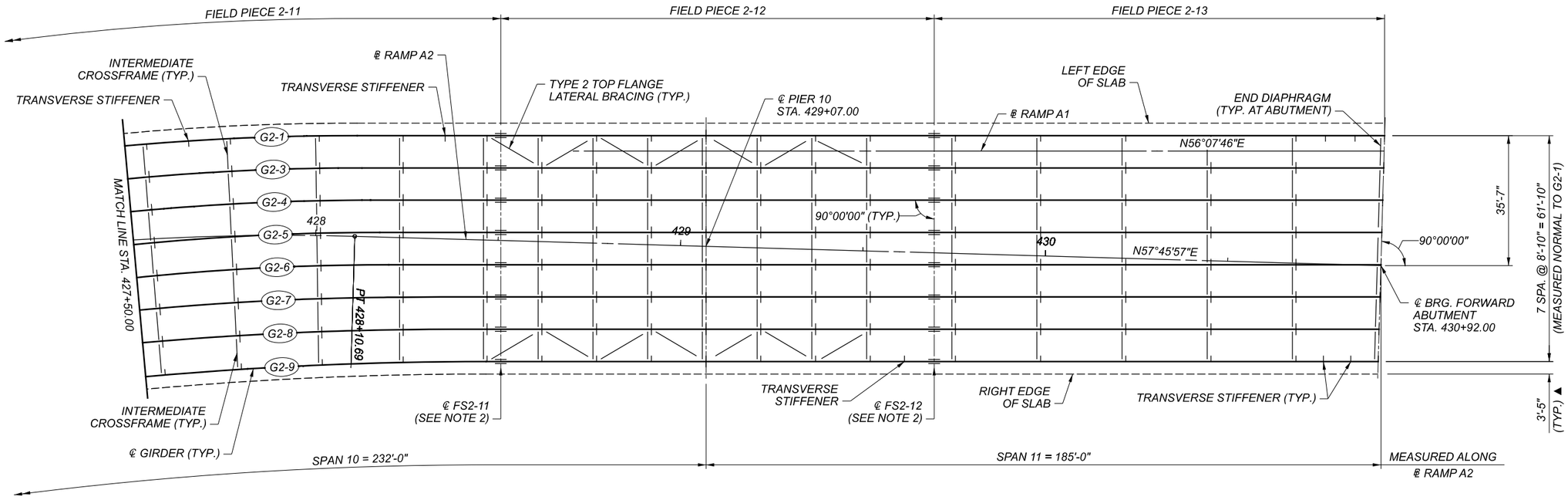

UNIT 2 ERECTION PLAN

CONCEPTUAL ERECTION SEQUENCE

14. SET ALL BEARINGS AT FORWARD ABUTMENT AND PIER 10.
15. PLACE FIELD PIECE 2-13 AND HOLD WITH CRANE.
16. PLACE FIELD PIECE 2-12 AND SPLICE WITH FIELD PIECE 2-13.
17. ERECT FIELD PIECE 2-12 AND FIELD PIECE 2-13 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 10.
18. SET ALL BEARINGS AT PIER 9.
19. PLACE FIELD PIECE 2-11 AND SPLICE WITH FIELD PIECE 2-12. HOLD FIELD PIECE 2-11 WITH CRANE.
20. PLACE FIELD PIECE 2-10 AND SPLICE WITH FIELD PIECE 2-11.
21. ERECT FIELD PIECE 2-10 AND FIELD PIECE 2-11 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 9.

LEGEND:

(#) = GIRDER NUMBER

NOTES:

1. FOR ERECTION PLAN NOTES SEE SHEET 92 / 164.
2. FOR FIELD SPLICE LOCATION TABLE, SEE SHEETS 61 / 164 THRU 63 / 164.

ERECTION PLAN AND DETAILS - (5 OF 6)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	JK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	96
TOTAL	164
SHEET	1538
TOTAL	2338

CUY-90-16.28 (CCG3A)

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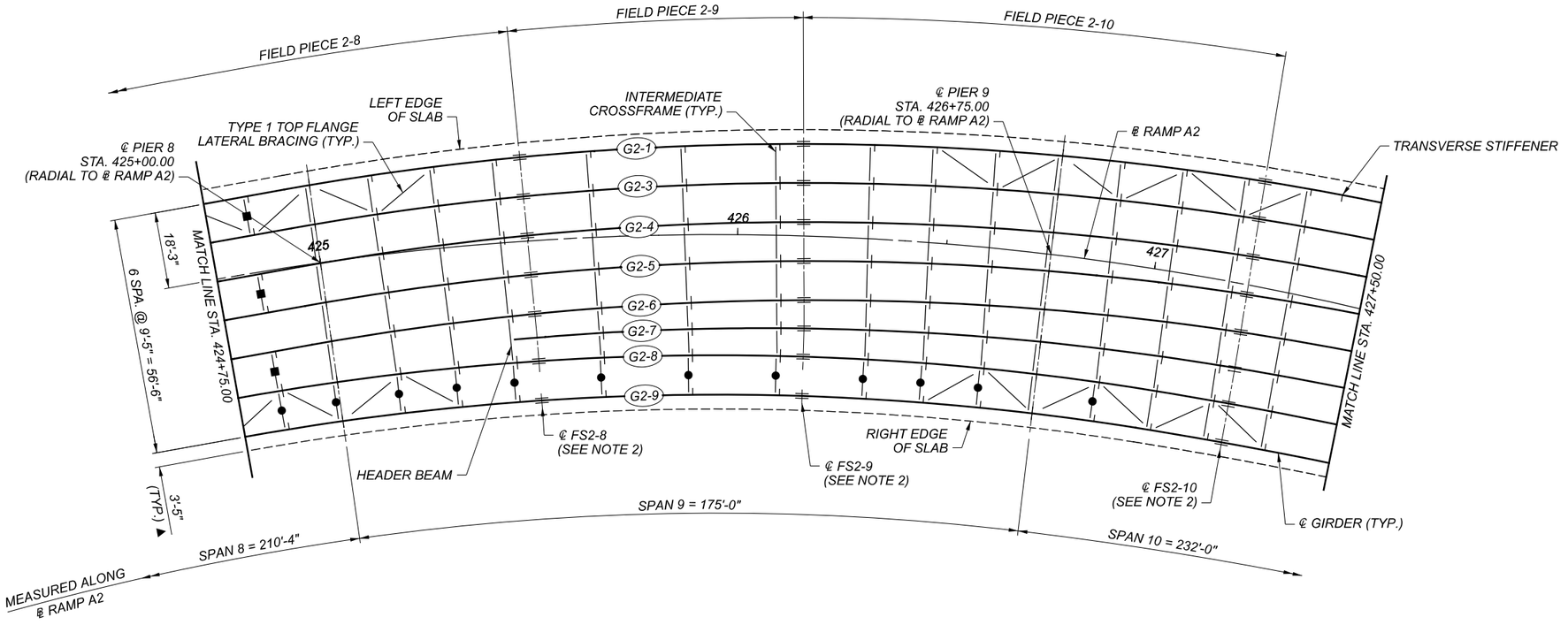


UNIT 2 ERECTION PLAN

CONCEPTUAL ERECTION SEQUENCE

22. SET ALL BEARINGS AT PIER 8.
23. PLACE FIELD PIECE 2-9 AND SPLICE WITH FIELD PIECE 2-10. HOLD FIELD PIECE 2-9 WITH CRANE.
24. PLACE FIELD PIECE 2-8 AND SPLICE WITH FIELD PIECE 2-9.
25. ERECT FIELD PIECE 2-8 AND FIELD PIECE 2-9 FOR ALL GIRDERS PRIOR TO MOVING ON TO SPAN 8.
26. PLACE FIELD PIECE 2-7 AND SPLICE WITH FIELD PIECE 2-6 AND FIELD PIECE 2-8 (SEE SHEET 88). ALL GIRDERS PLACED IN THIS STEP ARE ASSUMED TO BE SINGLE GIRDER PICKS.

LEGEND:

(#) = GIRDER NUMBER

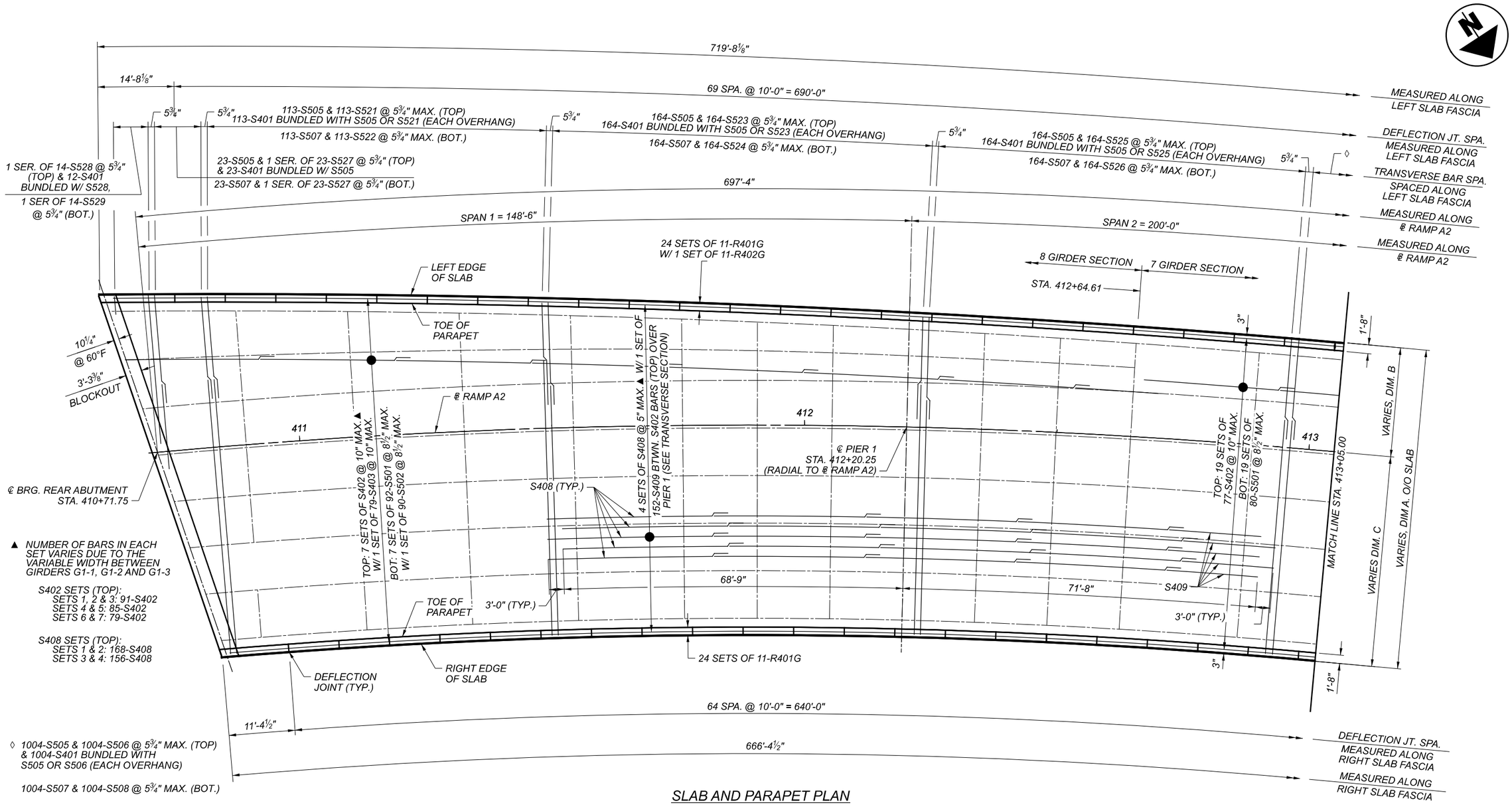
NOTES:

1. FOR ERECTION PLAN NOTES SEE SHEET 92 / 164.
2. FOR FIELD SPLICE LOCATION TABLE, SEE SHEETS 61 / 164 THRU 63 / 164.

ERECTION PLAN AND DETAILS - (6 OF 6)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER MKO | CHECKER JK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 97 | TOTAL 164
SHEET 1539 | TOTAL 2338

CUY-90-16.28 (CCG3A)



SLAB AND PARAPET PLAN

TABLE OF SLAB WIDTH DIMENSIONS**			
DIMENSION	410+70.87	410+81.13	412+94.77
A	73'-3⅜"	72'-4⅛"	63'-4"
B	31'-6⅞"	30'-8⅛"	21'-8"
C	41'-8½"	41'-8"	41'-8"

** DIMENSIONS MEASURED RADIAL TO ℄ RAMP A2.

REQUIRED MINIMUM LAP LENGTHS	
#4 (RAILING)	1'-1"
#4 (SLAB)	1'-10"
#5 (SLAB)	2'-10"

REQUIRED MINIMUM LAP LENGTHS	
#4 (RAILING)	1'-1"
#4 (SLAB)	1'-10"
#5 (SLAB)	2'-10"

NOTES:

1. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .
2. FOR MODULAR EXPANSION JOINT AND BLOCKOUT DETAILS, SEE SHEETS 121 / 164 THRU 127 / 164 .
4. FOR ADDITIONAL RAILING REINFORCING BARS AND DETAILS, SEE SHEETS 120 / 164 .
5. FOR DECK POUR SEQUENCE, SEE SHEET 151 / 164 .
6. FOR SCREED, TOP OF HAUNCH AND FINAL DECK ELEVATIONS, SEE SHEETS 128 / 164 THRU 150 / 164 .
7. FOR SCUPPER REINFORCEMENT DETAIL, SEE SHEET&9SD025 164 .
8. FIELD CUT SLAB REINFORCING BARS TO CLEAR SCUPPERS. FOR ADDITIONAL SCUPPER AND SLAB DETAILS, SEE SHEET 107 / 164 THRU 109 / 164 .
9. FOR REINFORCING STEEL LIST, SEE SHEETS 156 / 164 THRU 164 / 164 .

SLAB AND PARAPET PLAN - (1 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER NJH | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 98 | TOTAL 164
SHEET 1540 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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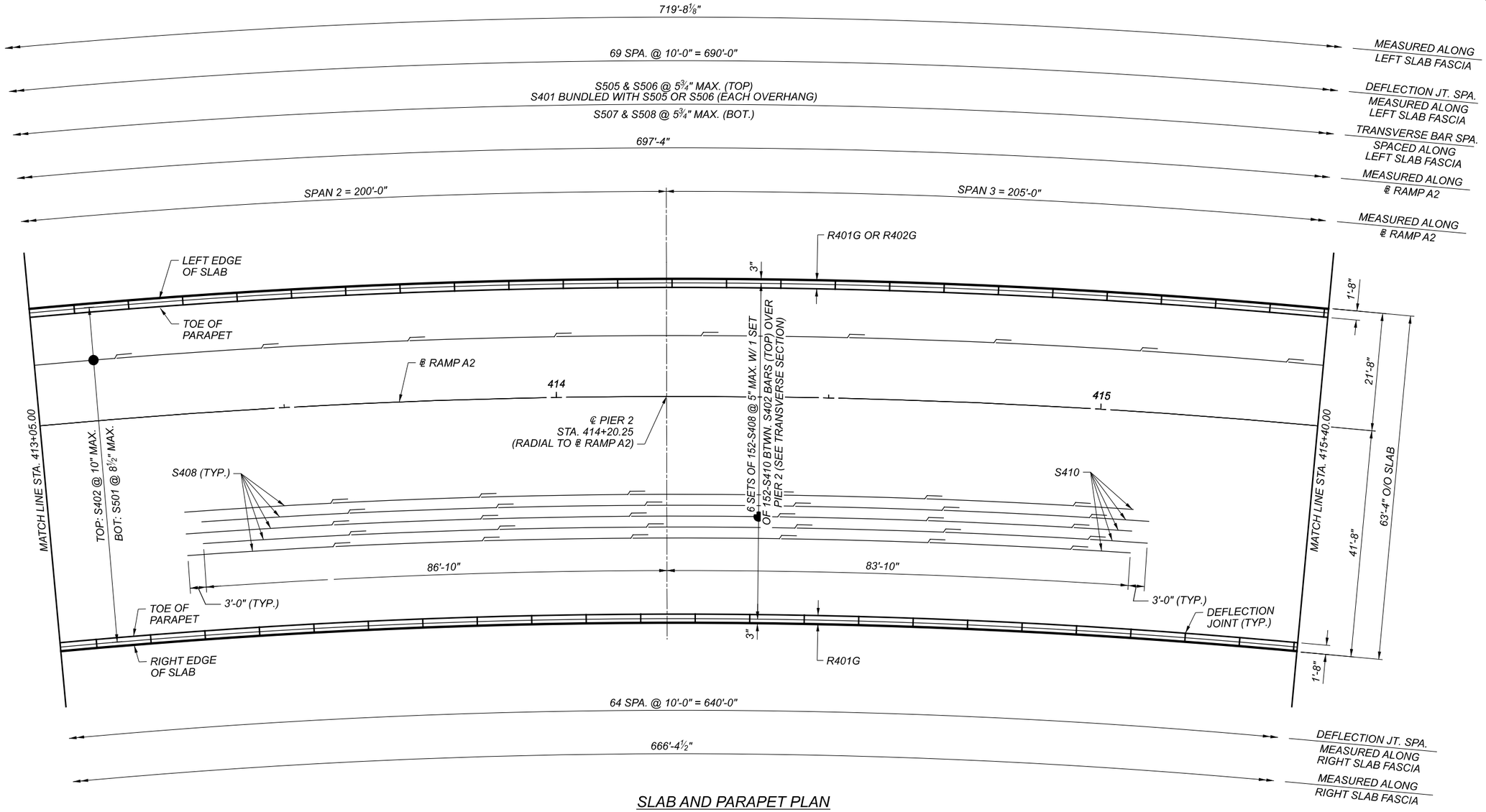

SLAB AND PARAPET PLAN

NOTES:

1. FOR ADDITIONAL SLAB REINFORCEMENT NOTES AND MINIMUM LAP LENGTHS, SEE SHEET 98 / 164 .
2. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .

SLAB AND PARAPET PLAN - (2 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER NJH | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 99 | TOTAL 164
SHEET 1541 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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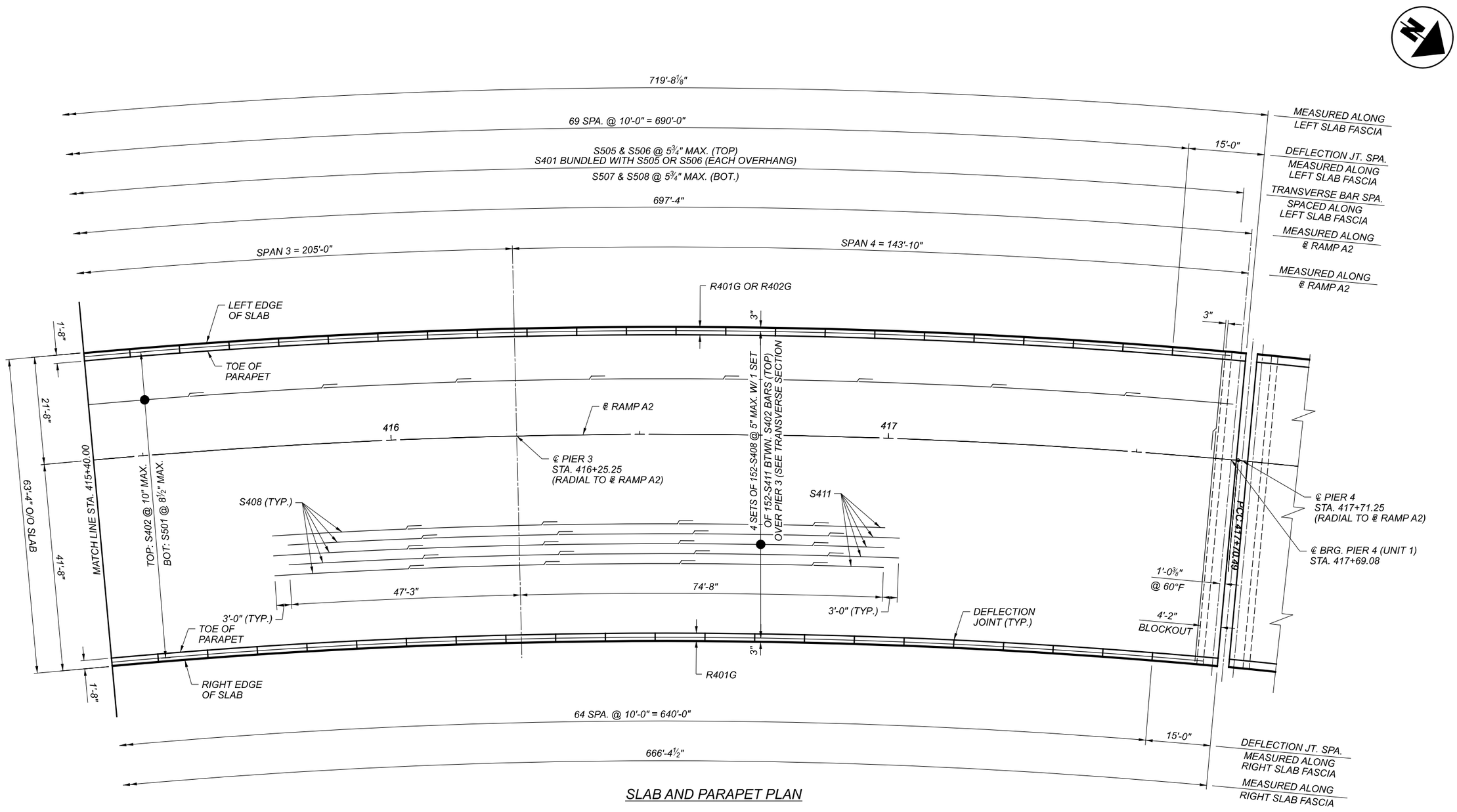


SLAB AND PARAPET PLAN

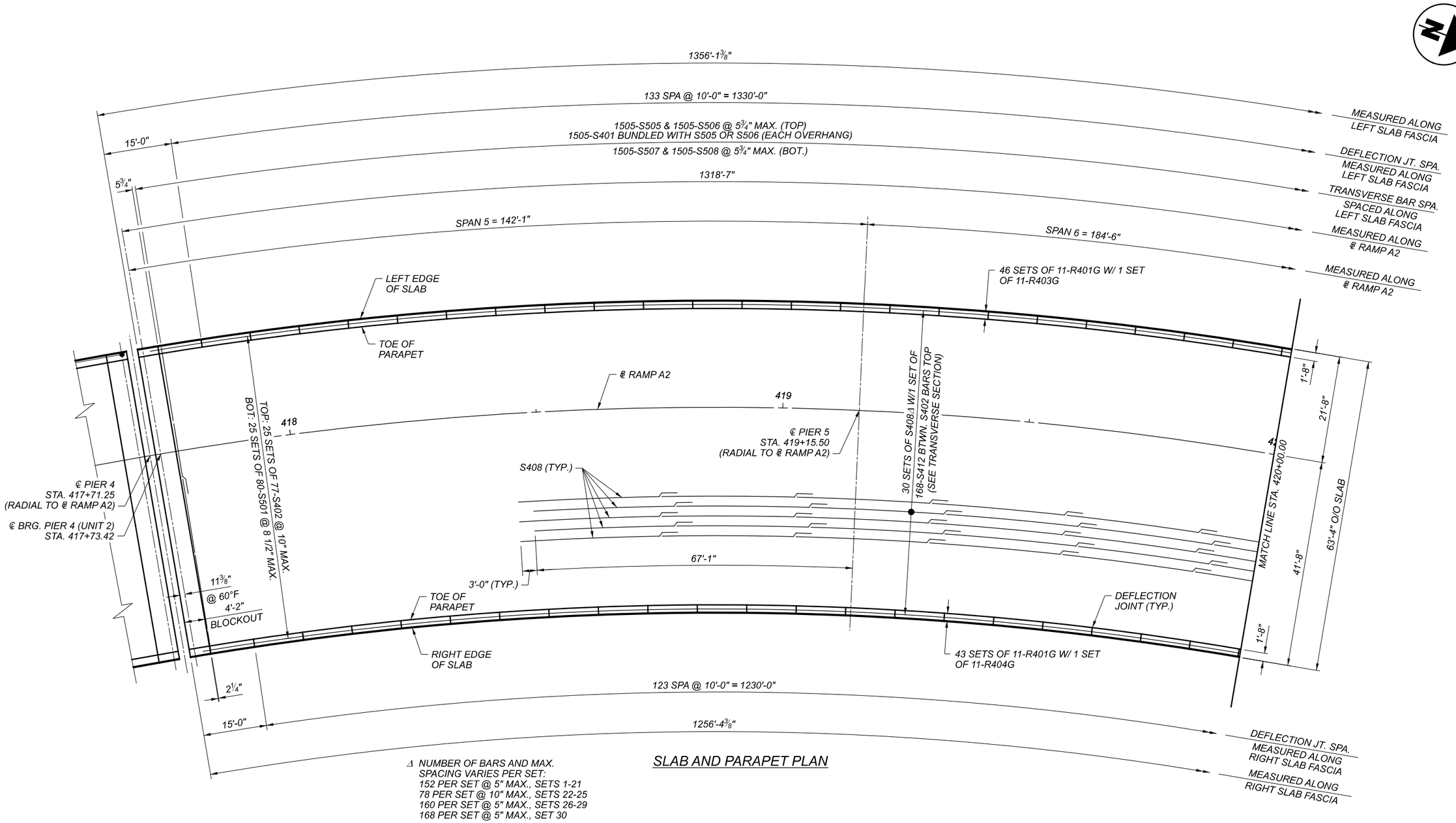
NOTES:

1. FOR ADDITIONAL SLAB REINFORCEMENT NOTES AND MINIMUM LAP LENGTHS, SEE SHEET 98 / 164 .
2. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .

SLAB AND PARAPET PLAN - (3 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 90 AND CR-721 (E. 14TH ST.) OVER I.R. 77 SB

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	100
TOTAL	164
SHEET	1542
TOTAL	2338

CUY-90-16.28 (CCG3A)



SLAB AND PARAPET PLAN

Δ NUMBER OF BARS AND MAX. SPACING VARIES PER SET:
152 PER SET @ 5" MAX., SETS 1-21
78 PER SET @ 10" MAX., SETS 22-25
160 PER SET @ 5" MAX., SETS 26-29
168 PER SET @ 5" MAX., SET 30

NOTES:

1. FOR ADDITIONAL SLAB REINFORCEMENT NOTES AND MINIMUM LAP LENGTHS, SEE SHEET 98 / 164 .
2. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .

SLAB AND PARAPET PLAN - (4 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

CUY-90-16.28 (CCG3A)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER NJH | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 101 | TOTAL 164
SHEET 1543 | TOTAL 2338

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:11:23 PM USER: CRICCARDI
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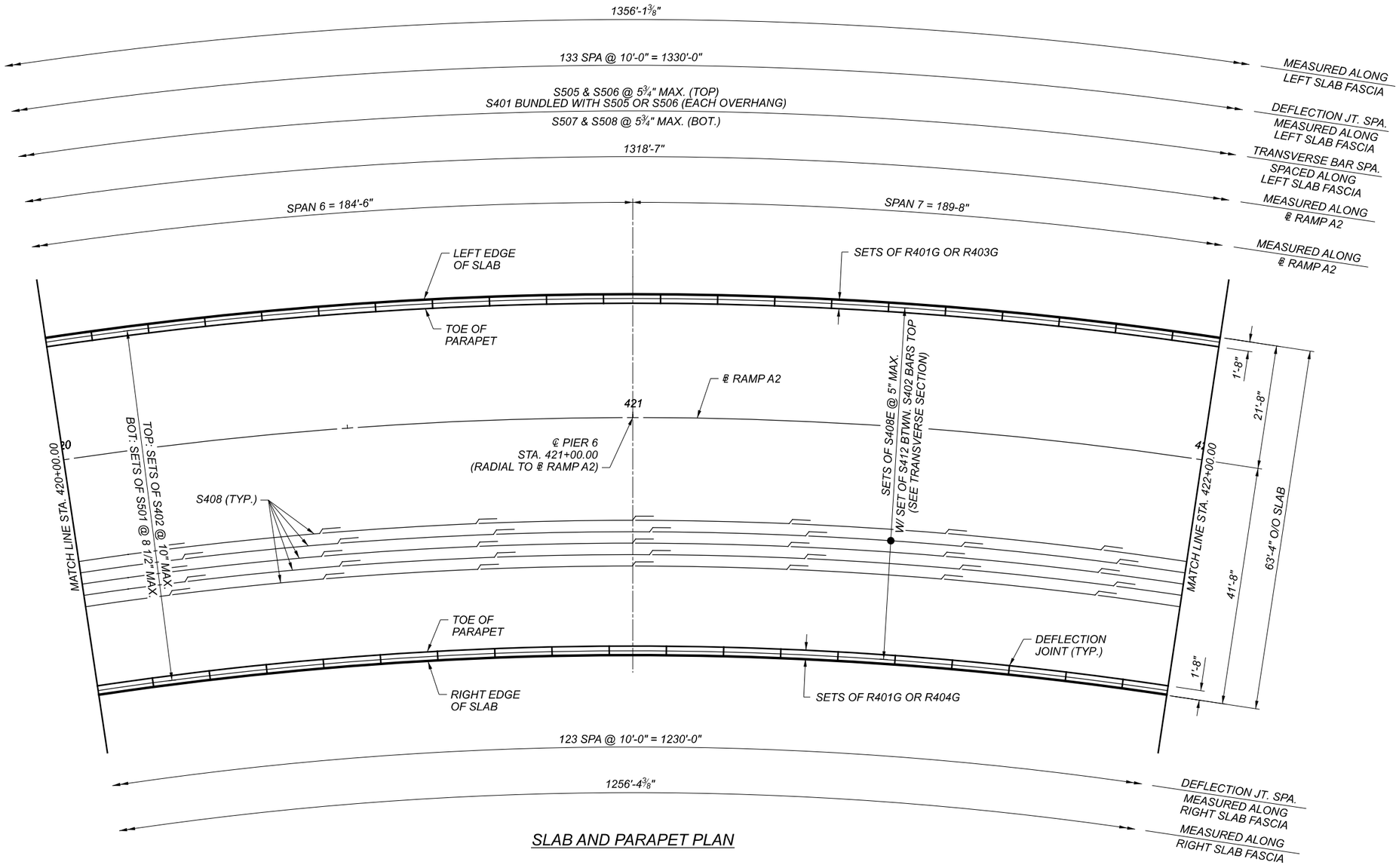

SLAB AND PARAPET PLAN

NOTES:

1. FOR ADDITIONAL SLAB REINFORCEMENT NOTES AND MINIMUM LAP LENGTHS, SEE SHEET 98 / 164 .
2. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .

SLAB AND PARAPET PLAN - (5 OF 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)
CUY-77-1587 (BRIDGE 9)

SFN	1806910
DESIGN AGENCY	FHR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	102
TOTAL	164
SHEET	1544
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:11:29 PM USER: CRICCARDI
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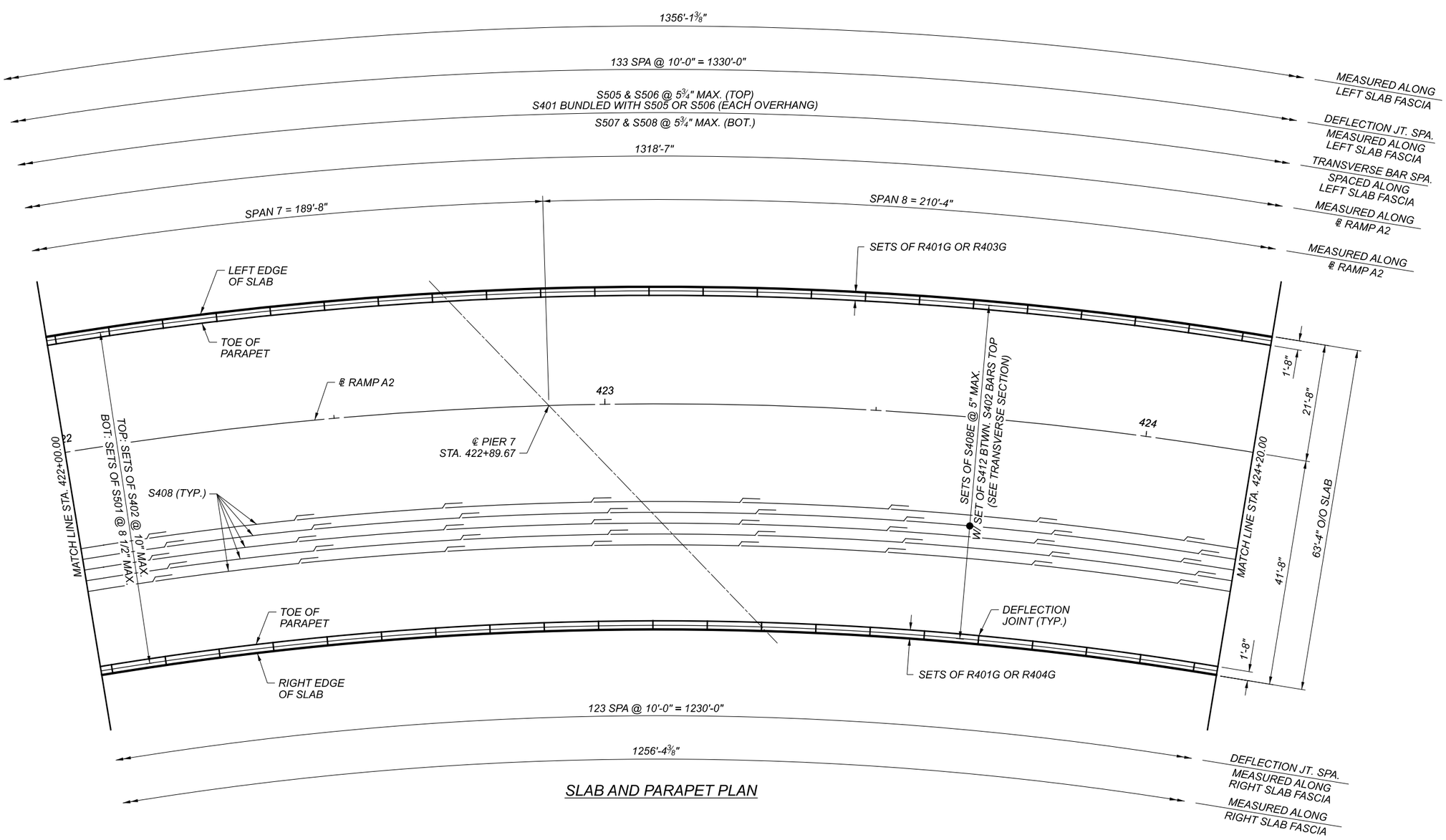

SLAB AND PARAPET PLAN

NOTES:

1. FOR ADDITIONAL SLAB REINFORCEMENT NOTES AND MINIMUM LAP LENGTHS, SEE SHEET 98 / 164 .
2. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .

SLAB AND PARAPET PLAN - (6 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	103
TOTAL	164
SHEET	1545
TOTAL	2338

CUY-90-16.28 (CCG3A)

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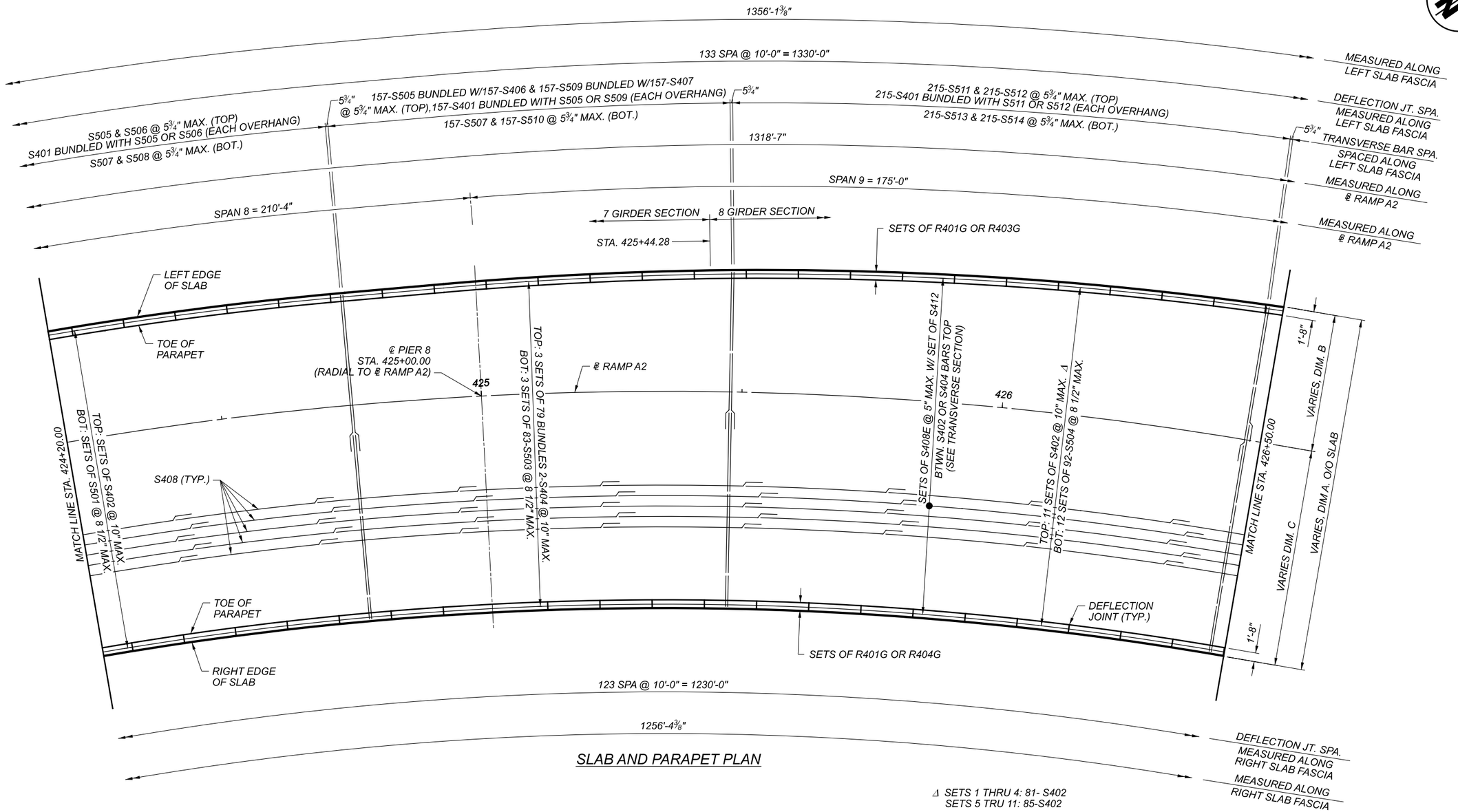

SLAB AND PARAPET PLAN

Δ SETS 1 THRU 4: 81- S402
SETS 5 TRU 11: 85-S402

TABLE OF SLAB WIDTH DIMENSIONS**		
DIMENSION	424+75.58	428+46.70
A	63'-4"	68'-8"
B	21'-8"	31'-11 7/8"
C	41'-8"	36'-8 1/8"

** DIMENSIONS MEASURED NORMAL TO LEFT EDGE OF SLAB

NOTES:

1. FOR ADDITIONAL SLAB REINFORCEMENT NOTES AND MINIMUM LAP LENGTHS, SEE SHEET 98 / 164 .
2. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .

SLAB AND PARAPET PLAN - (7 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	104
TOTAL	164
SHEET	1546
TOTAL	2338

CUY-90-16.28 (CCG3A)

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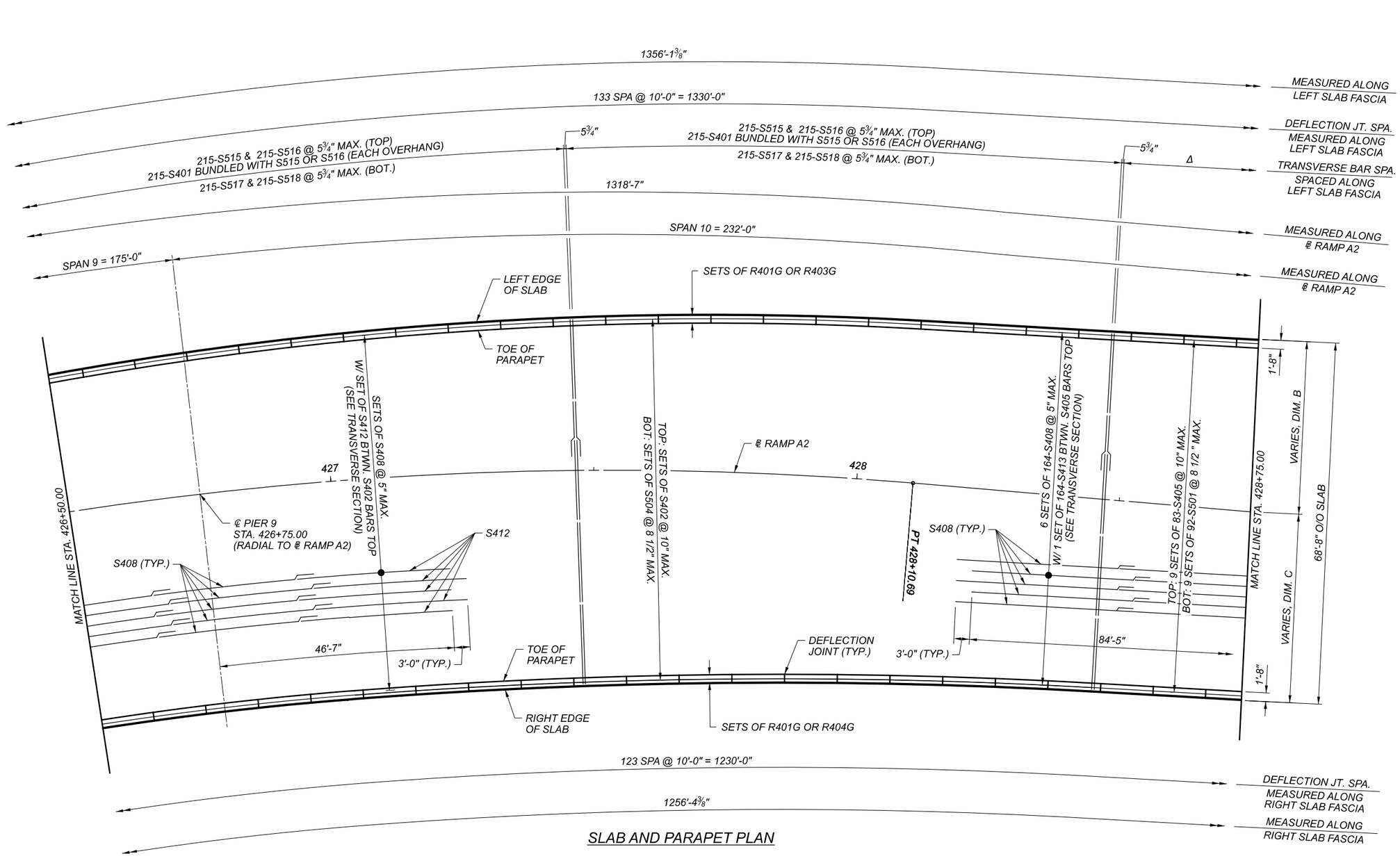


SLAB AND PARAPET PLAN

TABLE OF SLAB WIDTH DIMENSIONS**		
DIMENSION	428+46.70	430+92.69
B	31'-11⅞"	39'-0¼"
C	36'-8⅛"	29'-7¾"

** DIMENSIONS MEASURED NORMAL TO LEFT EDGE OF SLAB

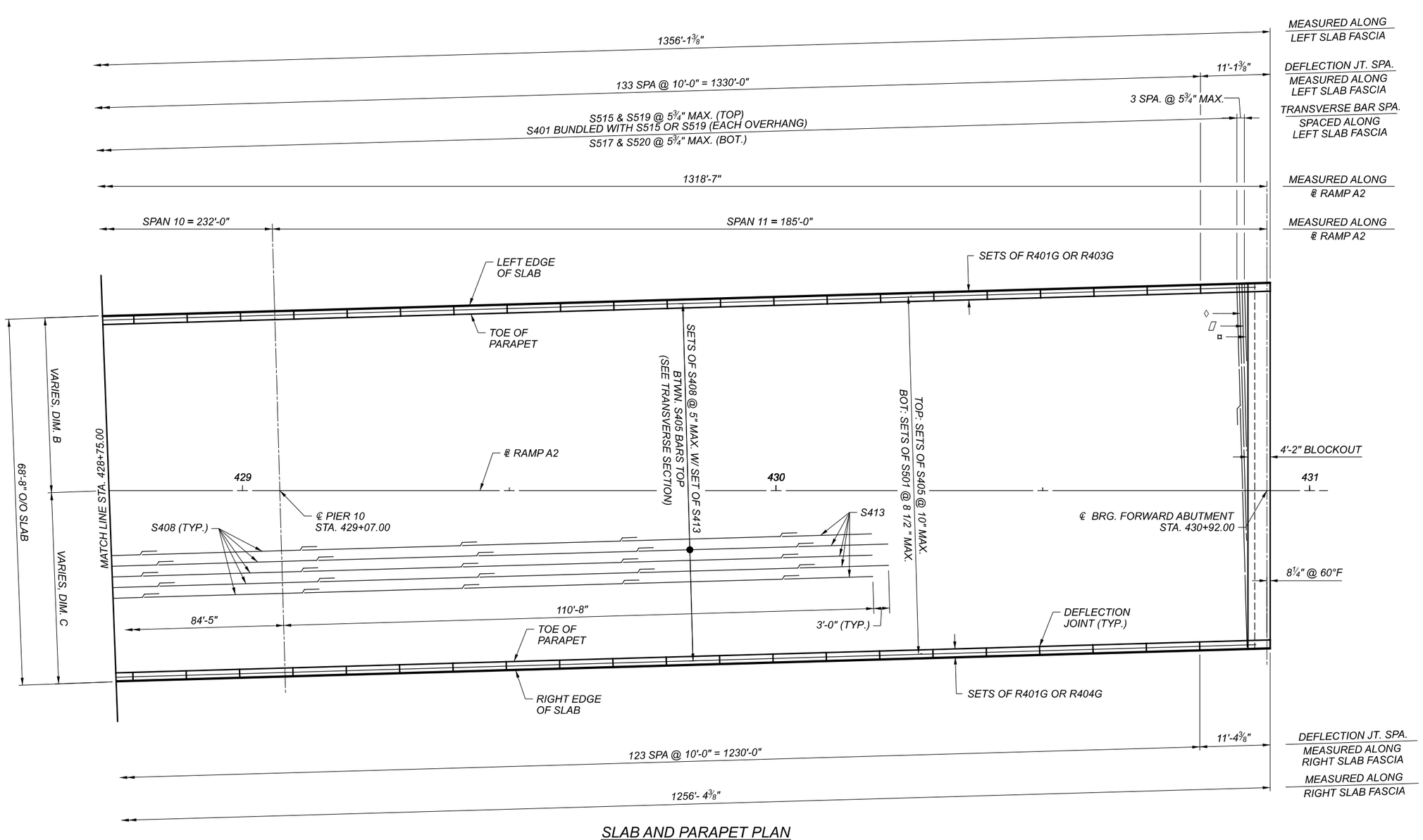
NOTES:

1. FOR ADDITIONAL SLAB REINFORCEMENT NOTES AND MINIMUM LAP LENGTHS, SEE SHEET 98 / 164 .
2. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .

SLAB AND PARAPET PLAN - (8 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER NJH | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 105 | TOTAL 164
SHEET 1547 | TOTAL 2338

CUY-90-16.28 (CCG3A)



SLAB AND PARAPET PLAN

◊ 1-S530 (TOP), BUNDLED WITH 1-S401 (LEFT OVERHANG), 1-S533 (BOT.)

▱ 1-S531 (TOP), BUNDLED WITH 1-S401 (LEFT OVERHANG), 1-S534 (BOT.)

¤ 1-S532 (TOP), BUNDLED WITH 1-S401 (LEFT OVERHANG), 1-S535 (BOT.)

TABLE OF SLAB WIDTH DIMENSIONS**		
DIMENSION	428+46.70	430+92.69
B	31'-11 7/8"	39'-0 1/4"
C	36'-8 1/8"	29'-7 3/4"

** DIMENSIONS MEASURED NORMAL TO LEFT EDGE OF SLAB

NOTES:

1. FOR ADDITIONAL SLAB REINFORCEMENT NOTES AND MINIMUM LAP LENGTHS, SEE SHEET 98 / 164 .
2. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164 .

SLAB AND PARAPET PLAN - (9 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER NJH | CHECKER RBK
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 106 | TOTAL 164
SHEET 1548 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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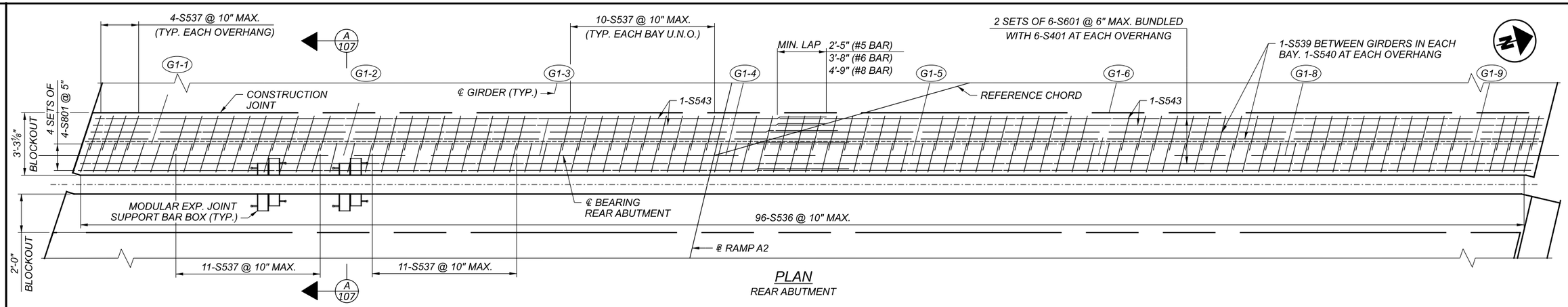
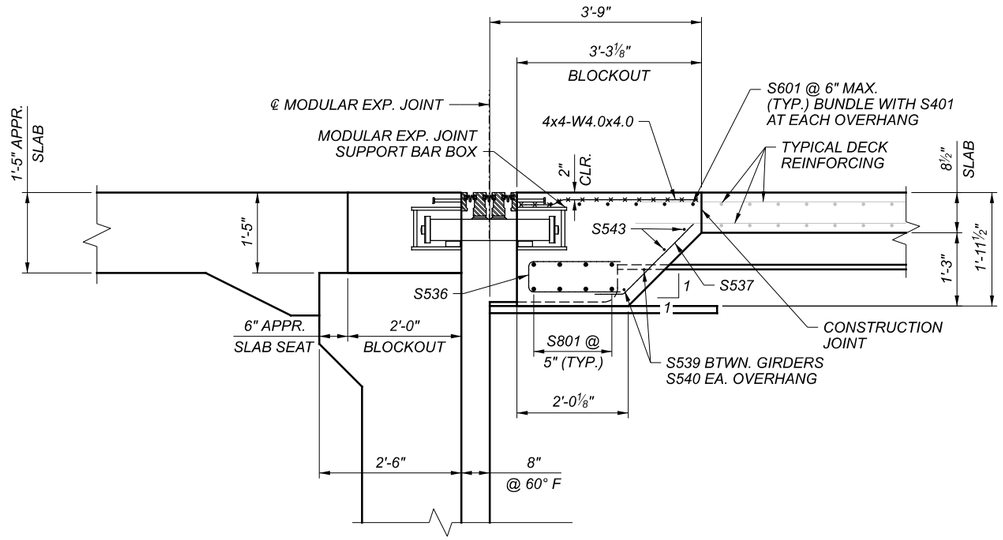
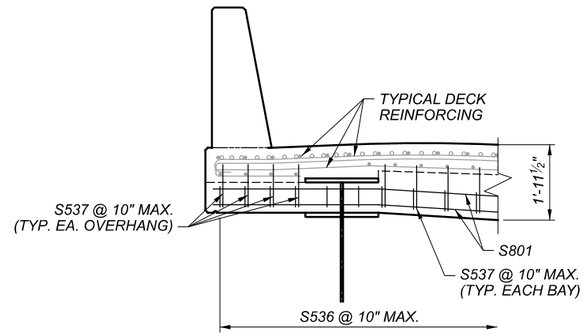


PLAN
REAR ABUTMENT



SECTION A-A



END VIEW

NOTES:

1. ADJUST REINFORCING STEEL AS NECESSARY TO CLEAR MODULAR EXPANSION JOINT. FOR MODULAR EXPANSION JOINT DETAILS, SEE SHEETS 121 / 164 THRU 127 / 164.
2. FOR MAIN DECK PLAN AND REINFORCEMENT, SEE SHEETS 98 / 164 THRU 106 / 164.
3. FOR ABUTMENT AND APPROACH SLAB BLOCKOUT DETAILS, SEE SHEETS 28 / 164 THRU 29 / 164.
4. FOR REINFORCING STEEL LIST, SEE SHEET 156 / 164.
5. GALVANIZED WELDED WIRE FABRIC SHALL CONFORM TO CMS 709.14 AND BE INCLUDED FOR PAYMENT WITH ITEM 509, EPOXY COATED REINFORCING STEEL, AS PER PLAN.
6. DIMENSIONS ARE BASED ON THE D.S. BROWN STEELFLEX EXPANSION JOINT SYSTEMS. THE CONTRACTOR MAY USE AN APPROVED EQUAL MODULAR EXPANSION JOINT SYSTEM. IF AN APPROVED EQUAL MODULAR JOINT SYSTEM IS SELECTED, THE CONTRACTOR SHALL SUBMIT A CORRECTIVE WORK PER CMS 501.05.C. THE SUBMITTAL SHALL INCLUDE ALL PROPOSED CHANGES ASSOCIATED WITH THE PROPOSED MODULAR EXPANSION SYSTEM, INCLUDING BUT NOT LIMITED TO: REINFORCING CHANGES, BLOCKOUT DIMENSIONAL CHANGES, MATERIAL SPECIFICATION AND BRIDGE RAILING MODIFICATIONS.

SLAB DETAILS - (1 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	107
TOTAL	164
SHEET	1549
TOTAL	2338

CUY-90-16.28 (CCG3A)

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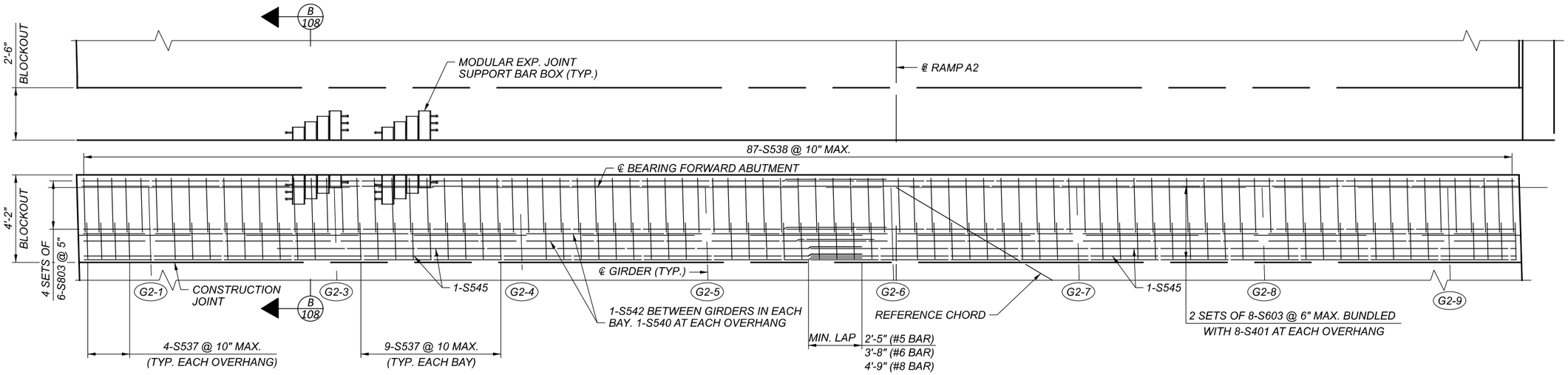
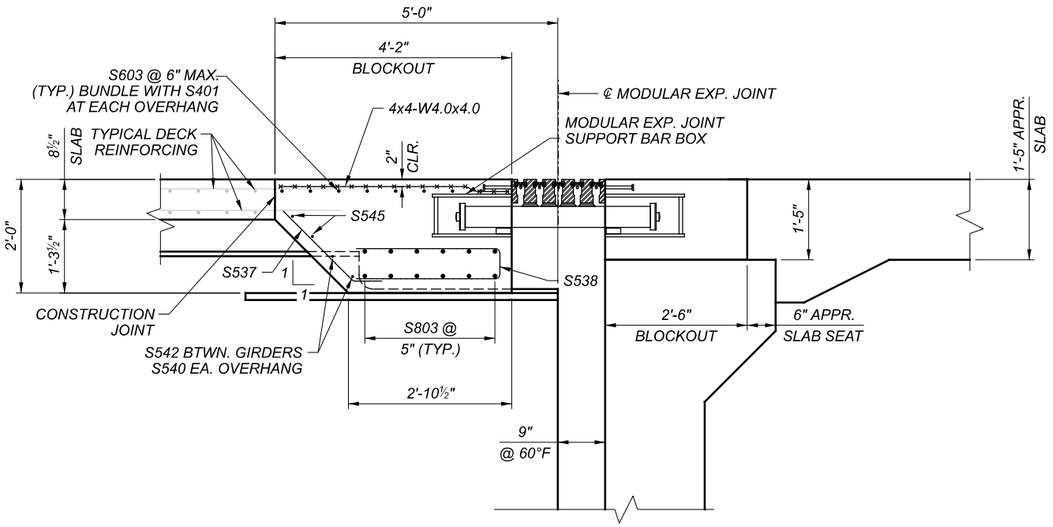
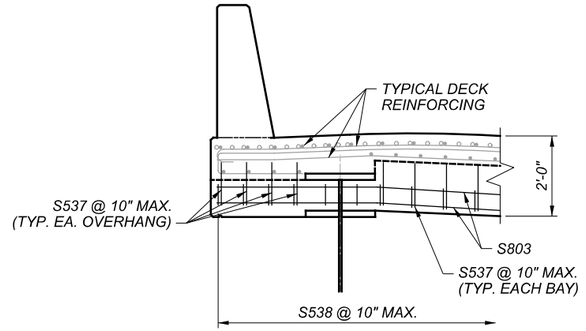


PLAN
FORWARD ABUTMENT



SECTION B-B



END VIEW

NOTES:

1. FOR SLAB DETAIL NOTES, SEE SHEET 107 / 164 .

SLAB DETAILS - (2 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	108
TOTAL	164
SHEET	1550
TOTAL	2338

CUY-90-16.28 (CCG3A)

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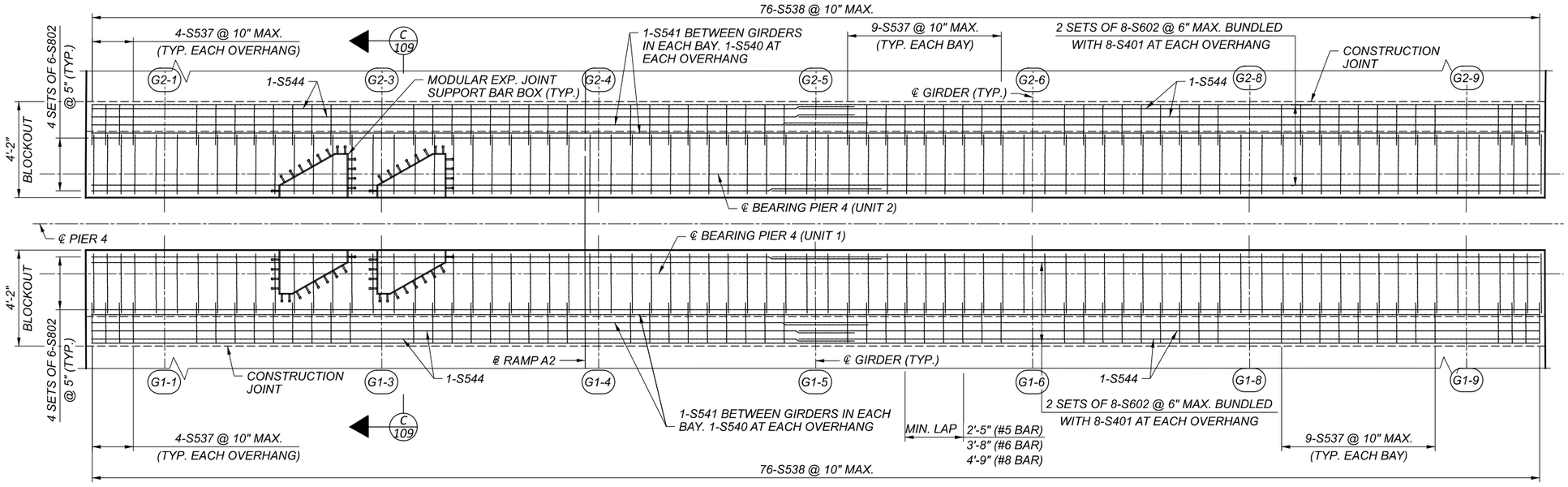
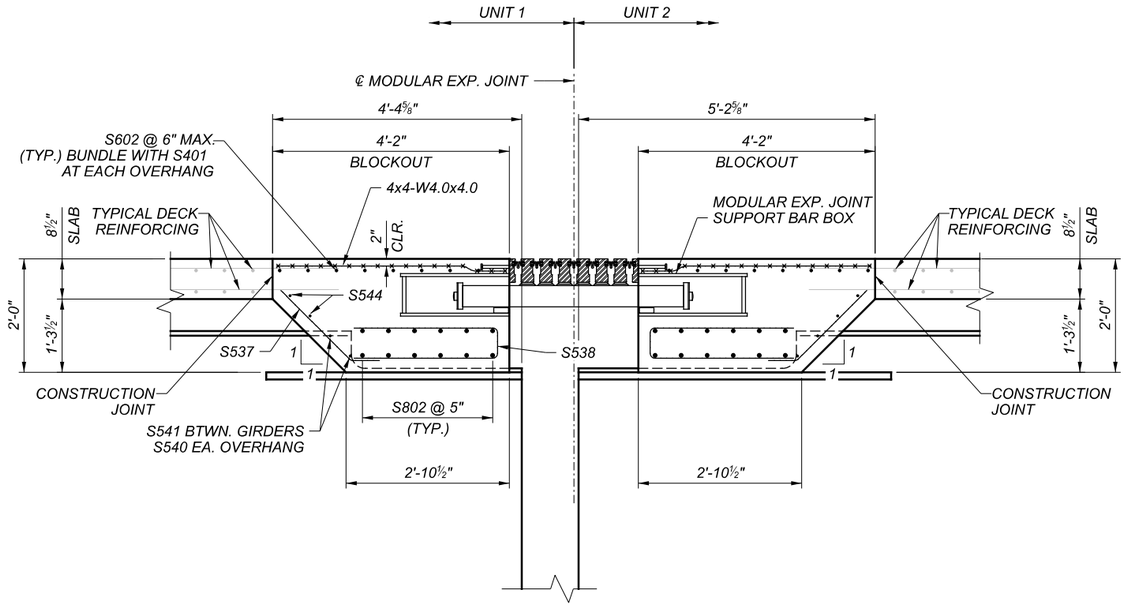
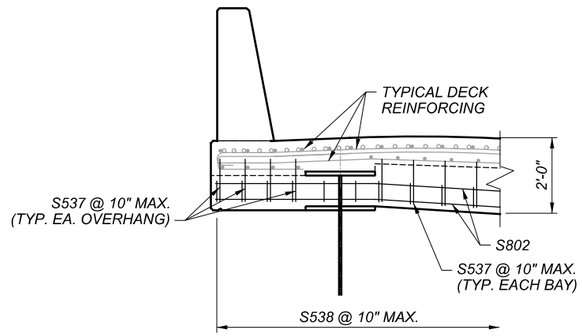


PLAN
PIER 4



SECTION C-C
(REINFORCEMENT IS SYMMETRICAL ABOUT JOINT)



END VIEW

NOTES:

1. FOR SLAB DETAIL NOTES, SEE SHEET 107 / 164.

SLAB DETAILS - (3 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	109
TOTAL	164
SHEET	1551
TOTAL	2338

CUY-90-16.28 (CCG3A)

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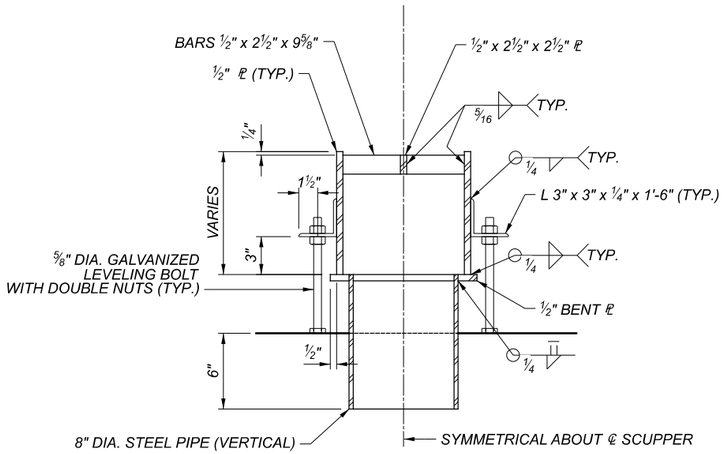
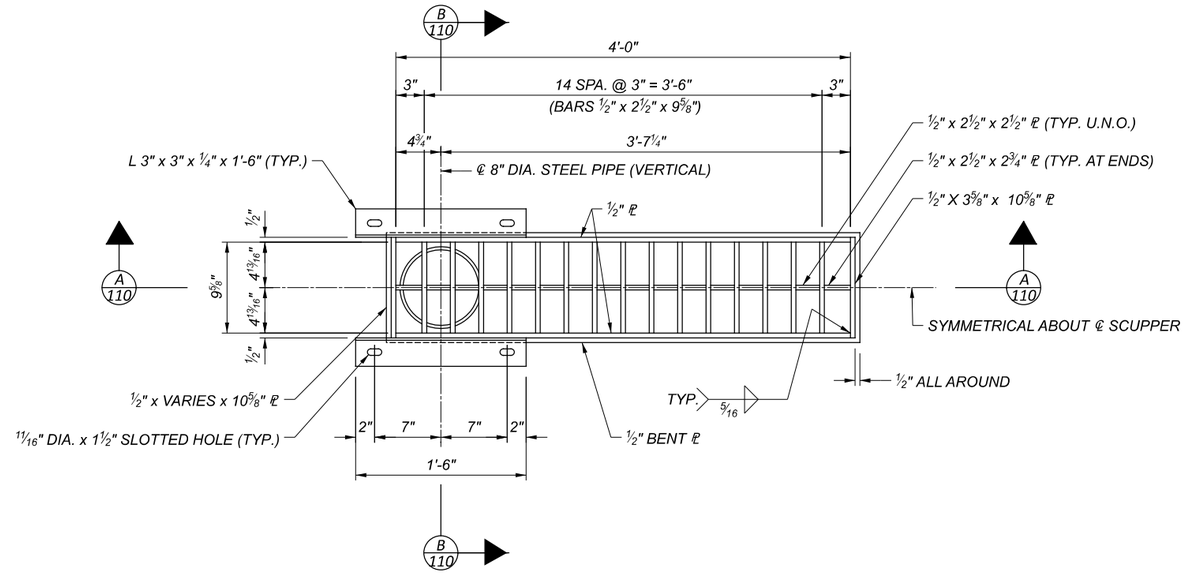
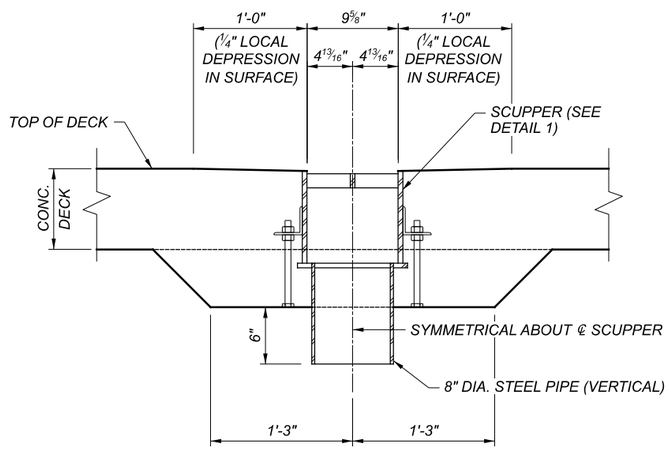


DETAIL 1



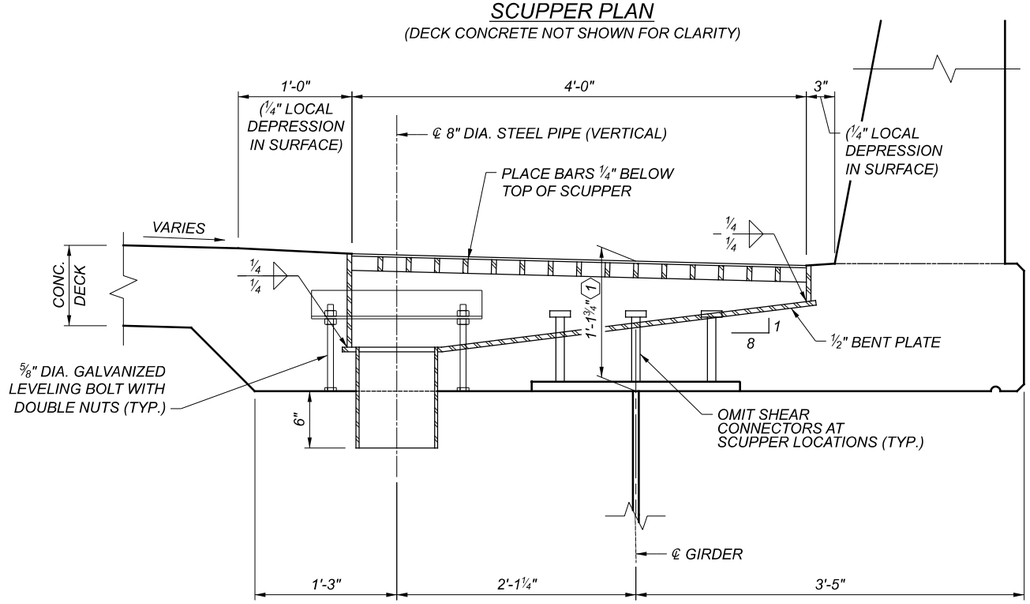
SCUPPER PLAN

(DECK CONCRETE NOT SHOWN FOR CLARITY)



SECTION B-B

(CONCRETE DECK REINFORCING NOT SHOWN)



SECTION A-A

(RIGHT SIDE SHOWN, LEFT SIDE SIMILAR)

1 MEASURED FROM TOP OF WEB TO TOP OF BAR.

NOTES:

1. FOR SCUPPER LOCATIONS, SEE SHEET 111 / 164 .
2. ALL STRUCTURAL STEEL FOR SCUPPERS SHALL BE ASTM A709, GRADE 36, EXCEPT AS NOTED.
3. SCUPPER PIPE SHALL BE ASTM A53, SCHEDULE 40.
4. SCUPPERS SHALL BE GALZVANIZED IN ACCORANCE WITH CMS 711.02.
5. FOR DOWNSPOUT PIPE DETAILS, SEE SHEETS 112 / 164 THRU 116 / 164 .
6. SCUPPERS SHALL CONFORM TO CMS 518, EXCEPT AS NOTED.
7. FOR DETAILS OF ADDITIONAL DECK REINFORCEMENT AT SCUPPERS, SEE SHEET 98 / 164 .
8. DRAINAGE PIPE, HANGER ASSEMBLIES, DRAIN PANS, SUPPORT BRACKETS AND ALL INCIDENTALS TO FURNISH AND INSTALL THE DRAINAGE COLLECTION SYSTEM SHALL BE INCLUDED WITH PAYMENT FOR ITEM 518 - SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN.

BRIDGE DRAINAGE DETAILS - (1 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	110
TOTAL	164
SHEET	1552
TOTAL	2338

CUY-90-16.28 (CCG3A)
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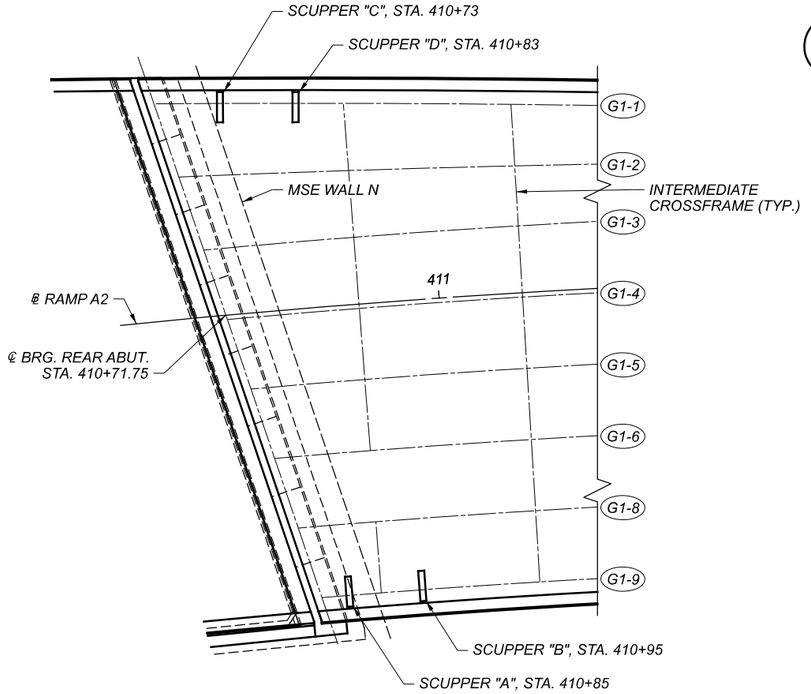
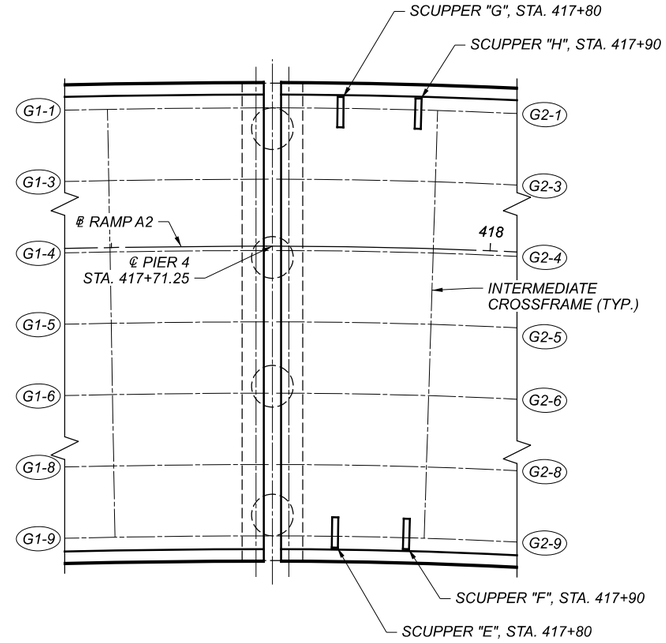
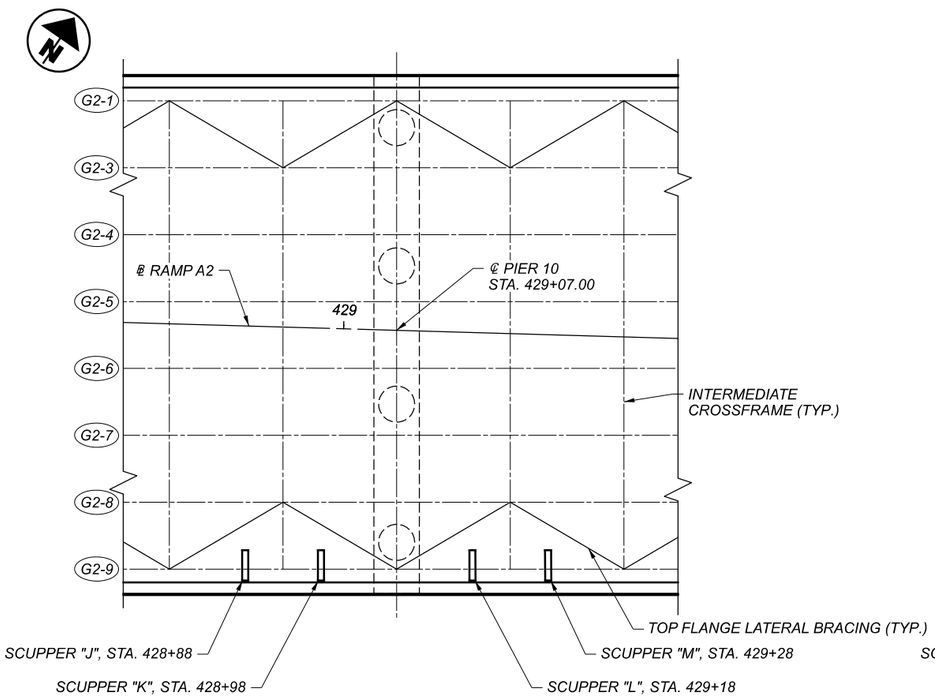


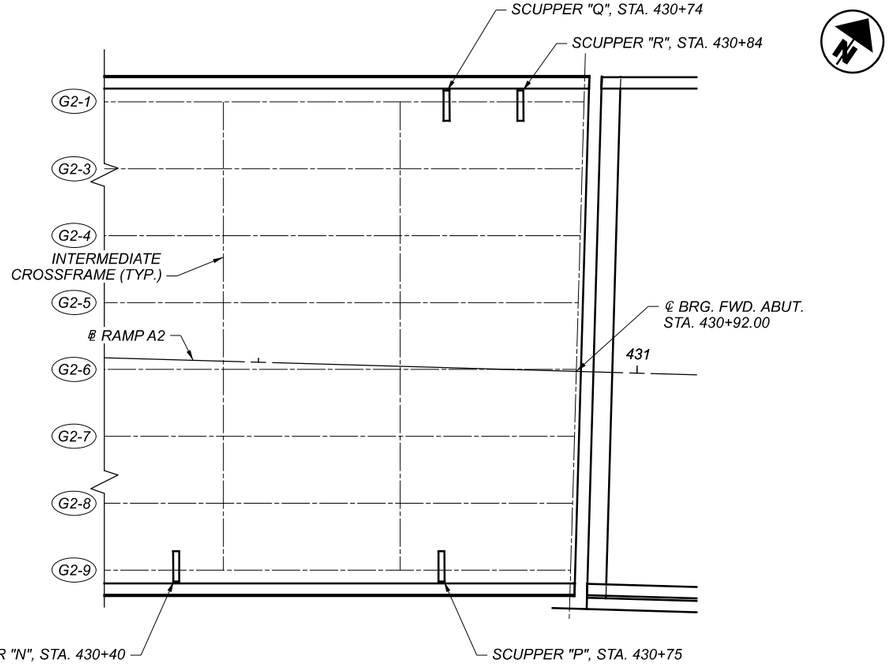
PLAN - REAR ABUTMENT



PLAN - PIER 4



PLAN - PIER 10



PLAN - FORWARD ABUTMENT

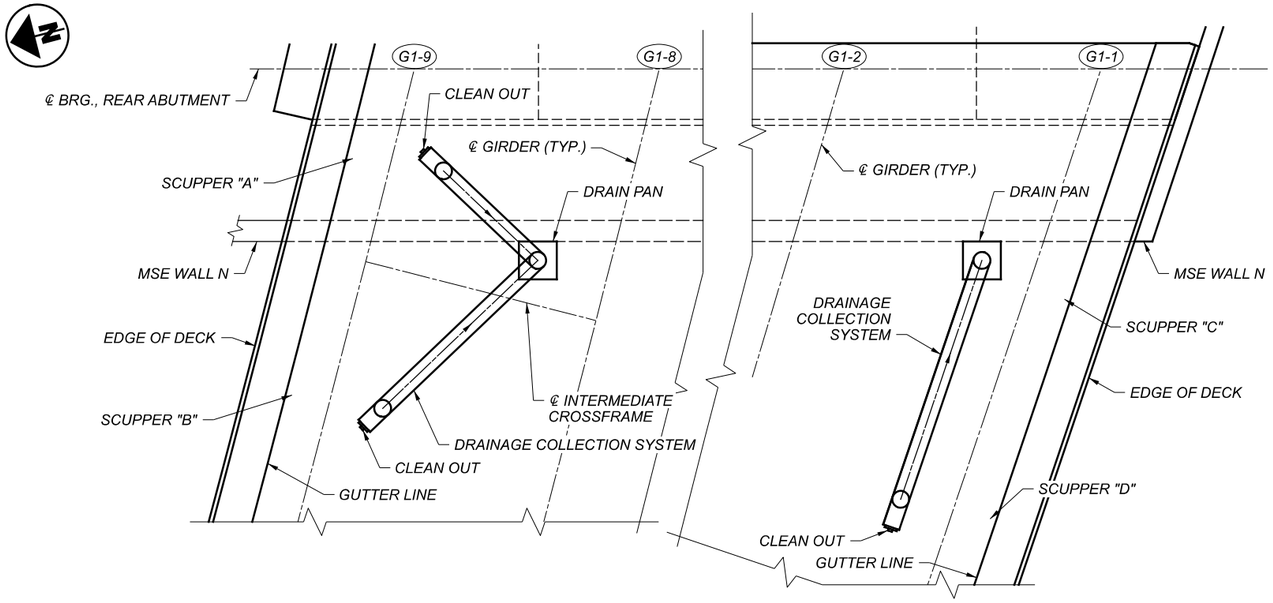
NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 110 / 164 .

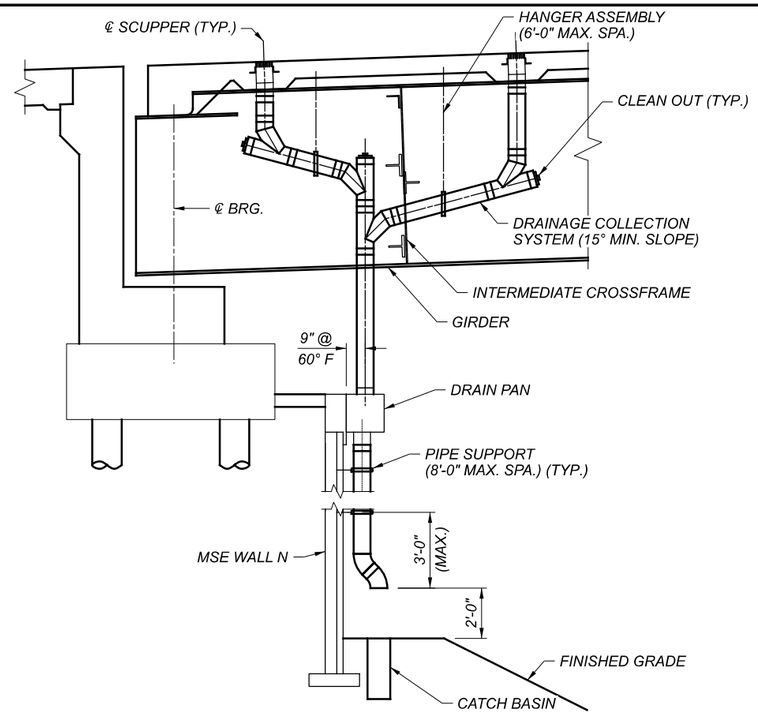
BRIDGE DRAINAGE DETAILS - (2 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	111
TOTAL	164
SHEET	1553
TOTAL	2338

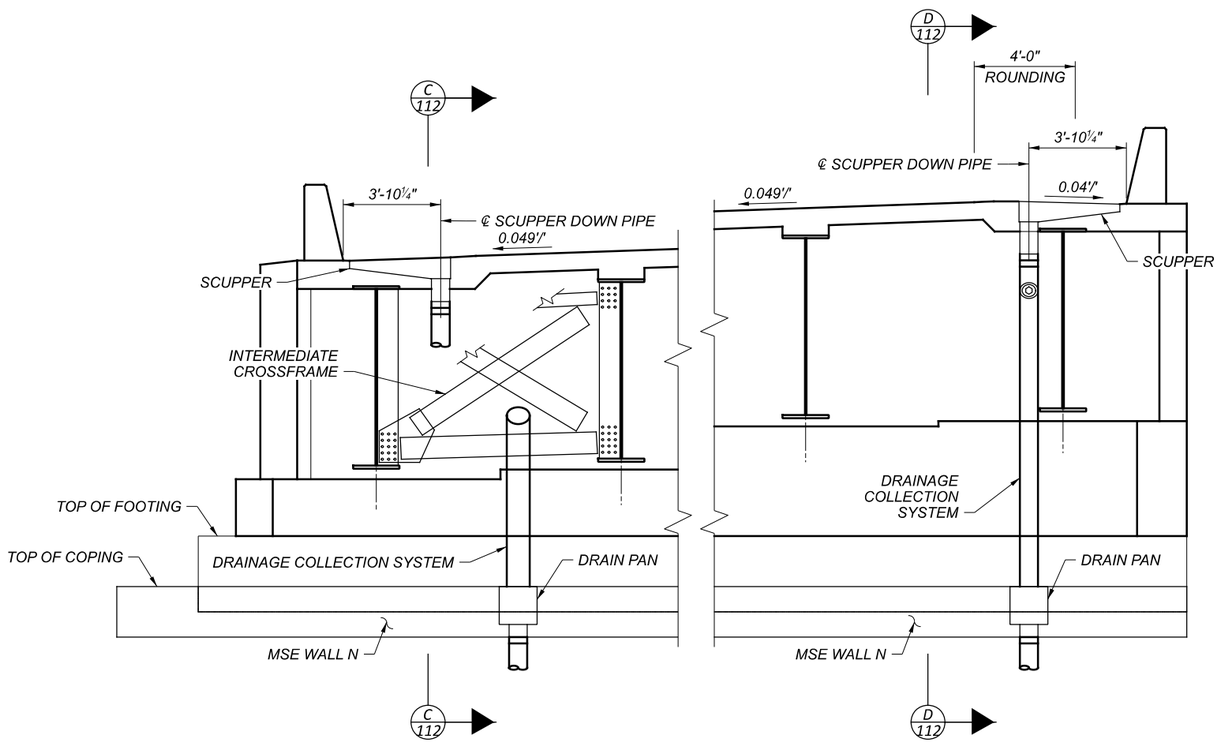
CUY-90-16.28 (CCG3A)



PLAN - REAR ABUTMENT



SECTION C-C

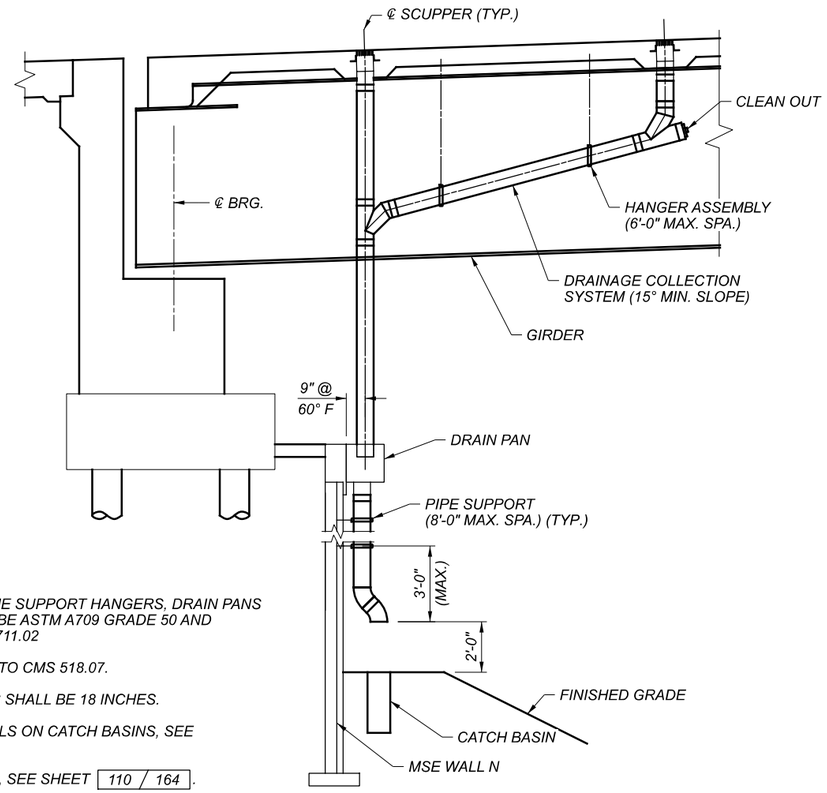


ELEVATION - REAR ABUTMENT

(LOOKING BACK STATION)

NOTES:

1. ALL MATERIALS FOR THE SUPPORT HANGERS, DRAIN PANS AND BRACKETS SHALL BE ASTM A709 GRADE 50 AND GALVANZIED PER CMS 711.02
2. PIPE SHALL CONFORM TO CMS 518.07.
3. MINIMUM BEND RADIUS SHALL BE 18 INCHES.
4. FOR ADDITIONAL DETAILS ON CATCH BASINS, SEE DRAINAGE PLANS.
5. FOR SCUPPER DETAILS, SEE SHEET 110 / 164.
6. FOR DRAIN PAN DETAILS, SEE SHEET 116 / 164.



SECTION D-D

BRIDGE DRAINAGE DETAILS - (3 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	112
TOTAL	164
SHEET	1554
TOTAL	2338

CUY-90-16.28 (CCG3A)

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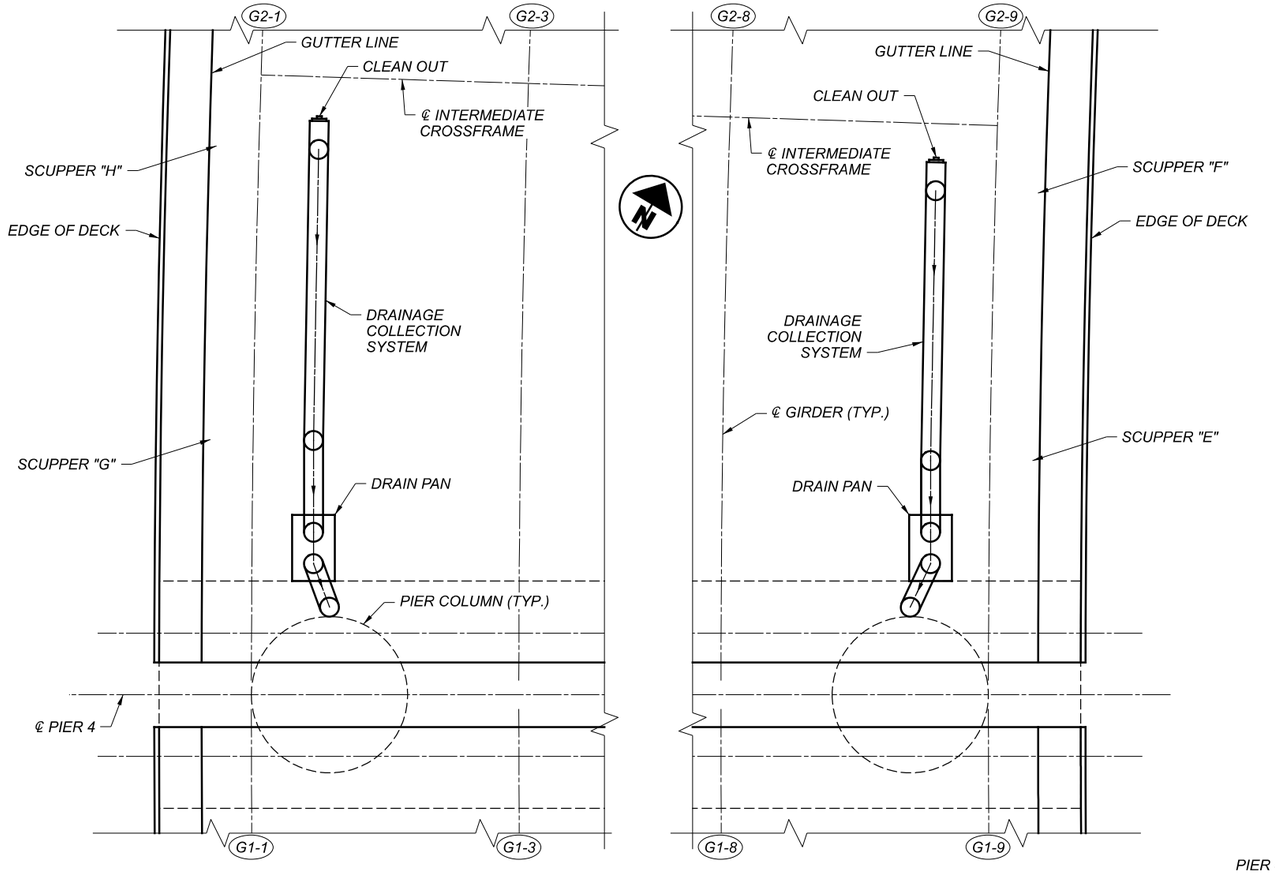
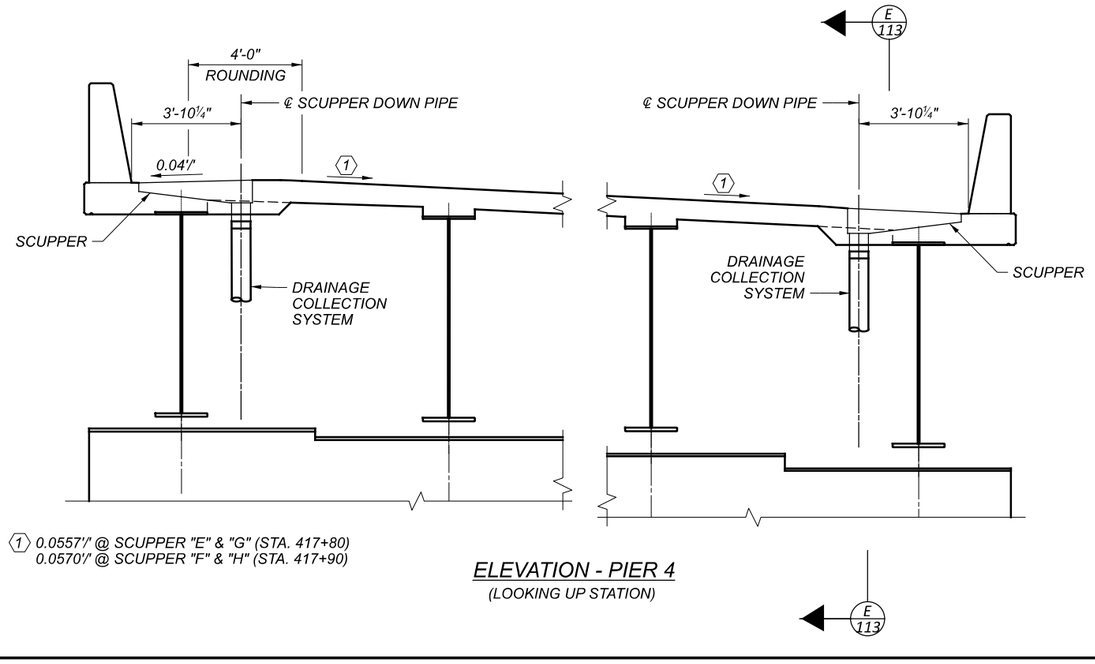
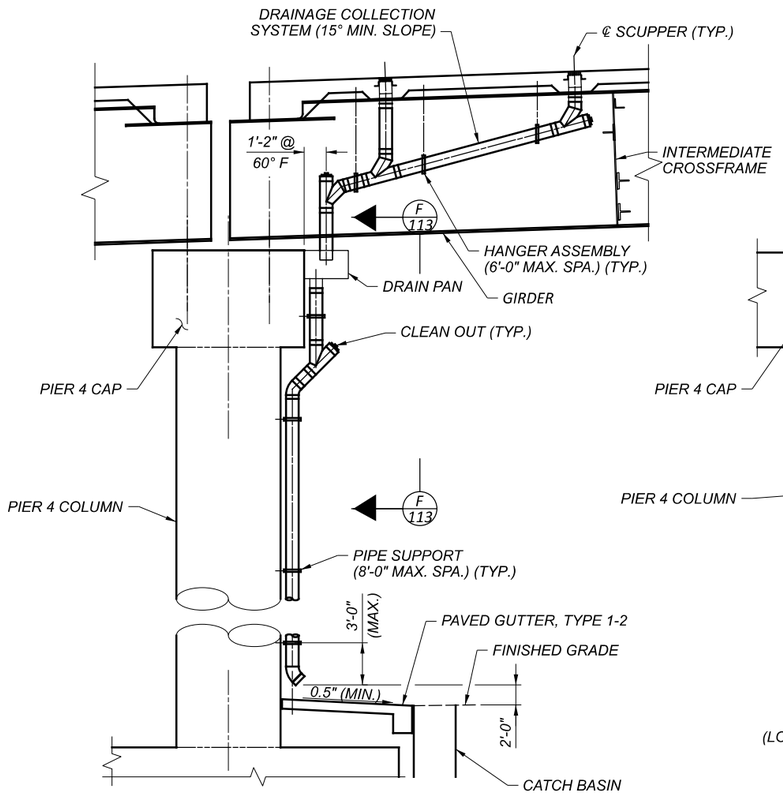


PLAN - PIER 4

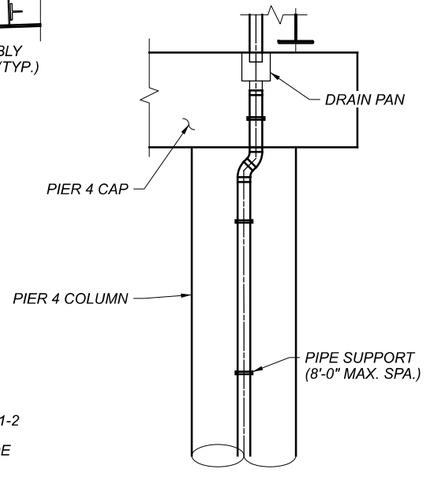


1 0.0557"/' @ SCUPPER "E" & "G" (STA. 417+80)
0.0570"/' @ SCUPPER "F" & "H" (STA. 417+90)

ELEVATION - PIER 4
(LOOKING UP STATION)



SECTION E-E



VIEW F-F
(LOOKING BACK STATION)

NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 110 / 164.
2. FOR ADDITIONAL NOTES AND DETAILS ON PAVED GUTTER, SEE ODOT SCD DM-2.1. INCLUDE WITH PAYMENT FOR ITEM 518 - SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN.

BRIDGE DRAINAGE DETAILS - (4 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	113
TOTAL	164
SHEET	1555
TOTAL	2338

CUY-90-16.28 (CCG3A)

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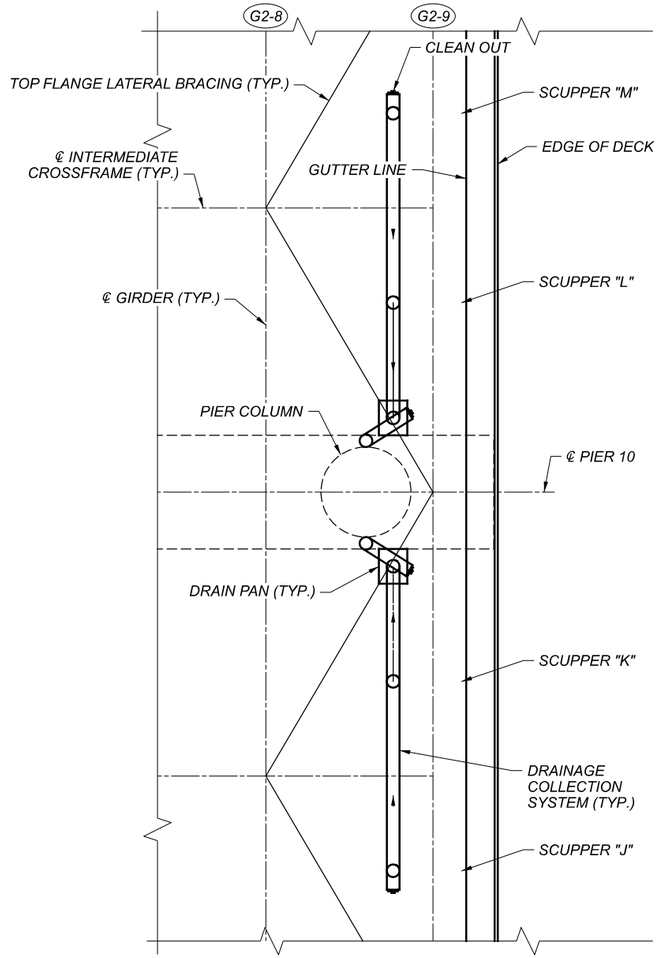
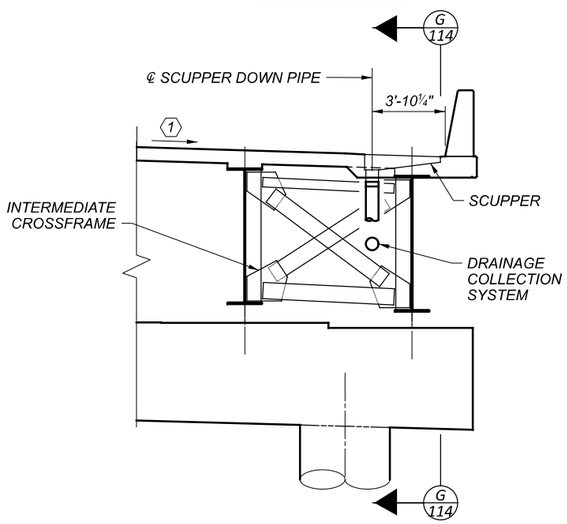


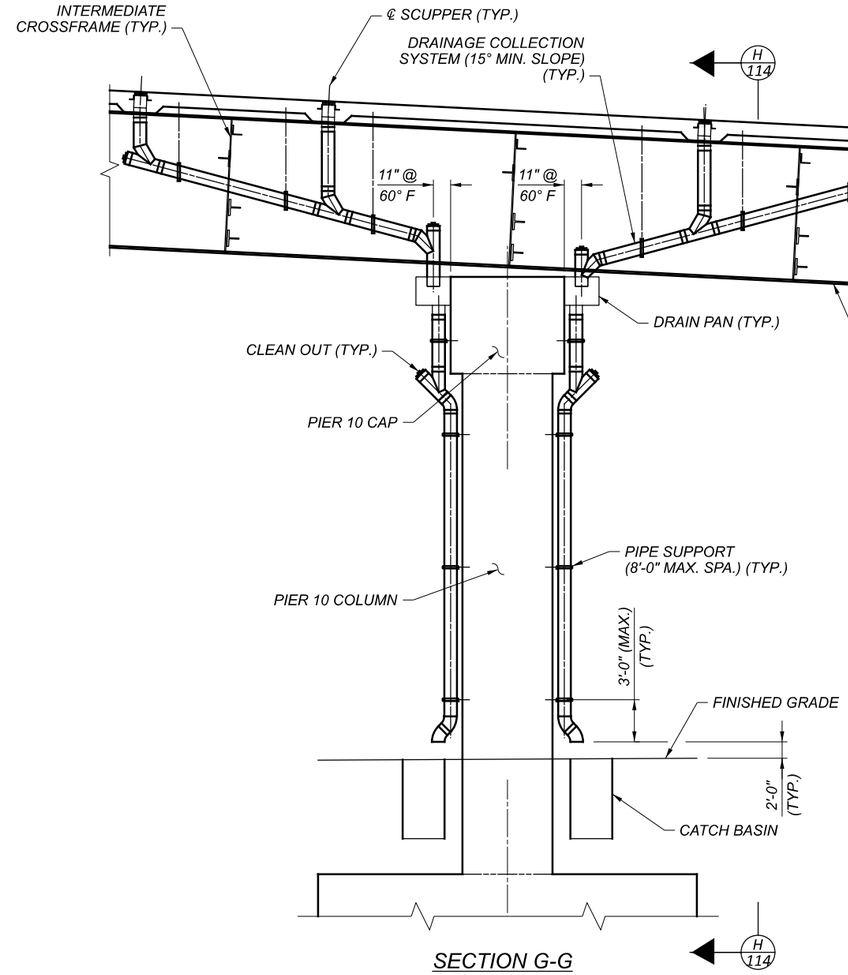
PLAN - PIER 10



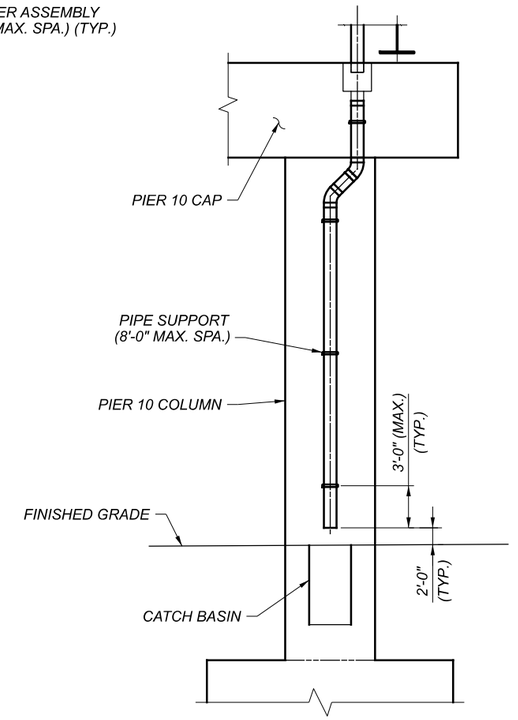
ELEVATION - PIER 10
(LOOKING UP STATION)

1 0.0305'/' @ SCUPPER "J" (STA. 428+88)
0.0293'/' @ SCUPPER "K" (STA. 428+98)

0.0268'/' @ SCUPPER "L" (STA. 429+18)
0.0256'/' @ SCUPPER "M" (STA. 429+28)



SECTION G-G



SECTION H-H
(LOOKING DOWN STATION)

NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 110 / 164 .

BRIDGE DRAINAGE DETAILS - (5 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	114
TOTAL	164
SHEET	1556
TOTAL	2338

CUY-90-16.28 (CCG3A)

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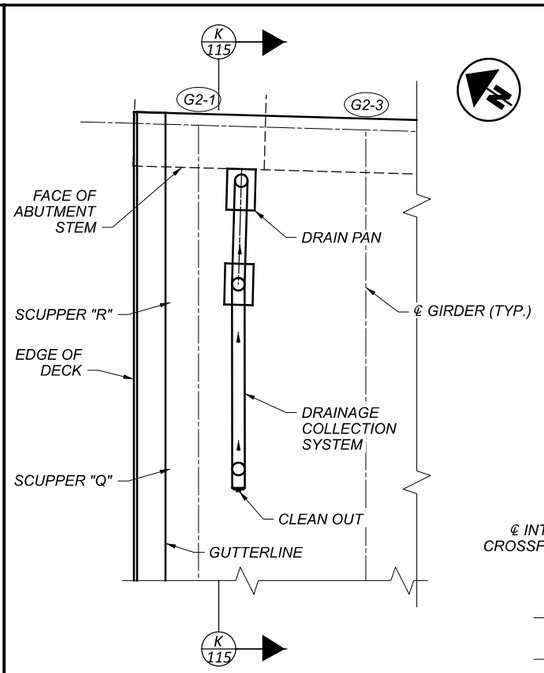
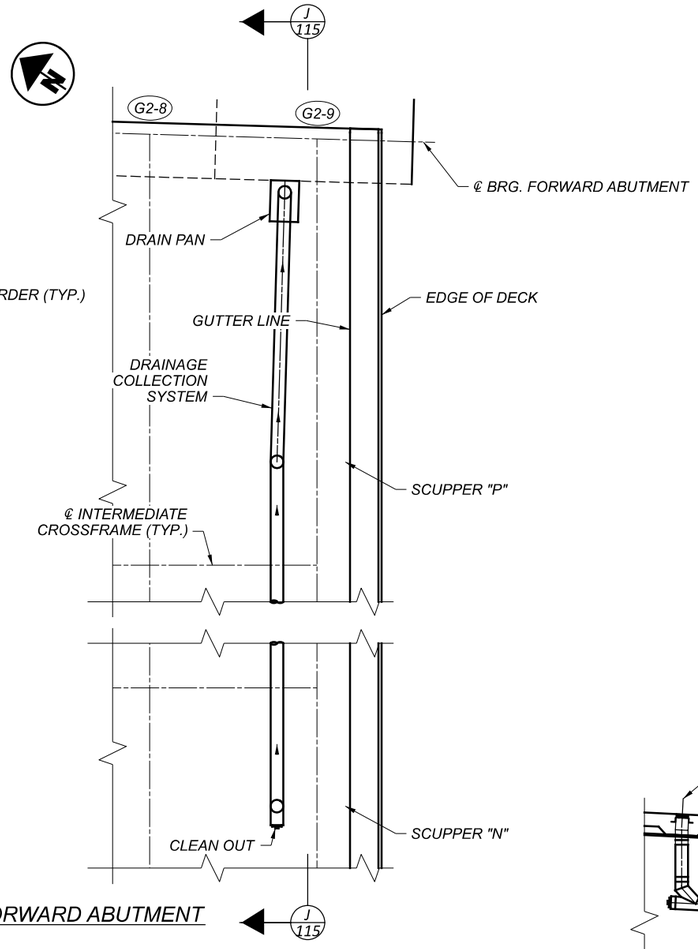
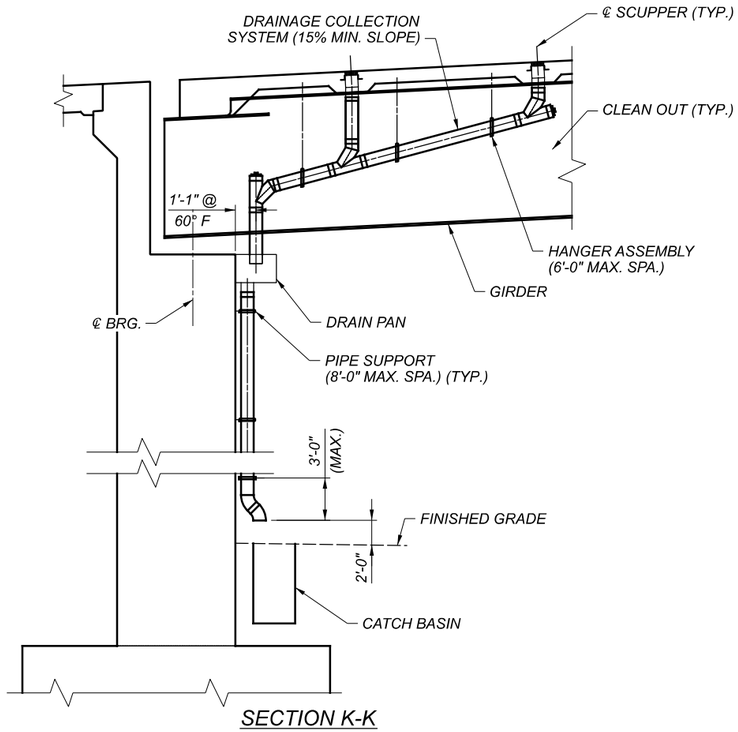
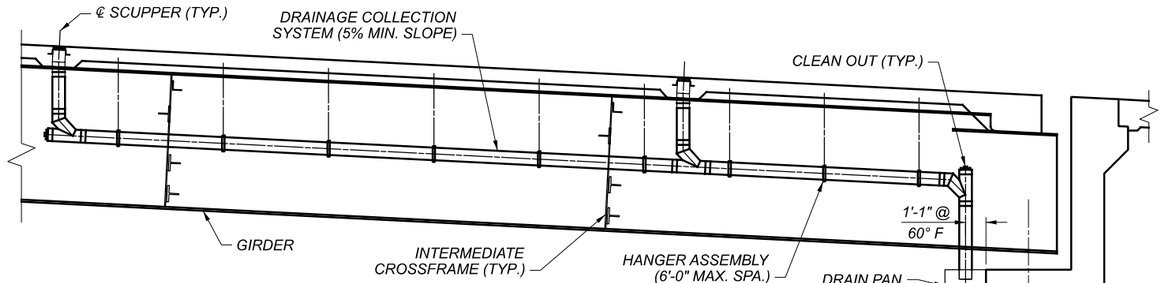




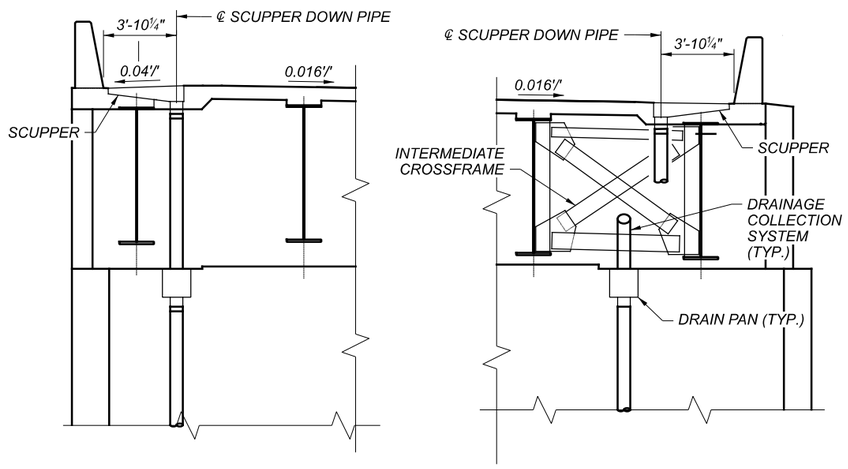
PLAN - FORWARD ABUTMENT



SECTION K-K



SECTION J-J



ELEVATION - FORWARD ABUTMENT
(LOOKING UP STATION)

NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 110 / 164.

BRIDGE DRAINAGE DETAILS - (6 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	115
TOTAL	164
SHEET	1557
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:13:03 PM USER: CRICCARDI
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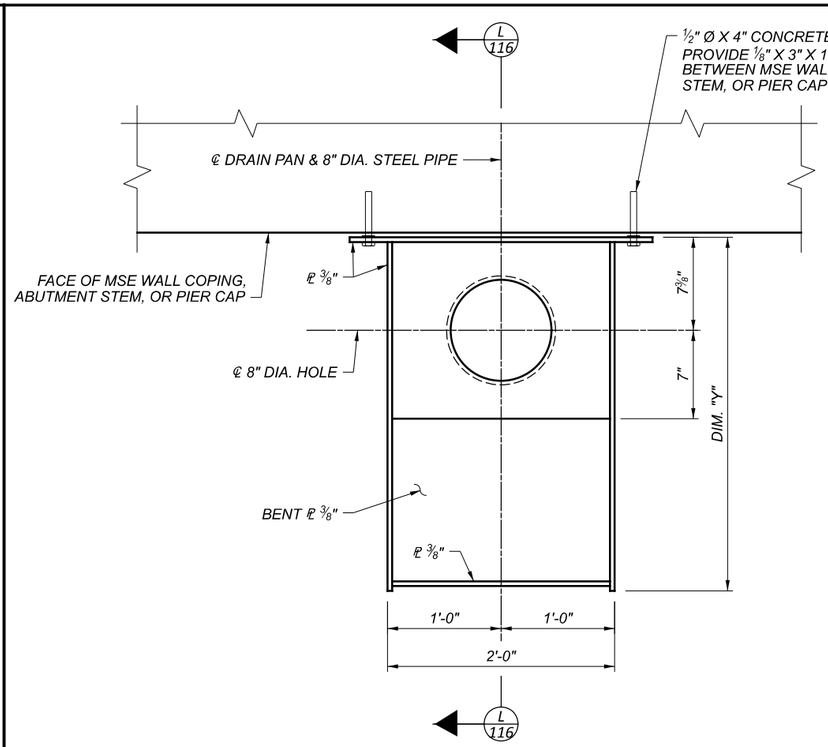
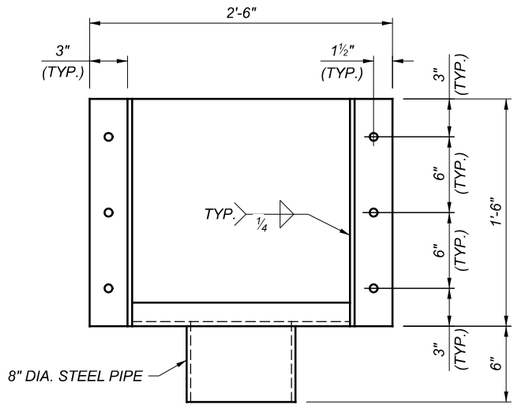


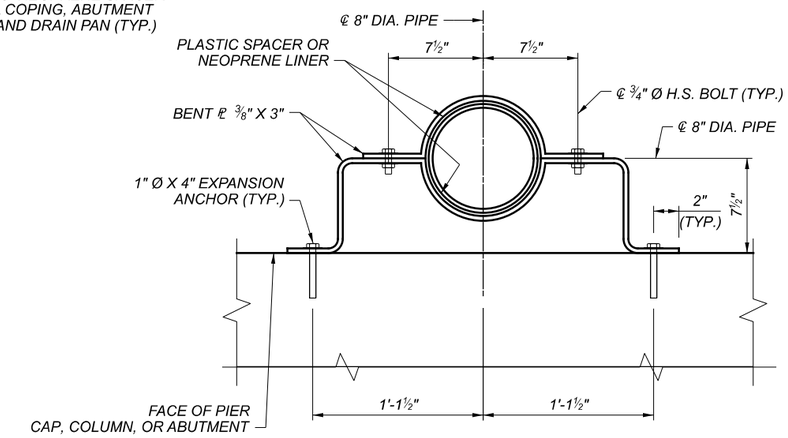
PLAN

DRAIN PAN DIMENSION TABLE		
LOCATION	DIM. "Y"	DIM. "Z"
REAR ABUTMENT	1'-6"	9"
PIER 4	2'-4"	1'-2"
PIER 10	1'-10"	11"
FORWARD ABUTMENT	2'-2"	1'-1"

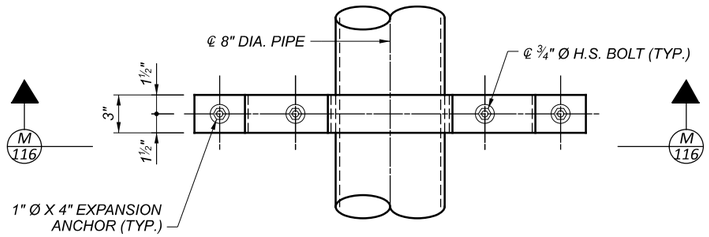


ELEVATION

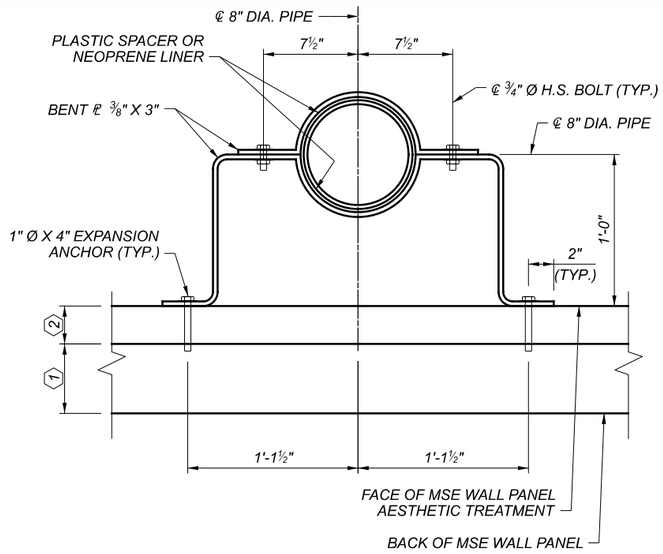
DRAIN PAN DETAILS



SECTION M-M
(AT PIERS AND FORWARD ABUTMENT)



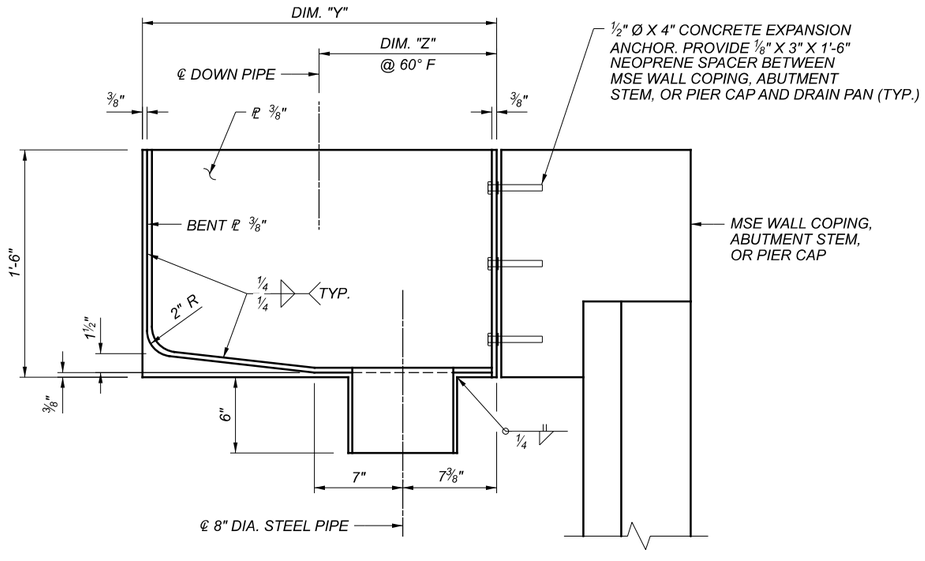
PIPE SUPPORT BRACKET DETAIL



SECTION M-M
(REAR ABUTMENT ONLY)

(1) 5½" MSE WALL PANEL THICKNESS

(2) 3" AESTHETIC FACING TREATMENT



SECTION L-L
(MSE WALL COPING SHOWN, ABUTMENT STEM AND PIER CAP SIMILAR)

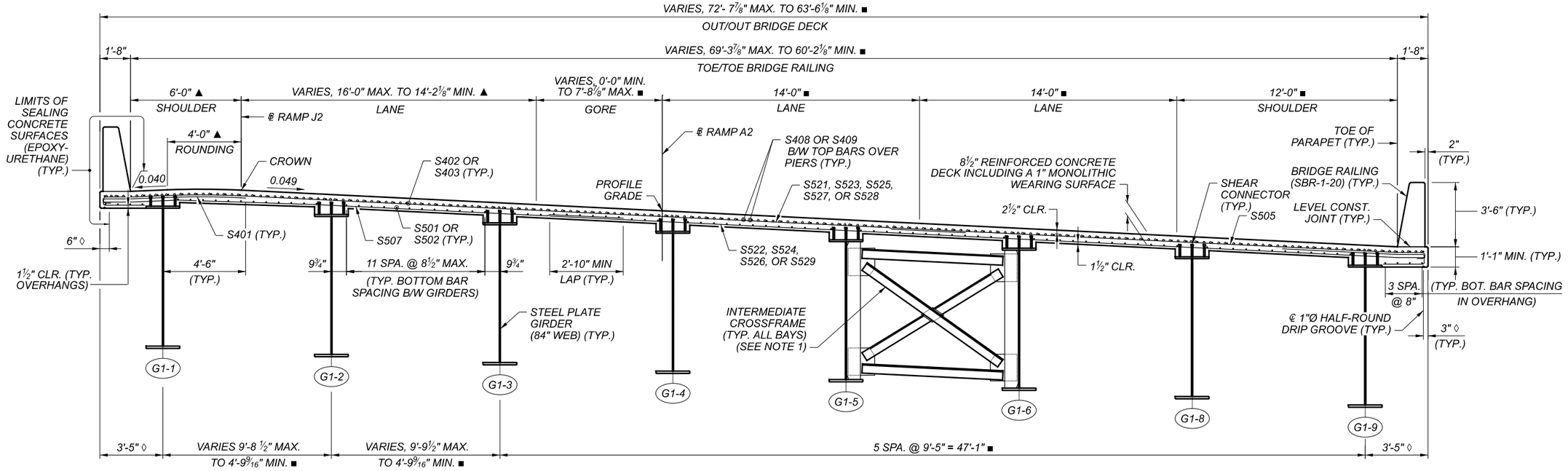
NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 110 / 164 .

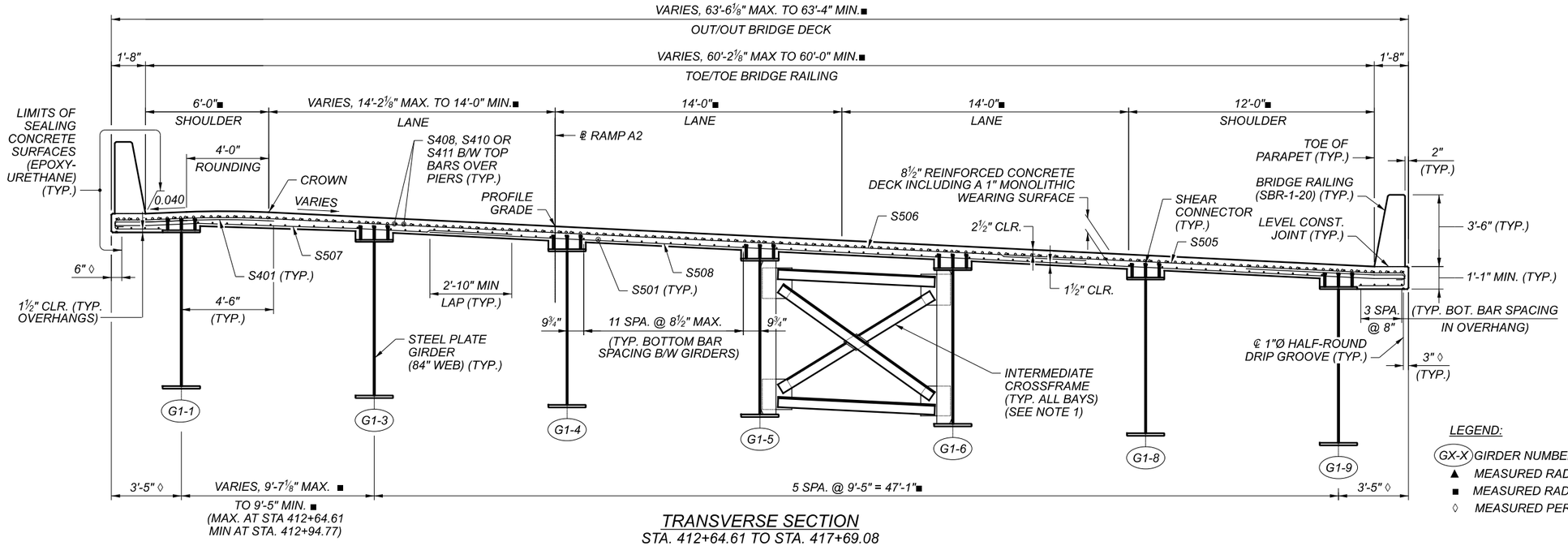
BRIDGE DRAINAGE DETAILS - (7 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	RBK
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	116
TOTAL	164
SHEET	1558
TOTAL	2338

CUY-90-16.28 (CCG3A)



TRANSVERSE SECTION
STA. 410+71.75 TO STA. 412+64.61



TRANSVERSE SECTION
STA. 412+64.61 TO STA. 417+69.08

LEGEND:

(GX-X) GIRDER NUMBER
▲ MEASURED RADIALLY TO ℄ RAMP J2
■ MEASURED RADIALLY TO ℄ RAMP A2
◊ MEASURED PERPENDICULAR TO THE EDGE OF DECK

NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 119 / 164 .
2. FOR SUPERELEVATION TRANSITION INFORMATION, SEE SHEET 119 / 164 .

TRANSVERSE SECTION - (1 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	117
TOTAL	164
SHEET	1559
TOTAL	2338

CUY-90-16.28 (CCG3A)

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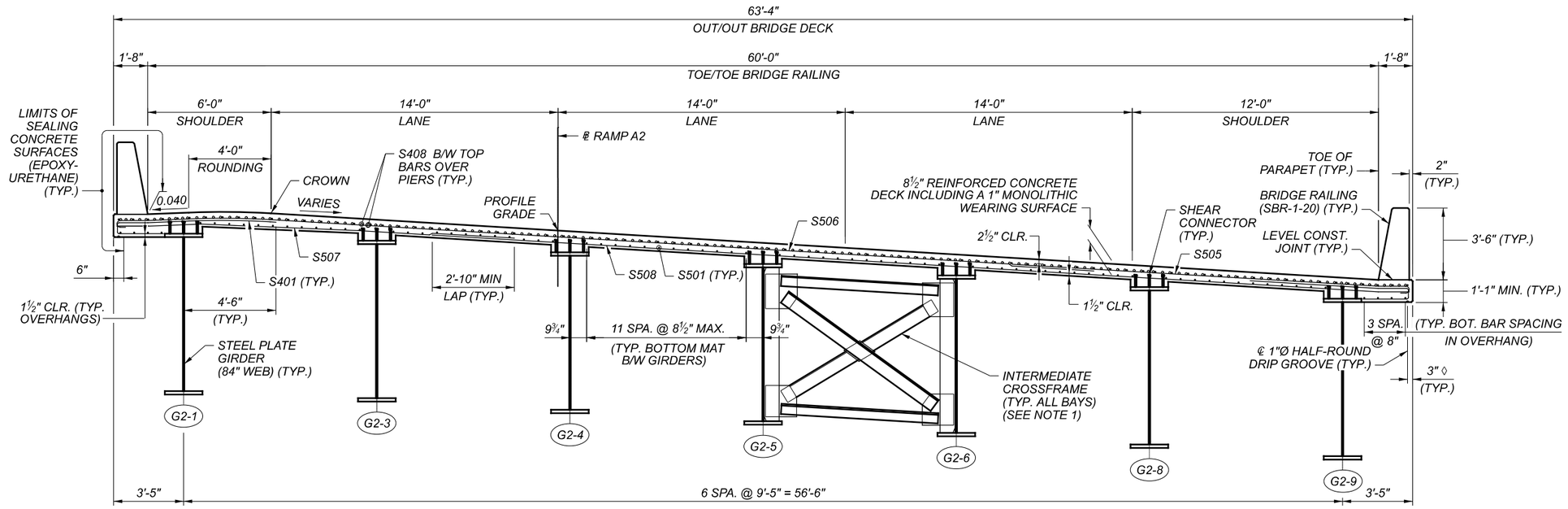
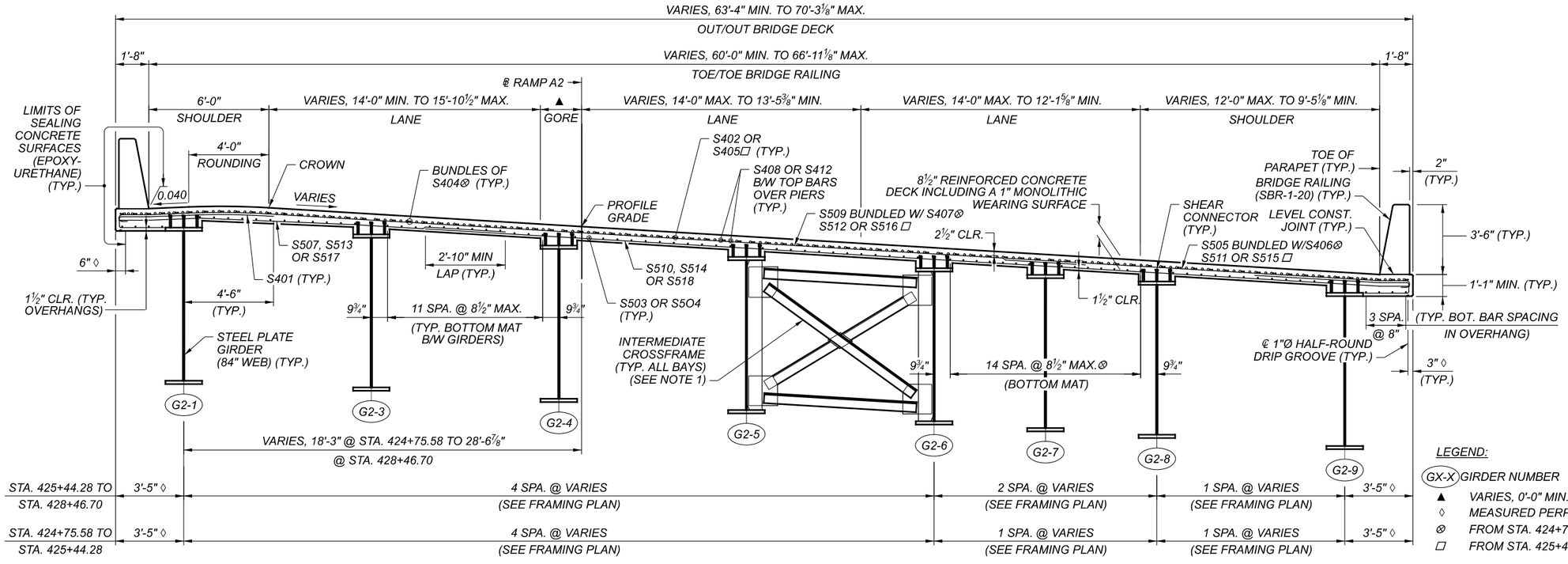


TRANSVERSE SECTION
STA. 417+73.42 TO STA. 424+75.58



TRANSVERSE SECTION
STA. 424+75.58 TO STA. 428+46.70

LEGEND:

- (GX-X) GIRDER NUMBER
- ▲ VARIES, 0'-0" MIN. TO 8'-5⅜" MAX.
- ◊ MEASURED PERPENDICULAR TO THE EDGE OF DECK
- ⊗ FROM STA. 424+75.58 TO STA. 425+48.37
- ☐ FROM STA. 425+48.37 TO STA. 428+46.70

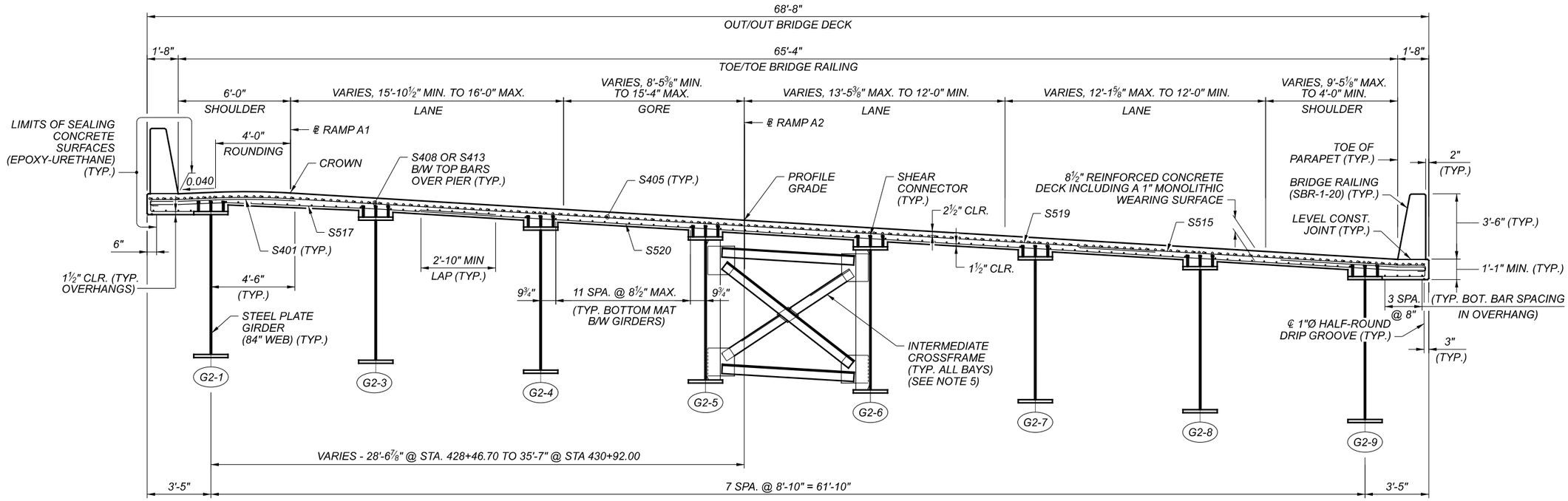
NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 119 / 164.
2. FOR SUPERELEVATION TRANSITION INFORMATION, SEE SHEET 119 / 164.

TRANSVERSE SECTION - (2 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

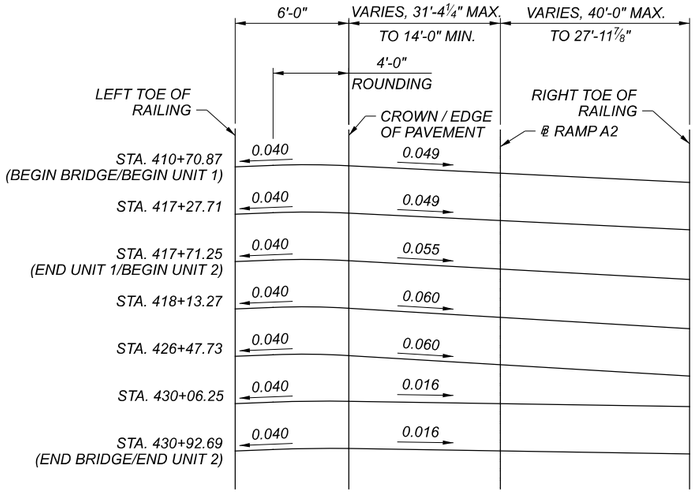
SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	118
TOTAL	164
SHEET	1560
TOTAL	2338

CUY-90-16.28 (CCG3A)



TRANSVERSE SECTION

STA 428+46.70 TO STA. 430+92.00
(ALL DIMENSIONS MEASURED PERPENDICULAR TO LEFT EDGE OF DECK)



SUPERELEVATION TRANSITION DIAGRAM

NOTES:

1. FOR FRAMING PLAN AND GIRDER ELEVATIONS, SEE SHEETS 58 / 164 THRU 68 / 164.
2. FOR SCREED, TOP OF HAUNCH, AND FINAL DECK ELEVATIONS, SEE SHEETS 128 / 164 THRU 150 / 164 .
3. FOR DECK PLANS, SEE SHEETS 98 / 164 THRU 106 / 164.
4. FOR BRIDGE RAILING PLAN AND DETAILS, SEE SHEET 120 / 164.
5. FOR CROSSFRAME DETAILS, SEE SHEETS 74 / 164 THRU 75 / 164.
6. FOR REINFORCING STEEL LISTS, SEE SHEETS 156 / 164 THRU 164 / 164.
7. DECK SLAB CONCRETE QUANTITIY. THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITIY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE STIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 5¾ INCHES AND HAUNCH WIDTH EQUAL TO TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.

   THE HAUNCH THICKNESS WAS ALSO MEASURED AT THE CENTERLINE OF GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.

LEGEND:

(GX-X) GIRDER NUMBER

TRANSVERSE SECTION - (3 OF 3)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	119
TOTAL	164
SHEET	1561
TOTAL	2338

CUY-90-16.28 (CCG3A)

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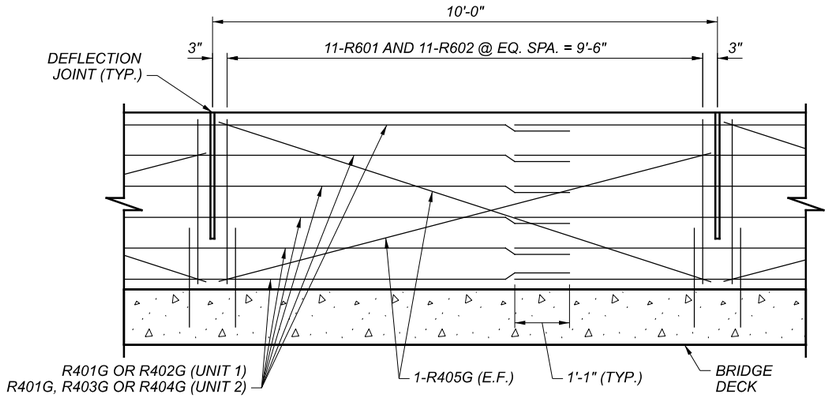
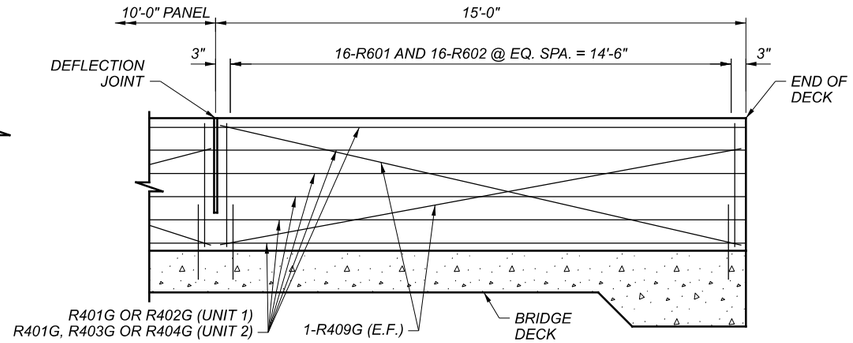


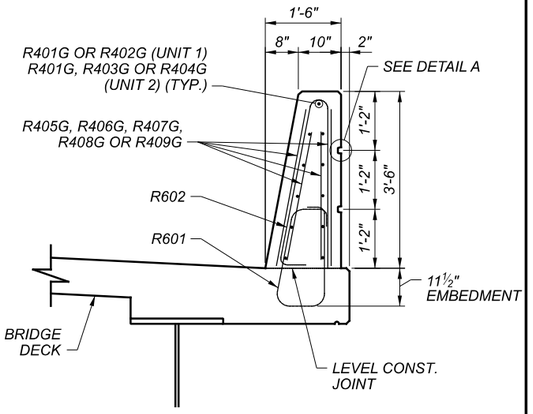
BRIDGE RAILING REINFORCING - 10'-0" PANEL

(133 PANELS - UNIT 1)
(256 PANELS - UNIT 2)



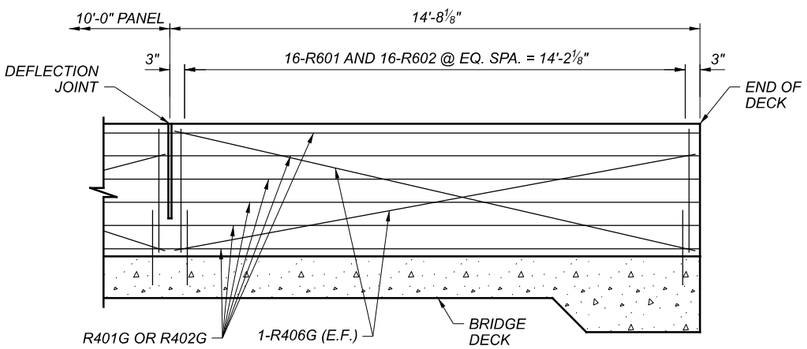
BRIDGE RAILING REINFORCING - 15'-0" PANEL

(2 PANELS - UNIT 1)
(2 PANELS - UNIT 2)



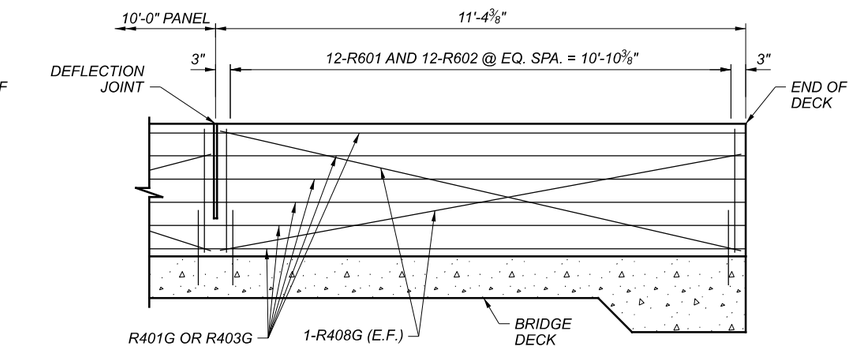
TYPICAL BRIDGE RAILING SECTION

(DECK REINFORCING NOT SHOWN)



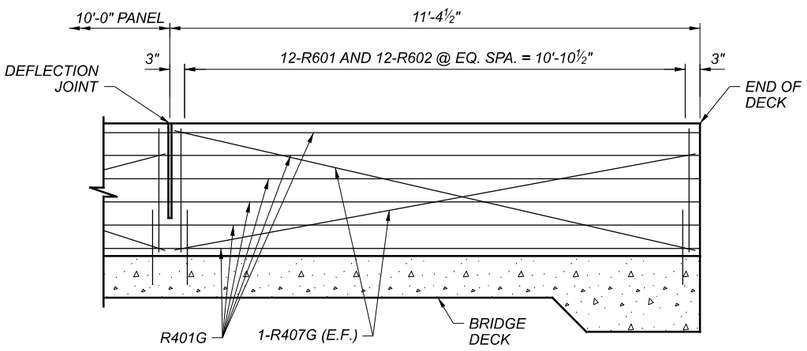
BRIDGE RAILING REINFORCING - 14'-8⅛" PANEL

(1 PANEL - UNIT 1)



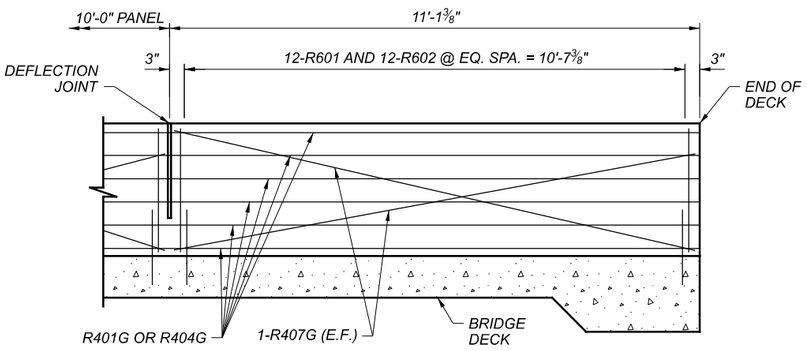
BRIDGE RAILING REINFORCING - 11'-4⅜" PANEL

(1 PANEL - UNIT 2)



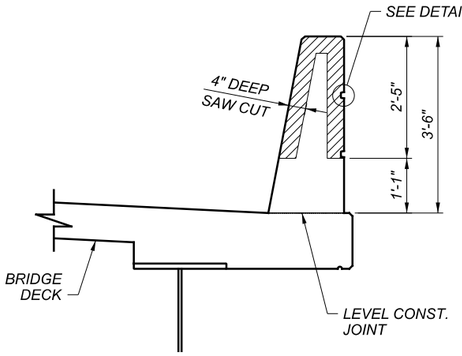
BRIDGE RAILING REINFORCING - 11'-4½" PANEL

(1 PANEL - UNIT 1)



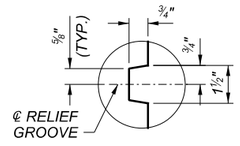
BRIDGE RAILING REINFORCING - 11'-1⅜" PANEL

(1 PANEL - UNIT 2)



DEFLECTION JOINT DETAIL

(DECK AND RAILING REINFORCING NOT SHOWN)



DETAIL A

NOTES:

1. FOR ADDITIONAL RAILING NOTES AND DETAILS, SEE ODOT STD. DWG. SBR-1-20.

2. THE CONCRETE FOR THE PARAPET (RAILING) MOUNTED ON THE APPROACH SLAB SHALL BE PAID FOR WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/QA BRIDGE DECK (PARAPET).

3. FOR APPROACH SLAB RAILING AND TRANSITION DETAILS, SEE SHEETS 154 / 164 AND 155 / 164 .

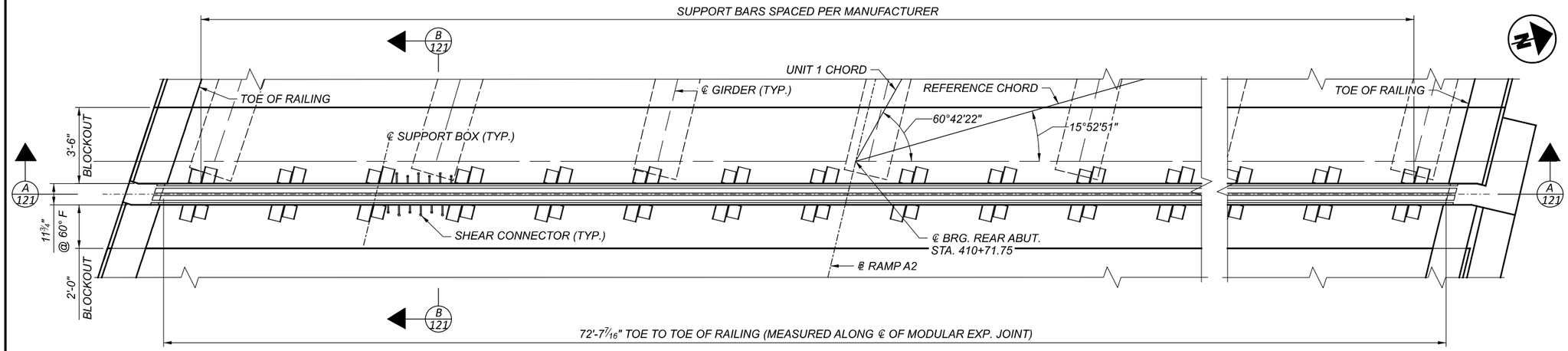
4. FOR SLAB AND RAILING PLAN, SEE SHEETS 98 / 164 THRU 106 / 164

5. FOR TRANSVERSE SECTIONS, SEE SHEETS 117 / 164 THRU 119 / 164

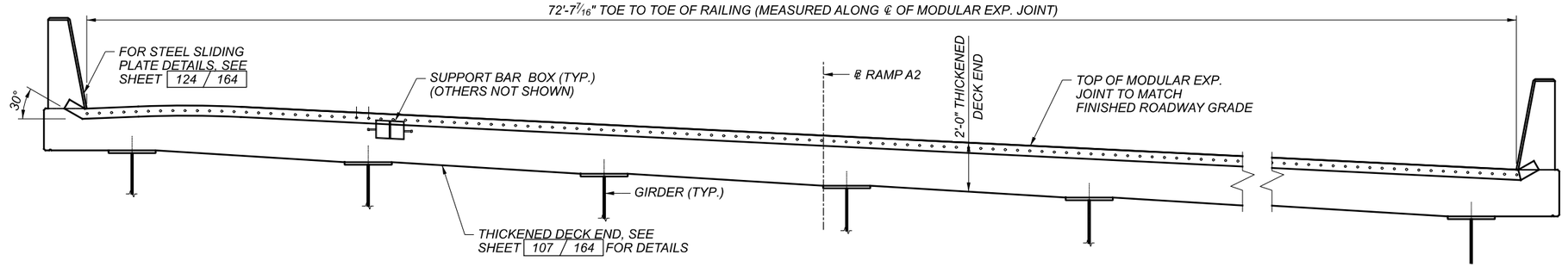
BRIDGE RAILING DETAILS
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	NJH
CHECKER	RBK
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	120
TOTAL	164
SHEET	1562
TOTAL	2338

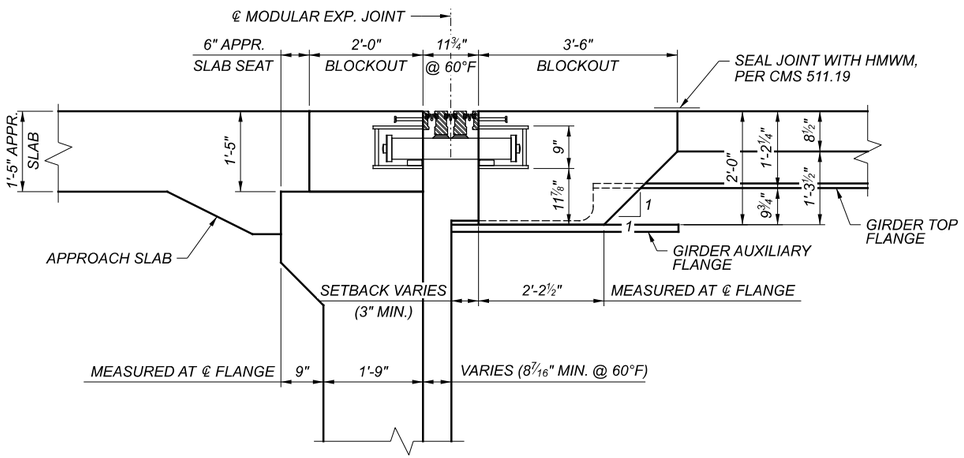
CUY-90-16.28 (CCG3A)



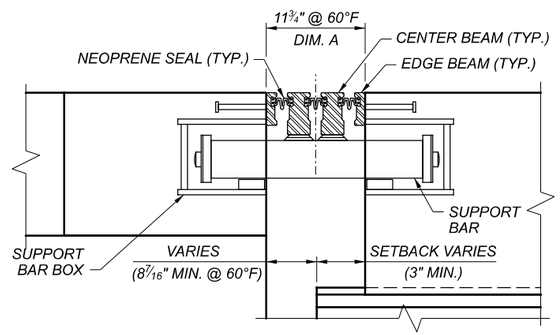
PLAN AT MODULAR EXPANSION JOINT
REAR ABUTMENT



SECTION A-A



SECTION B-B
(HORIZONTAL DIMENSIONS MEASURED NORMAL TO ℄ BRG. AND ℄ MODULAR EXP. JOINT, UNLESS NOTED OTHERWISE)



MODULAR EXP. JOINT DETAIL
(HORIZONTAL DIMENSIONS MEASURED NORMAL TO ℄ BRG. AND ℄ MODULAR EXP. JOINT, UNLESS NOTED OTHERWISE)

EXPANSION JOINT OPENING DIMENSIONS ▲	
	REAR ABUT. DIM. "A" (IN.)
30ºF	12.53
40ºF	12.27
50ºF	12.01
60ºF	11.75
70ºF	11.49
80ºF	11.23
90ºF	10.97

▲ JOINT OPENINGS SHOWN ARE BASED ON A MID-TEMP OF 45°F USING THE DESIGN DATA FOR D.S. BROWN STEELFLEX MODULAR EXPANSION JOINT SYSTEMS

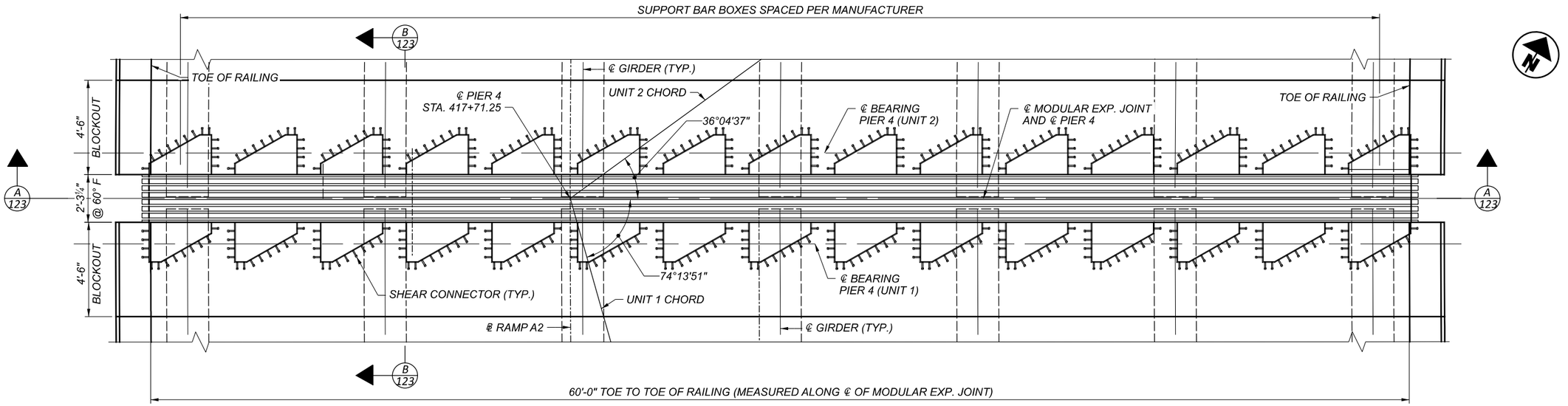
NOTES:

1. FOR MODULAR EXPANSION JOINT NOTES, SEE SHEET 124 / 164 .
2. DESIGN THE MODULAR EXPANSION JOINT SYSTEM TO ACCOMMODATE 8.4 INCHES OF MOVEMENT MEASURED ALONG THE LOCAL TANGENT OF BASELINE RAMP A2 WHERE IT CROSSES THE CENTERLINE OF BEARING. THIS MOVEMENT INCLUDES ALL AASHTO PRESCRIBED CONTINGENCIES.

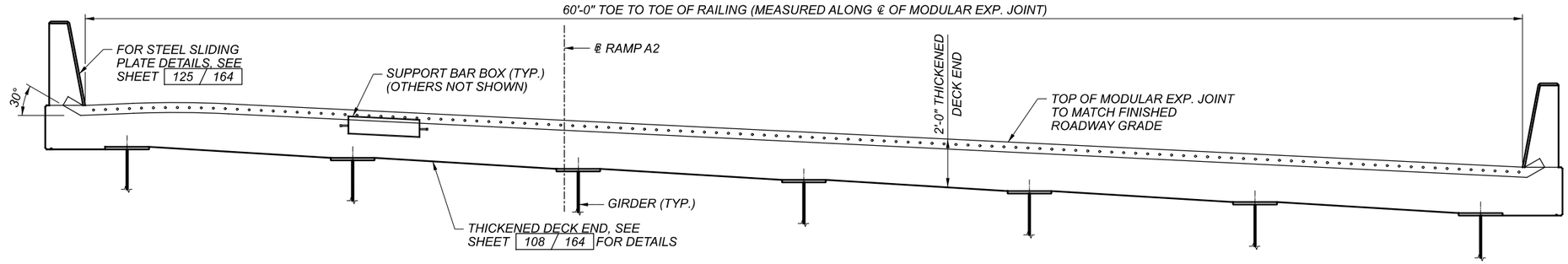
MODULAR EXPANSION JOINT DETAILS - (1 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER MKO | CHECKER ABO
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 121 | TOTAL 164
SHEET 1563 | TOTAL 2338

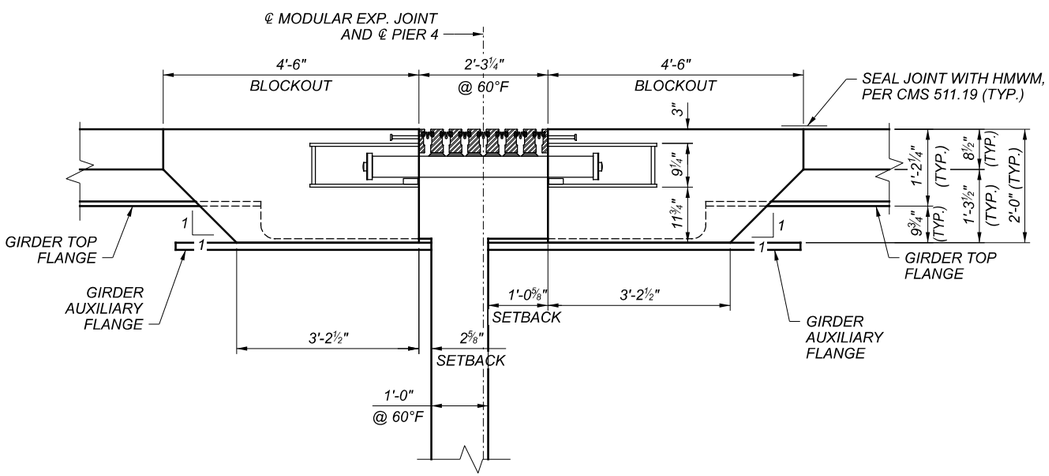
CUY-90-16.28 (CCG3A)



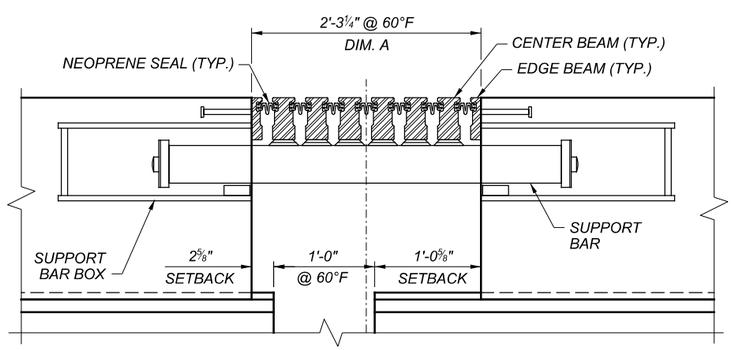
PLAN AT MODULAR EXPANSION JOINT
PIER 4



SECTION A-A



SECTION B-B
(HORIZONTAL DIMENSIONS MEASURED NORMAL TO ℄ PIER 4
AND ℄ MODULAR EXP. JOINT, UNLESS NOTED OTHERWISE)



MODULAR EXP. JOINT DETAIL
(HORIZONTAL DIMENSIONS MEASURED NORMAL TO ℄ PIER 4
AND ℄ MODULAR EXP. JOINT, UNLESS NOTED OTHERWISE)

EXPANSION JOINT OPENING DIMENSIONS▲	
	PIER 4 DIM. "A" (IN.)
30ºF	29.60
40ºF	28.82
50ºF	28.03
60ºF	27.25
70ºF	26.47
80ºF	25.69
90ºF	24.91

▲ JOINT OPENINGS SHOWN ARE BASED ON A MID-TEMP OF 45°F USING THE DESIGN DATA FOR D.S. BROWN STEELFLEX MODULAR EXPANSION JOINT SYSTEMS

NOTES:

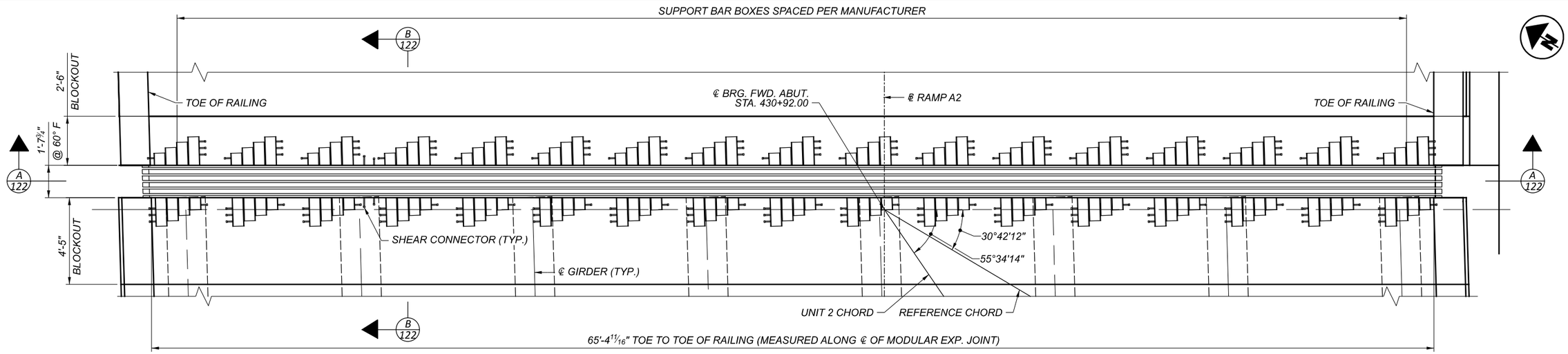
1. FOR MODULAR EXPANSION JOINT NOTES, SEE SHEET 124 / 164 .
2. DESIGN THE MODULAR EXPANSION JOINT SYSTEM TO ACCOMMODATE 19.7 INCHES OF MOVEMENT MEASURED NORMAL TO CENTERLINE OF BEARING AND CENTERLINE OF PIER 4. THIS MOVEMENT INCLUDES ALL AASHTO PRESCRIBED CONTINGENCIES.

MODULAR EXPANSION JOINT DETAILS - (2 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

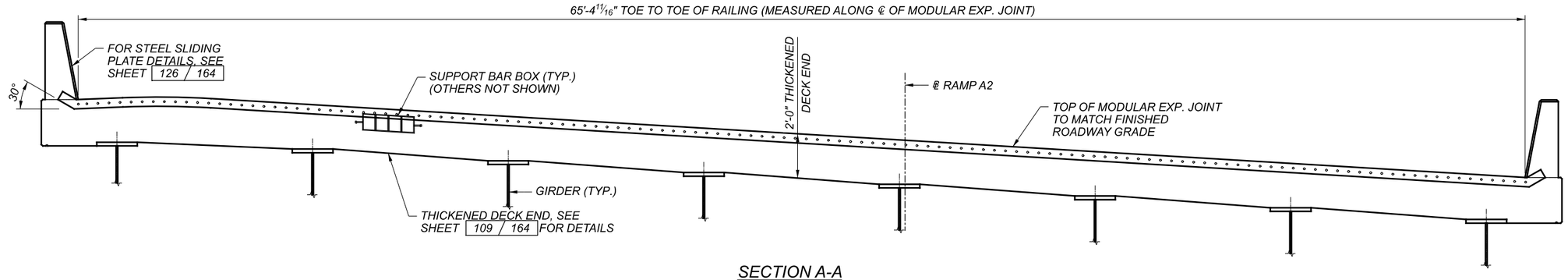
SFN 1806910
DESIGN AGENCY
DESIGNER MKO | CHECKER ABO
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 122 | TOTAL 164
SHEET 1564 | TOTAL 2338

CUY-90-16.28 (CCG3A)

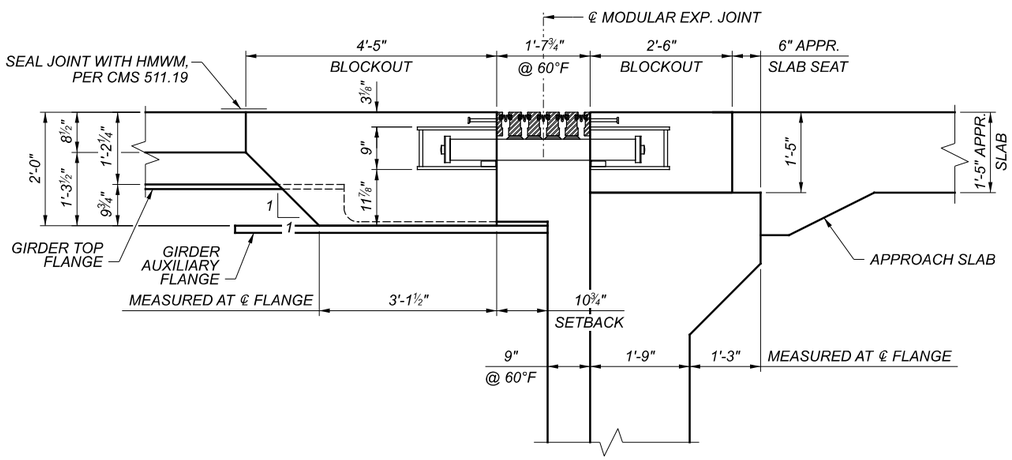
MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:13:48 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SX002.dgn



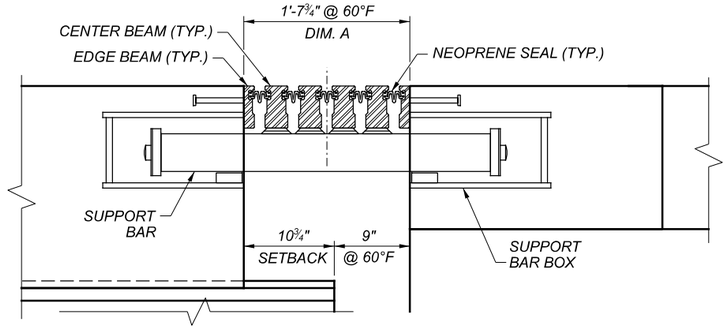
PLAN AT MODULAR EXPANSION JOINT
FORWARD ABUTMENT



SECTION A-A



SECTION B-B
(HORIZONTAL DIMENSIONS MEASURED NORMAL TO ℄ BRG. AND ℄ MODULAR EXP. JOINT, UNLESS NOTED OTHERWISE)



MODULAR EXP. JOINT DETAIL
(HORIZONTAL DIMENSIONS MEASURED NORMAL TO ℄ BRG. AND ℄ MODULAR EXP. JOINT, UNLESS NOTED OTHERWISE)

EXPANSION JOINT OPENING DIMENSIONS ▲	
	FWD. ABUT. DIM. "A" (IN.)
30ºF	21.13
40ºF	20.67
50ºF	20.21
60ºF	19.75
70ºF	19.29
80ºF	18.82
90ºF	18.36

▲ JOINT OPENINGS SHOWN ARE BASED ON A MID-TEMP OF 45°F USING THE DESIGN DATA FOR D.S. BROWN STEELFLEX MODULAR EXPANSION JOINT SYSTEMS.

NOTES:

1. FOR MODULAR EXPANSION JOINT NOTES, SEE SHEET 124 / 164 .
2. DESIGN THE MODULAR EXPANSION JOINT SYSTEM TO ACCOMMODATE 13.7 INCHES OF MOVEMENT MEASURED ALONG THE CENTERLINE OF GIRDER. THIS MOVEMENT INCLUDES ALL AASHTO PRESCRIBED CONTINGENCIES.

MODULAR EXPANSION JOINT DETAILS - (3 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER MKO | CHECKER ABO
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 123 | TOTAL 164
SHEET 1565 | TOTAL 2338

CUY-90-16.28 (CCG3A)

NOTES:

1. THE MODULAR EXPANSION JOINTS SHALL BE PLACED AFTER ALL DECK POURS FOR BOTH UNIT 1 AND UNIT 2 HAVE BEEN COMPLETED AND AFTER THE REQUIREMENTS NOTED IN THE DECK POURING SEQUENCE ON SHEET 151 / 164 HAVE BEEN SATISFIED SUCH THAT THE THICKENED DECK ENDS AND BLOCKOUTS ARE PERMITTED TO BEGIN.

2. THE MODULAR EXPANSION JOINT SYSTEM, INCLUDING ANCHORAGES AND SUPPORT BAR BOXES SHALL BE SUPPLIED BY THE APPROVED CHOSEN MANUFACTURER.

3. THE DETAILS SHOWN ARE INTENDED TO BE SCHEMATIC. THE ACTUAL COMPONENTS OF THE EXPANSION JOINT SYSTEM MAY VARY FROM THOSE SHOWN. THIS INCLUDES, BUT IS NOT LIMITED TO THE NUMBER OF CELLS, NUMBER OF SUPPORT BARS, SUPPORT BAR SPACING, AND SUPPORT BAR BOX SIZE. HOWEVER, THE TOTAL REQUIRED RANGE OF EXPANSION REMAINS UNCHANGED REGARDLESS OF MANUFACTURER CHOSEN.

4. SPACING OF SUPPORT BARS SHALL BE LIMITED TO THREE FOOT CENTERS UNDER MAIN LOAD BEARING BEAMS UNLESS FATIGUE TESTING OF THE ACTUAL WELDING CONNECTION DETAILS HAS BEEN PERFORMED TO SHOW THAT A GREATER SPACING IS ACCEPTABLE. FATIGUE RESISTANCE SHALL BE DETERMINED ACCORDING TO AASHTO LRFD 6.6.1.2.5. ALL COMPONENTS OR DETAILS SHALL BE DESIGNED FOR INFINITE LIFE USING FATIGUE I LOAD COMBINATION.

5. WELDING SHALL COMPLY WITH THE CURRENT AASHTO/AWS BRIDGE WELDING CODE D1.5.

6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

7. DETAILED SHOP DRAWINGS SHALL BE SUBMITTED FOR THE MODULAR EXPANSION JOINT ASSEMBLY AND THE SHIPPING DEVICE FOR APPROVAL BY THE ENGINEER. THE SHOP DRAWINGS SHALL INCLUDE A TEMPERATURE ADJUSTMENT CHART WITH 10° INCREMENTS BASED ON THE FINAL MODULAR EXPANSION JOINT DESIGN PERFORMED BY THE MANUFACTURER.

8. MODULAR EXPANSION JOINT SHALL BE MANUFACTURED TO FIT ROADWAY CROSS SLOPES AND GRADES INDICATED ON PLANS AND TO RUN CONTINUOUSLY BETWEEN LIMITS AS SHOWN. ALL WELDED SHOP AND FIELD SPLICES EXPOSED TO THE DECK SURFACES (FACE TO FACE OF PARAPETS) SHALL BE GROUND SMOOTH.

9. EXPANSION JOINT COVER PLATES ARE TO BE PROVIDED AT THE TRAFFIC BARRIERS. THE COST OF COVER PLATES, SCREWS, THREADED INSERTS, SHEAR CONNECTORS AND ANY OTHER INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID FOR SPECIAL - MODULAR EXPANSION JOINT.

10. CONTRACTOR SHALL COORDINATE AND ADJUST REBAR DETAILS AT EXPANSION JOINT BLOCKOUT WITH JOINT MANUFACTURER TO AVOID INTERFERENCE WITH EXPANSION JOINT COMPONENTS.

11. THE EXPANSION DEVICE SHALL MEET THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN AND ODOT BRIDGE DESIGN MANUAL.

12. SHOP AND FIELD WELDED SPLICES IN THE MAIN BEAMS AND CONNECTIONS TO THE MAIN BEAMS SHALL BE FULL PENETRATION WELDS AND 100 PERCENT NON-DESTRUCTIVELY TESTED IN ACCORDANCE WITH AWS D1.5 BRIDGE WELDING CODE.

13. APPROVED MANUFACTURER/FABRICATOR SHALL SUPPLY A QUALIFIED TECHNICAL REPRESENTATIVE TO THE JOBSITE DURING ALL INSTALLATION PROCEDURES.

14. FILL BLOCKOUT VOID WITH 4.5 KSI CLASS QC2 (SUPERSTRUCTURE) CONCRETE.

15. DIMENSIONS ARE BASED ON THE D.S. BROWN STEELFLEX MODULAR EXPANSION JOINT SYSTEMS. THE CONTRACTOR MAY USE AN APPROVED EQUAL MODULAR EXPANSION JOINT SYSTEM. IF AN APPROVED EQUAL MODULAR JOINT SYSTEM IS SELECTED, THE CONTRACTOR SHALL SUBMIT A CORRECTIVE WORK PER CMS 501.05.C. THE SUBMITTAL SHALL INCLUDE ALL PROPOSED CHANGES ASSOCIATED WITH THE PROPOSED MODULAR EXPANSION SYSTEM, INCLUDING BUT NOT LIMITED TO; REINFORCING CHANGES, BLOCKOUT DIMENSIONAL CHANGES, MATERIAL SPECIFICATION AND BRIDGE RAILING MODIFICATIONS.

MODULAR EXPANSION JOINT DETAILS - (4 OF 7)

CUY-77-1587 (BRIDGE 9)

I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

HDR

DESIGNER	CHECKER
MKO	ABO

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET	TOTAL
124	164

SHEET	TOTAL
1566	2338

CUY-90-16.28 (CCG3A)

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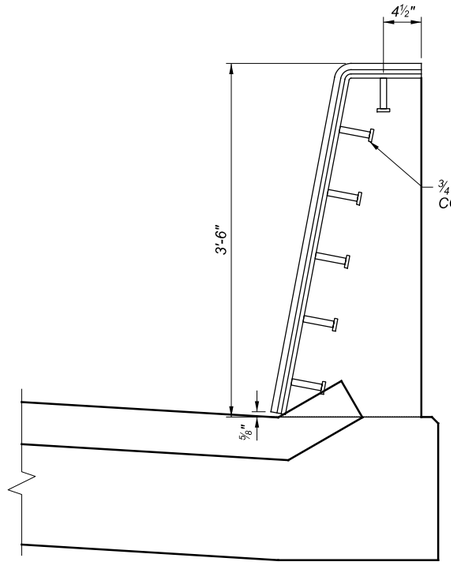
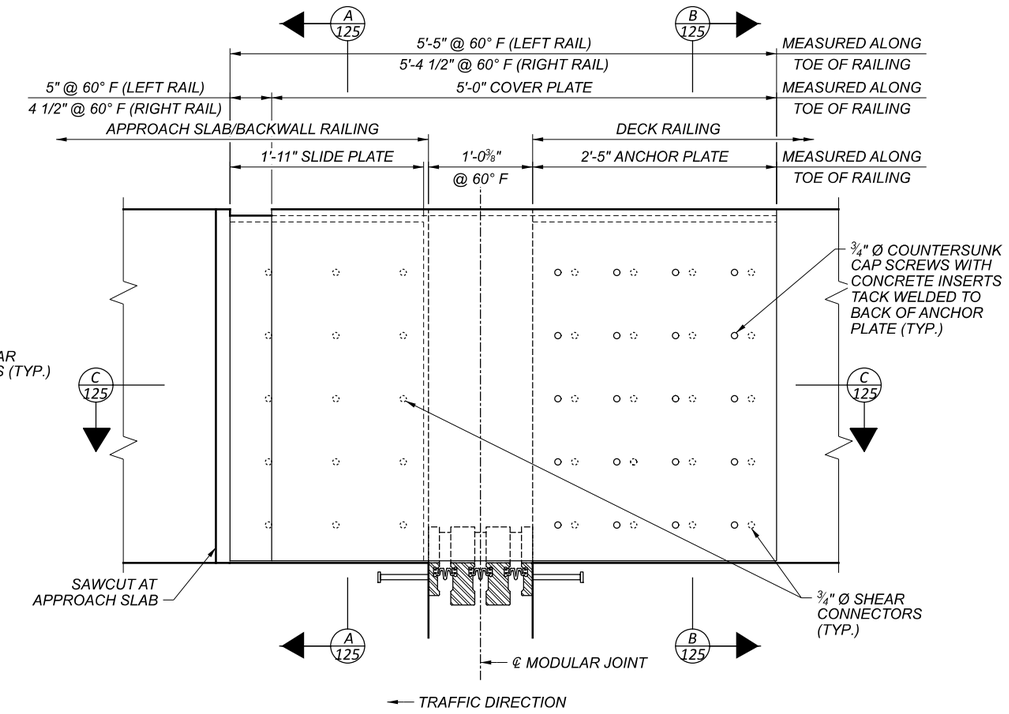
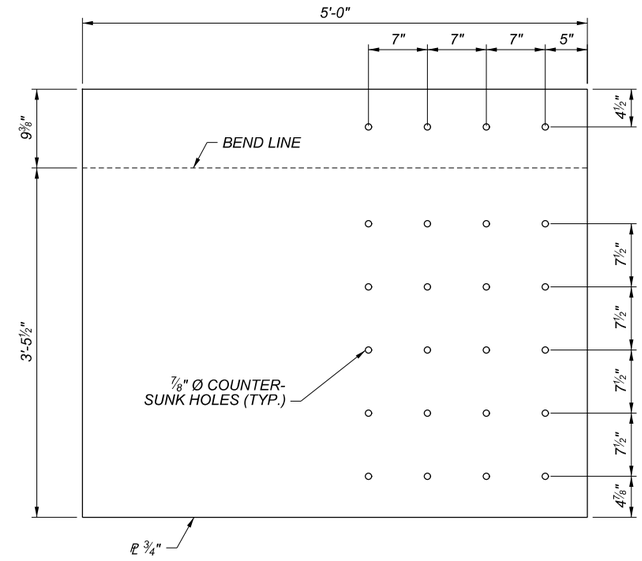


SECTION A-A



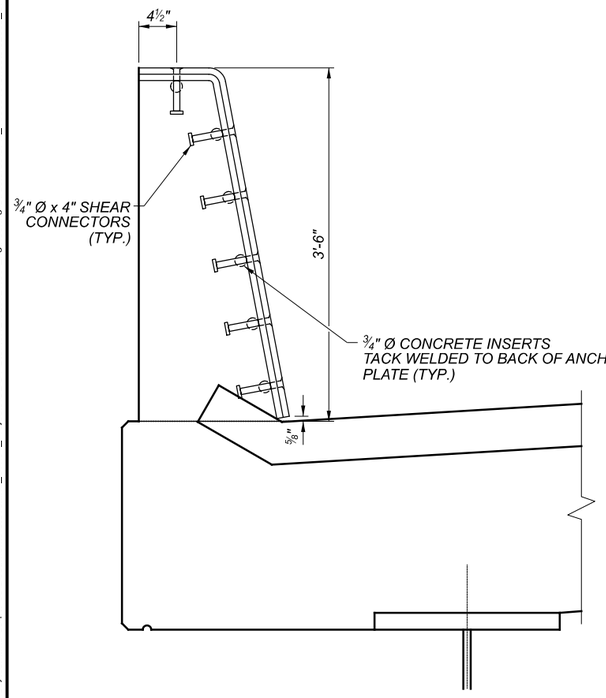
REAR ABUTMENT RAILING ELEVATION AT MODULAR EXPANSION JOINT

(LEFT RAILING SHOWN - RIGHT RAILING SIMILAR)

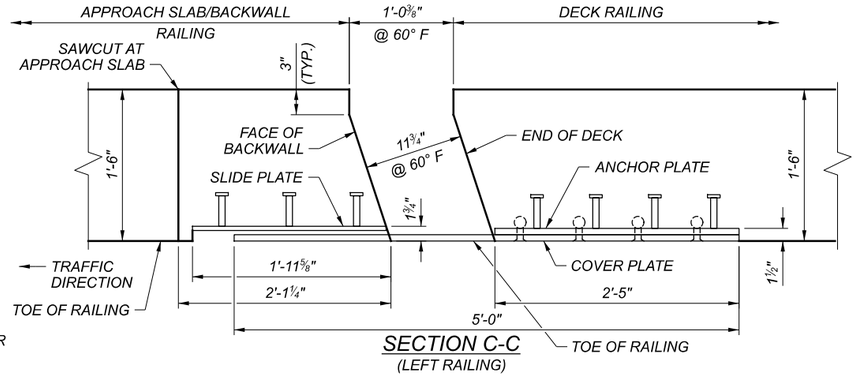


COVER PLATE

(DIMENSIONS SHOWN ARE AT MID-THICKNESS OF PLATE)

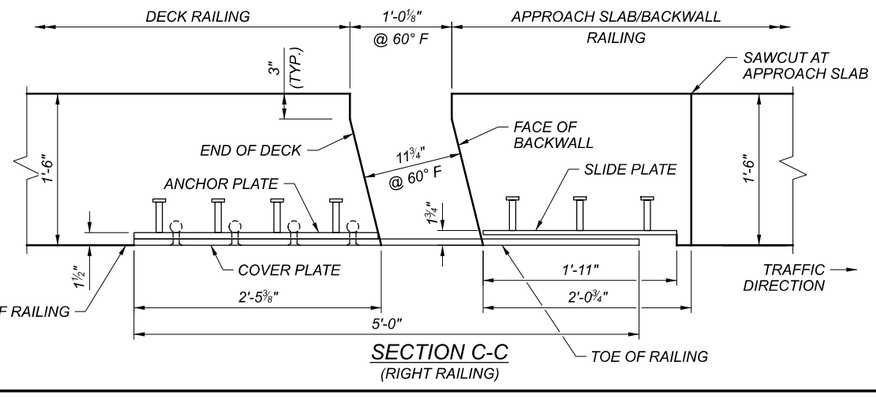


SECTION B-B



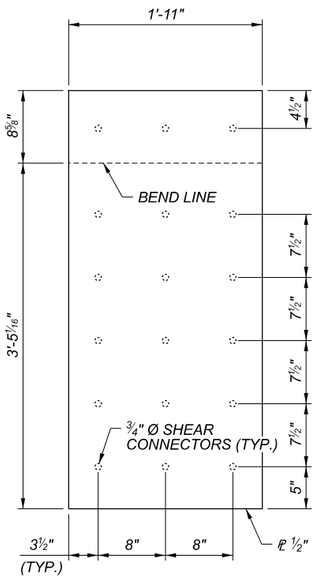
SECTION C-C

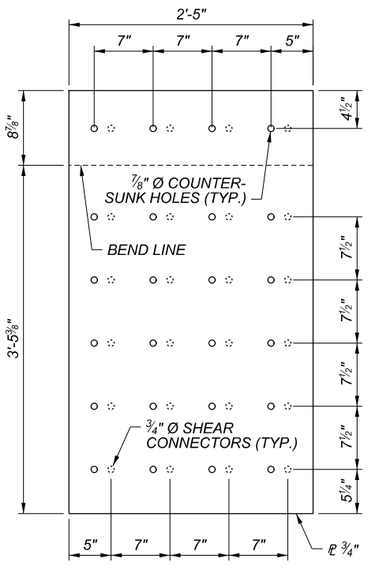
(LEFT RAILING)



SECTION C-C

(RIGHT RAILING)





SLIDE PLATE ANCHOR PLATE

(DIMENSIONS SHOWN ARE AT MID-THICKNESS OF PLATE)

NOTES:

1. ALL PLATES SHALL BE ASTM A709 GRADE 50 STEEL.
2. ALL STRUCTURAL STEEL, INCLUDING SHEAR CONNECTORS AND THREADED INSERTS SHALL MEET THE REQUIREMENTS OF ODOT CMS 513 AND GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ODOT CMS 711.02. ANY TEMPORARY SUPPORTS OR LEVELING HARDWARE TO BE ENCASED IN CONCRETE SHALL BE GALVANIZED IN ACCORDANCE TO CMS 711.02.
3. ALL MACHINE SCREWS SHALL BE GALVANIZED AND ¾" Ø UNLESS OTHERWISE NOTED.
4. FOR EXPANSION JOINT OPENING DIMENSIONS, SEE SHEET 121 / 164

MODULAR EXPANSION JOINT DETAILS - (5 OF 7)

CUY-77-1587 (BRIDGE 9)

I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	125
TOTAL	164
SHEET	1567
TOTAL	2338

CUY-90-16.28 (CCG3A)

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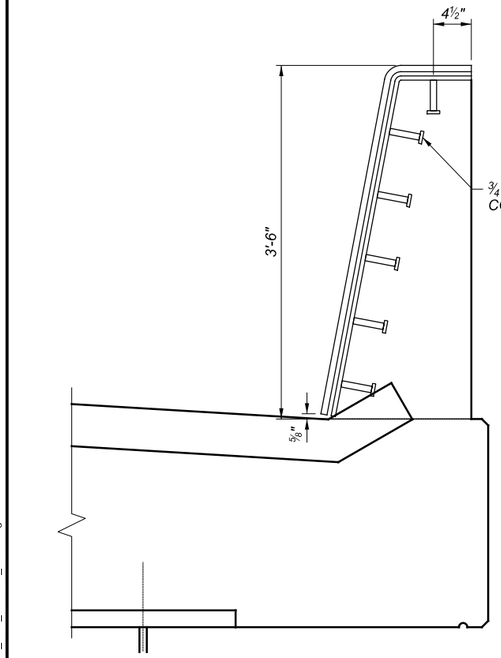
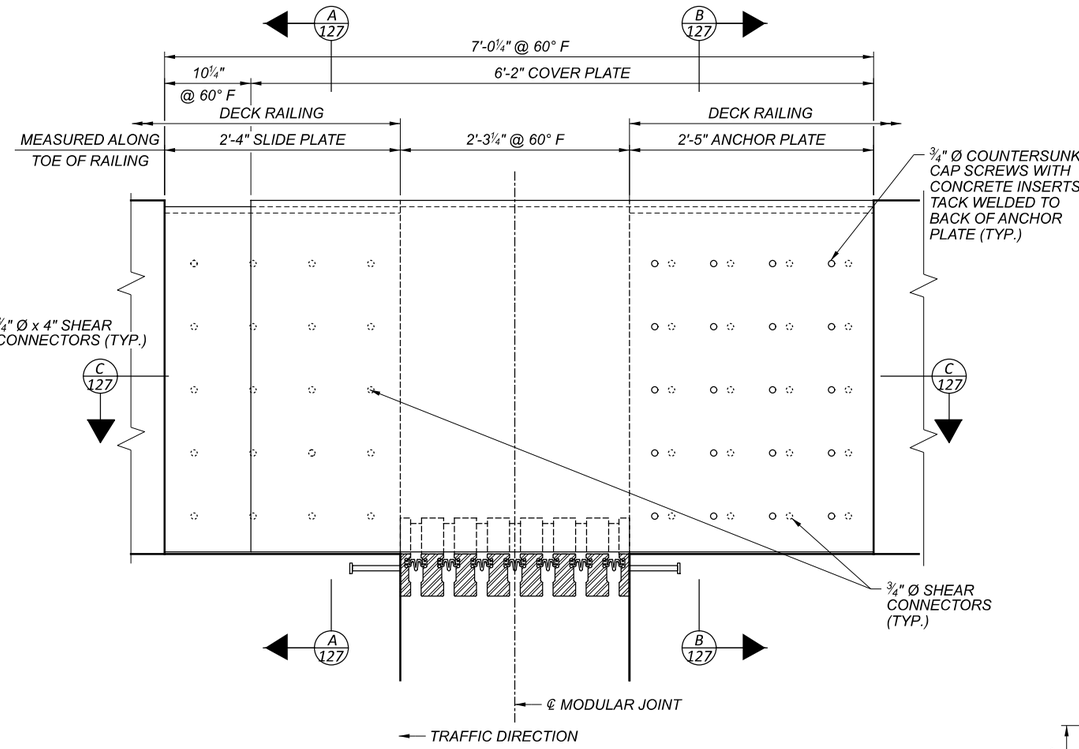
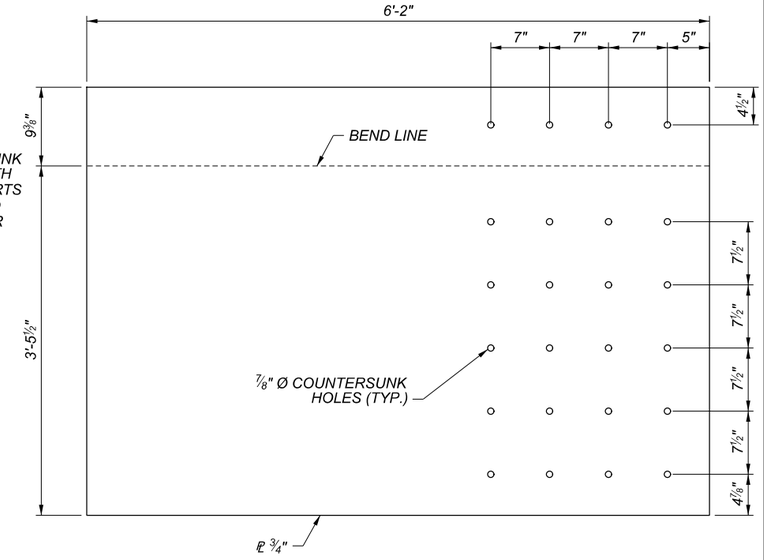


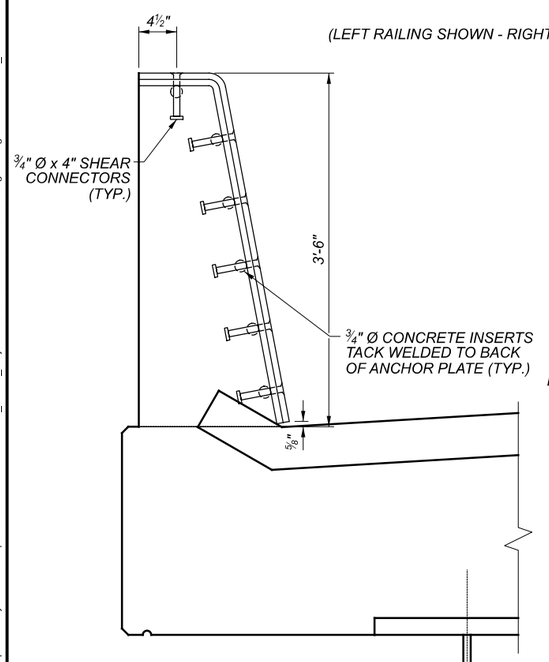
SECTION A-A



PIER 4 RAILING ELEVATION
AT MODULAR EXPANSION JOINT
(LEFT RAILING SHOWN - RIGHT RAILING SIMILAR)

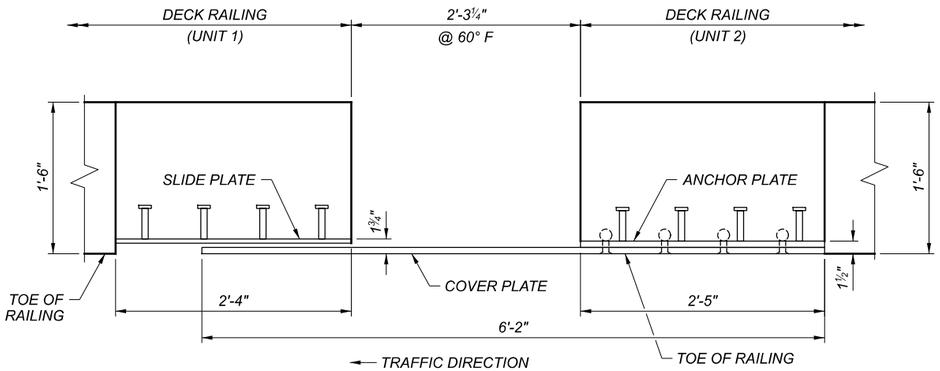


COVER PLATE
(DIMENSIONS SHOWN ARE AT MID-THICKNESS OF PLATE)

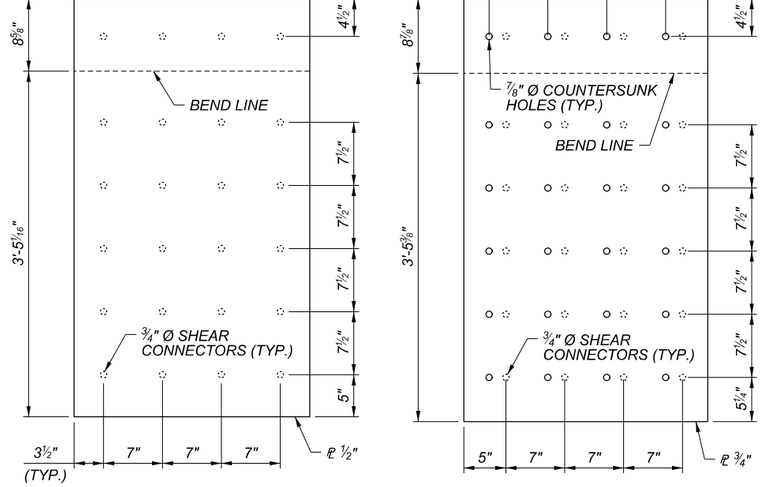


SECTION B-B

(LEFT RAILING SHOWN - RIGHT RAILING SIMILAR)



SECTION C-C
(LEFT RAILING SHOWN - RIGHT RAILING OPPOSITE HAND)



SLIDE PLATE ANCHOR PLATE
(DIMENSIONS SHOWN ARE AT MID-THICKNESS OF PLATE)

NOTES:

1. ALL PLATES SHALL BE ASTM A709 GRADE 50 STEEL.
2. ALL STRUCTURAL STEEL, INCLUDING SHEAR CONNECTORS AND THREADED INSERTS SHALL MEET THE REQUIREMENTS OF ODOT CMS 513 AND GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ODOT CMS 711.02. ANY TEMPORARY SUPPORTS OR LEVELING HARDWARE TO BE ENCASED IN CONCRETE SHALL BE GALVANIZED IN ACCORDANCE TO CMS 711.02.
3. ALL MACHINE SCREWS SHALL BE GALVANIZED AND ¾" Ø UNLESS OTHERWISE NOTED.
4. FOR EXPANSION JOINT OPENING DIMENSIONS, SEE SHEET 121 / 164

MODULAR EXPANSION JOINT DETAILS - (6 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

CUY-90-16.28 (CCG3A)

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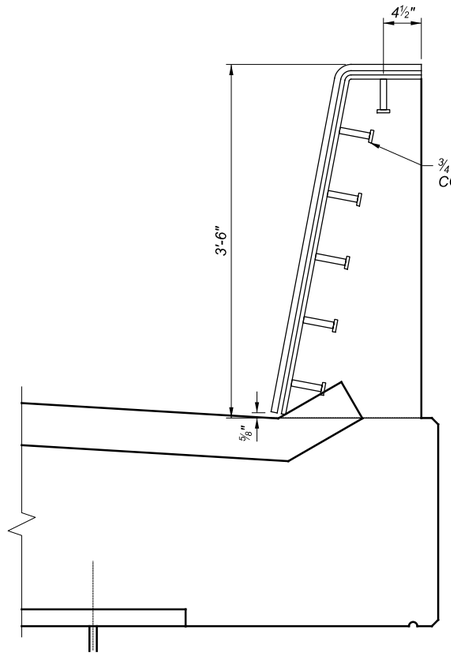
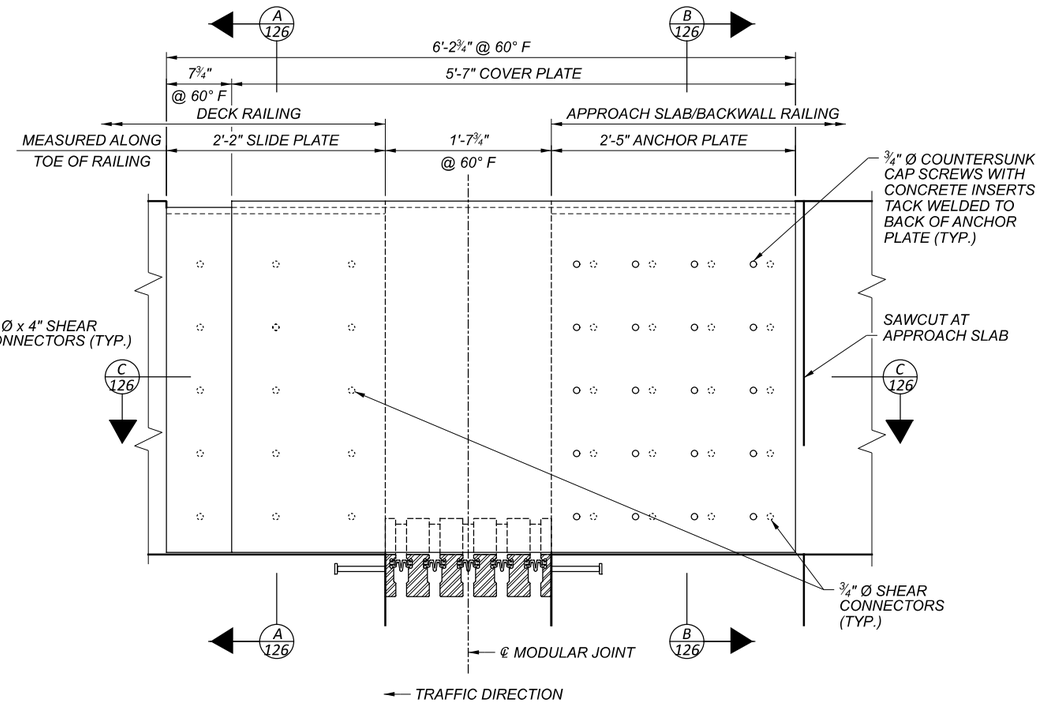
SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	126
TOTAL	164
SHEET	1568
TOTAL	2338

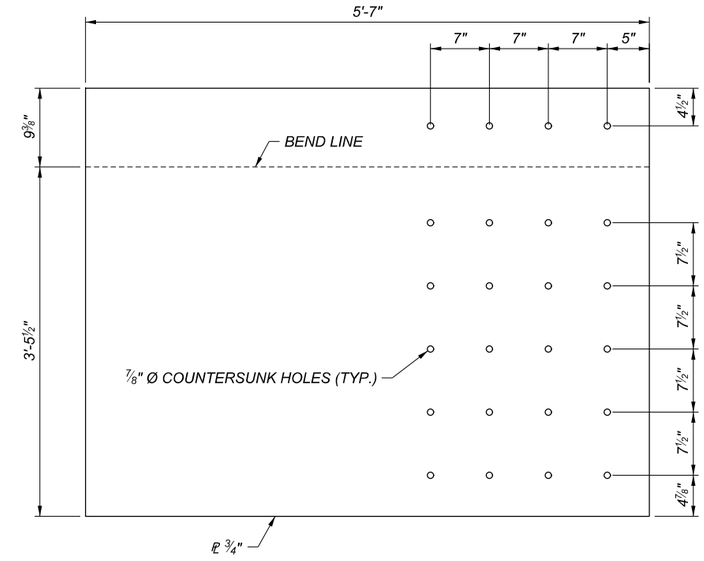


SECTION A-A



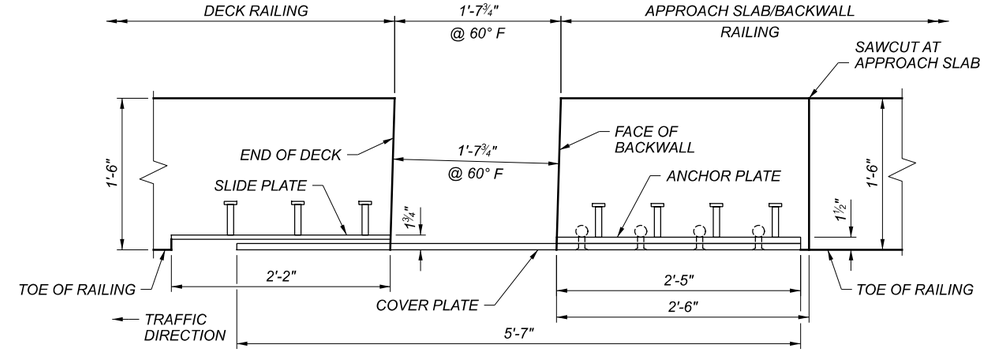
FORWARD ABUTMENT RAILING ELEVATION AT MODULAR EXPANSION JOINT

(LEFT RAILING SHOWN - RIGHT RAILING SIMILAR)



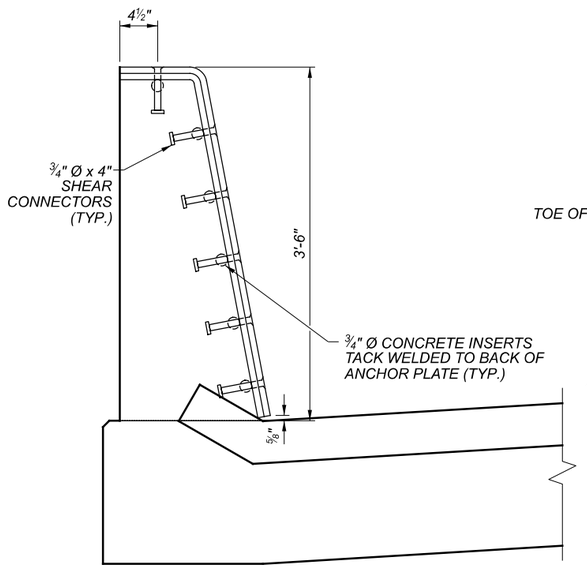
COVER PLATE

(DIMENSIONS SHOWN ARE AT MID-THICKNESS OF PLATE)

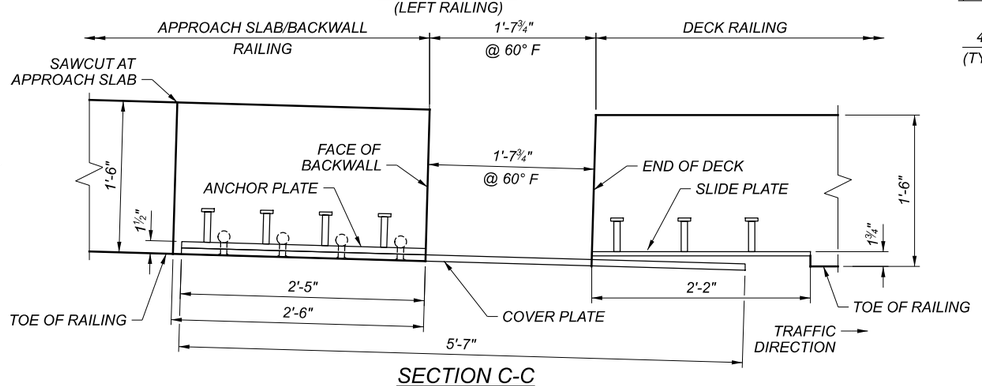


SECTION C-C

(LEFT RAILING)

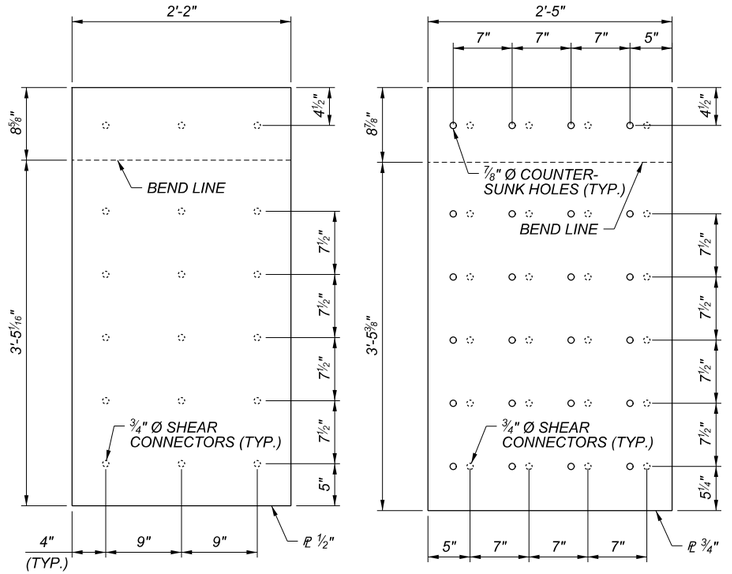


SECTION B-B



SECTION C-C

(RIGHT RAILING)



SLIDE PLATE ANCHOR PLATE

(DIMENSIONS SHOWN ARE AT MID-THICKNESS OF PLATE)

NOTES:

1. ALL PLATES SHALL BE ASTM A709 GRADE 50 STEEL.
2. ALL STRUCTURAL STEEL, INCLUDING SHEAR CONNECTORS AND THREADED INSERTS SHALL MEET THE REQUIREMENTS OF ODOT CMS 513 AND GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ODOT CMS 711.02. ANY TEMPORARY SUPPORTS OR LEVELING HARDWARE TO BE ENCASED IN CONCRETE SHALL BE GALVANIZED IN ACCORDANCE TO CMS 711.02.
3. ALL MACHINE SCREWS SHALL BE GALVANIZED AND ¾" Ø UNLESS OTHERWISE NOTED.
4. FOR EXPANSION JOINT OPENING DIMENSIONS, SEE SHEET 122 / 164

MODULAR EXPANSION JOINT DETAILS - (7 OF 7)

CUY-77-1587 (BRIDGE 9)

I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	MKO
CHECKER	TJE
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	127
TOTAL	164
SHEET	1569
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:14:19 PM USER: CRICCARDI
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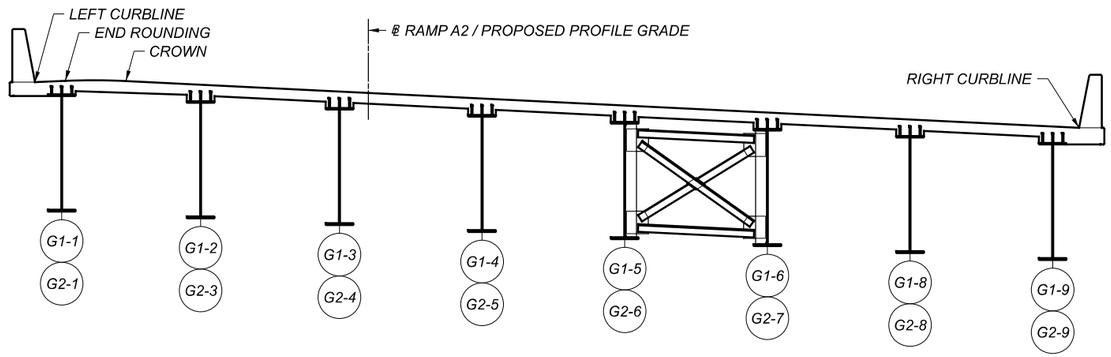
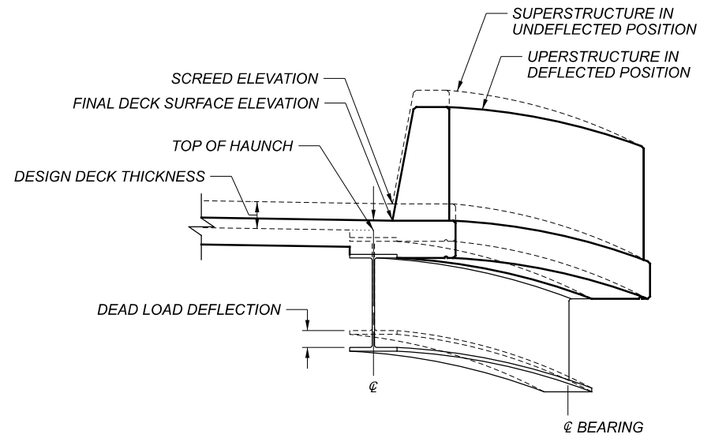
SCREED ELEVATIONS - UNIT 1 - SPAN 1													
LOCATION		CL BRG. REAR ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-1	0.8	0.9	CL PIER 1
LEFT CURBLINE	STATION	410+64.58	410+80.06	410+95.57	411+11.10	411+26.64	411+42.21	411+57.79	411+73.39	411+79.75	411+89.00	412+04.62	412+20.25
	SCREED ELEVATION	706.10	706.48	706.88	707.31	707.75	708.24	708.75	709.28	709.50	709.82	710.36	710.89
END ROUNDING	STATION	410+65.05	410+80.49	410+95.95	411+11.43	411+26.93	411+42.44	411+57.98	411+73.53	411+79.75	411+89.09	412+04.67	412+20.25
	SCREED ELEVATION	706.19	706.58	706.97	707.40	707.84	708.33	708.84	709.37	709.58	709.91	710.44	710.97
CROWN	STATION	410+66.00	410+81.34	410+96.71	411+12.09	411+27.50	411+42.92	411+58.36	411+73.82	411+79.75	411+89.28	412+04.76	412+20.25
	SCREED ELEVATION	706.20	706.58	706.98	707.40	707.85	708.33	708.84	709.37	709.57	709.90	710.43	710.95
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	410+71.75	410+86.60	411+01.45	411+16.30	411+31.15	411+46.00	411+60.85	411+75.70	411+79.75	411+90.55	412+05.40	412+20.25
	SCREED ELEVATION	705.21	705.65	706.10	706.57	707.06	707.57	708.09	708.63	708.77	709.16	709.69	710.21
RIGHT CURBLINE	STATION	410+81.72	410+95.57	411+09.42	411+23.28	411+37.13	411+50.98	411+64.84	411+78.69	411+79.75	411+92.54	412+06.40	412+20.25
	SCREED ELEVATION	703.58	704.01	704.45	704.90	705.37	705.84	706.32	706.81	706.85	707.30	707.78	708.25

SCEED ELEVATIONS - UNIT 1 - SPAN 2															
LOCATION		CL PIER 1	0.1	0.2	HEADER BEAM	FIELD SPLICE FS1-2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-3	0.8	0.9	CL PIER 2
LEFT CURBLINE	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	SCREED ELEVATION	710.89	711.52	712.14	0.00	712.37	712.75	713.37	714.03	714.71	715.43	715.87	716.16	716.88	717.57
END ROUNDING	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	SCREED ELEVATION	710.97	711.60	712.22	0.00	712.45	712.83	713.46	714.11	714.79	715.51	715.95	716.24	716.96	717.65
CROWN	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	SCREED ELEVATION	710.95	711.58	712.20	0.00	712.45	712.84	713.47	714.13	714.81	715.52	715.95	716.24	716.95	717.64
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	SCREED ELEVATION	710.21	710.86	711.49	0.00	711.72	712.11	712.74	713.40	714.09	714.80	715.24	715.54	716.26	716.95
RIGHT CURBLINE	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	SCREED ELEVATION	708.25	708.88	709.50	0.00	709.74	710.12	710.76	711.42	712.11	712.83	713.27	713.56	714.29	714.99



TYPICAL CROSS SECTION



DEFLECTION DETAIL

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR SLAB PLAN, SEE SHEETS 98 / 164 THRU 106 / 164.
3. FOR RAILING DETAILS, SEE SHEETS 154 / 164 AND 155 / 164.
4. FOR TRANSVERSE SECTION, SEE SHEETS 117 / 164 THRU 119 / 164.
5. FOR FINAL DECK SURFACE ELEVATIONS SEE SHEETS 140 / 164 THRU 150 / 164.

UNIT 1 - SCREED ELEVATIONS - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
HDR
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 128 | TOTAL 164
SHEET 1570 | TOTAL 2338

CUY-90-16.28 (CCG3A)

SCREED ELEVATIONS - UNIT 1 - SPAN 3														
LOCATION		CL PIER 2	0.1	0.2	FIELD SPLICE FS1-4	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-5	0.8	0.9	CL PIER 3
LEFT CURBLINE	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	SCREED ELEVATION	717.57	718.22	718.85	719.09	719.47	720.10	720.77	721.47	722.22	722.68	722.98	723.74	724.48
END ROUNDING	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	SCREED ELEVATION	717.65	718.30	718.93	719.17	719.55	720.18	720.85	721.56	722.30	722.76	723.06	723.82	724.56
CROWN	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	SCREED ELEVATION	717.64	718.30	718.94	719.18	719.57	720.22	720.89	721.59	722.32	722.78	723.07	723.81	724.54
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	SCREED ELEVATION	716.95	717.61	718.24	718.48	718.86	719.50	720.17	720.88	721.61	722.08	722.37	723.13	723.86
RIGHT CURBLINE	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	SCREED ELEVATION	714.99	715.66	716.30	716.55	716.93	717.58	718.25	718.95	719.68	720.13	720.42	721.17	721.90

SCREED ELEVATIONS - UNIT 1 - SPAN 4													
LOCATION		CL PIER 3	0.1	0.2	0.3	FIELD SPLICE FS1-6	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. PIER 4 BACK STA.
LEFT CURBLINE	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.13
	SCREED ELEVATION	724.48	724.96	725.42	725.88	726.01	726.33	726.79	727.26	727.76	728.26	728.82	729.41
END ROUNDING	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.12
	SCREED ELEVATION	724.56	725.04	725.50	725.96	726.09	726.41	726.87	727.34	727.84	728.34	728.90	729.49
CROWN	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.11
	SCREED ELEVATION	724.54	725.02	725.49	725.95	726.09	726.41	726.88	727.35	727.85	728.35	728.89	729.46
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.08
	SCREED ELEVATION	723.86	724.34	724.80	725.26	725.40	725.71	726.17	726.65	727.14	727.65	728.17	728.71
RIGHT CURBLINE	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+68.99
	SCREED ELEVATION	721.90	722.37	722.84	723.30	723.44	723.76	724.22	724.70	725.20	725.70	726.14	726.54

NOTES:

1. FOR SCREED ELEVATION NOTES, SEE SHEET 128 / 164 .

UNIT 1 - SCREED ELEVATIONS - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 129 | TOTAL 164
SHEET 1571 | TOTAL 2338

CUY-90-16.28 (CCG3A)

SCREED ELEVATIONS - UNIT 2 - SPAN 5														
LOCATION		CL BRG. PIER 4 AHEAD STA.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-1	0.8	0.9	CL PIER 5
LEFT CURBLINE	STATION	417+73.35	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	SCREED ELEVATION	729.57	730.04	730.49	730.93	731.35	731.77	732.18	732.58	732.64	732.95	733.28	733.58
END ROUNDING	STATION	417+73.36	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	SCREED ELEVATION	729.65	730.12	730.58	731.01	731.43	731.85	732.26	732.66	732.72	733.03	733.36	733.66
CROWN	STATION	417+73.37	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	SCREED ELEVATION	729.62	730.08	730.54	730.97	731.40	731.82	732.22	732.62	732.69	732.99	733.32	733.62
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	417+73.42	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	SCREED ELEVATION	728.85	729.28	729.72	730.15	730.57	730.99	731.40	731.79	731.85	732.15	732.48	732.78
RIGHT CURBLINE	STATION	417+73.55	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	SCREED ELEVATION	726.66	726.98	727.34	727.78	728.21	728.63	729.02	729.40	729.46	729.76	730.08	730.38

SCREED ELEVATIONS - UNIT 2 - SPAN 6														
LOCATION		CL PIER 5	0.1	0.2	FIELD SPLICE FS2-2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-3	0.8	0.9	CL PIER 6
LEFT CURBLINE	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	SCREED ELEVATION	733.58	733.88	734.11	734.14	734.29	734.43	734.56	734.67	734.77	734.84	734.85	734.89	734.86
END ROUNDING	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	SCREED ELEVATION	733.66	733.96	734.19	734.23	734.37	734.51	734.64	734.75	734.85	734.92	734.93	734.97	734.94
CROWN	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	SCREED ELEVATION	733.62	733.92	734.16	734.19	734.34	734.48	734.61	734.73	734.82	734.89	734.90	734.93	734.90
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	SCREED ELEVATION	732.78	733.09	733.33	733.37	733.52	733.67	733.80	733.92	734.01	734.07	734.08	734.10	734.06
RIGHT CURBLINE	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	SCREED ELEVATION	730.38	730.69	730.95	730.99	731.16	731.34	731.48	731.60	731.69	731.73	731.74	731.73	731.66

NOTES:

1. FOR SCREED ELEVATION NOTES, SEE SHEET 128 / 164 .

UNIT 2 - SCREED ELEVATIONS - (1 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 130 | TOTAL 164
SHEET 1572 | TOTAL 2338

CUY-90-16.28 (CCG3A)

SCREED ELEVATIONS - UNIT 2 - SPAN 7														
LOCATION		CL PIER 6	0.1	0.2	FIELD SPLICE FS2-4	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-5	0.8	0.9	CL PIER 7
LEFT CURBLINE	STATION	421+00.00	421+17.23	421+34.46	421+40.16	421+51.69	421+68.92	421+86.15	422+03.37	422+20.60	0+00.00	422+37.83	422+55.06	422+72.29
	SCREED ELEVATION	734.86	734.76	734.61	734.55	734.41	734.18	733.91	733.63	733.33	0.00	732.98	732.57	732.10
END ROUNDING	STATION	421+00.00	421+17.40	421+34.79	421+40.16	421+52.19	421+69.59	421+86.98	422+04.38	422+21.78	0+00.00	422+39.17	422+56.57	422+73.97
	SCREED ELEVATION	734.94	734.84	734.69	734.63	734.48	734.25	733.98	733.70	733.38	0.00	733.03	732.61	732.14
CROWN	STATION	421+00.00	421+17.74	421+35.47	421+40.16	421+53.21	421+70.94	421+88.68	422+06.41	422+24.15	0+00.00	422+41.89	422+59.62	422+77.36
	SCREED ELEVATION	734.90	734.80	734.64	734.58	734.43	734.18	733.90	733.61	733.28	0.00	732.91	732.49	732.00
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	421+00.00	421+18.97	421+37.93	421+40.16	421+56.90	421+75.87	421+94.84	422+13.80	422+32.77	0+00.00	422+51.74	422+70.70	422+89.67
	SCREED ELEVATION	734.06	733.94	733.75	733.73	733.51	733.23	732.92	732.59	732.22	0.00	731.81	731.35	730.81
RIGHT CURBLINE	STATION	421+00.00	421+22.92	421+45.85	421+40.16	421+68.77	421+91.69	422+14.62	422+37.54	422+60.46	0+00.00	422+83.39	423+06.31	423+29.23
	SCREED ELEVATION	731.66	731.46	731.17	731.25	730.82	730.41	729.98	729.52	729.02	0.00	728.47	727.85	727.15

SCREED ELEVATIONS - UNIT 2 - SPAN 8														
LOCATION		CL PIER 7	0.1	0.2	FIELD SPLICE FS2-6	0.3	0.4	0.5	0.6	0.7	0.8	FIELD SPLICE FS2-7	0.9	CL PIER 8
LEFT CURBLINE	STATION	422+72.29	422+95.06	423+17.83	0+00.00	423+40.61	423+63.38	423+86.15	424+08.92	424+31.69	424+54.47	424+59.85	424+77.24	425+00.00
	SCREED ELEVATION	732.10	731.36	730.52	0.00	729.61	728.66	727.70	726.74	725.76	724.77	724.53	723.76	722.77
END ROUNDING	STATION	422+73.97	422+96.57	423+19.17	0+00.00	423+41.78	423+64.38	423+86.99	424+09.59	424+32.20	424+54.80	424+59.85	424+77.41	425+00.00
	SCREED ELEVATION	732.14	731.39	730.55	0.00	729.65	728.70	727.75	726.79	725.82	724.84	724.62	723.84	722.85
CROWN	STATION	422+77.36	422+99.62	423+21.89	0+00.00	423+44.15	423+66.42	423+88.68	424+10.95	424+33.21	424+55.48	424+59.85	424+77.75	425+00.00
	SCREED ELEVATION	732.00	731.27	730.44	0.00	729.55	728.63	727.68	726.73	725.77	724.78	724.59	723.83	722.82
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	422+89.67	423+10.70	423+31.74	0+00.00	423+52.77	423+73.80	423+94.84	424+15.87	424+36.90	424+57.93	424+59.85	424+78.97	425+00.00
	SCREED ELEVATION	730.81	730.11	729.35	0.00	728.52	727.64	726.74	725.82	724.87	723.90	723.81	722.92	721.95
RIGHT CURBLINE	STATION	423+29.23	423+46.31	423+63.39	0+00.00	423+80.46	423+97.54	424+14.62	424+31.69	424+48.77	424+65.85	424+59.85	424+82.92	425+00.00
	SCREED ELEVATION	727.15	726.54	725.88	0.00	725.17	724.43	723.66	722.87	722.05	721.22	721.51	720.38	719.55

NOTES:

1. FOR SCREED ELEVATION NOTES, SEE SHEET 128 / 164 .

UNIT 2 - SCREED ELEVATIONS - (2 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 131 | TOTAL 164
SHEET 1573 | TOTAL 2338

CUY-90-16.28 (CCG3A)

SCREED ELEVATIONS - UNIT 2 - SPAN 9															
LOCATION		CL PIER 8	0.1	0.2	HEADER BEAM	FIELD SPLICE FS2-8	0.3	0.4	0.5	0.6	FIELD SPLICE FS2-9	0.7	0.8	0.9	CL PIER 9
LEFT CURBLINE	STATION	425+00.00	425+17.56	425+35.10	0+00.00	425+49.18	425+52.63	425+70.15	425+87.66	426+05.15	426+15.03	426+22.63	426+40.10	426+57.56	426+75.00
	SCREED ELEVATION	722.77	721.95	721.12	0.00	720.42	720.26	719.40	718.56	717.72	717.25	716.89	716.05	715.19	714.32
END ROUNDING	STATION	425+00.00	425+17.61	425+35.16	0+00.00	425+49.23	425+52.69	425+70.21	425+87.71	426+05.21	426+15.08	426+22.69	426+40.16	426+57.61	426+75.00
	SCREED ELEVATION	722.85	722.03	721.20	0.00	720.51	720.34	719.48	718.64	717.80	717.33	716.97	716.13	715.27	714.40
CROWN	STATION	425+00.00	425+17.72	425+35.26	0+00.00	425+49.34	425+52.80	425+70.31	425+87.82	426+05.32	426+15.19	426+22.80	426+40.26	426+57.72	426+75.00
	SCREED ELEVATION	722.82	721.96	721.12	0.00	720.44	720.27	719.42	718.58	717.74	717.27	716.91	716.08	715.22	714.37
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	425+00.00	425+18.13	425+35.69	0+00.00	425+49.78	425+53.24	425+70.78	425+88.30	426+05.80	426+15.69	426+23.30	426+40.78	426+58.25	426+75.00
	SCREED ELEVATION	721.95	721.04	720.17	0.00	719.46	719.29	718.40	717.53	716.67	716.18	715.81	714.94	714.06	713.20
RIGHT CURBLINE	STATION	425+00.00	425+19.34	425+36.91	0+00.00	425+50.65	425+54.46	425+72.00	425+89.52	426+07.03	426+16.56	426+24.53	426+42.01	426+59.48	426+75.00
	SCREED ELEVATION	719.55	718.56	717.66	0.00	716.96	716.77	715.88	715.01	714.16	713.69	713.30	712.45	711.58	710.80

SCREED ELEVATIONS - UNIT 2 - SPAN 10														
LOCATION		CL PIER 9	0.1	0.2	FIELD SPLICE FS2-10	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-11	0.8	0.9	CL PIER 10
LEFT CURBLINE	STATION	426+75.00	426+97.79	427+20.56	427+23.03	427+43.30	427+66.03	427+88.73	428+11.45	428+35.11	428+50.86	428+58.77	428+82.43	429+06.09
	SCREED ELEVATION	714.32	713.12	711.80	711.67	710.50	709.24	708.02	706.86	705.67	704.92	704.51	703.34	702.10
END ROUNDING	STATION	426+75.00	426+97.84	427+20.61	427+23.08	427+43.36	427+66.08	427+88.78	428+11.50	428+35.16	428+50.91	428+58.82	428+82.48	429+06.14
	SCREED ELEVATION	714.40	713.20	711.88	711.75	710.58	709.32	708.10	706.94	705.75	705.00	704.59	703.42	702.18
CROWN	STATION	426+75.00	426+97.95	427+20.72	427+23.19	427+43.46	427+66.19	427+88.89	428+11.62	428+35.28	428+51.03	428+58.94	428+82.60	429+06.26
	SCREED ELEVATION	714.37	713.16	711.87	711.74	710.58	709.33	708.12	706.96	705.77	705.03	704.63	703.45	702.21
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	426+75.00	426+98.51	427+21.29	427+23.77	427+44.05	427+66.79	427+89.51	428+12.29	428+35.96	428+51.73	428+59.64	428+83.32	429+07.00
	SCREED ELEVATION	713.20	711.94	710.69	710.56	709.46	708.27	707.12	706.03	704.93	704.20	703.84	702.74	701.60
RIGHT CURBLINE	STATION	426+75.00	426+99.73	427+22.51	427+24.98	427+45.25	427+67.96	427+90.63	428+13.33	428+36.97	428+52.72	428+60.63	428+84.29	429+07.95
	SCREED ELEVATION	710.80	709.50	708.44	708.31	707.41	706.41	705.46	704.56	703.68	703.07	702.74	701.79	700.82

NOTES:

1. FOR SCREED ELEVATION NOTES, SEE SHEET 128 / 164 .

UNIT 2 - SCREED ELEVATIONS - (3 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 132 | TOTAL 164
SHEET 1574 | TOTAL 2338

CUY-90-16.28 (CCG3A)

SCREED ELEVATIONS - UNIT 2 - SPAN 11														
LOCATION		CL PIER 10	0.1	0.2	0.3	FIELD SPLICE FS2-12	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. FWD. ABUT.
LEFT CURBLINE	STATION	429+06.09	429+24.68	429+43.27	429+61.86	429+68.56	429+80.45	429+99.04	430+17.63	430+36.23	430+54.82	430+73.41	430+92.00
	SCREED ELEVATION	702.10	701.08	700.03	699.04	698.69	698.06	697.08	696.14	695.24	694.37	693.53	692.72
END ROUNDING	STATION	429+06.14	429+24.73	429+43.33	429+61.92	429+68.62	429+80.51	429+99.10	430+17.69	430+36.28	430+54.87	430+73.47	430+92.00
	SCREED ELEVATION	702.18	701.16	700.11	699.12	698.77	698.14	697.16	696.22	695.32	694.45	693.61	692.80
CROWN	STATION	429+06.26	429+24.85	429+43.44	429+62.03	429+68.73	429+80.62	429+99.21	430+17.81	430+36.40	430+54.99	430+73.58	430+92.00
	SCREED ELEVATION	702.21	701.20	700.15	699.17	698.81	698.18	697.21	696.27	695.37	694.50	693.67	692.85
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	429+07.00	429+25.61	429+44.21	429+62.82	429+69.53	429+81.43	430+00.03	430+18.64	430+37.25	430+55.85	430+74.46	430+92.00
	SCREED ELEVATION	701.60	700.65	699.67	698.67	698.31	697.67	696.70	695.75	694.84	693.97	693.13	692.35
RIGHT CURBLINE	STATION	429+07.95	429+26.54	429+45.13	429+63.73	429+70.43	429+82.32	430+00.91	430+19.50	430+38.09	430+56.68	430+75.27	430+92.00
	SCREED ELEVATION	700.82	699.97	699.09	698.10	697.74	697.11	696.14	695.21	694.31	693.45	692.63	691.90

NOTES:

1. *FOR SCREED ELEVATION NOTES, SEE SHEET* 128 / 164 .

UNIT 2 - SCREED ELEVATIONS - (4 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 133 | TOTAL 164
SHEET 1575 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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TOP OF HAUNCH ELEVATIONS - UNIT 1 - SPAN 1														
LOCATION		CL BRG. REAR ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-1	0.8	0.9	CL PIER 1
G1-1	STATION	410+65.00	410+80.44	410+95.90	411+11.39	411+26.89	411+42.41	411+57.96	411+73.51	411+79.75	411+89.08	412+04.66	412+20.25
	HAUNCH ELEVATION	705.47	705.86	706.25	706.68	707.12	707.61	708.12	708.65	708.87	709.19	709.72	710.25
G1-2	STATION	410+67.30	410+82.55	410+97.82	411+13.10	411+28.39	411+43.69	411+58.99	411+74.30	411+79.75	411+89.61	412+04.93	412+20.25
	HAUNCH ELEVATION	705.27	705.67	706.10	706.55	707.02	707.52	708.05	708.59	708.78	709.13	709.67	710.19
G1-3	STATION	410+69.64	410+84.70	410+99.76	411+14.82	411+29.88	411+44.94	411+60.00	411+75.07	411+79.75	411+90.13	412+05.19	412+20.25
	HAUNCH ELEVATION	704.86	705.31	705.76	706.23	706.73	707.24	707.77	708.32	708.49	708.87	709.41	709.94
G1-4	STATION	410+71.89	410+86.73	411+01.56	411+16.40	411+31.23	411+46.07	411+60.91	411+75.74	411+79.75	411+90.58	412+05.41	412+20.25
	HAUNCH ELEVATION	704.47	704.92	705.37	705.84	706.33	706.83	707.35	707.89	708.04	708.43	708.96	709.47
G1-5	STATION	410+74.18	410+88.79	411+03.39	411+18.00	411+32.61	411+47.22	411+61.82	411+76.43	411+79.75	411+91.04	412+05.64	412+20.25
	HAUNCH ELEVATION	704.09	704.53	704.99	705.45	705.93	706.43	706.94	707.46	707.59	707.99	708.51	709.01
G1-6	STATION	410+76.51	410+90.88	411+05.26	411+19.63	411+34.00	411+48.38	411+62.75	411+77.13	411+79.75	411+91.50	412+05.88	412+20.25
	HAUNCH ELEVATION	703.71	704.15	704.60	705.06	705.53	706.02	706.52	707.04	707.13	707.55	708.06	708.55
G1-8	STATION	410+78.87	410+93.01	411+07.14	411+21.28	411+35.42	411+49.56	411+63.70	411+77.84	411+79.75	411+91.97	412+06.11	412+20.25
	HAUNCH ELEVATION	703.32	703.77	704.20	704.66	705.13	705.61	706.11	706.61	706.68	707.11	707.61	708.09
G1-9	STATION	410+81.27	410+95.17	411+09.06	411+22.96	411+36.86	411+50.76	411+64.66	411+78.56	411+79.75	411+92.45	412+06.35	412+20.25
	HAUNCH ELEVATION	702.94	703.38	703.82	704.27	704.74	705.21	705.69	706.18	706.23	706.67	707.15	707.63

TOP OF HAUNCH ELEVATIONS - UNIT 1 - SPAN 2															
LOCATION		CL PIER 1	0.1	0.2	HEADER BEAM	FIELD SPLICE FS1-2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-3	0.8	0.9	CL PIER 2
G1-1	STATION	412+20.25	41240.25	41260.25	41264.61	41267.75	41280.25	41300.25	41320.25	41340.25	41360.25	41372.25	41380.25	41400.25	41420.25
	HAUNCH ELEVATION	710.25	710.88	711.50	711.64	711.73	712.11	712.74	713.39	714.07	714.79	715.23	715.53	716.24	716.94
G1-2	STATION	412+20.25	41240.25	41260.25	41264.61	-	-	-	-	-	-	-	-	-	-
	HAUNCH ELEVATION	710.19	710.84	711.46	711.67	-	-	-	-	-	-	-	-	-	-
G1-3	STATION	412+20.25	41240.25	41260.25	41264.61	41267.75	41280.25	41300.25	41320.25	41340.25	41360.25	41372.25	41380.25	41400.25	41420.25
	HAUNCH ELEVATION	709.94	710.59	711.22	711.36	711.45	711.84	712.47	713.12	713.81	714.53	714.97	715.27	715.98	716.68
G1-4	STATION	412+20.25	41240.25	41260.25	-	41267.75	41280.25	41300.25	41320.25	41340.25	41360.25	41372.25	41380.25	41400.25	41420.25
	HAUNCH ELEVATION	709.47	710.12	710.75	-	710.99	711.37	712.00	712.66	713.35	714.07	714.51	714.80	715.52	716.21
G1-5	STATION	412+20.25	41240.25	41260.25	-	41267.75	41280.25	41300.25	41320.25	41340.25	41360.25	41372.25	41380.25	41400.25	41420.25
	HAUNCH ELEVATION	709.01	709.66	710.28	-	710.51	710.90	711.54	712.20	712.88	713.61	714.04	714.34	715.06	715.75
G1-6	STATION	412+20.25	41240.25	41260.25	-	41267.75	41280.25	41300.25	41320.25	41340.25	41360.25	41372.25	41380.25	41400.25	41420.25
	HAUNCH ELEVATION	708.55	709.19	709.82	-	710.05	710.43	711.07	711.73	712.42	713.14	713.58	713.87	714.59	715.29
G1-8	STATION	412+20.25	41240.25	41260.25	-	41267.75	41280.25	41300.25	41320.25	41340.25	41360.25	41372.25	41380.25	41400.25	41420.25
	HAUNCH ELEVATION	708.09	708.73	709.35	-	709.58	709.97	710.60	711.26	711.96	712.67	713.11	713.41	714.13	714.83
G1-9	STATION	412+20.25	41240.25	41260.25	-	41267.75	41280.25	41300.25	41320.25	41340.25	41360.25	41372.25	41380.25	41400.25	41420.25
	HAUNCH ELEVATION	707.63	708.26	708.88	-	709.11	709.50	710.14	710.80	711.49	712.21	712.65	712.94	713.66	714.37

NOTES:

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE BEAM/GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR SLAB PLAN, SEE SHEETS 98 / 164 THRU 106 / 164.
3. FOR RAILING DETAILS, SEE SHEETS 154 / 164 AND 155 / 164.
4. FOR TRANSVERSE SECTION, SEE SHEETS 117 / 164 THRU 119 / 164.
5. FOR FINAL DECK SURFACE ELEVATIONS SEE SHEETS 140 / 164 THRU 150 / 164.

UNIT 1 - TOP OF HAUNCH ELEVATIONS - (1 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER TJE | CHECKER JS

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 134 | TOTAL 164

SHEET 1576 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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TOP OF HAUNCH ELEVATIONS - UNIT 1 - SPAN 3														
LOCATION		CL PIER 2	0.1	0.2	FIELD SPLICE FS1-4	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-5	0.8	0.9	CL PIER 3
G1-1	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	HAUNCH ELEVATION	716.94	717.59	718.21	718.45	718.83	719.46	720.13	720.84	721.58	722.04	722.34	723.10	723.84
G1-3	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	HAUNCH ELEVATION	716.68	717.33	717.96	718.20	718.58	719.21	719.88	720.59	721.33	721.79	722.09	722.85	723.58
G1-4	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	HAUNCH ELEVATION	716.21	716.87	717.50	717.74	718.12	718.76	719.43	720.14	720.88	721.34	721.64	722.39	723.12
G1-5	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	HAUNCH ELEVATION	715.75	716.41	717.05	717.29	717.67	718.31	718.98	719.69	720.42	720.88	721.18	721.93	722.66
G1-6	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	HAUNCH ELEVATION	715.29	715.95	716.59	716.84	717.22	717.86	718.53	719.24	719.97	720.43	720.72	721.47	722.20
G1-8	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	HAUNCH ELEVATION	714.83	715.49	716.13	716.38	716.77	717.41	718.08	718.78	719.51	719.97	720.26	721.01	721.74
G1-9	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	HAUNCH ELEVATION	714.37	715.03	715.68	715.93	716.31	716.96	717.63	718.33	719.06	719.51	719.80	720.54	721.28

TOP OF HAUNCH ELEVATIONS - UNIT 1 - SPAN 4													
LOCATION		CL PIER 3	0.1	0.2	0.3	FIELD SPLICE FS1-6	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. PIER 4 BACK STA.
G1-1	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.12
	HAUNCH ELEVATION	723.84	724.32	724.78	725.24	725.37	725.69	726.15	726.62	727.12	727.62	728.18	728.77
G1-3	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.10
	HAUNCH ELEVATION	723.58	724.06	724.53	724.98	725.12	725.43	725.89	726.37	726.86	727.37	727.91	728.48
G1-4	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.08
	HAUNCH ELEVATION	723.12	723.60	724.07	724.52	724.66	724.98	725.44	725.92	726.41	726.92	727.44	727.97
G1-5	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.06
	HAUNCH ELEVATION	722.66	723.14	723.60	724.06	724.20	724.52	724.98	725.46	725.95	726.46	726.96	727.46
G1-6	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.04
	HAUNCH ELEVATION	722.20	722.68	723.14	723.60	723.74	724.06	724.52	725.00	725.49	726.00	726.48	726.95
G1-8	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.02
	HAUNCH ELEVATION	721.74	722.21	722.68	723.14	723.28	723.60	724.06	724.54	725.03	725.54	726.00	726.44
G1-9	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.00
	HAUNCH ELEVATION	721.28	721.75	722.22	722.67	722.82	723.14	723.60	724.08	724.58	725.08	725.52	725.93

NOTES:

1. *FOR TOP OF HAUNCH ELEVATION NOTES, SEE SHEET* 134 / 164 .

UNIT 1 - TOP OF HAUNCH ELEVATIONS - (2 OF 2)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER TJE | CHECKER JS

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 135 | TOTAL 164

SHEET 1577 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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TOP OF HAUNCH ELEVATIONS - UNIT 2 - SPAN 5														
LOCATION		CL BRG. PIER 4 AHEAD STA.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-1	0.8	0.9	CL PIER 5
G2-1	STATION	417+73.36	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	HAUNCH HAUNCH ELEVATION	728.93	729.40	729.86	730.29	730.71	731.13	731.54	731.94	732.01	732.31	732.65	732.94
G2-3	STATION	417+73.39	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	HAUNCH ELEVATION	728.63	729.08	729.53	729.96	730.38	730.81	731.21	731.61	731.67	731.97	732.31	732.60
G2-4	STATION	417+73.42	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	HAUNCH ELEVATION	728.11	728.54	728.97	729.41	729.83	730.25	730.66	731.05	731.11	731.41	731.74	732.04
G2-5	STATION	417+73.45	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	HAUNCH ELEVATION	727.60	728.00	728.41	728.85	729.28	729.69	730.10	730.49	730.55	730.85	731.18	731.47
G2-6	STATION	417+73.48	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	HAUNCH ELEVATION	727.08	727.45	727.86	728.29	728.72	729.14	729.54	729.92	729.99	730.29	730.61	730.91
G2-8	STATION	417+73.51	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	HAUNCH ELEVATION	726.56	726.91	727.30	727.73	728.16	728.58	728.98	729.36	729.43	729.72	730.05	730.34
G2-9	STATION	417+73.55	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	HAUNCH ELEVATION	726.04	726.37	726.74	727.18	727.61	728.02	728.42	728.80	728.86	729.16	729.48	729.78

TOP OF HAUNCH ELEVATIONS - UNIT 2 - SPAN 6														
LOCATION		CL PIER 5	0.1	0.2	FIELD SPLICE FS2-2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-3	0.8	0.9	CL PIER 6
G2-1	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	HAUNCH ELEVATION	732.94	733.24	733.47	733.51	733.65	733.80	733.92	734.04	734.13	734.20	734.22	734.25	734.23
G2-3	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	HAUNCH ELEVATION	732.60	732.90	733.14	733.18	733.33	733.48	733.61	733.72	733.82	733.88	733.89	733.91	733.89
G2-4	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	HAUNCH ELEVATION	732.04	732.34	732.58	732.62	732.77	732.93	733.06	733.18	733.27	733.33	733.34	733.36	733.32
G2-5	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	HAUNCH ELEVATION	731.47	731.78	732.03	732.06	732.22	732.38	732.52	732.63	732.73	732.78	732.79	732.80	732.76
G2-6	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	HAUNCH ELEVATION	730.91	731.22	731.47	731.51	731.67	731.83	731.97	732.09	732.18	732.23	732.24	732.24	732.19
G2-8	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	HAUNCH ELEVATION	730.34	730.65	730.91	730.95	731.12	731.28	731.43	731.54	731.63	731.68	731.68	731.68	731.63
G2-9	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	HAUNCH ELEVATION	729.78	730.09	730.35	730.39	730.56	730.73	730.88	731.00	731.08	731.13	731.13	731.12	731.06

NOTES:

1. *FOR TOP OF HAUNCH ELEVATION NOTES, SEE SHEET* 134 / 164 .

UNIT 2 - TOP OF HAUNCH ELEVATIONS - (1 OF 4)

CUY-77-1587 (BRIDGE 9)

I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER TJE | CHECKER JS

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 136 | TOTAL 164

SHEET 1578 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:15:11 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SD018.dgn

TOP OF HAUNCH ELEVATIONS - UNIT 2 - SPAN 7														
LOCATION		CL PIER 6	0.1	0.2	FIELD SPLICE FS2-4	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-5	0.8	0.9	CL PIER 7
G2-1	STATION	421+00.00	421+17.38	421+34.75	421+40.16	421+52.13	421+69.50	421+86.88	422+04.25	422+21.63	422+24.51	422+39.00	422+56.38	422+73.76
	HAUNCH ELEVATION	734.23	734.13	733.97	733.91	733.77	733.53	733.26	732.98	732.67	732.61	732.31	731.90	731.42
G2-3	STATION	421+00.00	421+18.18	421+36.36	421+40.16	421+54.55	421+72.73	421+90.91	422+09.09	422+27.27	422+33.62	422+45.46	422+63.64	422+81.82
	HAUNCH ELEVATION	733.89	733.77	733.60	733.56	733.38	733.12	732.84	732.53	732.18	732.06	731.80	731.36	730.86
G2-4	STATION	421+00.00	421+19.02	421+38.04	421+40.16	421+57.06	421+76.08	421+95.10	422+14.12	422+33.14	422+37.24	422+52.16	422+71.18	422+90.20
	HAUNCH ELEVATION	733.32	733.20	733.01	732.98	732.77	732.48	732.18	731.84	731.47	731.38	731.06	730.59	730.05
G2-5	STATION	421+00.00	421+19.89	421+39.78	421+40.16	421+59.68	421+79.57	421+99.46	422+19.35	422+39.24	422+40.89	422+59.13	422+79.02	422+98.92
	HAUNCH ELEVATION	732.76	732.61	732.41	732.40	732.14	731.84	731.50	731.13	730.74	730.70	730.29	729.79	729.23
G2-6	STATION	421+00.00	421+20.80	421+41.60	421+40.16	421+62.40	421+83.20	422+04.00	422+24.80	422+45.60	422+51.88	422+66.40	422+87.20	423+07.99
	HAUNCH ELEVATION	732.19	732.03	731.80	731.82	731.50	731.16	730.79	730.40	729.98	729.84	729.51	728.98	728.38
G2-8	STATION	421+00.00	421+21.75	421+43.49	421+40.16	421+65.24	421+86.99	422+08.73	422+30.48	422+52.22	422+55.48	422+73.97	422+95.72	423+17.46
	HAUNCH ELEVATION	731.63	731.45	731.19	731.23	730.86	730.50	730.10	729.68	729.22	729.15	728.72	728.15	727.51
G2-9	STATION	421+00.00	421+22.74	421+45.47	421+40.16	421+68.20	421+90.94	422+13.67	422+36.41	422+59.14	422+66.48	422+81.88	423+04.61	423+27.35
	HAUNCH ELEVATION	731.06	730.86	730.57	730.65	730.22	729.82	729.40	728.94	728.45	728.28	727.91	727.30	726.61

TOP OF HAUNCH ELEVATIONS - UNIT 2 - SPAN 8														
LOCATION		CL PIER 7	0.1	0.2	FIELD SPLICE FS2-6	0.3	0.4	0.5	0.6	0.7	0.8	FIELD SPLICE FS2-7	0.9	CL PIER 8
G2-1	STATION	422+73.76	422+96.38	423+19.01	423+34.61	423+41.63	423+64.26	423+86.88	424+09.51	424+32.13	424+54.76	424+59.85	424+77.38	425+00.00
	HAUNCH ELEVATION	731.42	730.68	729.84	729.22	728.93	727.99	727.03	726.07	725.11	724.12	723.90	723.12	722.13
G2-3	STATION	422+81.82	423+03.64	423+25.46	423+38.25	423+47.28	423+69.10	423+90.91	424+12.73	424+34.55	424+56.37	424+59.85	424+78.19	425+00.00
	HAUNCH ELEVATION	730.86	730.14	729.33	728.83	728.46	727.56	726.63	725.69	724.73	723.75	723.59	722.76	721.80
G2-4	STATION	422+90.20	423+11.18	423+32.16	423+45.66	423+53.14	423+74.12	423+95.10	424+16.09	424+37.07	424+58.05	424+59.85	424+79.03	425+00.00
	HAUNCH ELEVATION	730.05	729.36	728.59	728.06	727.76	726.89	725.99	725.07	724.12	723.15	723.07	722.17	721.23
G2-5	STATION	422+98.92	423+19.03	423+39.14	423+52.88	423+59.24	423+79.35	423+99.46	424+19.57	424+39.68	424+59.79	424+59.85	424+79.90	425+00.00
	HAUNCH ELEVATION	729.23	728.56	727.82	727.28	727.03	726.18	725.31	724.41	723.48	722.53	722.53	721.58	720.67
G2-6	STATION	423+07.99	423+27.20	423+46.40	423+60.25	423+65.60	423+84.80	424+04.00	424+23.20	424+42.41	424+61.61	424+59.85	424+80.81	425+00.00
	HAUNCH ELEVATION	728.38	727.73	727.02	726.47	726.25	725.44	724.60	723.73	722.83	721.91	721.99	720.99	720.10
G2-8	STATION	423+17.46	423+35.72	423+53.97	423+67.43	423+72.22	423+90.48	424+08.73	424+26.99	424+45.24	424+63.49	424+59.85	424+81.75	425+00.00
	HAUNCH ELEVATION	727.51	726.88	726.18	725.65	725.44	724.67	723.86	723.02	722.16	721.28	721.45	720.39	719.51
G2-9	STATION	423+27.35	423+44.61	423+61.88	423+76.47	423+79.14	423+96.41	424+13.67	424+30.94	424+48.20	424+65.47	424+59.85	424+82.74	425+00.00
	HAUNCH ELEVATION	726.61	726.00	725.34	724.74	724.63	723.88	723.10	722.30	721.48	720.63	720.91	719.79	718.95

NOTES:

1. *FOR TOP OF HAUNCH ELEVATION NOTES, SEE SHEET* 134 / 164 .

UNIT 2 - TOP OF HAUNCH ELEVATIONS - (2 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 137 | TOTAL 164
SHEET 1579 | TOTAL 2338

CUY-90-16.28 (CCG3A)

TOP OF HAUNCH ELEVATIONS - UNIT 2 - SPAN 9															
LOCATION		CL PIER 8	0.1	0.2	HEADER BEAM	FIELD SPLICE FS2-8	0.3	0.4	0.5	0.6	FIELD SPLICE FS2-9	0.7	0.8	0.9	CL PIER 9
G2-1	STATION	425+00.00	425+17.60	425+35.15	-	425+49.23	425+52.68	425+70.20	425+87.71	426+05.20	426+15.07	426+22.68	426+40.15	426+57.60	426+75.00
	HAUNCH ELEVATION	722.13	721.31	720.48	-	719.79	719.62	718.76	717.92	717.08	716.61	716.25	715.41	714.55	713.68
G2-3	STATION	425+00.00	425+17.86	425+35.41	-	425+49.48	425+52.94	425+70.46	425+87.96	426+05.46	426+15.33	426+22.94	426+40.40	426+57.86	426+75.00
	HAUNCH ELEVATION	721.80	720.95	720.11	-	719.43	719.26	718.40	717.56	716.73	716.26	715.90	715.06	714.21	713.36
G2-4	STATION	425+00.00	425+18.12	425+35.67	-	425+49.75	425+53.20	425+70.72	425+88.23	426+05.72	426+15.59	426+23.20	426+40.66	426+58.12	426+75.00
	HAUNCH ELEVATION	721.23	720.36	719.52	-	718.83	718.67	717.82	716.98	716.15	715.68	715.32	714.49	713.64	712.81
G2-5	STATION	425+00.00	425+18.39	425+35.94	-	425+50.02	425+53.47	425+70.99	425+88.50	426+05.99	426+15.86	426+23.47	426+40.93	426+58.38	426+75.00
	HAUNCH ELEVATION	720.67	719.77	718.92	-	718.24	718.07	717.22	716.39	715.56	715.10	714.74	713.91	713.07	712.25
G2-6	STATION	425+00.00	425+18.67	425+36.22	425+44.80	425+50.30	425+53.75	425+71.27	425+88.78	426+06.27	426+16.14	426+23.75	426+41.21	426+58.66	426+75.00
	HAUNCH ELEVATION	720.10	719.18	718.33	717.91	717.65	717.48	716.63	715.80	714.98	714.51	714.16	713.34	712.49	711.70
G2-7	STATION	-	-	-	425+44.97	425+50.47	425+53.93	425+71.45	425+88.97	426+06.47	426+16.35	426+23.95	426+41.43	426+58.89	426+75.00
	HAUNCH ELEVATION	-	-	-	717.60	717.29	717.12	716.26	715.41	714.56	714.09	713.73	712.88	712.03	711.23
G2-8	STATION	425+00.00	425+18.99	425+36.55	425+45.15	425+50.65	425+54.10	425+71.64	425+89.16	426+06.67	426+16.56	426+24.17	426+41.65	426+59.12	426+75.00
	HAUNCH ELEVATION	719.51	718.54	717.65	717.21	716.93	716.76	715.88	715.01	714.15	713.66	713.29	712.44	711.57	710.76
G2-9	STATION	425+00.00	425+19.29	425+36.85	-	425+50.65	425+54.40	425+71.94	425+89.46	426+06.97	426+16.56	426+24.47	426+41.95	426+59.42	426+75.00
	HAUNCH ELEVATION	718.95	717.96	717.06	-	716.36	716.17	715.28	714.41	713.56	713.09	712.70	711.85	710.98	710.20

TOP OF HAUNCH ELEVATIONS - UNIT 2 - SPAN 10														
LOCATION		CL PIER 9	0.1	0.2	FIELD SPLICE FS2-10	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-11	0.8	0.9	CL PIER 10
G2-1	STATION	426+75.00	426+97.84	427+20.60	427+23.08	427+43.35	427+66.07	427+88.78	428+11.50	428+35.16	428+50.91	428+58.82	428+82.48	429+06.14
	HAUNCH ELEVATION	713.68	712.48	711.16	711.03	709.86	708.60	707.38	706.23	705.03	704.28	703.88	702.70	701.46
G2-3	STATION	426+75.00	426+98.08	427+20.85	427+23.32	427+43.59	427+66.31	427+89.01	428+11.75	428+35.41	428+51.16	428+59.07	428+82.73	429+06.39
	HAUNCH ELEVATION	713.36	712.15	710.88	710.75	709.61	708.38	707.20	706.06	704.90	704.16	703.77	702.62	701.40
G2-4	STATION	426+75.00	426+98.34	427+21.10	427+23.57	427+43.84	427+66.56	427+89.25	428+12.00	428+35.66	428+51.41	428+59.32	428+82.98	429+06.64
	HAUNCH ELEVATION	712.81	711.59	710.36	710.23	709.14	707.96	706.81	705.71	704.59	703.87	703.49	702.37	701.19
G2-5	STATION	426+75.00	426+98.60	427+21.36	427+23.83	427+44.10	427+66.81	427+89.50	428+12.26	428+35.91	428+51.66	428+59.57	428+83.23	429+06.89
	HAUNCH ELEVATION	712.25	711.03	709.86	709.73	708.67	707.53	706.42	705.36	704.28	703.57	703.21	702.12	700.98
G2-6	STATION	426+75.00	426+98.87	427+21.63	427+24.10	427+44.36	427+67.07	427+89.75	428+12.51	428+36.17	428+51.92	428+59.83	428+83.48	429+07.14
	HAUNCH ELEVATION	711.70	710.48	709.34	709.21	708.20	707.10	706.03	705.01	703.97	703.28	702.93	701.87	700.77
G2-7	STATION	426+75.00	426+99.12	427+21.89	427+24.36	427+44.62	427+67.34	427+90.02	428+12.76	428+36.42	428+52.17	428+60.08	428+83.74	429+07.40
	HAUNCH ELEVATION	711.23	709.97	708.85	708.72	707.74	706.67	705.64	704.65	703.66	702.99	702.65	701.63	700.57
G2-8	STATION	426+75.00	426+99.38	427+22.15	427+24.63	427+44.90	427+67.61	427+90.29	428+13.02	428+36.67	428+52.42	428+60.33	428+83.99	429+07.65
	HAUNCH ELEVATION	710.76	709.47	708.37	708.23	707.28	706.23	705.24	704.29	703.35	702.71	702.37	701.38	700.36
G2-9	STATION	426+75.00	426+99.68	427+22.45	427+24.92	427+45.19	427+67.90	427+90.58	428+13.28	428+36.92	428+52.67	428+60.58	428+84.24	429+07.90
	HAUNCH ELEVATION	710.20	708.90	707.83	707.70	706.79	705.79	704.84	703.93	703.03	702.42	702.09	701.13	700.15

NOTES:

1. *FOR TOP OF HAUNCH ELEVATION NOTES, SEE SHEET* 134 / 164 .

UNIT 2 - TOP OF HAUNCH ELEVATIONS - (3 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 138 | TOTAL 164
SHEET 1580 | TOTAL 2338

CUY-90-16.28 (CCG3A)

TOP OF HAUNCH ELEVATIONS - UNIT 2 - SPAN 11														
LOCATION		CL PIER 10	0.1	0.2	0.3	FIELD SPLICE FS2-12	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. FWD. ABUT.
G2-1	STATION	429+06.14	429+24.73	429+43.32	429+61.91	429+68.61	429+80.50	429+99.09	430+17.68	430+36.28	430+54.87	430+73.46	430+92.00
	HAUNCH ELEVATION	701.46	700.44	699.39	698.41	698.05	697.42	696.44	695.50	694.60	693.73	692.89	692.09
G2-3	STATION	429+06.39	429+24.98	429+43.57	429+62.16	429+68.86	429+80.75	429+99.35	430+17.94	430+36.53	430+55.12	430+73.71	430+92.00
	HAUNCH ELEVATION	701.40	700.40	699.36	698.38	698.02	697.39	696.42	695.48	694.58	693.71	692.88	692.07
G2-4	STATION	429+06.64	429+25.23	429+43.82	429+62.41	429+69.11	429+81.01	429+99.60	430+18.19	430+36.78	430+55.37	430+73.96	430+92.00
	HAUNCH ELEVATION	701.19	700.21	699.21	698.22	697.86	697.23	696.26	695.33	694.43	693.56	692.72	691.93
G2-5	STATION	429+06.89	429+25.48	429+44.08	429+62.67	429+69.37	429+81.26	429+99.85	430+18.44	430+37.03	430+55.62	430+74.22	430+92.00
	HAUNCH ELEVATION	700.98	700.03	699.05	698.06	697.70	697.07	696.10	695.17	694.27	693.40	692.57	691.79
G2-6	STATION	429+07.14	429+25.74	429+44.33	429+62.92	429+69.62	429+81.51	430+00.10	430+18.69	430+37.28	430+55.88	430+74.47	430+92.00
	HAUNCH ELEVATION	700.77	699.84	698.89	697.90	697.54	696.91	695.94	695.01	694.11	693.25	692.42	691.65
G2-7	STATION	429+07.40	429+25.99	429+44.58	429+63.17	429+69.87	429+81.76	430+00.35	430+18.95	430+37.54	430+56.13	430+74.72	430+92.00
	HAUNCH ELEVATION	700.57	699.66	698.73	697.74	697.38	696.75	695.79	694.85	693.95	693.10	692.26	691.51
G2-8	STATION	429+07.65	429+26.24	429+44.83	429+63.42	429+70.12	429+82.01	430+00.61	430+19.20	430+37.79	430+56.38	430+74.97	430+92.00
	HAUNCH ELEVATION	700.36	699.48	698.57	697.58	697.23	696.59	695.63	694.69	693.79	692.94	692.11	691.36
G2-9	STATION	429+07.90	429+26.49	429+45.08	429+63.68	429+70.38	429+82.27	430+00.86	430+19.45	430+38.04	430+56.63	430+75.22	430+92.00
	HAUNCH ELEVATION	700.15	699.30	698.41	697.42	697.06	696.43	695.46	694.53	693.64	692.78	691.95	691.22

NOTES:

1. *FOR TOP OF HAUNCH ELEVATION NOTES, SEE SHEET* 134 / 164.

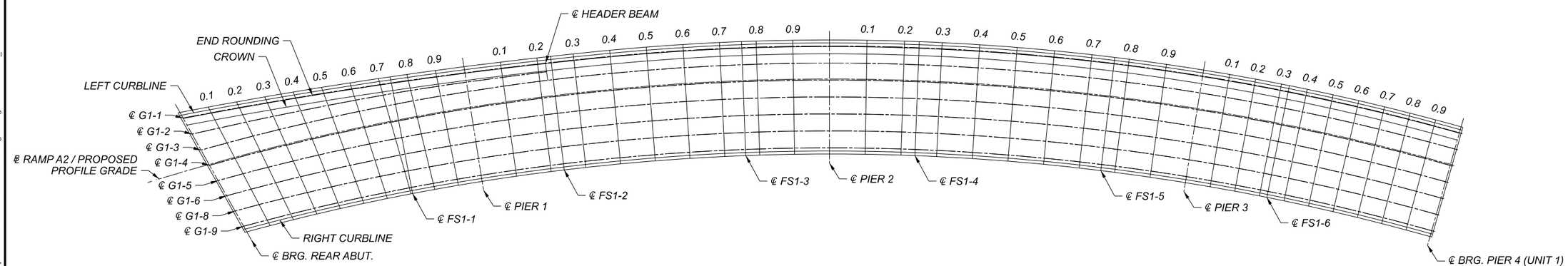
CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:15:28 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SD021.dgn

UNIT 2 - TOP OF HAUNCH ELEVATIONS - (4 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	JS
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	139
TOTAL	164
SHEET	1581
TOTAL	2338

FINAL DECK SURFACE ELEVATIONS - UNIT 1 - SPAN 1													
LOCATION		CL BRG. REAR ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-1	0.8	0.9	CL PIER 1
LEFT CURBLINE	STATION	410+64.58	410+80.06	410+95.57	411+11.10	411+26.64	411+42.21	411+57.79	411+73.39	411+79.75	411+89.00	412+04.62	412+20.25
	FINAL DECK ELEVATION	706.10	706.56	707.02	707.48	707.95	708.43	708.91	709.40	709.60	709.89	710.39	710.89
G1-1	STATION	410+65.00	410+80.44	410+95.90	411+11.39	411+26.89	411+42.41	411+57.96	411+73.51	411+79.75	411+89.08	412+04.66	412+20.25
	FINAL DECK ELEVATION	706.18	706.64	707.10	707.56	708.03	708.51	708.99	709.47	709.67	709.96	710.46	710.96
END ROUNDING	STATION	410+65.05	410+80.49	410+95.95	411+11.43	411+26.93	411+42.44	411+57.98	411+73.53	411+79.75	411+89.09	412+04.67	412+20.25
	FINAL DECK ELEVATION	706.19	706.65	707.11	707.57	708.04	708.52	709.00	709.48	709.68	709.97	710.47	710.97
CROWN	STATION	410+66.00	410+81.34	410+96.71	411+12.09	411+27.50	411+42.92	411+58.36	411+73.82	411+79.75	411+89.28	412+04.76	412+20.25
	FINAL DECK ELEVATION	706.20	706.65	707.11	707.57	708.04	708.51	708.99	709.47	709.66	709.96	710.45	710.95
G1-2	STATION	410+67.30	410+82.55	410+97.82	411+13.10	411+28.39	411+43.69	411+58.99	411+74.30	411+79.75	411+89.61	412+04.93	412+20.25
	FINAL DECK ELEVATION	705.98	706.45	706.93	707.42	707.91	708.40	708.90	709.40	709.58	709.90	710.40	710.90
G1-3	STATION	410+69.64	410+84.70	410+99.76	411+14.82	411+29.88	411+44.94	411+60.00	411+75.07	411+79.75	411+90.13	412+05.19	412+20.25
	FINAL DECK ELEVATION	705.57	706.08	706.58	707.09	707.60	708.11	708.61	709.12	709.28	709.63	710.14	710.64
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	410+71.75	410+86.60	411+01.45	411+16.30	411+31.15	411+46.00	411+60.85	411+75.70	411+79.75	411+90.55	412+05.40	412+20.25
	FINAL DECK ELEVATION	705.21	705.71	706.21	706.71	707.21	707.71	708.21	708.71	708.85	709.21	709.71	710.21
G1-4	STATION	410+71.89	410+86.73	411+01.56	411+16.40	411+31.23	411+46.07	411+60.91	411+75.74	411+79.75	411+90.58	412+05.41	412+20.25
	FINAL DECK ELEVATION	705.18	705.68	706.18	706.68	707.18	707.68	708.18	708.68	708.82	709.18	709.68	710.18
G1-5	STATION	410+74.18	410+88.79	411+03.39	411+18.00	411+32.61	411+47.22	411+61.82	411+76.43	411+79.75	411+91.04	412+05.64	412+20.25
	FINAL DECK ELEVATION	704.80	705.29	705.78	706.27	706.77	707.26	707.75	708.24	708.36	708.74	709.23	709.72
G1-6	STATION	410+76.51	410+90.88	411+05.26	411+19.63	411+34.00	411+48.38	411+62.75	411+77.13	411+79.75	411+91.50	412+05.88	412+20.25
	FINAL DECK ELEVATION	704.42	704.90	705.38	705.87	706.35	706.84	707.32	707.81	707.89	708.29	708.78	709.26
G1-8	STATION	410+78.87	410+93.01	411+07.14	411+21.28	411+35.42	411+49.56	411+63.70	411+77.84	411+79.75	411+91.97	412+06.11	412+20.25
	FINAL DECK ELEVATION	704.03	704.51	704.99	705.46	705.94	706.42	706.89	707.37	707.43	707.84	708.32	708.80
G1-9	STATION	410+81.27	410+95.17	411+09.06	411+22.96	411+36.86	411+50.76	411+64.66	411+78.56	411+79.75	411+92.45	412+06.35	412+20.25
	FINAL DECK ELEVATION	703.65	704.12	704.59	705.06	705.53	705.99	706.46	706.93	706.97	707.40	707.87	708.34
RIGHT CURBLINE	STATION	410+81.72	410+95.57	411+09.42	411+23.28	411+37.13	411+50.98	411+64.84	411+78.69	411+79.75	411+92.54	412+06.40	412+20.25
	FINAL DECK ELEVATION	703.58	704.05	704.52	704.98	705.45	705.92	706.38	706.85	706.89	707.32	707.78	708.25



KEY PLAN - UNIT 1

NOTES:

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
2. FOR SLAB SPLAN, SEE SHEETS 98 / 164 THRU 106 / 164.
3. FOR RAILING DETAILS, SEE SHEETS 154 / 164 AND 155 / 164.
4. FOR TRANSVERSE SECTION, SEE SHEETS 117 / 164 THRU 119 / 164.
5. FOR SCREED AND TOP OF HAUNCH ELEVATIONS, SEE SHEETS 128 / 164 THRU 139 / 164.

UNIT 1 - FINAL DECK ELEVATIONS - (1 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 140 | TOTAL 164
SHEET 1582 | TOTAL 2338

CUY-90-16.28 (CCG3A)

FINAL DECK SURFACE ELEVATIONS - UNIT 1 - SPAN 2															
LOCATION		CL PIER 1	0.1	0.2	HEADER BEAM	FIELD SPLICE FS1-2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-3	0.8	0.9	CL PIER 2
LEFT CURBLINE	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	710.89	711.54	712.19	0.00	712.44	712.86	713.53	714.20	714.88	715.55	715.96	716.23	716.90	717.57
G1-1	STATION	412+20.25	412+40.25	412+60.25	412+64.61	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	710.96	711.61	712.26	712.41	712.51	712.93	713.60	714.27	714.95	715.62	716.03	716.30	716.97	717.64
END ROUNDING	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	710.97	711.62	712.27	0.00	712.52	712.94	713.61	714.28	714.96	715.63	716.04	716.31	716.98	717.65
CROWN	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	710.95	711.60	712.26	0.00	712.50	712.92	713.59	714.27	714.94	715.61	716.02	716.29	716.96	717.64
G1-2	STATION	412+20.25	412+40.25	412+60.25	412+64.61	0+00.00	0+00.00	0+00.00	0+00.00	0+00.00	0+00.00	0+00.00	0+00.00	0+00.00	0+00.00
	FINAL DECK ELEVATION	710.90	711.56	712.23	712.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G1-3	STATION	412+20.25	412+40.25	412+60.25	412+64.61	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	710.64	711.32	711.99	712.14	712.24	712.67	713.34	714.01	714.69	715.36	715.77	716.04	716.71	717.38
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	710.21	710.88	711.56	0.00	711.81	712.23	712.91	713.58	714.25	714.93	715.33	715.60	716.28	716.95
G1-4	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	710.18	710.86	711.53	0.00	711.78	712.20	712.88	713.55	714.23	714.90	715.30	715.57	716.25	716.92
G1-5	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	709.72	710.39	711.07	0.00	711.32	711.74	712.42	713.09	713.76	714.44	714.84	715.11	715.79	716.46
G1-6	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	709.26	709.93	710.61	0.00	710.86	711.28	711.96	712.63	713.30	713.98	714.38	714.65	715.33	716.00
G1-8	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	708.80	709.47	710.15	0.00	710.40	710.82	711.49	712.17	712.84	713.52	713.92	714.19	714.86	715.54
G1-9	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	708.34	709.01	709.68	0.00	709.94	710.36	711.03	711.71	712.38	713.05	713.46	713.73	714.40	715.08
RIGHT CURBLINE	STATION	412+20.25	412+40.25	412+60.25	0+00.00	412+67.75	412+80.25	413+00.25	413+20.25	413+40.25	413+60.25	413+72.25	413+80.25	414+00.25	414+20.25
	FINAL DECK ELEVATION	708.25	708.92	709.60	0.00	709.85	710.27	710.95	711.62	712.29	712.97	713.37	713.64	714.32	714.99

NOTES:

1. *FOR FINAL DECK ELEVATION NOTES, SEE SHEET* 140 / 164 .

UNIT 1 - FINAL DECK ELEVATIONS - (2 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 141 | TOTAL 164
SHEET 1583 | TOTAL 2338

CUY-90-16.28 (CCG3A)

FINAL DECK SURFACE ELEVATIONS - UNIT 1 - SPAN 3														
LOCATION		CL PIER 2	0.1	0.2	FIELD SPLICE FS1-4	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS1-5	0.8	0.9	CL PIER 3
LEFT CURBLINE	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	717.57	718.27	718.96	719.23	719.65	720.34	721.03	721.72	722.41	722.83	723.10	723.79	724.48
G1-1	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	717.64	718.34	719.03	719.30	719.72	720.41	721.10	721.79	722.48	722.90	723.17	723.86	724.55
END ROUNDING	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	717.65	718.35	719.04	719.31	719.73	720.42	721.11	721.80	722.49	722.91	723.18	723.87	724.56
CROWN	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	717.64	718.33	719.02	719.29	719.71	720.40	721.09	721.78	722.47	722.89	723.16	723.85	724.54
G1-3	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	717.38	718.07	718.77	719.03	719.46	720.15	720.84	721.53	722.22	722.64	722.91	723.60	724.29
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	716.95	717.64	718.33	718.60	719.02	719.71	720.40	721.10	721.79	722.21	722.48	723.17	723.86
G1-4	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	716.92	717.61	718.30	718.57	718.99	719.68	720.38	721.07	721.76	722.18	722.45	723.14	723.83
G1-5	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	716.46	717.15	717.84	718.11	718.53	719.22	719.91	720.61	721.30	721.72	721.99	722.68	723.37
G1-6	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	716.00	716.69	717.38	717.65	718.07	718.76	719.45	720.14	720.84	721.26	721.53	722.22	722.91
G1-8	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	715.54	716.23	716.92	717.19	717.61	718.30	718.99	719.68	720.37	720.79	721.06	721.76	722.45
G1-9	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	715.08	715.77	716.46	716.73	717.15	717.84	718.53	719.22	719.91	720.33	720.60	721.29	721.98
RIGHT CURBLINE	STATION	414+20.25	414+40.75	414+61.25	414+69.25	414+81.75	415+02.25	415+22.75	415+43.25	415+63.75	415+76.25	415+84.25	416+04.75	416+25.25
	FINAL DECK ELEVATION	714.99	715.68	716.37	716.64	717.06	717.75	718.44	719.14	719.83	720.25	720.52	721.21	721.90

NOTES:

1. *FOR FINAL DECK ELEVATION NOTES, SEE SHEET* 140 / 164 .

UNIT 1 - FINAL DECK ELEVATIONS - (3 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 142 | TOTAL 164
SHEET 1584 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:15:46 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SD028.dgn

FINAL DECK SURFACE ELEVATIONS - UNIT 1 - SPAN 4													
LOCATION		CL PIER 3	0.1	0.2	0.3	FIELD SPLICE FS1-6	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. PIER 4 BACK STA.
LEFT CURBLINE	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.13
	FINAL DECK ELEVATION	724.48	724.97	725.45	725.94	726.08	726.42	726.91	727.39	727.88	728.36	728.88	729.41
G1-1	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.12
	FINAL DECK ELEVATION	724.55	725.04	725.52	726.01	726.15	726.49	726.98	727.46	727.95	728.43	728.95	729.48
END ROUNDING	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.12
	FINAL DECK ELEVATION	724.56	725.05	725.53	726.02	726.16	726.50	726.99	727.47	727.96	728.44	728.96	729.49
CROWN	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.11
	FINAL DECK ELEVATION	724.54	725.03	725.51	726.00	726.15	726.48	726.97	727.45	727.94	728.42	728.94	729.46
G1-3	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.10
	FINAL DECK ELEVATION	724.29	724.78	725.26	725.75	725.89	726.23	726.72	727.20	727.68	728.17	728.67	729.18
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.08
	FINAL DECK ELEVATION	723.86	724.34	724.83	725.31	725.46	725.80	726.28	726.77	727.25	727.74	728.22	728.71
G1-4	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.08
	FINAL DECK ELEVATION	723.83	724.31	724.80	725.28	725.43	725.77	726.25	726.74	727.22	727.71	728.19	728.67
G1-5	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.06
	FINAL DECK ELEVATION	723.37	723.85	724.34	724.82	724.97	725.31	725.79	726.28	726.76	727.25	727.71	728.17
G1-6	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.04
	FINAL DECK ELEVATION	722.91	723.39	723.88	724.36	724.51	724.85	725.33	725.82	726.30	726.79	727.23	727.66
G1-8	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.02
	FINAL DECK ELEVATION	722.45	722.93	723.42	723.90	724.05	724.38	724.87	725.35	725.84	726.32	726.75	727.15
G1-9	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+69.00
	FINAL DECK ELEVATION	721.98	722.47	722.95	723.44	723.59	723.92	724.41	724.89	725.38	725.86	726.27	726.64
RIGHT CURBLINE	STATION	416+25.25	416+39.63	416+54.02	416+68.40	416+72.75	416+82.78	416+97.17	417+11.55	417+25.93	417+40.32	417+54.70	417+68.99
	FINAL DECK ELEVATION	721.90	722.38	722.87	723.35	723.50	723.84	724.32	724.81	725.29	725.78	726.18	726.54

NOTES:

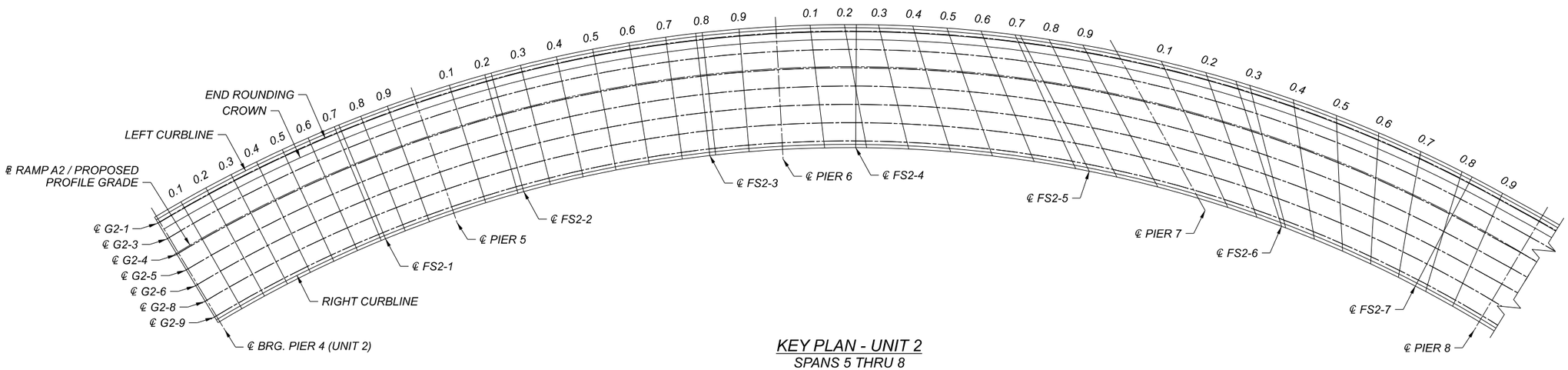
1. *FOR FINAL DECK ELEVATION NOTES, SEE SHEET* 140 / 164 .

UNIT 1 - FINAL DECK ELEVATIONS - (4 OF 4)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 143 | TOTAL 164
SHEET 1585 | TOTAL 2338

CUY-90-16.28 (CCG3A)

FINAL DECK SURFACE ELEVATIONS - UNIT 2 - SPAN 5													
LOCATION		CL BRG. PIER 4 AHEAD STA.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-1	0.8	0.9	CL PIER 5
LEFT CURBLINE	STATION	417+73.35	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	729.57	730.10	730.61	731.07	731.51	731.92	732.30	732.66	732.72	732.99	733.30	733.58
G2-1	STATION	417+73.36	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	729.64	730.17	730.68	731.14	731.58	731.99	732.37	732.73	732.79	733.06	733.37	733.65
END ROUNDING	STATION	417+73.36	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	729.65	730.18	730.69	731.15	731.59	732.00	732.38	732.74	732.80	733.07	733.38	733.66
CROWN	STATION	417+73.37	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	729.62	730.14	730.65	731.11	731.55	731.96	732.34	732.70	732.76	733.03	733.34	733.62
G2-3	STATION	417+73.39	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	729.34	729.84	730.34	730.80	731.24	731.65	732.03	732.39	732.45	732.72	733.03	733.31
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	417+73.42	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	728.85	729.33	729.81	730.27	730.71	731.12	731.50	731.86	731.92	732.19	732.50	732.78
G2-4	STATION	417+73.42	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	728.82	729.30	729.77	730.24	730.67	731.08	731.47	731.83	731.89	732.16	732.47	732.75
G2-5	STATION	417+73.45	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	728.30	728.75	729.21	729.67	730.11	730.52	730.90	731.26	731.32	731.59	731.90	732.18
G2-6	STATION	417+73.48	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	727.79	728.21	728.64	729.11	729.54	729.95	730.34	730.70	730.76	731.03	731.34	731.62
G2-8	STATION	417+73.51	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	727.27	727.66	728.08	728.54	728.98	729.39	729.77	730.13	730.19	730.46	730.77	731.05
G2-9	STATION	417+73.55	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	726.75	727.11	727.51	727.98	728.41	728.82	729.21	729.57	729.63	729.90	730.21	730.49
RIGHT CURBLINE	STATION	417+73.55	417+87.63	418+01.83	418+16.04	418+30.25	418+44.46	418+58.67	418+72.88	418+75.34	418+87.08	419+01.29	419+15.50
	FINAL DECK ELEVATION	726.66	727.01	727.41	727.87	728.31	728.72	729.10	729.46	729.52	729.79	730.10	730.38



KEY PLAN - UNIT 2
SPANS 5 THRU 8

NOTES:

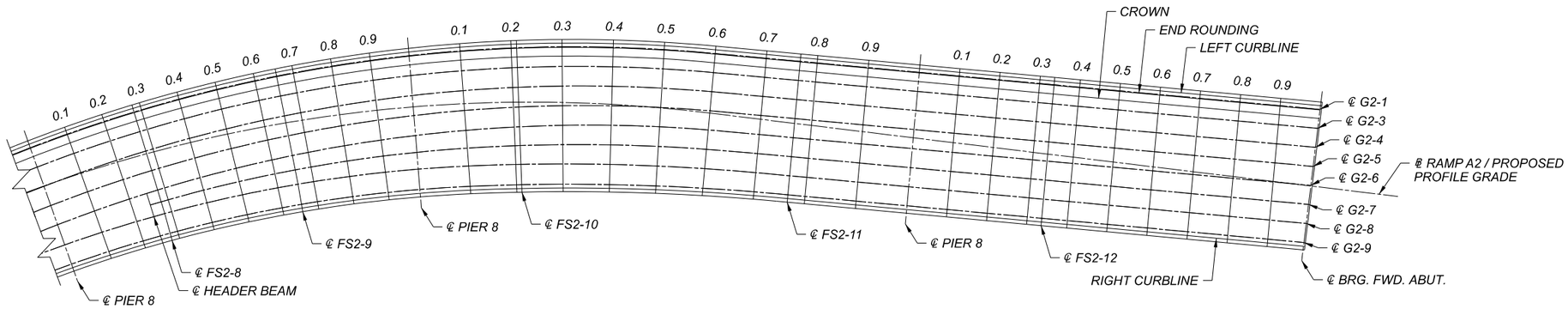
1. FOR FINAL DECK ELEVATION NOTES, SEE SHEET 140 / 164 .

UNIT 2 - FINAL DECK ELEVATIONS - (1 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 144 | TOTAL 164
SHEET 1586 | TOTAL 2338

CUY-90-16.28 (CCG3A)

FINAL DECK SURFACE ELEVATIONS - UNIT 2 - SPAN 6														
LOCATION		CL PIER 5	0.1	0.2	FIELD SPLICE FS2-2	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-3	0.8	0.9	CL PIER 6
LEFT CURBLINE	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	733.58	733.91	734.19	734.23	734.43	734.62	734.77	734.88	734.94	734.96	734.96	734.93	734.86
G2-1	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	733.65	733.98	734.26	734.30	734.50	734.69	734.84	734.95	735.01	735.03	735.03	735.00	734.93
END ROUNDING	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	733.66	733.99	734.27	734.31	734.51	734.70	734.85	734.96	735.02	735.04	735.04	735.01	734.94
CROWN	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	733.62	733.95	734.23	734.27	734.47	734.66	734.81	734.92	734.98	735.00	735.00	734.97	734.90
G2-3	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	733.31	733.64	733.92	733.96	734.16	734.35	734.50	734.61	734.67	734.69	734.69	734.66	734.59
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	732.78	733.11	733.39	733.43	733.63	733.82	733.97	734.08	734.14	734.16	734.16	734.13	734.06
G2-4	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	732.75	733.07	733.35	733.40	733.59	733.79	733.94	734.04	734.10	734.12	734.12	734.10	734.03
G2-5	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	732.18	732.51	732.79	732.83	733.03	733.22	733.37	733.48	733.54	733.56	733.56	733.53	733.46
G2-6	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	731.62	731.94	732.22	732.27	732.46	732.66	732.81	732.91	732.97	732.99	732.99	732.97	732.90
G2-8	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	731.05	731.38	731.66	731.70	731.90	732.09	732.24	732.35	732.41	732.43	732.43	732.40	732.33
G2-9	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	730.49	730.81	731.09	731.14	731.33	731.53	731.68	731.78	731.84	731.86	731.86	731.84	731.77
RIGHT CURBLINE	STATION	419+15.50	419+33.95	419+52.40	419+55.66	419+70.85	419+89.30	420+07.75	420+26.20	420+44.65	420+59.84	420+63.10	420+81.55	421+00.00
	FINAL DECK ELEVATION	730.38	730.71	730.99	731.03	731.23	731.42	731.57	731.68	731.74	731.76	731.76	731.73	731.66



KEY PLAN - UNIT 2
SPANS 9 THRU 11

NOTES:

1. FOR FINAL DECK ELEVATION NOTES, SEE SHEET 140 / 164 .

UNIT 2 - FINAL DECK ELEVATIONS - (2 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 145 | TOTAL 164
SHEET 1587 | TOTAL 2338

CUY-90-16.28 (CCG3A)

FINAL DECK SURFACE ELEVATIONS - UNIT 2 - SPAN 7														
LOCATION		CL PIER 6	0.1	0.2	FIELD SPLICE FS2-4	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-5	0.8	0.9	CL PIER 7
LEFT CURBLINE	STATION	421+00.00	421+17.23	421+34.46	421+40.16	421+51.69	421+68.92	421+86.15	422+03.37	422+20.60	0+00.00	422+37.83	422+55.06	422+72.29
	FINAL DECK ELEVATION	734.86	734.76	734.62	734.56	734.44	734.22	733.96	733.67	733.33	0.00	732.96	732.55	732.10
G2-1	STATION	421+00.00	421+17.38	421+34.75	421+40.16	421+52.13	421+69.50	421+86.88	422+04.25	422+21.63	422+24.51	422+39.00	422+56.38	422+73.76
	FINAL DECK ELEVATION	734.93	734.83	734.68	734.63	734.50	734.28	734.02	733.72	733.38	733.32	733.00	732.59	732.13
END ROUNDING	STATION	421+00.00	421+17.40	421+34.79	421+40.16	421+52.19	421+69.59	421+86.98	422+04.38	422+21.78	0+00.00	422+39.17	422+56.57	422+73.97
	FINAL DECK ELEVATION	734.94	734.84	734.69	734.64	734.51	734.29	734.03	733.73	733.39	0.00	733.01	732.59	732.14
CROWN	STATION	421+00.00	421+17.74	421+35.47	421+40.16	421+53.21	421+70.94	421+88.68	422+06.41	422+24.15	0+00.00	422+41.89	422+59.62	422+77.36
	FINAL DECK ELEVATION	734.90	734.80	734.65	734.60	734.46	734.23	733.96	733.65	733.30	0.00	732.91	732.48	732.00
G2-3	STATION	421+00.00	421+18.18	421+36.36	421+40.16	421+54.55	421+72.73	421+90.91	422+09.09	422+27.27	422+33.62	422+45.46	422+63.64	422+81.82
	FINAL DECK ELEVATION	734.59	734.48	734.33	734.29	734.13	733.89	733.61	733.29	732.92	732.78	732.51	732.06	731.57
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	421+00.00	421+18.97	421+37.93	421+40.16	421+56.90	421+75.87	421+94.84	422+13.80	422+32.77	0+00.00	422+51.74	422+70.70	422+89.67
	FINAL DECK ELEVATION	734.06	733.95	733.78	733.76	733.57	733.32	733.02	732.67	732.27	0.00	731.83	731.35	730.81
G2-4	STATION	421+00.00	421+19.02	421+38.04	421+40.16	421+57.06	421+76.08	421+95.10	422+14.12	422+33.14	422+37.24	422+52.16	422+71.18	422+90.20
	FINAL DECK ELEVATION	734.03	733.91	733.75	733.73	733.54	733.28	732.98	732.63	732.23	732.14	731.79	731.30	730.76
G2-5	STATION	421+00.00	421+19.89	421+39.78	421+40.16	421+59.68	421+79.57	421+99.46	422+19.35	422+39.24	422+40.89	422+59.13	422+79.02	422+98.92
	FINAL DECK ELEVATION	733.46	733.34	733.17	733.16	732.94	732.66	732.34	731.96	731.53	731.49	731.05	730.52	729.93
G2-6	STATION	421+00.00	421+20.80	421+41.60	421+40.16	421+62.40	421+83.20	422+04.00	422+24.80	422+45.60	422+51.88	422+66.40	422+87.20	423+07.99
	FINAL DECK ELEVATION	732.90	732.77	732.58	732.60	732.34	732.04	731.69	731.28	730.82	730.66	730.30	729.72	729.09
G2-8	STATION	421+00.00	421+21.75	421+43.49	421+40.16	421+65.24	421+86.99	422+08.73	422+30.48	422+52.22	422+55.48	422+73.97	422+95.72	423+17.46
	FINAL DECK ELEVATION	732.33	732.20	732.00	732.03	731.74	731.42	731.04	730.59	730.09	730.01	729.53	728.90	728.22
G2-9	STATION	421+00.00	421+22.74	421+45.47	421+40.16	421+68.20	421+90.94	422+13.67	422+36.41	422+59.14	422+66.48	422+81.88	423+04.61	423+27.35
	FINAL DECK ELEVATION	731.77	731.62	731.41	731.47	731.13	730.79	730.38	729.90	729.35	729.16	728.74	728.06	727.32
RIGHT CURBLINE	STATION	421+00.00	421+22.92	421+45.85	421+40.16	421+68.77	421+91.69	422+14.62	422+37.54	422+60.46	0+00.00	422+83.39	423+06.31	423+29.23
	FINAL DECK ELEVATION	731.66	731.52	731.30	731.36	731.02	730.67	730.25	729.77	729.21	0.00	728.59	727.91	727.15

NOTES:

1. *FOR FINAL DECK ELEVATION NOTES, SEE SHEET* 140 / 164 .

UNIT 2 - FINAL DECK ELEVATIONS - (3 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER TJE | CHECKER JS

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 146 | TOTAL 164

SHEET 1588 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:16:10 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SD032.dgn

FINAL DECK SURFACE ELEVATIONS - UNIT 2 - SPAN 8														
LOCATION		CL PIER 7	0.1	0.2	FIELD SPLICE FS2-6	0.3	0.4	0.5	0.6	0.7	0.8	FIELD SPLICE FS2-7	0.9	CL PIER 8
LEFT CURBLINE	STATION	422+72.29	422+95.06	423+17.83	0+00.00	423+40.61	423+63.38	423+86.15	424+08.92	424+31.69	424+54.47	424+59.85	424+77.24	425+00.00
	FINAL DECK ELEVATION	732.10	731.45	730.73	0.00	729.95	729.10	728.18	727.20	726.14	725.03	724.76	723.88	722.77
G2-1	STATION	422+73.76	422+96.38	423+19.01	423+34.61	423+41.63	423+64.26	423+86.88	424+09.51	424+32.13	424+54.76	424+59.85	424+77.38	425+00.00
	FINAL DECK ELEVATION	732.13	731.48	730.77	730.23	729.98	729.13	728.22	727.24	726.19	725.08	724.83	723.95	722.84
END ROUNDING	STATION	422+73.97	422+96.57	423+19.17	0+00.00	423+41.78	423+64.38	423+86.99	424+09.59	424+32.20	424+54.80	424+59.85	424+77.41	425+00.00
	FINAL DECK ELEVATION	732.14	731.49	730.77	0.00	729.99	729.14	728.23	727.25	726.20	725.09	724.84	723.96	722.85
CROWN	STATION	422+77.36	422+99.62	423+21.89	0+00.00	423+44.15	423+66.42	423+88.68	424+10.95	424+33.21	424+55.48	424+59.85	424+77.75	425+00.00
	FINAL DECK ELEVATION	732.00	731.35	730.64	0.00	729.86	729.02	728.11	727.14	726.11	725.02	724.80	723.90	722.82
G2-3	STATION	422+81.82	423+03.64	423+25.46	423+38.25	423+47.28	423+69.10	423+90.91	424+12.73	424+34.55	424+56.37	424+59.85	424+78.19	425+00.00
	FINAL DECK ELEVATION	731.57	730.92	730.21	729.76	729.44	728.60	727.71	726.75	725.74	724.66	724.49	723.57	722.51
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	422+89.67	423+10.70	423+31.74	0+00.00	423+52.77	423+73.80	423+94.84	424+15.87	424+36.90	424+57.93	424+59.85	424+78.97	425+00.00
	FINAL DECK ELEVATION	730.81	730.17	729.46	0.00	728.70	727.89	727.01	726.08	725.09	724.05	723.96	723.00	721.95
G2-4	STATION	422+90.20	423+11.18	423+32.16	423+45.66	423+53.14	423+74.12	423+95.10	424+16.09	424+37.07	424+58.05	424+59.85	424+79.03	425+00.00
	FINAL DECK ELEVATION	730.76	730.12	729.41	728.93	728.65	727.84	726.97	726.04	725.05	724.01	723.92	722.96	721.94
G2-5	STATION	422+98.92	423+19.03	423+39.14	423+52.88	423+59.24	423+79.35	423+99.46	424+19.57	424+39.68	424+59.79	424+59.85	424+79.90	425+00.00
	FINAL DECK ELEVATION	729.93	729.29	728.60	728.10	727.86	727.06	726.21	725.31	724.36	723.36	723.36	722.36	721.38
G2-6	STATION	423+07.99	423+27.20	423+46.40	423+60.25	423+65.60	423+84.80	424+04.00	424+23.20	424+42.41	424+61.61	424+59.85	424+80.81	425+00.00
	FINAL DECK ELEVATION	729.09	728.45	727.77	727.25	727.05	726.27	725.45	724.58	723.66	722.71	722.79	721.75	720.81
G2-8	STATION	423+17.46	423+35.72	423+53.97	423+67.43	423+72.22	423+90.48	424+08.73	424+26.99	424+45.24	424+63.49	424+59.85	424+81.75	425+00.00
	FINAL DECK ELEVATION	728.22	727.59	726.93	726.41	726.22	725.47	724.67	723.84	722.96	722.05	722.23	721.13	720.22
G2-9	STATION	423+27.35	423+44.61	423+61.88	423+76.47	423+79.14	423+96.41	424+13.67	424+30.94	424+48.20	424+65.47	424+59.85	424+82.74	425+00.00
	FINAL DECK ELEVATION	727.32	726.71	726.06	725.48	725.38	724.65	723.89	723.09	722.25	721.38	721.66	720.52	719.66
RIGHT CURBLINE	STATION	423+29.23	423+46.31	423+63.39	0+00.00	423+80.46	423+97.54	424+14.62	424+31.69	424+48.77	424+65.85	424+59.85	424+82.92	425+00.00
	FINAL DECK ELEVATION	727.15	726.54	725.90	0.00	725.22	724.50	723.74	722.94	722.11	721.26	721.56	720.40	719.55

NOTES:

1. FOR FINAL DECK ELEVATION NOTES, SEE SHEET 140 / 164 .

UNIT 2 - FINAL DECK ELEVATIONS - (4 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	
DESIGNER	TJE
CHECKER	JS
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	147
TOTAL	164
SHEET	1589
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:16:16 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SD033.dgn

FINAL DECK SURFACE ELEVATIONS - UNIT 2 - SPAN 9															
LOCATION		CL PIER 8	0.1	0.2	HEADER BEAM	FIELD SPLICE FS2-8	0.3	0.4	0.5	0.6	FIELD SPLICE FS2-9	0.7	0.8	0.9	CL PIER 9
LEFT CURBLINE	STATION	425+00.00	425+17.56	425+35.10	0+00.00	425+49.18	425+52.63	425+70.15	425+87.66	426+05.15	426+15.03	426+22.63	426+40.10	426+57.56	426+75.00
	FINAL DECK ELEVATION	722.77	721.92	721.07	0.00	720.39	720.23	719.38	718.54	717.69	717.21	716.85	716.00	715.16	714.32
G2-1	STATION	425+00.00	425+17.60	425+35.15	0+00.00	425+49.23	425+52.68	425+70.20	425+87.71	426+05.20	426+15.07	426+22.68	426+40.15	426+57.60	426+75.00
	FINAL DECK ELEVATION	722.84	721.99	721.14	0.00	720.46	720.30	719.45	718.61	717.76	717.28	716.92	716.07	715.23	714.39
END ROUNDING	STATION	425+00.00	425+17.61	425+35.16	0+00.00	425+49.23	425+52.69	425+70.21	425+87.71	426+05.21	426+15.08	426+22.69	426+40.16	426+57.61	426+75.00
	FINAL DECK ELEVATION	722.85	722.00	721.15	0.00	720.47	720.31	719.46	718.62	717.77	717.29	716.93	716.08	715.24	714.40
CROWN	STATION	425+00.00	425+17.72	425+35.26	0+00.00	425+49.34	425+52.80	425+70.31	425+87.82	426+05.32	426+15.19	426+22.80	426+40.26	426+57.72	426+75.00
	FINAL DECK ELEVATION	722.82	721.96	721.11	0.00	720.43	720.27	719.42	718.58	717.73	717.25	716.89	716.04	715.20	714.37
G2-3	STATION	425+00.00	425+17.86	425+35.41	0+00.00	425+49.48	425+52.94	425+70.46	425+87.96	426+05.46	426+15.33	426+22.94	426+40.40	426+57.86	426+75.00
	FINAL DECK ELEVATION	722.51	721.64	720.80	0.00	720.12	719.95	719.11	718.26	717.42	716.94	716.58	715.73	714.89	714.07
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	425+00.00	425+18.13	425+35.69	0+00.00	425+49.78	425+53.24	425+70.78	425+88.30	426+05.80	426+15.69	426+23.30	426+40.78	426+58.25	426+75.00
	FINAL DECK ELEVATION	721.95	721.04	720.17	0.00	719.46	719.29	718.41	717.54	716.66	716.17	715.79	714.91	714.04	713.20
G2-4	STATION	425+00.00	425+18.12	425+35.67	0+00.00	425+49.75	425+53.20	425+70.72	425+88.23	426+05.72	426+15.59	426+23.20	426+40.66	426+58.12	426+75.00
	FINAL DECK ELEVATION	721.94	721.07	720.22	0.00	719.54	719.37	718.53	717.69	716.84	716.37	716.00	715.16	714.33	713.51
G2-5	STATION	425+00.00	425+18.39	425+35.94	0+00.00	425+50.02	425+53.47	425+70.99	425+88.50	426+05.99	426+15.86	426+23.47	426+40.93	426+58.38	426+75.00
	FINAL DECK ELEVATION	721.38	720.49	719.64	0.00	718.96	718.80	717.95	717.11	716.27	715.80	715.43	714.59	713.76	712.96
G2-6	STATION	425+00.00	425+18.67	425+36.22	425+44.80	425+50.30	425+53.75	425+71.27	425+88.78	426+06.27	426+16.14	426+23.75	426+41.21	426+58.66	426+75.00
	FINAL DECK ELEVATION	720.81	719.91	719.06	718.65	718.39	718.22	717.38	716.54	715.70	715.22	714.86	714.02	713.19	712.41
G2-7	STATION	0+00.00	0+00.00	0+00.00	425+44.97	425+50.47	425+53.93	425+71.45	425+88.97	426+06.47	426+16.35	426+23.95	426+41.43	426+58.89	426+75.00
	FINAL DECK ELEVATION	0.00	0.00	0.00	718.31	718.04	717.87	717.01	716.15	715.29	714.81	714.44	713.58	712.73	711.94
G2-8	STATION	425+00.00	425+18.99	425+36.55	425+45.15	425+50.65	425+54.10	425+71.64	425+89.16	426+06.67	426+16.56	426+24.17	426+41.65	426+59.12	426+75.00
	FINAL DECK ELEVATION	720.22	719.27	718.39	717.96	717.69	717.52	716.64	715.76	714.89	714.39	714.01	713.14	712.26	711.47
G2-9	STATION	425+00.00	425+19.29	425+36.85	0+00.00	425+50.65	425+54.40	425+71.94	425+89.46	426+06.97	426+16.56	426+24.47	426+41.95	426+59.42	426+75.00
	FINAL DECK ELEVATION	719.66	718.69	717.81	0.00	717.12	716.94	716.06	715.18	714.31	713.83	713.43	712.56	711.68	710.91
RIGHT CURBLINE	STATION	425+00.00	425+19.34	425+36.91	0+00.00	425+50.65	425+54.46	425+72.00	425+89.52	426+07.03	426+16.56	426+24.53	426+42.01	426+59.48	426+75.00
	FINAL DECK ELEVATION	719.55	718.58	717.71	0.00	717.02	716.83	715.95	715.07	714.20	713.72	713.32	712.45	711.58	710.80

NOTES:

1. FOR FINAL DECK ELEVATION NOTES, SEE SHEET 140 / 164 .

UNIT 2 - FINAL DECK ELEVATIONS - (5 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 148 | TOTAL 164
SHEET 1590 | TOTAL 2338

CUY-90-16.28 (CCG3A)

FINAL DECK SURFACE ELEVATIONS - UNIT 2 - SPAN 10														
LOCATION		CL PIER 9	0.1	0.2	FIELD SPLICE FS2-10	0.3	0.4	0.5	0.6	0.7	FIELD SPLICE FS2-11	0.8	0.9	CL PIER 10
LEFT CURBLINE	STATION	426+75.00	426+97.79	427+20.56	427+23.03	427+43.30	427+66.03	427+88.73	428+11.45	428+35.11	428+50.86	428+58.77	428+82.43	429+06.09
	FINAL DECK ELEVATION	714.32	713.22	712.03	711.91	710.83	709.64	708.43	707.22	705.94	705.11	704.67	703.40	702.10
G2-1	STATION	426+75.00	426+97.84	427+20.60	427+23.08	427+43.35	427+66.07	427+88.78	428+11.50	428+35.16	428+50.91	428+58.82	428+82.48	429+06.14
	FINAL DECK ELEVATION	714.39	713.29	712.10	711.98	710.90	709.71	708.50	707.29	706.01	705.18	704.74	703.47	702.17
END ROUNDING	STATION	426+75.00	426+97.84	427+20.61	427+23.08	427+43.36	427+66.08	427+88.78	428+11.50	428+35.16	428+50.91	428+58.82	428+82.48	429+06.14
	FINAL DECK ELEVATION	714.40	713.30	712.11	711.99	710.91	709.72	708.51	707.30	706.02	705.19	704.75	703.48	702.18
CROWN	STATION	426+75.00	426+97.95	427+20.72	427+23.19	427+43.46	427+66.19	427+88.89	428+11.62	428+35.28	428+51.03	428+58.94	428+82.60	429+06.26
	FINAL DECK ELEVATION	714.37	713.26	712.08	711.96	710.89	709.70	708.51	707.30	706.03	705.21	704.77	703.51	702.21
G2-3	STATION	426+75.00	426+98.08	427+20.85	427+23.32	427+43.59	427+66.31	427+89.01	428+11.75	428+35.41	428+51.16	428+59.07	428+82.73	429+06.39
	FINAL DECK ELEVATION	714.07	712.96	711.80	711.68	710.64	709.47	708.29	707.11	705.86	705.05	704.62	703.38	702.10
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	426+75.00	426+98.51	427+21.29	427+23.77	427+44.05	427+66.79	427+89.51	428+12.29	428+35.96	428+51.73	428+59.64	428+83.32	429+07.00
	FINAL DECK ELEVATION	713.20	712.03	710.89	710.76	709.75	708.61	707.48	706.34	705.15	704.36	703.97	702.78	701.60
G2-4	STATION	426+75.00	426+98.34	427+21.10	427+23.57	427+43.84	427+66.56	427+89.25	428+12.00	428+35.66	428+51.41	428+59.32	428+82.98	429+06.64
	FINAL DECK ELEVATION	713.51	712.39	711.28	711.16	710.15	709.02	707.89	706.75	705.54	704.75	704.33	703.12	701.90
G2-5	STATION	426+75.00	426+98.60	427+21.36	427+23.83	427+44.10	427+66.81	427+89.50	428+12.26	428+35.91	428+51.66	428+59.57	428+83.23	429+06.89
	FINAL DECK ELEVATION	712.96	711.83	710.75	710.63	709.67	708.58	707.48	706.38	705.22	704.44	704.05	702.87	701.69
G2-6	STATION	426+75.00	426+98.87	427+21.63	427+24.10	427+44.36	427+67.07	427+89.75	428+12.51	428+36.17	428+51.92	428+59.83	428+83.48	429+07.14
	FINAL DECK ELEVATION	712.41	711.27	710.23	710.11	709.18	708.13	707.08	706.01	704.90	704.14	703.76	702.62	701.48
G2-7	STATION	426+75.00	426+99.12	427+21.89	427+24.36	427+44.62	427+67.34	427+90.02	428+12.76	428+36.42	428+52.17	428+60.08	428+83.74	429+07.40
	FINAL DECK ELEVATION	711.94	710.76	709.73	709.61	708.71	707.69	706.67	705.64	704.57	703.85	703.47	702.37	701.28
G2-8	STATION	426+75.00	426+99.38	427+22.15	427+24.63	427+44.90	427+67.61	427+90.29	428+13.02	428+36.67	428+52.42	428+60.33	428+83.99	429+07.65
	FINAL DECK ELEVATION	711.47	710.25	709.23	709.11	708.23	707.24	706.25	705.27	704.25	703.55	703.19	702.12	701.07
G2-9	STATION	426+75.00	426+99.68	427+22.45	427+24.92	427+45.19	427+67.90	427+90.58	428+13.28	428+36.92	428+52.67	428+60.58	428+84.24	429+07.90
	FINAL DECK ELEVATION	710.91	709.67	708.69	708.57	707.73	706.78	705.84	704.90	703.93	703.26	702.90	701.87	700.86
RIGHT CURBLINE	STATION	426+75.00	426+99.73	427+22.51	427+24.98	427+45.25	427+67.96	427+90.63	428+13.33	428+36.97	428+52.72	428+60.63	428+84.29	429+07.95
	FINAL DECK ELEVATION	710.80	709.56	708.59	708.47	707.64	706.69	705.76	704.82	703.87	703.20	702.85	701.82	700.82

NOTES:

1. *FOR FINAL DECK ELEVATION NOTES, SEE SHEET* 140 / 164 .

UNIT 2 - FINAL DECK ELEVATIONS - (6 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 149 | TOTAL 164
SHEET 1591 | TOTAL 2338

CUY-90-16.28 (CCG3A)

FINAL DECK SURFACE ELEVATIONS - UNIT 2 - SPAN 11													
LOCATION		CL PIER 10	0.1	0.2	0.3	FIELD SPLICE FS2-12	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. FWD. ABUT.
LEFT CURBLINE	STATION	429+06.09	429+24.68	429+43.27	429+61.86	429+68.56	429+80.45	429+99.04	430+17.63	430+36.23	430+54.82	430+73.41	430+92.00
	FINAL DECK ELEVATION	702.10	701.09	700.08	699.16	698.83	698.24	697.32	696.40	695.48	694.56	693.64	692.72
G2-1	STATION	429+06.14	429+24.73	429+43.32	429+61.91	429+68.61	429+80.50	429+99.09	430+17.68	430+36.28	430+54.87	430+73.46	430+92.00
	FINAL DECK ELEVATION	702.17	701.16	700.15	699.23	698.90	698.31	697.39	696.47	695.55	694.63	693.71	692.79
END ROUNDING	STATION	429+06.14	429+24.73	429+43.33	429+61.92	429+68.62	429+80.51	429+99.10	430+17.69	430+36.28	430+54.87	430+73.47	430+92.00
	FINAL DECK ELEVATION	702.18	701.17	700.16	699.24	698.91	698.32	697.40	696.48	695.56	694.64	693.72	692.80
CROWN	STATION	429+06.26	429+24.85	429+43.44	429+62.03	429+68.73	429+80.62	429+99.21	430+17.81	430+36.40	430+54.99	430+73.58	430+92.00
	FINAL DECK ELEVATION	702.21	701.21	700.21	699.29	698.96	698.37	697.45	696.53	695.61	694.69	693.76	692.85
G2-3	STATION	429+06.39	429+24.98	429+43.57	429+62.16	429+68.86	429+80.75	429+99.35	430+17.94	430+36.53	430+55.12	430+73.71	430+92.00
	FINAL DECK ELEVATION	702.10	701.12	700.13	699.21	698.88	698.29	697.37	696.45	695.53	694.61	693.69	692.78
BL RAMP A2 / PROPOSED PROFILE GRADE	STATION	429+07.00	429+25.61	429+44.21	429+62.82	429+69.53	429+81.43	430+00.03	430+18.64	430+37.25	430+55.85	430+74.46	430+92.00
	FINAL DECK ELEVATION	701.60	700.67	699.74	698.81	698.47	697.88	696.95	696.02	695.09	694.16	693.23	692.35
G2-4	STATION	429+06.64	429+25.23	429+43.82	429+62.41	429+69.11	429+81.01	429+99.60	430+18.19	430+36.78	430+55.37	430+73.96	430+92.00
	FINAL DECK ELEVATION	701.90	700.94	699.98	699.06	698.73	698.14	697.22	696.29	695.37	694.45	693.53	692.64
G2-5	STATION	429+06.89	429+25.48	429+44.08	429+62.67	429+69.37	429+81.26	429+99.85	430+18.44	430+37.03	430+55.62	430+74.22	430+92.00
	FINAL DECK ELEVATION	701.69	700.76	699.82	698.90	698.57	697.98	697.06	696.14	695.22	694.30	693.38	692.50
G2-6	STATION	429+07.14	429+25.74	429+44.33	429+62.92	429+69.62	429+81.51	430+00.10	430+18.69	430+37.28	430+55.88	430+74.47	430+92.00
	FINAL DECK ELEVATION	701.48	700.58	699.67	698.75	698.42	697.83	696.91	695.99	695.07	694.14	693.22	692.35
G2-7	STATION	429+07.40	429+25.99	429+44.58	429+63.17	429+69.87	429+81.76	430+00.35	430+18.95	430+37.54	430+56.13	430+74.72	430+92.00
	FINAL DECK ELEVATION	701.28	700.40	699.52	698.60	698.26	697.67	696.75	695.83	694.91	693.99	693.07	692.21
G2-8	STATION	429+07.65	429+26.24	429+44.83	429+63.42	429+70.12	429+82.01	430+00.61	430+19.20	430+37.79	430+56.38	430+74.97	430+92.00
	FINAL DECK ELEVATION	701.07	700.22	699.36	698.44	698.11	697.52	696.60	695.68	694.76	693.84	692.92	692.07
G2-9	STATION	429+07.90	429+26.49	429+45.08	429+63.68	429+70.38	429+82.27	430+00.86	430+19.45	430+38.04	430+56.63	430+75.22	430+92.00
	FINAL DECK ELEVATION	700.86	700.04	699.21	698.29	697.96	697.37	696.45	695.53	694.60	693.68	692.76	691.93
RIGHT CURBLINE	STATION	429+07.95	429+26.54	429+45.13	429+63.73	429+70.43	429+82.32	430+00.91	430+19.50	430+38.09	430+56.68	430+75.27	430+92.00
	FINAL DECK ELEVATION	700.82	700.00	699.18	698.26	697.93	697.34	696.42	695.49	694.57	693.65	692.73	691.90

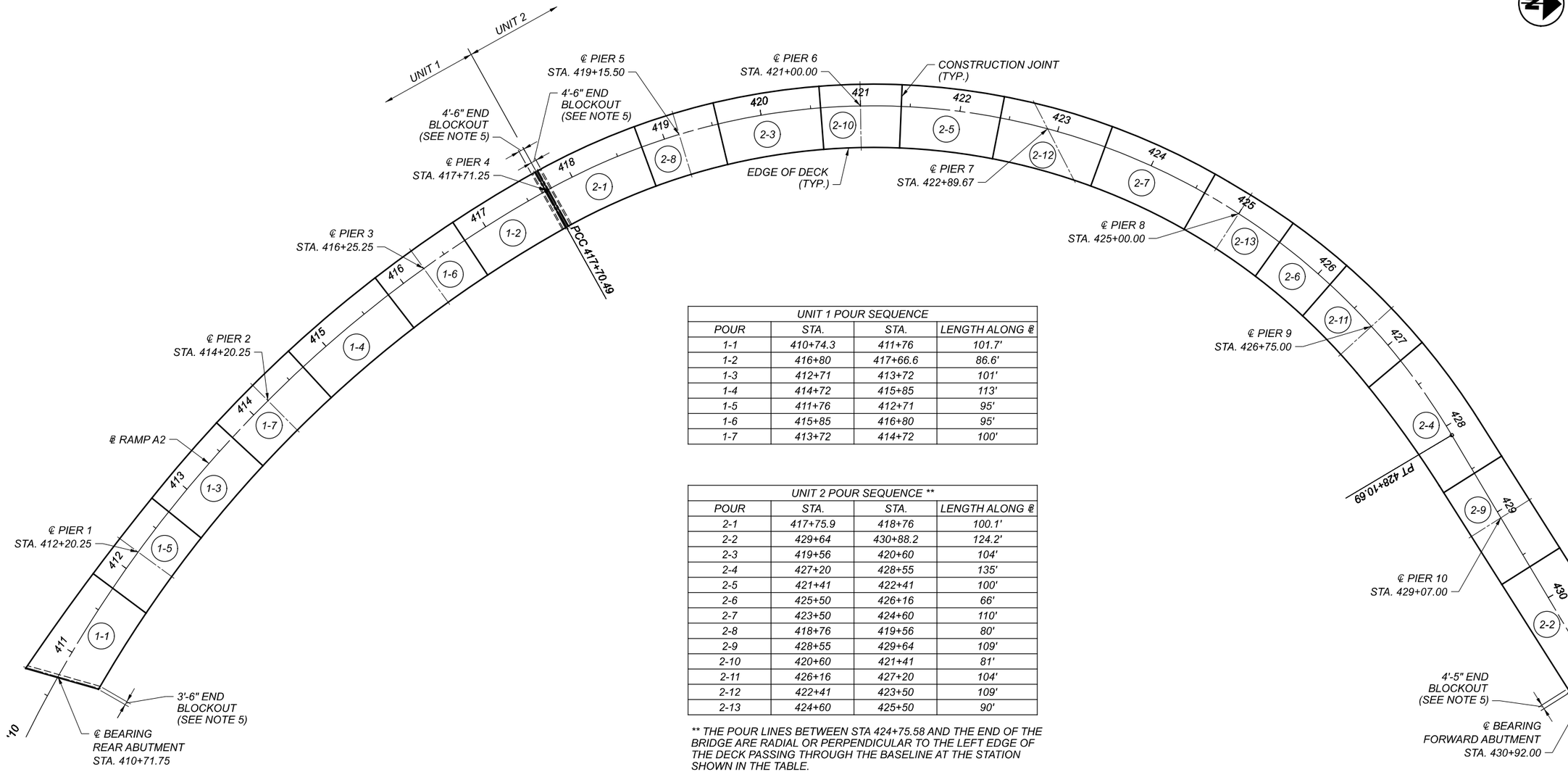
NOTES:

1. FOR FINAL DECK ELEVATION NOTES, SEE SHEET 140 / 164 .

UNIT 2 - FINAL DECK ELEVATIONS - (7 OF 7)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER JS
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 150 | TOTAL 164
SHEET 1592 | TOTAL 2338

CUY-90-16.28 (CCG3A)



UNIT 1 POUR SEQUENCE			
POUR	STA.	STA.	LENGTH ALONG ℄
1-1	410+74.3	411+76	101.7'
1-2	416+80	417+66.6	86.6'
1-3	412+71	413+72	101'
1-4	414+72	415+85	113'
1-5	411+76	412+71	95'
1-6	415+85	416+80	95'
1-7	413+72	414+72	100'

UNIT 2 POUR SEQUENCE **			
POUR	STA.	STA.	LENGTH ALONG ℄
2-1	417+75.9	418+76	100.1'
2-2	429+64	430+88.2	124.2'
2-3	419+56	420+60	104'
2-4	427+20	428+55	135'
2-5	421+41	422+41	100'
2-6	425+50	426+16	66'
2-7	423+50	424+60	110'
2-8	418+76	419+56	80'
2-9	428+55	429+64	109'
2-10	420+60	421+41	81'
2-11	426+16	427+20	104'
2-12	422+41	423+50	109'
2-13	424+60	425+50	90'

*** THE POUR LINES BETWEEN STA 424+75.58 AND THE END OF THE BRIDGE ARE RADIAL OR PERPENDICULAR TO THE LEFT EDGE OF THE DECK PASSING THROUGH THE BASELINE AT THE STATION SHOWN IN THE TABLE.*

DECK POUR SEQUENCE

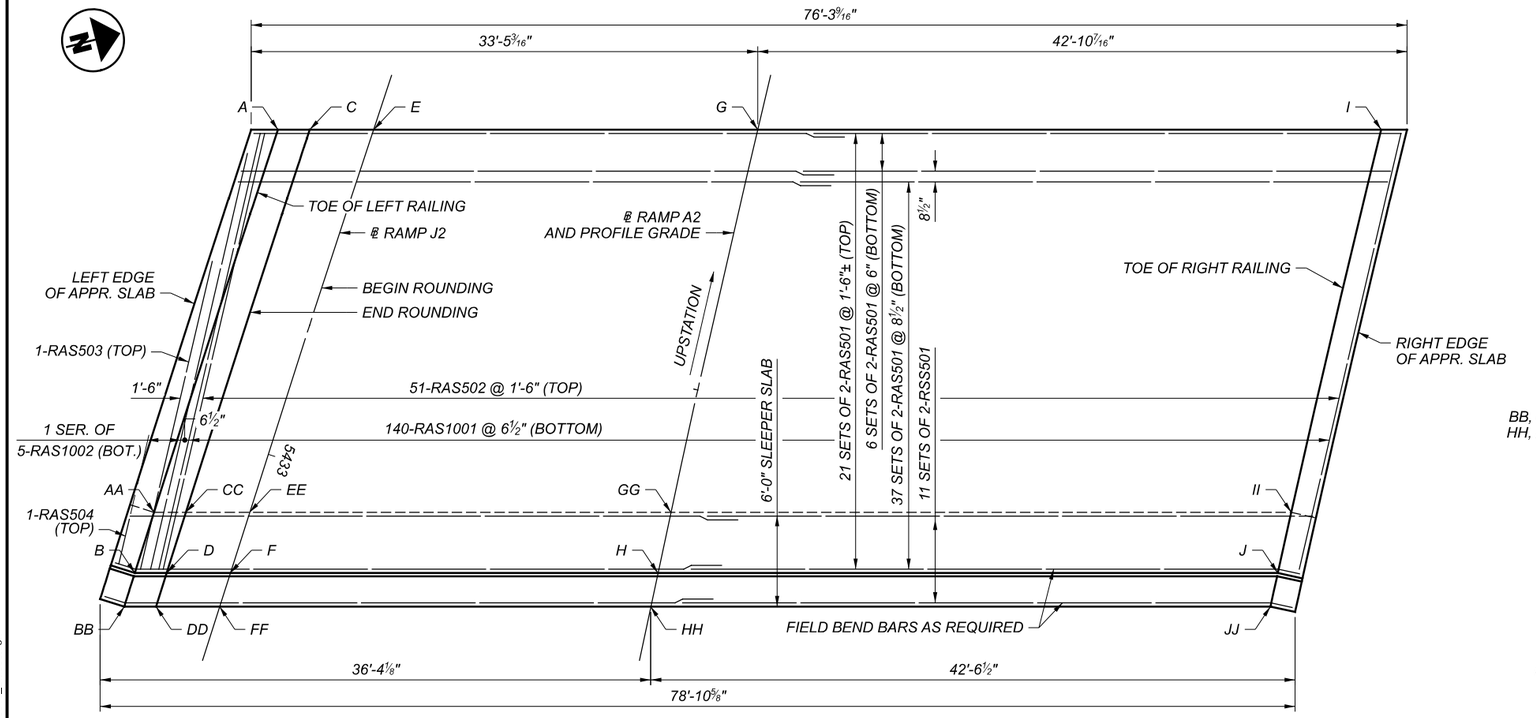
NOTES:

1. (#-#) INDICATES PLACEMENT SEQUENCE.
2. A MINIMUM OF TWO DAYS MUST ELAPSE BETWEEN POURS. TWO DAYS WILL BE MEASURED FROM THE END OF ONE POUR AND THE BEGINNING OF THE NEXT POUR.
3. DO NOT PLACE BRIDGE RAILING CONCRETE UNTIL ALL DECK POURS ARE COMPLETED.
4. NO OTHER SLAB PLACEMENT SEQUENCE IS PERMITTED WITHOUT WRITTEN APPROVAL OF THE ENGINEER AND WITHOUT A DETAILED COMPUTER ANALYSIS OF THE SUPERSTRUCTURE TO DEMONSTRATE THAT NO UNACCEPTABLE OVERSTRESS WILL RESULT. THE CONTRACTOR WILL PREPARE REVISED DRAWINGS.
5. MAKE FINAL ADJUSTMENTS OF MODULAR EXPANSION JOINTS PRIOR TO POURING THE END BLOCKOUT. FOR MODULAR JOINT AND BLOCKOUT DETAILS, SEE SHEET 121 / 164 THRU 127 / 164 .

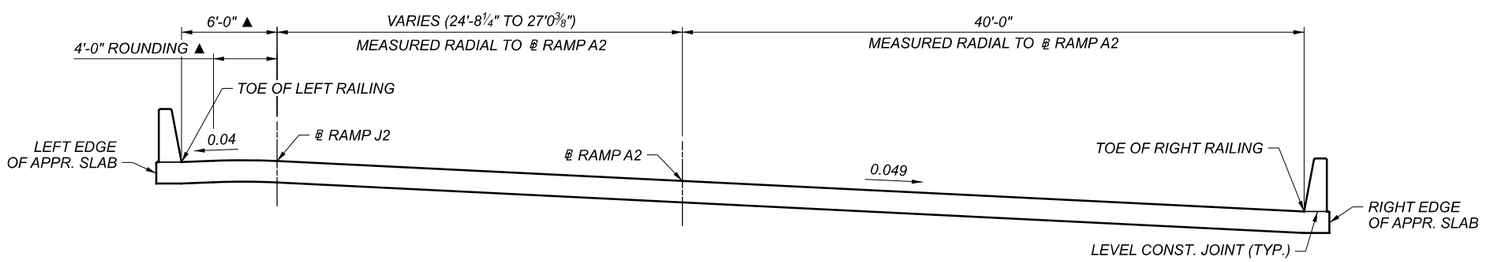
DECK POUR SEQUENCE
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER TJE | CHECKER NJH
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 151 | TOTAL 164
SHEET 1593 | TOTAL 2338

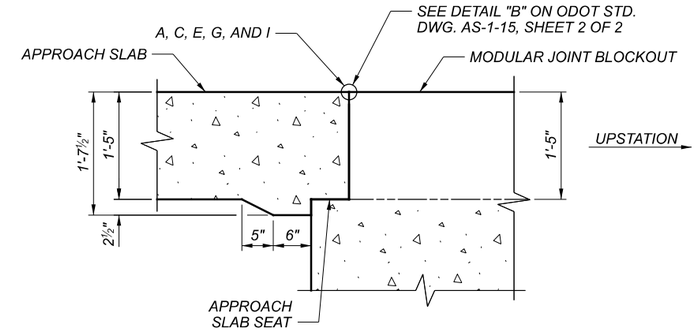
CUY-90-16.28 (CCG3A)



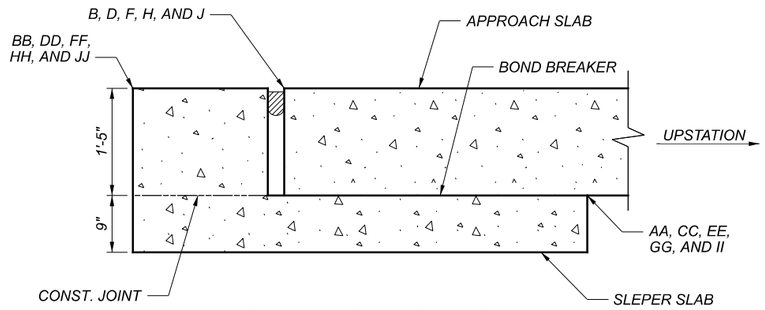
PLAN



APPROACH SLAB SECTION
(LOOKING UPSTATION)



APPROACH SLAB AT ABUTMENT
(SEE NOTE 1)



SLEEPER SLAB SECTION
(SEE NOTE 2)

REAR APPROACH SLAB							
MARK	STATION	OFFSET	ELEVATION	MARK	STATION	OFFSET	ELEVATION
A	410+60.49	30.84' LT	706.02	F	410+31.88	27.63' LT.	705.26
B	410+30.63	33.79' LT.	704.89	G	410+67.64	0.00'	705.11
C	410+60.95	28.79' LT.	706.11	H	410+37.64	0.00'	704.10
D	410+35.05	31.73' LT.	705.25	I	410+77.46	40.00' RT.	703.48
E	410+61.88	24.68' LT.	706.13	J	410+46.44	40.00' RT.	702.44

REAR SLEEPER SLAB							
MARK	STATION	OFFSET	ELEVATION	MARK	STATION	OFFSET	ELEVATION
AA	410+34.70	33.36' LT.	705.27	FF	410+29.62	27.86' LT.	705.20
BB	410+28.38	34.03' LT.	705.09	GG	410+41.73	0.00'	704.24
CC	410+35.12	31.31' LT.	705.37	HH	410+39.37	0.00'	704.03
DD	410+28.79	31.97' LT.	705.19	II	410+50.67	40.00' RT.	702.58
EE	410+35.97	27.20' LT.	705.38	JJ	410+44.09	40.00' RT.	702.36

NOTES:

1. FOR ADDITIONAL DETAILS, REINFORCING AND NOTES ON APPROACH SLAB AND SLEEPER SLABS, SEE ODOT STD. DWG. AS-1-15 AND AS-2-15.
2. APPROACH SLAB INSTALLATION SHALL BE TYPE C, PER ODOT STD. DWG. AS-2-15.
3. STATION AND OFFSETS ARE MEASURED FROM ℄ RAMP A2.
4. FOR APPROACH SLAB BRIDGE RAILING DETAILS, SEE SHEET 154 / 164 .
5. FOR MODULAR JOINT BLOCKOUT DETAILS, SEE SHEETS 28 / 164 AND 29 / 164 .
6. THE CONCRETE FOR THE BRIDGE RAILING MOUNTED ON THE APPROACH SLABS SHALL BE PAID FOR UNDER ITEM 511, CLASS QC2 CONCRETE WITH QA/QC, BRIDGE DECK (PARAPET). THE CONCRETE AND REINFORCING STEEL FOR THE APPROACH SLAB SHALL BE PAID FOR UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"). THE CONCRETE AND REINFORCING STEEL FOR THE SLEEPER SLAB INCLUDING CURB SHALL BE PAID FOR UNDER ITEM 526, TYPE C INSTALLATION.
7. THE ARMORLESS PREFORMED JOINT SEAL SHALL BE PAID FOR UNDER ITEM 526, ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN.

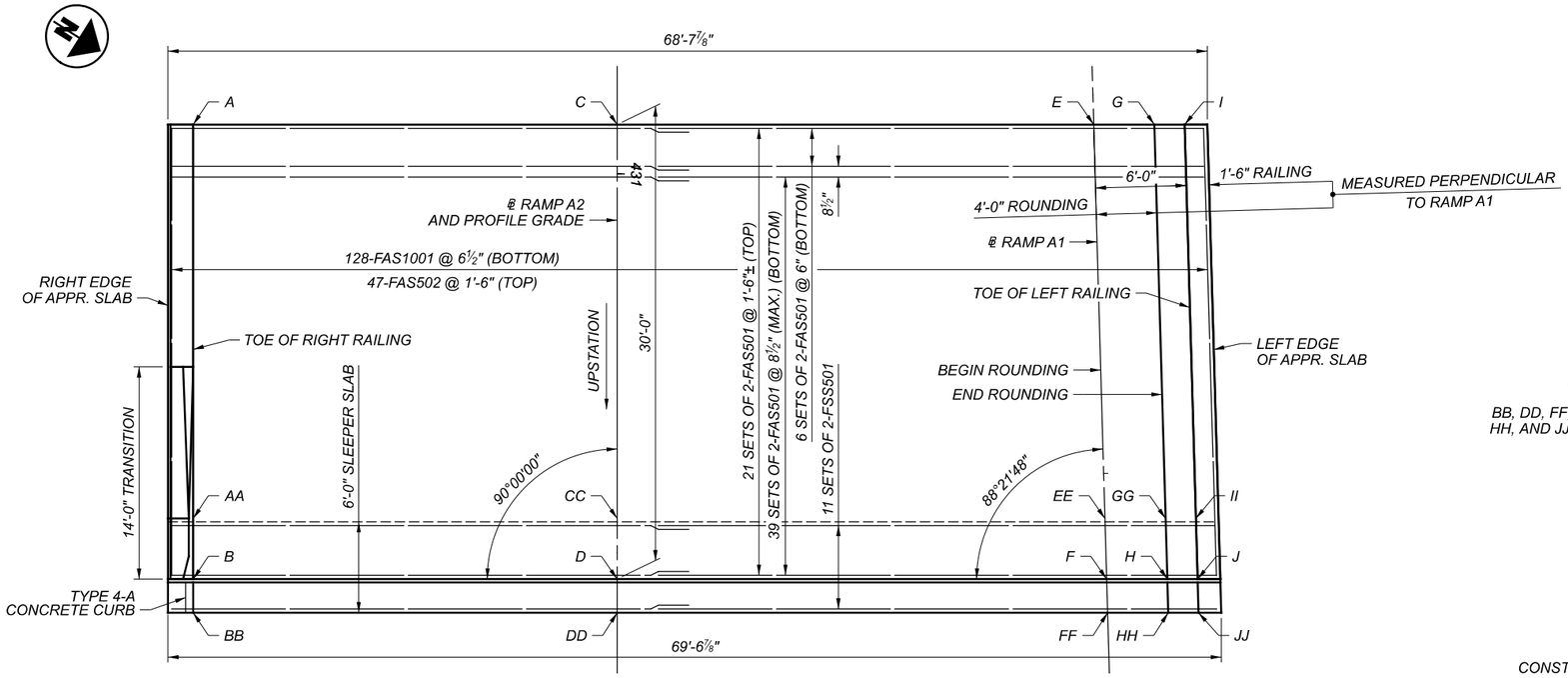
LEGEND:

▲ MEASURED RADIAL TO ℄ RAMP J2

REAR APPROACH SLAB
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

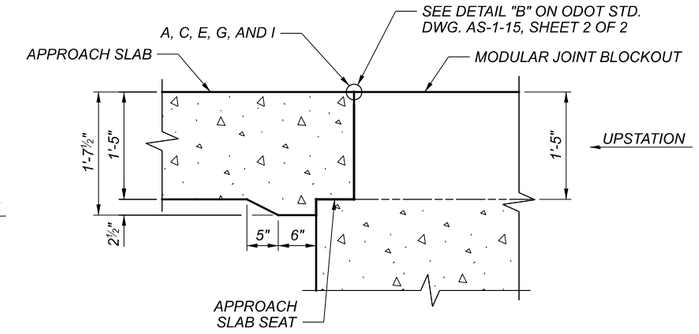
SFN 1806910
DESIGN AGENCY
HDR
DESIGNER TJE | CHECKER ABO
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 152 | TOTAL 164
SHEET 1594 | TOTAL 2338

CUY-90-16.28 (CCG3A)

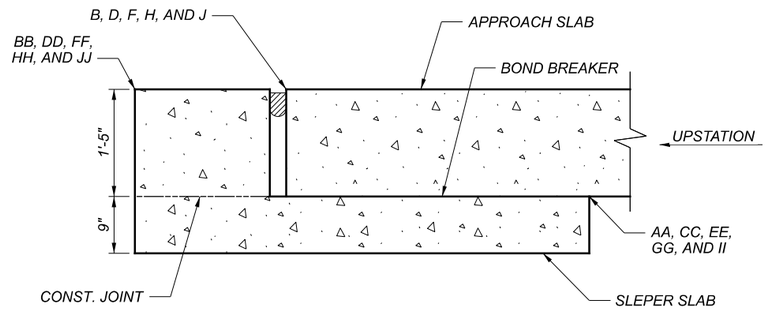


PLAN

APPROACH SLAB SECTION
(LOOKING BACKSTATION)



APPROACH SLAB AT ABUTMENT
(SEE NOTE 1)



SLEEPER SLAB SECTION
(SEE NOTE 2)

FORWARD APPROACH SLAB							
MARK	STATION	OFFSET	ELEVATION	MARK	STATION	OFFSET	ELEVATION
A	430+96.75	28.00' RT.	691.66	F	431+26.75	32.34' LT.	690.84
B	431+26.75	28.00' RT.	690.16	G	430+96.75	35.48' LT.	692.57
C	430+96.75	0.00'	692.11	H	431+26.75	36.34' LT.	690.77
D	431+26.75	0.00'	690.61	I	430+96.75	37.48' LT.	692.48
E	430+96.75	31.48' LT.	692.62	J	431+26.75	38.34' LT.	690.68

FORWARD SLEEPER SLAB							
MARK	STATION	OFFSET	ELEVATION	MARK	STATION	OFFSET	ELEVATION
AA	431+22.75	28.00' RT.	690.35	FF	431+26.97	32.42' LT.	690.70
BB	431+26.97	28.00' RT.	690.05	GG	431+22.75	36.24' LT.	691.00
CC	431+22.75	0.00'	690.80	HH	431+26.97	36.40' LT.	690.63
DD	431+26.97	0.00'	690.50	II	431+22.75	38.23' LT.	690.92
EE	431+22.75	32.22' LT.	691.07	JJ	431+26.97	38.40' LT.	690.55

NOTES:

1. FOR ADDITIONAL DETAILS, REINFORCING AND NOTES ON APPROACH SLAB AND SLEEPER SLABS, SEE ODOT STD. DWG. AS-1-15 AND AS-2-15.
2. APPROACH SLAB INSTALLATION SHALL BE TYPE C, PER ODOT STD. DWG. AS-2-15.
3. STATION AND OFFSETS ARE MEASURED FROM ℄ RAMP A2.
4. FOR APPROACH SLAB BRIDGE RAILING DETAILS, SEE SHEET 155 / 164 .
5. FOR MODULAR JOINT BLOCKOUT DETAILS, SEE SHEETS 31 / 164 AND 32 / 164 .
6. THE CONCRETE FOR THE BRIDGE RAILING MOUNTED ON THE APPROACH SLABS SHALL BE PAID FOR UNDER ITEM 511, CLASS QC2 CONCRETE WITH QA/QC, BRIDGE DECK (PARAPET). THE CONCRETE AND REINFORCING STEEL FOR THE APPROACH SLAB SHALL BE PAID FOR UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"). THE CONCRETE AND REINFORCING STEEL FOR THE SLEEPER SLAB INCLUDING CURB SHALL BE PAID FOR UNDER ITEM 526, TYPE C INSTALLATION.
7. THE ARMORLESS PREFORMED JOINT SEAL SHALL BE PAID FOR UNDER ITEM 526, ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN.

FORWARD APPROACH SLAB
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY
DESIGNER TJE | CHECKER ABO
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 153 | TOTAL 164
SHEET 1595 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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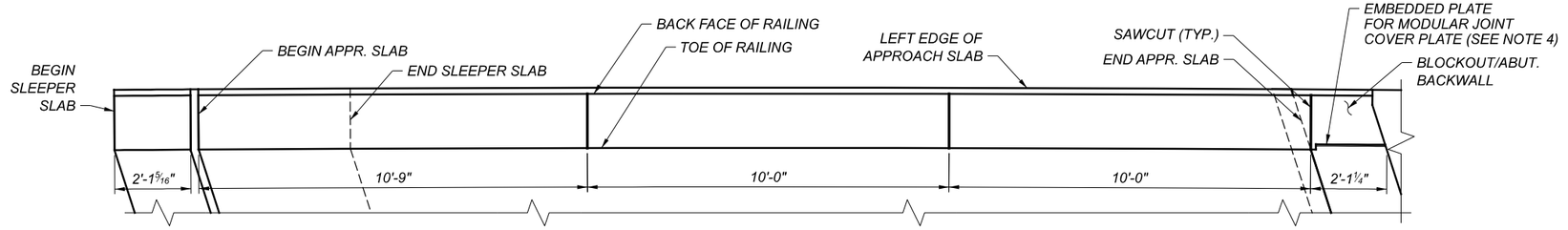
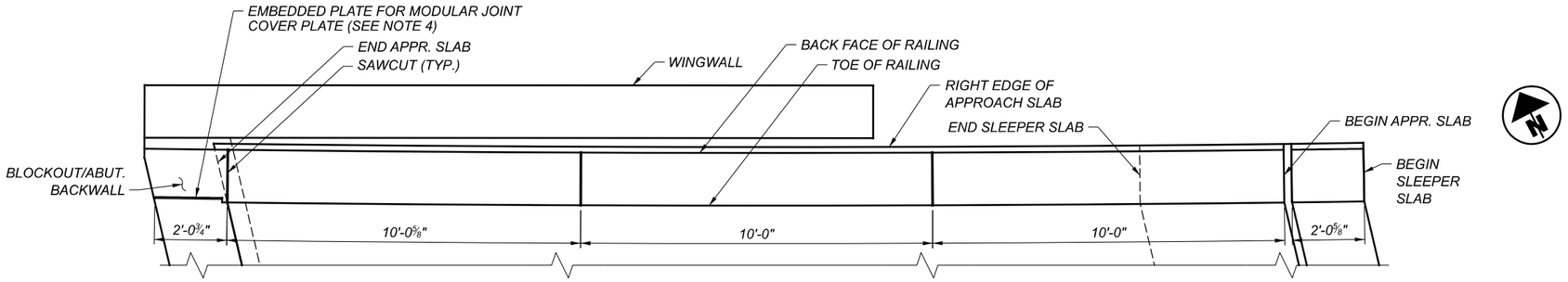
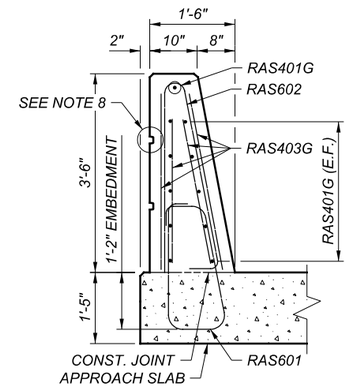


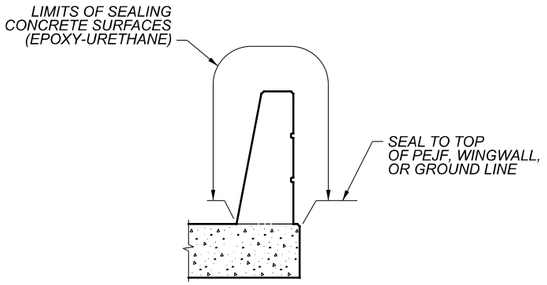
LEFT RAILING PLAN



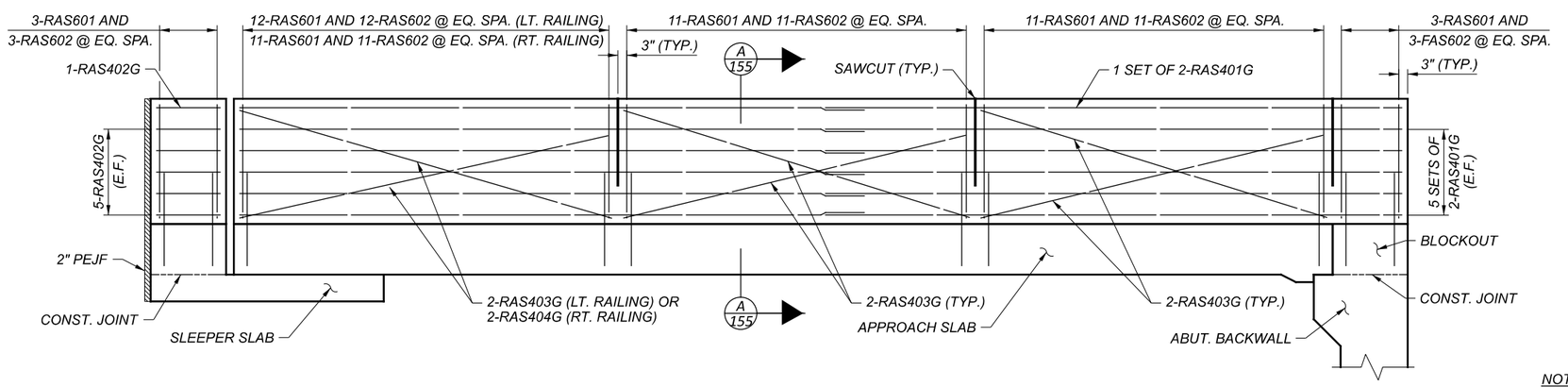
RIGHT RAILING PLAN



SECTION A-A



APPROACH SLAB RAILING SEALING DETAIL



RAILING ELEVATION
(LEFT RAILING SHOWN - RIGHT RAILING SIMILAR)

NOTES:

1. FOR ADDITIONAL DETAILS, NOTES, AND DIMENSIONS NOT SHOWN FOR APPROACH SLABS, SEE ODOT STD. DWG. AS-1-15 AND AS-2-15.
2. FOR ADDITIONAL DETAILS, NOTES AND DIMENSIONS NOT SHOWN FOR BRIDGE RAILING ON APPROACH SLABS, SEE ODOT STD. DWG. SBR-1-20.
3. FOR REAR APPROACH SLAB PLAN, SEE SHEET 152 / 164 .
4. FOR REAR ABUTMENT MODULAR JOINT COVER PLATE DETAILS, SEE SHEET 125 / 164 .
5. FOR REAR ABUTMENT DETAILS, SEE SHEETS 28 / 164 THRU 30 / 164 .
6. FIELD BEND BARS AS REQUIRED.
7. THE CONCRETE FOR THE RAILING ON THE APPROACH SLAB SHALL BE PAID FOR WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET). THE CONCRETE AND REINFORCING STEEL FOR THE APPROACH SLABS SHALL BE PAID FOR WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"). THE CONCRETE AND REINFORCING FOR THE SLEEPER SLAB SHALL BE PAID FOR WITH ITEM 526, TYPE C INSTALLATION.
8. FOR AESTHETIC GROOVE DETAIL, SEE SHEET 120 / 164 .

REAR APPROACH SLAB RAILING DETAILS

CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	ABO
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	154
TOTAL	164
SHEET	1596
TOTAL	2338

CUY-90-16.28 (CCG3A)

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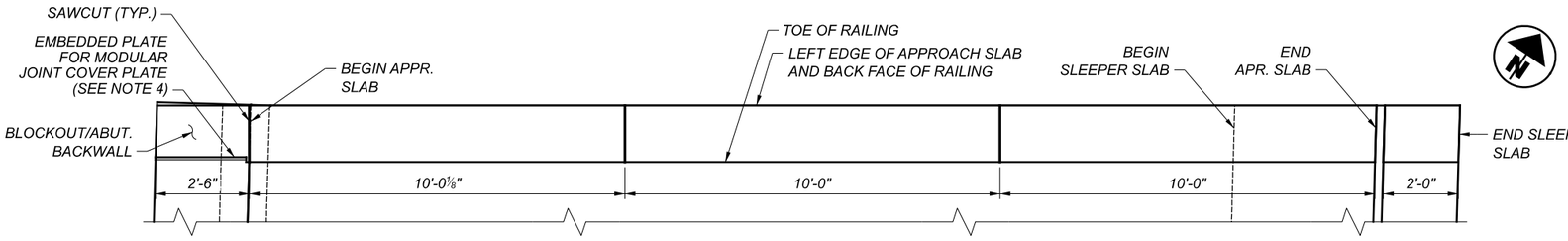
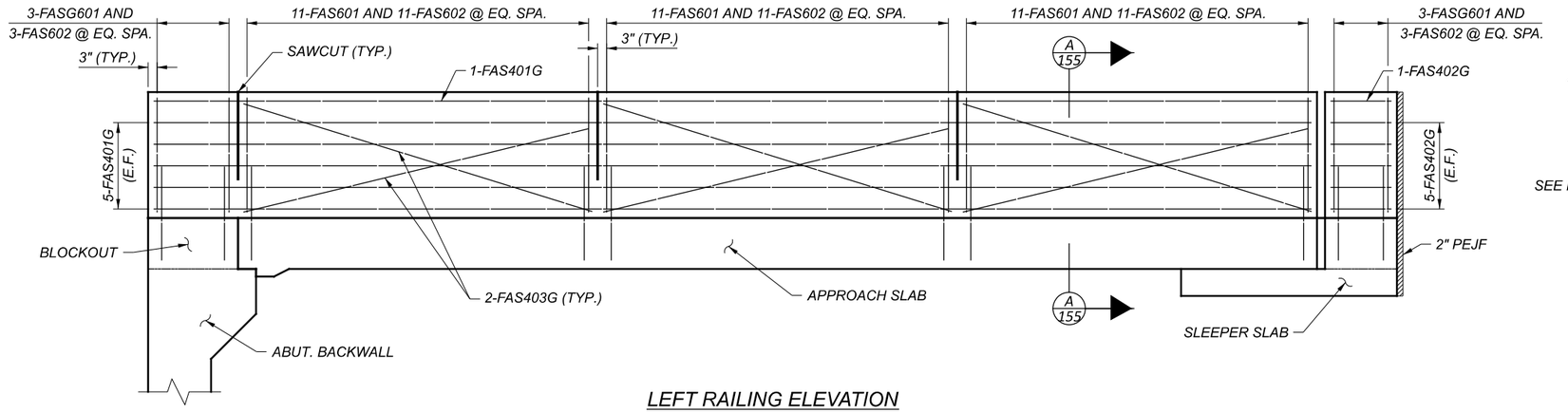
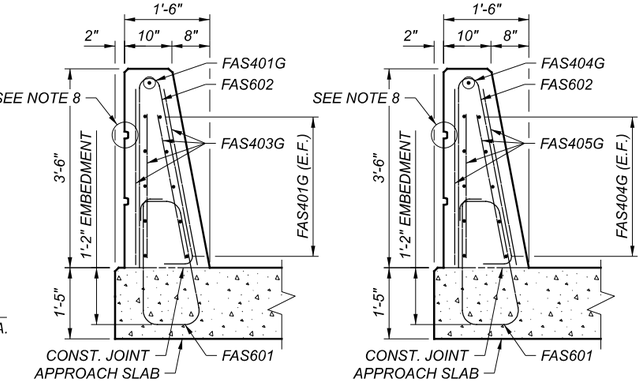
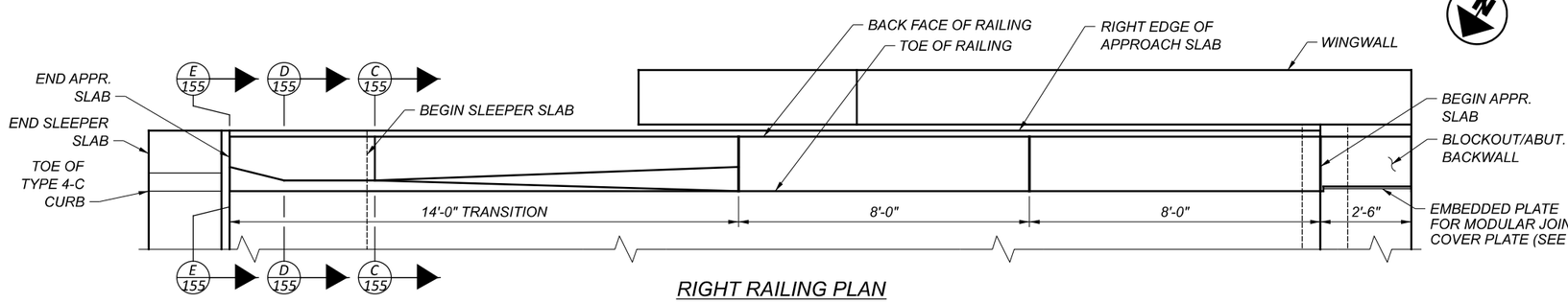


LEFT RAILING PLAN

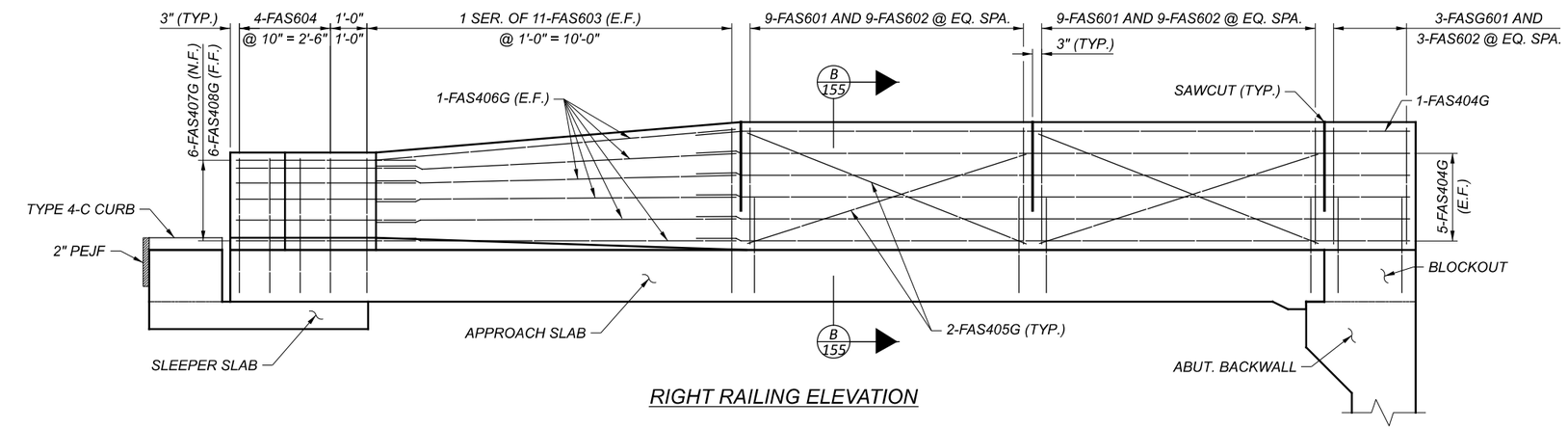


LEFT RAILING ELEVATION





RIGHT RAILING PLAN



RIGHT RAILING ELEVATION

NOTES:

1. FOR ADDITIONAL DETAILS, NOTES, AND DIMENSIONS NOT SHOWN FOR APPROACH SLABS, SEE ODOT STD. DWG. AS-1-15 AND AS-2-15.
2. FOR ADDITIONAL DETAILS, NOTES AND DIMENSIONS NOT SHOWN FOR BRIDGE RAILING ON APPROACH SLABS, SEE ODOT STD. DWG. SBR-1-20.
3. FOR FORWARD APPROACH SLAB PLAN, SEE SHEET 153 / 164 .
4. FOR FORWARD ABUTMENT MODULAR JOINT COVER PLATE DETAILS, SEE SHEET 127 / 164 .
5. FOR FORWARD ABUTMENT DETAILS, SEE SHEETS 31 / 164 THRU 32 / 164 .
6. FIELD BEND BARS AS REQUIRED.
7. THE CONCRETE FOR THE RAILING ON THE APPROACH SLAB SHALL BE PAID FOR WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET). THE CONCRETE AND REINFORCING STEEL FOR THE APPROACH SLABS SHALL BE PAID FOR WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"). THE CONCRETE AND REINFORCING FOR THE SLEEPER SLAB SHALL BE PAID FOR WITH ITEM 526, TYPE C INSTALLATION.
8. FOR AESTHETIC GROOVE DETAIL, SEE SHEET 120 / 164 .

FORWARD APPROACH SLAB RAILING DETAILS

CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	TJE
CHECKER	ABO
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	155
TOTAL	164
SHEET	1597
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:17:05 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\Distrct12\82382400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SM011.dgn

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
REAR ABUTMENT												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
FORWARD ABUTMENT												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 13 / 164.
2. FOR BAR BENDING DIAGRAM AND ADDITIONAL NOTES, SEE SHEETS 9SL010 / 164.

REINFORCING LIST - (1 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER JS | CHECKER BTA
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 156 | TOTAL 164
SHEET 1598 | TOTAL 2338

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 1												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 2												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

NOTES:

1. *FOR GENERAL NOTES, SEE SHEETS* 11 / 164 *THRU* 13 / 164 .
2. *FOR BAR BENDING DIAGRAM AND ADDITIONAL NOTES, SEE SHEET&9SL010 164* .

REINFORCING LIST - (2 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER JS | CHECKER BTA

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 157 | TOTAL 164

SHEET 1599 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 3												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 4												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 13 / 164 .
2. FOR BAR BENDING DIAGRAM AND ADDITIONAL NOTES, SEE SHEETS 9SL010 / 164 .

REINFORCING LIST - (3 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910
DESIGN AGENCY HDR
DESIGNER JS | CHECKER BTA
REVIEWER JMS 06/22/22
PROJECT ID 82382
SUBSET 158 | TOTAL 164
SHEET 1600 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:17:22 PM USER: CRICCARDI
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400-Engineering\Structures\SFN_1806910\Sheets\82382_SFN_1806910_SL003.dgn

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 5												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 6												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 12 / 164 .
2. FOR BAR BENDING DIAGRAM AND ADDITIONAL NOTES, SEE SHEET&9SL010 164 .

REINFORCING LIST - (4 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER JS | CHECKER BTA

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 159 | TOTAL 164

SHEET 1601 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 7												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 8												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

NOTES:

1. *FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 13 / 164.*
2. *FOR BAR BENDING DIAGRAM AND ADDITIONAL NOTES, SEE SHEETS 9SL010 / 164.*

REINFORCING LIST - (5 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY HDR

DESIGNER JS | CHECKER BTA

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 160 TOTAL 164

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 9												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 10												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 *THRU* 13 / 164 .

2. FOR BAR BENDING DIAGRAM AND ADDITIONAL NOTES, SEE SHEET 9SL010 164 .

REINFORCING LIST - (6 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER JS | CHECKER BTA

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 161 | TOTAL 164

SHEET 1603 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
SUPERSTRUCTURE												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
RAILING												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						
SUB-TOTAL						ITEM 509E30020, NO. 4 GFRP DEFORMED BARS						

NOTES:

1. *FOR GENERAL NOTES, SEE SHEETS* 11 / 164 *THRU* 13 / 164 .
2. *FOR BAR BENDING DIAGRAM AND ADDITIONAL NOTES, SEE SHEET&* 9SL010 / 164 .

REINFORCING LIST - (7 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER JS | CHECKER BTA

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 162 | TOTAL 164

SHEET 1604 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
REAR APPROACH SLAB (FOR INFORMATION ONLY)												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
FORWARD APPROACH SLAB (FOR INFORMATION ONLY)												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 *THRU* 13 / 164 .

2. FOR BAR BENDING DIAGRAM AND ADDITIONAL NOTES, SEE SHEET&9SL010 164 .

REINFORCING LIST - (8 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN 1806910

DESIGN AGENCY

DESIGNER JS | CHECKER BTA

REVIEWER JMS 06/22/22

PROJECT ID 82382

SUBSET 163 | TOTAL 164

SHEET 1605 | TOTAL 2338

CUY-90-16.28 (CCG3A)

BAR BENDING DIAGRAM

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 11 / 164 THRU 13 / 164.

2. THE LETTER PREFIX INDICATES BAR LOCATION. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE TWO DIGITS WHEN FOUR DIGITS ARE USED INDICATES BAR SIZE NUMBER. ALL REINFORCING IS ASSUMED EPOXY COATED UNLESS OTHERWISE INDICATED BY A LETTER SUFFIX. IF A LETTER SUFFIX IS PROVIDED, IT INDICATES BAR OR BAR COATING TYPE. EXAMPLE: R401G

   R: THE LOCATION OF THE BARS IN THE STRUCTURE (BRIDGE RAILING)
   4: BAR SIZE DIMENSION NO. 4
   01: SEQUENCE NUMBER
   G: GFRP

   THE FOLLOWING IS A LIST OF BAR LOCATION PREFIXES:
   - S: SUPERSTRUCTURE
   - R: BRIDGE RAILING
   - RA: REAR ABUTMENT
   - FA: FORWARD ABUTMENT
   - 1P: PIER 1
   - 2P: PIER 2
   - 3P: PIER 3
   - 4P: PIER 4
   - 5P: PIER 5
   - 6P: PIER 6
   - 7P: PIER 7
   - 8P: PIER 8
   - 9P: PIER 9
   - 10P: PIER 10

   THE FOLLOWING IS A LIST OF BAR MATERIAL SUFFIXES:
   - G: GFRP

3. BAR DIMENSIONS ARE SHOWN OUT-TO-OUT UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BAR BEND AT THE END OF THE BAR. STRAIGHT BARS ARE INDICATED BY "STR."

4. BAR MATERIAL:

   "STL" = GRADE 60 STEEL
   "GFRP" = GLASS FIBER REINFORCED POLYMER

REINFORCING LIST - (9 OF 9)
CUY-77-1587 (BRIDGE 9)
I.R. 77 SB OVER I.R. 90 AND CR-721 (E. 14TH ST.)

SFN	1806910
DESIGN AGENCY	HDR
DESIGNER	JS
CHECKER	BTA
REVIEWER	JMS 06/22/22
PROJECT ID	82382
SUBSET	164
TOTAL	164
SHEET	1606
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/29/2022 TIME: 1:17:55 PM USER: CRICCARDI
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